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NI 43-101 Technical Report and Mineral Resource Estimate for the Iron Creek Cobalt-Copper Property, Lemhi County, Idaho, USA

Prepared for



Electra Battery Materials Corporation

133 Richmond Street West
Suite 602
Toronto, ON M5H 2L3
Canada

Project Location

Latitude: 44°58' North; Longitude: 114°07' West
State of Idaho, USA

Prepared by:

Martin Perron, P.Eng.
Marc R. Beauvais, P.Eng,
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Pierre Roy, P.Eng.

Soutex inc.
Québec (Québec)

Effective Date: January 27, 2023
Signature Date: March 10, 2023

SIGNATURE PAGE – INNOVEXPLO

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(Original signed and sealed)

Signed at Québec on March 10th, 2023

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Prepared for



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Effective Date: January 27, 2023

(Original signed and sealed)

Signed at Québec on March 10th, 2023

Pierre Roy, P. Eng
Soutex inc.
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CERTIFICATE OF AUTHOR – ERIC KINNAN

I, Eric Kinnan, P.Geo. (OGQ No. 788), do hereby certify that:

1. I am an independent consultant for InnovExplo Inc. at 560 3^e Avenue, Val-d'Or, Québec, Canada, J9P 1S4.
2. This certificate applies to the report entitled “NI 43-101 Technical Report and Mineral Resource Estimates for the Iron Creek Cobalt-Copper Property, Lemhi County, Idaho, USA (the “Technical Report”) with an effective date of January 27, 2023, and a signature date of March 10th, 2023. The Technical Report was prepared for Electra Battery Materials Corporation, 133 Richmond Street West, Suite 602, Toronto, ON, M5H 2L3, Canada (the “Issuer”).
3. I graduated with a B.Sc. degree in Geology in 1995 from Université du Québec à Montréal (Montreal, Québec).
4. I am a member of the Ordre des Géologues du Québec (OGQ licence No. 00788).
5. I have worked as a geologist for a total of twenty-seven (27) years since graduating from university in 1995. My expertise was acquired while working as an exploration geologist and manager for several companies in West Africa and South America since 1994 and as a geological consultant for clients in Guyana, Mali, Ivory Coast, Gabon, Guinea and the USA. The companies I have worked for include: InnovExplo, Barrick Gold (Guyana), Crucible Gold Ltd./Major Star CI (in Ivory Coast, Burkina Faso and Ghana); Golden Star Resources (Suriname, Ghana, Ivory Coast, Burkina Faso, Niger), Vannessa Ventures Ltd, Vannessa Guyana Inc., and Vanarde Mining Ltd. (Guyana).
6. I have read the definition of a qualified person (“QP”) set out in National Instrument 43101/Regulation 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to act as a QP for the Technical Report within the meaning of NI 43-101.
7. I visited the Property from November 28 to 30, 2022, for the purpose of the present Technical Report.
8. I am co-author of items 1 and 12, for which I share responsibility.
9. I am independent of the Issuer in accordance with the application of section 1.5 of NI 43-101.
10. I have not had prior involvement with the Property that is the subject of the Technical Report.
11. I have read NI 43-101, and the items of the Technical Report for which I am responsible have been prepared in compliance with that instrument.
12. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Signed this 10th day of March 2023 in Piedmont, Québec, Canada.

(Original signed and sealed)

Eric Kinnan, P.Geo. (OGQ No. 00788)
For InnovExplo Inc.

eric.kinnan@innovexplo.com

CERTIFICATE OF AUTHOR – MARTIN PERRON

I, Martin Perron, P.Eng. (OIQ No.109 185) do hereby certify that:

1. I am employed by InnovExplo Inc. at 725, Boulevard Lebourgneuf, Suite 317, Québec City, Québec, Canada, G2J 0C4.
2. This certificate applies to the report entitled “NI 43-101 Technical Report and Mineral Resource Estimate for the Iron Creek Cobalt-Copper Property, Lemhi County, Idaho, USA” (the “Technical Report”) with an effective date of January 27, 2023 and a signature date of March 10th, 2023. The Technical Report was prepared for Electra Battery Materials Corporation (the “Issuer”).
3. I graduated with a Bachelor's degree in Geological Engineering from Université du Québec A Chicoutimi (UQAC, Ville de Saguenay, Québec) in 1992.
4. I am a member of the Ordre des Ingénieurs du Québec (OIQ No. 109185).
5. I have practiced my profession in mining geology, mineral exploration, consultation and resource estimation, mainly in gold, base metals and potash, and accessory in graphite and rare earth elements for a total of twenty-nine (29) years since graduating from university. My expertise was acquired while working with Cambior, Breakwater Resources, Genivar, Alexis Minerals, Richmond Mines, Agrium, Roche, Goldcorp and Iamgold. I am the Director of Geology for InnovExplo since October 2021.
6. I have read the definition of a qualified person (“QP”) set out in Regulation 43-101/National Instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a QP for the purposes of NI 43-101.
7. I have not visited the Property for the purpose of the Technical Report.
8. I am co-author of and share responsibility for all sections but section 13.
9. I am independent of the Issuer applying all the tests in section 1.5 of NI 43-101.
10. I have not had prior involvement with the Property that is the subject of the Technical Report.
11. I have read NI 43-101 and the items of the Technical Report for which I am responsible have been prepared in compliance with that instrument.
12. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Signed this 10th day of March 2023 in Québec City, Québec, Canada.

(Original signed and sealed)

Martin Perron, P.Eng. (OIQ, #109185)
InnovExplo Inc.
martin.perron@innovexplo.com



CERTIFICATE OF AUTHOR – MARC R. BEAUVAIS

I, Marc R. Beauvais, P.Eng., (OIQ No. 108195, PEO No. 100061114), do hereby certify that:

1. I am currently employed as a senior mine engineer with InnovExplo Inc., Consulting Firm in Mines and Exploration, 560, 3e Avenue, Val-d'Or, Québec, Canada, J9P 1S4.
2. This certificate applies to the report entitled "NI 43-101 Technical Report and Mineral Resource Estimate for the Iron Creek Cobalt-Copper Property, Lemhi County, Idaho, USA" (the "Technical Report") with an effective date of January 27, 2023, and signature date of March 10th, 2023. The Technical Report was prepared for Electra Battery Materials Corporation (the "Issuer").
3. I have practiced my profession in mining operation, construction and management for more than 30 years. I have experience in gold, base metals and diamonds. I have worked for Aur Resources (1986, 1987, 1994-1998), Agnico-Eagle Mines Ltd (1993-94), McWatters Mines (1998- 2000), Promine Software Inc. (2000-2001). I have founded and operated my own consulting firm (Promine Consultant Inc.) from 2001 to 2005. I have been a Business Associate of Genivar Inc from 2005 to 2009 where I have supervised a staff of nearly 30 professionals directly involved in every aspect of the mineral industry. I have worked for a foreign mining company (Aimroc) in Azerbaijan from 2009 to 2010. In 2012, I have founded and managed Minrail Inc who developed a patented, fully integrated mining system designed specifically to extract the ore of shallow dipping deposit for underground mines. I have worked mostly in Canada and abroad. I have multiple specializations in computer modeling in mine planning and construction.
4. I am a registered Professional Engineer in the Province of Québec (OIQ No. 108195).
5. I am a registered Professional Engineer in the Province of Ontario (PEO No. 100061114).
6. I have graduated in 1991, at Laval University located in Ste-Foy (Québec) with a B.Sc. in Mining Engineering.
7. I have not visited the Property for the purpose of the Technical Report.
8. I am a co-author of and share responsibility for Items 1, 14.14 to 14.17, and 25-26 of the report.
9. I have not had prior involvement with the Property that is the subject of the Technical Report.
10. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report misleading.
11. I am independent of the Issuer in accordance with the application of Section 1.5 of NI 43-101.
12. I have read NI 43-101 and Form 43-101F1, and the sections of the Technical Report for which I am responsible have been prepared in accordance with that instrument and form. As of the date of this certificate, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.
13. I have read the definition of "qualified person" set out in Regulation 43-101 /NI 43-01 and certify that by reason of my education, affiliation with a professional association (as defined in Regulation 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of Regulation 43-101.

Signed this 10th day of March 2023 in Val-d'Or, Québec, Canada.

(Original signed and sealed)

Marc R. Beauvais, P.Eng..

InnovExplo Inc.,

marcr.beauvais@innovexplo.com

CERTIFICATE OF AUTHOR – PIERRE ROY

I, Pierre Roy, P.Eng. (OIQ No. 45201) do hereby certify that:

1. I am an engineer with Soutex inc. located at 1990 rue Cyrille-Duquet, Local 204, Québec, Qc, G1N 4K8, Canada.
2. This certificate applies to the report entitled “NI 43-101 Technical Report and Mineral Resource Estimate for the Iron Creek Cobalt-Copper Property, Lemhi County, Idaho, USA” (the “Technical Report”) with an effective date of January 27, 2023, and signature date of March 10th, 2023. The Technical Report was prepared for Electra Battery Materials Corporation (the “issuer”).
3. I am a graduate of Université Laval (Québec, Québec, Canada) with a B.Sc. in Mining Engineering in 1986, and a M.Sc. in Mining in 1989.
4. I am a Professional Engineer registered with the Ordre des ingénieurs du Québec, (OIQ Licence: 45201), Professional Engineer registered with the Professional Engineers of Ontario, (PEO Licence: 100110987).
5. I have practiced my profession continuously in the mining industry since my graduation from university. I have been involved in mining operations, engineering and financial evaluations for 35 years. During this time, I have been involved in mineral processing and environmental coordination at Kiena mine for six (6) years and Troilus mine for nine (9) years. I have also worked as a consultant for the mineral processing industry for two (2) years at CRM in Québec and with Soutex inc. in Québec for sixteen (18) years. As consultant I have been involved in many projects in iron, base metals and gold mining sectors.
6. I have read the definition of a qualified person (“QP”) set out in Regulation 43-101/National Instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a QP for the purposes of NI 43-101.
7. I have not visited the Property for the purpose of the Technical Report.
8. I am co-author of and share responsibility for sections 1, 13 and 26.
9. I am independent of the issuer applying all the tests in section 1.5 of NI 43 101.
10. I have not had prior involvement with the Property that is the subject of the Technical Report.
11. I have read NI 43 101 and the items of the Technical Report for which I am responsible have been prepared in compliance with that instrument.
12. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Signed this 10th day of March 2023 in Québec, Québec, Canada.

(Original signed and sealed) _____

Pierre Roy, P.Eng.(OIQ 45201)

Soutex Inc

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1. SUMMARY

1.1 Introduction

Electra Battery Materials Corporation (“Electra” or the “Issuer”) retained InnovExplo Inc. (“InnovExplo”) to prepare an updated mineral resource estimate (the “2023 MRE”) for the Iron Creek Cobalt-Copper Property (the “Property” or the “Project”) located in Lemhi County, Idaho, USA, and a supporting technical report (the “Technical Report”). The mandate was assigned by Trent Mell, CEO of Electra.

The Technical Report has been prepared in accordance with Canadian Securities Administrators’ *National Instrument 43-101 Respecting Standards of Disclosure for Mineral Projects* (“NI 43-101”) and its related Form 43-101F1.

The Issuer is a Canadian mining company trading publicly on the TSX Venture Exchange (TSX-V:ELBM) and NASDAQ (NASDAQ:ELBM). Its head office is located at 133 Richmond Street west, Suite 602, Toronto, Ontario, M5H 2L3. The Issuer changed its name from First Cobalt Corp. on November 8th, 2021. The Issuer operates the Project through a wholly owned subsidiary, the Idaho Cobalt Company of Boise, Idaho (“Idaho Cobalt”). For clarity in this Technical Report, any activity described on the Project by Idaho Cobalt is referenced as done by the Issuer.

InnovExplo is an independent geology and mining engineering consulting firm based in Val-d’Or, Québec, Canada, with other provincial offices in Québec City and Longueuil. Outside of these offices, InnovExplo also employs professional consultants in Montréal, Trois-Rivières in Québec and Sudbury in Ontario, Canada.

1.2 Contributors

InnovExplo’s independent QPs, as defined in NI 43-101, prepared the Technical Report and the 2023 MRE. The QPs for the 2023 MRE are Eric Kinnan, P.Geo., Martin Perron, P. Eng. and Marc R. Beauvais, P.Eng., from InnovExplo, and Pierre Roy, P. Eng., from Soutex. The table below lists the QPs for the Technical Report and the sections for which each QP is responsible.

Table 1-1 – Qualified Persons Item Section Responsibilities

Qualified Person	Title (Permit)	Consultant Name	Site Visit	Item/Section Responsibility
Eric Kinnan	P.Geo (OGQ No. 00788)	Independent consultant	Iron Creek	1 and 12
Martin Perron	P.Eng. (OIQ 109185)	InnovExplo	None	All but 13
Marc R. Beauvais	P.Eng. (OIQ 108195)	InnovExplo	None	1, 14.14 to 14.17, 25-26
Pierre Roy	P.Eng. (OIQ 45201)	Soutex	None	1, 13 and 26

1.3 Property Description and Location

The Iron Creek Project is located about 18 miles or 30km southwest of Salmon, Idaho, USA, within the historic Blackbird cobalt-copper district of the Idaho Cobalt Belt. The center of the Property is located at approximately 44° 57' 42" North, and 114° 06' 57" West. Iron Creek is a tributary creek that drains from the Salmon River Mountains in the west into the Salmon River. The Property encompasses the North Fork of Iron Creek.

The Property consists of seven patented lode mining claims that straddle Iron Creek, and a surrounding group of 416 unpatented lode mining claims. Together the patented and unpatented claims cover an area of 18,075 acres (73.15km²).

The patented mining claims are described as Iron No.118, Iron No.135, Iron No.136, Iron No.143, Iron No.144, Iron No.182 and Iron No.189 of the Idaho Mineral Survey No. 3613 (the "Iron Creek Patents"), located in portions of Section 20 and Section 21, Township 19 North, Range 20 East, B.M., Parcel #RP9900000109A, Blackbird Mining District, Lemhi County, Idaho. The corners of the Iron Creek Patents have been surveyed professionally, most recently in 2018 by Wade Surveying of Salmon, Idaho. An RTK Total Station survey instrument was used.

1.4 Geology

The Iron Creek Property is situated in the Blackbird copper-cobalt ± gold mining district, the Idaho Cobalt Belt ("ICB"), in the eastern part of the Salmon River Mountains, central Idaho. The host rocks to the ICB are part of the Belt-Purcell Supergroup, a Mesoproterozoic meta-sedimentary sequence extending across the Idaho-Montana border into southern Canada. Stratigraphic correlations within the ICB and surrounding area are somewhat contentious, complicated by the gradational and repetitious nature of the metasedimentary rocks and by later thrust faulting. Tertiary-age volcanism has also covered significant portions of the Mesoproterozoic sequence making correlations difficult in places.

In the mid-1970s, host rocks for the entire ICB were assigned to the mid-Proterozoic Yellowjacket Formation by Ruppel (1975). Overall, metamorphism of the sedimentary sequence is lower greenschist facies, thus primary textures are relatively well-preserved. Consequently, Hughes (1983) described the Yellowjacket Formation as a 17,000ft (5,200m) thick sequence of shallow marine sediments deposited in playa and alluvial environments. Based on detailed cross-sections and regional mapping, Winston et al. (1999) re-assigned the ICB rocks to the Apple Creek Formation, a premise supported by Tysdal (2000) at a broader scale to also include rocks outside of the ICB. A consistent sub-division of the Apple Creek Formation is defined as four conformable units of siltite and interbedded quartzite, including a unit described as diamictite (Bookstrom et al., 2016; Burmester et al., 2016). Subdivisions are based on the relative thickness of quartzite-siltite couplets. Connor (1990) recognized iron-rich marker horizons that could be correlated across the Apple Creek Formation, although at that time these rocks were still considered to be part of the Yellowjacket Formation. In the upper portions of the Apple Creek Formation, iron occurs in biotite along this horizon, in contrast to the lower portions of the stratigraphic sequence where iron occurs in magnetite. The majority of stratabound cobalt-copper mineralization, including that at the Blackbird Mine, occurs along the biotite-rich horizon. Other cobalt-copper prospects, such as Iron Creek, are located along the iron-oxide magnetite-bearing horizon considered to be lower in the stratigraphic

sequence. Detrital zircons within the upper portion of the Apple Creek Formation were dated at $1,409 \pm 10\text{Ma}$, an age regarded as the maximum age of deposition (Aleinikoff et al., 2012). The same sequence of rocks is intruded by a composite igneous pluton dated between 1,377-1,359Ma and considered to be post-Apple Creek sedimentation (Evans and Zartman, 1990; Aleinikoff et al., 2012). The Mesoproterozoic rocks are overlain by Paleozoic sedimentary and Eocene volcanic rocks (Challis Volcanic; Figure 7-1 and Figure 7-2) that are considered to be post-mineralization lithological units (Saintilan et al., 2017).

On a regional scale, at least two fold generations were distinguished (Lund et al., 2011; Bookstrom et al., 2016). Lund and others (2011) proposed that the currently observed bedding is a product of transposition and its orientation is parallel to the axial plane of moderately NW-plunging F_1 folds. Subsequently, a second generation (F_2) of N-to NE-plunging, open to tight folds formed and are accompanied by vertical to steeply W-dipping shear zones (Lund et al., 2011). The subsequent deformation is manifested primarily as brittle structures. During the Cretaceous, the NW-striking thrusts, such as the Iron Lake fault, acted as an important roof thrust in the Cordilleran thrust belt (Tysdal, 2002; Tysdal et al., 2003). Such thrusts were reactivated as and cut by normal faults during the Eocene (Lund and Tysdal, 2007). North to Northeast-striking faults developed into graben structures and control the current distribution of the Challis volcanic sequence (Janecke et al., 1997).

Overall, deformation of the Mesoproterozoic rocks in the area is relatively minor and largely restricted to brittle fault zones. Lund et al. (2011) re-interpreted northwest-trending and subparallel folds as late Cretaceous thrust faults that subdivide the area into distinct structural blocks that were further displaced by younger, north-south and northeast-southwest-striking, normal faults. The most prominent thrust faults affecting the ICB rocks are the Iron Lake fault and the Poison Creek fault. More recent work has emphasized that the Poison Creek fault acted as the axial plane of a regional fold structure (Reed Lewis, 2019 personal communication). The protracted sequence of events for the district also adds to the complexity of cobalt-copper metallogenesis for the ICB deposits and prospects, but the following sequence of regional events is recognized (Bookstrom et al., 2016):

- sediment deposition within a rift basin $>1,470\text{Ma}$ to $1,379\text{Ma}$,
- intrusion of composite mafic-felsic plutons and development of metamorphic/ hydrothermal activity $1,379$ to $1,325\text{Ma}$,
- metamorphism related to continental-scale accretion (Rodinia) $1,200$ to $1,000\text{Ma}$,
- intrusion of mafic dikes and/or sills 665 to 485Ma , and
- metamorphism and development of Mesozoic fold-thrust belt, intrusion of the Idaho Batholith at 155 to 55Ma .

The bedrock geology of the Iron Creek project area has been mapped by Noranda (Chevillon, 1979) and more recently by Chadwick (2019) and Say et al., (2021) providing a more detailed local interpretation than the published maps. The Idaho Geological Survey issued a new set of geological maps for the Degan Mountain and Taylor Mountain Quadrangles at 1:24,000 scale. The Issuer has combined the project scale mapping with the recent IGS mapping to develop a geologic compilation that cover the Property and incorporate the knowledge gained through exploration on the Project. In general, the

meta-sedimentary rocks that host the Iron Creek cobalt-copper mineralization are fine-grained, interbedded siliciclastic rocks. Overall, the metamorphic grade is lower greenschist facies. Therefore, most of the primary grain size and sedimentary textures have been preserved, but metamorphic names are used to classify the rock type, staying consistent with published names and descriptions within the ICB.

The proposed Iron Creek mine sequence comprises three major units, known as the Footwall Quartzite, the Argillite-Siltite and the Hangingwall Quartzite that are thought to belong to the Banded Siltite unit of the upper Apple Creek Formation. The clastic rocks range in grain size from mudstone (argillite) to sandstone (quartzite), but the dominant rock type is siltstone (siltite). Individual beds are identified by distinct color variations that reflect both grain-size and compositional variations. In places, individual beds are calcareous, recognized by metamorphic porphyroblasts. Carbonate-rich rocks, such as limestone or dolostone, are absent in the meta-sedimentary sequence at the Iron Creek project.

Chevillon (1979) identified an argillite-siltite unit as the host to cobalt-copper mineralization at Iron Creek. Above all, Chadwick (2019) recognized a mappable variation within the argillite-siltite based on re-logging of 23 of the Issuer drill holes. This variation includes a) siltite-argillite dominated strata with minor interbedded meta-sandstone beds of less than 2in (5cm), and b) strata with meta-sandstone interbeds of greater than 2in (5cm).

Unmineralized Eocene Challis volcanic rocks unconformably overlie the Mesoproterozoic sedimentary rocks in the immediate vicinity of the Iron Creek deposit.

1.5 Mineralization

Within the Project boundary there are seven documented occurrences metallic of mineralization exposed at surface or encountered by drilling. From north to south these are known as “CAS”, “Sulphate”, “Iron Creek”, “Footwall” or “FW”, “MAG”, “Magnetite” and “Ruby”. Iron Creek is the main mineralized body in which the resources reported herein occur. Ruby is the second most important occurrence. The Iron Creek deposit is divided into an Upper (previously “No Name”) and a Lower (“Footwall No Name” or occasionally “Waite”) mineralized zones. In this Technical Report, No Name, Footwall No Name, and Waite are only used to refer to historical work and references.

Regionally, the SE-striking Iron Lake and Poison Creek faults are the most important structures. Similarly oriented, bedding-parallel faults (and mafic dikes) were also modelled at Iron Creek. Based on the distribution of the mineralized drill hole intervals, the Author’s believe that these faults play a role in controlling the emplacement of the Co-Cu mineralization. RBF interpolants were generated from both Co and Cu assays and were subsequently evaluated onto the surface of the modelled faults. This evaluation process resulted in the identification of ore shoots. Two dominant ore shoot orientations were identified for both the Co and Cu mineralization that have the same average orientations: a moderately NW-plunging one (Cu: 47°→305°; Co: 41°→305°) and a moderately E-plunging one (Cu: 43°→095°; Co: 42°→098°).

Drill core observations suggest that not all mineralization is stratabound but some sulphide stringers are associated by fractures and shear planes discordant to bedding. A combination of field and core observations as well as structural analyses led the Authors

to conclude that the most likely structural elements to control mineralization were formed as conjugate sets of sinistral Riedel shear structures. In this interpretation, ore shoots are parallel to the intersection lineation of different shear planes. The orange plane marks the average orientation of the bedding (S_0) and known faults, and is, therefore, plausible to define the orientation of a principal displacement zone (PDZ). The NW-plunging ore shoots may have formed at the intersection of the S_0 /faults and R-shear planes that form ca. 15° anticlockwise to the PDZ during sinistral deformation. The E-plunging ore shoots may be explained as the intersection between the S_0 /faults and R'-shear planes (blue plane on Figure 7-8) that are oriented ca. 75° clockwise to the PDZ in sinistral deformation zones.

The second most significant zone of known mineralization containing cobalt is the Ruby zone (historically known as the “Jackass” zone after the nearby creek) exposed approximately 5,000ft (1.5km) southeast of Iron Creek. Little is known about the Ruby zone subsurface because drill holes collared above the zone were abandoned before penetrating the projection of the main mineralized horizon. Hole NIC-22 did encounter an estimated 100ft of disseminated chalcopyrite before it was abandoned in a "squeezing fault zone" (Chevillon, 1979). Centurion's holes (1989 to 1990) were at convenient spots along the road for assessment purposes and did not test the zone.

The Ruby zone may be a separate stratigraphic unit or may be structurally offset from the Iron Creek mineralized horizon by a north-south trending fault based on bedrock mapping. Younger volcanic rocks are bound by two mapped branches of the fault, and partially cover the host rocks of Iron Creek and Ruby zones. The Ruby zone host rock to mineralization is a fine-grained argillite-siltite lithologic unit similar to the host rocks at Iron Creek. Massive magnetite horizons at Ruby extend across the full extent of the exposed mineralization. At Iron Creek, massive magnetite lenses occur in the footwall of the higher-grade cobalt mineralization zones.

Outcrop mapping (Noranda field team outcrop map) indicates that there is mineralogic zoning similar to that of the Iron Creek deposit such that a magnetite-pyrite assemblage is confined to the footwall, and pyrite increases and magnetite decreases in abundance higher in the stratigraphic sequence. Strongly sheared chloritic rocks occur in the hangingwall of the Ruby zone. The uppermost horizon of pyrite is locally massive and occurs at the contact between low magnetic susceptibility rocks and higher magnetic susceptibility rocks. Multiple horizons of pyrite+ magnetite as well as massive magnetite with only trace pyrite occur in the footwall of this zone and extend to the depth of current drilling. Crusts of white and pink radiating crystals occur on the surface of the Ruby exposures which have been identified as kasparite ($(\text{Mg},\text{Co})\text{Al}_2(\text{SO}_4)_4 \cdot 22\text{H}_2\text{O}$) via XRD analyses.

Approximately 5,000ft (1.5km) north of the Iron Creek Zone is a mesothermal quartz-arsenopyrite vein swarm which was historically described as the arsenopyrite or arsenopyrite-gold zone (Chevillon 1979). Mineralization occurs as a series of steeply north to northeast-dipping 0.1 to 3.0ft thick (3cm to 90cm) quartz veins. Exposure is very poor in the area and the best understanding of the geometry comes from roadcut and trench mapping and sampling. This mapping and sampling program revealed a series of sheeted veins that were traced for approximately 600ft (180m) along strike. Veins typically have coarse muscovite selvages and contain various amounts of arsenopyrite. Historic trench sampling was completed on the zone and the metal grades range from detection limit to 13.4ppm Au and 0.26% Co over a 3.0ft (0.9m) long intercept. Select

samples of vein material locally exceed 20ppm Au and 0.6% Co. Copper is typically low in these samples and rarely exceeds 1,000ppm. Drilling intercepted anomalous copper and gold grades in sheeted veins over a strike length of approximately 500ft (150m) and a dip extent of approximately 300ft (90m).

Identified in the Noranda outcrop maps as the “FW No Name Zone” over 2,000ft (600m) south of the Iron Creek zone (Figure 6-1, Figure 7-2). Chevillon (1979) describes this zone as stratabound, conformable lenses of magnetite and pyrite within chloritized argillite-siltite that are cut by veinlets of quartz-carbonate and secondary pyrite. The magnetite mineralization is traced over 300ft (90m) and the zone of chloritization is mapped along strike westward for over 2,000ft (600m). The FW zone is considered a separate stratigraphic horizon from the Iron Creek zone.

The Sulfate zone is located north of the Iron Creek zone. Chevillon (1979) described the Sulfate zone as another example of stratabound, magnetite-rich mineralization. Malachite is found in chloritic rocks in the area and a 7 to 10ft (2 to 3m) wide quartz vein with sparse pyrite and chalcopyrite is situated toward the footwall of the zone and is generally conformable with stratigraphy.

Magnetite-rich breccias occur conformable to local bedding over a strike length of 600ft in the southern portion of the Property. The breccia bodies were first shown on the Noranda outcrop maps, but not regarded as extensions of the Ruby zone and not as a separate mineralized zone (Chevillon, 1979).

1.6 Data Verification

Data verification and the site visit demonstrated that the databases for the Iron Creek deposit is considered valid and of sufficient quality to be used for the mineral resource estimates.

1.7 Mineral Resource Estimates

The updated mineral resource for the Iron Creek Project (the “2023 MRE”) was prepared by QPs Martin Perron, P.Eng. and Marc R. Beauvais, P.Eng. of InnovExplo, using all available information. The mineral resources herein are not mineral reserves as they do not have demonstrated economic viability. The result of this study is individual mineral resource estimates for the Iron Creek project. The effective date of the 2023 MRE is January 27, 2023. The mineral resource area of the Iron Creek Project covers an area of a 1,652 m strike length and a 780 m width, and extends to a height of 852 m. The DDH database contains 86 surface (26,304.8m) and 31 underground DDHs (5,670.8m). The database contains 23,308 sampled intervals taken from 29,481m of drilled core. All the sampled intervals were assayed for copper and cobalt. The database also includes lithological, alteration as well as structural descriptions and measurements taken from drill core logs.

The geological model was built using the DDH database as the primary source of information (lithological units, alteration, and mineralization) as well as surface data from outcrops, including surface structural measurements. The model was also based on the regional geology maps (i.e., Degan and Taylor Mountain sheets), and data from the Idaho Geological Survey. The model consists of a Lower Quartzite overlain by a Central Siltite unit. An Upper Quartzite resides on top of the Central Siltite. The Eocene Challis volcanics uncomfortably covers the Upper Quartzite. The Central Siltite unit was then

better define into Quartzite-enriched unit surrounded by Siltite-enriched rocks. The mineralization can be found in either the Quartzite or Siltite rocks.

The mineralization and structural models were built using the DDH database as the primary source of information (assays, lithological units, alteration, and mineralization). The structural model consists of nine modelled volumes representing shear zones called Shear 1 to Shear 9. These shear zones also coincide with mafic dykes that seem to have an unknown relationship to one another. The mineralization model consists of a single mineralized domain that was designed without a minimum thickness (true thickness of the mineralization zone) and is, therefore, not diluted. This modeling was preferred to better reflect the stratabound and structurally controlled mineralization occurrences as described in Item 7. The mineralized zone was modelled on the extents of logged intervals and snapped to assays irrespective of grades. A cut off grade of 0.015% Co or 0.5% Cu was assigned to the interpretation. This mineralization zone is used as the interpolation domain.

The 2023 MRE can be classified as Indicated and Inferred mineral resources based on geology, grade continuity, data density, search ellipse criteria, drill hole spacing and interpolation parameters. The requirement of reasonable prospects for eventual economic extraction has been met by having a minimum width for the modelling of the mineralization zones and a cut-off grade, using reasonable inputs, both for potential open pit and underground extraction scenarios, and constraints consisting of a surface shape for the open-pit scenario and mineable shapes for the underground scenario.

The QPs consider the 2023 MRE reliable and based on quality data and geological knowledge. The estimate follows CIM Definition Standards and CIM MRRM Best Practice Guidelines.

The following table displays the results of the 2023 MRE at the official cut-off grades.

Table 1-2 – 2023 Mineral Resource Estimate of the Iron Creek Cobalt and Copper Project (Effective date of January 27th, 2023)

Iron Creek Project	Mineral Resources	Tonnes (t)	Co (%)	Cu (%)	Lbs of Co	Lbs of Cu
	Indicated	4,451,000	0.19	0.73	18,364,000	71,535,000
	Inferred	1,231,000	0.08	1.34	2,068,000	36,485,000

Notes to the 2023 MRE

1. The effective date of the 2023 MRE is January 27, 2023.
2. The independent and qualified persons for the 2023 MRE are Martin Perron, P. Eng. and Marc R. Beauvais, P.Eng. all from InnovExplo Inc.
3. The 2023 MRE follows the CIM Standards.
4. These mineral resources are not mineral reserves, because they do not have demonstrated economic viability. The results are presented undiluted and are considered to have reasonable prospects of economic viability.
5. The estimate encompasses one large, mineralized envelope using the grade of the adjacent material when assayed or a value of zero when not assayed. Dilution zones encompassing all mineralized zones were created as part of the mineralized domain to reflect the dilution within the constraining shapes.
6. High-grade capping supported by statistical analysis was done on raw assay data before compositing and established on a per-metal basis, having a limiting value at 1% for cobalt and 10% for copper. Composites (1.5 m) were calculated within the zones using the grade of the adjacent material when assayed or a value of zero when not assayed.

7. The estimate was completed using a sub-block model in Surpac 2022. A 4m x 4m x 4m parent block size was used.
8. Grade interpolation was obtained by Inverse Distance Squared (ID2) using hard boundaries.
9. A density value of 2.78 g/cm³ was assigned to the mineralized domain.
10. The mineral resource estimate is classified as Indicated and Inferred. The Inferred category is defined with a minimum of three (3) drill holes within the areas where the drill spacing shows reasonable geological and grade continuity at the maximum range of the modeled semi-variogram. The Indicated mineral resource category is defined with a minimum of three (3) drill holes within the areas where the drill spacing shows reasonable geological and grade continuity at half the range of the modeled semi-variogram.
11. The 2023 MRE is locally constrained within Deswik Stope Optimizer shapes using a minimal mining width of 2.0m for a potential underground LH. An NSR-based cut-off grade was calculated using the following parameters: mining cost = US\$55.00/t; processing cost = US\$22.00/t; G&A = US\$10.00/t. The cut-off grade should be re-evaluated in light of future prevailing market conditions (metal prices, mining costs etc.).
12. The number of metric tonnes was rounded to the nearest thousand, following the recommendations in NI 43-101 and any discrepancies in the totals are due to rounding effects. The metal contents are presented in pounds of in-situ metal rounded to the nearest hundred.
13. The independent and qualified persons for the 2023 MRE are not aware of any known environmental, permitting, legal, political, title-related, taxation, socio-political, or marketing issues that could materially affect the Mineral Resource Estimate.

1.8 Interpretation and Conclusions

InnovExplo considers the present 2023 MRE to be reliable and thorough, based on quality data, reasonable hypotheses, and parameters in accordance with NI 43 101 criteria and CIM Definition Standards.

Mr. Perron has reviewed the Iron Creek Project data and Mr. Kinnan has conducted a site inspection of the Property. The Authors believe that the data provided by the Issuer are an accurate and reasonable representation of the Iron Creek project. As well, the exploration conducted by the Issuer has produced information on which important interpretations, conclusions and decisions can be made with reasonable confidence. All historical information, on the other hand, cannot be used in this report for anything more than an indication of mineralization.

The only factor that prevents Indicated and any Measured material from being classified higher is the inability to confidently correlate mineralized zones from one drill hole to another with the present drill spacing. Additional drilling at depth will help in the classification of some inferred material toward the indicated category.

The cobalt occurs mainly within pyrite but with minor amounts in the chalcopyrite. There is no cobaltite, and the cobalt and copper mineralization are not necessarily spatially coincident. Both metals are distributed independently from each other and occupy separate mineralized domains that are, in part, overlapping. Cobalt and copper commonly occur in economic grades separate from each other.

The drilling has demonstrated the cobalt and copper mineralization for 1,000 metres along strike and 550 metres vertically. The Authors consider the deposit to be open along strike, albeit at low grades, and at depth, except for copper in the eastern half of the deposit which seems to be closed off at depth. The Iron Creek project is a project in early stages of development and exploration.

The Authors conclude the following:

- the database supporting the 2023 MRE is complete, valid and up to date,
- the geological and grade continuity of cobalt and copper mineralization is demonstrated and supported by historical past samples, underground exposures and drilled areas,
- using the long hole mining method, the Project contains an estimated, Indicated Mineral Resource of 4,451,000 tonnes grading 0.19% Co and 0.73% Cu for 18,364,000 pounds of cobalt and 71,535,000 pounds of copper, and an estimated Inferred Mineral Resource of 1,231,000 tonnes grading 0.08% Co and 1.34% Cu for 2,068,000 pounds of cobalt and 36,485,000 pounds of copper,
- the 2023 MRE was prepared for a potential underground scenario with a US\$ 87.00 NSR cut-off grade using the long hole mining,
- it is likely that additional diamond drilling at depth and laterally would increase the Inferred Mineral Resource tonnage and upgrade some of the Inferred Mineral Resources to the Indicated category.

1.9 Recommendations

Based on the results of the 2023 MRE, the Authors recommend that the Project move to an advanced exploration phase and toward an initial economic study. A two-phase work program is recommended, where Phase 2 is conditional upon the positive conclusions of Phase 1.

In Phase 1, the Authors recommend completing exploration work on the project, update the 2023 MRE and use the results of this updated MRE and internal studies as a basis for a Preliminary Economic Assessment (“PEA”):

- drill 2 water wells on the Property to provide a secure groundwater source and establish water right for the Property,
- infill drilling in the eastern extension to potentially convert inferred mineral resources to the indicated category,
- exploration drilling of zones at depth and laterally to explore the true depth potential of high-grade zones using 100m step-outs downdip, and follow-ups on isolated intersections,
- exploration of the Ruby targets in order to increase the Mineral Resources Estimate on the Property,
- evaluate additional showings within the project, including the CAS occurrence with IP surveys and follow up drilling if warranted,
- update and complete the metallurgical and internal mining engineering studies, and
- initiate environmental and hydrogeological characterization testing.

In support to the PEA study, complete an updated NI 43-101 Technical Report.

In Phase 2, the Authors recommend to:

- Define and complete a PFS study in accordance with the PEA results and recommendations.
- In support to PFS study, complete an updated NI 43-101 Technical Report.

The Authors are of the opinion that the recommended work programs and proposed expenditures are appropriate and well thought out. The Authors believe that the proposed budget reasonably reflects the type and amount of the contemplated activities.

1.9.1 Costs estimate for recommended work

InnovExplo has prepared a cost estimate for the recommended two-phase work program to serve as a guideline. The budget for the proposed program is presented in Table 26-1. Expenditures for Phase 1 are estimated at CAD\$8,410,000 (incl. 15% for contingencies). Expenditures for Phase 2 are estimated at CAD\$1,150,000 (incl. 15% for contingencies). The grand total is CAD\$9,560,000 (incl. 15% for contingencies). Phase 2 is contingent upon the success of Phase 1.

Table 1-3 – Estimated Costs for the Recommended Work Program

PHASE 1 – Activity	Cost (CAD\$)
Infill drilling: to potentially convert inferred mineral resources to the indicated category (5,000m at 300 CAD\$/m)	1,500,000
Exploration drilling: expansion of known zones and follow-ups on isolated intersections (15,000m at 300 CAD\$/m)	4,500,000
Exploration drilling at CAS: (1,000m at 300 CAD\$/m)	300,000
IP surveys at Ruby and CAS: 20 kilometers at 13,000 CAD\$/km	260,000
Metallurgical and internal mining engineering studies.	250,000
Complete a PEA and an updated NI 43-101 Technical Report	500,000
Contingencies (15%)	1,100,000
Total (Phase 1)	8,410,000
PHASE 2 – Activity	Cost (CAD\$)
Complete a PFS and an updated NI 43-101 Technical Report	1,000,000
Contingencies (15%)	150,000
Total (Phase 2)	1,150,000
Total (Phase 1 and Phase 2)	9,560,000

2. INTRODUCTION

Electra Battery Materials Corporation (“Electra” or the “Issuer”) retained InnovExplo Inc. (“InnovExplo”) to prepare an updated mineral resource estimate (the “2023 MRE”) for the Iron Creek Cobalt-Copper Property (the “Property” or the “Project”) located in Lemhi County, Idaho, USA, and a supporting technical report (the “Technical Report”).

The mandate was assigned by Trent Mell, CEO of Electra.

The Technical Report has been prepared in accordance with Canadian Securities Administrators’ *National Instrument 43-101 Respecting Standards of Disclosure for Mineral Projects* (“NI 43-101”) and its related Form 43-101F1.

The 2023 MRE has an effective date of January 27, 2023. It represents an update of the previous mineral resource estimate contained in the technical report titled “Technical Report with Updated Estimate of Mineral Resources for the Iron Creek Cobalt-Copper Project, Lemhi County, Idaho, USA” dated November 27, 2019 with an effective date of November 2017, 2019, published by Steven J. Ristorcelli, C.P.G., P.G. and Joseph Schlitt, MMSA QP (the “2019 MRE”).

InnovExplo is an independent geology and mining engineering consulting firm based in Val-d’Or, Québec, Canada, with other provincial offices in Québec City and Longueuil. Outside of these offices, InnovExplo also employs professional consultants in Montréal, Trois-Rivières in Québec and Sudbury in Ontario, Canada.

2.1 Issuer

The Issuer is a Canadian mining company trading publicly on the TSX Venture Exchange (TSX-V:ELBM) and NASDAQ (NASDAQ:ELBM). Its head office is located at 133 Richmond Street west, Suite 602, Toronto, Ontario, M5H 2L3. The Issuer changed its name from First Cobalt Corp. on November 8th, 2021. The Issuer operates the Project through a wholly owned subsidiary, the Idaho Cobalt Company of Boise, Idaho (“Idaho Cobalt”). For clarity in this Technical Report, any activity described on the Project by Idaho Cobalt is referenced as done by the Issuer.

2.2 Overview or “Terms of Reference”

The Technical Report presents and supports an updated mineral resource estimate for the Project. Most of the supporting information was gleaned from surface and underground drilling on the current Property. Historical details, local and regional geological information, and general information relevant to the Property are also described.

The 2023 MRE has been prepared for the Issuer by InnovExplo’s independent qualified persons (“QPs” or “Authors”). The 2023 MRE adheres to the current Canadian Reporting Standards for Mineral Resources and Mineral Reserves, which are the Canadian Institute of Mining Metallurgy and Petroleum (“CIM”) Definition Standards for Mineral Resources and Mineral Reserves of May 2014 (“CIM Definition Standards”). The 2023 MRE also follows the CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines of November 2019 (the “CIM MRMR Best Practice Guidelines”).

2.3 Principal Source of Information

As part of the mandate, InnovExplo has reviewed the following with respect to the Project: a) the mining titles and their status on the Bureau of Land Management website (the USA online claim management system), b) agreements and technical data supplied by the Issuer (or its agents), and c) the Issuer's filings on SEDAR (press releases and MD&A reports).

The QPs have reviewed such information and have used all means necessary in their professional judgement to verify it and have no known reason to believe that any information used to prepare this Technical Report is invalid or contains misrepresentations. The Authors have sourced the information for the Technical Report from the reports listed in Item 27.

InnovExplo reviewed and appraised the information used to prepare the Technical Report, including the conclusions and recommendations. InnovExplo believes this information is valid and appropriate, considering the status of the Project and the purpose for which the Technical Report is prepared. The QPs do not disclaim any responsibility for the information, conclusions, and estimates contained in this Technical Report.

This Technical Report was prepared in return for fees based upon agreed commercial rates, and the payment of these fees is in no way contingent on the results of the Technical Report.

2.4 Report Responsibility and Qualified Persons

InnovExplo's independent QPs, as defined in NI 43-101, prepared the Technical Report and the 2023 MRE. The QPs for the 2023 MRE are Eric Kinnan, P.Geo., Martin Perron, P. Eng. and Marc R. Beauvais, P.Eng., from InnovExplo, and Pierre Roy, P. Eng., from Soutex. The table below lists the QPs for the Technical Report and the sections for which each QP is responsible.

Table 2-1 – Qualified Persons Item Section Responsibilities

Qualified Person	Title (Permit)	Consultant Name	Site Visit	Item/Section Responsibility
Eric Kinnan	P.Geo (OGQ No. 00788)	Independent consultant	Iron Creek	1 and 12
Martin Perron	P.Eng. (OIQ 109185)	InnovExplo	None	All but 13
Marc R. Beauvais	P.Eng. (OIQ 108195)	InnovExplo	None	1, 14.14 to 14.17, 25-26
Pierre Roy	P.Eng. (OIQ 45201)	Soutex	None	1, 13 and 26

2.5 Site Visit

Mr. Kinnan visited the Iron Creek project from, November 28 to 30, 2022. This site visit included reviewing sampling and exploration procedures, visiting and inspecting surface

outcrops and underground workings, reviewing core and taking independent samples as more fully described in Item 11.

2.6 Effective Date

The effective date of the 2023 MRE and the Technical Report is January 27, 2023.

The signature date is March 10th, 2023.

The close-out date of the drill hole database is December 15, 2022, including all available drilling data. No drilling was in progress while the estimate was being prepared.

2.7 Currency, Units of Measure, and Acronyms

The abbreviations, acronyms and units used in this Technical Report are provided in Table 2-2 and

Acronyms	Term
43-101	National Instrument 43-101 (Regulation 43-101 in Québec)
CAD:USD	Canadian-American exchange rate
BLM	Bureau of Land Management
CAD	Canadian dollars
CIM	Canadian Institute of Mining, Metallurgy and Petroleum
CIM Definition Standards	CIM Definition Standards for Mineral Resources and Mineral Reserves
CoG	cut-off grade
CRM	Certified reference material
CoV	Coefficient of variation
DDH	Diamond drill hole
DSO	Deswik Stopes Optimizer
EPA	Environmental Protection Agency
G&A	General and administration
ID2	Inverse distance squared
IDEQ	Idaho Department of Environmental Quality
IDL	Idaho Department of Lands
IDWR	Idaho Department of Water Resources
IEC	International Electrotechnical Commission
IOCG	iron oxide-copper-gold deposits
ISO	International Organization for Standardization
IT	Information technology
JV	Joint venture
mesh	US mesh
MRE	Mineral resource estimate
MRMR	Mineral resources and mineral reserves

Acronyms	Term
MSGP	Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity
MSHA	Mine Safety & Health Administration
MWMP	Meteoric water mobility potential
n/a	Not applicable
N/A	Not available
NAD	North American Datum
NAD 27	North American Datum of 1927
NAD 83	North American Datum of 1983
NICMEA	Notice of Intent to Conduct Mineral Exploration Activities
nd	Not determined
NI 43-101	National Instrument 43-101
NEPA	National Environmental Policy Act
NFS	National Forest System
NSR	Net smelter returns
OK	Ordinary kriging
P ₈₀	80% passing - Product
POO	Plan of Operations
PFS	Preliminary feasibility study
QA	Quality assurance
QA/QC	Quality assurance/quality control
QC	Quality control
QP	Qualified person (as defined in National Instrument 43-101)
RC	Reverse circulation (drilling)
RQD	Rock quality designation
SAG	Semi-autogenous grinding
SEDEX	Sedimentary Exhalative Deposits
SWPP	Stormwater Pollution Prevention Plan
SD	Standard deviation
SG	Specific gravity
UCoG	Underground cut-off grade
UG	Underground
TWUA	Temporary Water Use Authorization
US\$	United States dollars
UTM	Universal Transverse Mercator coordinate system
USFS	United States Forest Service
VMS	Volcanogenic Massive Sulphide

Table 2-3. All currency amounts are stated in Canadian dollars (CAD\$) or US dollars (US\$) as indicated. Quantities are stated in metric units, as per standard Canadian and international practice, including metric tons (tonnes, t) and kilograms (kg) for weight, kilometres (km) or metres (m) for distance, hectares (ha) for area, percentage (%) for copper and nickel grades, and gram per metric ton (g/t) for precious metal grades. Wherever applicable, imperial units have been converted to the International System of Units (SI units) for consistency (

Symbol	Unit
%	Percent
% solids	Percent solids by weight
\$, C\$, CAD	Canadian dollar
\$/t	Dollars per metric ton
°	Angular degree
°C	Degree Celsius
µm	Micron (micrometre)
cfs	Cubic feet per second
cm	Centimetre
cm ²	Square centimetre
cm ³	Cubic centimetre
d	Day (24 hours)
ft	Foot (12 inches)
g	Gram
G	Billion
Ga	Billion years
g/cm ³	Gram per cubic centimetre
g/t	Gram per metric ton (tonne)
in	Inch
k	Thousand (000)
ka	Thousand years
kg	Kilogram
km	Kilometre
km ²	Square kilometre
lb	Pound
M	Million
m	Metre
m ²	Square metre
Ma	Million years (annum)
masl	Metres above mean sea level
Mlbs	Million pounds

Symbol	Unit
Mt	Million metric tons
NiEq	Nickel equivalent
oz	Troy ounce
oz/t	Ounce (troy) per short ton (2,000 lbs)
ppm	Parts per million
psf	Pounds per square foot
s	Second
t	Metric tonne (1,000 kg)
ton	Short ton (2,000 lbs)
US\$, USD	American dollar

Table 2-4).

Table 2-2 – List of Acronyms

Acronyms	Term
43-101	National Instrument 43-101 (Regulation 43-101 in Québec)
CAD:USD	Canadian-American exchange rate
BLM	Bureau of Land Management
CAD	Canadian dollars
CIM	Canadian Institute of Mining, Metallurgy and Petroleum
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CoV	Coefficient of variation
DDH	Diamond drill hole
DSO	Deswik Stopes Optimizer
EPA	Environmental Protection Agency
G&A	General and administration
ID2	Inverse distance squared
IDEQ	Idaho Department of Environmental Quality
IDL	Idaho Department of Lands
IDWR	Idaho Department of Water Resources
IEC	International Electrotechnical Commission
IOCG	iron oxide-copper-gold deposits
ISO	International Organization for Standardization

Acronyms	Term
IT	Information technology
JV	Joint venture
mesh	US mesh
MRE	Mineral resource estimate
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MSGP	Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity
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RQD	Rock quality designation
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SEDEX	Sedimentary Exhalative Deposits
SWPP	Stormwater Pollution Prevention Plan
SD	Standard deviation
SG	Specific gravity
UCoG	Underground cut-off grade
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Acronyms	Term
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UTM	Universal Transverse Mercator coordinate system
USFS	United States Forest Service
VMS	Volcanogenic Massive Sulphide

Table 2-3 – List of units

Symbol	Unit
%	Percent
% solids	Percent solids by weight
\$, C\$, CAD	Canadian dollar
\$/t	Dollars per metric ton
°	Angular degree
°C	Degree Celsius
µm	Micron (micrometre)
cfs	Cubic feet per second
cm	Centimetre
cm ²	Square centimetre
cm ³	Cubic centimetre
d	Day (24 hours)
ft	Foot (12 inches)
g	Gram
G	Billion
Ga	Billion years
g/cm ³	Gram per cubic centimetre
g/t	Gram per metric ton (tonne)
in	Inch
k	Thousand (000)
ka	Thousand years
kg	Kilogram
km	Kilometre
km ²	Square kilometre
lb	Pound
M	Million
m	Metre
m ²	Square metre
Ma	Million years (annum)

Symbol	Unit
masl	Metres above mean sea level
Mlbs	Million pounds
Mt	Million metric tons
NiEq	Nickel equivalent
oz	Troy ounce
oz/t	Ounce (troy) per short ton (2,000 lbs)
ppm	Parts per million
psf	Pounds per square foot
s	Second
t	Metric tonne (1,000 kg)
ton	Short ton (2,000 lbs)
US\$, USD	American dollar

Table 2-4 – Conversion Factors for Measurements

Imperial Unit	Multiplied by	Metric Unit
1 inch	25.4	mm
1 foot	0.3048	m
1 acre	0.405	ha
1 ounce (troy)	31.1035	g
1 pound (avdp)	0.4535	kg
1 ton (short)	0.9072	t
1 ounce (troy) / ton (short)	34.2857	g/t

3. RELIANCE ON OTHER EXPERTS

In preparing this report, InnovExplo has relied on information from the Issuer. The QPs have reviewed such information and have used all means necessary in their professional judgement to verify it and have no reasons to doubt its reliability and have determined it to be adequate for the purposes of this Technical Report. The QPs do not disclaim any responsibility for the information, conclusions, and estimates contained in this Technical Report.

InnovExplo prepared it at the request of the Issuer. Eric Kinnan (P. Geo.), Martin Perron (P.Eng.), Marc R. Beauvais (P.Eng.) and Pierre Roy (P. Eng.) are the QPs responsible for reviewing the technical documentation relevant to the Technical Report, preparing a mineral resource estimate for the Project, and recommending a work program.

None of the QPs are an expert in legal, land tenure or environmental matters. Although QPs have reviewed the available data, they have only validated the pertinent portions of the full data set. QPs have made judgments about the general reliability of the underlying data. Where deemed inadequate or unreliable, the data were not used, or the procedures were modified to account for the lack of confidence in that information.

The QPs relied on the following sources for information that is not within their fields of expertise:

- a) the Issuer supplied information about mining titles, option agreements, royalty agreements, environmental liabilities and permits; neither the QPs nor InnovExplo are qualified to express any legal opinion concerning Property titles, ownership, or possible litigation;
- b) the Issuer supplied technical information through internal technical reports and various communications; while exercising all reasonable diligence in checking, confirming, and testing the data and formulating opinions and conclusions, QPs relied on the Issuer for project data and any available information generated by previous operators;
- c) the QPs have reviewed the various agreements under which the Issuer holds title to the Project's mineral claims; however, QPs offers no legal opinion regarding their validity; and
- d) a description of the properties, mineral titles, and ownership thereof, is provided for general information purposes only.

4. PROPERTY DESCRIPTION AND LOCATION

4.1 Location

The Iron Creek Project is located about 18 miles or 30km southwest of Salmon, Idaho, USA, within the historic Blackbird cobalt-copper district of the Idaho Cobalt Belt (Figure 4-1). The center of the Property is located at approximately 44° 57' 42" North, and 114° 06' 57" West. Iron Creek is a tributary creek that drains from the Salmon River Mountains in the west into the Salmon River. The Property encompasses the North Fork of Iron Creek.

4.2 Property Description

The Property consists of seven patented lode mining claims that straddle Iron Creek, and a surrounding group of 416 unpatented lode mining claims (Figure 4-2). Together the patented and unpatented claims cover an area of 18,075 acres (73.15km²). Table 4-1 provides a summary of the mining claims contained in the Property and a full list of the mining claims is provided in Appendix A.

Table 4-1 – Summary of the mining claims contained in the Property.

