NI 43-101 TECHNICAL REPORT, FOR THE CRACKER CREEK PROPERTY, BAKER COUNTY, OREGON, USA

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1 Summary

1.1 Introduction

The Cracker Creek Property ("the Project" or "the Property") is located in Baker County, Oregon, USA., in the Elkhorn Mountains, which are a part of the Blue Mountains of northeastern Oregon (OR) and southeastern Washington (WA). The Property is approximately 30 kilometers (km) (18.6 miles) west of the city of Baker City and 9 km (5.6 miles) north of Sumpter, OR. The Project comprises 61 consolidated parcels including patented lode claims, patented placer claims, patented mill site claims, and fee property lands, totalling approximately 1,575.32 acres (638 hectares) of surface and mineral rights. The Property is a consolidated parcel of four major historical mines: North Pole, the Excelsior and the Eureka (now jointly referred to as the "E & E") and the Columbia.

APEX Geoscience Ltd. ("APEX") of Edmonton, Alberta was engaged in August, 2020 by Lode Metals Corp. ("Lode Metals") to complete a National Instrument (NI) 43-101 Technical Report ("the Report") summarizing the geology and prior exploration history of the Property and the acquisition of the assets of the Cracker Creek Gold Corporation ("CCGC" or "Cracker Creek"), which controls the Cracker Creek Property. The Technical Report includes a summary of exploration activities and historical Mining conducted on the Property to date and recommendations for future work. The Report has been written on behalf of Lode Metals and was prepared in accordance with the guidelines set out by the Canadian Securities Association and NI 43-101 Standards of Disclosure for Mineral Projects (2011).

1.2 Property Description

The Property comprises 84 claims, consolidated into 61 parcels, including 42 patented lode claims, 17 patented placer claims, 5 patented mill site claims, located in Townships 8 South and 9 South, Range 37 East and 20 fee property land parcels in Sections 28, 29, 30, 32, and 33, Township 8 South, Range 37 East of the Willamette Meridian in Oregon. The claims have been recently acquired by Lode Metals under an Exploration and Purchase Option Agreement ('EPOM') with CCGC signed on November 9th, 2020. Lode Metals can acquire a 100% interest in the Cracker Creek Property with the initial payment of US$100,000 on signing (which has been completed) and a further US$60,000 every six (6) months thereafter until either May 10th, 2024 or until the option to purchase is exercised by paying US$3,000,000. Cracker Creek retains a 2.5% Net Smelter Returns Royalty (NSR). A service agreement was also signed with Minefinders, LLC on November 21st, 2020, which included an initial payment of US$40,000 (which has been completed) and further payments of US$40,000 every six months until May 1st, 2024. Minefinders, LLC retains a 0.5% NSR which can be purchased outright for US$500,000. If the NSR is purchased all payments stop at that time.

1.3 Geology

The Cracker Creek mining district is part of the Blue Mountain gold belt which lies within the Blue Mountain Province. The Cracker Creek mining district is underlain by tightly folded, fine-grained sediments of the Elkhorn Ridge Argillite. Near the Cracker Creek vein(s), the argillites consist mainly of interbedded chert and argillite. A discontinuous, northeast trending band of metagabbro and related rocks crosses the main vein in the southern part of the project area. The metagabbro are interpreted to be in fault contact with, and not intrusive to, the Elkhorn Ridge Argillite. The Cretaceous Bald Mountain Batholith lies to the north and west of the Property and is found within 1 mile of the southwest extension of the Cracker Creek vein(s). The granodiorite intrusive is interpreted to be the source of the fluids and metals resulting in the deposition of precious metal mineralization found on the Property.

The main Cracker Creek Structure, often referred to as the Cracker Creek vein ("the vein") is a broad S shaped shear zone trending northeast and dipping 75° to 85° to the southeast. The vein is mapped over eight kilometers (five miles) stretching from the South Pole mine northeast of the Property to the Bunker Hill mine southwest of the Property. It hosts nearly all of the former producers on the Property. The vein is reported to range from a few feet in width up to 300 ft in width but generally is in the range of 12 to 30 ft wide. The most productive portion of the vein was the 7,500 ft extent from the North Pole mine to the Golconda mine. The vein has been subjected to repeated reopening with at least two, and potentially more, pulses of gold mineralization. At least two of these gold-bearing pulses were characterized by quartz with more or less sulphide and dolomite. The sulphides are relatively fine grained and commonly occur in fine bands with or without dolomite in the quartz. The vein material is predominantly a combination of quartz and fragments and "horses" of country rock. Other gangue minerals include dolomite, calcite, montmorillonite and sericite. Pyrite is the most abundant sulphide followed by arsenopyrite; along with marcasite, they usually do not constitute more than 5 to 8% of the mineralized rocks.

1.4 Exploration

1.4.1 Historical Exploration

The Blue Mountain Province is responsible for approximately 75% of Oregon's gold production with the majority of the production being derived from a relatively narrow belt stretching from John Day to the Snake River at the Oregon-Idaho border. The Cracker Creek vein was discovered in the bed of Cracker Creek in 1873 and full-scale mining began in 1895 and continued to 1916. The current Property has consolidated the area of four separate mines: North Pole, Eureka, Excelsior, and Columbia which were previously owned and operated by four separate companies. Total historical production was valued at approximately US$9,000,000 at approximately US$20 per ounce (oz) of gold (450,000 oz). Mill heads were reported to be about 0.55 ounce per ton (oz/st) or 19 grams per tonne (g/t) gold (Au) with recovery at approximately 65%. Minor operations were conducted from 1916 to 1942. In 1946 and 1947, Cominco Ltd. and Solar Mining Co., took an option on the property. They reopened the North Pole mine to test for downward projections of possible mineralization and completed surface trenching and drilling.

In 1968-69 Omega Mining (Omega), reopened the E & E adit and drove 1,500 feet of new drift opening almost continuous ore grading 12 g/t (0.35 oz/st) Au over a width of 1.5 meters (m). Narrow vein mining was uneconomic at that grade and Omega withdrew from the project.

In 1980 Amax, Inc., in joint venture with Brook Minerals, Inc., known collectively as “BMI-AMAX”, reopened the North Pole and E & E mines to delineate reserves and resource along with rehabilitating the old mines. AMAX proposed to develop a 200 tonnes per day mine-mill operation by 1983. They concluded that from the geologic interpretation of the known structure and mineralization, the Property has potential for 4 to 5 million tonnes of mineralized rock, grading 10.5 g/t (0.31 oz/st) and 21 g/t (0.61 oz/st) silver (Ag).

BMI-AMAX reopened 5,000 feet (ft) of old drift, drove 3,000 ft of new drift, constructed 400 ft of raises, completed 32 diamond core holes and reopened the old E & E shaft. They concluded that there were no major problems associated with an orderly development of the project. However, due to cash flow problems, AMAX withdrew from the project in October, 1982.

In 1989, Simplot Resources (Simplot), under the Bourne-Simplot Mining Venture, completed exploration to test for extensions of the known mineralized zone and to search for new unmined zones. Simplot focused on exploration of untested underground targets, exploration for a shallow, open pit on the Columbia vein system and metallurgical testing involving gold recovery by bio-leaching. Simplot completed 41 underground core holes and 39 surface drill holes completed between 1990 and 1991. The holes were largely drilled from the hanging wall to the footwall, commonly at minus 45 and 60 degree angles. A total of 30 core holes were completed on the E & E level and 11 core holes were drilled from the North Pole No. 1 level. Of the 41 core holes drilled, only 38 had enough drill hole information to allow them to be useful in the database. A total of 28 surface core holes were completed over the Columbia claim block to test the potential of an open-pitable resource at the crest of the Columbia ridge down through the Eureka claim to the Excelsior. The remaining surface drill holes were completed at a variety of locations at E & E, North Pole and the Cracker-Dutchman prospect. In 1991 Simplot withdrew from metallic mineral development and consequently the Bourne-Simplot Mining Venture.

Numerous underground core holes drilled in 1981 - 1982 and 1991 along the E & E No. 1 level returned excellent assay results. Holes with grades greater than 10 g/t (0.292 oz/st) Au were distributed over 550 m (1,800 ft) of strike length along the E & E No. 1 Level where it is positioned below the North Pole 2 to 4 portals and workings. The area where the drilling was conducted starts about 550 m (1,800 ft) northeast along strike from the main E & E Portal on the 1720 ft level. Gold highlights including 59.1 g/t (1.724 oz/st) over 1.2 m core length in EE14, 64.28 g/t (1.875 oz/st) over 1.4 m core length in hole EE17, and 23.21 g/t (0.677 oz/st) over 4 m core length in EE30 by AMEX/BMI, and 13.03

g/t (0.38 oz/st) over 2.79 m core length in hole EE40, 10.32 g/t (0.301 oz/st) over 1.31 m core length in hole EE43 and 12.89 g/t (0.376 oz/st) over 2.63 m core length in hole EE61 in holes drilled by Simplot.

Surface drilling in 1990 – 1991 at the Columbia – Eureka mine areas yielded a number of gold highlights including 41.11 g/t (1.2 oz/st) over 1.6 m core length in hole 90-01, 11.90 g/t (0.347 oz/st) over 2.3 m core length in hole 90-03, 14.64 g/t (0.427 oz/st) over 1.48 m core length in hole 90-06, 13.24 g/t (0.386 oz/st) over 2.63 m core length in hole 91-1-45, 15.98 g/t (0.466 oz/st) over 11.16 m core length in hole 91-2-45 and 5.45 g/t (0.159 oz/st) over 7.02 m core length in hole 91-7-60.

No drilling has been completed on the property since 1991.

1.4.2 Historical Metallurgy

At the Effective Date of this Technical Report, Lode Metals has not carried out any production, mineral processing, or metallurgical test work at the Property, however, past property owners have produced several variations of historical metallurgical testing for the recovery of gold from high-grade gold veins.

Two types of gold mineralization from Cracker Creek have been evaluated to date: gouge and highly siliceous vein material. Historical studies indicated that the gouge material represents approximately 20% of the mineralized material and requires de-sliming to provide acceptable gold and silver recoveries and high-grade concentrates.

The historical metallurgical results have been erratic, with most of the variability due to variations in sample mineralogy and head grade, the lack of sample control and identification, and differences between the practices of the metallurgical laboratories used. Modern and well constrained metallurgical testing is required to establish the gold recovery by gravity, flotation and other appropriate methods.

1.4.3 Historical Resources and Reserves

Several historical reserves and resources have been estimated for the Cracker Creek vein from 1981 to 1999 as summarized in Table 1.1 and are briefly summarized below. A qualified person (QP) has not completed sufficient work to classify any of the estimates discussed below as current mineral resources or reserves as per the CIM Definition Standards for Mineral Resources & Mineral Reserves (2014) and the CIM Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines (2019). The author, an independent QP, has not done sufficient work to classify any of the estimates discussed below as current mineral resources or reserves and is treating these estimates as historical in nature and not current mineral resources or mineral reserves. These historical estimates are presented only for the purpose of describing the extent of gold mineralization and to outline the exploration potential.

The historical reserve and resource estimates are backed up by four generations of either underground channel sampling and/or surface and underground core drilling. The historical estimates range from proven and probable reserves ranging from 133,200 tons at a grade of 0.38 oz/st (13 g/t) Au to 320,100 tons at a grade of 0.3 oz/st (10.3 g/t) Au. The historical inferred resources (often termed possible reserves) range from 639,800 tons at a grade of 0.38 oz/st (13 g/t) Au up to 1,198,000 tons at a grade of 0.31 oz/st (10.6 g/t) Au (Table 1.1). The author has not done sufficient work to classify any of the estimates discussed as current mineral resources or reserves and is treating these estimates as historical in nature and not current mineral resources or mineral reserves. These historical estimates are presented only for the purpose of describing the extent of gold mineralization and to outline the exploration potential of the Cracker Creek vein to provide a future mineral resource with further work.

Table 1.1 Summary of historical mineral reserve and resource estimations completed on the Cracker Creek Property.

A) In situ, reserve estimations - proven and probable

		Proven		Probable		Proven and Probable Total			
Reserve estimation company	Date of estimate	Short tons ('000)	Grade (oz/st)	Short tons ('000)	Grade (oz/st)	Short tons ('000)	Grade (oz/st)	Cutoff (oz/st)	Total Oz (*000)
AMAX	Oct. 1982	100.0	0.38	33.2	0.36	133.2	0.38	0.18	50.6
Brooks Minerals	Oct. 1982	164.0	0.32	139.8	0.29	303.8	0.31	0.18	94.2
AMAX/Brooks	Mar. 1983	135.3	0.36	66.7	0.32	202.0	0.34	?	68.7
Arrowhead	1999	186.7	0.31	133.4	0.28	320.1	0.30	0.19	96

B) In situ, reserve estimations - inferred

		Inferred		
Reserve estimation company	Date of estimate	Short tons ('000)	Grade (oz/ton)	Total Oz (*000)
AMAX	Oct. 1982	639.8	0.38	243.1
Brooks Minerals	Oct. 1982	1,078.9	0.31	334.5
AMAX/Brooks	Mar. 1983	1,198.0	0.31	371.4
Arrowhead	1999	1,063.8	0.28	297.9

Note: The estimates provided above are historical reserve and resource estimations that predate CIM Definition Standards on Mineral Resources and Mineral Reserves and NI 43-101 Regulations. A QP has not done sufficient work to classify the historical estimations as current mineral resources, and the authors and the Issuer, are not treating any of the historical estimations as current mineral reserves or resources.

1.4.4 Exploration by Lode Metals

In 2020, Lode Metals commissioned APEX to complete a data compilation and review of historical data for the Property and a ground geophysical surveying program. The data compilation focused on assembling all available historical drill data into a digital database, reviewing historical mining, exploration, resource estimates, collating historical maps of underground workings and all geological data. Drill hole locations and assay results were compiled for 109 drill holes extending across the main area of mineralization on the Property, including a number of holes associated wit the historical mines: E & E, North Pole and Columbia.

The ground geophysical surveys included the capture of ground magnetic and Very Low Frequency (VLF) data between December 15, 2020 and January 27, 2021. The surveys were completed over the area encompassing the main mineralized zone including the areas underlain by the historical E & E, North Pole and Columbia mines. The survey grid encompassed an area covering approximately 300 hectares (ha). The magnetics and VLF surveys were completed over the same grid which totalled approximately 29-line kilometers with lines spaced at approximately 100 m. Preliminary data processing and interpretation of the magnetics data indicate that regional structures are clearly delineated by the data; the Cracker Creek vein is associated with a clear trend of demagnetization along the length of the vein. Final data processing and interpretation of the MAG and VLF data is currently ongoing.

1.5 Permitting Requirements

The Property consists entirely of fee owned land and patented claims, and does not require federal Bureau of Land Management (BLM) or United States Forestry Service (USFS) permits to conduct exploration.

The issuance of permits is the sole responsibility of the Oregon Department of Geology and Mineral Industries (DOGAMI), who coordinate the permitting effort among other state agencies. An Oregon Exploration Permit which authorizes exploration and preliminary development work short of production needs to be acquired. Cracker Creek has established a good rapport with DOGAMI personnel and have a cooperative and supportive relationship with them. Permits for water appropriation need to be renewed through the Oregon Water Resources Department. Permits for water discharge, subject to appropriate standards, will need to be renewed by the Oregon Department of Environmental Quality (DEQ).

Exploration and anticipated mining will have minimal impacts on the local and regional environment. Operations will be restricted to underground workings and surface disturbance restricted to the vicinity of mine openings. Upon completion of mining, the workings would be backfilled, and all mine openings permanently closed off. Infrastructure and other installations would be removed, the site will be regraded and revegetated compatible with surrounding land. All reclamation will be in compliance with applicable permits and regulatory authorities.

1.6 Author's Site Visit

Mr. Dufresne visited the Cracker Creek Property on September 15 and 16, 2020. The author collected samples for assay and located several historical workings. The author collected rock samples, examined and sampled historical core and visited several historical workings while at the Property. Most of the historical workings on the Property were found to be completely or partially reclaimed and inaccessible. The Jevne adit is the only historical adit which remains accessible. A total of 8 rock samples of quartz and argillite were collected near and around the North Pole, Columbia and E & E historical workings. A total of 3 surface rock grab samples returned anomalous gold and/or silver results including 1.96 g/t Au and 2.21 g/t Ag from a sample above the North Pole adit; 0.47 g/t Au and 1.26 g/t Ag from a composite grab sample from the North Pole area and 3.72 g/t Au and 20.4 g/t Ag from Columbia dump material.

Core from historical Simplot 1990 – 1991 drill holes is well organized and stored in a dry storage unit in Baker City. During the site visit the author examined drill core from 4 high interest holes from the 1991 Simplot drill program. A total of 12 composite samples of broken up core pieces were collected effectively quartering the core from 2 holes for assay. The samples were sent to ALS labs in North Vancouver, BC, Canada for analysis.

The quarter core composite samples returned assay results comparable with historical assays for similar zones. Samples from drill hole 91-2-45 returned an average grade of 12.43 g/t (0.363 oz/st) Au over 29 ft (8.8 m); historical assays for a similar zone returned an average grade of 15.98 g/t (0.466 oz/st) Au. Composite samples from drill hole 91-7-60 returned an average grade of 4.57 g/t (0.133 oz/st) Au over a interval of 8.4 ft (2.56 m); comparable to historical assays of 5.45 g/t (0.159 oz/st) Au over 23 ft (7.02 m) from a large zone that included the 2020 sampled core. The sampling by the author partially validates a portion of the historical drill core sample assay results.

1.7 Conclusions and Recommendations

The Cracker Creek Property is located in the Blue Mountains province which historically has accounted for approximately 75% of Oregon's gold production. Four historical mines are located on the Property: North Pole, Eureka and Excelsior (E & E) and Columbia. The Property lies within a prolific mineralized belt with numerous additional historical mines located in the immediate vicinity of the Property including Bald Mountain, Climax, Golconda, Ibex, and Tabor Fraction.

Modern exploration on the Property was completed between 1980 and 1991 by two joint ventures BMI-AMAX (1980-1982) and Simplot (1990-1991). During these periods, the companies re-opened several of the historical mines, drove new drifts and completed underground sampling along with surface and underground core drilling. In total, at least 73 underground core holes and 39 surface core holes were completed on the Property from 1981 to 1991. Some of the surface holes may have been completed by RC drilling.

Numerous underground core holes drilled in 1981-1982 and 1990-1991 along the E & E No. 1 level returned excellent assay results with a number of intersections with >10 g/t over greater than 1 m thickness. Holes with excellent grades were distributed over 1,800 ft (550 m) of strike length along the E & E No. 1 (1720) Level where it is positioned below the North Pole 2 to 4 portals and workings. In addition, surface drilling by Simplot at the Columbia – Eureka mine areas has yielded a number of shallow intersections with >10 g/t Au over greater than 1 m thickness. No drilling has been completed on the Property since 1991.

Cracker Creek offers an excellent opportunity to explore for and develop a small to mid-size precious metal deposit. The mineralized Cracker Creek vein structure has been delineated across the length of the Property and extends for over 5 miles (8 km). Other adjacent veins and the on-strike projections of the Cracker Creek vein remain essentially underexplored. Historically, the Cracker Creek vein structure is reported to have produced more than 225,000 oz of gold at an average grade of 0.68 oz/st (23.3 g/t) gold. Drilling and underground sampling by Simplot during the 1990's identified unmined mineralization that could be targeted for mineral resources and potentially future mining development.

No modern exploration techniques have been employed at the Property to either extend the known mineralization along strike and at depth, to identify new mineralization along strike or to assess parallel veins historically identified and mined in the area. A phased approach is recommended starting with a Phase 1 surface exploration program comprised of detailed geological mapping, resampling of historical drill core, rock and soil sampling in combination with additional ground geophysical surveys, a LIDAR survey to produce a detailed digital terrain model in combination with a structural study. Phase 1 should also include historical data compilation and validation, the initiation of drill permitting for the Phase 2 drill program, and the initiation of any required baseline monitoring surveys. An airborne geophysical survey such as a Versatile Time Domain Electromagnetic (VTEM) and magnetic survey should be considered as part of the Phase 1 program. The estimated cost of the Phase 1 program is US$400,000 (CDN$500,000).

The Phase 2 program is contingent on the positive results from Phase 1 and will only be completed if the Phase 1 results warrant further work. Historical drilling and underground sampling has delineated significant gold mineralization along 2.5 km of the Cracker Creek vein structure. Confirmation drilling is recommended along the extent of the vein to verify assays, continuity and the depth extent of mineralization. In addition, a modern metallurgical program is required, therefore a number of PQ core holes should be completed as part of the confirmation drilling program. The Phase 2 core drilling program should include approximately 15 confirmation core holes drilled with HQ core and 5 metallurgical holes completed using PQ core. The Phase 2 program should comprise about 4,000 m of core drilling and include a small amount of follow-up field work along with a number of metallurgical studies. The estimated cost to conduct the Phase 2 program is US$1,520,000 (CDN$1,900,000). The Phase 2 program should culminate with 3D geological modelling of the historical and new drilling leading to a maiden mineral resource estimate.

2 Introduction

2.1 Issuer and Purpose

The Cracker Creek Property ("the Project" or "the Property") is located in Baker County, Oregon, USA, within the Elkhorn Mountains, a part of the Blue Mountains of northeastern Oregon (OR) and southeastern Washington (WA) (Figure 2.1). The Project is an intermediate stage exploration property within the Blue Mountain gold belt that encompasses many past producing gold districts including the Baker, Cable Cove, Granite, and Rock Creek mining districts.

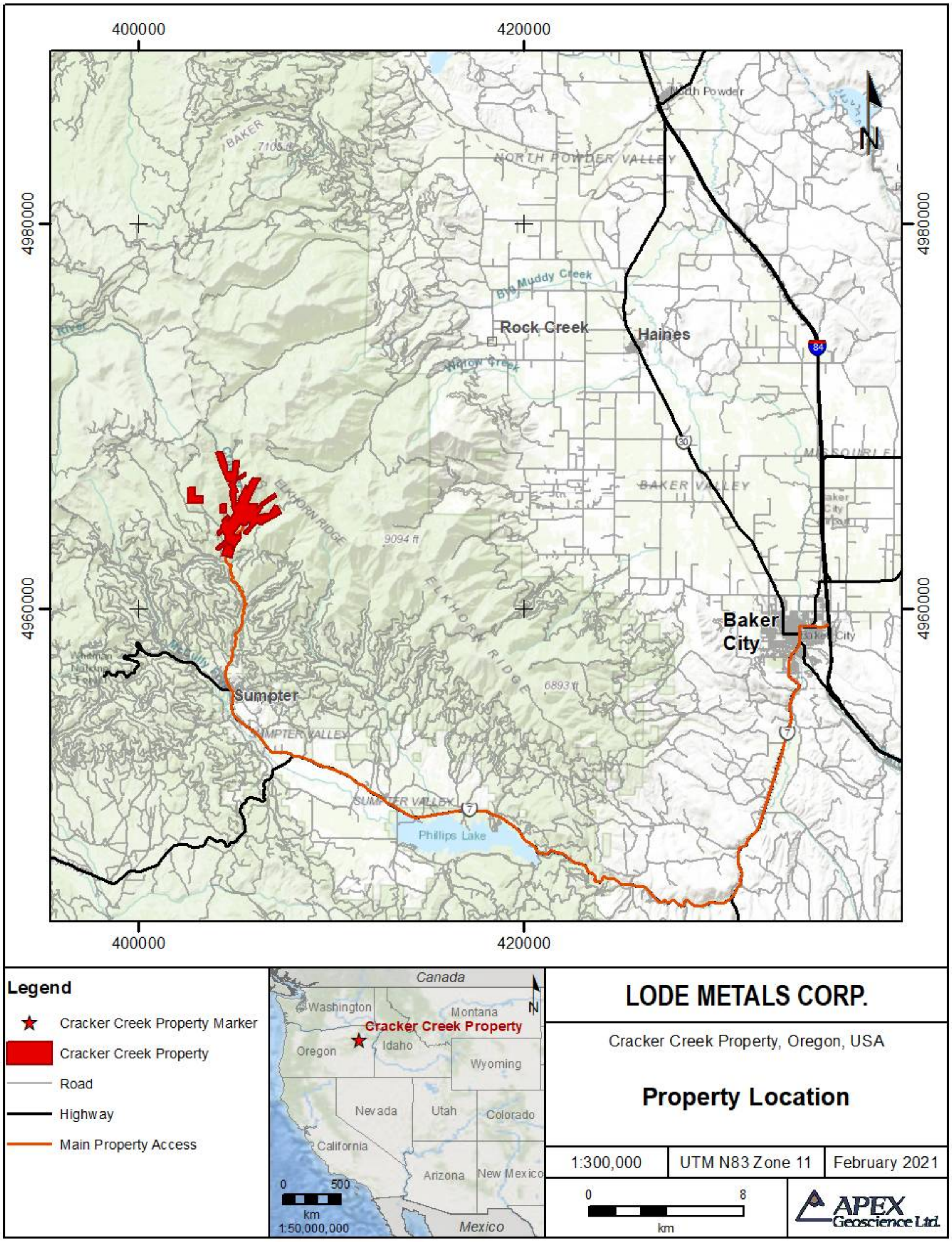
APEX Geoscience Ltd. (APEX) of Edmonton, Alberta was engaged in August, 2020 by Lode Metals Corp. ("Lode Metals") to complete a National Instrument (NI) 43-101 Technical Report ("the Report") pertaining to the acquisition of the Cracker Creek Property. The Report includes a technical summary of geologic and exploration activities, and historical mining conducted on the Property to date and recommendations for future work. The Report has been written on behalf of Lode Metals and was prepared in accordance with the guidelines set out by the Canadian Securities Association (CSA) and NI 43-101.

The Property is located approximately 30 kilometers (km) (18.6 miles) west of Baker City and 9 km (5.6 miles) north of Sumpter, OR. The project comprises 84 claims consisting of 42 patented lode claims, 17 patented placer claims, 5 patented mill site claims, and 20 fee property lands. The Property encompasses approximately 1,575.32 acres (638 hectares) of surface and mineral rights. The claims are wholly owned by Cracker Creek Gold Corporation ("CCGC) and Cracker Creek Gold Mining Company which has recently changed its name to CCGC. Lode Metals has the right to purchase 100% of the Cracker Creek Property through an Exploration and Purchase Option Agreement ("EPOM") subject to certain cash payments and a 2.5% Net Smelter Royalty (NSR) as detailed in Section 4 below. Lode Metals must also provide certain cash payments to Minefinders, LLC under a service agreement. Minefinders, LLC retains a 0.5% NSR, which can be bought for a one time US$500,000 payment.

2.2 Authors and Site Inspection

The authors of this Technical Report are Mr. Michael Dufresne and Ms. Anetta Banas of APEX Geoscience Ltd. Mr. Dufresne and Ms. Banas are independent of Lode Metals and are both Qualified Person's ("QP") as defined by NI 43-101. MrDufresne of APEX, is responsible for the preparation and publication of sections 9 to 14 and is jointly responsible for sections 1 to 8 and 15 to 20 of the Technical Report. Ms. Banas is jointly responsible for sections 1 to 8 and 15 to 20 of the Technical Report. Mr. Dufresne is a Professional Geologist with the Association of Professional Engineers and Geoscientists of Alberta (APEGA), a Professional Geologist with the Association of Professional Engineers and Geoscientists of British Columbia (APEGBC) and has worked as a geologist for more than 35 years since his graduation from university. Mr. Dufresne is a QP and has been involved in all aspects and stages of mineral exploration in North

Figure 2.1. Location of the Cracker Creek Property.



America, and has extensive experience exploring for precious metals deposits in the Western U.S.A. Ms. Banas is a Professional Geologist with the Association of Professional Engineers and Geoscientists of Alberta (APEGA) and has worked as a geologist for more than 18 years since her graduation from university. Ms. Banas is a QP and has been involved in all aspects and stages of mineral exploration in North America, and has extensive experience exploring for precious metals deposits in Western Canada and U.S.A. This report has been prepared in accordance with the guidelines set out by the Canadian Securities Association and in National Instrument (NI) 43-101.

Mr. Dufresne visited the Cracker Creek Property on September 15 and 16, 2020. The lead author collected samples for assay and located several historical workings. The lead author collected rock samples, examined and sampled historical core and visited several historical workings including a number of trenches, dumps and adits while at the Property. Most of the historical workings on the Property were found to be partially or entirely reclaimed and inaccessible. The Jevne adit is the only historical adit which remains accessible.

