NI 43-101 TECHNICAL REPORT

ON THE

TELEDYNE COBALT PROJECT

LARDER LAKE MINING DIVISION, NORTHEASTERN ONTARIO

FOR

LICO ENERGY METALS INC.



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Appendix I: Option Agreement

1. EXECUTIVE SUMMARY

At the request of LiCo Energy Metals Inc. ("LiCo"), the author has completed a geological review of the Teledyne Cobalt Project (the "Property") and prepared this technical report (the "Technical Report") in compliance with NI 43-101, Companion Policy NI43-101CP, and Form 43-101F1. This Technical Report has been prepared for the purposes of a financing document for LiCo.

The author has prepared this report to provide a summary of scientific and technical data on the Property, including historical exploration activities, and has 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 LiCo, as well as by the review of geological and exploration information available in the public domain.

LiCo Energy Metals Inc, formerly known as Wildcat Exploration Inc., optioned the Property from Palisade Resources Corp. ("Palisade) on September 8th, 2016. Under the terms of the Option Agreement, LiCo can earn an undivided 100% legal and beneficial interest and right in and to the Property by making staged payments totaling \$850,000, and issuing 11,000,000 shares over a period of 78 months. The agreement is also subject to a 2% net smelter royalty ("NSR") to Palisade. LiCo shall have the right to purchase 1% of the NSR from Palisade for the aggregate amount of \$1,000,000, reducing the royalty to 1% after such purchase.

The Property is situated approximately 6 km east-northeast of the town of Cobalt, Ontario. The Property consists of 5 patented and 8 unpatented mining claims covering an area of approximately 607.1 ha.

The Property is located within the Cobalt embayment in the Southern Province of the Canadian Shield. The Property is underlain by a Nipissing Diabase sill, which in turn is underlain by Proterozoic age Huronian sediments. The sediments in turn unconformably overlie Archean Keewatin-age volcanic rocks.

The Property adjoins the south and west boundaries of claims that hosted the Agaunico Mine. From 1905 through to 1961, the Agaunico Mine produced a total of 4,350,000 lbs. of cobalt ("Co"), and 980,000 oz. of silver ("Ag") (Cunningham-Dunlop, 1979). A significant portion of the cobalt that was produced at the Agaunico Mine was located along structures that extended southward towards the northern boundary of claim 372, currently under option to LiCo. Cobalt mineralization consisted of cobaltite and smaltite hosted within steeply dipping veins and extensive disseminations within Huronian sedimentary rocks. From 1951 through to 1957, the average Co content of the ores mined at the Agaunico Mine was approximately 0.5%. In 1955, 526,000 lbs. of Co, 146,000 oz. of Ag, 117,000 lbs. of nickel ("Ni"), and 81,000 lbs. of copper ("Cu") were extracted from 62,000 tons of ore (Cunningham-Dunlop, 1979).

In 1953, Big Agaunico Mines Ltd. carried out a drilling program on a portion of LiCo's Teledyne Cobalt Property to locate the extension of the south-striking Agaunico cobalt-rich Vein 15. Drill holes No. 8 and No. 12 intersected 0.58% Co over 5 ft (1.5 m), and 0.46% Co over 3 ft (0.9 m) respectively. These intersections, located 350 ft (106.7 m) and 600 ft (182.9 m) south of the northern claim boundary of claim 372, confirmed the likely extension of the Agaunico cobalt zone (Vein #15) onto the Property (Cunningham-Dunlop, 1979).

In 1979, Teledyne Canada Ltd. ("Teledyne") completed six surface diamond drill holes and encountered a zone of Co mineralization that extended 640 ft (195 m) south from the claim boundary. In 1980, Teledyne completed a 10 ft (3.0 m) by 13 ft (4.0 m) access decline at a decline of -15 degrees for length of approximately 2,300 ft (701.0 m) to reach the mineralization encountered in their recently completed surface diamond drilling program. A total of 6,167 ft (1,879.7 m) of underground diamond drilling was completed in 22 drill holes (Bresee, 1981). The drill program confirmed the extension of the Agaunico cobalt zone onto claim 372 for a strike length of 500 ft (152.4 m). The drill program also encountered a second zone with a strike length of 450 ft (137.2 m). The most significant results included 0.644% Co over 55.3 ft (16.9 m), 0.74% Co over 28.6 ft (8.7m), and 2.59% Co over 8 ft (2.4 m). The aforementioned widths represent drill intersected widths, not true widths.