Claim Group	# Claims	Locator	Royalty
Patented Lode		Idaho Survey No. 36123	
Iron No.118	1	Idaho Cobalt Co.	None
Iron No.135	1	Idaho Cobalt Co.	None
Iron No.136	1	Idaho Cobalt Co.	None
Iron No.143	1	Idaho Cobalt Co.	None
Iron No.144	1	Idaho Cobalt Co.	None
Iron No.182	1	Idaho Cobalt Co.	None
Iron No.189	1	Idaho Cobalt Co.	None
Total	7		
Unpatented Lode			
BCA	1-43	Idaho Cobalt Co.	None
BR	1-110	Idaho Cobalt Co.	None
BRS	1-29	Idaho Cobalt Co.	None
JA	1-103	Idaho Cobalt Co.	Arizona Lithium Co., 1.0% NSR
NBR	1-25	Scientific Metals (Delaware) Corp.	None

Claim Group	# Claims	Locator	Royalty
SCOB	1-30	Borah Resources Inc.	JV dilution, 2.5% NSR
CAS & IRON	76	Richard Fox	Richard Fox, 1.5% NSR
Total	416		

The patented mining claims are described as Iron No.118, Iron No.135, Iron No.136, Iron No.143, Iron No.144, Iron No.182 and Iron No.189 of the Idaho Mineral Survey No. 3613 (the “Iron Creek Patents”), located in portions of Section 20 and Section 21, Township 19 North, Range 20 East, B.M., Parcel #RP9900000109A, Blackbird Mining District, Lemhi County, Idaho. The corners of the Iron Creek Patents have been surveyed professionally, most recently in 2018 by Wade Surveying of Salmon, Idaho. An RTK Total Station survey instrument was used.

4.3 Ownership, Agreements and Royalties

The Iron Creek Patents, and unpatented mining claims BCA1-43, BR1-110, and BRS1-129 are held 100% by Idaho Cobalt Company of Boise, Idaho, a wholly owned subsidiary of the Issuer. The NBR1-25 unpatented claims are held 100% by Scientific Metals (Delaware) Corp. (“SMDC”) of Midvale, Utah also, a wholly owned subsidiary of the Issuer. There are no royalties on all the above mining claims royalties.

The Issuer, through Idaho Cobalt, holds unpatented mining claims JA1-103 100% subject to a 1.0% NSR royalty. The Issuer holds beneficial interests in the unpatented mining claims SCOB1-30, subject to 2.5% NSR royalty related to a possible joint venture dilution, and unpatented mining claims CAS1-46, IRON1-7, IRON14-15 and IRON31-61, subject to a 1.5% NSR royalty.

On August 23, 2016, U.S. Cobalt Inc. (“US Cobalt”), formerly Scientific Metals Corp., entered into a lease agreement with Chester Mining Company (“Chester”) with an option to purchase a 100% interest of the Iron Creek Patents. Under the terms of the lease, US Cobalt was required to make certain cash payments, Chester retained a 4.0% NSR royalty, and US Cobalt was granted the option to purchase the Iron Creek Patents and eliminate the royalty through a one-time payment. On September 4, 2018, the Issuer and Chester agreed to a 47% reduction of the purchase and royalty elimination payment to US\$1.07 million, which was paid in full.

On September 12, 2016, US Cobalt acquired unpatented mining claims BR1 to 58 by means of share purchase agreement for 100% of the shares of the Idaho Cobalt. US Cobalt subsequently staked the unpatented mining claims NBR1 to 25 through SMDC. No royalties apply to these mining claims.

On June 4, 2018, the Issuer acquired all the issued and outstanding shares of US Cobalt Inc. thereby acquiring Idaho Cobalt and SMDC, and all the respective assets of these two subsidiaries.

On March 12, 2021, the Issuer, through Idaho Cobalt, purchased the JA1 to 103 unpatented mining claims from with Arizona Lithium Company (“Arizona”). Arizona retains a 1.0% NSR royalty, and the Issuer has the right to purchase one-half (i.e., 0.5%)

of the royalty for CAN\$750,000 and an unrestricted right of first refusal to acquire the remaining one-half of the NSR royalty.

On March 21, 2021, the Issuer, through Idaho Cobalt, entered into an earn-in and joint venture agreement with Borah Resources and Phoenix Copper for the SCOB1 to 30 unpatented mineral claims (“Redcastle”). Under the agreement, the Issuer may earn a 51% interest in Redcastle by investing US\$1,500,000 on or before the third anniversary of the effective date of the agreement. It may earn a 75% interest by investing an additional US\$1,500,000 on or before the by the fifth anniversary. If, after the joint venture is formed, the ownership interest of a party is reduced to 10% or below, such interest will be converted to a 2.5% NSR dilution royalty. The other party will have the right to buy-down the dilution royalty at a rate of US\$500,000 per 0.5%, and shall retain a right of first refusal on any proposed sale of the dilution royalty to a third party. The Redcastle agreement is subject to a mutual area of interest provision.

On November 8th, 2021, the Issuer changed its name from First Cobalt Corp.

On March 22, 2022, the Issuer through Idaho Cobalt entered into a Property option agreement with Richard Fox to acquire the CAS1-46, IRON1-7, IRON14-15 and IRON31-61 unpatented mining claims for US\$1.5 million (“CAS”), payable over 10 years upon completion of specific milestones. Richard Fox retains a 1.5% NSR royalty which the Issuer may purchase for US\$500,000 within one year of commercial production from the CAS property. The Fox agreement is subject to a mutual area of interest provision.

In 2019, 2021, 2022, and 2023 the Issuer through Idaho Cobalt staked 124 additional claims covering 9.22 km² including BCA1-43, BR59-110 and BRS1-29. No royalties apply to these mining claims except those that fall within the Redcastle area of interest (approximately 2.13 km²) and those that fall within the CAS area of interest (approximately 1.41 km²).

4.4 Nature of the Mining Claims

An unpatented mining claim is a parcel of land for which the holder (the “Locator”) has asserted a right of possession and the right to develop and extract a discovered, valuable, mineral deposit. This right does not include surface rights. There are Federally administered lands in 19 states where one may locate a mining claim or site including Idaho. In these states, the Bureau of Land Management (“BLM”) manages the surface of public lands and United States Forest Service (“USFS”) manages the surface of National Forest System (“NFS”) land. The BLM is responsible for the subsurface on both public and NFS land. Mining claims are classified as “lode” (minerals located in the bedrock) or “placer” (minerals located in unconsolidated surface material). The Property includes only lode claims.

Ownership of unpatented mining claims is in the name of the Locator, subject to the paramount title of the United States of America. Under the Mining Law of 1872, which governs the location of unpatented mining claims on Federal lands. The Locator has the right to explore, develop, and mine minerals on unpatented mining claims without payments of production royalties to the Federal Government, subject to the surface management regulation of the BLM or USFS.

A patented mining claim is one which the Federal Government has passed its real and irremovable rights to the Locator, giving him or her full ownership of the surface rights and any “Locatable” minerals found in the subsurface. However, ownership of the

“Leasable” materials, such as oil, natural gas, and coal, and surface materials such as sand, gravel, and stone stays with the Federal Government and does not pass to the Locator.

Effective October 1, 1994, the United States Congress imposed a moratorium on spending appropriated funds for the acceptance or processing of mineral patent applications that had not yet reached a defined point in the patent review process before a certain cut-off date. Until the moratorium is lifted or otherwise expires, the BLM will not accept any new patent applications.

4.5 Maintenance of Mining Claims

The unpatented mining claims included within the Property have no expiration date if the annual claim maintenance fees are paid by August 31 of each year. These fees have been paid in full to September 1, 2023.

The Iron Creek Patents are not subject to annual claim-maintenance fees, but applicable real and immovable property taxes are payable to Lemhi County annually.

All annual maintenance fees including county taxes are listed in Table 4-1. The total annual land holding costs are estimated to be US\$68,984.34.



Figure 4-1 – Location map of the Iron Creek Property

4.6 Environmental Liabilities

The Authors are not aware of any existing environmental liabilities within the Property. Because the Property is located within the Salmon National Forest, the Issuer is subject

to surface management regulation by and is in communication with USFS personnel for guidance in ensuring that work is done in compliance with all applicable regulations.

It is understood that water and particulates from any drilling or other work into water resources requires permits from the State of Idaho. The Issuer, through Idaho Cobalt, operates under a Stormwater Pollution Prevention Plan (“SWPPP”) and the Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (“MSGP”). The MSGP was issued by the United States Environmental Protection Agency (“EPA”) with an effective date of September 21, 2021.

The North Fork of Iron Creek, a perennial regional drainage discharging to the Salmon River, bisects the Property, and cuts the sulphide-mineralized stratigraphic section. “Adit-1” (or “East Adit”) is excavated approximately 40ft above the elevation of the creek on the east side, and the lay-down and parking area is partially built on waste rock from driving the adit. Concerns regarding the proximity of historic waste dumps to Iron Creek were documented in an inspection by the Idaho Geological Survey (“IGS”) in June of 1994 (Moye, 1994). The waste rock contains pyrite and chalcopyrite and other sulphides that may be producing localized acid rock drainage. Jersey barriers and storm water prevention systems such as silt fencing and straw waddles have been used to attempt to prevent surface water from interacting with and potentially eroding this material into the creek.

The Issuer has collected water samples from Iron Creek at nine established points upstream, within, and downstream of the Property beginning in June 2017, prior to rehabilitating Adit-1 and “Adit-2” (or “West Adit” or “6,500 Level Adit”), and before commencing the surface drill program in 2017. This sampling program is ongoing and has had no samples with acidic values (pH < 6). This sampling program has shown that the Issuer’s exploration activities have had no deleterious effects on the water quality of Iron Creek. The Iron Creek drainage basin was recently identified as impaired due to stream samples collected by Idaho Department of Environmental Quality (“IDEQ”) which show elevated dissolved copper in the creek below the Property.

Water discharges at low flow rates from Adit 1 (<1 gallons per minute; gpm) and 2 (<5 gpm). These discharges predate the Issuer’s operations and were documented in an inspection by the IGS in June of 1994 (Moye, 1994). The Issuer, through Idaho Cobalt, entered a “Consent Order” with the IDEQ on December 21, 2021, to cease discharges of water from the adits into waters of the United States. As per the Consent Order, the Issuer submitted a design for an infiltration system whereby the water will be conveyed from the adit portals by gravity flow through pipes into infiltration trenches equipped with drain tile for Adit 1 and infiltration chambers for Adit 2. IDEQ accepted the design, which included an Engineered Construction Plan, Operation and Maintenance Manual, and Proposed Monitoring Plan in the late fall of 2022. The installation is scheduled for Spring 2023.

4.7 Environmental Permitting

The bulk of the Iron Creek Resource area occurs on the seven Iron Creek Patents. Surface disturbances associated with mineral exploration conducted in and around the Iron Creek resource are contained within the Iron Creek Patents which include ownership of the surface rights. However, this work requires a Notice of Intent to Conduct Mineral Exploration Activities (“NICMEA”) to be filed annually with the Idaho Department of Lands (“IDL”). A stormwater discharge permit is also required under the MSGP for current and planned surface exploration disturbances.

The Issuer has obtained a water right permit from the Idaho Department of Water Resources (“IDWR”) to divert up to 0.3 cubic feet per second between January 1 and December 31 from Iron Creek and/or from groundwater if a well is drilled on the patented claims. The water right permit allows water to be used on the Iron Creek Patents. Exploration operations in Idaho also commonly divert surface water for drilling under an annual Temporary Water Use Authorization (“TWUA”), which requires an application to be filed and approved by IDWR. Temporary water use authorizations were granted for the exploration work conducted prior to receiving the permanent water right permit.

Surface and underground activities must conform to applicable Mine Safety and Health Administration (“MSHA”) standards and regulations. Drilling and underground mapping and sampling were performed in accordance with these regulations. No work has been completed underground since 2019 and the site is not currently an active MSHA site.

Annual snow removal permits are required by the USFS if plowing is needed to access the project. The Issuer first received this permit during the winter of 2017-2018, and received permits in 2019, 2021, and 2022 when winter access was necessary for exploration activities.

A separate exploration program was executed at the Ruby zone on unpatented claims. This program was executed under a Plan of Operations (“POO”) authorized under a Categorical Exclusion by the USFS on May 2, 2022. As required by the permit all sites at Ruby have been reclaimed.

A POO was submitted to the USFS to conduct additional exploration throughout the land position in March 2022. The USFS acknowledged the POO on April 5, 2022, and initiated permitting activities. The plan is scoped for 92 pads with up to 6 holes per pad (diamond drill holes or reverse circulation holes) to be explored in a phased exploration approach over a 10-year period. The Issuer proposes to drill an average of 10 and up to 20 pads per year. Legal notice and request for comments was initiated by the USFS on November 24, 2022, as part of scoping activities related to the plan. As of February 1, 2023, the permitting and NEPA analyses is ongoing with a target permit issue date of July 1, 2023.

QPs are not aware of any adverse environmental or social issues related to permitting activities connected with the Property.

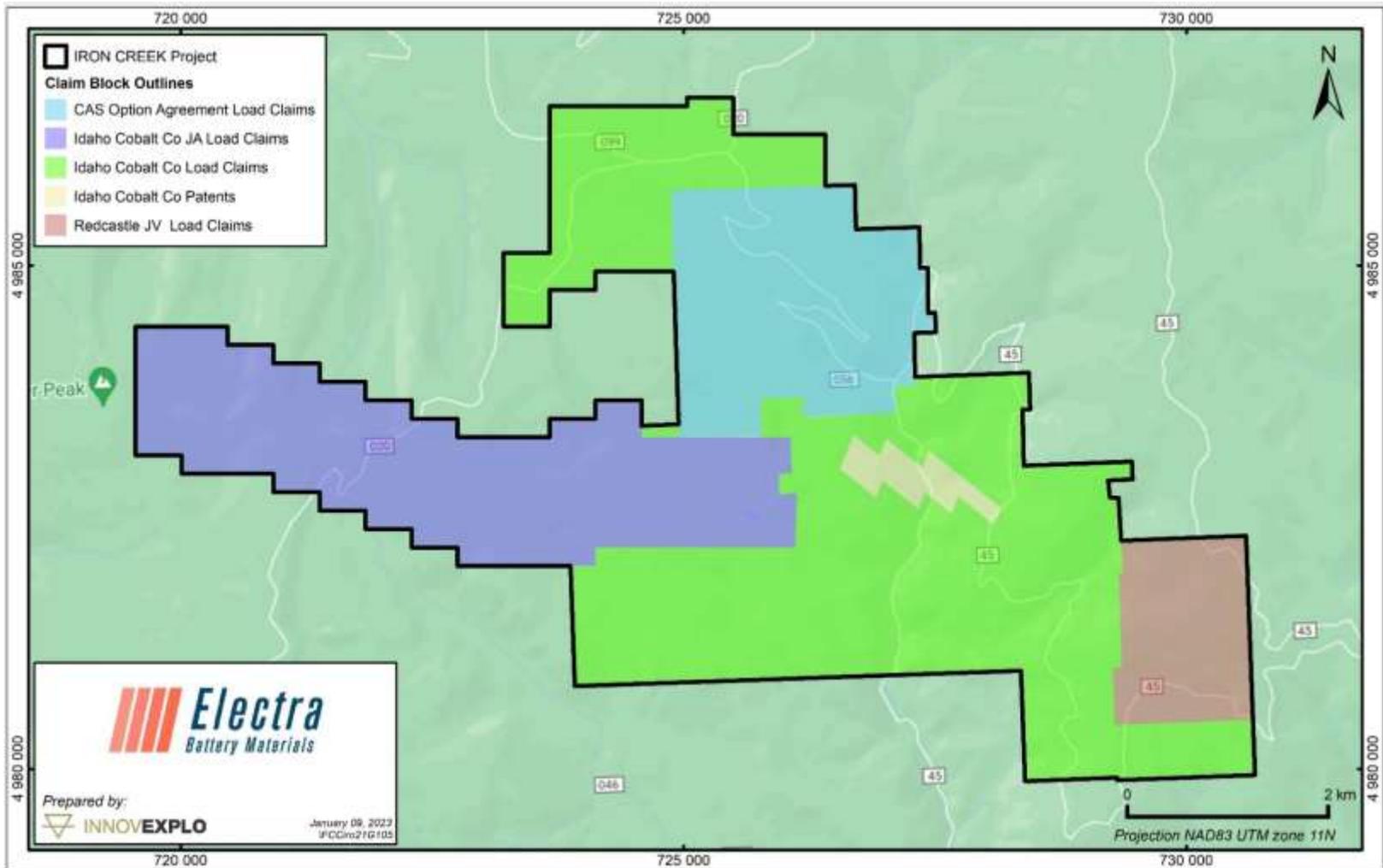


Figure 4-2 – Map of the Iron Creek Property Mineral Tenure

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

5.1 Accessibility

Access to the Property is via the paved, all-weather U.S. Highway 93 (“US 93”), and County Road 45 (“Iron Creek Road”) located 23mi (37km) south of the town of Salmon, Idaho. The Iron Creek Road is a well-maintained gravel road, accessible year-round, that traverses the central part of the Property approximately 11mi (~18km) west of US 93. Access throughout the Property is good because of a network of logging roads and previously constructed drill roads. Salmon is a town of about 3,000 inhabitants. The main industries are tourism, ranching and agriculture with some logging and mining. There are several small mining contractors in the region. Paved highways provide easy access to larger urban centers such as Butte, Montana, about 150mi (241 km) away, and Pocatello and Boise, Idaho, located 210mi (337km) and 250mi (402km) away, respectively.

5.2 Climate

The climate may be described as the temperate, continental-montane type. Annual precipitation ranges from 24in (600mm) per year in the lower elevations, to 30in (~760mm) at higher elevations. Of this, 70% falls as snow. Average winter snowpack is 3 to 4 ft (0.9 to 1.2m) in depth. Mining and exploration can be conducted year-round assuming snow removal is conducted to maintain road access during the winter. Road access for exploration may be limited or interrupted by snow from December to April.

5.3 Local Resources and Infrastructure

The Iron Creek Patents are real and irremovable property with complete surface rights for exploration and mining held by the Issuer, subject to state and federal environmental regulations. For the unpatented claims, the Mining Law of 1872 provides surface rights to the Issuer, subject to state and federal environmental regulations. The Project area is mountainous and rugged with few localities for permanent structures. Potential ore would likely be transported to an undefined off-site processing plant.

The nearest electrical power line is located approximately 11mi (18km) from the project. Water for exploration drilling and dust control is available from Little No Name Creek and Iron Creek. The Issuer through Idaho Cobalt obtained a 0.3 cubic foot per second or 214-acre feet per year water right from the Idaho Department of Water Quality on August 13, 2022. The water right allows the Issuer to pull up to 0.1 CFS from Iron Creek with the additional 0.2 CFS sourced from groundwater sources. Water wells have not been completed at this time. The Issuer has five years to develop the wells and show beneficial use of the water to establish the water right.

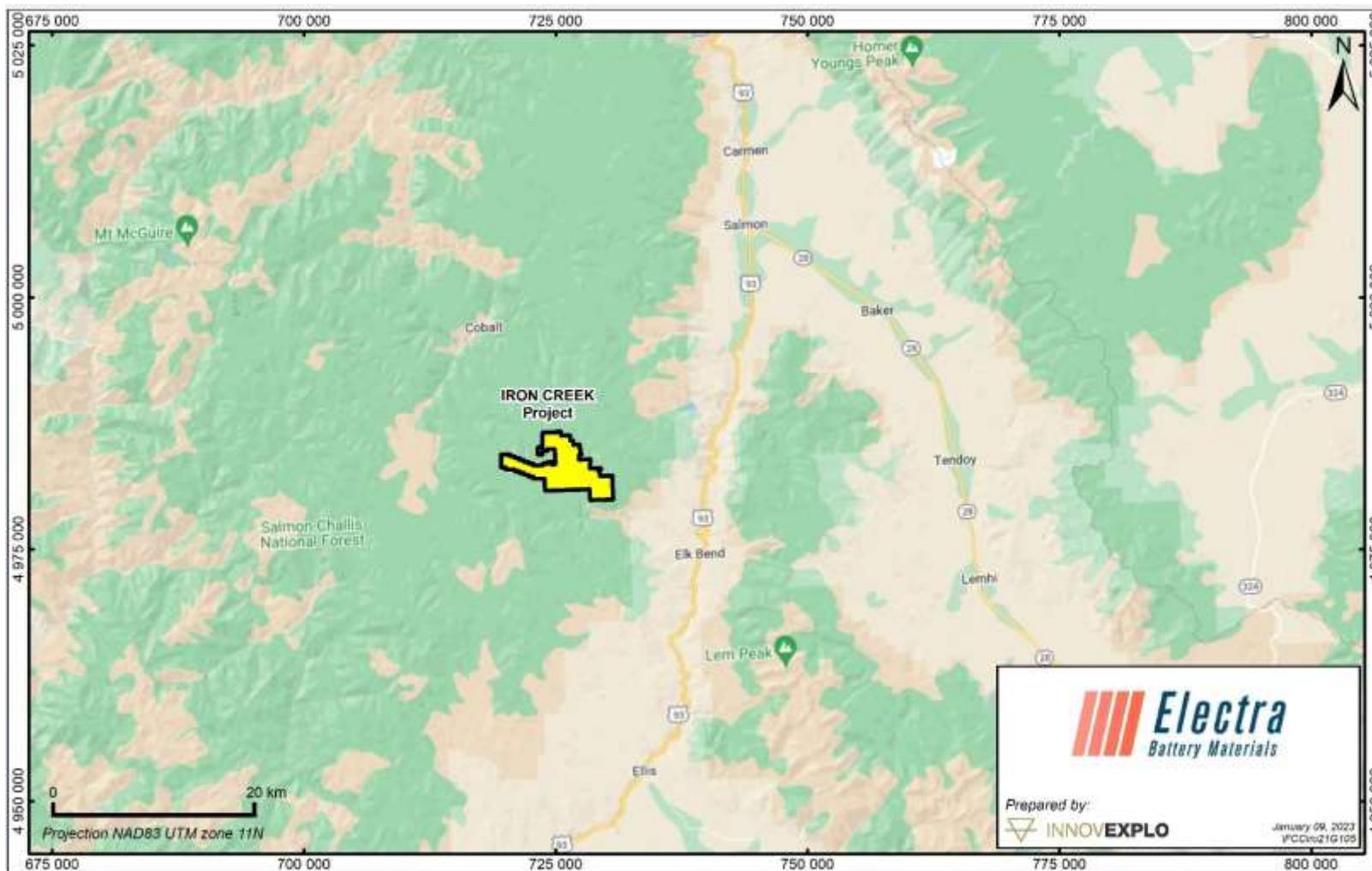


Figure 5-1 – Regional location and access map of the Iron Creek Property



A) US 93 (South-bound towards Elk Bend junction with Country Road 45); B) US-93 Northbound toward Salmon, ID; C) Iron Creek Road - County Road 45 (US 93 Elk Bend junction); D) to F) Cleared Iron Creek Rd. to Iron Creek Property accessible year-round.

Figure 5-2 – Road access to the Iron Creek Property

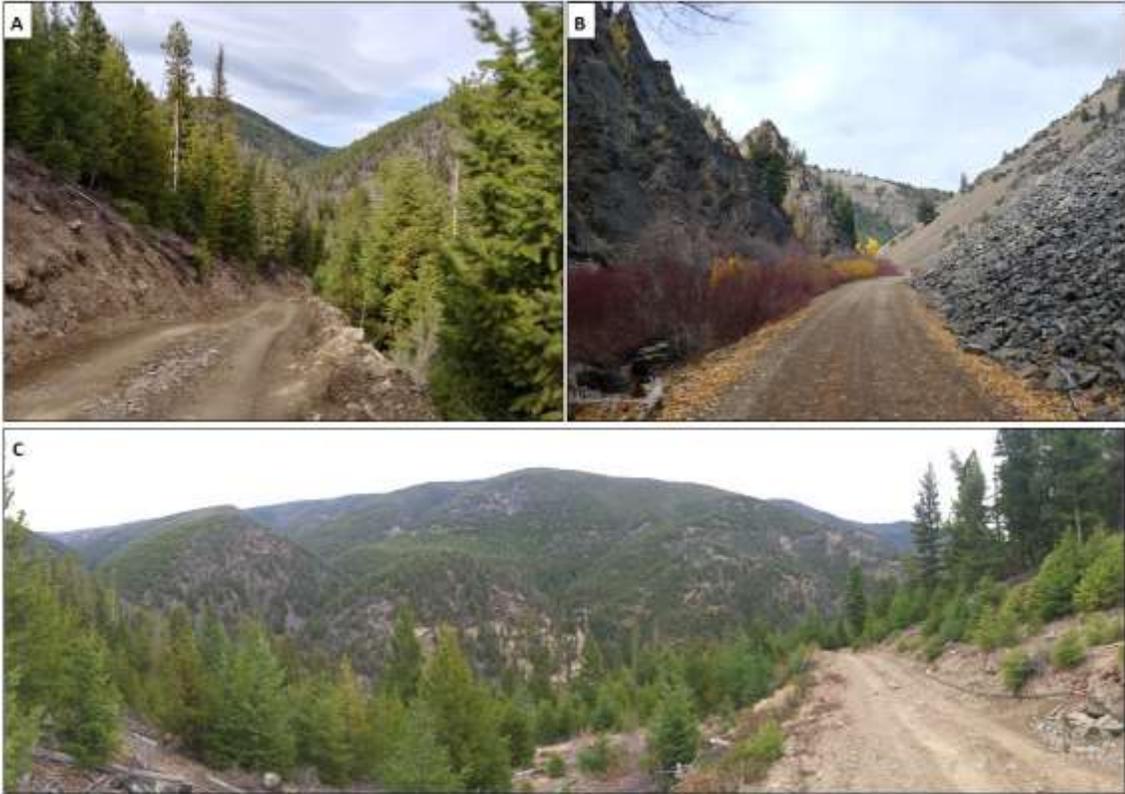
Fuel, groceries, hotels, restaurants, communications, schools, automotive parts and service, a health clinic, and emergency services are available in Salmon, within an hour's drive from the Property. Highly trained mining and industrial personnel are available in Butte, Montana, and Boise and Pocatello, Idaho. Engineering, banking and construction services, as well as heavy equipment sales and maintenance are also available in these cities, as well as in Salt Lake City, Utah, approximately 370 miles (600km) from the Project.

No mining or milling infrastructures are present on site. A strategic Idaho Cobalt Belt refinery is conceptually envisioned for mineral processing in the near vicinity (200 km) although no cobalt refinery currently exists in the western United States. Copper refinery plant is available at some 600km distance.

5.4 Physiography

The Project area consists of hilly to mountainous terrain with broadly rounded ridges surrounded by deeply incised stream valleys, the principal valley being that of Iron Creek and its tributaries. Elevations within the project area range from 6,300ft (1,920m) along Iron Creek to over 8,300ft (2,530m) near the north end of the Property. Much of the Property is forested, with abundant Douglas fir at the lower elevations and Lodgepole pine

increasing in abundance at higher elevations. Underbrush includes Ninebark brush on the north-facing slopes and Pine grass on the south-facing slopes.



A-C) Hilly to mountainous terrain with broadly rounded ridges surrounded by deeply incised stream valleys

Figure 5-3 - Physiography of Iron Creek Valley

6. HISTORY

The text of this section was modified from the 2019 MRE.

6.1 Iron Creek Zone

Much of the following has been modified from Cullen (2016) and references cited therein. According to Park (1973), the area of the Iron Creek zone initially drew interest as an iron prospect in 1946. In 1967, during construction of a logging road, Mr. L. Abbey staked 14 claims on copper-stained material in what later became known as the “No Name” zone (Figure 6-1). In May 1970, these claims were leased to Sachem Prospects Corporation (“Sachem”), a division of the POM Corporation of Salt Lake City, Utah.

Sachem carried out claim staking, geologic mapping, aerial photography, and induced polarization, self-potential, magnetic and geochemical surveys of the No Name zone. In addition, they drilled 11 diamond core holes and drove three underground exploratory drifts known as Adit-1, Adit-2 and Adit-3 (Figure 6-1).

Hanna Mining (“Hanna”) optioned the historical Iron Creek property in 1972 through its wholly owned subsidiaries, Coastal Mining Co. (“Coastal”) and Idaho Mining Co. and acquired it outright through a legal action in 1973. Between 1972 and 1974, Hanna conducted a preliminary evaluation of the No Name zone for copper and cobalt (Figure 6-1), as well as areas outside the current Property. Coastal’s work for Hanna included construction of topographic base maps, a soil-geochemical survey for copper and cobalt, and a reconnaissance induced-polarization and resistivity survey, a stream sediment survey, an aeromagnetic survey, geologic mapping, diamond-core drilling, underground development and metallurgical testing. A total of 3,000 soil samples were collected at depths of less than 12in (30cm), with spacing between samples of 100ft (30.5m) over the No Name zone and every 400ft (122m) away from the zone (Park, 1973, cited by Ristorcelli, 1988). The soil samples contained as much as 105ppm Co and 1,900ppm Cu (Ristorcelli, 1988).

Coastal drilled a total of 13,250ft (4,040m) of core, principally in the No Name zone. That drilling substantially outlined the mineralization currently defined by the 2019 MRE (Ristorcelli and Schlitt, 2019). An adit sitting at the 6,500 Level was driven in Iron Creek, bringing the total drift footage to about 1,500ft (457m). Bench-scale metallurgical tests were done on drill core and samples from the underground drifts. Hanna subsequently calculated “reserves” for the No Name zone that are not NI 43-101 compliant.

In 1979, Noranda Exploration, Inc. (“Noranda”) optioned the nearby Blackbird mine from Hanna that included a 75% interest in the Iron Creek property. Noranda conducted geologic mapping, re-logged three of the Coastal drill holes, conducted a soil-sample orientation survey, sampled the overlying Challis volcanic rocks, and mapped the underground workings. Noranda also drilled two core holes within the current Property.

Noranda geologists described the stratiform nature of the cobalt and copper mineralized lenses, more than one of which were recognized, and calculated tons and grade for the No Name zone (Webster and Stump, 1980, and stated that in some locations the copper mineralization was “generally overlying cobalt mineralization”).

Noranda subleased the Iron Creek property to Inspiration Mines, Inc (“Inspiration”) in 1985. Inspiration’s activities are poorly documented and no information on their exploration work can be found. Later in 1985, Noranda and Inspiration terminated their

interest in the Property, following which Hanna rehabilitated the underground workings and drove a new portal into the 6500 Level Adit, because the original portal had collapsed.

In January 1988, Centurion Gold (“Centurion”) acquired the Iron Creek property from Hanna, and completed silt and heavy mineral surveys throughout the Property with the objective of finding gold mineralization. Additional surface geologic mapping was done at this time.

Cominco American Resources Inc. (“Cominco”) leased the Iron Creek property from Centurion in 1991. Cominco’s goal was to significantly upgrade and enlarge the mineralized material in the No Name zone. In 1991, Cominco compiled and reviewed existing data to identify targets to be drilled in 1992. Based on this review, Cominco carried out the following exploration in 1991 and into early 1992:

- re-analyzed 111 stream-silt samples collected by Centurion,
- carried out 1:4,800-scale geologic mapping,
- had a grid of about 16.6 line-miles (26.7 line-km) cut and surveyed by Wilson Exploration,
- commissioned an EM survey of 15.2 line-miles (24.5 line-km) by Blackhawk Geosciences using the newly surveyed grid,
- commissioned VLF and ground magnetic surveys of 1.6 (2.6 line-km) line-miles each by Gradient Geophysics,
- collected 514 soil and 231 rock-chip samples,
- re-logged approximately 14,600ft (4,450m) of drill core, and
- created 1:600-scale cross sections through the No Name zone.

The QPs have no information on the types of equipment, spacing between stations, or operating parameters used for the geophysical and geochemical surveys done by Cominco during the early 1990s. A decision was reached by Cominco to terminate their lease of the Iron Creek property in early 1992 (Hall, 1992). However, Tureck (1996) indicates that Cominco drilled two core holes that totaled 2,308ft (703.5m) in 1996.

The Issuer has provided no information on exploration work that may or may have not been done on the Property between 1992 and 1996 when Cominco returned the Iron Creek property to Centurion, which later changed its name to Siskon Gold. The QPs have been provided with no information on the ownership or work done on the Iron Creek property from 1996 to 2016. At a time unknown to the Authors, the Iron Creek Patents were acquired by Chester Mining Company from an unidentified owner.

As described in Item 4.3, US Cobalt acquired the Iron Creek Patents on August 23, 2016, and later that year acquired 100% of the shares of the Idaho Cobalt. Eventually in 2018 it was itself the acquired by the Issuer. Therefore, all work done on Iron Creek zone since August 23, 2016, is considered to have been done by the Issuer. This work is discussed in Item 9 of the Technical Report.

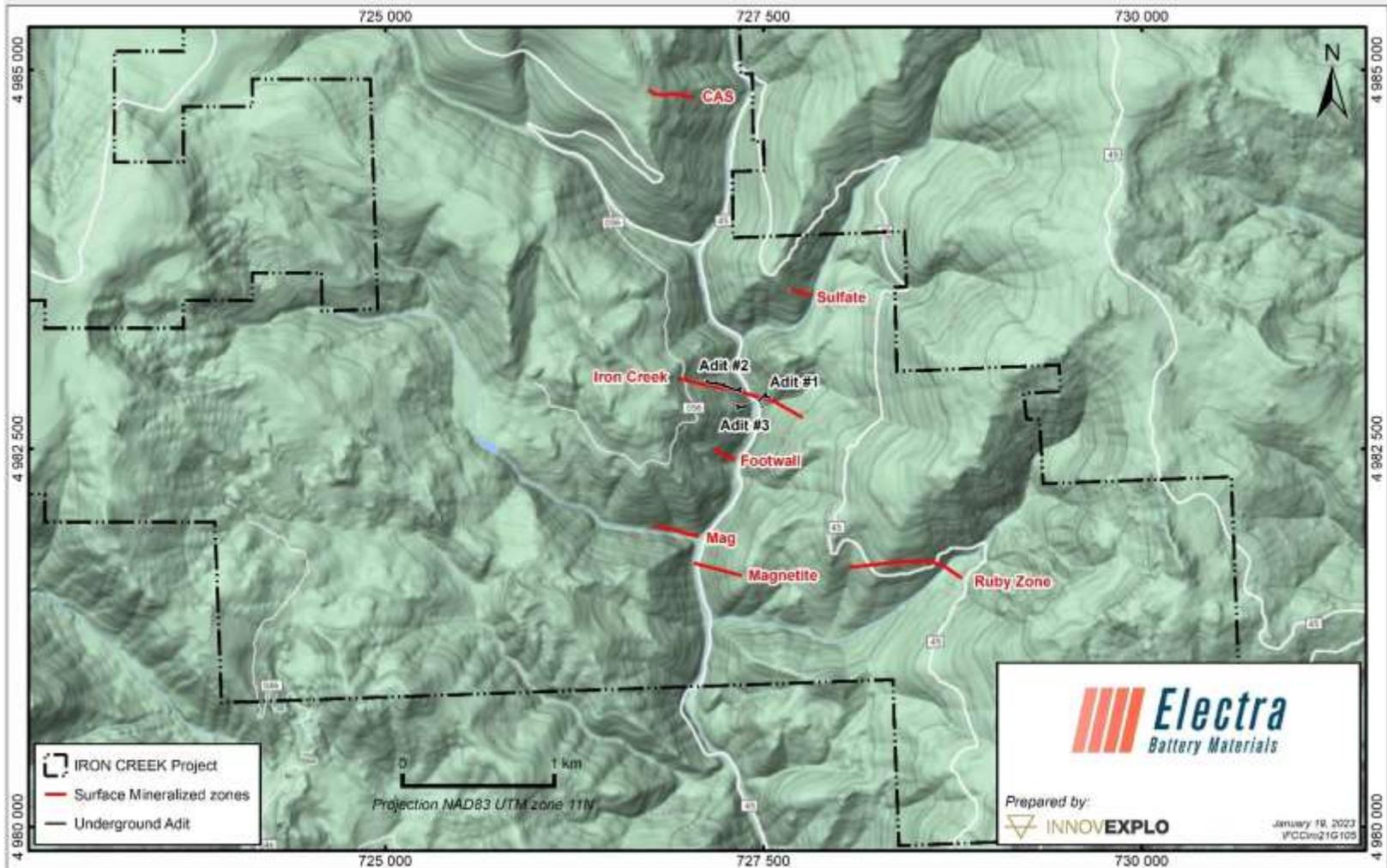


Figure 6-1 – Mineralized zones and existing adits on the Iron Creek Property

6.2 Ruby Zone

The Issuer acquired the Ruby zone as part of the amalgamation with US Cobalt but has incomplete records on historic activities on the Ruby Zone.

After its acquisition of the Iron Creek property in 1972-1973, Hanna conducted a reconnaissance exploration program between 1972 and 1974 at the Ruby (formerly “Jackass”) zone located southeast of the Iron Creek zone (Figure 6-1). The exploration program carried out by Coastal for Hanna included construction of topographic base maps, a reconnaissance induced polarization and resistivity line. Information is available for one drillhole (IC-6) which was likely drilled by Coastal at the Ruby zone.,

Noranda completed detailed geologic mapping over the Ruby zone and drilled a single hole (NIC-22). The hole was lost short of the target. Geologic logs and assays don’t indicate any mineralization was intercepted.

After Centurion acquired the Iron Creek property from Hanna in January 1988, they drilled four holes in the Ruby zone in 1989 and 1990. Hall (1992) reports a total of six drillholes were done at Ruby. Locations are available as plotted by Chevillon (1979) for two drillholes (IC-6, NIC-22) with limited geologic descriptions and assay results. Hall reports four additional drill holes were completed 1989 and 1990 (IC-23, 24, 25, and 26) but does not report locations for those holes. One hole (IC-26) is reported in the text to be the deepest hole at 898 feet and to contain an upper zone of 100ft @ 0.12% Co and a lower zone of 81ft.0 @ 0.14% Co. Detailed assay or log data and parameters used to calculate the cobalt-bearing intercept are not reported.

Cominco leased the Iron Creek property from Centurion in 1991 and carried out the following exploration in 1991 and possibly into early 1992:

- collected 133 rock chip samples across the Ruby Zone, and
- created 1:600-scale cross sections through the Ruby zone.

6.3 CAS Zone

Richard Fox located the claim block covering the CAS portion of the Property beginning in 1998 (Figure 6-1). Fox and Hulen conducted surface sampling including a gradient array grid electrical survey to map resistivity, induced polarization, and spontaneous potential surveys (Ristorcelli, 2019). Fox leased the property to Nevada Contact in 2002. Nevada Contact conducted additional surface sampling and drilled eight diamond drill holes in 2003 and six reverse circulation holes in 2004 (total length 1,971m). The DDHs effectively intercepted the vein swarm at depth with multiple intercepts for cobalt and gold. The RC holes were drilled to test the extensions of the vein swarm to the east and west and were unsuccessful at intercepting significant mineralization. The CAS agreement was subsequently dropped by Nevada Contact.

In 2005, Salmon River Resources leased the CAS property from Fox and conducted additional exploration work including five DDHs for a total of 2,128ft (649m) in the main vein zone. Narrow zones of mineralization (3.0 to 20.5ft (0.9 to 6.3m) ranging in gold grade from 0.03 to 0.19 oz/t Au) were reported from this drilling by Stewart (2006). The lease agreement was terminated in late 2008.



Hybrid Minerals leased the CAS property from Fox in 2017. Hybrid reported surface trenching on the project although results of that trenching project are currently unavailable. They also completed a large aeromagnetic survey on the property. The lease agreement was terminated in 2019.

As discussed in Item 4.3, the Issuer through entered into an option agreement with Richard Fox on March 22, 2022.

7. GEOLOGICAL SETTING AND MINERALIZATION

The text of this section was modified from the 2019 MRE.

7.1 Regional Geology

The Iron Creek Property is situated in the Blackbird copper-cobalt ± gold mining district, the Idaho Cobalt Belt (“ICB”), in the eastern part of the Salmon River Mountains, central Idaho. The host rocks to the ICB are part of the Belt-Purcell Supergroup, a Mesoproterozoic meta-sedimentary sequence extending across the Idaho-Montana border into southern Canada. Stratigraphic correlations within the ICB and surrounding area are somewhat contentious, complicated by the gradational and repetitious nature of the metasedimentary rocks and by later thrust faulting. Tertiary-age volcanism has also covered significant portions of the Mesoproterozoic sequence making correlations difficult in places.

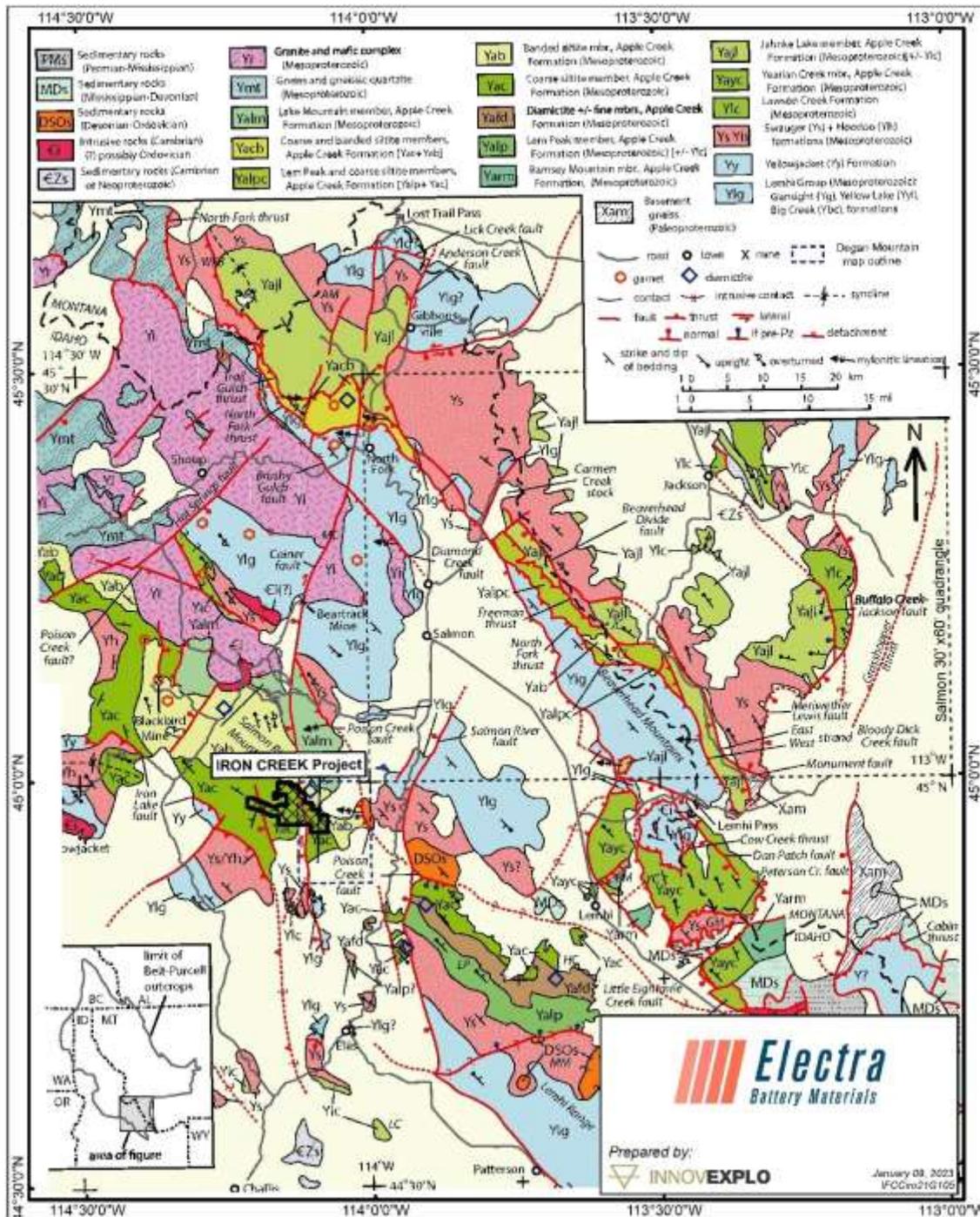
In the mid-1970s, host rocks for the entire ICB were assigned to the mid-Proterozoic Yellowjacket Formation by Ruppel (1975). Overall, metamorphism of the sedimentary sequence is lower greenschist facies, thus primary textures are relatively well-preserved. Consequently, Hughes (1983) described the Yellowjacket Formation as a 17,000ft (5,200m) thick sequence of shallow marine sediments deposited in playa and alluvial environments. Based on detailed cross-sections and regional mapping, Winston et al. (1999) re-assigned the ICB rocks to the Apple Creek Formation, a premise supported by Tysdal (2000) at a broader scale to also include rocks outside of the ICB (Figure 7-1). A consistent sub-division of the Apple Creek Formation is defined as four conformable units of siltite and interbedded quartzite, including a unit described as diamictite (Bookstrom et al., 2016; Burmester et al., 2016). Subdivisions are based on the relative thickness of quartzite-siltite couplets. Connor (1990) recognized iron-rich marker horizons that could be correlated across the Apple Creek Formation, although at that time these rocks were still considered to be part of the Yellowjacket Formation. In the upper portions of the Apple Creek Formation, iron occurs in biotite along this horizon, in contrast to the lower portions of the stratigraphic sequence where iron occurs in magnetite. The majority of stratabound cobalt-copper mineralization, including that at the Blackbird Mine, occurs along the biotite-rich horizon. Other cobalt-copper prospects, such as Iron Creek, are located along the iron-oxide magnetite-bearing horizon considered to be lower in the stratigraphic sequence. Detrital zircons within the upper portion of the Apple Creek Formation were dated at $1,409 \pm 10$ Ma, an age regarded as the maximum age of deposition (Aleinikoff et al., 2012). The same sequence of rocks is intruded by a composite igneous pluton dated between 1,377-1,359Ma and considered to be post-Apple Creek sedimentation (Evans and Zartman, 1990; Aleinikoff et al., 2012). The Mesoproterozoic rocks are overlain by Paleozoic sedimentary and Eocene volcanic rocks (Challis Volcanic; Figure 7-1 and Figure 7-2) that are considered to be post-mineralization lithological units (Saintilan et al., 2017).

On a regional scale, at least two fold generations were distinguished (Lund et al., 2011; Bookstrom et al., 2016). Lund and others (2011) proposed that the currently observed bedding is a product of transposition and its orientation is parallel to the axial plane of moderately NW-plunging F_1 folds. Subsequently, a second generation (F_2) of N-to NE-plunging, open to tight folds formed and are accompanied by vertical to steeply W-dipping shear zones (Lund et al., 2011). The subsequent deformation is manifested primarily as brittle structures. During the Cretaceous, the NW-striking thrusts, such as the Iron Lake

fault, acted as an important roof thrust in the Cordilleran thrust belt (Tysdal, 2002; Tysdal et al., 2003). Such thrusts were reactivated as and cut by normal faults during the Eocene (Lund and Tysdal, 2007). North to Northeast-striking faults developed into graben structures and control the current distribution of the Challis volcanic sequence (Janecke et al., 1997).

Overall, deformation of the Mesoproterozoic rocks in the area is relatively minor and largely restricted to brittle fault zones. Lund et al. (2011) re-interpreted northwest-trending and subparallel folds as late Cretaceous thrust faults that subdivide the area into distinct structural blocks that were further displaced by younger, north-south and northeast-southwest-striking, normal faults. The most prominent thrust faults affecting the ICB rocks are the Iron Lake fault and the Poison Creek fault (Figure 7-1 and Figure 7-2). More recent work has emphasized that the Poison Creek fault acted as the axial plane of a regional fold structure (Reed Lewis, 2019 personal communication). The protracted sequence of events for the district also adds to the complexity of cobalt-copper metallogenesis for the ICB deposits and prospects, but the following sequence of regional events is recognized (Bookstrom et al., 2016):

- sediment deposition within a rift basin >1,470Ma to 1,379Ma,
- intrusion of composite mafic-felsic plutons and development of metamorphic/hydrothermal activity 1,379 to 1,325Ma,
- metamorphism related to continental-scale accretion (Rodinia) 1,200 to 1,000Ma,
- intrusion of mafic dikes and/or sills 665 to 485Ma, and
- metamorphism and development of Mesozoic fold-thrust belt, intrusion of the Idaho Batholith at 155 to 55Ma.



Source: Lewis et al., 2021a,b, Stewart et al., 2021.

Figure 7-1 – Pre-Mesozoic bedrock geology map of the vicinity of Salmon, ID, USA

7.2 Local Geology

The bedrock geology of the Iron Creek project area has been mapped by Noranda (Chevillon, 1979) and more recently by Chadwick (2019) and Say et al., (2021) providing

a more detailed local interpretation than the published maps. The Idaho Geological Survey issued a new set of geological maps for the Degan Mountain and Taylor Mountain Quadrangles at 1:24,000 scale. The Issuer has combined the project scale mapping with the recent IGS mapping to develop a geologic compilation that cover the Property and incorporate the knowledge gained through exploration on the Project (Figure 7-2; Lewis et al., 2021b, Stewart et al., 2021a). In general, the meta-sedimentary rocks that host the Iron Creek cobalt-copper mineralization are fine-grained, interbedded siliciclastic rocks. Overall, the metamorphic grade is lower greenschist facies. Therefore, most of the primary grain size and sedimentary textures have been preserved, but metamorphic names are used to classify the rock type, staying consistent with published names and descriptions within the ICB.

The proposed Iron Creek mine sequence comprises three major units, known as the Footwall Quartzite, the Argillite-Siltite and the Hangingwall Quartzite that are thought to belong to the Banded Siltite unit of the upper Apple Creek Formation (Figure 7-3; Electra, 2019). The clastic rocks range in grain size from mudstone (argillite) to sandstone (quartzite), but the dominant rock type is siltstone (siltite). Individual beds are identified by distinct color variations that reflect both grain-size and compositional variations. In places, individual beds are calcareous, recognized by metamorphic porphyroblasts. Carbonate-rich rocks, such as limestone or dolostone, are absent in the meta-sedimentary sequence at the Iron Creek project.

Chevillon (1979) identified an argillite-siltite unit as the host to cobalt-copper mineralization at Iron Creek (Figure 7-3). Above all, Chadwick (2019) recognized a mappable variation within the argillite-siltite based on re-logging of 23 of the Issuer drill holes. This variation includes a) siltite-argillite dominated strata with minor interbedded meta-sandstone beds of less than 2in (5cm), and b) strata with meta-sandstone interbeds of greater than 2in (5cm).

Unmineralized Eocene Challis volcanic rocks unconformably overlie the Mesoproterozoic sedimentary rocks in the immediate vicinity of the Iron Creek deposit (Figure 7-3).

7.2.1 Local Units in Drill Core

The Issuer studied the stratigraphy at Iron Creek to develop a 3D geological model (Santaguida and Kirwin, 2019). Descriptions of the major rock types (Figure 7-4) logged in diamond drill core are presented below.

Siltite (“SLTT”)

The most prominent rock type at Iron Creek is siltite that is composed of chlorite, quartz and biotite (Figure 7-4A). Bedding is generally well-preserved and in places color variations occur that likely reflect variable concentrations of clay to coarse silt grains. Several lithological variations of siltite were distinguished, but are grouped together for correlation:

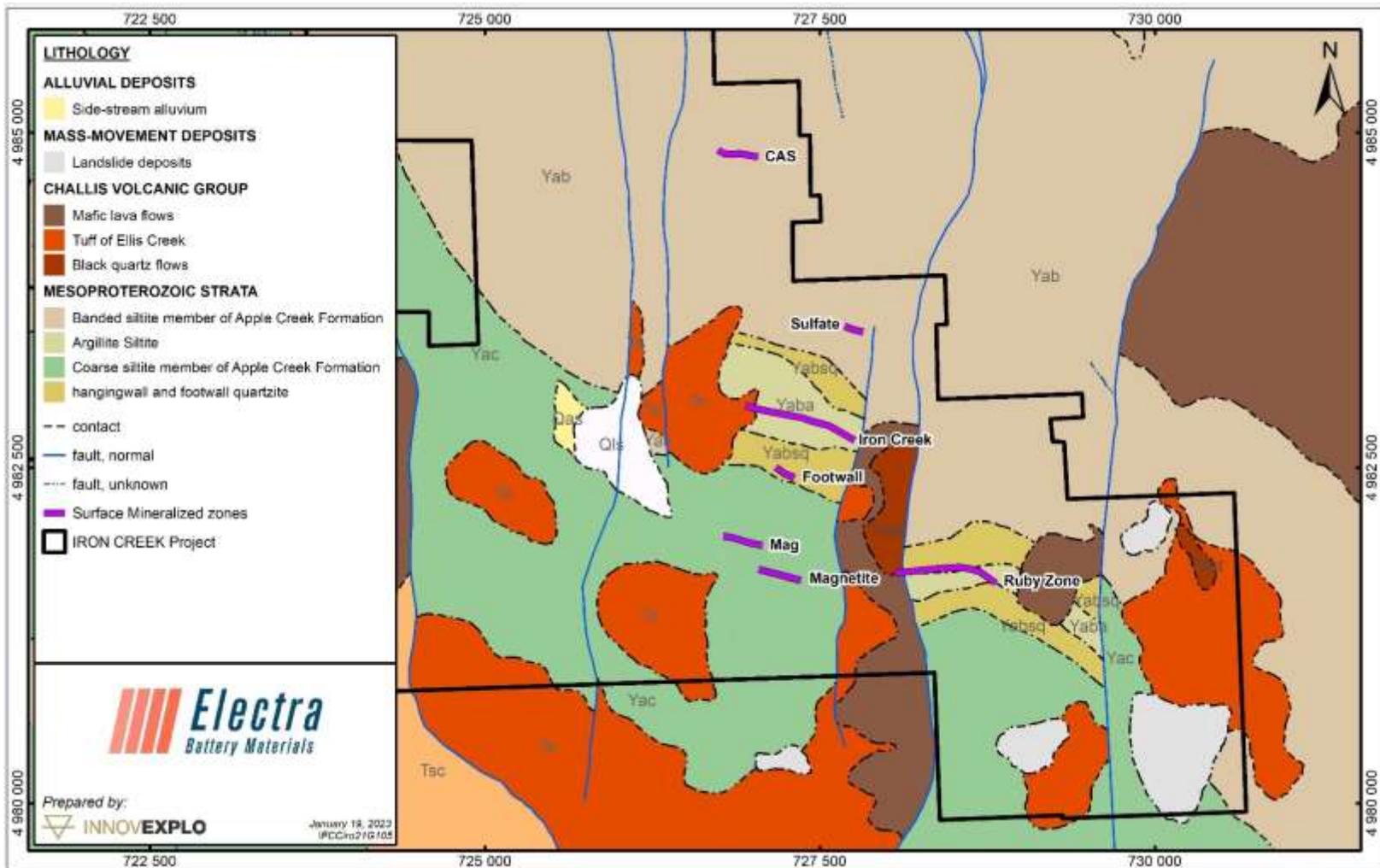
- bedded siltite (“BDST”).
- sheared siltite (discontinued after logging drill hole IC18-09) (“SHST”), and
- argillite (“ARG:”).

