

Annexure B – First Cobalt Technical Report Update

(attached as a separate document)



Report No: R394.2017

October 20, 2017

Board of Directors
First Cobalt Corp.
140 Yonge Street
Toronto, Ontario
CANADA M5C 1X6

Dear Sirs:

Re: JORC Code Addendum – “Technical Report on the Greater Cobalt Project, Larder Mining Division, Ontario” prepared for First Cobalt Corp. dated July 31, 2017

This document has been prepared at the request of First Cobalt Corp. (**First Cobalt**). It is an addendum to the report titled “Technical Report on the Greater Cobalt Project, Larder Mining Division, Ontario” prepared for First Cobalt Corp. (**First Cobalt**) dated July 31, 2017 (**Report**), a copy of which is annexed hereto.

Purpose of document

The geological information in the Report was prepared in accordance with National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* published by the Canadian Securities Administrators.

The information in this document has been prepared in accordance with the ‘Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves’ (2012 edition) published by the Australasian Joint Ore Reserves Committee (**JORC Code**) to ensure that reporting of geological information in the Report also complies with the JORC Code.

This document is filed in support of First Cobalt’s application for admission to the Australian Securities Exchange and its proposed Information Memorandum to be issued in or about October 2017 in relation to the same.

Competent Person's Statement

I, Ian Trinder confirm that:

- I have read and understood the requirements of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves ("JORC Code, 2012 Edition").
- I am a Competent Person as defined by the 2012 JORC Edition, having five years' experience which is relevant to the style of mineralisation and type of deposit described in this document (including the Report), and to the activity for which I am accepting responsibility.
- I am a registered Member with the Association of Professional Engineers and Geoscientists of Manitoba as well as with the Association of Professional Geoscientists of Ontario (each being a "Recognised Professional Organisation" for the purposes of the ASX Listing Rules).
- I have reviewed in this document (including the Report) to which this Statement applies.
- I am a full-time employee of **CSA Global Canada Geosciences Ltd.**

I verify that this document (including the Report) is based on and fairly and accurately reflects in the form and context in which it appears, the information in my supporting documentation.

JORC Code, 2012 Edition – Table 1 report

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	Commentary
Sampling techniques	<p><u>2017 - First Cobalt Corp</u></p> <ul style="list-style-type: none"> As of the effective date (June 15, 2017) of the report, “Technical Report on the Greater Cobalt Project, Larder Lake Mining Division, Ontario” for First Cobalt Corp. (the “Report”) dated July 31, 2017, First Cobalt, had initiated very limited exploration on the Cobalt Project including outcrop stripping and channel sampling at the Keeley-Frontier area. Results were not yet available. <p><u>2012-2014 – Previous operator - Canadian Silver Hunter</u></p> <ul style="list-style-type: none"> During 2012, Canadian Silver Hunter completed a six hole, 2,058 m diamond drill program on the Keeley-Frontier group claims. The focus of the 2012 diamond drilling program were areas of the Beaver Lake Fault that had been the final target of exploration and mining when the mine closed in 1968. <ul style="list-style-type: none"> The NQ drill core was sawed in half at the North Cobalt facility, with one half returned to the core box for archive and the other half bagged and sent for aqua regia digestion and multielement (including Ag, Co, Ni, Bi, Sb) analysis (ICPOES finish) at AGAT Laboratories Ltd. Sample core lengths varied from 0.15 m to 1.5 m. During 2012 and 2014, Canadian Silver Hunter completed overburden stripping and bedrock channel sampling on the Keeley-Frontier group claims. <ul style="list-style-type: none"> Channel samples were cut using a Stihl gas powered saw using a diamond blade and chipped out using both manual chiseling and mechanical electric hammer chisel methods. After the channel samples were collected the channels were mapped, sample numbers assigned to the bags and aluminum tags with the sample numbers fixed in the channels at the end of the intervals. Samples were sealed in their bags and removed from the field sites to the core shack facility in North Cobalt for detailed examination and description. Samples were then resealed in their bags and submitted for aqua regia digestion and multielement (including Ag, Co, Ni, Bi, Sb) analysis (ICPOES finish). Sample channel lengths typically varied from 0.15 m to 1.5 m. <p><u>2010 – Previous operator - Silver Centre Resources</u></p> <ul style="list-style-type: none"> <ul style="list-style-type: none"> In 2010, Silver Centre contracted JVX Ltd to conduct magnetic, pole-dipole IP/RES and moving loop transient EM (TerraTEM) surveys over the Beaver Lake area in the southwestern part of the Keeley-Frontier group patents. Production was 61 sounding of TerraTEM, 3.2 km of magnetics, and 1.3 km of IP/RES using a grid with lines 50 m apart and oriented 075°. <p><u>Pre-2010 – Various previous operators</u></p> <ul style="list-style-type: none"> Work conducted by previous operators and holders of the ground within the Project area is derived from historic assessment reports dating back to the 1950's and on file with the Ontario Ministry of Northern Development and Mines. This work is discussed in Section 6 (History) of the Report and includes sampling by means of: <ul style="list-style-type: none"> Ground EM, VLF-EM, magnetics and IP surveys Helicopter-borne magnetics and electromagnetics Soil sampling Outcrop, trench and subsurface rock chip and grab samples Diamond drill coring. Sampling techniques, sample preparation, analytical methods and security

Criteria	Commentary
	<p>protocols and procedures utilized by previous operators for assay results disclosed in the History section were not available to the author for verification. The author is of the opinion however that the historical work programs were conducted to industry best practices at the time and the quality of data and information produced from them are relevant</p>
Drilling techniques	<p><u>2012 - Previous operator - Canadian Silver Hunter</u></p> <ul style="list-style-type: none"> 2012 drill program was completed with a diamond drill rig operated by Laframboise Drilling of Earleton, Ontario. Drill core was NQ diameter and recovered with a standard core tube. Core was not oriented. <p><u>Pre-2010 – Various previous operators</u></p> <ul style="list-style-type: none"> Specifics in respect to rig type, hole diameter and other relevant criteria are generally not detailed, particularly in older assessment reports. However, CSA Global have assumed industry standard practices appropriate for the time were used on the basis of no evidence to the contrary. Given the historic nature of the drilling, the core was not oriented.
Drill sample recovery	<p><u>2012 - Previous operator - Canadian Silver Hunter</u></p> <ul style="list-style-type: none"> Diamond drill core recovery was determined by comparing the recovered core length to the known distance drilled for each core run. The author was not provided any documentation of any measures that may have been taken to maximise recovery and ensure representative samples or whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. <p><u>Pre-2010 – Various previous operators</u></p> <ul style="list-style-type: none"> In general, specific details in respect to sample media, recoveries, and other factors that may impact the quality of returned analytical results are not available for historic work presented in the assessment reports.
Logging	<p><u>2012 - Previous operator - Canadian Silver Hunter</u></p> <ul style="list-style-type: none"> Based on information available to the author, the 2012 core was geologically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. However, CSA Global notes that the drilling was wide spaced and exploratory in nature; no Mineral Resource estimation or mining studies have been carried out. Logging was qualitative in nature with some qualitative logging of recovery and magnetic susceptibility. Core was photographed wet and dry prior to sampling. Six diamond drill holes totaling 2,058 metres were logged in their entirety. <p><u>Pre-2010 – Various previous operators</u></p> <ul style="list-style-type: none"> Assessment reports of historic drill holes generally provide limited information with respect to logging, particularly in older reports. Where such information is provided, it is considered qualitative in nature. All historic assessment report results and logging relate to an early stage of exploration such that no Mineral Resource estimations have been completed or are appropriate.
Sub-sampling techniques and sample preparation	<p><u>2012-2014 - Previous operator - Canadian Silver Hunter</u></p> <ul style="list-style-type: none"> The NQ size diamond drill core was sawed in half at the North Cobalt facility, with one half returned to the core box for archive and the other half bagged for analysis. Sample core lengths varied from 0.15 m to 1.5 m. AGAT Laboratories Ltd. collected the split core samples from the company's core shack and delivered them to its preparation lab in Sudbury, Ontario. Pulps were then sent to AGAT facilities in Mississauga, Ontario for analysis. The 2012 and 2014 bedrock surface channel samples were cut using a Stihl gas powered saw using a diamond blade and chipped out using both manual chiseling

Criteria	Commentary
	<p>and mechanical electric hammer chisel methods. After the channel samples were collected the channels were mapped, sample numbers assigned to the bags and aluminum tags with the sample numbers fixed in the channels at the end of the intervals. Samples were sealed in their bags and removed from the field sites to the core shack facility in North Cobalt for detailed examination and description. Samples were then resealed for delivery to the laboratory. Sample channel lengths typically varied from 0.15 m to 1.5 m. AGAT Laboratories Ltd. collected the split core samples from the company's core shack and delivered them to its preparation lab in Sudbury, Ontario. Pulps were then sent to AGAT facilities in Mississauga, Ontario for analysis.</p> <ul style="list-style-type: none"> • The crushing and pulverization methods utilized by AGAT are unavailable to CSA Global therefore the author is unable to comment on the nature, quality and appropriateness of the sample preparation technique and quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. • Canadian Silver Hunter did not submit field duplicate/second-half or quarter samples to determine if the sampling was representative of the in-situ material collected. Future programs should include field/core duplicates. • In general, sample sizes appear to have been appropriate to the grain size of the material being sampled. <p><u>Pre-2010 – Various previous operators</u></p> <ul style="list-style-type: none"> • Historic drilling completed by previous operators comprised diamond drill core drilling. • Assessment reports of historic diamond drill holes referred to within the Report do not provide information in respect sampled material. No information is provided respect to sample preparation, sample representivity, or QAQC protocols. As such, the author has been unable to validate any of the data in this context.
<p><i>Quality of assay data and laboratory tests</i></p>	<p><u>2012-2014 - Previous operator - Canadian Silver Hunter</u></p> <ul style="list-style-type: none"> • 2012 core samples and 2012-2014 surface channel samples were analysed using aqua regia digestion and multielement (including Ag, Co, Ni, Bi, Sb) analysis (ICPOES finish) at AGAT Laboratories Ltd. The digestion is considered complete for elements of interest but is partial for silicates, aluminates and refractory minerals. There may also be partial loss of volatile arsenic and antimony species. • AGAT is a fully accredited laboratory and conforms with the requirements of CANP4E (ISO/IEC 17025:2005) and CANP1579 by the Standards Council of Canada. • Canadian Silver Hunter's quality assurance and quality control (QAQC) program included the use of certified reference standards and blank samples inserted into the assay stream by company personnel every 25 samples in addition to the AGAT's internal QAQC programs. Samples assaying greater than 100 g/t Ag were fire assayed with a gravimetric finish. QAQC also included sending selected pulp samples for check assays at an independent lab (ALS Chemex) using both four acid (MEMS61) and aqua regia (MEMS41) digestions for multielement analysis. Selected higher grade silver and several random sample rejects were chosen for screen metallic analysis for silver only, at AGAT Laboratories. Canadian Silver Hunter noted that screen metallic assaying was required to more accurately quantify silver values in higher grade portions of mineralised zones due to the presence of coarse native silver. • The author has not reviewed the quality control results to confirm whether acceptable levels of accuracy and precision was established given the limited number of QAQC samples and historical nature of the exploratory drill program. <p><u>Pre-2010 – Various previous operators</u></p> <ul style="list-style-type: none"> • Assessment reports of historic diamond drill holes referred to within the Report do

Criteria	Commentary
	<p>not provide information on the nature of the laboratory tests and quality of assay data. Insufficient data is available to validate the effectiveness of analytical methods. No QA/QC data procedures or results are reported and therefore results cannot be validated in any way nor level of accuracy and precision established. As such, the author is unable to validate nor comment on any of the historic data in this context. Furthermore, the author was unable to confirm certification of the assay labs nor their relationship to the previous operators for assay results disclosed in the Report's History section.</p>
Verification of sampling and assaying	<p><u>2012 -2014 - Previous operator - Canadian Silver Hunter</u></p> <ul style="list-style-type: none"> CSA Global did not receive details of Canadian Silver Hunter's documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols and is therefore unable to comment other than: <ul style="list-style-type: none"> Canadian Silver Hunter sent selected pulp samples for check assays at an independent lab (ALS Chemex) using both four acid (MEMS61) and aqua regia (MEMS41) digestions for multielement analysis. Selected higher grade silver and several random sample rejects were chosen for screen metallic analysis for silver only, at AGAT Laboratories. No drill holes were twinned. Final silver grades for Canadian Silver Hunter's assay database was arrived at by averaging duplicate geochemical values; geochemical values were replaced by fire assay or screen metallic analyses when available. CSA Global conducted limited verification sampling of three archived intervals from Canadian Silver Hunter diamond drill hole CSH12-03 and two mineralised structures from 2012–2014 power stripped bedrock exposures. <ul style="list-style-type: none"> The Author personally collected the continuous chip samples from the bedrock structures and sealed the sample bags with ladder lock ties. The Author marked the three archived half-drill core intervals for quarter-core sampling. Canadian Exploration Services personnel cut the three quarter-core samples, placing one quarter of the sample into plastic sample bags and returning the remaining quarter-core to the core box for archive. The five sealed sample bags were then delivered to SGS Minerals Services at 185 Concession St., Lakefield, Ontario for analysis. The SGS Lakefield laboratory has accreditation from the Standards Council of Canada (No. 184) conforming to requirements of CAN-P-1579 (Mineral Analysis) and CAN-P-4E (ISO/IEC 17025:2005) for methods including those requested by CSA Global (see next paragraph). Sample preparations follow industry best practices and procedures. The analytical methods used are routine. All CSA Global verification samples submitted to SGS were prepared and analysed using SGS preparation code G-PRP89 in which the sample is weighed, dried, crushed to 75% passing 2 mm screen, a 250 g split is then taken and pulverised to 85% passing 75 microns. The pulverised material was then analysed using SGS analytical codes GO FAG313 Ag and GO FAG313 Ag. GO FAG313 Ag is a 30 g Fire assay for silver with gravimetric finish and detection limits of 10–5,000 ppm. GE ICP90A is a sodium peroxide (Na₂O₂) fusion with an ICP-OES finish. Lower detection limits are 10 ppm for the elements analysed (Co, Cu, Ni). SGS and their employees are independent from CSA Global and First Cobalt. CSA Global and First Cobalt personnel and consultants and contractors were not involved in sample preparation and analysis. CSA Global's verification samples are too few to permit a statistical comparison with the historic samples, however, they do provide an independent confirmation of the presence of silver, cobalt and nickel mineralisation at the Silver Centre Property.

Criteria	Commentary
	<ul style="list-style-type: none"> It is the opinion of CSA Global that the sample preparation and analytical procedures implemented by previous operator Canadian Silver Hunter were adequate for the exploration conducted during 2012–2014. <p><u>Pre-2010 – Various previous operators</u></p> <ul style="list-style-type: none"> All results are reported from historic assessment reports and government geological reports. No additional verification work has been reported or completed. No access to original sample material is possible given the historic and third-party nature of the data.
<p><i>Location of data points</i></p>	<p><u>2012 -2014 - Previous operator - Canadian Silver Hunter</u></p> <ul style="list-style-type: none"> Canadian Silver Hunter surface stripping and channel sampling and diamond drill collar locations were located using a hand-held GPS with a reported horizontal accuracy of approximately 3 metres. Downhole directional surveys were completed at approximately 30 metre intervals using a “Reflex” instrument. The channel samples and diamond drill holes are exploratory in nature and therefore do not rely on absolute locational accuracy. CSA Global therefore considers these methods adequate and fit for purpose. Data has not been utilized for Mineral Resource estimation. Location coordinates are referenced to the UTM coordinate system (Zone 17 T) - NAD83 datum. The source of topographic control utilized by Canadian Silver Hunter Key is a Gemcom elevation model. Survey points to establish the Gemcom model were collected with a handheld Trimble GPS. The elevation data was corrected by post processing resulting in an accuracy of approximately 1 metre. Given the relatively low topographic relief of property area and exploratory nature of the drilling CSA Global considers this method adequate for purpose. <p><u>Pre-2010 – Various previous operators</u></p> <ul style="list-style-type: none"> All data is derived from historic assessment reports and government geological reports in the public domain. No specific information is provided in respect to methods of location. It is assumed that historic drilling and sampling was carried out using techniques such as chain and compass relative to claim locations and/or local exploration or mine grids; more recent drilling and sampling may be located using handheld GPS. While such methods have intrinsic error in the order of $\pm 20\text{m}$ or more, the early stage nature of the exploration programs completed do not rely on absolute locational accuracy. CSA Global therefore considers these methods adequate and fit for purpose. Data has not been utilized for Mineral Resource estimation. Historic underground mines such as the Keeley Frontier would have been surveyed by traditional industry standard survey methods appropriate for the time.
<p><i>Data spacing and distribution</i></p>	<p><u>2012-2014 - Previous operator - Canadian Silver Hunter</u></p> <ul style="list-style-type: none"> Channel sample and drill core sample lengths varied from 0.15 m to 1.5 m. Channel sampling and diamond drilling was widely spaced and exploratory in nature. The spacing and distribution of the samples was not sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications. Sample compositing if applied was length weighted. <p><u>Pre-2010 – Various previous operators</u></p> <p>The majority of reported historic drilling was widely spaced and exploratory in nature. Data spacing and distribution is therefore adequate and fit for such purpose. Historic sample intervals were considered industry standard at the time and are considered appropriate for this stage of drilling and style of mineralisation. No known historic Mineral Resource and Ore Reserve estimation procedure(s) and</p>

Criteria	Commentary
	<p>classifications have been applied to the historic drill results.</p> <p><u>2012-2014 – Previous operator - Canadian Silver Hunter</u></p> <ul style="list-style-type: none"> The focus of Canadian Silver Hunter's 2012 drill program was to confirm and identify structures for more detailed exploration, which the author deems reasonable. Drill holes were inclined with azimuth oriented to intersect perpendicular to the projected strike of targeted structures. Given the wide spaced nature of the drill holes and lack of oriented core, orientations of intersected structures relative to the drill hole are uncertain. The author is therefore unable to comment whether the relationship between the drilling orientation and the orientation of key mineralized structures may have introduced a sampling bias. <p><u>Pre-2010 – Various previous operators</u></p> <ul style="list-style-type: none"> No specific information is provided with respect to the orientation of historic sampling relative to possible structures hosting mineralization. As such no comment on potential sample bias can be made. Most historic diamond drill holes have been inclined holes. Given the early stage of exploration and the general lack of information in respect to structural orientations the author is unable to comment whether the relationship between the drilling orientation and the orientation of key mineralized structures may have introduced a sampling bias. The dominant focus of historic early stage drilling appears to have been to identify structures for more detailed exploration, which the author deems reasonable.
<i>Sample security</i>	<p><u>2012-2014 – Previous operator - Canadian Silver Hunter</u></p> <ul style="list-style-type: none"> Drill core and surface channel samples were sealed in their sample bags and stored in the company's core shack facility in North Cobalt. AGAT Laboratories Ltd. collected the samples from the core shack and delivered them to its preparation lab in Sudbury, Ontario. Pulps were then sent to AGAT facilities in Mississauga, Ontario for analysis. Archived drill core is currently stored in a locked ocean shipping container at the historic Keeley-Frontier mine site. <p><u>Pre-2010 – Various previous operators</u></p> <ul style="list-style-type: none"> All sample results are reported from historic assessment reports and government geological reports. No information has been provided in respect to sample security. As such no comment on sample security and validity of results can be made.
<i>Audits or reviews</i>	<p><u>2012-2014 Canadian Silver Hunter</u></p> <ul style="list-style-type: none"> It is CSA Global's opinion that as reported, Canadian Silver Hunter's 2012-2014 sampling techniques are generally of industry standard. CSA has not audited the data reported by Canadian Silver Hunter (2010-2014). <p><u>Pre-2010 – Various previous operators</u></p> <ul style="list-style-type: none"> All results are derived from historic assessment reports and government geological reports are as documented in the Report. As such no primary laboratory certificates could be assessed to determine absolute validity of data.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> First Cobalt's Greater Cobalt Project in eastern Ontario comprises one group of near contiguous claims in the historic Silver Centre mining camp, herein referred to as the Silver Centre Property, and one group of non-contiguous claims in the historic Cobalt mining camp herein referred to as the Cobalt Area Properties, approximately 400 kilometres (km) north of Toronto. The Cobalt Area Property claims lie within an 8 km radius of the community of Cobalt and the Silver Centre Property is approximately 25 km southeast of the community of Cobalt, west of Lake Temiskaming and the Ottawa River which form the Ontario-Quebec provincial border in this area. As of the Effective Date of the Report (June 15, 2017), the Project covers a total area of approximately 4,301 hectares (ha). The Silver Centre Property, situated in South Lorrain Township, comprises: <ul style="list-style-type: none"> The 619.15 ha Keeley-Frontier claim group comprised of 13 contiguous patented (fee simple) mining claims with surface and mining rights totalling approximately 174.29 ha and five contiguous mining leases with mining rights only totalling approximately 444.86 ha. The CSH claim group comprised of seven contiguous staked mining claims totalling 34 claim units and covering approximately 544 ha. The CIC claim group comprised of 17 contiguous and non-contiguous staked mining claims totalling 136 claim units and covering approximately 2,176 ha. The BMC South claim group comprised of eight contiguous staked mining claims totalling eight claim units and covering approximately 128 ha. First Cobalt holds an option to earn a 100% interest in the five mining leases, 13 patented mineral claims of the Keeley-Frontier claim group and seven unpatented mineral claims of the CSH claim group. Upon earning a 100% interest, Canadian Silver Hunter shall be granted a 2% net smelter return royalty, subject to First Cobalt having the right to purchase 1% for \$1 million over the ensuing 10 years. The Company may elect to accelerate the earn-in. First Cobalt holds a 100% interest in the 17 staked mining claims of the CIC claim group by way of its acquisition of Cobalt Industries of Canada Inc. (Cobalt Industries) announced on 23 January 2017. As announced on 7 June 2017, First Cobalt holds a 100% interest in the eight staked mining claims of the BMC South claim group which were acquired from Brixton Metals Corp. The Cobalt Area Properties include: <ul style="list-style-type: none"> The BMC North claim group comprised of 14 unpatented (staked) mining claims totalling 151 units and 2,416 ha in the townships of Coleman, Gillies Limit and Lorrain. The Yukon Refinery claim group comprised of approximately 16.268 ha (40.2 acres) of surface rights only patents with a tailings management facility and a cobalt-silver extraction refinery. As announced on 7 June 2017, First Cobalt holds a 100% interest in the 14 staked mining claims which were acquired from Brixton Metals Corp. First Cobalt announced on 1 June 2017 that it had entered into an option agreement with Cobalt One Limited (Cobalt One) to earn into a 50-50 joint venture on the Yukon cobalt extraction refinery and 16.268 ha (40.2 acres) of permitted property in Cobalt, Ontario. It is anticipated that this joint venture agreement will be superseded by the transaction announced on 26 June 2017 whereby First Cobalt would acquire Cobalt One. To CSA Global's knowledge, the patents, leases and claims are currently in good standing and there are no current or pending challenges to ownership of the

Criteria	Commentary														
	<p>Properties.</p> <ul style="list-style-type: none">• See section 4 and of the Report for details.														
Exploration done by other parties	<ul style="list-style-type: none">• The exploration and prior ownership histories of the Properties are presented in sections 6.2 to 6.5 of the Report.• Information on the Project's early exploration and ownership history (pre-1950) is limited and uncomplete, particularly with respect to the MNDM online assessment files. Some additional hardcopy information on early exploration in the Project area is available in historic Resident Geologist notes and donated files archived at the District Geologist's office in Kirkland Lake.														
Geology	<ul style="list-style-type: none">• Archean Keewatin rocks are the oldest rocks in the Cobalt Camp and form the southernmost portion of the Western Abitibi subprovince of the Superior Province. These rocks include predominantly intermediate to mafic metavolcanic flows with intercalated metasedimentary rocks. The Archean rocks were folded and intruded by mafic to ultramafic dikes and granite stocks and batholiths. The eroded Archean surface is unconformably overlain by relatively flat lying Paleoproterozoic sedimentary rocks of the Huronian Supergroup which forms the mildly deformed Cobalt Embayment of the Southern Province. At the northeast edge of the Cobalt Embayment in the Cobalt area, the Huronian Supergroup rocks comprise only the Cobalt Group (Gowganda and Lorrain formations) and are commonly found filling interpreted paleo-valleys or troughs in the Archean basement. Early Proterozoic-age Nipissing Diabase intrudes both the Archean basement and the Huronian sediments. The Nipissing Diabase are the most abundant and widespread igneous rocks intruding the Huronian Supergroup sediments and occur as dykes, and sills up to several hundred metres thick. In the Cobalt area, the Nipissing diabase is interpreted as a thick undulating sheet intruding the Cobalt Group sediments at or immediately above the Archean unconformity.• The Cobalt Camp is the type locality of arsenide silver-cobalt vein deposits which are the exploration target at the Cobalt Project. Arsenide silver-cobalt vein deposits are localized in areas affected by basinal subsidence and rifting and are spatially related to regional fault systems and closely associated with intrusions of mafic rocks. The arsenide silver-cobalt vein deposits in the Cobalt Camp are associated with Aphebian conglomerate, quartzite, and greywacke rocks of the Cobalt Group (Coleman Member of the Gowganda Formation), as well as with major sill-like bodies of Nipissing diabase and with Archean mafic and intermediate lavas and intercalated pyroclastic and sedimentary rocks. Distribution of the silver-cobalt veins in the Cobalt Camp is controlled by the contact between the Nipissing diabase sheets and the rocks of the Cobalt Group (Gowganda Formation) and to a lesser extent the Archean metavolcanic and metasedimentary rocks. The veins occur in the diabase and in the Aphebian and Archean rocks within about 200 m of their contact with the diabase.• The Properties are underlain by the rock types associated with the historic arsenide Ag-Co vein deposits elsewhere in the Camp, namely Archean (Keewatin) metavolcanics and metasediments, Proterozoic (Huronian) Cobalt Group sediments and Nipissing Diabase. Minor occurrences of quartz-carbonate veining with sporadic arsenide Ag-Co mineralization are present within the Properties. Within the Project areas, the historic Keeley-Frontier Mine had significant silver and cobalt production; the historic Bellellen mine also reported minor production of Ag and Co.• See Sections 6.5, 7 and 8 of the Report for details.														
Drill hole Information	<p><u>2012 – Previous operator - Canadian Silver Hunter</u></p> <table><tr><th>Drillhole</th><th>Easting UTM Z17 NAD83</th><th>Northing UTM Z17 NAD83</th><th>Collar elevation (m Est)</th><th>Collar azimuth (True)</th><th>Collar dip</th><th>Length (m)</th></tr><tr><td>CSH12-01</td><td>612607.99</td><td>5228414.47</td><td>307.52</td><td>220</td><td>-60.2</td><td>317</td></tr></table>	Drillhole	Easting UTM Z17 NAD83	Northing UTM Z17 NAD83	Collar elevation (m Est)	Collar azimuth (True)	Collar dip	Length (m)	CSH12-01	612607.99	5228414.47	307.52	220	-60.2	317
Drillhole	Easting UTM Z17 NAD83	Northing UTM Z17 NAD83	Collar elevation (m Est)	Collar azimuth (True)	Collar dip	Length (m)									
CSH12-01	612607.99	5228414.47	307.52	220	-60.2	317									

Criteria	Commentary																																										
	<table><tr><td>CSH12-02</td><td>612774.52</td><td>5228311.27</td><td>304.46</td><td>254</td><td>-47.6</td><td>362</td></tr><tr><td>CSH12-03</td><td>612887.25</td><td>5227767.46</td><td>320.04</td><td>296</td><td>-62</td><td>404</td></tr><tr><td>CSH12-04</td><td>612775.14</td><td>5228061.88</td><td>309.46</td><td>237</td><td>-58</td><td>338</td></tr><tr><td>CSH12-05</td><td>612838.99</td><td>5227913.88</td><td>309.48</td><td>258</td><td>-58</td><td>362</td></tr><tr><td>CSH12-06</td><td>612838.99</td><td>5227913.88</td><td>309.48</td><td>253</td><td>-60</td><td>275</td></tr><tr><td>TOTALS</td><td></td><td></td><td></td><td></td><td></td><td>2,058</td></tr></table> <p><u>Pre-2010 – Various previous operators</u></p> <ul style="list-style-type: none">• The reported pre-2010 historic drilling conducted by numerous previous operators was widely spaced and exploratory in nature. Any drill results reported in the Report's history section are for informational purposes with respect to mineralization types and styles found in the Project area, if any such mineralization was intersected.• The dominant focus of historic early stage drilling appears to have been to identify structures for more detailed exploration, which the author deems reasonable. This is not considered material to CSA Global's evaluation of the project, which is on a qualitative basis.• The author deems the pre-2010 historic drill hole coordinate and survey data not Material for the above reasons and its exclusion does not detract from the understanding of the Report.• See section 6 of the Report.	CSH12-02	612774.52	5228311.27	304.46	254	-47.6	362	CSH12-03	612887.25	5227767.46	320.04	296	-62	404	CSH12-04	612775.14	5228061.88	309.46	237	-58	338	CSH12-05	612838.99	5227913.88	309.48	258	-58	362	CSH12-06	612838.99	5227913.88	309.48	253	-60	275	TOTALS						2,058
CSH12-02	612774.52	5228311.27	304.46	254	-47.6	362																																					
CSH12-03	612887.25	5227767.46	320.04	296	-62	404																																					
CSH12-04	612775.14	5228061.88	309.46	237	-58	338																																					
CSH12-05	612838.99	5227913.88	309.48	258	-58	362																																					
CSH12-06	612838.99	5227913.88	309.48	253	-60	275																																					
TOTALS						2,058																																					
<i>Data aggregation methods</i>	<p><u>2012 – Previous operator - Canadian Silver Hunter</u></p> <ul style="list-style-type: none">• Sample compositing, if applied, was length weighted.• No cutting factors have been applied to reported grades of individual samples and composited sample intervals <p><u>Pre-2010 – Various previous operators</u></p> <ul style="list-style-type: none">• Assessment reports of historic diamond drill hole and surface sampling referred to within the Report do not provide information on any data aggregation methods that may have been utilized. As such, the author is unable to validate nor comment on any of the historic data in this context.																																										
<i>Relationship between mineralisation widths and intercept lengths</i>	<p><u>2012 - Previous operator - Canadian Silver Hunter</u></p> <ul style="list-style-type: none">• Drill holes were inclined with azimuth oriented to intersect perpendicular to the projected strike of targeted structures. Given the wide spaced nature of the drill holes and lack of oriented core, the author is unable to confirm the geometry of mineralization and intersected structures with respect to reported drill holes. Unless otherwise noted, assay interval widths and thicknesses should be considered apparent widths (e.g. downhole lengths); true widths are generally uncertain or unknown. This is not considered material to CSA Global's evaluation of the project, which is on a qualitative basis. <p><u>Pre-2010 – Various previous operators</u></p> <ul style="list-style-type: none">• The author is unable to confirm the geometry of mineralization with respect drill holes and surface samples reported in historic assessment reports. Unless otherwise noted, historic assay interval widths and thicknesses should be considered apparent widths (e.g. downhole lengths); true widths are generally uncertain or unknown. This is not considered material to CSA Global's evaluation of the project, which is on a qualitative basis.																																										
<i>Diagrams</i>	<ul style="list-style-type: none">• No significant discovery is reported.• See sections 6, 7 and 8 of the Report for various diagrams																																										
<i>Balanced</i>	<p><u>2012 – Previous operator - Canadian Silver Hunter</u></p>																																										

Criteria	Commentary																																																																																																									
reporting	<div>2012 Canadian Silver Hunter diamond drill program assay results</div> <table><tr><th>Drillhole</th><th>From (m)</th><th>To (m)</th><th>Length (m)*</th><th>Silver (g/t)**</th><th>Cobalt (ppm)**</th><th>Comment</th></tr><tr><td>CSH12-01</td><td>105.8</td><td>106.1</td><td>0.3</td><td>6.5</td><td></td><td>Anomalous As, Cu, Bi, Co; Beaver Lake Fault?</td></tr><tr><td>CSH12-02</td><td>285.75</td><td>286.05</td><td>0.3</td><td>3.3</td><td></td><td>Anomalous Cu, Bi, Co, Pb; Beaver Lake Fault?</td></tr><tr><td>CSH12-03</td><td>111</td><td>122.3</td><td>11.3</td><td>72.5</td><td></td><td>New Zone</td></tr><tr><td>including</td><td>117.9</td><td>122.3</td><td>4.4</td><td>168.2</td><td></td><td>New Zone</td></tr><tr><td>including</td><td>121.6</td><td>122.3</td><td>0.7</td><td>923.9</td><td></td><td>New Zone</td></tr><tr><td>CSH12-04</td><td>254</td><td>258.3</td><td>4.3</td><td>25.9</td><td></td><td>Beaver Lake Fault – North Drift Extension</td></tr><tr><td>CSH12-05</td><td>248</td><td>249.9</td><td>1.5</td><td>405.64</td><td></td><td>Beaver Lake Fault</td></tr><tr><td>including</td><td>248</td><td>248.4</td><td>0.4</td><td>65.9</td><td></td><td></td></tr><tr><td></td><td>248.4</td><td>248.8</td><td>0.4</td><td>226.0</td><td>17.5</td><td></td></tr><tr><td>and</td><td>248.8</td><td>249.9</td><td>1.1</td><td>447.0</td><td>69.0</td><td>Sample interval includes 0.9 m of core loss (drift opening?)</td></tr><tr><td></td><td>249.9</td><td>250.3</td><td>0.4</td><td>12.7</td><td></td><td></td></tr><tr><td>CSH12-06</td><td>253.85</td><td>254.8</td><td>0.95</td><td>58.2</td><td></td><td>Beaver Lake Fault</td></tr><tr><td>including</td><td>253.85</td><td>254.50</td><td>0.65</td><td>86.9</td><td>28.2</td><td></td></tr><tr><td>and</td><td>254.50</td><td>254.80</td><td>0.30</td><td>32.8</td><td>1080</td><td></td></tr></table> <div>* Intervals reported are core lengths; true widths of mineralisation are not known. ** Assay results are length weighted</div> <div>Pre-2010 – Various previous operators</div> <ul style="list-style-type: none">See section 6 of the Report.	Drillhole	From (m)	To (m)	Length (m)*	Silver (g/t)**	Cobalt (ppm)**	Comment	CSH12-01	105.8	106.1	0.3	6.5		Anomalous As, Cu, Bi, Co; Beaver Lake Fault?	CSH12-02	285.75	286.05	0.3	3.3		Anomalous Cu, Bi, Co, Pb; Beaver Lake Fault?	CSH12-03	111	122.3	11.3	72.5		New Zone	including	117.9	122.3	4.4	168.2		New Zone	including	121.6	122.3	0.7	923.9		New Zone	CSH12-04	254	258.3	4.3	25.9		Beaver Lake Fault – North Drift Extension	CSH12-05	248	249.9	1.5	405.64		Beaver Lake Fault	including	248	248.4	0.4	65.9				248.4	248.8	0.4	226.0	17.5		and	248.8	249.9	1.1	447.0	69.0	Sample interval includes 0.9 m of core loss (drift opening?)		249.9	250.3	0.4	12.7			CSH12-06	253.85	254.8	0.95	58.2		Beaver Lake Fault	including	253.85	254.50	0.65	86.9	28.2		and	254.50	254.80	0.30	32.8	1080	
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Further work	<ul style="list-style-type: none">See section 18 of the Report.																																																																																																									

Yours sincerely

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Ian Trinder
 Principal Geologist

ANNEX 1

**“Technical Report on the Greater Cobalt Project, Larder Lake Mining Division, Ontario”
for First Cobalt Corp. and dated 31 July 2017**



CSA Global
Mining Industry Consultants



NI43 101 Technical Report

Technical Report on the Greater Cobalt Project, Larder Lake Mining Division, Ontario

CSA Global Report Nº R258.2017
31 July 2017

www.csaglobal.com

Report prepared for

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Project Name/Job Code	FCCNIR01
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Contact Title	Vice President Business Development
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Author and Reviewer Signatures

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Date and Signature Page

This Report titled “Technical Report on the Greater Cobalt Project, Larder Lake Mining Division, Ontario” for First Cobalt Corp. and dated 31 July 2017 was prepared and signed by the following author:

[“SIGNED AND SEALED”]

{*Ian Trinder*}

Dated at Toronto, ON

31 July 2017

Report Effective Date:

15 June 2017

Ian Trinder, M.Sc., P.Geo. (ON, MB)

Principal Geologist

CSA Global Geosciences Canada Ltd

CERTIFICATE OF QUALIFICATION

CERTIFICATE OF QUALIFICATION OF AUTHOR – Ian Trinder, M.Sc., P.Ge.

I, Ian D. Trinder, M.Sc., P.Ge. (ON, MAN), do hereby certify that:

1. I reside at 4185 Taffey Crescent, Mississauga, Ontario, L5L 2A6.
2. I am employed as a Principal Geologist by CSA Global Geosciences Canada Ltd located at 365 Bay St., Suite 501, Toronto, Ontario, Canada. M5H 2V1.
3. I graduated with a degree in Bachelor of Science Honours, Geology, from the University of Manitoba in 1983 and a Master of Science, Geology, from the University of Western Ontario in 1989.
4. I am a Professional Geoscientist (P.Ge.) registered with the Association of Professional Engineers and Geoscientists of Manitoba (APEGM, No. 22924) and with the Association of Professional Geoscientists of Ontario (APGO, No. 452). I am a member of the Society of Economic Geologists and of the Prospectors and Developers Association of Canada.
5. I have approximately 30 years of direct experience with precious and base metals mineral exploration in Canada, USA and the Philippines including project evaluation and management. Additional experience includes the completion of various National Policy 2A and NI 43-101 technical reports for gold and base metal projects.
6. I have read the definition of “qualified person” set out in National Instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purposes of NI 43-101.
7. I have visited the Cobalt Project.
8. I am author of the technical report titled: “Technical Report on the Greater Cobalt Project, Larder Lake Mining Division, Ontario” for First Cobalt Corp. dated 31 July 2017 (the “Report”). I am responsible for all sections of the Report.
9. I have no prior involvement with the Issuer, Vendor or the Property.
10. As of the effective date of the technical report (15 June 2017), to the best of my knowledge, information, and belief, the technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.
11. I am independent of the Issuer, the Vendor and the Property applying all the tests in section 1.5 of National Instrument 43-101.
12. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
13. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

DATED this 31st day of July 2017

[“SIGNED AND SEALED”]

{*Ian Trinder*}

Ian D. Trinder, M.Sc., P. Geo.

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Report issued by	I
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Appendix

Appendix 1:	Establishing Mineral Rights in Ontario
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1 Summary

This technical report (the “Report”) was prepared by CSA Global Canada Geosciences Ltd (CSA Global) at the request of Mr Peter Campbell, Vice President Business Development of First Cobalt Corp. (“First Cobalt” or “the Issuer” or “the Company”) and focuses on the exploration potential of the Issuer’s Greater Cobalt Project (“Project”) in Ontario. The Report is specific to the standards dictated by National Instrument 43-101 (“NI 43-101”), companion policy NI43-101CP and Form 43-101F1 (Standards of Disclosure for Mineral Projects). This Report is dated 31 July 2017 with an Effective Date of 15 June 2017.

First Cobalt’s Greater Cobalt Project in eastern Ontario comprises one group of near contiguous claims in the historic Silver Centre mining camp, herein referred to as the Silver Centre Property, and one group of non-contiguous claims in the historic Cobalt mining camp herein referred to as the Cobalt Area Properties, approximately 400 kilometres (km) north of Toronto. The Cobalt Area Property claims lie within an 8 km radius of the community of Cobalt and the Silver Centre Property is approximately 25 km southeast of the community of Cobalt, west of Lake Temiskaming and the Ottawa River which form the Ontario-Quebec provincial border in this area. As of the Effective Date of this Report, the Project covers a total area of approximately 4,301 hectares (ha).

The Silver Centre Property, situated in South Lorrain Township, comprises:

1. The 619.15 ha Keeley-Frontier claim group comprised of 13 contiguous patented (fee simple) mining claims with surface and mining rights totalling approximately 174.29 ha and five contiguous mining leases with mining rights only totalling approximately 444.86 ha.
2. The CSH claim group comprised of seven contiguous staked mining claims totalling 34 claim units and covering approximately 544 ha.
3. The CIC claim group comprised of 17 contiguous and non-contiguous staked mining claims totalling 136 claim units and covering approximately 2,176 ha.
4. The BMC South claim group comprised of eight contiguous staked mining claims totalling eight claim units and covering approximately 128 ha.

First Cobalt holds an option to earn a 100% interest in the five mining leases, 13 patented mineral claims and seven unpatented mineral claims of the Keeley-Frontier claim group. Upon earning a 100% interest, Canadian Silver Hunter shall be granted a 2% net smelter return royalty, subject to First Cobalt having the right to purchase 1% for \$1 million over the ensuing 10 years. The Company may elect to accelerate the earn-in.

First Cobalt holds a 100% interest in the 17 staked mining claims of the CIC claim group by way of its acquisition of Cobalt Industries of Canada Inc. (Cobalt Industries) announced on 23 January 2017.

As announced on 7 June 2017, First Cobalt holds a 100% interest in the eight staked mining claims of the BMC South claim group which were acquired from Brixton Metals Corp.

The Cobalt Area Properties include:

1. The BMC North claim group comprised of 14 unpatented (staked) mining claims totalling 151 units and 2,416 ha in the townships of Coleman, Gillies Limit and Lorrain.
2. The Yukon Refinery claim group comprised of approximately 16.268 ha (40.2 acres) of surface rights only patents with a tailings management facility and a cobalt-silver extraction refinery.



As announced on 7 June 2017, First Cobalt holds a 100% interest in the 14 staked mining claims which were acquired from Brixton Metals Corp.

First Cobalt announced on 1 June 2017 that it had entered into an option agreement with Cobalt One Limited (Cobalt One) to earn into a 50-50 joint venture on the Yukon cobalt extraction refinery and 16.268 ha (40.2 acres) of permitted property in Cobalt, Ontario. It is anticipated that this joint venture agreement will be superseded by the transaction announced on 26 June 2017 whereby First Cobalt would acquire Cobalt One.

To CSA Global's knowledge, the patents, leases and claims are currently in good standing and there are no current or pending challenges to ownership of the Properties.

As of the Effective Date, First Cobalt does not currently hold any Exploration Plans or Permits for exploration work proposed on mining claims and mining leases in this Report. The Keeley-Frontier group patented claims do not require an Exploration Plan or Permit. First Cobalt warrants that they will acquire any and all government permits required to execute the proposed early exploration activities where required on the Project properties. First Cobalt warrants that it will consult with the appropriate First Nation and Metis communities as required per the Ontario Mining Act.

Environmental, permitting, legal, title, taxation, socio-economic, marketing, and political or other relevant issues could potentially materially affect access, title or the right or ability to perform the work recommended in this report on the Property. However, at the time of this report, CSA Global is unaware of any such potential issues affecting the Properties.

The Greater Cobalt Project is located in the historic Silver Centre and Cobalt mining camps. The various Properties are generally accessible via all weather roads and seasonal all-terrain vehicle (ATV) trails.

Most services and supplies required for a mineral exploration program are available in the City of Temiskaming Shores, approximately 25 km north of the centre of the Project area. Given the mining history of the Cobalt Camp and the proximity of mining communities such as Kirkland Lake and Sudbury and service centres such as North Bay, exploration and mining personnel are readily available in the region. The city of Greater Sudbury is located approximately 200 km by road southwest of the Properties at the intersection of the Trans-Canada Highway, Highway 69S and Highway 144N.

Other than several powerlines, all-weather roads and ATV trails, no infrastructure is present within the Properties. The centre of the Project area lies approximately 15 km east of Provincial Highway 11 and the Ontario Northland rail line. Hydro One 115 kV and 230 kV transmission lines cross or are near the Project property areas. Abundant water resources are present in the lakes, rivers, creeks, and beaver ponds on the Properties.

As of the Effective Date, it appears that First Cobalt both holds and has the option acquire sufficient mining claims necessary for proposed exploration activities and potential future mining operations (including potential tailings storage areas, potential waste disposal areas, and potential processing plant sites) should a mineable mineral deposit be discovered.

The climate in the Project area is warm summer humid continental with warm and often hot summers and long, cold winters. Season-specific mineral exploration may be conducted year-round. Swampy areas and lakes/ponds may be best accessed for drilling and ground geophysical surveys during the winter months when the ground and water surfaces are frozen. Mine operations in the region can operate year-round with supporting infrastructure.

The Project area is characterised by rocky, rolling bedrock hills with locally steep ledges and cliffs, separated by valleys filled with clay, glacial material, swamps and streams. Total relief within the Project area is approximately 200 m with topography varying from 250 m to 380 m above sea level (ASL) in the Silver Centre Property, and 180–355 m ASL in the Cobalt Area Property claims. Local relief is commonly up to 30 m, although some ridges are up to 60 m or more above surrounding lowlands.

Vegetation is typical boreal forest with mixed second growth forest of mixed coniferous and deciduous trees, including poplars, birch, maple, pine, spruce, alders, and willows. Swampy low-lying areas contain abundant tag alders.

The initial discovery of silver in the region was made west of Lake Temiskaming in 1903 during the construction of the Temiskaming and Northern Ontario Railway. This began a rich mining history in the area. The location along the railway was named Cobalt after one of the elements found in the arsenide minerals within the veins. The first mines commenced production as early as 1904 and mining was, more or less, continuous until 1989 with production peaking in 1911 (Petruk *et al.*, 1971). In addition to silver, cobalt, nickel and copper were recovered from the ore. Mineralisation was not just limited to the area immediately around Cobalt, but was recovered from areas with similar geology within the Cobalt embayment of the Southern Province, from Gowganda in the west to Silver Centre in the southeast.

Information on the Project's early exploration and ownership history (pre-1950) is limited and incomplete, particularly with respect to the Ministry of Northern Development and Mines (MNDM) online assessment files. Some additional hardcopy information on early exploration in the Project area is available in historic Resident Geologist's notes and donated files archived at the District Geologist's office in Kirkland Lake.

Three historic mines are located within First Cobalt's Silver Centre Property. The Keeley Mine of Keeley Silver Mines Ltd produced intermittently from 1908 to 1942 with most of the production occurring between 1921 and 1931. Total reported production was 12,154,353 oz Ag (378,043 kg) and 1,617,684 lb (73,377 kg) Co. The Frontier Mine was operated by Mining Corporation of Canada Ltd from 1921 to 1943 and produced 6,695,415 oz (208,251 kg) Ag and 1,683,769 lb (763,746 kg) Co and 12,158 lb (5,515 kg) Ni. Keeley Frontier Mines Ltd/Canadian Keeley Mines Ltd operated the combined Keeley and Frontier mines during the 1963–1965 period and produced 347,645 oz (10,812 kg) Ag, 9,003 lb (4,083 kg) Co and 14,358 lb (6,512 kg) Ni. The 1963–1965 production was primarily from the Keeley Mine and included reprocessed tailings. Sergiades (1968) reported total production of 1,182,772 g (38,027 oz) Ag; 12,930 kg (28,481 lb) Co and 6,085 kg (13,404 lb) Ni from the Bellelenn Mine between 1910 and 1943 (intermittent).

The Cobalt/Silver Centre area is underlain by Precambrian rocks of the Superior and Southern provinces (Guindon *et al.*, 2016). Outliers of Paleozoic strata are exposed immediately to the north in the Haileybury area and further to the north between New Liskeard and Englehart.

Archean Keewatin rocks are the oldest rocks in the Cobalt/Silver Centre area and form the southernmost portion of the Western Abitibi sub-province of the Superior Province. These rocks include predominantly intermediate to mafic metavolcanic flows with intercalated metasedimentary rocks. The Archean rocks were folded and intruded by mafic to ultramafic dikes and granite stocks and batholiths. The eroded Archean surface is unconformably overlain by relatively flat lying Paleoproterozoic sedimentary rocks of the Huronian Supergroup which forms the mildly deformed Cobalt Embayment of the Southern Province. At the northeast edge of the Cobalt Embayment in the Cobalt area, the Huronian Supergroup rocks comprise only the Cobalt Group (Gowganda and Lorrain formations) and are commonly found filling interpreted paleo-valleys or troughs in the Archean basement. Early Proterozoic-age Nipissing Diabase intrudes both the Archean basement and the Huronian sediments. The Nipissing Diabase are the most abundant and



widespread igneous rocks intruding the Huronian Supergroup sediments and occur as dykes, and sills up to several hundred metres thick. In the Cobalt area, the Nipissing diabase is interpreted as a thick undulating sheet intruding the Cobalt Group sediments at or immediately above the Archean unconformity.

The grade of regional metamorphism in the area ranges from subgreenschist facies in the Huronian sedimentary rocks to greenschist facies in the Archean metavolcanic rocks (Born and Hitch, 1990). Contact metamorphism of sedimentary rocks of the Gowganda and Lorrain Formations occurred during the emplacement of Nipissing diabase.

The oldest rocks on the Project's Silver Centre Property are folded, faulted, and steeply dipping metamorphosed Archean (Keewatin) intermediate to mafic pillowed flows, tuffs, and agglomerates. Numerous early (Haileyburian) biotite lamprophyre and hornblende lamprophyre intrude the Archean volcanics (McIlwaine, 1970). Huronian-age Gowganda Formation, Coleman Member sediments were subsequently deposited in basins on the erosional surface of the Archean volcanics. Nipissing Diabase intrudes the Archean volcanics and the Huronian sediments and is approximately 277 m thick in the Keeley-Frontier Mine area. Numerous faults are present in the area with several periods of deformation postulated: the earliest faults are pre-ore, and most of this set strike north; there are possibly two ages of northwest-trending faults, pre- and post-olivine diabase intrusion; and finally, a minor north-easterly trending set of faults.

The native silver-cobalt arsenide veins in the Silver Centre area typically contain native silver, cobaltite, lollingite, niccolite, breithauptite, smaltite and calcite (Mayer and Pearson, 1989). Mineralogically, the veins are similar to those in the main Cobalt camp; however, their structural and stratigraphic setting is different. Whereas more than 90% of the silver produced in the main Cobalt camp came from veins in the Huronian Cobalt Group sediments adjacent to (underlying) the lower diabase sill contact, productive veins in the South Lorrain township (Silver Centre) area were predominantly in Archean metavolcanic rocks adjacent to (overlying) the upper contact of the diabase sill. Only limited production came from veins in Archean rocks below the diabase in the Keeley mine (Mayer and Pearson, 1989). No significant silver-bearing veins have yet been found in Cobalt Group sediments in the South Lorrain township area.

The Keeley and Frontier Mines were developed on the most significant and productive veins in the Silver Centre camp on the northwest flank of the South Lorrain diabase dome and comprise both north-south and east-west vein systems. The productive parts of these veins occur within about 120 m (400 ft) of the Nipissing Diabase/Keewatin contact with the richest veins being those that continued into the diabase. Historically, the most important veins on the property were the Woods and Watson which strike north-south and the No. 26, No. 20 and No. 16 veins and to a lesser extent the No. 28 vein, all of which strike approximately east-west (Mayer and Pearson, 1989). Other historic occurrences of quartz-carbonate veining with sporadic arsenide Ag-Co mineralisation are present within the Project area.

The Cobalt Camp (and the satellite Silver Centre Camp) is the type locality of arsenide silver-cobalt vein deposits which are the exploration target at the Greater Cobalt Project. At both camps the veins occur in the Nipissing diabase and in the Huronian Cobalt Group sediments and Archean metavolcanic rocks within about 200 m of their contact with the diabase.

As of the Effective Date of the Report, First Cobalt had initiated its 2017 exploration program designed to increase its understanding of the silver-cobalt potential of the Silver Centre Property. The work underway includes:

- Digital compilation of historic Keeley-Frontier mine data to generate a three-dimensional (3D) geological model



- Detailed and property-scale structural mapping of mineralised veins and host rocks
- Bore-hole geophysics and televiwer imaging of drillholes from the 2012 drilling campaign
- Systematic surface sampling at known prospects and occurrences throughout the property

Results of the program will be compiled, interpreted and reported as the work is completed.

Previous historic surface based exploration has relied largely on prospecting for mineralised fractures supported by overburden stripping and pitting programs. In addition to prospecting methods, the Issuer should consider testing and using modern geophysical and geochemical techniques to identify features controlling arsenide Ag-Co mineralisation or the arsenide Ag-Co veins themselves at the Cobalt Project.

CSA Global concludes that the Greater Cobalt Project and particularly the Silver Centre Property, has potential to host arsenide Ag-Co vein deposits and exploration is warranted. First Cobalt's 2017 exploration program is intended to provide a better understanding of the extent of cobalt mineralisation within the historic Keeley-Frontier Mine as well as explore known silver-cobalt prospects on the Silver Centre Property. These areas will be specifically targeted during this program. Historic exploration and development on the Silver Centre Property focused on the narrow high-grade silver-rich portions of the vein structures. Historic assays indicate cobalt-rich veins were encountered during mining but not often followed up or exploited, as silver was the focus. The Company intends to gain an appreciation for the cobalt zonation within the Keeley-Frontier mine area, the exploration potential of known and potentially new high-grade mineralised structures and of the potential for disseminated mineralisation, which could be amenable for bulk mining.

CSA Global considers the Greater Cobalt Project and its Silver Centre Property to be at an early stage of exploration and recommends a multifaceted exploration program including historical data compilation, prospecting, geological mapping, testing of modern geophysical and geochemical methods and conducting follow-up surveys and finally diamond drill testing of targets developed from the initial studies.

First Cobalt has scheduled a 2017 exploration program for the Silver Centre Property which is now in progress. Work is to include:

- Digital compilation of historic Keeley-Frontier mine data to generate a 3D geological model
- Detailed and property-scale structural mapping of mineralised veins and host rocks
- Bore-hole geophysics and televiwer imaging of drillholes from the 2012 drilling campaign targeting the Beaver Lake Fault west of the former mine
- Systematic surface sampling at known prospects and occurrences throughout the property
- Detailed magnetic survey of the property
- 5,000 m of diamond drilling within the footprint of the Keeley-Frontier Mine testing targets from the 3D geological model
- 2,000 m of regional exploration drilling to identify new mineralised fault systems.

First Cobalt has proposed a preliminary budget of \$1,000,000 for the 2017 work program as detailed below. CSA Global concurs with First Cobalt's program and budget.

Table 1: 2017 Silver Centre Property exploration program and budget (May 2017 to April 2018)

	Task	Budget (\$)
General	Project Geo (1/2 time May 2017 to April 2018)	\$60,000
	Data compilation – 3D model	\$15,000
	Property rehabilitation (July)	\$10,000
Field work	Structural mapping	\$40,000
	Outcrop wash and channel sampling	\$15,000
	Historic drillhole and dump sampling	\$15,000
	Prospecting	\$10,000
	Borehole geophysics and televiewer	\$25,000
Keeley-Frontier mine area drilling	Mine site drilling (5,000 m)	\$400,000
	Mineralogy (GeoMet) (Nov)	\$5,000
	Drilling geo	\$80,000
	Drilling tech	\$40,000
Regional exploration	Airborne mag geophysics	\$50,000
	Magnetic data 3D modelling	\$20,000
	Exploration drilling (2,000 m)	\$200,000
	Borehole geophysics	\$15,000
TOTAL		\$1,000,000



2 Introduction

2.1 Issuer

This technical report ("Report") was prepared by CSA Global at the request of Mr Peter Campbell, Vice President Business Development of First Cobalt, and focuses on the exploration potential of the Issuer's Greater Cobalt Project, in particular the Silver Centre Property in vicinity of Cobalt, Ontario.

First Cobalt's registered office is at Suite 488, 1090 West Georgia St., Vancouver, BC V6E 3V7 and its corporate head office is at Suite 201, 140 Yonge Street, Toronto, ON M5C 1X6. It is a TSX Venture Exchange (TSXV) listed exploration and development company currently focused on cobalt exploration in the Cobalt region of Ontario, Canada and the Central African Copperbelt in the Democratic Republic of Congo.

2.2 Terms of Reference

CSA Global was commissioned by the Issuer to prepare a technical report on its Greater Cobalt Project in Ontario, Canada. The Report is specific to the standards dictated by NI 43-101, companion policy NI43-101CP and Form 43-101F1 (Standards of Disclosure for Mineral Projects). The Report focuses on the exploration potential of the Project and is intended to enable the Issuer and potential partners to reach informed decisions with respect to the Project.

The effective date of this Report is 15 June 2017. The Report is based on information known to CSA Global at that date.

The Issuer reviewed draft copies of this Report for factual errors. Any changes made because of these reviews did not include alterations to the interpretations and conclusions made. Therefore, the statements and opinions expressed in this document are given in good faith and in the belief that such statements and opinions are not false and misleading at the date of this Report.

2.3 Sources of Information

This report has been prepared by CSA Global based on review of publicly available geological reports, maps, assessment files, mining claim information and technical papers, and company letters and memoranda made available by the Issuer, as listed in Section 19 (References) of this Report. CSA Global has taken reasonable steps to verify the information provided where possible.

CSA Global also had discussions with the management and consultants of the Issuer Dr Frank Santaguida, P.Geo. and Mr Peter Campbell, P.Eng., First Cobalt's Vice Presidents of Exploration and Business Development respectively and Mr David Jamieson, P.Geo., First Cobalt's consulting geologist.

2.4 Qualified Person Property Inspection

Mr Ian Trinder, M.Sc., P.Geo., CSA Global Principal Geologist and Qualified Person (QP), is responsible for the preparation of this report. Mr Trinder has a Master of Science degree in geology and is a registered Professional Geoscientist (P.Geo.) in good standing registered in the Provinces of Ontario and Manitoba Canada (APGO no. 0452, APEGM no. 22924). Mr Trinder has over 30 years' experience in the mining industry with a background in international precious and base metals mineral exploration including resource estimates, project evaluation and management.



The Author completed a one-day field visit at the Greater Cobalt Project on 6 June 2017. First Cobalt's Dr Frank Santaguida, Mr Peter Campbell and Mr David Jamieson accompanied and guided the Author during the field visit, providing valuable insight into the history and current status of the Silver Centre Property and the Keeley-Frontier claim group in particular.

The Author considers that the site visit is current under Section 6.2 of NI 43-101.

2.5 Units and Currency

The Metric System or SI System is the primary system of measure and length used in this Report and is generally expressed in kilometres, metres and centimetres; volume is expressed as cubic metres, mass expressed as metric tonnes, area as hectares, and zinc, copper and lead grades as percent or parts per million. The precious metal grades are generally expressed as grams/tonne but may also be in parts per billion or parts per million. Conversions from the SI or Metric System to the Imperial System are provided below and quoted where practical. Many of the geologic publications and more recent work assessment files now use the SI system but older work assessment files almost exclusively refer to the Imperial System. Metals and minerals acronyms in this report conform to mineral industry accepted usage and the reader is directed to online resources at https://en.wikipedia.org/wiki/List_of_chemical_elements and http://cms.unige.ch/sciences/terre/research/Groups/mineral_resources/opaques/ore_abbreviations.php

Other abbreviations include UTM = Universal Transverse Mercator; NAD = North American Datum; WGS = World Geodetic System.

Conversion factors utilised in this report include:

- 1 troy ounce/ton = 34.2857 grams/tonne
- 1 gram/tonne = 0.0292 troy ounces/ton
- 1 troy ounce = 31.1035 grams
- 1 gram = 0.0322 troy ounces
- 1 pound = 0.4536 kilograms
- 1 foot = 0.3048 metres
- 1 mile = 1.609 kilometres
- 1 acre = 0.4047 hectares
- 1 square mile = 2.590 square kilometres.

The term gram/tonne or g/t is expressed as "gram per tonne" where 1 gram/tonne = 1 ppm (part per million) = 1,000 ppb (part per billion). Other abbreviations include ppb = parts per billion; ppm = parts per million; oz/t = ounce per short ton; Moz = million ounces; Mt = million tonne; t = tonne (1,000 kilograms); SG = specific gravity; lb/t = pound/ton; and, st = short ton (2,000 pounds).

Unless otherwise mentioned, all UTM coordinates in this Report are provided in the datum of Canada, NAD83 Zone 17 T.

All currency in this report in Canadian dollars (C\$) unless otherwise noted. As of the effective date of this report, the Bank of Canada exchange rate between the US and Canadian Dollars was approximately US\$1.00 = C\$1.33.



3 Reliance on Other Experts

CSA Global has relied upon the Ontario MNDM for online information on mining claim location and status and patented claim location (Section 4). The MNDM disclaims any guarantee or warranty that their information is accurate, complete or reliable. CSA Global has relied upon the Issuer, its management and legal counsel for information related to underlying contracts and agreements pertaining to the acquisition of the mining claims, mining leases and patented claims and their status (Section 4). CSA Global has not independently verified ownership or mineral title beyond information that is publicly available or been provided by the Issuer. The Property description presented in this report is not intended to represent a legal, or any other opinion as to title.

4 Property Description and Location

4.1 Project Location

First Cobalt's Greater Cobalt Project in eastern Ontario comprises one group of near contiguous claims in the historic Silver Centre mining camp, herein referred to as the Silver Centre Property, and one group of non-contiguous claims in the historic Cobalt mining camp herein referred to as the Cobalt Area Properties, approximately 400 km north of Toronto. The Cobalt Area Property claims lie within an 8 km radius of the community of Cobalt and the Silver Centre Property is approximately 25 km southeast of the community of Cobalt, west of Lake Temiskaming and the Ottawa River which form the Ontario-Quebec provincial border in this area (Figure 1).

The individual properties are approximately centred at the coordinates listed in Table 2.

Table 2: Approximate centre points of the Greater Cobalt Project properties (Zone 17T, NAD83)

Property	UTM east	UTM north	Latitude	Longitude
Cobalt Area	599,400	5,249,500	47°23'30" North	79°41'00" West
Silver Centre	611,875	5,228,140	47°11'50" North	79°31'23" West

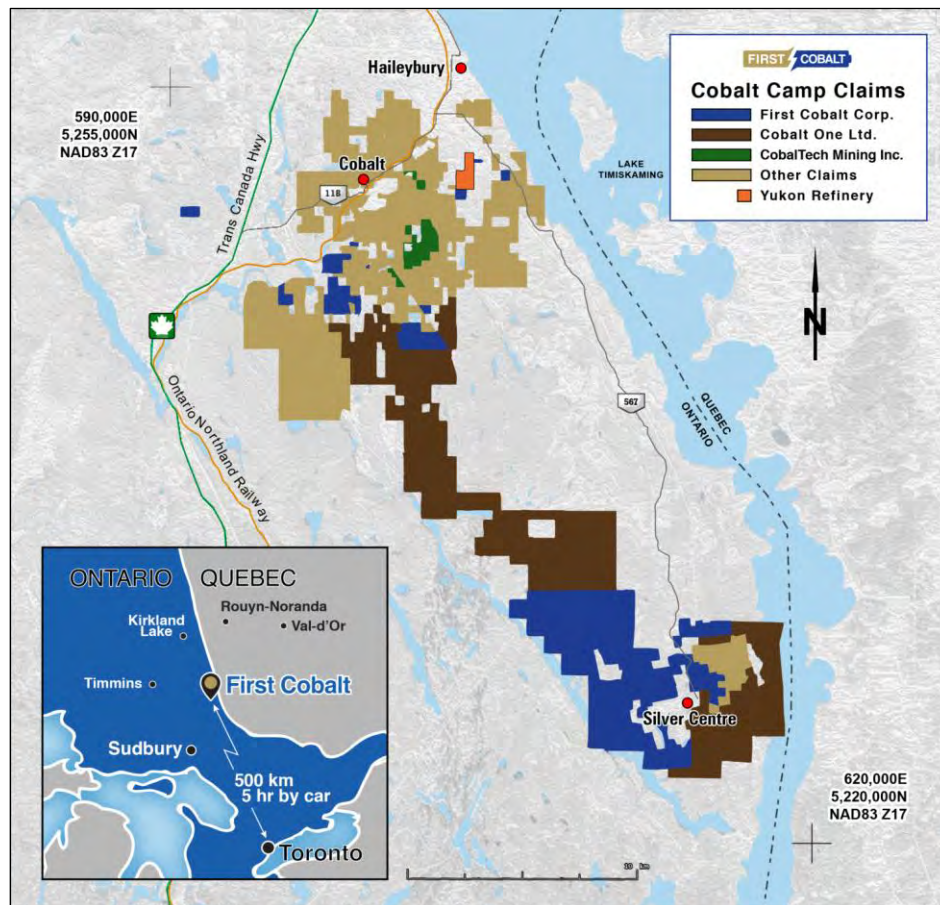


Figure 1: Greater Cobalt Project location



4.2 Project Description and Title

As of the Effective Date of this Report, the Project comprises 46 unpatented claims (229 units totalling approximately 3,664 ha), five leases (approximately 444.862 ha) and 16 patent claims (approximately 191.9 ha). Claim descriptions are summarised in Table 3, Table 4 and Table 5 as property group and type of claim.

The reader is referred to [Appendix 1](#) for a description of Ontario mineral tenure.

Table 3: Description of Crown Grant patented claims of the Greater Cobalt Project

Property	Claim group	Current claim no.	Old claim no.	Parcel description	PIN	Township/ area	Area (ha)	Mining land tax (\$)	Provincial tax (\$)	Rights	Owner	First Cobalt interest
Silver Centre	Keeley-Frontier	T9299	HR17	14082SST	61391-0067	South Lorrain	15.58	62.32	101.00	M+SR	Canadian Silver Hunter	Option to earn 100%
		T9771	HS 39	8342NND	61391-0084	South Lorrain	17.705	70.82	72.00	M+SR	Canadian Silver Hunter	Option to earn 100%
		T10155	HR 16 N pt	4851NND	61391-0037	South Lorrain	7.689	30.76	31.00*	M+SR	Canadian Silver Hunter	Option to earn 100%
			HR 16 S pt	7361NND	61391-0036	South Lorrain	7.689	30.76	31.00	M+SR	Canadian Silver Hunter	Option to earn 100%
		T10285	HR 19	4815NND	61391-0039	South Lorrain	17.705	70.82	72.00	M+SR	Canadian Silver Hunter	Option to earn 100%
		T10286	HR 21	4852NND	61391-0041	South Lorrain	18.009	72.04	74.04	M+SR	Canadian Silver Hunter	Option to earn 100%
		T10287	HR 22	4929NND	61391-0128	South Lorrain	12.788	51.15	73.00	M+SR	Canadian Silver Hunter	Option to earn 100%
		T10288	RL 455	14081SST	61391-0127	South Lorrain	14.771	59.08	74.61	M+SR	Canadian Silver Hunter	Option to earn 100%
		T10289	RL 456	14081SST	61391-0127	South Lorrain	16.187	64.75		M+SR	Canadian Silver Hunter	Option to earn 100%
		T10359	HR 25	5305NND	61391-0038	South Lorrain	8.903	35.61	73.00	M+SR	Canadian Silver Hunter	Option to earn 100%
		10365	HR20	4911NND	61391-0081	South Lorrain	1.35	31.68*	72.54	M+SR	Canadian Silver Hunter	Option to earn 100%
		T19308	HR 68	2730SST	61391-0040	South Lorrain	1.174	4.7	73.00	M+SR	Canadian Silver Hunter	Option to earn 100%
		T32960	-	13533SST	61391-0066	South Lorrain	16.697	66.79	74.00	M+SR	Canadian Silver Hunter	Option to earn 100%
		T46400	-	14999SST	61391-0035	South Lorrain	19.393	77.57	74.00	M+SR	Canadian Silver Hunter	Option to earn 100%
		13		14	14		175.64	728.85*	895.19*			
Cobalt Area	Yukon Refinery Cobalt One JV option	T174	-	8284 SEC SST	61358-0228	Bucke	n/a	n/a	n/a	SRO	36569 Yukon Inc.	Option to earn 50%
		T11517	-	22822 SEC SST	61358-0229	Bucke	n/a	n/a	n/a	SRO	36569 Yukon Inc.	Option to earn 50%
		-	-	24578 SEC SST	61390-0213	Lorrain	n/a	n/a	n/a	SRO	36569 Yukon Inc.	Option to earn 50%
		3					16.268*	n/a**	n/a**			

* Approximate value; ** The refinery has been in receivership for a number years and taxes were not being paid. Under the purchase plan, all back taxes will be paid with proceeds of the sale. Future annual tax amounts are unknown at this time.

Table 4: Description of 21-year mineral leases of the Greater Cobalt Project

Property	Group	Lease	Parcel	PIN	Lease name	Township	Ha	Start date	Expiry date	Annual property rent	Rights	Owner	First Cobalt interest	Description
Silver Centre	Keeley-Frontier	108217	4621LT	61391-0217 (LT)	T43338	South Lorrain	18.288	9/1/2017	8/31/2028	\$55.00	MRO	Canadian Silver Hunter	Option to earn 100%	Mining Claim T43338
		108218	4622LT	61391-0135 (LT)	CLM112	South Lorrain	210.663	9/1/2017	8/31/2028	\$635.00	MRO	Canadian Silver Hunter	Option to earn 100%	Mining Location CLM112 comprising Mining Claims T44483 to T44494 inclusive, being land and land under the water of the Montreal River
		108219	4623LT	61391-0129 (LT)	CLM111	South Lorrain	186.661	9/1/2017	8/31/2028	\$563.00	MRO	Canadian Silver Hunter	Option to earn 100%	Mining Location CLM111 comprising Mining Claims T43553, T44411, T44412, T44413: T44477 to T44482 inclusive, and T45225, saving and excepting the row of the ONR crossing the said claims
		109383	4977LT	61391-0203 (LT)	T29994	South Lorrain	12.634	6/1/2013	5/31/2034	\$38.00	MRO	Canadian Silver Hunter	Option to earn 100%	Mining Claim T29994 (recorded as Mining Claim T34601)
		109590	5690LT	61391-0205 (LT)	T40521	South Lorrain	16.616	2/1/2015	1/31/2036	\$50.00	MRO	Canadian Silver Hunter	Option to earn 100%	Mining Claim T40521, T/W LT290848
					5		444.862			\$1,341.00				

Table 5: Description of unpatented claims of the Greater Cobalt Project

Property	Claim group	Claim no.	Township	Claim units	Ha	Recording date	Claim due date	Work required	Recorded holder	First Cobalt interest	Notes
Silver Centre	CSH	4250892	South Lorrain	6	96	2010-Jul-16	2017-Jul-16	\$2,400	Canadian Silver Hunter Inc.	Option to earn 100%	MRO in part subject to WP2008-327 Banked credits from 2012 drilling to be filed
		4268658	South Lorrain	2	32	2013-Sep-27	2018-Jan-21	\$800	Canadian Silver Hunter Inc.	Option to earn 100%	
		4269659	South Lorrain	8	128	2012-Jan-09	2019-Jan-09	\$412	Canadian Silver Hunter Inc.	Option to earn 100%	MRO in part subject to WP2008-327
		4269660	South Lorrain	8	128	2012-Jan-09	2019-Jan-09	\$412	Canadian Silver Hunter Inc.	Option to earn 100%	
		4275020	South Lorrain	4	64	2015-May-26	2017-May-26	\$1,600	Canadian Silver Hunter Inc.	Option to earn 100%	\$3,200 assessment filed by FCC on 25 May 2017
		4275021	South Lorrain	3	48	2015-May-26	2017-May-26	\$1,200	Canadian Silver Hunter Inc.	Option to earn 100%	\$2,030 assessment filed by FCC on 25 May 2017
		4286434	South Lorrain	3	48	2017-Jan-23	2019-Jan-23	\$1,200	Canadian Silver Hunter Inc.	Option to earn 100%	Being land under water
		7		34	544			\$8,024			
	CIC	4282446	Lorrain	4	64	2016-Nov-04	2018-Nov-04	\$1,600	Cobalt Industries of Canada	100% by acquisition of Cobalt Industries of Canada announced 23 January 2017	MRO subject to WP2008-333; Excluding patent
		4282449	Lorrain	4	64	2016-Nov-04	2018-Nov-04	\$1,600	Cobalt Industries of Canada	100% as above	MRO subject to WP2008-333/WP2008-327 Excluding patent
		4282748	Lorrain	4	64	2016-Nov-04	2018-Nov-04	\$1,600	Cobalt Industries of Canada	100% as above	MRO subject to WP2008-327
		4278692	South Lorrain	2	32	2016-Nov-04	2018-Nov-04	\$800	Cobalt Industries of Canada	100% as above	MRO in part subject to WP2008-327
		4280570	South Lorrain	1	16	2016-Nov-24	2018-Nov-24	\$400	Cobalt Industries of Canada	100% as above	MRO subject to WP2008-327
		4282406	South Lorrain	14	224	2016-Nov-24	2018-Nov-24	\$5,600	Cobalt Industries of Canada	100% as above	MRO subject to WP2008-333/WP2008-327
		4282445	South Lorrain	4	64	2016-Nov-04	2018-Nov-04	\$1,600	Cobalt Industries of Canada	100% as above	MRO subject to WP2008-333
		4282447	South Lorrain	16	256	2016-Nov-04	2018-Nov-04	\$6,400	Cobalt Industries of Canada	100% as above	MRO subject to WP2008-333
		4282448	South	4	64	2016-Nov-	2018-	\$1,600	Cobalt Industries of	100% as above	MRO subject to WP2008-333/WP2008-327

Property	Claim group	Claim no.	Township	Claim units	Ha	Recording date	Claim due date	Work required	Recorded holder	First Cobalt interest	Notes
			Lorrain			04	Nov-04		Canada		
		4282450	South Lorrain	12	192	2016-Nov-04	2018-Nov-04	\$4,800	Cobalt Industries of Canada	100% as above	MRO subject to WP2008-333/WP2008-327
		4282451	South Lorrain	12	192	2016-Nov-04	2018-Nov-04	\$4,800	Cobalt Industries of Canada	100% as above	MRO in part - 3rd party SRO patents
		4282702	South Lorrain	11	176	2016-Nov-30	2018-Nov-30	\$4,400	Cobalt Industries of Canada	100% as above	
		4282703	South Lorrain	13	208	2016-Nov-30	2018-Nov-30	\$5,200	Cobalt Industries of Canada	100% as above	
		4282704	South Lorrain	1	16	2016-Nov-30	2018-Nov-30	\$400	Cobalt Industries of Canada	100% as above	MRO -3rd party SRO patent MRO in part subject to WP2008-327
		4282747	South Lorrain	7	112	2016-Nov-04	2018-Nov-04	\$2,800	Cobalt Industries of Canada	100% as above	MRO in part – 3 rd party SRO patents MRO subject to WP2008-333/WP2008-327
		4282749	South Lorrain	12	192	2016-Nov-04	2018-Nov-04	\$4,800	Cobalt Industries of Canada	100% as above	MRO subject to WP2008-327
		4282750	South Lorrain	15	240	2016-Nov-04	2018-Nov-04	\$6,000	Cobalt Industries of Canada	100% as above	MRO subject to WP2008-327
		17		136	2176			\$54,400			
	BMC South	4264322	South Lorrain	1	16	2015-May-26	2019-May-26	\$100	Brixton Metals Corporation (BMC) to be transferred to Cobalt Industries of Canada Inc. (CIC)	100% - Acquisition from Brixton Metals announced June 7, 2017	
		4275041	South Lorrain	1	16	2015-May-26	2019-May-26	\$100	BMC to be transferred to CIC	100% as above	
		4275042	South Lorrain	1	16	2015-May-26	2019-May-26	\$100	BMC to be transferred to CIC	100% as above	
		4275044	South Lorrain	1	16	2015-May-26	2019-May-26	\$100	BMC to be transferred to CIC	100% as above	
		4275170	South Lorrain	1	16	2014-Oct-20	2018-Oct-20	\$100	BMC to be transferred to CIC	100% as above	
		4275171	South Lorrain	1	16	2014-Oct-20	2018-Oct-20	\$100	BMC to be transferred to CIC	100% as above	
		4278609	South Lorrain	1	16	2015-Jul-02	2019-Jul-02	\$100	BMC to be transferred to CIC	100% as above	

Property	Claim group	Claim no.	Township	Claim units	Ha	Recording date	Claim due date	Work required	Recorded holder	First Cobalt interest	Notes
		4278610	South Lorrain	1	16	2015-Jul-02	2019-Jul-02	\$100	BMC to be transferred to CIC	100% as above	
		8		8	128			\$800			
Cobalt Area	BMC North	1118210	Bucke	6	96	1997-Mar-04	2018-Jul-04	\$400	BMC to be transferred to CIC	100% as above	NE 1/4 OF N 1/2 LOT 14 CON 2 ETAL
		1118211	Bucke	4	64	1997-Mar-04	2018-Jul-04	\$902	BMC to be transferred to CIC	100% as above	NE 1/4 OF N 1/2 LOT 13 CON 2 ETAL
		4243946	Bucke	1	16	2009-Sep-22	2017-Sep-22	\$400	BMC to be transferred to CIC	100% as above	S1/4 OF NW1/4 OFS1/2 LOT 14, CON 1
		4275150	Coleman	1	16	2014-Dec-23	2018-Dec-23	\$300	BMC to be transferred to CIC	100% as above	S1/2 SW 1/4 of Lot 2 & 3, Con 3
		4275168	Coleman	1	16	2014-Oct-20	2019-Oct-20	\$200	BMC to be transferred to CIC	100% as above	NE1/4 N1/2 L16, CON5
		4275169	Coleman	1	16	2014-Oct-20	2019-Oct-20	\$200	BMC to be transferred to CIC	100% as above	NW1/4 N1/2 L15, CON5
		4275037	Gillies Limit	15	240	2015-Feb-02	2018-Feb-02	\$4,000	BMC to be transferred to CIC	100% as above	S1/2 OF BLOCK 6, & PART OF BLOCK 7
		4275043	Gillies Limit	1	16	2015-May-27	2018-May-27	\$400	BMC to be transferred to CIC	100% as above	Part of Block A
		4275172	Gillies Limit	2	32	2014-Oct-30	2017-Oct-30	\$531	BMC to be transferred to CIC	100% as above	PT BLOCK 4
		4275173	Gillies Limit	5	80	2014-Oct-30	2017-Oct-30	\$1,768	BMC to be transferred to CIC	100% as above	PT of Block A
		4275175	Gillies Limit	11	176	2014-Oct-30	2017-Oct-30	\$3,454	BMC to be transferred to CIC	100% as above	Pt of Block 2 and Part of Block 3
		4280114	Gillies Limit	1	16	2016-Sep-22	2018-Sep-22	\$400	BMC to be transferred to CIC Inc.	100% as above	PART OF E 1/2 OF BLOCK A
		4275034	Lorrain	1	16	2015-Feb-02	2018-Feb-02	\$258	BMC to be transferred to CIC	100% as above	NE1/4 L3, N1/2 C12
		4275036	Lorrain	1	16	2015-Feb-02	2018-Feb-02	\$128	BMC to be transferred to CIC	100% as above	NW1/4 LOT 1, S1/2 C12
		14		51	816			\$13,341			

Note: MRO = Mining rights only; SRO = Surface rights only

4.2.1 Silver Centre Property

The Silver Centre Property, situated in South Lorrain Township, comprises:

1. The 619.15 ha Keeley-Frontier claim group comprised of 13 contiguous patented (fee simple) mining claims with surface and mining rights totalling approximately 174.29 ha and five contiguous mining leases with mining rights only totalling approximately 444.86 ha (Table 3 and Table 4, Figure 2).
2. The CSH claim group comprised of seven contiguous staked mining claims totalling 34 claim units and covering approximately 544 ha (Table 5, Figure 2). Some claims have MRO because of Ministry of Natural Resources surface withdrawals as discussed in Section 4.3.3.
3. The CIC claim group comprised of 17 contiguous and non-contiguous staked mining claims totalling 136 claim units and covering approximately 2176 ha (Table 5, Figure 2). Some claims have MRO because of third party overlapping surface rights only patents or Ministry of Natural Resources surface withdrawals as discussed in Section 4.3.3.
4. The BMC South claim group comprised of eight contiguous staked mining claims totalling 8 claim units and covering approximately 128 ha (Table 5, Figure 2).

