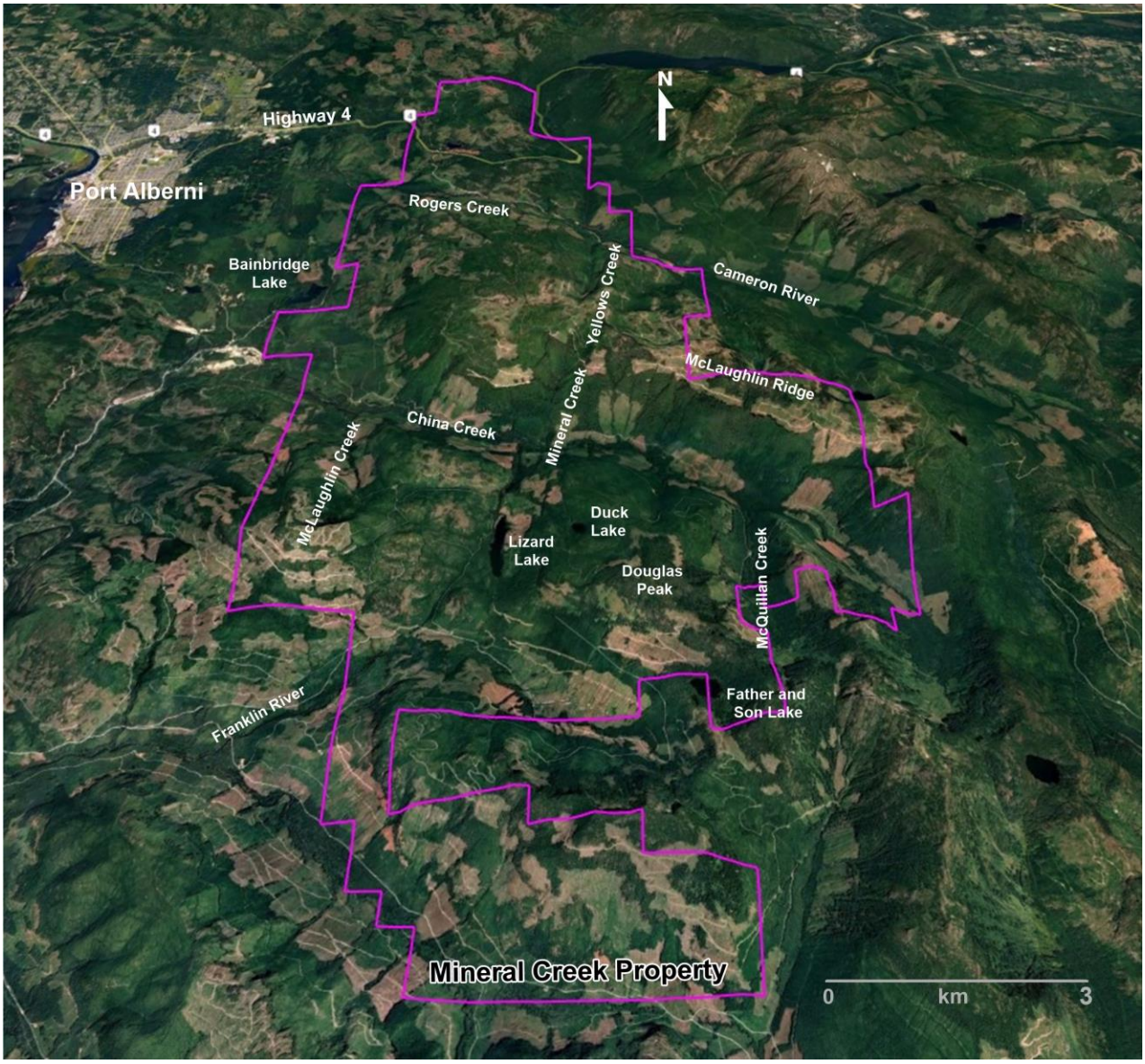

Frontispiece: Satellite view of Theia Gold Corp.'s Mineral Creek Property with named features. Port Alberni area, Vancouver Island, BC, Canada

NI 43-101
TECHNICAL REPORT ON THE MINERAL CREEK PROJECT

Port Alberni Area
Vancouver Island
British Columbia, Canada

Centered at approximately

Latitude 49° 11.01’ N, Longitude 124° 40.38’ W
378,100 E, 5,449,750 N (UTM NAD83 Zone 10)

NTS Map Sheets 92F/02, /07
Alberni & Victoria Mining Divisions

Report Prepared For

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Effective Date

June 5, 2024

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1.0 EXECUTIVE SUMMARY

1.1 SUMMARY AND CONCLUSIONS

The Mineral Creek Property, owned by Theia Gold Corp. (“Theia” or “Theia Gold”) is centered twelve kilometers southeast of Port Alberni, on Vancouver Island, British Columbia. Within the Property area a complexly inter-layered succession of volcanic and sedimentary rocks of the Paleozoic Sicker Group and Mississippian to Lower Permian Buttle Lake Group is overlain by basaltic flows and pillow basalt of the Triassic Karmutsen Formation, which have all been intruded by stocks of the Early-Middle Jurassic Island Plutonic Suite.

The Mineral Creek Property exhibits good exploration potential in several areas; many related to gold-bearing structures, and possible volcanogenic massive sulfide (VMS)-style Cu-Zn mineralization, as well as potential for Cu-Au stockworks in volcanic rocks and adjacent diorite intrusions.

The area of the current Property has been subject to extensive exploration programs and limited gold extraction over the past 115 years. The exploration targets were gold-bearing quartz-carbonate veins and VMS deposits. Historical work has primarily been concentrated in three areas - Mineral Creek, Rogers Creek and Regina-Lizard Lake - leaving extensive regions of this large property under-explored.

Of the three main targets, the **Mineral Creek Zone**, in the central part of the Property, has received the greatest amount of drilling to date, with 219 holes totalling 43,650 m completed up to 2009, and an additional 4789 m in 2023. This zone comprises a low-grade gold deposit up to 35 meters wide and 500 m long that is hosted by a carbonate-altered fault zone cataclasite. Gold occurs with disseminated pyrite and arsenopyrite and in fine quartz-carbonate veinlets.

An exploration tunnel was excavated in 1988 along the hangingwall side of the Mineral Creek Fault Zone for 1.8 km, at which point two crosscuts were driven across the Mineral Creek Gold Zone. Continuous chip sampling in the crosscuts averaged between 2.34 g/t Au and 3.62 g/t Au over 11 m to 30 m widths across the Mineral Creek Zone.

In 1989, a mineral inventory estimate that is **not 43-101 compliant** was produced by Westmin Mines Ltd., based on the results of approximately 315 drill holes in the Mineral Creek Zone and adjacent areas. The total probable mineral inventory for the Mineral Creek Zone along a 500 m strike length, an average 20 m width, and a 200 m depth, was reported as 172,082 tonnes averaging 3.26 g/t Au (0.0951 oz/ton Au) containing 18,036 ounces of gold. As a comparison, the average of twenty-six 1-m chip samples collected across the zone in the southernmost underground crosscut was 3.62 g/t Au over 26 m, comparing closely with the estimated grade and width of the drilled zone.

Many of the holes that were drilled in the Mineral Creek Zone also intersected the **Linda Vein** that splays to the northeast from the main Mineral Creek Fault structure. Westmin's 1989 estimate also included a non-compliant probable mineral inventory in the Linda Zone of 51,871 tonnes grading 8.40 g/t Au (0.245 oz/ton Au), containing 14,008 ounces of gold, based on the results of approximately 30 drill holes in an area measuring about 200 m long by 2 m wide by 20 m of depth.

From 2006 through 2008, Bitterroot Resources Ltd. ("Bitterroot") drilled 60 holes in the Linda Vein that appear to have defined a high-grade shoot near surface. Several excellent gold intervals were intersected; some of the best results included 159.03 g/t Au over 7.2 m (BTT-L54), 215.15 g/t Au over 1.65 m (BTT-L58) and 45.48 g/t Au over 2.7 m (BTT-L3). The vein's true thickness ranges from a few centimeters to 1.3 meters and in places it splits into two or three veins. No revisions to the 1989 mineral inventory estimates have been made.

A bulk sample estimated at 620 tonnes was collected from the Linda Vein by open cut and an 11 m long drift in 2009 and 2010. The quartz vein material was crushed and milled on site then run over a shaker table to produce a pyritic concentrate that was sold to a refinery. Concentrate material assayed at the refinery returned values of up to 15.685 oz/ton Au and 4.356 oz/ton Ag. The total gold recovered in dore and concentrate was estimated to be about 8000 grams from 620 tonnes, however, there is no detailed accounting available to the authors.

The **Ember Vein** parallels the Linda Vein, about 80 m in the hangingwall. Bitterroot drilled this vein with 68 holes in 2009 tracing it along a strike length of 130 meters and an elevation range of about 90 meters. The vein's thickness ranges from a few centimeters to 1.3 meters and in places it splits into two or three veins. The gold grades vary from trace up to 467.0 g/t gold and the highest grades are often accompanied by visible gold grains. Of the 68 holes, 11 returned gold values greater than 20 g/t, over sample lengths of 0.15 m to 0.85 m.

The Linda and Ember veins appear to be north-easterly continuations of two veins that were mined on a small scale by Vancouver Island Gold Mines Ltd. in the 1930's that reportedly produced 365 tonnes yielding 9425 grams (303 oz) of gold. There are indications of additional veins that splay off the Mineral Creek Fault that have returned sporadic high gold values, but these require further drilling for more complete definition.

The **900 Zone** is another important gold-quartz vein deposit about 1.1 km southwest of the Mineral Creek Zone. Mineralization consists of native gold, pyrite, magnetite and arsenopyrite associated with faults, quartz stockworks and cherty iron formation. The 900 Zone has received 84 drill holes, defining a steeply dipping, pipe-like mineralized zone at the juncture of two faults. Quartz veins and stockworks carrying significant gold values within the fault intersection zone cover an area of about 180 m x 150 m, to a depth of over 120 m. Westmin reported a non-compliant probable mineral inventory in 1989 for the 900 Zone of 28,294 tonnes grading 11.69 g/t Au, containing 10,634 ounces of gold.

In 1995, under option from Westmin, White Hawk Ventures Inc. developed a portion of the 900 Zone and mined a bulk sample estimated to contain approximately 800 ounces of gold in about 900 tonnes of vein rock. In 1997, 894 tonnes of the bulk sample material was shipped and milled offsite, producing 7,478 kilograms of concentrate, which was then shipped to Cominco's smelter in Trail for refining. Gold values were not reported.

The **1050 Zone** is located 750 m northwest of the 900 Zone. Narrow, high-grade veins were intersected in some of the 14 holes drilled in this zone in 2005, returning some excellent values from drill core such as 244 g/t Au over 0.8 m and 34.1 g/t over 5.3 m, however, true widths were not determined, and more drilling is required.

Exploration of volcanogenic massive sulfide (VMS) mineralization has occurred near the north and south ends of the Property. In the north, the **Rogers Creek** surface showing consists of banded, fine-grained sphalerite with minor chalcopyrite and galena in four thin lenses, which have assayed 14.1% zinc, 0.87% lead and 0.12% copper over 20 cm. Nearby, a north trending, 200-meter-wide, pyritic sericite-chlorite-carbonate schist zone with a coincident IP anomaly was drilled, returning 2.06% zinc, 0.32% copper, 0.04% lead and 5.8 g/t silver over 0.6 meters. To the southeast of Rogers Creek, a large coincident Cu-Zn soil anomaly follows the contact between Nitinat Formation and overlying McLaughlin Ridge Formation for more than 2 km. This anomalous area has never been drill tested and presents an excellent VMS-style target.

The McLaughlin Ridge Formation contains felsic volcaniclastic units with interbedded tuffaceous siltstone and argillite, and coarser pyroclastic rocks found toward the top of this unit that indicate the possibility of a felsic volcanic center nearby. VMS mineralizing systems are known to be commonly associated with felsic volcanic and sedimentary rocks. At the nearby Myra Falls mine, more than 20 lenses of massive sulfides are found within a section of Myra Formation several hundred meters in thickness, typically hosted by intervals of coarse-grained felsic volcaniclastic rocks, sandstones, and mudstones.

In the south part of the Property, near the **Regina** vein showings, Westmin drilling in 1987 intersected felsic tuffs and flows with lesser basalts hosting quartz veins, as well as disseminated pyrite and chalcopyrite, with specks of sphalerite and sporadic Au and Ag anomalies. The geological model of mineralization near the basalt – felsic volcanic boundary suggested potential for VMS mineralization. In 2007, Bitterroot drilled 18 holes on potential VMS targets in the Regina area, revealing copper and zinc mineralization, occasionally present up to a few percent, mostly within one stratum of altered basalt flows within 100 m of surface, which was traced from hole to hole throughout the drilled area. Mineralization, occurring with jasper and magnetite, returned values of up to 5.6% Zn, 2.9% Cu over 0.2 m. The Regina area falls within a north-south trending Cu-Zn-As soil anomaly that extends for nearly 2 km, indicating potential for additional mineralization in Duck Lake Formation volcanic rocks.

In the **Lizard Lake** area, at the south end of the Property, work in the 1980's located a few broad copper, arsenic and gold soil geochemical anomalies with some associated IP anomalies and a best reported drill intersection of 2 g/t Au over 0.6 m. Most of the gold mineralization was found to be associated with pyrite and arsenopyrite in small quartz veins, however, this area is underlain by McLaughlin Ridge Formation that has good potential for VMS-type mineralization, in addition to the gold-bearing veins.

Near the north end of Lizard Lake, Bitterroot drilled 22 holes in 2006-07 to test the Mineral Creek Fault and potential splay structures for gold-bearing veins. Significant gold assays of 5 to 9 g/t Au were returned from several holes over narrow widths of 0.3 to 0.9 m. The mineralization comprised pyrite, arsenopyrite and rare chalcopyrite in thin quartz veins, gouge seams and shear-breccias with ankerite-silica alteration halos, which resembles the mineralized areas along Mineral Creek, 3.5 km to the north.

In conclusion, the considerable exploration work that has been undertaken on the Property has revealed several zones of significant mineralization. In the Mineral Creek area, most of the gold zones are open to expansion through further drilling and there is potential for discovery of new mineralized splay veins near the Mineral Creek Fault based on distribution of anomalous gold soil geochemistry.

In the Rogers Creek area, the combination of known VMS-type showings, broad alteration zones, and extensive Cu and Zn soil anomalies highlight the very good potential for discovery of new VMS zones.

The Regina-Lizard Lake area exhibits strong multi-element soil anomalies over a length of 3 km and several occurrences that include gold-bearing veins and VMS-style mineralization. Several geochemically anomalous areas remain to be evaluated.

Other areas of the Property have shown mineral potential, based on clusters of soil geochemical anomalies and favourable host rocks. Some have received preliminary drill testing; others have not been drilled. Geological and geophysical evaluation of these targets will help to determine which of them warrant drilling.

The authors conclude that the Mineral Creek Property, which is the subject of this report, has good potential to host significant mineral deposits of gold-bearing veins and VMS-type Cu-Zn-Ag-Au mineralization, and further work is recommended. A follow-up exploration program is proposed, at an estimated cost of $350,000, to conduct geological, geochemical and geophysical work to evaluate untested targets, based on the exploration models of both vein-type gold and VMS type mineralization. Phase 2 drilling, totalling 2500 m, is also recommended to test priority targets identified by the proposed work.

1.2 TECHNICAL SUMMARY

Property Description and Location

The Mineral Creek Property is centered twelve kilometers southeast of the town of Port Alberni, on the southern part of Vancouver Island, British Columbia. The Property consists of a block of contiguous mineral claims approximately 7 km x 15 km in size.

The area is moderately mountainous and incised by two northwest-oriented river valleys. Elevations on the Property range from 160 m to 1480 m. The forests are principally comprised of stands of Douglas-fir, of which seventy percent, or more, has been logged within the Property area.

The climate on the Property is very similar to that of Port Alberni, although it ranges from 100 m to 1400 m higher in elevation. The summers are short and warm, and the winters are cold and wet. The temperature typically varies from 0°C to 27°C, and the wettest period is from October through to mid-April. On the Property, at higher elevations, the amount of precipitation falling as snow is greater than in Port Alberni and remains on the ground longer.

Land Tenure

The Property consists of 51 MTO mineral tenures and one Crown Grant registered as 100% ownership by Theia. The tenures and the Crown Grant were purchased in 2021 from Lu'an (Canada) Capital & Energy Investment Inc. ("Lu'an") for a specified share issuance and granting of a 1.0% net smelter return royalty on certain claims. Various tenures are also subject to a 0.5% net smelter return royalty to Mineral Creek Ventures Inc., and a 3.0% net smelter return royalty to Nyrstar (the successor to Boliden Westmin (Canada) Limited).

Land lots that cover the entire area of the Property were part of an extensive land grant given to E&N Railway circa 1887 as payment for construction of a 115 km rail line from Esquimalt to Nanaimo. The land lots that were granted included rights to timber and base metal minerals. E&N Railway has since sold the land lots that cover the Property to three timber companies - Island Timberlands, TimberWest and Western Forest Products - with Island Timberlands holding the lots that cover most of the main showing areas on the Property. The authors believe that there is very high probability that any mineral rights associated with the E&R lands within the Property area were surrendered or forfeited for non-payment of BC Mineral Land Tax.

Site Infrastructure

The E & N Railroad line and Highway 4 cross the northernmost claims. Logging company-owned mainline roads cross the Property, following along the main valleys. Gates are located on these roads to restrict unauthorized access. Extensive branch roads stem from the mainlines and provide additional access to most parts of the Property.

There are several short, abandoned mine tunnels and a larger exploration tunnel in the Mineral Creek area. There are no buildings on the Property. All exploration activity has been facilitated by existing services located in the nearby town of Port Alberni, or the larger centers of Nanaimo and Victoria. A 6.5 megawatt, run-of-river, hydroelectric project is located near the west edge of the Property, along China Creek. As well, water is drawn from China Creek for the town of Port Alberni water supply, and Lizard Lake serves as a reservoir.

History

A significant amount of exploration has been undertaken in several different areas of the Property by various operators. In the late 1800s, placer gold was mined from China Creek. Prospecting upstream in the 1890's led to the discovery of gold-bearing quartz veins along Mineral Creek. Between 1897 and 1939, seven short adits were driven in the Mineral Creek valley and reportedly produced 365 tonnes yielding 9425 grams (303 oz) of gold, 1679 grams of silver and 88 kilograms of copper.

The south-central part of the Property was also explored in the 1890s and the 1930s. Trenches and short adits and shafts examined the Regina showings, comprised of narrow quartz-calcite veins containing pyrite, chalcopyrite, galena, sphalerite and arsenopyrite.

The Thistle Mine, 0.9 km south of the Property, reported that between 1938 and 1942 production totalled 6,867 tons containing 2,667 oz of gold, 1,667 oz of silver, and 626,556 lb of copper. Although the deposit was originally thought to be skarn related it has more recently been interpreted as possible VMS-style mineralization.

During the 1970's and 1980's, exploration work initially focussed on the search for VMS mineralization in the south part of the Property. Major surveys undertaken by a UMEX/ Noranda joint venture, included soil geochemistry, geological mapping, magnetometer and IP surveys, as well as limited trenching, rock sampling, EM surveys and several diamond drill holes. The best reported drill intersection was 2 g/t Au over 0.6 meters associated with pyrite and arsenopyrite in small quartz veins.

From 1979 to 1987, Westmin Resources Limited ("Westmin") undertook extensive geological, geochemical and geophysical surveys throughout much of their large property (which covered most of the central and northern parts of the current Property), initially in search of VMS-type deposits. On the north part of the Property in 1984, diamond drilling of three holes was undertaken jointly by Westmin and Noranda. The holes targeted the down-dip extension of the Rogers Creek VMS-type showing and a nearby geophysical anomaly. Drilling under the showing, and within a north trending, 200-meter wide, pyritic sericite-chlorite-carbonate schist zone returned narrow intercepts, up to 0.6 m, with banded Zn, Cu, Pb, Ag mineralization.

From 1986 to 1988, Westmin continued their VMS exploration, shifting to the area south of China Creek. A Westmin/ Nexus joint venture drilled 10 holes near the old Regina adits, to test

prospective VMS targets represented by surface showings, IP geophysical anomalies, soil geochemical anomalies and stratigraphic modelling. Several holes encountered scattered disseminated pyrite with minor chalcopyrite and sporadic anomalous Au and Ag values. The presence of strong sulfides associated with the more felsic volcanic horizons was reported to be encouraging.

In 1986, Westmin expanded their mandate from strictly VMS-targets and began exploring for gold on their claims, and on some Nexus-optioned ground in the Mineral Creek area. Westmin/ Nexus joint venture undertook an extensive amount of work in the Mineral Creek drainage area from 1986 to 1990, comprising about 300 diamond drill holes totalling approximately 50,000 meters, a 1.8-kilometer exploration tunnel (Debbie Tunnel), trenching, geological mapping and geophysical and geochemical surveys.

Two of the most significant gold discoveries received much of the Westmin/ Nexus joint venture work: the Mineral Creek Zone and the Linda Zone. The Mineral Creek Zone, found within the north-trending Mineral Creek fault/ shear structure, contains disseminated, as well as veinlet and vein hosted, pyrite and minor arsenopyrite with gold values, within a broad cataclasite zone, up to 35 m wide. The Mineral Creek Zone has been extensively ankerite-quartz-sericite-pyrite altered and traced over a length of 600 m, although mineralization continues along the fault over narrow widths for a much greater distance. The Linda Zone, comprised of a north-easterly splay from the Mineral Creek structure, consists of shears containing veins of quartz-clay-ankerite with minor pyrite and arsenopyrite, as well as local native gold, and has returned local bonanza grades over widths of generally less than 1 m.

The Westmin/ Nexus drilling also led to the discovery of the 900 Zone about 1.1 km southwest of the Mineral Creek Zone. The 900 Zone is another important gold-quartz vein deposit that is also hosted by Sicker Group basalts with intercalated chert. Mineralization consists of native gold, pyrite, magnetite and arsenopyrite associated with fault-hosted veins, quartz stockworks and cherty iron formation. The 900 Zone received drilling of 84 holes, defining a steeply dipping, pipe-like mineralized zone at the juncture of two faults.

A major part of the Westmin/ Nexus exploration program included the driving in 1988 of a sizeable exploration tunnel, along the hanging wall side of the Mineral Creek Fault Zone for 1.8 km, at which point crosscuts were driven to the Mineral Creek Gold Zone. This trackless underground development includes 1780 m of 3 m x 4 m main adit, two smaller crosscuts through the Mineral Creek Zone totalling 121 m, three raises totalling 65 m, and a 27 m long sub-drift at the top of one raise. Chip sampling was undertaken on the walls of the crosscuts that pass through the Mineral Creek Zone and along the sub-level drift at continuous 1-m intervals. These workings were established to provide a drill platform for exploration drilling, to facilitate evaluation of the mineralization grade and characteristics, and to allow detailed definition drilling of the Mineral Creek Zone and Linda Zone.

In 1990, Westmin's discovered the 1050 Zone located 800m west of the 900 Zone. Here, drilling of four packsack holes to test soil anomalies revealed a quartz-veined shear zone that returned an intersection of 287 g/t (8.38 oz/ton) Au over 1.7m. This hole was not followed up until some years later.

In 1995, under option from Westmin, White Hawk Ventures Inc. developed a portion of the 900 Zone, with 240 m of drifts and 135 m of raises, and mined a bulk sample estimated to contain approximately 800 ounces of gold in about 900 tonnes of vein material. White Hawk was reported to have shipped 894 tonnes of vein material from the 900 zone in 1997 for offsite milling and refining. Gold values were not reported.

In 2005, Bitterroot drilled 14 holes to explore part of the 1050 Zone. Vein intercepts returned some excellent values from drill core, such as 244 g/t Au over 0.8 m and 34.1 g/t over 5.3 m, however, true widths were not determined.

From 2006 to 2009 Bitterroot drilled 202 holes (35,931 m) to test targets in eight different zones, primarily in the central and southern parts of the Property. In 2006-07, 22 holes were drilled in the Big Southeastern Zone, near the north end of Lizard Lake, to test the southern extension of the Mineral Creek Fault. Significant gold assays of 5 to 9 g/t Au were returned from several of the holes, but over narrow widths of 0.3 to 0.9 m.

Eighteen Bitterroot holes in 2007 explored for VMS-style mineralization near the historical Regina showings. A mineralized layer of chlorite-epidote-calcite-altered basalt within 100 meters of surface was traced from hole to hole throughout the drilled area. Sulfides comprised narrow pyrite bands, veins and disseminations, and there was occasional copper and zinc mineralization present in this layer, in concentrations up to a few percent.

Sixty Bitterroot holes were drilled to test the Linda Vein in the Mineral Creek area in 2006 and 2008. The drilling appears to have defined a high-grade shoot near surface that may plunge moderately steeply to the southwest, although the edges of the shoot are sparsely drilled, leaving the possibility for extension along strike and to depth by further drilling. Many of the intercepts included multiple stringers or splays of quartz-calcite veins that are hosting most of the gold. Fine specks of visible gold, up to 2 mm, are seen rarely.

Thirty-four Bitterroot holes were drilled to explore targets in three areas: the Gap Zone (12 holes) located west of the Mineral Creek Zone, the southern part of the Mineral Creek Zone (9 holes) and south of the 900 Zone (13 holes). A few moderate gold values were returned over narrow widths but there were no significant extensions to the known zones discovered.

The Ember Vein was discovered 80 m in the hangingwall of the Linda Vein and Bitterroot drilled this new vein with 68 holes in 2009. Drilling traced the vein along a strike length of 130 meters and an elevation range of about 90 meters. The vein's thickness ranges from a few centimeters to

1.3 m and in places it splits into two or three veins. Several drill intercepts returned bonanza gold grades and the highest grades are often accompanied by visible gold.

Bulk sampling of the Linda Vein by open cut and an 11 m long, 2m x 1.5m drift was undertaken in 2009 and 2010. An estimated 620 tonnes of quartz vein material was extracted, crushed, and milled on site. Pyritic concentrate was produced using a shaker table and sold to a refinery.

Bitterroot commissioned Airborne VTEM-Magnetic surveys in 2008 and 2010 that together cover about 60% of the Property, mainly the north, central and south-central areas. VTEM responses in the survey area are in general weak, with broad weakly conductive areas probably caused by formational conductivity, whereas linear features are possibly fault related.

Tilt derivative maps from the magnetic data were produced, as it was believed that the negative tilts reflect magnetic lows like fault zones and possible alteration areas in which original magnetite has been destroyed. Linear magnetic lows strongly correlate with the Mineral Creek Fault and also with a broad zone of pyrite-sericite-chlorite-carbonate schist in the Rogers Creek area in the north part of the Property; both areas of known mineralization. Irregular magnetic lows partly coincide with the Regina showings and with a north-south trending zone of coincident Cu-Zn geochemical anomalies. There is no record of any follow up of the airborne geophysical targets by Bitterroot.

In 2012 the Property was purchased from Bitterroot by Lu'an. Lu’an collected soil samples along the projected trends of the Linda and Ember Veins that returned high gold values, indicated near surface mineralized veins extending over lengths of more than 250 m.

In 2013 the Property was optioned from Lu'an by Sona Resources Inc., which was subsequently acquired in 2019 by Tempus Resources (Canada) Ltd., which undertook a very brief property examination and collection of 3 rock samples in 2019, yielded no significant results.

Theia purchased the Property from Lu’an in 2021 and in 2022 undertook soil sampling of 3,061 samples to confirm, and better define, geochemically anomalous areas throughout the core of the Property. The Company also compiled a GIS database of historical information, and undertook evaluation of this geological, geochemical and geophysical data to pick high priority targets for further exploration. As well, historical drill core stored in a nearby community was re-boxed to salvage it from deteriorating core boxes, and selected mineralized intervals of the core were resampled to provide check analyses and for additional evaluation, such as fluid inclusion studies.

After compilation and analysis of historical and recent exploration activities, priority drill targets were selected in the Mineral Creek area, based on anomalous soil geochemistry, and structural and conductivity anomalies interpreted from airborne geophysics. In 2023, Theia Gold completed a 4789m diamond drilling program comprising 15 holes, with the main objectives of confirming the tenor of historical gold analytical results, and supporting the exploration model.

On March 13, 2024, Theia completed a business reorganization with Karus Gold Corp. and 1452146 B.C. Ltd. (a subsidiary of Karus) whereby Theia was acquired by Karus. Karus changed its name to Karus Mining Inc.

For the purposes of this report, information prior to the date of the company amalgamation is attributed to Theia Gold Corp. After consolidation, information included in this report is attributed to Karus Mining Inc.

Geology

Volcanic and sedimentary units of the Devonian Sicker Group and Permian Buttle Lake Group are the oldest in the area. They are overlain by Upper Triassic basaltic rocks of the Karmutsen Formation (Vancouver Group) which are overlain by Lower Jurassic Bonanza Group volcanic and lesser sedimentary rocks, followed by Upper Cretaceous sediments of the Nanaimo Group. In places, Late Triassic Mount Hall gabbroic rocks intrude Palaeozoic Sicker units. All the above units are intruded by Early to Middle Jurassic Island Plutonic Suite rocks, typically of diorite to granodiorite composition. Minor Late Eocene Mount Washington Intrusive Suite dacite sills and dikes occur throughout the area.

Most of the Property is underlain by Middle (?) to Late Devonian Sicker Group rocks interpreted to represent three distinct volcanic and volcaniclastic assemblages. The three main Sicker Formations (Duck Lake, Nitinat and McLaughlin Ridge) show a general north-westerly trend across the claims, possibly repeated by folding about northwest-trending fold axes.

The Duck Lake Formation is the oldest of the series and consists primarily of basaltic pillowed to massive flows and breccias, locally intruded by dacite-rhyolite dikes and sills. The top part of the Formation contains intervals of cherty tuff and felsic tuff, as well as chert and jasper of possible exhalitive affinity, such as units seen near the 900 Zone that may be related to mineralization.

The Nitinat Formation overlies Duck Lake Formation and comprises mafic, submarine volcanic and volcaniclastic rocks that are mostly basaltic to andesitic agglomerates, tuffs and breccias, with local chert layers, and may include local pillowed and massive flows. The Mineral Creek, Linda and Ember Zones are all hosted by rocks of this unit.

The McLaughlin Ridge Formation overlies the Nitinat Formation and is described as a sequence of volcaniclastic sediments, mostly thickly bedded, massive tuffites of dacite and lesser rhyolite composition with interbedded tuffaceous siltstone and argillite. Coarser pyroclastic rocks found toward the top of this unit indicate the possibility of a felsic volcanic center in the Alberni area.

A number of prominent faults lie within the core of the Property and postdate regional Eocene thrust faults. The steeply dipping Mineral Creek fault underlies the entire 15 kilometer north-south length of the claims and, in the Mineral Creek Zone, this fault consists of an altered cataclasite zone up to 35 m wide that is locally mineralized with gold. The Stokes fault, Bostock fault and an

unnamed nearby fault are prominent sub-parallel, northwest-trending structures on the north part of the Property. All three faults truncate against the Mineral Creek fault and may be splays from it.

Mineralization

Mineral occurrences on the Property encompass several styles of mineralization, but are typically comprised of veins, disseminations or breccias with local wider zones of stockwork-style mineralization that may be related to shear zones. Many of the narrower veins (generally <1m width) have returned high Au + Ag +/- Cu, Pb and Zn values. Most veins are lacking in continuity, with mineralization occurring in “shoots”, commonly at the intersection of structures. Stratabound Zn, Cu, Pb, Ag mineralization is also known and has been described by previous workers as VMS-style mineralization.

Deposit Types

Mineralization in the Mineral Creek Zone and adjacent splay veins fit the definition of low-sulfide gold-quartz veins, sometimes called mesothermal or shear zone-hosted veins. These types of deposits formed at moderate depths in compressional settings that facilitated transfer of hot gold-bearing fluids from deeper levels up faults, whereupon the fluids underwent rapid decrease in temperature and pressure causing precipitation of the gold, along with quartz gangue, in fractures. These veins generally contain no more than a few percent sulfide minerals. Wall rocks, which in some deposits include significant disseminated mineralization, contain abundant carbonate minerals, quartz, sericite, and sulfides. Arsenic is the minor element most commonly enriched in alteration haloes.

High-angle faults that splay from these major shear zones are also common sites of mineralization. Individual veins are generally <1 to 10 meters wide and less than a few hundred meters long, but ore-bearing zones are typically larger, and include multiple veins. Veins and ore zones are equally persistent laterally and vertically. High-grade ore frequently consists of coarse crystalline gold intergrown with quartz, commonly with no associated sulfide minerals. Alteration zones may locally contain enough gold to be ore-grade. Sulfides, especially pyrite and arsenopyrite, tend to be more abundant in such wallrock disseminated mineralization, although gold grades are generally lower than in the veins. Sulfides also tend to be more abundant in altered rocks that host stockwork veins and may contribute to broad low-grade gold zones.

Some of the mineralization found on the Mineral Creek Project has a similar style of base and precious metal mineralization, and host rocks of the same age as those of the Myra Falls VMS deposits, located approximately 80 km to the northwest. VMS deposits are predominantly stratabound accumulations of sulfide minerals that precipitate from hydrothermal fluids on or below the seafloor. They represent major sources of copper, zinc, lead, gold and silver in a high grade, low tonnage ratio.

The Myra Falls deposits are typically classed as Kuroko, or bimodal-felsic VMS deposits that are spatially associated with felsic volcanic rocks of the Myra Formation, which is part of the middle to

late Devonian Sicker Group. Myra Formation is a succession of rhyolitic, andesitic, and basaltic volcanic and sedimentary rocks that are equivalent to some of the rocks located on the Mineral Creek Property. There are up to twenty, or more, mineralized lenses that lie at various levels within a section of Myra Formation several hundred meters in thickness. Mineralized zones at Myra Falls are massive to semi-massive tabular sulfide bodies, with main ores of chalcopyrite, sphalerite, pyrite, and galena. The H-W Main lens is one of the largest at 950 m long, 450 m wide and 1 to 60 m thick, totalling 22.1 M tonnes. Stringer mineralization consisting of veins of chalcopyrite, pyrite, and lesser quartz may underlie the sulfide lenses within broad zones of silicified rock that represent the conduits for the mineralizing hydrothermal fluids.

Although mineralization at Mineral Creek shows characteristics of the VMS and Gold-Quartz Vein models, that is not necessarily indicative of the tenure of mineralization that may be present on the Property that is the subject of this report.

Exploration for VMS mineralization generally consists of the following techniques: geological mapping to identify prospective volcanic and volcaniclastic rocks, which typically show intense hydrothermal alteration close to the mineralized center; geochemical surveys to identify elements (Cu, Zn, Pb, Au, Ag, Ba) indicative of mineralization; geophysical surveys to identify contrasts in magnetic, electrical conductance, and gravity measurements; trenching and drilling to identify, then delineate mineralization.

Ongoing exploration on the Mineral Creek Property should focus attention on the characteristics that are common for low-sulfide gold-quartz veins as well as Kuroko-type VMS deposits, which are apparent in several areas of the Property, based on the data from previous exploration work.

2.0 INTRODUCTION

2.1 SITE VISIT

The project has had several site visits by author Rowe between 2010 and 2013 and again in 2021, to observe the terrain, access routes, bedrock outcrop, and some of the known mineral occurrences. Four of the principal target areas and their respective mineral showings were examined in the past and selected samples of vein mineralization were collected, primarily from prospective areas near the 1050 Zone. The authors have observed several outcrops of altered and locally mineralized rocks, photographed rock types and general vistas of the Property, and visited sites of previous underground workings and drill sites to verify drill hole locations and determine any possible reclamation requirements. Some of the known mineral zones in the southern part of the Property have not been visited. Descriptions and photographs from previous site visits are provided in this report, along with results from verification rock samples.

Most recently, author McMullan visited the Mineral Creek Project including the core logging facility and drill sites on September 18-19, 2023 for core examination, review of safety, sampling and logging protocols, and staff training.

In preparation for the writing of this report, the authors reviewed all aspects of exploration work carried out to date on the Property, including results from historical sampling, trenching, drilling, and geochemical and geophysical surveys. The Property hosts at least 15 known mineral showings, several of which have received only limited early-stage exploration work. The most advanced are the Mineral Creek, Linda, and 900 areas, which have had a small amount of underground drifting and minor historical production, 444 surface drill holes totalling approximately 70,350 m, 4,200 m of underground drilling in 12 holes, an 894-tonne bulk sample from the 900 Zone sent for milling and smelting of concentrate in the 1990's, and a 620-tonne bulk sample from the Linda Vein in 2010. Other mineral showing areas on the Property have received surface sampling and mapping, as well as geophysical surveys and diamond drilling at several sites, totalling approximately 19,160 m in 93 holes.

The Project is considered by the authors to have excellent exploration potential, based mainly on the presence of gold-bearing veins and shear zones observed over wide areas, and the occurrence of VMS-style mineral showings that are similar to the style of mineralization found at the Myra Falls mine, located about 80 km to the northwest. As well, some of the showings are coincident with broad soil geochemical anomalies that remain open in several directions, and local geophysical testing has indicated prospective targets at depth. There has been a relative lack of detailed exploration beyond the limits of the historically explored vein structures, both on surface and at depth. In addition, a better understanding and modelling of geological and structural features should be developed to help guide exploration and develop drill targets, in conjunction with geophysical work to better define drill targets at depth.

Some of the historical drill core from the Mineral Creek Property is stored at a private, secure yard in Merville, BC. Several of the boxes of core were cursorily examined by the author (Rowe) in 2012, however, the labels on the boxes and meterage blocks were in poor condition and often unreadable. The core that was observed contains several areas with abundant quartz veining, some with disseminated sulfide minerals and rare visible gold, as well as zones of alteration surrounding the veins, resembling the descriptions found in past technical reports. In 2022, some of the core was transferred into new core boxes and core blocks were re-labelled to determine the intervals of mineralization, some of which were re-sampled and analyzed to confirm earlier reported analytical results. Drill core from many of the other holes drilled at various locations on the Property was not available to the authors.

2.2 SOURCES OF INFORMATION

The authors have reviewed previous exploration activities on the Property, including assessment reports on file available through the BC Government's Ministry of Energy, Mines & Low Carbon Innovation ARIS (Assessment Report Indexing System) database, which includes reports prepared between the 1970's and 2020. This Report in part draws upon and references past work and reports by other qualified geologists and professional field personnel. Other non-project specific reports by qualified personnel have been referenced wherever possible. Although some

of the earlier work referenced was carried out in the era prior to adoption of the NI 43-101 standards, it is the opinion of the authors that the work referred to appears to have been carried out by reputable exploration companies in a competent, professional manner, and the results are representative. The information, conclusions, opinions and recommendations in this Report are based upon:

- information available to the authors at the time of preparation.
- assumptions, conditions and qualifications as set forth in this report.
- data, reports and other information provided by Theia Gold and other third-party sources.
- published reports from the operating mines in the region, plus other published government reports and scientific papers.

Information concerning the legal agreements for purchase of the mineral tenures currently comprising the Property was provided by Theia Gold and has not been independently verified by the authors. Statistics, weather, and local information for the Project area was obtained from online sources, historical reports and personal knowledge of the Property area. A detailed list of references and sources of information is provided in the References section of this Report.

Much of the background information for this report, such as geological descriptions, regional mineral occurrences, geochemical and geophysical results, and interpretations was derived from previous technical reports prepared for various exploration companies. The documentation reviewed, as well as other sources of information, are listed at the end of this report in the References section.

2.3 ABBREVIATIONS AND UNITS OF MEASURE

Metric units are used throughout this Report and currencies are in Canadian Dollars (C$) unless otherwise stated. Market gold or silver metal prices are reported in US$ per troy ounce. A list of abbreviations that may be used in this Report is provided in Table 2.1 below.

Table 2.1 Abbreviations used in this report

Abbreviation	Description	Abbreviation	Description
AA	atomic absorption	li	limonite
Ag	silver	m	meter
ASL	above sea level	m^2	square meter
As, aspy	Arsenic, arsenopyrite	m^3	cubic meter
Au	gold	Ma	million years ago
AuEQ	gold equivalent grade	mg	magnetite
AgEQ	silver equivalent grade	mm	millimeter
Az	azimuth	mm^2	square millimeter
Bi	bismuth	M oz	million troy ounces
b.y.	billion years	ser	sericite
C$ or $	Canadian dollar	M t	million tonnes
Ca	calcite	mu	muscovite
Cl	chlorite	m.y.	million years
Cm	centimeter	NI 43-101	National Instrument 43-101
cm^2	square centimeter	oz/ton	troy ounces per short ton (34.285 grams/tonne)
Cp	chalcopyrite	oz	troy ounce (31.1035 grams)

Cu	copper	Pb	Lead
Cy	clay	pf	plagioclase feldspar
°C	degree Celsius	po	pyrrhotite
°F	degree Fahrenheit	ppb	parts per billion
DDH	diamond drill hole	ppm	parts per million
Ep	epidote	py	pyrite
Ft	feet	QA	Quality Assurance
ft^2	square feet	QC	Quality Control
ft^3	cubic feet	qz	quartz
G	gram	RQD	rock quality description
Gn	galena	Sb	antimony
Go	goethite	SEDAR	System for Electronic Document Analysis & Retrieval
GPS	Global Positioning System	SG	specific gravity
gpt, g/t	grams per tonne	sph	sphalerite
Ha	hectare	t	tonne (1,000 kg or 2,204.6 lbs)
Hg	mercury	Te	Tellurium
Hm	hematite	to	tourmaline
ICP	inductively coupled plasma	ton	short ton (2,000 pounds)
Kf	potassium feldspar	um	micron
Kg	kilogram	US$	United States dollar
Km	kilometer	VMS	Volcanogenic massive sulfide
km^2	square kilometer	Zn	Zinc

3.0 RELIANCE ON OTHER EXPERTS

This report has been prepared by Jeffrey Rowe and Steven McMulllan (authors) for Theia Gold Corp. The information, conclusions, opinions, and estimates contained herein are based on information available to the authors at the time of preparation of this report and on data, reports, and opinions supplied by Theia Gold and other third-party sources. The authors reserve the right, but will not be obligated, to revise the Technical Report and conclusions if additional information becomes known to the authors subsequent to the effective date of this Technical Report.

On June 4, 2024, the authors confirmed the status and registration of the subject mineral tenures with information available through the web page of the Mineral Titles Branch, Ministry of Energy, Mines and Low Carbon Innovation, Government of British Columbia (Government of British Columbia, 2022). This B.C. government agency records real-time tenure information for all mineral claims in the province. The tenures that comprise the Property are registered 100% to Theia Gold Corp., Free Miners Certificate Number 288771.

The British Columbia Geological Survey geological library was accessed for geological maps and reports (Government of British Columbia, 2024).

In August 2022, the Company had a title review undertaken of various Crown Grant mineral claim lots that are covered by the Property. It was determined that Crown land lots were granted to E&R Railway circa 1887 that included certain base metal rights. These lots were subsequently sold to various timber companies. It is believed that the mineral rights were forfeited or relinquished, however, up-to-date mineral land tax statements for the lots would need to be examined to definitively determine if they still hold the mineral rights to underlying base metals.

The authors have relied upon the opinion of Theia Gold's management and legal counsel regarding the legal validity of the agreements that grant Theia Gold Corp. the right to acquire ownership of the mineral titles that comprise the Mineral Creek Property, some of which are subject to NSR payments. Theia Gold's legal counsel is Jeff Lightfoot, of Owen Bird Law Corporation of Vancouver, BC.

Alex Gostevskikh, MSc Geology, MBA, MMSA (QP), is an associate of Theia Gold Corp, and was the operational supervisor during the 2023 drilling program.

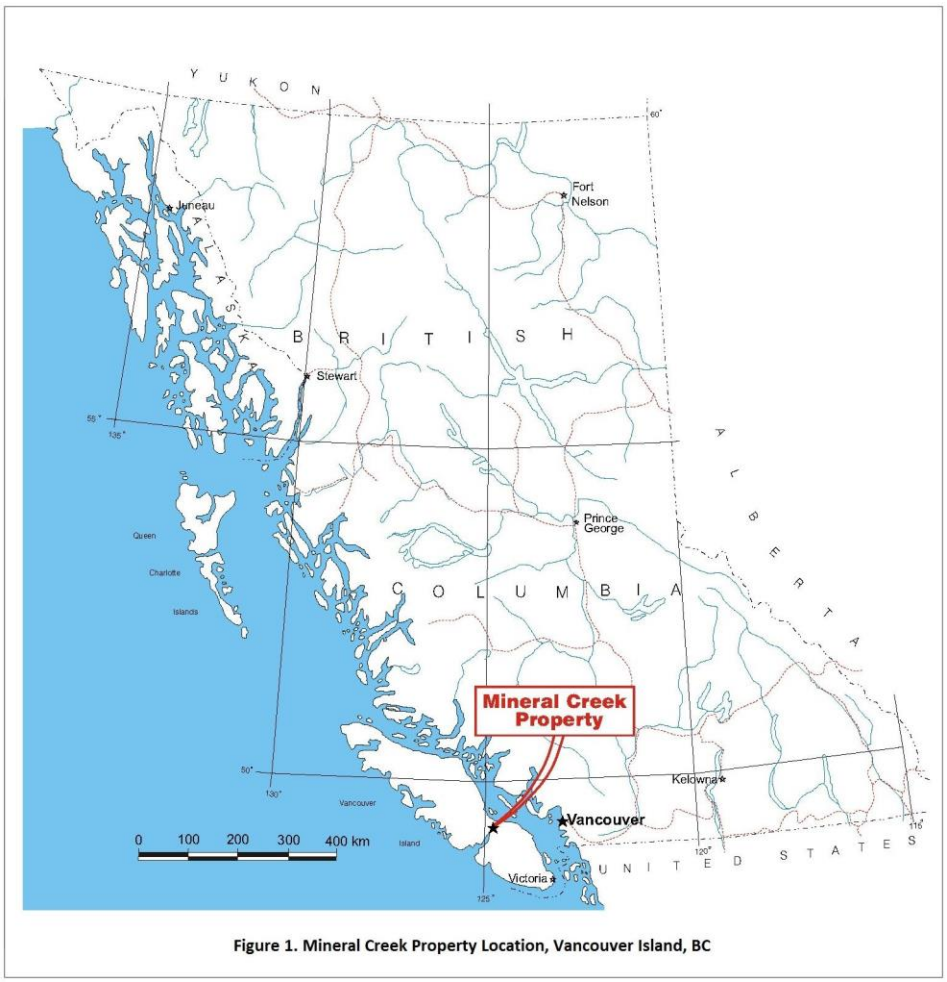
The authors, Jeffrey D. Rowe and Steven R. McMullan are responsible for preparing all sections of this report. The authors are Qualified Persons only in respect of the areas in this Technical Report identified in their "Certificate of Qualified Person" submitted with this Technical Report.

4.0 PROPERTY DESCRIPTION AND LOCATION

4.1 PROPERTY LOCATION

The Mineral Creek Property is centered twelve kilometers southeast of the town of Port Alberni, on the southern part of Vancouver Island, British Columbia (Figure 4.1). The Property consists, as of June 4, 2024, of a block of contiguous mineral claims approximately 7 km x 15 km in size totaling 13,286.7 hectares (Figure 4.2). The co-ordinates of the center of the Property are approximately 49° 11.01' N latitude and 124° 40.38' W longitude, on map sheet NTS 92F/02 & /07 and tenures are located within both the Alberni and Victoria mining divisions.

Figure 4.1 Location of the Mineral Creek Property in southwest BC



4.2 PROPERTY DESCRIPTION

The Mineral Creek Property, as of June 4, 2024, consisted of 51 MTO mineral tenures shown on Figure 4.2 and listed in Table 4.1. The tenures are registered as 100% ownership by Theia Gold Corp. (FMC #288771). The Company has acquired, through staking and share issuance, 100% ownership of all the MTO mineral tenures that comprise the Property, as well as the Regina No.2 Crown Grant, although various tenures are subject to a 0.5% net smelter return royalty to Mineral Creek Ventures Inc., a 3.0% net smelter return royalty to Nyrstar (the successor to Boliden Westmin (Canada) Limited), and a 1.0% net smelter return royalty to Lu'an (Canada) Capital & Energy Investment Inc.

