NTS 82G 02 and 03
BCGS 82G005 and 006

Assessment Report for the Robocop Property, South-Eastern British Columbia

Claims: 547692, 557543, 557544, 991102, 991103, 991104, 997142, 997162 and 997163

Approximate Location:
Latitude 49° 1' 39" N
Longitude 114° 59' 24" W
Fort Steele Mining Division

Prepared For:
Peter Klewchuk
408 Aspen Road
Kimberley, BC, Canada
V1A 3B5

Prepared by:
APEX Geoscience Ltd.
Suite 200, 9797-45 Avenue
Edmonton, Alberta, Canada
T6E 5V8

Michael Dufresne, M.Sc., P. Geol.
Anetta Banas, M.Sc., P. Geol.
Kathryn Salter, B.Sc., Geol.I.T.

March 18, 2013
Edmonton, Alberta, Canada

Contents

1 Summary ... 1
2 Introduction and Terms of Reference ... 4
3 Disclaimer ... 4
4 Property Description and Location ... 4
5 Accessibility, Climate, Local Resources, Infrastructure and Physiography ... 6
6 History ... 7
7 Geological Setting and Mineralization ... 11
7.1 Regional Geology ... 11
7.2 Property Geology ... 15
7.3 Historical Mineral Occurrences ... 19
7.4 Mineralization ... 21
8 2012 Exploration ... 23
8.1 Rock Sample Preparation and Analysis ... 28
9 Exploration Expenditures ... 29
10 Interpretation and Conclusions ... 29
11 Recommendations ... 31
12 References ... 32
13 Certificate of Author ... 35

Tables

Table 1 Tenure List of the 2012 Robocop Property Claims ... 6
Table 2 Substratigraphic Members of the Sheppard Formation (adapted from Pighin, 2009) ... 16

Figures

Figure 1 Property Location and Claims ... 5
Figure 2 Historical work - Overview ... 8
Figure 3 Historical Work – Trench, Rock and Soil Sampling ... 8
Figure 4 Historical Work - Drilling and Geophysical Anomalies ... 9
Figure 5 Regional Geology of British Columbia. Adapted from Vandienste et al. (2012). ... 12
Figure 6 Bedrock Regional Geology ... 13
Figure 7 Regional Correlative Stratigraphic Units. ... 14
Figure 8 Property Geology ... 18
Figure 9 3D Micromine model of drilling (top) and geology (bottom) at the Robocop Property ... 24
Figure 10 Micromine model of drilling showing vertical fault and east side down ... 25
Figure 11 Micromine model of topography showing Phillips Creek soil anomaly; (a) geology draped on topography with cobalt in soil samples; (b) image of contoured copper draped on topography with cobalt in soil samples. ... 27

Figure 12 Micromine model of topography showing Phillips Creek soil anomaly with draped image of contoured copper. 28

Plates

Plate 1 Mineralized rock sample (a) and barite vein (b) from Robocop Property 28

Appendices

Appendix 1 – Data Compilation Database.. 38
Appendix 2 – Micromine Drill Sections.. 59
Appendix 3 – 2012 Robocop Rock Sample Assay Certificate...................................... 63
Appendix 4 – 2012 Robocop Expenditures 68

1 Summary

APEX Geoscience Ltd. (APEX) was retained in 2012 by Peter Klewchuck to complete the 2012 program and an assessment of the Robocop Property (the Property). The Robocop Property (the Property) is located in south-eastern British Columbia and is immediately north of the Canada-USA border. It is located approximately 45 kilometres (km) south of Fernie and 70 km southeast of Cranbrook. The Property is comprised of 9 mineral claims totalling 3,156.16 hectares (ha) which are held by Peter Klewchuk and Robert Andrew Klewchuk.

The Robocop Property is an exploration stage Property within the Fort Steele Mining District. The geological and stratigraphic setting of the Property is favourable to potentially contain a sediment hosted copper (Cu and associated minerals) deposit. The Property is largely underlain by the Late Proterozoic Sheppard Formation of the Purcell Supergroup. The Sheppard Formation is comprised of a lower-basal conglomerate and an upper section composed of fine crystalline to silty-sandy dolomite and stromatolitic dolomite. The Sheppard Formation is underlain by a thick sequence of volcanics consisting mainly of basalt and associated pyroclastics. The copper and cobalt mineralization of interest on the Property occurs within the Sheppard Formation specifically in the coarse clastic sediments (arkosic conglomerate and arkosic grit) either adjacent to or immediately below the lowermost dolomite unit. This mineralized layer has historically been referred to as the Roo Horizon. Depending on the historical stratigraphy used this mineralized unit belongs either to the base of the Upper Sheppard Formation (Pighin, 2009) or the top of the Lower Sheppard Formation (Thomson, 1990).

Previous exploration in the area was focused on strata bound copper mineralization within the Sheppard Formation and also led to the discovery of massive barite-rich veins that cross cut the Sheppard Formation. Five historic mineral occurrences are known to exist on the Robocop Property. Of particular interest is the mineralization associated with the Green and Roo occurrences both of which are characterized by sediment hosted copper (Cu), silver (Ag) ± cobalt (Co) mineralization contained within the so called Roo Horizon of the Sheppard Formation. The Roo Horizon can be traced along a northwest – southeast trend in sporadic outcrop for over 2 km. In 2012 a rock sample was collected from an old trench site that sampled the Roo Horizon near historic drilling in the northwest part of the Property. The sample returned an assay of 1.63% Cu, 4.1 g/t Ag and 1,010 ppm Co, confirming historic results from the area. Copper, cobalt, hematite and associated mineralization have also been recognised in the underlying sequence of Nicol Creek volcanics. Historically barite has been mined from quartz barite veins that occur within the lowermost stromatolite unit of the Sheppard Formation. These veins often contain associated copper, silver and cobalt mineralization.

The 2012 program included a detailed compilation of all available historic exploration work conducted on the Robocop Property. A digital database was created containing all historic drillhole, trench, rock and soil sample information along with all available geological and assay data formatted for use in Micromine and ArcGIS software. The

drill database is comprised of 15 historic drillholes and includes 325 samples containing assays for Au, Ag, Cu, Co, Mn, Hg and S. Correlation of detailed geological units between different generations of historical drilling was impossible due to the use of different lithological description and unit names by the different generations explorers involved. Relogging of all the historic drill core to the standard of the 2008 Ruby Red drill logs is strongly recommended to facilitate more detailed correlation of the stratigraphy.

The geological modelling, completed in Micromine, produced a 3-D model of the geological Formations, faults, and mineralization underlying the Robocop Property for the area of drilling. The 3-D modelling in the northern extent of the drilling shows significant low grade mineralization associated with what appears to be a high angle fault with step like offset (down) to the east. Historically these types of faults have been interpreted to be syn-sedimentary growth like graben related features. These faults would likely have been planes of weakness that would have been reactivated during subsequent tectonic activity indicating a structural component to the mineralization control. Based on the presence of low grade copper mineralization in and around the faults at surface and in drill holes it is likely that these faults may have controlled mineralizing fluids at some stage.

The limited soil sampling has highlighted an excellent copper and cobalt in soil anomaly southeast of the historic drilling. The Phillips Creek soil anomaly is considered a high quality anomaly that is a minimum of 1.5 km in length and warrants drill testing. Other sampling on the Property has yielded only a few sporadic comparable anomalies, indicating that there are local controls, potentially structural and stratigraphic, to copper-cobalt-silver mineralization within the Sheppard Formation. The soil sampling and the presence of the Phillips Creek anomaly indicates that there are potential locations on the Property with significantly increased copper and cobalt indicating that the geology and stratigraphy are permissive for higher grade copper-cobalt-silver deposits than what has been indicated by drilling to date. The mineralization style is perhaps similar to that associated with Revett Minerals Ltd.'s Troy Mine and the Rock Creek Deposit in western Montana. The Troy Mine and the Rock Creek Deposit, found within the Proterozoic Revett Formation, contain more than 2.5 billion pounds of copper and 300 million ounces of silver as disseminated stratabound hydrothermal mineralization.

Although the Sheppard Formation is stratigraphically quite a bit higher in the middle Proterozoic stratigraphy than the Revett Formation in western Montana, the geological setting is similar and the style of copper-cobalt-silver mineralization is very similar to that of the Troy Mine and Rock Creek Deposit. The fact that there are areas with significant copper-cobalt in soil anomalies and drilling to date that have intersected grades approaching the required economic values, the Robocop Property is considered a high priority project that requires follow-up exploration. Further soil sampling along with a helicopter Time Domain Electromagnetic and Magnetic airborne survey are considered high priority. Further geological, stratigraphic and structural mapping should be considered prior to drilling. A LIDAR survey combined with a high resolution satellite image should be considered for acquisition as the airborne geophysics combined with the high resolution LIDAR and satellite data may aid in identifying parts of the Property with the required vertical structural feeder zones along with better associated stratiform copper mineralization.

The total expenditure to complete the 2012 program was $20,163.63.

On the Robocop Property areas with significant copper-cobalt in soil anomalies have been identified. Additionally, historic drilling has intersected grades approaching economic values. The results of the 2012 data compilation indicate that significant potential exists to expand the known extent of the copper-silver-cobalt mineralization on the Property and further exploration is warranted. A 2 phase exploration program is recommended for the Robocop Property:

Phase 1 should include the completion of an airborne Magnetics and Time Domain Electromagnetics survey. The survey should cover the Cu – bearing horizon and overlying units over the majority of the Property. The area of the survey would consist of approximately 500 line km. At an all in cost of $200 per line km the total expenditure for the airborne survey is estimated to be approximately $100,000.

Phase 2 should include a field program that consists of drill testing the Cu in soil anomaly located southeast historic drilling and fieldwork to follow-up on anomalies identified from the airborne geophysical survey. The follow-up fieldwork should include prospecting, geological mapping, and soil sampling. The cost to complete the follow-up field exploration is estimated at $100,000. Drilling of the soil anomaly should include 4 to 6 holes from 3 setups with a vertical and angled hole completed from each color. Any high priority targets identified from the geophysics should be drilled with 2 to 4 holes. Approximately 1,000 m of drilling is recommended at an all in cost of $300/m, totalling $300,000. The total cost to complete Phase 2 would be approximately $400,000.

The total expenditure to complete both Phase 1 and Phase 2 programs is estimated at $500,000.

2 Introduction and Terms of Reference

The Robocop Property (the Property) is located within the Fort Steele Mining District in south-eastern British Columbia (BC). The Property encompasses 9 mineral claims covering an area of approximately 3,156.16 ha. APEX Geoscience Ltd. (APEX) was retained during 2012 by Peter Klewchuk to conduct a 2012 work program and an assessment of the potential of the Robocop Property for sediment-hosted copper mineralization. The 2012 work completed by APEX comprised a compilation of all publically available data, 3-D modelling and interpretation of the subsurface stratigraphy in Micromine™ software. Mr. Michael Dufresne, M.Sc., P. Geol., the lead author, is a principal of APEX, visited the Property in October, 2012.

3 Disclaimer

The author, in writing this report, uses sources of information as listed in the references. The report written by Mr. Dufresne, P.Geol., a Qualified Person, is a compilation of proprietary and publicly available information as well as information obtained during the sampling. Government reports were prepared by qualified persons holding post-secondary geology, or related university degree(s), and are therefore deemed to be accurate. For those reports, which were written by others, whom are not qualified persons, the information in those reports is assumed to be reasonably accurate, based on the data review and Property visit conducted by the author, however, they are not the basis for this report.

4 Property Description and Location

The Robocop Property is comprised of 9 mineral claims (Table 1) totalling 3,156.16 ha and extends from the Canada-United States border (at the 49th parallel) northward over four kilometres in the Phillip's Creek drainage basin (Figure 1). The Property lies approximately 45 km due south of the municipality of Fernie, and approximately 70 km southeast of Cranbrook. It is centered at a latitude of 49° 1' 39" and a longitude of 114° 59' 24" and spans NTS Sheets 82G02 and 03. All claims are 100% owned, either by Robert Andrew Klewchuk or Peter Klewchuk (Table 1).

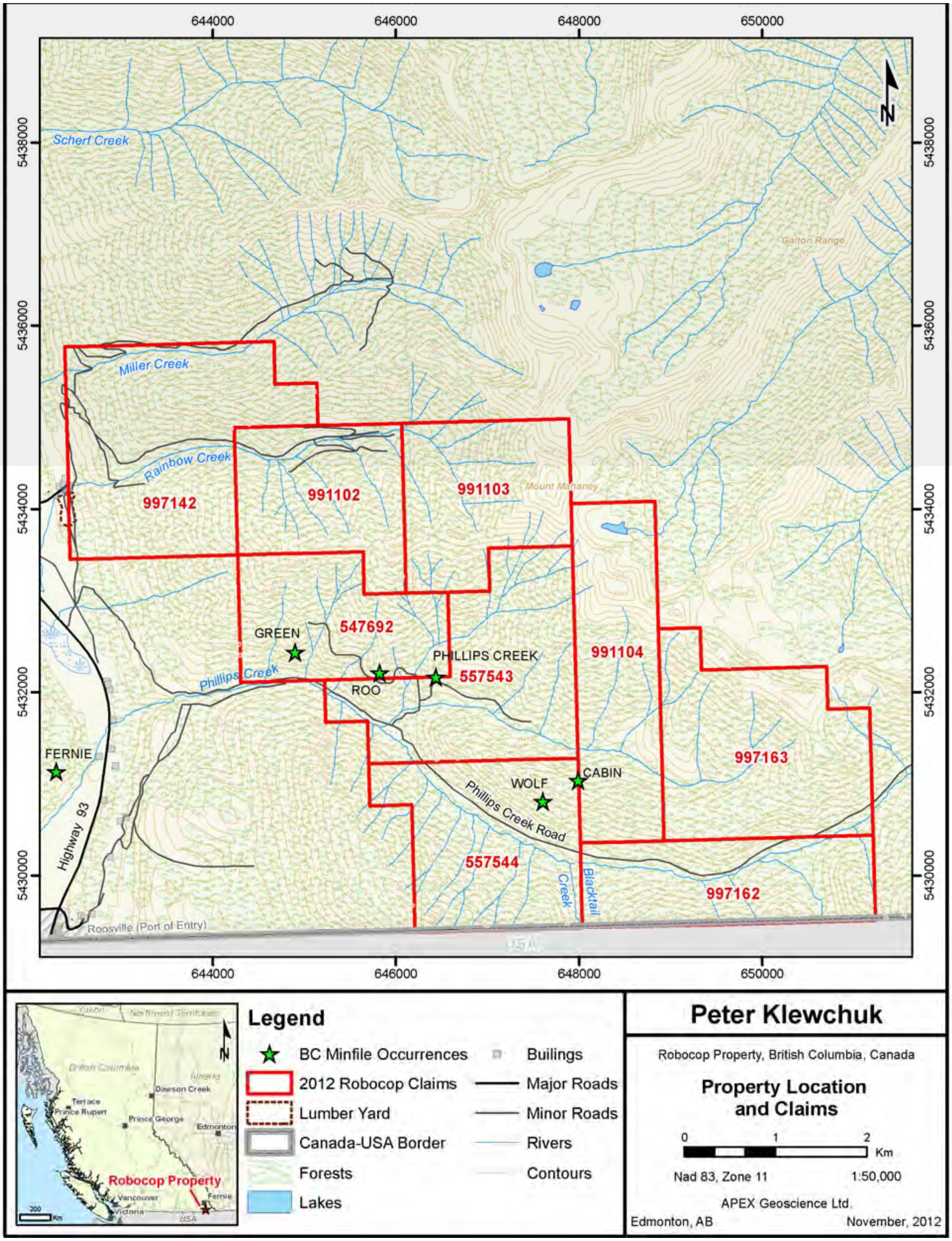


Figure 1 Property Location and Claims

Table 1 Tenure List of the 2012 Robocop Property Claims

Tenure Number	Owner Number	Owner Name	Claim Name	Issue Date	Good until date	Area (ha)
547692	208886	Robert Andrew Klewchuk	Robocop	19/12/2006	15/12/2012	275.35
557543	208886	Robert Andrew Klewchuk	Robocop4	24/04/2007	15/12/2012	402.48
557544	208886	Robert Andrew Klewchuk	Robocop5	24/04/2007	15/12/2012	360.23
991102	114281	Peter Klewchuk	Robo4	28/05/2012	28/05/2013	275.2846
991103	114281	Peter Klewchuk	Robo5	28/05/2012	28/05/2013	296.4627
991104	114281	Peter Klewchuk	Robo6	28/05/2012	28/05/2013	338.9327
997142	114281	Peter Klewchuk	Robo7	14/06/2012	14/06/2013	486.9922
997162	114281	Peter Klewchuk	Robo8	14/06/2012	14/06/2013	296.6887
997163	114281	Peter Klewchuk	Robo9	14/06/2012	14/06/2013	423.7341
						Total Area: 3156.155

5 Accessibility, Climate, Local Resources, Infrastructure and Physiography

The Robocop claims are located east of the Canada-US border crossing at Roosville. Highway 93 runs north-south <1 km west of the Property. Approximately 24 km north of the Property, Highway 93 joins Highway 3. From this junction Fernie lies along Highway 3 to the northeast (~45 km north of the Property) and Cranbrook lies along Highway 93/3 to the northwest (~70 km northwest of the Property). The Property can be accessed by limited access logging roads that are accessible from Highway 93 at McDonald's Lumberyard at the north western edge of the Property; permission to cross their land should be acquired. The southern part of the Property can be accessed by an old forestry road that branches off of Highway 93 and parallels Phillips Creek (Figure 1). Spur roads, occurring off of the logging roads, provide additional access to the mineral claims and historic showings. An old exploration trail provides further access to historic showings, old trenches and drill sites.

The Robocop Property is found within the Rocky Mountain Trench and is located in the Galton Range of the Canadian Rockies. The Property overlies the Phillips Creek, Rainbow Creek, and Miller Creek drainage systems and is <8 km east of Kooteney Lake. Topographic relief on the Property ranges from 1,150 m to over 2,200 m. The majority of the area is forested comprising mainly of spruce, fir, and pine (BCForestry, 2008). In the vicinity of creeks and at high elevations the hillsides range in slope from gentle to steep and are covered with grasses.

6 History

Exploration activities in the region of the Robocop Property began in the early 1900's and have been sporadic since. Cominco Ltd. (Cominco) was the first large company to work on the claims in the late 1960's and investigated copper occurrences. The next generation of exploration on the Robocop claims wasn't until the late 1980's and included road building and trenching. Active exploration ventures since then continued every few years up until the present and included expansion of the claims group as well as drilling. The historical exploration work carried out on the Robocop claims group is described in detail below (Figures 2, 3 and 4).

Historical work from the early 1900's in the vicinity of Phillip's Creek is summarized by Wolfhard and Richardson (1967). Around 1900 quartz veins were discovered that yeilded minor high grades. Work prior to 1940 (likely also around 1900) included four shafts, four adits, and six open cuts driven into the quartz veins. Additionally, in the 1920's or 1930's a carload of barite was shipped from the area.

In 1967, Cominco Ltd. conducted exploration on the Phillips's Creek claims (on the north side of Phillips Creek largely overlapping the current Robocop claims). A soil survey was completed with samples collected from the top of the B' horizon. It was highlighted that chalcopyrite of significant concentration occurred at the upper contact of the lower Sheppard Formation (Wolfhard and Richardson, 1967). Thompson (1990b) reports that in 1967 Cominco additionally conducted a bulldozer-type trench program consisting of 5 trenchs to re-evaluate copper occurrences. Thompson (1990b) concluded the mineralization to be attributed to syneitic dyking however this information was not included in the orginal Cominco report.

In 1989, Teck Exploration Ltd. (Teck), conducted exploration activities on the Roo 1-3 claims (which were staked by and under option from Equity Engineering Ltd.). The Roo claims are overlain by the current Robocop Property. The program consisted of mapping, soil sampling (114 samples) and eight backhoe trenches (totalling 250 m) aimed at evaluating sediment hosted copper-silver-cobalt showings (Thompson, 1990b; Kemp, 1992). Four individual trenches and four interconnected trenches investigated copper mineralization previously highlighted by Cominco; these were backfilled at the end of the program. The showings were noted to be located at the base of a stromatolitic dolomite horizon. The best assays results included 1.93% Cu and 579 ppm Co over 6 m (Thompson, 1990b; Kemp, 1992). Diamond drilling was recommended (Thompson, 1990b).

In 1990, an eight hole (R-90-1 to R-90-8) diamond drilling program totalling 605.6 m (NQ-sized) was conducted by Teck on the Roo 1-3 claims (all of the historic drill holes are located on the current Property; Figure 4). The drill program covered three sites spaced approximately 570 m apart, based on the 1989 Tech exploration program. A total of 29 drill core samples were sent for analysis and it was noted that copper occurrences were concentrated at the top of a sequence of quartzo-feldspathic wackes, beneath a stromatolitic horizon. Copper grades from 4 of the drill holes returned