To the author's knowledge, no further work has been completed on the Property since 1981. LiCo has not completed any work on the Property.

It is recommended that a GIS (Geographic Information System) compilation be completed prior to commencement of any work programs. Prospecting and geological mapping is also recommended to map in the geological contacts and structures on the Property which will assist in the preparation of future work programs. Magnetometer, VLF, and Induced Polarization (IP) geophysical surveys should be completed to assist in expanding known structures and mineralization on the Property. A diamond drill program is also recommended, with the first phase totaling 2,000 m, and the second phase, contingent upon favorable results in the first phase of diamond drilling, totaling

3,000 m. The aggregate expenditure of the work programs proposed is estimated to be \$780,010.

2. INTRODUCTION AND TERMS OF REFERENCE

2.1 Introduction

At the request of LiCo, the author has prepared this Technical Report to provide a summary of scientific and technical data on the Property. This Technical Report provides a summary and description of results from exploration work carried out by previous operators on the Property.

2.2 Terms of Reference

The author was retained by LiCo to carry out an independent technical review of the Property. The review commenced September 1st, and continued through to October 5th, 2016.

The author's assignment consisted of:

- 1) Reviewing and summarizing historical exploration data generated on the Property prior to LiCo's acquisition of the Property;
- 2) Undertaking a site visit to confirm historical 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 Palisade and LiCo.

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 September 20th, 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

The author visited the Property on September 11th, 2016. The site visit included visiting the location of the Teledyne decline, locating historical drill collars, and reviewing the surficial geology. A gate, located at 604990E/5252075N (Photo 1), provides access to the decline located at 605116E/5252016N (Photo 2).

The author was only able to locate one drill collar located at 604975E/5252146N, likely being historical drill hole T5, located in Photo 3. Unfortunately, claim 372 was logged within the last 10 years and the regrowth of poplar and other brush is very dense, therefore locating additional collars would be much easier in the late fall or early spring when there are no leaves on the trees. An empty fuel drum and a concrete pad measuring approximately 10 m by 20 m were located at 605143E/5252071N (Photo 4).



Photo 1: Gated entrance to the Teledyne decline (Looking east, Lake Temiskaming is located in the background). Electrical powerlines located in the top right of the photo.



Photo 2: Entrance to the Teledyne decline.



Photo 3: Old drill casing (possibly T5).



Photo 4: Empty fuel drum located beside concrete pad.

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.

Abbreviation	Unit or Term
Ag	silver
ASL	above sea level
As	arsenic
Au	gold
Ga	billion years
С	Celsius
cm	centimetre
Со	cobalt
CRM	certified reference material
Cu	copper
ft ²	square foot
ft ³	cubic feet
0	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
М	metre
mm	millimetre
Moz	million troy ounces
Ма	million years
MNDM	Ministry of Northern Development and Mines
Ni	nickel
NI 43-101	Canadian National Instrument 43-101
NSR	Net Smelter Royalty
oz	ounce(s), Troy ounce(s)
%	percent
ppm	parts per million
QA/QC	Quality Assurance/Quality Control
SG	specific gravity
ton	short ton (2,000 pounds)
Т	metric tonne (2,000 kg) (2,204.6 pounds)
Zn	zinc

Table 1: Abbreviations

3. RELIANCE ON OTHER EXPERTS

The information, conclusions and recommendations contained herein are based on a review of digital and hard copy data and information supplied to the author by Palisade and LiCo, and various reports that were available in the public domain.

Some relevant information on the Property presented in this Technical Report is based on data derived from reports written by geologists and/or engineers who may or may not be "qualified persons" (as defined in NI 43-101). The author has made every attempt to accurately convey the content of those reports, 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 in Bucke and Lorrain Townships, located approximately 6 km eastnortheast of the town of Cobalt, Ontario. The Property consists of 5 patented and 8 unpatented mining claims covering an area of approximately 607.1 ha.

The Property is bounded by UTM NAD83 Z17T coordinates 604390E to 607220E, and 5248120N to 5252980N and is covered by National Topographic System (NTS) map sheet 31M/5.