Figure 4.2 Mineral Creek Property mineral tenure locations

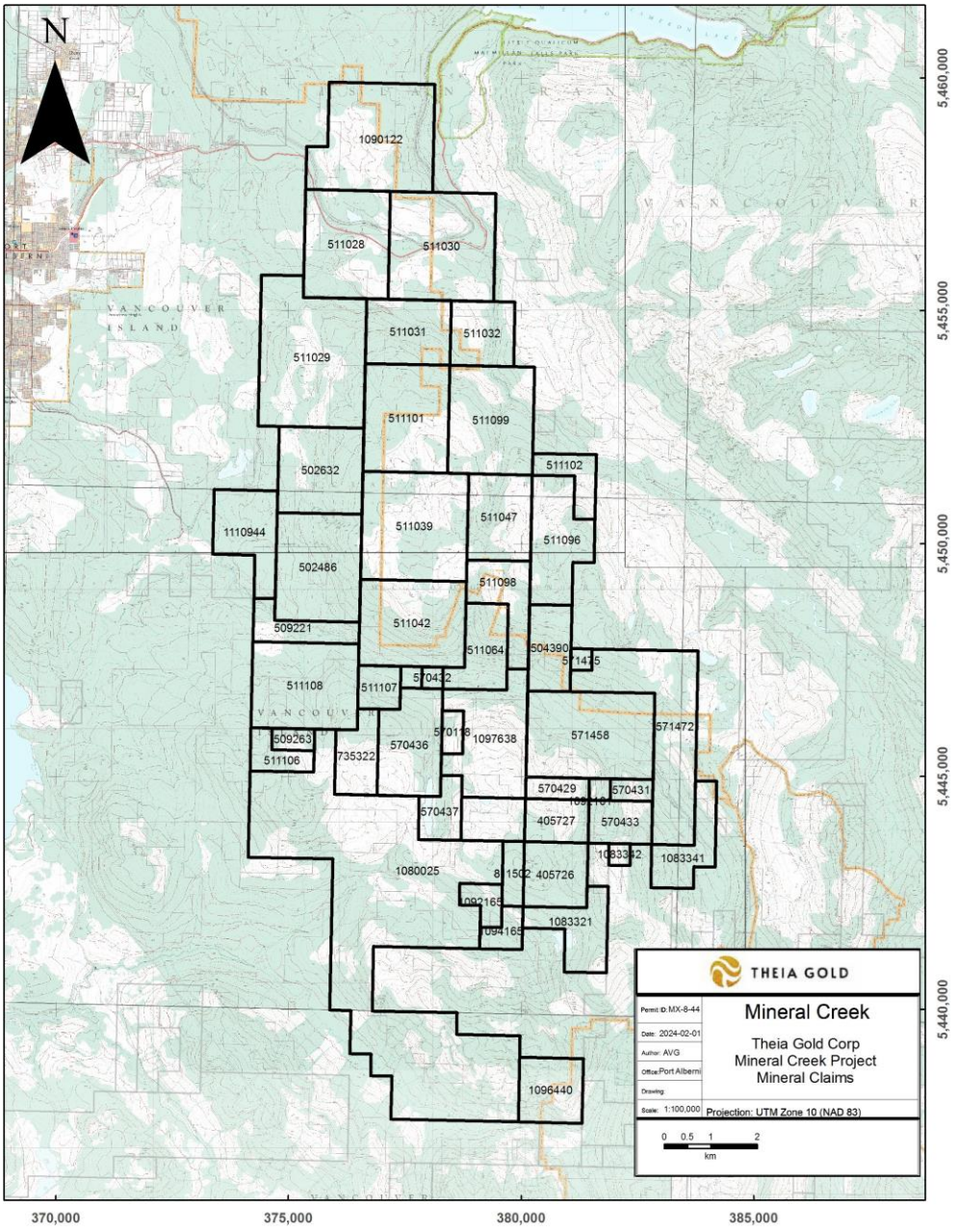


Table 4.1 Mineral Creek Property mineral tenures

Title Number	Claim Name	Owner	Issue Date	Good To Date	Area (ha)
405726	BULL ELK 2	288771 (100%)	2003/OCT/13	2027/DEC/31	300.0
405727	BULL ELK 3	288771 (100%)	2003/OCT/13	2027/DEC/31	200.0
415996	BAETIS 2	288771 (100%)	2004/NOV/12	2027/DEC/31	150.0
416540	SPRUCE GROUSE 5	288771 (100%)	2004/NOV/27	2027/DEC/31	25.0
416541	SPRUCE GROUSE 6	288771 (100%)	2004/NOV/27	2027/DEC/31	25.0
502486	Ariel	288771 (100%)	2005/JAN/12	2027/DEC/31	422.3
502632	RickW	288771 (100%)	2005/JAN/12	2027/DEC/31	337.7
504390	GAP	288771 (100%)	2005/JAN/20	2027/DEC/31	169.0
509221	wit	288771 (100%)	2005/MAR/18	2027/DEC/31	126.7
509263	DM	288771 (100%)	2005/MAR/18	2027/DEC/31	42.3
511028		288771 (100%)	2005/APR/19	2027/DEC/31	421.8
511029		288771 (100%)	2005/APR/19	2027/DEC/31	675.1

511030		288771 (100%)	2005/APR/19	2027/DEC/31	527.2
511031		288771 (100%)	2005/APR/19	2027/DEC/31	253.1
511032		288771 (100%)	2005/APR/19	2027/DEC/31	189.9
511039		288771 (100%)	2005/APR/19	2027/DEC/31	527.8
511042		288771 (100%)	2005/APR/19	2027/DEC/31	422.4
511047		288771 (100%)	2005/APR/19	2027/DEC/31	253.3
511064		288771 (100%)	2005/APR/19	2027/DEC/31	190.1
511096		288771 (100%)	2005/APR/19	2027/DEC/31	295.6
511098		288771 (100%)	2005/APR/19	2027/DEC/31	190.1
511099		288771 (100%)	2005/APR/19	2027/DEC/31	422.1
511101		288771 (100%)	2005/APR/19	2027/DEC/31	422.1
511102	MIK	288771 (100%)	2005/APR/19	2027/DEC/31	105.5
511106		288771 (100%)	2005/APR/19	2027/DEC/31	84.5
511107		288771 (100%)	2005/APR/19	2027/DEC/31	84.5
511108		288771 (100%)	2005/APR/19	2027/DEC/31	422.5
570118	ROOT 1	288771 (100%)	2007/NOV/15	2027/DEC/31	42.3
570429	BITTERROOT RESOURCES LTD.	288771 (100%)	2007/NOV/22	2027/DEC/31	63.4
570431	BITTER 1	288771 (100%)	2007/NOV/22	2027/DEC/31	42.3
570432		288771 (100%)	2007/NOV/22	2027/DEC/31	21.1
570433		288771 (100%)	2007/NOV/22	2027/DEC/31	126.8
570436		288771 (100%)	2007/NOV/22	2027/DEC/31	295.8
570437		288771 (100%)	2007/NOV/22	2027/DEC/31	105.7
571458	BANK 1	288771 (100%)	2007/DEC/09	2027/DEC/31	507.1
571472	BANK 2	288771 (100%)	2007/DEC/09	2027/DEC/31	528.2
571475		288771 (100%)	2007/DEC/09	2027/DEC/31	21.1
735322	GECHO	288771 (100%)	2010/MAR/26	2027/DEC/31	147.9
795125	HAMMER	288771 (100%)	2010/JUN/19	2027/DEC/31	21.1
811502	DOUGLAS	288771 (100%)	2010/JUL/09	2027/DEC/31	63.4
1080025	VERANO	288771 (100%)	2020/DEC/11	2027/DEC/31	2114.5
1083321	MC SOUTH	288771 (100%)	2021/JUL/08	2027/DEC/31	190.3
1083341	MC SE1	288771 (100%)	2021/JUL/09	2027/DEC/31	169.1
1083342	MC SE2	288771 (100%)	2021/JUL/09	2027/DEC/31	21.1
1090122		288771 (100%)	2022/JAN/23	2027/DEC/31	569.1
1092161	KING SOLOMON	288771 (100%)	2022/JAN/28	2027/DEC/31	21.1
1092165	GAP	288771 (100%)	2022/JAN/28	2027/DEC/31	63.4
1094165	MINSOUTH	288771 (100%)	2022/MAR/29	2027/DEC/31	63.4
1096440	VERANO2	288771 (100%)	2022/JUL/01	2027/DEC/31	190.4
1097638		288771 (100%)	2022/SEP/16	2027/DEC/31	380.3
1110944	JEFF	288771 (100%)	2024/FEB/01	2025/FEB/01	232.2
				TOTAL HEC.	**13286.7**

The tenures are all registered with the MTO office as 100% ownership by Theia Gold Corp., Free Miner Certificate #288771.

A number of Crown Grant lots are shown on Mineral Title Maps in the central part of the Mineral Creek Property. Most of these lots measure about 20 hectares or less in area. A title review undertaken by the Company determined that most of these lots appear to have the mineral rights forfeited, or reverted to the Crown, however, mineral land tax records are not always available, so it can not be determined definitively that they are, in fact, forfeited. The Regina No.2 Crown Grant in the south part of the Property is active, and covers the Regina mineral showings. This Crown Grant is owned by Theia, and it is covered in its entirety by MTO tenure 570118 which is also held by Theia.

The E&N Railway was granted large areas of lands on Vancouver Island by the Government of the Dominion of Canada circa 1887 as payment for construction of a 115 km rail line from Esquimalt to Nanaimo (Taylor, 1975), and these lands included surface, timber, and certain base metal mineral rights, but not the gold and silver rights. Basically, the entire Property is underlain by land lots that were originally part of the E&N land grant, although they are now owned primarily by three timber companies - Island Timberlands, TimberWest and Western Forest Products - with Island Timberlands holding the lots that cover most of the main mineral occurrence areas on the Property. These companies purchased the lots primarily to acquire the rights to the valuable timber in the area. Theia has entered into road use agreements with the timber companies for the right to use the private roads and perform surface work on the Property.

Over the years since 1887, E&N Railway and its successor entities entered into various agreements respecting the land, timber and mineral rights for various parts of the E&N Railway grant. The early transfers were made by Canadian Pacific as it had acquired the E&N Railway and a number of the Canadian Pacific entities were the transferees of various interests. Unfortunately, the records in the Land Title Office do not reflect all of these transfers because of the size of the Property and the multitude of titles which came into effect over time as the E&N lands were subdivided into blocks and even further smaller parcels over time.

In 1973 the BC Mineral Land Tax Act came into effect and it imposed mineral land taxes on all mineral Crown Grant interests in the province including the lands contained within the E&N Railway grant. As a result of this, most of the mineral rights for E&N lands were forfeited for non-payment of taxes or surrendered to the Crown by way of various agreements.

Global surrender of the mineral rights on most of the lands retained by E&N was implemented by surrender documents dated December 21, 1973 and August 1, 1975. There are a number of schedules to these agreements where transfers of different interests in the E&N Railway lands were excluded from the surrender of the mineral rights, and documentation was not always filed.

The possibility exists that there are unregistered interests which have never come to light and, because the land title system did not track all of the transfers or subsequent transfers respecting the underlying mineral rights, it is not possible for the authors to say with 100% certainty that no mineral rights are held by third parties within the Property area.

It is the authors' view that Theia's ownership of base metal mineral rights for the Property is of very high probability, however, there is a remote possibility that in the future an unregistered document, originating from a transferred E&N land lot may be brought forward. In that instance the authors believe that mineral ownership rights would be difficult for a third party to establish in the absence of clear and unambiguous documentation. Regardless, the gold and silver rights, which were not part of the E&N mineral rights, are held by Theia's current mineral tenures.

The authors have determined, by viewing British Columbia Mineral Titles Online records that, as of the writing of this Report, all of the mineral tenures have an expiry date of December 31, 2027, except one new claim which has an expiry date of February 01, 2025, as shown in Table 4.1. The Company undertook work on the Property in 2022 and 2023, and filed the work costs in January 2023 and April 2024 to maintain the claims in good standing.

An exploration permit (number MX-8-44) was granted for the Property by the Ministry of Energy and Mines in April 1988 and has been amended in 1989, 2003, 2005, 2007, 2013, and most recently in 2022. The Company has assumed the permit and posted reclamation security, which will allow the Company to undertake certain exploration work. The 5-year multi-year area based (MYAB) exploration permit authorizes drilling at up to 50 drill sites and ground-based geophysics for various areas of the Property. Authorization for other types of work (such as underground exploration or bulk sampling) will require further interaction with the Ministry of Mines and relevant stakeholders.

4.3 MINERAL CREEK PROPERTY AGREEMENTS

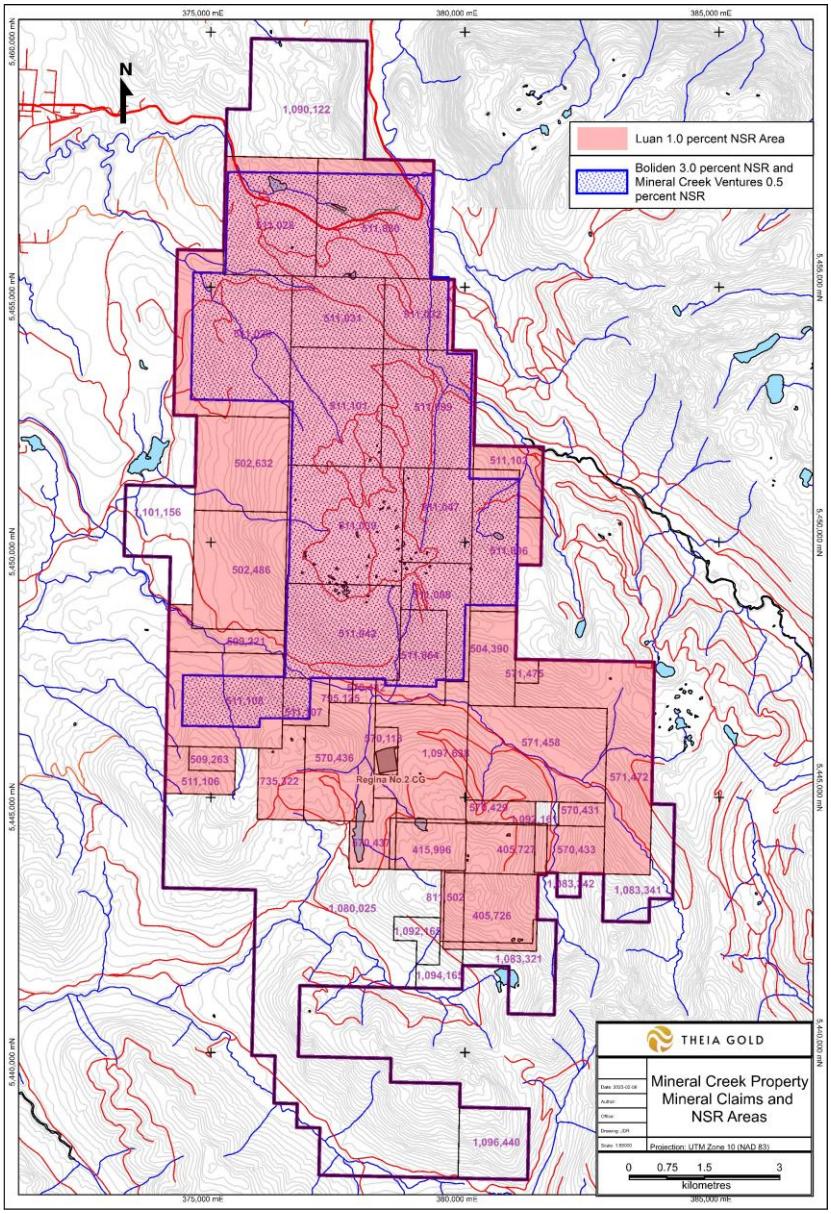
The Mineral Creek Property is comprised of a parcel of mineral claims that have been purchased pursuant to an agreement with Lu'an (Canada) Capital & Energy Investment Inc. (Lu'an), and by staking of certain claims. The details of the purchase agreement are described below and the claim locations of the current property are shown on Figure 4.2.

Mineral Creek Purchase Agreement

Theia Gold Corp. acquired a 100% interest in certain claims of the Property, pursuant to a Sale and Assignment of Rights Agreement dated May 31, 2021 with Lu'an, in exchange for shares of Theia Gold Corp. (issued) and a 1.0% net smelter return (NSR) royalty. The NSR area is shown on Figure 4.3.

Additionally, Theia has assumed previously issued NSR obligations for the originally optioned Boliden Westmin Limited tenures, which primarily comprise the northern and central parts of the Property. A 0.5% NSR is held on this area by Mineral Creek Ventures Inc. and a 3.0% NSR is held by Boliden Westmin (Canada), which was taken over by Breakwater Resources Ltd. in 2004, and Breakwater was subsequently taken over by Nyrstar NV in 2011. Trafigura Group Pte Ltd. is currently the majority owner of Nyrstar.

Figure 4.3 Areas of the Mineral Creek Property subject to NSR agreements



4.4 MINERAL TENURE OWNERSHIP IN BRITISH COLUMBIA

In British Columbia, the owner of a mineral claim is granted 100% ownership of all sub-surface minerals. A valid Free Miner Certificate ("FMC") is required to record a claim or acquire a recorded claim or interest in a recorded claim by transfer, and to conduct exploration for minerals on mineral claims within British Columbia. A company FMC is available to any registered corporation in good standing for a fee of $500, and to individuals for $25, renewable annually.

Mineral titles in British Columbia are acquired and maintained through Mineral Titles Online, a computerized system that provides map-based staking. Acquisition costs for claims are $1.75 per hectare. This confers ownership of the claim for one year beyond the date of staking. To continue to hold the claims beyond the first year, the owner must complete assessment work, either

physical or technical, on the property, or pay cash in lieu. A report must be filed detailing the work performed and the results. These assessment reports remain confidential for one year and then become available for public access. If assessment work or cash in lieu is not filed by the required date the claims will automatically forfeit.

For years 1 and 2 of claim existence the work requirement is $5 per hectare per year, for years 3 and 4 it is $10 per year, years 5 and 6 it is $15 per year, and thereafter $20 per year. Rather than perform work on the Property, cash in lieu may be paid to hold the claims, at a rate twice that of required exploration expenditures. The Mineral Creek Property tenures were all staked and had work applied prior to the end of 2011, however, on July 1, 2012, amendments were made to the Mineral Tenure Act Regulation. One of the changes was that the first expiry date for a mineral claim would be treated as the end of the first anniversary year regardless of how long the claim had been held. Therefore, since essentially no work had been applied to the claims since the change in regulations, the end of the first anniversary year falls in 2020 and the annual exploration and development work requirements beginning in 2021 were at the first-year rate of $5/ha.

4.5 ENVIRONMENTAL REGULATIONS & EXPLORATION PERMITS

A reclamation bond or security is required to be posted with the government of BC as part of the exploration permitting process to pay for the cost of reclamation of surface disturbance in the event that a company defaults on its obligation to perform any required remediation. Permits and reclamation security are required for any type of exploration work that may cause disturbance or possible environmental damage to the land. These include, but are not limited to, the following:

- construction of drill sites and helicopter pads
- cutting of timber for geophysical grid lines or access trails
- trenching
- construction of roads or trails
- camp construction
- drilling and blasting
- underground development
- use of wheeled or other mobile equipment
- fuel storage

The posted bond, or security, can be recovered by the Company upon acceptable remediation of environmental disturbance on the Property caused by exploration activities. There are historical areas of disturbance on the Property that may require remediation and the posting of a bond by the Company to cover the possible cost of remedial work. The primary requirements for clean-up related to historical workings would be the secure closure of 5 adit openings in the lower Mineral Creek area, the 900 Zone portal and the Debbie (Yellows Creek) tunnel, as well as contouring and re-vegetating the rock dump in front of the Debbie portal, with monitoring and management of surface and groundwaters in the disturbed areas. Exploration Permit MX-8-44 was issued in 1988 and has been held by several previous operators. This exploration permit has been transferred to,

and assumed by the Company. The Company has amended the proposed work program for a 5-year term and has posted the required security for reclamation liabilities. Additional amendments to the existing permit can be obtained from the BC Ministry of Mines which provides for a range of property exploration activities, including specified levels of diamond drilling, blasting, geophysical surveys, camp site disturbance, fuel storage, underground exploration and more, by making application to the regional BC Ministry of Mines office. The permit process generally takes from 4 to 6 months to complete, following consultation with other Ministries and affected groups.

The permitting process for specific types of work may also require baseline archaeological and environmental studies (water quality, flora, fauna) in the areas proposed for exploration, and consultation with any affected First Nations or local groups. The authors do not foresee any significant factors or risks that may affect access, title, or the right or ability to perform work on the Property.

Notice of Work

The Notice of Work (NoW) permit advises the regulatory authorities of the type, location, duration, impacts and reclamation of exploration activities on mineral exploration properties. The NoW permit No. 0800173-2022-02 was accepted June 29, 2022, and includes IP/Resistivity surveys and diamond drilling.

Multi-Year Area-Based (MYAB) Permit

The Multi-Year Area-Based permit is granted by the Ministry of Energy, Mines, and Low Carbon Innovation under the Mines Act, and authorizes exploration activities described in the NoW. Permit Permit #: MX-8-44 was granted to Theia Gold Corporation on December 21, 2022 for a five-year duration.

As part of the MYAB permit requirements, studies of Cultural Heritage, an Archaeological Chance Find Policy, an Emergency Response Plan, a Road Use Agreement, and other documents have been completed.

4.6 ENVIRONMENTAL CONSIDERATIONS

To the best knowledge of the authors, there are no serious environmental considerations or other significant factors or risks that may affect the right or ability to perform work on the Property.

Parts of the Property cover drainages that flow into the water supply for the community of Port Alberni. The Company must communicate and coordinate with the Engineering department of Port Alberni and First Nations groups to ensure that the water quality is not affected by exploration work on the Property. Surface exposures of mineralization and historical tunnels that may have contributed metals to the surface water over a period of many years are located in the Mineral Creek drainage basin, which flows into China Creek, about 2 km downstream from the mineral zones. The town’s water inlet pipe station is on China Creek at the western edge of the

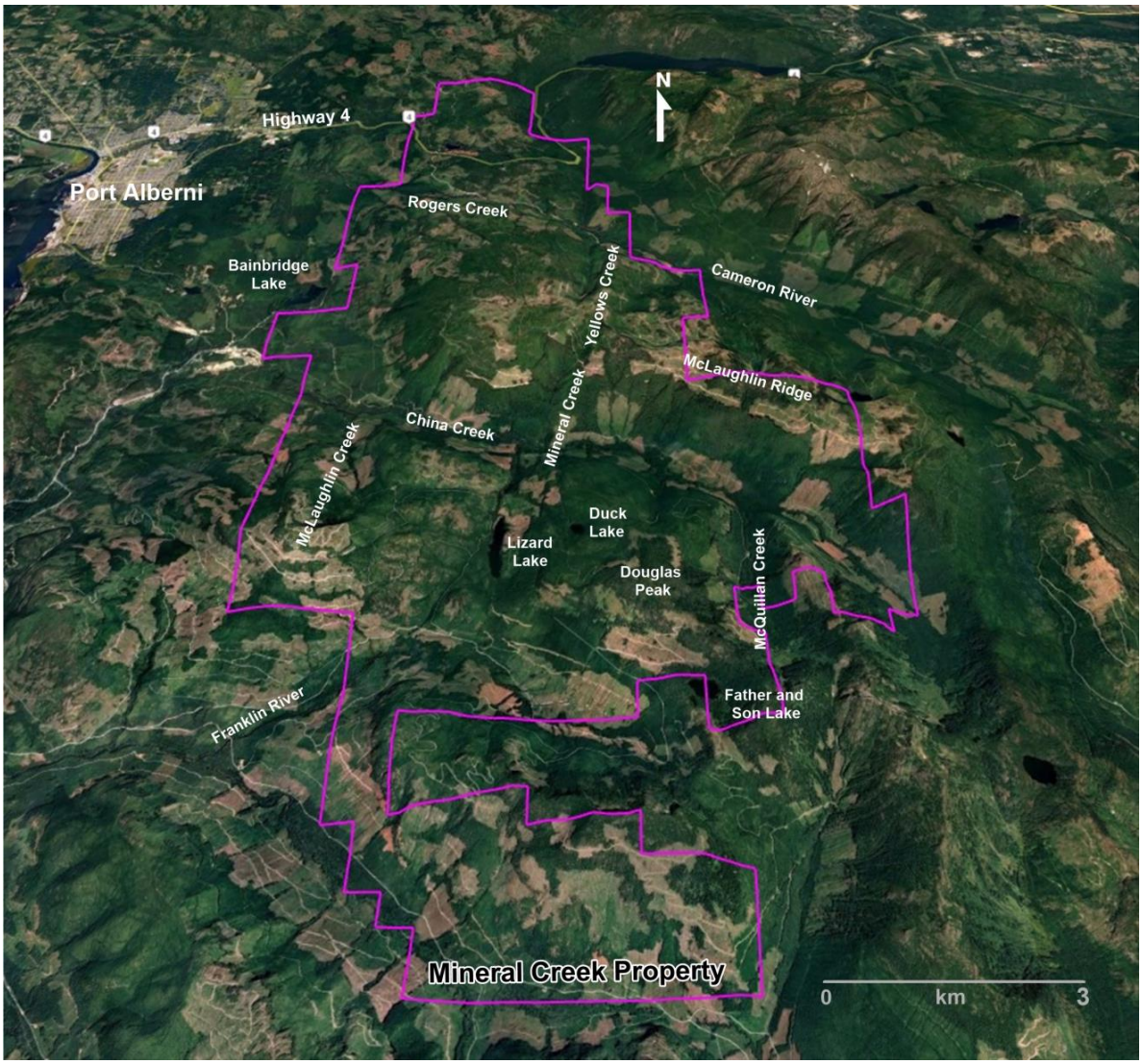
Property. It is recommended that the Company conduct water quality sampling in any potentially affected drainages that enter China Creek, from both the north and south tributary areas, to establish a baseline of the current water quality and to monitor any changes.

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 ACCESSIBILITY

The E & N Railroad line and Highway 4 cross the northernmost claims. Logging company-owned mainline roads cross the Property, following along the valleys of Rogers Creek, Cameron River, China Creek and Franklin River (Figure 5.1). Extensive branch roads stem from the mainlines and provide additional access to most parts of the Property, although some of the steep hillsides have no road access.

Figure 5.1 Satellite view of the Mineral Creek Property area with named features



Originally part of the E & N Railway Land Grant, most of the surface rights in the Property area are now owned by Island Timberlands GP Ltd., Timberwest Forest Corp., and Western Forest Products, and they have placed locked gates on some of their private access roads. Admittance to the upper part of the Yellows Creek and Mineral Creek drainage areas is mostly along active logging roads from the north end of the Property. The sites are reached from Port Alberni by following Highway 4 approximately 10 km, turning south onto Cameron Main for about 5 km, and then onto a secondary road that climbs steeply to the south and over the flat hilltop to the main drill area near the top of a steep southwest-facing slope of the Mineral Creek drainage basin. Access to the central part of the Property is along the China Creek Main logging road which is gated at the turnoff from Cameron Main Road, just south of Bainbridge Lake. Extensive road systems branch from the China Creek and Franklin River mainline roads and traverse up several of the steep slopes in the southern part of the Property. The Company has entered into a road use agreement with Island Timberlands, as well as with Mosaic Forest Management Corporation which manages the forestry operations.

5.2 CLIMATE, VEGETATION AND WILDLIFE

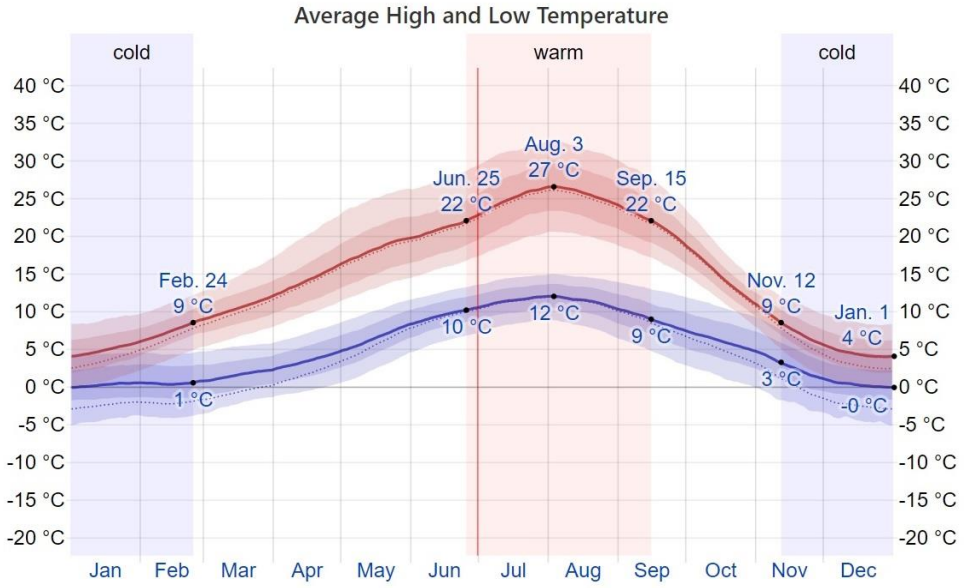
The climate on the Property is very similar to that of Port Alberni, as it lies just 5 km east of town and ranges from 100 m to 1400 m higher in elevation. In Port Alberni, the summers are short, warm, and partly cloudy and the winters are cold, wet, and overcast. Over the course of the year, the temperature typically varies from 0°C to 27°C and is rarely below -5°C, or above 33°C. (Weatherspark, 2016).

The warm season lasts for about 3 months, from mid-June to mid-September, with an average daily high temperature between 22° and 27°C (Figure 5.2). The hottest time of the year is typically in early August, with an average high of 27°C and low of 12°C.

The cold season lasts for 3.5 months, from mid-November through February, with an average daily high temperature between 4° and 9°C. The coldest time of the year is early January, with an average low of 0°C and high of 4°C.

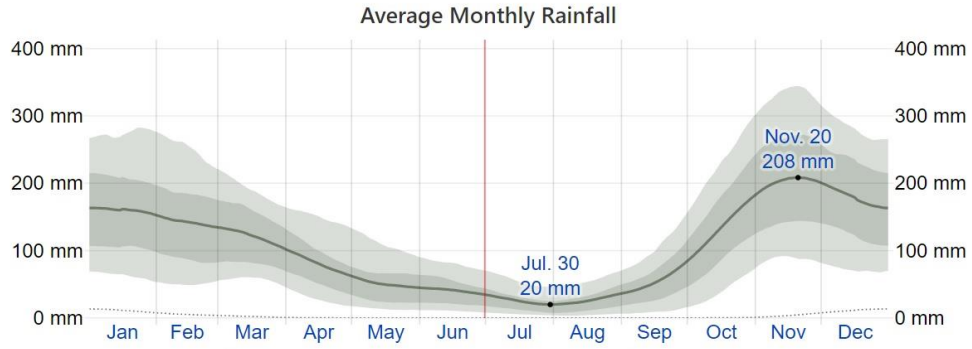
The wettest season in Port Alberni lasts 6.5 months, from October through to mid-April, with a greater than 34% chance of any given day being a wet day. Rain falls throughout the year, but the chance of a wet day peaks at 58% in mid-November with the most rain falling during this period, averaging a total accumulation of 208 millimeters over 31 days (Figure 5.3). The drier season lasts 5.5 months, from mid-April to October. The smallest chance of a wet day is 10% at the end of July, with an average total accumulation of 20 millimeters over 31 days.

Figure 5.2 Port Alberni average temperatures (Weatherspark, 2016)



The daily average high (red line) and low (blue line) temperature, with 25th to 75th and 10th to 90th percentile bands.

Figure 5.3 Port Alberni average rainfall (Weatherspark, 2016)



The average rainfall (solid line) accumulated over the course of a sliding 31-day period centered on the day in question, with 25th to 75th and 10th to 90th percentile bands. The thin dotted line is the corresponding average liquid-equivalent snowfall.

The most common form of precipitation throughout the year is rain alone, although inter-mixed snow does fall from mid-November through February, averaging from 3 to 13 mm liquid-equivalent over 31 days. On the Property, at higher elevations, the amount of precipitation falling as snow is greater than in Port Alberni and remains on the ground longer.

In the Port Alberni area there is a long history of timber harvesting. Seventy percent, or more, of the Mineral Creek Property area has been logged (Figure 5.4). The forests are principally comprised of stands of Douglas-fir, with minor amounts of red alder, western red cedar, western hemlock, grand fir, and western white pine. Wetter areas along streams commonly contain thick underbrush, including ferns, salal and devil's club.

Figure 5.4 Clear-cut logged areas within the Property provide good road access and bedrock exposures

The Property area is home to a variety of small mammals and birds, as well as many larger mammals such as black bear, deer, elk, moose, and less commonly, cougar and wolves.

It has been reported that the nesting habitat of Queen Charlotte goshawks in old growth forest in the region is endangered. Sensitive habitat areas for Vancouver Island marmot, western painted turtle, northern myotis (bat), little brown myotis, and red-legged frog have been identified in certain areas of the Property. Consultation with approved biologists is required prior to undertaking any disturbance within these specified areas. The Port Alberni city council and several conservation and recreation organizations have called for the protection of old growth forest on McLaughlin Ridge, located in the east part of the Property, on the north side of China Creek.

5.3 PHYSIOGRAPHY

The area is moderately mountainous and lies within the Vancouver Island Ranges of the Insular Mountains physiographic zone. Within the Property the mountains are incised by two northwest-oriented valleys, one contains Rogers Creek and Cameron River, the other contains China Creek (Figure 5.1). Tributaries originating within the Property flow northerly and southerly into these main drainages. China and Rogers Creeks flow into Alberni Inlet to the west, Cameron River

flows northwest, then turns to the north and enters Cameron Lake. Elevations on the north part of the Property range from 160 m to 1320 m above sea level and in the south from 200 m to a height of 1480 m on the top of Douglas Peak, one of the higher peaks in the area. In the southern claims the Franklin River valley cuts westerly through the mountains.

A small plateau occurs on the hilltop west of Mineral Creek in the north-central part of the Property and contains several small ponds, typically only 50 to 100 m long. A few small ponds are present on the southern claims, including Lizard Lake, which is a north-south oriented, 1,200 m by 150 m reservoir lake that flows into China Creek and provides part of Port Alberni's water supply.

5.4 LOCAL RESOURCES & INFRASTRUCTURE

Infrastructure located on the Mineral Creek Property consists of logging access roads, several short, abandoned mine tunnels in the Mineral Creek drainage area and a larger exploration tunnel that extends from upper Yellows Creek southward into the Mineral Creek area. All exploration activity on the Property has been facilitated by existing services located in the nearby town of Port Alberni, or the larger centers of Nanaimo and Victoria. Two-lane, paved, Highway #4 runs east from Port Alberni and passes through the north end of the Property. Logging roads on the Property are privately owned by local timber companies and gates restrict access on some of the main roads. Theia Gold has signed agreements with the timber companies that allow use of the roads to conduct mineral exploration.

A 6.5 megawatt, run-of-river, hydroelectric project, developed by the Hupacasath First Nation is located near the west edge of the Property. Water travels 4.5 kilometers from China Creek down a five-foot wide underground penstock to a powerhouse located 1 km west of Bainbridge Lake, where the water flow turns turbines to generate power. The Upnit Power project on China Creek has produced approximately 24 gigawatts of power annually since 2005, and 2010 and 2011 were record years of production, with 28 and 30.6 gigawatts of power, respectively. An Energy Purchase Agreement with BC Hydro was entered into in 2006 with a twenty-year term.

6.0 HISTORY

A significant amount of exploration has been undertaken in several different areas of the Property by various operators, and this work has been well documented in assessment reports that are referenced in Minfile summary descriptions of the mineral occurrences (B.C. Ministry of Energy Mines and Petroleum Resources, 2007*). The reader is referred to these assessment reports for detailed descriptions of the work programs. The mineral occurrences that are described below include some that are identified on Figure 6.1.

Previous mineral exploration within the area of the claims, and nearby, has been concentrated in three time periods: the 1890s to 1930s, the 1970s to 1980s, and the 1990s to present.

The 1890s to 1930s

In the late 1800s, placer gold was mined from China Creek, mainly near the junction with McLaughlin Creek. Prospecting upstream in the 1890's led to the discovery of gold-bearing quartz veins along Mineral Creek. Between 1897 and 1939, several short adits were driven in the Mineral Creek valley, in the central part of the Property, from which small tonnages of gold- and silver-bearing quartz veins were mined. Vancouver Island Gold Mines Ltd. conducted the most extensive work in the 1930s, which included seven adits totalling 686 m of lateral development that reportedly produced 365 tonnes yielding 9425 grams (303 oz) of gold, 1679 grams of silver and 88 kilograms of copper by 1939 (Massey, 1995). This company worked for three years and built a 35-ton pilot-mill in 1936, but difficulties of operation forced it to terminate all work the same year. Small shipments were also made to a smelter in Tacoma, Washington.

The three main gold-bearing quartz veins that were developed from the old workings along Mineral Creek are, from west to east, the Mac (also called the Dunsmuir to the north), the Belcher, and the Waterfall. The veins follow well-developed northeast-trending shear zones on the east side of Mineral Creek. They are lens-shaped and consist of two generations of quartz. Pyrite, arsenopyrite and minor sphalerite are disseminated in the veins and free gold has also been reported. Vein widths range from 0.1 to 1.2 m and have returned sporadic high gold values. Sixty-three samples taken over a 75 m length of vein in the Mac workings averaged 126.5 g/t gold over an average vein width of 15 centimeters (Neale & Hawkins, 1985).

The slopes south of China Creek, in the south-central and south-western parts of the Property were also explored in the 1890s and the 1930s. A number of trenches and 10, or more, short adits and shafts examined the Regina showings, comprised of narrow quartz &/or calcite veins containing pyrite, chalcopyrite, galena, sphalerite and arsenopyrite (Stevenson, 1945).

The Thistle Mine on Franklin Creek, near the south border of the Property, reported that between 1938 and 1942 a small tonnage of high-grade mineralization was shipped. To date, Thistle has reported production of 6,867 tons of gold-copper ore containing 2,667 oz of gold, 1,667 oz of silver, and 626,556 lb of copper. Although the deposit was originally thought to be skarn related it has been more recently interpreted as possible VMS-style mineralization.

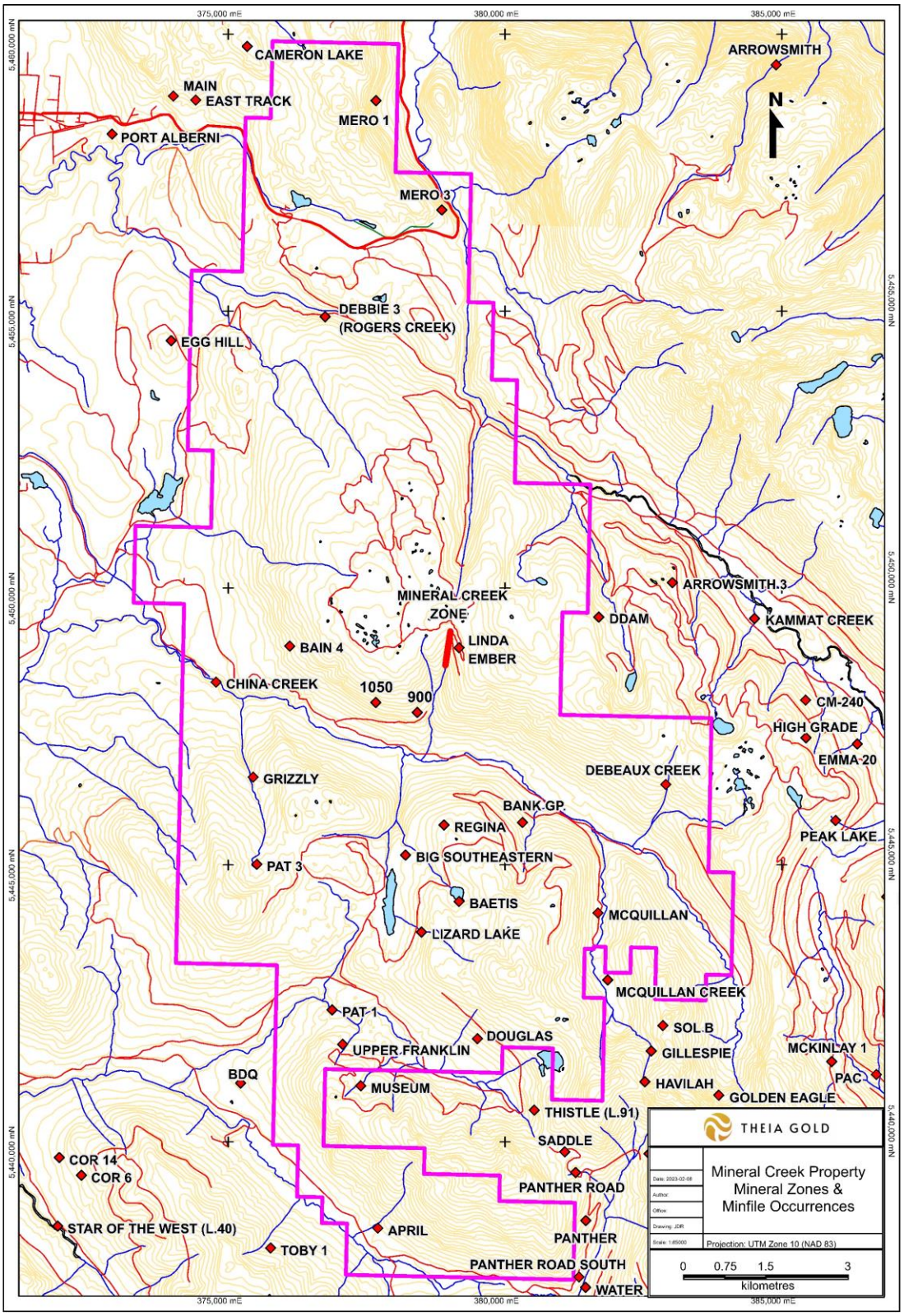
The 1970s and 1980s

During the 1970's and 1980's, exploration work initially focussed on the search for VMS mineralization in the area south of China Creek.

In 1978-79, UMEX held claims in the southern part of the current Mineral Creek Property, extending from Lizard Lake east to Duck Lake, approximately 1.3 km south of the historical Regina showings. Originally conducting a regional search for VMS deposits, Umex's focus later shifted to gold after soil geochemical surveys located several strong gold anomalies, and prospecting discovered an outcrop that assayed 4.46 g/t gold, 24 g/t silver and 0.13% copper

over 2.0 meters (Pauwels, 1981). This showing (Minfile 092F285 “Lizard Lake”) is southeast of Lizard Lake at the southern border of mineral tenure 570437.

Figure 6.1 Mineral Zones and Minfile occurrence locations



During the 1980s, major surveys undertaken by UMEX, in conjunction with Noranda, in the southern Property area included soil geochemistry, geological mapping, magnetometer and Induced Polarization (IP) surveys, as well as limited trenching, rock sampling, Electromagnetic (EM) surveys and several diamond drill holes (MacIntosh et al, 1988). Their work located a few broad arsenic and gold soil geochemical anomalies with some associated IP anomalies. The best reported drill intersection was 2 g/t Au over 0.6 meter and most of the gold mineralization was found to be associated with pyrite and arsenopyrite in small quartz veins.

In 1981, McQuillan Gold Ltd, Oliver Resources Ltd and Jan Resources Ltd held claims extending northward from near the Thistle Mine into the south-eastern part of the current Mineral Creek Property. The owners commissioned an airborne magnetometer and VLF-EM survey that covered approximately 350 line-km on both their claims and part of the Lizard Lake area (Pezzot and White, 1981).

Six major EM-defined conductive trends were observed across the airborne survey area, the strongest of which correlates with a mapped dioritic intrusion, 2.5 km southeast of Father and Son Lake, located to the south of the Property. Pezzot and White (1981) indicated that the combined magnetic and EM responses over that area suggest an extremely favorable target for mineralization. Some of the other trends occur in the area surrounding Douglas Peak, and 700 meters south of Lizard Lake. The area southeast of Lizard Lake exhibits numerous high spatial frequency, weak EM responses, which are believed to represent areas of complex, near surface faulting. Several areas within the survey showed near surface localized conductivity increases, and although these responses are generally weak, they could be reflecting sulfide mineralization. Ground surveys were recommended to follow up the magnetic and EM anomalies, but it is not known by the authors if these were done.

The area of the Thistle Mine, 0.9 km south of the Property, has seen considerable exploration work in search of new zones of massive sulfide mineralization. Originally believed to be a replacement-type deposit, Thistle has more recently been interpreted as metamorphosed VMS mineralization. Nexus Resources Corp. acquired claims covering the Thistle Mine in late 1980 and in 1981-82 conducted surveys in the Panther Road and Thistle mine areas. In 1983 the Property was optioned by Westmin Resources Ltd. and over $1 million was spent on surveys, including geological mapping, linecutting, IP surveys, soil geochemistry and 6,054 m of diamond drilling. Westmin dropped the option on the Thistle property at the end of 1987. In 1988, 1,205 m of NQ diamond drilling was undertaken by Nexus on the Thistle property to test three new zones and three previously drilled zones to expand the results obtained by Westmin. The best intersections obtained from this program were 1.19 m grading 3.50 g/t (0.102 oz/ton) Au and several samples with values of 1 to 2 g/t Au over 0.4 to 1.0 m widths (Walker, 1988).

On the southeastern part of the Mineral Creek Property that covers McQuillan Creek Valley, work by Hollycroft Resource Corporation in 1985 included geological mapping and soil geochemical surveys that located a broad zinc anomaly (Neale and Hawkins, 1985b). The McQuillan mineral

showing (Minfile 092F444), within pillowed amygdaloidal basalt of the Devonian Duck Lake Formation, consists of one or two altered fracture zones up to 3 centimeters wide with disseminated pyrite and fracture-filled chalcopyrite.

From 1979 to 1987, Westmin undertook extensive geological, geochemical and geophysical surveys throughout much of their large property (which covered most of the current Property area), initially in search of VMS-type deposits in Sicker Group rocks. Limited geophysical surveying on the north part of the Property was followed in 1984 by diamond drilling of three holes totalling 745 m, undertaken jointly by Westmin and Noranda Exploration Ltd. The holes targeted the down-dip extension of the Rogers Creek VMS showing (Minfile 092F445) and a nearby geophysical anomaly.

The Rogers Creek occurrence area is underlain by porphyritic mafic volcanic rocks of the Nitinat and Duck Lake Formations that include massive and pillowed basalts and crudely stratified volcaniclastic rocks. A north trending, 200-meter wide, pyritic sericite-chlorite-carbonate schist zone with a coincident IP anomaly was drilled, returning 2.06% zinc, 0.32% copper, 0.04% lead and 5.8 g/t silver over 0.6 meters (Walker, 1986). Mineralization intersected in the drill hole included thin bands and disseminations of pyrite and minor gypsum, sphalerite and chalcopyrite. A nearby surface showing of banded, fine-grained sphalerite with minor chalcopyrite and galena in four thin lenses assayed 14.1% zinc, 0.87% lead and 0.12% copper over 20 cm (Walker & Benvenuto, 1985).

From 1986 to 1988, Westmin continued their VMS exploration, shifting to the area south of China Creek. In this area during the 1890's, on the Regina Crown Grant, at least 8 adits were driven by the Alberni Gold Development Syndicate into highly silicified and pyritized andesite to explore quartz-sulfide lenses and veins. One adit was developed on a tight shear partly filled by quartz veins up to 5 centimeters wide, containing chalcopyrite and galena. One grab sample returned 22.6 g/t gold and 480.0 grams g/t silver, and a 60 cm sample assayed 0.69 g/t gold and 27.43 g/t silver (Minfile 092F078). Westmin undertook geological mapping, airborne geophysics, Induced Polarization and Electromagnetic ground surveys, soil geochemistry, and litho-geochemistry.

In 1986 and 1987, a joint venture of Westmin and Nexus drilled 10 holes, totalling 2049.0 m, to the east of the old Regina adits, to test prospective VMS targets represented by surface showings, IP geophysical anomalies, soil geochemical anomalies and stratigraphic modelling. A broad horseshoe-shaped complex of anomalies was defined, associated with felsic tuffs and flows with lesser intercalated basalt and ferruginous chert. A series of holes along the western branch of the horseshoe encountered scattered disseminated pyrite with minor chalcopyrite and sporadic anomalous Au and Ag values. Some of the best results, over one meter sample lengths, consisted of 2.0% copper, 2.3% zinc and 0.14% lead (Lyons, 1987). Four holes along the eastern side of the anomalies encountered only minor precious and base metal values within basalt flows and volcaniclastics with ferruginous chert. The presence of strong sulfides associated with the more felsic horizons was reported to be encouraging. Geological mapping

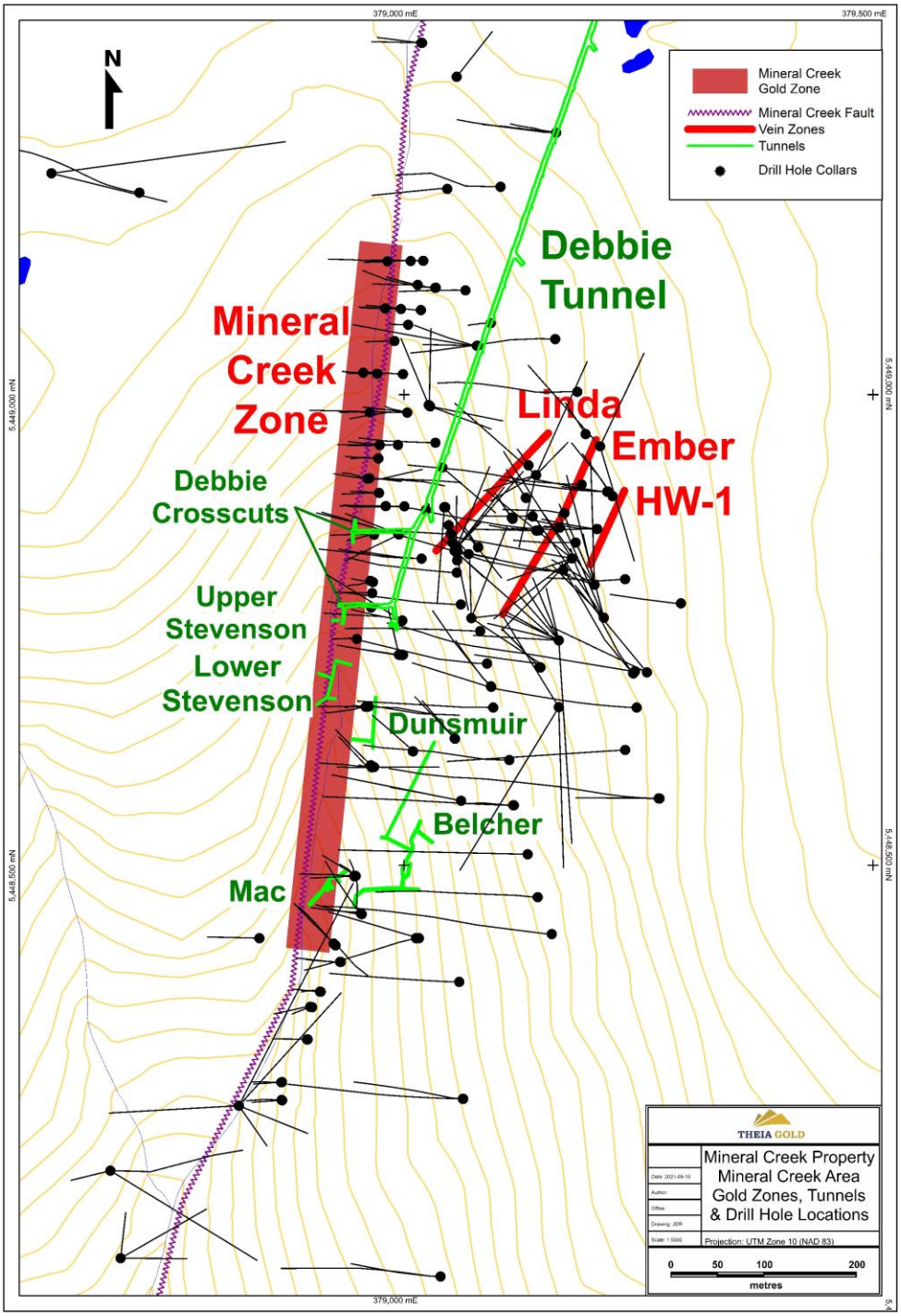
was recommended to better understand the complexity of the area, which shows indications of two major fault zones.