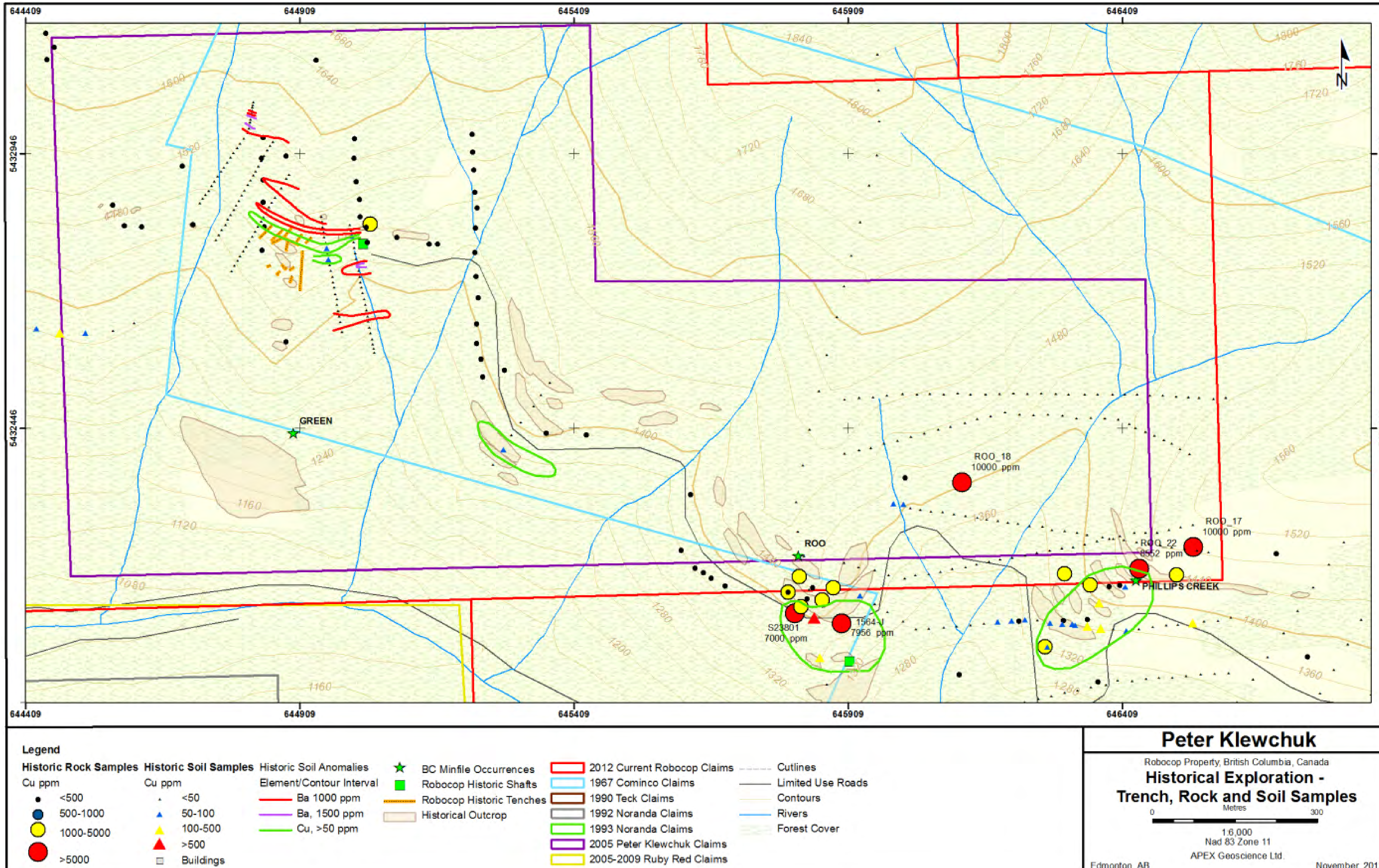


Figure 3 Historical Work – Trench, Rock and Soil Sampling

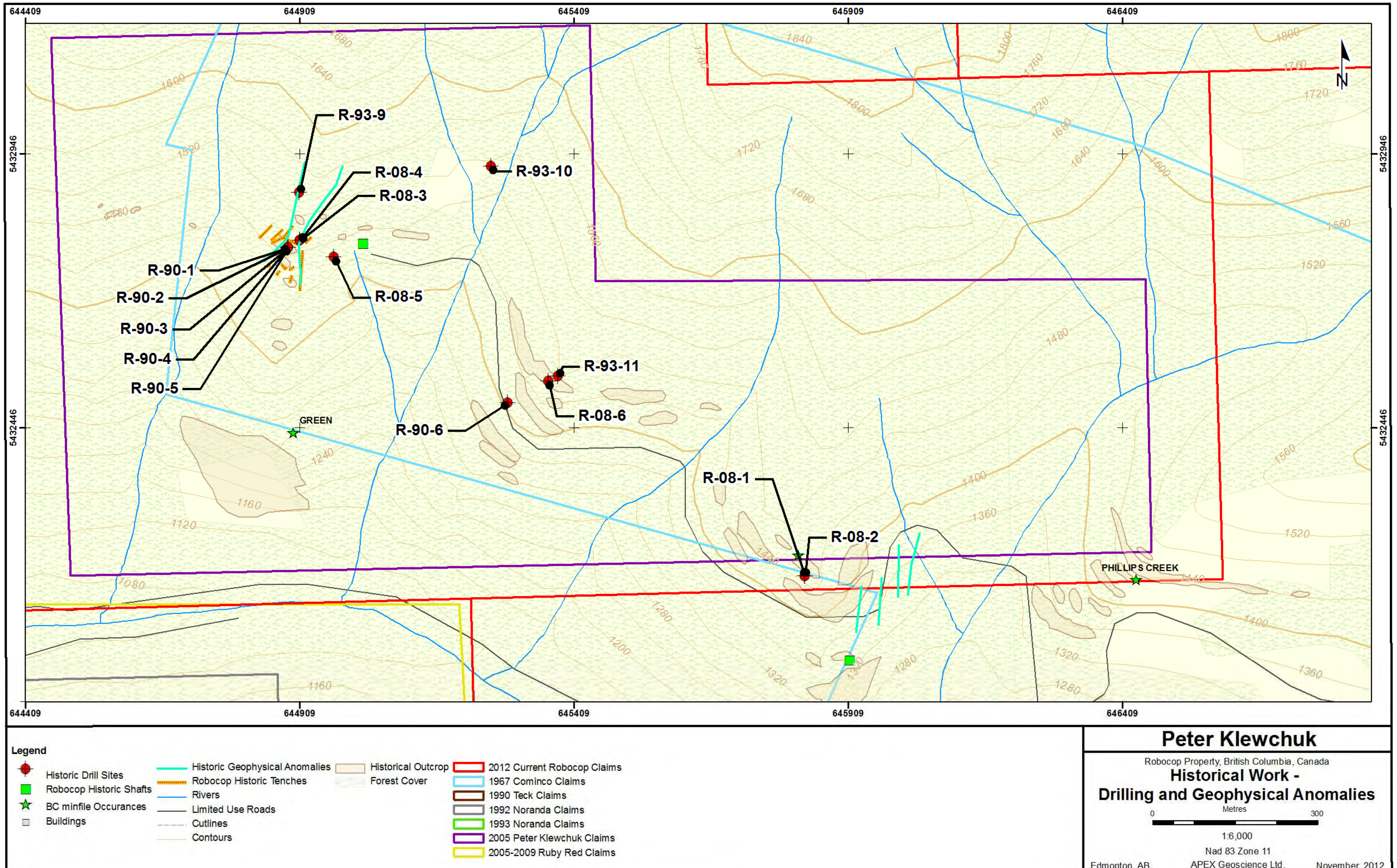


Figure 4 Historical Work - Drilling and Geophysical Anomalies

approximately 1-2% Cu (Kemp (1992). Highlights include a best assay of 0.806% Cu over 11 m and a mineralized zone ranging from 1-5 m was intersected. Mineralization was noted along fracture surfaces and in voids as malachite or chalcocite. Additionally, 28 soil samples were collected from three different areas: along the base of the stromatolitic horizon, from the west extension of the 1989 soil survey, and from southwest (SW) corner of the Property. It was concluded that samples (SS-29, 30, 31, 32, 34) taken from the SW corner of the Property yielded the best results. Further exploration was recommended along the Sheppard Formation sequence (Thomson, 1990a). The following year in 1991 Equity Engineering Ltd., added the Roo 4-7 claims to the Roo Claims Group (Kemp, 1992).

In 1992, Noranda Exploration Company Ltd. (Noranda), undertook exploration activities on the Roo 1-7 claim group (which largely overlaps the current Robocop Property). Exploration included 11.2 km of mapping focused on the Lower Sheppard horizon to get a better understanding of the stratigraphy that hosts mineralization and to highlight any controls on mineralization. Mapping identified a north trending normal fault interpreted to be active during the deposition of the Lower Sheppard Formation and thought to be a rift related structure along the north trending graben. The 1992 exploration program also included a small rock sampling program (16 samples); the best results were returned from the Roo Horizon and included chalcopyrite, bornite, pyrite and chalcocite mineralization. The mapping program also highlighted a notable sulphide-oxide trend that runs perpendicular to the Lower Sheppard basin for over 1200 m and found chalcopyrite to be present in many outcrops in the Phillips Creek area. The soil sampling program consisted of 103 samples (from the B' horizon) mainly taken in the area south of Phillips Creek with anomalies yielding from 51 ppm Cu to 578 ppm Cu. Further work was recommended (Kemp, 1992).

In 1993 Noranda held the Roo 1-7 claims as well as surrounding claims (Surf, Surf-1 and Mill claims) and conducted a three hole diamond drilling program totalling 475.5 m (NQ-sized core) on the Roo Belt claim group. The program was designed to assess the dip and strike extension of the known Cu-Co-Ag mineralization highlighted by Teck's previous drilling (1990). The drillholes lie within the current Robocop Property (Figure 4). Results identified the Roo Horizon to be an arkosic pebbly-sandstone within the upper portion of the Lower Sheppard Formation overlain by a purple mudstone identified to be a volcanic flow unit and bounded below by an intrusive sill. The best assay from the 1993 drill program from the Roo Horizon was 674 Cu ppm, 239 ppm Co over 1.4 m from drillhole R93-9. It was concluded that the potential for a sizeable deposit of sufficient tonnage and grade was small (Kemp, 1993).

In 2004 operator Peter Klewchuck commissioned a reconnaissance VLF-EM survey over the Robocop Property (then comprised of 6 claim blocks that lie within the extent of the current Property; Figure 2) to identify possible fault structures related to Cu mineralization. Two anomalies were identified in the vicinity of known occurrences of Cu mineralization. The anomalies were interpreted to highlight growth fault(s) that may have influenced Cu-Co deposition and/or mineralization. Further work was recommended (Klewchuk, 2005).

In 2007 Ruby Red Resources undertook exploration activities on the Robocop Property including mapping, prospecting, soil sampling, and trenching. The 2007 rock sampling program (70 samples) focused on mineral occurrences in the Phillips Creek area. The main Cu-Co showings on the Property are located within the Roo Horizon but the sampling program uncovered mineral showings within quartzites and stromatolites above the Roo Horizon and in volcanic stratigraphy below the Roo Horizon. The soil sampling program consisted of three lines of contour soil samples with the majority of the sampling conducted within the current Property (Figure 3). The second line showed a significant anomaly running over a kilometre in length with values up to 313 ppm Cu. The third soil sample line showed a moderate anomaly, trending over 700 m, and is potentially related to the Miller Creek showing in the vicinity. The 2007 trenching program was designed to re-assay the Roo showing and assess the style of mineralization. Five historic trenches were reopened and Trench number 5 was noted to display Cu-bearing barite veins (Kennedy, 2007). All trenches to date have been completed in the same vicinity and lie within the current Property (Figure 3).

In 2008 Ruby Red Resources drilled 6 diamond drill holes (R-08-1 to R-08-6) totalling 868.5 m on the Robocop Property to test a sediment-hosted Cu-Co deposit. All six holes lie within the current Property (Figure 4). Anomalous results were reported from 4 holes with the best results from hole R-08-3 which returned 0.48% Cu, 2.7 g/t Ag and 0.021% Co over 7 m. Mineralization in the hole was identified as limonite, pyrolusite, black copper oxide, malachite, pyrite and rare chalcopyrite occurring as disseminations and fracture filling in the arkosic conglomerate. Exploration activities also included surface geological mapping in the area of drilling as well as a soil sampling program that identified a Cu-Co anomaly 1.7 km in length southeast of the historical drilling. Drill-testing of the soil anomaly, further mapping and prospecting efforts, as well as, additional reconnaissance soil geochemical surveys were recommended (Pighin, 2009).

7 Geological Setting and Mineralization

7.1 Regional Geology

The Robocop Property is dominantly underlain by Proterozoic rocks of the Purcell Supergroup which correlate to the Belt Supergroup in the United States (Hoy, 1993). The Belt-Purcell Supergroup is composed of clastic and carbonate sequences deposited within an intracratonic basin that is interpreted to have formed as a rift-fill sequence of rocks during the Mid – Late Proterozoic. Regionally it extends over the south-eastern portion of British Columbia and covers parts of Idaho, Montana, Washington and Alberta. The Purcell Supergroup is exposed in the Purcell, Hughs, Lizard and Galton ranges of the Kootenays, east of the Rocky Mountain Trench (Thomson, 1990a; Hoy, 1993; Gardner, et al., 2007). Regionally, the Property is located within the *Foreland fold and thrust belt* in the western extent of the Front Ranges of the Rocky Mountains – a notable area of thrust sheets and intense deformation. Wolfhard and Richardson (1967) noted that features in the Property area were more similar to the characteristics of the Main Ranges, including normal faults, thrust faults and a lesser degree of deformation than the Front Ranges (Wolfhard and Richardson, 1967; Hoy, 1993; Figure 4). The structure of the western part of the Foreland thrust belt is dominated by the Purcell anticlinorium: a large regional structure, which contains northeast trending right-lateral reverse faults, easterly verging thrust faults and tight folds. Normal faults trending parallel to the Rocky Mountain Trench intersect earlier faults and folds in the region (Hoy, 1993; Figure 5).

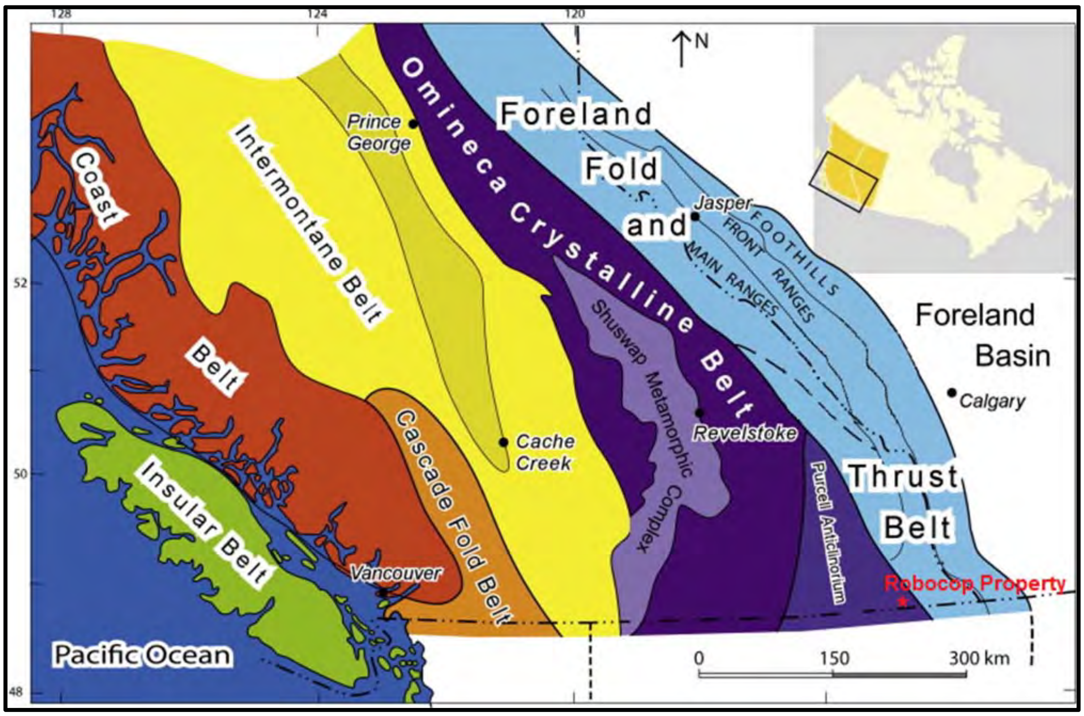


Figure 5 Regional Geology of British Columbia. Adapted from Vandienste et al. (2012).

The Property is largely underlain by the Sheppard Formation of the Purcell Supergroup which contains the Cu-Co occurrences of economic interest. Unconformably underlying the Sheppard Formation is the Nicol Creek Formation (Price, 1962; Hoy, 1993; Figures 6 and 7). The Nicol Creek Formation is comprised of a sequence of amygdaloidal basaltic flows, tuffs and interbedded siltstone and sandstone. The flood basalts are dominated by vesicular and amygdaloidal flows and contain disseminated chalcopyrite. The Nicol Creek Formation has a sharp contact with the lower Van Creek Formation and is regionally thickest in the Hughs and Baker Ranges (Hoy, 1993; Hartlaub, et al., 2011). The Sheppard Formation is comprised of a lower-basal conglomerate and an upper section composed of fine crystalline to silty-sandy dolomite and stromatolitic dolomite (Thomson, 1990a; Hoy, 1993; Figure 7). Regionally, the thickness of the Sheppard Formation ranges from <100 m to 1,500 m and is correlated with prominent facies changes. Southeast of Cranbrook, the Sheppard conglomerate unit is noted to have locally removed up to several hundred metres of the

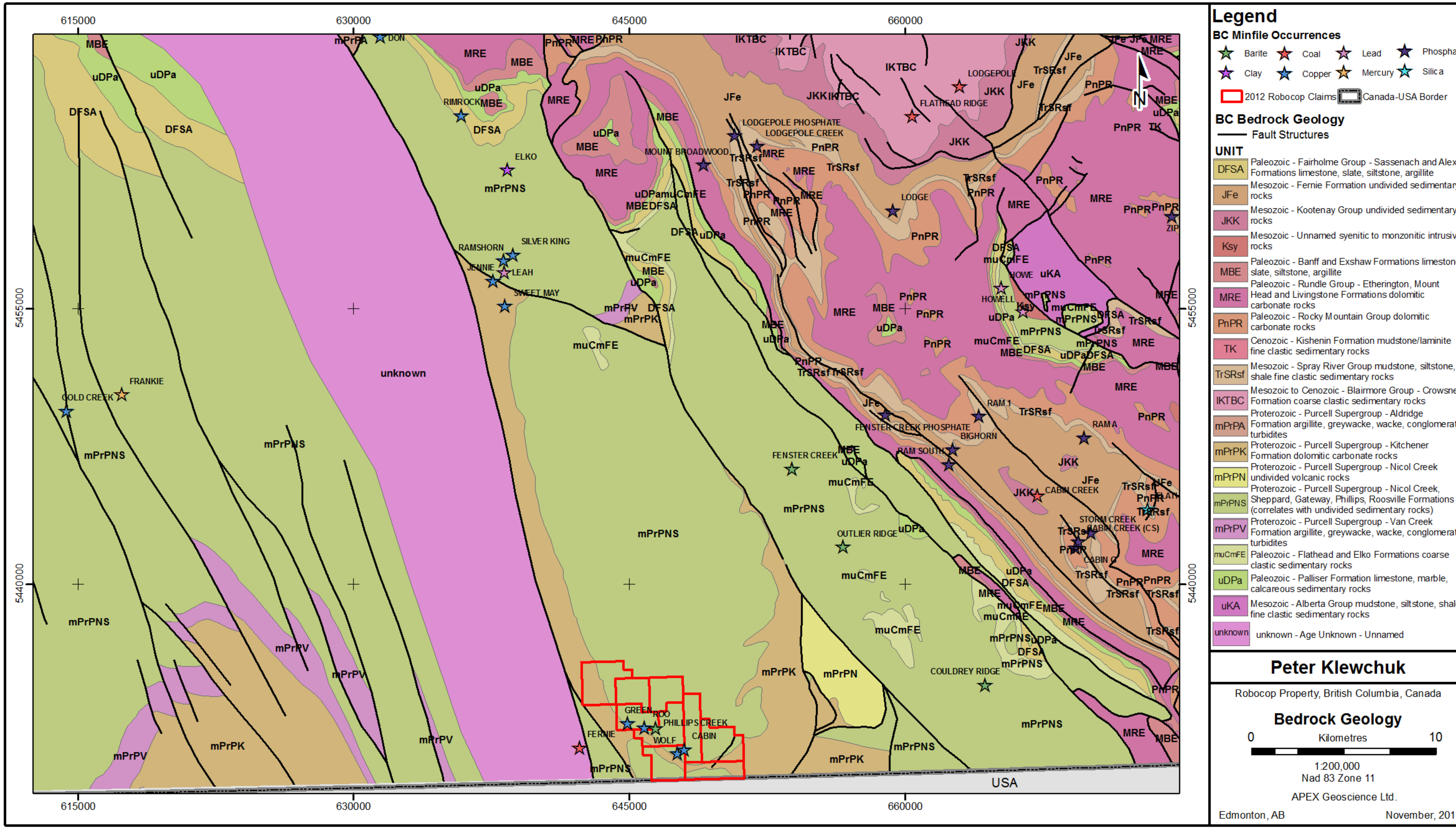


Figure 6 Bedrock Regional Geology

APEX Geoscience Ltd.

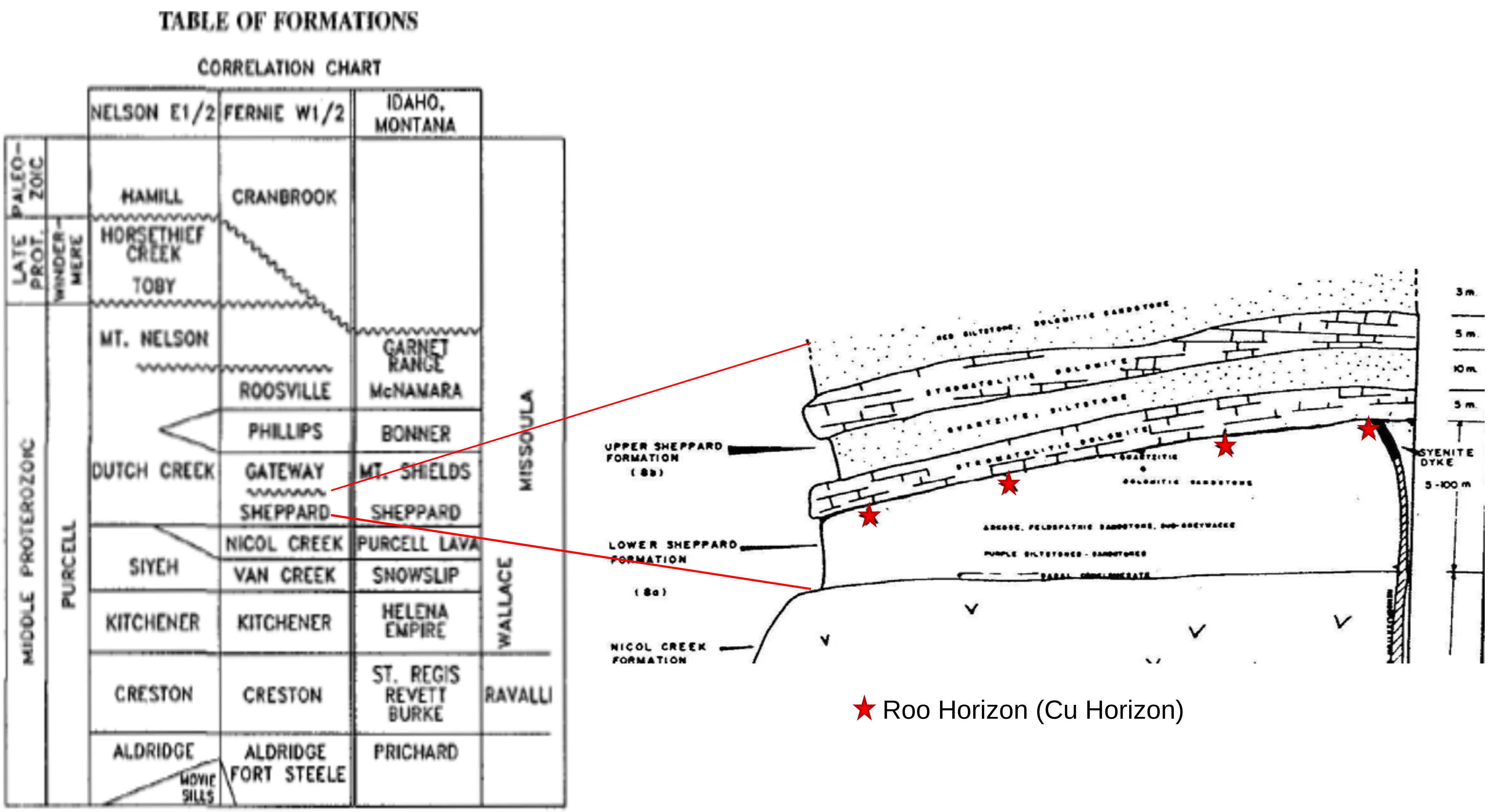


Figure 7 Regional Correlative Stratigraphic Units.

The Table of Formations (left side of Figure) is reproduced from Hoy (1993) and illustrates the stratigraphic units of the Purcell Supergroup in three regional areas. Historic reports use a combination of the regional names given in the table. The middle column is relevant to the Robocop Property. The right side of the figure is adapted from Thomson (1990 a,b) and illustrates the Upper and Lower units of the Sheppard Formation as outlined by Wolfhard and Richardson (1967).

Nicol Creek Formation. The conglomerate may lie unconformably on the Nicol Creek Formation but is commonly underlain by several tens of metres of purple to green siltstone and minor quartzite. In other regions the Sheppard Formation is comprised mainly of a stromatolitic – sediment sequence. Sedimentary structures including desiccation cracks, mud breccias and ripple marks indicate periods of cyclical subaerial exposure (Hoy, 1993). The Formation is interpreted to have been deposited in a marine shelf or shallow lacustrine environment. The Gateway Formation unconformably overlies the Sheppard Formation (Figure 7). The Gateway Formation is composed of green siltstone with minor dolomite and is approximately 300 to 900 m thick. It is overlain by a transition zone into the red and green siltstones of the Phillips Formation (Thomson, 1990a; Hoy, 1993; Figure 7).

In the area of the Property Wolfhard and Richardson (1967) divided the Sheppard Formation into the Upper and Lower Sheppard Formation. The Lower Sheppard Formation ranges in thickness from 5 to 91 m and is comprised of basal conglomerates overlain by purple siltstones and sandstones with some dolomitic sandstones. Up section the unit grades to sub greywackes, arkose, feldspathic sandstones, and quartz sandstone. Wolfhard and Richardson (1967) define the Upper Sheppard Formation to begin at the base of the first stromatolitic dolomite package above the top of the Purcell Lavas which are correlated to the Nicol Creek Formation (Kennedy, 2007). This basal stromatolite is 1.5 – 5 m thick and overlain by 6 – 12 m of grey quartzite followed by another 1.5 – 5 m package of a stromatolitic dolomite overlain by >3 metres of red siltstone and dolomitic sandstones (Figure 7).

7.2 Property Geology

The Property is underlain by sediments and volcanics of the Purcell Supergroup and more specifically the Sheppard Formation (Figure 8). The Sheppard Formation contains sediment-hosted copper mineralization. Wolfhard and Richardson (1967) divided the Sheppard Formation into an upper and a lower member as described above (Figure 7).The Sheppard Formation was further subdivided by Pighin (2009), into 16 sub-stratigraphic units summarized in (Table 2).

Pighin (2009) noted that the sediments on the Property dip moderately to the northeast at 10° to 25°. Wolfhard and Richardson (1967) provided the following observations about the structure of the Property area:

1. A gentle (amplitude [150 m] wavelength [>1.5 km]) anticlinal structure in the Purcell, which may be depositional or tectonic.
2. Very gentle warping (dips to 15°) in the Sheppard Formation, interpreted as tectonic because the sediments are mainly shallow water types, probably deposited in a plane, with low initial dips.
3. A few northerly striking normal faults with vertical displacements in the order of [1 to 6 m].
4. One thrust fault, dipping about 10° to 15° to the west, which has a maximum horizontal movement of [30 m].