4.2 Mineral Dispositions

LiCo optioned the Property from Palisade Resources Corp. on September 8th, 2016. Under the terms of the Option Agreement, LiCo can earn an undivided 100% legal and beneficial interest and right in and to the Property by making staged payments totaling \$850,000, and issuing 11,000,000 shares over a period of 78 months. The agreement is also subject to a 2% net smelter royalty ("NSR") to Palisade. LiCo shall have the right to purchase 1% of the NSR from Palisade for the aggregate amount of \$1,000,000, reducing the royalty to 1% after such purchase. Details of the option agreement can be found in Appendix 1.

The Property consists of 5 patented and 8 unpatented mining claims covering an area of approximately 607.1 ha. Both surface and mineral rights are attached to the patents that comprise the Property. Patented and unpatented claim details are provided in Tables 2 and 3, and shown in Figure 2.

At the time of report writing, the author understands that the patented and unpatented mining claims are currently held 100% by Palisade.

The author has not sought a formal legal opinion with regard to the ownership status of the claims comprising the Property and has in all aspects of tenure relied on materials made available on the MNDM's website (http://www.mci.mndm.gov.on.ca/claims/clm_mdvcl.cfm) and by LiCo and Palisade. The author expresses no opinion as to the ownership status of the Property.

Claim Number	Parcel Number	PIN Number	Township
429	6934	61357-0010 (LT)	Bucke
372/229	3434	61357-0032 (LT)*	Bucke
372 (portion)	12249	61357-0071 (LT)**	Bucke
372/229	10413	61357-0054 (LT)***	Bucke
REF64769	4254	61390-0227 (LT)	Lorrain
T32348	12456	61390-0101 (LT)	Lorrain

Table 2: Patented Claim Details

*includes area of PIN#61357-0071

***W corner of PIN#61357-0032 *** Covers same area as PIN #61357-0032 but excludes NW corner (PIN #61357-0071) and excludes small portion in SW corner.

Table 3: Unpatented Claim Details

Claim Number	Township	Date Recorded	Due Date	Work Required	Units	Area (ha)
4282354	Bucke	2016-May-04	2018-May-04	\$400	1	16
4282359	Lorrain	2016-May-04	2018-May-04	\$400	1	16
4282369	Lorrain	2016-May-04	2018-May-04	\$2,400	6	96
4282393	Lorrain	2016-May-04	2018-May-04	\$2,800	7	112
4283363	Lorrain	2016-May-04	2018-May-04	\$2,400	6	96
4283365	Lorrain	2016-May-04	2018-May-04	\$800	2	32
4282529	Bucke	2016-Aug-4	2018-Aug-04	\$800	2	32
4282530	Lorrain	2016-Aug-4	2018-Aug-04	\$3,200	8	128



Figure 1: Location of the Teledyne Cobalt Project, Ontario

4.3 Environmental Liabilities and Permitting

Environmental liabilities on the Property are confined to the patented claims and include the decline and any previous water quality impairments that exist on the Property.

Bresee (1981) reports that approximately 32,000 tons of rock were excavated during the construction phase of the decline and stored on surface 1,000 ft (304.8 m) away from the entrance to the decline. If there are any metals, including arsenic, present in the waste rock pile,

it could affect drainage from the site in terms of water quality. During the site visit, the author was not able to locate the waste pile.

An environmental due diligence study should be completed to identify the nature and extent of any environmental liabilities that may be present on the Property. The Ontario Environmental Protection Act and the Ontario Water Resources Act provide that past and present owners can be held responsible for the discharge of contaminate.

MNDM has indicated to the author that a closure plan was filed by Ego Resources Inc. in 1995. The closure plan was submitted for an Advanced Exploration Project that included dewatering and rehabilitating the decline, and carrying out some underground exploration work. The closure plan was not accepted by the MNDM and the work that was outlined was not completed. There was no financial assurance submitted to the MNDM by Ego Resources Ltd.

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.

5. ACCESS, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY

5.1 Accessibility

The Property is situated approximately 6 km east-northeast of the town of Cobalt, Ontario in Bucke and Lorrain Townships. Highway 537, a well maintained gravel highway, provides access to the Property. Bucke Park road, located at 604590E/5251790N, provides access through claim 372. An unmarked road, located at 604990E/5252075N, leads to the decline located at 605116E/5252016N.

The remaining patented and unpatented claims can be accessed through secondary roads and trails located off of Highway 537.

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 Teledyne Cobalt Project

5.3 Local Resources and Infrastructure

Local resources on the Property consist of mixed deciduous and coniferous trees.

An electrical power line crosses the Property and comes within 75 m from the entrance of the decline.

