TECHNICAL REPORT ON THE CHU CHUA PROPERTY
KAMLOOPS MINING DIVISION, BRITISH COLUMBIA

Approximate Property Location:
120°4'15" W Longitude, 51°22'34" N Latitude

Prepared For: Newport Exploration Ltd.
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1 Summary

This Technical Report (the "Report") is written for the Chu Chua Property ("the Property") in which Newport Exploration Ltd. ("Newport") has 100 percent (%) interest while subject to two separate 1% net smelter return (NSR) royalties. This report has been prepared for Newport Exploration Ltd. ("Newport") for the purpose of graduating from TSX Venture Exchange to TSX. The Chu Chua Property consists of two active mineral claims totaling 282.5 hectares (ha); located 24 km northeast of Barriere, B.C.

During 2021, APEX was retained by Newport to complete and updated mineral resource estimate for the Chu Chua Property. Mr. Kristopher Raffle, B.Sc., P. Geo., Mr. Steve Nichols, BA.Sc (Geology) MAIG, and Mr. Alfonso Rodriguez, M.Sc., P. Geo., of APEX are independent qualified persons as defined by the Canadian Securities Administration (CSA) National Instrument (NI) 43-101, and are the authors of this report. Mr. Raffle supervised the 2011 re-sampling of historic core and data verification and conducted property visits during 2008 and 2012. Mr. Rodriguez conducted the most recent property visit on July 14th, 2021. The mineral resource estimation of the Chu Chua mineralized zone was completed by Mr. Nichols. This Report is written in accordance with the requirements of the National Instrument 43-101 Standards of Disclosure for Mineral Projects, and is a technical summary of the available geological, geophysical, and geochemical data relevant to the Project.

The property is host to the Chu Chua deposit; a Cyprus-type volcanogenic massive sulphide body first discovered in 1978. The property is largely underlain by the Mississippian to Permian aged Fennell Formation which comprises basaltic and rhyolitic volcanic rocks, clastic and chemical sedimentary rocks, and diabase sills. This volcanic stratigraphy is prospective for other Cyprus-type and Kuroko-type massive sulphide deposits.

A total of 99 diamond drill holes, totaling 19,707 m were completed to delineate the Chu Chua deposit between 1978 and 1982 by Craigmont Mines Ltd. (Craigmont) and between 1988 and 1991 by by Minnova Inc. (Minnova). Within the current boundaries of the Chu Chua Property, a total 89 drill holes totalling 17,782.51 m have been drilled for mineral exploration. The drilling defined two areas of relatively thick, high grade sulphide mineralization occurring within 100 m of the surface. Highlights from this early drilling included drill hole CC-6 which yielded 3.4% copper (Cu), 0.6% zinc (Zn), 0.86 grams per tonne (g/t) gold (Au) and 12.14 g/t silver (Ag) over 23 m core length and drill hole CC-16 which yielded 3.82% Cu, 0.47% Zn, 0.53 g/t Au and 11.88 g/t Ag over 22.7 m core length. Additional drilling to test the grade, thickness, lateral and depth extent, and continuity of the deposit was completed by Minnova Inc. (Minnova) between 1988 and 1991. Minnova drilled a total of 46 holes (8,887 m) during the period. Highlights from the Minnova drilling include drill hole CCF-19 which yielded 4.53% Cu, 0.21% Zn, 0.36 g/t Au and 13.86 g/t Ag over 21.5 m core length and drill hole CCF-22 which yielded 4.61% Cu, 0.67% Zn, 1.7 g/t Au and 19.59 g/t Ag over 25.5 m core length.

The mineral resource modelling and estimation was carried out using a 3-dimensional block model, using commercial mine planning software Micromine. To demonstrate that the Chu Chua deposit has reasonable prospects for future economic extraction, the mineral resource was constrained using the Lerchs-Grossman pit optimization algorithm implemented in Micromine v2021 with the following mining costs and mineral processing parameters (Table 1.1).

Table 1.1 Mining and Processing Parameters for LG Pit

Parameter	Unit	Cost
Mining Costs and Parameters		
Ore Mining Cost	USD $/Tonne Ore	2.00
Waste Mining Cost	USD $/Tonne Waste	2.00
G&A Cost	USD $/Tonne Ore	10.00
Pit Wall Angle	degrees	50
Density	t/m^3	4.3
Total Processing Cost	USD $ / Tonne	20.0
Copper Processing Parameters		
Copper Sale Price	USD $ / lbs	4
Copper Recovery	%	85
Copper Cut-off Grade	% Mass	5
Zinc Processing Parameters		
Zinc Sale Price	USD $ / lbs	1.2
Zinc Recovery	%	75
Zinc Cut-off Grade	% Mass	5
Gold Processing Parameters		
Gold Sale Price	USD $ / oz	1700
Gold Recovery	%	50
Gold Cut-off Grade	g/t	0.1
Silver Processing Parameters		
Silver Sale Price	USD $ / oz	25
Silver Recovery	%	50
Silver Cut-off Grade	g/t	1.0

The mineral resource estimate comprises an inferred mineral resource of 2.29 million tonnes averaging 2.11 % copper, 0.30 % zinc, 9.99 g/t silver, 0.50 g/t gold at a copper block cut-off grade of 1.0% (Table 1.2), which is considered to be prospective for development based on the project’s favorable location for access, power, water, labor force and other assumptions derived from deposits of similar type and scale.

Table 1.2. Mineral Resource Estimate for the Chu Chua Deposit (1.0 % copper block)

Classification	Tonnes*	Cu %	Zn %	Ag g/t	Au g/t
Inferred	2,289,000	2.11	0.30	9.99	0.50

*Tonnes have been rounded to nearest 1,000

Metallurgical flotation tests have achieved copper recoveries to a maximum of 92.2%; with gold and silver recoveries of 35.5% and 61.3%, respectively (51 µm grind size and pH 12 test parameters). A single preliminary cleaner floatation test utilizing a 16 µm re-grind of the rougher concentrate produced a 22.4% copper concentrate.

To date, mineralization has been modeled over a 480 m strike length and to a depth of 180 m from surface. Additional drilling is warranted to define the extent of near surface mineralization at the north end of the deposit; at depth within and beneath the currently modeled Main Lens; and to the south where limited deep drilling has encountered narrow sulphide intercepts.

The Chu Chua Property is subject to the typical external risks that apply to all mining projects, such as change in metal prices, availability of investment capital, changes in government regulations, community engagement, and general environmental concerns. The three latter points are mitigated to a certain extent by jurisdiction. British Columbia is a mining friendly Province with well established mining law and permitting processes.

There is no guarantee that diamond drilling will result in the discovery of additional mineralization, or an economic mineral deposit. However, in the Author's opinion there are no significant risks or uncertainties that could reasonably be expected to affect the reliability or confidence in the currently available exploration information with respect to the Chu Chua Property.

A follow up drilling program is recommended to test the main zone and the north zone to aid in the validation of the historic drilling and to convert some of the resource into an indicated category. Additionally, drilling to the south end of the main zone and below the main zone is recommended to test lateral and depth extent of known sulphide mineralization. The exact number of holes and the total depth may be adjusted depending on initial results. Drilling at depth should include downhole electromagnetic (EM) surveys to assist in extending the current known extent of the Chu Chua massive sulphide lenses and in targeting new separate zones. In addition, systematic downhole multi trace element and whole rock geochemical work should be conducted on any new core to identify and better map out the existing volcanic stratigraphy associated with the Chu Chua massive sulphide lenses. A total of twelve (12) holes are recommended for a total of 3,00 m. The follow up drilling program is estimated at CDN$ 1,050,000.

2 Introduction

2.1 Issuer and Purpose

This Technical Report (the “Report”) for the Chu Chua Property (“Chu Chua” or the “Property”) was prepared by APEX Geoscience Ltd. (“APEX”) at the request of Newport Exploration Corp. (“Newport”) for the purpose of graduating from TSX Venture Exchange to TSX.

This Technical Report has been prepared in accordance with the Canadian Securities Administration’s (“CSA”’s) National Instrument 43-101 (“NI 43-101”) Standards of Disclosure for Mineral Projects and guidelines for technical reporting Canadian Institute of Mining, Metallurgy and Petroleum (“CIM”) “Best Practices and Reporting Guidelines” for disclosing mineral exploration. The Effective Date of this Technical Report is September 1st, 2021. The Technical Report includes a summary of exploration activities conducted on the Property to date and recommendations for future work.

The Chu Chua property consists of two active mineral claims covering a combined area of approximately 282.5 hectares (ha), located within the Kamloops Mining Division of British Columbia, about 24 kilometers (km) northeast of Barriere, B.C.

2.2 Authors and Personal Inspection

Mr. Kristopher J. Raffle, P.Geo., Principal and Consultant of APEX, a Qualified Person (“QP”) as defined by the National Instrument 43-101 (“NI 43-101”), is the primary author of the Report. Mr. Raffle is responsible for all sections of this Report except Section 12 and 14. Mr. Alfonso Rodriguez, M.Sc., P. Geo., Project Geologist of APEX, and Mr. Steve Nicholls, BASc, M-AIG, Senior Resource Geologist of APEX, are Qualified Persons and are responsible for Sections 12 and 14, respectively of this Report.

Mr. Raffle visited the Property during 2008 and again on June 26th, 2012. Subsequently Mr. Alfonso Rodriguez, M.Sc., P. Geo., Project Geologist of APEX completed a site visit on July 14, 2021, to verify current site access and conditions. Mr. Nichols has not visited the Property.

2.3 Sources of Information

The authors, in writing this Report, used sources of information as listed in Section 21 “References”. 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 that were written by others, who are not Qualified Persons, the information is assumed to be reasonably accurate based on data review and site visits conducted by the author(s); however, they are not the basis for this Report.

2.4 Units of Measure

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

- Abbreviated shorthand consistent with the International System of Units (International Bureau of Weights and Measures, 2006);
- 'Bulk' weight is presented in both United States short tons ("tons"; 2,000 lbs or 907.2 kg) and metric tonnes ("tonnes"; 1,000 kg or 2,204.6 lbs.);
- Geographic coordinates are projected in the Universal Transverse Mercator ("UTM") system relative to Zone 10 of the North American Datum ("NAD") 1983.
- Currency in Canadian dollars (CAD$), unless otherwise specified (e.g., U.S. dollars, US$; Euro, €).

3 Reliance on Other Experts

The Author did not investigate any legal, political, environmental, or tax matters associated with the Chu Chua Property, and is not an expert with respect to these issues, including the assessment of the legal validity of mineral claims, mineral rights, private lands, and property agreements. Information with respect to prior option agreements and NSR (Net Smelter Return) royalties were provided by Newport as of the effective date of this Report.

The Chu Chua claims are in good standing and registered to Newport Exploration Ltd. according to email communication on July 21st, 2021 with the Mineral Titles Branch of the Ministry of Energy, Mines and Low Carbon Innovation of British Columbia. Additionally, on March 27, 2020, a time extension order from the Chief Gold Commissioner was applied automatically to all claims with good to/expiry dates before December 31, 2021, meaning no individual application for a time extension is required. The holder of Chu Chua's two titles has until December 31, 2021, at midnight to either apply work to the claims or make another cash in lieu payment to extend the good to date and avoid forfeitures of the titles.

4 Property Description and Location

4.1 Description and Location

The Chu Chua claims are located 24 km northeast of Barriere, B.C and approximately 30 Km north of the city of Kamloops, B.C. The Property lies within the National Topographic System ("NTS") 1:50,000 scale map sheet and are located within NTS map sheet 92P/8 (Figures 4.1 and 4.2). It is centered on the Chu Chua prospect, 120°4'15" W longitude and 51°22'34" N latitude (703,859 m E / 5,695,730 m N UTM NAD83 Zone 10).

The Chu Chua property consists of two active mineral claims (529300, 529301) totaling 282.5 hectares (ha) held by Newport (Table 4.1). The Chu Chua massive sulphide deposit is located on claim 529300 (Chu Chua 1). The claims were staked by Strongbow Exploration Inc. ("Strongbow") through online staking on March 2nd, 2006, and subsequently transferred online to Reva Resources Corp. ("Reva") on December 16, 2009, which subsequently transferred the titles to Newport following acquisition agreements. The current owner of the Chu Chua Property claims is Newport. The project is subject to two existing 1% NSR royalties.

Table 4.1. Claim information for the Chu Chua Property, BC

Title Number	Claim Name	Owner	Issue Date	Good To Date	Area (ha)
529300	CHU CHUA 1	NEWPORT EXPLORATION LTD. (100%)	2006/MAR/03	2021/SEP/30	161.41
529301	CHU CHUA 27	NEWPORT EXPLORATION LTD. (100%)	2006/MAR/03	2021/SEP/30	121.08

In British Columbia, the holder of a mineral claim acquires the right to or interest in the minerals which were available at the time of claim location and as defined in the Mineral Tenure Act of British Columbia. Claims are valid for a period of one year after the date of recording or registration. To maintain a claim in good standing the claim holder must, on or before the anniversary date of the claim, either: (a) record sufficient exploration and development work carried out on that claim during the current anniversary year; or (b) pay cash in lieu of work. Payment of cash in lieu of work requirements are assessed at double the value of exploration and development work that would be required to maintain the claim for the following anniversary year ($11,300 for one year).

Figure 4.1. Chu Chua Property Location Map

The value of exploration and development work required to maintain a mineral claim for one year is at least: (a) $5 per hectare for each of the first and second anniversary years; (b) $10 per hectare for each of the third and fourth anniversary years; (c) $15 per hectare for each of the fifth and sixth anniversary years; and (d) $20 per hectare for each subsequent anniversary year. Only work and associated costs for the current anniversary year of the mineral claim may be applied toward that claim unit. If the value of work performed in a year exceeds the required minimum for a claim, the value of the excess work may be applied to work requirements for that claim for future years, subject to the Mineral Tenure Act and Regulation.

Exploration and development work must be registered online by the recorded claim holder or an authorized agent using the Government of British Columbia's Mineral Titles Online ("MTO") internet-based electronic mineral titles administration system. A report pertaining to the exploration and development work completed must be submitted to the chief gold commissioner in the form and manner prescribed by the Mineral Tenure Act Regulations, within 30 days or registering physical work or within 90 days of registering technical work. Physical work reports are uploaded to MTO; technical work reports and required data are uploaded to the Assessment Report and Digital Data Submission Portal.

According to a consultation with the Mineral Titles Branch of the Ministry of Energy, Mines and Low Carbon Innovation of British Columbia, Newport must either apply work to the claims or make another cash in lieu payment to extend the good to date and avoid forfeitures of the 2 mineral claims that comprise the Chu Chua Property by December 31, 2021, at midnight.

All work carried out on a claim that disturbs the surface by mechanical means (including drilling, trenching, excavating, blasting, construction or demolishment of a camp or access, induced polarization surveys using exposed electrodes, and site reclamation) requires a Notice of Work permit under the Mines Act and the owner must receive written approval from the District Inspector of Mines prior to undertaking the work. The Notice of Work must include: the pertinent information as outlined in the Mines Act; additional information as required by the Inspector; maps and schedules for the proposed work; applicable land use designation; up to date tenure information; and details of actions that will minimize any adverse impacts of the proposed activity. The claim owner must outline the scope and type of work to be conducted, and approval generally takes one month.

Exploration activities that do not require a Notice of Work permit include prospecting with hand tools, geological/geochemical surveys, airborne geophysical surveys, ground geophysics without exposed electrodes, hand trenching (no explosives) and the establishment of grids (no tree cutting). These activities and those that require Permits are outlined and governed by the Mines Act of British Columbia.

The Chief Inspector of Mines makes the decision whether land access will be permitted. Other agencies, principally the Ministry of Forests, determine where and how the access may be constructed and used. With the Chief Inspector's authorization, a mineral tenure holder must be issued the appropriate "Special Use Permit" by the Ministry of Forests, subject to specified terms and conditions. The Ministry of Energy and Mines makes the decision whether land access is appropriate, and the Ministry of Forests must issue a Special Use Permit. However, three ministries, namely the Ministry of Energy and Mines; Forests; and Environment, Lands and Parks, jointly determine the location, design and maintenance provisions of the approved road.

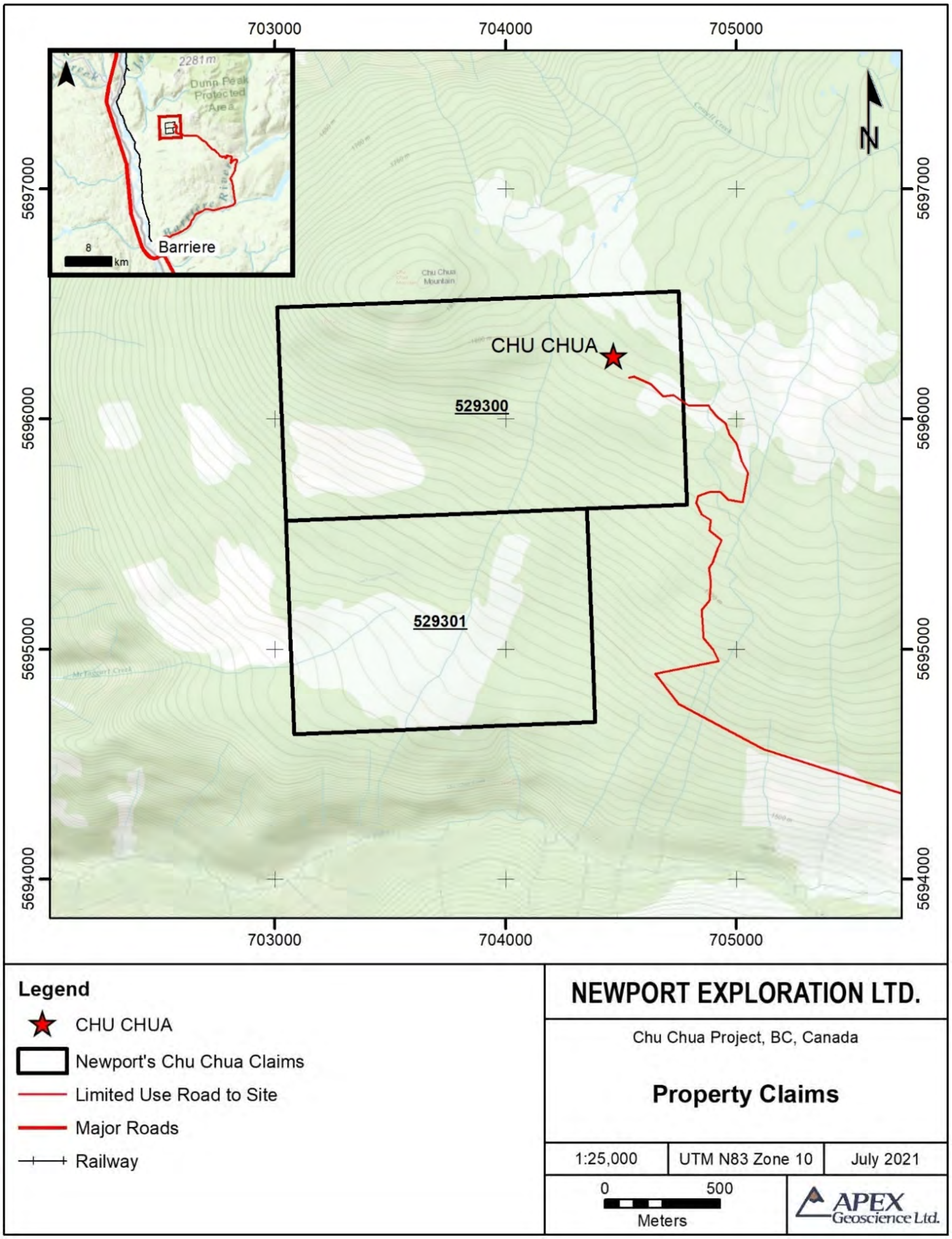
Notification must be provided before entering private land for any mining activity, including non-intrusive forms of mineral exploration such as mapping surface features and collecting rock, water or soil samples. Notification may be hand delivered to the owner shown on the British Columbia Assessment Authority records or the Land Title Office records. Alternatively, notice may be mailed to the address shown on these records or sent by email or facsimile to an address provided by the owner. Mining activities cannot start sooner than eight days after notice has been served. Notice must include a description or map of where the work will be conducted and a description of what type of work will be done, when it will take place and approximately how many people will be on the site. It must include the name and address of the person serving the notice and the name and address of the onsite person responsible for operations.

Newport does not currently hold a Notice of Work permit for the Property. Approval of a completed Notice of Work permit application takes approximately 1 to 2 months from the date of submission. At present, the author does not know of any environmental liabilities to which the property may be subject.

4.2 Royalties and Agreements

Newport's Chu Chua's project is subject to two existing 1% NSR royalties. As of the effective date of this report, the author is not aware of any other agreements that Newport has entered, associated with the Chu Chua Property.

Figure 4.2. Chu Chua Property Claims



4.2 Environmental Liabilities, Permitting and Significant Factors

4.2.1 Permitting

In British Columbia, all work carried out on a claim that disturbs the surface by mechanical means (including drilling, trenching, excavating, blasting, construction or demolishment of a camp or access, induced polarization surveys using exposed electrodes, and site reclamation) requires a Notice of Work (NOW) permit under the Mines Act, and the owner must receive written approval from the District Inspector of Mines prior to undertaking the work. The NOW must include: the pertinent information as outlined in the Mines Act; additional information as required by the Inspector; maps and schedules for the proposed work; applicable land use designation; up to date tenure information; and details of actions that will minimize any adverse impacts of the proposed activity. The claim owner must outline the scope and type of work to be conducted, and approval generally takes one or two months.

Exploration activities that do not require a NOW permit include prospecting with hand tools, geological/geochemical surveys, airborne geophysical surveys, ground geophysics without exposed electrodes, hand trenching (no explosives) and the establishment of grids (no tree cutting). These activities and those that require NOW permits are outlined and governed by the Mines Act of British Columbia.

The Author is not aware of recent NOW submitted by Newport in the past year for the Chu Chua Property.

4.2.2 Environmental Liabilities and Significant Factors

The Author is not aware of social, political, or environmental liabilities to which the Property may be subject, or any other significant factors or risks that would affect access, title, or Newport's ability to perform work on the Chu Chua Property.

5 Accessibility, Climate, Local Resources, Infrastructure and Physiography

5.1 Accessibility

The Chu Chua claims are located 24 km northeast of Barriere, B.C., and approximately 80 Km North of Kamloops (Figure 4.1, 4.2). The Property is centered on the Chu Chua deposit (120°4'15” W longitude and 51°22'34” N latitude or 703,859 m E / 5,695,730 m N UTM NAD83 Zone 10). The property is vehicle-accessible along the paved Barriere Lakes Road and either the North Barriere Lake or Birk Creek logging roads. The Chu Chua deposit can be accessed via 4x4 vehicle from the end of the Birk Creek logging road.

5.2 Climate

The climate varies seasonally with temperature ranging from -30 to +40^{o}C. Experiencing heavy snowfall in the winter, the work season lasts from late June to mid-October.

5.3 Site Topography, Elevation and Vegetation

Elevation varies from 900 to over 2200 metres (m). Snow may still be present into July at higher elevations. Vegetation varies with elevation from alpine to sub alpine below 1800 m. Logging status has had great effect on the area with clear cut, second growth, spruce pine and cedar forests all being present on the property.

5.4 Local Resources and Infrastructure

Barriere (population 1,713) is the closest town to the property; accommodations, RCMP and a health center can be found there. Lodging may be found at other communities between Barriere and Kamloops. Kamloops (population 90,280) is the nearest major urban center, providing all services; located 64.1 km south of Barriere along Highway 5 (The Yellowhead). Kamloops has an airport that provides charters along with scheduled air service.

If an exploration camp were to be established on the property electric power would be provided by a diesel generator and water may be sourced from numerous streams in the Chu Chua area.

6 History

6.1 Ownership

The Chu Chua property was explored by Vestor Explorations Ltd. In 1977. The property was optioned by Craigmont Mines Ltd. (Craigmont) which performed several exploration programs within the property. The Craigmont exploration program at Chu Chua was cancelled in 1983 due to the closure of the Craigmont Mine near Merritt, B.C. and difficult deep hole drilling conditions (Morganti, 1983), and the property was returned to Vestor.

In August 1985, Falconbridge Copper (Falconbridge) acquired the Chu Chua deposit. In 1987, Falconbridge changed its name to Minnova Inc. (Minnova). Minnova completed their last work in the Chu Chua area in the fall of 1991.

Strongbow acquired the claims overlying the Chu Chua deposit by online staking on March 2nd, 2006. Strongbow transferred the Chu Chua Property claims online to Reva on December 16, 2009. On September 10, 2013, Newport entered into an agreement to acquire Reva's 100% interest in the Property, subject to the two existing 1% NSR royalties. The agreement was accepted by the TSX Venture Exchange on October 3rd, 2013. The current owner of the Chu Chua Property claims is Newport.

6.2 Exploration and Development Work Conducted by Previous Owners

In 1977, Vestor Explorations Ltd. (Vestor) conducted a stream sediment survey and located a 10 square-metre (m^2) limonite gossan on the south slope of Chu Chua Mountain near a northerly striking massive magnetite body (Vollo, 1979a). The property was optioned by Craigmont Mines Ltd. which subsequently drilled the property between 1978 and 1982 (Figure 6.1).

In 1978 Craigmont drilled a total of 2,843 m in 23 holes within the Chu Chua Property. Twenty-two of these holes are located within claim 529300 and one hole (CC-8) falls approximately 45 m north of the claim boundary. This initial drilling outlined the Chu Chua massive sulphide body with thicknesses up to 15 m, a strike length of 300 m and a vertical depth of 200 m. Highlights from this early drilling include sample 2436 from drill hole CC-6 which assayed 4.41% copper (Cu), 0.69% zinc (Zn), 1.23 grams-per-tonne (g/t) gold (Au) and 15.09 g/t silver (Ag) over 5 m, sample 2305 from drill hole CC-16 which assayed 7.47% Cu, 0.75% Zn, 0.69 g/t Au and 22.6 g/t Ag over 5 m, and sample 2313 from drill hole CC-17 which assayed 14.54% Cu, 0.93% Zn, 1.03 g/t Au and 9.3 g/t Ag over 4.2 m (Vollo, 1979a).

Between April 5 and May 20, 1979, a Digital Helicopter Electromagnetic (DIGHEM) survey of 2,274 line-km was flown in the North Thompson River Area, including over the Chu Chua deposit, by DIGHEM Ltd. for Craigmont (Fraser and Dvorak, 1979). Following the survey 21 holes totaling 3,330 m were drilled. A total of 15 holes (2,655 m) targeted the main area of interest identified by the 1978 drilling, these holes fall within claim 529300. Eleven of these holes intersected massive sulfides. An additional 4 holes (CC-

34, CC-35, CC-37, and CC-39) were drilled to test the extent of the deposit along strike to the north of the Property. At a depth of 15.0 m, drill hole CC-34 intersected chert matrix agglomerate containing up to 5% pyrite-chalcopyrite-pyrrhotite mineralization at a depth of 15.0 m that returned assays of 0.17% Cu, 0.06% Zn, 0.25 g/t Au and 4 g/t Ag over 1.3 m. Drill holes CC-35 and CC-37, collared at distances of 200 and 400 m to the north of CC-34, respectively, did not intersect significant mineralization. At a depth of 85.0 m drill hole, CC-39 collared 600 m to the north of CC-34, intersected rhyolite containing 5-10% pyrite mineralization that returned assays of 0.3 g/t Au and 0.6 g/t Ag over 5 m (Cu, Pb and Zn were not analyzed). Two holes (CC-43, and CC-44) were drilled approximately 1.3 km east of the deposit to test nearby conductors that proved to be graphitic cherts (Vollo, 1979b, c).

By the early 1980s it was evident that the Chu Chua deposit consisted of at least two sulfide lenses within the Fennell Formation (Vollo, 1981, 1982a). In October 1980, a Horizontal Loop Electromagnetic (HLEM) survey was carried by Craigmont. The survey covered area extending from southern tip of Chu Chua to 1 km to the south of the deposit. A total of 6.7 line-km was surveyed over 100 m spaced east-west lines with 200 m coil separation. A north-south conductor was detected along the southern tip of the deposit, extending approximately 180 m (Hallof et al. 1981). In 1981, three additional holes were drilled to test the extent of the known ore zone. Two holes (CC-45, 46) fall on claim 529300 and one hole (CC-47) lies just south of the claim. Hole CC-45 (319 m total depth) was drilled to test the down-dip extension of Chu Chua sulphide zone and encountered tuffite with minor chalcopyrite (Vollo, 1981). Hole CC-46 (420 m total depth) intersected beds of massive, cupriferous pyrite, magnetite and talc in a siliceous tuffite unit. Hole CC-47 (110.5 m total depth) was drilled on a parallel conductor but intersected only basalt (Vollo, 1982a).

In 1982, Craigmont drilled eight holes totalling 3,992 m targeting the Chu Chua mineralized zone (all on claim 529300). Hole CC-48 intersected massive to weakly banded chalcopyrite, magnetite and talc in a siliceous tuff unit that assayed 2.4% Cu, 0.34% Zn, 2.61 g/t Au and 13.8 g/t Ag over 6.7 m (Vollo, 1982a). Three additional holes (CC-49, CC-54 CC-55) tested the depth extent of the Chu Chua sulphide lens and intersected narrow zones of massive sulphides, tuff and altered basalt at downhole depths up to 600 m (Vollo, 1982b). Additionally in 1982, Craigmont conducted VLF-EM and magnetic surveys over a 35 km grid, 516 soil samples were collected and four holes (CC-50 to CC-53) totalling 229.5 m were drilled, 3 km to the northeast of the Chu Chua deposit. The drilling intersected graphitic argillite and tuff containing disseminated pyrite and pyrrhotite; no samples were submitted for analysis (Vollo, 1982c).

The Craigmont exploration program at Chu Chua was cancelled in 1983 due to the closure of the Craigmont Mine near Merritt, B.C. and difficult deep hole drilling conditions (Morganti, 1983) and the Property was returned to Vestor.

During October of 1984, Vestor conducted an electromagnetic survey to the south of the1980 HLEM grid (to the northeast of the Property), extending the surveyed as south as Cowell Creek. A total of 19 line-km was surveyed over 200 m spaced lines. Several strong northwest trending conductors were detected, with the most prominent one stretching along the survey grid, measuring close to 2 km in strike length (Candy and White, 1984).

In August 1985, Falconbridge Copper (Falconbridge) acquired the Chu Chua deposit. Subsequently, 82.5 line-km of horizontal-loop EM (HLEM) surveys were carried out on 3 grids. The Chu Chua grid covered the Chu Chua deposit and adjacent claims to the east of the Property. The other two grids (SC/CH and Anna grids) were located to the approximately 7 km to south of the Chu Chua deposit (Pirie, 1985a). Three drill holes located east of the Chu Chua deposit, totalling 618 m were drilled to test HLEM anomalies and adjacent stratigraphy but no significant sulfides were intersected (Pirie, 1985b).

In 1986, Falconbridge extended the Chu Chua grid 1.5 km south, and collected 30 line-km of HLEM data and 1,074 soil geochemical samples to test for strike parallel mineralization to the east of the Chu Chua deposit. The geophysical survey defined an approximately 100 x 1400 m, north-south trending conductive anomaly crossing the entire survey grid. An approximately 25 x 300 m, Pb, Zn, Cu, Ag soil geochemical anomaly is broadly coincident with the northern third of the conductive anomaly (Pirie, 1986).

In 1987, Falconbridge changed its name to Minnova Inc. (Minnova) which drilled the Property between 1988 and 1991. In 1987 Minnova completed diamond drilling of 6 holes totalling 852 m. Minnova's drilling continued to test the HLEM conductive anomaly east of the Chu Chua deposit; and a quartz-feldspar porphyry rhyolite dome within the SC/CH grid at head of Slate Creek. Four holes (CCF-12 to CCF-15) drilled within the Chu Chua grid did not intersect massive sulphides. Drill holes CCF-16 and CCF-17 targeted the flanks of a rhyolite dome. Silica-sericite altered rhyolite and tuffaceous argillite intersected within drill hole CCF-16 returned assays of 1.1 g/t Au over 3 m between 94.5 and 97.5 m depth. CCF-17 did not return significant assays (Gray, 1987).

The 1988 field season consisted of a focused drilling program on the Chu Chua deposit and an extension of the Chu Chua Main HLEM Grid to the north of the Property As noted above, drilling by Craigmont in the late 1970's and early 1980's had defined two zones of relatively thick, high-grade mineralization occurring within 100 m of the surface which became known as the Main and North Lenses.

Minnova's 1988 drilling was designed to test the continuity of grade and thickness of both lenses of the Chu Chua sulfide deposit by establishing drill intercepts at 25 m spacing. The program consisted of 13 holes totalling 1,152 m (all holes were within claim 529300). As a result of this drilling significant tonnage was added to the deposit and the western margin of the Main sulphide lens was defined. The Main Lens was determined to be a funnel shaped body with two zones of mineralization termed the Footwall and Hanging Wall Zones. The Footwall Zone was found to be a well-developed, continuous zone of highly variable thickness located along the footwall contact of the lens. It had an average thickness of about 7.2 m and contained the highest-grade mineralization in the deposit. The Hanging Wall Zone was found to be thinner, less continuous and of lower grade, with an average thickness of about 4.5 m. The North Lens was found to be thinner than the upper part of the Main Lens, contained uniform mineralization but with lower grades than the Footwall Zone (Blackadar, 1989 and Lear, 1989).

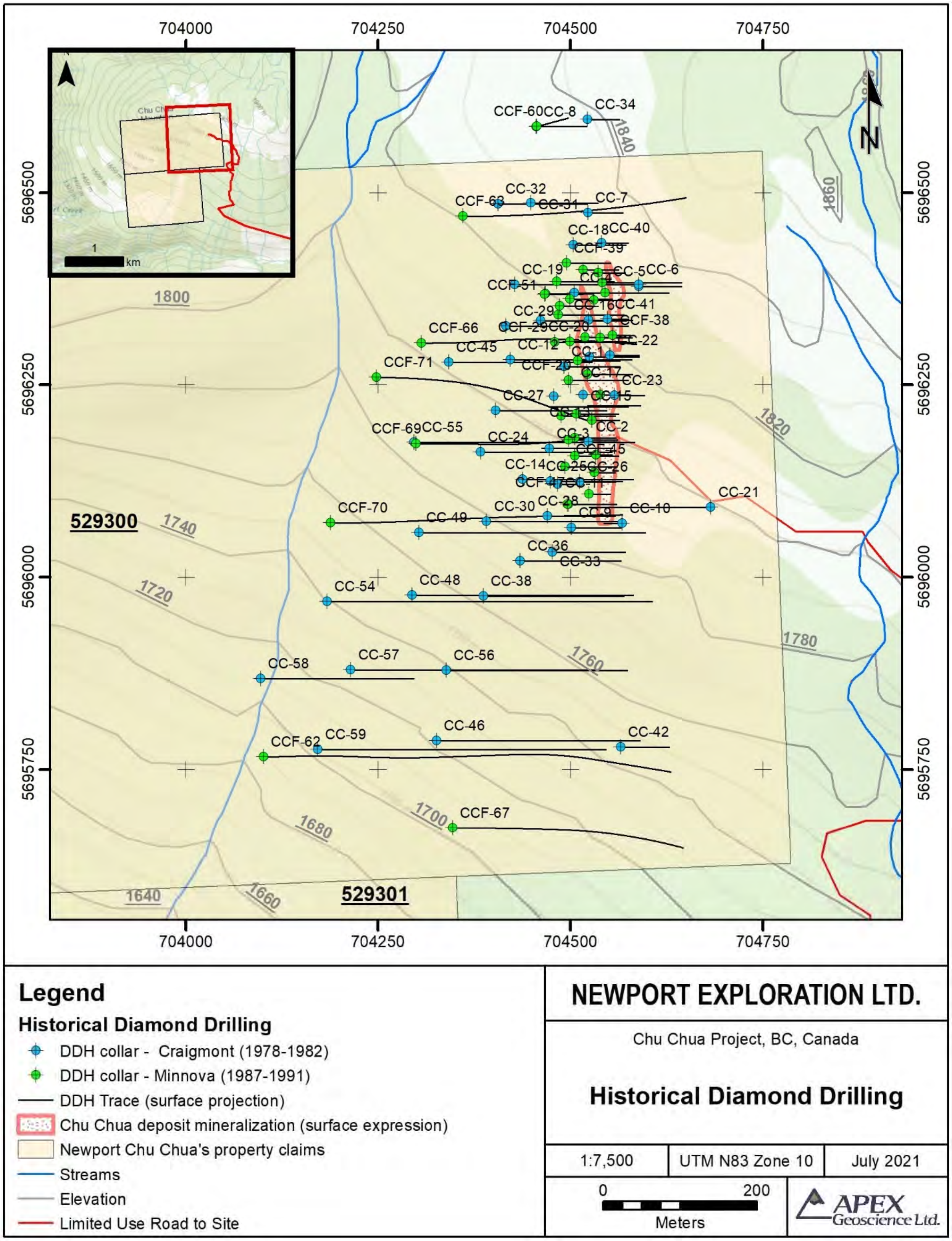
During the 1989 field season, 21 holes totalling 1,663 m were drilled in the deposit area (all holes were within claim 529300). The drilling further delineated of the near surface mineralization and showed that the highest copper grades occurred in the Footwall and Hanging-wall massive sulphide zones. Grades within the massive sulphide zones tended to be highly variable; though increased copper grades correlated positively with zinc, silver, and gold values. Additionally, Quantech Consulting Inc. completed a 24.3 line-km of transient electromagnetic (TEM) survey over the deposit and area to the north and south. The survey defined a subtle conductive anomaly extending north from the Chu Chua deposit 200 m. Beyond this, the anomaly is more evident and extends a further 650 m to the northwest, suggesting the potential for the discovery of additional deep massive sulphide mineralization (Wild, 1989).

During 1990, Minnova drilled eleven holes, totaling 1,731 m. Three holes were drilled into the Chu Chua deposit to test specific targets in the footwall and on the plane of mineralization. Two holes (CCF-61 and CCF62), totalling 1,014.1 m, on claim 529300, and one hole (CCF-60) totalling 100.9 m falls to the north of the Property. At a depth of 83 m, drill hole CCF-60 intersected s sequence of fine-grained siliceous sediments containing 2-10% pyrite bands and stringers and trace chalcopyrite that returned assays of 0.18% Cu, 0.03% Zn and 4.4 g/t Ag over 4.3 m. Hole CCF-61 did not identify any new mineralization, but did provide an additional, shallow intersection of the North Lens. Hole CCF-62 demonstrated that the massive sulfide extends to 550 m depth and identified a zone of zinc rich massive sulphide; something that had not been previously observed at Chu Chua (Heberlein, 1990). In addition, eight diamond drill holes (MCC-52 through MCC-59) were completed to test coincident EM and magnetic anomalies at pass separating the headwaters of Birk and Chu Chua creeks (3 km south of the Chu Chua deposit). The drill holes intersected a sequence of sericite altered sediments, argillite and magnetic diorite sills that explained the geophysical anomalies. Drill hole MCC-56 intersected a 3.7 m cherty interval containing 1-3% bedded pyrite, trace chalcopyrite, and a 15 cm interval of massive sulphide with approximately 3% chalcopyrite. The massive sulphide interval returned assays of 1% Cu and 9 g/t Ag. Drill hole MCC-37 through MCC-39 tested the potential for additional mineralization to the north and south but did not intersect massive sulphides (Heberlein, 1990).

Minnova completed their last work in the Chu Chua area in the fall of 1991. Nine deep drill holes totalling 4,957 m tested the Chu Chua sulphide horizon along strike and down-dip. Four of the drill holes (CCF-63, 64, 67 and 69) were surveyed with downhole pulse EM. Six holes, totalling 3,793 m, are located within claim 529300. Two holes (CCF-64 and CCF-65) to the north of Chu Chua deposit and one hole (CCF-68) to the south were also drilled. Holes CCF-63 to CCF-66 tested the Chu Chua horizon at depth to the north of the Main Lens. Drill hole CCF-63 intersected silicified basalt and sulphide stringers interpreted as a footwall alteration zone that returned assays of 0.12% Cu over 11.7 m; and drill hole CCF-66 intersected two separate intervals of pyrite exhalite that returned assays of 0.21% Cu, 360 ppm Zn over 4.3 m, and 0.33% Cu, 330 ppm Zn over 1.5 m. Holes CCF-67 and CCF-68 tested the Chu Chua horizon to the south of the Main Lens and did not intersect significant mineralization or alteration. Hole CCF-69 was drilled to test the down-dip extent of the Main Lens. The hole intersected a new hanging wall massive sulphide zone at a depth of 381 m that returned assays of 0.97% Cu, 0.84 g/t Au over 14.85 m occurring 1.9 m above a second zone assaying 0.75% Cu, 1.37 g/t Au over 4.65 m. Drill hole CCF-70 was collared 150 m southwest of CCF-69 and intersected an 11.5 m zone of chert and magnetite-hematite-pyrite exhalite; 230 m further down dip than the massive sulphide intersected in CCF-69 (Wells, 1991). Hole CCF-71 tested the down-dip and northern strike extent of mineralization within CCF-69, and intersected massive sulfide zone at a depth of 658 m that returned assays of 0.69% Cu, 0.13% Zn, 0.14 g/t Au and 5.69 g/t Ag over 9.95 m.

Strongbow acquired the claims overlying the Chu Chua deposit by online staking on March 2nd, 2006. During fall 2006, Strongbow completed a soil geochemical survey and a compilation of historic Craigmont and Minnova soil sampling. A total of 302 soil samples were collected at a spacing of 50 m over a series of select east-west oriented gridlines designed to test the geochemical response over the Chu Chua deposit and select conductive anomalies from Craigmont's 1979 DIGEM airborne geophysical survey (Fraser and Dvorak, 1979). Of the 302 samples collected by Strongbow, 38 were collected within the Property (Figure 5.2). A series of six consecutive samples collected over the Main Lens of the Chu Chua deposit returned anomalous values ranging from between 27 and 335 ppm Cu. A line crossing just north of the Main Lens, and a second line 400 m further to the north, did not return anomalous values. A series of 100 and 400 m spaced soil lines completed DIGEM and HLEM conductive anomalies within the southern part of the Falconbridge's Chu Chua grid (Pirie, 1985b; and Pirie 1986) correlated with several single and two sample greater than 100 ppm Cu anomalies. Two soil lines spaced at 100 m tested the area above Minnova's MCC-52 through MCC-55 drill sites (Heberlein, 1990), but did not return significant anomalies. Compilation of 2,703 historic Craigmont and Minnova soil samples revealed numerous single and multi-sample greater than 100 ppm Cu, and 125 ppm Zn, soil anomalies to the north and south of the Chu Chua deposit (Gale, 2007).

Figure 6.1. Historical Diamond Drilling of Chu Chua Deposit.