2.3 Sources of Information

This report summarises publicly available and proprietary information as listed in the reference section and relies heavily on information from Arrowhead Resources, LLC's 1999 executive summary report on the Property, authored by E.M. Gerick, J.W. Ashton, PE, and D.B. Rogers.

The data discussed in this report was provided by Lode Metals in digital and paper format and was compiled and examined by the author who has conducted data verification. The data provided included previous property owners executive/summary reports, maps, exploration data, drill data and historical resource estimations. The supporting documents used as background information are referenced in the History, Geologic Setting and Mineralization, Deposit Types and Reference sections. Mr. Dufresne, the author of this Technical Report has supervised the preparation of the report and takes responsibility for all sections of this report. Based on the author's property visit on September 15th and 16th, 2020 and the work performed on the Property to date, the author believes that exploration completed by previous property owners as listed in the reference section is accurate and complete, and has been completed to acceptable standards.

2.4 Units of Measure

With respect to units of measure, unless otherwise stated, this Technical Report uses:

- Abbreviated shorthand consistent with the International System of Units (International Bureau of Weights and Measures, 2006);

- 'Bulk' weight is presented in both United States short tons ("tons"; 2,000 lbs or 907.2 kg) and metric tonnes ("tonnes"; 1,000 kg or 2,204.6 lbs.);

- Geographic coordinates are projected in the Universal Transverse Mercator ("UTM") system relative to Zone 11 of the North American Datum ("NAD") 1983; and,

- Currency in Canadian dollars (CDN$), unless otherwise specified (e.g., U.S. dollars, US$; Euro dollars, €).

3 Reliance of Other Experts

The author is not qualified to provide an opinion or comment on issues related to legal agreements, royalties, permitting and environmental matters. Accordingly, the author of this Technical Report disclaims portions of the Technical Report particularly in Section 4, Property Description and Location. This limited disclaimer of responsibility includes the following:

- The QP relied entirely on background information and details regarding the nature and extent of Mineral and Land Titles (in Section 4.1) provided by Lode Metals. The legal and survey validation of the claims is not in the author's expertise and the QP is relying on a Title Report by Parsons Behle and Latimer dated January 28, 2021 titled: Title Report – Cracker Creek Mining Project, Baker County, Oregon.
- The QP relied entirely on information regarding royalties that was provided by Parsons Behle and Latimer (2021) and is summarised to the best of the author's knowledge in Section 4.2.
- The QP relied entirely on information regarding permitting and environmental status of the Project that was provided by Lode Metals and is summarised to the best of the author's knowledge in Section 4.3.
- The Property contains a number of historical workings and infrastructure that has been mostly removed and reclaimed based upon the authors field visit. However, there is still some infrastructure that has not been entirely removed and reclaimed, indicating there may still be some potential for future environmental work that may be required and associated liabilities.

4 Property Description and Location

4.1 Description and Location

The Project is located in Baker County, Oregon, U.S.A., within the Elkhorn Mountains, a part of the Blue Mountains of northeastern Oregon and southeastern Washington. The Property is approximately 30 km (18.6 miles) west of Baker City and 9 km (5.6 miles) north of Sumpter, OR. The approximate center of the Property in Universal Transverse Mercator (UTM) NAD83 Zone 11 coordinates is 405,000 m E, 4,965,000 m N. The Property sits within Townships 8 South and 9 South, Range 37 East, Williamette Meridian of the Bureau of Land Management's (BLM) Public Land Survey System (PLSS).

The Property consists of 84 claims, consolidated into 61 parcels, consisting of patented lode claims, patented placer claims, patented mill site claims and fee land parcels (Figure 4.1). The Property encompasses approximately 1,575.32 acres (638 ha). A title opinion was provided to Lode Metals and APEX by Parsons Behle and Latimer on January 28, 2021 with respect to the Property. The Property is owned by Cracker Creek Gold Corporation and Cracker Creek Gold Mining Company ("CCGC" or "Cracker Creek") and the land holdings are summarized from the title opinion below. Cracker Creek Gold Mining Company changed its name to Cracker Creek Gold Corporation on August 21, 2019 and subsequently executed a Bargain and Sale deal to transfer all its surface and mineral claim holdings to Cracker Creek Gold Corporation. Not all of the transfers are complete as of the date of this report.

On November 9th, 2020, 2262496 Alberta Ltd. signed an Exploration and Purchase Option Agreement ('EPOM') with CCGC to acquire a 100% interest in the Cracker Creek Property. The EPOM extends for 42 months (3.5 years), whereby, US$100,000 was payable on signing (which has been completed) and a further US$60,000 is payable every six (6) months thereafter until either May 10th, 2024 or until the option to purchase is exercised by paying US$3,000,000. Cracker Creek retains a 2.5% Net Smelter Royalty (NSR). As well, a service agreement was signed with Minefinders, LLC on November 21st, 2020, which included an initial payment of US$40,000 (which has been completed) and further payments of US$40,000 every six months until May 1st, 2024. Minefinders, LLC retains a 0.5% NSR which can be purchased outright for US$500,000. If the NSR is purchased all payments stop at that time.

On January 28th, 2021, 2262496 Alberta Ltd. signed a Binding Letter of Intent ('LOI') with Crane Capital Corp. to acquire the issued and outstanding shares of 2242696 Alberta Ltd. As part of the LOI, Crane Capital Corp. (Crane) will change its name to Lode Metals Corp. The LOI is subject to a Share Exchange Agreement and Definitive Agreement.

The patented claims and fee lands are wholly owned and subject to property taxes (paid on an annual basis) as determined by the County. Taxes for 2019/2020 have been paid in full. The holding costs owing for the patented claims and fee lands controlled by Lode Metals for 2020/2021 is US$6,977.95.

4.1.1 Property Claims

The Property consists of 84 claims, consolidated into 61 parcels, that include: 42 patented lode claims, 17 patented placer claims, 5 patented mill site claims (collectively "patented claims") and 20 fee properties ("Fee Lands"; Figure 4.1). The patented lode claims, patented placer claims, patented mill site claims are described in Appendix 1.

The Fee Lands of the Cracker Creek Property comprise:

- In Township 8 South, Range 37 East of the Willamette Meridian, County of Baker and State of Oregon:

Section 28: Lots 12 and 13.

Section 29: Lot 9;

Section 32: Lots 4 through 10 inclusive, and Lots 14 and 15;
Section 33: Lots 3 through 7 inclusive, and lot 9.

And include Lieu Land Selections:
The Dalles 026766
Section 30: The Southeast quarter of the Northwest quarter;
the Northeast quarter of the Southwest quarter; and
the Northwest quarter of the Southeast quarter.

The Dalles 023714
Section 29: the East half of the Southeast quarter of the Southwest quarter, and
the East half of the West half of the Southeast quarter of the Southwest quarter.

Section 32: the North half of the Northeast quarter of the Northwest quarter, and
the Northeast quarter of the Northwest quarter of the Northeast quarter of the Northwest quarter.

4.1.1 Patent Reservations

The Patents list a reservation of a right of way for ditches or canals. The Patents for the placer mining claims list a reservation for any veins or lodes of quartz, or other rock in place bearing gold, silver, cinnabar, lead, tin, copper, or other valuable deposits within the lands patented which may have been discovered or known to exist prior to the dates defined for each patent. The dates listed for the patent reservations all precede 1901.

4.2 Royalties and Agreements

Cracker Creek retains a 2.5% Net Smelter Royalty (NSR) as part of the EPOM. As part of a Service Agreement that was signed, Minefinders, LLC retains a 0.5% NSR, which can be purchased outright for US$500,000.

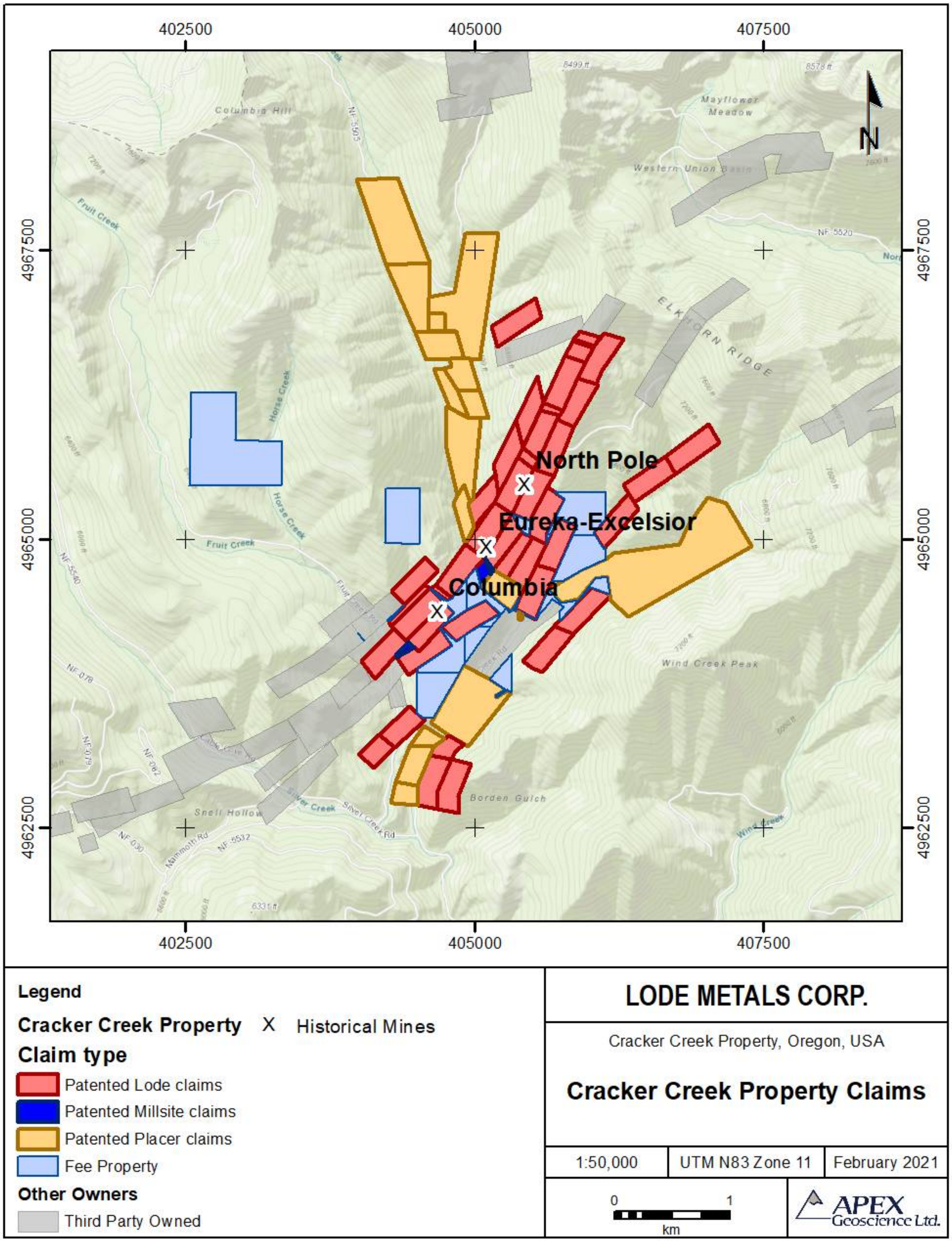
No other royalties have been identified for the Property based upon the title opinion provided by Parsons Behle and Latimer on January 28, 2021.

4.3 Environmental Liabilities, Permitting and Significant Factors

The Property consists entirely of fee owned land and patented claims, and hence does not require federal permits.

The issuance of permits is the sole responsibility of the Oregon Department of Geology and Mineral Industries (DOGAMI) who coordinate the permitting effort among

Figure 4.1. Cracker Creek Property claims overview.



other state agencies. An Oregon Exploration Permit which authorizes exploration and preliminary development work short of production needs to be acquired. Cracker Creek has established a good rapport with DOGAMI personnel and have a cooperative and supportive relationship with them. Permits for water appropriation need to be renewed through the Oregon Water Resources Department. Permits for water discharge, subject to appropriate standards, will need to be renewed by the Oregon Department of Environmental Quality (DEQ).

In Oregon, mine operators are required to obtain an operating permit from DOGAMI only if they disturb an area greater than 1 acre per year up to a maximum of 5 acres in 5 years, or mine more than 5,000 cubic yards of material annually (for reference, this is equivalent to removing about 3.5 ft of material over an acre). Starting in 2016, surface mining operations below the permit threshold are required to register with DOGAMI and obtain an Exclusion Certificate that will provide a better understanding of the extent of small-scale mining in Oregon, although operators will not be required to report their production (Madin et al., 2016).

The Property is densely forested with evidence of historical logging however no present day no logging is occurring. Continued maintenance of the forestry roads on the Property suggests that there is future logging potential on the Property.

Exploration and anticipated mining will have minimal impacts on the local and regional environment. Operations will be restricted to underground workings and surface disturbance restricted to the vicinity of mine openings. Upon completion of mining, the workings would be backfilled, and all mine openings permanently closed off. Infrastructure and other installations would be removed, the site will be regraded and revegetated compatible with surrounding land. All reclamation will be in compliance with applicable permits and regulatory authorities.

The author is not aware of any environmental liabilities, or any other known significant factors or risks related to the Cracker Creek Property that may affect access, title or the right or ability to perform work on the Property.

5 Accessibility, Climate, Local Resources, Infrastructure and Physiography

5.1 Accessibility

The Property is situated in Baker County in northeast Oregon, within the Elkhorn Mountain Range of the Blue Mountains. Access to the Property from Baker City is via Highway OR-7 S (Sumpter Stage Highway) for 46 km (29 miles) to the town of Sumpter. The route from Sumpter continues 12 km (7.5 miles) north on the unpaved Cracker Creek Road (Rd) to the Property Centre. The Cracker Creek Rd passes through the small ghost town of Bourne, OR, a town once integral to the mining development of the Crack Creek area in the late 1800’s.

Alternatively, the Property can be accessed from the north from Rock Creek, or by traveling north on Rock Creek Town Rd (which transitions into Foothill Rd) for 4 km (2.5 miles). Then by heading west on Bulger Flat Lane (Ln) for 8 km (5 miles), Bulger Flat Ln transitions into NF-7301 for 12 km (7.5 miles). After 12 km (7.5 miles) on NF-7301, turning south onto NF-5505 for 2 km (1.2 miles) to reach the northern tip of the Property. Travelling an additional 3 km along NF-5505 reaches the Property centre. The southern claims can be reached via this route by remaining on NF-7301 and heading west for an additional 3 km (1.9 miles) and taking Fruit Creek Rd south for 5 km (3.1 miles) to the Property. A second option to access the southern claims is remaining on NF-7301 for 6 km (3.7 miles) then head south on NF-5540 for 7 km (4.3 miles), continuing on this road as it transitions in to Cable Creek Rd which will pass through the Property and eventually connect to Cracker Creek Rd.

Throughout the Property numerous access roads were developed during the mineral exploration boom of the late 1800's to early 1900's, many of these follow the stream beds. These roads provide access to the historical mine workings on the Property. As well, there are many forestry access roads on the Property which remain well maintained.

5.2 Site Topography, Elevation and Vegetation

The Property is defined by ridges and small valleys. Elevation on the Property varies from approximately 1,600 m (5250 ft) to 2,100 m (6,900 ft), which is characteristic of the rugged and variable topography of the Elkhorn Mountain Range. Steep terrain gives way to many tributaries including Cracker Creek, Silver Creek, and Fruit Creek.

Streams on the Property are alpine in origin and are in pristine condition. Fruit Creek, Cracker Creek, and various unnamed tributaries flow south through the valleys and drain into Silver Creek and eventually into Phillips Lake.

The Property lies within the Wallowa-Whitman National Forest (WWNF). The WWNF encompasses 930,000 ha (2.3 million acres) of northeastern Oregon and extends from the Wallowa Mountains to the Snake River which denotes the Oregon-Idaho border (US Dep. Of Agriculture, 1990). Douglas fir forest are found on the Property and in addition to Douglas fir include larch, ponderosa pine, lodgepole pine and white fir (Thomas, 1979). Numerous species of woodpeckers, sapsuckers, and nuthatches inhabit the forest's canopy. Mammals in the area include elk, deer, and black bears (Thomas, 1979).

5.3 Climate

The mountainous terrain creates unpredictable weather in the area and great variability with elevation. Low valleys on the Property, and the town of Bourne have a continental climate. Bourne is located approximately 100 m (328 ft) east of the Property at an elevation of 1,640 masl (5,380 ft). The summer average high temperature is 28°C (82°F) and the average winter low is -1°C (30°F). Annual precipitation is estimated at 530 mm (20 in) and is primarily rain.

Higher elevations experience more drastic temperature variance and heavy snow fall between October and March. Though no temperature ranges are recorded for the specific Property area, surrounding weather information indicates lows of -28°C (-20°F) in the winter and highs of up to 32°C (90°F) in the summer. The heavy snowfall in the winter limits work on the Property to the summer months. Average annual snowfall accumulations of approximately 6 m (20 ft) are common at higher elevations.

5.4 Local Resources and Infrastructure

The information about historical Property infrastructure and underground workings is summarized and/or reproduced from Gerick et al. (1999). Rehabilitation of the main historical underground workings was completed by BMI-AMAX in 1981 as part of their work on the Property. A detailed outline of their rehabilitation efforts is given in Section 6 of this Technical Report. This restoration has since deteriorated and will require assessment and re-rehabilitation prior to entry.

The Property surrounds the abandoned town of Bourne, formerly Cracker City. With the discovery of gold in the area, Bourne became a booming mining town supporting local operations. In present day, Bourne has no amenities and is used as a summer vacation area. The nearest town to the Property, Sumpter, has a population of approximately 200 with historical mining tourism supporting much of local economy, including the Cracker Creek Museum of Mining. Food, lodging, and basic supplies are available in Sumpter.

The closest full-service center to the Property, Baker City, has a population of approximately 9,800 with a hospital, restaurants, grocery and hardware stores, lodging, mechanical shops, and an airport. Saint Alphonsus Medical Center has an emergency department and a suite of medical services. The Baker City airport, 9 km (5.6 miles) north of Baker City, facilitates chartered flights.

The Property itself consists of four historical underground mines: North Pole, Excelsior, Eureka, and Columbia. These mines are comprised of various underground and interconnected networks of vertical shafts, drifts, raises, sumps and levels all accessing the Cracker Creek vein. A longitudinal section along the length of the workings is shown below in Figure 5.1.

During the site visit, the author located 3 adits and 2 shafts related to the old mine workings. Historical workings on the Property were found to be partially or fully rehabilitated or in disrepair and inaccessible. The Jevne adit is the only historical adit which remains accessible. All mining equipment and facilities have been removed and old foundations and timbers are all that remain. The core is stored in a dry storage facility in Baker City. Descriptions of the main mine levels are given below.

5.4.1 Jevne Adit (1600 level)

The Jevne Adit is located at UTM 404922E/4963743N at an elevation 1,600 m (5,250 ft). Historically it was designed to be the main haulageway. It is 2.4 m by 3 m (8 ft by 10 ft) in cross section and a with 24-inch gauge track. The Jevne tunnel was driven 210 m (700 ft) to the northwest in an attempt to get under the Columbia - E&E workings, but was never completed and is about 460 m (1,500 ft) short of the historical workings. At one time, the Jevne Adit area was selected as a potential mill site.

5.4.2 Excelsior and Eureka (E & E) Shaft

The E & E shaft is located at UTM 405056E/4964818N. The shaft is approximately 225 m (740 ft) deep and would need to be de-watered and would require significant rehabilitation prior to any use. This shaft does not have a headframe.

5.4.3 Excelsior No. 1 Adit (1720 Level)

At an elevation of approximately 1,700 m (5,600 ft), the Excelsior No. 1 adit extends 915 m (3,000 ft) to the northeast along the vein structure and then 183 m (600 ft) into the footwall. Two bypass drifts were driven into the hanging wall where the original drift had badly caved. Crosscuts were driven into the hanging wall to serve as diamond drill pads for the level below.

5.4.4 Clark Level

Driven off a winze from the North Pole No. 1 level, the Clark Level is connected by raises to the Excelsior No. 1 level and includes crosscuts to delineate the footwall and hanging wall.

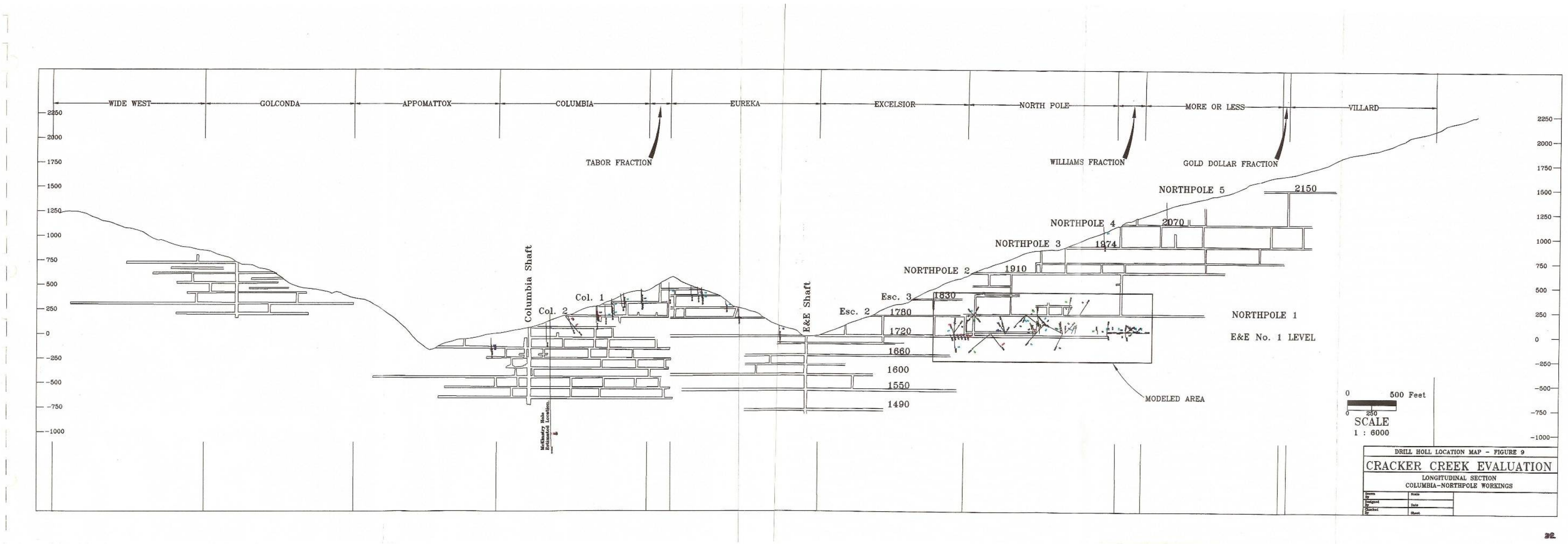
5.4.5 North Pole No. 1 (1780 Level)

The North Pole No. 1 level consists of a 305 m (1,000 ft) crosscut into the vein and 427 m (1,400 ft) drift along the footwall with crosscuts into the structure. Stopes above have collapsed. All of the North Pole adits appear to have been reclaimed and are inaccessible and likely would require significant rehabilitation to be used in future.

5.4.6 North Pole No. 5 (2150 Level)

The North Pole No. 5 level is at an elevation of approximately 2,164 m (7,100 ft) and the drift was driven 152 m (500 ft) by BMI and AMAX during rehabilitation.

Figure 5.1 Longitudinal section along the Cracker Creek vein (Gerick et al. 1999).



6 History

The property history outlined below is largely compiled and reproduced from Gerick et al. (1999), Brooks Minerals Inc. (1982) and Amax Exploration Inc. (1982). For the purposes of this Technical Report, early property history considers work on the Property pre-1980 (pre-AMAX-BMI work) and modern exploration history considers work thereafter. A summary overview of historical exploration activities is provided in Table 6.1

Table 6.1 Summary of exploration activities on the Cracker Creek Property.

Company Name	Year	Work Conducted	Zone
H. W. Turner	1907	Sampled a section of the vein formerly accessible from the old E & E shaft plus two adits on the Eureka claim	E&E shaft and two adits on the Eureka claim
Omega Mining	1968-1969	reopened the E & E adit and completed 1,500 feet of new drift	E & E
Chapman, Wood and Griswold (CWG)	1969	Sampled 400m of the new drift on the E & E Level	E & E Level
BMI-AMAX	1980-1982	Geological mapping and geochemical surveys. Drilled 24 core holes underground on the E & E level, 6 core holes underground in the North Pole No. 1 level, & 2 holes for geological reasons at Jevne decline. Total length drilled was 900m. Accurate information is only available for 29 of these holes.	E & E Level, North Pole No. 1, Jevne.
Simplot Exploration	1989-1991	Sampling and re-assaying. Drilled 30 core holes underground on the E & E level. Ten core holes drilled from the North Pole No. 1 level. Drilled 33 RC holes on surface over Columbia Claim Block.	E & E Level, North Pole No. 1, Columbia.

6.1 District and Early Property History – Pre-1980

The Property is located in the Cracker Creek mining district within the Bourne Quadrangle of northeastern Oregon, USA. Using historical values of gold and silver at the time of mining, the total value of production from the mines in the Bourne quadrangle is estimated to be between US$8 - US$11 million from vein deposits and US$3 million from placers. Most of the lode production occurred between 1895 and 1916 and most placer production is recorded from 1938-1941 (Brooks et al., 1980). The gold price averaged about US$19 per ounce between 1895 and 1916, and US$34 per ounce between 1938 and 1941.

Historically, the Cracker Creek mining district is one of the most important mining districts in Oregon (Figure 6.1). This district is one of several that were discovered and explored in eastern Oregon during the latter part of the 19th century. The Cracker Creek vein itself was discovered in the bed of Cracker Creek in 1873 and full-scale mining began in 1895 and continued to 1916. Four separate companies produced from four mines that lie within the current consolidated Cracker Creek Property. The four mines included the Eureka, Excelsior, North Pole and Columbia (Figure 6.2). The Eureka and Excelsior collectively became known as the E & E Mine. Total production is estimated at 450,000 ounces gold (Au) totalling approximately US$9,000,000 at US$19 per oz. Mill head grades ran about 0.55 oz/st (19 g/t) Au and recovery is estimated at about 65% with tailings dumped into the creek. No subsequent investment in more efficient mills was made.

In 1907, H.W. Turner sampled a section of the Cracker Creek vein formerly accessible from the old E & E shaft plus two adits on the Eureka claim. Subsequent sampling was conducted over some of these areas by other explorers including Knight and Porter in 1941. The results of this subsequent sampling verified and confirmed Turner's original results. Even so, there are still gaps in Turner's coverage that can be attributed to timbered backs or to the drift being off the ore structure. More recent check sampling of the E & E No. 1 or 1720 level is discussed below in Section 6.2.1.

Minor operations were conducted from 1916 to 1942. In 1946 and 1947, the property was optioned by Cominco Ltd. Co. and Solar Mining Co. Exploration focused on reopening the North Pole mine to test for downward projections of possible ore, as well as surface trenching and drilling. They option was dropped in late 1947.

Figure 6.1 Historical mines surrounding the Cracker Creek Property - regional.