Table 2 Substratigraphic Members of the Sheppard Formation (adapted from Pighin, 2009)

Member	Sheppard Unit	Thickness	Mineralogy	Consistency and Colouring
1	Top of Upper Sheppard	10m	Dolomitic quartzite	Mature unsorted quartz sand; weak dolomitic matrix
2	Upper	7-8m	Micritic stromatolitic dolomite; some quartzite lenses or beds	Amount of quartzite varies between drillholes; dolomite is thin-medium bedded, commonly wavy with sharp bedding contacts; some oolitic dolomite beds range up to 1 m thick
3	Upper	9-25m	Quartzite; local dolomite and hematite; thin beds of oolitic dolomitic-quartzite	Quartzite is massive bedded, mostly ungraded quartz sand; rock is grey with purple hematite bands
4	Upper	2m	Siltstone interbedded argillite, interbeds of mud chips and rare dolomite	Distinct wavy bedding, purply rock
5	Upper	4-10m	Quartzite, weakly dolomitic	Mostly immature quartz sand; massive, generally light grey on fresh surface- to lightly weathered, can be locally absent
6	Upper	2-18m	Micritic stromatolitic dolomite; some thin arenaceous beds	Thin beds; weathers dark orange, fresh rock is white-pinky with some green lineations, wavy bedding planes. Contains thin-lense siltstone/quartzite
7	Upper	2-10m	Amygdaloidal andesite; minor dolomite/calcite amygdules	browny-purply grey andesite, aphanitic matrix with red/white dolomite filled amygdules/veinlets; local red/white calcite forming crackle breccia
8	Upper	2-2.5m	Dolomitic, silty argillite with thin interbeds of grit/quartzite.	Layered green, pink and mauve; disrupted by soft sediment deformation
9	Upper	2-4m	Dolomitic, sericitic, arenaceous siltstone	Thick beds. On fresh surfaces rock is light grey with brown, orange and pink speckles
10	Upper	1-2m	Siltstone and arenaceous siltstone	Thin beds, wavy/wispy bedding planes: lower section is green-mauve, upper section is pink with brown speckles

11	Upper	Upper Conglomerate 0.5-1m Lower Conglomerate (within Member 12's litho unit) 2-3 m thick [Beds 3-4 m apart]	Arkosic conglomerate (quartz, quartzite, acid volcanics, argillite, siltstone clasts with quartz-feldspar grit matrix) **The conglomerate beds host copper and cobalt mineralization	Two conglomerate beds: Upper 0.5-1.0m marks the top of Member 12's arkosic grit; the Lower conglomerate bed occurs within Member 12's arkosic grit and is 2-3m thick. Clasts between 5 - 40mm, well rounded to angular, matrix supported. Matrix is altered (sideritic and limonitic).
12	Upper	?	Arkosic grit **This Member can host copper and cobalt mineralization	Immature-mature quartz sand, detritus (similar to clasts in Member 11's conglomerate beds). Matrix is mainly carbonate-iron carbonate and minor sericite. Weathers strongly limonitic
13	Top of Lower Sheppard Formation	14-46 m	Trachyte flow	Apple-green, massive, aphanitic with scattered amygdules filled with sericite, chlorite siderite or locally hematite. Weathers brown at surface
14	Lower	15 m	Pyroclastics interbedded with siltstone	Medium-thick bedding, basalt detritus with lesser feldsite, quartzite, quartz, siltstone, argillite, hematite. Siltstone interbeds are dark purplish
15	Lower	3 m	Volcanic conglomerate with amygdaloidal basalts clasts and lesser siltstone clasts	Clasts: 1-7 cm with some 10 cm+. Clasts are matrix supported, locally clast supported, rounded-angular. Colours: grey with speckles of white, purple, black, grey and green
16	Lower	?	Siltstone (thin beds)	Thin beds, wavy bedding, laminated. Undergone soft sediment deformation (ball and pillow) *Not always in stratigraphy, but if present always unconformably above the Nicol Creek basalts.
17	Lower	Top of Nicol Creek Volcanics	Amygdaloidal basalt	Massive basalts

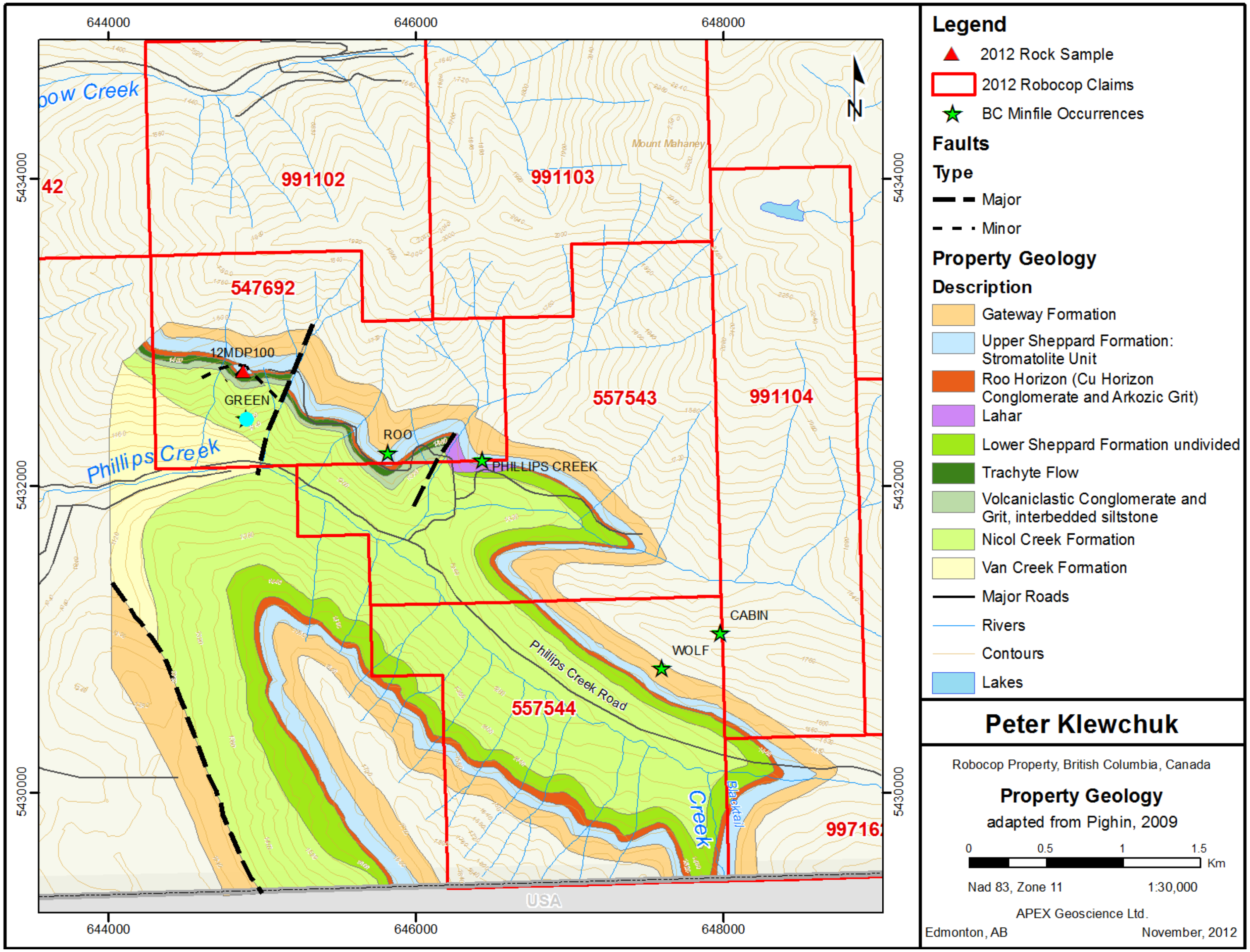


Figure 8 Property Geology

Wolfhard and Richardson (1967) also noted that foliation on less competent beds, striking 170°-180° and dipping steeply west, are likely fracture cleavages associated with bed deformation. One half of the quartz veins on the Property exhibit the same strike, while the other half of the quartz veins strike 90°-120° and dip steeply west or nearly vertically. Wolfhard and Richardson (1967) suggested that the orientation of the bedding, veining, faulting, shearing and foliation indicate a period of deformation along a N-S axis following a minor tilting event in the area on a E-W axis. Pighin (2009) noted that quartz – dolomite veins containing copper, on the Property, generally strike and dip parallel to the dominant foliation (strike 010° dip 74° W, and strike 310° dip 80°W and 75°E). Ruby Red Resources identified two minor normal faults and verified a NW trending normal fault with 30 m dip slip (Pighin, 2009; Figure 8).

7.3 Historical Mineral Occurrences

On the Property copper, cobalt and silver mineralization has been identified principally in the coarse clastic sediments of the Roo Horizon, and the quartzites and stromatolites above the Roo Horizon within the Sheppard Formation and in the underlying volcanics within the Nicol Creek Formation. Additionally, massive barite veins have been identified cross cutting the Sheppard Formation.

From the BC Minfile database 5 mineral occurrences are recognised on the Property: Green, Roo, Phillips Creek, Wolf and Cabin (Figure 2). Numerous explorers working in the area have identified additional occurrences and used alternate names for some of the occurrences listed in the BC Minfiles database. Specifically Ruby Red outlined the Roo, Copper Corner, Green Economy and Miller Time showings (Kennedy, 2007). However the Roo, Copper Corner, and Green Economy are in the same locations, respectively, as the Green, Roo and Phillips Creek mineral occurrences as listed with BC Minfiles (Figure 2). To complicate matters further the showing descriptions for showings with the same locations differ in some instances. For example, the Green Economy (a Ruby Red showing) refers a copper occurrence in a conglomerate unit noted to be from the Nicol Creek Formation, whereas the coincidently located Phillips Creek occurrence (MINFILE082GSE001) refers to massive barite veins cross cutting the Sheppard Formation. All known mineral occurrences on the Property are described in detail below.

The Green showing (also known as the Roo showing) is located on claim 547692. The Green showing was discovered and trenched in 1989, it contains copper and silver occurrences hosted within the Roo Horizon of the Sheppard Formation (MINFILE082GSW020; Kennedy, 2007). The location from the BC Minfile database places the Green showing ~300 m south of the known location of the Roo Horizon but this is within the stated 500 m error of the Minfile report. The mineralized Roo Horizon can be traced to the northwest and southeast. An assay of 3.51% Cu was returned from trenching in the sandstones below the basal stromatolitic horizon of the Sheppard Formation (Thomson, 1990b). In 2007, the Ruby Red Roo showing was described by Kennedy (2007) from an old re-habilitated trench as being characterized by malachite and black copper (potentially tenerite) staining along fractures and on minerals grains, with minor chalcopyrite in the quartzite. It was suggested copper mineralization may have been transported along solution fronts controlled by northerly trending conduits (Kennedy, 2007). The exhumed trenches were noted to expose a number of barite veins with northerly trending chalcopyrite and malachite. The Roo showing as described by Kennedy (2007) and the Green showing (historically also known as Roo) described by BC MINFILE082GSW020 are located in the same area and are considered to be synonymous (Figure 2).

The BC Minfile Roo prospect (historically known as Wilda and not to be confused with the aforementioned Green/Roo showing) is located on claim 547692. In 2007, Ruby Red described the Copper Corner showing in the same location as the Roo showing and these showings are considered to be synonymous (Figure 2). The modes of mineralization are similar to those reported at the Green showing with copper mineralization occurring in the Roo Horizon, purple siltstone, basal stromatolite and some of the upper quartzite bands of the Sheppard Formation. Two grab samples from 1989 returned 0.47% Cu, 4.8 g/t Ag and 0.70% Cu, 3.8 g/t Ag (MINFILE082GSW019; Thomson, 1990b). In outcrop the basal stromatolite and upper quartzite contain weak copper mineralization as disseminations and fractures, along with barite veins. One instance of barite veins associated with a syenite(?) intrusive dyke containing significant copper mineralization has been mapped (Kennedy, 2007).

The Phillips Creek mineral occurrence (a Minfile occurrence) is located on the border of Robocop claims 547692 and 557543 (Figure 3). The occurrence is classified as an open pit, past producer of barite where 7 tonnes of barite were shipped in 1940. The grade was reported at 56.46% BaO, 0.64% CaO, 0.18% Fe and 31.45% SO_3. The barite is hosted in massive veins that are associated with sediment-hosted copper. The mineralization is found within brecciated argillite, quartzite, volcanic rock and altered porphyry of the Sheppard Formation. The main mineralized vein has been traced for over 107 m trending NW-SE and is 15 cm to 1.53 m wide. The hanging wall of the vein is reported to contain altered porphyry whereas the footwall of the vein contains brecciated argillite. The main vein contains massive, opaque barite with considerable disseminated carbonate found throughout. Accessory barite veins, up to 30 cm wide, occur parallel and/or perpendicular to the main vein (MINFILE082GSE001).

Ruby Red identified the Green Economy showing in the same area as the Phillips Creek occurrence (Figure 2). In contrast to the Phillips Creek Minfile description the mineralization at the Green Economy showing is reported to be hosted within the Nicol Creek volcanics underlying the Sheppard Formation. This occurrence lies across a fault structure from the above Green and Roo occurrences and a significant change in the stratigraphy was mapped. Volcanic pyroclastic and brecciated units occur in place of the purple siltstone of the Sheppard Formation and a sudden absence of the Roo Horizon was noted. The Green Economy showing refers specifically to a conglomerate sequence of the Nicol Creek volcanics >7 m width that contains copper, cobalt, hematite and associated mineralization (Kennedy, 2007). Kennedy (2007) reports that the Green Economy target area may be a slump feature related to Nicol Creek venting processes and that local quartz-carbonate-barite-chalcopyrite-cobalt veins may also be associated with these processes.

The Wolf showing, located on the 557544 claim (Figure 2), is comprised of Cu-Zn mineralization also hosted in the Sheppard Formation which in this area composed of sub greywacke, quartzite sandstone and stromatolitic dolomite. Significant mineralization has been observed and is characterized by disseminated chalcopyrite, sphalerite and barite. The mineralization is noted to be approximately 12 m below a stromatolitic dolomite marker horizon of the upper Sheppard Formation and thus occurs within the lower Sheppard Formation (MINFILE082GSE009).

The Cabin showing located at the border claims 557544 and 991104 (Figure 2) and is hosted in subgreywacke, quartzite sandstone and stromatolitic dolomite of the Sheppard Formation. The showing is comprised of significant disseminated mineralization of chalcopyrite, sphalerite and barite. The disseminated sulphides at both the Wolf and Cabin showings are noted to be closely associated with normal faults that show little offset. Stratigraphically, mineralization at the Cabin showing is the same as at the Wolf Showing (located ~400 m SE of Cabin) and occurs 12 m below the stromatolitic dolomite of the upper Sheppard Formation (MINFILE082GSE010).

The Miller Time showing is located on a northern talus slope above Miller Creek, just north of the Property boundary (Figure 2) and is hosted by the Nicol Creek Volcanics. Float boulders were found in the area with quartz-carbonate-copper-sphalerite veins that were traced up slope to an old shaft. The exact location is unclearly marked on historic maps but is estimated to be within 270 m north of Robocop claim 997142. The Mineralization includes disseminated chalcopyrite, malachite, azurite, limonite, pyrite and sphalerite as well as massive hematite veins (plus or minus Cu and Zn mineralization) and smaller mineralized veins. The area also contained a basalt flow that contained copper mineralization with chalcopyrite and malachite amygdules. It was noted that the top of the Nicol Creek in this area is bounded by the basal Roo Horizon containing magnetite grains (Kennedy, 2007).

7.4 Mineralization

Several modes of mineralization occur on the Property which are classified differently by historic authors (see Thomson, 1990 and Pighin 2009) and summarized below.

The principle exploration target is sediment-hosted copper, silver and cobalt mineralization that is hosted in coarse clastic sediments (arkosic conglomerate and arkosic grit) of the Sheppard Formation. This coarse clastic sediment unit has historically been referred to as the Roo Horizon. The Roo Horizon was identified to be an arkosic pebbly-sandstone located within the upper portion of the Lower Sheppard Formation; it is overlain by a purple mudstone identified to be a volcanic flow unit and bounded below by an intrusive sill. The Roo Horizon lies below the basal stromatolitic dolomite of the Sheppard Formation (Thomson, 1990b). The mineralization consists of heavily disseminated and fracture controlled limonite, black copper (potentially tenerite), pyrolusite, malachite, minor pyrite, rare chalcopyrite and locally minor barite. The mineralization has been intercepted in drilling along a 1.1 km long strike length but is open in both directions (Thomson, 1990,a, b; Pighin, 2009). Copper mineralization has also been noted above the Roo Horizon, in the purple siltstone, basal stromatolite and some of the upper quartzite bands of the Sheppard Formation. Historically it has been noted that copper mineralization that occurred below the stromatolitic sequence was the most economically viable (Thomson, 1990a).

Thomson (1990a) proposed a model for the copper mineralization of the Sheppard Formation that suggested the source of the copper was the underlying Nicol Creek Formation. He proposed that the Nicol Creek volcanics were emplaced with a high copper content and the subsequent deposition of the clastic lower Sheppard unit included copper sulphide detrital grains trapped within the sediment matrix. A later stage remobilization process, possibly caused by a syenite intrusive, resulted in the scavenging of copper from surrounding sediments by quartz-barite veins. Finally copper mineralization was concentrated through faulting and later stage ground water infiltration. Hartlaub et al., (2011), have subsequently suggested that the copper mineralization within the Sheppard Formation may be the result of hydrothermal fluid circulation associated with the emplacement of the Nicol Creek Formation. The presence of abundant barite, which is interpreted to be a sandstone cementing agent, and the stromatolitic packages are interpreted as further evidence supporting the presence of an active hydrothermal system (Hartlaub et al., 2011).

Quartz barite veins and breccias with associated copper, silver and cobalt are found within the lowermost stromatolite unit of the Sheppard Formation. The copper bearing veins are thin, rarely more than 1 cm in width and overall the veins are relatively rare. Some veinlets of quartz-barite occur in association with syenite dykes (Thomson, 1990a). One occurrence of mineralized breccia measuring 3 m width has been developed in an old shaft. This occurrence consists of weakly fractured stromatolitic dolomite, healed by quartz and dolomite with scattered chalcopyrite and associated malachite (Pighin, 2009). The quartz-barite veins, and associated copper mineralization, are interpreted to have formed as a result of the remobilization of primary mineralization from sandstone horizons. The heat source inducing such remobilization may have been a deeper seated syenitic intrusive body with copper sourced from the Nicol Creek volcanics (Thomson, 1990a).

Ruby Red Resources additionally identified copper mineralization within the Nicol Creek Volcanics at the Miller Time and Green Economy showings. At the Miller Time occurrence mineralization includes disseminated chalcopyrite, malachite, azurite, limonite, pyrite and sphalerite as well as massive hematite veins (± Cu and Zn mineralization) and smaller mineralized veins. The area also contained a basalt flow that contained copper mineralization with chalcopyrite and malachite amygdules (Kennedy, 2007). At the Green Economy mineralization includes copper, cobalt, hematite and associated mineralization that may be related to a slump feature associated with Nicol Creek venting processes (Kennedy, 2007).

8 2012 Exploration

In 2012, APEX was commissioned to complete a thorough data compilation for the Robocop Property and provide a 3-D model and geologic interpretation of the area. Additionally one rock sample was collected from a historic trench site and historic drill core, in storage near Cranbrook, was examined.

In 2012, APEX completed a detailed data compilation of all available historic exploration work conducted on the Robocop Property. The data compilation resulted in the creation of a database containing all available historic drillhole, trench, rock sample and soil sample information along with all available geological and assay data formatted for use in Micromine and ArcGIS software. The compilation of the historic drillholes included data for location, lithology and assays. Information for 15 historic drill holes completed between 1990 and 2008 was compiled in the database including 325 samples containing assays for Au, Ag, Cu, Co, Mn, Hg and S (Appendix 1). Two additional historic drillholes (R-90-7 and R-90-8) were found with assay and geological logs but no location information was available for these holes and they are not included in the modelling. During the compilation effort it became evident that previous companies that worked in the area used different lithological descriptions and unit names during their logging of the drill core. This made correlating discrete geological units between different generations of drilling impossible. It is strongly recommended that all available historic drill core be relogged to the standard of the 2008 Ruby Red drill logs. Previous explorers did however, all use the same Formation names so it was possible to correlate the geologic Formations between different generations of drilling. Numerous faults have been mapped in the area of drilling. This along with the irregularly spaced and oriented drillholes created difficulties in the correlation of geologic data between holes.

Drill sections were created to show the distribution of mineralization and complexity of the drilling (Appendix 2). The geological modelling, which was completed in Micromine, produced a 3-D model of the geological Formations, faults, and mineralization underlying the Robocop Property for the area of drilling (Figures 9 and 10). The 3-D modelling in the northern extent of the drilling shows significant low grade mineralization associated with what appears to be a high angle fault with step like offset (down) to the east (Figure 10). Authors of prior exploration reports refer to these faults as potentially syn-sedimentary “growth-like” graben related faults. These faults most likely would have been planes of weakness and would have been reactivated during subsequent tectonic activity indicating a structural component to the mineralization control (illustrated by drillholes R90-1 to R90-5 and R08-3 to R08-5; Figure 10). Based on the indications of low grade copper mineralization in and around the faults at surface and in drill holes, it is quite possible that these faults may have controlled mineralizing fluids at some stage.

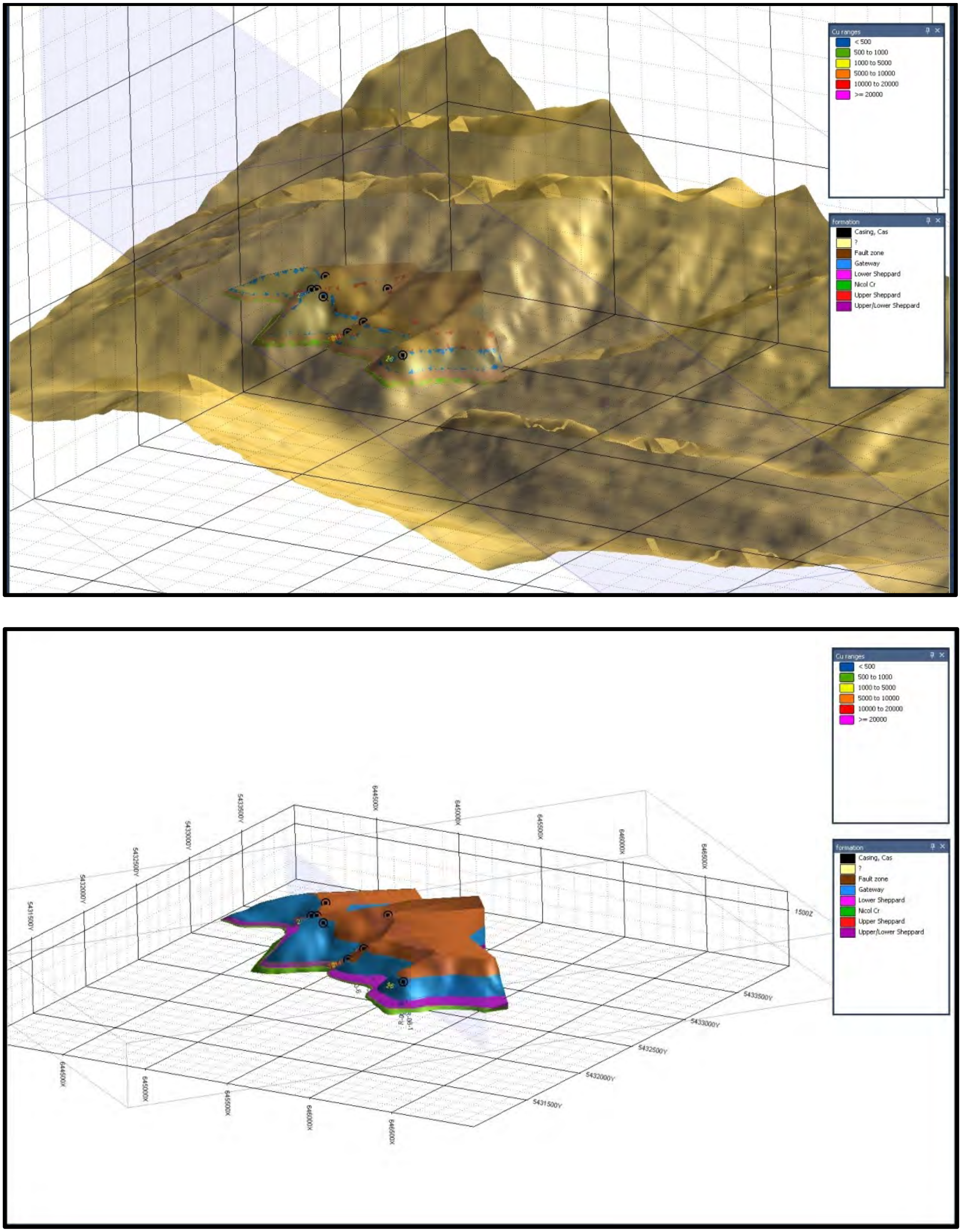


Figure 9 3D Micromine model of drilling (top) and geology (bottom) at the Robocop Property.

