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# BATTERY

## MINERAL RESOURCES

Prospecting Report on the Elk Lake Property of Battery Mineral Resources Ltd, in Barber, Farr, James, Mickle, Smyth, Truax, Tudhope, and Willet Townships, Northeastern Ontario.

03/17/2020  
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## 1. SURVEY OVERVIEW

### 1.1 PROJECT NAME

This project is known as the **Elk Lake Project**.

### 1.2 CLIENT

Battery Mineral Resources Limited

P.O. Box 219  
14579 Government Road  
Larder Lake  
Ontario  
Canada  
P0K 1L0

### 1.3 SUMMARY

The Battery Mineral Resources' (BMR) Elk Lake project is comprised of 1249 mining cell claims Barber, Farr, James, Mickle, Smyth, Truax, Tudhope and Willet Townships in eastern Ontario, approximately 135 km north-northeast of Sudbury, 35 km east of Gowganda, and centred on the small town of Elk Lake. In total the Elk Lake property takes up 43,903 ha. of contiguous mining claims.

During the summer and autumn of 2018, BMR's field staff, contracted through Canadian Exploration Services (CXS) of Larder Lake, Ontario, prospected some of the known mineral occurrences, features recorded by the Ontario government's Abandoned Mines Information System (AMIS) database, and geological areas of interest. The objective of the work was to prospect for outcropping cobalt occurrences, ground truth historic and LiDAR features, and verify the regional geology. Data generated by this prospecting program will be used to plan follow-up surveys and drilling.

A high-resolution LiDAR survey was completed over the Elk Lake project area to identify and accurately locate outcrops and historic exploration features.

All coordinates presented in this report are in UTM NAD83 Z17N.

#### 1.4 WORK UNDERTAKEN

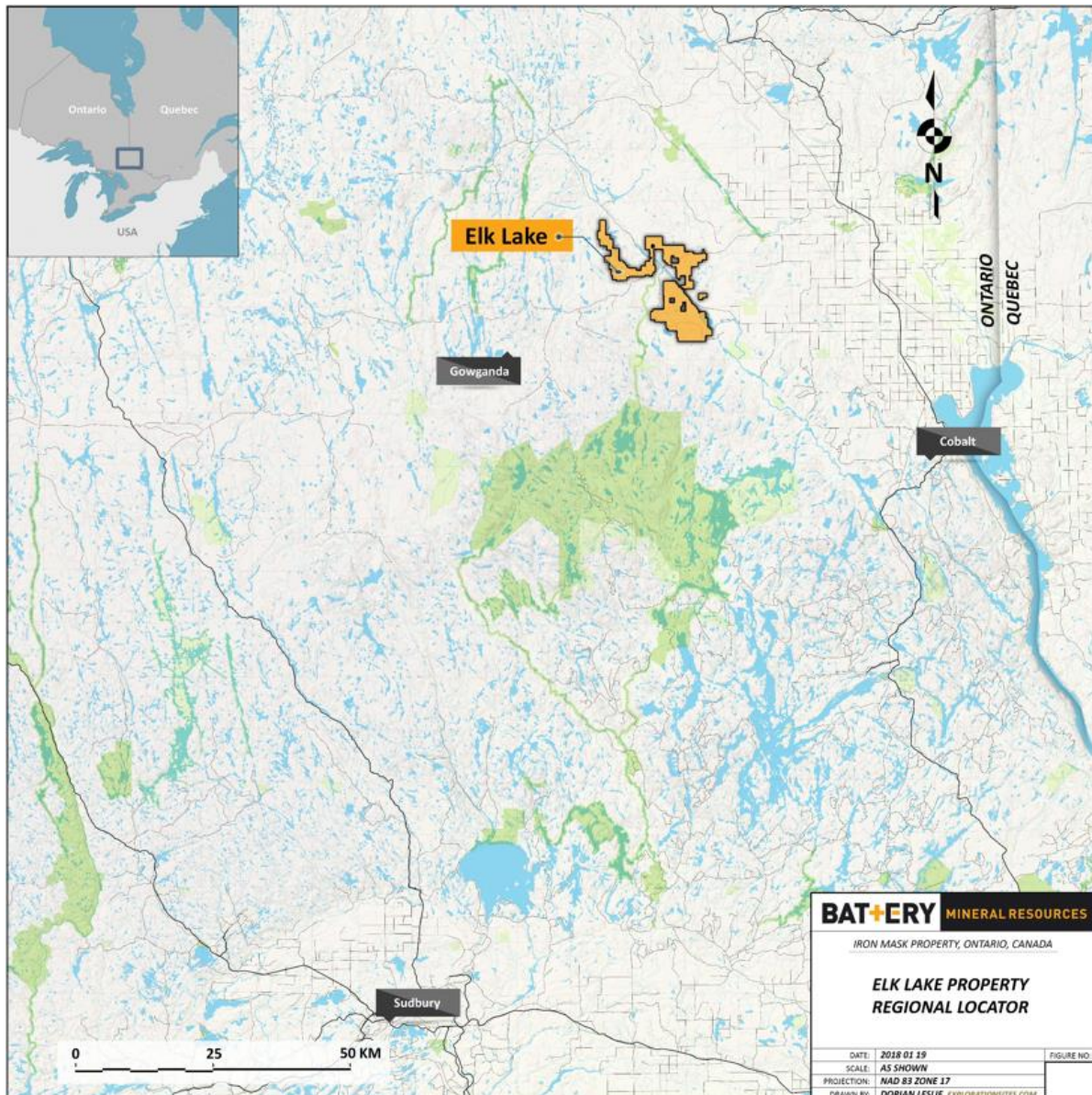
Work Performed	Dates	Details	Performed By
Prospecting	May28 – October 9, 2018	44 chip/grab samples	BMR/CXS Geologists
Assaying	June 7, 2018 – November 1, 2018	44 samples	ALS Minerals
LiDAR	May 30, 2018 June 2, 3, 14, 2018	4 days / 119.14 sq. km	Airborne Imaging

**Table 1: Work Performed**

## 2. SURVEY LOCATION DETAILS

### 2.1 LOCATION

The Elk Lake property is very large and of complex shape. It is in the Townships of Barber, Farr, James, Mickle, Smyth, Truax, Tudhope and Willet in eastern Ontario, approximately 135 km north-northeast of Sudbury, 35 km east of Gowganda, and centred on the small town of Elk Lake. The Property comprises 43,903 ha. (439.03 km<sup>2</sup>) of contiguous mining claims, apart from one small claim block. It covers a good portion of the Elk Lake Silver District.



***Figure 1: Elk Lake Property Location Map***



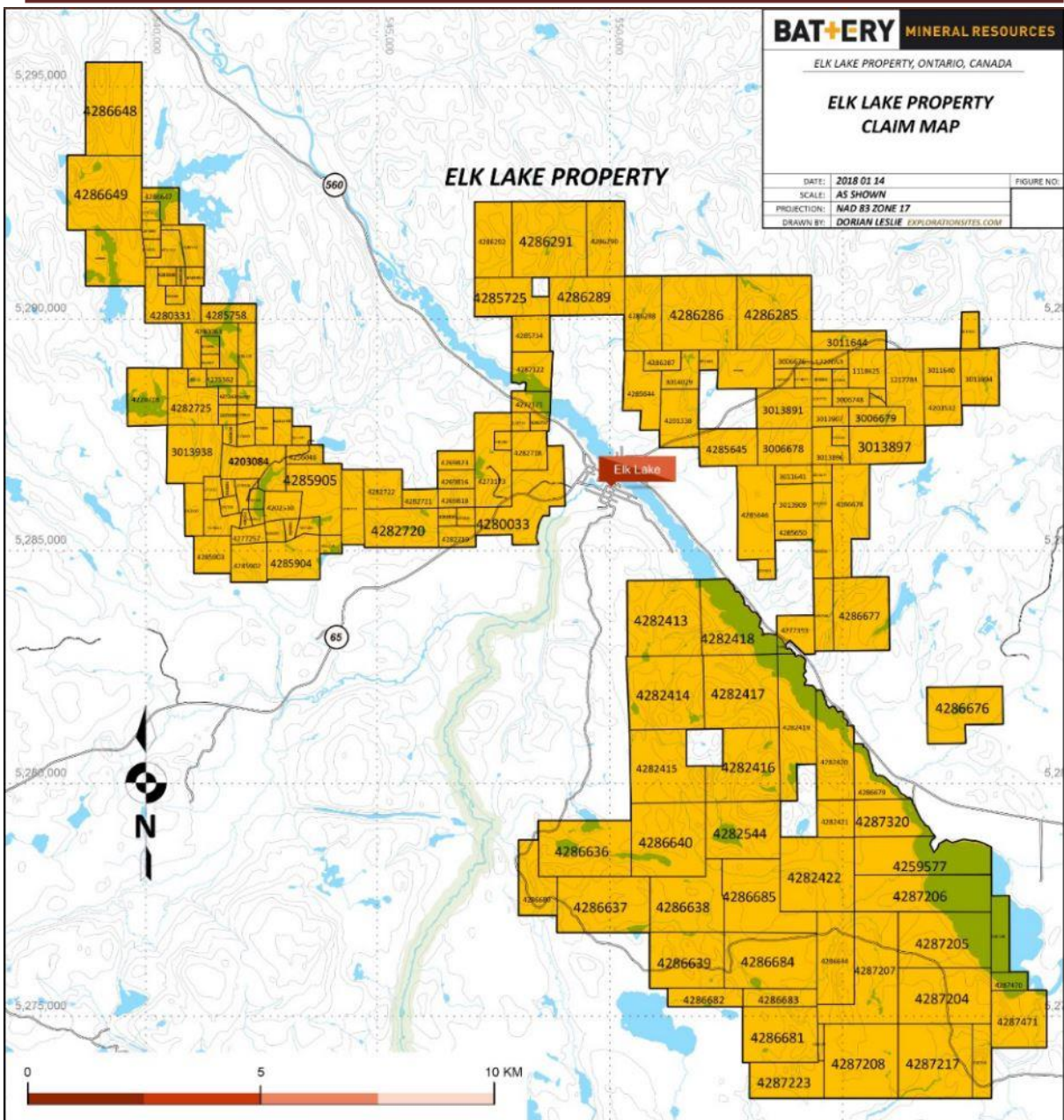
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## 2.2 ACCESS

There are many ways to access different parts of the property from Highway 560, a sealed two-lane all-weather road which passes through the property. Access was gained by the author from Highway 560 via two gravel roads 8km and 3.5km west of Elk Lake, a town of 400 people based on local hunting and fishing lodges and a logging mill. The east side of the property has similar access from Highway 560 (Figure 2).

## 2.3 MINING CLAIMS / OWNERSHIP

The Elk Lake Project totals 1,249 claims covering 43,903 hectares (439.03 square kilometres) in a contiguous block. These claims are composed of several purchased, optioned, joint venture and staked claims. The Elk Lake Property is in the townships of Barber, Farr, James, Mickle, Smyth, Truax, Tudhope and Willet in eastern Ontario. See Figure 3 for an image of the property claim map and Appendix 1 for the full list and detail of claims.