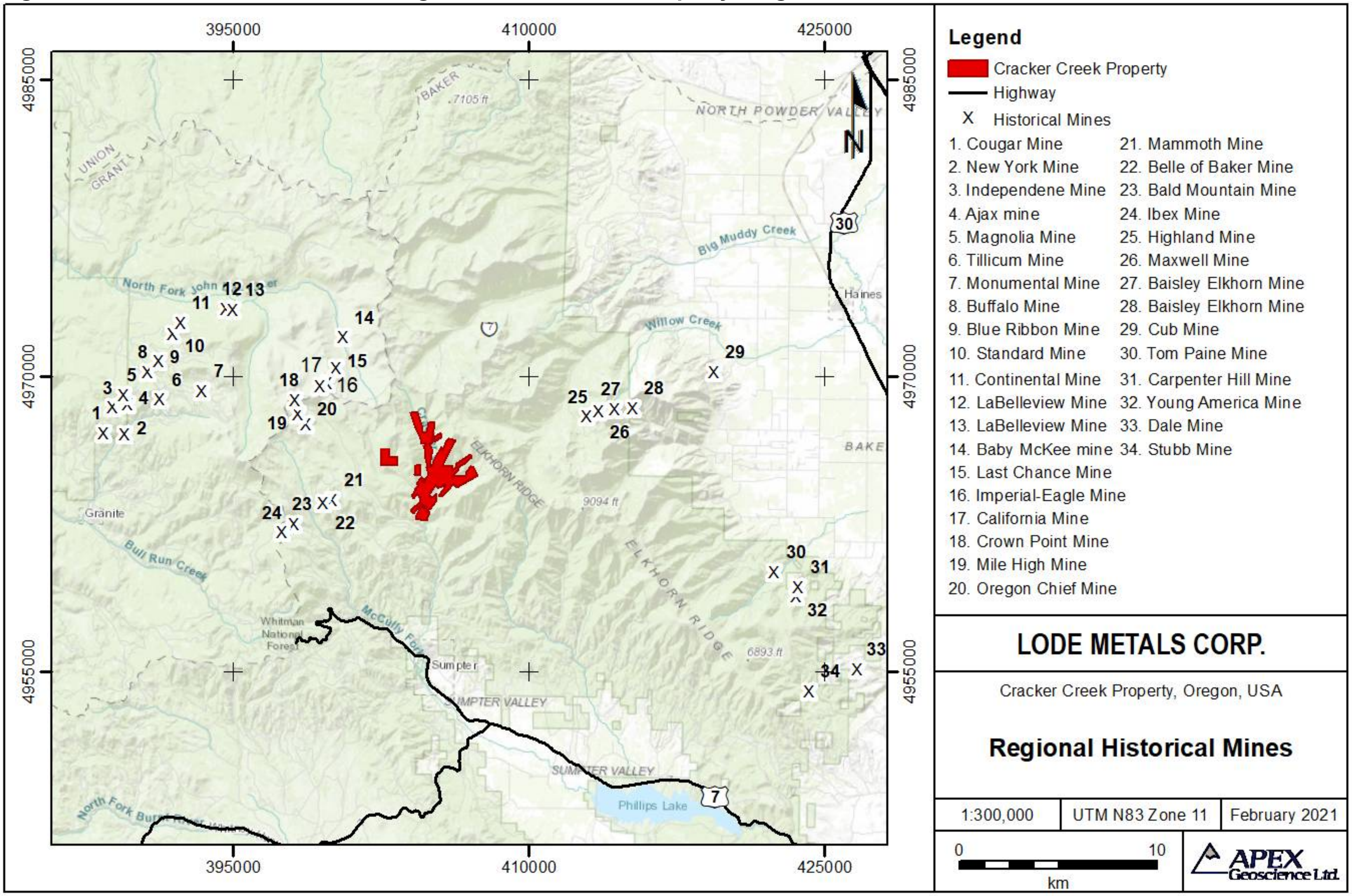
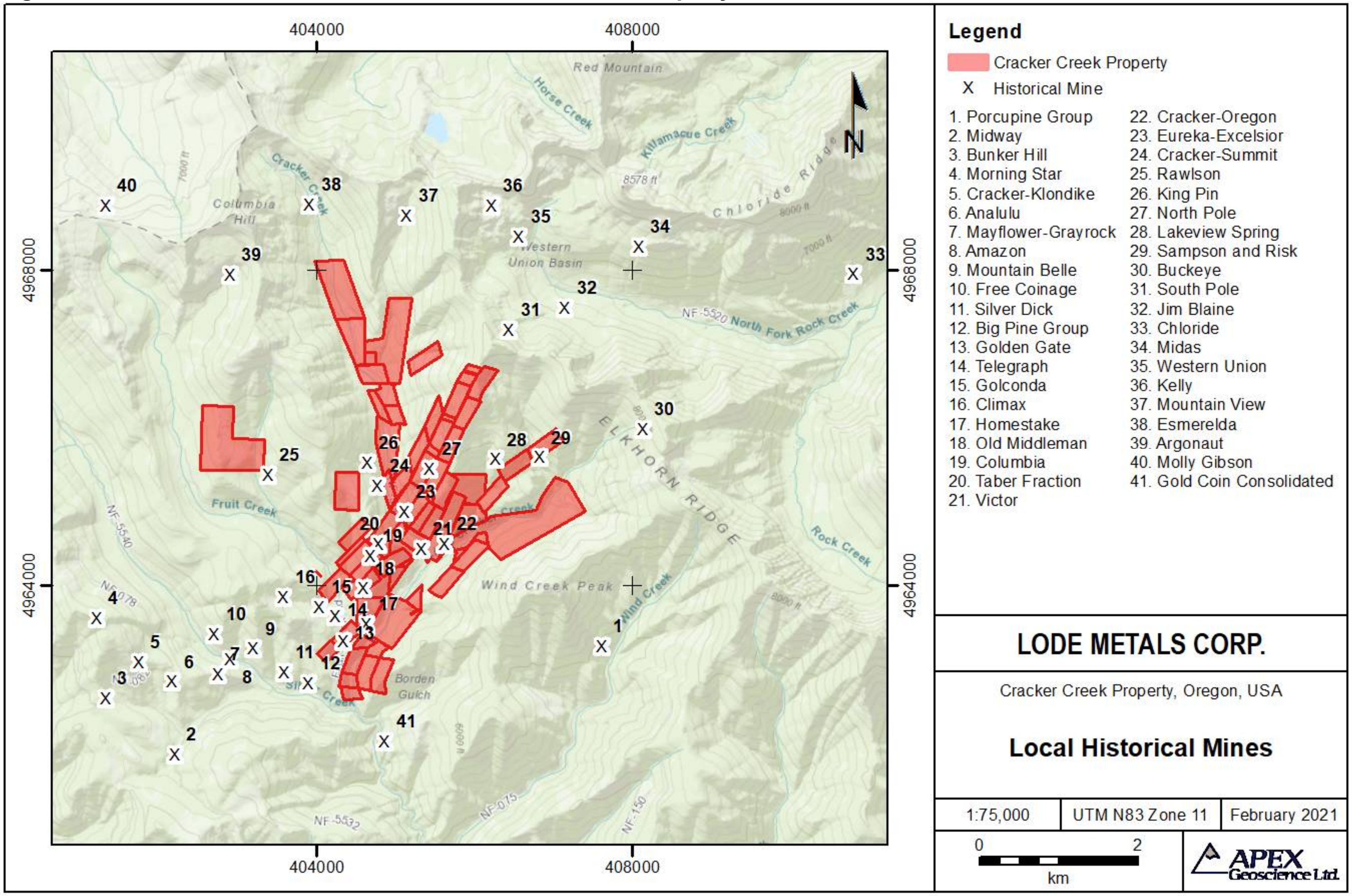


Figure 6.2 Historical mines on and near the Cracker Creek Property - local.



In 1968-69, a Canadian company Omega Mining (Omega) reopened the E & E adit and completed 1,500 ft of new drift. Along the drift they encountered almost continuous mineralized vein grading 12 g/t (0.35 oz/st) over an average width of 1.5 m. However, mining of the narrow vein was considered uneconomical at the time and Omega withdrew from the property. During Omega's tenure, Chapman, Wood and Griswold (CWG) sampled 400 m of the new drift on the E & E level in 1969. Their sampling returned an average grade and width of 11.8 g/t (0.344 oz/st) Au over 1.3 m.

6.2 Modern Exploration History – Post 1980

6.2.1 BMI-AMAX Joint Venture

In 1980 Amax Exploration, Inc. (AMAX) in joint venture with Brook Minerals, Inc. (BMI), collectively known as "BMI-AMAX", began exploring the Property.

They reopened the North Pole and E & E mines to delineate ore reserves and rehabilitate the old mines. AMAX Exploration financed this work and AMAX personnel supervised the geologic mapping and underground sampling. AMAX proposed to develop a 200 tonne per day mine-mill operation by 1983. They concluded that from the geologic interpretation of the known structure and mineralization, the property (Columbia, E & E and North Pole mines) has a potential ore reserve of 4 to 5 million tonnes, grading 10.5 grams gold per tonne (0.31 opt) and 21 grams silver per tonne (0.60 opt). Work up to that date, coupled with old data, indicated a current ore reserve (measured and indicated) of 290,400 tonnes (320,000 tons) averaging 10.2 grams Au per tonne (0.30 opt) over 1.5 meters (4.8 feet). Inferred reserves total 967,100 tonnes (1.07 million tons). Details of all the historical reserve and/or resource estimations completed on the Property are given below in Section 6.4.

The historical mineral reserve and resource estimates discussed in this Technical Report were calculated prior to the implementation of the Canadian Institute of Mining (CIM) "Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines" dated November 23rd, 2003 (and the updated document in 2019) and the CIM "Definition Standards for Mineral Resources and Mineral Reserves" dated May 10th, 2014, as well as the reporting requirements within the Canadian Securities Administrators (CSA) NI 43-101. Furthermore, a Qualified Person has not reviewed and validated the resource estimate or its underlying data and calculation parameters. As a result, the resource estimate provided above is to be treated by the reader as a historical estimate, and not a current mineral resource estimate. The estimate has been provided simply as an indication of the mineral potential of the property.

Under the joint venture agreement with AMAX, BMI spent some US$5.5 million reopening 5,000 feet of old drift, driving 3,000 feet of new drift, constructing 400 feet of raises, completing some 32 diamond drill holes and reopening the old E & E shaft. All primary mining equipment and the surface mining plant was installed, and a suitable area was found for the mill site. They concluded that there were no major problems associated *with an orderly development of the project. However, due to cash flow problems, AMAX withdrew from the project in October 1982 removing all equipment and facilities.*

BMI-AMAX performed the following work beginning in March 1980 and ending in October 1982:

6.2.1.1 Jevne Adit and Mill Site (1600 Level)

The Jevne Adit portal area was picked as a potential mill site. The Jevne Adit, which was designed to be the main haulageway was collared at an elevation of 1600 meters (5,249 feet) and has been advanced approximately 700 feet. This adit has an 8' x 10' cross section and is equipped with 24-inch gauge track. Waste rock from the adit has been used to fill in the old placer tailings along Cracker Creek at the proposed mill site. To allow use of the site, the county road was relocated to the south side of the creek for a distance of one-half mile, and culverts installed. The power line was also rerouted to follow the new road and was upgraded to allow transmission of the anticipated load. The local power provider has since removed this power line; thus, power will need to be re-established or an alternative source obtained.

6.2.1.2 E & E No. 1 Level 1720

BMI-AMAX rehabilitated and re-sampled an accessible portion of the 1,500 ft (457 m) drift opened by Omega in 1968-1969 on the E & E No. 1. The BMI-AMAX sampling returned results of 18.0 g/t Au (0.525 oz/st) over an average width of 1.6 m. These results compare favourably with the CWG's results over the same interval which yielded 11.9 g/t Au (0.344 oz/st) over 1.3 m. Additional floor sampling by BMI-AMAX of approximately 180 m of the preceding section of an older portion of the E & E level returned an average 13.1 g/t Au over 1.5 m. This section has not been stoped below the level.

6.2.1.3 Excelsior and Eureka (E & E) Shaft

The shaft was reopened down to the existing water table (68 feet) and rehabilitated. A culvert was placed in the creek and backfilled to allow passage to the shaft. Currently there is no headframe and the shaft will need to be de-watered and rehabilitated. The shaft is an estimated 225 meters (750 feet) deep.

6.2.1.4 Excelsior No. 1 Adit (1720 Adit)

This adit, although in disrepair, extended 3,000 feet to the northeast along the vein structure at the time the property was taken over by BMI. It is at an elevation of 5,600 feet. It was repaired and retimbered to the face. At two locations, where the old drift was badly caved, by-pass drifts were driven in the hanging wall of the vein.

The drift face was advanced for an additional 600 feet in the footwall, with crosscuts back to the vein at intervals. Several short crosscuts were driven into the hanging wall to serve as diamond drill stations for holes intersecting the vein below the level.

6.2.1.5 North Pole No. 1 (1780 Level)

The first portion of this level consists of a 1,000-foot crosscut into the vein. The caved portal was reopened, drained and timbered, and the crosscut was rehabilitated. Along the vein, stopes above had collapsed on the drift timbers, and a new drift was put in along the footwall, with crosscuts back into the structure at intervals, for 1,400 feet. Old workings were sampled where possible.

6.2.1.6 North Pole 5 (2150 Level)

This is the most northerly of the major workings along the structure, with the portal at an elevation of about 7,100 feet. The old drift was rehabilitated for 500 feet.

6.2.1.7 Clarke Level

This drift was originally driven off a winze sunk from the North Pole No. 1 level, 200 feet above. It was connected by raises from the Excelsior No. 1 level, rehabilitated, extended about 150 feet with crosscuts at intervals to delineate the foot and hanging walls of the structure, and sampled.

6.2.1.8 Raises

An inclined raise at the north end of the old workings and connected to the North Pole No. 1 level was rehabilitated. A five-foot borehole between the two levels, put in by the Omega group, was fitted with ladders, and three crosscuts, each intercepting the foot and hanging wall of the structure, were put in and sampled. A new raise, about halfway between the two discussed above, was driven. As this raise advanced, three crosscuts were installed and each was sampled.

6.2.1.9 Surface Work

Access roads were improved and office facilities were established. The main road to Bourne was relocated to provide space for the mill. Power and telephone lines were installed in anticipation of placing the mine into production.

6.2.1.10 Engineering

A survey net was established and tied to the Oregon State grid system. All patented claim corners that could be identified have been re-established, marked with brass caps and surveyed. Seventy-two lode and placer claims have been located and recorded. For the most part, these are fractional claims to cover gaps that were found, and in some cases, both placer and lode claims were staked on the same parcel of ground to prevent the possibility of outside interference.

6.2.1.11 Geology

The entire area was mapped and geochemical surveys were completed in 1980-81. Also, in conjunction with the Oregon Department of Geology and Mineral Industries, the entire Bourne quadrangle was mapped. This map has been published by the Department as GMS-19 and authored by Brooks at al. 1980.

Currently, some of the surface and underground geochemical survey data is available in hard copy to review and any future work programs should have an allowance to compile this data.

6.2.1.12 Work on Other Veins

On the hill to the southwest of the E & E shaft is a parallel vein in the hanging wall of the main structure about 600 feet from the main lode, known as the "Ralph" or "Victor" vein. An old northwest trending crosscut had been reopened which intersects the vein about 800 feet from the portal. At that point, the vein is 4'-5' wide, and had been drifted on for about 100 feet. This had been sampled and indicates 1.3 feet of mineralization averaging 13 g/t (0.38 opt) Au. No work has been done on any of the other veins except for surface sampling.

6.2.2 Simplot Resources Exploration

Simplot Resources (Simplot) visited the E & E and North Pole mines in January and February of 1989. Numerous samples were collected and assayed to verify the AMAX data. AMAX and Cominco data were analyzed, and meetings were held with BMI and former AMAX personnel to discuss the potential of the property. Simplot concluded that enough potential existed to put together the Bourne-Simplot mining venture and begin exploration for extensions of known ore bodies and to search for new ore bodies. Simplot focused on exploration of untested underground targets, exploration for a shallow, open pit resource on the Columbia vein system and metallurgical test work involving gold recovery by bio-leaching. Simplot completed 41 underground core holes and 39 surface core holes between 1990 and 1991. Additional information about the drill program is provided in Section 6.3. A couple of reports suggest that some of the surface drilling was completed as RC holes. The author has found only evidence of core holes to date.

No further mineral exploration has been completed on the property since Simplot withdrew from metallic mineral exploration and development sector in 1991.

6.2.3 Cracker Creek Gold Mining Company

In the 1990’s and 2000’s Cracker Creek Gold Mining Company carried out maintenance and reclamation on the Property. They demolished and removed deteriorating buildings and structures and undertook various environmental initiatives to eliminate problem areas identified by the Oregon DEQ (Jevne, 2008). The water permit was maintained until at least 2012 (BHLK, 2012a).

Several attempts were made by Cracker Creek Gold Mining to sell the Property. In 1999, Arrowhead Resources (Arrowhead) reviewed the Project and recommended additional exploration and development drilling to enhance underground ore reserves (Gerick et al., 1999). The historical resource estimations completed by Arrowhead are discussed in Section 6.4.3. No follow up exploration is reported. Subsequently in 2008 Minera S.A. commissioned a scoping level study for the project. The study primarily focused on updating/developing capital and operating costs for a 400 tonne per day underground mine and a surface plant producing a bulk sulphide concentrate (Sipols, 2008). No follow up is reported. In 2012, the BHLK Group reviewed the Property and also recommended additional exploration and delineation work (BHLK, 2012b). However, no follow-up exploration is reported.

6.3 Historical Drilling

Two documented historical drill programs were completed on the Property: 1981-82 by BMI-AMAX and 1990-91 by Simplot.

In 1981 and 1982, BMI-AMAX drilled a total of 32 core holes: 24 underground holes on the E & E No. 1 level, six underground holes on the North Pole No. 1 level, and two holes on the Jevne decline (Figure 6.3). Total length drilled was 900 meters. One of the Jevne surface holes, drilled from near the top of the ridge northeast of the mine workings, intersected the structure with very poor core recovery. The second hole was not completed because of weather conditions. Accurate drill hole information is available for 29 of the drill holes. Assay information is available for 22 of the 32 core holes.

Numerous holes drilled along the E & E No. 1 (1720) level returned excellent assay results with more than 60% of the holes (with assay data) providing at least one assay greater than 5 g/t (Table 6.2; Figure 6.3). Holes with excellent grades were distributed over 550 m (1,800 ft) of strike length along the E & E No. 1 Level where it is positioned below the North Pole 2 to 4 portals and workings. The area where the drilling was conducted starts about 550 m (1,800 ft) northeast along strike from the main E & E Portal on the No. 1 (1720) level (Figure 6.3). At least 12 core holes yielded greater than 10 g/t over more than 1 m thickness with highlights including 59.1 g/t (1.724 oz/st) over 1.2 m core length in EE14, 64.28 g/t (1.875 oz/st) over 1.4 m core length in hole EE17, and 23.21 g/t (0.677 oz/st) over 4 m core length in EE30 (Table 6.2).

It is reported that a total of 40 underground core holes and 33 surface RC holes were completed in 1990-1991 by Simplot. The author has found evidence of 41 underground core holes and 39 surface holes, most of which appear to be core holes based upon the geological logs and core remnants in a storage unit. The underground holes were typically drilled from the hanging wall into the footwall at minus 45 and 60 degree angles. A total of 30 core holes were completed on the E & E level. The other 11 core holes were drilled from the North Pole No. 1 level. Of the 41 core holes drilled, only 38 had enough drill hole information to allow them to be useful in the database. A total of 33 surface holes over the Columbia claim block were completed to test the potential of a near surface open-pitable resource. The other six 1991 holes were completed at the E & E and North Pole prospects. Based upon the author's visit to the core storage facility it appears that most if not all the 1991 surface holes were core holes.

Numerous holes from the E & E No. 1 level completed during 1991 returned excellent results including 13.03 g/t (0.38 oz/st) Au over 2.79 m core length in hole EE40, 10.32 g/t (0.301 oz/st) Au over 1.31 m core length in hole EE43 and 12.89 g/t (0.376 oz/st) Au over 2.63 m core length in hole EE61, with all of the holes drilled in the same area of the 1981-1982 BMI-Amax drilling along the E & E No. 1 (1720) Level (Table 6.2 and Figure 6.3).

Simplot conducted a surface drilling program in 1990-1991 employing core drilling. With the exception of a few holes, most of the holes were drilled at the Columbia Mine area and over the hill to the northeast into the Eureka Mine area (Figure 6.4).

Based upon the historical mining long sections it is apparent there was less underground mining on the Eureka claim coming down the hill to the E & E No.1 (1720) portal and main E & E workings. Simplot conducted the drilling with the goal of identifying potential mineralization that could be mined by open pit. Some workings were intersected by the drilling, however there were a number of good intersections obtained from a couple of the surface Columbia holes with gold highlights including 41.11 g/t (1.2 oz/st) over 1.6 m core length in hole 90-01, 11.90 g/t (0.347 oz/st) over 2.3 m core length in hole 90-03, 14.64 g/t (0.427 oz/st) over 1.48 m core length in hole 90-06, 13.24 g/t (0.386 oz/st) over 2.63 m core length in hole 91-1-45, 15.98 g/t (0.466 oz/st) over 11.16 m core length in hole 91-2-45 and 5.45 g/t (0.159 oz/st) over 7.02 m core length in hole 91-7-60. (Table 6.2 and Figure 6.4).

Historical drilling on the Property is illustrated in Figures 6.3 and 6.4. No drilling has been completed on the property since 1991.

6.4 Historical Reserve/Resource Estimations

Several historical reserve/resource estimates have been completed by past exploration companies that include: BMI (Brooks Minerals Inc., 1981, 1982; Walker, 1981, 1982), AMAX (Rostad, 1982; 1983), and a joint AMAX/Brooks estimation (1983) and Arrowhead Resources, LLC (Gerick et al., 1999).

The historical reserve/resource estimations summarized in the text that follows include: 1) AMAX (Rostad, 1982); 2) a comparison between AMAX and BMI resource estimations conducted by Behre Dolbear – Riverside Inc. (1987); and 3) Arrowhead Resources, LLC (Gerick et al., 1999). The Rostad (1982) and Gerick et al. (1999) internal or in-house assessments of reserves/resources include discussion on the delineation and computation of the reserves/resources, and therefore, the lead QP considers documentation of the estimations relevant background information in this Technical Report. In addition, a comparison between several AMAX-Brooks internal 1982-1983 reserve/resource estimations – as conducted by Behre Dolbear – Riverside Inc. (1987) – is provided as background information.

Table 6.2. Assay highlights from 1981-1982 BMI-AMAX and 1990-1991 Simplot drilling.

			Intercept		Au		Ag	
Hole ID	From (m)	To (m)	Width (m)	Width (ft)	(g/t)	(oz/st)	(g/t)	(oz/st)
90-01	11.16	12.77	1.61	5.28	41.11	1.20	-	-
90-01	39.04	47.24	8.20	26.91	4.46	0.13	-	-
90-03	45.93	48.23	2.30	7.54	11.90	0.35	-	-
90-03	61.68	62.34	0.66	2.15	6.24	0.18	-	-
90-04	42.98	45.28	2.30	7.54	5.38	0.16	-	-
90-05	22.97	25.92	2.95	9.69	6.82	0.20	-	-
90-06	60.37	61.84	1.48	4.84	14.64	0.43	-	-
91-1-45	33.79	36.42	2.63	8.61	13.24	0.39	-	-
91-1-45	42.65	44.62	1.97	6.46	9.94	0.29	-	-
91-2-45	27.56	38.71	11.16	36.60	15.98	0.47	-	-
91-4-37	35.43	36.75	1.31	4.30	6.79	0.20	-	-
91-7-45	24.28	26.35	2.07	6.78	6.82	0.20	-	-
91-7-60	32.02	39.04	7.02	23.03	5.45	0.16	-	-
91-8-45	23.95	24.61	0.66	2.15	16.42	0.48	-	-
91-8-45	28.54	33.14	4.59	15.07	6.48	0.19	-	-
91-10-45	23.62	27.56	3.94	12.92	3.74	0.11	-	-
91-12-35	21.33	23.95	2.63	8.61	3.63	0.11	-	-
91-13-45	15.09	15.75	0.66	2.15	9.05	0.26	-	-
91-13-60	13.12	13.78	0.66	2.15	7.61	0.22	-	-
EE10	5.20	6.10	0.90	2.95	5.20	0.15	4.10	0.12
EE14	9.50	10.70	1.20	3.94	59.10	1.72	26.40	0.77
EE15	14.60	15.40	0.80	2.62	67.70	1.97	30.50	0.89
EE16	13.70	17.10	3.40	11.15	9.27	0.27	50.70	1.48
EE16 - including	13.70	16.20	2.50	8.20	11.76	0.34	64.75	1.89
EE17	15.20	17.70	2.50	8.20	46.80	1.37	109.23	3.19
EE17- including	16.30	17.70	1.40	4.59	64.28	1.87	286.20	8.35
EE18	17.30	19.30	2.00	6.60	15.25	0.44	20.75	0.61
EE19	13.10	14.40	1.30	4.27	6.00	0.18	7.75	0.23
EE21	21.00	22.00	1.00	3.28	31.70	0.92	0.34	0.01
EE23	13.40	14.30	0.90	2.95	28.30	0.83	12.70	0.37
EE30	56.10	60.10	4.00	13.12	23.30	0.68	10.07	0.29
EE30 - including	56.10	57.40	1.30	4.27	13.00	0.38	8.60	0.25
EE30 - including	57.40	58.80	1.40	4.59	19.80	0.58	7.90	0.23
EE30 - including	58.80	60.10	1.30	4.27	37.10	1.08	13.70	0.40
EE31	53.40	55.20	1.80	5.91	12.90	0.38	9.60	0.28
EE40	13.45	16.24	2.79	9.15	13.03	0.38	-	-
EE41	41.01	42.65	1.64	5.38	7.61	0.22	-	-
EE43	23.29	24.61	1.31	4.30	10.32	0.30	-	-
EE61	12.47	15.09	2.63	8.61	12.89	0.38	-	-
EE63B	24.93	28.22	3.28	10.76	9.53	0.28	-	-
EE64	17.88	18.87	0.98	3.23	12.28	0.36	-	-
EE65	16.40	17.39	0.98	3.23	6.21	0.18	-	-
EE67	14.76	16.40	1.64	5.38	14.40	0.42	-	-
EE68	9.84	11.48	1.64	5.38	7.03	0.21	-	-
EE69	36.42	37.40	0.98	3.23	17.93	0.52	-	-
EE70	24.28	25.75	1.48	4.84	6.31	0.18	-	-
EE71	31.17	32.48	1.31	4.30	11.62	0.34	-	-
EE73	21.33	22.64	1.31	4.30	8.30	0.24	-	-
EE76	16.90	18.04	1.15	3.77	9.64	0.28	-	-
NP 90-01	29.53	31.66	2.13	7.00	5.45	0.16	-	-

Figure 6.3 Historical drill holes over the E&E area.