Highway 11B is located approximately 4 km to the northwest of the Property, and the Ontario Northland Railway, operated by the Ontario Northland Transportation Commission, a provincial Crown agency of the government of Ontario, services Cobalt.

Most supplies and services can be found in Temiskaming Shores, Ontario, a City with a population of approximately 10,500.

5.4 Physiography

The local terrain consists of gently rolling to steep ledges and cliffs. Typical vegetation on the Property consists of a boreal forest with a mixture of coniferous and deciduous trees, including poplar, birch, pine, spruce, alders, and willows. The elevation of the Property is approximately 210 m above sea level and the maximum topographical relief is generally less than 25 m.

6. HISTORY

At the time of writing this Technical report, limited historical information on the patented claims was available through online searches of assessment files through MNDM's Assessment File Research Imaging (AFRI) database. It is highly recommended that the Resident Geologist's Office in Kirkland Lake be visited to locate additional historical reports that pertain to the patented and unpatented claims that may not be accessible online.

6.1 Historical Mineral Exploration – Patented Claims

Claim 372 (Big Agaunico)

In 1953, Big Agaunico Mines Ltd. carried out a drilling program on a portion of LiCo's Property to locate the extension of the south-striking Agaunico cobalt zone (Vein #15). Drill holes No. 8 and No. 12 intersected 0.58% Co over 5 ft (1.5 m), and 0.46% Co over 3 ft (0.9 m) respectively.

These intersections, located 350 ft (106.7 m) and 600 ft (182.9 m) south of the northern claim boundary of claim 372, confirmed the extension of the Agaunico cobalt zone on the Property (Cunningham-Dunlop, 1979).

In 1979, following up on Big Agaunico's drill results, Teledyne Canada Ltd. ("Teledyne") completed six surface diamond drill holes totalling 4,203 ft (1281.1 m). Teledyne encountered the zone of cobalt mineralization intersected by Big Agaunico, and extended the mineralization 640 ft (195 m) south from northern claim boundary. In 1980, Teledyne completed a 10 ft (3 m) by 13 ft (4.0 m) access decline at a decline of -15 degrees for length of approximately 2,300 ft (701 m) to reach the mineralization encountered in their recent drill program. A total of 6,167 ft (1,879.7 m) of underground diamond drilling was completed in 22 drill holes. The drill program confirmed the extension of the Agaunico cobalt zone onto claim 372 for a strike length of 500 ft (152.4 m). The drill program also encountered a second zone with a strike length of 450 ft (137.2 m). The most significant results included 0.644% Co over 55.3 ft (16.9 m), 0.74% Co over 28.6 ft (8.7m), and 2.59% Co over 8 ft (2.4 m) (Bresee, 1981). The aforementioned widths represent drill intersected widths, not true widths. Table 4 provides the highlights from the drilling completed on the Teledyne Cobalt Project from 1979 through to 1980. Figure 3 displays the historical drill hole locations and traces. Note that the location of the drill hole information and ramp location were derived from a historical report completed by Bresee (1981). At the time of writing this report, there were very few control points available to the author to georeference the historical map. The location of the drill holes, traces, and ramp should be considered for illustration purposes only. Locating drill hole casings and survey pins for the claims would provide better control on the positioning of features that are included in the figure.

To the author's knowledge, no further work has been completed on the Property since 1981.

Claim 429

No historical mineral exploration has been reported on this claim.

Claim REF64769

No historical mineral exploration has been reported on this claim.

Claim T32348

In 1952, Fred Thompson completed one drill totaling 124 ft (37.8 m). No information on the results are known at this time.

Claim 229

No historical mineral exploration has been reported on this claim.

DDH	Sample Width (ft)	Sample Width (m)	Co (%)	Ag (oz/ton)
UT-2	55.3	16.86	0.64	-
includes	3.0	0.91	6.90	0.22
UT-3	28.6	8.72	0.74	-
includes	1.0	0.30	10.20	-
UT-8	1.5	0.46	0.10	4.21
UT-11	6.5	1.98	0.45	0.88
UT-13	8.0	2.44	0.49	-
UT-15	5.2	1.58	0.59	-
UT-16	5.5	1.68	0.50	-
UT-18	8.0	2.44	2.59	-
UT-20	17.0	5.18	0.35	-
UT-21	10.0	3.05	0.59	-
T-1	5.5	1.68	1.02	0.27
includes	0.5	0.15	10.80	2.36
T-5	17.0	5.18	0.50	0.13
T-6	5.5	1.68	0.53	0.59

Table 4: Teledyne Canada Ltd. 1979-1980 Diamond Drilling Highlights

* T-series = surface drill holes, UT-series = underground drill holes. ** sample widths represent drill intercept widths, not true widths.



