A Technical Report on the Elder Creek Copper-Gold Project,Humboldt and Lander Counties, Nevada

Timberline RESOURCES

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1.0 SUMMARY

This technical report on the Elder Creek Copper-Gold Project, located in Lander and Humboldt Counties, Nevada, was prepared at the request of Timberline Resources Corp. ("Timberline"). Timberline, through acquisition of the property, holds an earn-in right to acquire up to a 65% interest in the project through its participation in a Joint Venture (JV) with a subsidiary of McEwen Mining Corporation (McEwen).

This report was prepared in compliance with the disclosure and reporting requirements set forth in the Canadian Securities Administrators' National Instrument 43-101 ("NI 43-101"), Companion Policy 43-101CP, and Form 43-101F1, as well as with the Canadian Institute of Mining, Metallurgy and Petroleum's "CIM Definition Standards - For Mineral Resources and Reserves, Definitions and Guidelines" ("CIM Standards") adopted by the CIM Council on May 10, 2014.

The purpose of this report is to provide a technical summary of the Elder Creek project and describe exploration work conducted to date. The Effective Date of this technical report is November 28, 2018.

1.1 PROPERTY DESCRIPTION AND OWNERSHIP

The Elder Creek property is located in northern Nevada, 8 miles west-northwest of Battle Mountain. The project lies in the Battle Mountains within the Battle Mountain mining district, covers approximately 9,600 acres and includes 583 unpatented lode mining claims.

In May, 2018, Timberline entered into a Purchase and Sale Agreement with America's Gold Exploration Inc. (AGEI) to purchase the latter's rights, title and interest in, to, and under the Elder Creek Joint Venture (JV Agreement) with a subsidiary of McEwen.

The underlying Elder Creek JV with McEwen grants Timberline, as operator of the project, terms of earn-in to acquire a 51% ownership for $2.6 M expenditure over 4 years by December 31, 2021, and a 65% ownership for an additional $2.5M expenditure for a total commitment of $5.1M over 6 years by December 31, 2023. The agreement includes industry standard dilution to a 2% NSR following earn-in. Upon completion of the 65% earn-in expenditures, if McEwen elects to participate, the parties will form a joint venture (the "Joint Venture"), and each party would contribute to further exploration spending according to their ownership interest. There are no underlying royalties on the property.

1.2 EXPLORATION AND MINING HISTORY

The Elder Creek project is located in the northern part of the Battle Mountain mining district near the northwest limit of the Battle Mountain-Eureka trend. Several companies have explored the region that includes the project area since the 1960's including Duval Corporation who developed and began mining several porphyry-skarn copper-gold deposits in the district. Additional exploration in the 1970's and 1980's led to the discovery of gold-silver, skarn-replacement deposits that are spatially related to the copper-gold deposits. Battle Mountain Gold Company developed these deposits (Tomboy, Minnie, Fortitude in the Copper Canyon area; Surprise, Labrador, and Bailey Day in the Copper Basin area). Battle Mountain Gold (now Newmont Mining Corporation) -developed and mined other deposits (Midas, Reona, Phoenix) primarily in the southern Copper Canyon porphyry system within the Battle Mountain district. Newmont continues to mine at Phoenix today.

Test pits, adits, shafts, and declines that were developed beginning in the late 1800's are evidence for very small-scale prospecting and mining at Elder Creek. Only minor production is recorded.

Modern copper exploration was initiated by Duval Corporation in 1965 and they were the first company to drill test the Elder Creek project area for porphyry copper style mineralization. Rocky Mountain Energy drilled in the late 1960's and targeted copper-molybdenum mineralization. Several other companies also explored in the 1960's with most effort directed at geophysical targets believed to represent copper mineralization under pediment gravels along the north-northeastern periphery of the target area. -. Exploration also included copper oxide mineralization which was tested by five shallow holes (total depth of 190 to 330 feet) by the Valmy Copper Corporation.

Gold values in surface outcrop exposures within and around the Elder Creek project area led to extensive drilling of the gold targets by several companies in the 1980's and 1990's, including Cordex, BRM Gold, and Battle Mountain Gold. Battle Mountain Gold staked most of the Elder Creek stock in 1985 and completed about 40 drill holes, reportedly encountering substantial low-level gold. Western Mining Co. (1994-1995) drilled in the area and on adjacent ground and encountered low-level gold mineralization. During 1995, a Santa Fe-Battle Mountain Gold joint venture drilled north of the property.

Available exploration records indicate that the core of the Elder Creek property is untested by drilling except for two holes of unknown extent.

To date, no historic or current resource estimates have been generated at the Elder Creek project.

1.3 GEOLOGY OF THE ELDER CREEK AREA

In the western part of the Elder Creek area, the Dewitt Thrust fault places Ordovician Valmy Formation cherts and shales on top of Cambrian Harmony Formation quartz- and feldspathic-sandstones and shales, which are locally calcareous. Faults at Elder Creek dip steeply, strike north-northwest to north-northeast and show normal and oblique-slip offset. The Elder Creek Fault indicates normal, down-to-the-west movement.

The Cambrian Harmony Formation underlies most of the Elder Creek area and is intruded by dikes and stocks of the Eocene Elder Creek porphyry center (Theodore et al., 1973). In addition to the felsic intrusions associated with the Elder Creek center, there are older dioritic and andesitic dikes in the area as well as Eocene pebble dikes that contain lithic fragments of the Devonian Scott Canyon Formation.

At Elder Creek, the Cambrian Harmony Formation consists of arkosic sandstone and interbedded shale that forms part of the upper plate of the Roberts Mountains allochthon, emplaced during the Devonian-early Mississippian Antler Orogeny (Roberts, 1964). The Roberts Mountains allochthon is comprised of several thrust slices and is exposed in the area as the DeWitt thrust which juxtaposes Cambrian Harmony Formation on top of the Ordovician Valmy Formation.

King (2011) documented three major phases of felsic intrusions that include early-stage, fine- to medium-grained sub-porphyritic hornblende-biotite granodiorite and intermediate-stage and late-stage quartz eye-hornblende-biotite granodiorite porphyry. The intermediate- and late-stage intrusions have been dated by K-Ar to be 37.3 $\pm$ 0.7 Ma and 35.4 $\pm$ 1.1 Ma, respectively (Theodore et al., 1973 and McKee, 1992).

Hydrothermal breccias are locally present in the Elder Creek complex and are dominated by quartz and rock flour matrix which supports sub-rounded to sub-angular clasts of Harmony Formation and porphyry phases. Clasts are typically pervasively altered and occasionally mineralized with copper oxides.

Alteration is extensive at Elder Creek and occurs in broad annular zones that suggest a large magmatic-hydrothermal center(s) is present within the Elder Creek porphyry system. The intense stock-work fractured and quartz veined core of the system is northeasterly-elongate and exceeds 3.0 km by 1.5 km. Surface exposures indicate the limit of potassic (biotote±K-feldspar) alteration is about 4.0 km by 2.5 km and the outer limit of biotite-pyrite-pyrrhotite hornfels in the Harmony Formation sandstones exceeds 4.5 km by 3.5 km. Actinolite alteration occurs locally within the quartz veined core of the porphyry system. Garwin (2014) interprets the actinolite as characteristic of inner- propylitic alteration that overprints and flanks the potassic zone in many global porphyry deposits. Several northerly-trending zones of late-stage, feldspar-destructive quartz-sericite-pyrite alteration occurs in the outer portions of the Elder Creek porphyry system, and the largest zone, near the Gracie mine, exceeds 2.0 km by 1.5 km.

Trace element analyses from over 5,500 soil and rock samples confirm strong zonation in the magmatic-hydrothermal system at Elder Creek. The distribution of key trace elements suggests there may be two primary centers: 1) Cu-Mo-Ag-W-As-Li centered over the west central part of the area and 2) Cu-Au-Mo-W-Bi-As in the northerly elongate zone that extends along the east side of the property from the Big Pay mine to the Morning Star mine. The presence of Li > 30 ppm and the relative lack of Bi in the western center which is cored by early-stage intrusions may indicate that this center is early and has been overprinted by a later porphyry event. The near-surface expression of this later event could be the eastern, Bi-rich and Li-deficient zone that contains intermediate-stage quartz-eye porphyry intrusions. A Bi-rich plume has the potential to be the high-level signature of a northerly-elongate mineralized cupola at depth.

Mineralization at Elder Creek is variably distributed throughout the complex as disseminated sulfides and as locally concentrated, structurally controlled massive sulfide veins. Drilling by Timberline has confirmed the presence of copper oxide and sulfides in reverse circulation drill hole RCEC18-01 with assay results highlighted in the following (Table 1.1).

Table 1.1: Drill Hole RCEC18-01 Assay Summary

From (feet)	To (feet)	Total (feet)	From (meters)	To (meters)	Total (meters)	Cu (ppm)	Cu (%)	Au (g/t)	Ag (ppm)	As (ppm)	Bi (ppm)	Co (ppm)	Re (ppm)
0	500	500	0.0	152.4	152.4	2099	0.21		3				
including:													
0	*270*	270	0.0	82.3	82.3	*2826*	*0.28*		*4*				
160	*270*	110	48.8	82.3	33.5	*4385*	*0.44*		*5*				
195	210	15	59.5	64.0	4.6			0.331	13	242	15		
145	150	5	44.2	45.7	1.5							101	
215	270	55	65.5	82.3	16.8							274	
490	495	5	149.4	150.9	1.5							119	
110	135	25	33.5	41.2	7.6								0.422
260	280	20	79.3	85.4	6.1								0.228
430	435	5	131.1	132.6	1.5								0.211

In addition, core hole CCEC18-02 intersected visible chalcopyrite and molybdenite mineralization throughout, with mineralization best developed in hydrothermal breccias between 1313.5 – 1365 feet. Key assay results are summarized as follow (Table 1.2).

Table 1.2: Drill Hole CCEC18-02 Assay Summary

From (feet)	To (feet)	Total (feet)	From (meters)	To (meters)	Total (meters)	Au (g/t)	Ag (g/t)	Cu %	Mo ppm/%	Re ppm	K %	Fe %	S %
840	1497	657.0	256.1	456.4	200.3	-	4.1	1,450	730	0.163	4.2	2.6	0.9
Including													
1313.5	*1360*	*46.5*	*400.5*	*414.6*	*14.2*	*0.126*	*25.5*	*1.20%*	*0.31%*	*0.980*	*4.9*	*5.1*	*2.8*
Including													
1313.5	1318.0	4.5	400.5	401.8	1.4	0.042	11	0.41%	2060	0.532	5.6	6.5	1.8
1318.0	1322.0	4.0	401.8	403.0	1.2	0.140	25	1.06%	1360	0.361	5.0	5.6	2.4
1322.0	1323.0	1.0	403.0	403.4	0.3	0.263	59	2.84%	1895	0.470	4.8	7.7	5.5
1323.0	1326.5	3.5	403.4	404.4	1.1	0.152	39	1.55%	3480	0.881	5.4	6.0	3.5
1326.5	1328.0	1.5	404.4	404.9	0.5	0.127	27	1.57%	7170	1.860	5.2	6.4	3.6
1328.0	1330.0	2.0	404.9	405.5	0.6	0.100	23	1.19%	11900	4.050	4.9	5.3	3.5
1330.0	1334.0	4.0	405.5	406.7	1.2	0.104	27	1.43%	7970	2.570	4.5	5.6	3.5
1334.0	1336.5	2.5	406.7	407.5	0.8	0.112	32	1.64%	5880	2.680	4.8	6.2	3.5
1336.5	1338.0	1.5	407.5	407.9	0.5	0.115	31	1.45%	2340	1.065	4.5	5.4	3.3
1338.0	1338.5	0.5	407.9	408.1	0.2	0.309	73	3.52%	5660	2.680	3.6	8.6	6.7
1338.5	1339.0	0.5	408.1	408.2	0.2	0.116	39	1.93%	2360	0.890	4.8	4.9	3.5
1339.0	1342.0	3.0	408.2	409.1	0.9	0.132	37	1.86%	2260	0.777	4.8	5.4	3.6
1342.0	1346.5	4.5	409.1	410.5	1.4	0.060	16	0.71%	2230	0.564	4.8	3.3	2.1
1346.5	1350.0	3.5	410.5	411.6	1.1	0.026	7	0.29%	882	0.148	4.9	3.6	1.5
1350.0	1354.0	4.0	411.6	412.8	1.2	0.116	18	0.71%	1085	0.151	4.7	3.5	2.0
1354.0	1354.5	0.5	412.8	413.0	0.2	0.351	47	2.12%	1305	0.179	4.6	5.7	4.5
1354.5	1355.5	1.0	413.0	413.3	0.3	0.576	41	2.48%	1725	0.223	5.0	5.0	3.8
1355.5	1359.0	3.5	413.3	414.3	1.1	0.232	26	1.22%	920	0.117	4.9	4.1	2.5
1359.0	1360.0	1.0	414.3	414.6	0.3	0.075	30	1.36%	1830	0.218	4.4	3.5	2.6

See Section 11.2.1 for assay protocol
True thickness of drill intercepts is unknown

1.4 METALLURGICAL TESTING AND MINERAL PROCESSING

No metallurgical or mineral processing tests have been completed at Elder Creek.

1.5 MINERAL RESOURCE AND MINERAL RESERVE ESTIMATE

There are no current mineral resources or mineral reserve estimates for the Elder Creek project.

1.6 CONCLUSIONS AND RECOMMENDATIONS

The author has reviewed the project data and has visited the project site. It is believed that the data provided by Timberline are generally an accurate and reasonable representation of the Elder Creek project.

The Elder Creek property warrants further exploration to follow-up the 2018 drilling by Timberline which constitutes the deepest and first significant drill testing of the core area of the Elder Creek porphyry target. The data compilation, field reviews, and drilling completed by Timberline confirms that Elder Creek is a mineralized porphyry copper-gold system. The extent of mineralization has not been defined and will require extensive drilling to do so.

Recommendations include completion of additional detailed surface mapping and sampling, acquisition and re-processing of historic magnetic and gravity data, and completion of an IP/resistivity survey to identify possible deep chargeability and resistivity anomalies.

In addition, follow-up drilling should be completed on the copper oxide zone tested by Timberline's initial drill hole. Additional deep drilling should be completed in the porphyry core including deepening of core hole CCEC18-02.

The cost to complete the recommendations is approximately $1.25 million dollars.

2.0 INTRODUCTION AND TERMS OF REFERENCE

2.1 PROJECT SCOPE AND TERMS OF REFERENCE

This technical report on the Elder Creek copper-gold project, located in Lander and Humboldt Counties, Nevada, U.S. A. was prepared at the request of Timberline Resources Corporation (Timberline), a U.S.-based company listed on the TSX Venture and the OTCQB Exchanges. Timberline holds a Joint Venture (JV) Agreement with an option to earn-in up to a 65% ownership in the project with its partner, McEwen Mining Corporation (McEwen). The purpose of the JV is exploration of the Elder Creek property.

This report was prepared in compliance with the disclosure and reporting requirements set forth in the Canadian Securities Administrators' National Instrument 43-101 ("NI 43-101"), Companion Policy 43-101CP, and Form 43-101F1, as well as with the Canadian Institute of Mining, Metallurgy and Petroleum's "CIM Definition Standards - For Mineral Resources and Reserves, Definitions and Guidelines" ("CIM Standards") adopted by the CIM Council on May 10, 2014.

The purpose of this report is to provide a technical summary of the Elder Creek project and describe exploration work conducted to date. The Effective Date of this Technical Report is November 28, 2018.

2.2 DEFINITIONS AND FREQUENTLY USED ACRONYMS AND ABBREVIATIONS

Measurements are generally reported in imperial units in this report. Where information was originally reported in metric units, conversions may have been made according to the formulas shown below; discrepancies may result in slight variations from the original data in some cases.

Frequently used acronyms, abbreviations, and unit conversions

AA	atomic absorption spectrometry
Ag	silver
As	arsenic
Asp	arsenopyrite
Au	gold
Bi	bismuth
BLM	United States Department of the Interior, Bureau of Land Management
cm	centimeter; 1 cm = 0.3937 inch
Co	cobalt
Cpy	chalcopyrite
Cu	copper
°F	degrees Fahrenheit
ft	foot or feet; 1 ft = 0.3048 m
g/t	grams per tonne; 1 g Au/t = 1 ppm Au = 0.02917 oz/ton
ICP	inductively coupled plasma
ICP-AES	inductively coupled plasma with atomic emission spectroscopy
in.	inch or inches
IP	induced polarization geophysical survey
kg	kilogram; 1 kg = 2.205 pounds

mm	millimeter; 1 mm = 0.001 m = 0.003281 feet
mo	molybdenite
Mo	molybdenum
oz	troy ounce; 12 troy oz = 1 troy pound; 1 oz Au/ton = 34.2857 g Au/t
ppm	parts per million
ppb	parts per billion
py	pyrite
QA/QC	quality assurance/quality control
R	range
RC	reverse-circulation drilling method
Re	Rhenium
t, tonne	metric tonne = 1.1023 short tons
T	township

Currency Unless otherwise indicated, all references to dollars ($) in this report refer to currency of the United States.

3.0 RELIANCE ON OTHER EXPERTS

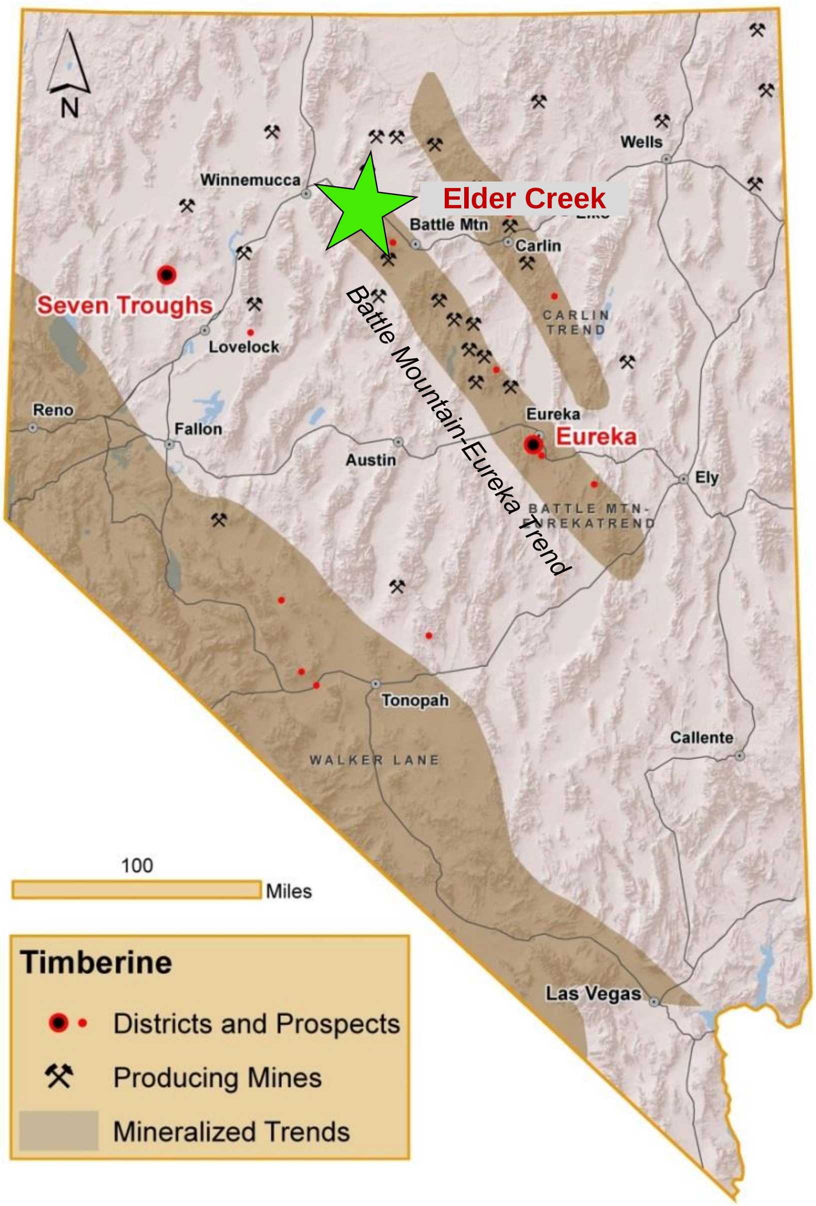
The author of this report is not an expert in legal matters, such as the assessment of the legal validity of mining claims, mineral rights, and property agreements in the United States. No investigations of the environmental or social-economic issues associated with the Elder Creek project have been undertaken as the author is also not an expert with respect to these issues.

4.0 PROPERTY DESCRIPTION AND LOCATION

4.1 LOCATION

The project is located in the Battle Mountain mining district of northern Nevada. The center of the project is located approximately 8 miles (in a straight line) west-northwest of Battle Mountain, Nevada, and straddles the boundary between T32 - 33N, R43 - 44 E (Figure 4-1). The property sits primarily in Lander County with a small portion of the southern end of the property in Humboldt County. The project is on the Snow Gulch, Nevada (1:24,000) topographic map.

Figure 4-1: Project Location

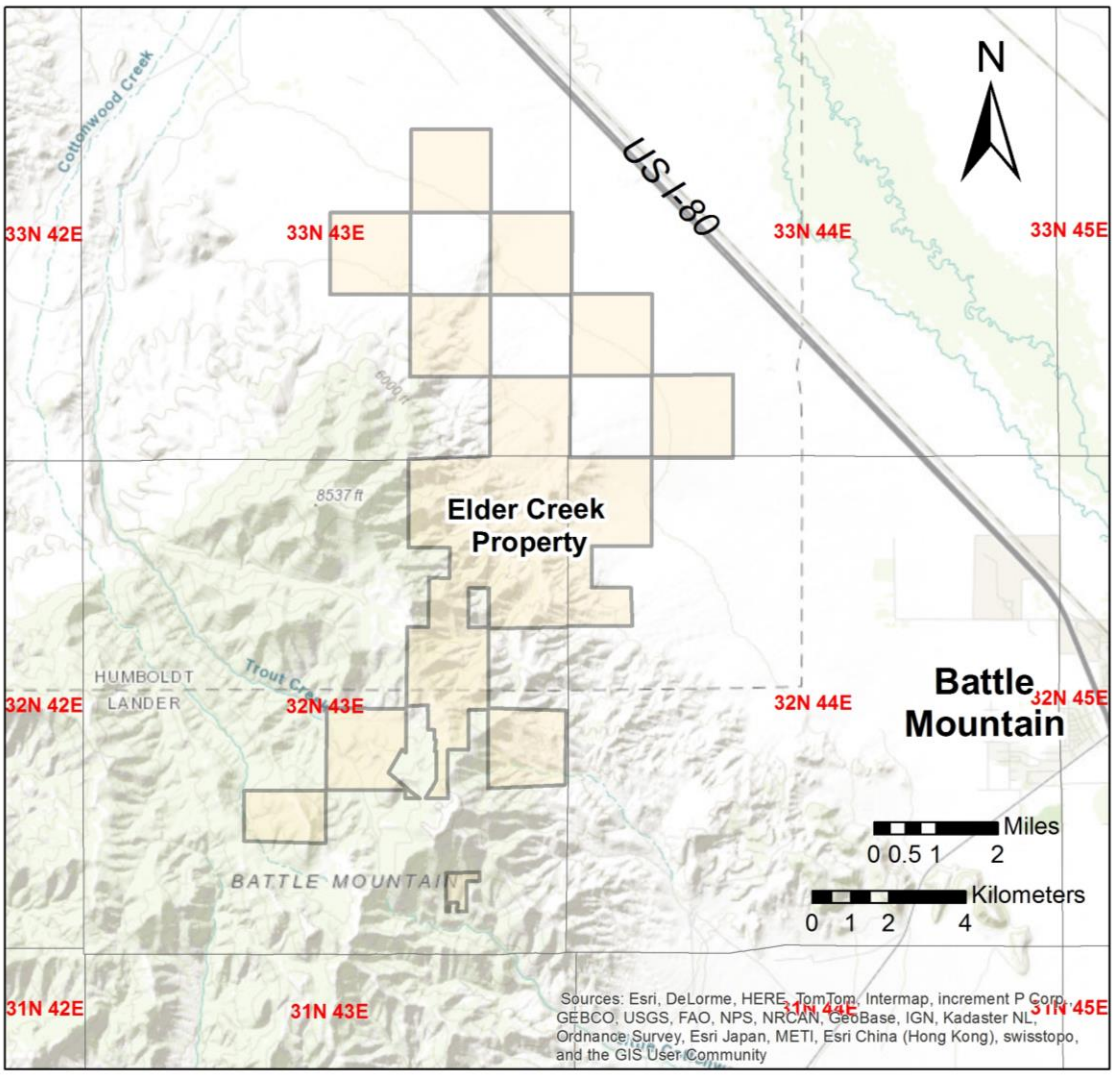


4.2 LAND AREA

The Elder Creek property covers approximately 9,600 acres (Figure 4-2). There are a total of 583 unpatented mining claims (Appendix A) which are located on land controlled by the United States Department of the Interior Bureau of Land Management (BLM), which require annual mining claim maintenance fees to be timely paid by August 30th of each year and a notice to hold mining claims to be timely recorded in the Official Records of the Lander and Humboldt County Recorder's office by October 31 of each year.

Lands immediately adjacent to those on which BLM claims are located are fee-simple lands owned by Newmont Mining Corporation.

Figure 4-2: Elder Creek Property Map



Ownership of the unpatented mining claims is in the name of the holder (locator), subject to the paramount title of the United States of America, under the administration of the U.S. Bureau of Land Management ("BLM"). Under the Mining Law of 1872, which governs the location of unpatented mining claims on federal lands, the locator has the legal right of surface access and to explore, develop, and mine minerals on unpatented mining claims without payments of production royalties to the U.S. government, subject to the surface management regulation of the BLM.

Currently, annual claim-maintenance fees are the only federal payments related to unpatented mining claims, and these fees have been paid in full to September 1, 2019. The current annual holding costs for the Elder Creek project unpatented mining claims is $95,759 which includes the BLM and county recording fees. No other land holding costs exist on the Elder Creek project.

Access to the Elder Creek property for mineral exploration is along dirt roads open to the public which extend south from US I-80.

4.3 AGREEMENTS AND ENCUMBRANCES

4.3.1 Purchase Agreement with America's Gold Exploration, Inc.

In an agreement dated May 23, 2018 Timberline entered a Purchase and Sale Agreement (Agreement) with America's Gold Exploration Inc. (AGEI) to purchase the latter's rights, title and interest in, to and under the Elder Creek Joint Venture (JV) Agreement with a subsidiary of McEwen Mining Corporation (McEwen). In addition to the Elder Creek JV, the Agreement included acquisition of a JV interest in an adjacent property named Paiute. As a combined purchase price for the two properties, Timberline paid AGEI 10,000,000 shares of common stock, and 5,000,000 common stock purchase warrants upon closing the transaction on August 14, 2018. An additional 5,000,000 warrants will be issued upon completion of the initial year earn-in or upon completion of a financing.

The underlying Elder Creek JV with McEwen which Timberline (assumed from AGEI) has an earn-in right as operator with terms of earn-in as follows:

- **51% Earn-In** for $2.6 M over 4 years by December 31, 2021
- Year 1: $100,000 One Time Cash Payment by May 17, 2018
- Year 1: $500,000 Work Commitment by December 31, 2018
- Year 2: $500,000 Work Commitment by December 31, 2019
- Year 3: $750,000 Work Commitment by December 31, 2020
- Year 4: $750,000 Work Commitment by December 31, 2021
- **65% Earn-In** for an additional $2.5M work commitment for a total of $5.1M over 6 years by December 31, 2023.

The agreement includes industry standard dilution to a 2% NSR following earn-in as described below (Section 4.3.4).

Upon completion of earn-in requirements, ownership of the unpatented claims will change from McEwen to the Elder Creek Joint Venture of which Timberline would control majority ownership as noted above.

4.3.2 Joint Venture Operating Agreement

Upon completion of the 65% earn-in expenditures, if McEwen elects to participate, the Parties will form a joint venture (the "Joint Venture"), and each Party would contribute to further exploration spending according to their ownership interest. The McEwen Parties and Timberline will make all commercially reasonable efforts to finalize an acceptable Joint Venture agreement ("Joint Venture Agreement") in good faith that represents their respective percentage ownerships of the Property. Until such time as the parties enter into a Joint Venture Agreement, Timberline will continue to be the operator of the Properties in accordance with this Agreement or, if applicable, the McEwen Parties elect not to participate in a joint venture within the applicable specified time period.

4.3.4 Royalties

There are no underlying royalties on the property. However, upon formation of a JV Operating Agreement, should McEwen elect to not participate in advancing the property forward, their interest will automatically dilute on a straight-line basis according to the future expenditures by Timberline. Once the McEwen percentage ownership is diluted to ten percent (10%) or less in the aggregate, the McEwen interest shall revert to a 2% Net Smelter Return on any production from the Property. McEwen and Timberline will make all commercially reasonable efforts to finalize an acceptable Royalty Agreement in good faith.

4.4 ENVIRONMENTAL LIABILITIES

At present, no environmental liabilities are known at Elder Creek. Disturbance is limited to that associated with recent drilling activities undertaken by Timberline. These activities have been completed under authority granted by the BLM on July 16, 2018 with a cash bond in-place to cover reclamation costs (see Section 4.5).

Timberline contracted completion of an aerial mapping survey which included photography for identification and documentation of historic disturbance and potential environmental liabilities. No such liabilities have been recognized to-date.

4.5 PERMITTING

A Notice of Intent (NOI) application was submitted on June 13, 2018 to the BLM Mount Lewis Field Office for the Elder Creek Project to allow disturbance related to construction of up to 46 proposed drill holes off existing and new access roads. The BLM designated the plan as BLM Case File Number NVN096917 and payment of a reclamation bond of $15,390 was subsequently submitted on August 13, 2018 and received BLM approval on August 15, 2018.

As all work planned is surface exploration-oriented, no other permits are currently required by the BLM or the State of Nevada regulatory agencies.

4.6 ENVIRONMENTAL RISKS

There are no environmental risks known on the Elder Creek property.

