

**GEOLOGICAL SURVEY BRANCH  
ASSESSMENT REPORT**

**29,220**

**Copper Mountain Project  
Similco Fr 1 and Similco Fr 2 Mineral Claims  
Princeton, British Columbia  
NTS Map Sheet 92H/7E  
Latitude 49° 20'N; Longitude 120° 31'W**

**Prepared for Copper Mountain Mining Corp.**

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## Executive Summary

The Copper Mountain project is located 20 kilometres south of the town of Princeton, near Highway 3, in southern British Columbia. The Copper Mountain project includes the Similco Mine site where mining began in 1923 and up to 1996 had produced 1.74 billion pounds of copper. A 100% interest in the project was acquired by Copper Mountain Mining Corp through a purchase agreement with Compliance Energy.

Mineral deposits on Copper Mountain have a long history of exploration and mining dating back to the first claims which were staked in 1882. Granby Consolidated Mining, Smelting and Power Company (Granby) began underground mining in 1923 and by 1957 had extracted 31.5 million tonnes grading 1.08% Cu with minor silver (approx 5 g/t) and gold (0.23 g/t) from a series of deposits located in what would later become the Pit 1 and Pit 3 areas. More modern exploration and mining began in 1966 when Newmont Mining Corporation of Canada optioned claims on the west side of the Similkameen River and discovered the Ingerbelle deposit. Newmont purchased all of Granby's claims and data on Copper Mountain, primarily to obtain space for a tailings facility (Smelter Lake). Open pit mining began on the Ingerbelle deposit in 1972. In 1979, Newmont began developing reserves on the east, or Copper Mountain, side of the river and installed a crusher and conveyer system to move ore across the river to the mill adjacent to the Ingerbelle Pit. Production commenced from Pit 2 in 1980 and from Pit 3 in 1983. Mining in the Ingerbelle pit ceased in 1981 and Pit 2 was completed in 1985.

Newmont sold the entire Copper Mountain property to Cassiar Mining Corporation (later to become Princeton Mining Corp.) in 1988 as part of a corporate re-organization. Princeton operated the property as Similco Mines Ltd. from that time through to the end of 1996 with minor shut-downs during periods of low copper prices. Similco's production initially came from Pit 3 and Pit 1, followed by the newly discovered Virginia Pit in 1991 and low grade stock piles from Pit 2 and Ingerbelle in later years. A significant reserve\* base remained in place at the time of shut down. The Similco Mine was hard pressed to produce a significant operating profit during periods of low copper prices, primarily due to a relatively small mill size of 20,000 t/day which was often run at 24,000 t/day or greater, and relatively small equipment (100-120 ton trucks and 7 yard shovels) that could not efficiently handle the waste from progressively higher strip ratio reserves.

Existing historical resources\*\* in the project area include resources in the bottoms and sides of the Pit 2, Pit 3, and Ingerbelle deposits as well as material remaining in the Virginia deposit. Additionally, exploration drilling from 1992 to 1996 defined approximately 30 million tonnes of inferred resources\*\* in the Alabama area. The total resources on the Copper Mountain side of the property (Pits 2 and 3, not including Alabama) are in excess of 100 million tonnes grading 0.42% copper at an average strip ratio of 2.2:1. Only a limited amount of historical drilling was carried out in the areas

*\* defined as reserves during mine operation but currently defined\*\* as historical resources which are not compliant with NI43-101 and although relevant, should not be relied upon.*

peripheral to Pit 1, Pit 2 and Pit 3 and an exploration drilling program is currently underway to test these areas. This program is significant as any mineralization in the area between the pits would not only increase resources but would significantly lower the stripping ratio of the pit expansions. Additional exploration is planned to test for additional resources in the Virginia, Alabama, and Mill zones, as well as to test for other areas of mineralization such as the drilling that is the subject of this report.

Three drill-holes totalling 1,001 feet were drilled on the Similco #1 Fr and the Similco # 2 Fr claims to test for mineralization that might extend between the Ingerbelle Pit area to the west and the Alabama deposit, to the east. The drilled area has outcrop with strong potassic alteration with some copper mineralization present and is located under the historical conveyor system used to transport ore from the pits on Copper Mountain to the milling complex adjacent to the Ingerbelle deposit on the west side of the Similkameen River. Consequently this area had never been drill-tested previously. Drilling encountered badly broken rock with a deep weathering profile. Low grade copper mineralization was associated with potassically altered intrusive rocks in the drill-hole CM07P2-29 but it appears that a significant amount of the copper may have been oxidized and leached on this area of steep slopes. A narrow (10') zone grading 0.83% copper was intersected in CM07P2-30. Drill-hole CM07P2-31 consisted exclusively of fault gouge. All holes were terminated prior to reaching target depth due to caving in broken ground. It appears that the steep terrain in this area is due to extensive faulting associated with the orientation of the Similkameen River canyon. The area remains of interest but will have to be drilled at different orientations.