**Figure 2: Legacy mining cell claims comprising the Elk Lake property**

Elk Lake Property Claim Map

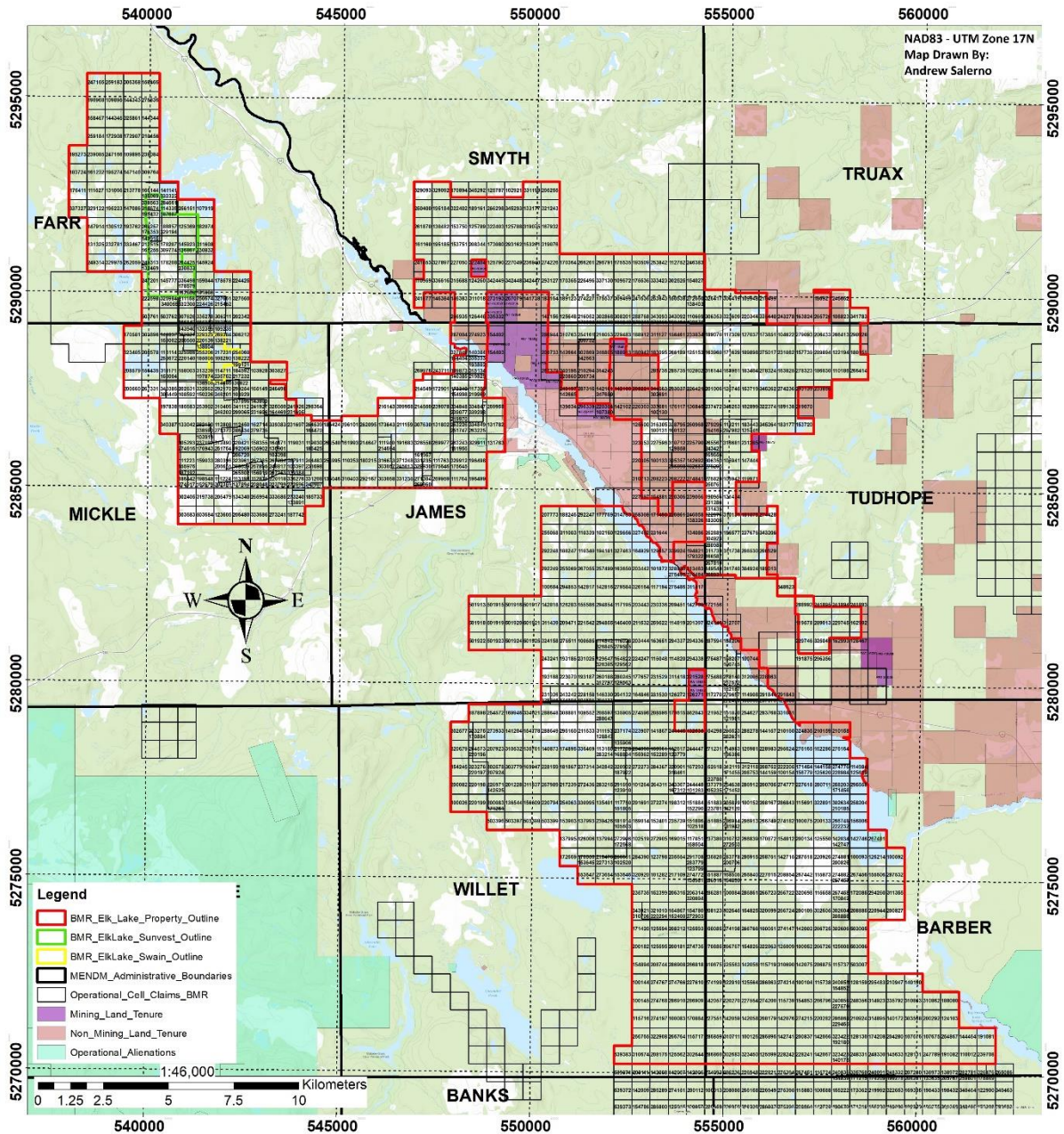


Figure 3: Operation cell claims comprising the Elk Lake property

## 2.4 HISTORIC WORK

The Elk Lake area is host to numerous former mines, abandoned workings, and prospects. Mining started after the discovery of native silver in 1906, giving rise to Elk Lake as a mining camp. Mining peaked between 1907 and 1913, when there were about thirty active mining properties in the area. A summary of historical exploration drilling on the Elk Lake Property is provided in **Error! Reference source not found.**

Year	Operator	No. Drill-holes	Total Metres	Township
1952	Bailey Group	7	207.3	Mickle
1953	W J Hosking	2	158.8	Mickle
1954	Quebec Metallurgical Industries Ltd	11	?	Mickle
1955	Hasaga Gold Mines Ltd	6	410.1	Mickle
1955	Silverclaim L Mines Ltd	1	92.1	Mickle
1958-59	B M Welsh	3	92.1	Tudhope
1959	H R Lynch	6	125.9	Tudhope
1961-62	Le Mans Expl.	5	527.1	Mickle
1961	G S Welsh	1	30.8	Tudhope
1961	H R Lynch	1	50.0	
1961	C Cook	2	62.2	Tudhope
1961	Ethel Copper Mines Ltd	1	?	Tudhope
1962	Big Jackpot Mines Ltd	1	160.4	Tudhope
1962	Zenmac Metal Mining Co Ltd	1	38.1	
1962	L Ramp	2	371.0	
1962	Majortrans Oil & Mines Ltd	2	383.5	Mickle
1962	Zenmac Metal Mining Co Ltd	6	294.4	
1963	Ganda Silver Mines Ltd	7	43.3	Willet
1964	Gomar Mines Ltd	4	415.2	Willet
1964	Accra Expl Ltd	2	105.8	Barber
1973	Majestic Construction Ltd	2	108.2	James
1976-77	Northern Silver Fox Res Inc	12	408.7	Tudhope
1980	1980 Enr Partnership Ltd / Silver Lake Resources Inc	17	2,157.9	Mickle
1982	Silver Lake Resources Inc	68	7,110.5	Mickle
1984	Teck Explorations Ltd/Lacana Mining Corp	11	1,802.1	Mickle
1985	Silver L Res Inc	6	893.3	Mickle
1998	Cusil Venture Corp	4	1,350.0	Tudhope
1999	Garfield Pinkerton	2	80.7	Tudhope
2006	Metalex Ventures Ltd	1	44.2	Willet
2006	Norman J McBride	1	48.0	
2006	Jkate Expl Inc	2	86.5	James
2007	Amador Gold Corp	23	2,798.0	Mickle
2007-2008	Temex Res Corp	22	4,436.5	James Tudhope
2011	Silver Shield Resources Corp	10	1,285.0	Mickle
<b>Total:</b>		<b>252</b>	<b>26,177.7</b>	

**Table 2: Elk Lake Historical Drill Programs**

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Since BMR controls a large portion of the Elk Lake silver district, a complete review of all historical work undertaken in the BMR claim block is not possible in this report. Too many companies have operated in the Elk Lake district for nearly 100 years. Rather the focus will be on areas visited by the author and other important prospects.

## **West Elk Lake**

The history of the project provided here is modified from Smith (2016), Pringle (2016a, b, c), and Larocque (2003). Overall, the area has experienced a significant amount of exploration in very specific areas primarily for silver, since the early 1900's. The first mineral discovery in the area was made in the autumn of 1906 when a showing of native silver was found in James township. Most exploration and development work were done between 1907 and 1913, although it extended the 1990's (MacKean, 1967). The following history or work relies heavily on Sergiades, 1968:

### *1908 - Shane-Darragh Claim W.D. (Cotley area, 5 miles west of Elk Lake)*

1908-13: Surface trenching and open pitting was carried out. Shaft was sunk to about 50'. An open pit 30' long and 15' deep produced 11 tons of ore. 1953: A former test pit was deepened to 79' and became No. 1 shaft. 71' of drifting on the 75' level. 26 diamond drill holes totalling 3,452' were drilled. 437 tons of ore were hoisted.

1955: No. 1 shaft was deepened to 84' and 30' of raising was done from 75' level. Diamond drilling included 5 surface holes totalling 881' and 8 underground totalling 554'.

### Production

1953 to 1955 Silver: 63,471 ozs. \$54,396. Cobalt: 1,214 lbs. \$ 2,367

### *1912 - Roy Silver Mines Ltd. (Location: SW side of Hubert Lake, 7 miles northwest of Elk Lake.*

Diamond drilling included: 8 holes, totalling 835' were drilled from surface. 10 holes, totalling 1,178' were drilled underground.

Production: 1953: 2,209 tons of development ore were stockpiled. 1954: 3007 tons of cobalt ore

were mined. 1964: 1084 ozs. of silver. 1966: 804 ozs. of silver was produced.

The following is an extract from Meyer, et al, 1998:

"Past development on the property includes 3 shafts, which were sunk around 1912. There is no record of production until Roy Silver Mines Ltd. leased the property and operated the mine between 1952 and 1954. During this period, work included deepening the main shaft to 390 feet, 1200 feet of underground development, 1178 feet

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of underground diamond drilling and 3737 feet of surface diamond drilling. In 1954, 2472 tons of treated ore produced a carload of cobalt--copper concentrate averaging 7% cobalt and 6% copper. The property produced 1084 ounces of silver in 1964 and a further 804 ounces of silver in 1966.

In 1996, D. Chartré and R. Dufresne staked part the property. With the aid of an OPAP grant, an exploration program was carried out between August and October 1997, to re--evaluate the silver, cobalt and copper occurrences. The work included stripping, trenching and sampling, as well as line cutting and a magnetometer survey.

Fifteen areas were stripped and power washed, along a strike length of 900 m. The main vein area, at the mine site, was exposed for a length of 90 m. The vein, which is variable in width up to 30 cm., contains disseminated cobalt arsenides and chalcopryrite. Fifty--five samples taken along this vein averaged 0.7 oz. Ag/t, 1.64% Co, 3.22% Cu and 0.16% Ni. Best values obtained were 4.7 oz. Ag/t, 7.4% Co, 14.02% Cu and 0.55% Ni.

Several narrow calcite veins, containing chalcopryrite and magnetite, run parallel to, and east of, the main vein. Copper values up to 8.46 % were returned from these veins. The high copper sample also returned an anomalous gold value of 390 ppb... The veins on this property occur in cylindrical joints in the Nipissing gabbro..."

#### *Welsh-Otisse Mine Area*

History partly derived from Mlot, 2011.

"Patented Mining Claim TR224 (EB21) includes the Welsh Mine (former Otisse Mine) where several rich silver veins were discovered in 1908. Subsequent to discovery, a vertical shaft was sunk to 160 feet with a total of 1,515 of lateral and cross-cut development with the partial development of veins on the 75 ft and 150 ft levels. Operations were suspended in 1911 apparently due to litigation and the plant was burnt down around 1915."

In 1961 LeMans Exploration Ltd. dewatered the mine, installed a head frame, surveyed and mapped the underground workings and conducted face sampling, as well as underground and surface diamond drilling campaigns for silver (no assays reported), but work stopped due to a lack of funds (Le Mans, 1961).

In 1962-1963, Majortrans Oils and Mines Ltd. (Majortrans) dewatered the mine once again, sampled the underground workings on the 75 ft and 150 ft levels, and completed further underground and surface diamond drilling campaigns. Majortrans sent a 326-ton bulk sample mined from the No.4 vein on the 75 ft level to both Cobalt and Noranda with a result of 33.8 oz Ag/ton or a total of ~ 11,000 ounces mined - a quite positive result." They completed 2 diamond drill holes for 1258 feet a few hundred feet south of the Otisse shaft. A cobalt vein was logged in hole S62-9 at 819.5 feet, but no assay reported (Majortrans, 1962).

"In October 1963, Candore Explorations Ltd. obtained an option and, once again,

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resampled the underground workings (except the No.4 vein stope mined by Majortrans) and drilled 40 short underground holes totalling 2,087 ft to test vein continuity above and below the mine levels apparently with positive results.

From 1964 to 1968, Welsh Silver Mines Ltd. installed a small gravity concentrating mill near the mineshaft with a rated capacity of 20-25 tons per day. In addition, an adit with a 19° decline was sunk from surface on the No.3 vein to the 75 ft level. At that time also, the rock dump at the shaft head was reported to have between 7- and 9-ounces Ag/ton. Roughly 4,000 tons of material is estimated to reside in this rock dump, and an initial bulk test has just been conducted.

An old shaft (Welsh Mine south) occurs a short distance south of the Welsh mine shaft itself. Several rock-cut trenches occur north, east and south of the Welsh mineshaft and cobalt bloom along with possible apple-green nickel bloom can be seen on some of the cut rock faces. Silver Shield did diamond drilling in this area in 2006 and 2008.

#### *Otisse-Currie Property*

On claim L-1167183 the Otisse-Currie shaft is found. It was sunk to a depth of 100 feet with 250 feet of drifting. It is not known what economic features were exposed by this development.

#### *Cameron*

1980-1983 Silver Lake Resources conducted surface drilling, constructed underground adit at Cameron, near the south end of Silverclaim Lake, and completed a round of underground drilling (Willars, 1980, 1983).

The area that is today on claim L-3003055 has had a long history of work including small prospect shafts to 10 feet, a great deal of diamond drilling and trenching. However, the most significant feature is the production ramp driven in 1983-84 by Silver Lake Resources Inc., Teck Corporation and Lacana Mining Corporation. This ramp was driven in order to test the significant silver values encountered by diamond drilling in 1980. A number of bulk samples were taken and studies made to bring the Teck mill from Cobalt to the mine site. With the price of silver dropping the property was placed on care and maintenance and subsequently abandoned when the Teck Silver Division and Silver Lake withdrew support for silver exploration.

During 1983 a ramp decline, 9-foot-high by 14' wide, was driven for 1,049 feet to a vertical depth of 210 feet at a 20% grade (-11.5°). Lateral work consisted of 440' and raising was 109.5 feet accompanied by seventeen underground diamond drill holes totalling 3822.5 feet.

A bulk sample weighing 7.5 tons and taken from the floor of the decline for 15' long (at 720' to 735') and 6' 1" wide assayed 11.277 oz. Ag per ton. A picked and screened sample of the development material from this area and weighing 3.5 tons assayed 52.63 oz. Ag per ton (Willars, 1983). At the bottom level of the bottom of the decline

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and 50' to the east, the 1-N drift was driven 80' north along a strong 3" to 4" pink to grey calcite vein containing cobaltite and visible silver. A second bulk sample taken from a 20' length and 4' width of this vein, and weighing 10.3 tons, assayed 14.390 oz. Ag per ton.

West of the decline 110', a 30' drift was driven north on a vein in which niccolite was observed. A bulk sample weighing 624 pounds from a 3' width and 4' length of this vein assayed 18.075 oz Ag per ton (ibid.).

1984 Teck Corp. managed a 13-hole drill programme near the adit portal.

In late 2006, Silver Shield cut a grid, and conducted a preliminary exploration drilling campaign.

In September 2008 Silver Shield carried out 3,200 metres of diamond drilling focusing on an area south of Silverclaim Lake (Cameron).