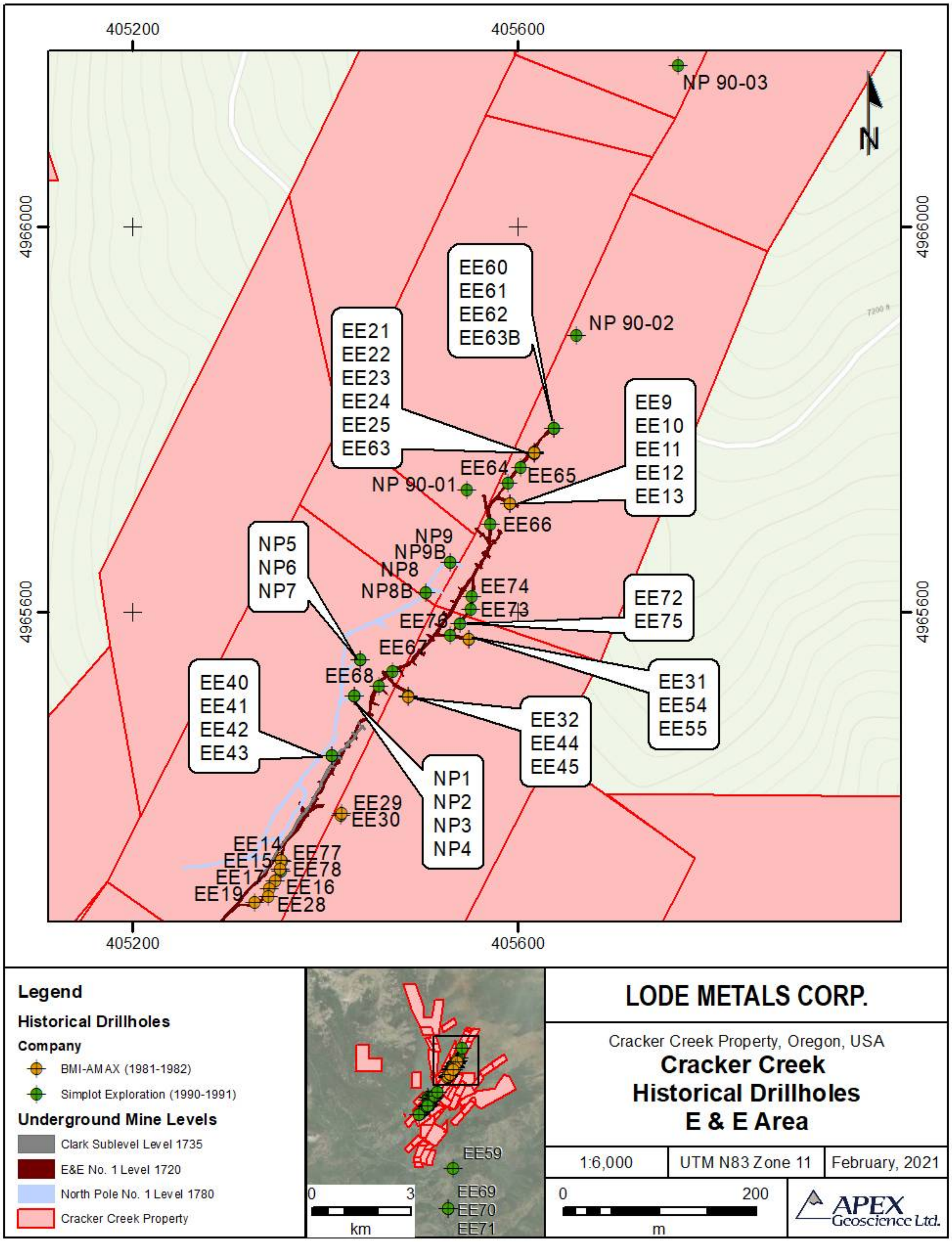
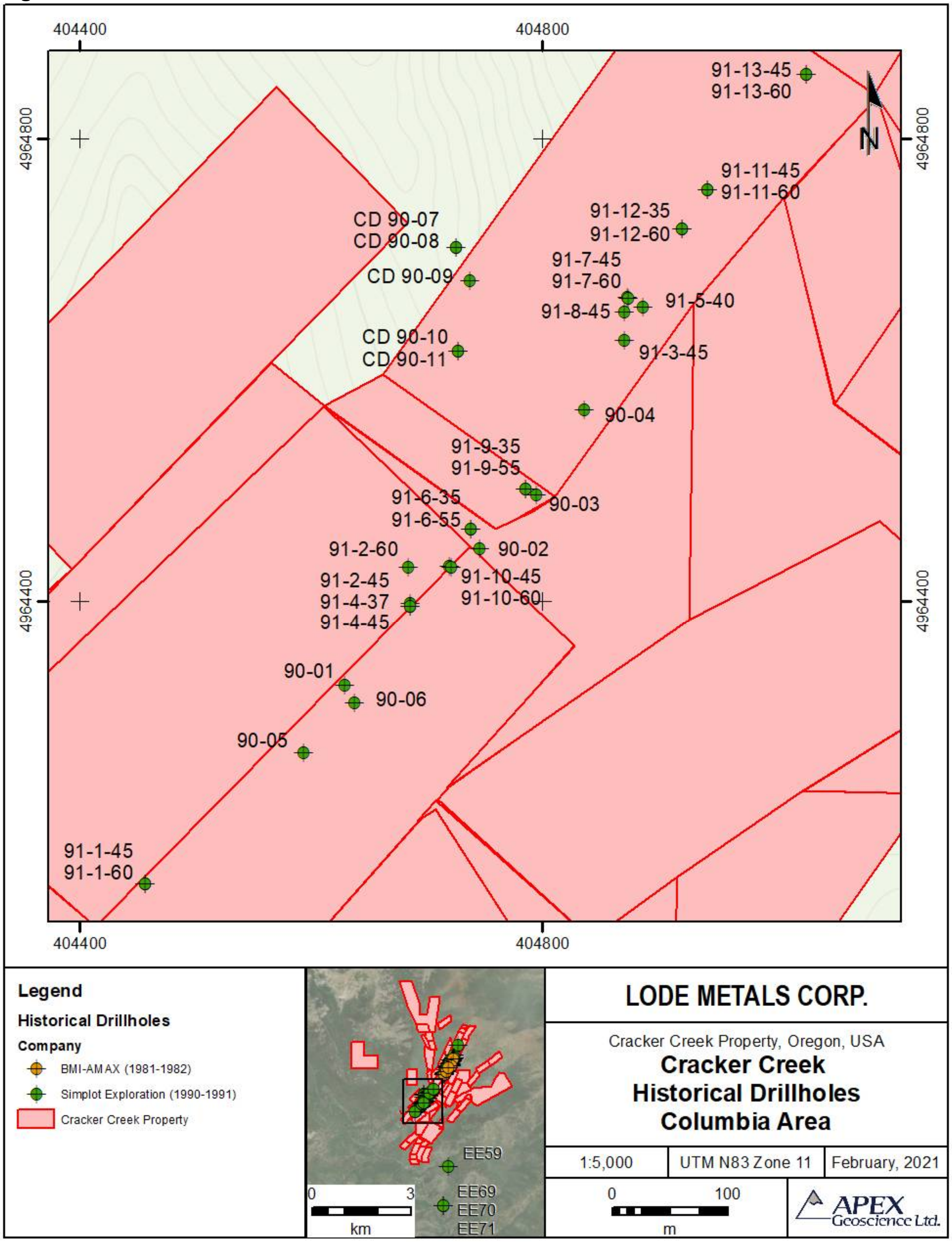


Figure 6.4 Historical drill holes over the Columbia area.



Comparisons between the historical resource estimations are subjective due to a number of factors, including but not limited to: 1) different assay and geological databases available when the resource estimates were calculated; 2) different resource estimation methodologies; 3) the lack of uniform cutoff grades used in the resource estimates; and 4) the lack of uniformly applied dilution factors.

The historical mineral reserves/resources presented in this sub-section have not been validated by a QP or the authors of this report and are being treated as historical in nature. These historical estimates all predate CIM Definition Standards on Mineral Resources and Mineral Reserves (May 10, 2014) and the CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines provided in 2003 and updated in 2019. A QP has not done sufficient work to classify the historical estimations as current mineral resources, and the authors and Lode Metals are not treating any of the historical estimates as a current mineral reserve or resource. The historical reserves or resources are presented only to highlight the historical references to potential mineralization that may be present at the project and to provide information with respect to the potential grade and volumes that might be targeted in future with further work.

The historical resource estimates were completed prior to the implementation of NI 43-101 Standards of Disclosure for Mineral Projects and the author's use categories other than those stipulated by CIM Definition Standards on Mineral Resources and Mineral Reserves. For example, definition terms used to define these historical resource estimations include the U.S. Bureau of Mines, Dictionary of Mining, Mineral and Related Terms (Rostad, 1982). In addition, all estimations are presented as mineral reserves with no reference to mineral resources. Consequently, the historical reserve and/or resource estimations are not compliant with CIM Definition Standards on Mineral Resources and Mineral Reserves as required by NI 43-101.

The historical reserves/resources are presented for the purposes of illustrating the potential extent of mineralization that may be present at Cracker Creek.

6.4.1 Historical Reserve/Resource Estimations: AMAX Exploration Inc. (Rostad, 1982)

AMAX completed an assessment of the geology and ore reserves at the Cracker Creek Project in April 1982. The information presented in this text, with selected extracts (in quotations and italicized), is taken directly from Rostad (1982).

The estimations focus on a major vein structure identified as the North Pole – E & E – Columbia vein system. Gold showings included in the estimations – identified as sectors – included the North Pole, Excelsior, Eureka and Columbia zones. A summary of the number of rock samples, trenches, drill holes and/or assay datasets used in the resource estimations is not provided. It appears a polygonal method was used to calculate the mineral reserves on each individual block, which in this case, refers to estimations conducted individually on the individual mineral claims.

Rostad (1982) states that the reserve estimation has substantially lower tonnage than reported by Brooks Minerals Inc. (1981, 1982) and Walker (1981, 1982) due to more rigorous application of cutoff limitations and tighter limitations on the inferred blocks.

The estimations were classified into two categories of:

- "*Probable ore reserves* [split into Probable A and Probable B] *with the lower of the two (Probable B) as just a shade above rank inferred*"; and
- "*Inferred ore*" designated to blocks where "*the vein is presumed to exist and for which no assay information is available*".

Probable A reserves includes material that is exposed and sampled on one or more sides of the block (or claim) and has generally more than one assay available. Probable B reserves include small blocks (or claims) that have only one assay available or there is greater uncertainty than the Probable A blocks.

The ore reserve estimated does not include any blocks classified as proven or measured because "*assays are generally limited to one side of the block*" (or claim).

The estimations are divided into "*geological reserve with assumption that minimum mining width is one metre*" and "*diluted reserve which assumes that the minimum mining width will be 4.5 ft* [1.37 m] *and that dilution will average 0.5 ft* [0.15 m] *on each side of the pay streak*".

The minimum mining width was estimated to be one metre (3.3 feet). Cutoff grade is generally one metre averaging 0.18 oz/st (6.17 g/t) Au "*except where low-grade samples must be included within the stope block*". A density of 12.2 short tons per cubic foot was used (roughly 2.62 tonnes/m^3).

As per Rostad (1982), "*the computed tonnage and grade are judged to be accurate within limits which are stated, and no such limit is judged to differ from the computed tonnage or grade by more than 20 per cent*". In addition, "*Most of our blocks have assays on only one side and thus the limits are not clearly established and certainly not within ±20%*".

The estimation results are presented in Table 6.3. Total gold in the Probable A, Probable B and Inferred categories were estimated by Rostad (1982) at: 49,978 ounces, 42,944 ounces and 165,923 ounces gold, respectively. The authors or a QP have not done sufficient work to classify the historical estimate as current mineral resources, and the authors and the Issuer, are not treating any part of the historical estimate as current mineral reserves or resources.

A "*reduced ore reserve summary*" was also reported in the event ore-grade continuity cannot be established at Blocks (Claims) 5 and 6. The recalculation affected mainly the inferred category which, for example, reduced the estimated geological reserves inferred tonnage from 473,500 short tons to 292,000 short tons and the estimated mineable (diluted) reserves from 581,000 short tons to 360,000 short tons.

Nicol (1993) reports that additional low grade or development dump material was not included in the estimation. Preliminary sampling by Simplot and others indicated the old dumps contained approximately 170,000 tons averaging 0.070 ounces per ton (2.40 g/t) Au (Nicol, 1993). The authors or a QP have not done sufficient work to classify the historical estimate as current mineral resources, and the authors and the Issuer, are not treating any part of the historical estimate as current mineral reserves or resources.

6.4.2 Historical Reserve/Resource Estimations: Comparison of AMAX-Brooks 1982-1983 Estimations

The AMAX April 1982 reserve estimation was followed up by several additional Cracker Creek reserve estimations completed by AMAX (October 1982), BMI (October 1982) and AMAX/BMI (March 1983). The follow-up estimations were summarized by Behre Dolbear – Riverside Inc. (1987), the results of which are presented in Table 6.4. The authors or a QP have not done sufficient work to classify the historical estimates as current mineral resources, and the authors and the Issuer, are not treating any part of the historical estimates as current mineral reserves or resources.

The separate estimations used a volume/tonnage factor of 12 (roughly 2.67 tonnes/m^3) and polygonal reserve calculations were conducted on a block-by-block basis (note: including on non-contiguous blocks). A dilution factor has not been uniformly applied in any of the 3 estimations.

Table 6.3 Geological and Mineable (Diluted) Reserves as estimated by AMAX Exploration Inc. (Rostad, 1982).

A) Geologic Reserves

	Tonnage (short tons)	Width (feet)	Grade (ounces Au)
Probable A	126,500	5.97	0.378
Probable B	117,400	5.57	0.366
Probable (A+B)	243,900	5.78	0.372
Inferred	473,500	5.04	0.350
Total	717,400	5.29	0.358

B) Mineable (Diluted) Reserves

	Tonnage (short tons)	Width (feet)	Grade (ounces Au)
Probable A	149,000	6.82	0.322
Probable B	139,100	6.46	0.309
Probable (A+B)	288,100	6.65	0.315
Inferred	581,000	6.00	0.286
Total	869,100	6.22	0.296

Note: The estimates provided above are historical reserve and resource estimations that predate CIM Definition Standards on Mineral Resources and Mineral Reserves and NI 43-101 Regulations. A QP has not done sufficient work to classify the historical estimations as current mineral resources, and the authors and the Issuer, are not treating any of the historical estimations as a current mineral reserves or resources.

Table 6.4 Mineral reserve estimation comparison between Amax Exploration Inc., Brooks Minerals Inc. and a combined estimation conducted in October 1982 and March 1983.

A) Reserve estimation parameters

Reserve estimation company	Date of estimate	Number of blocks		Average width (feet)		Cutoff grade (oz/ ton)
		Proven	Probable	Proven	Probable	
AMAX	Oct. 1982	32	18	5.3	5.3	0.18
Brooks Minerals	Oct. 1982	15	13	4.6	5.1	0.18
AMAX/Brooks	Mar. 1983	?	?	?	?	?

B) In situ, reserve estimations - proven and probable

Reserve estimation company	Date of estimate	Proven		Probable		Total	
		Short tons ('000)	Grade (oz/ton)	Short tons ('000)	Grade (oz/ton)	Short tons ('000)	Grade (oz/ton)
AMAX	Oct. 1982	100.0	0.38	33.2	0.36	133.2	0.38
Brooks Minerals	Oct. 1982	164.0	0.32	139.8	0.29	303.8	0.31
AMAX/Brooks	Mar. 1983	135.3	0.36	66.7	0.32	202.0	0.34

C) In situ, reserve estimations - inferred

Reserve estimation company	Date of estimate	Inferred	
		Short tons ('000)	Grade (oz/ton)
AMAX	Oct. 1982	639.8	0.38
Brooks Minerals	Oct. 1982	1,078.9	0.31
AMAX/Brooks	Mar. 1983	1,198.0	0.31

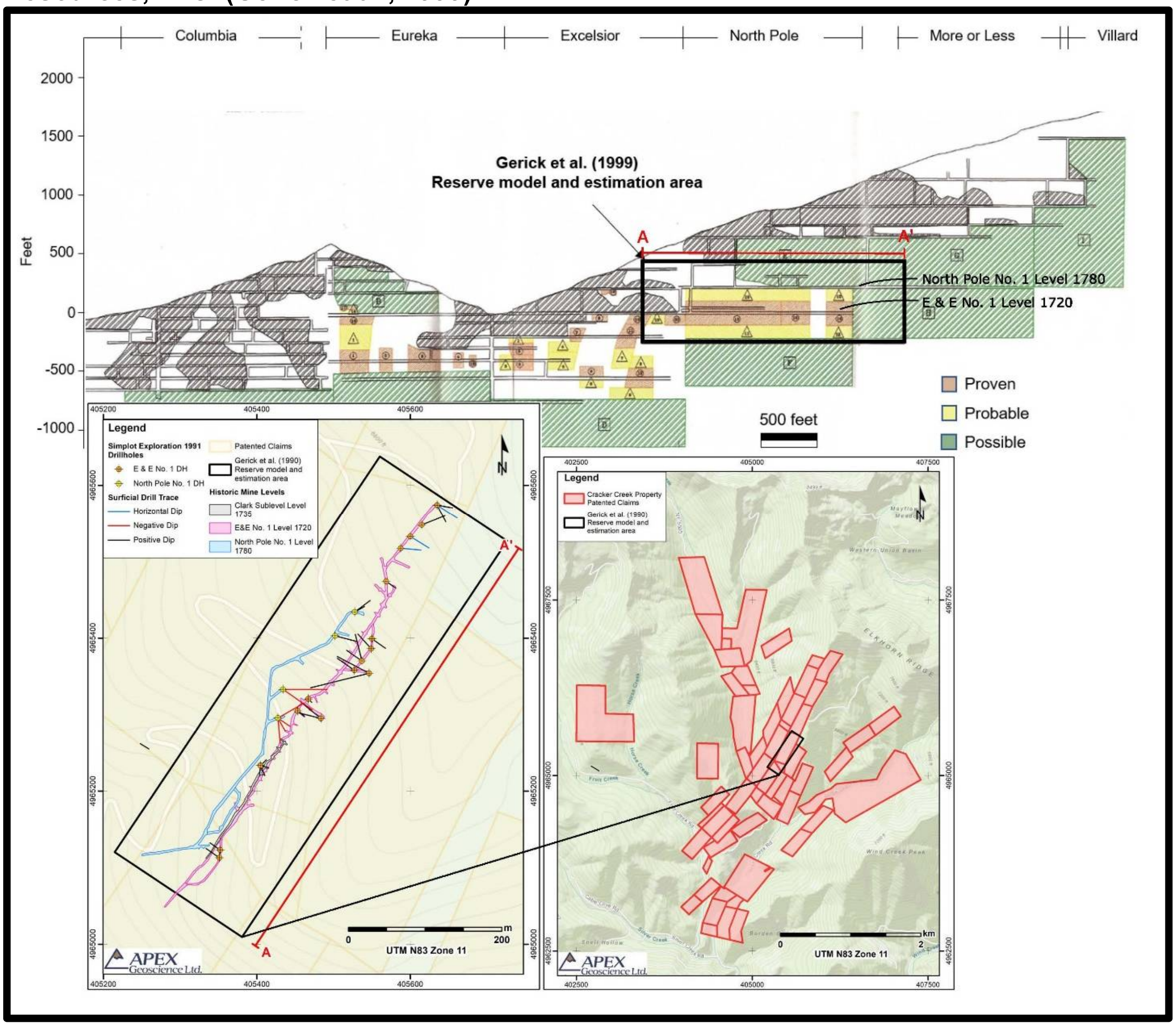
Note: The estimates provided above are historical reserve and resource estimations that predate CIM Definition Standards on Mineral Resources and Mineral Reserves and NI 43-101 Regulations. A QP has not done sufficient work to classify the historical estimations as current mineral resources, and the authors and the Issuer, are not treating any of the historical estimations as a current mineral reserves or resources.

6.4.3 Historical Reserve/Resource Estimations: Arrowhead Resources, LLC (Gerick et al., 1999)

Arrowhead Resources, LLC (Arrowhead) completed an assessment of the ore reserves at the Cracker Creek Project in August 1999. The information presented in this text is taken directly from Gerick et al. (1999). The authors or a QP have not done sufficient work to classify the historical estimate as current mineral resources, and the authors and the Issuer, are not treating any part of the historical estimate as current mineral reserves or resources.

The historical resource model and estimation were completed on a well-defined vein structure that occurs between the Excelsior No. 1 level (also referred to as the E & E No. 1) and the North Pole No. 1 level including the Clark Sub-level (Figures 6.3 and 6.5).

Figure 6.5 Area of the Cracker Creek mineral inventory as estimated by Arrowhead Resources, LLC. (Gerick et al., 1999).



The resource work was completed using the Medsystem and Minesight mine evaluation programs developed by Mintec, Inc. A total of 286 assay intervals were used to wireframe the mineralized portion of the vein. A three dimensional (3-D) solid, representing the main vein, had a total volume of 107,480 m^3 (283,747 tonnes). The reserves do not include consideration of known ore-grade material in the adjacent veins known as the Victor, Dutchman, Lakeview and Sampson-Risk (Gerick et al., 1999). From the description it also does not appear to take into account any other vein zones along the main trend from the E & E No. 1 – North Pole modelled area. The material that was modelled was over a 600 m strike length of the E & E No. 1 (1720) Level and looks to have covered material about 50 m to 60 m above and below the level.

The assay data was geologically coded as 'within vein' or 'outside vein' using the vein wireframe and composited at one-metre intervals. A total of 573 composites were generated. A 1 m wide by 2 m thick by 2.5 m high block model was created with each block representing 13.2 tonnes. Variogram parameters were used along with the kriging algorithm to interpolate grade values into blocks within the vein.

Arrowhead (Gerick et al.,1999) describes a historical reserve/resource produced by AMAX/BMI or both that "*indicated a current ore reserve (measured and indicated) of 290,400 tonnes (320,000 tons) averaging 10.2 grams Au per tonne (0.30 opt) over 1.5 meters (4.8 feet). Inferred reserves total 967,100 tonnes (1.07 million tons)" (Table 6.5).* It is unclear what the source for this historical estimate is but it approximates the numbers produced by BMI in 1982 and are provided in Table 6.4. Gerick et al. (1999) provide a fair amount of detail for this historic reserve/resource including the details of each block, however the numbers have not been validated and therefore the estimate is considered historical in nature. A long section showing the locations of each block, is reproduced here as part of Figure 6.5. This long section is also presented in one of the AMAX/BMI reports from 1982-1983.

Table 6.5 Cracker Creek mineral inventory as estimated by Arrowhead based on AMAX Exploration Inc. (Gerick et al., 1999).

	Tonnage (metric tons)	Average width (m)	Grade (g/t Au)
Proven (Measured)	169,400	1.4	10.6
Probable (Indicated)	121,000	1.5	9.7
Proven + Probable	290,400	1.5	10.2
Inferred	967,100	1.2	9.7
Total	1,257,500	1.3	9.8

Note: The estimates provided above are historical reserve and resource estimations that predate CIM Definition Standards on Mineral Resources and Mineral Reserves and NI 43-101 Regulations. A QP has not done sufficient work to classify the historical estimations as current mineral resources, and the authors
and the Issuer, are not treating any of the historical estimations as a current mineral reserves or resources.

Gerick et al. (1999) indicate that a cut-off grade of 6.0 g/t Au (0.18 oz/st) and a tonnage factor of 12.2 (2.64 t/m^{3}) were used to estimate the historical resource for Cracker Creek. At US$300 per ounce gold (1999 prices) and mining/milling costs associated with a 400 tonne per day operation, they suggested a cut-off grade of 6.0 g/t Au would most likely be required. Minimum mining width is considered to be 1.0 m. Dilution was estimated at 0.25 tonnes dilution per tonne of ore.

In a concluding statement, Gerick et al. (1999) noted that given the "*geological interpretation from known geological structure and mineralization in the district indicates a potential ore reserve of 4 to 5 million tonnes grading greater than 9.3 g/t Au and 20.0 g/t Ag*". This statement, however, indicates a considerably higher estimate than any calculated resource estimations and should be treated with caution.

Gerick et al. (1999) report that the resource did not include known ore-grade material in the adjacent veins (i.e. Victor, Dutchman, Lakeview and Sampson-Risk), or open-pitable potential over the Columbia area. Several estimates have been reported for open-pitable resources on the Property. Simplot completed surface drilling over the old Columbia workings to assess the potential of an open-pitable resource. They estimated the near surface resource at 270,400 tonnes grading 4.7 g/t Au (Gerick et al. 1999). Kimball, (1991) reports 298,000 tons of shallow "open-pitable" in situ mineralized material over Columbia and Eureka that averages 0.15 ounces per ton (5.14 g/t) Au. The authors or a QP have not done sufficient work to classify the historical estimates as current mineral resources, and the authors and the Issuer, are not treating any part of the historical estimates as current mineral reserves or resources.

Kimball (1991) additionally reports the presence of 180,681 tonnes grading at an average of 0.074 oz/st (2.53 g/t) Au from low grade surface dumps at North Pole No. 2, North Pole No. 3, North Pole No. 4, Columbia and Eureka No. 2.

6.5 Historical Metallurgy and Gold-Silver Production at the Cracker Property

At the Effective Date of this Technical Report, Lode Metals has not carried out any production, mineral processing, or metallurgical test work at the Cracker Creek Property. The metallurgical information presented in this sub-section is for background historical information purposes only. The authors consider the work dated and, as a result, historical results of the metallurgical test work have not been verified or validated. The authors and Lode Metals do not view the metallurgical test work as current going forward.

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The Cracker Creek Property has undergone several variations of historical metallurgical testing for the recovery of gold from high-grade gold veins. Bench-scale investigations include Dawson Laboratories (1980); Colorado School of Mines Research Institute (1981); Lakefield Research of Canada Ltd. (1981) and AMAX Metallurgical Research (1982).

Two types of gold mineralization from Cracker Creek have been evaluated to date: gouge and highly siliceous vein material. It is reported that the gouge material represents approximately 20% of the mineralized material and requires de-sliming to provide acceptable gold and silver recoveries and high-grade concentrates.

The metallurgical results overall have been erratic, with most of the variability due to variations in sample mineralogy and head grade, the lack of sample control and identification, and differences between the practices of the metallurgical laboratories used. Additional metallurgical testing is required to, for example, to firm up the expected flotation concentrate gold grades and to establish the gold recovery by flotation/de-sliming/re-grind methods.

It is not known if the test sample feed for the metallurgical work were representative or if there were any processing factors or deleterious elements that could have had a serious effect on bench scale historical work.

6.5.1 Historical Metallurgy: Lakefield Research of Canada Ltd. (Wyslouzil and Yen, 1981)

An investigation of the recovery of gold and silver from a Cracker Creek sample submitted by AMAX was reported by Lakefield Research of Canada Ltd. (Wyslouzil and Yen, 1981). The Cracker Creek head sample had a specific gravity of 2.64 g/cm^3 and the XRF semi-quantitative analysis included: 12.24 g/t Au, 28.32 g/t Ag, 2.19 g/t Fe, 0.0087% Cu, 0.0025% Ni, 0.0027% Pb, 0.0054% Zn, 78.3% SiO_2, 0.17% As and 1.66% S.

The preliminary flotation results found that the best gold-silver recovery was about 70% using a simple flowsheet. The fineness of primary grind and the type of collector had little effect on the results. The activating agents, on the other hand, were important in the flotation procedure. The best results were obtained with a coarse primary grind, using activating agents, a slime—sand separation and regrind and flotation of the sand fraction. The overall gold-silver recovery depended upon the size distribution of slime fractions. If the slime fraction was all minus 200 mesh, the gold-silver recovery from the rougher stage was about 94-95% leaving 2-3% gold-silver in the sand tailing and the slime fraction.

Better results were obtained in the cleaning stage when regrinding the rougher concentrate and cleaning three times with the addition of small amounts of collector. The best 3rd cleaner concentrate obtained in this investigation contained 164.7 g/t Au and 397.0 g/t Ag with recoveries of 80.6% gold and 82.0% silver.

The direct cyanidation on the flotation rougher concentrate was not successful. Only 32% of the gold and 90% of the silver could be extracted even with very severe conditions (Test 5). Autoclave leaching and roasting followed by cyanidation improved the gold recovery to 53% but the silver recovery fell to 70% (Test 8a). Roasting followed by cyanidation gave better gold extraction than autoclave leaching, of 83% but the silver recovery was only 17%.

Acid producing potential was negative for all flotation tailings: sand and slime fraction. The arsenic content is also low for the flotation tailing. The percolation rate of the sand fraction was 13 inches per hour, which was considered acceptable for backfill operation.

6.5.2 Historical Metallurgy: Brooks Minerals Inc. (1982)

The mineralization of the Cracker Creek deposit consists of sulphide (arsenopyrite, pyrite and pyrrhotite) that contain gold in solid solution, some free gold, and a quartzitic to shaley host rock. A composite sample prepared from channel cuttings from several locations in the mine and were subjected to cyanidation under a variety of conditions, including varying solution strengths, leaching time, etc. Results from these tests confirmed earlier findings that the concentrates are refractory to conventional leaching techniques. Subsequent autoclaving or roasting of the concentrates did result in substantial increases in recovery during cyanidation of the leach residue or the calcine.

Optimization of the flotation recovery of gold and silver was then investigated by work at Dawson Laboratories of Salt Lake City, Lakefield Research of Ontario, Canada, the

Colorado School of Mines Research Institute, and the AMAX Metallurgical Research Facility of Golden, Colorado.

The two types of ore: curly quartz and sheared footwall, have different concentration characteristics. On the curly quartz, tests showed recovery of gold and silver in the 95% range. Tests on the sheared footwall material showed recovery in the 70% range. A description of the ore types is presented in Section 7.3.

Tests on a composite made of 80% quartz, 20% footwall gave average recoveries of about 90% for gold and 92%-94% silver,

A mineralogical examination of the tailing indicates that gold losses are due to submicron free gold as well as submicron sulphide losses, with the losses mainly in the slimes fraction.

The optimum autoclaving/roasting conditions applicable to the concentrates have not yet been determined. The flotation concentrate has a concentration ratio of about 12.5:1. Based on these tests, a preliminary flowsheet has been developed incorporating conventional crushing and grinding, followed by rougher flotation to produce a rougher and cleaner concentrate. For the purposes of this study, it will be assumed that dewatered flotation concentrates will be sold directly to a smelter. The decision to roast or autoclave these concentrates with subsequent gold and silver recovery by cyanidation must wait until more definitive testing has been completed.

Testing to date along these lines by Dawson and AMAX R&D indicate that an acid autoclaving followed by cyanide leach can recover up to 98% of the gold, but with silver recovery less than 75%. The remaining silver is believed to be tied up in an artificial argentojarosite.