In 1986, Westmin expanded their mandate from strictly VMS-targets and began exploring for gold on their claims, and on some Nexus-optioned ground that included the Yellow claim in the Mineral Creek area. The small Yellow claim, in the area of the old Vancouver Island Gold Mine workings along Mineral Creek, was staked in 1979 by Silver Cloud Mines Ltd, within the Westmin claim block. A number of different companies conducted work from 1979 to 1988 on the Yellow claim. These included Silver Cloud Mines Ltd, Reward Resources Ltd, Angle Resources Ltd and Nexus Resources Corp, with the later work done in joint venture with Westmin. The work included geological, soil geochemical, geophysical and diamond drilling programs.

The Westmin/ Nexus joint venture undertook an extensive amount of work in the Mineral Creek drainage area from 1986 to 1990, comprising about 300 diamond drill holes totalling approximately 50,000 meters, a 1.8-kilometer exploration tunnel (Debbie Tunnel), minor underground drilling, as well as trenching, geological mapping and geophysical and geochemical surveys.

Two of the most significant gold discoveries received much of the Westmin/ Nexus joint venture work: the Mineral Creek Zone and the Linda Zone (Figure 6.2). The Mineral Creek Zone, found within the north-trending Mineral Creek fault/ shear structure, contains disseminated, as well as veinlet and vein hosted, pyrite and minor arsenopyrite with gold values, hosted by Sicker Group bedded volcaniclastic rocks and aphyric basalt flows. These rocks have been deformed and mineralized within a broad cataclasite zone, up to 35 m wide, that has been extensively ankerite-quartz-sericite-pyrite altered and traced over a length of 600 m, although mineralization continues along the fault over narrow widths for a much greater distance. The Linda Zone, comprised of a north-easterly splay from the Mineral Creek structure, consists of shears containing veins of quartz-clay-ankerite or calcite with minor pyrite and arsenopyrite, as well as local native gold. Vein samples have returned local bonanza grades over widths of generally less than 1 m. The Linda Vein may be an extension of one of the veins worked by the historical Vancouver Island Gold Mine that mined 365 tonnes, yielding 9425 grams of gold, 1679 grams of silver and 88 kilograms of copper from various narrow veins between 1898 and 1936.

Figure 6.2 Mineral Creek area gold zones, tunnels, and drill hole locations



In 1986, Westmin/ Nexus focussed attention on strong gold-in-soil anomalies detected by the earlier surveys within the Property which, at that time, excluded the Yellow Claim. At the same time Silver Cloud Mines Limited was undertaking geological and geochemical surveys on their Yellow Claim to evaluate the gold potential in the area of the old Vancouver Island Gold adits. Reward Resources Ltd. and Angle Resources Ltd., which later merged with Nexus, optioned the Yellow Claim in 1986 in the first step towards consolidation of the property. Substantial drill

programs were initiated, and in 1986 Westmin/ Nexus discovered economically significant gold intersections over long intervals in the Mineral Creek shear zone immediately north of the Yellow Claim, followed by discovery of the 900 Zone about 1 km south-southwest of the Mineral Creek Zone (Watkins et al, 1987). The 900 Zone (Figure 6.1) is another important gold-quartz vein deposit that is also hosted by Sicker Group basalts with intercalated chert. Mineralization consists of native gold, pyrite, magnetite and arsenopyrite associated with fault-hosted veins, quartz stockworks and cherty iron formation.

Drilling by Reward and Angle extended the Mineral Creek Zone south along the Mineral Creek Fault well into the Yellow Claim, as well as testing splay veins that had been partially explored by some of the historical adits (Naciuk & Hawkins, 1987). The Westmin/ Nexus program also discovered previously unrecognized high grade gold veins in the Linda Zone, located east of the Mineral Creek Fault and north of the Yellow Claim. In total 41,765 m of drilling in 210 holes were completed from 1986 to 1989 on the Mineral Creek Zone, the Linda vein, and other splay veins. Table 6.1 shows a selection of some of the more significant composite gold intercepts in Mineral Creek Zone drill holes. Many holes had drilled intercept lengths of greater than 30 m, although true width of the zone is thought to average in the 20 to 30 m range along a 500 m strike length. Several narrower but higher-grade intervals, greater than 10 g/t Au, were returned from intercepts of quartz-calcite veins within the Mineral Creek shear, or structures splaying to the northeast of the shear zone. The Linda Vein is one of the larger and more consistent splay veins and has returned a number of high gold values; selected intercepts from the Linda Vein are shown in Table 6.2.

Table 6.1 Selected drill intercepts from the Mineral Creek Zone

Hole ID	From	To	Length m	Au g/t	Zone
D86DH03	76.13	111.75	**35.62**	2.120	Min Ck
D86DH05	124.60	155.45	**30.85**	1.186	Min Ck
D86DH07	32.50	92.00	**59.50**	0.804	Min Ck
D86DH09	85.86	149.50	**63.64**	1.221	Min Ck
D86DH12	30.69	83.00	**52.31**	1.629	Min Ck
D86DH15	101.78	173.06	**71.28**	0.981	Min Ck
Incl	124.70	128.46	3.76	**12.106**	Min Ck
& incl	166.16	173.06	6.90	1.628	Min Ck
D86DH19	47.30	82.50	**35.20**	1.752	Min Ck
D87DH25	79.58	112.50	**32.92**	1.260	Min Ck
D87DH28	134.28	169.00	**34.72**	1.229	Min Ck
D87DH29	24.00	54.50	**30.50**	2.850	Min Ck
D87DH32	33.00	78.45	**45.45**	1.381	Min Ck
D87DH35	52.20	86.10	**33.90**	1.645	Min Ck
D87DH43	75.36	79.55	4.19	**9.056**	Min Ck
D87DH74	100.36	131.20	**30.84**	1.825	Min Ck
D87DH78	73.77	91.03	**17.26**	2.310	Min Ck
Incl	79.43	81.46	2.03	**14.964**	Min Ck
D87DH84	41.03	71.65	**30.62**	1.205	Min Ck
D87DH87	46.14	83.82	**37.68**	2.131	Min Ck
D87DH90	66.18	92.01	**25.83**	1.854	Min Ck

D87DH93	59.83	78.09	**18.26**	1.302	Min Ck
D87DH95	29.70	35.20	5.50	5.744	Min Ck
& D87DH95	94.00	133.90	**39.90**	1.258	Min Ck
D87DH97	28.10	29.00	0.90	**19.303**	Min Ck
& D87DH97	73.40	85.20	**11.80**	1.672	Min Ck
D87DH98	29.60	30.50	0.90	**14.366**	Min Ck
& D87DH98	69.50	98.00	**28.50**	1.798	Min Ck
D87DH119	27.22	71.66	**44.44**	1.352	Min Ck
D87DH138	147.00	175.35	**28.35**	0.778	Min Ck
D88DU159	193.60	195.00	1.40	**14.317**	N Min Ck
D88DM172	39.30	61.30	**22.00**	1.846	Min Ck
D89DM174	39.90	88.90	**49.00**	1.321	Min Ck
D89DM175	45.30	81.10	**35.80**	1.180	Min Ck
D89DM176	62.20	93.90	**31.70**	2.153	Min Ck
D89DU199	37.15	40.70	3.55	**12.531**	N Min Ck
Y87DH03	236.16	246.00	9.84	**20.627**	Min Ck
Y87DH13	81.55	128.90	**47.35**	1.929	Min Ck
Incl	96.85	128.90	**32.05**	2.536	Min Ck
Y87DH16	60.25	78.80	**18.55**	1.148	Min Ck
Incl	73.60	78.80	5.20	2.716	Min Ck
Y87DH16	94.00	147.80	**53.80**	1.495	Min Ck
Incl	94.00	104.40	**10.40**	2.521	Min Ck
Y87DH18	59.60	71.50	**11.90**	1.770	Min Ck
& Y87DH18	89.20	102.60	**13.40**	2.881	Min Ck
& Y87DH18	109.35	111.55	2.20	**12.069**	Min Ck
& Y87DH18	135.10	166.00	**30.90**	1.985	Min Ck
Y87DH24	84.54	101.64	**17.10**	1.291	Min Ck
Y87DH29	432.76	436.50	3.74	**12.259**	S Min Ck
Y87DH33	57.50	71.02	**13.52**	3.572	Min Ck
Y87DH37	28.89	48.21	**19.32**	1.547	Min Ck
& Y87DH37	100.33	124.66	**24.33**	1.276	Min Ck
Y87DH39	52.48	79.69	**27.21**	1.864	Min Ck
Y87DH41	103.43	130.76	**27.33**	1.116	Min Ck
Y88DH81	107.74	123.50	**15.76**	1.396	Min Ck
Y88DH85	35.36	87.86	**52.50**	1.557	Min Ck
Incl	53.65	87.86	**34.21**	1.975	Min Ck
Y88DH91	90.80	99.80	9.00	3.247	S Min Ck
Y88DH93	67.90	78.50	**10.60**	2.739	S Min Ck
Y89DH100	17.30	89.00	**71.70**	1.706	Min Ck

*Based on drill results documented by Westmin (unpublished company reports)

*Lengths reported are drilled lengths, true widths have not been determined

Table 6.2 Selected drill intercepts from the Linda Zone

Hole ID	From	To	Length m	Au g/t	Zone
D87DH62	126.60	131.25	4.65	4.142	Linda
D87DH74	35.75	36.20	0.45	**15.189**	Linda
D87DH83	94.54	97.54	3.00	**45.493**	Linda
D87DH91	88.72	90.13	1.41	**52.443**	Linda
D87DH124	161.52	163.00	1.48	**34.149**	Linda
D87DH125	95.50	100.25	4.75	4.445	Linda
D87DH127	93.90	97.15	3.25	6.587	Linda
D87DH136	79.60	79.90	0.30	**31.097**	Linda

D88DM162	100.80	112.10	**11.30**	7.088	Linda
Incl	106.90	108.00	1.10	**37.927**	Linda
& incl	111.00	112.10	1.10	**14.656**	Linda
D88DM166	91.40	94.60	3.20	4.708	Linda
& D88DM166	105.50	105.80	0.30	**121.372**	Linda
D88DM167	76.60	79.00	2.40	6.179	Linda
D88DM171	12.50	14.10	1.60	**35.495**	Linda
D89DM186	34.70	35.30	0.60	**25.269**	Linda
D89DM187	47.30	48.00	0.70	**92.273**	Linda
D89DM197	34.70	36.20	1.50	9.257	Linda
D89DM198	46.30	47.50	1.20	**37.509**	Linda
Y89DH101	23.20	24.00	0.80	**30.500**	Linda
BTT-L2	14.80	15.50	0.70	**71.51**	Linda
BTT-L3	13.50	16.20	2.70	**45.48**	Linda
BTT-L10	15.40	18.10	2.70	**22.66**	Linda
BTT-L11	102.10	109.80	7.70	5.06	Linda
BTT-L12	21.60	25.30	3.70	4.36	Linda
BTT-L14	21.30	22.40	1.10	**152.65**	Linda
BTT-L16	9.60	10.50	0.90	**12.89**	Linda
BTT-L17	38.90	39.80	0.90	**54.77**	Linda
BTT-L18	32.80	33.00	0.20	**68.15**	Linda
BTT-L25	38.40	41.20	2.80	**14.44**	Linda
BTT-L25	44.30	47.80	3.50	5.59	Linda
BTT-L26	45.00	46.00	1.00	**24.54**	Linda
BTT-L28	43.30	44.80	1.50	**11.57**	Linda
BTT-L40	108.00	108.20	0.20	**185.46**	Linda
BTT-L43	14.60	15.50	0.90	**130.97**	Linda
BTT-L54	49.90	52.10	2.20	6.45	Linda
BTT-L54	63.80	71.00	**7.20**	**159.03**	Linda
BTT-L55	43.85	49.50	5.65	4.51	Linda
BTT-L55	57.30	59.75	2.45	**11.20**	Linda
BTT-L55	123.20	123.55	0.35	**42.70**	Linda
BTT-L56	24.50	26.30	1.80	**61.57**	Linda
BTT-L56	31.60	33.50	1.90	7.14	Linda
BTT-L58	26.00	27.65	1.65	**215.15**	Linda
BTT-L58	36.45	37.10	0.65	**18.20**	Linda
BTT-L59	30.80	31.80	1.00	**24.60**	Linda
BTT-L59	38.50	38.70	0.20	**117.50**	Linda

*Based on drill results documented by Westmin & Bitterroot (unpublished company reports)

*Lengths reported are drilled lengths, true widths have not been determined

As well, the 900 Zone had received 8,194 m of drilling in 84 holes, defining a steeply dipping, pipe-like mineralized zone at the juncture of two faults. Quartz veins and stockworks carrying significant gold values within the intersecting faults zone cover an area of about 180 m x 150 m, to a depth of over 120 m. Selected drill intercepts from the 900 Zone are shown in Table 6.3.

Extensive rock and soil geochemistry, mapping and geophysical surveys were also completed during this 4-year period. Overburden trenching and rock sampling was done, old adit collars were reopened, and a 2.5 km drill access road was constructed to logging standards on the east

side of Mineral Creek. Survey control was established, and background environmental studies were initiated.

Table 6.3 Selected drill intercepts from the 900 Zone

Hole ID	From	To	Length m	Au g/t	Zone
D86DH08	34.60	52.20	**17.60**	2.740	900
D87DH50	55.70	77.50	**21.80**	**23.648**	900
Incl	55.70	70.70	**15.00**	**32.685**	900
D87DH52	35.20	45.20	**10.00**	6.987	900
D87DH55	84.90	95.90	**11.00**	4.055	900
D87DH58	26.80	31.80	**5.00**	5.951	900
D87DH59	22.70	24.30	1.60	**32.867**	900
& D87DH59	31.90	39.90	**8.00**	1.635	900
D87DH63	44.70	57.30	**12.60**	3.110	900
& D87DH63	112.20	113.00	0.80	**116.298**	900
D87DH66	93.00	97.30	4.30	**38.371**	900
D87DH71	26.50	33.30	**6.80**	2.808	900
D87DH79	20.10	26.10	**6.00**	3.091	900
D87DH85	31.20	32.30	1.10	**14.023**	900
D87DH86	42.70	44.80	2.10	**94.525**	900
D87DH89	33.20	34.40	1.20	**10.629**	900
& D87DH89	48.30	48.60	0.30	**134.367**	900
D87DH92	55.80	58.90	3.10	4.973	900
D87DH94	65.50	67.00	1.50	**12.114**	900
D87DH112	18.00	29.60	**11.60**	2.555	900
D87DH114	41.70	42.96	1.26	**24.047**	900
& D87DH114	83.90	94.00	**10.10**	4.359	900
D87DH115	25.00	35.00	**10.00**	5.205	900
D87DH118	41.00	59.00	**18.00**	**112.036**	900
D87DH121	63.55	71.91	**8.36**	**36.446**	900
D88DH139	59.60	61.50	1.90	8.334	900
D88DH142	42.60	54.30	**11.70**	1.711	900
D89DN178	53.50	60.00	**6.50**	3.541	900
D89DN182	40.40	59.40	**19.00**	1.700	900
Incl	48.90	59.40	**10.50**	2.399	900

*Based on drill results documented by Westmin (unpublished company reports)

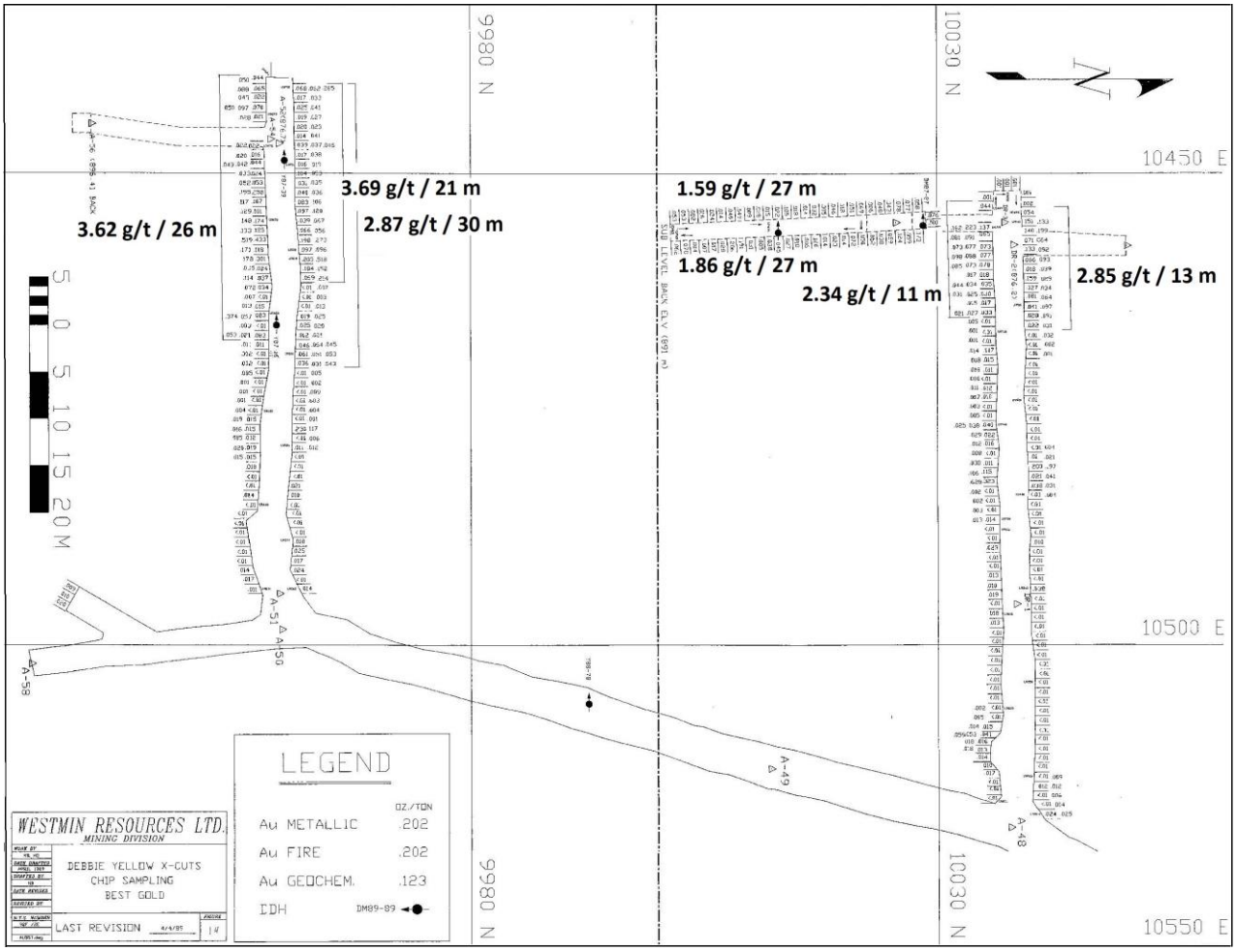
*Lengths reported are drilled lengths, true widths have not been determined

A major part of the Westmin/ Nexus exploration program included the driving in 1988 of a sizeable exploration tunnel, extending south from a portal in Yellows Creek at 850 m elevation along the hanging wall side of the Mineral Creek Fault Zone for 1.8 km, at which point crosscuts were driven to the Mineral Creek Gold Zone. A raise was broken through to surface near Mineral Creek on the Yellow Claim to provide ventilation and secondary access. This trackless underground development includes 1780 m of 3 m x 4 m main adit, two smaller crosscuts through the Mineral Creek Zone totalling 121 m, three raises totalling 65 m, and a 27 m long sub-drift at the top of one raise. These workings were established at a cost of approximately $3 million to provide a drill platform for exploration drilling of the Mineral Creek Fault Zone, to facilitate evaluation of the mineralization grade and characteristics, and to allow detailed definition drilling

of the Mineral Creek Zone and Linda Zone. Accessing the Mineral Creek Zone with this exploration tunnel eliminated the need for road access to the south side of the mountain at an estimated cost saving of approximately $1 million and allowed the adit drainage to enter the Cameron River watershed rather than China Creek, from which Port Alberni municipal water is drawn. Potential mill sites are available on the north side of McLaughlin Ridge, whereas a mill facility in China Creek would be less favourably received.

Chip sampling was undertaken in 1988 by Westmin/ Nexus on the walls of the crosscuts that pass through the Mineral Creek Zone and along the sub-level drift at continuous 1 m intervals (Figure 6.3). Samples collected from the Mineral Creek mineralized shear zone were fire assayed, as well as metallics assayed. Best results from these assays were averaged across the zone for the crosscuts and along the strike of the zone for the sub-level drift. Samples across the zone in the two crosscuts averaged 2.85 g/t Au over 13 m and 3.62 g/t Au over 26 m. The sampling along 2 walls of the sub-level drift averaged 1.59 g/t Au and 1.86 g/t Au over 27 m.

Figure 6.3 Plan view Debbie Tunnel crosscuts and sub-level drift chip sample Au values



In 1989, Westmin Resources Ltd. estimated a mineral inventory, that is not 43-101 compliant, based on the results of approximately 210 drill holes in the Mineral Creek area. The Mineral

Creek Zone inventory was estimated based on a 500-meter strike length, a width averaging 20 m, and a depth of 200 m. A Westmin internal company report by Prefontaine, Walker and Wojdak (1991) stated a Probable Mineral Inventory for the Mineral Creek Zone estimated at 172,082 tonnes grading 3.26 g/t gold, containing a total of 18,036 ounces of gold. As a comparison, the average of twenty-six 1m chip samples collected across the zone in the southernmost underground crosscut was 3.62 g/t Au over 26 m, comparing closely with the estimated grade and width of the drilled zone.

Also quoted in the internal company report was Westmin's estimate of a Probable Inventory in the Linda Zone at 51,871 tonnes grading 8.40 g/t gold, containing 14,008 ounces of gold, based on the results of approximately 30 drill holes in an area measuring about 200 m long by 2 m wide by 20 m of depth. As well, the 900 Zone had a quoted Probable Inventory of 28,294 tonnes grading 11.69 g/t gold, containing 10,634 ounces of gold, in an area about 100 m long by 40 m wide by 20 m deep.

The mineral inventory figures quoted in this report are pre-National Instrument 43 -101 Standards of Disclosure for Mineral Projects. Westmin Resources Ltd.'s inventory of the "Debbie" property is considered historical.

Table 6.4 Non-compliant mineral inventory (Prefontaine, Walker & Wojdak, 1991)

Category	Zone	Tonnes (t)	Grade g/t	Grams Au	Oz Au
Probable	MC zone	172,082	3.260	560,987	18,036
Probable	Linda	51,871	8.400	435,716	14,008
Probable	900	28,294	11.690	330,757	10,634
Subtotal		252,247	5.262	1,327,431	42,678
Possible	MC zone	451,246			
Possible	Linda	68,350			
Possible	900	17,488			
Subtotal		537,084			
Total		789,331			

*Mineral inventory used a cutoff of 1.71 g/t Au over minimum 2 m thickness
*No grades were estimated for the possible category of inventory

Overall, 318 diamond drill holes, totalling approximately 56,060 m, were drilled in various parts of the Property by Westmin/ Nexus and associated companies during the period 1986 through 1989.

In 1989, Mingold Resources Inc. conducted reconnaissance soil sampling in an area that partly covers the west side of the Property along China Creek. A small grid and road traverse sampling returned local spot anomalies of gold and copper (Nicholson & Nicholson, 1989). No followed up of these anomalies was reported.

The 1990s to Present

In 1990, Westmin's program was scaled down to a limited drill test of the 1050 Zone located 800m west of the 900 Zone (Figure 6.1). Here, trenching and drilling of a strong Au-in-soil anomaly led to discovery of a quartz-veined shear zone containing high grade gold. Four packsack holes tested this structure and one of them intersected 287.3 g/t (8.38 oz/ton) Au over a length of 1.7 m; however, core recovery was only 30%. This hole was not followed up until some years later.

After 1990, Westmin, and its successor company Boliden-Westmin (Canada) Limited (formed in 1998), did no further exploration on the Property. In 1995, under option from Westmin, White Hawk Ventures Inc. developed a portion of the 900 Zone and mined a bulk sample estimated to contain approximately 800 ounces of gold in about 900 tonnes of vein material, which was stockpiled on surface (Sleeman, 1996). Development on the 900 Zone included 240 m of drifts and 135 m of raises. While the grade of the overall mineral body was encouraging, the size turned out to be less than expected and further mining was halted in early 1996 pending investigation of various milling alternatives. It was estimated that 200 to 500 tonnes of material with good gold grades remained in place underground.

Preliminary metallurgical test work was undertaken by Beattie Consulting Ltd. in 1996 on a composite sample of the White Hawk bulk sample, collected from four points on the stockpile and from material remaining at an underground chute. The composite was crushed and split into 2 kg portions for test work. Gravity concentration recovered about 70% of the gold, with a further 21% recovered in flotation concentrate, which also contained approximately 1% As. Coarse free gold was noted. The calculated head assay was 29.7 g/t Au and 9.0 g/t Ag (Sleeman, 1996). White Hawk was reported in George Cross Newsletter #219 (Nov 14, 1997) to have shipped 894 tonnes of stockpiled material from the 900 zone in 1997 to Bow Mine's mill at Greenwood and, from there, 7,478 kilograms of concentrate was shipped to Cominco's smelter in Trail for refining. Gold values were not reported. In 1997 White Hawk discontinued work on the Property.

In 2004, Barry Hanslit completed one drill hole (BH-04-01) to a target depth of 365 feet to test the projection of the Mineral Creek fault in the China Creek valley. A second hole was attempted but not completed due to thick overburden and bad drilling conditions. In 2005 several intervals were sampled from the core; however, they showed very little sign of mineralization or alteration. Gold results were generally low, with a best value of 0.5 g/t Au over 8 centimeters from an irregular quartz band containing magnetite and 1% pyrite.

Mineral Creek Ventures Inc. acquired the mineral tenures held by Boliden-Westmin in 2004, and in 2005 entered into an option agreement with Bitterroot Resources Ltd. Bitterroot acquired additional claims in 2007 and 2010 to expand the original block.

In 2005, limited geological mapping and rock sampling were undertaken by Bitterroot in localized areas on the west side and the east side of the Property to determine potential for mineralization.

In the west area there was follow-up of anomalous copper soil geochemistry and a known chalcopyrite showing, but no new mineralization was discovered. Also in 2005, 14 drillholes, totalling 1573 m, explored part of the 1050 Zone, which had been discovered and sparsely drilled with a packsack drill by Westmin in 1990.

The drilling in the 1050 area targeted a strong, west-trending gold-in-soil anomaly, which was partially explained by the narrow, high-grade veins that were intersected in some of the drillholes. Based on the drill section plots, the veins appear to trend NW to WNW and dip 50° to 80° NE. These veins have returned some excellent values from drill core, based on unpublished Bitterroot drill data, such as 244.0 g/t Au over 0.8 m and 34.1 g/t Au over 5.3 m (drillholes BTT-1053 and BTT-1058), however true widths were not determined.

From 2006 to 2009 Bitterroot Resources Ltd drilled 202 holes (35,931 m) to test targets in eight different zones, primarily in the central and southern parts of the Property. Assessment reports were submitted detailing the results of forty drill holes in the southern part of the Property that tested gold veins in one area and stratiform copper-zinc targets in another (Wilson, 2008 & Wilson and Price, 2008), as well as a report documenting 68 holes drilled in the Ember Vein zone in 2009 (Rowe & Greig, 2011). The remaining 94 drill holes have not been reported in public records, however, the authors have had access to some of the unpublished drill data.

The reported, 2006-2007 gold vein drill testing was undertaken in 22 holes near the north end of Lizard Lake, called the Big Southeastern Zone, along the southern extension of the Mineral Creek Fault, which is a regional feature that has influenced gold mineralization a few kilometers to the north in the Mineral Creek area. Three holes had been previously drilled in the Lizard Lake area in 1985 by the Umex-Noranda joint venture. Significant gold assays of 5 to 9 g/t Au were returned from several of the Bitterroot holes, but over narrow widths of 0.3 to 0.9 m (Wilson & Price, 2008). The mineralization comprised pyrite, arsenopyrite and rare chalcopyrite in thin quartz veins, gouge seams and shear-breccias with ankerite-silica alteration halos, hosted by andesite, basalt and gabbroic rocks.

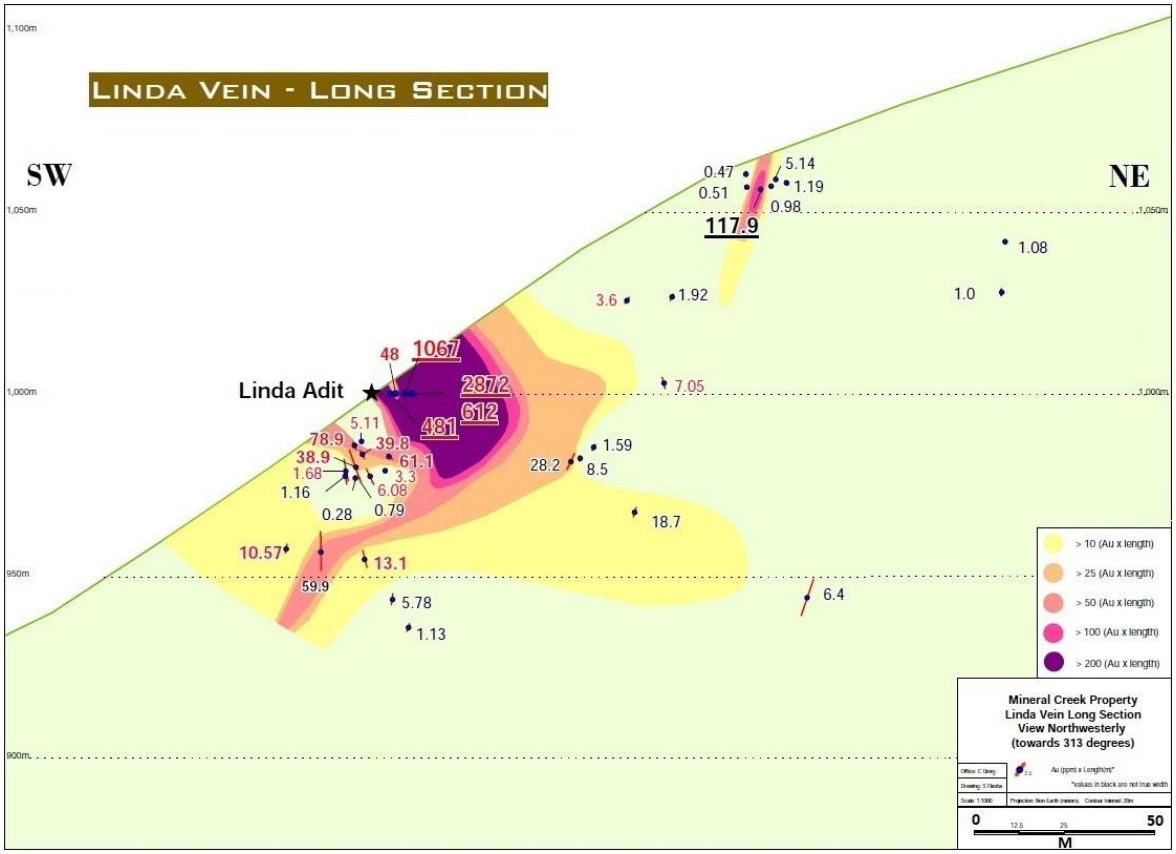
An additional eighteen holes were drilled by Bitterroot in 2007 in the second area, about 1 km to the northeast of the Big Southeastern Zone, exploring for VMS-style mineralization near the historical Regina showings. A mineralized layer of chlorite-epidote-calcite-altered basalt within 100 meters of surface was traced from hole to hole throughout the drilled area. Although the main sulfides comprised narrow pyrite bands, veins and disseminations, there was occasional copper and zinc mineralization present in this layer, in concentrations up to a few percent. Chalcopyrite was observed in some pyrite bands, in quartz veins, and as fine wisps in the host rocks. Sphalerite was encountered over narrow intervals and was commonly banded.

The thickest interval of semi-massive pyrite (25-50%) encountered in the 2007 Regina area drilling was a four-meter interval in hole BTT-BS-26, from 293.2 - 297.2 meters depth, with true thickness estimated at about two meters. The Cu, Pb, and Zn values for this interval were

background. As stated by Wilson & Price (2008), the pyrite, with local chalcopyrite/ sphalerite mineralization, bears some resemblance to footwall stringer mineralization at Myra Falls where it is stratabound; host rocks have strong chloritic alteration; and pyrite/chalcopyrite/sphalerite is present as stringers over a considerable thickness (~20-30 meters). The association of quartz veining with base metal mineralization could be interpreted as remobilization of footwall volcanogenic mineralization or, conversely, the base metal mineralization may be solely a product of Tertiary intrusive activity and resultant quartz veining.

Sixty of the undocumented Bitterroot holes were drilled to test the Linda Vein in 2006 and 2008. This vein had been discovered previously by Westmin in the process of drilling the Mineral Creek Zone and was included as part of the gold mineral inventory reported by Westmin in 1990. The Bitterroot drilling tested the Linda Vein at spacings of about 10 m x 10 m in the most strongly mineralized area, and 25 m x 25 m on the periphery, tracing the zone for about 100 m of strike length and to a depth of 50 to 80 m (Figure 6.4). The drilling appears to have defined a high-grade shoot near surface that may plunge moderately steeply to the southwest, although the edges of the shoot are sparsely drilled, leaving the possibility for extension by further drilling, both along strike and to depth. Intercepts of the vein/ shear zone ranged from 0.1 to 7.7 m (drilled length), although the thicker intercepts commonly were at low angles to the core axis, thereby exaggerating the true thickness of the zone. Some of the best results included 159.03 g/t Au over 7.2 m (BTT-L54), 215.15 g/t Au over 1.65 m (BTT-L58) and 45.48 g/t Au over 2.7 m (BTT-L3) (see Table 6.2). Many of the intercepts included multiple stringers or splays of quartz-calcite veins that are hosting most of the gold, as well as altered, silicified, pyritic wallrocks that typically contain 0.5 to 1.0 g/t Au, extending outward up to 1 m or more from the veins. The vein's thickness ranges from a few centimeters to 1.3 meters and in places it splits into two or three veins. The massive to brecciated vein quartz locally contains 3-5% disseminations and stringers of pyrite, lesser arsenopyrite and local fuchsite. Fine specks of visible gold, up to 2 mm, are seen rarely. Often a thin seam of sulfide-bearing clay gouge is present along vein contacts.

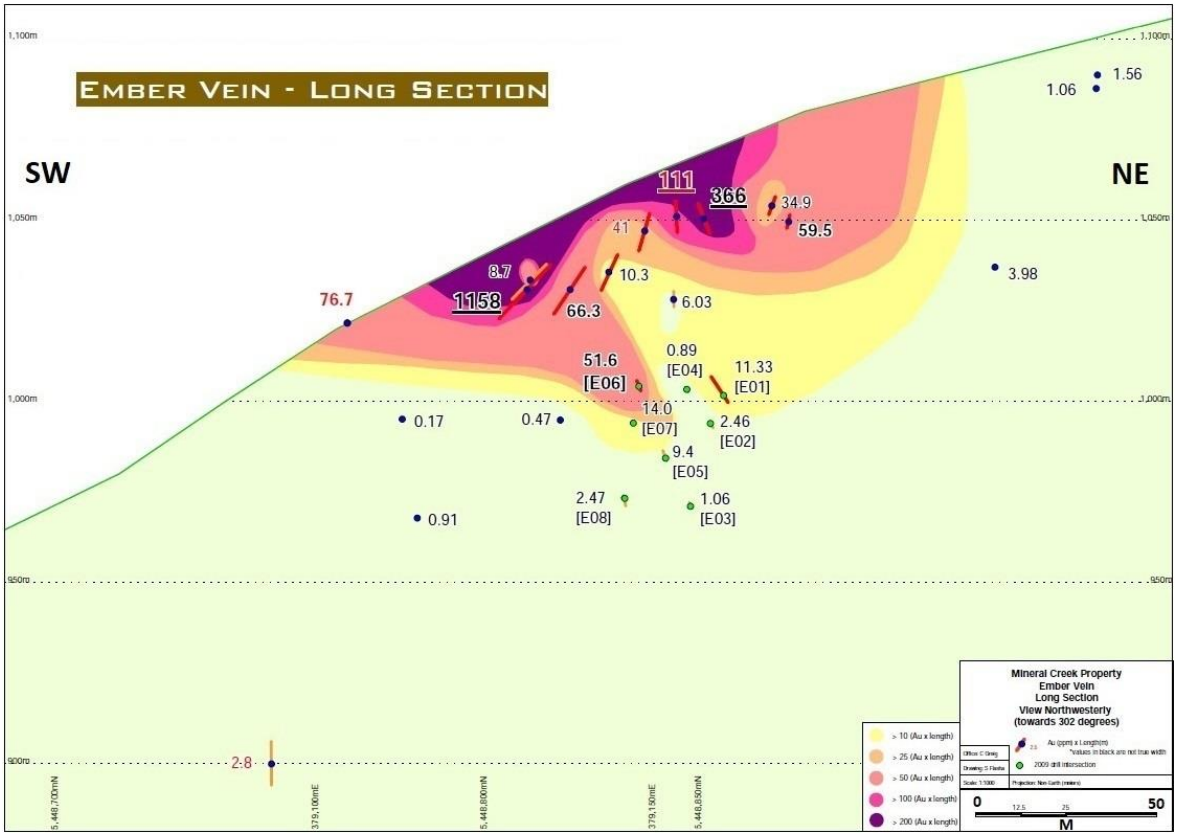
Figure 6.4 Linda Vein Longitudinal Section, viewed northwesterly, values represent grade (Au g/t) x drilled length (m)



Thirty-four of the undocumented Bitterroot holes were drilled to explore targets in three areas: the Gap Zone (12 holes) located west of the Mineral Creek Zone, the southern part of the Mineral Creek Zone (9 holes) and the 900 Zone (13 holes). The Gap drilling returned a few narrow intervals with moderate Au values, such as 3.84 g/t Au over 0.6 m (BTT-G19). Holes in the southern section of the Mineral Creek Zone intersected a few relatively narrow intercepts of low grade such as 0.88 g/t Au over 6.9 m (Hole BTT-M5). Drilling to the south of the 900 Zone returned moderate gold values over narrow widths, such as 11.10 g/t Au over 0.3 m (BTT-N1).

An outcrop of gold-bearing quartz vein named the Ember Vein was discovered in a road cut, about 80 m in the hangingwall, and parallel to, the Linda Vein. Bitterroot drilled this new vein with 68 holes in 2009. Drill spacing of the Ember Zone was relatively tight, with a horizontal and vertical distance of 5 to 15 meters between holes in the central area of drilling but widening to about 50 m at the edges. Drilling traced the vein along a strike length of 130 meters and an elevation range of about 90 meters (Figure 6.5).

Figure 6.5 Ember Vein Longitudinal Section, viewed northwesterly, values represent grade (Au g/t) x drilled length (m)



The Ember vein's thickness ranges from a few centimeters to 1.3 meters and in places it splits into two or three veins. The gold grades vary from trace up to 467.0 g/t Au and the highest grades are often accompanied by visible gold grains. One of the better intercepts, from MC2009-E57, returned a 4.4-meter-wide vein/breccia interval of the Ember Zone averaging 75.35 g/t gold, however, this grade was enhanced by two relatively narrow intervals of 0.4 m and 0.6 m that both assayed greater than 200 g/t gold (Rowe & Greig, 2011). Of the 68 holes in the Ember Zone, 11 returned gold values greater than 20 g/t, over sample lengths of 0.15 m to 0.85 m. Selected drill intercepts from the Ember Zone are shown in Table 6.5.

Table 6.5 Selected drill intercepts from Ember Zone

Hole ID	From	To	Length m	Au g/t	Zone
D87DH57	38.42	39.45	1.03	**33.030**	Ember
D87DH62	40.35	43.35	3.00	**19.817**	Ember
Y88DH70	35.22	46.40	**11.18**	3.045	Ember
Incl	35.22	35.53	0.31	9.154	Ember
& incl	37.91	42.02	4.11	6.843	Ember
MC2009-E05	108.4	111.1	2.70	3.473	Ember
MC2009-E06	98.8	102.4	3.60	**14.332**	Ember
MC2009-E07	105.5	105.75	0.25	**55.700**	Ember

MC2009-E13	114.6	116.25	1.65	6.873	Ember
MC2009-E14	113.7	114.2	0.50	6.440	Ember
& MC2009-E14	121.6	122.1	0.50	**11.850**	Ember
MC2009-E17	166.8	168.2	1.40	6.397	Ember
MC2009-E18	64.8	66.3	1.50	7.407	Ember
MC2009-E23	55.7	56	0.30	**17.100**	Ember
MC2009-E26	53.2	53.65	0.45	8.650	Ember
&MC2009-E26	125.9	128.65	2.75	4.930	Ember
MC2009-E28	60.1	60.5	0.40	**25.900**	Ember
MC2009-E29	60.75	61.55	0.80	**15.700**	Ember
MC2009-E30	60.6	63.35	2.75	6.611	Ember
MC2009-E34	54.5	59.75	**5.25**	3.741	Ember
& MC2009-E34	61.7	64.65	2.95	4.299	Ember
MC2009-E35	70.5	71.4	0.90	8.912	Ember
MC2009-E39	92	97.3	**5.30**	**13.078**	Ember
MC2009-E42	92.85	94.1	1.25	8.158	Ember
MC2009-E44	42.3	45.05	2.75	6.252	Ember
MC2009-E47	89.9	91	1.10	6.333	Ember
MC2009-E49	68.8	69.5	0.70	8.770	Ember
MC2009-E50	72.75	73.9	1.15	**13.338**	Ember
MC2009-E53	28.45	31.4	2.95	**26.298**	Ember
MC2009-E53	82.45	84.1	1.65	**15.342**	Ember
MC2009-E56	94.4	96.6	2.20	6.544	Ember
MC2009-E57	75.05	79.45	**4.40**	**75.351**	Ember
MC2009-E60	87.9	90.2	2.30	**29.185**	Ember

*Based on drill results documented by Rowe & Greig (2011) & Westmin (company reports)

*Lengths reported are drilled lengths, true widths have not been determined

During drilling of the Ember vein another quartz vein (HW Zone) was intersected, approximately 30 meters in the Ember hangingwall, averaging about 0.5 meter in thickness. An intersection of the HW vein in hole MC2009-E53 returned a 0.55-meter interval grading 137.5 g/t gold and was noted to contain local visible gold. Another interval, possibly from the HW Vein, returned high-grade silver mineralization, up to 1,170 g/t silver over 0.15 meter, in hole MC2009-E35 (Rowe & Greig, 2011).

Bulk sampling of the Linda Vein by open cut and an 11 m long, 2 m x 1.5 m drift was undertaken by M. Becherer under an agreement with Bitterroot in 2009 and 2010. An estimated 620 tonnes of quartz vein material was extracted, crushed, and milled in a small ball mill. The product was run over a shaker table from which the gold-rich stream was collected and further concentrated using a small Knelson concentrator. This product was smelted into dore bars. The remainder of the pyritic concentrate from the table was stored in drums and these were sold to a refinery. Two shipments of concentrate material assayed at the refinery returned values of 15.685 oz/ton Au & 4.356 oz/ton Ag and 11.641 oz/ton Au & 1.061 oz/ton Ag. The total gold recovered in dore and

concentrate was estimated to be about 8000 grams (257 oz) from 620 tonnes, however, there is no detailed accounting available to the authors.

Bitterroot commissioned Airborne VTEM-Magnetic surveys in 2008 and 2010 that together cover about 60% of the current Property, mainly the north, central and south-central areas (Figure 6.6). Data was collected along N-S lines 100 m apart and E-W lines 200 m apart. Brief reports were written by J. Klein interpreting some of the EM and magnetic responses.

Klein (2008) stated that the VTEM responses in the survey area are generally weak, but they can be divided into broad responses or groups of more or less parallel responses and those of more isolated ones. Broad, weakly conductive areas are probably caused by formational conductivity, linear features are possibly fault related, such as along China Creek. Isolated conductors near areas of known mineralization, such as two spot anomalies near the Regina pyritic Zn-Cu showings warrant further analysis.

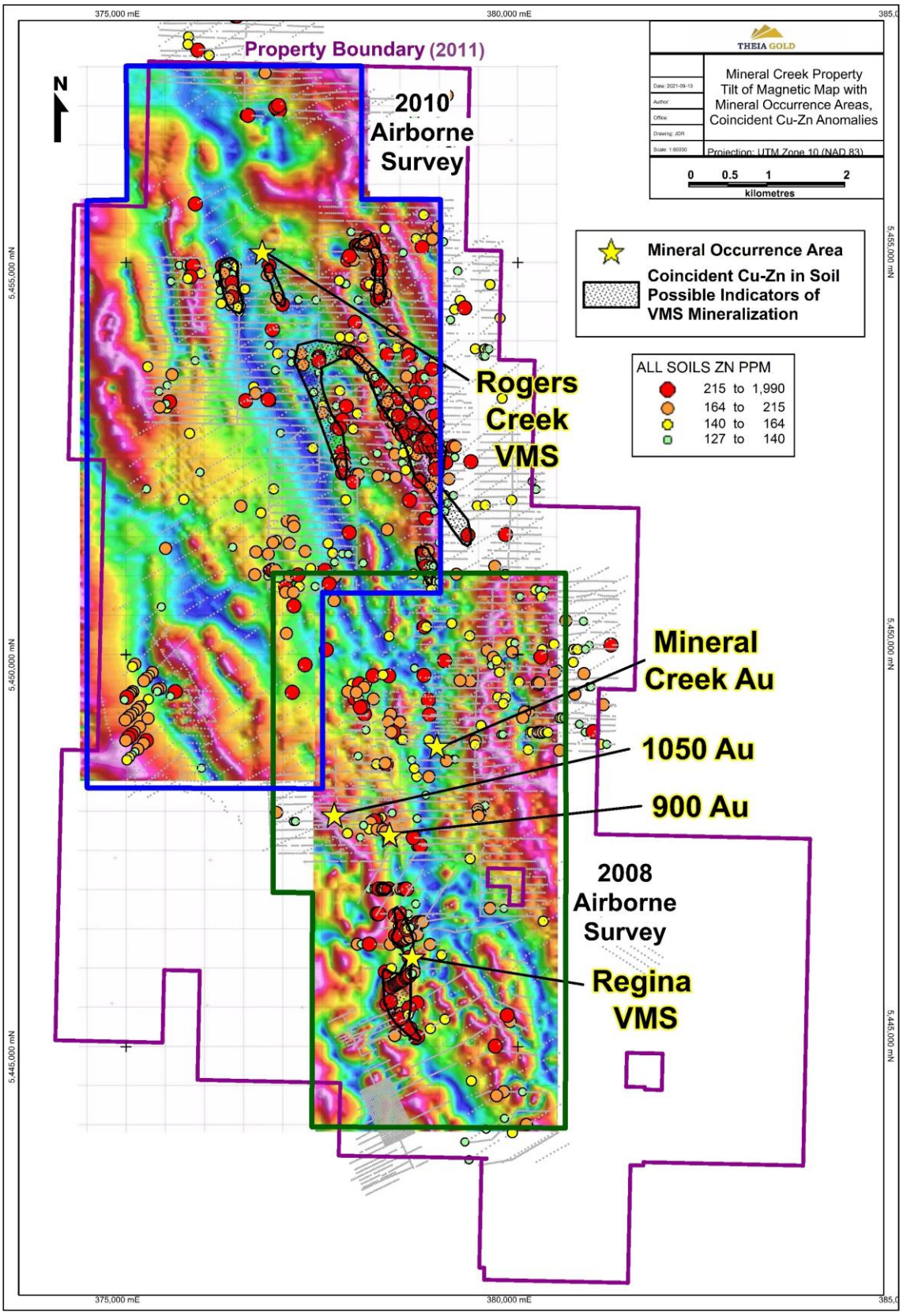
Klein (2011) found the magnetic results to be of greater interest. He produced tilt derivative maps from the magnetic data and indicated that the negative tilts are more important because they reflect magnetic lows, like fault zones and possible alteration areas, in which original magnetite in the rock has been destroyed.

A linear magnetic low reflects the ~N10ºE mineralized fault zone that runs along the Mineral Creek-Yellows Creek corridor offsetting rocks in a right lateral sense by possibly several kilometers based on the pattern/character of the tilt magnetic lows on either side of that fault (Figure 6.6).

A broad zone of pyrite-sericite-chlorite-carbonate schist in the Rogers Creek area, in the north part of the Property, correlates with one of the strongest negative tilt axes, striking ~N20ºW. Cu-Pb-Zn and Pb-Zn-Au showings are recorded near this location. This schist may continue along the magnetic low for several kilometers to the south. A horseshoe-shaped coincident Cu-Zn anomaly to the southeast of Rogers Creek partly coincides with a linear magnetic low and could represent an altered and VMS-mineralized horizon that has been fold repeated. This anomaly is over 2 km in length and has never been drill tested.

In the south part of the Property, irregular magnetic lows partly coincide with the Regina showings and with a north-south trending zone of coincident Cu-Zn geochemical anomalies. More detailed geophysical evaluation of this area may define prospective targets. There is no record of any follow up of the airborne geophysical targets by Bitterroot.