### *The Cotley Mine*

In 1908 work began at the site of the present Cotley Mine site presently located on mining claim L-1239097. Not much is known, but by 1913, 11 tons of ore was shipped from an open cut and a shaft started. In 1953 a pit was deepened and was made into the #1 shaft with a level established at 75 feet, with 71 feet of drifting and 3,425 feet of underground drilling. 437 tons of ore was hoisted with 290 tons of high-grade sent to Gowganda for milling. In 1955 the shaft was deepened to 84 feet and a 30-foot raise from the 75-foot level was made. 2,106 tons of ore was mined and milled at the Siscoe Mill in Gowganda (Larocque, 2003).

### *The Silverclaim Copper showing*

At the north end of Silverclaim Lake a large trench running about 250 feet long and up to 6 feet wide was put down on a large vein system up to 30 inches wide. This vein contains carbonate, specularite and chalcopyrite historically grading 10% copper. This trench is located on claim L-1167182.

### *1908-1968 Various Prospects and Small Mines*

Prospecting and underground development was done on a small scale throughout the area. There are too many prospects and companies to list individually, but it certainly is a testament to the widespread distribution of cobalt mineralization throughout the Elk Lake claim block. This work continued in some cases to the late 1960's. Small scale production consisted of silver and cobalt, up to 100 oz silver and 860 pounds of cobalt (ibid.). Isolated drill holes were completed by various small companies and individuals including Le Mans Exploration Ltd. in 1962,

1989 – *Agnico-Eagle*: Agnico-Eagle Mines Limited completed 4 surface diamond drill holes totalling 1020 feet on their Leroy Mine property in Nicol and Haultain townships.



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### *Otisse-Currie Property*

On claim L-1167183 the Otisse-Currie shaft is found. It was sunk to a depth of 100 feet with 250 feet of drifting. It is not known what economic features were exposed by this development.

### *Silverstrike*

The following is a summary taken from Rungis, 2008, 2003 that focused on the Silver Strike area:

In 1906, the first mineral discovery in James Township was recorded. Considerable exploration and development took place in the area from 1906-1913. Extensive pitting, trenching and shaft sinking occurred on the property at this time.

In 1907, the first geological work in Elk Lake was conducted by the Ontario Bureau of mines.

1909- 1912 Big Six Silver Cobalt Mines Ltd operated on the property. Shaft No. 1 (Big Six Shaft) was sunk to 194ft.

In 1912 a shaft was sunk to a depth of 100ft on the North East side of the property by John Gordon Donaldson. Reported assays from this shaft indicated 2,000 ounces of silver per ton. This property was later sold to The Beaver Auxiliary Mines Co. The Beaver Auxiliary Mine was operated in intervals from 1912-1927.

In 1954 James Township was partially mapped by Lawton. This same year, assessments and geological sketches of the area were completed by resident geologist Dr. Thomson.

*2006-2008 – Amador Gold Corp.* – In December 2006, Katrine Exploration and Development Inc. stripped for Amador Gold Corp. an area 100m x 10m from the #2 shaft of the Silverstrike property to the #3 shaft. The trench exposed a north-south trending, 1/2" to 1" wide calcite vein with cobalt bloom (Larocque, 2007). In 2008, Katrine Exploration and Development Inc. conducted contract location surveys for Amador Gold Corp. Samples were taken, but not assayed (Rungis, 2008).

### *Other*

In the late 1990's after the Temagami Land Caution was lifted work was conducted in the area by Lake Superior Resources Corp. who undertook a large stripping program at the top end of Silverclaim Lake.

*2003 Canadian Prospecting Ventures Inc.* – Pumped, stripped and sampled the copper trench at the north end of Silverclaim Lake (ibid.).

*1996, D. Chartré and R. Dufresne* - The Roy property is located in the NW corner of BMR's Elk Lake claim block (UTM NAD 83, Zone 17 540182E, 5291737N). An exploration programme was carried out between August and October 1997, to re-eval-

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uate the silver, cobalt and copper occurrences. The work included stripping, trenching and sampling, as well as line-cutting and a magnetometer survey (Meyer, 1998). The work and results are summarized below:

Fifteen areas were stripped and power washed, along a strike length of 900 m. The main vein area, at the mine site, was exposed for a length of 90 m. The vein, which is variable in width up to 30cm., contains disseminated cobalt arsenides and chalcopyrite. Fifty-five samples taken along this vein averaged 0.7 oz. Ag/t, 1.64% Co, 3.22% Cu and 0.16% Ni. Best values obtained were 4.7 oz. Ag/t, 7.4% Co, 14.02% Cu and 0.55% Ni. Several narrow calcite veins, containing chalcopyrite and magnetite, run parallel to, and east of, the main vein. Copper values up to 8.46 % were returned from these veins. The magnetometer survey identified two anomalous north trending zones, attributed to local increases in magnetite in the gabbro sill, which may be related to these magnetite bearing calcite veins.

The veins on this property occur in cylindrical joints in the Nipissing gabbro similar to those found in the Gowganda area.

*2006-2010 Amador Gold Corp.* - A drill program was completed on Canadian Prospecting Ventures' Silverclaim Lake property during the 2007 field season. Drilling tested historical silver workings and their strike extensions. Drilling intersected strong structures, on strike with historical workings, that locally contain high grade silver (Ag) mineralization such as 506 g Ag/tonne over 2.32m down-hole width (hole AGSC07-12), or disseminated lower grade silver over wider drilled widths, such as 63g Ag/tonne over 11.03m down-hole width in hole AGSC07-07. 22 drill holes were drilled in total.

Amador also flew VTEM airborne surveys over their Silverclaim, Silverstrike and Donovan Basin Silver Properties in the Elk Lake and Gowganda Silver Camps (Amador Gold Corp., 2009).

### **East Elk Lake – Temex Ethel/Merico area**

The area has had a long history of exploration mainly for silver, copper and gold. Most of the exploration and development work occurred around the Merico area and Ethel Copper Mine. A comprehensive review is given in Hann, 2008 and the portion relating to cobalt and silver are reproduced here:

“1909 A 100-foot shaft was sunk by Silver Alliance Mines, on a 3-inch-wide carbonate vein with silver, bornite, chalcopyrite, and “cobalt bloom” striking 76 degrees to the northeast. The shaft or mine is called the “Silver Deposit” or “Northern Silver Fox” occurrence.

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1909 United States Silver Mines Ltd. sank a shaft along a northeast trending silver vein, on a property northwest of the Silver Deposit, known as the Silver Jackpot Deposit. They also sank a smaller shaft to the southwest and several other pits along the vein between the two shafts (J.G. Willars, 1977). The mine was then abandoned that year.

1919 Toledo Silver Mines Ltd. originally owned the Toledo Silver Mine, which is reported to contain a 250-foot-deep shaft. Johns (1986) reported the mine dump contained a little vein material of calcite with chalcopryite, specular hematite, and traces of cobalt bloom.

1951 Silver Jackpot Mines Ltd. dewatered the Silver Jackpot shaft and discovered several bags of silver mineralisation at the bottom of the shaft (G. Johns, 1986). They performed surface stripping and blasting in the vicinity of the shaft. The veins are reported to contain carbonate, native silver, bornite, specular hematite, and chalcopryite.

1952 Ethel Copper Mines drilled 3 holes, on the edge of James Township, over the area currently containing the Ethel Copper Mine. The holes intersected significant copper.

1953 Ethel Copper Mines Ltd. carried out a self potential survey over the Toledo Mine area, and delineated an anomaly over the main showing.

1955 Stan Welsh sunk a 213-foot long diamond-drill hole through the diabase on the Sauv  Prospect.

1956-1957 Fred Walsh owned two claims, the Cummings claims in the north part of lot 10, concession V, Tudhope Township, underlain by a sill of Nipissing Diabase. A pit 10x12x23 feet intersected a small carbonate vein with silver and cobalt mineralization. Walsh completed three diamond-drill holes, totaling 81 feet, through the N 21° E trending vein.

1959 Min-Ore Ltd. held six claims in the south part of lot 12, concession V, and north part of lot 12, concession IV, Tudhope Township. Trenching was carried out, and two diamond-drill holes, totaling 330 feet, were completed. Both holes intersected massive chalcopryite up to 7.5 feet in thickness.

1959-1961 Harold Lynch owned claims covering the center of lot 11, concession VI, Tudhope Township. At present these are covered by JKate claim #1118625. He drilled 6 holes to intersect a narrow quartz-carbonate vein containing chalcopryite, malachite, bornite, azurite and specular hematite. No samples or assays are given. In 1961 he drilled a seventh hole, 164 feet long, in the same area, and it intersected 1 foot of 8.27% Cu, 1.10 oz/ton Ag in a quartz carbonate vein with bornite.

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1960-1962 Ethel Copper Mines conducted significant work including an inclined adit along the copper zone at Ethel Copper, James Township. More than 2300 metres of diamond drilling was completed. Hann reports small tonnages of around 3% copper were outlined.

1962 The St. Lucie Syndicate, subsequently changed to the St. Lucie Exploration Company Ltd., obtained an agreement to carry out underground development and mining operations on the Ethel Copper Mine Property. Work was performed until the surface plant was destroyed by fire in January 1963. St. Lucie then terminated the agreement.

1976-1980 Northern Silver Fox Resources Inc. conducted considerable work at the Jackpot shaft area. The included geophysics, trenching, drilling, (570 metres), and drove an adit. The best intersection was hole 77-5, which encountered 1.3 feet of 1.97 oz/ton Ag at 20 feet in the hole.

1995-1996 Garfield Pinkerton worked Merico Shaft area, where a shear zone contains carbonate veins with disseminated chalcopyrite, bornite, specularite, and cobalt bloom. Work completed included stripping, trenching, and sampling. A total of 6 trenches, up to 1 metre wide, were completed, and an area 265 metres long was stripped, 13 samples were collected. No assays were reported.

1999 J Kate Explorations completed two drill holes in the southern part of the Property, over the Paramount Occurrence. Both holes are on the southern half of claim #1225024. Hole BP-1-99, drilled to the north-northeast, at -54°, intersected 0.2 metres of 0.06% Cu, 0.1 g/t Au, 0.8 g/t Ag, and 0.13% Co, and 9.4 metres farther down the hole at and intersected 0.4 metres of 4.77% Cu, 0.189% Co, 4.2 g/t Ag and (ibid.).

2004-2005 Temex Resources Corp. optioned the Property, and conducted line-cutting, trenching, soil sampling, geophysics and litho-geochemical sampling was conducted.

2005-2008 Temex completed several drill holes.

## **2.5 REGIONAL & LOCAL GEOLOGY**

### **REGIONAL GEOLOGY**

#### ***Overview***

The project area occurs within the Superior Province that is composed of northeast-trending Paleo- to Neoproterozoic gneissic complexes, granite-greenstone terranes, and sedimentary basins that were assembled by repeated island arc-microcontinent

collisions (Bauer et al., 2011). The Elk Lake project is hosted Nipissing diabase dikes that intrude Paleoproterozoic (2.5-2.2 Ga) metasedimentary rocks of the Huronian Supergroup (HS) that form a ~60,000 km<sup>2</sup> irregular-shaped siliciclastic paleo-basin, colloquially known as the Cobalt Embayment (Potter and Taylor, 2009). The HS unconformably overlies complexly folded and sub vertically dipping Neoproterozoic volcanic, intrusive, and sedimentary rocks of the Wawa-Abitibi terrane that forms the southernmost sub province of the Canadian portion of the Superior Province (Stott et al., 2010; Stott, 2011; Lodge, 2013). Both Archean rocks and the HS were intruded by Nipissing Diabase sills that are primarily tholeiitic and were sourced from MORB-type parental magma (Potter and Taylor, 2009). These intrusive rocks were emplaced along reactivated pre-HS faults at ca. 2.219 Ga (Corfu and Andrews, 1986) and are envisioned as the heat source that drove hydrothermal fluid circulation responsible for Ag-Co mineralization.

### ***Archean Rocks***

Archean rocks in the region are part of the Wawa-Abitibi sub province and dominantly comprise mafic to felsic volcanic and volcanoclastic rocks, syn- to post-volcanic intrusions and lesser siliciclastic and chemical sedimentary rocks deposited at ca. 2.7 Ga. The volcanic rocks were deposited in an oceanic arc setting during collision between the Wawa terrane and the Superior Craton in the Neoproterozoic time period. Paleotectonic settings (e.g., arc, back-arc, rifted arc) and crustal architecture and thickness varies both between and within greenstone belts in the Wawa-Abitibi terrane, which has resulted in a diverse petrogenesis of igneous rocks and related mineralization styles (Mercier-Langevin et al., 2014).

Deformation in the Archean resulted in tight folding and tilting of the rocks to sub-vertical dips. The stress field was also accommodated by thrust faulting as evidenced by duplication of rock sequences and implied in areas where strain intensity is too low to account for the subvertical rock orientations. Major thrust faults may have been reactivated from deep-seated normal faults developed during extension and deposition of the volcanic facies (Bleeker, 2015). After Archean deformation and deposition of the Huronian Supergroup, the rocks were deformed during the Proterozoic orogeny that resulted in local reactivation of faults developed in the Archean and Proterozoic (Potter and Taylor, 2009).