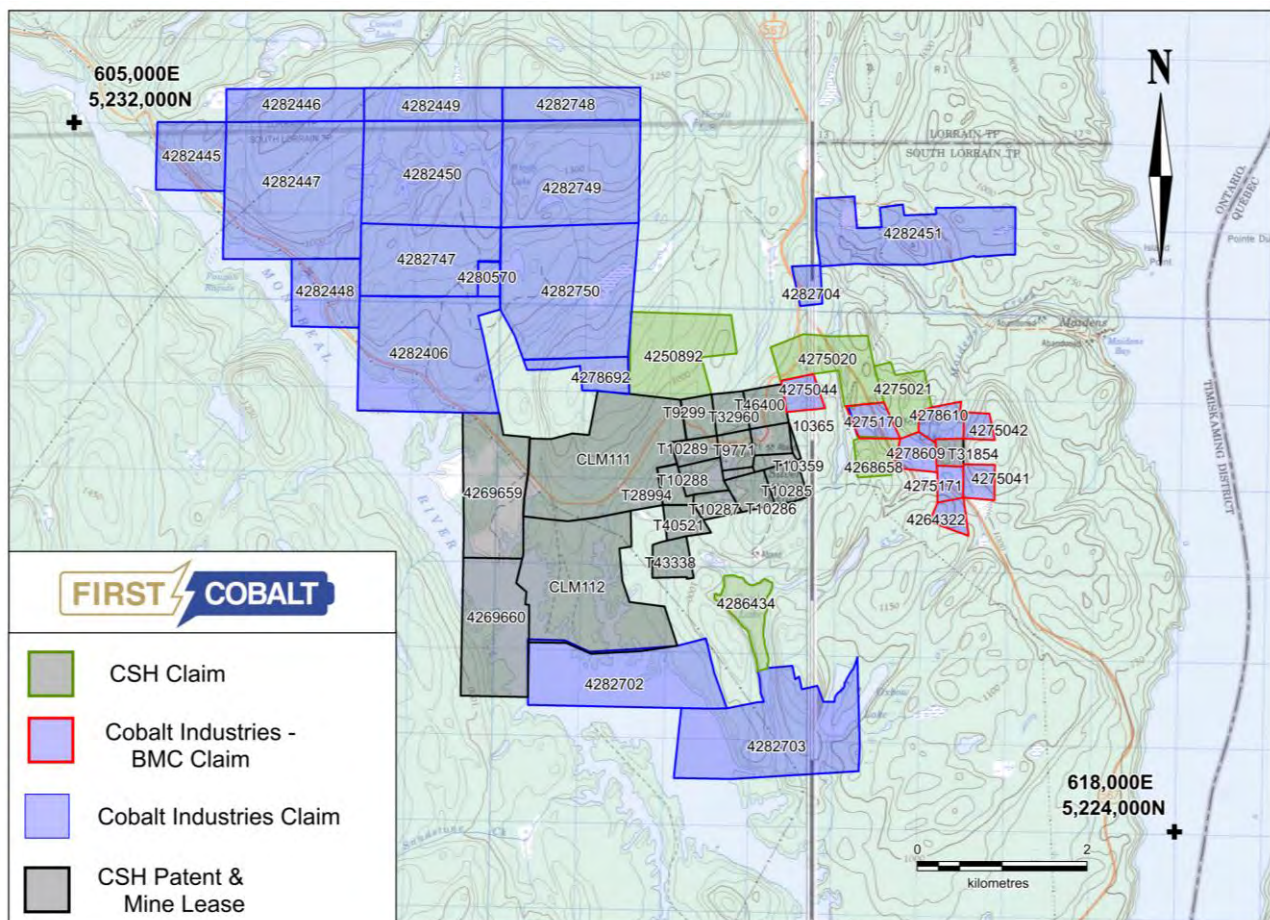


Figure 2: Greater Cobalt Project – Silver Centre Property claim location map



First Cobalt holds an option to earn a 100% interest in the 13 patented mineral claims and 5 mining leases of the Keeley-Frontier claim group, and the 7 unpatented mineral claims of the CSH claim group by way of acquisition of all outstanding share capital of Cobalt Projects International Corp. (Cobalt Projects), a privately-held Ontario-based mineral exploration Company as announced March 16, 2017. As consideration for the acquisition, the Company issued 4.45 million shares to existing shareholders of Cobalt Projects, which shall vest in six equal tranches over a four to 18-month period. Cobalt Projects holds the rights to earn up to a 100% interest in the Keeley-Frontier and CSH groups from Canadian Silver Hunter Inc.

First Cobalt may earn up to a 100% interest in the Keeley-Frontier and CSH groups as follows:

- 50% interest upon payment of \$850,000 (of which \$350,000 has been paid) and incurring expenditures of \$1,750,000 on the property over a period of three years
- 51% interest upon payment of \$200,000 within 60 days of having exercised the first option and producing a technical report in compliance with NI 43-101 – Standards of Disclosure for Mineral Projects by the fourth anniversary (24 January 2021)
- 100% interest upon payment of \$750,000 and incurring additional expenditures of \$1,250,000 by the fifth anniversary (24 January 2022).

Upon earning a 100% interest, Canadian Silver Hunter shall be granted a 2% net smelter return royalty, subject to First Cobalt having the right to purchase 1% for \$1 million over the ensuing 10 years. The Company may elect to accelerate the earn-in.

First Cobalt holds a 100% interest in the 17 staked mining claims of the CIC claim group by way of its acquisition of Cobalt Industries of Canada Inc. (Cobalt Industries) announced 23 January 2017. Cobalt Industries is now a 100% owned subsidiary of First Cobalt and will serve as the holding company for the Greater Cobalt Project properties. In consideration for the acquisition of all the outstanding share capital of Cobalt Industries, the Company issued 6,900,000 common shares. All securities issued in connection with the acquisition are subject to an 18-month escrow arrangement restricting resale of the securities. Under the terms of the escrow arrangement, the securities will be released from escrow in five equal tranches, with the first release occurring six months following completion of the acquisition.

As announced 7 June 2017, First Cobalt holds a 100% interest in the eight staked mining claims of the BMC South claim group which were acquired by making a \$325,000 cash payment to Brixton Metals Corp. for a 22-claim package in the Silver Centre and Cobalt town areas.

4.2.2 Cobalt Area Property

The Cobalt Area Property includes:

1. The BMC North claim group comprised of 14 unpatented (staked) mining claims totalling 151 units and 2,416 ha in the townships of Coleman, Gillies Limit and Lorrain (Table 5, Figure 3).
2. As announced 7 June 2017, First Cobalt holds a 100% interest in the 14 staked mining claims which were acquired by making a \$325,000 cash payment to Brixton Metals Corp. for a 22-claim package in the Silver Centre and Cobalt town areas.
3. The Yukon Refinery claim group comprised of approximately 16.268 ha (40.2 acres) of surface rights only patents (Table 3, Figure 3) with a tailings management facility and a cobalt-silver extraction refinery.
4. First Cobalt announced on 1 June 2017 that it had entered into an option agreement with Cobalt One Limited (Cobalt One) to earn into a 50-50 joint venture on the Yukon cobalt extraction refinery and (40.2 acres) of permitted property in Cobalt, Ontario for potential future processing and tailings

management options. In consideration for the option to enter a 50-50 joint venture, First Cobalt made a non-refundable payment of \$750,000 to Cobalt One. First Cobalt will have until 31 December 2017 to exercise the option. On exercise, First Cobalt will be obligated to pay Cobalt One an additional \$2.25 million and pay the equivalent of 50,000,000 shares of ASX-listed Cobalt One in cash or shares of First Cobalt (approximate value of \$5.5 million). The agreement is subject to certain conditions including, but not limited to, the receipt of all necessary regulatory and other approvals including the approval of the TSX Venture Exchange. It is anticipated that this joint venture agreement will be superseded by the transaction announced on 26 June 2017 whereby First Cobalt would acquire Cobalt One (see Section 16).

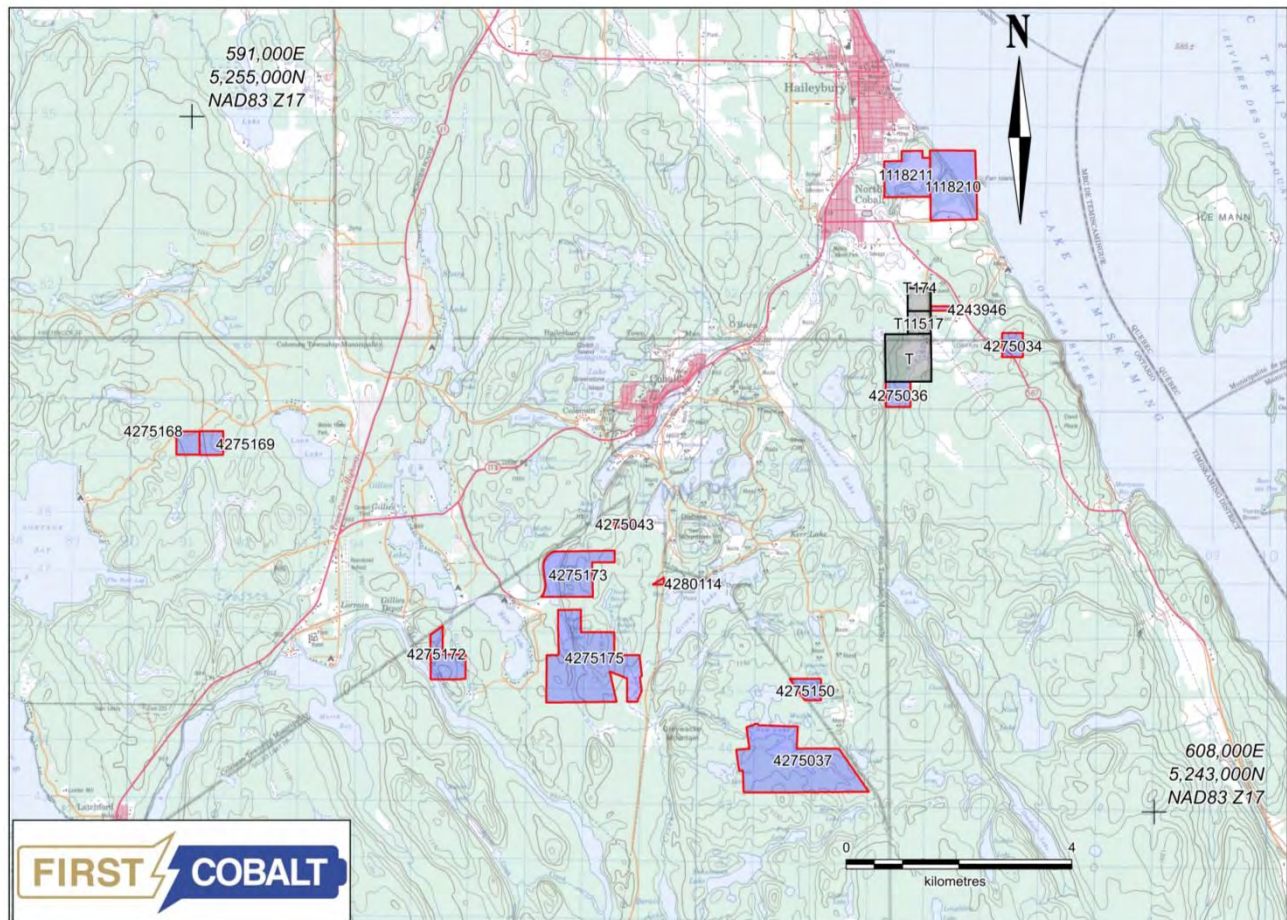


Figure 3: Greater Cobalt Project – Cobalt Area Property claim location map

4.3 Property Claim Status

To the best of CSA Global's knowledge, the Greater Cobalt Project mining claims, mining leases and patented mining claims currently in good standing and First Cobalt warrants that there are no current or pending challenges to ownership of the Project claims of which it is aware.

4.3.1 Patented Mining Claims

The patented claims include both surface and mining rights and would have been legally surveyed at the time of patent application.

The patented lands transferred under the Crown Grant to the patentee are generally subject to the following exclusions/qualifications:

- Five to ten percent (5–10%) of the lands are reserved for the Crown for the purpose of constructing roads;
- All pine trees on the lands are reserved for the Crown and may be cut and removed by any person to whom the Crown grants a timber licence; however, the patentee of the lands may, without a licence, cut and use pine trees for building, fencing and fuel on the land or any other purpose essential to the working of the mines thereon as long as it compensates the Crown or the licence-holder, as applicable, for the value of such trees;
- Free use, passage and enjoyment of navigable waters flowing through any part of the lands are reserved for the Crown; and
- Access and use of shorelines of all rivers, streams and lakes on the lands are reserved for vessels, boats and persons which use such waters for fishery purposes.

In addition, deemed exclusions/qualifications set out in the Ontario Public Lands Act (PLA) include:

- Wood, gravel and other materials required for the construction or improvement of roads may be taken by the Ministry of Natural Resources and Forestry, or a person authorised by it, from the land without compensation to the patentee (Public Lands Act, s. 65(2)); and
- Any portage which exists, or has existed, over the lands may be used by any person travelling on waters connected by said portage without the permission of, or payment to, the owner of the lands (Public Lands Act, s. 65(4)).

CSA Global is unaware of any other encumbrances on the patented mining claims other than a royalty described in Section 4.3.4 below and property tax payments. The patented claims are subject annual property taxes which totalled approximately \$1,625 in 2016 (Section 4.2).

4.3.2 *Mining Leases*

Unless a mining lease states otherwise, a mining lease vests in the leaseholder all title of the Crown in the lands described and all mines and minerals within those lands. Mining leases require a plan of survey approved by the Surveyor General of Ontario. The Silver Centre Property, Frontier-Keeley group's five mining leases are for mining rights only, surface rights are retained by the Crown. A right to lease the surface rights for development purposes exists through the Ontario Mining Act.

Ontario mining leases have an initial term of 21 years and are renewable for further 21-year terms. The holder of a mining lease cannot transfer, mortgage, charge or sublet the lease or make the lease subject to a debenture without the written consent of the Minister.

To maintain a lease in good standing, the holder of a mining lease in Ontario must comply with various requirements under Ontario's Mining Act. The lands, surface rights or mining rights issued under a lease must be used solely for the purposes of the mining industry. Any breach of this requirement could invalidate a lease.

All mining leases issued in Ontario are subject to a number of reservations. These reservations relate to such public interest matters as power lines, pipelines, roads, railways and waterways. In addition, pursuant to modernisation amendments in effect as of 2009, every lease issued under the act, including leases issued or renewed before the enactment of the amendment, includes or is deemed to include the provision that the lessee's rights under the lease are subject to the protection provided for existing Aboriginal or treaty rights



in section 35 of the *Constitution Act 1982* and the lessee shall conduct itself on the demised premises in a manner consistent with the protection provided to any such rights.

CSA Global is unaware of any other encumbrances on the leases other than a royalty described in Section 4.3.4 below and lease rental payments. Total annual rental requirement for the Frontier-Keeley group's five leases is \$1,341.00. The earliest first term lease expiry date is 31 August 2028.

4.3.3 *Unpatented Mining Claims*

The Project's staked mining claims have not been legally surveyed. The staked claims include no surface rights; however, a right to acquire the surface rights for development purposes exists through the Ontario Mining Act. The Mining Act also provides legal access to the land for the purpose of exploration.

Staked claims are generally subject to the following reservations:

- 400 ft surface rights reservation around all lakes and rivers
- Sand and gravel reserved
- Peat reserved.

Certain staked claims also:

- Include land under water
- Are MRO or part MRO where all or part of the surface rights within the claim are held by a third party
- Exclude roads
- Exclude hydro right of ways.

In addition, Silver Centre Property mining claims 4280570, 4282406, 4282445, 4282446 4282447, 4282448, 4282449, 4282450, 4282747, 4282748, 4282749, 4282750, and parts of 4250892, 4269659, 4282704 and 4278692 are subject to wind power area applications for surface rights only (SRO) under the PLA (WP2008-327 and WP2008-333). Under the Mining Act s. 28(2) (3), the wind power PLA SRO applications have priority over the mining claims. Any surface mineral exploration activities conducted on claims will therefore require notification and approval of the company holding the applications; this would be completed as part of the exploration permit/plan application process (see Section 4.6). If the PLA SRO applications lapse, are withdrawn or are not accepted or approved, a mining claim staked during the time that the overlapping application was pending shall be deemed to be amended to include the minerals and rights that were the subject of the application (in this case, SRO) as if the application had never existed.

CSA Global is unaware of any other encumbrances on the staked claims other than a royalty described in Section 4.3.4 below and annual mining claim assessment work requirements and. First Cobalt must perform \$400 worth of approved assessment work per mining claim unit, per year filed on or before the claim due date (anniversary date). Table 5 details the assessment costs and current due dates for the staked mining claims of the Temagami Project. Total annual assessment requirement for the Project's staked mining claims is \$91,600; however, because of previously filed excess assessment work, as of the Effective Date, the total required assessment for the next due dates is only \$76,565. Assessment work for mining claims 4275020 and 4275021 due on 26 May 2017 has been filed with the MNDM and is awaiting approval. Mining claim 4250892 26 July 2017 will have banked assessment credits applied. The next claim due will be 22 September 2017 (Table 5).



4.3.4 *Royalties*

Upon First Cobalt earning a 100% interest, the 13 patented mining claims, five leases and seven staked mining claims of the Silver Centre Property's Frontier-Keeley group are subject to a 2% net smelter return royalty payable to Canadian Silver Hunter. First Cobalt will have the right to purchase 1% for \$1 million over the ensuing 10 years.

4.4 **Environmental Liabilities**

4.4.1 *Patented Mining Claims*

Upon earning its 100% interest in the Silver Centre Property Keeley-Frontier group's 13 patented mineral claims First Cobalt will become responsible for all historic environmental liabilities on the patented claims and any necessary rehabilitation. This work would be covered in a mine closure plan for any new proposed mine.

First Cobalt warrants that it has not received from Canadian Silver Hunter or any government authority, notice of, or communication relating to, any actual or alleged breach of any environmental laws, regulations, policies or permits with respect to the Keeley-Frontier patented claims.

Ontario's Abandoned Mines Information System (AMIS) documents four AMIS sites totalling 21 features on the 13 Keeley-Frontier group patented claims (Table 6, Figure 4). The features are historic waste dumps, unconfined tailings, surface trenches and pits, raises and stopes to surface and exploration shafts. Of the features, one is rehabilitated, two are considered not a hazard and 18 are considered a hazard. Since First Cobalt will become responsible for the ongoing maintenance of any remediation efforts on the patents (fencing, signage, etc.) upon earning its 100% interest in the claims, CSA Global recommends that First Cobalt locate and document the hazards and environmental liabilities and inspect them on a semi-annual basis.

4.4.2 *Unpatented Mining Claims*

First Cobalt is not liable for environmental issues existing on its unpatented mining claims prior to their staking date. A claim holder would however become liable for a pre-existing hazard if it were to disturb it, for example excavating a stockpile. If in the future, a party obtains mining rights by taking a mining claim to lease or patent, they will then be responsible for the pre-existing liabilities on the claim (stockpiles, tailings etc.) and any necessary rehabilitation. This work would be covered in a mine closure plan for any new proposed mine.

Of note, under the Mining Act an individual or company not responsible for creating a pre-existing mine hazard may apply to voluntarily undertake mine hazard rehabilitation work without becoming liable for the pre-existing environmental issues on the site. Applications are to be sent to the Director of Mine Rehabilitation for review and if approved, the Director may set conditions that must be met by the applicant. Once approved, applicants shall carry out voluntary rehabilitation according to their approved rehabilitation plan, in accordance with the standards in the Mine Rehabilitation Code of Ontario as specified by the Director.

AMIS documents known abandoned mine features within the Greater Cobalt Project's (staked) mining claims. Eight AMIS sites totalling 21 features are present on the Silver Centre Property's (staked) mining claims (Table 6, Figure 4). The features are historic surface trenches and pits, raises to surface and exploration shafts. Of the features, five are rehabilitated, eight are considered not a hazard, five are

considered a hazard and the status of three are unknown. As noted above, First Cobalt is not liable for these pre-existing hazards. First Cobalt warrants that it has not received from its property vendors or any government authority any notice of, or communication relating to, any actual or alleged breach of any environmental laws, regulations, policies or permits with respect to the Project's staked claims.

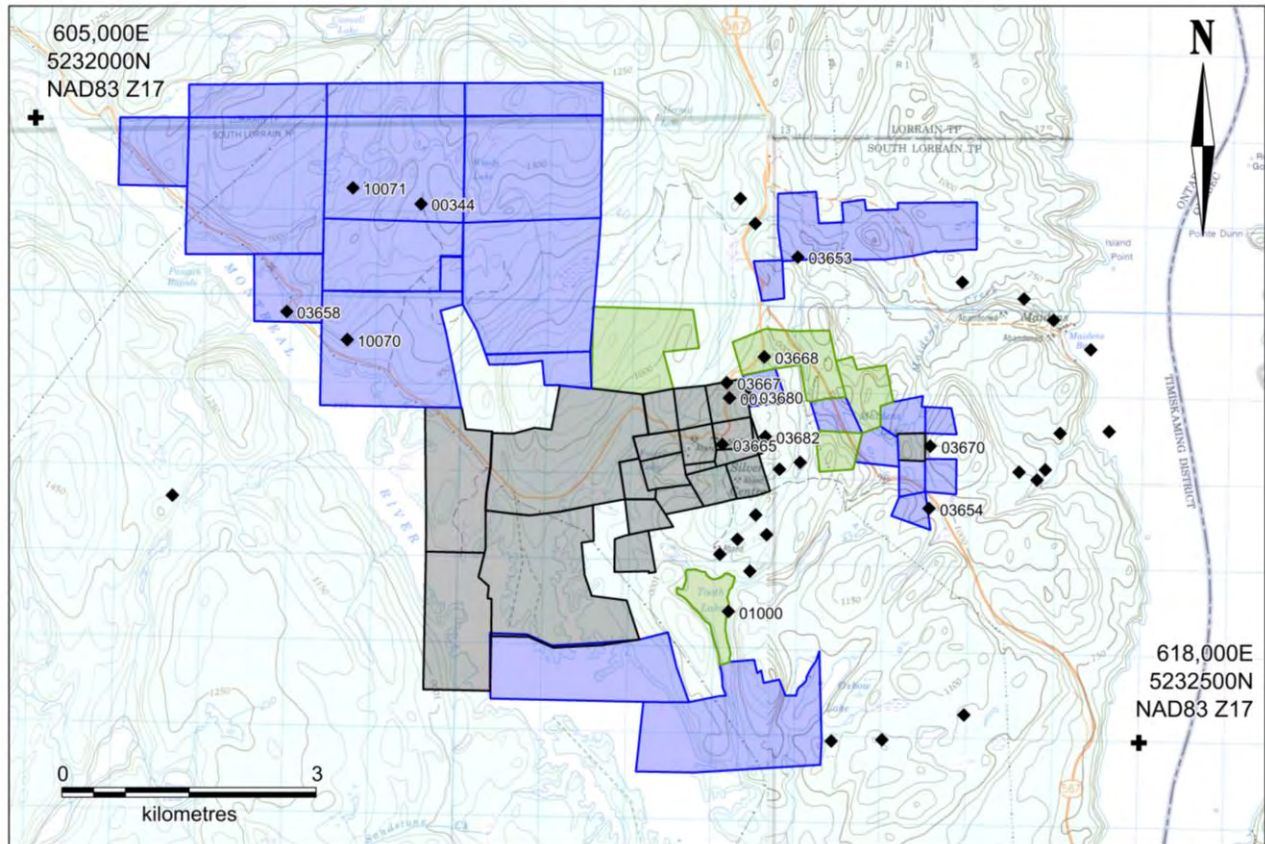


Figure 4: AMIS documented abandoned mine feature locations within the Silver Centre Property

Table 6: AMIS documented abandoned mine feature locations within the Silver Centre Property

Claim group	Claim ID	Patent ID	AMIS site ID	Mine feature ID	Mine feature type description	Mine hazard status	Mine feature condition description	Northing	Easting
CIC	4282450		00344	81814	Exploration shaft – vertical shaft	Not available		5231096	609509
CIC	4282451		03653	74487	Exploration shaft - inclined shaft	Active hazard	2000 assessment; sunk in rock at the edge of a huge outcrop, water filled to 0.5 m below grade surface (bgs). Archives indicate shaft depth of 15 m.	5230567	613910
CIC	4282448		03658	74489	Trench	Not a hazard	2000 assessment; shallow trench.	5229814	607970
CIC	4282703		03673	74527	Exploration shaft – vertical shaft	Rehabilitated	2000 assessment; backfilled using rock dump material (true depth unspecified).	5224710	614027
CIC	4282703		03673	82115	Trench	Not a hazard	2000 assessment; shallow trench.	5224810	614289
CIC	4282406		10070	81815	Exploration shaft – vertical shaft	Not available		5229500	608680
CIC	4282450		10071	81816	Exploration shaft – vertical shaft	Not available		5231268	608710
BMC	4264322		03654	82083	Trench	Not a hazard	2000 assessment; shallow trench.	5227577	615478
BMC	4264322		03654	82084	Trench	Not a hazard	2000 assessment; long shallow trench	5227539	615447
BMC	4275044		03680	74537	Shaft – 2 compartments – vertical shaft	Active hazard	2000 assessment; shaft #1: partially filled-in, backfill material may have subsided.	5228933	613373
BMC	4275044		03680	74538	Shaft – 1 compartment – vertical shaft	Active hazard	2000 assessment; shaft #4: water filled to 1 m below grade surface (bgs), historical depth not specified.	5228867	613392
BMC	4275044		03680	74539	Shaft – 1 compartment – vertical shaft	Active hazard	2000 assessment; shaft #5: historical depth unspecified.	5229158	613576
BMC	4275044		03680	81321	Shaft – 2 compartments – unknown	Rehabilitated	2000 assessment; shaft #6: shaft located on T46581 (formerly RI474); partly backfilled – old pipe sticking out of the ground - small depression in ground suggest subsidence, historical depth of shaft unspecified in report.	5229740	613651
BMC	4275044		03680	81322	Trench	Not a hazard	2000 assessment; long shallow trench.	5229754	613732
BMC	4275044		03680	82285	Raise to surface	Rehabilitated	2000 assessment; raise: suspected raise – filled in or capped, although uncertain, 2 old pipes sticking out (pressure equalisation) suggest capping, historical depth unspecified in report.	5228947	613374
BMC	4275044		03680	82504	Shaft – 2 compartments – vertical shaft	Active hazard	2000 assessment; shaft #2: known as Harris no. 1 shaft – log covered – logs are partially rotted initially fenced but fence is down, water filled to 2.5 m below grade surface. Historical depth of shaft is unspecified.	5228976	613364
Keeley-Frontier	4275020		03668	82167	Shaft – 1 compartment – inclined shaft	Rehabilitated	2000 assessment; shaft #1: backfilled in the northeast trending trench, there is a small metal pipe in the wider part of the trench. The area looks like it was filled a long time ago. Original depth unspecified, slumped to 1 m.	5229397	613543

Claim group	Claim ID	Patent ID	AMIS site ID	Mine feature ID	Mine feature type description	Mine hazard status	Mine feature condition description	Northing	Easting
Keeley-Frontier	4275020		03668	82168	Trench	Not a hazard	2000 assessment; shallow trench lies directly south of shaft #1.	5229389	613543
Keeley-Frontier	4275020		03668	82169	Trench	Not a hazard	2000 assessment; long shallow trench close to pond, shaft #2 inside trench on south end.	5229388	613514
Keeley-Frontier	4275020		03668	82170	Trench	Not a hazard	2000 assessment; shallow trench curves to the west.	5229417	613533
Keeley-Frontier	4275020		03668	82473	Shaft – 1 compartment – vertical shaft	Rehabilitated	2000 assessment; shaft #2: rehabilitated, backfilled.	5229370	613502
Keeley-Frontier		T46400	00573	82057	Shaft – 1 compartment – inclined shaft	Active hazard	2000 assessment; shaft – was fence once but fence is now mostly down. There are rotted logs covering the shaft -- some of the logs have fallen in the shaft.	5228911	613147
Keeley-Frontier		T46400	00573	82058	Waste rock dump	Not a hazard	2000 assessment; rock pile.	5228920	613140
Keeley-Frontier		T10286	03665	74515	Exploration shaft – inclined shaft	Active hazard	2000 assessment; open, inclined exploration shaft: timbered two compartments, inclined at 80° east, Keeley no.4 shaft in literature, true depth unspecified in report.	5227952	613140
Keeley-Frontier		T10285	03665	74516	Shaft – 1 compartment – unknown	Active hazard	2000 assessment; shaft #4: collapsed head frame over the shaft, timber cribbed, Keeley no.3 shaft. Historical depth unspecified.	5227958	613220
Keeley-Frontier		T10155	03665	74517	Shaft – 2 compartments – unknown	Active hazard	2000 assessment; shaft: 2 compartments, backfilled with rock and wood, known as Frontier no.3 shaft. Historical depth of shaft unspecified in report.	5228419	613163
Keeley-Frontier		T10155	03665	74518	Shaft – 1 compartment – inclined shaft	Active hazard	2000 assessment; logs used to cap shaft. Fence is down, Frontier no.1 shaft. Historical depth of shaft unspecified in report.	5228483	613286
Keeley-Frontier		10365	03665	74519	Exploration shaft – vertical shaft	Active hazard	2000 assessment; timber cribbed.	5228479	613450
Keeley-Frontier		T10155	03665	74520	Tailings – unconfined	Active hazard	2008 tailings assessment; approximately 70% of the tailings surface is covered by a pond. A waste rock pad is situated on the southeast edge of the basin, adjacent the site access road. A small tailings beach occurs in the southwest section of basin.	5228539	613011
Keeley-Frontier		T10155	03665	82093	Shaft – 2 compartments – vertical shaft	Active hazard	2000 assessment; shaft covered with logs to form a “cap”; water filled to 12 m below grade surface. Historical depth not specified in report.	5228369	613075
Keeley-Frontier		T10286	03665	82094	Shaft – 2 compartments – vertical shaft	Active hazard	2000 assessment; caving in at surface – rock pile occurs near the shaft, listed as Keeley no.5 shaft in literature – unknown total depth, not specified in report.	5227789	613136
Keeley-Frontier		T10286	03665	82095	Stope	Active hazard	2000 assessment; stope inclined at 35° east, partially filled in on one side. Depth of stope unspecified.	5227999	613143

Claim group	Claim ID	Patent ID	AMIS site ID	Mine feature ID	Mine feature type description	Mine hazard status	Mine feature condition description	Northing	Easting
Keeley-Frontier		T10285	03665	82096	Stope	Active hazard	2000 assessment; small hole on the edge of a "trench". The "trench" was a stope capped with plywood. Now, it is filled with soil and few trees, previously fenced, but fence is now down. Historical depth of stop unspecified in report.	5228000	613303
Keeley-Frontier		T10155	03665	82097	Shaft – 3 compartments – inclined shaft	Active hazard	2000 assessment; shaft: timber cribbed, 3-compartment shaft, inclined at 80° east, known as Haileybury silver shaft. Historical depth of shaft not verified in report.	5228586	613367
Keeley-Frontier		T10285	03665	82468	Exploration shaft – unknown	Rehabilitated	2000 assessment; possible shaft location backfilled, known as Keeley no.1 shaft in literature; the shaft collar was not identified, according to a historical map, the shaft is located between the adjacent concrete structure and the rock pile.	5228113	613292
Keeley-Frontier		T10285	03665	82493	Shaft – 2 compartments – vertical shaft	Active hazard	2000 assessment; known as Keeley no.2 shaft in literature, covered with wood of 50 cm in diameter, there is some regrowth on top of plywood, two old pipes are sticking out. Historical depth of shaft unspecified in report.	5228022	613360
Keeley-Frontier		T10359	03665	82495	Shaft – 2 compartments – vertical shaft	Active hazard	2000 assessment; known as Crompton shaft, timber, partially filled-in. Historical depth of shaft unspecified in report.	5228197	613208
Keeley-Frontier		10365	03665	82496	Open pit	Active hazard	2000 assessment; water filled to 2 m below grade surface. Depth unspecified but >2 m.	5228469	613459
Keeley-Frontier		T46400	03667	74522	Shaft – 2 compartments – vertical shaft	Rehabilitated	2000 assessment; backfilled (known as former no. 1 shaft in literature). Historical depth of shaft unspecified in report.	5229089	613111
Keeley-Frontier		T46400	03667	74524	Waste rock dump	Not a hazard	2000 assessment; rock pile, report does not specify if rock pile is waste.	5229085	613093
Keeley-Frontier		T46400	03680	82283	Stope to surface	Active hazard	2000 assessment; full of water – log covered – fence down, coordinates taken from site map(approximate).	5228970	613340
Keeley-Frontier		T46400	03680	82284	Shaft – 1 compartment – inclined shaft	Active hazard	2000 assessment; inclined shaft #3: known as Harris no.2 shaft – timbered cribbed fenced needs to be fixed - not solid. Hazard dimensions unspecified in report, depth undetermined in report.	5228961	613331

4.5 Required Exploration Permits

As of the Effective Date, First Cobalt does not currently hold any Exploration Plans or Permits for exploration work proposed on mining claims and mining leases in this Report (Section 18). The Keeley-Frontier group patented claims do not require an Exploration Plan or Permit. First Cobalt warrants that they will acquire any and all government permits required to execute the proposed early exploration activities where required on the Project properties. A brief discussion of exploration plans and permits that might be required for early exploration activities on First Cobalt's mining claims and mining leases follows.

Ontario Mining Act regulations require exploration plans and permits, with graduated requirements for early exploration activities of low to moderate impact undertaken on mining claims, mining leases and licenses of occupation. Exploration plans and permits are not required on patented mining claims.

There are a number of exploration activities that do not require a plan or permit and may be conducted while waiting for a plan or permit is effective. These may include the following:

- Prospecting activities such as grab/hand sampling, geochemical/soil sampling, geological mapping
- Stripping/pitting/trenching below thresholds for permits
- Transient geophysical surveys such as radiometric, magnetic
- Other baseline data acquisition such as taking photos, measuring water quality, etc.

4.5.1 Exploration Plan

Those proposing to undertake minimal to low impact exploration plan activities (early exploration proponents) must submit an exploration plan. Early exploration activities requiring an exploration plan include:

- Geophysical activity requiring a power generator
- Line cutting, where the width of the line is 1.5 m or less
- Mechanised drilling for the purposes of obtaining rock or mineral samples, where the weight of the drill is 150 kg or less
- Mechanised surface stripping (overburden removal), where the total combined surface area stripped is less than 100 m² within a 200-m radius
- Pitting and trenching (of rock), where the total volume of rock is between 1 m³ and 3 m³ within a 200-m radius.

In order to undertake the above early exploration activities, an exploration plan must be submitted and any surface rights owners must be notified. Aboriginal communities potentially affected by the exploration plan activities will be notified by the MNM and have an opportunity to provide feedback before the proposed activities can be carried out.

4.5.2 Exploration Permit

Those proposing to undertake moderate impact exploration permit activities (early exploration proponents) must apply for an exploration permit. Early exploration activities that require an exploration permit include:

- Line cutting, where the width of the line is more than 1.5 m
- Mechanised drilling, for the purpose of obtaining rock or mineral samples, where the weight of the drill is greater than 150 kg



- Mechanised surface stripping (overburden removal), where the total combined surface area stripped is greater than 100 m² and up to advanced exploration thresholds, within a 200-m radius
- Pitting and trenching (rock), where the total volume of rock is greater than 3 m³ and up to advanced exploration thresholds, within a 200-m radius.

The above activities will only be allowed to take place once the permit has been approved by the MNDM. Surface rights owners must be notified when applying for a permit. Aboriginal communities potentially affected by the exploration permit activities will be consulted and have an opportunity to provide comments and feedback before a decision is made on the permit.

4.5.3 *First Nation Consultations*

First Cobalt warrants that it will consult with the appropriate First Nation and Metis communities as required per the Ontario Mining Act.

4.5.4 *Exploration on Mining Rights Only Mining Claims*

Under Ontario's Mining Act, surface rights owners must be notified prior to conducting exploration activities. Where there is a surface rights holder of land, a person who:

- Prospects, stakes or causes to be staked a mining claim;
- Formerly held a mining claim that has been cancelled, abandoned or forfeited;
- Is the holder of a mining claim and who performs assessment work; or
- Is the lessee or owner of mining lands and who carries on mining operations,

on such land, shall compensate the surface rights holder for damages sustained to the surface rights by such prospecting, staking, assessment work or operations.

4.6 **Other Significant Factors and Risks**

Environmental, permitting, legal, title, taxation, socio-economic, marketing, and political or other relevant issues could potentially materially affect access, title or the right or ability to perform the work recommended in this report on the Properties. However, at the time of this report, CSA Global is unaware of any such potential issues affecting the Properties.

5 Accessibility, Climate, Local Resources, Infrastructure and Physiography

5.1 Accessibility

The Greater Cobalt Project is located in the historic Silver Centre and Cobalt mining camps. The Property areas are accessible as follows:

5.1.1 Silver Centre Property

The Silver Centre Property is accessible via all-weather paved highway as follows:

1. From Highway 11B in the town of North Cobalt take Lakeview Avenue 1.2 km east.
2. Lakeview avenue changes to Silver Centre Road, continue 2.8 km south.
3. Silver Centre Road changes to Provincial Highway 567, continue south 24.3 km to the gravel access road to the historic Silver Centre camp.
4. Turn right onto the Silver Centre camp road and travel 2.1 km to the historic Frontier Mine area located on the Keeley Frontier group of claims. Several forestry access roads, trails and hydro transmission line right-of-way provide access to portions of the Silver Centre Property. Other than an access trail along the north shore of the Montreal River, the northwestern CSH claims generally have only limited road and trail access.
5. From the Silver Centre turn-off, continue south on Highway 567 three km to the south shore of Maiden Lake to access the eastern CSH and BMC claims of the Silver Centre Property.

5.1.2 Cobalt Area Property

The various non-contiguous Cobalt Area Property claims are accessible via all-weather gravel roads, trails and hydro transmission line right-of-way located off Highways 11B and 567 in and around the towns of Cobalt and North Cobalt.

5.2 Climate

The climate in the Project area is warm summer humid continental (Koppen climate classification Dfb). This region has warm and often hot summers with long, cold winters. It is situated northeast of the Great Lakes, making it prone to arctic air masses.

Ville Marie, Québec, on the east side of Lake Temiskaming, is the closest centre representative of the Properties for which Environment Canada (2017) climatic records are available (1981 to 2010). Mean summer temperature is approximately 17 degrees Celsius (°C); however, extreme daily summer maximum temperatures can reach 40°C. Mean winter temperature is -12.5°C; however, extreme daily winter minimum temperatures can reach -50°C. Average annual precipitation (combined rain and snow) is approximately 836.5 mm per year. Monthly precipitation is relatively equal year-round but typically the greatest amount of precipitation falls from late spring to early fall and the least precipitation occurs in the winter months. Some snow cover is expected six months of the year. Mean total rainfall is 655.9 mm. Mean total annual snowfall is 180.6 cm. Smaller lakes in the immediate area are typically frozen between December and March.



Season-specific mineral exploration may be conducted year-round. Swampy areas and lakes/ponds may be best accessed for drilling and ground geophysical surveys during the winter months when the ground and water surfaces are frozen. Mine operations in the region can operate year-round with supporting infrastructure.

5.3 Local Resources and Infrastructure

Most services and supplies required for a mineral exploration program are available in the City of Temiskaming Shores (2016 Census population of 9,920), an amalgamated municipality (formerly the Town of Haileybury, New Liskeard and the Township of Dymond) at the head of Lake Temiskaming approximately 25 km north of the centre of the Project area. The Town of Cobalt (2016 Census population of 1,128), at the north end of the Project area offers some basic services. Given the mining history of the Cobalt Camp and the proximity of mining communities such as Kirkland Lake and Sudbury, as well as service centres such as North Bay, exploration and mining personnel are readily available in the region.

The city of Greater Sudbury (2016 Census population of 161,531) is located approximately 200 km by road southwest of the Project at the intersection of the Trans-Canada Highway, Highway 69S and Highway 144N. Sudbury is located 390 km north of Toronto. A world leader in nickel mining, milling, smelting and refining, Greater Sudbury has diversified and is now a regional service centre for northeastern Ontario, having established itself as a major centre of finance, business, tourism, health care, education, government, and science and technology research. Over 300 mining supply and service companies are in Greater Sudbury. A full range of equipment, supplies and services required for any mining development is available in Greater Sudbury.

Other than several powerlines, all-weather roads and ATV trails, no infrastructure is present within the Properties. The centre of the Project area lies approximately 15 km east of Provincial Highway 11 and the Ontario Northland rail line which provides freight services for the transportation of mineral and forest products, chemicals, petroleum and other products to and from northeastern Ontario and northwestern Quebec. Hydro One 115 kV and 230 kV transmission lines cross or are near the Project property areas.

Abundant water resources are present in the lakes, rivers, creeks, and beaver ponds on the Properties.

As of the Effective Date, it appears that First Cobalt both holds and has the option acquire sufficient mining claims necessary for proposed exploration activities and potential future mining operations (including potential tailings storage areas, potential waste disposal areas, and potential processing plant sites) should a mineable mineral deposit be discovered.

5.4 Physiography

The major topographic feature of the area is Lake Temiskaming located immediately east of the Project (Figure 1). The Montreal River immediately to the west of the Project and Lake Temiskaming itself (part of the Ottawa River system) are the major drainage channels in the area.

The Project lies adjacent to one of the Canadian Shield's rare "clay belts". These late/post-glacial lacustrine deposits preserve well developed accumulations of sediment that are well suited to agriculture. As a result, the area to the north of the Project area retains a robust agricultural community, particularly north of Lake Temiskaming.

The Project area is characterized by rocky, rolling bedrock hills with locally steep ledges and cliffs, separated by valleys filled with clay, glacial material, swamps and streams. Total relief within the Project area is approximately 200 m with topography varying from 250 m to 380 m ASL in the Silver Centre Property, 180–



300 m ASL in the northeastern Cobalt Area Property claims near Temiskaming Lake and 280–355 m ASL in the southwestern Cobalt Area Property claims. Local relief is commonly up to 30 m, although some ridges are up to 60 m or more above surrounding lowlands.

Vegetation is typical boreal forest with mixed second growth forest of mixed coniferous and deciduous trees, including poplars, birch, maple, pine, spruce, alders, and willows. Swampy low-lying areas contain abundant tag alders. Locally, the clay-belt extends intermittently south into Project area supporting limited farmland but outside of the Project properties.

6 History

6.1 Regional Exploration and Development History

The initial discovery of silver in the region was made west of Lake Temiskaming in 1903 during the construction of the Temiskaming and Northern Ontario Railway. This began a rich mining history in the area. The location along the railway was named Cobalt after one of the elements found in the arsenide minerals within the veins. The first mines commenced production as early as 1904 and mining was more or less, continuous until 1989 with production peaking in 1911 (Petruk *et al.*, 1971). In addition to silver, cobalt, nickel and copper were recovered from the ore. Mineralisation was not just limited to the area immediately around Cobalt, but was recovered from areas with similar geology within the Cobalt embayment of the Southern Province, from Gowganda in the west to Silver Center in the southeast.

Guindon *et al.* (2016) tabulated the historic production (1904 to 1989) from approximately 140 silver-cobalt properties in the Cobalt embayment. First Cobalt's Greater Cobalt Project lies within the Cobalt and Silver Center mining camps. Table 7 presents the historic production from approximately 107 mines in the Cobalt and Silver Centre camps. The information is suspected to be under-reported, in part, due to lease mining during the 1930s (Guindon *et al.*, 2016). Only two of the historic mines are located within First Cobalt's Silver Centre Property. The Author has been unable to verify the information in Table 7 and the information is not necessarily indicative of the mineralisation on the Properties.

Table 7: Silver, cobalt, nickel and copper production at Cobalt and Silver Center mining camps (1904 to 1989)

Mine	Township	Tons milled	Ag (oz)	Co (lb)	Ni (lb)	Cu (lb)	Years of production
Cobalt Camp							
Agaunico and Reuthel Mine	Bucke	NA	980,000	4,350,000	418,717	216,767	1905-1960
Cobalt Contact Mine	Bucke	11,074	26,000	31,000			1912-1944
Dotsee Mine	Bucke	NA	125	8,000			1906-1939
Genesee Mining	Bucke	NA	66,236	12,063			1915-1965
Green-Meehan & Red Rock Mine	Bucke	NA	498,000	27,000		6,000	1905-1939
Harrison-Hibbert & Ruby Mine	Bucke	NA	876,500	214,600	69,458		1920-1963
North Cobalt and Hunter Mine	Bucke	NA	1,453				1909
Casey Cobalt-Silver Mines	Casey	NA	9,373,085	356,418	141,733	88,437	1908-1966
Langis	Casey & Harris	49,542	653,882	25,474	8,013	8,550	1983-1989
Agnico Surface Dumps	Coleman	28,907	51,051	7,455	2,606	15,204	1974-1975
Agnico Tailings Mill	Coleman	312,248	607,097	78,827	1,151,744	124,576	1967-1970
Alexandra Silver (Silverfields)	Coleman	1,322,813	17,793,862	357,501	493,255	238,893	1964-1983
Beaver Consolidated Mines Ltd	Coleman	65,191	7,127,858	139,472	1,397		1907-1940
Beaver-Temiskaming Mine	Coleman	218,816	3,986,761	240,735	76,395	130,614	1977-1988
Ben Tailings	Coleman	1,676	3,715	564	196	511	1969-1970
Brady Lake Property	Coleman	55,485	7,000,000	190,641	8,620	11,320	1910-1960
Buffalo Mines Ltd	Coleman	332,449	14,155,558	152,269			1905-1959
Cart Lake	Coleman	NA	84,193	7,779	2,378	3,070	1966
Chambers Ferland Mining	Coleman	NA	2,030,000				1908-1958

Mine	Township	Tons milled	Ag (oz)	Co (lb)	Ni (lb)	Cu (lb)	Years of production
Chambers Ferland Mining	Coleman	NA	2,175,469	13,000	2,400		1904-1932
Christopher and Cobalt Lode	Coleman	NA	35,378	2,140	511	895	1966
Christopher Silver Mines Ltd	Coleman	NA	4,100,000				1906-1964
City of Cobalt	Coleman	NA	14,000,000	25,000			1907-1930
Cobalt Badger Silver	Coleman	NA	3,475	112	89		1929-1940
Cobalt Lake	Coleman	175,129	6,900,708	146,073	7,920		1908-1943
Cobalt Lode Silver	Coleman	263,140	4,493,542	2,545,117	610,716	459,078	1917-1956
Cobalt Silver Queen	Coleman	6,969	1,406,000	168,311	102		1905-1939
Cobalt Townsite	Coleman	913,268	37,362,032	1,852,765	163,687	90,288	1907-1939
Cochrane Cobalt Mining	Coleman	2,671	33,280	2,702			1913-1939
Colonial Mining	Coleman	63,687	1,211,956	3,671			1907-1954
Coniagas 73 Shaft	Coleman	207,875	889,617	57,576	19,197	143,823	1975-1985
Coniagas Mines	Coleman	750,164	33,963,067	310,557	3,543	47,470	1905-1943
Conisil Mines	Coleman	NA	100,000				1961-1965
Consolidated Silver Banner	Coleman	NA	41,700			412	1927-1964
Cross Lake O'Brien	Coleman	129,670	11,600,000	98,248	38,843	172,611	1928-1966
Crown Reserve mining	Coleman	58,596	20,325,302	33,682			1908-1948
Drummond Mines	Coleman	60,808	3,887,585	245,807			1905-1936
Farah Mining	Coleman	557	8,952				1923-1926
Foster Cobalt Mining	Coleman	2,818	1,159,390	457,164	21,766	24,121	1951-1956
Frontier	Coleman	2,870	39,433	5,538	1,841	2,522	1973
Hargrave Silver Mines	Coleman	1,534	506,927	6,418			1905-1920
Hudson Bay Mines	Coleman	52,370	6,452,266	185,572	1,630		1905-1953
Juno Metals	Coleman	2,674	46,391				1918-1922
Kerr Lake Mining	Coleman	235,503	28,502,037	650,094		1,792	1905-1948
King Edward Mining	Coleman	53,357	1,294,233	3,466	1,310	18,618	1905-1964
LaRose Mines	Coleman	57,544	17,479,977	200,000	111,010		1904-1948
Lawson	Coleman	NA	4,213,513				1905-1953
Little Nipissing	Coleman	NA	82,000				1906-1945
Mayfair Mines	Coleman	NA	26,240				1945-1953
McKinely-Darragh Savage Mines	Coleman	NA	17,300,000				1904-1952
Mensilvo Mines	Coleman	62,571	374,824	149,508	21,605	21,834	1913-1964
Nancy Helen Mines	Coleman	249	91,770				1907-1911
Nerlip Mines	Coleman	613	911	2,949	2,502		1940-1944
New Bailey Mines	Coleman	90,769	3,131,352	76,780		4,084	1912-1966
Nipissing Mines	Coleman	NA	32,000,000				1904-?
Nipissing Mines	Coleman	NA	7,000,000				1904-?
Nipissing Mines	Coleman	NA	1,000				1915-1917
Nipissing Mines	Coleman	1,066,589	32,000,000	3,636,704			1905-1951
Nipissing Mines	Coleman	NA	300,000				1932?
Nipissing Mines	Coleman	NA	20,000,000				1910?-1967

Mine	Township	Tons milled	Ag (oz)	Co (lb)	Ni (lb)	Cu (lb)	Years of production
Nipissing Mines	Coleman	NA	1,750,000				1904-1967
Nipissing Mines	Coleman	NA	300,000				1913-1967
No. 407 Shaft	Coleman	NA	5,200				1926
No. 407 Shaft	Coleman	92,159	1,838,433	157,597	37,687	69,370	1966-1971
No. 96 Shaft	Coleman	56,153	1,236,879	73,970	22,329	46,738	1969-1974
Nova Scotia Silver	Coleman	7,184	1,082,774	114,199			1906-1952
O'Brien	Coleman	NA	33,655,872	835,764	1,481	2,130	1905-1966
O'Brien Dumps	Coleman	8,524	26,709	2,204	710	2,633	1968-1970
Ophir Cobalt Mines (1)	Coleman	NA	69				1921
Penn Canadian Mines	Coleman	189,356	4,418,802	190,650	11,246	26,806	1908-1974
Peterson Lake Silver Cobalt	Coleman	NA	909,064	27,303			1906-1966
Peterson Lake Silver Cobalt	Coleman	60,341	5,627,297				1912-1916
Princess Claim	Coleman	NA	3,713,805				1908-1922
Red Jacket Property	Coleman	NA	3	354			1938-1943
Refinery	Coleman	NA	11,656				1983-1985
Reinhardt Cross Lake Group	Coleman	NA	278,631	2,532	484	141	1949-1951
Right of Way Mines	Coleman	NA	169,000				1906-1935
Right of Way Mines	Coleman	23,073	2,800,000				1906-1935
Savage Mine	Coleman	646,439	4,500,000	465,582	11,348	51,751	1904-1954
Silver Cliff Mining	Coleman	20,552	535,246	9,314	15,380	6,287	1908-1954
Silver Cross Cobalt	Coleman	NA		3,091			1940-1942
Silver Leaf Mining	Coleman	321	495,443	1,206			1906-1931
Smith Cobalt Mines	Coleman	NA		914			1939-1940
Temiskaming Mining	Coleman	149,807	12,118,796	202,687	25,337	6,261	1907-1963
Trethewey Silver Cobalt Mines	Coleman	17,666	7,256,470	216,198			1904-1943
Trout Lake	Coleman	44,705	1,783,536	250,530	85,506	33,312	1969-1977
University Mines	Coleman	400	790,000	82,681			1905-1968
Victoria Silver Cobalt Mines	Coleman	NA	1,000				1906-1910
Violet Mining	Coleman	NA	897,291				1905-1925
Claim A.3	Gillies Limit	NA		900			1935-1940
Cleopatra Mining	Gillies Limit	NA	2,500,000				1964-1968
Cobalt A53 Mining	Gillies Limit	NA		2,251			1946
Provincial Mine	Gillies Limit	258	286,897	54,473	2,842		1908-1940
Waldman Silver Mines	Gillies Limit	58	33,525	2,066			1910-1930
Wyandoh Silver Mines	Gillies Limit	29	33,699	1,234			1910-1937
Harmak Mining	Harris	NA	4,625	12,925			1966
Lang-Caswell	Lorrain	NA	1,503	4,932			1936
Silver Centre Camp							
Bellellen Mine ⁽¹⁾	South Lorrain	NA	38,027	28,481			1910-1943
Canadian Lorrain Mine	South Lorrain	NA	276,825	16,678			1926-1940
Curry Mine	South Lorrain	87	49,821	7,691			1916-1938

Mine	Township	Tons milled	Ag (oz)	Co (lb)	Ni (lb)	Cu (lb)	Years of production
Gilgreer mine	South Lorrain	NA	446	1,732			1936-1943
Harris Mines	South Lorrain	462	13,659	26,286			1925-1939
Keeley and Frontier Mines ⁽¹⁾	South Lorrain	NA	19,197,413	3,310,556	27,252	10,292	1908-1965
Lorrain Lake Mines	South Lorrain	22,405	1,093,404	64,458			1924-1943
Nipissing Lorrain Mine	South Lorrain	NA	350,000	5,521			1925-1929
Silver Eagle Claim	South Lorrain	NA	7,989				1918
Wettlaufer Mine	South Lorrain	6,861	2,593,041	23,910			1909-1940
TOTAL ⁽²⁾		8,007,036	492,538,553	23,279,622	3,624,786	2,087,211	1904-1989

Source: Guindon *et al.*, 2016

Notes: (1) Historic mine located within the First Cobalt's Silver Centre Property area. (2) The Author has been unable to verify the information in Table 7 and the information is not necessarily indicative of the mineralisation on the Properties.

6.2 Exploration History of the Silver Centre Property

6.2.1 Silver Centre Property Peripheral to the Keeley-Frontier Patents

On 13 March 2012, Canadian Silver Hunter announced that it staked seven claims totalling 79 claim units adjacent to its existing Keeley-Frontier patents. Then, on 19 November 2012, Canadian Silver Hunter announced that it acquired a one-third interest in Veinlode Silver Mines Limited (Veinlode), thereby acquiring an indirect interest in certain claims in the Silver Centre area. Canadian Silver Hunter subsequently announced on 19 February 2014, that it acquired from Veinlode a 100% interest in five mining rights only leases and 26 mineral claims adjacent to the its Keeley-Frontier patents.

As announced 16 March 2017, First Cobalt holds an option to earn a 100% interest in Canadian Silver Hunter's five mining leases and seven unpatented mineral claims which together with the 13 Keeley-Frontier patents (see Section 6.2.2) forms the Keeley-Frontier claim group.

First Cobalt also holds a 100% interest in the 17 mining claims of the CIC claim group by way of its acquisition of Cobalt Industries announced 23 January 2017 and a 100% interest in the eight mining claims of the BMC South claim group purchased from Brixton Metals Corp on 7 June 2017.

The known exploration history of these 32 mineral claims and five mining leases in the Silver Centre Property, peripheral to the core Keeley-Frontier patents, is summarised in Table 8, based on available online Ontario government assessment files and MDI files. The approximate locations of the historic work areas are noted in Figure 5 with the Map ID and or MDI number referenced in Table 8. The exploration history of the core Keeley-Frontier patents is presented separately in Section 6.2.2.

Table 8: General exploration history of the Silver Centre Property peripheral to Keeley-Frontier patents

Year	Map ID	Assessment file/reference	Operator	Work history
1950	49	31M03NW0009	H G Miller	PDRILL 2 Ddh/435'
1952	59	31M04NE0040	Macfie Expl Ltd	PDRILL 1 Ddh/266.5'
1956	57	31M04NE0027	W Hammerstrom	GEOLOG Mapping
1959	50	31M04NE0039	W Hammerstrom	ASSAY Dd Core PDRILL 6 Ddh/6011'
1960	33	31M03NW0018	Geoscientific Prospectors Ltd	ASSAY Dd Core PDRILL 2 Ddh/2510'
1961	60	31M04NE0032	Keeley-Frontier Mines	PDRILL 1 Ddh/200'
1963	48	31M03NW0010	E De Camps	PDRILL 1 Ddh/200'
1963	58	31M04NE0033	Bi-met Mines Ltd	PDRILL 1 Ddh/121'
1965	45	31M03NW0021	M Oslund	PDRILL 2 Ddh/202.5'
1970	46	31M04NE0035	J Price	PDRILL 3 Ddh/318'
1973	21	31M04NE0003	Aggressive Mining Ltd	GCHEM 500 Rx Samp/dd Core/co Ag GEOLOG Mapping PDRILL 8 Ddh/3186'/dd Core Samp VLF 30 Lmi
1974	20	31M04NE0024	F Joubin P Hermiston	MAG Unknown
1974	44	31M04NE0029	J Price	PDRILL 1 Ddh/105'
1987	52	31M04NE0021	Place Resc Corp Winteroad Resc Ltd	ASSAY Dd Core PDRILL 2 Ddh/2956'
1995	28	31M03NW0040	John A Gore	MAG 5.1 Km PCUT 5.5 Km VLF 4.2 Km
1995	39	31M03NW0032	Hugh A Moore	MAG 5.6 Km PCUT 5.7 Km VLF 5.6 Km
1996	25	31M03NW0047	John A Gore	ASSAY 15 Samples PCUT 35 Days PROSP 32 Days PSTRIP 11 Areas
1996	31	31M03NW0048	John A Gore	MAG 6.1 Km PCUT 6.1 Km PROSP 3 Claims VLF 5.3 Km
1996	31	31M03NW0033	John A Gore	GCHEM 40 Samples GLCOMP Geol Map Incl Sample Locations
1996	34	31M03NW0042	B Wright	PROSP 7 Days
1997	43	31M03NW0049	Hugh A Moore	GCHEM 39 Samples
1998	10	31M04NE2012	Dave Ross Hanes James Malcolm MacLachlan Sherwood Plunkett	GCHEM 29 Samples PROSP 4 Days
1998	15	31M04NE2011	Wolverine Expl And Mineral Recovery	GCHEM Approx 38 Samples PROSP 3.5 Days
1998	29	31M03NW2002	John A Gore	IP 14.5 Line Km MAG 24.26 Line Km PCUT 31.75 Line Km



Year	Map ID	Assessment file/ reference	Operator	Work history
1999	2	31M04NE2010	Dave Ross Hanes James Malcolm Maclachlan Sherwood Plunkett	GCHEM 23 Samples PROSP 20 Days
1999	7	31M04NE2009	Dave Ross Hanes James Malcolm Maclachlan Sherwood Plunkett	GCHEM 11 Samples PROSP 1 Claim
1999	13	31M04NE2013	Dave Ross Hanes James Malcolm Maclachlan Sherwood Plunkett	PROSP 2 Days
1999	19	31M04NE2021	Dave Ross Hanes James Malcolm Maclachlan Sherwood Plunkett	GCHEM 101 Soil 65 Rock GEOL 1:1000 Geol Map MAG 1:2500 Total Field Contour Map PCUT 13 Days PMECH 5 Days Excavator VLF 1:2500 Profiles Map
1999	26	31M03NW2006	John A Gore	ASSAY 96 Samples PDRILL 3 Holes
1999	35	31M03NW2012	John A Gore	ASSAY 67 Samples GEOL2 Maps 1 1:200 1 1:2500
1999	40	31M03NW2004	Hugh A Moore	MAG 2.72 Line Km PCUT 2.72 Line Km VLF 2.72 Line Km
1999	42	31M03NW2009	John A Gore	EM 7 Line Km MAG 8.13 Line Km PCUT 8.13 Line Km VLF 8.13 Line Km
2000	4	31M04NE2023	Dave Ross Hanes James Malcolm Maclachlan Sherwood Plunkett	GCHEM 41 Rock 6 Soil Samples PROSP 28 Days
2000	23	31M04NE2019	Wolverine Expl And Mineral Recovery	GCHEM 4 Soil Samples PROSP 4 Hrs
2000	47	31M03NW2010	John A Gore	ASSAY 34 Samples PDRILL 1 Hole
2000	54	31M04NE2040	Frank Palmay John Ross Moses	ASSAY 58 Core Samples PDRILL 1 Hole
2000	56	31M04NE2020	Frank Palmay John Ross Moses	EM 9.43 Line Km PCUT 10 Line Km
2001	3	31M04NE2030	Dave Ross Hanes James Malcolm Maclachlan Sherwood Plunkett	ASSAY 15 Grab Samples GCHEM 10 Soil Samples GOVER 3 Till Samples PMECH 13 Hrs Backhoe 3 Areas PROSP 5.5 Days
2001	12	31M04NE2029	Marlene R Carr Wolverine Expl And Mineral Recovery	ASSAY 7 Grab Samples GCHEM 4 Alluvial Samples GEOL 1:10000 Geol Map
2001	22	31M05SE2037	Murray Simpson Outcrop Expl Ltd	GCHEM 14 Alluvial Samples

Year	Map ID	Assessment file/ reference	Operator	Work history
2002	1	31M04NE2037	Dave Ross Hanes James Malcolm MacLachlan Sherwood Plunkett	ASSAY 6 Grab Samples GCHEM 4 Soil Samples GOVER 9 Till & 2 Sed Samples LC 11.431 Line Km MAG 11.431 Line Km MICRO 51 Grains Microprobe Analysis PROSP 1:1250 Prosp Maps
2002	9	31M04NE2034	Marlene R Carr Wolverine Expl And Mineral Recovery	ASSAY 13 Samples MICRO 3 Polished Thin Sections PROSP 10 Man Days
2002	14	31M04NE2034	Marlene R Carr Wolverine Expl And Mineral Recovery	ASSAY 13 Samples MICRO 3 Polished Thin Sections PROSP 10 Man Days
2002	55	31M04NE2035	Frank Palmay John Ross Moses	ASSAY 64 Core Samples PDRILL 1 Hole
2003	5	31M04NE2038	Dave Ross Hanes James Malcolm MacLachlan Sherwood Plunkett	PMECH 1 Area Excavater PROSP 4 Man Days PSTRIP 1 Area
2003	11	31M04NE2039	Marlene R Carr Wolverine Expl And Mineral Recovery	PROSP 1:2000 Prosp Map
2003	27	31M03NW2019	John A Gore	PROSP 2 Man Days
2004	8	31M04NE2043	Marlene R Carr Wolverine Expl And Mineral Recovery	ASSAY 2 Rock Samples PROSP 1:2000 Prosp Map 8 Man Days
2004	24	20000000283	John A Gore	PROSP 3 Man Days
2004	51	31M04NE2041	Frank Palmay John Ross Moses	BENEF 1 Sample Caustic Dissolution
2005	53	20000000862	Frank Palmay John Ross Moses	ASSAY 117 Core Samples PDRILL 2 Holes 816 M
2006	32	20000002444	Adroit Resc Inc	work overlapped some of FCC claims AEM 241 Line Km AMAG 241 Line Km
2007	18	20000002299	Dave Ross Hanes James Malcolm MacLachlan Sherwood Plunkett	ASSAY 2 Samples PMAN 10 Man Days
2007	30	20000002465	Adroit Resc Inc	IP 23 Line Km MAG 25 Line Km
2007	32	20000002725	Adroit Resc Inc	work overlapped some of FCC claims ASSAY 64 Rock 42 Soil Samples GCHEM 42 Soil Samples PDRILL 9 Holes 1063m
2009	16	20000000115	Dave Ross Hanes James Malcolm MacLachlan Sherwood Plunkett	ASSAY 1 Sample PMAN 2 M Days
2009		20000004272	John A Gore	LC 2.775 Line Km MAG 2.775 Line Km VLF 2.775 Line Km
2011	6	20000006591	Dave Ross Hanes James Malcolm MacLachlan Sherwood Plunkett	ASSAY 1 Sample PROSP 2 Man Days
2011	17	20000005679	Dave Ross Hanes James Malcolm MacLachlan Sherwood Plunkett	ASSAY 20 Soil Samples GCHEM 26 Soil Samples PMAN 2 Man Days

Year	Map ID	Assessment file/reference	Operator	Work history
2011	36	20000006393	Mhakari Gold Corp.	LC 11.7 L Km MAG 11.7 L Km VLF 11.7 L Km
2011	37	20000006529	John A Gore	LC 1.6 L Km MAG 1.6 L Km
2012	38	20000007308	John A Gore	PMECH 1 M Day
2012	41	20000007783	John A Gore	MAG 3.6 L Km

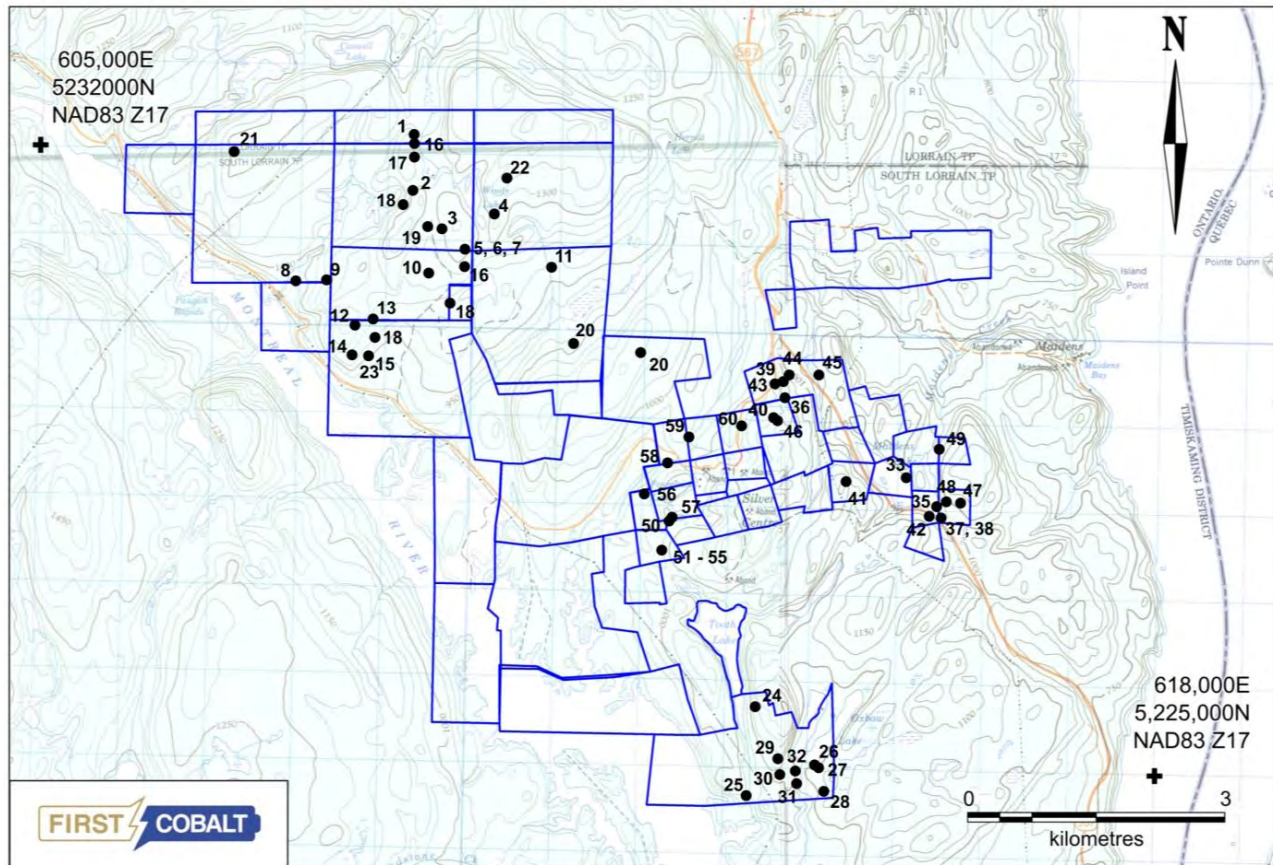


Figure 5: Silver Centre Property – location of assessment work areas peripheral to Keeley-Frontier patents

Note: Numbers correspond to assessment work index numbers in Table 8

6.2.2 Silver Centre Property – Core Keeley-Frontier Patented Claims Exploration History

As announced 16 March 2017, First Cobalt entered an option to earn a 100% interest in Canadian Silver Hunter's 13 core Keeley-Frontier patent claims, which together with five mining leases and seven unpatented mineral claims form the Silver Centre Property's Keeley-Frontier claim group. The exploration and development history is reasonably well documented as summarised below, however details are limited.

The original discovery of silver mineralisation on the Keeley claim (HR 19) was made in 1907 by prospectors J.M. Wood, R.J. Jowsey, and C. Keeley, leading to development of the Keeley Mine. In 1908, J.M. Wood discovered the Wood vein on the adjacent Beaver Lake claim (HR-21). Claims HR 19 and HR21 were sold to interests connected with "Farmers Bank" however the bank was never owner of the mine. The property,



under the name of Keeley Mine Limited, was worked by interests associated with the bank until 1911. The Farmers Bank then became involved, and the bank failed. The liquidators of the bank gained possession of the Keeley mine. The operating company, Keeley Mine Limited was kept in good standing and not allowed to fail. In 1913, Associated Gold Mines of Western Australia acquired an option on the property from Keeley Mine Limited and in August 1919, following several option renewals, the property and the majority of the stock in Keeley Mine Limited was transferred to Associated Gold (Knight, 1922). Keeley Silver Mines Ltd and the property were acquired by Anglo-Huronian Limited in 1933.

What is now known as the Frontier mine originated in the south half of the Haileybury Silver Mining Company's claim, HR 16. Henry Newburger, of Memphis, Tennessee, bought the south half of HR 16 from the Haileybury Silver Mining Company in 1912 and formed the Haileybury Frontier Company. Haileybury Frontier sank two shafts. Minor drifting and crosscutting was completed on the 75 and 150-foot levels of the northern of the two shafts. Both levels showed a strong vein carrying smaltite, but no significant silver. Henry Newburger died and the company went into liquidation in 1914. Joseph Newburger, brother of the deceased, bought in the property in the interests of his brother's widow, and the mine remained closed until the autumn of 1920. During the summer of 1920, Joseph Newburger had the mine dewatered and examined by representatives of several silver-mining companies. In 1920, a United States-based company represented by Horace Strong purchased the Haileybury Silver property (north half of HR16) and secured a one-year lease option to purchase the Frontier Mine (south half HR 16) (Knight, 1922). Strong discovered high-grade silver on the south half of claim HR 16 in 1921 immediately north of the Keeley claim (Willars, 1965). In 1921, the Mining Corporation of Canada amalgamated several companies and claims, including the Haileybury Silver Mines and Frontier Mine properties (north and south halves of HR 16 respectively), the former Compton (HR 25), Little Keeley (HS 40) and the Keeley Extension properties (HR39, HR 41) into Frontier Silver Mines Limited.

Both the Keeley and the Frontier Mines have extensive underground workings (Figure 6). As summarised by McIlwaine (1970), during initial operations five shafts were sunk on the Keeley property and three on the Frontier property. The main working shaft of the Keeley Mine was the No. 3 shaft, which extended to a depth of 174 m. The No. 1 shaft was an emergency exit and ventilation shaft. The No. 2 shaft served as a prospect shaft for the No. 4 vein. The No. 4 and No. 5 shafts were prospect shafts on the Woods vein. In addition to the shafts, there were originally six winzes, only two of which were operative in the last phase of mining in the 1960s. At the Frontier Mine the main working shaft was the No. 3 shaft sunk to a depth of 194 m. The F8 and F9 winzes extended to depths of 415 m and 444 m respectively. Sixteen shafts and winzes totalling 2,513 m were sunk on the Keeley Frontier group patents providing access to a maximum depth of 427 m.

The Keeley Mine of Keeley Silver Mines Ltd produced intermittently from 1908 to 1942 with most of the production occurring between 1921 and 1931. The Frontier Mine was operated by Mining Corporation of Canada Ltd from 1921 to 1943. A summary of reported production from the Keeley and Frontier Mines is presented in Section 6.5.1.

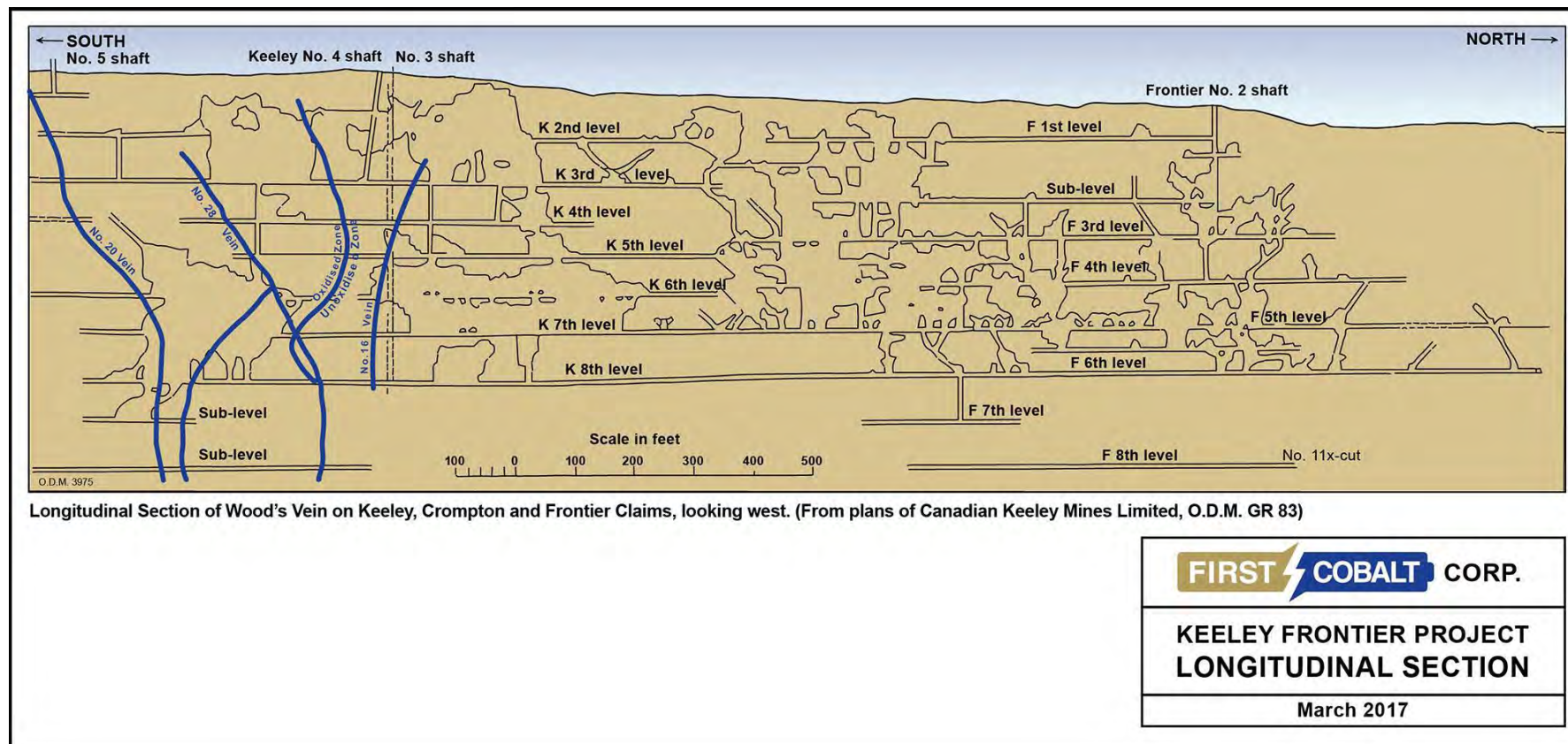


Figure 6: Longitudinal section Keeley-Frontier mine workings on the Woods vein looking west

In 1961 Keeley-Frontier Mines Limited purchased and consolidated the 13 patented claims that now form the core Keeley-Frontier patent claim group:

- Keeley claims HR19 and HR21 from Anglo-Huronian Limited that controlled Keeley Silver Mines Limited
- Frontier claims HR16, HR17, HR20, HR25, HR68 and HS39 from The Mining Corporation of Canada Limited which controlled Frontier Silver Mines Limited
- Claims HR22, RL455 and RL456 from Keeley Extension Mines Limited
- Claims T32960 and T46400 (formerly HS40 or the Little Keeley claim) from N. Oslund of Haileybury, Ontario.