Figure 3: Teledyne decline and drill holes projected to surface on Claim 372 (location approximate).

6.2 Historical Mineral Exploration – Unpatented Claims

Assessment files covering the unpatented mining claims were sourced online through MNDM's Assessment File Research Imaging (AFRI) database. The summaries provided below are not an inclusive account of all of the work performed on the Property. The author recommends that LiCo undertake a GIS compilation of all of the historical work that has been completed on the patented and unpatented claims. Additionally, any historical prospects, drill holes, shafts, etc., should be located in the field to confirm their location with the current claim fabric. It is also

recommended that the Resident Geologist's Office in Kirkland Lake be visited to locate additional historical reports that pertain to the Property which may not be available online.

Unpatented Claim 4282354

1908: Stellar Silver Cobalt Mines sank a 45 ft (13.7 m) deep shaft near the southeast corner of the claim, and drove an 18 ft (5.5 m) adit near the northeast corner of the claim. Results unknown.

1956-1959: Eight diamond drill holes were completed. Assays or logs were not made public.

1967: Prospecting, geological mapping, and geophysical surveying (magnetics, radiometrics) were completed by an unknown individual. Results unknow.

1980: Malouf Holdings completed line cutting and limited geophysical surveying (VLF-EM, magnetometer). Mechanical stripping was recommended to follow up on some of the anomalies. No results available.

1985: T.T.L. Minerals Ltd. completed two diamond drill holes totalling 236 ft (71.9 m). No significant results were reported.

1997: S. Wareing and M. Simpson completed prospecting on the claim.

2004: Cabo Mining completed geological mapping on the claim.

Unpatented Claim 4282359

2002: Cabo Mining completed geological mapping on the claim.

Unpatented Claim 4282369

1951: Broshier Porcupine Mines Ltd. completed 4 diamond drill holes totalling 1719.5 ft (524.1 m). No assays were reported.

1985: Osisko Lake Mines Ltd. completed prospecting and geophysical surveying (VLF-EM).

2012: Canagco Mining Corp. completed prospecting.

Unpatented Claim 4283363

1906-1909: Extensive surface work and three shafts were sunk on the Big Fissure prospect located on the west side of the current claim. Results unknow.

1963: Benner completed one diamond drill hole totalling 202 ft (61.6 m). No assays reported.

1964: March Minerals Ltd. completed 6 diamond drill holes totalling 1,011 ft (308.2 m).

1974: McAllister completed 7 trenches and 2 diamond drill holes totalling 131 ft (39.9 m). A sample from a 2" wide cobalt vein assays 23 oz/ton Ag. The drill holes did not intersect any significant mineralization.

1979-1980: Teck Explorations Ltd. optioned claims owned by McAllister and completed trenching, geophysical surveying (magnetics, VLF-EM), and diamond drilling on the Big Fissure prospect (formerly claim S398702). Seven drill holes totalling 3,569 ft (1,087.8 m) were completed. Assays were not reported. Surface grab samples from the main trench assayed up to 1,196 oz/ton Ag, 10.20 % Co, and 7.28% Ni (Dillon, 1980).

Unpatented Claim 4282529

No assessment files were available through MNDM's AFRI online database.

Unpatented Claim 4282393

1955: Cobalt Consolidated Mining Corp. Ltd. completed geophysical surveying (EM).

1985: Osisko Lake Mines Ltd. completed prospecting and geophysical surveying (VLF-EM).

1995: 683648 Ontario Ltd. completed limited geophysical surveying (magnetometer) towards the northern boundary of the current claim.

2008: International Millennium Mining Corp. completed line cutting and MMI soil sampling.

Unpatented Claim 4282530

1952-1955: Masco Cobalt Silver Mines Ltd. completed 9 diamond drill holes totalling 5,828.5 ft (1776.5 m) along the northern boundary of the claim. No results available.

2002: Cabo Mining completed geological mapping on the claim.

2008: International Millenium Mining Corp. completed line cutting and MMI soil sampling. No results available.