Leaching under alkaline conditions has been proposed, but no work has been done. Results of roasting tests do not appear to be encouraging.

6.6 Historical Production

The Cracker Creek Property consists of several old, inactive mines that occur contiguously, from southwest to northeast, the Columbia, Eureka and Excelsior (E & E) and North Pole. Mineralization associated with these historical mining camps is believed to be contiguous within the same vein system, which was historically known as the Cracker Creek "Mother Lode" vein. A series of narrow claims were developed by separate owners along the lode for approximately 3.2 km (with the mineralization believed to extend for approximately 8 km).

The most intense period of historical mining occurred between the 1890's and 1916 when some 477,000 short tons of ore was mined (Table 6.6). Production rates of 50 to 100 tons per day were achieved. Gold was the main product although silver content ranged from 1:1 to several times the gold assay. The profitable operations ceased prior to World War I when costs exceeded the fixed gold price and depth increased the mining costs (Lorain, 1937).

A summary of the historical production and infrastructure developed from the Columbia, E & E and North Pole mine sites is provided in the following text.

The production information presented in this sub-section is for background historical information only. The QP has not verified the historical gold production, and therefore, the QP and Lode Metals do not view the production history as current going forward.

Columbia Mine: The Columbia Mine consists of approximately 50,000 ft of drifts, crosscuts, and raises from a shaft 918 feet deep with adits. Mine infrastructure included a 20-stamp amalgamation and concentration mill and a 60-ton cyanidation plant. Mine production between 1887 and 1916 reportedly included 112,067 ounces, which contained 58,063 fine ounces of gold and 26,366 fine ounces of silver (Brooks and Ramp, 1968). The 1887-1916 totalled US$3,638,960 (Elmer, 1930).

The ratio of gangue to sulphide is 10:1 to 15:1. Recovery averaged about 75% and free gold is approximately 40%.

Table 6.6 Summary of historical mine production at the Columbia, E & E and North Pole mines.

Mine	Short tons produced	Grade (ounce / ton)	Ag to Au ratio
Columbia	203,341	0.67	1:1
E&E	115,000	0.45	2:1
North Pole	158,917	0.76	1:1
Total	477,258		

E & E Mine: Mine infrastructure included a 760 ft deep shaft on the north bank of Cracker Creek and 8 adits totalling about 20,000 ft. Three adits extended north and 5 adits south from Cracker Creek. Stoping was conducted mainly above the 300-ft level. A 100-ton flotation mill was constructed on the Property. The main periods of mining activity were 1891, 1894-1898, 1903-1905 and 1920-1922 (Elmer, 1930). The total production output was US$1,064,833.57 (Brooks and Ramp, 1968).

The ratio of gangue to sulphide is 25:1 to 20:1. The gold to silver ration is 1 to 2. Free gold is <5%.

In 1968-69 a Canadian firm, Omega Mining, reopened the E & E adit and drove 1,500 ft of new drift and opened up a zone of fairly continuous mineralized rock grading 12 g/t Au over a width of 1.5 m. Narrow vein mining, with gold selling for USD$41 per oz, was considered uneconomic at that grade and Omega withdrew.

North Pole Mine: Full-scale mining reportedly began in 1895 and continued to 1916. The mine comprised 5 adits totalling approximately 13,000 feet. Total recovery between 1895 and 1908 included 100,045 fine ounces gold and 103,616 fine ounces silver from 158,917 dry tons of ore (Brooks and Ramp, 1968). With mining over a 12-year period, this would indicate a recoverable grade of approximately 0.63 ounces per ton. Mill heads ran about 19 grams per tonne gold (0.55 opt) and recovery was approximately 65% (Brooks and Ramp, 1968).

In 1946 and 1947, Cominco Ltd. Co. as Solar Mining Co., took an option on the property. They reopened the North Pole mine to test for downward projections of possible ore and completed surface trenching and drilling. The project was discontinued in late 1947 at which time, the price of gold was $35 per ounce.

There are several other accounts of Past Production. AMAX (1982) reports gross production revenue for the Columbia, E & E and North Pole at about $US7.94 Million dollars, which at $US 20 per ounce yields close to 400,000 ounces. Using a 73% reported recovery for the mining yields total ounces mined of well over 500,000 ounces.

Behre Dolbear – Riverside report production also by value referring to figures provided by Brooks and Ramp (1968) and Longyear (1938). The historical production, using $US20.67 per ounce works out to just over 500,000 ounces of gold with an overall grade of 0.64 oz/st (21.9 g/t) Au.

7 Geological Setting and Mineralization

7.1 Regional Geology

The Cracker Creek Property is located within the Basin and Range Geological Province of the Western United States. The Cracker Creek mining district is part of the Blue Mountains gold belt described in detail by Waldemar Lindgren (1901). Further work is reported by J.T. Pardee (1909) in USGS Bulletin 380A which discusses the stratigraphy and structural geology of the region. In the late 1970's – early 1980's mapping of the Bourne quadrangle was completed by Howard Brooks and others with the Oregon Department of Geology and Mineral Industries (DOGAMI) and was published as map GMS-19 (1982). No significant geological mapping has been completed in the area since that time.

The Blue Mountains province consists of a complex collage of Middle Devonian – Late Jurassic island arc and related melange and or sedimentary terranes that accreted to western North America in the Early Cretaceous and were intruded by Late Jurassic – Early Cretaceous plutonic complexes (Schwartz et al., 2014). The Blue Mountains are comprised of three terranes: the Wallowa, Baker, and Olds Ferry (Figure 7.1).

All 3 terranes were subject to widespread Late Jurassic faulting and folding resulting from a north south – directed contractional event. The Property lies within the structurally complex Baker terrane: a long-lived subduction zone accretionary complex consisting of extensively disrupted fragments of ocean floor and island arc volcanic, plutonic and sedimentary rocks of Middle Devonian to Early Jurassic age. More specifically the Property lies within the Bourne subterrane which is characterized by extensive exposures of chert and argillite of the Permian to Early Jurassic Elkhorn Ridge Argillite (Dorsey and LaMaskin, 2008; Schwartz et al., 2010 and references therein). In the Early Cretaceous the Elkhorn Argillite was intruded by the Bald Mountain Batholith (Figures 7.1 and 7.2). Fractures and fissures associated with the batholith filled with circulating, gold-bearing fluids that eventually led to veins. Most gold deposits occur along steep, northeast – trending faults in argillite. Some such as the Mountain View, Argonaut and Mammoth veins are very near the tonalite contact and may locally cut the tonalite (Brooks and Ramp, 1968).

Figure 7.1 Regional setting of the Cracker Creek Property

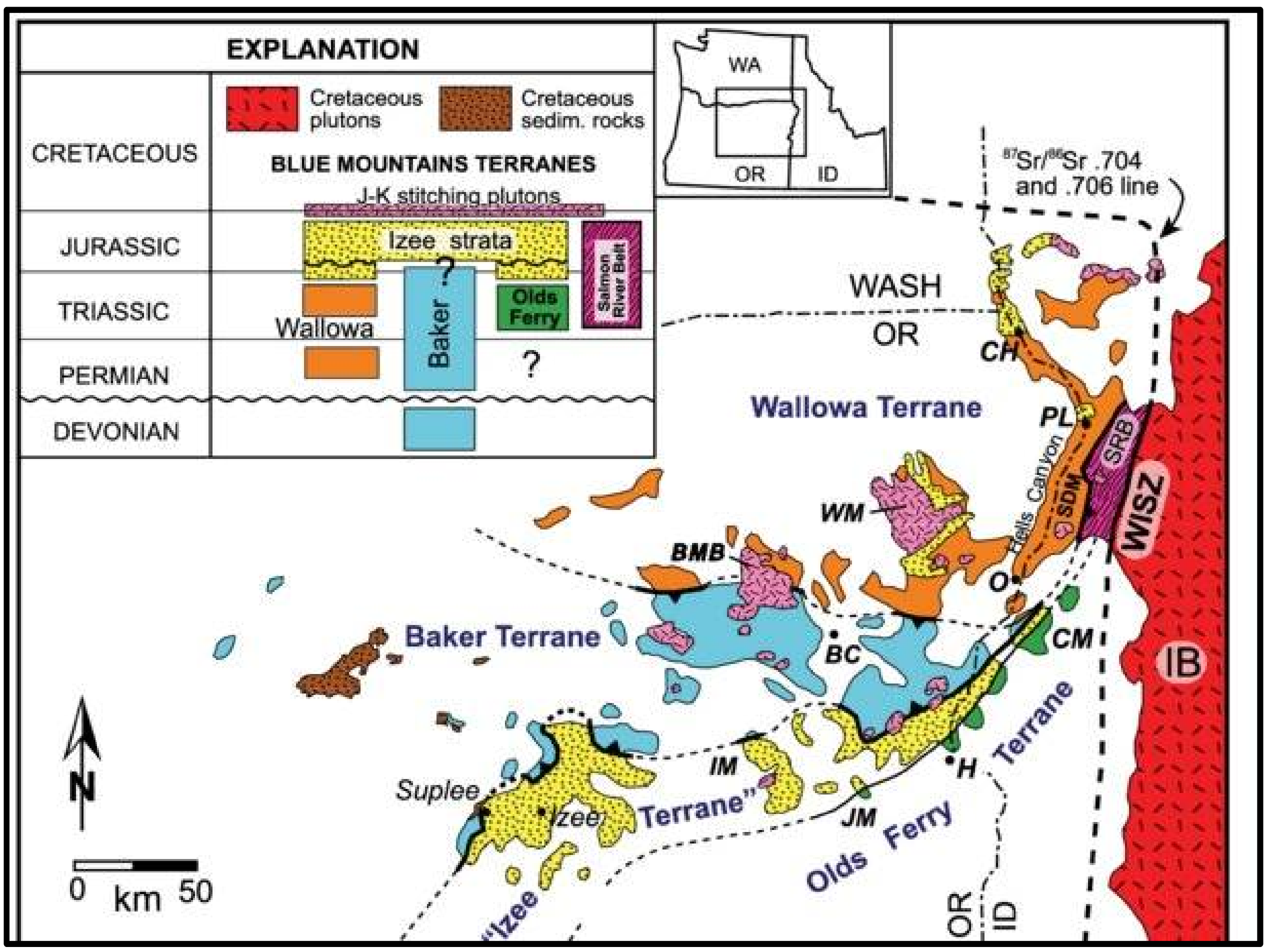
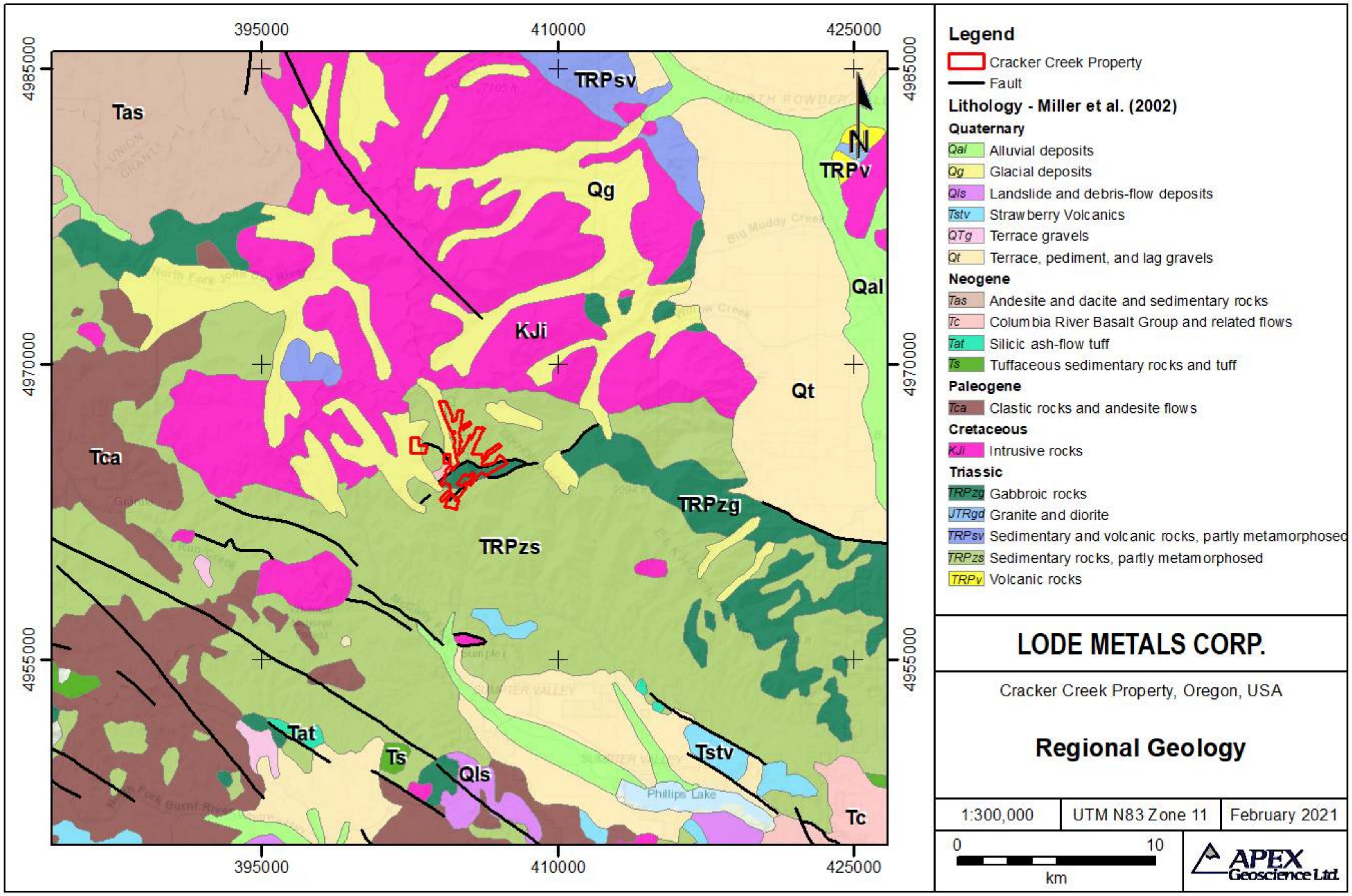


Figure 7.2 Regional geology surrounding the Cracker Creek Property.



7.2 Property Geology

Property geology is summarized from Rostad (1982) and Leheup (1982).

In the area of the Cracker Creek Property the Elkhorn Ridge Argillite comprises tightly folded, tuffaceous argillites. These argillites are mainly cherts, especially near the Cracker Creek vein. Locally, they are graphitic as noted in some of the drifting on the North Pole No. 1 level. A discontinuous, east-northeast trending band of metagabbro and/or hornfels crosses the main vein trend at the southern end of the Property. The metagabbro is suspected to be in fault contact with and not intrusive to the Elkhorn Argillite. The southern contact of the Cretaceous Bald Mountain Batholith extends along the northern and western edge of the district (Figures 7.2, 7.3 and 7.4). Many dykes related to the latter intrusive are found in the argillite series.

Figure 7.3 Stratigraphic chart for the Bourne Quadrangle (Brooks et al., 1982)

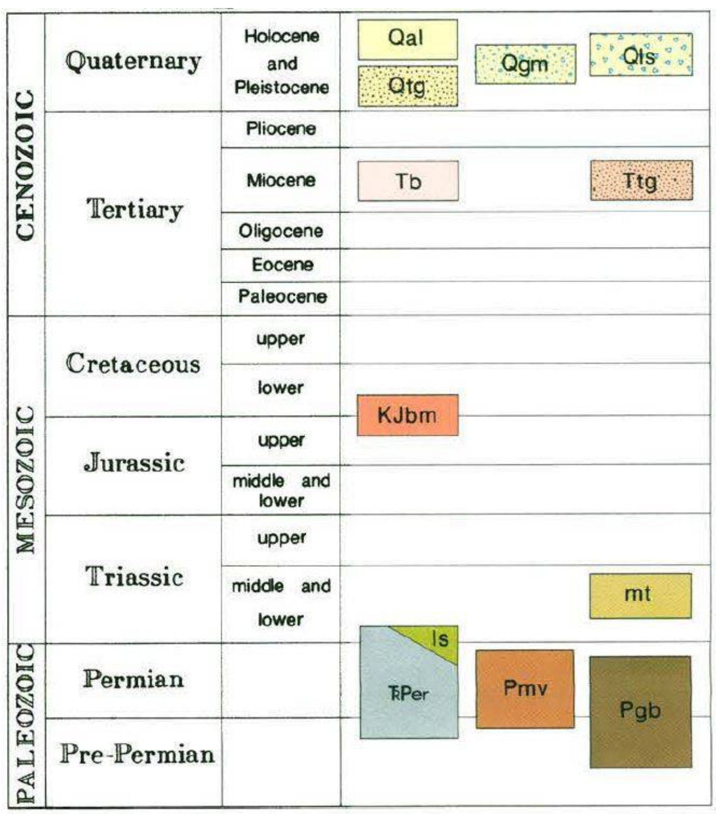
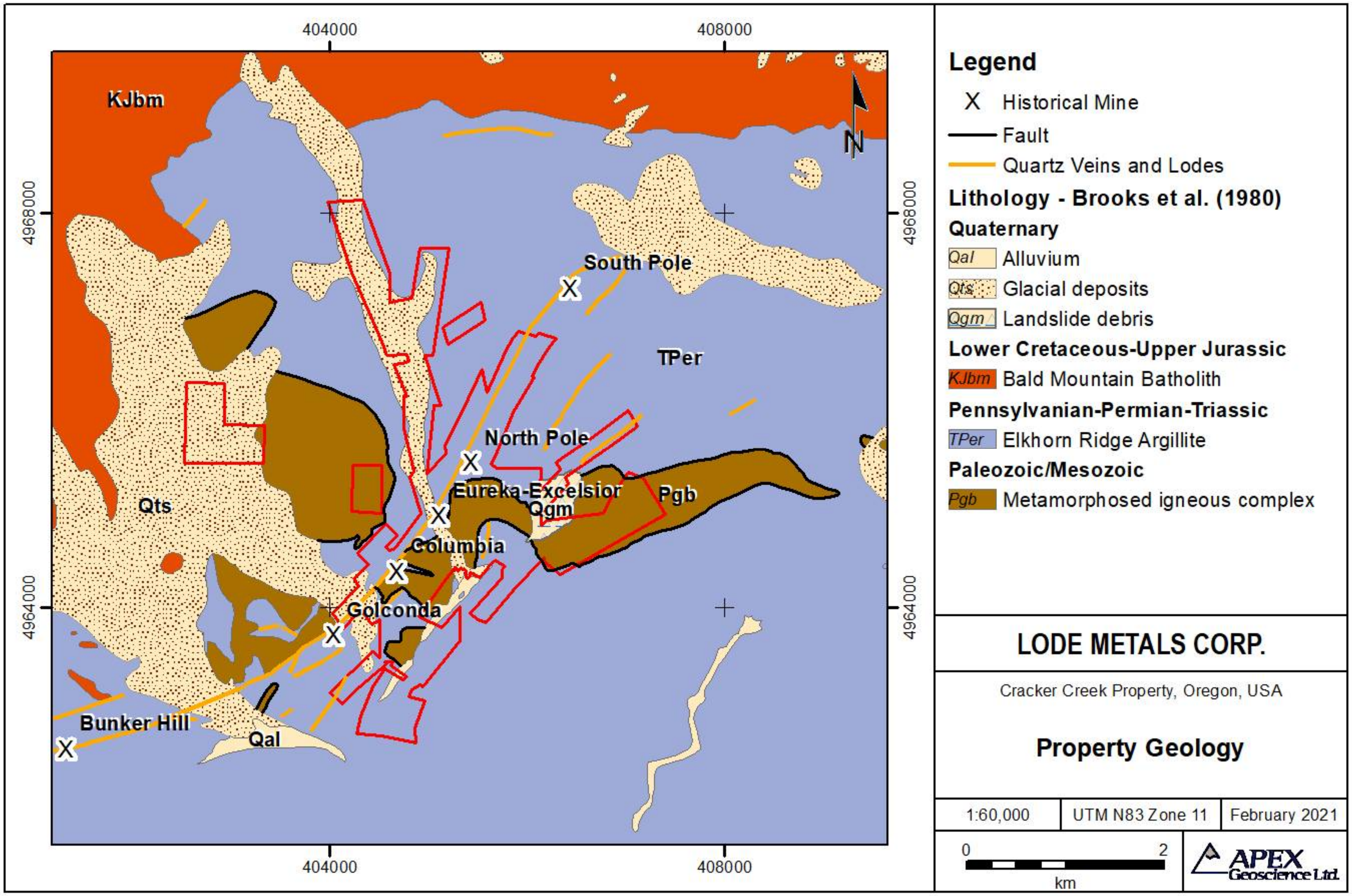


Figure 7.4 Property Geology of the Cracker Creek Property.



7.2.1 Lithology

Elkhorn Ridge Argillite

The host Elkhorn Ridge Argillite series is composed largely of blue gray, very fine-grained laminated cherts. The lamina range from 1 to 4 cm thick and are separated by thin films of very fine grained, dark pyrite bearing argillite. The lamina are usually lensy indicating boudinage. In places the intervening argillite films can be slightly graphitic. The remainder of the series is a dark greenish gray, very fine grained, slightly chloritic argillite containing about 1% to 2% fine cubic pyrite. Bedding is poorly developed for the most part.

Limey units can be found in parts of the argillites. These were probably dirty limestones and are now largely recrystallized. Considerable tremolite or related minerals are usually found in these recrystallized limey beds. As exposures are limited, the size and extent of the limey units are unknown.

From underground exposures, one would deduce that the Elkhorn series is basically fairly flat lying with dips ranging for 20° or less to as much as 45° to the south or east. However, this would be misleading as on surface, where weathering has accentuated the bedding in some areas, the argillites are seen to have been folded into tight chevron folds with flat axial planes. These sediments are believed to have been formed on the ocean floor and during diastrophism, instead of the oceanic plate being completely subducted, it was in part buckled against the continental margin giving rise to the tight folds. This action also thrust the metagabbro and argillites together explaining the lack of intrusive features at their contacts.

Metagabbro

The metagabbro is a metamorphosed igneous complex consisting mainly of gabbro with some diorite and quartz diorite that have been metamorphosed to greenschist facies. Locally the unit is foliated and grades into amphibolite. The unit is interpreted to be in fault contact with the Elkhorn Ridge Argillite. The age of the complex in this area is unknown (Brooks et al., 1982). The metagabbro units have previously been described as greenstone.

Surface exposures of the metagabbro indicates that it is adjacent to the main structure at the former Columbia Mine. From old longitudinal sections of the mine, this would coincide with an unstoped area. Old records suggest that the main structure was dispersed in this area and afforded little opening for mineralization (Leheup, 1982).

There were limited exposures of the metagabbro reported in the underground workings. At a reported occurrence in the Jevne Adit, about 1,200 feet (365 m) southeast of the vein, the metagabbro is fairly fine grained, dense, dark and green-gray. It is quite blocky and where sheared can be very talcose. It contains a few very fine grained sulphides, probably pyrrhotite. Mariposite was noted ~180 meters from the portal

(Leheup, 1982). Rostad 1982, reported a small dike of apparent metagabbro on the North Pole No. 1 level indicating the potential of at least some of the metagabbro to be intrusive. The metagabbro was considered a potential source rock for the gold, but not as the cause of mineralization in the area.

Bald Mountain Batholith

The Bald Mountain batholith comprises a diachronous plutonic suite of an older, mafic-felsic suite of lesser areal extent and a younger, laterally extensive, tonalite-granodiorite suite (Schwartz et al., 2014 and references there-in). Near the project area the Bald Mountain batholith is characterized by a large mass of biotite-hornblende tonalite that was emplaced at shallow depths, perhaps as little as 5 km (8 miles) below the old land surface in the Late Jurassic to Early Cretaceous. Recent dating of tonalite samples give dates ranging from 140 to 145 million years (Schwartz et al, 2014). The main mass of the batholith is exposed 2 to 3 miles to the north and west of the Property (Figure 7.3). Outcrops of the tonalite occur within 1 mile of the southwestern portion of the Cracker Creek vein. Gold mineralization associated with the Bald Mountain batholith is also primarily located in and around the southern part of the batholith (Brooks et al., 1982; Ferns et al., 1982).

Dykes

Intermittent exposures of dyke material occur in the hanging wall of the main structure as exposed on the Excelsior # 1 level and the Clarke sub-level. This unit ranges in thickness from a film to nearly a meter and is so highly altered and sheared that its original texture is destroyed. Color varies from light brown to a dark green where chloritized. Pyrite content ranges from 2% to 5% as disseminated 1 mm cubes. The dyke predates mineralization as fragments of it can be found within the vein (Leheup, 1982).

Some altered porphyry dikes, which are possibly related to the granodiorite, are reported to be cut by ore-grade quartz vein in the Columbia mine (Rostad, 1982).

Veins

The Cracker Creek vein, which hosts the mineralization, is the most prominent vein in the area. It is a composite vein that is approximately 5 miles in length, striking northeast, dipping southeast and averaging 20 feet in thickness (Figure 7.3). It appears to have been formed by several periods of shearing alternating with introductions of hydrothermal material. The net result is a gouge and crushed argillite bounded vein of quartz cemented argillite breccia. Within the breccia are lenses up to 100 meters long and 2 meters wide of banded quartz, or quartz and carbonate and fine sulphides. Most of the ore shoots are within this structure. Braided shearing occurs throughout the vein, especially in areas without the banded quartz (Leheup, 1982).

Historically, several roughly parallel veins have been identified in the Cracker Creek area but none of them has been responsible for any significant production. Their presence is based on limited surface exposure and old dumps as historical records are lacking for most of them. The Cracker Oregon vein is located about 2,000 feet to the southeast of the Cracker Creek vein. The Cracker Summit vein is located about 1,000 to 1,500 ft to the northwest of the Cracker Creek vein. From the limited information available they range from 150 to 400 metres in length and are composed of quartz, quartz-carbonate or quartz cemented argillite breccia. The majority of veins strike northeast and have near vertical dips. The most notable exception is the Cracker Summit (Dutchman) vein which strikes north and dips west (Leheup, 1982; Rostad, 1982).

7.2.2 Structure

7.2.2.1 General Structure

The structural setting at Cracker Creek is very complex. In the Bourne-Sumpter area the bedded chert-argillite sequences have been coherently folded. Pervasive imbricate faulting on all scales has created a broken formation but complete stratal disruption is rare (Coward, 1983).

Dynamic forces, which converted the rocks to metasediments and greenschist facies were also responsible for tight recumbent folding, which is evident on the Property (i.e. North Pole No. 1 level and the E & E level). The axis of these folds is trending from N75°E to S85°E or roughly E-W. Faults, which are younger than the Bald Mountain batholith, formed in the zone peripheral to the batholith and were mineralized. Some fault structures within the batholith are also reported to be mineralized (Rostad, 1982).

7.2.2.2 Vein Structure

The Cracker Creek vein (also known as the “North Pole - E & E - Columbia - Golconda vein”) is the strongest and most continuous vein in this part of the Blue Mountains and potentially in the entire Blue Mountains region. The main Cracker Creek vein follows a broad S shaped shear zone generally trending north 35 degrees east and dipping 75-85 degrees to the southeast. It is about five miles (8 km) long extending from the South Pole mine located northeast of the Property to the Bunker Hill mine located southwest of the Property and hosts nearly all the former producers on the Property. Several small structures with indications of gold and silver also lie within the area (Kimball, 1991).

In detail the strike of the vein is almost E-W in the vicinity of the Bunker Hill mine, near the south end of the vein (south of the Property), it curves northward so that it’s strike is about N50°W at the Golconda mine (south of the Property), N40°W at the Columbia mine, N25°W at the North Pole mine, then curves back to about N70°E at the South Pole mine (north of the Property). The vein dips steeply to the southeast from the Golconda to the North Pole mine but is generally less steep at the north end of the North Pole mine. The dip is reported to average 86.5° to the southeast at the Columbia mine and about 76° to the southeast in the North Pole section (North Pole 4 down to E & E level, over 1,080 ft vertical range; Rostad, 1982). From the Columbia Mine and to the Golconda Mine (south of the Property) the vein is reported to split into two and potentially three parallel strands where it cuts through metagabbro (Rostad, 1982; Leheup, 1982). Pardee (1909) reports movement on the vein structure has resulted in an effective displacement of the metasedimentary units by 400 ft vertically and 1,800 ft horizontally.