### ***Paleoproterozoic Huronian Supergroup***

The Huronian Supergroup comprises a southward-thickening sequence of mainly siliciclastic sedimentary rocks that reach a maximum thickness of 12 km in the southern part of the basin but have an estimated thickness of ~6 km near Cobalt, Ontario (Young et al., 2001). The HS is subdivided in Lower and Upper Huronian. The Lower Huronian comprises, from top to bottom, the Elliot Lake, Hough Lake, and Quirke Lake groups, while the Upper Huronian is solely composed of the Cobalt group. The Lower Huronian has a restricted distribution and was deposited in a rift controlled, non-marine environment. After a significant hiatus, deposition of the more homogeneous Upper Huronian is interpreted to have taken place at a passive margin under

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submarine conditions (Young et al., 2001).

Inversion of the Huronian basin resulted in lower greenschist metamorphism of the sedimentary rocks and caused basin scale hydrothermal fluid flow that resulted in regionally extensive Na and Ca alteration of the rocks (Potter and Taylor, 2009).

### ***Sudbury Igneous Complex***

The Sudbury Igneous Complex is a northeast-trending, 2.5 to 3.0 km thick, ~60 km long and ~25 km wide mafic-ultramafic sheeted igneous complex that hosts the largest currently mined magmatic sulfide Ni-Cu deposits in the world. It is an erosional remnant of a larger (>15,000 km<sup>2</sup>) ~1850 Ma (Walker et al. 1991) meteor impact structure (Dietz, 1964; Dietz and Butler; 1964; Bray et al., 1966; French, 1970; Theriault et al., 2002) that comprises fractured and brecciated Archean rocks of the Abitibi terrane and Paleoproterozoic Huronian Supergroup metasediments. It differs from rift-related layered mafic complexes in that it has an overall intermediate composition, crustal isotopic signature, hydrous nature, and unusually large amount of granophyric rocks (Theriault et al., 2002). It is unlikely that the Sudbury Ni-Cu mineralization was related to the Co mineralization event at the Elk Lake project.

## **PROPERTY GEOLOGY**

The Elk Lake claim block is dominated by Nipissing diabase sills and dykes, often with a conical or basinal shape. The sills are intruded into Proterozoic Huronian Cobalt Group sedimentary rocks typical of the Cobalt Embayment. The outline of the Elk Lake Property follows that of a large body of Nipissing diabase that defines a sigmoidal map pattern. The diabase intrudes the Cobalt Group near—and at—its lower unconformable contact with the Archean basement, here represented by granitic rocks. A strong northwest-southeast lineament bisects the Property.

Mineralisation generally occurs in the diabase, often in the lower portion, but may occur in the Huronian sedimentary rocks or at the contact with the Archean basement rocks. The area is best known for high grade silver, with accessory cobalt and nickel arsenides.

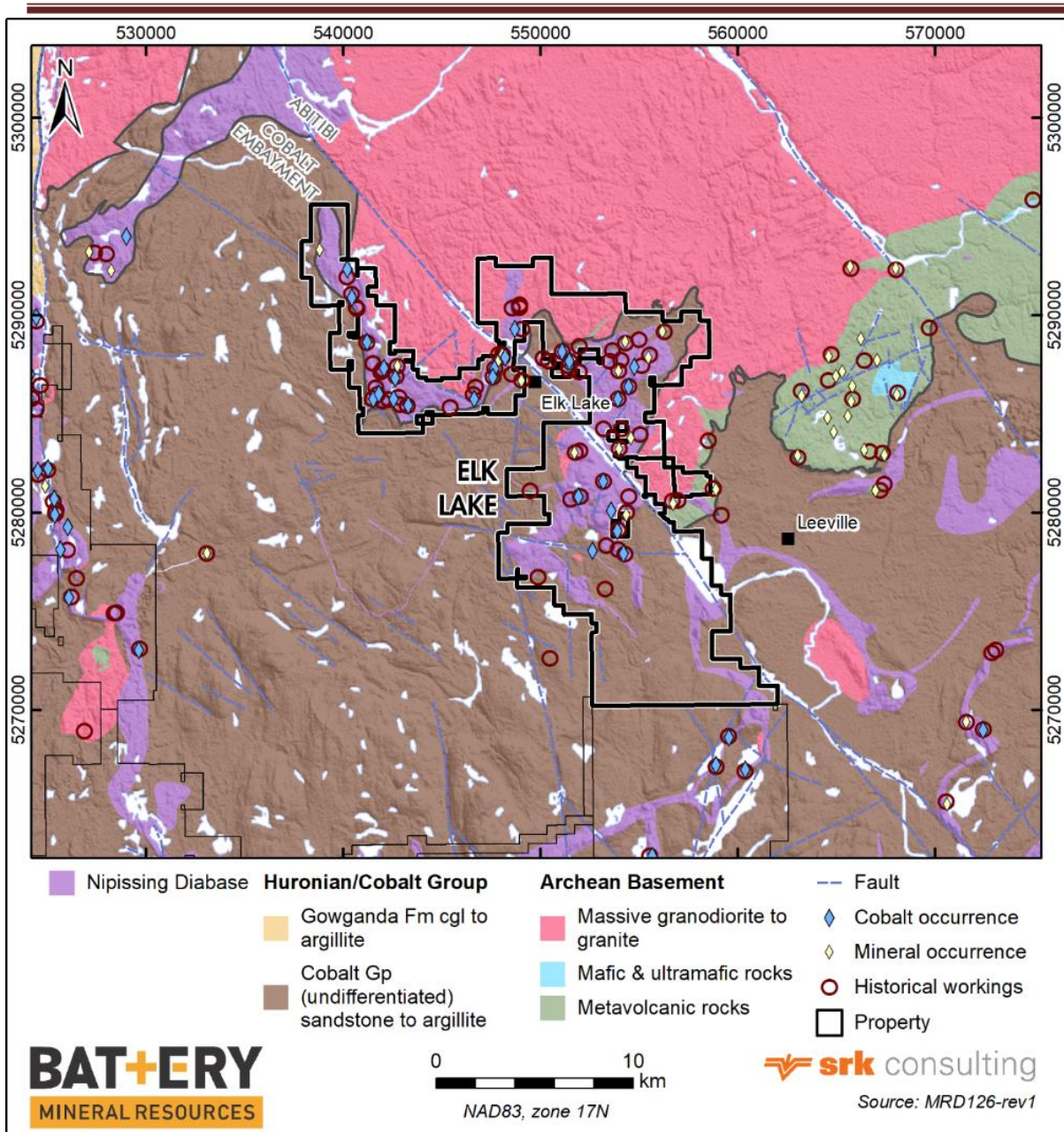
Mineralized silver-cobalt veins are strongly focused within well-developed structures. Mineralisation is dominated by narrow Cu-Au-Ag-Co-rich calcite and/or quartz veins oriented parallel to dominant faulting, fracturing or jointing, oriented differently at each location.

Three significant structures identified in mapping were confirmed by BMR drilling:

342°/54° NNW-striking Regional Fault – Youngest

078°/66° offset E-W brittle fault

017°/66° to 00°/66° (Roy Vein) – Oldest



**Figure 4: Geology of Elk Lake Project**

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## 2.6 MINERALIZATION

The Elk Lake claim block is dominated by complexly distributed Nipissing diabase sills and dykes, often with a conical or basinal shape. The sills are intruded into Proterozoic Huronian Cobalt Group sediments typical of the Cobalt Belt. Mineralized calcite-silver-cobalt veins are strongly focused within well developed structures.

Mineralisation is dominated by narrow Cu-Au-Ag-Co rich calcite and/or quartz veins oriented parallel to dominant faulting, fracturing or joining, different at each location. Mineralisation generally occurs in the diabase, often in the lower portion, but may occur in the Huronian sediments or in contact with the Archean basement rocks. The area is best known for high grade silver, with accessory cobalt and nickel arsenides.



### 3. PROSPECTING & MAPPING

#### 3.1 OVERVIEW

During the summer and autumn of 2018, prospecting was completed at the Elk Lake property. The purpose of the mapping was to better understand the geological context of the area, define contact relationships between the sediments and diabase, as well as, locate AMIS features which are generally centred on past developed zones of mineralization.

The work included verifying the geological stratigraphy and investigating historic features such as shafts, pits, adits. A LiDAR survey was used as a tool for accurately locating historic features and traverse tracks. Historically, the area had been explored mainly for silver, but the current work focussed on the exploration for cobalt. The information collected will be used to plan follow up work and a possible winter diamond drill campaign.

#### 3.2 PLANS & PERMITS

The prospecting work reported on here was surficial and did not require plans or permits.

#### 3.3 PERSONNEL

The prospecting crew consisted of BMR's field staff; including Geordie Hamilton, Gerry Dumouchel, Isaac Riddle, Mercedes Rich, Mallory Metcalf, Adam Shushan, Sarah Mills, Jon Edwards and Seun Ajibode, contracted through Canadian exploration Services (CXS) of Larder Lake, Ontario. Senior geologists and consulting geologists Frank Ploeger, Mike Hendrickson, and Doug Hunter were at site on occasion to assist in prospecting and to evaluate site locations.

#### 3.4 DAILY LOG

Date	Log
May 28, 2018	3 BMR/CXS geologists prospected AMIS features along the central and south of the Silverstrike property.  2 historic shafts, 1 water filled cut, and 1 adit was noted. 6 samples were collected. Samples assayed very well, nearly 5% Cobalt on 1 sample.
June 2, 2018	3 BMR/CXS geologists prospected AMIS known as the Merico.

	2 historic shafts, 1 water filled cut, and 1 adit was noted. 4 samples were collected. Samples assayed very well, nearly 5% Cobalt on 1 sample.
June 12, 2018	Frank Ploeger, senior BMR/CXS geologist prospected the Silver-strike property and collected two samples from the muck pile next to the shaft.
July 8, 2018	Mike Hendrickson prospected various areas over the Elk Lake property.
July 9, 2018	Mike Hendrickson prospected various areas over the Elk Lake property.
July 10, 2018	Mike Hendrickson prospected various areas over the Elk Lake property.
July 11, 2018	Mike Hendrickson prospected various areas over the Elk Lake property.
July 12, 2018	BMR/CXS geologists and consultant geologist, Mike Hendrickson prospected the north area of the Silverstrike property.  3 samples were collected.
July 13, 2018	BMR/CXS geologists and consultant geologist, Mike Hendrickson continued prospecting the north area of the Silverstrike property.  1 sample was collected.
July 14, 2018	Forest fires nearby being monitored.  BMR/CXS geologists and consultant geologist, Mike Hendrickson prospected various areas over the Elk Lake property. Various traverses were completed.  A large stripped outcrop to the south of silverstrike lake was noted. Veins were extensively drilled. 2 samples were collected.
July 15, 2018	BMR/CXS geologists and consultant geologist, Mike Hendrickson prospected various areas over the Elk Lake property. Various traverses were completed. Some traverses were focused west of Boland Lake.  4 samples were collected.
July 16, 2018	BMR/CXS geologists and consultant geologist, Mike Hendrickson prospected various areas over the Elk Lake property. Various traverses were completed.  1 adit was noted west of a water filled north-south trending depression flowing into Boland Lake. 3 samples were collected; 2 grabs from the dump and 1 chip sample from small bluffs near the adit entrance.

July 18, 2018	<p>BMR/CXS geologists and consultant geologist, Mike Hendrickson prospected the East area of the Elk Lake property. Various traverses were completed. The focus was on the Merico property.</p> <p>1 small pit was noted and 3 samples were collected (R040, R0214, and R0553).</p>
July 20, 2018	<p>Prospect the Silverstrike area for additional historical features.</p> <p>Nothing of significance was noted.</p>
August 30, 2018	<p>BMR/CXS geologists prospected the Elk Lake property with focus south of the Roy Mine. They were following up on anomalies identified in an IP survey.</p> <p>2 samples were collected along with a shaft</p>
August 31, 2018	<p>BMR/CXS geologists prospected the Elk Lake property with focus south of the Roy Mine. They were following up on anomalies identified in an IP survey.</p> <p>One sample was collected (51)</p>
September 4, 2018	<p>BMR/CXS geologists prospected the Elk Lake property with focus south of the Roy Mine. They were following up on anomalies identified in an IP survey.</p> <p>One sample was collected (623) near what appeared to be an adit/open cut.</p>
September 6, 2018	<p>BMR/CXS geologists prospected the Elk Lake property with focus south of the Roy Mine. They were following up on anomalies identified in an IP survey.</p> <p>Two samples were collected (624, 625)</p>
September 14, 2018	<p>Consultant geologist, Mike Hendrickson and Doug Hunter prospected the around the historic Roy Mine.</p>
September 27, 2018	<p>BMR/CXS geologists prospected the Elk Lake property with focus on the east side of Boland Lake.</p> <p>Nothing of significance was noted, only slight variations in OGS geology, but no evidence of veining or mineralization.</p>
September 28, 2018	<p>BMR/CXS geologists prospected the Elk Lake property with focus on the east and west side of Boland Lake, using the completed Li-DAR maps to review and search for specific AMIS features.</p>

	1 shaft, 2 large pits and a few trenches were noted. Minimal mineralization was found in the muck piles; trace disseminated chalcopyrite and galena were observed in carbonate veining. 1 sample was collected (351).
September 29, 2018	BMR/CXS geologists prospected the Elk Lake property with focus on the Roy  2 samples were collected (628, 629)
October 7, 2018	BMR/CXS geologists prospected the Elk Lake property with focus near Shane Lake and Downey Lake.  Multiple trench systems, outcrops, 3 pits, and 1 shaft were noted. 2 samples were collected.
October 8, 2018	BMR/CXS geologists prospected the Elk Lake property. The Silverstrike property was revisited and focused on.  1 sample was collected (353).
October 9, 2018	BMR/CXS geologists prospected the Elk Lake property. The Silverstrike north and south property was revisited and focused on.  4 samples were collected (354, 635-638).