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 overlie 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 4).



Figure 4: Regional Geology of the Cobalt Area, Ontario (after OGS MRD 282).

7.2 Property Geology

The Property is underlain by a Nipissing Diabase sill, which in turn is underlain by Huronian sediments of Proterozoic age. The sediments in turn unconformably overlie Keewatin-age volcanic rocks (Figure 5).

7.3 Mineralization

Cobalt mineralization consists of cobaltite and smaltite hosted within steeply dipping veins and extensive disseminations within Huronian sedimentary rocks. From 1951 through to 1957, the average Co content of the ore mined at the neighbouring Agaunico Mine was approximately 0.5%. The steeply dipping cobalt veins of the Agaunico Mine, including vein 15 which was mined to the north boundary of claim 372, extended up to 125 ft (38.1 m) above the Archean-Huronian unconformity. The Co mineralization was locally massive and up to several inches in width within the lower conglomerates, and as fine disseminations and fracture-fills within the slate and quartzite horizons. Mineralization was erratic along strike, and stoping widths varied from 5 ft (1.5 m) to 50 ft (15.2 m). The average width for the Agaunico stope, mined to the northern boundary of claim 372, was 15 ft (4.6 m) (Cunningham-Dunlop, 1979).

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 5: Property Geology (after OGS MRD 282).

9. EXPLORATION

LiCo has not completed any exploration activities on the Property.

10. DRILLING

LiCo has not completed any drilling on the Property.

11. SAMPLE PREPARATION, ANALYSES, AND SECURITY

LiCo 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 Teledyne Cobalt Project along with a review of assessment files made available through MNDM's Assessment File Research Imaging (AFRI) database. It is recommended that the Kirkland Lake Resident Geologist's office be visited to locate additional historical reports that pertain to the Property.

The author has relied upon the information that has been reviewed as described in the previous sections. The author is of the opinion that the available information is generally of sufficient accuracy to form the basis of an exploration program on the Property.

12.2 Recent Data Verification

LiCo has not completed any work programs on the Property.

13. MINERAL PROCESSING AND METALLURGICAL TESTING

There has been no mineral processing or metallurgical testing completed on the Property.

14. MINERAL RESOURCE ESTIMATES

There is no mineral resource yet defined on the Property.

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

In 1980, Teledyne completed a 10 ft (3.0 m) by 13 ft (4.0 m) access decline at a decline of -15 degrees for length of approximately 2,300 ft (701.0 m) to reach the mineralization encountered in their 1979 surface diamond drilling program (Bresee, 1981).

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 PROPERTES

The Cobalt mining camp has seen considerable exploration and development since the discovery of silver in 1903 and thus there are numerous adjacent Properties. To describe each Property would be very time consuming. For the purpose of this report, the author feels that the three most important Properties that should be included in this technical report are the nearby Agaunico Mine, Falconbridge's 585 claim, and the Cobalt Contact Mine located on claim T43819. The location of these properties is displayed in Figure 6.

Agaunico Mine

The Teledyne Cobalt Project adjoins the south and west boundaries of claims that hosted past producing Agaunico Mine (claims 388, 696, 697, 932, 944, 2623). From 1905 through to 1961, the Agaunico Mine produced a total of 4,350,000 lbs. of cobalt ("Co"), and 980,000 oz. of silver ("Ag") (Cunningham-Dunlop, 1979). The amount of Co produced from the Agaunico Mine is greater than that of any other mine in the Cobalt Mining Camp. Production ceased in 1961 due to depressed Co prices and over-supply (Thomson, 1964).

Cobalt mineralization consisted of cobaltite and smaltite hosted within steeply dipping veins and extensive disseminations within Huronian sedimentary rocks. From 1951 through to 1957, the

average Co content of the ores mined at the Agaunico Mine was approximately 0.5%. In 1955, 526,000 lbs. of Co, 146,000 oz. of Ag, 117,000 lbs. of nickel ("Ni"), and 81,000 lbs. of copper ("Cu") were extracted from 62,000 tons of ore (Cunningham-Dunlop, 1979).

A significant portion of the cobalt that was produced at the Agaunico Mine was located along structures (Vein #15) that extended southward towards the northern boundary of claim 372, currently under option to LiCo. Mineralization was generally located within 125 ft (38.1 m) above the Huronian/Archean unconformity. Stoping widths of up to 50 ft (15.2 m) were not unusual at the Agaunico Mine (Cunningham-Dunlop, 1979).