4.7 OTHER

No other significant factors and risks are recognized that may affect access, title, or the right or ability to perform work on the Elder Creek property.

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY

5.1 ACCESS TO PROPERTY

Access to the Elder Creek property is along dirt roads open to the public. The primary access road extends south from the Interstate 80 Exit at Mote Road which is approximately 12 miles west of Battle Mountain. A single lane dirt road for approximately 5 miles southward leads to the center of the property block (Figure 5-1).

Many dirt tracks within the property boundary provide excellent access to various localities and points of interest.

5.2 CLIMATE

The climate is typical of the northern Great Basin with cold, wet winters and hot, dry summers. Most of the precipitation is received during the months of November through May, primarily in the form of snow. The months of June through October are generally dry, although thunderstorms can create wet periods.

5.3 PHYSIOGRAPHY

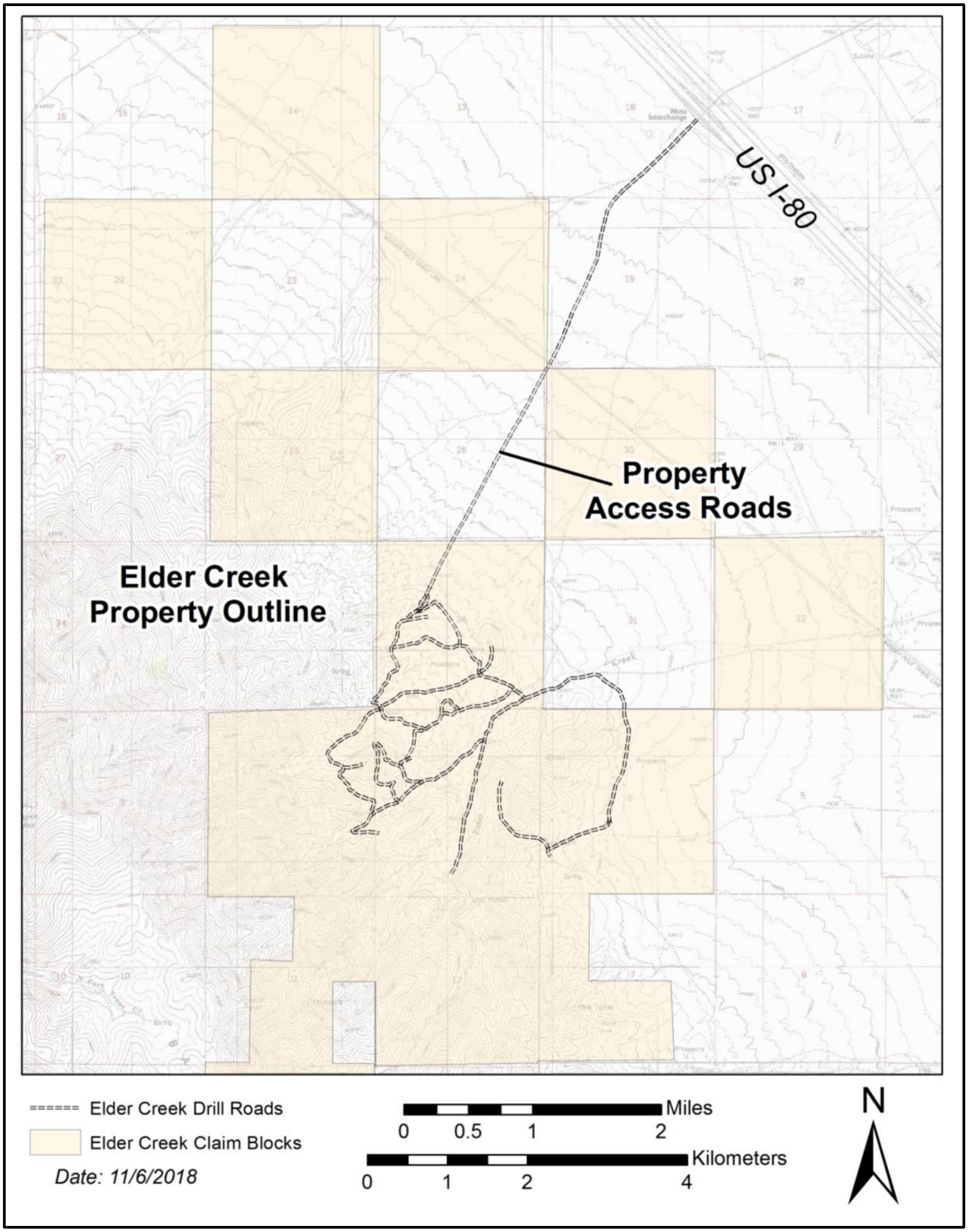
The project is situated in the Basin and Range province, which is characterized by north-northeast trending mountain ranges separated by alluvial filled valleys. The claims are located in the Battle Mountains, a roughly equidimensional mountain range varying in elevation from a high of 8550 feet at North Peak to a low of approximately 4500 feet in the Reese River Valley. Elder Creek sits in the transition from high mountain peaks to the south with moderate elevations to the west and east and alluvial pediment to the north.

5.4 LOCAL RESOURCES AND INFRASTRUCTURE

The Elder Creek property is situated in north-central Nevada in an area with well-established mining infrastructure. An east-west trending high-voltage power line transects the northern portion of the property and connects with the Valmy Power Plant which is located approximately 14 miles to the northwest - of the property. Interstate Highway 80 located immediately north of the property connects Winnemucca approximately 42 miles to the northwest, Battle Mountain 12 miles to the southeast, and Elko 83 miles to the northeast.. Essential services such as food and lodging are available in Battle Mountain, including dockage for shipments of heavy equipment. Battle Mountain's estimated 2010 population was 3,635 (2010 US Census). A small airport at Battle Mountain is available for private air transport, and regularly scheduled air service is available in Elko, Nevada.

Skilled technical support professionals, mining supplies, and services area are available in Battle Mountain, Winnemucca, and Elko.

Figure 5-1: Property Access Roads



6.0 HISTORY

The Elder Creek project is located in the northern part of the Battle Mountain mining district near the northwest limit of the Battle Mountain-Eureka trend (Figure 4-1). The Battle Mountain district has been a source of base and precious metal production since the late 1800s. In the 1960's Duval Corporation developed and began mining several porphyry-skarn copper-gold deposits located at Copper Canyon in the southern part of the district and at Copper Basin located in the northern part of the district. Continued exploration in the 1970's and 1980's led to the discovery of gold-silver, skarn-replacement deposits that are spatially related to the copper-gold deposits. Battle Mountain Gold Company was spun off from Duval Corporation to develop these deposits (Tomboy, Minnie, Fortitude in the Copper Canyon area; Surprise, Labrador, and Bailey Day in the Copper Basin area). Battle Mountain Gold (now Newmont Mining Corporation) developed and mined other deposits (Midas, Reona, Phoenix) primarily in the southern Copper Canyon porphyry system within the Battle Mountain district. Newmont continues to mine at Phoenix today.

Numerous very small scale historic prospecting and mining related developments including test pits, adits, shafts, and declines are present throughout the district including locally on the Elder Creek property. Production records are typically unknown for each of these developments.

6.1 EXPLORATION HISTORY

Precious metal-rich base metal veins were first prospected in the area in the late 1800's, but only minor production resulted. The pervasive alteration of the Elder Creek stock attracted the attention of explorers for porphyry copper mineralization as early as the 1960's. Duval Corporation was the first company to test the Elder Creek porphyry system for porphyry copper mineralization. In 1965 they drilled 3 core holes in Sec. 6, T32N, R44E. From 1966 to 1969, Rocky Mountain Energy, the minerals group of the Union Pacific Railroad Co., completed exploration on the property -and in 1968 they drilled 8 deep core holes that encountered sub-economic copper-molybdenum values. Two holes were drilled in Sec. 6, and 6 holes were drilled 0.5 miles to the west in Sec. 1.

Additional exploration in the 1960's focused on geophysical targets and included multiple drill holes in and around S36, T33N, R43E with low-grade copper mineralization identified under pediment gravels along the north-northeastern outer fringe of a magnetic anomaly. Also in the 1960's, Valmy Copper Corporation drilled five shallow holes that identified low-grade copper oxide mineralization from surface to 190- 330 feet deep along an annular magnetic anomaly that surrounds the porphyry core. The reported copper grades were considered to be too low to warrant further exploration.

Low-level gold values within and around the Elder Creek stock led to fairly extensive drilling in the central stock area by several major companies in the 1980's and 90's. V. E. K. Associates held the property in 1984 and brought in Cordex (1987) to drill 3 holes, BRM Gold (1991) drilled 4 holes, and Battle Mountain Gold (1992) completed 3 holes. Battle Mountain Gold staked most of the Elder Creek stock and completed about 40 drill holes, reportedly encountering substantial low-level gold but no orebody. Western Mining Co. (1994-95) drilled 11 holes in the Elder Creek property area and 8 holes on adjacent ground. The deepest hole went to a depth of about 1,500 feet. Eleven of these holes contained thirty, 10-foot intervals that exceeded 100 ppb gold (Theodore et al., 2000, p.185). During 1995, a Santa Fe-Battle Mountain Gold joint venture drilled 7 holes north of the property, one on the north boundary of the Mote claims. The Mote claims were located by NLRC in 1999.

There are no known historic resource estimates at the Elder Creek project.

7.0 GEOLOGICAL SETTING AND MINERALIZATION

The following discussion is taken from previous workers in the Battle Mountain district. In particular the discussion and figures that follow are from King (2011) with supplement from Theodore (1996) and Garwin (2013).

7.1 GEOLOGIC SETTING

7.1.1 Regional Geology

The geologic history of the area known as the modern Great Basin is one of varying tectonic settings and multiple episodes of magmatism beginning shortly before Phanerozoic time and continuing through Cenozoic time. Beginning in the latest part of the Precambrian, continental separation by rifting delineated the Cordilleran margin and initiated the deposition of a westward-thickening sequence of deep marine, miogeoclinal sedimentary rocks (Stewart, 1980; Poole et al., 1993; Dickinson, 2006). Deposition continued through the Devonian when it was interrupted by the Devonian-Mississippian Antler Orogeny, which was responsible for the emplacement of the Roberts Mountain Plate, the Dewitt Plate, and the Antler Sequence at Battle Mountain while the Golconda Plate was emplaced during the younger Permian-Triassic Sonoma Orogeny (Roberts, 1964; Madrid and Roberts, 1991; Theodore et al., 1992; Doebrich and Theodore, 1995; Dickinson, 2006). The subduction of the Farallon Plate commenced in the Mid- Jurassic leading to the development of a Jurassic arc (Barton, 1996; Dickinson, 2006). Magmatism continued and evolved throughout the Cretaceous leading to the development of numerous porphyry systems throughout the Great Basin, including the Buckingham Stockwork (McKee, 1992) and the Trenton Canyon Deposit (Theodore et al., 1973), both at Battle Mountain. In the Late Cretaceous a dominantly compressional tectonic regime impacted the Basin and Range as Laramide tectonics came to dominate this terrain and magmatism shifts eastward through time due to the shallowing of the subducting slab (Barton, 1996; Dickinson, 2006).

Eocene extension and magmatism in the Great Basin began around 43 Ma (Seedorff, 1991; Henry and Ressel, 2000). After this time numerous porphyry centers were emplaced throughout the northern and eastern Great Basin including those seen at Battle Mountain such as Copper Canyon, Elder Creek, and Buffalo Valley but also numerous others including Bingham and Pine Grove, Utah as well as Ward and Harrison Pass, Nevada (Seedorff, 1991). These different systems all were a part of a southwestward sweep of igneous activity related to the stagnation, steepening and ultimate rollback of the subducting Farrallon Plate (Henry and Ressel, 2000; McKee, 1995; Humphreys, 1995). Extension followed a similar pattern as the igneous activity with the oldest areas of extension in the northeast moving to younger areas of extension in the southwestern Great Basin (Seedorff, 1991; Dickinson, 2006). From 43Ma onward, large-scale extension occurred forming the Basin and Range province and continued through the end of the subduction of the Farralon slab and the formation of the San Andreas transform fault system (Dickinson, 2002; 2006). Eocene and younger extensional faulting dismembered and tilted many of the known porphyry deposits in northern and eastern Nevada including Copper Basin (Keeler and Seedorff, 2010), Yerington (Proffett, 1977) and the older Robinson porphyry center (Seedorff et al., 1995).

7.1.2 Battle Mountain Structure and Stratigraphy

Paleozoic rocks at Battle Mountain can be divided into four distinct domains based on regional thrust faults which form distinct allocthonous plates (Fig. 7-1). The first domain is the Roberts Mountains Allocthon located on the northwest side of the range, which forms the lowest plate in the sequence. It is composed of the Ordovician Valmy Formation and the Devonian Scott Canyon Formation (Roberts, 1964; Stewart, 1980; Murchey, 1994; Doebrich and Theodore, 1995). The second domain is the Dewitt Plate located on the northeast and eastern side of the area, which is composed of the Cambrian Harmony Formation (Roberts, 1964; Stewart, 1980; Doebrich and Theodore, 1995). The third domain is the Antler Sequence which forms a northwest-trending block extending across the center of the range along with a small exposure on the east side of Copper Basin. The Antler Sequence uncomformably overlies the Roberts Mountain and Dewitt Plates and consists of the Battle Formation, the Antler Peak Limestone, and the Edna Mountain Formation (Roberts, 1964; Stewart, 1980; Doebrich and Theodore, 1995). The final domain is the Golconda block located on the western side of the range, which forms the uppermost plate at Battle Mountain. It is composed of the Pumpernickel Formation and the Havallah Formation (Roberts, 1964; Stewart, 1980; Doebrich and Theodore, 1995).

7.2 GEOLOGY OF THE ELDER CREEK AREA

7.2.1 Project Geology

Three major phases of felsic intrusions are documented by King (2011) (Figure 7-2), including early-stage, fine- to medium-grained sub-porphyritic hornblende-biotite granodiorite; and intermediate-stage and late-stage quartz eye-hornblende-biotite granodiorite porphyries. The intermediate- and late-stage intrusions have been dated by K-Ar to be 37.3 $\pm$ 0.7 Ma and 35.4 $\pm$ 1.1 Ma, respectively (Theodore et al., 1973 and McKee, 1992).

In the western part of the area, the Dewitt Thrust fault places Ordovician Valmy Formation cherts and shales on top of Cambrian Harmony Formation quartz- and feldspathic-sandstones and shales, which locally are calcareous. The mapped faults at Elder Creek dip steeply, strike north-northwest to north-northeast and show normal and oblique-slip offset. The Elder Creek Fault indicates normal, down-to-the-west movement that is inferred to offset mineralization.

The Elder Creek area (Figure 7-2) exposes mainly Cambrian Harmony Formation. The Harmony Formation is intruded by dikes and stocks that comprise the Eocene Elder Creek porphyry center (Theodore et al., 1973). In addition to the felsic intrusions associated with the Elder Creek center there are older dioritic and andesitic dikes in the area as well as Eocene pebble dikes that contain lithic fragments of the Devonian Scott Canyon Formation.

Sedimentary Rocks

Cambrian Harmony Formation (Ꞓh)

The (undivided) Cambrian Harmony Formation is predominantly a quartz- and feldspar-rich sandstone with minor amounts of shale and limestone (Stewart, 1980). In exposures at Battle Mountain the proportions of these sedimentary units are estimated at 70% sandstones, 28% shales and calcareous shales, with the remaining 2% representing limestones (Roberts, 1964). In this area the Harmony Formation is highly variable, but the lithological contrasts between the subunits are easily observed in the field from finer to coarser units, are black shales and slates, fine- to medium grained quartz sandstones, fine- to medium grained limey quartz sandstones, medium- to coarse grained quartz and feldspathic arenites, and sub-rounded to rounded, quartz pebble conglomerates. The fine to medium-grained rocks weather extensively and form rounded ridge crests with large dark-colored talus slopes. In contrast, the quartz pebble conglomerates are easily identified in the field forming solid ridges and fins that stick out from the surrounding finer-grained subunits. The thickness of the Harmony Formation in the Elder Creek area is not known but measurements made in the Antler Peak quadrangle to the west Roberts (1964) estimated a total thickness of about 3,000 feet (900 meters).

Ordovician Valmy Formation (Ov)

The Ordovician Valmy Formation at Battle Mountain is subdivided into three members of early to middle Ordovician age (Roberts, 1964). Member1 is gray quartzites, chert, shale and greenstone; member 2 is mostly interbedded shale, chert, and greenstone with thick quartzite units at the base and top; member 3 consists of chert, shale and greenstone (Roberts, 1964). In the study area for Elder Creek the Ordovician Valmy Formation is only exposed on the western side of the complex where it is in fault contact with the Cambrian Harmony Formation along the Dewitt thrust. These exposures are dominantly member 3 of Roberts (1964) and consist of gray to black cherts interbedded with sections of gray to black shale. The cherts are generally complexly folded and sheared and form large ridges whereas the shale units commonly form recessive saddles between the units of chert. The overall thickness of the Ordovician Valmy Formation is not accurately measured and estimates range from 2,500ft (810m) (Churkin and Kay, 1967) to 25,000ft (7,500m) (Gilluly and Gates, 1965) with an estimated aggregate thickness at Battle Mountain of around 3,000ft (900m) (Roberts, 1964).

Devonian Scott Canyon Formation (Dsc)

Initially the Scott Canyon Formation was mapped as an early to middle Cambrian unit at Battle Mountain (Roberts, 1964; Stewart, 1980). Recent studies of radiolarians (Murchey, 1994) have shown that the Scott Canyon Formation is likely of Devonian age, i.e., much younger than previously reported. The Scott Canyon Formation consists of chert, argillite, and greenstone with lesser amounts of sandstone, black and gray quartzite, and limestone (Roberts, 1964). In the Elder Creek area there are no surface exposures of the Scott Canyon Formation with the exception of lithic fragments of this unit that are found within pebble dikes in the southeastern part of the complex. These fragments range from several millimeters to several centimeters in size and consist of fragments of black quartzite. The overall thickness at Battle Mountain is estimated to be more than 5,000 ft (1,620m) (Roberts, 1964).

Igneous Rocks of the Elder Creek Area

Igneous rocks at Elder Creek include early dioritic and andesite dikes (Figure 7-2) followed by three different granodiorite porphyries and by sparse pebble dikes. The most abundant rocks are the granodioritic Elder Creek porphyry and the Elder Creek quartz eye porphyry whereas the late quartz eye porphyry is most abundant in the southern part of the complex and south of the Elder Creek area. Associated with the Elder Creek porphyries are a series of crosscutting hydrothermal matrix breccias that are only found in the core of the complex within the area of the exposed Elder Creek porphyries.

Diorite Dike (FGD)

A small exposure of diorite (FGD) occurs in the central part of the complex where it was previously mapped as biotite lamprophyre (Theodore 1994, Theodore 2000). This unit consists of plagioclase (40-50%, <2 mm), actinolite (20-30%, <1 mm), biotite (15-20%, <1mm), quartz (5-10%, <1 mm) which were confirmed by semiquantitative XRD (McComb, 2000). In addition to the three main minerals, pyrrhotite and chalcopyrite occur within the mafic mineral sites along with minor amounts of chromite and ilmenite that is partially replaced by titanite in former mafic sites (McComb, 2000). This unit is pervasively altered by both potassic and sodic-calcic alteration and numerous clots of shreddy biotite are present along with secondary amphiboles that are dominantly actinolite. This alteration obscures the original character of the unit and the identification of the original protolith is difficult because the primary minerals and textures have been overprinted, and to a certain extent obliterated, by secondary mineral assemblages associated with the Elder Creek stocks.

Figure 7-1: Generalized Geology of the Battle Mountain Area

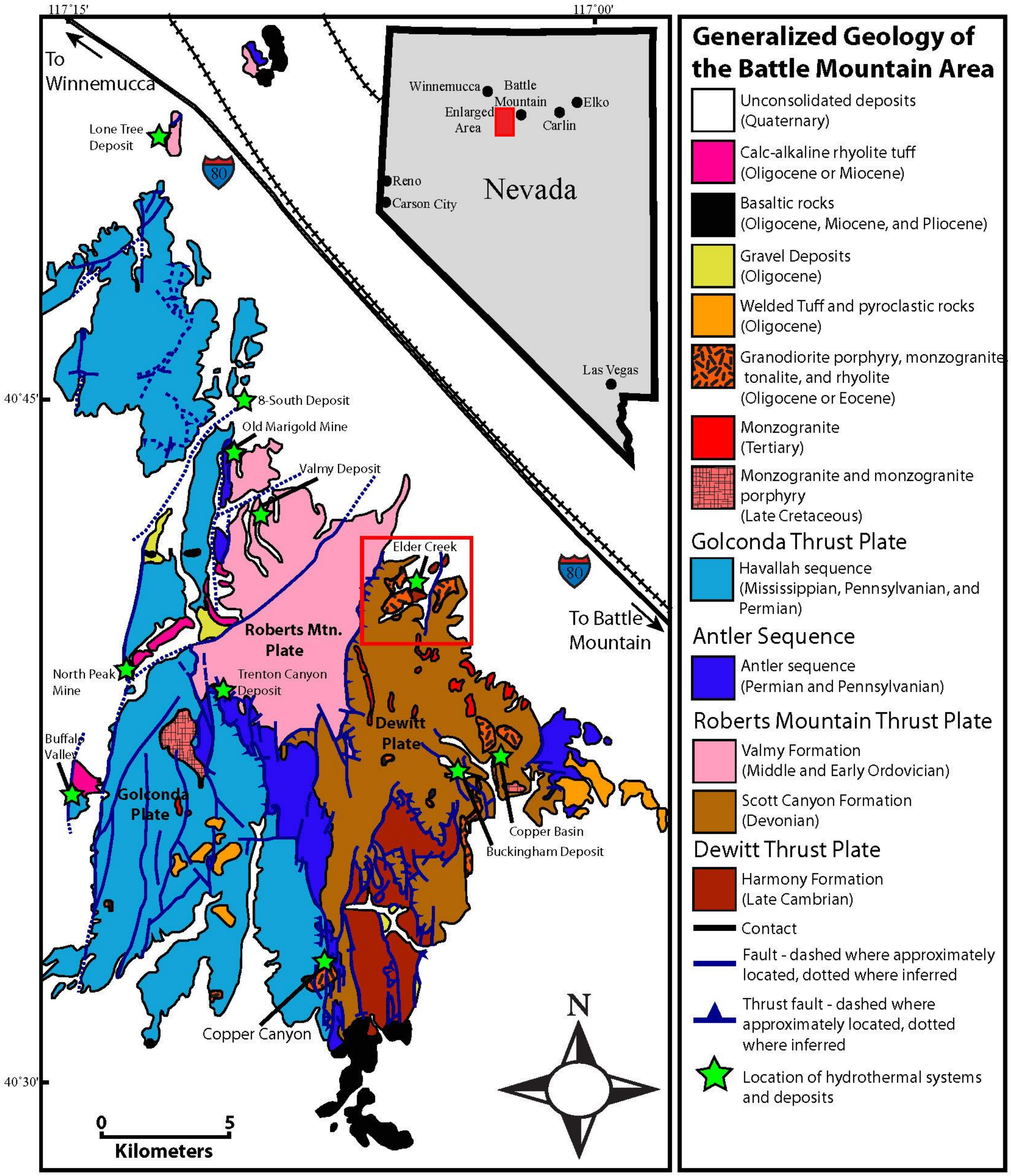
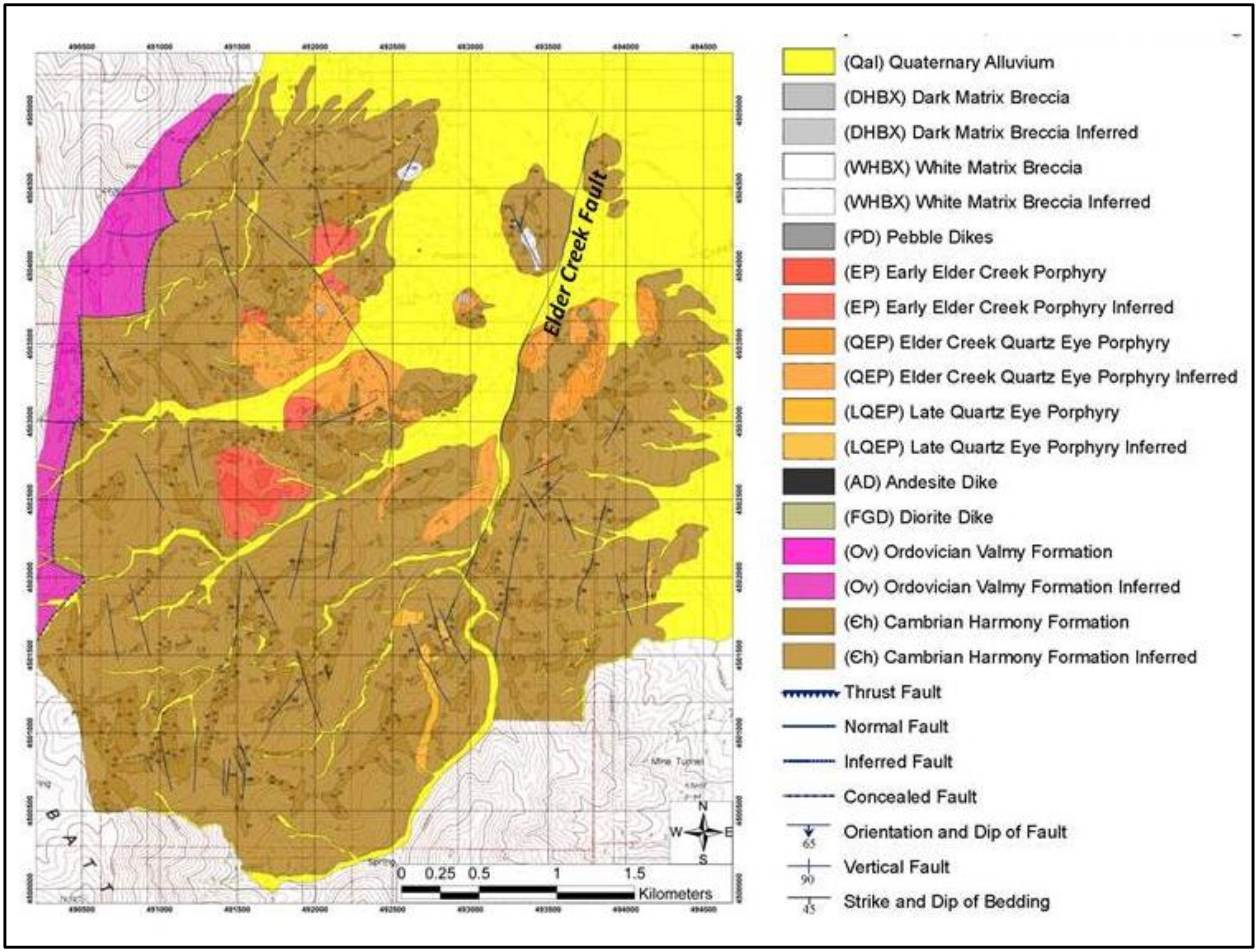


Figure 7-2: Geology of the Elder Creek Area (from King, 2011)



Andesite Dikes (AD)

Andesite dikes (AD) crop out in several locations in the southern part of the complex. This unit is composed of 30-40% phenocrysts of hornblende (40-50%, 1-5 mm), biotite (20-30%, 3-5 mm), plagioclase (10-20%, 1-7 mm), and quartz (5-10%, <2 mm). It has an aphanitic groundmass composed of plagioclase, quartz and fine-grained biotite and hornblende. These dikes appear to pre-date the main porphyry intrusions in the area because the mafic sites have been moderately to pervasively altered to shreddy biotite and chlorite associated with the Elder Creek stocks.

Pebble Dikes (PD)

Two small exposures of pebble dikes are located in the southern part of the Elder Creek area near the Ridge Mine. The first of these is located in the center line of the Elder Creek Fault and the other is located within the fault that extends through the center of the Ridge Mine. The matrix of these pebble dikes is composed of quartz and K-feldspar along with disseminated arsenopyrite, pyrite and chalcopyrite. In addition, the iron oxides hematite and jarosite are abundant in the groundmass replacing sites that were either pyrite or magnetite. Clasts in the dike include pieces of the Cambrian Harmony Formation and an additional sedimentary unit that is dominantly composed of black quartzite that is not exposed in the Elder Creek area at the surface. In similar pebble dikes and breccias in the Buckingham area to the south these black quartzite clasts are interpreted to be the Devonian Scott Canyon Formation or the Ordovician Valmy Formation (Theodore et al., 1992). These pebble dikes have an inferred Eocene to Oligocene age based on observations of the matrix which cuts across quartz veins in the surrounding host that are associated with the Elder Creek stocks.

Early Elder Creek Porphyry (EP)

The earliest igneous unit associated with the Elder Creek porphyry system is the fine- to medium-grained, porphyritic granodiorite located on the western side of the complex known as the Early Porphyry (EP) (Figure 7-2). This unit is composed of 60-80% phenocrysts of quartz (20-30%, 1-3 mm) and andesine (40-50%, 1-4 mm) lesser biotite (10-15%, <1 mm) and hornblende (5-10%, <2 mm) with accessory apatite, titanite, ilmenite, and zircon. The groundmass has an aplitic texture and is composed of <0.15mm quartz, plagioclase, and K-feldspar.

Timing for emplacement of this unit is uncertain as no exposures in the area demonstrate the relative age of this unit in comparison to the QEP. This unit has an identical mineralogical composition as the QEP and may be an earlier phase of the Elder Creek Quartz Eye Porphyry or it may be cogenetic with the QEP being its finer-grained equivalent.