The vein has been subjected to repeated reopening. Some of the fractures which opened after the first heavy introduction of quartz allowed the introduction of quartz and sulphides to produce en echelon lenses which cross from footwall to hangingwall at a more north-easterly strike than the main structure. Gold-bearing quartz-sulphide veins show banding which has been interrupted and re-healed with more sulphide-banded quartz.

Some of the gold-bearing quartz mineralization has been crushed and sheared by post mineralization movement. Slickensides have been noted that rake south at an angle of 50 to 60°. Other slickensides have been observed which rake down to the north at angles from 100 to 30°. Some low-angle faults cross from footwall to hangingwall and offset mineralization a foot or more, yet do not cross out of the major structure. Other low-angle faults have been noted which do cross through the main structure. Some steep faults which do not appear to be mineralized cross the vein and also the bounding FW & HW faults.

Leheup (1982) proposed the sequence of events that resulted in the current vein structure/mineralization were as follows:

1. Initial shearing.
2. Introduction of dyke material.
3. Refracturing (2nd stage): Formation of argillite breccia and locally brecciation of the dyke. Breccia fragments range from 0.5 cm to 20 cm.
4. Introduction of quartz, cementing and replacing the argillite fragments. Degree of replacement ranges from nil to total. Where total, all that remains of the fragment is its "ghost".
5. Re-shearing (3rd stage fracturing): One main break although occasionally two or more openings along and within the quartz cemented breccia
6. Introduction of more quartz, carbonate, pyrite, arsenopyrite, gold and silver. This formed the main ore shoots- "curly quartz".
7. 4th stage fracturing: Introduction or remobilization of quartz and carbonate and deposition as fine fracture filling.

There were at least one and probably several later periods of shearing and fracturing. At the base of Raise 710-112-12 the vein is very blocky from several horizontal and vertical fractures. Further up the same raise is evidence of the vein being pulled apart by a shear passing from hanging to footwall as one goes up the raise.

One post vein offset has been located. This is a cross fault striking N40W and dipping 35° to 45° southwest. It appears to form the northeast margin of Block 0, 2, and 3. Horizontal displacement (right lateral) is 14 meters on the North Pole #1 and 5.5 meters on the Excelsior # 1.

7.2.3 Mineralization

The Cracker Creek vein is reported to range from a few feet in width up to 300 ft (91 m) in width but generally is in the range of 12 to 30 ft (3.5 - 9 m) wide. The most productive portion of the vein was the 7,500 ft (2,286 m) length from the North Pole mine (on the Property) to the Golconda mine (180 m south of the Appomattox claim at the southern end of the Property). The historical ore that was mined was commonly restricted to a much narrower width than the total vein width.

The vein material is predominantly a combination of quartz and fragments and "horses" of country rock. Other gangue minerals are dolomite, calcite, montmorillonite and sericite. The ore zones are characterized by very fine brown sulphides in wispy streaks and bands (Leheup, 1982). The minerals of economic interest are so fine grained that they can not be identified in hand specimens. The sulphides are believed to be largely pyrite and constitute about 2% to 3% of the ore. Other sulphides and ore-related minerals reported include arsenopyrite, marcasite, chalcopyrite, tetrahedrite or schwartzite (a mercury-antimony-bearing variety of tetrahedrite), pyrargyrite, cinnabar, stibnite, sphalerite, gold, hessite, sylvanite, some native copper (Columbia), mariposite and roscoelite. Roscoelite is reported to be very closely associated with free gold. Mariposite, is present but does not have a close association with gold in this area. Marcasite appears to be predominantly associated with fractures in the argillite and may not be related to mineralization. Locally coarser grained, cubic pyrite forming patches up to several centimeters in size can comprise up to locally 15% to 20% of the ore. The amount of coarse pyrite appears to not be related to gold content whereas the presence of fine brown sulphides appears to have an positive association with gold (Leheup, 1982; Rostad 1982).

Microscopic and electron microprobe analyses completed by AMAX reported the gold to occur as electrum containing 85% gold and 15% silver. The electrum grains were generally 3 to 5 μm in size with 80-90% of the electrum being associated with tellurides as inclusions in pyrite. The remainder of the electrum was not associated with tellurides but was locked with either pyrite or quartz and carbonates. The majority (60-70%) of the tellurides are hessite (Ag_2Te) and the remainder is coloradoite (HgTe). Silver that did not occur in hessite was in tetrahedrite. Arsenopyrite was noted to occur as rims on pyrite. Electron microprobe analyses of pyrite and arsenopyrite indicated that they did not contain any detectable amounts of gold in solid solution (Leheup, 1982).

The first phase, and apparently the most massive phase, of quartz vein filling appears to have been essentially barren of sulphides and of gold. Fragments of argillite in the E & E mine are surrounded by quartz which gives the vein the appearance of a quartz-cemented breccia. Some of the fragments are moderately to strongly silicified, others are still very dark (Rostad, 1982). Following the heavy introduction of quartz, the vein structure was reopened several times and at least two and probably three or more pulses of gold mineralization took place. At least two of these gold-bearing pulses were characterized by quartz with more or less sulphide and dolomite. The sulphides are relatively fine grained and commonly occur in fine bands with or without dolomite in the quartz. This sulphide-banded quartz has been referred to as "curly quartz" in the historical reports. Some of the banded sulphide mineralization in the quartz has clearly been broken and re-healed by later sulphide-banded quartz. Some of the banding surrounds fragments of quartz indicating open fracture filling and brecciation of earlier quartz by renewed tectonic movement (Rostad, 1982).

The "pay-streak", or ore-bearing zone of mineralization within the vein, is generally along the footwall of the vein. However, it may be in the middle or along the hangingwall or in en echelon pods crossing from footwall to hangingwall. There is a strong suggestion that some of the northernmost ore-grade mineralization on the E & E level may be of the en echelon type indicating that in certain areas there may be two roughly parallel "pay streaks". In these areas it may be possible to mine both together with a low-grade intervening zone to produce stopes up to 25 ft wide. In general, the pay streak is relatively narrow (Rostad, 1982).

Some ore-grade mineralization is present in the footwall gougy zone. This zone is characterized by strongly sheared country rock consisting of argillite in the portions of the E & E and North Pole No. 1 levels. In areas where this zone is significantly mineralized it contains some quartz and some sulphide. Rostad (1982) reports that the footwall gougy zone in the E&E/North Pole area averages approximately 1 to 3 ft wide but can be up to 7 ft wide. Historical assays indicate that most of the gougy material was too low-grade to be considered ore.

The continuity of the overall mineralized structure is well established but the continuity of ore shoots, both along strike and down dip, is not as well established. Overall, there appears to be a general trend or zone of ore shoots which rakes down at a low angle to the south. Individual shoots within the general trend rake down steeply to the south. In more detail, and within the ore shoots which rake down steeply to the south, there appears to be a low-angle rake down to the north. The reasons for these rakes are not immediately apparent but may be related to movements in and along the vein structure. Alternatively, these rakes may be due to low-angle recumbent folding in the metasediments. The major low-angle rake down to the south might possibly be explained as stratigraphic, caused by the influence of different strata in the argillites on the deposition of gold values. More detailed geological information is required to address these questions (Rostad, 1982).

8 Deposit Types

On the Cracker Creek Property mineralized zones were formed during compressional deformation processes at a convergent plate margin in an accretionary and collisional orogeny in close proximity to a felsic intrusion. Gold mineralization at the Cracker Creek Property comprises one or more phases of quartz+sulphide veining within earlier (mostly barren) quartz veining hosted in a shear zone/brittle fault structure extending across the Property from southwest to northeast.

Mineralization of the Cracker Creek vein is proposed to be sourced from the nearby Bald Mountain Batholith. Based on the geological setting, rock types and field observations two deposit models should be used to guide future exploration on the Property: Intrusion-Related Gold (IRG) and epithermal gold deposits.

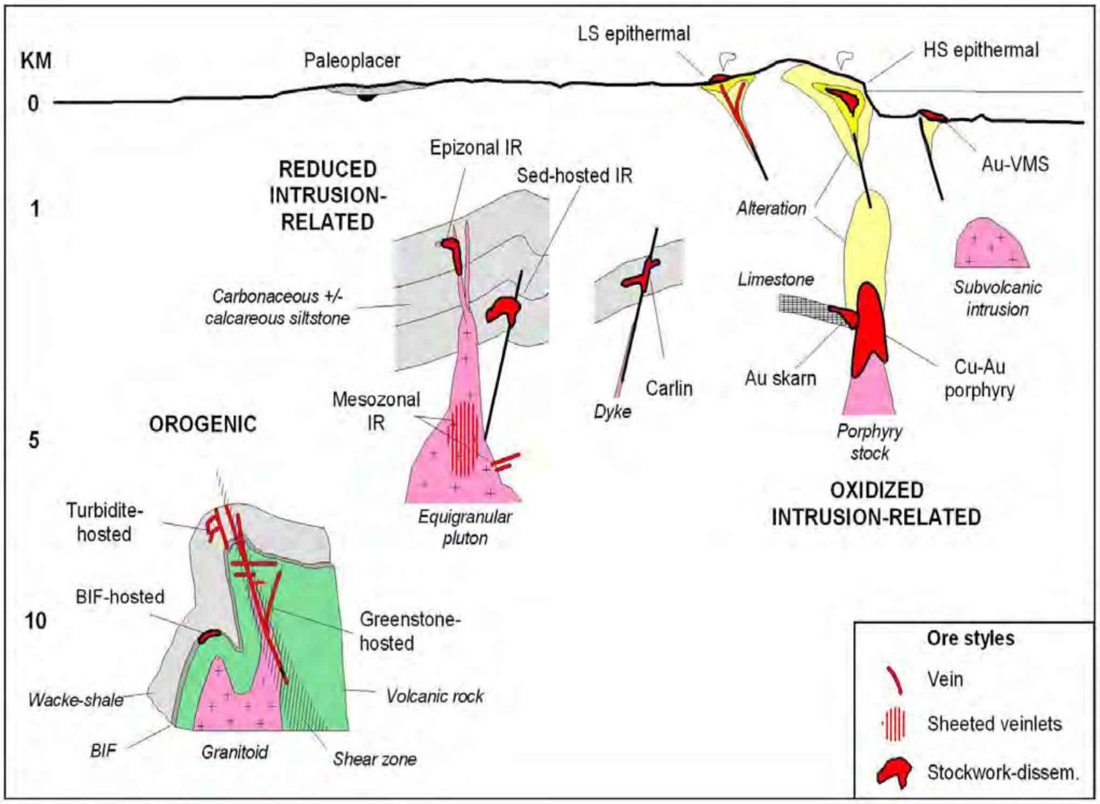
8.1 Intrusion-Related Gold Systems (IRGS)

Deposit models for gold-only deposits associated with moderately reduced intrusions have seen significant development since the late 1990's (Richard et al., 2007). The style of gold mineralization described at Cracker Creek is conducive to classification within the recently described Intrusive Related Gold System (IRGS) (Figure 8.1). Reduced-IRGS encompass a wide range of gold-only mineral deposit styles whose formation is genetically linked with a cooling felsic intrusion. These deposits occur mainly in reduced siliciclastic sedimentary rock sequences and are commonly orogenic deposits. A wide range of styles and depths of formation has been documented for reduced-IRGS, including intrusion-hosted deposits of mesozonal to epizonal character, and more distal, sediment-hosted mesozonal equivalents (Richard et al., 2007). Associated deposit styles include skarns, veins, disseminations, stockworks, replacements, and breccias. The most diagnostic deposit style within the reduced-IRGS classification is intrusion-hosted, sheeted arrays of thin, low sulphide quartz veins with a Au-Bi-Te-W signature, which typically comprise bulk tonnage, low-grade Au resources. However, other deposit styles associated with reduced-IRGS form within the region of hydrothermal influence surrounding the pluton, and are characterized by proximal Au-W-As and distal Ag-Pb-Zn metal associations. The depositional style at Cracker Creek are mineralized veins of mesothermal character associated with the intrusive Bald Mountain batholith which is of Jurassic to early Cretaceous age.

Plutons that generate reduced-IRGS form in tectonic settings characterized by weak post-collisional extension behind a thickened continental margin. There is still quite a bit of controversy as to which deposits truly are reduced-IRGS however the Phanerozoic appears to be the most favorable time for the formation of reduced-IRGS, particularly the Cretaceous and the mid-Paleozoic (Devonian to Carboniferous). The grades and tonnages of deposits classified as reduced-IRGS are wide-ranging due to the variation of deposit styles within the classification (Hart, 2005, 2007).

Mesothermal veins are formed at moderate temperature (250 – 450°C) and depth (1-10 km). They are associated with fissures or fractures that form in areas of structural dilation in brittle to brittle-ductile shear zones (Peters, 1993). The veins often occur in parallel sets that continue to depth. The veins contain complex mixtures of mineralized quartz, gouge, fault rocks and altered wall-rock that reflect the environment of formation. Macroscopic textures include comb, ribbon, buck and breccia quartz. Veins often contain multiple generations of quartz that were involved in cracking, stress corrosion and dissolution due to porosity changes and dilation prior to and during faulting (Peters, 1993). Typical mineralization includes the sulphides chalcopyrite, sphalerite, galena, tetrahedrite, bornite and chalcocite. Gangue includes quartz, carbonates and pyrite.

Figure 8.1. Schematic cross-section of main gold systems (Richard et al., 2007).



8.2 Epithermal Gold Deposits

Observations made by the author during the site visit indicate that the mineralization at Cracker Creek may not be strictly mesothermal in origin. The author observed multi-episodic breccia's, hints of boiling, open space, vuggy texture, bladed characteristics and coxcomb textures in the vein rocks indicating potential for low-intermediate sulfidation epithermal deposition.

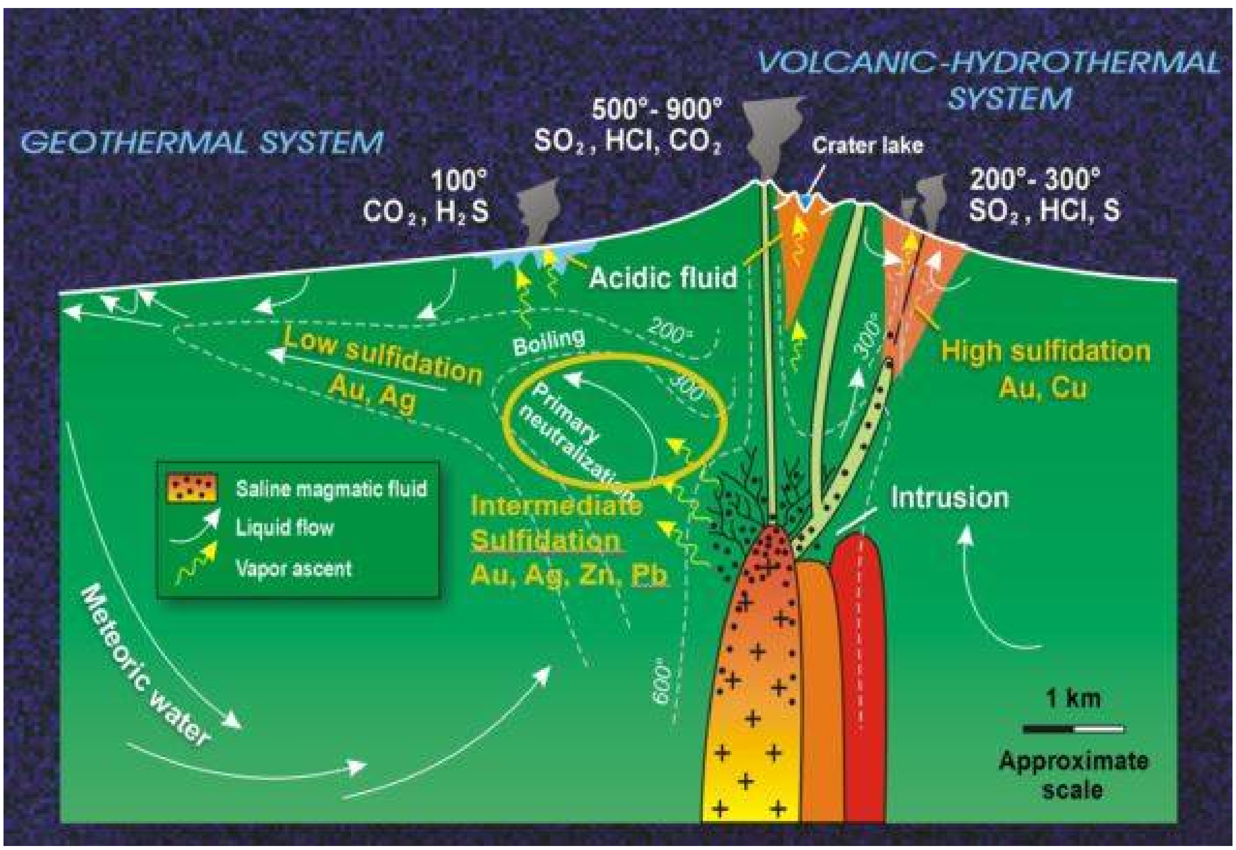
Low-intermediate sulphidation veins are a subtype of epithermal deposits formed in subduction-related arc settings or post-collisional orogenic belts. The occurrence of low-intermediate deposits is interpreted to be controlled by tectono-magmatic settings and fluid evolution paths. Low-intermediate sulphidation epithermal deposits represent the mid to uppermost parts of intrusion-related hydrothermal systems (Figure 8.2). Although formation usually occurs at shallow depths, within 500 metres of surface, occasionally they may form between 1-2 kilometres depth. Epithermal ore deposition occurs at temperatures below 250°C through processes of fluid boiling, fluid mixing and vapour release (Hedenquist et al., 2000; Wang, 2019). Gold and/or silver are the primary products however copper, lead, zinc, and (or) mercury can be important by-products in some deposits. Host rocks often contain bladed calcite, colloform quartz, and adularia. Associated advanced argillic and argillic alteration blankets form as a result of the generation of steam-heated waters. (Hedenquist et al., 2000).

Differences in form and metal content between low- and intermediate-sulfidation deposits can be described as follows (John et al., 2018):

- Low-sulfidation deposits commonly consist of multiple stages of concordant and discordant banded or layered minerals and breccias, sheeted veins, and (or) vein stockworks and breccias adjacent to layered veins and faults that were mined exclusively for gold and silver.

- Intermediate-sulfidation deposits consist of multistage veins and associated breccias that contain significant amounts of other metals in addition to gold and silver, and were (a) mined exclusively for gold and (or) silver, with no or minor production of copper, lead, and zinc, or (b) mined primarily because of their gold and silver contents but also produced appreciable copper, lead, and zinc.

Figure 8.2 Schematic cross-section showing the environments for the formation of epithermal ore deposits (modified from Arribas et al., 2000; Hedenquist et al., 2000).



9 Exploration

Lode Metals has conducted surface exploration at the Property in the form of ground geophysical surveys to date. A summary of all historical exploration activities is provided in Section 6 of this Technical Report.

9.1 Historical Data Compilation

Lode Metals commissioned APEX to complete a data compilation and review of historical data for the Property. The data compilation focused on assembling all available historical drill data into a digital database, reviewing historical reserve and resource estimates, collating historical maps of underground workings and all geological data. The compilation was based on all publicly available and proprietary reports for the Property. Drill hole locations and assay results were compiled in an Excel database and spatially as ArcGIS shapefiles. Drill hole locations and assay results were compiled for 109 surface and underground drill holes extending across the main area of mineralization on the Property. The locations of several historical drill holes which were found to be incorrectly recorded were rectified based on the author's site visit and investigative work. The majority of historical drilling from 1981-82 and 1990-91 was concentrated in the areas of the historical mines: E & E, North Pole and Columbia (Figures 6.3 and 6.4).

9.2 Author's site visit

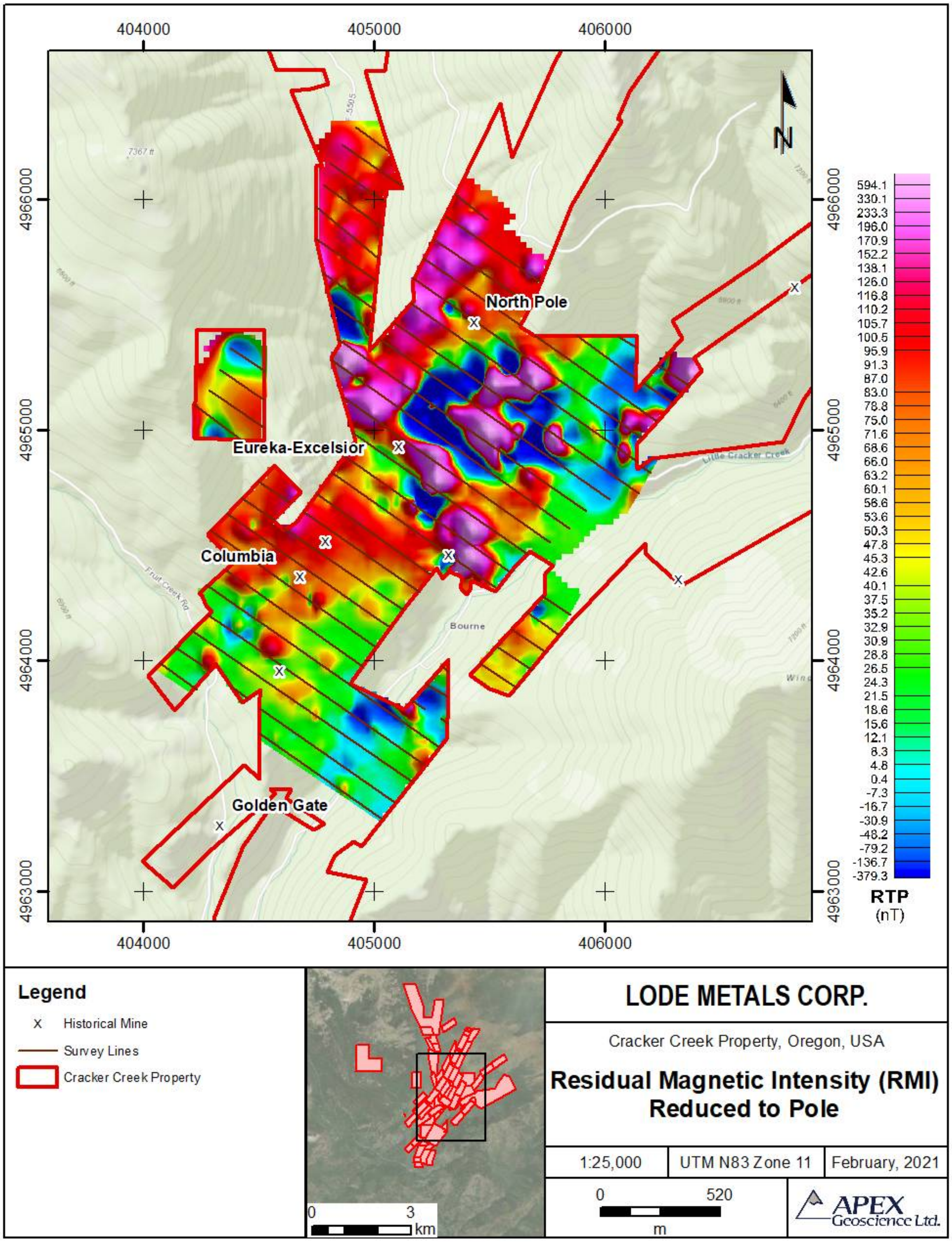
The lead author completed a site visit to the Property and examined historical drill core stored in Baker City on September 15 and 16, 2020. Details are provided in Section 12. Grab samples of quartz and argillite were collected from across the Property near and around the North Pole, Columbia and E & E historical workings; a total of 8 rock samples were collected. The lead author also examined drill core from four high interest holes from the 1991 Simplot drill program which is stored in Baker City. A total of 12 composite samples of broken up core pieces trying to effectively quarter the core were collected from 2 holes for re-assay. The samples were sent to ALS labs in North Vancouver, BC, Canada for analysis.

9.3 Ground Geophysical Surveys

Lode Metals commissioned APEX to conduct ground magnetic (MAG) and Very Low Frequency (VLF) surveying over the Cracker Creek Property (Figure 9.1). The MAG and VLF survey was completed over the area encompassing the main mineralized zone including the areas covering the historical E & E, North Pole and Columbia mines. The ground geophysical surveying was completed over two field programs over the course of 15 field days. The first program was completed between December 15 and 19, 2020 and a second program was completed between January 18 and 27, 2021.

The MAG and VLF surveys were completed over the same grid which encompassed an area covering approximately 300 hectares (ha). The survey grid consisted of 24 traverse lines oriented approximately northwest/southeast (125°/305°) and spaced

Figure 9.1 2020/2021 Ground Magnetics survey - Residual Magnetic Intensity



approximately 100 m apart. The survey lines totalled approximately 29-line kilometers of magnetic survey data. The VLF measurements were collected along the survey lines at 20 m intervals totalling approximately 1,450 stations. Preliminary data processing and interpretation of the magnetics data indicate that regional structures are clearly delineated by the data: the Cracker Creek vein is associated with a clear trend of demagnetization along the length of the vein. Final data processing and interpretation of the MAG and VLF data is currently ongoing. The MAG data and survey grid are presented in Figure 9.1.

10 Drilling

Lode Metals has not conducted any drilling on the Property to date. Previous drilling was completed by BMI-AMAX in 1981-1982 and Simplot in 1990-1991 and is detailed in the History section of this report.

11 Sample Preparation, Analyses and Security

11.1 Sample Collection, Preparation and Security

The lead author collected 8 rock samples during his site visit on September 16, 2020. Grab samples of quartz and argillite were collected from across the Property near and around the North Pole, Columbia and E & E historical workings. Samples were placed in labeled plastic bags and sealed with zip ties. Core samples (n=12) were collected from remaining core from 2 holes that had been selected prior to the site visit as high interest holes. The core samples consisted of broken up pieces of core that were left in the core boxes. To facilitate sampling some of the larger core pieces were additionally broken by the author using a rock hammer.

The lead author was in possession of the samples from the time they were collected until they reached the APEX office in Edmonton. In Edmonton, the samples were packaged in plastic buckets and sealed. They were shipped to ALS Global laboratories in North Vancouver, BC, Canada (ALS) via courier. ALS reported no issues with the samples upon arrival. No standards or blanks accompanied the samples.

The samples were assayed at ALS Vancouver, BC, Canada, which is entirely independent of APEX and Lode Metals. ALS is certified with ISO 9001:2015 for survey/inspection activity and ISO/IEC 17025:2017 UKAS ref 4028 for laboratory analysis.

11.2 Analytical Procedures

The samples were assayed at ALS North Vancouver, BC, Canada. The rock samples were prepared using ALS process PULP-31 in which the samples are crushed to 70% less than 2mm, then a rifle split 250 g aliquot is extracted and pulverised to better than 85% passing 75 µm. The core samples were prepared using ALS procedure PREP-31D in which samples were crushed to 90% less than 2 mm, then riffle split up to 1kg, with the split pulverised to >85% passing 75 µm.

The analytical procedure used for both sets of samples was the same. Analytical procedure ME-MS61 was used which involves a 0.25 g aliquot undergoing 4 acid digestion followed by geochemical analysis with Inductively Coupled Plasma Mass Spectrometry (ICP-MS). Pulps were assayed for Au with Au-ICP21 where a 30 g aliquot was fire assayed and then analyzed with ICP atomic emission spectroscopy (AES). Samples which returned Au over limit values were reanalysed with Au-GRA21 in which a 30 g sample is fire assayed with a gravimetric finish.

11.3 Quality Assurance – Quality Control

These samples were collected to verify and confirm historical mineralization on the Property. No external QA/QC samples were inserted into the sample stream. Internal standards and blanks inserted by ALS returned results within acceptable ranges.

12 Data Verification

The lead author completed a Property visit on September 15 and 16, 2020. The author collected rock samples, examined and sampled historical core and visit several historical workings while at the Property. Historical workings on the Property were found to be partially reclaimed and inaccessible. The Jevne adit is the only historical adit which remains accessible. A total of 8 rock samples were collected (Figure 12.1). Grab samples of quartz and argillite were collected from across the Property near and around the North Pole, Columbia and EE historical workings. Core from historical Simplot drill holes is well organized and stored in a dry storage unit in Baker City. During the site visit the lead author examined drill core from 4 high interest holes from the 1991 Simplot drill program. A total of 12 composite samples of broken up core pieces trying to effectively quarter the core were collected from 2 holes for assay (Figure 12.1). Core samples were collected over depths spanning 2 feet to 19 feet and consisted of all quartz, argillite and silicified and brecciated argillite. The samples were sent to ALS Global in North Vancouver, BC, Canada for geochemical analysis.