In 2008 the field program for the Chu Chua property included a helicopter-borne time domain geophysical survey and a property visit by Mr. Raffle (Figures 6.2 and 6.3). During summer 2008, Aeroquest Limited completed an 840 line-km helicopter-borne AeroTEM III survey (covering the Chu Chua property and surrounding area). The AeroTEM III, time-domain EM system in conjunction with a cesium vapour magnetometer was flown east-west with a 100 m cross line spacing from June 29 to July 5, which identified the Chu Chua deposit as a magnetic anomaly accompanied by a slightly offset strong EM anomaly likely representing the juxtaposition of the massive sulphide body and magnetite alteration of the host rocks. The anomalies revealed that the Chu Chua deposit has an approximate strike length of between 400 and 450 m and is steep in nature. The elongated magnetic contours to the south may indicate that the deposit plunges to depth to the south. During fall 2008, Mr. Raffle visited the Chu Chua Property and collected a total of 5 rock and/or historic core samples from the Property. Three rock samples of variably altered volcanic rocks were collected from around the Chu Chua deposit and two samples from historic core were collected from drill hole CC-21 at approximate depths of 193 and 208 m, respectively (Raffle, 2008). Pyrite and magnetite were associated with the rock samples, the best of which (08KRP800) assayed 0.086% Cu, 0.027% Zn, 0.129 g/t Au and 2.93 g/t Ag. The core samples comprised chalcopyrite-bearing volcanic rocks and massive sulphide, the latter of which (08KRM002) assayed 3.78% Cu, 0.6% Zn, 0.318 g/t Au and 7.35 g/t Ag (Raffle, 2008).

In 2011, the Chu Chua Property exploration program included differential global positioning system (DGPS) surveying of historic diamond drill hole collars and select re-sampling of historic diamond drill core stored at the Property. The work was completed between the dates of July 6 and July 16, 2011 (Raffle, 2011).

Historic drill core review and data verification program carried out in 2011, included a total of 110 samples that were taken from the historic drill core stored in racks located on the Chu Chua property (Raffle, 2011). The objective of 2011's drill core re-sampling program was to verify the presence of historically reported mineralization at the Chu Chua massive sulphide deposit. Re-sampled drill core intervals were chosen based on a previously completed compilation of historic diamond drill hole results (Raffle and Dufresne, 2010). Specific re-sampled intervals were selected based on the drill core available on site at the time; and to replicate select historic high-grade intercepts from both the north and south sulphide lenses at both near surface and relatively deep drill intersections. Additionally, the data verification program included drill hole surveying in the field and digitalization as well as digital data review and compilation. Details of the data verification 2011's program, including sample procedures and associated quality analysis//quality control process are provided in sections 11 (Sample Preparation, Analysis and Security) and 12 (Data Verification).

Figure 6.2. 2008 AeroTEM III Airborne Geophysical Survey (Zoff).

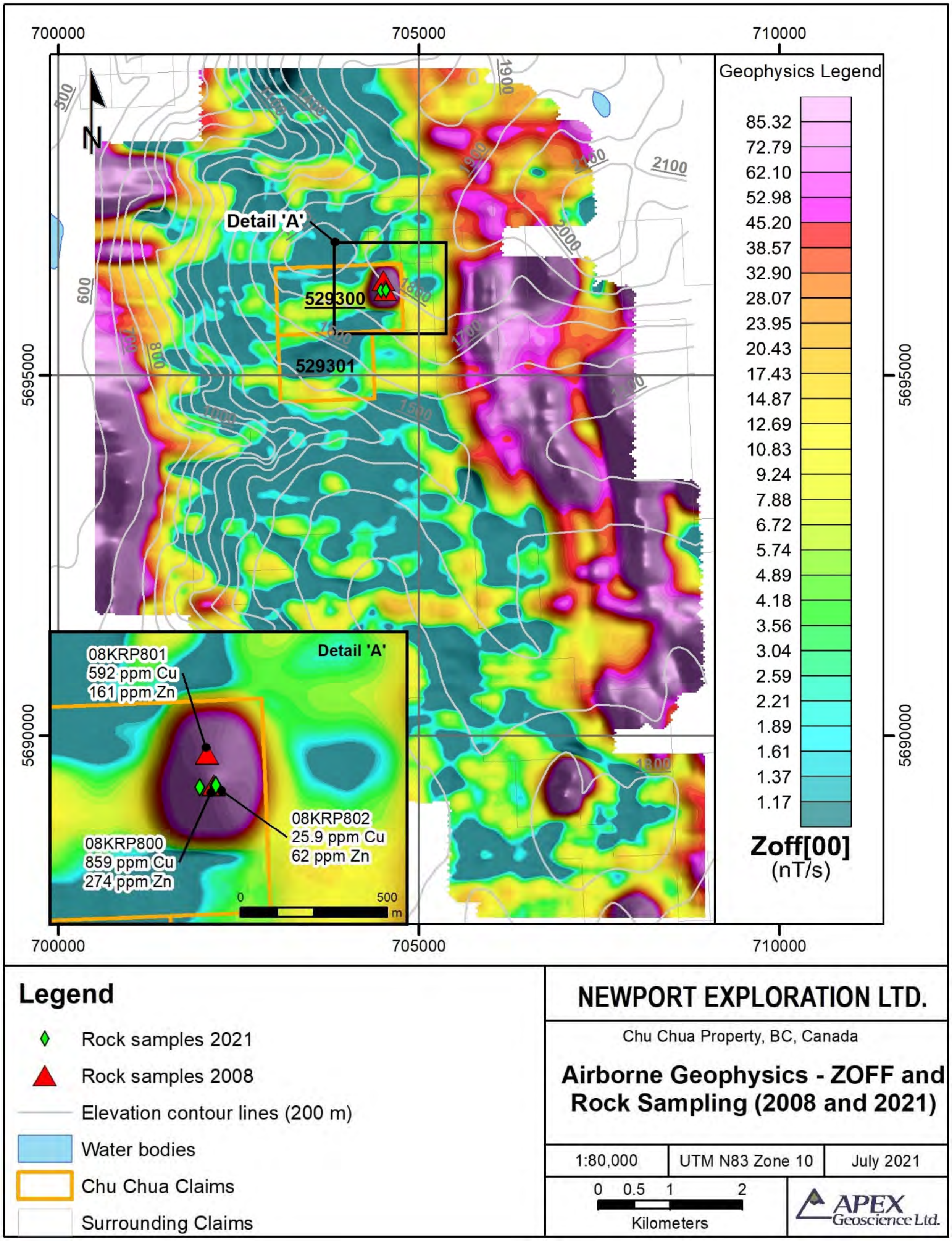
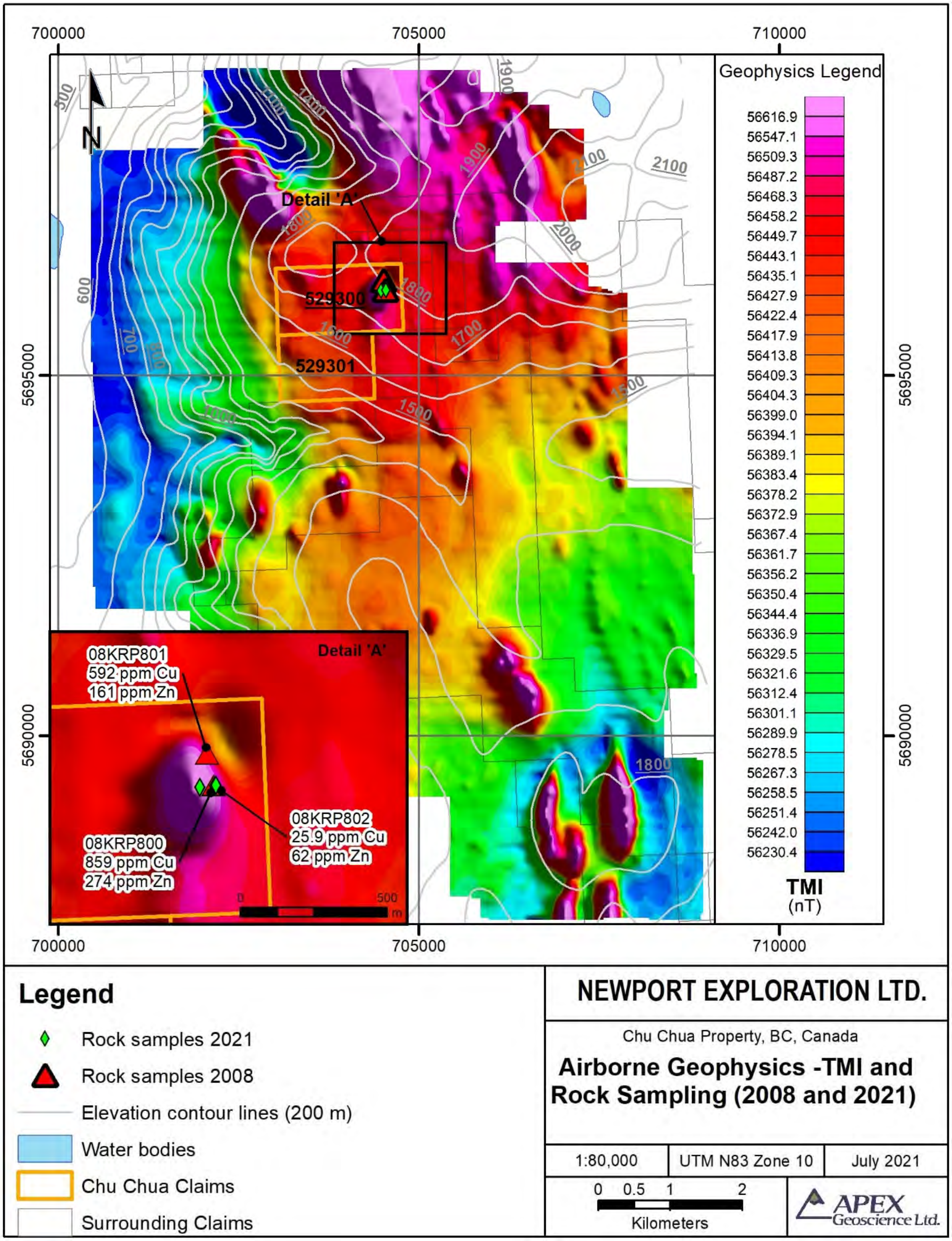


Figure 6.3. 2008 AeroTEM III Airborne Geophysical Survey (TMI)



7 Geological Setting and Mineralization

7.1 Regional Geology

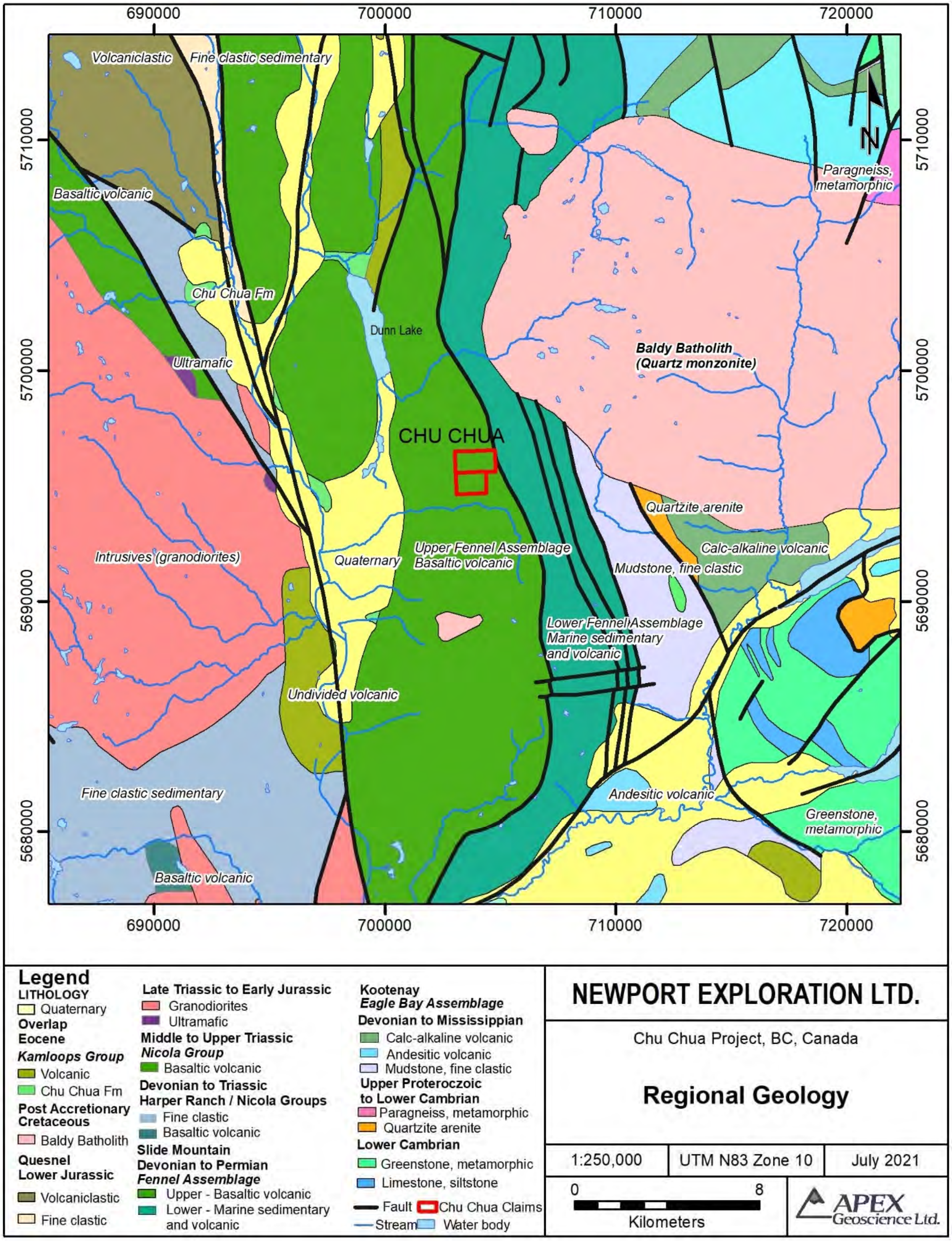
Schiarizza and Preto (1987) mapped the Adams Plateau Clearwater-Vaven by area at 1:100,000 providing a concise regional geological picture for the Chu Chua property. The following regional geology section is taken from their work.

The Chu Chua area is on the western edge of the Omineca Belt and is underlain by the Fennell Formation of the Slide Mountain Assemblage to the west and by the Eagle Bay Assemblage to the east (Figure 7.1). The Early Cambrian to Mississippian Eagle Bay Assemblage is in the pericratonic Kootenay Terrane and consists of metasedimentary and metavolcanic rocks which are repeated in four Northwest-dipping thrust sheets. The assemblage is comprised of a Lower Palaeozoic succession of clastic metasediments, *carbonate* and mafic metavolcanic rocks, and an overlying Devono-Mississippian succession of felsic to intermediate metavolcanic rocks and metasediments. The Homestake and Rea VMS deposits are hosted by intermediate to felsic metavolcanic rocks of the Lower Devono-Mississippian succession.

The Slide Mountain Assemblage is part of Slide Mountain Terrane and consists of the Devonian to Middle Permian Fennell Formation. The formation is an oceanic sequence consisting of two major divisions. The structurally lower (eastern) division comprises a heterogeneous assemblage of bedded chert, gabbro, diabase, pillowed basalt, clastic metasediments, quartz-feldspar-porphyry rhyolite and intraformational conglomerate. The upper (western) division consists almost entirely of pillowed and massive basalt with gabbro and minor bedded chert and argillite. Both intrusive and extrusive mafic igneous rocks are tholeiitic. Tops throughout the succession consistently face west.

The Fennell Formation and Eagle Bay Assemblage are intruded by mid-Cretaceous granodiorite and quartz-monzonite of the Raft and Baldy batholiths. The package is locally overlain by Eocene Kamloops Group volcanic and sedimentary rocks and Miocene lavas. The map area is dominated by easterly directed thrust faults, which imbricate the Fennell Formation and *separate* it from the underlying Eagle Bay Assemblage. Tectonic emplacement of the Fennell Formation over the Eagle Bay Assemblage was followed by southwesterly-directed folding and associated thrust faulting. Folding and fabrics associated with this event are evident in the Eagle Bay Assemblage but are rarely seen in the Fennell Formation.

Figure 7.1. Regional Geology



7.2 Property Geology

The following summary of the local geology is reprinted from Heberlein (1990). Detailed discussion of individual lithological units can be found in Wild (1989).

The Chu Chua property is underlain by rocks of the Mississippian to Permian Fennell Formation (Schiarizza and Preto, 1987). Two litho-structural packages make up the Fennell Fm. These are called the upper and lower divisions. The lower division forms a north-south belt that extends from the Barriere River fault in the south to Clearwater in the north. It is composed of a complexly interbedded and thrust imbricated sequence of massive basalt, clastic metasediments (greywackes and argillites), ribbon cherts, quartz-feldspar phyric rhyolite and intraformational conglomerate. The upper division underlies most of the property area and hosts the Chu Chua deposit. It consists of pillowed to massive basalt flows, diabase sills, argillite, and rare chert. These rocks can be traced from Barriere as far north as Wells Grey Park. They are responsible for the rugged cliff exposures on either side of the North Thompson River Valley between Little Fort and Clearwater. Both divisions of the Fennell Formation are intruded by the Cretaceous Baldy Batholith, which forms a prominent easterly trending mountain range to the northeast of Barriere.

Deformation in the Fennell formation is not intense. Units have been rotated into a vertically dipping west facing homocline that is interpreted to be the western limb of a thrust-dismembered anticline (Schiarizza and Preto, 1987). There is little evidence for mesoscopic folding and penetrative fabrics are mostly absent. Late, north, and east trending (Tertiary?) normal faults cause local offsets of the Upper Fennell stratigraphy. A west-dipping thrust fault is inferred to separate the upper and lower divisions of the Fennell Fm. This is based on conodont ages determined from chert beds in both divisions. The Lower Fennell sequence is also inferred to be thrust imbricated based on fossil data (Schiarizza and Preto, 1987).

Both Fennell Formation divisions are regionally metamorphosed to lower greenschist facies. Close to the contact of the Baldy Batholith (within approximately 500 m) the regional metamorphism is overprinted by a contact thermal aureole. Locally this reaches hornblende hornfels grade. Despite the metamorphism, primary textures are well preserved in both volcanic and sedimentary units.

7.3 Mineralization

The work of Wild (1989) offered an excellent description of Chu Chua mineralization; the subsequent three paragraphs are from this work.

The Chu Chua deposit consists of two major and several minor sulphide lenses hosted by massive and pillowed green basalt of the Upper Fennell Formation. The lenses are oriented along a north-south trend dipping from vertical to very steeply west. The principal axes of the lenses appear to plunge gently to the south. The strike extension of near surface mineralization is approximately 300 m and total thicknesses for the mineralized zones range up to 80 m.

Massive sulphides lie immediately below a very sharp contact with the hanging-wall basalts. Pyrite (FeS_2) makes up approximately 90% of the massive sulphide, often occurring as coarse anhedral grains displaying annealed textures. Chalcopyrite ($CuFeS_2$) is the main ore mineral occurring as massive streaks up to 25 cm thick, as small inclusions in both pyrite and magnetite (Fe_3O_4), and as fracture fillings and interstices in coarse granular pyrite. These textures suggest a large degree of remobilization. Thin section work (Manley, 1988 -unpublished paper), has shown good triple junctions in granular pyrite with chalcopyrite often occurring in the interstices, as tiny anhedral blebs (50-200 micrometres), and as inclusion trails inside pyrite grains. Megascopically, sections of massive sulphide show good, rolled textures and brecciation, indicating either primary collapse structures or, more likely, tectonic activity.

Other base metal bearing minerals identified in drill core include covellite (CuS), chalcocite (Cu_2S), sphalerite ((Zn, Fe)S) and magnetite. Cubanite ($CuFeS_3$) and stannite (Cu_2FeSnS_4) are also present (Aggarwal, 1982). Covellite occurs in chalcopyrite-rich sections as fracture fillings. Chalcocite occurs as discrete grains within either pyrite or chalcopyrite (Manley, 1988). Sphalerite and possibly trace amounts of galena (PbS) occur as fine grained and massive blebs usually but not exclusively with copper mineralization. Magnetite content increases towards the footwall occurring as subhedral grains possibly mixed with or replacing pyrite. The matrix is likely quartz and barite. Other metals present in the ore zone include gold (commonly 1 g/t), silver (commonly 15-30 g/t), cobalt (310-475 ppm), and trace amounts of tin (stannite), platinum, and palladium (Aggarwal, 1982).

8 Deposit Types

The principal deposit of interest on the Chu Chua property is a Cyprus-type volcanogenic massive sulphide (VMS). The stratigraphy underlying the property is also prospective for Kuroko-type massive sulphide deposits evidenced by the presence of several of these proximal to the property. In general terms, volcanic-associated massive sulphide deposits (VMS) are an important source of copper, lead and zinc with lesser precious metals and comprise a massive sulphide ore lens underlain by a stringer zone of intensely altered rocks hosting vein and disseminated ore (Franklin, 1993). These deposits are generally hosted in volcanic rocks of varying compositions with associated but less abundant sedimentary rocks.

8.1 Cyprus Type Massive Sulphide

Cyprus-type massive sulphide deposits are part of the volcanic-associated massive sulphide deposits spectrum, present in ophiolite sequences, dominated by mafic and ultramafic volcanic rocks (Galley and Koski, 1999). These ophiolite sequences form in fore-arc and back-arc environments and comprise sheeted dyke complexes overlain by volcanic successions of lava flows, pillow lavas, breccias, hyaloclastites, feeder dykes and sills and interstitial sediments. Driven by the heat of underlying magma chambers, hydrothermal fluids circulate through the volcanic pile scavenging metals, redepositing them as massive, stratiform sulphide lenses typically composed of pyrite, chalcopyrite, sphalerite and magnetite; the underlying stringer/feeder zone typically consists of quartz and pyrite with minimal base metal content. The sulphide lenses are commonly clustered in groups and can often be found along strike of other lenses. In British Columbia, workers have noted a common alignment of these lenses near steep, normal faults (Hoy, 1995).

Cyprus-type deposits in British Columbia are primarily Mississippian-Permian or late-Triassic in age; the most significant of which are the Anyox deposits which range from 0.2 to 23.7 million tonnes in size and average grades of 1.5% Cu, 9.9 g/t Ag and 0.17 g/t Au (Hoy, 1995). The authors have not verified the size and/or grade of these deposits as described by Hoy (1995) and the mineralization contained within these deposits may or may not be indicative of the mineralization on the Chu Chua Property.

Exploration for these deposits is aided by the highly conductive nature of the massive sulphide bodies which can be readily identified using various electromagnetic or induced-polarization geophysical techniques or the associated magnetite mineralogy resolved by magnetic geophysical techniques. Soil sampling will typically display anomalous levels of the relevant metals including copper and zinc or other associated elements. When rock exposure allows, prospecting and mapping should focus on altered packages of submarine volcanic rocks of mafic-ultramafic compositions. Alteration of these rock types results in common chlorite-talc-carbonate-magnetite assemblages; the underlying stringer zone can be typified by this assemblage with accompanying quartz-pyrite veins (Hoy, 1995).

8.2 Kuroko Massive Sulphide

Kuroko (or Noranda) type massive sulphide deposits are typically present within felsic volcanic rocks in calc-alkaline, bimodal arc successions. They form during the development of island arc complexes during rifting within or behind an oceanic or continental margin (Hoy, 1995). Host rocks to these deposits are typically rhyolite-dacite submarine volcanic rocks with associated andesites or, less commonly, mafic volcanic rocks or sedimentary rocks. Mineralization, including pyrite, sphalerite, galena and chalcopyrite, is found within one or more lenses of massive sulphides, commonly zoned with a Cu-rich base and a Pb+Zn-rich top. These deposits can also have a significant concentration of precious metals including silver and gold. Underneath these lenses, low-grade stringer zones are common, while barite or chert layers commonly overlie these lenses. As with the Cyprus-type deposits, the massive sulphide lens forms above a hydrothermal-fluid cell with the stringer zone representing the remains of the channel way of these fluids. Individual sulphide lenses vary in thickness from 1 to 10’s of metres with strike lengths of 10’s to 100’s of metres.

In British Columbia, Kuroko-type deposits are the most common form of VMS deposits, principally hosted by the late-Devonian Eagle Bay Assemblage located northeast of Kamloops and the late-Devonian Sicker group on Vancouver Island (Hoy, 1995). Less commonly they are Permian-Mississippian, late-Triassic, early to middle Jurassic, and Cretaceous in age. A typical deposit in British Columbia can range from less than 1 million tonnes to more than 10 million tonnes. The most notable Kuroko deposits in British Columbia, the H-W and Kutcho, are reported to contain 10.1 million tonnes grading 2.0% Cu, 3.5% Zn, 0.3% Pb, 30.4 g/t Ag and 2.1 g/t Au and 17 million tonnes grading 1.6% Cu, 2.3% Zn, 0.06% Pb, 29 g/t Ag and 0.3 g/t Au, respectively (Hoy, 1995). The authors have not verified the grade and tonnage information provided by Hoy (1995).

Exploration for Kuroko deposits parallels that for the Cyprus deposits save the host rocks and associated alteration. Felsic volcanic domes and centres should be investigated along with pyrite and chert horizons, all of which display quartz-sericite-chlorite alteration with distal clay mineral-, albite-, or carbonate-alteration.

9 Exploration

No field exploration has been carried out within the property since 2011 when Newport competed a program of data verification and historical core resampling in support of an initial mineral resource estimate (Raffle, 2011; and Dufresne et. al., 2012). Subsequently, during 2014 a composite subsample of historical drill core rejects was subject to a metallurgical testwork campaign at ALS Metallurgy, Kamloops, BC. Details of metallurgical testwork are presented in Section 13.

10 Drilling

No drilling has been completed on behalf of Newport within the Property. All drilling within the Property is historic in nature. A description of the historic drilling completed within the Property, as it relates to the current mineral resource estimate with respect to the Chu Chua Deposit (this Report) is considered relevant and is presented below.

A total of 99 diamond drill holes, totaling 19,707 m were completed to delineate the Chu Chua deposit between 1978 and 1991. Craigmont Mines Ltd. (Craigmont) drilled a total of 10,820 m in 55 core holes between 1978 and 1982. Additional drilling to test the grade, thickness, lateral and depth extent, and continuity of the deposit was completed by Minnova Inc. (Minnova) between 1988 and 1991. Minnova drilled a total of 46 holes (8,887 m) during the period.

Within the current boundaries of the Chu Chua Property, a total 89 drill holes totalling 17,782.51 m have been drilled for mineral exploration:

- Craigmont drilled 47 holes 10,162.7 m all in BQ except for CC-54 of 688.3 m drilled in AQ size. The downhole survey used the acid etch technique only recording inclination of the hole.
- Minnova, drilled 42 holes 7619.81 m, all in NQ size, however, core size for CCF-69, CCF-70 was not verified. Minnova's drill holes down hole dip measurements were collected every 30 to 40 m using an acid dip test but failed to collect any azimuth readings.
- The 1990 to 1991 drilling that Minnova conducted were all deeper drill holes ranging from 100 to 813m in depth. These drill holes had sporadic dip and azimuth surveys collected on average every 250m intervals down the hole. There were dip only surveys collected at around 60 metre intervals. All the 1990 to 1991 drill hole surveys were collected using a single shot camera.

Based on collar records, for all drill holes, a 90º azimuth was assigned except for CC-21 which was oriented at 270º azimuth. Dip of drillholes ranged between -45º and -70º.Table 10.1 shows location and orientation of drillholes within the Property.

Due to the historic nature of the diamond drilling and the lack of historic documentation there is limited information about the sampling and assaying methodology conducted for the Chu Chua diamond drilling. Given this situation a data verification program carried out in 2011 which included resampling and re-assaying of quarter core split by means of a core splitter. Details on this data verification program are provided on section 11.2.

A summary of drill intercepts returning uncapped composite grades of greater than or equal to 2.00% Cu is provided in Table 10.2. Based on this drilling, three main polymetallic veins have been defined and are illustrated in Figures 10.1, 10.2, 10.3.

Table 10.1. Drilling carried out over Chu Chua Property (claims 529300, 529301)

Drill Hole ID	Easting**	Northing**	Elevation (m)	Length* (m)	Dip (º)	Azimuth (º)	Year	Company	Core Size
CC-1*	704,492	5,696,274	1,806.02	129.00	-55	90	1978	Craigmont	BQ
CC-2*	704,523	5,696,176	1,800.16	65.20	-55	90	1978	Craigmont	BQ
CC-3*	704,473	5,696,167	1,796.89	162.50	-55	90	1978	Craigmont	BQ
CC-4	704,505	5,696,370	1,821.07	216.00	-55	90	1978	Craigmont	BQ
CC-5	704,589	5,696,378	1,829.68	87.70	-50	90	1978	Craigmont	BQ
CC-6*	704,589	5,696,380	1,830.25	73.50	-50	270	1978	Craigmont	BQ
CC-7	704,523	5,696,474	1,832.29	71.70	-50	90	1978	Craigmont	BQ
CC-9	704,501	5,696,065	1,787.11	100.00	-50	90	1978	Craigmont	BQ
CC-10	704,567	5,696,070	1,784.92	37.80	-50	270	1978	Craigmont	BQ
CC-11	704,483	5,696,121	1,793.25	40.40	-50	90	1978	Craigmont	BQ
CC-12	704,422	5,696,283	1,808.39	263.30	-55	90	1978	Craigmont	BQ
CC-13*	704,478	5,696,235	1,805.15	155.50	-50	90	1978	Craigmont	BQ
CC-14*	704,438	5,696,127	1,788.82	225.00	-50	90	1978	Craigmont	BQ
CC-15*	704,516	5,696,237	1,806.79	109.00	-50	90	1978	Craigmont	BQ
CC-16*	704,524	5,696,334	1,817.18	91.00	-50	90	1978	Craigmont	BQ
CC-17*	704,524	5,696,286	1,808.66	100.40	-50	90	1978	Craigmont	BQ
CC-18	704,504	5,696,432	1,830.70	105.00	-50	90	1978	Craigmont	BQ
CC-19	704,428	5,696,381	1,817.38	215.00	-50	90	1978	Craigmont	BQ
CC-20*	704,461	5,696,333	1,815.97	174.20	-50	90	1978	Craigmont	BQ
CC-21*	704,683	5,696,091	1,798.98	233.00	-50	270	1978	Craigmont	BQ
CC-22	704,552	5,696,288	1,817.57	60.00	-50	90	1978	Craigmont	BQ
CC-23	704,557	5,696,237	1,814.18	60.00	-50	90	1978	Craigmont	BQ
CC-24	704,383	5,696,163	1,787.85	304.00	-55	90	1979	Craigmont	BQ
CC-25*	704,474	5,696,125	1,792.66	160.60	-55	90	1979	Craigmont	BQ
CC-26*	704,512	5,696,124	1,795.30	85.00	-55	90	1979	Craigmont	BQ
CC-27	704,403	5,696,217	1,797.29	267.00	-55	90	1979	Craigmont	BQ
CC-28*	704,470	5,696,080	1,785.72	150.00	-55	90	1979	Craigmont	BQ
CC-29	704,416	5,696,327	1,809.83	241.70	-50	90	1979	Craigmont	BQ
CC-30	704,391	5,696,073	1,777.36	273.00	-50	90	1979	Craigmont	BQ
CC-31*	704,448	5,696,487	1,826.98	138.00	-50	90	1979	Craigmont	BQ
CC-32	704,406	5,696,486	1,825.01	191.00	-50	90	1979	Craigmont	BQ
CC-33	704,476	5,696,033	1,777.90	149.50	-50	90	1979	Craigmont	BQ
CC-36*	704,435	5,696,021	1,771.93	205.00	-50	90	1979	Craigmont	BQ
CC-38	704,387	5,695,975	1,762.41	292.20	-50	90	1979	Craigmont	BQ
CC-40*	704,541	5,696,435	1,831.06	55.00	-50	90	1979	Craigmont	BQ
CC-41*	704,548	5,696,335	1,823.25	45.00	-50	90	1979	Craigmont	BQ
CC-42	704,565	5,695,779	1,746.35	100.00	-50	90	1979	Craigmont	BQ
CC-45	704,342	5,696,280	1,801.20	319.00	-55	90	1981	Craigmont	BQ
CC-46	704,326	5,695,787	1,719.59	420.00	-50	90	1981	Craigmont	BQ

Drill Hole ID	Easting**	Northing**	Elevation (m)	Length* (m)	Dip (°)	Azimuth (°)	Year	Company	Core Size
(Table 10.1 continued)									
CC-48	704,294	5,695,976	1,748.57	509.00	-50	90	1982	Craigmont	BQ
CC-49	704,303	5,696,058	1,763.37	499.30	-55	90	1982	Craigmont	BQ
CC-54	704,184	5,695,968	1,738.20	688.30	-55	90	1982	Craigmont	AQ
CC-55	704,297	5,696,176	1,784.58	477.00	-55	90	1982	Craigmont	BQ
CC-56	704,338	5,695,879	1,736.41	396.40	-55	90	1982	Craigmont	BQ
CC-57	704,214	5,695,880	1,727.32	489.00	-55	90	1982	Craigmont	BQ
CC-58	704,097	5,695,868	1,711.01	335.00	-55	90	1982	Craigmont	BQ
CC-59	704,171	5,695,776	1,699.93	597.50	-55	90	1982	Craigmont	BQ
CCF-18*	704,510	5,696,282	1,806.26	90.80	-52	90	1988	Minnova	NQ
CCF-19*	704,523	5,696,264	1,809.44	87.50	-47	90	1988	Minnova	NQ
CCF-20*	704,497	5,696,256	1,805.06	114.80	-45	90	1988	Minnova	NQ
CCF-21*	704,519	5,696,312	1,815.40	80.20	-50	90	1988	Minnova	NQ
CCF-22*	704,499	5,696,306	1,813.90	115.20	-50	90	1988	Minnova	NQ
CCF-23*	704,536	5,696,396	1,828.24	53.30	-45	90	1988	Minnova	NQ
CCF-24*	704,516	5,696,400	1,826.25	66.70	-50	90	1988	Minnova	NQ
CCF-25*	704,545	5,696,370	1,826.47	49.70	-47	90	1988	Minnova	NQ
CCF-26*	704,531	5,696,361	1,822.47	77.70	-50	90	1988	Minnova	NQ
CCF-27*	704,484	5,696,341	1,815.39	127.10	-47	90	1988	Minnova	NQ
CCF-28*	704,539	5,696,311	1,819.23	65.50	-47	90	1988	Minnova	NQ
CCF-29*	704,479	5,696,305	1,810.74	159.50	-50	90	1988	Minnova	NQ
CCF-30*	704,538	5,696,237	1,808.54	62.50	-50	90	1988	Minnova	NQ
CCF-31*	704,506	5,696,181	1,801.39	89.60	-52	90	1989	Minnova	NQ
CCF-32*	704,508	5,696,213	1,806.27	93.27	-53	90	1989	Minnova	NQ
CCF-33*	704,528	5,696,204	1,805.13	53.34	-45	90	1989	Minnova	NQ
CCF-34*	704,506	5,696,158	1,797.77	116.70	-60	90	1989	Minnova	NQ
CCF-35*	704,506	5,696,158	1,797.77	73.50	-45	90	1989	Minnova	NQ
CCF-36*	704,533	5,696,159	1,798.98	31.40	-45	90	1989	Minnova	NQ
CCF-37*	704,531	5,696,136	1,795.93	40.50	-45	90	1989	Minnova	NQ
CCF-38*	704,555	5,696,315	1,820.29	34.10	-45	90	1989	Minnova	NQ
CCF-39	704,495	5,696,409	1,823.02	83.20	-45	90	1989	Minnova	NQ
CCF-40*	704,500	5,696,361	1,818.96	82.60	-46	90	1989	Minnova	NQ
CCF-41*	704,486	5,696,353	1,814.40	64.60	-45	90	1989	Minnova	NQ
CCF-42*	704,468	5,696,368	1,815.14	85.30	-45	90	1989	Minnova	NQ
CCF-43	704,482	5,696,385	1,818.67	107.30	-45	90	1989	Minnova	NQ
CCF-44*	704,488	5,696,210	1,803.64	111.60	-53	90	1989	Minnova	NQ
CCF-45*	704,498	5,696,179	1,800.41	119.20	-58	90	1989	Minnova	NQ
CCF-46	704,493	5,696,144	1,795.04	39.90	-55	90	1989	Minnova	NQ
CCF-47*	704,493	5,696,144	1,795.07	97.20	-47	90	1989	Minnova	NQ
CCF-48*	704,497	5,696,095	1,788.41	76.50	-45	90	1989	Minnova	NQ
CCF-49*	704,496	5,696,095	1,788.20	134.10	-62	90	1989	Minnova	NQ
CCF-50*	704,524	5,696,108	1,791.88	39.90	-45	90	1989	Minnova	NQ
CCF-51*	704,467	5,696,368	1,815.01	88.70	-55	90	1989	Minnova	NQ
CCF-61*	704,541	5,696,383	1,826.68	200.90	-60	90	1990	Minnova	NQ
CCF-62	704,101	5,695,767	1,692.83	813.20	-50	90	1990	Minnova	NQ
CCF-63	704,360	5,696,469	1,829.54	529.10	-58	90	1991	Minnova	NQ
CCF-66	704,306	5,696,305	1,799.49	716.60	-68	90	1991	Minnova	NQ
CCF-67	704,347	5,695,674	1,700.12	539.20	-58	90	1991	Minnova	NQ

Drill Hole ID	Easting**	Northing**	Elevation (m)	Length* (m)	Dip (º)	Azimuth (º)	Year	Company	Core Size
(Table 10.1 continued)									
CCF-69	704,299	5,696,174	1,784.25	588.20	-68	90	1991	Minnova	N/V
CCF-70	704,188	5,696,071	1,754.98	703.10	-63	90	1991	Minnova	N/V
CCF-71	704,248	5,696,260	1,791.98	716.50	-70	90	1991	Minnova	NQ

Total drilling within boundaries of the Property (metres)	17,782.51
* Drill hole used in resource estimate	
**Easting, Northing, UTM NAD 83 zone 10 N	

Table 10.2. Selected drill hole intersects higher than or equal to 2% copper within the Chu Chua Property. *True thickness is interpreted to be approximately 60-70% of drilled width.