Elder Creek Quartz Eye Porphyry (QEP)

The main igneous unit associated with the Elder Creek porphyry system is the Quartz Eye Porphyry granodiorite (QEP)(Figure 7-2). This unit has a porphyritic texture and is composed of 50-70% subhedral to bipyramidal phenocrysts of quartz (20-30%, 2 mm to 1.2 cm), plagioclase (andesine and oligoclase, 30-40%, 2-7 mm), biotite (<3 mm), and hornblende (<4 mm) -with accessory apatite, titanite, ilmenite, and zircon. The groundmass has an aplitic texture and is composed of very fine <0.2mm quartz and plagioclase with minor amounts of K-feldspar. Pseudomorphs of primary, cubic mafic minerals occur sporadically in this unit and are interpreted to be hematite and limonite after pyrite. No primary igneous magnetite was observed in this unit. This unit has a K-Ar date of 37.3±0.7 Ma (Theodore et al., 1973). Due to compositional similarities this unit appears to be a coarse-grained equivalent of the EP that might have formed from a common source by progressive crystallization and generation of the distinctive quartz phenocrysts.

Late Quartz Eye Porphyry (LQEP)

The youngest felsic intrusion at Elder Creek is the Late Quartz Eye Porphyry granodiorite (LQEP) (Figure 7-2). This unit has a porphyritic texture and is composed of 30-50% subhedral to bipyramidal phenocrysts of quartz (20-30%, 1 mm to 1 cm), plagioclase (andesine, 40-50%, 1-7 mm), biotite (10-20%, <1 mm), hornblende (<1 mm) and accessory apatite, titanite, ilmenite, and zircon. The groundmass has an aplitic texture and is composed of very fine <0.2mm quartz and plagioclase with minor amounts of K-feldspar. A similar unit in the Buckingham area to the south has a K-Ar date of 35.4±1.1 Ma from a study by McKee (1992). This unit cuts the QEP in the northeastern part of the complex.

Hydrothermal Breccias (HBX)

Three crosscutting, matrix-supported breccia bodies (Figure 7-2) crop out in the core of the Elder Creek complex. These breccias have similar matrix and lithic clast compositions. The proportions of matrix to lithic fragments vary in the range from 50% matrix and 50% lithics to areas where there are more lithic fragments and the proportions equal 30% matrix and 70% lithic fragments. The matrix of these breccias is dominated by hydrothermal quartz and rock flour which supports sub-rounded to sub-angular clasts of Harmony Formation biotite hornfels and QEP. The transition into the surrounding host rocks consists of crackle breccias of shattered host rock infilled with hydrothermal quartz. Most of the clasts and the rock flour matrix are pervasively altered and have abundant secondary biotite, sericite, and actinolite. Alteration mineral proportions vary depending on the location of the breccias in the complex. The characteristics of these breccias are similar but they seem to have formed at different times in the evolution of this system because they are present at different levels within the Elder Creek system and exhibit different alteration types in different breccias bodies.

7.2.2 Structure

There is evidence for at least one major thrust fault, numerous folds, and several generations of normal faults in the Elder Creek area. Within the Elder Creek area there appears to be four main sets of faults: from oldest to youngest, these are the Middle Paleozoic Dewitt thrust fault (Figure 7-1) and several sets of younger northeast to northwest trending extensional normal faults (Figure 7-2). These faults sets occur throughout the Battle Mountain district (Doebrich and Theodore, 1995), and the younger faults may dismember and tilt much of the east side of the district as noted in the vicinity of the Buckingham stockwork and Copper Basin 5-6 kilometers to the south (Keeler and Seedorff, 2010). However, the timing and net displacement along the faults at Elder creek is difficult to determine due to lack of good exposures and lack of marker beds within the relatively homogenous Cambrian Harmony Formation. It is also unclear if many of these faults are strictly normal faults or if they are reactivated, older thrust faults from earlier compressional tectonic regimes. What is certain is normal faults offset numerous segments of the Elder Creek system and leave isolated blocks of upper level alteration types throughout the area.

Dewitt Thrust

The Dewitt thrust fault (Figure 7-1) is the only major thrust fault at Battle Mountain exposed in the Elder Creek area and the upper plate hosts all the exposed alteration and intrusive rocks. The Dewitt fault presently dips about 30-50° to the SE where it crops out near the Dewitt Mill area south of Elder Creek, and places the Cambrian Harmony Formation over the Devonian Scott Canyon Formation (Roberts, 1964). The Dewitt thrust fault is one of several major thrust faults at Battle Mountain that formed during the Devonian-Mississippian Antler Orogeny and many authors believe that the Dewitt thrust may actually be a splay of the Roberts Mountain thrust fault (Roberts, 1964; Theodore et al., 1992; Doebrich and Theodore, 1995). In the Elder Creek area the Dewitt thrust forms the western boundary of the system and places the Cambrian Harmony Formation in contact with the Ordovician Valmy Formation.

There are a significant number of large and small scale folds in the Cambrian Harmony Formation at Elder Creek. These folds are related to the Dewitt thrust along the western margin of the area and most of the folds are perpendicular to the direction of movement of the thrust fault and result in a series of antiforms and synforms with axial traces running parallel to the trace of the Dewitt thrust. Folding in other areas appears to be related to the emplacement of the porphyry stocks associated with the Elder Creek system. In these areas the folds mirror the shape of the intrusions in map view and generally have axial traces that run parallel to the intrusive bodies. The overall pattern of folding in this area is from more intense folding in the southwest and west parts of the complex to more gentle folding in the eastern parts of the area.

Extensional Normal Faults

A series of north to northwest-trending normal faults in the Elder Creek area occur on the western side of the complex in the vicinity of the Dewitt Thrust and throughout the southern part of the area. These faults are oriented from N. 4°E to N. 35° W. and tend to roughly parallel the strike of the bedding in the Harmony Formation. These normal faults are relatively moderate to high angle faults with dips ranging from 50° to 85° to the NE and E and have minor strike-slip components represented by slickenslides. In all the observed faults, the eastern block appears to be the down-dropped block. These faults were present before or synchronous with the emplacement / formation of the Elder Creek system as there does not appear to be a difference in the alteration on the opposing sides of the faults. Mineralization in the Elder Creek system is localized along many of these faults and it in some cases these faults acted as fluid conduits where sulfides are locally concentrated.

North to northeast-trending normal faults occur in a band that goes from the southwest to the northeast side of the Elder Creek area (Figure 7-2). These faults have variable strike directions and are roughly parallel to the bedding of the Harmony Formation. These faults are normal faults with a minor strike-slip component represented by slickenslidesand are relatively high angle faults with dips ranging from 45° to 86° to the west. As with the NW-trending faults, the NE-trending fault set hosts mineralization and massive sulfide veins localized along these structures. In addition to mineralization, pebble dikes occur along these structures in the southern part of the Elder Creek fault and the fault that goes through the center of the Ridge Mine in the southeast part of the area (Fig. 4). These pebble dikes occur in the centers of these structures and cut across quartz veins of the Elder Creek system making the faults synchronous in age to or slightly younger than the intrusive. These faults appear to have been active or reactivated continuously since the emplacement of the Elder Creek system as they cut across the QEP in several locations and superimpose blocks containing upper level sericitic alteration against lower level potassic and sodic-calcic altered units.

The final set of faults occurs on the eastern side of the Elder Creek complex near the LQEP dikes. These faults trend northeast and are the steepest set of faults in the area with dips ranging from 70° to 90° to the east. These faults appear to coincide with the LQEP intrusion and the mineralization found in most of these faults, which is commonly massive sulfide veins, is associated with younger porphyry dikes. These faults also cut the LQEP dikes in the southeast part of the area and it appears that movement along these faults probably began after the emplacement of the EP and QEP stocks and continued until the LQEP dikes were emplaced.

7.2.3 Alteration

Alteration mineral zonation was first recognized at Elder Creek by explorationists in the 1960's, and verified by the detailed petrographic studies of King (2011). The zoning (Figure 7-3) indicates the presence of a large magmatic-hydrothermal center(s) to the Elder Creek porphyry system. The intensely stock-work fractured and quartz veined core of the system is northeasterly-elongate and exceeds 3.0 km by 1.5 km and compares favorably to other global porphyry systems. The limit of potassic (biotite±K-feldspar) alteration is about 4.0 km by 2.5 km and the outer limit of biotite-pyrite-pyrrhotite hornfels in the Harmony Formation sandstones exceeds 4.5 km by 3.5 km. Actinolite alteration occurs locally within the quartz veined core of the porphyry system. King (2011) interprets this to be part of a deep sodic-calcic alteration assemblage. However, Garwin (2014), re-interpreted the actinolite as characteristic of inner- propylitic alteration that overprints and flanks the potassic zone in many global porphyry deposits. Several northerly-trending zones of late-stage, feldspar-destructive quartz-sericite-pyrite alteration occur in the outer portions of the Elder Creek porphyry system and the largest zone, near the Gracie mine, exceeds 2.0 km by 1.5 km.

King (2011) supplemented detailed 1:5000 scale Anaconda-style field mapping of the hydrothermal features with the petrographic examination of 90 thin sections of representative samples collected across the area. In addition to petrographic studies the use of whole rock analysis, the scanning electron microscope (SEM) and the electron microprobe (EMP) aided in identifying the mineralogy of the alteration assemblages and associated mineralization. Previous studies in this area (Theodore, 1994, 1995, and 2000, Gostyayeva et al., 1996) focused on aspects of the abundant quartz veining and potassic alteration.

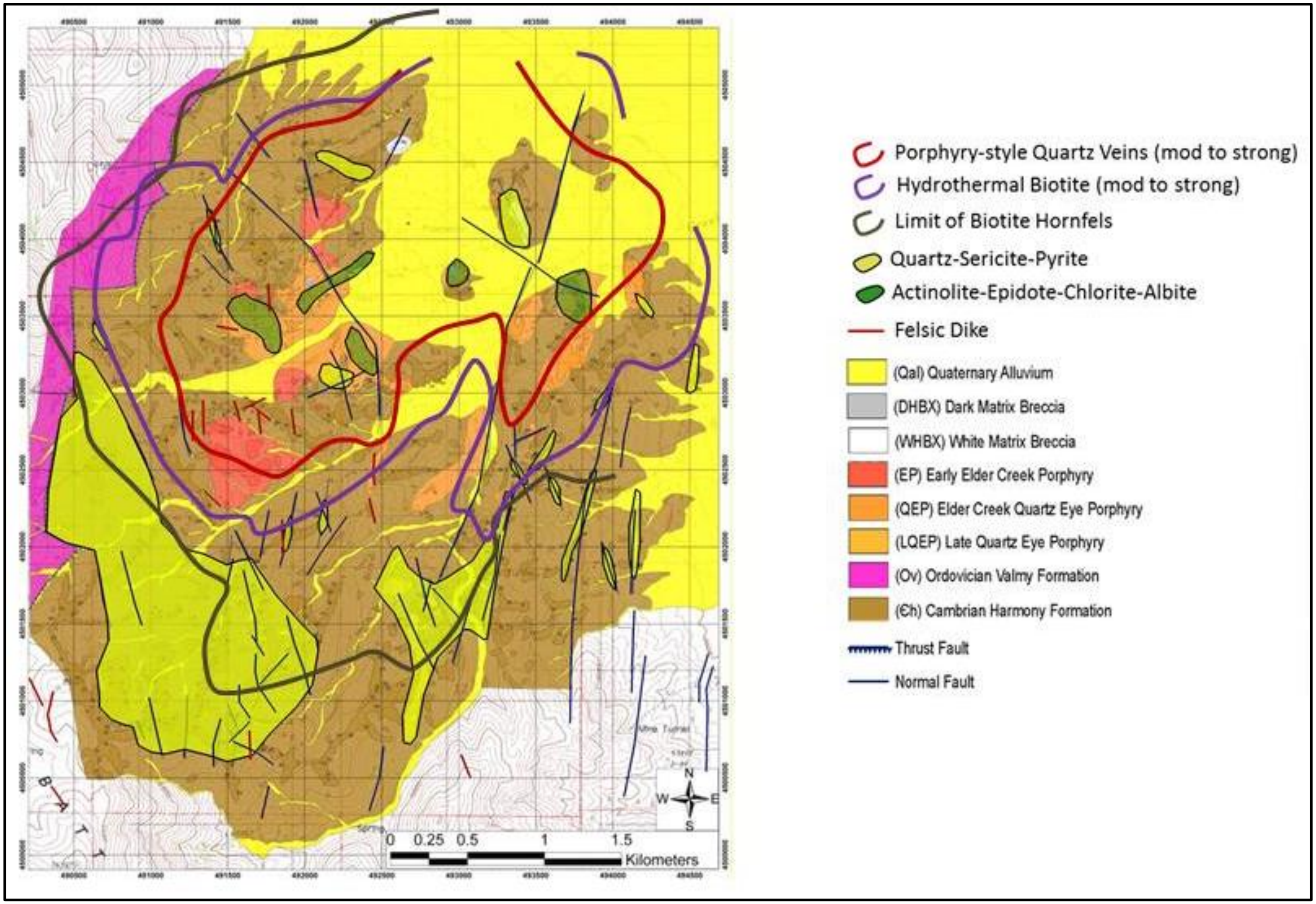
King's (2011) study describes four main alteration types-- potassic alteration, sericitic alteration, sodic-calcic alteration, and calcic alteration --identified in the Elder Creek area. These types of alteration are unevenly distributed at Elder Creek with widespread potassic alteration covering most of the area with sodic-calcic alteration observed in the core of the system and sericitic and calcic alteration on the periphery of the system. Mineralization at Elder Creek directly corresponds to the different alteration types and is variably distributed throughout the complex as disseminated sulfides and as locally concentrated, structurally controlled massive sulfide veins.

Potassic Alteration

Potassic alteration is characterized by the secondary mineral suite quartz + biotite + K- feldspar + rutile with minor pyrrhotite, arsenopyrite, chalcopyrite and pyrite. It is the most widespread type of alteration at Elder Creek and covers an area of approximately 12.5 km^2 (Fig. 7-3). Potassic alteration varies depending upon the host rock. It occurs both as vein envelopes and as pervasive alteration.

In the igneous rocks, new potassic minerals form in both the mafic and feldspar sites. Shreddy biotite replaces mafic sites containing primary igneous biotite and hornblende. The feldspar sites in these rocks range from no replacement to the almost complete replacement of primary plagioclase by K-feldspar. The groundmass of the igneous rocks shows addition of fine-grained K-feldspar along with fine-grained secondary biotite. This style of alteration is observed in the EP, QEP, LQEP, and in the older igneous rocks such as the FGD, and the AD in the southern part of the area.

Figure 7-3: Alteration Zoning at Elder Creek



The intensity of potassic alteration in the Cambrian Harmony Formation varies depending upon the nature of the protolith with grain size and composition of the clasts and matrix the most important variables. In the very fine-grained units such as shales and slates, the potassic alteration is pervasive and converts the entire unit to a biotite hornfels. In sandstones and quartz arenites, the quartz-rich clasts are unaltered but the majority of the fine grained matrix is converted to shreddy biotite ± K-feldspar. The quartz pebble conglomerates show a similar style of alteration as the sandstones and quartz arenites with quartz pebbles unaltered and the fine matrix material converted to shreddy biotite ± K-feldspar.

Vein types associated with potassic alteration at Elder Creek consist of four distinct assemblages. The first type is quartz ± K-feldspar (up to 3 cm wide) with distinct K-feldspar envelopes. The vein fill is granular quartz with 1-10% disseminated K-feldspar. Vein envelopes up to a centimeter wide have a distinct bleached appearance due to the addition of abundant K-feldspar and quartz. . The second vein type is quartz (<3 mm wide) with 3-5mm envelopes of biotite and minor K-feldspar. These veins differ from the first type as the vein envelope assemblage is dominantly secondary biotite and minor K-feldspar. The third vein type is K-feldspar veins (<1 mm) without envelopes. The last vein type is barren quartz veins (up to 4 cm) which occur in abundance throughout the central part of the system and are some of the largest veins in the complex. The quartz is similar in appearance and texture to the other vein types but there is no apparent alteration envelope associated with these veins.

Sericitic Alteration

Sericitic alteration (Figure 7-3) is characterized by the secondary mineral suite quartz + sericite + pyrite with varying amounts of chlorite, arsenopyrite, and chalcopyrite. Sericitic alteration is present throughout the southern portion of the Elder Creek area as well as on the periphery of the system commonly along mineralized faults. As with the potassic alteration, the sericitic alteration is manifested differently throughout the complex depending upon the host lithology and is observed as both pervasive alteration and as vein envelopes.

In the igneous rocks, sericitic alteration in the mafic sites consists of replacement of primary and secondary biotite by sericite and chlorite. No relationships between primary hornblende and sericitic alteration were observed as all rocks within the complex that contained primary hornblende apparently underwent an early potassic alteration event that converted all hornblende to secondary biotite. The feldspar sites are generally very soft as a result of the sericitization of the feldspar. The groundmass of the igneous rocks shows nearly complete replacement of fine-grained feldspars and secondary biotite by sericite and chlorite with minor disseminated pyrite and added quartz.

Sericitic alteration in the Cambrian Harmony formation is as diverse as the potassic alteration observed at Elder Creek. In the very fine-grained units, such as shales and slates in the southern portion of the complex, there is a complete replacement of secondary biotite by sericite and chlorite with minor disseminated pyrite, chalcopyrite and arsenopyrite. This pervasive alteration is only observed in the thinly bedded and laminated sediments. In thicker bedded units such as sandstones and quartz arenites, there is pervasive alteration of the secondary biotite matrix to sericite and chlorite on the outer layers of the rocks but remnants of the early potassic alteration assemblage are preserved in the interior In addition, minor amounts of feldspar in the rocks are almost completely converted to fine-grained sericite. In the quartz pebble conglomerates the sericitic alteration is confined mostly to the matrix where there is the addition of sericite and quartz with very minor amounts of pyrite.

Veins associated with sericitic alteration at Elder Creek are generally of two main types and differ depending upon the presence or absence of sulfides. The first vein type is dominantly quartz with a sericite envelope and no sulfides. The second vein type is sulfides ± quartz with sericitic envelopes which can be divided into two distinct types of veins.. One is dominated by massive sulfides with quartz intermixed throughout the vein and the other is a typical "D" vein of Gustafson and Hunt (1975) with a pyrite center surrounded by quartz and sericite. In these veins the sulfide assemblage varies throughout the complex but the common sulfides present are pyrite, chalcopyrite, and arsenopyrite. In all cases these veins crosscut the veins associated with the potassic alteration where the two alteration types overlap. In many cases these veins are emplaced along early potassic alteration veins and the K-feldspar envelopes and secondary biotite are partially to wholly replaced by sericite.

Sodic-Calcic Alteration

Sodic-calcic alteration (Figure 7-3) is characterized by the secondary mineral suite plagioclase (albite and oligoclase) + actinolite + chlorite + titanite + epidote. At Elder Creek this alteration type is only present in the core of the system and is associated with the QEP intrusive. The largest exposures are in the northern half of the complex within the core of the QEP intrusion. This type of alteration is only present in small exposures elsewhere in the complex.

Sodic-calcic alteration at Elder Creek is only present in the QEP intrusion. The primary igneous biotite, secondary biotite after primary biotite, and hornblende in the mafic sites are replaced by actinolite, chlorite, and titanite with almost no Fe oxides remaining in the QEP stock. The feldspar sites show a range of intensity of replacement of primary plagioclase by more sodic and calcic phases. In many cases there are phenocrysts with cores and rims rich in sodium while the remainder of the grain is enriched in calcium. In other samples it appears that the feldspars were in relative equilibrium and the sites remain unchanged. some of the feldspar phenocrysts show minor to moderate replacement of the feldspars by epidote.

Veins associated with sodic-calcic alteration at Elder Creek are of three main types. The first type is dominantly actinolite with no apparent envelope. In these veins it is difficult to determine if there is an envelope due to the pervasive alteration of the host rock and the flooding of the groundmass with plagioclase. The second type of vein has a center of actinolite with distinct plagioclase envelopes. Within both vein types there is minor chlorite, titanite and epidote. The last vein type is represented by very narrow cross-cutting veins of albite and oligoclase that in some cases are so abundant that they pervasively alter the host rock to a solid block of plagioclase.

Ca-rich Alteration

A small area, measuring <25 m x 50 m in outcrop, of calcium-rich alteration occurs along the Dewitt Thrust on the western side of the complex (Figure 7-1). This alteration is characterized by secondary amphibole (actinolite-hornblende) + diopside + quartz + plagioclase (labradorite) with disseminated pyrrhotite + chalcopyrite + gersdorffite + other minor sulfides and Ni-arsenides.

These rocks are completely recrystallized and consist of very fine-grained pyroxene-amphibole with abundant calcic plagioclase and quartz. Although apparently hosted by the Harmony Formation the protolith is uncertain as carbonate rocks are scare or absent in the Harmony Formation. However, this might have been a mafic rock or an unusually favorable clastic unit. The mineral association and permissive evidence for a clastic protolith make calcic alteration (Ca addition) more likely than skarn (Si ± Fe addition; Barton et al., 1991 cf. endoskarn Einaudi and Burt, 1982).

7.2.2 Mineralization

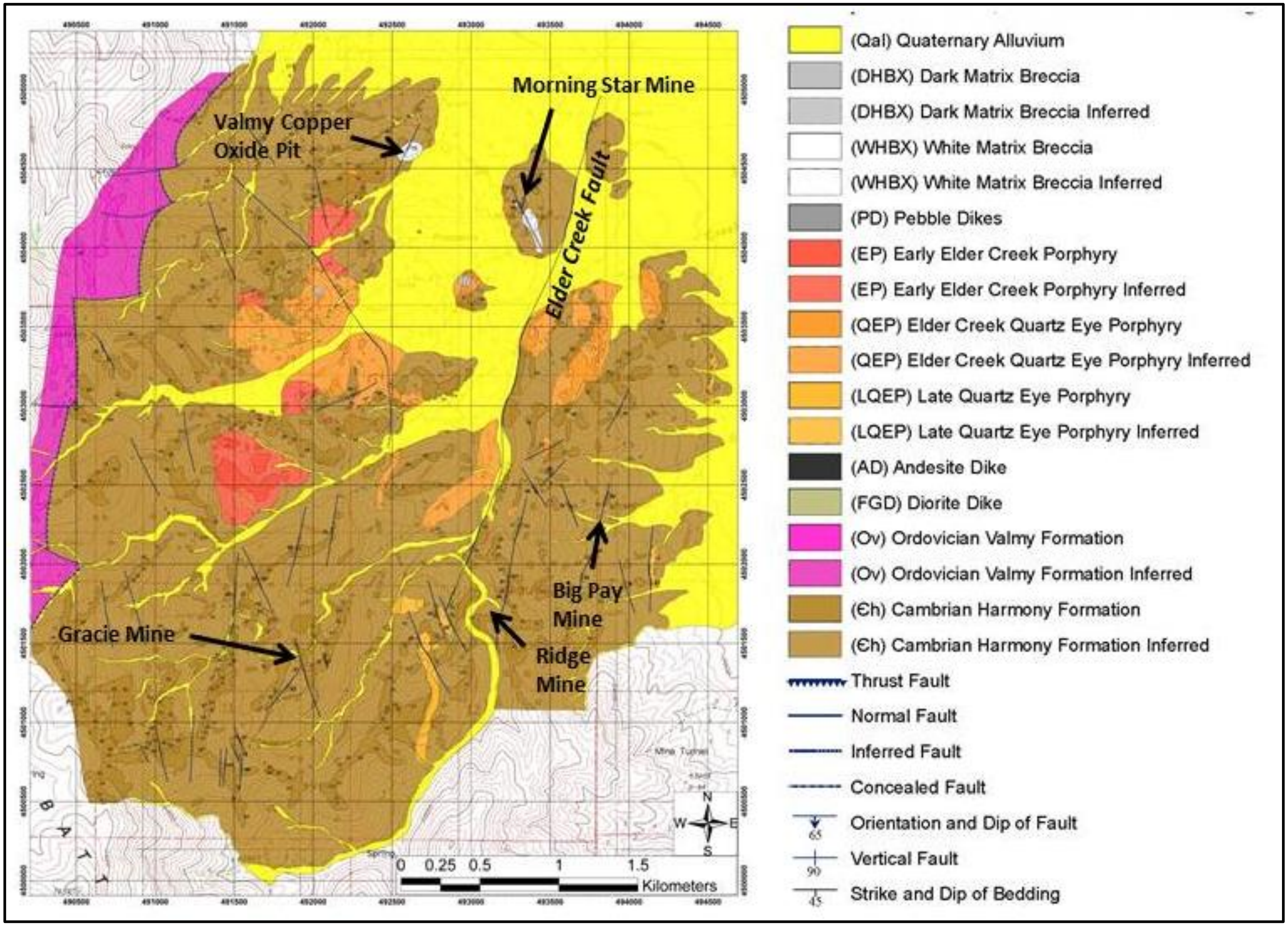
The major styles of mineralization recognized in the Elder Creek area are calc-alkaline porphyry copper style mineralization and associated peripheral gold-silver-bearing base-metal vein systems. The gold-silver-bearing base-metal vein systems are well represented at historic prospects (e.g. Morning Star, Big Pay, Ridge Mine) (Figure 7-4).

The sulfide mineral assemblages described by King (2011) and Gostyayeva et al. (1996) at Elder Creek include chalcopyrite, arsenopyrite, pyrrhotite, pyrite, scheelite, wolframite, galena, sphalerite and Pb-Sb-Ag-Bi-bearing sulfosalt minerals. Ilmenite is the dominant oxide mineral in the least-altered intrusions; magnetite is not described.

Most surface exposed sulfide minerals occur on the margins of the porphyry system and are associated with potassic, sericitic, and calcic alteration that coincides with the outer ring of magnetic highs defined by geophysical surveys King (2011). Subsequent work by Timberline and the previous operator (Garwin, 2014) documents that copper mineralization also occurs within the central non-magnetic portion of the porphyry system where potassic alteration is dominant and ,at surface, manifests as copper oxide (malachite, azurite, neoticite) with FeOx in fractures. Copper oxide occurs in breccia matrix and fragments and indicates multiple stages of mineralization. In addition, recent drilling (see Section 10) intersected thick intervals with visible chalcopyrite, molybdenite, possible chalcocite, and minor occurrences of bornite in the interior non-magnetic portion of the porphyry system.

King (2011) completed petrographic and backscatter imaging and microprobe analysis of sulfide minerals in potassic altered Harmony and described arsenopyrite + pyrrhotite + chalcopyrite with accessory pyrite, scheelite ($CaWO_4$), wolframite ($(Fe,Mn)WO_4$), galena, jamesonite ($Pb_4FeSb_6S_{14}$), gustavite ($PbAgBiS_6$), and meneghinite ($Pb_{13}CuSb_7S_{24}$). The arsenopyrite has varying compositions and the use of backscatter imaging and microprobe analysis shows the presence of galena inclusions along with antimony enrichment in the cores and rims of arsenopyrite grains. These minerals weather to form some combination of covellite, black copper wad, malachite, azurite, and chrysocolla after chalcopyrite, iron arsenates after arsenopyrite, and hematite, goethite, and jarosite after iron sulfides. Sericitic alteration contains pyrite, chalcopyrite, and arsenopyrite with accessory galena, sphalerite, jamesonite and Pb-Sb-Ag-Bi sulfosalts. In some instances these minerals overprint the mineralization associated with potassic alteration.

Figure 7-4: Elder Creek Geology and Historic Mines



Calcic alteration contains a distinctive sulfide suite not seen elsewhere and consists of pyrrhotite + chalcopyrite + gersdorffite (NiAsS) + pentlandite ($(Fe,Ni)_9S_8$) with accessory sphalerite and nickeline (NiAs). The source of the nickel in these minerals is unknown as Ni concentrations throughout the complex are generally quite low (<40 ppm in most whole rock samples). Increased concentrations outside of the skarn are only seen sporadically in this area and are almost always related to enrichments in Ni as a result of mafic dikes such as the diorite and andesite dikes in the center and southern part of the complex.

Precious metals do occur at Elder Creek but their distribution is not clearly understood. King (2011) did not identify gold petrographically, however assays indicate that it correlates with arsenopyrite. Silver occurs as widespread sulfosalts in the sulfide-rich zones; these minerals carry up to 17 wt% silver. They have been found only as small inclusions (<20 microns) in arsenopyrite, pyrite, and galena. Pb-Sb-Bi and Ag correlate throughout the area with the highest values concentrated in the southern and southeastern part of the complex.

7.3 Fluid Inclusions

The results for fluid inclusions analyzed by the USGS (Theodore, 1996 and Gostyayeva et al., 1996) show increased temperatures (> 450°C) and salinities (> 40 % NaCl equiv.) near the Morning Star mine, in the eastern center of mineralization. This data supports the concept of a concealed late-stage cupola beneath the northerly-elongate Cu-Au-Mo-W-Bi-As anomaly in this area. There is also potential for late-stage mineralization at depth beneath the western center of mineralization, which would lie along the western margin of the inferred mineralized cupola.