**Table 3: Daily Prospecting Log**

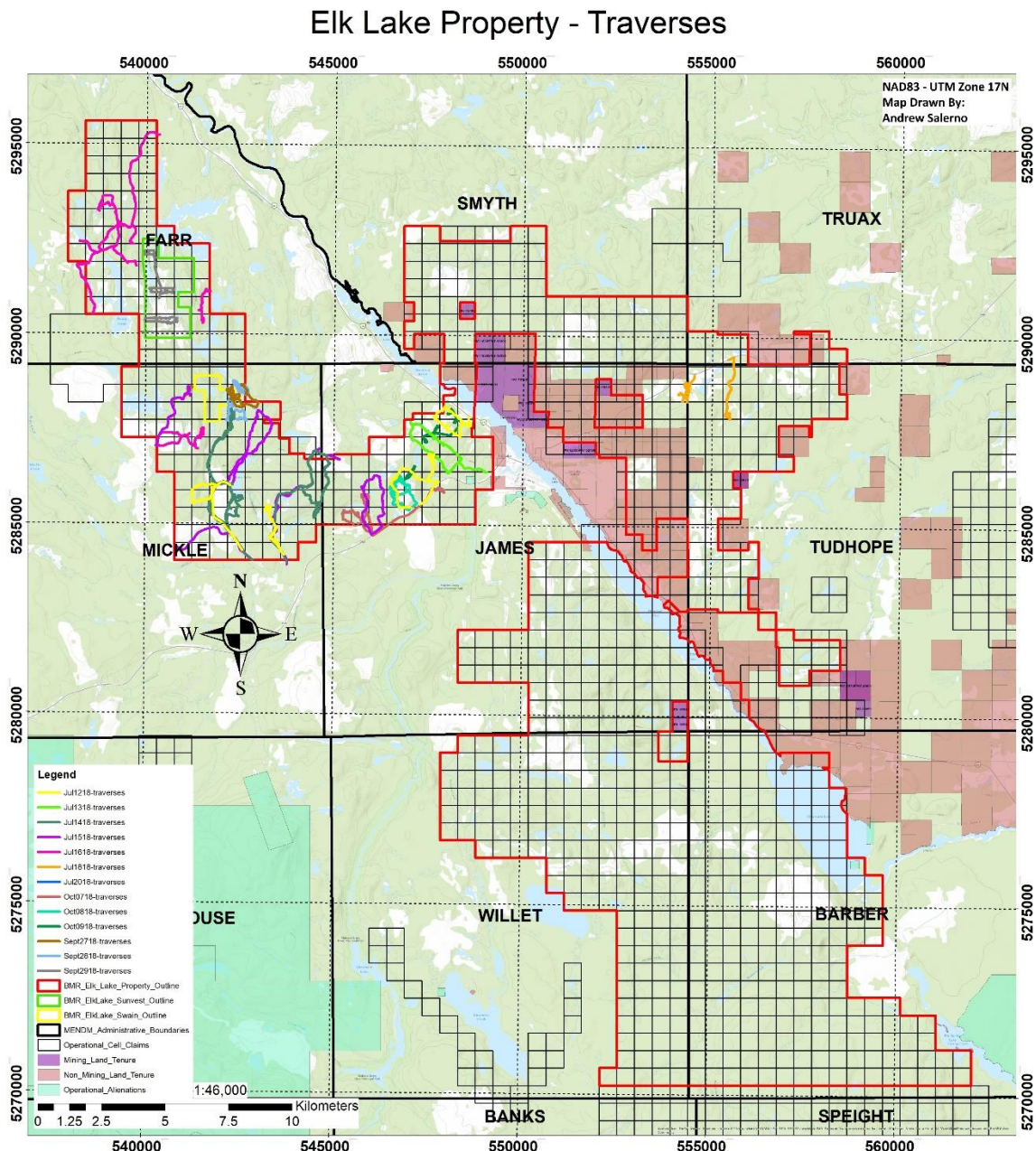
### 3.5 LiDAR

A LiDAR (light detecting and ranging) survey was flown over the Elk Lake Project area, on May 30, June 2, 3, and 14, 2018 by Airborne Imaging of Calgary, Alberta. It is an airborne system that measures the distance to ground features by illuminating the ground by pulsed laser light and measuring the reflected pulses with a sensor. Differences in return times and wavelengths can then be used to construct 3-D images of the surface features. The data can then be filtered to virtually remove vegetation and reveal the actual surface contours of the ground surface topography to an accuracy of 0.5m. This can then reveal man made disturbances such as trenches and shafts, which was its intended use.

See Appendix 3 and 4 for more details on the LiDAR completed.

### 3.6 TRAVERSES

While traversing to these sites, features of interest were documented, and samples were taken. During prospecting, traverse tracks were recorded by Garmin InReach GPS's and transferred onto a tablet which was used to document the historic and geological features encountered. LiDAR data was used to ensure that no significant hidden features were missed. The traverses completed while prospecting is displayed in Figure 5.



**Figure 5: Prospecting traverses. Colours denoting different days traversed.**

### 3.7 PROSPECTING & MAPPING

#### Silverstrike

On Tuesday May 28<sup>th</sup>, 2018 BMR-CXS sent a field crew comprised of 5 geologists (and GITs) to visit two properties in the Elk Lake area which hosted recently stripped outcrops. The weather on the 28<sup>th</sup> was mostly Sunny and warm, with a high of about 30°C. Nearing 4:30 the weather changed as the field crew was leaving the second field area and it started to rain.

The first property visited was the Silverstrike property, historically known as either Downey or Bermead. The target area was found 0.7 km into the bush from the access point. There is a possibility of the access point being more proximal and accessible to the stripped area if some cutting and maintenance is done. This would also be beneficial if multiple vehicles are present at a point in time. There were 4 hazards identified proximal to the traverse path; 2 historic shafts, 1 water filled cut and 1 adit. On the stripped outcrop visible cobalt and erythrite bloom was observed, 6 samples were collected to be analyzed from mineralized areas of interest (R0001 to R0006). Upon returning to the base camp in Larder Lake the samples were cut into slabs (which have been analysed for the chemical constituents) and pieces (which have been sent to ALS laboratories for a full analysis). One of the more noticeable textures that were observed within the outcrop was a variety of cylindrical joints. These ranged from have a diameter on a centimeter scale to almost 5 meters.

#### Sample R0001



***Figure 6: Images of cut sample R-0001***

Quartz-Calcitic vein hosted in Nipissing Diabase with an azimuth of 150° and a dip of 75° (dipping West). The calcite is medium grained and hosts small parallel mm scale wavy stringers of chlorite. These in turn host variable amounts of very fine-grained cobaltite. Vein wall hosts noticeable cobalt bloom over the entirety of the samples extent.

**Sample R0002**



***Figure 7: Images of cut sample R-0002***

Fine-grained, massive Nipissing Diabase sample. Sample was selected due to its proximity to a calcitic vein. Small calcitic stringers are also cross cutting the sample.

**Sample R0003**



***Figure 8: Image of field outcrop where sample R-0003 was collected***



***Figure 9: Images of cut sample R-0003***

Fine-grained, massive, altered Nipissing Diabase sample. Sample contains small millimetre scale elongate mafic grains. Both calcitic and iron oxidized alteration present. Cobalt bloom is present and in field cobaltite vein was observed and identified.

#### **Sample R0004**



***Figure 10: Images of cut sample R-0004***

3- to 4-centimeter vein with associated chalcopryrite. Vein comprised dominantly of fine to medium grained calcitic carbonate. This vein groundmass hosts various chlorite altered clasts of the diabase unit. These clasts are typically sub-rounded and found on a centimeter scale. Some variation in the colouration of the sample, likely produced by iron oxidation.



**Sample R0005**



***Figure 11: Images of cut sample R-0005***

Massive, fine grained Nipissing Diabase. Sample contains small millimetre scale elongate mafic grains. Both calcitic and iron oxidized alteration present. Cobalt bloom is present and appears to be disseminated through the groundmass. This sample resembles R0003 but appears to have increased weathering.

**Sample R0006**



***Figure 12: Image1 of field outcrop where sample R-0006 was collected***



**Figure 13: Image2 of field outcrop where sample R-0006 was collected**



**Figure 14: Image3 of field outcrop where sample R-0006 was collected**



***Figure 15: Images of cut sample from R-0006***

Sample is of a massive calcite vein which is cross cutting the Diabase. On one side of the vein a fracture has formed. Along the fracture surface and at the contact between the Diabase and calcitic vein Erythrite is present.

## **Merico**

The second property which the field crew visited was the Merico property. To reach the stripped area the field crew hiked 1.3km (on both an ATV trail and through uncut bush) from the road access point. Once again, the ATV trail could possibly allow for a closer truck access point if cleaned-up. There were no historical hazards identified on the site. From the extensive stripped area 4 samples were taken for analysis (R0008-

R0011). These samples have been cut, analysed with the XRF and shipped to ALS for full analysis. This area was defined by high amounts of sulphides but a decreased amount of cobalt bloom. The vein sets here appear to have two perpendicular orientations and often has the veins curving sharply between the two.

### Sample R0008



***Figure 16: Images of cut sample from R-0008***

Massive calcitic vein which is surrounded by an outer Quartz vein (which has subhedral grains, a slight green hue and appears to have precipitate textures). Mineralization of interest in this sample is specular hematite which has a radiating texture in the acicular grained which is commonly intergrown with semi-euhedral chalcopyrite cubes.

### Sample R0009



***Figure 17: Images of cut sample from R-0009***

Large Quartz carbonate vein which hosts chlorite altered brecciated clasts. Vuggy on surface, therefore the likely due to weathering. Both chalcopyrite and specularite are found, with a high amount of chalcopyrite at this location. Possible malachite found on the outcrop associated with the vein and the small offshoot veins.

### Sample R0010



***Figure 18: Image of field outcrop where sample R-0010 was collected***



***Figure 19: Image of field outcrop where sample R-0010 was collected with interpretations***

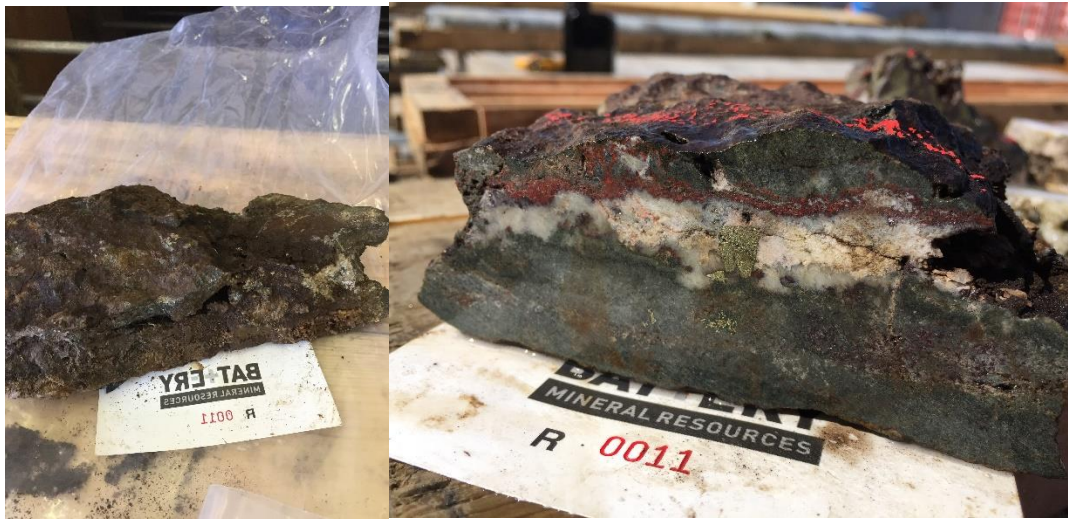


***Figure 20: Images of cut sample from R-0010***

Fine grained Nipissing Diabase which is crosscut by Quartz-carbonate veins and small calcitic veinlets. Though there appeared to be cobalt bloom in the outcrop neither cobalt or silver was recorded when checked with the XRF. There was also common small chalcopyrite stringer which are associated with the unit.

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## Sample R0011



***Figure 21: Images of cut sample from R-0011***

A multi-generational, green tinted, chlorite altered Quartz-carbonate vein cross cutting the Nipissing Diabase. Surface weathering has resulted in some vuggy textures in the vein. Both minor specular hematite and chalcopyrite are present in the sample.

## Boland Lake Group

### GEOLOGY

One of the objectives while conducting the prospecting/ mapping traverses was to confirm the geology of the claim group and the locations of the lithological contacts. The following are photographs and accompanying descriptions of some of the major host lithologies.