APEX Geoscience Ltd.

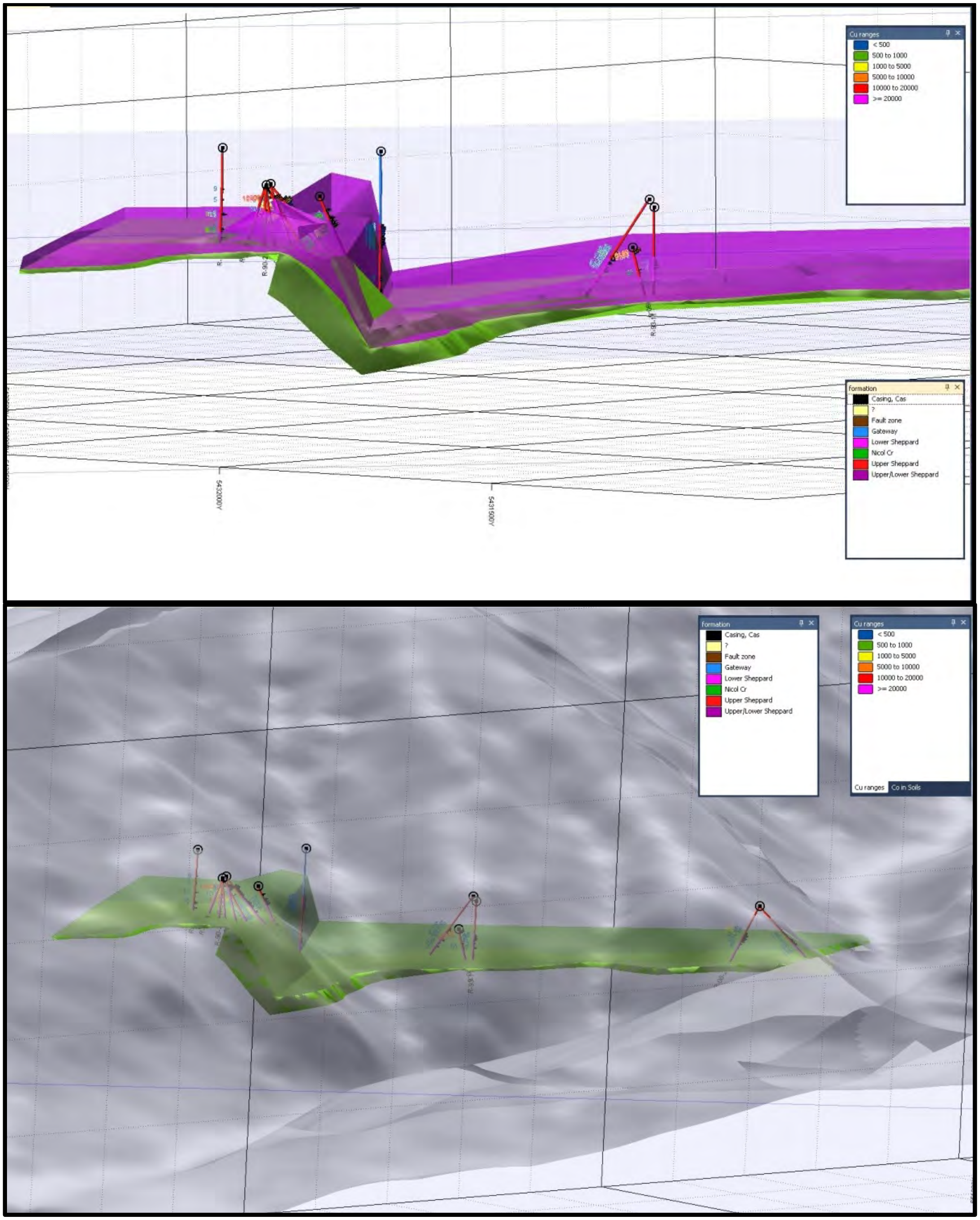


Figure 10 Micromine model of drilling showing vertical fault and east side down.

APEX Geoscience Ltd.

Assay data from the rock and soil samples were added to the 3-D model to review the results of surface sampling to date and relative to the mapped extent of the mineralized units (Figures 11 and 12). In the 3-D model the soil anomaly southeast of the historic drilling, near the historic Wolf occurrence and herein named the Phillips Creek soil anomaly, is identified as a pronounced copper-cobalt anomaly along the south side of the Phillips Creek Ridge (Figures 11 and 12). Further soil sampling on the north side of the ridge and south across the valley from the Phillips Creek soil anomaly did not produce any significant copper or cobalt in soil anomalies even though mapping shows that the most prospective Sheppard Formation stratigraphy is present. Historic soil sampling has produced a few other sporadic copper anomalies on the Property to the west and northwest of the main Robocop showings. Further detailed soil sampling should be conducted in these areas.

Although limited soil sampling has been conducted to date across the Property, the sampling has highlighted an excellent copper and cobalt in soil anomaly that is a minimum of 1.5 km in length. The anomaly is considered high quality and warrants drill testing. Other sampling on the Property has yielded only a few sporadic comparable anomalies, indicating that there are local controls, potentially structural and stratigraphic, to copper-cobalt-silver mineralization within the Sheppard Formation. The soil sampling and the presence of the Phillips Creek anomaly indicates that there are potential locations on the Property with significantly increased copper and cobalt contents indicating that the geology and stratigraphy are permissive for higher grade copper-cobalt-silver deposits than what has been indicated by drilling to date. This may perhaps be similar in style to mineralization associated with Revett Minerals Ltd.'s Troy Mine and the Rock Creek Deposit in western Montana. The Troy Mine and the Rock Creek Deposit in the Proterozoic Revett Formation contain more than 2.5 billion pounds of copper and 300 million ounces of silver as disseminated stratabound hydrothermal mineralization.

During the field visit, a single rock sample (12MDP100) was taken from rubble along a roadside from a historic trench area on claim 547692 targeting the mineralized horizon (i.e. Roo Horizon; Figure 8). The sample was located at 644875E and 5432745N NAD83 zone 11. The sample was a fine grained siltstone-sandstone that showed disseminated malachite and pyrolusite +/- bornite with weathered white calcite along the fractures (Plate 1a). The sample returned an assay value of 1.63% Cu, in agreement with historical results from this area. A massive barite vein was also identified in the area (Plate 1b; Appendix 3).

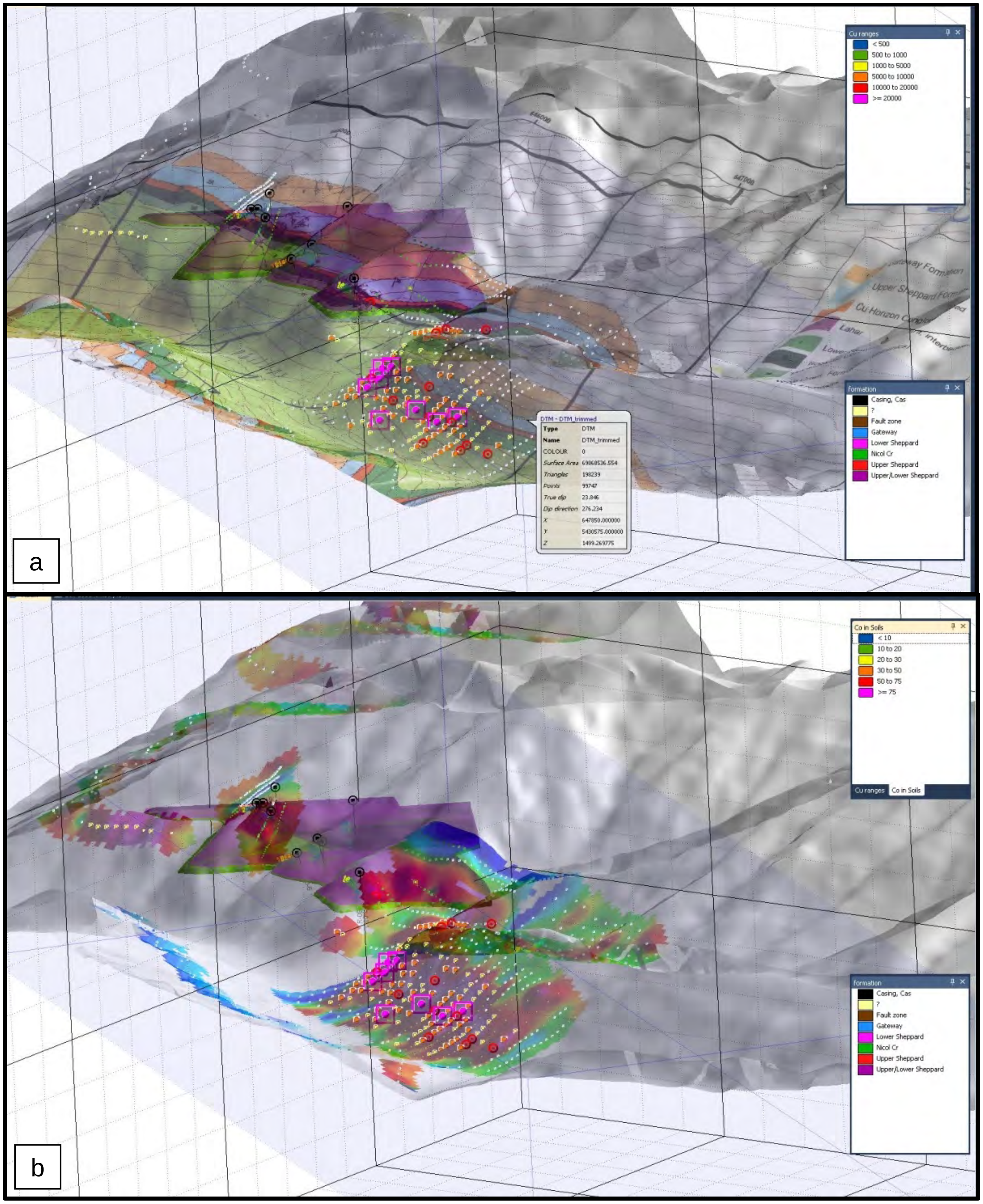


Figure 11 Micromine model of topography showing Phillips Creek soil anomaly; (a) geology draped on topography with cobalt in soil samples; (b) image of contoured copper draped on topography with cobalt in soil samples.

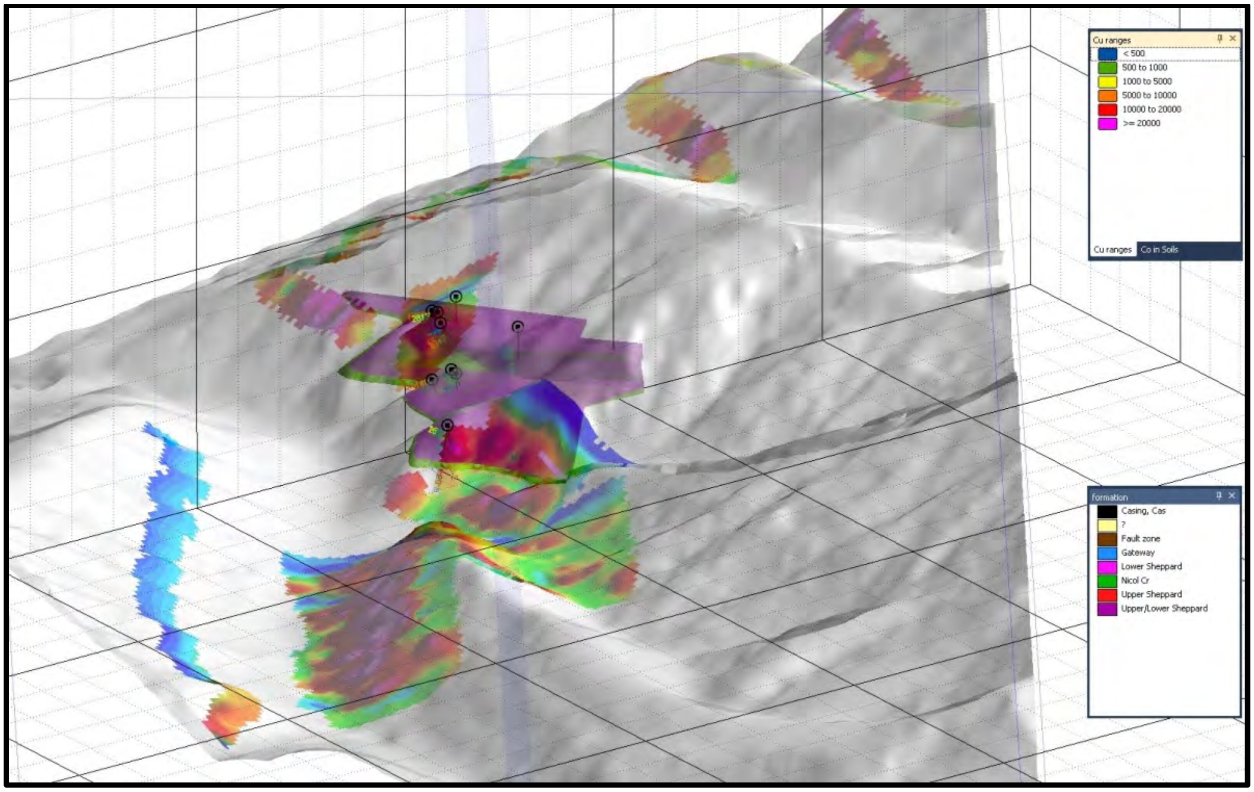


Figure 12 Micromine model of topography showing Phillips Creek soil anomaly with draped image of contoured copper.

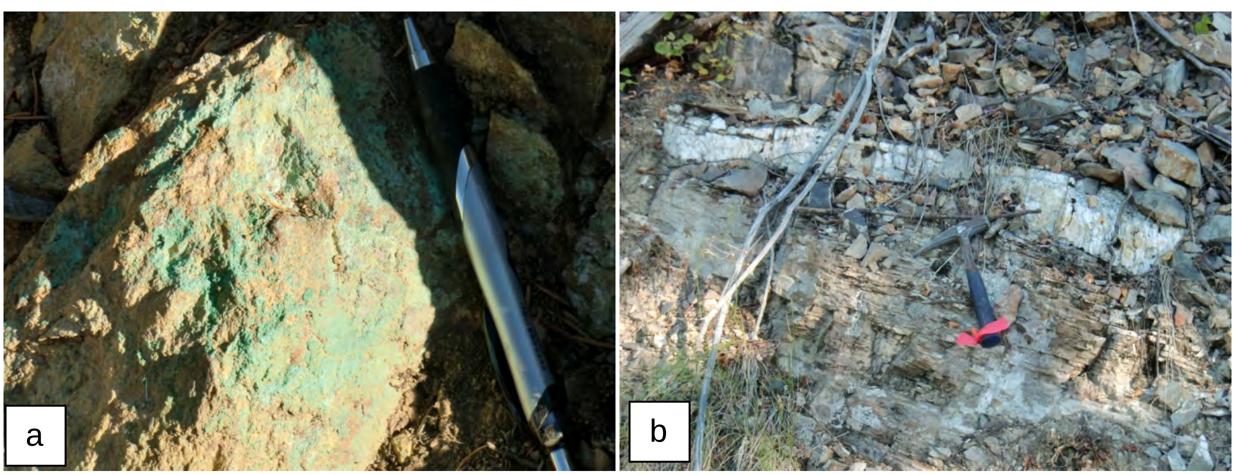


Plate 1 Mineralized rock sample (a) and barite vein (b) from Robocop Property

8.1 Rock Sample Preparation and Analysis

One rock sample (12MDP100) was collected on the Robocop Property and sent to ALS Minerals (ALS) for laboratory analysis. The sample preparation procedure includes weighing, drying, and fine crushing the sample so 70% of the crush passes through a 2 mm sieve. Then a 250 g split (or up to 1, 000g) of the 2 mm crush is pulverized to 85% or better, to pass through a 75 micron sieve (ALS, 2012). The ALS equipment is cleaned between each sample with compressed air and brushes. The prepared sample is digested with aqua regia in a graphite cooling block and diluted with 12.5 ml of deionized water (ALS, 2009). The sample then undergoes inductively coupled atomic emission spectroscopy (ICP-AES) analysis to measure 35 elements. The analytical results are corrected for inter-element spectral interferences.

9 Exploration Expenditures

The 2012 work completed by APEX resulted in a total expenditure of approximately CDN $20,163.63 for the Robocop Property. A breakdown of expenditures is presented in Appendix 4.

10 Interpretation and Conclusions

The 2012 program included a comprehensive historic data compilation, conversion of all historic data into digital format and input of the compiled data into 3-D modelling and geospatial software for interpretation of the stratigraphic units and related mineralization. Additionally, one rock sample was collected and historic core was examined.

The Property is largely underlain by the Late Proterozoic Sheppard Formation of the Purcell Supergroup. The Sheppard Formation is comprised of a lower-basal conglomerate and an upper section composed of fine crystalline to silty-sandy dolomite and stromatolitic dolomite. The Sheppard Formation is underlain by a thick sequence of volcanics consisting mainly of basalt and associated pyroclastics. The copper and cobalt mineralization of interest on the Property occurs in the Sheppard Formation specifically in the arkosic conglomerate and arkosic grit either adjacent to or immediately below the lowermost dolomite unit. Depending on the historical stratigraphy used the mineralized unit belongs either to the base of the Upper Sheppard Formation (Pighin, 2009) or the top of the Lower Sheppard Formation (Thomson, 1990).

Previous exploration in the area was focused on strata bound copper mineralization within the Sheppard Formation and also led to the discovery of massive barite-rich veins that cross cut the Sheppard Formation. Five historic mineral occurrences are known to exist on the Robocop Property. Of particular interest is the mineralization associated with the Green and Roo occurrences both of which are characterized by sediment hosted copper (Cu), silver (Ag) ± cobalt (Co) mineralization contained within the so called Roo Horizon of the Sheppard Formation. The Roo Horizon can be traced along a northwest – southeast trend in sporadic outcrop for over 2 km. In 2012 a rock sample was collected from an old trench site that sampled the Roo Horizon near historic drilling in the northwest part of the Property. The sample returned an assay of 1.63% Cu, 4.1 g/t Ag and 1,010 ppm Co, confirming historic results from the area. Copper, cobalt, hematite and associated mineralization have also been recognised in the underlying sequence of Nicol Creek volcanics. Historically barite has been mined from quartz barite veins that occur within the lowermost stromatolite unit of the Sheppard Formation. These veins often contain associated copper, silver and cobalt mineralization.

The 2012 program included a comprehensive compilation of all available historic exploration work conducted on the Robocop Property. A digital database was created containing all historic drillhole, trench, rock and soil sample information along with all available geological and assay data formatted for use in Micromine and ArcGIS software. The drill database is comprised of 15 historic drillholes and includes 325 samples containing assays for Au, Ag, Cu, Co, Mn, Hg and S. Correlation of detailed geological units between different generations of historical drilling was impossible due to the use of different lithological description and unit names by the different generations explorers involved. Relogging of all the historic drill core to the standard of the 2008 Ruby Red drill logs is strongly recommended to facilitate more detailed correlation of the stratigraphy.

The geological modelling, completed in Micromine, produced a 3-D model of the geological Formations, faults, and mineralization underlying the Robocop Property for the area of drilling. The 3-D modelling in the northern extent of the drilling shows significant low grade mineralization associated with what appears to be a high angle fault with step like offset (down) to the east. Historically these types of faults have been interpreted to be syn-sedimentary growth like graben related features. These faults would likely have been planes of weakness that would have been reactivated during subsequent tectonic activity indicating a structural component to the mineralization control. Based on the presence of low grade copper mineralization in and around the faults at surface and in drill holes it is likely that these faults may have controlled mineralizing fluids at some stage.

The limited soil sampling has highlighted an excellent copper and cobalt in soil anomaly southeast of the historic drilling. The Phillips Creek soil anomaly is considered a high quality anomaly that is a minimum of 1.5 km in length and warrants drill testing. Other sampling on the Property has yielded only a few sporadic comparable anomalies, indicating that there are local controls, potentially structural and stratigraphic, to copper-cobalt-silver mineralization within the Sheppard Formation. The soil sampling and the presence of the Phillips Creek anomaly indicates that there are potential locations on the Property with significantly increased copper and cobalt indicating that the geology and stratigraphy are permissive for higher grade copper-cobalt-silver deposits than what has been indicated by drilling to date. An analogy with the mineralization style associated with Revett Minerals Ltd.’s Troy Mine and the Rock Creek Deposit in western Montana can be drawn. The disseminated stratabound hydrothermal mineralization at the Troy Mine and the Rock Creek Deposit is found within the Proterozoic Revett Formation. These deposits contain more than 2.5 billion pounds of copper and 300 million ounces of silver.

Although the Sheppard Formation is Stratigraphically quite a bit higher in the middle Proterozoic stratigraphy than the Revett Formation in western Montana, the geological setting is similar and the style of copper-cobalt-silver mineralization is very similar to that of the Troy Mine and Rock Creek Deposit. The fact that there are areas with significant copper-cobalt in soil anomalies and drilling to date that have intersected grades approaching the required economic values, the Robocop Property is considered a high priority project that requires follow-up exploration. Further soil sampling along with a helicopter Time Domain Electromagnetic and Magnetic airborne survey are considered high priority. Further geological, stratigraphic and structural mapping should be considered prior to drilling. A LIDAR survey combined with a high resolution satellite image should be considered for acquisition as the airborne geophysics combined with the high resolution LIDAR and satellite data may aid in identifying parts of the Property with the required vertical structural feeder zones along with better associated stratiform copper mineralization.

11 Recommendations

On the Robocop Property areas with significant copper-cobalt in soil anomalies have been identified. Additionally, historic drilling has intersected grades approaching economic values. The results of the 2012 data compilation indicate that significant potential exists to expand the known extent of the copper-silver-cobalt mineralization on the Property. The Robocop Property is considered a high priority project that requires follow-up exploration. A 2 phase exploration program is recommended for the Robocop Property:

Phase 1 should include the completion of an helicopter borne Time Domain Electromagnetics and magnetics survey. The survey should cover the Cu – bearing horizon and overlying units over the majority of the Property. The area of the survey would consist of approximately 500 line km. At an all in cost of $200 per line km the total expenditure for the airborne survey is estimated to be approximately $100,000.

Phase 2 should include a field program that consists of drill testing the Cu in soil anomaly located southeast historic drilling and fieldwork to follow-up on anomalies identified from the airborne geophysical survey. The follow-up fieldwork should include prospecting, geological mapping, and soil sampling. The cost to complete the follow-up field exploration is estimated at $100,000. Drilling of the soil anomaly should include 4 to 6 holes from 3 setups with a vertical and angled hole completed from each color. Any high priority targets identified from the geophysics should be drilled with 2 to 4 holes. Approximately 1,000 m of drilling is recommended at an all in cost of $300/m, totalling $300,000. The total cost to complete Phase 2 would be approximately $400,000.

The total expenditure to complete both Phase 1 and Phase 2 programs is estimated at $500,000.

APEX Geoscience Ltd.

PROFESSIONAL GEOLOGIST MICHAEL B. DUFRESNE ALBERTA

PROFESSIONAL GEOLOGIST ANETTA BANAS ALBERTA

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

Kathryn Salter, B.Sc., Geol.I.T.   March 18, 2013

12 References

ALS (2007): Geochemical Procedure ME-ICP41 Trace Level Methods using Conventional ICP-AES Analysis; URL <http://www.alsglobal.com/~/media/Files/Divisions/Minerals/Geochemistry/Geochemistry%20Resources/Short%20Method%20Descriptions/Sample%20PREP-31BY%20Standard%20Sample%20Preparation%20Package%20for%20Rock%20and%20Drill%20Samples%20using%20Boyd-Rotary%20Crush-Split%20Machine.ashx

ALS (2009): Geochemical Procedure ME-ICP41 Trace Level Methods using Conventional ICP-AES Analysis; URL <http://www.alsglobal.com/~/media/Files/Divisions/Minerals/Geochemistry/Geochemistry%20Resources/Short%20Method%20Descriptions/ME-ICP41%20Aqua%20Regia-ICP%20Multi-element%20Method.ashx>[November 22, 2012].

ALS (2012): Technical Note Low Level Sample Preparation Procedures; URL <http://www.alsglobal.com/~/media/Files/Divisions/Minerals/Geochemistry/Geochemistry%20Resources/Technical%20Note%20Items/Laboratory%20Sample%20Preparation%20Procedures%20Techincal%20Note%202012.ashx> [November 23, 2012].

ALS (2012): Technical ALS Schedule of Services and Fees 2012 CAD; Sample Preparation Packages; URL <http://www.alsglobal.com/~/media/Files/Divisions/Minerals/Geochemistry/Geochemistry%20Resources/Services%20Schedules/ALS%20Geochemistry%20Service%20Schedule%202012%20-%20CAD.ashx> [November 23, 2012].