7.4 EXPLORATION POTENTIAL

Based on the geologic data collected at Elder Creek, including rock types (host rocks and intrusives), structural setting, hydrothermal alteration, extensive stockwork quartz veining, oxidized sulfide veins, copper mineralization evident at the surface, geophysics (Section 9.3), and geochemical signatures in soil and rock sampling (Section 9.4), potential exists for discovery of a porphyry copper ± gold mineralization at Elder Creek. Key elements at Elder Creek include:

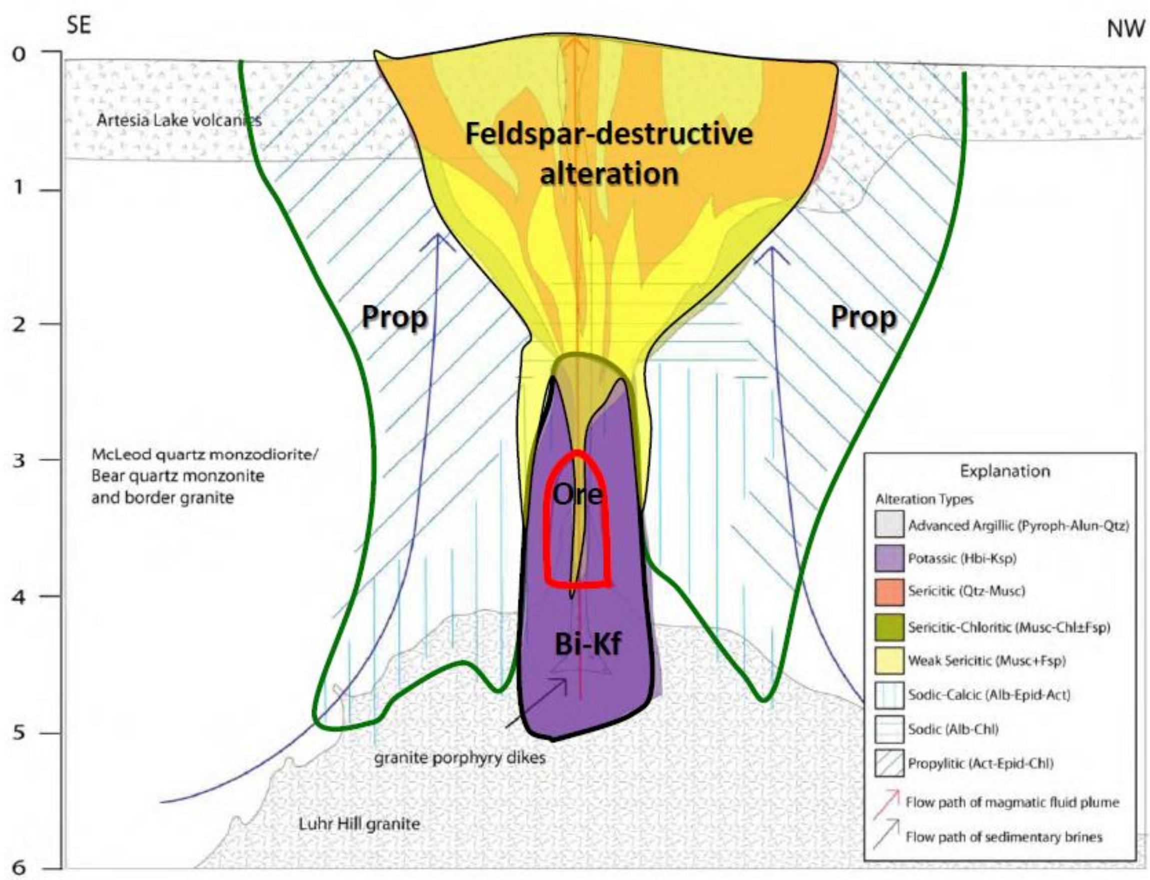
- Multiple alteration zones
- Relatively high Cu and Mo, low Au
- Mineralization spatially related to potassic-phyllic alteration zones
- K metasomatism prevalent
- High S content, abundant pyrite, little magnetite
- Si-rich fluids, abundant quartz in veins
- Stockworks and breccias common
- Strong mineral zoning

8.0 DEPOSIT TYPES

The major styles of mineralization recognized in the Elder Creek area are calc-alkaline, porphyry copper style mineralization and associated peripheral gold-silver-bearing base-metal vein systems (e.g. Morning Star and other historic mines). The hydrothermal alteration zoning pattern indicates the presence of a large magmatic-hydrothermal center(s) to the Elder Creek porphyry system. The stockwork quartz veined core of the system is northeasterly-elongate and exceeds 3.0 km by 1.5 km, which compares favorably to other global porphyry systems.

Garwin (2013) recognized that, by analogy, the Elder Creek project is schematically comparable to the Ann-Mason porphyry deposit of Yerington, Nevada (Dilles et al., 2000 and Cohen, 2011) (Figure 8-1).

Figure 8-1: Schematic Model of the Ann-Mason Porphyry Copper Deposit



9.0 EXPLORATION

Since acquisition of the property, Timberline has conducted extensive compilation and review of historic data as part of their exploration program. Those results led to an initial drill program which is discussed in Section 10.0.

9.1 DATA COMPILATION

Exploration at Elder Creek is based in significant part on review and interpretation of historic data beginning in the 1960's which has been compiled and organized into project data sets. These datasets include digital scans of historic reports from approximately 15 companies and includes regional and property-scale geologic investigations, prospect reviews, summary of historic geophysics (magnetics), drill data, and geochemical information.

Property-scale geologic mapping data by King (2011) was digitized and georeferenced for use as a base map for geologic analysis by Timberline. Drill hole collars, survey data (where available), geologic information, and assays were recorded and compiled into a project Access database which now includes partial data from approximately 191 historic drill holes (Appendix B).

In addition, a database incorporating approximately 4,300 soil samples and 1,100 rock samples collected from the Elder Creek project area was incorporated into the Timberline data set.

Timberline utilizes ArcGIS as a software platform for spatial-analysis based review of the compiled geologic, drill, and soil and rock geochemical data.

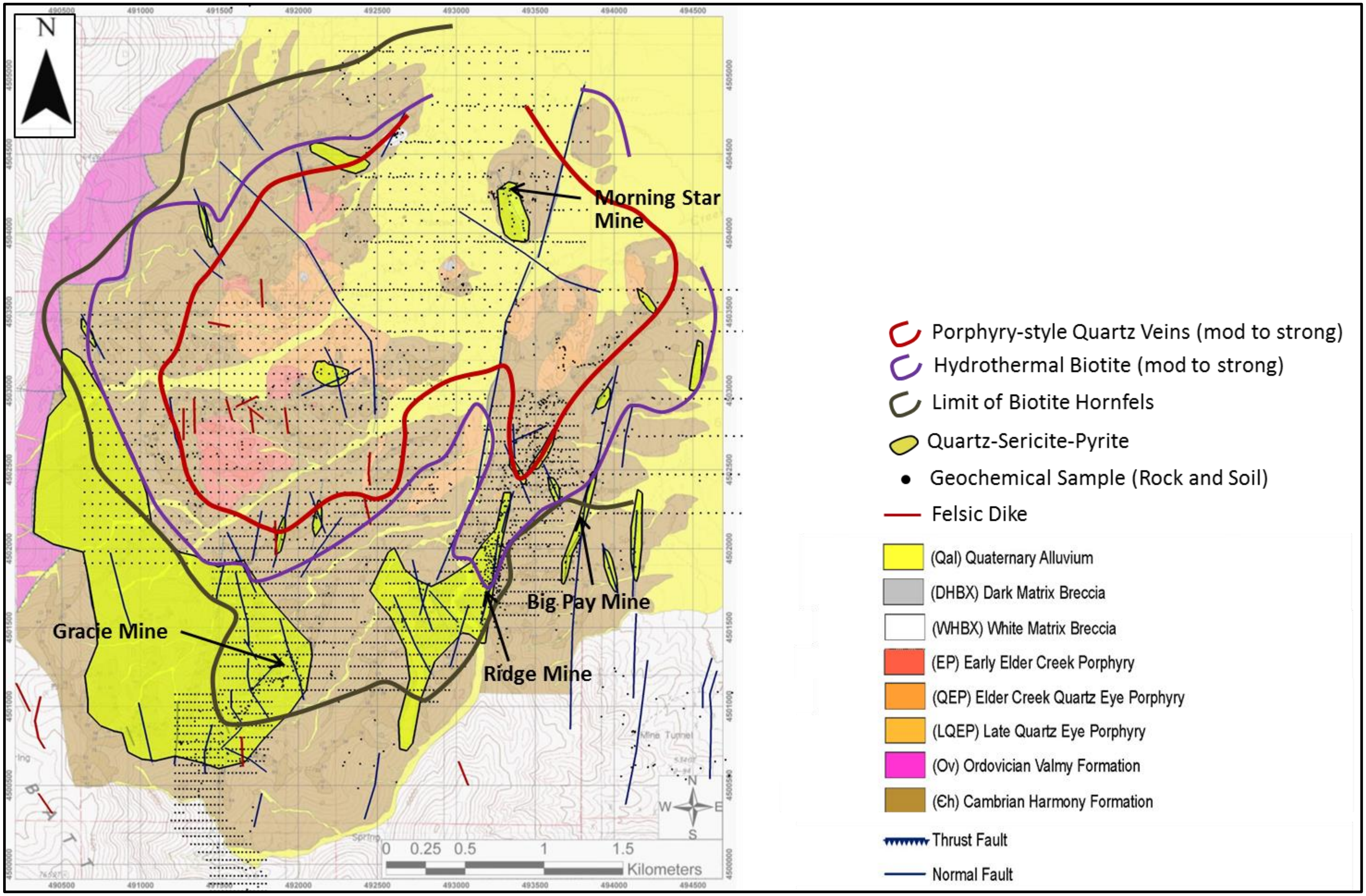
9.2 SURFACE SAMPLING AND GEOCHEMISTRY

Knowledge of the distribution of trace elements associated with the Elder Creek porphyry center is based upon geochemical sampling from historic (circa 2011-2012) exploration in the area by McEwen Mining (or predecessor). Available sample data covers the majority of the porphyry area (Figure 9-1). The database contains 4,327 soil samples analyzed by ICP/AA, and 1,101 rock samples generally assayed for 52 elements.

9.2.1 Summary of Trace Element Distribution in Rocks and Soils

Gold results that exceed 1 ppm in rock-chip, with a maximum of 139.5 ppm Au, are common in the base-metal-bearing vein systems that flank the porphyry center particularly to the east and south (Figure 9-2). In contrast, the gold rock results for the intrusive center are typically less than 50 ppb Au. The central part of the porphyry system, characterized by moderate to strong quartz veins, coincides with a zone of Ag/Au > 50. In contrast, the vein systems along the flanks of the system typically indicate lower Ag/Au values with coherent zones of Ag/Au < 10.

Figure 9-1: Soil and Rock Sample Sites



Zones of copper > 300 ppm in soil / rock occur over a 2.0 km by 1.5 km area in the center and eastern side of the zone of increased quartz veins (Figure 9-3). The jarosite-goethite ratios in these anomalies range from about 40:60 to 80:20, which indicates up to 80% leaching of the copper from the rock. Such weathering would be consistent with a near-surface proto-ore grade of up to 0.25% Cu, assuming 80% leaching to produce a 500 ppm Cu value in leached outcrop.

The distribution of Mo and W (Figure 9-3) shows strong anomalies in the central part of the area and in a northerly elongate zone that extends from the Big Pay mine to the Morning Star mine. Bi and As (Figure 9-4) appear concentrated along the northerly elongate zone. The increased abundance of Li and relative lack of Bi in the central area suggests that this area is probably less eroded than the eastern area with the north-south anomalous trend.

9.2.3 Summary of Trace-element Distribution at Elder Creek

The distribution of key trace elements suggests there may be two primary centers of mineralization at Elder Creek including: 1) Cu-Mo-Ag-W-As-Li centered over the the central part of the area and 2) Cu-Au-Mo-W-Bi-As in the northerly elongate zone that extends from the Big Pay mine to the Morning Star mine. The presence of Li > 30 ppm and the relative lack of Bi in the western center which is cored by early-stage intrusions, may indicate that this center is early and has been overprinted by a later porphyry event. The near-surface expression of this later event could be the eastern, Bi-rich and Li-deficient zone that contains intermediate-stage quartz-eye porphyry intrusions. The Bi-rich plume has the potential to be the high-level signature of a northerly-elongate mineralized cupola at depth.

In comparison to, and as a model for Elder Creek, Garwin (2014) summarized (Figure 9-5) the zoned trace-element distribution and their position relative to the copper ore body in a schematic cross-section through the Ann-Mason porphyry deposit, Yerington, Nevada (Cohen, 2011). Note that Mo and W form proximal to the Cu-rich core, with As and Li forming more distal anomalies. Bismuth forms a plume to Cu-Mo-W mineralization at depth. Zinc and other trace-elements are depleted in the central part of the system and from a distal halo to Cu-Mo mineralization. The Cu/Zn values increase from the peripheral to central parts of the system.

Figure 9-2: Gold Distribution in Rocks and Soils Showing Anomalous Concentrations

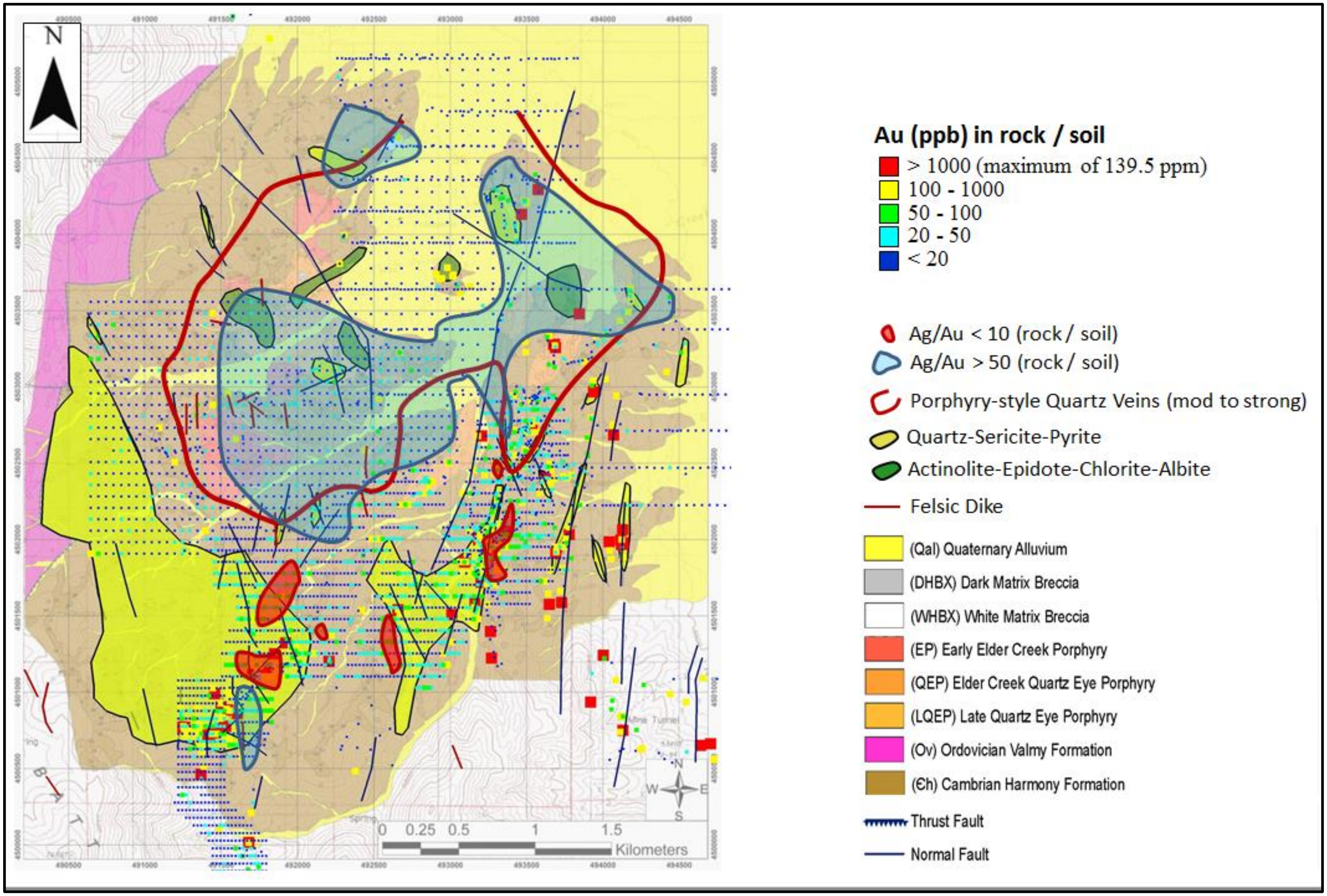


Figure 9-3: Copper Distribution in Rocks and Soils Showing Anomalous Concentrations

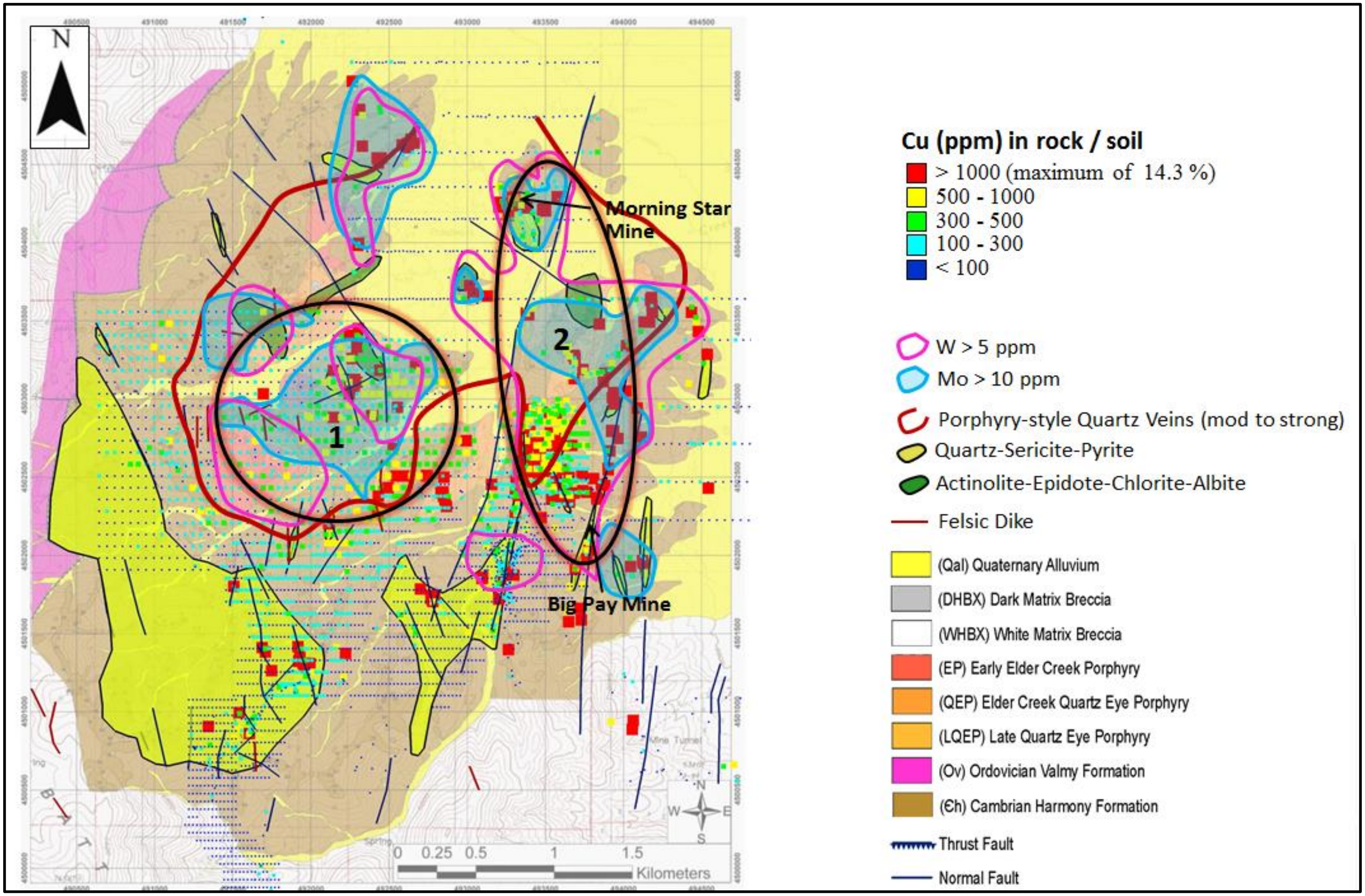


Figure 9-4: Lithium, Arsenic, and Bismuth Distribution in Rocks and Soils

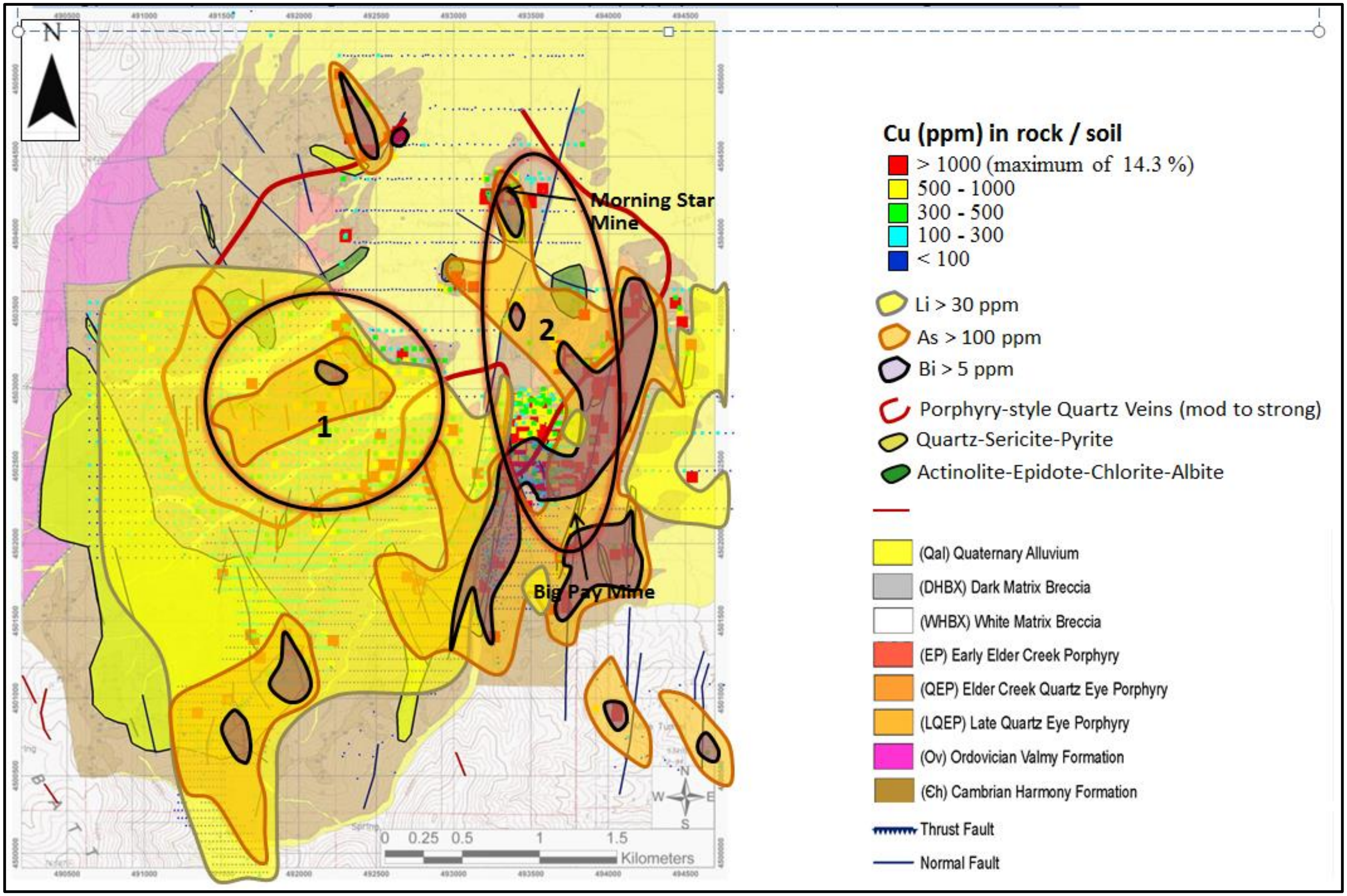
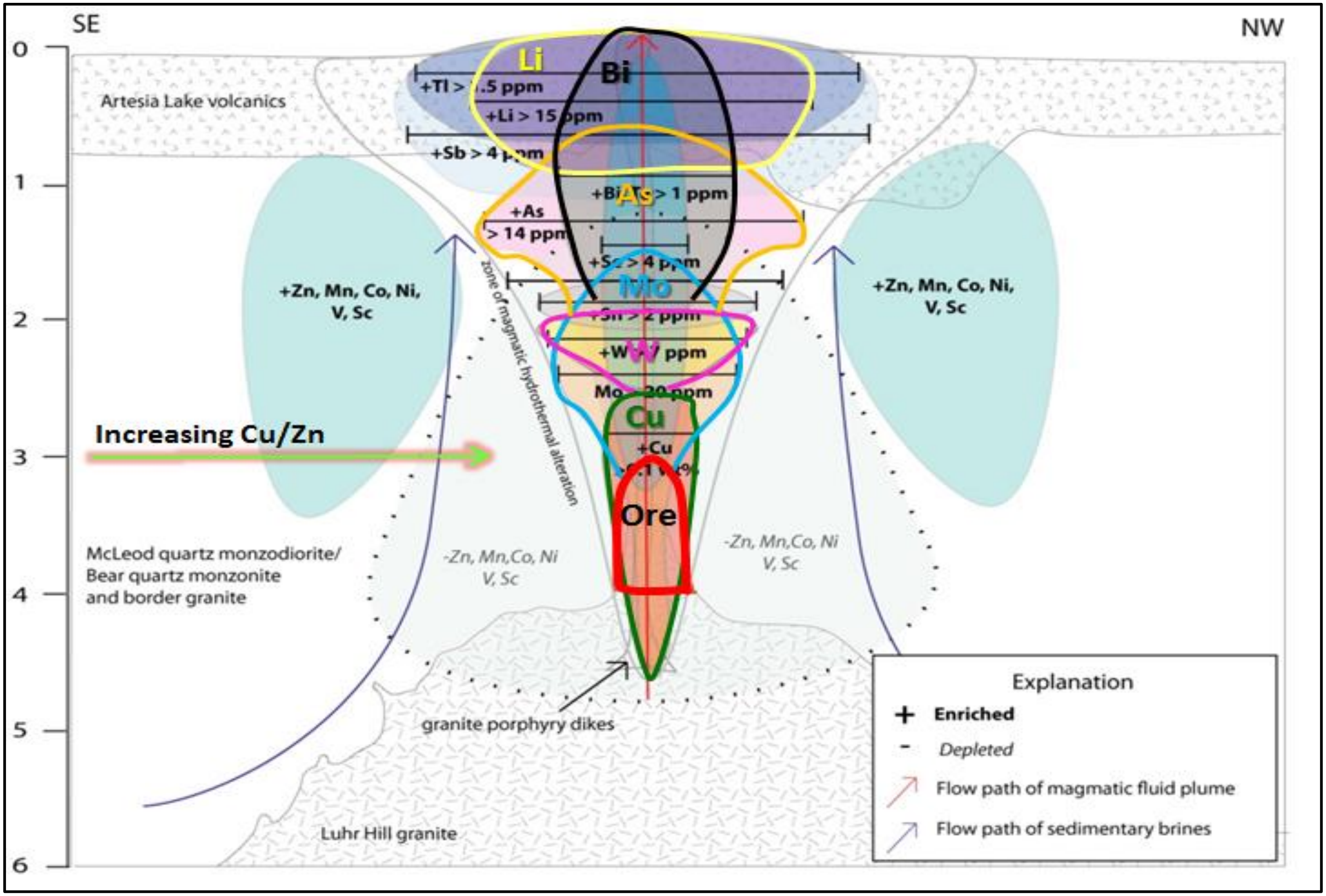


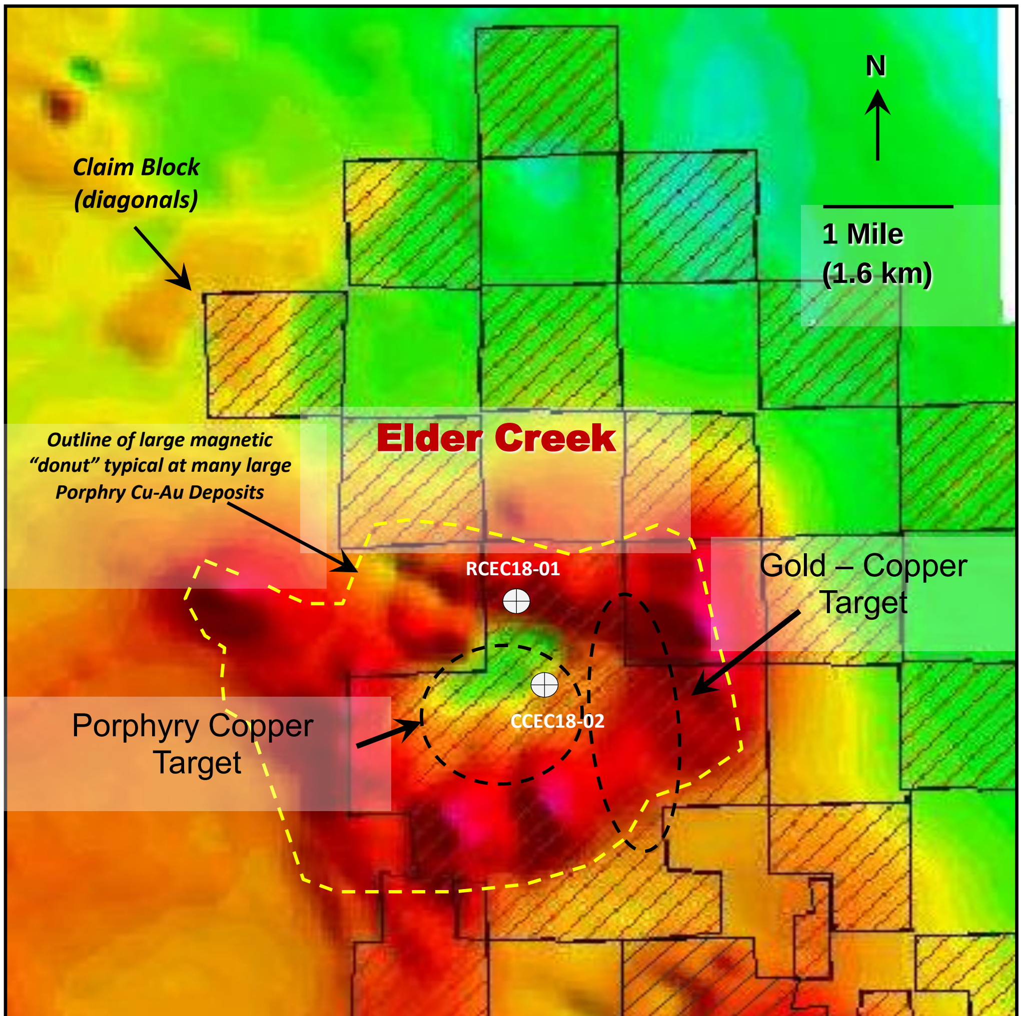
Figure 9-5: Summary of Zoned Trace-element Distribution at Ann-Mason Porphhyr Deposit as a Model for Elder Creek.