Hole Id	From (m)	To (m)	Width* (m)	Lode	Cu (%)	Zn (%)	Ag (g/t)	Au (g/t)
CC-1	90	90.7	0.7	2	2.04	0.27	7.50	0.41
CC-2	35	40	5	2	2.78	0.36	8.60	0.62
CC-3	140	144	4	2	3.67	0.75	17.83	0.55
CC-6	42	68	26	1	2.76	0.44	10.22	0.68
includes								
CC-6	55	68	13		4.09	0.61	13.37	1.04
CC-11	29.3	32.6	3.3	3	3.59	0.10	6.84	0.37
CC-12	216.2	219.7	3.5	1	2.32	1.08	12.30	0.62
CC-13	105	107.2	2.2	2	2.30	0.19	13.30	0.55
CC-14	174	180	6	1	2.66	0.88	12.30	0.69
CC-15	10.3	11.3	1	3	2.13	0.02	6.80	0.27
CC-15	49	53	4	2	2.54	0.32	8.90	0.34
CC-16	42.6	62.6	20		4.14	0.53	12.84	0.58
CC-17	20	25	5	2	2.55	0.57	12.30	0.55
CC-17	38.3	42.5	4.2	2	14.54	0.93	9.30	1.03
CC-26	31.5	35	3.5	2	2.06	0.08	4.80	0.62
CC-28	110	120	10	2	2.11	0.45	7.00	0.38
CC-29	200	200.4	0.4	1	2.29	0.05	34.00	0.30
CC-31	98.6	100.2	1.6	2	8.62	0.36	62.00	0.69
CC-48	445.7	450	4.3	2	2.40	0.36	13.32	2.25
CC-54	599.5	602.2	2.7	2	3.82	0.76	15.17	0.52
CC-55	395.9	397.7	1.8	2	2.47	0.30	10.32	0.90
CC-57	460	462.5	2.5	2	6.72	0.05	7.47	1.17
CCF-18	51.3	57.2	5.9	2	4.52	0.02	8.92	0.19
CCF-18	52.7	57.2	4.5	2	5.60	0.02	10.70	0.23
CCF-19	23.5	48.5	25	2	4.53	0.21	13.86	0.36

Hole Id	From (m)	To (m)	Width* (m)	Lode	Cu (%)	Zn (%)	Ag (g/t)	Au (g/t)
(Table 10.2 continued)								
CCF-20	17	20	3	3	2.93	0.04	8.40	0.39
CCF-20	24.5	26	1.5	3	4.29	0.16	15.50	0.27
CCF-20	32	33.5	1.5	2	2.42	0.19	11.40	0.27
CCF-20	39.5	41	1.5	2	2.40	0.44	11.80	0.34
CCF-20	51.5	53	1.5	2	2.07	0.31	6.30	0.19
CCF-20	62.7	77.4	14.7	2	2.69	0.09	5.33	0.14
includes								
CCF-20	69.2	71.6	2.4	2	6.48	0.07	7.97	0.14
CCF-20	73.9	77.4	3.5	2	3.74	0.08	4.84	0.18
CCF-20	84.6	86	1.4	1	3.38	0.11	18.30	0.98
CCF-21	14.5	15.5	1	2	3.97	0.24	6.30	0.34
CCF-21	32	33.7	1.7	2	2.32	0.12	10.90	0.18
CCF-21	56.5	67.6	11.1	1	2.89	0.31	10.41	0.28
includes								
CCF-21	63.4	64	0.6	1	6.17	0.69	16.20	0.52
CCF-21	67	67.6	0.6	1	8.44	0.32	32.60	0.33
CCF-22	20.2	30.5	10.3	2	2.01	0.36	14.57	0.42
includes								
CCF-22	20.2	21.5	1.3	2	5.12	0.13	25.90	0.60
CCF-22	42.5	71	28.5	2	3.89	0.65	16.35	1.19
includes								
CCF-22	54.5	71	16.5	2	5.86	0.83	25.17	2.39
CCF-23	16.3	22.3	6	1	2.26	0.15	11.90	0.81
CCF-23	31.5	36.6	5.1	1	2.61	0.03	3.72	0.39
CCF-24	37.5	48	10.5	1	2.26	0.46	8.16	0.88
CCF-25	14.5	29.5	15	1	3.25	0.28	10.92	0.59
CCF-26	32.5	48	15.5	1	2.89	0.90	12.81	1.03
CCF-27	48.5	50	1.5	2	2.01	0.29	9.60	0.32
CCF-27	59	62.62	3.62	2	9.37	1.28	37.33	1.29
CCF-27	102.7	103.4	0.7	1	2.47	0.06	8.20	0.20
CCF-28	37.3	40.3	3	1	2.15	0.82	11.33	0.53
CCF-29	58.2	61	2.8	2	2.14	0.39	18.26	1.05
CCF-29	76	78.6	2.6	2	5.61	0.72	22.04	0.90
CCF-29	89.4	90.3	0.9		2.02	0.04	13.60	0.32

Hole Id	From (m)	To (m)	Width* (m)	Lode	Cu (%)	Zn (%)	Ag (g/t)	Au (g/t)
(Table 10.2 continued)								
CCF-30	14.3	24.5	10.2	2	6.03	N/A	N/A	0.92
CCF-30	28	29	1	2	2.23	N/A	N/A	0.59
CCF-31	45.6	48.6	3	2	3.21	0.14	10.70	0.70
CCF-31	54.8	59.6	4.8	2	4.37	0.15	19.40	1.21
CCF-32	17.4	24.1	6.7	3	4.73	0.67	13.34	0.75
includes								
CCF-32	17.4	18.6	1.2	3	10.01	0.03	17.80	0.80
CCF-32	19.2	20.1	0.9	3	8.42	0.16	16.00	0.99
CCF-32	20.6	21.1	0.5	3	10.75	0.78	18.20	0.81
CCF-32	23.6	24.1	0.5	3	7.40	0.53	17.00	0.60
CCF-32	44.2	49.9	5.7	2	3.10	0.75	14.05	0.29
CCF-32	60.1	63.8	3.7	2	2.16	0.36	7.46	0.44
CCF-32	66.75	68.9	2.15	2	2.52	0.56	8.05	0.24
CCF-33	13.4	17.9	4.5	2	3.26	0.10	11.17	0.93
CCF-33	22.4	26.9	4.5	2	3.61	0.03	8.17	0.51
CCF-33	30.1	33.5	3.4	2	10.37	1.64	27.11	1.23
CCF-34	62.8	66.8	4	2	2.44	0.84	14.31	0.49
CCF-34	69.5	70.7	1.2	2	2.90	0.66	10.30	0.41
CCF-34	75.2	76.2	1	2	2.24	0.24	10.40	0.46
CCF-34	80.7	86.7	6	2	2.48	0.31	12.85	0.67
CCF-34	93.6	98.8	5.2	2	3.79	1.09	21.60	1.37
includes								
CCF-34	96.8	98.8	2	2	7.88	0.89	35.00	2.05
CCF-34	106.9	108.4	1.5	1	2.22	0.01	6.30	0.05
CCF-35	19.3	24.9	5.6	2	2.71	0.27	10.41	0.33
CCF-36	12.4	13.9	1.5	2	2.23	0.16	17.60	1.00
CCF-36	20.4	21.9	1.5	2	2.19	3.22	25.80	3.01
CCF-37	11.4	16.5	5.1	2	3.12	0.28	19.90	2.24
includes								
CCF-37	11.4	12.4	1	2	10.04	0.61	46.30	3.44
CCF-38	19.2	22.2	3	1	2.74	0.11	13.20	0.84
CCF-40	28.6	29.3	0.7	2	5.03	1.04	26.20	1.27
CCF-41	48.3	54.4	6.1	2	5.20	1.04	20.82	0.91
CCF-42	65.5	69.1	3.6	2	4.98	0.51	19.38	0.76
CCF-44	82.5	89.6	7.1	2	3.84	0.63	24.96	1.28

Hole Id	From (m)	To (m)	Width* (m)	Lode	Cu (%)	Zn (%)	Ag (g/t)	Au (g/t)
(Table 10.2 continued)								
CCF-45	82.3	83.8	1.5	2	2.25	0.18	7.90	0.42
CCF-45	98.8	99.9	1.1	2	2.62	1.83	31.00	1.37
CCF-47	27.5	28.6	1.1	3	3.20	0.02	9.60	0.18
CCF-47	53.5	59.1	5.6	2	4.00	0.08	10.30	0.35
CCF-47	82.1	82.9	0.8	1	2.37	1.05	7.40	0.93
CCF-47	86.4	89.4	3	1	4.28	0.55	11.60	1.29
CCF-47	92.5	92.7	0.2	1	2.07	0.02	5.10	0.16
CCF-48	60.4	64.8	4.4	2	2.99	0.87	14.63	0.70
CCF-48	69.2	70.1	0.9	2	2.01	0.08	8.40	0.35
CCF-49	61.8	62.8	1	2	3.28	8.20	12.20	0.46
CCF-49	78	78.7	0.7	2	2.44	0.16	11.70	0.42
CCF-49	82.6	84.6	2	2	6.93	0.97	28.58	0.73
CCF-49	106	106.7	0.7	1	2.02	0.02	4.10	0.08
CCF-49	122.7	123.8	1.1	1	2.06	0.31	5.80	0.20
CCF-51	82.6	83.2	0.6	2	6.30	0.53	20.20	0.59
CCF-61	23.4	29.4	6	1	2.90	0.46	6.60	0.75
CCF-61	36.9	38.4	1.5	1	2.59	0.03	4.20	0.20
CCF-61	39.9	42.9	3	1	2.09	0.04	4.05	0.13
CCF-69	381.2	384.5	3.3		2.38	0.01	9.17	0.89
CCF-69	403.05	403.65	0.6		2.03	0.03	10.70	0.83
CCF-71	657.75	658.32	0.57		3.25	0.76	22.80	0.97

Figure 10.1. East-West Southern section 5696175mN looking North

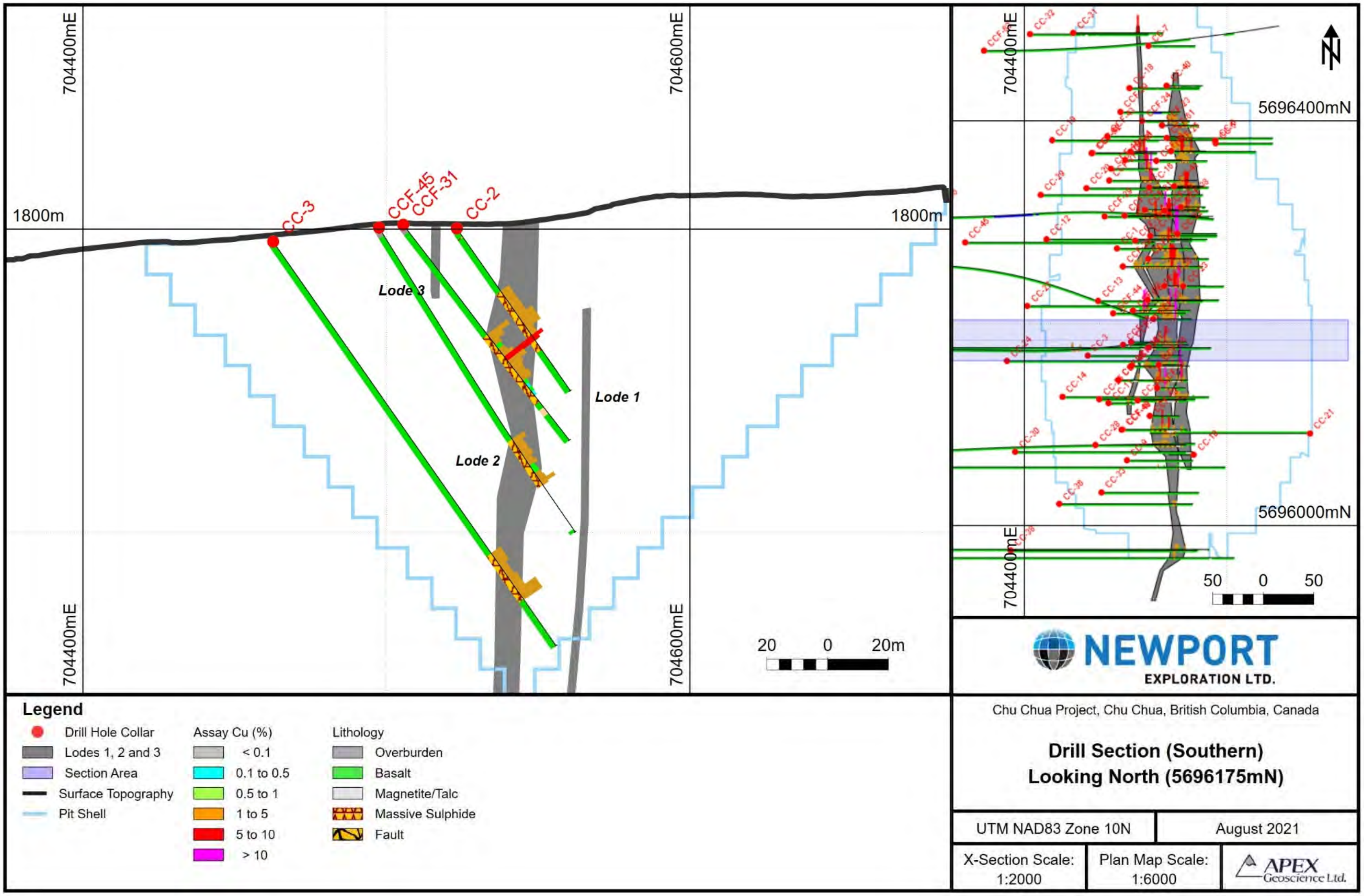


Figure 10.2. East-West Central section 569200mN looking North

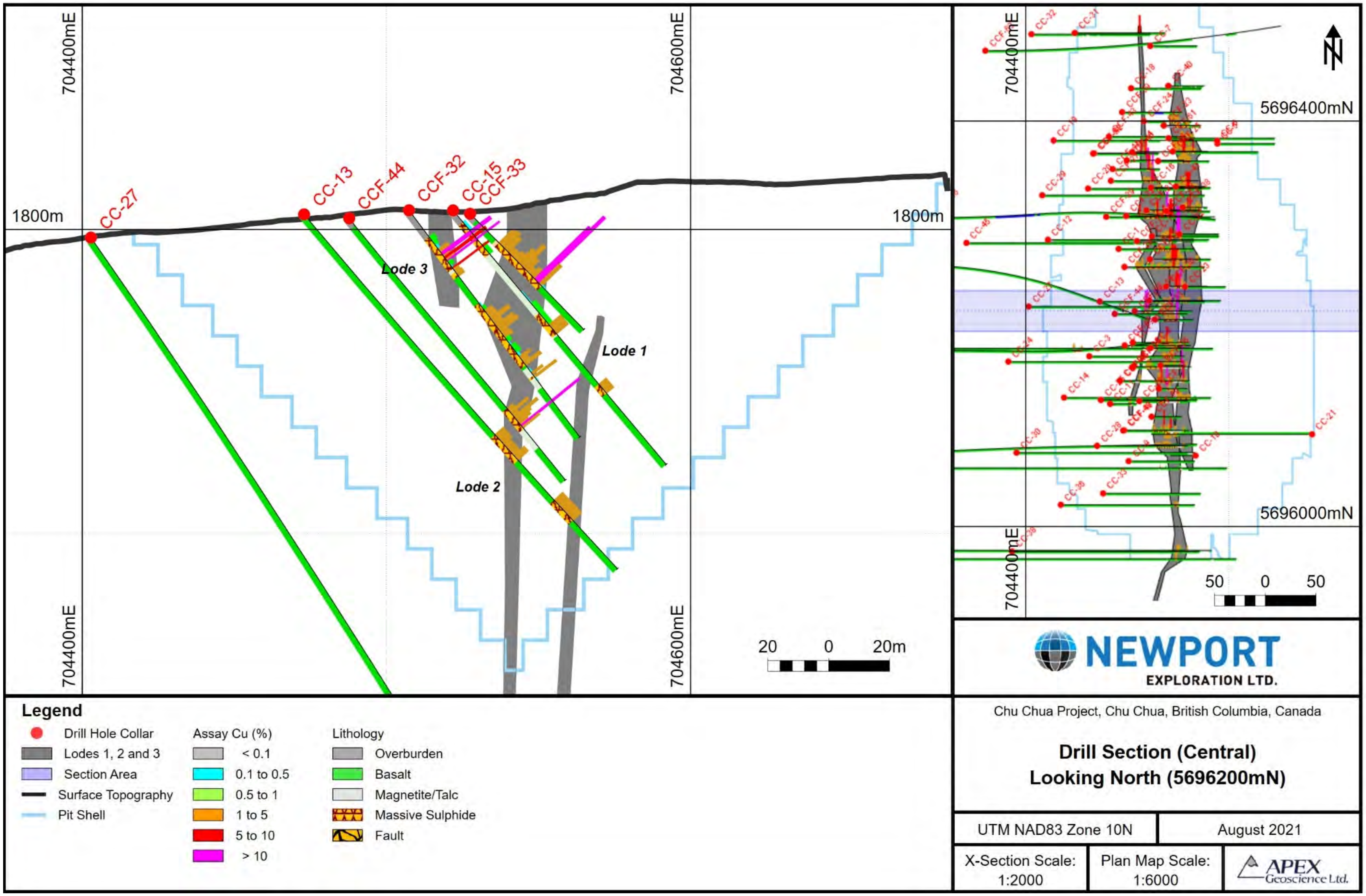
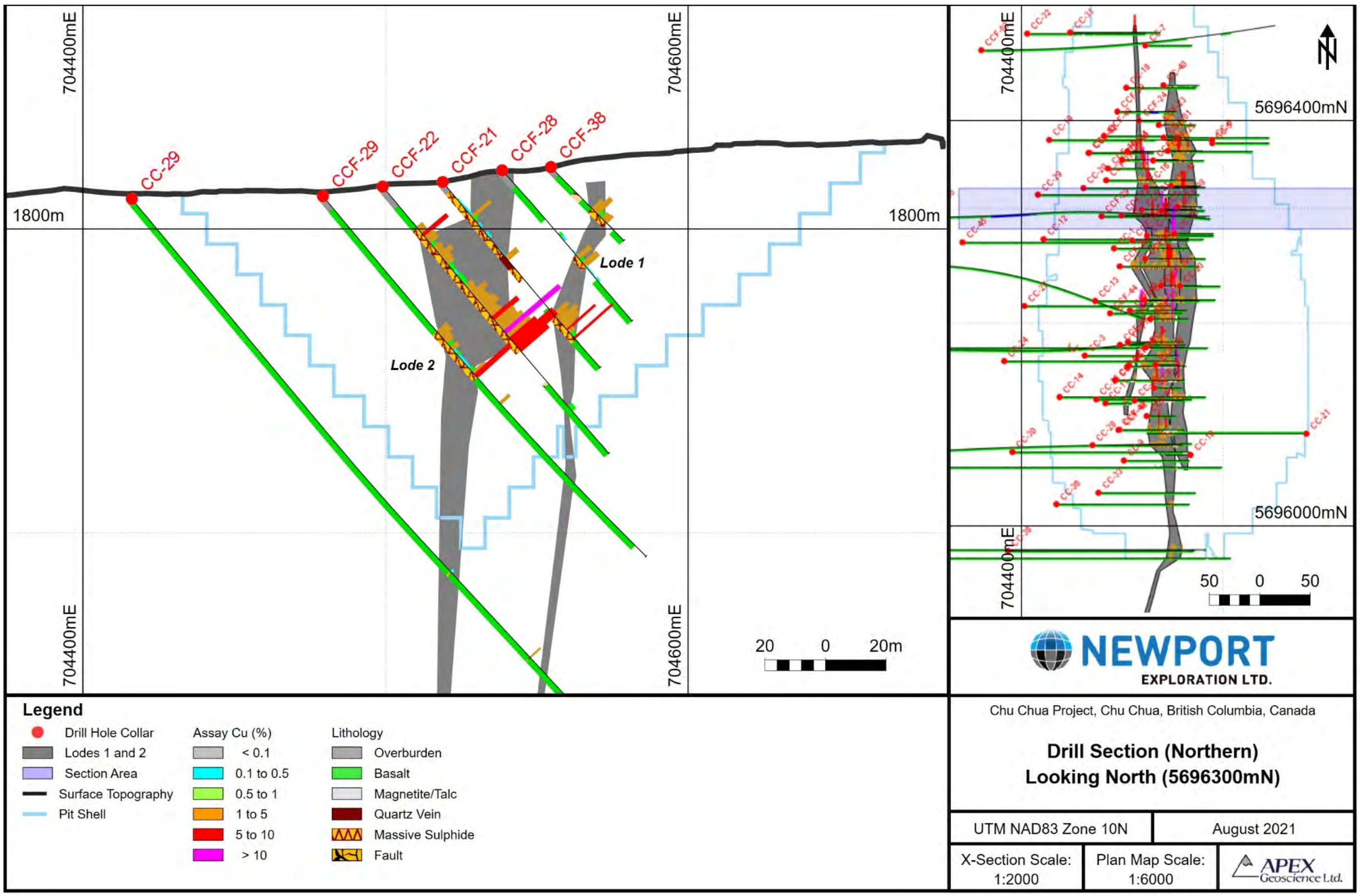


Figure 10.3. East-West Northern section 569300mN looking North



11 Sample Preparation, Analyses and Security

11.1 Historic Samples

There is little information available for the sampling method and approach for the historic soil, rock, and core sampling. Where information is available, the historic core sampling methodology is discussed below in the Data Verification section as part of the ongoing drill hole database validation.

11.2 Core Re-Sampling 2011

11.2.1 Sample Collection and Shipping

In July of 2011, a total of 110 core samples were re-sampled in the field by APEX geologists from existing historic core present on the Chu Chua property. A rock splitter was on site and the core was split and bagged into plastic sample bags. On every 10th sample, a QA/QC sample (Standard, Blank, or Duplicate) was inserted into the stream of samples, a total of 12 QA/QC samples were added. Sample identifiers were written on the outside of each bag and part of the sample card with the sample number was placed in the bag with the rock sample number written on it. All sample bags were closed using zip ties. Upon completion of sampling the total of 122 (including QA/QC) samples were placed in poly-woven bags and sent to ALS in North Vancouver, BC for processing. The authors have no reason to believe that the security of the samples was compromised. Although an exhaustive sampling was not conducted, the samples collected represent select mineralized intervals based on previous historic data. All core samples collected on the property had their sample numbers recorded along with the drill hole identification depth interval (from-to) in metres. Any missing sections within the sampled intervals were recorded and are noted.

11.2.2 Sample Preparation and Analysis

Samples at ALS are received, sorted, and verified according to a Sample Submittal Form. The shipment is assigned an ALS reference number, after which a worksheet with analyses requested is generated. Excessively wet samples are first dried in drying ovens and then crushed. Large rock or core samples are typically coarse crushed using an oscillating jaw crusher to 70% passing a Tyler 9 mesh (2.0mm) screen. The sample is then split using a riffle splitter. A sample split of up to 250g is then ring-mill pulverized to better than 85% of the sample passing a Tyler 200 mesh (75 microns) screen. At the beginning of each shift and/or the start of a new group, samples are screened to ensure correct particle sizes. Crushers, rifflers, and pans are cleaned with compressed air between samples. Pulverizing pots and rings are brushed, hand cleaned, and air blown.

A 30-gram nominal sample weight charge is then taken and the entire plus fraction is retained. Sample decomposition is performed by fire assay fusion (FA-FUS) and the digested solution is analyzed by inductively coupled plasma atomic emission spectrometry (ICP-AES) against matrix-matched standards. Gold detection limits for FA by ICP-AES is 0.001 to 10 ppm. The default overlimit method (Assay procedure Au-

AA25) for an ore grade analyte is by atomic absorption spectrometry (AAS) which has a detection limit of 0.05 to 100 ppm.

A prepared 0.25 gram minus fraction was sent for multi-acid ICP-AES and inductively coupled plasma mass spectrometry (ICP-MS) analysis. The ICP analysis detects 48 elements, and the use of the multi-acid (HNO3-HCLO4-HF-HCL) digestion liberates more elements than the Aqua Regia partial leaching process. The four acid digestions are able to dissolve most minerals; however, although the term "*near-total*" is used, depending on the sample matrix, not all elements are quantitatively extracted. The elements are then detected by their characteristic wavelength specific light, which can then be measured by the ICP Spectrometer, and the results are corrected for spectral interelement interferences.

The assay procedure ME-OG62 is the default overlimit method for ore grade analytes. The evaluation of ores and high-grade materials are optimized for accuracy and precision at high concentrations using conventional ICP-AES analysis which provides greater upper limits. The samples are similarly decomposed by the same four acid digestion and the results from the Spectrometer are equally corrected for spectral interelement interferences.

ALS Vancouver is an ISO 9001:2008 certified laboratory and is also accredited by the Standards Council of Canada (SCC) and has been found to conform to the requirements of ISO/IEC 17025:2005.

11.2.3 Quality Assurance and Quality Control

Laboratory pulp standards inserted into the sample stream by the field crew were compared to the expected certified values and if the lab results fell significantly outside the established third standard deviation confidence levels, the internal batch or the entire sample shipment was requested to be re-run. In addition, an analytical batch was considered a failure if two or more values from that same analytical batch fell outside the +/- 2 standard deviation (SD) lines.

Quality assurance and quality control (QA/QC) measures at ALS include routine screen tests to verify crushing and pulverizing efficiency, sample preparation duplicates, and analytical quality controls (blanks, standards, and duplicates). Quality control samples are inserted on each analytical run, based on the rack sizes associated with the method. Regular AAS, ICP-AES and ICP-MS methods use a rack size of 40 and are allocated 2 standards, 1 duplicate and 1 blank. Regular fire assay methods use a rack size of 84 and are allocated 2 standards, 3 duplicates, and 1 blank. The blank is inserted at the beginning, standards are inserted at random intervals, and duplicates are analyzed at the end of the batch. ALS in-house standards are tested by internal round robin exchanges and by external proficiency tests.

The QA/QC measures employed in the field by APEX during the 2011 core re-sampling program comprised inserting analytical standards, blanks, and laboratory duplicate samples into the sample stream, each at an approximate rate of 1 QA/QC sample per 20 samples. Standards and blanks are compared to expected values to ensure the laboratory results fall within the acceptable margin of error. Similarly, duplicate sample results are compared to originals to test the repeatability of laboratory results. In the author's opinion, the QA/QC procedures are reasonable for this type of deposit and the current level of exploration. Based on the results of the QA/QC sampling summarized below, the analytical data is accurate; the analytical sampling is considered to be representative of the drill sample, and the analytical data to be free from contamination.

Standards

Analytical standards were inserted into the sample stream to verify the accuracy of the laboratory analysis. CDN-ME-12 certified reference standards were selected for the core re-sampling program. QA/QC summary charts for copper (Cu), zinc (Zn), lead (Pb), silver (Ag) and gold (Au) are presented in Figure 11.1. The charts indicate the measured values for zinc, gold and silver were all within the two SD limits while one copper and one lead value fell outside the two standard deviation limits, triggering a provisional warning but not a failure.

Blanks

Barren coarse material was used for coarse "blank" samples to monitor potential contamination during the sample preparation procedure. The assay for the blanks showed consistent results with <0.01% Cu, <0.01% Zn, <0.001% Pb, <1ppm Ag, and <0.01ppm (Figure 11.2).

Duplicates

The 2011 re-sampling included the collection of four (4) samples as quarter-split drill core duplicates (Raffle, 2011). A comparison of duplicate analysis permitted an assessment of Chu Chua drill core mineralization heterogeneity (within sample variation). A comparison of 4 duplicate samples collected during 2011 indicates that no significant within sample variability exists for silver and gold (Figure 11.3). The average difference of duplicate sample analysis for copper and zinc are 0.20% Cu and 0.14% Zn, respectively; the difference due almost entirely to a single relatively high grad duplicate within hole CC-16. The results indicate that at a significant part of the copper variability between historically reported and the 2011 re-sampled drill core is a result of the inherent variability of disseminated to semi-massive and massive sulphide mineralization within the Chu Chua deposit.

Figure 11.1. Standard CDN-ME-12 performance for 2011's core re-sampling program

Figure 11.2. Blank performance for 2011's core re-sampling program.

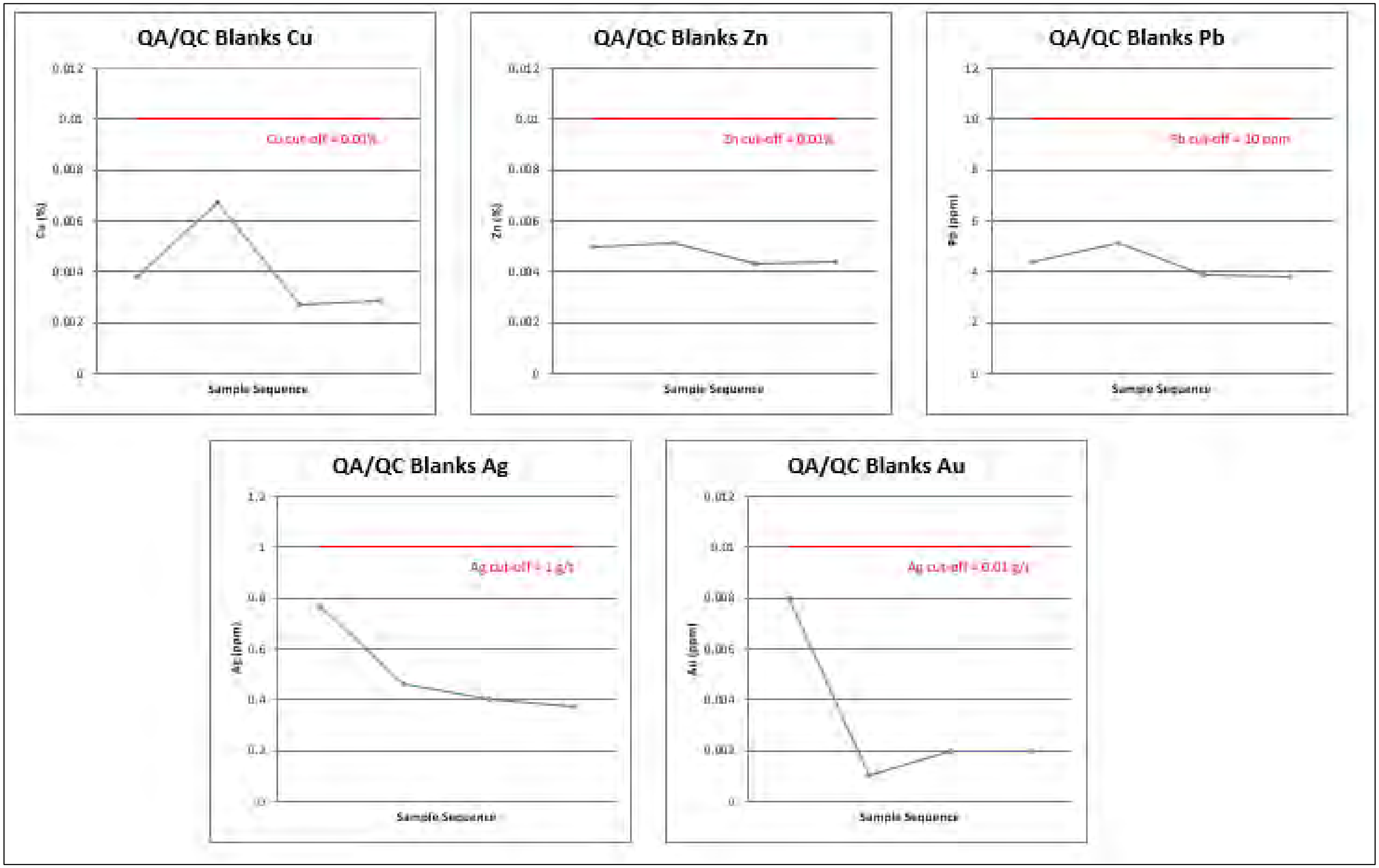
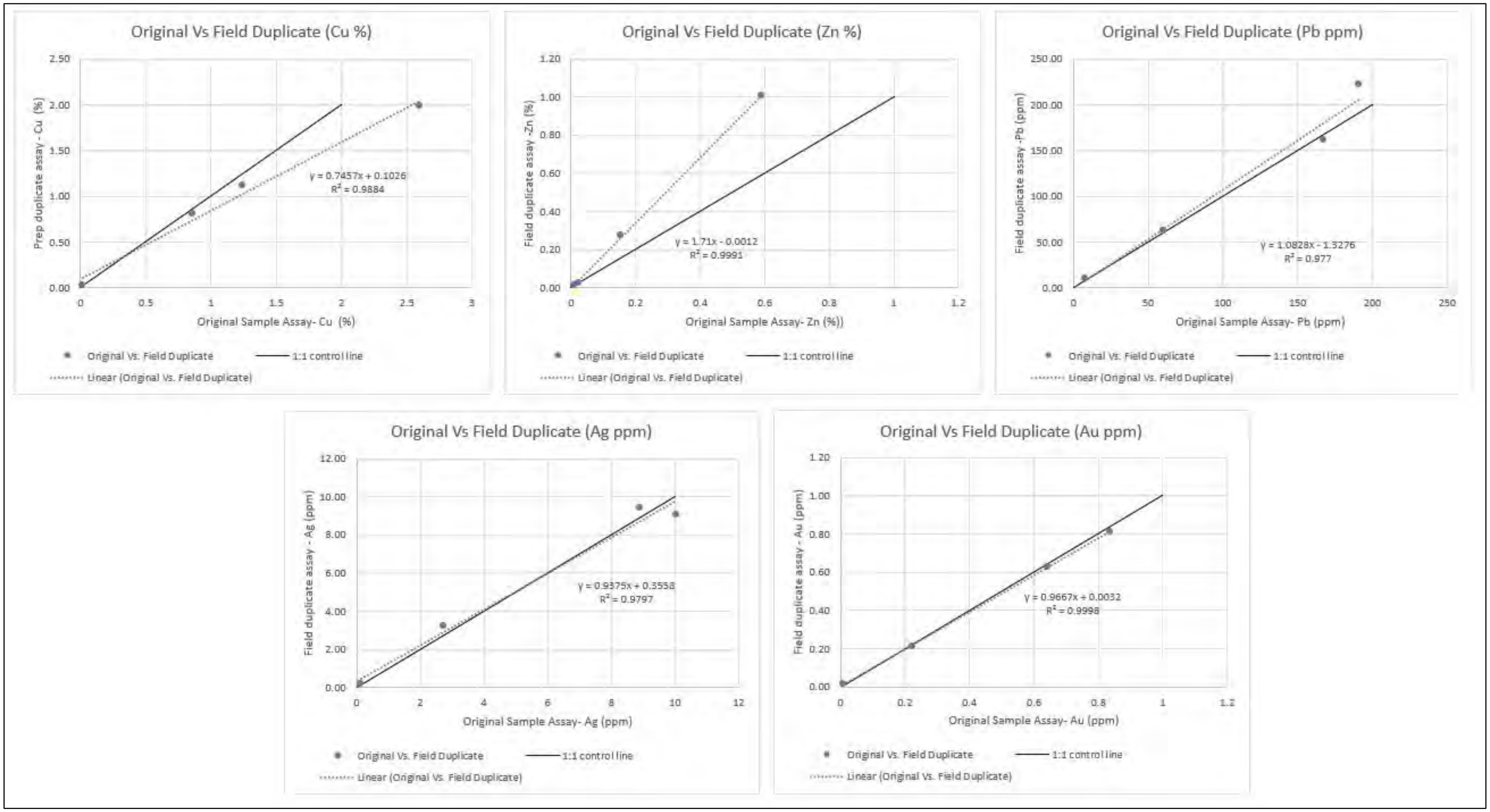


Figure 11.3. Original drill re-sample assays versus duplicate



12 Data Verification

Mr. Raffle visited the Property during 2008 and again on June 26th, 2012. Subsequently Mr. Alfonso Rodriguez, M.Sc., P. Geo., Project Geologist of APEX completed a site visit on July 14, 2021, to verify current site access and conditions. Prior to these visits, a campaign of core resampling as well as locating of historical drill holes was completed in 2011 by APEX Geoscience Ltd. (Raffle, 2011). Details of the data verification are provided below.

12.1 2011 Data Verification Program

12.1.1 Historic Core Sampling

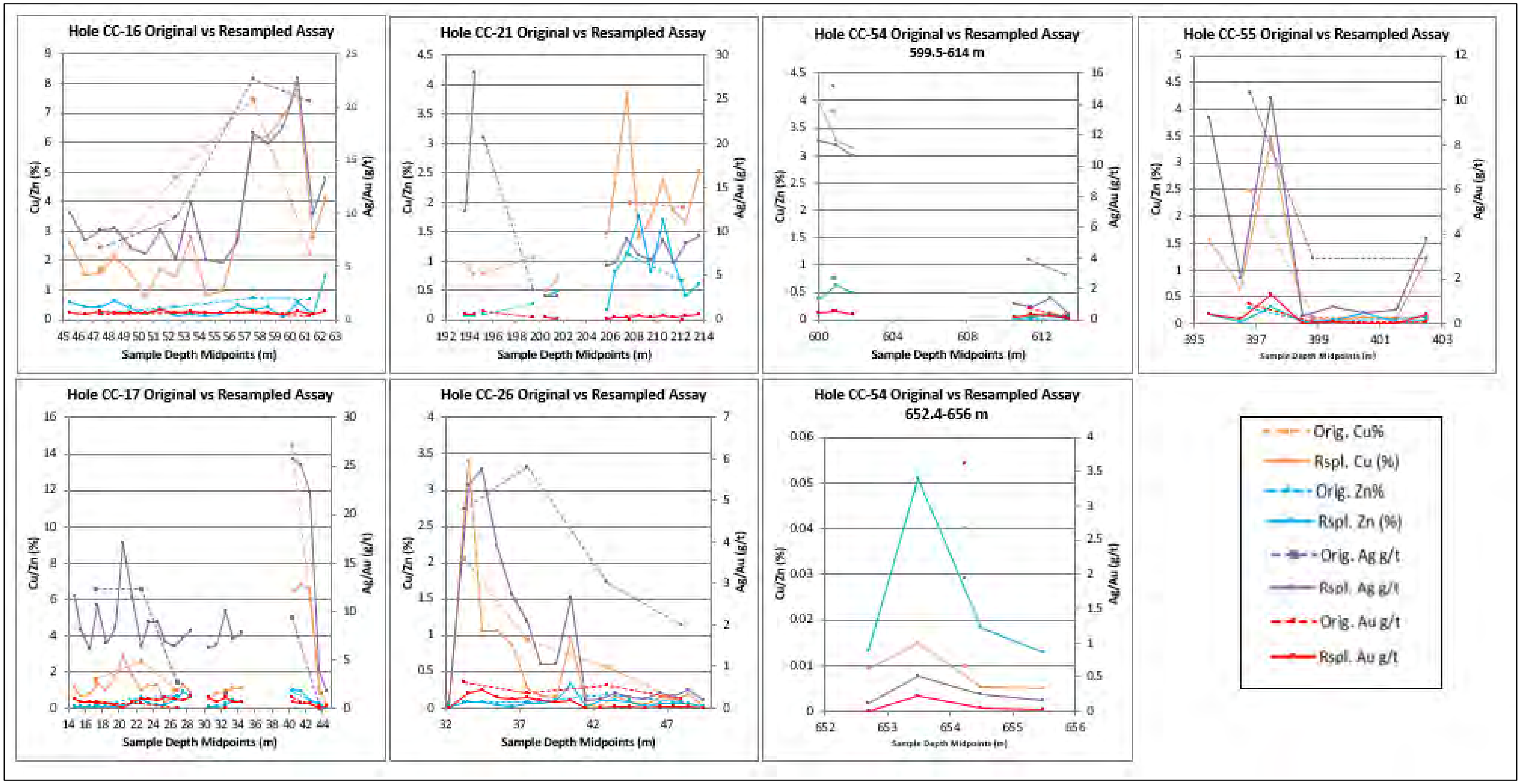
Diamond drill core re-sampling carried out in 2011 was completed at 1 m intervals unless the length of the core was insufficient, and the intervals had to be reduced. Samples were selected from high grade intercepts within historic drill holes CC-16, CC-17, CC-21, CC-26, CC-54, and CC-55 as well as CC-57 (located outside of current project boundary), comprising a total sampled core length of 103.7 m. Resampling was completed on cut core, so most samples were quartered. The 1 m interval data was then combined into 5 m data groups to be compare with historic data. Duplicates were taken every 30 samples; standards and blanks were included every 30 samples as well so that every 10th sample (10%) was a part of QA/QC.

A comparison of historic and new composite grades was completed for a total of 82.3 m of the 103.7 m of drill core re-sampled during 2011. The reduction in comparable assays was because only results for which the entire historic sample interval was available (ranging from 2.5 to 6 m) were included in the comparison. Comparison of historic and 2011 composite grades indicated that no significant variability exists between historically reported versus 2011 re-sampling for zinc, gold, and silver assays at the Chu Chua deposit (-0.07% Zn, -0.07 g/t Au and -0.41 g/t Ag of the length weighted average difference based on 82.3 m of drill core re-sampled, Table 12.1). Copper values indicated a -0.39% Cu length weighted average difference between the re-sampled and historically reported drill core assays available for 2011's comparison. The difference in re-sampled versus historically reported copper values was largely due to grade apparent grade variability within the drill hole CC-16 where particularly high historic copper grades (up to 7.57% Cu over 5 m) were reported. Re-sampling of the same high-grade interval returned assays of 4.6% Cu over 5 m (Table 12.1.). It is considered reasonable for grade variation to occur, with respect to relatively high-grade intervals such as those found within CC-16, given the inherent variability of disseminated to semi-massive and massive sulphide mineralization within the Chu Chua deposit. An exclusion of the results for CC-16 returns a -0.14% Cu length weighted average difference between the re-sampled and historically reported drill core assays (64.7 m of drill core directly compared). The results indicate that at a significant part of the copper variability between historically reported and the 2011 re-sampled drill core is a result of the inherent variability of mineralization within the Chu Chua deposit.

Table 12.1. 2011 Diamond Drill Core Re-Sampling Results

Drill hole	From (m)	To (m)	Length (m)	Historic Assay				2011 APEX Re-sampling				Difference (2011-Historic)			
				Cu %	Zn %	Ag g/t	Au g/t	Cu %	Zn %	Ag g/t	Au g/t	Cu %	Zn %	Ag g/t	Au g/t
CC-16	45.0	50.0	5.0	1.74	0.26	6.80	0.55	1.88	0.50	8.28	0.66	0.14	0.24	1.48	0.11
CC-16	50.0	55.0	5.0	4.83	0.44	9.60	0.69	1.52	0.21	7.39	0.76	-3.31	-0.23	-2.21	0.07
CC-16	55.0	60.0	5.0	7.47	0.75	22.60	0.69	4.60	0.31	12.94	0.66	-2.87	-0.44	-9.66	-0.03
CC-16	60.0	62.6	2.6	2.25	0.69	20.50	0.41	4.99	0.63	15.59	0.67	2.74	-0.06	-4.91	0.26
CC-17	14.6	20.0	5.4	1.59	0.19	12.30	0.55	1.10	0.08	8.27	0.55	-0.49	-0.11	-4.03	0.00
CC-17	20.0	25.0	5.0	2.55	0.57	12.30	0.55	1.61	0.26	10.50	0.67	-0.94	-0.31	-1.80	0.12
CC-17	25.0	28.8	3.8	1.02	0.71	2.70	0.00	0.82	0.52	7.13	1.00	-0.20	-0.19	4.43	1.00
CC-17	30.0	35.0	5.0	0.91	0.24	1.37	0.00	0.89	0.24	7.50	0.83	-0.02	0.00	6.13	0.83
CC-17	42.5	45	2.5	0.82	0.2	0.00	0.00	2.60	0.24	9.32	0.25	1.78	0.04	9.32	0.25
CC-21	205.5	210.0	4.5	1.99	1.09	0.00	0.00	2.22	1.02	7.27	0.30	0.23	-0.07	7.27	0.30
CC-21	210.0	214.4	4.4	1.91	0.66	0.00	0.00	2.14	0.89	8.54	0.46	0.23	0.23	8.54	0.46
CC-26	31.5	35.0	3.5	2.06	0.08	4.80	0.62	1.28	0.05	3.21	0.22	-0.78	-0.03	-1.59	-0.40
CC-26	35.0	40.0	5.0	0.94	0.07	5.80	0.34	0.50	0.06	2.15	0.21	-0.44	-0.01	-3.65	-0.13
CC-26	40.0	46.0	6.0	0.55	0.19	3.00	0.55	0.21	0.11	0.64	0.03	-0.34	-0.08	-2.36	-0.52
CC-26	46.0	50.0	4.0	0.07	0.08	2.00	0.21	0.10	0.04	0.28	0.01	0.03	-0.04	-1.72	-0.20
CC-54	599.5	602.2	2.7	3.82	0.76	15.17	0.52	3.49	0.51	11.24	0.46	-0.33	-0.25	-3.93	-0.06
CC-54	610.2	614	3.8	0.07	0.03	3.51	0.50	0.07	0.06	0.89	0.23	0.00	0.03	-2.62	-0.27
CC-54	652.4	656.1	3.7	0.01	0.04	1.94	3.61	0.01	0.03	0.28	0.08	0.00	-0.01	-1.66	-3.53
CC-55	394.6	400.0	5.4	1.06	0.14	5.99	0.40	1.17	0.12	4.49	0.40	0.11	-0.02	-1.50	0.00
Total (m)			82.3	Length Weighted Average Difference								-0.39	-0.07	-0.41	-0.07

Figure 12.1. Drill hole Original Vs. Resampled Assay



12.1.2 Drill Hole Collar Surveying

12.1.2.1 Surveyed DDH in the field

A total of 60 drill hole collars were surveyed during the 2011 field program, of which 45 were exposed rods that were in place. For the remainder of the holes surveyed, a point was taking from middle of the clearing or where the collars seem most likely to be based on orientation of the holes. The data was post-processed and corrected after the field visit to obtain sub-meter accuracy of absolute locations of surveyed data.

Drill collar surveys were completed in RTK survey mode, whereby the stationary base receiver broadcasts a correction signal to the mobile receiver via UHF radio connection providing horizontal accuracies of up to 10 cm and vertical accuracy of up to 20 cm. The locations of drill hole collars surveyed from a clearing site were verified using historic plan maps and their relative position to the surveyed holes with exposed rod in-situ. The orientation and set-up of the drill were also considered in order minimize errors.

12.1.2.2 Digitized Drill Hole Collars

All the historic diamond drilling plans from the original assessment reports available were rectified using Google Earth imagery, NTS 1:50k base map data, and the 2011 drill hole collar survey. In the case of digitization with the 2011 drill hole collar survey only drill hole with sub-meter accuracy values were used to rectify the old drilling plans.

The locations of 32 drill hole collars, which could not be verified via surveying, were digitized using the rectified plan maps, and the previously verified drill hole collar locations. The newly digitized locations honored the relativity of holes within historic plans in relations to the 2011 surveyed drill hole collars, while falling within areas of roads-trails, and clearings.

12.1.3 Digital Data

Basic digital data from the Chu Chua property was provided to APEX by Strongbow which served as the base for a geographic information systems (GIS) project, specifically for an ArcGIS project built by APEX. An access digital drill hole database was also provided. APEX proceeded to compile and digitize all available data pertaining to the Chu Chua deposit and relevant to the property.