BC Forestry (2008): BC Forest Service Research Branch; BEC WEB; Biogeoclimatic Zones of British Columbia; URL <http://www.for.gov.bc.ca/hre/becweb/resources/maps/map_download.html > [Accessed November 15, 2012].

BC Geological Survey (1985): MINFILE Detail Report 082GSE001, Phillips Creek, BC Geological Survey; Minister of Energy, Mines & Petroleum Resources, revised Grant, B. 1986. URL <http://minfile.gov.bc.ca/Summary.aspx?minfilno=082GSE001 > [June 10, 2012]. [online document]

BC Geological Survey (1985): MINFILE Detail Report 082GSE009, Wolf, BC Geological Survey; Minister of Energy, Mines & Petroleum Resources, revised Grant , B. 1986. URL <http://minfile.gov.bc.ca/Summary.aspx?minfilno=082GSE009 > [June 10, 2012]. [online document]

BC Geological Survey (1985): MINFILE Detail Report 082GSE010, Cabin, BC Geological Survey; Minister of Energy, Mines & Petroleum Resources, revised Grant , B. 1986. URL <http://minfile.gov.bc.ca/Summary.aspx?minfilno=082GSE010 > [June 10, 2012]. [online document]

BC Geological Survey (1985): MINFILE Detail Report 082GSW019, Roo, BC Geological Survey; Minister of Energy, Mines & Petroleum Resources, revised Owsiacki, G. 1993. URL <http://minfile.gov.bc.ca/Summary.aspx?minfilno=082GSW019> [June 8, 2012]. [online document]

BC Geological Survey (1985): MINFILE Detail Report 082GSW020, Green, BC Geological Survey; Minister of Energy, Mines & Petroleum Resources, revised Owsiacki, G. 1991. URL <http://minfile.gov.bc.ca/Summary.aspx?minfilno=082GSW020> [June 8, 2012]. [online document]

BC Geological Survey (1986): MINFILE Detail Report 082GNW066, Fernie, BC Geological Survey; Minister of Energy, Mines & Petroleum Resources, revised Van der Flier, E. 1986. URL <http://minfile.gov.bc.ca/Summary.aspx?minfilno=082GNW066> [June 10, 2012]. [online document]

BC Government (2005): Government of British Columbia; Data BC (beta); URL<http://www.empr.gov.bc.ca/Mining/Geoscience/PublicationsCatalogue/DigitalGeologyMaps/Pages/default.aspx> [Accessed November 2012]

BC Government (1990): Ministry of Environment Water Stewardship Division; Foweraker, J.C.; Ground Water Resources of British Columbia Chapter 9 – Ground Water Resources of the Basins, Lowlands and Plains 9.2 2 Rocky Mountain Trench: South Rocky Mountain Trench: URL <http://www.env.gov.bc.ca/wsd/plan_protect_sustain/groundwater/gwbc/C0922_Rocky_Mtn_Trench.html > [Accessed November 20, 2012]

Gardner, D.W., and Johnston, S.T. (2007): Sedimentology, correlation, and depositional environment of the upper Purcell Supergroup northern Purcell Basin, southeastern British Columbia; Geological Survey of Canada; Current Research 2007-A6.

Gonzalez-Alvarez, I.J. (2005): Geochemical Study of the Mesoproterozoic Belt-Purcell Supergroup, Western North America: Implications for Provenance, Weathering and Diagenesis

Hartlaub, R.P, Davis, W.J., and Dunn, C.E. (2011): The characteristics, origin and exploration potential for sediment-hosted Cu+/-Ag mineralization in the Purcell Supergroup, Canada; Department of Mining and Mineral Exploration, British Columbia Institute of Technology; Natural Resources Canada, Geoscience BC Report 2011-16

Hoy, T. (1993): Geology of the Purcell Supergroup in the Fernie West-half Map Area, Southeastern British Columbia; BC Ministry of Energy, Mines and Petroleum Resources; Bulletin 84

Kemp, R. (1992): Geological and Geochemical Report on the Roo 1-7 Claim Group [Assessment Report 22644].

Kemp, R. (1993): Diamond Drill Report on the Roo Belt Claim Group Located in East Kootenay District Fort Steele Mining Division [Assessment Report 23083].

Kennedy, S. (2007): Report on: Geology, Prospecting, Rock and Soil Geochemistry Robocop Mineral Claims [Assessment Report 29941].

Klewchuk, P. (2005): Assessment Report on VLF-Em Geophysics Robocop Claims Phillips Creek Area Fort Steele Mining Division [Assessment Report 27690].

Pighin, D. L. (2009): Assessment Report Geological, Geochemical and Diamond Drilling Report Robocop Property [Assessment Report 30693].

Price, R.A. (1962): Fernie Map-area, East-half, Alberta and British Columbia: *Geological Survey of Canada,* Paper 61-24.

Thomson, G. (1990a): Diamond Drilling Assessment Report on the Roo 1-3 Claim Group for Teck Explorations Ltd. [Assessment Report 20700].

Thomson, G. (1990b): Geological and Trenching Report on the Roo Claim Group Consisting of Roo 1-3 Claims [Assessment Report 19898].

Vandeinste, V., Swennen, R., Alleays, M., Ellam, R.M., Osadetz, K., and Roure, F. (2012): Challenges of structural diagenesis in foreland fold-and-thrust-belts: A case study on paleofluid flow in the Canadian Rocky Mountains West of Calgary; Marine and Petroleum Geology, v. 35, no. 1, p. 235-251.

Wolfhard, M.R., Richardson, J. (1967): Report of Geological and Geochemical Surveys of the Phil #2 Group of 36 Claims, Situated on Phillips Creek, 3 Miles East of Highway 93, in the Fort Steele M.D. [Assessment Report 01023].

13 Certificate of Author

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

1. I am President of:
   APEX Geoscience Ltd.
   Suite 200, 9797 – 45th Avenue
   Edmonton, Alberta T6E 5V8
   Phone: 780-439-5380
2. I graduated with a B.Sc. Degree in Geology from the University of North Carolina at Wilmington in 1983 and with a M.Sc. Degree in Economic Geology from the University of Alberta in 1987.
3. I am and have been registered as a Professional Geologist with the Association of Professional Engineers, Geologists and Geophysicists of Alberta (APEGGA) since 1989 and I am a 'Qualified Person' in relation to the subject matter of this report.
4. I have worked as a geologist for more than 20 years since my graduation from university.
5. I am responsible for and have supervised the preparation of the Assessment report titled *"Assessment Report for the Robocop Property, South-Eastern British Columbia"*, and dated *March 18, 2013* (the "Assessment report"). I visited the Property October 10, 2012.
6. I am not aware of any scientific or technical information with respect to the subject matter of the Assessment report that is not reflected in the Assessment report, the omission to disclose which makes the Assessment report misleading.
7. I consent to the filing of the Assessment report with the regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files or their websites.

Dated this *March 18, 2013*
Edmonton, Alberta, Canada

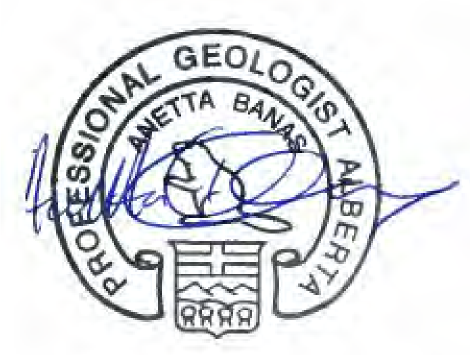
Michael B. Dufresne, M.Sc., P.Geol.

Certificate of Author

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

1. I am an employee of:
   APEX Geoscience Ltd.
   Suite 200, 9797 – 45th Avenue
   Edmonton, Alberta T6E 5V8
   Phone: 780-439-5380
2. I graduated with a B.Sc. Degree in Geology from the University of Alberta in 2002 and with a M.Sc. Degree in Earth and Atmospheric Sciences from the University of Alberta in 2005.
3. I am and have been registered as a Professional Geologist with the Association of Professional Engineers, Geologists and Geophysicists of Alberta (APEGGA) since 2009.
4. I have worked as a geologist for more than 6 years since my graduation from university.
5. I am responsible for and have supervised the preparation of the Assessment report titled *"Assessment Report for the Robocop Property, South-Eastern British Columbia"*, and dated *March 18, 2013* (the "Assessment report").
6. I am not aware of any scientific or technical information with respect to the subject matter of the Assessment report that is not reflected in the Assessment report, the omission to disclose which makes the Assessment report misleading.
7. I consent to the filing of the Assessment report with the regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files or their websites.

Dated this *March 18, 2013*
Edmonton, Alberta, Canada



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

Certificate of Author

I, Kathryn Salter, B.Sc., Geol.I.T., do hereby certify that:

1. I am an employee of:

   APEX Geoscience Ltd.
   Suite 200, 9797 – 45th Avenue
   Edmonton, Alberta T6E 5V8
   Phone: 780-439-5380
2. I graduated with a B.Sc. Degree in Geology from the University of Alberta in 2010.
3. I am and have been registered as a Geologist in Training with the Association of Professional Engineers, Geologists and Geophysicists of Alberta (APEGGA) since 2010.
4. I have worked as a geologist for more than 2 years since my graduation from university.
5. I am responsible for the preparation of the Assessment report titled *"Assessment Report for the Robocop Property, South-Eastern British Columbia"*, and dated *March 18, 2013* (the "Assessment report").
6. I am not aware of any scientific or technical information with respect to the subject matter of the Assessment report that is not reflected in the Assessment report, the omission to disclose which makes the Assessment report misleading.
7. I consent to the filing of the Assessment report with the regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files or their websites.

Dated this *March 18, 2013*
Edmonton, Alberta, Canada

Kathryn Salter, B.Sc., Geol.I.T.

Appendix 1 – Data Compilation Database

Drill Hole collars

Hole	Easting	Northing	Elevation	Azimuth	Dip	Depth	new elevation
R-08-1	645831	5432174	1460	138	-45	160	1428.656
R-08-2	645831	5432174	1460	318	-65	145	1428.656
R-08-3	644910	5432787	1493	100	-45	172	1493.222
R-08-4	644910	5432787	1493	205	-45	115	1493.222
R-08-5	644972	5432756	1474	70	-45	116	1455.679
R-08-6	645363	5432530	1460	338	-55	161	1462.570
R-93-9	644910	5432874	1537	0	-90	126	1538.694
R-93-10	645259	5432922	1512	0	-90	215	1513.987
R-93-11	645381	5432539	1448	0	-90	135	1475.472
R-90-1	644889	5432774	1493	205	-70	85	1507.798
R-90-2	644889	5432774	1493	230	-70	93	1507.798
R-90-3	644889	5432774	1493	290	-70	77	1507.798
R-90-4	644889	5432774	1493	100	-55	111	1507.798
R-90-5	644889	5432774	1493	40	-60	34	1507.798
R-90-6	645289	5432490	1402	90	-70	69	1406.972

Drill Hole Lithology

Hole	From	To	Code	Formation	Lithology	Description
R-08-1	0.00	1.00	Cas	Cas	Casing	no recovery
R-08-1	1.00	4.30	1	Upper Sheppard	Dolomitic quartzite	95% quartz sand, light grey, banded and speckled by buff colored dolomite. Massive with fine wispy laminations. Weakly sericitized throughout and intensely silicified. Rare fine crystalline pyrite
R-08-1	4.30	14.00	2	Upper Sheppard	Stromatolitic dolomite	White with ligh orange tinge, some fine wispy grey laminations at base. Thin to thin-bedded, distict and irregular to wavy. 8.5-9.5m dolomitic quartzite
R-08-1	14.00	26.30	3	Upper Sheppard	Quartzite locally dolomitic and hematitic	oolitic dolomitic quartzite at 14-14.5m and 18.4-18.7m. Massive, no visible bedding, intensely silicified nad sericitized with patchy dolomitization
R-08-1	26.30	28.70	4	Upper Sheppard	Siltstone interbedded argillite	28.3-28.7mtin beded dolomite. Purplish grey with some lamination. Medium to thinly bedded, bedding distict and wavy @ 55 degrees tca. Hematized with patchy silicification
R-08-1	28.70	42.00	5	Upper Sheppard	Quartzite weakly dolomitic an sericitic	Light grey with orange tinge. Massive with no visible bedding. Medium-fine grained immature quartz. Intensely silicified and sericitized. Rare pyrite and dark gren black mineral. 5cm quartz vein at 15
R-08-1	42.00	43.00	6	Upper Sheppard	Stromatolitic dolomite	Thininterbeds or arenaceous sericitic dolomite. Light buff-white and pink to light pink. Irregularly lined by light green sericite thin sharp and wavy bedding. Intensel silicied, weakly hematized. 54-
R-08-1	43.00	44.50	5	Upper Sheppard	Quartzite weakly dolomitic an sericitic	Light grey with orange tinge. Massive with no visible bedding. Medium-fine grained immature quartz. Intensely silicified and sericitized. Rare pyrite and dark gren black mineral. 5cm quartz vein at 15
R-08-1	44.50	45.00	6	Upper Sheppard	Stromatolitic dolomite	Thininterbeds or arenaceous sericitic dolomite. Light buff-white and pink to light pink. Irregularly lined by light green sericite thin sharp and wavy bedding. Intensel silicied, weakly hematized. 54-
R-08-1	45.00	45.40	X	Upper Sheppard	Siltstone	grey silitstone similar to unit 4?
R-08-1	45.40	65.40	6	Upper Sheppard	Stromatolitic dolomite	Thininterbeds or arenaceous sericitic dolomite. Light buff-white and pink to light pink. Irregularly lined by light green sericite thin sharp and wavy bedding. Intensel silicied, weakly hematized. 54-
R-08-1	65.40	73.10	7	Upper Sheppard	Amygdaloidal andesite	brown grey with white and red amygdales and veinlets. Massive microcrystaline. Widely scattered hematite and dolomite filled amygdales. 66.5-67m minor chalcopyrite disseminated associated wit hematit
R-08-1	73.10	75.90	8	Upper Sheppard	Lithic Grit	minor dolomitic agillite interbeds. Mottled dark green and grey. Thinly bedded with parallel laminations. Rare disseminated limonite
R-08-1	75.90	79.00	9	Upper Sheppard	Sericitic dolommitic siltstone	Light grey speckled brown, light orange and pink, thinly bedded.intense sericitization. Abundant disseminated limonite
R-08-1	79.00	81.00	10	Upper Sheppard	Siltstone	interbedded arenaceous siltstone,light buff-to pink upper section. Light green mauve lower section. Thin to very thinly bedded
R-08-1	81.00	82.40	11	Upper Sheppard	Conglomerate	Mineralized by Cu, Co and Ag. Greenish tan matrix with multicolored clasts. Massive bedded.
R-08-1	82.40	87.70	12	Upper Sheppard	Arkosic Grit	Massive, unsorted grit. Mineralized by Cu,Co and Ag. Greenishtan matrix with multi colored clasts. Partly silicifed, sericitic throughout.
R-08-1	87.70	92.00	11	Upper Sheppard	Conglomerate	
R-08-1	92.00	98.00	12	Upper Sheppard	Arkosic Grit	Massive, unsorted grit. Mineralized by Cu,Co and Ag. Greenishtan matrix with multi colored clasts. Partly silicifed, sericitic throughout.
R-08-1	98.00	114.40	13	Lower Sheppard	Trachyte	light apple green,aphanitic. Strongly speckled by late siderite
R-08-1	114.40	134.00	14	Lower Sheppard	Pyroclastic Lithic grit	Interbedded siltstone,light greento dark purple grey. Medium to thin bedding. Weak disseminated chalcopyrite and pyrite
R-08-1	134.00	137.40	15	Lower Sheppard	Conglomerate	Volcanic conglomerate, large clasts in grit matrix, grey-black. Hematized throughout, rare pyrite
R-08-1	137.40	139.40	16	Lower Sheppard	Siltstone	grey to purple grey, thin to very thinly bedded
R-08-1	139.40	160.00	17	Nicol Cr	Amygdaloidal Basalt	purple black with quartz and pyrite filled amygdales

Drill Hole Lithology

Hole	From	To	Code	Formation	Lithology	Description
R-08-2	0.00	4.40	1	Upper Sheppard	Dolomitic quartzite	95% quartz sand, light grey, banded and speckled by buff colored dolomite. Massive with fine wispy laminations. Weakly sericitized throughout and intensely silicified. Rare fine crystalline pyrite
R-08-2	4.40	11.40	2	Upper Sheppard	Stromatolitic dolomite	White with ligh orange tinge, some fine wispy grey laminations at base. Thin to thin-bedded, distict and irregular to wavy. 8.5-9.5m dolomitic quartzite
R-08-2	11.40	22.50	3	Upper Sheppard	Quartzite locally dolomitic and hematitic	oolitic dolomitic quartzite at 15-15.3m. Massive, no visible bedding, intensely silicified nad sericitized with patchy dolomitization
R-08-2	22.50	25.20	4	Upper Sheppard	Siltstone interbedded argillite	24.7-25.2 m thin beded dolomite. Purplish grey with some lamination. Medium to thinly bedded, bedding distict and wavy @ 55 degrees tca. Hematized with patchy silicification
R-08-2	25.20	35.60	6	Upper Sheppard	Stromatolitic dolomite	Thininterbeds or arenaceous sericitic dolomite. Light buff-white and pink to light pink. Irregularly lined by light green sericite thin sharp and wavy bedding. Intensel silicied, weakly hematized. 54-
R-08-2	35.60	35.90	X	Upper Sheppard	Siltstone	grey silitstone similar to unit 4?
R-08-2	35.90	36.10	6	Upper Sheppard	Stromatolitic dolomite	Thininterbeds or arenaceous sericitic dolomite. Light buff-white and pink to light pink. Irregularly lined by light green sericite thin sharp and wavy bedding. Intensel silicied, weakly hematized. 54-
R-08-2	36.10	36.40	X	Upper Sheppard	Siltstone	grey silitstone similar to unit 4?
R-08-2	36.40	44.60	6	Upper Sheppard	Stromatolitic dolomite	Thininterbeds or arenaceous sericitic dolomite. Light buff-white and pink to light pink. Irregularly lined by light green sericite thin sharp and wavy bedding. Intensel silicied, weakly hematized. 54-
R-08-2	44.60	47.20	7	Upper Sheppard	Amygdaloidal andesite	brown grey with white and red amygdales and veinlets. Massive microcrystaline. Widely scattered hematite and dolomite filled amygdales. 66.5-67m minor chalcopyrite disseminated associated wit hematit
R-08-2	47.20	48.50	6	Upper Sheppard	Stromatolitic dolomite	Thininterbeds or arenaceous sericitic dolomite. Light buff-white and pink to light pink. Irregularly lined by light green sericite thin sharp and wavy bedding. Intensel silicied, weakly hematized. 54-
R-08-2	48.50	55.10	7	Upper Sheppard	Amygdaloidal andesite	brown grey with white and red amygdales and veinlets. Massive microcrystaline. Widely scattered hematite and dolomite filled amygdales. 66.5-67m minor chalcopyrite disseminated associated wit hematit
R-08-2	55.10	57.00	8	Upper Sheppard	Lithic Grit	minor dolomitic agillite interbeds. Mottled dark green and grey. Thinly bedded with parallel laminations. Rare disseminated limonite
R-08-2	57.00	59.90	9	Upper Sheppard	Sericitic dolommitic siltstone	Light grey speckled brown, light orange and pink, thinly bedded.intense sericitization. Abundant disseminated limonite
R-08-2	59.90	61.40	10	Upper Sheppard	Siltstone	interbedded arenaceous siltstone,light buff-to pink upper section. Light green mauve lower section. Thin to very thinly bedded
R-08-2	61.40	62.50	11	Upper Sheppard	Conglomerate	Mineralized by Cu, Co and Ag. Greenish tan matrix with multicolored clasts. Massive bedded.
R-08-2	62.50	66.10	12	Upper Sheppard	Arkosic Grit	Massive, unsorted grit. Mineralized by Cu,Co and Ag. Greenishtan matrix with multi colored clasts. Partly silicifed, sericitic throughout.
R-08-2	66.10	69.50	11	Upper Sheppard	Conglomerate	Mineralized by Cu, Co and Ag. Greenish tan matrix with multicolored clasts. Massive bedded.
R-08-2	69.50	75.50	12	Upper Sheppard	Arkosic Grit	Massive, unsorted grit. Mineralized by Cu,Co and Ag. Greenishtan matrix with multi colored clasts. Partly silicifed, sericitic throughout.
R-08-2	75.50	77.50	11	Upper Sheppard	Conglomerate	Mineralized by Cu, Co and Ag. Greenish tan matrix with multicolored clasts. Massive bedded.
R-08-2	77.50	83.40	12	Upper Sheppard	Arkosic Grit	Massive, unsorted grit. Mineralized by Cu,Co and Ag. Greenish tan matrix with multi colored clasts. Partly silicifed, sericitic throughout.
R-08-2	83.40	105.40	13	Lower Sheppard	Trachyte	light apple green,aphanitic. Strongly speckled by late siderite
R-08-2	105.40	123.80	14	Lower Sheppard	Pyroclastic Lithic grit	Interbedded siltstone,light greento dark purple grey. Medium to thin bedding. Weak disseminated chalcopyrite and pyrite

Drill Hole Lithology

Hole	From	To	Code	Formation	Lithology	Description
R-08-2	123.80	126.20	15	Lower Sheppard	Conglomerate	Volcanic conglomerate, large clasts in grit matrix, grey-black. Hematized throughout, rare pyrite
R-08-2	126.20	128.20	16	Lower Sheppard	Siltstone	grey to purple grey, thin to very thinly bedded
R-08-2	128.20	145.00	17	Nicol Cr	Amygdaloidal Basalt	purple black with quartz and pyrite filled amygdales
R-08-3	0.00	7.00	5	Upper Sheppard	Quartzite weakly dolomitic an sericitic	Light grey with orange tinge. Massive with no visible bedding. Medium-fine grained immature quartz. Intensely silicified and sericitized. Rare pyrite and dark gren black mineral.
R-08-3	7.00	11.40	6	Upper Sheppard	Stromatolitic dolomite	Thin interbeds or arenaceous sericitic dolomite. Light buff-white and pink to light pink. Irregularly lined by light green sericite thin sharp and wavy bedding. Intensel silicied, weakly hematized. 54
R-08-3	11.40	12.60	7	Upper Sheppard	Amygdaloidal andesite	brown grey with white and red amygdales and veinlets. Massive microcrystaline. Widely scattered hematite and dolomite filled amygdales. 66.5-67m minor chalcopyrite disseminated associated wit hematit
R-08-3	12.60	17.60	8	Upper Sheppard	Lithic Grit	minor dolomitic agillite interbeds. Mottled dark green and grey. Thinly bedded with parallel laminations. Rare disseminated limonite
R-08-3	17.60	26.80	9	Upper Sheppard	Sericitic dolommitic siltstone	Light grey speckled brown, light orange and pink, thinly bedded.intense sericitization. Abundant disseminated limonite
R-08-3	26.80	31.60	10	Upper Sheppard	Siltstone	interbedded arenaceous siltstone,light buff-to pink upper section. Light green mauve lower section. Thin to very thinly bedded
R-08-3	31.60	33.10	11	Upper Sheppard	Conglomerate	Mineralized by Cu, Co and Ag. Greenish tan matrix with multicolored clasts. Massive bedded.
R-08-3	33.10	42.50	12	Upper Sheppard	Arkosic Grit	Massive, unsorted grit. Mineralized by Cu,Co and Ag. Greenishtan matrix with multi colored clasts. Partly silicifed, sericitic throughout.
R-08-3	42.50	48.00	11	Upper Sheppard	Conglomerate	Mineralized by Cu, Co and Ag. Greenish tan matrix with multicolored clasts. Massive bedded.
R-08-3	48.00	58.00	12	Upper Sheppard	Arkosic Grit	Massive, unsorted grit. Mineralized by Cu,Co and Ag. Greenishtan matrix with multi colored clasts. Partly silicifed, sericitic throughout.
R-08-3	58.00	111.80	13	Lower Sheppard	Trachyte	light apple green,aphanitic. Strongly speckled by late siderite
R-08-3	111.80	137.40	14	Lower Sheppard	Pyroclastic Lithic grit	Interbedded siltstone,light greento dark purple grey. Medium to thin bedding. Weak disseminated chalcopyrite and pyrite
R-08-3	137.40	142.00	15	Lower Sheppard	Conglomerate	Volcanic conglomerate, large clasts in grit matrix, grey-black. Hematized throughout, rare pyrite
R-08-3	142.00	172.00	17	Nicol Cr	Amygdaloidal Basalt	purple black with quartz and pyrite filled amygdales
R-08-4	0.00	4.35	Cas	Casing	No recovery	
R-08-4	4.35	16.70	5	Upper Sheppard	Quartzite weakly dolomitic an sericitic	Light grey with orange tinge. Massive with no visible bedding. Medium-fine grained immature quartz. Intensely silicified and sericitized. Rare pyrite and dark gren black mineral.
R-08-4	16.70	20.20	6	Upper Sheppard	Stromatolitic dolomite	Thin interbeds or arenaceous sericitic dolomite. Light buff-white and pink to light pink. Irregularly lined by light green sericite thin sharp and wavy bedding. Intensel silicied, weakly hematized. 54
R-08-4	20.20	26.00	X	Fault zone	Arkosic grit and trachyte rubble	
R-08-4	26.00	81.80	13	Lower Sheppard	Trachyte	Lower Sheppard
R-08-4	81.80	102.20	14	Lower Sheppard	Pyroclastic Lithic grit	Interbedded siltstone,light greento dark purple grey. Medium to thin bedding. Weak disseminated chalcopyrite and pyrite
R-08-4	102.20	108.00	15	Lower Sheppard	Conglomerate	Volcanic conglomerate, large clasts in grit matrix, grey-black. Hematized throughout, rare pyrite
R-08-4	108.00	110.50	16	Lower Sheppard	Siltstone	grey to purple grey, thin to very thinly bedded
R-08-4	110.50	115.00	17	Nicol Cr	Amygdaloidal Basalt	purple black with quartz and pyrite filled amygdales
R-08-5	0.00	1.00	Cas	Casing	No recovery	