9.3 GEOPHYSICS

An image of historic airborne total field magnetics at Elder Creek collected in the 1960's documents a magnetic "donut" pattern (Figure 9-6) which coincides with the outer limit of biotite-hornfels alteration that is known to contain pyrrhotite (a magnetic mineral). The cause of the central magnetic low could be non-magnetic intrusions that lack pyrrhotite, or pyrrhotite- destructive alteration. No magnetite has been documented in the Elder Creek area.

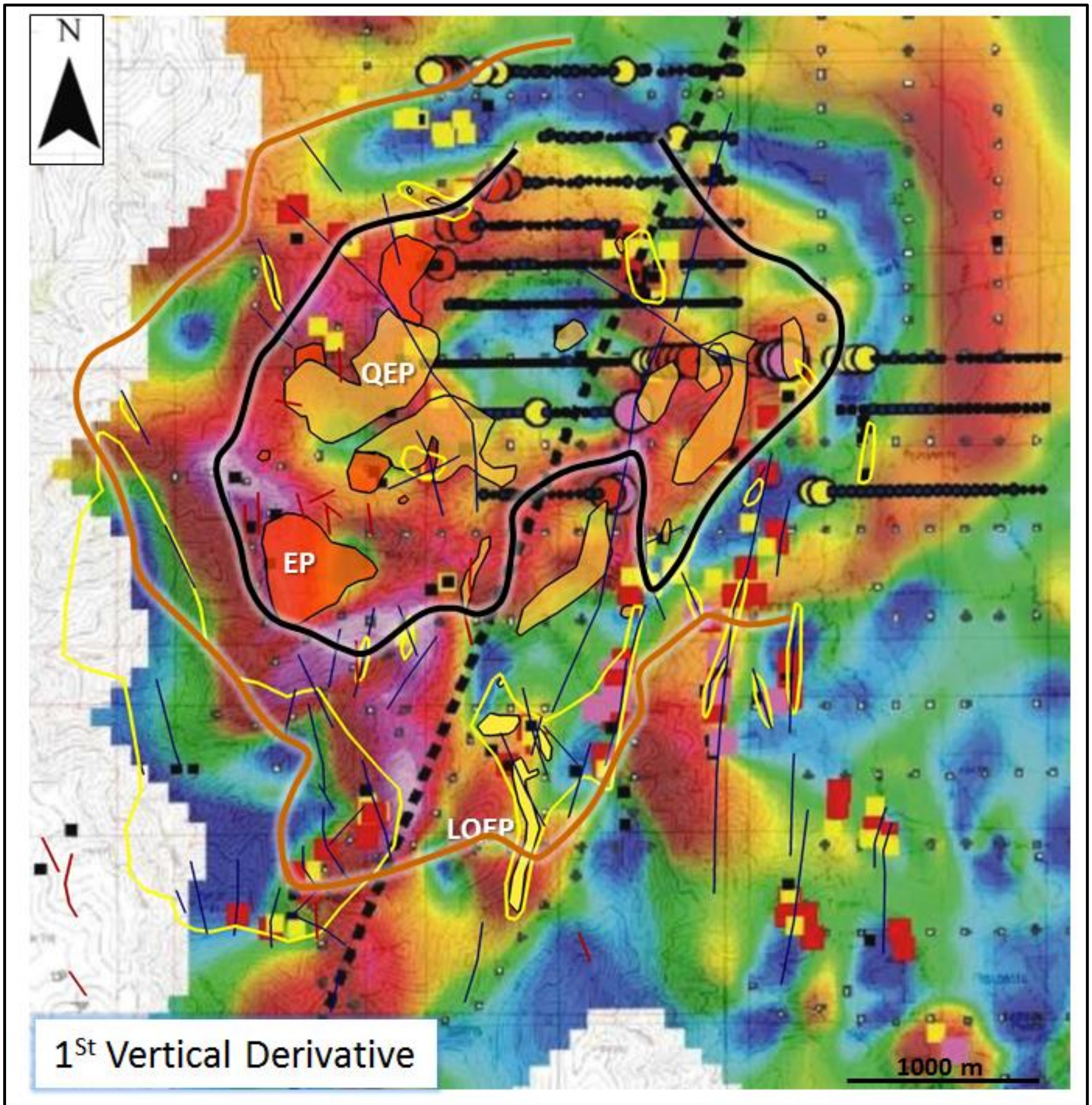
Figure 9-6: Historic Total Field Magnetics for the Elder Creek Project Area



The magnetic image was acquired from the dataset compiled by the underlying property owner; the image is considered historic as no information has been identified on source, survey or processing details.

A historic Bouguer 1st vertical derivative gravity image for the Elder Creek project area is also in the Timberline data compilation. The gravity image shows a donut-like pattern that mimics the magnetic data interpretation.

Figure 9-7: Historic Bouguer Gravity for Elder Creek Project Area



The gravity image was acquired from the dataset compiled by the underlying property owner; the image is considered historic as no information has been identified on source, survey or processing details.

9.4 HISTORIC DRILLING

Approximately 250 historic drill-holes have been completed in the area from 1964 to 2012 by at least 15 companies (Table 9.1). This drilling was focused primarily on the gold-bearing vein systems that flank the intrusive center (Figure 9-8). The majority of the holes are less than 500 ft (150 m) deep with the deepest holes, located in the vicinity of the Morning Star and Ridge mines, reaching down-hole depths of 800 ft (244 m) and 1500 ft (457 m). The center of the porphyry system was tested by only two shallow holes, for which no data is available. Much of the drill data exists as scanned paper logs; these data have been compiled in a digital database of consistent format. Data is generally limited on these holes to collar locations and assay results. Lithologic and alteration information is generally not available.

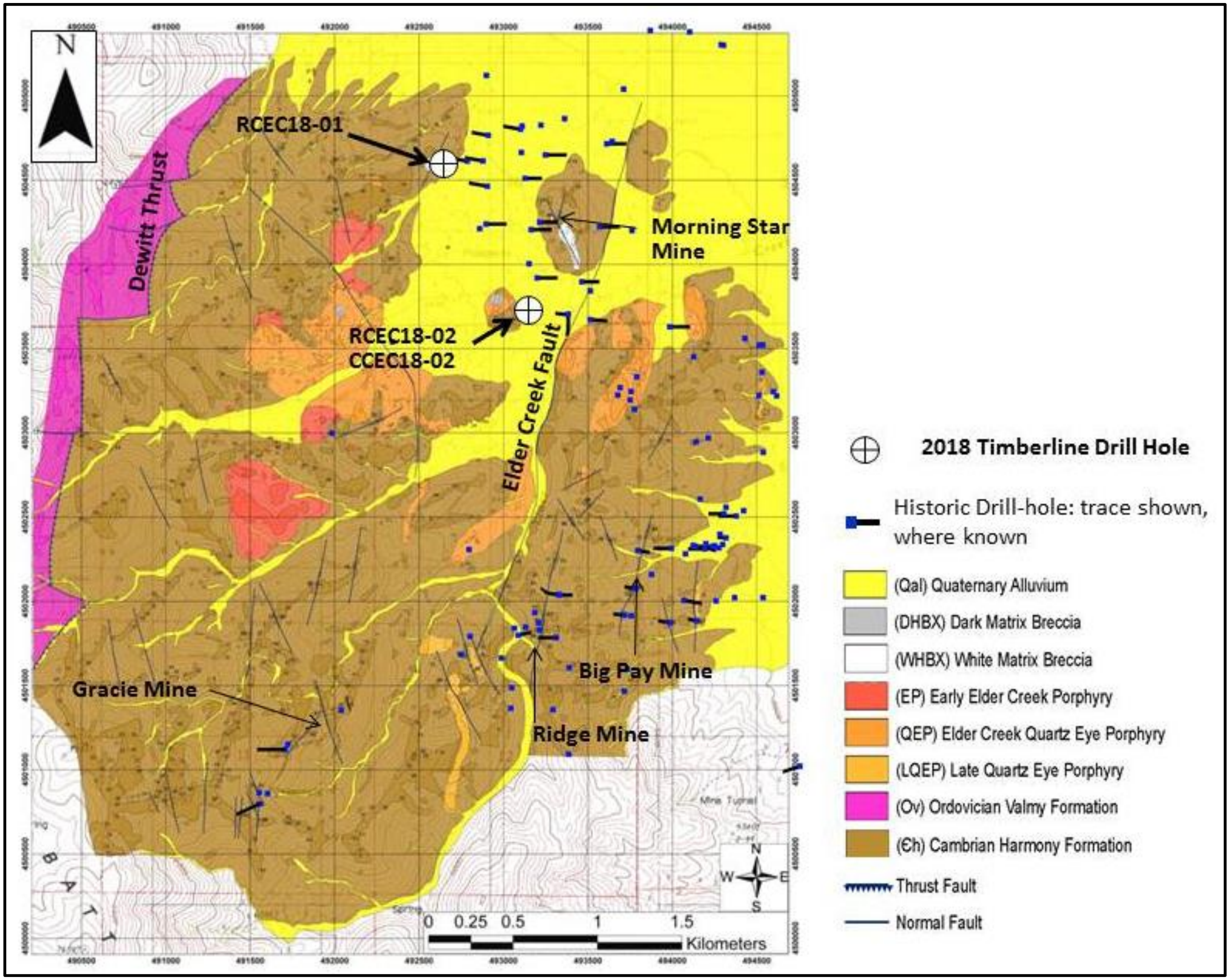
Table 9.1: Drill Holes in Timberline's Elder Creek Database

Company	Period	Number of Holes
Amoco	1975	2
Aur Resources	1998	14
Bear Creek	Unknown	4
Battle Mtn Gold	1992,1983	43
BMR	1991	4
Condor Minerals		8
Duval	1965	3
Cordex	1987	3
Kennecott	1994-1995	12
Kinetic	1983	14
Nevada Pacific	2003, 2006	18
Oro Nevada	1998	6
US Gold	2010-2011	10
Rocky Mountain Energy	1968	8
WMC Exploration	1994	11
Unknown	unknown	79

Subsequent to compilation and interpretation of the historic data, Timberline initiated a drill program at the Elder Creek porphyry copper-gold project in September, 2018. Three drill holes (two reverse circulation and one diamond core hole) have been completed to date.

Details of the Timberline drill program and assay results available to-date are included in Section 10.0.

Figure 9-8: Historic and Recent Drill Holes at Elder Creek Project



10.0 DRILLING

Timberline completed 3 drill holes at the Elder Creek project between August 28, 2018 and October 16, 2018 (Table 10.1)

Table 10.1: Timberline Drill Holes

Hole No.	UTM East	UTM North	Type*	Collar Elev (m)	Azimuth	Inclination	Depth Feet (meters)
RCEC18-01	492640	4504613	RC	1601	0	-90°	500 (152.4)
RCEC18-02	493037	4503658	RC	1634	0	-90°	840 (256.1)
CCEC18-02*	493037	4503658	DDH	1634	0	-90°	1497 (456.4)
* RC: reverse circulation; DDH: diamond drill hole (HQ core)							
**Hole begun as a deepening of RCEC18-02; deviation resulted in "twin" drilling from 115.5 ft (35.2m)							

10.1 Reverse Circulation Hole: RCEC18-01

Reverse circulation (RC) drill hole RCEC18-01 (Figure 10-1) was collared as a vertical hole and drilled to a total depth of 500 feet (152 m) and intersected oxidized arkosic quartzite and a quartz-bearing porphyritic intrusion with strong potassic (biotite) and silica alteration over its entire length. The hole intersected 110 feet (34 meters) of 0.44% copper from 160 to 270 feet (48.8-82.3 m). The total 500 foot (152 meters) length of the hole averaged 0.21% copper and bottomed in mineralization at 500 feet due to depth limitations of the rig (Table 10.2). It contains multiple intervals of anomalous gold, silver, and pathfinder elements.

Table 10.2: Drill Hole RCEC18-01 Assay Summary Results

From (feet)	To (feet)	Total (feet)	From (meters)	To (meters)	Total (meters)	Cu (ppm)	Cu (%)	Au (g/t)	Ag (ppm)	As (ppm)	Bi (ppm)	Co (ppm)	Re (ppm)
0	500	500	0.0	152.4	152.4	2099	0.21		3				
including:													
0	*270*	270	*0.0*	*82.3*	82.3	*2826*	*0.28*		*4*				
160	*270*	110	*48.8*	*82.3*	33.5	*4385*	*0.44*		*5*				
195	210	15	59.5	64.0	4.6			0.331	13	242	15		
145	150	5	44.2	45.7	1.5							101	
215	270	55	65.5	82.3	16.8							274	
490	495	5	149.4	150.9	1.5							119	
110	135	25	33.5	41.2	7.6								0.422
260	280	20	79.3	85.4	6.1								0.228
430	435	5	131.1	132.6	1.5								0.211

True widths of drill intercepts are unknown. The samples were assay by ALS USA Inc. (ALS) and were transported to Elko, Nevada for sample preparation. Drill samples were assayed by ALS in Reno, Nevada for gold by Fire Assay of a 30 gram (1 assay ton) charge with an AA finish (ALS code Au-AA23). Samples were also assayed for a 48 multi-element four acid ICP-MS (code ME-MS61) geochemical suite in Vancouver, B.C.

The hole was designed to test the grade and continuity of mineralization intersected in five shallow vertical holes drilled by the Valmy Copper Corp. in 1967 (Table 10.3) when copper prices were $0.38/lb. These holes intersected continuous copper mineralization grading 0.2% to 0.3% from surface to their total depths of 190 to 330 feet.

Table 10.3: Valmy Copper Corp. Drilling Results

Hole No.*	UTM East	UTM North	Collar Elev (m)	Azimuth	Inclination	Depth Feet(meters)	Cu (%)
VDH-01	492634.5	4504621	1598	0	-90°	330 (100.6)	0.282
VDH-02	492611.5	4504630	1603	0	-90°	199 (60.7)	0.340
VDH-03	492667	4504620.5	1594	0	-90°	205 (62.5)	0.215
VDH-04	492624	4504585	1597	0	-90°	190 (57.9)	0.223
VDH-06	492601	4504562	1600	0	-90°	220 (67.1)	0.195

**Historic data; Hole type, assay methodology, true thickness unknown*

10.2 Reverse Circulation Hole: RCEC18-02

Reverse circulation drill hole RCEC18-02 was collared within the non-magnetic circular core of the porphyry system (Figure 10-1). Drilling intersected oxidized, hornfelsed Harmony Formation (arkosic sandstone), and a feldspar porphyritic intrusion with strong quartz-sericite alteration over its 840 foot (256 meters) length. Copper oxide minerals are visible in rock chips from above a redox boundary depth of approximately 250 feet (76 m) below which iron-, copper-, and molybdenum-sulfide mineralization is visible. The hole encountered heavy groundwater making drilling increasingly inefficient with depth and the hole was terminated at 840 feet and later deepened by diamond drill coring.

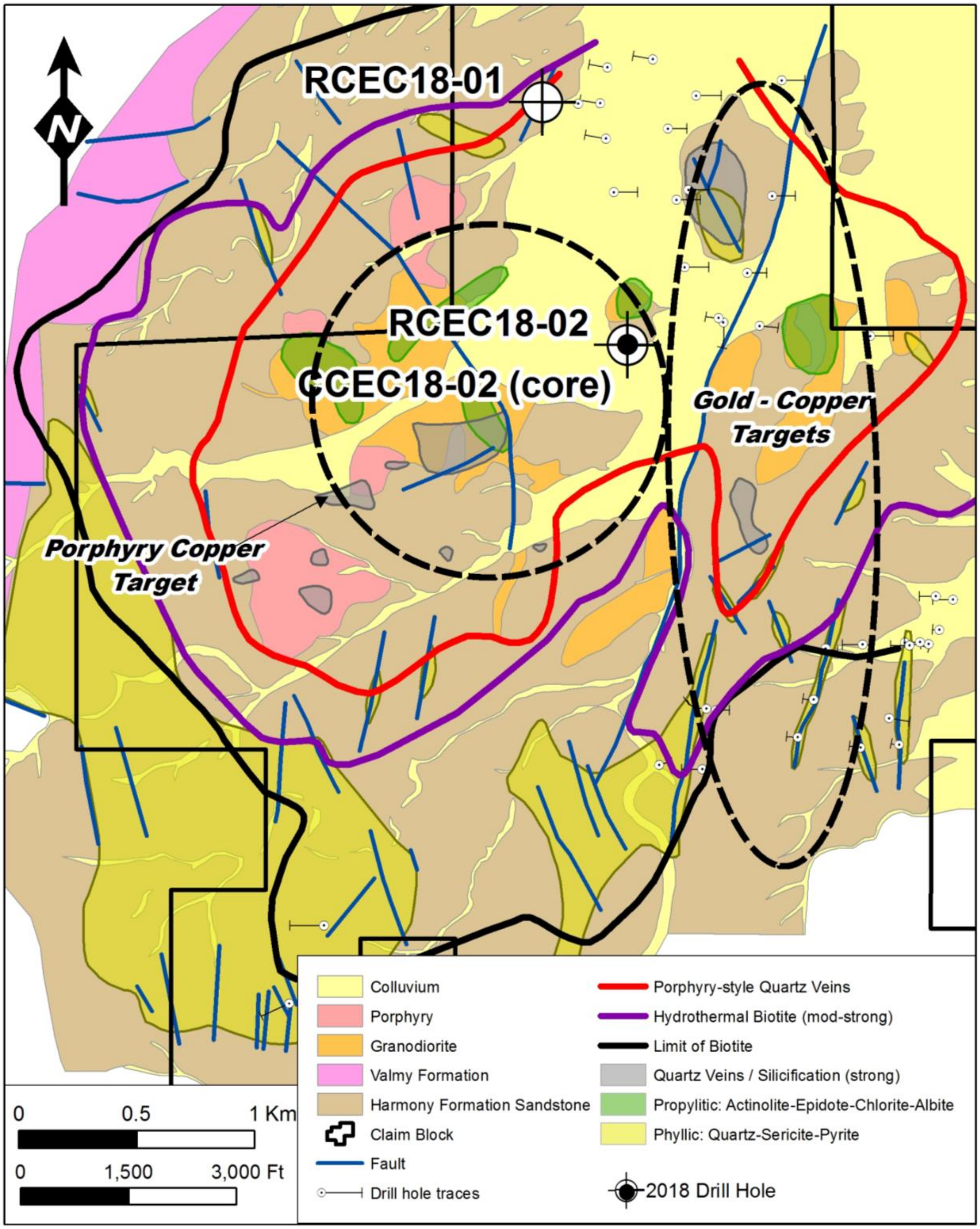
Assay results (Table 10.4) confirm visual recognition of minor (<1%) copper and molybdenum sulfides throughout the hole.

Table 10.4: Drill Hole RCEC18-02 Assay Statics Summary

From (ft)	To (ft)	Statistic	Cu (ppm)	Mo (ppm)	Au (ppb)	Ag (ppm)	As (ppm)	Bi (ppm)	Co (ppm)	Re (ppm)
0	840	Average	704	170		1.94	50.9	1.55	9.6	0.060
		Max:	2100	1455	140	11.3	800	68.3	87.8	0.417
		Min:	215	3.1	<5	0.51	2.6	0.12	2.2	0.002

Data set includes 167 samples collected on 5-foot intervals.
See Section 11.2.1 for assay protocol.
True thickness of drill intercepts is unknown.

Figure 10-1: Timberline Drill Hole Locations



10.3 Diamond Drill Core Hole: CCEC18-02

Diamond core hole CCEC18-02 deepened hole RCEC18-02 to a final depth of 1,497 feet (456 m) and targeted an un-tested flat-lying chargeability/resistivity (IP/Resistivity) anomaly referenced in historic reports. The hole intersected altered biotite hornfels (after Harmony Formation shales and arkosic sandstones) (Figure 10-2), feldspar porphyritic rocks, and hydrothermal breccia which is well developed from 1313.5 – 1360 feet (400.5 – 414.6 m) depth.

Alteration is pervasive throughout as silicification, sericite and pyrite alteration, and potassic alteration (as K-feldspar and biotite) becomes prominent down-hole. Quartz stock-work veining is common and cuts all rock-types.

Pyrite, chalcopyrite, and molybdenite occur throughout the host rock hornfels, intrusives, and breccia as fine irregular-shaped disseminations, <1 mm to 2 cm-thick veinlets and veins, irregular clots up to 1 cm across, and as coatings on fracture surfaces (Figure 10-3). Local semi-massive arsenopyrite veins up to two inches (5 cm) wide are also present. In the breccias (Figure 10-4), mineralization is typically found with quartz as matrix material supporting fragments, and in irregular veinlets and fracture-coatings.

Copper and molybdenum mineralization is present throughout the assay section of CCEC18-02 (Table 10.5, and is best developed in the hydrothermal breccia between 1,313.5 - 1,360 feet (400.5 – 414.6 meters).

Mineralization in CCEC18-02 is distinctly polymetallic (Cu-Mo-Au-Ag-Re) (Table 1) as compared to primary copper in RC drill hole RCEC18-01 which is located 1 km to the north-northwest at the Valmy copper area (Figure 1). RCEC18-01 intersected 110 feet (34 meters) of 0.44% copper as chalcocite within a near-surface, cross-cutting altered porphyry intrusive. The chalcocite mineralization occurs within a broader interval (500 feet; 152 meters) of 0.21% copper (see press release dated September 27, 2018), much of which is oxidized.

Breccia-Zone Assay Results

In addition to copper, molybdenum, gold and silver, assays from the zone of mineralized hydrothermal breccia show general consistency and enrichment in rhenium, potassium, iron, and sulfur (Table 10.5). Rhenium is generally associated with molybdenum, potassium reflects intense potassic (biotite and Kspar) alteration, and iron and sulfur are associated with abundant pyrite and chalcopyrite sulfides. These characteristics suggest a robust multi-staged mineralizing system exists at Elder Creek.

Table 10.5: Assays from Core Hole CCEC18-02 Hydrothermal Breccia Zone

From (feet)	To (feet)	Total (feet)	From (meters)	To (meters)	Total (meters)	Au (g/t)	Ag (g/t)	Cu %	Mo ppm/%	Re ppm	K %	Fe %	S %
840	1497	657.0	256.1	456.4	200.3	-	4.1	1,450	730	0.163	4.2	2.6	0.9
Including													
1313.5	*1360*	*46.5*	*400.5*	*414.6*	*14.2*	*0.126*	*25.5*	*1.20%*	*0.31%*	*0.980*	*4.9*	*5.1*	*2.8*
Including													
1313.5	1318.0	4.5	400.5	401.8	1.4	0.042	11	0.41%	2060	0.532	5.6	6.5	1.8
1318.0	1322.0	4.0	401.8	403.0	1.2	0.140	25	1.06%	1360	0.361	5.0	5.6	2.4
1322.0	1323.0	1.0	403.0	403.4	0.3	0.263	59	2.84%	1895	0.470	4.8	7.7	5.5
1323.0	1326.5	3.5	403.4	404.4	1.1	0.152	39	1.55%	3480	0.881	5.4	6.0	3.5
1326.5	1328.0	1.5	404.4	404.9	0.5	0.127	27	1.57%	7170	1.860	5.2	6.4	3.6
1328.0	1330.0	2.0	404.9	405.5	0.6	0.100	23	1.19%	11900	4.050	4.9	5.3	3.5
1330.0	1334.0	4.0	405.5	406.7	1.2	0.104	27	1.43%	7970	2.570	4.5	5.6	3.5
1334.0	1336.5	2.5	406.7	407.5	0.8	0.112	32	1.64%	5880	2.680	4.8	6.2	3.5
1336.5	1338.0	1.5	407.5	407.9	0.5	0.115	31	1.45%	2340	1.065	4.5	5.4	3.3
1338.0	1338.5	0.5	407.9	408.1	0.2	0.309	73	3.52%	5660	2.680	3.6	8.6	6.7
1338.5	1339.0	0.5	408.1	408.2	0.2	0.116	39	1.93%	2360	0.890	4.8	4.9	3.5
1339.0	1342.0	3.0	408.2	409.1	0.9	0.132	37	1.86%	2260	0.777	4.8	5.4	3.6
1342.0	1346.5	4.5	409.1	410.5	1.4	0.060	16	0.71%	2230	0.564	4.8	3.3	2.1
1346.5	1350.0	3.5	410.5	411.6	1.1	0.026	7	0.29%	882	0.148	4.9	3.6	1.5
1350.0	1354.0	4.0	411.6	412.8	1.2	0.116	18	0.71%	1085	0.151	4.7	3.5	2.0
1354.0	1354.5	0.5	412.8	413.0	0.2	0.351	47	2.12%	1305	0.179	4.6	5.7	4.5
1354.5	1355.5	1.0	413.0	413.3	0.3	0.576	41	2.48%	1725	0.223	5.0	5.0	3.8
1355.5	1359.0	3.5	413.3	414.3	1.1	0.232	26	1.22%	920	0.117	4.9	4.1	2.5
1359.0	1360.0	1.0	414.3	414.6	0.3	0.075	30	1.36%	1830	0.218	4.4	3.5	2.6

See Section 11.2.1 for assay protocol
True thickness of drill intercepts is unknown

Figure 10-2: Drill Core Hole CCEC18-02 Photos showing altered biotite hornfels (after Harmony Formation sandstone) and porphyritic intrusive at Elder Creek. Scale: HQ drill core diameter = 6.5 mm (2.6 inches).

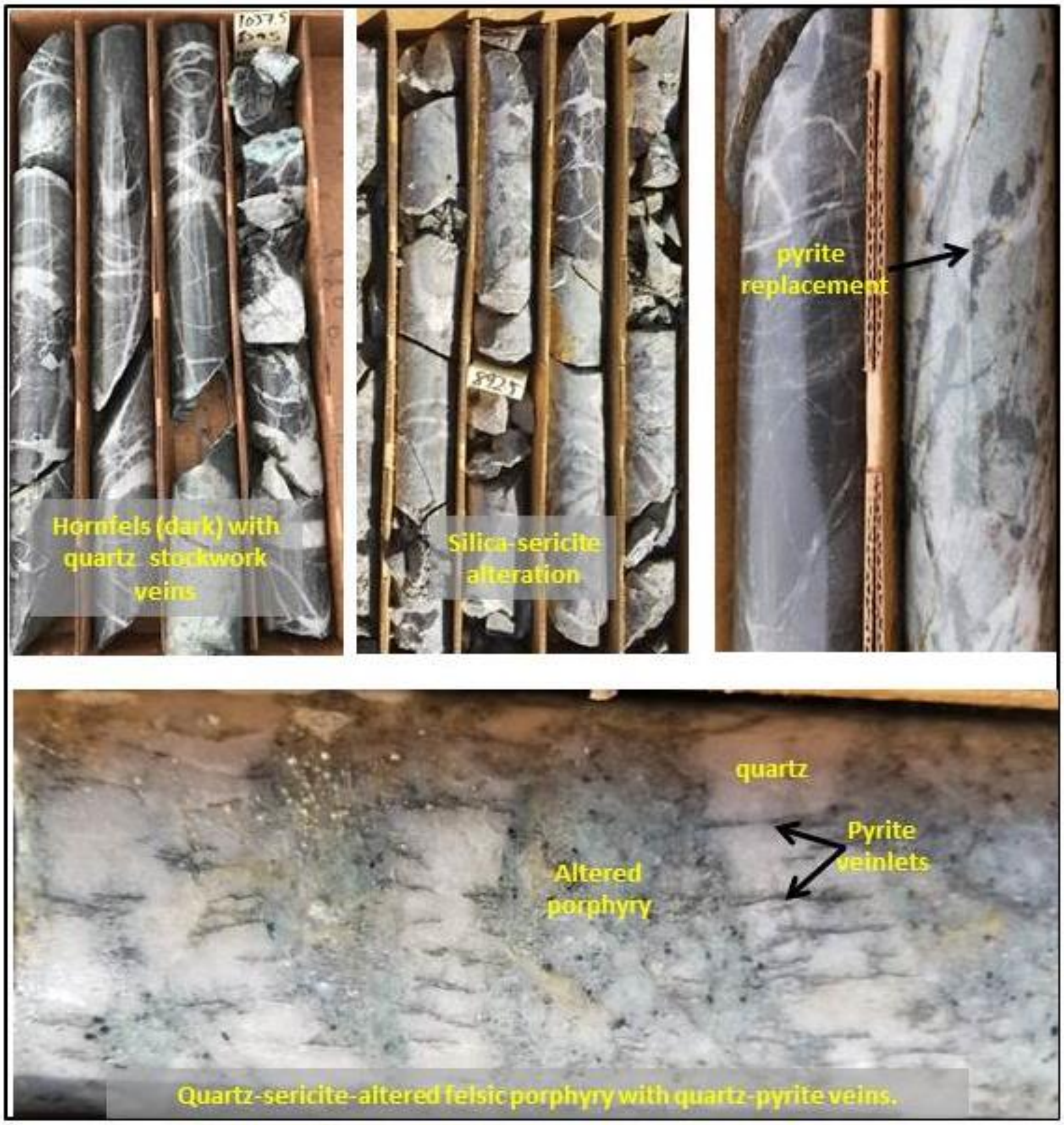


Figure 10-3: Drill core CCEC18-02 core photos showing typical sulfide mineralization styles at Elder Creek. Scale: HQ drill core diameter = 6.5 mm (2.6 inches).