Keeley-Frontier Mines Limited was subsequently re-organised as Canadian Keeley Mines Ltd in 1964, and then became Keeley Frontier Resources Inc. in 1980.

Keeley-Frontier began work on the property in 1961 and in 1962 the Keeley and Frontier mines were dewatered and rehabilitated. Keeley-Frontier connected the two mines at three points including the main haulage way between the 6th level of the Frontier Mine and the 8th level of the Keeley Mine. Access and services were provided largely through the Frontier No. 3 shaft and the 828 winze, which was deepened by Keeley-Frontier from the 11th to the 12th level. Development totals occurring between 1961 and 1965, include 1,110 m of drifting, 341 m of cross cutting, 39 m of shaft sinking and 1,117 m of raising. Little diamond drill exploration was done at the mines prior to 1961, but from 1961 to 1965, five surface drillholes and 276 underground drillholes were completed for a total of 15,922 m.

The Woods vein had been mined out by this time and the 1963–1965 Keeley-Frontier production as summarised in Table 11 (Section 6.5.1) came primarily from the Keeley Mine and reprocessed tailings.

Based on limited information available on level plans filed as assessment files with the MNDM, Agnico Eagle optioned the property circa 1969 to 1972 and completed an underground drill program.

M & M Porcupine Gold Mines (M & M Porcupine) acquired the property from Keeley Frontier Resources in 1984 (Pearson and Kerr, 1985).

155433 Canada Limited, a subsidiary of LaChib Development Corporation (LaChib) acquired the property from M & M Porcupine in 1987 (Mayer and Pearson, 1989). Geological consultants Derry, Michener, Booth and Wahl recommended a 4,570-m diamond drill program focusing on fault vein systems near Beaver Lake (Mayer and Pearson, 1989). This proposal incorporated many of the targets proposed by Hammerstrom, Thoday and Watts (1981). No exploration was conducted.

Circa 1994, Transway Capital Inc. (Transway) acquired the property from LaChib. Transway sold to Cobatec Ltd approximately 10,000 tons of surface muck which was removed to the latter's cobalt recovery plant under construction in the Cobalt area (Trussler, 1994). In 1995 Transway contracted JVX Ltd of Richmond Hill, Ontario to conduct time-domain spectral induced polarisation/resistivity (IP/RES), VLF-EM, magnetic and time domain electromagnetic (TDEM) surveys on the property, excluding the area covered by Beaver Lake, (JVX, 1996). Field work was completed between 5 June and 6 July 1995. Total coverage was 8,925 m of IP/RES with "a"-spacing of 25 and 50 m, 25,550 m of VLF-EM, 24,488 m of magnetics and approximately 6,650 m of TDEM. Truncations of magnetic patterns with coincident IP/RES and/or time domain EM surveys or VLF-EM surveys were interpreted to indicate the presence of five geophysical targets suggestive of disseminated to massive sulphide mineralisation and warranting diamond drill testing.

1695255 Ontario Inc. acquired the property from Transway on 13 April 2007. 1695255 Ontario Inc. changed its name to Silver Centre Resources Inc. (Silver Centre) effective 20 February 2007.

In 2010, Silver Centre contracted JVX Ltd to conduct magnetic, pole-dipole IP/RES and moving loop transient EM (TerraTEM) surveys over the Beaver Lake area in the southwestern part of the Keeley-Frontier group patents. Field work was completed in the 4–19 February 2010 period. Production was 61 sounding of TerraTEM, 3.2 km of magnetics, and 1.3 km of IP/RES using a grid with lines 50 m apart and oriented 075°. The magnetic data indicates the possible location of north-trending faults identified by previous property operators, which are now CSH targets. The TerraTEM survey was only conducted on Beaver Lake and produced ambiguous results. Pole-dipole IP/RES data for the whole project area has identified 50 IP anomalies of which 33 are classified as strong. Four of the IP anomalies have an associated resistivity high and 6 have an associated resistivity low, and 40 have no clear resistivity expression. The best quality anomalies reside in the 1995 IP/RES survey (JVX, 1996). The present IP/RES survey did not identify additional quality targets underneath Beaver Lake. The VLF-EM data did not present an easily interpretable array of information. However, given the shallow nature of the overburden, some of the responses are indicative of fault/shear zones, generally trending north-south.

Silver Centre Resources Inc. changed its name Canadian Silver Hunter Inc. effective 23 November 2010.

During 2012, Canadian Silver Hunter completed a six hole, 2,058 m diamond drill program on the Keeley-Frontier group claims (Table 9). The focus of the 2012 diamond drilling program were areas of the Beaver Lake Fault that had been the final target of exploration and mining when the mine closed in 1968.

Table 9: 2012 Canadian Silver Hunter diamond drill program

Drillhole	Easting UTM Z17 NAD83	Northing UTM Z17 NAD83	Collar elevation (m Est)	Collar azimuth (True)	Collar dip	Length (m)	Start date	Stop date	Samples	Remarks
CSH12-01	612607.99	5228414.47	307.52	220	-60.2	317	10 Jan 2012	14 Jan 2012	53	Test mineralisation potential at northern extension of Beaver Lake Fault
CSH12-02	612774.52	5228311.27	304.46	254	-47.6	362	14 Jan 2012	19 Jan 2012	64	Test mineralisation potential at north extension of Beaver Lake Fault and reported mineralisation intersected in in DDH U-106 (20.1 opt/10 ft, 7.6 opt/10 ft)
CSH12-03	612887.25	5227767.46	320.04	296	-62	404	23 Jan 2012	26 Jan 2012	79	Test mineralisation potential at intersection of #16 structure and Beaver Lake Fault
CSH12-04	612775.14	5228061.88	309.46	237	-58	338	27 Jan 2012	30 Jan 2012	74	Test mineralisation potential at intersection of Beaver Lake Fault and #28 structure
CSH12-05	612838.99	5227913.88	309.48	258	-58	362	31 Jan 2012	3 Feb 2012	69	Drilled to confirm reported Ag mineralisation below Level 12 Beaver Lake stope. Intersected Level 12 drift
CSH12-06	612838.99	5227913.88	309.48	253	-60	275	7 Feb 2012	9 Feb 2012	155	As with CSH12-05. Dip adjustment to avoid stope opening
TOTALS						2,058			494	

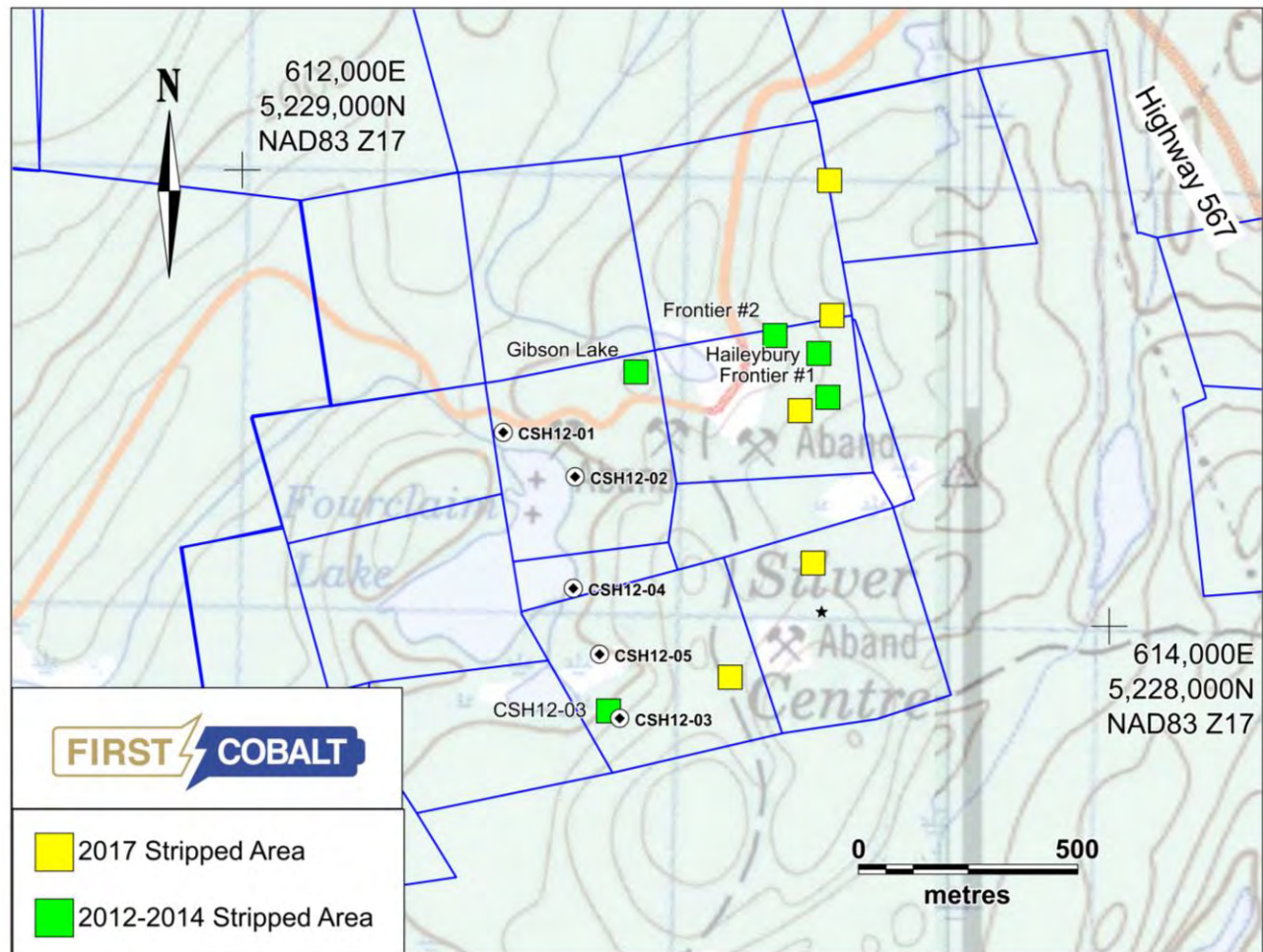


Figure 7: Location of Canadian Silver Hunter 2012 diamond drill collars and 2012-2014 power stripping and channel sampling

Diamond drilling was done under contract to Laframboise Drilling of Earlton, Ontario. The drill rig was mobilised on 8 January 2012 and was demobilised on 3 March 2012. Core was logged and cut in a rented facility in North Cobalt. Logging of the core was completed by Val Volodine of Richmond Hill, Ontario, and Dean Cutting, P.Geo. (APGO #1080) of Rouyn Noranda, Quebec. Assistance was provided by Al Kon of Haileybury, Ontario, Steve Novosel of Cobalt, Ontario, Charles Tatai of Cobalt Ontario, and Skylar Huard of Cobalt, Ontario. The program was managed by David Jamieson P.Geo., Dean Cutting P.Geo., and JVX Ltd.

The NQ drill core was sawed in half at the North Cobalt facility, with one half returned to the core box for archive and the other half bagged and sent for aqua regia digestion and multielement (including Ag, Co, Ni, Bi, Sb) analysis (ICPOES finish) at AGAT Laboratories Ltd. Sample core lengths varied from 0.15 m to 1.5 m. AGAT collected the split core samples from the Company's core shack and delivered them to its preparation lab in Sudbury, Ontario. Pulps were then sent to AGAT facilities in Mississauga, Ontario for analysis. AGAT is a fully accredited laboratory and conforms with the requirements of CANP4E (ISO/IEC 17025:2005) and CANP1579 by the Standards Council of Canada.

Canadian Silver Hunter's quality assurance and quality control (QAQC) program included the use of certified reference standards and blank samples inserted into the assay stream by the Company's personnel every 25 samples in addition to the AGAT's internal QAQC programs. Samples assaying greater than 100 g/t Ag are



fire assayed with a gravimetric finish. QAQC also included sending selected pulp samples for check assays at an independent lab (ALS Chemex) using both four acid (MEMS61) and aqua regia (MEMS41) digestions for multielement analysis. Selected higher grade silver and several random sample rejects were chosen for screen metallic analysis for silver only, at AGAT Laboratories. A final silver number for the database was arrived at by averaging duplicate geochemical values; geochemical values were replaced by fire assay or screen metallic analyses when available. Canadian Silver Hunter indicated that screen metallic assaying is required to more accurately quantify silver values in higher grade portions of the mineralised zones due to the presence of coarse native silver.

Archived drill core is currently stored in a locked ocean shipping container at the historic Keeley-Frontier mine site.

Selected highlights are presented in Table 10. Diamond drillhole CSH12-03 returned significant silver values potentially in the historic # 40 vein structure between 111.0 m and 122.3 m downhole, with a composite silver value of 72.47 g/t Ag over 11.3 m, including 168.22 g/t over 4.2 m, with no individual silver assay below 2.4 g/t. The interval included the following screen metallic assays:

- 1,517 g/t over 0.3 m
- 479 g/t over 0.4 m
- 91 g/t over 0.3 m.

This # 40 vein system received relatively little historic underground drifting and there is no record of any historic surface drilling in the area. Further down hole, disseminated arsenides and fine calcite veining occur in what may be a parallel or second branch of the # 40 zone. Elevated copper and bismuth values also occur within both zones.

CSH12-04 returned a composite silver assay of 25.9 g/t over 4.3 m, starting at 254 m downhole which appears to correlate to the north extension of the Beaver Lake Fault.

CSH12-05 and CSH12-06 were drilled to test beneath the one stope developed on the Beaver Lake Fault before mine closure. CSH12-05 returned a composite silver value from the Beaver Lake Fault of 398.42 g/t over 1.9 m, however 0.9 m of this intersection was lost core or void due to the hole intercepting what is interpreted to be old workings at 258.8 m downhole. At 249 m, it appears that the hole broke into the corner of Beaver Lake drift, resulting in 0.9 m of lost core within a 1.1 m interval. Angular fragments of altered volcanic material containing cobalt arsenides were recovered and assayed 447 g/t Ag. The hangingwall samples assayed 226 g/t Ag over 0.4 m, and 65.9 g/t Ag over 0.4 m, while the footwall sample assayed 12.7 g/t Ag over 0.4 m.

A second zone of interest was located at 143 m in the form of a dark grey streaked calcite vein 33 cm in core length, which assayed 26.2 g/t Ag over 0.55 m. Several samples of faulted material between 15 m and 75 m returned anomalous silver, arsenic, cobalt values.

CSH12-06 was drilled to test within 25 m below and west of CSH12-05 to avoid the historic drift/stope area and returned a composite silver value of 58.21 g/t over 0.95 m. At 253 m, a 0.65 metre sample in the immediate hangingwall of the Beaver Lake Fault assayed 86.9 g/t Ag, and 108 ppm Bi, with subsequently check assaying returning 68 g/t Ag by screen metallic methods. This sample is described as having hairline carbonate veinlets with associated hematite and epidote alteration; chalcopryrite, arsenopyrite (possibly cobalt arsenides), bismuthite? and pyrite are common as grains and small masses.

The Beaver Lake Fault is interpreted to be located between 254.5 m and 255.1 m, consisting of a brittle fault zone with a 5.5 cm core length of pink carbonate-quartz vein at 60° to the core axis with grey metallic streaks and local silvery blebs (bismuthite?). The fault itself assayed 32.8 g/t Ag, 0.1% Co and 60 ppm Bi.

Table 10: 2012 Canadian Silver Hunter diamond drill program assay results

Drillhole	From (m)	To (m)	Length (m)*	Silver (g/t)**	Cobalt (ppm)**	Comment
CSH12-01	105.8	106.1	0.3	6.5		Anomalous As, Cu, Bi, Co; Beaver Lake Fault?
CSH12-02	285.75	286.05	0.3	3.3		Anomalous Cu, Bi, Co, Pb; Beaver Lake Fault?
CSH12-03	111	122.3	11.3	72.5		New Zone
including	117.9	122.3	4.4	168.2		New Zone
including	121.6	122.3	0.7	923.9		New Zone
CSH12-04	254	258.3	4.3	25.9		Beaver Lake Fault – North Drift Extension
CSH12-05	248	249.9	1.5	405.64		Beaver Lake Fault
including	248	248.4	0.4	65.9		
	248.4	248.8	0.4	226.0	17.5	
and	248.8	249.9	1.1	447.0	69.0	Sample interval 0.9 m of lost core (drift opening)
	249.9	250.3	0.4	12.7		
CSH12-06	253.85	254.8	0.95	58.2		Beaver Lake Fault
including	253.85	254.50	0.65	86.9	28.2	
and	254.50	254.80	0.30	32.8	1080	

* Intervals reported are core lengths; true widths of mineralisation are not known. ** Assay results are length weighted

In November 2012, Canadian Silver Hunter completed a bedrock stripping and channel sampling program on the Keeley-Frontier patent claim block at the DDH CSH12-03 collar area (#40 Vein System) and immediately west of Gibson Lake. The mechanical stripping, washing, and channel sampling was performed under contract by Laframboise Drilling of Earlton, Ontario. A John Deere 240D excavator was mobilised to the property on 1 November 2012 and was demobilised on 9 November 2012. Washing of the bedrock exposed by the excavator was then undertaken using a “Wajax Type” high pressure water pump supported by man and mechanical shoveling and brushing. After the exposed outcrops were washed, geological mapping was undertaken followed by markup of channel sampling intervals based on geological observations. Cold late fall temperatures limited the amount of detailed mapping possible, however basic geological observations were completed, and channel cut samples examined for mineralisation by the field geologist.

Channel samples were cut using a Stihl gas powered cut all saw using a diamond blade and chipped out using both manual chiseling and mechanical electric hammer chisel methods. After the channel samples were collected the channels were mapped, sample numbers assigned to the bags and aluminum tags with the sample numbers fixed in the channels at the end of the intervals. Samples were sealed in their bags and removed from the field sites to the core shack facility in North Cobalt for detailed examination and description. Samples were then resealed in their bags. Standards and blanks were inserted into the sample stream at the core facility roughly every 25 samples. In addition, the lab’s internal QAQC programs were relied upon. AGAT Laboratories provided pickup of the channel samples from the Company’s core shack in North Cobalt, and delivery to its preparation lab in Sudbury, Ontario. Analysis is performed at AGAT facilities in Mississauga, Ontario. AGAT is a fully accredited laboratory and conforms to the requirements of CANP4E (ISO/IEC 17025:2005) and CANP1579 by the Standards Council of Canada. Samples were submitted for aqua regia digestion and multielement (including Ag, Co, Ni, Bi, Sb) analysis (ICPOES finish). Samples returning



greater than 100 g/t Ag were fire assayed with a gravimetric finish. Sample channel lengths typically varied from 0.15 m to 1.5 m. The program was managed by David R. Jamieson P.Geo. (APGO #1843) of Peterborough, Ontario with field work performed by Dean R. Cutting P.Geo. (APGO #1080) of Rouyn-Noranda, Quebec.

The CSH12-03 collar area was stripped to expose bedrock in the area of the drillhole where it is interpreted to have intercepted the #40 vein system (Figure 7). Results returned in the drillhole were 168.22 g/t Ag over 4.2 m within an interval grading 72.47 g/t Ag over 11.3 m (Table 10). The stripping of the overburden was undertaken along the surface trace of hole CSH12-03 from the collar approximately 60 m to the west. The overburden was significantly deeper than expected requiring additional time and handling. Cold weather and the exposed outcrop rough surface prevented adequate power washing for mapping and channel sampling of the exposure. The work at this site was therefore suspended to await improved field conditions. No detailed geological mapping or channel sampling of the outcrop was undertaken in 2012. The outcrop exposure measures about 61 m by 10 m in an irregular shape. As of the Effective Date, it has yet to be mapped and sampled, and remains available for future evaluation.

The second area of mechanical stripping in the 2012 program is located immediately to the west of Gibson Lake (Figure 7 and Figure 8) to follow-up on grab sample results taken in the summer of 2012 from a historic blasted surface trench while prospecting geophysical IP anomalies.

There are no available records of previous exploration results in the Gibson Lake area. Silver and cobalt production are known to have occurred 300 m to the east from the Woods and Watson veins.

The stripped area of approximately 48 m by 10–15 m (Figure 8) exposed a pillowed mafic volcanic cut by numerous brittle looking fractures and faults trending principally between 310° and 330°, variably though normally steeply dipping. Disseminated pyrite grains and blebs, chalcopyrite, galena, sphalerite, arsenopyrite, native silver and bismuth were visible within and in proximity to many of the fractures in the system. Pyrite mineralisation is also associated with the pillow selvages. A total of 50.45 m of channel samples were collected in 77 samples. The average length weighted composite analysis for all 77 samples collected was 11.33 g/t Ag, 0.12% Pb, 0.14% Zn, and 0.12% Cu. Silver values ranged from 0.4 to 190 g/t with only seven samples assaying below 1.0 g/t. A similar widespread dispersion of Cu, Pb and Zn values was also noted with a high correlation to Ag values (65.9 ppm to 5,760 ppm Cu; 17 ppm to 1.46% Pb and 39.9 ppm to 1.72% Zn).

Selected highlights include:

- Channel line 2 returned a composite silver value of 70.4 g/t Ag over 1.85 m, including 190 g/t Ag over 0.6 m.
- Channel line 7 returned composite silver values of 69.3 g/t Ag over the full length of 2.9 m, including 86.8 g/t Ag, 0.91% Pb, 0.65% Zn, 0.28% Cu over 2.25 m. One sample returned a value of 174 g/t Ag and 1.46% Pb over 0.95 m.
- Channel line 8 returned a composite silver value of 28.0 g/t Ag over 2.05 m, with 0.58% Pb, and 0.69% Zn. The composite included a 0.6 m of 70 g/t Ag, 1.31% Pb, 1.64% Zn and 0.42% Cu.

It is significant to note that the Gibson Lake stripping area is approximately 100 m above the historic “productive zone” above the Nipissing diabase with which the Keeley-Frontier high grade silver zones are associated. Canadian Silver Hunter personnel recommended additional mechanical stripping, detailed mapping and channel sampling on the Gibson Lake structure extending to the northwest. Additional follow-up geophysics followed by shallow diamond drilling may be warranted after receipt of the channel sample analyses.

Historic exploration and production in the Silver Centre and Cobalt camps focused on trenching and underground drifting along narrow high-grade structures. Wider zones of lower grade mineralisation were not historically targeted but may now represent a valid exploration target for bulk mineable silver and cobalt mineralisation. These lower grade zones are potentially traceable using geophysics, surface drilling or mechanical stripping. Notably, strong chargeability anomalies from earlier Canadian Silver Hunter IP surveying suggests the presence of disseminated sulphide/arsenide targets along a northwest trending anomaly 100 m wide by at least 400 m long stretching northwest from the Gibson Lake stripping area.

In addition to the bedrock stripping and channel sampling, backhoe sampling was completed in 2012 along the edge of Little Beaver Lake at one location to examine the depth of tailings and distribution of silver and other metals in the tailings profile. Five samples were assayed at AGAT Labs and returned silver values between 74.8 g/tonne (2.18 ounces per ton) and 404 g/tonne (11.78 ounces per ton).

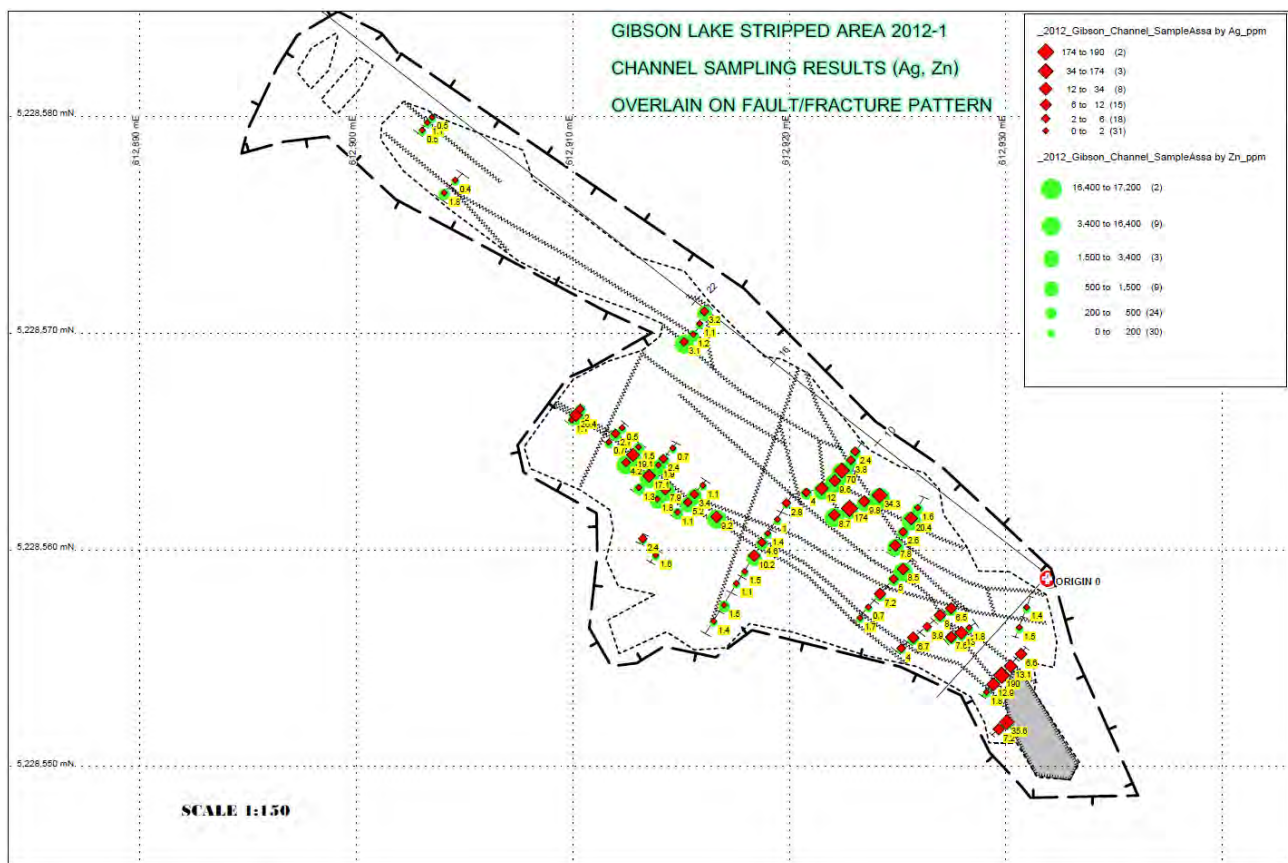


Figure 8: 2012 Gibson Lake stripped area – Channel sample results (Ag)

In 2013, Canadian Silver Hunter power-stripped an area along the #1 Fault structure, proximal to the Frontier #1 Shaft, approximately 440 m east of the Gibson Lake stripping area (Figure 7). No channel sampling was completed in 2013 due to depth of overburden and flooding of the trenches. In 2014, the area was revisited, with additional power-stripping, mapping and channel sampling. Results indicate that the #1 Fault structure in this area consists of a wide (20 m) zone of fractured, epidotized and silicified pillowed metavolcanics, cut by syenitic and micaceous dykes.

The Frontier #1 Shaft area channel samples returned anomalous silver, arsenic, and copper (up to 20.7 g/t Ag, 0.16% As and 25.7 to 1,650 ppm Cu). No discrete veins were sampled; higher metal values are associated



with pyrrhotite-pyrite-chalcopyrite veinlets within patchy epidote-silica altered metavolcanics. The mineralisation and assay results are similar to the Gibson Lake area, although the Gibson Lake area returned locally higher silver, zinc and lead values including 86.6 g/t Ag, 0.28% Cu, 0.65% Zn and 0.91% Pb over 2.25 m.

The excavating, power washing and channel cutting program was carried out under contract by Laframboise Drilling Inc. of Earlton Ontario, managed and supervised by David R. Jamieson P.Geo. and Dean R. Cutting P.Geo. Channel samples were cut with a gas-powered saw using a diamond blade, and sent for aqua regia digestion and multielement analysis (ICPOES finish) at AGAT Laboratories Ltd in Mississauga, Ontario. Sample collection, analysis and QAQC procedures were the same as those described for the 2012 stripping and channel sampling programs.

6.3 Exploration History of the Cobalt Area Properties

The Issuer's Cobalt Area Properties comprise 11 small non-contiguous claim blocks which are not part of the Greater Cobalt Project's immediate (2017) exploration plans. These properties have been acquired as part of a longer-term acquisition strategy in the Cobalt camp.

The exploration histories of the Cobalt Area Properties will not be presented in this report as they are not considered material as of the Effective Date.

6.4 Significant Historic Mineral Resource and Mineral Reserve Estimates

There are no significant historical Mineral Resource and Mineral Reserve estimates applicable to Greater Cobalt Project Properties and mineral occurrences.

6.5 Historic Mineral Production

6.5.1 Silver Centre Property – Keeley Frontier Claim Group – Keeley and Frontier Mines Historic Production

The Keeley Mine of Keeley Silver Mines Ltd produced intermittently from 1908 to 1942 with most of the production occurring between 1921 and 1931. Total reported production was 12,154,353 oz Ag (378,043 kg) and 1,617,684 lbs (73,377 kg) Co (Table 11).

The Frontier Mine was operated by Mining Corporation of Canada Ltd from 1921 to 1943 and produced 6,695,415 oz (208,251 kg) Ag and 1,683,769 lb (763,746 kg) Co and 12,158 lb (5,515 kg) Ni (Table 11).

Keeley Frontier Mines Ltd/Canadian Keeley Mines Ltd operated the combined Keeley and Frontier mines during the 1963–1965 period and produced 347,645 oz (10,812 kg) Ag, 9,003 lb (4,083 kg) Co and 14,358 lb (6,512 kg) Ni (Table 11). The 1963–1965 production was primarily from the Keeley Mine and included reprocessed tailings.

Table 11: Keeley and Frontier Mine production (1908 to 1965)

Year	Silver (oz)	Silver (kg)	Cobalt (lb)	Cobalt (kg)	Nickel (lb)	Nickel (kg)	Copper (lb)	Copper (kg)
Frontier								
1921	47,227	1,469						
1922	508,958	15,830	31,529	14,301				
1923	1,300,323	40,445	143,545	65,111				
1924	466,047	14,496	54,687	24,806				
1925	1,158,854	36,044	253,191	114,846				
1926	1,104,597	34,357	80,582	36,551				
1927	902,591	28,074	88,980	40,361				
1928	395,692	12,307	117,418	53,260				
1929	14,295	445	7,162	3,249				
1930	404,903	12,594	292,351	132,608				
1931	320,302	9,963	550,773	249,827				
1932	22,144	689	6,517	2,956				
1935	14,000	435	2,000	907				
1936	7,306	227	10,253	4,651				
1937	8,368	260	3,804	1,725				
1938	2,097	65	5,235	2,375	3,157	1,432		
1939	5,278	164	15,881	7,204	7,954	3,608		
1940	4,327	135	1,470	667	1,047	475		
1941	4,233	132	7,910	3,588				
1942	3,007	94	7,516	3,409				
1943	866	27	2,965	1,345				
Subtotal	6,695,415	208,251	1,683,769	763,746	12,158	5,515		
Keeley								
1908	13,124	408	24,800	11,249				
1909	11,213	349	236	107				
1914	3,524	110						
1918	39,199	1,219	2,410	1,093				
1919	4,586	143	3,160	1,433				
1920	8,253	257	9,897	4,489				
1921	281,659	8,761	16,167	7,333				
1922	775,349	24,116	167,062	75,778				
1923	1,655,323	51,486	175,689	79,691				
1924	1,903,793	59,215	231,005	104,782				
1925	1,446,679	44,997	167,020	75,759				
1926	1,705,531	53,048	210,764	95,601				
1927	1,153,024	35,863	99,402	45,088				
1928	690,168	21,467	99,841	45,287				
1929	837,331	26,044	119,766	54,325				
1930	1,351,121	42,025	91,700	41,594				
1931	265,458	8,257	196,089	88,945				
1935	2,412	75						
1942	6,606	205	2,776	1,259	736	334		
Subtotal	12,154,353	378,043	1,592,748*	722,459	736	334		

Year	Silver (oz)	Silver (kg)	Cobalt (lb)	Cobalt (kg)	Nickel (lb)	Nickel (kg)	Copper (lb)	Copper (kg)
Keeley-Frontier								
1963	136,274	4,239	9,003	4,084	14,322	6,496	10,292	4,668
1964	93,609	2,912			26	12		
1965	117,762	3,663						
Subtotal	347,645	10,813	9,003	4,084	14,348	6,508	10,292	4,668
TOTAL (1908 to 1965)	19,197,413	597,107	3,285,520*	1,490,289	27,242	12,357		

*McIlwaine's (1970) 1908–1942 Keeley Mine cobalt production total was reported at 1,617,784 lb Co but the column actually totals 1,592,748 lb Co. The reason for the error is unknown, the Author has utilised the latter total in the Keeley subtotal and corrected the 1908–1965 total production from the Keeley and Frontier Mines in Table 11.

Source: McIlwaine, 1970

Actual production is probably higher than recorded in Table 11 because under the Delora Smelter contract, the smelter accepted ore for either its silver content or its cobalt content. For example, in 1930 and 1931 when the silver price was too low for profitable mining, both mines shipped cobalt ore with considerable silver content but were only credited for the cobalt content (Hammerstrom *et al.*, 1981). Similarly, cobalt production shipped from the Frontier Mine under Mining Corporation contract with Delora was credited to its main operation in Cobalt proper, not the Frontier Mine (Hammerstrom *et al.*, 1981). Credits were not readily given for minor elements present; Ni, Bi, As, Sb etc. (Harron, 2011)

To the end of 1965, South Lorrain Township (Silver Centre) had produced a total of 23,338,906 oz of silver with 82% of this coming from the Keeley and Frontier Mines, and over 50% from the Keeley Mine itself (McIlwaine, 1970).

6.5.2 Silver Centre Property – BMC Claim Group – Bellellen Mine Historic Production

Sergiades (1968) reported total production of 1,182,772 g (38,027 oz) Ag; 12,930 kg (28,481 lb) Co and 6,085 kg (13,404 lb) Ni from the Bellellen Mine between 1910 and 1943 (intermittent).

7 Geological Setting and Mineralisation

7.1 Regional Geology

The following summary is largely taken from Andrews *et al.* (1986), Smyk and Watkinson, (1990), Born and Hitch (1990), Guindon *et al.* (2016), and others.

The Cobalt/Silver Centre area is underlain by Precambrian rocks of the Superior and Southern provinces. Outliers of Paleozoic strata are exposed immediately to the north in the Haileybury area and further to the north between New Liskeard and Englehart.

Archean Keewatin rocks are the oldest rocks in the Cobalt/Silver Centre area and form the southernmost portion of the Western Abitibi sub-province of the Superior Province. These rocks include predominantly massive and pillowed intermediate to mafic metavolcanic flows with intercalated pyroclastics and metasedimentary rocks, including cherty and sulphidic interflow sediments; felsic metavolcanic rocks are relatively rare. The Archean rocks were folded and intruded by mafic to ultramafic dikes and granite stocks and batholiths (Table 12).

The eroded Archean surface is unconformably overlain by relatively flat lying Paleoproterozoic sedimentary rocks of the Huronian Supergroup which forms the mildly deformed Cobalt Embayment of the Southern Province. The Supergroup comprises four individual shelf type sedimentary cycles. Each cycle consists of a lower sequence of conglomerate of probable glacial origin succeeded by mudstone, siltstone and coarse arenite; some chemical sediments are associated with the uppermost cycle (Cobalt Group). Southwest of Sudbury the Huronian Supergroup attains a thickness of 12 km and thins northward across the Cobalt Embayment due to wedging out of lower cycles, a thinning of clastic units and erosion within the sequence (Harron, 2008). At the northeast edge of the Cobalt Embayment in the Cobalt area (Figure 9), the Huronian Supergroup rocks comprise only the Cobalt Group (Gowganda and Lorrain Formations) and are commonly found filling interpreted paleo-valleys or troughs in the Archean basement (Table 12).

Early Proterozoic-age Nipissing Diabase, a suite of tholeiitic gabbroic intrusive rocks and differentiates, intrude both the Archean basement and the Huronian Supergroup sediments. The Nipissing Diabase are the most abundant and widespread igneous rocks intruding the Huronian sediments and occur as dykes, and sills up to several hundred metres thick uniformly distributed across the Cobalt Embayment. In the Cobalt area, the Nipissing Diabase is interpreted as a thick undulating sheet intruding the Cobalt Group sediments at or immediately above the Archean unconformity. Minor Middle Proterozoic diabase dikes intrude all the rocks (Table 12).

The grade of regional metamorphism in the area ranges from subgreenschist facies in the Huronian sedimentary rocks to greenschist facies in the Archean metavolcanic rocks (Born and Hitch, 1990). Contact metamorphism of sedimentary rocks of the Gowganda and Lorrain Formations occurred during the emplacement of Nipissing Diabase at around 2219 Ma, including chlorite-spotted alteration and feldspar clotting. Mineral assemblages in Nipissing Diabase rocks generally reflect greenschist metamorphism which probably occurred during the Penokean Orogeny at around 1900 Ma.

The Lake Temiskaming Structural Zone (graben) trends north-northwest from the Grenville Front and extends across the Cobalt Embayment well beyond the Cobalt/Kirkland Lake area. The axial portion of the graben is filled with flat lying Ordovician and Silurian sedimentary rocks that rest unconformably upon both Archean and Proterozoic terranes. Faulting affects these Paleozoic rocks.

Cretaceous to Jurassic age kimberlite intrusions occur within and proximal to the Lake Temiskaming Graben. Recent exploration indicates that some of the (20 or more) kimberlite intrusions are diamondiferous (Harron, 2008). Sage (1996) notes that kimberlites of the Cobalt-New Liskeard area are often spatially associated with northwest-trending Lake Temiskaming structures and oblique cross structures.

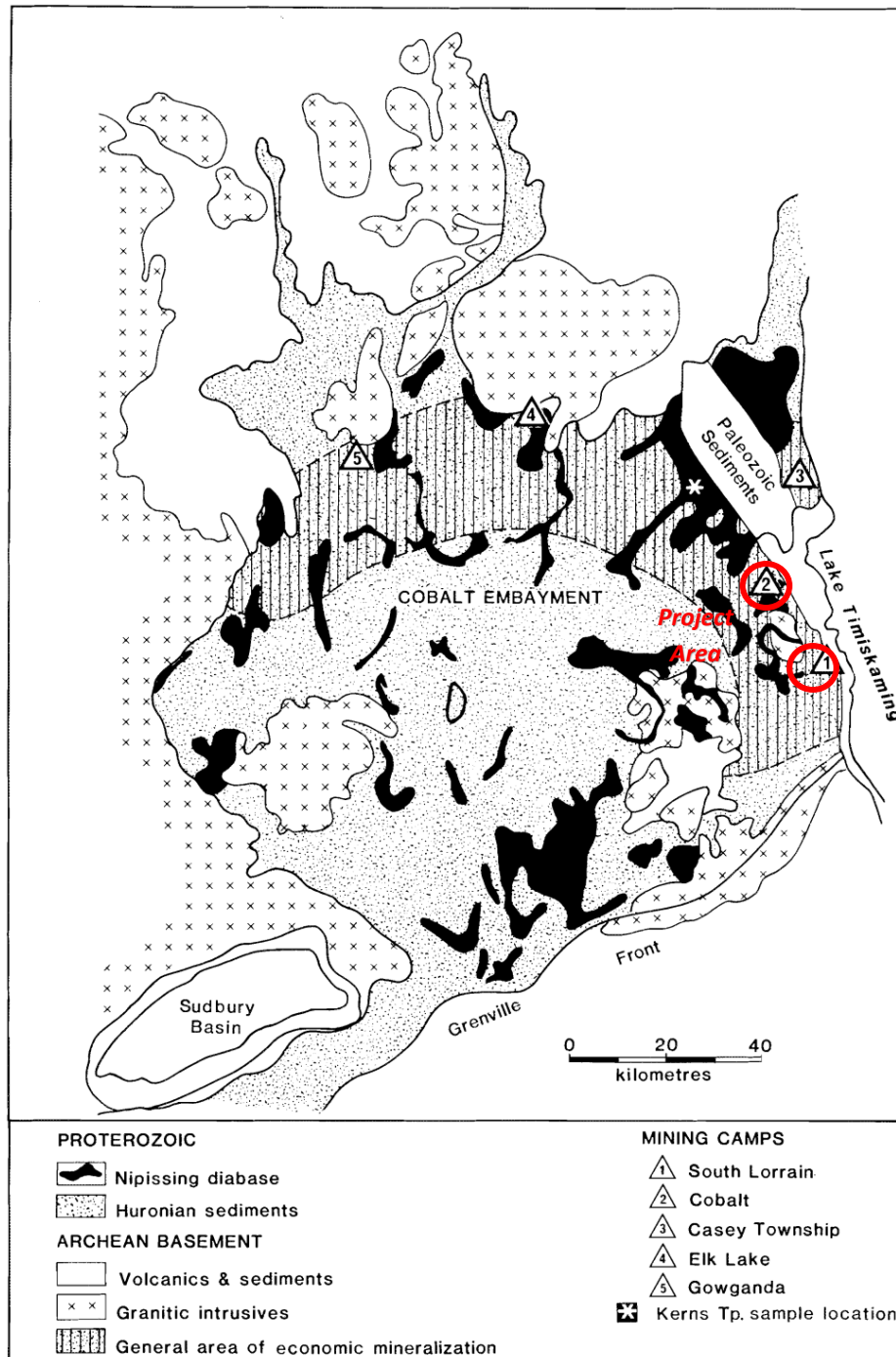


Figure 9: Simplified geology of the Cobalt Embayment

Source: Andrews *et al.*, 1986

Table 12: Lithologic units in the Cobalt region

PHANEROZOIC**CENOZOIC****QUATERNARY****PLEISTOCENE AND RECENT***Sand, gravel, clay and swamp deposits***UNCONFORMITY****PRECAMBRIAN****MIDDLE PROTEROZOIC****Lamprophyre Dikes and Diatreme Breccia***Lamprophyre dikes, Lake Temagami-type diatreme breccia***Olivine Diabase Dikes (Sudbury Swarm)***Fine-grained (chilled), coarse-grained and plagioclase porphyritic olivine diabase***INTRUSIVE CONTACT****EARLY PROTEROZOIC****Mafic Intrusive Rocks****Nipissing Diabase***Gabbro, hypersthene gabbro, quartz gabbro, leucogabbro, varied textured gabbro, granophyre, sheared and/or hydrothermally altered gabbro***INTRUSIVE CONTACT****HURONIAN SUPERGROUP****Cobalt Group****Lorrain Formation***Arkose, shaly mudstone quartzite, contact metamorphic rocks***CONFORMABLE CONTACT****Gowganda Formation****Firstbrook Member***Siltstone, mudstone, arenite; contact metamorphic rocks; tectonically brecciated sediments***CONFORMABLE CONTACT****Coleman Member***Basal (regolithic) conglomerate; clast-supported, massive conglomerate; matrix-supported conglomerate; pebbly wacke and lesser arenite; shaly mudstone; sheared and tectonically brecciated sediments***UNCONFORMITY****ARCHEAN****Felsic to Intermediate Plutonic Rocks***Mafic diorite and minor quartz diorite; tonalite; granodiorite; granite***INTRUSIVE CONTACT****Metavolcanic Rocks****Intermediate to Felsic Metavolcanic Rocks***Dacite; rhyolite; lapilli-stone tuffs and pyroclastic flows***Mafic to Intermediate Metavolcanic Rocks***Amphibolite; basalt; pillowed basalt; plagioclase-phyric basalt; variolitic basalt; andesite; minor sedimentary and/or pyroclastic debris flows*

Source: Born and Hitch, 1990

7.2 Property Geology

7.2.1 Silver Centre Property Geology

The oldest rocks on the Property are folded, faulted, and steeply dipping metamorphosed Archean (Keewatin) intermediate to mafic pillowed flows, tuffs, and agglomerates. Numerous early (Haileyburian) biotite lamprophyre and hornblende lamprophyre intrude the Archean volcanics (McIlwaine, 1970). McIlwaine (1970) noted that the Keeley No. 16 vein follows a biotite lamprophyre dike for most of its length and other veins have been found in a similar environment; the opinion has been expressed that the lamprophyre dikes take a part in localising the silver-cobalt veins of the Silver Centre area (Kent, 1965).

A small granodiorite body intrudes the Archean age volcanic rocks near Beaver Lake.

A major erosional unconformity resulted in the development of basins and highlands on the surface of Archean metavolcanics and intrusives. In the Property area, Huronian-age Gowganda Formation, Coleman Member sediments were deposited in the basins and remain relatively undeformed. The beds are generally close to flat-lying, except in the areas of faults where they dip steeply (McIlwaine, 1970). The vertical thickness of the Coleman Member is interpreted to be between 55 m and 240 m in the vicinity of the Property based on historic drill logs (McIlwaine, 1970). McIlwaine (1970) suggests that the variation in thicknesses represents irregular basement topography on which the Coleman Formation was deposited, with the suggestion of a local trough trending east-northeast subparallel to the flanks of the diabase domes. South of the dome, McIlwaine (1970) estimated that the Coleman Formation might reach a maximum thickness of approximately 300 m based on bedding attitudes and topography. The rocks of the Coleman Member are a heterogeneous mixture of greywacke and quartzose siltstone, arkose, argillite, and conglomerate. Conglomerate pebbles, cobbles, and rare boulders are generally pink granitic rocks with minor white granite, "greenstone", and diabase. They are generally sub-angular to sub-rounded and range up to 15–20 cm in diameter.

The Nipissing Diabase intrudes the Archean volcanics and the Huronian sediments and is approximately 277 m (910 ft) thick in the Keeley-Frontier Mine area. McIlwaine (1970) considers the Nipissing Diabase in South Lorrain Township to be a single sheet, with numerous rolls, both major and minor. On the east side of the Property, the diabase is in the form of a dome, with the central part removed by erosion. The axis of the dome strikes north-northeast. This axis is subparallel to the margin of the interpreted basin of deposition of the Cobalt Group sedimentary rocks. The south flank of the dome which lies southeast of the Property dips steeply southeast, and on the northwest and wider flank, contours of the top of the diabase, based on historical underground workings and diamond drilling, indicate an anticlinal limb dipping to the west across the property. The average dip of the sill is 15° to 34°, but Kent (1965, p- 4) states that there is evidence of a marked flattening to about 8° on claim T46400 and that there is possibly a major downthrow farther west. The north contact of the northwest flank dips to the south and thus forms a minor basin within the dome. A second diabase dome with an erosional window through its core exposing underlying Archean metavolcanics is present in the northwest part of the property suggesting a diabase basin structure lies between the two domes (Figure 10). The diabase is typical a fine- to medium-grained, fresh to slightly altered rock.

Numerous faults are present in the area with several periods of deformation postulated: the earliest faults are pre-ore, and most of this set strike north – as supported by McIlwaine's (1970) observation that lamprophyre dykes are contained within the same north trending structures as the Woods and Watson Veins; there are possibly two ages of northwest-trending faults, pre- and post-olivine diabase intrusion; and

finally, a minor north-easterly trending set of faults, for which the evidence indicates that these are the youngest Precambrian faults in the area (McIlwaine, 1970).

Based on the Lake Temiskaming Fault, and several northwest-striking faults in the Cobalt area being post-Silurian in age it is suggested that some of the faults in South Lorrain Township are also post-Silurian and probably branches of the Lake Temiskaming Fault (McIlwaine, 1970).

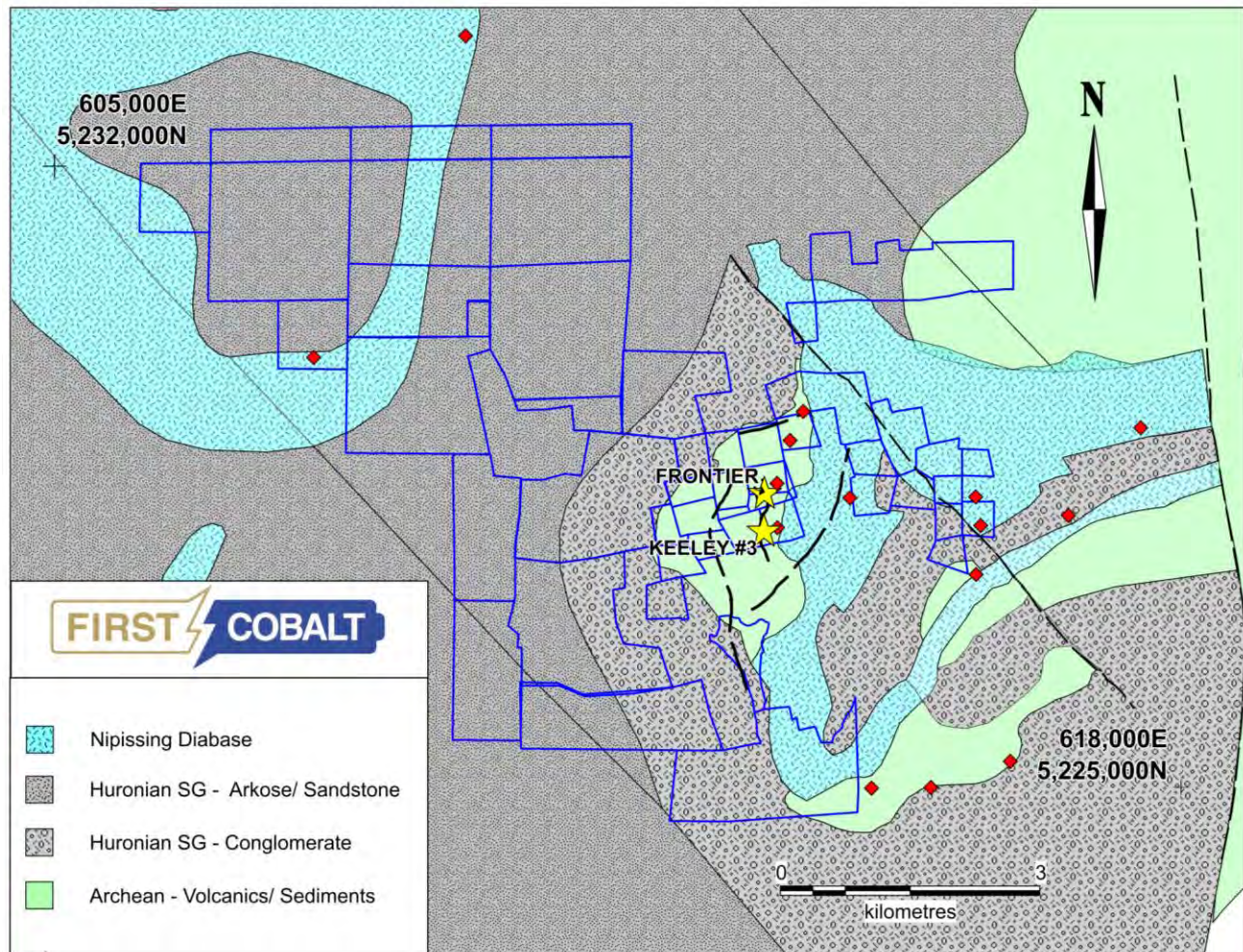


Figure 10: Silver Centre Property Geology

7.2.2 Geology of the Cobalt Area Properties

The Issuer's Cobalt Area Properties comprise 11 small non-contiguous claim blocks which are not part of the Greater Cobalt Project's immediate (2017) exploration plans. These properties have been acquired as part of a longer-term acquisition strategy in the Cobalt camp.

The detailed geology of the Cobalt Area Properties will not be presented in this report as they are not considered material as of the Effective Date.

7.3 Significant Mineralised Zones on the Cobalt Project

7.3.1 Silver Centre Property

The native silver-cobalt arsenide veins in the South Lorrain township area typically contain native silver, cobaltite, lollingite, niccolite, breithauptite, smaltite and calcite (Mayer and Pearson, 1989). Mineralogically, the veins are similar to those in the main Cobalt camp; however, their structural and stratigraphic setting is different. Whereas more than 90% of the silver produced in the main Cobalt camp came from veins in the Huronian Cobalt Group sediments adjacent to (underlying) the lower diabase sill contact, productive veins in the South Lorrain township area were predominantly in Archean metavolcanic rocks adjacent to (overlying) the upper contact of the diabase sill. Only limited production, approximately 300,000–400,000 oz., came from veins in Archean rocks below the diabase in the Keeley mine (Mayer and Pearson, 1989; Figure 11). While many workers suggest that the Archean rocks below the diabase in the Silver Centre Camp are less prospective than those above the upper diabase contact, this may be more apparent than real given the historic lack of significant exploration beneath the diabase in the camp. No significant silver-bearing veins have yet been found in Cobalt Group sediments in the South Lorrain township area. Mayer and Pearson (1989) speculate that this may be because to the east, Huronian sediments are adjacent to (underlie) the historically less favourable lower contact of the Nipissing Diabase at Silver Centre, while to the west the Huronian sediments are too high, +/- 250 m (800 ft) above the diabase and are outside the “productive horizon” above the diabase sill.

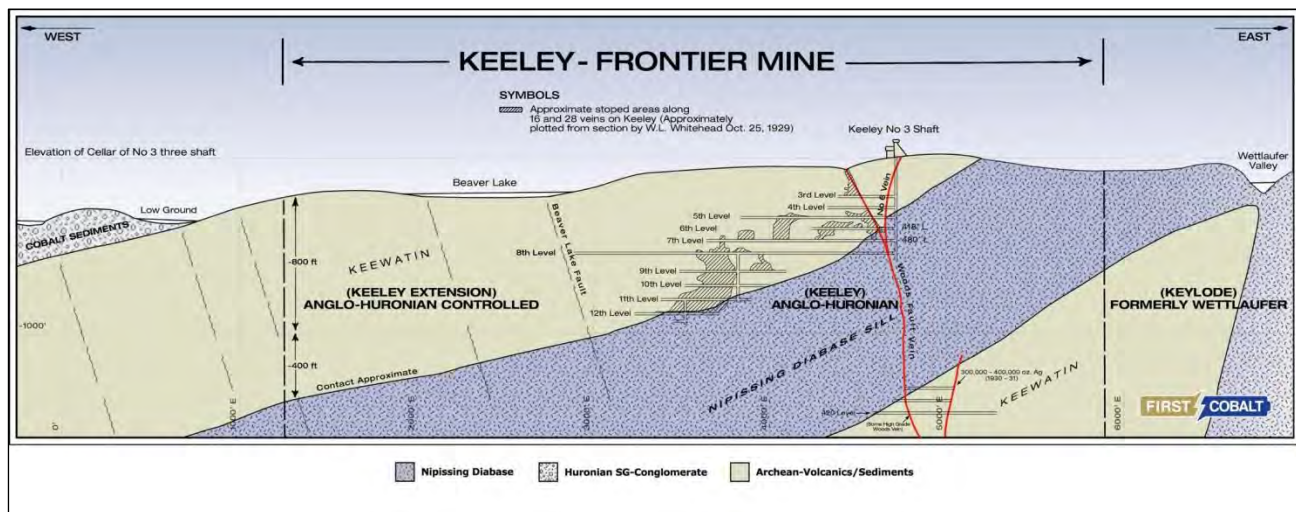


Figure 11: Section through the Keeley-Frontier Mine showing spatial relationship of mineralisation and the Nipissing Diabase/Archean metavolcanic contact

Keeley Frontier Mines

The Keeley and Frontier Mines were developed on the most significant and productive veins in the Silver Centre camp on the northwest flank of the South Lorrain diabase dome. The Keeley and Frontier Mines comprise both north-south and east-west vein systems. The productive parts of these veins occur within about 120 m (400 ft) of the Nipissing Diabase/Keewatin contact with the richest veins being those that continued into the diabase. Within this favourable area along and above the upper contact the most important factors controlling development are as follows (McIlwaine, 1970):

1. The intersection of two or more veins;



2. The intersection of veins with unmineralised faults or with flat faults;
3. A flexure or “roll” in a vein caused by an abrupt change in strike and/or dip; and
4. The intensity of fracturing in the vicinity of faults.

Factors 1 and 2 are most useful for regional exploration. Once a vein structure has been located, however, the latter two criteria are more important.

Ore shoots tend to be controlled by a marked variation in attitudes (“rolls”) in fault-vein structures and to a limited extent by hornblende lamprophyre dykes which appear to locally control ore deposition (McIlwaine, 1970). Ore shoots ranged from 3 m to 30 m in length, 15 cm to 1 m wide; one shoot measured 31 m by 10.7 m and up to 1.02 m wide (Harron, 2011).

Historically, the most important veins on the property were the Woods and Watson which strike north-south and the No. 26, No. 20 and No. 16 veins and to a lesser extent the No. 28 vein, all of which strike approximately east-west (Figure 12; Mayer and Pearson, 1989).

The Woods Vein was the most productive vein and was mined for a strike length of 670 m (2,200 ft). It accounted for about 70% of total production in both mines. This fault structure strikes north and dips 55° to 69°E and contained several very high-grade silver-bearing ore shoots, two of which are as follows (Knight, 1922; Mayer and Pearson, 1989):

1. 300 ft level on the Crompton Mine (now part of Frontier). This shoot was 31 m (102 ft) long, having an average height of 10.7 m (35 ft), produced 900,000 oz Ag to the end of 1923. Assuming a 1.5 m (5 ft) mining width and a tonnage factor of 12 cu. ft/ton, this would represent about 1,490 tons grading 604 oz Ag/ton (Mayer and Pearson, 1989).
2. “N” shoot on the 7th level of the Keeley Mine (Figure 3). This shoot was 60 m (198 ft) long and had an average assay of 370 oz/ton Ag across a 48 cm (19 in) average vein width, or 117 oz/ton Ag over a 1.5 m (5 ft) mining width (Mayer and Pearson, 1989).

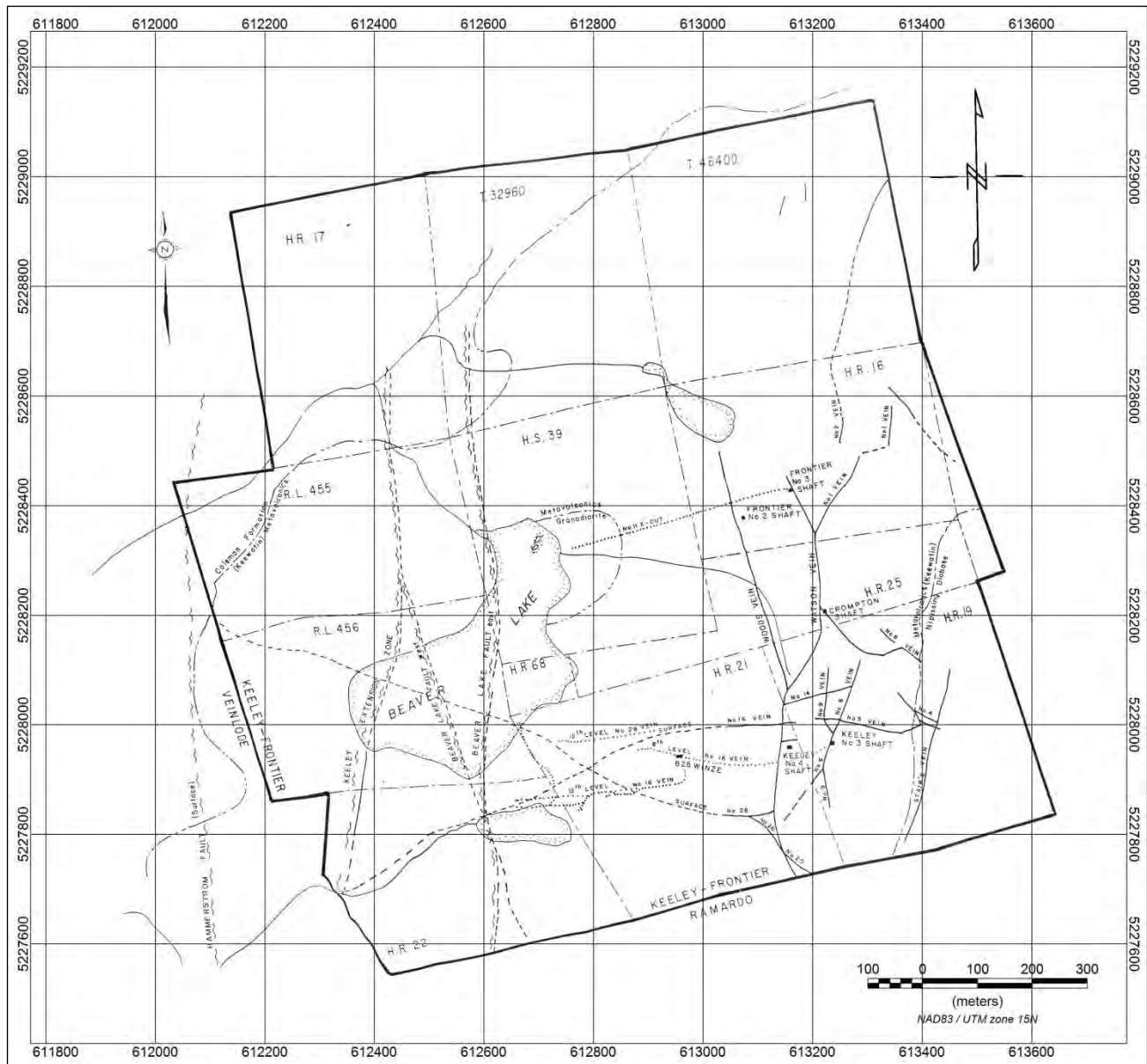


Figure 12: Silver Centre Property – Keeley-Frontier patent claim geology and vein distribution

Source: Mayer and Pearson, 1989

Figure 13 is a longitudinal section of the Woods Vein showing underground development in both the Keeley and Frontier mines. Planimeter measurements by Mayer and Pearson (1989) of the stopes on the original mine section indicate that about 150,000 tons of ore was mined assuming a 1.5 m (5 ft) average mining width and a tonnage factor of 12 cu.ft/ton. According to W. Hammerstrom, who was the mine geologist during much of the production period, total production from the Woods Vein was about 6,000,000 oz Ag in the “N” shoot; about 3,000,000 oz Ag from the “D” orebody in the No. 3 Keeley shaft area; and 4,000,000 oz Ag from the Frontier Mine portion of the vein (Mayer and Pearson, 1989). Total production from the Woods Vein was therefore about 13,000,000 oz Ag from 150,000 tons of ore for an average mining grade of 87 oz/ton Ag (Mayer and Pearson, 1989).

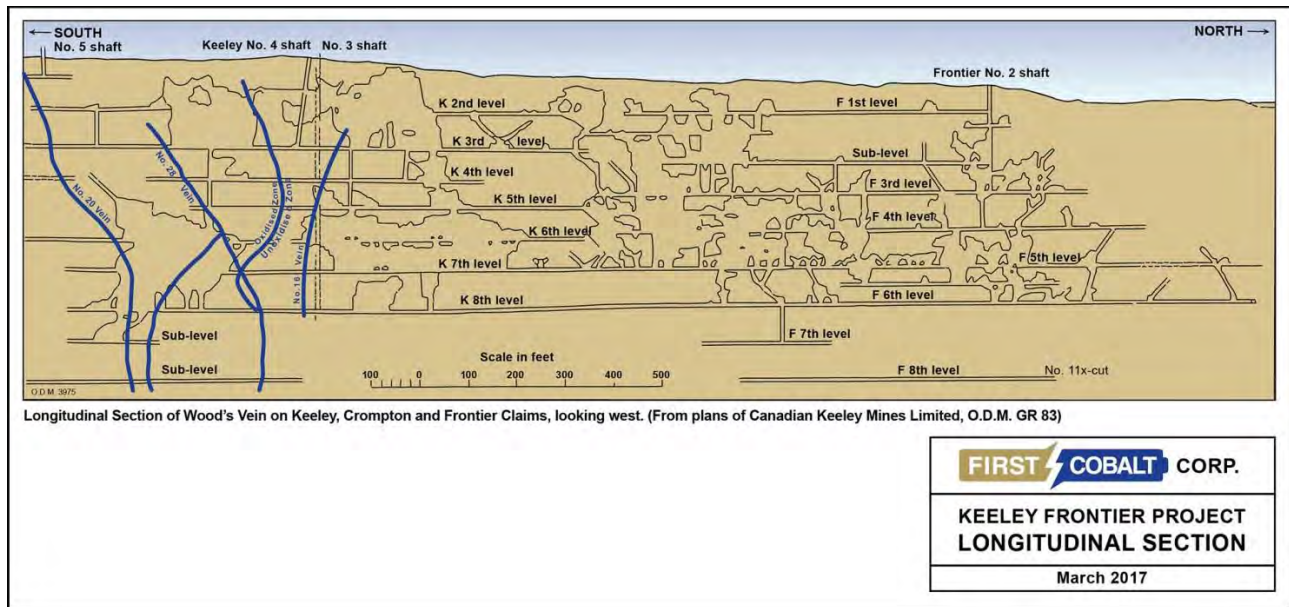


Figure 13: Longitudinal section Keeley-Frontier mine workings on the Woods vein looking west

An unusual feature of the Woods Vein is the presence of significant secondary (i.e. supergene) enrichment due to preserved pre-glacial weathering which extends to a depth of 146 m (McIlwaine, 1970), particularly in the “N” shoot. The vein is altered to soft, brownish-red hematite-rich rock. Wallrock adjacent to the vein, particularly Nipissing Diabase, is strongly kaolinized (Mayer and Pearson, 1989). The vein is vuggy and silver is in leaf, wire, ruby and spongy forms, smaltite is both massive and vuggy in grape-like form (McIlwaine, 1970).

The Watson Vein is a branch of the Woods Vein and intersects the No. 1 vein to the north (Figure 12). About 80 m (260 ft) south of the No. 1 vein junction, the Watson Vein was reported by Knight (1922) to contain a shoot 9.1 m (30 ft) long and 6.7 m (22 ft) high with a maximum width of 58 cm (23 in), which produced 125,000 oz Ag. According to W. Hammerstrom, total production from the Watson vein was about 3,000,000 oz Ag and production from the No. 1 vein was about 100,000 oz Ag (Mayer and Pearson, 1989).

The No. 26 and No. 20 veins are branches of the Woods Vein to the west and east, respectively, which occur near the junction of the Woods and 28 veins. These veins are probably the same structure and although they have limited strike length, they extend from surface to about the Keeley No. 10 level. The richest area in the mine, the “N” shoot, was at the intersection of the No. 26 and No. 20 veins with the Woods Vein near the Nipissing Diabase/Archean metavolcanic contact (Figure 12 and Figure 13; Mayer and Pearson, 1989).

The No. 26 vein contained a very high-grade shoot 22.6 m (74 ft) long which had an average assay of 2,600 oz Ag across a 38 cm (15 in) average width, which is equivalent to 650 oz Ag/ton over a 1.5 m (5 ft) mining width. According to company reports, not less than 250,000 oz of silver was removed from 22.6 m (74 ft) of drifting muck on this vein before any stoping was carried out (Mayer and Pearson, 1989). The No. 20 vein was also mined; however, no production and grade data are available.

The No. 16 vein varies in width from 1.3 cm (0.5 in) to 61 cm (2 ft), averaging about 13 cm (5 in) and is associated with a 2.1 m (7 ft) wide biotite lamprophyre dyke for most of its length. The vein strikes east-west, dips 65°S in the volcanic rocks but steepens to near vertical in the underlying Nipissing Diabase. On the sixth level of the Keeley Mine immediately west of the Woods Vein, a rich shoot in the 16 Vein, 9.1 m



(30 ft) long and 7.6 m (25 ft) high, produced 150,000 oz Ag (Knight, 1922); 480 oz Ag/ton over a 1.5 m (5 ft) mining width (Mayer and Pearson, 1989).

The No. 28 vein, in the area mined, strikes east-west, dips 50–60°N, and intersects the No. 16 vein at about 122–152 m (400–500 ft) below surface. Typically, the No. 28 vein is marked by a wide, up to 2.1 m (7 ft) gouge zone. Combined production from the No. 16 and No. 28 veins, was estimated by Hammerstrom to be about 3,000,000 oz, of which the No. 16 accounted for about 70% (Mayer and Pearson, 1989). Planimeter measurements of old stope plans, using the same assumptions as for the Woods Vein, gives an estimated tonnage of 33,000 tons with an average grade of 91 oz Ag/ton (Mayer and Pearson, 1989).

Very little data is available on the grades and distribution of cobalt in the veins previously mined on the Keeley-Frontier property. The production records, however, indicate that the cobalt content was appreciable at about 0.2 lb. Co for every ounce of Ag produced (Mayer and Pearson, 1989). Assuming that the Woods Vein accounted for 70% of cobalt production, this would give about 1,048,000 kg (2,310,000 lb) Co from 136,078 t (150,000 tons) of feed for an average grade of about 0.8% Co (Mayer and Pearson, 1989). The actual mine grade was probably higher because of the unreported cobalt content in silver concentrates shipped to the Delora smelter (Mayer and Pearson, 1989).

Bellellen Mine

At the Bellellen Mine, a 91 m long north-trending calcite vein up to 38 cm wide occurs in steeply dipping Keewatin volcanics that strike north. Underground workings on the vein extended to a depth of 104 m below surface. The volcanics are intruded by the west side of a domed Nipissing quartz diabase sheet up to 300 m thick that dips about 40° west beneath the mine workings. The veins are mineralised with chloanthite (the diarsenide of nickel) as well as native silver and smaltite (cobalt iron nickel arsenide). On the first level (28 m below surface) the calcite vein was reported to be 15–18 cm wide and the mineralisation in the vein a maximum of 15 cm wide. The mineralisation is characterised by high nickel content. Reported grades were: 1,259 oz/ton Ag from 24 tons mined in 1910–1911 and 43 oz/ton Ag, 159 lb/ton Co, and 275 lb/ton Ni from 35 tons mined in 1916. The 12.27 tons shipped in 1943? ran 9.25% Co and 11.55% Ni (McIlwaine, 1970). Total production (intermittent from 1910 to 1943) was: 1,182,772 g (38,027 oz) Ag; 12,930 kg (28,481 lb) Co and 6,085 kg (13,404 lb) (Guindon *et al.*, 2016).

8 Deposit Types

The exploration target at the Greater Cobalt Project is arsenide Ag-Co vein deposits of which the historic Cobalt Camp and satellite Silver Centre Camp are the type locality. The arsenide Ag-Co vein deposit type is also referred to as the Five-Element (Ni-Co-As-Ag-Bi) Vein (FEV) deposit type (Kissin, 1993). The following descriptions of the arsenide silver-cobalt vein deposit model (Sections 8.1 and 8.2) are extracted and modified from Ruzicka and Thorpe (1996).

8.1 Physical Model – Arsenide Ag-Co Vein Deposits

Arsenide silver-cobalt vein deposits are localised in areas affected by basinal subsidence and rifting and are spatially related to regional fault systems and closely associated with intrusions of mafic rocks. The arsenide Ag-Co vein deposits in the Cobalt Camp are associated with Aphebian conglomerate, quartzite, and greywacke rocks of the Cobalt Group (Coleman Member of the Gowganda Formation), as well as with major sill-like bodies of Nipissing Diabase and with Archean mafic and intermediate lavas and intercalated pyroclastic and sedimentary rocks (Figure 14).

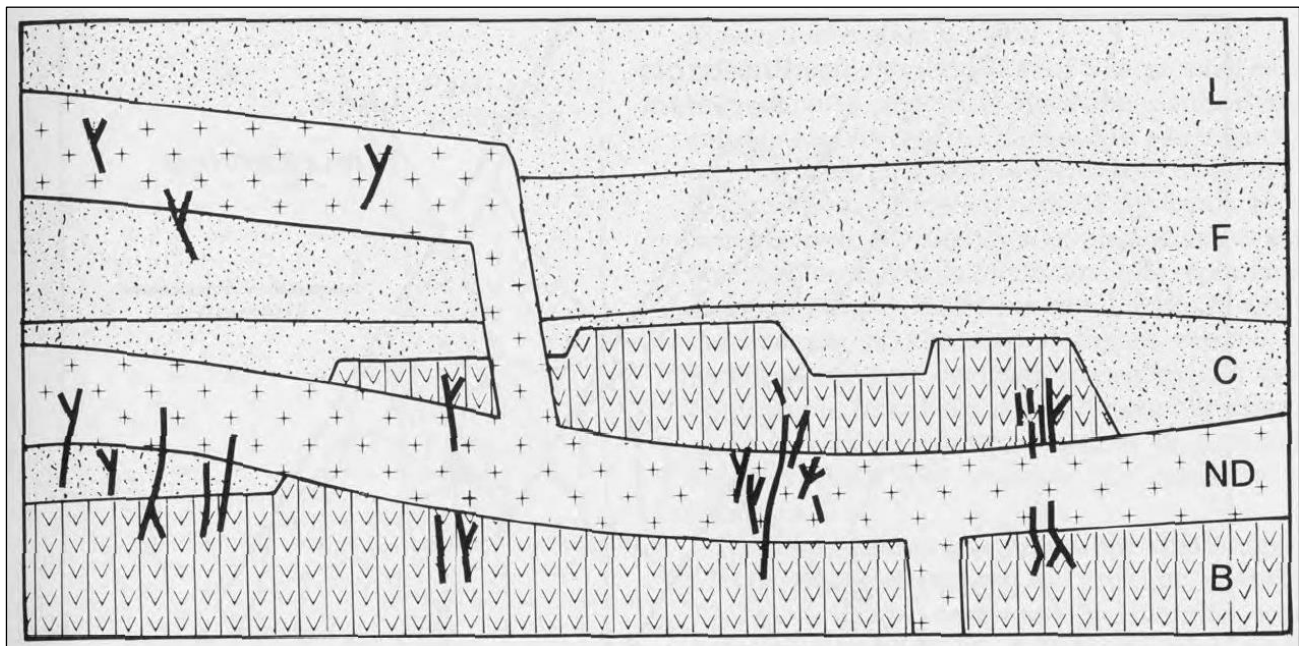


Figure 14: Simplified geological schematic section showing relationship between major lithological units and distribution of arsenide silver-cobalt vein systems (black lines)

Note: Huronian sediments include the Lorrain Formation (L), and the Gowganda Formation's Firstbrook Member (F) and Coleman Member (C). Archean basement rock (B) are steeply dipping metavolcanic sequences. All units are intruded by Nipissing diabase (ND).

Source: Andrews *et al.*, 1986a

The deposits in the Cobalt Camp contain three principal mineral assemblages: (i) a relatively minor base metal sulphide assemblage, which is confined to Archean metasedimentary and metavolcanic rocks; (ii) the arsenide Ag-Co assemblage, which occurs prevalingly at and near the contacts between the Nipissing Diabase and the sedimentary rocks of the Cobalt Group, and is present to a lesser extent along contacts

between the diabase and the Archean rocks; and (iii) a late stage sulphide assemblage, which is in part distributed along the margins of arsenide-rich veins, where these have apparently been reopened.

The age of the arsenide Ag-Co veins has been established from geological evidence and from dating of the associated diabase sheets. In the Cobalt area, the arsenide Ag-Co veins cut the Nipissing Diabase, but are displaced by post-mineralisation reverse faults, which are contemporaneous with the intrusion of the quartz diabase dykes. Therefore, the deposition of the mineralisation must have taken place after intrusion of the Nipissing Diabase sills, but before intrusion of the quartz diabase dykes, i.e. between 2.22 Ga and 1.45 Ga. The bulk of the mineralisation apparently formed shortly after intrusion of the Nipissing Diabase sheets, which took place about 2.22 Ga (Jambor, 1971a; Corfu and Andrews *et al.*, 1986a).

Distribution of the Ag-Co veins in the Cobalt Camp is controlled by the contact between the Nipissing diabase sheets and the rocks of the Cobalt Group (Gowganda Formation) and to a lesser extent the Archean metavolcanic and metasedimentary rocks. The veins occur in the diabase and in the Aphebian and Archean rocks within about 200 m of their contact with the diabase. They dip steeply, extend horizontally as much as 1,000 m and vertically as much as 120 m, and are as wide as 1.2 m. A typical deposit consists of a few short anastomosing veins of variable thickness from a few centimetres to two or three decimetres.