Drill logs and assay data for 99 diamond drill holes, totaling 19,707 m, that targeted the Chu Chua deposit were compiled and validated against available paper copies. Drilling completed from 1978 to 1982 by Craigmont included 55 holes. The holes were documented only with handwritten logs; holes CC-1 to -49 have been validated against paper copies. It is unclear, but unlikely, that any collar surveys were done hence an uncertainty exists about the exact location of the collars. Only downhole acid dip tests were carried out, with the data recorded on the logs. No downhole azimuth or specific gravity (SG) measurements were taken. The logs show that most of the sample intervals within the massive sulphide zones are on the order of 4 to 5 m in length for single samples. The assays are handwritten on the logs, with no assay certificates available. No QA/QC samples were analysed. The 1978 to 1982 drill core was stored in racks on site; it has been verified to be present and is in reasonable shape.

A total of 46 holes were drilled by Minnova between 1988 and 1991. The Minnova data is comprised of computer-generated drill logs that contain information on the collar locations and downhole surveys. Most of the available drill logs indicate that the collars have not been surveyed after completion of the drill hole. For two of the collars that have been surveyed a discrepancy exists between the plotting coordinate and an alternate coordinate and it is unclear which the final surveyed collar location is. There is no downhole azimuth data for the 1988 and 1989 drill holes, which represent the bulk of the Minnova drilling. For the 1990 and 1991 deep drilling single shot azimuth and dip data is recorded on the logs. It should be noted that for the deep holes drilled by Minnova, the end of hole northing coordinate versus the collar northing coordinates due to azimuth deviation of the easterly drilled holes ranges from a few meters up to more than 60 m (hole CC-71 drilled to a depth of 667.7 m core length). It is highly likely that some of the deeper Craigmont BQ core holes drilled to depths of between 300 and 668 m core length in the period between 1978 and 1982 would have encountered significant downhole deviation for some of the holes, throwing into question the exact location of the deeper massive sulphide intercepts due to a lack of downhole survey information.

The 1988 to 1991 drill hole data includes a significant amount of SG data, however, there is no indication on how the measurements were taken. Sampling of the core during 1988 to 1991 through the massive sulphide zones was done with more reasonable intervals with samples taken at 1 to 1.5 m sample lengths. The samples were analysed by Min En Laboratories and assay data have been validated against the assay certificates for samples from drill holes CCF-31-34, 43-47 and partially for CCF-49. In several cases, high grade base and precious metal zones identified in the Minnova drilling lack adjacent wall rock sampling in order to characterize the grade of potential wall rock dilution. Whole rock geochemical samples were also collected and processed at Min En Laboratories. A thorough review of the paper and digital data indicates that there is no obvious QA/QC data for the assay, geochemical or SG analyses. The 1988 to 1991 drill core is reported to have been retained and stored by Minnova in a warehouse in Barierre, however, Strongbow indicates that the core has been disposed of (Gale, pers comm., 2009).

According to 2011’s data verification process, overall, it is considered that the hardcopy data, the drill hole database and the contained data for the Chu Chua property are of a reasonable standard and relatively complete and are suitable for use in the mineral resource estimate.

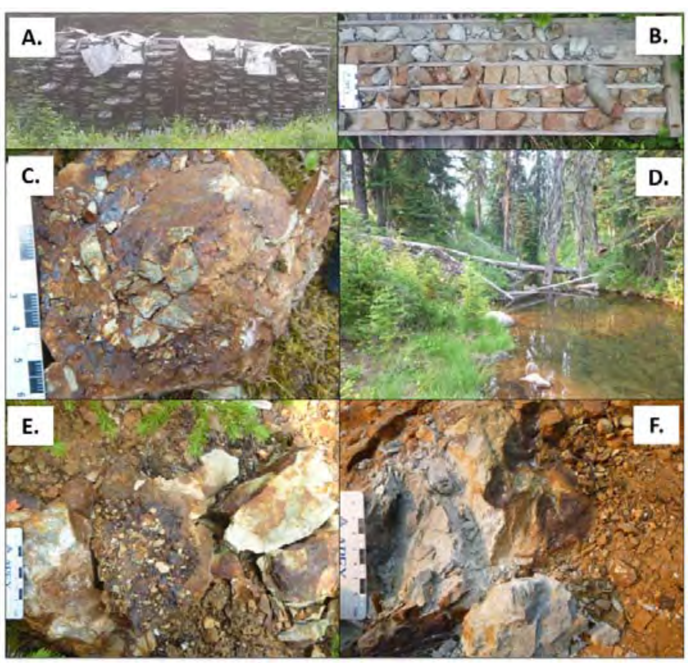
12.2 Personal Inspection

A personal inspection was carried out by Mr. Rodriguez on July 14th, 2021, to verify current site access and conditions. The condition of the historical core was observed, and a traverse of the deposit area was completed (Figure 6.2 and 6.3). Massive sulphides as well as iron oxide cement dominated breccias were evident in the property (Table 12.1). The creek along Chu Chua deposit structure exhibits evidence of sulphide bearing rocks. Prior site visits were completed by Mr. Raffle during 2008 and again on June 26th, 2012.

Table 12.1. Authors Rock Samples (2008 and 2021)

Sample ID	Easting (N81Z10)	Northing (N83Z10)	Au (ppm)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Material	Sample Description
08KRP800	704,540	5,696,177	0.13	2.93	859	37	274	Outcrop	Grey, altered basalt, disseminated pyrite
08KRP801	704,514	5,696,314	0.02	0.63	592	8	161	Outcrop	Pervasive altered volcanic breccia, limonite-magnetite
08KRP802	704,542	5,696,178	0.01	0.14	26	7	62	Float	Silicified breccia
08KRM001	704,989	5,695,845	0.64	22.5	3560	201	233	Drill Core	CC21 @ 193m, basalt, stringer chalcopyrite
08KRM002	704,989	5,695,845	0.32	7.35	37,800	126	5,960	Drill Core	CC21 @ 208m, massive chalcopyrite-pyrite
21ARP001	704,481	5,696,170	0.01	0.34	248	6	147	Float	Breccia boulder, iron-oxide, silicified and bleached
21ARP002	704,546	5,696,177	0.09	3.31	389	196	127	Float	Brecciated mafic/intermediate volcanic, pyrite to 10%
21ARP003	704,551	5,696,178	0.28	5.46	82	260	86	Outcrop	Silicified volcanic, disseminated pyrite to 10%

Figure 12.2. A and B: Chu Chua drill core. C. Brecciated andesite D. Oxidation in creek along strike, E. Goethite cemented breccia (21ARP001), F. Bleached/silicified, andesite



13 Mineral Processing and Metallurgical Testing

13.1 Historical Testwork

Minnova completed extensive programs of mineralogical characterization and metallurgical test work from 1989 to 1991 (Purkis, 1991). The reported metal recoveries from the Chu Chua ore, for Cu, were less than desirable, however, the test work was conducted solely based on the Afton Mill flow sheet and then was looked at as feedstock for the Samatosum Mill. The ore processing flow sheet at both mills, both of which are currently not in operation, was less than optimum for processing Chu Chua ore. Further metallurgical work was strongly recommended for the Chu Chua ore (Purkis, 1991).

13.2 2014 Metallurgical Testwork

During 2013, Newport commissioned metallurgical testwork, which was completed by ALS Metallurgy, Kamloops, BC ("ALS") on representative mineralization sourced from historical drill core. The sections (13.2.1 to 13.2.4) present details on the test work performed by ALS laboratories and reported by Roulston and Mehrfert, 2014.

13.2.1. Metallurgical Testing Objectives and Sample Characteristics

Metallurgical test work carried out carried out at Chu Chua was performed on coarse reject material from historical drill core replicate samples. The objectives of the study included:

- Measuring the chemical and mineral content,
- Measuring mineral fragmentation.
- Conduct preliminary flotation testing on the composite through batch rougher and cleaner testing

Approximately 41 kilograms of sample, 38 kilograms of which were combined into a composite for use in this program. Duplicate representative head cuts from the new composite were assayed using standard analytical techniques. Averaged assays are displayed in Table 13.1.

Mineral content was determined through Particle Mineral Analysis via QEMSCAN. A summary of mineral content data is displayed in Table 13.2. The sample was typical of a massive sulphide deposit with about 47 percent of the sample being sulphur. Most of this sulphur was contained within pyrite, which comprised about 76 percent of the feed. The copper content of the composite was about 2 percent and was primarily contained in the copper sulphide chalcopyrite. About 10 percent of the copper was cyanide soluble, indicative of secondary copper minerals; however, mineralogical analysis found only trace levels of secondary copper sulphide minerals. Gold and silver assayed about 0.7 and 11 g/tonne, respectively. Zinc, which was contained in sphalerite, assayed about 0.4 percent in the feed. The amount of zinc would not be considered of economic interest, in our experience, and if it reported to a product concentrate, would not likely cause significant concentrate dilution.

Table 13.1. Composite 1 Head Assay

Sample	Cu (%)	CuOx (%)	CuCN (%)	Zn (%)	Fe (%)	S (%)	Ag (g/t)	Au (g/t)
Composite 1 Head 1	2.04	0.08	0.16	0.36	35	46.8	10	0.69
Composite 1 Head 2	1.93	0.1	0.22	0.37	34.7	46.7	11	0.66
Average Composite 1	**1.99**	**0.09**	**0.19**	**0.37**	**34.9**	**46.8**	**11**	**0.68**
CuOx	Copper soluble in weak sulphuric acid solution							
CuCN	Copper soluble in weak sodium cyanide solution							

Table 13.2. Sample mineral characteristics

Mineral	Content Percent
Chalcopyrite	5.9
Covellite	<0.01
Tetrahedrite	<0.02
Galena	0.01
Sphalerite	0.6
Pyrite	76.1
Non-sulphide gangue	17.3
Total	**100**

13.2.2 Mineral Fragmentation

Mineral liberation and fragmentation data was determined through a Particle Mineral Analysis (PMA) via QEMSCAN. The analysis was completed at a primary grind sizing of 147µm K80. Copper sulphide, pyrite liberation and association data is presented in Figure 13.1; data was extrapolated for finer primary grind sizes of 100, 75, 50 and 30µm K_{80}.

The results from the mineralogical analysis showed a texturally complex mineralogy. An example of the physical interlocking of the minerals can be seen in the previously displayed Figure 13.2. At the analyzed level of 147µm K_{80}, copper sulphides within Composite 1 were about 27 percent liberated. For a massive sulphide deposit such as this, copper sulphide liberation of around 60 percent would be ideal for efficient rougher separation. To achieve this, an extremely fine primary grind would be necessary, estimated to be finer than 30µm K_{80}. This would most likely be an economically inhibitive energy intensive, high capital cost process.

The copper sulphide release curve shows the liberation of analyzed particles by their average particle size. Typically for a cleaner circuit, regrind discharge liberation of about 90 percent is ideal for efficient separation. For this material, this liberation may not be achievable.\

The mineralogically limiting grade-recovery curves display the maximum recoveries and grades, limited by the physical interlocking of the copper sulphide particles with undesirable minerals, given perfect selectivity. Decreasing the primary grind from 147 to 100μm K_{80} would not significantly improve the upgrade potential of the copper sulphides; finer primary grinding to about 30 to 50μm K_{80} would be recommended. Without grinding to this level, circuit stability and selectivity would be a challenge to achieve and diminishing recovery.

13.2.3 Metallurgical Performance of the Composite

Flotation testing was conducted using the selective Cytec 3418A as the copper sulphide collector, using lime as the pH modifier and using Methyl Isobutyl Carbinol (MIBC) as the frother.3.1 Rougher Flotation Response. Figure 13.3 summarizes the rougher test conditions for rougher tests completed on Composite 1.

A series of rougher tests were completed testing the effect of primary grind on performance. Four primary grinds were tested at a pH of 11.0; 152, 121, 84 and 51μm K_{80}. As primary grind decreased, the copper recovery increased. The best performance was found with a primary grind of 51μm K_{80}. About 89 percent of the copper was recovered to approximately 21 percent of the mass. Finer primary grinding may improve performance; testing would be required to confirm.

The effects of increased pH on rougher performance were tested. Higher pH typically increases the selectivity against pyrite. The effect of a pH of 11.5 and 12.0 was tested. The copper-sulphur selectivity increased slightly as pH increased, allowing higher copper recoveries at slightly lower mass. At a pH of 12.0, 92 percent of the copper was recovered to about 23 percent of the mass. Lime consumption for pH control was quite high in all testing

Figure 13.1. Mineral Fragmentation (after Roulston and Mehrfert, 2014).

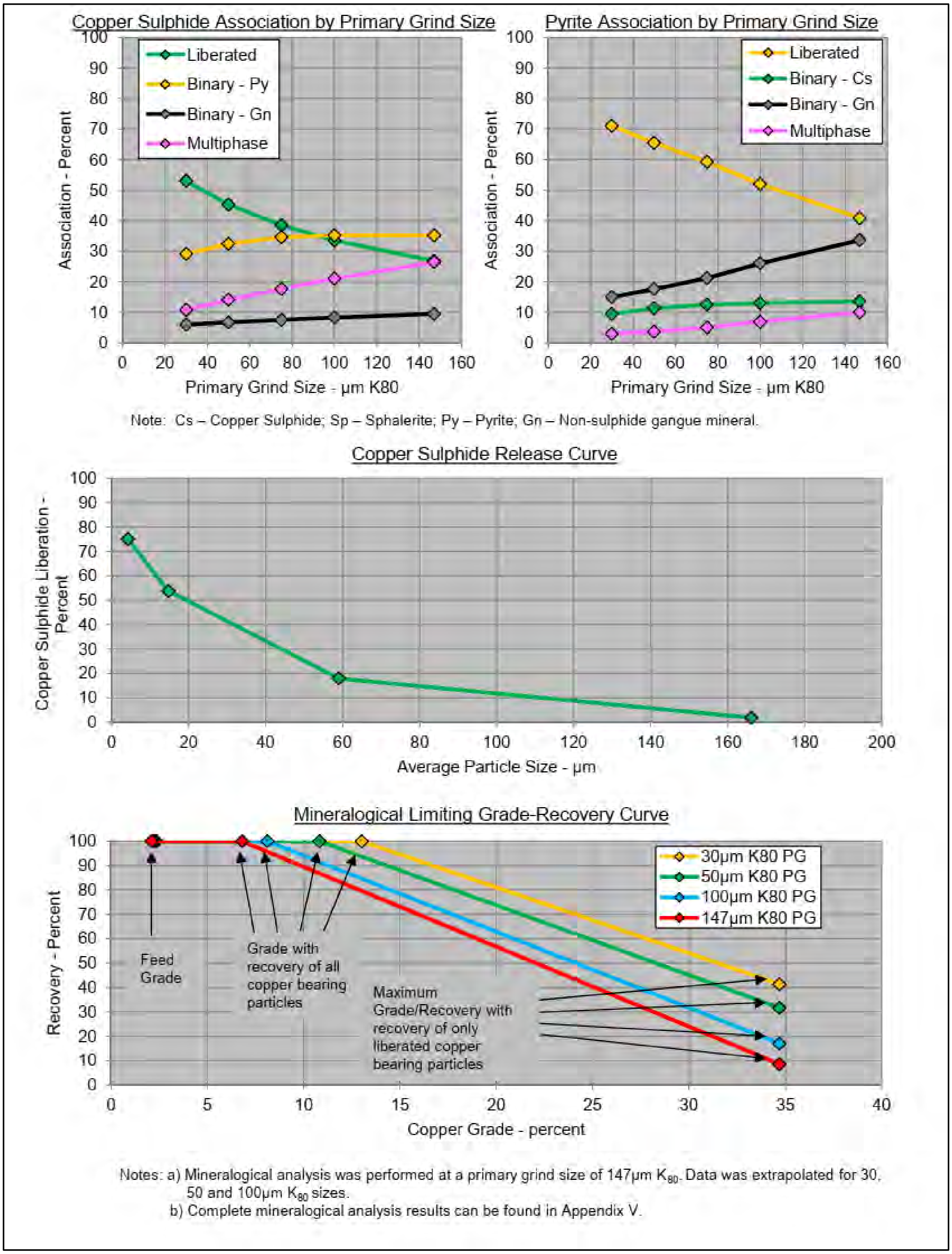
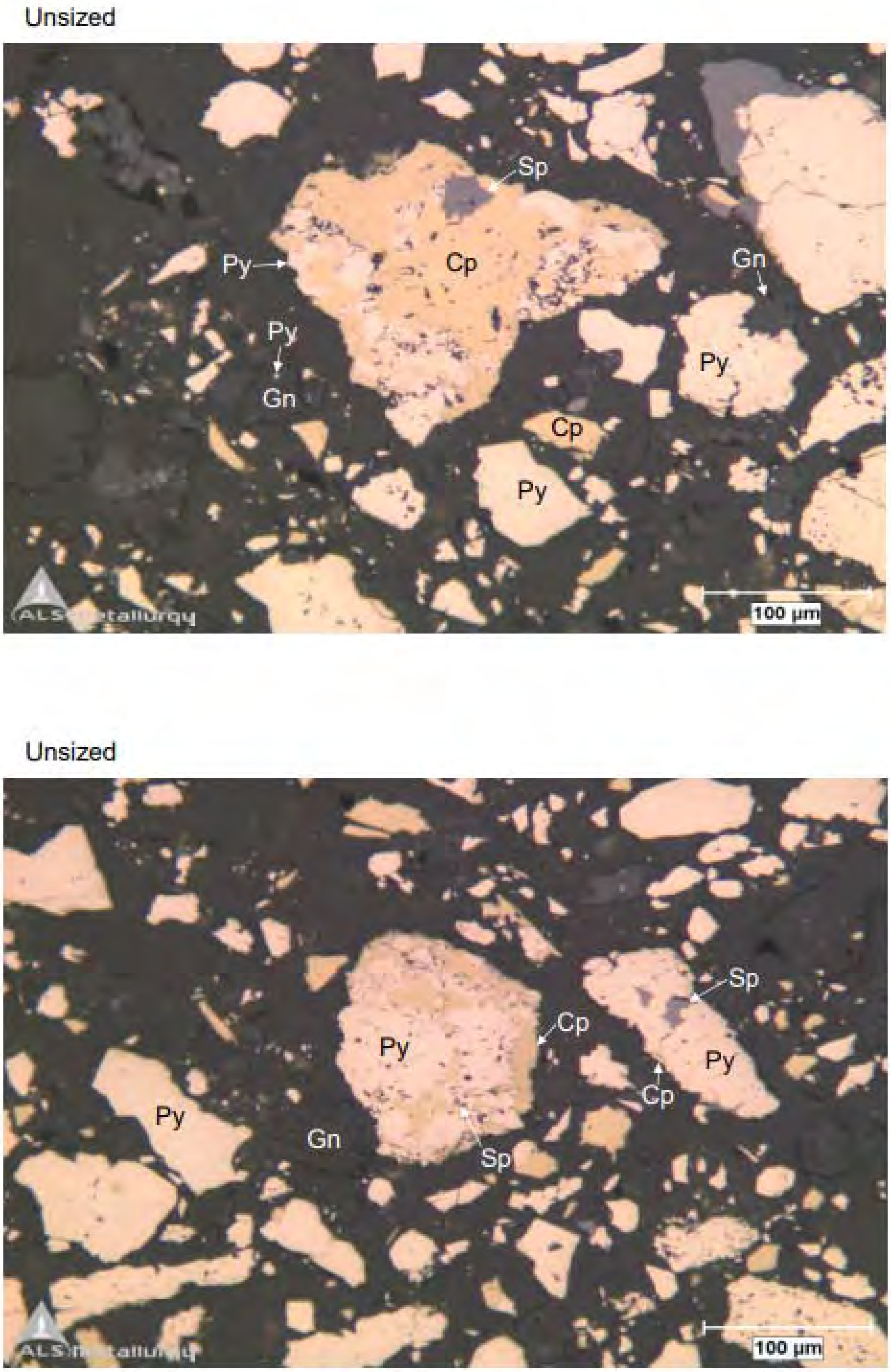


Figure 13.2. Sample photomicrograph 1 (after Roulston and Mehrfert, 2014).



*Cp-Chalcopyrite, Sp-Sphalerite, Py-Pyrite, Gn-Gangue.

13.2.4 Cleaner Flotation Response

A preliminary batch cleaner test was completed on Composite 1. A summary of the conditions and results from this test can be found in Figure 13.4. The test was completed at a primary grind of 51µm K_{80}, with a regrind discharge of 16µm K80, and with a rougher and cleaner pH of 11.0.

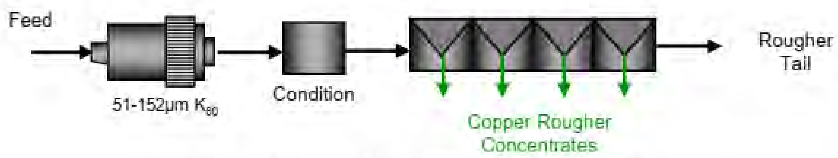
A copper concentrate grading 22 percent copper was produced, recovering about 81 percent of the feed copper. The concentrate appeared to be diluted with pyrite. Mineralogical analysis would be required to determine whether the remaining pyrite is due to physical interlocking or reported through insufficient selectivity. Further testing would be required to determine whether improvement could be made; additional regrinding, higher pH or the addition of a pyrite depressant such as cyanide may improve performance.

In the concentrate, gold graded slightly over 1 g/tonne and silver graded about 36 g/tonne. Recovery of gold and silver to the concentrate was only about 14 and 30 percent, respectively. While gold may be of sufficient grade to merit credit from the smelter, silver would likely not grade high enough for credit.

Most of the gold and silver reported to the tailings, which suggests that the minerals may be mostly associated with pyrite, however, some of the gold and silver is free, associated with copper sulphides or associated with other minerals that reported to the concentrate. There may be the potential for further recovery of these minerals from tailings streams through cyanide leaching.

Figure 13.3. Rougher flotation response, flow-sheet summary (after Roulston and Mehrfert, 2014).

Flowsheet Summary



Condition and Reagent Summary

Stage	pH	Redox mV	Reagent - g/tonne Lime	Reagent - g/tonne 3418A
Primary Grind	5.0 to 10.4	-308 to 55	750 to 7500	-
Conditioner	11.0 to 12.0	-500 to -105	0 to 5700	-
Roughers	11.0 ro 12.0	-99 to 45	0 to 800	85 to 90

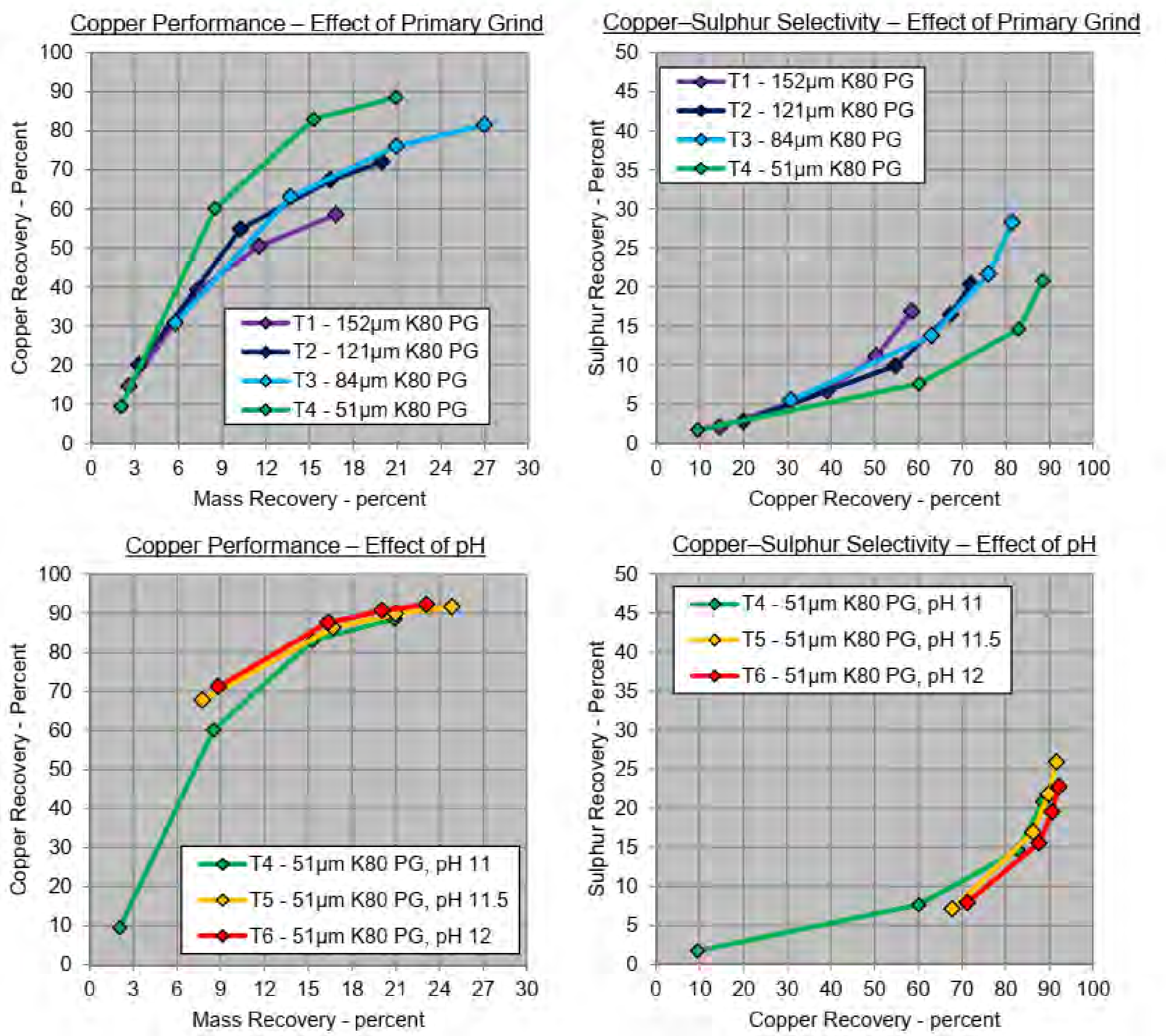
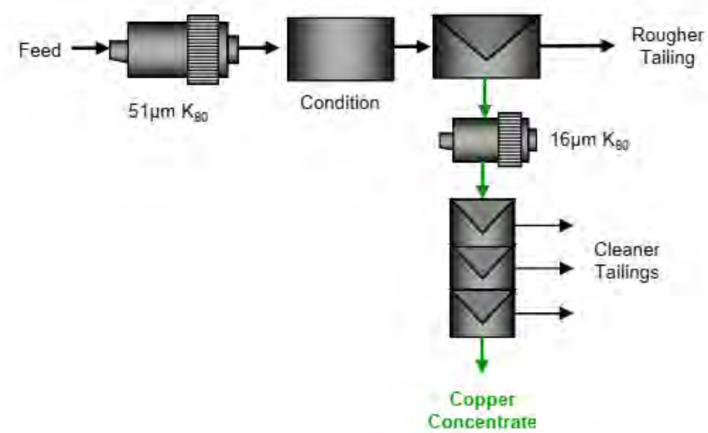


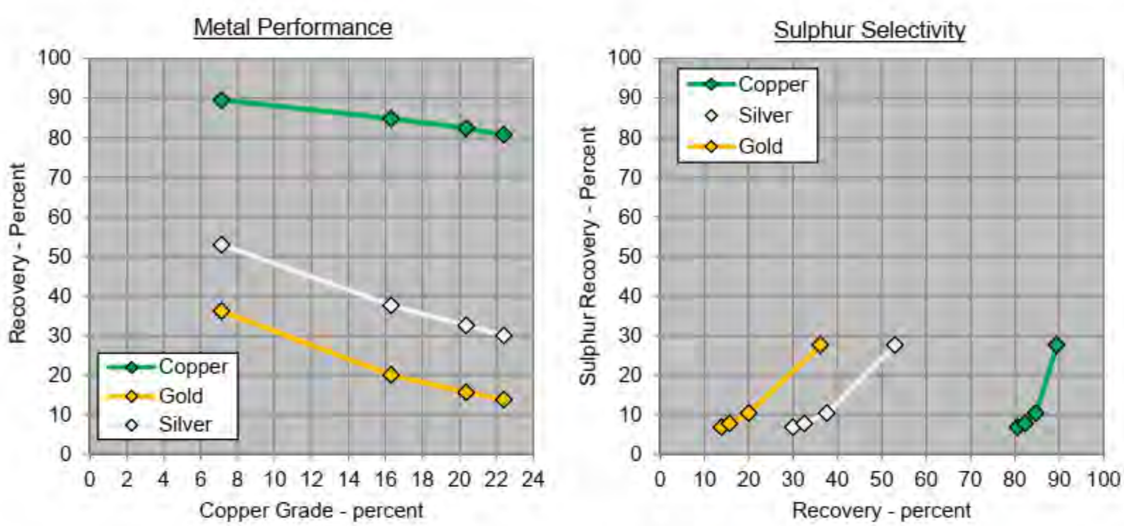
Figure 13.4. Cleaner flotation response, flow-sheet summary (after Roulston and Mehrfert, 2014).

Flowsheet Summary



Test Condition Summary

Stage	pH	Redox mV	Reagent - g/tonne	
			Lime	3418A
Primary Grind	9.4	-167	7500	-
Conditioner	11.0	-203	600	-
Rougher	11.0	-143 to -139	300	90
Regrind	10.9	-195	500	-
Cleaner	11.0	-210 to -117	90	25



13.3 Metallurgical Test Conclusions and Recommendations

- The composite contained about 2 percent copper and 0.7 g/tonne gold. From this, a concentrate grading about 22 percent copper and 1 g/tonne gold was produced. This represented about 81 percent of the feed copper and 14 percent of the feed gold.

- The composite had a very complex mineral texture, which to reach the achieved results, fine primary grinding and regrinding of 51 and 16µm K_{80}, respectively, was required. In addition, the composite contained very high levels of pyrite; this required the use of a selective collector, Cytec 3418A and high lime dosages to achieve a pH of 11.0 throughout the circuit to depress the pyrite

- These tests reported that copper recoveries for the base case rougher test were 58.5%, with poor chalcopyrite-pyrite liberation at a course 152-micron (um) grind size. Five additional rougher tests at increasingly finer grind sizes (down to 51 um) and variable pH reported much improved copper recoveries to a maximum of 92.2%; with gold and silver recoveries of 35.5% and 61.3%, respectively (51 um grind size and pH 12 test parameters). The test program was limited, improvements in performance are likely possible. Finer primary grinding would likely be required to improve rougher circuit recovery.

- A single preliminary cleaner floatation test utilizing a 16-um re-grind of the rougher concentrate produced a 22.4% copper concentrate. To improve cleaner circuit performance, finer regrinding would likely be required. Increasing selectivity through higher pH or addition of a pyrite depressant may also improve cleaner circuit performance. Testing would be required to confirm.

- Most of the gold and silver in the feed reported to the tailings. The upgrading of these metals in the concentrate likely indicated that some was either freely liberated or associated with copper sulphides, or some other recovered mineral. The remainder of the gold and silver was likely associated with pyrite in some manner. There may be the potential for additional recovery of these metals through cyanide leaching of tailings streams.

- Further metallurgical tests were recommended to improve pyrite selectivity and increase cleaner flotation concentrate copper grades.

14 Mineral Resource Estimates

14.1 Introduction

The mineral resource estimation of the Chu Chua mineralized zone was completed by Mr. Nicholls who is a "Qualified Person" with respect to the style of mineralization and mineral resource estimation as defined by NI 43-101. The mineral resource modelling and estimation was carried out using a 3-dimensional block model, using commercial mine planning software Micromine (version 12.05.03 and version 21.0.5.49 for pit optimization).

The Chu Chua mineralized zone block model utilised a parent block size of 2 m (X) x 25 m (Y) x 10 m (Z) with sub blocking down to 0.5 (X) m x 2.5 m (Y) x 1 m (Z). The resource modelling utilised 55 historic core holes completed between 1978 and 1990. APEX personnel have not overseen any of this historic drilling, but site visit has been performed by Mr. K. Raffle during 2008 and 2012, and subsequently by Mr. Rodriguez on July 14, 2021, to verify current site access and conditions. Mr. Raffle has overseen the compilation of the historical drill hole data for the use in this resource estimation.

Definitions used in this section are consistent with those adopted by the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") Council in "Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines" dated November 29, 2019, and "Definition Standards for Mineral Resources and Mineral Reserves" dated May 10th, 2014 and prescribed by the Canadian Securities Administrators' NI 43-101 and Form 43-101F1, Standards of Disclosure for Mineral Projects. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

14.2 Data

14.2.1 Micromine Database

The drilling database used is current up to April 1, 2012. This incorporates all available diamond drilling and analytical data. All data provided for the mineral resource estimation was copied from excel spread sheets into Micromine format. The five .xlsx files that were unitised were:

- CC_DH_Collars_2011.xlsx – Collar file
- DH_downhole surveys verified2010.xlsx – Survey file
- DH_Chu-Chua logs verified2010.xlsx – Geology file
- DH_Assays_verified 2010.xlsx – Sample file
- Chuchua_DEM_final.XYZ – DEM surface file

There was a total of 99 diamond drill holes within the provided export of which 50 were used in the resource estimation. Spacing between drill lines is quite varied with drilling conducted not on set line spacing. The drill line spacing varies from 10 m to 45 m, with an average of about 20 m between drill lines. The sample file comprises 873 samples of variable length but when composited in Micromine yielded a database of 251 sample composites for the Chu Chua mineralization that were used for the mineral resource estimation.

Data supplied and utilised in Micromine included collar easting, northing and elevation co-ordinates, lithology information, and Cu, Pb, Zn, Ag, and Au assay data, as well as bulk density data (specific gravity) data. The collar co-ordinates were obtained by a combination of Differential GPS drill hole collar pickups and the use of historic collars provided from the drill logs. The elevation of the drill holes that did not have their collar picked up had a Reduced Level (RL) assigned using the provided DEM topographic surface in Micromine. The method of the down hole surveys for the Chu Chua mineralized zone varies from dip only acid etch surveys to single shot down hole surveys which provided a dip and an azimuth for the drill hole orientation. The initial collar setup was performed using a compass and a clinometer. Where no azimuths were not able to be obtained from the down hole surveys then the collar azimuth setup was applied to the dip only down hole surveys.

14.2.2 Collar Coordinates

A total of 99 diamond drill holes are known to have been drilled on the Chu Chua properties of which fifty of these holes were used in the resource. Due to the lack of historic documentation of the drill hole collar set out, it was decided to ground truth the collar positions and resurvey where possible. This was conducted using a Trimble R8 GNSS GPS system that has a horizontal accuracy of 0.25m and vertical accuracy of 0.5m. Out of a total of 50 diamond drill holes that have been used in the resource estimation a total of 26 holes have had the drill hole collars picked up by locating the actual drill hole collar casing sticking out of the ground. Of the remaining 24 holes there were an additional 4 holes where a 10m x 10m clearing was visible and picked up. For the remaining drill holes that could not be verified on the ground, a variety of registration techniques were utilised to better constrain the reported historic drill hole co-ordinates. The original historic drill plans that were completed soon after the completion of drilling were registered using the 26 re-surveyed drill holes and used in conjunction with notable cleared drill pads observed on Bing Maps aerial photography. From a combination of these techniques new easting and northing co-ordinates were generated for the remaining 20 drill holes. The elevation for these drill hole collars were generated by assigning a new RL using the surveyed topographic DTM surface in Micromine.

This surface DTM was created by walking 25m spaced line traverses with points collected every 3m along the lines. This was conducted using the Trimble R8 GNSS GPS system. Due to some spikes in the data this data set was then smoothed out to provide a more realistic set of points that could be used for the surface DTM surface. The size of the surface DTM covered the entire resource area of which is 650m wide x 850m long in size.

14.2.3 Sampling/Assaying

Due to the historic nature of the diamond drilling and the lack of historic documentation there is limited information about the sampling and assaying methodology conducted for the Chu Chua diamond drilling.

14.2.4 Downhole Surveys

Craigmont drilled 55 BQ and AQ diamond drill holes between 1978 and 1982.The down hole surveys (acid etch) that were completed on this drilling only recorded the down hole dip of the drill hole. There were no azimuth surveys able to be collected using the acid etch technique. An assigned azimuth was assigned to the drill hole based on the collar setup (usually 90°). The maximum hole depth of these drill holes range from 37 to 688 m. Due to the depth of the drill holes drill hole deviation in the azimuth is expected and as such raises concerns over the exact location of the massive sulphide/stringer mineralization intersected in the drilling.

During 1988 and 1991 Minnova completed 46 NQ size diamond drill holes. The holes that were drilled between 1988 and 1989 had down hole dip measurements collected every 30 to 40 m using an acid dip test but failed to collect any azimuth readings. These holes were generally shallow with the maximum depth of 120 m. Although these holes are relatively shallow drill hole deviation in the azimuth is still expected. As such it raises into question the exact locations of the deeper massive sulphide/stringer intersections.

The 1990 to 1991 drilling that Minnova conducted were all deeper drill holes ranging from 100 to 813m in depth. These drill holes had sporadic dip and azimuth surveys collected on average every 250m intervals down the hole. There was dip only surveys collected at around 60 metre intervals. All the 1990 to 1991 drill hole surveys were collected using a single shot camera.

Based on the above-mentioned concerns over the accuracy of the down hole positions of the drill holes drilled at the Chu Chua mineralized zone, this has a direct implication on the classification of the resource.

14.3 Geological Modelling

Mineralized lode wireframes were constructed and used to constrain the resource block model (Figures 10.1, 10.2, and 10.3). The Chu Chua mineralization consists of copper, lead, zinc, silver, and gold. A correlation table of the five elements indicated that there was a strong correlation between copper and silver. As copper and silver are the dominate metals of interest it was decided to use these as the control on the interpretation of mineralization. A primary lower cut-off of 0.5% copper and secondary 1 to 5 g/t silver cut-off was used to constrain the outer edges of the lode interpretation. A copper block cut-off grade of 1.0% was used in subsequent reporting of the resource as a base case that is prospective for development based on the project's favorable location for access, power, water, labor force and other assumptions derived from deposits of similar type and scale. With this 1% reporting lower cut off in mind it was decided to use a 0.5 % Cu lower cut off for the lode interpretation to ensure that the zones were mappable from drillhole to drillhole and to also ensure any composites that were just under the reporting cut-off of 1 % Cu would be used in the interpolation process. This is important as if there is any mineralization just under the 1 % Cu reporting cut off (e.g., 0.5 to 0.9 % Cu) and situated between two zones of higher-grade mineralization, then it would be anticipated that this lower grade zone would be in fact mined as a part of the higher-grade zone. Removing the lower than 1 % Cu samples from the interpretation process may cause an amount of selectivity that would not be able to be achieved in a possible mining scenario.

The wireframes included some zones where there was no mineralization if the down hole length was less than two metres. There are gaps in the samples that have been collected over the mineralized ore zones, so for completeness dummy intervals were inserted in these gaps and assigned a 0.0% or 0.0 g/t grade. This is discussed further under Drill hole Flagging and Compositing.

The interpretation was conducted on 25 m spaced east-west cross sections looking north with a window of 12.5 m towards and away. The lodes were extrapolated 12.5 metres along strike or halfway to the next drill hole (whichever one was less), and up to around 30 m up/down dip depended on the mineralization on neighbouring sections.

The width of the ore zones tends to drop off around the 180m below surface. Widths range from up to over 40 m to less than one metre. Although mineralization extends down to 560m below surface it was decided to only wireframe mineralization with reasonable prospects of economic extraction.

All drilling data was used to conduct and guide the lode wireframe interpretation.

14.4 Assay Summary Statistics

There are five elements of interest that were defined by the Chu Chua Mineralized Zone resource. These include Copper Cu, Pb, Zn, Au, and Ag. Typical down hole copper profiles are shown in Figures 10.1, 10.2, and 10.3. Summary statistics and histograms were calculated for the Chu Chua mineralized zone (Table 14.1 and Figures 14.1 through 14.6).

The precious metal Lead (Pb) was reviewed and excluded from the resource work below, because only it is in such low concentrations (except for CC-28) at and near it's detection limit, therefore it is not included in the final resource estimate. For this reason, the grades displayed in CC-28 raise concerns over the Pb analysis of this drill hole. It is recommended that this drill hole be re-analysed for Pb. Of the total 597 samples within the Chu Chua mineralized domain only 80% of these samples assayed for Pb. The statistics for Lead are presented in Table 5 for comparative purposes; however, they are not included in the resource estimate or any other tabulation below.

Table 14.1. Summary Statistics for Assay Data within the Chu Chua Mineralized Zone

	Copper (%)	Lead (%)	Zinc (%)	Silver (g/t)	Gold (g/t)
Number	597	487	590	591	595
Minimum	0.001	0	0	0	0
Maximum	15.3	27.9	8.2	76.2	5.12
Mean	2.168	0.305	0.346	9.85	0.554
Median	1.505	0.02	0.18	8.1	0.41
Std Dev	2.271	2.674	0.557	8.142	0.578
Variance	5.156	7.15	0.311	66.286	0.334
Std Error	0.004	0.005	0.001	0.014	0.001
Coeff Var	1.047	8.778	1.61	0.827	1.043

Correlations between the various metal grades were calculated for the Chu Chua mineralized zone. There is a strong correlation between copper and silver and also between gold and silver (Table 14.2 and Appendix 1). A moderate correlation between gold and copper exists and to a lesser degree between silver and zinc. There is a poor correlation with lead in respect to the other metals.

Table 14.2. Correlation Between Assay Values Within the Chu Chua Mineralized Zone

	Cu	Pb	Zn	Ag	Au
Cu	1	-0.02	0.25	0.74	0.48
Pb	-0.02	1	0.02	-0.04	-0.02
Zn	0.25	0.02	1	0.35	0.32
Ag	0.74	-0.04	0.35	1	0.69
Au	0.48	-0.02	0.32	0.69	1

14.5 Drill Hole Flagging and Compositing

Drill hole samples that were situated within the Chu Chua mineralized wireframes were selected and flagged with the wireframe name/code.

The flagged samples were checked visually next to the drill hole to check the automatic flagging process worked correctly. All samples were correctly flagged and there was no need to manually flag or remove any samples.

Review of the sample lengths was conducted for all Chu Chua samples that were constrained within the mineralized zone. The review showed that the Chu Chua sample lengths vary form 0.2 m to 11.4 m in length (Table 14.3 and Figure 14.6). Looking at the samples, there were four main populations, one being 0.5 m to 1.0 m in length, 1.0 m to 1.5 m in length, 1.5 m to 2.0 m in length and finally 4.5 m to 5 m in length. Essentially

99% of the sample data is less than 5 m in length. It was decided that 5 m should be used for a composited sample length.