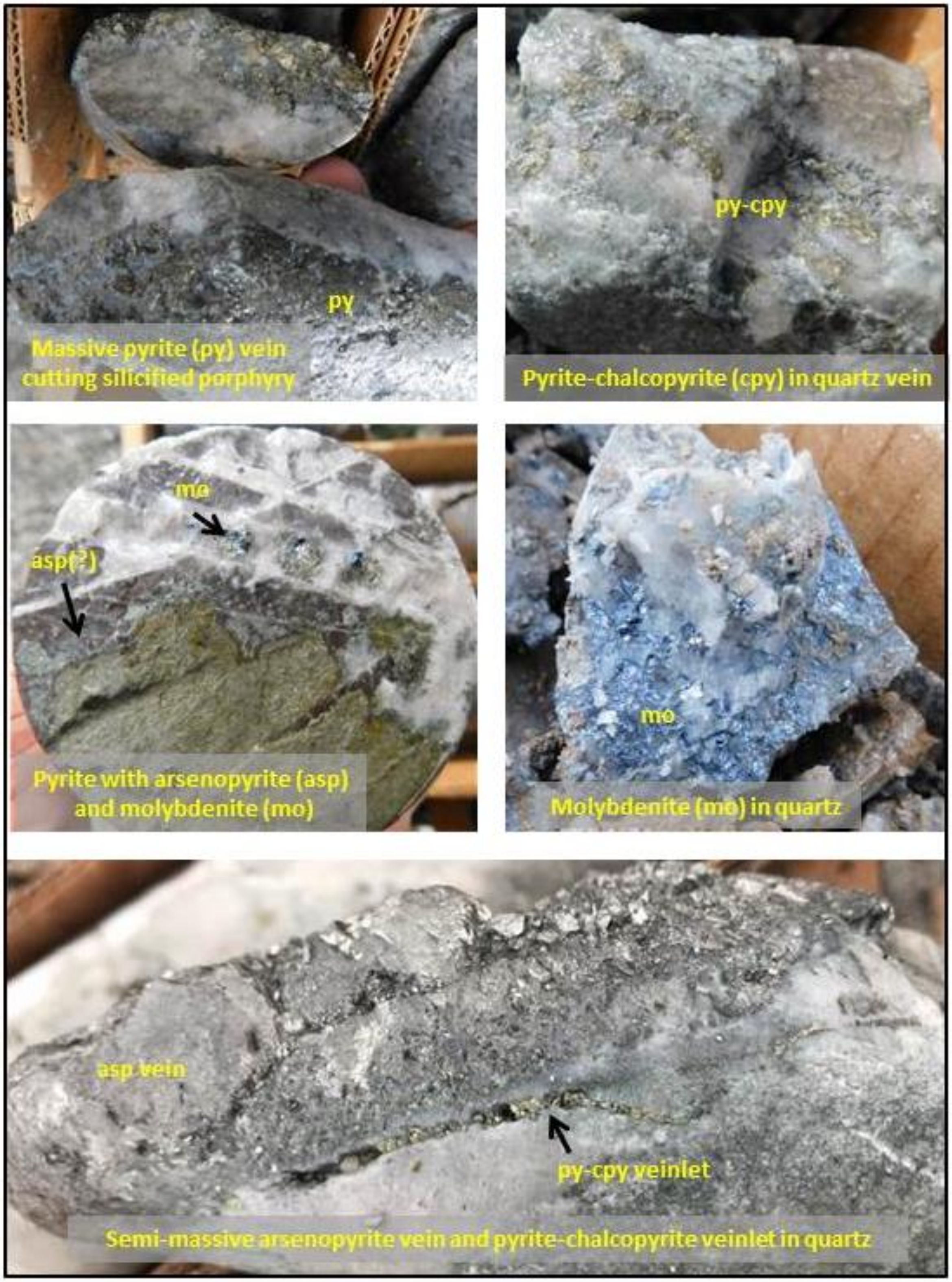


Figure 10-3: (continued)

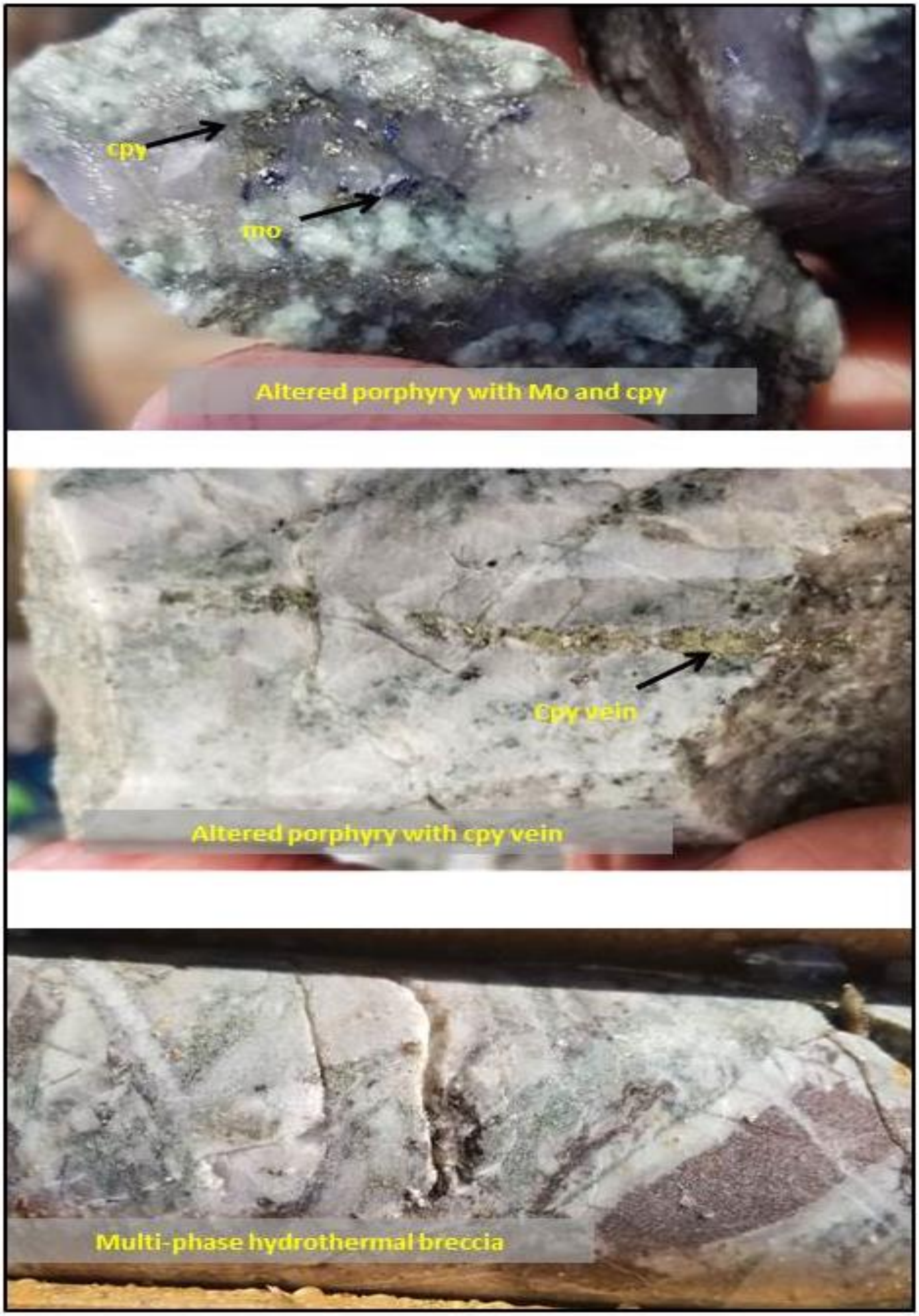


Figure 10-4: Chalcopyrite and Molybdenite Mineralization in Altered Hydrothermal Breccia

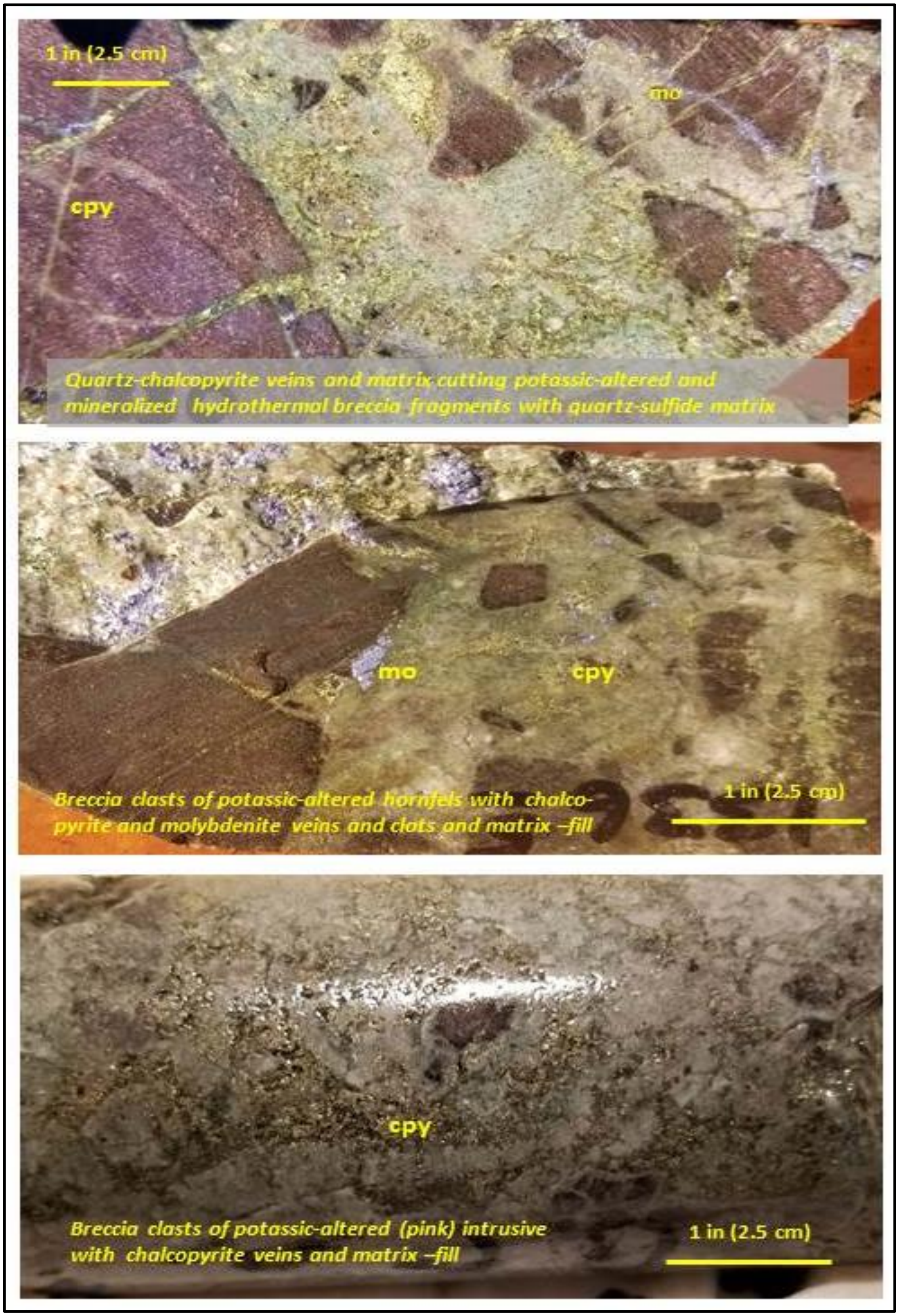
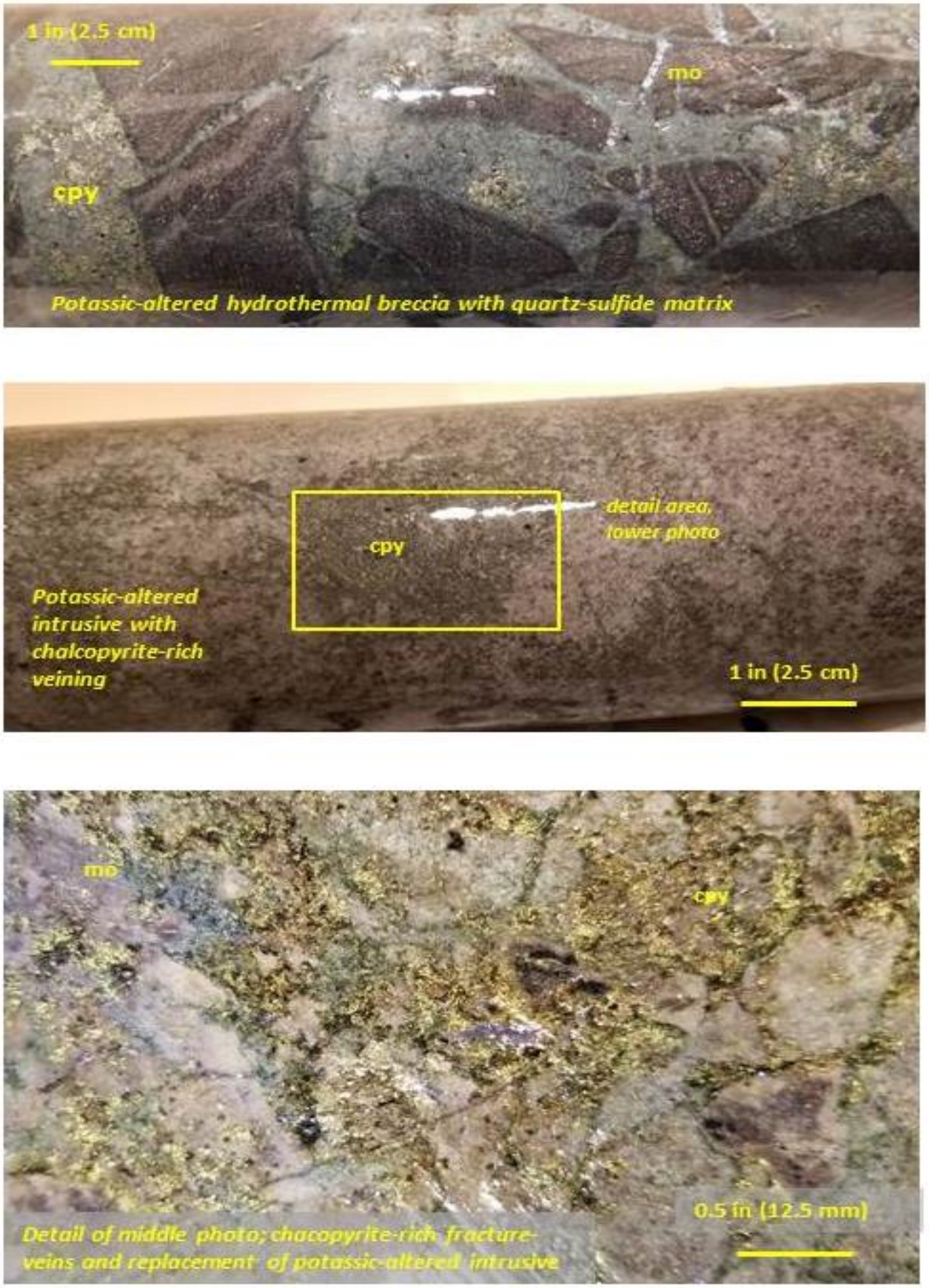


Figure 10-4: (continued)



11.0 SAMPLE PREPARATION, ANALYSES AND SECURITY

11.1 PREVIOUS OPERATORS

Between 2010 and 2012, US Gold Corporation (predecessor to McEwen Mining) collected over 5,000 soil and rock samples at Elder Creek which were analyzed by standard 52 element ICP along with Au by AA. In addition, AGEI collected 41 rock samples in 2013 from mineralized outcrops at Elder Creek. Analysis was completed including 48 element ICP and Au by AA at ALS Chemex.

No record is available of sample collection procedures or Chain of Custody security protocols for the sampling or for incorporation of independent standards and blanks in the sample suites. All assays by US Gold were conducted by ALS Chemex or ALS Minerals for which Laboratory Certificates have been reviewed and confirmed by the author; the Certificates include laboratory methodology for sample preparation along with assay results. No record has been identified for a standards, duplicate, or blanks assay program for QA/QC control.

Sample results were compiled by US Gold into separate soil and rock databases including location coordinates from which ArcGIS map plots were developed for analysis. It is the author's judgement that the results are internally consistent in trends and magnitude of anomalies in multi-elements (see section 9.2.3) and are consistent with visual outcrop observations and independent sampling (see Section 12.1.1).

In addition, as the sampling was done by respected, reputable mineral exploration firms it is believed by the author that industry standards and best practices were likely employed at the time.

No information is available on historic drilling methods, sampling preparation and sampling methods, and analytical procedures used by other past operators at Elder Creek.

11.2 TIMBERLINE RESOURCES CORPORATION

11.2.1 Surface Rock Samples

Twelve samples were collected by Timberline from select outcrop locations at Elder Creek (see Section 12; Table 12.1). Sample preparation included sealing by tie-strings in cotton sample bags, numbering, and recording of a UTM location and a sample description. Upon completion of sampling, the set of 12 individual samples were bundled in a single rice-bag which was secured with a zip-ties and hand delivered by the Company's Qualified Person to ALS Global in Elko, NV where a sample-submittal form was completed.

Sample preparation and analytical procedures employed by ALS are summarized below (Table 11.1).

Table 11.1: ALS Preparation and Analytical Procedures for Rock Samples

SAMPLE PREPARATION	
ALS CODE	**DESCRIPTION**
WEI-21	Received Sample Weight
CRU-21	Crush entire sample >70% -6 mm
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2 mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 m
SND-ALS	Send samples to internal laboratory

ANALYTICAL PROCEDURES		
ALS CODE	**DESCRIPTION**	**INSTRUMENT**
Au-GRA21	Au 30g FA-GRAV finish	WST-SIM
ME- ICP41	35 Element Aqua Regia IPC-AES	ICP-AES
Ag-OG46	Ore Grade Ag - Aqua Regia	ICP-AES
ME-OG46	Ore Grade Elements - Aqua Regia	ICP-AES
Cu-OG46	Ore Grade Cu - Aqua Regia	ICP-AES
Pb-OG46	Ore Grade Pb - Aqua Regia	ICP-AES
Au-AA23	Au 30g FA-AA finish	AAS
The results of the assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim or deposit has been determined based on the results of assays of multiple samples of geological materials collected by the prospective investor or by a qualified person selected by him/her and based on an evaluation of all engineering data which is available concerning any proposed project. Statement required by Nevada State Law NRS 519		

11.2.1 RC and Drill Core Samples

Collection of reverse circulation (RC) percussion drill samples for Timberline drill holes RCEC18-01 and RCEC18-02 was completed by a designated, specific employee of New Frontier Drilling Company under the supervision of a Timberline representative. Sample material was bagged directly from the cyclone and sample splitter, tied, and arranged in sequential order for drying. Quality control in assays was monitored by the insertion of numerous blind certified standard reference materials and blanks into each sample shipment. The samples were collected on-site by ALS USA Inc. (ALS) and were transported to Elko, Nevada for sample preparation. Samples were assayed by ALS in Reno, Nevada for gold by Fire Assay of a 30 gram (1 assay ton) charge with an AA finish (ALS code Au-AA23). Samples were also assayed for a 48 multi-element four acid ICP-MS (code ME-MS61) geochemical suite in Vancouver, B.C.

Samples of drill core from hole CCEC18-02 were transferred daily by Company employees to a storage facility in Battle Mountain, Nevada. Upon completion of logging, core was transferred to Front Range Geological in Elko, Nevada for cutting by diamond saw, marking, and sampling into intervals from approximately 1 foot, based on geologic controls, to up to approximately 10 feet in length. Upon completion of sampling, standards and blanks were inserted into the sample sequence which was thereafter delivered directly to ALS in Elko for preparation and assay exactly as with reverse circulation samples.

Preparation of drill core and RC drill cuttings was identical to rock samples (Table 11.2); however, analysis differed in use of a four-acid digestion and determination of 48 elements by ICP-MS. The remaining core is stored in locked storage in Battle Mountain.

Table 11.2: ALS Preparation and Analytical Procedures for Drill Hole Samples

SAMPLE PREPARATION	
ALS CODE	**DESCRIPTION**
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test
CRU-31	Fine crushing - 70% <2 mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 m
SND-ALS	Send samples to internal laboratory

ANALYTICAL PROCEDURES		
ALS CODE	**DESCRIPTION**	**INSTRUMENT**
ME- MS61	48 element four acid IPC-MS	
ME-OG62	Ore Grade Elements - Four Acid	ICP-AES
Cu- OG62	Ore Grade Cu - Four Acid	
Au-AA23	Au 30g FA-AA finish	AAS
The results of the assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim or deposit has been determined based on the results of assays of multiple samples of geological materials collected by the prospective investor or by a qualified person selected by him/her and based on an evaluation of all engineering data which is available concerning any proposed project. Statement required by Nevada State Law NRS 519		

11.2.3 QUALITY ASSURANCE/QUALITY CONTROL

Geochemical reference standards were included in Timberline drill sample submittals to ALS along with a blank consisting of clean silica sand. The reference standards were obtained from Shea Clark Smith, Minerals Exploration & Environmental Geochemistry based out of Washoe Valley, Nevada, included:

- MEG-A106009X: 0.136% Cu
- MEG-A106010X: 0.215% Cu
- MEG-A106011X: 0.291% Cu
- MEG-A106012X: 0.388% Cu
- MEG-A106013X: 0.574% Cu
- MEG-A106014X: 1.428% Cu

Blanks, standards, and duplicates were also included by ALS as a standard internal QA/QC protocol.

11.2.3.1 Standard Reference Material

Standard reference material (SRM) for copper was inserted approximately one every 20 samples. The standards were placed in the sample bag and inserted in with the samples at the drill rig for RC samples, or inserted in with drill core samples at Range Front Geologic during the core sampling process.

Table 11.3 documents ALS analysis of the standards. Visual inspection indicates close correlation between the standards value for copper and the ALS assay.

Table 11.3: Comparison of Certified Copper Standard and ALS Analysis

Sample No.	Standard No.	Certified Standard Value	ALS Assay
		Cu (ppm)	Cu (ppm)
RCEC18-1 100-105S	A106009X	1360	1330
RCEC18-2 100-105S		1360	1400
RCEC18-1 200-205S	A106010X	2150	2230
RCEC18-2 200-205S		2150	2180
RCEC18-2 500-505S		2150	2240
RCEC18-1 300-305S	A106011X	2910	3030
RCEC18-2 300-305S		2910	3070
RCEC18-2 700-705S		2910	3070
RCEC18-1 400-405S	A106012X	3880	4320
RCEC18-2 400-405S		3880	4110
RCEC18-2 600-605S		3880	4250
RCEC18-1 495-500S	A106013X	5740	5750
RCEC18-2 465-470S		5740	5950
RCEC18-2 800-805S	A106014X	14280	1.42%

11.2.3.2 Blanks

A total of 15 blank samples were submitted during the 2018 drilling program for an insertion frequency of approximately 20%. Table 11.4 reports assays in the blank for 8 key parameters at Elder Creek. Analytical results are generally consistent except for variation in the first and to a lesser degree the second blank for copper.

Table 11.4: Assays of Key Parameters in 2018 Elder Creek Drilling Sample Blank

SAMPLE NO.	ME-MS61	ME-MS61	Au-AA23	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
	Cu	Mo	Au	Ag	As	Bi	Co	Re
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
RCEC18-1 100-105B	538	4.99	<0.005	0.62	7.9	0.21	0.6	<0.002
RCEC18-1 200-205B	71.1	3.83	<0.005	0.23	8.3	0.09	1.3	0.005
RCEC18-1 300-305B	39.2	1.82	0.007	0.15	6.1	0.06	1.2	<0.002
RCEC18-1 400-405B	16.2	5.98	<0.005	0.09	4.8	0.08	0.8	0.008
RCEC18-1 495-500B	12.3	2.42	<0.005	0.06	2.3	0.03	0.6	<0.002
RCEC18-2 100-105B	33.4	3.07	<0.005	0.1	0.7	0.04	0.5	<0.002
RCEC18-2 200-205B	11.1	0.98	<0.005	0.07	0.5	0.04	0.4	<0.002
RCEC18-2 300-305B	19.1	2.84	<0.005	0.08	0.5	0.03	0.5	<0.002
RCEC18-2 400-405B	16.3	2.46	<0.005	0.06	0.6	0.02	0.3	<0.002
RCEC18-2 465-470B	12.7	3.73	<0.005	0.04	0.8	0.03	0.3	0.002
RCEC18-2 550-555B	2.6	0.22	<0.005	0.03	0.4	0.01	0.2	<0.002
RCEC18-2 650-655B	4	1.1	<0.005	0.04	0.8	0.05	0.2	<0.002
RCEC18-2 750-755B	8.1	1.34	<0.005	0.08	2.3	0.09	0.2	<0.002
RCEC18-2 830-835B	3.9	2.06	<0.005	0.04	1.6	0.03	0.2	<0.002
CCEC18-2 1318-1322B	17.2	5.59	<0.005	0.06	0.7	0.05	0.3	0.002
CCEC18-2 1392-1394B	12.6	4.37	<0.005	0.06	0.9	0.05	0.4	<0.002

11.4 ALS GLOBAL LABORATORY Standards and Blanks

ALS Global has completed internal laboratory assay checks on every sample batch of Elder Creek rocks (grab samples, RC drilling chips, and diamond drill core) submitted by Timberline. The checks include internal standards, blanks and duplicates, along with systematic duplicates of samples. All assay batches have met ALS ranges.

11.5 LABORATORY ACCREDITATION

With the exception of soil and rock samples collected by US Gold in 2010 – 2012, no record is evident of the laboratories used for assay of exploration samples. During much of this period accreditation of laboratories was not common.

Currently, ALS is registered to ISO 9001:2008 and a number of their facilities have received ISO 17025 accreditations for specific laboratory procedures, according to their website.

11.6 RELATIONSHIP OF LABORATORY TO ISSUER

The author is unaware of any legal or beneficial corporate relationship between Timberline or McEwen (including predecessor companies) and ALS or historic laboratories which have analyzed soil, surface rock grab samples, drill core, or rotary drill cuttings from the Elder Creek property..

11.7 QP'S SUMMARY STATEMENT

The author has reviewed the geochemical sampling completed by Timberline, and the data compiled from previous operators. Original laboratory assay certificates, internal standards, along with cross-check with geologic outcrops were completed by Timberline.

It is the author's opinion that sample preparation, analyses, and security employed by Timberline meets the standards of the industry for a project at the stage of Elder Creek.

As the project is very early stage, the size of the Company's Standards and Blanks dataset is not large enough to definitively indicate if an issue is present with the possible exception of the silica sand blank dataset. Some variation is noted in the copper analysis in the blanks whereas no such variation was recognized in the ALS analysis of internal blanks. It is recommended that for future analysis, the company discontinue use of silica sand and acquire a blank from a certified standards supplier.

Nonetheless, the data collected to-date will provide an initial basis for QA/QC monitoring as the project progresses through additional drilling. It is recommended that future sampling include RC drilling field duplicates, and quartered duplicates of drill core be collected.

12.0 DATA VERIFICATION

12.1 DATA VERIFICATION BY TIMBERLINE

As part of due diligence review prior to acquisition of the property, Timberline completed a field review of the property geology, and reviewed all available geophysical and geochemical data. Outcrop reviews substantiated the project geology as defined by King (2011), and Theodore (1996), including occurrence of visible surface mineralization. This data was also reviewed by the author as part of this project review.

To verify the occurrence of mineralization Timberline collected 12 samples (18EC-0XX series) (Table 11.1) from outcrop for cross-check with assays compiled in the historic rock database. Timberline's samples were collected by the company's Qualified Person and hand delivered to ALS in Elko, NV for assay.

These 12 surface grab samples complement 41 rock samples (RDEC-XX and RDEH-XX series) collected in 2013 (Table 12.1) by previous operator, AGEI. Visual inspection (Figures 12-1, 12-2) of the Au and Cu data with the 2013 samples indicates the data to be consistent with those collected by Timberline.