**Figure 22: Diabase (Nipissing)- medium to dark green grey, medium grained, massive, predominantly equigranular with local coarse grained patches, weakly to moderately magnetic; Weak chlorite alteration and weak sericite alteration of plagioclase; trace fine grained pyrite. (Figures 22, 23, 24, all taken traverse date September 27, 2018)**



**Figure 23: Sandstone (Lorrain(?))- Medium grey to pink, fine to medium grained sand, massive to very weakly foliated (laminated?), well sorted. Locally minor biotite formation, and pink hematite(?) staining.**



No photograph taken of the following lithology: Conglomerate (Gowganda(?))- Medium grey to pink, massive, polymictic (felsic, granitic to intermediate), sub-rounded to rounded clasts, typically poorly sorted, ranging from granules to boulder, typically granule to pebble, matrix supported composed of mud to coarse sand, trace disseminated pyrite.



**Figure 24: Granite (Gneissic phase) from west edge of Round Lake Batholith- Light grey, black and white, coarse grained, gneissic- augen texture, typically with quartz eyes and moderately developed foliation defined by feldspar, lesser quartz and biotite.**

### AMIS Sites

AMIS 10083- West of Mapes Johnson

On a traverse (July 16, 2018) west of a water filled north- south trending depression that flows into Boland Lake, an adit was located at UTM coordinates 17T 541522E 5287512N approximately halfway down a cliff on a small ledge (Photograph 4) on legacy claim L 3013938 (mining claim 150226, grid cell 41P09L049). Two grab samples mineralized with specular hematite in calcitic vein material were taken from the dump as well as a chip sample from small bluffs near the adit entrance. These three samples were sent for assay (R0413 to R0415).



***Figure 25: Adit following a specularite vein on the Boland Lake Claims***

AMIS 03632- Boland Thomson

Traversing west of Boland Lake, initially on July 15 and again on September 28 after the LiDAR maps were reviewed, falls near the junction of 4 grid cells (41P16D388/389 & 41P09L008/009) and 4 mining claims (220139/040, 200550, & 255206) within legacy claim L4269512.



**Figure 26: Historic Boland Thomson Shaft (yellow dashed)**

Traversing encountered a number of water filled and overgrown pits and trenches in claim 220140 (Table 4) which were generally oriented north-south. They exposed minor calcite veins in Nipissing Diabase ranging up to 10cm wide with local evidence of sulphide mineralization and minor pink erythrite staining. The team encountered a well masked 5' x 5' shaft adjacent to a significant muck pile (Figure 26), which, according to MacKean & Sergiades (both 1968), indicates that the shaft is 70 feet deep with some lateral workings, apparently along a 2 inch vein in a granophyric phase of Nipissing Diabase and reportedly assaying 1100 opt Ag.

Points/Features of Interest					
ID	Feature	Easting	Northing	Claim	Description
hP19	Adit	541530	5287513	150226	Adit into cliff face, approximately 2 by 1.5 m. Large, alluvial fan style, muck pile at base.
hP42	Shaft	541212	5288582	220140	5x5m shaft, collapsed, with big muck pile
Historical Polygons					
HP9	Pit	541143	5288609	220140	2 x 2 meter pit in coarse grained Nipissing Diabase, no veining or mineralization evident
HP53	Trench	541206	5288612	220140	9x4m trench, striking North-North-East, filled with water (can't see how deep)
HP54	Trench	541211	5288582	220140	Muck pile
HP55	Trench	541204	5288605	220140	Muck pile
HP56	Trench	541218	5288590	220140	Trending North-South, 1 to 2 m wide, small muck pile along eastern side
HP57	Trench	541219	5288599	220140	Trench trending 20 ish degrees, small muck pile along eastern side
HP58	Trench	541207	5288594	220140	10x4 m water filled trench

**Table 4: Locations of points of interest and historical features on the Boland Lake claim group.**

## 4. RESULTS

### 4.1 PROSPECTING RESULTS

Many features of interest over the Elk Lake property were noted during the prospecting. The high-resolution LiDAR data was useful in that it effectively outlined outcrop and some of the significant historic features located during prospecting.

2 historic shafts, 1 water filled cut and 1 adit were located during the mapping within the Silverstrike section.

While examining AMIS Sites west of Mapes Johnson (AMIS 10083) and west of Boland Lake (AMIS 03632- Boland Thomson), BMR geologists encountered some of the historic workings, an adit and shaft, on the respective sites. Sampling of the muck and walls of the adit returned only low Co and Ag values, and although historic values to 1100 opt Ag were reported from the Boland Thomson shaft, no significant mineralization was noted by the field crews.

During a series of prospecting traverses, BMR crews confirmed the geology of the Boland Lake area as mapped by MacKean and examined several historic AMIS sites. Most of the historic pits and trenches were found to be overgrown and water filled but appeared to follow north- south trending carbonate stringers weakly mineralized with sulphides and cobalt. This northerly trend reflects the orientation of the veining and IP anomalies observed and interpreted on the Roy (Sunvest) claims to the north.

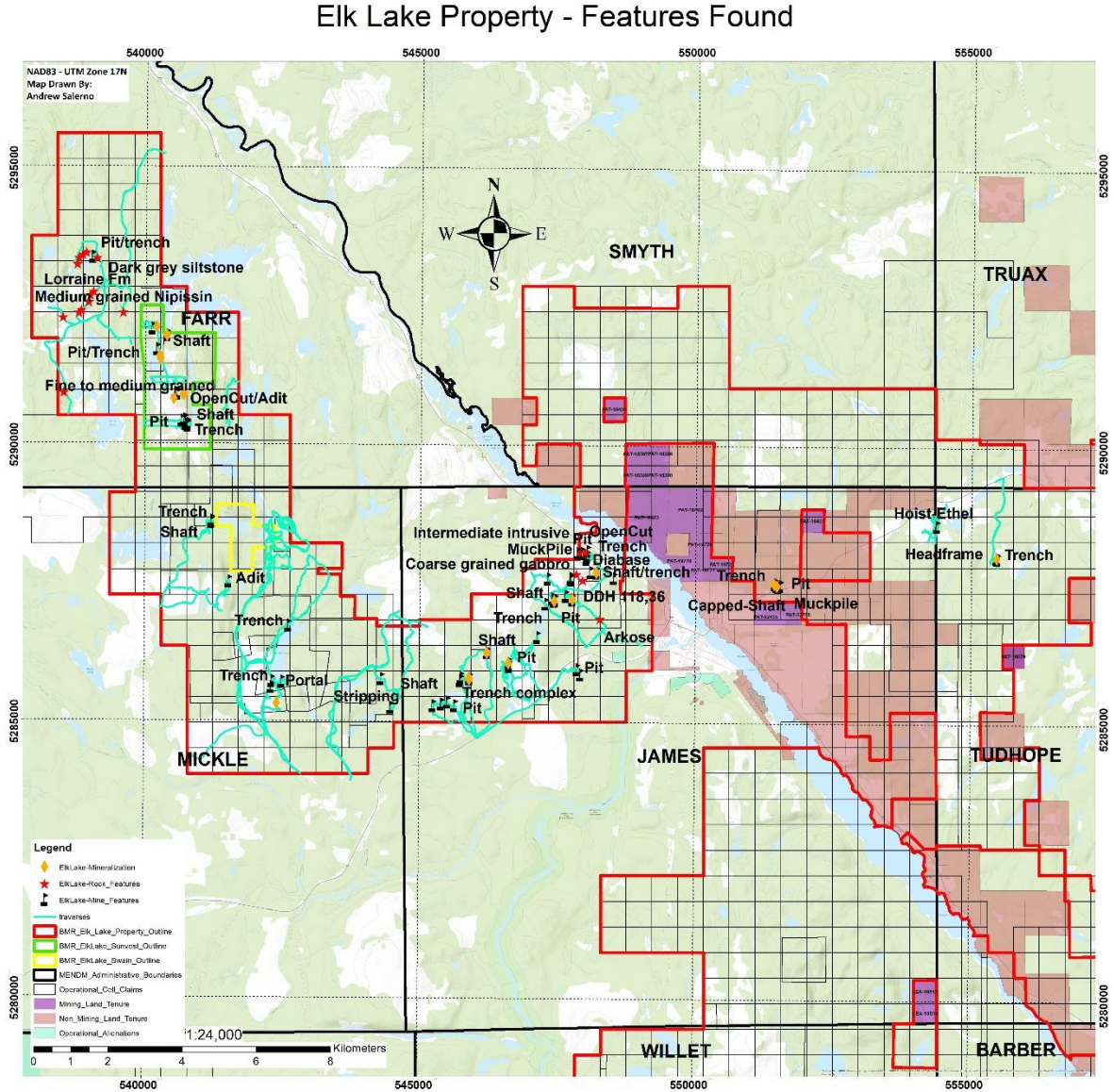
All the mapping features located throughout the Elk Lake property are listed in Table 5 and shown in Figure 28.

Feature	UTM X (m)	UTM Y (m)
Pit and trench in Nipissing, dark green/grey, medium grained, moderately magnetic and pyroxene dominated. Trench orientation 040, no visible mineralization or alteration	539032	5293361
Likely in-situ Lorraine Fm, very fine grain siltstone, grey, weakly chloritized, Fe oxides on fracture surfaces	538918	5293433
Very fine grain Lorraine siltstone with iron oxide on fracture surfaces. Weathering pattern in outcrop indicating cm-scale beds with differential resistance (SiO <sub>2</sub> ?) at 285/74NE. Photo attached.	538849	5293394
Coarse grained Nipissing with potassic or iron stained phenocrysts, moderately magnetic	538779	5293333
Medium coarse Nipissing with iron or potassic staining on phenocrysts, moderately magnetic and massive	538755	5293222
Medium grained Nipissing, moderately magnetic and massive. Float material on top of outcrop	5399097	5292752
Dark grey siltstone with iron oxide on fracture surfaces, unsure if in-situ	539112	5293337

Medium grained Nipissing, trace sub-mm py, moderately magnetic, euhedral pyroxene	539049	5292727
Medium grained Nipissing, moderately magnetic	538991	5292662
Medium coarse Nipissing, weakly magnetic, massive, fractures 258/84N	538963	5292537
Coarse grained Nipissing moderately magnetic, euhedral pyroxene and plag, possible epidote filling fractures	538830	5292394
Medium grained Nipissing, massive, moderately magnetic	538782	5292345
Medium grained nipissing with weakly magnetic. Weathered surface only.	538497	5292265
Fine to medium grained Lorrain Fm sandstone, equigranular sub-rounded grains, massive, fracture 310/75NE with epidote fill	538519	5290908
Medium grained Nipissing, euhedral pyroxene and plagioclase grains, massive, moderately magnetic	539592	5292357
Medium coarse gneiss (presumed granitoid protolithe) basement. 245 deg foliation and cross-cutting fine-grained veins.	542803	5290419
Adit into cliff face, approximately 2 by 1.5m. Large, alluvial fan style, muck pile at base.	541530	5287513
5x5m shaft, collapsed, with big muck pile	541212	5288582
2x2 m pit in coarse grained Nipissing Diabase, no veining or mineralization evident	541143	5288609
9x4m trench, striking North-North-East, filled with water (can't see how deep)	541206	5288612
Trench; Muck pile	541211	5288582
Trench; Muck pile	541204	5288605
Trench trending North-South, 1-2m wide, small muck pile along eastern side	541218	5288590
Trench trending 20ish degrees, small muck pile along eastern side	541219	5288599
10x4m water filled trench	541207	5288594
Cemetery pit	547891	5285910
Cemetery pit	547916	5285862
Cemetery trench	547776	5285973
Cemetery trench	547759	5285953
DDH 118/36	547647	5287282
EW trench system	545906	5285783
NS trench system	545740	5285737
Outcrop ridge trench	545505	5285366
Pit	545510	5285352
Shaft	545241	5285288
Small pit	554191	5288495
Trench complex	545638	5285287
Trench, outcrop cliff	545393	5285323

Trench	545254	5285126
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**Table 5: Features recorded during prospecting.**



**Figure 27: Mine, rock and mineralization features found and recorded while prospecting**

39 samples were collected from various parts of the prospected area. Table 6 details the locations and descriptions of the samples.