Table 14.3. Sample Length Statistics for the Chu Chua Domain

	Un Composited Width
Number	597
Minimum	0.2
Maximum	11.4
Mean	1.754
Median	1.5
Std Dev	1.22
Variance	1.49
Std Error	0.002
Coeff Var	0.696

It should be noted that there exist gaps in the samples that have been collected to date. It is unknown if these gaps were in fact core loss or visually not mineralized and deemed not required for sampling. Either case missing sampled should be inserted. A part of the compositing process was to insert these missing intervals in the existing sampling. These samples were given a 0.0 % or 0.0 g/t grade for copper, lead, zinc, silver, and gold. There was a total of 8 samples/gaps inserted into the sample file prior to compositing.

Length Weighted composites were calculated for Cu, Pb, Zn, Ag and Au. The compositing process starts from the first point of intersection between the drill hole and the Chu Chua mineralized wireframe and is halted upon the end of the mineralized wireframe.

Upon completion of the 5 m compositing, it was decided to examine the sample population which is less than 5m in width. The average of the remaining samples less than 5 m in length was 1.973% Cu compared to the 5 m composite length samples of 1.981% Cu. The inclusion of the sub 5 m composite lengths dropped the global average copper grade by 0.002%. It was decided to include all samples in the estimation as this was deemed to be within tolerances. This produced 251 composited with an average grade of 1.979% Cu.

The compositing process did not add any undue bias to the data (Table 14.4). The composited samples were used for all sample statistics, capping, estimation input file and validation comparisons.

Figure 14.1. Histogram of Cu Assay Data Within Chu Chua Mineralized Zone

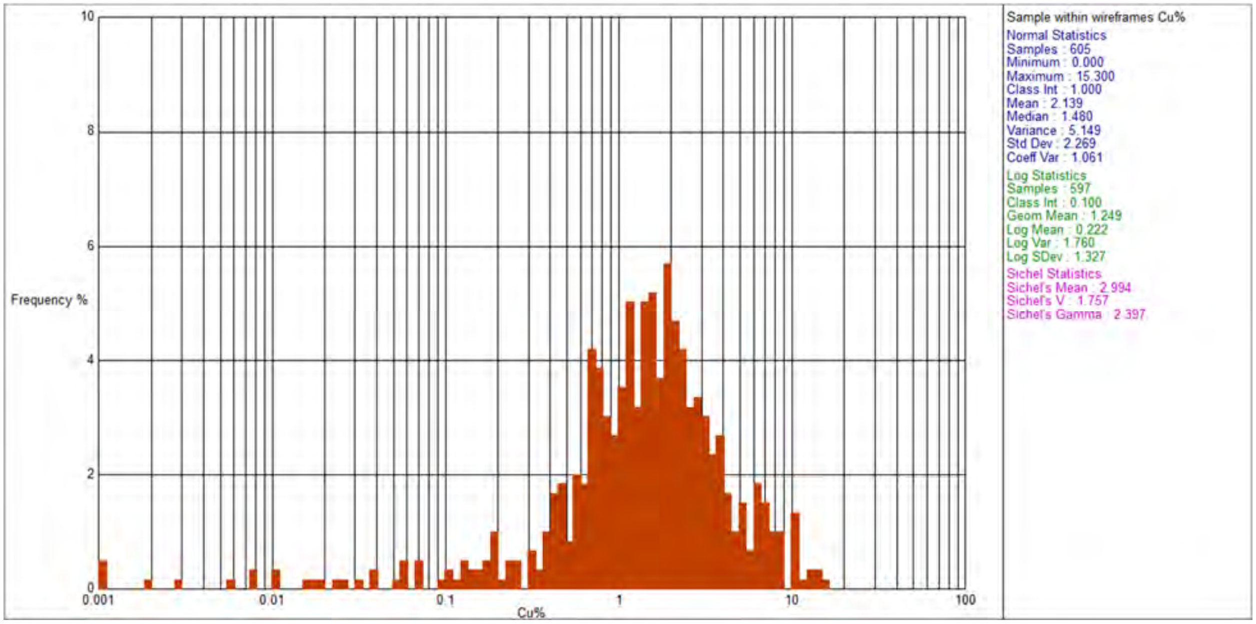


Figure 14.2. Histogram of Pb Assay Data Within Chu Chua Mineralized Zone

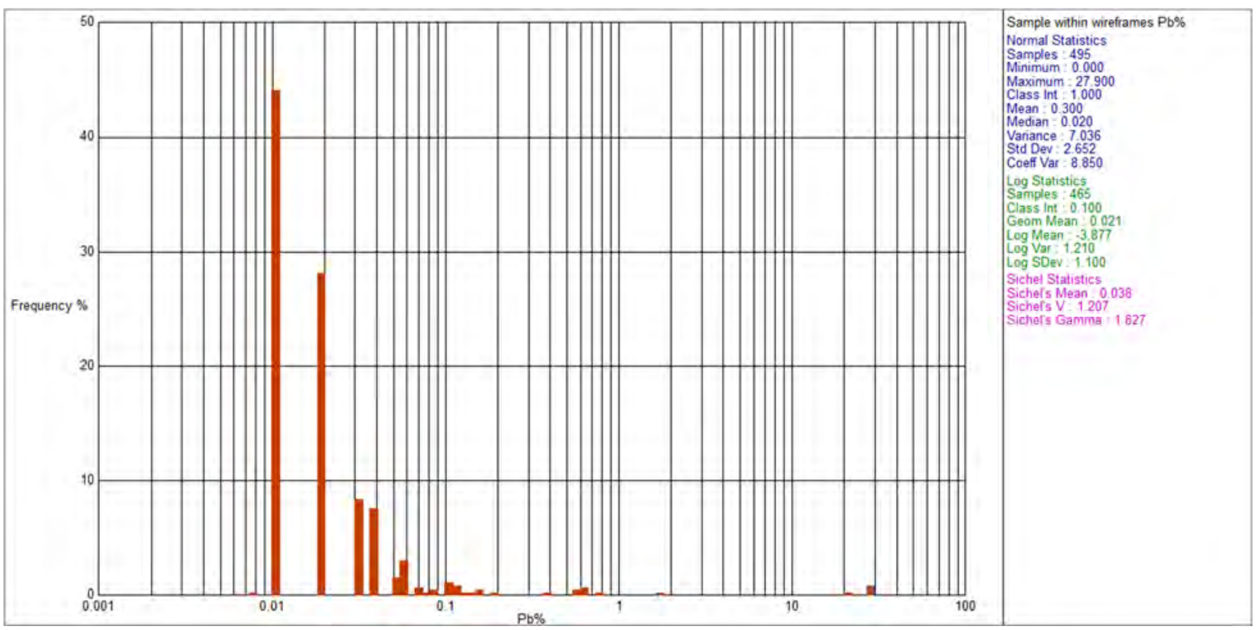


Figure 14.3. Histogram of Zn Assay Data Within Chu Chua Mineralized Zone

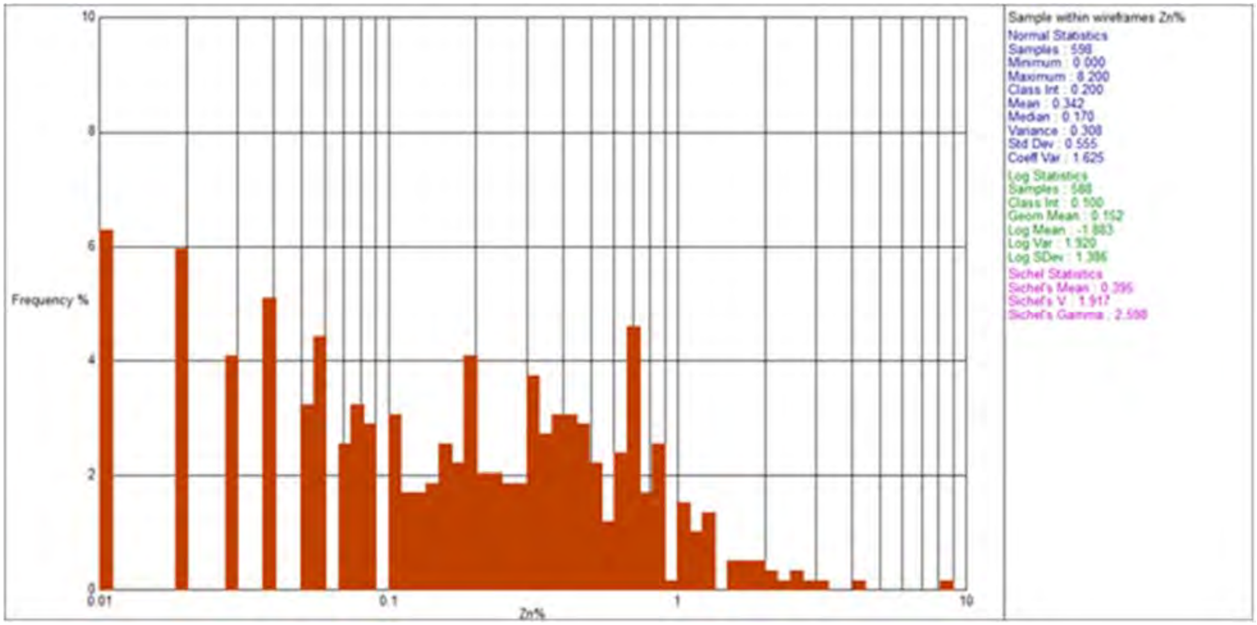


Figure 14.4. Histogram of Ag Assay Data Within Chu Chua Mineralized Zone

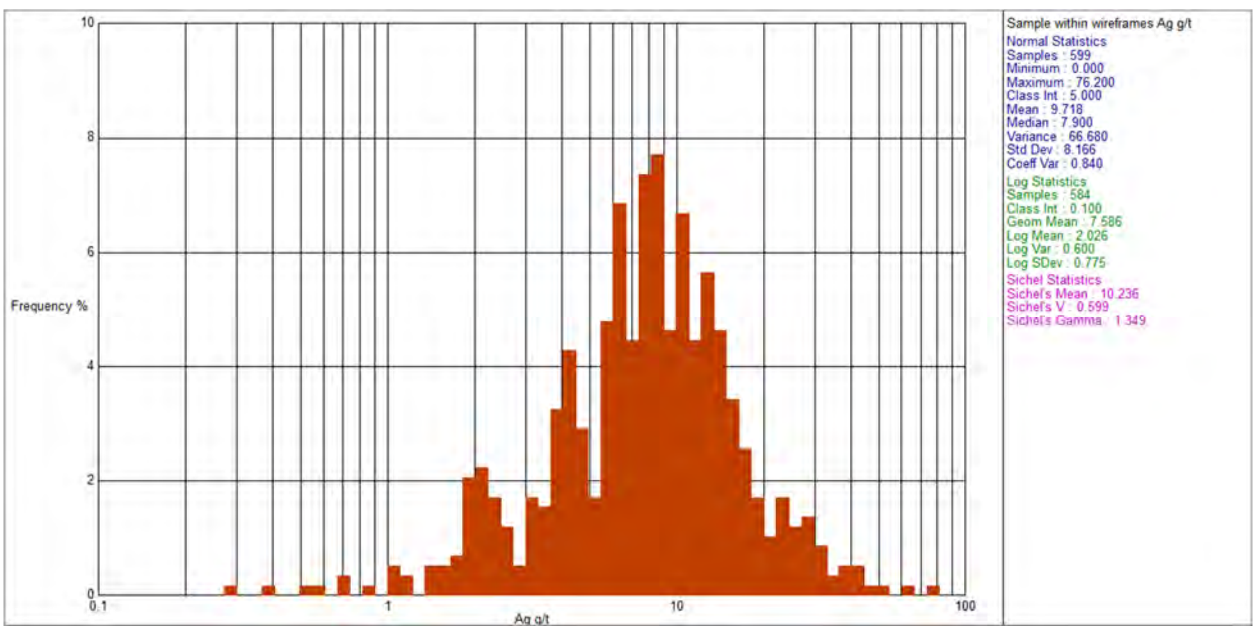


Figure 14.5. Histogram of Au Assay Data Within Chu Chua Mineralized Zone

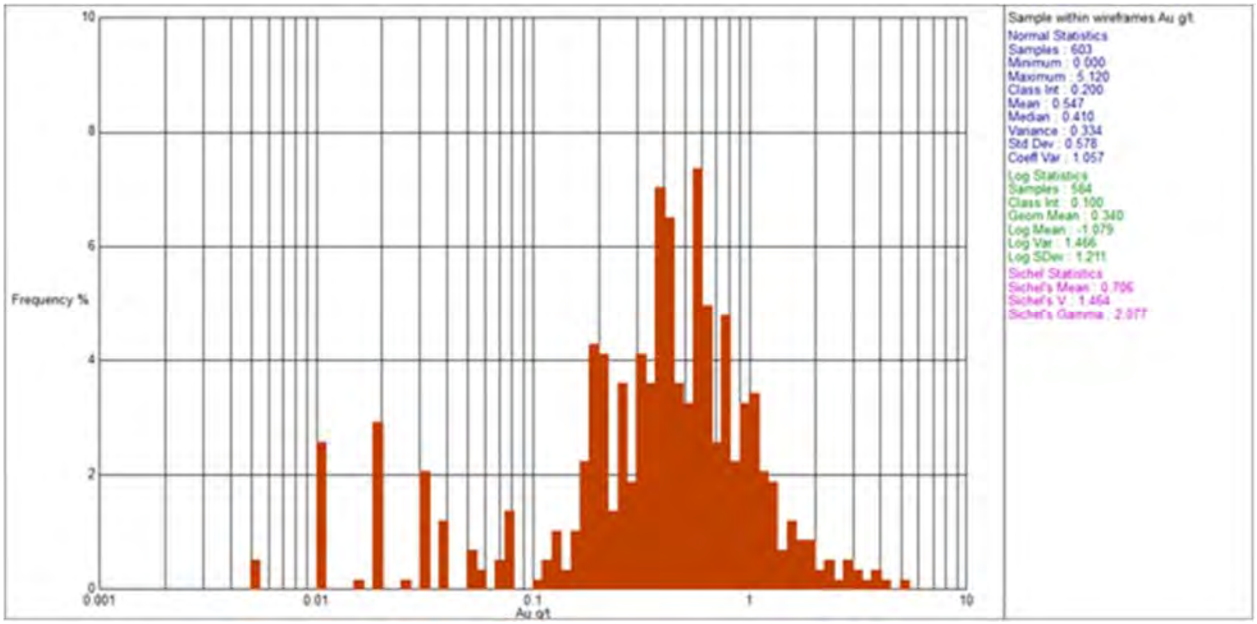


Figure 14.6. Histogram of Sample Length for the Chu Chua Domain Prior to Compositing

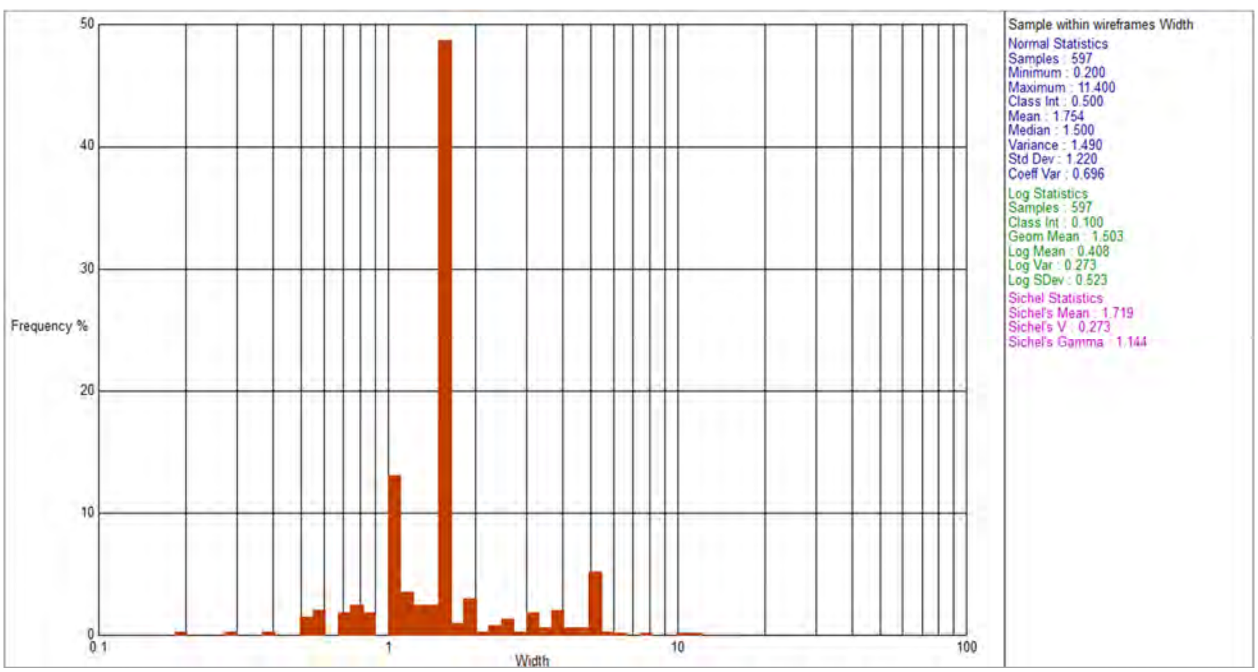


Table 14.4. Composited Sample Summary Statistics for the Chu Chua Domain

	Un Composted Samples				Composited Samples			
	Cu%	**Zn%**	**Ag g/t**	**Au g/t**	**Cu%**	**Zn%**	**Ag g/t**	**Au g/t**
Number	597	590	591	595	251	250	249	250
Minimum	0.001	0	0	0	0.006	0	0	0
Maximum	15.3	8.2	76.2	5.12	8.778	2.64	62	4.301
Mean	2.168	0.346	9.85	0.554	1.979	0.331	9.263	0.5
Median	1.505	0.18	8.1	0.41	1.541	0.221	7.663	0.414
Std Dev	2.271	0.557	8.142	0.578	1.634	0.354	7.049	0.479
Variance	5.156	0.311	66.286	0.334	2.669	0.125	49.693	0.23
Std Error	0.004	0.001	0.014	0.001	0.007	0.001	0.028	0.002
Coeff Var	1.047	1.61	0.827	1.043	0.826	1.068	0.761	0.959

14.5 Top Cut / Capping

The composited sample data within the Chu Chua lode wireframes were used for top cut/capping analysis. All elements within the Chu Chua mineralized domain were examined individually to determine suitable capping to apply to the respective grade populations. A combination of histograms and probability plots were used to determine the extreme values to be cut (Appendix 2 and 3). During the estimation the extreme values were capped to the values provided in (Table 14.5).

Table 14.5. Capping Levels Applied to the Chu Chua Mineralized Domain

Grade Element	Capping Level	No Of Samples Capped
Cu	5.90%	12
Zn	0.86%	16
Ag	32g/t	3
Au	1.4g/t	6

14.6 Grade Continuity

The variography utilized the composite data within the mineralized Chu Chua lode wireframes to produce spherical semi variograms. Each element was modelled individually to determine the continuity and orientation of mineralization. Some difficulties were encountered with the semi variograms for some of the elements due to limited number of samples. Table 14.6 provides the search criteria and the limits used in the estimation process. The individual variograms are provided in Appendix 4.

Table 14.6. Semi-variogram Parameters for the Composited Chu Chua Domain

Grade Element	Nugget (%)	C1 (gamma)	Range 1 (m)	Range 2 (m)	Range 3 (m)
Cu	13.6	1.9	49	32	3
Zn	14.3	0.059	52	57	3
Ag	19.6	35	32	36	2
Au	12.5	0.105	45.1	26	4

14.7 Search Ellipsoids

The estimation of the Chu Chua mineralized zone was constrained within an-isotropic ellipsoids. The ellipsoid orientation was aligned to the strike and the dip of the lode being estimated. Each grade element was looked at individually and the search ellipsoid plunge was tailored to the observations from the variographic analysis. The search ellipsoid orientation is shown in Table 14.7. These search orientations honour the geological interpretation of the Chu Chua mineralization.

Table 14.7. Search Ellipsoids Used in the Chu Chua Estimation Process

Lode	Strike	Dip	Plunge			
			Cu	Zn	Ag	Au
Lode01	178°	88°	27°	44°	18°	41°
Lode02	176°	90°	27°	44°	18°	41°
Lode03	174°	88°	27°	44°	18°	41°

14.8 Bulk Density

A total of 522 bulk density measurements were collected from drill core within the Chu Chua area. The samples were tagged with the lode name and separated for use in the estimation process. A total of 465 samples were collected from within the mineralized horizon at Chu Chua. The bulk densities for each lode were examined using normal histograms to determine if there were any outliers present. Only one outlier was identified (CCF-31 – 6.49t/m^3) and subsequently was removed from the bulk density dataset. This produced an average bulk density (specific gravity) of 4.366 t/m^3. A breakdown of the bulk density by lode is presented in Table 14.8.

The bulk density samples were collected by Minnova Inc. between 1998 and 1991. Due to the lack of historic documentation the methodology adopted to calculate the bulk densities is unknown but is of the authors opinion that these measurements seem realistic based on the geology encountered in the drill logs.

Table 14.8. Bulk Density Values by Lode

Lode	No. Samples	Average Density
All	464	4.362
Lode01	107	4.372
Lode02	331	4.329
Lode03	26	4.732

14.10 Block Modelling

As a result of the varied historic drill spacing a parent block model size of 2 m (X) x 25 m (Y) x 10 m (Z) was chosen for the Chu Chua resource estimation. This block selection honours the approximate drill hole spacing, which varies from 10 m to 45 m, with an average of about 20 m between drill lines. The block size dimensions were selected with the with respect to the current level of drilling density in mind, to ensure the resultant block model was not over smoothed or artificially selective. The block model extents were extended far enough past the mineralized wireframe to encompass the entire mineralized domain. Table 14.9 presents the coordinates ranges and block size dimensions used to build 3D block model from the mineralization wireframes. Sub blocking was used to more effectively honour the volumes and shapes created during the geological interpretation of the mineralized lodes. The blocks were oriented in a north-south orientation parallel to the strike of the mineralization. There were a total number of 19,426 blocks.

Table 14.9. Block Model Extents and Cell Dimensions for the Chu Chua Domain

Deposit	Block Model Dimensions	Easting	Northing	RL (m)
Chu Chua	Maximum	704600	5696505	1860
	Minimum	704400	5695855	1180
	Parent Cell Size	2	25	10
	Sub Blocking Cell Size	0.5	2.5	1

Upon setup of the block model, the volume of the block model lode was cross checked with the volume of the wireframes to check there were no significant discrepancies between the two. The block volume was only 0.01% different from the wireframe volume. Refer to Table 14.10 for a comparison.

Table 14.10. Volume Comparison between Block model and Wireframe for the Chu Chua Deposit

Lode	Wireframe Volume (m^3)	Block Model Volume (m^3)	% Difference
Lode01	184,862	184,974	0.06%
Lode02	445,453	445,351	-0.02%
Lode03	19,214	19,108	-0.56%
Total	649,529	649,433	-0.01%

14.10 Mining and Geological Surfaces

The Chu Chua mineralization is overlain with between 1 and 17 m of transported overburden. A DTM surface of the base of the overburden was created using the down hole geology logs from the diamond drilling. This was intern used to cut the top of the mineralized lode wireframes as the overburden. The block model was then constrained to the modified Chu Chua lode wireframes.

There is no open pit or underground workings to Boolean out of the block model.

14.11 Grade Estimation

The Chu Chua mineral resource estimation was calculated using Ordinary Kriging (OK) grade estimation technique for each metal element. No trends were applied to the OK grade estimation. The kriging parameters were based on the variography conducted on the individual grade elements within the Chu Chua mineralized domain. Estimation was only calculated on parent blocks. All sub blocks within the parent block were assigned the parent block grade. A block discretisation of 2 (X) x 5 (Y) x 3 (Z) was applied to all blocks during kriging. The Chu Chua lode wireframes were treated as hard boundaries, which meant that only samples within the lode were used to estimate the grade of the blocks within that lode.

There were four passes of estimation conducted. The size of the elliptical search ellipsoid was based on the suggested ranges obtained from the variography. The estimation criteria for each pass are provided in Table 14.11.

Table 14.11. Search Ellipsoid Criteria for the Chu Chua Grade Estimation

Run Number	Minimum No. of Samples	Minimum No. of Holes	Factor x Radius	% Blocks Estimated
1	12	3	1	0%
2	8	2	2	46%
3	4	1	3	52%
4	1	1	30	2%

14.12 Model Validation

14.12.1 Visual Validation

The blocks were visually validated on cross section comparing block grades versus the sample grades for all sections and drill holes. In addition, the block and sample data were compared for each grade element, by lode, northing and elevation (RL). These comparisons are present in Table 14.12, Figures 14.7, 14.8, 14.9, and in Appendix 5.

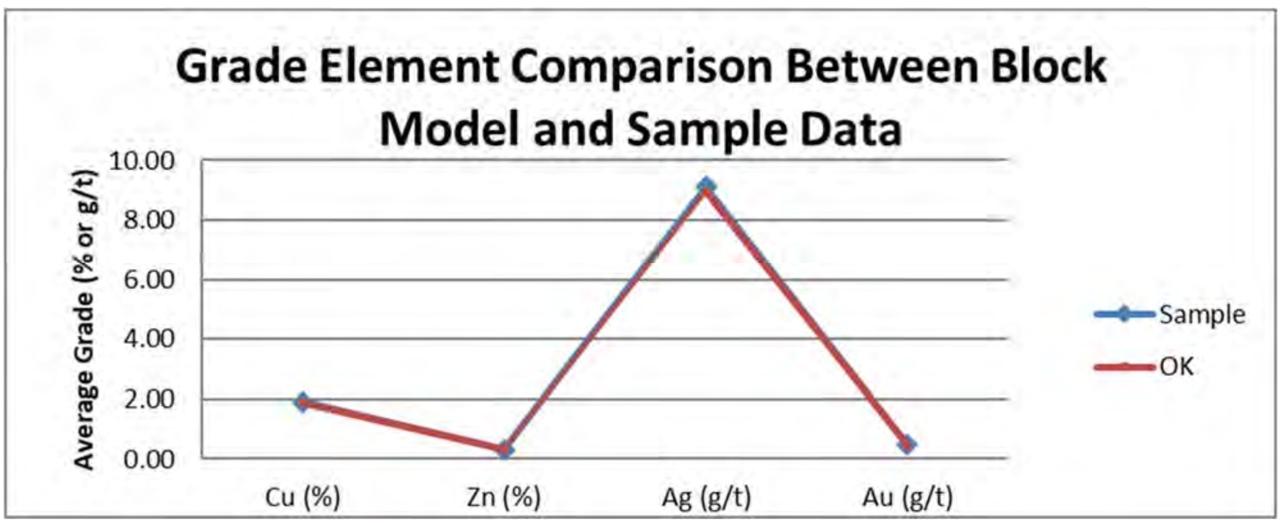
Table 14.12. Global Average of Capped and Composited Sample Grades vs. Calculated Model Grades

Grade Element	Sample (average)	OK Block Model (calculated grade)
Cu %	1.92	1.90
Zn %	0.30	0.32
Ag g/t	9.12	8.96
Au g/t	0.47	0.47

14.12.2 Statistical Validation

Figure 14.7 and Table 14.12 show the average grade of the composited capped sample data versus the block model data. It can be concluded that the average grade of the OK block model data is very close to or generally slightly lower than the composited and capped sample data. This is the expected result for well-behaved data and if the block model estimation process is being done correctly. The model data tends to have a reduced dispersion of the block grades resulting from the grade estimation process. The OK block modelling and estimation process tends to lower the high-end grades compared to the sample data and increase the low-end grades compared to the sample data. This is expected with the overall smoothing of the estimation process.

Figure 14.7. Average Grade Element Comparison Between Input Sample and OK Block Model Data



14.12.3 Lode Comparison

The input composited sample average that was broken down by lode was compared to the reported OK block model grade for each metal of interest for the Chu Chua Mineralized Zone (Appendix 5). Overall, the copper, zinc, silver and gold comparisons compare very well. There is some slight local over and under estimation but on the whole the differences in grade displayed in the comparisons are deemed to be within acceptable tolerances. These in combination with the global comparisons indicate that there are no concerns over the calculation of the Chu Chua estimation process. Refer to Appendix 5.

14.12.4 Northing Comparison

The input sample and block model averages were calculated on 25 m composite sections down the northing for the Chu Chua Mineralized Zone (Appendix 5). Due to the near vertical nature of the deposit this is parallel to the strike of the mineralization. The purpose is to compare the input sample file with the resulting block model data to make sure there is no gross over or under estimation occurring. The northing composites generally compare quite well. There is some local over and under estimation observed but this is to be expected with the estimation process. Overall, the block averages follow the general trend of the input sample data. Graphs of the individual grade element comparisons are provided in Appendix 5.

14.12.5 RL Comparison

The sample and block model averages were calculated on 10 m composite slices through the RL for the Chu Chua Mineralized Zone (Appendix 5). Due to the vertical nature of the deposit this is parallel to the dip of the mineralization. The purpose is to compare the input sample file with the resulting block model data to make sure there is no gross over or under estimation occurring. The RL composites generally compare quite well. There is some local over and under estimation observed but this is to be expected with the estimation process. Overall, the block average grades follow the general trend of the input sample data. Graphs of the individual grade element comparisons are provided in Appendix 5.

Figure 14.8. Cross-section showing Cu Block Model Grades (%) versus Cu Sample Grades

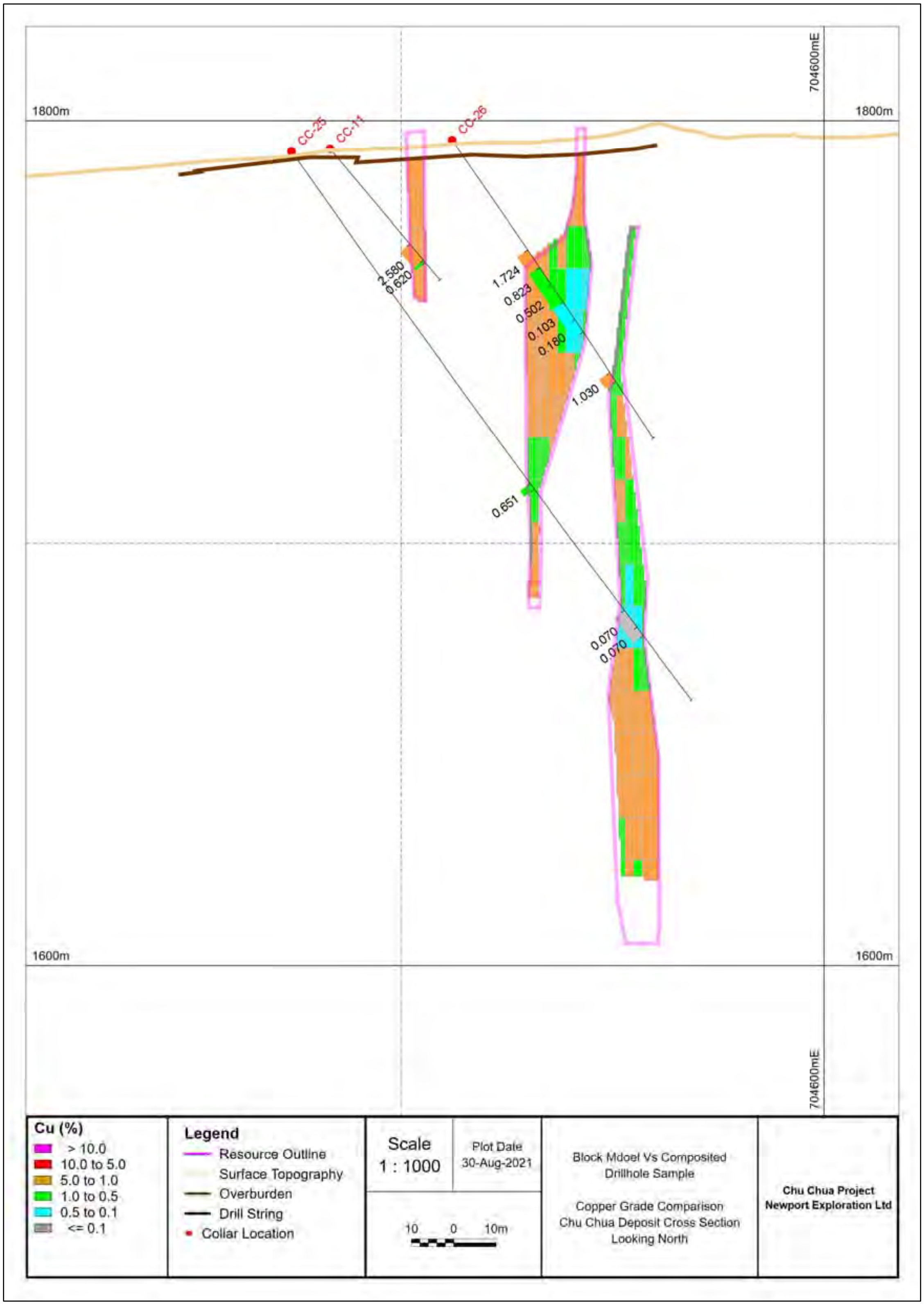
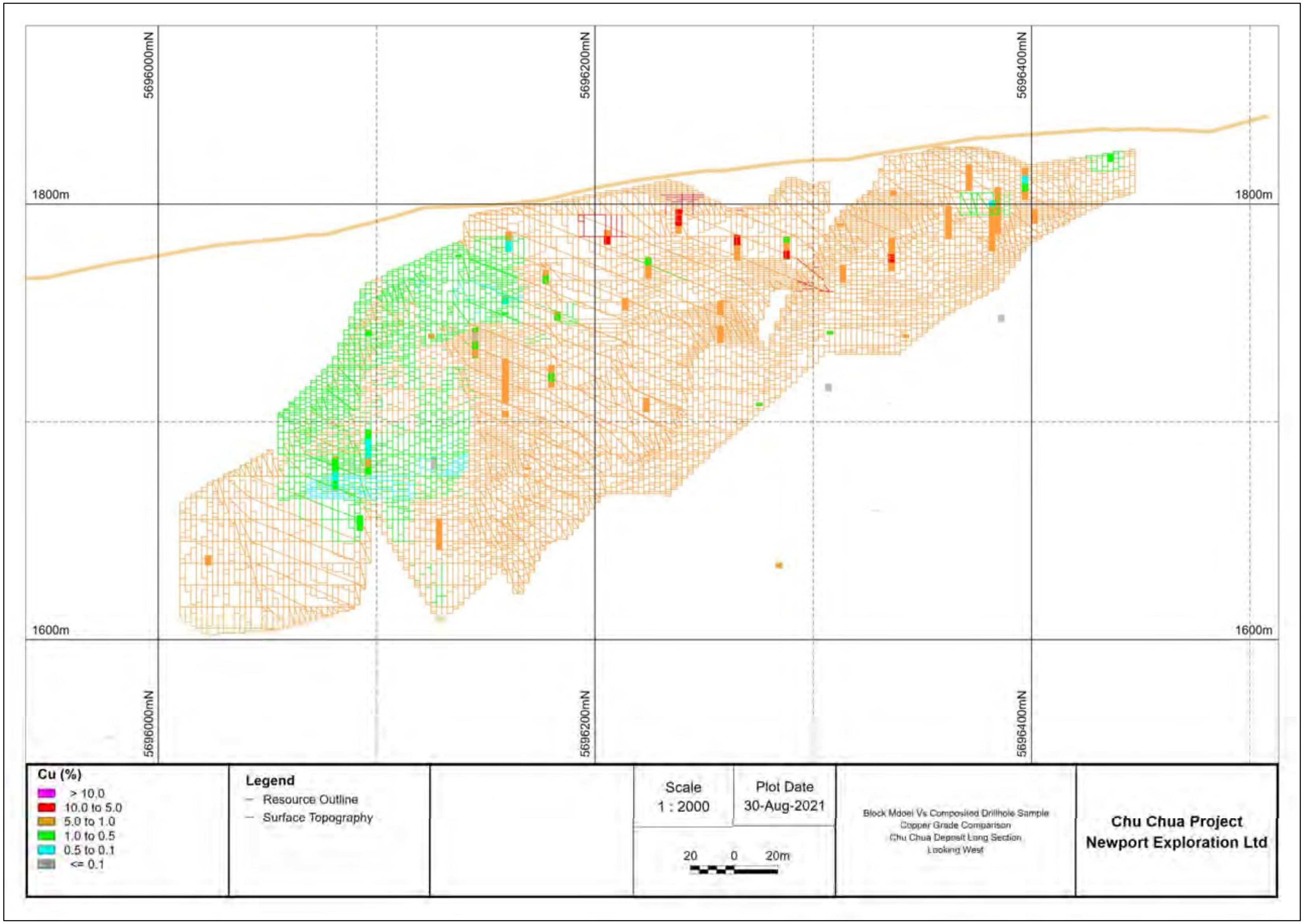


Figure 14.9. Long section showing Cu Block Model Grades (%) versus drill hole Cu Sample Grades.



14.13 Classification

The mineral resources were classified in accordance with guidelines established by the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") Council in “Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines” dated November 29, 2019, and “Definition Standards for Mineral Resources and Mineral Reserves” dated May 10th, 2014, and prescribed by the Canadian Securities Administrators' NI 43-101 and Form 43-101F1, Standards of Disclosure for Mineral Projects.

An ‘Inferred Mineral Resource’ is that part of a Mineral Resource for which quantity and grade or quality can be estimated based on geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.”

Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

This is the mineral resource estimate completed for the Chu Chua mineralized zone. This mineral resource estimate has been classified as inferred according to the CIM definition standards. This classification is based on several factors which are noted below:

- Historical nature of the drilling and no recent confirmation drilling has been carried out.
- Limited down hole surveys that have been performed and the uncertainty associated with down hole intersection locations.
- Lack of documentation on QAQC and assaying/sampling procedures.
- Inability to re-survey the collar locations of lack of collar location survey control.
- Good continuity of mineralization from section to section along 630 m of strike.
- Good geological control of mineralization along strike and up and down dip.

14.14 Reasonable Prospects for Economic Extraction

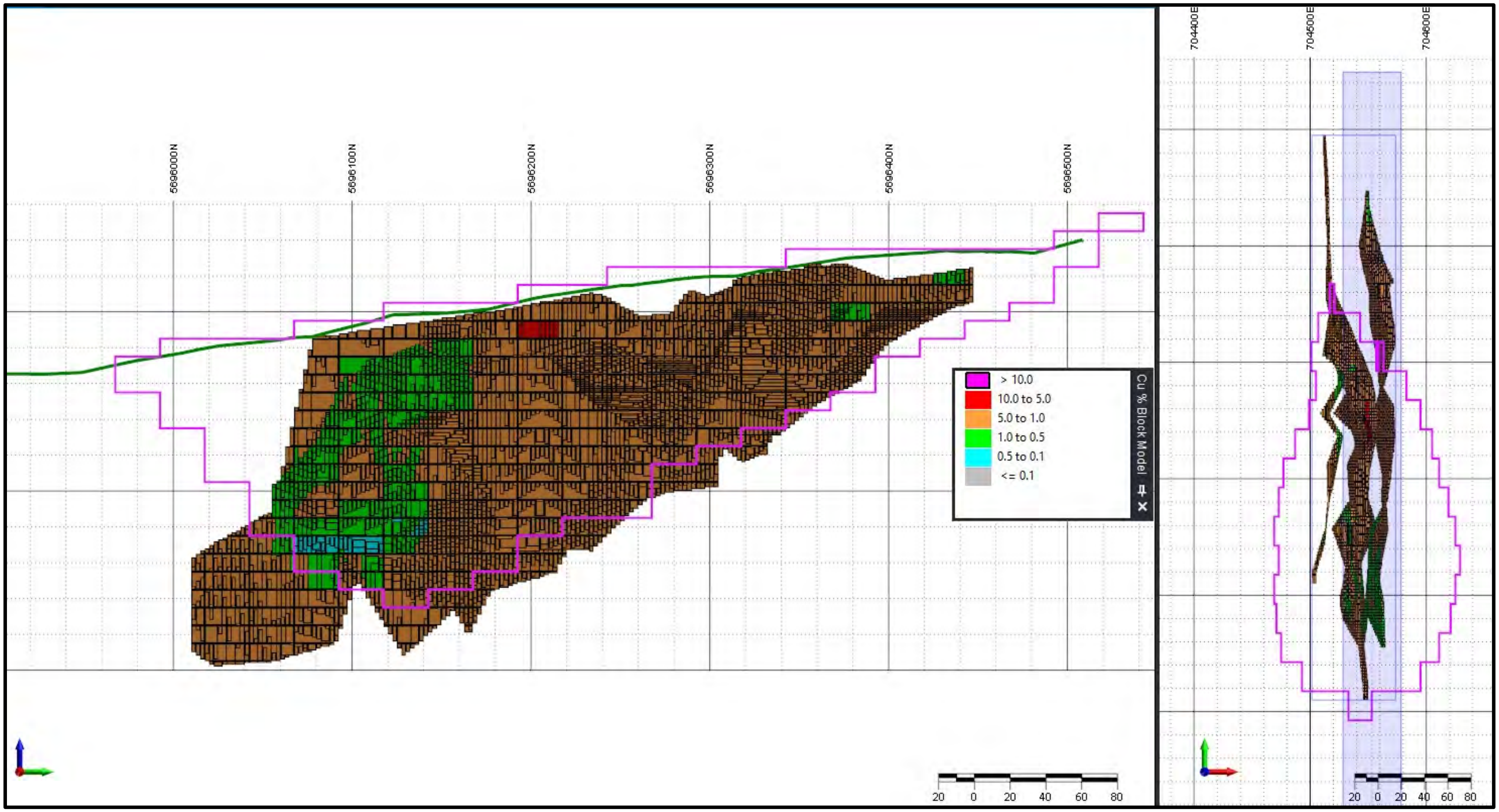
To demonstrate that Chu Chua Deposit has the potential for future economic extraction, the unconstrained resource block model was subjected to several pit optimization scenarios to look at the prospect for eventual economic extraction. Pit optimization was performed in Micromine using the industry standard Lerchs-Grossman (LG) algorithm. The criteria used in the LG pit optimizer were considered reasonable for a Copper, Zinc, Gold, and Silver deposit. All mineral resources reported below are reported within an optimized pit shell using USD $4/lb Copper, USD $1.2/lbs Zinc, USD $1,700/oz Gold and USD $25/oz Silver prices. The resource was defined using blocks classified as Inferred. The criteria used for the pit shell optimization are shown in Table 14.13.