Figure 6.6 Tilt derivative of magnetic data with coincident Cu-Zn soil anomalies and mineral occurrence areas (magnetic map from Klein, 2011)



In 2012 the Property was purchased from Bitterroot by Lu'an (Canada) Capital & Energy Investment Inc. Lu'an collected soil samples along the projected trends of the Linda and Ember Veins that returned high gold values in 18 of 33 samples, ranging from 52 to 3950 ppb Au (Lu'an, 2012, personal communication). These results indicated possible near surface mineralized veins extending over lengths of more than 250 m, with values in soils generally increasing to the southwest, toward the Mineral Creek Fault.

In 2013 the Property was optioned from Lu'an by Sona Resources Inc., which was subsequently taken over in 2019 by Tempus Resources (Canada) Ltd. A very brief property examination and collection of 3 rock samples was undertaken in 2019 with no significant results.

Theia purchased the Property from Lu'an by share issuance in May 2021 and added new claims, primarily in the south part of the Property. The Company undertook exploration work in 2022 and 2023, which is described in Sections 9 and 10.

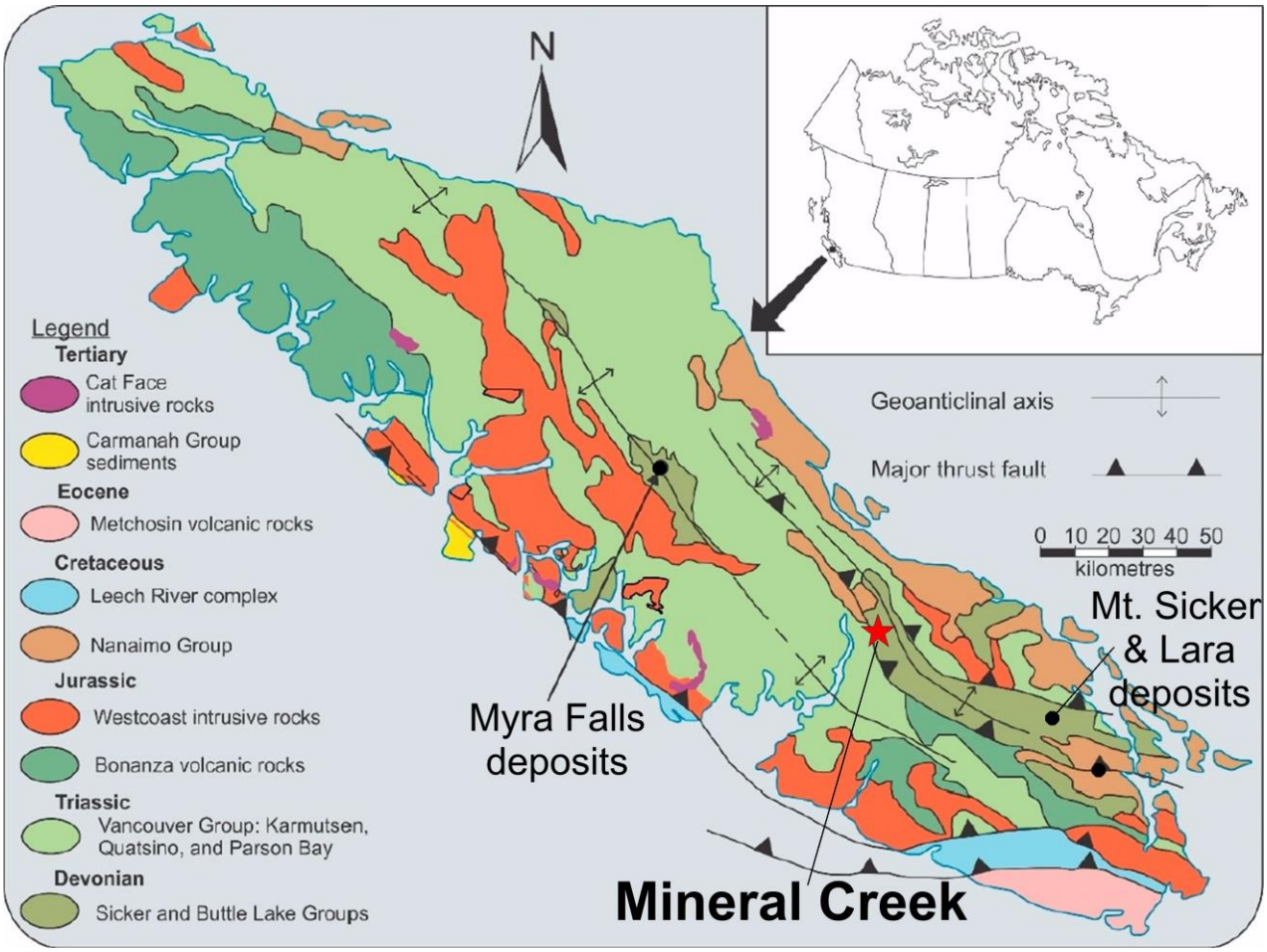
7.0 GEOLOGICAL SETTING AND MINERALIZATION

7.1 REGIONAL SETTING

The geology of the southern part of Vancouver Island in the area of the Mineral Creek Property has been documented by England et al. (1997), Massey (1995), Muller (1980), Stevenson (1945) and more recently by Ruks et al. (2010). The Mineral Creek property lies at the western edge of the Cowichan uplift, a prominent geanticlinal structure within the Wrangellia Terrane (Figure 7.1). Volcanic and sedimentary units of the Devonian Sicker Group and Permian Buttle Lake Group are the oldest in the area. They are overlain by Upper Triassic basaltic rocks of the Karmutsen Formation (Vancouver Group) which are overlain by Lower Jurassic Bonanza Group volcanics and lesser sediments, followed by Upper Cretaceous sediments of the Nanaimo Group. In places, Late Triassic Mount Hall gabbroic rocks intrude Palaeozoic Sicker units. All the above units are intruded by Early to Middle Jurassic Island Plutonic Suite rocks, typically of diorite to granodiorite composition. Minor Late Eocene Mount Washington Intrusive Suite dacite sills and dikes occur throughout the area.

The region displays a complex history of folding, faulting and thrusting. Major Eocene faults are particularly important. Of these, the northwest-trending Cowichan thrust faults dip at 45 to 90 degrees to the northeast and can appear as sharp, narrow zones to wide, schistose zones. These faults have unknown displacements but could be five to ten kilometers horizontally and one to two kilometers vertically. The northerly-trending Mineral Creek fault is another regional Eocene structure; it is a sub-vertical shear zone and was active later than the Cowichan faults. It has sinistral displacement of over one kilometer, and unknown vertical displacement. Gold mineralization is associated with the Mineral Creek fault zone on the Property.

Figure 7.1 Mineral Creek and selected VMS deposit locations relative to major lithological units of Vancouver Island (from Marshall et al., 2018)



Significant mineral deposits surround the Mineral Creek Project. Of particular importance are the nearby, large VMS-type Myra Falls deposits located 78 km to the northwest, and the Mount Sicker and Lara deposits, 75 km to the southeast. These deposits are hosted by Sicker Group rocks that have distinct similarities to the rocks of the Sicker Group at the Mineral Creek Property that also host showings of VMS-style mineralization.

To the southeast of the Property, on Mount Sicker, the Lenora and Tyee mines began production in 1898, lasting until 1909, and the nearby Richard III mine produced from 1903 to 1907. A total of about 229,000 tons were recovered from these three mines, with estimated average grades of 4.0% Cu, 100.1 g/t Ag and 4.8 g/t Au (Zn not recovered) (Minfile number 092B 001). The Tyee, Lenora and Richard III deposits (which may all be parts of the same deposit) were eventually amalgamated under the Twin J mine which operated intermittently between 1942 and 1952, producing 48,000 tonnes averaging 4.0% Zn, 0.3% Pb, 0.8% Cu, 41.7 g/t Ag and 1.3 g/t Au. More recent exploration has provided estimates of additional mineralization that are about equal to that mined in the past.

Extending over an interval of about 14 km, to the northwest from the Mount Sicker deposits, the Lara project comprises seven identified VMS zones. A resource estimate for Lara, reported in 2007, gave an Indicated Resource using a 1% zinc block cut off, containing approximately 1,146,700 tonnes, with an average grade of 3.01% zinc, 0.58% lead, 1.05% copper, 32.97 g/t silver and 1.97 g/t gold (Minfile number 092B 129).

The Myra Falls deposits, located northwest of the Mineral Creek Property, initially were mined by open pit in 1966 by Western Mines Limited (which became Westmin Resources Ltd. in 1976), but later relied mainly on underground bulk-mining methods. The current mill was commissioned in 1985 and has been progressively modernized since then. Concentrates are transported to the deep-water port at Campbell River, and from there are shipped to overseas smelters, typically in Japan and Korea. From discovery to 2002, an overall pre-mining mineral resource (all categories) totalled greater than 40 M tonnes averaging 6.1% Zn, 0.5% Pb, 1.8% Cu, 49.0 g/t Ag and 2.1 g/t Au (Chong et al., 2005). As of January 2004, 23.9 M tonnes had been mined and milled. Twelve known deposit areas consist of clusters of mineral lenses of variable sizes, of which the H-W deposit is the largest, at 22.1 M tonnes.

In 2004, Boliden-Westmin was taken over by Breakwater Resources, which announced in December 2010 Proven plus Probable Reserves for Myra Falls of 6.26 M tonnes grading 4.9% Zn, 0.5% Pb, 0.9% Cu, 43 g/t Ag and 1.3 g/t Au. The mine was acquired by Nystar in 2010, but the operations were temporarily shut down in 2015 due to low metal prices.

In 2020, Trafigura Mining Group acquired the Myra Falls Mine from Nyrstar. With a projected lifespan of over ten years, the company is ramping up production at the facility to over 800,000 metric tonnes of zinc, lead and copper ore per annum. Published Proven plus Probable Reserves as of December 2018 were 4.7 M tonnes at 7.11% Zn, 0.78% Pb, 0.92% Cu, 76.6 g/t Ag and 1.78 g/t Au (Mining Data Online, 2018).

Polymetallic massive sulfide deposits have been a major target within the Sicker Group since the development of the Myra Falls mine in the 1960’s. Following the discovery of the H-W polymetallic massive sulfide orebody of the Myra Falls deposits in 1979, nearly all areas of Sicker Group outcrop in the Alberni-Nanaimo Lakes and the Duncan area were staked, and extensive exploration and drilling has occurred since then.

Gold-rich vein deposits are also found within the southern Vancouver Island region, typically with associated base metals and quartz-calcite gangue. Host rocks include volcanic and intrusive rocks, and veins are often associated with large-scale fault structures. Mineralized veins are generally narrow (<1 m) and discontinuous, but may contain localized shoots of high-grade gold, up to 100 g/t or more. Historical mining of gold-rich veins in the area near the Property has typically produced only a few hundred to a few thousand tonnes from zones accessed by shallow open cuts or limited underground workings.

A nearby example with gold-rich veins is the Corrigan Creek (or 3W's) deposit, located 11 km to the south of the Property, where three northeast-trending quartz veins mineralized with pyrite, sphalerite and galena occur over a 300-meter length in granodiorite and diorite of the Early to Middle Jurassic Corrigan Creek Pluton that intrudes volcanic rocks of the Upper Triassic Karmutsen Formation. The three veins range from 50 to 90 meters long, 10 to 35 centimeters wide, and dip at 25 to 45 degrees. They are exposed in short adits and open cuts. Underground development was initiated in 1899 and continued intermittently until 1935, recovering a reported 114.2 tonnes averaging 136.8 g/t gold, 147.1 g/t silver, 0.23% copper and 1.1% lead (Minfile number 092F 141).

Another nearby gold zone that shows similarities to the Mineral Creek Shear Zone is found at the Black Panther occurrence, 1.5 km southeast of the Property. A north-striking fault separates andesites of the Devonian Duck Lake Formation (Sicker Group) from Early to Middle Jurassic Island Plutonic Suite diorite. Quartz veins, lenses, stockworks and stringers within a shear zone that sub-parallels the andesite/diorite contact contain variable amounts of sulfides; mainly pyrite, chalcopyrite, minor galena, and sphalerite. The wallrock is strongly ankerite altered over widths of several centimeters, locally up to 9 meters. The main shear zone, which has been traced for at least 3.2 km, is locally cut by quartz stringers that range from 2.5 cm to 90 cm wide and up to 12 m long. A subordinate shear set, trending 20 to 30 degrees, is also present. Gold grades are highest where these two shear sets intersect.

The mineralized zone at Black Panther has been estimated at 12,250 tonnes, averaging 6.86 g/t gold (Minfile 092F 084), and may be continuous with the Black Lion showing found along the extension of the main shear zone, about 500 m to the southeast. Production from 1947 to 1950 totalled 1,715 tonnes, which yielded 15,832 grams gold, 29,642 grams silver, 226 kg copper and 5,588 kg lead (Minfile 092F 084).

Although the nearby known mineral deposits are hosted by similar geological units to those of the Mineral Creek Property, that is not necessarily indicative of the tenor of mineralization that may be present on the Mineral Creek Property that is the subject of this Technical Report.

7.2 LOCAL GEOLOGY

Detailed geological mapping has been undertaken in various parts of the Property by a number of geologists working for Westmin, Umex, Noranda, and various junior companies, primarily during the 1980's. Much of the detailed geological work has been focused on the Mineral Creek and Lizard Lake areas, as well as at individual showings. The Property geology is based on the general geology of the Port Alberni – Nanaimo Lakes Area, which was compiled as part of a 1:250,000 scale map made by geologists of the BC Geological Society.

7.2.1 Property Geology

Geology of the Property is shown on Figure 7.2, which is derived from Geoscience Map 1991-1, compiled by Massey et al. (1991). A legend describing the geologic units is included in Table 7.1. The map also shows locations of Minfile mineral occurrences as well as drill hole collar locations for all known holes on the Property. Descriptions of the map units are summarized below from various published reports.

Much of the Property is underlain by Middle (?) to Late Devonian Sicker Group rocks interpreted to represent three distinct volcanic and volcaniclastic assemblages that together are thought to record the evolution of an oceanic magmatic arc (Massey, 1995; Yorath et al.,1999). Mapped areas of the three main Sicker Formations (Duck Lake, Nitinat and McLaughlin Ridge) show a general northwesterly trend across the claims, possibly repeated by folding about northwest-trending fold axes.

The Duck Lake Formation is the oldest of the series and has yielded normal mid-ocean-ridge basalt geochemical signatures (Massey, 1995) and is interpreted to represent the oceanic-crust basement on which the Sicker arc was built. Duck Lake rocks consist primarily of grey to maroon, amygdaloidal, aphyric basaltic pillowed to massive flows and breccias. The pillowed sections are locally intruded by dacite-rhyolite dikes and sills. The top part of the Formation contains intervals of cherty tuff and felsic tuff, as well as chert and jasper of possible exhalative affinity. Chert and jasper are present in Duck Lake rocks near the 900 Zone and may be related to mineralization in this area. A sample of dacite flow yielded a Late Devonian age, indicating that in some areas, rocks of the Duck Lake Formation may be time transgressive, overlapping in age with rocks of the McLaughlin Ridge Formation (Ruks, 2015).

The Nitinat Formation overlies the Duck Lake Formation and comprises mafic, submarine volcanic and volcaniclastic rocks with dominantly calc-alkaline compositions and trace-element signatures typical of volcanic arc settings. These rocks are interpreted as an early stage of arc development. On the Property these rocks are mostly pyroxene-feldspar phyric, amygdaloidal, basaltic to andesitic agglomerates, tuffs and breccias, with local chert layers, and may include local pillowed and massive flows. Pyroxene phenocrysts may be large, up to 1 cm, comprising 5 to 20 percent of the rock. The Mineral Creek, Linda and Ember Zones are all hosted by rocks of this unit.

The McLaughlin Ridge Formation overlies the Nitinat Formation and represents a more evolved stage of arc activity. It is described as a sequence of volcaniclastic sediments, mostly thickly bedded, massive tuffites of dacite and lesser rhyolite composition with interbedded tuffaceous siltstone and argillite, suggesting deposition distal from a volcanic center (Yorath et al.,1999). However, coarser pyroclastic rocks found toward the top of this unit indicate the possibility of a felsic volcanic center in the Alberni area. Radiolarian biochronology conducted on cherts within the McLaughlin Ridge Formation have yielded Late Devonian ages (Ruks, 2015).

Figure 7.2 Mineral Creek Property local geology and Minfile mineral occurrences (geology derived from Massey et al., 1991)

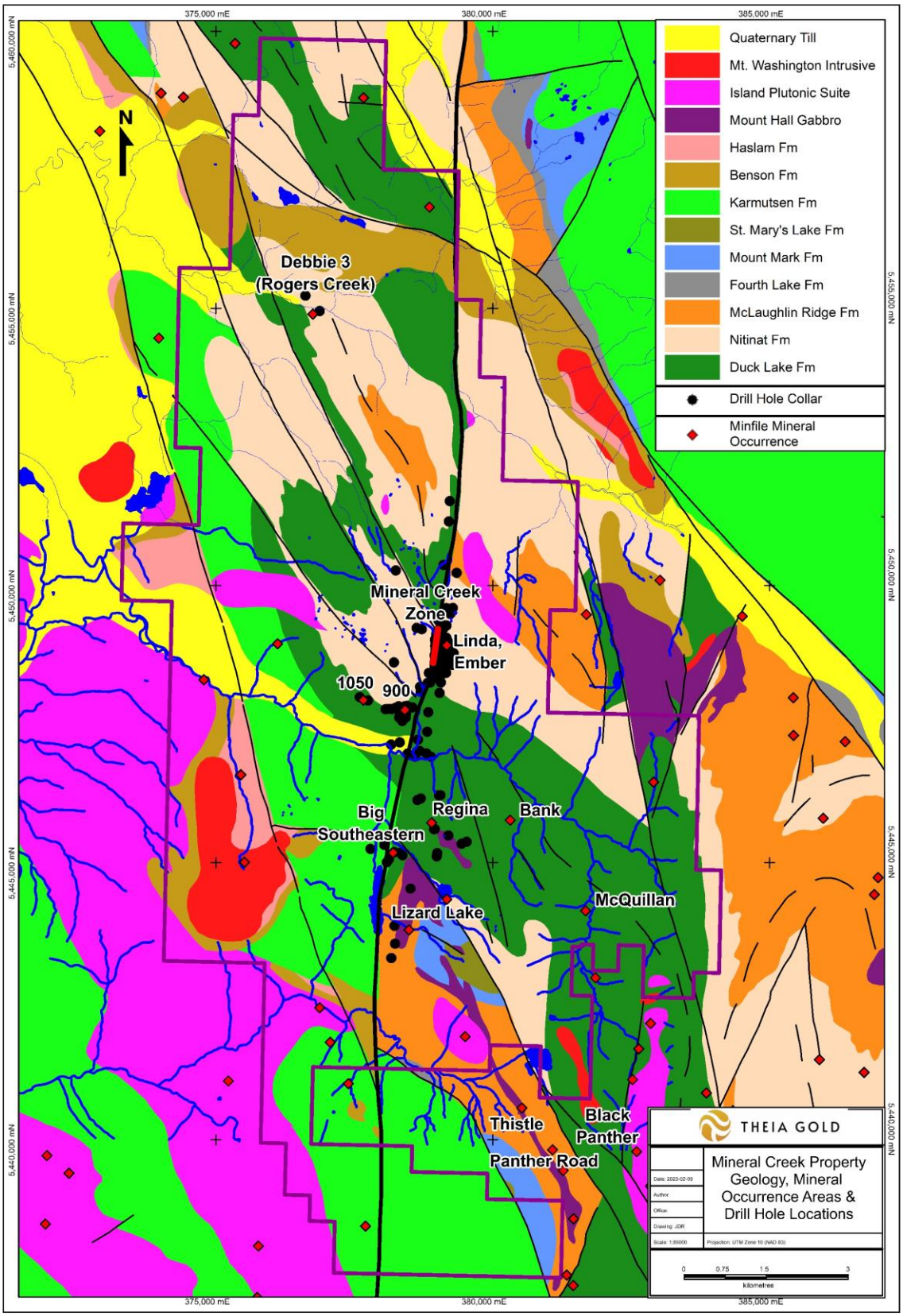


Table 7.1 Geologic Legend to accompany Figure 7.2 (from Massey et al., 1991)

INTRUSIVE ROCKS

LATE EOCENE
MOUNT WASHINGTON INTRUSIVE SUITE

Tw	Hornblende–feldspar dacite porphyries

JURASSIC(?)
MINOR INTRUSIONS

A F H	Pyroxene–feldspar diabase (A), feldspar, quartz–feldspar porphyry (F), hornblende–feldspar porphyry (H)

EARLY TO MIDDLE JURASSIC
ISLAND PLUTONIC SUITE

Ji	Diorite, granodiorite, quartz diorite often with abundant xenoliths, gabbro, aplite

LATE TRIASSIC
MOUNT HALL GABBRO

uTl	Sills and dikes coeval with Karmutsen Formation: diabase and gabbro

VOLCANIC AND SEDIMENTARY ROCKS

QUATERNARY

Qal	Unconsolidated glacial till and poorly sorted alluvium

UPPER CRETACEOUS
NANAIMO GROUP

uKh	HASLAM FORMATION: argillite, siltstone, shale and minor sandstone
uKb	BENSON FORMATION: boulder and pebble conglomerate, sandstone and minor siltstone

LOWER JURASSIC
BONANZA GROUP

JB	Feldspar basalt, andesite, dacite, tuff, sandy tuff, crystal tuff, lapilli tuff and breccia, with minor argillite and sandstone

UPPER TRIASSIC
VANCOUVER GROUP

uTs	QUATSINO AND PARSON BAY FORMATIONS (UNDIFFERENTIATED): massive micrite, flaggy limestone, argillite, siltstone
uTk	KARMUTSEN FORMATION: pillowed and massive basaltic flows, hyaloclastite and hyaloclastite breccia

MISSISSIPPIAN TO LOWER PERMAIN
BUTTLE LAKE GROUP
LOWER PERMIAN

lPs	ST. MARY'S LAKE FORMATION: volcanic sandstone and pebble conglomerate, graded sandstone and argillite, cherty argillite, chert and minor jasper
	UPPER PENNSYLVANIAN TO LOWER PERMIAN
PPm	MOUNT MARK FORMATION: massive crinoidal limestone, bedded limestone, marble, chert, cherty argillite and siltstone
	MISSISSIPPIAN TO PENNSYLVANIAN
MPf	FOURTH LAKE FORMATION: ribbon chert, argillite, crinoidal limestone, intercalated thinly bedded sandstone, siltstone and argillite, epiclastic sandstone, conglomerate

MIDDLE(?) TO UPPER DEVONIAN
SICKER GROUP

uDm	MCLAUGHLIN RIDGE FORMATION: thickly bedded tuffite and lithic tuffite, feldspar–crystal tuff, heterolithic lapilli tuff and breccia, rhyolite, dacite, laminated tuff, and chert
Dn	NITINAT FORMATION: pyroxene–feldspar phyric agglomerate, breccia and lapilli tuff, massive and pillowed flows, massive tuffite and lithic tuffite, laminated tuff, and chert
Dd	DUCK LAKE FORMATION: pillowed and massive basaltic flows, monolithic basalt breccia and pillow breccias, chert, jasper and cherty tuff, felsic tuffs and lapilli tuff, massive dacite and rhyolite

Exposures of the Buttle Lake Group's Fourth Lake Formation and Mount Mark Formation occur near the north and south extents of the Property. These units are Mississippian through Early Permian and comprise "laterally interfingering ramp carbonate and slope argillite deposits" (Massey, 1995) that may represent a marginal basin assemblage that developed on top of the Sicker arc. The Fourth Lake Formation consists of sedimentary and reworked tuffaceous volcanic rocks, whereas the Mount Mark Formation is mostly limestone with minor argillite and siltstone located in the southern part of the property in the wedge formed between the Mineral Creek and North Cowichan faults, southeast of Lizard Lake. To the north of the Property, near Lacey Lake, Early Permian dates have also been determined for ribbon chert with interbedded intermediate crystal tuff, leading Ruks (2015) to state that Permian volcanic centers in the Alberni area may have been constructed upon, or proximal to, older igneous centers of Mississippian age.

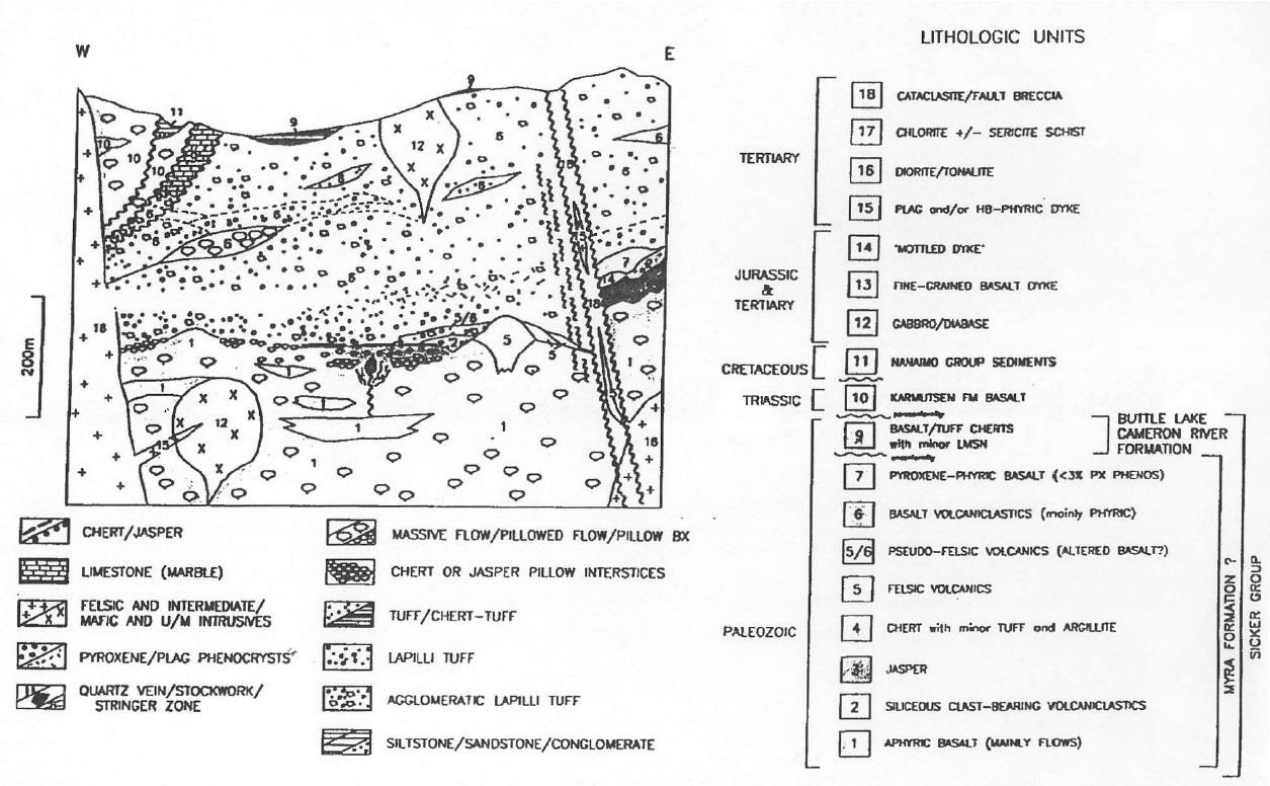
The Middle to Late Triassic Karmutsen Formation of the Vancouver Group occupies a roughly north-south, 1- to 2-kilometer-wide band along the western edge of the property. This sequence of basaltic flows sits atop the South Cowichan thrust fault in this area but south of China Creek it is cut off by the Mineral Creek fault. Typically, the basalts are feldspar phyric in a fine groundmass and are commonly pillowed flows or flow breccias.

Upper Cretaceous Nanaimo Group rocks appear in two places on the property. A 600-meter-wide belt of Benson Formation conglomerates and sandstones crosses the northern part of the claims. The same unit, along with Haslam Formation argillites, siltstones and shales occupies a small area in the southwest part of the property where they are intruded by a Late Eocene Mount Washington dacite body.

In addition to a few small intrusions of the Triassic Mount Hall gabbro and the Mount Washington dacite, there are several small to medium-size stocks of Jurassic Island Plutonic Suite throughout the property area. They are up to 0.5 x 2 kilometers in size and are usually classified as granodiorite to quartz diorite but can exhibit wide compositional variety. A gabbro body east of Lizard Lake may belong to either this unit or to the Mount Hall unit.

A schematic stratigraphic section for the Property was drawn by Prefontaine et al. (1991) and is shown in Figure 7.3. This cross section illustrates massive basalt flows of the Duck Lake Formation at the base, with the upper part of the Formation containing chert and jasper, as well as a possible felsic stock (unit 5) that could have been the source of VMS mineralization. This is overlain by a thick succession of volcanic and volcaniclastic rocks of the Nitinat Formation that also contains felsic volcanic lenses, which may be equivalent to the overlying McLaughlin Ridge Formation. These felsic rocks and associated cherty tuffs may also be associated with VMS systems. Cutting the right side of the figure a steeply dipping fault breccia and cataclasite zone represents the Mineral Creek Fault with localized gold mineralization, as well as splay faults from the main structure that contain quartz veins with high grade gold. Some previous workers have theorized that the gold mineralization may have been remobilized along structures that cut mineralized cherty exhalite horizons in the volcanic pile.

Figure 7.3 Mineral Creek Property schematic stratigraphic section (From Prefontaine, Walker & Wojdak, 1991)



7.2.2 Structural Geology

A number of prominent faults lie within the core of the Property and postdate the Eocene Cowichan system thrust faults. The steeply dipping Mineral Creek fault underlies the entire 20 kilometer north-south length of the claims and, near the south end of the Property, it merges with the South Cowichan Fault. In the Mineral Creek Zone, this fault consists of an altered cataclasite zone up to 35 m wide that is locally mineralized with gold. The Stokes fault, Bostock fault and an unnamed nearby fault are prominent sub-parallel, northwest-trending structures on the north part of the property. All three faults truncate against the Mineral Creek fault and might be splays from it. In the south part of the property, east of the Mineral Creek fault, Westmin mapped the north-northwest trending Gap fault. Displacements on this fault are unknown but it is the locus of intense carbonate-quartz alteration.

Mapping by previous authors has indicated that strata are upright and folded on a large scale, having axial planes trending northwest-southeast, parallel to the bounding regional faults. Fold plunge is typically shallow, from 0-10° and possibly undulating from northwest to southeast. Strong to weak penetrative foliation and mineral/amygdule lineation in drill core has been observed. Most is related to ductile folding, although faulting has also resulted in local foliation. Quartz (+/- calcite) veins define brittle structures. Narrow clay gouge seams, broken and

brecciated quartz, and slickensides on vein contacts are all evidence for ongoing brittle failure following vein formation.

7.2.3 Mineralization and Alteration

There are several reported mineral occurrences on the Mineral Creek Property, as well as surrounding the Property. Occurrences encompass several styles of mineralization, but are typically comprised of veins, disseminations or breccias with local wider zones of stockwork-style mineralization that may be related to shear zones. Many of the narrower veins (generally <1m width) have returned high Ag, Cu, Pb and Zn values with lesser high Au values, whereas those near the Mineral Creek Fault commonly contain high Au with lesser Ag, Cu and Zn. Most veins are lacking in continuity, with mineralization occurring in “shoots”, commonly at the intersections of structures. Stratabound Zn, Cu, Pb, Ag mineralization is also known and has been described by previous workers as VMS-style mineralization.

Most of the known mineral occurrences in the Property area have been described in Minfile summaries (BC Ministry of Energy, Mines and Low Carbon Innovation Minfile Website) that have been largely compiled from assessment reports and company news releases. Following are excerpts from the Minfile summaries for the pertinent mineral occurrences on the Property.

Debbie (also known as Mineral Creek, Linda) (Minfile No. 092F 079)

Located in the central part of the Property, the Debbie Zone consists of a number of occurrences of gold mineralization that have received considerable exploration work in the past. The area is underlain by andesitic to basaltic flows, pillowed basalts, tuff, agglomerates, cherty tuffs and chert of the Duck Lake and Nitinat Formations. The north-northeast striking Mineral Creek Fault cuts the north-northwest striking stratigraphy. The two main gold zones are known as the Mineral Creek and Linda Zones. The Mineral Creek Zone, which received the bulk of the drilling, has a 500-meter strike length within a wide cataclasite zone that envelopes the steeply east-dipping Mineral Creek Fault. The width of the mineralized zone ranges from a few meters to more than 35 m, averaging about 20 m. Two styles of mineralization are present in the Mineral Creek Zone:

1) gold occurs in a wide zone of cataclasis and pervasive ankerite-quartz-sericite-pyrite alteration with minor arsenopyrite in volcaniclastics and aphyric basalt flows adjacent to the fault. The zone typically consists of disseminated, as well as veinlet and vein hosted, pyrite and minor arsenopyrite with moderate gold values, in the 2-3 g/t range.

2) gold with minor pyrite and arsenopyrite in quartz veins cut both the alteration zone and its immediate hanging wall aphyric basalt host. The strongest gold values were found to be associated with quartz veins in argillaceous cherts, and visible gold was observed. The veins post-date the faulting, which is believed to be Eocene in age.

The Linda Zone, extending up to 600 meters north-easterly from the Mineral Creek Fault, consists of a set of quartz-clay-ankerite/calcite veins containing pyrite and minor arsenopyrite, with native gold. The northeast striking veins, which are haloed by narrow ankerite-sericite-pyrite selvages,

occur within a 600-meter long by 200-meter-wide area. The Linda Zone originally referred to the Linda Vein, as well as the various parallel veins historically exploited by the Vancouver Island Gold mine.

The three main gold-bearing quartz veins that were developed in the historical workings are, from west to east, the Mac (called the Dunsmuir to the north), the Belcher, and the Waterfall (Figure 6.2). The veins follow well-developed shear zones on the east side of Mineral Creek. They are lens-shaped and consist of two generations of quartz. Pyrite, arsenopyrite and minor sphalerite are disseminated in the veins and free gold has also been reported.

The main workings were on the Mac Vein, which was traced for 75 meters by several open cuts and two adits (Figure 6.2). The vein averages 0.14 meter in width, ranging from 0.07 to 0.45 meter. The vein strikes northeast in the south part and north in the north part, dipping between 40° and 55° SE. Sixty-three samples taken over the length of the vein averaged 126.5 g/t gold over 15 centimeters average vein width (Neale & Hawkins, 1985a).

The Belcher Vein is exposed in several open cuts and one adit over 290 meters. It strikes northeast, dips 40° to 45° SE and is up to 1.2 meters wide, averaging 0.20 meter. Sampling in 1973 returned assays from 0.1 to 9.95 g/t gold and 2.1 to 3.4 g/t silver over 1.5-meter sample lengths (Neale & Hawkins, 1985a). This vein appears to be the southwest extension of the Ember Vein that was discovered in 2008 and drilled extensively in 2009.

The Waterfall Vein was reportedly exposed by a few trenches over 35 meters, strikes north and dips about 65° east. Widths range from 0.08 to 0.75 meter. Sample values were generally low except for one which assayed 404 g/t gold over 0.15 meters. The authors do not have the location of this vein, but believe that it is in the hangingwall of the Belcher vein.

From 2006 through 2009, Bitterroot Resources Ltd. drilled 128 holes to test the three parallel Linda, Ember and HW Veins that splay from the Mineral Creek Fault. Drilled intercepts ranged from a few centimeters to 1.3 meters and in places veins split into two or three shoots. Host rocks are basalt with minor chert and siliceous tuff. Mafic dykes were seen in many of the holes, commonly adjacent to veins. The gold grades varied from trace to 467.0 g/t gold and the highest grades were often accompanied by visible gold grains. One of the better intercepts, from MC2009-E57, returned a 4.4-meter-wide vein/breccia interval of the Ember Zone averaging 75.35 g/t gold, although this grade was enhanced by two relatively narrow intervals of 0.4 meter and 0.6 meter that both assayed greater than 200 g/t gold (Rowe and Greig, 2011).

The Mineral Creek and Linda Zones are discussed in greater detail in Section 6.0, above.

<u>900 Zone (Minfile No. 092F 331)</u>

The 900 Zone is located west of the Mineral Creek Fault, and 1300 m to the southwest of the Mineral Creek and Linda Zones. The area is underlain by locally isoclinally folded andesitic to

basaltic rocks and cherty tuffs that trend about 140 degrees and dip 20 to 40 degrees northeast. A volcaniclastic interval overlies and is in sharp contact with mainly aphyric and amygdaloidal basalt units. The volcanic rocks are intruded by an andesitic porphyry body.

A magnetite-jasper-sulfide-bearing, bedded chert horizon contains gold values. Native gold, pyrite, magnetite and arsenopyrite occur in quartz and carbonate veinlets and stockwork cutting the chert and the underlying ankerite-altered pillow basalt. The 900 Zone is a pipe-like body that occurs in a flexure resulting from the offset of the north-northeast trending 900 Fault by a west-northwest fault. The mineralized area strikes north for 180 meters, is 150 meters wide and over 120 meters deep. Three different geological environments host gold:

1) the cherty iron formation, which is generally flat and folded,

2) a north trending, steeply west-dipping fault that contains quartz stockwork, and

3) the intersections of a series of moderately altered east-trending faults with the north-trending fault, in quartz stockwork veinlets underlying the cherty iron formation.

Drilling on the 900 Zone in 1988 intersected quartz stockworks with visible gold, and a series of northerly trending narrow quartz veins south of the stockwork that contained native gold. Probable geological mineral inventory for the 900 Zone was estimated by Westmin in an internal company report at 28,294 tonnes grading 11.69 g/t gold (Prefontaine, Walker and Wojdak, 1991). This estimate is not compliant with 43-101 rules and policies and is considered historical.

White Hawk Ventures Inc. extracted an underground bulk sample from the 900 Zone in 1995 and shipped 894 tonnes to a mill at Greenwood. From there, 7,478 kilograms of concentrate was shipped to Cominco for refining, however the grade of the concentrate was not published (George Cross News Letter #219, Nov 14, 1997).

Regina (Minfile No. 092F 078)

The Regina occurrence is located in the south-central part of the Property, approximately 1 km northeast of Lizard Lake. The showing area is within Duck Lake and Nitinat volcanic units east of the subvertical, northerly-trending Mineral Creek fault/shear zone.

In the 1890's, work done on the Regina Crown Grant consisted of at least 8 adits driven into andesitic rocks to explore tight quartz-sulfide lenses and veins. One adit sunk on a tight shear striking 050° and dipping 20° SE in highly silicified and pyritized andesite revealed quartz-chalcopyrite-galena veins up to 5 cm and quartz stringers up to 13 cm in width. One grab sample returned 22.6 g/t gold and 480.0 g/t silver. One 60-centimeter sample assayed 0.69 g/t gold and 27.43 g/t silver.

In 1987, Westmin conducted a nine-hole drill program immediately adjacent to the Regina Crown Grant in an area of dacitic clastic rocks and chert. Drilling intersected felsic tuffs and flows with lesser basalts hosting quartz veins, as well as disseminated pyrite and chalcopyrite, with specks of sphalerite and sporadic Au and Ag anomalies. A 1-meter interval returned a value of 1.41 g/t

gold. Another 1-meter sample returned a value of 2% copper (Lyons, 1987). The geological model of mineralization near the basalt – felsic volcanic boundary suggested potential for VMS mineralization. Westmin concluded that an area that surrounds the Regina showings, about 1000 meters wide and extending about 2200 meters from near China Creek to near Duck Lake, has high potential for VMS mineralization, however, no further follow-up work was done by Westmin.

In 2007, drilling of 18 holes on potential VMS targets in the Regina area by Bitterroot Resources Ltd. returned selected intercepts as shown in Table 7.2.

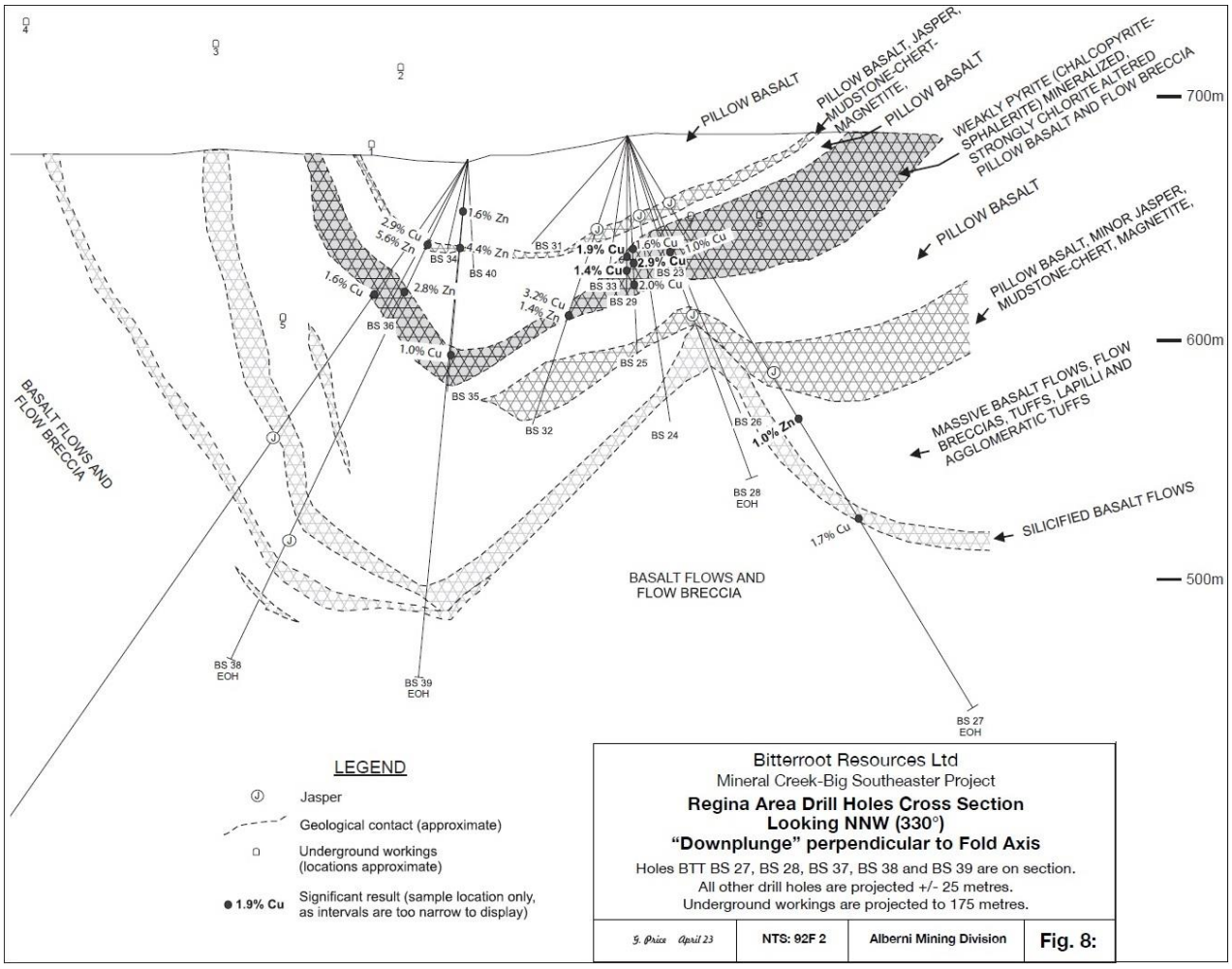
Table 7.2 Selected drill intercepts from Regina area drilling

Hole	From (meters)	To (meters)	Interval (meters)	Gold (g/t)	Silver (ppm)	Copper (ppm)	Lead (ppm)	Zinc (ppm)
BTT-BS-30	63.4	64.6	1.2	1.12	99	1,261	4	113
BTT-BS-32	79.8	80.4	0.6	0.05	12	32,100	91	13,900
BTT-BS-34	54.6	55.5	0.9	1.27	2	572	68	425
BTT-BS-36	38.4	39.1	0.7	0.26	29	23,900	7,989	24,600
BTT-BS-38	40.6	40.8	0.2	0.09	25	29,000	448	56,300

(from Wilson & Price, 2008)

Copper and zinc mineralization, occasionally present up to a few percent in core samples, was discovered, mostly within one stratum of basalt flows. The mineralized layer is within 100 m of surface and can be traced from hole to hole throughout the drilled area. The main sulfides are pyrite (most prominent as semi-massive bands, veins and disseminations), chalcopyrite (disseminated in the pyrite bands, in quartz veins and as fine wisps), and sphalerite (usually banded over narrow intervals). Figure 7.4 shows a cross section of some of the mineralized drill holes indicating a folded, but continuous, horizon of strongly chlorite altered basalt flow and breccia. Mineralization occurs within this horizon, as well as within an overlying horizon of mudstone and chert, with jasper and magnetite, that returned values of up to 5.6% Zn, 2.9% Cu over 0.2 m (hole BTT-BS-38) (Wilson & Price, 2008).

Figure 7.4 Cross section of Regina area geological units and mineralization in drill holes (from Wilson & Price, 2008)



Big Southeastern (Minfile No. 092F 605)

The Big Southeastern occurrence is located 600 m southwest of the Regina showing, approximately 400 meters north-northeast of the north end of Lizard Lake. The showing area is underlain by Duck Lake Formation and is just to the east of the Mineral Creek fault/shear zone near its intersection with the north-westerly trending North Cowichan reverse fault.

Locally, gold mineralization is associated with quartz veinlets, thin veins, and their narrow ankerite-silica alteration halos within andesitic to basaltic volcanics. Sulfide mineralization is mainly pyrite and arsenopyrite with rare chalcopyrite and some probable tetrahedrite-tennantite.

In 2006, gold mineralization was intersected in drill holes by Bitterroot and is summarized below in Table 7.3.

Table 7.3 Selected drill intercepts from Big Southeastern area drilling

Hole	From (meters)	To (meters)	Interval (meters)	Gold (g/t)
BTT-BS-7	25.7	30.0	4.3	1.0
BTT-BS-7	156.6	166.9	10.3	0.6
BTT-BS-8	22.3	25.0	2.7	0.9
BTT-BS-9	29.5	31.5	2.0	1.2
BTT-BS-9	128.4	130.5	2.1	1.5
BTT-BS-11	57.4	63.0	2.9	0.8
BTT-BS-11	153.9	158.3	4.4	0.6

(from Wilson, 2008)

Lizard Lake (Minfile No. 092F 285)

The Lizard Lake occurrence is located near the east side of Lizard Lake, and 1600 m south of the Big Southeastern showing. The area is underlain by basaltic flows, agglomerates, bedded tuffs and andesite of the McLaughlin Ridge Formation adjacent to limestones and marbles of the Mount Mark Formation, with a nearby intrusion of Late Triassic gabbro. The north trending Mineral Creek Fault is about 200 m to the west.

Chalcopyrite and malachite are found in quartz-carbonate stringers within epidotized shears in fractured, silicified, carbonate-altered andesite. Massive sulfides occur in a tuffaceous pyritic chert layer, of possible exhalative affinity, below the quartz vein-bearing andesite. Gold mineralization is associated with quartz veining and cross-cutting small fault structures. Siliceous, calcareous and ankeritic alteration zones associated with faults or shears average 3 to 4 meters in width and sometimes contain up to 3% pyrite.

A surface showing assayed 4.46 g/t gold, 24 g/t silver and 0.13% copper from a 2.0-meter chip sample (Pauwels, 1981). A chip sample (#62556) just east of that showing, across 0.4 meters of a quartz splay vein and gouge, assayed 0.24% copper, 0.26% zinc, 0.21% lead, 130 g/t silver and 1 g/t gold (MacIntosh, Bradish & Wilson, 1988). A diamond-drill hole (DDH 84-5) intersected a pyritic chert horizon with a section assaying 1.13 g/t gold and 3.6 g/t silver over 1.8 meters (Neale & Hawkins, 1985b).

Bank (Minfile No. 092F 167)

The Bank showing is located about 1800 m east of the Regina occurrence. The area is underlain by volcanic and volcaniclastic rocks of the Duck Lake Formation that have been intruded by Early to Middle Jurassic Island Plutonic Suite diorite. A series of open cuts have been dug on quartz veins carrying pyrite, chalcopyrite and galena in altered, fractured and sheared andesite. Quartz-carbonate veins, generally 1 to 5 millimeters in thickness, are common in the area and pyrite content increases in veined rocks. The mineralized zone, striking 200 degrees and dipping 20° to 40° west, was reported to be 3 meters wide, and extends about 100 meters along strike. A

grab sample from a dump near an open cut assayed trace gold, 34 g/t silver and 3.2% copper (Annual Report of the BC Minister of Mines,1917 p. 247).

McQuillan (Minfile No. 092F 444)

In the southeast part of the Property, the McQuillan mineral showing is found within pillowed amygdaloidal basalt of the Devonian Duck Lake Formation. It consists of one or two altered fracture zones up to 3 centimeters wide with disseminated pyrite and fracture-filling chalcopyrite. A grab sample assayed 0.184% copper, 0.01% zinc and 1.8 g/t silver (Neale, 1985).