Sample #	Easting (m)	Northing (m)	Type	Lithology	Rock Description
R-0001	546611	5285933	Grab	Quartz-carbonate vein	Quartz -carbonate vein cutting Diabase dyke (150/75)
R-0002	546611	5285932	Grab	Quartz-carbonate vein	Quartz carbonate vein in groundmass with Co-bloom (198/85)
R-0003	546585	5285969	Grab	Cobaltite vein	Cobaltite-Quartz-Carbonate vein cutting through Diabase with bloom
R-0004	546572	5285991	Grab	Quartz-carbonate vein	Quartz-carbonate vein with minor Cobalt bloom (140/82)
R-0005	546572	5285990	Grab	Carbonate Vein	Carbonate vein stringer with Co-bloom (160/68)
R-0006	546571	5286000	Grab	Quartz-carbonate vein	25cm wide quartz-carbonate vein with sub-angular clasts of basalt
R-0008	555188	5288758	Grab	Quartz-carbonate vein	Quartz-carbonate vein with specular hematite and chalcopyrite
R-0009	555061	5288725	Grab	Quartz-carbonate vein	Vuggy quartz-carbonate vein, mineralized with euhedral Quartz, Chalcopyrite, Pyrite, Bornite
R-0010	555088	5288713	Grab	Quartz-carbonate vein	Quartz-carbonate vein mineralized with Erythrite
R-0011	555087	5288713	Grab	Calcite Vein	Large calcite vein 30cm wide (262/70). Main vein on outcrop.
R-0040	548092	5287725	Grab	Granophyre	Dark grey/pink medium grained granophyre, moderate amount of pyrite in matrix.
R-0050	540213	5291723	Grab		White to light grey carbonate vein hosted in Diabase, erytherite.
R-0051	540262	5291527	Grab		Carbonate vein (10-20 cm, pinch swell) in diabase, moderate amounts of erythrite
R-0108	546607	5285918	Grab	Quartz-carbonate vein	3-5cm Quartz-Calcite vein with bands of Cobalt bloom in diabase host off muck pile
R-0109	546607	5285918	Grab	Vein	Vein material from muck pile at shaft
R-0213 / R0214	548298	5287696	Grab	Carbonate Vein	Sub-cm Carbonate vein in coarse-grained gabbro (Epidote and Amphibole visible), no visible mineralization, from adit muck pile.  NOTE: a sample tag issue resulted in 213 and 214 representing the same sample.
R-0303	540217	5291983		Tailings	Tailings sample taken from 0.5 m level
R-0351	541208	5288596	Grab	Diabase	carbonate veins with chalcopyrite and galena (mainly galena) mineralization; sample from muck pile
R-0353	546615	5286061	Grab	Diabase	predominantly carbonate veins with massive chalcopyrite and specularite (altered to rusty red) layered mineralization; sample from muck pile

R-0354	547439	5287179	Chip	Diabase	carbonate vein in pit with chalcopyrite, malachite and hematite staining
R0407	548030	5287999	Grab		medium- to coarse-grained blebby chalcopyrite in quartz vein. Chalcopyrite is interstitial to quartz; sample from muck pile
R0408	548030	5287999	Grab		carbonate-magnetite (and/or specular hematite!?) (+/- quartz) vein (bounded by thin pale-green band (chlorite) and altered host (rock)) with what appears to be an augin. Sample from muck pile (approximately 1.5 by 2.5 cm) (of broken (?) quartz and minor carbonate with specular hematite/magnetite (?)), at the contact between the augin and the boundary between the augin and the meg-qtz vein an approximately 3 to 5 mm thick string of chalcopyrite occurs
R0409	548030	5287999	Grab		3 to 5 cm thick vein of magnetite/specular hematite (?) and carbonate (+/-quartz) vein with large 2 cm calcite cube, disseminated chalcopyrite. Muck pile sample
R0410	547766	5287215	Grab		quartz/carbonate vein with blebby disseminated chalcopyrite in (weakly altered(?)) gabbro from shaft wall edge
R0411	544298	5285762	Grab		medium to coarse-grained alkali feldspar-rich gabbro (composed predominantly of alkali feldspar and pyroxene, minor quartz (likely vug infill)) with trace disseminated sulphides (chalcopyrite, pyrite), with carbonate veins (? - not cross cutting more interstitial blebs), out-crop sample
R0412	544332	5286687	Grab		Arkosic sandstone (composed of alkali feldspar (60 to 70) and quartz (30 to 40)) composed of fine to coarse-grained sand, sub angular to rounded, moderately sorted. With variable amounts of interstitial sulphides (predominantly chalcopyrite)
R0413	541522	5287512	Grab		massive, specular hematite, found in muck pile around adit
R0414	541522	5287512	Grab		weakly altered, (silicified) gabbro (fine to medium grained) from in adit, locally weakly to moderately magnetic, visible specular hematite, trace pyrite. Grab samples from within adit.
R0415	541522	5287512	Grab		fine to medium grained specular hematite vein (?) from outside of adit on cliff wall. Sample is moderately gossened from within gabbro rock, chip sample



R-0425	540526	5291002			Massive carbonate vein (maybe minor quartz), with minor surficial pale pink cobloom. Sample from muck pile around pit.
R-0427	540531	5291031			Carbonate-Quartz vein, with speck. hem and blebby chalcopyrite. (malachite staining, locally on surface) Sample from muck pile around pit. In fine to medium grained diabase.
R-0429	545259	5285126	Rock Chip	Diabase (with potassic alteration?)	Medium-grained diabase (1 to 2 mm, standard looking diabase) with pink alkali (?) segregation pods (+/- minor carbonate) up to several cm across. (locally with trace disseminated pyrite). locally with black stringers to blebs of chlorite (?), with globular to disseminated pyrite. one 1.5 by 4 cm ovoid carbonate vug, with thin (2 mm) pink alteration halo. Sample from trench, can't tell for sure if in-situ or grab sample,
R-0430	545401	5285326	Rock Chip	Vein	carbonate-quartz vein. Surficial pale pink cobloom. Locally, black chlorite stringers/ blebs (?) in vein. On the side, rusty pink alkali altered diabase? Muck Pile, around shaft. In diabase. Trace disseminated (one speck)
R-0508	542407	5295322	Grab		Contact sulfides (pyrite) in Gowganda proximal to Nipissing
R-0509	542613	5286737	Grab		Specular Hematite in Nipissing Diabase
R-0510	542613	5286737	Grab		Cpy in Nipissing Diabase
R-0553	555461	5288013	In Situ		Py blebs with Tr. Fracture filly Malachite taken off a trench wall near a shaft
R-0610	546225	5286248	Grab		Quartz vein with sulphide (py-cpy), hosted in altered diabase, trench sample
R-0623	540528	5290883			Carbonate -specular hematite bearing carbonate vein in diabase with minor erythrite, muck pile grab
R-0624	540532	5290915			~5 cm wide chalcopyrite-bearing carbonate vein in diabase
R-0625	540510	5290810			Chalcopyrite-specular hematite-cobaltite-bearing carbonate vein with minor erythrite in diabase.
R-0628	540765	5290332			Sterling - Erythrite -bearing carbonate vein muck grab.
R-0629	540767	5290357			Sterling - 1-3 cm wide carbonate vein along trench wall. 332/50 NE
R-0633	545889	5285775	Chip	Diabase	Wall rock of 50-60 cm wide barite-carbonate vein with minor cpy.

R-0634	545889	5285775	Chip	Diabase	~50-60 cm Cpy-bearing barite-carbonate vein in trench.
R-0635	548198	5287706	Grab	Diabase	Muck grab. Cpy-Spec.Hem-bearing carbonate vein. Cpy-Spec.Hem is disseminated throughout carbonate and along wall rock contact.
R-0636	547136	5286525	Chip	Diabase	Cpy-bearing aplite-dabase. Cpy- occurs finely disseminated throughout aplite and along wall rock associated with weak-moderate, pervasive carbonate alteration.
R-0637	547136	5286525	Chip	Diabase	Aplite vein/dyke with ~0.5% finely disseminated Cpy.
R-0638	547136	5286525	Grab	Aplite vein	Clinopyroxene-bearing aplite vein in pit

**Table 6: Location and descriptions of samples collected.**

Elk Lake Property - Samples Taken

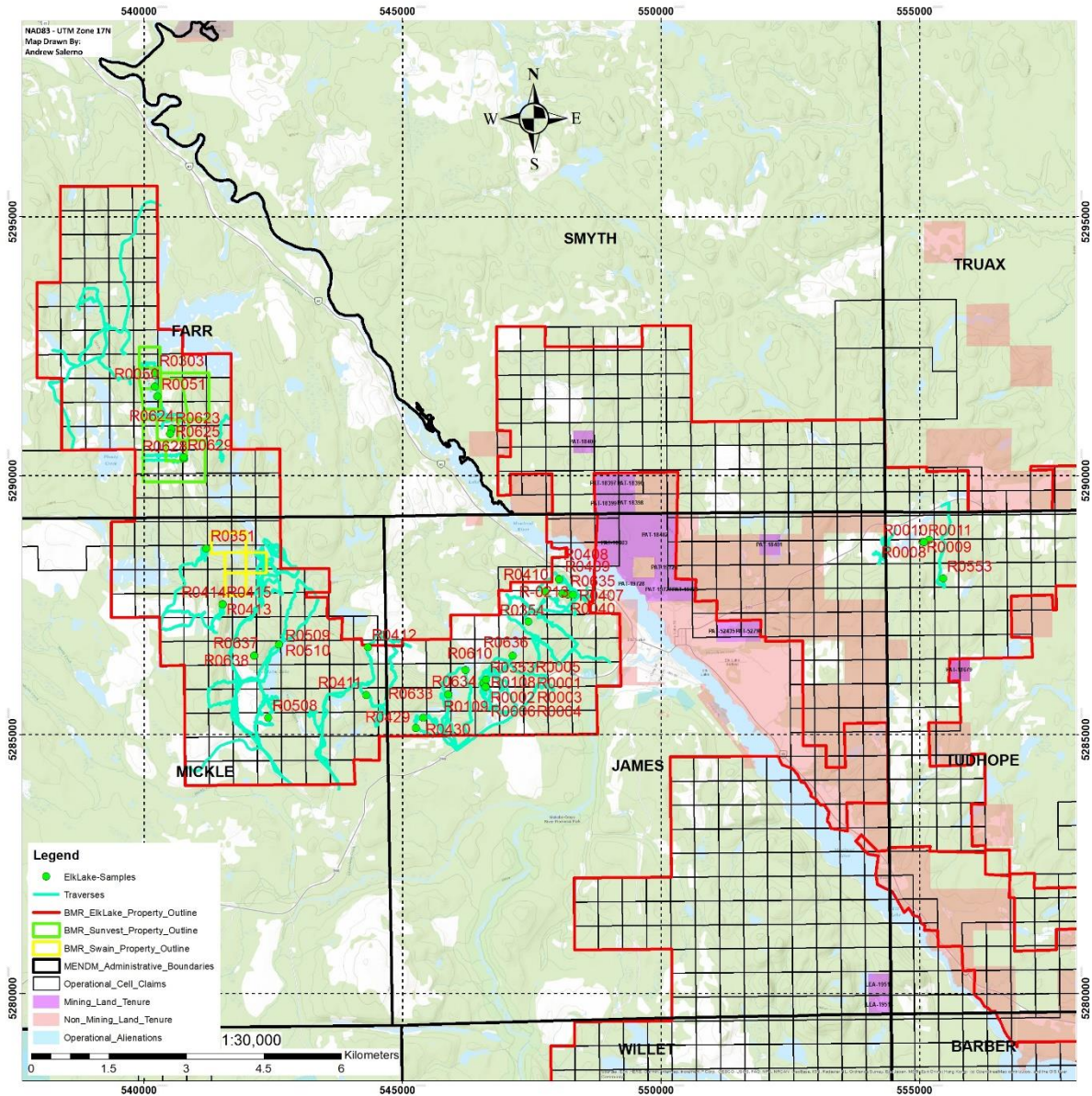


Figure 28: Map of samples on traverses

4.2 ASSAY RESULTS

36 of the 39 samples were submitted to ALS Minerals for assaying. Some samples

were also or only XRF'd (x-ray fluorescence) at CXS. See Table 7 and 8 for a summary of the sample assay results. Certificates of Analyses which detail the full assay results are attached as Appendix 2.

Sample	Run #	Co	Ag	Bi	Ni	Fe	As	S
R-0001	1	1.05	0.00	0.00	0.13	1.71	0.92	0.35
R-0002	1	0.67	0.00	0.01	0.10	6.55	0.71	0.91
R-0003	1	0.27	0.00	0.01	0.12	5.25	0.35	0.25
R-0003	2	0.25	0.00	0.00	0.12	3.66	0.30	0.05
R-0003	3	0.26	0.00	0.00	0.12	3.70	0.30	0.07
R-0004	1	0.00	0.00	0.00	0.02	5.44	0.08	2.27
R-0004	2	0.00	0.00	0.00	0.01	1.40	0.02	0.20
R-0004	3	0.00	0.00	0.00	0.01	4.56	0.02	0.28
R-0004	4	0.00	0.00	0.00	0.01	2.63	0.02	0.09
R-0005	1	0.64	0.01	0.00	0.08	3.50	0.60	0.17
R-0006	1	1.79	0.00	0.00	0.10	0.81	1.38	0.39
R-0006	2	4.32	0.00	0.01	0.22	0.90	2.84	0.85
R-0006	3	0.00	0.00	0.00	0.01	0.38	0.02	0.00
R-0006	4	0.00	0.00	0.00	0.01	2.27	0.01	0.02
R-0008	1	0.00	0.00	0.00	0.00	1.59	0.00	0.74
R-0009	1	0.00	0.00	0.00	0.00	3.38	0.00	1.97
R-0010	1	0.00	0.00	0.00	0.00	2.28	0.00	0.17
R-0010	2	0.00	0.00	0.00	0.00	2.21	0.01	0.14
R-0011	1	0.00	0.00	0.00	0.00	1.48	0.00	0.07

**Table 7: XRF results of the Silverstrike samples R-0001-R-0011**

Sample ID	Co (ppm)	Ag (ppm)	Bi (ppm)	Cu (ppm)	Ni (ppm)	As (ppm)	Fe (%)
R-0001	>10000	8.57	72.5	79.8	1450	>10000	1.61
R-0002	5920	9.63	48	243	628	8530	5
R-0003	>10000	10.3	453	30.9	>10000	>10000	3.95
R-0004	882	11.6	10.7	7450	145.5	1180	3.2
R-0005	6850	8.23	35.8	125.5	621	9180	1.52
R-0006	202	0.59	1.37	58.3	27.1	150.5	0.92
R-0008	27.6	0.84	0.57	8930	5.8	32.1	2
R-0009	1085	1.36	0.38	>10000	50.4	44.2	9.47
R-0010	3340	8.52	53.8	>10000	548	5810	11.35
R-0011	23.9	1.58	0.32	3550	39.9	16.1	6.62