Table 14.13 Mining and Processing Parameters for LG Pit

Parameter	Unit	Cost
Mining Costs and Parameters		
Ore Mining Cost	USD $/Tonne Ore	2.00
Waste Mining Cost	USD $/Tonne Waste	2.00
G&A Cost	USD $/Tonne Ore	10.00
Pit Wall Angle	degrees	50
Density	t/m^3	4.3
Total Processing Cost	USD $ / Tonne	20.0
Copper Processing Parameters		
Copper Sale Price	USD $ / lbs	4
Copper Recovery	%	85
Copper Cutoff Grade	% Mass	5
Zinc Processing Parameters		
Zinc Sale Price	USD $ / lbs	1.2
Zinc Recovery	%	75
Zinc Cutoff Grade	% Mass	5
Gold Processing Parameters		
Gold Sale Price	USD $ / oz	1700
Gold Recovery	%	50
Gold Cutoff Grade	g/t	0.1
Silver Processing Parameters		
Silver Sale Price	USD $ / oz	25
Silver Recovery	%	50
Silver Cutoff Grade	g/t	1.0

Longitudinal cross-section of the USD $4/lb CU LG pit and the MRE block model are shown in Figure 14.9.

Figure 14.9 Long section of USD 4$/lb CU Lerchs-Grossman pit constraining MRE to reasonable economic extraction. LG Pit outline is shown with Magenta Line.



14.15 Reported Resource (August 1, 2021, effective date)

Reported Resource (August 1, 2021, effective date) is shown in Table 14.14. Mineral resources are sensitive to the selection of the reporting cut-off grade and demonstrated in Table 14.15

Table 14.14. Mineral Resource Estimate for the Chu Chua Deposit (reported at 1.0 %Cu lower cut off and reported within a USD $4/lb Cu pit optimization)

Classification	Tonnes*	Cu %	Zn %	Ag g/t	Au g/t
Inferred	2,289,000	2.11	0.30	9.99	0.50

*Tonnes have been rounded to nearest 1,000

Table 14.15 Mineral Resource Estimate for the Chu Chua Deposit (at various reporting cut offs reported within a USD $4/lb Cu pit optimization).

Cu % Block Cut Off	Tonnes	Cu %	Zn %	Ag g/t	Au g/t
0.2	2,643,700	1.91	0.30	9.36	0.48
0.4	2,623,900	1.91	0.30	9.37	0.48
0.6	2,570,700	1.95	0.30	9.47	0.48
0.8	2,472,900	2.00	0.30	9.65	0.49
1.0	**2,289,200**	**2.11**	**0.30**	**9.99**	**0.50**
1.2	2,083,600	2.21	0.31	10.35	0.51
1.4	1,818,300	2.33	0.31	10.75	0.53
1.6	1,525,200	2.49	0.32	11.12	0.54
1.8	1,193,800	2.72	0.33	11.42	0.56
2.0	900,200	2.98	0.35	11.77	0.59
2.2	749,100	3.21	0.36	12.11	0.61
2.4	615,500	3.40	0.37	12.52	0.62
2.6	522,700	3.58	0.38	12.94	0.63
2.8	436,900	3.78	0.40	13.36	0.63
3.0	360,900	3.98	0.41	13.93	0.65

*Tonnes have been rounded to nearest 1,000

Table 14.16. Mineral Resource Estimate for the Chu Chua Deposit by Lode Deposit (reported at 1.0 %Cu lower cut off and reported within a USD $4/lb Cu pit optimization)

Lode	Tonnes*	Cu %	Zn %	Ag g/t	Au g/t
Lode01	594,000	1.94	0.25	10.20	0.49
Lode02	1,629,000	2.23	0.35	10.08	0.51
Lode03	66,000	1.80	0.09	6.79	0.36

*Tonnes have been rounded to nearest 1,000

15 Adjacent Properties

The section titled “Adjacent Properties” is based on a review of available public company documents including press releases, annual reports, and NI 43-101 technical reports as listed in the “References” section. However, all sources of information referred to in this section were prepared by Qualified Person’s as defined by NI 43-101 and are assumed accurate based on based on the data review conducted by the author.

15.1 Taseko Mines Limited’s Yellowhead Copper Project

Taseko Mines Limited’s Yellowhead Copper Project (Yellowhead) is a polymetallic volcanogenic sulphide deposit is located 23 km to the northeast of the Chu Chua Property.

The Project includes proven and probable reserves of 817,000,000 tonnes at a cut-off grade of 0.17% and an average copper grade of 0.29% copper equivalent. Development is planned via open pit and 90,000 tonne per day concentrator throughput, yielding a 25-year mine life and total life of mine production in excess of 4.4 billion pounds of copper, 440,000 ounces of gold and 19 million ounces of silver. The project, has a pre-production capital cost of C$1.3 billion and provides a pre-tax NPV (Net Present Value) at an 8.0% discount rate of C$1.3 billion and a pre-tax internal rate of return of 18% with a 4.2-year payback (Weymark, 2020).

16 Other Relevant Data and Information

The authors are not aware of any other relevant information with respect to the Chu Chua property.

17 Interpretation and Conclusions

The Chu Chua property, located 24 km northeast of Barriere, B.C., is host to the Chu Chua deposit, a Cyprus-type volcanogenic massive sulphide body first discovered in 1978. The property is largely underlain by the Mississippian to Permian aged Fennell Formation which comprises basaltic and rhyolitic volcanic rocks, clastic and chemical sedimentary rocks, and diabase sills. The Chu Chua deposit consists of two major and several minor sulphide lenses hosted by massive and pillowed green basalt of the Upper Fennell Formation. The lenses are oriented along a north-south trend dipping from vertical to very steeply west. The principal axes of the lenses appear to plunge gently to the south.

A total of 99 diamond drill holes, totaling 19,707 m were completed to delineate the Chu Chua deposit between 1978 and 1991. Craigmont Mines Ltd. (Craigmont) drilled a total of 10,820 m in 55 core holes between 1978 and 1982. Additional drilling to test the grade, thickness, lateral and depth extent, and continuity of the deposit was completed by Minnova Inc. (Minnova) between 1988 and 1991. Minnova drilled a total of 46 holes

(8,887 m) during the period. Within the current boundaries of the Chu Chua Property, a total 89 drill holes totalling 17,782.51 m have been drilled for mineral exploration: Craigmont drilled 47 holes 10,162.7 m while Minnova, drilled 42 holes 7619.81 m.

The drilling defined two areas of relatively thick, high grade sulphide mineralization occurring within 100 m of the surface. Deep drilling during 1989 to 1991 by Minnova seems to indicate that the main deposit may plunge to the south as suggested by the 2008 airborne magnetic data. For the most part, little in the way of massive sulphide has been intersected deeper than 200 m below the surface. However, other than a series of about 10 deep drill holes with targeted depths of about 500 to 600 m below surface, there is little drilling that has targeted the area between the deep drilling and the known bottom of the sulphide zones. At the south end of the main Chu Chua deposit, deep drilling by Craigmont and by Minnova did encounter a couple of narrow intersections of massive sulphide and/or wider stockwork breccia zones with disseminated sulphide in drill holes CC-54 and CCF-62.

Comparison of historic and 2011 composite grades indicated that no significant variability exists between historically reported versus 2011 re-sampling for zinc, gold, and silver assays at the Chu Chua deposit. Copper values indicated a -0.39% Cu length weighted average difference between the re-sampled and historically reported drill core assays. The difference in re-sampled versus historically reported copper values was largely due to grade apparent grade variability within the drill hole CC-16 where particularly high historic copper grades were reported. It is considered reasonable for grade variation to occur, with respect to relatively high-grade intervals such as those found within CC-16, given the inherent variability of disseminated to semi-massive and massive sulphide mineralization within the Chu Chua deposit. Historic drill core was sampled at approximately 5 m intervals and locally smaller intervals where discreet zones of mineralization were encountered. During 2011, drill core was sampled at 1 m intervals to better assess the within-intercept variability of Chu Chua deposit sulphide mineralization. The use of smaller sample intervals revealed that most of the mineralization within the historic intervals is relatively homogeneous.

An updated pit constrained mineral resource estimate for Chu Chua mineralized zone was completed by Mr. Nicholls. The estimate comprises an inferred mineral resource of 2.29 million tonnes averaging 2.11 % copper, 0.3% zinc, 9.99 g/t silver, 0.5 g/t gold at a copper block cut-off grade of 1.0%.

The mineral resource modelling and estimation was carried out using a 3-dimensional block model, using commercial mine planning software Micromine version 12.05.03 while pit optimization was done through Micromine version 21.0.5.49. Out of the 99 diamond drill holes, a total of 50 were used in the resource estimation. Spacing between drill lines is quite varied with drilling conducted not on set line spacing. The drill line spacing varies from 10 m to 45 m, with an average of about 20 m between drill lines. A total of 251 composites of 5 m length, capped at 5.90% copper, 0.86% zinc, 32 g/t silver and 1.4 g/t gold, were used for the estimation. The mineral resource was estimated by ordinary kriging within a three-dimensional mineralization envelope, defined by similar geological characteristics in terms of alteration and mineralogy, using a 0.5% copper cut-off grade. The search ellipsoid orientations were based on variography and ranged in size from 30 to 50 m along the primary axis, depending on the metal of interest. The search ellipsoids were used for grade interpolation into 2 m (X) x 25 m (Y) x 10 m (Z) parent blocks. All blocks were classified as being in the inferred category. A total of 464 bulk density measurements were used to calculate the average for each of three modeled massive sulphide lenses. The average density of each of the three lenses varied from 4.33 to 4.73 g/cm^3. Due to the lack of historic documentation, the methodology used to calculate the bulk densities is unknown, however the densities used in the resource estimate are considered consistent with the geology and style of mineralization of the Chu Chua deposit.

Metallurgical flotation tests have achieved copper recoveries to a maximum of 92.2%; with gold and silver recoveries of 35.5% and 61.3%, respectively (51 µm grind size and pH 12 test parameters). A single preliminary cleaner floatation test utilizing a 16 µm re-grind of the rougher concentrate produced a 22.4% copper concentrate.

To date, mineralization has been modeled over a 480 m strike length and to a depth of 180 m from surface. Additional drilling is warranted to define the extent of near surface mineralization at the north end of the deposit; at depth within and beneath the currently modeled Main Lens; and to the south where limited deep drilling has encountered narrow sulphide intercepts.

The Chu Chua Property is subject to the typical external risks that apply to all mining projects, such as change in metal prices, availability of investment capital, changes in government regulations, community engagement, and general environmental concerns. The three latter points are mitigated to a certain extent by jurisdiction. British Columbia is a mining friendly Province with well established mining law and permitting processes.

Factors that may affect the mineral resource estimates include: metal price assumptions, changes in interpretations of mineralization geometry, continuity of mineralization zones, changes to kriging assumptions, metallurgical recovery assumptions, operating cost assumptions, confidence in the modifying factors, including assumptions that surface rights to allow mining infrastructure to be constructed will be forthcoming, delays or other issues in reaching agreements with regulatory authorities and stakeholders, and changes in land tenure requirements or in permitting requirements.

There are currently no known additional legal, political, title, taxation, socio-economic, marketing, political or other relevant factors that could materially affect the potential development of the mineral resources. As the project develops and economic studies are completed, more information on these factors will become available.

There is no guarantee that diamond drilling will result in the discovery of additional mineralization, or an economic mineral deposit. However, in the Author’s opinion there are no significant risks or uncertainties that could reasonably be expected to affect the reliability or confidence in the currently available exploration information with respect to the Chu Chua Property.

18 Recommendations

Based on the data compilation, re-interpretation of geology, and the mineral resource estimate a follow up drilling program is recommended to test the main zone and the north zone to aid in the validation of the historic drilling and to convert some of the resource into an indicated category. Additionally, drilling to the south end of the main zone and below the main zone is recommended to test lateral and depth extent of known sulphide mineralization.

The exact number of holes and the total depth may be adjusted depending on initial results. Drilling at depth should include downhole electromagnetic (EM) surveys to assist in extending the current known extent of the Chu Chua massive sulphide lenses and in targeting new separate zones. In addition, systematic downhole multi trace element and whole rock geochemical work should be conducted on any new core to identify and better map out the existing volcanic stratigraphy associated with the Chu Chua massive sulphide lenses. A total of twelve (12) holes are recommended for a total of 3,000 m. The follow up drilling program is estimated at CDN$ 1,050,000 (Table 18.1).

Table 18.1. Budget for Recommended Exploration

Total Drill Holes	Total Drilling Length (m)	Cost all-up per m*
12	3,000 (Including 1,500 m downhole EM @ $50/m)	350
Total Cost of Recommended Drilling Program		1,050,000.00

* Cost Estimates Exclude GST

19 Date and Signature Page

This Technical Report was prepared to NI 43-101 standards by the following Qualified Persons. The effective date of this report is September 1st, 2021.

“Signed”

Kristopher J. Raffle, B.Sc., P.Geo.

“Signed”

Steven J Nicholls, BA.Sc(Geology) MAIG

“Signed”

Alfonso Rodriguez, M. Sc., P. Geo

Vancouver, British Columbia, Canada
Signing Date: September 1, 2021

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21 Certificate of Author

I, Kristopher J. Raffle, residing in Vancouver British Columbia, do hereby certify that:

1. I am a Principal of APEX Geoscience Ltd., located at 410-800 West Pender Street, Vancouver, British Columbia, Canada.

2. I am the author of this Technical Report entitled: "Technical Report on the Chu Chua Property, British Columbia, Canada" having an effective date of September 1, 2021 (the "Technical Report"). I am a graduate of The University of British Columbia, Vancouver, British Columbia with a B.Sc. (Honours) in Geology (2000) and have practiced my profession continuously since 2000. Over the past 15 years I have supervised exploration programs specific to base and precious metal sulphide deposits having similar geologic characteristics to the Chu Chua Property within British Columbia, Canada, and Fiji. I am a Professional Geologist registered with APEGBC (Association of Professional Engineers and Geoscientists of British Columbia) and I am a 'Qualified Person' in relation to the subject matter of this Technical Report.

4. I visited the Property that is the subject of this Report during 2008, and on June 26th, 2012.

5. I am responsible for all sections of the Technical Report, except Section 14: Mineral Resource Estimates, which was authored by Steven J. Nicholls and Section 12 authored by Alfonso Rodriguez.

6. I am independent of Newport Exploration Ltd, applying all the tests in section 1.5 of National Instrument 43-101. I have not received, nor do I expect to receive, any interest, directly or indirectly, in Newport Exploration Ltd. I have co-authored prior Technical Reports with respect to the Chu Chua Property as listed in the references section. I have no other prior involvement with the property. I am not aware of any other information or circumstance that could interfere with my judgment regarding the preparation of the Technical Report.

7. I have read and understand National Instrument 43-101 and Form 43-101 FI and the Report has been prepared in compliance with the instrument.

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

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

Dated this September 1, 2021

Vancouver British Columbia, Canada

"Signed"

Kristopher J. Raffle, B.Sc., P.Geo.

I, Steven J. Nicholls, MAIG., do here by certify that:

1. I am currently employed as a Resource Geologist with APEX Geoscience Australia Pty Ltd. 9/18 Parry Street Fremantle WA Australia 6160.
2. My academic qualification is: Bachelor of Applied Science, in Geology, received from the University of Ballarat in 1997.
3. My professional affiliation is: Member of the Australian Institute of Geoscientists, Australia (AIG).
4. I have worked as a geologist for a total of 21 years since my graduation from university and have extensive experience in gold/base metal exploration/resource estimation. Prior to commencing work with APEX Geoscience Ltd. I was employed by Tanami Gold NL as a Senior Exploration geologist where I was responsible for the company resource estimations/resource delineation drilling and mining technical support. Since commencing work with APEX eight years ago, I have been responsible for most of APEX's mineral and industrial resource estimations across the United States, Canada, Australia, and South American projects. These mineral and industrial resource estimations (>30) comprise a variety of commodities including, REE, graphite, gold, silver, base metal (Cu-Pb-Zn), iron, vanadium, silica/frac sand, to both CIM and JORC standard.
5. I have read the definition of "qualified person" set out in the National Instrument 43-101 ("NI 43-101") and certify that be reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfil the requirements to be a "Qualified Person" for the purposes of NI 43-101.
6. I am responsible for the preparation of the "Mineral Resource Estimates" section 14 in this Technical Report titled "Technical Report on the Chu Chua Property, British Columbia, Canada" having an effective date of September 1, 2021. I have not visited the Chu Chua Property.
7. As of the date on this certificate, to the best of my knowledge, information and belief, the Resource Report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.
8. I am independent of Newport Exploration Ltd. in accordance with section 1.5 of NI 43-101.
9. I consent to the public filing of the Technical Report and to extracts from, or a summary of the Technical Report, with any stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their website accessible by the public.

Dated this September 1, 2021

Vancouver, British Columbia, Canada

"Signed"

Steven J Nicholls, BA.Sc. (Geology) MAIG

I, Alfonso Rodriguez Madrid, residing in Vancouver British Columbia, do hereby certify that:

1. I am a Senior Geologist of APEX Geoscience Ltd., located at 410-800 West Pender Street, Vancouver, British Columbia, Canada.

2. I am the author of this Technical Report entitled: "Technical Report on the Chu Chua Property, British Columbia, Canada" having an effective date of September 1, 2021 (the "Technical Report"). I graduated with a degree in Geology from the Santander Industrial University (UIS) in Colombia in 2005 and with a M.Sc. in Geological Sciences from the University of British Columbia in 2014. I have practiced my profession continuously since my graduation in 2005.Over the past 15 years I have supervised exploration programs specific to base and precious metal sulphide deposits having similar geologic characteristics to the Chu Chua Property in Colombia, Chile, and British Columbia, Canada. I am a Professional Geologist registered with APEGBC (Association of Professional Engineers and Geoscientists of British Columbia) and I am a 'Qualified Person' in relation to the subject matter of this Technical Report.

4. I visited the Property that is the subject of this Report on July 14th, 2021.

5. I am responsible for Section 12 of this Report.

6. I am independent of Newport Exploration Ltd, applying all the tests in section 1.5 of National Instrument 43-101. I have not received, nor do I expect to receive, any interest, directly or indirectly, in Newport Exploration Ltd. I have no prior involvement with the property. I am not aware of any other information or circumstance that could interfere with my judgment regarding the preparation of the Technical Report.

7. I have read and understand National Instrument 43-101 and Form 43-101 FI and the Report has been prepared in compliance with the instrument.

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

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

Dated this September 1, 2021

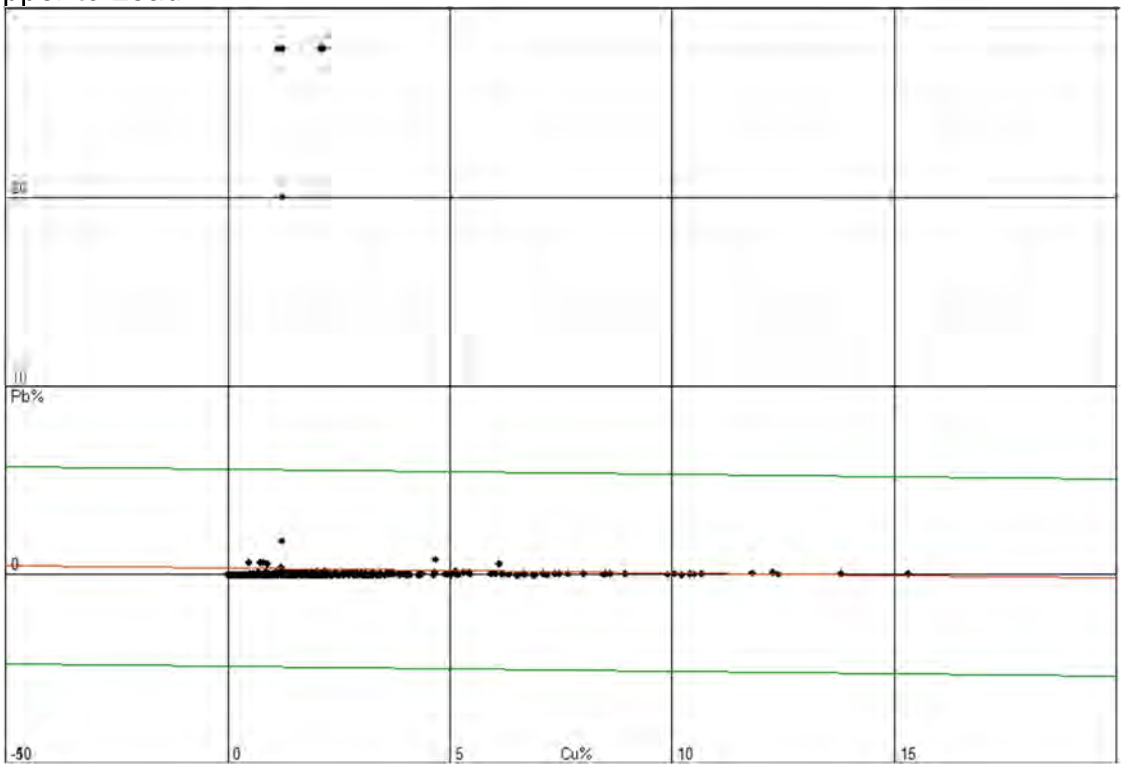
Vancouver British Columbia, Canada

"Signed"

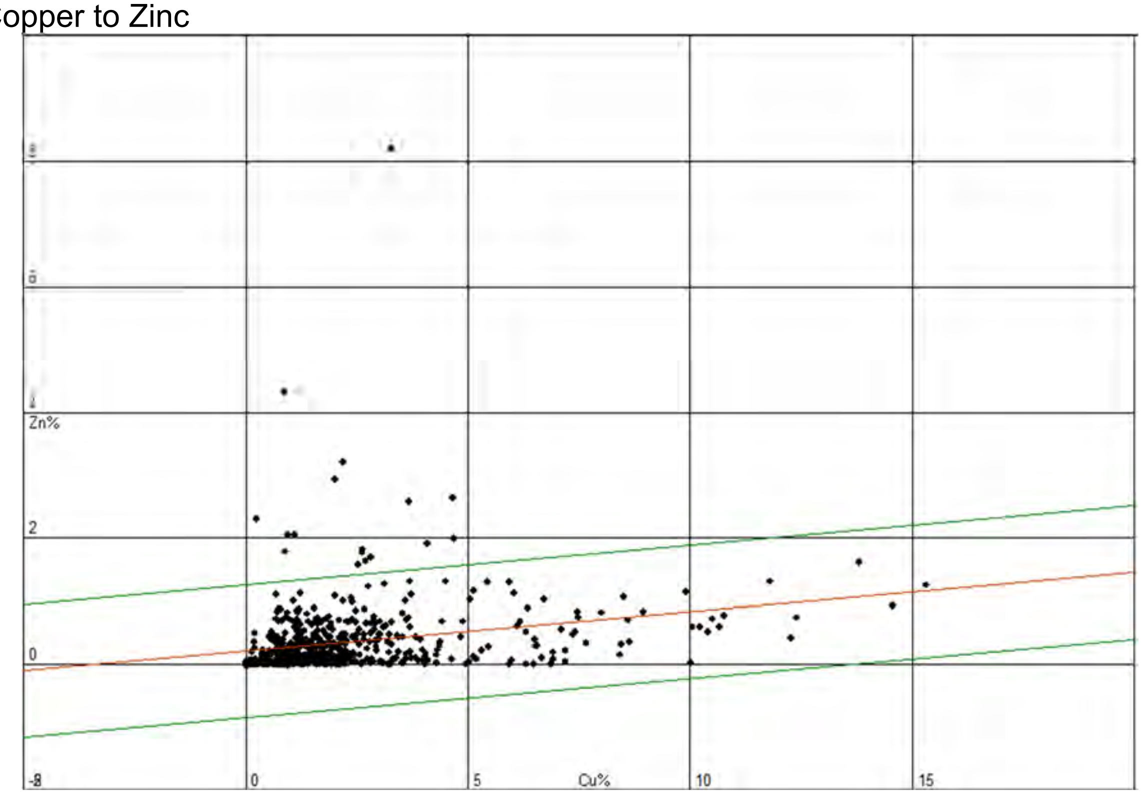
Alfonso Rodriguez Madrid, M. Sc., P. Geo.

Appendix 1 – Matrix Scatterplots

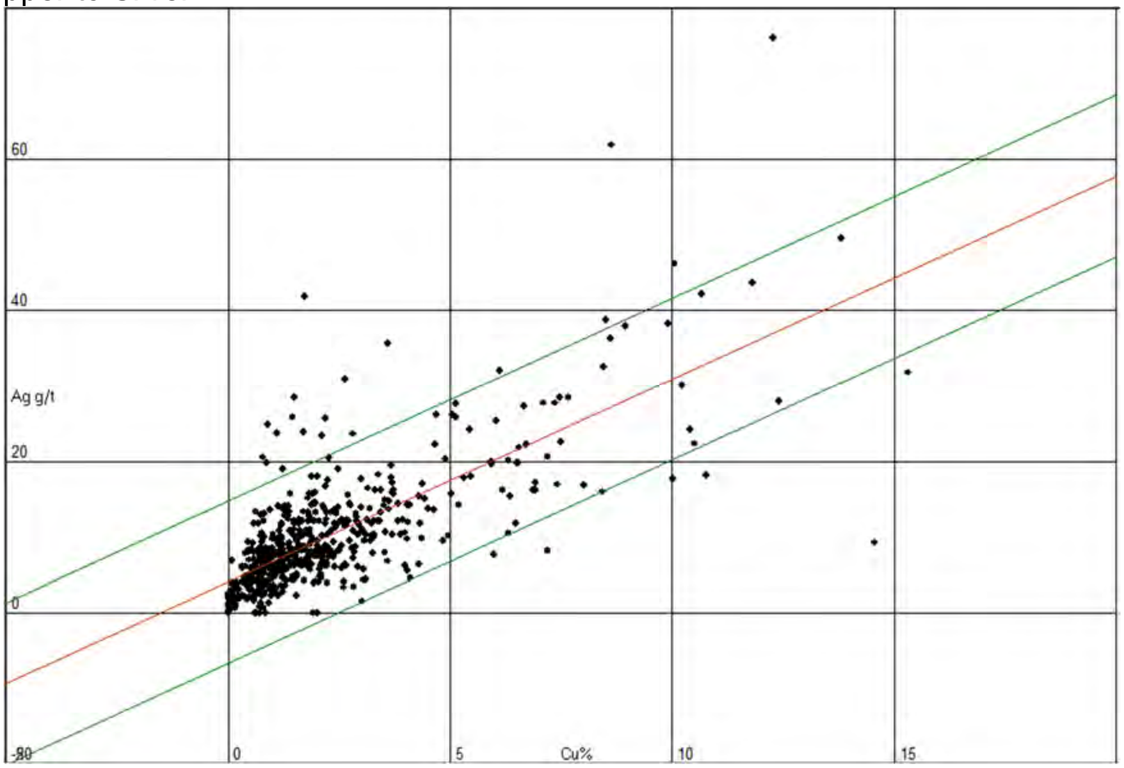
Copper to Lead



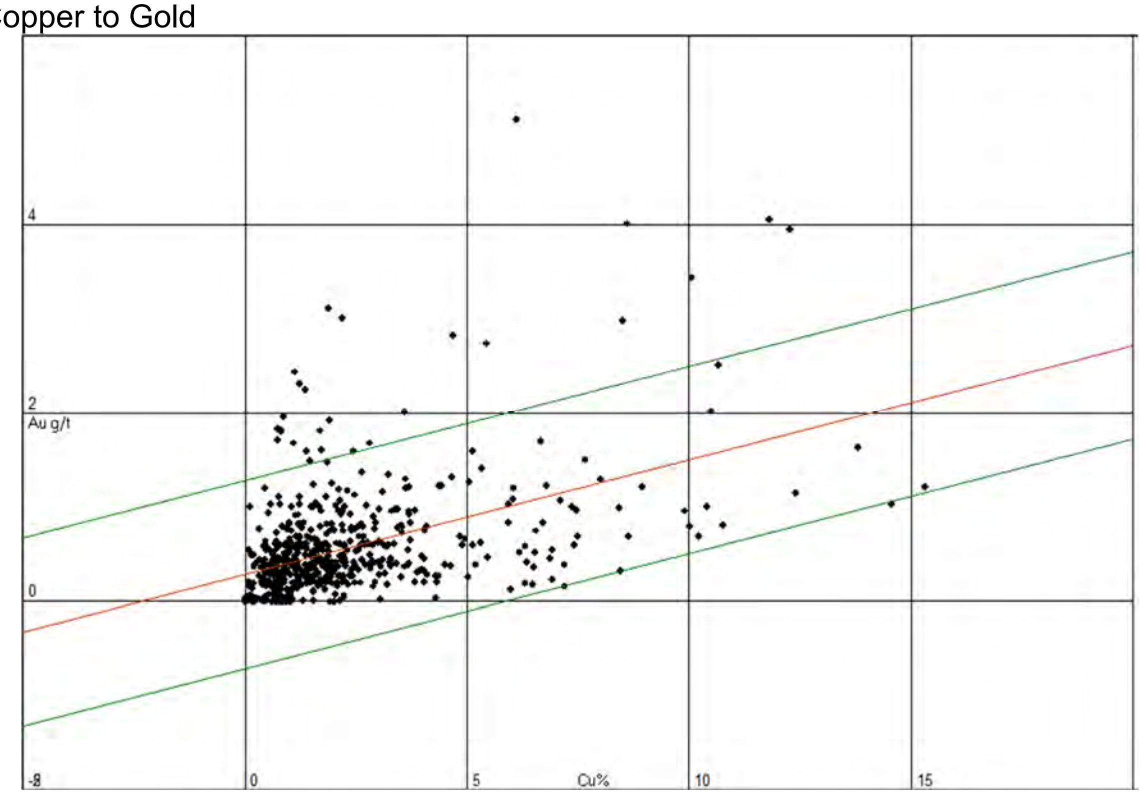
Copper to Zinc



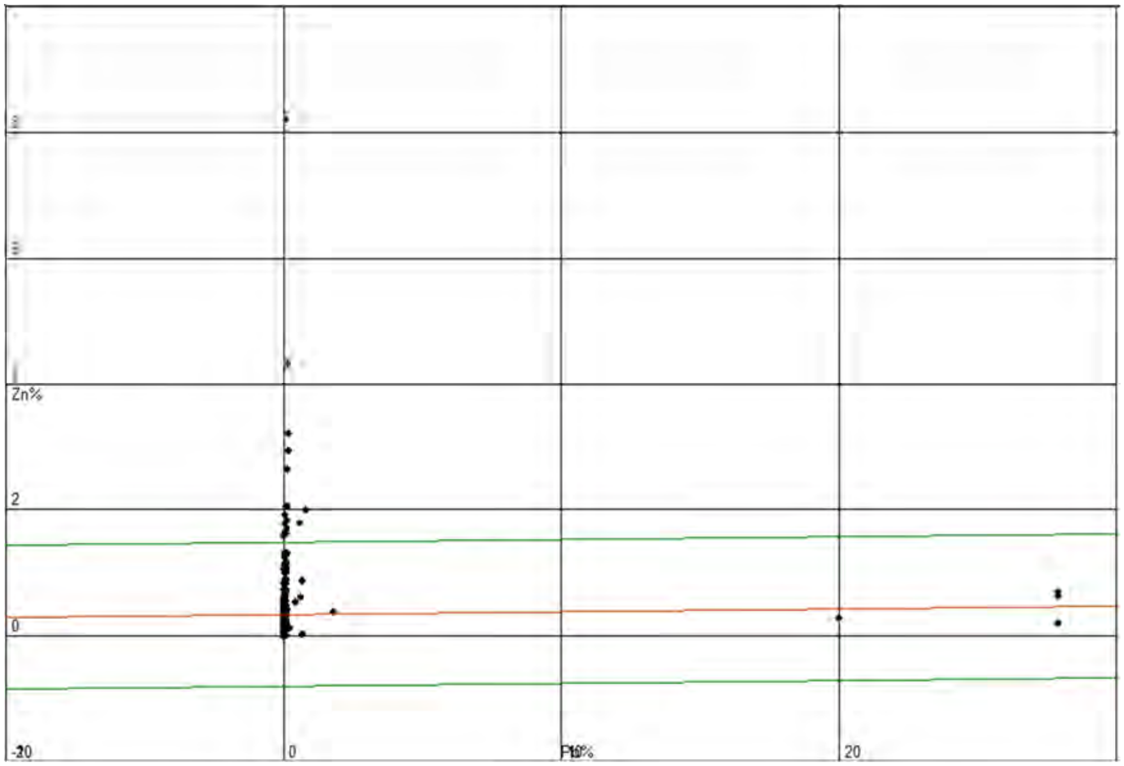
Copper to Silver



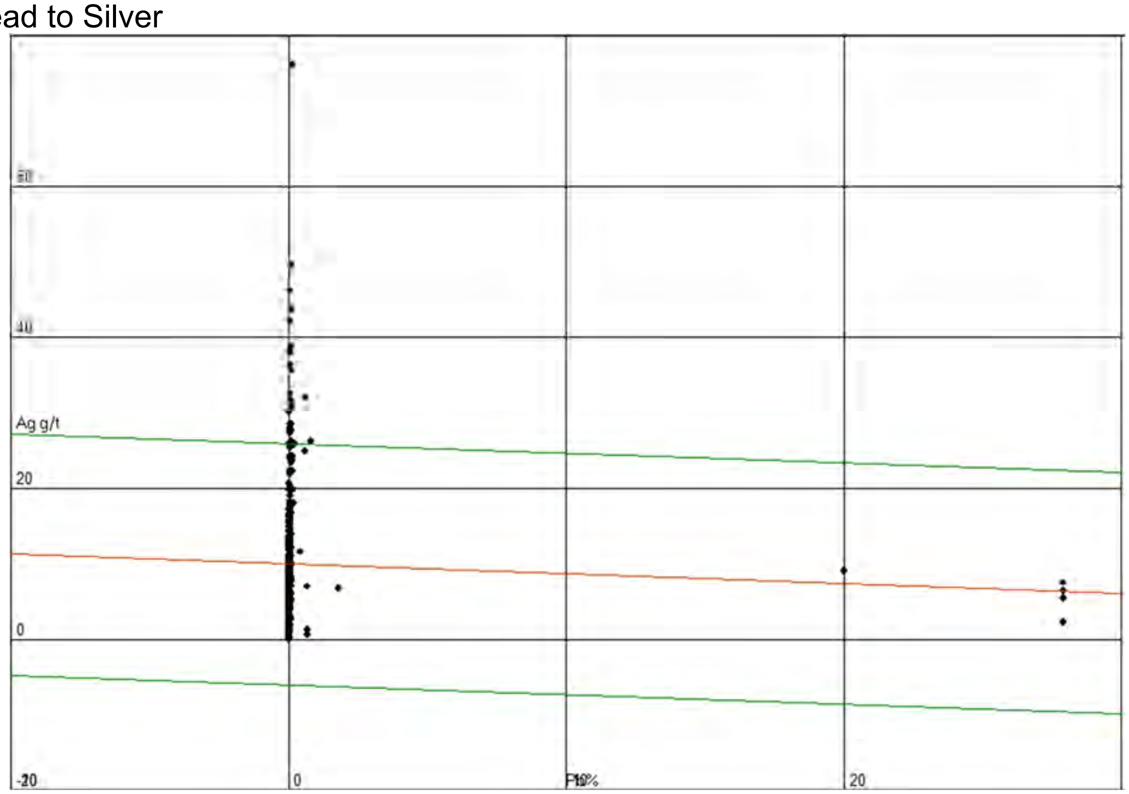
Copper to Gold



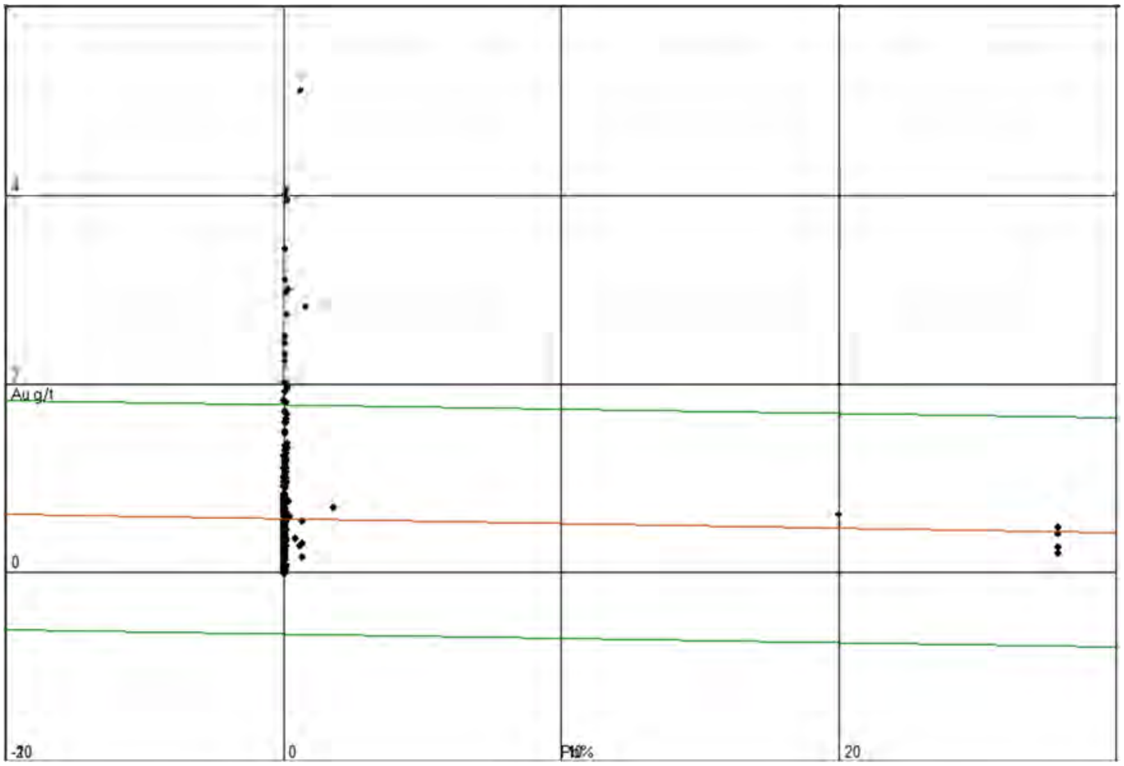
Lead to Zinc



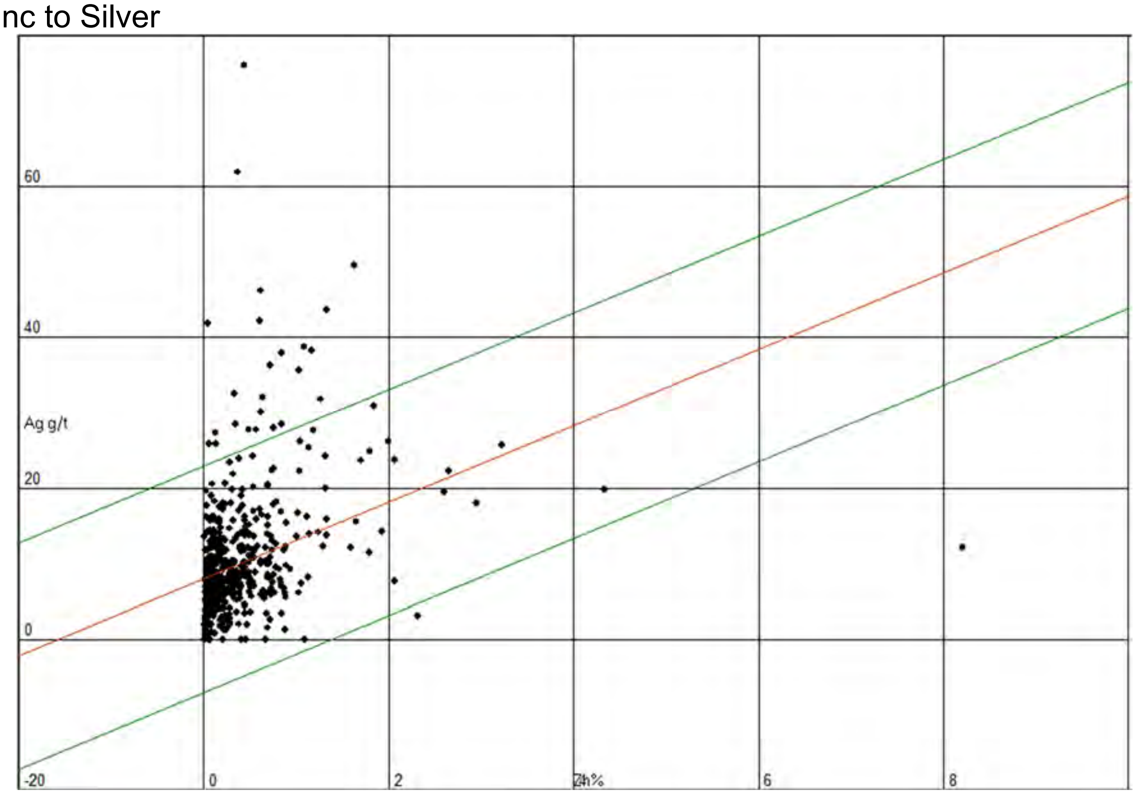
Lead to Silver



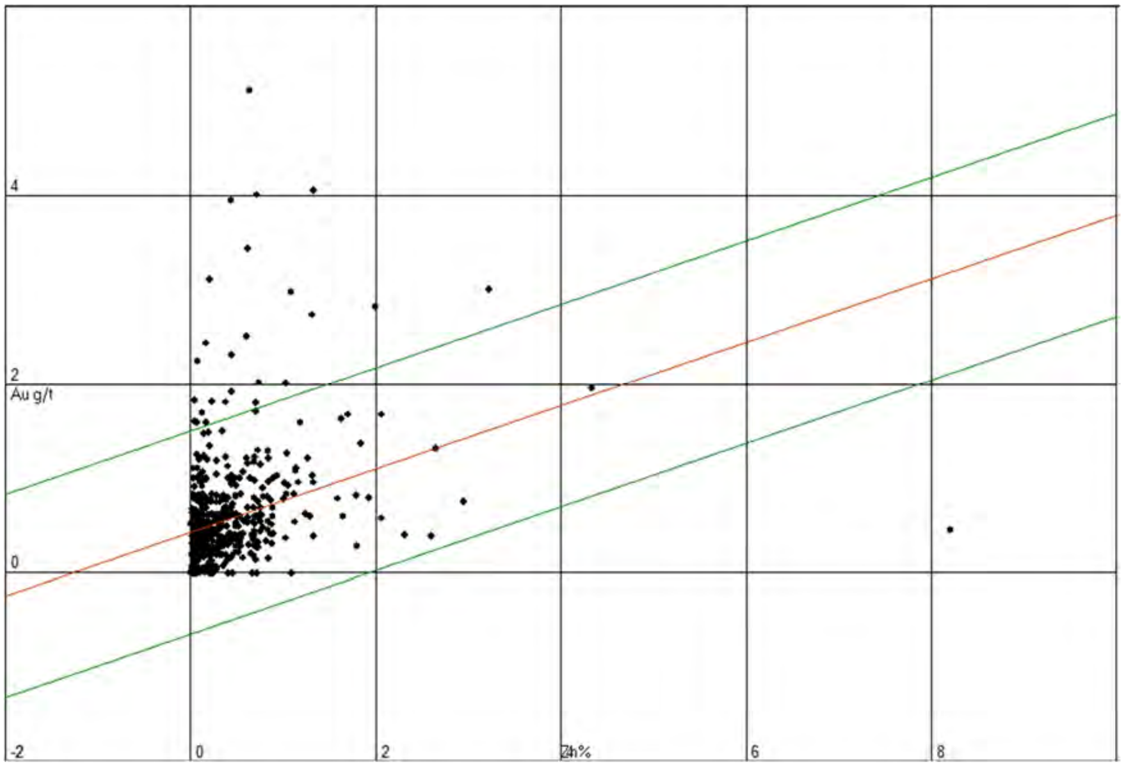
Lead to Gold



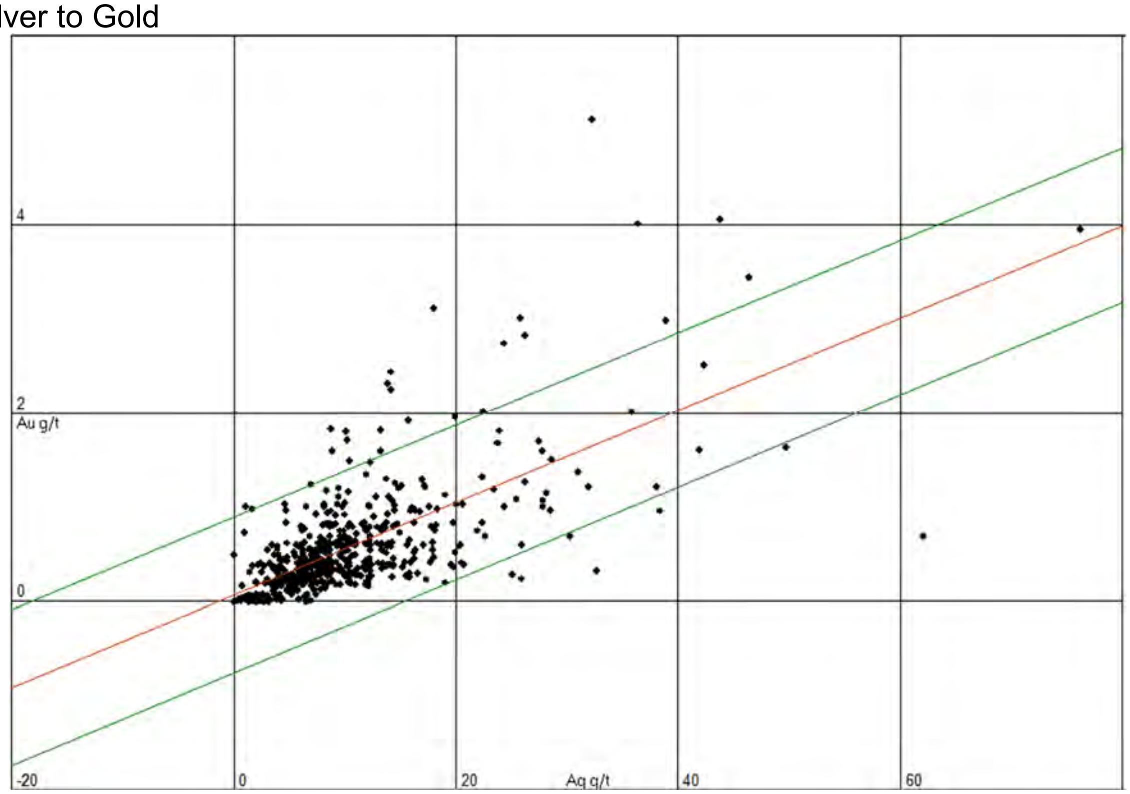
Zinc to Silver



Zinc to Gold



Silver to Gold



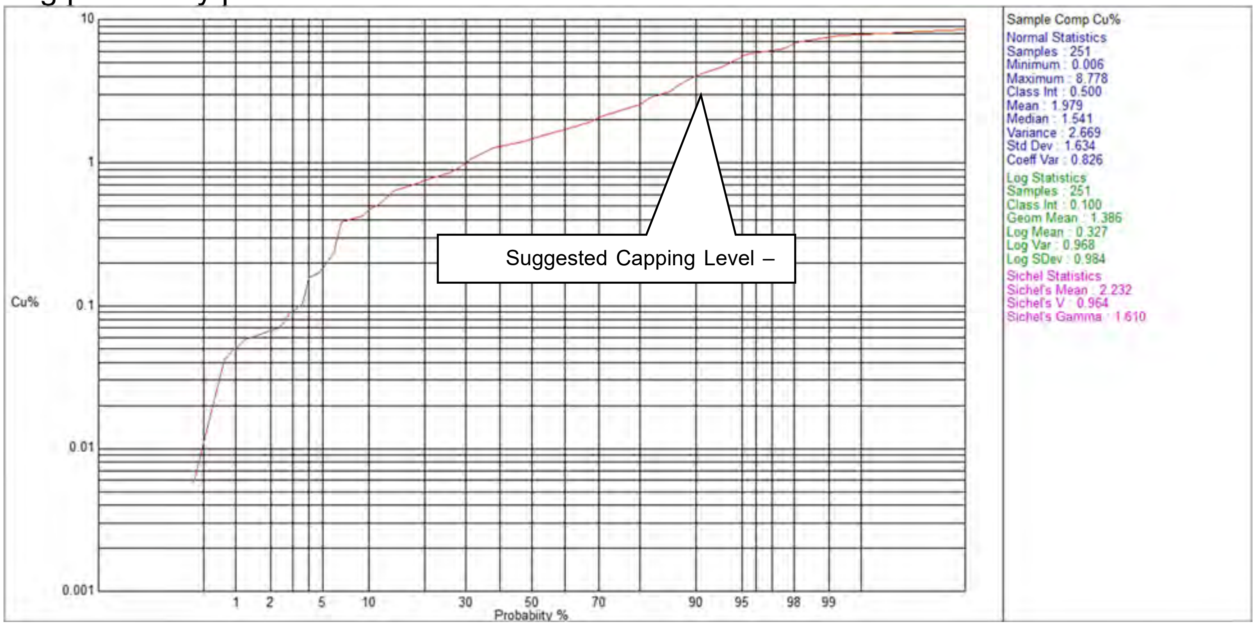
Appendix 2 – Chu Chua Sample Statistics displaying the effect of Capping