Falconbridge Claim 585

To the immediate west of the Teledyne Cobalt Project is claim 585, once owned by Falconbridge Nickel Mines Ltd. In 1981, Teledyne Canada Ltd. optioned the Property and completed 36 surface diamond drill holes, outlining two separate vein systems containing significant cobalt and silver values (Bresee, 1982). The main zone had a north-south strike, which Teledyne hypothesized was the southern extension of the #3 vein from the Cobalt Contact Mine, located to the north on claim T43819. Drilling by Teledyne followed the structure for approximately 500 ft (152.4 m) south of the northern claim boundary of claim 585. The southern drill holes did encounter cobalt mineralization, thus indicating that the zone could extend further south (Bresee, 1982).

Cobalt Contact

Surface mineralization that led to the development of the Cobalt Contact Mine was first discovered on claim T43819 in 1905. Cobalt Contact Mining Company acquired the ground, sunk a shaft to a depth of 130 ft (39.6 m), and completed a considerable amount of lateral development. Cobalt Contact Mines Ltd. optioned the claims from 1924 through to 1926, deepened the shaft to 230 ft (70.1 m) and continued exploring three known veins. From 1930 through to 1945, intermittent underground work was carried out by three separate mining companies. Cobalt and silver was produced from the Cobalt Contact Mine, however the author could not confirm the production figures (Thomson, 1964).



Figure 6: Adjacent Properties to the Teledyne Cobalt Project (geology after OGS MRD 282, P2050).

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

The author was engaged by LiCo to prepare an independent review of the geological potential of the Property and to prepare a NI 43-101 Technical Report.

The author concludes that the Property is situated over geology that is favourable for hosting Co and Ag mineralization. Teledyne's diamond drilling programs, conducted from 1979 through to 1980 on the Property, intersected significant Co mineralization. This is further supported by the presence of nearby historical production at the Agaunico Mine that produced a total of 4,350,000 lbs. of Co, and 980,000 oz. of Ag from the period between 1905 and 1961 (Cunningham-Dunlop, 1979). A significant portion of the cobalt that was produced at the Agaunico Mine was located along structures that extended southward towards the northern boundary of claim 372, currently under option to LiCo.

Review of Teledyne's diamond drilling program suggests there remains further potential along the southern strike of the structures hosting the mineralization that Teledyne encountered in 1979 that ultimately led to the construction of a decline. The two southernmost diamond drill holes, UT-15 and UT-16, intersected 5.2 ft (1.58 m) of 0.59% Co, and 5.5 ft (1.68 m) of 0.50% Co respectively.

Other historical occurrences on the Property also warrant further follow up.

26. RECOMMENDATIONS

Subsequent to the research conducted for this Technical Report, and taking into consideration information provided by LiCo, the author recommends a two-phase exploration program:

Phase 1:

- 1) An environmental due diligence study should be completed to identify the nature and extent of any environmental liabilities that may be present on the Property.
- 2) Creation of a GIS database. All geological, geophysical and historical information that pertain to the patented and unpatented claims should be compiled. The Resident Geologist's Office in Kirkland Lake should be visited to locate additional historical reports that may not be accessible online.
- 3) A Phase 1 surface exploration work program is recommended prior to the commencement of any diamond drilling. This should include geological mapping, prospecting, line cutting, and geophysical surveying. A very-low-frequency electromagnetic (VLF-EM) and magnetometer survey should be completed over the patented claims to extend known north-south oriented structures, and to explore for the potential of additional unknown structures. An induced polarization (IP) survey should also be considered.
- 4) A 2,000 m, Phase 1 diamond drill program is recommended to confirm the historical mineralization as reported by Teledyne Canada Ltd., to extend the known mineralization along strike, and follow up on targets generated by the Phase 1 surface exploration program.

Phase 2:

1) Based on favorable results from Phase 1, a 3,000 m follow-up diamond drill program is recommended for the Property.

Tables 5, 6, and 7 summarize the budget and recommendations of a two-phase exploration program for the Property.