Drill Hole Lithology

Hole	From	To	Code	Formation	Lithology	Description
R-08-5	1.00	8.50	6	Upper Sheppard	Stromatolitic dolomite	Thin interbeds or arenaceous sericitic dolomite. Light buff-white and pink to light pink. Irregularly lined by light green sericite thin sharp and wavy bedding. Intensel silicied, weakly hematized. 54
R-08-5	8.50	18.20	7	Upper Sheppard	Amygdaloidal andesite	brown grey with white and red amygdales and veinlets. Massive microcrystaline. Widely scattered hematite and dolomite filled amygdales. 66.5-67m minor chalcopyrite disseminated associated wit hematit
R-08-5	18.20	21.60	8	Upper Sheppard	Lithic Grit	minor dolomitic agillite interbeds. Mottled dark green and grey. Thinly bedded with parallel laminations. Rare disseminated limonite
R-08-5	21.60	23.50	9	Upper Sheppard	Sericitic dolommitic siltstone	Light grey speckled brown, light orange and pink, thinly bedded.intense sericitization. Abundant disseminated limonite
R-08-5	23.50	26.70	10	Upper Sheppard	Siltstone	interbedded arenaceous siltstone,light buff-to pink upper section. Light green mauve lower section. Thin to very thinly bedded
R-08-5	26.70	28.30	11	Upper Sheppard	Conglomerate	Mineralized by Cu, Co and Ag. Greenish tan matrix with multicolored clasts. Massive bedded.
R-08-5	28.30	35.40	12	Upper Sheppard	Arkosic Grit	Massive, unsorted grit. Mineralized by Cu,Co and Ag. Greenishtan matrix with multi colored clasts. Partly silicifed, sericitic throughout.
R-08-5	35.40	37.90	11	Upper Sheppard	Conglomerate	Mineralized by Cu, Co and Ag. Greenish tan matrix with multicolored clasts. Massive bedded.
R-08-5	37.90	46.10	12	Upper Sheppard	Arkosic Grit	Massive, unsorted grit. Mineralized by Cu,Co and Ag. Greenishtan matrix with multi colored clasts. Partly silicifed, sericitic throughout.
R-08-5	46.10	100.60	13	Lower Sheppard	Trachyte	light apple green,aphanitic. Strongly speckled by late siderite
R-08-5	100.60	115.50	14	Lower Sheppard	Pyroclastic Lithic grit	Interbedded siltstone,light greento dark purple grey. Medium to thin bedding. Weak disseminated chalcopyrite and pyrite
R-08-6	0.00	1.60	Cas	Casing	No recovery	
R-08-6	1.60	8.20	1	Upper Sheppard	Dolomitic quartzite	95% quartz sand, light grey, banded and speckled by buff colored dolomite. Massive with fine wispy laminations. Weakly sericitized throughout and intensely silicified. Rare fine crystalline pyrite
R-08-6	8.20	14.40	1	Upper Sheppard	Dolomitic quartzite	unit(1a) calcarous quartzite, light buff-white massive indistinct bedding
R-08-6	14.40	18.60	2	Upper Sheppard	Stromatolitic dolomite	White with ligh orange tinge, some fine wispy grey laminations at base. Thin to thin-bedded, distict and irregular to wavy.
R-08-6	18.60	20.00	1x	Upper Sheppard		
R-08-6	20.00	24.27	2	Upper Sheppard	Stromatolitic dolomite	White with light orange tinge, some fine wispy grey laminations at base. Thin to thin-bedded, distict and irregular to wavy.
R-08-6	24.27	55.30	3	Upper Sheppard	Quartzite locally dolomitic and hematitic	oolitic dolomitic quartzite at 24.5-25m, 29-29.3m, 47.7-47.9m. Massive, no visible bedding, intensely silicified nad sericitized with patchy dolomitization
R-08-6	55.30	57.20	4	Upper Sheppard	Siltstone interbedded argillite	56.6-57.2 m thin beded dolomite. Purplish grey with some lamination. Medium to thinly bedded, bedding distict and wavy @ 55 degrees tca. Hematized with patchy silicification
R-08-6	57.20	66.40	5	Upper Sheppard	Quartzite weakly dolomitic an sericitic	Light grey with orange tinge. Massive with no visible bedding. Medium-fine grained immature quartz. Intensely silicified and sericitized. Rare pyrite and dark gren black mineral.
R-08-6	66.40	77.00	6	Upper Sheppard	Stromatolitic dolomite	Thin interbeds or arenaceous sericitic dolomite. Light buff-white and pink to light pink. Irregularly lined by light green sericite thin sharp and wavy bedding. Intensel silicied, weakly hematized. 54
R-08-6	77.00	78.60	7	Upper Sheppard	Amygdaloidal andesite	brown grey with white and red amygdales and veinlets. Massive microcrystaline. Widely scattered hematite and dolomite filled amygdales. 66.5-67m minor chalcopyrite disseminated associated wit hematit
R-08-6	78.60	80.50	8	Upper Sheppard	Lithic Grit	minor dolomitic agillite interbeds. Mottled dark green and grey. Thinly bedded with parallel laminations. Rare disseminated limonite

Drill Hole Lithology

Hole	From	To	Code	Formation	Lithology	Description
R-08-6	80.50	83.50	9	Upper Sheppard	Sericitic dolommitic siltstone	Light grey speckled brown, light orange and pink, thinly bedded.intense sericitization. Abundant disseminated limonite
R-08-6	83.50	85.60	10	Upper Sheppard	Siltstone	interbedded arenaceous siltstone,light buff-to pink upper section. Light green mauve lower section. Thin to very thinly bedded
R-08-6	85.60	87.10	11	Upper Sheppard	Conglomerate	Mineralized by Cu, Co and Ag. Greenish tan matrix with multicolored clasts. Massive bedded.
R-08-6	87.10	91.20	12	Upper Sheppard	Arkosic Grit	Massive, unsorted grit. Mineralized by Cu,Co and Ag. Greenishtan matrix with multi colored clasts. Partly silicifed, sericitic throughout.
R-08-6	91.20	92.90	11	Upper Sheppard	Conglomerate	Mineralized by Cu, Co and Ag. Greenish tan matrix with multicolored clasts. Massive bedded.
R-08-6	92.90	98.20	12	Upper Sheppard	Arkosic Grit	Massive, unsorted grit. Mineralized by Cu,Co and Ag. Greenishtan matrix with multi colored clasts. Partly silicifed, sericitic throughout.
R-08-6	98.20	133.30	13	Lower Sheppard	Trachyte	light apple green,aphanitic. Strongly speckled by late siderite
R-08-6	133.30	152.00	14	Lower Sheppard	Pyroclastic Lithic grit	Interbedded siltstone,light greento dark purple grey. Medium to thin bedding. Weak disseminated chalcopyrite and pyrite
R-08-6	152.00	157.00	15	Lower Sheppard	Conglomerate	Volcanic conglomerate, large clasts in grit matrix, grey-black. Hematized throughout, rare pyrite
R-08-6	157.00	161.00	17	Nicol Cr	Amygdaloidal Basalt	purple black with quartz and pyrite filled amygdales
R-93-9	0.00	5.20	OVB	Cas	Overburden	
R-93-9	5.20	7.70	GTW	Gateway	Siltstone	Thinly laminated alternating fine grained purple siltstone and coarser grained green sandstone
R-93-9	7.70	29.60	1to6	Upper Sheppard	Impure quartz arenite and dolomite	Dirty Impure quartz arenite and dolomite, dark green to buff in color with lighter green argillite bands. Pyrite concentrated in coarser bands upto 3 cm wide
R-93-9	29.60	29.80	1to6	Upper Sheppard	Stromatolite	
R-93-9	29.80	30.10	1to6	Upper Sheppard	Quartzite Dolomitic	
R-93-9	30.10	30.30	1to6	Upper Sheppard	Stromatolitic	
R-93-9	30.30	33.30	1to6	Upper Sheppard	Impure rosy Quartz arenite	
R-93-9	33.30	34.00	1to6	Upper Sheppard	Stromatolitic	
R-93-9	34.00	34.80	1to6	Upper Sheppard	oolite	
R-93-9	34.80	36.20	1to6	Upper Sheppard	Banded rosy quartzite an green argillites	
R-93-9	36.20	37.00	1to6	Upper Sheppard	Stromatolite	
R-93-9	37.00	38.70	1to6	Upper Sheppard	Banded dolomitic quartz arenite	
R-93-9	38.70	39.30	1to6	Upper Sheppard	solution breccia	
R-93-9	39.30	44.50	1to6	Upper Sheppard	Banded dolomitic quartz arenite	
R-93-9	44.50	47.40	1to6	Upper Sheppard	Quartz arenite	Cleaner Quartz arenite lacking argillite interbeds. Stromatolitic section. Arenite and stromatolite horizone becoming more dominate downsection. Purple siltston and sandstone layers occur as transitio
R-93-9	47.40	51.10	1to6	Upper Sheppard	Stromatolite	
R-93-9	51.10	51.80	1to6	Upper Sheppard	Quartz arenite	
R-93-9	51.80	55.70	1to6	Upper Sheppard	Stromatolite	
R-93-9	55.70	55.90	1to6	Upper Sheppard	oolite	
R-93-9	55.90	58.70	1to6	Upper Sheppard	Quartz arenite	
R-93-9	58.70	59.00	1to6	Upper Sheppard	oolite	

Drill Hole Lithology

Hole	From	To	Code	Formation	Lithology	Description
R-93-9	59.00	64.70	1to6	Upper Sheppard	Quartz arenite	
R-93-9	64.70	66.10	1to6	Upper Sheppard	Purple siltstone/Sandstone	
R-93-9	66.10	66.50	1to6	Upper Sheppard	Stromatolite	
R-93-9	66.50	67.30	1to6	Upper Sheppard	oolite	
R-93-9	67.30	75.90	1to6	Upper Sheppard	Quartz arenite	
R-93-9	75.90	77.00	1to6	Upper Sheppard	Stromatolite	
R-93-9	77.00	77.40	1to6	Upper Sheppard	oolite	
R-93-9	77.40	78.20	1to6	Upper Sheppard	Quartz arenite	
R-93-9	78.20	82.50	1to6	Upper Sheppard	Stromatolite	
R-93-9	82.50	85.20	7	Upper Sheppard	Purple Siltstone	
R-93-9	85.20	86.10	8	Upper Sheppard	Stromatolite	
R-93-9	86.10	88.00	9	Upper Sheppard	Quartz arenite	
R-93-9	88.00	88.30	10	Upper Sheppard	Pebbly Arkosic Sandstone	Malachite chalcopyrite rimmed by chalcocite
R-93-9	88.30	89.10	11and12	Upper Sheppard	Interbedded arksosic sandstone/siltstone	purple
R-93-9	89.10	91.00	11and12	Upper Sheppard	volcanic conglomerate	
R-93-9	91.00	101.40	11and12	Upper Sheppard	volcanic flow	purple
R-93-9	101.40	107.20	11and12	Upper Sheppard	siltstone	variably colored thinly laminated, intensly sheare fracturedd,brecciatedre healed
R-93-9	107.20	108.40	11and12	Upper Sheppard	interbeded pebbly volcanic? Sandstone/siltstone	interbeded pebbly volcanic? Sandstone/siltstone
R-93-9	108.40	111.00	11and12	Upper Sheppard	Pebbly Sandstone	polymictic cream, red, purple grey, interval appears as as altered pebbly volcanic unit.malachite an possible chalcoite invading unit along crossutting micro fractures
R-93-9	111.00	125.90	13	Lower Sheppard	Intrusive sill	altered to cream color with quartz and ankerite veining hostig malachite and cpy
R-93-10	0.00	2.10	OVB	Cas	Overburden	
R-93-10	2.10	95.40	GTW	Gateway		Fine grained tan to light green, loal reddish hue. Siltstone. Ripup clasts, load clasts undulating bedforms. Thin bdded color banding from gen to tan. Moderatly soft.
R-93-10	95.40	110.90	1to6	Upper Sheppard	Quartz arenite	dolomitic quartzite and stromatolite
R-93-10	110.90	113.00	1to6	Upper Sheppard	oolite	
R-93-10	113.00	115.20	1to6	Upper Sheppard	Quartz arenite	
R-93-10	115.20	115.60	1to6	Upper Sheppard	oolite	
R-93-10	115.60	117.30	1to6	Upper Sheppard	Dolomitic quartz arenite	
R-93-10	117.30	120.70	1to6	Upper Sheppard	Stromatolite with argilaceous interbeds	
R-93-10	120.70	123.60	1to6	Upper Sheppard	Dolomitic quartz arenite	
R-93-10	123.60	128.70	1to6	Upper Sheppard	Quartz arenite	Clean quartz arenite pink/white stromatolite oolite
R-93-10	128.70	132.30	1to6	Upper Sheppard	Pink Stromatolite	
R-93-10	132.30	132.70	1to6	Upper Sheppard	Quartz arenite	
R-93-10	132.70	132.90	1to6	Upper Sheppard	Stromatolite	
R-93-10	132.90	133.32	1to6	Upper Sheppard	Quartz arenite	
R-93-10	133.32	133.36	1to6	Upper Sheppard	Stromatolite	
R-93-10	133.36	133.60	1to6	Upper Sheppard	Quartz arenite	

Drill Hole Lithology

Hole	From	To	Code	Formation	Lithology	Description
R-93-10	133.60	137.10	1to6	Upper Sheppard	Stromatolite	
R-93-10	137.10	137.40	1to6	Upper Sheppard	oolite	
R-93-10	137.40	140.20	1to6	Upper Sheppard	Quartz arenite	
R-93-10	140.20	140.30	1to6	Upper Sheppard	oolite	
R-93-10	140.30	147.20	1to6	Upper Sheppard	Quartz arenite	
R-93-10	147.20	148.70	1to6	Upper Sheppard	interbeded Sandstone/siltstone	
R-93-10	148.70	149.10	1to6	Upper Sheppard	Red-green bandd stromatolite	
R-93-10	149.10	149.70	1to6	Upper Sheppard	oolite	
R-93-10	149.70	155.60	1to6	Upper Sheppard	Quartz arenite	
R-93-10	155.60	156.50	1to6	Upper Sheppard	interbeded Sandstone/siltstone/Argillite	
R-93-10	156.50	157.40	1to6	Upper Sheppard	Quartz arenite	
R-93-10	157.40	158.30	1to6	Upper Sheppard	Stromatolite	
R-93-10	158.30	158.80	1to6	Upper Sheppard	oolite	
R-93-10	158.80	159.20	1to6	Upper Sheppard	Quartz arenite	
R-93-10	159.20	163.50	1to6	Upper Sheppard	Stromatolite	
R-93-10	163.50	163.90	1to6	Upper Sheppard	Quartz arenite	
R-93-10	163.90	164.90	1to6	Upper Sheppard	interbeded Sandstone/siltstone	
R-93-10	164.90	166.30	1to6	Upper Sheppard	Stromatolite	
R-93-10	166.30	166.60	1to6	Upper Sheppard	Quartz arenite	
R-93-10	166.60	167.20	1to6	Upper Sheppard	silic stromatolite	
R-93-10	167.20	168.60	7	Upper Sheppard	Pebbly Arkosic Sandstone	pink-white or purple sub rounded polymicitc poorly sorted fragments
R-93-10	168.60	177.50	8to10	Upper Sheppard	amygdaloidal basalt	
R-93-10	177.50	177.70	11and12	Upper Sheppard	interfolw greywake-sandstibe	ripple marks present
R-93-10	177.70	182.40	11and12	Upper Sheppard	Siltstone	purple pink finely laminated
R-93-10	182.40	191.70	11and12	Upper Sheppard	volcanic pebbly sandstone	
R-93-10	191.70	210.50	13	Lower Sheppard	Intrusive sill	mm siedckits rimmed bt specular hematite
R-93-10	210.50	214.60	14	Lower Sheppard	volcanic pebbly sandstone/siltstone	hosting polymiticfragnebts subrounded to subangular poorly sorted. Purple color. Large euhedral pyrite associated with pebbly beds or along carbonate veins
R-93-11	0.00	3.35	OVB	Cas	Overburden	
R-93-11	3.35	5.70	1to6	Upper Sheppard	Dolomitic stromatolite	dolomitic impure quartz arenite/stromatolite/argillaceous siltstone
R-93-11	5.70	11.02	1to6	Upper Sheppard	Dolomitic quartz arenite	
R-93-11	11.02	14.56	1to6	Upper Sheppard	Quartz arenite	
R-93-11	14.56	17.85	1to6	Upper Sheppard	Stromatolite with argilaceous interbeds	
R-93-11	17.85	18.97	1to6	Upper Sheppard	Quartz arenite	
R-93-11	18.97	23.12	1to6	Upper Sheppard	Stromatolite	

Drill Hole Lithology

Hole	From	To	Code	Formation	Lithology	Description
R-93-11	23.12	23.45	1to6	Upper Sheppard	oolite	
R-93-11	23.45	26.42	1to6	Upper Sheppard	Quartz arenite	
R-93-11	26.42	26.55	1to6	Upper Sheppard	oolite	
R-93-11	26.55	28.28	1to6	Upper Sheppard	Quartz arenite	
R-93-11	28.28	28.37	1to6	Upper Sheppard	oolite	
R-93-11	28.37	28.96	1to6	Upper Sheppard	Quartz arenite	
R-93-11	28.96	29.07	1to6	Upper Sheppard	Stromatolite	
R-93-11	29.07	34.77	1to6	Upper Sheppard	Quartz arenite	
R-93-11	34.77	37.73	1to6	Upper Sheppard	Stromatolite	
R-93-11	37.73	38.01	1to6	Upper Sheppard	oolite	
R-93-11	38.01	44.07	1to6	Upper Sheppard	Quartz arenite	
R-93-11	44.07	47.89	1to6	Upper Sheppard	siltstone/sandstone	
R-93-11	47.89	48.33	1to6	Upper Sheppard	Stromatolite	
R-93-11	48.33	48.83	1to6	Upper Sheppard	oolite	
R-93-11	48.83	55.80	1to6	Upper Sheppard	Quartz arenite	
R-93-11	55.80	56.45	1to6	Upper Sheppard	Stromatolite	
R-93-11	56.45	57.18	1to6	Upper Sheppard	oolite	
R-93-11	57.18	57.31	1to6	Upper Sheppard	Quartz arenite	
R-93-11	57.31	64.20	1to6	Upper Sheppard	Stromatolite	
R-93-11	64.20	66.01	7	Lower Sheppard	Volcanic flow	
R-93-11	66.01	71.02	8to10	Lower Sheppard	vario-colored siltstone/sandstone	
R-93-11	71.02	78.41	11and12	Lower Sheppard	Pebbly Arkosic Sandstone	Interbedded fine grained, green argillaceous bes and coarser pbbles. Porous with brown limonite. Hosting specular hematite and pyrite
R-93-11	78.41	105.90	13	Lower Sheppard	Intrusive sill	
R-93-11	105.90	128.30	14	Lower Sheppard	volcanic pebbly sandstone/siltstone	
R-93-11	128.30	131.40	15	Lower Sheppard	volcanic conglomerate	
R-93-11	131.40	133.30	16	Lower Sheppard	volcanic siltstone	
R-93-11	133.30	135.00	17	Nicol Cr	amygdaloidal basalt	
R-90-1	0.00	6.40	CAS	Upper Sheppard	Casing	
R-90-1	6.40	10.00	8	Upper Sheppard	Quartzitic Sandstone	
R-90-1	10.00	12.50	9	Upper Sheppard	Stromatolitic dolomite	
R-90-1	12.50	14.00	9	Upper Sheppard	Sandstone	Purple fine grained, rusty carbonate fracures. Calcite amygdale looking patches
R-90-1	14.00	14.60	9	Upper Sheppard	Stromatolitic dolomite	laminated
R-90-1	14.60	15.55	10	Upper Sheppard	greywake	laminated siltstone interbed beding at 60 degrees
R-90-1	15.55	16.46	10	Upper Sheppard	Sandstone	Purple fine grained, rusty carbonate fracures. Calcite amygdale looking patches
R-90-1	16.46	27.74	11and12	Upper Sheppard	greywake	fine-med grained, hematite stained, strongly fractured
R-90-1	27.74	37.20	11and12	Upper Sheppard	greywake	as above with sericite altered fragments
R-90-1	37.20	53.00	13	Lower Sheppard	greywake	limonite stained medium grained with 2-6 cm quartz veins
R-90-1	53.00	53.95	13	Lower Sheppard	greywake	fine-med grained, hairline hematite fractures

Drill Hole Lithology

Hole	From	To	Code	Formation	Lithology	Description
						red-green-brown. Medium -coarse grained, interbedded pebbly section and finer sandstone. Larger fragments are
R-90-1	53.95	59.40	13	Lower Sheppard	Arkosic Sandstone	amygdaloidal basalt
R-90-1	59.40	62.50	13	Lower Sheppard	Arkosic Sandstone	fine-medium grained rare pebbles with minor laminated siltstone interbeds
R-90-1	62.50	72.85	13and14	Lower Sheppard	Arkosic Sandstone	fine-medium grained. Local pebbly sections mod-strong fracturing
R-90-1	72.85	73.30	14	Lower Sheppard	Fault Zone	gouge with quartz veining
R-90-1	73.30	77.10	14	Lower Sheppard	Arkosic Sandstone	fine grained grey.
R-90-1	77.10	80.20	14	Lower Sheppard	Siltstone	Finellaminated siltstone with repetitive coarser interbeds
R-90-1	80.20	82.00	14	Lower Sheppard	Pebbly Sandstone	
R-90-1	82.00	84.65	15	Lower Sheppard	Conglomerate	basalt fragment conglomerate, dark green amygdaloidal basalt in arkose matrix
R-90-1	84.65	84.90	16	Lower Sheppard	Siltstone	finegrained purple
R-90-1	84.90	85.00	17	Nicol Cr	amygdaloidal basalt	round amygduales
R-90-2	0.00	6.00	CAS	Cas	Casing	
R-90-2	6.00	13.10	9	Upper Sheppard	Dolomitic sandstone	moderately broken massive, fine grained, buff colored parlty stromatolitic?
R-90-2	13.10	19.35	10	Upper Sheppard	greywake	fine grained purple, limonitic staining. Strongly broken throughout abundent carbonate coatings
R-90-2	19.35	33.83	11and12	Upper Sheppard	greywake/Arkose Sandstone	brown limonite stained fine-med grained, sporadic sericite. Patchy diffuse quartz veining
R-90-2	33.83	34.23	11and12	Upper Sheppard	greywake/Arkose Sandstone	weak malachite and sporadic cpy I quartz veinlets
R-90-2	34.23	36.10	11and12	Upper Sheppard	greywake/Arkose Sandstone	fine/med grained 2-5% quartz veining
R-90-2	36.10	46.00	13	Lower Sheppard	Arkose Sandstone	brown purple, fine to med grained increase in hematitic patches
R-90-2	46.00	51.80	13	Lower Sheppard	Arkose Sandstone	brown fine-med grained. Qtz veinlets with limonite patches
R-90-2	51.80	52.60	13	Lower Sheppard	Volcanic Sandstone	Purple fine grained, conspicuous feldspathic and hematitic alteration spots
R-90-2	52.60	57.30	13	Lower Sheppard	Sandstone	medium to Coarse heterolithic. Possible turbidite sequence. Coarser congolmerate at 55.5-56.4m
R-90-2	57.30	74.80	13and14	Lower Sheppard	Arkose Sandstone	grey brown fine grained. Sporadic green purple siltstone interbeds ocassional coarsening
R-90-2	74.80	77.65	14	Lower Sheppard	Siltstone	Purple grey finely laminated, interbedded with medium-coarse sandstone in narrow beds
R-90-2	77.65	79.60	15	Lower Sheppard	Arkose Sandstone	Coarse grained sandstone- fine grained conglomerate
R-90-2	79.60	81.70	15	Lower Sheppard	volcanic conglomerate	coarse 20-30%dark hematitic amygdaloidal basaltclasts
R-90-2	81.70	82.90	16	Lower Sheppard	Siltstone	purple, bands of coarse sandstone
R-90-2	82.90	92.95	17	Nicol Cr	Amygdaloidal Basalt	dark purple brown. Quartz amygdales, hematite rimmed
R-90-3	0.00	7.00	CAS	Cas	Casing	
R-90-3	7.00	13.10	9	Upper Sheppard	Dolomite/sandstone/siltstone	Fine grained beige-pink. Broken, minor hematite on fractures, occasion green siltiy interbeds
R-90-3	13.10	16.75	10	Upper Sheppard	Dolomite stromatolitic	pink-beige minor siltstone interbedds
R-90-3	16.75	21.30	11and12	Upper Sheppard	Lost Core	Rubble oxidized,arkosic sandstone
R-90-3	21.30	31.09	11and12	Upper Sheppard	Arkosic Sandstone/greywacke	Fine-med grained, brown homogenous patchy zones of sericitized clasts
R-90-3	31.09	42.98	13	Lower Sheppard	Arkosic Sandstone/greywacke	Increased quartz veining and hematite frature healing
R-90-3	42.98	51.50	13	Lower Sheppard	Arkosic Sandstone	As above lacking hematite
R-90-3	51.50	55.20	13	Lower Sheppard	Arkosic Sandstone	med-coarse grained, homogenous rhythmicallybanded with fine sandstone/silty iterbeds