The metallic minerals occur in irregular high-grade lenses surrounded by aureoles of low grade material. Arsenides, sulpharsenides, and antimonides of Ni, Co, and Fe as well as native Ag, are the principal metallic constituents of the veins. The mineralised veins in the Cobalt area contain native Ag, dyscrasite, acanthite, rammelsbergite, skutterudite, arsenopyrite, gersdorffite, cobaltite, glaucodot, nickeline, breithauptite, chalcopyrite, tetrahedrite, and native Bi. Native Ag and the Co-Ni arsenides are the most abundant metallic minerals. Quartz, chlorite, calcite, and dolomite are the most common gangue minerals (Lang *et al.*, 1970; Petruk *et al.*, 1971a, b, c, d; Jambor, 1971c).

The metallic minerals occur in masses, lenses, veinlets, and disseminations with or without associated gangue minerals and in various textural forms, such as intergrowths, disseminations, dendrites, rosettes, and monocrystals. They are present in distinct mineral assemblages, such as Ni-arsenide, Ni-Co-arsenide, Co-arsenide, Co-Fe-arsenide, Fe-arsenide, sulphide, and oxide (Petruk, 1971), with the following features:

- The Ni-arsenide assemblage is localised in many cases at the periphery of major veins, but also occurs in various places in small veins.
- The nickel-cobalt arsenide assemblage occupies a transitional position between the Ni-arsenide and Co-arsenide assemblages. Much of the best Ag mineralisation is associated with this assemblage.
- The Co-arsenide assemblage occurs generally in the main parts of the veins.
- The Co-Fe-arsenide assemblage is less common than the preceding ones.
- Minerals of the Fe-arsenide assemblage tend to be concentrated at the ends of the veins. They are commonly accompanied by native Bi, galena, and marcasite.
- The sulphide assemblages typically contain chalcopyrite and tetrahedrite, although more than thirty sulphide minerals have been reported (Petruk, 1971). They occur in some of the main carbonate veins, usually in the peripheral portions of highly mineralised sections.
- Oxide minerals, hematite, magnetite, rutile, anatase, ilmenite, and wolframite, occur in the veins only in small amounts. They are typically associated with the carbonate gangue.

The host rocks of the deposits in the Cobalt Camp were affected by several phases of alteration. Intrusion of the diabase sheets was accompanied by contact metasomatic alteration of the country rocks and by deuteric alteration of the diabase itself. A specific kind of contact alteration is the spotted chloritic

alteration, which developed in the vicinity of the Nipissing Diabase prior to mineralisation. It is characterised by the occurrence of chlorite-rich spots, which are surrounded by chlorite-deficient aureoles, and affected many of the rocks intruded by the diabase.

The most prominent alteration was, however, associated with formation of the mineralised veins. Its effects depended upon the composition of the rocks involved. For instance, the alteration of diabase resulted in: (i) replacement of pyroxene by actinolite and some chlorite; (ii) retrogression of plagioclase to muscovite, epidote, and albite; and (iii) replacement of ilmenite and magnetite by leucoxene and titanate (Andrews *et al.*, 1986). The hydrothermal wall rock alteration along the mineralised veins is developed in narrow zones, typically a few centimetres wide. The most distinct alteration zones are developed in the diabase and consist of two or three layers. The first (inner) layer, immediately adjacent to the veins, contains albite, chlorite, and anatase; the second layer has calcite, epidote, and small amounts of muscovite; and the third (outer) layer comprises increased amounts of muscovite (Jambor, 1971b; Andrews *et al.*, 1986).

8.2 Genetic Model – Arsenide Ag-Co Vein Deposits

The solutions that deposited Ag-arsenide ores were initially as hot as 400°C in some cases, although wide ranges of fluid inclusion temperatures (mostly 100° to 250°C) and salinities have been recorded (Franklin *et al.*, 1986; Kerrich *et al.*, 1986; Jennings, 1987; Kissin, 1988). The fluids may have been variable mixtures of basinal brines and meteoric waters. Kissin (1988) has suggested that the deposits were formed in an environment characterised by incipient rifting of continental crust.

In the case of the arsenide Ag-Co veins in the Cobalt area, genetic models have been postulated that involve derivation of the Ag, Ni, Co, As, Sb, Bi, Cu, and Hg either from the Archean sedimentary beds, with minor contributions from certain volcanic flows (Boyle and Dass, 1971), or, more recently, from the formational brines of the Archean carbonaceous, pyritic tuffs or their clastic derivatives in the Proterozoic sedimentary sequence (Watkinson, 1986). The latter hypothesis is supported by fluid inclusion and oxygen isotopic data. Watkinson (1986) inferred from the relatively homogeneous Pb isotopic ratios (Thorpe *et al.*, 1986) that the metalliferous brines had a long residence time in the sulphide-bearing rocks, but were released into tensional fractures upon intrusion of the Nipissing Diabase sills. The sudden release of pressure caused rapid precipitation of the mineralisation in fractures at the diabase contacts (Watkinson, 1986). According to sulphur isotope studies, the mineralisation took place under temperatures between 130°C and 254°C (Goodz *et al.*, 1986). The mineralisation components, principally native Ag, As, and Co, were introduced into the fractures along with carbonate gangue by hydrothermal solutions of high pH and low Eh.

The reader is referred to Kissin (1992, 1993) for a discussion of alternative genetic models for arsenide Ag-Co deposits.

8.3 Exploration Guides – Arsenide Ag-Co Vein Deposits

Selection of exploration targets areas for arsenide-silver-cobalt vein deposits should consider:

1. The contact between the Nipissing diabase sheets and the rocks of the Cobalt Group (Gowganda Formation) and to a lesser extent the Archean metavolcanic and metasedimentary rocks. Known veins occur in the diabase and in the Aphebian and Archean rocks within about 200 m of their contact with the diabase.
2. In addition to recognition of the prospective envelope relative to the Nipissing Diabase contact, previous workers have noted that many of the significant deposits hosted by the Coleman Member sediments are at or near the contact with the basement Archean rock (Nichols, 1988). The Coleman



Member sedimentary rocks are often in “basins or troughs” developed on the Archean paleotopography proximal Nipissing diabase intrusions.

3. Based on work in the main Cobalt Camp, the occurrence of sulphide-bearing carbonaceous tuffaceous horizons (reductants) in the Archean and/or Proterozoic complexes located beneath diabase sills (Ruzicka and Thorpe, 1996). Nichols (1988) noted sulphide enrichment of the Archean interflow sediments adjacent to high grade mineralised veins. Although a relationship between the quantity of sulphides and the quantity of Ag was not established, the relative amount of Cu, Pb and Zn sulphides increased with proximity to Ag mineralisation in each interflow. Thus, as an exploration guideline, the relative amount of base metal sulphides, particularly chalcopyrite, in an interflow chert can be interpreted as an indication of proximity to a high-grade shoot. Based on historic and current work this does not seem to be an important guide in the Silver Centre area; interflow sediments in volcanic units are not reported.
4. Permeable rocks in the overlying sequence capable of yielding formational metalliferous brines (Ruzicka and Thorpe, 1996).
5. Presence of favourable structural features, which include broad dome-like arches of the base of a diabase sill and possible associated structural traps in the form of fracture systems favourable for deposition of metallic minerals from hydrothermal solutions (Ruzicka and Thorpe, 1996).
6. When targeting cobalt mineralisation, bear in mind observed metal zonation in the arsenide-Ag-Co vein deposits. Historic mining generally targeted the Ag-rich portions of the veins, Co-rich zones if present may therefore have locally been left underexplored and undeveloped if the Ag grade did not meet cut-off grade.
7. Nichols (1988) also noted the strike of Archean volcanics appears to have a definite influence on Ag mineralisation. Thus, the strike of volcanics should be determined very early in an exploration program. The remainder of the program should then test the ideal host rock environment for veins parallel or sub-parallel to the strike of the Archean basement rocks.

In the Cobalt area, past surface-based exploration has relied largely on prospecting for mineralised fractures supported by overburden stripping and pitting programs.

In addition to prospecting methods, exploration of the Cobalt Project should consider the use of the following techniques and guides to identify the features controlling arsenide Ag-Co mineralisation or the arsenide Ag-Co veins alone:

- Airborne and ground based geophysical surveys including magnetic, EM and IP methods to map lithology and structure.
- Detailed geological mapping to map prospective lithology, alteration and structure.
- Quaternary geology mapping to aid in planning and interpretation of soil and overburden geochemical surveys. Sampling of the basal till for mineral exploration and tracing of mineralised float is most easily and efficiently accomplished in areas of ground moraine and follow-up exploration should be easier than in other glacial landforms, such as hummocky moraine.
- Selective multi-element (Ni-Co-As-Ag) geochemical surveys including soils and basal till. Soil gas surveys may be useful. Contamination of the surface soils by previous mining activities may locally limit the utility of soil geochemical surveys.
- Diamond drilling testing of any geological geophysical and geochemical targets should consider the 200 m vertical prospective envelope above and below the Nipissing diabase contacts with the Cobalt sediments and the Archean metavolcanics and metasediments. Targeting should also consider the



evidence that many of the significant deposits hosted by the Coleman Member sediments are at or near the contact with the basement Archean rock.

8.4 First Cobalt's Exploration Strategy

First Cobalt's 2017 exploration program is intended to provide a better understanding of the extent of economic metals that include silver, cobalt, nickel and copper at the Keeley-Frontier deposit. Historically, only silver had been considered for mining and exploration. Cobalt, nickel, and copper rich veins were found and selectively mined and processed from stockpiles when metal prices were ideal. Therefore, annual production numbers for Co and Ni may not reflect that specific year's mining. Very little is known about the spatial distribution of the metals in relation to silver since only a few assays have been reported from within Keeley-Frontier Mine, although "Co" is recorded on historic maps where visible Co-bearing minerals occur. Drilling within the Mine is sparse and Co was not routinely assayed in the holes, so the presence of Co-Ni-Cu in the hydrothermal selvages of the veins is essentially unknown. In addition, Co-rich veins were not fully developed in mining so the true strike length and depth extent of these vein systems is open. Comparable vein-style metallic mineral deposits; epithermal, epigenetic, volcanogenic etc., demonstrate metal zoning related to chemical controls (e.g. temperature, solubility, acidity etc.). Research has not been done at an appropriate scale in the Cobalt Mining district to address this to help the exploration model.

It has been well demonstrated throughout the Cobalt Mining district that a spatial relationship exists between silver-cobalt mineralisation and the Nipissing Diabase sills. Many historic maps from Keeley-Frontier Mine highlight a 100–200 m "productive zone" away from the contact with the Archean volcanic rocks. Kissin (1992) and Watkinson (1986) have suggested that the sills are not necessarily a heat source for the hydrothermal system, but the persistence of this relationship cannot be dismissed. The rheologic contrast of the diabase sills compared to the volcanic rocks and Proterozoic sedimentary rocks is a likely controlling factor on the development of brittle deformation in the region. The relationship of these regional deformation structures to the emplacement of the silver-cobalt veins is also unknown.

First Cobalt's initial exploration program in 2017 is directed at these unknowns. Initial field work will include mapping, prospecting, assaying, geophysics and downhole geophysics with televue imaging. Sampling of bedrock and existing drillholes will be done to specifically generate continuous metal values from silver-cobalt veins into the wallrock at a scale of 10's of metres. Structural mapping will also be done both at the detailed scale (1:100 scale at stripped outcrops), deposit-scale (1:1,000) and property scale (1:5,000). A preliminary drill program will also be designed to test for metal distribution near surface at Keeley-Frontier and several cobalt-rich areas which lack extensive historical development. The Company intends to gain an appreciation for the cobalt zonation within the Keeley-Frontier mine area and of the potential for disseminated mineralisation, which could be amenable for bulk mining. Details are provided in Section 9.

9 Exploration

On 3 May 2017, First Cobalt announced an exploration program designed to increase its understanding of the silver-cobalt potential of the Silver Centre Property. The proposed program is to include:

- Digital compilation of 50 years of historic Keeley-Frontier mine data to generate a 3D geological model
- Detailed and property-scale structural mapping of mineralised veins and host rocks
- Bore-hole geophysics and televiewer imaging of drillholes from the 2012 drilling campaign targeting the Beaver Lake Fault west of the former mine
- Systematic surface sampling at known prospects and occurrences throughout the property for assay analyses
- Detailed magnetic survey of the property
- 5,000 m of diamond drilling within the footprint of the Keeley-Frontier Mine testing targets from the 3D geological model
- 2,000 m of regional exploration drilling to identify new mineralised fault systems,

Although still at an early stage, work on the 2017 exploration program that has been initiated as of the effective date of this Report include:

9.1 Digital Compilation and 3D Geological Model

First Cobalt has initiated the acquisition and digital data compilation of available historic Keeley-Frontier mine data for the purpose of generating a 3D geological model of the mine and surrounding area. The preliminary 3D model, focused on mine infrastructure: shafts, drifts, stopes, and winzes, is anticipated to be completed by the end of July 2017. The Nipissing Diabase-volcanic rock contact will be modelled with the available data. This will be used to in part constrain the drillhole locations. Integration of underground drilling information will also be incorporated as well as new information from mapping and eventually the 2017 drilling results will continue to improve the 3D model.

9.2 Bore-Hole Geophysics and Televiewer Imaging

DGI Geoscience Inc. was engaged to conduct a borehole geophysics and televiewer program at the Silver Centre Property. The program, completed 2–7 June 2017, consisted of taking measures from within six drillholes completed by Canadian Silver Hunter in 2012 on the Beaver Lake Fault in an area known as the Keeley Extension. The Beaver Lake Fault was previously mined but only to a limited extent. The fault is located to the west of the main silver-cobalt ore zone of the Keeley-Frontier Mine (Figure 12).

Four of the six holes were surveyed for resistivity, natural gamma and magnetic susceptibility. Resistivity and natural gamma are measured to determine alteration of the rocks related to mineralisation. Magnetic susceptibility variations, specifically in the host mafic volcanic rocks, can be used to determine their depth extension below the Huronian sedimentary rocks providing future targets for drilling. The data from this program could allow the Company to more accurately project the depth to the volcanic unit that hosts mineralisation.

The southernmost hole from the 2012 drill program (CSH12-03), intersected an 11.3 m interval containing a composite value of 72.47 g/t Ag. Cobalt mineralisation was not specifically targeted by the 2012 program therefore some intervals were unsampled. Other short intervals of Ag-Co-Ni mineralisation were intersected

in other holes. The geophysical surveys were conducted to determine geophysical signatures for this mineralisation as well as establish the background response from the host rocks.

Optical televiewer and acoustic televiewer surveys were completed on three holes for detailed, in-situ structural information and to measure the true orientation of the lithological contacts. The televiewer information will therefore allow for a better appreciation of the structural context within the holes. Data will be integrated with the ongoing structural mapping program to predict extensions of known mineralisation and infer new areas for drill targeting.

Interpretation of the geophysical and televiewer data by DGI Geoscience and First Cobalt is ongoing as of the effective date of the Report, final synthesis is estimated to be available in September 2017 when it will be integrated with results from the field mapping program.

The program is intended to help First Cobalt improve its understanding of the controlling structures in the mineralised system(s) at the Silver Centre Property. The Woods Vein was historically the largest productive vein for Keeley and is well defined. However, other north-trending structures and east-west cross faults were not well defined. By improving the understanding of the broader structural environment, the Company anticipates it will be in a better position to predict where additional vein structures may lie.

9.3 Detailed and Property-Scale Structural Mapping

First Cobalt has initiated 1:5000 structural mapping of the Keeley Frontier patent claim area and detailed 1:1000 structural geology mapping of the immediate Keeley Frontier mines area. Historic and new stripped bedrock exposures will be mapped at 1:100 scale. Mapping, compilation and interpretation are estimated to be completed by September 2017.

9.4 Systematic Surface Sampling at Known Prospects and Occurrences

First Cobalt has engaged Canadian Exploration Services of Larder Lake, Ontario to provide equipment and personnel to conduct outcrop stripping and channel sampling at the Keeley-Frontier area. Mobilisation to site was 13 June 2017. New areas will be stripped at areas including the Bellellen prospect. Areas previously stripped by Canadian Silver Hunter including the Keeley #3 shaft, Frontier #1 shaft and Gibson Lake will be expanded as necessary.

Proposed stripping will be conducted utilizing a backhoe and exposed bedrock will be washed and cleaned utilising a high-pressure pump and firehose.

Proposed channel samples are to be collected from the stripped areas as follows:

- The channel sample interval will be laid out with spray paint on the bedrock surface approximately perpendicular to the trend of the targeted structure. Sample intervals may vary between 0.3 m and 1 m depending on lithology structure and mineralisation content. Two parallel cuts approximately 4 cm apart and each 5 cm to 7 cm deep will be made into the bedrock utilising a portable cut-off saw with a diamond blade. A water-feed will provide lubrication and cooling of the blade.
- After the saw cuts are completed, each sample interval will be removed from the channel using a hammer and chisel. Each sample will be separately bagged in a large polyethylene sample bag, a unique pre-labelled sample tag will be placed in each sample bag and the outside of the bag labelled with the same number using permanent ink marker. The bags will be closed and secured.

In addition, First Cobalt intends to conduct systematic grab and chip sampling of known prospects and occurrences within the Silver Centre Property area.



10 Drilling

First Cobalt has conducted no drilling on the Greater Cobalt Project as of the Effective Date. Historic drilling by previous operators is discussed in Section 6.

11 Sample Preparation, Analyses, and Security

As noted in Section 10, First Cobalt has initiated a surface stripping and sampling program at the Keeley Frontier claim group. Channel sample collection will be completed in August and final analytical results are expected by end of August 2017.

AGAT Laboratories Ltd (AGAT) in Mississauga, Ontario will be used as the primary analytical facility for the Keeley-Frontier program. The method being used is Sodium Peroxide Fusion followed by ICP-OES and ICP-MS finish. For QAQC, certified reference standards and blanks are inserted (interchangeably) every 20 samples. For drilling, sample duplicates by quarter cutting of core will be done every 50 samples or at the discretion of the geologist where samples are predicted to be high grade (Co, Ni, Ag, Cu). Pulp check will be conducted regularly by submitting 5% of samples to another analytical lab on a monthly basis. AGAT is a fully accredited laboratory and conforms with the requirements of CANP4E (ISO/IEC 17025:2005) and CANP1579 by the Standards Council of Canada.

Sample chain of custody will be maintained. Sample bags are to be moved from the trenches and placed in rice bags for organisation and ease of transport. Presently, First Cobalt personnel deliver the samples in rice bags directly to the AGAT analytical facility in Mississauga.

AGAT Laboratories and their employees are independent from First Cobalt. First Cobalt personnel and consultants and contractors were not involved in sample preparation and analysis.

CSA Global recommends that during any future systematic surface sampling or drill program, a robust QAQC program continue to be implemented which would include the insertion of certified reference materials and coarse blanks to independently check the laboratory for potential systematic errors, contamination and instrument drift over time. Duplicates, preparation duplicates and pulp check duplicates should also be inserted to confirm the reproducibility of results and suitability of the sampling methodology.

The following is a description of known historical sample preparation, analyses and security protocols and procedures utilised during previous sampling programs on the Property (Section 6), in particular the 2012–2014 Canadian Silver Hunter programs.

11.1 Prior to 2012

Sample preparation and analytical techniques employed by historic mines and exploration companies at the Silver Centre Property area prior to 2012 are largely unknown.

CSA Global is therefore unable to determine whether the sample preparation and analytical techniques employed by those companies were appropriate for the sample media and mineralisation type and conform to current industry standards. For this reason, it is CSA Global's opinion that historic analytical results should be viewed for historical reference only and should not be relied upon. CSA Global notes however that the historical production records of the Keeley and Frontier mines indicate that significant mineralisation was in place within and mined and processed from known structures on the Silver Centre Property utilising methods available at the time (Section 6.5.1).

11.2 Canadian Silver Hunter (2012 to 2014)

11.2.1 Sample Security

Samples were collected and placed into plastic bags and sealed in the field. Security of samples prior to dispatch to the analytical laboratory was maintained by limiting access of unauthorised persons. Samples were transported from the field at the end of each field day and were in the possession of Canadian Silver Hunter contractors until they were delivered to the AGAT sample preparation facility in Sudbury, Ontario. The labelled sample bags were packed in polypropylene rice bags and sealed. The assay preparation laboratory completed sample preparation operations and employed bar coding and scanning technologies that provide complete chain of custody records for every sample.

Following analysis, the laboratory pulps from the 2012 diamond drill program and 2012/2014 channel sampling programs were returned to Canadian Silver Hunter and are currently stored with archived 2012 drill core in the locked ocean shipping container at the historic Frontier mine site.

CSA Global believes the security and integrity of the samples submitted for analyses is un-compromised, given the adequate record keeping, storage locations, sample transport methods, and the analytical laboratories' chain of custody procedures.

11.2.2 Sample Preparation and Analysis

AGAT collected split core samples and surface channel samples from the Canadian Silver Hunter's core shack/warehouse and delivered them to its preparation lab in Sudbury, Ontario. Pulps were then sent to AGAT facilities in Mississauga, Ontario for analysis using aqua regia digestion and multielement (including Ag, Co, Ni, Bi, Sb) analysis (ICPOES finish). AGAT is a fully accredited laboratory and conforms with the requirements of CANP4E (ISO/IEC 17025:2005) and CANP1579 by the Standards Council of Canada.

AGAT and their employees are independent from Canadian Silver Hunter. Canadian Silver Hunter personnel and consultants and contractors were not involved in sample preparation and analysis.

It is CSA Global's opinion that security, sample collection, preparation and analytical procedures undertaken on the Silver Centre Property during the 2012–2014 programs are appropriate for the sample media and mineralisation type and conform to industry standards.

11.2.3 Quality Assurance and Quality Control

Canadian Silver Hunter's QAQC program included the use of certified reference standards and blank samples inserted into the assay stream by the Company's personnel every 25 samples in addition to AGAT's internal QAQC programs. Samples assaying greater than 100 g/t Ag were fire assayed with a gravimetric finish. QAQC also included sending selected pulp samples for check assays at an independent lab (ALS Chemex) using both four acid (MEMS61) and aqua regia (MEMS41) digestions for multielement analysis. Selected higher grade silver and several random sample rejects were chosen for screen metallic analysis for silver only, at AGAT. A final silver number for the database was arrived at by averaging duplicate geochemical values; geochemical values were replaced by fire assay or screen metallic analyses when available. Canadian Silver Hunter indicated that screen metallic assaying is required to more accurately quantify silver values in higher grade portions of the mineralised zones due to the presence of coarse native silver.

Internal laboratory quality control samples including certified reference materials, blanks, and duplicates are inserted within each analytical run. The minimum number of quality control samples required to be inserted are based on the rack size specific to the method.



12 Data Verification

At the time of the site visit, First Cobalt was in the process of mobilising geological and geo-technical field crews to Silver Centre Property. As such, First Cobalt samples were not yet available for verification sampling at the time of the site visit and as of the Effective Date of the Report.

12.1 CSA Global 2017 Site Visit

CSA Global's representative and Author, Mr Ian Trinder, completed a one-day field visit at the Silver Centre Property on 6 June 2017 as part of CSA Global's due diligence in the preparation of this Report. Confirmation of the existence of selected historic shafts, trenches, collapsed stopes and work sites in addition to more recent areas of recent power-stripping, channel sampling and diamond drilling (2012 to 2014) was conducted by the Author.

First Cobalt's Dr Frank Santaguida, Mr Peter Campbell and Mr David Jamieson accompanied and guided the Author during the field visit, providing valuable insight into the history and current status of the Silver Centre Property and the Keeley-Frontier claim group in particular.

First Cobalt's proposed exploration objectives and activities, methodologies, QAQC procedures and security were discussed. The Property and technical observations were generally as reported in historic documents and First Cobalt's current public documents. Several verification samples were collected.

12.2 CSA Global 2017 Verification Sampling

CSA Global conducted limited verification sampling of three archived intervals from Canadian Silver Hunter diamond drillhole CSH12-03 and two mineralised structures from 2012–2014 power stripped bedrock exposures. The Author personally collected the continuous chip samples from the bedrock structures and sealed the sample bags with ladder lock ties. The Author marked the three archived half-drill core intervals for quarter-core sampling and secured the core box with a lid. The author handed possession of the bagged bedrock samples and core box to Bill Bonney of Canadian Exploration Services of Larder Lake, Ontario, an independent mineral exploration contractor. Canadian Exploration Services personnel cut the three quarter-core samples, placing one quarter of the sample into plastic sample bags and returning the remaining quarter-core to the core box for archive. The five sealed sample bags were then delivered to SGS Minerals Services at 185 Concession St., Lakefield, Ontario for analysis.

The SGS Lakefield laboratory has accreditation from the Standards Council of Canada (No. 184) conforming to requirements of CAN-P-1579 (Mineral Analysis) and CAN-P-4E (ISO/IEC 17025:2005) for methods including those requested by CSA Global (see next paragraph). Sample preparations follow industry best practices and procedures. The analytical methods used are routine.

All CSA Global verification samples submitted to SGS were prepared and analysed using SGS preparation code G-PRP89 in which the sample is weighed, dried, crushed to 75% passing 2 mm screen, a 250 g split is then taken and pulverised to 85% passing 75 microns. The pulverised material was then analysed using SGS analytical codes GO FAG313 Ag and GO FAG313 Ag. GO FAG313 Ag is a 30 g Fire assay for silver with gravimetric finish and detection limits of 10–5,000 ppm. GE ICP90A is a sodium peroxide (Na_2O_2) fusion with an ICP-OES finish. Lower detection limits are 10 ppm for the elements analysed (Co, Cu, Ni).

SGS and their employees are independent from CSA Global and First Cobalt. CSA Global and First Cobalt personnel and consultants and contractors were not involved in sample preparation and analysis.

CSA Global's verification samples are too few to permit a statistical comparison with the historic samples, however, they do provide an independent confirmation of the presence of silver, cobalt and nickel mineralisation at the Silver Centre Property. Note that CSA Global sample 16904 is 30 cm in length whereas the comparable Canadian Silver Hunter claim was 0.6 m. The start and end of the Canadian Silver Hunter 60 cm channel sample was uncertain at the time of the Author's site visit therefore only the main 30 cm mineralised structure was sampled within the 60 cm Canadian Silver Hunter interval (Table 13).

It is the opinion of CSA Global that the sample preparation and analytical procedures implemented by previous operator Canadian Silver Hunter were adequate for the exploration conducted during 2012–2014.

Table 13: CSA Global verification sample results and comparison to 2012–2014 Canadian Silver Hunter results

CSA Global sample #	Sample width (m)	Sample weight (kg)	Ag (g/t)	Co (ppm)	Cu (ppm)	Ni (ppm)	Canadian Silver Hunter sample #	Sample width (m)	Ag (g/t)	Co (ppm)	Ni (ppm)
16901	0.5	0.3339	17	240	975	116	1726076	0.5	29.6	258	101
16902	0.55	0.4837	<10	43	272	130	1726077	0.55	8.3	34.9	103
16903	0.3	0.237	31	981	1,834	129	1726078	0.3	15.5	612	103
16904	0.3	1.0244	1,253	4,118	821	476	1726632	0.6	190	1,080	220
16905	0.3	0.8589	<10	12,684	188	9,699	n/a	n/a	n/a	n/a	n/a
REP-16901			18								
REP-16903				980	1879	132					

CSA Global sample #	Occurrence	DDH from or UTM E	DDH to or UTM N	Sample description
16901	DDH CSH12-03	118.3 m	118.8 m	Logged as lamprophyre. Minor calcite veining with weak sulphides and arsenides
16902	DDH CSH12-03	118.8 m	119.35 m	Logged as lamprophyre. Rare calcite veinlet
16903	DDH CSH12-03	119.35 m	119.65 m	Logged as lamprophyre. Minor calcite veining with weak sulphides and arsenides
16904	Gibson Lake	612935	5228548	Approximately 30 cm wide sulphide bearing carbonate vein trending 145/85.
16905	Haileybury Vein	613367	5228590	Approximately 20–30 cm wide carbonate vein trending 330/80. Contains smaltite, minor erythrite.

12.3 General

The Author has reviewed available historic third party technical reports provided by First Cobalt, online MNDM historic third-party exploration assessment reports, online MNDM mineral deposit inventory (MDI) files and various OGS geological publications pertinent to the current Project areas.

First Cobalt provided CSA Global with limited historic third-party exploration reports and assay data in digital format. CSA Global completed a spot check comparison of approximately 10% of historic assay data against available digital scans/PDF files of laboratory certificates to verify accuracy and completeness. No errors were detected.



CSA Global has not independently conducted any title or other searches, but has relied upon Ontario government online mining claims databases and First Cobalt and its lawyers for information on the status of the claims, property title, agreements, and other pertinent permitting and environmental conditions (see Section 4).

It is CSA Global's and the Author's opinion that the historic information and data available to CSA Global are a reasonable and accurate representation of the Greater Cobalt Project, particularly the Silver Centre Property, and are of sufficient quality to provide the basis for the conclusions and recommendations reached in this report.

CSA Global recommends that during the ongoing and any future systematic surface sampling or drill program, a robust QAQC program continue to be implemented which would include the insertion of certified reference materials and coarse blanks to independently check the laboratory for potential systematic errors, contamination and instrument drift over time. Duplicates, preparation duplicates and pulp check duplicates should also be inserted to confirm the reproducibility of results and suitability of the sampling methodology.



13 Mineral Processing and Metallurgical Testing

As of the Effective Date of this Report, no mineral processing or metallurgical testwork have been completed by First Cobalt on the Greater Cobalt Project.



14 Mineral Resource Estimates

As of the date of this Report, First Cobalt has found no new significant mineral deposit in the Greater Cobalt Project areas and no Mineral Resources have been estimated.



15 Adjacent Properties

The Cobalt and Silver Centre areas have recently experienced an increase of staking activity and interest in the area's cobalt exploration potential both by the Issuer and third parties; however, there are currently no significant exploration or development properties in the immediate area of the Greater Cobalt Project.



16 Other Relevant Data and Information

Post Effective Date of the Report, First Cobalt and Cobalt One announced on 26 June 2017 that both parties signed a letter of intent on 23 June 2017, pursuant to which First Cobalt intends to acquire all of the issued and outstanding common shares of Cobalt One by way of a court approved scheme of arrangement

Post Effective Date of the Report, First Cobalt and CobalTech Mining Inc. (CobalTech) announced on 26 June 2017 that both parties signed a letter of intent on 23 June 2017, pursuant to which First Cobalt intends to acquire all of the issued and outstanding common shares of CobalTech by way of a court approved scheme of arrangement

No additional information or explanation is necessary to make the technical report understandable and not misleading.

17 Interpretation and Conclusions

The Greater Cobalt Project lies within the historic Cobalt mining camp and its southern satellite, the Silver Centre mining camp in the Lake Temiskaming area of Ontario. The Cobalt Camp and satellite Silver Centre Camp is the type locality of arsenide Ag-Co vein deposits which are the exploration target at the Greater Cobalt Project.

Arsenide Ag-Co vein deposits are localized in areas affected by basinal subsidence and rifting and are spatially related to regional fault systems and closely associated with intrusions of mafic rocks. The arsenide Ag-Co vein deposits in the Cobalt and Silver Centre camps are associated with Aphebian conglomerate, quartzite, and greywacke rocks of the Cobalt Group (Coleman Member of the Gowganda Formation), as well as with major sill-like bodies of Nipissing Diabase and with Archean mafic and intermediate lavas and intercalated pyroclastic and sedimentary rocks. Distribution of the Ag-Co veins in the Cobalt Camp is controlled by the contact between the Nipissing Diabase sills and the rocks of the Cobalt Group (Gowganda Formation) and to a lesser extent the Archean metavolcanic and metasedimentary rocks. Distribution of the known Ag-Co veins in the Silver Centre camps, however, is controlled by the contact between the Nipissing Diabase sills and the Archean metavolcanic and metasedimentary rocks. In both camps, the veins occur in the diabase and in the Aphebian and Archean rocks within about 200 m of their contact with the diabase.

The Keeley-Frontier patents of the Silver Centre Property had significant historic silver and cobalt production. The Keeley-Frontier Mine's combined total 1908–1965 production is recorded as 19,197,413 oz (597,107 kg) Ag, 3,285,520 lb (1,490,289 kg) Co and 27,252 lb (12,357 kg) Ni. Actual production is probably higher than recorded because under the Delora Smelter contract, the smelter accepted ore for either its silver content or its cobalt content, but not both metals (Pearson and Kerr, 1985). To the end of 1965, South Lorrain Township (Silver Centre) had produced a total of 23,338,906 oz of silver with 82% of this coming from the Keeley and Frontier Mines, and over 50% from the Keeley Mine itself (McIlwaine, 1970).

The Greater Cobalt Project claims and properties peripheral to the Silver Centre Property's Keeley-Frontier group are underlain by the rock types associated with the historic arsenide Ag-Co vein deposits elsewhere in the Cobalt and Silver Centre camps, namely Archean (Keewatin) metavolcanics and metasediments, Proterozoic (Huronian) Cobalt Group sediments and Nipissing Diabase. The relatively fewer number of arsenide Ag-Co vein occurrences in Silver Centre Property area compared to the main Cobalt Camp could be due to an unknown geological control but it may also in part reflect masking overburden cover hindering prospecting efforts and the poor accessibility of the areas during the time that the camp was most active in the first half of the 20th century.

As noted by McIlwaine (1970), with respect to the observed favourable area for high grade mineralised shoots along and above the upper Nipissing Diabase/Archean metavolcanics, the most important factors controlling development are as follows:

1. The intersection of two or more veins;
2. The intersection of veins with unmineralised faults or with flat faults;
3. A flexure or "roll" in a vein caused by an abrupt change in strike and/or dip; and
4. The intensity of fracturing in the vicinity of faults.

Factors 1 and 2 are most useful for regional exploration. Once a vein structure has been located, however, the latter two criteria are more important.



Ore shoots tend to be controlled by a marked variation in attitudes (“rolls”) in fault-vein structures and to a limited extent by hornblende lamprophyre dykes which appear to locally control ore deposition.

Previous work in both the Cobalt camp and South Lorrain district has also demonstrated that only strong major fault systems such as the Woods fault, which was been mined for a strike length of 2,200 ft, penetrate the Nipissing Diabase. Less well-defined faults and fracture zones generally do not penetrate the more competent diabase. Exploration, therefore, should focus on major fault structures, particularly where they are intersected by other veins and/or faults and are near the Nipissing Diabase/Keewatin contact.

Previous historic surface based exploration has relied largely on prospecting for mineralised fractures supported by overburden stripping and pitting programs. In addition to prospecting methods, the Issuer should consider testing and using modern geophysical and geochemical techniques to identify features controlling arsenide Ag-Co mineralisation or the arsenide Ag-Co veins themselves at the Cobalt Project.

First Cobalt’s 2017 exploration program is intended to provide a better understanding of the extent of cobalt mineralisation within the historic Keeley-Frontier Mine as well as explore known silver-cobalt prospects on the Silver Centre Property. These areas will be specifically targeted during this program. Historic exploration and development on the Silver Centre Property focused on the narrow high-grade silver-rich portions of the vein structures. Historic assays indicate cobalt-rich veins were encountered during mining but not often followed up or exploited, as silver was the focus. The Company intends to gain an appreciation for the cobalt zonation within the Keeley-Frontier mine area, the exploration potential of known and potentially new high-grade mineralised structures and of the potential for disseminated mineralisation, which could be amenable for bulk mining.

CSA Global concludes that the Greater Cobalt Project and particularly the Silver Centre Property, has potential to host arsenide Ag-Co vein deposits and exploration is warranted.

18 Recommendations

CSA Global considers the Greater Cobalt Project and its Silver Centre Property to be at an early stage of exploration and recommends a multifaceted exploration program including historical data compilation, prospecting, geological mapping, testing of modern geophysical and geochemical methods and conducting follow-up surveys and finally diamond drill testing of targets developed from the initial studies.

First Cobalt has scheduled a 2017 exploration program for the Silver Centre Property which is now in progress. Work is to include:

- Digital compilation of historic Keeley-Frontier mine data to generate a 3D geological model
- Detailed and property-scale structural mapping of mineralised veins and host rocks
- Bore-hole geophysics and televiwer imaging of drillholes from the 2012 drilling campaign targeting the Beaver Lake Fault west of the former mine
- Systematic surface sampling at known prospects and occurrences throughout the property
- Detailed magnetic survey of the property
- 5,000 m of diamond drilling within the footprint of the Keeley-Frontier Mine testing targets from the 3D geological model
- 2,000 m of regional exploration drilling to identify new mineralised fault systems.

First Cobalt has proposed a preliminary budget of \$1,000,000 for the 2017 work program as detailed in Table 14. CSA Global concurs with First Cobalt's program and budget.

Table 14: 2017 Silver Centre Property exploration program and budget (May 2017 to April 2018)

	Task	Budget (\$)
General	Project Geo (1/2 time May 2017 to April 2018)	\$60,000
	Data compilation – 3D model	\$15,000
	Property rehabilitation (July)	\$10,000
Field work	Structural mapping	\$40,000
	Outcrop wash and channel sampling	\$15,000
	Historic drillhole and dump sampling	\$15,000
	Prospecting	\$10,000
	Borehole geophysics + televiwer	\$25,000
Keeley-Frontier Mine area drilling	Minesite drilling (5,000 m)	\$400,000
	Mineralogy (GeoMet) Nov	\$5,000
	Drilling Geo	\$80,000
	Drilling Tech	\$40,000
Regional exploration	Airborne mag geophysics	\$50,000
	Mag data 3D modelling	\$20,000
	Exploration drilling (2,000 m)	\$200,000
	Borehole geophysics	\$15,000
TOTAL		\$1,000,000

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Appendix 1: Establishing Mineral Rights in Ontario

Mining Claims

In Ontario, Crown lands are available, for the purposes of mineral exploration, to a person or entity that holds a prospector's licence from the Ministry of Northern Development and Mines (MNDM). The prospector must complete the Mining Act Awareness Program (MAAP) within 60 days before applying for a licence or a licence renewal. MAAP is an online program that provides basic information on the mining sequence. It includes information on staking claims, early exploration and Aboriginal consultation requirements.

A licensed prospector must first stake a mining claim to gain the exclusive right to prospect on Crown land. The owner of a mining claim is not granted title or ownership to the land and cannot extract or sell any resources removed from the land. Claim staking is governed by O. Reg. 43/11: Claim Staking and Recording under Mining Act, R.S.O. 1990, c. M.14 and is administered through the Provincial Mining Recorder and Mining Lands offices of the MNDM.

Claims are currently staked in Ontario by ground staking or in the case of southern Ontario only, map staking. Ontario is in the process of converting to an online system of claim registration using a cell-based provincial grid which will replace ground and map staking. At conversion, ALL active, unpatented claims would be converted from their legally defined location by claim posts on the ground or by township survey to the cell-based provincial grid. Following conversion, the claims would be legally defined by their cell on the grid and coordinate location in CLAIMaps. As of the effective date of this Report, the date of this conversion is undetermined. Legislation to enable the process of conversion, the Aggregate Resources and Mining Modernization Act (Bill 39), received second reading and was referred to the Standing Committee on Justice Policy on 15 November 2016 for review. Following planned public hearings in the first quarter of 2017 the committee will then review the Bill section by section and consider amendments. MNDM will keep clients informed as implementation processes are finalized.

Ground Staking

An unpatented mining claim is a square or rectangular area of open Crown land or Crown mineral rights that a licensed prospector marks out with a series of claim posts and blazed lines. Mining claims can be staked either in a single unit or in a block consisting of several single units. In un-surveyed territory, a single unit claim is laid out to form a 16 ha (40 acre) square with boundary lines running 400 m (1,320 ft) astronomic north, south, east and west. Multiples of single units, up to a maximum of 16 units (256 ha), may be staked with only a perimeter boundary as one block claim but must be staked in a square or rectangular configuration.

Each corner of the mining claim must be marked with a post. These posts are known as corner posts. Corner posts can be constructed from a standing tree, commercial timber or a loose post. They must stand 1.2 m above ground when erected. A metal tag, known as a claim corner post tag, must be affixed to each corner post. Claim corner post tags are engraved with a unique number, known as a claim number, which identifies the mining claim. They also have a second number, which indicates which corner post the tag is to be placed on. Tags may be purchased from the Provincial Recording Office or other offices, such as the Mining Land Consultant Office, or Service Ontario. A clearly marked line, known as a claim boundary, must be made between the four corner posts. Claim boundaries are usually marked by blazing trees and cutting underbrush with an axe. Piles of loose rock, known as cairns, or stakes cut from other smaller trees, known as pickets, are acceptable if trees are not available or undesirable to cut. A line post is used in conjunction with a claim line to mark the perimeter of a mining claim. For unsurveyed areas, line posts must be erected

at every 400 m along a claim line and at locations where the boundary changes direction. A metal tag, known as a claim line post tag, must be affixed to each line post. Claim line post tags are blank when purchased and must be engraved with the claim number found on the claim corner post tags along with the distance and direction from the last corner post.

Global Positioning System (GPS) georeferencing data must be included on the application to record a mining claim staked on or after 1 November 2012. This requirement only applies to ground staked mining claims on lands that are unsurveyed. It does not apply to land surveyed into lots and concession.

Upon completion of staking, and not later than 30 days after the day on which the staking was completed, a recording application form is filed with payment to the Provincial Recording Office. Staking completion time takes priority, meaning that if two licensees file applications to record the staking of all or part of the same lands, then the applicant with the earliest completion time will have priority. Where the time limited for any proceeding or for the completion of said proceeding in an office of a mining recorder or an office of the Commissioner or an office of the Minister or Deputy Minister expires or falls upon a day on which the relevant office is closed, the time so limited extends to and the recording may be done on the day next following the day on which the relevant office was closed. All claims are liable for inspection at any time by the Ministry and may be cancelled for irregularities or fraud in the staking process. Disputes of mining claims by third parties will not be accepted after one year of the recording date or after the first unit of assessment work has been filed and approved.

The staker must notify all persons who own surface rights to any part of the land located within the claim area that their land has been staked for the purpose of mineral exploration. A surface rights holder is a person who owns rights to a piece of land which do not include the mineral rights. The staker must send proof of an attempt to notify surface rights holders to the Provincial Mining Recorder within 60 days after making the application to record the claim, in order for the mining claim to remain valid.

A mining claim remains valid as long as the claim holder properly completes and files the assessment work as required by the Mining Act and the Minister approves the assessment work. A claim holder is not required to complete any assessment work within the first year of recording a mining claim. In order to keep an unpatented mining claim current, the mining claim holder must perform \$400 worth of approved assessment work per mining claim unit, per year; immediately following the initial staking date, the claim holder has two years to file one year's worth of assessment work. No payments in lieu of work can be made. Claims are forfeited if the assessment work is not done.

A mining claim can be transferred, charged or mortgaged by the prospector without obtaining any consents. Notice of the change of owner of the mining claim or charge thereof should be filed with the MNDM at the district mining recorder's office.

Map Staking

Introduced in November 2012, map staking is only permitted in surveyed areas in Southern Ontario, provided there are no registered surface rights owners.

Map staking is the action of staking a mining claim using a map reference system, without having to physically be on the land. A map staked mining claim must have common boundaries with the section, lot or concession lines established by the original survey. It must provide a description of the claim with reference to the original survey fabric. A title search at the Land Registry Office may be required prior to map staking.

Mining Leases

A claimholder may prospect or carry out mineral exploration on the land under a mining claim. However, the land covered by these claims must be converted to leases before any development work or mining can be performed. Mining leases are issued for 21-year terms and may be renewed for further 21-year periods upon submission of an application to the MNDM within 90 days before the expiry date of the lease. Pursuant to the provisions of the Mining Act, the holder of a mining claim is entitled to a lease if it has complied with the provisions of the Act in respect of those lands. An application for a mining lease may be submitted to the MNDM at any time after the first prescribed unit of work in respect of the mining claim is performed and approved. Leases can be issued for surface and mining rights, mining rights only or surface rights only. Once issued, the lessee pays an annual rent to the province. Furthermore, prior to bringing a mine into production, the lessee must comply with all applicable federal and provincial legislation.

A mining lease cannot be transferred or mortgaged by the lessee without the prior written consent of the MNDM. The consent process generally takes between two and six weeks and requires the lessee to submit various documentation and pay a fee.

Freehold Mining Lands

A prospector interested in removing minerals from the ground may, instead of obtaining a mining lease, make an application to the Ministry of Natural Resources and Forestry (MNRF) to acquire the freehold interest in the subject lands. If the application is approved, the freehold interest is conveyed to the applicant by way of the issuance of a mining patent. A mining patent can include surface and mining rights or mining rights only.

The issuance of mining patents is much less common today than in the past, and most prospectors will obtain a mining lease in order to extract minerals. If a prospector is issued a mining patent, the mining patent vests in the patentee all of the provincial Crown's title to the subject lands and to all mines and minerals relating to such lands, unless something to the contrary is stated in the patent.

The holder of a mining patent enjoys the freehold interest in the lands that are the subject of such patent, therefore no consents are required for the patentee to transfer or mortgage those lands.



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Annexure C – Cobalt One Technical Report Update

(attached as a separate document)



Report No: R393.2017

October 20, 2017

Board of Directors
First Cobalt Corp.
140 Yonge Street
Toronto, Ontario
CANADA M5C 1X6

Dear Sirs:

**Re: JORC Code Addendum – “Technical Report on the Cobalt Project, Larder Mining Division, Ontario”
prepared for Cobalt One Limited dated January 31, 2017**

This document has been prepared at the request of First Cobalt Corp. (**First Cobalt**). It is an addendum to the report titled “Technical Report on the Cobalt Project, Larder Mining Division, Ontario” prepared for Cobalt One Limited (formerly named Equator Resources Ltd) dated January 31, 2017 (**Report**), a copy of which is annexed hereto.

Purpose of document

The geological information in the Report was prepared in accordance with National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* published by the Canadian Securities Administrators.

The information in this document has been prepared in accordance with the ‘Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves’ (2012 edition) published by the Australasian Joint Ore Reserves Committee (**JORC Code**) to ensure that reporting of geological information in the Report also complies with the JORC Code.

This document is filed in support of First Cobalt’s application for admission to the Australian Securities Exchange and its proposed Information Memorandum to be issued in or about October 2017 in relation to the same.

Competent Person's Statement

I, Ian Trinder confirm that:

- I have read and understood the requirements of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves ("JORC Code, 2012 Edition").
- I am a Competent Person as defined by the 2012 JORC Edition, having five years' experience which is relevant to the style of mineralisation and type of deposit described in this document (including the Report), and to the activity for which I am accepting responsibility.
- I am a registered Member with the Association of Professional Engineers and Geoscientists of Manitoba as well as with the Association of Professional Geoscientists of Ontario (each being a "Recognised Professional Organisation" for the purposes of the ASX Listing Rules).
- I have reviewed in this document (including the Report) to which this Statement applies.
- I am a full-time employee of **CSA Global Canada Geosciences Ltd.**

I verify that this document (including the Report) is based on and fairly and accurately reflects in the form and context in which it appears, the information in my supporting documentation.

JORC Code, 2012 Edition – Table 1 report

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	Commentary
<i>Sampling techniques</i>	<ul style="list-style-type: none"> As of the effective date of the report, “Technical Report on the Cobalt Project, Larder Lake Mining Division, Ontario” for Equator Resources Limited (the “Report” dated January 31, 2017), Equator, now Cobalt One, has conducted no exploration on the Cobalt Project. Work conducted by previous operators and holders of the ground within the Project area is derived from historic assessment reports dating back to the 1950’s and on file with the Ontario Ministry of Northern Development and Mines. This work is discussed in Section 6 (History) of the Report and includes sampling by means of: <ul style="list-style-type: none"> Ground EM, VLF-EM, magnetics and IP surveys Helicopter-borne magnetics and electromagnetics Soil sampling Outcrop, trench and subsurface rock chip and grab samples Diamond drill coring. Information with respect to sampling techniques, sample preparation, analytical methods and security protocols and procedures utilized by previous operators for assay results disclosed in the History section were not available to the author for verification. The author is of the opinion however that the historical work programs were conducted to industry best practices at the time and the quality of data and information produced from them are relevant
<i>Drilling techniques</i>	<ul style="list-style-type: none"> Historic drilling completed by previous operators comprised diamond drill core drilling. Specifics in respect to rig type, hole diameter and other relevant criteria are generally not detailed, particularly in older assessment reports. However, CSA Global have assumed industry standard practices appropriate for the time were used on the basis of no evidence to the contrary. Given the historic nature of the drilling, the core was not oriented.
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> In general, specific details in respect to sample media, recoveries, and other factors that may impact the quality of returned analytical results are not available for historic work presented in the assessment reports.
<i>Logging</i>	<ul style="list-style-type: none"> Assessment reports of historic drill holes generally provide limited information with respect to logging, particularly in older reports. Where such information is provided, it is considered qualitative in nature. All historic assessment report results and logging relate to an early stage of exploration such that no Mineral Resource estimations have been completed or are appropriate.
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> Assessment reports of historic diamond drill holes referred to within the Report do not provide information in respect sampled material. No information is provided respect to sample preparation, sample representivity, or QAQC protocols. As such, the author has been unable to validate any of the data in this context.

Criteria	Commentary
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> Assessment reports of historic diamond drill holes referred to within the Report do not provide information on the nature of the laboratory tests and quality of assay data. Insufficient data is available to validate the effectiveness of analytical methods. No QA/QC data procedures or results are reported and therefore results cannot be validated in any way nor level of accuracy and precision established. As such, the author is unable to validate nor comment on any of the historic data in this context. Furthermore, the author was unable to confirm certification of the assay labs nor their relationship to the previous operators for assay results disclosed in the Report's History section.
Verification of sampling and assaying	<ul style="list-style-type: none"> All results are reported from historic assessment reports and government geological reports. No additional verification work has been reported or completed. No access to original sample material is possible given the historic and third party nature of the data.
Location of data points	<ul style="list-style-type: none"> All data is derived from historic assessment reports and government geological reports in the public domain. No specific information is provided in respect to methods of location. It is assumed that historic drilling and sampling was carried out using techniques such as chain and compass relative to claim locations and/or local exploration or mine grids; more recent drilling and sampling may be located using handheld GPS. While such methods have intrinsic error in the order of $\pm 20\text{m}$ or more, the early stage nature of the exploration programs completed do not rely on absolute locational accuracy and therefore these methods are considered adequate and fit for purpose. Historic underground mines such as Silverfields would have been surveyed by traditional industry standard survey methods appropriate for the time.
Data spacing and distribution	<ul style="list-style-type: none"> The majority of reported historic drilling was widely spaced and exploratory in nature. Data spacing and distribution is therefore adequate and fit for such purpose. Historic sample intervals were considered industry standard at the time and are considered appropriate for this stage of drilling and style of mineralisation. No known historic Mineral Resource and Ore Reserve estimation procedure(s) and classifications have been applied to the historic drill results.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> No specific information is provided with respect to the orientation of historic sampling relative to possible structures hosting mineralization. As such no comment on potential sample bias can be made. Most historic diamond drill holes have been inclined holes. Given the early stage of exploration and the general lack of information in respect to structural orientations the author is unable to comment whether the relationship between the drilling orientation and the orientation of key mineralized structures may have introduced a sampling bias. The dominant focus of historic early stage drilling appears to have been to identify structures for more detailed exploration, which the author deems reasonable.
Sample security	<ul style="list-style-type: none"> All sample results are reported from historic assessment reports and government geological reports. No information has been provided in respect to sample security. As such no comment on sample security and validity of results can be made.
Audits or reviews	<ul style="list-style-type: none"> All results are derived from historic assessment reports and government geological reports as documented in the Report. As such no primary laboratory certificates could be assessed to determine absolute validity of data.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> The Cobalt Project comprises five property groups of contiguous or near contiguous claims in the Cobalt and Silver Centre mining camps of eastern Ontario ("the Properties"), approximately 400 km north of Toronto. The Properties lie approximately 8 km, 17 km, 25 km, 28 km and 39 km south and southeast of the community of Cobalt on the west side of Lake Timiskaming and the Ottawa River which form the Ontario-Quebec provincial border in this area. As of the effective date of Report, the Project comprises 60 unpatented claims (392 units totaling approximately 6,272 hectares (ha)) and four patent claims (approximately 30.32 ha). Pursuant to a purchase agreement dated 25 November 2016 and Shareholder approval dated 6 February 2017, Equator acquired 80% and the option to the remaining 20% of Ophiolite (the "Vendor") and its assets, namely the Cobalt Project. The Cobalt Project claims remain held 100% in the name of Ophiolite and are currently in good standing. To CSA Global's knowledge, there are no current or pending challenges to ownership of the Properties. See sections 4 and 6.1 of the Report for details.
Exploration done by other parties	<ul style="list-style-type: none"> The exploration and prior ownership histories of the Properties are presented in sections 6.3.1 to 6.3.5 of the Report. Information on the Project's early exploration and ownership history (pre-1950) is limited and uncomplete, particularly with respect to the MNDM online assessment files. Some additional hardcopy information on early exploration in the Project area is available in historic Resident Geologist notes and donated files archived at the District Geologist's office in Kirkland Lake.
Geology	<ul style="list-style-type: none"> Archean Keewatin rocks are the oldest rocks in the Cobalt Camp and form the southernmost portion of the Western Abitibi subprovince of the Superior Province. These rocks include predominantly intermediate to mafic metavolcanic flows with intercalated metasedimentary rocks. The Archean rocks were folded and intruded by mafic to ultramafic dikes and granite stocks and batholiths. The eroded Archean surface is unconformably overlain by relatively flat lying Paleoproterozoic sedimentary rocks of the Huronian Supergroup which forms the mildly deformed Cobalt Embayment of the Southern Province. At the northeast edge of the Cobalt Embayment in the Cobalt area, the Huronian Supergroup rocks comprise only the Cobalt Group (Gowganda and Lorrain formations) and are commonly found filling interpreted paleo-valleys or troughs in the Archean basement. Early Proterozoic-age Nipissing Diabase intrudes both the Archean basement and the Huronian sediments. The Nipissing Diabase are the most abundant and widespread igneous rocks intruding the Huronian Supergroup sediments and occur as dykes, and sills up to several hundred metres thick. In the Cobalt area, the Nipissing diabase is interpreted as a thick undulating sheet intruding the Cobalt Group sediments at or immediately above the Archean unconformity. The Cobalt Camp is the type locality of arsenide silver-cobalt vein deposits which are the exploration target at the Cobalt Project. Arsenide silver-cobalt vein deposits are localized in areas affected by basinal subsidence and rifting and are spatially related to regional fault systems and closely associated with intrusions of mafic rocks. The arsenide silver-cobalt vein deposits in the Cobalt Camp are associated with Aphebian conglomerate, quartzite, and greywacke rocks of the Cobalt Group

Criteria	Commentary
	<p>(Coleman Member of the Gowganda Formation), as well as with major sill-like bodies of Nipissing diabase and with Archean mafic and intermediate lavas and intercalated pyroclastic and sedimentary rocks. Distribution of the silver-cobalt veins in the Cobalt Camp is controlled by the contact between the Nipissing diabase sheets and the rocks of the Cobalt Group (Gowganda Formation) and to a lesser extent the Archean metavolcanic and metasedimentary rocks. The veins occur in the diabase and in the Aphebian and Archean rocks within about 200 m of their contact with the diabase.</p> <ul style="list-style-type: none"> The Properties are underlain by the rock types associated with the historic arsenide Ag-Co vein deposits elsewhere in the Camp, namely Archean (Keewatin) metavolcanics and metasediments, Proterozoic (Huronian) Cobalt Group sediments and Nipissing Diabase. Minor occurrences of quartz-carbonate veining with sporadic arsenide Ag-Co mineralization are present within the Properties. Within the Project areas, the historic Silverfields Mine had significant silver and cobalt production; the historic Ophir and Lang Caswell mines also reported minor production of Ag and Co. See Sections 6.5, 7 and 8 of the Report for details.
Drill hole Information	<ul style="list-style-type: none"> The reported historic drilling conducted by numerous previous operators was widely spaced and exploratory in nature. Any drill results reported in the Report's history section are for informational purposes with respect to mineralization types and styles found in the Project area, if any such mineralization was intersected. The dominant focus of historic early stage drilling appears to have been to identify structures for more detailed exploration, which the author deems reasonable. This is not considered material to CSA Global's evaluation of the project, which is on a qualitative basis. The author deems the historic drill hole coordinate and survey data not Material for the above reasons and its exclusion does not detract from the understanding of the Report. See Report Section 6 and 7.3.
Data aggregation methods	<ul style="list-style-type: none"> Assessment reports of historic diamond drill hole and surface sampling referred to within the Report do not provide information on any data aggregation methods that may have been utilized. As such, the author is unable to validate nor comment on any of the historic data in this context.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> The author is unable to confirm the geometry of mineralization with respect drill holes and surface samples reported in historic assessment reports. Unless otherwise noted, historic assay interval widths and thicknesses should be considered apparent widths (e.g. downhole lengths); true widths are generally uncertain or unknown. This is not considered material to CSA Global's evaluation of the project, which is on a qualitative basis.
Diagrams	<ul style="list-style-type: none"> No significant discovery is reported.
Balanced reporting	<ul style="list-style-type: none"> See sections 6.3.1 to 6.3.5 of the Report.
Other substantive exploration data	<ul style="list-style-type: none"> See sections 6.3.1 to 6.3.5 of the Report.
Further work	<ul style="list-style-type: none"> See section 18 of the Report.

Yours sincerely

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Ian Trinder
Principal Geologist

ANNEX 1

**“Technical Report on the Cobalt Project, Larder Lake Mining Division, Ontario”
for Equator Resources Ltd. and dated 31 January 2017**



CSA Global
Mining Industry Consultants



NI43 101 Technical Report

Technical Report on the Cobalt Project, Larder Lake Mining Division, Ontario

CSA Global Report № R109.2017
31 January 2017

www.csaglobal.com

Report prepared for

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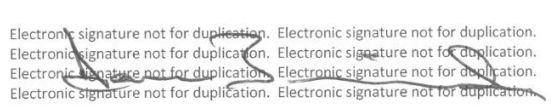
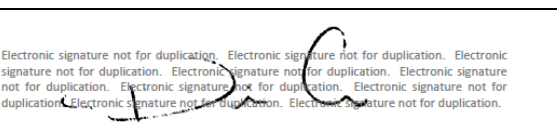
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Date and Signature Page

This Report titled “Technical Report on the Cobalt Project, Larder Lake Mining Division, Ontario” for Equator Resources Ltd. and dated 31 January 2017, was prepared and signed by the following author:

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Dated at Toronto, ON

24 March 2017

Ian Trinder, M.Sc., PGeo (ON, MB)

Principal Geologist

CSA Global Geosciences Canada Ltd

Report Effective Date:

31 January 2017

CERTIFICATE OF QUALIFICATION

CERTIFICATE OF QUALIFICATION OF AUTHOR – Ian Trinder, M.Sc., P.Geo.

I, Ian D. Trinder, M.Sc., P.Geo. (ON, MAN), do hereby certify that:

1. I reside at 4185 Taffey Crescent, Mississauga, Ontario, L5L 2A6.
2. I am employed as a Principal Geologist by CSA Global Geosciences Canada Ltd located at 365 Bay St., Suite 501, Toronto, Ontario, Canada. M5H 2V1.
3. I graduated with a degree in Bachelor of Science Honours, Geology, from the University of Manitoba in 1983 and a Master of Science, Geology, from the University of Western Ontario in 1989.
4. I am a Professional Geoscientist (P.Geo.) registered with the Association of Professional Engineers and Geoscientists of Manitoba (APEGM, No. 22924) and with the Association of Professional Geoscientists of Ontario (APGO, No. 452). I am a member of the Society of Economic Geologists and of the Prospectors and Developers Association of Canada.
5. I have approximately 30 years of direct experience with precious and base metals mineral exploration in Canada, USA and the Philippines including project evaluation and management. Additional experience includes the completion of various National Policy 2A and NI 43-101 technical reports for gold and base metal projects.
6. I have read the definition of “qualified person” set out in National Instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purposes of NI 43-101.
7. I completed a 1.5-day field visit at the Cobalt Project from November 24-25, 2016.
8. I am author of the technical report titled: “Technical Report on the Cobalt Project, Larder Lake Mining Division, Ontario” for Equator Resources Limited dated January 31, 2017 (the “Report”). I am responsible for all sections of the Report.
9. I have no prior involvement with the Issuer, Vendor or the Property.
10. As of the effective date of the technical report, to the best of my knowledge, information, and belief, the technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.
11. I am independent of the Issuer, the Vendor and the Property applying all the tests in section 1.5 of National Instrument 43-101.
12. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
13. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

DATED this 24th day of March 2017

["SIGNED AND SEALED"]

{*Ian Trinder*}

Ian D. Trinder, M.Sc., P. Geo.

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Appendix

Appendix 1:	Establishing Mineral Rights in Ontario
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1 Summary

This technical report (the “Report”) was prepared by CSA Global Canada Geosciences Ltd (CSA Global) at the request of Mr Alex Passmore, Director of Equator Resources Limited (“Equator” or “the Issuer” or “the Company”) and focuses on the exploration potential of the Issuer’s 80% owned Cobalt Project (“Project”) in Ontario. The Report is specific to the standards dictated by National Instrument 43-101 (“NI 43-101”), companion policy NI43-101CP and Form 43-101F1 (Standards of Disclosure for Mineral Projects). The effective date of this Report is January 31, 2017.

The Cobalt Project comprises five property groups of contiguous or near contiguous claims in the Cobalt and Silver Centre mining camps of eastern Ontario (“the Properties”), approximately 400 km north of Toronto. The Properties lie approximately 8 km, 17 km, 25 km, 28 km and 39 km south and southeast of the community of Cobalt on the west of Lake Timiskaming and the Ottawa River which form the Ontario-Quebec provincial border in this area. As of the effective date of this Report, the Project comprises 60 unpatented claims (392 units totalling approximately 6,272 hectares (ha)) and four patent claims (approximately 30.32 ha).

Pursuant to a purchase agreement dated 25 November 2016 and Shareholder approval dated 6 February 2017, Equator acquired 80% and the option to the remaining 20% of Ophiolite (the “Vendor”) and its assets, namely the Cobalt Project. The Cobalt Project claims remain held 100% in the name of Ophiolite and are currently in good standing. To CSA Global’s knowledge, there are no current or pending challenges to ownership of the Properties.

Equator and Ophiolite do not currently hold any exploration plans or permits for exploration work proposed in this Report. Equator and Ophiolite warrant that they will acquire any and all government permits required to execute the proposed early exploration activities on the Properties. Equator and Ophiolite warrant that they will consult with the appropriate First Nation and Metis communities as required per the Ontario Mining Act.

Environmental, permitting, legal, title, taxation, socio-economic, marketing, and political or other relevant issues could potentially materially affect access, title or the right or ability to perform the work recommended in this report on the Property. However, at the time of this report, CSA Global is unaware of any such potential issues affecting the Properties.

The Cobalt Project is located south of the Town of Cobalt, situated between and part of the historic Cobalt and Silver Centre mining camps. The Project’s Cooper Lake Property is a satellite property located on the South Lorrain-Eldridge Township boundary approximately 16 km south of Silver Centre. The various Properties are accessible via all weather roads and seasonal all-terrain vehicle (ATV) trails.

Most services and supplies required for a mineral exploration program are available in the City of Temiskaming Shores, approximately 25 km north of the centre of the Project area. Given the mining history of the Cobalt Camp and the proximity of mining communities such as Kirkland Lake and Sudbury and service centres such as North Bay, exploration and mining personnel are readily available in the region. The city of Greater Sudbury is located approximately 200 km by road southwest of the Properties at the intersection of the Trans-Canada Highway, Highway 69S and Highway 144N.

Other than several powerlines, all-weather roads and ATV trails, no infrastructure is present within the Properties. The centre of the Project area lies approximately 15 km east of Provincial Highway 11 and the

Ontario Northland rail line. Hydro One 115 kV and 230 kV transmission lines cross or are in close proximity to the Properties. Abundant water resources are present in the lakes, rivers, creeks, and beaver ponds on the Properties.

At this time, it appears that Ophiolite and through it, Equator, hold sufficient mining claims necessary for proposed exploration activities and potential future mining operations (including potential tailings storage areas, potential waste disposal areas, and potential processing plant sites) should a mineable mineral deposit be discovered.

The climate in the Project area is warm summer humid continental with warm and often hot summers and long, cold winters. Season-specific mineral exploration may be conducted year-round. Swampy areas and lakes/ponds may be best accessed for drilling and ground geophysical surveys during the winter months when the ground and water surfaces are frozen. Mine operations in the region can operate year-round with supporting infrastructure.

The Project area is characterized by rocky, rolling bedrock hills with locally steep ledges and cliffs, separated by valleys filled with clay, glacial material, swamps and streams. Total relief within the Project area is approximately 200 m with topography varying from 180 m to 390 m above sea level (ASL). Local relief is commonly up to 30 m, although some ridges rise up to 60 m or more above surrounding lowlands.

Vegetation is typical boreal forest with mixed second growth forest of mixed coniferous and deciduous trees, including poplars, birch, maple, pine, spruce, alders, and willows. Swampy low lying areas contain abundant tag alders.

A vein-bearing cobalt was discovered in 1884 by Sir William Logan at a site that would become the Agaunico Mine 1 km south of today's town of Haileybury (Hall, 2016). The initial discovery of silver in the region was made west of Lake Temiskaming in 1903 during the construction of the Temiskaming and Northern Ontario Railway. This began a rich mining history in the area. The location along the railway was named Cobalt after one of the elements found in the arsenide minerals within the veins. The first mines commenced production as early as 1904 and mining was, more or less, continuous until 1989 with production peaking in 1911 (Jambor, 1975). In addition to silver, cobalt, nickel and copper were recovered from the ore. Mineralization was not just limited to the area immediately around Cobalt, but was recovered from areas with similar geology within the Cobalt embayment of the Southern Province, from Gowganda in the west to Silver Center in the southeast. Information on the Project's early exploration and ownership history (pre-1950) is limited and uncomplete, particularly with respect to the Ministry of Northern Development and Mines (MNDM) online assessment files. Some additional hardcopy information on early exploration in the Project area is available in historic Resident Geologist's notes and donated files archived at the District Geologist's office in Kirkland Lake.

The Cobalt Camp area is underlain by Precambrian rocks of the Superior and Southern provinces (Guindon *et al.*, 2016). Outliers of Paleozoic strata are exposed immediately to the north in the Haileybury area and further to the north between New Liskeard and Englehart.

Archean Keewatin rocks are the oldest rocks in the Cobalt Camp and form the southernmost portion of the Western Abitibi subprovince of the Superior Province. These rocks include predominantly intermediate to mafic metavolcanic flows with intercalated metasedimentary rocks. The Archean rocks were folded and intruded by mafic to ultramafic dikes and granite stocks and batholiths. The eroded Archean surface is unconformably overlain by relatively flat lying Paleoproterozoic sedimentary rocks of the Huronian Supergroup which forms the mildly deformed Cobalt Embayment of the Southern Province. At the northeast

edge of the Cobalt Embayment in the Cobalt area, the Huronian Supergroup rocks comprise only the Cobalt Group (Gowganda and Lorrain formations) and are commonly found filling interpreted paleo-valleys or troughs in the Archean basement. Early Proterozoic-age Nipissing Diabase intrudes both the Archean basement and the Huronian sediments. The Nipissing Diabase are the most abundant and widespread igneous rocks intruding the Huronian Supergroup sediments and occur as dykes, and sills up to several hundred metres thick. In the Cobalt area, the Nipissing diabase is interpreted as a thick undulating sheet intruding the Cobalt Group sediments at or immediately above the Archean unconformity.

The grade of regional metamorphism in the area ranges from subgreenschist facies in the Huronian sedimentary rocks to greenschist facies in the Archean metavolcanic rocks (Born and Hitch, 1990). Contact metamorphism of sedimentary rocks of the Gowganda and Lorrain Formations occurred during the emplacement of Nipissing diabase.

Neither Equator nor Ophiolite have conducted exploration work or diamond drilling on the Project as of the effective date of this Report.

The Cobalt Camp is the type locality of arsenide silver-cobalt vein deposits which are the exploration target at the Cobalt Project. Arsenide silver-cobalt vein deposits are localized in areas affected by basinal subsidence and rifting and are spatially related to regional fault systems and closely associated with intrusions of mafic rocks. The arsenide silver-cobalt vein deposits in the Cobalt Camp are associated with Aphebian conglomerate, quartzite, and greywacke rocks of the Cobalt Group (Coleman Member of the Gowganda Formation), as well as with major sill-like bodies of Nipissing diabase and with Archean mafic and intermediate lavas and intercalated pyroclastic and sedimentary rocks. Distribution of the silver-cobalt veins in the Cobalt Camp is controlled by the contact between the Nipissing diabase sheets and the rocks of the Cobalt Group (Gowganda Formation) and to a lesser extent the Archean metavolcanic and metasedimentary rocks. The veins occur in the diabase and in the Aphebian and Archean rocks within about 200 m of their contact with the diabase.

The Properties are underlain by the rock types associated with the historic arsenide Ag-Co vein deposits elsewhere in the Camp, namely Archean (Keewatin) metavolcanics and metasediments, Proterozoic (Huronian) Cobalt Group sediments and Nipissing Diabase. Minor occurrences of quartz-carbonate veining with sporadic arsenide Ag-Co mineralization are present within the Properties. The historic Ophir, and Lang Caswell mines have reported minor production of Ag and Co from within the Properties. The relatively fewer number of arsenide Ag-Co vein occurrences in the Project areas compared to the main Cobalt Camp could be due to an unknown geological control but it may also in part be a reflection of masking overburden cover hindering prospecting efforts and the poor accessibility of the areas during the time period that the camp was most active in the first half of the 20th century. The Issuer intends to investigate modern geophysical methods to overcome the masking effect of the overburden cover.

The Cobalt Project's Silverfields Property stands out in that it hosts the Silverfields Mine which had significant production of Ag and Co. At shutdown of the mine in June 1983, Teck reported total production from 1964 to 1983 at 1,290,753 tonnes (1,422,812 tons) with 566,593 kg (18,216,523 oz) Ag recovered and an average head-grade 439 g/t (12.8 oz/ton) Ag. Guindon et al. (2016) reported total production from 1964 to 1983 at 1,200,035 tonnes (1,322,813 tons) with 553,447 kg (17,793,862 oz) Ag, 162,160 kg (357,501 lbs) Co, 223,737 kg (493,255 lbs) Ni and 108,360 kg (238,893 lbs) Cu recovered. The reason for the differences in Ag production quoted by Teck and Guindon is unknown to the Author. Total Co production at the Silverfields Mine is probably uncertain because smelters often did not credit Co content of the ore shipped. While the mine was shut down due to exhaustion of its Ag reserves, the zoned nature of the mineralization and the

fact that Ag was the main target metal for production, may mean that some areas of low grade Ag mineralization that were not mined may have significant a significant Co content. The Silverfields Property was acquired to investigate this possibility. Cobalt grades in the veins at the Silverfields Mine are uncertain. In a site examination report dated 5 December 1978, Resident geologist Howard Lovell referred to an ore grade of 1% Co when calculating potential losses from the non-payment for Co in the concentrates from Silverfields. However, in the same report while discussing a vein in the back of the level 3 drift, he describes a strong cobalt bloom unrepresentative of the cobalt content of the vein which he estimated to be less than 1%, perhaps 0.25%.

CSA Global concludes that the Cobalt Project has potential to host arsenide silver-cobalt vein deposits and exploration is warranted. Previous historic surface based exploration has relied largely on prospecting for mineralized fractures supported by overburden stripping and pitting programs. In addition to prospecting methods, the Issuer should consider testing and using modern geophysical and geochemical techniques to identify features controlling arsenide silver-cobalt mineralization or the arsenide silver-cobalt veins themselves at the Cobalt Project. Given the relatively narrow widths of the historic veins mined in the Cobalt Camp, the cobalt +/- silver target veins, if of similar width, will need to be high grade and preferably in vein sets.

CSA Global considers the Cobalt Project to be at an early stage of exploration and recommends a multifaceted exploration program to compile historic data and, in addition to prospecting and geological mapping, test and conduct modern geophysical and geochemical surveys to determine if they are suitable for arsenide silver-cobalt vein exploration. A suggested Phase 1 exploration program would include:

Cobalt Project – general:

- GIS data compilation of available government data and historic assessment file data and information
- 3-D geological and structural modelling in Leapfrog software
- Helicopter-borne magnetic and electromagnetic (EM) survey to map lithology and structure
- Independent interpretation of the airborne geophysical survey results
- Prospecting of historic occurrences and airborne survey targets
- Geological mapping to identify favourable host rocks and structures for arsenide silver-cobalt vein deposits
- Orientation geochemical surveys (MMI, basal till, soil gas) to determine best geochemical method for exploration of arsenide Ag-Co vein deposits
- Quaternary mapping in support of geochemical surveys
- Property scale geochemical surveys based on orientation survey results.

Ophir Mine area – North Gillies Limit Property:

- Three-dimensional (3D) underground geological and structural modelling
- Orientation geophysical surveys (induced polarisation (IP), EM, magnetics) to determine best geophysical method(s) for exploration of arsenide Ag-Co vein deposits masked by overburden cover and at depth in bedrock.

Silverfields Mine area – Silverfields Property:

- Field location and documentation of abandoned mine hazards
- Detailed GIS compilation and 3D underground, geological and structural modelling.

A preliminary Phase 1 budget of C\$740,000 is proposed for the 2017 field season as detailed below in Table 1.

Table 1: Recommended Phase 1 exploration program and budget

Task	Cost (C\$)	Total (C\$)
Cobalt Project – general		
GIS data compilation of available government data and historic assessment file data and information		\$50,000
3D geological and structural modelling		\$15,000
Helicopter-borne magnetic and EM survey	~\$90/line km	\$168,000
Independent airborne geophysical interpretation		\$10,000
Prospecting – all inclusive with interpretation		\$50,000
Geological mapping – all inclusive with interpretation		\$75,000
Orientation geochemical surveys (MMI, basal till, soil gas) – all inclusive with interpretation		\$20,000
Quaternary mapping in support of geochemical surveys		\$30,000
Property scale geochemical surveys based on orientation survey results – all inclusive with interpretation		\$150,000
	Subtotal	\$568,000
Ophir Mine area – North Gillies Limit Property		
3D geological and structural modelling		\$15,000
Orientation geophysical surveys (IP, EM, magnetics) – all inclusive with interpretation		\$20,000
	Subtotal	\$35,000
Silverfields Mine area – Silverfields Property		
Field location and documentation of abandoned mine hazards		\$10,000
Detailed GIS compilation and 3D underground, geological and structural modelling		\$30,000
	Subtotal	\$40,000
	TOTAL	\$643,000
	~15% contingency	\$97,000
	GRAND TOTAL	\$740,000

Contingent on results from the Phase 1 exploration work, a Phase 2 diamond drill program may be warranted to initially test targets generated in the Phase 1 program. An all inclusive 2,000 m diamond drill program totalling C\$345,000 would be reasonable as tabled below:

Table 2: Recommended Phase 2 exploration program and budget

Task	Cost (C\$)	Total (C\$)
Cobalt Project – general		
All inclusive diamond drill program	2,000m at \$150/m	\$300,000
	~15% contingency	\$45,000
	GRAND TOTAL	\$345,000



2 Introduction

2.1 Issuer

This technical report (the “Report”) was prepared by CSA Global at the request of Mr Alex Passmore, Director of Equator, and focuses on the exploration potential of the Issuer’s Cobalt Project in Ontario.

Equator’s registered office is at Level 1, 35 Richardson Street, West Perth, Western Australia 6005. It is an Australian Securities Exchange (ASX) listed exploration and development company currently focused on cobalt exploration in the Cobalt region of Ontario, Canada.

2.2 Terms of Reference

CSA Global was commissioned by the Issuer to prepare a technical report on its 80% owned Cobalt Project in Ontario, Canada. The Report is specific to the standards dictated by NI 43-101, companion policy NI43-101CP and Form 43-101F1 (Standards of Disclosure for Mineral Projects). The Report focuses on the exploration potential of the Project and is intended to enable Equator and both current and potential partners to reach informed decisions with respect to the Project.

The effective date of this Report is 31 January 2017. The Report is based on information known to CSA Global at that date.

The Issuer reviewed draft copies of this Report for factual errors. Any changes made as a result of these reviews did not include alterations to the interpretations and conclusions made. Therefore, the statements and opinions expressed in this document are given in good faith and in the belief that such statements and opinions are not false and misleading at the date of this Report.

2.3 Sources of Information

This report has been prepared by CSA Global based on review of publicly available geological reports, maps, assessment files, mining claim information and technical papers, and company letters and memoranda made available by the Issuer, as listed in Section 19 (“References”) of this Report. CSA Global has taken reasonable steps to verify the information provided where possible.

CSA Global also had discussions with the management and consultants of Equator and the Vendor, in particular, Mr James Thompson and Mr Gino Chitaroni of Ophiolite Consultants Pty. (“Ophiolite”).

2.4 Qualified Person Property Inspection

Mr Ian Trinder, M.Sc., P.Geo., CSA Global Principal Geologist and Qualified Person (QP), is responsible for the preparation of this report. Mr Trinder has a Master of Science degree in geology and is a registered Professional Geoscientist (P.Geo.) in good standing registered in the Provinces of Ontario and Manitoba Canada (APGO no. 0452, APEGM no. 22924). Mr Trinder has over 30 years’ experience in the mining industry with a background in international precious and base metals mineral exploration including resource estimates, project evaluation and management.