The definition of these codes is not well established, so consistency of the logging has been variable during the drilling program. A relatively thick (up to 250ft or ~76 m) siltite

unit does comprise the hanging wall to the cobalt-copper mineralization (Figure 7-3) across the strike length of the resource. This unit is distinguished by the lack of quartzite beds and fine-grained nature (mudstone) giving a massive appearance to the rock. More prominent bedding within siltite is logged as BDST.

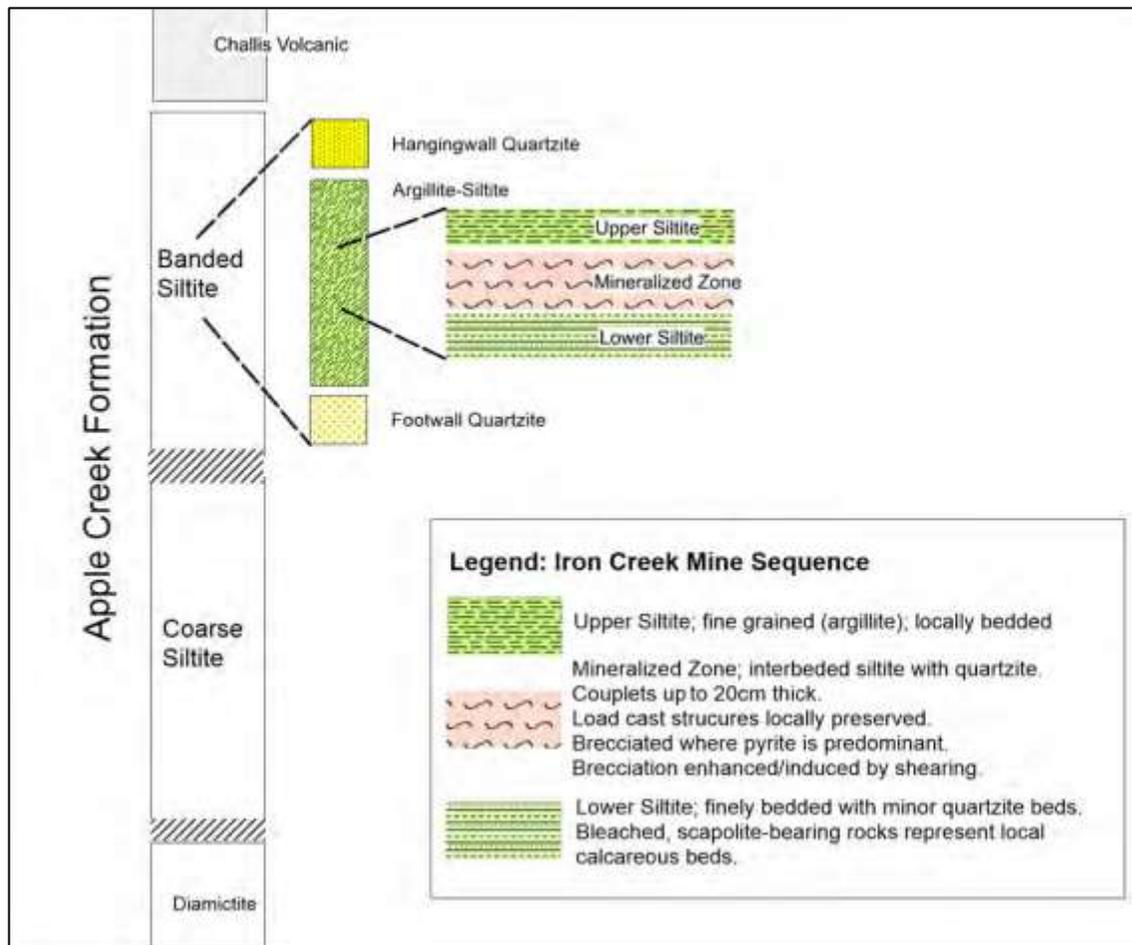
Bleached Siderite Unit (“BSU”)

A distinct unit of siltite is defined by the presence of relatively coarse siderite crystals and the bleached color of the fine-grained clastic matrix compared to other siltite units (Figure 7-4C). Siderite crystals were previously misidentified as scapolite which has not been confirmed on the Property. The BSU unit is easily recognized by prismatic crystal aggregates that are 0.05 to 0.2in (1-5mm) in diameter and comprise 5-10% of the rock. Siderite crystals are often concentrated and aligned along specific beds within the siltite. These crystals are interpreted as porphyroblasts. Siderite forms under greenschist metamorphic conditions possibly from evaporites and carbonate rocks, which are chemically susceptible and reactive to hydrothermal fluids, and often are associated with base metal deposits. As such, the BSU is considered to be a meta-sedimentary stratigraphic unit where primary carbonate minerals or salts had accumulated. Thus, correlations are considered to represent paleo-bedding.



Source: Modified from Lewis et al., 2021b, Stewart et al., 2021a.

Figure 7-2 – Local geology of Iron Creek Property, ID, USA



Source: Electra, 2019

Figure 7-3 – Interpreted Stratigraphic Section of the Iron Creek Project

Rhythmically Banded Unit (“RBU”)

Rocks with distinct quartzite bands interlayered with siltite occur throughout the resource area. These have typically been logged as RBU where regular intervals of quartzite to siltite are consistently repeated (Figure 7-4D). In many drill holes, where the quartzite layers are relatively thick (1 to 2cm) and relatively abundant (>5% over 3.0m intervals) these rocks were also logged as quartzite (“QTZT”; Figure 7-4B)” because a strict, quantitative quartzite content has not been designated for logging. In places, a gradation from sandstone to fine siltstone has been preserved and these have been called “couplets” by most geoscientists mapping in the ICB (Burmester et al., 2016).

Quartzite as a rock type name still applies in the Iron Creek resource area, particularly in reference to the major rock units mapped north and south of the mineralized zone on surface (Chevillon, 1979; Chadwick, 2019). These informal map units are termed the “Hangingwall Quartzite” and “Footwall Quartzite”, respectively, both containing quartzite interbeds up to one-foot thick (Figure 7-3).

Brecciated Quartzite

All brecciated meta-sedimentary rocks contain an appreciable amount of pyrite within the matrix, greater than 5%, and up to 60%, over several feet in places. Sulphide rich breccia was often originally logged by the Issuer as Mineralized Zones (“MZ”). Clasts of quartzite are prominent, so this rock type likely correlates with the RBU units. When well-mineralized, pyrite wraps around the resistive clasts that in places are rotated and aligned as boudins. Chalcopyrite and quartz crystal “flames” occur in the pressure shadows of the quartzite clasts and likely represent post-mineralization shearing. Multiple phases of brecciation are present on the project and distinguishing the individual pulses and their relationship to mineralization warrants further study.

Mafic Dikes

Mafic (or diabase) dikes are easily recognized in drill core contrasting in texture, density, composition and degree of alteration compared to the clastic sedimentary rocks. The dikes are typically 3 to 6ft (0.9 to 1.8m) in true width. Unaltered mafic dikes in places are porphyritic with euhedral plagioclase phenocrysts up to 0.1in (2.5mm) in diameter.

The mafic dikes cut the meta-sedimentary rocks and mineralization at various orientations, but in general are steeply dipping. The radiogenic age of these dikes is unknown, but they are considered to have preferentially intruded along bedding planes. In places, the dikes are highly altered and, where chloritized, they are foliated. The dikes are frequently intercepted near mineralization, particularly in the copper zone, but do not contain elevated concentrations of copper or cobalt. Correlations of the dikes from hole to hole indicate that faulting offset of the strata is minimal.



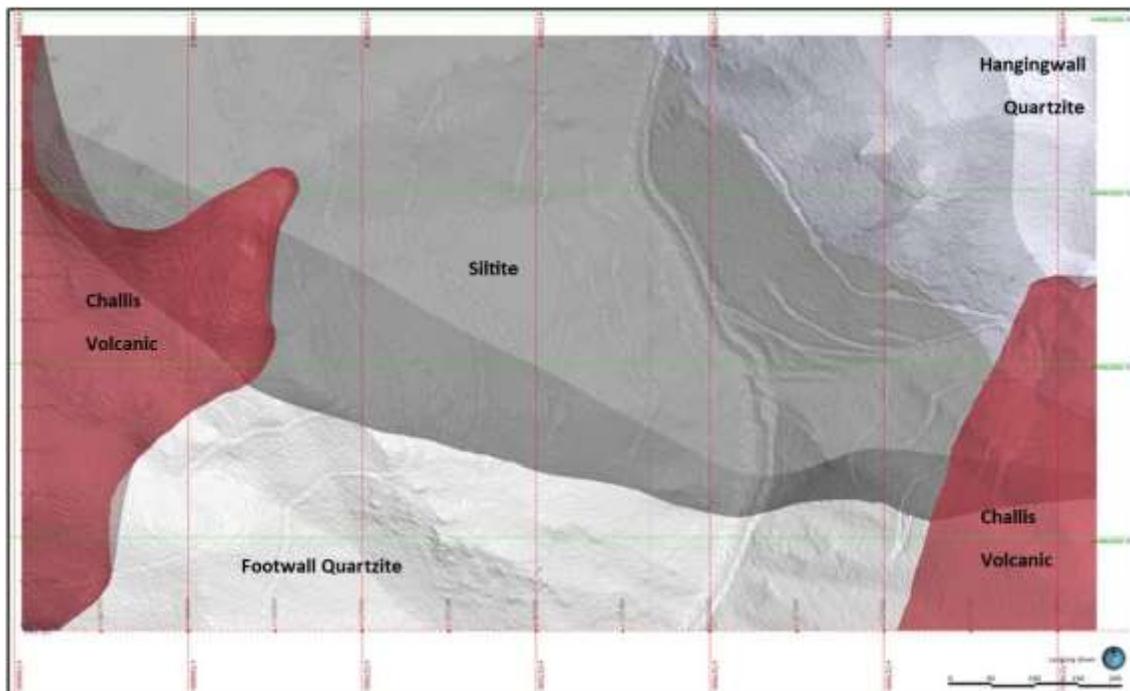
A) Siltite (SLTT); B) Quartzite (QTZT): thin (yellow arrow) and thicker (>5cm; red arrow) coarse inter-beds of quartzite are prominent within siltite; C) Bleached Siderite Unit (BSU); D) Rhythmically Bedded Unit (RBU); E) Siltite-Quartzite Disrupted Unit (SQD)

Figure 7-4 – Common lithological units in the Iron Creek Co-Cu deposit

7.2.2 Simplified modelling for Mineral Resource Estimation purpose

Due to the random distribution of the different sedimentary facies, the numerous lithological units contained in the database needed to be simplified in order to achieve a meaningful 3D lithological model.

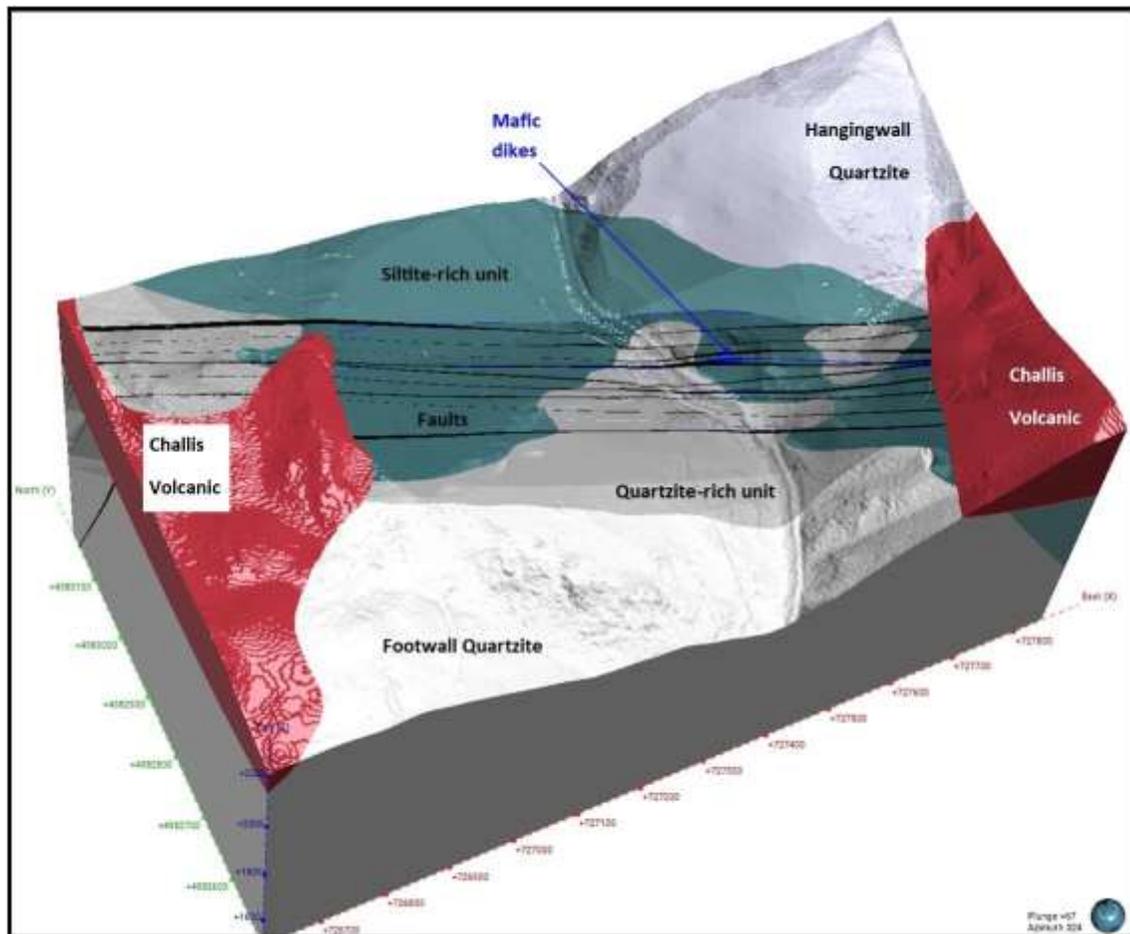
A preliminary lithological model distinguishes the Footwall Quartzite, Siltite, Hangingwall Quartzite and the Challis Volcanic (Figure 7-5). Most drillholes did not extend into both quartzite units, therefore the Footwall and Hangingwall Quartzite units were modelled based on the available geological maps with their dips determined by structural measurements from regional mapping (Lewis et al., 2021b, Stewart et al., 2021a) and oriented drill core. The Challis Volcanic rocks are modelled based on drillhole intercepts and regional geological mapping. The unconformity surface separating the Eocene volcanic and Mesoproterozoic sedimentary rocks was determined using structural measurements from the regional mapping program (Lewis et al., 2021b, Stewart et al., 2021a).



Coordinates: UTM NAD83 Zone 11N

Figure 7-5 – Plan view of the simplified geological model of the Iron Creek Project

A more detailed lithological model aiming to distinguish different units within the siltite unit of the preliminary model that hosts the bulk of the Iron Creek deposit was created. The detailed model differentiated a quartzite-rich and a siltite-rich unit, faults and mafic dikes (Figure 7-6). The quartzite-rich unit is based a merged lithological table that includes rhythmically bedded unit, siltite-quartzite disrupted unit and quartzite. The siltite-rich unit was generated by the merging of argillite and siltite/argillite lithologies. The faults and mafic dikes have orientations similar to one another and to that of the bedding observed in the sedimentary rocks.



Coordinates: UTM NAD83 Zone 11N

Figure 7-6 – Detailed geological model of the Iron Creek Project

The bleached siderite unit and the sulphide zone were not separately modelled because these are alteration facies that display a clear zonation, such that the sulphide zone and the sideritic unit are present in the core and on the periphery of the deposit, respectively.

7.2.3 Structure

In general, brittle deformation in the area drilled at Iron Creek is minor. Several fracture zones where core competency and core recovery are poor have been intersected by drilling. Most of these are minor, less than 3ft in drilled width, but in places are greater than 6ft and can be correlated between drill holes. In places, shearing is interpreted to have occurred where core angles to bedding abruptly change within a single drill hole. Chadwick (2019) recognized folding in drill core but did not correlate folded rocks between holes. Instead, his interpreted lithological contacts on cross-sections illustrate folds at the local scale (3 to 6ft (0.9-1.8m)). Based on the continuity of the BSU, the pyrite mineralized units, and the mafic dikes, it is deemed that folding is not significant across the Iron Creek resource area.

Previous work on historical drill core by Jones and Reeve (1989) and Hall (1992) concluded small, recumbent, isoclinal drag folds are common among the strata and

compose fields of unique orientation and drag sense that can imply only the presence of much larger isoclinal folds.

A structural mapping and review campaign was completed by InnovExplo in 2021. Based on local and regional geological maps and geophysical surveys, the Authors believe that the Property may be located near a fold hinge of a regional F_2 fold that may explain the orientation of bedding and the local N-S-trending faults. The results of this study confirm the local nature of the folding, but a weak, consistently oriented axial planar foliation observed in association with these small folds suggests that the folds are of tectonic origin. The orientation of these folds and their axial plane is inconsistent with regional F_2 folds as defined by the Issuer's geologists, but they may be the product of F_1 folding that was suggested to cause the transposition of the bedding into a northwesterly orientation in the Blackbird area (Lund et al., 2011; Bookstrom et al., 2016).

Fault offset within the drilled area of the Property is considered minor. Chadwick (2019) identified two sets of faults on surface. The first set trends west-northwest and is roughly parallel to bedding. The northern of these faults occurs up-section from the mineralization and appears to be nearly conformable with the regional bedding, dipping steeply to the north. This fault coincides with the northern edge of the quartzite breccia. The southern west-northwest-trending fault is a distinct boundary between rocks up-section that are chlorite-dominated and contain interbedded meta-sandstones (RBU), and the siltite-dominated rocks below, interpreted as stratigraphically lower, with increased biotite content relative to the RBU. Offset is limited to <1m based on the continuity of mafic dikes that cross the west-northwest-trending faults.

The second set is known regionally and strikes north and east-northeast. The fault on the eastern side of the drilled area is part of this set. These faults are interpreted as normal faults with displacement down to the east (Bookstrom et al., 2016). The amount of offset on the fault shown is not known since outcrops are sparse and no drilling has yet been conducted on the east side of the fault.

7.2.4 Discussion of Property Rocks in Relation to Regional Stratigraphy

Correlating units between drill holes remains difficult but still an initial stratigraphic sequence, here referred to as the Iron Creek mine sequence, is proposed within the context of the regional setting and the Apple Creek Formation as summarized in Figure 7-3. The drill data from the 2017-2022 programs have supported the previous interpretations of a northeast-younging direction. The relatively thick sequence of siltite without interbedded quartzite above the mineralized zone is considered a distinct unit referred to as the "Upper Siltite". The Iron Creek zone, host to the resources, is set where quartzite layers are prominent and where pyrite mineralization has developed. The "Lower Siltite" is recognized by the occurrence of the BSU, and, in some places, BSU occurs along the footwall to cobalt mineralization. This relationship is developed in the western portion of the drilled area where holes have intersected lower portions of the strata. The BSU units have not been encountered in the eastern part of the drilled area because the drill holes may not have penetrated as deeply into the footwall strata. The three units: Upper Siltite, Iron Creek zone and Lower Siltite, all correspond to the Argillite-Siltite unit shown in the historical bedrock map by Noranda (Chevillon, 1979). The thickness of the siltite-quartzite couplets of less than 2in (5cm) in the Iron Creek zone is comparable to descriptions of the Banded Siltite of the Apple Creek Formation.

The Iron Creek zone contains brecciated meta-sedimentary rocks that may have been formed by debris flow and dewatering (Webster and Stump, 1980; Nash, 1989), but post-depositional shearing is also present, as shown by secondary minerals developed in pressure shadows around quartzite clast augens. Regardless of the origin, these “disrupted”, internally folded beds are stratabound and can still be regarded as stratigraphic horizons.

Chevillon (1979) described the sequence of rocks similarly, but contacts were not defined. In fact, the contacts are loosely defined except in the west where the first occurrence of BSU is encountered downhole and in the east where the brecciated quartzites occur. The composition of the individual quartzite interbeds may be indicative of stratigraphic sequencing, therefore future work may focus on this in detail.

7.3 Mineralization

7.3.1 Occurrences

Within the Project boundary there are seven documented occurrences metallic of mineralization exposed at surface or encountered by drilling. From north to south these are known as “CAS”, “Sulphate”, “Iron Creek”, “Footwall” or “FW”, “MAG”, “Magnetite” and “Ruby” (Figure 7-3). Iron Creek is the main mineralized body in which the resources reported herein occur. Ruby is the second most important occurrence. The Iron Creek deposit is divided into an Upper (previously “No Name”) and a Lower (“Footwall No Name” or occasionally “Waite”) mineralized zones. In this Technical Report, No Name, Footwall No Name, and Waite are only used to refer to historical work and references.

7.3.2 Descriptions of Metallic Minerals

Mineralization generally conforms to the bedding in the host meta-sedimentary rocks generally striking north-northwest and dipping between 60° and 80° northeast. Cross-cutting veins of mineralization also occur within the host stratigraphic package. The following descriptions of the metallic minerals are largely based upon observations of mineralization in drill core by the Issuer’s geology team as well as consideration of previous descriptions in unpublished reports (Chevillon, 1979; Hall, 1992).

The observed primary mineral assemblage consists of pyrite, chalcopyrite, pyrrhotite, and magnetite. Typically, but not exclusively, the distribution of sulphide and magnetite mineralization is coincident with zones of moderate to intense shearing. Such shear zones are interpreted as zones of weakness through which mineralizing solutions flowed and/or were remobilized. However, some zones of disseminated, very fine-grained pyrite are present within unsheared beds and laminations of the siltite units. The presence of shear strain has also led to some distinct styles of mineralization, such as pyrrhotite formed within pressure shadows around pre-existing pyrite grains. Such paragenesis indicates the possibility of multiple stages of mineralization.

Pyrite is the most widespread of the sulphide minerals observed on the Property. In the drill core, pyrite varies from massive to blebby, and from coarse-grained disseminated crystals to very fine-grained patches and disseminations. It is typically subhedral to euhedral with octahedral pyrite more abundant than cubic pyrite.

Chalcopyrite varies from streaks and wisps to large blebs, is entirely anhedral to subhedral, and occurs intergrown with pyrite and pyrrhotite when the minerals are observed together. The bulk of the chalcopyrite occurs to the west of the North Fork of Iron Creek in the upper portion of the Upper zone, with fewer occurrences and lower concentrations to the east of the creek in the Lower zone down section to the south.

While the pyrite mineralization can be regarded as stratabound, chalcopyrite mineralization crosscuts the sequence in the Iron Creek.

Pyrrhotite occurs in two distinct habits which are both anhedral. One variant has a dull, metallic brownish- purple color and is weakly magnetic. The second variant has a lustrous, metallic reddish-brown color and is highly magnetic.

Magnetite is relatively uncommon in the Iron Creek zone and occurs in either a massive or fine-grained, disseminated habit. Massive magnetite within the Iron Creek zone is typically found in highly sheared rocks and accompanies moderate to strong sulphide mineralization in bands and pods up to 4in (10cm) thick in drill core. Magnetite generally occurs below the uppermost pyrite mineralized bed. Fine-grained magnetite occurs in disseminated blebs and patches, typically within bedded to weakly sheared siltite and quartzite. This habit is much more widespread than the massive bands seen in highly mineralized zones and does not appear to be associated with greater amounts of sulphide mineralization. Massive magnetite zones from meters to tens of meters thick typically occurs in heavily sheared zones in the footwall of the deposit and is well exposed at the Ruby zone.

Native copper and arsenopyrite are essentially trace minerals that have been observed in the drill core and underground exposures. Dendritic native copper is almost exclusively fracture controlled with grains from <0.04 to 1.6in (<0.1 to 4.0cm) in length and is intimately associated with a brecciated diabase dike in Adit-1. Arsenopyrite is quite rare and was observed mostly within the hanging wall quartzite of the upper zone occurring as very small clusters of anhedral grains.

Oxidation and weathering have formed shallow surficial zones of residual quartz, jarosite, goethite and hematite ± brochantite ± chalcantinite, as well as kasparite, which has been observed around the portal of Adit-1 and at the massive magnetite exposure at the Ruby zone. The copper sulfate minerals occur as thin fracture coatings and weak disseminations in and adjacent to highly mineralized zones in Adit-1 and Adit-2 and in nearby drill holes. Copper oxides are also widespread on the eastern edge of the resource area and particularly well developed at the contact between the Challis volcanics and the underlying Apple Creek. Oxidation levels are shallow across the Property, generally less than 50ft (15m) deep, increasing to 80 to 100ft (24 to 30m) deep under North Fork of Iron Creek.

Both Hanna and Noranda conducted mineralogical and metallurgical studies on samples from the Upper zone. Hanna's microscopic and X-ray studies indicated that cobalt dominantly occurs in cobaltian pyrite (Mattson, 1972; Mattson, 1973). Noranda studied core from a cobalt-rich zone with a scanning-electron microscope ("SEM") and found that the cobalt occurs almost entirely in the pyrite (Snow, 1983). Noranda recognized two varieties of pyrite included a) a cobalt-rich variety, containing from 2.5% to 4.5% cobalt, and b) a cobalt-free type of pyrite.

The Issuer commissioned SEM tests at American Assay Labs in Sparks, NV, and quantitative evaluation of materials by scanning electron microscopy ("QEMSCAN") tests

at Bureau Veritas in Richmond, BC in 2018 and at SGS Minerals (“SGS”) in Lakefield, Ontario in 2018. The results of these recent tests agree with the work performed by Hanna and Noranda that cobalt is present largely within pyrite at Iron Creek. These tests also concluded that there is a distinct lack of cobaltite. Relatively low levels of arsenic in assays from drill core support this conclusion, although a small amount of arsenic occurs with cobalt in highly mineralized zones. An anomalous mineral seen in drill core with a steel-grey to violet color with an isometric crystal form has yielded cobalt values upwards of 5% during handheld X-ray-fluorescence (“XRF”) spot tests. That mineral is tentatively identified as the cobalt sulphide, linnaeite ($\text{Co}^{2+}\text{Co}^{3+}_2\text{S}_4$).

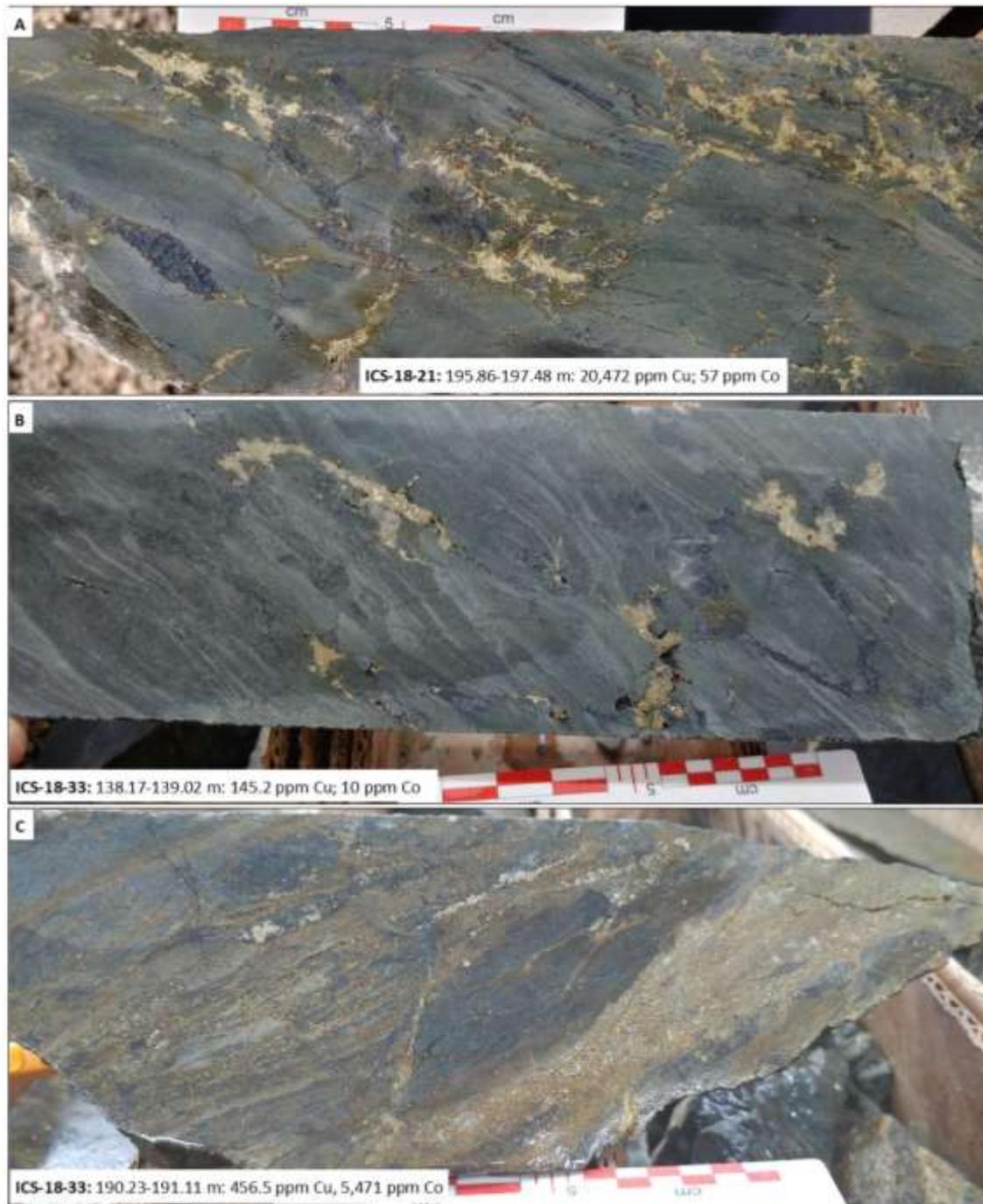


Figure 7-7 – A-B) Discordant chalcopyrite - pyrite mineralization in siltite; C) Concordant and discordant pyrite-chalcopyrite mineralization in siltite

7.3.3 Iron Creek Zone

Mineralization at Iron Creek (Figure 6-1, Figure 7-10) has previously been described as conformable zones interspersed within the sedimentary strata. The host rock to mineralization is a fine-grained argillite-siltite lithologic unit. The Upper zone was explored

and drilled by Sachem Prospects Corporation and Coastal Mining Corporation between 1970 and 1972 as the No Name zone. The Issuer's drill program in 2017-2018 has been more extensive than the 1970s work and has outlined the Lower zone: a second continuous zone stratigraphically below the Upper zone. Several sulphide lenses and stringer zones were also intersected between these two horizons and in the hanging wall of the Upper zone such that naming all of them is confusing. Therefore, the name Iron Creek is used to refer to all mineralized horizons contained in the estimated resources.

Individual mineralized lenses at Iron Creek are steeply dipping, tabular zones containing variably continuous layers and lenses of sulphide minerals along bedding planes in a sequence of interbedded siltite, fine-grained siltite, quartzite, and in places argillite. The overall length of mineralization defined to date is ~3,300ft (1,000m), and the overall dip extent is ~1,650ft (500m). The overall width of the mineralization is ~1,500ft (450m). Pyrite mineralization containing cobalt in places is massive to semi-massive up to 65ft true thickness whereas elsewhere is fine-grained and disseminated. Lenses of disseminated pyrite mimic the shape and orientation of the metasedimentary rocks following bedding planes and stratigraphic structures. Locally, pyrite is contained in narrow, rough veins or fracture fillings cutting bedding. The mineralization consists of pyrite, chalcopyrite, pyrrhotite, magnetite and quartz with traces of native copper and possibly linnaeite (Figure 7-7). Oxidation and weathering of pyrite mineralization have formed surficial zones of residual quartz, jarosite, goethite, hematite, brochantite, chalcantite and rare erythrite.

Copper-rich mineralization is specifically found in the western portion of the drilled area at Iron Creek and mostly in the Upper zone. Zones of chalcopyrite stringers over 30ft (9m) wide (interpreted true width) cut the sedimentary strata at shallow angles (<15°) to bedding. Individual stringers are < ½in. (<1.3cm) wide. The stringer zones are developed concordant to the pyrite-rich horizons, but a discrete zone is well developed in the hanging wall siltite extending over 1,000ft (300m) of strike length. Pyrite is conspicuously sparse in the copper-rich zones. Pyrrhotite is locally associated with chalcopyrite.

Currently available drill data show that cobalt and copper mineralization in the Upper zone are distinctly zoned with respect to each other and form separate but overlapping mineral domains (Figure 7-8). Cobalt is the principal metal to the east and copper is the principal metal to the west in the upper zone. The cobalt and copper mineralization overlap in the central part.

7.3.4 Preliminary Interpretation of the Structural Control on the Co and Cu Mineralization at Iron Creek

Regionally, the SE-striking Iron Lake and Poison Creek faults are the most important structures. Similarly oriented, bedding-parallel faults (and mafic dikes) were also modelled at Iron Creek. Based on the distribution of the mineralized drill hole intervals, the Author's believe that these faults play a role in controlling the emplacement of the Co-Cu mineralization. RBF interpolants were generated from both Co and Cu assays and were subsequently evaluated onto the surface of the modelled faults. This evaluation process resulted in the identification of ore shoots. Two dominant ore shoot orientations were identified for both the Co and Cu mineralization that have the same average orientations: a moderately NW-plunging one (Cu: 47°→305°; Co: 41°→305°) and a moderately E-plunging one (Cu: 43°→095°; Co: 42°→098°) (Figure 7-8). The orientation

of the ore shoots approximates the orientation of lineations measured on the Property (Figure 7-8).

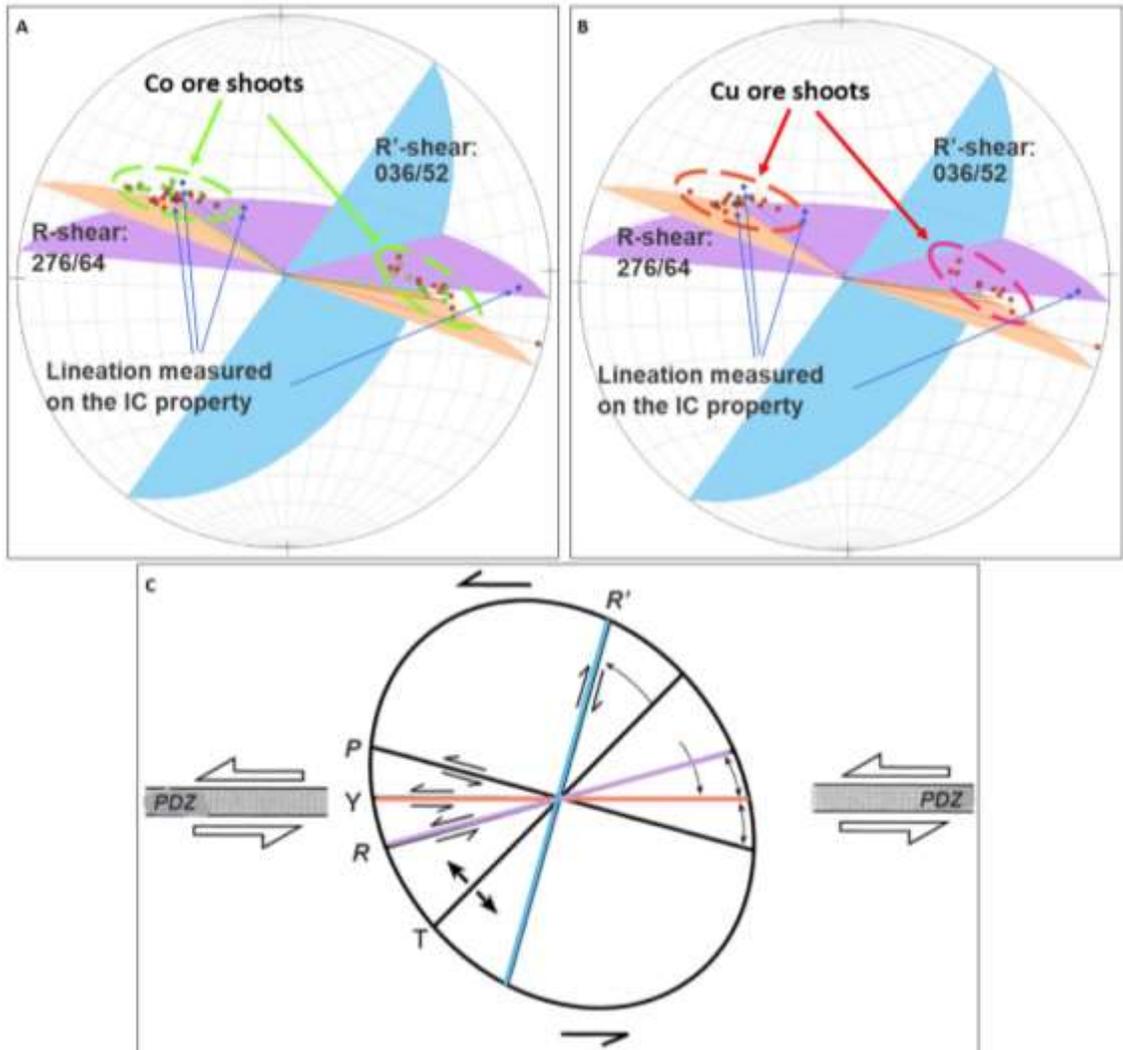
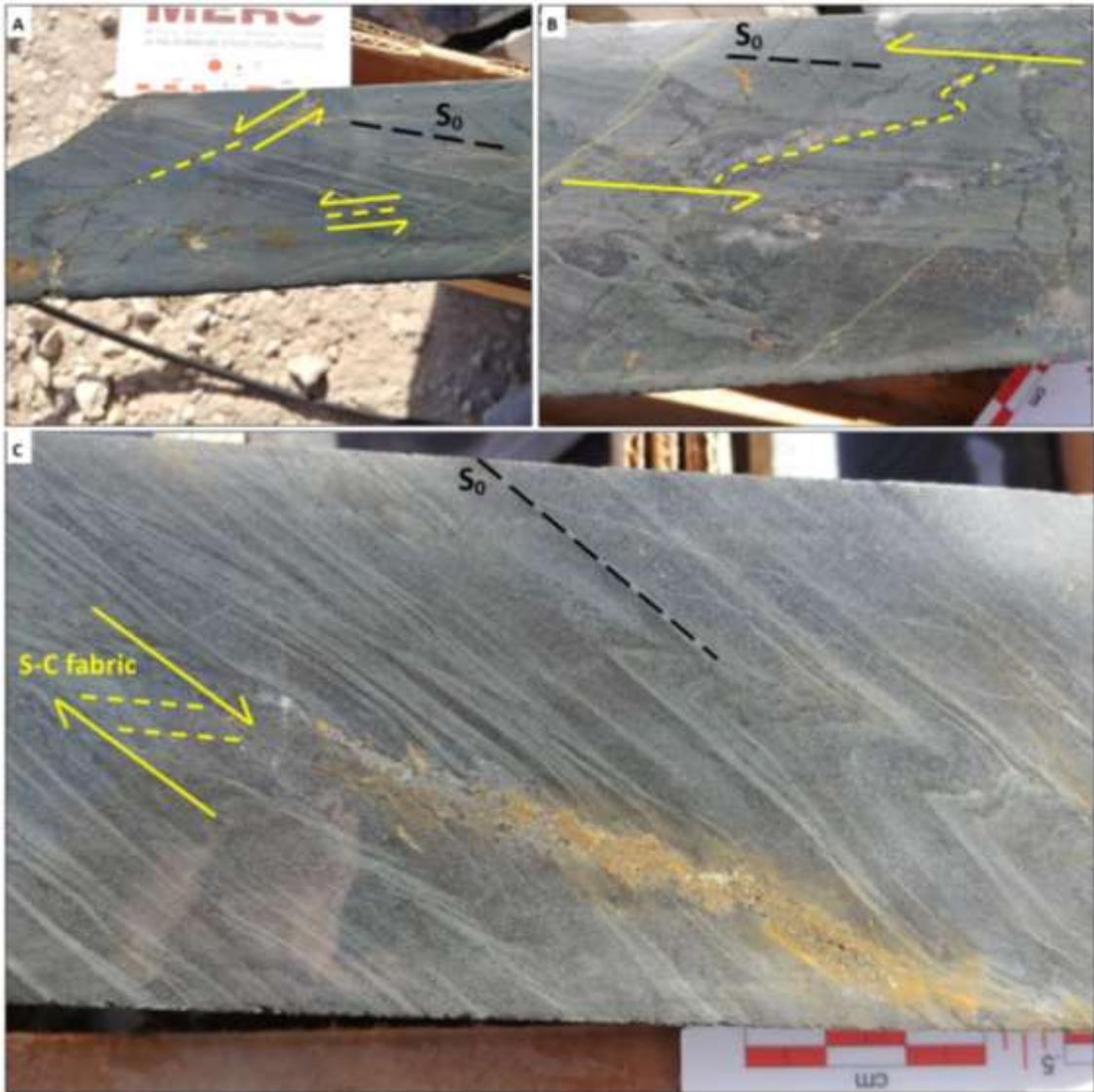


Figure 7.8C is modified after Davis et al., 2000. Elements of a Riedel shear zone: PDZ: principal displacement zone; R: an overstepping, en échelon array of synthetic shears (called R-shears) oriented 15° anticlockwise (ACW) to the trace of the sinistral strike-slip shear zone; R': an en échelon array of antithetic shears (called R'-shears) strike at 75° to anticlockwise (ACW) to the trace shear zones; P: Synthetic P-shear: 15° CW to the PDZ; Y: A Y-shear (also synthetic) forms parallel to the trace of the PDZ; T: T-fractures (tension fractures) would form at 45° ACW to the PDZ.

Figure 7-8 – A) Co and B) Cu ore shoots and their relationship to modelled and theoretical planes in a Riedel shear system. C) Hypothetical sinistral Riedel shear system showing the 2D angular relationship between various structural elements

Drill core observations suggest that not all mineralization is stratabound but some sulphide stringers are associated by fractures and shear planes discordant to bedding (Figure 7-9). A combination of field and core observations as well as structural analyses led the Authors to conclude that the most likely structural elements to control mineralization were formed as conjugate sets of sinistral Riedel shear structures. In this interpretation, ore shoots are parallel to the intersection lineation of different shear planes (Figure 7-8). The orange plane marks the average orientation of the bedding (S_0) and

known faults, and is, therefore, plausible to define the orientation of a principal displacement zone (PDZ). The NW-plunging ore shoots may have formed at the intersection of the S_0 /faults and R-shear planes (purple plane on Figure 7-8) that form ca. 15° anticlockwise to the PDZ during sinistral deformation. The E-plunging ore shoots may be explained as the intersection between the S_0 /faults and R'-shear planes (blue plane on Figure 7-8) that are oriented ca. 75° clockwise to the PDZ in sinistral deformation zones.



Please note that shear direction may appear opposite on different images because unoriented drill core is not suitable to determine the shear sense.

Figure 7-9 – Evidence for Riedel type fractures (A), folding (B) and folding accompanied by S-C type fabric relationships (C) in drill core.

7.3.5 Ruby Zone

The second most significant zone of known mineralization containing cobalt is the Ruby zone (historically known as the “Jackass” zone after the nearby creek) exposed approximately 5,000ft (1.5km) southeast of Iron Creek (Figure 6-1, Figure 7-2). Little is known about the Ruby zone subsurface because drill holes collared above the zone were abandoned before penetrating the projection of the main mineralized horizon. Hole NIC-22 did encounter an estimated 100ft of disseminated chalcopyrite before it was abandoned in a "squeezing fault zone" (Chevillon, 1979). Centurion's holes (1989 to 1990) were at convenient spots along the road for assessment purposes and did not test the zone.

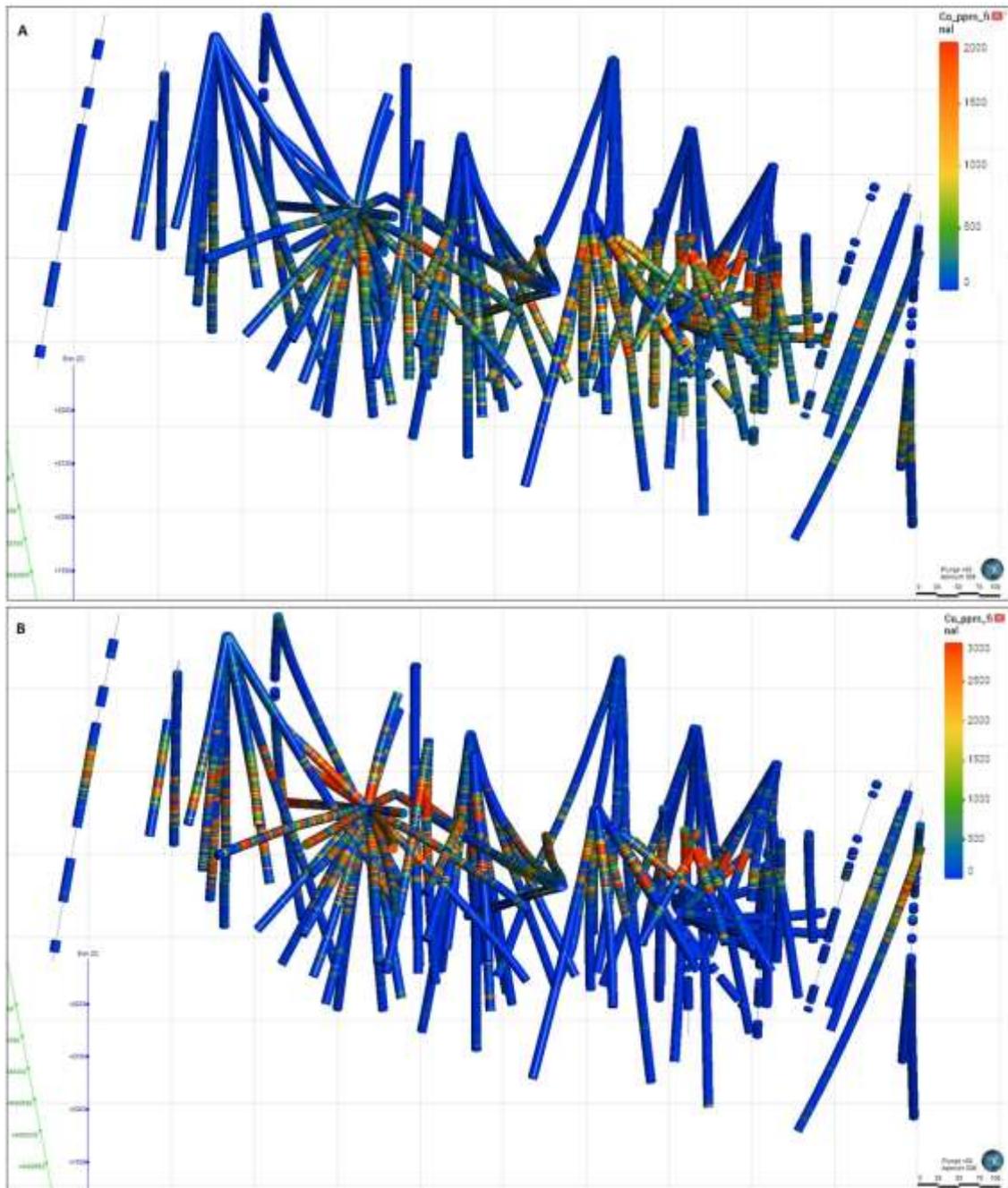


Figure 7-10 – Distribution of A) Co and B) Cu grades in the Iron Creek deposit

The Ruby zone may be a separate stratigraphic unit or may be structurally offset from the Iron Creek mineralized horizon by a north-south trending fault based on bedrock mapping. Younger volcanic rocks are bound by two mapped branches of the fault, and partially cover the host rocks of Iron Creek and Ruby zones. The Ruby zone host rock to mineralization is a fine-grained argillite-siltite lithologic unit similar to the host rocks at Iron Creek. Massive magnetite horizons at Ruby extend across the full extent of the exposed

mineralization. At Iron Creek, massive magnetite lenses occur in the footwall of the higher-grade cobalt mineralization zones.

Outcrop mapping (Noranda field team outcrop map) indicates that there is mineralogical zoning similar to that of the Iron Creek deposit such that a magnetite-pyrite assemblage is confined to the footwall, and pyrite increases and magnetite decreases in abundance higher in the stratigraphic sequence. Strongly sheared chloritic rocks occur in the hangingwall of the Ruby zone. The uppermost horizon of pyrite is locally massive and occurs at the contact between low magnetic susceptibility rocks and higher magnetic susceptibility rocks. Multiple horizons of pyrite+ magnetite as well as massive magnetite with only trace pyrite occur in the footwall of this zone and extend to the depth of current drilling. Crusts of white and pink radiating crystals occur on the surface of the Ruby exposures which have been identified as kasparite ((Mg,Co)Al₂(SO₄)₄ · 22H₂O) via XRD analyses.

7.3.6 CAS Zone

Approximately 5,000ft (1.5km) north of the Iron Creek Zone (Figure 6-1, Figure 7-2) is a mesothermal quartz-arsenopyrite vein swarm which was historically described as the arsenopyrite or arsenopyrite-gold zone (Chevillon 1979). Mineralization occurs as a series of steeply north to northeast-dipping 0.1 to 3.0ft thick (3cm to 90cm) quartz veins. Exposure is very poor in the area and the best understanding of the geometry comes from roadcut and trench mapping and sampling. This mapping and sampling program revealed a series of sheeted veins that were traced for approximately 600ft (180m) along strike. Veins typically have coarse muscovite selvages and contain various amounts of arsenopyrite. Historic trench sampling was completed on the zone and the metal grades range from detection limit to 13.4ppm Au and 0.26% Co over a 3.0ft (0.9m) long intercept. Select samples of vein material locally exceed 20ppm Au and 0.6% Co. Copper is typically low in these samples and rarely exceeds 1,000ppm. Drilling intercepted anomalous copper and gold grades in sheeted veins over a strike length of approximately 500ft (150m) and a dip extent of approximately 300ft (90m).

7.3.7 Footwall Zone

Identified in the Noranda outcrop maps as the “FW No Name Zone” over 2,000ft (600m) south of the Iron Creek zone (Figure 6-1, Figure 7-2). Chevillon (1979) describes this zone as stratabound, conformable lenses of magnetite and pyrite within chloritized argillite-siltite that are cut by veinlets of quartz-carbonate and secondary pyrite. The magnetite mineralization is traced over 300ft (90m) and the zone of chloritization is mapped along strike westward for over 2,000ft (600m). The FW zone is considered a separate stratigraphic horizon from the Iron Creek zone.

7.3.8 Sulfate Zone

The Sulfate zone is located north of the Iron Creek zone (Figure 6-1, Figure 7-2). Chevillon (1979) described the Sulfate zone as another example of stratabound, magnetite-rich mineralization. Malachite is found in chloritic rocks in the area and a 7 to 10ft (2 to 3m) wide quartz vein with sparse pyrite and chalcopyrite is situated toward the footwall of the zone and is generally conformable with stratigraphy.

A recommended hole was drilled and apparently yielded disappointing results (Centurion, 1990).

7.3.9 MAG and Magnetite Zones

Magnetite-rich breccias occur conformable to local bedding over a strike length of 600ft in the southern portion of the Property (Figure 6-1, Figure 7-2). The breccia bodies were first shown on the Noranda outcrop maps, but not regarded as extensions of the Ruby zone and not as a separate mineralized zone (Chevillon, 1979).

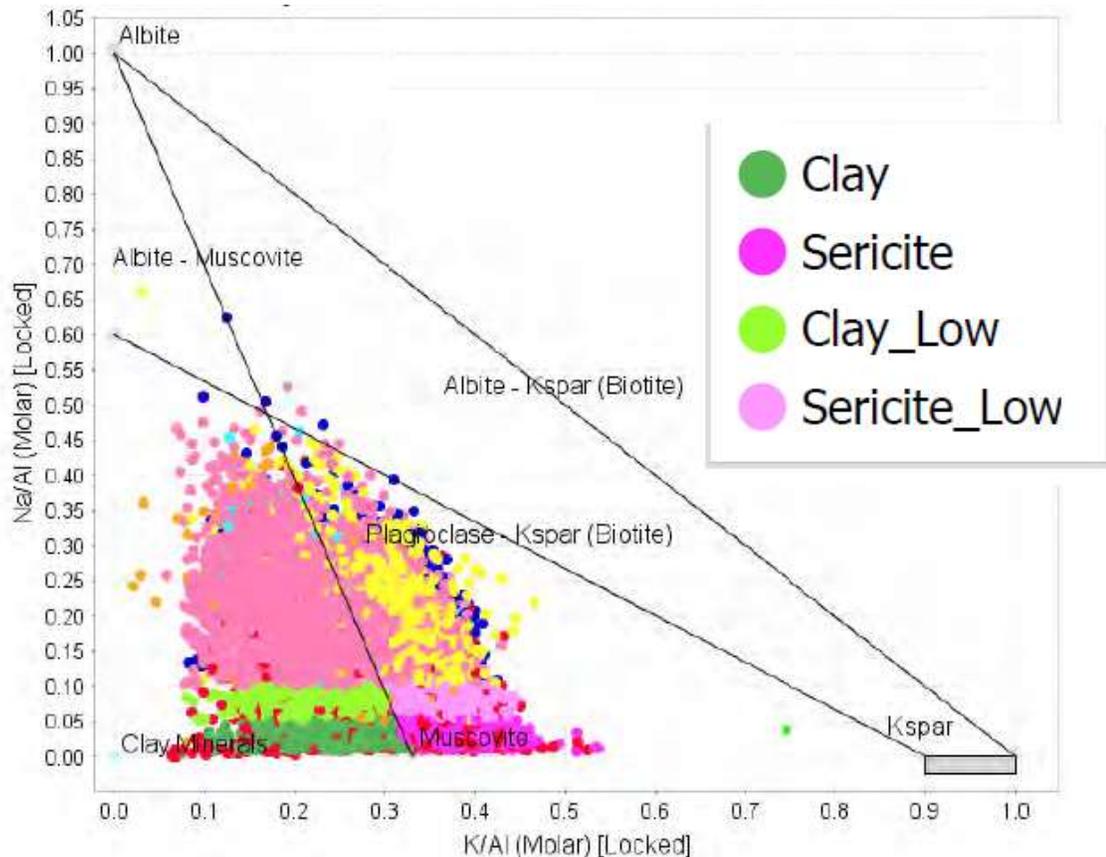
7.4 Hydrothermal Alteration

Extensive work was done to understand the hydrothermal alteration associated with mineralization at the Iron Creek zone, and the following was principally derived from the Issuer's Idaho work.