	Samples with no Capping Applied				Samples with Capping Applied			
	Cu%	Zn%	Ag g/t	Au g/t	Cu% Capped	Zn% Capped	Ag g/t Capped	Au g/t Capped
Number	251	250	249	250	251	250	249	250
Minimum	0.006	0	0	0	0.006	0	0	0
Maximum	8.778	2.64	62	4.301	5.9	0.86	32	1.4
Mean	1.979	0.331	9.263	0.5	1.923	0.304	9.119	0.469
Median	1.541	0.221	7.663	0.414	1.541	0.221	7.663	0.414
Std Dev	1.634	0.354	7.049	0.479	1.457	0.263	6.277	0.339
Variance	2.669	0.125	49.693	0.23	2.122	0.069	39.402	0.115
Std Error	0.007	0.001	0.028	0.002	0.006	0.001	0.025	0.001
Coeff Var	0.826	1.068	0.761	0.959	0.757	0.867	0.688	0.724
Log Num	251	249	243	243	251	249	243	243
Geom Mean	1.386	0.183	7.505	0.357	1.375	0.179	7.479	0.352
Log Min	-5.116	-4.962	-0.357	-4.605	-5.116	-4.962	-0.357	-4.605
Log Max	2.172	0.971	4.127	1.459	1.775	-0.151	3.466	0.336
Log Mean	0.327	-1.698	2.016	-1.029	0.319	-1.721	2.012	-1.044
Log S Dev	0.984	1.247	0.716	0.963	0.97	1.212	0.708	0.936
Log Var	0.968	1.555	0.513	0.928	0.942	1.47	0.501	0.875
Sichel Stats								
Mean	2.232	0.396	9.665	0.565	2.189	0.371	9.569	0.542
V	0.964	1.549	0.511	0.924	0.938	1.464	0.499	0.872
Gamma	1.61	2.162	1.288	1.581	1.592	2.075	1.28	1.539
Percentiles								
10	0.465	0.03	2.365	0.079	0.465	0.03	2.365	0.079
20	0.772	0.06	3.914	0.171	0.772	0.06	3.914	0.171
30	1.019	0.101	5.558	0.253	1.019	0.101	5.558	0.253
40	1.368	0.16	6.718	0.33	1.368	0.16	6.718	0.33
50	1.541	0.221	7.663	0.414	1.541	0.221	7.663	0.414
60	1.778	0.296	9.151	0.482	1.778	0.296	9.151	0.482
70	2.136	0.389	10.832	0.569	2.136	0.389	10.832	0.569
80	2.678	0.54	12.796	0.69	2.678	0.54	12.796	0.69
90	4.389	0.742	17.886	0.986	4.389	0.742	17.886	0.986
95	5.707	0.886	20.841	1.219	5.707	0.86	20.841	1.219
97.5	6.486	1.188	25.788	1.352	5.9	0.86	25.788	1.352
99	7.57	1.719	33.303	2.508	5.9	0.86	31.885	1.4

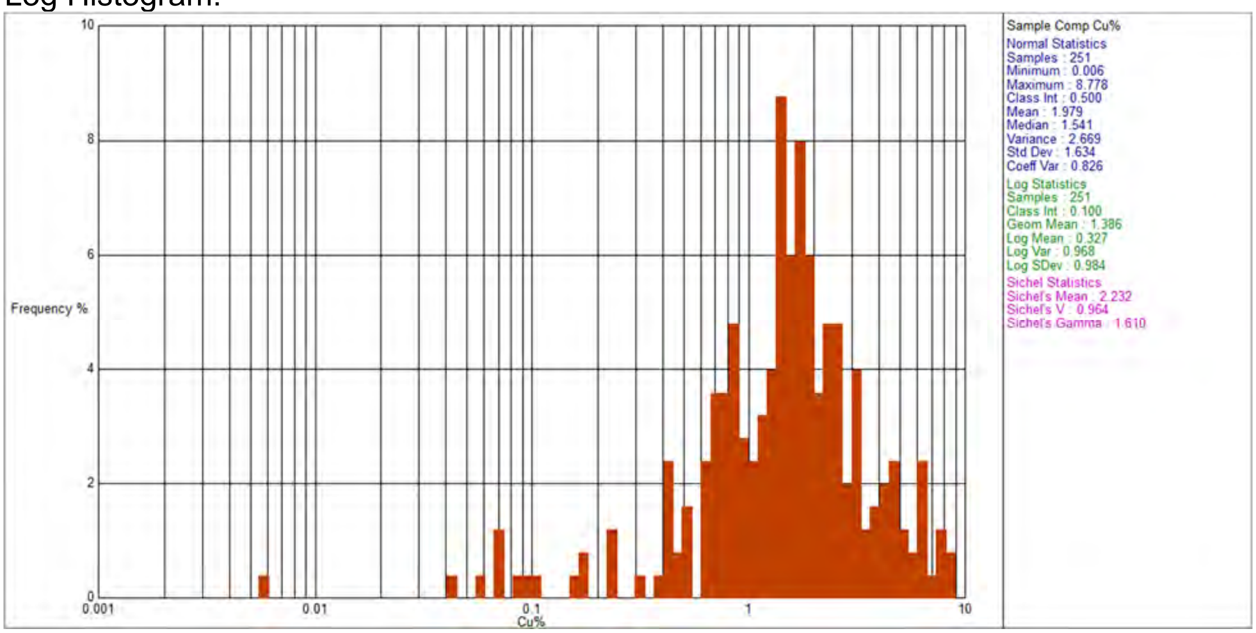
Appendix 3 – Top Cut/Capping Plots

Copper:

Log probability plot:

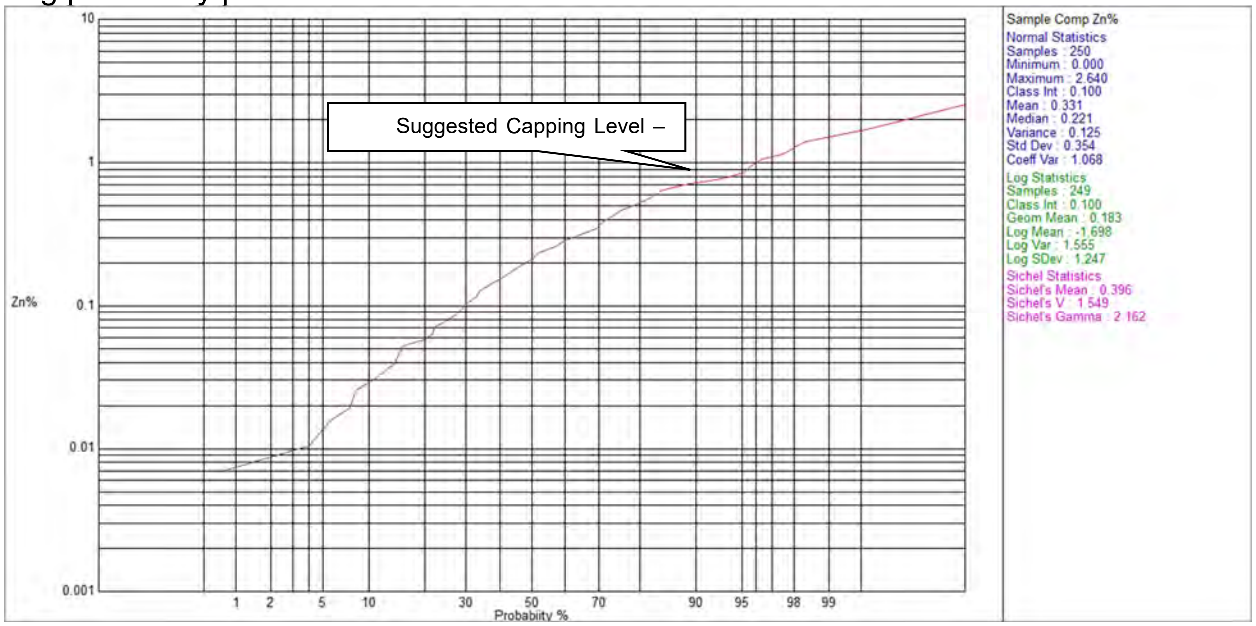


Log Histogram:

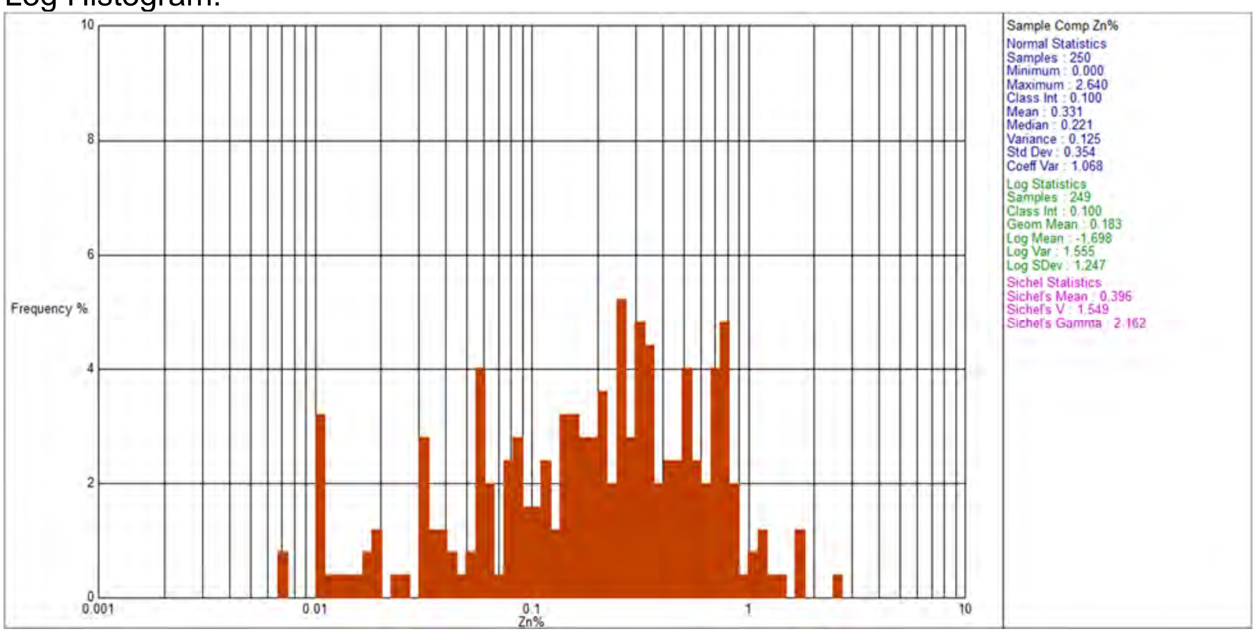


Zinc:

Log probability plot:

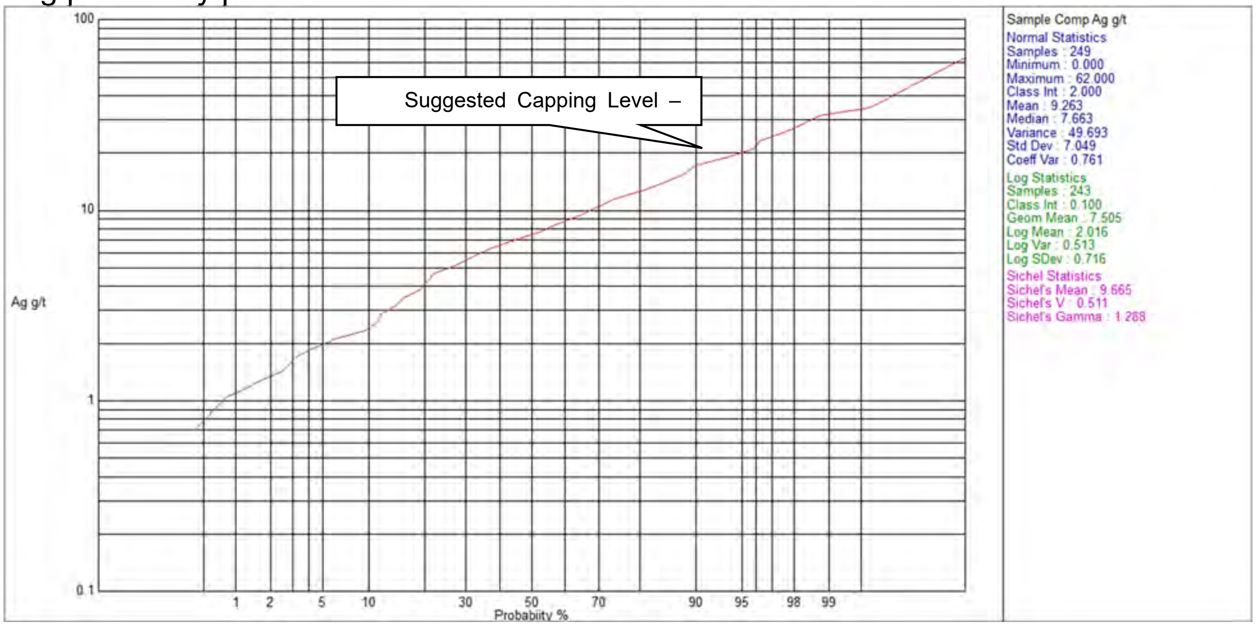


Log Histogram:

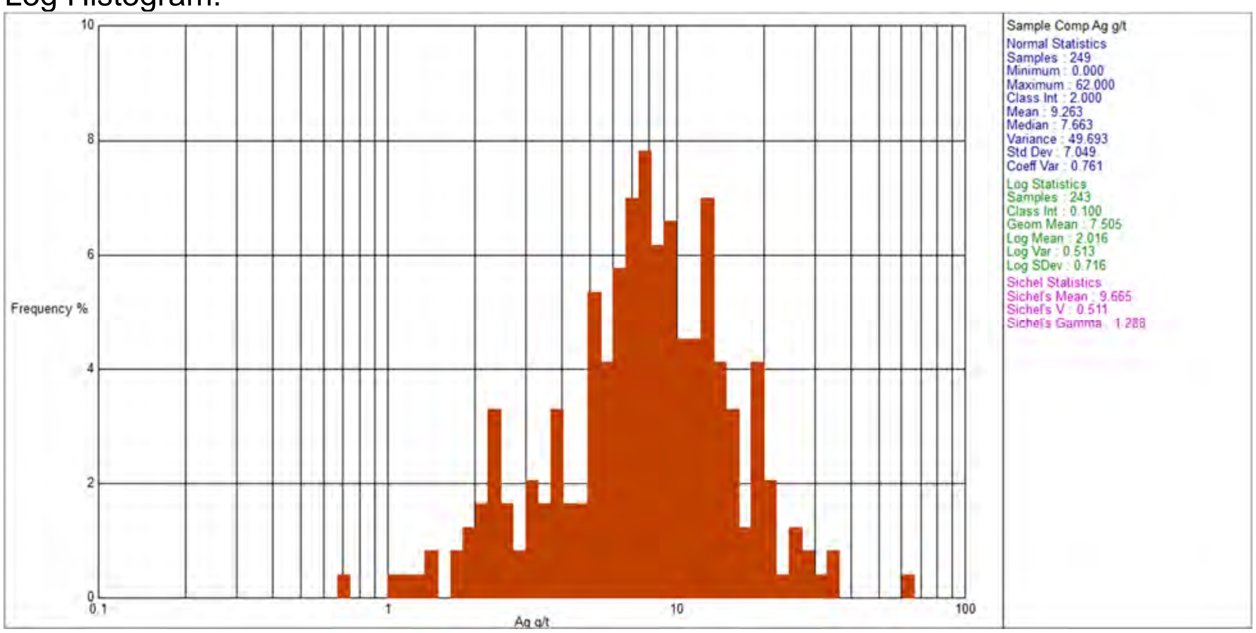


Silver:

Log probability plot:

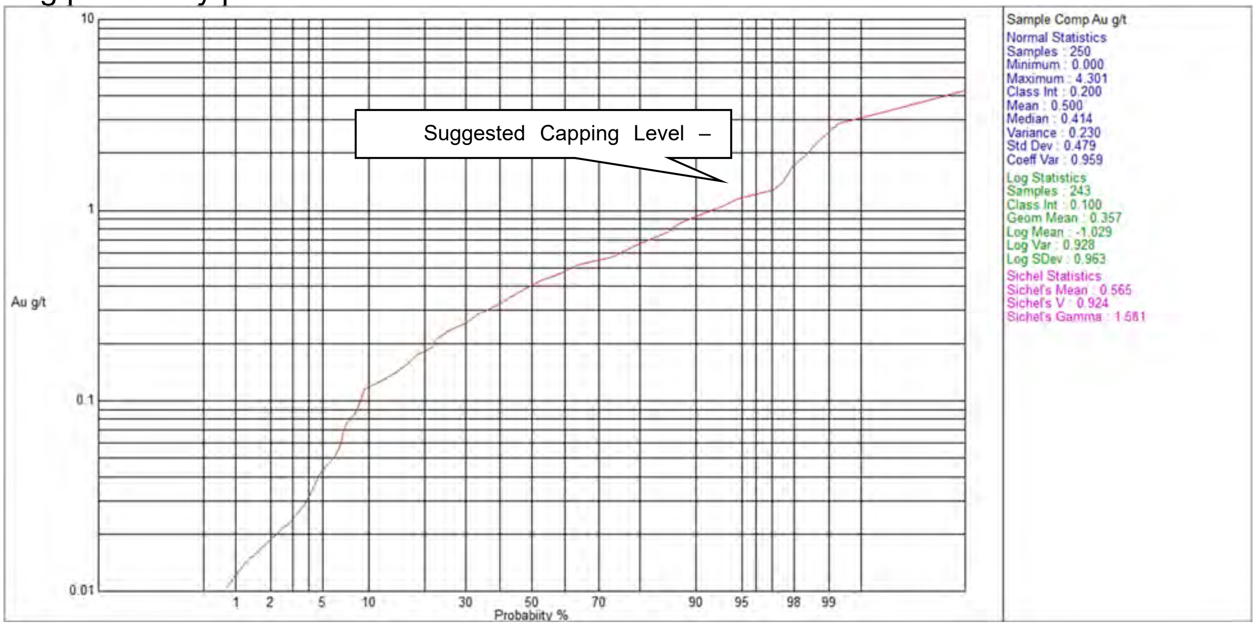


Log Histogram:

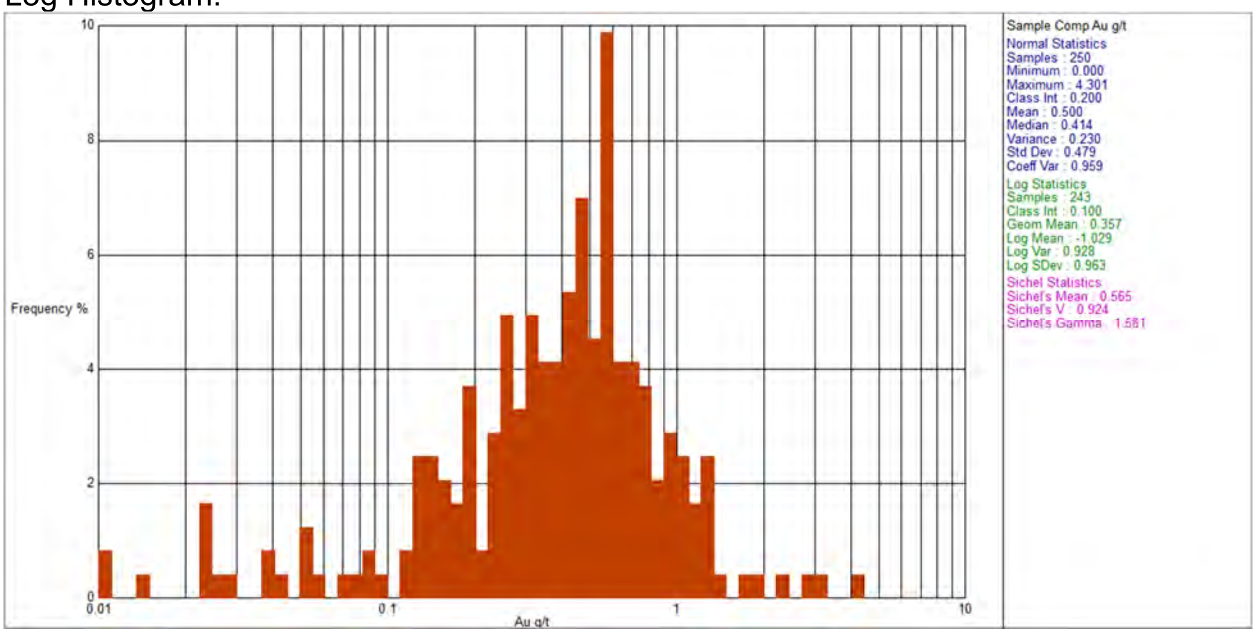


Gold:

Log probability plot:

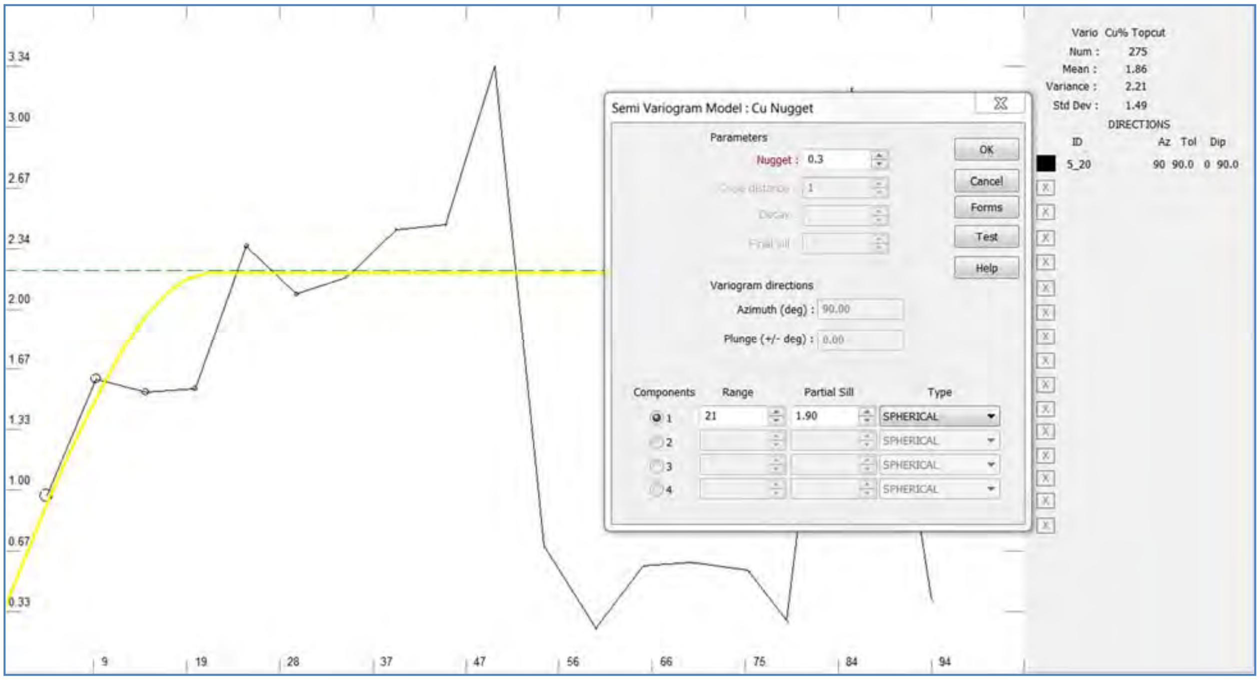


Log Histogram:

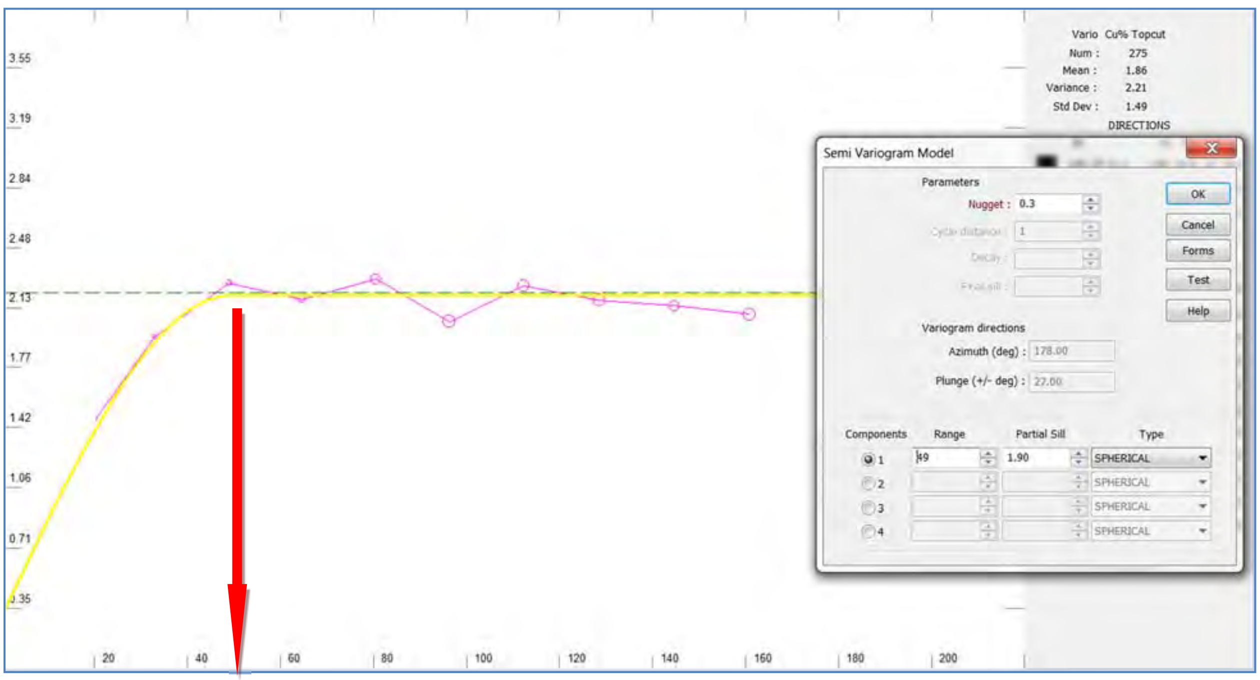


Appendix 4 – Variography

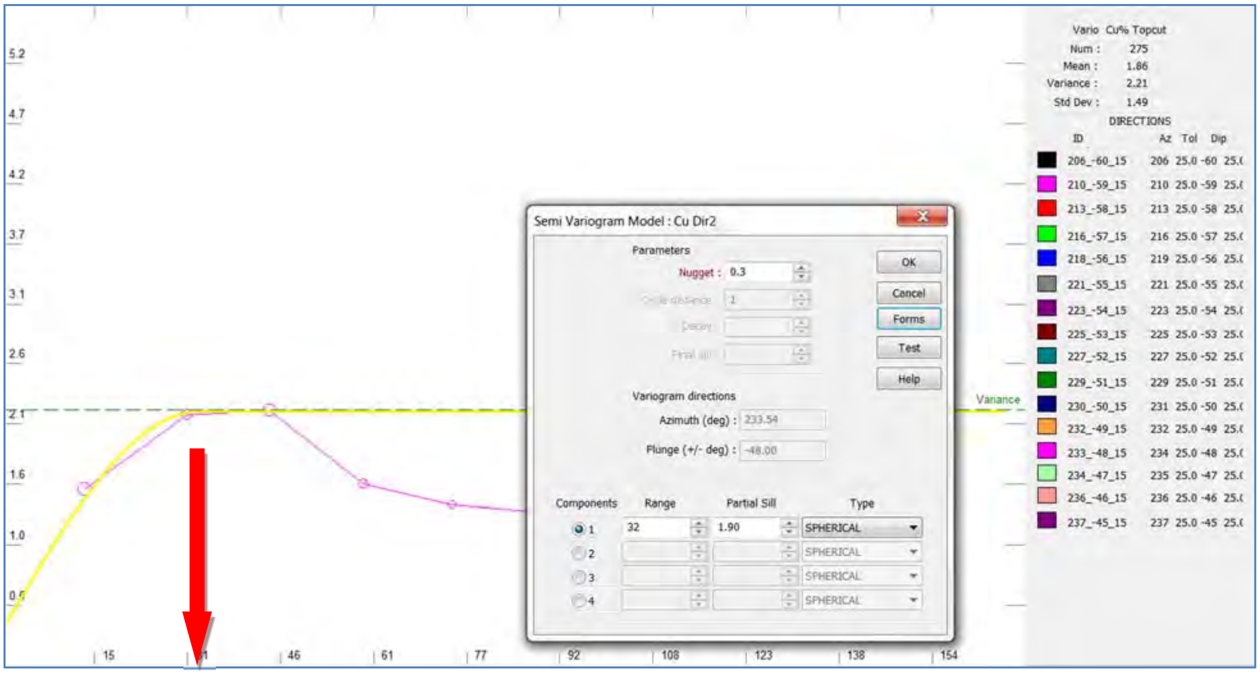
Copper



Down hole variogram. Nugget of 13.6%

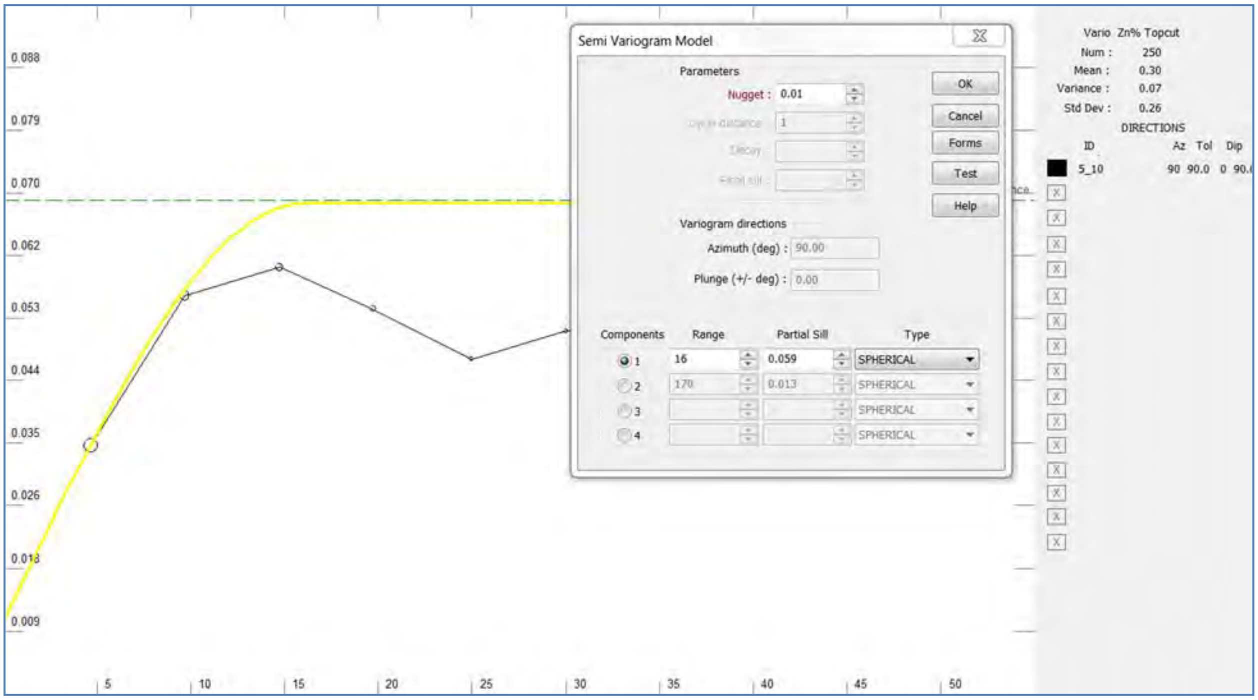


Directional variogram-Direction 1-Strike of 178° and 27° plunge. Suggested range of 49m.

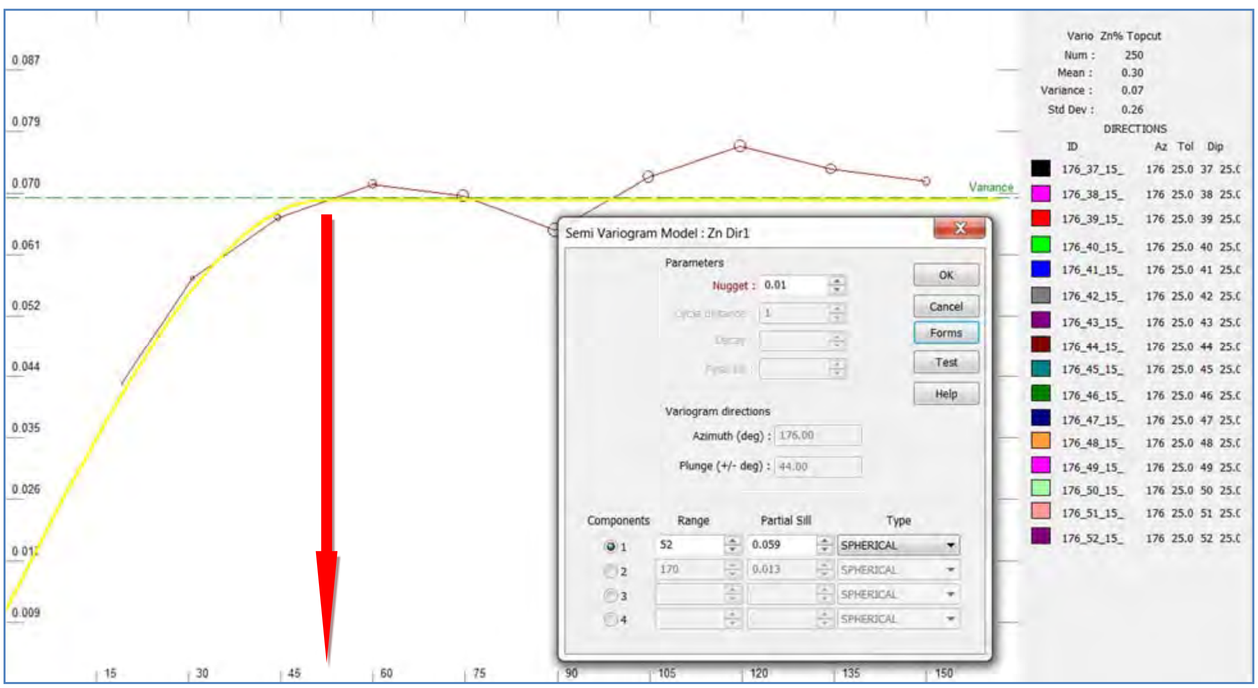


Directional Variogram – Dip of -48° Suggested range of 32m.