The Author completed a 1.5-day field visit at the Project on 24-25 November 2016. Ophiolite’s project manager, Mr Gino Chitaroni accompanied and guided the Author during the field visit, providing valuable insight into the history of the Cobalt Camp and the current status of the Project areas.

The Author considers that the site visit is current under Section 6.2 of NI 43-101.

2.5 Units and Currency

The Metric System or SI System is the primary system of measure and length used in this Report and is generally expressed in kilometres, metres and centimetres; volume is expressed as cubic metres, mass expressed as metric tonnes, area as hectares, and zinc, copper and lead grades as percent or parts per million. The precious metal grades are generally expressed as grams/tonne but may also be in parts per billion or parts per million. Conversions from the SI or Metric System to the Imperial System are provided below and quoted where practical. Many of the geologic publications and more recent work assessment files now use the SI system but older work assessment files almost exclusively refer to the Imperial System. Metals and minerals acronyms in this report conform to mineral industry accepted usage and the reader is directed to online resources at https://en.wikipedia.org/wiki/List_of_chemical_elements and http://cms.unige.ch/sciences/terre/research/Groups/mineral_resources/opagues/ore_abbreviations.php

Other abbreviations include UTM = Universal Transverse Mercator; NAD = North American Datum; WGS = World Geodetic System.

Conversion factors utilized in this report include:

- 1 troy ounce/ton = 34.2857 grams/tonne
- 1 gram/tonne = 0.0292 troy ounces/ton
- 1 troy ounce = 31.1035 grams
- 1 gram = 0.0322 troy ounces
- 1 pound = 0.4536 kilograms
- 1 foot = 0.3048 metres
- 1 mile = 1.609 kilometres
- 1 acre = 0.4047 hectares
- 1 square mile = 2.590 square kilometres

The term gram/tonne or g/t is expressed as “gram per tonne” where 1 gram/tonne = 1 ppm (part per million) = 1,000 ppb (part per billion). Other abbreviations include ppb = parts per billion; ppm = parts per million; oz/t = ounce per short ton; Moz = million ounces; Mt = million tonne; t = tonne (1,000 kilograms); SG = specific gravity; lb/t = pound/ton; and, st = short ton (2,000 pounds).

Unless otherwise mentioned, all UTM coordinates in this Report are provided in the datum of Canada, NAD83 Zone 17 T.

All currency in this report in Canadian dollars (C\$) unless otherwise noted. As of the effective date of this report, the exchange rate between the US and Canadian Dollars was approximately 1.00 US\$ = 1.31 C\$.



3 Reliance on Other Experts

CSA Global has relied upon the Ontario Ministry of Northern Development and Mines (MNDM) for online information on mining claim location and status and patented claim location (Section 4). The MNDM disclaims any guarantee or warranty that their information is accurate, complete or reliable. CSA Global has relied upon the Issuer, its management and legal counsel for information related to underlying contracts and agreements pertaining to the acquisition of the mining claims and patented claims and their status (Section 4). CSA Global has not independently verified ownership or mineral title beyond information that is publicly available or been provided by the Issuer. The Property description presented in this report is not intended to represent a legal, or any other opinion as to title.

4 Property Description and Location

4.1 Project Location

The Cobalt Project comprises five property groups of contiguous or near contiguous claims in the Cobalt and Silver Centre mining camps of eastern Ontario ("the Properties"), approximately 400 km north of Toronto. The Properties lie approximately 8 km, 17 km, 25 km, 28 km and 39 km south and southeast of the community of Cobalt on the west of Lake Timiskaming and the Ottawa River which form the Ontario-Quebec provincial border in this area (Figure 1).

The Project area is centred at approximately latitude 47°16'11" north and longitude 79°36'35" west (UTM Zone 17T coordinates 605,000E and 5,235,000N, NAD83 Datum). The individual properties are approximately centred at the coordinates listed in Table 3.

Table 3: Approximate centre points of the Cobalt Project properties (Zone 17T, NAD83)

Property	UTM east	UTM north	Latitude	Longitude
North Gillies Limit	600,900	5,241,600	47°19'14" North	79°39'50" West
Lorrain Valley	607,600	5,234,500	47°15'19" North	79°34'40" West
South Lorrain - N	616,750	5,230,750	47°13'11" North	79°27'28" West
South Lorrain - S	615,800	5,226,550	47°10'56" North	79°28'18" West
Cooper Lake	612,400	5,212,500	47°03'23" North	79°31'17" West

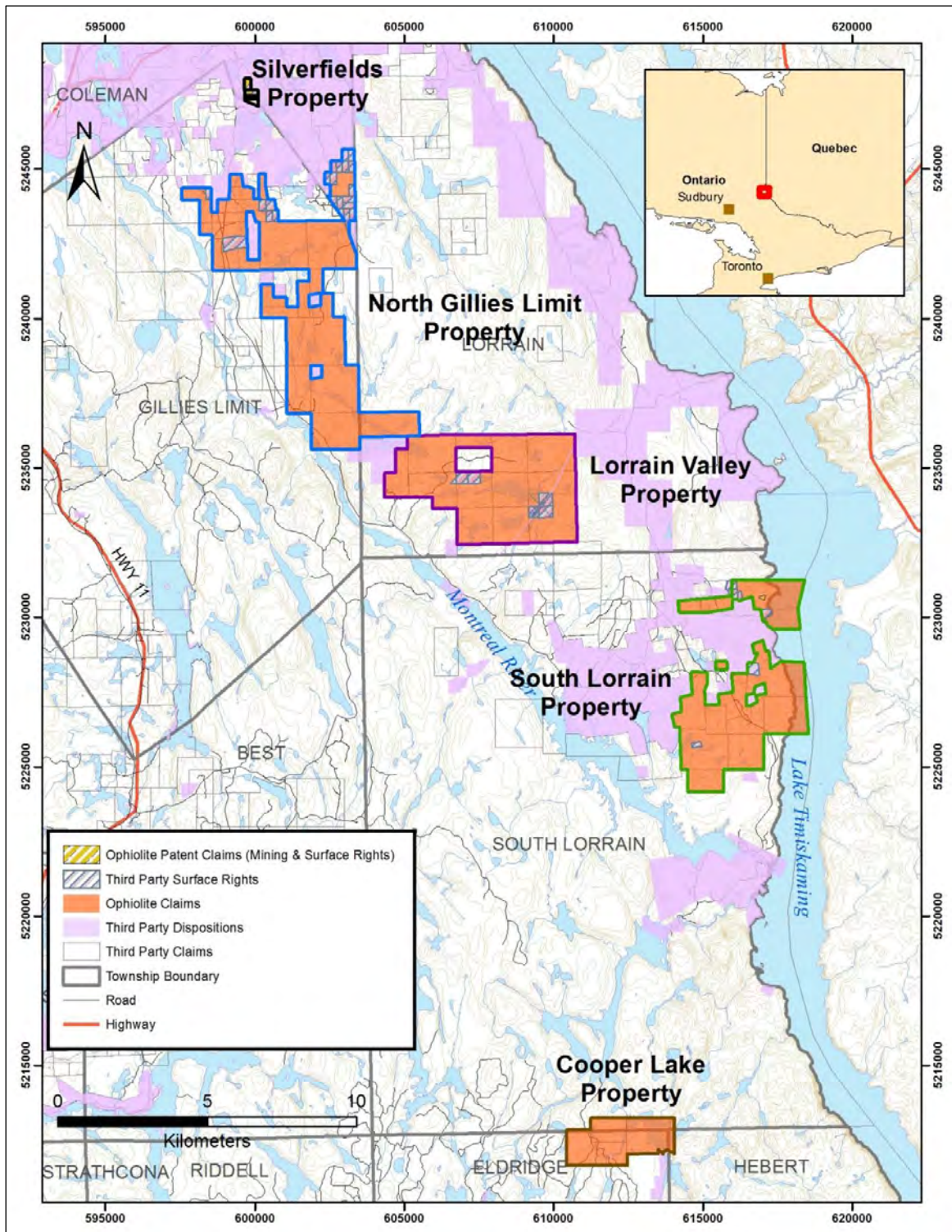


Figure 1: Cobalt Project location

4.2 Project Description

As of the effective date of this Report, the Project comprises 60 unpatented claims (392 units totalling approximately 6,272 ha) and four patent claims (approximately 27.27 ha). Claim descriptions are summarized in Table 4 and Table 5 as per property group and type of claim.

The reader is referred to [Appendix 1](#) for a description Ontario mineral tenure.

Table 4: Description of Crown Grant patented claims of the Cobalt Project

Property	Historic claim	PIN	Township/area	Ha/Acre	Start date	Annual property taxes	Description
Silverfields	McCormack Claim 1490	61389 - 0081 LT	COLEMAN	7.042/ 17.40	1906-12-11	\$256.86	PCL 5323 SEC SST; SE PT LT 5 CON 4 COLEMAN AS IN NP1944; COLEMAN; DISTRICT OF TIMISKAMING Taxes: Final Roll #540100000311700
	Silver Mountain Claim 1385	61389 - 0082 LT	COLEMAN	4.209/ 10.40	1908-11-14	\$251.39	PCL 3728 SEC SST; PT BROKEN LT 5 CON 4 COLEMAN AS IN NP3614; COLEMAN; DISTRICT OF TIMISKAMING Taxes: Final Roll #540100000311800
	Alexandra Claim 395	61389 - 0083 LT	COLEMAN	7.924/ 19.58	1906-12-05	\$262.32	PCL 3727 SEC SST; PT LT 5 CON 4 COLEMAN AS IN NP1946 EXCEPT PT 1 54R3291; COLEMAN; DISTRICT OF TIMISKAMING Taxes: Final Roll #540100000311900
	Meteor Claim 1511	61389 - 0099 LT	COLEMAN	8.094/ 20.00	1907-01-23	\$262.32	PCL 5324 SEC SST; PT BROKEN LT 5 CON 4 COLEMAN AS IN NP2046; COLEMAN; DISTRICT OF TIMISKAMING Taxes: Final Roll #540100000312200
	4			27.269/ 67.38		\$1,032.89	

Table 5: Description of unpatented claims of the Cobalt Project

Property	Claim no.	Township/area	Claim units	Ha	Recording date	Claim due date	Work required	Notes
North Gillies Limit	4280138	Coleman	1	16	2016-Sep-14	2018-Sep-14	\$400	MRO
	4283320	Coleman	8	128	2016-Aug-29	2018-Aug-29	\$3,200	Part MRO
	4280116	Gillies Limit	1	16	2016-Nov-22	2018-Nov-22	\$400	
	4280120	Gillies Limit	3	48	2016-Sep-20	2018-Sep-20	\$1,200	MRO
	4280131	Gillies Limit	8	128	2016-Sep-20	2018-Sep-20	\$3,200	
	4280132	Gillies Limit	8	128	2016-Sep-20	2018-Sep-20	\$3,200	
	4280133	Gillies Limit	15	240	2016-Sep-20	2018-Sep-20	\$6,000	Excludes patent
	4280134	Gillies Limit	12	192	2016-Sep-20	2018-Sep-20	\$4,800	
	4280144	Gillies Limit/ Coleman	15	240	2016-Sep-20	2018-Sep-20	\$6,000	Part MRO (Coleman)
	4280145	Gillies Limit	16	256	2016-Sep-20	2018-Sep-20	\$6,400	
	4280180	Gillies Limit	3	48	2016-Aug-30	2018-Aug-30	\$1,200	
	4280181	Gillies Limit	2	32	2016-Aug-30	2018-Aug-30	\$800	
	4280182	Gillies Limit	3	48	2016-Aug-30	2018-Aug-30	\$1,200	
	4280183	Gillies Limit	3	48	2016-Aug-30	2018-Aug-30	\$1,200	
	4280184	Gillies Limit	3	48	2016-Aug-30	2018-Aug-30	\$1,200	
	4280192	Gillies Limit	1	16	2016-Jul-04	2018-Jul-04	\$400	
	4280193	Gillies Limit	2	32	2016-Jul-04	2018-Jul-04	\$800	
	4280194	Gillies Limit	2	32	2016-Jul-04	2018-Jul-04	\$800	
	4280195	Gillies Limit	13	208	2016-Jul-04	2018-Jul-04	\$5,200	
	4280196	Gillies Limit	1	16	2016-Jul-04	2018-Jul-04	\$400	
	4280197	Gillies Limit	2	32	2016-Jul-15	2018-Jul-15	\$800	
	4280198	Gillies Limit	1	16	2016-Jul-15	2018-Jul-15	\$400	
	4280199	Gillies Limit	4	64	2016-Jul-15	2018-Jul-15	\$1,600	

Property	Claim no.	Township/area	Claim units	Ha	Recording date	Claim due date	Work required	Notes
	4280200	Gillies Limit	2	32	2016-Jul-15	2018-Jul-15	\$800	
	4281662	Gillies Limit	9	144	2016-Nov-16	2018-Nov-16	\$3,600	Part MRO re WP2008-196
	4282378	Gillies Limit	1	16	2016-Jul-15	2018-Jul-15	\$400	
	4282379	Gillies Limit	2	32	2016-Jul-15	2018-Jul-15	\$800	
	4281663	Lorrain	10	160	2016-Nov-16	2018-Nov-16	\$4,000	Connector claim to Lorrain Valley Property
Subtotal	28		151	2,416			\$60,400	
Lorrain Valley	4276645	Lorrain	3	48	2014-Mar-03	2018-Mar-03	\$1,200	Part MRO; and Part MRO re WP2008-327 and 333
	4280159	Lorrain	9	144	2016-Aug-08	2018-Aug-08	\$3,600	Part MRO; and Part MRO re WP2008-333
	4280160	Lorrain	9	144	2016-Aug-08	2018-Aug-08	\$3,600	MRO re WP2008-333
	4280161	Lorrain	12	192	2016-Aug-08	2018-Aug-08	\$4,800	
	4280162	Lorrain	12	192	2016-Aug-15	2018-Aug-15	\$4,800	Part MRO re WP2008-327 and 333
	4280163	Lorrain	8	128	2016-Aug-08	2018-Aug-08	\$3,200	Part MRO?; and Part MRO re WP2008-327 and 333
	4280164	Lorrain	12	192	2016-Aug-08	2018-Aug-08	\$4,800	Part MRO re WP2008-333
	4280165	Lorrain	9	144	2016-Aug-08	2018-Aug-08	\$3,600	
	4280166	Lorrain	9	144	2016-Aug-08	2018-Aug-08	\$3,600	MRO re WP2008-333
	4280167	Lorrain	9	144	2016-Aug-08	2018-Aug-08	\$3,600	MRO re WP2008-327 and 333
	4280168	Lorrain	3	48	2016-Aug-08	2018-Aug-08	\$1,200	
	4280177	Lorrain	10	160	2016-Aug-08	2018-Aug-08	\$4,000	Part MRO; and Part MRO re WP2008-333
	4281661	Lorrain	6	96	2016-Nov-16	2018-Nov-16	\$2,400	Part MRO re WP2008-333
Subtotal	13		111	1,776			\$44,400	
South Lorrain	04275044	South Lorrain	1	16	2016-Jul-05	2018-Jul-05	\$400	
	4280140	South Lorrain	1	16	2016-Sep-14	2018-Sep-14	\$400	
	4280141	South Lorrain	6	96	2016-Sep-14	2018-Sep-14	\$2,400	
	4280142	South Lorrain	1	16	2016-Sep-14	2018-Sep-14	\$400	MRO
	4280143	South Lorrain	13	208	2016-Sep-14	2018-Sep-14	\$5,200	Excludes patent
	4280158	South Lorrain	9	144	2016-Aug-08	2018-Aug-08	\$3,600	
	4280169	South Lorrain	5	80	2016-Jul-05	2018-Jul-05	\$2,000	Part MRO
	4280170	South Lorrain	11	176	2016-Jul-05	2018-Jul-05	\$4,400	Part MRO; Excludes patent
	4280171	South Lorrain	2	32	2016-Jul-05	2018-Jul-05	\$800	
	4280172	South Lorrain	4	64	2016-Jul-15	2018-Jul-15	\$1,600	
	4280173	South Lorrain	6	96	2016-Jul-15	2018-Jul-15	\$2,400	
	4280174	South Lorrain	12	192	2016-Jul-15	2018-Jul-15	\$4,800	
	4280175	South Lorrain	9	144	2016-Jul-15	2018-Jul-15	\$3,600	
	4280176	South Lorrain	1	16	2016-Aug-02	2018-Aug-02	\$400	
	4280178	South Lorrain	13	208	2016-Sep-14	2018-Sep-14	\$5,200	Part MRO
	4281664	South Lorrain	6	96	2016-Nov-22	2018-Nov-22	\$2,400	
Subtotal	16		100	1,600			\$40,000	
Cooper Lake	4280136	South Lorrain	6	96	2016-Nov-22	2018-Nov-22	\$2,400	
	4280137	South Lorrain	12	192	2016-Nov-22	2018-Nov-22	\$4,800	
	4280135	Eldridge, South Lorrain	12	192	2016-Nov-22	2018-Nov-22	\$4,800	Excludes License of Occupation
Subtotal	3		30	480			\$12,000	
TOTAL	60		392	6,272			\$156,800	

Note: MRO = Mining rights only; SRO = Surface rights only

4.2.1 Silverfields Property

The Silverfields Property comprises four contiguous patented (fee simple) mining claims with surface and mining rights totalling approximately 27.27 ha in the township of Coleman (Table 4, Figure 2).

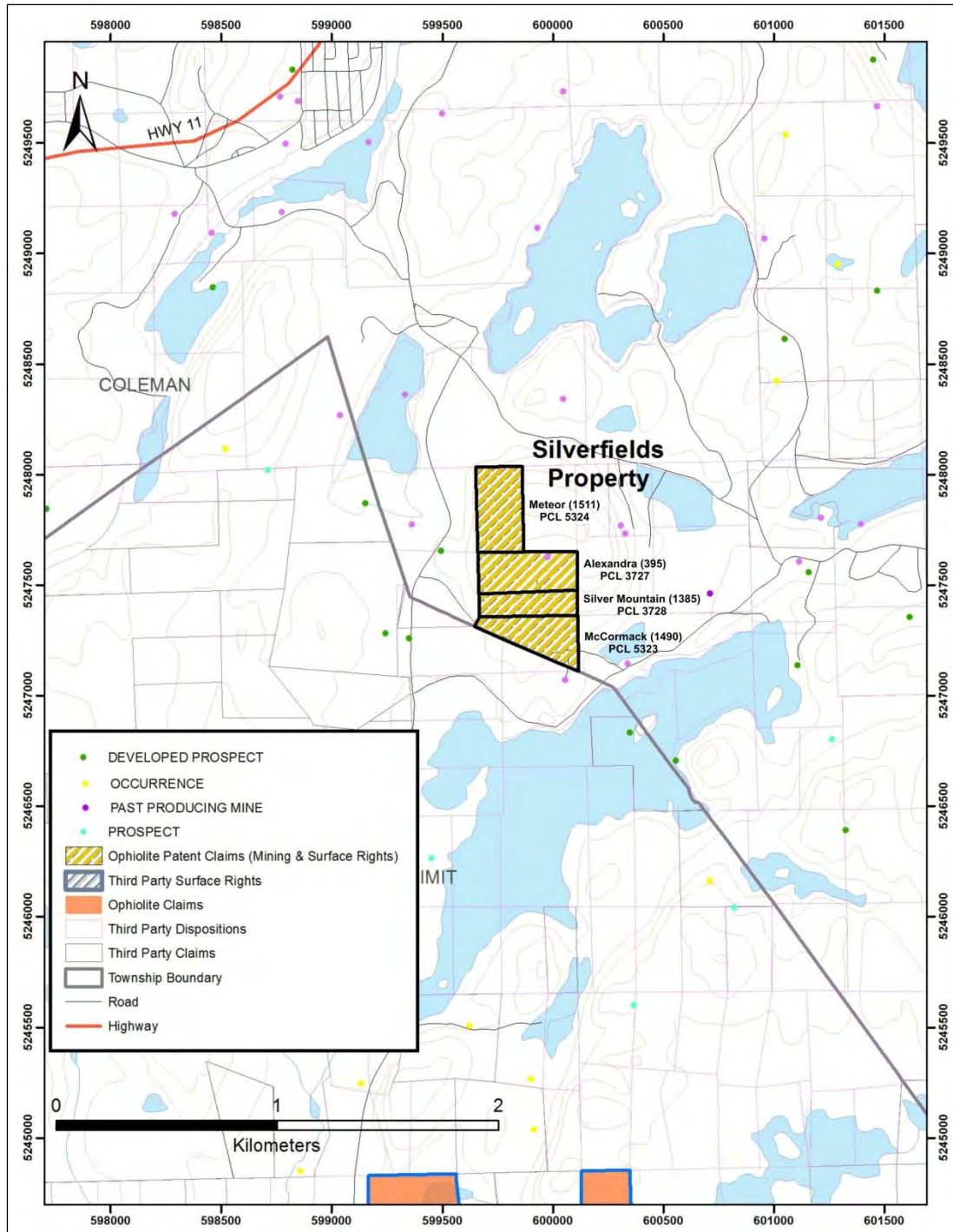


Figure 2: Cobalt Project – Silverfields Property claim location map

4.2.2 North Gillies Limit Property

The North Gillies Limit Property comprises 28 unpatented (staked) mining claims totalling 151 units and 2,416 ha in the townships of Coleman, Gillies Limit and Lorrain (Table 5, Figure 3).

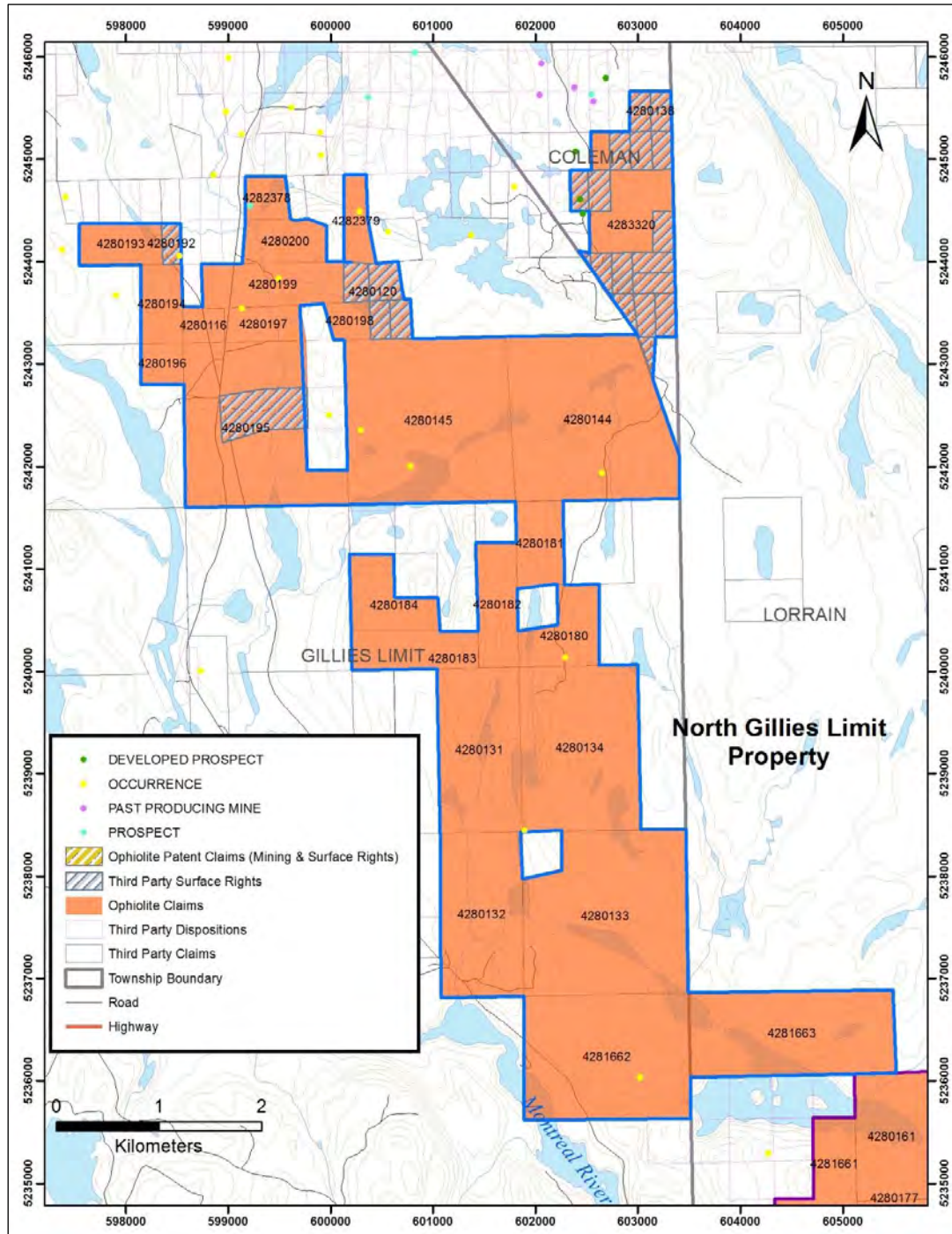


Figure 3: Cobalt Project – North Gillies Limit Property claim location map

4.2.3 Lorrain Valley Property

The Lorrain Valley Property comprises 13 unpatented mining claims totalling 111 units and 1,776 ha in the Lorrain Township (Table 5, Figure 4).

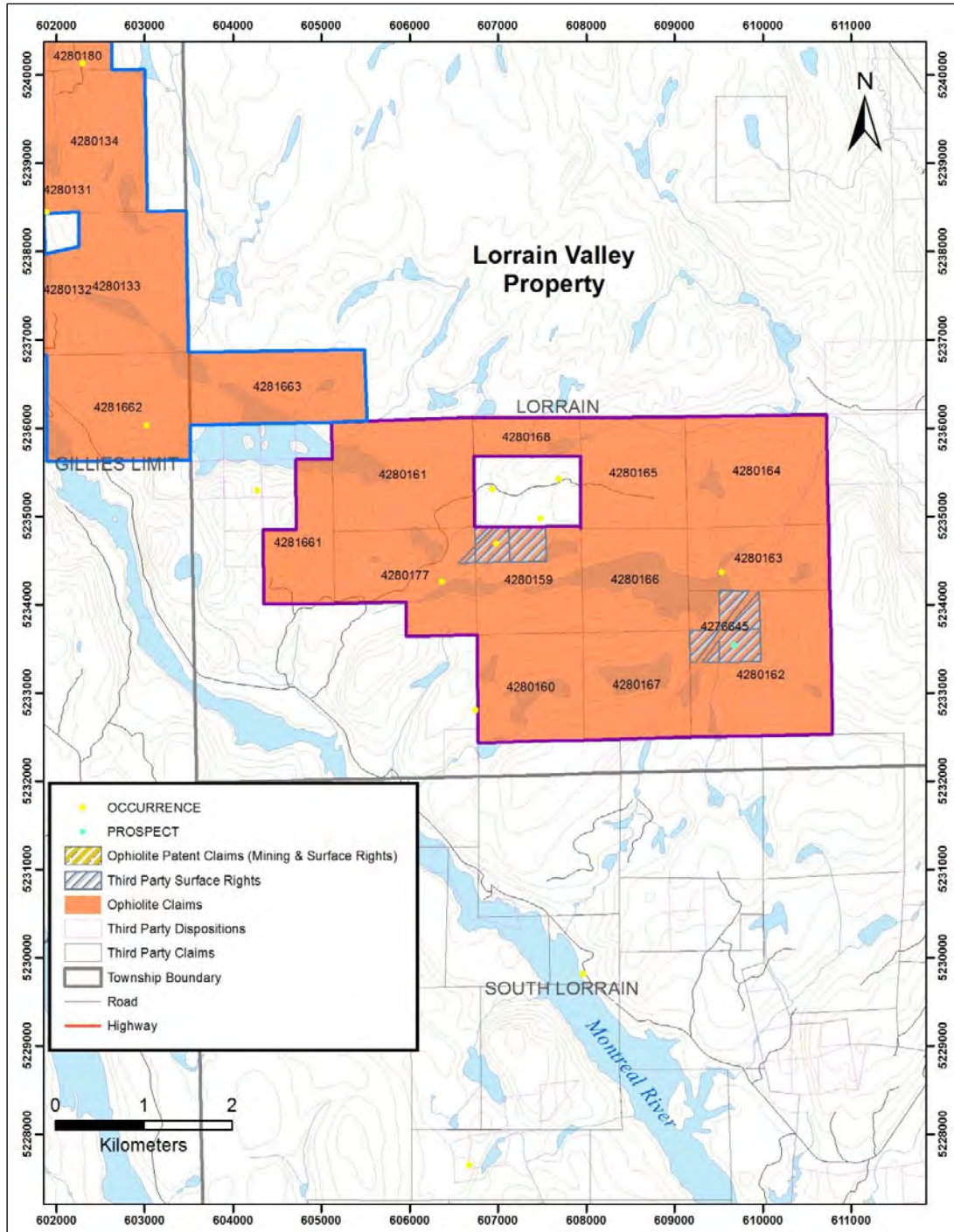


Figure 4: Cobalt Project – Lorrain Valley Property claim location map

4.2.4 South Lorrain Property

The South Lorrain Property comprises 16 unpatented mining claims totalling 100 units and 1,600 ha in the South Lorrain Township (Table 5, Figure 5).

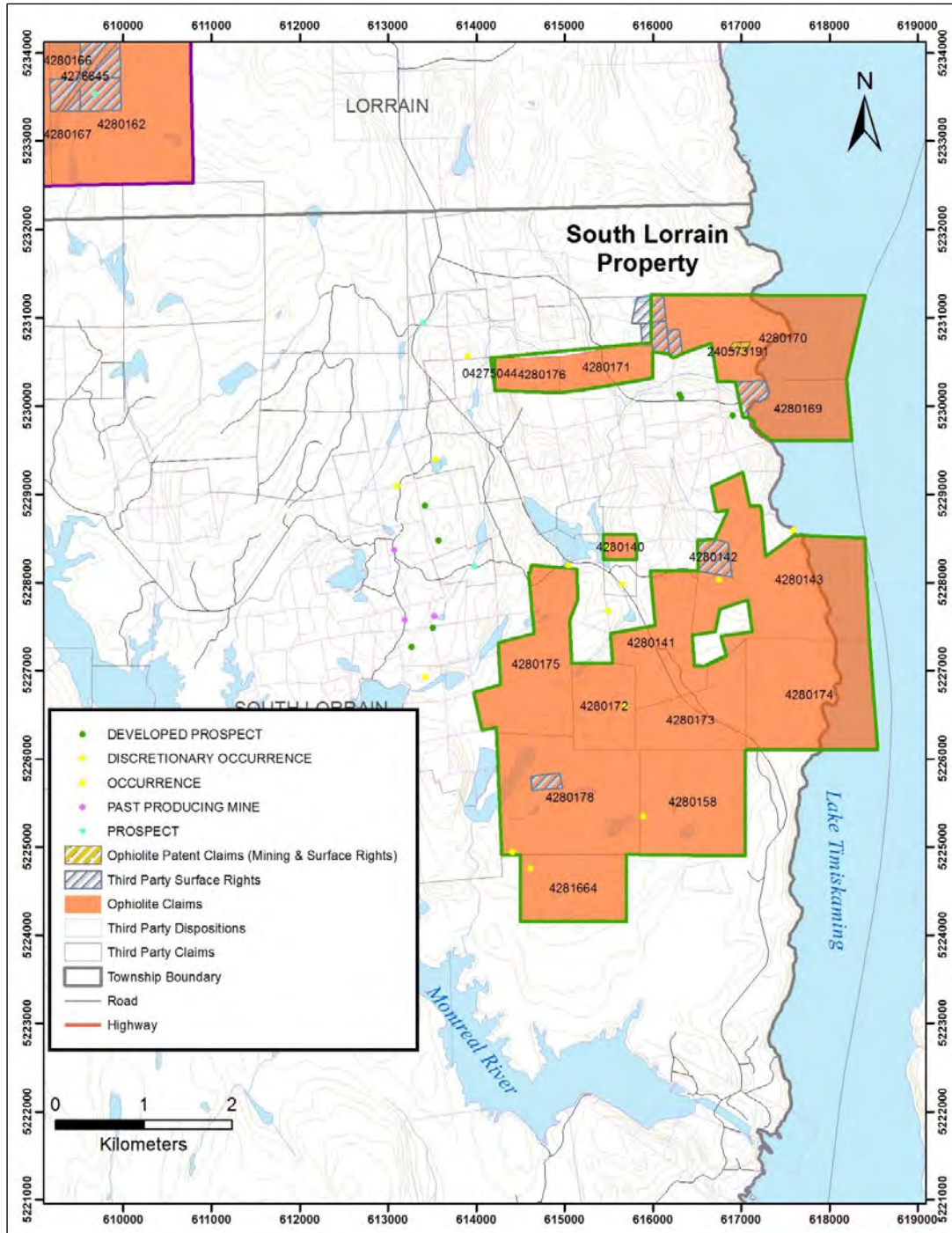


Figure 5: Cobalt Project – South Lorrain Property claim location map

4.2.5 Cooper Lake Property

The Cooper Lake Property comprises three unpatented mining claims totalling 30 units and 480 ha in the South Lorrain and Eldridge townships (Table 5, Figure 6).

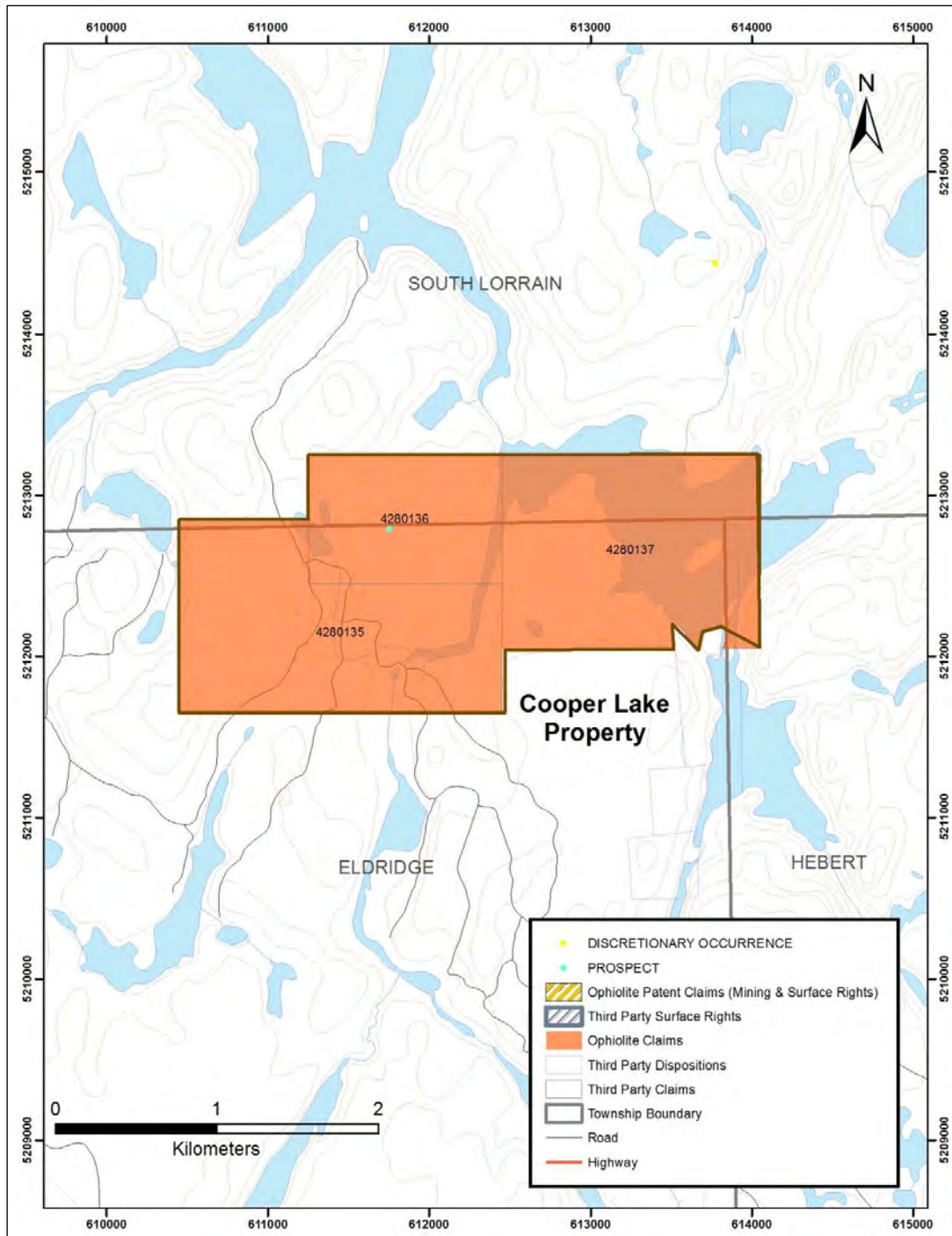


Figure 6: Cobalt Project – Cooper Lake Property claim location map

4.3 Property Claim Status

The Cobalt Project claims are held 100% in the name of Ophiolite and are currently in good standing. To CSA Global's knowledge, there are no current or pending challenges to ownership of the Project claims. The reader is referred to Section 6.1 for a discussion of the ownership history and underlying property acquisition agreements of the Project.

4.3.1 Patented Mining Claims

The patented claims include both surface and mining rights and would have been legally surveyed at the time of patent application.

The patented lands transferred under the Crown Grant to the patentee are subject to the following exclusions/qualifications:

- Five percent (5%) of the lands are reserved for the Crown for the purpose of constructing roads;
- All pine trees on the lands are reserved for the Crown and may be cut and removed by any person to whom the Crown grants a timber licence; however, the patentee of the lands may, without a licence, cut and use pine trees for building, fencing and fuel on the land or any other purpose essential to the working of the mines thereon as long as it compensates the Crown or the licence-holder, as applicable, for the value of such trees;
- Free use, passage and enjoyment of navigable waters flowing through any part of the lands are reserved for the Crown; and
- Access and use of shorelines of all rivers, streams and lakes on the lands are reserved for vessels, boats and persons which use such waters for fishery purposes.

In addition, deemed exclusions/qualifications set out in the Ontario Public Lands Act (PLA) include:

- Wood, gravel and other materials required for the construction or improvement of roads may be taken by the Ministry of Natural Resources and Forestry, or a person authorized by it, from the land without compensation to the patentee (Public Lands Act, s. 65(2)); and
- Any portage which exists, or has existed, over the lands may be used by any person travelling on waters connected by said portage without the permission of, or payment to, the owner of the lands (Public Lands Act, s. 65(4)).

The patented claims are subject annual property taxes which totalled \$1,032.89 in 2016 (Table 4). In a summary review of the terms of the Crown patents on behalf of Ophiolite, Stikeman Elliott LLP, Barristers & Solicitors of Vancouver, BC, noted there is a notice of agreement recorded against the title to each of the parcels as No. 205331 to which is attached an agreement dated December 27, 1978 among Bursary Silver Mines Limited, Teck Corporation, Consolidated Summit Mines Limited and Radicon (1963) Limited (Markin, Q., 2016). There is also an old notice of lease (registered in 1911) to British Canadian Power Company that is registered against PIN 61389-0081 as No. NLT17961 (Markin, Q., 2016). The current legal validity of these encumbrances is unknown; however, Ophiolite is of the opinion that given their age and the fact that some of the companies no longer exist, these historic registrations are simply orphans that have not been cleaned from the titles (Gino Chitaroni, pers. comm., 2017).

4.3.2 *Unpatented Mining Claims*

The staked mining claims have not been legally surveyed. The staked claims include no surface rights; however, a right to acquire the surface rights for development purposes exists through the Ontario Mining Act. The Mining Act also provides legal access to the land for the purpose of exploration.

The staked claims are subject to the following reservations:

- 400 feet surface rights reservation around all lakes and rivers;
- Sand and gravel reserved; and
- Peat reserved.

Certain staked claims also:

- Include land under water;
- Are MRO or part MRO where all or part of the surface rights within the claim are held by a third party;
- Exclude roads; and
- Exclude Hydro right of ways.

In addition, Lorrain Property claims 4276645, 4280159, 4280160, 4280162, 4280163, 4280166, 4280167, 4280177, parts of 4280164 and 4281661 and parts of North Gillies Limit Property claim 4281662 are subject to wind power area applications for surface rights only (SRO) under the PLA (WP2008-196, -327 and -333; Table 5). Under the Mining Act s. 28(2) (3), the wind power PLA SRO applications have priority over the mining claims. Any surface mineral exploration activities conducted on claims will therefore require notification and approval of the company holding the applications; this would be completed as part of the exploration permit/plan application process (see Section 4.6). If the PLA SRO applications lapse, are withdrawn or are not accepted or approved, a mining claim staked during the time that the overlapping application was pending shall be deemed to be amended to include the minerals and rights that were the subject of the application (in this case, SRO) as if the application had never existed.

With exception to claim 4276645 which is subject to a 1% net smelter return (NSR) payable to the vendor of the claim, CSA Global is unaware of any other encumbrances on the staked claims other than annual mining claim assessment work requirements. The NSR on claim 4276645 may be bought back in increments of 0.5% for \$100,000 per increment (\$200,000 total). Ophiolite must perform \$400 worth of approved assessment work per mining claim unit, per year filed on or before the claim due date (anniversary date). Table 5 details the assessment costs and current due dates for the staked mining claims of the Cobalt Project. Total annual assessment requirement for the Project is \$156,800. The earliest staked claim due date is 2 March 2018.

4.4 **Environmental Liabilities**

4.4.1 *Patented Mining Claims*

As owner of the Silverfields Property patented claims Ophiolite is responsible for all historic environmental liabilities on the property and any necessary rehabilitation. This work would be covered in a mine closure plan for any new proposed mine.

Ophiolite warrants that it has not received from any government authority any notice of, or communication relating to, any actual or alleged breach of any environmental laws, regulations, policies or permits with respect to the Project's patented claims.



CSA Global notes that Ontario's Abandoned Mines Information System (AMIS) documents 12 features on the Silverfields Property under AMIS ID number 03840 including underground lateral workings on six levels, three shafts, one raise to surface and one adit. One of the shafts (Alexandra shaft) and the raise to surface have concrete caps. The second shaft (Claim 1385 Shaft) has been filled and is considered rehabilitated. The third shaft (Claim 1490 Shaft) remains open and reportedly unprotected. The adit (Meteor) is protected by a wooden barricade door. Since Ophiolite is responsible for the ongoing maintenance of any remediation efforts on the Silverfields Property (fencing, signage, etc.), CSA Global recommends that Ophiolite locate and document the hazards and environmental liabilities and inspect them on a semi-annual basis.

4.4.2 *Unpatented Mining Claims*

The majority of the Cobalt Project consists of unpatented mining claims, and as such Ophiolite as holder of the claims is not liable for pre-existing environmental issues on these claims. A claim holder would however become liable for a pre-existing hazard if it were to disturb it, for example excavating a stockpile. If in the future, a party obtains mining rights by taking a mining claim to lease or patent, they will then be responsible for the pre-existing liabilities on the claim (stockpiles, tailings etc.) and any necessary rehabilitation. This work would be covered in a mine closure plan for any new proposed mine.

Of note, under the Mining Act an individual or company not responsible for creating a pre-existing mine hazard may apply to voluntarily undertake mine hazard rehabilitation work without becoming liable for the pre-existing environmental issues on the site. Applications are to be sent to the Director of Mine Rehabilitation for review and if approved, the Director may set conditions that must be met by the applicant. Once approved, applicants shall carry out voluntary rehabilitation according to their approved rehabilitation plan, in accordance with the standards in the Mine Rehabilitation Code of Ontario as specified by the Director.

AMIS documents known abandoned mine features within the Cobalt Project unpatented mining claims (Figure 7). The majority of these hazards are historic surface trenches and pits and exploration shafts. As noted above, Ophiolite is not liable for these pre-existing hazards. Ophiolite warrants that it has not received from any government authority any notice of, or communication relating to, any actual or alleged breach of any environmental laws, regulations, policies or permits with respect to the Project's staked claims.

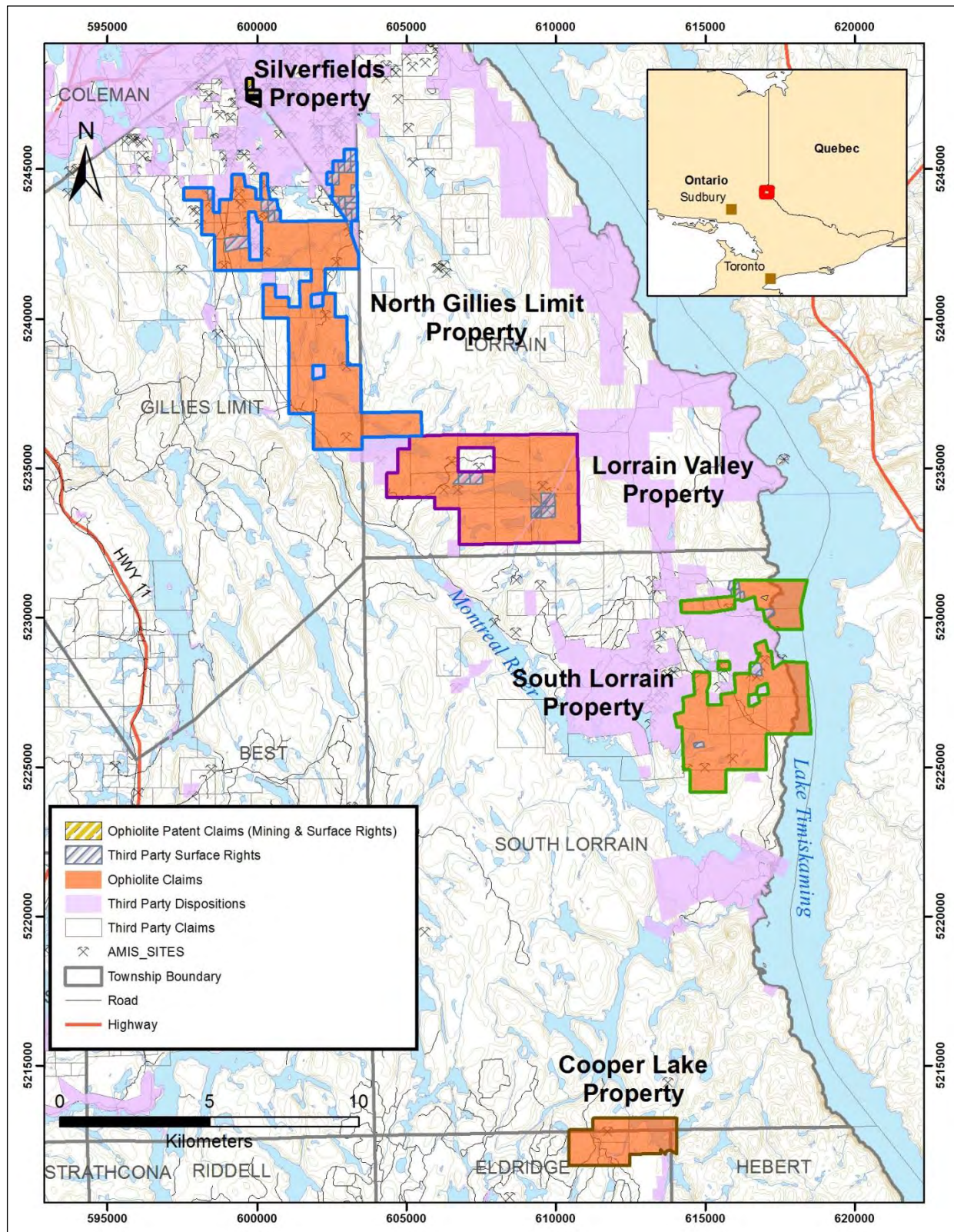


Figure 7: AMIS documented abandoned mine feature locations within the Cobalt Project area

4.5 Required Exploration Permits

Equator and Ophiolite do not currently hold any Exploration Plans or Permits for exploration work proposed in this Report (Section 18). Equator and Ophiolite warrant that they will acquire any and all government permits required to execute the proposed early exploration activities on the Project properties.

Ontario Mining Act regulations require exploration plans and permits, with graduated requirements for early exploration activities of low to moderate impact undertaken on mining claims, mining leases and licenses of occupation. Exploration plans and permits are not required on patented mining claims.

There are a number of exploration activities that do not require a plan or permit and may be conducted while waiting for a plan or permit is effective. These may include the following:

- Prospecting activities such as grab/hand sampling, geochemical/soil sampling, geological mapping
- Stripping/pitting/trenching below thresholds for permits
- Transient geophysical surveys such as radiometric, magnetic
- Other baseline data acquisition such as taking photos, measuring water quality, etc.

4.5.1 Exploration Plan

Those proposing to undertake minimal to low impact exploration plan activities (early exploration proponents) must submit an exploration plan. Early exploration activities requiring an exploration plan include:

- Geophysical activity requiring a power generator
- Line cutting, where the width of the line is 1.5 m or less
- Mechanized drilling for the purposes of obtaining rock or mineral samples, where the weight of the drill is 150 kg or less
- Mechanized surface stripping (overburden removal), where the total combined surface area stripped is less than 100 m² within a 200-m radius
- Pitting and trenching (of rock), where the total volume of rock is between 1 m³ and 3 m³ within a 200-m radius.

In order to undertake the above early exploration activities, an exploration plan must be submitted and any surface rights owners must be notified. Aboriginal communities potentially affected by the exploration plan activities will be notified by the MNM and have an opportunity to provide feedback before the proposed activities can be carried out.

4.5.2 Exploration Permit

Those proposing to undertake moderate impact exploration permit activities (early exploration proponents) must apply for an exploration permit. Early exploration activities that require an exploration permit include:

- Line cutting, where the width of the line is more than 1.5 m
- Mechanized drilling, for the purpose of obtaining rock or mineral samples, where the weight of the drill is greater than 150 kg
- Mechanized surface stripping (overburden removal), where the total combined surface area stripped is greater than 100 m² and up to advanced exploration thresholds, within a 200-m radius



- Pitting and trenching (rock), where the total volume of rock is greater than 3 m³ and up to advanced exploration thresholds, within a 200-m radius.

The above activities will only be allowed to take place once the permit has been approved by the MNM. Surface rights owners must be notified when applying for a permit. Aboriginal communities potentially affected by the exploration permit activities will be consulted and have an opportunity to provide comments and feedback before a decision is made on the permit.

4.5.3 *First Nation Consultations*

Equator and Ophiolite warrant that they will consult with the appropriate First Nation and Metis communities as required per the Ontario Mining Act.

4.5.4 *Exploration on Mining Rights Only Mining Claims*

Under Ontario's Mining Act, surface rights owners must be notified prior to conducting exploration activities. Where there is a surface rights holder of land, a person who:

- Prospects, stakes or causes to be staked a mining claim;
- Formerly held a mining claim that has been cancelled, abandoned or forfeited;
- Is the holder of a mining claim and who performs assessment work; or
- Is the lessee or owner of mining lands and who carries on mining operations,

on such land, shall compensate the surface rights holder for damages sustained to the surface rights by such prospecting, staking, assessment work or operations.

4.6 **Other Significant Factors and Risks**

Environmental, permitting, legal, title, taxation, socio-economic, marketing, and political or other relevant issues could potentially materially affect access, title or the right or ability to perform the work recommended in this report on the Properties. However, at the time of this report, CSA Global is unaware of any such potential issues affecting the Properties.

5 Accessibility, Climate, Local Resources, Infrastructure and Physiography

5.1 Accessibility

The Cobalt Project is located south of the Town of Cobalt, situated between and part of the historic Cobalt and Silver Centre mining camps. The Project's Cooper Lake Property is a satellite property located on the South Lorrain-Eldridge Township boundary approximately 16 km south of Silver Centre. The various properties of the Project area are accessible as follows:

5.1.1 *Silverfields Property*

The Silverfields Property is accessible via all-weather gravel roads as follows:

1. From Highway 11B in the town of Cobalt take Coleman Rd east 1.7 km;
2. Turn right onto Silverfields Road and travel south 1.1 km; and
3. Turn left onto a gravel road and travel east 1.0 km to the Alexandra shaft on the Property.

5.1.2 *North Gillies Limit Property*

The North Gillies Limit Property is accessible via all-weather gravel roads as follows:

1. From Highway 11B in the town of Cobalt take Coleman Rd east 1.7 km;
2. Turn right onto Silverfields Road and travel south 4.7 km to the northwest end of the North Gillies Limit Property; and
3. Continue another 8.8 km south along the west side of the North Gillies Limit Property to the end of Silverfields Road. At this point forestry access roads and ATV accessible trails provide access to the south part of the North Gillies Limit Property and the west part of the Lorrain Valley Property.

Alternatively:

1. From Highway 11B in the town of Cobalt take Coleman Rd/Glen Lake Rd east 3.3 km;
2. Merge right onto Kerr Lake Road and travel 0.2 km;
3. Turn left onto Beaver-Timisk Road and travel 2.3 km; and
4. Turn right onto Silver Lake Road and travel south 2.2 km to the Mayfair Mine area. At this point, Forestry access roads and ATV accessible trails provide access to the northeast part of the North Gillies Limit Property.

5.1.3 *Lorrain Valley Property*

The western part of the Lorrain Valley Property is accessible via all-weather gravel roads as follows:

1. From Highway 11B in the town of Cobalt take Coleman Rd east 1.7 km; and
2. Turn right onto Silverfields Road and travel south 13.5 km to the end of Silverfields Road. At this point forestry access roads and ATV accessible trails provide access to the south part of the North Gillies Limit Property and the west part of the Lorrain Valley Property.

The eastern part of the Lorrain Valley Property is accessible via all-weather paved highway as follows:

1. From Highway 11B in the town of North Cobalt take Lakeview Avenue 1.2 km east;
2. Lakeview avenue changes to Silver Centre Road, continue 2.8 km south;
3. Silver Centre Road changes to Provincial Highway 567, continue south approximately 18 km; and
4. Turn right (west) onto a forestry access road and travel west 5.6 km (veering left at road junctions. The access road ends in the northeastern corner claim of the Lorrain Property (4280164). From this point, a hydro transmission line right-of-way can be accessed and followed southwest into the Lorrain property.

5.1.4 South Lorrain Property

The South Lorrain Property is accessible via all-weather paved highway as follows:

1. From Highway 11B in the town of North Cobalt take Lakeview Avenue 1.2 km east;
2. Lakeview avenue changes to Silver Centre Road, continue 2.8 km south;
3. Silver Centre Road changes to Provincial Highway 567, continue south 22.8 km to Maidens Head Camp Road; and
4. Turn left on Maiden Heads Camp Road (gravel all-weather) and travel east 4.4 km to Maidens Head Camp on Lake Timiskaming. The road travels through the northern claim block of the South Lorrain Property.

Continuing to the southern claim block of the South Lorrain Property:

1. From the Maidens Head Camp turnoff continue south on Highway 567 6.8 km through the eastern part of the southern claim block of the South Lorrain Property; and
2. Turn left onto a recent forestry access road and travel west 3.8 km across the southern claims of the South Lorrain Property.

5.1.5 Cooper Lake Property

The Cooper Lake Property is accessed during summer by four-wheel drive vehicle as follows:

1. From Highway 11 at a point 18 km south of Temagami and 150 m north of Gramps Place General store take the Rabbit Lake forestry access road northeast 30 km;
2. Turn left (north) on to a logging trail that leads to Cooper Lake. The trail is accessible via four-wheel drive vehicle or ATV a distance of approximately 5.5 km to a point 450 m south of the southern boundary of the Property's claim 4280135; and
3. From this point an overgrown trail continues approximately 900 m to the creek in the southeast part of claim 4280135 southwest of Cooper Lake.

Alternatively:

1. Winter access is also via established snowmobile trails which run from Cassels Lake to Rabbit Lake: and then to Cooper Lake a distance of 25 km; and
2. A secondary winter ice access route is available from the power generating station on the Matabitchuan River, southerly along Fourbass Lake to Cooper Lake, a distance of 8 km.

5.2 Climate

The climate in the Project area is warm summer humid continental (Koppen climate classification Dfb). This region has warm and often hot summers with long, cold winters. It is situated northeast of the Great Lakes, making it prone to arctic air masses.

Ville Marie, Québec, on the east side of Lake Timiskaming, is the closest centre representative of the Properties for which Environment Canada (2017) climatic records are available (1981 to 2010). Mean summer temperature is approximately 17 degrees Celsius (°C); however, extreme daily summer maximum temperatures can reach 40°C. Mean winter temperature is -12.5°C; however, extreme daily winter minimum temperatures can reach -50°C. Average annual precipitation (combined rain and snow) is approximately 836.5 mm per year. Monthly precipitation is relatively equal year-round but typically the greatest amount of precipitation falls from late spring to early fall and the least precipitation occurs in the winter months. Some snow cover is expected six months of the year. Mean total rainfall is 655.9 mm. Mean total annual snowfall is 180.6 cm. Smaller lakes in the immediate area are typically frozen between December and March.

Season-specific mineral exploration may be conducted year-round. Swampy areas and lakes/ponds may be best accessed for drilling and ground geophysical surveys during the winter months when the ground and water surfaces are frozen. Mine operations in the region can operate year-round with supporting infrastructure.

5.3 Local Resources and Infrastructure

Most services and supplies required for a mineral exploration program are available in the City of Temiskaming Shores, an amalgamated municipality (formerly the Town of Haileybury, New Liskeard and the Township of Dymond) with a population of approximately 11,000 at the head of Lake Timiskaming approximately 25 km north of the centre of the Project area. The Town of Cobalt (2011 Census population of 1,133), at the north end of the Project area offers some basic services. Given the mining history of the Cobalt Camp and the proximity of mining communities such as Kirkland Lake and Sudbury, as well as service centres such as North Bay, exploration and mining personnel are readily available in the region.

The city of Greater Sudbury (2011 Census population of 160,274) is located approximately 200 km by road southwest of the Property at the intersection of the Trans-Canada Highway, Highway 69S and Highway 144N. Sudbury is located 390 km north of Toronto. A world leader in nickel mining, milling, smelting and refining, Greater Sudbury has diversified and is now a regional service centre for northeastern Ontario, having established itself as a major centre of finance, business, tourism, health care, education, government, and science and technology research. Over 345 mining supply and service companies are located in Greater Sudbury. A full range of equipment, supplies and services required for any mining development is available in Greater Sudbury.

Other than several powerlines, all-weather roads and ATV trails, no infrastructure is present within the Properties. The centre of the Project area lies approximately 15 km east of Provincial Highway 11 and the Ontario Northland rail line which provides freight services for the transportation of mineral and forest products, chemicals, petroleum and other products to and from northeastern Ontario and northwestern Quebec. Hydro One 115 kV and 230 kV transmission lines cross or are in close proximity to the Project property areas.

Abundant water resources are present in the lakes, rivers, creeks, and beaver ponds on the Properties.

At this time, it appears that Ophiolite and through it, Equator, hold sufficient mining claims necessary for proposed exploration activities and potential future mining operations (including potential tailings storage areas, potential waste disposal areas, and potential processing plant sites) should a mineable mineral deposit be discovered.

5.4 Physiography

The major topographic feature of the area is Lake Timiskaming located immediately east of the Project (Figure 1). The Montreal River immediately to the west of the Project and Lake Timiskaming itself (part of the Ottawa River system) are the major drainage channels in the area.

The Project lies adjacent to one of the Canadian Shield's rare "clay belts". These late/post-glacial lacustrine deposits preserve well developed accumulations of sediment that are well suited to agriculture. As a result, the area to the north of the Project area retains a robust agricultural community, particularly north of Lake Timiskaming.

The Project area is characterized by rocky, rolling bedrock hills with locally steep ledges and cliffs, separated by valleys filled with clay, glacial material, swamps and streams. Total relief within the Project area is approximately 200 m with topography varying from 290 m to 355 m ASL in the Cooper Lake Property, 180 m to 360 m ASL in the South Lorrain Property, 280 m to 390 m ASL in the Lorrain Property, 250 m to 390 m ASL in the North Gillies Limit Property and 340 m to 390 m ASL in the Silverfields Property. Local relief is commonly up to 30 m, although some ridges are up to 60 m or more above surrounding lowlands (Photo 1).

Vegetation is typical boreal forest with mixed second growth forest of mixed coniferous and deciduous trees, including poplars, birch, maple, pine, spruce, alders, and willows. Swampy low lying areas contain abundant tag alders. Locally, the clay-belt extends intermittently south into Project area supporting limited farmland but outside of the Project properties.



Photo 1: Looking southeast at a small hill of Nipissing diabase in a deforested area south of Oxbow Lake in the South Lorrain Property (UTM 614,250E 5,225,200N)

6 History

6.1 Ownership History

6.1.1 *Equator-Ophiolite Agreement*

Pursuant to a purchase agreement dated 25 November 2016 and Shareholder approval dated 6 February 2017, Equator (the “Issuer”) acquired 80% and the option to the remaining 20% of Ophiolite (the “Vendor”) and its assets, namely the Cobalt Project, as set out below:

- Provide up to A\$500,000 as a loan facility to Ophiolite for the funding of agreed exploration activities on the Assets until settlement, on standard commercial terms for a term of up to six months; and
- Issue 100,000,000 Ordinary Shares in Equator to the owner (or their nominee) of Ophiolite; and
- Issue 25,000,000 Performance Shares as a facilitation fee (Facilitation Performance Shares) to parties that assisted in the project acquisition. The Performance Shares will vest on satisfaction of a performance milestone for the provision of ongoing services to the Company up to 31 December 2017.

Ophiolite has also granted Equator a call option to acquire the remaining 20% of Ophiolite as follows:

- 25,000,000 options exercisable at A\$0.03 exercisable within three years after grant. It is a condition of exercise that Equator has been provided by the vendor with a report on the Assets that is equivalent to and compliant as a NI 43-101 report on the Assets; and
- 25,000,000 options exercisable at A\$0.06 cents within three years after grant. It is a condition of exercise that Equator has released a report in respect of the Project confirming a JORC and/or NI 43-101 compliant resource or on any subsequent complementary mining asset acquired by Equator if it was introduced by the Vendor.

If both tranches of the call options vest then Equator has the option (but not obligation) to require the transfer of the remaining 20% in Ophiolite (resulting in Equator becoming a 100% shareholder). If only one tranche of the options has vested then Equator has the option (but not obligation) to require the transfer of a 10% shareholding interest in Ophiolite to Equator and the parties agree to enter into good faith discussions regarding the remaining 10% shareholding interest in Ophiolite by Equator at a price to be agreed between the parties.

6.1.2 *Patented Mining Claims*

Ophiolite acquired a 100% interest in four contiguous patented (fee simple) mining claims referred to as the Silverfields Property covering approximately 27.27 ha (Table 4). The claims were purchased from Andre Dugas of Belle Vallee, Ontario for a cash sum pursuant to an Agreement of Purchase and Sale accepted on 29 October 2016. The land transfer was registered with the Land Registrar in Haileybury, Ontario on 14 December 2016 as Registration No. DT57440.

6.1.3 *Unpatented Mining Claims*

Ophiolite Consultants Pty staked and recorded a 100% interest in three claim groups totalling 59 unpatented mining claims (389 units) covering approximately 6,224 ha, all in the Larder Lake Mining Division except for claim 4280135 which is in the Sudbury Mining Division. The claims were staked in the months of July, August, September and November 2016 (Table 5).

Ophiolite also acquired a 100% interest in one unpatented mining claim -#4276645- (three units) covering approximately 48 ha in the Larder Lake Mining Division (Table 5). The claim was purchased from a third party for a cash sum. The ownership transfer was registered with the MNDM on 19 August 2016.

6.2 Regional Exploration and Development History

A vein bearing cobalt was discovered in 1884 by Sir William Logan at a site that would become the Agaunico Mine 1 km south of today's town of Haileybury (Hall, 2016). The initial discovery of silver in the region was made west of Lake Temiskaming in 1903 during the construction of the Temiskaming and Northern Ontario Railway. This began a rich mining history in the area. The location along the railway was named Cobalt after one of the elements found in the arsenide minerals within the veins. The first mines commenced production as early as 1904 and mining was more or less, continuous until 1989 with production peaking in 1911 (Jambor, 1975). In addition to silver, cobalt, nickel and copper were recovered from the ore. Mineralization was not just limited to the area immediately around Cobalt, but was recovered from areas with similar geology within the Cobalt embayment of the Southern Province, from Gowganda in the west to Silver Center in the southeast.

Guindon *et al.* (2016) tabulated the historic production (1904 to 1989) from approximately 140 silver-cobalt properties in the Cobalt embayment. The Cobalt Project lies within and in the immediate vicinity of the Cobalt and Silver Center mining camps. Table 6 presents the historic production from approximately 107 mines in the Cobalt and Silver Center camps. The information is suspected to be under-reported, in part, due to lease mining during the 1930s (Guindon *et al.*, 2016). Only four of the historic mines are located within the Properties. The Author has been unable to verify the information in Table 6 and the information is not necessarily indicative of the mineralization on the Properties.

Table 6: Silver, cobalt, nickel and copper production at Cobalt and Silver Center mining camps 1904 to 1989

Mine	Township	Tons milled	Ag oz	Co lb	Ni lb	Cu lb	Years of production
Agaunico and Reuthel Mine	Bucke	NA	980,000	4,350,000	418,717	216,767	1905-1960
Cobalt Contact Mine	Bucke	11,074	26,000	31,000			1912-1944
Dotsee Mine	Bucke	NA	125	8,000			1906-1939
Genesee Mining	Bucke	NA	66,236	12,063			1915-1965
Green-Meehan & Red Rock Mine	Bucke	NA	498,000	27,000		6,000	1905-1939
Harrison-Hibbert & Ruby Mine	Bucke	NA	876,500	214,600	69,458		1920-1963
North Cobalt and Hunter Mine	Bucke	NA	1,453				1909
Casey Cobalt-Silver Mines	Casey	NA	9,373,085	356,418	141,733	88,437	1908-1966
Langis	Casey & Harris	49,542	653,882	25,474	8,013	8,550	1983-1989
Agnico Surface Dumps	Coleman	28,907	51,051	7,455	2,606	15,204	1974-1975
Agnico Tailings Mill	Coleman	312,248	607,097	78,827	1,151,744	124,576	1967-1970
Alexandra Silver (Silverfields) (1)(2)	Coleman	1,322,813	17,793,862	357,501	493,255	238,893	1964-1983
Beaver Consolidated Mines Ltd.	Coleman	65,191	7,127,858	139,472	1,397		1907-1940
Beaver-Temiskaming Mine	Coleman	218,816	3,986,761	240,735	76,395	130,614	1977-1988
Ben Tailings	Coleman	1,676	3,715	564	196	511	1969-1970
Brady Lake Property	Coleman	55,485	7,000,000	190,641	8,620	11,320	1910-1960
Buffalo Mines Ltd	Coleman	332,449	14,155,558	152,269			1905-1959
Cart Lake	Coleman	NA	84,193	7,779	2,378	3,070	1966
Chambers Ferland Mining	Coleman	NA	2,030,000				1908-1958
Chambers Ferland Mining	Coleman	NA	2,175,469	13,000	2,400		1904-1932
Christopher and Cobalt Lode	Coleman	NA	35,378	2,140	511	895	1966
Christopher Silver Mines Ltd	Coleman	NA	4,100,000				1906-1964
City of Cobalt	Coleman	NA	14,000,000	25,000			1907-1930
Cobalt Badger Silver	Coleman	NA	3,475	112	89		1929-1940
Cobalt Lake	Coleman	175,129	6,900,708	146,073	7,920		1908-1943
Cobalt Lode Silver	Coleman	263,140	4,493,542	2,545,117	610,716	459,078	1917-1956
Cobalt Silver Queen	Coleman	6,969	1,406,000	168,311	102		1905-1939

Mine	Township	Tons milled	Ag oz	Co lb	Ni lb	Cu lb	Years of production
Cobalt Townsite	Coleman	913,268	37,362,032	1,852,765	163,687	90,288	1907-1939
Cochrane Cobalt Mining	Coleman	2,671	33,280	2,702			1913-1939
Colonial Mining	Coleman	63,687	1,211,956	3,671			1907-1954
Coniagas 73 Shaft	Coleman	207,875	889,617	57,576	19,197	143,823	1975-1985
Coniagas Mines	Coleman	750,164	33,963,067	310,557	3,543	47,470	1905-1943
Conisil Mines	Coleman	NA	100,000				1961-1965
Consolidated Silver Banner	Coleman	NA	41,700			412	1927-1964
Cross Lake O'Brien	Coleman	129,670	11,600,000	98,248	38,843	172,611	1928-1966
Crown Reserve mining	Coleman	58,596	20,325,302	33,682			1908-1948
Drummond Mines	Coleman	60,808	3,887,585	245,807			1905-1936
Farah Mining	Coleman	557	8,952				1923-1926
Foster Cobalt Mining	Coleman	2,818	1,159,390	457,164	21,766	24,121	1951-1956
Frontier	Coleman	2,870	39,433	5,538	1,841	2,522	1973
Hargrave Silver Mines	Coleman	1,534	506,927	6,418			1905-1920
Hudson Bay Mines	Coleman	52,370	6,452,266	185,572	1,630		1905-1953
Juno Metals	Coleman	2,674	46,391				1918-1922
Kerr Lake Mining	Coleman	235,503	28,502,037	650,094		1,792	1905-1948
King Edward Mining	Coleman	53,357	1,294,233	3,466	1,310	18,618	1905-1964
LaRose Mines	Coleman	57,544	17,479,977	200,000	111,010		1904-1948
Lawson	Coleman	NA	4,213,513				1905-1953
Little Nipissing	Coleman	NA	82,000				1906-1945
Mayfair Mines	Coleman	NA	26,240				1945-1953
McKinely-Darragh Savage Mines	Coleman	NA	17,300,000				1904-1952
Mensilvo Mines	Coleman	62,571	374,824	149,508	21,605	21,834	1913-1964
Nancy Helen Mines	Coleman	249	91,770				1907-1911
Nerlip Mines	Coleman	613	911	2,949	2,502		1940-1944
New Bailey Mines	Coleman	90,769	3,131,352	76,780		4,084	1912-1966
Nipissing Mines	Coleman	NA	32,000,000				1904-?
Nipissing Mines	Coleman	NA	7,000,000				1904-?
Nipissing Mines	Coleman	NA	1,000				1915-1917
Nipissing Mines	Coleman	1,066,589	32,000,000	3,636,704			1905-1951
Nipissing Mines	Coleman	NA	300,000				1932?
Nipissing Mines	Coleman	NA	20,000,000				1910?-1967
Nipissing Mines	Coleman	NA	1,750,000				1904-1967
Nipissing Mines	Coleman	NA	300,000				1913-1967
No. 407 Shaft	Coleman	NA	5,200				1926
No. 407 Shaft	Coleman	92,159	1,838,433	157,597	37,687	69,370	1966-1971
No. 96 Shaft	Coleman	56,153	1,236,879	73,970	22,329	46,738	1969-1974
Nova Scotia Silver	Coleman	7,184	1,082,774	114,199			1906-1952
O'Brien	Coleman	NA	33,655,872	835,764	1,481	2,130	1905-1966
O'Brien Dumps	Coleman	8,524	26,709	2,204	710	2,633	1968-1970
Ophir Cobalt Mines (1)	Coleman	NA	69				1921
Penn Canadian Mines	Coleman	189,356	4,418,802	190,650	11,246	26,806	1908-1974
Peterson Lake Silver Cobalt	Coleman	NA	909,064	27,303			1906-1966
Peterson Lake Silver Cobalt	Coleman	60,341	5,627,297				1912-1916
Princess Claim	Coleman	NA	3,713,805				1908-1922
Red Jacket Property	Coleman	NA	3	354			1938-1943
Refinery	Coleman	NA	11,656				1983-1985
Reinhardt Cross Lake Group	Coleman	NA	278,631	2,532	484	141	1949-1951
Right of Way Mines	Coleman	NA	169,000				1906-1935
Right of Way Mines	Coleman	23,073	2,800,000				1906-1935
Savage Mine	Coleman	646,439	4,500,000	465,582	11,348	51,751	1904-1954
Silver Cliff Mining	Coleman	20,552	535,246	9,314	15,380	6,287	1908-1954
Silver Cross Cobalt	Coleman	NA		3,091			1940-1942
Silver Leaf Mining	Coleman	321	495,443	1,206			1906-1931
Smith Cobalt Mines	Coleman	NA		914			1939-1940
Temiskaming Mining	Coleman	149,807	12,118,796	202,687	25,337	6,261	1907-1963
Trethewey Silver Cobalt Mines	Coleman	17,666	7,256,470	216,198			1904-1943
Trout Lake	Coleman	44,705	1,783,536	250,530	85,506	33,312	1969-1977
University Mines	Coleman	400	790,000	82,681			1905-1968

Mine	Township	Tons milled	Ag oz	Co lb	Ni lb	Cu lb	Years of production
Victoria Silver Cobalt Mines	Coleman	NA	1,000				1906-1910
Violet Mining	Coleman	NA	897,291				1905-1925
Claim A.3	Gillies Limit	NA		900			1935-1940
Cleopatra Mining	Gillies Limit	NA	2,500,000				1964-1968
Cobalt A53 Mining	Gillies Limit	NA		2,251			1946
Provincial Mine	Gillies Limit	258	286,897	54,473	2,842		1908-1940
Waldman Silver Mines	Gillies Limit	58	33,525	2,066			1910-1930
Wyandoh Silver Mines	Gillies Limit	29	33,699	1,234			1910-1937
Harmak Mining	Harris	NA	4,625	12,925			1966
Lang-Caswell (1)	Lorrain	NA	1,503	4,932			1936
Bellellen Mine	South Lorrain	NA	38,027	28,481			1910-1943
Canadian Lorrain Mine	South Lorrain	NA	276,825	16,678			1926-1940
Curry Mine	South Lorrain	87	49,821	7,691			1916-1938
Gilgreer mine	South Lorrain	NA	446	1,732			1936-1943
Harris Mines	South Lorrain	462	13,659	26,286			1925-1939
Keeley & Frontier Mines	South Lorrain	NA	19,197,413	3,310,556	27,252	10,292	1908-1965
Lorrain Lake Mines	South Lorrain	22,405	1,093,404	64,458			1924-1943
Nipissing Lorrain Mine	South Lorrain	NA	350,000	5,521			1925-1929
Silver Eagle Claim	South Lorrain	NA	7,989				1918
Wettlaufer Mine	South Lorrain	6,861	2,593,041	23,910			1909-1940
TOTAL		8,007,036	492,538,553	23,279,622	3,624,786	2,087,211	1904-1989

Source: Guindon *et al.*, 2016

Notes:

1. Historic mine located within the Properties areas.
2. Teck reported its 1964-1983 Silverfields Mine total production as: 1,422,812 tons totalling 18,216,523 oz Ag; average head-grade 12.8 oz/ton Ag.
3. The Author has been unable to verify the information in Table 6 and the information is not necessarily indicative of the mineralization on the Properties.

6.3 Exploration History of the Cobalt Project

The exploration and prior ownership histories of the Properties are presented in subsections 6.3.1 to 6.3.5 below. Information on the Project's early exploration and ownership history (pre-1950) is limited and incomplete, particularly with respect to the MNDM online assessment files. Some additional hardcopy information on early exploration in the Project area is available in historic Resident Geologist notes and donated files archived at the District Geologist's office in Kirkland Lake. Unless otherwise noted, historic assay interval widths and thicknesses should be considered apparent widths (e.g. downhole lengths); true widths are generally uncertain or unknown.

6.3.1 Silverfields Property

The exploration and development history of the Silverfields Property is summarized in Table 7. The history is derived from historic Ontario Resident Geologist's notes on file at the District Geologist's office in Kirkland Lake (File CO-0786-01), and in Ontario Geological Survey (OGS) publications PR 1961-6, MRC 10, MP 91 and MP 117.