Table 12.1: Assay results from Elder Creek Project Rock Sampling* **

SAMPLE	UTM-E	UTM-N	Au (ppb)	Cu (ppm)	SAMPLE	UTM-E	UTM-N	Au (ppb)	Cu (ppm)
18EC-001	492628	4504621	25	12,900	RDEC-16-1	492518	4502986	25	337
18EC-002	492628	4504621	63	8,990	RDEC-16-2	492523	4502977	156	845
18EC-003	492322	4503406	6	269	RDEC-17	492139	4503487	10	551
18EC-004	492255	4503167	15	363	RDEC-18	492279	4504871	27	481
18EC-005	492262	4503072	12	78,700	RDEC-19	492216	4504713	141	488
18EC-006	493037	4503669	47	9,640	RDEC-20	492130	4504610	66	60,070
18EC-007	493054	4503757	9	649	RDEC-21	492040	4504533	9	1,700
18EC-008	493279	4504045	9	109	RDEC-22	492135	4504519	5	513
18EC-009	493500	4503999	28	287	RDEC-23	492085	4503735	84	454
18EC-010	493196	4502887	17	530	RDEC-24	492004	4503793	<5	255
18EC-011	493226	4501796	2710	2,340	RDEC-25	491954	4503906	<5	1,060
18EC-012	492796	4501693	278	17,000	RDEC-26	491544	4503338	<5	196
RDEC0-1	492595	4504614	34	10,300	RDEC-27	491657	4503379	<5	91
RDEC-02	492942	4503703	<5	332	RDEC-28	491770	4503297	<5	44
RDEC-03	492915	4503600	83	15,300	RDEC-29	492658	4502247	23	6,060
RDEC-04	493325	4504253	12	101,000	RDEC-30	493077	4502242	<5	179
RDEC-05	493438	4503974	51	343	RREH-01	494169	4503559	13	19,500
RDEC-06	492338	4503987	<5	617	RREH-02	494160	4503622	36	27,700
RDEC-07	492261	4503753	<5	125	RREH-03	493916	4503189	295	2,700
RDEC-08	493668	4503279	1340	1,080	RREH-04	493719	4503456	18	539
RDEC-09	493673	4503288	366	2,560	RREH-05	494113	4501959	1950	3,940
RDEC-10	493695	4503140	24	689	RREH-06	494115	4501906	173	17,100
RDEC-11	493623	4502932	41	778	RREH-07	493222	4501929	2960	1,290
RDEC-12	493492	4502716	46	8,150	RREH-08	493027	4501524	402	163
RDEC-13	493889	4502413	465	83,700	RREH-09	492781	4501738	5	67,700
RDEC-14	493461	4503545	6	3,720	RREH-10	492801	4501738	66	-
RDEC-15	493325	4503392	5	447					

**Grab samples are selective and do not represent the true mineralization of the prospect*
***The above assays were determined by ALS USA Inc. from grab samples. The samples were crushed and pulverized and a fraction was selected for analyses. Gold was determined by 30 g Fire Assay with an Atomic Adsorption finish. Samples assaying over 10 ppm gold were re-assayed and completed with a gravimetric finish. Silver and base metals concentrations were analysed using Aqua Regia ICP-AES.*

Figure 12-1: Comparison of Copper in Timberline, AGEI, and Historic Rock Samples

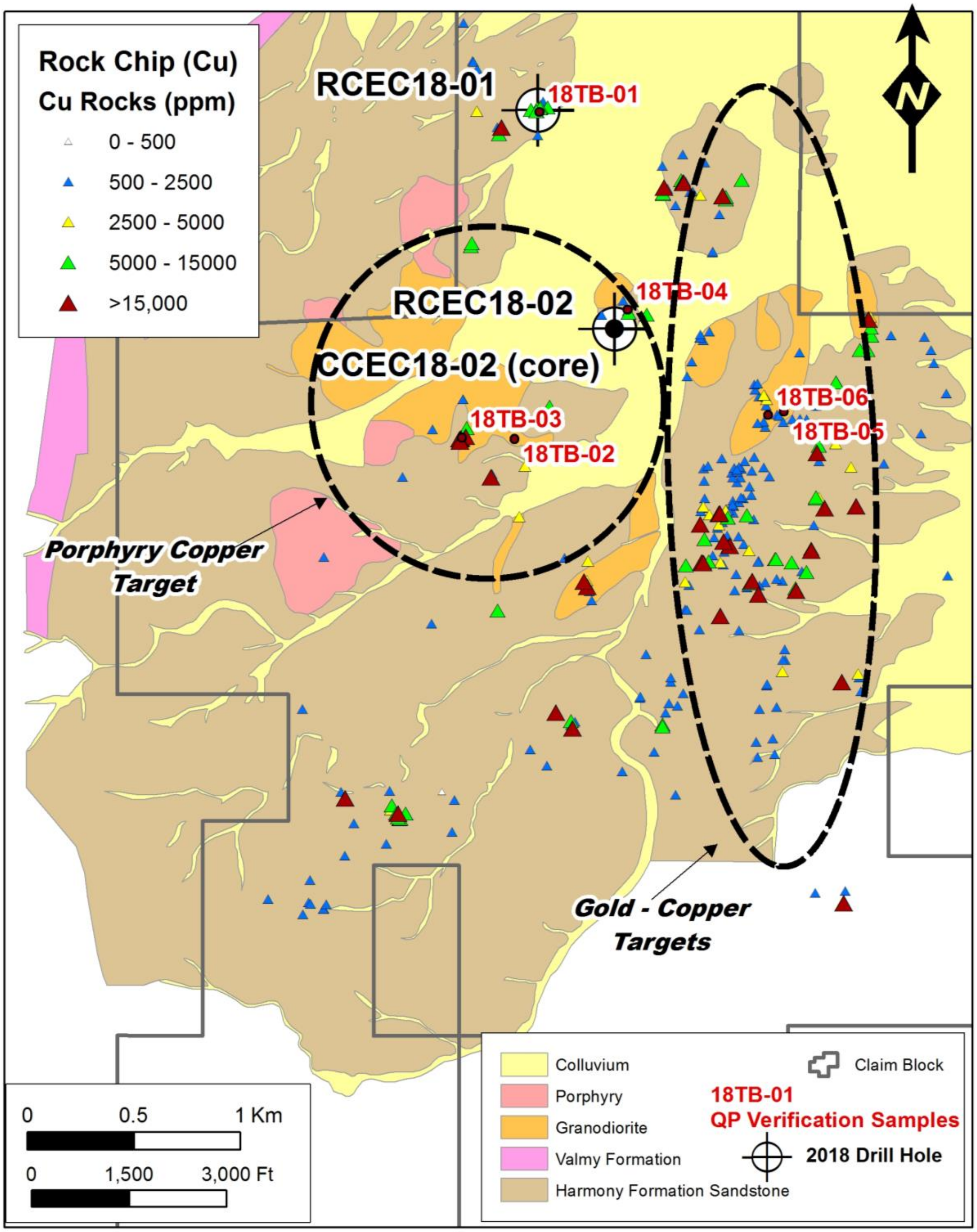
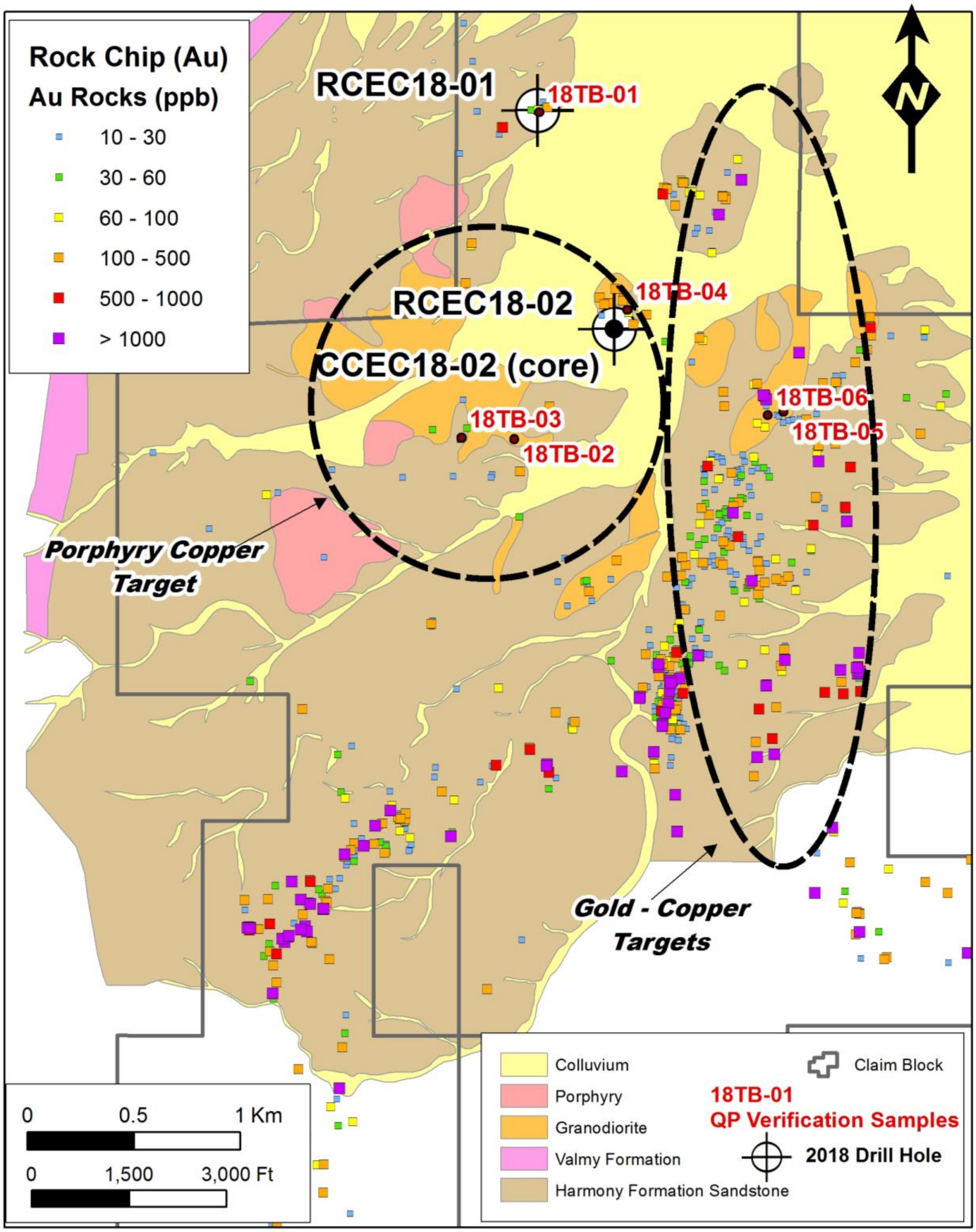


Figure 12-2: Comparison of Gold in Timberline, AGEI, and Historic Rock Samples



12.2 QP INDEPENDENT DATA VERIFICATION

12.2.1 Data and Document Examination

In preparing this report, the author reviewed technical documents and other historical information on the Elder Creek project. This data was provided by Timberline who gave unrestricted access to all of the available historic and current information related to the project consisting of various reports, maps and other technical data regarding geology, geophysics, geochemistry and reports as well as land tenure information. The information represents the products of activities from various exploration programs carried out by different companies intermittently since the 1960's. Most of this information is credible and of good technical quality, although incomplete in many instances. The information reviewed appears to have been gathered by competent and credible technical persons. Any inconsistencies in the information were checked and rechecked until those inconsistencies were reconciled to reasonable satisfaction.

Copies of the original laboratory assay certificates for soil and rock sampling by US Gold have been reviewed (See Section 11.1). No such records have been identified for historical drill sampling and assays. QA/QC data (standards, blanks, dupes) is also lacking in the historical assay information.

All assay certificates for samples, standards, and blanks for the current project work by Timberline were made available and were reviewed. Assay and geochemical data plotted on maps and sections were spot checked and no errors were detected.

12.2.2 Site Visit

The author visited the property on October 4, 2018 accompanied by Steven Osterberg for Timberline. The visit included examination of the surface of the property including drill-hole sites completed by Timberline. Many historic workings were examined with some selectively sampled for documentation of mineralization as reported. Drill cuttings and drill core were also examined.

12.2.1 Independent Verification Sampling

As further verification of geochemical data, the author has independently collected six samples from outcrops on the property as part of the property review associated with this report. Assay results (Table 12.2) are consistent with data generated by Timberline (Table 12.1) and by previous operators.

Table 12.2: Outcrop Sample Verification Assay Results

SAMPLE	UTM (NAD83) Location		Cu	Mo	Au	Ag	Al	As	Bi	Co	Fe
	East	North	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%
18TB-01	492623	4504612	7040	21	0.04	4.4	1.27	38	4	6	2.07
18TB-02	492507	4503074	1.12%	74	0.123	11.2	1.17	28	4	12	2.12
18TB-03	492258	4503080	266	141	<0.005	3.2	0.41	68	2	<1	0.7
18TB-04	493038	4503682	9060	119	0.171	5.5	0.83	161	9	13	2.7
18TB-05	493775	4503200	2400	32	0.349	4.7	1.62	2590	16	10	17.25
18TB-06	493700	4503185	2560	140	0.678	34.3	0.48	9670	32	21	20.2

The above assays were determined by ALS USA Inc. from grab samples. The samples were crushed and pulverized and a fraction was selected for analyses. Silver and base metals were determined by ALS method ME-ICP41 using Aqua Regia ICP-AES with overlimits by Cu-OG46. Gold was determined by 30 g Fire Assay with Atomic Adsorption finish by ALS method Au-AA23.

12.3 SUMMARY STATEMENT

Although historical rock and soil sample assays lack QA/QC standards of completeness (e.g. standards, blanks, duplicates), the author has no reason to doubt the integrity of the various historical assay results reported in the records, maps and cross-sections reviewed. Verification assays that have been taken appear to be reasonably consistent with assays of samples recently collected by Timberline and AGEI.

13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

No mineral processing and metallurgical testing has been completed on the Elder Creek project.

14.0 MINERAL RESOURCE ESTIMATES

There are no current mineral resources estimates for the Elder Creek project.

15.0 MINERAL RESERVE ESTIMATES

There are no current mineral reserve estimates for the Elder Creek project.

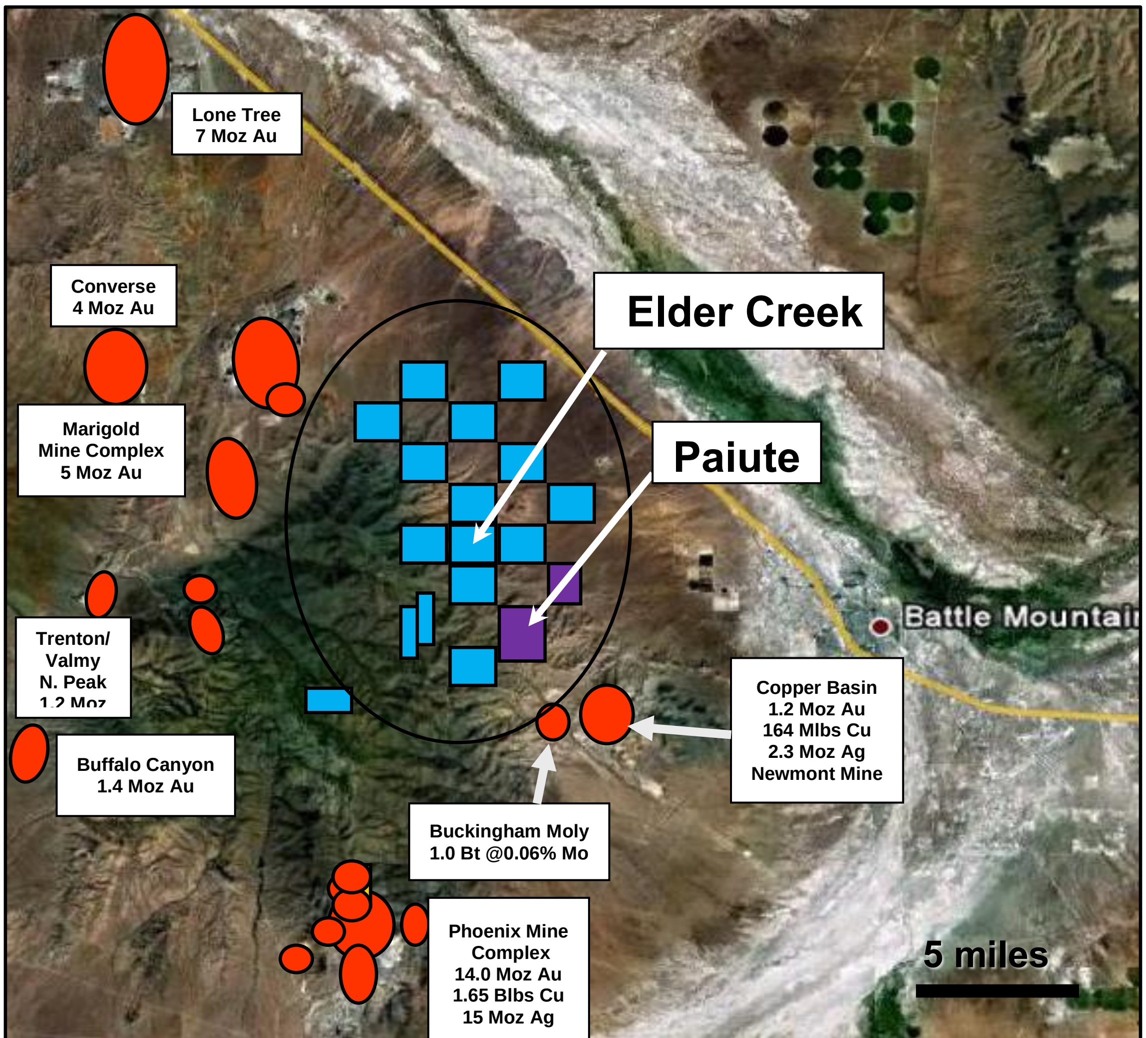
16.0 ADJACENT PROPERTIES

The Elder Creek project is located on the northeast side of the Battle Mountain Mining District (Figure 16-1) which currently produces gold ± copper from the Lone Tree and Phoenix Mines (Newmont) and the Marigold Mine (SSR Resources). Newmont owns several other properties in the district including Copper Basin, Buckingham Moly, Buffalo Canyon, Trenton/Valmy and Lone Tree. Waterton Global owns the Converse project.

Paiute is an early stage porphyry copper-gold exploration project controlled by Timberline and is the only property immediately adjacent to the Elder Creek project.

The author has not visited nor characterized mineralization at these properties. The reader is cautioned that mineralization at these properties is not necessarily indicative of the mineralization at Elder Creek.

Figure 16-1: Elder Creek and Adjacent Properties in the Battle Mountain Mining District



Mine data collected from Newmont and SSR annual reports; information on undeveloped projects compiled from internal data and historic information.

17.0 OTHER RELEVANT DATA AND INFORMATION

The author is unaware of any other data and/or information that would be relevant to this report that is not contained in one of the existing sections.

18.0 INTERPRETATION AND CONCLUSIONS

The Elder Creek Project is a large porphyry system with strong metal and alteration zoning and a footprint that exceeds 1.9 mi (3 km) by 1.2 mi (2 km) which is consistent with many global porphyry copper-gold systems. Salient features include:

- The property is primarily controlled by Timberline under an option to earn up to a 65% interest in the project from McEwen Mining.
- At least three phases of porphyritic granodiorite intrusions of late Eocene age (similar age to Copper Canyon – Phoenix)
- There is a central zone of stockwork quartz veins flanked by proximal potassic (biotite-K-feldspar) alteration and distal biotite-pyrite-pyrrhotite hornfels in Harmony Formation sandstones
- Late-stage quartz-sericite-pyrite (phyllic) alteration is associated with Au-Ag-bearing base-metal veins that flank the porphyry (e.g., Morning Star, Big Pay, Ridge and Gracie)
- Copper in the main soil / rock anomaly exceeds 300 ppm over a 1.2 mi (2 km) by 0.9 mi (1.5 km) zone with evidence of Cu-leaching (abundant jarosite)
- Metal zoning characterized by Cu, Mo, W, As, Bi and Li suggest that there are two centers of porphyry-style mineralization; the main center (Cu-Mo-W-Ag-As-Li) is inferred to be older and exposed at a higher level than the younger, eastern center (Cu- Mo-W-Au-As-Bi), which may host a mineralized cupola at depth
- USGS fluid-inclusion study confirms higher temperatures (> 450°C) and salinities (> 40% NaCl equiv.) from quartz veins in the eastern center
- An airborne-magnetic high has the appearance of a donut, which may be related to magnetic biotite-pyrite-pyrrhotite hornfels intruded by a non-magnetic granodiorite intrusive core
- Gravity data shows a similar donut pattern, the significance of which requires further explanation but may relate to the differences in density between the hornfelsed sandstones (more dense) and the granodiorite intrusions (less dense)
- Recent drilling intersected significant widths of copper mineralization that include copper oxides (malachite, azurite, neotocite) and copper sulfides (chalcopyrite, and minor bornite) with associated molybdenite.
- Assays confirm the presence of a multi-element (Cu-Mo-Ag-Au-Re) mineralized system.

As an early stage project with substantial history, it is concluded that certain risk is recognized as the incomplete record of historic exploration data may preclude recognition that some target areas have been previously drill tested. The potential impact of this risk is that certain targets could be unknowingly re-drilled. Nonetheless, the risk is mitigated to a degree as state-of-the art multi-element assay data would be of significant added value to comprehensive exploration of the project area.

19.0 RECOMMENDATIONS

Historic data and recent results of exploration by Timberline support advancing the Elder Creek project through additional exploration. Recommendations for the Elder Creek Project include:

- Complete detailed surface mapping with emphasis on the property core and surrounding historic mine and prospects
- Focus on mapping (1:2,000-scale) of quartz vein-, sulfide mineral- and fracture- abundances, intrusive types, hydrothermal alteration of hornblende- and feldspar-sites, and jarosite / goethite ratios
- Create a series of interpretive map overlays that emphasize the key elements mapped, including: 1) intrusions, faults, fracture- and quartz vein-abundances; 2) sulfide mineral abundance and jarosite-goethite ratio; and 3) hydrothermal alteration, particularly the geometry of late-stage phyllic alteration zones which may provide vectors to the porphyry centers
- Complete compilation of historic drill-data, including geology, alteration, mineralization, oxidation and assays into a central digital database
- Process surface geochemical data for alteration indices (e.g., Al_2O_3 / Na_2O and Na_2O+K_2O / $CaO+ Na_2O+K_2O$) within intrusive and sandstone host rocks to assist in recognition of hydrothermal alteration in areas of poor exposure
- Additional geochemical soil and rock sampling is recommended between the Morning Star and Big Pay mines and in the northern part of the project area (northern part of section 1 and the entirety of section 36)
- Acquire digital data and reprocess magnetic, gravity and topographic data using algorithms that enhance gradients over a range of wavelengths
- If the above activities yield positive results, then each porphyry center should be drill tested by one to two deep diamond drill holes to depths of about 2500 ft (~760 m), for a total of 5,000 feet (~1500 m)
- Additional drilling should be completed on the copper oxide initially tested by Timberline drill hole RCEC18-01 to determine the limit of oxide copper laterally and at depth.
- Complete detailed mapping/prospecting of the Gracie mine area
- Complete IP/Resistivity orientation lines over the project area for verification of deep chargeability anomaly(s). Survey should extend to and cover the Gracie Mine area as a prospective structural gold-copper mineralization target.

Estimated costs of the work program are summarized in Table 19.1:

Table 19.1: Recommended Elder Creek Work Program

Item	Estimated Cost
Geologic Mapping: Detailed Porphyry area	$ 50,000
Mapping Gracie Mine area	$ 25,000
Geophysics Survey (IP/Resistivity) and data processing	$ 150,000
Geochemical Sampling: Soils and Rocks	$ 25,000
Drilling	$ 1,000,000
Total:	**$ 1,250,000**

20.0 REFERENCES

Barton, M.D., Ilchik, R.P., and Marikos, M.A., 1991, *Metasomatism, Reviews in Mineraology*, v. 26, p. 321-350.

Churkin, M. Jr., and Kay, M., 1967, *Graptolite-Bearing Ordovician Siliceous and VolcanicRocks, Northern Independence Range, Nevada*, Geological Society of America Bulletin, v.78, p. 651-668.

Dickinson, W.R., 2002, *The Basin and Range Province as a Composite Extensional Domain*, International Geology Review, v. 44, p. 1-38.

Dickinson, W.R., 2006, *Geotectonic Evolution of the Great Basin*, Geosphere, V. 2, p. 353-368.

Doebrich, J.L., and Theodore, T.G., 1995, *Geologic History of the Battle Mountain Mining District, Nevada, and Regional Controls on the Distribution of Mineral Systems*, *in* Coyner, A.R., and Fahey, P.L., eds., Geology and Ore Deposits of the American Cordillera, Geological Society of Nevada, Reno/Sparks, Nevada, v. 1, p. 453-483.

Einaudi, M.T., and Burt, D.M., 1982, *Terminology, Classification, and Composition of SkarnDeposits*, Economic Geology, v. 77, p. 745-754.

Garwin, S., 2014, *Elder Creek, Battle Mountain, Nevada: Geology, Mineralization and Exploration Significance,* Internal Presentation for Americas Gold Exploration, Inc.

Gilluly, J., and Gates, O., 1965, *Tectonic and Igneous Geology of the Northern Shoshone Range, Nevada*, United States Geological Survey Professional Paper 465, p. 153.

Gostyayeva, N., Theodore, T.G., and Lowenstern, J.B., 1996, *Implications of Fluid-Inclusion Relations in the Elder Creek Porphyry Copper System, Battle Mountain Mining District, Nevada, United States Geological Survey*, Open-File Report 96-268, p. 60.

Gustafson, L.B., and Hunt, J.P., 1975, *The Porphyry Copper Deposit at El Salvador, Chile*, Economic Geology, v. 70, p. 857-912.

Henry, C.D., and Ressel, M.W., 2000, *Eocene Magmatism of Northeastern Nevada: The Smoking Gun for Carlin-Type Gold Deposits*, *in* Cluer, J.K., Price, J.G., Struhsaker, E.M., Hardyman, R.F., and Morris, C.L., Geology and Ore Deposits 2000: The Great Basin and Beyond, Geological Society of Nevada, Reno, Nevada v 1. p. 365-388.

Humphreys, E.D., 1995, *Post-Laramide Removal of the Farrallon Slab, Western United States*, Geology, v. 23, p. 987-990.

Keeler, D., and Seedorff, E., 2010, *Structural Reconstruction of the Copper Basin Area, Battle Mountain District, Nevada*, Unpublished Master of Science Thesis, University of Arizona, p. 92.

King, Caleb A., 2011, *Geology, Alteration, and Mineralization of the Elder Creek Porphyry System, Battle Mountain, Nevada*, Prepublished Master of Science Thesis, University of Arizona

Madrid, R.J., and Roberts, R.J., 1991, *Compendium of Stratigraphy and Structure of the Battle Mountain Gold Belt*, *in* Buffa, R.H., and Coyner, A.R., eds., Geology and Ore Deposits of the Great Basin Field Trip Guidebook Compendium, Geological Society of Nevada, Reno, Nevada, v. 2 p. 910-926.

McKee, E.H., 1992, *Potassium-Argon and 40Ar/39Ar Geochronology of Selected Pltuons in the Buckingham Area*, *in* Theodore, T.G., Blake, D.W., Loucks, T.A., and Johnson, C.A., eds., Geology of the Buckingham Stockwork Molybdenum Deposit and Surrounding Area, Lander County, Nevada, United States Geological Survey Professional Paper 798-D, p. 36-40.

McKee, E.H., 1995, *Cenozoic Magmatism and Mineralization in Nevada*, *in* Coyner, A.R., and Fahey, P.L., eds., Geology and Ore Deposits of the American Cordillera, Geological Society of Nevada, Reno/Sparks, Nevada, v. 2, p. 581-588.

Murchey, B.L., 1994, *Radiolarians in the Ordovician Valmy Formation and Devonian Scott Canyon Formation*, in Theodore, T.G., Preliminary Geologic Map of the Snow Gulch Quadrangle, Humboldt and Lander Counties, Nevada, United States Geological Survey, Open File Report 94-436, p. 23-24.

Poole, F.G., Stewart, J.H., Palmer, A.R., Sandberg, C.A., Madrid, R.J., Ross, R.J., Hintze, L.F., Miller, M.M., and Wrucke, C.T., 1993, *Latest Precambrian to Latest Devonian Time: Development of a Continental Margin*, in Burchfiel, B.C., Lipman, P.W., and Zoback, M.L., eds., The Cordilleran Orogen: Conterminous U.S., Geological Society of America, Boulder, Colorado, The Geology of North America v. G-3, p. 9-56.

Proffett, J.M., 1977, *Cenozoic Geology of the Yerington District, Nevada and Implications for the Nature and Origin of Basin and Range Faulting*, Geological Society of America Bulletin, v. 88, p. 247-266.

Roberts, R.J., 1964, *Stratigraphy and Structure of the Antler Peak Quadrangle Humboldt and Lander Counties Nevada*, United States Geological Survey Professional Paper 459-A, p. 93.

Seedorff, E., 1991, *Magmatism, Extension, and Ore Deposits of Eocene to Holocene Age in the Great Basin - Mutual Effects and Preliminary Proposed Genetic Relationships*, *in* Raines, G.L., Lisle, R.E., Schafer, R.W., and Wilkinson, W.H., eds., Geology and Ore Deposits of the Great Basin, Geological Society of Nevada, Reno/Sparks, Nevada, v. 1,p. 133-178.

Seedorff, E., Hasler, R.W., Breitrick, R.A., Fahey, P.L., Jeanne, R.A., Shaver, S.A., Stubbe, P., Troutman, T.W., and Manske, S.L., 1995, *Overview of the Geology and Ore Deposits of the Robinson District, With Emphasis on Its Post-Mineral Structure*, *in* Green, S.M., and Struhsacker, E.M., eds., Geology and Ore Deposits of the American Cordillera Field Trip Guidebook Compendium, Geological Society of Nevada,, Reno/Sparks, Nevadap. 87-99.

Stewart, J.H., 1980, *Geology of Nevada: A Discussion to Accompany the Geologic Map of Nevada, Nevada Bureau of Mines and Geology*, Special Publication 4, p. 136.

Theodore, T.G., and Nash, J.T,. 1973, *Geochemical and Fluid Zonation at Copper Canyon, Lander County, Nevada*, Economic Geology, v. 68., p. 565-570.

Theodore, T.G., Silberman, M.L., and Blake, D.W., 1973, *Geochemistry and Potassium-Argon Ages of Plutonic Rocks in the Battle Mountain Mining District, Lander County, Nevada*, United States Geological Survey Professional Paper 798-A, p. 24.

Theodore, T.G., Blake, D.W., and Kretschmer, E.L., 1982, *Geology of the Copper Canyon Porphyry Copper Deposit, Lander County, Nevada*, *in* Titley, S.R., ed., Advances in Geology of the Porphyry Copper Deposits, Southwestern North America, Tucson, University of Arizona Press, p. 543-550.

Theodore, T.G., 1994, *Preliminary Geologic Map of the Snow Gulch Quadrangle, Humboldt and Lander Counties, Nevada*, Open File Report 94-436, United States Geological Survey, p. 31.

Theodore, T.G., 1995, *Geology and Implications of Silver/Gold Ratios of the Elder Creek Porphyry Copper System, Battle Mountain Mining District, Nevada*, *in* Coyner, A.R., and Fahey, P.L., eds., Geology and Ore Deposits of the American Cordillera, Geological Society of Nevada, Reno/Sparks, Nevada, v. 3,p. 1557-1571.

Theodore, T.G., 2000, *Geology of Pluton-Related Gold Mineralization at Battle Mountain, Nevada*, *in* Force, E.R., ed., Geology of Pluton-Related Gold Mineralization at Battle Mountain, Nevada: Tucson, Arizona, Center for Mineral Resource Science, p. 271.