The effects of hydrothermal alteration such as: a) selvages to sulphide veins, b) replacement of primary minerals or sedimentary structures, or c) infilling of open spaces by secondary minerals are not prominent in the rocks hosting mineralization at Iron Creek. Secondary silicate minerals typically associated with hydrothermal alteration such as biotite, chlorite, sericite, clay minerals or carbonate minerals are present but obvious zones cannot be mapped on observation alone.

The multi-element dataset (over 10,000 samples) available for Iron Creek was reviewed to determine if distinct geochemical units can be recognized and/or define spatial zones related to hydrothermal alteration (Santaguida and Kirwin, 2019).

Chemical discrimination of the meta-sedimentary rocks cannot be made because trace element (Ti, V, Sc, Cr, Y, Zr) distributions show a similar provenance for all of the sedimentary rocks. Chemical variations in major elements (Si, Al, Fe, Mg, Na, K) are related to hydrothermal alteration. In general, alteration can be recognized by sodium depletion rather than specific enrichment of other major elements that typically reflects feldspar destruction (Figure 7-9).



Alteration indices from Davies and Whitehead, 2006

Figure 7-11 - Standardized Alteration Mineral Diagram Using K-Na Versus Al Molar Ratios

Iron Creek samples with high Al and low Na contain clay minerals (e.g., kaolinite). High K and low Na are considered to contain muscovite (sericite). Hard boundaries are not defined in the diagram for the clay and muscovite fields, thus “low” is used to reflect weak alteration intensity. Most mineralized rocks also plot within the clay and muscovite fields.

Mapping the samples identified as “Clay-Altered” or “Muscovite-Altered” has shown that discrete zones can be broadly correlated from hole to hole. Clay and muscovite alteration zones envelope sulphide mineralization but sericite (muscovite) is more directly associated spatially with mineralization. In places where sericite and clay alteration are developed spatially close to mineralization, it suggests a direct relationship. Sericite alteration zones are also prevalent within the quartzite breccia hosting mineralization. Sericite alteration away from the mineralization appears as selective replacement of individual beds preferentially occurring in fine-grained siltite that may be more permeable and reactive to hydrothermal fluids.

The most spatially consistent and distinct clay alteration occurs in the siltite above the mineralization. It can be traced across the strike length of the drilled area. The zone is discrete and is typically 15 to 30ft (4.5 to 9.0m) in width (true thickness). In the thicker portion of the mineralized zone the clay alteration zone forms the immediate hanging wall. Along strike, where mineralization is thinner the clay alteration zone persists. This

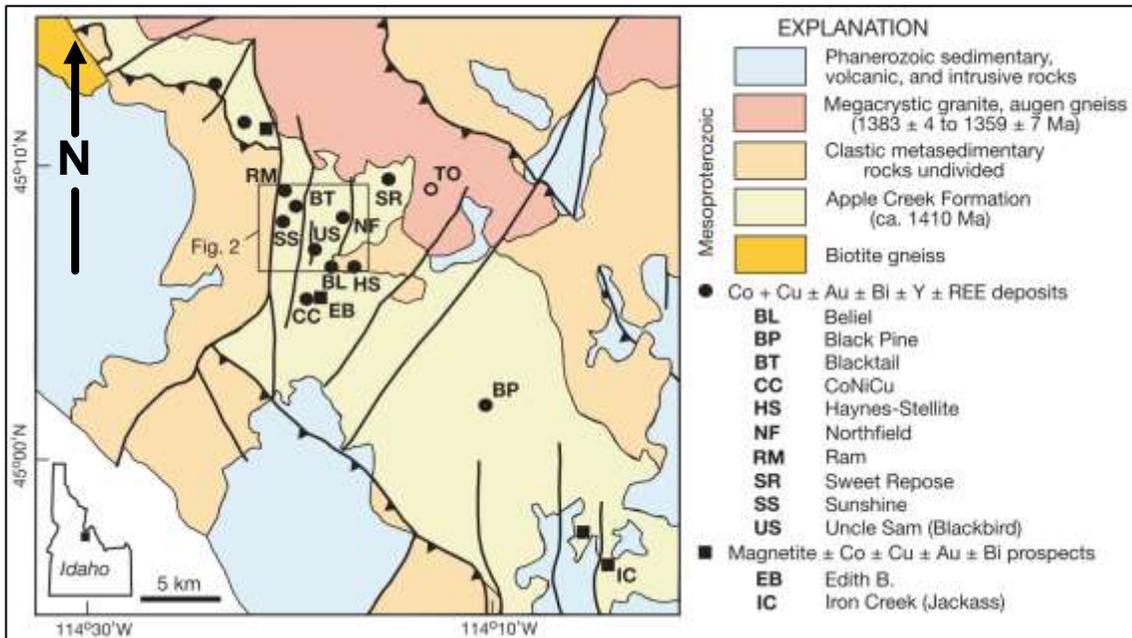


zone is not specifically associated with post-mineralization deformation (shearing or faulting), therefore may represent hydrothermal fluid migration during the mineralizing event, but where metals were not deposited.

8. DEPOSIT TYPES

The text of this section was modified from the 2019 MRE.

The cobalt and copper mineralization at Iron Creek belong to a class of deposits variably described as “Blackbird Co-Cu” (Evans et al., 1986) or “Blackbird Sediment-hosted Cu-Co” (Höy, 1995) in and adjacent to the Blackbird mining district of Idaho. The Blackbird mining district contains several cobalt-copper ±gold deposits and prospects in proximity that are hosted in similar meta-sedimentary rocks. These deposits and prospects define the Idaho Cobalt Belt or IBC as shown in Figure 8-1.



Source: Slack, 2012

Figure 8-1 – Simplified geological map of the Idaho Cobalt Belt

According to Evans and others (1986), “*These deposits are stratabound iron-, cobalt-, copper- and arsenic-rich sulphide mineral accumulations in nearly carbonate-free argillite/siltite couplets and quartzites*”.

There has been disagreement about the origin and formation processes of the “Blackbird-type” deposits, with some workers attributing the mineralization to sea-floor hydrothermal activity and associated, syn-sedimentary style (“SEDEX”) or volcanogenic massive sulphide (“VMS”) deposition (e.g., Nash, 1989; Nash and Hahn 1989, Connor, 1990). In the Blackbird deposits, the biotite-rich host rocks are considered pyroclastic tuff accumulations, but these micaceous rocks are not found without sulphide mineralization.

Slack et al. (2017) proposed that the origin of the Blackbird cobalt-copper deposits varied with a range of mineralizing processes, from diagenetic to epigenetic; the latter occurring both before and during metamorphism. At the Blackbird deposits, geochronological and geochemical evidence suggests links to the post-sedimentary composite granite-gabbroic plutons dating the main stage of cobalt mineralization to be younger than 1,370Ma, postdating the host rocks by approximately 30Ma (Slack, 2012; Aleinikoff et al, 2012). Cobalt mineralization hosted by tourmaline-rich breccia bodies and veins that are

also prevalent throughout the Blackbird area was also linked to the later metamorphic events discussed above: (1) 1,200 to 1,000Ma and (2) 155 to 55Ma (Lund et al., 2011; Slack, 2012; Bookstrom et al., 2016; Saintilan et al., 2017). The Iron Creek mineralization is considered to have formed due to metamorphism during the Sevier orogeny at 112-85Ma according to Bookstrom and others (2016).

The evidence for epigenetic style cobalt-copper mineralization has led to the comparison to iron oxide-copper-gold deposits (“IOCG”) by Slack (2017) and Hitzman et al (2017). The widespread occurrence of magnetite at Iron Creek, specifically, supports this possible IOCG connection.

Interestingly, Chevillon (1979) drew similarities between the Iron Creek zone, Ruby zone, and Magnetite zone to the copper-gold deposits at Tennant Creek that are now considered to be IOCG deposits, rather than syn-genetic deposits as proposed by Skirrow and Walshe (2002).

Regardless of genetic models for cobalt and copper, both metals are generally stratabound on a local scale at Iron Creek.

9. EXPLORATION

The text of this section was modified from the 2019 MRE.

9.1 General

The Issuer, first as Scientific Metals Corp., then US Cobalt, then First Cobalt and currently Electra) commenced exploration of the Iron Creek Property in 2016 with a compilation of historical geological, drilling, geophysical and geochemical data. In 2017 and 2018, Issuer rehabilitated about 1,260ft of underground workings in Adit-1 and Adit-2, which provide subsurface access to portions of the Upper zones of the Iron Creek deposit. The objectives in 2017 were as follows:

- Diamond-core drill approximately 35,000ft (10,670m) from surface along a 1,500ft (460m) strike length of the Upper zone, twinning historical holes to confirm and increase confidence in historical estimates of cobalt mineralization; and
- Re-habilitate the underground workings of the Adit-1 and Adit-2 for underground diamond drilling and channel sampling.

Adit-1 was fully rehabilitated and both portals of Adit-2 were excavated and partly rehabilitated during 2017. In the first quarter of 2018, the rehabilitation of Adit-2 was completed.

The entire length of Adit-1 was channel sampled and geologically mapped in detail by the Issuer's geologists. A total of 133 channel samples each 5.0ft (1.5m) in length were collected from both ribs along the crosscut and drift. The samples were collected using air-powered chisels, with average sample weights of about 7.3lb (3.3kg). The underground channel samples were transported by one of the Issuer's geologists from Adit-1 to the laboratory of American Assay Laboratories ("AAL") in Sparks, Nevada.

Road-cut sampling was started but not completed along the roads cross-cutting the Iron Creek deposit on the west side of the North Fork of Iron Creek.

During 2018, the Issuer initiated mineralogical and petrographic studies of mineralized material from the upper zone. A total of 20 samples of drill core from 13 of the 2017 and 2018 drill holes were sent to SGS Minerals in Lakefield, Ontario for detailed mineralogical descriptions. The purpose of the study was to identify and quantify metallic mineral species over a range of cobalt grades as identified by geochemical analyses. Specific attention was made in this study to identify cobalt-bearing minerals. Core logging and underground mapping found a diversity of pyrite textures and a range of grain sizes that had not been systematically analyzed for cobalt content.

The SGS samples were derived from drill core and underground grab samples of pyrite-rich material. SGS prepared polished mounts of each sample for analysis using QEMSCAN, a standard method to derive high-resolution mineralogic images. Individual minerals are identified on each image manually by a mineralogist.

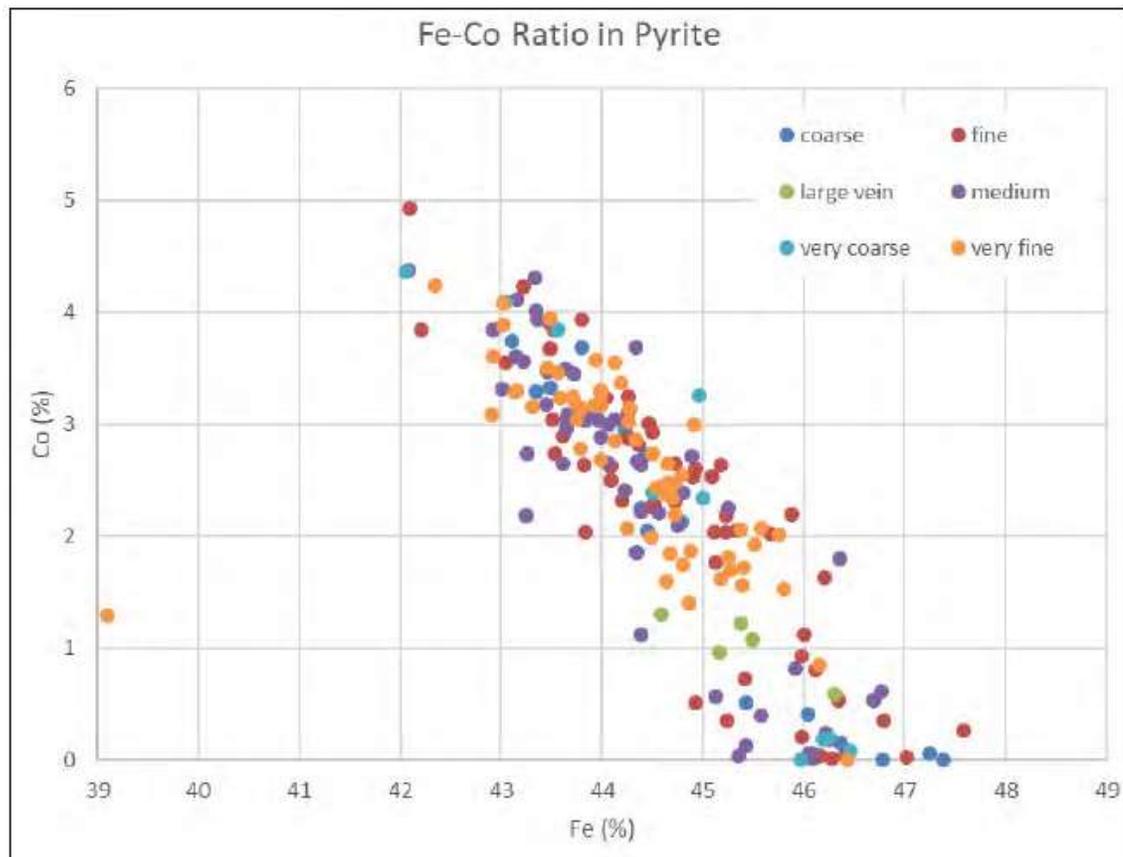
The principal metallic mineral in all 20 samples was pyrite. In six (6) samples, chalcopyrite was identified to a maximum of over 14% in one sample. Pyrrhotite was identified in one sample. Magnetite and/or hematite are present in all samples; one sample contains over 75% iron oxide. The cobalt-bearing minerals cobaltite, glaucodot, and gersdorffite were

identified in four samples, but generally are in minor concentrations (maximum of 0.33%). Arsenopyrite was not found in any of the 20 samples.

Further electron microprobe work was done to determine the cobalt concentration within pyrite relating to texture and grain size. Based on the QEMSCAN maps, pyrite grains were sub-divided as:

- Very fine grained - <50µm;
- Fine grained – 50 to 200µm;
- Medium grained – 200 to 700µm;
- Coarse Grained – 700µm to 1500µm; and
- Very Coarse Grained - >1500µm.

Based on the microprobe results, iron and cobalt demonstrate an inverse relationship (Figure 9-1) that reflects direct substitution within pyrite. High levels of cobalt occur in all sub-divisions of grain sizes. Images of cobalt concentration within pyrite show cobalt is entrained within the pyrite grain lattice appearing as “growth bands”.



Source: Electra, 2018

Figure 9-1 – Cobalt concentration in pyrite

In 2021 and 2022 drill core samples from Iron Creek and Ruby were provided to Dr. Katha Pfaff at the Colorado School of Mines to conduct additional research on the deposit. The project ‘Controls on Mineralization in the Idaho Cobalt Belt and Role of the Metamorphic

Overprint' is supported through the Center to Advance the Science of Exploration to Reclamation in Mining (CASERM) and is conducting research on the mineralogy and geochemistry of the Iron Creek deposit (both the Iron Creek project as well as the Ruby Zone). Preliminary results indicate an early (syn-sedimentary?) cobaltiferous pyrite generation at the Iron Creek project and an equivalent early magnetite generation at the Ruby Zone. Later main-stage ore minerals include cobaltiferous pyrite and chalcopyrite, and associated chlorite alteration. Late-stage (syn-metamorphic?) silicification and quartz veining is host to cobaltiferous pyrrhotite and minor galena and sphalerite. Post-metamorphic oxidation of pyrrhotite resulted in pyrrhotite breakdown and marcasite/pyrite plus goethite plus cobaltite-vaesite formation.

9.2 Geophysics

9.2.1 Induced Polarization Surveys

Induced Polarization ("IP") geophysical surveys effectively define the zones of mineralization intercepted on the project to date (Figure 9-2). Dipole-Dipole IP was conducted for Sachem Resources over the Iron Creek project and surrounding areas in 1971 (Fox, 1971). A total of 19.1 line-miles of dipole dipole IP were completed which effectively mapped out the Iron Creek zone and identified several additional chargeability anomalies. In 2020 Aurora Geosciences completed an 18.5 line-km pole-dipole survey on the margins of the Iron Creek Resource Area. This survey was designed to cover the edges of the resource and extend the signature to the east and west. In 2022 Rock Bottom Geophysics conducted an 8.0 line-km pole-dipole survey on the Ruby prospect including one line to evaluate the strike extent of mineralization onto the Redcastle project.

9.2.2 Borehole electromagnetic surveys

Borehole electromagnetic ("EM") measurements were completed on eight diamond-drill-holes at Iron Creek to: a) identify "off-hole" EM responses, and b) determine the conductivity of both pyrite-rich and chalcopyrite-rich mineralization to plan airborne or ground geophysical surveys for future exploration. The geophysical surveys were conducted in November 2018 by Abitibi Geophysics (Abitibi Geophysics, 2019). The eight surveyed drill holes are well distributed along the strike extent of mineralization (Figure 9-3). The holes intersected a range of pyrite and chalcopyrite abundance from massive sulphides (IC17-27 and IC17-38) to disseminated mineralization (ICS18-09A).

The EM data for each hole were modeled to identify in-hole and off-hole conductors. Conductors are modeled as "plates" to match the measured EM responses. Plates were modeled for seven of the eight holes where conductors were interpreted to occur off-hole (Figure 9-4). The strongest responses, highest conductivity, were encountered in holes IC17-27 (300 Siemens) and ICS18-13 (250 Siemens), likely detecting nearby massive-pyrite and stringer-chalcopyrite mineralization that had been drilled nearby.

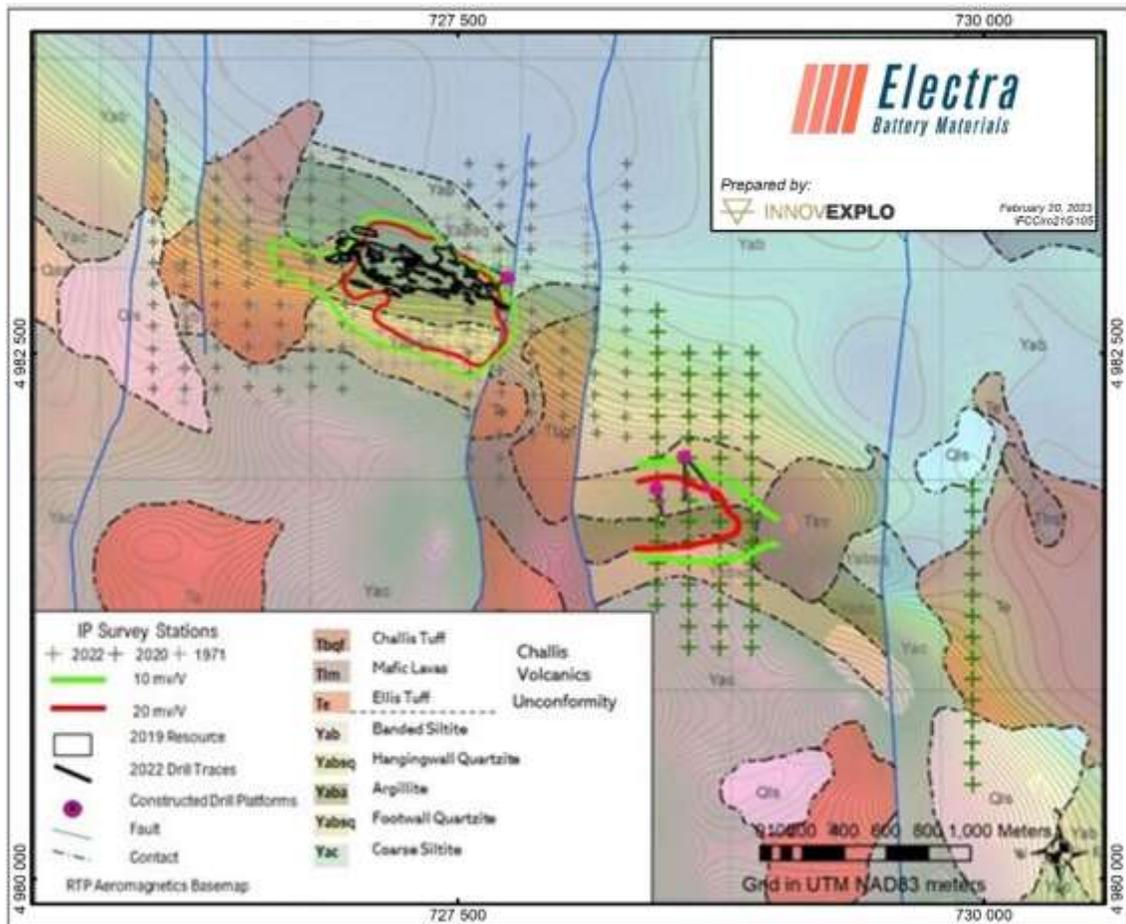
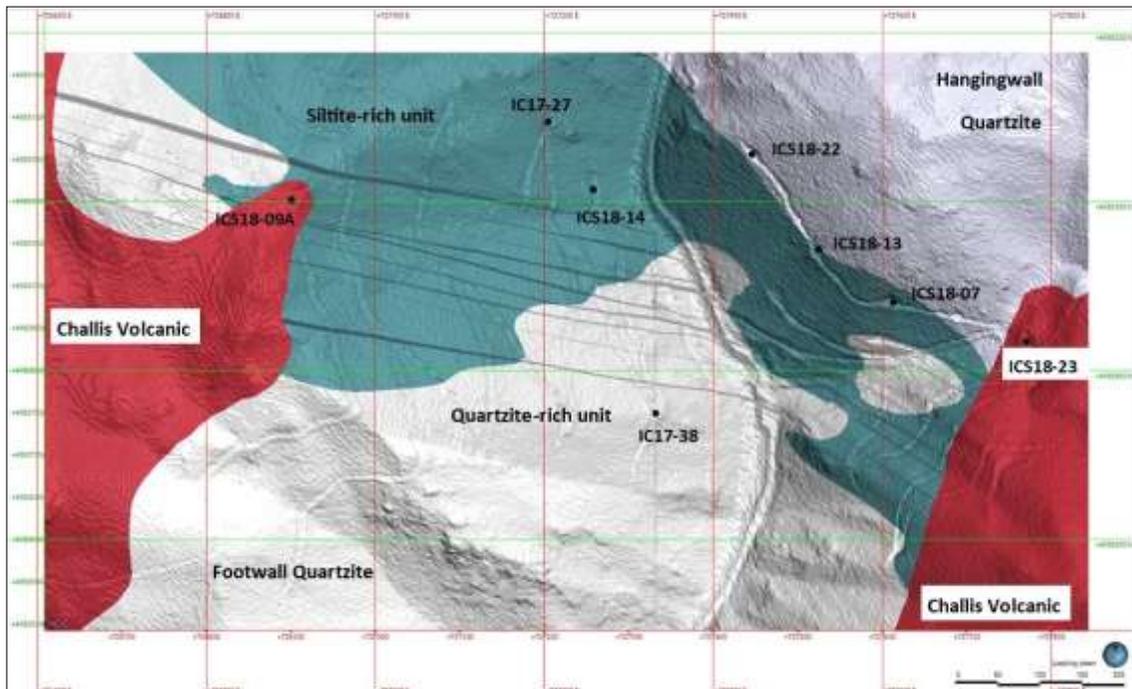
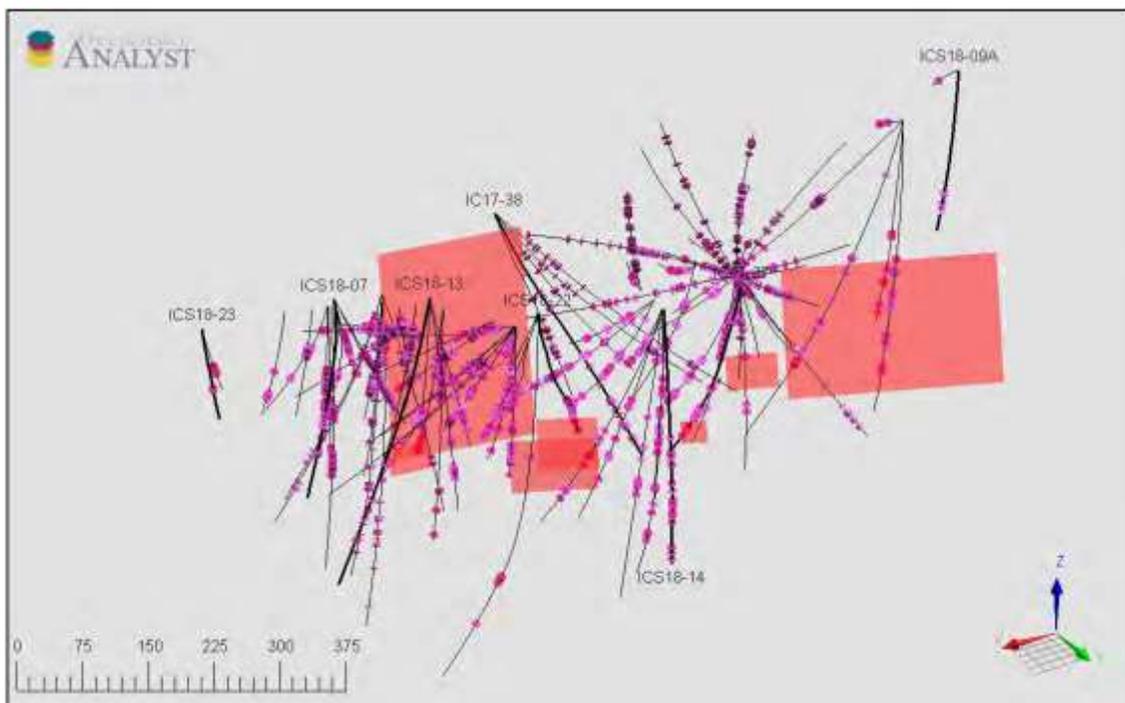


Figure 9-2 – IP Survey stations on Iron Creek and Ruby



Coordinates: UTM NAD83 Zone 11N; scale in meters.

Figure 9-3 – Location of the eight DDHs included in the EM survey



from Electra; red planes are modeled from EM data; dipping towards viewer; looking southeast

Figure 9-4 – 3D View of Modeled EM-Response Plates

9.2.3 Airborne Magnetic surveys

Airborne Magnetics was flown over the Property along with the overall Idaho Cobalt Belt as part of the Earth MRI program in 2021 (Phelps, 2021). The magnetics defines the mineralization at Ruby and at Iron Creek as occurring on the northeast margin of strong regional magnetic gradients. The Blackpine deposit to the northwest occurs on a similar geophysical break.

9.3 2018 Surface Sampling at Ruby

Previous work in the Ruby zone by Cominco (Hearn, 1992) included bedrock sampling across the exposures highlighting anomalous cobalt. Exact locations of the Cominco sampling and the quality of geochemical data could not be verified so the Issuer collected samples across the Ruby zone in 2018 (Table 9-1). The Ruby zone occurs along Jackass Creek as a series of large gossanous outcrops containing a 3ft- to 50ft (0.9-15m) thick interval of massive magnetite and pyrite mineralization.

Ninety-six discontinuous samples were collected along approximately 1575ft (480m) of strike to test the metal content of mineralization and to examine the nature of the host rocks. Samples were not collected where breaks in the outcrops occur. Sampling was conducted using a rock saw at a constant height. Sampling was started in gossanous rock and individual samples were demarcated every five feet (1.5m) from the start point. Assay results returned 35ft (10.6m) of 0.24% Co, including 4.0ft (1.2m) of 0.43% Co, and 24.9ft (7.6m) of 0.26% Co.

The Issuer implemented a quality control program to comply with industry best practices in geochemical sampling including sampling procedures, chain of custody and analyses. As part of the QA/QC program, blanks, duplicates and standards were inserted with the field samples at Issuer's office in Challis, Idaho. Over 15% of the total number of analyzed samples are control samples separate from the laboratory standards. For this sampling program, samples were prepared and analyzed by American Assay Laboratories (AAL) in Sparks, Nevada. The rock samples were dried, weighed, crushed to 85 % passing -6 mesh, roll crushed to 85% passing -10 mesh, split to obtain 250g pulps, then pulverized in a closed bowl ring pulverizer to 95 % passing -150 mesh, and finally dissolved using 5-acid digestion for ICP analysis.

Table 9-1 – Selected surface samples from the 2018 exploration program at the Ruby Zone

From (ft)	To (ft)	Length (ft)	Length (m)	Co (%)
40	50	10	3.0	0.19
85	110	25	7.6	0.26
120	125	5	1.5	0.14
210	245	35	10.7	0.24
including		5	1.5	0.48
375	380	5	1.5	0.14

10. DRILLING

The text of this section was modified from the 2019 MRE.

10.1 Summary

The Project database has 169 holes drilled from 1969 through to January 2022. That total includes five sets of underground channel samples entered into the database as “drill holes”. Of the 169 drill holes, 117 (excluding the five sets of underground channel samples) were drilled and/or sampled by the Issuer and were used in the estimate in some fashion (as summarized in Table 14-2). Five holes were lost and drilled again. Records for the historical drill holes are incomplete, but all are believed to have been drilled with diamond-core methods. The total footage drilled within the Property is at least 139,906ft (42,642m). Five of the holes were vertical (four historical and one drilled in 2017), and the balance were inclined with dips of +40° to -85°. None of the drill holes drilled by operators prior to the Issuer were used for the mineral resource estimation.

Year	Company	Number of holes	Feet drilled	Metres drilled	Comments
unknown	unknown	20	12,727	3,879	historical holes by unknown companies
1969-1970	Wilson	4	623	190	Not in MRE
1970-1971	Sachem	7	4,161	1,268	Not in MRE
1972-1974	Hannah/ Coastal	15	12,736	3,882	Not in MRE
1978-1979	Noranda	1	579	176	Not in MRE
1985	Inspiration	1	467	142	Not in MRE
1989-1990	Centurion	4	1,398	426	Not in MRE
1996	Cominco	2	2,308	703	Not in MRE
2017-2022	Idaho Cobalt	117	104,907	31,976	
Total		171	139,906	42,642	

10.2 Historical Drilling

10.2.1 Iron Creek

Records of the historical drilling are limited to references in historical reports and plotted on historical cross sections. Although all the drilling is believed to have been done with diamond-core methods, no information is available on the drilling contractors, drill rig types, or the exact drilling and sampling procedures. Maps and sections in historical reports indicate that many of the holes were surveyed for down-hole deviation, but the type(s) of instruments and applied methods are not known, and none of the down-hole deviation data are available. The results of the historical drilling were used by Hanna, Noranda and Centurion to estimate historical Mineral Reserves, but were not used in any way for the work described in this Technical Report.

Little is known on the Property before Sachem in 1970 when 11 diamond drill core holes were done.

Coastal drilled a total of 13,250ft (4,040m) of core, principally in the Iron Creek zone, and one hole at each of the Sulfate and Ruby zones. That drilling substantially outlined the mineralization currently defined by The Issuer's drilling.

In 1979, Noranda optioned the nearby Blackbird mine from Hanna. This option included a 75% interest in the Iron Creek Property. Noranda subleased the Iron Creek Property to Inspiration Mines, Inc. in 1985. Two holes were drilled on the current Property during the Noranda/inspiration period.

In January 1988, Centurion Gold acquired the Property from Hanna. Centurion drilled three short holes in the Ruby zone in 1989.

Cominco American Resources Inc. leased the Property from Centurion in 1991. A report by Tureck (1996) indicates that Cominco drilled two core holes for a total of 2,308ft (703.5m) in 1996.

10.2.2 CAS

During the historical period, exploration work was conducted on the CAS portion of the Property. Nevada Contact drilled eight diamond drill holes in 2003 and six reverse circulation holes of unknown length in 2004 (6,476ft (1,973.9m) total length). The DD holes effectively intercepted the vein swarm at depth with multiple intercepts for cobalt and gold. The RC holes were drilled to test the extensions of the vein swarm to the east and west and were unsuccessful at intercepting significant mineralization.

In 2005, Salmon River Resources leased the CAS Property from and drilled five diamond drill holes for a total of 2,128ft (649m). Narrow zones of mineralization (3.0 to 20.5ft) (0.9m to 6.3m) ranging in gold grade from 0.03 to 0.19 oz/t Au were reported from this drilling by Stewart (2006).

10.3 Drilling 2017 to 2019

The Issuer, as US Cobalt, drilled a total of 94,857ft (28,912m) in 110 holes (InnovExplo resource database) from July 2017 to the end of the program in 2019. All the holes were drilled from the surface or from underground using diamond-core, wireline methods to recover HQ- and NQ-diameter core.

The 2017 drilling focused on the Upper zone at Iron Creek to confirm, infill and potentially expand the mineralized zones that were known from the historical drilling. The drilling did substantially confirm what was indicated by drilling by previous operators. The drilling contractor was Timberline Drilling (“Timberline”) of Hayden Lake, Idaho. Two modular Atlas Copco U8 underground type core drills were used.

In 2018, underground core drilling commenced again with Timberline as the contractor. A single Sandvik DE-130 underground drill was used to drill 27 NQ-diameter diamond-core holes in Adit-2. A total of four core holes were drilled in Adit-1. Timberline also drilled 14 HQ-diameter diamond-core holes from the surface before being evacuated from the project area due to a wildfire. Another 18 surface core holes were drilled later in 2018. The 2018 surface drilling was carried out by Timberline with two Atlas Copco CS-14 track-mounted rigs, one modular Atlas Copco U8 underground rig and one UDR track-mounted rig. AK Drilling of Butte, Montana completed two drill holes (ICS18-20 and ICS18- 23) with LF90 drill rig coring HQ-size core.

Core drilling from the surface was also conducted in 2019. Four holes were drilled for a total of 3,790ft.

The results of the 2017, 2018 and 2019 drilling have generally confirmed the cobalt and copper mineralization encountered by historical drilling in the Iron Creek deposit and confirmed the known orientation and general thickness of mineralization. Most importantly, the drilling helped the Issuer to recognize that the cobalt and copper mineralized zones are distinct from each other but spatially overlap in some areas.

Sampling procedures for drill programs followed by the Issuer are discussed in detail in Item 11 of this Report.

10.4 Drilling 2021 to 2022

In 2021, Electra Batteries Material commenced surface drilling in September with Major Drilling using a track mounted LF-90 operated in 2 12-hour shifts. Six holes were drilled totaling 2433 m targeting the extensions of mineralization on the east and west side of the deposit. The drilling successfully expanded the Cu and Co mineralization on the west side of the resource area at depth, and intercepted Co mineralization east of the resource area along strike and at depth. All holes were drilled with HQ diameter core.

In 2022, Electra commenced drilling in May with Titan Drilling out of Elko, Nevada using a track mounted LF-70 operating on two 10 hour shifts each day. Electra completed 6 holes for 1,674 m. One hole was completed on the east side of the Iron Creek Resource area to infill between the edge of the resource boundary and the drill intercepts in the 2021 step out program. The remaining 3 collars with two wedges were completed on the Ruby target to evaluate the depth extent of Ruby zone. All holes were collared with HQ diameter core and three were reduced to NQ diameter for core recovery and extensions. All holes intercepted significant cobalt mineralization confirming the depth extent and continuity of the Ruby zone.

Sampling procedures for drill programs conducted by the Issuer are discussed in detail in Item 11 of this Report.

10.5 Drill-Hole Collar Surveys

There is no information on how the historical collar locations were surveyed by the historical operators. The Issuer's geologists were able to measure the locations of five or six historical drill collars with a handheld GPS. The balance of the historical collar locations was estimated from historical aerial photographs, maps and cross-sections, and evidence of historical drilling sites observed in the field. The collar locations of the 2017 and 2018 surface and underground core holes were surveyed by Wade Surveying with an RTK Total Station. The 2021 and 2022 drilling campaign collar locations were surveyed by Civil Science of Twin Falls, Idaho with a Trimble R8-3 Base and a Trimble R10-2 Rover. The mine base used for 2017-2018 was paired in the 2021 and 2022 surveys along with a local mineral monument and select survey points throughout the Property to maintain consistency.

10.6 Down-Hole Surveys

Although drill hole maps compiled by Cominco (Hall, 1992) show curved traces for many of the historical holes, the Authors have no information on the methods, procedures and equipment used for the down-hole deviation measurements.

In 2017-2019 drillholes were oriented at surface with a Reflex TM14 Gyro Compass. In 2021 and 2022, the Issuer's geologists used a Brunton compass and handheld HPS, with front and back sights set before moving the drill to the pad to orient drillholes. In 2017-2019 downhole surveys were completed using a Reflex EZ-shot Multi-shot magnetic survey tool at approximately 50 foot intervals. A Reflex Gyro Sprint-IQ was used in 2021 and Reflex Gyromaster was used in 2022. Downhole surveys in 2022 and 2023 were carried out at 100 feet intervals and many were re-run with continuous surveys recording orientation at 5-foot intervals. Surveying was conducted by drilling contractors and overseen and quality control checked by the supervising geologists. All holes, surface and underground, were surveyed down-hole and corrected for magnetic declination of 12.9° East.

10.7 2021-2022 Drilling Programs

The Issuer drilled 12 surface holes on the Iron Creek claim block from 2021 to 2022, for a total of 4,391.84 m. Table 10-1 summarize the Issuer's annual drilling totals.

Table 10-2 presents the significant results of the 2021 to 2022 Drilling Program.

Table 10-1 – Summary of the 2021-2022 Program

Year	Number of holes	Metres drilled	Caliber
2021	6	2,717.84	HQ
2022	6	1,674.00	HQ and NQ
Total	12	4,391.84	-

In 2021, exploration activities targeted extensions to the resource along strike to the cobalt-rich east and copper-rich west, where mineralization remains open for further exploration (Figure 10-1). In 2022, exploration activities targeted the eastern extensions to the resource area between the resource boundary and these latest intercepts. The second phase of drilling targeted the Ruby Zone located 1.5km southeast of the known resource area at Iron Creek (Figure 10-2 and Figure 10-3).

Table 10-2 – Significant results of the 2021-2022 Drilling Program

Hole ID	From (m)	To (m)	Core Length (m)	True Width (m)	Cu %	Co %	CoEq %	Target	Conclusion
IC21-01	186.20	204.80	18.60	16.80	0.42	0.00	0.05	Western extension along strike to the copper-rich	Drilling the cobalt-copper mineral confirm is extended mineralization by an additional 180 metres to the east of the current deposit as well as down dip from the eastern edge of the resource zone. Holes IC21-02 and IC21-03 define a broad zone of copper mineralization in the hangingwall of the deposit.
Including	196.30	197.90	1.60	1.50	2.18	0.01	0.28		
IC21-02	285.30	337.50	52.20	24.80	0.63	0.05	0.12	Depth extension	
Including	303.60	311.40	7.90	3.70	1.72	0.10	0.31		
Including	331.50	335.50	4.00	2.00	0.85	0.18	0.28		
Including	391.00	393.40	2.40	1.20	0.10	0.27	0.28		
IC21-03	274.80	331.60	56.80	29.10	0.70	0.01	0.10		
Including	301.00	306.90	5.90	3.00	2.19	0.03	0.30		
Including	327.10	331.60	4.60	2.40	2.10	0.04	0.31		
Including	375.10	377.20	2.20	1.10	0.03	0.19	0.19		
Including	429.20	431.80	2.70	1.50	0.43	0.51	0.52		
IC21-04	79.40	82.70	3.30	2.48	0.21	0.18	0.21	Eastern Extension	
IC21-05	417.90	419.40	1.50	0.64		0.31	0.31		
IC21-05	440.10	442.30	2.20	0.92		0.21	0.21		
IC21-05	450.60	453.80	3.20	1.37		0.40	0.40		
IC21-05A	388.80	393.80	5.00	2.41		0.20	0.20		
IC21-05A	417.50	419.80	2.30	1.14		0.25	0.25		
IC22-01	228.8	234.3	5.6			0.24			
IC22-02	307.50	313.90	6.40			0.21		The Ruby target, testing the eastern portion of a geophysics anomaly that appears to thicken to the west as it approaches a fault system.	
IC22-03	333.60	334.37	0.76			0.27			
IC22-03	363.93	364.55	0.61			1.34			
IC22-03	364.54	365.91	N/A			N/A			
IC22-03	365.91	366.37	0.46			0.52			
IC22-03	405.38	406.91	1.52			0.20			
IC22-03A	364.30	364.94	0.64			0.87			
IC22-04	211.4	215.8	4.3			0.25			

True width estimated from the surveyed drillholes intercept angle with the azimuth and inclination of the grade shell in the 2019 resource model. Cobalt equivalent is calculated as %CoEq = %Co + (%Cu/8). Copper intercepts are calculated using a lower 0.2% cutoff for zones > 10 m with an upper cutoff of 1%. Co intercepts are calculated using a 0.18% CoEq cutoff. Both methods allow up to 1.5m of dilution where the overall grade exceeds the cutoff.

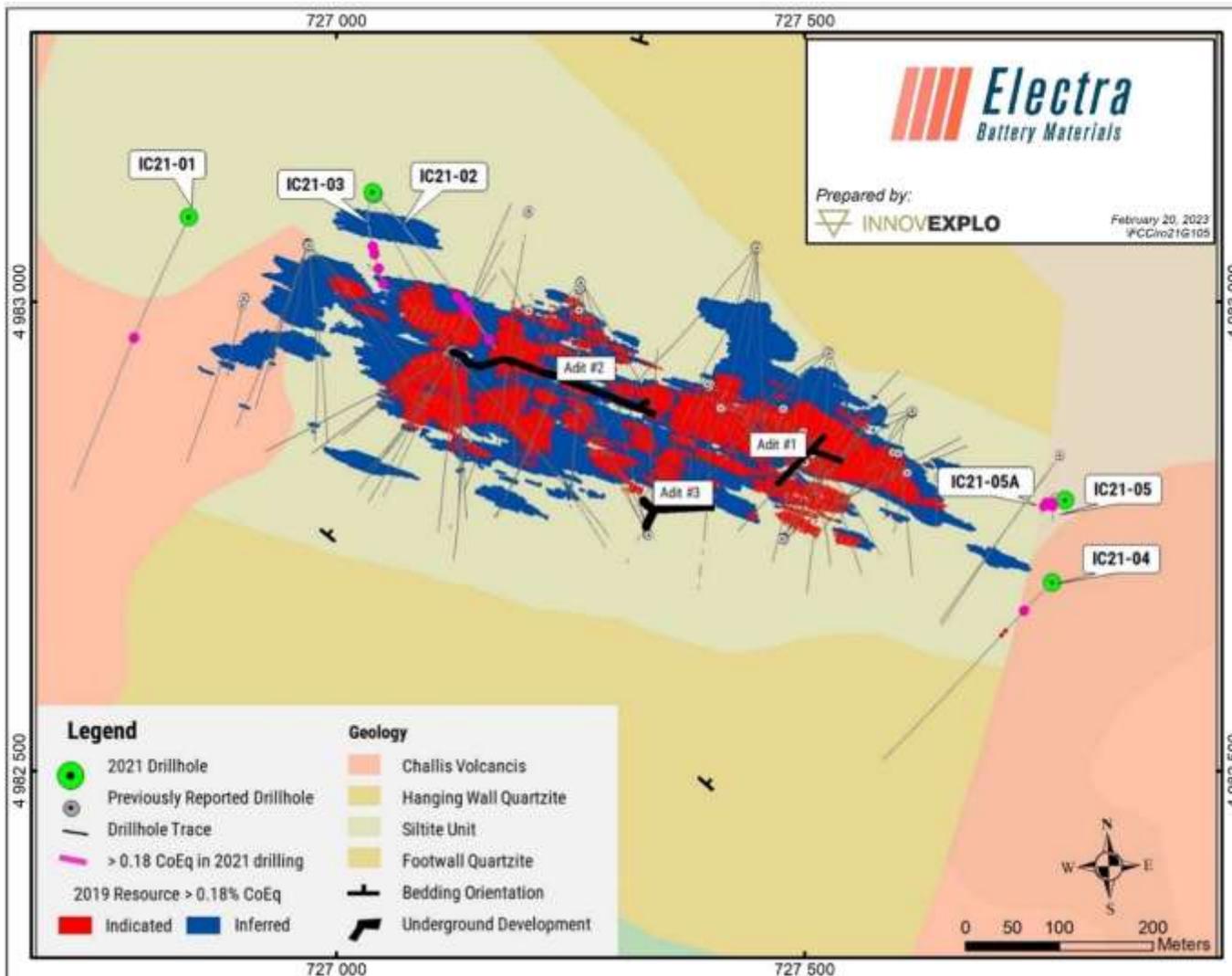


Figure 10-1 – Plan map showing drillholes 2021

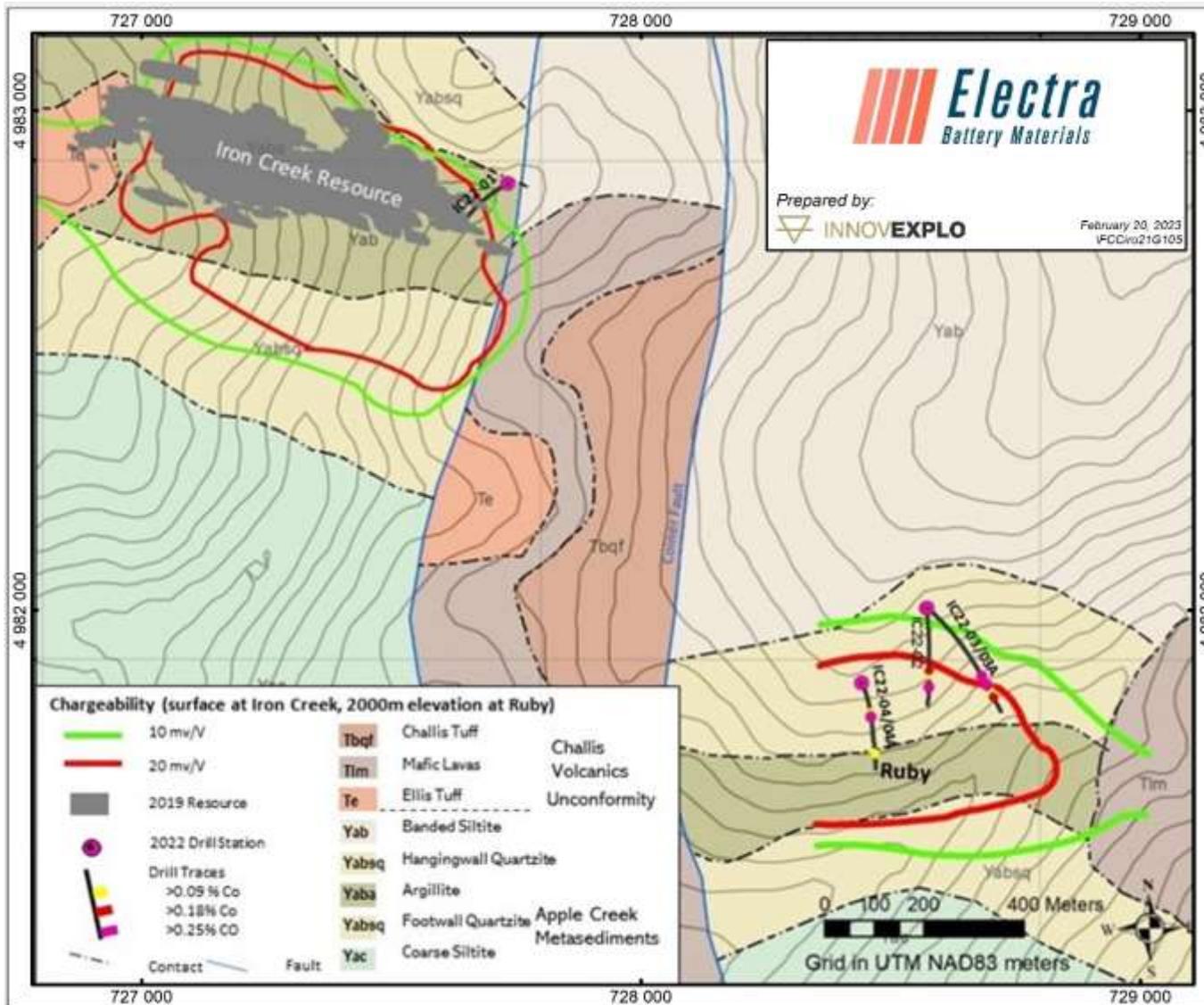
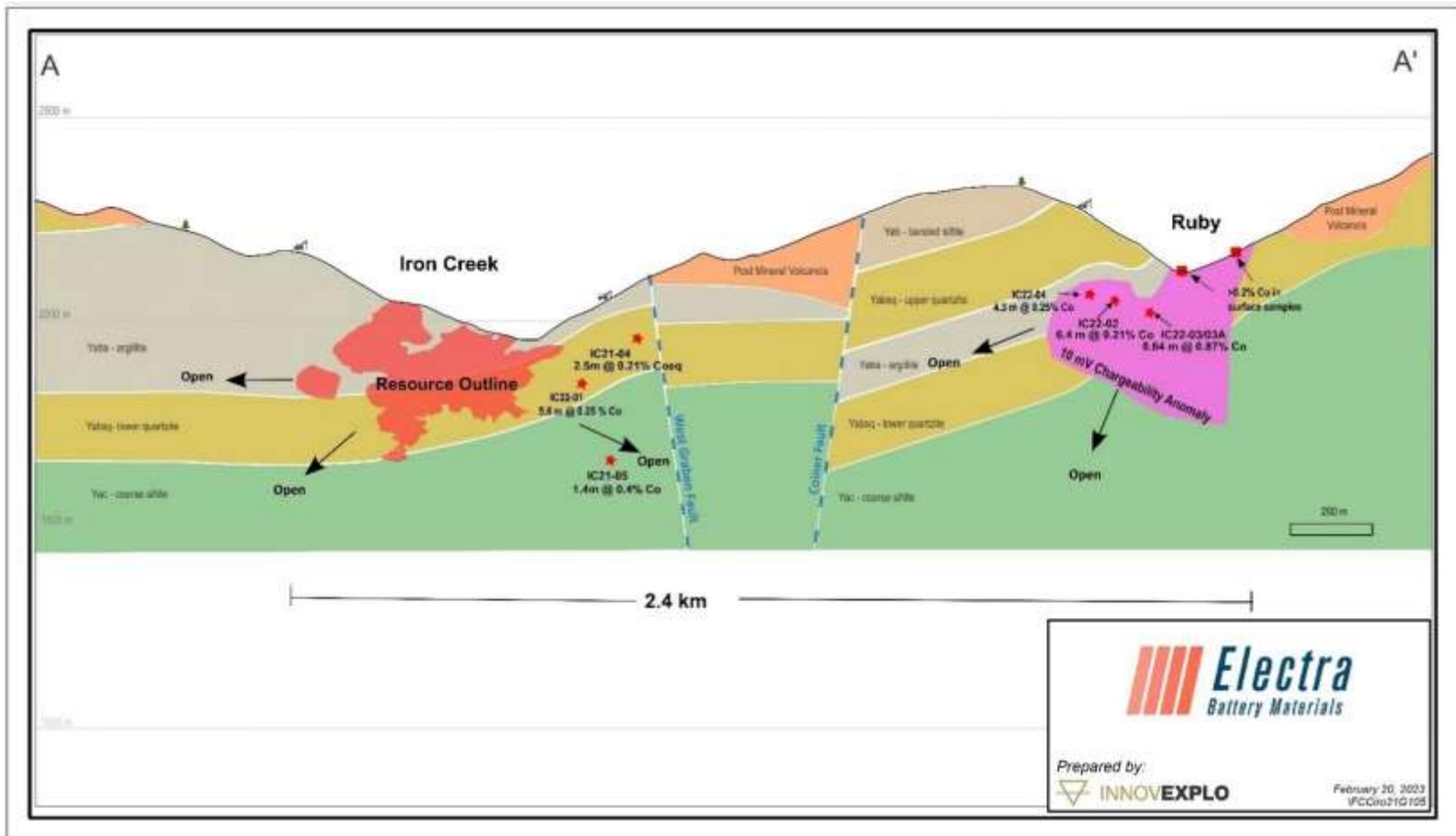


Figure 10-2 – Plan map of the iron Creek project showing 2022 drilling



October 5, 2022, Press release

Figure 10-3 – Schematic cross section of the Iron Creek and Ruby areas

11. SAMPLE PREPARATION, ANALYSES AND SECURITY

11.1 Historical Sample Preparation, Analysis and Security

The Authors have no information on the methods and procedures used by historical operators for sampling, sample preparation, analysis and security. Because of this, combined with some doubt in actual locations of drill holes at the surface and at depth, the historical drill holes were excluded from the estimation of mineral resources presented in Item 14.0.