Table 7: Exploration and development history of the Silverfields Property

Year	Operator	History (as reported in Resident Geologist notes)
1906	Alexandra Silver Mining Company	Silver discovered on Reinhart claim 395.
1907	Alexandra Silver Mining Company	Claim 395 Alexandra Shaft sunk through Nipissing diabase into underlying Coleman member sedimentary rocks.
1907-1922	1907 – Alexandra Silver Mining Company 1913 – Canadian Gold and Silver Mining Company 1915 – Leased to Sydney Smith 19?? – Carl Reinhardt 19?? – Mining Corporation of Canada Limited	Claim 395: Alexandra Shaft: first, second and third levels driven at 19.8 m (65 ft), 61 m (200 ft) and 94.5 m (310 ft) respectively. Total of 281.9 m (925 ft) drifts, 265.2 m (870 ft) cross-cuts and 37.8 m (124 ft) raises. Claim 1490: A shaft sunk approximately 91.5 m (300 ft). In 1922, lateral work from the No. 3 University shaft southeast of the Property was extended into Claim 1490 on the 27.7 m (91 ft) level. Claim 1385: A shaft sunk approximately 30.5 m (100 ft). Claim 1511: Meteor #1 adit approximately 152.4 m (500 ft) long with 76.2 m (250 ft) internal shaft and levels at 31.7 m (104 ft) and 76.2 m (250 ft). Meteor #2 adit and Meteor inclined shaft are collared on the Savage claim to the west. Meteor #2 adit was driven 27.4 m (90 ft). Workings from the inclined shaft connect with those from the #1 adit
1962-1964	Silverfields Mining Corporation	Alexandra Shaft deepened 38.4 m (126 ft) to depth of 132.9 m (436 ft). Fourth and fifth levels driven at 108.5 m (356 ft) and 127.7 m (419 ft) respectively. Mine development work included 1,436.8 m (4,714 ft) of drifting, 888.8 m (2,916 ft) cross-cutting, 194.5 m (638 ft) raising and 237 underground drillholes totaling 1,106.4 m (43,000 ft).
1964	Silverfields Mining Corporation	Mine production begins.
1965-1967	Silverfields Mining Corporation	Alexandra Shaft deepened 25 m (82 ft) and sixth level opened at 157.9 m (518 ft) 1965 cut-off grade reported to be 994 g/t (29 oz/ton) Ag (\$1.10/oz).
Jan 1964 – Aug 1967	Silverfields Mining Corporation	174,182 tonnes (192,003 tons) milled producing 143,673.4 kg (4,619,245 oz) Ag, 108,360 kg (238,893 lbs) Cu, and 99,430 kg (219,206 lbs) Co. Average head-grade 823 g/t (24 oz/ton) Ag, 0.65 kg/t (1.3 lb/ton) Cu and 0.55 kg/t (1.1 lb/ton) Co.
1971	Teck Corporation Limited Silverfields Division	Silverfields merged into Teck.
April 1976	Teck Corporation Limited Silverfields Division	Mine production 263 tonnes (290 tons) per day. Cut-off grade rose from 137 g/t (4 oz/ton) Ag to 206 g/t (6 oz/ton) Ag.
Jan 1978	Teck Corporation Limited Silverfields Division	Mine production 227 tonnes (250 tons) per day with a 206 g/t (6 oz/ton) Ag cut-off grade. Production down from 272 tonnes (300 tons) per day.
1980	Teck Corporation Limited Silverfields Division	Cut-off grade lowered from 206 g/t (6 oz/ton) to 103 g/t (3 oz/ton) Ag.
Oct 1982	Teck Corporation Limited Silverfields Division	Cut-off grade reported to be 206 g/t (6 oz/ton) Ag.
June 1983	Teck Corporation Limited Silverfields Division	Mine shut down June 1983. Teck reported 1964-1983 total production: 1,290,753 tonnes (1,422,812 tons) totaling 566,593 kg (18,216,523 oz) Ag; average head-grade 439 g/t (12.8 oz/ton) Ag.
19?? – 200?	Moore	Ownership – former Teck geologist.
200? - 2016	Andre Dugas	Ownership.

6.3.2 North Gillies Limit Property

The exploration history of the North Gillies Limit Property summarized in Table 8 is based on available online Ontario government assessment files, MDI files, historic Ontario Resident Geologist notes on file at the District Geologist's office in Kirkland Lake, and OGS publications PR 1961-2, MRC 10, MP 91, and MP 117. The approximate locations of the historic work areas are noted in Figure 8 with the Map ID and or MDI number referenced in Table 8.

Table 8: General exploration history of the North Gillies Limit Property area

Map ID	Year	Assessment file/reference	Operator	Work history
General Property area				
1	1947	31M05SE0096	Fairfax Mining	Geological mapping.
1	1950	31M05SE0035	Fairfax Mining	Two DDH -480.4 m (1576 ft).
2	1953	31M05SE0051	Bradville	DDH-403.7 m (1324'7") in 11 holes.
3	1960	31M05SE0052	Benner	DDH-569.2 m (1867.5') in nine holes.
4	1960	31M05SE0085	Gareau	Geological mapping.
5	1962	31M05SE0200	Silver Miller Mines	DDH-70.9 m (232.6') in two holes.
6	1962	31M05SE0039	Nickel Rim Mines	DDH- 272.2 m (893'), assay.
7	1964	31M05SE0056	Mentor Exploration	DDH-871.5 m (2859.1') in nine holes.
8	1975	31M05SE0103	McAllister	One DDH – drilled to 70 m in 1974, re-drilled to 144 m (473 ft) in 1975.
10	1997	31M05SE0072	Wabana Expl.	Ground VLF, magnetic, gradiometric, prospecting, geochemistry, stripping.
11	1998	31M05SE2006	Simpson	Stripping.
12	2000	31M05SE2028	Cabo Mining	Ground EM and magnetic.
13	2001	31M05SE2033	Cabo Mining	Geochem – seven alluvial samples – kimberlite exploration.
14	2004	31M05SE2060	Cabo Mining	Geology and stripping.
15	2004	31M05SE2064, 31M05SE2069	Cabo Mining/ Simpson	Seven DDH, 215 assays; including two DDH at Santa Maria 342 m; one DDH at Fleming - 81 m.
16	2006	20000001646	Cabo Mining	Two DDH – 319 m COB-29 and 30.
Ophir Mine (MDI31M05SE00108)				Source: MDI file; Thomson (1961) and Ontario Resident Geologist notes at the District Geologist's office in Kirkland Lake
	1910-1913		Ophir Cobalt Mines Limited	Shaft #1 sunk to depth of 61 m (200 ft) by 1910. Underground work continued to 1913 and Shaft #2 put down about this time.
	1915		Ophir Cobalt Mines Limited	Underground work continued from Shaft #1. Levels are reported at depths of 30.5 m, 61 m and 91.5 m (100, 200 and 300 ft).
	1917			Drift driven north on the 121.9 m (400 ft) level from Peoples Silver Mine (now the Mayfair Shaft) onto the property; #4 winze started on this level.
	1918		Mining Corporation	Continued work on the 1,221.9 m (400 ft) level and the #4 winze.
	1919		Nipissing Mining Company	Optioned property and continued operations.
	1920-1952			No work, except a brief and unsuccessful leasing operation in 1930.
	1952		Silver Crater Mines	Acquired lease on claim.

Map ID	Year	Assessment file/reference	Operator	Work history
	1954		Silver Crater Mines	<p>At this time #4 Winze down 42.7 m (140 ft) with sublevels established at 152.4 m and 164.6 m (500 ft and 540 ft) depths (relative to Mayfair shaft).</p> <p>Extended 61 m (200 ft) level of the Mayfair Shaft north onto Ophir claim and mined 2,282 tonnes (2,515 tons) of Co ore (89.9 m (295 ft) of drifting on the Ophir section). Ophir Shaft #2 connects with these workings. The stope was about 18.3 m (60 ft) high above the level and about 61 m (200 ft) long. Cobalt mineralization restricted for the most part to the vein proper so width of the stope kept small, about 0.8 m (32 inches). Minor silver and bismuth in the stoped material.</p> <p>A crosscut from the Victory shaft on the Silver Banner claim was extended south on the 152.4 m (500 ft) level to connect with the Ophir 152.4 m (500 ft) sublevel workings (333.5 m (1,094 ft) of lateral development). One very small silver rich pocket (some 4,000 oz/ton or 137,143 g/t) was found but the vein was not workable for either its silver or cobalt content.</p>
	1957		Juno Metals Corp	Sub-leased Ophir from Silver Crater. Sublease and lease dropped during the year.
9	1977	31M05SE0401	Burton & McAllister	<p>DDH95-2, Az 088, Dip-50, TD 160.3 m (526') did not reach interpreted upper contact of Nipissing diabase:</p> <ul style="list-style-type: none"> 51.8 m (170 ft): 4" banded calcite vein – brecciated with some galena, sphalerite and chalcopryite, 22.84 oz/ton Ag 66.5 m (218 ft): 1" calcite vein – 10% cobaltite some pyrite and chalcopryite each side 342 g/t (9.98 oz/ton) Ag 76.2 m (250 ft) 1" calcite vein – 10% cobaltite some pyrite each side 242g/t (7.07 oz/ton) Ag.
Gauthier Occurrence (MDI31M05SE00138)				Source: MDI file and; Thomson (1961)
	Pre-1935		Gauthier	<p>In the early days of the Cobalt camp, Mr Gauthier put down a 15.9 m (52 ft) shaft by hand steel and windlass. The shaft and adjacent trenches investigated a zone trending north of west along New Lake Creek.</p> <p>Gauthier reported a one-inch cobalt-bearing vein in the shaft. S. Cole reported that six samples taken from the shaft contained between 137 g/t and 789 g/t (4 oz/ton and 23 oz/ton) Ag and dump samples containing galena and pyrite yielded assays of about 3,429 g/t (100 oz/ton) silver.</p>
	1968		Sisco Metals of Canada	Ownership.
McGary Occurrence (MDI31M05SE00160)				Source: MDI file and; Thomson (1961)
	1922-1928		Kirk-Budd Mining Company	<p>Underground work was started in 1922 and continued intermittently until 1928.</p> <p>Kirk-Budd shaft completed to a depth of 51.8 m (170 ft) deep with a level at 47.6 m (156 ft). Lateral work extended 158.5 m (520 ft) east and 76.2 m (250 ft) west from the shaft.</p> <p>Two adits driven easterly 6.4 m and 14.6 m (21 ft and 48 ft) into a westerly-facing cliff.</p>
Cobalt Lode Occurrence (MDI31M05SE00119)				Source: MDI file and Thomson (1961)
	Pre 1950			Early days Cobalt Camp shaft possibly 30 ft deep, put down on approx. ½ inch wide northwesterly striking calcite vein with associated aplite dike in Diabase.
	1949-1950		Cobalt Lode Silver Mines Limited	Two scissor DDHs each approximately 121.9 m (400 ft) long and one DDH approximately 167.9 m (551 ft) long.

Map ID	Year	Assessment file/reference	Operator	Work history
	1965		Mentor Expl. & Dev. Ltd	Additional DDH?
Trainmen (Bomont) Occurrence (MDI31M05SE00123)			Source: MDI file and; Thomson (1961)	
	19??-1922		J. McAndrew	
	1922-195?		Trainmen Company	1925 – Trainmen shaft sank to 23.8 m (78 ft). 1926 – Shaft was deepened to 32.6 m (107') and an eastward crosscut of 71.9 m (236') made on the 30.5 m (100') level. 1927 – Drifts of 23.2 m (76') north and 24.4 m (80') south were made on 30.5 m (100') level. Underground work continued intermittently until 1928 and claims subsequently lapsed.
	1952			One DDH (designated T-1 on Map P.95).
	1953		Bomont Mines	1953 – Bomont Mines acquired claims in 1953. 1954 – Detailed geological survey. 1956 – Two DDHs (T-2 and 3). 1958 – Two DDHs totalling 61 m (200 ft).
	1960		Chimo Gold Mines	Optioned property. Five DDHs (S-1 to S-5, aggregate 778.5 m/2,554 ft).
Armstrong Occurrence (MDI31M05SE00161)			Source: MDI file and Thomson (1961)	
	1950		Penn-Cobalt Silver Mines, Limited	One DDH (S-1) 309.7 m (1,016 ft) inclined -45. MDI file reports 182 g/t Ag/2.5 cm in calcite-chalcopyrite vein in Huronian conglomerate.
Knight Occurrence (MDI31M05SE00114)			Source: MDI file and Thomson (1961)	
	1950-1954		H.W. Knight	Exploring for eastern extension of veins intersected in at the Kelly Prospect. Eleven short DDHs of which one was reported for assessment. Only DDH K-2 passed through Keewatin into underlying Nipissing Diabase at a vertical depth of 40.5 m (133 ft). DDH K-1 intersected a 15 cm (6-inch) intersection of disseminated cobalt mineralization reported at a downhole depth of 21.3 m (70 ft).
Fairfax Occurrence (MDI31M05SE00164)			Source: MDI file and Thomson (1961)	
	1947		Fairfax Mines Limited	Geological mapping.
	1952-1953		Fairfax Mines Limited	The Schumann Lake diabase arch was regarded as a geological feature of good exploration for the occurrence of silver-cobalt bearing veins particularly in view of the rich deposits occurring in association with the similar Kerr Lake diabase arch Coleman township. Seven DDH (F8-F14, 4,432 ft).
	1959		Fairfax Mines Limited	One DDH (F15, 228.8 m/751 ft) and deepened (F9). All DDHs passed through Nipissing diabase from surface, entered underlying Cobalt Series sediments and ended in the Keewatin below. Vertical depth from surface to bottom of the diabase was 112.8 m to 143.3 m (370 ft to 470 ft). The vertical thickness of the Huronian sediments was 11 m to 49.1 m (36 ft to 161 ft). A few small calcite-quartz veins are known at surface; the only mineralization seen in these was sparse chalcopyrite. Small calcite veins were intersected in the drillholes but no mention of cobalt or silver mineralization is made in the logs.

Map ID	Year	Assessment file/reference	Operator	Work history
Fleming Occurrence (MDI31M05SE00135)				Source: MDI file and Thomson (1961)
	Circa 1930		J. Burke	Cobalt bearing vein discovered and trenched.
	1951		Fairfax Mines Limited	<p>Seven DDH (aggregate length 426.7 m/1,400 ft) in the trench area. Holes are designated K-1 to 7 on Map P.95 and tested the downward extension of the vein in the Keewatin and to a smaller extent, in the underlying Nipissing diabase.</p> <p>DDH K-3 reported to have intersected a ½-inch vein of calcite with cobalt mineralization at 31.2 m (102.5 ft) downhole. The intersection was in Keewatin rock 70 ft below surface and 0.61 m (2 ft) above the contact of the Nipissing diabase sill. Benner reported an assay of 276 g/t (8.04 oz/ton) Ag and 2.1% Co over the ½-inch width. Drill results were insufficient to warrant exploration of the vein by underground work.</p>
	1959		Fairfax Mines Limited	<p>A resistivity survey was completed over much of the Fleming claim group. One of the anomalies extended northward from the north end of Chopin Lake; corresponds to a topographic low, suggestive of a fault.</p> <p>Eleven DDHs (F-1 to F-4, F-6 to F-11 and F-15 to F-16) totaling approximately 694.9 m (2,280 ft) completed after geophysics</p> <p>Numerous calcite, as well as quartz-calcite veins were intersected in Keewatin volcanics, lamprophyre, Lorrain granite and Nipissing diabase.</p> <p>Silver and cobalt-bearing veins were intersected in hole F-3 which Thomson 1961 reports as distinct from the vein exposed at surface and explored by DDHs K-1 to K-7. Mineralization in hole F-3 includes:</p> <ul style="list-style-type: none"> • 50.7 m (166.4 ft) – native silver (in leaves up to an estimated thickness of 1/25 inch), argentite, and cobalt mineralization in small amount occurred in a 1/3-inch calcite vein; native silver in a small amount also occurred in the wall rock. • 48.1 m and 48.5 m (157.8 ft and 159.0 ft) – cobaltite with chalcopyrite in 1/4-inch veinlets. • 51 m (167.2 ft) – argentite in a 1/2-inch calcite vein. <p>The latter three intersections are in Lorrain granite and about 2.4 m (8ft) above the Lorrain-Nipissing contact. In DDH F-3 the Lorrain granite has a vertical thickness of 10.1 m (33 ft) lying between Keewatin volcanics (above) and Nipissing diabase (below). The attitude and extent of the silver-cobalt mineralization has to-date not been determined; other drillholes were not successful in intersecting mineralization.</p>
Santa Maria Occurrence (MDI31M05SE00169)				Source: MDI file (Resident Geologist file CO-1103)
				Quartz calcite veins: up to 243 g/t Ag/6.4 cm; large high grade “float”. Diamond drilling, geophysics, geology.
Naneek Occurrence (MDI31M05SE00169)				Source: MDI file (Resident Geologist file CO-1074, CO1104)
				<p>Surface geology – Nipissing diabase, Mafic-felsic volcanics.</p> <p>Diamond drilling assays: up to 0.39% Zn/1.0 m; 0.20% Cu/1.5 m; 37 g/t Ag/0.43 m.</p>

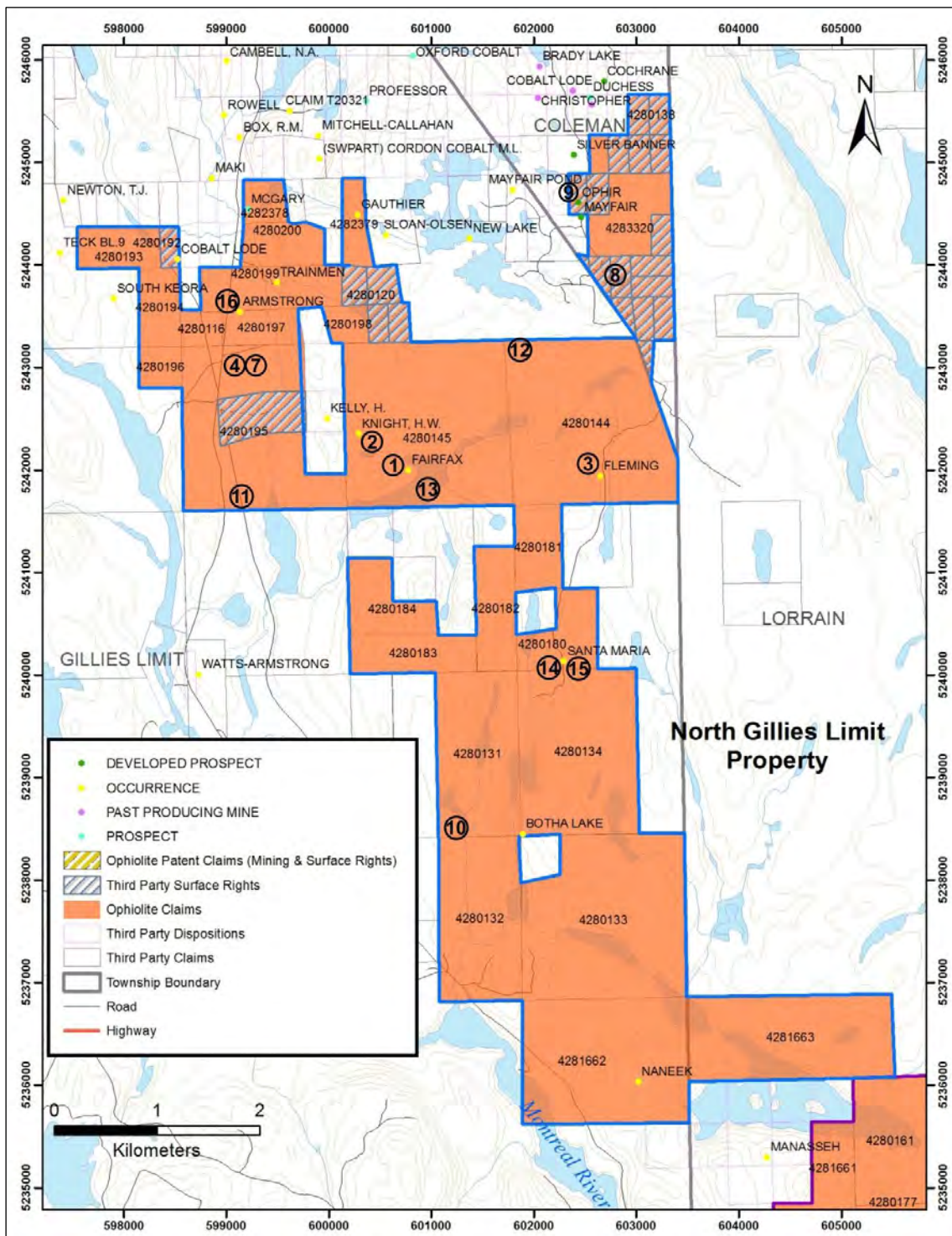


Figure 8: North Gillies Limit Property – location of historic occurrences and assessment work areas

Note: Circled numbers correspond to assessment work index numbers in Table 8

6.3.3 Lorrain Valley Property

The exploration history of the Lorrain Valley Property summarized in Table 9 is based on available online Ontario government assessment files, MDI files, historic Ontario Resident Geologist notes on file at the District Geologist's office in Kirkland Lake, and OGS publications MRC 10, and MP 051. The approximate locations of the historic work areas are noted in Figure 9 with the Map ID and or MDI number referenced in Table 9.

Table 9: General exploration history of the Lorrain Valley Property area

Map ID	Year	Assessment file/ reference	Operator	Work history
General Property area				
1	1972	31M04NE0006	Aggressive Min.	Ground EM.
2	1972- 1973	31M04NE0009; 31M04NE0007	Aggressive Min.	DDH-3186' in eight holes.
3	1980	31M04NE0002	Clarke	Geology, prospecting.
3	1981- 1982	31M05SE0001; 31M05SE0003	Clarke	Ground VLF.
4	1988	31M04NE0001	Bishop	Ground VLF and magnetic.
5	2000	31M05SE2019; 31M05SE2022	Cabo Mining	Prospecting, stripping, geochemistry, petrography. Geology, ground VLF and magnetic.
6	2001	31M05SE2037	Cabo Mining	Geochemistry – 14 alluvial samples (KIMs).
7	2002	31M05SE2043	Cabo Mining	Geology.
Thomson, R. Occurrence (MDI31M05SE00094)				
	1920s	MP051	Richardson	Discover of silver occurrence at Paul's shaft by Richardson. Prospecting, trenching and pitting in the area of 15 m (50 ft) deep Paul's shaft. The Northern Miner (1923) reported: "The surface silver showing in a vein two feet wide was blasted out with the first round, and while from time to time in the shaft sinking silver was found the quantities were small".
	1923	MP051	McKinley-Darragh-Savage Mines of Cobalt Limited	Three DDH. No records.
	1950	MP051	Vanadium Exploration Syndicate	One DDH - 49.4 m (162 ft) hole – no significant mineralization.
	1970	MP051 and 31M05SE0008	R. Thomson	Three DDH (totalling 87.2 m/286 ft) drilled in the vicinity of Paul's shaft – chalcopryite and low silver assays reported.
	1971- 1973	MP051	R. Thomson	Geological and limited geochemical surveys and trenching.
	1975	MP051	R. Thomson	Reduced claim holdings.
Chukuni Occurrence (MDI31M05SE00096)				
	19??	MP051	?	Shaft – depth and age unknown.
	1970	MP051	Chukuni Gold Mines Limited	Three DDH from the same set up (total footage of 234 m/766 ft). Minor pyrite and chalcopryite disseminated in feldspar porphyry and lamprophyre, and along slips in chlorite schists. Drill core assayed trace amounts of silver.

Map ID	Year	Assessment file/ reference	Operator	Work history
La Tour Occurrence (MDI31M05SE00092)				
	19??	MRC010		15.2 m (50 ft) shaft with 7.3 m (24 ft) of crosscutting.
	1940	MRC010		Production: Silver: 1.7 kg (53 ozs), Cobalt: 11.8 kg (26 lbs).
Caswell (Lang-Caswell) Occurrence (MDI31M04NE00051)				
	1910	MP051	Lang-Caswell Cobalt Mines Limited	Sank No. 1 shaft to a depth of 47.2 m (155 ft), with 39.9 m (131 ft) of crosscutting on the 38.1 m (125 ft) level, and also sank No. 2 shaft to 10 m (32 ft).
	19??	MP051		Extensive trenching and pitting carried out (dates uncertain).
	19??	MDI file		Trench sampling northeast of shaft, assays to 4.2% Co, 0.8% Ni, 0.96% Cu over unknown intervals.
	1936	MRC010		Minor production: 46.75 kg (1,503 oz) Ag; 2,237 kg (4,932 lb) Co.
	1951	MP051	Siscoe Metals of Ontario Limited	Six DDH (659.3 m/2,163 ft). Pyrite, pyrrhotite and minor chalcopyrite reported. One drillhole is reported to have intersected cobalt arsenides. Dewatered shaft.
	1968	MRC010	Taylor Pipe	Ownership.
	1976	MP051	Lepaladan Corporation Limited	Ownership.
	1998	31M05SE2009	Simpson, M. and Wareing, S.	11 grab samples collected from random excavations of the surface of Shaft #1 dump along its length. The dump is estimated to be on the order of 1000 tonnes. Samples were not described but based on cobalt content it appears that mineralized material was selectively sampled. Samples assayed 1.75% to 12.30% Co, 2.74 to 14.4 g/t (0.08 oz/ton to 0.42 oz/ton) Ag and 0.219% to 3.83% Ni. The low Ag grades were attributed to high-grading of the silver mineralization during the shaft sinking and underground development in 1910-1936.
7	2000	31M05SE2024	Cabo Mining	Geology, ground VLF and magnetic.

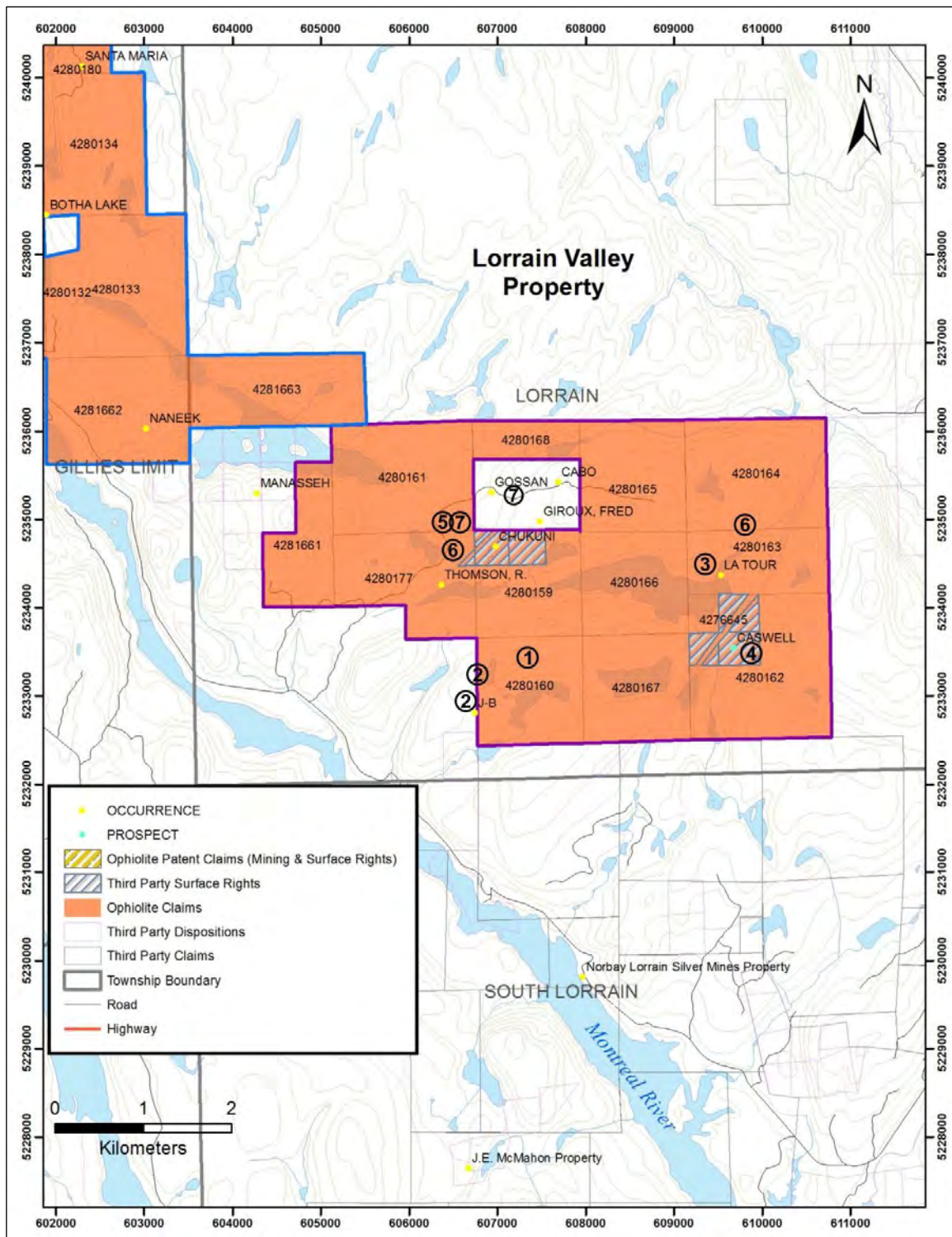


Figure 9: Lorrain Valley Property – location of historic occurrences and assessment work areas

Note: Circled numbers correspond to assessment work index numbers in Table 9

6.3.4 South Lorrain Property

The exploration history of the South Lorrain Property summarized in Table 10 is based on available online Ontario government assessment files and MDI files. The approximate locations of the historic work areas are noted in Figure 10 with the Map ID and or MDI number referenced in Table 10.

Table 10: General exploration history of the South Lorrain Property area

Map ID	Year	Assessment file/reference	Operator	Work history
General Property Area				
1	1949	31M03NW0017	Ramardo	DDH-93 m (305') in two holes.
2	1949	31M03NW0019	Ramardo	DDH- 355.4 m (1,166') in seven holes.
3	1954	31M03NW0011	De Camp	DDH-717.5 m (2,354') in five holes.
4	1954	31M03NW0013		DDH- 50.4 m (165.5') in one hole.
6	1966	31M03NW0007	Millerfields Silver	Ground magnetic and resistivity – 28.8 km (18 miles).
9	1992	31M03NW9737	Chitaroni	Three DDH at Oxbow Lake – 61 m (200 ft) total, two DDH at Highway 357 – 22.9 m (75 ft) total.
10	1992	31M03NW9740	Chitaroni	Airborne magnetics and VLF, prospecting.
12	1995	31M03NW0035	Moore	Ground magnetics and VLF – 11.3 km.
14	1996	31M03NW0045	Moore	Geochemical – 113 samples, geology.
15	1997	31M03NW2001	Gore	Ground magnetics, EM, VLF -11.5 km.
16	1998	31M03NW2002	Isometric Min.	Ground magnetics and IP – 31.75 km.
15	1998	31M03NW2003	Gore	Stripping, prospecting, geochemistry – 27 samples.
15	1998	31M03NW2007	Gore	Prospecting.
15	1998	31M03NW2008	Gore	Stripping, prospecting, geochemistry – eight samples.
17	1999	31M03NW2006	Gore/Medici	DDH – three holes, geochemistry – 96 samples.
18	1999	31M03NW2009	Gore	Ground magnetics, EM, VLF – 8.13 km.
18	2002	31M03NW2016	Gore	Pits – 8.
18	2003	31M03NW2018	Gore	Stripping, geochemistry – 1.
19	2006	20000001575	Gore	Prospecting.
20	2006	20000001752	Gore	Prospecting.
21	2006	20000002444	Adroit Resources	Airborne EM and magnetics.
20	2007	20000000051	Silver Shield/Gore	Ground magnetics – 1.5 km.
22	2007	20000002465	Adroit Resources	Ground magnetics and IP – 23 km.
20	2007	20000002529	Gore	Prospecting.
21	2007	20000002725	Adroit Resources	DDH – 1,063 m in nine holes, geochemistry – 43 soils, 62 rock.
22	2008	20000000190	Adroit Resources	DDH – 887 m in three holes, geochemistry – 141 samples; only one hole in current property area.
18	2008	20000003235	Gore	Prospecting.
18	2011	20000006885	Gore	Ground magnetics and VLF – 1.9 km.
18	2011	20000006529	Gore	Ground magnetics - 1.6 km.
24	2012	20000007783	Gore	Ground magnetics 3.6 km.
24	2012	20000007233	Meunier	Ground magnetics, VLF – 1.9 km.
18	2012	20000007305	Gore	Stripping.

Map ID	Year	Assessment file/reference	Operator	Work history
H.G. Miller, Maiden's Lake (1949) Occurrence (MDI31M03NW00023)				Aka: E.B.E. de Camps Estate – 1952; H.R. 69 – 1909
	Circa 1909	MDI File		Underground development (adits, winze to 18.3 m/60 ft). Assays from the main adit vein returned values of 0.48% Co and 0.42% Co. A second vein found in the adit strikes across the adit (N75W) also reportedly returned Co values.
	1950	MDI File and 31M03NW0009	H.G. Miller	DDH 1 and 2, on the east shore of the southern bay of Maidens Lake.
	1952-1963	MDI File and 31M03NW0010	E.B.E. de Camps	Grab samples collected by E.B.E. de Camps from the adit dump returned assays of 0.34% Co and 0.07% Co. DD-1 (drilled in 1963), on the west shore of the southern bay of Maidens Lake returned assays of trace to 0.01% Ag over lengths up to 0.55 m (1.82 ft).
23	2008	20000003007	Silver Shield/Gore	Geology
J.A. Gore Property – 1980 (MDI31M03NW00016)				Aka: Mining Corporation of Canada Ltd. Group 3 – 1928; Benner Property – 1963
	1928-1929	MDI file	Mining Corporation of Canada Ltd	Shaft sinking to 128 m (420 ft); level developed at 123.8 m (406 ft), with drifting, cross-cutting and diamond drilling.
8	1990	31M03NW0003	Gore	Geochem.
8	1991	31M03NW0001 31M03NW0023	Gore	One DDH -70.1 m (230'), geochemistry. Trenching - 4, geochemistry – 14 samples.
8	1992	31M03NW0002 31M03NW0004 31M03NW0025 31M03NW9738	Gore	Prospecting, geochemistry. Stripping. One DDH – 90.7 m (297.5') extension from 70.1 m to 160.8 m (230' to 527.5'), geochemistry, Huronian-Keewatin contact reported at 114.3 m (375 ft) below surface. Trenching - 4, prospecting, geochemistry – 26 samples. A trench grab sample assayed 3582 ppm Cu, 629 ppm Co and trace Ag. Additional grab samples from the property returned values up to 0.905% Cu, 0.166% Co and 0.003% Ni.
8	1993	31M03NW9783	Gore	Stripping, geochemistry.
8	1994	31M03NW0022	Gore	Stripping, prospecting, geochemistry – seven samples.
8	2003	31M03NW2017	Gore	Stripping, geochemistry.
8	2012	20000007308	Gore	Stripping.
Oxbow Lake Claims – 1993 (MDI000000001585)				Aka: Ramardo Claims – 1953; Elite Cobalt Base Metal Project – 1992
	1953	MDI file	Ramardo Mines Limited	Five DDH.
11	1993	31M03NW0024	Gore	Prospecting, geochemistry, VLF-EM.
11	1994	31M03NW0027 31M03NW0028 31M03NW0030	Chitaroni/Gore	Prospecting, geochemistry – 47 samples. Assay – 14 samples.
11	1995	31M03NW0031	Gore	Prospecting, stripping – nine areas.
Ox-Bow Silver Mining Company Limited Property – 1946 (MDI31M03NW00020)				Aka: Clifton Consolidated Mines Ltd. – 1925; HS500 – 1928; Argentia Ridge Project – 2006
	1924-1925	MDI file	Clifton Consolidated Mines Limited	Shaft sinking, pitting, stripping, 298.7m (980ft) of diamond drilling.
	1946-1953	MDI file	Ox-Bow Silver Mining Company Limited	23 DDHs, pitting, trenching. Assays from the 1947 diamond drilling returned Ag-Co value of \$28.68 including, 3.25% Co over 0.95 m (3.1 ft). DDH 8 yielded

Map ID	Year	Assessment file/reference	Operator	Work history
				37.7 g/t (1.1 oz/t) Ag, 1.41% Co over 0.85 m (2.8 ft). DDH 6 assayed 10.5 g/t (0.299 oz/t) Ag and 2.167% Co over an unspecified length.
5	1956	31M03NW0016	Elite Cobalt Mines Ltd.	Four DDH-totalling 378.6 m (1,242 ft).
9	1992	31M03NW9737	Chitaroni	Three DDH at Oxbow Lake – 61 m (200 ft) total, two DDH at Highway 357 – 22.9 m (75 ft) total.
13	1995	31M03NW0036	Gore	Prospecting
13	1995	31M03NW0040	Gore	Ground magnetics, VLF – 5.1 km.
13	1996	31M03NW0033	Gore	Geochem – 40, compilation/geology.
13	1996	31M03NW0037	Gore	Geology, geochemistry – 11 samples.
13	1996	31M03NW0038	Gore	Prospecting.
13	1996	31M03NW0047	Gore	Stripping, prospecting, geochemistry – 15.
13	1996	31M03NW0048	Gore	Ground magnetics and VLF – 6.1km.
13	2000	31M03NW2011	Gore	Geochem, geology.
13	2002	31M03NW2014	Gore	Stripping.
13	2003	31M03NW2019	Gore	Prospecting.
13	2007	20000002019	Silver Shield/Gore	Ground magnetics – 3.2 km.
Oslund-Hermiston Group – 1949 (MDI31M03NW00021)				Aka: Elite Cobalt Prospect – 1956; Silver Tower Mines Ltd. – 1965; Argentia Ridge Project – 2006
	Pre 1956	MDI file		Pitting, trenching.
5	1956-1965	MDI file and 31M03NW0016	Elite Cobalt Mines Limited	1956 – four DDH-totalling 378.6 m (1,242 ft).
	1968	MDI file	Silver Tower Mines Limited	Four DDH. The best assay reportedly returned 61.7 g/t (1.8 oz/ton) Ag over 1 inch. Other assays ranged from 6.9 g/t to 27.4 g/t (0.2 oz/t to 0.8 oz/t) Ag over sample lengths ranging from 1 to 4 inches. Galena was observed within chlorite schist in irregular streaks over a maximum core length of 1.5 m (5 ft). Minor pyrite and carbonate also was observed. Traces of pink carbonate also carried galena and minor cobalt bloom. The mineralization appears to lie adjacent to the contact with the overlying metasedimentary rocks.
	1969	MDI file	M. Oslund	Four DDH totalling 128.3 m (421 ft).
Bulldog Shaft - 1914, MDI31M03NW00029				Aka: Price-Bradley Group – 1968; Argentia Ridge Project – 2006
7	1969	MDI file and 31M03NW0015	Price-Bradley	Two DDH totalling 554.4 m (1,819 ft). Assays from the 1969 diamond drilling returned values up to 37.7 g/t (1.1 oz/t) Au over 2 inches and 68.6 g/t (2 oz/ton) Ag over 4 inches in a calcite vein in metavolcanics.

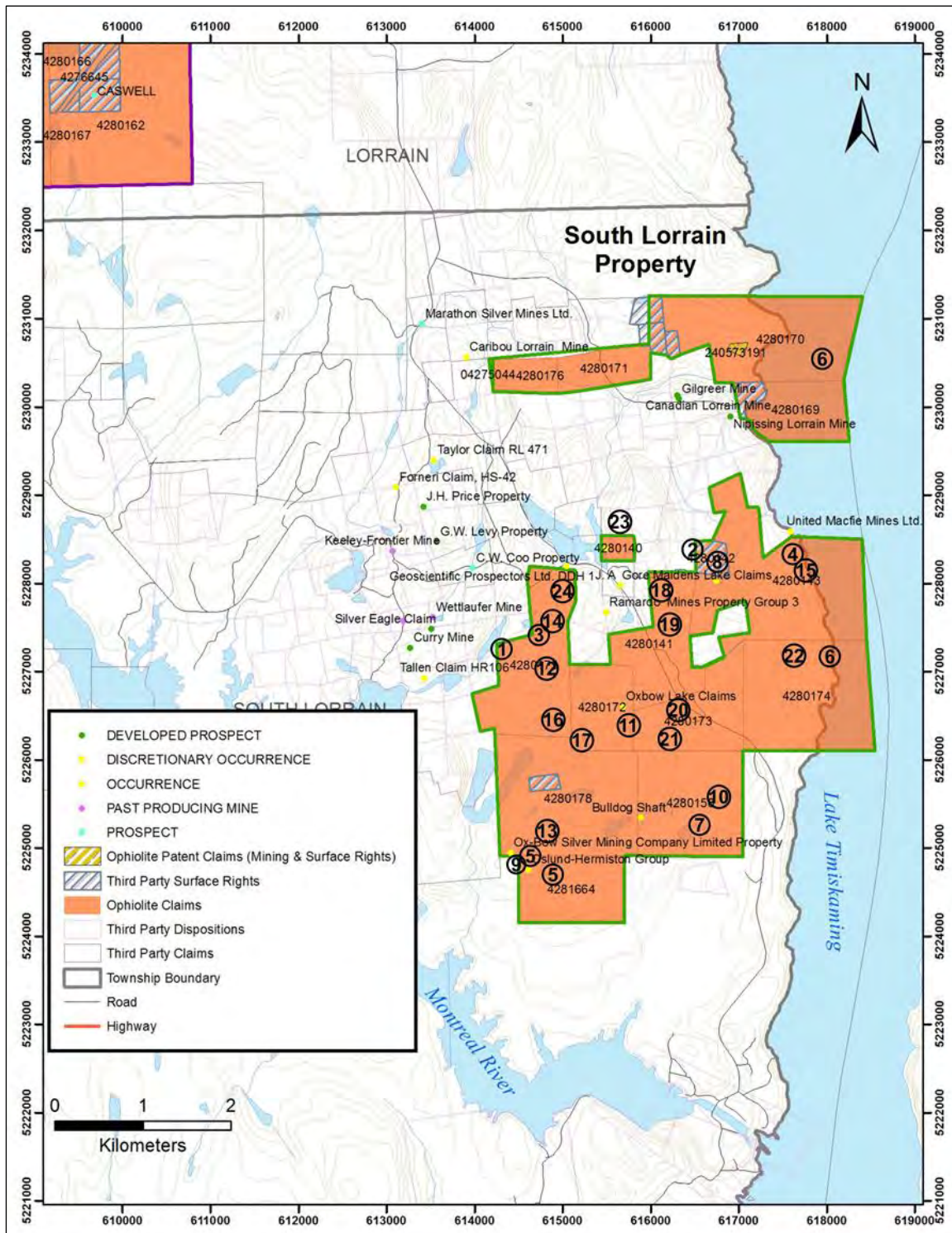


Figure 10: South Lorrain Property – location of historic occurrences and assessment work areas

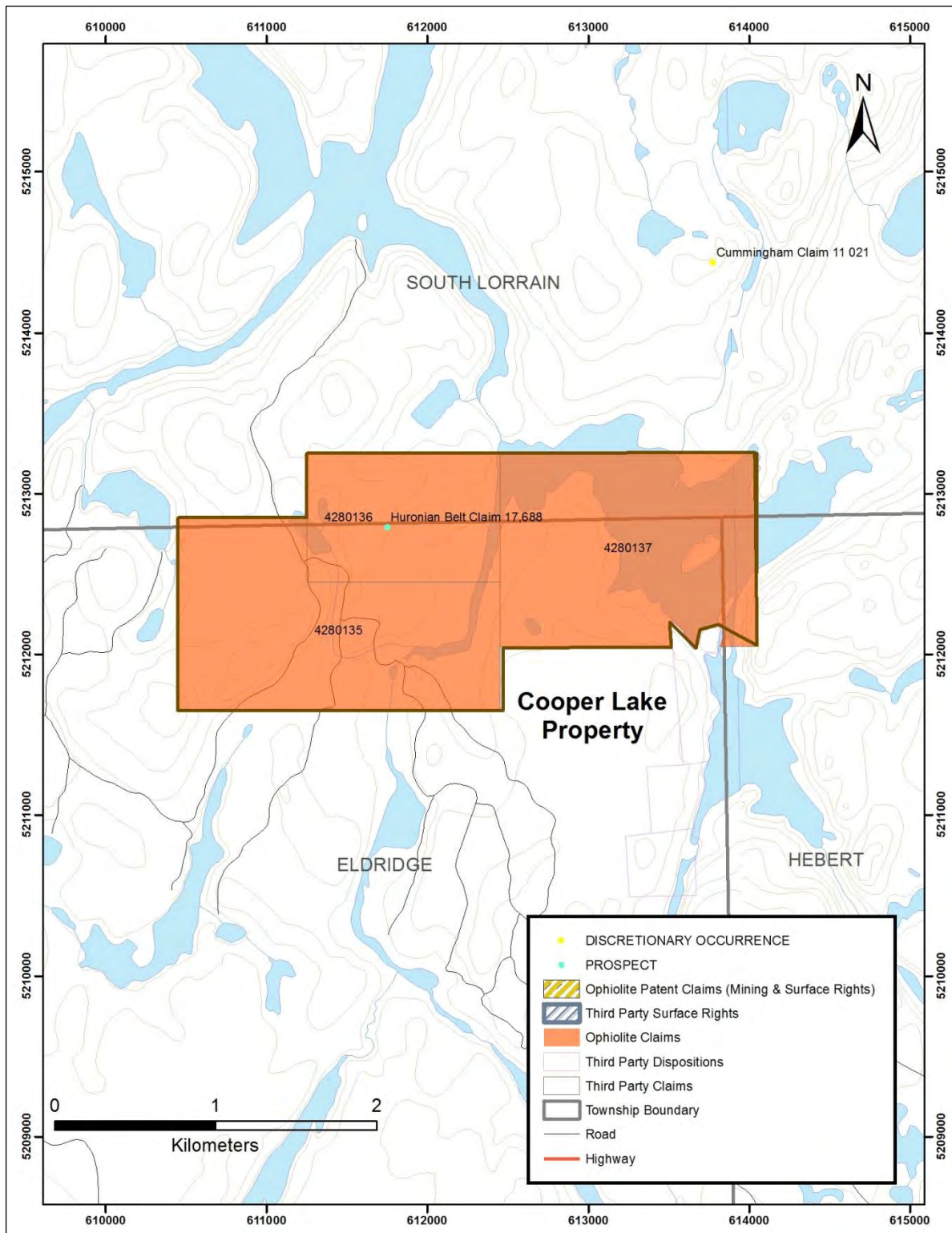
Note: Circled numbers correspond to assessment work index numbers in Table 10

6.3.5 Cooper Lake Property

The exploration history of the Cooper Lake Property summarized in Table 11 is based on available online Ontario government assessment files and MDI file MDI31M04SE00026. The approximate locations of the historic work areas are noted in Figure 11 with the Map ID and or MDI number referenced in Table 11.

Table 11: General exploration history of the Cooper Lake Property area

Year	Assessment file/ reference	Operator	Work history
1913	MDI31M04SE00026	Leo Beland	First staking to cover a cobalt/silver calcite vein on the northern contact of a Nipissing Diabase.
1921	MDI31M04SE00026	Ontario Smelters and Refiners Ltd	Property optioned to Ontario Smelters and Refiners Ltd. Shipment of 11.3 tonnes (12.5 tons) of material from the Ogistoh Mine shaft to Welland Ontario. The shipment was never processed but the ore was reported to contain about 5% Co. The shaft was approximately 24.4 m (80 ft) deep and 12.2 m (40 ft) of drifting was completed on its northwest side.
1924	MDI31M04SE00026	Huronian Belt Company Limited	Put down a 12 m shaft on a vertical fault zone.
1968	MDI31M04SE00026	Kerr Addison Mines Limited	Owned two patented claims over the Ogistoh Mine.
1978	MDI31M04SE00026	Rutex Syndicate	Sampling.
1991	31M04SE0027	Miron	Prospecting, eight samples.
1994	31M04SE0025	Goddard	10 assays.
1994	31M04SE0026	Goddard	Prospecting, stripping and trenching.
1995	31M04SE0028	Goddard	Stripping and trenching, 10 samples.
1996	31M04SE0030	Goddard	Ground magnetics and VLF-EM.
1998	31M03SW2001	Orex	Ground HLEM.
1998	31M04SE2004	Orex	IP.
2001	31M04SE2011	Orex	Stripping, seven DDH – 581 m, assays.
2002	31M03NW2015	Tres Ore	Airborne magnetics interpretation.
2003	31M03SW2012	Rhonda	Airborne magnetics and EM.
2004	20000000464	Tres Ore	Airborne magnetics and EM.
2005	20000000273	Tres Ore	Airborne magnetics interpretation – predominantly south of south of but clips Cooper Property area.
2005	20000000442	Tres Ore	Geophysical, GIS and remote sensing compilation.



6.4 Significant Historic Mineral Resource and Mineral Reserve Estimates

There are no significant historical Mineral Resource and Mineral Reserve estimates applicable to Cobalt Project Properties and mineral occurrences.

6.5 Historic Mineral Production

6.5.1 Silverfield Property – Silverfields Mine Historic Production

At shutdown of the Silverfields Mine in June 1983, Teck reported a total production of 1,290,753 tonnes (1,422,812 tons) with 566,593 kg (18,216,523 oz) Ag recovered and an average head-grade 439 g/t (12.8 oz/ton) Ag. Guindon *et al.* (2016) reported total production from 1964 to 1983 at 1,200,035 tonnes (1,322,813 tons) with 553,447 kg (17,793,862 oz) Ag, 162,160 kg (357,501 lbs) Co, 223,737 kg (493,255 lbs) Ni and 108,360 kg (238,893 lbs) Cu recovered. Total cobalt production at the Silverfields Mine is probably uncertain because smelters often did not credit cobalt content of the ore shipped. In a site examination report dated 20 July 1981, Resident Geologist, Howard Lovell, referred to millheads at the Silver Summit Mill, where the Silverfields production was being processed, as 308.6 g/t (9 oz/ton) Ag, 0.12% Co, 0.76% Cu, 0.04% Ni, 0.04% Zn and 0.55% As. In addition, since silver was the targeted metal, if mineralization did not exceed the mine silver cut-off grade but contained significant cobalt, it may not have been mined since depending on where the concentrates were processed, Teck did not always receive payment for the Co. Cobalt grades in the veins at the Silverfields Mine are uncertain. In a site examination report dated 5 December 1978, Resident Geologist, Howard Lovell, referred to an ore grade of 1% Co when calculating potential losses from the non-payment for Co in the concentrates from Silverfields. However, in the same report while discussing a vein in the back of the level 3 drift, he describes a strong cobalt bloom unrepresentative of the cobalt content of the vein which he estimated to be less than 1%, perhaps 0.25%.

6.5.2 North Gillies Limit Property – Ophir Mine Historic Production

Guindon *et al.* (2016) reported Ophir Mine production of 2.2 kg (69 oz) Ag in 1921. Thomson (1961) reported that 2,282 tonnes (2,515 tons) of Co mineralization was extracted in 1954 from the Ophir Mine claim via underground development extending from the Mayfair workings on the property immediately to the south. Cobalt mineralization was generally restricted to the vein proper so the width of the stope was kept small, about 0.8 m (32 inches); the stope was approximately 18.3 m (60 ft) in height about 61 m (200 ft) long. Minor Ag and Bi was reported in the stoped material. Thomson (1961) reports that production statistics for Ag and Co from the Ophir claim were not available to him but states that production would appear to have been small and unprofitable.

Total historic silver and cobalt production from the Ophir Mine is uncertain, complicated by the fact that the Ophir claim was also accessed via shafts and underground development from the adjacent Mayfair and Silver Banner mine properties. Any production from Ophir hoisted at those shafts may have been attributed to their respective mines.

6.5.3 Lorrain Valley Property - Lang-Caswell Mine Historic Production

Guindon *et al.* (2016) reported minor production of 46.8 kg (1,503 oz) Ag and 2,237 kg (4,932 lbs) Co from the Lang-Caswell Mine in 1936.

7 Geological Setting and Mineralization

7.1 Regional Geology

The following summary is largely taken from Andrews *et al.* (1986), Smyk and Watkinson, (1990), Born and Hitch (1990), Guindon *et al.* (2016), and others.

The Cobalt area is underlain by Precambrian rocks of the Superior and Southern provinces. Outliers of Paleozoic strata are exposed immediately to the north in the Haileybury area and further to the north between New Liskeard and Englehart.

Archean Keewatin rocks are the oldest rocks in the Cobalt Silver Camp and form the southernmost portion of the Western Abitibi subprovince of the Superior Province. These rocks include predominantly massive and pillowed intermediate to mafic metavolcanic flows with intercalated pyroclastics and metasedimentary rocks, including cherty and sulphidic interflow sediments; felsic metavolcanic rocks are relatively rare. The Archean rocks were folded and intruded by mafic to ultramafic dikes and granite stocks and batholiths (Table 12).

The eroded Archean surface is unconformably overlain by relatively flat lying Paleoproterozoic sedimentary rocks of the Huronian Supergroup which forms the mildly deformed Cobalt Embayment of the Southern Province. The Supergroup comprises four individual shelf type sedimentary cycles. Each cycle consists of a lower sequence of conglomerate of probable glacial origin succeeded by mudstone, siltstone and coarse arenite; some chemical sediments are associated with the uppermost cycle (Cobalt Group). Southwest of Sudbury the Huronian Supergroup attains a thickness of 12 km and thins northward across the Cobalt Embayment due to wedging out of lower cycles, a thinning of clastic units and erosion within the sequence (Harron, 2008). At the northeast edge of the Cobalt Embayment in the Cobalt area (Figure 12), the Huronian Supergroup rocks comprise only the Cobalt Group (Gowganda and Lorrain Formations) and are commonly found filling interpreted paleo-valleys or troughs in the Archean basement (Table 12).

Early Proterozoic-age Nipissing Diabase, a suite of tholeiitic gabbroic intrusive rocks and differentiates, intrude both the Archean basement and the Huronian Supergroup sediments. The Nipissing Diabase are the most abundant and widespread igneous rocks intruding the Huronian sediments and occur as dykes, and sills up to several hundred metres thick uniformly distributed across the Cobalt Embayment. In the Cobalt area, the Nipissing Diabase is interpreted as a thick undulating sheet intruding the Cobalt Group sediments at or immediately above the Archean unconformity. Minor Middle Proterozoic diabase dikes intrude all the rocks (Table 12).

The grade of regional metamorphism in the area ranges from subgreenschist facies in the Huronian sedimentary rocks to greenschist facies in the Archean metavolcanic rocks (Born and Hitch, 1990). Contact metamorphism of sedimentary rocks of the Gowganda and Lorrain Formations occurred during the emplacement of Nipissing Diabase at around 2219 Ma, including chlorite-spotted alteration and feldspar clotting. Mineral assemblages in Nipissing Diabase rocks generally reflect greenschist metamorphism which probably occurred during the Penokean Orogeny at around 1900 Ma.

The Lake Timiskaming Structural Zone (graben) trends north-northwest from the Grenville Front and extends across the Cobalt Embayment well beyond the Cobalt/Kirkland Lake area. The axial portion of the graben is filled with flat lying Ordovician and Silurian sedimentary rocks that rest unconformably upon both Archean and Proterozoic terranes. Faulting affects these Paleozoic rocks.

Cretaceous to Jurassic age kimberlite intrusions occur within and proximal to the Lake Timiskaming Graben. Recent exploration indicates that some of the (20 or more) kimberlite intrusions are diamondiferous (Harron, 2008). Sage (1996) notes that kimberlites of the Cobalt-New Liskeard area are often spatially associated with northwest-trending Lake Timiskaming structures and oblique cross structures.

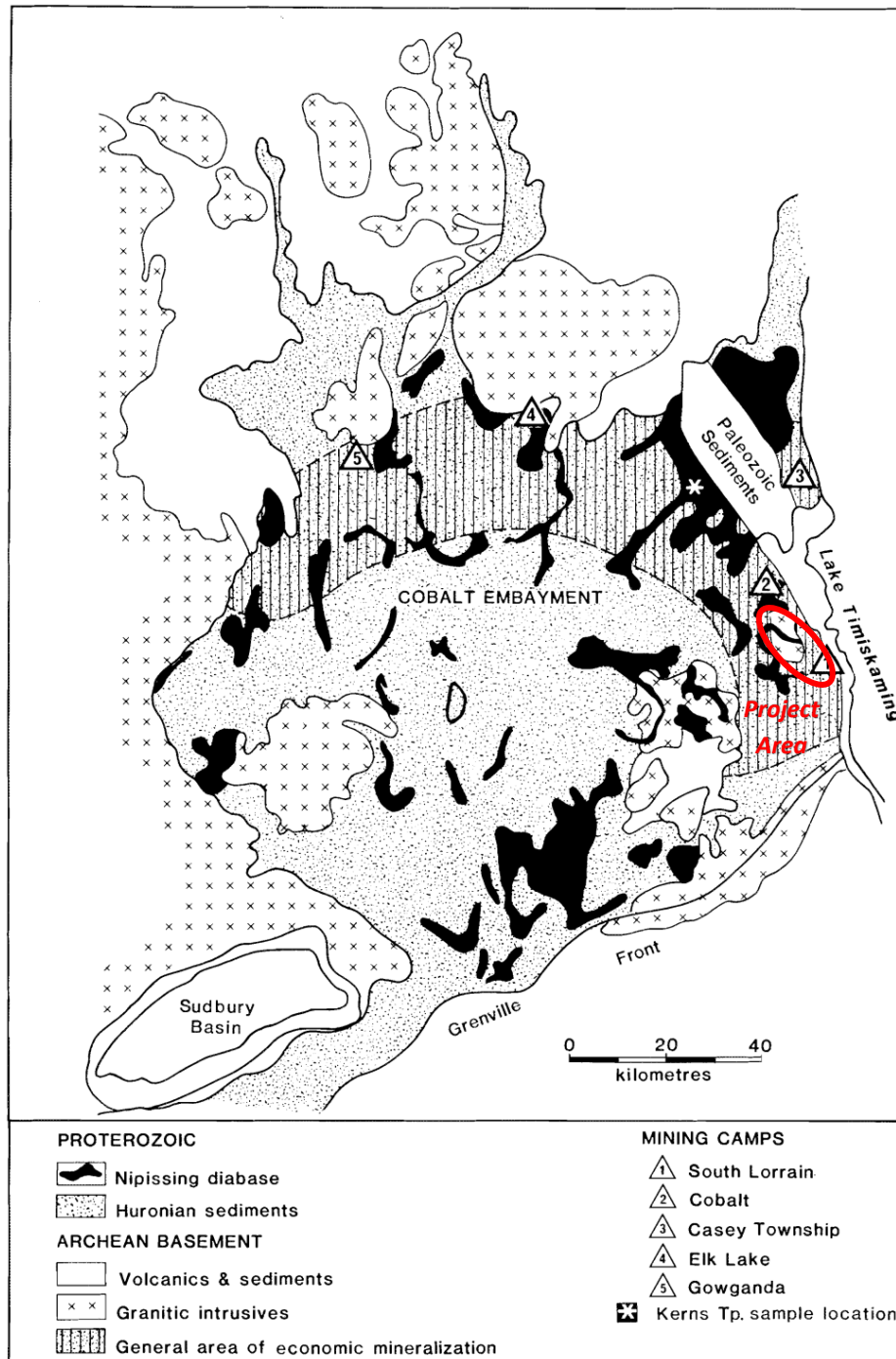


Figure 12: Simplified geology of the Cobalt Embayment

Source: Andrews *et al.*, 1986

Table 12: Lithologic units in the Cobalt Region

PHANEROZOIC**CENOZOIC****QUATERNARY****PLEISTOCENE AND RECENT***Sand, gravel, clay and swamp deposits***UNCONFORMITY****PRECAMBRIAN****MIDDLE PROTEROZOIC****Lamprophyre Dikes and Diatreme Breccia***Lamprophyre dikes, Lake Temagami-type diatreme breccia***Olivine Diabase Dikes (Sudbury Swarm)***Fine-grained (chilled), coarse-grained and plagioclase porphyritic olivine diabase***INTRUSIVE CONTACT****EARLY PROTEROZOIC****Mafic Intrusive Rocks****Nipissing Diabase***Gabbro, hypersthene gabbro, quartz gabbro, leucogabbro, varied textured gabbro, granophyre, sheared and/or hydrothermally altered gabbro***INTRUSIVE CONTACT****HURONIAN SUPERGROUP****Cobalt Group****Lorrain Formation***Arkose, shaly mudstone quartzite, contact metamorphic rocks***CONFORMABLE CONTACT****Gowganda Formation****Firstbrook Member***Siltstone, mudstone, arenite; contact metamorphic rocks; tectonically brecciated sediments***CONFORMABLE CONTACT****Coleman Member***Basal (regolithic) conglomerate; clast-supported, massive conglomerate; matrix-supported conglomerate; pebbly wacke and lesser arenite; shaly mudstone; sheared and tectonically brecciated sediments***UNCONFORMITY****ARCHEAN****Felsic to Intermediate Plutonic Rocks***Mafic diorite and minor quartz diorite; tonalite; granodiorite; granite***INTRUSIVE CONTACT****Metavolcanic Rocks****Intermediate to Felsic Metavolcanic Rocks***Dacite; rhyolite; lapilli-stone tuffs and pyroclastic flows***Mafic to Intermediate Metavolcanic Rocks***Amphibolite; basalt; pillowed basalt; plagioclase-phyric basalt; variolitic basalt; andesite; minor sedimentary and/or pyroclastic debris flows*

Source: Born and Hitch, 1990

7.2 Property Geology

7.2.1 *Silverfields Property Geology*

The Silverfields property is underlain by Nipissing Diabase, Huronian sedimentary rocks, and Keewatin rocks (Figure 13). The Nipissing Diabase is present as a sill-like body outcropping and subcropping over most, if not all, of the Property. The diabase is locally up to 80 m thick, forming the local topographic high on the property known as Diabase Mountain and overlies both Huronian Cobalt Group, Gowganda Formation, Coleman Member sedimentary rocks and Archean Keewatin volcanic rocks. The base of the sill dips approximately 7° south. The Coleman Member sediments occupy a northerly trending trough in underlying Keewatin rocks approximately 300 m in width approximately 20 m below the diabase, narrowing to less than 15 m width on the fifth level, 125 m below surface (Lovell and Gabrowski, 1981). The sediments are up to 65 m thick, and composed of a succession of gently dipping conglomerate and greywacke beds. The rocks in this succession are somewhat altered, with the type of alteration depending on the sediment composition and distance from the diabase. The alteration of the interbedded conglomerate takes the form of numerous chlorite spots, up to 1 inch in diameter, whereas the basal conglomerate contains bleached spots. The lower and middle greywackes are chloritized along layers and the upper greywacke directly below the diabase contains biotite. The Keewatin rocks consist of mafic to intermediate lava with interflow sedimentary layers of chert, tuff and agglomerate. These rocks strike northwest and have nearly vertical dips

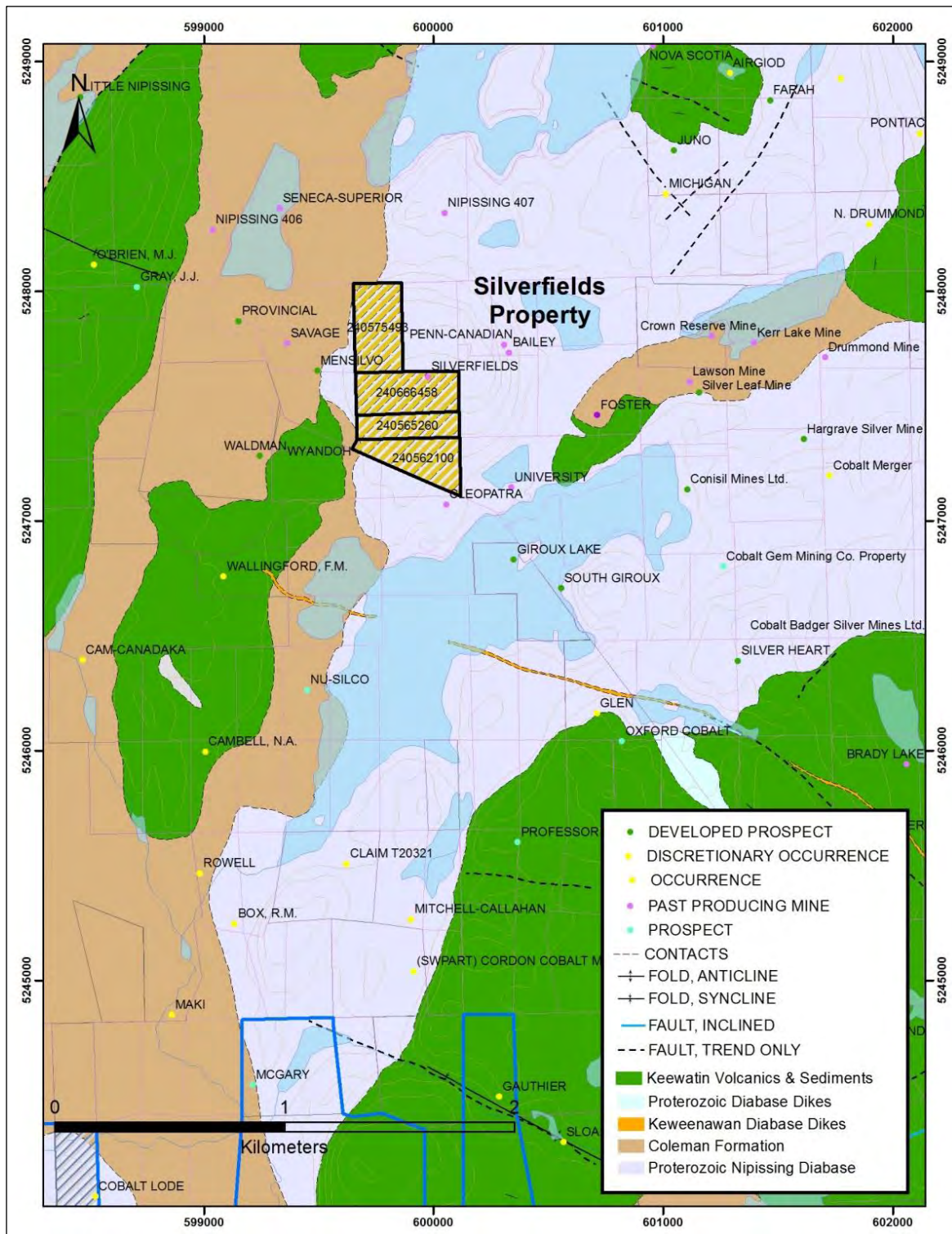


Figure 13: Cobalt Project – Silverfields Property geology

7.2.2 North Gillies Limit Property Geology

An extensive area of Keewatin metavolcanics informally referred to as the New Lake Diabase Basin extends into the northern portions of the Property (Figure 14). A second area of metavolcanics occurs along the east central portion of the Property on the west flank of the Lorrain Granite Batholith. The metavolcanics are mafic to intermediate, commonly pillowed with some flow breccia. Minor interflow chert and tuff bands (usually less than 15 m thick) are present. The metavolcanic rocks in the east-central part of the Property commonly strike north of west (Thomson, 1961)

The east part of the Property overlies the western flank of the Algoman Lorrain Granite Batholith. The granite is coarse, even-grained and massive. The batholith contact appears to be relatively sharp and the adjacent Keewatin rocks do not exhibit significant alteration (Thomson, 1961). The dip of the contact is uncertain; it is interpreted to generally be steep but locally shallow dips are noted. The contact of the Keewatin over the Lorrain Granite has a westward dip of less than 20° in the area of the Fleming occurrence.

Cobalt Group, Gowganda Formation sediments are exposed at surface in three areas of the Property:

1. In the north part, near Barth Lake within the Property and New Lake to the north of the Property Coleman Member conglomerate (estimated by Thomson (1961) to be less than 23 m thick) occurs as an erosional remnant resting on Keewatin which in turn rests on Nipissing diabase of the New Lake basin.
2. Along the western side of the Property. This area is covered by a sand plain and has limited outcrop exposure. Thomson (1961) suggests that the thickness of Coleman Member sediments overlying the metavolcanic basement varies from 30 m to 60 m in the north to possibly 275 m further south. Coleman conglomerates are exposed at surface in the north and are overlain by greywackes to the south. The sediments are flanked by Nipissing Diabase but Thomson interpreted the sediments not to be underlain by Nipissing Diabase. The elongate distribution of these Coleman sediments particularly in the north part of the Property between two Archean metavolcanic areas is suggestive of a pre-Huronian topographic depression subsequently filled with Cobalt Group sediments; and
3. In the southeastern part of the Property on the Gillies Limit-Lorrain township boundary north and northwest of Pine Lake, Coleman Member conglomerate and greywacke sediments and Lorrain Formation arkose overlie the Archean Keewatin metavolcanics and Algoman Lorrain Granite (Born and Hitch, 1990).

Historic diamond drilling at the Fairfax occurrence has confirmed the presence of Coleman Member sediments overlying Archean metavolcanics beneath the Nipissing Diabase arch at Schumann Lake. The vertical depths of the Nipissing Diabase over the Cobalt Group contact varied from 112 m to 143 m and the vertical thicknesses of the sediments varied from 11 m to 52 m (Thomson, 1961). The areal extent of the Coleman greywackes and conglomerates beneath the diabase is uncertain.

A Nipissing Diabase sheet dipping east beneath Gowganda Formation sediments, Algoman granite and Keewatin metavolcanics occurs in the southern part of the Property. Moving north, the sill rotates into the N60E trending Schumann Lake arch and the subparallel New Lake Basin underlying metavolcanics at the north end of the Property. The western contact of this sill with Coleman sediments is poorly understood because of the lack of outcrop. It is interpreted to be steeply dipping and may reflect a post-Huronian fault structure controlling the emplacement of the diabase in this area. A second interpreted sill lies on the western most side of the northern part of the Property.

Archean metavolcanic rocks have a southeast-trending foliation. Orientation of the foliation fabric is generally near vertical. Pillow younging directions in mafic metavolcanics indicate consistent top directions



to the southwest. Local folding appears to be minor. The volcanic sequence thus appears to be a steeply dipping monoclinial sequence facing to the southwest (Born and Hitch, 1990). Gowganda and Lorrain Formations sedimentary rocks are generally undeformed with local gentle flexure folding developed during the Penokean Orogeny. Faulting and subsequent tilting may have also caused changes in the strike and dip of the Huronian strata. Several northeast- and northwest-trending shear and extensional fracture zones cut the Proterozoic Nipissing diabase. Vertical-oriented northwest and northeast joint sets are well developed in Nipissing diabase. A less prominent sub-horizontal set generally dips 5° to 10° in both the northeast and northwest directions with a similar trend to the vertical joint sets (Born and Hitch, 1990).

The most prominent fault in the Property area is the Montreal River fault which occurs immediately southwest of the Property, part of the northwest striking Lake Timiskaming Rift Valley (Lovell and Caine, 1970).

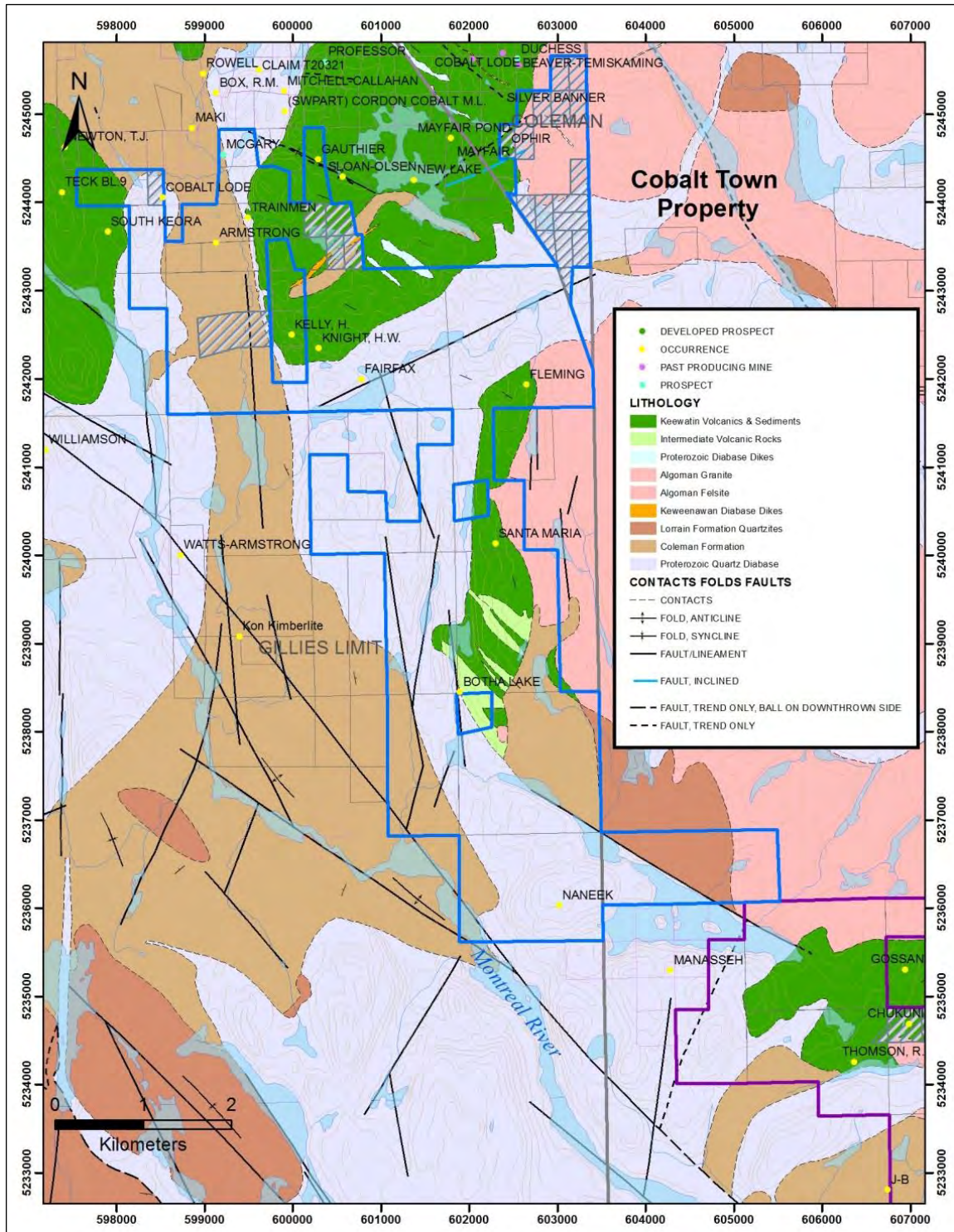


Figure 14: Cobalt Project – North Gillies Limit Property geology

7.2.3 *Lorrain Valley Property Geology*

A window of Archean Keewatin metavolcanics lies in the northwest part of the property and comprises massive to pillowed mafic and intermediate flows and pyroclastic rocks (Figure 15). The southern edge of the Algomian-age Lorrain Granite batholith occurs in the northern part of the Property.

Middle Precambrian sedimentary rocks of the Gowganda Formation (Coleman Member) and overlying Lorrain Formation unconformably overlie the Archean metavolcanic and granite intrusive basement. The Coleman Member is comprised of greywackes, siltstones and conglomerates. The Lorrain Formation is composed predominantly of arkoses (Lovell and de Grijns, 1978).

A Middle Precambrian Nipissing Diabase intrusive sill forms a basin in the southwestern part of the Property where it is overlain by Huronian sediments and minor Archean rocks.

The Archean metavolcanic rocks dip steeply, and are most schistose close to granitic intrusive rocks, where the schistosity is roughly parallel to the contacts. Huronian sediments are relatively flat-lying.

The most prominent faults in the Property area are those of the northwest-striking Lake Timiskaming Rift Valley (Lovell and Caine, 1970). These include the Montreal River and Cross Lake faults which occur immediately southwest and northeast of the Property

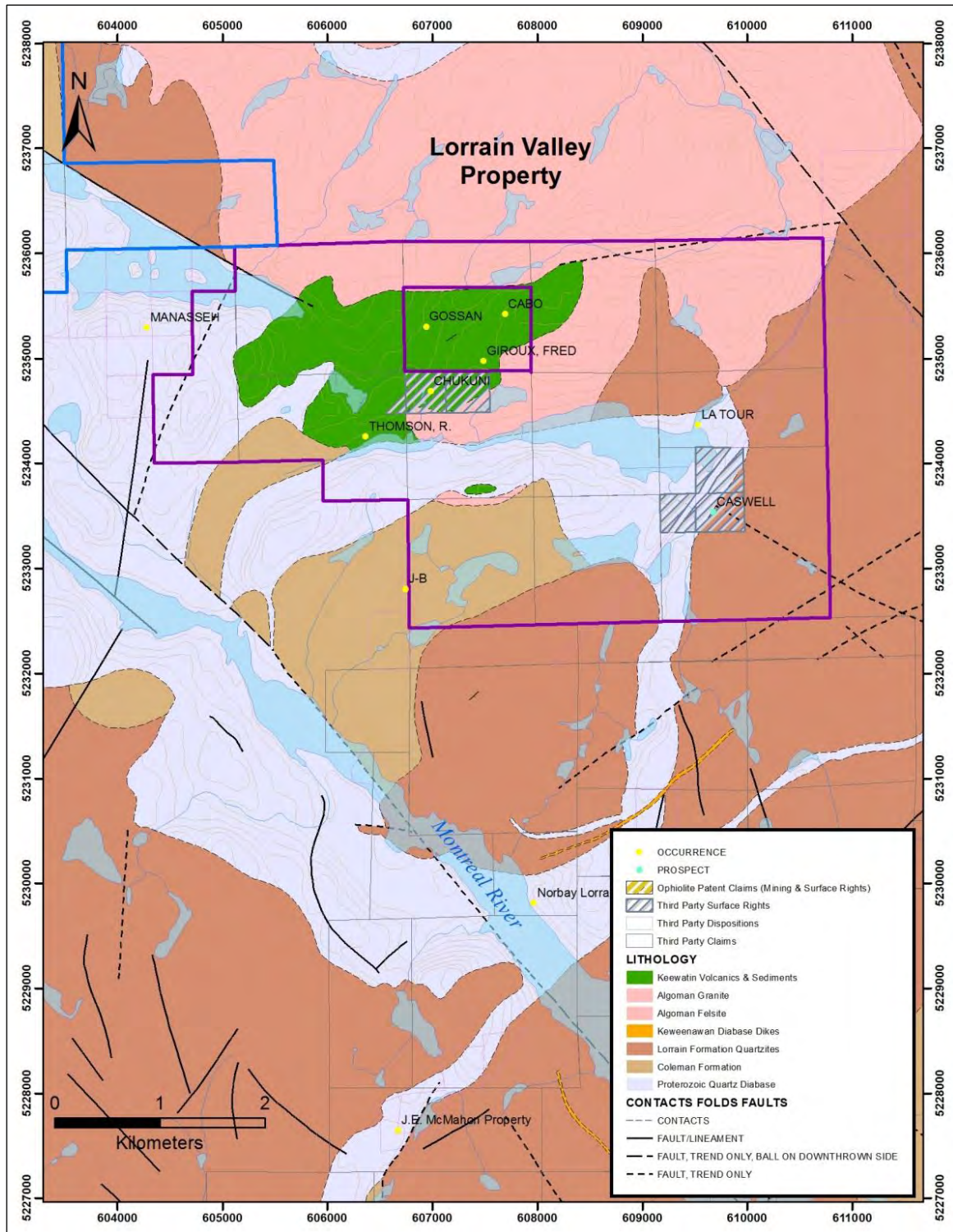


Figure 15: Cobalt Project – Lorrain Valley Property geology

7.2.4 *South Lorrain Property Geology*

The South Lorrain Property comprises basement Archean metavolcanics and associated intrusions cut by lamprophyre dikes and felsic intrusive rocks (Figure 16). Unconformably overlying these Archean rocks are the Huronian Cobalt Group sedimentary rocks. All of these older rocks are intruded by Nipissing Diabase.