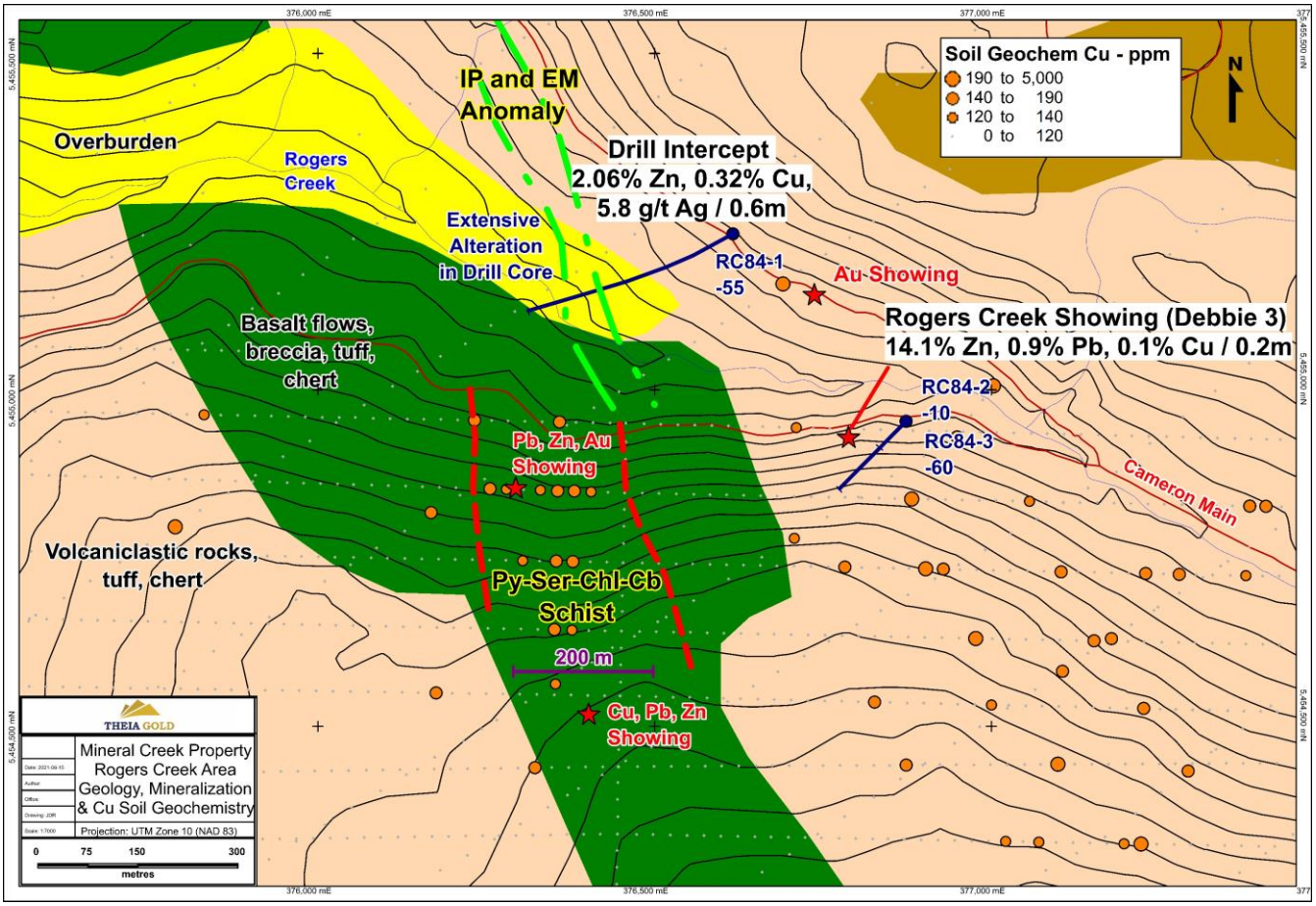
Debbie 3 (Minfile No. 092F 445)

The Debbie 3 (also known as Rogers Creek) occurrence, located in the north part of the Property, displays similarities to the Regina VMS showings in the southern claims. The area is underlain by massive and pillowed porphyritic basalts, volcaniclastic rocks, tuff and chert of the Duck Lake and Nitinat Formations. The volcanic sequence is crudely stratified, strikes north-northwesterly and dips moderately east, containing narrow to broad zones of schistosity conformable with stratification. Chlorite schist comprises areas of metamorphosed and deformed mafic rock.

A north trending, 200-meter-wide, pyritic, sericite-chlorite-carbonate schist zone occurs in the showing area (Figure 7.5). A drill hole (RC84-1), cutting the northern extension of the alteration zone, with coincident IP and EM anomalies, returned 0.6 m that assayed 2.06% zinc, 0.32% copper, 0.04% lead and 5.8 g/t silver (Walker & Benvenuto, 1985). Mineralization intersected in the drill hole included thin bands and disseminations of pyrite, and minor gypsum, sphalerite, and chalcopyrite. The drill hole also intersected a 1.3-meter width of disseminated stibnite, including a 7 cm massive band.

Three hundred and fifty meters south of the drill hole and 350 meters east of the alteration zone is the Rogers Creek (or Debbie 3) surface showing of banded, fine-grained sphalerite with minor chalcopyrite and galena in four lenses, 4 to 20 centimeters thick, conformable within schistose porphyritic basaltic clastic rocks. Schistosity strikes 160 degrees and dips 49° east, with lineation plunging 14° south-southeast. A 20-centimeter chip sample assayed 14.1% zinc, 0.87% lead and 0.12% copper (Walker & Benvenuto, 1985). Earlier workers considered this alteration and mineralization to be consistent with a VMS mineralizing system.

Figure 7.5 Rogers Creek area geology, mineralization and Cu soil geochemistry



Other Nearby Mineral Occurrences

About 2 km northeast of Duck Lake, near the Bank showing in the southern part of the Property, an outcrop contains a small, newly-discovered, pyrite-dominated VMS lens. A sample of chert interbedded with mafic volcanic rocks from this site, assigned to the Duck Lake Formation, provided a radiolarian fossil age of either Middle or Late Devonian (Ruks et al., 2009, 2010). This age dating suggests that Duck Lake Formation may, in places, be time transgressive with McLaughlin Ridge Formation, which has significant implications for the potential discovery of VMS mineralization within Duck Lake Formation, in addition to McLaughlin Ridge Formation rocks.

The Thistle occurrence, 900 m south of the Property, was the site of production from 1938 to 1942, extracting 6283 tonnes averaging 13.7 g/t Au, 10.5 g/t Ag and 4.9% Cu (MinFile No. 092F 083). The limited production came from two mineralized bodies, 40 meters apart that measured 2 to 20 meters long by 1 to 8 meters wide. Pods of disseminated to massive sulfide mineralization, consisting of pyrite, chalcopyrite and minor pyrrhotite, plus sulfide rich quartz-carbonate veins, occur in sheared pyritic quartz-sericite schists, with chloritized mafic volcanic flows and tuffs of the McLaughlin Ridge Formation. A 1.8-meter channel sample of a high-grade shear at the south

end of the lower glory hole assayed 38.4 g/t gold, 30.5 g/t silver and 2.69% copper (Hawkins, 1982). Extensive exploration programs in the 1980's included 7,260 m of diamond drilling to test three new zones and three previously drilled zones. Some of the intersections obtained were 0.20 m grading 17.6 g/t Au in chloritic basalt, 1.19 m grading 3.50 g/t Au, and several values of 1 to 2 g/t Au over 0.4 to 1.0 m widths.

The Panther Road showing (MinFile No. 092F 439), is located approximately 1 km southeast of the Thistle mine in McLaughlin Ridge Formation basaltic flows, agglomerates and bedded tuffs. A 2.2-meter-wide interval of pyritic, chlorite- and sericite-altered basalt contains an 80-centimeter width of massive pyrite. The mineralized zone strikes about 150 degrees and dips southwest. Chlorite-epidote-carbonate-quartz alteration is also present. A chip sample across the 2.2-meter width assayed 16.8 g/t gold, 1.7 g/t silver and 0.09% copper (Benvenuto, 1984). Drilling near this showing in 1988 (hole 88P02) returned a sample assaying 2.06 g/t gold, 9.0 g/t silver, 0.0175% copper and 0.0078% zinc over 0.5 m from a pyritic interval within a chloritic alteration zone (Walker, 1988). Three other showings, located up to 230 meters south of the Panther Road occurrence, returned gold values from chip samples, with a high value of 12.0 g/t Au over 17 cm.

The Black Panther mine, 1.4 km east of the Panther Road showing, had minor production from 1947 to 1950 of 1,715 tonnes with recovered metals averaging 9.2 g/t Au, 17.3 g/t Ag, 0.3% Pb and 0.01% Cu (Minfile No. 092F 084). At Black Panther, a north striking fault separates andesites of the Duck Lake Formation from Early to Middle Jurassic diorite. Quartz veins, lenses, stockworks and stringers containing variable amounts of sulfides; mainly pyrite, chalcopyrite, minor galena and sphalerite, occur in a shear zone that sub-parallels the andesite/diorite contact. The wallrock is strongly altered by ankeritic carbonate for widths ranging from several centimeters to 9 meters. The main shear zone, which has been traced for at least 3.2 kilometers, is locally cut by quartz veins and stringers. The veins are 2.5 cm to 90 cm wide and up to 12 meters long. A subordinate shear set, trending 20 to 30 degrees, is also present. Grades are highest where these two shear sets intersect. The Black Lion showing (Minfile No. 092F 085), about 0.5 km to the southeast, is considered to be an extension of the main shear zone.

8.0 DEPOSIT TYPES

Within the Mineral Creek Project area there is potential for discovery of various styles of mineralization such as those found on nearby properties. Significant deposits in the area include VMS-type base & precious metal-rich massive sulfide systems, and medium to high grade shear-hosted Au-Ag vein systems. Both of these deposit types have been explored at the Mineral Creek Property.

8.1 VOLCANOGENIC MASSIVE SULFIDE DEPOSITS

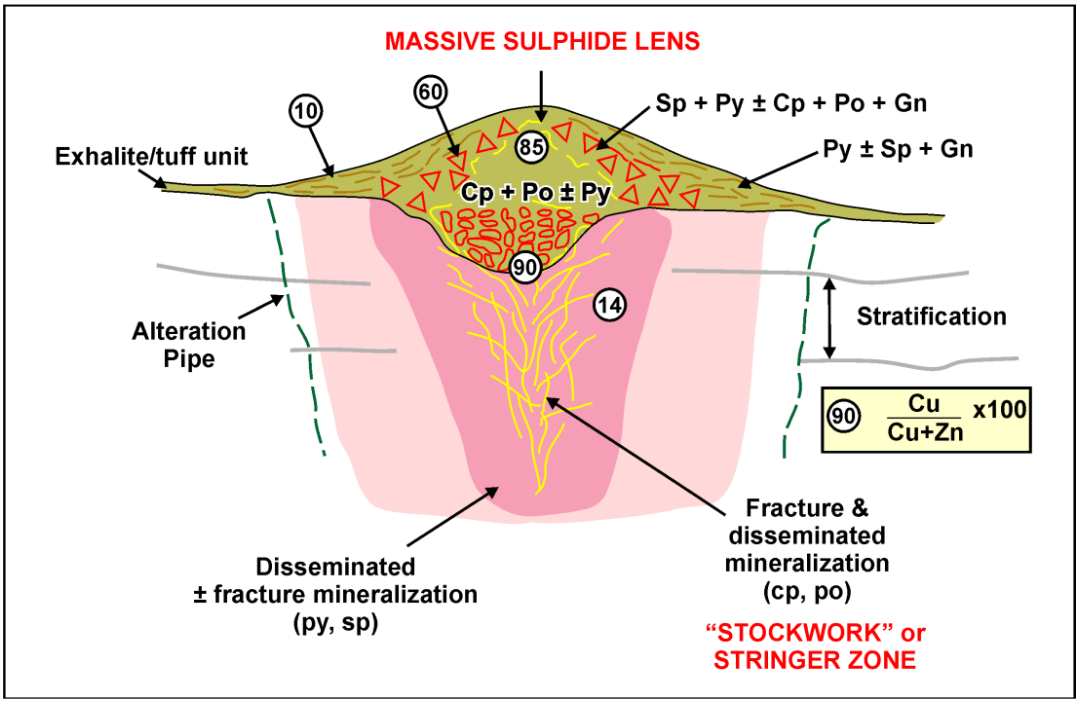
VMS deposits are predominantly stratabound accumulations of sulfide minerals that precipitate from hydrothermal fluids on or below the seafloor in a wide range of ancient and modern

geological settings. In modern oceans they are characterized by sulfurous plumes called black smokers.

VMS ore deposits formed in close temporal association with submarine volcanism that may be of any age and are formed by hydrothermal circulation and exhalation of sulfides onto the sea floor. They typically occur in back-arc settings within environments dominated by volcanic or volcanic derived sedimentary rocks, and the deposits are coeval and coincident with the formation of the host rocks. A quiescent period in deposition of sediments is required to limit dilution of the sulfides. These deposits represent major sources of copper, zinc, lead, gold and silver in a high grade, low tonnage ratio.

Generally, VMS deposits contain footwall mineralization consisting of quartz-chalcopyrite stringers (stockwork), overlain by primary bedded (stratiform) sulfides composed of pyrite, chalcopyrite, ± sphalerite, ± galena, ± barite, ± tetrahedrite/ tennantite. A schematic model of active VMS formation, alteration and mineralization is presented in Figure 8.1.

Figure 8.1 Schematic model for active VMS mineralization showing principal alteration and mineralization types (source: Gibson et al., 2007)



Notes: Idealized VMS deposit showing a stratabound lens of massive sulfide overlying a discordant stringer sulfide zone within an envelope of altered rock (alteration pipe). Base metal zonation indicated by numbers in circles with the highest numbers being Cu-rich and the lower numbers more Zn-rich (Py = pyrite, Cp = chalcopyrite, Po = pyrrhotite, Sp = sphalerite, and Gn = galena. Source: Gibson et al. (2007)

In some deposits the stratiform massive sulfide lenses makes up the entire economic deposit, whereas in other deposits large quantities of ore are also mined from the stockwork zone. The stratiform sulfides are typical overlain, or grade laterally into, an iron-rich silica facies that is

usually manifested as a banded iron formation (BIF). The stockwork zone beneath these deposits is the conduit through which the hydrothermal fluids rose and consists of vein sulfide mineralization. Hydrothermal alteration forms a pipe around the stockwork zone and grades from an inner chloritized zone to an outer sericitic zone. Due to the plastic nature of the massive sulfides, they are commonly deformed.

There are various classes of VMS type deposits distinguished primarily by their mineral composition and their environment of formation. The deposits found on Vancouver Island and the nearby mainland are typically classed as Kuroko, or bimodal-felsic VMS deposits that are spatially associated with felsic volcanic rocks. These include Britannia and Myra Falls, two of the larger deposits in British Columbia. Kuroko type Zn-Cu-Pb-Ag-Au VMS deposits in British Columbia typically contain on average about 10 million tonnes of ore (BCGS Information Circular 2015-12).

The Britannia deposit, near Squamish, BC, is a Kuroko-type VMS deposit hosted in Early Cretaceous Gambier group rocks which, between 1905 and 1977, yielded approximately 47.8 million tonnes of ore grading 1.1% copper, 0.65% zinc, 6.8 g/t silver and 0.6 g/t gold (Minfile No. 092GNW003). Massive mineralization typically occurs along, or slightly above a dacitic tuff-breccia unit, commonly in, or near cherty andesitic rocks, with stringer mineralization emplaced in the underlying tuff-breccias (Payne et al., 1980). Pyrite was the main sulfide mineral in both types of orebodies and was accompanied by much less abundant chalcopyrite and erratically distributed sphalerite and galena. Tennantite, tetrahedrite, argentite, pyrrhotite and native gold occurred sporadically and sparingly.

There were several massive ore bodies at Britannia, which accounted for about 21% of the mined ore (Payne et al., 1980). These had zoned structures consisting of a chalcopyrite-rich core surrounded by a lower grade copper zone and overlapping pyrite- and silica-rich zones (Sutherland-Brown and Robinson 1971). Zinc-rich ore was present in the upper central parts of some massive orebodies and gold was clearly most abundant in the massive zinc–copper bodies.

Stringer orebodies consisted of veins of chalcopyrite, pyrite, and lesser quartz and accounted for 79% of mined ore. They were typically associated with broad zones of silicified rock containing quartz and quartz–pyrite veins in the footwall of the massive mineralization (Payne et al. 1980). Average grades for the various massive and stringer ore types that were mined are listed below in Table 8.1.

The Myra Falls VMS deposits on Vancouver Island occur within a series of middle to late Devonian Sicker Group volcanogenic rocks. From discovery to 2002, an overall pre-mining mineral resource (all categories) totalled greater than 40 M tonnes averaging 6.1% Zn, 0.5% Pb, 1.8% Cu, 49.0 g/t Ag and 2.1 g/t Au (Chong et al., 2005).

Table 8.1 Britannia ore type average grades (from Payne et al., 1980)

Type	Cu%	Zn%	Pb%	Ag ppm	Au ppm
massive Zn	0.25	5	0.4	34	0.06
massive Zn-Cu	1.5	4.4	0.3	10	9.5
massive Cu	2.2	0.2	0	10	0.2
Total massive	2	1.2	0.1	11	2
stringer	1.1	0.4	0	4	0.6

The Myra Formation, which hosts all the ore bodies at Myra Falls, is a succession of rhyolitic, andesitic, and basaltic volcanic and sedimentary rocks. Mineralized zones are massive to semi-massive tabular sulfide lenses, with main ores of chalcopyrite, sphalerite, pyrite, and galena. Some bornite and tetrahedrite, as well as accessory chalcocite, colusite, and gold are also present. There are up to twenty, or more, mineralized lenses varying in size, with the H-W Main lens being one of the largest at 950 m long, 450 m wide and 1 to 60 m thick, totalling 22.1 M tonnes. Lenses lie at various levels within a section of Myra Formation several hundred meters in thickness, however, they are typically confined to intervals of coarse-grained rhyolitic volcaniclastic rocks, sandstones, and mudstones that are overlain by hangingwall andesite. The sulfide lenses are zoned vertically and laterally and accompanied by silicification of the host rocks. Mineral lenses that lie stratigraphically above H-W Main are high in sphalerite, galena, and barite, but low in pyrite.

Some of the VMS mineralization found on the Mineral Creek Project has a similar style of base and precious metal mineralization, and host rocks of the same age as those of the Myra Falls deposits.

Exploration for VMS mineralization generally consists of the following techniques: geological mapping to identify prospective volcanic and volcaniclastic rocks, which typically show intense hydrothermal alteration close to the mineralized center; geochemical surveys to identify elements (Cu, Zn, Pb, Au, Ag, Ba) indicative of mineralization; geophysical surveys to identify contrasts in magnetic, electrical conductance, and gravity measurements; trenching and drilling to identify, then delineate mineralization.

Gibson et al. (2007) have listed some of the parameters for targeting VMS mineralization:

1) Deposits commonly occur in clusters that define VMS districts. VMS districts occur within large volcanic edifices, calderas and crustal structures.
2) Some of the largest deposits (> 50 MT) may be associated with a major long-lived crustal structure, or with thick successions of volcaniclastic rocks, or occur in more stable rifted continental margin settings. The large deposits tend to be associated with widespread, low temperature alteration systems, felsic volcaniclastics and thin, but laterally extensive Fe and Fe-Mn formations.

3) Deposits associated with mafic dominated terranes tend to be Cu and Cu-Zn endowed. Continental margin or successor rifted arc-hosted deposits with felsic volcaniclastic-sedimentary host rocks have a higher Pb-Zn endowment.

8.2 LOW-SULFIDE GOLD-QUARTZ VEIN DEPOSITS

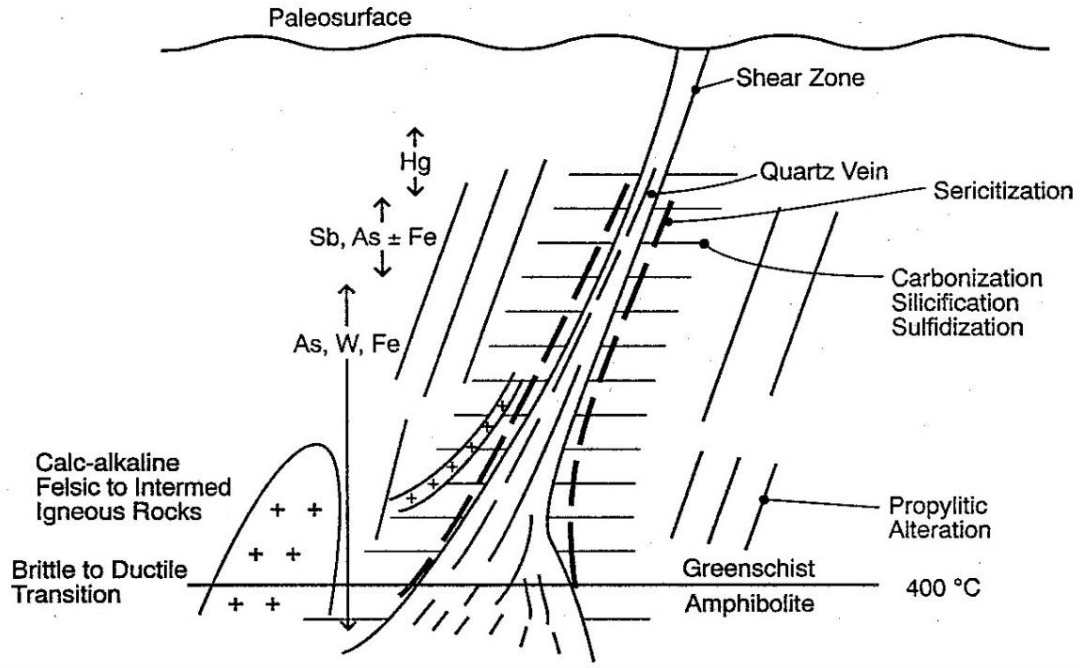
Low-sulfide gold-quartz vein deposits have been well described by R. Ashley (2002) in a publication modeling selected mineral deposit types for the USGS. The paragraphs below summarize many of the characteristics Ashley outlines for these types of deposits.

Low-sulfide gold-quartz vein deposits include quartz and quartz-carbonate veins mined primarily for gold. They are commonly found in accreted terranes dominated by greenstone and slate sequences, formed at moderate depths in compressional settings that facilitate transfer of hot gold-bearing fluids from deeper levels. The hydrothermal fluids containing the gold were transported up faults, whereupon the fluids underwent rapid decrease in temperature and pressure causing precipitation of the gold, along with quartz gangue, in fractures.

These veins generally contain no more than a few percent sulfide minerals. Wall rocks, which in some deposits include significant disseminated mineralization, contain abundant carbonate minerals, quartz, sericite, and sulfides. Mineralization is commonly associated with regional shear zones, which may include melange zones containing varied lithologies. Those deposits spatially associated with plutonic rocks tend to have a more varied suites of metals and are more likely to contain greater amounts of silver, and to yield copper, lead, and zinc as by-products. Arsenic is the minor element most commonly enriched in alteration haloes. These types of deposits are also known as orogenic, mesothermal, shear zone-hosted, Mother Lode-type, metamorphic rock-hosted, greenstone-hosted, turbidite-hosted, or slate-belt gold (Groves et al., 1998). Low-sulfide gold-quartz veins are found world-wide in deformed metamorphic rocks of all ages. Individual deposits have yielded from a few tonnes to more than 100 tonnes of gold. In almost all areas where low-sulfide gold quartz veins are exposed, gold released by erosion is concentrated in placer deposits.

Deposits sometimes found at shallower depths in accreted terranes include gold-antimony veins and silica-carbonate mercury veins. Either of these deposit types could conceivably represent the near-surface expression of the hydrothermal systems that produce low-sulfide gold-quartz lodes at depth (Figure 8.2). All these deposits form from carbonic fluids derived from metamorphic dewatering reactions. Polymetallic vein deposits may also be spatially associated, especially where plutons intrude accreted terranes. In fact, there may be a continuum between low-sulfide gold-quartz veins produced by fluids that show no clear evidence of magmatic fluid contributions, and precious-metal bearing polymetallic veins produced by alkali chloride-rich magmatic-dominated fluids.

Figure 8.2 Schematic cross-section of shear zone hosted gold-quartz veins, alteration, and associated elements (from Goldfarb et al., 1996)



The size of low-sulfide gold-quartz deposits vary considerably from region to region. Archean deposits are the largest (median 1.1 M tonnes), but their greater size may be the result of particularly favorable regional tectonic and structural features rather than any factors directly related to age. It is important to note that some deposits include mineralized wall rock, which usually results in higher tonnages and lower grades, and many recently mined deposits have exploited bulk-minable mineralized wall rock or densely veined stockwork zones.

Mafic to intermediate metavolcanic rocks are the most important host rocks for low-sulfide gold-quartz veins, especially in the case of the Archean deposits. Slate and graywacke are also important hosts, especially in Phanerozoic rocks. Ultramafic rocks and serpentinite occur in some mineralized shear zones. Pre-mineralization plutons may also host deposits. Carbonate and other types of sedimentary rocks are not usually associated with low-sulfide gold-quartz deposits but may occur locally in melange belts associated with mineralized regional shear zones. Some ore minerals and alteration minerals are restricted to certain host rock types, whereas others are always present regardless of rock type, and still others vary from deposit to deposit but are not associated with any particular rock type.

Most low-sulfide gold-quartz deposits occur in highly deformed, metamorphosed, accreted volcanic-sedimentary terranes of greenschist facies. Many deposits, especially the larger ones, are associated with major regional shear zones. High-angle faults that either splay from, or are cut by, these major shear zones are commonly sites of mineralization.

Alteration zones are always present and are generally more developed in metavolcanic rocks than in slates. Widths of alteration zones vary with lithology, size of the vein system, and abundance of minor faults. Alteration can extend away from deposits for many kilometers along shear zones and fault zones. Carbonic hydrothermal fluids replace calcium, magnesium, and iron silicates of the wall rocks with carbonate minerals, and add potassium mica, quartz, and sulfides. Components most notably added are CO2, H2O, potassium, and sulfur. Silica may be added or redistributed from wall rocks into veins. Hydrothermal carbonate minerals include dolomite, ankerite, magnesite, siderite, and calcite. Although the dominant carbonate mineral is frequently described as ankerite, it is usually ferroan dolomite. Alteration assemblages vary with host rock lithology but typically include ferroan dolomite, albite, quartz, potassium-mica, chlorite, pyrite, and arsenopyrite.

Individual veins are generally <1 to 10 meters wide and less than a few hundred meters long, but ore-bearing zones are typically larger, and include multiple veins. Veins and ore zones are equally persistent laterally and vertically, and most deposits show no notable vertical or along-strike zoning of vein minerals, ore minerals, or alteration minerals. Among deposits that show such zoning, patterns vary from deposit to deposit.

Veins commonly show ribbon texture or contain wall-rock fragments. In typical ore, both gold and sulfide grains occur scattered through the quartz, but gold tends to be concentrated at the margins of the ribbons and wall-rock fragments, whereas sulfides tend to be concentrated within the ribbons and fragments. Some gold is associated with sulfides, located on grain boundaries or on microfractures within grains, or forming inclusions. Proportions of gold occurring as isolated free-milling grains, as opposed to gold associated with sulfides, varies between deposits, but may be greater than 50 percent. The most common minor sulfide minerals are galena, sphalerite, and chalcopyrite. Carbonate in the veins tends to occur in discrete growth bands, commonly near or at the vein walls. High-grade ore frequently consists of coarse crystalline or leaf gold intergrown with quartz, commonly with no associated sulfide minerals.

Alteration zones may locally contain enough gold to be ore-grade. Sulfides, especially pyrite and arsenopyrite, tend to be more abundant in such wallrock disseminated mineralization, up to about 10 percent, although gold grades are generally lower than in the veins. Sulfides also tend to be more abundant in altered rocks that host stockwork veins and may contribute to broad low-grade gold zones. Because low-sulfide gold-quartz veins are relatively small and high-grade (commonly >15 g/t in historical mines), underground methods were used in most historical mines, and are still used in the majority of active mines worldwide. However, more recently, the increased value of gold, as well as technological advances, have allowed the economic mining of much lower grade (1 g/t or less) by bulk mining techniques.

In addition to gold, silver and base metals, minor elements most strongly enriched in low-sulfide gold-quartz deposits include arsenic, antimony, tellurium, selenium, tungsten, molybdenum, bismuth, and boron (McCuaig and Kerrich, 1998). The degree of enrichment of these elements

varies greatly among regions, and within regions and districts, but usually not much within deposits. The gold-silver ratio averages 5:1 (McCuaig and Kerrich, 1998). The element most consistently enriched along with the precious metals is arsenic, occurring as arsenopyrite and arsenian pyrite.

In most low-sulfide gold-quartz deposits the native gold contains 15 to 20 weight percent silver. In some relatively base-metal rich and high-silver deposits, silver may occur in sulfosalts (ruby silvers) and tetrahedrite. Associated minerals, listed in decreasing order of frequency reported, are pyrite, galena, arsenopyrite, chalcopyrite, sphalerite, pyrrhotite, stibnite, tetrahedrite, and scheelite (Bliss and Jones, 1988). Total sulfide contents are generally less than 5 percent in veins and 10 percent in disseminated zones.

The largest gold-quartz vein deposit in British Columbia is the Bralorne-Pioneer which produced in excess of 117,800 kilograms (3.79 M oz) of Au from ore with an average grade of 9.3 g/t Au (BC Geol. Survey GeoFile 2020-11).

Ore-bearing quartz veins are rarely well exposed, owing to presence of ribbon structure, wall-rock fragments, carbonate-rich bands, and vuggy textures that are enhanced by weathering of sulfides. Alteration zones, because they are heterogeneous and carbonate- and sulfide-bearing, also tend to be poorly exposed, especially where associated with shear zones.

Arsenic concentrations in soils overlying unmined deposits reach about 1,000 ppm, and concentrations in soils over surrounding alteration zones range from tens to several hundreds of ppm (Savage et al., 2000). Although gold itself is the primary target element in geochemical soil-sampling exploration programs, arsenic has been used as a pathfinder element. Antimony may also show anomalies. Other exploration techniques include geological mapping to identify prospective host rocks, structural features (faults and shear zones), alteration and sulfide or oxide minerals, and geophysical surveys to identify concealed fault zones, particularly linear magnetic lows identifying areas of carbonate alteration and magnetite destruction.

The cataclasite-hosted Mineral Creek Zone exhibits many characteristics of the low-sulfide gold-quartz vein deposits. Portions of the Mineral Creek Fault and other major structures that host mineralization have yet to be explored.

The gold-bearing Linda, Ember, 900 and 1050 Zones may be considered various parts of an extensive mesothermal system. These types of individual vein zones are located in either steep normal to reverse faults, in the fault deformation zone, in secondary faults or splays off the major faults, in shear zones, or in fold hinges. The vein deposits can have a significant vertical extent. Ore bodies are mainly tabular veins in competent lithologies but are composed of veinlets and stringers in less competent rocks. Some economic mesothermal gold deposits contain up to a few million tones of ore and the average grade varies from 5 to 15 g/t gold.

Ore “shoots” can be localized at the intersections of veins/shears/faults or at the intersection of these structures and a reactive or competent rock unit. There have been suggestions by previous workers in the Mineral Creek area that chert horizons of possible exhalative origin within the basalt sequence contain anomalous levels of gold and that structures that cut the chert may have localized and concentrated the gold values. Concentration at dilatational jogs along structures or within fold hinges are yet more possibilities. The implication of this structural complexity is that exploration programs in the Mineral Creek veins should be designed to test for variously oriented gold-bearing features and intersections of these features.

Although mineralization at Mineral Creek shows characteristics of the VMS and Gold-Quartz Vein models, that is not necessarily indicative of the tenure of mineralization that may be present on the Property that is the subject of this report.

9.0 EXPLORATION

9.1 EVALUATION OF PREVIOUS WORK

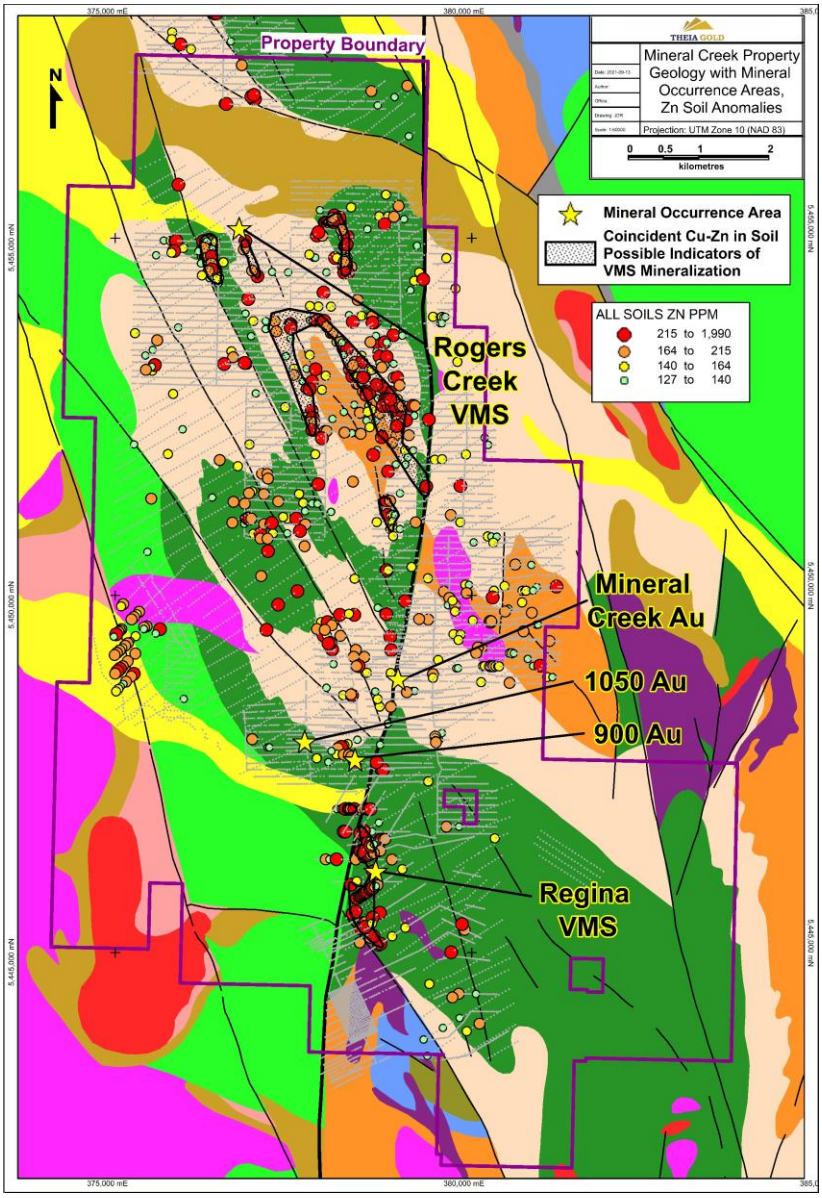
Theia undertook a compilation of all historical exploration data and input the data into Geographic Information System (GIS) software to view the exploration results as a layered assemblage, allowing comparison of data sets, such as how soil geochemical values for copper fit with various geological units that may be favourable hosts for VMS mineralization. Geophysical results can also be overlain on geology to help determine projections of geological boundaries, or to indicate possible buried intrusions or regional structures that could have implications for mineralizing systems. Initial field work, undertaken in 2022 followed up prospective targets developed from the data study.

Figures 9.1 through 9.4 show thematically the historical results for Zn, Cu, Au and As in soil samples from the Property. Coloured dots represent the top 1, 2, 3 and 4 percentile ranges for each element. Approximately 22,500 soil samples have been collected property-wide by various exploration companies, however, some samples were not analyzed for some of the elements in certain sampling campaigns.

The zinc plot (Figure 9.1) shows a number of clustered anomalies, some of which appear to be trending along fault structures, and some that may be trending along certain stratigraphic horizons, possibly indicative of VMS mineralization. Also illustrated on this figure are outlines of areas that contain coincident Zn and Cu anomalies, which is a common geochemical signature of VMS mineralization containing sphalerite and chalcopyrite. The Rogers Creek area, where VMS mineral showings are known, shows such a signature extending south from the showings for several hundred meters. Of particular significance is a large horseshoe-shaped coincident Cu-Zn anomaly to the southeast of Rogers Creek that follows the contact between Nitinat Formation and overlying McLaughlin Ridge Formation for more than 2 km, and appears to be folded in a

synclinal structure that may plunge to the southeast. This anomalous area has never been drill tested.

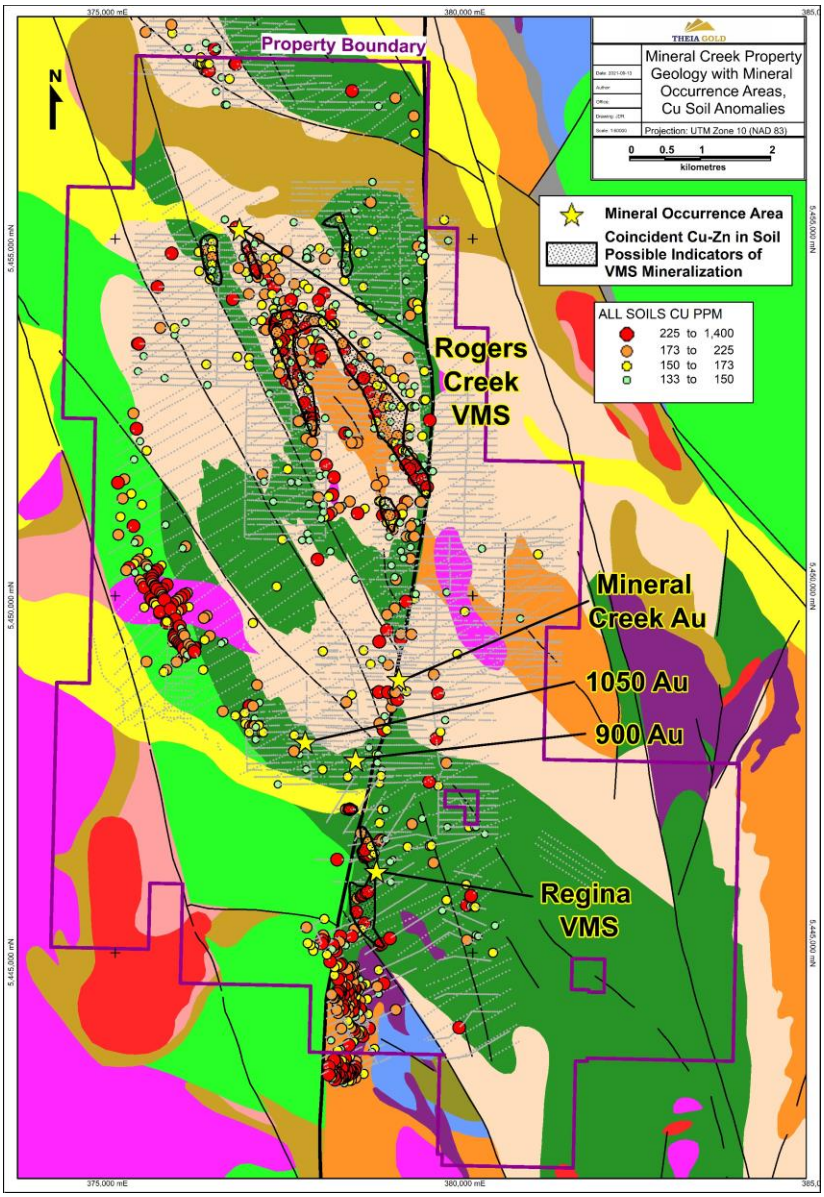
Figure 9.1 Geology with Zn soil anomalies and coincident Cu-Zn areas



In the south part of the Property the Regina area also falls within a north-south trending Cu-Zn anomaly that extends for nearly 2 km. Parts of this anomaly have not been evaluated and warrant further work. Anomalous clusters of Zn anomalies on the west side of the Property tend to fall along northwest trending faults, but alternatively could be associated with Sicker Group units that also trend northwesterly. On the east side of the Property clusters of moderately anomalous Zn overlie McLaughlin Ridge Formation as well as a small intrusive body. Exploration work is justified for these areas.

The copper plot (Figure 9.2) shows a very convincing stratigraphic association in the Rogers Creek area and extending to the southeast where it is coincident with Zn. On the west side of the Property a linear, northwest-trending Cu anomaly overlies a small intrusive body and Karmutsen volcanic rocks. This appears to follow a structural control but considering the intrusive association it holds potential for broader stockwork or “porphyry-style” Cu mineralization. Other elements in the soils in this area returned weak values.

Figure 9.2 Geology with Cu soil anomalies and coincident Cu-Zn areas

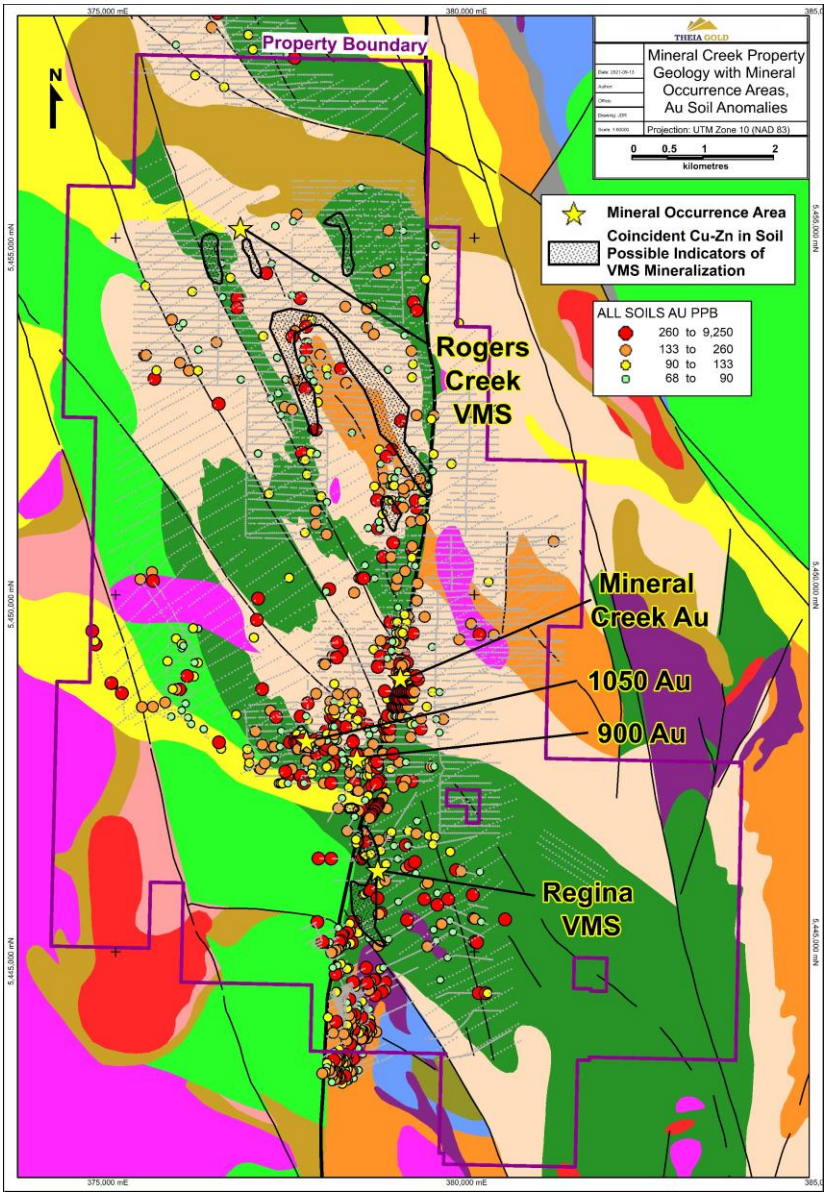


A relatively extensive Cu anomaly along Lizard Lake at the south end of the Property sits on the east side of the Mineral Creek Fault and is partly underlain by McLaughlin Ridge volcaniclastic rocks. Gold, and to a lesser extent arsenic, are associated with this copper anomaly, which could represent either vein-type or VMS-type mineralization. Previous drilling in this area has revealed both chalcopyrite in quartz-carbonate stringers as well as massive sulfides in a tuffaceous pyritic

chert layer, of possible exhalative affinity. Scattered Cu anomalies in the Mineral Creek Zone show a weak affinity with Au, which is substantiated by relatively minor chalcopyrite that occurs in some of the Au-bearing quartz veins.

The gold plot (Figure 9.3) illustrates very strong clustering of anomalies over the known gold zones – Mineral Creek, Linda, Ember, 900, 1050, Big Southeastern and Lizard Lake. Detailed evaluation of the geochemical results may help identify extensions of some of these zones.

Figure 9.3 Geology with Au soil anomalies and coincident Cu-Zn areas

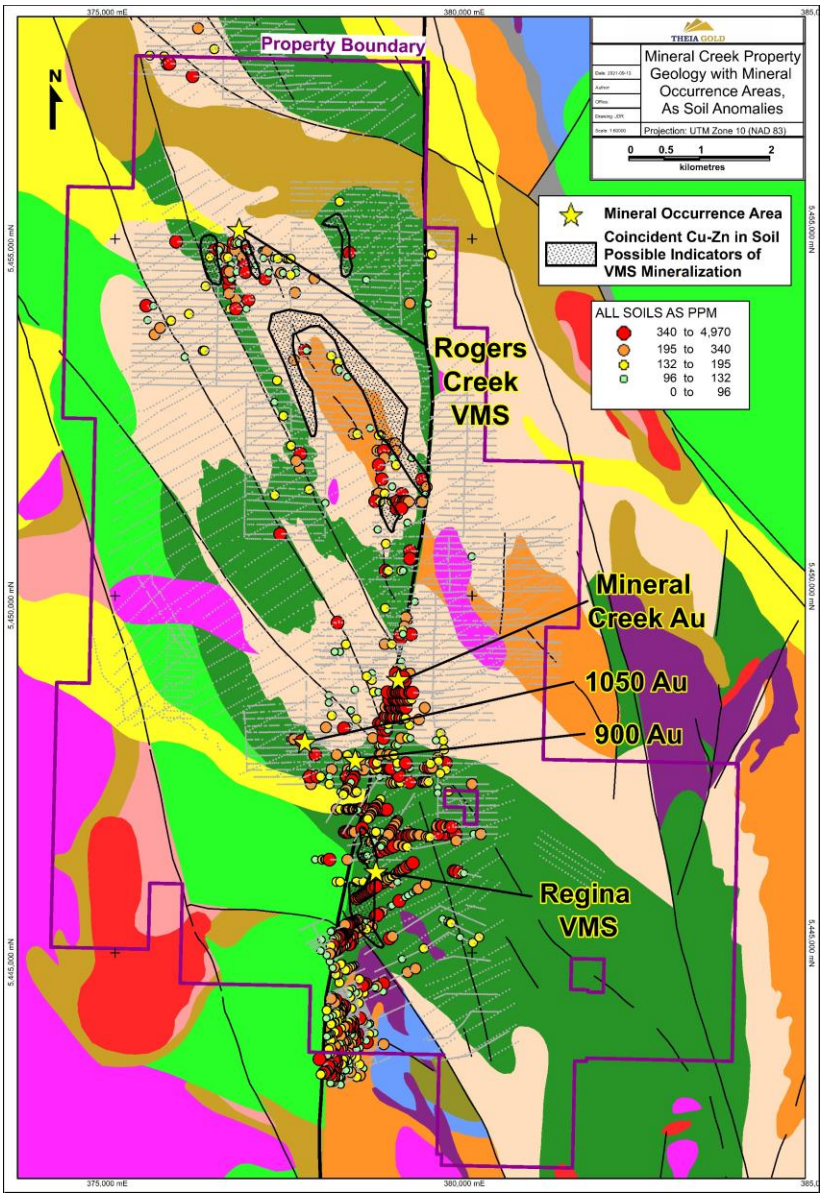


In addition, a sizeable Au anomaly about 2.5 km north of the Mineral Creek Zone lies partly along the Mineral Creek Fault and partly over volcaniclastic rocks with associated Cu anomalies, suggesting potential for both vein-type and VMS-type mineralization. This area has had only limited drilling and surface exploration and warrants further work. Scattered high Au values locally

coincide with Cu, especially in the Rogers Creek and Regina areas, suggesting that potential Cu-Zn-bearing VMS mineralization may also contain significant gold values.

The arsenic plot (Figure 9.4), although lacking As analyses for some areas, shows a very strong correlation with Au anomalies.

Figure 9.4 Geology with As soil anomalies and coincident Cu-Zn areas

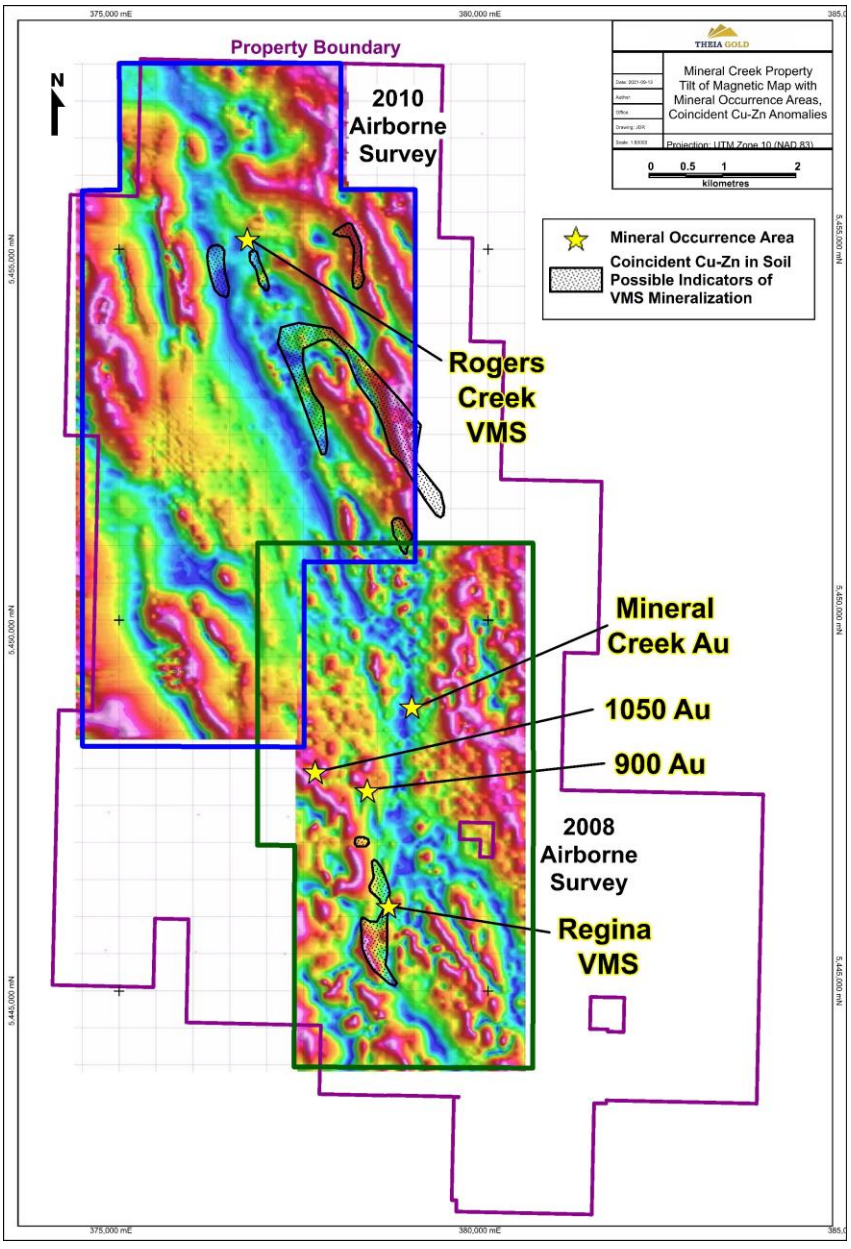


Arsenopyrite is a common constituent in the veins in the Mineral Creek area and arsenic in soil has been known to be a good pathfinder element for Au in this area. Also significant, is a cluster of strongly anomalous As overlying the Rogers Creek showing and adjacent pyritic, sericite-chlorite-carbonate schist zone. This, along with a localized As anomaly over the Regina VMS showing and continuing to the north and east, suggests that As may be present in VMS-type

mineralization in this region as well. Therefore, areas with coincident Cu-Zn-As soil anomalies should be considered prime targets for VMS-type mineralization.