11.2 Idaho Cobalt Sample Preparation, Analysis, Security and Qa/Qc Protocols

11.2.1 2017 to 2021 campaign

The drill core was transported by the Issuer's geologists from the drill sites to the Issuer's core-processing facility in Challis, Idaho. Core recovery, rock quality designation ("RQD"), and bulk density were measured by the Issuer geologists, and recorded in spreadsheets on notebook computers. Then whole-core digital photographs were taken. Following the photography, the core was sawn into two equal halves using an Almonte core saw and returned to the core boxes by technicians employed by Earl Waite and Sons Mining Contractors.

After being sawn, the Issuer's geologists logged the core and inserted wooden core blocks to mark sample intervals taking into consideration lithological contacts and degrees of observed mineralization. Sample intervals varied from 1.0ft to 5.0ft (0.3-1.5m). The log information was recorded directly into spreadsheets in notebook computers. After the completion of the logging, the geologists removed the half-core sample intervals and placed them in pre-numbered sample bags which were closed with ties. The bagged samples were then placed in either plastic super sacks, or plastic collapsible bins, along with blanks, certified reference materials ("CRM") and duplicate quarter-core samples. The duplicates, blanks and CRM samples were inserted at a frequency of one for every five regular samples and were alternated throughout the length of the hole, such that a blank, CRM or duplicate was analyzed once in every 20 samples.

Beginning in mid-2018, after the logging and sampling of the entire hole were completed, a second set of photographs was then taken of the sawn half core, with the sample intervals marked and visible. All the samples were then removed from the corresponding super sack or bin and inventoried prior to shipment. The samples ready for shipment were stored at the Issuer's core facility and then transported by truck to AAL in Sparks, Nevada. AAL is an independent commercial assay laboratory that is accredited under ISO/IEC 17205:2005 and is independent of the Issuer. The core boxes containing the remaining core were stored in locked sea container at the core facility in Challis Idaho until July of 2021.

At the AAL laboratory, the drill core samples were oven-dried, weighed, crushed in their entirety to 85% passing 6 mesh, and roll crushed to 85% passing 10 mesh. The crushed samples were then split to obtain 250g sub-samples that were pulverized to 95% passing 150 mesh.

AAL analyzed some of the drill samples by inductively-coupled plasma atomic-emission spectrometry ("ICP-AES") using a 5-acid digestion of 2.0g aliquots of the sample pulps

to determine Co, Cu, and 43 major, minor and trace elements (AAL method code ICP-5A; for Ag, Al, Ba, Be, Ca, Cd, Ce, Cr, Ga, Hf, Hg, Fe, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Rb, S, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y, Zn, and Zr). Early on and for only a few certificates, samples were analyzed by ICP-AES using a four-acid digestion of a 0.5g aliquot of the sample pulps to determine Co, Cu, and 32 major, minor and trace elements (AAL method code ICP-4A). For many of the samples analyzed by ICP-4A, a separate 2.0g aliquot was analyzed by ICP-5A for Co that was in excess of the upper limit of detection of the ICP-4A analyses. In some cases, Cu and Zn were also determined by ICP-5A. In yet other cases, drill samples that were analyzed by ICP-4A were also analyzed by ICP-AES using a 2-acid (aqua regia) digestion of 0.5g aliquots of the sample pulps to determine Cu plus Ag, As, Ca, Fe, Hg, Mo, Pb, S, Sb, U and Zn (AAL method code ICP-2A), and Co was also determined by 4-acid digestion ICP-AES of a 2.0g aliquot (ICP- 5A).

Channel samples were taken from the ribs of the underground workings in Adit-1 by the Issuer's geologists in continuous 5ft (1.5m) intervals using air-powered chisels. Depending on their locations, the channel samples were taken either perpendicular to layering of the host rock and stratiform mineralization, or oblique to the mineralization. Blanks, duplicates and CRMs were inserted at the rate of about one for every five channel samples. The closed sample bags were transported by The Issuer geologists to AAL in Sparks, Nevada.

At AAL, the channel samples were prepared with methods similar to those for the drill core described above. From each sample pulp, aliquots were extracted and analyzed for Au, Pd and Pt by fire assay with an ICP-OES finish. Separate aliquots of 0.5g of each sample pulp were subjected to a 4-acid digestion followed by ICP-AES determinations of Co, Cu, and 32 major, minor and trace elements (AAL method code ICP-4A). Co was also analyzed by ICP-AES following 4-acid digestion of another 2.0g aliquot (AAL method code ICP-5A). Two-acid (aqua regia) digestions on 0.5g aliquots followed by ICP-AES analysis of Ag, As, Ca, Co, Cu, Fe, Hg, Mo, Pb, S, Sb, U, and Zn, were also completed on all of the channel samples.

11.2.2 2021 to Current

In June of 2021 the Issuer's core storage facilities were moved to Salmon, Idaho. Sea containers of core were transported via specialized transport trucks from Challis to a private property in Salmon partially loaded with core. Some core and pulp samples were removed for stability purposes and shipped from Challis to Salmon before being re-loaded into sea containers at the destination yard. Sea containers were unlocked during the period of transport and reloading, as well as during periods of active re-logging but were stored on private property within viewshed of a contractor's residence who was operating on behalf of the Issuer. All sea containers were locked following relogging in October of 2021 and remain locked since that time except for when access is required for additional studies on the core.

In 2021 and 2022 core was collected at the drill site by contract geologists and transported to the core facility in Salmon. RQD, Recovery, Magnetic Susceptibility, and quick logs were performed either on site or at the core facility upon arrival. Whole core was then photographed. Detailed logging followed the core photographic. Sample tags were inserted by the logging geologist and a cut sheet of sample intervals was recorded. Core was then cut into half core and sampled at the cutting station. CRMs and blanks

were inserted into the sample stream at the cut station. In 2021 one CRM, coarse duplicate, or blank was inserted every 20 samples. In 2022 one CRM and one blank was inserted every 20 samples. In 2022 the Issuer began cutting one half of the core again to produce a quarter core sample for assay. The $\frac{3}{4}$ core sample was preserved in the box for additional analyses. Samples selected for analyses were bundled in rice sacks and loaded in crates at the core facility and then transported by contractors operating on behalf of the Issuer to the ALS preparation laboratory in Twin Falls, Idaho. The remaining core was transported to the sea container storage site in Salmon and placed in locked sea containers for future analyses.

In 2019, pulps of samples prepared and analyzed at AAL were sent to ALS Laboratory Group (“ALS”) in Reno, Nevada for check assays (see Item 12.3.4). These pulps were analyzed for cobalt and copper.

11.3 QA/QC Validation

The QA/QC procedures and methods used by Issuer are summarized and discussed in Item 12.3, along with the visiting QP’s evaluation of the QA/QC data. The QA/QC protocol established by the Issuer indicates that a CRM and a blank is placed in the sample sequence for every 20 samples. No split duplicates were produced by the Issuer. Lab duplicates were produced at ALS Laboratory at a ratio of 1 each 30.

11.4 QP Opinion and recommendation

Handling, preparations, analysis and security of samples were discussed with the Principal Geologist during and after the site visit described in Item 12.1. This information combined with the site visit QP’s observation during the site visit suggests that the preparation, shipment, chain of custody and analysis of the samples, the assay results and the security of sample, drill core and data storage are in accordance with industry standards.

The site visit QP is of the opinion that the sample preparation, analysis, QA/QC, and security protocols for the Project follow generally accepted industry standards and that the data is valid.

The site visit QP concludes that the sample preparation, security, and analytical procedures, as well as the QA/QC (see Item 12.4), are acceptable and the drilling samples can be used in resource estimation. However, the underground channel assays should not be used in estimation but can be used for domain modeling.

12. DATA VERIFICATION

This item covers data verification for the 2023 MRE described in this Report, including the site visit where field evidence for exploration and definition drilling were observed and verified. Additionally, the QPs completed the validation process for the database and the MRE model that included the verification of assay results through independent check assay sampling, to confirm that the data has been generated with proper procedures and was accurately transcribed from the original source into a reliable and secured database and to ensure the data are suitable to be used.

On behalf of InnovExplo, Mr. Eric Kinnan, P.Geo, (the “site visit QP”), visited the Iron Creek project including the Property and office in Salmon, Idaho, USA, from November 28 to 30, 2022. Throughout the duration of the site visit, the site visit QP was accompanied by the Principal Geologist, Mr. Dan Pace, and by Mr. Clayton Campbell, field and laboratory technician for the Project.

Throughout the visit, the site visit QP had full access to a) the entire exploration facility including exploration locations, core storage units, core shed facilities and the Issuers’ exploration office, and b) to all the exploration and drilling logs and databases. There were no limitations on, or failure to conduct, the data verification for this report. Additional confirmation of the suitability of the drill data for use are the analyses of the Iron Creek project QA/QC procedures and results as described in Section 11.5 and 12.3.

During the site visit, the site visit QP observed, verified, and ascertained the following key elements to establish the validity of the data used for the 2021-2023 MRE. On the Property the site visit QP observed evidence and precision of onsite exploration and drilling infrastructures including accessible representative of underground and surface drill hole collars, drill pads, the network of access drill road and trail network linked to the local, and regional access road to the Issuer’s Iron Creek tenement, two exploration adits and representative tenement boundary claim posts. In Salmon at the Issuer’s core storage facility and core shed, the site visit QP observed the presence of drill core, drill samples and returned assay lab pulps stored in an undisturbed state in secured storage units.

Drill core interval from selected drill holes, and the complete drill core of a number of selected representative drill holes were reviewed, of which selected key intervals were re-sampled for independent check-assay in preparation for the production of the current MRE report.

Throughout the visit the site visit QP had a number of direct discussion on site, and supplemental follow-up video conference discussions and email exchanges to verify and ascertain the Issuers’ data acquisition and storage, drilling, logging, sampling, QA/QC, chain of custody procedures and protocols applied throughout the exploration and definition drilling campaigns from drill targeting and drill planning to drill core data acquisition, to the reception of assay results and their integration into the final secured resource database.

The result of the site visit, core review and check-assay controls and the various communications is that the site visit QP has no significant concerns with the project procedures and deems the data reliable and suitable for the 2023 MRE.

12.1 Site visit and data verification

All coordinates verification in the field, at surface were, conducted using a Garmin Oregon 550t handheld GPS, datum: UTM-NAD83-Z11TN. The site visit QP conducted a visual inspection and general assessment of the project site infrastructures, the conditions of the access road and trail network to the Property and the drill sites, and the core storage facilities. The site visit QP conducted a drill collar verification on any drill pads and collars that were still visible and accessible to check and validate their location and orientation. The site visit QP reviewed several preselected, and randomly selected drill core intervals, and an entire drill hole, for which he reviewed drilling, logging, sampling logs and procedures. Additionally, the site visit QP reviewed protocols for QA/QC, sample handling and dispatch, data capture, core and sample storage, as well as assay result data reception and transmission.

The site visit QP also reviewed the overall database integrity and security of the Issuers' 2021-22 drilling campaigns, and drill core, drill logs, sampling, QA/QC protocols and procedures relative to exploration and resource definition drilling campaigns for all the historical drill campaign. The site visit QP also validated the drill hole data by conducting basic cross-check routines between all available databases and verified the concordance between geological drill logs and the drill core lithologies, structures, alterations, and mineralization, and at rock exposures found on site, on naturally outcropping surfaces, along road cuts and drill pads, and in and around underground Adit No.1 to verify the descriptions in the core logs.

The visit of the core storage facilities included an evaluation of core storage conditions and core sample integrity, and a review of selected drill core intervals and of random spot-check of drill core in the core storage containers.

The assessment of drilling procedures and protocols included a review of procedures for drill hole location and set-up, drilling methodology, downhole survey, collar survey, drill core handling, geotechnical and geological logging on- and off-site, oriented core, drill core transportation, detailed geological and structural logging and sampling at the core shed. Drill core and data verification included all aspects of the Iron Creek drill hole database for all available historical drill holes up to the 2021-2022 drilling by the Issuer and included collar locations, downhole data, sampling and QA/QC protocols, assay validation sampling (independent re-sampling of selected core intervals), checks against assay certificates from the laboratories, and data acquisition, transmission, and archiving verifications.

Discussions held with the Issuers' Principal Geologist allowed to review hole location and hole closure survey protocols and procedures, used during drilling programs from implementation to final collar surveys.

12.1.1 Drill Collar Verification

During the field visit, the site visit QP identified and confirmed the location of a total of 12 drill holes including the collar location of four drill holes on a single drill pad and four drill pads without observable drill collars on surface. Additionally, the site visit QP visited Adit No.1 and observed and verified the location of 4 capped and visible underground drill collars located on a single drill pad. These collars are showing signs of grouting and are abandoned.

Idaho State regulations require that all bore holes drilled at surface must be closed and covered upon completion. Additionally, the snow cover prevented the location and direct verification of any of the drill holes at surface at the time of the site visit and the site visit QP could not directly observe any open drill collars. Only the drill holes located underground in Adit No.1 could easily be visually inspected and verified directly for hole orientation and dip (Figure 12-1A to Figure 12-1F). Drill hole location at surface could only be approximately located based on remaining drill pads (Figure 12-1H). Their bore hole locations could only be approximately located and identified from their respective wooden ID picket and a steel cable with identification metal tags, driven into the bore holes when they were plugged. Therefore, only drill holes No. ICS18-05, ICS18-06B, ICS18-02, ICS18-07 were located at surface and their GPS location verified by the site visit QP (Figure 12-1A and B). The location of another drill hole (IC22-01) could only be determined approximately based on the presence of their drill pad visible on site (Figure 12-1B).

The coordinate readings for drill collars at surface have an acceptable range of precision and are considered adequate for the purpose of this Technical Report.

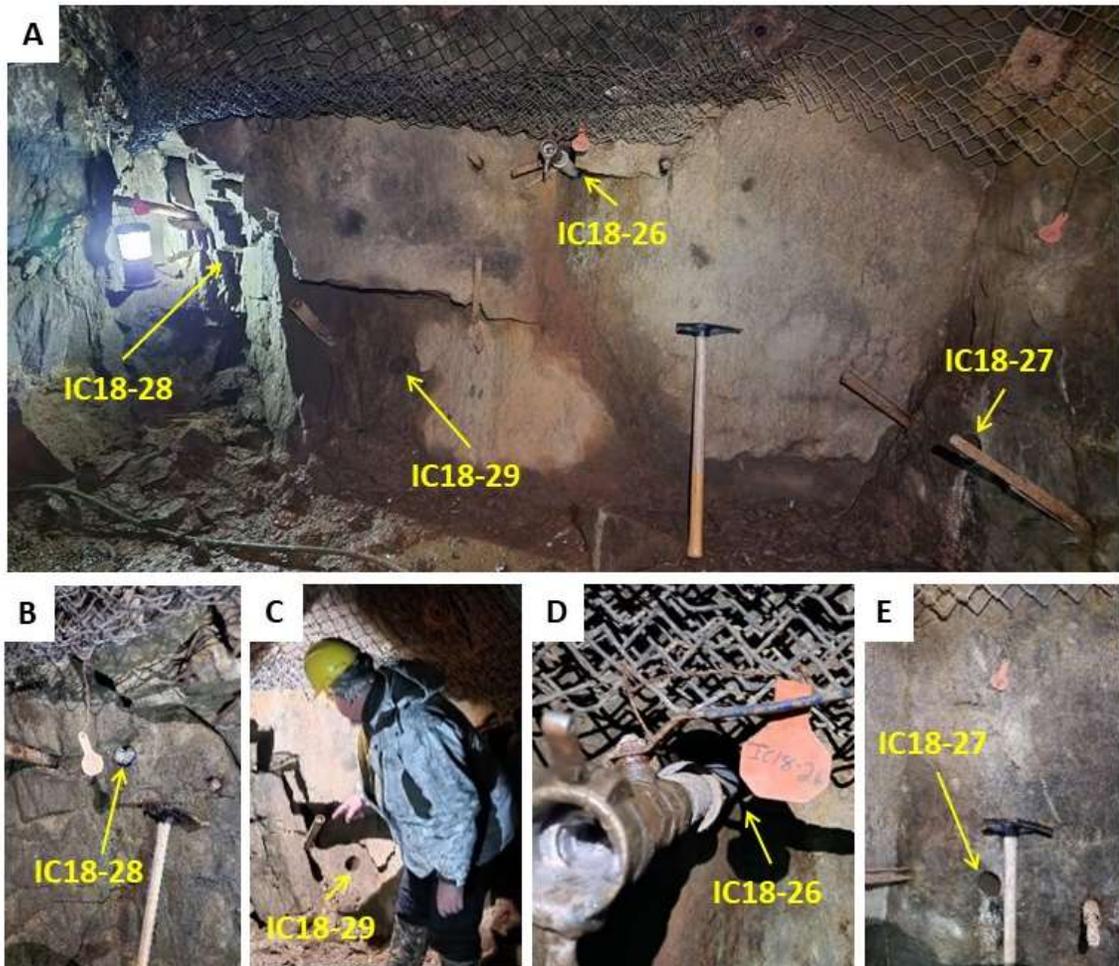
The Issuer conducted downhole surveys on all of its drill holes used for this report using Gyro Reflex survey tools following the protocols and procedures discussed with Issuer's Principal Geologist.

The site visit QP confirms the validity of the procedures and the results of the downhole survey tool readings recorded in the database and deems the downhole survey data correct and reliable.



Site visit QP pointing at hole collars ICS18-05, 18-06B, 18-02, 18-07; B) Collar GPS coordinates verification for holes ICS18-05, 18-06B, 18-02, 18-07 (datum: UTM-NAD83-Z11TN); C) Author on Drill Pad for IC22-01

Figure 12-1 – Surface Drill Collars and drill pad verifications

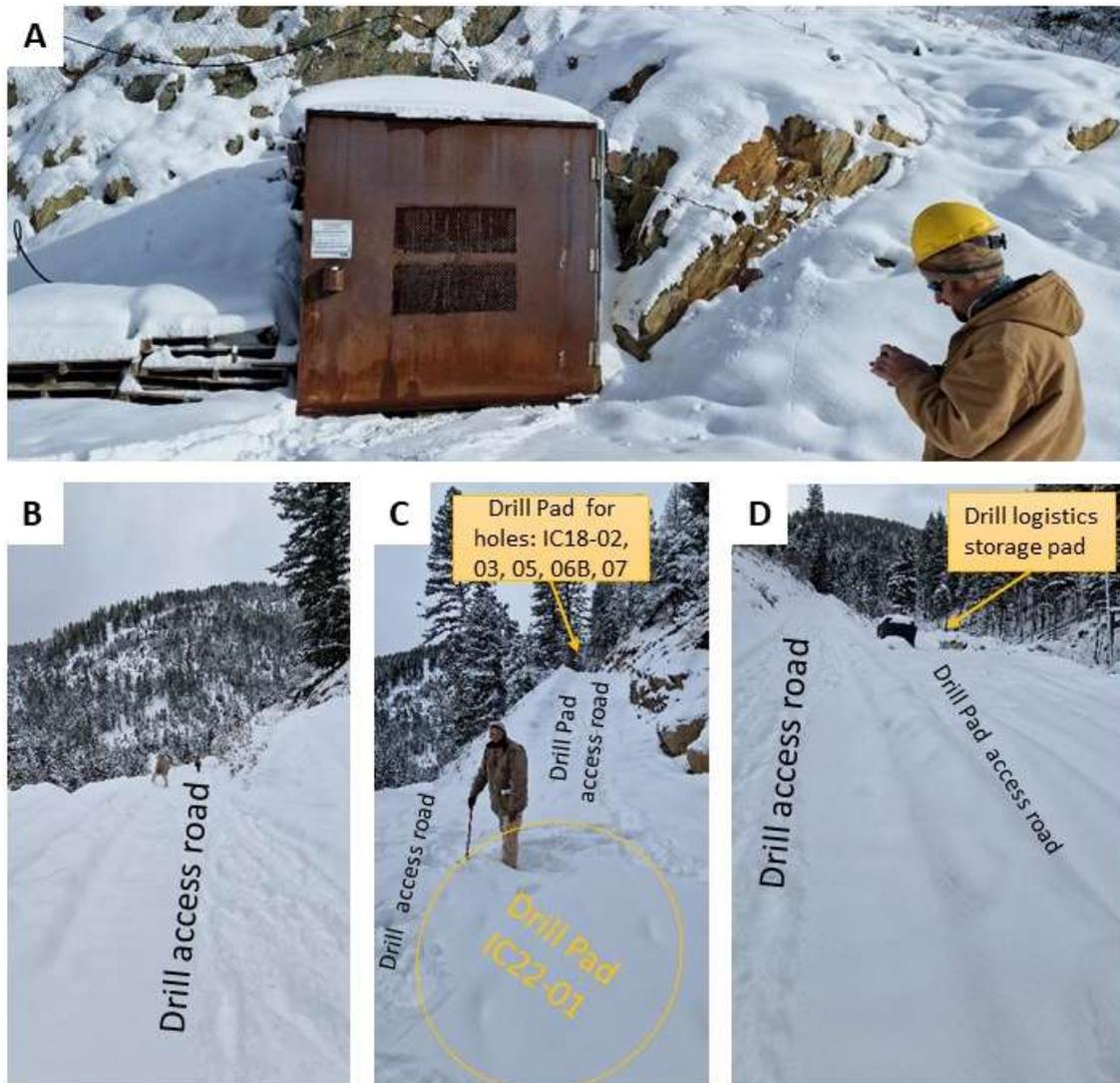


In adit No.1: A) IC18-26 to IC18-29; B) IC18-28; C) Visiting QP near hole collar IC18-29; D) IC18-26; E) IC18-27.

Figure 12-2 – Underground Drill Collars and drill pad verifications

12.1.2 Infrastructure

Although due to weather and ground conditions the number of drill sites visited at surface was limited, many drill pads, and drill access roads and trails were observed by the site visit QP. Recent active exploration and drilling activities are apparent on the Property including a) the drill access road network, b) two drill logistics material storage pads (Figure 12-2D), drill pads (Figure 12-1A and C, and Figure 12-2C), c) two drill adit entrances (Figure 12-1A), d) four verified drill collars in Adit No.1 (Figure 12-1A to E), and e) several gated drill access roads and trails (Figure 12-2B to D) accessible from US 93 highway and County Road 45 (Figure 5-2). Project access and its safety are well-maintained year-round through regular site environment control and maintenance trips by the Issuer's crew.



A) Adit No.1 entrance and Principal Geologist Dan Pace; B) drill access road to IC22-01; C) drill access road to drill pad for holes ICS18-05, ICS18-06B, ICS18-02, ICS18-07 (looking west from drill pad IC22-01); C) Drill logistic storage pad (west of drill pad IC22-01 and south of ICS18-05, ICS18-06B, ICS18-02, ICS18-07);

Figure 12-3 – Site exploration and drilling infrastructures and drill access road network

12.1.3 Drill Core Review

Close attention was paid to the review of drill core intercepts included in the 2023 MRE. This core, stored onsite, was examined to ascertain its physical integrity and the validity and concordance of geological and geotechnical descriptions, sampling intervals, and original assay certificates. The site visit QP examined a combination of drill core intervals for review and re-sampling including a) pre-selected (before the site visit) by Ms. Zsuzsanna Toth, P.Geol., of InnovExplo, and b) significant intervals chosen by the site visit QP while onsite. The final total was 12 drill holes from the Iron Creek Project (tenement) deposit, including a full-length review of two drill holes and partial reviews of

10 pre-selected drill holes, and eight spot checks on randomly selected drill core intercepts from drill core stored in the Issuer's core storage sea-containers.

In addition, quick, partial reviews of two drill holes were conducted at the end of the visit from the Issuer's Ruby zone located adjacent to the Iron Creek zone, to compare the geological similarities and differences between zones. In all cases, the site visit QP found the remaining reference (witness) core undisturbed and available for verification and sampling (Figure 12-3A and B, and Figure 12-4D and E and Figure 12-5C to D). Routine checks included the following: hole identification, box number, from-to meterage (footage) on the core box, drill-run separator blocks (wood, plastic, or metal) in the box, and EOH marker blocks (Figure 12-3A-B). Core lengths were verified against the meterage (footage) markers. RQD and core recovery (%) were also checked for accuracy and errors. The review demonstrated the presence and accuracy of the abovementioned elements and that the drill logs and database are coherent with the core observed. Sampling of the core was continuous, without gaps. Sample intervals in the drill core typically varied between 2.0 to 5.0ft but shorter and longer intervals ranging up to 8.0ft were present. The sample lengths were adjusted to lithological contacts, mineralized zones and structures. Long intervals (>50ft) of core that did not appear visually mineralized were not sampled for assay. This practice is widespread and adequate for RC drilling but could be improved in cases of core drilling where geological contacts allow a better selection of sampling intervals.

Evidence that oriented drill core and systematic structural orientations were collected by the Issuer's geologist was observed and verified by the site visit QP during the core review. The site visit QP inspected the oriented core procedures and protocol documents and discussed them with the Principal Geologist to ensure systematic industry accepted practice was consistently used to control and ensure the collection of good and reliable structural orientation on the core and reported in the database.



A) and B) Iron Creek typical well preserved drill core, with excellent recovery in waxed cardboard drill core box with : hole identification, box number, from-to meterage (footage) on the core box, drill-run and recovery separator drillers blocks (wood, plastic or metal) in the box, and EOH marker blocks;

Figure 12-4 – Representative drill core from the Iron Creek Project

The drill hole core used for this report is securely stored and available at the Issuer's core storage facilities in Salmon, Idaho. The site visit QP confirms that the drill logs and database accurately reflect core witnesses.

12.1.4 Iron Creek Property Lithology

During the field visit the QP visited several rock exposures to observe location and nature of the Property's major lithologies, mineralization, structures, and alteration patterns at surface and underground. The site-visit QP cross referenced these observations with drill log descriptions from the historical and recent 2021-2022 drill campaigns. The site visit QP examined some naturally outcropping rock exposures visible at the surface as well as road cuts, drill pad exposures and exposed rock in, and around, Adit No.1. During his visit, the site visit QP was by the Issuer Principal Geologist who shared his observations on the Project's lithologies, veining, structural geology, alteration, and mineralisation (Figure 12-4). There is a general correspondence between field observations and drilling descriptions. The site visit QP also had access to the Issuer's surface and underground geological field maps and final published maps. The site visit QP concluded that the quality of the geological mapping, drilling descriptions and interpretations is sufficient to support the 2021-2023 MRE.



A) and B) Author observing Meta-volcanic siltstones outcrop around adit No. 1 entrance; C) Road cut east of County road 45, north of adit No.1 entrance; D) and E) Sulphide zone in Thinly laminated and sheared meta-volcanic siltstones rock, with Py-Cpy and copper oxide staining, sample from underground adit's IC18-28 drill site; F) and G) sheared meta-volcanic siltstones/ sandstones rocks in Adit No. 1 near holes IC18-26, 27, 28 and 29 and (G) Sheared meta-volcanic siltstones/sandstone rock, with Py-Cpy and copper oxide staining, grab sample from underground adit observed in daylight;

Figure 12-5 – Exposures and observed lithologies at the Iron Creek Project

12.2 Diamond drill holes databases

During the site visit and subsequent communications with the Issuers' Principal Geologist, the site visit QP discussed the Issuer's historical drill and exploration database, logging and sampling procedures, and QA/QC up to the 2021-2022 campaigns. The outcome of these discussions indicated that there is no historical analogue archive database in existence for the project since its inception, and the data used for the Mineral Resource Estimation was exclusively captured in digital format, either in Excel files imported into the main Access database or captured directly into the main Access database controlled by the Principal Geologist. For the most part, the logging data was directly captured in Excel files, using pull-down menus designed by the lead Project

geologist and Principal Geologist. Original data collection was in imperial measurements (feet, NAD27 datum) prior to 2021. InnovExplo was tasked to convert the data into metric measurements (metres, NAD 83 datum) to generate a metric Access database. The logging data was then transferred into the main Access database under the custody of the Principal Geologist on site. The Access database, and all the Excel Logging data files including drill, sample, assay, survey, and QA/QC data are stored on the Principal Geologists' computer. A copy of the master files is stored on the Cloud in Dropbox as well as within the Cloud system of InnovExplo. A digital copy of these databases and excel files are also kept on an external hard drive on site for redundancy. These files and databases are periodically updated. An additional digital copy of the data is also kept on a hard drive at Issuer's head office in Salmon, ID.

All the logged geology, core recovery and density data were imported from spreadsheets supplied by the Issuer and checked for veracity. After each round of importing data, a series of data validations were run to check for unlikely or erroneous data. Any issues found were corrected within the database in an iterative process. Data was output for modeling directly from Excel spreadsheets and transferred into an Access database.

The 2018, 2021 and 2022 down-hole and collar survey data were received directly from the drillers and surveyors, respectively.

12.2.1.1 Assays

The site visit QP had full access to all assay certificates and datasets from recent and historical drill programs on the Project. The original digital assay certificates were sent directly from by the geochemical analytical laboratories in Excel and PDF format. The assay values in the database were compared to the original laboratory certificates. No discrepancies were found. The Project database is considered valid and reliable and of good overall quality.

12.2.1.2 Drill Hole Collar and Downhole Surveys

Downhole surveys (mainly Multishot surveys) were conducted on the majority of the Issuer's surface and underground drill holes. The Authors had access to the source files of the multishot surveys. A visual 3D review was completed on the drillholes traces and no irregular deviation was observed.

12.3 QA/QC Validation

12.3.1 Certified reference materials prior 2021

Eight different CRMs have been used in the Issuer's drilling programs. An example of the graphs made to evaluate the results of the Co and Cu CRMs is shown in Figure 12-10. All eight CRMs have certified cobalt values, but only five have certified copper values. There were 1,142 assays of CRMs for each Co and Cu. Of those 1,142 assays of CRMs, 18 are considered failures for Co and 15 are considered failures for Cu, for a failure rate of 1.6% and 1.3% for Co and Cu, respectively. A failure means that the cobalt or copper values fell outside of three standard deviations of the mean. Upon closer inspection, 10 of the Co failures and 9 of the Cu failures likely were caused by mishandling or mis-

recording CRMs because the values match other CRM values, they still represent failures in the database because they are errors, but they are not analytical errors.

Of the remaining eight failures, seven were from one CRM: OREAS 77a. There is drift in the mean grade returned for two cobalt CRMs beginning around June 2018, one drifting positive and one negative. Overall, MDA finds that the CRMs inserted into the sample stream demonstrate that the assay values returned from the laboratory have enough accuracy to be used in resource estimation, but more care must be used in sample handling and recording, as well as an investigation into the reliability of CRMs OREAS 77a and OREAS 165. None of the failures were sent in for re-assay.

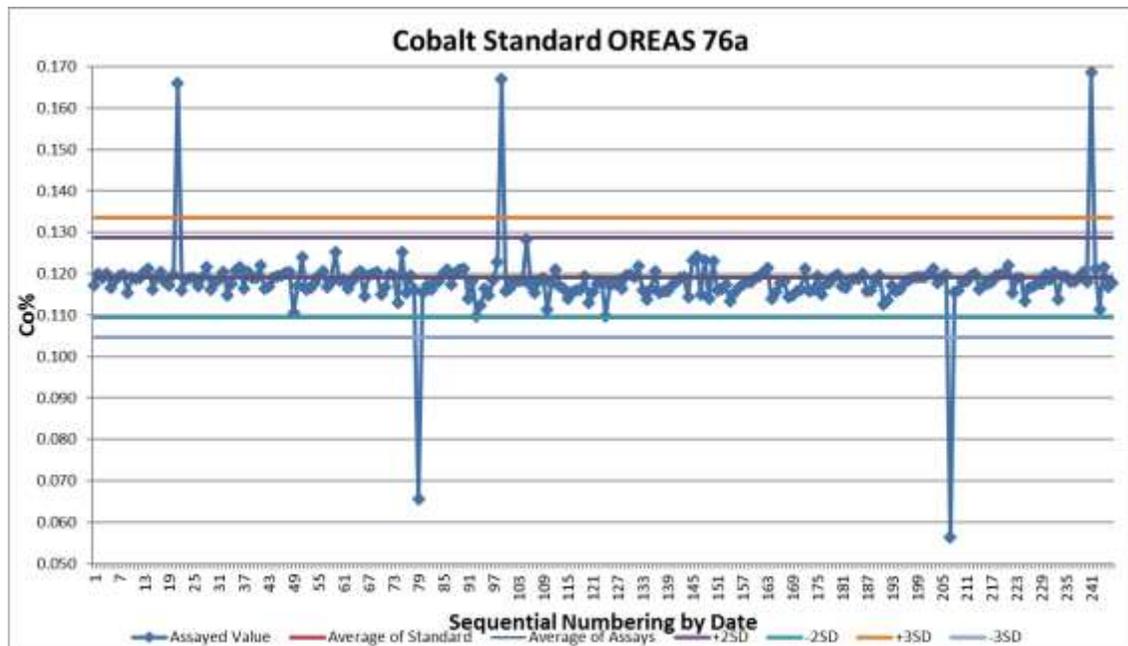


Figure 12-6 – Cobalt Standard OREAS 76a Results

12.3.2 Certified reference materials (standards) 2021-2022

The certified reference materials used for the 2021 and 2022 drilling campaigns are: OREAS 112, OREAS 76A, OREAS 77A; and, for the 2022 campaign: OREAS 76a, OREAS 162, OREAS 554.

Other standards used, according to the Issuer’s protocol flow sheet, the following CRMs were also used: OREAS 552, 554, 165 and 928 were used.

Table 12-1 – List of used CRMs and the elements they are certified for Cu and Co

CRM ID					
Certified elements					
	4-acid digestion	Peroxide Fusion ICP	Pb fire assay	Borate / Peroxide Fusion ICP	Infrared Combustion
OREAS 112	Cu, Fe, Ag, As, Cd, Co, Pb, Sb, Zn	Cu, Fe, Ag, As, Cd, Co, Pb, Sb, Zn	-	-	-
OREAS 76A	Ni, As, Co, Cr, Cu, Fe, MgO, S, Al ₂ O ₃	-	Pt, Pd, Au	Al ₂ O ₃ , As, Co, Cr, Cu, Fe, MgO, Ni, S, SiO ₂	S
OREAS 77A	Ni, As, Co, Cr, Cu, Fe, MgO, S, Al ₂ O ₃	-	Pt, Pd, Au	Al ₂ O ₃ , As, Co, Cr, Cu, Fe, MgO, Ni, S, SiO ₂	S
OREAS 162	Co, Ag, Al ₂ O ₃ , CaO, Cu, Fe, MgO, Pb, S, Zn	Cu, Fe, Ag, Al ₂ O ₃ , CaO, Co, MgO, Pb, S, SiO ₂ , Zn	-	-	-
OREAS 554	Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Dy, Er, Eu, Fe, Ga, Gd, Ge, Hf, Ho, In, K, La, Li, Lu, Mg, Mn, Mo, Na, Nb, Nd, Ni, P, Pb, Pr, Rb, Re, S, Sb, Sc, Se, Sm, Sn, Sr, Ta, Tb, Te, Th, Ti, Tl, Tm, U, V, W, Y, Yb, Zn, Zr	Ag, Al, As, B, Ba, Bi, Ca, Ce, Co, Cr, Cs, Cu, Dy, Er, Eu, Fe, Ga, Gd, Hf, Ho, K, La, Li, Lu, Mg, Mn, Mo, Na, Nd, Ni, P, Pb, Pr, Rb, S, Sb, Sc, Si, Sm, Sr, Ta, Tb, Th, Ti, Tm, U, V, Y, Yb, Zn, Zr	-	Al ₂ O ₃ , BaO, CaO, Co, Cr ₂ O ₃ , Cu, Fe ₂ O ₃ , K ₂ O, MgO, MnO, P ₂ O ₅ , SiO ₂ , SO ₃ , SrO, TiO ₂ (1);	S, C
OREAS 552	Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Dy, Er, Eu, Fe, Ga, Gd, Hf, Ho, In, K, La, Li, Lu, Mg, Mn, Mo, Na, Nb, Nd, Ni, P, Pb, Pr, Rb, Re, S, Sb, Sc, Se, Sm, Sn, Sr, Ta, Tb, Te, Th, Tl, Tm, U, V, W, Y, Yb, Zn, Zr	Ag, Al, As, B, Ba, Bi, Ca, Ce, Co, Cs, Cu, Dy, Er, Eu, Fe, Ga, Gd, Ho, K, La, Li, Lu, Mg, Mn, Nd, Ni, P, Pb, Pr, Rb, S, Si, Sm, Sr, Tb, Th, Ti, Tm, U, V, Y, Yb, Zn, Zr	-	Al ₂ O ₃ , BaO, CaO, Co, Cu, Fe ₂ O ₃ , K ₂ O, MgO, MnO, P ₂ O ₅ , SiO ₂ , SO ₃ , SrO, TiO ₂ (1);	S, C
OREAS 165	Ag, Al ₂ O ₃ , CaO, Co, Cu, Fe, MgO, Pb, S, Zn	Cu, Fe, Ag, Al ₂ O ₃ , CaO, Co, MgO, Pb, S, SiO ₂ , Zn,	-	-	-
OREAS 928	Al, Sb, As, Ba, Be, Bi, Ca, Cr, Co, Cu, Fe, La, Pb, Li, Mg, Mn, Mo, Ni, Nb, P, K, Se, Ag, Na, Sr, S, Tl, Th, Sn, Ti, W, V, Y, Zn	Sb, As, Bi, Co, Cu, Fe, Pb, Se, Si, Ag, S, Sn, Zn	-	Co, Cu, Fe ₂ O ₃ , Pb, SiO ₂ , S, Zn (1)	S

(1) Borate fusion XRF;

Two standards were primarily used for the 2022 drilling program. The low standard was Oreas CRM 162 (631 ppm Co, 7610 ppm Cu). The high standard was Oreas CRM 76a

(1191 ppm Co, 0.28% Cu). For CRM 162 the high Co outlier reported 6% over the lab reported analyses and the low Co outlier reported 6% lower than the lab certified results. No job systematically reported high or low and the overall average analytical value was under 1% higher than the lab certified value.

For CRM 76a the high Co outlier reported 2% over the lab certified value and the low Co outlier reported 7% under the lab certified value. The average standard value reported just under 2% lower than the lab certified value and no systematic drift was observed in the analyses.

Two samples of standard Oreas CRM 554 were run. This sample is higher in Co than most of the samples at Iron Creek and is run with overlimit analyses for Cu which is why it wasn't used more. It was meant to be inserted where high grades were anticipated based on the judgment of core logging geologist. In the two analyses one ran high by 6% and one low by 3% for Co. Both are considered acceptable for the purposes of this drilling program.

12.3.3 Blank samples

The blanks used for the project are composed of Challis Tuff that has historically returned near nil ppm values for copper and cobalt since the inception of the project. The Challis Tuff has not been certified in accordance with industry standards, but QA/QC results are showing no discrepancy to its barren results.

The Challis Tuff was collected in bulk from roadcut outcrops found on the Property along County Road 45, and prepared as blank sample material by the Issuer's technicians under supervision by Mr. Dan Pace, the "Principal Geologist" for the Project. Blank samples are individually cleaned, prepared, and bagged under controlled environments to prevent sample contamination. The blank is inserted in the sample bag as a whole piece of rock to be sent to the assay laboratory for sample preparation (crushing, pulverising) and assay according to the required assay method.



A) Challis Tuff sample selection and preparation by field/core shed lab technician, Clayton Campbell and supervising Principal Geologist, Dan Pace - B) Bulk Challis Tuff from the Property's outcrop; C)-D) Prepared blank samples made of Challis Tuff

Figure 12-7 – Challis Tuff Blanks sample material Preparation

12.3.3.1 Blank samples prior 2021

Prior 2021, there were 1,198 Co analyses of blanks and 1,214 analyses of Cu in blanks that were taken during the drill campaign.

Nine of the 1,198 cobalt assays in the blanks were distinctly anomalous with grades higher than the previous sample in the sample stream. Those nine blank samples ranged in grade from 360ppm Co to 2,106ppm Co. It is possible that these blank samples were in fact not blank, and/or there were some sample-handling or mis-labeling issues. The great majority of cobalt assays on the blanks were at or below 60ppm Co, which is about three times the average for shale and siltstone, and about 10 times the average for rhyolite or granite. Most of the anomalous samples were from early in the program. Figure 12-12 is a chart showing the cobalt analyses in the blanks, and in the previous drill samples in the sample stream.

There is no meaningful evidence that the grades reported for the blanks are related to the grades in the preceding samples, so between-sample contamination is considered insignificant.

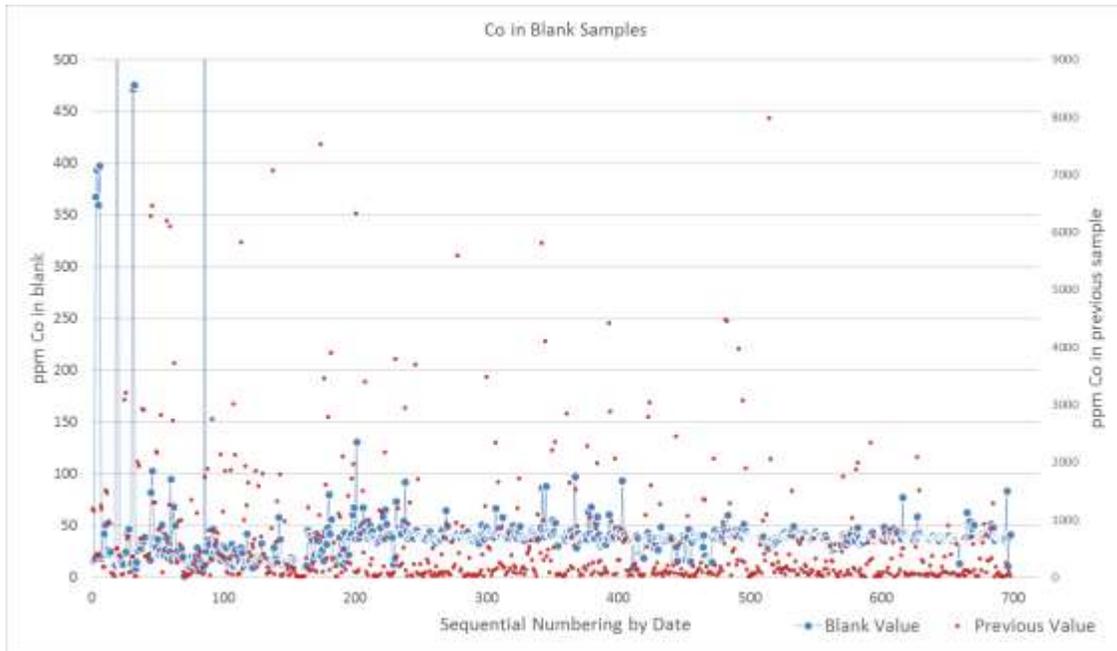


Figure 12-8 – Cobalt assays in blanks

There are some distinctly anomalous values in the copper assays of blank samples and some evidence of minor but insignificant carry-over sample contamination. The great majority of copper assays on the blanks were at or below 50ppm Cu. There is a moderate relationship between grades of the blanks and previous samples (Figure 12-9). While there is some evidence of grade carryover between samples, the amount is negligible.

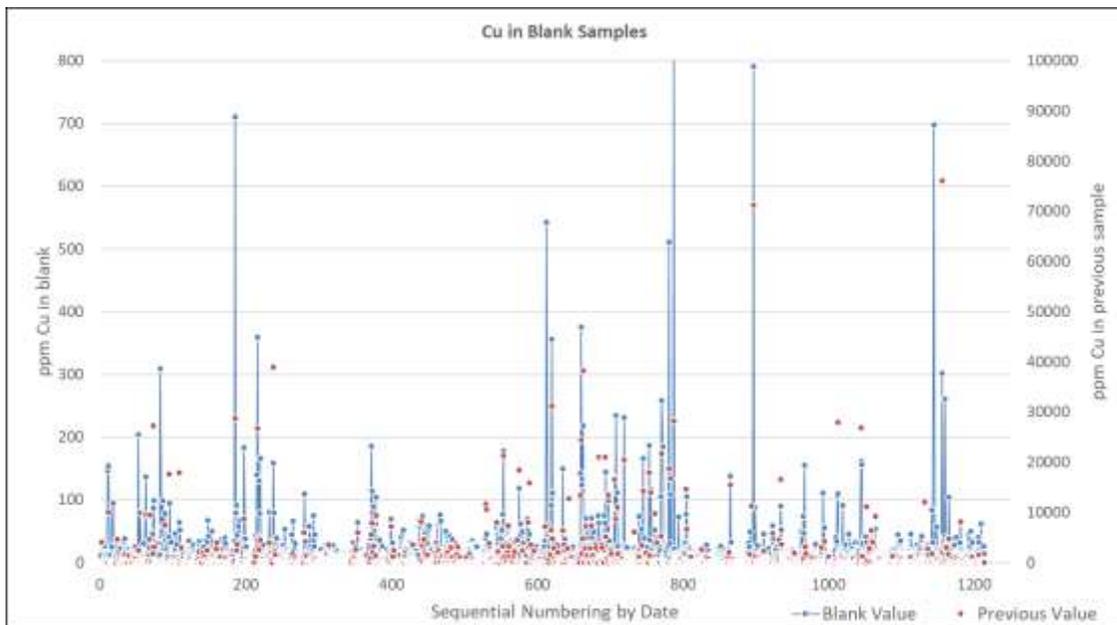


Figure 12-9 – Copper assays in blanks

12.3.4 Blank samples in 2021-2022

Thirty-four blanks were run in the 2022 drill program. Samples consistently run below 30ppm Co which is considered an acceptable background for drilling materials. One sample exceeded this (E552405 @ 218 ppm Co). This sample was submitted directly after a drill core sample which assayed 13,400ppm Co. The carry over contamination from this sample is 1.6% which is considered acceptable for the analyses being completed. All blanks passed the lower copper threshold with a maximum reported value of 30ppm Cu.

12.3.5 ALS duplicates

No core sample duplicates were produced at the Issuers' core shed. The only available duplicates are the analytical lab split duplicates. One split sample duplicate was inserted into the sample stream for every 50 samples by ALS Laboratories (ALS 2022. Sample Preparation Quality Control; Technical Note; alsglobal.com).

Pulp Samples from 2021 and 2022 drilling were submitted to American Assay Labs in Reno, Nevada for lab checks. Twenty pulp samples, two standards, and two blanks were submitted for analyses from holes IC21-03, IC21-05, and IC22-01. Samples were analyzed with the with the ICP-5A035 technique consistent with the assaying procedure in 2017 and 2018 run by US cobalt.

Nineteen pulps from the 2022 drilling program were analyzed with both the MEMS-61 and ME-MS89L techniques to compare the two analytical techniques. The sample set was made up of eight samples from IC22-01, six samples from IC22-02, two standards, and three blanks.

Sixteen samples run with both ME-MS89L and ICP-5A035 reported an average of 19.9% more cobalt in the ME-MS89L (13.5%-32.0% range).

Nine samples run with both ME-MS61 and ICP-5A035 reported an average of 14.1% more cobalt in the ME-MS61 technique (8.7%-17.3% range).

Fourteen samples run with both ME-MS89L and ME-MS61 reported an average of 5.9% more cobalt in the ME-MS89L technique (-7% to 13.8% range).

Three samples of mineralized core were run twice with core duplicates to check the initial results. The average deviation was 7.9% (-8.4% – 31.1%)

The ME-MS89L technique likely represents the most complete digestion of cobalt and therefore the most accurate analyses for drill samples. The MEMS89L technique has approximately twice the turn around time and costs 36% more. Given that a correction is required for recoveries anyway, ME-MS61 is recommended for future drilling at new exploration targets.

12.4 Independent Resampling

During the site visit, the site visit QP re-sampled 13 drill core intervals from 12 distinct drill holes for independent re-sampling purposes and copper, cobalt assay analysis as part of the independent audit of the 2023 MRE. Some sample intervals were selected by InnovExplo personnel before the site visit, and others by the site visit QP while inspecting and reviewing the core.

12.4.1 Independent sampling core selection and preparation procedure

The 13 representative samples were selected in, and around high- to medium-grade Co-Cu-rich ore intervals to compare to the assay values found in the Issuers' database that was used for the present MRE. The handling, preparations, bagging and shipment of all the check assay samples were conducted under the site visit QP's supervision. The selected representative drill core intervals were cut longitudinally in half with a rock saw by the Issuers' lab technician, leaving ¼ of the core in the core bow as witness core, and the other quarter was bagged, numbered, sealed and placed in a sequence with the other independent check assay samples to be dispatched. The rock saw was thoroughly cleaned between each core cut.

12.4.2 Independent sampling core QA/QC procedure

Two sealed certified standards, OREAS 162 and 554 and one in-house blank were used as QA/QC controls in the shipment dispatch.

The blank sample used for the independent assay QA/QC control was composed of fresh Challis Tuff rocks collected from selected outcrops on the Property as discussed in Items 11.6.2 and shown in fig. 11.1).

12.4.3 Independent sampling dispatch

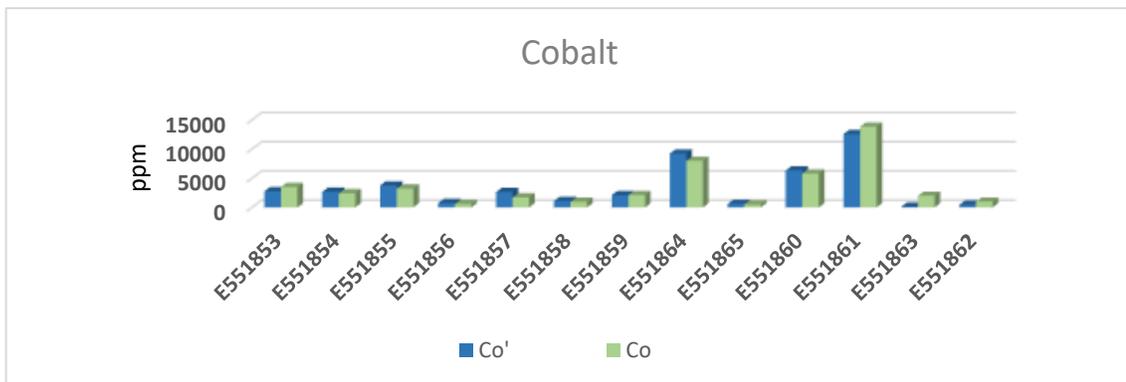
The site visit QP handled, bagged, and numbered the samples and inserted the QA/QC samples in the core sample sequence. The site visit QP sealed and submitted the independent sample dispatch container to the Fedex agent in Salmon, Idaho. The samples were as an intact package by ALS Laboratories in Reno, Nevada where they were prepared for analysis. The prepared pulps were then shipped ALS Vancouver (BC, Canada) where they were received as an intact package and underwent the final assaying procedure. Samples were crushed to 70% passing a 2mm screen. A 250g sub-sample is then pulverized to 85% passing a 75-micron screen. Metal assaying was performed using the ME-MS89L protocol, using ICP-MS.

12.4.4 Independent sampling: Results

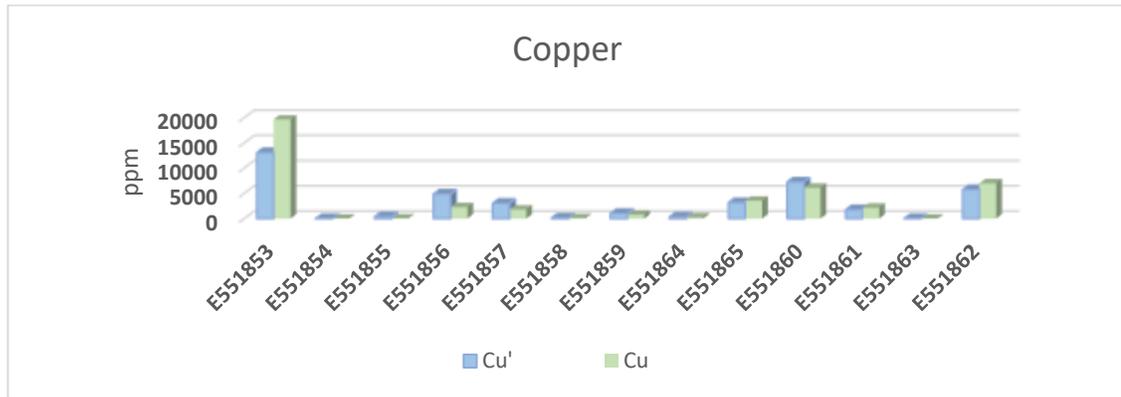
Independent re-sampling of 13 samples yielded the following results: a) 12 cobalt results in the same order of magnitude to the original, one with a substantially higher values; and b) 13 copper results in the same order of magnitude to the original. The relative Co/Cu ratio of the 13 check-assay results remains proportionate to the original assay results being verified. The variability of the results can be attributed to sample variance where the relative sulphide mineral concentration within the sample interval being resampled for the check assay exercise varies (Table 12-2). The site visit QP concluded that the results of his independent resampling program were satisfactory.