Drill Hole Lithology

Hole	From	To	Code	Formation	Lithology	Description
R-90-3	55.20	56.90	13	Lower Sheppard	Sandstone/Conglomerate	coarse grained. Fine grained conglomerat/sandstone, 10-20% angular rounded clasts, downward coarsening
R-90-3	56.90	64.00	13	Lower Sheppard	Sandstone	fine-medium grained grey, several angular clasts, very homogenious
R-90-3	64.00	64.30	13	Lower Sheppard	Conglomerate	finegrained, rounded clasts
R-90-3	64.30	76.50	13	Lower Sheppard	Arkosic Sandstone	rhythmically narrow interbedds interbeds of coarse and silty sandstone
R-90-4	0.00	12.80	CAS	Cas	Casing	
R-90-4	12.80	19.00	9	Upper Sheppard	Sandstone	Fine-medium graied, broken pervasive limonitic staining
R-90-4	19.00	20.80	10	Upper Sheppard	Sandstone	medium to coarse grained, strongly broken and weathered
R-90-4	20.80	21.50	10	Upper Sheppard	Conglomerate	pervasive limonite staining, green felsics, subangulr rounded
R-90-4	21.50	22.60	11	Upper Sheppard	Sandstone	Medium grained strongly weathered and limonitic staining. Gouge section 34cm at 22.55m
R-90-4	22.60	23.80	11	Upper Sheppard	Sandstone	Fine grained siltstone bedding, green weak limonitic staining
R-90-4	23.80	25.90	12	Upper Sheppard	Conglomerate	Coarse sandstone with .9m haing subangular clasts. Beige felsics. Malachite chalcocite fracture coating 1-3% disseminated cpy
R-90-4	25.90	30.00	12	Upper Sheppard	Sandstone	medium-coarse grained. Pervasive malachite, chalcocite coatings along fracture planes
R-90-4	30.00	31.85	12	Upper Sheppard	Sandstone	fine-medium grained, decreased limonite, localized fractured with sporadic malachite-chalcocite coatings
R-90-4	31.85	91.13	11and12	Upper Sheppard	Sandstone	fine-medium grained, pale green. Sporadic malachite fracture coatings
R-90-4	91.13	92.60	13	Lower Sheppard	Sandstone	fine-medium grained, darker in color (more mafic composition?)
R-90-4	92.60	97.23	13	Lower Sheppard	Sandstone	fine-medium grained grey, coarser fractions
R-90-4	97.23	97.84	13	Lower Sheppard	Mixed Quartz/Sandstone	Quartz with sandstone inclusions
R-90-4	97.84	98.45	13	Lower Sheppard	Sandstone	medium-fine grained grey-green
R-90-4	98.45	101.80	13	Lower Sheppard	Quartz Vein	micofracture limonite, broken chloritized, mixed pink coarse barite ad quartz
R-90-4	101.80	104.50	13	Lower Sheppard	Arkosic Sandstone	medium green, broken with interspersed quartz-quartz barite veinlets
R-90-4	104.50	111.20	14	Lower Sheppard	Arkosic Sandstone	purple grey, fine-medgrained, coarser sections interbeddedwith siltstone
R-90-5	0.00	6.00	CAS	Cas	Casing	
R-90-5	6.00	9.90	9	Upper Sheppard	Dolomitic sandstone	dark beige, fine grained
R-90-5	9.90	12.80	9	Upper Sheppard	Stromatolitic dolomite	laminated, buff color
R-90-5	12.80	13.72	10	Upper Sheppard	Greywacke	fine-medium grained, limonite stained
R-90-5	13.72	17.68	10	Upper Sheppard	Sandstone	brown, fine-med grained, feldspathic. Minor green-purple silty interbeds
R-90-5	17.68	21.64	11and12	Upper Sheppard	Quartz Sandstone	fine-medium grained, strongly leached and weathered. Malachite-chalcocite coatings along bedding planes
R-90-5	21.64	34.44	11and12	Upper Sheppard	Arkose Sandstone/greywake	fine-medium grained, feldspathic, malachite along fractures
R-90-6	0.00	3.00	CAS		Casing	
R-90-6	3.00	7.62	11and12	Upper Sheppard	Arkose Sandstone	medium-coarse grained, pervasivel leached, pervasive malachite-chalcocite coatings associated with disseminiated chalcopyrite
R-90-6	7.62	41.00	11and12	Upper Sheppard	Arkose Sandstone	fine-medium grained, grey green. Sporadic quartz-barite veinlets. Dissemianted py and chalcopyrite within veining
R-90-6	41.00	41.75	13and14	Lower Sheppard	Sandstone	dark green fine-med grained with hematite veinlets
R-90-6	41.75	45.72	13and14	Lower Sheppard	Sandstone	medium grained red green
R-90-6	45.72	46.63	13and14	Lower Sheppard	Sandstone	medium-coarse, mottle grey and red. Minor quartz veinlets
R-90-6	46.63	58.75	14	Lower Sheppard	Siltstone	Rhythmic beds of coarse grained, medium grained siltstone

Drill Hole Lithology

Hole	From	To	Code	Formation	Lithology	Description
R-90-6	58.75	63.25	14	Lower Sheppard	Siltstone	laminated siltstone, polymictic sandstone
R-90-6	63.25	65.53	14	Lower Sheppard	Sandstone	purple pebbly cobbles of amy basalt, interbdded siltstone/sandstone
					Amygdaloidal Basalt	
R-90-6	65.53	68.58	15	Lower Sheppard	Conglomerate	purple
R-90-7	0.00	3.00	CAS	Cas	Casing	
R-90-7	3.00	5.18		Upper Sheppard	Greywacke	fine-med grained with ocassionaal pebbles
R-90-7	5.18	8.68			Greywacke	coarse grained with 3% pebbles
R-90-7	8.68	37.80			Sandstone?	Alternating red and green gernally fne grained with some coarse sections. Minor disseminated pyrite, fractured with weak malachite coatings
R-90-7	37.80	57.00			Sandstone	rhythmically bedded coarse-fine grained sandstone purple
R-90-7	57.00	58.83			Sandstone	fine grained siltstone, purple volcanically derived sediments
R-90-7	58.83	72.85	17	Nicol Cr	Amygdaloidal basalt	
R-90-8	0.00	3.00	CAS	Cas	Casing	
R-90-8	3.00	7.62		Upper Sheppard	Arkosic Greywacke/Sandstone	medim grained
R-90-8	7.62	9.45			Greywacke	coarse grained 10% pebbles
R-90-8	9.45	44.80			Sandstone?	alternating red and green gernally fine-medium grained
R-90-8	44.80	64.00			Sandstone	Purple rhythmically beddedm fine-coarse grained

Drill Hole Samples and Assays

Hole	Sample Id	From	To	Length	Au ppb	Cu ppm	Ag ppm	Co ppm	Mn ppm	Hg ppm	S %
R-08-1	53651	66	67	1	0	10	0	33	1040	0	0
R-08-1	53652	67	68	1	0	1	0	28	865	0	0
R-08-1	53653	68	69	1	0	1	0	32	952	0	0
R-08-1	53654	69	70	1	0	1	0	36	986	0	0
R-08-1	53655	70	71	1	0	0	0	26	750	0	0
R-08-1	53656	71	72	1	0	2	0	22	707	0	0
R-08-1	53657	72	73	1	0	1	0	19	1067	0	0
R-08-1	53658	73	74	1	0	1	0	4	407	0	0
R-08-1	53659	74	75	1	0	1	0	10	1079	0	0
R-08-1	53660	75	76	1	0	0	0	6	1382	0	0
R-08-1	53661	76	77	1	0	0	0	7	654	0	0
R-08-1	53662	77	78	1	10	0	0	10	724	0	0
R-08-1	53663	78	79	1	0	3	0	13	527	0	0
R-08-1	53664	79	80	1	0	1	0	7	1606	0	0
R-08-1	53665	80	81	1	4	1	0	9	606	0	0
R-08-1	53666	81	82	1	4	3	0	13	534	0	0
R-08-1	53667	82	83	1	0	3	0	9	271	0	0
R-08-1	53668	83	84	1	0	2	0	9	163	0	0
R-08-1	53669	84	85	1	0	2	0	12	435	0	0
R-08-1	53670	85	86	1	0	1	0	11	588	0	0
R-08-1	53671	86	87	1	0	1	0	8	588	0	0
R-08-1	53672	87	88	1	0	1	0	6	440	0	0
R-08-1	53673	88	89	1	0	2	0	6	765	0	0
R-08-1	53674	89	90	1	0	2	0	10	411	0	0
R-08-1	53675	90	91	1	0	8	0	14	589	0	0
R-08-1	53676	91	92	1	0	8	0	8	597	0	0
R-08-1	53677	92	93	1	0	3	0	9	965	0	0
R-08-1	53678	93	94	1	0	21	0	13	527	0	0
R-08-1	53679	94	95	1	0	61	0	26	370	0	0
R-08-1	53680	95	96	1	0	47	0	19	1250	0	0
R-08-1	53681	96	97	1	0	22	0	18	516	0	0
R-08-1	53682	97	98	1	0	16	0	33	569	0	0
R-08-1	53683	98	99	1	0	1	0	9	1738	0	0
R-08-1	53684	99	100	1	0	3	0	14	1860	0	0
R-08-1	53685	100	101	1	0	7	0	15	2245	0	0
R-08-1	53686	101	102	1	0	52	0	14	1263	0	0
R-08-1	53687	102	103	1	0	8	0	8	1870	0	0
R-08-1	53688	103	104	1	0	4	0	7	1900	0	0
R-08-1	53689	104	105	1	0	5	0	10	1921	0	0
R-08-1	53690	105	106	1	0	72	0	16	1373	0	0
R-08-1	53691	106	107	1	0	14	0	10	1796	0	0
R-08-1	53692	107	108	1	0	13	0	8	1233	0	0
R-08-1	53693	108	109	1	0	122	0	13	1221	0	0

Drill Hole Samples and Assays

Hole	Sample Id	From	To	Length	Au ppb	Cu ppm	Ag ppm	Co ppm	Mn ppm	Hg ppm	S %
R-08-1	53694	111	113	2	0	1	0	2	214	0	0
R-08-1	53695	158	158	0	0	12	0	29	2514	0	3
R-08-2	866001	61	62	1	0	2	0	7	928	0	0
R-08-2	866002	62	63	1	0	35	0	10	353	0	0
R-08-2	866003	63	64	1	0	67	1	72	847	0	1
R-08-2	866004	64	65	1	0	33	0	28	363	0	0
R-08-2	866005	65	66	1	0	21	0	96	626	0	0
R-08-2	866006	66	67	1	0	84	2	257	595	1	1
R-08-2	866007	67	68	1	4	1644	6	296	210	2	0
R-08-2	866008	68	69	1	9	1677	3	320	718	1	0
R-08-2	866009	69	70	1	3	1634	2	546	877	0	0
R-08-2	866010	70	71	1	0	428	3	590	846	2	1
R-08-2	866011	71	72	1	0	374	1	176	568	0	0
R-08-2	866012	72	73	1	0	47	0	135	981	0	1
R-08-2	866013	73	74	1	0	230	1	990	1100	0	1
R-08-2	866014	74	75	1	0	2775	4	1799	1145	1	3
R-08-2	866015	75	76	1	5	430	1	137	678	0	2
R-08-2	866016	76	77	1	0	48	0	20	551	0	0
R-08-2	866017	77	78	1	3	265	1	92	431	0	1
R-08-2	866018	78	79	1	0	206	0	9	522	0	0
R-08-2	866019	79	80	1	0	54	0	36	862	0	0
R-08-2	866020	80	81	1	0	102	1	118	644	0	1
R-08-2	866021	81	82	1	0	790	1	134	1106	1	0
R-08-2	866022	82	83	1	0	111	1	92	1198	0	1
R-08-2	866023	83	84	1	0	207	0	73	1464	0	1
R-08-2	866024	84	85	1	0	2	0	14	1551	0	0
R-08-2	866025	85	86	1	0	2	0	17	1578	0	0
R-08-2	866026	86	87	1	2	1	0	14	1706	0	0
R-08-2	866027	87	88	1	0	27	0	21	1674	0	0
R-08-2	866028	88	89	1	0	56	0	19	999	0	0
R-08-2	866029	89	90	1	0	6	0	14	1332	0	0
R-08-2	866030	90	91	1	0	3	0	7	816	0	0
R-08-2	866031	91	92	1	0	3	0	10	713	0	0
R-08-2	866032	92	93	1	0	1	0	7	1740	0	0
R-08-2	866033	93	94	1	0	1	0	10	767	0	0
R-08-2	866034	94	95	1	0	2	0	9	818	0	0
R-08-2	866035	95	96	1	0	3	0	7	1139	0	0
R-08-2	866036	96	97	1	0	3	0	6	732	0	0
R-08-2	866037	97	98	1	0	4	0	7	526	0	0
R-08-2	866038	98	99	1	0	5	0	9	562	0	0
R-08-3	866039	28	29	1	3	196	0	104	871	0	0
R-08-3	866040	29	30	1	7	214	1	202	684	0	0
R-08-3	866041	30	31	1	5	77	0	77	1203	0	0

Drill Hole Samples and Assays

Hole	Sample Id	From	To	Length	Au ppb	Cu ppm	Ag ppm	Co ppm	Mn ppm	Hg ppm	S %
R-08-3	866042	31	32	1	7	373	0	170	683	0	1
R-08-3	866043	32	33	1	12	5789	2	282	818	1	1
R-08-3	866044	33	34	1	23	8503	8	177	192	0	1
R-08-3	866045	34	35	1	6	1518	1	219	569	0	1
R-08-3	866046	35	36	1	8	2957	2	191	554	0	1
R-08-3	866047	36	37	1	6	7134	2	136	1002	0	0
R-08-3	866048	37	38	1	25	4254	2	159	1015	0	1
R-08-3	866049	38	39	1	22	3447	2	240	1216	0	0
R-08-3	866050	39	40	1	6	467	0	29	1245	0	0
R-08-3	866051	40	41	1	4	181	0	28	994	0	0
R-08-3	866052	41	42	1	3	59	0	19	848	0	0
R-08-3	866053	42	43	1	0	59	0	28	703	0	0
R-08-3	866054	43	44	1	0	59	0	31	556	0	0
R-08-3	866055	44	45	1	2	63	0	33	542	0	0
R-08-3	866056	45	46	1	0	36	0	20	540	0	0
R-08-3	866057	46	47	1	0	57	0	42	693	0	0
R-08-3	866058	47	48	1	0	67	0	13	495	0	0
R-08-3	866059	48	49	1	6	69	0	18	210	0	0
R-08-3	866060	49	50	1	0	65	0	36	737	0	0
R-08-3	866061	50	51	1	3	19	0	49	1029	0	0
R-08-3	866062	51	52	1	0	30	0	46	895	0	0
R-08-3	866063	52	53	1	3	127	0	20	450	0	0
R-08-3	866064	53	54	1	0	50	0	15	583	0	0
R-08-3	866065	54	55	1	0	30	0	15	1025	0	0
R-08-3	866066	55	56	1	3	17	0	14	1213	0	0
R-08-3	866067	56	57	1	0	232	0	12	899	0	0
R-08-3	866068	57	58	1	0	17	0	7	577	0	0
R-08-3	866069	58	59	1	0	11	0	30	906	0	0
R-08-3	866070	59	60	1	0	105	0	46	1366	0	0
R-08-3	866071	60	61	1	0	2	0	19	1236	0	0
R-08-3	866072	61	62	1	0	2	0	18	1032	0	0
R-08-3	866073	62	63	1	0	4	0	18	901	0	0
R-08-3	866074	63	64	1	0	15	0	15	765	0	0
R-08-3	866075	64	65	1	0	3	0	8	688	0	0
R-08-3	866076	65	66	1	0	2	0	7	558	0	0
R-08-3	866077	66	67	1	0	1	0	1	49	0	0
R-08-3	866078	67	68	1	0	4	0	1	72	0	0
R-08-3	866079	68	69	1	0	3	0	1	59	0	0
R-08-3	866080	69	70	1	0	14	0	7	285	0	0
R-08-3	866081	70	71	1	0	3	0	8	661	0	0
R-08-3	866082	71	72	1	3	3	0	8	883	0	0
R-08-3	866083	72	73	1	0	6	0	4	752	0	0
R-08-3	866084	73	74	1	0	4	0	3	744	0	0

Drill Hole Samples and Assays

Hole	Sample Id	From	To	Length	Au ppb	Cu ppm	Ag ppm	Co ppm	Mn ppm	Hg ppm	S %
R-08-3	866085	74	75	1	2	5	0	3	882	0	0
R-08-3	866086	75	76	1	0	6	0	4	940	0	0
R-08-3	866087	76	77	1	0	102	0	2	851	0	0
R-08-3	866088	77	78	1	0	38	0	2	1065	0	0
R-08-3	866089	78	79	1	0	38	0	2	1224	0	0
R-08-3	866090	79	80	1	3	44	0	2	1146	0	0
R-08-3	866091	80	81	1	0	17	0	2	1193	0	0
R-08-3	866092	81	82	1	0	40	0	12	786	0	1
R-08-3	866093	82	83	1	3	179	0	23	682	0	0
R-08-3	866094	83	84	1	4	273	0	22	731	0	0
R-08-3	866095	84	85	1	0	293	0	25	608	0	0
R-08-3	866096	85	86	1	0	92	0	20	645	0	0
R-08-3	866097	86	87	1	0	15	0	9	582	0	0
R-08-3	866098	87	88	1	0	10	0	5	663	0	0
R-08-3	866099	88	89	1	0	13	0	4			
R-08-3	866100	89	90	1	0	16	0	2			
R-08-3	866101	90	91	1	0	52	0	3			
R-08-3	866102	91	92	1	0	53	0	2			
R-08-3	866103	92	93	1	0	10	0	2			
R-08-3	866104	93	94	1	0	209	0	2			
R-08-3	866105	94	95	1	0	4	0	2			
R-08-3	866106	95	96	1	0	3	0	2			
R-08-3	866107	96	97	1	0	5	0	3			
R-08-3	866108	97	98	1	16	3	0	5			
R-08-3	866109	98	99	1	9	2	0	4			
R-08-3	866110	99	100	1	2	9	0	7			
R-08-3	866111	100	101	1	0	1	0	5			
R-08-3	866112	101	102	1	6	3	0	19			
R-08-3	866113	102	103	1	11	2	0	13			
R-08-3	866114	103	104	1	3	2	0	9			
R-08-3	866115	104	105	1	0	1	0	7			
R-08-3	866116	105	106	1	0	50	0	9			
R-08-3	866117	106	107	1	0	16	0	8			
R-08-3	866118	107	108	1	0	162	0	13			
R-08-3	866119	108	109	1	2	105	0	26			
R-08-3	866120	109	110	1	0	11	0	17			
R-08-4	866121	20	21	1	14	2812	0	29			
R-08-4	866122	21	22	1	8	423	0	81			
R-08-4	866123	22	23	1	0	260	0	27			
R-08-4	866124	23	25	2	0	227	0	35			
R-08-5	866125	26	27	1	0	33	0	20	519	0	0
R-08-5	866126	27	28	1	6	301	0	39	441	0	0
R-08-5	866127	28	29	1	0	746	1	34	571	0	0

Drill Hole Samples and Assays

Hole	Sample Id	From	To	Length	Au ppb	Cu ppm	Ag ppm	Co ppm	Mn ppm	Hg ppm	S %
R-08-5	866128	29	30	1	0	16	0	20	412	0	0
R-08-5	866129	30	31	1	0	5	0	12	524	0	0
R-08-5	866130	31	32	1	0	5	0	4	308	0	0
R-08-5	866131	32	33	1	0	4	0	7	498	0	0
R-08-5	866132	33	34	1	0	2	0	9	377	0	0
R-08-5	866133	34	35	1	0	1	0	7	431	0	0
R-08-5	866134	35	36	1	0	2	0	122	492	0	0
R-08-5	866135	36	37	1	13	2	0	13	304	0	0
R-08-5	866136	37	38	1	0	5	0	26	355	0	1
R-08-5	866137	38	39	1	0	2	0	5	215	0	0
R-08-5	866138	39	40	1	0	4	0	13	304	0	0
R-08-5	866139	40	41	1	4	15	0	9	537	0	0
R-08-5	866140	41	42	1	0	95	0	16	226	0	0
R-08-5	866141	42	43	1	0	9	0	19	385	0	0
R-08-5	866142	43	44	1	0	301	0	22	399	0	0
R-08-5	866143	44	45	1	3	713	0	50	869	0	0
R-08-5	866144	45	46	1	2	1031	1	87	636	0	0
R-08-5	866145	46	47	1	0	43	0	46	1585	0	0
R-08-5	866146	47	48	1	0	15	0	25	1341	0	0
R-08-5	866147	48	49	1	0	6	0	20	849	0	0
R-08-5	866148	49	50	1	0	101	0	62	1755	0	0
R-08-5	866149	50	51	1	0	2	0	24	1373	0	0
R-08-5	866150	51	52	1	0	1	0	20	1268	0	0
R-08-5	866151	52	53	1	3	1151	1	185	2223	0	1
R-08-5	866152	53	54	1	0	26	0	33	1277	0	0
R-08-5	866153	54	55	1	0	50	0	31	2383	0	0
R-08-5	866154	55	56	1	0	44	0	37	2589	0	0
R-08-5	866155	56	57	1	0	97	0	53	1991	0	0
R-08-5	866156	57	59	2	0	615	0	101	1952	0	0
R-08-5	866157	59	60	1	0	4147	1	476	1030	0	0
R-08-5	866158	60	61	1	0	2810	1	185	2440	0	0
R-08-5	866159	61	62	1	0	108	0	30	1465	0	0
R-08-6	866160	85	86	1	0	17	0	8	537	0	0
R-08-6	866161	86	87	1	0	27	0	45	2083	0	1
R-08-6	866162	87	88	1	0	32	0	28	1727	0	0
R-08-6	866163	88	89	1	0	50	0	38	805	0	0
R-08-6	866164	89	90	1	0	44	0	52	1128	0	0
R-08-6	866165	90	91	1	0	85	0	44	2800	0	1
R-08-6	866166	91	92	1	0	174	0	72	949	0	2
R-08-6	866167	92	93	1	0	468	0	86	1504	0	3
R-08-6	866168	93	94	1	0	201	1	36	19	0	1
R-08-6	866169	94	95	1	0	634	0	48	757	0	1
R-08-6	866170	95	96	1	0	401	0	59	598	0	0