21.0 CERTIFICATE OF QUALIFIED PERSON- Thomas Bidgood

I, Thomas W. Bidgood of *Arvada, Colorado* do hereby certify that as an author of this report called "A Technical Report of the Elder Creek Copper-Gold Project, Lander and Humboldt Counties, Nevada, USA, November 28, 2018, I hereby make the following statements:

1. I am a Consulting Geologist and carried out this assignment for Timberline Resources Corporation, phone number 208.664.4859.
2. This certificate applies to the Technical Report titled "A Technical Report of the Elder Creek Copper-Gold Project, Lander and Humboldt Counties, Nevada, USA, November 28, 2018" (the "Technical Report").
3. I graduated with the following degrees from the University of Minnesota: Bachelor of Arts, Geology, 1970; South Dakota School of Mines and Technology: Master of Science – Geology, 1974; South Dakota School of Mines and Technology: Doctor of Philosophy – Geology, 1978.
4. I am a Registered Professional Geologist, registered in the State of Wyoming, and a Registered Member of the Society for Mining, Metallurgy & Exploration, recognized as a professional association as defined by NI 43-101.
5. I have worked as a geologist for 48 years since my graduation from the University of Minnesota.
6. I am familiar with NI 43-101 and by reason of my education, experience and affiliation with a professional association (as defined in NI43-101); I fulfill the requirements of a Qualified Person.
7. I am responsible for the technical report titled "A Technical Report of the Elder Creek Copper-Gold Project, Lander and Humboldt Counties, Nevada, USA, November 28, 2018". I visited the Property between 3 and 5 October, 2018.
8. I have had no prior involvement with the property that is the subject of this Technical Report.
9. I am independent of the issuers as defined by Section 1.5 of NI 43-101.
10. That, as of the date of this certificate, to the best of my knowledge, information and belief, the Technical Report contains all the scientific and technical information that is required to be disclosed to make this Technical Report not misleading.
11. I have read NI 43-101 and I certify that the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.

Signed and dated 28th day of November, 2018 at *Arvada, Colorado*

"Thomas W. Bidgood"

(signed)
Thomas W. Bidgood
PG-497 (Wyoming)
Registered Member 04054453 (SME)

APPENDIX A: Elder Creek Project Claims

Elder Creek Project Claims (573)
Humboldt and Lander Counties, Nevada

Claim Count	Claim Name	BLM Serial #	Document #	County
1	MOTE #1	NMC835945	2002-6081	Humboldt
2	MOTE #2	NMC835946	2002-6082	Humboldt
3	MOTE #3	NMC835947	2002-6083	Humboldt
4	MOTE #4	NMC835948	2002-6084	Humboldt
5	MOTE #5	NMC835949	2002-6085	Humboldt
6	MOTE #6	NMC835950	2002-6086	Humboldt
7	MOTE #7	NMC835951	2002-6087	Humboldt
8	MOTE #8	NMC835952	2002-6088	Humboldt
9	MOTE #9	NMC835953	2002-6089	Humboldt
10	MOTE #10	NMC835954	2002-6090	Humboldt
11	MOTE #11	NMC835955	2002-6091	Humboldt
12	MOTE #12	NMC835956	2002-6092	Humboldt
13	MOTE #13	NMC835957	2002-6093	Humboldt
14	MOTE #14	NMC835958	2002-6094	Humboldt
15	MOTE #15	NMC835959	2002-6095	Humboldt
16	MOTE #16	NMC835960	2002-6096	Humboldt
17	MOTE #17	NMC835961	2002-6097	Humboldt
18	MOTE #18	NMC835962	2002-6098	Humboldt
19	MOTE #19	NMC835963	2002-6099	Humboldt
20	MOTE #20	NMC835964	2002-6100	Humboldt
21	MOTE #21	NMC835965	2002-6101	Humboldt
22	MOTE #22	NMC835966	2002-6102	Humboldt
23	MOTE #23	NMC835967	2002-6103	Humboldt
24	MOTE #24	NMC835968	2002-6104	Humboldt
25	MOTE #25	NMC835969	2002-6105	Humboldt
26	MOTE #26	NMC835970	2002-6106	Humboldt
27	MOTE #27	NMC835971	2002-6107	Humboldt
28	MOTE #28	NMC835972	2002-6108	Humboldt
29	MOTE #29	NMC835973	2002-6109	Humboldt
30	MOTE #30	NMC835974	2002-6110	Humboldt
31	MOTE #31	NMC835975	2002-6111	Humboldt
32	MOTE #32	NMC835976	2002-6112	Humboldt
33	MOTE #33	NMC835977	2002-6113	Humboldt

34	MOTE #34	NMC835978	2002-6114	Humboldt
35	MOTE #35	NMC835979	2002-6115	Humboldt
36	MOTE #36	NMC835980	2002-6116	Humboldt
37	MOTE #37	NMC835981	2002-6117	Humboldt
38	MOTE #38	NMC835982	2002-6118	Humboldt
39	MOTE #39	NMC835983	2002-6119	Humboldt
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41	MOTE #41	NMC835985	2002-6121	Humboldt
42	MOTE #42	NMC835986	2002-6122	Humboldt
43	MOTE #43	NMC835987	2002-6123	Humboldt
44	MOTE #44	NMC835988	2002-6124	Humboldt
45	MOTE #45	NMC835989	2002-6125	Humboldt
46	MOTE #46	NMC835990	2002-6126	Humboldt
47	MOTE #47	NMC835991	2002-6127	Humboldt
48	MOTE #48	NMC835992	2002-6128	Humboldt
49	MOTE #49	NMC835993	2002-6129	Humboldt
50	MOTE #50	NMC835994	2002-6130	Humboldt
51	MOTE #51	NMC835995	2002-6131	Humboldt
52	MOTE #52	NMC835996	2002-6132	Humboldt
53	MOTE #53	NMC835997	2002-6133	Humboldt
54	MOTE #54	NMC835998	2002-6134	Humboldt
55	MOTE #55	NMC835999	2002-6135	Humboldt
56	MOTE #56	NMC836000	2002-6136	Humboldt
57	MOTE #129	NMC836001	2002-6137	Humboldt
58	MOTE #130	NMC836002	2002-6138	Humboldt
59	MOTE #131	NMC836003	2002-6139	Humboldt
60	MOTE #132	NMC836004	2002-6140	Humboldt
61	MOTE #133	NMC836005	2002-6141	Humboldt
62	MOTE #134	NMC836006	2002-6142	Humboldt
63	MOTE #135	NMC836007	2002-6143	Humboldt
64	MOTE #136	NMC836008	2002-6144	Humboldt
65	MOTE #137	NMC836009	2002-6145	Humboldt
66	MOTE #138	NMC836010	2002-6146	Humboldt
67	MOTE #139	NMC836011	2002-6147	Humboldt
68	MOTE #140	NMC836012	2002-6148	Humboldt
69	MOTE #141	NMC836013	2002-6149	Humboldt
70	MOTE #142	NMC836014	2002-6150	Humboldt
71	MOTE #143	NMC836015	2002-6151	Humboldt
72	MOTE #144	NMC836016	2002-6152	Humboldt

73	MOTE #145	NMC836017	2002-6153	Humboldt
74	MOTE #146	NMC836018	2002-6154	Humboldt
75	MOTE #147	NMC836019	2002-6155	Humboldt
76	MOTE #148	NMC836020	2002-6156	Humboldt
77	BBC #19	NMC839953	2003-37	Humboldt
78	BBC #20	NMC839954	2003-38	Humboldt
79	BBC #21	NMC839955	2003-39	Humboldt
80	BBC #22	NMC839956	2003-40	Humboldt
81	BBC #23	NMC839957	2003-41	Humboldt
82	BBC #24	NMC839958	2003-42	Humboldt
83	BBC #25	NMC839959	2003-43	Humboldt
84	BBC #26	NMC839960	2003-44	Humboldt
85	BBC #27	NMC839961	2003-45	Humboldt
86	BBC #28	NMC839962	2003-46	Humboldt
87	BBC #29	NMC839963	2003-47	Humboldt
88	BBC #30	NMC839964	2003-48	Humboldt
89	BBC #31	NMC839965	2003-49	Humboldt
90	BBC #32	NMC839966	2003-50	Humboldt
91	BBC #33	NMC839967	2003-51	Humboldt
92	BBC #34	NMC839968	2003-52	Humboldt
93	BBC #35	NMC839969	2003-53	Humboldt
94	BBC #36	NMC839970	2003-54	Humboldt
95	MOTE #93	NMC839971	2003-56	Humboldt
96	MOTE #94	NMC839972	2003-57	Humboldt
97	MOTE #95	NMC839973	2003-58	Humboldt
98	MOTE #96	NMC839974	2003-59	Humboldt
99	MOTE #97	NMC839975	2003-60	Humboldt
100	MOTE #98	NMC839976	2003-61	Humboldt
101	MOTE #99	NMC839977	2003-62	Humboldt
102	MOTE #100	NMC839978	2003-63	Humboldt
103	MOTE #101	NMC839979	2003-64	Humboldt
104	MOTE #102	NMC839980	2003-65	Humboldt
105	MOTE #103	NMC839981	2003-66	Humboldt
106	MOTE #104	NMC839982	2003-67	Humboldt
107	MOTE #105	NMC839983	2003-68	Humboldt
108	MOTE #106	NMC839984	2003-69	Humboldt
109	MOTE #107	NMC839985	2003-70	Humboldt
110	MOTE #108	NMC839986	2003-71	Humboldt
111	MOTE #109	NMC839987	2003-72	Humboldt

112	MOTE #110	NMC839988	2003-73	Humboldt
113	MOTE #111	NMC839989	2003-74	Humboldt
114	MOTE #112	NMC839990	2003-75	Humboldt
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491	BBC #159	NMC841279	224699	Lander
492	BBC #160	NMC841280	224700	Lander
493	BBC #161	NMC841281	224701	Lander
494	BBC #162	NMC841282	224702	Lander
495	BBC #163	NMC841283	224703	Lander
496	BBC #164	NMC841284	224704	Lander
497	BBC #165	NMC841285	224705	Lander
498	BBC #166	NMC841286	224706	Lander
499	BBC #167	NMC841287	224707	Lander
500	BBC #168	NMC841288	224708	Lander
501	BBC #169	NMC841289	224709	Lander

502	BBC #170	NMC841290	224710	Lander
503	BBC #171	NMC841291	224711	Lander
504	BBC #172	NMC841292	224712	Lander
505	BBC #173	NMC841293	224713	Lander
506	BBC #174	NMC841294	224714	Lander
507	BBC #175	NMC841295	224715	Lander
508	BBC #176	NMC841296	224716	Lander
509	BBC #625	NMC842141	224804	Lander
510	BBC #626	NMC842142	224805	Lander
511	BBC #627	NMC842143	224806	Lander
512	BBC #628	NMC842144	224807	Lander
513	BBC #629	NMC842145	224808	Lander
514	BBC #630	NMC842146	224809	Lander
515	BBC #631	NMC842147	224810	Lander
516	BBC #632	NMC842148	224811	Lander
517	BBC #633	NMC842149	224812	Lander
518	BBC #634	NMC842150	224813	Lander
519	BBC #635	NMC842151	224814	Lander
520	BBC #636	NMC842152	224815	Lander
521	BBC #637	NMC842153	224816	Lander
522	BBC #638	NMC842154	224817	Lander
523	BBC #639	NMC842155	224818	Lander
524	BBC #640	NMC842156	224819	Lander
525	BBC #641	NMC842157	224820	Lander
526	BBC #642	NMC842158	224821	Lander
527	BBC #643	NMC842159	224822	Lander
528	BBC #644	NMC842160	224823	Lander
529	BBC #645	NMC842161	224824	Lander
530	BBC #646	NMC842162	224825	Lander
531	BBC #647	NMC842163	224826	Lander
532	BBC #648	NMC842164	224827	Lander
533	MOTE #181	NMC843698	225347	Lander
534	MOTE #182	NMC843699	225348	Lander
535	MOTE #183	NMC843700	225349	Lander
536	MOTE #184	NMC843701	225350	Lander
537	MOTE #185	NMC843702	225351	Lander
538	MOTE #186	NMC843703	225352	Lander
539	MOTE #187	NMC843704	225353	Lander
540	MOTE #188	NMC843705	225354	Lander

541	MOTE #189	NMC843706	225355	Lander
542	MOTE #190	NMC843707	225356	Lander
543	MOTE #191	NMC843708	225357	Lander
544	MOTE #192	NMC843709	225358	Lander
545	MOTE #193	NMC843710	225359	Lander
546	MOTE #194	NMC843711	225360	Lander
547	MOTE #195	NMC843712	225361	Lander
548	MOTE #196	NMC843713	225362	Lander
549	MOTE #197	NMC843714	225363	Lander
550	MOTE #198	NMC843715	225364	Lander
551	MOTE #199	NMC843716	225365	Lander
552	MOTE #200	NMC843717	225366	Lander
553	MOTE #201	NMC843718	225367	Lander
554	MOTE #202	NMC843719	225368	Lander
555	MOTE #203	NMC843720	225369	Lander
556	MOTE #204	NMC843721	225370	Lander
557	MOTE #205	NMC843722	225371	Lander
558	MOTE #206	NMC843723	225372	Lander
559	MOTE #207	NMC843724	225373	Lander
560	MOTE #208	NMC843725	225374	Lander
561	MOTE #209	NMC843726	225375	Lander
562	MOTE #210	NMC843727	225376	Lander
563	MOTE #211	NMC843728	225377	Lander
564	LP 1	NMC862186	230380	Lander
565	LP 2	NMC862187	230381	Lander
566	LP 3A	NMC862188	230382	Lander
567	LP 4A	NMC862189	230383	Lander
568	LP 5A	NMC862190	230384	Lander
569	LP 6A	NMC862191	230385	Lander
570	BBC #47	NMC0841167	224761/2003-619	Lander/Humboldt
571	BBC #48	NMC0841168	224762/2003-620	Lander/Humboldt
572	BBC #123	NMC0841243	224764/2003-621	Lander/Humboldt
573	BBC #132	NMC0841252	224766/2003-622	Lander/Humboldt

APPENDIX B: Elder Creek Drill Holes Compilation

Hole	Company	Easting UTM NAD83	Northing UTM NAD83	Elevation (meters)	Azimuth (°)	Inclination (°)	Depth (feet)
36-1			4495060				540
4060							
4061							
6-92-1							
6-92-2							
6-92-3							
98EC-01	Aur Resources	493297	4504048	1595.00	90	-60	700
98EC-02	Aur Resources	493245	4504005	1595.00	90	-55	700
98EC-03	Aur Resources	493651	4504021	1565.00	90	-50	610
98EC-04	Aur Resources	492866	4504411	1588.00	280	-50	710
98EC-05	Aur Resources	493329	4504448	1566.00	90	-50	650
98EC-06	Aur Resources	493693	4504514	1542.00	90	-50	600
98EC-07	Aur Resources	493546	4503695	1583.00	90	-50	530
98EC-08	Aur Resources	493281	4503718	1605.00	90	-55	700
98EC-09	Aur Resources	492978	4504037	1613.00	90	-55	700
98EC-10	Aur Resources	493208	4504309	1581.00	90	-55	580
98EC-11	Aur Resources	493182	4504600	1564.00	280	-55	600
98EC-12	Aur Resources	492960	4504412	1587.00	280	-55	625
98EC-13	Aur Resources	492985	4504262	1597.00	280	-55	640
98EC-14	Aur Resources	492990.99	4504564	1574.00	280	-55	580
AEC-1	Amoco	493842.89	4503999.3	1550.00	0	-90	904
AEC-2	Amoco	494385.02	4505098.6	0.00	0	-90	705
AP-1							
AP-2							
AP-4							
AP-5		494511	4503360	0.00	0	0	0
AP-7							
AP-8							
AS-01	Kennecott	491872.09	4508415.5	1461.87	0	-90	620
AS-02	Kennecott	491367.63	4508616.5	1463.84	0	-90	680
AS-03	Kennecott	490271.88	4506830.5	1586.54	110	-60	760
AS-04	Kennecott	489734.38	4506801.5	1618.95	0	-90	860
AS-05	Kennecott	489440.78	4507177.5	1596.01	0	-90	800
AS-06	Kennecott	489391.16	4507000	1613.11	0	-90	760
AS-07	Kennecott	490213.09	4507701	1538.77	0	-90	680
AS-08	Kennecott	490026.75	4507140	1583.08	90	-75	605
AS-09	Kennecott	489194.66	4507261	1593.85	305	-75	1145
AS-10	Kennecott	489324.78	4507437	1576.06	310	-70	1050
AS-11	Kennecott	489137.84	4506989.5	1615.96	200	-75	860
AS-12	Kennecott	489925.97	4506740.5	1613.33	120	-75	800
B-1		500360	4495690				340
B-2		499970	4496020				445
B-3		500200	4495980				520
BB01	US Gold	491009	4497252	2320.00	260	-45	565
BB02	US Gold	491011	4497251	2320.00	250	-70	630
BB03	US Gold	491071	4497260	2325.00	250	-70	720
BB04	US Gold	491027	4497216	2328.00	250	-70	440
BB-UNK1		490987.44	4497370.4	2295.41	0	0	0
BM001	US Gold	491682.99	4500657.7	1985.01	245	-45	735
BM002	US Gold	491786.38	4500918.5	1978.86	270	-45	770
BM003	US Gold	491634.48	4500596	2023.19	245	-45	700
BM004	US Gold	493408.16	4501839.1	1692.33	270	-60	1500
BM005	US Gold	493413.7	4501835.5	1692.48	90	-60	505
BM006	US Gold	493393.88	4501582.7	1701.41	270	-45	500
BMG-01		492423.22	4503338.8	0.00	0	0	0
BMG-02		493758.16	4503022.8	0.00	0	0	0
BMG-03		493836.49	4503043.1	0.00	0	0	0
BMG-04		493857.2	4502937.8	0.00	0	0	0
BMG-05		494292.74	4502768	0.00	0	0	0
BMG-06		494245.8	4502405	0.00	0	0	0

BMG-07		494348.47	4502115.1	0.00	0	0	0
BMG-08		493958.19	4501958.1	0.00	0	0	0
BMG-09		492876.57	4502105.1	0.00	0	0	0
BMG-10		492063.31	4502796	0.00	0	0	0
BMG-11		493267.23	4501731.5	0.00	0	0	0
BMG-12		493289.26	4501670.1	0.00	0	0	0
BMG-13		493296.82	4501628.5	0.00	0	0	0
BMG-14		493211.49	4501643.4	0.00	0	0	0
BMG-15		493145.21	4501638.2	0.00	0	0	0
BMG-16		492881.67	4501590.3	0.00	0	0	0
BMG-17		492830.02	4501482.3	0.00	0	0	0
BMG-18		493067.6	4501461	0.00	0	0	0
BMG-19		493470.6	4501404.6	0.00	0	0	0
BMG-20		493814.18	4501393.1	0.00	0	0	0
BMG-21		493838.13	4501712	0.00	0	0	0
BMG-22		493796.23	4501265.8	0.00	0	0	0
BMG-23		493130.41	4501285.9	0.00	0	0	0
BMG-24		493124.42	4501163.7	0.00	0	0	0
BMG-25		493374.31	4501154.3	0.00	0	0	0
BMG-26		493466.54	4500890.8	0.00	0	0	0
BMG-27		492118.89	4501151.6	0.00	0	0	0
BMG-28		491802.35	4500948	0.00	0	0	0
BMG-29		491633.1	4500662.3	0.00	0	0	0
BMX-03-01	Nevada Pacific Gold	494408.53	4506154	1451.00	270	-60	1000.66
BMX-03-02	Nevada Pacific Gold	494116.81	4506148	1457.00	90	-45	990.814
BMX-03-03	Nevada Pacific Gold	493168	4501597	1695.00	80	-60	820.21
BMX-03-04	Nevada Pacific Gold	494115.41	4506148	1458.00	90	-70	810.367
BMX-03-05	Nevada Pacific Gold	494150	4501804	1554.00	100	-45	501.969
BMX-03-06	Nevada Pacific Gold	494218	4502125	1539.00	85	-45	600.394
BMX-03-07	Nevada Pacific Gold	493464	4503503	1588.00	180	-60	800.525
BMX-03-08	Nevada Pacific Gold	493465	4503501	1588.00	270	-60	501.969
BMX-03-09	Nevada Pacific Gold	493595.66	4503470.5	1574.00	90	-45	492.126
BMX-03-10	Nevada Pacific Gold	494066.56	4503427	1563.00	90	-45	557.743
BMXR06-01	Nevada Pacific Gold	494399	4502175	1524.00	274	-45	240
BMXR06-02	Nevada Pacific Gold	493799	4501717	1612.00	275	-60	450
BMXR06-03	Nevada Pacific Gold	493863	4501874	1584.00	279	-60	440
BMXR06-04	Nevada Pacific Gold	493864	4501875	1584.00	0	-90	480
BMXR06-05	Nevada Pacific Gold	493878	4502100	1575.00	100	-60	475
BMXR06-06	Nevada Pacific Gold	494227	4501682	1584.00	282	-60	365
BMXR06-07	Nevada Pacific Gold	494066	4501672	1572.00	278	-60	460
BMXR06-08	Nevada Pacific Gold	494838	4500819	1538.00	252	-45	500
BT-01		500610	4496140				405
BT-02		500500	4496730				405
BT-03		498870	4498350				505
BT-04		499800	4497980				305
BT-05		502650	4494630				330
BT-06		494184	4505178	1496.57	0	-90	660
BT-07		496382	4504023	1475.24	0	-90	640
BT-08		497217	4503365				505
BT-09		497217	4503365				460
BT-10		493595	4503641	1580.39	0	-90	320
BT-11							
BT-12		499000	4497030				485
BT-13		500500	4495620				480
BT-14		502190	4495160				480
BT-15		500740	4495250				480
BT-16		500600	4496440				425
BT-17		494160	4502080	1545.34	0	-90	270
BT-18		493232	4503802	1612.40	0	-90	505
BT-19		494359	4506451	1441.71	0	-90	505
BT-20		502940	4495110				300
BT-21		499590	4496060				620
BT-22		499020	4497300				1040

BT-23		497440	4502540				400	
BT-24	BMR Gold Corp	496942	4504218	1423.42	0	-90	890	
BT-25	BMR Gold Corp	494340	4501800	1536.20	0	-90	300	
BT-26	BMR Gold Corp	494450	4501820	1528.58	0	-90	300	
BT-27	BMR Gold Corp	494620	4501820	1517.91	0	-90	285	
BT-28		497170	4501880				400	
BT-29		499600	4495880				700	
C-1		490995.63	4497290.4	2310.00	240	-45	100	
C-1-CO	Condor Minerals Management Inc.	490996	4497290	2313.63	250	-45	100	
C-2		490997.28	4497290.9	2310.00	240	-70	150	
C-2-CO	Condor Minerals Management Inc.	490997	4497291	2313.63	250	-70	150	
C-3-CO	Condor Minerals Management Inc.	490965	4497342	2309.23	0	-90	120	
C-4		491011.38	4497248.7	2320.00	240	-45	170	
C-4-CO	Condor Minerals Management Inc.	491008.22	4497252.7	2322.24	250	-45	170	
C-5		491024.64	4497214.9	2330.00	260	-45	150	
C-5-CO	Condor Minerals Management Inc.	491025	4497215	2327.44	260	-45	150	
C-6		491062.68	4497197.7	2350.00	240	-45	105	
C-6-CO	Condor Minerals Management Inc.	491059.98	4497204.7	2345.62	240	-45	105	
C-7		491054.64	4497131.2	2350.00	260	-45	100	
C-7-CO	Condor Minerals Management Inc.	491052.95	4497137.1	2360.82	260	-45	100	
C-8		491002.66	4497414.9	2275.00	260	-45	150	
C-8-CO	Condor Minerals Management Inc.	490993.45	4497422.6	2278.58	260	-45	150	
cased DH		493232	4503802					
CCEC18-02	Timberline	493037	4503658	5360.00	0	-90	1470	
DDH-1_BB	Kinetic	490969.45	4497154.5	2357.71	0	-90	433.9	
DDH-2_BB	Kinetic	491006.98	4497413	2277.61	0	-90	565.4	
DDH-803								
DDH804	Duval	494221	4502744	1565.90	0	-90	0	
DDH-804		494221	4502744	0.00	0	0	0	
DDH805	Duval	494208	4503250	1591.23	0	-90	0	
DDH-805		494208	4503250	0.00	0	0	0	
DEC-2		494677	4503565					
DEM-14		494587	4503793					
DEW98-001	Oro Nevada Exploration Inc.	490983	4497161	2341.00	250	-60	447	
DEW98-002	Oro Nevada Exploration Inc.	490906	4497138	2338.00	270	-60	535	
DEW98-003	Oro Nevada Exploration Inc.	491177	4496846	2338.00	215	-50	562	
DEW98-004	Oro Nevada Exploration Inc.	491072	4496950	2359.00	250	-55	575	
DEW98-007	Oro Nevada Exploration Inc.	490986	4497366	2316.00	310	-65	500	
DEW98-008	Oro Nevada Exploration Inc.	491020	4497221	2329.00	250	-65	350	
DH 6-1		495480	4503180	1475.00	0	0	420	
DHX		495562	4503572					
drill pad		493232	4503801					
E-1	Bear Creek	493303	4504625	1554.00	0	-90	327	
E-2	Bear Creek	494371	4505102	1469.00	0	-90	540	
E-3	Bear Creek	492980	4504920	1554.00	0	-90	363	
E-4	Bear Creek	492940	4504010	1617.00	0	-90	250	
Elder Base		493739.75	4503123.5					
M-??		494620.09	4502682.6	0.00	0	0	0	
M-???		495004.84	4502297.2	0.00	0	0	0	
M-02		494214.36	4506539.4	0.00	0	0	0	
M-03		495570.57	4504734	0.00	0	0	0	
M-05		494379.79	4502135.3	0.00	0	0	0	
M-06		494331.8	4502127.8	0.00	0	0	0	
M-07		494279.72	4502140.3	0.00	0	0	0	
M-08		494363.55	4502196	0.00	0	0	0	
M-09		494503.39	4502335.9	0.00	0	0	0	
M-10		494398.88	4502356.1	0.00	0	0	0	
M-11		494699.43	4503017.5	0.00	0	0	0	
M-12		494617.04	4503321.5	0.00	0	0	0	
M-13		494205.15	4502129.7	0.00	0	0	0	
M-14		494592.92	4503018.8	0.00	0	0	0	
M-15		495088.2	4503040.7	0.00	0	0	0	
M-16		493186.12	4504462.7	0.00	0	0	0	

M-17		493792.65	4504837.8	0.00	0	0	0	
M-18		494270.38	4505381.3	0.00	0	0	0	
M-19		492688.38	4506892.3	0.00	0	0	0	
MAR-1								
MAR-2								
MOTC-02	WMC Exploration	494271	4506502	1426.00	0	-90	480	
MOTC-03	WMC Exploration	495550	4504709	1539.00	0	-90	695	
MOTC-04	WMC Exploration	493373	4507444	1442.00	0	-90	400	
MOTC-05	WMC Exploration	494357	4502116	1527.00	270	-45	260	
MOTC-06	WMC Exploration	494319	4502123	1530.00	270	-45	400	
MOTC-07	WMC Exploration	494274	4502109	1533.00	270	-45	470	
MOTC-08	WMC Exploration	494076	4502113	1554.00	270	-45	500	
MOTC-09	WMC Exploration	494460	4502304	1515.00	270	-45	500	
MOTC-10	WMC Exploration	494386	4502318	1524.00	270	-60	600	
MOTC-11	WMC Exploration	494680	4503043	1503.00	0	0	541.338	
MOTC-12	WMC Exploration	494597	4503319	1522.00	0	-90	1486.22	
MOTC-13	WMC Exploration	494218	4502123	1539.00	0	-90	1499.34	
MOTC-14	WMC Exploration	494613	4503158	1509.00	0	0	541.338	
MOTC-15	WMC Exploration	495069	4503038	1481.00	0	-90	400.262	
MOTC-16	WMC Exploration	493191	4504619	1561.00	0	-90	351.049	
MOTC-17	WMC Exploration	493725	4504529	1539.00	0	-90	508.529	
MOTC-18	WMC Exploration	494259	4505381	1484.00	0	-90	400.262	
MOTC-19	WMC Exploration	494359	4506451	1439.00	0	-90	439.632	
MR-1		491043.37	4497148.9	2360.24	0	0	0	
MR-2		491021.79	4497151.6	2358.06	0	0	0	
MR-3		491007.02	4497152	2358.26	0	0	0	
old DH		494224	4502743					
RCEC18-01	New Frontier Drilling	492640	4504613		0	-90	500	
RCEC18-02	New Fronteer Drilling	493037	4503658	1634.00	0	-90	840	
RDH-1		493772	4503066	0.00	0	0	0	
RDH-2		493832	4502993	0.00	0	0	0	
RDH-3		493870	4503130	0.00	0	0	0	
RH-1	Kinetic	491024.02	4497220	2333.72	0	-90	380	
RHB-01?	Kinetic	491024.59	4497458.3	2260.78	0	-90	460	
RHB-02	Kinetic	490943.61	4497310.5	2323.81	0	-90	485	
RHB-03	Kinetic	491004.05	4497336.6	2279.90	0	-90	155	
RHB-04	Kinetic	491003.29	4497299.7	2307.43	0	-90	445	
RHB-05	Kinetic	490936.39	4497249.1	2338.79	0	-90	435	
RHB-06	Kinetic	491021.38	4497252.9	2322.10	0	-90	7630	
RHB-07	Kinetic	490988.46	4497229	2332.66	0	-90	500	
RHB-08	Kinetic	490872.83	4497152.9	2348.01	0	-90	245	
RHB-09	Kinetic	491023.72	4497393.2	2275.33	0	-90	500	
RHB-10	Kinetic	490890.33	4497161.2	2351.35	0	-90	420	
RHB-13	Kinetic	491024.71	4497199.4	2344.61	0	-90	340	
SPPC well		498848	4503041				821	
U6-1								
V-1		493443	4504663	1548.39	0	-90	340	
V-2		493950	4505186	1487.43	0	-90	585	
V-3		495180	4505240	1495.05	0	-90	743	
V-4		494012	4506404	1449.33	0	-90	484	
V-5		495185	4506230	1277.12	0	-90	855	
V-6		493570	4506930	1441.71	0	-90	265	
V-7		495701	4504650	1463.04	0	-90	844	
VDH-01		492634.5	4504621	1598	0	-90	330	
VDH-02		492611.5	4504630	1603	0	-90	199	
VDH-03		492667	4504620.5	1594	0	-90	205	
VDH-04		492624	4504585	1597	0	-90	190	
VDH-05		492601	4504562	1600	0	-90	220	
VDH-06							220	
ww		496220	4505280				850	
ww #30514		494695	4510720				676	
ww #30515		496184	4505955				822	
ww #31165		497189	4503532				850	

ww #37177		495637	4508474				648	
ww #41006		497307	4504862				855	