Table 12-2 – InnovExplo independent re-sampling results for the Iron Creek 2023 MRE Project

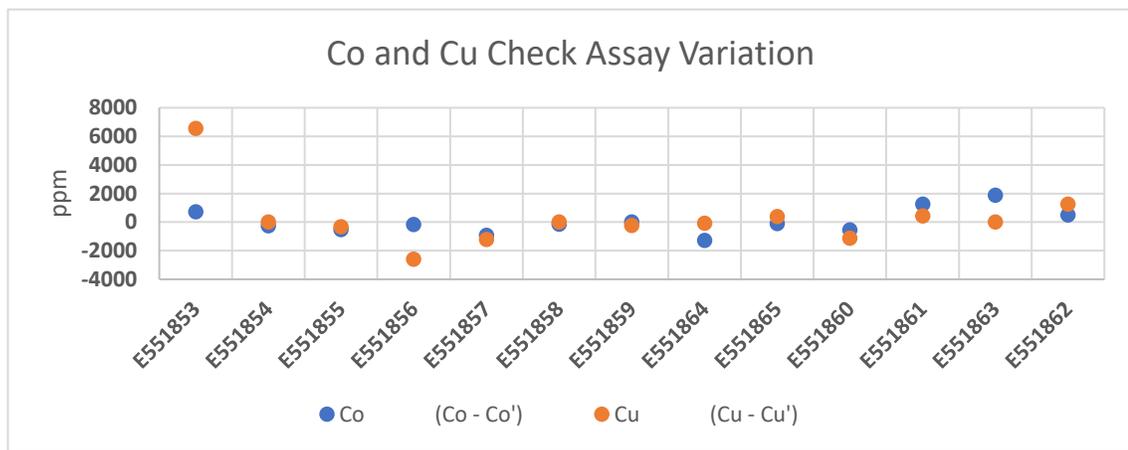
Hole Number	from (m)	to (m)	Expected		Independent Control		Assay value	
			Assay Values		Check Assay Values		Variations	
			Co' (ppm)	Cu' (ppm)	Co (ppm)	Cu (ppm)	Co (Co - Co') (ppm)	Cu (Cu - Cu') (ppm)
IC17-04	75.9	77.4	2,779	13,091	3,510	19,650	731	6,559
IC17-19	115.8	116.9	2,678	12	2,430	30	-248	18
IC17-26	79.2	80.7	3,765	396.1	3,230	70	-535	-326.1
IC17-30	98.5	100.0	758	4878.2	591	2,280	-167	-2598.2
IC17-32	285.6	286.7	2,647	3,030.5	1,730	1,810	-917	-1220.5
IC17-39	358.0	359.1	1,123	118.6	973	120	-150	1.4
IC18-13	78.7	79.9	2,113	1,021.9	2,120	780-	7	-241.9
IC18-16	85.3	86.1	9,251	323,5	7,980	250	-1,271	-73.5
IC18-25	45.4	46.5	618	3,156.4	522	3,540	-96	383.6
ICS18-05	153.0	154.1	6,350	7,249	5,810	6,120	-540	-1129
ICS18-05	160.9	161.9	12,590	1,754.7	13,850	2,180	1,260	425.3
IC21-05A	403.9	404.8	126	10	1,995	30	1,869	20
IC21-02	302.2	303.6	481	5,750	987	7,000	506	1,250



- a) Cobalt original assay vs check assay: Difference between original and check assay values are minor, proportionate and within acceptable threshold;



a) Copper original assay vs check assay: Difference between original and check assay values are minor, proportionate and within acceptable threshold.



a) Cobalt and Cu check assay variation value: Co check assay values variations are within acceptable threshold for this MRE.

For Co the population: 12/13 samples have nearly identical results and 1 sample has slightly higher value (E551863) as the original assay; 5 assay values are slightly lower, 3 are slightly higher and 4 have equal to nearly equal values to the original values. All Co check assay values fall within acceptable variation range for this MRE.
For Cu the population: 11/13 samples have nearly identical results and 1 sample has a substantially higher value (E551853) and 1 has a substantially lower value (E551856) as the original assays; 3 assay values are very slightly higher, 3 are slightly higher and 4 have equal to nearly equal values to the original values; All Cu check assay values fall within acceptable variation range for this MRE.

Figure 12-10 – Cobalt and Copper original vs check assay result charts

12.5 Core Storage, Logging and Sampling Areas

During the site visit, the site visit QP found that the Issuer has appropriate and adequate infrastructure for drill hole description, sampling, and storage (Figure 12-5A and Figure 12-5B).

12.5.1 Core Storage

The drill core and pulps are adequately stored in nine secured and locked sea-containers in very good condition. They rest on slightly elevated pads above the surrounding well-drained ground surface. The containers are kept shut and locked, located on a privately-owned heavy equipment storage area 4.5km away, by road, from the core shed on the outskirts of Salmon, Idaho. Although the containers are secured with padlocks, there is

no specific security detail guarding the yard that is outlined by an open fence. The core storage area is gated but not locked, and the containers are within view of the landowner's residence at all times. The containers can only be opened by the Issuer's authorised personnel.

The core and pulp boxes are pristine, well-marked and relatively well-organized by hole number in the core box racks. At the time of the visit, the QP observed that in general, the order of the core boxes for any given complete drill hole is maintained in a relatively good logical sequential order. However, different portions of the given hole could be found in 2 or 3 different locations within a specific container for several odd holes. The Principal Geologist for the Issuer explained that the core had recently been moved to the new storage location, that the final organization of the core boxes remained to be completed. Random spot checks in the core boxes throughout the containers by the visiting QP indicated that the drill core is well-maintained and remains undisturbed. Overall, the core boxes are organized by drill hole area, or zone, and are stored in locked sea-containers. The integrity and maintenance of the core storage are assured by the Issuer's authorized personnel on regular and frequent visits that are carried out for work and for specific security spot checks.

The QP deems the drill core secured, well, in a good state and the core storage facilities adequate.



A and B) Secured core and pulp storage sea-containers in Salmon, Idaho; C) Drill core stored in organised core boxes in sea-containers; D) Stored pulp samples and drill core stored in the locked sea-container; E) Secured, well organized and documented pulps returned from ALS Laboratories to the Issuer in Salmon, ID;

Figure 12-11 – Secured core storage facility in Salmon, Idaho

12.5.2 Logging and Sampling Areas

The core shed facility, situated on the southern outer edge of Salmon, Idaho on Interstate I-28 includes the following logging, sampling, office, and representative reference rock sample display areas, and temporary sample storage and racks for exploration tools. The logging area is very well-organized and well-maintained. It is well-lit with natural and fluorescent lighting. The work environment is ergonomically planned with emphasis on employee safety, where heavy lifting and core box manipulation is optimised to prevent injuries from the core box reception at the shed to the core saw for sample preparation. The core is seamlessly, and effectively fed to the isolated core saw chamber for sampling without having to lift the core boxes during the logging process. The core saw chamber is also conceived for safety and to minimize sample contamination. The saw is a water cooled saw with three stage decanting and routine water replacement is used to minimize dust production. A respirator is required to be worn by core cutting personnel at the facility. A fan is also installed in a vent hole to provide some negative pressure in proximity to the core saw. However, the chamber does not vent directly to an outdoor environment and therefore can output dust into the core logging area when closed in winter.



A) Issuers' core shed on I-28 in Salmon, ID (photo Google Earth); B) Efficient ergonomic core logging benches properly set-up for safe and comfortable core logging, C) temporary storage racks and D) confined core cutting and sampling lab.

Figure 12-12 – Issuers' Core shed in Salmon, Idaho, USA

12.6 Discussion and Recommendations

The site visit QP had no major concerns with the drill core integrity and log description or with the precision of the database generated by the Issuers' geologists for the present 2023 MRE. However, it is the site visit QP's opinion that some improvements could be made to the core logging and data capture, and for the photographic drill core documentation procedures and protocols. These proposed improvements are presented in item 12.6.1 and 12.6.2 below.

In addition, the core cutting laboratory presents a preventable potential health safety issue in the core shed that could be improved. The ventilation system from the core cutting and sampling lab does not have a sufficient ventilation system to adequately establish a negative pressure environment and pipe any dust produced during cutting to the exterior of the facility. Remediation to this issue could easily be done by adding an adequate ventilation duct to send the particles outdoors directly from the core cutting lab and outside the enclosed work area of the core shed. The site visit QP recommends

connecting an output exhaust pipe to the exhaust fan of the core cutting lab to push the core saw ejections directly outdoor. This would need to be done with compliance with the various regulatory organizations.

12.6.1 Data capture and logging software

As above mentioned in item 12.2.1, the core logging is captured by the geologists and technicians directly in core log form in Excel spreadsheets, using pre-defined, locked, dropdown menus designed and controlled by the Principal Geologist. It is the QP's opinion that this practice leaves too much room to import too much wrong, or non-standardized data/descriptions into the final database.

Although, some elements of control are in place to prevent data and nomenclature variations and alterations during the logging data capture and transfers to the final Access database, the use of Excel spreadsheets for the logging process leaves many possibilities to corrupt the integrity of the forms, modify the nomenclature and table, or column structure potentially negatively affecting the final database. It may also result in extra, time-consuming database verifications, corrections and standardisation work to validate the Issuers' final Access database. In order to avoid, or minimise erroneous data entry, nomenclature variations or typos during the logging process, and to standardise the overall logging format, it would be advisable to use an industry recognized logging software for each and every step of the logging protocol from the extraction of the core at the drill through the geological logging, to the sampling and introduction of the QA/QC check standards prior to exporting the data captured in the logging software to the final database used to generate any resource models and calculations.

12.6.2 Core Photography

It was also observed that the core photo library presented images with great image quality variations resulting from the method used to document the drill core.

From 2017 to 2019, core was photographed in a core photo booth by a technician to maintain consistency of artificial lighting and objective distance to the core. This system was efficient and maintained consistency but the photograph quality was not optimal. In 2021 the lead geologist established an alternative technique to photograph core under natural light. A white balance was photographed along with a standard labeling convention to allow post-processing to standardize variations in light as occur with natural lighting. These photographs did produce higher quality images than the photo booth design but maintained less consistency. In addition, the process was time-consuming and raises safety hazards to the employees and increasing the risk to the integrity itself through the multiple handling of the core boxes.

To improve and remediate the above-mentioned core photography issues, the visiting QP recommends installing a dedicated, fixed or mobile, core photography station directly on the core benches that can be operated by the logging geologist directly during the logging process, or by the lab technician upon completion of the logging process. A mobile station would be set on rails mounted directly on the logging bench and moved up and down the bench to photograph the core. A fix station could be mounted at the end of the logging bench where the core is pushed through under the station before entering the core cutting lab, etc. Several possibilities are available. The station should be able to

maintain the photography lens at a constant distance, and its surface parallel to the core boxes.

Producing a standardized frame of reference in the logging facility, in which the camera is set at a fix distance and angle, using constant lighting, scales and title block will improve the quality of the core documentation and could improve the overall core shed productivity and employee fatigue and safety.

12.7 Conclusion

Based on the site visit observations, verifications and on the discussions with the Issuers' key representatives, the visiting QP concluded that reasonable exploration and definition drilling procedures are in place. There were no limitations on, or failure to conduct, the data verification for this report. A site visit was completed which showed that the protocols and procedures used to collect and generate the data are in accordance with industry standards and have been accurately transcribed from the original source and the reported drill hole collar locations in the 2023 MRE database are of good quality and acceptable for usage in the production of this Report.

Overall, the Authors are of the opinion that the data verification process demonstrates the validity of the data and protocols for the Project. The Authors consider the database for the Project to be valid and of sufficient quality to be used for the 2023 MRE.

13. MINERAL PROCESSING AND METALLURGICAL TESTING

This summary accurately represents the mineral processing and metallurgical testing conducted with mineralized material from the Property.

13.1 Historical Testing

Metallurgical test work dates to the early 1970s when studies were done by Hanna and its subsidiary Coastal. Apparently, Noranda also undertook some metallurgical testing. The original metallurgical files or reports are apparently not available. The only sources of metallurgical information are summaries by others (e.g., Ristorcelli, 1988; Centurion Gold, 1990).

Work done by Hanna/Coastal showed that the coarse-grained sulphides were well liberated and could be floated as a bulk concentrate. A copper concentrate was then produced with excellent recovery. This concentrate contained about 0.5oz Ag/ton and 0.2% As. The cobalt was rejected with the pyrite in the tailings. Concurrent mineralogical examination showed that the bulk of the copper was present as chalcopyrite. Little discrete cobalt mineralization was detected, indicating that most cobalt was contained within the pyrite structure as cobaltian pyrite. The cobalt content ranged from 2.0 to 4.0%. Additional pyrite, probably from a different depositional event, was found that was completely devoid of cobalt. These observations strongly suggest that the maximum cobalt content in the concentrate will be limited by the solubility of the cobalt in the pyrite structure.

13.2 Metallurgical Testing 2018

McClelland Laboratories Inc. (“McClelland”) in Sparks, Nevada, was commissioned by the Issuer to undertake metallurgical testing commencing in 2018. McClelland received samples of drill core from four holes drilled in 2017, but the cobalt and copper contents were low, and the core was not tested. The Issuer then extracted two bulk samples from Adit-1 and one from Adit-2, which were received by McClelland in May of 2018. At McClelland the sample identification of ICA1-SE, ICA1-SW and ICA2 were checked against First Cobalt’s sample manifest. Then each sample was weighed, photographed and given a unique laboratory number so that the sample chain of custody could be maintained until the material was either returned to the issuer or disposed. If two or more samples are to be combined to produce a composite for testing that composite will be given a new laboratory number for tracking purposes. Once the samples were logged in, they were placed in a freezer to prevent any possibility of sulphide oxidation during storage.

The three adit samples were found to contain mostly size fragments greater than 2 inches. As a result, after each sample was thoroughly blended sufficient material was split out and set aside for eventual comminution tests. Then material was split out for head assays. Each sample was assayed in triplicate for cobalt and copper, with single assays for Ag, As, C-Total, C-Organic, S-Total and S-Sulphide. For the triplicate assays, precision exceeded 98% for five of the six sets of assays. Precision exceeded 96% for the sixth set of assays. The head assays for the three bulk samples are summarized in Table 13-1, with sulfate sulphur calculated as the difference between the total and sulphide sulphur values. A single ICP metals analysis was done on each of three samples

for the remaining metals, including iron. Results for the latter element are included in Table 13-1.

Table 13-1 – Adit Bulk Sample Head Assays

Analyte, Units	McClelland Bulk Sample Identification		
	4313-001	4313-002	4313-003
Ag, ppm	5	5	<1
As, ppm	619	426	713
Ave. Co, ppm	4,287	2,596	2,653
Ave. Cu, ppm	8,659	9,966	1,250
C – Total, %	0.15	0.13	0.09
C – Organic, %	0.06	0.02	0.04
Fe – Total % (ICP result)	14.60	11.55	12.00
S – Total, %	11.4	7.84	10.3
S – Sulfide, %	8.63	4.47	6.06
S – Sulfate, %	2.77	3.37	4.24

Note: sample 4313-001 is ICA1-SE; sample 4313-002 is ICA1-SW; and sample 4313-003 is ICA2.

Two of the bulk samples have head grades approaching 1.0% Cu, while the third has a much lower copper content. All three have cobalt values in the range of 0.25 to about 0.40% Co. There was agreement with the Issuer that these three samples would be suitable for the initial flotation testing.

The first step in the initial flotation testing was to determine the optimum grind size for each bulk sample. This involved running several rougher flotation tests where 80% of the feed passed grind sizes of 212, 106, 75, 53 or 45 microns. The optimum grind size was determined by plotting cobalt recovery and concentrate grade vs. feed size. A typical grind size plot is shown in Figure 13-1.

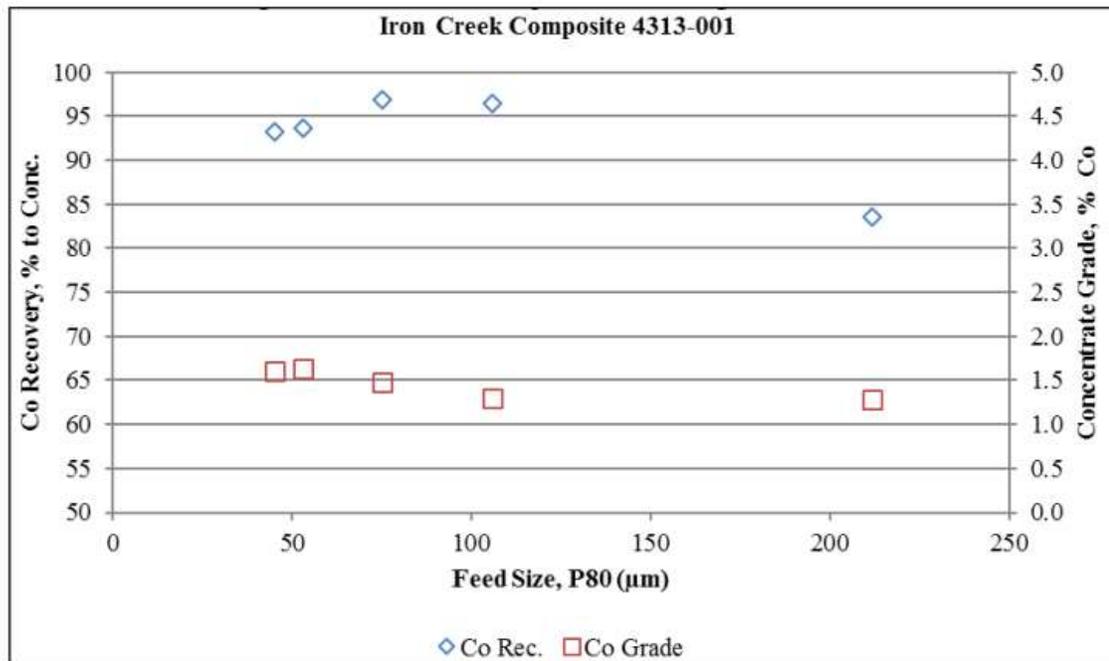


Figure 13-1 - Grind Size Optimization Plot for Bulk Sample Sample Head Assays

The grind size optimization tests were very consistent. All three bulk samples produced the same result, with the optimum grind size being 80% of the material passing a screen size of 75 microns, i.e., a P80 of 75µm.

The first set of flotation tests involved a series of rougher floats to determine if bulk sulphide concentrates could be recovered that contained high percentages of both cobalt and copper. Two rougher tests were conducted on each bulk sample. All tests utilized a consistent set of reagents (with or without copper sulfate additions) and were performed at 33wt.% solids and the natural pH (pH 6 to 8). Results are summarized in Table 13-2.

Table 13-2 Summary of 2018 Rougher Flotation Tests

Sample	4313-001		4313-002		4313-003	
Test No.	F-1	F-2	F-3	F-4	F-5	F-6
Wt. %						
Concentrate	28.1	30.4	32.3	23.0	25.9	26.9
Tail	71.9	69.6	67.7	77.0	74.1	73.2
Cu ppm						
Concentrate	30,876	29,093	30,758	42,871	4,641	4,498
Tail	621	385	206	164	170	88
Cu Distribution %						
Concentrate	95.1	97.1	98.6	98.7	90.5	94.9
Tail	4.9	2.9	1.4	1.3	9.5	5.1
Co ppm						
Concentrate	15,270	14,736	7,854	10,891	10,510	10,419
Tail	247	211	126	146	157	174
Co Distribution %						
Concentrate	96.0	96.8	96.7	95.7	95.9	95.6
Tail	4.0	3.2	3.3	4.3	4.1	4.4
S Distribution %						
Concentrate	96.3	97.4	98.2	97.6	96.6	96.2
Tail	3.7	2.6	1.8	2.4	3.4	3.8

All three bulk samples responded well in the rougher flotation tests. The mass pull averaged about 28% with more than 96% of the sulphide sulphur contained in the resulting concentrate. About 96% of the cobalt also reported to the sulphide concentrate.

Copper recovery into the sulphide rougher concentrate showed somewhat more variability, averaging over 97% for the two high-grade samples but less than 93% for the lower-grade sample. It does not appear that the addition of the copper sulfate had a significant impact on the flotation responses.

Following successful completion of the rougher tests, additional bulk rougher tests were conducted to produce enough sulphide concentrate to perform the cleaner flotation tests. These involved three different flotation conditions for each bulk sample: a) Cleaning at the natural pH without regrinding, b) Adding lime to pH 12 without regrinding, and c) Adding lime to pH 12 with regrinding. The results from the cleaner tests are shown in Table 13-3, Table 13-4 and Table 13-5. Except as noted, the cleaner flotation tests were conducted under the same conditions as the rougher tests.

Table 13-3 Cleaner Test Results for Bulk Sample 4310-001

Test No.	F-22	F-25	F-28
Test Conditions	No Re grind/ Nat. pH	No Re grind/pH 12	Re grind/ pH 12
Weight %			
Recleaner Conc.	22.7	3.4	2.5
Cleaner Tail #2	1.9	4.5	0.8
Cleaner Tail #1	4.5	21.2	25.8
Rougher Tail	70.9	70.9	70.9
Cu Content, ppm			
Recleaner Conc.	35,600	117,000	275,000
Cleaner Tail #2	12,300	34,400	107,000
Cleaner Tail #1	6,100	16,700	4,470
Rougher Tail	347	347	347
Cu Distribution, %			
Recleaner Conc.	91.5	42.7	75.3
Cleaner Tail #2	2.6	16.6	9.4
Cleaner Tail #1	3.1	38.0	12.6
Rougher Tail	2.8	2.7	2.7
Co Content, ppm			
Recleaner Conc.	19,500	15,800	3,400
Cleaner Tail #2	12,600	19,700	12,800
Cleaner Tail #1	6,610	16,900	18,100
Rougher Tail	225	225	225
Co Distribution, %			
Recleaner Conc.	86.0	10.4	1.7
Cleaner Tail #2	4.7	17.2	2.0
Cleaner Tail #1	5.8	69.4	93.1
Rougher Tail	3.1	3.0	3.2

Table 13-4 Cleaner Test Results for Bulk Sample 4313-002

Test No.	F-23	F-26	F-29
Test Conditions	No Re grind/ Nat. pH	No Re grind/pH 12	Re grind/ pH 12
Weight %			
Recleaner Conc.	12.9	3.8	3.0
Cleaner Tail #2	3.3	3.8	0.7
Cleaner Tail #1	7.4	16.0	19.9
Rougher Tail	76.4	76.4	76.4
Cu Content, ppm			
Recleaner Conc.	60,000	127,000	303,000
Cleaner Tail #2	40,800	40,500	55,400
Cleaner Tail #1	15,900	24,100	4,900
Rougher Tail	253	253	253
Cu Distribution, %			
Recleaner Conc.	74.0	46.3	85.4
Cleaner Tail #2	12.9	14.8	3.6
Cleaner Tail #1	11.3	37.0	9.2
Rougher Tail	1.8	1.9	1.8
Co Content, ppm			
Recleaner Conc.	15,700	12,900	2,180
Cleaner Tail #2	13,000	16,000	13,000
Cleaner Tail #1	5,100	11,900	14,500
Rougher Tail	190	190	190
Co Distribution, %			
Recleaner Conc.	68.0	15.6	2.1
Cleaner Tail #2	14.4	19.3	2.9
Cleaner Tail #1	12.7	60.5	90.5
Rougher Tail	4.9	4.6	4.6

Table 13-5 Cleaner Test Results for Bulk Sample 4313-003

Test No.	F-24	F-27	F-30
Test Conditions	No Re grind/ Nat. pH	No Re grind/pH 12	Re grind/ pH 12
Weight %			
Recleaner Conc.	12.0	1.6	0.5
Cleaner Tail #2	4.8	1.3	1.3
Cleaner Tail #1	8.7	22.6	23.7
Rougher Tail	74.5	74.5	74.5
Cu Content, ppm			
Recleaner Conc.	7,700	62,800	107,000
Cleaner Tail #2	5,200	10,400	29,700
Cleaner Tail #1	2,060	1,000	1,200
Rougher Tail	142	142	142
Cu Distribution, %			
Recleaner Conc.	63.3	68.3	40.8
Cleaner Tail #2	17.1	9.2	29.4
Cleaner Tail #1	12.3	15.3	21.7
Rougher Tail	7.3	7.2	8.1
Co Content, ppm			
Recleaner Conc.	15,700	13,200	7,190
Cleaner Tail #2	15,000	15,300	10,200
Cleaner Tail #1	6,240	13,200	12,600
Rougher Tail	190	190	190
Co Distribution, %			
Recleaner Conc.	57.4	6.0	1.1
Cleaner Tail #2	22.0	5.6	4.0
Cleaner Tail #1	16.6	84.6	90.8
Rougher Tail	4.0	3.8	4.0

Overall, the fine re grind followed by flotation at pH 12 gave the best results. For the two higher-grade samples, copper recovery ranged from 75 to 85% and the resulting cleaner concentrates varied from 27.5 to 30.0% Cu. In this grade range, the concentrate should be readily accepted as smelter feed. Since most of the arsenic appears to associate with the pyrite, no impurities are expected to reach smelter penalty levels.

The third sample had a much lower copper head grade and did not respond as well as the others when the pH was raised and the sample was re ground. Under these conditions the recleaner concentrate contained only about 40% of the copper at a grade below that required for smelting. Over 20% of the copper also reported to the pyrite concentrate,

along with the cobalt. Thus, this material will require further optimization to produce an acceptable flotation response.

The cleaner tail #1 represents the pyrite that was depressed by increasing the pH to 12. For all three bulk samples, this product contains more than 90% of the cobalt at grades of 1.2% to 1.8%. Higher grades may be difficult to achieve, as most of the cobalt appears to substitute for iron in the pyrite crystal structure. Post-flotation mineralogical studies on various products from the flotation studies have now been completed to confirm this as reported by Ma (2018). Results from these studies are discussed below in more detail.

During the flotation testing, it was realized that the adits had been open to the atmosphere for years. Thus, there was an initial concern that the exposed sulphide mineralization could have undergone surface oxidation, which might adversely affect flotation recovery. Therefore, a short analytical program was undertaken to investigate this possibility. Since the copper sulphides are more readily oxidized than pyrite, the focus was on the former. If oxidation had occurred, the result would be the formation of copper oxide on the exposed mineral surfaces. Since any copper oxides, such as cuprite, are acid soluble, splits from the head samples of all three bulk samples were analyzed for acid-soluble copper. The results are shown in Table 13-6.

Table 13-6 Acid-Soluble Copper Content of the Adit Material

Sample ID	Total Cu ppm	Acid-Soluble Cu ppm	Acid-soluble Cu % of Total Cu
Adit Sample #1	8,659	306.5	3.54
Adit Sample #2	9,966	232.5	2.33
Adit Sample #3	1,250	41.5	3.32
Average	6,625	193.5	3.06
<i>* The values shown are averages of multiple assays.</i>			

As can be seen, the acid-soluble copper is far lower than the total copper content of each sample. In addition, only trace amounts of copper oxide were detected in the mineralogical program discussed below and 99% of the copper was carried in the chalcopyrite. These results suggest that any impact of sample oxidation should be small. An additional factor is that the bulk samples were quite coarse so that most mineral surfaces would not be exposed to air until the material was crushed and ground for flotation. At this point the samples were stored in a freezer.

It is worth noting that the current flotation results parallel those obtained in the earlier studies done by Hanna/Coastal. Both programs produced acceptable copper concentrates and showed that the bulk of the cobalt reported with the pyrite. However, the cobalt grade was generally low.

13.3 Mineralogical Evaluation

Once the initial flotation tests were completed and a variety of flotation products were available, a suite of products was selected for mineralogical evaluation. This work was done at BV Minerals – Metallurgical Division of Bureau Veritas Commodities Canada Ltd., in Richmond, British Columbia, and documented in the report of Ma (2018). Four samples were studied including at least one product from each bulk sample and at least one sample of each cleaner flotation product. The samples included the cleaner concentrate from Test F23 (bulk sample 002), the cleaner tail #2 from Test F25 (bulk sample 001), and the cleaner tail #1 from Tests F26 (bulk sample 002) and F30 (bulk sample 003).

Pyrite was the dominant sulphide in all samples, followed by chalcopyrite. Together these accounted for 56% to 82% of the total sample mass, respectively. Copper oxide and other sulphides, including the cobalt-bearing jaipurite/siegenite, were found in only trace amounts. In descending order, the principal non-sulphide gangue minerals were quartz, muscovite/illite and biotite/phlogopite. All other gangue minerals were present at levels below 1%.

The mineralogical investigation included QEMSCAN particle mineral analysis, X-ray diffraction analysis (to help calibrate the QEMSCAN results) and electron microprobe analysis. Results from these analyses support the following conclusions:

- a) The deportment of cobalt, copper and arsenic is very similar in all samples.
- b) Pyrite is the main carrier for cobalt, carrying over 90% of the total sample cobalt, with cobalt levels ranging from <0.1% to more than 5%. This cobalt likely substitutes for iron in the pyrite structure.
- c) Pyrite is also the major carrier of the arsenic, with arsenic concentrations to nearly 7,000ppm. However, the reconciliation of the QEMSCAN and chemical assays suggests there may be other arsenic-bearing minerals unaccounted for.
- d) A smaller amount of cobalt, up to 700 ppm, is carried in the chalcopyrite, probably also substituting for iron. This cobalt is not recoverable and would be lost in the copper concentrate sent to the copper smelter. The cobalt-bearing sulphides may also float with the chalcopyrite and be lost as well. Any cobalt that reports to the smelter would likely be recovered in the electrolyte purification section of the copper refinery. It is not clear if this would be considered as a payable by-product.
- e) The main contaminants in the low-grade copper concentrate are liberated pyrite grains and non-sulphide gangue.
- f) Most of the copper lost in the cleaner tails (up to 81%) is contained in liberated sulphide grains; and
- g) The majority of the pyrite lost in the cleaner tails is also liberated.

The last three conclusions suggest that flotation optimization should improve both metal recovery and concentrate quality.

13.4 Metallurgical Testing 2021

In 2021, a sample of drill cores identified as 4657-Comp was sent to a metallurgical laboratory perform some flotation test work. One of the goals of the test was to verify if a

cobalt concentrate with a higher grade could be obtained. The Table 13-7 shows the results of the test work.

Table 13-7 – 2021 Flotation Test Results

Idaho Cobalt Composite 4657-001, 80%-150M Feed Size											
Product	Wt. %	Cum. Wt. %	Assay			Cu Distribution		Co Distribution		S ⁻ Distribution	
			% Cu	% Co	% S ⁻	%	Cum. %	%	Cum. %	%	Cum. %
Recleaner Conc.	4.6	4.6	17.39	0.90	25.9	92.4	92.4	15.0	15.0	19.7	19.7
3 rd Cl. Tail	0.8	5.4	0.81	1.59	31.38	0.7	93.1	4.6	19.6	4.2	23.9
2 nd Cl. Tail	15.3	20.7	0.11	1.30	28.71	1.9	95.0	72.1	91.7	72.7	96.6
1 st Cl. Tail	3.4	24.1	0.81	0.23	4.31	3.2	98.2	2.8	94.5	2.4	99.0
Ro. Tail	76.0	100.1	0.02	0.02	0.08	1.8	100.0	5.5	100.0	1.0	100.0
Composite	100.1		0.87	0.28	6.04	100.0		100.0		100.0	

The copper concentrate obtained has a lower grade than what was seen in the previous test work and the grade of the cobalt concentrate stays in the same range of values. It should be noted that the cobalt grade was expected to be higher in this sample than it was in the adit samples that were tested in 2018 but it was not the case. The Table 13-8 shows the assayed grade in the “4657-Head” column while the calculated grade based on the flotation test work is shown in the “4657-Comp” column. The three other column shows the grade from the samples tested in 2018.

Table 13-8 – Head Assay Comparison

Analyte, units	4657-Head	4657-Comp	Adit-001	Adit-002	Adit-003
Co, ppm	2,428	2,800	4,287	2,506	2,653
Cu, ppm	7,910	8,700	8,659	9,966	1,250
Sulfide, %	3.70	6.04	8.63	4.47	6.06
Sulfate, %	4.88	ND	2.77	3.37	4.24

The Table 13-9 shows the cobalt grade and recovery based on cleaner tails combination. It shows that it is only possible to increase slightly the cobalt grade and the expense of an important loss of recovery.

Table 13-9 – Potential Cobalt Concentrates

Potential Co Products	Wt. %	Assay			Distribution		
		% Cu	% Co	% S ⁻	% of Cu	% of Co	% of S ⁻
3 rd Cl. Tail	0.8	0.81	1.59	31.38	0.7	4.6	4.2
3 rd + 2 nd Cl. Tail	16.1	0.14	1.31	28.84	2.6	76.7	76.9
2 nd + 1 st Cl. Tail	18.7	0.24	1.11	24.27	5.1	74.9	75.1
3 rd + 2 nd + 1 st Cl. Tail	19.5	0.26	1.13	24.57	5.8	79.5	79.3
Ro. Conc.	24.1	3.53	1.08	24.82	98.2	94.5	99.0

A higher cobalt grade would have had the potential to produce a higher cobalt grade concentrate if it means that the pyrite, the cobalt carrier, has itself a higher cobalt grade. Another point that was observed is the higher ratio of sulfate to sulphide in the 4657

sample. This is an indication of oxidation that had occurred to the drill core sample. This oxidation may have produced soluble copper species, and this could be the explanation of the lower grade of the copper concentrate, a result of pyrite activation by copper ions.

13.5 Summary

The Issuers metallurgical 2018 testing has been limited to work on two bulk samples obtained from adjacent spots in Adit-1 and one bulk sample from a nearby single location in Adit-2. It is not clear how closely they represent the average life-of-mine cobalt and copper levels. However, both the cobalt and copper levels in the samples do fall within the expected grade ranges, so are representative in that sense.

All three samples responded very well when subjected to rougher flotation using standard conditions at the natural pH of 6 to 8. More than 96% of the sulphide sulphur reported to the bulk concentrate and cobalt recovery also averaged over 96%. Copper recovery into the bulk concentrate averaged over 97% for the two high-grade samples and 92.5% for the low-grade sample.

An initial round of cleaner flotation tests was performed on the sulphide rougher concentrates. Optimum performance was achieved by regrinding the rougher concentrate and floating at pH 12 to depress the pyrite. For the two high-grade copper samples, 75% to 85% of the copper was recovered into copper concentrates that would be suitable for conventional copper smelting. The low-grade copper sample appears to need some further flotation optimization in order to produce acceptable smelter feed.

The cobalt was recovered in the pyrite product that represents the cleaner flotation tailings. For all three bulk samples, this product contained more than 90% of the cobalt at grades of 1.2% to 1.8% Co. Higher grades may be difficult to obtain, as the cobalt is bound up within the pyrite crystal structure.

Following completion of the flotation tests, mineralogical studies were performed on four cleaner flotation products. These confirmed that pyrite and chalcopyrite are the principal sulphide minerals and that the pyrite is also the major carrier for both cobalt and arsenic. The main contaminants in the low-grade concentrate are liberated pyrite grains and non-sulphide gangue. Most of the copper losses in the cleaner tails are liberated grains of chalcopyrite. Most of the pyrite lost in the cleaner tails is also liberated. These findings suggest that optimization of the flotation parameters should improve both metal recovery and concentrate quality.

The metallurgical testing performed in 2021 shows lower metallurgical performances that was likely related to drill core sample degradation with time. These results are then not considered for predicting performances.

It is expected that the cobalt concentrate will be sent to a plant that has the required process to extract the cobalt and then pay for the cobalt value in the concentrate. The copper concentrate will be sent to a copper concentrate treatment plant, and it is not expected that metal credit will be obtained from cobalt.

13.6 NSR Calculation

The metallurgical test work shows that a saleable copper concentrate could be obtained from the mineralized material, but difficulties were met in the samples of the 2021 campaign. However, it could be expected that more test work will demonstrate that the

flotation parameters could be adjusted to improve the metallurgical performances. The grade of the cobalt concentrate could reach a value of near 1.5% but this seems to be the highest value that could be obtained. Based on the results, it could be stated that two concentrates that have acceptable grades could be produced. However, the applied metal recoveries should be conservative considering the limited number of flotations test work.

The Table 13-10 and the Table 13-11 show the criteria used for the NSR calculation of the copper and cobalt concentrate. The recovery of copper and cobalt is considered as a conservative value while the grade is comparable to what was obtained in test work. The distance from the smelter is based on the nearest known smelter for copper concentrate and a projected smelter in the area for the cobalt, as described in section 5.3. The smelting cost is based on what is generally seen in the industry. No approach with the smelting plant has been done to confirm the availability or the smelting cost. Considering the level of the present study, this is an acceptable approach. The table also include the NSR value related to the average head grade of the block model.

Table 13-10 – Copper NSR Calculation Criteria

Parameters	Unit	Value
Concentrate		
Copper grade	%	0.25
Copper recovery	%	85.0
Concentrate grade	%	28.0
Concentrate moisture	%	5.0
Economic		
Copper selling price	\$/t	8 800
Transport		
Truck transport cost	\$/t/km	0.15
Rail transport cost	\$/t/km	0.05
Distance to smelter by truck	km	600
Distance to smelter by rail	km	-
Smelting		
Treatment cost (by concentrate dry tons)	\$/t	200
Refining cost (per tonne of metal)	\$/t	5
Payable metal	%	98

Table 13-11 – Cobalt NSR Calculation Criteria

Parameters	Unit	Value
Concentrate		
Cobalt grade	%	0.10
Cobalt recovery	%	85.0
Concentrate grade	%	1.5
Concentrate moisture	%	5.0
Economic		
Cobalt selling price	\$/t	66 250
Transport		
Truck transport cost	\$/t/km	0.15
Rail transport cost	\$/t/km	0.05
Distance to smelter by truck	km	200
Distance to smelter by rail	km	-
Smelting		
Treatment cost (by concentrate dry tons)	\$/t	200
Refining cost (per tonne of metal)	\$/t	5
Payable metal	%	95

Since the NSR must be calculated for each block of the model because the value is related to the grade that is different from block to block, an equation for NSR calculation has been derived from the criteria. The NSR calculation is also based on a recovery that is constant throughout the deposit, which is again an acceptable assumption considering the level of the study. The Table 13-12 and Table 13-13 show the equation and the constant that are used in this equation. This equation has then been integrated in the block model for calculating the NSR of each block.

Table 13-12 – Copper NSR Calculation Formula

NSR calculation formula		
CuHG (Copper Head Grade)	%	0.25
CuRe (Copper Recovery)	%	85.0
CuCG (Copper Concentrate Grade)	%	28.0
A		0.861910
B		2.947368
$NSR = CuHG * CuRe * (A - B / CuCG)$	\$/t	16.08

Table 13-13 – Cobalt NSR Calculation Formula

NSR calculation formula		
CoHG (Cobalt Head Grade)	%	0.10
CoRe (Cobalt Recovery)	%	85.0
CoCG (Cobalt Concentrate Grade)	%	1.5
A		6.293275
B		2.315789
$NSR = CoHG * CoRe * (A - B / CoCG)$	\$/t	40.37

13.7 Discussion and Recommendations

The main objective of the ongoing metallurgical program should be to advance the test work to the point where it supports preparation of economic and engineering studies. Testing has shown that the Iron Creek mineralized material generally responds well to conventional milling and flotation with 92% to 97% of both cobalt and copper. Production of a copper concentrate suitable for conventional copper smelting has been achieved. More than 90% of the cobalt has been recovered in the pyrite concentrate, along with most of the arsenic.

However, so far samples have been limited to material from the existing adits, so are not representative of the entire mineralized deposit. The main contaminants in the copper concentrates are liberated pyrite grains and non-sulphide gangue. Most of the copper and pyrite losses are present as liberated grains. Both suggest that further optimization would be beneficial. Also, there has been no testing yet on treatment of the pyrite product to extract and recover the cobalt and any residual copper. With the limited information available, the criteria for the calculation of the NSR are conservative values.

In view of the foregoing results, further optimization of the flotation parameters is needed to improve both metal recovery and concentrate grades. This should include locked-cycle flotation testing, along with supporting mineralogy. Additional samples from throughout the mineralized areas are also needed to confirm that these also respond well to the

flotation. That will help to confirm if metallurgical performance parameters should be varied from zone to zone or kept constant.

For the copper and cobalt concentrate, potential plants will have to be well identified and eventually have signed agreement to obtain treatment cost. Such requirement will be necessary for feasibility study level.

In addition, comminution testing should be performed to determine crushing and ball mill work indices and abrasion indices, to aid in circuit design. Some supporting mineralogical studies may also be beneficial.

14. MINERAL RESOURCE ESTIMATES

The updated mineral resource for the Iron Creek Project (the “2023 MRE”) was prepared by QPs Martin Perron, P.Eng. and Marc R. Beauvais, P.Eng. of InnovExplo, using all available information.

The mineral resources herein are not mineral reserves as they do not have demonstrated economic viability. The result of this study is individual mineral resource estimates for the Iron Creek project.

The effective date of the 2023 MRE is January 27, 2023.

The close-out date of Iron Creek Project database is December 15, 2022.

14.1 Methodology

The mineral resource area of the Iron Creek Project covers an area of a 1,652 m strike length and a 780 m width, and extends to a height of 852 m.

The 2023 MRE is based on diamond drill holes drilled between 2017 and 2022 and a litho-structural model constructed in Leapfrog.

The 2023 MRE was prepared using the Leapfrog Geo software v.2021.2.4 and with Surpac 2022. Surpac was used for the grade estimation, and block modelling. Basic statistics, capping and validations were established using a combination of Surpac, Microsoft Excel and Snowden Supervisor v.8.13 (Supervisor).

The main steps in the methodology were as follows:

- review and validation of the DDH database,
- validation of the topographic surface,
- modelling of the bedrock surfaces, the fault surfaces and the interpretation of the mineralized domains based on lithological and structural information and metal content,
- performing a capping study on assay data for each mineralized domain,
- grade compositing,
- geostatistics (spatial statistics),
- grade interpolation,
- validation of the grade interpolation,
- mineral resource classification,
- assess the mineral resource with “reasonable prospects for potential economic extraction” by selecting the appropriate cut-off grades and produce “resources-level” optimized underground mineable shapes and
- generation of a mineral resource statement.

14.2 Drill Hole Database

The database close-out date is December 15, 2022, and the effective date of the estimate is January 27, 2023.

The DDH database contains 86 surface (26,304.8m) and 31 underground DDHs (5,670.8m). The database contains 23,308 sampled intervals taken from 29,481m of drilled core. All the sampled intervals were assayed for copper and cobalt. The database

also includes lithological, alteration as well as structural descriptions and measurements taken from drill core logs.

The mineral resource database covers the strike length of the mineral resource area at variable drill spacings ranging mainly from 10 to 50m.

In addition to the tables of raw data, the mineral resource database includes tables of calculated drill hole composites and wireframe solid intersections, which are required for the statistical evaluation and mineral resource block modelling.

14.3 Geological Model

The geological model was built using the DDH database as the primary source of information (lithological units, alteration, and mineralization) as well as surface data from outcrops, including surface structural measurements. The model was also based on the regional geology maps (i.e., Degan and Taylor Mountain sheets), and data from the Idaho Geological Survey.

The model consists of a Lower Quartzite overlain by a Central Siltite unit. An Upper Quartzite resides on top of the Central Siltite. The Eocene Challis volcanics uncomfortably covers the Upper Quartzite (Figure 14-1).

The Central Siltite unit was then better define into Quartzite-enriched unit surrounded by Siltite-enriched rocks.

The mineralization can be found in either the Quartzite or Siltite rocks.

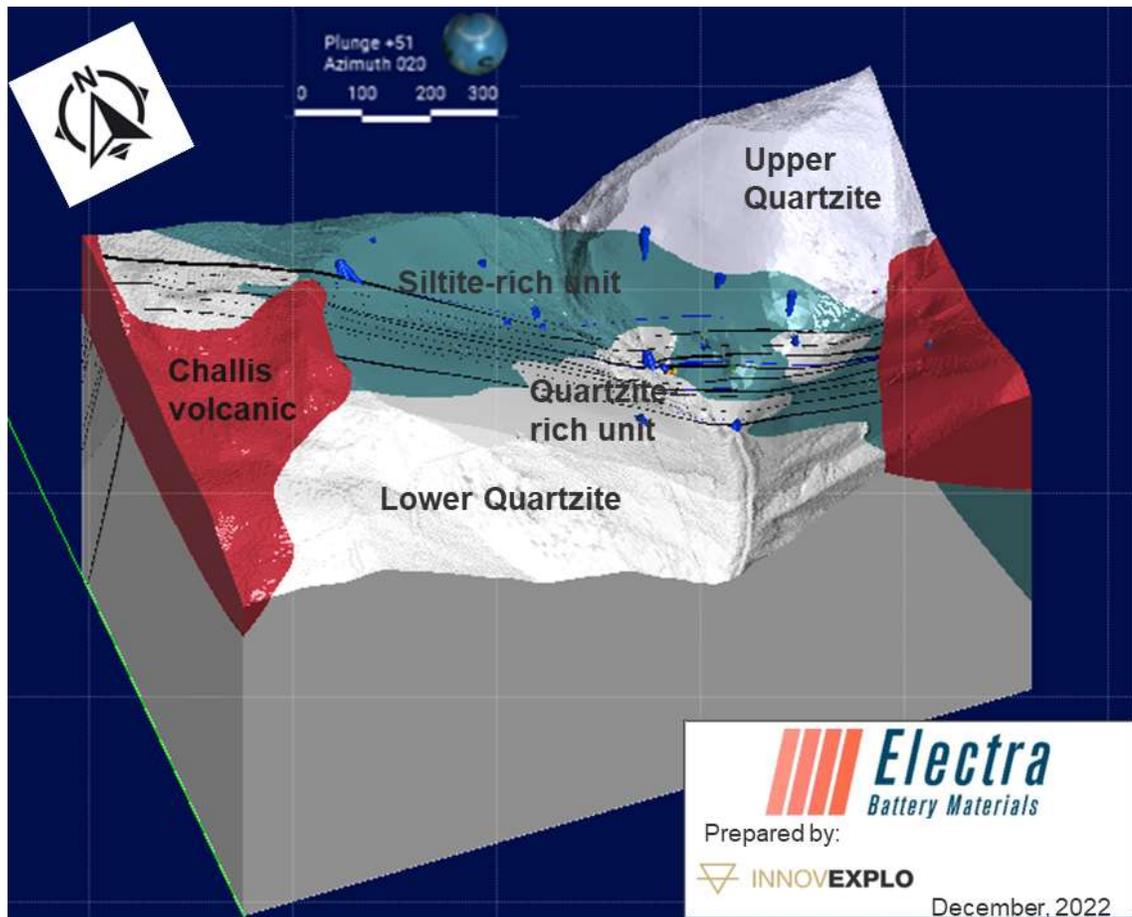


Figure 14-1 – Inclined View of the Geological Model Looking Northeast

14.4 Mineralization Model (Definition and Interpretation of Estimation Domains)

The mineralization and structural models were built using the DDH database as the primary source of information (assays, lithological units, alteration, and mineralization).

The structural model consists of nine modelled volumes representing shear zones called Shear 1 to Shear 9. These shear zones also coincide with mafic dykes that seem to have an unknown relationship to one another.

The mineralization model consists of a single mineralized domain (Figure 14-2 that was designed without a minimum thickness (true thickness of the mineralization zone) and is, therefore, not diluted. This modeling was preferred to better reflect the stratabound and structurally controlled mineralization occurrences as described in Item 7. The mineralized zone was modelled on the extents of logged intervals and snapped to assays irrespective of grades. A cut off grade of 0.015% Co or 0.5% Cu was assigned to the interpretation. This mineralization zone is used as the interpolation domain.

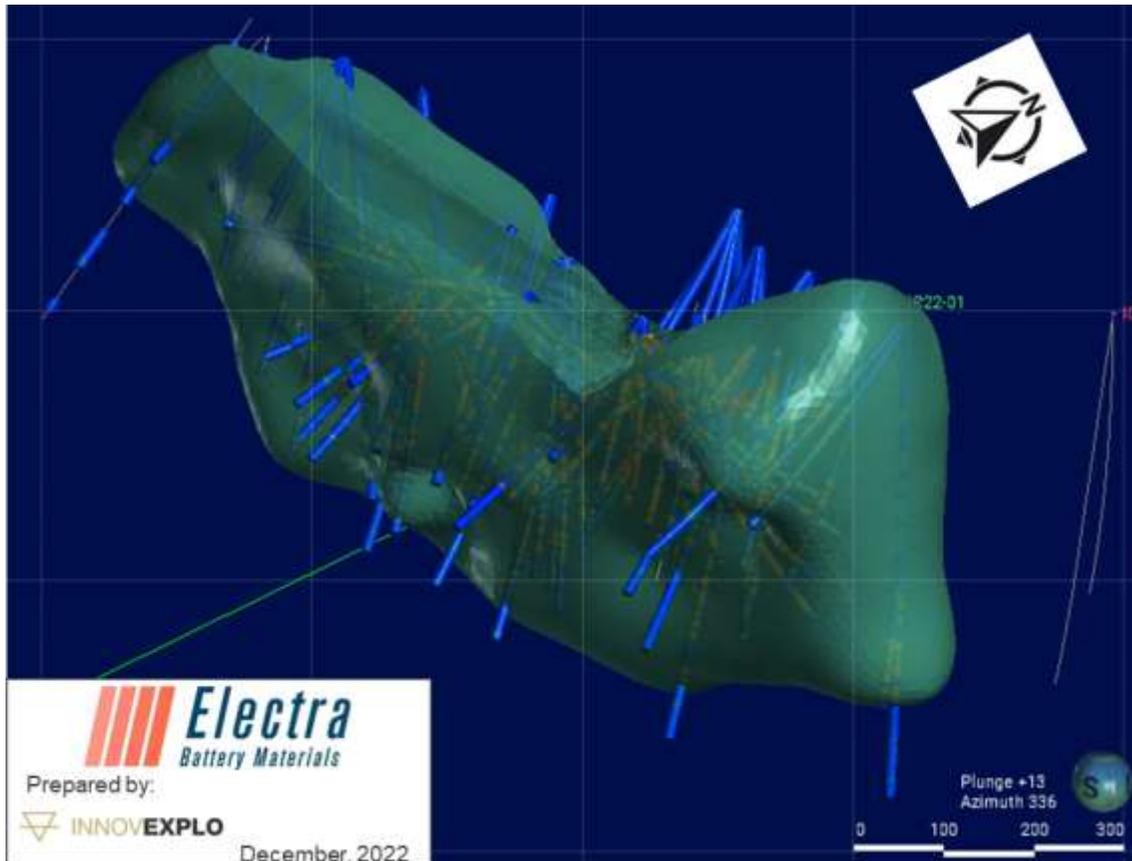


Figure 14-2 – Inclined View of the Mineralization Model Looking Northeast: Dilution Blocks (A) and Mineralized Zones (B)

14.5 Other 3D Surfaces (Topography, Bedrock and Voids Model)

Individual 3D surfaces were created to define the surface topography and overburden/bedrock contact. The topography surface was created from a LiDAR survey that has an approximately 1 m resolution. The overburden-bedrock contact surface was modelled using logged overburden intervals and is used to clip the 3D wireframes of the mineralization zones.

The voids model represents historical underground workings from the exploration drift. These 3D wireframes were provided by direct surveying of the underground workings. The void model was included in the block model as voids as it lays inside of the mineralization model.

14.6 High-grade Capping

Basic univariate statistics were completed for both Cobalt and Copper in the mineralization domain. Capping was applied to raw assays. Capping values were selected by combining the dataset analysis (coefficient of variation, decile analysis, metal content) with the probability plot and log-normal distribution of grades. Table 14-1 presents a summary of the statistical analysis for the estimation domain. Figure 14-3A



shows high grade capping for the Cobalt assays figure 14-3B shows high grade capping for the Copper assays.

Table 14-1 – Uncapped and Capped Assay Statistics

Code	Domain Name	Uncapped Assays						Capped Assays					
		Count	Mean (%)	Std. (%)	Min (%)	Max (%)	CoV	Capping Value (%)	Count Capped	Mean (%)	Std. (%)	Max (%)	CoV
101	Co	19,869	0.05	0.12	0.00	1.59	2.17	1.00	32	0.05	0.11	1.00	2.11
102	Cu	19,869	0.15	0.56	0.00	20.00	3.83	10.00	9	0.15	0.52	10.00	3.61

Std = standard deviation; Min = minimum; Max = maximum; CoV = coefficient of variation

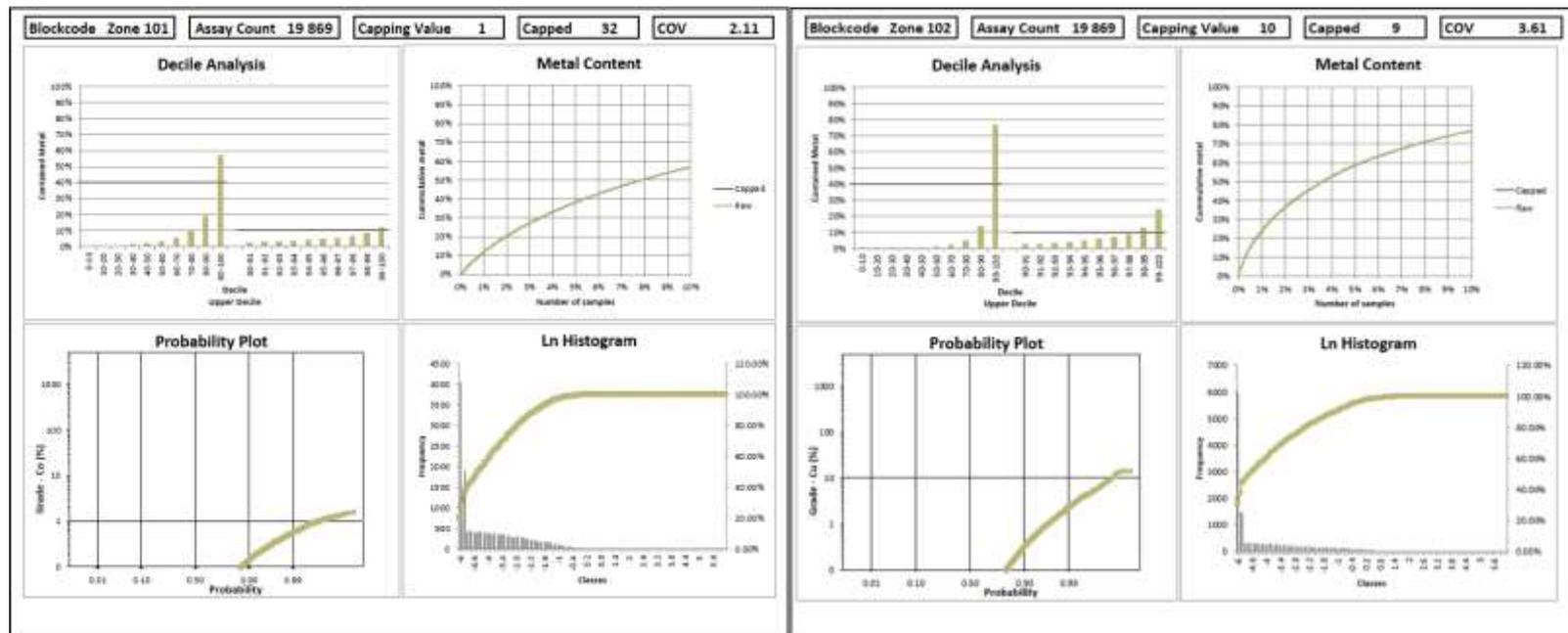


Figure 14-3 – Capping Analysis (Plots) for Cobalt (A, left) and Copper (B, right)

14.7 Compositing

To minimize any bias introduced by the variable sample lengths, the Cobalt and Copper assays of the DDH data were composited to 1.5m lengths in the mineralization domain. The thickness of the mineralized structures, the proposed block size and the original sample lengths were considered when determining the composite length, using the Best Fit method in Surpac. Tails measuring less than 50% were considered. The QPs chose to assign 0.00% Co and Cu grade to intervals that were not sampled. A total number of composites of 16,274 for Co and 16,258 for Cu respectively were generated for the Project.