R-0040	62.8	1.31	0.12	151	1.7	6.2	11.95
R-0108	>10000	20.6	140	384	1755	>10000	2.67
R-0109	332	10.8	628	266	89.3	559	2.8
R-0213	64.1	0.64	0.39	53.5	13	62.2	8.69
R-0351	271	3.14	0.67	1030	54	346	6.51
R-0353	19.4	10.65	3.38	>10000	23.7	16.7	15.45
R-0354	9.6	>100	0.19	>10000	22.4	7.4	14.7
R-0407	11.5	21.4	0.35	>10000	3.9	21.4	1.89
R-0408	38.9	0.79	0.06	3500	20.8	3.4	9.53
R-0409	8.4	3.11	0.12	4220	7	3.3	10.3
R-0410	43.6	0.58	0.11	423	79.9	2.5	7.77
R-0411	12.1	1.02	0.07	185	2.3	3.4	9.32
R-0412	17.3	0.04	0.04	1020	4.9	0.8	1.91
R-0413	122	0.4	0.44	385	27.1	2.4	30.2
R-0414	56.3	0.11	0.23	143.5	76.9	2	8.99
R-0415	427	3.88	1.99	742	42.5	57.2	33.8
R-0508	6.4	0.05	0.02	512	22.8	1.3	2.03
R-0509	51.2	0.18	0.05	929	15.6	1.6	4.14
R-0510	1130	3.62	0.55	>10000	56.3	9.2	5.12
R-0553	43.1	0.43	0.23	303	93	26.4	7.32
R-0610	53.6	0.1	0.14	759	259	1.3	4.83
R-0633	47.8	0.18	0.25	228	70.9	6.5	6.9
R-0634	5.3	0.12	0.03	66.4	6.2	2.5	0.51
R-0635	950	11.95	1.97	9130	283	518	13.2
R-0636	78.6	4.08	0.54	6590	36.9	47.5	4.5
R-0637	11.3	24	1	3450	5.3	19.3	0.95

**Table 8: Summary table of assay results of samples assayed.**

### 4.3 RECOMMENDATIONS

Elk Lake is a large, past silver ± cobalt mining district. It is recommended that permit applications for mechanical stripping be submitted for exhuming the historic pits and trenches to better examine the veining and mineralization. This would be followed by detailed mapping and sampling, including possible channel sampling. Once the extent and strength of the veining have been determined, a drill program could be warranted, therefore, permits for drilling should also be included in the application.

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## 6. QUALIFICATIONS

### STATEMENT OF QUALIFICATIONS

I, C. Jason Ploeger, hereby declare that:

1. I am a professional geophysicist with residence in Larder Lake, Ontario and am presently employed as a Geophysicist and Geophysical Manager of Canadian Exploration Services Ltd. of Larder Lake, Ontario.
2. I am a Practising Member of the Association of Professional Geoscientists, with membership number 2172.
3. I graduated with a Bachelor of Science degree in geophysics from the University of Western Ontario, in London Ontario, in 1999.
4. I have practiced my profession continuously since graduation in Africa, Bulgaria, Canada, Mexico and Mongolia.
5. I am a member of the Ontario Prospectors Association, a Director of the Northern Prospectors Association and a member of the Society of Exploration Geophysicists.
6. I do not have nor expect an interest in the properties and securities of **Battery Mineral Resources Ltd.**
7. I am responsible for the compilation of the presentation of this report. The statements made in this report represent my professional opinion based on my consideration of the information available to me at the time of writing this report.



C. Jason Ploeger, P.Geo., B.Sc.  
Geophysical Manager  
Canadian Exploration Services Ltd.

Larder Lake, ON  
March 17, 2020

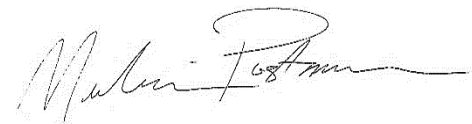
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## CERTIFICATE OF QUALIFICATION AND CONSENT

### STATEMENT OF QUALIFICATIONS

I, Melanie Postman, hereby declare that:

1. I am a Geoscientist-in-Training with residence in Larder Lake, Ontario and am presently employed as a Junior Geophysicist with Canadian Exploration Services Ltd. of Larder Lake, Ontario.
2. I graduated with a Bachelor of Science Honors specialization degree in geophysics for professional registration from the University of Western Ontario, in London Ontario, in 2017.
3. I am a member of the Association of Professional Geoscientists as a Geoscientist-in-Training (Member ID 10710).
4. I have previous geophysical work experience during and following my education.
5. I do not have nor expect an interest in the properties and securities of **Battery Mineral Resources Ltd.**
6. I am responsible for assisting with the final processing and validation of the survey results and the compilation of the presentation of this report. The statements made in this report represent my opinion based on my consideration of the information available to me at the time of writing this report.



Melanie Postman, GIT, B.Sc.  
Junior Geophysicist

Larder Lake, ON  
November 14, 2019

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## CERTIFICATE OF QUALIFICATION AND CONSENT

***I, Frank Rainer Ploeger of the town of Virginiatown, Province of Ontario, do hereby certify:***

- 1) That I am a consulting geologist and reside at 21 Waite Avenue, Virginiatown, Ontario, P0K 1X0.
- 2) That I graduated from Queen's University at Kingston, Ontario with a Bachelor of Applied Science degree in 1973; and, that I completed 2 years of an MSc program at McMaster University in Hamilton, Ontario (1980- 1982).
- 3) That I am member in good standing of the Association of Geoscientists of Ontario (#479), the Association of Professional Engineers and Geoscientists of Saskatchewan (#10852, non- practicing), the Geological Association of Canada, the Prospectors and Developers Association, and the Northern Prospectors Association. I have received a temporary permit (#2153) to practice in Quebec from the Ordre des geologues du Quebec pending acceptance by the Office quebequois de la langue franaise (OQLF).
- 4) That I have practiced my profession as a mineral exploration and mine geologist for a period of about 45 years.
- 5) This document is based on information from various public documents and my supervision of the field crews who visited the property.

*Although the information supplied to me is believed to be accurate and all reasonable care has been taken in the completion of this report, I hereby disclaim any and all liability arising out of its use and circulation. While I stand behind my interpretations, I cannot guarantee the accuracy of the source information and the use of this report or any part thereof shall be at the user's sole risk.*

6) I am employed by Battery Mineral Resources Ltd and Canadian Exploration Services Ltd as a geological consultant.

7) *My written permission is required for the release of any summary or excerpt.*

Frank R. Ploeger

Virginiatown, Ontario, March 17, 2020

## 7. INSTRUMENT SPECIFICATIONS

### GARMIN INREACH EXPLORER+



- Specifications obtained from [www.garmin.com](http://www.garmin.com)

<b>General</b>	
Physical dimensions	2.7" x 6.5" x 1.5" (6.8 x 16.4 x 3.8 cm) with keypad and SOS door bump
Display size	1.4"W x 1.9"H (3.5 x 4.7 cm); 2.31" diag (5.9 cm)
Display resolution	200 x 265 pixels
Display type	transflective color TFT
Weight	7.5 oz (213.0 g)
Battery	Rechargeable internal lithium ion
Battery life	Up to 100 hours at 10-minute tracking mode (default); up to 75 hours at 10-minute tracking with 1-second logging; up to 30 days at the 30-minute interval power save mode; and up to 3 years when powered off
Water rating	IPX7
Memory/History	2 GB
High-sensitivity receiver	
Interface	USB
<b>Maps &amp; Memory</b>	
Preloaded maps	yes. The North America SKU of the inReach Explorer+ comes preloaded with a 1:24k map of Garmin Yarmouth (Former DeLorme) North America data of the U.S. and

	Canada. Mexico also is included at a 1:125k scale (derived from Garmin Yarmouth's Digital Atlas of the Earth).
Ability to add maps	
Waypoints/favorites/locations	500
Routes	20
<b>Sensors</b>	
Barometric altimeter	
Compass	Yes (tilt-compensated 3-axis)
<b>Outdoor Recreation Features</b>	
Camera	No
<b>Additional</b>	
<ul style="list-style-type: none"> <li>• Wireless compatible: yes (Bluetooth®)</li> <li>• Trigger an interactive SOS with 24/7 search and rescue monitoring center: yes</li> <li>• Send and receive text messages to SMS and email: yes</li> <li>• Send and receive messages with other inReach users, exchange locations: yes</li> <li>• Track and share location with friends and family on web-based MapShare® portal: yes</li> <li>• Request weather forecasts for current location and planned destination: yes</li> <li>• Virtual keyboard for custom text messaging: yes</li> <li>• Send waypoints to MapShare portal during trip: yes</li> </ul> <p>Send route selection to MapShare portal for friends and family to see progress: yes</p>	

## 8. INSTRUMENT SPECIFICATIONS

### OLYMPUS VANTA SERIES



*Brand:* Olympus

*Model:* Vanta, C-Series, VCR-XXX-G2-U-CANADA

*Sensitivity:*

Limit of detection for elements most commonly associated with mineralization,

Element	Limit of Detection
Co	<5 ppm
Ag	<5 ppm
Cu	<5 ppm
Zn	<5 ppm
Pb	<5 ppm
Ni	<5 ppm
Bi	<5 ppm
As	<5 ppm
Au	<5 ppm

*Cabibration/Method of Measurement:* measurements were take for 60 seconds using the Vanta Work Station, standards were inserted approximately every 20 samples

## Vanta Specifications

<b>Dimensions (W x H x D)</b>	8.3 cm x 28.9 cm x 24.2 cm (3.25 in. x 11.4 in. x 9.5 in.)
<b>Weight</b>	M series, C series, and L series: 1.70 kg (3.75 lb) with battery, 1.48 kg (3.24 lb) without battery Element: 1.54 kg (3.39 lb) with battery, 1.32 kg (2.91 lb) without battery
<b>Excitation Source</b>	4-watt X-ray tube with application-optimized anode material (rhodium (Rh), silver (Ag), or tungsten (W)) M series (Rh W) and C series (Ag): 8–50 kV C series (Rh W): 8–40 kV L series (W) and Element (W): 35 kV (2 watts)
<b>Primary Beam Filtration</b>	M and C series: 8-position autoselected filter per beam per mode; optional collimation to 3 mm diameter beam spot L series and Element: Fixed aluminum filter and no internal collimation
<b>Detector</b>	M series: Large-area silicon drift detector C series: Silicon drift detector L series and Element: Silicon PIN detector
<b>Power</b>	Removable 14.4 V Li-ion battery with hot-swap capability (M, C, and L series only) or 18 V power transformer 100–240 VAC, 50–60 Hz, 70 W max
<b>Display</b>	800 x 480 (WVGA) LCD with capacitive touch screen supporting gesture control
<b>Operating Environment</b>	Temperature range for the M, C, and L series: –10 °C to 50 °C (14 °F to 122 °F), (continuous duty cycle with optional fan); Temperature range for the Element: –10 °C to 45 °C (14 °F to 113 °F) Humidity: 10% to 90% relative humidity non-condensing
<b>Drop Test</b>	Military Standard 810-G 4-foot (1.3 M) drop test
<b>IP Rating and Detector Shutter</b>	M series, and Element IP54: dust protected and protected against water splashing from all directions C and L series IP55: dust protected and protected against water jets from all directions M and C series: Solid detector shutter to help prevent detector damage
<b>Pressure Correction</b>	M and C series: Built-in barometer for automatic altitude and air density correction

<b>GPS</b>	M, C, and L series: Embedded GPS / GLONASS receiver
<b>Operating System</b>	Linux® Cloud enabled with user fleet manager capability
<b>Data Storage</b>	microSD™ slot with removable 1 GB industrial SD card included
<b>USB</b>	(2) USB 2.0 type A host ports for accessories such as wireless LAN, Bluetooth®, and USB flash drives. (1) USB 2.0 type mini-B port for connection to computer.
<b>Wireless LAN</b>	Supports 802.11 b/g/n (2.4 GHz) cable optional USB adaptor
<b>Bluetooth</b>	Supports Bluetooth® with an optional USB adaptor
<b>Aiming Camera</b>	Full VGA CMOS camera (Optional)
<b>Panorama Camera</b>	5-megapixel CMOS camera with autofocus lens (Optional on M, C, and L series)
<b>Warranty</b>	M, C, and L series: Three-year warranty; Element: One-year warranty
<b>Selected Optional Accessories</b>	M, C, and L series: Field Stand, Soil Foot, Holster, Work Station, Weld Mask, Hot Heel, Probe Shield, and VLW Collimation Mask (L series only) Element: Field Stand, Soil Foot, and Holster



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## 9. APPENDIX

- Appendix 1: Mining Claims Information
- Appendix 2: Assay Certificates
- Appendix 3: LiDAR Summary
- Appendix 4: Maps (LiDAR & Traverses)
- Appendix 5: LiDAR Report