Figure 12.1 2020 Samples and Site Visit Locations

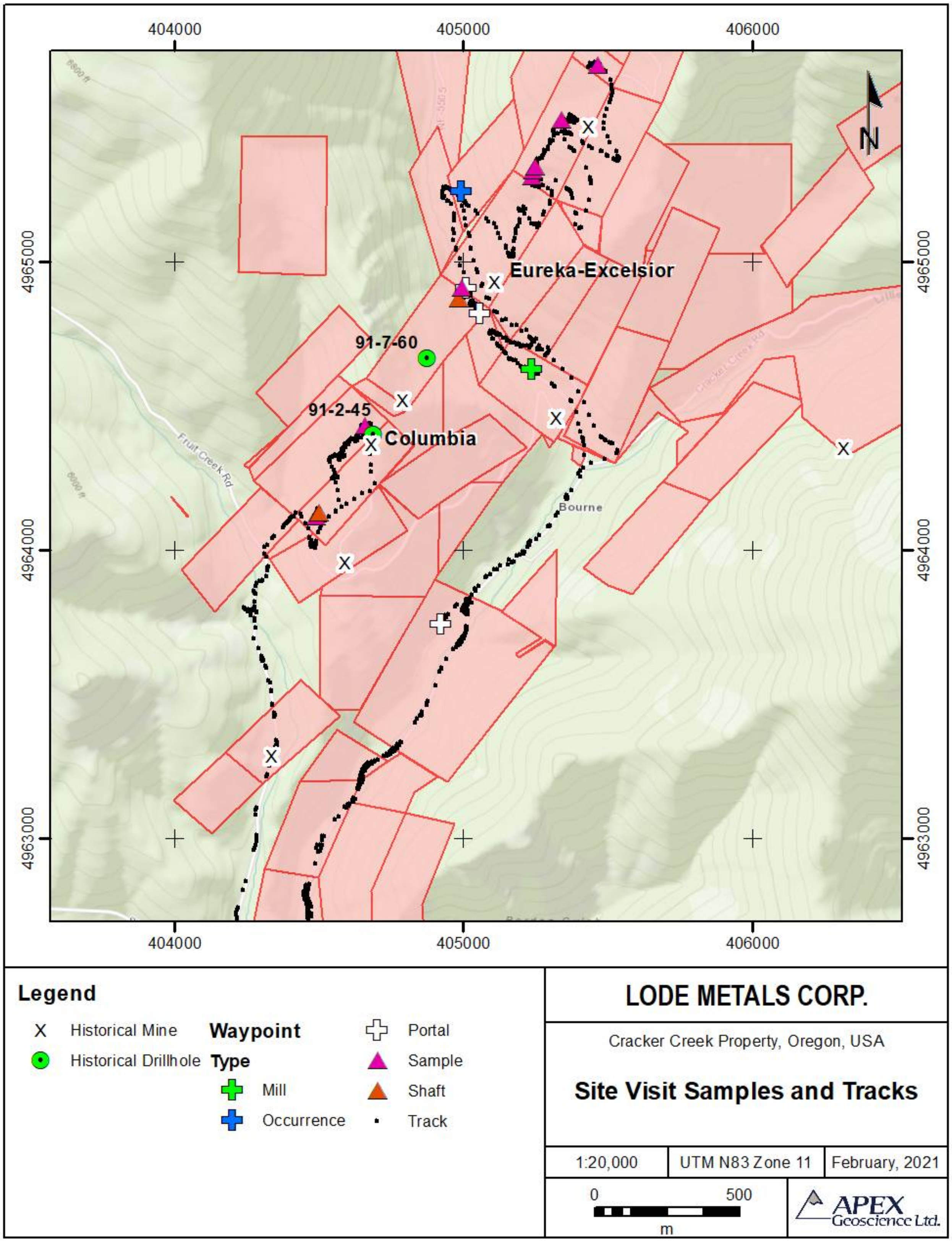


Table 12.1 Geochemical results for 2020 rock grab samples.

Sample	Au g/t 30g FA ICP21	Ag g/t ME MS61	As ppm ME MS61	Sb ppm ME MS61	Cu ppm ME MS61	Pb ppm ME MS61	Zn ppm ME MS61
20MDP500	0.073	0.41	44.8	4.59	9.1	6.2	22
20MDP501	0.025	0.46	20.9	1.78	15.5	23.3	44
20MDP502	1.96	2.21	365	7.51	53.5	6	16
20MDP503	0.075	1.1	131.5	5.85	39.2	24.2	84
20MDP504	0.467	1.26	63.2	9.04	27.4	7.3	18
20MDP505	0.009	0.72	15.4	2.94	32.1	14.4	29
20MDP506	3.72	20.4	370	43.8	101	18.3	53
20MDP507	0.013	0.73	13.7	6.41	18.9	9.7	19

From the rock grab samples 3 samples returned significantly anomalous gold results (Table 12.1). A grab sample from the trench above North Pole adit consisting of a 20 ft composite of quartz vein and bleached altered, hematite stained, argillite returned 1.96 g/t Au and 2.21 g/t Ag. Further north in the North Pole area a composite grab sample of quartz-silicified argillite from a dump site returned 0.47 g/t Au and 1.26 g/t Ag. From the Columbia workings area, a composite of oxidized dump material comprising silicified argillite, quartz and quartz breccia returned 3.72 g/t Au and 20.4 g/t Ag (Table 12.1).

A total of 9 composite samples were collected from historical drill hole 91-2-45 between 92 ft (28 m) and 121 ft (36.9 m) depth (Table 12.2). The samples were collected as equivalent to quartering the remaining core. Over this 29 ft (8.8 m) interval the samples returned an average grade of 12.43 g/t Au. This compares favourably with historically reported assay results for a similar interval from 27.6m to 41.99 m which returned a grade of 15.98 g/t Au (see Table 6.2). Samples collected from hole 91-7-60, also returned assay results that were comparable with historically reported assays. Two samples collected over an interval of 8.4 ft (2.56 m) from 103.6 ft to 112 ft (31.58 – 34.14 m) returned average assays of 4.57 g/t Au (Table 12.2), which compare favourably with a reported assay of 5.45 g/t Au over 23 ft (7.02 m) from interval 105.1 to 128 ft (32.02-39.04 m).

Table 12.2 Geochemical results for 2020 re-sampling of historical 1991 drill core.

Drill Hole ID: Footage From-To	Au g/t 30g FA ICP21	Ag g/t ME MS61	As ppm ME MS61	Sb ppm ME MS61	Cu ppm ME MS61	Pb ppm ME MS61	Zn ppm ME MS61
91-2-45: 92-97	26.7	28.8	124.5	53.5	31.5	26	16
91-2-45: 97-99	8.82	15.7	196	32.2	15	17.2	11
91-2-45: 99-101	8.97	2.65	716	21.9	13.4	5.3	11
91-2-45: 101-104	17.9	21.4	1545	63	34.5	10.4	15
91-2-45: 104-106	34.9	27.2	3140	57	26.9	15.7	11
91-2-45: 106-108	8.34	10.5	1455	33.4	44.5	6.6	13
91-2-45: 108-110	0.148	2.19	161.5	5.35	14.9	3	10
91-2-45: 110-112.2	2.96	20	690	32.9	46.2	9.5	26
91-2-45: 112-2-121	3.22	2.75	1085	20.5	59.3	5.4	28
91-7-60: 73-92	0.138	2.07	322	17.85	25.8	6.3	249
91-7-60: 103.6-107.2	5.72	23.7	705	30.4	35.4	7.7	17
91-7-60: 109.2-112	3.42	4.86	430	22.3	26.3	45	70

12.1 Data Verification Procedures

Drill hole locations and available assay results were compiled in an Excel database and as ArcGIS shapefiles. The initial drill hole compilation from the historical reports identified errors in the locations of several Simplot drill holes which plotted off the Property. Based on the author's site visit and some investigative work these holes were rectified to their appropriate locations within the Property Boundary. Historically, drilling was concentrated in the areas of the historical mines: Columbia and E&E (see Figures 6.3 and 6.4).

Historical documentation including production records, mining and exploration reports, drilling assays, surface sampling, property maps and drill core from historical programs was well maintained by Cracker Creek. All available documentation has been acquired and is available in pdf format only. All data will need to be digitized and compiled into a digital drill hole and assay database that can be used to create a 3D model. This effort is currently underway.

12.2 Adequacy of the Data

Based on the preliminary data compilation described above and Mr. Dufresne's site visit, the lead author believes that the historical drill hole data is sufficiently reliable for use in ongoing exploration and modelling studies.

13 Mineral Processing and Metallurgical Testing

No mineral processing or metallurgical testing has been completed by the Lode Metals. Results of previous metallurgical test work are summarized in the History Section (Section 6.5) of this report.

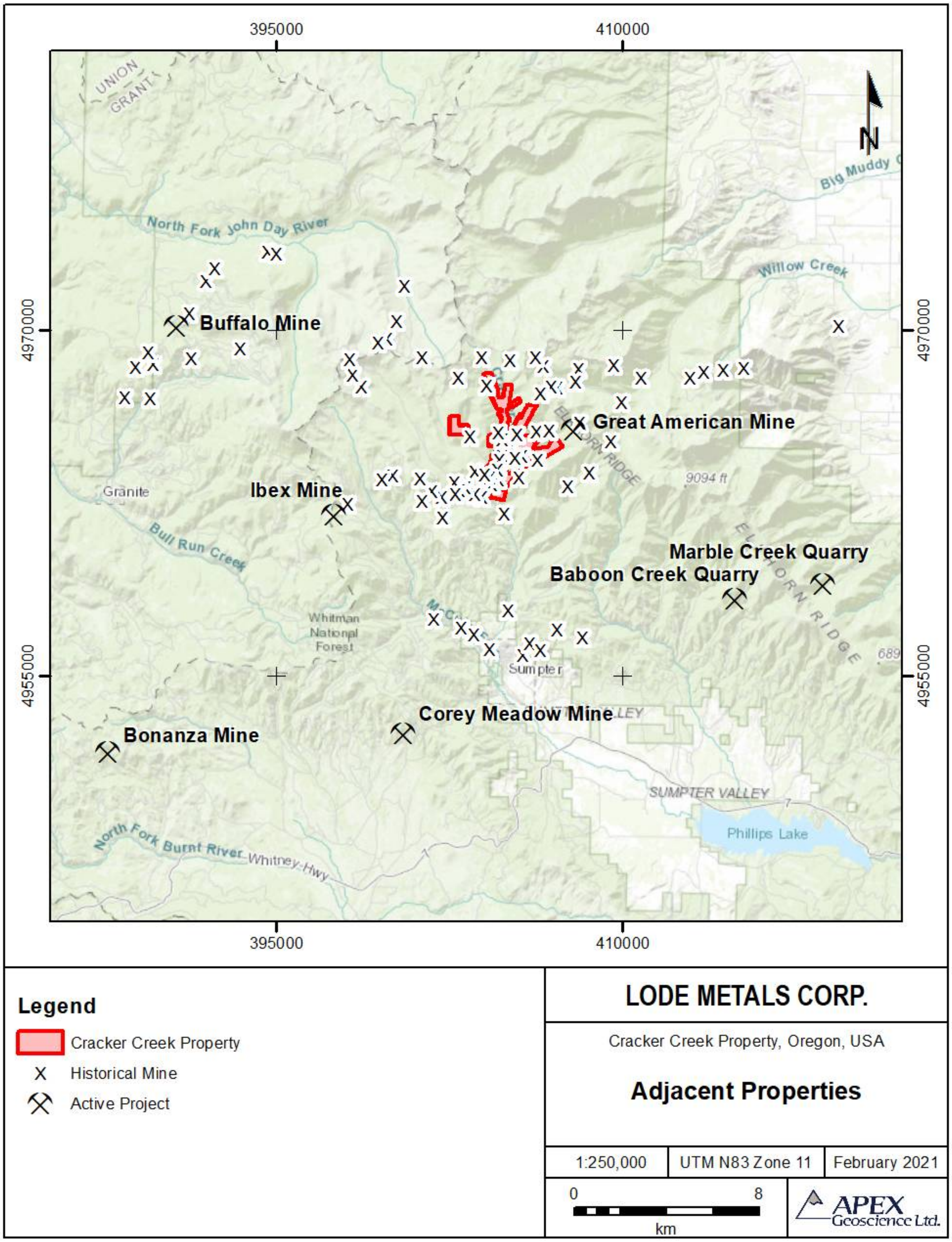
14 Mineral Resource Estimates

There are no current resources for the Project. Historical resource estimates are discussed in the History section (Section 6.4) of this report.

15 Adjacent Properties

The Blue Mountains province is responsible for approximately 75% of Oregon's gold production. The majority of the production was derived from a 40 mile wide by 120 mile long strip extending from John Day to the Snake River and continuing into Idaho (Orr and Orr, 2010). Due to the prolific mineralization in this area numerous historical mines are present in the area surrounding the Cracker Creek Property. Madin et al. (2016) identified 20 historical mines in the immediate vicinity of the Property with significant recorded

Figure 15.1 Adjacent Properties



production or extensive workings (Figure 15.1). The majority of historical mining operations were small and focused on extracting high value ore from surface and relatively shallow depths compared to modern standards. Surface, underground and placer mining was conducted in the area with the most mines ceasing production by the end of WWII. It is widely reported that the majority of mines ceased production without exhausting their resources (Madin et al., 2016).

As of 2016, there are 4 metals mines: Buffalo Mine, Corey Meadow Mine, Great American Mine, and Golden Ibex, and 2 Industrial Minerals Mines: Baboon Creek and Marble Creek Quarry that are listed as active mines in the immediate vicinity of the Property (Madin et al., 2016). The Buffalo and Golden Ibex Mines are discussed briefly below. No additional information is available for any of the other operations. In the greater vicinity, the active Bonanza Mine is located 30 miles (20 km) southwest of the Property (Figure 15.1).

The Buffalo Mine is located approximately 9 miles (15 km) northwest of the Property. Gold mineralization is hosted in quartz veins chiefly contained in argillite which are similar to those seen at Cracker Creek (Lindgren, 1901). The Buffalo deposit was discovered in mid-1880's with production beginning in 1903. From 1903 to 1958 the mine was continually active. From 1958-2016 activity was confined to exploration and development of veins at greater depth and reprocessing of tailings material. There is about 10,000 feet of drifts and crosscuts divided among four adit level (USDAFS, 2006). The ownership of the Property was the subject of a lawsuit in the late 2010's. Current status could not be confirmed.

The Golden Ibex Property is currently held Golden Ibex Inc. The property consists of 13 patented mining claims located approximately 10 miles (16 km) west of Sumpter and 5 miles (8 km) southwest of the Cracker Creek Property. The Golden Ibex property hosts the historical Ibex Mine. The Ibex Mine was an underground mining operation with one known shaft and reached subsurface depths of 183 meters (600 feet). Mineralization in the area is hosted in a composite quartz vein consisting of a silicified argillite-quartz breccia cut by strands of quartz. The quartz vein cuts through Cretaceous granodiorite-tonalite of the Bald Mountain Batholith and the Elkhorn Ridge Argillite. Mined ore comprised cinnabar, marcasite and pyrargyrite with waste material consisting primarily of quartz and calcite. The mineralized vein extends 4,267 meters (14,000 feet) in length and is 7 meters (25 feet) wide. No recent exploration on the property is reported.

The Bonanza Property, currently held by Marathon Gold Corp., is located 20 km southwest of the Cracker Creek Property. The Bonanza property encompasses the Bonanza Mine, a historical underground mine along with 6 other historical mines/occurrences. Production from the Bonanza mine totalled approximately 99,937.4 oz of gold from 128,514 tons (short tons) of ore mined from small scale underground workings. Underground workings were developed to a depth of 365.8 m (1,200 ft) in the late 1890s and early 1900s. Subsequently, limited exploration was completed by various companies in the 1950's, 1970's and in 2011. Gold mineralization is hosted in several, sub-vertical quartz veins that are associated with shear zones and faults in the Elkhorn

Ridge Argillite. The mineralization is interpreted to be of hydrothermal replacement origin related to a nearby Jurassic-Cretaceous granitoid pluton. Marathon Gold acquired the Property in 2011 to assess the potential of economic mineralization below the 200-ft level, along the lateral extensions of the Bonanza vein, North vein and South vein, the presence of zones of higher grade disseminated mineralization, and additional mineralization along the contacts or under the Tertiary cover. Marathon has completed no exploration on the Property to date (Marathon Gold, 2013, 2019).

The authors have been unable to verify the information for the Adjacent Properties described in this section. The information described for the Adjacent Properties in this section is not necessarily indicative of the mineralization on the Property that is the subject of this Technical Report.

16 Other Relevant Data and Information

The authors are not aware of any other information or data relevant to the Cracker Creek Project at this time.

17 Interpretation and Conclusions

17.1 Results and Interpretations

The Cracker Creek Project is an intermediate stage exploration project that has seen moderate exploration, drilling and small scale mining completed on the Property in the early and mid 1900's and then intermittently from 1981-1991. Previous work includes sampling, drilling, metallurgical studies, historical reserve and resource estimates and small scale mining. The authors have reviewed the historical data provided by Lode Metals.

The Property comprises 84 claims, consolidated into 61 parcels, consisting of 42 patented lode claims, 17 patented placer claims, 5 patented mill site claims, and 20 fee land parcels. The claims have been recently acquired by Lode Metals under an EPOM with CCGC signed on November 9th, 2020. Lode Metals can acquire a 100% interest in the Cracker Creek Property with the payment of a number of cash payments over time. Cracker Creek retains a 2.5% NSR.

The Cracker Creek Property is located in the Blue Mountains province which historically has accounted for approximately 75% of Oregon's gold production. Four historical mines are located on the Property: North Pole, Eureka and Excelsior, and Columbia. Additionally, the Property lies with in a prolific belt, with numerous historical mines located in the immediate vicinity of the Property including Bonanza, Buffalo, Corey Meadow, and Ibex.

Modern exploration on the Property was completed between 1980 and 1991 by two joint ventures BMI-AMAX (1980-1982) and Simplot (1990-1991). During these periods the companies re-opened several of the historical mines, drove new drifts and completed surface and underground sampling, and core drilling. In total 112 drill holes were completed on the Property both from surface and underground.

Numerous underground core holes completed in 1981-1982 and 1990-1991 along the E & E No. 1 level returned excellent assay results. Holes with grades greater than 10 g/t (0.292 oz/st) Au were distributed over 550 m (1,800 ft) of strike length along the E & E No. 1 Level where it is positioned below the North Pole 2 to 4 portals and workings. The area where the drilling was conducted starts about 550 m (1,800 ft) northeast along strike from the main E & E Portal on the 1720 ft level. Gold highlights including 59.1 g/t (1.724 oz/st) over 1.4 m core length in EE14, 64.28 g/t (1.875 oz/st) over 1.4 m core length in hole EE17, and 23.21 g/t (0.677 oz/st) over 4 m core length in EE30 by AMAX/BMI, and 13.03 g/t (0.38 oz/st) over 2.79 m core length in hole EE40, 10.32 g/t (0.301 oz/st) over 1.31 m core length in hole EE43 and 12.89 g/t (0.376 oz/st) over 2.63 m core length in hole EE61 in holes drilled by Simplot.

Surface drilling in 1990 – 1991 at the Columbia – Eureka mine areas yielded a number of gold highlights including 41.11 g/t (1.2 oz/st) over 1.6 m core length in hole 90-01, 11.90 g/t (0.347 oz/st) over 2.3 m core length in hole 90-03, 14.64 g/t (0.427 oz/st) over 1.48 m core length in hole 90-06, 13.24 g/t (0.386 oz/st) over 2.63 m core length in hole 91-1-45, 15.98 g/t (0.466 oz/st) over 11.16 m core length in hole 91-2-45 and 5.45 g/t (0.159 oz/st) over 7.02 m core length in hole 91-7-60.

No drilling has been completed on the property since 1991.

In 2020, Lode Metals commissioned APEX to complete a data compilation and review of historical data for the Property and conduct a ground geophysical surveying program. The data compilation focused on assembling all available historical drill data into a digital database, reviewing historical mining, exploration, resource estimates, collating historical maps of underground workings and all geological data. Drill hole locations and assay results were compiled for 109 drill holes extending across the main area of mineralization on the Property, including a number of holes associated with the historical mines: Eureka and Excelsior, North Pole and Columbia.

The ground geophysical surveys included the capture of ground MAG and VLF data between December 15, 2020 and January 27, 2021. The surveys were completed over the area encompassing the main mineralized zone including the areas underlain by the historical E & E, North Pole and Columbia mines. The survey grid encompassed an area covering approximately 300 hectares (ha). The MAG and VLF surveys were completed over the same grid which totalled approximately 29-line kilometers with lines spaced at approximately 100 m. Preliminary data processing and interpretation of the magnetics data indicate that regional structures are clearly delineated by the data; the Cracker Creek vein is associated with a clear trend of demagnetization along the length of the vein. Final data processing and interpretation of the MAG and VLF data is currently ongoing.

At the Effective Date of this Technical Report, Lode Metals has not carried out any production, mineral processing, or metallurgical test work at the Property, however, past property owners have produced several variations of historical metallurgical testing for the recovery of gold from high-grade gold veins.

Two types of gold mineralization from Cracker Creek have been evaluated to date: gouge and highly siliceous vein material. Historical studies indicated that the gouge material represents approximately 20% of the mineralized material and requires de-sliming to provide acceptable gold and silver recoveries and high-grade concentrates.

The historical metallurgical results have been erratic, with most of the variability due to variations in sample mineralogy and head grade, the lack of sample control and identification, and differences between the practices of the metallurgical laboratories used. Modern and well constrained metallurgical testing is required to establish the gold recovery by gravity, flotation and other appropriate methods.

Several resources have been calculated for the Cracker Creek vein from 1981-1999 as summarized in Table 17.1 and are briefly discussed below. The authors or a QP have not conducted sufficient work to classify any of the estimates discussed below as current mineral resources or reserves as per the CIM Definition Standards for Mineral Resources & Mineral Reserves (2014) and the CIM Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines (2019). The authors have not done sufficient work to classify any of the estimates discussed below as current mineral resources or reserves and is treating these estimates as historical in nature and not current mineral resources or mineral reserves. These historical estimates are presented only for the purpose of describing the extent of gold mineralization and to outline the exploration potential.

The historical reserve and resource estimates are backed up by four generations of either underground channel sampling and/or surface and underground core drilling. The historical proven and probable reserves range from 133,200 tons at a grade of 0.38 oz/st (13 g/t) Au to 320,100 tons at a grade of 0.3 oz/st (10.3 g/t) Au. The historical inferred resources (often termed possible reserves) range from 639,800 tons at a grade of 0.38 oz/st (13 g/t) Au up to 1,198,000 tons at a grade of 0.31 oz/st (10.6 g/t) Au (Table 17.1). The authors have not done sufficient work to classify any of the estimates discussed as current mineral resources or reserves and is treating these estimates as historical in nature and not current mineral resources or mineral reserves. These historical estimates are presented only for the purpose of describing the extent of gold mineralization and to outline the exploration potential of the Cracker Creek vein to provide a future mineral resource with further work.

Mr. Dufresne visited the Cracker Creek Property on September 15 and 16, 2020. The lead author collected samples for assay and located several historical workings. The author collected rock samples, examined and sampled historical core and visited several historical workings while at the Property. Most of the historical workings on the Property were found to be completely or partially reclaimed and inaccessible. The Jevne adit is the only historical adit which remains accessible. A total of 8 rock samples of quartz and argillite were collected near and around the North Pole, Columbia and E & E historical workings. A total of 3 surface rock grab samples returned anomalous gold and/or silver results including 1.96 g/t Au and 2.21 g/t Ag from a sample above North Pole adit; 0.47 g/t Au and 1.26 g/t Ag from a composite grab sample from the North Pole area and 3.72 g/t Au and 20.4 g/t Ag from Columbia dump material.

Table 17.1 Summary of historical mineral reserve and resource estimations completed on the Cracker Creek Property.

A) In situ, reserve estimations - proven and probable

		Proven		Probable		Proven and Probable Total			
Reserve estimation company	**Date of estimate**	**Short tons ('000)**	**Grade (oz/st)**	**Short tons ('000)**	**Grade (oz/st)**	**Short tons ('000)**	**Grade (oz/st)**	**Cutoff (oz/st)**	**Total Oz (*000)**
AMAX	Oct. 1982	100.0	0.38	33.2	0.36	133.2	0.38	0.18	50.6
Brooks Minerals	Oct. 1982	164.0	0.32	139.8	0.29	303.8	0.31	0.18	94.2
AMAX/Brooks	Mar. 1983	135.3	0.36	66.7	0.32	202.0	0.34	?	68.7
Arrowhead	1999	186.7	0.31	133.4	0.28	320.1	0.30	0.19	96

B) In situ, reserve estimations - inferred

		Inferred		
Reserve estimation company	**Date of estimate**	**Short tons ('000)**	**Grade (oz/ton)**	**Total Oz (*000)**
AMAX	Oct. 1982	639.8	0.38	243.1
Brooks Minerals	Oct. 1982	1,078.9	0.31	334.5
AMAX/Brooks	Mar. 1983	1,198.0	0.31	371.4
Arrowhead	1999	1,063.8	0.28	297.9

Note: The estimates provided above are historical reserve and resource estimations that predate CIM Definition Standards on Mineral Resources and Mineral Reserves and NI 43-101 Regulations. A QP has not done sufficient work to classify the historical estimations as current mineral resources, and the authors and the Issuer, are not treating any of the historical estimations as a current mineral reserves or resources.

Core from historical Simplot 1990 – 1991 drill holes is well organized and stored in a dry storage unit in Baker City. During the site visit the author examined drill core from 4 high interest holes from the 1991 Simplot drill program. A total of 12 composite samples of broken up core pieces were collected effectively quartering the core from 2 holes for assay. The samples were sent to ALS labs in North Vancouver, BC, Canada for analysis.

The quarter core composite samples returned assay results comparable with historical assays for similar zones. Samples from drill hole 91-2-45 returned an average grade of 12.43 g/t (0.363 oz/st) Au over 29 ft (8.8 m); historical assays for a similar zone returned an average grade of 15.98 g/t (0.466 oz/st) Au. Composite samples from drill hole 91-7-60 returned and average grade of 4.57 g/t (0.133 oz/st) Au over an interval of 8.4 ft (2.56 m); comparable to historical assays of 5.45 g/t (0.159 oz/st) Au over 23 ft (7.02 m) from a large zone that included the 2020 sampled core. The sampling by the author partially validates a portion of the historical drill core sample assay results.

Based on the review of historical information, the Property visit by the QP and recent assay results, the author considers the Cracker Creek Property a property of significant merit that requires further exploration and delineation work. The Cracker Creek vein deposit lies in a prolific mining district with past production from historical mines on the Property of approximately 450,000 to greater than 500,000 oz Au averaging 0.55 oz/st (18.9 g/t) to 0.64 oz/st (21.9 g/t) Au. The mineralized Cracker Creek vein has been delineated across the length of the Property. Historical drilling has defined excellent strike continuity and a steep downward dip. Additionally, other adjacent veins and the on-strike projections of the Cracker Creek vein remain essentially unexplored. Historical mining focused on relatively shallow underground workings indicates that the deeper mineralization needs to be assessed with modern exploration techniques.

17.2 Risks and Uncertainties

Additional work needs to be completed at Cracker Creek to develop information on the grade and continuity of mineralized shoots within the vein system at all four mine areas. Based on the work to date, how the vein and grades persist to depth is undefined.

Although the Cracker Creek vein is manifest as a strong, continuous and wide structure, the high grade mineralized zone within the structure is narrower than the full vein width, and often comprises multiple shoots on the hangingwall, footwall and sometimes within the vein structure. Additionally, economic type grades may have continuity issues both along strike and up and down dip.

Potentially economic grade zones appear to be mostly concentrated along the footwall of the main vein but can also occur as en echelon quartz cutting across the main vein at an acute angle, as breccia zones and as gougy material with lesser quartz in the footwall of the main structure. Historical metallurgical testing suggests there could be different recoveries for each of the different mineralization types, with some of the recoveries considered to be poor.