Table 5: Phase 1 Surface Exploration Budget

Personnel costs (GIS compilation)	Unit	Unit cost	Sub-Total
Project Geologist/Project Manager	10 days	\$600/day	\$6,000
Personnel costs (prospecting, geological mapping)			Sub-Total
Project Geologist/Project Manager	30 days	\$600/day	\$18,000
Technician	30 days	\$300/day	\$9,000
Fixed contract costs	Unit	Unit cost	Sub-Total
Mechanized Stripping	1	\$15,000	\$15,000
Line cutting	20 km	\$700/km	\$14,000
IP Survey	20 km	\$ 2,800/km	\$56,000
Magnetometer & VLF Survey	20 km	\$400/km	\$8,000
Other costs	Unit	Unit cost	Sub-Total
Meals and accommodation	30	\$100/day	\$3,000
Truck Rental & Fuel	30	\$120/day	\$3,600
ATV Rental & Fuel	30	\$100/day	\$3,000
Assays	200	\$40	\$8,000
Supplies	1	\$5,000	\$5,000
	•	Total:	\$148,600

Table 6: Phase 1 Diamond Drilling Budget (2,000 m)

Personnel costs (diamond drilling)	Unit	Unit cost	Sub-Total
Project Geologist/Project Manager	30 days	\$600/day	\$18,000
Technician	20 days	\$300/day	\$6,000
Fixed contract costs	Unit	Unit cost	Sub-Total
Diamond Drilling (all inclusive)	2000 m	\$85/m	\$170,000
Other costs	Unit	Unit cost	Sub-Total
Supplies	1	\$6,000	\$6,000
Core shack Rental	1 month	\$800/mth	\$800
Diamond Saw Rental	1 month	\$600/mth	\$600
Meals and accommodation	30	\$100	\$3,000
Assays	300 samples	\$40/Sample	\$12,000
Truck Rental & Fuel	30	\$120/day	\$3,600
ATV Rental & Fuel	30	\$100/day	\$3,000
	•	Total:	\$ 223,000

Table 7: Phase 2 Diamond Drilling Budget (3,000 m)

Personnel costs (diamond drilling)	Unit	Unit cost	Sub-Total
Project Manager	45 days	\$600/day	\$27,000
Technician	35 days	\$300/day	\$10,500
Fixed contract costs	Unit	Unit cost	Sub-Total
Diamond Drilling (all inclusive)	3000 m	\$85/m	\$255,000
Other costs	Unit	Unit cost	Sub-Total
Supplies	1	\$7,500	\$10,000
Core shack Rental	1.5 months	\$800/mth	\$1,200
Diamond Saw Rental	1.5 months	\$600/mth	\$900
Meals and accommodation	30	\$100	\$3,000
Assays	500 samples	\$40/Sample	\$20,000
Truck Rental & Fuel	45	\$120/day	\$5,400
ATV Rental & Fuel	45	\$100/day	\$4,500
		Total:	\$337,500

Sub-Total: \$709,100 Contingency (10%): \$70,910 Total: \$780,010

27. DATE AND SIGNATURE PAGE

This report titled "NI 43-101 Technical Report on the Teledyne Cobalt Project, Larder Lake Mining Division, Northeastern Ontario" for LiCo Energy Metals Inc. dated October 5th, 2016, was prepared and signed by the following author:

Signed by:



Joerg M. Kleinboeck, P.Geo.

28. REFERENCES

Ayer, J.A. and Chartrand, J.E. 2011. Geological compilation of the Abitibi greenstone belt; Ontario Geological Survey, Miscellaneous Release—Data 282.

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CERTIFICATE OF AUTHOR

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 16 years on a variety of exploration properties targeting gold, silver, Ni-Cu-PGE, base metals, diamonds, and industrial minerals.
- 5. 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 ensure that the Technical Report is not misleading.
- 6. In accordance with section 1.5 of NI 43-101, I am independent of LiCo Energy Metals Inc.
- 7. I have read National Instrument 43-101 and the Technical Report has been prepared in compliance with National Instrument 43-101.
- I am responsible for all sections of the Technical Report titled "NI 43-101 Technical Report on Teledyne Cobalt Project, Larder Lake Mining Division, Northeastern Ontario", dated October 5th, and prepared for LiCo Energy Metals Inc.
- 9. I am a "qualified person" as defined in National Instrument 43-101.
- 10. I visited the Teledyne Cobalt Project on September 11th, 2016 for a period of 3 hours. I have had no prior involvement other than described above with respect to the Teledyne Cobalt Project.

Dated this 5th Day of October, 2016

Joerg M. Kleinboeck, P.Geo.

JMK Exploration Consulting

Appendix I: Option Agreement