Figure 9.5 illustrates the tilt derivative of magnetic values from previous airborne survey data collected over much of the Property area. This view tends to accentuate the magnetic lows, shown in blue colours.

Figure 9.5 Tilt derivative of magnetics with mineral occurrences & coincident Cu-Zn areas



**Note "warm" colours depict areas of magnetic highs, blue colours are magnetic lows*

The magnetic lows often define linear fault zones and may also define alteration zones that have had magnetic minerals destroyed by hydrothermal processes. Fault structures could contain mineralized veins, and alteration zones could be associated with VMS mineralization. Magnetic

highs may be related to formational volcanic units or intrusive bodies that contain magnetite, but discrete highs may be indicative of sulfide-rich VMS bodies.

The property-scale magnetic map can be a useful mapping tool to better define stratigraphic units and structures. Promising geophysical signatures that coincide with soil geochemical anomalies and favourable host rocks should be followed up with ground geophysical surveys, geological evaluation and prospecting, followed by drilling of prospective targets.

The Company has undertaken an evaluation of VTEM and magnetic geophysical targets in conjunction with soil geochemical anomaly patterns and favourable host lithologies. The target picks are illustrated on Figure 9.6 and brief descriptions and rationale for each target area are summarized below.

Rogers Creek

- Strong EM conductor approximately 1500-2000m in length and up to 700m in width, good continuity between 100m spaced VTEM lines, strongest anomaly defined in the northern survey area. Moderate but inconsistent magnetic anomaly
- Moderate arsenic-copper soil geochemistry with coincident weak zinc and gold
- Anomaly localized between two parallel NW faults
- Host rocks primarily Duck Lake and Nitinat intermediate volcanics
- Previously tested with 3 angle holes, intersected wide zones of VMS alteration with pyrite, and narrow zones of base metals
- If the anomaly is validated, follow-up with ground EM

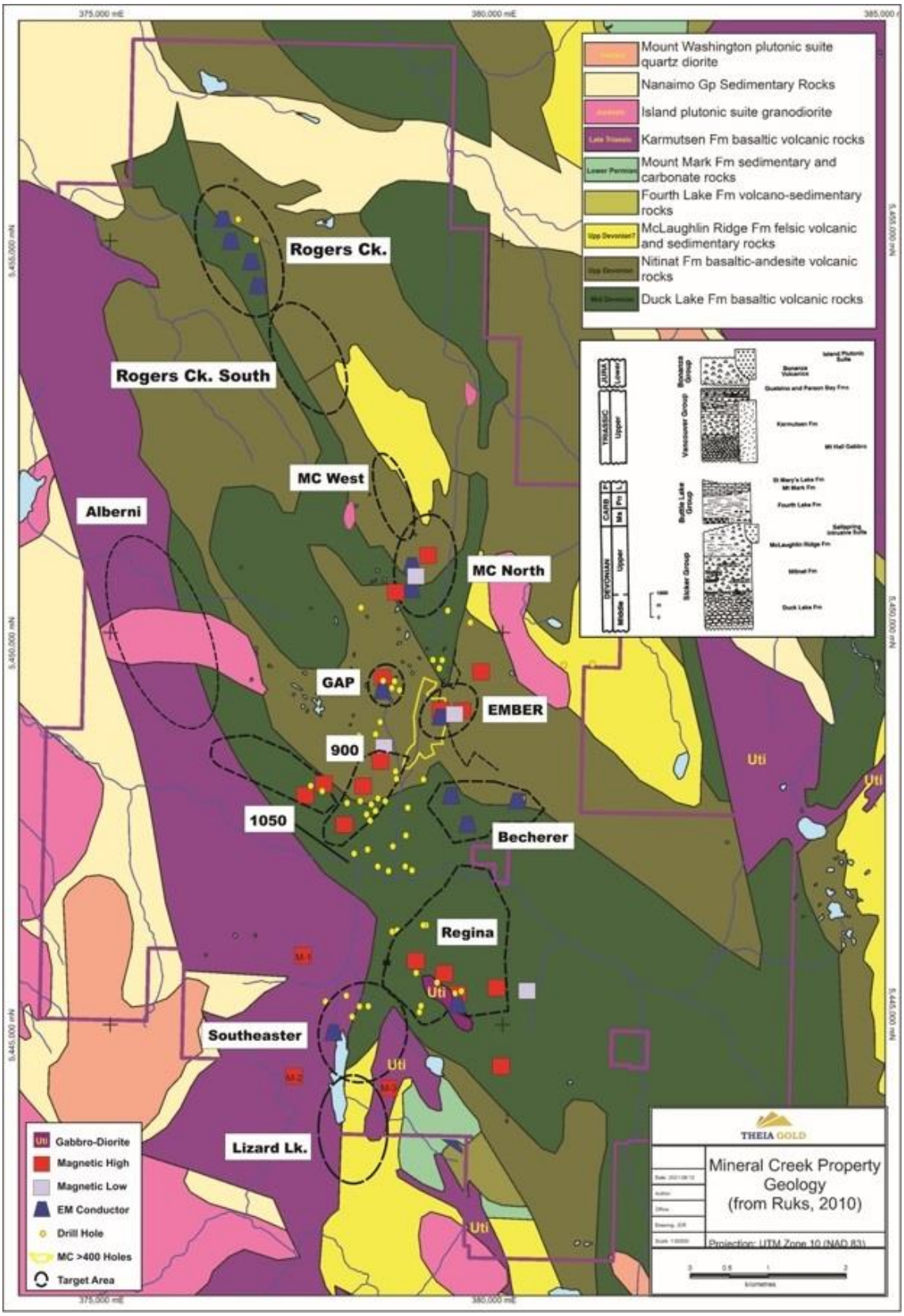
Rogers Creek South

- Target localized along NW faults
- Host rocks primarily Nitinat intermediate volcanics
- No EM response but strong NW magnetic anomaly
- Strong copper-gold soil geochemistry, ~1200 x 500m
- Possible VMS setting
- No drilling

MC West

- Target localized along a NW fault
- Host rocks primarily Nitinat intermediate volcanics and small Jurassic stock located ~500m to the west of the anomaly
- No EM response but strong NW magnetic anomaly
- Strong arsenic-gold soil geochemistry with weak zinc and copper ~1500 x 500m
- Anomaly extends to the southeast toward the Mineral Creek Fault
- Possible orogenic veins or VMS setting
- No drilling

Figure 9.6 Property Geology with selected exploration targets based on coincident geophysical and geochemical anomalies



MC North

- Target at the intersection of a NW fault and the N-trending Mineral Creek Fault
- Host rocks primarily Duck Lake and Nitinat intermediate volcanics
- Very strong EM response and moderate magnetic anomaly with both NW and N trends,
- Moderate arsenic-copper soil geochemistry with weak zinc and gold ~1000 x 300m
- Possible orogenic vein setting
- No drilling

Alberni

- Host rocks Triassic age Karmutsen intermediate volcanics intruded by an east trending Jurassic age diorite body
- Strong copper soil geochemistry with a NW-oriented geochemical footprint measuring ~500-1000 x 2300, could be related in part to the Karmutsen volcanics
- Strong NW trending magnetic anomaly which contrasts with the E-W orientation of the diorite pluton. Unusual feature within the larger anomaly is the presence of a discreet circular magnetic feature which is interpreted to be a possible breccia pipe.
- Possible porphyry or skarn setting
- No drilling

Gap

- Host rocks Nitinat intermediate volcanics
- Moderate zinc-gold soil geochemistry with associated magnetic high
- Nearby NW oriented fault
- IP anomalies have been reported in the area
- Possible orogenic vein or VMS setting
- No drilling

Ember

- Anomaly localized along a strong magnetic break between high and low magnetic intensity. A small magnetic low suggests a possible breccia pipe feature
- Host rocks Nitinat intermediate volcanics, possible lithology change to the east
- Strong EM response and magnetic anomaly that is moderate in the west and very strong in the east
- Strong arsenic-gold soil geochemistry with weak zinc and copper over ~1000 x 300m
- Weak geochemical values to the east
- Orogenic vein setting
- Extensive drilling in the west part of the anomaly with holes directed only to the west, east side no drilling

900 Zone

- Anomaly localized along NW and NE magnetic trends with complex pattern
- Host rocks Duck Lk. and Nitinat intermediate volcanics
- Weak EM response and strong, but localized magnetic anomaly - drilling intersected magnetite-bearing cherty exhalite
- Strong arsenic-gold soil geochemistry with moderate to weak zinc and forms part of a very large geochemical footprint measuring ~2000 x 1000m that includes the 1050 Zone.
- Orogenic vein setting
- Extensive drilling in the south end of the anomaly with numerous narrow bonanza grade intersections, north part of the anomaly not drilled

1050 Zone

- Target localized along WNW magnetic trend with complex pattern
- Host rocks Duck Lk. intermediate volcanics
- Moderate EM response and very strong magnetic response along WNW and minor NE trends covering ~1500 x 500m
- Strong arsenic-gold soil geochemistry in the SE end of the anomaly and moderate to strong zinc and copper oriented to the WNW, parallel to the magnetic trends
- Orogenic vein setting
- Very limited drilling with narrow high grade bonanza gold intersections

Becherer

- Anomaly expressed by a series of EM conductors along a NW fault system
- Host rocks Duck Lk. intermediate volcanics
- EM response weak to moderate and inconsistent covering an area of ~600 x 1000m with a weak magnetic signature
- Weak gold soil geochemistry
- Possible orogenic vein setting
- No drilling

Regina

- A very complex and irregular series of anomalies with multiple orientations
- Host rocks Duck Lk. intermediate volcanics
- Weak and spotty EM response with a series of strong NW subparallel magnetic ridges
- Strong arsenic-gold soil geochemistry footprint with weak zinc measuring ~2000 x 1500m.
- Orogenic vein and VMS setting
- Limited drilling returned narrow low-grade gold-arsenopyrite values and stratabound bands of pyrite, with local sphalerite and chalcopyrite

Southeaster

- A very complex and irregular series of anomalies with multiple orientations
- Possibly fault bounded area of Duck Lk intermediate volcanics with McLaughlin Ridge felsic volcanics and a gabbroic intrusion. Karmutsen volcanics in faulted contact along the southern extension of the Mineral Creek Fault
- Strong EM response in the south part of the anomaly with a coincident strong north trending magnetic response.
- Strong arsenic-gold-zinc-copper soil geochemistry with a geochemical footprint measuring 1000 x 1000m. The anomaly is oriented to the NE and is probably controlled in part by the fault structures
- Possible orogenic veins, VMS or skarn setting
- Limited drilling

Lizard Lake

- Host rocks McLaughlin Ridge intermediate to felsic volcanics intruded by upper Triassic diorite-gabbro and possible Jurassic age dykes
- Area not covered by geophysical survey
- Strong gold-copper-arsenic soil geochemistry, N-S oriented footprint measuring ~400 x 1000 m and possibly open to the south
- Possible orogenic veins, VMS or skarn setting
- Very limited drilling

9.2 2022 EXPLORATION PROGRAM

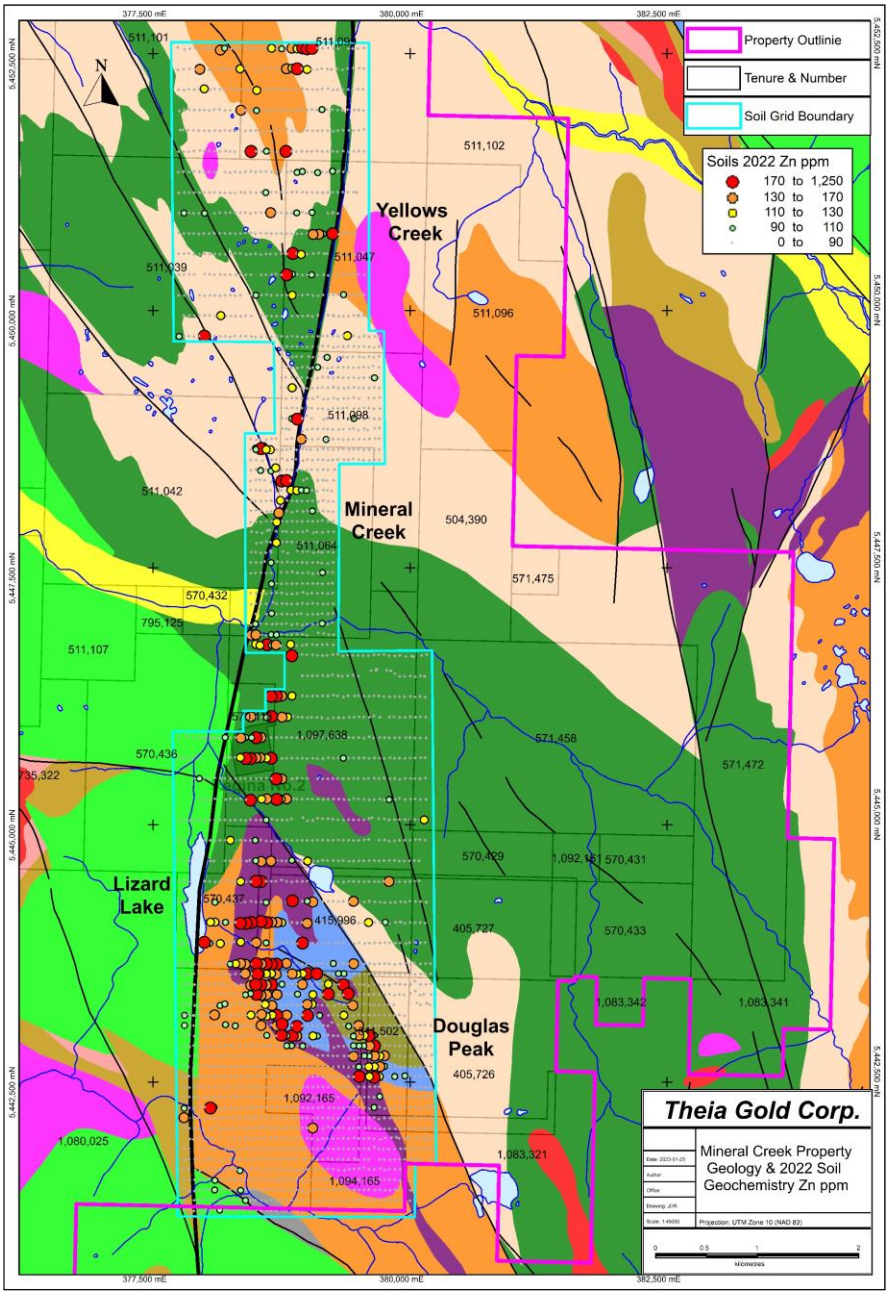
In 2022 Theia Gold undertook a program of extensive soil sampling along a north-south corridor, primarily covering the Mineral Creek fault and favourable Sicker Group lithologies. Most of the Property had been sampled during various historical programs, however this resulted in a patchwork coverage with many gaps and areas with different quantitative data available due to use of different analytical methods. The 2022 soil sampling program was intended to provide more consistent data over anomalous areas of interest and to expand the coverage over unsampled areas to help discover new targets for follow-up exploration.

In 2022, sample lines were all oriented east-west and spaced 100 m, or in some cases 200 m, apart with 50 m sample spacing. Stations were located using hand-held GPS units. The highest priority grids were the Mineral Creek Central and South grids, with other priority areas at Douglas Peak, Yellows Creek and Lizard Lake. Soil samples were all analysed at ALS Geochemistry Laboratory in North Vancouver, BC.

Areas of anomalous elements that had been identified by Theia's research of historical results were largely confirmed by the 2022 sampling. Geochemical element maps that include geology are plotted on Figures 9.7 through 9.10, showing thematically the 2022 results for Zn, Cu, Au and As in soil samples. Coloured dots represent approximately the top 1, 2, 3 and 4 percentile ranges for each element for the 3,061 soil samples that were analyzed. These can be compared with the plots of historical results for the same four elements on Figures 9.1 to 9.4.

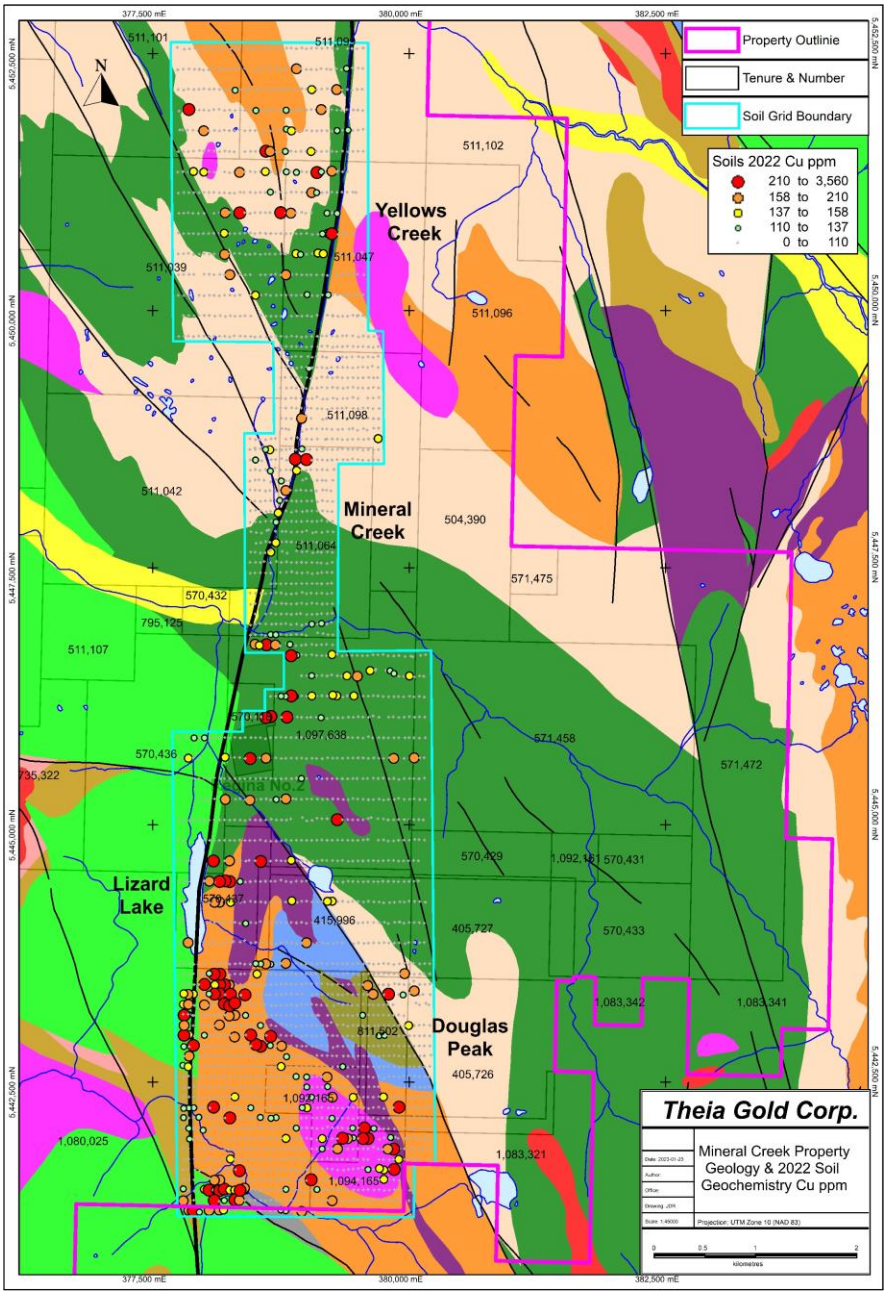
The 2022 Zn results (Figure 9.7) vary from historical results primarily in that the Yellows Creek area shows somewhat sparser clusters of anomalous Zn, likely due to the wider, 200 m-spaced lines in that area. However, the Lizard Lake anomaly shows a strong extensive anomaly trending over 2 km to the southeast, toward Douglas Peak, in an area that was not previously sampled, or was not analyzed for Zn. This area is underlain by Mount Mark and St. Mary's Lake Formations of sedimentary and carbonate rocks intruded by Mount Hall gabbro, suggesting a possible skarn environment. A linear, strong Zn anomaly north of Lizard Lake and east of the Mineral Creek fault was confirmed by the 2022 sampling.

Figure 9.7 Geology with 2022 Zn soil anomalies



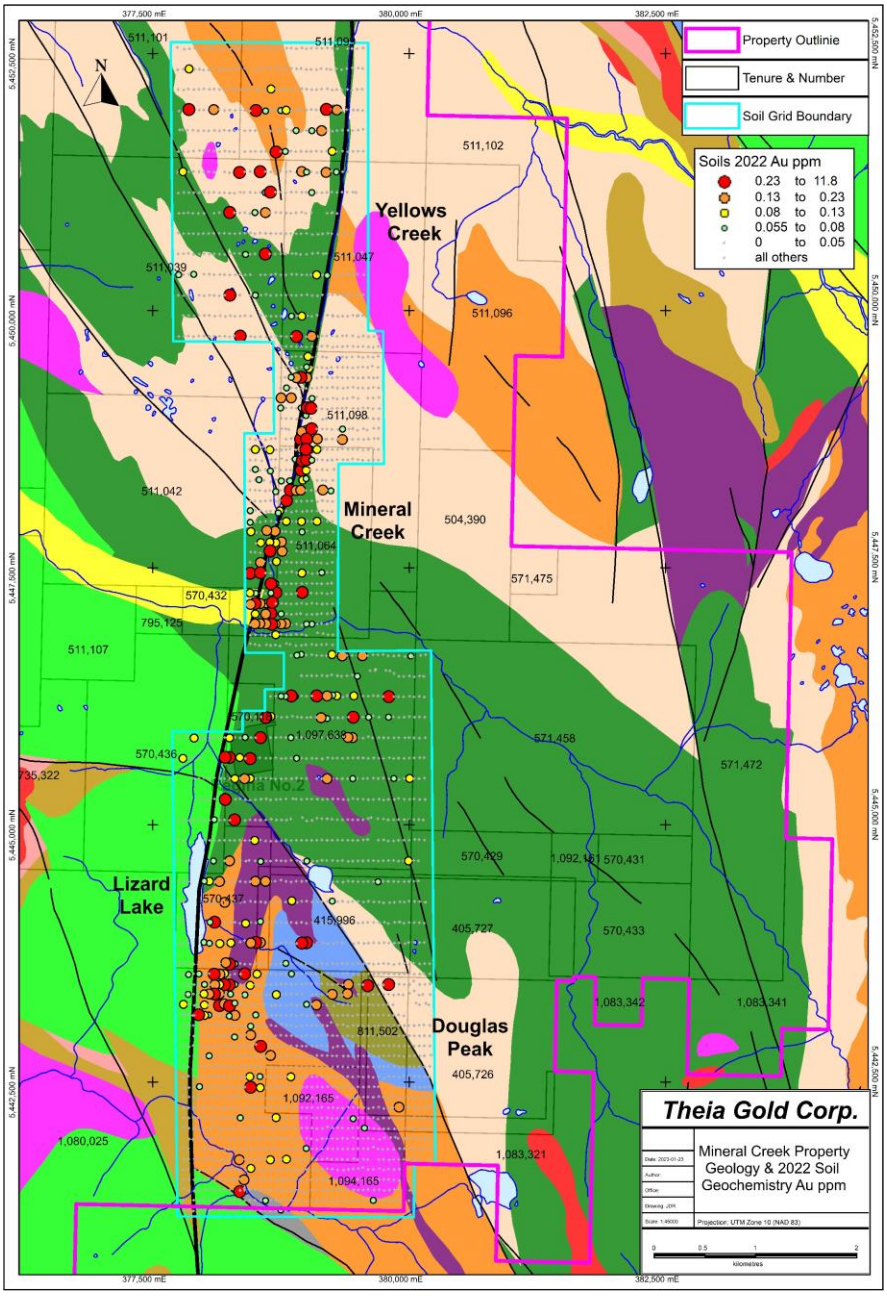
The 2022 Cu results (Figure 9.8) vary from historical results primarily in that the Yellows Creek area shows somewhat sparser clusters of anomalous Cu, likely due to the wider, 200 m-spaced lines in that area. The area immediately east of Lizard Lake also has a reduced distribution of anomalous Cu compared to previous results, but 2.2 km south of Lizard Lake, in a newly sampled area, there is a cluster of anomalous Cu near the intersection of a northwest-trending fault with the Mineral Creek fault. Also, new sampling revealed an area of anomalous Cu southwest of Douglas Peak that is underlain by a small stock of Island Plutonic Suite diorite with potential for porphyry-style stockwork mineralization.

Figure 9.8 Geology with 2022 Cu soil anomalies



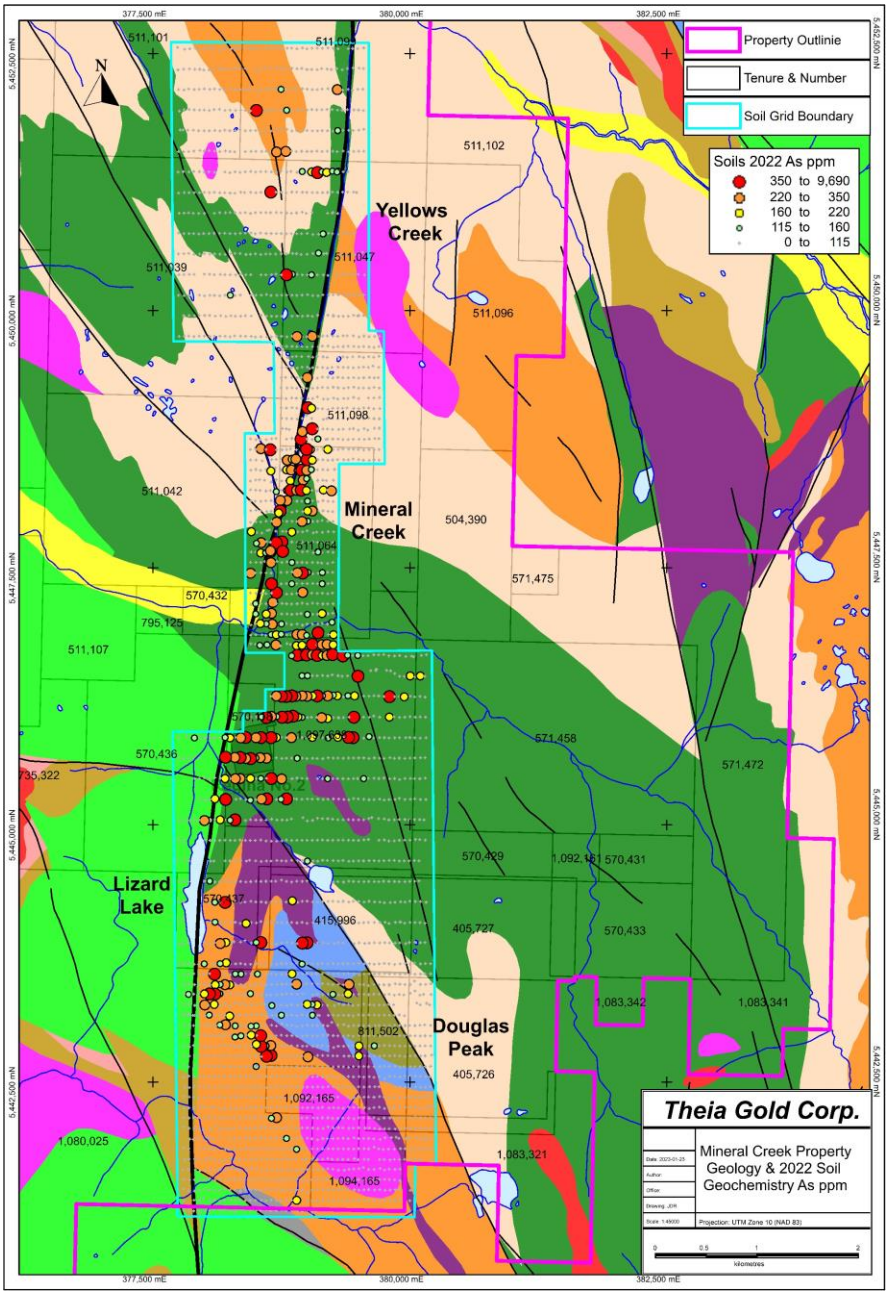
The 2022 Au results (Figure 9.9) confirmed previous results, showing strongly anomalous Au along Mineral Creek and south to Lizard Lake, although the northern extent of the Mineral Creek fault in Yellows Creek area has sparser Au anomalies, in part due to wider sample spacing. The Regina area sampling, northeast of Lizard Lake, has confirmed the previous Au anomalies, but again, is sparser due to wider line spacing. A cluster of strongly anomalous gold near the south end of Lizard Lake is underlain by the favourable McLaughlin Ridge Formation and is a high priority exploration target.

Figure 9.9 Geology with 2022 Au soil anomalies



The 2022 As results (Figure 9.10) coincide closely with Au values from 2022, as well as the historical As results, although somewhat sparser in the Yellows Creek area and on the east side of Lizard Lake. New areas of sampling show a coincident As-Au trend extending 1 km southeast from the south end of Lizard Lake, within favourable McLaughlin Ridge rocks.

Figure 9.10 Geology with 2022 As soil anomalies



9.3 2023 EXPLORATION PROGRAM

In 2023, the Company undertook a diamond drilling program totalling 4774 m in 15 holes to verify and extend areas of gold mineralization that had been indicated by historical drilling in the main Mineral Creek Zone, as well as in the Linda and Ember Veins. Some of the holes were positioned to cut the Linda, and/ or Ember veins and then continue to depth to test the Mineral Creek Zone.

The holes were collared from drill pads located on access roads that cut across the slope on the east side of the Mineral Creek valley. Most of the holes were drilled near the locations of historical holes that had returned significant gold values. Many of the 2023 drill holes intersected narrow

quartz-calcite veins containing disseminated pyrite and arsenopyrite, some of which returned high gold values. Some of these vein intercepts probably correspond to the Ember and Linda veins described in previous drill campaigns. Deeper holes extended across the Mineral Creek fault cataclasite zone and returned low grade gold intercepts over 10's of meters, similar to results from historical holes.

Descriptions of the mineralized intervals in the 2023 drill core are similar for most of the holes. Those cutting the stratigraphy in the hangingwall (east side) of the Mineral Creek fault intersected basaltic tuff and volcaniclastic rocks with interbedded cherty argillite, cut by narrow, locally sheeted, irregular, quartz-calcite veins within envelopes of chlorite-sericite-carbonate alteration. The quartz-calcite-sulphide veins are typically <1 to 10 cm wide and may contain 1-5% fine grained disseminations or stringers of pyrite and minor arsenopyrite. Areas of faulting and brecciation are commonly silicified, with fragments and breccia matrix of quartz-calcite, containing a few percent pyrite and arsenopyrite.

Intercepts of the Mineral Creek cataclasite zone consisted of strongly sheared and sericite-ankerite altered tuff and volcaniclastic rocks over lengths of more than 30 meters that contain several percent pervasively disseminated pyrite and abundant fine, irregular quartz-calcite veins with disseminations and stringers of pyrite and minor arsenopyrite, that commonly carry gold values.

Below are a few of the mineralized intercepts from the 2023 drill holes (Theia Gold, unpublished data).

MC23-02 - 32.6 g/t Au and 8.84 g/t Ag over 0.30 m in a silicified, healed fault breccia zone.

MC23-03 - 64.95 g/t Au and 8.87 g/t Ag over 1.02 m in quartz stockwork zone, green and white quartz veinlets, strong silica, moderate sericite-chlorite altered basaltic tuff, pyrite disseminations confined mostly to sericite altered groundmass.

MC23-04 - 26.06 g/t Au and 4.50 g/t Ag over 1.48 m in a white, massive quartz vein containing specks of visible gold, with minor disseminated pyrite and arsenopyrite.

MC23-05 - 28.60 g/t Au and 2.73 g/t Ag over 1.0 m in a massive quartz vein with specks of visible gold, and minor pyrite and arsenopyrite disseminations and hairline stringers.

MC23-05 - 0.71 g/t Au over 15.0 m in fine-grained argillitic sediments that are strongly sericite altered, with pervasive moderate calcite alteration and local gouge. The interval shows 20-30% quartz veins and breccias 3-20 cm thick and abundant disseminated pyrite around veins.

MC23-06 - 10.22 g/t Au and 7.23 g/t Ag over 5.56 m in sericite altered basalt with common quartz-carbonate-pyrite veins and stringers, and local fault gouge.

MC23-06 – 0.927 g/t Au over 58.41 m, including 7.84 g/t Au over 0.68 m, within strongly sericite altered, fine-grained basaltic ash tuff with irregular, anastomosing quartz stringers and veins containing disseminated and blebby pyrite.

MC23-07 - 22.20 g/t Au over 3.22 m in grey-white, cloudy quartz-calcite-pyrite veins with wispy dark, discontinuous pyrite stringers, and visible gold as <1mm flecks, some rimmed by pyrite.

MC23-08 - 306.00 g/t Au over 1.00 m, in a quartz-calcite vein hosted by weakly altered basaltic ash lapilli tuff; the vein contains blebs of massive fine-grained pyrite with possible arsenopyrite.

MC23-11 - 48.1 g/t Au and 4.05 g/t Ag over 0.41 m within quartz veinlets, in a 2 m interval of 3-5% finely disseminated pyrite within lapilli tuff; moderate pervasive chlorite with weak patchy pervasive calcite and weak calcite fracture fills; weak epidote along fractures and some very weak shears.

MC23-15 - 1.437 g/t Au and 1.14 g/t Ag over 8.10 m in the Mineral Creek Fault zone; intense cataclasite with 75% gouge and 25% subangular to rounded clasts of relict quartz, calcite and more competent basaltic units; some smoky-grey quartz fragments could be from mineralized veins; trace of very fine-grained disseminated pyrite through the gouge.

MC23-16 - 1.89 g/t Au over 31.72 m, including 9.72 g/t Au over 1.00 m, in a zone of moderately foliated, fine- to medium-grained basaltic tuff; 1-3% fine disseminated to fracture-filling pyrite and some pyritic stringers throughout the unit, with rare quartz veinlets and stringers.

MC23-17 - 1.57 g/t Au and 1.20 g/t Ag over 34.02 m in strongly altered and pyritic basaltic tuff, with mafic dykes throughout the interval; strong to moderate sericite alteration replacing mafic phenocrysts; 1-5%, 0.5-1 cm-thick, quartz veinlets and stringers.

Many of the drill holes intersected multiple narrow mineralized intervals in the hangingwall of the Mineral Creek Zone containing quartz stringers, and veins up to about 1 meter in width, that returned values ranging from 1 to 5 g/t Au over 1 to 4 m lengths, and it appears that some of these veins contain bonanza grade gold with values ranging from about 20.0 to 306.0 g/t Au. As well, the Mineral Creek Zone has demonstrated wide intervals of 30 m, or more, with continuous gold values of 1 to 2 g/t.

The 2023 drilling program was successful in confirming locations, extents and grades of mineralized intervals that had been described in historical reports, and the results are discussed in more detail in Section 10.2.

10.0 DRILLING

10.1 HISTORICAL DRILLING

More than 93,700 meters of drilling has been undertaken on the Mineral Creek Property in the past by previous operators. A summary of drilling statistics for the Mineral Creek Project from 1984 to 2009 is provided in Table 10.1, reported by year. Major drilling programs were carried out by the Westmin/ Nexus joint venture during the period 1986 to 1989 to primarily explore the Mineral Creek, Linda, 900, and Regina mineral zones. Bitterroot Resources Ltd. took over the project and had several drilling campaigns from 2005 to 2009, exploring the Linda, 1050, Mineral Creek, 900, Big Southeastern, Regina, Gap (west of Mineral Creek) and Ember zones.

Table 10.1 Mineral Creek Project historical drilling statistics

Year	No. of Holes	Total Meters	Area	Company
1984	3	744.6	Rogers Creek	Westmin-Noranda
1984	5	not known	Lizard Lake	Noranda-Umex
1985	3	not known	Big Southeastern	Noranda-Umex
1986	7	744.4	900	Westmin-Nexus
1986	12	2041.6	Mineral Creek	Westmin-Nexus
1986	4	1086.9	Regina	Westmin-Nexus
1987	106	21667.2	Mineral Creek	Westmin-Nexus
1987	46	4932.7	900	Westmin-Nexus
1987	6	1232.3	Regina	Westmin-Nexus
1987	6	1047.9	China Creek	Westmin-Nexus
1988	61	12227.4	Mineral Creek	Westmin-Nexus
1988	3	928.7	Mineral Creek U/G	Westmin-Nexus
1988	15	1391.9	900	Westmin-Nexus
1988	5	1989.4	China Creek	Westmin-Nexus
1989	19	1589.9	Mineral Creek	Westmin-Nexus
1989	9	3310.7	Mineral Creek U/G	Westmin-Nexus
1989	16	1124.7	900	Westmin-Nexus
1990	4	not known	1050	Westmin-Nexus
2004	2	151.5	China Creek	Hanslit
2005	1	44.8	China Creek	Hanslit
2005	14	1572.6	1050	Bitterroot
2006	44	5327.8	Linda	Bitterroot
2006	9	1888.6	Mineral Creek	Bitterroot
2006	13	2336.0	900	Bitterroot
2006	1	258.2	Big Southeastern	Bitterroot
2007	21	6429.7	Big Southeastern	Bitterroot
2007	18	4607.3	Regina	Bitterroot
2008	16	2849.0	Linda	Bitterroot
2008	12	3588.7	Gap (MC West)	Bitterroot
2009	68	8645.5	Ember	Bitterroot
Total:	**549**	**93,760.0**		

The drilling results have been reported in several assessments reports that are available online in the BC Geological Survey ARIS database. Westmin/ Nexus published an estimated mineral inventory based on their drilling results; however, the estimate is not fully compliant with the current standards set out in NI 43-101 documentation, so should be viewed only as a guide to potential grades and volumes that could be outlined by further work.

Exploration results for the past drilling are discussed in Section 6.0 and drill core sampling procedures are described in Section 11.0.

10.2 2023 DRILLING

In 2023, the Company undertook a diamond drilling program to verify and extend areas of gold mineralization that had been indicated by historical drilling in the main Mineral Creek Zone, as well as in the Linda and Ember Veins. Drill hole locations were selected to focus on the Mineral Creek Fault Zone and related structures in the hangingwall, as potential hosts for mineralization.

Full Force Diamond Drilling Ltd of Peachland, BC conducted the drilling, utilizing a skid mounted rig capable of drilling HQ-size core with the ability to reduce to NQ-size core. All drilling was HQ size (63.5 mm) to reduce the effect of sampling bias caused by inherent inhomogeneity of gold in veins. Drill collars were located on existing forestry roads to reduce the impact and cost of road building. Completed holes had a cement cap placed on surface with casing stick-up to allow future re-entry for possible deepening or geophysical logging. Drilling totalled 4789 m in 15 holes, employing two shifts, averaging 93 m/day, and was completed in 52 days.

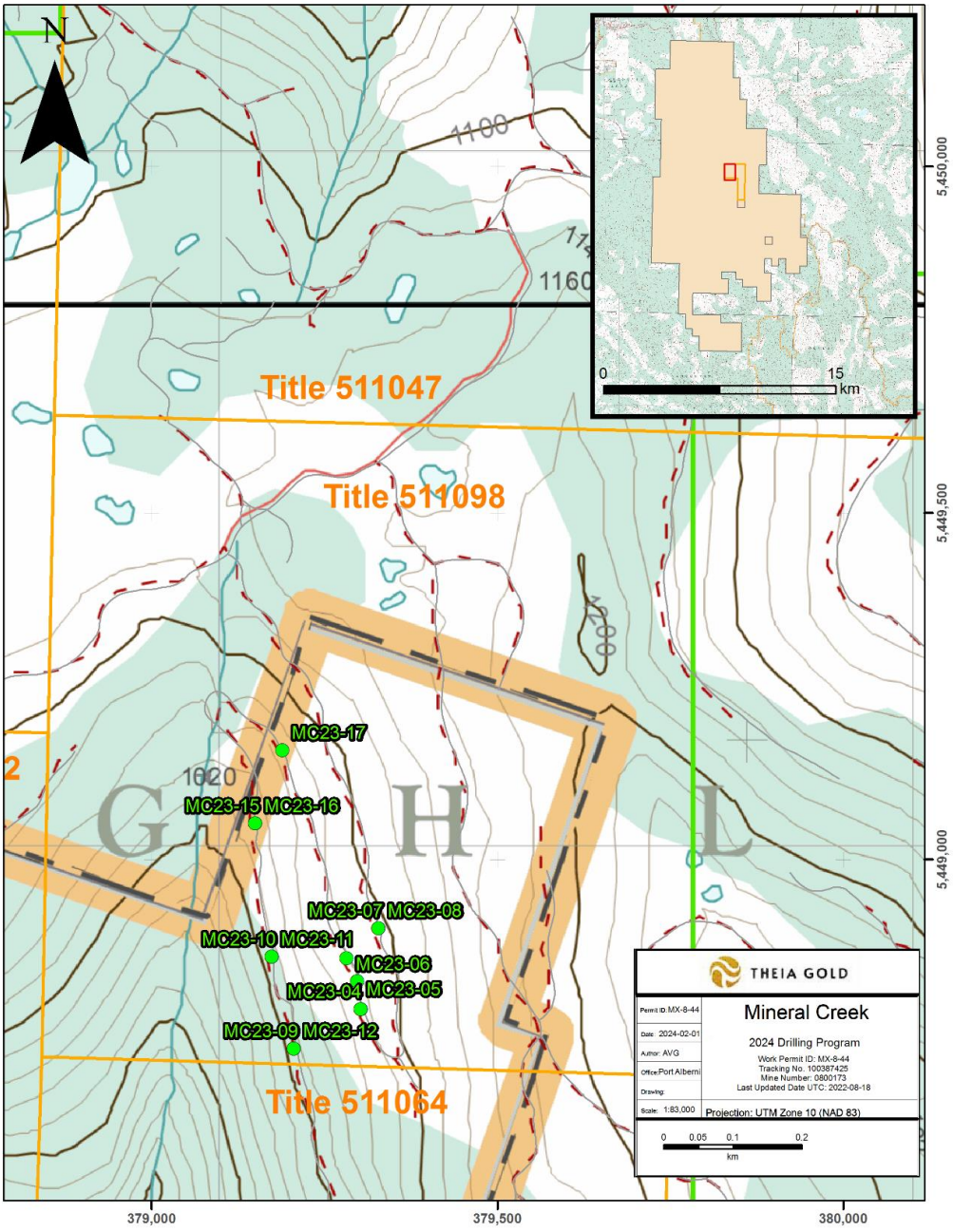
On completion of drilling, Underhill Geomatics was contracted to survey markers on drill pads using differential GNSS, with an estimated accuracy of +/- 3 cm. The collar locations and orientations of drill holes in the 2023 campaign are listed in Table 10.2 and shown on Figure 10.1.

Table 10.2 Drill hole locations and orientations

Hole ID	Easting	Northing	Elevation	Inclination	Azimuth	Depth
MC23-01	379203.07	5448764.56	1065.16	-75	270	180
MC23-02	379203.07	5448764.56	1065.16	-50	290	150
MC23-03	379203.07	5448764.56	1065.16	-62	295	630
MC23-04	379203.07	5448764.56	1065.16	-60	280	474
MC23-05	379197.65	5448805.11	1063.35	-55	305	450
MC23-06	379182.30	5448838.18	1065.70	-50	270	324
MC23-07	379228.56	5448881.21	1089.53	-60	270	169.5
MC23-08	379228.56	5448881.21	1089.53	-60	305	525
MC23-09	379106.30	5448708.00	994.78	-55	350	350.1
MC23-10	379074.23	5448840.71	1001.89	-55	340	336
MC23-11	379074.23	5448840.71	1001.89	-45	310	210
MC23-12	379106.30	5448708.00	994.78	-54	284.4	333
MC23-15	379050.18	5449033.02	1014.71	-74	267.6	249
MC23-16	379050.18	5449033.02	1014.71	-58.4	261.1	174
MC23-17	379089.74	5449138.48	1053.84	-59.8	264.8	219

Drillhole trajectories were surveyed at 50 m intervals using a Reflex Instruments multi-shot borehole survey instrument. Many of the holes deviated to the right by up to 15 degrees, primarily due to the rotation of the drill rods, and some of the holes flattened by up to 10 degrees. The downhole measurements allow accurate plotting of the drill holes and the mineralized intervals.

Figure 10.1 2023 drill hole collar locations



Summarized highlights of many of the mineralized intervals were extracted from the drill hole geological logs, and are described below.

Hole ID	Easting	Northing	Elevation	Inclination	Azimuth	Depth
MC23-01	379203.065	379203.065	1065.161	-75	270	180

- 0.86 g/t Au over 1.3 m from 84.5 m to 85.8 m in weakly sericite-carbonate altered basalt containing numerous small irregular quartz-sulphide veins.
- 1.57 g/t Au over 0.99 m from 162.51 m to 163.5 m in a quartz vein hosted by argillaceous sediments, intensely silicified, with breccia matrix filled with pyrite+arsenopyrite stringers; series of hairline fault gouge traverse the interval, left lateral oblique slip, nearly vertical.

Hole ID	Easting	Northing	Elevation	Inclination	Azimuth	Depth
MC23-02	379203.065	5448764.556	1065.161	-50	290	150

- 0.82 g/t Au over 1.3 meter from 74.5 m to 75.8 m in chlorite-sericite altered basaltic tuff (volcanic breccia) containing quartz veins and discrete quartz zones (about 50% vein material); pyrite occurs as subhedral to euhedral, very fine to fine disseminations in basalt and also as stringers with chlorite occupying the breccia matrix of the quartz vein.
- 32.6 g/t Au and 8.84 g/t Ag over 0.30 meter from 95.0 m to 95.3 in a healed fault zone, silicification (quartz vein) about 70%, with relict basalt tuff weakly silicified and gouged; very fine disseminated subhedral to euhedral pyrite, about 3-5%, mostly within the basalt groundmass.
- 0.73 g/t Au and 2.46 g/t Ag over 0.95 meter from 147.9 m to 148.85 m in a zone of sheeted quartz stringers/veinlets with a 6 cm healed silicified fault at 147.9 m.

Hole ID	Easting	Northing	Elevation	Inclination	Azimuth	Depth
MC23-03	379203.065	5448764.556	1065.161	-62	295	630

- 2.00 g/t Au over 1.23 meter from 69.0 m to 70.23 m in a zone of sheeted quartz veinlets (2-12 cm wide) with trace disseminations of fine, sub-euhedral pyrite in the vein, hosted by sericite-altered basaltic tuff.
- 64.95 g/t Au and 8.87 g/t Ag over 1.02 meter from 102.0 m to 103.02 m in quartz stockwork zone, green and white quartz veinlets, strong silica-moderate sericite-chlorite altered, pyrite disseminations confined mostly to sericite altered groundmass - hosted by sericite-altered basaltic tuff.
- 2.22 g/t Au over 1 meter from 104.0 m to 105.0 m in a narrow zone of fracture-fill quartz-carbonate stringers/veinlets hosted by weakly chlorite-epidote altered basaltic tuff.
- 1.45 g/t Au over 0.61 meter from 163.85 m to 164.46 m in a white quartz vein, breccia with sericite-chlorite-pyrite in relict host rock; pyrite about 2% sub- to euhedral and fine-grained.
- 0.87 g/t Au over 0.83 meter from 196.38 m to 197.21 m, and anomalous As (3291 ppm) over 1.36 m, in fine-grained basaltic tuff with interbeds of minor laminated argillite and discrete narrow veinlets/stringers with associated sericite halo and pyrite+arsenopyrite hairline stringers and dissemination in altered groundmass.
- 0.96 g/t Au over 2.35 meters from 207.35 m to 209.7 m, and anomalous As (2370 ppm) in finely-bedded laminated sericite-altered argillite with sheeted quartz-calcite stringers; pyrite, 3-5%, and disseminated arsenopyrite in both host rock and veins.
- 2.13 g/t Au over 0.91 meters from 270.80 m to 271.71 m, and highly anomalous As in sheeted quartz veinlets in a sericite-altered healed basaltic tuff breccia with 3-5% disseminated pyrite and arsenopyrite in veins and in sericite altered groundmass; quartz-

calcite occupies healed breccia matrix.

- 1.285 g/t Au over 0.9 meters from 326.5 m to 327.4 m, and anomalous As in fine-grained basaltic tuff with minor cherty argillite, with narrow sericite-chlorite-fuchsite selvage alteration with associated fine grained, subhedral pyrite disseminations.
- 0.775 g/t Au over 1.05 meters from 334.28 m to 335.33 m in fine-grained basaltic tuff traversed by a fault exhibiting breccia texture with discrete sericite as well as fuchsite-sericite sections (fault breccia); the brecciated matrix is filled with calcite; very fine pyrite+arsenopyrite disseminations in veins and groundmass, about 3%.