Repeated fault movements in, across and along the main vein have been documented pre- syn- and post mineralization complicating control on the localization of the ore shoots. There is some evidence of bottoming out of the mineralized zones that has been presented by AMAX including a general decrease in grade with depth, a decrease in stoping with depth and the fact that few of the historical reserve/resource blocks are greater than 0.5 oz/st (17.14 g/t) Au given the historical mill head average grades of well over these grades.

There is no modern information on the metallurgy and processing to determine realistic costs and eventual cutoff grades. The cutoff grade employed could significantly affect any future resource estimation. A significant amount of reclamation has been conducted and many of the old portals and shafts are in disrepair or completely reclaimed.

Discussion with an engineer who was involved with much of the rehabilitation of the underground workings in the 1980's indicated the workings were in very poor shape then and even with the 1980's effort to rehabilitate a number of the workings, would most likely be in poor shape now. Environmental and permitting issues need to be addressed.

DOGAMI representatives have expressed a willingness to approve a mining permit application for the Cracker Creek Property with the proviso that they would not look favourably on an application that contemplated the use of cyanide on the property although it is permitted in Oregon (BHLK, 2012a).

18 Recommendations

Cracker Creek offers an excellent opportunity to explore for and develop a small to mid-size precious metal deposit. The mineralized Cracker Creek vein structure has been delineated across the length of the Property and extends for over 5 miles (8 km). Other adjacent veins and the on-strike projections of the Cracker Creek vein remain essentially underexplored. Historically, the Cracker Creek vein structure is reported to have produced more than 450,000 oz to 500,000 oz of gold at an average grade of 0.55 to 0.64 oz/st (18.86 to 21.94 g/t) gold. Drilling and underground sampling by AMAX-BMI and Simplot during the 1980's to early 1990's identified unmined mineralization that could be targeted for mineral resources and potentially future mining development.

No modern exploration techniques have been employed at the Property to either extend the known mineralization along strike and at depth, to identify new mineralization along strike or to assess parallel veins historically identified and mined in the area. A phased approach is recommended starting with a Phase 1 surface exploration program comprised of detailed geological mapping, resampling of historical drill core, rock and soil sampling in combination with additional ground geophysical surveys, a LIDAR survey to produce a detailed digital terrain model in combination with a structural study. Phase 1 should also include historical data compilation and validation, the initiation of drill permitting for the Phase 2 drill program, and the initiation of any required baseline monitoring surveys. An airborne geophysical survey such as a Versatile Time Domain Electromagnetic (VTEM) and magnetic survey should be considered as part of the Phase 1 program. The estimated cost of the Phase 1 program is US$400,000 (CDN$500,000; Table 18.1).

The Phase 2 program is contingent on the positive results from Phase 1 and will only be completed if the Phase 1 results warrant further work. Historical drilling and underground sampling has delineated significant gold mineralization along 2.5 km of the Cracker Creek vein structure. Confirmation drilling is recommended along the extent of the vein to verify assays, continuity and the depth extent of mineralization. In addition, a modern metallurgical program is required, therefore a number of PQ core holes should be completed as part of the confirmation drilling program. The Phase 2 core drilling program should include approximately 15 confirmation core holes drilled with HQ core and 5 metallurgical holes completed using PQ core. The Phase 2 program should comprise about 4,000 m of core drilling and include a small amount of follow-up field work along with a number of metallurgical studies. The estimated cost to conduct the Phase 2 program is US$1,520,000 (CDN$1,900,000; Table 18.1). The Phase 2 program should culminate with 3D geological modelling of the historical and new drilling leading to a maiden mineral resource estimate.

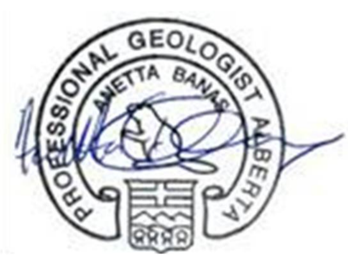
Table 18.1 Recommended 2020-2021 Program and Budget

Phase 1	
Activity Type	**Cost**
Geological Mapping & Structural Interpretation	$50,000
Rock & Soil Sampling (4 weeks) along with Historical Core sampling	$100,000
Ground Geophysical Surveying, Processing and Interpretation	$50,000
Drone/Lidar DTM and Structural mapping	$50,000
Data compilation and Validation	$50,000
Airborne VTEM and Magnetic Survey	$110,000
Permitting, Base Line Data Surveys & Consultation	$50,000
Contingency ~10%	$40,000
Phase 1 Activities Subtotal	CDN$500,000

Phase 2					
Property	**Cost/ft (All-in)**	**Cost/m (approx.)**	**Quantity (ft)**	**Quantity (m)**	**Cost**
Follow Up Sampling & Mapping					$100,000
HQ Core 15 holes (Infill Holes)	$106/ft	$350/m	9,840	3,000	$1,050,000
PQ Core 5 holes (Met Holes)	$137/ft	$450/m	3,280	1,000	$450,000
Mineral Resource Modelling					$50,000
Metallurgical Studies					$100,000
Contingency ~10%					$150,000
				Phase 2 Activities Subtotal	CDN$1,900,000
				Grand Total	CDN$2,600,000

APEX Geoscience Ltd.

PERMIT TO PRACTICE
APEX GEOSCIENCE LTD.
RM SIGNATURE:
RM APEGA ID #: 48439
DATE: February 15, 2021
PERMIT NUMBER: P005824
The Association of Professional Engineers and Geoscientists of Alberta (APEGA)



Michael B. Dufresne, M.Sc., P.Geol., P.Geo.

Anetta Banas, M.Sc., P.Geol.

Edmonton, Alberta, Canada
Effective Date: January 31, 2021
Signing Date: February 15, 2021

19 References

Arribas, A., Hedenquist, J. (2000) Exploration for Epithermal Gold Deposits. Conference Presentation at Gold in 2000, Lake Tahoe, USA.

Behre Dolbear – Riverside Inc. (1987): A critical evaluation of the Cracker Creek Gold Mine near Baker, Oregon; Internal Report, 106p.

BHLK Group (2012a): Cracker Creek Mine Baker County, Oregon; BHLK Group, Internal Report, January 15, 2012, 10p.

BHLK Group (2012b): Update - Cracker Creek Mine Baker County, Oregon; BHLK Group, Internal Report, June 15, 2012, 5p.

Brooks, H.C. and Ramp, L. (1968): Gold and Silver in Oregon; Originally published in 1968 by the State of Oregon Department of Geology and Mineral Resources; currently published in 2010 by Sylvanite Publishing, 356p.

Brooks Minerals Inc. (1981): Development Report: Cracker Creek Project, Baker County, Oregon; Brooks Minerals Inc., Internal Report, 61p.

Brooks Minerals Inc. (1982): Development Report: Cracker Creek Project, Baker County, Oregon; Brooks Minerals Inc., Internal Report, 87p.

Cracker Creek Gold Mining Company (2008): Executive Summary; Cracker Creek Gold Mining Company, Internal Report, 4p.

Dorsey, R.J., LaMaskin, T.A., (2008): Mesozoic collision and accretion of oceanic terranes in the Blue Mountains province of north- eastern Oregon: New insights from the stratigraphic record in Spencer, J.E., Titley, S.R., (eds.) Ores and orogenesis: Circum-Pacific tectonics, geologic evolution, and ore deposits. Arizona Geological Society Digest 22, p 325 - 332

Elmer, W.W. (1930): Private company engineering report cited in numerous Oregon historical mining publications [complete reference unknown].

Gerick, E.M., Ashton, J.W., & Rogers, D.B. (1999): Executive Summary for the Cracker Creek Property Baker County, Oregon; Arrowhead Resources, LLC, 192p.

Ferns, M.L., Brooks, H.C., and Ducette, J., 1982, Geology and mineral resources map of the Mt Ireland quadrangle, Baker and Grant Counties, Oregon: Oregon Department of Geology and Mineral Industries Geologic Map Series GMS-22, scale 1:24,000

Gerick, E.M., Ashton, J.W., Rogers, D.B. (1999): Arrowhead Resources, LLC Executive Summary for the Cracker Creek Property, Baker County, Oregon. Internal Report, 192 p.

Hart, C.J.R. (2005): Classifying, Distinguishing, and Exploring for Intrusion-Related Gold Systems; The Gangue, Issue 87, 9p.

Hart, C.J.R., (2007), Reduced intrusion-related gold systems, in Goodfellow, W.D., ed., Mineral deposits of Canada: A Synthesis of Major Deposit Types, District Metallogeny, the Evolution of Geological Provinces, and Exploration Methods: Geological Association of Canada, Mineral Deposits Division, Special Publication No. 5, p. 95-112.

Hedenquist, J.W, Arribas, A. R., Gonzalez-Urien, E. (2000) Exploration for Epithermal Gold Deposits in Hagemann, S.G., Brown, P.E. (eds) Gold in 2000, Reviews in Economic Geology, V.13, p. 245-278

Jevne (2008) Executive Summary – Cracker Creek Gold Mining Company Property. Cracker Creek Gold Mining Company, 4p.

John, D.A., Vikre, P.G., du Bray, E.A., Blakely, R.J., Fey, D.L., Rockwell, B.W., Mauk, J.L., Anderson, E.D., Graybeal, F.T., (2018) Descriptive models for epithermal gold-silver deposits: U.S. Geological Survey Scientific Investigations Report 2010–5070–Q, 247 p.

Kimball, R.V. (1991): Executive Summary, Cracker Creek Mines: Geology and Mineralogy from previous exploration; Simplot Mining Venture, 12 p.

Leheup, D. (1982) Geology of Cracker Creek. Report prepared for AMAX Exploration Inc. 5p.

Lindgren W. (1901): The Gold Belt of the Blue Mountains of Oregon; U.S. Geological Survey, 22nd Annual Report, 225p.

Madin, I.P., Houston, R.A., Niewendorp, C.A., Claughry, J.D., Wiley, T.J., Duda, C.J.M. (2016): Metallic and Industrial Mineral Resource Potential of Southern and Eastern Oregon: Report to the Oregon Legislature. Open-File Report O-16-04, Oregon Department of Geology and Mineral Industries, 62p.

Miller, R.J., Raines, G.L., and Connors, K.A. (2002): Spatial digital database for the geologic map of Oregon: Geology compiled by G.W. Walker and N.S. MacLeod, USGS Open-File Report 03-67, scale 1:500,000.

Nicol, D.L., (1993): Review of the Current Status and Economic Potential of the Cracker Creek Gold Property, Baker County, Oregon. Report Prepared for Bourne Mining Company by Dunn-Behre Dolbear Inc., 81p.

Oregon Department of Geology and Mineral Industries (1982): Geology and Gold Deposits Map of the Bourne Quadrangle, Oregon;

Pardee, J.T. (1909): Faulting and Vein Structure in the Cracker Creek Gold District, Baker County, Oregon; Contributions to Economic Geology, USGS Bulletin 380 A, 13p.

Parsons Behle and Latimer (2021): Title Report: Cracker Creek Mining Project, Baker County, Oregon. Confidential report provided to Lode Metals Corp., 50p.

Peters, S. G. (1993): Formation of oreshoots in mesothermal gold-quartz vein deposits: examples from Queensland, Australia, Ore Geology Reviews, V.8, p. 277-301,

Robert, F., Brommecker, R., Bourne, B. T., Dobak, P. J., McEwan, C. J., Rowe, R. R. and Zhou, X. (2007) Models and Exploration Methods for Major Gold Deposit Types. Ore Deposits and Exploration Technology 48: 691-711.

Rostad, O.H. (1982): Geology & Ore Reserves, Cracker Creek Project, Baker County Oregon; Amax Exploration Inc., Internal Report, 2p.

Schwartz, JJ, Snoke, AW, Frost, CD, Barnes, CG, Gromet, LP, Johnson, K (2010): Analysis of the Wallowa-Baker terrane boundary: Implications for tectonic accretion in the Blue Mountains province, northeastern Oregon. *GSA Bulletin* ; 122 (3-4): 517–536.

Schwartz, J.J., Johnson, K., Mueller, P., Valley, J., Strickland, A., and Wooden, J.L. (2014): Time scales and processes of Cordilleran batholith construction and high-Sr/Y magmatic pulses: Evidence from the Bald Mountain batholith, northeastern Oregon: Geosphere , v.10, p. 1456–1481

Thomas, J.W. (1979): Wildlife Habitats in Managed Forests: the Blue Mountains of Oregon and Washington; U.S. Department of Agriculture, Forest Services, 107p.

United States Department of Agriculture Forest Service (1990): Land and Resource Management Plan Wallowa-Whitman National Forest; Forest Service Pacific Northwest Region, Internal Report, 192p.

Walker, G. (1981): Letter to W. Lodder re ore reserves; Internal company report dated December 1981.
Walker, G. (1982): Revised Cracker Creek ore inventory; Internal company report dated January 1982.

Wang, L., Qin, K.-Z., Song, G.-X., & Li, G.-M. (2019). A review of intermediate sulfidation epithermal deposits and subclassification. Ore Geology Reviews, 107, 434–456.

Wyslouzil, D.M. and Yen, W.T. (1981): An investigation of the recovery of gold and silver from a Cracker Creek sample submitted by AMAX of Minnesota Incorporated; Progress Report No. 1., 111p.

20 Certificate of Author

I, Michael Dufresne, M. Sc., P. Geol., P. Geo., do hereby certify that:

1. I am President and a Principal of APEX Geoscience Ltd., Suite 100, 11450 – 160th Street, Edmonton, AB, Canada, T5M 3Y7.

2. I graduated with a B.Sc. Degree in Geology from the University of North Carolina Wilmington in 1983 and a M.Sc. Degree in Economic Geology from the University of Alberta in 1987.

3. I am and have been registered as a Professional Geologist with the Association of Professional Engineers and Geoscientists ("APEGA") of Alberta since 1989. I have been registered as a Professional Geologist with the association of Professional Engineers and Geoscientists of BC since 2012.

4. I have worked as a geologist for more than 35 years since my graduation from University and have extensive experience with exploration for, and the evaluation of, gold deposits of various types, including epithermal, sediment-hosted and intrusion related gold systems.

5. I have read the definition of "Qualified Person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of NI 43-101.

6. I am responsible for sections 9 to 14 and jointly responsible for section 1 to 8 and 15 to 20 of the Technical Report titled "Technical Report for the Cracker Creek Property, Baker County, Oregon, USA", with an effective date of February 15, 2021 (the "Technical Report"). I visited the Cracker Creek Property on September 15-16, 2020.

7. To the best of my knowledge, information and belief, the Technical Report contains all relevant scientific and technical information that is required to be disclosed, to make the Technical Report not misleading.

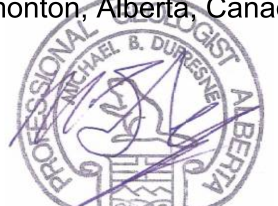
8. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.

9. I am independent of the issuer, the vendor and the Property applying all of the tests in section 1.5 of both NI 43-101 and 43-101CP.

10. I have not had any prior involvement with the Property that is the subject of the Technical Report.

11. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files or their websites.

Effective date: February 15th, 2021
Edmonton, Alberta, Canada



Michael B. Dufresne, M.Sc., P.Geol., P.Geo.

Certificate of Author

I, Anetta Banas, M.Sc., P.Geol., do hereby certify that:

1. I am a Senior Staff Geologist with APEX Geoscience Ltd. Suite 100, 11450 – 160th Street, Edmonton, AB, Canada, T5M 3Y7.

2. I graduated with a B.Sc. Degree in Geology from the University of Alberta in 2002 and with a M.Sc. Degree in Geology from the University of Alberta in 2005.

3. I am and have been registered as a Professional Geologist with the Association of Professional Engineers and Geoscientists of Alberta since 2009.

4. I have worked as a geologist for more than 18 years since my graduation from university and have extensive experience with the exploration for, and the evaluation of, gold deposits of various types, including epithermal, mesothermal and intrusion related gold systems.

5. I have read the definition of “Qualified Person” set out in National Instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “Qualified Person” for the purposes of NI 43-101.

6. I am jointly responsible for the preparation of sections 1 to 8 and 15 to 20 of the Technical Report titled “Technical Report for the Cracker Creek Property, Baker County, Oregon, USA”, with an effective date of February 15, 2021 (the “Technical Report”). I have not visited the Property.

7. To the best of my knowledge, information and belief, the Technical Report contains all relevant scientific and technical information that is required to be disclosed, to make the Technical Report not misleading.

8. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.

9. I am independent of the issuer, the vendor and the Property applying all of the tests in section 1.5 of both NI 43-101 and 43-101CP.

10. I have not had any prior involvement with the Property that is the subject of the Technical Report.

11. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files or their websites.

Effective date: February 15th, 2021.
Edmonton, Alberta, Canada

PROFESSIONAL GEOLOGIST ANETTA BANAS ALBERTA

Anetta Banas, M.Sc., P.Geol.

APPENDIX 1 Cracker Creek Property Patented Claims Table

No.	Claim Name	Claim Type	Consolidated Claim Group	Rights	Date Recorded	Owner
1	CRACKER CREEK PLACER MINING CLAIM	Patented-Placer	EUREKA CONSOLIDATED PLACER MINING CLAIM	Surface and Mineral	-	Cracker Creek Gold Mining Company
2	BARING PLACER CLAIM	Patented-Placer	BARING CONSOLIDATED PLACER MINING CLAIM	Surface and Mineral	1895	Cracker Creek Gold Corporation
3	MARYLAND PLACER CLAIM	Patented-Placer	BARING CONSOLIDATED PLACER MINING CLAIM	Surface and Mineral	1895	Cracker Creek Gold Corporation
4	ANNEX PLACER CLAIM	Patented-Placer	BARING CONSOLIDATED PLACER MINING CLAIM	Surface and Mineral	1895	Cracker Creek Gold Corporation
5	BASIN PLACER CLAIM	Patented-Placer	BARING CONSOLIDATED PLACER MINING CLAIM	Surface and Mineral	1895	Cracker Creek Gold Corporation
6	MAJESTIC QUARTZ LODE MINING CLAIM	Patented-Lode	-	Surface and Mineral	1905	Cracker Creek Gold Corporation
7	SMALL HOPE PLACER MINING CLAIM	Patented-Placer	-	Surface and Mineral	1923	Cracker Creek Gold Corporation
8	NORTHERN PLACER CLAIM	Patented-Placer	NORTHERN CONSOLIDATED PLACER MINING CLAIM	Surface and Mineral	1923	Cracker Creek Gold Corporation
9	SOUTHERN PLACER CLAIM	Patented-Placer	NORTHERN CONSOLIDATED PLACER MINING CLAIM	Surface and Mineral	1923	Cracker Creek Gold Corporation
10	CREEK PLACER CLAIM	Patented-Placer	NORTHERN CONSOLIDATED PLACER MINING CLAIM	Surface and Mineral	1923	Cracker Creek Gold Corporation
11	CENTRAL PLACER MINING CLAIM	Patented-Placer	-	Surface and Mineral	1895	Cracker Creek Gold Corporation
12	WILLAMETTE PLACER MINING CLAIM	Patented-Placer	-	Surface and Mineral	1923	Cracker Creek Gold Corporation
13	TABER FRAC LODE CLAIM (also known as the SUMMIT AND FRACTIONAL QUARTZ)	Patented-Lode	CONSOLIDATED FRACTIONAL QUARTZ LODE MINING CLAIM	Surface and Mineral	1893	Cracker Creek Gold Corporation
14	EUREKA QUARTZ LODE MINING CLAIM	Patented-Lode	-	Surface and Mineral	1923	Cracker Creek Gold Corporation
15	EUREKA MILLSITE CLAIM	Patented-Millsite	-	Surface and Mineral	1923	Cracker Creek Gold Corporation

16	WEBFOOT PLACER MINING CLAIM	Patented-Placer	-	Surface and Mineral	1923	Cracker Creek Gold Corporation
17	CRACKER QUARTZ CLAIM	Patented-Lode	CRACKER AND OREGON CONSOLIDATED QUARTZ MINING CLAIM	Surface and Mineral	1893	Cracker Creek Gold Corporation
18	OREGON QUARTZ CLAIM	Patented-Lode	CRACKER AND OREGON CONSOLIDATED QUARTZ MINING CLAIM	Surface and Mineral	1893	Cracker Creek Gold Corporation
19	BLACKMAILER QUARTZ LODE MINING	Patented-Lode	SHYSTER CONSOLIDATED MINING CLAIM	Surface and Mineral	1923	Cracker Creek Gold Corporation
20	SHYSTER QUARTZ LODE MINING	Patented-Lode	SHYSTER CONSOLIDATED MINING CLAIM	Surface and Mineral	1923	Cracker Creek Gold Corporation
21	SHYSTER MILLSITE CLAIM	Patented-Millsite	SHYSTER CONSOLIDATED MINING CLAIM	Surface and Mineral	1923	Cracker Creek Gold Corporation
22	EXCELSIOR QUARTZ LODE MINING CLAIM	Patented-Lode	-	Surface and Mineral	1923	Cracker Creek Gold Corporation
23	EXCELSIOR NO.2 QUARTZ LODE MINING CLAIM	Patented-Lode	-	Surface and Mineral	1923	Cracker Creek Gold Corporation
24	RAGING ROLAND MINING CLAIM	Patented-Lode	-	Surface and Mineral	1905	Cracker Creek Gold Corporation
25	BISMARK QUARTZ MINING CLAIM	Patented-Lode	BISMARK CONSOLIDATED QUARTZ MINING	Surface and Mineral	1906	Cracker Creek Gold Corporation
26	GLADSTONE MINING CLAIM	Patented-Lode	BISMARK CONSOLIDATED QUARTZ MINING	Surface and Mineral	1906	Cracker Creek Gold Corporation
27	NORTH POLE QUARTZ MINING CLAIM	Patented-Lode	-	Surface and Mineral	1892	Cracker Creek Gold Corporation
28	NORTH STAR QUARTZ LODE MINING CLAIM	Patented-Lode	-	Surface and Mineral	1895	Cracker Creek Gold Corporation
29	NORTH STAR NO. 2 LODE MINING CLAIM	Patented-Lode	-	Surface and Mineral	1906	Cracker Creek Gold Corporation
30	WILLIAMS QUARTZ LODE MINING CLAIM	Patented-Lode	-	Surface and Mineral	1895	Cracker Creek Gold Corporation
31	FRITZ LODE CLAIM	Patented-Lode	ANNIVERSARY CONSOLIDATED QUARTZ MINING CLAIM	Surface and Mineral	1907	Cracker Creek Gold Corporation

32	PROTECTION LODE CLAIM (Survey No. 494)	Patented-Lode	ANNIVERSARY CONSOLIDATED QUARTZ MINING CLAIM	Surface and Mineral	1907	Cracker Creek Gold Corporation
33	ANNIVERSARY LODE CLAIM	Patented-Lode	ANNIVERSARY CONSOLIDATED QUARTZ MINING CLAIM	Surface and Mineral	1907	Cracker Creek Gold Corporation
34	MORE OR LESS QUARTZ LODE MINING CLAIM	Patented-Lode	-	Surface and Mineral	1896	Cracker Creek Gold Corporation
35	GOLD DOLLAR LODE MINING CLAIM	Patented-Lode	-	Surface and Mineral	1907	Cracker Creek Gold Corporation
36	VILLARD QUARTZ LODE MINING CLAIM	Patented-Lode	-	Surface and Mineral	1901	Cracker Creek Gold Corporation
37	BLUE MOUNTAIN QUARTZ LODE MINING CLAIM	Patented-Lode	-	Surface and Mineral	1904	Cracker Creek Gold Corporation
38	YANKEE JACK LODE MINING CLAIM	Patented-Lode	-	Surface and Mineral	1906	Cracker Creek Gold Corporation
39	YANKEE JIM LODE MINING CLAIM**	Patented-Lode	-	Surface and Mineral	1906	Cracker Creek Gold Corporation
40	TAMARACK PLACER MINING CLAIM	Patented-Placer	-	Surface and Mineral	1893	Cracker Creek Gold Corporation
41	SOUTH POLE LODE MINING CLAIM	Patented-Lode	-	Surface and Mineral	1905	Cracker Creek Gold Corporation
42	EVANS LODE MINING CLAIM	Patented-Lode	-	Surface and Mineral	1905	Cracker Creek Gold Corporation
43	SAMPSON LODE MINING CLAIM	Patented-Lode	SAMPSON CONSOLIDATED QUARTZ MINING CLAIM	Surface and Mineral	1904	Cracker Creek Gold Mining Company
44	RISK LODE MINING CLAIM	Patented-Lode	SAMPSON CONSOLIDATED QUARTZ MINING CLAIM	Surface and Mineral	1904	Cracker Creek Gold Mining Company
45	VENTURE LODE MINING CLAIM	Patented-Lode	SAMPSON CONSOLIDATED QUARTZ MINING CLAIM	Surface and Mineral	1904	Cracker Creek Gold Mining Company
46	CYCLONE LODE CLAIM	Patented-Lode	CYCLONE CONSOLIDATED QUARTZ MINING CLAIM	Surface and Mineral	1902	Cracker Creek Gold Mining Company

47	PROTECTION LODE CLAIM (Survey No. 366)	Patented-Lode	CYCLONE CONSOLIDATED QUARTZ MINING CLAIM	Surface and Mineral	1902	Cracker Creek Gold Mining Company
48	COLUMBIA QUARTZ LODE MINING CLAIM	Patented-Lode	-	Surface and Mineral	1963	Cracker Creek Gold Mining Company
49	APPOMATTOX QUARTZ LODE MINING CLAIM	Patented-Lode	-	Surface and Mineral	1900	Cracker Creek Gold Mining Company
50	OLD MIDDLEMAN LODE MINING	Patented-Lode	-	Surface and Mineral	1938	Cracker Creek Gold Mining Company
51	TIN HORN LODE MINING	Patented-Lode	-	Surface and Mineral	1938	Cracker Creek Gold Mining Company
52	TIN HORN MILLSITE CLAIM	Patented-Millsite	-	Surface and Mineral	1938	Cracker Creek Gold Mining Company
53	AFTER THOUGHT QUARTZ LODE MINING CLAIM	Patented-Lode	-	Surface and Mineral	1923	Cracker Creek Gold Mining Company
54	HYDROLIC PLACER MINING CLAIM	Patented-Lode	-	Surface and Mineral	1904	Cracker Creek Gold Mining Company
55	HOMESTAKE LODE MINING CLAIM	Patented-Lode	-	Surface and Mineral	1928	Cracker Creek Gold Mining Company
56	GOLDEN GATE LODE MINING CLAIM	Patented-Lode	-	Surface and Mineral	1928	Cracker Creek Gold Mining Company
57	ALEXANDER PLACER CLAIM	Patented-Placer	LOUISE CONSOLIDATED MINING CLAIM	Surface and Mineral	1895	Cracker Creek Gold Mining Company
58	LOUISE PLACER CLAIM	Patented-Placer	LOUISE CONSOLIDATED MINING CLAIM	Surface and Mineral	1895	Cracker Creek Gold Mining Company
59	CASSEL PLACER CLAIM	Patented-Placer	LOUISE CONSOLIDATED MINING CLAIM	Surface and Mineral	1895	Cracker Creek Gold Mining Company

60	BLACK BEAR LODE CLAIM	Patented-Lode	BEAR CONSOLIDATED MINING CLAIM	Surface and Mineral	1928	Cracker Creek Gold Mining Company
61	BROWN BEAR LODE CLAIM	Patented-Lode	BEAR CONSOLIDATED MINING CLAIM	Surface and Mineral	1928	Cracker Creek Gold Mining Company
62	GRIZZLY BEAR LODE CLAIM	Patented-Lode	BEAR CONSOLIDATED MINING CLAIM	Surface and Mineral	1928	Cracker Creek Gold Mining Company
63	WILLIAMS MILLSITE CLAIM	Patented-Millsite	WILLIAMS MILLSITE CLAIM	Surface and Mineral	1892	Cracker Creek Gold Corporation
64	TIN HORN AND CYCLONE	Patented-Millsite	TIN HORN AND CYCLONE	Surface and Mineral	1906	Cracker Creek Gold Mining Company

** Only a portion, described as follows, of YANKEE JIM LODE MINING CLAIM is included in the Property:

“Beginning at Corner No. 1, from which U. S. Mineral Monument No. 2 bears South 20°52' West 211.3 feet distant; thence North 34°5' East 358.6 feet along the Easterly side line; thence North 67°30' West (variation 20 East) 600 feet to Westerly side line; thence South 34°15' West (variation 20 East) 358.6 feet along Westerly side line to corner No. 4; thence South 67°30' East (variation 21 East) 600 feet to corner No. 1, the place of beginning.