In the Maidens Bay area, the northern claim group is underlain by fine-grained intermediate to mafic Archean metavolcanics with associated mafic intrusive rocks. Coarser grained facies or gabbroic flows may be intrusive in part but much of it is probably coarse-grained volcanic rocks. Schistosity is generally weak and pillows are rare. The few pillows observed indicate tops face slightly west of south (McIlwaine, 1970).

In the southern claim group, two narrow belts of metavolcanics are separated by overlying Cobalt Group sedimentary rocks. The northern of the two belts is mainly intermediate to mafic metavolcanics similar to those described above. Near Lake Timiskaming chlorite schist is present, a result of numerous faults in the area. The southern belt is characterized by several outcrops of felsic metavolcanics. Interbedded with the felsic metavolcanics are layers of quartzite. McIlwaine (1970) noted several outcrops of metagabbro which could be a coarse-grained flow. Both northern and southern belts lie above the Nipissing Diabase.

Early (Haileyburian) biotite lamprophyre and hornblende lamprophyre have been noted west of the property area (McIlwaine, 1970). The lamprophyre occurs as small dikes, some of which are thought to be nearly flat-lying. McIlwaine (1970) noted that west of the Property, the Keeley No. 16 vein follows a biotite lamprophyre dike for most of its length and other veins have been found in a similar environment, and the opinion has been expressed that the lamprophyre dikes take a part in localizing the silver-cobalt veins of the Silver Centre area (Kent, 1965).

An Algoman quartz monzonite outcrop area approximately 2 km by 1.5 km lies immediately north of the northern claim group.

A major erosional unconformity resulted in the development of basins and highlands on the surface of Archean metavolcanics and intrusives. In the Property area Huronian-age Gowganda Formation, Coleman Member sediments were deposited in the basins and remain relatively undeformed. The beds are generally close to flat-lying, except in the area of faults where they dip steeply (McIlwaine, 1970). Within the erosional window through the diabase dome the vertical thickness of the Coleman Member is interpreted to be between 55 m and 240 m based on historic drill logs (McIlwaine, 1970). McIlwaine (1970) suggests that the variation in thicknesses represents irregular basement topography on which the Coleman Formation was deposited, with the suggestion of a local trough trending east-northeast subparallel to the flanks of the diabase dome. South of the dome, McIlwaine (1970) estimated that the Coleman Formation might reach a maximum thickness of approximately 300 m based on bedding attitudes and topography. The rocks of the Coleman Member are a heterogeneous mixture of greywacke and quartzose siltstone, arkose, argillite, and conglomerate. Conglomerate pebbles, cobbles, and rare boulders are generally pink granitic rocks with minor white granite, "greenstone", and diabase. They are generally sub-angular to sub-rounded and range up to 15 cm to 20 cm in diameter.

McIlwaine (1970) considers the Nipissing Diabase in South Lorrain Township to be a single sheet, with numerous rolls, both major and minor. On the Property, the diabase is in the form of a dome, with the central part removed by erosion. The axis of the dome strikes north-northeast. This axis is subparallel to the margin of the interpreted basin of deposition of the Cobalt Group sedimentary rocks. The south flank of the dome dips steeply southeast, and the northwest and wider flank dips approximately 30° west. The north



contact of the northwest flank dips to the south and thus forms a minor basin within the dome. The diabase is typical a fine- to medium-grained, fresh to slightly altered rock.

Schistosity is most prominent in the Archean metavolcanics where it strikes within a few degrees of east with steep dips. The Coleman Member has well developed schistosity where it has been faulted (McIlwaine, 1970).

Numerous faults are present in the area with several periods of deformation postulated: the earliest faults are pre-ore, and most of this set strike north; there are possibly two ages of northwest-trending faults, pre- and post-olivine diabase intrusion; and finally a minor north-easterly trending set of faults, for which the evidence indicates that these are the youngest Precambrian faults in the area (McIlwaine, 1970).

On the basis of the Lake Timiskaming Fault, and several northwest-striking faults in the Cobalt area being post-Silurian in age it is suggested that some of the faults in South Lorrain Township are also post-Silurian and probably branches of the Lake Timiskaming Fault (McIlwaine, 1970).

The Bulldog fault passes through the Bulldog shaft and strikes N35-65W. The contact of the Coleman Member with the basement metavolcanics has been truncated and there is an apparent right-hand displacement of 120 m to 425 m. The northwest trending branch of the Maidens Lake Fault strikes N40W and can be traced about 8 km from Lake Timiskaming, through Maidens Lake and beyond. The contact of the Cobalt Group with the diabase has been offset, but in an irregular manner, southwest of the fault. Vertical movement is indicated; most of the evidence points to the northeast side down relative to the southwest. The northeast trending branch of the Maidens Lake Fault is indicated by a well-defined lineament. The difference in elevation of the lower contact of the diabase indicates the east side moved down about 150 feet relative to the west side. Two northwest-trending faults are located east of Maidens Lake. South of the diabase dome the Coleman Member-metavolcanic contact has been displaced approximately 200 m by both faults; the same is true for the lower, diabase-Coleman Member contact in the central part of the dome. Suggested vertical movement is southwest side down relative to the northeast side in both contacts (McIlwaine, 1970). Northwest trending Maidens Creek and Cross Lake faults pass through the Property's northern claim group.

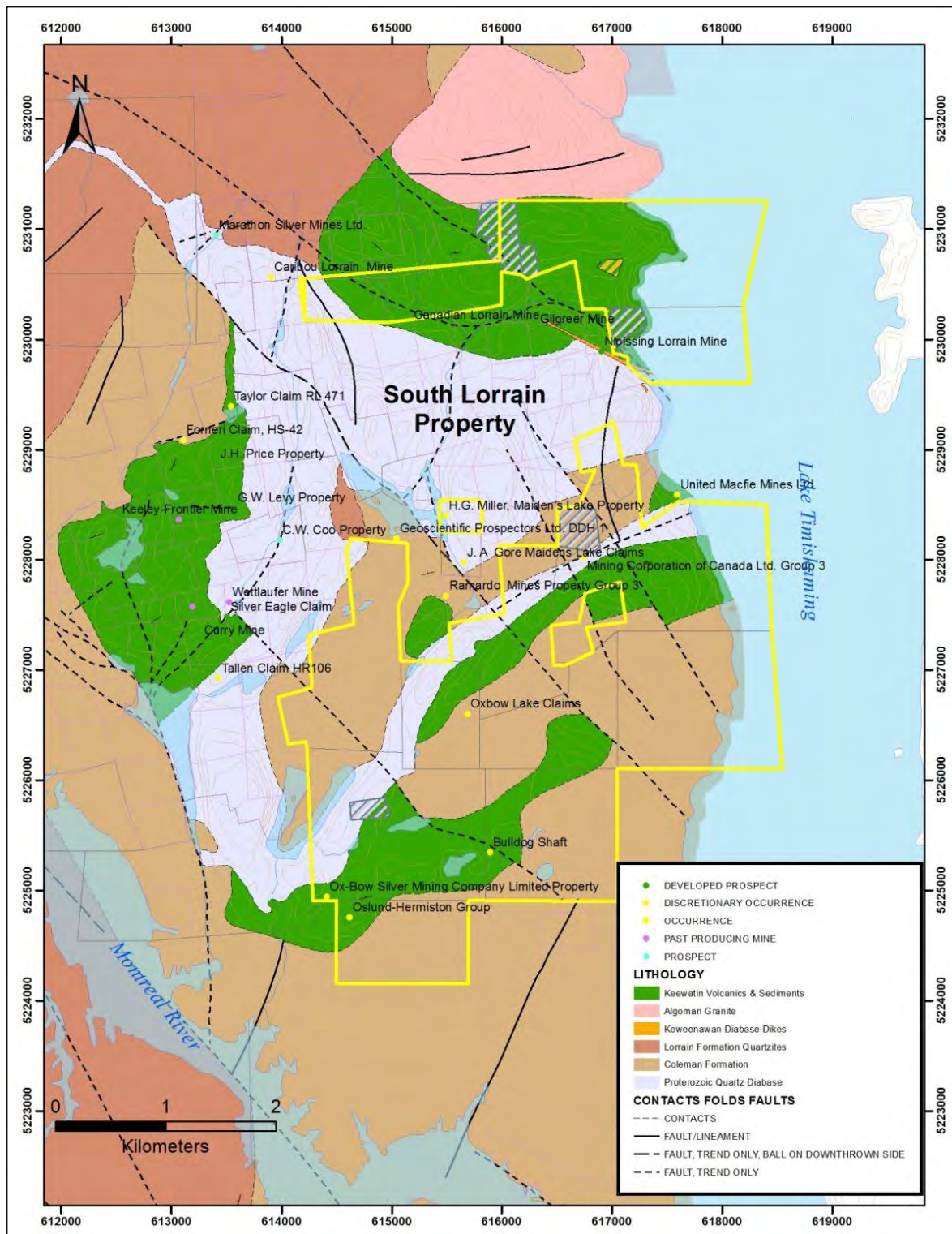


Figure 16: Cobalt Project – South Lorrain Property geology



7.2.5 *Cooper Lake Property*

The southern and eastern portion of the Cooper Lake Property is underlain by Archean (Algoman) granites. An area of Archean quartz diorite underlies the northwest part of the Property (Figure 17). Gowganda Formation Coleman Member sediments are in unconformable contact with the Archean intrusives in the northwest part of the property. Nipissing Diabase trends northeast across the western half of the Property and is in contact with Huronian sediments and Archean quartz diorite to the northwest and Archean granite to the southwest (Figure 17).

The Cooper Lake fault trends northwest across the eastern part of the Property and is considered part of the northwest striking Lake Timiskaming Rift Valley. Several late Precambrian (Keweenawan) mafic intrusive dikes also trend northwest in the vicinity of the Property. Northeast trending faults are also noted flanking the Property. The Grenville Front is located several kilometres south of the Property.

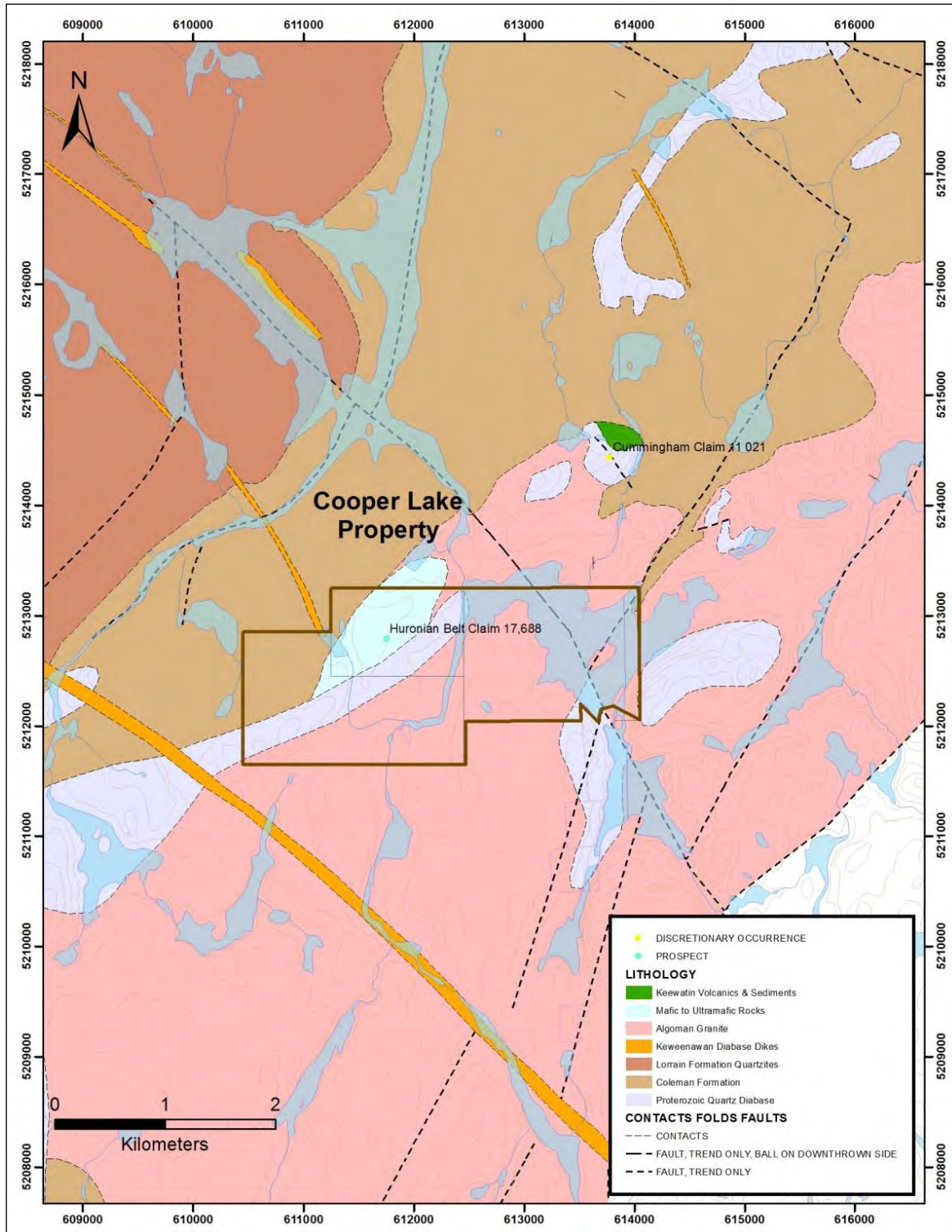


Figure 17: Cobalt Project – Cooper Lake Property geology

7.3 Significant Mineralized Zones on the Cobalt Project

7.3.1 *Silverfields Property*

The following description of the Silverfields deposit mineralization is taken from Petruk, 1971a. The historically mined Silverfields deposit comprised principal veins, cross-veins, masses of mineralized Keewatin interflow rocks, and disseminated minerals in the Coleman Member. Only the principal veins contained silver mineralization of economic interest and they occur primarily in the Coleman Member.

The principal veins are steeply dipping to vertical, and they vary from approximately 50 feet to 900 feet in length, 50 feet to 200 feet in vertical extent and up to 8 inches in width. In some places, they pinch out for several feet; in other places, they horse-tail out and may or may not continue. They vary from single veins to multiple veins composed of several branches and containing elongated inclusions of chloritized wall rock.

The principal veins consist of carbonates, arsenides, native silver, and sulphides. Dolomite is the main gangue constituent in the veins with some calcite present as inclusions in dolomite and as narrow veinlets at the edges of the veins. Small amounts of siderite are also present.

Arsenides and native silver are the principal metal-bearing minerals in the principal veins. The arsenides, including nickel, cobalt, and iron varieties, occur as masses and disseminated grains in the carbonate minerals. Some masses extend across the entire widths of the veins, others are present as irregular bodies in the centers of the veins, and still others occur at the edges of the veins. The distribution of the arsenides is similar in each vein, the sequence from top to bottom (moving away from the diabase-Coleman Member contact) being nickel, cobalt and then iron. The veins are, therefore, zoned, and the zones classified as (1) Ni-As, (2) Ni-Co-As, (3) Co-As, (4) Co-Fe-As, and (5) Fe-As.

Native silver occurs throughout the mineralized parts of the principal veins, and in many places is present in sufficient quantities to produce a high-grade silver ore. Highest grade silver mineralization is in the Ni-Co-As zone, intermediate-grade silver mineralization is in the Ni-As and Co-As zones, and the lowest grade silver is in Fe-As and Co-Fe-As zones.

A number of low-angle and a few nearly vertical, cross-veins are present in late faults that offset the principal veins by several feet. They vary from a fraction of an inch to 1 foot in width and consist of calcite, brecciated wall-rock, and a sulphide assemblage that is quite similar, both in mineralogy and in texture, to the sulphides in the narrow calcite veins discussed in the principal veins. Marcasite generally has a colloform texture, and contains inclusions of sphalerite, chalcopyrite and pyrite. Galena contains inclusions of all the sulphide minerals, and some galena is present as a coating on sphalerite, chalcopyrite and pyrite. Chalcopyrite is intergrown with sphalerite and contains inclusions of pyrite. Pyrite occurs both as crystalline and as fine-grained porous aggregates.

Layers of Keewatin interflow rocks are exposed in the fourth and fifth levels where the principal veins extend into them at the west end of the deposit. These layers vary from several feet to several tens of feet in width, and are at an angle to the ore veins. They consist of tuff, chert and agglomerate and contain disseminated grains of sulphides and graphite. The quantity of sulphides varies from a few disseminated grains to nearly massive sulphides which are present as layers, up to 6 inches wide, and as irregular bodies up to 1 foot in size. Some of the sulphide layers and bodies consist of complex mixtures of sulphide minerals, but others are nearly mono-minerallic. The minerals present are sphalerite, galena, chalcopyrite, pyrite, pyrrhotite and arsenopyrite. The pyrrhotite contains a few inclusions of marcasite and a few flame-like bodies that have the appearance of pentlandite. The sphalerite contains globules of chalcopyrite and pyrrhotite.

Mineralization in the Coleman Member occurs as disseminated grains, films along fractures surfaces and pebbles in conglomerate and includes chalcopyrite, pyrite, pyrrhotite, galena, sphalerite, arsenopyrite, affiorite, cobaltite, native silver, freibergite, chalcocite, rutile, wolframite and molybdenite. The arsenopyrite, affiorite, native silver, wolframite, and molybdenite were found only near mineralized principal veins, whereas the other sulphides were found throughout the conglomerate. The quantity of sulphides and particularly chalcopyrite appears to increase towards the principal veins, but seldom exceeds about 0.5% of the rock. The disseminated grains vary from 1 micron to several millimeters in size, and generally replace chlorite grains and chlorite spots in the sedimentary rocks. The native silver in the Coleman Member sedimentary rocks is present as minute disseminated grains in the rock, and as films along fracture planes. The disseminated grains in the rock occur near principal veins. A few pebbles of massive sulphides are present in conglomerate toward the eastern ends of the principal veins. These pebbles are up to 2 inches in diameter, and have sharp to gradational boundaries with the surrounding rocks. They are generally composed of chalcopyrite, pyrrhotite, pyrite, sphalerite, arsenopyrite, galena, and freibergite.

7.3.2 North Gillies Limit Property

Historic mineralized occurrences within the North Gillies Limit Property are minor and generally poorly documented. Most occurrences would have been developed on thin outcropping quartz and or calcite veins which may or may not have contained sulphides or other indications of mineralization such as erythrite (cobalt bloom). Potential length, width, depth, and continuity of the mineralization at the various occurrences (Table 8) are generally unknown.

Resident Geologist's file CO-0734 documents a series of veins numbered 1 to 6 on the Ophir claim. The veins have north to northwest strikes, steep dips and vary from 7.5 cm to 61 cm thick. The vein #1 structure appears to be most continuous extending at least 335 m north-south and with vein widths of 7.5 cm to 10 cm. During CSA Global's site visit, the Author noted two 1 cm to 3 cm thick quartz-calcite veins in a 40 cm wide structure hosted by Keewatin mafic metavolcanics at the #1 Shaft at the north end of the #1 vein (Photo 2). The vein structure is traceable south through pillowed mafic metavolcanic outcrops to the #2 Shaft area. The nature of the mineralization within the veins is undocumented. Guindon *et al.* (2016) reported Ophir Mine production of 69 oz Ag in 1921 and Thomson (1961) reported that 2,515 tons of Co mineralization was extracted in 1954. The Co mineralization was generally restricted to the vein proper so the width of the stope was kept small, about 32 inches; the stope was approximately 60 feet in height and about 200 feet long. Minor Ag and Bi was reported in the stoped material. One very small Ag-rich pocket (some 4,000 oz/ton) was found on the 500 ft level of Vein #1 but the vein was not workable for either its Ag or Co content.

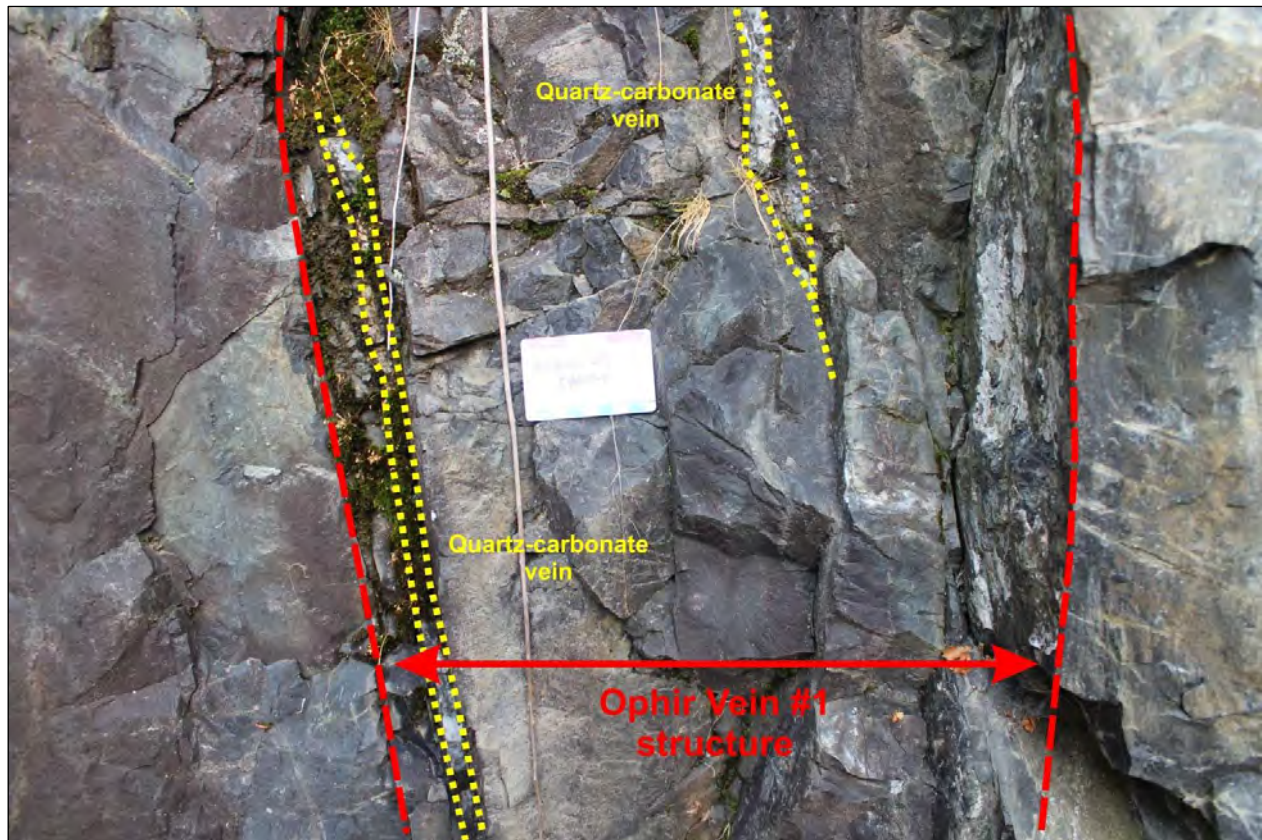


Photo 2: #1 Vein structure in north wall of the Ophir Mine #1 Shaft hosting 1 cm to 3 cm quartz calcite veins (UTM 602447E 5244742N)

7.3.3 Lorrain Valley Property

Historic mineralized occurrences within the Lorrain Valley Property are minor and generally poorly documented. Most occurrences would have been developed on thin outcropping quartz and or calcite veins which may or may not have contained sulphides or other indications of mineralization such as erythrite (cobalt bloom). Potential length, width, depth, and continuity of the mineralization at the various occurrences (Table 9) are generally unknown.

Mineral occurrences located to date within the Property are hosted by Nipissing Diabase and Keewatin metavolcanics, including the Lang-Caswell mine southeast of Latour Lake. Minor production of 46,700 g (1,503 oz) Ag and 2,237 kg (4,932 lb) Co was reported for 1936 in OGS publications MRC 10. Pyrite, pyrrhotite and minor chalcopryrite reported in drill core and one drillhole is reported to have intersected Co arsenides.

7.3.4 South Lorrain Property

Historic mineralized occurrences within the South Lorrain Property are minor and generally poorly documented. Most occurrences would have been developed on thin outcropping quartz and or calcite veins which may or may not have contained sulphides or other indications of mineralization such as erythrite (cobalt bloom). Potential length, width, depth, and continuity of the mineralization at the various

occurrences (Table 10) are generally unknown. The property was also locally investigated for its volcanic-hosted massive sulphide exploration potential.

Mineral occurrences located to date within the Property are hosted by Nipissing Diabase and Keewatin metavolcanics.

7.3.5 *Cooper Lake Property*

The Ogistoh Mine shaft was put down on a Ag-Co-bearing vein at the contact between diorite and diabase. Mineralization occurs within a 3-inch wide vein of unspecified length which strikes N60W, as traced on the surface by a number of pits; a direction at approximate right angles to the diabase contact. Cobaltite, arsenopyrite, pyrite, and a Ni mineral were identified in the vein in one of these pits. The mineralization reportedly contains about 5% Co. A sample assayed by the ODM returned 10.2 oz/ton Ag and 0.05 oz/ton Au (\$1.10/ton Au at \$20.67/oz). An analysis of a mineral separate (partially separated from the quartz and calcite gangue) of the ODM sample returned: 21.48% insoluble, 10.90% Co, 2.34% Ni, 11.40% Fe, 25.42% As and 10.45% S (MDI31M04SE00026). Beland (1913) reported that an assay of 92 oz/t Ag over 6 feet was obtained at one place in the shaft (McIlwaine, 1970). A grab sample collected by T. Miron in 1991 from the old dump site assayed 0.425% Cu, 0.794% Ni and 0.028 oz/t Au. Samples collected by D. Goddard in 1995 returned assays ranging from 110 ppm Co, 606 ppm Cu, 3130 ppm Ni to 701 ppm Co, 4720 ppm Cu, 10100 ppm Ni (MDI31M04SE00026).

A second and distinct mineral occurrence occurs within the quartz diorite as 0.5 m to 5.0 m wide zones are strongly Fe-stained due to weathering of disseminated to semi-massive massive (3% to 25%) pyrrhotite, pyrite and chalcopyrite. Of these zones, a strongly mineralized breccia zone trending N35E in the quartz diorite is exposed for approximately 80 m with widths to 5.0 m. A 1.5-m wide lens in the centre of the zone contains about 25% sulphides made up of 15% pyrrhotite and pyrite and 10% chalcopyrite. Grab sample assays from the breccia zone returned Cu and Ni values ranging from 0.5% to 1.5%. A grab sample collected by the OGS from the sulphide-rich lens within the gabbro/diorite assayed 0.46% Cu and 0.89% Ni. A sample collected by N. Ruttan assayed 0.64% Cu. Anomalous gold assays of up to 1.5 g/t were reported to be associated with the sulphide rich breccia (Poloni, 2001).

Potential length, width, depth, and continuity of the mineralization at the occurrences are generally poorly understood or unknown.

8 Deposit Types

The Cobalt Camp is the type locality of arsenide Ag-Co vein deposits which are the exploration target at the Cobalt Project. The arsenide Ag-Co vein deposit type is also referred to as the Five-Element (Ni-Co-As-Ag-Bi) Vein (FEV) deposit type (Kissin, 1993). The following descriptions of the arsenide silver-cobalt vein deposit model (Sections 8.1 and 8.2) are extracted and modified from Ruzicka and Thorpe (1996).

8.1 Physical Model – Arsenide Ag-Co Vein Deposits

Arsenide silver-cobalt vein deposits are localized in areas affected by basinal subsidence and rifting and are spatially related to regional fault systems and closely associated with intrusions of mafic rocks. The arsenide Ag-Co vein deposits in the Cobalt Camp are associated with Aphebian conglomerate, quartzite, and greywacke rocks of the Cobalt Group (Coleman Member of the Gowganda Formation), as well as with major sill-like bodies of Nipissing Diabase and with Archean mafic and intermediate lavas and intercalated pyroclastic and sedimentary rocks (Figure 18).

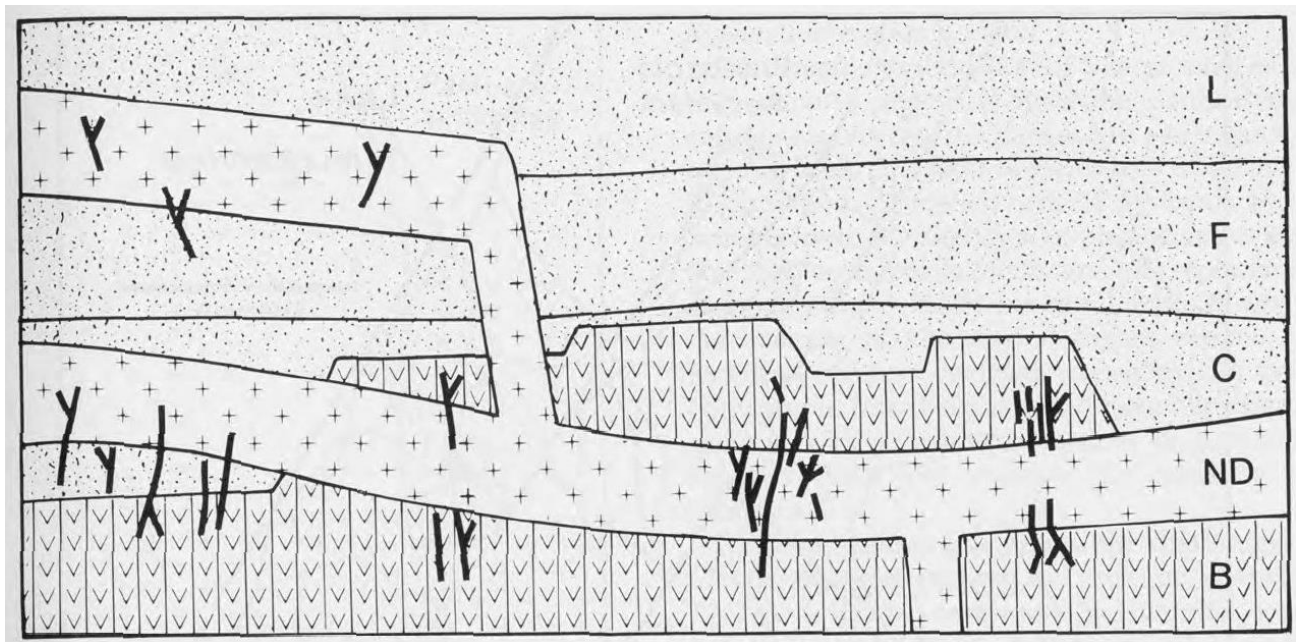


Figure 18: Simplified geological schematic section showing relationship between major lithological units and distribution of arsenide silver-cobalt vein systems (black lines)

Note: Huronian sediments include the Lorrain Formation (L), and the Gowganda Formation's Firstbrook Member (F) and Coleman Member (C). Archean basement rock (B) are steeply dipping metavolcanic sequences. All units are intruded by Nipissing diabase (ND).

Source: Andrews *et al.*, 1986.

The deposits in the Cobalt Camp contain three principal mineral assemblages: (i) a relatively minor base metal sulphide assemblage, which is confined to Archean metasedimentary and metavolcanic rocks; (ii) the arsenide Ag-Co assemblage, which occurs prevalently at and near the contacts between the Nipissing Diabase and the sedimentary rocks of the Cobalt Group, and is present to a lesser extent along contacts

between the diabase and the Archean rocks; and (iii) a late stage sulphide assemblage, which is in part distributed along the margins of arsenide-rich veins, where these have apparently been reopened.

The age of the arsenide Ag-Co veins has been established from geological evidence and from dating of the associated diabase sheets. In the Cobalt area, the arsenide Ag-Co veins cut the Nipissing Diabase, but are displaced by post-mineralization reverse faults, which are contemporaneous with the intrusion of the quartz diabase dykes. Therefore, the deposition of the mineralization must have taken place after intrusion of the Nipissing Diabase sills, but before intrusion of the quartz diabase dykes, i.e. between 2.22 Ga and 1.45 Ga. The bulk of the mineralization apparently formed shortly after intrusion of the Nipissing Diabase sheets, which took place about 2.22 Ga (Jambor, 1971a; Corfu and Andrews, 1986).

Distribution of the Ag-Co veins in the Cobalt Camp is controlled by the contact between the Nipissing diabase sheets and the rocks of the Cobalt Group (Gowganda Formation) and to a lesser extent the Archean metavolcanic and metasedimentary rocks. The veins occur in the diabase and in the Aphebian and Archean rocks within about 200 m of their contact with the diabase. They dip steeply, extend horizontally as much as 1,000 m and vertically as much as 120 m, and are as wide as 1.2 m. A typical deposit consists of a few short anastomosing veins of variable thickness from a few centimetres to two or three decimetres.

The metallic minerals occur in irregular high grade lenses surrounded by aureoles of low grade material. Arsenides, sulpharsenides, and antimonides of Ni, Co, and Fe as well as native Ag, are the principal metallic constituents of the veins. The mineralized veins in the Cobalt area contain native Ag, dyscrasite, acanthite, rammelsbergite, skutterudite, arsenopyrite, gersdorffite, cobaltite, glaucodot, nickeline, breithauptite, chalcopyrite, tetrahedrite, and native Bi. Native Ag and the Co-Ni arsenides are the most abundant metallic minerals. Quartz, chlorite, calcite, and dolomite are the most common gangue minerals (Lang *et al.*, 1970; Petruk *et al.*, 1971a, b, c, d; Jambor, 1971c).

The metallic minerals occur in masses, lenses, veinlets, and disseminations with or without associated gangue minerals and in various textural forms, such as intergrowths, disseminations, dendrites, rosettes, and monocrystals. They are present in distinct mineral assemblages, such as Ni-arsenide, Ni-Co-arsenide, Co-arsenide, Co-Fe-arsenide, Fe-arsenide, sulphide, and oxide (Petruk, 1971), with the following features:

- The Ni-arsenide assemblage is localized in many cases at the periphery of major veins, but also occurs in various places in small veins.
- The nickel-cobalt arsenide assemblage occupies a transitional position between the Ni-arsenide and Co-arsenide assemblages. Much of the best Ag mineralization is associated with this assemblage.
- The Co-arsenide assemblage occurs generally in the main parts of the veins.
- The Co-Fe-arsenide assemblage is less common than the preceding ones.
- Minerals of the Fe-arsenide assemblage tend to be concentrated at the ends of the veins. They are commonly accompanied by native Bi, galena, and marcasite.
- The sulphide assemblages typically contain chalcopyrite and tetrahedrite, although more than thirty sulphide minerals have been reported (Petruk, 1971). They occur in some of the main carbonate veins, usually in the peripheral portions of highly mineralized sections.
- Oxide minerals, hematite, magnetite, rutile, anatase, ilmenite, and wolframite, occur in the veins only in small amounts. They are typically associated with the carbonate gangue.

The host rocks of the deposits in the Cobalt Camp were affected by several phases of alteration. Intrusion of the diabase sheets was accompanied by contact metasomatic alteration of the country rocks and by deuteric alteration of the diabase itself. A specific kind of contact alteration is the spotted chloritic

alteration, which developed in the vicinity of the Nipissing Diabase prior to mineralization. It is characterized by the occurrence of chlorite-rich spots, which are surrounded by chlorite-deficient aureoles, and affected many of the rocks intruded by the diabase.

The most prominent alteration was, however, associated with formation of the mineralized veins. Its effects depended upon the composition of the rocks involved. For instance, the alteration of diabase resulted in: (i) replacement of pyroxene by actinolite and some chlorite; (ii) retrogression of plagioclase to muscovite, epidote, and albite; and (iii) replacement of ilmenite and magnetite by leucoxene and titanate (Andrews *et al.*, 1986). The hydrothermal wall rock alteration along the mineralized veins is developed in narrow zones, typically a few centimetres wide. The most distinct alteration zones are developed in the diabase and consist of two or three layers. The first (inner) layer, immediately adjacent to the veins, contains albite, chlorite, and anatase; the second layer has calcite, epidote, and small amounts of muscovite; and the third (outer) layer comprises increased amounts of muscovite (Jambor, 1971b; Andrews *et al.*, 1986).

8.2 Genetic Model – Arsenide Ag-Co Vein Deposits

The solutions that deposited Ag-arsenide ores were initially as hot as 400°C in some cases, although wide ranges of fluid inclusion temperatures (mostly 100° to 250°C) and salinities have been recorded (Franklin *et al.*, 1986; Kerrich *et al.*, 1986; Jennings, 1987; Kissin, 1988). The fluids may have been variable mixtures of basinal brines and meteoric waters. Kissin (1988) has suggested that the deposits were formed in an environment characterized by incipient rifting of continental crust.

In the case of the arsenide Ag-Co veins in the Cobalt area, genetic models have been postulated that involve derivation of the Ag, Ni, Co, As, Sb, Bi, Cu, and Hg either from the Archean sedimentary beds, with minor contributions from certain volcanic flows (Boyle and Dass, 1971), or, more recently, from the formational brines of the Archean carbonaceous, pyritic tuffs or their clastic derivatives in the Proterozoic sedimentary sequence (Watkinson, 1986). The latter hypothesis is supported by fluid inclusion and oxygen isotopic data. Watkinson (1986) inferred from the relatively homogeneous Pb isotopic ratios (Thorpe *et al.*, 1986) that the metalliferous brines had a long residence time in the sulphide-bearing rocks, but were released into tensional fractures upon intrusion of the Nipissing Diabase sills. The sudden release of pressure caused rapid precipitation of the mineralization in fractures at the diabase contacts (Watkinson, 1986). According to sulphur isotope studies, the mineralization took place under temperatures between 130°C and 254°C (Goodz *et al.*, 1986). The mineralization components, principally native Ag, As, and Co, were introduced into the fractures along with carbonate gangue by hydrothermal solutions of high pH and low Eh.

The reader is referred Kissin (1992, 1993) for a discussion of alternative genetic models for arsenide Ag-Co deposits.

8.3 Exploration Guides – Arsenide Ag-Co Vein Deposits

Selection of exploration targets areas for arsenide-silver-cobalt vein deposits should consider:

1. The contact between the Nipissing diabase sheets and the rocks of the Cobalt Group (Gowganda Formation) and to a lesser extent the Archean metavolcanic and metasedimentary rocks. Known veins occur in the diabase and in the Aphebian and Archean rocks within about 200 m of their contact with the diabase.
2. In addition to recognition of the prospective envelope relative to the Nipissing Diabase contact, previous workers have noted that many of the significant deposits hosted by the Coleman Member sediments are at or near the contact with the basement Archean rock (Nichols, 1988).

3. The occurrence of sulphide-bearing carbonaceous tuffaceous horizons (reductants) in the Archean and/or Proterozoic complexes located beneath diabase sills (Ruzicka and Thorpe, 1996).
4. Permeable rocks in the overlying sequence capable of yielding formational metalliferous brines (Ruzicka and Thorpe, 1996).
5. Presence of favourable structural features, which include broad dome-like arches of the base of a diabase sill and possible associated structural traps in the form of fracture systems favourable for deposition of metallic minerals from hydrothermal solutions (Ruzicka and Thorpe, 1996).
6. Recognition of Coleman Member sedimentary rocks in “basins or troughs” developed on the Archean paleotopography and the presence of proximal Nipissing diabase intrusions.
7. When targeting cobalt mineralization, bear in mind observed metal zonation in the arsenide-Ag-Co vein deposits. Historic mining generally targeted the Ag-rich portions of the veins, Co-rich zones if present may therefore have locally been left underexplored and undeveloped if the Ag grade did not meet cut-off grade.
8. Based on work in the main Cobalt Camp, Nichols (1988) noted sulphide enrichment of the Archean interflow sediments adjacent to high grade mineralized veins. Although a relationship between the quantity of sulphides and the quantity of Ag was not established, the relative amount of Cu, Pb and Zn sulphides increased with proximity to Ag mineralization in each interflow. Thus, as an exploration guideline, the relative amount of base metal sulphides, particularly chalcopyrite, in an interflow chert can be interpreted as an indication of proximity to a high-grade shoot.
9. Nichols (1988) also noted the strike of Archean volcanics appears to have a definite influence on Ag mineralization. Thus, the strike of volcanics should be determined very early in an exploration program. The remainder of the program should then test the ideal host rock environment for veins parallel or sub-parallel to the strike of the Archean basement rocks.
10. Hall (2016) highlights the importance of structure, noting that the ore-bearing veins tend to occur in Reidel type features in sinistral pull-apart basins as well as the main fault orientations. Hall (2016) noted that the stress field orientations vary over the Project area. For example, structural trends in the vicinity of large felsic intrusive bodies are different than elsewhere.
11. Hall (2016) noted that, based on historic reports, strong Co mineralization may be associated with proximity to Archean lamprophyres and gabbros, particularly in the South Lorrain area. Hall (2016) speculates that if true, they may act as either a chemical or a physical barrier in much the same way as has been postulated for the Nipissing Diabase sills.

In the Cobalt area, past surface-based exploration has relied largely on prospecting for mineralized fractures supported by overburden stripping and pitting programs.

In addition to prospecting methods, exploration of the Cobalt Project should consider the use of the following techniques and guides to identify the features controlling arsenide Ag-Co mineralization or the arsenide Ag-Co veins themselves:

- Airborne and ground based geophysical surveys including magnetic, electromagnetic and IP methods to map lithology and structure.
- Detailed geological mapping to map prospective lithology, alteration and structure.
- Quaternary geology mapping to aid in planning and interpretation of soil and overburden geochemical surveys. Sampling of the basal till for mineral exploration and tracing of mineralized float is most easily and efficiently accomplished in areas of ground moraine and follow-up exploration should be easier than in other glacial landforms, such as hummocky moraine.



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- Selective multi-element (Ni-Co-As-Ag) geochemical surveys including soils and basal till. Soil gas surveys may be useful. Contamination of the surface soils by previous mining activities may locally limit the utility of soil geochemical surveys.
 - Diamond drilling testing of any geological geophysical and geochemical targets should consider the 200 m vertical prospective envelope above and below the Nipissing diabase contacts with the Cobalt sediments and the Archean metavolcanics and metasediments. Targeting should also consider the evidence that many of the significant deposits hosted by the Coleman Member sediments are at or near the contact with the basement Archean rock.



9 Exploration

Equator and Ophiolite have conducted no exploration on the Cobalt Project to the effective date. Mineral exploration conducted by previous operators within the Project area is discussed in Section 6 (History).

10 Drilling

Equator and Ophiolite have conducted no drilling on the Cobalt Project to the effective date. Drilling conducted by previous operators within the Project area is discussed in Section 6 (History).

11 Sample Preparation, Analyses, and Security

Equator and Ophiolite have conducted no sampling on the Cobalt Project to the effective date. Detailed descriptions of sample preparation, analytical methods and security protocols and procedures utilized by previous operators for assay results disclosed in the History section were not available to the author. Furthermore, the author was unable to confirm certification of the assay labs nor their relationship to the previous operators for assay results disclosed in the History section.



12 Data Verification

The Author has reviewed available online historic third party exploration assessment reports, online mineral deposit inventory (MDI) files and various OGS geological publications pertinent to the current Project areas.

The Author completed a 1.5-day field visit at the Project on 24-25 November 2016. Ophiolite's project manager, Mr Gino Chitaroni accompanied and guided the Author during the field visit, providing valuable insight into the history of the Cobalt Camp and the current status of the Project areas. The author visited the Project's Silverfields property, portions of the North Gillies Limit Property including the historic Ophir mine site, and the South Lorrain Property. Additional areas outside and surrounding the Project were visited to further an understanding of the Cobalt Camp history and its exploration potential.

Equator and Ophiolite have not yet conducted exploration on the Project and as such the Author elected not to conduct any verification sampling at the time of the visit as there were no Company results to verify.

It is the Author's opinion that the historic information and data available to CSA Global are a reasonable and accurate representation of the Cobalt Project and are of sufficient quality to provide the basis for the conclusions and recommendations reached in this report.



13 Mineral Processing and Metallurgical Testing

As of the effective date of this report, no mineral processing or metallurgical testwork have been completed by Equator and Ophiolite for the Cobalt Project.

14 Mineral Resource Estimates

As of the date of this report, no significant mineral deposit has been found to date in the Cobalt Project areas and no Mineral Resources have been estimated.



15 Adjacent Properties

The Cobalt area has recently experienced an increase of staking activity and interest in the area's cobalt exploration potential both by the Issuer and third parties, however there are currently no significant exploration or development properties in the immediate area of the Properties.

16 Other Relevant Data and Information

No additional information or explanation is necessary to make the technical report understandable and not misleading.

17 Interpretation and Conclusions

The Cobalt Project lies within the historic Cobalt mining camp and its southern satellite, the Mine Center mining camp in the Lake Timiskaming area of Ontario. The Cobalt Camp is the type locality of arsenide Ag-Co vein deposits which are the exploration target at the Cobalt Project.

Arsenide Ag-Co vein deposits are localized in areas affected by basinal subsidence and rifting and are spatially related to regional fault systems and closely associated with intrusions of mafic rocks. The arsenide Ag-Co vein deposits in the Cobalt Camp are associated with Aphebian conglomerate, quartzite, and greywacke rocks of the Cobalt Group (Coleman Member of the Gowganda Formation), as well as with major sill-like bodies of Nipissing Diabase and with Archean mafic and intermediate lavas and intercalated pyroclastic and sedimentary rocks. Distribution of the Ag-Co veins in the Cobalt Camp is controlled by the contact between the Nipissing Diabase sills and the rocks of the Cobalt Group (Gowganda Formation) and to a lesser extent the Archean metavolcanic and metasedimentary rocks. The veins occur in the diabase and in the Aphebian and Archean rocks within about 200 m of their contact with the diabase.

The Properties are underlain by the rock types associated with the historic arsenide Ag-Co vein deposits elsewhere in the Camp, namely Archean (Keewatin) metavolcanics and metasediments, Proterozoic (Huronian) Cobalt Group sediments and Nipissing Diabase. Minor occurrences of quartz-carbonate veining with sporadic arsenide Ag-Co mineralization are present within the Properties. The historic Ophir, and Lang Caswell mines have reported minor production of Ag and Co from within the Properties. The relatively fewer number of arsenide Ag-Co vein occurrences in the Project areas compared to the main Cobalt Camp could be due to an unknown geological control but it may also in part be a reflection of masking overburden cover hindering prospecting efforts and the poor accessibility of the areas during the time period that the camp was most active in the first half of the 20th century. The Issuer intends to investigate modern geophysical methods to overcome the masking effect of the overburden cover.

The Cobalt Project's Silverfields Property stands out in that it hosts the Silverfields Mine which had significant production of Ag and Co. At shutdown of the mine in June 1983, Teck reported total production from 1964 to 1983 at 1,290,753 tonnes (1,422,812 tons) with 566,593 kg (18,216,523 oz) Ag recovered and an average head-grade 439 g/t (12.8 oz/ton) Ag. Guindon et al. (2016) reported total production from 1964 to 1983 at 1,200,035 tonnes (1,322,813 tons) with 553,447 kg (17,793,862 oz) Ag, 162,160 kg (357,501 lbs) Co, 223,737 kg (493,255 lbs) Ni and 108,360 kg (238,893 lbs) Cu recovered. The reason for the differences in Ag production quoted by Teck and Guindon is unknown to the Author. Total Co production at the Silverfields Mine is probably uncertain because smelters often did not credit Co content of the ore shipped. While the mine was shut down due to exhaustion of its Ag reserves, the zoned nature of the mineralization and the fact that Ag was the main target metal for production, may mean that some areas of low grade Ag mineralization that were not mined may have significant a significant Co content. The Silverfields Property was acquired to investigate this possibility. Cobalt grades in the veins at the Silverfields Mine are uncertain. In a site examination report dated 5 December 1978, Resident Geologist, Howard Lovell, referred to an ore grade of 1% Co when calculating potential losses from the non-payment for Co in the concentrates from Silverfields. However, in the same report while discussing a vein in the back of the level 3 drift, he describes a strong cobalt bloom unrepresentative of the cobalt content of the vein which he estimated to be less than 1%, perhaps 0.25%.



CSA Global concludes that the Cobalt Project has potential to host arsenide Ag-Co vein deposits and exploration is warranted. Previous historic surface based exploration has relied largely on prospecting for mineralized fractures supported by overburden stripping and pitting programs. In addition to prospecting methods, the Issuer should consider testing and using modern geophysical and geochemical techniques to identify features controlling arsenide Ag-Co mineralization or the arsenide Ag-Co veins themselves at the Cobalt Project. Given the relatively narrow widths of the historic veins mined in the Cobalt Camp, the Co +/- Ag target veins, if of similar width, will need to be high grade and preferably in vein sets suitable for modern mining methods.

18 Recommendations

CSA Global considers the Cobalt Project to be at an early stage of exploration and recommends a multifaceted exploration program to compile historic data and, in addition to prospecting and geological mapping, test and conduct modern geophysical and geochemical surveys to determine if they are suitable for arsenide Ag-Co vein deposits. A suggested Phase 1 exploration program would include:

Cobalt Project – general:

- GIS data compilation of available government data and historic assessment file data and information
- 3D geological and structural modelling in Leapfrog software
- Helicopter-borne magnetic and EM survey to map lithology and structure
- Independent interpretation of the airborne geophysical survey results
- Prospecting of historic occurrences and airborne survey targets
- Geological mapping to identify favourable host rocks and structures for arsenide silver-cobalt vein deposits
- Orientation geochemical surveys (MMI, basal till, soil gas) to determine best geochemical method for exploration of arsenide Ag-Co vein deposits
- Quaternary mapping in support of geochemical surveys
- Property scale geochemical surveys based on orientation survey results.

Ophir Mine area – North Gillies Limit Property:

- 3D underground geological and structural modelling
- Orientation geophysical surveys (IP, EM, magnetics) to determine best geophysical method(s) for exploration of arsenide Ag-Co vein deposits masked by overburden cover and at depth in bedrock.

Silverfields Mine area – Silverfields Property:

- Field location and documentation of abandoned mine hazards
- Detailed GIS compilation and 3D underground, geological and structural modelling.

A preliminary budget of C\$740,000 is proposed for the 2017 field season as detailed in Table 13.

Table 13: Recommended Phase 1 exploration program and budget

Task	Cost	Total
Cobalt Project – general		
GIS data compilation of available government data and historic assessment file data and information		\$50,000
3D geological and structural modelling		\$15,000
Helicopter-borne magnetic and EM survey	~\$90/line km	\$168,000
Independent airborne geophysical interpretation		\$10,000
Prospecting – all inclusive with interpretation		\$50,000
Geological mapping – all inclusive with interpretation		\$75,000
Orientation geochemical surveys (MMI, basal till, soil gas) – all inclusive with interpretation		\$20,000
Quaternary mapping in support of geochemical surveys		\$30,000
Property scale geochemical surveys based on orientation survey results – all inclusive with interpretation		\$150,000
	Subtotal	\$568,000
Ophir Mine area – North Gillies Limit Property		
3D geological and structural modelling		\$15,000
Orientation geophysical surveys (IP, EM, magnetics) – all inclusive with interpretation		\$20,000
	Subtotal	\$35,000
Silverfields Mine area – Silverfields Property		
Field location and documentation of abandoned mine hazards		\$10,000
Detailed GIS compilation and 3D underground, geological and structural modelling		\$30,000
	Subtotal	\$40,000
	TOTAL	\$643,000
	~15% contingency	\$97,000
	GRAND TOTAL	\$740,000

Contingent on results from the Phase 1 exploration work a Phase 2 diamond drill program may be warranted to initially test targets generated in the Phase 1 program. An all inclusive 2,000 m diamond drill program totalling C\$345,000 would be reasonable as tabled below:

Table 14: Recommended Phase 2 exploration program and budget

Task	Cost	Total
Cobalt Project - General		
All inclusive diamond drill program	2,000 m at \$150/m	\$300,000
	~15% contingency	\$45,000
	Grand Total	\$345,000

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Appendix 1: Establishing Mineral Rights in Ontario

Mining Claims

In Ontario, Crown lands are available, for the purposes of mineral exploration, to a person or entity that holds a prospector's licence from the Ministry of Northern Development and Mines (MNDM). The prospector must complete the Mining Act Awareness Program (MAAP) within 60 days before applying for a licence or a licence renewal. MAAP is an online program that provides basic information on the mining sequence. It includes information on staking claims, early exploration and Aboriginal consultation requirements.

A licensed prospector must first stake a mining claim to gain the exclusive right to prospect on Crown land. The owner of a mining claim is not granted title or ownership to the land and cannot extract or sell any resources removed from the land. Claim staking is governed by O. Reg. 43/11: Claim Staking and Recording under Mining Act, R.S.O. 1990, c. M.14 and is administered through the Provincial Mining Recorder and Mining Lands offices of the MNDM.

Claims are currently staked in Ontario by ground staking or in the case of southern Ontario only, map staking. Ontario is in the process of converting to an online system of claim registration using a cell-based provincial grid which will replace ground and map staking. At conversion, ALL active, unpatented claims would be converted from their legally defined location by claim posts on the ground or by township survey to the cell-based provincial grid. Following conversion, the claims would be legally defined by their cell on the grid and coordinate location in CLAIMaps. As of the effective date of this Report, the date of this conversion is undetermined. Legislation to enable the process of conversion, the Aggregate Resources and Mining Modernization Act (Bill 39), received second reading and was referred to the Standing Committee on Justice Policy on 15 November 2016 for review. Following planned public hearings in the first quarter of 2017 the committee will then review the Bill section by section and consider amendments. MNDM will keep clients informed as implementation processes are finalized.

Ground Staking

An unpatented mining claim is a square or rectangular area of open Crown land or Crown mineral rights that a licensed prospector marks out with a series of claim posts and blazed lines. Mining claims can be staked either in a single unit or in a block consisting of several single units. In un-surveyed territory, a single unit claim is laid out to form a 16 ha (40 acre) square with boundary lines running 400 m (1,320 feet) astronomic north, south, east and west. Multiples of single units, up to a maximum of 16 units (256 ha), may be staked with only a perimeter boundary as one block claim but must be staked in a square or rectangular configuration.

Each corner of the mining claim must be marked with a post. These posts are known as corner posts. Corner posts can be constructed from a standing tree, commercial timber or a loose post. They must stand 1.2 m above ground when erected. A metal tag, known as a claim corner post tag, must be affixed to each corner post. Claim corner post tags are engraved with a unique number, known as a claim number, which identifies the mining claim. They also have a second number, which indicates which corner post the tag is to be placed on. Tags may be purchased from the Provincial Recording Office or other offices, such as the Mining Land Consultant Office, or Service Ontario. A clearly marked line, known as a claim boundary, must be made between the four corner posts. Claim boundaries are usually marked by blazing trees and cutting underbrush with an axe. Piles of loose rock, known as cairns, or stakes cut from other smaller trees, known as pickets, are acceptable if trees are not available or undesirable to cut. A line post is used in conjunction

with a claim line to mark the perimeter of a mining claim. For unsurveyed areas, line posts must be erected at every 400 m along a claim line and at locations where the boundary changes direction. A metal tag, known as a claim line post tag, must be affixed to each line post. Claim line post tags are blank when purchased and must be engraved with the claim number found on the claim corner post tags along with the distance and direction from the last corner post.

Global Positioning System (GPS) georeferencing data must be included on the application to record a mining claim staked on or after 1 November 2012. This requirement only applies to ground staked mining claims on lands that are unsurveyed. It does not apply to land surveyed into lots and concession.

Upon completion of staking, and not later than 30 days after the day on which the staking was completed, a recording application form is filed with payment to the Provincial Recording Office. Staking completion time takes priority, meaning that if two licensees file applications to record the staking of all or part of the same lands, then the applicant with the earliest completion time will have priority. Where the time limited for any proceeding or for the completion of said proceeding in an office of a mining recorder or an office of the Commissioner or an office of the Minister or Deputy Minister expires or falls upon a day on which the relevant office is closed, the time so limited extends to and the recording may be done on the day next following the day on which the relevant office was closed. All claims are liable for inspection at any time by the Ministry and may be cancelled for irregularities or fraud in the staking process. Disputes of mining claims by third parties will not be accepted after one year of the recording date or after the first unit of assessment work has been filed and approved.

The staker must notify all persons who own surface rights to any part of the land located within the claim area that their land has been staked for the purpose of mineral exploration. A surface rights holder is a person who own rights to a piece of land which do not include the mineral rights. The staker must send proof of an attempt to notify surface rights holders to the Provincial Mining Recorder within 60 days after making the application to record the claim, in order for the mining claim to remain valid

A mining claim remains valid as long as the claim holder properly completes and files the assessment work as required by the Mining Act and the Minister approves the assessment work. A claim holder is not required to complete any assessment work within the first year of recording a mining claim. In order to keep an unpatented mining claim current, the mining claim holder must perform \$400 worth of approved assessment work per mining claim unit, per year; immediately following the initial staking date, the claim holder has two years to file one year worth of assessment work. No payments in lieu of work can be made. Claims are forfeited if the assessment work is not done.

A mining claim can be transferred, charged or mortgaged by the prospector without obtaining any consents. Notice of the change of owner of the mining claim or charge thereof should be filed with the MNDM at the district mining recorder's office.

Map Staking

Introduced in November 2012, map staking is only permitted in surveyed areas in Southern Ontario, provided there are no registered surface rights owners.

Map staking is the action of staking a mining claim using a map reference system, without having to physically be on the land. A map staked mining claim must have common boundaries with the section, lot or concession lines established by the original survey. It must provide a description of the claim with reference to the original survey fabric. A title search at the Land Registry Office may be required prior to map staking.

Mining Leases

A claimholder may prospect or carry out mineral exploration on the land under a mining claim. However, the land covered by these claims must be converted to leases before any development work or mining can be performed. Mining leases are issued for twenty-one year terms and may be renewed for further 21-year periods upon submission of an application to the MNDM within 90 days before the expiry date of the lease. Pursuant to the provisions of the Mining Act, the holder of a mining claim is entitled to a lease if it has complied with the provisions of the Act in respect of those lands. An application for a mining lease may be submitted to the MNDM at any time after the first prescribed unit of work in respect of the mining claim is performed and approved. Leases can be issued for surface and mining rights, mining rights only or surface rights only. Once issued, the lessee pays an annual rent to the province. Furthermore, prior to bringing a mine into production, the lessee must comply with all applicable federal and provincial legislation.

A mining lease cannot be transferred or mortgaged by the lessee without the prior written consent of the MNDM. The consent process generally takes between two and six weeks and requires the lessee to submit various documentation and pay a fee.

Freehold Mining Lands

A prospector interested in removing minerals from the ground may, instead of obtaining a mining lease, make an application to the Ministry of Natural Resources and Forestry (MNRF) to acquire the freehold interest in the subject lands. If the application is approved, the freehold interest is conveyed to the applicant by way of the issuance of a mining patent. A mining patent can include surface and mining rights or mining rights only.

The issuance of mining patents is much less common today than in the past, and most prospectors will obtain a mining lease in order to extract minerals. If a prospector is issued a mining patent, the mining patent vests in the patentee all of the provincial Crown's title to the subject lands and to all mines and minerals relating to such lands, unless something to the contrary is stated in the patent.

The holder of a mining patent enjoys the freehold interest in the lands that are the subject of such patent, therefore no consents are required for the patentee to transfer or mortgage those lands.



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Annexure D – CobalTech Technical Report Update

(attached as a separate document)



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October 23rd, 2017

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Dear Sirs:

Re: JORC Code Addendum – “NI 43-101 Technical Report on the Duncan Kerr Property, Larder Lake Mining Division, Northeastern Ontario” prepared for CobalTech Mining Inc. dated October 14th, 2016

This document has been prepared at the request of First Cobalt Corp. (**First Cobalt**). It is an addendum to the report titled “NI 43-101 Technical Report on the Duncan Kerr Property, Larder Lake Mining Division, Northeastern Ontario” prepared for CobalTech Mining Inc. (formerly named Big North Graphite Corp.) dated October 14th, 2016 (**Report**), a copy of which is annexed hereto.

Purpose of document

The geological information in the Report was prepared in accordance with National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* published by the Canadian Securities Administrators.

The information in this document has been prepared in accordance with the ‘Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves’ (2012 edition) published by the Australasian Joint Ore Reserves Committee (**JORC Code**) to ensure that reporting of geological information in the Report also complies with the JORC Code.

This document is filed in support of First Cobalt’s application for admission to the Australian Securities Exchange and its proposed Information Memorandum to be issued in or about October 2017 in relation to the same.

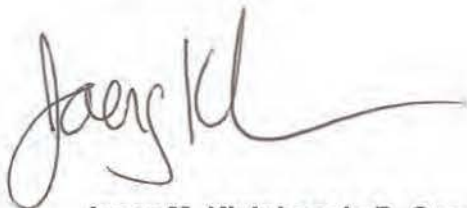


Competent Persons' Statement

The information in this document (including the Report) that relates to exploration results is based on information compiled by Messrs Joerg M. Kleinboeck (P.Geo) and Garry J. Clark (P.Geo), each being a Competent Person (as defined in the JORC Code) who is registered with the Association of Professional Geoscientists of Ontario (being a 'Recognised Professional Organisation' for the purposes of the ASX Listing Rules).

Messrs Kleinboeck and Clarke are both independent consulting geologists who have sufficient experience that is relevant to the style of mineralisation, the type of deposit under consideration and to the activity being undertaken to qualify as Competent Persons as defined in the JORC Code.

Yours faithfully,

A handwritten signature in dark ink, appearing to read 'Joerg M. Kleinboeck', with a long horizontal flourish extending to the right.

Joerg M. Kleinboeck, P. Geo.





Clark Exploration Consulting Inc.

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Email: giclarck@tbaytel.net

October 23, 2018

Competent Persons' Statement

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Yours
Truly,

J. Garry Clark, P.Geo.

JORC Table 1
Section 1 Sampling Techniques and Data
 (Criteria in this section apply to all succeeding sections.)

Criteria	Explanation	
Sampling techniques	<ul style="list-style-type: none"> Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information. 	<ul style="list-style-type: none"> The authors nor Big North Graphite Corp. (the Company, now known as CobalTech Mining Inc.) have completed sampling. Previous operators had completed grab samples of the historical stockpiles. No samples taken. Authors relied on sampling procedures from the previous operators. The 2012 diamond drilling program produced approximately 2.7 cm diameter core that was not sampled. Sample descriptions and methods are not provided in the Golder Report on the stockpiles.
Drilling techniques	<ul style="list-style-type: none"> Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc). 	<ul style="list-style-type: none"> 2012 drilling was diamond drilling (2.7cm core diameter).
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	<ul style="list-style-type: none"> 2012 core was logged and no samples were taken.
Logging	<ul style="list-style-type: none"> Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> No Mineral Resource estimation completed.

JORC Code, 2012

Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> • If core, whether cut or sawn and whether quarter, half or all core taken. • If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. • For all sample types, the nature, quality and appropriateness of the sample preparation technique. • Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. • Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. • Whether sample sizes are appropriate to the grain size of the material being sampled. 	<ul style="list-style-type: none"> • No core sampling completed by previous operator(s) or Big North Graphite Corp. on diamond drill core produced from the 2012 diamond drill program.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> • The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. • For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. • Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	<ul style="list-style-type: none"> • No assays/analysis completed on the drill core obtained in 2012.
Verification of sampling and assaying	<ul style="list-style-type: none"> • The verification of significant intersections by either independent or alternative company personnel. • The use of twinned holes. • Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. • Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> • No samples taken, therefore no verification completed.
Location of data points	<ul style="list-style-type: none"> • Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. • Specification of the grid system used. • Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> • Data points verified in field and from public documents. The authors concluded that the diamond drilling was not completed to industry standards, and should not be relied upon. • No resource calculations.
Data spacing and distribution	<ul style="list-style-type: none"> • Data spacing for reporting of Exploration Results. • Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. • Whether sample compositing has been applied. 	<ul style="list-style-type: none"> • Not applicable

Orientation of data in relation to geological structure	<ul style="list-style-type: none"> Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	<ul style="list-style-type: none"> Not determined.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Not applicable.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> Not applicable.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	Explanation	
Mineral tenement and land tenure status	<ul style="list-style-type: none"> Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	<ul style="list-style-type: none"> Section 4.2 of the report. No known issues to security of tenure.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Section 6 of the report.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> Section 7 and 7.2 of the report.
Drill hole Information	<ul style="list-style-type: none"> A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	<ul style="list-style-type: none"> Section 6 of the report.

JORC Code, 2012

<i>Data aggregation methods</i>	<ul style="list-style-type: none"> • In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. • Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. • The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<ul style="list-style-type: none"> • No data aggregation of drilling. Aggregation of the stockpiles completed in the Golder Report, not reviewed by this report.
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> • These relationships are particularly important in the reporting of Exploration Results. • If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. • If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). 	<ul style="list-style-type: none"> • Mineralization is described in situ but no resource. Stockpiles are piles of ground materials.
<i>Diagrams</i>	<ul style="list-style-type: none"> • Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. 	<ul style="list-style-type: none"> • 2012 drill holes locations illustrated in Figure 5
<i>Balanced reporting</i>	<ul style="list-style-type: none"> • Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. 	<ul style="list-style-type: none"> • Not applicable
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> • Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density; groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. 	<ul style="list-style-type: none"> • Not applicable
<i>Further work</i>	<ul style="list-style-type: none"> • The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). • Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	<ul style="list-style-type: none"> • Planned work described in Section 26.

Section 3 Estimation and Reporting of Mineral Resources
(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	Explanation	
Database integrity	<ul style="list-style-type: none"> Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. Data validation procedures used. 	<ul style="list-style-type: none"> Not applicable
Site visits	<ul style="list-style-type: none"> Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. 	<ul style="list-style-type: none"> Not applicable
Geological interpretation	<ul style="list-style-type: none"> Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology. 	<ul style="list-style-type: none"> Not applicable
Dimensions	<ul style="list-style-type: none"> The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource. 	<ul style="list-style-type: none"> Not applicable
Estimation and modelling techniques	<ul style="list-style-type: none"> The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions behind modelling of selective mining units. 	<ul style="list-style-type: none"> Not applicable

**Annexure – NI 43-101 Technical Report on the Duncan Kerr Property, Larder Lake
Mining Division, Northeastern Ontario**

(attached as a separate document)

NI 43-101 TECHNICAL REPORT
ON THE
DUNCAN KERR PROPERTY
LARDER LAKE MINING DIVISION, NORTHEASTERN ONTARIO
FOR
BIG NORTH GRAPHITE CORP.



Prepared by:

Joerg M. Kleinboeck, P.Geo.

Garry J. Clark, P.Geo.

October 14th, 2016

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Appendix I: Purchase Agreement

Appendix II: Agnico-Eagle Mines Ltd. Closure Plan

Appendix III: Title Documents

1. EXECUTIVE SUMMARY

At the request of Big North Graphite Corp. (“BNG”), the authors have completed a geological review of the Duncan Kerr Property (the “Property”) and prepared this technical report (the “Technical Report”) in compliance with NI 43-101, Companion Policy NI43-101CP, and Form 43-101F1.

The authors have prepared this report to provide a summary of scientific and technical data on the Property, including historical exploration activities, and have made recommendations concerning future exploration and development of the Property. This Technical Report is based on exploration and Property information supplied to the author by BNG, Trio Resources AG Inc. (“Trio”), as well as by the review of geological and exploration information available in the public domain. A site visit was completed by Joerg Kleinboeck on September 27th, 2016.

On October 13th, 2016, BNG acquired 100% ownership in two patented mining claims in Coleman Township, 1831NND and 3694NND along with equipment owned by Trio. The claims are located on property parcel PT E 1/2 of N 1/2, Lot 3, Con 4, and SW 1/4 of N 1/2, Lot 3, Con 4 respectively. BNG acquired the assets from Trio for the purchase price of \$2,000,000. The purchase by BNG included a cash payment of \$125,000 and the issuance of 8,500,000 common shares on the closing date. The cash payment was made in trust and to be used to satisfy secured debts owing on Trio’s assets. An additional \$650,000 is to be paid on or before the date that is 9 months following the closing date, and \$1,225,000 is to be paid on or before the date that is 24 months following the closing date.

The Property is situated approximately 3 km southeast of the town of Cobalt, Ontario in Coleman Township, Larder Lake Mining Division. The Property consists of 2 contiguous patented mining claims known as Parcels 1831 NND, and 3694 NND, totalling 32.374 ha in area. The Property encompasses the part of the historical mine workings of the Kerr Lake Mine that are located on Parcel 1831 NND, as well as the historical mine workings of the Lawson Mine that are located on Parcel 3694 NND. An estimated total of 32,715,590 oz of Ag have been produced from the Kerr Lake and Lawson Mines (Cunningham, 1963). A well maintained municipal road and power line service the Property. The Property is bounded approximately by UTM NAD83 Z17T coordinates 600901E to 601691E, and 5247333N to 5247875N.

The Property is located within the Cobalt embayment in the Southern Province of the Canadian Shield. The oldest rocks on the Property are Archean mafic volcanics that have been intruded

by several lamprophyre dykes. These rocks have been unconformably overlain by Proterozoic age Huronian sediments. A large south-southeast dipping Nipissing diabase sill intrudes the Archean mafic volcanics and Huronian sediments. This sill is part of a domed Nipissing diabase sheet that is also exposed to the north of the Property. Most of the silver deposits in the Cobalt mining camp are located proximal to the Huronian-Archean unconformity and are spatially associated with the Nipissing diabase sills.

Silver mineralization on the Property has been exploited by several mining operations from 1905 through to the 1960's. An estimated 32,715,590 oz of Ag have been produced from the Kerr Lake and Lawson Mines (Cunningham, 1963). The Property encompasses the historical mine workings of the Kerr Lake Mine that lie on Parcel 1831 NND, as well as the historical mine workings of the Lawson Mine on Parcel 3694 NND. There has not been sufficient exploration work completed by Trio or Big North Graphite to describe significant mineralized zones encountered on the Property.

Exploration potential exists south of the Kerr Lake Mine where the Huronian-Archean unconformity may exist beyond the mine workings. A review of a north-south orientated long section from an unknown source in the Ministry of Northern Development and Mines ("MNDM") government assessment files shows a profile through the Kerr Lake Mine. The interpretation of that section shows the diabase contact becoming very steeply dipping at approximately 70 degrees south. This may have been inferred or implied from geological observations seen on the 2nd level of the Kerr Lake Mine, but in contrast the diabase contact to the west on the Conisil and Lawson Mines has a generally shallow dipping contact at approximately 20 to 30 degrees south-southeast with local areas where the contact dips steeply over a short strike length. Assuming this is the case south of the Kerr Lake Mine, potential may exist for a southern, relatively shallow dipping, extension of the Huronian-Archean unconformity or at the Archean-diabase contact. Silver was mined at the Conisil, Lawson, and Kerr Lake Mines within the diabase near the Archean contact. For example, the Number 3 vein at the Kerr Lake Mine produced over 3 Moz of Ag, and it was hosted in diabase and Archean rocks (Cunningham, 1963).

It is recommended that a GIS (Geographic Information System) compilation be completed prior to commencement of any work programs. Prospecting, geological mapping, and geophysical surveys are recommended to map in the geological contacts and structures on the Property which will assist in the preparation of future work programs. A diamond

drill program is also recommended totaling 1,500 m. The aggregate expenditure of the work programs proposed for 2016 is estimated to be \$235,015.

2. INTRODUCTION AND TERMS OF REFERENCE

2.1 Introduction

At the request of Big North Graphite (“BNG”), the authors have prepared this Technical Report to provide a summary of scientific and technical data on the Property. This Technical Report provides a summary and results from exploration work on the Property carried out by previous operators, and publicly available information.

2.2 Terms of Reference

The authors were retained by BNG to carry out an independent technical review of the Property. The review commenced September 27th, and continued to October 14th, 2016.

The author’s assignment consisted of:

- 1) Reviewing and summarizing historical exploration data generated on the Property prior to BNG’s acquisition of the Property;
- 2) Undertaking a site visit to confirm historical and current data;
- 3) Preparing a technical report on the Property; and
- 4) Making recommendations for future exploration activities on the Property.

2.3 Sources of Information

The historical exploration information was mostly gathered from the Ontario government databases and from documents provided by BNG and the vendor Trio Resources AG Inc. (“Trio”). Information in regards to the Property and work completed by Trio was provided by Duncan Reid, Trio’s Chief Executive Officer.

For geographical reference purposes, all UTM locations used in this Technical Report are using NAD83 Zone 17N projection. Tenure information presented in this Technical Report was valid on the MNDM website on October 2nd, 2016. Other online database sites providing basic geographic information used for this Technical Report, such as topographic contours, digital elevation models, drainage systems and roads, include: <http://geogratis.cgdi.gc.ca/> and <http://www.geobase.ca/>.

2.4 Details of Personal Inspection of the Property

A site visit by Joerg Kleinboeck was completed on September 27th, 2016. The site visit included meeting representatives of BNG and Trio, reviewing the Property and regional geology, viewing the stockpile B, and heavy equipment owned by Trio. The author noticed that stockpile A was not located where shown by Golder's resource estimate report, and that stockpile B has been reshaped at the top. Stockpile C, located inside the building, was not visited. **The authors have not verified the volume or tenure of the stockpiles. No attempt was made to reconcile the Golder Associates Ltd. calculations of volume or tenure that was completed in 2014.**



Photo 1: Stockpile A, Duncan Kerr Property, moved from original location located outside (photograph supplied by Trio).



Photo 2: Stockpile B, Duncan Kerr Property.



Photo 3: Stockpile C, Duncan Kerr Property (photograph supplied by Trio).

2.5 Units and Currency

This Technical Report uses both the Imperial and Metric Systems (System International or “SI”) as systems of measure and length. Conversions from the Metric System to the Imperial System are provided below and quoted where practical. Many of the geologic publications and more recent work assessment files now use the SI system but older work assessment files almost exclusively refer to the Imperial System. Metal and mineral acronyms in this Technical Report conform to mineral industry accepted usage.

Conversion factors utilized in this Technical Report include: 1 inch = 2.54 centimetres (cm); 1 pound (lb.) = 0.454 kilograms (kg); 1 foot (ft) = 0.3048 metres (m); 1 mile (mi) = 1.609 kilometres (km); 1 acre (ac) = 0.405 hectares (ha); and, 1 sq mile = 2.59 square kilometres.

Table 1 lists the common abbreviations that are used in this Technical Report. Dollars are expressed in Canadian currency (\$) unless otherwise noted. Unless otherwise mentioned, all coordinates in this Technical Report are provided as UTM datum NAD83, Zone 17N.

Table 1: Abbreviations

Abbreviation	Unit or Term
Ag	silver
ASL	above sea level
As	arsenic
Au	gold
Ga	billion years
C	celsius
cm	centimetre
Co	cobalt
CRM	certified reference material
Cu	copper
ft ²	square foot
ft ³	cubic feet
°	degree (degrees)
ddh	diamond drill hole
ft	foot (feet)
g	gram
GIS	Geographic Information System
g/t	gram per tonne
ha	hectare
km	kilometre
km ²	square kilometres
M	metre
mm	millimetre
Moz	million troy ounces
Ma	million years
MNDM	Ministry of Northern Development and Mines
Ni	nickel
NI 43-101	Canadian National Instrument 43-101
oz	ounce(s), Troy ounce(s)
%	percent
PGE's	platinum-group elements
ppb	parts per billion
ppm	parts per million
QA/QC	Quality Assurance/Quality Control
SG	specific gravity
ton	short ton (2,000 pounds)
T	metric tonne (2,000 kg) (2,204.6 pounds)
Zn	zinc

3. RELIANCE ON OTHER EXPERTS

The authors have made every attempt to accurately convey the content of historical geological information, but cannot guarantee either the accuracy, validity, or completeness of the data contained within those files. However, it is believed that these reports were written with the objective of presenting the results of the work performed, without any promotional or misleading intent.

4. PROPERTY DESCRIPTION AND LOCATION

4.1 Location

The Property is situated approximately 3 km southeast of the town of Cobalt, Ontario in Coleman Township, Larder Lake Mining Division (Figure 1). A well maintained municipal road and power line service the Property. The Property is bounded approximately by UTM NAD83 Z17T coordinates 600901E to 601691E, and 5247333N to 5247875N, and is covered by National Topographic System (NTS) map sheet 31M/5.

4.2 Mineral Dispositions

On October 13th, 2016, BNG acquired 100% ownership in two patented mining claims in Coleman Township, 1831NND and 3694NND (Figure 2). The claims are located on property parcel PT E 1/2 of N 1/2, Lot 3, Con 4, and SW 1/4 of N 1/2, Lot 3, Con 4 respectively (Table 2).