Hole ID	Easting	Northing	Elevation	Inclination	Azimuth	Depth
MC23-04	379203.065	5448764.556	1065.161	-60	280	474

- 26.06 g/t Au and 4.50 g/t Ag over 1.48 meter from 112.23 m to 113.71 m in a quartz vein with specks of visible gold, white, massive, with minor pyrite and arsenopyrite disseminations in hairline stringers.
- 16.2 g/t Au and 2.11 g/t Ag over 0.3 meter from 119.45 m to 119.75 m in a quartz vein in fine-grained basaltic tuff, chlorite-epidote altered, traversed with minor quartz-calcite veinlets.
- 1.03 g/t Au and 1.06 g/t Ag over 0.9 meter from 235.36 m to 236.26 m in a quartz vein, strong silicification, relict host rock not completely silicified, original color still visible, with pyrite aggregation common along vein selvages. The upper half is shattered and healed with gouge disseminated with fine pyrite, about 2%; some sections of sericite-fuchsite tuff.
- 1.22 g/t Au over 3.0 meters from 320.22 m to 323.22 m in fine- to medium-grained basaltic tuff and minor breccia with pyrite occurring along the margins of breccia fragments; minor calcite-ankerite breccia veins with blebby euhedral pyrite, minor pyrite veinlets, discontinuous, micro-faulted; common carbonate>>chlorite-pyrite veins.
- 2.01 g/t Au over 0.9 meter from 431.85 m to 432.75 m in a fault zone; intercalations of gouge and silica altered basalt; gougy intervals consist of very soft, light to dark clay with common mm-cm sized subangular to subrounded quartz fragments and silicified host rock clasts. Competent silica altered intervals are strongly sericite-altered, textures are destroyed. Fracturing and planes of weakness are ~65° to core axis.
- 1.099 g/t Au over 2.74 meters from 439.47 m to 442.21 m in a fault zone; intercalations of gouge and silica altered basalt; gougy intervals consist of very soft, light to dark clay with common mm-cm sized subangular to subrounded quartz fragments and silicified host rock clasts; pyrite distribution is patchy, trace fine-grained arsenopyrite.

Hole ID	Easting	Northing	Elevation	Inclination	Azimuth	Depth
MC23-05	379197.653	5448805.107	1063.351	-55	305	450

- 28.60 g/t Au and 2.73 g/t Ag over 1.0 meter from 57.0 m to 58.0 m in a quartz vein with specks of visible gold, white, massive, with minor pyrite and arsenopyrite disseminations in hairline stringers.
- 19.85 g/t Au and 2.03 g/t Ag over 1.0 meter from 144.5 m to 145.5 m in a quartz vein in pervasive sericite-altered basaltic lapilli tuff with epidote stringers and calcite fracture fills; mineralization is represented by medium-grained euhedral pyrite. Mineralized intervals also have small grey altered fractures.

- 8.27 g/t Au and 3.01 g/t Ag over 1.0 meter from 152.2 m to 153.2 m in a quartz vein in a sericite-chlorite-epidote-altered intrusive-looking mafic unit; mottled to pervasive calcite alteration; mineralization of 3-5% fine disseminated pyrite associated with weak pervasive sericite alteration and diffuse quartz vein at 152.55-152.90m. Lower contact sheared and broken.
- 0.71 g/t Au over 15.0 meters from 205.0 m to 220.0 m in fine-grained strongly altered argillitic sediments; strong sericite alteration with moderate pervasive calcite alteration; alteration is strongest around quartz veins and quartz breccias; interval shows 20-30% quartz veins and breccias 3-20 cm thick at 55˚-80˚ to core axis; strong disseminated pyrite mineralization around veins pf 3-8%, some euhedral pyrite but mostly anhedral; no arsenopyrite noted even though the interval exhibits anomalous As throughout. Intense gouge at 212.45-212.70m.
- 0.72 g/t Au over 4.00 meters from 412.0 to 416.0 m in intensely sheared basaltic unit; moderate to strong sericite along foliation with intense calcite and weak mottled fuschite. Shearing at 35-40° to core axis, 2-3% fine pyrite along shear planes. Strong 5-10% pyrite from 413.70-414.10 m. Some relict quartz and carbonate vein fragments from 413 to 417.25 m. Hematized quartz vein fragment at 415.20-415.30 m.

Hole ID	Easting	Northing	Elevation	Inclination	Azimuth	Depth
MC23-06	379182.301	5448838.183	1065.703	-50	270	324

- 10.22 g/t Au and 7.23 g/t Ag over 5.56 meters from 29.06 m to 34.62 m in buff-grey sericite-altered basalt; common quartz-carbonate-pyrite veining and stringers; discrete fault gouge at 30.61m and 31.73m, gouge is light to dark clay, minor diss pyrite within gouge.
- 1.155 g/t Au over 1.0 meter from 94.0 m to 95.0 m in planar, sheeted calcite veins and wispy, irregular quartz-epidote-calcite veinlets in basaltic crystal-lapilli-block tuff; fine- to medium-grained groundmass with common lapilli and minor volcanic blocks (up to 30cm).
- 1.63 g/t Au over 2.0 meters from 144.57 m to 146.57 m in three quartz-calcite-pyrite veins (5-30 cm wide) with specs of visible gold; gold-bearing vein is characterized by dominant grey-milky white quartz with minor calcite and chlorite, vein is planar, 70° to core axis, minor clay-pyrite gouge on upper fractured contact; three <1mm flecks of gold are present entirely within quartz (no associated minerals).
- 1.005 g/t Au over 0.75 meter from 197.75 m to 198.5 m in quartz-calcite-pyrite veins/veinlets with strong sericite halos, hosted by basaltic crystal lapilli tuff; some quartz is banded.
- 0.927 g/t Au and 0.52 g/t Ag over 58.41 meters from 248.67 m to 307.08 m, including 7.84 g/t Au over 0.68 m from 295.14 m, in fine-grained basaltic ash tuff; strong sericite alteration associated with quartz-pyrite veining; fine- and medium-grained disseminated and blebby pyrite, often cubic, forms rare clusters/framboids; quartz-pyrite stringers to veins, irregular and anastomosing; basal contact marked by sharp decrease of sericite alteration.

Hole ID	Easting	Northing	Elevation	Inclination	Azimuth	Depth
MC23-07	379228.562	5448881.214	1089.533	-60	270	169.5

- 2.25 g/t Au over 1.35 meter from 108.65 m to 110.00 m in 11 cm wide quartz-calcite vein with minor wispy pyrite stringers along vein margins and selective calcite alteration, hosted by mottled basaltic lapilli tuff with abundant pyrite mineralization.

- 22.20 g/t Au over 3.22 meters from 127.23 m to 130.45 m in grey-white cloudy quartz-calcite-pyrite veins with wispy dark, discontinuous pyrite stringers; visible gold occurs as <1mm flecks within quartz, no mutual grain boundaries; several flecks are circled with what appears to be pyrite.

Hole ID	Easting	Northing	Elevation	Inclination	Azimuth	Depth
MC23-08	379228.562	5448881.214	1089.533	-60	305	525

- 1.93 g/t Au over 5.39 meters from 31.11 m to 36.50 m in 'listwenized' basaltic lapilli tuff with fine-grained disseminated pyrite and fine-grained pyrite-quartz stringers.
- 1.61 g/t Au over 1.00 meter from 55.00 m to 56.00 m in pervasively calcite-altered mottled basaltic lapilli tuff; groundmass almost entirely replaced by calcite; minor calcite-epidote veinlets; weak pyrite mineralization.
- 153.93 g/t Au over 2.0 meters from 85.51 m to 87.51 m, including 306.00 g/t Au over 1 meter from 85.51 m, in a quartz-calcite vein hosted by weakly altered basaltic ash lapilli tuff; the vein contains blebs of massive fine-grained pyrite with arsenopyrite(?).
- 5.1 g/t Au over 1.0 meter from 105.5 m to 106.5 m in a 0.5 m bleached quartz-calcite-pyrite band in basaltic ash-lapilli tuff with common disseminated pyrite; weak pervasive silicification; minor calcite-quartz-epidote veinlets, planar, stringers are wispy.
- 1.185 g/t Au over 1.0 meter from 228.85 m to 229.85 m in basaltic tuff hematite-stained along fractures within a strongly chloritized interval with common calcite veinlets.
- 1.056 g/t Au over 4.04 meters from 237.36 m to 241.40 m in intercalated mudstone/siltstone and basaltic tuff intervals with patchy strong sericite alteration throughout; sericitic alteration is associated with quartz-calcite-pyrite veining and abundant disseminated fine-grained anhedral-euhedral pyrite.

Hole ID	Easting	Northing	Elevation	Inclination	Azimuth	Depth
MC23-09	379106.303	5448708.004	994.78	-55	350	350.1

- 2.24 g/t Au and 2.32 g/t Ag over 0.5 meter from 30.0 m to 30.5 m in a fine-grained argillized basalt-derived unit with strong sericite alteration and moderate pervasive calcite; alteration associated with low angle 1cm thick quartz>calcite veinlet at 15˚ to core axis; 3-5% disseminated fine-granted anhedral pyrite throughout.
- 2.65 g/t Au and 1.76 g/t Ag over 1.0 meter from 35.0 to 36.0 m in a small mineralized quartz>calcite breccia vein about 15 cm thick with weak colloform texture and angular clasts of wallrock 0.5-1 cm in diameter, 5 cm sericite alteration halo and mineralization of 5% fine disseminated to fracture filling pyrite.
- 1.325 g/t Au over 0.44 meter from 163.5 m to 163.94 in a strongly altered basalt (intense to strong silicification and moderate sericite with trace fuchsite); 10% 2-3mm thick quartz veinlets with one large vein 5cm wide.
- 1.648 g/t Au over 4.14 meters from 168.0 m to 172.14 m in a strongly altered interval of basalt; strong silicification with moderate sericite and trace fuschite; interval is strongly veined with 10-20% quartz ± cal veining with a moderate foliation at 45˚-30˚ to core axis; strong pyrite mineralization 5-8% fine-grained to medium-grained euhedral and anhedral disseminated throughout; trace possible arsenopyrite.
- 4.178 g/t Au over 2.10 meters from 194.9 m to 197.0 m in sericite-calcite altered

volcanic-derived sediments; veining of 10-20% quartz veins 0.5-3.0 cm wide with smoky grey quartz and weak colliform texture in places; some late calcite veinlets and stringers crosscut all other veins; very fine pyrite along vein selvages and weak disseminated anhedral pyrite disseminated in wallrock.

Hole ID	Easting	Northing	Elevation	Inclination	Azimuth	Depth
MC23-10	379074.231	5448840.71	1001.885	-55	340	336

- 1.47 g/t Au and 1.10 g/t Ag over 0.75 meter from 80.3 m to 81.05 m in a basaltic ash lapilli tuff; sericite alteration; abundant pyrite alteration; common quartz-calcite-pyrite veining, up to 30 cm; veins are quartz-dominant, planar, typically banded with alternating white and grey quartz; fine-grained disseminated, euhedral pyrite. This interval is at the center of a wide lower grade envelope averaging 0.71 g/t Au over 9.94 meters from 77.86 m.
- 1.07 g/t Au over 0.63 meter from 99.06 m to 99.69 m in a quartz vein hosted by sericite-altered basaltic ash tuff; trace fuchsite alteration; white-grey quartz with fine-grained, wispy to planar pyrite stringers.
- 4.08 g/t Au and 1.19 g/t Ag over 0.65 meter from 161.00 m to 161.65 m in low-angle quartz-chlorite-calcite-pyrite veins, minor gouge along fractures in mudstone/siltstone and basaltic ash tuff, laminated and bedded; weak pervasive chlorite alteration; moderate silica alteration.
- 1.16 g/t Au over 1.0 meter from 187.54 m to 188.54 m in an interval of strong silica alteration, some intense patches are grey and massive, with a single very fine-grained wispy, discontinuous pyrite veinlet hosted by basaltic ash tuff with minor mudstone-siltstone-fine sandstone intervals; basaltic ash tuff is dominant.

Hole ID	Easting	Northing	Elevation	Inclination	Azimuth	Depth
MC23-11	379074.231	5448840.71	1001.885	-45	310	210

- 3.685 g/t Au and 2.54 g/t Ag over 3.27 meters from 23.33 m to 26.6 m in a smoky-grey quartz vein and weak calcite fracture-fills and chloritic stylolites within a zone of strong sericite alteration; visible gold flecks at 23.33 m near the vein hanging wall contact and a 2 mm fleck at 23.75 m.
- 1.815 g/t Au over 0.6 meter from 40.0 m to 40.6 m in two mineralized quartz>calcite veins 3-5 cm thick, with strong sericite and 5-8% fine-grained pyrite halo; arbitrary lower contact as unit transitions to larger percentage of lapilli.
- 48.1 g/t Au and 4.05 g/t Ag over 0.41 meter from 86.75 m to 87.16 m in an interval of 3-5% fine disseminated pyrite around veins within lapilli tuff; moderate pervasive chlorite with weak patchy pervasive calcite and weak calcite fracture fills; weak epidote along fractures and some very weak shears.
- 1.36 g/t Au and 0.83 g/t Ag over 16.78 meters from 150.52 m to 167.3 m in a mineralized zone containing smoky-grey quartz veins 1-5 cm wide with weak disseminated pyrite; pyrite occurs as 5-8% fracture filling, disseminated, and some bedding plane-controlled fine anhedral grains throughout unit; trace arsenopyrite noted in wallrock near quartz veins.
- 1.28 g/t Au over 5.0 meters from 171.0 m to 176.0 m in moderate to strong pervasive chlorite with calcite altered amygdaloidal basaltic unit with a crackled-type texture with 5-10% calcite>quartz fracture fills and stringers.

- 1.36 g/t Au over 3.7 meters from 182.5 m to 186.2 m in an intensely sheared cataclastic interval; strong silicification, moderate sericite alteration; shearing is intense; 5% quartz vein fragments and few stringers within cataclasite; mineralization of 5-8% fine pyrite oriented along foliation.

Hole ID	Easting	Northing	Elevation	Inclination	Azimuth	Depth
MC23-12	379106.303	5448708.004	994.78	-54	284.4	333

- 2.14 g/t Au and 3.45 g/t Ag over 0.5 meter from 33.27 m to 33.77 m in quartz-pyrite veins with strong sericitic halo and wispy pyrite ± quartz stringers, quartz veins are grey-white with subangular clasts of wallrock.
- 1.10 g/t Au over 0.83 meter from 246.67 m to 247.50 m in a zone of quartz-pyrite ± calcite stringers hosted by 'listwenized' basaltic tuff; alteration destroyed textures throughout much of the interval; where texture is preserved, basalt is fine to medium grained tuffaceous with 2% fine grained crystals, altered to chlorite and fuchsite; pyrite within quartz veinlets is fine to medium grained, euhedral.
- 1.405 g/t Au over 0.75 meter from 267.25 m to 268.0 m in a zone of schistose and gouged basalt; moderate to strong shearing throughout; upper 1m of the unit is strongly sheared with wavy, fabric, quartz boudins with mylonitic texture; gouge intervals 10-40 cm thick.

Hole ID	Easting	Northing	Elevation	Inclination	Azimuth	Depth
MC23-15	379050.1805	5449033.018	1014.708	-74	267.6	249

- Visible gold (2mm grains) was observed at 21.06 m within a quartz vein, numerous small flecks of gold in a dark quartz-calcite vein at 72.0-72.38 m. Highlights of assay results include:
- 1.377 g/t Au over 8.25 meters from 20.75 m to 29.0 m in a strongly sericite and silica altered lapilli tuff with a quartz vein containing 5-8% disseminated to fracture filling pyrite; visible gold speck was observed at 21.06 m.
- 5.04 g/t Au over 2.0 meters from 72.0 m to 74.0 m, including 15.9 g/t Au over 1.0 meter from 72.0 m, in a quartz-calcite vein with many very small flecks of gold in dark purplish to grey quartz-rich fill; some rounded brecciated vein fragments within matrix; strong calcite alteration halo around vein but no sericite or fuchsite.
- 1.53 g/t Au over 2.5 meters from 94.0 m to 96.5 m in a low-angle quartz vein with dark grey to black stylolites and 5% fine pyrite; vein has weak sericite alteration halo with trace fuchsite after mafic clasts.
- 1.135 g/t Au over 1.0 meter from 138.0 m to 139.0 m in a weak cataclastic interval with quartz>calcite veinlets 1-2 cm thick; trace to 1% medium-grained to coarse-grained disseminated euhedral pyrite; strong mottled to pervasive calcite alteration with weak sericite along shear planes; moderate to weak pervasive chlorite.
- 1.485 g/t Au over 0.5 meter from 154.0 m to 154.5 m in a zone of moderate pervasive chlorite and calcite alteration in fine-grained bedded sedimentary unit with tuffaceous intervals.
- 1.437 g/t Au over 8.1 meters from 177.3 m to 185.4 m in the Mineral Creek Fault zone; intense cataclasite and faulting with 75% gouge and the rest is subangular to rounded clasts of relict quartz, calcite and more competent basaltic units; some quartz fragments appear to be smoky-grey quartz and could be from mineralized veins; mineralization of

very fine-grained disseminated pyrite in trace amounts through the gouge.

Hole ID	Easting	Northing	Elevation	Inclination	Azimuth	Depth
MC23-16	379050.1805	5449033.018	1014.708	-58.4	261.14	174

- Visible gold was identified at 44.90 m as two 1-mm flecks within a thin quartz-filled fracture. Highlights of assay results include:
- 0.955 g/t Au over 20 meters from 41.0 m to 61.0 m, including 3.49 g/t over 1.0 meter from 58.0 m, in an extensive zone of quartz ± ankerite veining in tuffaceous basalt host rock; alteration alternates between moderate chlorite and calcite with moderate sericite and weak silicification around veining showing abundant 2-5 mm quartz ± calcite low angle mineralized veinlets with strong 3-5% medium-grained anhedral disseminated to fracture-filling pyrite halos with sericite and some pyrite in vein selvages.
- 1.60 g/t Au over 3.70 meters from 65.0 m to 68.7 m in a zone of quartz ± ankerite veining in tuffaceous basalt host rock; chlorite-calcite-sericite-silica alteration, abundant 2-5 mm quartz ± calcite veinlets with 3-5% disseminated to fracture-filling pyrite, with sericite + pyrite in selvages.
- 1.894 g/t Au over 31.72 meters from 93.28 m to 125.0 m, including 9.72 g/t Au over 1.0 m from 106 m, in a zone of moderately foliated fine- to medium-grained basaltic tuffaceous rock; quartz veinlets and stringers are rare throughout the zone; mineralization of 1-3% fine disseminated to fracture-filling pyrite and some pyritic stringers throughout unit.
- 1.36 g/t Au over 1.01 meter from 130.34 m to 131.35 m in a cataclasite containing 10-20% sub-rounded to rounded clasts of quartz-carbonate vein fragments; trace pyrite disseminated in matrix of cataclasite.

Hole ID	Easting	Northing	Elevation	Inclination	Azimuth	Depth
MC23-17	379089.739	5449138.477	1053.837	-59.79	264.8	219

- 1.18 g/t Au over 1.15 meter from 44.85 m to 46.0 m in a zone of small shears with quartz veinlets and stringers with moderate sericite and 3-5% disseminated to fracture-controlled pyrite in basaltic lapilli tuff; quartz>calcite vein also at lower contact with 5-10% disseminated pyrite.
- 1.005 g/t Au over 1.00 meter from 49.0 m to 50.0 m in patchy weak sericite alteration with moderate pervasive chlorite alteration in basaltic lapilli tuff; weak pervasive calcite alteration present when there is no sericite; few small shears with quartz veinlets and stringers with moderate sericite and 3-5% disseminated to fracture-controlled pyrite.
- 1.571 g/t Au and 1.20 g/t Ag over 34.02 meters from 92.30 m to 126.32 m in strongly altered and mineralized basaltic tuff, with mafic dykes throughout the interval; alteration shows strong to moderate sericite replacing mafic phenocrystals; veining consists of 1-5% small 0.5-1 cm thick quartz veinlets and stringers.

Cross sections that graphically illustrate gold intercepts from several of the 2023 holes, as well as historical holes, are shown below in Figures 10.2 to 10.5.

Figure 10.2 Schematic cross section MC23-01, 23-02 and 23-04 viewed to N

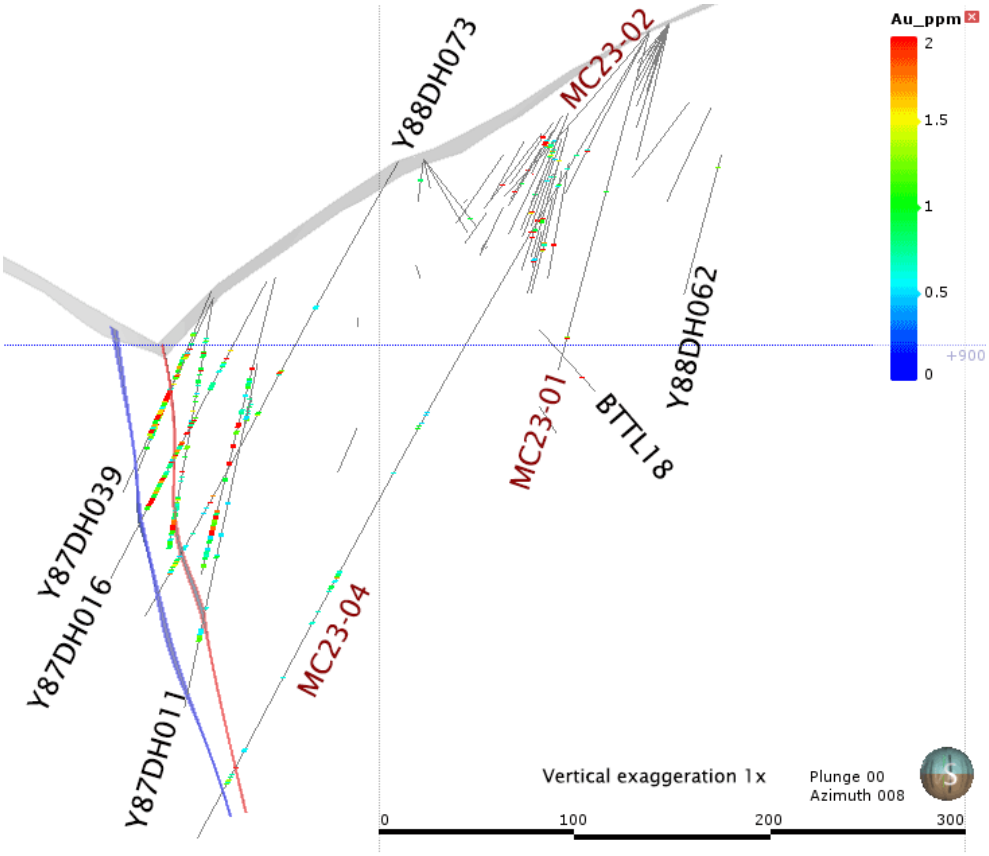


Figure 10.3 Schematic cross section MC23-05, 23-07, 23-10 and 23-11 viewed to N

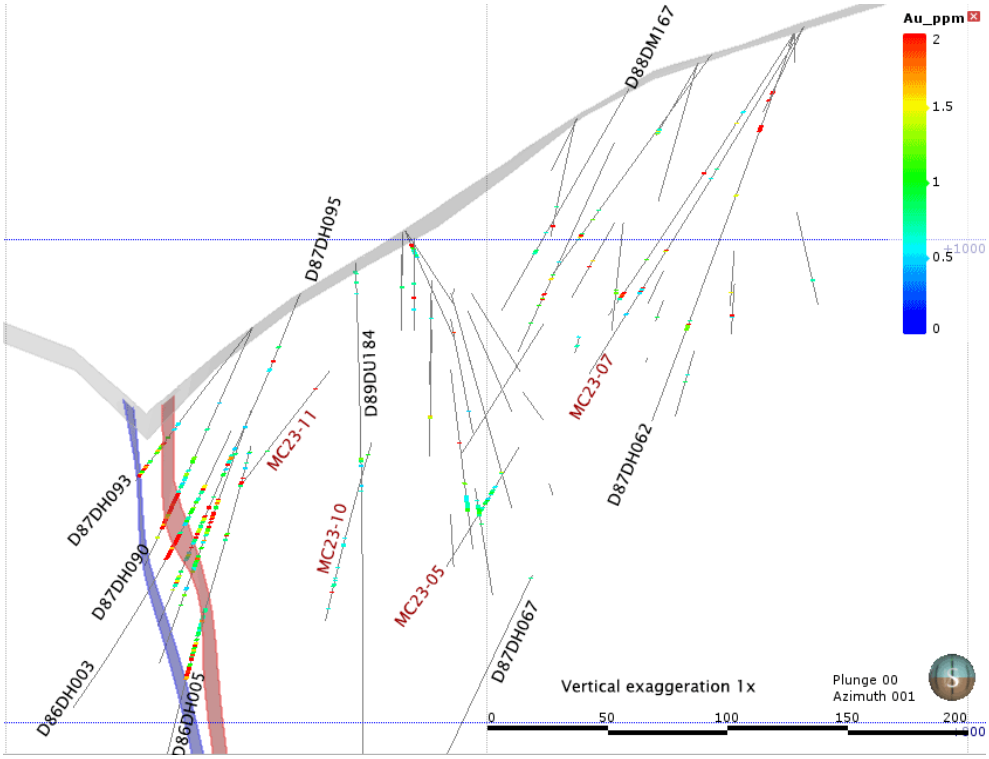


Figure 10.4 Schematic cross section MC23-15 and 23-16 viewed to N

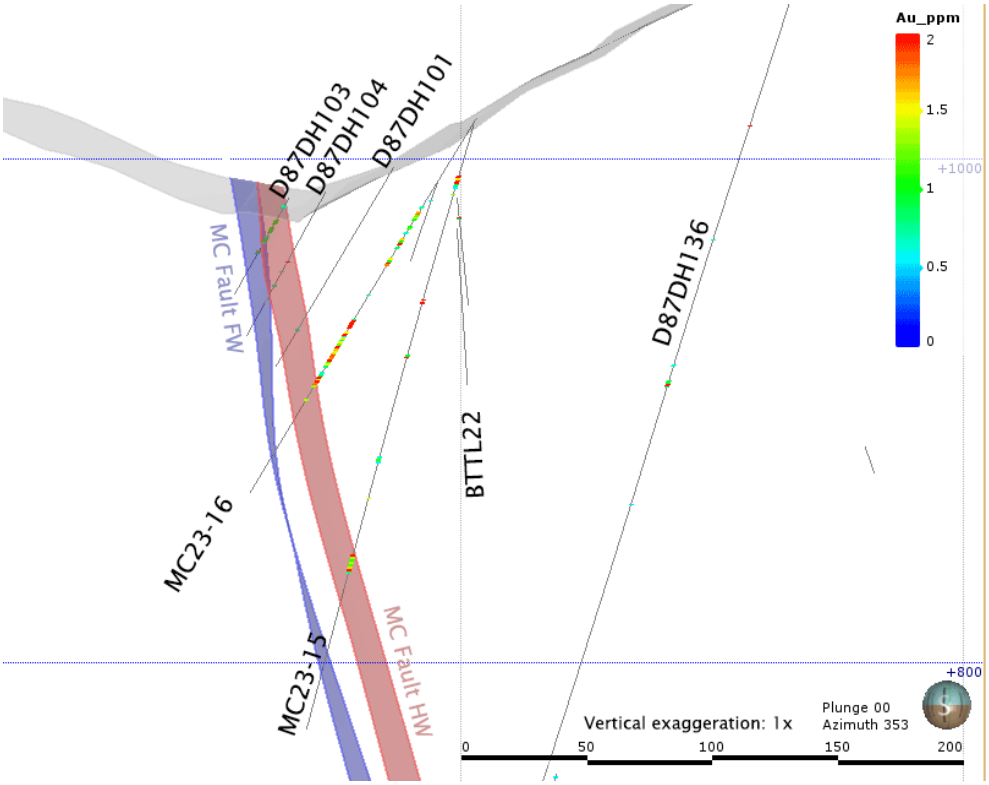
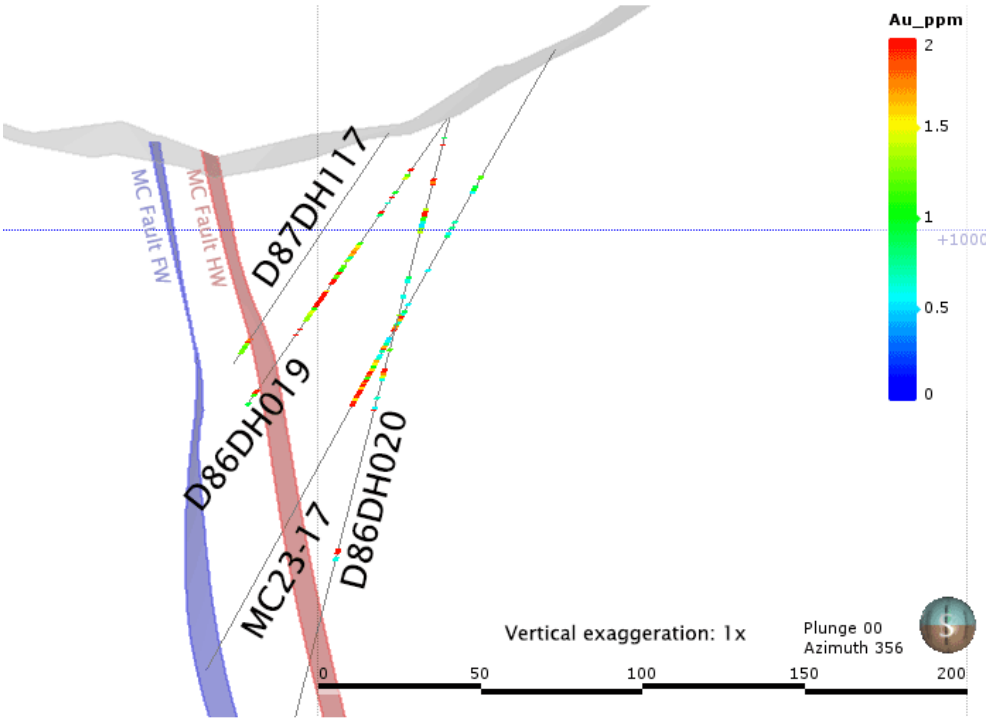


Figure 10.5 Schematic cross section MC23-17 viewed to N



The drill sections illustrate the broadly mineralized Mineral Creek Zone, which is a steeply dipping fault cataclasite zone that surfaces at the bottom of the Mineral Creek valley. Underlying the hillside to the east of the main zone there are many narrow, high grade vein intercepts in drill holes, illustrated graphically by red intervals, that are believed to occupy faults that splay off the Mineral Creek Fault. At least two of these veins (Linda and Ember) have been shown by drilling to contain consistently high gold grades over significant lengths and depths. Additional drilling may be required to determine a compliant mineral resource estimate for the Mineral Creek area.

11.0 SAMPLE PREPARATION, ANALYSES AND SECURITY

11.1 HISTORICAL SAMPLES

Reconnaissance rock samples collected by numerous geologists from 1978 to 2009 at various locations on the Property were typically not accompanied by standards, blanks or duplicates because they were intended as indicators of various styles of mineralization, or pathfinder minerals, for which exact values were not the main objective. These samples typically consisted of grab rock chips from some of the strongest mineralized areas and are not necessarily representative of overall grades. There were, however, checks on the accuracy of the analyses done in-house by the commercial laboratories, which routinely inserted blanks and standards to make certain that the analytical equipment was properly calibrated. Sample preparation, analyses and security procedures were not well documented for drill core samples collected by Westmin/ Nexus from 1986 to 1990, and by Bitterroot Resources from 2005 to 2009, however, some observations are detailed below.

Sample Preparation, Transportation and Security

The diamond drilling undertaken by Westmin/ Nexus produced LTK (35.3 mm), BQ (36.4 mm) and NQ (47.6 mm) sized core, with a few smaller packsack test drill holes undertaken in the 1050 Zone. Bitterroot drilling all produced NQ (47.6 mm) sized core. Besides geological logging of the core, core recovery was measured and calculated, and sample intervals were marked, with sample lengths typically between 0.2 and 1.0 m, based generally on geological divisions.

Core sample intervals were split or sawn in half along the long axis and half of the core was placed into a plastic bag with a sample tag designating the sample number. Bags were tied securely and placed into sacks, which were trucked on a regular basis by company personnel to Port Alberni and then transported by commercial trucking company to analytical laboratories in the Vancouver area.

Core boxes containing remaining core for some of the drill holes have been stored in strapped piles on a private property in Merville, located north of Courtenay, BC, however, many of the boxes with older small-diameter core are badly deteriorated and markings on the boxes are not readable in many cases. In 2022, Theia personnel re-boxed core from some of the boxes that

were less deteriorated, and regenerated the markers on the boxes, however, some of the core was not completely salvageable.

Laboratory Analytical Procedures

The drill core laboratory procedures for the various drilling programs at Mineral Creek were quite similar. The core samples were received at the lab preparation facilities where they were logged-in, sorted, dried and crushed to approximately 80% passing 10 mesh. The resultant crushed samples were then riffle split down to 250-gram sub-samples which were then pulverized to 95% passing 150 mesh.

The sub-samples were again riffle spit into smaller portions. A 10- to 50-gram split was utilized for gold assaying using either aqua regia and atomic absorption spectroscopy (AAS) or fire-assay fusion with AAS or ICP finish. In addition, a 0.25- to 0.5-gram split was digested with two acids (Agua Regia) and analyzed using ICP methodology for a suite of additional elements, including silver, copper, zinc and arsenic. Much of the core that Westmin/ Nexus collected from the Mineral Creek Zone and Linda veins was also analyzed for metallic gold due to the presence of free gold in quartz veins. Repeat fire assays were done using gravimetric finishes for any of the gold fire assays and ICP silver values that were over-limits. Copper, lead and zinc over-limits were done by AAS. The laboratory's in-house quality assurance and quality control procedures were utilized during the assaying of the samples including their own blanks, Standards and duplicates.

Duplicates, Standards and Blanks

The companies that undertook previous drilling did not report the inclusion of random samples of Standards or blanks in their core shipments; however, internal quality control and quality assurance procedures were utilized at the assay laboratories used for core analyses. For each sample batch the lab analyzed Standards and blanks to validate the accuracy of the analytical equipment. There were no reported irregularities with the checks conducted by the laboratories.

11.2 2023 DRILL CORE SAMPLES

Sampling Protocols

Drill core from the 2023 drilling program was treated using the following steps:

- Assembly of core pieces, measurement and core loss estimate
- RQD and structural measurements on oriented core
- Geological logging and selection of potentially mineralized core, with samples limited by change in lithology or evidence of mineralization
- Split potentially mineralized sections of core using diamond blade circular saw
- Washing of core to remove surface contamination
- Composite sample of split core, nominal 1m length
- Three-part sample tagging (core box, sample bag, retain stub in sample book)
- Marking of sample number on outside of sample bag
- Insertion of control samples in sample batch
- Samples securely stored in a locked warehouse facility within a fenced industrial area
- Chain of custody control using sample dispatch/receipt documentation

Laboratory Analytical Procedures

Core samples taken during the 2023 drilling campaign were sent to ALS Laboratory in Vancouver and followed the following sample preparation protocols (ALS code PREP-31):

- Jaw crush to 70% passing -2 mm
- Riffle split 250 g
- Pulverize to >85% passing 75 microns

Analysis of samples used the following steps:

- 4-acid digestion
- ICP-AES 51 element analysis, plus ICP-MS for Hg
- Fire assay ICP21 Au with ICCP-AES finish
- For Au samples exceeding 5 ppm, Fire Assay with gravimetric finish

Duplicates, Standards and Blanks

Certified Reference Material (CRM) provided by CDN Laboratories of Vancouver were selected to span the expected range of gold analyses. Controls including CRM, blanks, and duplicates of quartered core were inserted into the sample stream at a total 17% insertion rate.

Table 11.1 Control sample insertions

Sample Type	Number Inserted	Percent Inserted
Blanks	91	4%
Standards	161	7%
Duplicates	68	3%
Split Core	1904	86%
Total	2224	100%

Blanks

Blanks of prepared pulp weighing 100-140 g were inserted by Theia at an approximate rate of 1-in-25 samples. The blank chosen for the QAQC program was a commercial certified reference material (CDN-BL-10) prepared from granitic material by CDN Resource Laboratories.

CDN-BL-10 has values of <0.01 ppm Au, <0.01 ppm platinum, and <0.01 ppm palladium. As the main purpose of conducting multi-element analysis is for internal geochemical, lithological and alteration studies, blank analytical results for elements other than gold were not reviewed as part of the QAQC process.

Certified Reference Materials

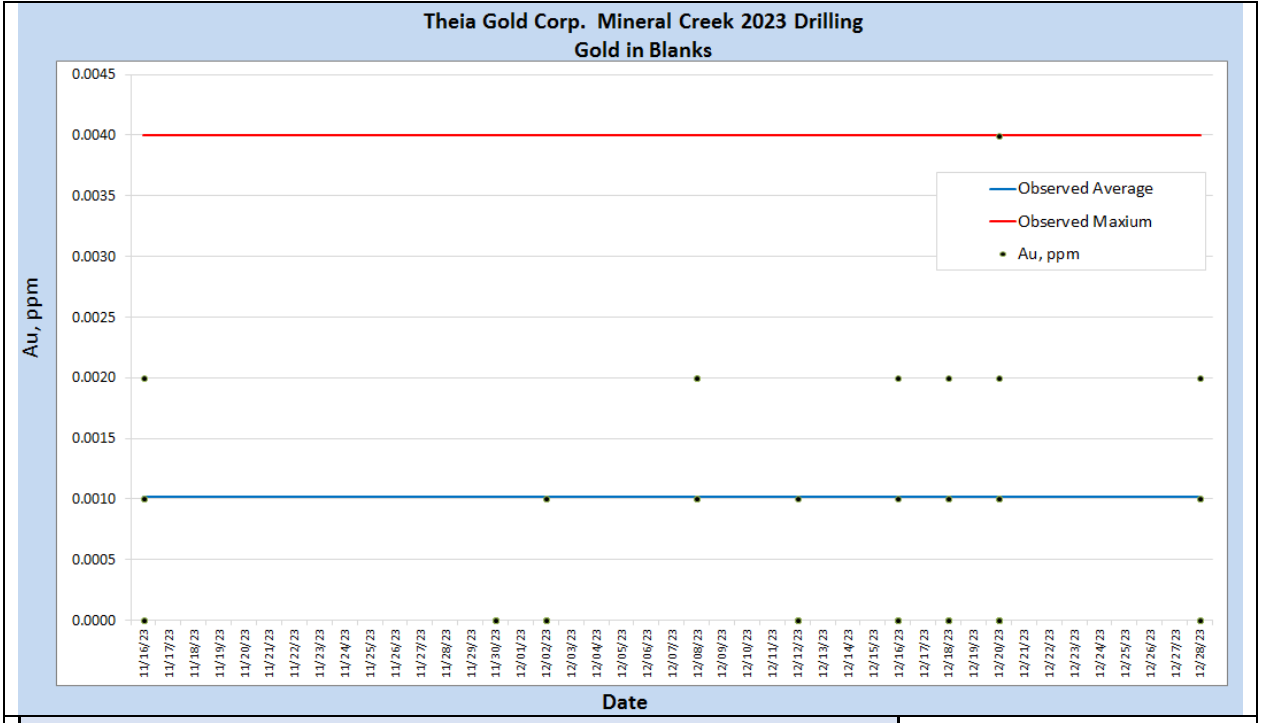
A total of 163 Certified Reference Materials (CRMs) were inserted at an approximate rate of 1-in-15 samples to assess the gold analytical performance of the laboratory. CDN Resource Laboratories of Langley, BC supplied four different CRMs, CDN-CM-48, CDN-GS-12B, CDN-GS-1ZA, and CDN-GS-P2B, in 50 g pre-packaged lots that represent low, moderate, and high gold values. The major lithologies of the CRMs include andesitic pyroclastic volcanics and tuff, sedimentary rock and granodiorite.

Quality Control Results

Blanks

During the 2023 drilling campaign, 93 blanks were included in the sample stream. No blank QAQC samples failed for gold (Figure 11.1). The reported values ranged from 0 to 0.002 ppm Au, with an average of 0.001.

Figure 11.1 Gold values for blank samples



Summary Statistics - Blanks			
Expected Values		Observed Values	
Mean	0.001	Number of samples	93
Maximum	0.004	Mean	0.001
		Percent of Maximum	1.08%

Certified Reference Materials

The average observed gold values for all four certified reference materials are slightly above the corresponding certified values, suggesting a slight high bias at the laboratory. However, the percentage of accepted for all four standards are within the acceptable range of 98%-102%. The observed Coefficient of Variation (CV) values for all reference materials is considerably below the corresponding certified values, or marginally higher, which suggests an acceptable variation of the reference materials (Table 11.2).

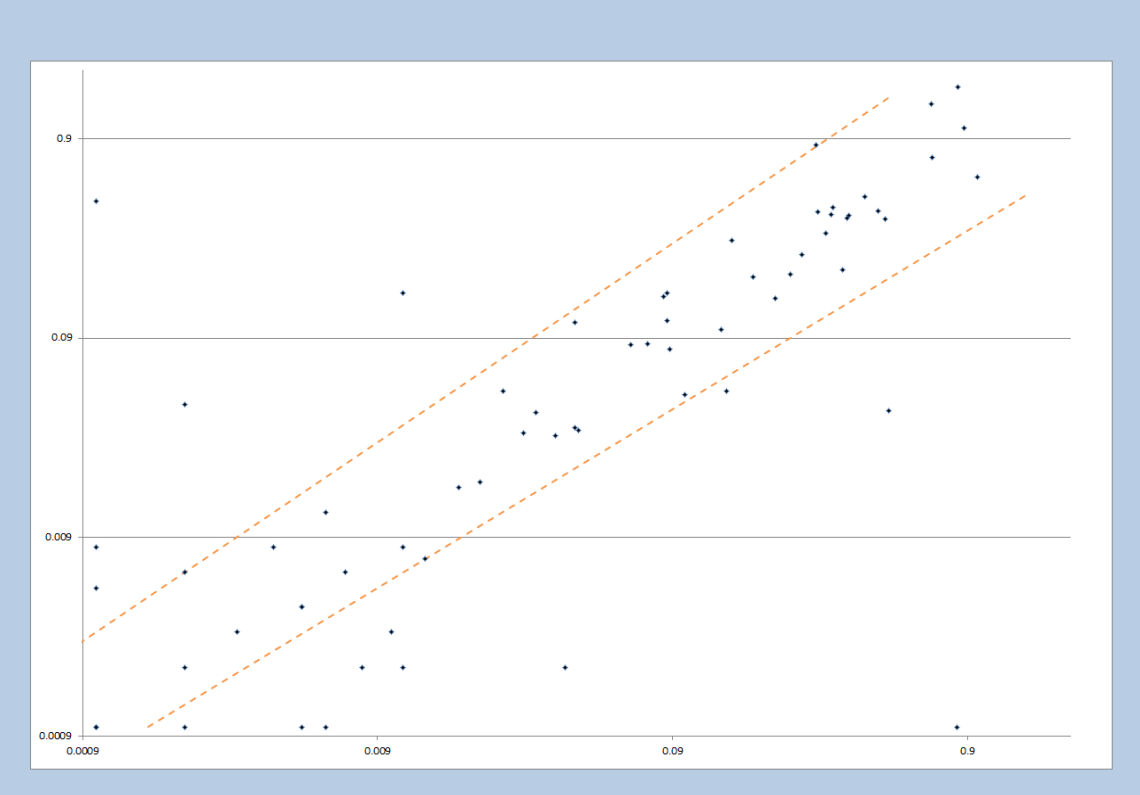
Table 11.2 Statistics for CRM gold results

QC	CDN-CM-48	CDN-GS-12B	CDN-GS-1ZA	CDN-GS-P2B	Total
Number	25	13	67	73	**178**
Outlier excluded	0	0	0	0	**0**
NSS, Excluded		1			**1**
Failure excluded	0	0	0	0	**0**
RE-Assayed	0	0	0	0	**0**
CRM Certified Value Au, ppm	3.462	11.87	1.367	0.433	-
CRM SD	0.138	0.366	0.0617	0.0191	-
CRM CV	0.0399	0.0309	0.0451	0.0440	-
Observed Mean Value Au, ppm	3.483	11.9083	1.3862	0.4398	-
Observed SD	0.1283	0.5612	0.0687	0.0114	-
Observed CV	0.0368	0.0472	0.0495	0.0259	-
Percent of accepted	100.61%	100.32%	101.40%	101.57%	-
Weighted average of percent of accepted	101.29%				-

Duplicates

In 2023, 72 quarter-core duplicate samples were analyzed for 50 elements by ALS' ME-MS61 method and for Au by ME-ISP21. 92.0% of the gold quarter-core duplicate pairs that are greater than 10 times the lower detection limit (0.001 ppm Au) reported values between ±50% of each other (Figure 11.2). Examination of the core for two apparent failures of duplicate assays (0.001 ppm vs 0.437 ppm Au, and 0.826 ppm Au vs 0.001 ppm Au) suggested that the variability could be due to coarse gold within faulted zones.

Figure 11.2 Gold value comparisons for quarter core duplicates



12.0 DATA VERIFICATION

12.1 HISTORICAL DATA

Analytical values for samples from the Property that are quoted in this report are, in most cases, substantiated by signed analytical certificates that were issued by an accredited laboratory that performed the work. The authors have no reason to doubt the validity of the analytical results and, as well, the authors are of the opinion that core sampling that was conducted by reputable exploration companies in the past would have been undertaken to industry standards by professional geologists or by geologists who were overseen by professional geologists or professional engineers. Any re-evaluation by the Company of areas that were previously explored by others should be subject to confirming the reported analytical results through re-drilling of selected holes or, if feasible, re-sampling of core from selected holes in storage.

BC Assessment reports, and some unpublished company reports, that documented previous sampling results contain copies of the lab analytical certificates. Many of the reconnaissance rock samples that have been reported did not specify the type of sampling or the dimensions of the sample so, in those instances, the authors have assumed that the samples probably consisted of selected rock chip or grab samples from some of the stronger mineralization. Diamond drilling reports for more recent work included data such as UTM coordinates of drill collars, downhole surveys of drill hole inclination and azimuth at recorded depths, as well as geological logs, downhole sample intervals, and analytical results. Some reports also included drill hole plan maps as well as vertical sections with graphical representations of analytical values.

12.2 INDEPENDENT VERIFICATION

Author Rowe visited the site on November 20, 2021 along with Theia Gold personnel to provide a property tour. At that time, 4 verification grab samples were collected, and are described below.

The four verification samples were located near the 1050 and 900 Zones (Figure 12.1). Three were road-cut bedrock grab samples from cm-scale Fe-carbonate, quartz veins that were observed to cut sheared basalt, chert and volcaniclastic rocks. The fourth was a grab sample from dump material of chloritized volcanic rocks cut by Fe-carbonate, quartz veins hosting pyrite and arsenopyrite (Table 12.1). Two of the grab samples returned gold values of 0.909 g/t and 7.99 g/t, with elevated As and Ag (Table 12.2).

Four of the principal target areas on the Property (Mineral Creek, Linda, 1050, & Rogers Creek Zones) and their respective mineral showings have been examined by Rowe in the past, and selected samples of vein mineralization were collected, primarily from prospective areas near the 1050 Zone. The authors have observed several outcrops of altered and locally mineralized rocks, photographed rock types and general vistas of the Property, and viewed sites of previous underground workings and drill sites to verify drill hole locations and determine any possible reclamation requirements.

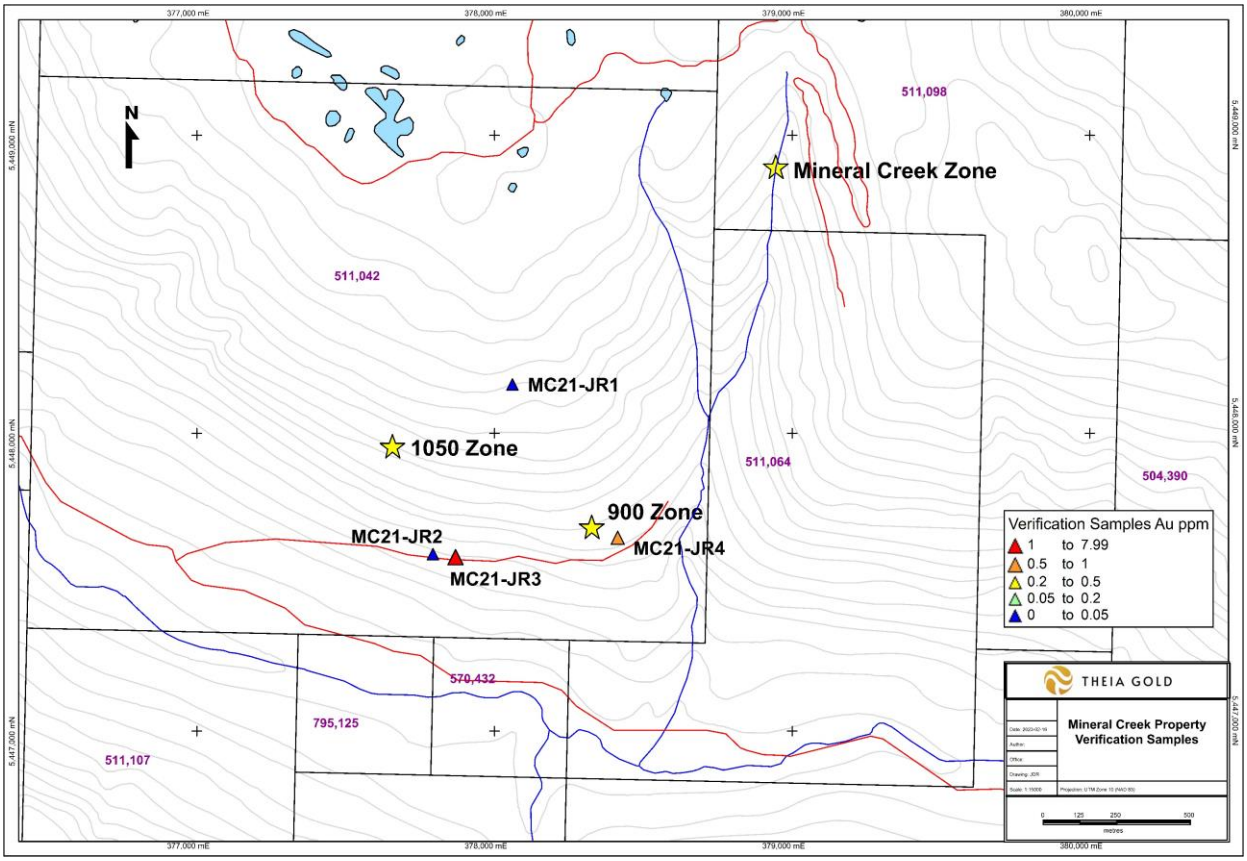
Table 12.1 Author's verification samples November 20, 2021

Sample	Type	E_N83_Z10	N_N83_Z10	Elev	Description
MC21-JR1	Rock Grab Chips	378060	5448164	908	Road cut: Ankeritic shear with cm-scale light grey-white quartz veins (up to 10 cm) at contact of weakly chloritic volcaniclastics to manganese coated basalt which is weakly phyric to the east. Quartz veins show chloritic septae, vugs and sigmoidal structures. Main quartz vein in shear oriented 185/60 W, while thinner quartz veinlets and veins in basalt to east are oriented 190/70 E and are possibly conjugate. More shears with thinner quartz veinlets and sericitization a few meters to the east.
MC21-JR2	Rock Grab Chips	377793	5447594	487	Road cut: Pyritized small shear with cm-scale quartz veining in weakly chloritized volcaniclastics. Quartz veins vuggy with minor Fe-Ox staining. Weak jasper noted in subordinate basaltic flow units where present overprinting background chloritization. Pyrite to 3% mostly in sheared selvages of the veins which are oriented at 125/75 NE. Horizontal slickensides in same orientation.
MC21-JR3	Rock Grab Chips	377869	5447584	500	Road cut with two, 2cm-wide, north dipping (80/70N), vuggy, rusty, quartz, Fe-carb veinlets with very little shearing at contact between chert and a lightly feldspar-porphyritic (dacitic ?) flow. No sulfides seen in the veins.
MC21-JR4	Rock Grab Chips	378414	5447649	586	Dump of strongly quartz, Fe-carb veined and brecciated chloritic basalt (?) or volcanic flow with pyrite and arsenopyrite blebs to 1% each. Could be a heap / dump of material from a small (>5m wide) trench, about 200 m from the 900 Zone adit.