Table 14-2 shows the basic statistics for the composites of the domains (mineralized zones). It illustrates the effect of capping and compositing on the Coefficient of Variation (CoV) of the capped data.

Table 14-2 – Summary Statistics for the Composites

Domain Name	Capped Assays		Composites			
	Mean (%)	CoV	Count	Max (%)	Mean (%)	CoV
Co	0.05	2.11	16274	1.00	0.05	1.92
Cu	0.15	3.61	16258	8.26	0.12	3.17

Max = maximum; CoV = coefficient of variation

Note: Mean and CoV of capped assays are different than Table 14-1 as a grade of 0.00% Co and Cu assigned to intervals not sampled, was accounted in the statistics of the table above

14.8 Density

For the purpose of the mineral resources estimate, 261 core samples were collected in the mineralized zones and in the host rocks. These core samples were processed for specific gravity (SG), using the standard water immersion method provided in ISO 1183-174. The results show an average of 2.78 g/cm³ specific gravity and are presented in Table 14-3.

Table 14-3 –Density per lithology (2022 Measurements Campaign)

Lithology	Number	Average SG (g/cm3)	Minimum SG (g/cm3)	MaximumSG (g/cm3)
Bleached Siderite Unit	19	2.74	2.56	2.88
Challis Volcanics	1	1.92	N/A	N/A
Diabase	16	2.74	2.38	3.03
Mineralized Diabase	5	2.87	2.66	3.03
Mineralized Shear Zones	52	3.06	2.66	3.84
Quartzite	21	2.71	2.66	2.81
Rythmicly Bedded Unit	38	2.73	2.59	2.79

Lithology	Number	Average SG (g/cm ³)	Minimum SG (g/cm ³)	MaximumSG (g/cm ³)
Siltite	66	2.73	2.59	2.91
Siltite-Quartzite Disrupted Unit	47	2.77	2.53	3.00

In conclusion, an average density value of 2.78 g/cm³ is considered appropriate for the mineralized domain and was used for the mineral resource estimate.

14.9 Block Model

A block model was created, which included the mineralization zone and adjacent rocks. A rotated sub-block model was used in Surpac.

The origin of the block model is the upper-southwest corner. Block dimensions reflect the drilling spacing, the size of the mineralized zones and plausible mining methods.

Table 14-4 shows the properties of the block model.

Table 14-4 – Block Model Properties

Description	X	Y	Z
Block Model Origin (UTM NAD 83 Zone 17)	726,650	4,983,500	1,450
Rotation Angle	None	110°	None
Parent Block Dimension	4.00 m	4.00 m	4.00 m
Number of Parent Blocks	195	413	213
Minimum Sub-block Dimension	1.00 m	1.00 m	1.00 m

14.10 Variography and Search Ellipsoids

For the deposit, 3D directional variography was completed in Snowden Supervisor on DDH composites of capped metal assay data. The 3D direction-specific investigations were done on the interpolation domain and yielded best-fit models along orientations that correspond to the mean strike and dip of the zone. Three sets of search ellipsoids (first, second and third search pass) were built from the variogram analysis, corresponding to proportionally 0.5, 1.0 and 2.0 the results obtained from the variography study.

Figure 14-4 presents the variographic map for both Cobalt and Copper according to the composite data points of the mineralized zone and Figure 14-5 and Figure 14-6 shows the variography study for both Cobalt and Copper in the mineralized domain.

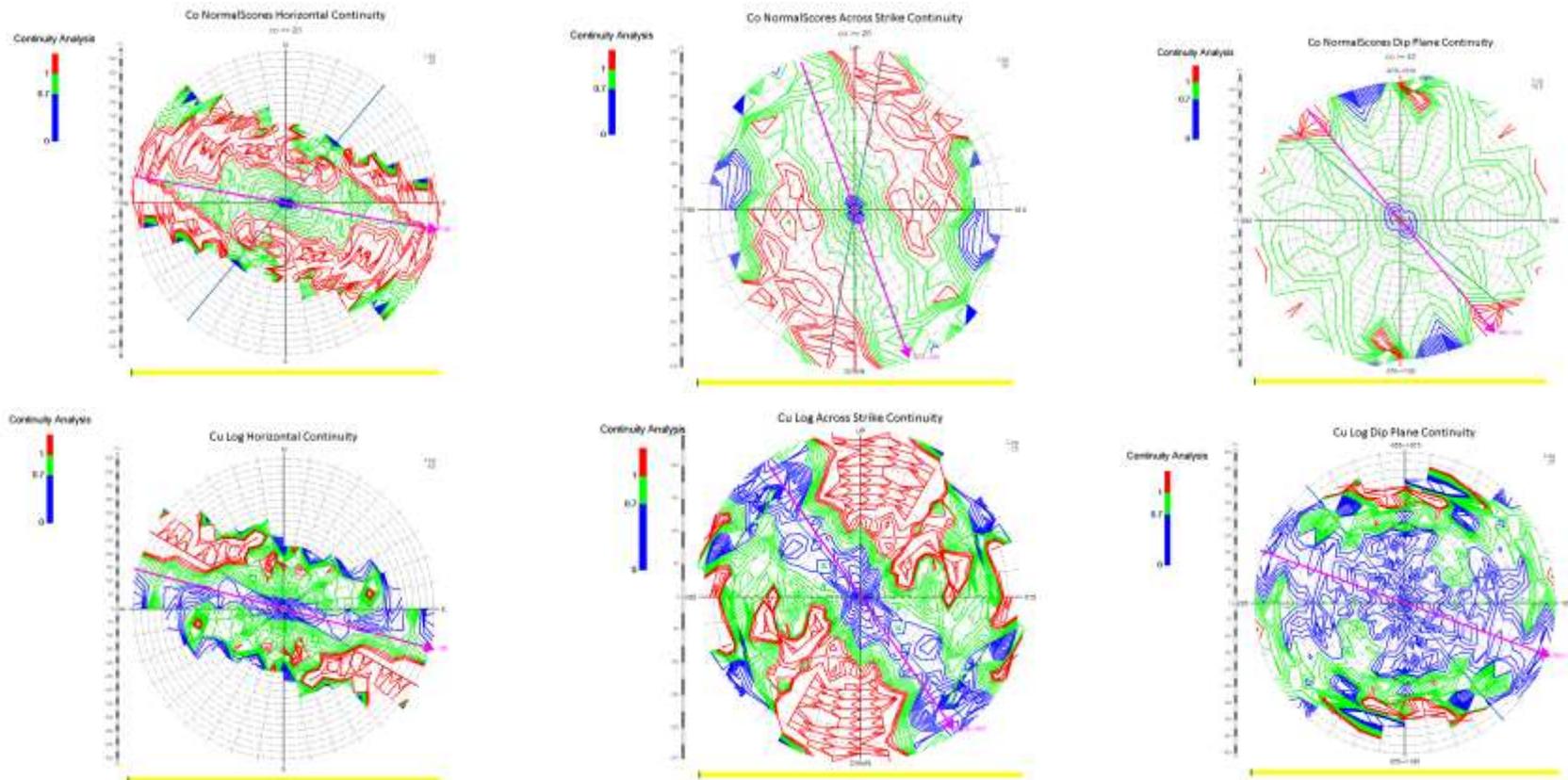


Figure 14-4 – Variographic map of the mineralized domain (Upper Cobalt, Lower Copper)

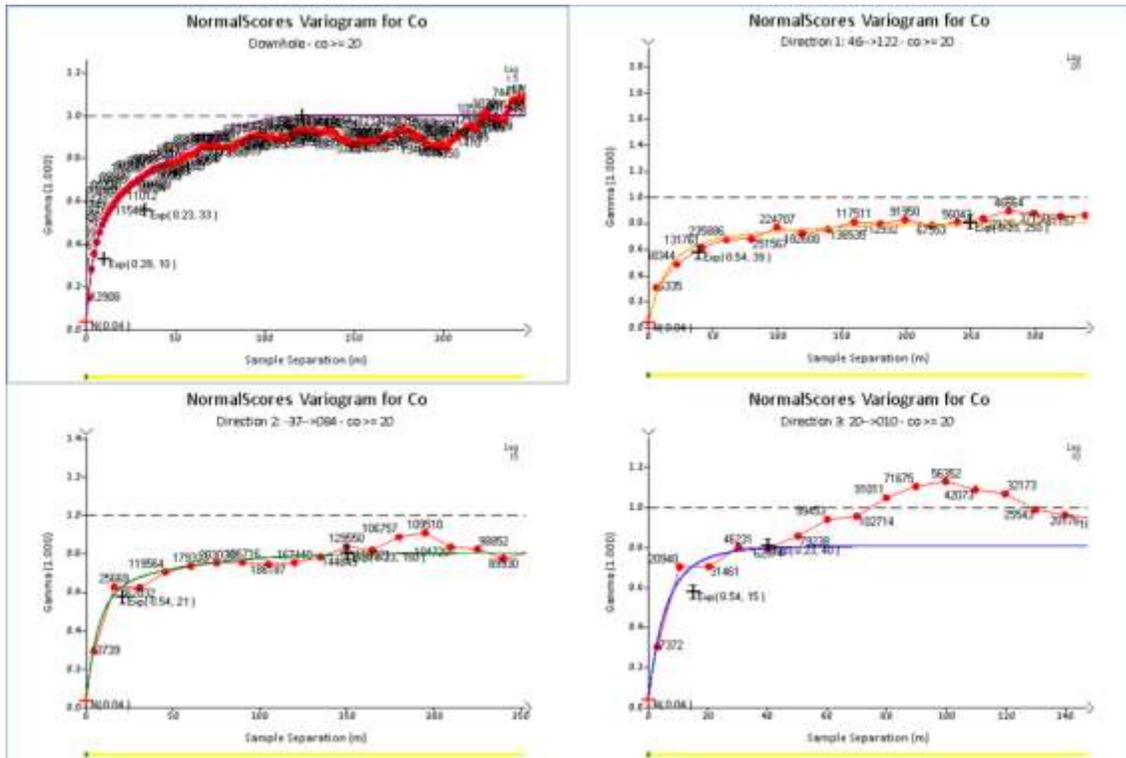


Figure 14-5 – Variograms for Cobalt for mineralized domain

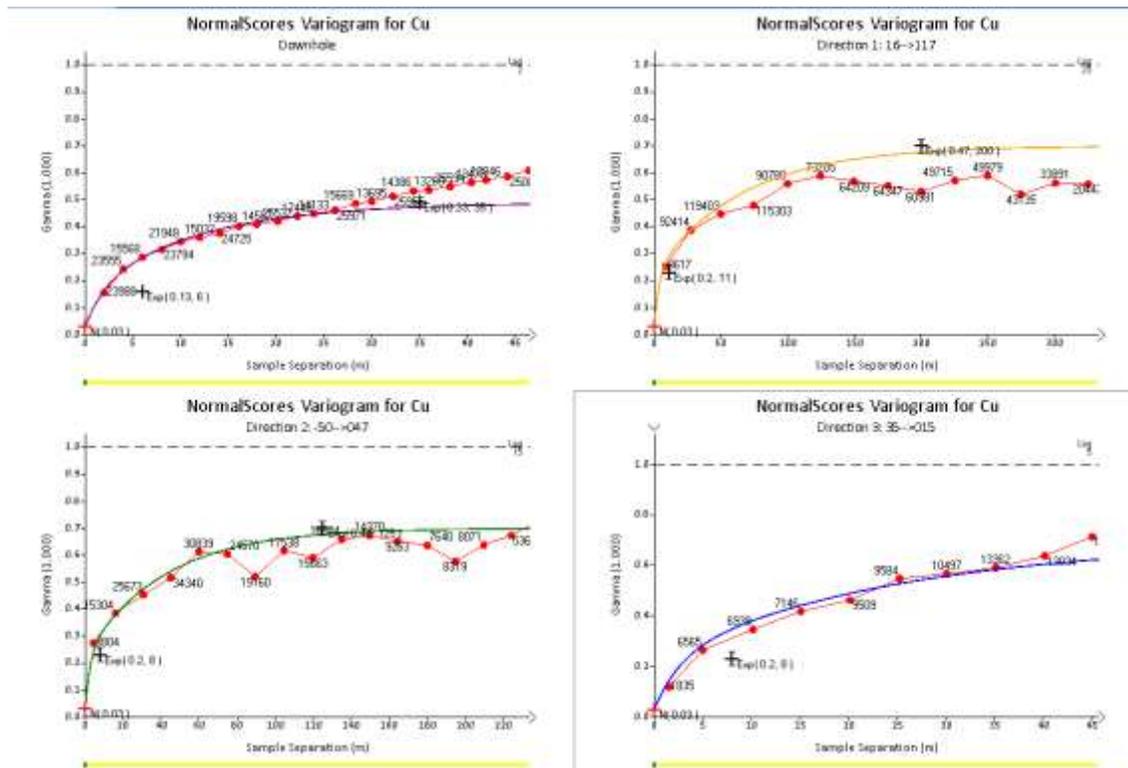


Figure 14-6 – Variograms for Copper for mineralized domain

14.11 Grade Interpolation

The interpolation profiles were customized to estimate grades with hard boundaries. The variography study provided the parameters used to interpolate the grade model using the composites. The interpolation inside the interpolation domain was run in Surpac on point datasets which correspond to the mid-points of the composite intervals. A three-pass strategy was used with the capped composites. The ID2 method was selected because it better honours the grade distribution of the deposit.

For the mineralized domain, two models were produced using the inverse distance squared (“ID2”) and ordinary kriging (“OK”). These methods were chosen because they best honoured the raw assays and composite grade distribution for that deposit. Models were compared visually (in section, plan and longitudinal), statistically and with swath plots. The aim was to limit the smoothing effect to preserve local grade variations while avoiding the smearing of high-grade values.

ID2 was selected for the final resource estimate.

The parameters of the grade estimation specific to Surpac are summarized in Table 14-5.

Table 14-5 – Estimation Parameters

Mineralized Zone	Pass	Ellipsoid	Composite Parameters			Orientation			Ranges (Based on Variogram)		
			Min Comp	Max Comp	Max CMP /ddh	Dip	Dip Az	Pitch	Major (m)	Int. (m)	Minor (m)
Cobalt	1	0.5 x vario ranges	5	8	2	117/69		19.0	125.0	75	20.0
	2	1.0 x vario ranges	3	8	2				250.0	150.0	40.0
	3	1.5 x vario ranges	1	8	2				375.0	225.0	60.0
Copper	1	0.5 x vario ranges	5	8	2	110/55		8.0	100.0	62.5	37.5
	2	1.0 x vario ranges	3	8	2				200.0	125.0	75.0
	3	1.5 x vario ranges	1	8	2				300.0	187.5	112.5

14.12 Block Model Validation

Validation was done visually and statistically by the QPs to ensure that the final mineral resource block model is consistent with the primary data.

First, the volume estimates for each code attributed by the mineralized zones were compared between the block model and the three-dimensional wireframe models.

Additionally, block model grades, composite grades and assays were visually compared on sections, plans and longitudinal views for both densely and sparsely drilled areas (Figure 14-7 to 14-9). No significant differences were observed. A generally good match was noted in the grade distribution without excessive smoothing in the block model (compares the composites to the block grade).

Table 14-6 statistically compares, the global mean of the block model for the two interpolation scenarios and the composite grades for the mineralized domain at zero cut-off for the Indicated and Inferred blocks.

The trend and local variation of the estimated inverse distance square (ID2) and ordinary kriging (OK) models were compared to the composite data using swath plots in three directions (North, East and Elevation) for the Measured, Indicated and Inferred blocks for Cobalt (Figure 14-10 to 14-12) and for Copper (Figure 14-13 to 14-15).

Cases in which the composite mean is higher than the block mean are often a consequence of clustered drilling patterns in high-grade areas. It is also worth noting that the mean of the composites is independent of the classification.

The comparison between composite and block grade distribution and the overall validation did not identify significant issues.

Table 14-6 – Comparison of the Mean Grades for Blocks and Composites

Mineralized Zone	Indicated and Inferred Blocks				
	Count	Grade (%)	Count	ID2 Model (%)	OK Model (%)
Co	16274	0.047	1676024	0.029	0.030
Cu	16258	0.124	1676024	0.096	0.095

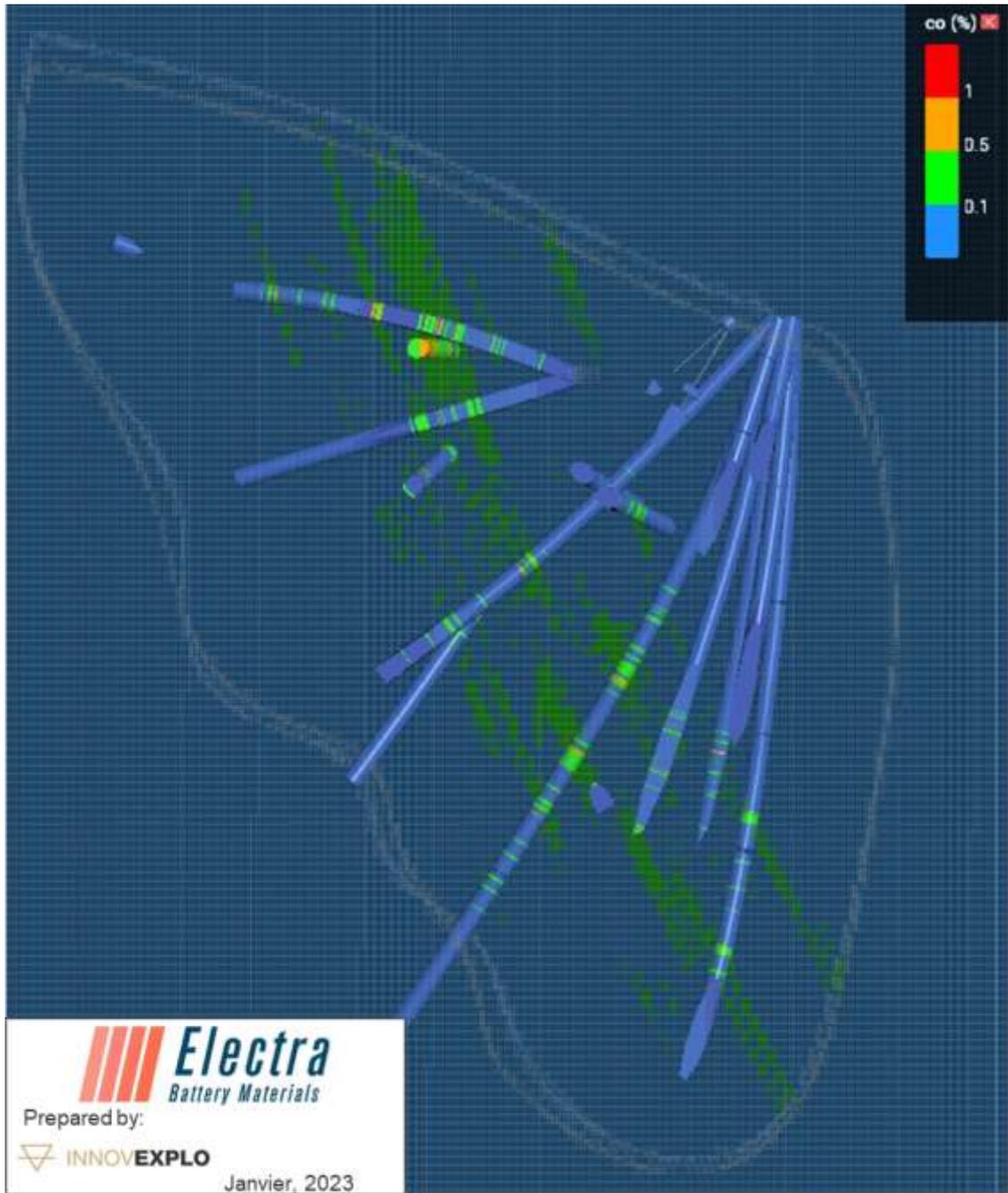


Figure 14-7 – Validation of the interpolation results, comparing drill hole assays and block model grade values on section

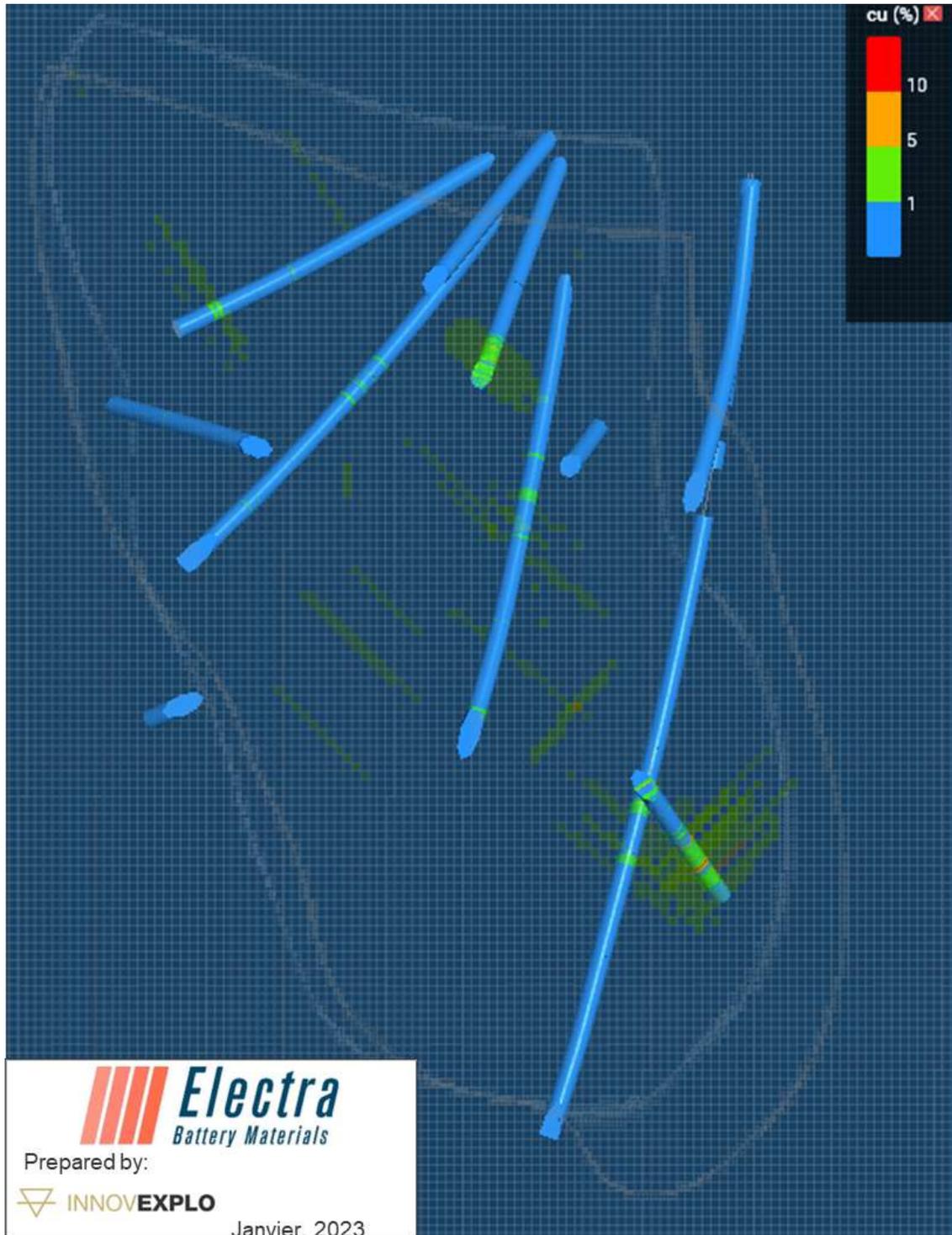


Figure 14-8 – Validation of the interpolation results of Cu, comparing drill hole assays and block model grade values on section

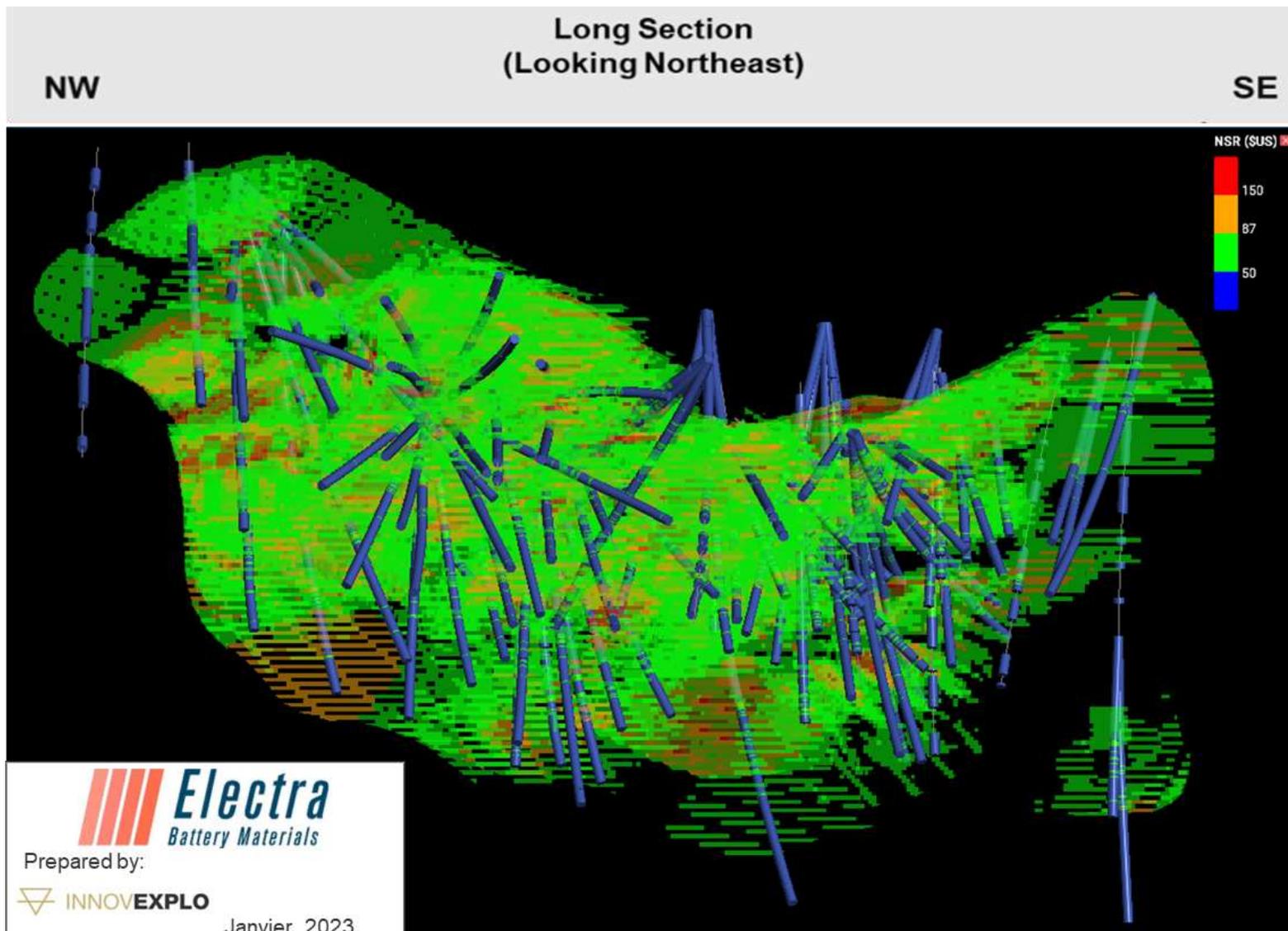


Figure 14-9 – Validation of the calculated NSR Results

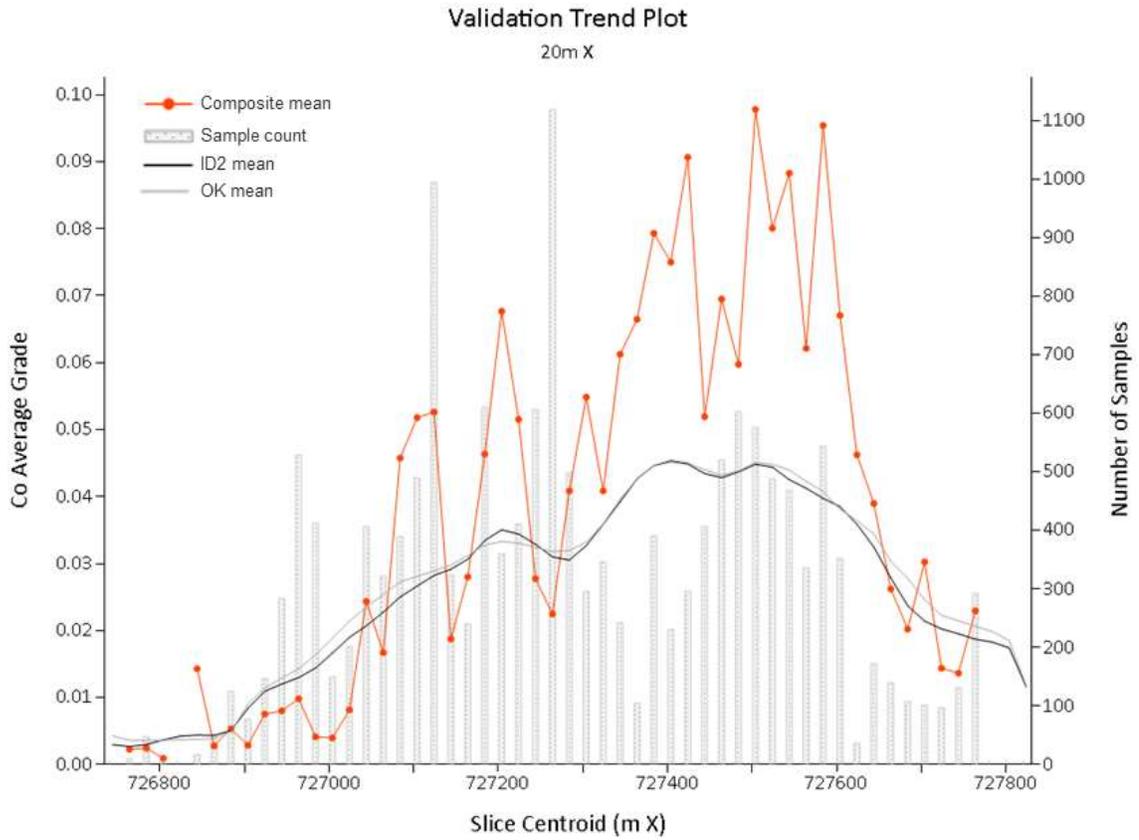


Figure 14-10 – Swath Plot Comparison of Block Estimates along East-West Direction for Cobalt

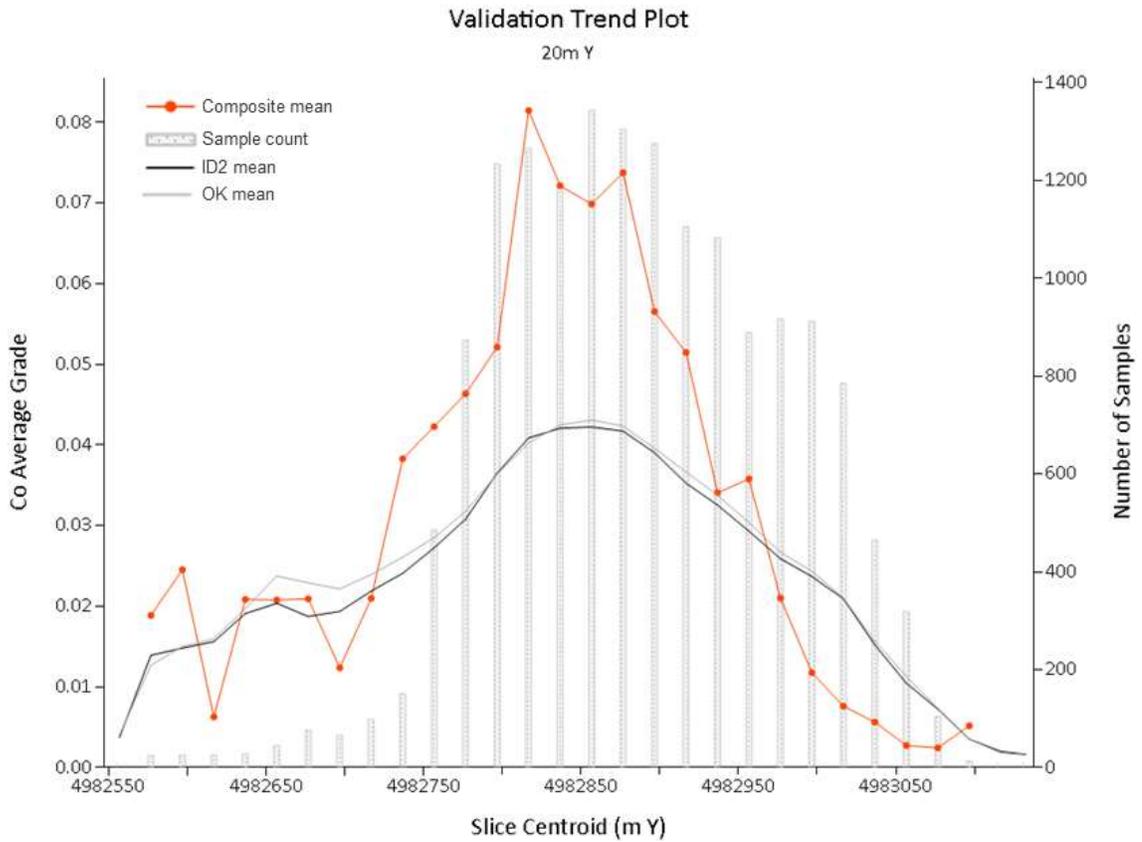


Figure 14-11 – Swath Plot Comparison of Block Estimates along North-South Direction for Cobalt

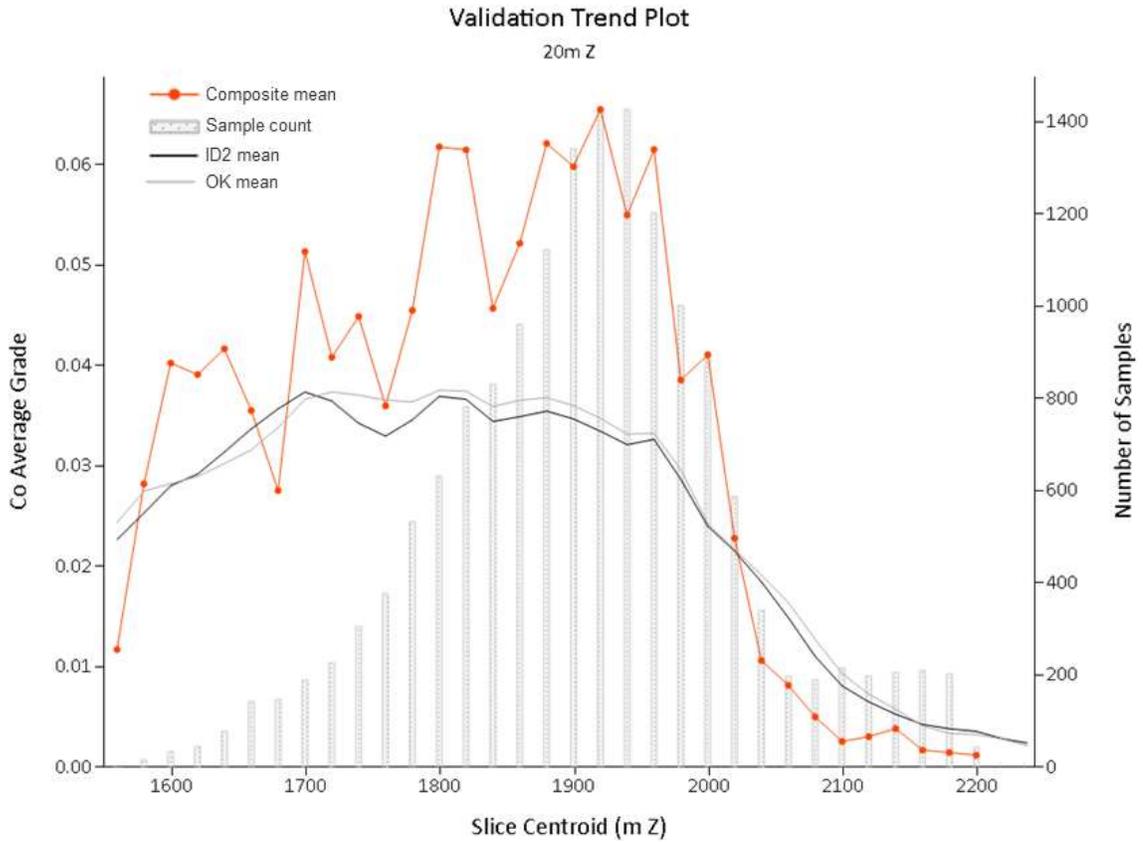


Figure 14-12 – Plot Comparison of Block Estimates along Vertical Direction for Cobalt

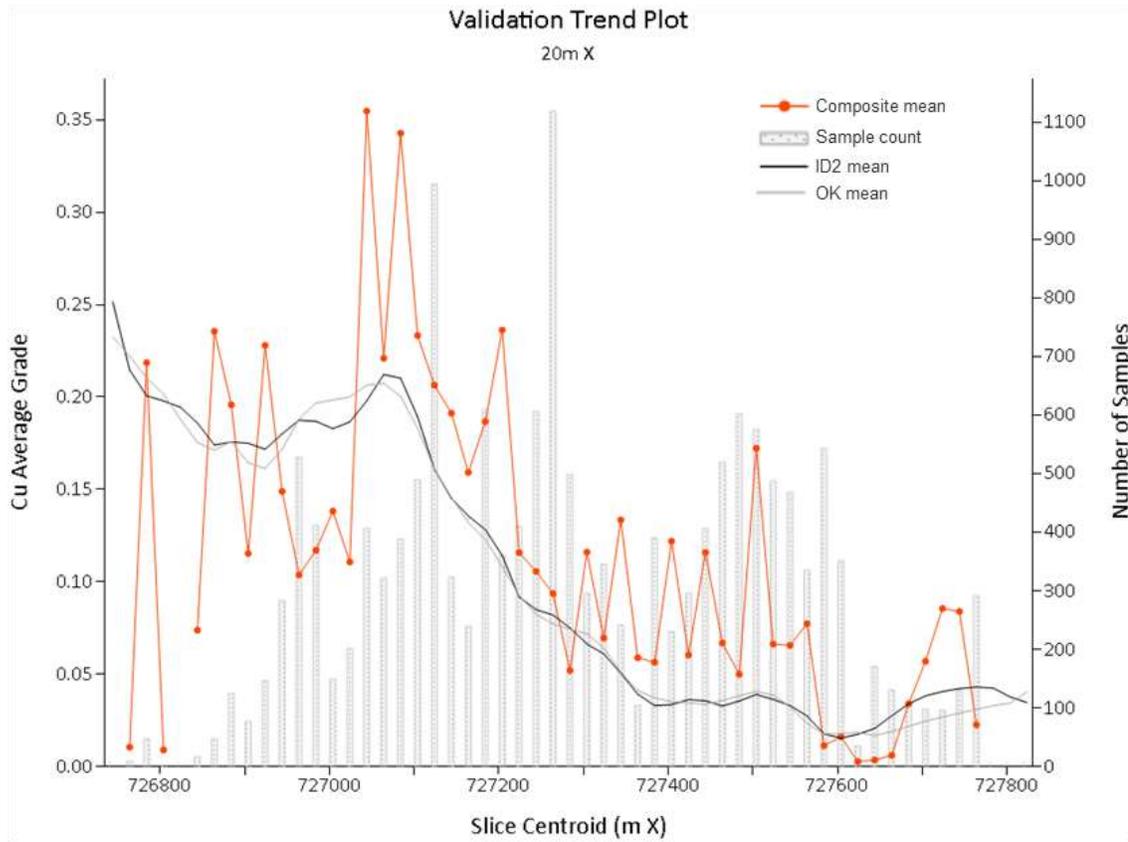


Figure 14-13 – Swath Plot Comparison of Block Estimates along East-West Direction for Copper

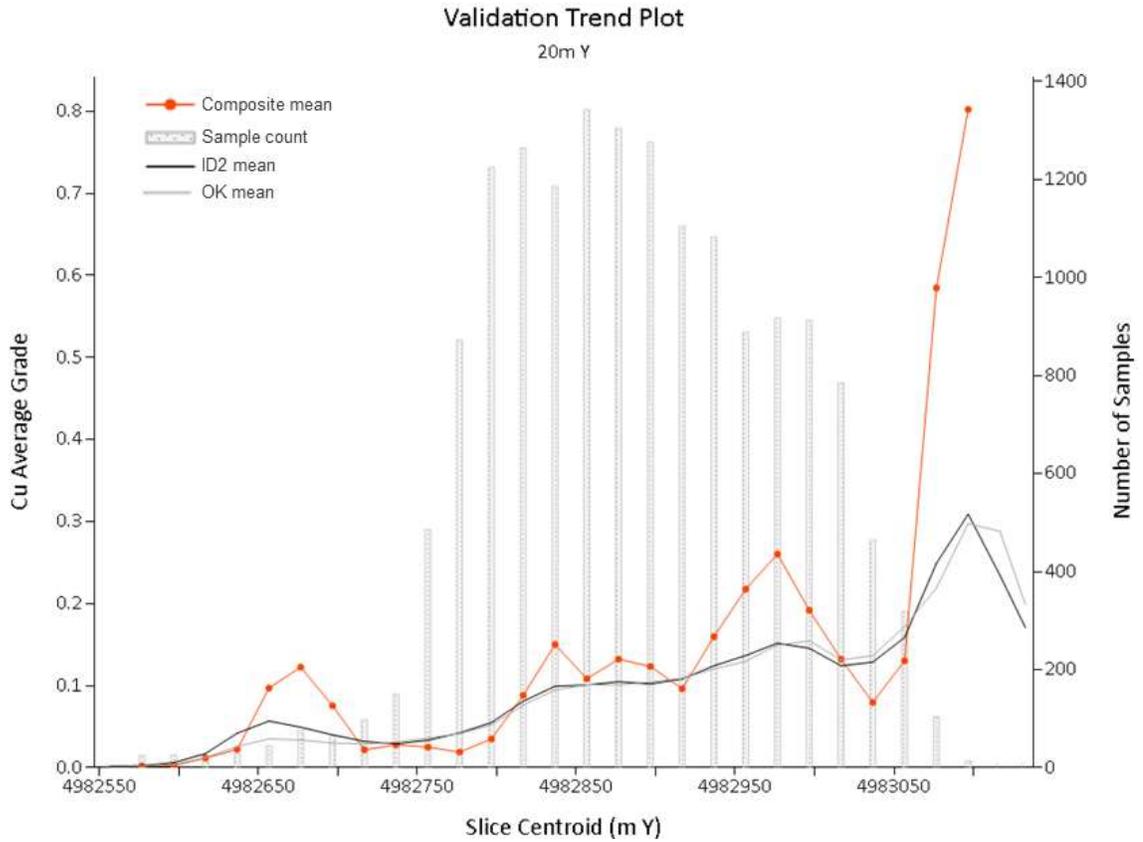


Figure 14-14 – Swath Plot Comparison of Block Estimates along North-South Direction for Copper

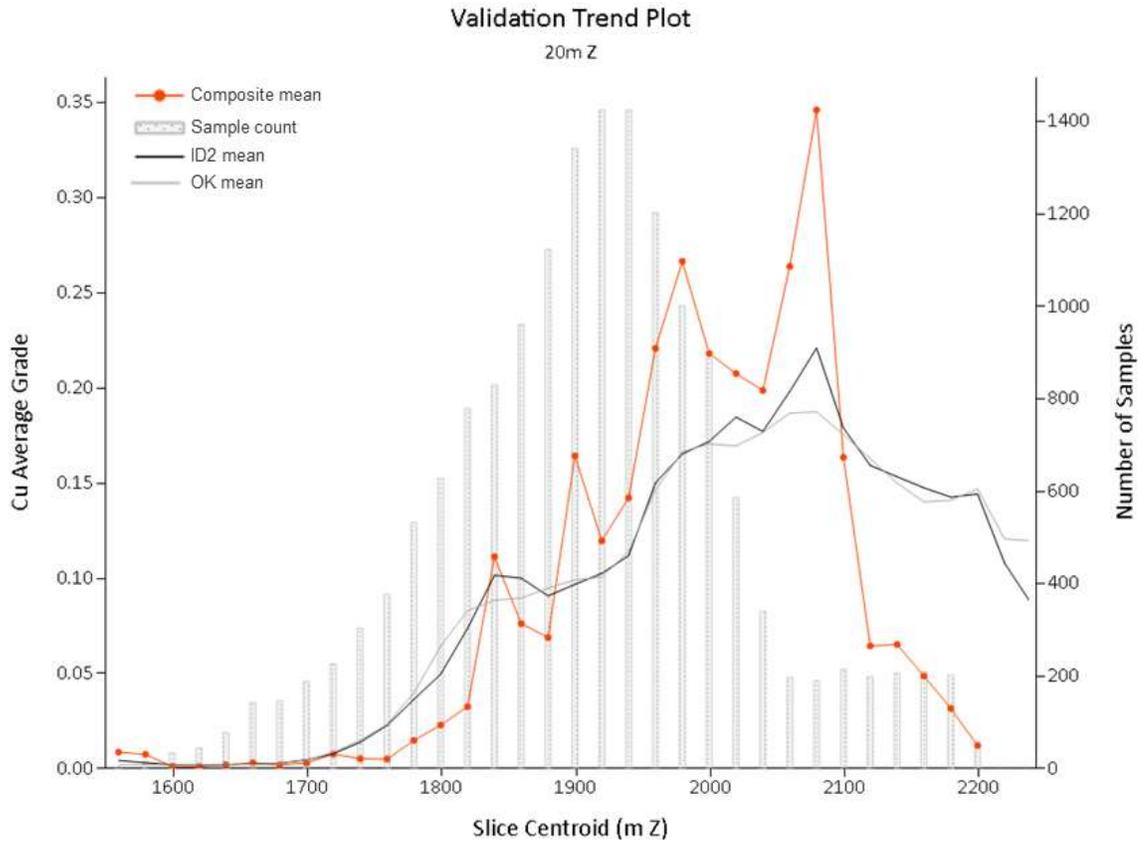


Figure 14-15 – Plot Comparison of Block Estimates along Vertical Direction for Copper

14.13 Net Smelter Return Calculation

Net Smelter Return calculation (“NSR”) parameters were determined by QP, Pierre Roy, P.Eng., using the parameters presented in Table 14-9. The detail of the calculation is presented in section 13.6.

The Calculation is established as follow:

NSR value = Metal Head Grade * Metal Recovery * (A – B / Metal Concentrate Grade)

Where as: Metal is Cobalt or Copper

A = Payable Metal * (Metal Price – Refining Cost) / 10,000

B = (Treatment Cost + 1) / (1-Concentrate Moisture) * C / 100

C = (Truck Trans Cost * Truck Distance + Rail Trans Cost * Rail Distance)

Table 14-7 – Input Parameters Used to Calculate the Net Smelter Return for the Iron Creek Project

Input parameter	Value
Cobalt Head Grade (%)	Interpolated by BM
Copper Head Grade (%)	Interpolated by BM
Cobalt Price (US\$/t)	66,250
Copper Price (US\$/lb)	8,700
Exchange rate (USD: CAD)	1.3
Royalty (%)	0.00
Cobalt Recovery (%)	85
Cobalt Concentrate Grade (%)	1.5
Copper Recovery (%)	85
Copper Concentrate Grade (%)	28
Concentrate Moisture (%)	5
Concentrate Truck Transport Cost (US\$/t/km)	0.15
Distance to Cobalt Smelter by Truck (km)	200
Distance to Copper Smelter by Truck (km)	600
Treatment costs (US\$ by concentrate dry tonnes)	200
Refining Cost (US\$ per tonne of metal)	5.00
Cobalt Payable Metal (%)	95
Copper Payable Metal (%)	98

14.14 Economic Parameters and Cut-Off Grade

Cut-off grade (“CoG”) parameters were determined by QP, Marc R. Beauvais, using the parameters presented in Table 14-9. The deposit is reported at a rounded CoG of USD NSR using the potentially Long-Hole mining method (LH). Long-Hole method was generated by the Deswik Stope Optimizer where general dip is greater or equal to 43 degrees.

The QP considers the selected cut-off value of US\$87.00 to be adequate based on the current knowledge of the Project and to be instrumental in outlining mineral resources with reasonable prospects for eventual economic extraction for an underground mining scenario.

Table 14-8 – Input Parameters Used to Calculate the Underground Cut-off Grade (Potentially using the Long-hole Mining Method) for the Iron Creek Project

Input parameter	Value
LH minimal stope angle (°)	43
Global mining costs (US\$/t)	55
Processing & transport costs (US\$/t)	22
General and administration (G&A) costs (US\$/t)	10
Total NSR cut-off value (US\$/t)	87.00

For long-hole method, the DSO parameters used a standard length of 25.0m longitudinally, along the strike of the deposit, a 25.0m height and a minimum width of 2.0m. The minimum shape measures 15.0m x 15.0m x 2.0m. The standard shape was optimized first. If it was not potentially economical, smaller stope shapes were optimized until it reached the minimum mining shape.

The use of those conceptual mining shapes as constraints to report mineral resource estimates demonstrate that the “reasonable prospects for eventual economic extraction” meet the criteria defined in the MRMR Best Practice Guidelines; November 29, 2019.

14.15 Mineral Resource Classification

The 2023 MRE comprises Indicated and Inferred mineral resources. The preliminary categories were prepared using a script in Surpac. Based on that preliminary classification, Deswik Stope Optimizer (“DSO”) was used to apply constraining volumes to any blocks in the potential underground extraction scenario. A class attribute was determined for each DSO based on the dominant preliminary block class using the 50%+1 rule. The final classification was then applied for each block based on the DSO class attribute.

The preliminary classification takes into account the following criteria:

- Interpolation pass
- Number of drill holes used to estimate the block's grade

The indicated category was assigned to blocks estimated in the first pass with a minimum of three drill holes.

The inferred category is defined for blocks estimated in the second pass with also a minimum of two drill holes.

14.16 Mineral Resource Estimate

The QPs are of the opinion that the Iron Creek Project 2023 MRE can be classified as Indicated and Inferred mineral resources based on geological and grade-continuity, data density, search ellipse criteria, drill hole spacing and interpolation parameters. The requirement of reasonable prospects for eventual economical extraction has been met by a) having a cut-off grade applied to the constraining shapes b) using reasonable inputs for the potential long-hole mining method and c) constraints consisting of mineable shapes for the underground scenarios.

The QPs consider the Iron Creek Project 2023 MRE to be reliable and based on quality data and geological knowledge. The estimate follows CIM Definition Standards.

Table 14-5 displays the results of the Iron Creek Project 2023 MRE.

Figures 14-16 and Figure 14-17 show the classified mineral resources within the constraining volumes (DSOs) for the Iron Creek Project.

Table 14-9 – 2023 Mineral Resource Estimate of the Iron Creek Cobalt and Copper Project (Effective date of January 27th, 2023)

Iron Creek Project	Mineral Resources	Tonnes (t)	Co (%)	Cu (%)	Lbs of Co	Lbs of Cu
	Indicated	4,451,000	0.19	0.73	18,364,000	71,535,000
	Inferred	1,231,000	0.08	1.34	2,068,000	36,485,000

Notes to the 2023 MRE

1. The effective date of the 2023 MRE is January 27, 2023.
2. The independent and qualified persons for the 2023 MRE are Martin Perron, P. Eng. and Marc R. Beauvais, P.Eng. all from InnovExplo Inc.
3. The 2023 MRE follows the CIM Standards.
4. These mineral resources are not mineral reserves, because they do not have demonstrated economic viability. The results are presented undiluted and are considered to have reasonable prospects of economic viability.
5. The estimate encompasses one large, mineralized envelope using the grade of the adjacent material when assayed or a value of zero when not assayed. Dilution zones encompassing all mineralized zones were created as part of the mineralized domain to reflect the dilution within the constraining shapes.
6. High-grade capping supported by statistical analysis was done on raw assay data before compositing and established on a per-metal basis, having a limiting value at 1% for cobalt and 10% for copper. Composites (1.5 m) were calculated within the zones using the grade of the adjacent material when assayed or a value of zero when not assayed.
7. The estimate was completed using a sub-block model in Surpac 2022. A 4m x 4m x 4m parent block size was used.
8. Grade interpolation was obtained by Inverse Distance Squared (ID2) using hard boundaries.
9. A density value of 2.78 g/cm³ was assigned to the mineralized domain.
10. The mineral resource estimate is classified as Indicated and Inferred. The Inferred category is defined with a minimum of three (3) drill holes within the areas where the drill spacing shows reasonable geological and grade continuity at the maximum range of the modeled semi-variogram. The Indicated mineral resource category is defined with a minimum of three (3) drill holes within the areas where the drill spacing shows reasonable geological and grade continuity at half the range of the modeled semi-variogram.
11. The 2023 MRE is locally constrained within Deswik Stope Optimizer shapes using a minimal mining width of 2.0m for a potential underground LH. An NSR-based cut-off grade was calculated using the following parameters: mining cost = US\$55.00/t; processing cost = US\$22.00/t; G&A = US\$10.00/t. The cut-off grade should be re-evaluated in light of future prevailing market conditions (metal prices, mining costs etc.).
12. The number of metric tonnes was rounded to the nearest thousand, following the recommendations in NI 43-101 and any discrepancies in the totals are due to rounding effects. The metal contents are presented in pounds of in-situ metal rounded to the nearest hundred.
13. The independent and qualified persons for the 2023 MRE are not aware of any known environmental, permitting, legal, political, title-related, taxation, socio-political, or marketing issues that could materially affect the Mineral Resource Estimate.