BNG acquired assets from Trio for the purchase price of \$2,000,000. The purchase by BNG included a cash payment of \$125,000 and the issuance of 8,500,000 common shares on the closing date. The cash payment was made in trust and to be used to satisfy secured debts owing on Trio's assets. An additional \$650,000 is to be paid on or before the date that is 9 months following the closing date, and \$1,225,000 is to be paid on or before the date that is 24 months following the closing date. The purchase agreement is provided in Appendix I.

At the time of report writing, the authors understand that the patented mining claims are currently held 100% by Trio.

Recent title searches were supplied by Trio. These are provided in Appendix 3. Several liens are registered to the claims. However, in a letter of intent supplied by BNG, a cash payment of \$125,000 was to have been made in trust upon the closing date of the purchase agreement, and is to be used to satisfy secured debts on Trio's assets. A review of the Property Index Map is also provided in Appendix 3. Two narrow parcels bisect claims 1831NND and 3694NND. These two parcels, known as 61389-0073 and 61389-0111, are owned by The Temiskaming and Northern Ontario Railway Commission. Trio has entered into discussions with the Ontario Northland Railway Commission to obtain title to these two parcels.

The authors have not sought a formal legal opinion with regard to the ownership status of the claims comprising the Property and have in all aspects of tenure relied on materials made available on the MNDM's website (https://www.mci.mndm.gov.on.ca/claims/clm_mmen.cfm), by BNG, and by Trio. The authors express no opinion as to the ownership status of the Property. Both surface and mineral rights are attached to the patents that comprise the Property as indicated by Trio. The patents are held "Fee Simple", which requires the annual payment of \$129.50 Mining Land Tax. Property taxes for the two claims totalled \$2,364.18 for 2015. There is an outstanding amount of \$5,139.28 that is owed to the Township of Coleman for the 2014 and 2015 taxes.

Table 2: Claim Details

Township	Parcel Number	PIN Number	Claim Type	Claim Size (ha)	Annual Mining Land Taxes
Coleman	1831 NND	61389-0059	Patented	16.187	\$64.75
Coleman	3694 NND	61389-0074	Patented	16.187	\$64.75

The Ontario Mining Act requires exploration plans and permits for exploration to be undertaken on Crown Lands. Once the application has been received, the MNDM circulates the exploration plan and permit to the Environmental Registry and to Aboriginal communities whose traditional lands may be impacted by the work. The processing periods for exploration plans is 30 days, and 50 days for exploration permits. Consultations with the affected Aboriginal communities identified by the MNDM are recommended. No exploration plan or permit is required to complete exploration work for patented mining claims, thus BNG does not need to apply for early exploration activities.

The authors are unaware of any other significant factors and risks that may affect access, title, or the right or ability to perform work on the Property.

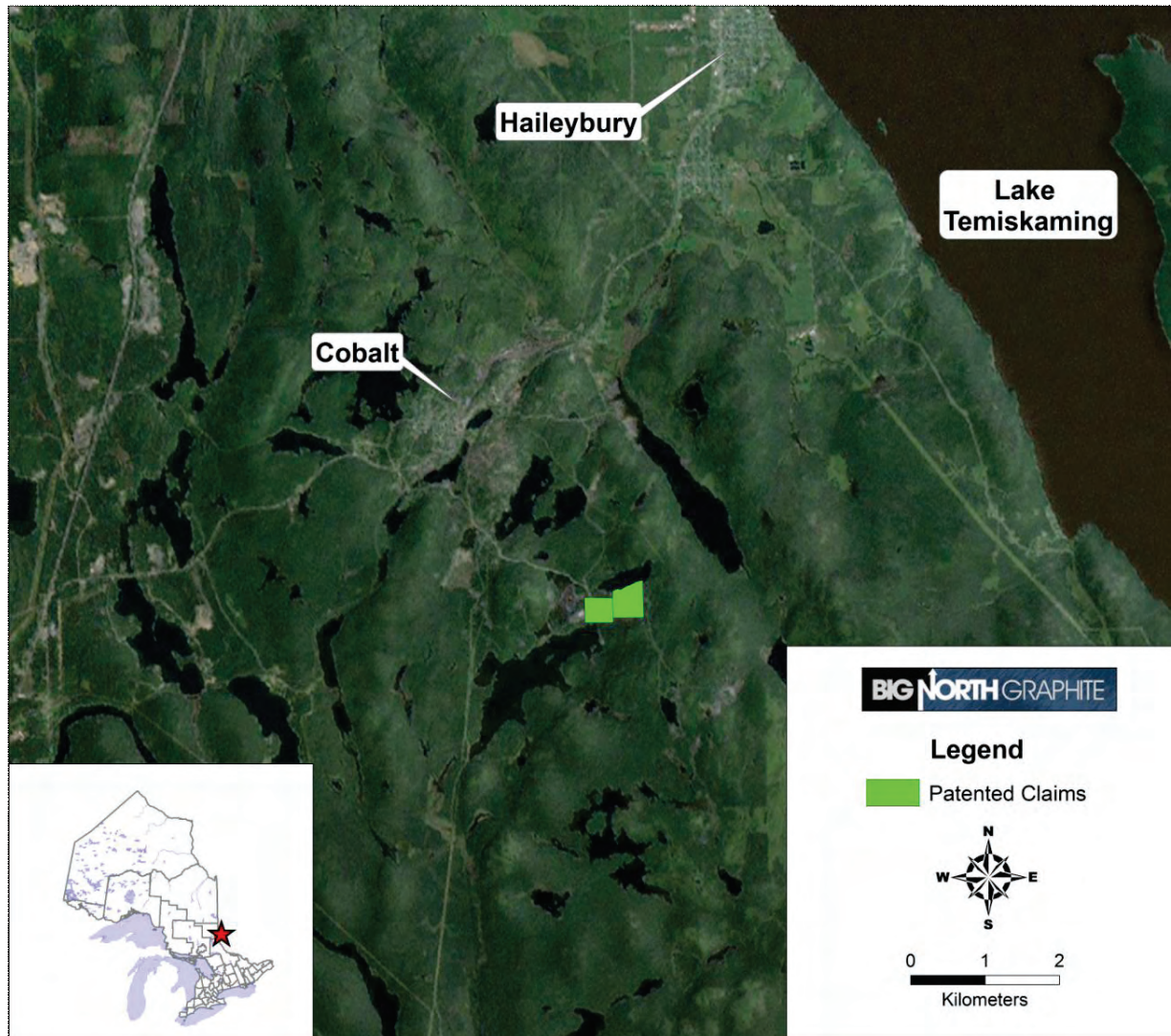


Figure 1: Location of the Duncan Kerr Property, Cobalt, Ontario

4.3 Environmental Liabilities and Permitting

The Property hosts parts of the past producing Kerr Lake Mine which operated intermittently from 1905 through to 1964, and the Lawson Mine which operated intermittently from 1909 through to the 1960's.

BNG is responsible for all environmental and mine hazards located on the Property. The majority of the mine hazards have been addressed, but according to inspection reports, several

hazards still exist on the Property. As well, BNG is responsible for the ongoing maintenance of the remediation efforts such as maintaining fencing, signage, etc. It is recommended that the hazards and environmental liabilities on the property be documented by BNG and inspected on a semi-annual basis. Appendix 2 provides the closure plan that was submitted by Agnico Eagle Mines Ltd. in 1994, and a site inspection report completed by the MNM in 2014.

An environmental due diligence study should be completed by BNG to identify the nature and extent of any environmental liabilities that may be present on the Property.

5. ACCESS, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY

5.1 Accessibility

The Property is located approximately 3 km southeast of the town of Cobalt, Ontario in Coleman Township. A well maintained year-round municipal road and power line service the Property. The Property is bounded approximately by UTM NAD83 Z17T coordinates 600901E to 601691E, and 5247333N to 5247875N.

5.2 Climate

The Property is under the influence of a moist boreal climate. The mean January temperature is -16.4°C; the mean July temperature is 18.1°C. The annual precipitation is approximately 785.1 mm (<http://climate.weatheroffice.gc.ca>). The beginning of permanent snow cover varies from year to year, sometimes starting in November and lasting until late April.

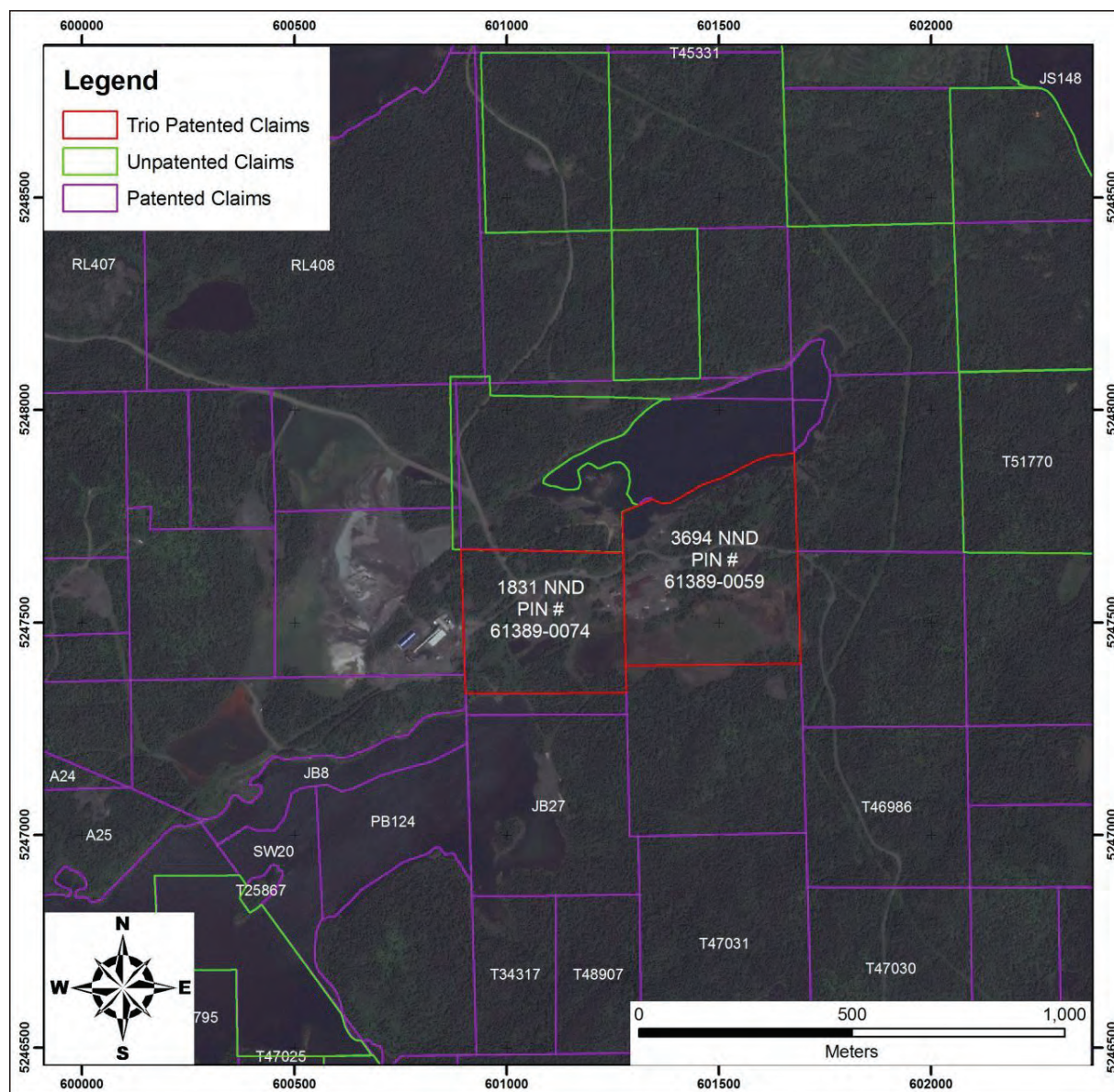


Figure 2: Land Tenure of the Duncan Kerr Property

5.3 Local Resources and Infrastructure

Local resources on the Property consist of an abundance of fresh water, and mixed deciduous and coniferous trees.

Several buildings are present on the Property, including a 4,000 ft² partially heated warehouse. The Property is serviced by hydro. Highway 11 is located approximately 10 km to the west of

the Property. Most supplies and services can be found in Temiskaming Shores, Ontario, a city with a population of approximately 10,500.

5.4 Physiography

The physiography is typical of the Precambrian Shield area in northeastern Ontario with general rolling and steep ledges and cliffs with occasional swamps, lakes, and streams. Typical vegetation on the Property consists of a boreal forest with a mixture of coniferous and deciduous trees, including poplars, birch, maple, pine, spruce, alders, and willows. The elevation of the Property is approximately 310 m above sea level and the maximum topographical relief is generally less than 25 m.

6. HISTORY

6.1 Historical Mineral Exploration

Historical exploration in the area of the Property dates back to 1903 with the discovery of silver in Cobalt, Ontario. Silver production of the Cobalt Camp is reported to be 464,853,101 oz (Pressacco, Webster, and Zalnieriunas, 2008).

The Kerr Lake deposit was discovered in 1904, and production commenced in 1905 whereby the Kerr Lake Mine was operated intermittently until it finally closed in 1964. The original Kerr Lake property was comprised of three claims historically referred to as Parcel 1764 NND (under Kerr Lake), 1831 NND, and 4821 NND (referred to as the Kerr Lake fraction). From 1905 through to 1956, 28,502,037 oz of Ag was produced from the three claims (Cunningham, 1963). A total of 8 shafts and were sunk on the Kerr Lake claims, along with one adit that was driven south from the shoreline of Kerr Lake. The main shaft, known as the Number 3 shaft, was sunk to a depth of 550 ft with 9 levels being developed. The underground workings were connected to the Hargrave, Conisil, and Lawson Mines located to the southeast, south, and west respectively.

The Lawson deposit was discovered in 1905 and production commenced at the Lawson Mine in 1909. A total of 4 shafts were sunk on the Lawson claim (Parcel 3694 NND). The deepest shaft, the No 8, was sunk to a depth of approximately 410 ft. All underground workings were

connected and 6 levels were developed. When the mine initially closed in 1919, a total of 4,213,553 oz of Ag had been produced (Cunningham, 1963). From 1922 through to 1944, the Lawson Mine was operated pursuant to several leases. The mine was later re-opened in 1953 and was operated through to 1960 by Silver Miller Mines Ltd. No records of silver production were recorded during this period as the ore was mixed with other Silver Miller ores from the surrounding mines (Cunningham, 1963).

In 1977, St. Joseph Exploration Ltd. constructed the Canadaka Mill on the Lawson claim (parcel 3694NND). It was designed to process up to 500 tons per day, but was estimated to have only processed 350 tons per day. The mill was designed as an ore concentrator by combining gravity and flotation methods to process ore from the company's area mines. The mill was closed in 1980 when the company's mines ceased production.

In 1983, the mill was bought by Sulpetro Minerals Ltd. and was modified to process tailings being mined at the Chambers-Ferland tailings containment area. Milling rates averaged 450 to 500 tons per day. The tailings were deposited to the south of the Main Shaft in a series of three ponds that were formed by damming a small creek flowing from Kerr Lake to Giroux Lake. At the time, the tailings capacity had not been reached and an estimated 500,000 tons of tailings could be added (Anderson, 1993). The mill was later sold prior to Trio's acquisition of the Property.

In 2012, Trio completed 8 short AQ diameter (2.7 cm) diamond drill holes, with the longest drill hole, DK12-07, drilled to a depth of 165.1 ft. The author re-logged four drill holes, DK12-02, DK12-04, DK12-07, and DK12-08 in 2013. No core samples had been submitted for analysis. All four holes that were logged intersected Cobalt series sediments (Figure 5). In diamond drill hole DK12-07, local sections of mineralization consisting of cobaltite +/-silver veinlets up to several mm's in width were intersected. Drill hole DK12-07 was drilled at a vertical inclination, and would have been orientated sub-parallel to the known orientation of the veins on the Property. This is supported by several mineralized fractures that are orientated 0° to the core axis. The diamond drilling program was not conducted to industry standards as outlined by CIM Best Practice guidelines. The author attempted to validate the drill results, and it is the opinion of the author that the results should not be considered reliable.

In 2014, Trio commissioned Golder Associates Ltd. to complete a resource calculation on three above ground stockpiles of crushed rock and mill residual material sourced from the Duncan

Kerr Property (Photos 1, 2, and 3). A total of 6,588 Tonnes grading 761 g/t Ag, 0.08 g/t Au, 0.33% Ni, 0.95% Co, and 5.92% As, was estimated in the indicated category (Thomas, Palmer, 2014). **The resource estimate is a historical estimate as defined by National Instrument 43-101. . It is important to note that a qualified person has not done sufficient work to classify the historical estimate as current mineral resources or mineral reserves and the issuer is not treating the historical estimate as current mineral resources or mineral reserves. There was been no review of the methods and results of this historical resource estimate by a Qualified Person. During the site visit, the author noticed that stockpile A had been moved inside the building, and that stockpile B had been reshaped. Stockpile C was not visited. The authors have not verified the volume or tenure of the stockpiles. No attempt was made to reconcile the Golder Associates Ltd.'s calculations of volume or tenure completed in 2014. Trio has disclosed to the authors that they have spent in excess of \$100,000 on the Golder Associates Ltd. Resource Estimate Report and associated work.**

As at the date of this Technical Report, limited historical information was available. It is recommended that on-going efforts be made to locate historical reports that pertain to the Property.

7. GEOLOGICAL SETTING AND MINERALIZATION

7.1 Regional Geology

The Property is located within the Cobalt Embayment in the Southern Province of the Canadian Shield. Huronian Supergroup sedimentary rocks unconformably overly Archean basement rocks, and are commonly found filling paleo-valleys or troughs in the Archean basement. The Archean rocks are summarized as a steeply dipping sequence of mafic to felsic volcanics, intercalated with cherty and sulphidic interflow sediments, along with intrusions of mafic to ultramafic dykes and sills. Both the Huronian sediments and Archean rocks have been intruded by Proterozoic-aged Nipissing diabase occurring as both sills and dykes (Figure 3).

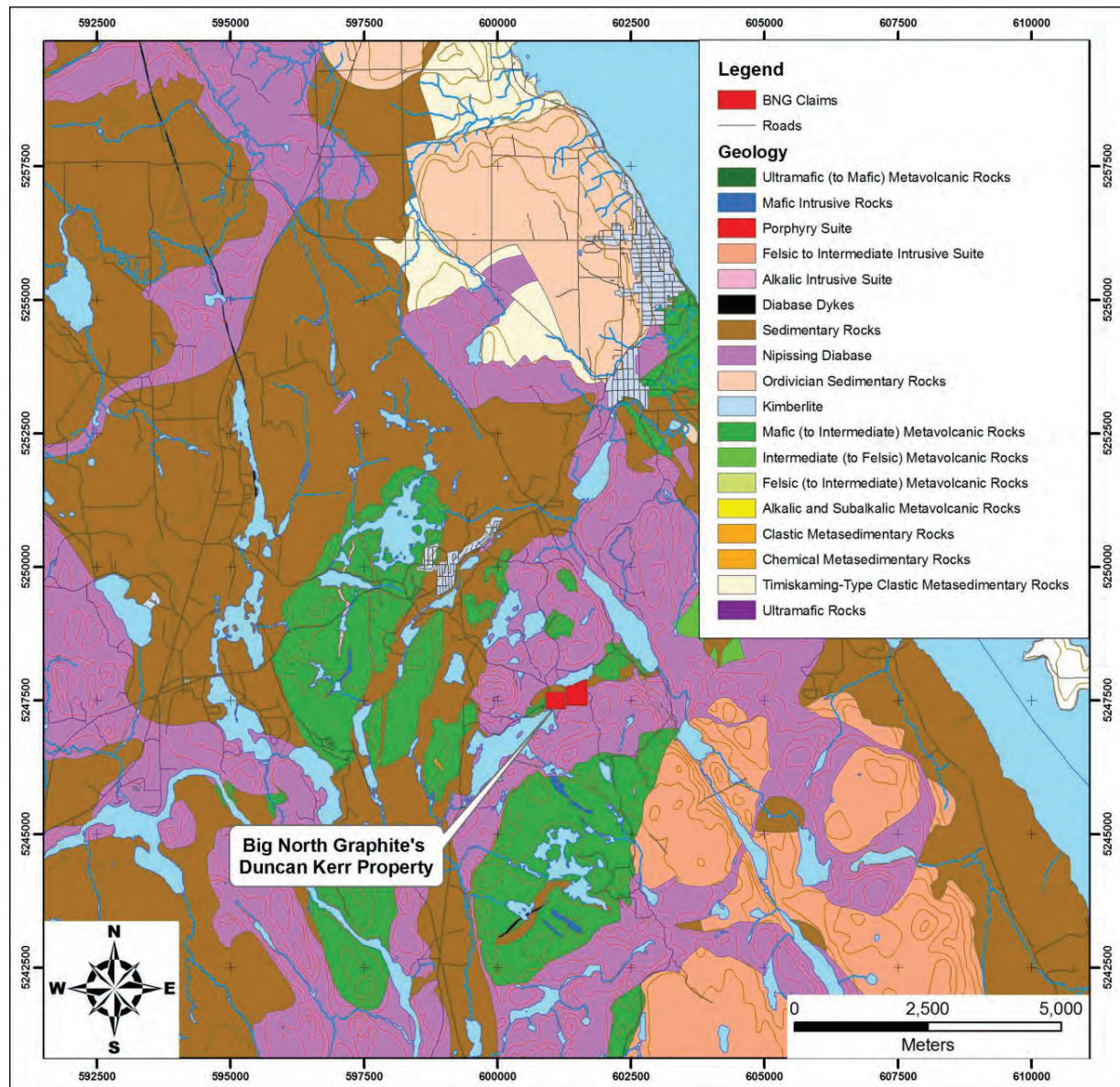


Figure 3: Regional Geology of the Cobalt Area, Ontario (after OGS MRD 282).

7.2 Property Geology

The oldest rocks on the Property are Keewatin-age volcanic rocks that have been overlain by Huronian sediments of Proterozoic age. A large south-southeast dipping Nipissing diabase sill intrudes the Archean mafic volcanics and Huronian sediments. This sill is part of a domed Nipissing diabase sheet that is also exposed to the north of the Property. The current level of erosion has exposed the underlying Cobalt Series sediments and Keewatin volcanic rocks (Figure 4).

Exploration potential exists south of the Kerr Lake Mine where the Huronian/Archean unconformity may exist beyond the mine workings. A review of a north-south orientated long section from an unknown source in the MNM government assessment files shows a profile through the Kerr Lake Mine. The interpretation of that section has the diabase contact becoming very steeply dipping at approximately 70 degrees south. This may have been inferred or implied from geological observations seen on the 2nd level of the Kerr Lake Mine, but in contrast the diabase contact to the west on the Conisil and Lawson Mines has a generally shallow dipping contact at approximately 20 to 30 degrees south-southeast with local areas where the contact dips steeply over a short strike length. Assuming this is the case south of the Kerr Lake Mine, potential may exist for a southern, relatively shallow-dipping, extension of the Huronian-Archean unconformity or at the Archean-diabase contact. Silver was mined at the Conisil, Lawson, and Kerr Lake Mines within the diabase near the Archean contact.

7.3 Mineralization

Silver mineralization on the Property has been exploited by several mining operations from 1905 through to the 1960's. An estimated 32,715,590 oz of Ag have been produced from the Kerr Lake and Lawson Mines (Cunningham, 1963). The Property encompasses the historical mine workings of the Kerr Lake Mine that lie on Parcel 1831 NND, as well as the historical mine workings of the Lawson Mine on Parcel 3694 NND. There has not been sufficient exploration work completed by Trio or Big North Graphite to describe significant mineralized zones encountered on the Property.

8. DEPOSIT TYPES

Most of the silver deposits in the Cobalt Camp are located proximal to the Huronian-Archean unconformity and are spatially associated with the Nipissing diabase sills. The majority of the historical silver production from the Cobalt Camp has been within 200 m of the contacts of the diabase.

The veins hosting the mineralization in the Cobalt Camp are referred to as five-element veins, containing Ni, Co, As, Ag, and Bi. The veins are characteristically open-space filling, and the replacement of wall rock is not extensive. Most veins are directly or indirectly associated with

vertical to sub-vertical fault systems. Veins are commonly completely filled with hydrothermally deposited minerals and pinch and swell from cm to m scale thicknesses.

Mineralization is typically discontinuous along the structure with high-grade ore pockets commonly occurring in the vicinity of vein intersections, or at the intersections of veins with late, shallow-dipping shear zones, and at lithological contacts. Ore minerals occur in a wide variety of forms including massive pods, bands, dendrites, plates, leaves, and zoned rosettes.

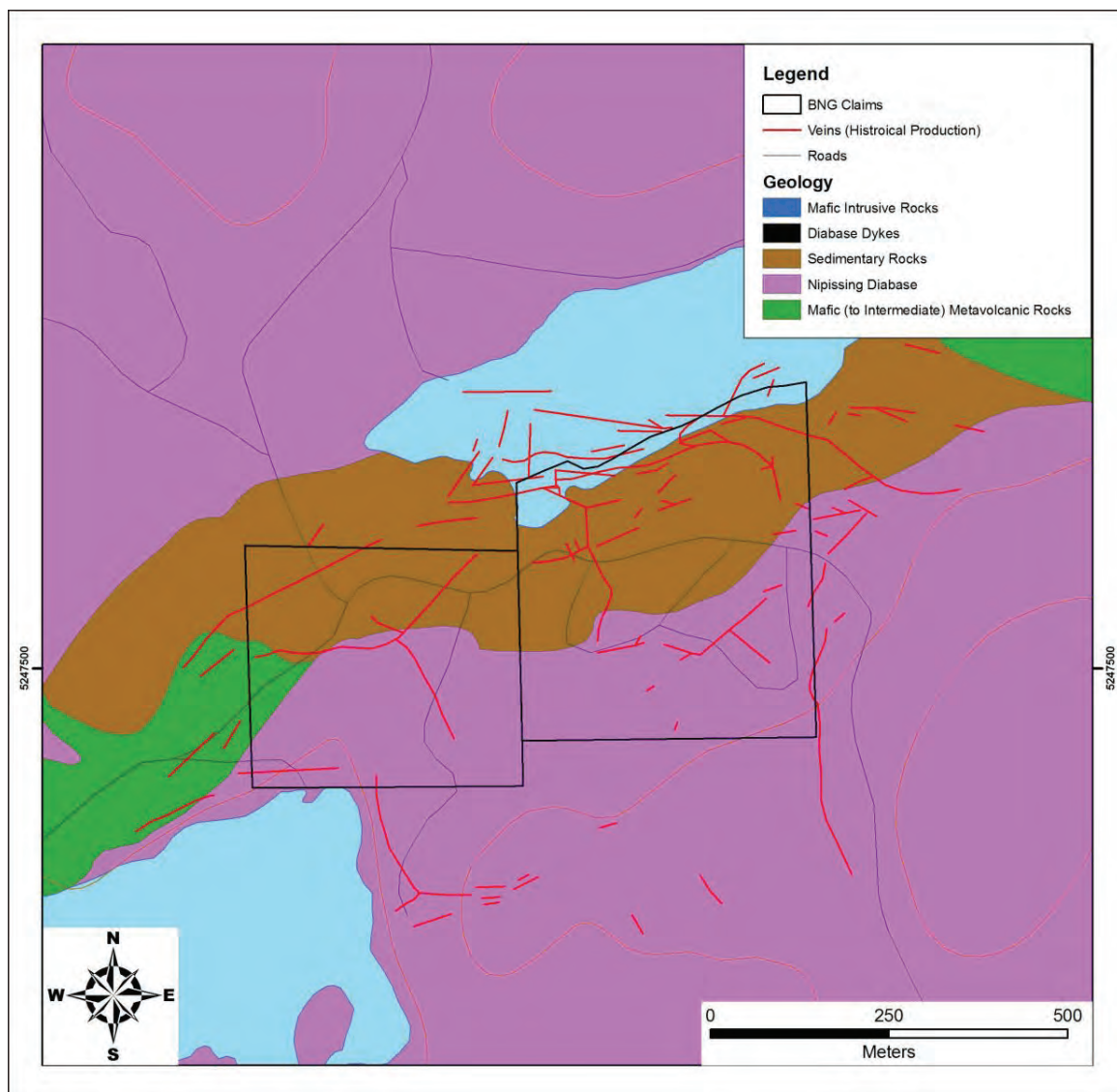


Figure 4: Property Geology with approximate location of historical veins projected to surface (after OGS MRD 282).

9. EXPLORATION

BNG has not completed any exploration activities on the Property.

10. DRILLING

10.1 Historical Drilling

No records of any surface diamond drilling were located from the OGS digital database and through searching through assessment files at the Kirkland Lake Resident Geologist Office. Several underground drill holes were shown on level plan maps.

In 2012, Trio completed 8 short AQ diameter (2.7 cm) diamond drill holes, with the longest drill hole, DK12-07, drilled to a depth of 165.1 ft. No assays were report. In 2013, Mr. Joerg Kleinboeck did review the core in four drill holes, DK12-02, DK12-04, DK12-07, and DK12-08. No core samples were submitted for analysis at the time. The diamond drilling program was not conducted to industry standards as outlined by CIM Best Practice guidelines. At the time, Mr. Joerg Kleinboeck attempted to validate the drill results, and it is the opinion of the author that the results should not be considered reliable.

10.2 Drilling

BNG has not completed any diamond drilling on the Property.

11. SAMPLE PREPARATION, ANALYSES, AND SECURITY

BNG has not carried out any sampling programs on the Property.

12. DATA VERIFICATION

12.1 Historical Data Verification

Historical data verification included a site visit to the former locations of the Kerr Lake and Lawson Mines, as well as the tailings facility. In 2013, the author also reviewed historical maps and reports pertaining to the Property that are located at the Kirkland Lake Resident Geologist Office. The authors believe this information is generally of sufficient accuracy to form the basis of an exploration program on the Property.

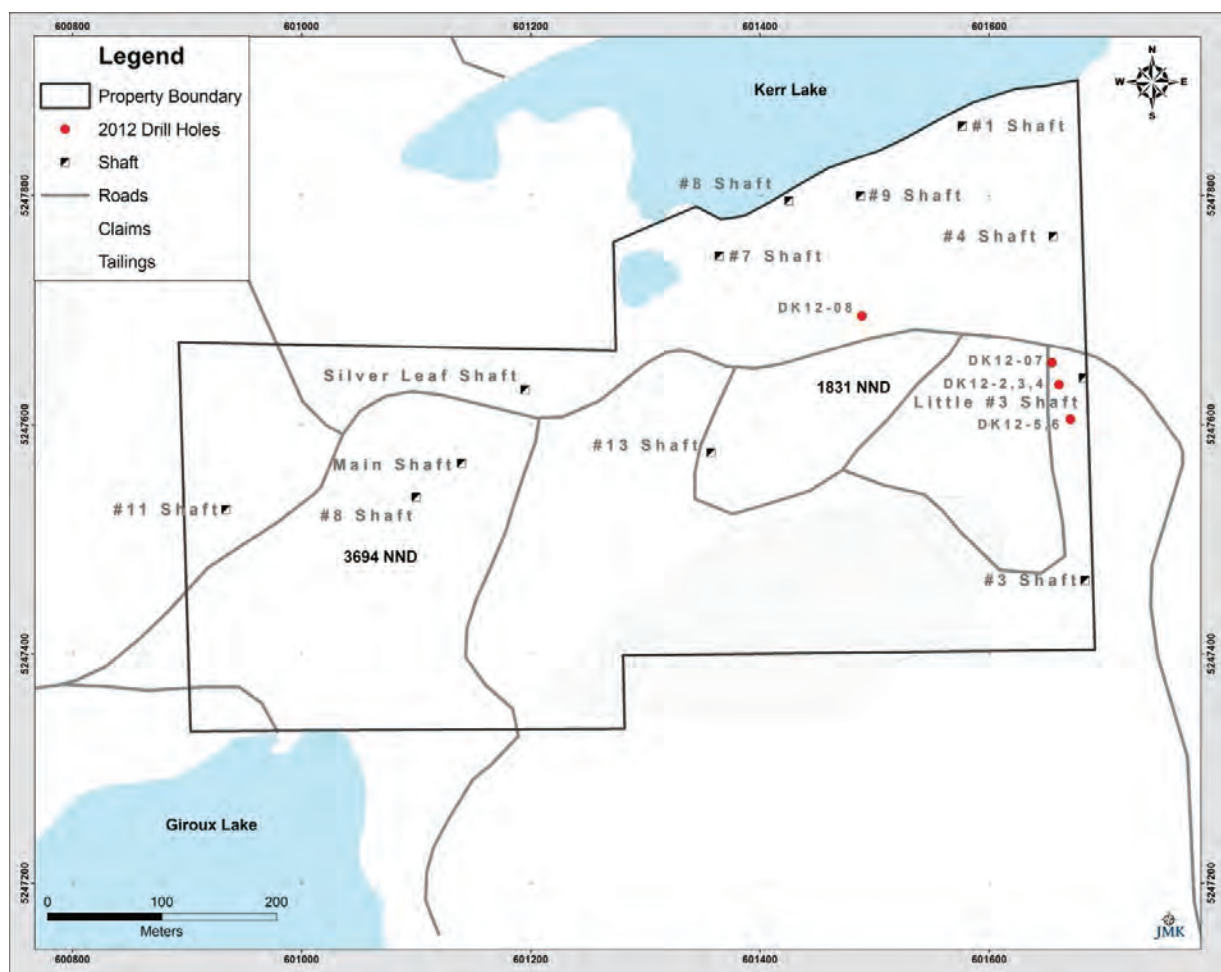


Figure 5: 2012 Diamond drill hole locations.

12.2 Recent Data Verification

The diamond drilling program completed in 2012 by Trio was reviewed by the author in 2013. At the time, the author logged four drill holes, DK12-02, DK12-04, DK12-07, and DK12-08 as part of the technical review at the time. No core samples were submitted for assay. As previously noted, the diamond drilling program was not conducted to industry standards as outlined by CIM Best Practice guidelines. In 2013, the author attempted to validate the diamond drilling results, and it is the opinion of the author that the diamond drilling results should not be considered reliable.

13. MINERAL PROCESSING AND METALLURGICAL TESTING

The Property is at the exploration stage and no metallurgical testing has been carried out.

14. MINERAL RESOURCE ESTIMATES

There has not been sufficient work on the Property to undertake a mineral resource estimate.

15. MINERAL RESERVE ESTIMATES

There is no mineral reserves yet defined on the Property.

16. MINING METHODS

Not applicable.

17. RECOVERY METHODS

Not applicable.

18. PROJECT INFRASTRUCTURE

Not applicable.

19. MARKET STUDIES AND CONTRACTS

Not applicable.

20. ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT

Not applicable.

21. CAPITAL AND OPERATING COSTS

Not applicable.

22. ECONOMIC ANALYSIS

Not applicable.

23. ADJACENT PROPERTIES

The Property hosts parts of the past producing Kerr Lake Mine, and the Lawson Mine, which represent two of the numerous past producing mines that have operated over the past century in the Cobalt Camp. The majority of the mines in the Cobalt Camp contained mineralization similar to that in the Kerr Lake and Lawson Mines.

24. OTHER RELEVANT DATA AND INFORMATION

The author is unaware of any further data or relevant information that could be considered of any practical use in this report.

25. INTERPRETATION AND CONCLUSIONS

Exploration potential exists south of the Kerr Lake Mine where the Huronian/Archean unconformity may exist beyond the mine workings. A review of a north-south orientated long section from an unknown source in the MNDM government assessment files show a profile through the Kerr Lake Mine. The interpretation of that section has the diabase contact becoming very steeply dipping at approximately 70 degrees south. This may have been inferred or implied from geological observations seen on the 2nd level of the Kerr Lake Mine, but in contrast the diabase contact to the west on the Conisil and Lawson Mines has a generally shallow dipping contact at approximately 20 to 30 degrees south-southeast with local areas where the contact dips steeply over a short strike length. Assuming this is the case south of the Kerr Lake Mine, potential may exist for a southern, relatively shallow-dipping, extension of the Huronian-Archean unconformity or at the Archean-diabase contact. Silver was mined at the Conisil, Lawson, and Kerr Lake Mines within the diabase near the Archean contact. For example, the Number 3 vein at the Kerr Lake Mine produced over 3 Moz of Ag and it was hosted in diabase and Archean rocks (Cunningham, 1963).

In regard to the historical resource estimate completed by Golder Associates Ltd., the significant risks and uncertainties that could reasonably be expected to affect the reliability or confidence in the resource estimate is that there is a possibility that the mineralization within the stockpiles is

not homogeneous or consistent, and additional sampling would be required. As well, there was no attempt made to reconcile the volume or tenure of the stockpiles as reported by Golder Associates Ltd.

26. RECOMMENDATIONS

Subsequent to the research conducted for this Technical Report, and taking into consideration information provided by Trio and BNG, the authors recommend a one phase exploration program:

Phase 1:

- 1) Creation of a GIS database, including all geological, geophysical and historical information should be completed. This would entail digitization of historical plans and sections, along with the supporting assay data. This will help to assist in the preparation of future work programs along with targeting the most prospective areas on the Property.
- 3) A surface work program is recommended prior to the commencement of any diamond drilling. This should include geological mapping, prospecting, line cutting, and possible geophysical surveys such as induced polarization, VLF, and magnetometer surveys to assist in identifying diamond drill targets.
- 4) A 1,500 m diamond drill program is recommended for the Property.

Tables 3 and 4 summarize the budget and recommendations of a one phase exploration program for the Property.

Table 3: Phase 1 Surface Exploration Budget

Personnel costs (GIS compilation)	Unit	Unit cost	Sub-Total
Project Manager/Geologist	10 days	\$700/day	\$ 7,000
Personnel costs (geological mapping, prospecting)			
Project Manager/Geologist	15 days	\$700/day	\$10,500
Fixed contract costs	Unit	Unit cost	Sub-Total
Line cutting	5 km	\$600/km	\$3,000
Magnetometer & VLF Survey	5 km	\$400/km	\$2,000
Other costs	Unit	Unit cost	Sub-Total
Meals and accommodation	25	\$100/day	\$2,500
Assays	100	\$40	\$4,000
Supplies	1	\$5,000	\$5,000
Reports	1	\$6,000	\$6,000
Total:			\$40,000

Table 4: Phase 1 Diamond Drilling Budget (1,500 m)

Personnel costs (diamond drilling)	Unit	Unit cost	Sub-Total
Project Manager/Geologist	25 days	\$700/day	\$17,500
Technician	25 days	\$300/day	\$ 7,500
Fixed contract costs	Unit	Unit cost	Sub-Total
Diamond Drilling (all inclusive)	1,500 m	\$85/m	\$127,500
Other costs	Unit	Unit cost	Sub-Total
Supplies	1	\$5,000	\$5,000
Diamond Saw Rental	1 mth	\$650	\$650
Meals and accommodation	25	\$100	\$2,500
Assays	250 samples	\$40/Sample	\$10,000
Report	1	\$3,000	\$3,000
Total:			\$ 173,650

Sub-Total: \$213,650
 Contingency (10%): \$21,365
 Total: \$235,015

27. DATE AND SIGNATURE PAGE

This report titled “NI 43-101 Technical Report on the Duncan Kerr Property, Larder Lake Mining Division, Northeastern Ontario” for Big North Graphite Corp., dated October 14th, 2016, was prepared and signed by the following authors:

Signed by:

“Joerg M. Kleinboeck”

Joerg M. Kleinboeck, P.Geo.

“J. Garry Clark”

J. Garry Clark, P.Geo

28. REFERENCES

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CERTIFICATE OF QUALIFIED PERSON

I, Joerg M. Kleinboeck, of 147 Lakeside Dr., North Bay, Ontario do hereby certify that:

1. I am a Consulting Geologist offering geological exploration services to the mineral exploration industry.
2. I hold the following academic qualifications: B.Sc. Geology (2000) Laurentian University.
3. I am a member of the Association of Professional Geoscientists of Ontario (Member #1411).
4. I have worked as a geologist for over 13 years on a variety of exploration properties targeting gold, Ni-Cu-PGE, base metals, diamonds, and industrial minerals.
5. "Technical Report" refers to the report titled "NI 43-101 Technical Report on the Duncan Kerr Property, Larder Lake Mining Division, Northeastern Ontario.", and dated effective October 14th, 2016. At the effective date of the Technical Report, to the best of my knowledge, information, and belief, the Technical Report, contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.
6. In accordance with section 1.5 of NI 43-101, I am independent of Trio Resources AG, Inc., and Big North Graphite Corp.
7. I have read National Instrument 43-101 and the Technical Report has been prepared in compliance with National Instrument 43-101.
8. I am jointly responsible for sections 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 25, and 26. I am solely responsible for sections 13 through to 24.
9. I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements as a Qualified Person for the purposes of NI 43-101.
10. I last visited the Duncan Kerr Property on September 27th, 2016 for a period of 2 hours.
11. Since 2013, I have occasionally provided geological consulting services to Trio in respect to the Duncan Kerr Property. I have prepared an NI 43-101 report for Trio in 2013. I have also completed GIS data collection and drafting.

Dated this 14th Day of October, 2016



Joerg M. Kleinboeck, P.Geo.

CERTIFICATE OF QUALIFIED PERSON

I, J. Garry Clark, P. Geo. (#0254), do hereby certify that:

1. I am a consulting geologist with an office at 1000 Alloy Dr., Thunder Bay, Ontario.
2. I graduated with the degree of Honours Bachelor of Science (Geology) from Lakehead University, Thunder Bay, in 1983. I have been a consulting geologist since 1987 working extensively in Ontario and Quebec but also internationally. I have completed all aspect of gold and base metal exploration from prospecting to resource definition drilling. I have written qualifying property reports for companies such as Rainy River Resources and Parkside Resources.
3. "Technical Report" refers to the report titled "NI 43-101 Technical Report on the Duncan Kerr Property, Larder Lake Mining Division, Northeastern Ontario.", and dated effective October 14th, 2016.
4. I am a registered Professional Geoscientist with the Association of Professional Geoscientists of Ontario (#0245) and a member Ontario Prospectors Association.
5. I have worked as a Geologist for over 30 years since my graduation from university.
6. I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements as a Qualified Person for the purposes of NI 43-101.
7. I am jointly responsible for ITEMS: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 25, and 26. As a co-author I also reviewed and edited the entire report.
8. I am independent of Big North Graphite, and Trio in regard to transaction for which the Technical Report is required, other than providing consulting services, and in the application of all of the tests in section 1.5 of NI 43-101.
9. I have had no prior involvement with the mineral property that forms the subject of this Technical Report.
10. I have read NI-43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that Instrument and Form.
11. I did not visit the Property.
12. As of the date of this certificate, and to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 14th day of October, 2016.

SIGNED

"J. Garry Clark"

J. Garry Clark, P.Geo.

Appendix I: Purchase Agreement

Annexure E – Corporate Governance Statement

(attached as a separate document)



Corporate Governance Statement

First Cobalt Corp. (ARBN 620 935 499) (Company)

Overview

The Company believes in the importance of a strong board of directors (**Board**) and sound corporate governance policies and practices to direct and manage its business affairs. The Company considers that good corporate governance enhances its performance, and is essential to retaining the trust of shareholders, attracting the right people to the organisation and maintaining its social license in the communities in which it operates.

Canadian Corporate Governance

The Company's Board is responsible for the overall corporate governance of the Company, and it recognises the need for the highest standards of ethical behaviour and accountability. It is committed to administering its corporate governance structures to promote integrity and responsible decision making.

As the Company is incorporated in the Province of British Columbia, Canada and listed on the TSX Venture Exchange (**TSX-V**) and the OTCQB tier of OTC Markets, the Board seeks to apply the corporate governance practices and procedures set out in National Policy 58-201 – *Corporate Governance Guidelines (NP 58-201)* (published by the British Columbia Securities Commission and other Canadian corporate securities regulators) where possible, having regard to the Company's size and the nature of its operations.

Compliance with ASX Recommendations

The corporate governance principles and practices adopted by the Company may depart from those generally applicable to ASX-listed companies under the Corporate Governance Principles and Recommendations' (Third Edition) (**ASX Recommendations**) published by the ASX Corporate Governance Council.

The Company sets out below its "if not why not" report in relation to those matters of corporate governance where the Company's practice departs from the ASX Recommendations, to the extent that they are currently applicable to the Company.

Corporate Governance Documents

Copies of the Company's corporate governance mandates, policies and charters are available on its website, <https://firstcobalt.com/>.

Date

This statement is current as at 7 November 2017 and has been approved by the Board.

ASX Corporate Governance Principles and Recommendations

1. Principle 1: Lay a solid foundation for management and oversight – companies should establish and disclose the respective roles and responsibilities of its board and management and how their performance is monitored and evaluated

1.1 Recommendation 1.1

A listed entity should disclose:

- (a) the respective roles and responsibilities of its board and management; and
- (b) those matters expressly reserved to the board and those delegated to management.

Compliance with ASX Recommendation: followed

The Company has adopted a Mandate of the Board of Directors (**Board Mandate**) which discloses the roles and responsibilities of the Board and senior management.

Under the Board Mandate, the Board is responsible for the overall operation and stewardship of the business and affairs of the Company and, in particular, is responsible for:

- approving the appointment of the Company's chief executive officer, and the other officers of the Company;
- conducting an annual review of the effectiveness of the Board, any committees appointed by the Board, and the performance of each director of the Board;
- providing leadership and setting the strategic objectives of the Company;
- succession planning (including appointing, training and monitoring senior management);
- overseeing management's implementation of the Company's strategic objectives and its performance generally;
- approving operating budgets and major capital expenditure;
- overseeing the integrity of the Company's accounting and corporate reporting systems, including the external audit;
- ensuring that the Company has in place an appropriate risk management framework and setting the risk appetite within which the Board expects management to operate;
- overseeing the Company's process for making timely and balanced disclosure of all material information concerning the Company that a reasonable person would expect to have a material effect on the price or value of the Company's securities;
- overseeing the Company's environmental sustainability practices;
- ensuring that the Company has appropriate corporate governance structures in place, including standards of ethical behaviour and a culture of corporate and social responsibility;
- monitoring the effectiveness of the Company's governance practices; and
- ensuring that the Board is and remains appropriately skilled to meet the changing needs of the Company.

A copy of the Board Mandate is available on the Company's website.

1.2 Recommendation 1.2

A listed entity should:

- (a) undertake appropriate checks before appointing a person, or putting forward to security holders a candidate for election, as a director; and
- (b) provide security holders with all material information relevant to a decision on whether or not to elect or re-elect a director.

Compliance with ASX Recommendation: followed

All candidates for new director positions with the Company are required to complete a Personal Information Form. This form requests that the candidate disclose extensive personal information in relation to their identification, citizenship, employment history, education, involvement in any civil or criminal proceedings and any insolvency issues. The Company considers the candidate's responses set out in the form and conducts further checks and enquiries as is deemed appropriate on a case-by-case basis.

The Company does not propose to conduct specific checks prior to nominating an existing director for re-election by shareholders at a general meeting on the basis that this is not considered necessary given that each director is required to submit to the ASX 'good fame and character' assessment as part of the Company's application for admission to the official list of ASX.

As a matter of practice, the Company will include in its management proxy circulars (which accompany every notice of meeting) a brief biography and other material information in relation to each director who stands for election or re-election at the relevant meeting. Each biography will set out (amongst other things) the relevant qualifications and professional experience of the nominated director for consideration by shareholders.

1.3 Recommendation 1.3

A listed entity should have a written agreement with each director and senior executive setting out the terms of their appointment.

Compliance with ASX Recommendation: partially followed

The Company enters into written consultancy agreements with its executive (non-independent) directors and other senior managers, which set out key employment terms and otherwise govern their engagement or employment by the Company.

As a matter of practice, the Company does not currently enter into written formal agreements with its non-executive (independent) directors. The key employment terms of these engagements are determined on a case-by-case basis, and these engagements are governed by applicable Canadian law.

In addition to the above, the Company enters into a formal indemnity agreement with each director upon their commencement with the Company.

1.4 Recommendation 1.4

The company secretary of a listed entity should be accountable directly to the board, through the chair, on all matters to do with the proper functioning of the board.

Compliance with ASX Recommendation: not followed

The Company, as a foreign company registered under the *Corporations Act 2001* (Cth) (**Corporations Act**), does not currently have a company secretary. The Company's local Australian agent, Blue Leaf Corporate Pty Ltd, currently provides company secretarial services to the Company. The Company is currently considering whether to formally appoint its local agent as its company secretary.

If appointed, the company secretary's duties and responsibilities will include:

- reporting directly, and being accountable, to the Board through the chairman in relation to all governance matters;
- being responsible for advising and supporting the Board members on matters of general governance including by providing guidance to the directors, as appropriate, in relation to the requirements of the Corporations Act, the Company's Constitution and the ASX Listing Rules; and
- being responsible for reviewing and updating the Company's corporate governance policies and procedures in accordance with ASX guidance.

If the Company determines not to formally appoint a company secretary, the Company's local agent will be responsible for performing the above duties.

1.5 Recommendation 1.5

A listed entity should:

- (a) have a diversity policy which includes requirements for the board or a relevant committee of the board to set measurable objectives for achieving gender diversity and to assess annually both the objectives and the entity's progress in achieving them;
- (b) disclose that policy or a summary of it; and
- (c) disclose as at the end of each reporting period the measurable objectives for achieving gender diversity set by the board or a relevant committee of the board in accordance with the entity's diversity policy and its progress towards achieving them, and either:
 - (i) the respective proportions of men and women on the board, in senior executive positions and across the whole organisation (including how the entity has defined "senior executive" for these purposes); or
 - (ii) if the entity is a "relevant employer" under the Workplace Gender Equality Act, the entity's most recent "Gender Equality Indicators", as defined in and published under that Act.

Compliance with ASX Recommendation: not followed

Given the Company's size and scope of operations, the Company has not adopted a formal diversity policy at this stage. There is no requirement to have such a policy under Canadian securities laws or the requirements of TSX-V.

The Company has a policy to select the best available officers and staff for each relevant position in a non-discriminatory manner based on merit.

Notwithstanding this, the Board respects and values the benefits that diversity (e.g. gender, age, ethnicity, cultural background, disability and marital/family status etc) brings in relation to expanding the Company's perspective and thereby improving corporate performance, increasing shareholder value and maximising the probability of achieving the Company's objectives.

The Board is committed to developing a diverse workplace where appointments or advancements are made on a fair and equitable basis.

1.6 Recommendation 1.6

A listed entity should:

- (a) have and disclose a process for periodically evaluating the performance of the board, its committees and individual directors; and
- (b) disclose, in relation to each reporting period, whether a performance evaluation was undertaken in the reporting period in accordance with that process.

Compliance with ASX Recommendation: followed

In accordance with the requirements of the Board Mandate, the Board undertakes annual reviews of the Board's performance and effectiveness as well as the effectiveness and performance of its committees. Effectiveness is subjectively measured by comparing actual corporate results with stated objectives. The contributions of individual directors are informally monitored by other Board members, having regard to the particular credentials of the individual and the purpose of originally nominating the individual to the Board.

The Company will disclose in its annual management's discussion and analysis report (**MD&A**) if a performance evaluation has been conducted.

1.7 Recommendation 1.7

A listed entity should:

- (a) have and disclose a process for periodically evaluating the performance of its senior executives; and
- (b) disclose in relation to each reporting period, whether a performance evaluation was undertaken in the reporting period in accordance with that process.

Compliance with ASX Recommendation: followed

In accordance with the requirements of the Board Mandate, the Board undertakes a review of the performance of each director on at least an annual basis, and senior management on an on-going basis.

Performance of directors and senior management is assessed against performance criteria set by the Board.

The Company will disclose in its annual MD&A if a performance evaluation has been conducted.

2. Principle 2: Structure the Board to add value – a listed entity should have a board of an appropriate size, composition, skills and commitment to enable it to discharge its duties effectively

2.1 Recommendation 2.1

The board of a listed entity should:

- (a) have a nomination committee which:
 - (i) has at least three members, a majority of whom are independent directors; and
 - (ii) is chaired by an independent director,and disclose:
 - (iii) the charter of the committee;
 - (iv) the members of the committee; and
 - (v) as at the end of each reporting period, the number of times the committee met throughout the period and the individual attendances of the members at those meetings; or
- (b) if it does not have a nomination committee, disclose that fact and the processes it employs to address board succession issues and to ensure that the board has the appropriate balance of skills, knowledge, experience, independence and diversity to enable it to discharge its duties and responsibilities effectively.

Compliance with ASX Recommendation: 2.1(a) not followed, 2.1(b) followed

The Company does not have a nomination committee at this stage. The Board considers that, given the current size and scope of the Company's operations, efficiencies or other benefits would not be gained by establishing a separate nomination committee.

The Board currently performs the role and responsibility of a nomination committee, and in particular is responsible for:

- determining the necessary and desirable competencies of directors;
- identifying and reviewing prospective new directors;
- developing a process for the evaluation of the performance of the Board, its committees and directors; and
- the appointment and re-election of directors.

The Board considers the following factors when selecting new directors and when recommending directors to shareholders for election or re-election:

- the aim of having a majority of independent directors on the Board and of having an independent chairman;
- whether the directors as a whole have the appropriate skill base and range of expertise, experience and diversity to discharge the Board's responsibilities set out in the Board Mandate;
- that each individual director has sufficient time to meet his/her commitments as a director of

the Company;

- the duration of each existing director's tenure, noting the retirement provisions set out in the Company's Articles of Incorporation; and
- whether the size of the Board is appropriate to facilitate effective discussions and efficient decision making.

The Board intends to reconsider the requirement for, and benefits of, a separate nomination committee as the Company's operations grow and evolve.

2.2 Recommendation 2.2

A listed entity should have and disclose a board skills matrix setting out the mix of skills and diversity that the board currently has or is looking to achieve in its membership.

Compliance with ASX Recommendation: not followed

The Company does not currently have a formal skills or diversity matrix in relation to the Board members. The Board considers that such a matrix is not necessary given the current size and scope of the Company's operations.

However, as a matter of practice, the Board requires that each director:

- possess the skills and experiences required to carry out their duties and functions; and
- demonstrate a track record of honesty, integrity, ethical behaviour, fairness and responsibility and a commitment to representing the long-term interests of the Company's shareholders.

The Board endeavours to ensure that the Board is comprised of individuals with varying backgrounds, who have (either collectively or individually) significant experience in running and managing public companies, particularly in the natural resource sector.

The Board may adopt a formal skills matrix at a later time as the Company's operations grow and evolve.

2.3 Recommendation 2.3

A listed entity should disclose:

- (a) the names of the directors considered by the board to be independent directors;
- (b) if a director has an interest, position, association or relationship of the type described in Box 2.3 but the board is of the opinion that it does not compromise the independence of the director, the nature of the interest, position, association or relationship in question and an explanation of why the board is of that opinion; and
- (c) the length of service of each director.

Compliance with ASX Recommendation: followed

The Company has three directors who satisfy the criteria for "independence" as outlined in ASX Recommendation 2.3 and NP 58-201, being Bryan Slusarchuk, John Pollesel and Jeffery Swinoga.

NP 58-201 provides that a director is "independent" if a reasonable person with knowledge of all the relevant circumstances would conclude that the director has no material relationship with the

Company that would reasonably be expected to interfere with the exercise of such director's independent judgment.

The Company will disclose in its annual MD&A the names of the directors considered by the Board to be "independent".

The Board currently comprises the following members:

- **Ross Phillips – Chairman**

Ross Phillips has held this office since 10 February 2017.

The Board (excluding Mr Phillips) does not consider Mr Phillips to be independent as he is an executive employee of the Company.

- **Trent Mell – President and Chief Executive Officer**

Trent Mell has held this office since 2 March 2017.

The Board (excluding Mr Mell) does not consider Mr Mell to be independent as he is an executive employee of the Company.

- **Bryan Slusarchuk – Director**

Bryan Slusarchuk has held this office since 22 December 2016.

The Board (excluding Mr Slusarchuk) considers Mr Slusarchuk to be independent as he is free from any business or other relationship with the Company that could materially interfere with, or reasonably be perceived to materially interfere with, the independent exercise of his judgement as director.

- **John Pollesel – Director**

John Pollesel has held this office since 18 May 2017.

The Board (excluding Mr Pollesel) considers Mr Pollesel to be independent as he is free from any business or other relationship with the Company that could materially interfere with, or reasonably be perceived to materially interfere with, the independent exercise of his judgement as director.

- **Jeffery Swinoga – Director**

Jeffery Swinoga has held this office since 10 May 2017.

The Board (excluding Mr Swinoga) considers Mr Swinoga to be independent as he is free from any business or other relationship with the Company that could materially interfere with, or reasonably be perceived to materially interfere with, the independent exercise of his judgement as director.

As announced by the Company to the TSX-V on 5 October 2017, the Company is proposing to seek shareholder approval for the re-election of Trent Mell, Bryan Slusarchuk, Ross Phillips, Jeffrey Swinoga and John Pollesel at its annual general meeting to be held on 26 October 2017.

In addition, the Company is seeking shareholder approval for the appointment of Robert Cross, Jason Bontempo and Paul Matysek to its Board. These appointments are subject to completion of the Company's proposed acquisition of Cobalt One Limited (ASX:CO1) pursuant to a scheme of arrangement conducted in accordance with the Corporations Act (**Cobalt One Transaction**).

Following completion of the Cobalt One Transaction and the appointment of Mr Cross, Mr Bontempo and Mr Matysek to the Board, it is proposed that Mr Slusarchuk will resign as a director of the Company with immediate effect.

The Board considers that, upon appointment, Mr Cross, Mr Bontempo and Mr Matysek will all be independent directors as each will be free from any business or other relationship with the Company that could materially interfere with, or reasonably be perceived to materially interfere with, the independent exercise of their judgement as director.

2.4 Recommendation 2.4

A majority of the board of a listed entity should be independent directors.

Compliance with ASX Recommendation: followed

The Board currently comprises a majority of independent directors (three independent directors and two non-independent directors).

It is proposed that, upon completion of the Cobalt One Transaction, the Board will continue to comprise a majority of independent directors, as it will consist of five independent directors, and two non-independent directors.

Refer to Recommendation 2.3 above for further information.

2.5 Recommendation 2.5

The chair of the board of a listed entity should be an independent director and, in particular, should not be the same person as the CEO of the entity.

Compliance with ASX Recommendation: not followed

The Board does not consider that the chairman of the Company, Ross Phillips, satisfies the criteria for independence as outlined in ASX Recommendation 2.3 and NP 58-201.

The Board does not consider that an independent chairman is necessary given the Company's current size and scope of operations. As the Company develops and its operations expand, the Board will review this position.

2.6 Recommendation 2.6

A listed entity should have a program for inducting new directors and provide appropriate professional development opportunities for directors to develop and maintain the skills and knowledge needed to perform their role as directors effectively.

Compliance with ASX Recommendation: not followed

The Company does not currently have in place a formal induction program for new directors, nor a formal professional development program for existing directors. The Board does not consider that such programs are currently necessary given the size and scope of the Company's operations.

All new directors appointed to the Board are informally briefed on the Company's current property holdings, ongoing exploration programs, overall strategic plans, short, medium and long term corporate objectives, financials status, general business risks and mitigation strategies, and existing corporate policies. The Board considers this informal induction process to be appropriate given the Company's size and current level of operations, the ongoing interaction amongst the directors and the Company's low director turn-over.

The Board is comprised of individuals with varying backgrounds, who have, both collectively and

individually, extensive experience in running and managing public companies, particularly in the natural resource sector. The Board actively encourages its members to communicate with management, auditors and technical consultants to ensure that they remain up to date with industry trends and developments and changes in relevant legislation.

The Board seeks to ensure that all of its members understand the Company's operations. Board members are given the opportunity to attend, on behalf of the Company and otherwise, appropriate and relevant technical and commercial seminars and industry conferences which enable them to maintain their understanding of industry matters and relevant technical advancements.

3. Principle 3: Act ethically and responsibly – a listed entity should act ethically and responsibly

3.1 Recommendation 3.1

A listed entity should:

- (a) have a code of conduct for its directors, senior executives and employees; and
- (b) disclose that code or a summary of it.

Compliance with ASX Recommendation: followed

The Company is committed to adhering to high standards of corporate governance, and promoting a strong ethical culture within the organisation.

Accordingly, the Company has established a Code of Business Conduct (**Code**) which sets out the standards with which all directors, officers, employees and consultants of the Company are expected to comply in relation to the affairs of the Company's business and when dealing with each other, shareholders and the broader community.

In fulfilling their duties, each director, officer, employee and consultant of the Company is expected to familiarise themselves with any laws and regulatory requirements which apply to the duties they carry out on behalf of the Company, and may seek legal advice from their supervisor or the Company's legal counsel if required.

The Code outlines the procedure for reporting any breaches of the Code and the possible disciplinary action the Company may take in respect of any breaches. The Board monitors compliance with the Code through its Audit Committee, which oversees the Company's anonymous whistle-blower program.

In accordance with the requirements of the Code, each director, officer, employee and consultant of the Company is required, on an annual basis, to complete and sign a Compliance Acknowledgement Form, certifying that he or she has received a copy of the Code, has reviewed it and is adhering to the standards of business ethics set out in the Code.

A copy of the Code is available on the Company's website.

4. Principle 4: Safeguard integrity in corporate reporting – a listed entity should have formal and rigorous processes that independently verify and safeguard the integrity of its corporate reporting

4.1 Recommendation 4.1

The board of a listed entity should:

- (a) have an audit committee which:
 - (i) has at least three members, all of whom are non-executive directors and a majority of whom are independent directors; and
 - (ii) is chaired by an independent director, who is not the chair of the board, and disclose:
 - (iii) the charter of the committee;
 - (iv) the relevant qualifications and experience of the members of the committee; and
 - (v) in relation to each reporting period, the number of times the committee met throughout the period and the individual attendances of the members at those meetings; or
- (b) if it does not have an audit committee, disclose that fact and the processes it employs that independently verify and safeguard the integrity of its corporate reporting, including the processes for the appointment and removal of the external auditor and the rotation of the audit engagement partner.

Compliance with ASX Recommendation: followed (other than 4.1(a)(ii))

The Company has established a separate Audit Committee under its Mandate of the Audit Committee (**Audit Mandate**).

The Audit Mandate sets out the purpose and functions of the Audit Committee. The purpose of the Audit Committee is to assist the Board in its oversight of:

- the Company's financial reporting process and the quality, transparency and integrity of its financial statements and other related public disclosures;
- the Company's internal controls over financial reporting;
- the Company's compliance with legal and regulatory requirements relevant to the Company's financial statements; and
- the external auditor's qualifications and independence.

The Audit Mandate requires that the Audit Committee comprise of not less than three directors, the majority of which must be independent directors. The Audit Committee currently comprises three directors: Ross Phillips (non-independent), Jeffery Swinoga (independent) and John Pollesel (independent).

The current chair of the Audit Committee is Mr Phillips, the chairman of the Board and a non-independent director. The Board does not consider that an independent chair of the Audit Committee is necessary given the Company's current size and scope of operations. Following completion of the Cobalt One Transaction, the Company will reconsider the need for an independent chair of the Audit Committee.

All members of the Audit Committee are financially literate and have an understanding of the industries in which the Company operates. The relevant education and experience of each current member of the Audit Committee is set out in the Company's management proxy circular accompanying its notice of annual general meeting announced to the TSX-V on 5 October 2017.

The qualifications, experience and attendance record of Audit Committee members will be disclosed in the Company's annual MD&A.

A copy of the Audit Mandate is available on the Company's website.

4.2 Recommendation 4.2

The board of a listed entity should, before it approves the entity's financial statements for a financial period, receive from its CEO and CFO a declaration that, in their opinion, the financial records of the entity have been properly maintained and that the financial statements comply with the appropriate accounting standards and give a true and fair view of the financial position and performance of the entity and that the opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.

Compliance with ASX Recommendation: followed

As a foreign registered company, the Company is not required to comply with the annual financial reporting requirements of the Corporations Act. The Company is therefore not required to provide these declarations in accordance with section 295A of the Corporations Act.

However, in accordance with the requirements of Canadian securities law (National Instrument 52-109), the chief executive officer and chief financial officer of the Company are required to formally certify financial statements filed by the Company. As part of this certification process, the chief executive officer and chief financial officer are required to provide a certificate declaring that they have each reviewed the financial statements, the financial statements contain no misrepresentations and that they fairly present, in all material respects, the financial condition, results of operations and cash flows of the Company.

4.3 Recommendation 4.3

A listed entity that has an AGM should ensure that its external auditor attends its AGM and is available to answer questions from security holders relevant to the audit.

Compliance with ASX Recommendation: followed

The Company will request that a representative of its external auditor attend each annual general meeting and be available to answer any shareholder questions concerning the conduct of the audit and the preparation and content of the auditor's report.

5. Principle 5: Make timely and balanced disclosure – a listed entity should make timely and balanced disclosure of all matters concerning it that a reasonable person would expect to have a material effect on the price or value of its securities

5.1 Recommendation 5.1

A listed entity should:

- (a) have a written policy for complying with its continuous disclosure obligations under the Listing Rules; and
- (b) disclose that policy or a summary of it.

Compliance with ASX Recommendation: not followed

The Company does not currently have any formal policies in place for compliance with the disclosure requirements of the ASX Listing Rules. However, pursuant to the Company's Code of Business Conduct, all employees (including senior management) are obligated to ensure compliance with all applicable laws, rules and regulations affecting the Company.

Canadian securities laws and the rules of the TSX-V do not impose formal policy requirements on companies for compliance with such laws and rules, but rather all public companies are expected to comply as a matter of course.

The Company is committed to meeting its disclosure obligations under the ASX Listing Rules. In accordance with the Board Mandate, the Board is responsible for:

- approving and reviewing the Company's disclosure policy and any other policies that address communications with shareholders, employees, financial analysts, governments and regulatory authorities, the media and the communities in which the business of the Company and its wholly-owned subsidiaries is conducted; and
- monitoring the effectiveness of the Company's continuous disclosure program with a view to satisfying itself that material information is disseminated in a timely fashion.

The Board is in the process of preparing a continuous disclosure policy to ensure compliance with the ASX disclosure regime, and proposes to implement such a policy in the future.

6. Principle 6: Respect the rights of security holders – A listed entity should respect the rights of its security holders by providing them with appropriate information and facilities to allow them to exercise those rights effectively

6.1 Recommendation 6.1

A listed entity should provide information about itself and its governance to investors via its website.

Compliance with ASX Recommendation: followed

Information about the Company, including copies of its various corporate governance policies is available on the Company's website.

6.2 Recommendation 6.2

A listed entity should design and implement an investor relations program to facilitate effective two-way communication with investors.

Compliance with ASX Recommendation: followed

The Company has a formal investor relations arrangement in place with a professional advisory firm, Skanderbeg Capital Advisors Inc (**Skanderbeg**). Pursuant to this arrangement, Skanderbeg is responsible for, at the direction of the Company, assisting with and coordinating shareholder communications to ensure that shareholders and potential investors are provided with information in respect of the Company and the Company's operations.

In this regard, the Company:

- complies with the continuous disclosure obligations set out in the rules of the TSX-V;
- complies with the continuous disclosure obligations applicable to Canadian reporting issuers (such as the Company) as set out in National Instrument 51-102;
- the Canadian regulations for communications with beneficial owners of securities as set out complies with in National Instrument 54-101; and
- upon its successful admission to the official list of ASX, will comply with the continuous disclosure obligations applicable to entities listed on the ASX (except to the extent that ASX has granted the Company a waiver in respect of a disclosure obligation).

6.3 Recommendation 6.3

A listed entity should disclose the policies and processes it has in place to facilitate and encourage participation at meetings of security holders.

Compliance with ASX Recommendation: followed

The Board encourages full participation of shareholders at its general meetings, and gives formal notice of all meetings to shareholders as required under Canadian law. Shareholders who are unable to attend general meetings are encouraged to:

- lodge proxy appointments in advance of the meeting; or
- access the Company's online voting system through its securities registry, to cast their votes on the relevant resolutions in advance of the meeting.

The Company's officers and management make themselves available to address shareholder queries. Shareholders or the public may make enquires to the Company via its website, <https://firstcobalt.com/contact/>.

Shareholder queries are dealt with on an individual basis and any requested information is generally provided where possible. Significant shareholder queries are brought to the attention of management or the Board.

6.4 Recommendation 6.4

A listed entity should give security holders the option to receive communications from, and send communications to, the entity and its security registry electronically.

Compliance with ASX Recommendation: followed

The Company considers that communicating with shareholders by electronic means is an efficient way to distribute information in a timely and convenient manner.

Canadian law does not permit the Company to send all types of disclosure documents to shareholders electronically, however, as a matter of practice, the Company provides shareholders with the option to receive communications from the Company electronically, wherever possible.

Existing shareholders are able to, and encouraged to:

- consent to receiving communications electronically (where permitted by law) by completing and returning a consent form which may be obtained from the Company or its securities registry; and
- subscribe to the Company's mailing list, to receive ongoing updates in relation to the Company and its operations via email.

7. Principle 7: Recognise and manage risk – a listed entity should establish a sound risk management framework and periodically review the effectiveness of that framework

7.1 Recommendation 7.1

The board of a listed entity should:

- (a) have a committee or committees to oversee risk each of which:
 - (i) has at least three members, a majority of whom are independent directors; and
 - (ii) is chaired by an independent director,and disclose:
 - (iii) the charter of the committee;
 - (iv) the members of the committee; and
 - (v) as at the end of each reporting period, the number of times the committee met throughout the period and the individual attendances of the members at those meetings; or
- (b) if it does not have a risk committee or committees that satisfy (a) above, disclose that fact and the processes it employs for overseeing the entity's risk management framework.

Compliance with ASX Recommendation: followed

Audit Committee

In addition to the specific responsibilities of the Audit Committee set out in Recommendation 4.1 above, the Audit Committee is also responsible for reviewing the financial risks of the Company and overseeing the implementation and evaluation of appropriate risk management practices.

In carrying out this function, the Audit Committee will liaise with management in relation to how financial risks are managed, and seek opinions from management and the independent auditor in relation to the adequacy of risk mitigation strategies.

The Audit Committee currently comprises three directors, a majority of whom are independent directors. Further details of the Audit Committee are set out in Recommendation 4.1 above.

Board

In accordance with the Board Mandate, the Board is responsible for (amongst other things):

- overseeing the processes by which the principal risks of the Company are identified, assessed and managed; and
- ensuring that appropriate risk management systems are implemented and maintained with a view to achieving a proper balance between risks incurred and the creation of long-term sustainable value to shareholders.

In carrying out these responsibilities, the Board adopts an enterprise-wide approach to risk management, which is designed to support the achievement of organisational objectives, including strategic objectives, to improve long-term organisational performance and enhance shareholder value.

The Board considers that a fundamental part of risk management is not only understanding the risks a company faces and what steps management is taking to manage those risks, but also understanding what level of risk is appropriate for the Company. The involvement of the full Board in setting the Company's business strategy is a key part of its assessment of the Board's appetite for risk and also a determination of what constitutes an appropriate level of risk for the Company.

7.2 Recommendation 7.2

The board or a committee of the board should:

- (a) review the entity's risk management framework at least annually to satisfy itself that it continues to be sound; and
- (b) disclose, in relation to each reporting period, whether such a review has taken place.

Compliance with ASX Recommendation: followed

Under the Audit Mandate, the Audit Committee is responsible for (amongst other things) monitoring the Company's risk management framework and will review this framework on an annual basis to ensure that it continues to be effective.

The Company will disclose the outcome of the annual risk management review in its annual MD&A.

7.3 Recommendation 7.3

A listed entity should disclose:

- (a) if it has an internal audit function, how the function is structured and what role it performs; or
- (b) if it does not have an internal audit function, that fact and the processes it employs for evaluating and continually improving the effectiveness of its risk management and internal control processes.

Compliance with ASX Recommendation: 7.3(a) not followed, 7.3(b) followed

The Company does not currently have an internal audit function.

Under the Audit Mandate, the Audit Committee is responsible for (amongst other things) inquiring as to the adequacy of the Company's system of internal controls and reviewing periodic reports from management regarding internal controls, which includes assessing risk with respect to financial reporting. The Audit Committee provides quarterly reports to the Board in this regard, and the Board is responsible for overseeing the processes implemented to ensure the integrity of the Company's internal control and management information systems.

The processes that the Board and Audit Committee employ for evaluating and continually improving the effectiveness of the Company's risk management and control processes are set out in Recommendation 7.1 above.

Further details of the Audit Mandate and the responsibilities of the Audit Committee are set out in Recommendation 4.1 above.

7.4 Recommendation 7.4

A listed entity should disclose whether it has any material exposure to economic, environmental and social sustainability risks and, if it does, how it manages or intends to manage those risks.

Compliance with ASX Recommendation: followed

The Company's primary activity is the exploration and development of mineral assets, with a particular focus on cobalt. The Company is therefore exposed to economic, environmental and social sustainability risks.

The Company considers that the following (non-exhaustive) operational risks are inherent in the industry in which it operates, having regard to the Company's circumstances:

- fluctuations in commodity prices and exchange rates;
- accuracy of mineral reserve and resource estimates;
- reliance on licenses, permits and approvals from governmental authorities;
- ability to obtain additional financing;
- acquisition of new business opportunities; and
- changed operating, market or regulatory environments.

The Code and the Audit Mandate provide for the establishment, maintenance and evaluation of risk management systems, to manage and minimise risks to the Company.

In addition, the Company:

- adheres to the principles of the Responsible Mining Framework which defines the way that the Company will manage the economic, social, and environmental challenges of its business;
- retains the services of specialised and experienced advisors when considering a major transaction (such as a potential acquisition) and conducts due diligence enquiries in respect of the proposed transaction in an effort to minimise and mitigate risk;
- considers that its business can generate shared value for local communities, and understands that relationships based on trust and transparency are important to its success; and
- strives to avoid negative environmental and social impacts, and where impacts are unavoidable, endeavours to minimise and mitigate these impacts and the costs incurred in doing so form part of the Company's business value determination.

Please refer to the Company's website at <https://firstcobalt.com/responsibility/> for further information.

8. Principle 8: Remunerate fairly and responsibly – companies should ensure that the level and composition of remuneration is sufficient and reasonable and that its relationship to performance is clear

8.1 Recommendation 8.1

The board of a listed entity should:

- (a) have a remuneration committee which:
 - (i) has at least three members, a majority of whom are independent directors; and
 - (ii) is chaired by an independent director,and disclose:
 - (iii) the charter of the committee;
 - (iv) the members of the committee; and
 - (v) as at the end of each reporting period, the number of times the committee met throughout the period and the individual attendances of the members at those meetings; or
- (b) if it does not have a remuneration committee, disclose that fact and the processes it employs for setting the level and composition of remuneration for directors and senior executives and ensuring that such remuneration is appropriate and not excessive.

Compliance with ASX Recommendation: 8.1(a) not followed, 8.1(b) followed

The Company has not established a separate remuneration committee.

The role of the remuneration committee is undertaken by the full Board. The Board considers that, given its current size and that only two directors hold executive positions in the Company, efficiencies or other benefits would not be gained by establishing a separate remuneration committee.

The Company's executive compensation philosophy is based on pay for performance and prudent risk management to motivate the senior leadership to execute corporate strategy in a manner that delivers strong results for shareholders. The Company recognises the contribution that its directors and executives make to the Company and seeks to compensate them accordingly. Compensation of directors and executives is reviewed annually and determined by the Board.

The level of compensation for directors and executives is determined after consideration of various relevant factors, including:

- the expected nature and quantity of duties and responsibilities;
- past performance;
- comparison with compensation paid by other entities of comparable size and nature;
- the availability of financial resources;
- the need to align the interests of executive officers with the short-term and long-term interests of shareholders; and
- the need to compensate executives at a level and in a manner that ensures the Company is

capable of attracting, motivating and retaining directors and executives of a high calibre.

To strengthen the alignment between pay and performance, a percentage of the compensation of directors and executives may be variable in nature, and paid in the form of cash bonuses and stock options pursuant to the terms of the Company's stock option plans.

The Company will set out the remuneration paid or provided to directors and executives annually in the Company's annual MD&A.

As the Company's operations grow and evolve, the Board will reconsider the appropriateness of forming a separate remuneration committee.

8.2 Recommendation 8.2

A listed entity should separately disclose its policies and practices regarding the remuneration of non-executive directors and the remuneration of executive directors and other senior executives.

Compliance with ASX Recommendation: followed

The Company's policies and practices regarding the remuneration of its directors and other senior executives will be set out in its annual MD&A.

8.3 Recommendation 8.3

A listed entity which has an equity-based remuneration scheme should:

- (a) have a policy on whether participants are permitted to enter into transactions (whether through the use of derivatives or otherwise) which limit the economic risk of participating in the scheme; and
- (b) disclose that policy or a summary of it.

Compliance with ASX Recommendation: followed

The Company is currently seeking shareholder approval for the adoption of a long term incentive plan, which, if approved, will replace the Company's current stock option plan which was adopted by the Board on 25 August 2017.

In accordance with the Company's Insider Trading Policy, the plan does not allow participants to enter transactions that would limit their economic risk under the scheme.

The Company's Insider Trading Policy sets out the circumstances in which directors, officers, employees, consultants and contractors (**Restricted Persons**) are prohibited from dealing in the Company's Securities.

A copy of the Company's Insider Trading Policy is available on the Company's website.