Table 12.2 Verification samples selected geochemical results

SAMPLE	Au	Ag	As	Ba	Ca	Cu	Fe	K	Mn	Na	Pb	S	Zn
DESCRIPTION	ppm	Ppm	ppm	ppm	%	ppm	%	%	ppm	%	ppm	%	ppm
MC21-JR1	0.001	<0.5	<5	320	0.15	45	1.84	0.92	1090	0.2	3	0.01	94
MC21-JR2	0.009	<0.5	80	130	1.8	78	9.69	0.24	490	0.22	5	2.11	44
MC21-JR3	7.99	2.2	1005	130	0.08	86	2.69	1.07	1090	0.07	13	0.03	34
MC21-JR4	0.909	0.7	4300	180	10.6	11	2.99	0.81	862	0.53	4	0.42	31

Figure 12.1 Verification sample locations



Some of the historical drill core from the Project is stored at a private, secure yard in Merville, a short distance north of Courtenay, BC. Several of the boxes of core have been cursorily examined by the author (Rowe) in the past, however, the labels on the boxes and meterage blocks were in poor condition and often unreadable. The core that was observed contains several zones characterized by the presence of abundant quartz veining, some with disseminated sulfide minerals and rare specks of visible gold, as well as zones of alteration surrounding the veins. It is possible, although time-consuming, to re-label the core blocks and determine the mineralized intervals, however, for the purposes of the inspection at that time it was sufficient to determine that the reported drilling and sampling appears to have been performed in a professional manner and that there is veining and alteration present. Note that part of Theia's 2022 program involved re-boxing core from selected holes (Figure 12.2), and collecting samples for verification analyses and further test work, such as fluid inclusion studies.

Most recently, author McMullan visited the Mineral Creek Project, including the core logging facility and drill sites, on September 18-19, 2023 for core examination, review of safety procedures, sampling and logging protocols, and staff training. McMullan evaluated the analytical results from the 2023 drill core and QAQC samples and determined that the values were representative and that they verified the locations and tenor of mineralization that had been previously reported for the Mineral Creek, Linda and Ember Zones. McMullan has recommended

further work in the Mineral Creek area, as well as in areas of anomalous soil geochemistry outside of the Mineral Creek area.

Figure 12.2 Stacked boxes of drill core in Merville, BC from past Mineral Creek drilling programs. Some core has been transferred into new boxes.

13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

There has been no mineral processing or metallurgical testing of mineralization from the Property undertaken by the Company.

14.0 MINERAL RESOURCE ESTIMATES

Westmin/Nexus joint venture estimated a non-compliant mineral inventory in 1990, however, the Mineral Creek Property currently has no defined Mineral Resources. There is insufficient data to determine such an estimate.

15.0 ADJACENT PROPERTIES

Within the Mineral Creek Project area there is potential for discovery of various styles of mineralization such as those found on nearby properties. High grade gold-bearing veins are common on the Property and the area immediately to the southeast, such as at the Black Panther mine, where 1,715 tonnes were produced with recovered metals averaging 9.2 g/t Au, and 17.3 g/t Ag (Minfile 092F 084). Small-scale production also took place from similar veins in the Mineral Creek area, primarily in the 1930s, which included seven adits totalling 686 m of lateral development that reportedly produced 365 tonnes yielding 9425 grams (303 oz) of gold, and 1679 grams of silver (Massey, 1995). The Thistle occurrence, 900 m south of the Property, was the site of production from 1938 to 1942, extracting 6283 tonnes averaging 13.7 g/t Au, 10.5 g/t Ag and 4.9% Cu (MinFile No. 092F 083). At Thistle, pods of disseminated to massive sulfide mineralization, consisting of pyrite, chalcopyrite and minor pyrrhotite, plus sulfide-rich quartz-carbonate veins, occur in sheared, pyritic, quartz-sericite schists and chloritized mafic volcanic flows and tuffs of the McLaughlin Ridge Formation. The mineralization was originally believed to be skarn-type; however, more recent evaluations have suggested that it is VMS-type.

Sizeable mineral bodies that have been developed in the region include VMS deposits containing Cu, Zn, Ag and Au mineralization that have been mined in the past at the Mount Sicker mines, as well as at the currently operating Myra Falls mine. These deposits are within 80 km of the Property to the southeast and the northwest, and are described above in Sections 7.1 and 8.0.

Based on the abundance of mineral occurrences and drill-defined deposits surrounding and on the Mineral Creek Property, there is good potential for discovery of mesothermal, shear/ vein-hosted high-grade Au-Ag, or VMS-style Cu-Zn-Pb-Ag-Au mineralization within the Property area. Distinctive characteristics of the nearby known mineral occurrences will help to guide further exploration at Mineral Creek.

16.0 OTHER RELEVANT DATA AND INFORMATION

There is no other relevant data or information required for disclosure in this NI 43-101 technical report.

17.0 INTERPRETATIONS AND CONCLUSIONS

17.1 DISCUSSION - HISTORICAL WORK

Previous exploration programs within the Mineral Creek Project area have focused on discovery of high-grade precious metal veins or VMS-style mineralization, similar to some of the deposits found on nearby properties. Significant mineralization of each of these types has been revealed in three areas of the Property – Mineral Creek, Rogers Creek and Regina-Lizard Lake. Historical work has primarily been concentrated in these three areas, leaving extensive regions of this large property under-explored.

Of the three main targets, the **Mineral Creek** area in the central part of the Property has received the greatest amount of drilling to date. This work has primarily tested for extensions of a broad, low-sulfide, gold-bearing shear/ vein system associated with the Mineral Creek Fault, as well as splays from the fault containing relatively narrow quartz veins that have returned a number of high gold and silver values from diamond drilling and from limited historical underground mining.

The cataclasite-hosted Mineral Creek Zone has been drill tested by 219 holes (43,650 m). Many holes had drilled intercept lengths of greater than 30 m, although true width of the zone is thought to average in the 20 to 30 m range along a 500 m strike length.

An exploration tunnel was excavated in 1988 along the hanging wall side of the Mineral Creek Fault Zone for 1.8 km, at which point two crosscuts were driven across the Mineral Creek Gold Zone, as well as a 27m long sub-drift along the zone, at the top of a short raise. Continuous chip sampling was undertaken on the walls of the crosscuts that pass through the Mineral Creek Zone and along the sub-level drift at 1-meter intervals. Crosscut samples averaged between 2.34 g/t Au and 3.62 g/t Au over 11 m to 30 m widths of the zone. Some exploration drilling of the Mineral Creek fault zone was done from drill stations in the main tunnel. A few significant gold intercepts were returned, but the underground drilling program was cut short before completion and no further underground drilling was done.

In 1989, a mineral inventory estimate that is **not NI43-101 compliant** was conducted by Westmin Mines Ltd., based on the results of approximately 210 drill holes in the Mineral Creek Zone along a 500-meter strike length, with a width averaging 20 m, and a depth of 200 m. A Westmin internal company report by Prefontaine, Walker and Wojdak (1991) stated a Probable Mineral Inventory for the Mineral Creek Zone estimated at 172,082 tonnes grading 3.26 g/t gold, containing a total of 18,036 ounces of gold.

Many of the holes that the Westmin/ Nexus joint venture drilled in the Mineral Creek Zone also intersected the Linda Vein that splays to the northeast from the main fault structure. Westmin’s 1989 mineral inventory estimate also included a non-compliant Probable Inventory in the Linda Zone of 51,871 tonnes grading 8.40 g/t gold, containing 14,008 ounces of gold, based on the results of approximately 30 drill holes in an area measuring about 200 m long by 2 m wide by 20 m of depth.

In 2006 and 2008, sixty additional holes were drilled in the Linda Zone by Bitterroot Resources Ltd. tracing the zone for about 100 m of strike length and to a depth of 50 to 80 m. The drilling appears to have defined a high-grade shoot near surface that may plunge moderately steeply to the southwest. Intercepts of the vein/ shear zone ranged from 0.1 to 7.7 m (drilled length) and some of the best results included 159.03 g/t Au over 7.2 m (BTT-L54), 215.15 g/t Au over 1.65 m (BTT-L58) and 45.48 g/t Au over 2.7 m (BTT-L3) (unpublished company reports). The vein's true thickness ranges from a few centimeters to 1.3 meters and in places it splits into two or three veins.

A bulk sample estimated at 620 tonnes was collected from the Linda Vein by open cut and an 11 m long drift, driven in 2009 and 2010. The quartz vein material was crushed and milled in a small ball mill on site, then run over a shaker table to produce a pyritic concentrate that was sold to a refinery. Concentrate material assayed at the refinery returned values of up to 15.685 oz/ton Au & 4.356 oz/ton Ag. The total gold recovered in dore and concentrate was estimated to be about 8000 grams (257 oz), however, there is no detailed accounting available to the authors.

The Ember Vein parallels the Linda Vein, about 80 m in the hangingwall. Bitterroot drilled this vein with 68 holes in 2009 tracing it along a strike length of 130 meters and an elevation range of about 90 meters. The vein's thickness ranges from a few centimeters to 1.3 meters and in places it splits into two or three veins. The gold grades vary from trace up to 467.0 g/t gold across the width of the vein and the highest grades are often accompanied by visible gold grains. Of the 68 holes, 11 returned gold values greater than 20 g/t, over sample intervals of 0.15 m to 0.85 m.

There are indications of additional parallel veins on the east side of the Mineral Creek Fault; the HW Vein about 30 m in the hangingwall of the Ember Vein, and the Lower Linda Vein, either a fault offset or footwall vein to the Linda Vein. These have been intersected in a few drill holes but not well defined.

To the west of the Mineral Creek Fault, and 1.1 km southwest of the Mineral Creek Zone, the 900 Zone has received 8,194 m of drilling in 84 holes, defining a steeply dipping, pipe-like mineralized zone at the juncture of two faults. Quartz veins and stockworks carrying significant gold values within the fault intersection zone cover an area of about 180 m x 150 m, to a depth of over 120 m. Westmin quoted a non-compliant Probable Inventory for the 900 Zone of 28,294 tonnes grading 11.69 g/t gold, containing 10,634 ounces of gold, in an area about 100 m long by 40 m wide by 20 m deep. In 1995, under option from Westmin, White Hawk Ventures Inc. developed a portion of the 900 Zone and mined a bulk sample estimated to contain approximately 800 ounces of gold in about 900 tonnes of vein rock. In 1997, 894 tonnes of bulk sample material was milled offsite, producing 7,478 kilograms of concentrate, which was shipped to Cominco’s smelter in Trail for refining. Gold values were not reported.

The 1050 Zone, about 600 m west of the 900 Zone, is another area of high-grade gold veining that has been partly explored with 14 drill holes in 2005. The holes returned some excellent values from drill core, based on unpublished Bitterroot drill data, such as 244.0 g/t Au over 0.8 m and 34.1 g/t over 5.3 m (drillholes BTT-1053 and BTT-1058), however true widths were not determined.

Considerable exploration drilling has taken place in the Mineral Creek area, revealing several zones of significant gold mineralization. Most of the zones are open to expansion through further drilling and there is potential for discovery of new mineralized veins near the Mineral Creek Fault based on distribution of anomalous gold soil geochemistry.

The **Rogers Creek** area, in the north part of the Property, was explored by Westmin in the early 1980's revealing a broad alteration zone and surface showings with VMS-style mineralization, from which samples have returned assays of up to 14.1% zinc, 0.87% lead and 0.12% copper over 20 cm. Drilling of 3 holes in 1984 on geochemical and geophysical targets returned 2.06% zinc, 0.32% copper, 0.04% lead and 5.8 g/t silver over 0.6 meters, consisting of thin bands and disseminations of pyrite, sphalerite and chalcopyrite. No further drilling has been undertaken in this region, even though a large horseshoe-shaped coincident Cu-Zn soil anomaly to the southeast of Rogers Creek follows the contact between Nitinat Formation and overlying McLaughlin Ridge Formation for more than 2 km. The McLaughlin Ridge Formation contains felsic volcaniclastic units with interbedded tuffaceous siltstone and argillite, and coarser pyroclastic rocks found toward the top of this unit that indicate the possibility of a felsic volcanic center nearby. VMS mineralizing systems are known to be commonly associated with felsic volcanic and sedimentary rocks. Additionally, recent work in the area has identified felsic tuff, chert and jasper in Duck Lake Formation (Ruks, 2015) indicating potential for VMS-type mineralization at various levels within a thick stratigraphic section of Sicker Group rocks in the Property area. At the Myra Falls mine, located 80 km to the northwest, more than 20 lenses of massive sulfides are found in Sicker Group rocks, within a section of Myra Formation several hundred meters in thickness, where they are typically confined to intervals of coarse-grained rhyolitic volcaniclastic rocks, sandstones, and mudstones.

Based on the known showings, broad alteration zones and extensive Cu and Zn soil anomalies in the Rogers Creek area, further work consisting of geophysical surveys, geological modelling and drill testing of favourable targets is warranted.

The **Regina and Lizard Lake** areas indicate potential for both gold veins and VMS-type mineralization. Westmin/ Nexus joint venture drilled 10 holes to the east of the historical Regina adits, to test prospective VMS targets represented by surface showings, IP geophysical anomalies, soil geochemical anomalies and stratigraphic modelling. A series of holes encountered scattered disseminated pyrite with minor chalcopyrite and sporadic anomalous Au and Ag values, with best results of 2.0% copper, 2.3% zinc and 0.14% lead over 1 m. Later drilling in this area by Bitterroot traced a sulfide-mineralized layer of chlorite-epidote-calcite-altered basalt within 100 meters of surface from hole to hole throughout the drilled area. Although the main sulfides comprised narrow pyrite bands, veins and disseminations, there was occasional copper and zinc mineralization present in this layer, in concentrations up to a few percent. As stated by Wilson & Price (2008), the pyrite, with local chalcopyrite/ sphalerite mineralization, bears some resemblance to footwall stringer mineralization at the Myra Falls deposits. Areas of anomalous Cu, Zn and As in soil to the north and south of the Regina showings indicates potential for additional mineralization in Duck Lake Formation volcanic rocks in this part of the Property and further exploration is warranted.

Near the south end of Lizard Lake, to the east of the Mineral Creek Fault, in the early 1980's major surveys were undertaken by UMEX and Noranda, included soil geochemistry, geological

mapping, magnetometer and IP surveys, as well as limited trenching, rock sampling, EM surveys and drilling of several diamond drill holes. Their work located a few broad arsenic and gold soil geochemical anomalies with some associated IP anomalies and a best reported drill intersection of 2 g/t Au over 0.6 m. Most of the gold mineralization was found to be associated with pyrite and arsenopyrite in small quartz veins. This area is underlain by McLaughlin Ridge Formation that may include felsic volcanic rocks, and exhibits strongly anomalous Cu, As and Au geochemistry. Good potential exists for VMS-type mineralization in these rocks, as well as gold-bearing veins.

Just north of Lizard Lake, Bitterroot drilled 22 holes in 2006-07 at the Big Southeastern Zone to test the Mineral Creek Fault and potential splay structures for gold-bearing veins. Significant gold assays ranging from 5 to 9 g/t Au were returned from several of the Bitterroot holes, but over narrow widths of 0.3 to 0.9 m. The mineralization comprised pyrite, arsenopyrite and rare chalcopyrite in thin quartz veins, gouge seams and shear-breccias with ankerite-silica alteration halos in basaltic rocks, which resemble the mineralized areas along Mineral Creek, 3.5 km to the north.

Other areas of the Property have indicated mineral potential, based on clusters of soil geochemical anomalies. An area on the west side of the Mineral Creek Fault, located 2.5 km north of the Mineral Creek Zone has coincident Au-As anomalies over an area of about 200 m by 250 m. Two holes drilled by Westmin in this area tested the Mineral Creek Fault, but did not adequately test the soil anomalies, which are located to the west of the area drilled.

Gold-in-soil anomalies about 400 m to 1500 m north of the 900 Zone are also located west of the Mineral Creek Fault, and the trend of the anomalous soils suggests possible northeast-trending gold-bearing quartz veins. Bitterroot drilled 6 holes in one part of the anomaly, intersecting 1 to 4 g/t Au over narrow widths of 0.4 to 0.6 m, however, some of the strongest geochemical anomalies were not tested.

About 3 km west of the Mineral Creek Zone, in the west part of the Property, a northwest-trending copper-in-soil anomaly extends for 1600 m and is up to 400 m wide. This anomaly overlies a small diorite stock of the Island Plutonic Suite and basalt flows of the Karmutsen Group. Quartz-carbonate veins and stringers with pyrite, chalcopyrite and minor arsenopyrite occur in the area. Programs of silt, soil, and rock geochemical surveys within this copper anomalous area returned samples containing anomalous gold values. One sample, described as a mafic intrusive with malachite staining, assayed 0.39 g/t gold, 0.266% copper and 0.008% zinc. This area has potential for stockwork-type Cu-Au mineralization in intrusive and adjacent volcanic rocks.

In the southeast part of the Property an area measuring about 5 km by 3 km, underlain by prospective Duck Lake and Nitinat Formations, has not been tested by soil sampling. These formations have only recently shown potential for hosting VMS-type mineralization. This area should be initially evaluated by stream sediment sampling, followed by selective reconnaissance

soil sample lines that test any sediment anomalies and also cover geologically modelled prospective areas.

The authors conclude that the Mineral Creek Property, that is the object of this report, has good potential to host significant mineral deposits of gold-bearing veins and VMS-type Cu-Zn-Ag-Au mineralization, and further work is recommended, as outlined in Section 18.0.

17.2 DISCUSSION – 2023 DRILLING CAMPAIGN

The 2023 drilling program in the Mineral Creek area indicated, in general, that gold correlates with the occurrence of pyrite, and commonly arsenopyrite, within quartz-carbonate veins, and as fine disseminations and stringers in chlorite-sericite-carbonate alteration envelopes surrounding veins or shear zones. Correlation coefficients derived from several of the other elements analyzed in the drill core have shown notable strong positive correlations of Au with Ag, Sb, Bi, Mo, Cu, Pb and Zn. Plotting of the geochemical results for these elements on a property-wide scale has provided a useful guide for focussing exploration in new untested target areas.

Gold mineralization in the Mineral Creek area is typically hosted by basaltic flows and volcaniclastic rocks, with intercalated fine-grained, cherty, sedimentary rocks. Mafic dykes are common throughout the volcanics but their relationship to mineralization is not known. Gold appears to occur in two modes: low grades associated with disseminations and stringer mineralization within a strongly altered fault cataclasite zone that is up to 10’s of meters in width; and high grades within sub-meter-scale quartz-calcite veins.

An example of the low-grade disseminated type is demonstrated by the intercept in hole MC23-17 from 92.30 m to 126.32 m. Table 17.1 illustrates the relatively continuous Au and Ag mineralization over this interval, with spikes of higher grades such as 3.50 g/t Au and 3.62 g/t Ag over 0.85 m, that are typically attributed to the presence of narrow quartz-calcite veins containing local specks of native gold.

The second mode of gold mineralization, in narrow high-grade veins, is demonstrated by the intercept in hole MC23-08 from 85.51 to 87.51 m, shown in Table 17.2. The weighted grade over this 2-meter interval is 153.93 g/t Au. The upper 1-meter sample returned 306.00 g/t Au and 50.5 g/t Ag from a 45 cm quartz vein containing fine wisps and sparse disseminations of pyrite and minor arsenopyrite, with several fine specks of native gold. The lower 1-meter sample, which returned 1.87 g/t Au, consisted of sericite altered, basaltic tuff host rock with fine quartz-calcite-pyrite stringers and pyritic fault gouge next to the quartz vein. It is apparent that high gold values are confined to quartz veins and quartz breccias and the disseminated and stringer sulfide mineralization found in altered wallrocks may typically contain gold values in the 1 to 3 g/t range.

Table 17.1 Wide low-grade intercept example

MC23-17

Wide low-grade intercept

Hole ID	From	To	Interval	Au ppm	AuxL	Ag ppm	AgxL
MC23-17	92.30	93.50	1.20	0.898	1.0776	1.44	1.728
MC23-17	93.50	94.50	1.00	0.607	0.607	1.79	1.79
MC23-17	94.50	95.50	1.00	2.850	2.85	1.52	1.52
MC23-17	95.50	96.57	1.07	1.685	1.80295	1.2	1.284
MC23-17	96.57	97.25	0.68	0.672	0.45696	0.53	0.3604
MC23-17	97.25	98.00	0.75	1.135	0.85125	1.37	1.0275
MC23-17	98.00	99.00	1.00	1.715	1.715	1.76	1.76
MC23-17	99.00	100.00	1.00	2.030	2.03	4.27	4.27
MC23-17	100.00	101.10	1.10	1.685	1.8535	2.29	2.519
MC23-17	101.10	102.00	0.90	0.363	0.3267	0.29	0.261
MC23-17	102.00	103.00	1.00	0.529	0.529	0.37	0.37
MC23-17	103.00	104.00	1.00	0.585	0.585	0.38	0.38
MC23-17	104.00	105.00	1.00	0.772	0.772	0.48	0.48
MC23-17	105.00	105.70	0.70	1.660	1.162	2.63	1.841
MC23-17	105.70	106.55	0.85	3.500	2.975	3.62	3.077
MC23-17	106.55	107.30	0.75	0.682	0.5115	0.56	0.42
MC23-17	107.30	108.00	0.70	0.437	0.3059	0.47	0.329
MC23-17	108.00	109.00	1.00	0.559	0.559	0.34	0.34
MC23-17	109.00	110.00	1.00	0.675	0.675	0.4	0.4
MC23-17	110.00	111.00	1.00	1.655	1.655	0.72	0.72
MC23-17	111.00	112.00	1.00	1.540	1.54	0.75	0.75
MC23-17	112.00	113.00	1.00	1.040	1.04	0.49	0.49
MC23-17	113.00	114.00	1.00	1.610	1.61	0.71	0.71
MC23-17	114.00	115.00	1.00	1.995	1.995	0.89	0.89
MC23-17	115.00	116.00	1.00	1.820	1.82	1	1
MC23-17	116.00	116.70	0.70	1.130	0.791	0.65	0.455
MC23-17	116.70	117.70	1.00	2.160	2.16	1.46	1.46
MC23-17	117.70	118.50	0.80	1.710	1.368	1.34	1.072
MC23-17	118.50	119.50	1.00	3.490	3.49	1.68	1.68
MC23-17	119.50	120.50	1.00	1.600	1.6	1.59	1.59
MC23-17	120.50	121.50	1.00	2.810	2.81	1.67	1.67
MC23-17	121.50	122.53	1.03	2.870	2.9561	2	2.06
MC23-17	122.53	123.50	0.97	1.905	1.84785	1.2	1.164
MC23-17	123.50	124.50	1.00	1.525	1.525	0.69	0.69
MC23-17	124.50	125.50	1.00	1.930	1.93	1.3	1.3
MC23-17	125.50	126.32	0.82	1.990	1.6318	1.32	1.0824
			34.02		**1.570**		**1.262**
			Composite Length		Weighted Avg Au g/t		Weighted Avg Ag g/t

Table 17.2 Narrow high-grade intercept example

MC23-08

Narrow high-grade intercept

Hole ID	From	To	Interval	Au ppm	AuxL	Ag ppm	AgxL
MC23-08	85.51	86.51	1.00	306.000	306.000	50.50	50.5
MC23-08	86.51	87.51	1.00	1.865	1.865	0.25	0.25
			2.00		**153.933**		**25.375**
			Composite Length		Weighted Avg Au g/t		Weighted Avg Ag g/t

18.0 RECOMMENDATIONS

There has been considerable mineral exploration undertaken within the Property area over many campaigns, however, there has been a relative lack of concentrated exploration beyond the limits of the historically worked vein structures, both on surface and at depth. In addition, there appears to have been a lack of a coherent property-scale stratigraphic and structural modelling that might help guide exploration and develop drill targets, as well as a relative lack of geochemical and geophysical work in some parts of the Property, which again may help in guiding exploration and developing targets.

The following technical recommendations are made for future work on the project:

- Undertake statistical analysis of the gold intercepts from the 2023 drilling campaign, compared to previous drilling results, to verify the tenor of mineralization and to identify areas for further drilling.

- Geological mapping should be undertaken over the entire Property to outline the geological framework, with more detailed mapping in the three primary mineralized zones; the Rogers Creek VMS showings in the north, Mineral Creek gold showings in the central area, and the VMS-favourable Sicker Group rocks extending from the Regina showings to the southeast part of the Property.

- Emphasis should be placed on defining felsic volcanic units within Duck Lake, Nitinat and McLaughlin Ridge Formations that may be related to VMS systems, as well as determining the projections of major fault zones, and the location of intrusive bodies, including dykes and stocks. Detailed analysis of the structures controlling mineralization should be undertaken to help model areas of potential undiscovered mineralization. Gossanous or altered zones should be mapped and categorized as to type of alteration. Mineralized zones should be mapped in detail to determine trends and possible mineral controls.

- Statistical analysis of the extensive database of multi-element soil geochemistry may be used to identify potential areas of mineralization outside of the historically explored zones.

- Soil geochemical sample lines should be established, spaced about 200 m apart with 50 m stations, primarily oriented easterly, to test Duck Lake and Nitinat units in the southeast part of the Property where there is no record of previous soil sampling.

- Areas of anomalous soils or stream sediments should be prospected for possible mineral showings, accompanied by geological evaluation, and rock sampling.

- An airborne VTEM and magnetic survey should be completed over the southeastern parts of the Mineral Creek Property that have not been previously surveyed. This will provide a

geophysical framework that will aid in delineation of host lithologic units for geologic mapping and to help identify key geological structures, particularly those that may host or offset gold systems. Soil geochemical data should be overlain on the geophysical data to define prospective exploration targets.

- A test program of ground-based Electromagnetic (EM) or Induced Polarization (IP) geophysical surveys is recommended for selected mineral zones as a targeting tool to help identify mineral-controlling structures, massive, disseminated or stockwork sulfide mineralization, or alteration zones that commonly surround mineral bodies. Lines should initially be spaced at 200 meters, with in-fill lines at spacings as close as 50 meters over areas showing strong chargeability and low to high resistivity responses (these responses might be expected in areas containing sulfide mineralization and alteration, such as silicification causing high resistivity or certain clay alteration minerals causing low resistivity). EM and IP have previously identified targets at the Rogers Creek showing, where drilling confirmed strong pyrite-sericite-chlorite-carbonate alteration with narrow zones of zinc and copper mineralization.

- Diamond drilling may be warranted for promising targets revealed by compilation of historical data in various areas of the Property. Geological models developed in conjunction with exploration results from geochemical and geophysical programs are also expected to define favourable drill targets. Based on the currently known mineral showings, as well as soil geochemical and geophysical targets on the Property, preliminary drilling for a Phase 2 exploration program is recommended at 2500 m in 10 to 15 holes.

Given the compilation and analysis of historical exploration information and refinement of the exploration model, as well as the verification of gold mineralization by the 2023 drilling campaign, future exploration work should expand the focus into untested target areas, with the objective of new discoveries. Given this objective, the work program and budget outlined in Table 18.1 is proposed.

In summary, the presence on the Mineral Creek Property of a 2 km x 2 km area containing more than 5 known gold-bearing vein occurrences, in addition to extensive areas of coincident copper and zinc soil geochemical anomalies with nearby occurrences of copper and zinc-bearing VMS-style mineralization, suggest good potential for the discovery of significant mineralization. Further geological, geochemical, and geophysical exploration is warranted, as well as preliminary drill testing of selected targets in a Phase 2 program. If further compelling evidence is found then diamond drilling should be continued to test new targets and known mineralization at depth.

Table 18.1 Proposed exploration budget

Activity	Scope	Cost ($CDN)
Geological Mapping	2 geologists, 40 field days, 5 office days	$54,000
Data Evaluation & Report Preparation	1 geologist 50 office days	$30,000
Prospecting	1 prospector, field reconnaissance, 40 days	$22,000
Geochemical Sampling	900 soils, 100 silts, 50 field mandays	$23,000
IP Survey	30 line-km various test grids @ $3200/km	$96,000
Assaying	1200 samples @ $40/sample	$48,000
Shipping and Transport	samples and supplies	$1,000
Travel, Vehicle Rental, Fuel	5 personnel and gear	$9,000
Room & Board	300md @ $200/md	$60,000
Administration, Planning, Permitting	management	$7,000
	Total Estimated Cost:	**$350,000**

19.0 REFERENCES

Ashley, R. (2002): Chapter K, Geoenvironmental Model for Low-Sulfide Gold-Quartz Vein Deposits; in Seal II, R.R and Foley, N.K. (eds.), Progress on Geoenvironmental Models for Selected Mineral Deposit Types, U.S. Geol. Surv., OF Report 02-195, pp 176-195.

B.C. Ministry of Energy Mines and Petroleum Resources (2007*): Minfile Data 092F/ 02, 07; Retrieved from http://minfile.gov.bc.ca/searchbasic.aspx

Benvenuto, G. (1984): Thistle Property, 1984 Assessment Report, Soil Sampling, Magnetometer and I.P.-Resistivity, Dighem Airborne EM and Magnetometer Surveys and Diamond Drilling Program on the Thistle Property, Vancouver Island, B.C. BCMM Assessment Report No. 13,711, part 1.

Bliss, J.D., and Jones, G.M. (1988): Mineralogic and grade-tonnage information on low-sulfide Au-quartz veins: U.S. Geological Survey Open-file Report 88-229, 99 p.

Chong, A., Becherer, M., Sawyer, R., Wasteneys, H., Baldwin, R., Bakker, F., and McWilliams, I. (2005): Massive sulphide deposits at Myra Falls Operations, Vancouver Island, British Columbia. In Geological field trips southern British Columbia, Geological Association of Canada, Cordilleran Section, Vancouver.

Christopher, P.A. (1987): Report on the Yellow Property, Alberni M. D., Vancouver Island, British Columbia, for Angle Resources Ltd. & Reward Resources Ltd., dated revised December 4, 1987.

Geotech Limited, 2008: Report on a Helicopter-Borne Versatile Time-Domain Electromagnetic (VTEM) and Aeromagnetic Geophysical Survey, Mineral Creek / Big Southeaster Block, Port Alberni, British Columbia, Canada For: Bitterroot Resources Ltd. By Geotech Ltd. 245 Industrial Parkway North Aurora, Ont., CANADA, Survey flown during August and September, 2008 Project 8201 December 2008, 40p.

Geotech Limited, 2011: Report, 27p.t on a Helicopter-Borne Versatile Time-Domain Electromagnetic (VTEM) and Aeromagnetic Geophysical Survey, Mineral Creek Property, Port Alberni, British Columbia, For: Bitterroot Resources Ltd, by: Geotech Ltd., 245 Industrial Parkway North, Aurora, Ont., CANADA, L4G 4C4, Survey flown during October – December 2010, Project 10228, January, 2011, 60p.

Gibson, H.L., Allen, R.L., Riverin, G., and Lane, T. E. (2007): The VMS Model: Advances and Application to Exploration Targeting, Paper 49, Ore Deposits and Exploration Technology, in "Proceedings of Exploration 07: Fifth Decennial International Conference on Mineral Exploration" edited by B. Milkereit, 2007, p. 713-730.

Goldfarb, R.J., Berger, B.R., Klein, T.L., Pickthorn, W.J., and Klein, D.P. (1996): Low sulfide Au quartz veins; in du Bray, E.A. (ed.), Preliminary compilation of descriptive geoenvironmental mineral deposit models: U.S. Geological Survey Open-File Report 95–831, pp.261–267.

Government of British Columbia. (2024): British Columbia Geological Survey, Geology of BC. Retrieved from https://www2.gov.bc.ca/gov/content/industry/mineral-exploration-mining/british-columbia-geological-survey/geology

Government of British Columbia. (2022): Mineral Titles Online. Retrieved from https://www2.gov.bc.ca/gov/content/industry/mineral-exploration-mining/mineral-titles/mineral-placer-titles/mineraltitlesonline

Groves, D.I., Goldfarb, R.J., Gebre-Mariam, M., Hagemann, S.G. and Robert, F. (1998): Orogenic gold deposits: proposed classification in the context of their crustal distribution and relationship to other gold deposit types. Ore Geol. Review, 13, 7–27.

Hawkins, T.E.G. (1982): Detailed Geological Report on the Thistle Mine Property including the McQuillan, Quill, Lore 1, Lore 2, Lore 3, Levi, Sue, Crow, Rand, Museum, April, Rose, and Jumbo Claims. BCMM Assessment Report No. 11,064, part 2.

Juras, S.S. (1987): Geology of the Polymetallic Buttle Lake Camp, with Emphasis on Price Hillside, Central Vancouver Island, British Columbia, Canada; Ph.D. Thesis, University of British Columbia.

Klein, J, 2011-: Comments on Results of a VTEM/Magnetic Survey Conducted over Parts of the Mineral Creek Property, Vancouver Island BC, on behalf of Bitterroot Resources Ltd, Part 2 – Magnetic Data, 15p.

Klein, J, 2011-2: Brief Comments on the Preliminary Results of a VTEM Survey conducted over Parts of the Mineral Creek Property, Vancouver Island, BC, on behalf of Bitterroot Resources Limited, 27p.

Klein, J. (2008): Bitterroot Resources Ltd., August-September 2008 VTEM-Magnetic Survey over the China Creek Property, Vancouver Island, B.C., Project #8201, Interpretive Comments Based on the Preliminary Data Set, prepared for Bitterroot Resources Ltd., November 5, 2008.

Klein, J. (2011): Brief Comments on the Preliminary Results of a VTEM Survey Conducted Over Parts of the Mineral Creek Property, Vancouver Island, B.C., on behalf of Bitterroot Resources Ltd., January 5, 2011.

Lyons, E. (1987): Report on Diamond Drill Program on part of China Group, Port Alberni Area, British Columbia. BCMM Assessment Report No. 16,144.

MacIntosh, R., Bradish, L., and Wilson, R. (1988): Report on Geology, Geochemistry and Geophysics of the Lizard Group. BCMM Assessment Report No. 18,314.

Massey, NWD. (1995): Geological Compilation, Vancouver Island, B.C. Ministry of Energy,Mines and Petroleum Resources, Open File 1994-6, 1: 250,000

Massey, N.W.D. and Friday, S.J. (1988): Geology of the Port Alberni - Nanaimo Lakes Area, Vancouver Island; B.C. Ministry of Energy, Mines and Petroleum Resources, Geological Fieldwork 1988.

Massey, N.W.D., Riddell, J.M., and Dumais, S.E. (1989): Geology of the Port Alberni - Nanaimo Lakes Area; B.C. Ministry of Energy, Mines and Petroleum Resources, Open File Map 1989-6, 1:50,000 and 1:20,000.

Massey, N.W.D., Friday, S.J., Riddell, J.M., and Dumais, S.E. (1991): Geology of the Port Alberni - Nanaimo Lakes Area; B.C. Ministry of Energy, Mines and Petroleum Resources, Geoscience Map 1991-1, 1:50,000 (with Paper 1992-2).

Massey, N.W.D. (1992): Geology and Mineral Resources of the Alberni - Nanaimo Lakes Sheet; B.C. Ministry of Energy, Mines and Petroleum Resources, Paper 1992-2.

Massey, N.W.D. (1994): The Vancouver Island Mineral Potential Project (92B, C,F,G,K,L and 102I; B.C. Ministry of Energy, Mines and Petroleum Resources, Geological Fieldwork 1994.

Massey, N.W.D. (1995): Geological Compilation, Vancouver Island, B.C. Ministry of Energy, Mines and Petroleum Resources, Open File 1994-6, 1: 250,000.

Massey, N.W.D., MacIntyre, D.G., Desjardins, P.J. and Cooney, R.T. (2005): Digital Geology Map of British Columbia: Whole Province. British Columbia Ministry of Energy and Mines, British Columbia Geological Survey Geofile 2005-1, 1:250,000 scale.

McCuaig, T.C., and Kerrich, R. (1998): P-T-t-deformation-fluid characteristics of lode gold deposits: evidence from alteration systematics: Ore Geology Reviews, v. 12, p. 381-453.

McMullan SR and Rowe, JD, 2022: Interpretation of Airborne Geophysical Surveys undertaken in 2008 & 2010 and data from 2021 Airborne Magnetic and EM Surveys on the Mineral Creek Property Port Alberni Area, Vancouver Island, BC (N.T.S. 092F02 & 092F07) Alberni & Victoria Mining Divisions, Southwest British Columbia, Approximately centred at Lat 49.1682 N, Long -124.6737 W, UTM 378,000 E, 5,447,500 N (NAD83 Z10) Prepared For: Theia Gold Corporation, 2900-595 Burrard Street, Vancouver, B.C. V7X 1J5, ARIS Report No 39644.

Mining Data Online (2018): Myra Falls Mine, Reserves, Retrieved from https://miningdataonline.com/property/64/Myra-Falls-Mine.aspx#Documents

Naciuk, T.M., and Hawkins, T.G. (1987): Report on Phases I to III, Geology, Geochemistry, Geophysics and Diamond Drilling, Yellow Property, report prepared for Reward Resources Ltd. and Angle Resources Ltd., Feb. 28, 1987.

Neale, T. (1985): Report on Geological Mapping, Prospecting and Rock Sampling of the McQuillan Claim. BCMM Assessment Report No. 13,904.

Neale, T., and Hawkins, T.G. (1985a): Report on Geological and Geochemical Exploration of the Yellow and Yellow M Claims (Yellow Group). BCMM Assessment Report No. 14,483.

Neale, T., and Hawkins, T.G. (1985b): Report on Phase I Geological and Geochemical Exploration of the McQuillan Claim. BCMM Assessment Report No. 14,880.

Nicholson, G.E. and Nicholson, J.A. (1989): Geochemical Survey Summary Report, Bain 3, 4 Claims, Alberni Mining Division. BCMM Assessment Report No. 19,586.

Pauwels, A. (1981): Assessment Report on Trenching and Rock Sampling on the Lizard Claim Group. BCMM Assessment Report No. 8981.

Payne, J.G., Bratt, J.A. and Stone, B.G. (1980): Deformed Mesozoic volcanogenic Cu-Zn sulphide deposits in the Britannia district, British Columbia: Economic Geology, v. 75, p. 700-721.

Pezzot, E.T. and White, G.E. (1981): Geophysical Report on an Airborne VLF-Electro-magnetometer and Magnetometer Survey, Crow, Levi, Sue, Mar, Jan, Rand, Remy Claims. BCMM Assessment Report No. 9126.

Prefontaine, M., Walker, R., and Wojdak, P. (1991): Overview of the Debbie-Yellow Property, Alberni & Nanaimo Mining Districts, Port Alberni, B.C., prepared for Westmin Resources Limited, April, 1991.

Rowe, J.D. and Greig, C.J. (2011): 2009 Diamond Drilling Program and 2010 Geochemical Sampling Program on the Mineral Creek Property. BCMM Assessment Report No. 32,204.

Ruks, T.W. (2015): Stratigraphic and Paleotectonic Studies of Paleozoic Wrangellia and Its Contained Volcanogenic Massive Sulfide (VMS) Occurrences, Vancouver Island, British Columbia, Canada, Ph.D. Thesis submitted to the University of British Columbia, Vancouver, Canada, August, 2015.

Ruks, T. and Mortensen, J.K. (2008): Geological setting of volcanogenic massive sulphide occurrences in the Middle Paleozoic Sicker Group of the Cowichan Lake uplift, Port Alberni area (NTS 092F/02, /07), southern Vancouver Island, British Columbia; in Geoscience BC Summary of Activities 2007, Geoscience BC, Report 2008-1, p. 77–92.

Ruks, T., Mortensen, J.K. and Cordey, F. (2009): Preliminary results of geological mapping, uranium-lead zircon dating, and micropaleontological and lead isotopic studies of volcanogenic massive sulphide–hosting stratigraphy of the Middle and Late Paleozoic Sicker and Lower Buttle Lake Groups on Vancouver Island, British Columbia (NTS 092B/13, 092C/16, 092E/09, /16, 092F/02, /07); in Geoscience BC Summary of Activities 2008, Geoscience BC, Report 2009-1, p.103–122.

Ruks, T., Mortensen, J.K. and Cordey, F. (2010): New results of geological mapping, micropaleontological and lead isotopic studies of volcanogenic massive sulphide–hosting stratigraphy of the middle and late Paleozoic Sicker and Buttle Lake groups on Vancouver Island, British Columbia (NTS 092B/13, 092C/16, 092E/09, /16, 092F/02, /05, /07); in Geoscience BC Summary of Activities 2009, Geoscience BC, Report 2010-1, p. 149–170.

Savage, K.S., Bird, D.K., and Ashley, R.P. (2000): Legacy of the California gold rush: environmental geochemistry of arsenic in the southern Mother Lode gold district: International Geology Review.

Sleeman, B.E.G. (1996): Debbie 900 Zone, Proposed Continuation of Test Bulk Sample and Milling Program, prepared for White Hawk Ventures Inc., November 18, 1996.

Stevenson, J.S. (1945): Geology and Ore Deposits of the China Creek Area, Vancouver Island, British Columbia; Annual Report of the Minister of Mines of the Province of British Columbia, 1944, pp. A143 - Al61.

Sutherland-Brown, A., and Robinson, J.W. (1971): Britannia Mine: Geology, Exploration and Mining in British Columbia: British Columbia Department of Mines and Petroleum Resources, 1970, p. 233-246.

Taylor, W.A. (1975): Crown Land Grants, A History of the Esquimalt and Nanaimo Railway Land Grants, The Railway Belt and the Peace River Block, Crown Land Registry Services, BC Ministry of Environment, Lands and Parks.

Walker, J.E. (1988): Assessment Report, Thistle Project, 1988 Report On Diamond Drilling Program On Thistle Property. BCMM Assessment Report No. 17,661.

Walker, R. (1986): Assessment Report, Deb-Lu Group, Analyses of Drill Core from Roger's Creek Area, Port Alberni, B.C. BCMM Assessment Report No. 15,023.

Walker, R. and Benvenuto, G. (1985): Assessment Report, McLaughlin Ridge Property, 1984 Diamond Drill Program, Rogers Creek Area, Port Alberni, B.C. BCMM Assessment Report No. 13,758.

Watkins, J.J., Truemen, E.A.G., and Price, G.A. (1987): 1986-1987 Debbie Project Report, report prepared for Westmin Resources Ltd., dated July 15, 1987.

Weatherspark (2016): Climate and Average Weather Year Round at Port Alberni, B. C. Canada,

Retrieved from https://weatherspark.com/y/145174/Average-Weather-at-Port-Alberni-B.-C.;-Canada-Year-Round

Wilson, J. (2008): Assessment Report, 2006-2007 Diamond Drilling Program on the Big Southeaster Claim and Mineral Tenure 570436, Big Southeaster Property, Alberni Mining Division. BCMM Assessment Report No. 29,733.

Wilson, J. and Price, G. (2008): Assessment Report, 2007 Diamond Drilling Program on the Big Southeaster Claim and Mineral Tenure 570118, Mineral Creek, Big Southeaster Property, Alberni Mining Division. BCMM Assessment Report No. 30,212.

Wind, E, 2023: Survey Report on drill pads for Mineral Creek Project, Vancouver Island, Underhill Geomatics, Courtney BC, for Theia Gold Corp, email 13 December 2023.

Yorath, C.J., Sutherland Brown, A., and Massey, N.W.D. (1999): Lithoprobe, southern Vancouver Island, British Columbia: geology, in Geological Survey of Canada, Bulletin 498, 1999, 145 p.

*All Assessment Reports are available on-line at
http://aris.empr.gov.bc.ca/

BC Geological Survey Minfile descriptions are available on-line at
http://minfile.gov.bc.ca/searchbasic.aspx

BC Ministry of Energy and Mines, Exploration Assistant is available online at
http://webmap.em.gov.bc.ca/mapplace/minpot/ex_assist.cfm

All BC GSB publications are available on-line at
http://www.empr.gov.bc.ca/MINING/GEOSCIENCE/PUBLICATIONSCATALOGUE/Pages/default.aspx

20.0 DATE AND SIGNATURE PAGE

This report titled “NI 43-101 Technical Report on the Mineral Creek Project” and dated June 5, 2024 was prepared and signed by the authors:

Jeffrey D. Rowe is the author responsible for all Sections of this report.

Steven R. McMullan contributed as author to parts of Sections 9 (Exploration), 10 (Drilling), 11 (Sample Preparation, Analyses and Security), 12 (Data Verification), 17 (Interpretations and Conclusions), and 18 (Recommendations) of this report.

Dated at Surrey, BC
June 5, 2024

Jeffrey D. Rowe, P.Geo.

Gaborone, Botswana
June 5, 2024

Steven R McMullan, P.Geo.

21.0 CERTIFICATES OF QUALIFIED PERSONS

I, Jeffrey D. Rowe, am a professional geologist residing at 111-6109 Boundary Drive W, Surrey, British Columbia, Canada and do hereby certify that:

- I am an author of the report entitled “NI 43-101 Technical Report on the Mineral Creek Project”, dated June 5, 2024;
- I am a Registered Professional Geoscientist (P. Geo.), Practicing, with the Engineers and Geoscientists, British Columbia, (License # 19950);
- I graduated from the University of British Columbia, Canada, with a B.Sc. (Geological Sciences, 1975);
- I have worked as a geoscientist in the minerals industry for over 35 years, I have been directly involved in the exploration, evaluation and mining of mineral properties, mainly in Canada and Mexico, for gold, silver, tungsten, molybdenum and base metals;
- I have visited and examined the Mineral Creek Property;
- I have been previously involved with writing of evaluation and assessment reports for the Mineral Creek Property in 2010 and 2011;
- I am responsible as author for all sections of “NI 43-101 Technical Report on the Mineral Creek Project”, dated June 5, 2024;
- I am independent of Theia Gold Corp., as independence is described in Section 1.5 of NI 43-101. I have not received, nor do I expect to receive, any interest, directly or indirectly, in Theia Gold Corp.;
- I was retained by Theia Gold Corp. to prepare an exploration summary on the Mineral Creek Property, Vancouver Island, British Columbia, in accordance with National Instrument 43-101. The report is based on my review of Project files and information provided by Theia Gold Corp. personnel and publicly available data;
- I have read National Instrument 43-101 and Form 43-101F1 and, by reason of education and past relevant work experience, I fulfill the requirements to be a “Qualified Person” for the purposes of NI43-101. This technical report has been prepared in compliance with National Instrument 43-101 and Form 43-101F1;
- 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.
- I consent to the filing and public disclosure of this Report with any stock exchange or other regulatory authority, and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public.

Signed this 5th day of June 2024 in Surrey, British Columbia:

Jeffrey D. Rowe, B.Sc., P.Geo. (PGBC license no. 19950)

Certificate of Qualified person

I, Steven R. McMullan, am a professional geoscientist residing at Plot 21140/K18, Hippopotamus Road, Gaborone, Botswana, and do hereby certify that:

- I am an author of the report entitled “NI 43-101 Technical Report on the Mineral Creek Project”, dated June 5, 2024;
- I am a Registered Professional Geoscientist (P.Geo.), with the Association of Professional Engineers and Geoscientists of Saskatchewan, License No 10018;
- I graduated from the University of Waterloo, Ontario, Canada with a B.Sc. (Honours Earth Sciences) (1979), and have practiced my profession continuously from 1980 to the present day;
- I have been directly involved in the exploration and evaluation of mineral properties in Africa, Asia, South America, USA and Canada, for base and precious metals including gold, diamondiferous kimberlites, industrial minerals, environmental and groundwater studies;
- I visited the Mineral Creek Gold Property on 18 – 19 September 2023 at the start of the drilling campaign;
- I am not independent of Theia Gold Corp (subsequently Karus Mining Corp.) as I will receive shares in the Company at a future date as part compensation;
- As of the date of this certificate, I am not aware of any material fact or material change with respect to the subject matter of this report that is not reflected in the report, the omission to disclose which makes the technical report misleading.
- I consent to the filing and public disclosure of this Report with any stock exchange or other regulatory authority, and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public.

Dated at Gaborone, Botswana, this 5th day of June 2024.

SR McMullan, P.Geo.
APEGS No 10018