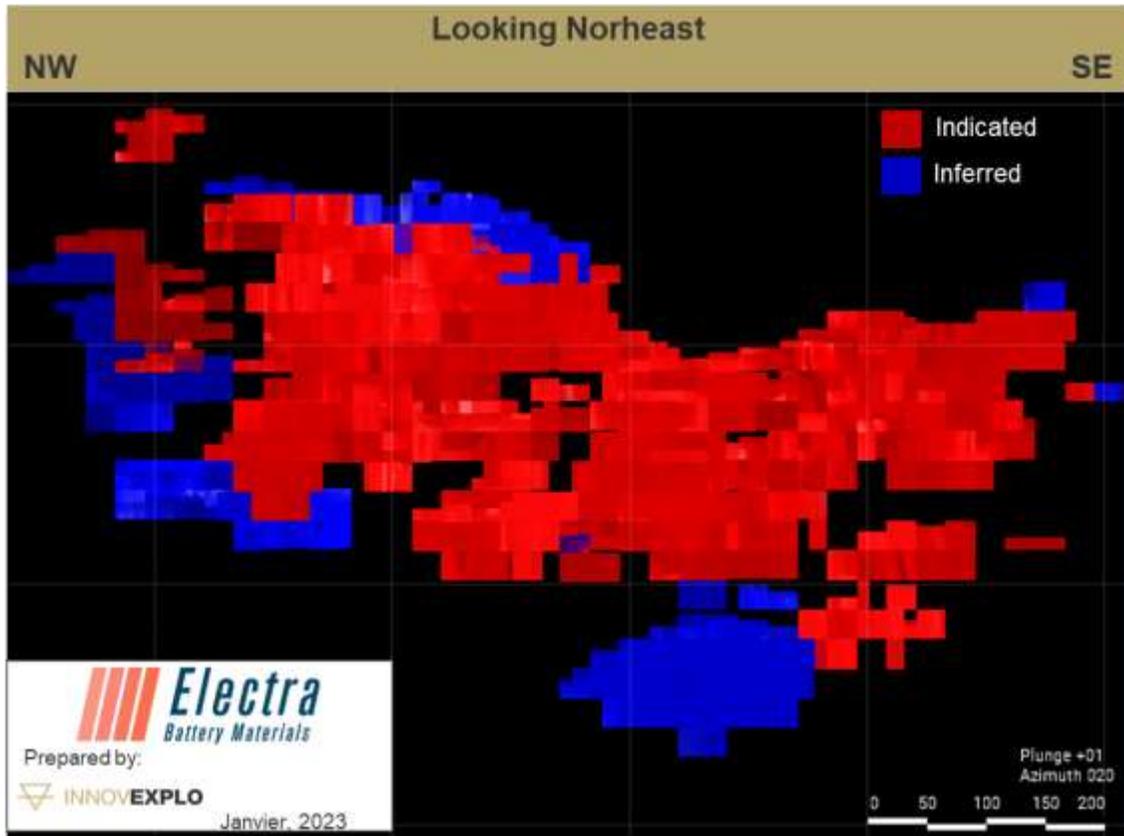


Figure 14-16 – Classified Mineral Resources Within the Constraining Volumes for the Iron Creek Project (Looking Northeast)

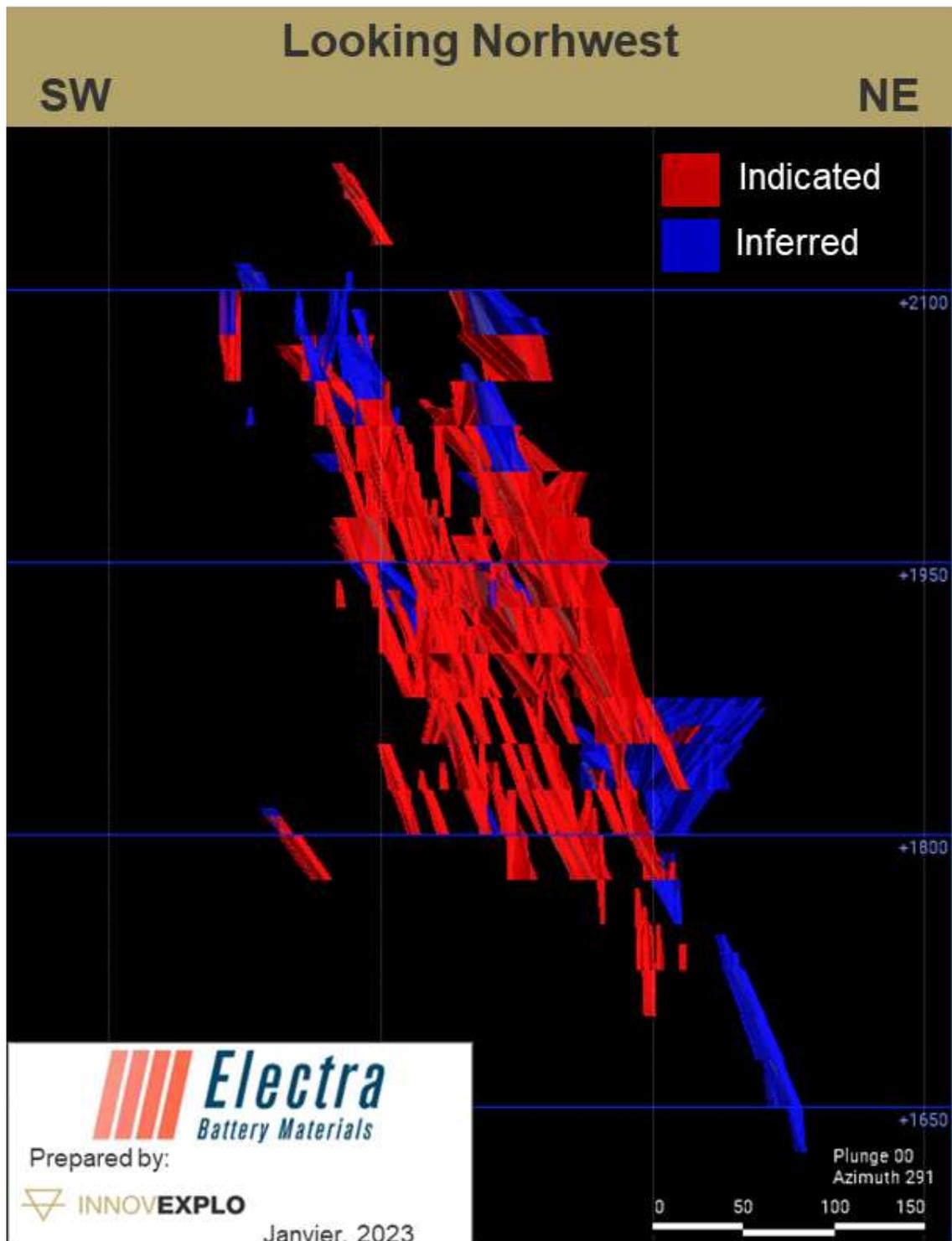


Figure 14-17 – Classified Mineral Resources Within the Constraining Volumes for the Iron Creek Project (Looking Northwest)

14.17 Sensitivity to Cut-off Grade

Table 14-10 shows the cut-off NSR sensitivity analysis of the Iron Creek Project 2022 mineral resource estimate. The reader should be cautioned that the numbers provided should not be interpreted as a mineral resource statement. The reported quantities and grade at different cut-off grades are presented in-situ and for the sole purpose of demonstrating the sensitivity of the mineral resource model to the selection of a reporting cut-off grade.

Table 14-10 – Sensitivity of the 2023 MRE to Different NSR values (Effective Date of January 27th, 2023)

NSR Cut-off (US\$)	Tonnes (t)	Co (%)	Cu (%)	Lbs of Co	Lbs of Cu
INDICATED MINERAL RESOURCES					
78.30	5,778,000	0.17	0.66	22,146,000	83,822,000
82.65	5,035,000	0.18	0.69	20,102,000	76,517,000
87.00	4,451,000	0.19	0.73	18,364,000	71,535,000
91.35	4,033,000	0.19	0.77	16,930,000	68,319,000
95.70	3,609,000	0.20	0.80	15,651,000	63,371,000
INFERRED MINERAL RESOURCES					
78.30	1,693,000	0.07	1.19	2,789,000	44,422,000
82.65	1,470,000	0.07	1.28	2,361,000	41,367,000
87.00	1,231,000	0.08	1.34	2,068,000	36,485,000
91.35	1,094,000	0.08	1.42	1,810,000	34,208,000
95.70	1,027,000	0.08	1.44	1,709,000	32,563,000

Note: Numbers may not add up due to rounding. The reader is cautioned that the figures provided in Table 14-10 should not be interpreted as a statement of mineral resources. Quantities and estimated grades for different NSR values are presented for the sole purpose of demonstrating the sensitivity of the mineral resources model to the choice of a specific NSR values cut-off.

15. MINERAL RESERVE ESTIMATES

This section does not apply to the Technical Report.

16. MINING METHODS

This section does not apply to the Technical Report.

17. RECOVERY METHODS

This section does not apply to the Technical Report.

18. PROJECT INFRASTRUCTURE

This section does not apply to the Technical Report.

19. MARKET STUDIES AND CONTRACTS

This section does not apply to the Technical Report.

20. ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT

This section does not apply to the Technical Report.

21. CAPITAL AND OPERATING COSTS

This section does not apply to the Technical Report.

22. ECONOMIC ANALYSIS

This section does not apply to the Technical Report.

23. ADJACENT PROPERTIES

The following information is derived from various corporate websites regarding location and activities that have not been validated. These activities have been disclosed publicly through press releases. The Authors of this report have not verified the information, and the information is not necessarily indicative of the mineralization on the Property that is the subject of this Technical Report.

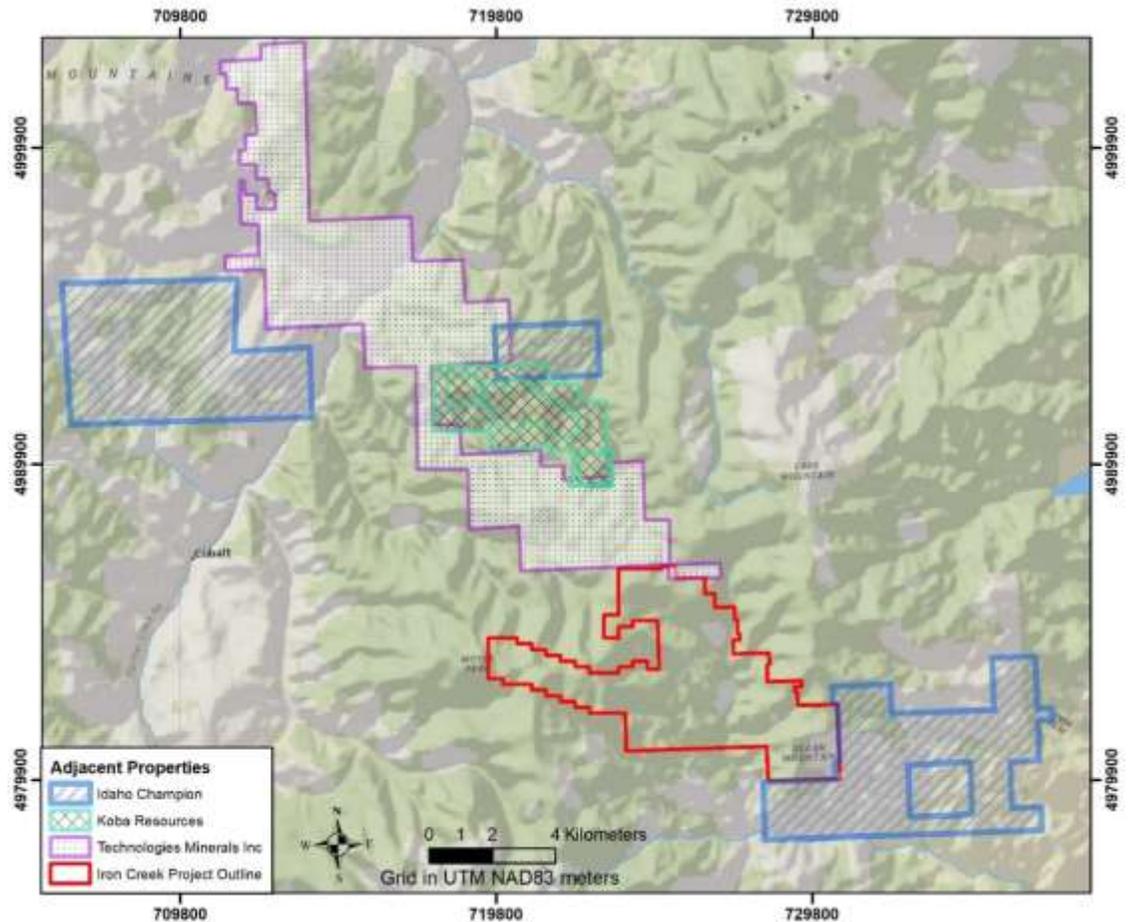


Figure 23-1 – Adjacent properties in the vicinity of the Iron Creek Project.

For perspective of deposit size in the Idaho Cobalt Belt, the Blackbird district has combined historical production plus current reserves that total 17,000,000t at 0.7% Co, 1.4% Cu, and 1g Au/t (Hitzman, et. al., 2017). The historic Blackbird Mine Property is held by Glencore plc with a reported remaining reserve of 3.5Mt at 0.73% Co and 1.67% Cu. Individual deposits are open at depth.

The most advanced Property with respect to development within the Belt is the Idaho Cobalt Project held by Jervois Global Limited which announced it had commenced commissioning at the Project on October 10, 2022. The project is expected to achieve full nameplate capacity by the end of Q1 2023. The mineral resources from their latest Feasibility report are included in Table 23-1 below (January 20, 2020). In October 2019, Jervois announced the results of two exploration holes intersecting copper mineralization

in the footwall of Ram; best result is 4.0m @0.48% Cu and 0.05% Co from 321.6m down hole highlighting further resource potential in this area.

Table 23-1 – Reported Resources at Ram Deposit

(From Sletten et al. 2020)

Category	Resource (M Tons)	Resource (M tonnes)	Co (%)	Co (M lbs)	Cu (%)	Cu (M lbs)	Au (oz/Ton)	Au (g/tonne)	Au (oz)
Measured ⁽¹⁾	2.92	2.65	0.45	26.2	0.59	34.4	0.013	0.45	38,000
Indicated ⁽¹⁾	2.85	2.59	0.42	23.8	0.80	45.7	0.018	0.62	51,000
M+i	5.77	5.24	0.44	50.1	0.69	80.1	0.015	0.53	89,000
Inferred	1.73	1.57	0.35	12.0	0.44	15.2	0.013	0.45	23,000

1. Mineral Resources are not Mineral Reserves and by definition do not have demonstrated economic viability. The Mineral Resources in this news release were estimated using the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM"), CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council (2014).
2. The Cobalt cut-off grade for inclusion in the resource is 0.15%, no consideration of copper or gold content was used in determination of cut-off grade.
3. Contained metal values and totals may differ due to rounding of figures.

Koba Resources Ltd. conducted exploration drilling on both the Colson Creek (986.6m) and Blackpine (457.8m) prospects in 2022 along with IP and Soil Surveys. Drilling at Blackpine intercepted multiple zones of cobalt including 1.2m @ 0.31% Co and 0.57 g/t Au from 92.5 m (Vallerine 2023). Technology Minerals PLC and Idaho Champion have both completed limited surface exploration programs in recent years on adjacent claim blocks to the Iron Creek Project (Belcher, 2021; Buick, 2022)

24. OTHER RELEVANT DATA AND INFORMATION

The Authors are not aware of any other relevant data and information that could have a significant impact on the interpretation and conclusions presented in this report.

25. INTERPRETATION AND CONCLUSIONS

The objective of InnovExplo's mandate was to generate a mineral resource estimate for the Iron Creek Property (the "2023 MRE") and provide a supporting Technical Report in accordance with NI 43 101 and Form 43-101F1.

The Issuer requested that the 2023 MRE include new drill holes added to the database since 2019 and changes in royalties, capital costs, operating costs and metal prices.

InnovExplo considers the present 2023 MRE to be reliable and thorough, based on quality data, reasonable hypotheses, and parameters in accordance with NI 43 101 criteria and CIM Definition Standards.

Mr. Perron has reviewed the Iron Creek Project data and Mr. Kinnan has conducted a site inspection of the Property. The Authors believe that the data provided by the Issuer are an accurate and reasonable representation of the Iron Creek project. As well, the exploration conducted by the Issuer has produced information on which important interpretations, conclusions and decisions can be made with reasonable confidence. All historical information, on the other hand, cannot be used in this report for anything more than an indication of mineralization.

The only factor that prevents Indicated and any Measured material from being classified higher is the inability to confidently correlate mineralized zones from one drill hole to another with the present drill spacing. Additional drilling at depth will help in the classification of some inferred material toward the indicated category.

The cobalt occurs mainly within pyrite but with minor amounts in the chalcopyrite. There is no cobaltite, and the cobalt and copper mineralization are not necessarily spatially coincident. Both metals are distributed independently from each other and occupy separate mineralized domains that are, in part, overlapping. Cobalt and copper commonly occur in economic grades separate from each other.

The drilling has demonstrated the cobalt and copper mineralization for 1,000 metres along strike and 550 metres vertically. The Authors consider the deposit to be open along strike, albeit at low grades, and at depth, except for copper in the eastern half of the deposit which seems to be closed off at depth. The Iron Creek project is a project in early stages of development and exploration.

The Authors conclude the following:

- the database supporting the 2023 MRE is complete, valid and up to date,
- the geological and grade continuity of cobalt and copper mineralization is demonstrated and supported by historical past samples, underground exposures and drilled areas,
- using the long hole mining method, the Project contains an estimated, Indicated Mineral Resource of 4,451,000 tonnes grading 0.19% Co and 0.73% Cu for 18,364,000 pounds of cobalt and 71,535,000 pounds of copper, and an estimated Inferred Mineral Resource of 1,231,000 tonnes grading 0.08% Co

and 1.34% Cu for 2,068,000 pounds of cobalt and 36,485,000 pounds of copper,

- the 2023 MRE was prepared for a potential underground scenario with a US\$ 87.00 NSR cut-off grade using the long hole mining,
- it is likely that additional diamond drilling at depth and laterally would increase the Inferred Mineral Resource tonnage and upgrade some of the Inferred Mineral Resources to the Indicated category.

25.1 Risks and Opportunities

Table 25-1 identifies the significant internal risks, potential impacts and possible risk mitigation measures that could affect the future economic outcome of the Project. The list does not include the external risks that apply to all mining projects (e.g., changes in metal prices, exchange rates, availability of investment capital, change in government regulations, etc.).

Significant opportunities that could improve the economics, timing and permitting are identified in Table 25-2. Further information and study are required before these opportunities can be included in the project economics.

Table 25-1 – Risks for the Project

RISK	POTENTIAL IMPACT	POSSIBLE RISK MITIGATION
Local wide drill spacing for the inferred mineral resource.	Potential lack of grade continuity.	Risk can be reduced through future infill drilling campaigns; it will reduce the spacing between samples improving the inferred mineral resource.
Potentially poor social acceptability.	Social acceptability is an inherent risk for all mining projects; It can affect permitting and the Project's development schedule. Possibility that the population does not accept the mining project	Establish a pro-active and transparent strategy to identify all stakeholders and maintain the communication plan with host communities. Continue to organize information sessions, publish information on the mining project, and meet with host communities.
Proximity to the Iron Creek.	Mining costs might differ negatively from what is currently estimated for water inflow rates. Possibility that the population does not accept the mining project.	Conduct hydrogeological assessment to better estimate water inflow rates. Conduct an environmental baseline study to evaluate potential environmental impact. Continue to organize information sessions, publish information on the mining project, and meet with host communities.

Table 25-2 – Opportunities for the Project

OPPORTUNITIES	EXPLANATION	POTENTIAL BENEFIT
Additional infill drilling	Would likely confirm and improve confidence of the known zones.	Potential to increase mineral resources.
Exploration drilling	<p>Opportunities to extend the mineralized zones laterally and down-dip.</p> <p>Additional opportunities at depth and parallel to the known zones.</p> <p>Opportunity to increase toward known historical cobalt occurrences.</p>	<p>Potential to increase mineral resources.</p> <p>Potential for new discoveries as cobalt occurrences on the Property remain underexplored.</p>

26. RECOMMENDATIONS

Based on the results of the 2023 MRE, the Authors recommend that the Project move to an advanced exploration phase and toward an initial economic study. A two-phase work program is recommended, where Phase 2 is conditional upon the positive conclusions of Phase 1.

In Phase 1, the Authors recommend completing exploration work on the project, update the 2023 MRE and use the results of this updated MRE and internal studies as a basis for a Preliminary Economic Assessment (“PEA”):

- drill 2 water wells on the Property to provide a secure groundwater source and establish water right for the Property,
- infill drilling in the eastern extension to potentially convert inferred mineral resources to the indicated category,
- exploration drilling of zones at depth and laterally to explore the true depth potential of high-grade zones using 100m step-outs downdip, and follow-ups on isolated intersections,
- exploration of the Ruby targets in order to increase the Mineral Resources Estimate on the Property,
- evaluate additional showings within the project, including the CAS occurrence with IP surveys and follow up drilling if warranted,
- update and complete the metallurgical and internal mining engineering studies, and
- initiate environmental and hydrogeological characterization testing.

In support to the PEA study, complete an updated NI 43-101 Technical Report.

In Phase 2, the Authors recommend to:

- Define and complete a PFS study in accordance with the PEA results and recommendations.
- In support to PFS study, complete an updated NI 43-101 Technical Report.

The Authors are of the opinion that the recommended work programs and proposed expenditures are appropriate and well thought out. The Authors believe that the proposed budget reasonably reflects the type and amount of the contemplated activities.

26.1 Costs Estimate for Recommended Work

InnovExplo has prepared a cost estimate for the recommended two-phase work program to serve as a guideline. The budget for the proposed program is presented in Table 26-1. Expenditures for Phase 1 are estimated at CAD\$8,410,000 (incl. 15% for contingencies). Expenditures for Phase 2 are estimated at CAD\$1,150,000 (incl. 15% for contingencies). The grand total is CAD\$9,560,000 (incl. 15% for contingencies). Phase 2 is contingent upon the success of Phase 1.

Table 26-1 – Estimated Costs for the Recommended Work Program

PHASE 1 – Activity	Cost (CAD\$)
Infill drilling: to potentially convert inferred mineral resources to the indicated category (5,000m at 300 CAD\$/m)	1,500,000
Exploration drilling: expansion of known zones and follow-ups on isolated intersections (15,000m at 300 CAD\$/m)	4,500,000
Exploration drilling at CAS: (1,000m at 300 CAD\$/m)	300,000
IP surveys at Ruby and CAS: 20 kilometers at 13,000 CAD\$/km	260,000
Metallurgical and internal mining engineering studies.	250,000
Complete a PEA and an updated NI 43-101 Technical Report	500,000
Contingencies (15%)	1,100,000
Total (Phase 1)	8,410,000
PHASE 2 – Activity	Cost (CAD\$)
Complete a PFS and an updated NI 43-101 Technical Report	1,000,000
Contingencies (15%)	150,000
Total (Phase 2)	1,150,000
Total (Phase 1 and Phase 2)	9,560,000

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APPENDIX I – LIST OF MINING TITLES

CLAIM NAME	STATUS	NEXT PAYMENT DUE	CLAIM TYPE	MERIDIAN TOWNSHIP RANGES	QUADRANT	CLAIMANT
BR 60	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 029	NW	IDAHO COBALT CO
BR 59	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 029	NE	IDAHO COBALT CO
BR 62	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 029	NW	IDAHO COBALT CO
BR 61	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 029	NE	IDAHO COBALT CO
BR 82	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 019	SW	IDAHO COBALT CO
BR 81	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 019	SE	IDAHO COBALT CO
BR 64	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 019	SE	IDAHO COBALT CO
BR 63	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 019	SE	IDAHO COBALT CO
BR 84	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 019	SW	IDAHO COBALT CO
BR 83	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 019	SE	IDAHO COBALT CO
BR 66	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 019	SE	IDAHO COBALT CO
BR 65	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 019	SE	IDAHO COBALT CO
BR 98	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 019	NW	IDAHO COBALT CO
BR 97	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 019	NE	IDAHO COBALT CO
BR 122	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 028		IDAHO COBALT CO
BR 121	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 028		IDAHO COBALT CO
BR 112	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 028		IDAHO COBALT CO
BR 111	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 028		IDAHO COBALT CO
BR 124	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 028		IDAHO COBALT CO
BR123	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 028		IDAHO COBALT CO
BR 114	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 028		IDAHO COBALT CO
BR 113	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 028		IDAHO COBALT CO
BR 120	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 028		IDAHO COBALT CO
BR 108	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 030	NE	IDAHO COBALT CO
BR 118	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 030	NW	IDAHO COBALT CO
BR 109	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 028		IDAHO COBALT CO

CLAIM NAME	STATUS	NEXT PAYMENT DUE	CLAIM TYPE	MERIDIAN TOWNSHIP RANGES	QUADRANT	CLAIMANT
BR 107	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 029	NW	IDAHO COBALT CO
BR 117	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 028		IDAHO COBALT CO
BR 119	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 028		IDAHO COBALT CO
BR 116	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 030	SW	IDAHO COBALT CO
BR 105	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 029	SW	IDAHO COBALT CO
BR 115	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 030	SE	IDAHO COBALT CO
BR 106	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 030	SE	IDAHO COBALT CO
BR 100	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 029	SE	IDAHO COBALT CO
BR 104	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 027		IDAHO COBALT CO
BR 102	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 029	NE	IDAHO COBALT CO
BR99	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 029	SE	IDAHO COBALT CO
BR 101	FILED	2023-09-01	LODE CLAIM	08 0190N 0020E 029	SE	IDAHO COBALT CO
BR 103	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 027		IDAHO COBALT CO
BR 126	FILED	2023-09-01	LODE CLAIM	08 0190N 0190E 025	NE	IDAHO COBALT CO
BR 129	FILED	2023-09-01	LODE CLAIM	08 0190N 0190E 025	NE	IDAHO COBALT CO
BR 128	FILED	2023-09-01	LODE CLAIM	08 0190N 0190E 025	NE	IDAHO COBALT CO
BR 127	FILED	2023-09-01	LODE CLAIM	08 0190N 0190E 025	NE	IDAHO COBALT CO
BR 125	FILED	2023-09-01	LODE CLAIM	08 0190N 0190E 025	SE	IDAHO COBALT CO
BR 130	FILED	2023-09-01	LODE CLAIM	08 0190N 0190E 024	SE	IDAHO COBALT CO
BR 131	FILED	2023-09-01	LODE CLAIM	08 0190N 0190E 024	SE	IDAHO COBALT CO
BR 132	FILED	2023-09-01	LODE CLAIM	08 0190N 0190E 024	SE	IDAHO COBALT CO
BR 86	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 019	SW	IDAHO COBALT CO
BR 85	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 019	SE	IDAHO COBALT CO
BR 68	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 019	SE	IDAHO COBALT CO
BR 67	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 019	SE	IDAHO COBALT CO
BRS-114	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 027	SE	IDAHO COBALT CO

CLAIM NAME	STATUS	NEXT PAYMENT DUE	CLAIM TYPE	MERIDIAN TOWNSHIP RANGES	QUADRANT	CLAIMANT
BRS-119	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 026	SW	IDAHO COBALT CO
BRS-116	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 034	NE	IDAHO COBALT CO
BRS-120	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 034	NE	IDAHO COBALT CO
BRS-118	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 034	NE	IDAHO COBALT CO
BRS-121	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 034	NE	IDAHO COBALT CO
BRS-113	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 027	SW	IDAHO COBALT CO
BRS-115	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 034	NW	IDAHO COBALT CO
BRS-117	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 034	NW	IDAHO COBALT CO
BRS-112	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 033	NE	IDAHO COBALT CO
BRS-110	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 033	NE	IDAHO COBALT CO
BRS-108	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 027	SW	IDAHO COBALT CO
BRS-106	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 027	SW	IDAHO COBALT CO
BRS-104	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 027	SW	IDAHO COBALT CO
BRS-102	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 027	SW	IDAHO COBALT CO
BRS-111	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 033	NE	IDAHO COBALT CO
BRS-109	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 033	NE	IDAHO COBALT CO
BRS-107	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 028	SE	IDAHO COBALT CO
BRS-105	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 028	SE	IDAHO COBALT CO
BRS-103	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 028	SE	IDAHO COBALT CO
BRS-101	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 028	SE	IDAHO COBALT CO
BRS-130	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 017	SW	IDAHO COBALT CO
BRS-135	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 021	NE	IDAHO COBALT CO
BRS-132	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 016	SW	IDAHO COBALT CO
BRS-136	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 016	SE	IDAHO COBALT CO
BRS-134	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 016	SW	IDAHO COBALT CO
BRS-137	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 016	SE	IDAHO COBALT CO

CLAIM NAME	STATUS	NEXT PAYMENT DUE	CLAIM TYPE	MERIDIAN TOWNSHIP RANGES	QUADRANT	CLAIMANT
BRS-133	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 016	SW	IDAHO COBALT CO
BR 58	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 020	NW	IDAHO COBALT CO
BR 53	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 020	NE	IDAHO COBALT CO
BR 50	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 020	NE	IDAHO COBALT CO
BR 45	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 021	NW	IDAHO COBALT CO
BR 43	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 021	NE	IDAHO COBALT CO
BR 44	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 021	NW	IDAHO COBALT CO
BR 49	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 020	NE	IDAHO COBALT CO
BR 52	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 020	NE	IDAHO COBALT CO
BR 57	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 020	NW	IDAHO COBALT CO
BR 56	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 020	NW	IDAHO COBALT CO
BR 51	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 020	NE	IDAHO COBALT CO
BR 48	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 020	NE	IDAHO COBALT CO
BR 47	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 020	NE	IDAHO COBALT CO
BR 27	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 021	NW	IDAHO COBALT CO
BR 42	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 021	NE	IDAHO COBALT CO
BR 55	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 020	NW	IDAHO COBALT CO
BR 37	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 020	NE	IDAHO COBALT CO
BR 26	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 021	NW	IDAHO COBALT CO
BR 41	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 021	NE	IDAHO COBALT CO
BR 4	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 021	NE	IDAHO COBALT CO
BR 5	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 022	NW	IDAHO COBALT CO
BR 54	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 020	NW	IDAHO COBALT CO
BR 35	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 020	NE	IDAHO COBALT CO
BR 36	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 020	NE	IDAHO COBALT CO
BR 46	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 020	SE	IDAHO COBALT CO

CLAIM NAME	STATUS	NEXT PAYMENT DUE	CLAIM TYPE	MERIDIAN TOWNSHIP RANGES	QUADRANT	CLAIMANT
BR 25	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 021	SW	IDAHO COBALT CO
BR 24	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 021	NE	IDAHO COBALT CO
BR 40	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 021	SE	IDAHO COBALT CO
BR 6	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 021	NE	IDAHO COBALT CO
BR 15	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 020	SW	IDAHO COBALT CO
BR 33	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 020	SE	IDAHO COBALT CO
BR 34	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 020	SE	IDAHO COBALT CO
BR 23	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 021	SW	IDAHO COBALT CO
BR 22	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 021	SE	IDAHO COBALT CO
BR 38	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 021	SE	IDAHO COBALT CO
BR 39	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 021	SE	IDAHO COBALT CO
BR 7	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 021	SE	IDAHO COBALT CO
BR 14	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 020	SW	IDAHO COBALT CO
BR 31	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 020	SE	IDAHO COBALT CO
BR 32	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 020	SE	IDAHO COBALT CO
BR 21	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 021	SW	IDAHO COBALT CO
BR 20	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 021	SE	IDAHO COBALT CO
BR 1	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 021	SE	IDAHO COBALT CO
BR 8	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 021	SE	IDAHO COBALT CO
BR 13	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 020	SW	IDAHO COBALT CO
BR 29	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 020	SE	IDAHO COBALT CO
BR 30	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 020	SE	IDAHO COBALT CO
BR 19	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 021	SW	IDAHO COBALT CO
BR 18	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 021	SE	IDAHO COBALT CO
BR 2	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 021	SE	IDAHO COBALT CO
BR 9	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 021	SE	IDAHO COBALT CO

CLAIM NAME	STATUS	NEXT PAYMENT DUE	CLAIM TYPE	MERIDIAN TOWNSHIP RANGES	QUADRANT	CLAIMANT
BR 12	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 020	SW	IDAHO COBALT CO
BR 11	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 020	SE	IDAHO COBALT CO
BR 28	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 020	SE	IDAHO COBALT CO
BR 17	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 021	SW	IDAHO COBALT CO
BR 16	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 021	SE	IDAHO COBALT CO
BR 3	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 021	SE	IDAHO COBALT CO
BR 10	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 021	SE	IDAHO COBALT CO
NBR 25	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 028	NW	SCIENTIFIC METALS (DELAWARE) CORP
NBR 20	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 028	NW	SCIENTIFIC METALS (DELAWARE) CORP
NBR 24	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 028	NW	SCIENTIFIC METALS (DELAWARE) CORP
NBR 18	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 028	NW	SCIENTIFIC METALS (DELAWARE) CORP
NBR 16	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 028	NW	SCIENTIFIC METALS (DELAWARE) CORP
NBR 22	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 028	NW	SCIENTIFIC METALS (DELAWARE) CORP
NBR 23	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 028	NW	SCIENTIFIC METALS (DELAWARE) CORP
NBR 14	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 028	NW	SCIENTIFIC METALS (DELAWARE) CORP
NBR 19	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 028	NE	SCIENTIFIC METALS (DELAWARE) CORP
NBR 17	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 028	NE	SCIENTIFIC METALS (DELAWARE) CORP
NBR 15	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 028	NE	SCIENTIFIC METALS (DELAWARE) CORP
NBR 13	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 028	NE	SCIENTIFIC METALS (DELAWARE) CORP

CLAIM NAME	STATUS	NEXT PAYMENT DUE	CLAIM TYPE	MERIDIAN TOWNSHIP RANGES	QUADRANT	CLAIMANT
NBR 10	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 028	NE	SCIENTIFIC METALS (DELAWARE) CORP
NBR 9	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 027	NW	SCIENTIFIC METALS (DELAWARE) CORP
NBR 8	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 028	NE	SCIENTIFIC METALS (DELAWARE) CORP
NBR 7	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 027	NW	SCIENTIFIC METALS (DELAWARE) CORP
NBR 6	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 028	NE	SCIENTIFIC METALS (DELAWARE) CORP
NBR 5	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 027	NW	SCIENTIFIC METALS (DELAWARE) CORP
NBR 4	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 028	NE	SCIENTIFIC METALS (DELAWARE) CORP
NBR 3	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 027	NW	SCIENTIFIC METALS (DELAWARE) CORP
NBR 1	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 027	SW	SCIENTIFIC METALS (DELAWARE) CORP
NBR 2	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 028	SE	SCIENTIFIC METALS (DELAWARE) CORP
NBR 11	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 028	SE	SCIENTIFIC METALS (DELAWARE) CORP
NBR 12	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 028	SW	SCIENTIFIC METALS (DELAWARE) CORP
NBR 21	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 028	SW	SCIENTIFIC METALS (DELAWARE) CORP
JA 376	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 024	SW	IDAHO COBALT CO
JA 369	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 023	SE	IDAHO COBALT CO
JA 375	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 024	SW	IDAHO COBALT CO
JA 362	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 023	SE	IDAHO COBALT CO
JA 368	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 023	SE	IDAHO COBALT CO

CLAIM NAME	STATUS	NEXT PAYMENT DUE	CLAIM TYPE	MERIDIAN TOWNSHIP RANGES	QUADRANT	CLAIMANT
JA 374	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 024	SW	IDAHO COBALT CO
JA 355	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 023	NE	IDAHO COBALT CO
JA 361	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 023	NE	IDAHO COBALT CO
JA 367	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 023	NE	IDAHO COBALT CO
JA 373	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 024	NW	IDAHO COBALT CO
JA 348	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 023	NW	IDAHO COBALT CO
JA 354	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 023	NE	IDAHO COBALT CO
JA 360	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 023	NE	IDAHO COBALT CO
JA 366	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 023	NE	IDAHO COBALT CO
JA 372	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 024	NW	IDAHO COBALT CO
JA 334	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 022	NE	IDAHO COBALT CO
JA 341	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 022	NE	IDAHO COBALT CO
JA 347	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 023	NW	IDAHO COBALT CO
JA 353	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 023	NE	IDAHO COBALT CO
JA 359	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 023	NE	IDAHO COBALT CO
JA 365	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 023	NE	IDAHO COBALT CO
JA 371	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 024	NW	IDAHO COBALT CO
JA 326	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 022	NW	IDAHO COBALT CO
JA 333	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 022	NE	IDAHO COBALT CO
JA 340	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 022	NE	IDAHO COBALT CO
JA 346	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 023	NW	IDAHO COBALT CO
JA 352	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 023	NE	IDAHO COBALT CO
JA 358	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 023	NE	IDAHO COBALT CO
JA 364	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 023	NE	IDAHO COBALT CO
JA 325	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 015	SW	IDAHO COBALT CO
JA 332	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 015	SE	IDAHO COBALT CO

CLAIM NAME	STATUS	NEXT PAYMENT DUE	CLAIM TYPE	MERIDIAN TOWNSHIP RANGES	QUADRANT	CLAIMANT
JA 339	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 014	SW	IDAHO COBALT CO
JA 345	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 014	SW	IDAHO COBALT CO
JA 351	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 014	SE	IDAHO COBALT CO
JA 357	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 014	SE	IDAHO COBALT CO
JA 363	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 013	SW	IDAHO COBALT CO
JA 324	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 015	SW	IDAHO COBALT CO
JA 331	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 015	SE	IDAHO COBALT CO
JA 338	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 014	SW	IDAHO COBALT CO
JA 344	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 014	SW	IDAHO COBALT CO
JA 350	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 014	SE	IDAHO COBALT CO
JA 356	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 014	SE	IDAHO COBALT CO
JA 323	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 015	SW	IDAHO COBALT CO
JA 330	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 015	SE	IDAHO COBALT CO
JA 337	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 014	SW	IDAHO COBALT CO
JA 343	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 014	SW	IDAHO COBALT CO
JA 349	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 014	SE	IDAHO COBALT CO
JA 322	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 015	SW	IDAHO COBALT CO
JA 329	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 015	SE	IDAHO COBALT CO
JA 336	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 014	SW	IDAHO COBALT CO
JA 342	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 014	SW	IDAHO COBALT CO
JA 321	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 015	NW	IDAHO COBALT CO
JA 328	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 015	NE	IDAHO COBALT CO
JA 335	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 014	NW	IDAHO COBALT CO
JA 320	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 015	NW	IDAHO COBALT CO
JA 327	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 015	NE	IDAHO COBALT CO
JA 370	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 024	NW	IDAHO COBALT CO

CLAIM NAME	STATUS	NEXT PAYMENT DUE	CLAIM TYPE	MERIDIAN TOWNSHIP RANGES	QUADRANT	CLAIMANT
JA 380	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 024	NE	IDAHO COBALT CO
JA 382	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 024	SE	IDAHO COBALT CO
JA 378	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 024	NW	IDAHO COBALT CO
JA 379	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 024	NW	IDAHO COBALT CO
JA 383	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 024	SE	IDAHO COBALT CO
JA 377	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 024	NW	IDAHO COBALT CO
JA 381	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 024	SE	IDAHO COBALT CO
JA 389	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 024	SE	IDAHO COBALT CO
JA 387	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 024	NE	IDAHO COBALT CO
JA 391	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 024	SE	IDAHO COBALT CO
JA 385	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 024	NE	IDAHO COBALT CO
JA 390	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 024	SE	IDAHO COBALT CO
JA 386	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 024	NE	IDAHO COBALT CO
JA 388	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 024	NE	IDAHO COBALT CO
JA 384	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 013	SE	IDAHO COBALT CO
JA 397	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 024	NE	IDAHO COBALT CO
JA 394	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 024	NE	IDAHO COBALT CO
JA 395	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 024	NE	IDAHO COBALT CO
JA 393	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 024	NE	IDAHO COBALT CO
JA 399	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 024	SE	IDAHO COBALT CO
JA 396	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 024	NE	IDAHO COBALT CO
JA 398	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0190E 024	SE	IDAHO COBALT CO
JA 392	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 018	SW	IDAHO COBALT CO
JA 409	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 019	NE	IDAHO COBALT CO
JA 411	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 019	SE	IDAHO COBALT CO
JA 406	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 019	NE	IDAHO COBALT CO

CLAIM NAME	STATUS	NEXT PAYMENT DUE	CLAIM TYPE	MERIDIAN TOWNSHIP RANGES	QUADRANT	CLAIMANT
JA 410	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 019	SE	IDAHO COBALT CO
JA 408	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 019	NE	IDAHO COBALT CO
JA 407	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 019	NE	IDAHO COBALT CO
JA 420	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 019	NE	IDAHO COBALT CO
JA 419	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 019	NE	IDAHO COBALT CO
JA 421	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 019	NE	IDAHO COBALT CO
JA 418	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 019	NE	IDAHO COBALT CO
JA 422	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 019	SE	IDAHO COBALT CO
JA 423	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 019	SE	IDAHO COBALT CO
JA 432	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 019	NE	IDAHO COBALT CO
JA 435	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 019	SE	IDAHO COBALT CO
JA 431	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 019	NE	IDAHO COBALT CO
JA 433	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 019	NE	IDAHO COBALT CO
JA 434	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 019	SE	IDAHO COBALT CO
JA 430	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 019	NE	IDAHO COBALT CO
JA 440	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 020	NW	IDAHO COBALT CO
JA 441	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 020	NW	IDAHO COBALT CO
JA 439	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 020	NW	IDAHO COBALT CO
JA 442	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 020	SW	IDAHO COBALT CO
JA 443	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 020	SW	IDAHO COBALT CO
SCOB-8	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 027	SW	BORAH RESOURCES INC
SCOB-7	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 027	NW	BORAH RESOURCES INC
SCOB-12	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 027	SE	BORAH RESOURCES INC
SCOB-6	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 027	NW	BORAH RESOURCES INC
SCOB-5	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 027	NW	BORAH RESOURCES INC
SCOB-4	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 027	NW	BORAH RESOURCES INC

CLAIM NAME	STATUS	NEXT PAYMENT DUE	CLAIM TYPE	MERIDIAN TOWNSHIP RANGES	QUADRANT	CLAIMANT
SCOB-3	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 022	SW	BORAH RESOURCES INC
SCOB-2	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 022	SW	BORAH RESOURCES INC
SCOB-13	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 027	SE	BORAH RESOURCES INC
SCOB-14	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 027	SE	BORAH RESOURCES INC
SCOB-15	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 027	SE	BORAH RESOURCES INC
SCOB-16	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 027	NE	BORAH RESOURCES INC
SCOB-17	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 027	NE	BORAH RESOURCES INC
SCOB-18	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 027	NE	BORAH RESOURCES INC
SCOB-19	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 027	NE	BORAH RESOURCES INC
SCOB-20	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 022	SE	BORAH RESOURCES INC
SCOB-21	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 022	SE	BORAH RESOURCES INC
SCOB-31	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 027	SE	BORAH RESOURCES INC
SCOB-30	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 027	SE	BORAH RESOURCES INC
SCOB-29	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 027	SE	BORAH RESOURCES INC
SCOB-28	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 027	SE	BORAH RESOURCES INC
SCOB-27	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 027	NE	BORAH RESOURCES INC
SCOB-26	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 027	NE	BORAH RESOURCES INC
SCOB-25	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 027	NE	BORAH RESOURCES INC
SCOB-24	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 027	NE	BORAH RESOURCES INC
SCOB-23	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 022	SE	BORAH RESOURCES INC
SCOB-22	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 022	SE	BORAH RESOURCES INC
SCOB-11	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 027	SW	BORAH RESOURCES INC
SCOB-10	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 027	SW	BORAH RESOURCES INC
SCOB-9	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 027	SW	BORAH RESOURCES INC
CAS 46	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 017	SE	Richard Fox
IRON 14	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 017	SE	Richard Fox

CLAIM NAME	STATUS	NEXT PAYMENT DUE	CLAIM TYPE	MERIDIAN TOWNSHIP RANGES	QUADRANT	CLAIMANT
CAS 45	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 017	SE	Richard Fox
IRON 6	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 017	SE	Richard Fox
CAS 44	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 017	SE	Richard Fox
CAS 43	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 017	SE	Richard Fox
CAS 42	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 017	SE	Richard Fox
CAS 41	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 017	SE	Richard Fox
IRON 15	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 017	SE	Richard Fox
IRON 7	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 017	SE	Richard Fox
IRON 34	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 017	SW	Richard Fox
IRON 33	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 017	SW	Richard Fox
IRON 5	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 017	SW	Richard Fox
IRON 4	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 017	SW	Richard Fox
IRON 3	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 017	SW	Richard Fox
IRON 2	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 017	NW	Richard Fox
CAS 6	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 017	NE	Richard Fox
CAS 5	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 017	NE	Richard Fox
CAS 23	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 016	NW	Richard Fox
CAS 25	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 017	NW	Richard Fox
CAS 1	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 017	NE	Richard Fox
CAS 2	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 017	NE	Richard Fox
CAS 4	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 017	NE	Richard Fox
IRON 31	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 008	SE	Richard Fox
CAS 22	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 008	SE	Richard Fox
IRON 32	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 008	SE	Richard Fox
CAS 3	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 017	NE	Richard Fox
CAS 13	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 008	SE	Richard Fox

CLAIM NAME	STATUS	NEXT PAYMENT DUE	CLAIM TYPE	MERIDIAN TOWNSHIP RANGES	QUADRANT	CLAIMANT
CAS 21	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 008	SE	Richard Fox
CAS 18	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 008	SW	Richard Fox
CAS 10	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 008	SW	Richard Fox
CAS 20	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 008	SW	Richard Fox
IRON 35	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 008	SE	Richard Fox
IRON 36	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 008	SE	Richard Fox
CAS 15	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 007	SE	Richard Fox
CAS 14	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 007	SE	Richard Fox
IRON 37	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 008	SW	Richard Fox
IRON 38	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 008	SW	Richard Fox
IRON 39	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 008	SW	Richard Fox
CAS 16	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 007	SE	Richard Fox
CAS 17	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 007	SE	Richard Fox
CAS 19	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 007	SE	Richard Fox
CAS 12	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 007	SE	Richard Fox
CAS 11	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 007	SE	Richard Fox
CAS 9	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 017	NW	Richard Fox
CAS 8	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 017	NW	Richard Fox
CAS 7	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 017	NW	Richard Fox
CAS 33	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 017	NW	Richard Fox
CAS 35	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 017	NW	Richard Fox
CAS 36	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 017	NW	Richard Fox
CAS 34	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 017	NW	Richard Fox
IRON 1	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 017	NW	Richard Fox
CAS 32	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 017	NE	Richard Fox
CAS 31	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 016	NW	Richard Fox

CLAIM NAME	STATUS	NEXT PAYMENT DUE	CLAIM TYPE	MERIDIAN TOWNSHIP RANGES	QUADRANT	CLAIMANT
IRON 40	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 007	SE	Richard Fox
IRON 41	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 007	SE	Richard Fox
IRON 60	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 007	SE	Richard Fox
IRON 51	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 007	SE	Richard Fox
IRON 50	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 018	NE	Richard Fox
IRON 49	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 018	NE	Richard Fox
IRON 48	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 018	NE	Richard Fox
IRON 47	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 018	NE	Richard Fox
IRON 46	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 018	SE	Richard Fox
IRON 45	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 018	SE	Richard Fox
IRON 44	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 018	SE	Richard Fox
IRON 43	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 018	SE	Richard Fox
IRON 42	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 019	NE	Richard Fox
IRON 52	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 018	SE	Richard Fox
IRON 53	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 018	SE	Richard Fox
IRON 61	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 007	SE	Richard Fox
IRON 59	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 007	SE	Richard Fox
IRON 58	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 017	SE	Richard Fox
IRON 54	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 018	SE	Richard Fox
IRON 55	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 018	SE	Richard Fox
IRON 56	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 018	NE	Richard Fox
IRON 57	ACTIVE	2023-09-01	LODE CLAIM	08 0190N 0200E 018	NE	Richard Fox
BRS-131	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 016	SW	IDAHO COBALT CO
BCA-07	FILED	2023-09-01	LODE CLAIM	08 0190N 0190E 013	NE	IDAHO COBALT CO
BCA-08	FILED	2023-09-01	LODE CLAIM	08 0190N 0190E 013	NE	IDAHO COBALT CO
BCA-09	FILED	2023-09-01	LODE CLAIM	08 0190N 0190E 013	NE	IDAHO COBALT CO

CLAIM NAME	STATUS	NEXT PAYMENT DUE	CLAIM TYPE	MERIDIAN TOWNSHIP RANGES	QUADRANT	CLAIMANT
BCA-10	FILED	2023-09-01	LODE CLAIM	08 0190N 0190E 012	SE	IDAHO COBALT CO
BCA-18	FILED	2023-09-01	LODE CLAIM	08 0190N 0190E 013	NE	IDAHO COBALT CO
BCA-19	FILED	2023-09-01	LODE CLAIM	08 0190N 0190E 012	SE	IDAHO COBALT CO
BCA-20	FILED	2023-09-01	LODE CLAIM	08 0190N 0190E 012	SE	IDAHO COBALT CO
BCA-21	FILED	2023-09-01	LODE CLAIM	08 0190N 0120E 007	SW	IDAHO COBALT CO
BCA-22	FILED	2023-09-01	LODE CLAIM	08 0190N 0120E 007	SW	IDAHO COBALT CO
BCA-23	FILED	2023-09-01	LODE CLAIM	08 0190N 0190E 012	SE	IDAHO COBALT CO
BCA-25	FILED	2023-09-01	LODE CLAIM	08 0190N 0190E 012	NE	IDAHO COBALT CO
BCA-33	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 007	SW	IDAHO COBALT CO
BCA-34	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 007	SW	IDAHO COBALT CO
BCA-35	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 007	SW	IDAHO COBALT CO
BCA-36	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 007	SW	IDAHO COBALT CO
BCA-37	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 007	SW	IDAHO COBALT CO
BCA-38	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 007	NW	IDAHO COBALT CO
BCA-39	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 007	NW	IDAHO COBALT CO
BCA-49	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 007	SE	IDAHO COBALT CO
BCA-50	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 007	SE	IDAHO COBALT CO
BCA-52	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 007	SE	IDAHO COBALT CO
BCA-53	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 007	SE	IDAHO COBALT CO
BCA-54	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 007	NE	IDAHO COBALT CO
BCA-55	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 007	NE	IDAHO COBALT CO
BCA-56	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 007	NE	IDAHO COBALT CO
BCA-57	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 057	NE	IDAHO COBALT CO
BCA-58	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 007	NE	IDAHO COBALT CO
BCA-59	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 007	NE	IDAHO COBALT CO
BCA-60	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 007	NE	IDAHO COBALT CO

CLAIM NAME	STATUS	NEXT PAYMENT DUE	CLAIM TYPE	MERIDIAN TOWNSHIP RANGES	QUADRANT	CLAIMANT
BCA-62	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 007	NE	IDAHO COBALT CO
BCA-64	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 007	NE	IDAHO COBALT CO
BCA-63	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 007	NE	IDAHO COBALT CO
BCA-67	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 008	NW	IDAHO COBALT CO
BCA-65	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 008	SW	IDAHO COBALT CO
BCA-66	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 008	NW	IDAHO COBALT CO
BCA-61	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 007	NE	IDAHO COBALT CO
BCA-69	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 007	NW	IDAHO COBALT CO
BCA-68	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 007	NE	IDAHO COBALT CO
BCA-70	FILED	2023-09-01	LODE CLAIM	08 0190N 0200E 007	NW	IDAHO COBALT CO
BCA-71	FILED	2023-09-01	LODE CLAIM	08 0190N 0190E 012	NE	IDAHO COBALT CO
BCA-72	FILED	2023-09-01	LODE CLAIM	08 0190N 0190E 012	NE	IDAHO COBALT CO
BR 110	FILED	2021-06-03	LODE CLAIM	08 0190N 0200E 030	NE	IDAHO COBALT CO
BCA-24	FILED	2022-04-14	LODE CLAIM	08 0190N 0200E 007	NW	IDAHO COBALT CO
BCA-51	FILED	2022-04-13	LODE CLAIM	08 0190N 0200E 007	SW	IDAHO COBALT CO