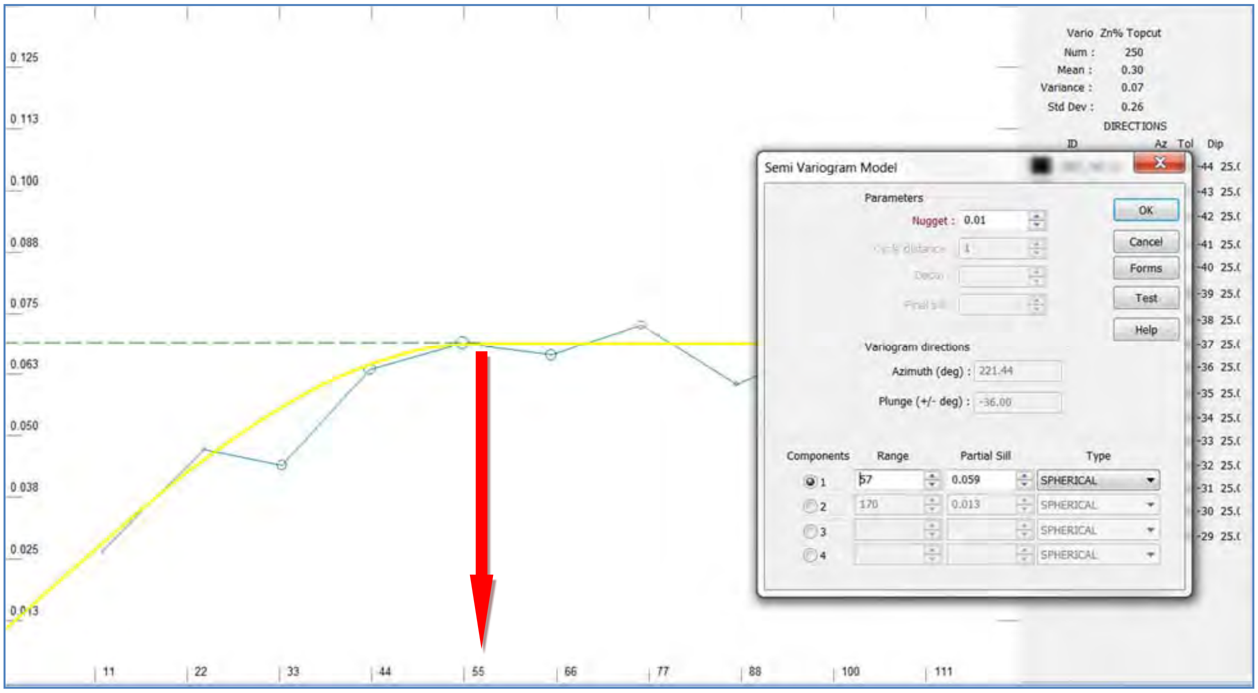
ZINC



Down Hole variogram. Nugget of 14%

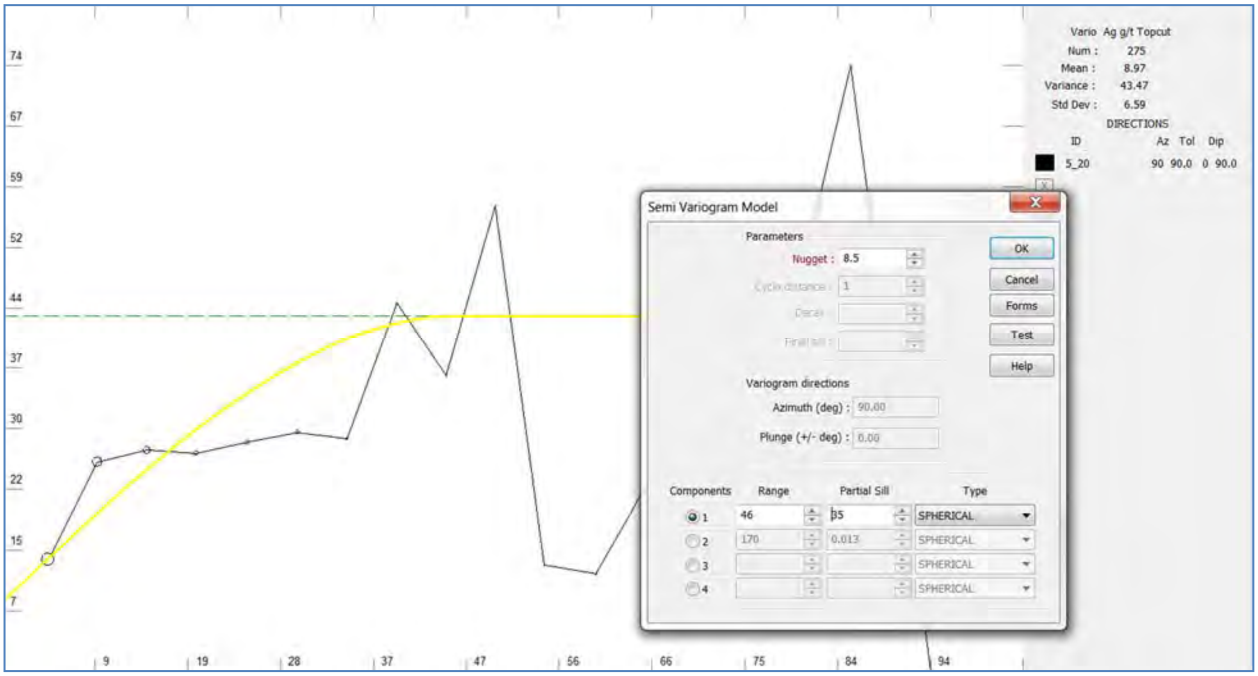


Directional Variogram. Strike of 176° and a 44° plunge. Suggested range of 52m.

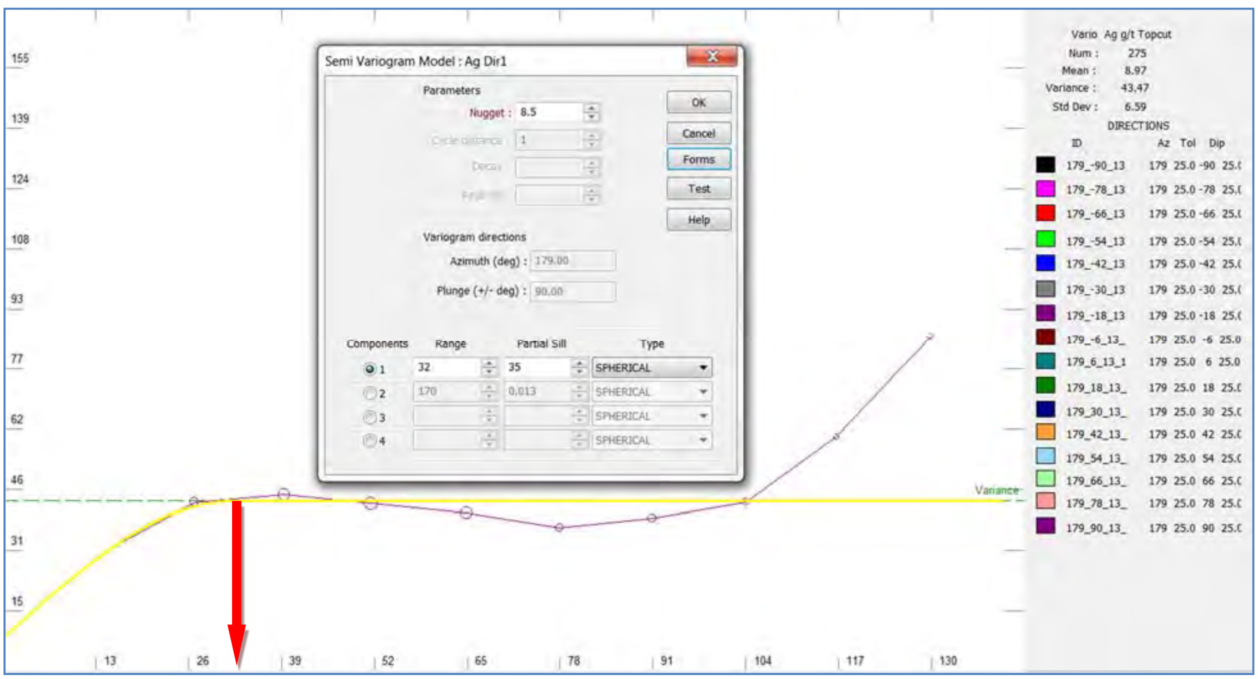


Directional Variogram. Suggested range of 57m.

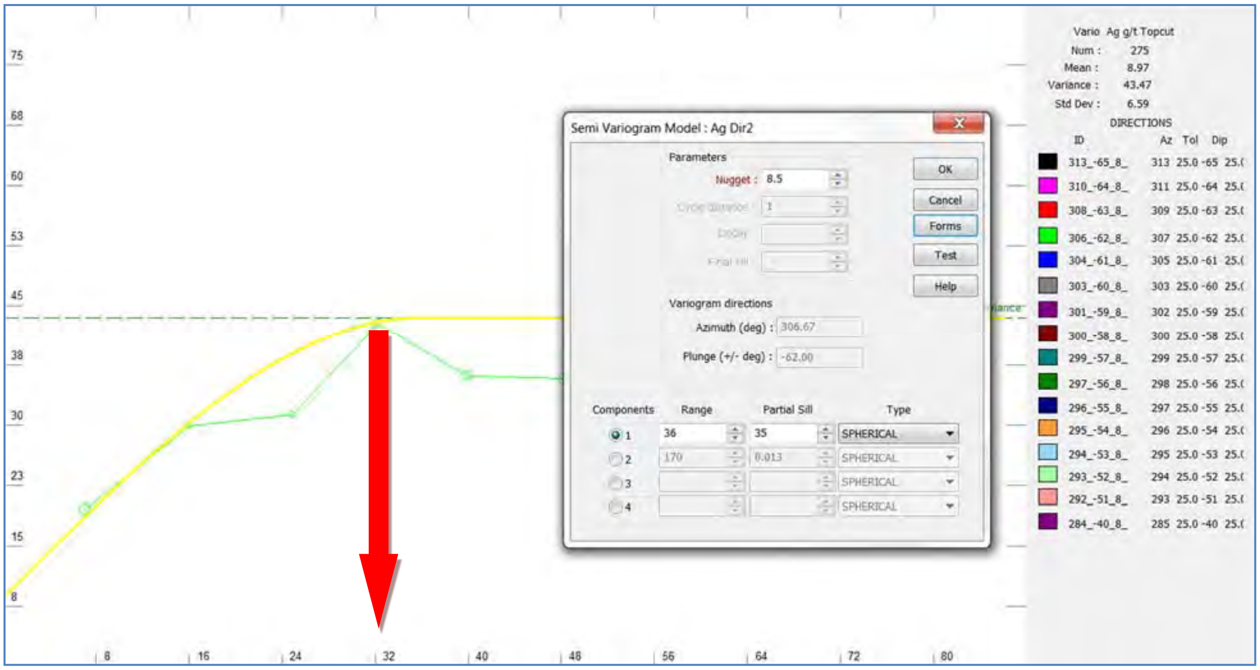
Silver



Down hole variogram. 19.6% Nugget

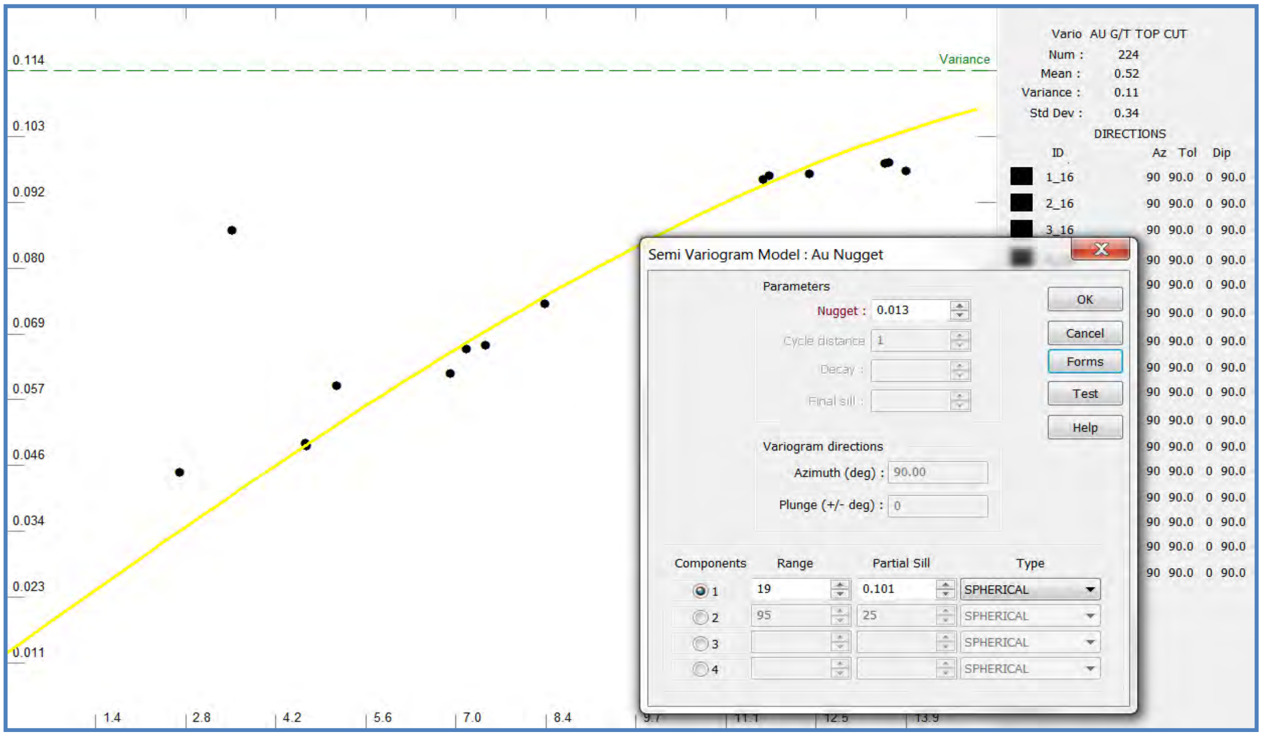


Directional variogram. Strike of 179° and 18° plunge. Suggested range of 32m.

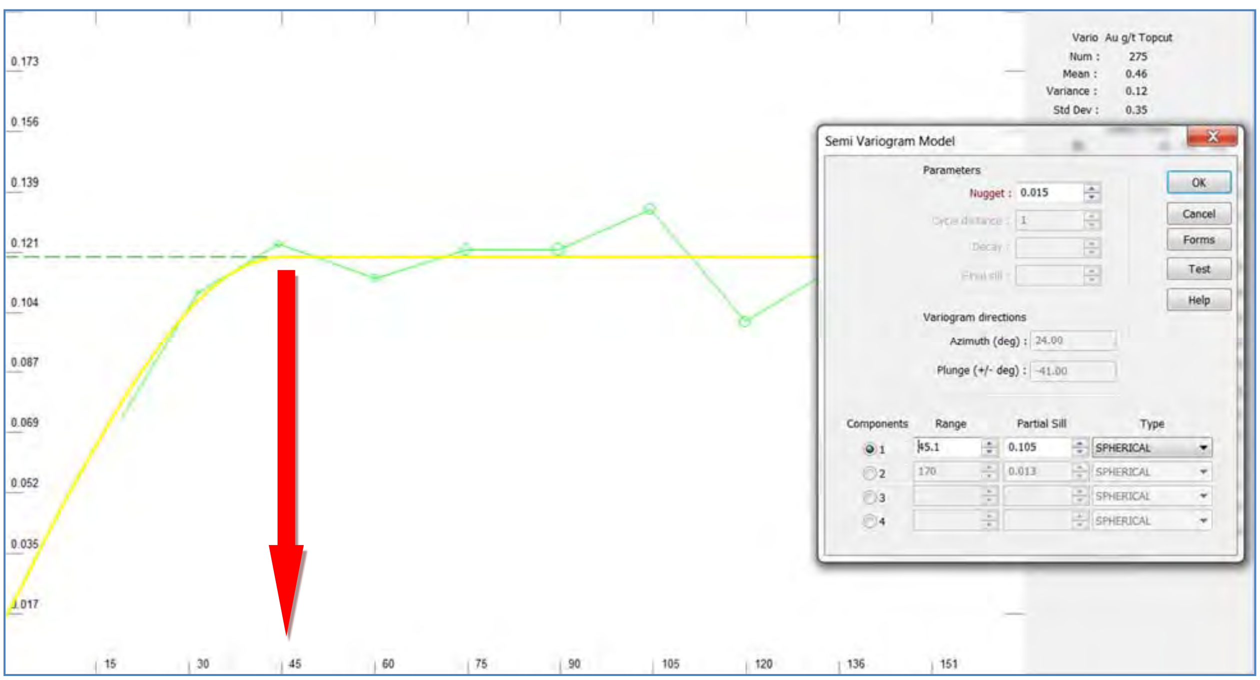


Directional Variogram. Second Direction. Suggested range 36m.

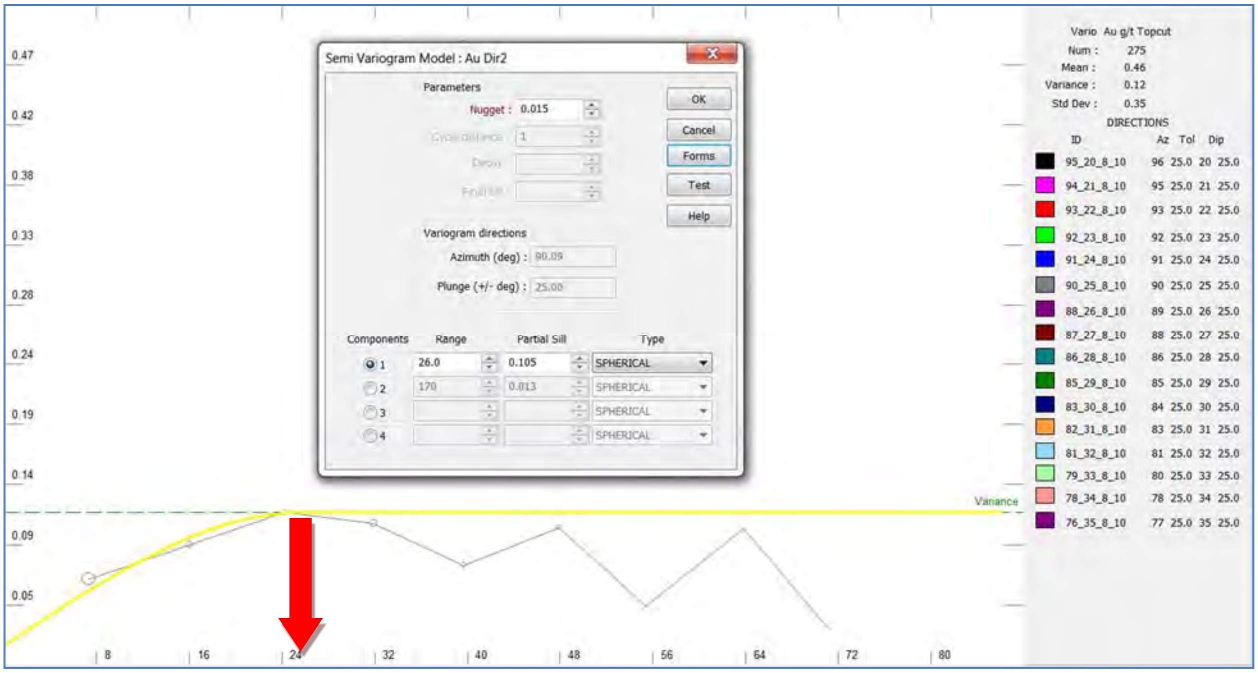
Gold



Down hole variogram. Nugget of 12.5%



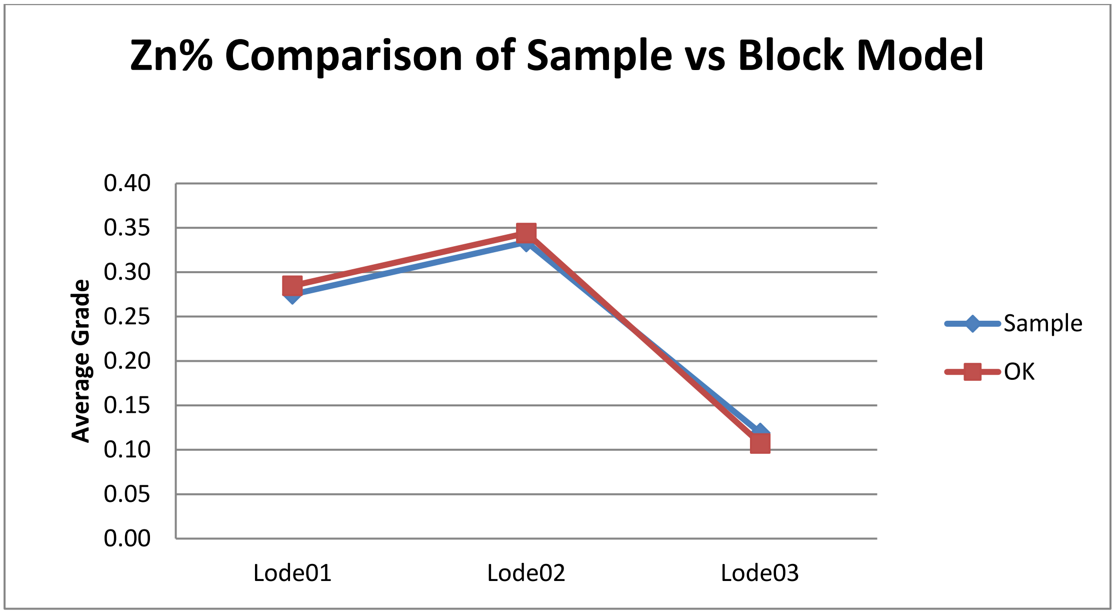
Directional Variogram. Strike of 24° and 41°plunge. Suggested range 45.1m.

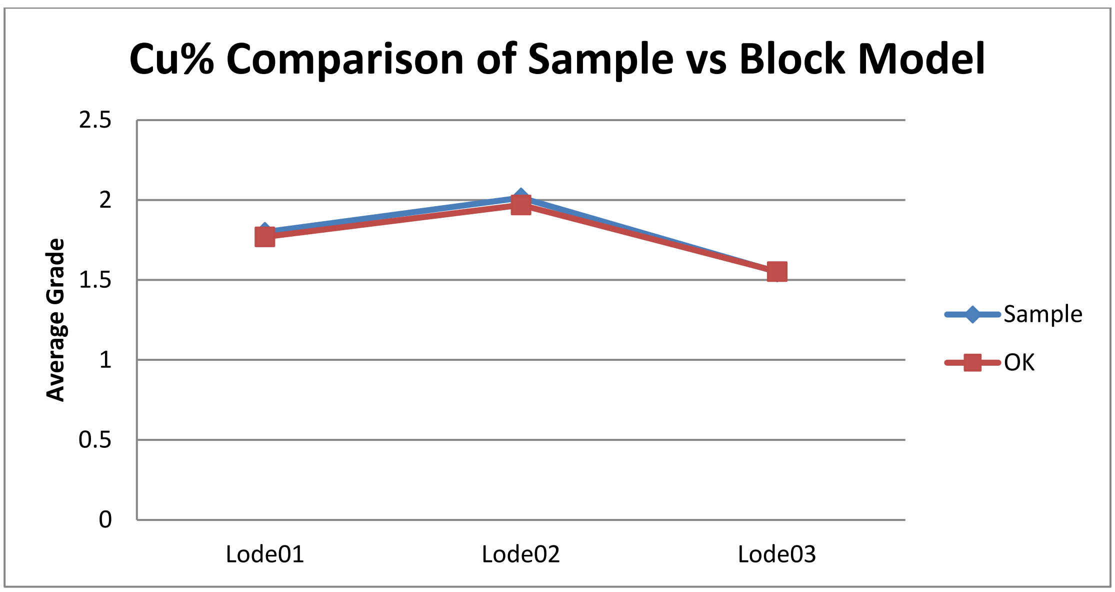


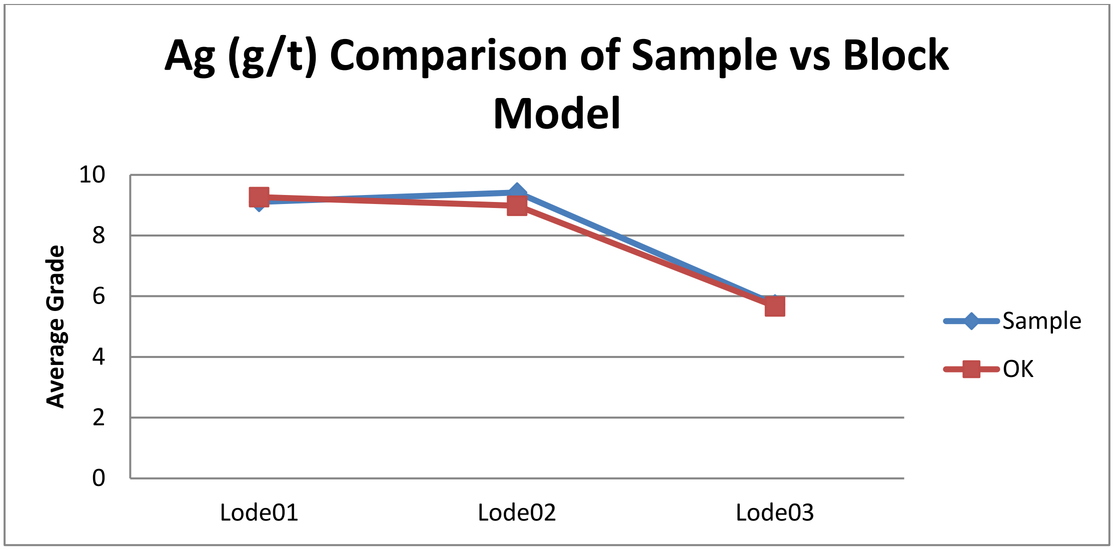
Directional Variogram. Suggested range of 26m.

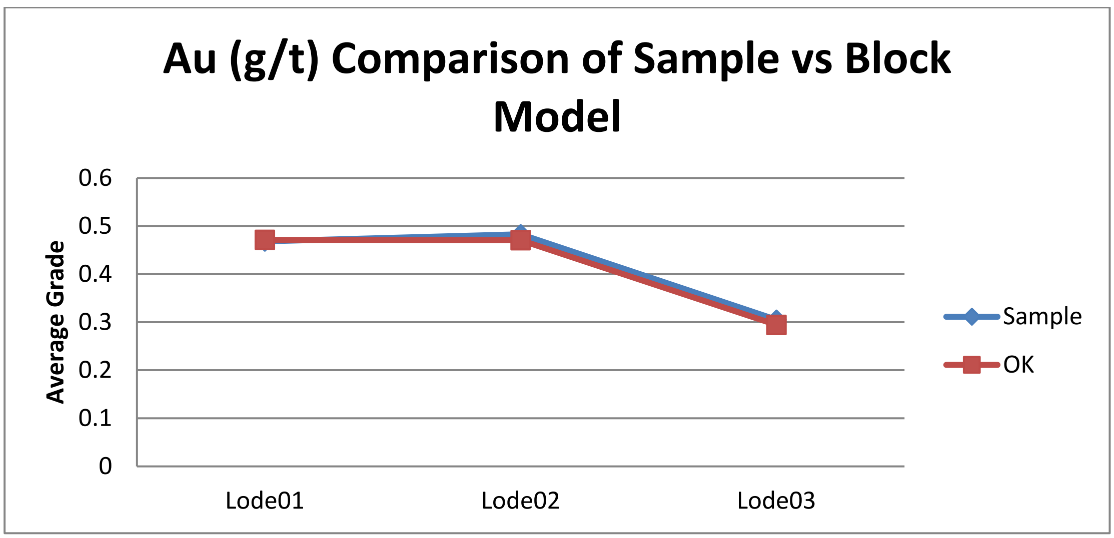
Appendix 5 – Block Model Validation Graphs

Drill hole samples versus Block Model broken down by Lode:

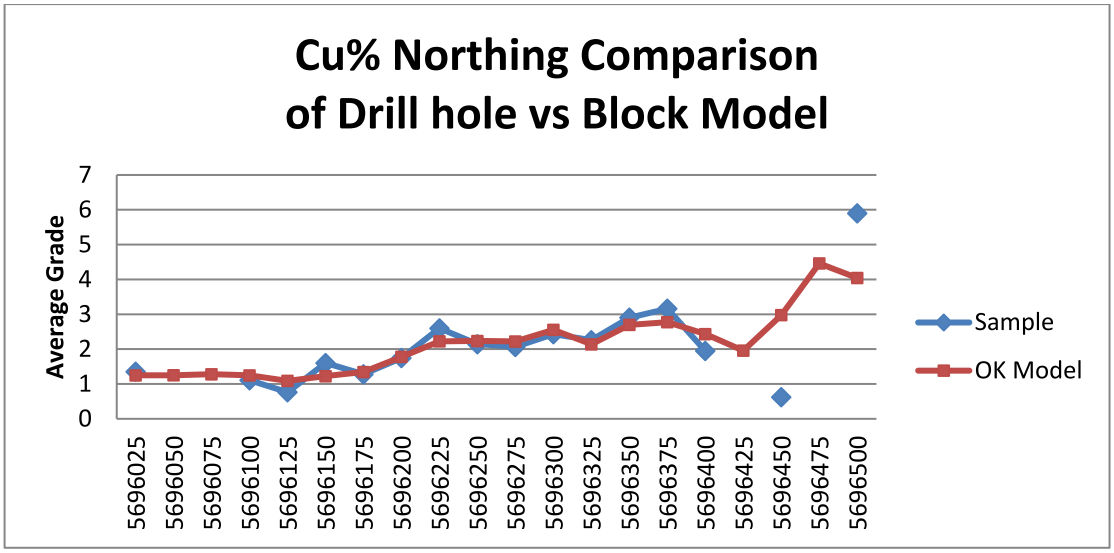


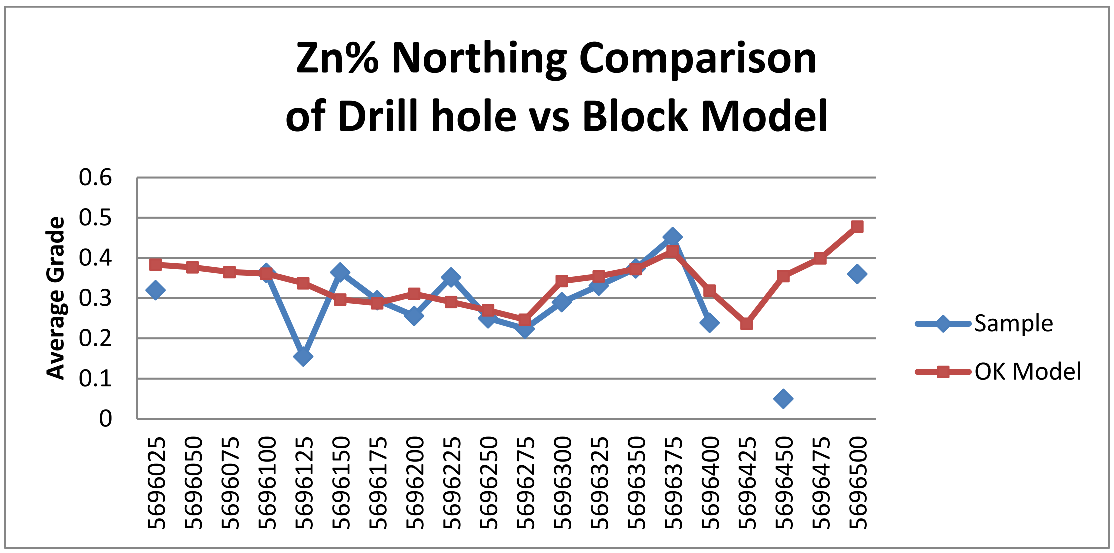


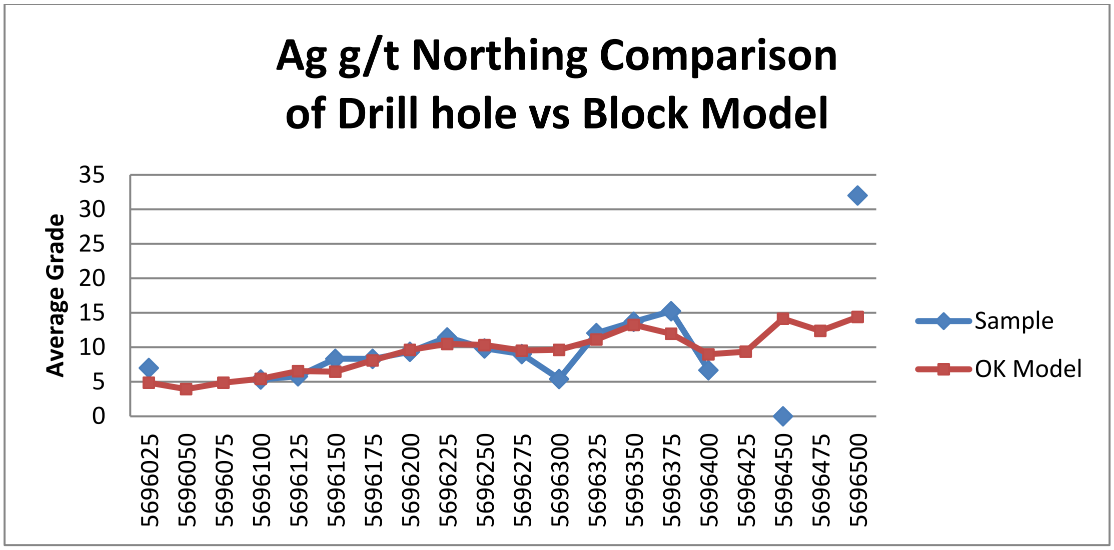

Ag (g/t) Comparison of Sample vs Block Model
Average Grade
0
2
4
6
8
10
Lode01
Lode02
Lode03
Sample
OK

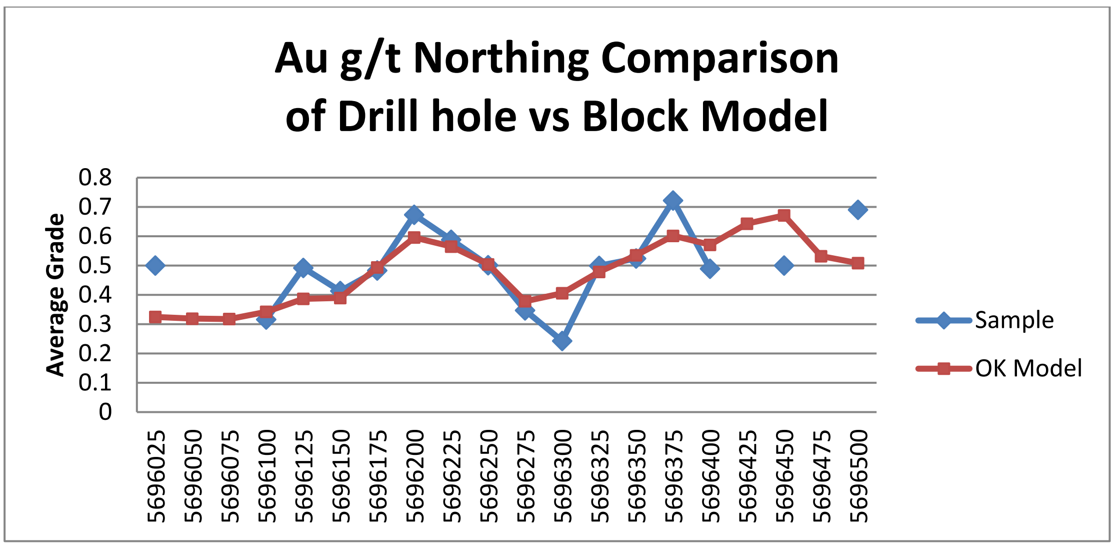

Au (g/t) Comparison of Sample vs Block Model
Average Grade
0
0.1
0.2
0.3
0.4
0.5
0.6
Lode01
Lode02
Lode03
Sample
OK

Drill hole samples versus Block Model broken down by Northing:

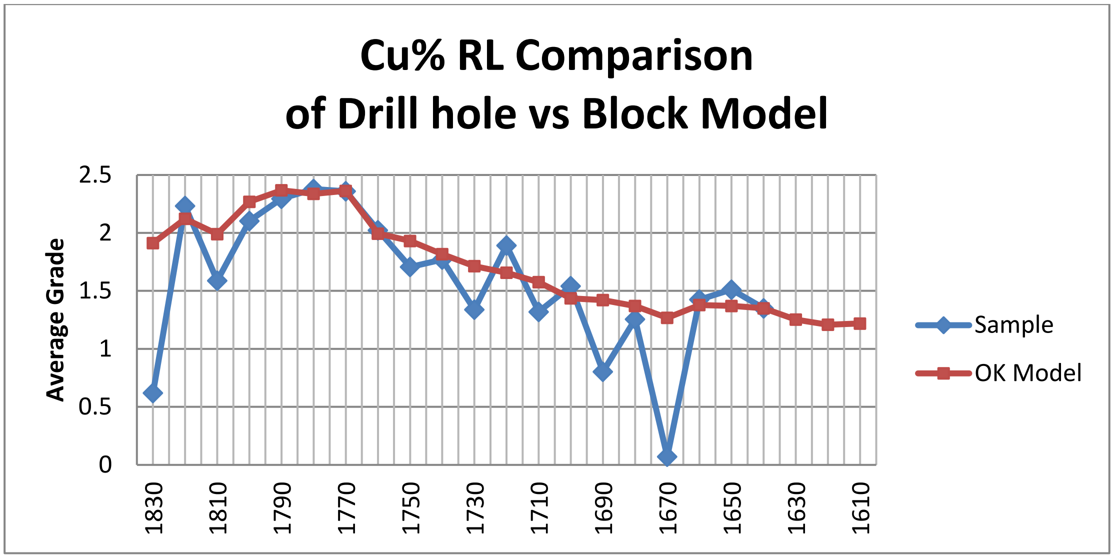


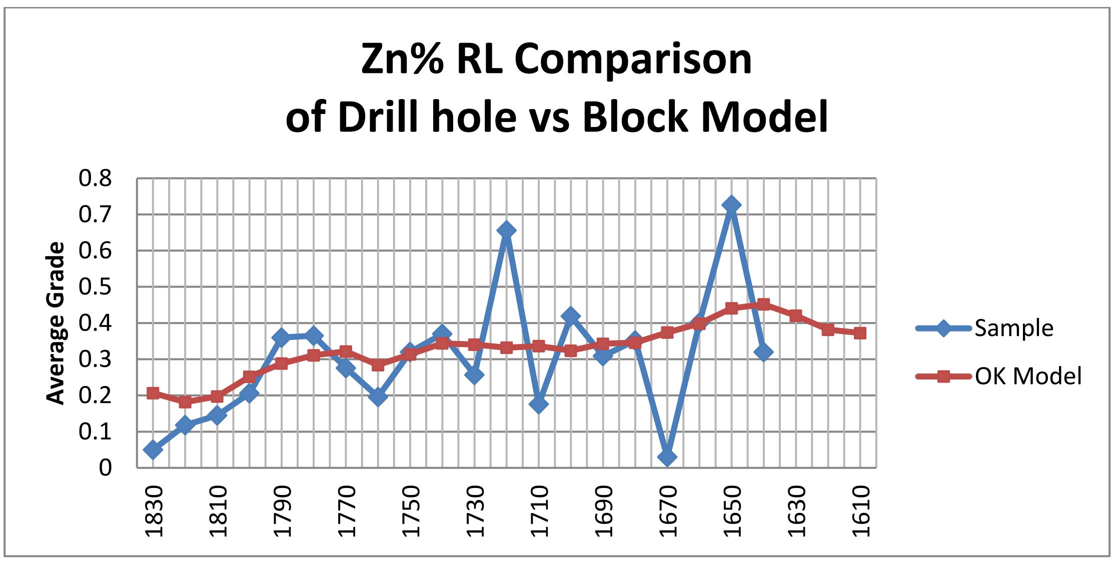


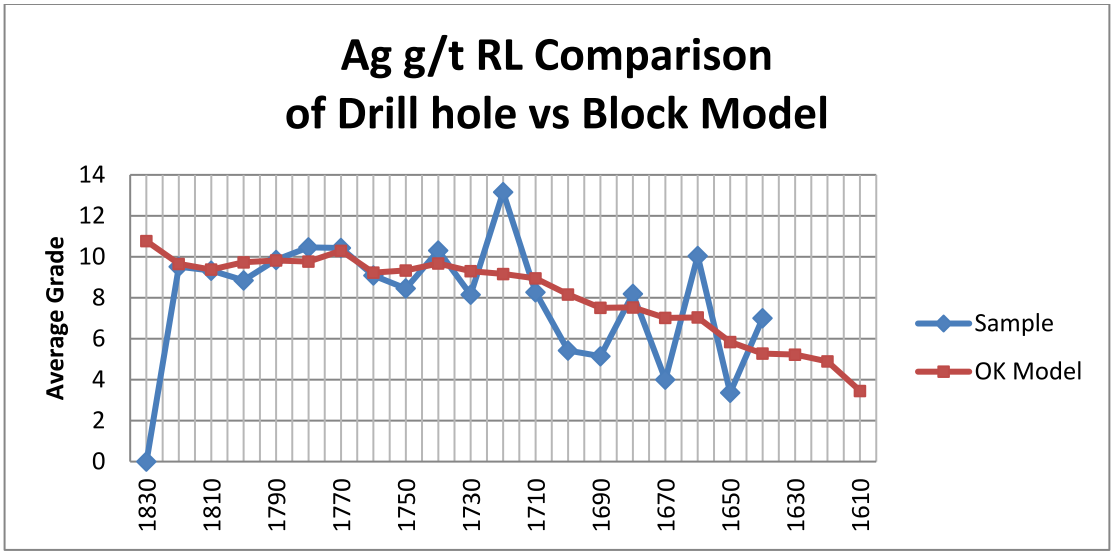

Ag g/t Northing Comparison
of Drill hole vs Block Model
Average Grade
35
30
25
20
15
10
5
0
5696025
5696050
5696075
5696100
5696125
5696150
5696175
5696200
5696225
5696250
5696275
5696300
5696325
5696350
5696375
5696400
5696425
5696450
5696475
5696500
Sample
OK Model

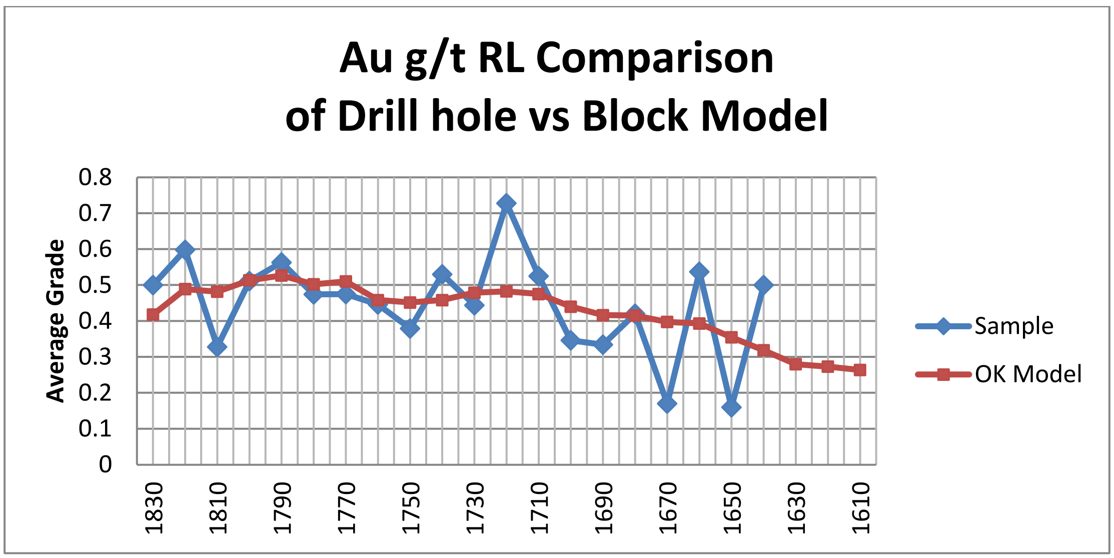

Au g/t Northing Comparison
of Drill hole vs Block Model
Average Grade
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
5696025
5696050
5696075
5696100
5696125
5696150
5696175
5696200
5696225
5696250
5696275
5696300
5696325
5696350
5696375
5696400
5696425
5696450
5696475
5696500
Sample
OK Model

Drill hole samples versus Block Model broken down by RL:






Ag g/t RL Comparison
of Drill hole vs Block Model
Average Grade
14
12
10
8
6
4
2
0
1830
1810
1790
1770
1750
1730
1710
1690
1670
1650
1630
1610
Sample
OK Model


Au g/t RL Comparison
of Drill hole vs Block Model
Average Grade
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
1830
1810
1790
1770
1750
1730
1710
1690
1670
1650
1630
1610
Sample
OK Model