Drill Hole Samples and Assays

Hole	Sample Id	From	To	Length	Au ppb	Cu ppm	Ag ppm	Co ppm	Mn ppm	Hg ppm	S %
R-08-6	866171	96	97	1	0	273	0	43	550	0	0
R-08-6	866172	97	98	1	0	198	0	60	1578	0	0
R-08-6	866173	98	99	1	0	16	0	22	1162	0	0
R-08-6	866174	101	102	1	0	11	0	20	2628	0	0
R-08-6	866175	102	103	1	0	97	0	21	1925	0	0
R-08-6	866176	103	104	1	0	142	0	14	2349	0	0
R-08-6	866177	104	105	1	0	121	0	18	2401	0	0
R-08-6	866178	109	110	1	0	7	0	13	1844	0	0
R-08-6	866179	110	111	1	0	13	0	9	1152	0	0
R-08-6	866180	111	112	1	0	5	0	14	1198	0	0
R-08-6	866181	112	113	1	0	2	0	11	1524	0	0
R-08-6	866182	113	114	1	0	118	0	15	1588	0	0
R-08-6	866183	114	115	1	0	148	0	17	1839	0	0
R-08-6	866184	115	116	1	0	180	0	14	2119	0	0
R-08-6	866185	116	117	1	0	453	0	14	1834	0	0
R-08-6	866186	126	127	1	0	4	0	4	1271	0	0
R-08-6	866187	132	133	1	0	9	0	7	785	0	0
R-08-6	866188	133	134	1	0	57	0	12	2134	0	0
R-08-6	866189	144	145	1	0	1	0	1	253	0	0
R-93-9	87501	54	55	1		9	0	6	811		
R-93-9	87502	68	69	1		5	0	3	162		
R-93-9	87503	86	88	2		13	0	6	423		
R-93-9	87504	88	88	1		811	0	10	742		
R-93-9	87505	88	89	1		34	0	11	352		
R-93-9	114637	106	107	1		8	0	10	910		
R-93-9	114638	107	108	1		18	0	16	1008		
R-93-9	114639	108	110	1		974	0	45	506		
R-93-9	114640	110	111	1		619	0	19	408		
R-93-9	114641	111	112	1		13	0	13	809		
R-93-9	114642	119	120	2		965	1	31	1473		
R-93-10	87506	96	98	2		18	0	5	255		
R-93-10	87507	98	99	2		20	0	18	628		
R-93-10	87508	99	101	2		239	2	55	774		
R-93-10	87509	101	102	2		190	1	25	789		
R-93-10	87510	102	104	2		206	1	25	597		
R-93-10	87511	104	105	2		137	1	19	727		
R-93-10	87512	105	107	2		92	0	19	620		
R-93-10	87513	107	108	2		72	1	24	605		
R-93-10	87514	108	110	2		101	1	23	642		
R-93-10	87515	110	111	2		75	0	21	525		
R-93-10	87516	111	112	1		45	1	20	1124		
R-93-10	87517	112	113	1		15	0	12	963		
R-93-10	87518	113	114	1		29	0	21	319		

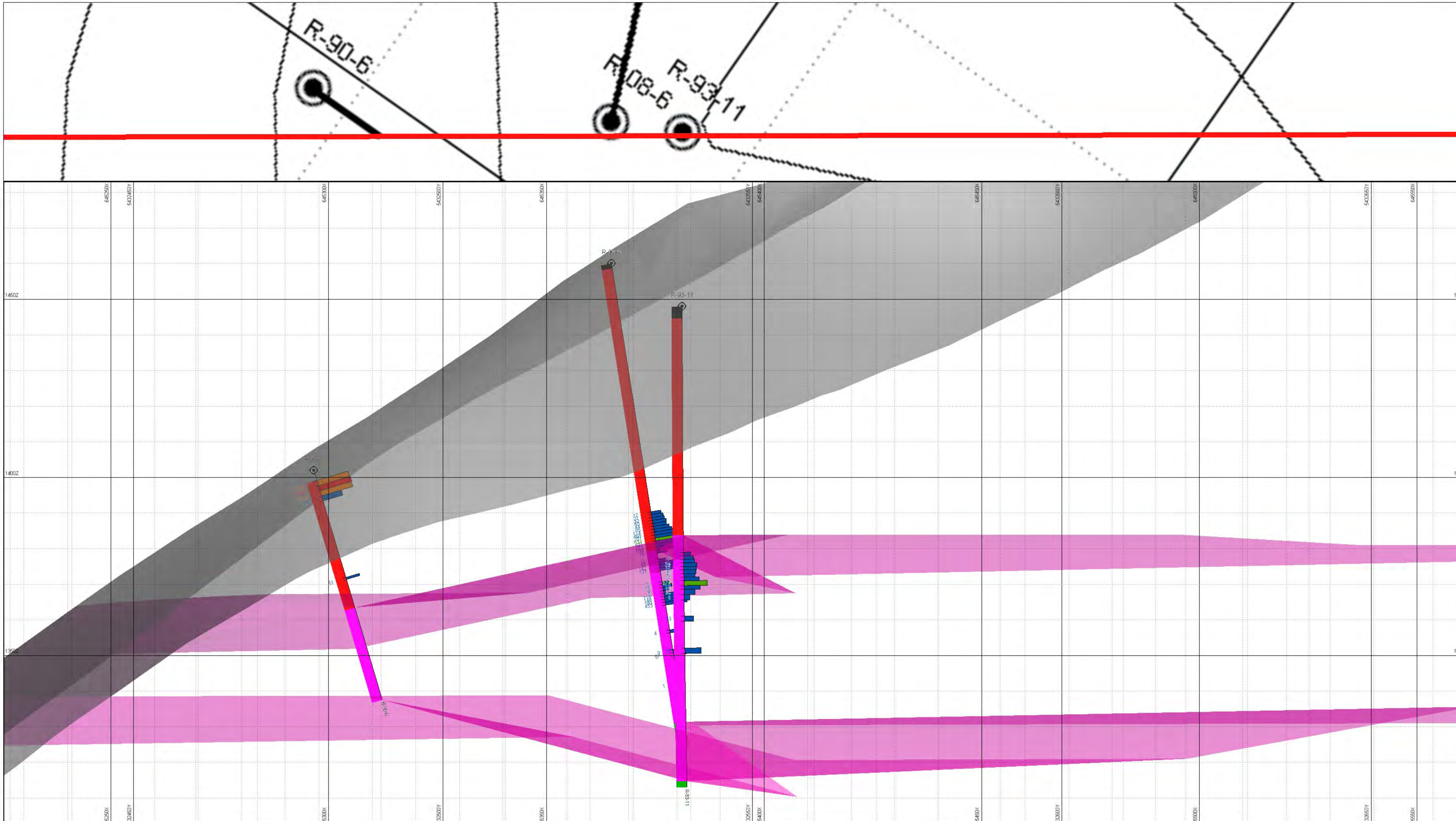
Drill Hole Samples and Assays

Hole	Sample Id	From	To	Length	Au ppb	Cu ppm	Ag ppm	Co ppm	Mn ppm	Hg ppm	S %
R-93-10	87519	114	115	1		212	0	14	288		
R-93-10	87520	115	116	1		81	0	29	572		
R-93-10	87521	116	117	1		112	0	10	278		
R-93-10	87522	117	118	1		50	0	13	713		
R-93-10	87523	118	119	1		74	0	15	943		
R-93-10	87524	119	120	1		38	0	30	878		
R-93-10	87525	120	121	1		73	1	40	823		
R-93-10	87526	121	122	1		196	0	36	770		
R-93-10	87527	122	123	1		88	0	44	632		
R-93-10	87528	123	124	1		77	0	37	321		
R-93-10	87529	124	125	1		8	0	6	271		
R-93-10	87530	125	126	1		8	0	4	312		
R-93-10	87531	126	127	1		13	0	3	214		
R-93-10	87532	127	128	1		13	0	3	224		
R-93-10	87533	166	167	1		10	0	13	1165		
R-93-10	87534	167	169	1		12	0	9	879		
R-93-10	87535	169	170	2		9	0	18	1135		
R-93-10	114626	181	183	2		6	0	8	1042		
R-93-10	114627	183	184	1		4	0	5	233		
R-93-10	114628	184	185	1		10	0	7	306		
R-93-10	114629	185	186	1		4	0	5	271		
R-93-10	114630	186	187	1		4	0	4	321		
R-93-10	114631	187	188	1		4	0	5	225		
R-93-10	114632	188	189	1		3	0	4	254		
R-93-10	114633	189	190	1		4	0	4	281		
R-93-10	114634	190	191	1		3	0	5	196		
R-93-10	114635	191	192	1		5	0	6	703		
R-93-10	114636	192	193	2		6	0	9	1203		
R-93-11	87536	69	70	1		7	0	7	787		
R-93-11	87537	70	71	1		15	0	9	1227		
R-93-11	87538	71	72	1		21	0	46	492		
R-93-11	87539	72	73	1		38	0	60	1781		
R-93-11	87540	73	74	1		34	1	49	1248		
R-93-11	87541	74	75	1		30	0	54	2537		
R-93-11	87542	75	76	1		22	0	39	3737		
R-93-11	87543	76	77	1		77	1	136	1187		
R-93-11	87544	77	78	1		674	2	239	1141		
R-93-11	87545	78	79	1		90	1	231	814		
R-93-11	87546	79	81	2		22	0	66	1595		
R-93-11	87547	81	82	2		5	0	109	1756		
R-93-11	87548	87	88	2		13	1	10	1125		
R-93-11	87549	96	97	2		97	0	18	1032		
R-90-2	502297	34	34	1		100	2	18	1745	0	

Drill Hole Samples and Assays

Hole	Sample Id	From	To	Length	Au ppb	Cu ppm	Ag ppm	Co ppm	Mn ppm	Hg ppm	S %
R-90-4	502286	21	22	1		2230	4	401	990	0	
R-90-4	502287	22	23	1		9900	3	460	710	2	
R-90-4	502288	23	24	1		357	2	55	500	0	
R-90-4	502289	24	25	1		1185	3	222	1285	6	
R-90-4	502291	25	26	1		9300	5	299	730	0	
R-90-4	502292	26	27	2		9700	7	127	115	0	
R-90-4	502293	27	29	2		17300	5	376	510	0	
R-90-4	502294	29	30	1		18700	4	249	100	1	
R-90-4	502295	30	31	1		10200	3	371	735	0	
R-90-4	502296	31	32	1		1695	3	176	1455	0	
R-90-4	502297	32	33	1		91	2	18	1745	0	
R-90-4	502298	45	46	1		1675	2	144	1565	0	
R-90-5	502051	18	20	2		12300	3	871	695	0	
R-90-5	502052	20	21	1		11900	34	1340	1450	0	
R-90-5	502053	21	22	1		6740	4	727	655	0	
R-90-5	502054	22	23	1		184	2	158	1060	0	
R-90-6	502055	3	5	2		8140	2	1325	1565	0	
R-90-6	502056	5	6	2		10400	3	1475	840	1	
R-90-6	502057	6	8	2		9150	2	382	650	1	
R-90-6	502058	8	9	2		319	1	41	1935	0	
R-90-6	502059	32	33	1		51	1	3	830	0	
R-90-7	502060	17	18	1		9730	3	399	4410	3	

Appendix 2 – Micromine Drill Sections



Legend

Lithology
- Casing
- Fault zone
- Gateway Formation
- Upper Sheppard Formation
- Lower Sheppard Formation
- Nicole Creek Formation

Copper Assays
- < 25 ppm Cu
- 25 to 50 ppm Cu
- 50 to 100 ppm Cu
- 100 to 200 ppm Cu
- 200 to 500 ppm Cu
- >= 500 ppm Cu

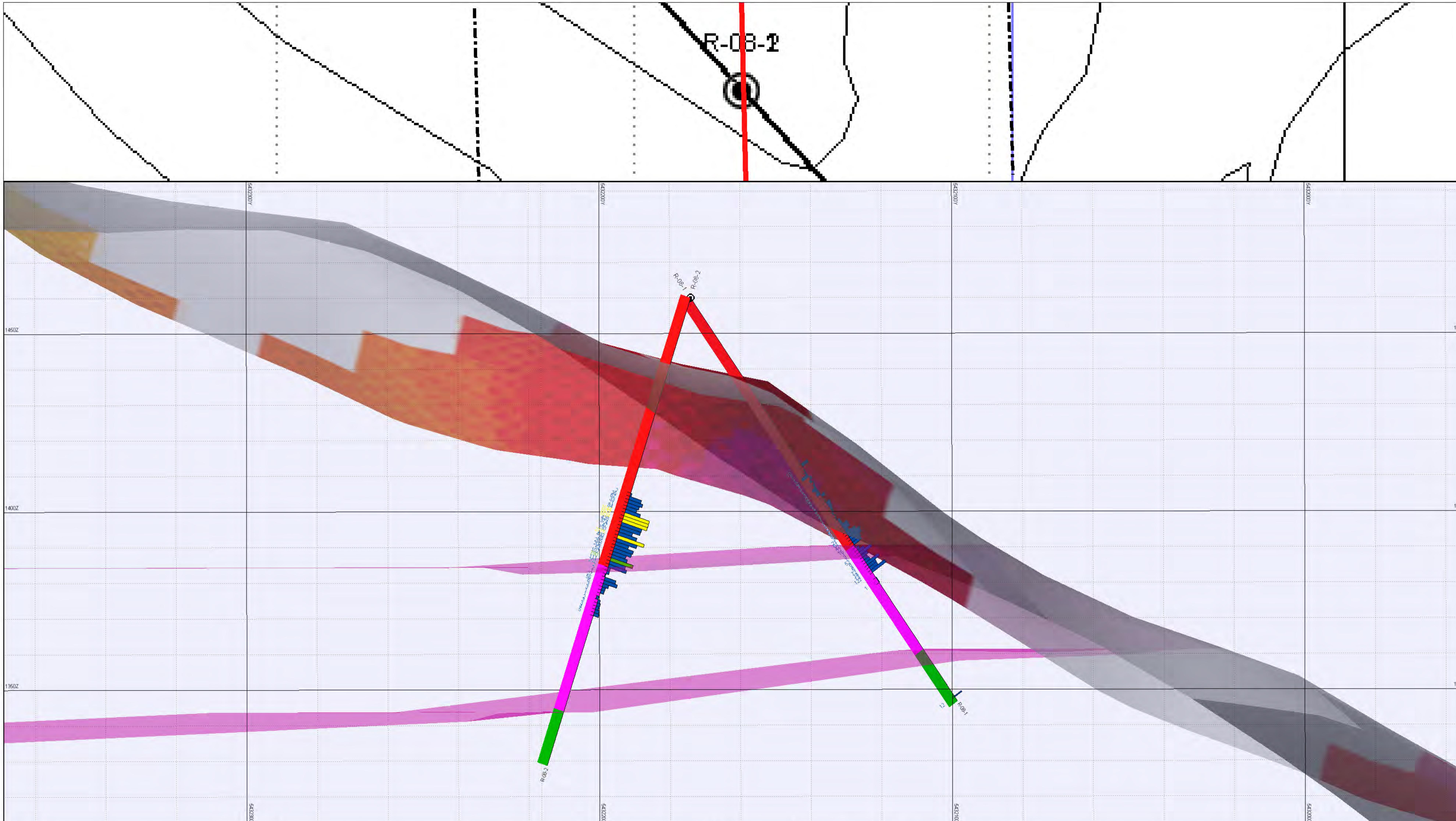
APEX Geoscience Ltd.

Scale	Plot Date	Sheet
1:500	19-Mar-2013	1 of 1
	Plot File: Vizex	

20 0 20m

East Cross Section Copper Assays

Robocop Project



APEX Geoscience Ltd.

Legend

Lithology

- Casing
- Fault zone
- Gateway Formation
- Upper Sheppard Formation
- Lower Sheppard Formation
- Nicole Creek Formation

Cu Ranges

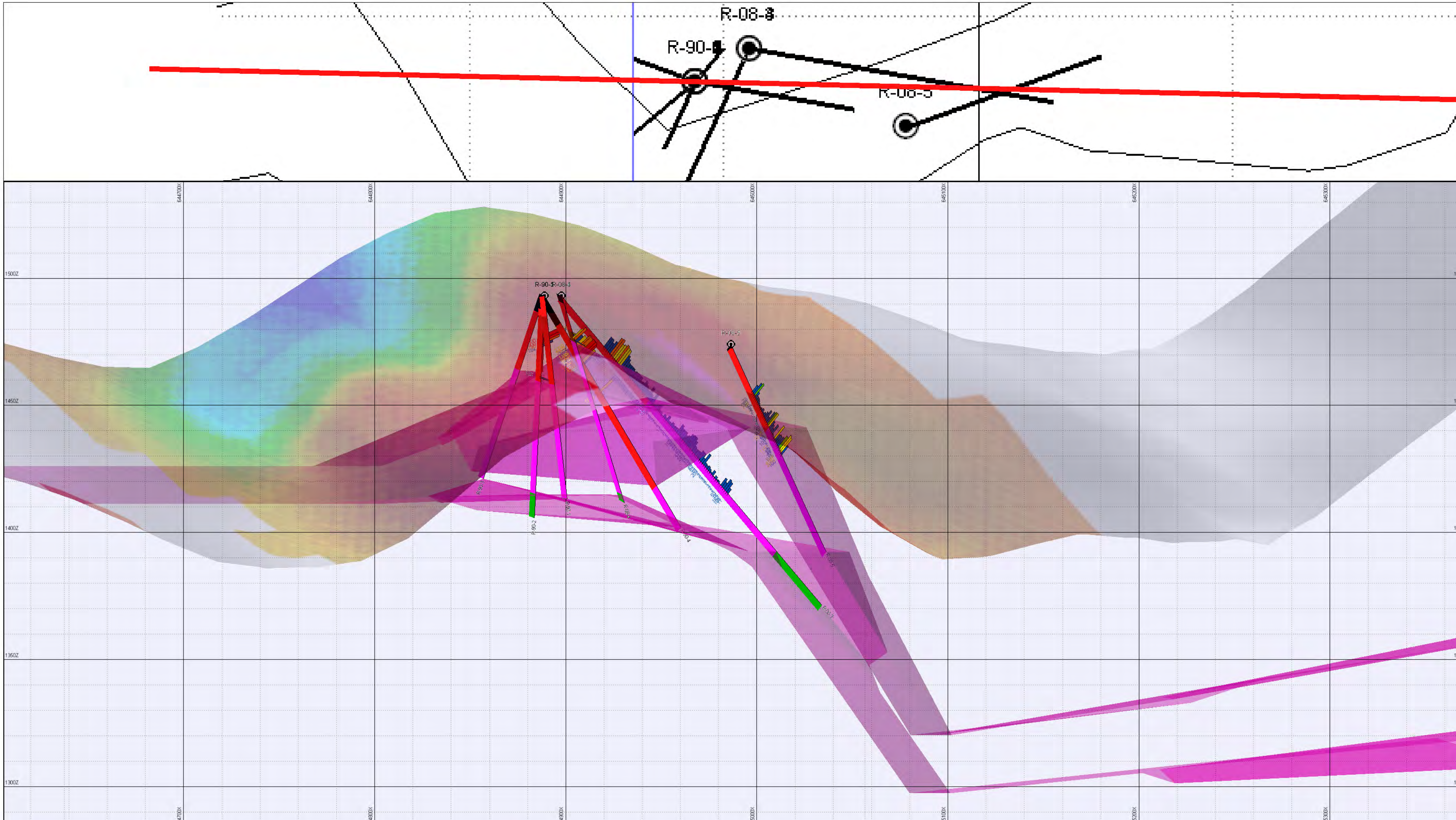
- < 500
- 500 to 1000
- 1000 to 5000
- 5000 to 10000
- 10000 to 20000
- >= 20000

Scale	Plot Date	Sheet
1:500	19-Mar-2013	1 of 1
	Plot File: Vizex	

20 0 20m

Far East Cross Section Copper Assays

Robocop Project



Legend

Lithology

- Casing
- Fault zone
- Gateway Formation
- Upper Sheppard Formation
- Lower Sheppard Formation
- Nicole Creek Formation

Cu Ranges

- < 500 ppm
- 500 to 1000 ppm
- 1000 to 5000 ppm
- 5000 to 10000 ppm
- 10000 to 20000 ppm
- >= 20000 ppm

APEX Geoscience Ltd.

Scale	Plot Date	Sheet
1:700	19-Mar-2013	1 of 1
	Plot File: Vizex	

North Cross Section Copper Assays

Robocop Project

Appendix 3 – 2012 Robocop Rock Sample Assay Certificate

ALS Minerals
ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: **APEX GEOSCIENCE LTD.**
200- 9797 45 AVE
EDMONTON AB T6E 5V8

Finalized Date: 8- NOV- 2012
Account: TTB

CERTIFICATE VA12245574

Project:
P.O. No.:
This report is for 1 Rock samples submitted to our lab in Vancouver, BC, Canada on 18- OCT- 2012.
The following have access to data associated with this certificate:

MIKE DUFRESNE		

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
LOG- 22	Sample login - Rcd w/o BarCode
CRU- QC	Crushing QC Test
CRU- 31	Fine crushing - 70% <2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% <75 um
EXTRA- 01	Extra Sample received in Shipment

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME- ICP41	35 Element Aqua Regia ICP- AES	ICP- AES
ME- OG46	Ore Grade Elements - AquaRegia	ICP- AES
Cu- OG46	Ore Grade Cu - Aqua Regia	VARIABLE
Au- ICP21	Au 30g FA ICP- AES Finish	ICP- AES
Au- GRA21	Au 30g FA- GRAV finish	WST- SIM

To: **APEX GEOSCIENCE LTD.**
ATTN: MIKE DUFRESNE
200- 9797 45 AVE
EDMONTON AB T6E 5V8

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature:
Colin Ramshaw, Vancouver Laboratory Manager

ALS Minerals

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: **APEX GEOSCIENCE LTD.**
200- 9797 45 AVE
EDMONTON AB T6E 5V8

Finalized Date: 8- NOV- 2012
Account: TTB

CERTIFICATE OF ANALYSIS VA12245574

Sample Description	Method	WEI-21	Au-ICP21	Au-GRA21	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
	Analyte	Recvd Wt.	Au	Au	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu
	Units	kg	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
	LOR	0.02	0.001	0.05	0.2	0.01	2	10	10	0.5	2	0.01	0.5	1	1	1
12MDP100		2.14	0.015		4.1	0.26	71	<10	780	<0.5	4	0.18	<0.5	1010	5	>10000

ALS Minerals

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: **APEX GEOSCIENCE LTD.**
200- 9797 45 AVE
EDMONTON AB T6E 5V8

Finalized Date: 8- NOV- 2012
Account: TTB

CERTIFICATE OF ANALYSIS VA12245574

Sample Description	Method Analyte Units LOR	ME- ICP41 Fe % 0.01	ME- ICP41 Ga ppm 10	ME- ICP41 Hg ppm 1	ME- ICP41 K % 0.01	ME- ICP41 La ppm 10	ME- ICP41 Mg % 0.01	ME- ICP41 Mn ppm 5	ME- ICP41 Mo ppm 1	ME- ICP41 Na % 0.01	ME- ICP41 Ni ppm 1	ME- ICP41 P ppm 10	ME- ICP41 Pb ppm 2	ME- ICP41 S % 0.01	ME- ICP41 Sb ppm 2	ME- ICP41 Sc ppm 1
12MDP100		2.14	<10	<1	0.20	40	0.03	187	6	<0.01	119	260	6	0.14	<2	1

ALS Minerals

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: **APEX GEOSCIENCE LTD.**
200- 9797 45 AVE
EDMONTON AB T6E 5V8

Finalized Date: 8- NOV- 2012
Account: TTB

CERTIFICATE OF ANALYSIS VA12245574

Sample Description	Method Analyte Units LOR	ME- ICP41 Sr ppm 1	ME- ICP41 Th ppm 20	ME- ICP41 Ti % 0.01	ME- ICP41 Tl ppm 10	ME- ICP41 U ppm 10	ME- ICP41 V ppm 1	ME- ICP41 W ppm 10	ME- ICP41 Zn ppm 2	Cu- OG46 Cu % 0.001
12MDP100		73	<20	<0.01	<10	<10	4	<10	3	1.630

Appendix 4 – 2012 Robocop Expenditures

APEX Geoscience Ltd.

ROBOCOP Property Expenditure Detail

January through December 2012

Item	Source Name	Class	Rates $/Day	Days	Amount	Totals
APEX Data & reproduction costs					107.25	
APEX Travel - airfare, taxi, food, accommodation, truck rental					2,000.00	
APEX Software & Computer Rental					1,000.00	
			Total APEX 3rd Party			3,107.25
APEX Fieldwork, Digitizing, Micromine Modelling, ArcGIS & Geosoft - Wages & benefits						
	Dufresne, Michael B		850	2.00	1,698.56	
	Gunson, Tara D		525	5.24	2,748.68	
	Hough, Rachelle J		400	7.77	3,109.29	
	Maan, Simran S		325	9.77	3,174.15	
	Mollel, Godwin F		325	4.84	1,573.77	
	Salter, Kathryn L		475	6.85	3,251.93	
	Total APEX Wages & benefits					15,556.38
Subcontract - Fieldwork - Field Visit and Core Review						
	Cliff Boychuk				500.00	
	Peter Klewchuck				500.00	
	Benjamin Cox				500.00	
				Total Subcontract		1,500.00
			TOTAL 2012 Project Cost			**20,163.63**