## Table of Contents

Executive Summary.....	ii
1. Introduction .....	1
1.1 Property Description and Location.....	1
1.2 Accessibility, Climate, Local Resources, Infrastructure, & Physiography .....	2
1.3 History .....	4
1.3.1 Project area, Exploration and Mining History.....	4
1.3.2 Recent Production History.....	5
1.3.3 Exploration History .....	5
1.4 Current Work.....	7
2. GEOLOGY AND MINERALIZATION.....	8
2.1 Regional Geology .....	8
2.2 Property Geology.....	9
2.2.1 Stratigraphy .....	9
2.2.2 Intrusive Rocks .....	11
2.2.3 Structure.....	12
2.3 Deposit Type.....	13
2.4 Mineralization and Alteration.....	14
2.4.1 Mineralization.....	14
2.4.2 Alteration .....	16
3. Diamond Drill Program .....	19
3.1 Introduction .....	19
3.2 Description of Program and Sampling Methods .....	19
3.3 Results .....	20
4.0 Conclusions and Recommendations.....	22
4.1 Conclusions .....	22
4.1 Recommendations .....	22
References .....	23

## List of Figures

<b>Figure 1.1 Location Map.....</b>	<b>1</b>
<b>Figure 1.2 Claim Map.....</b>	<b>3</b>
<b>Figure 1.3 Generalized Geology, Open Pits and Similco #1 &amp; # 2 claims.....</b>	<b>8</b>
<b>Figure 2.1 Regional Geology.....</b>	<b>9</b>
<b>Figure 2.2 Property Geology with Pit outlines.....</b>	<b>10</b>
<b>Figure 2.3 Geology and Primary Structures.....</b>	<b>12</b>
<b>Figure 2.4 Comparison of Production tonnage and grades.....</b>	<b>15</b>
<b>Figure 2.5 Fracture controlled magnetite-cu veins.....</b>	<b>17</b>
<b>Figure 2.6 Fracture intersection model for Copper Mountain Mineralizazztion....</b>	<b>18</b>
<b>Figure 3.1 Photo of carbonate healed tectonic breccia in core.....</b>	<b>20</b>
<b>Figure 3.2 Cross section of drill holes showing analytical results.....</b>	<b>21</b>

**List of Tables**

**Table 1.1 Similco Recent Production Statistics.....5**  
**Table 3.1 Summary of drill collar data.....20**

**Certificates**

**Statement of Expenditures.....25**  
**Statement of Qualifications.....26**

**Appendices**

**Appendix 1 Mineral claim and Crown Grant information.....27**  
**Appendix II Analytical data.....32**  
**Appendix III Drill logs.**

# 1. Introduction

## 1.1 Property Description and Location

The mineral deposits of the Copper Mountain area are situated 15 km south of Princeton, British Columbia and 180 km east of Vancouver (Lat. 49 20' N; Long. 120 31' W). The NTS map sheet is 92H/7E, (Fig. 1.1). The property consists of 127 Crown granted mineral claims, 155 located mineral claims and 15 mining leases covering an area of 6,702.1 hectares or 67 square kilometres. Claims are shown in Figure 1.2 and listed in Appendix I. Approximately 30% of the claims, primarily in the northwestern property area, are subject to certain production royalties. Copper Mountain Mining Corp. owns the claims through the purchase of Similco Mines Ltd. from Compliance Energy Corporation.

The claims straddle the Similkameen River with the Ingerbelle deposit on the west side of the river and the Copper Mountain deposits on the east side of the river. The Ingerbelle side of the property is immediately adjacent to the Hope-Princeton Highway (No. 3) and has numerous roads from previous mining activity. The original mill complex is located on the Ingerbelle side and was connected to the Copper Mountain side by a conveyer system. Much of the milling equipment has been removed and there are plans to use mill buildings for other purposes such as a wood waste power plant. Currently, the northwestern part of the Ingerbelle area is being used as a washing area for coal mined from nearby Tulameen Mountain by Compliance Energy. Access to the Copper Mountain area is via a 26 km paved road from the town of Princeton.

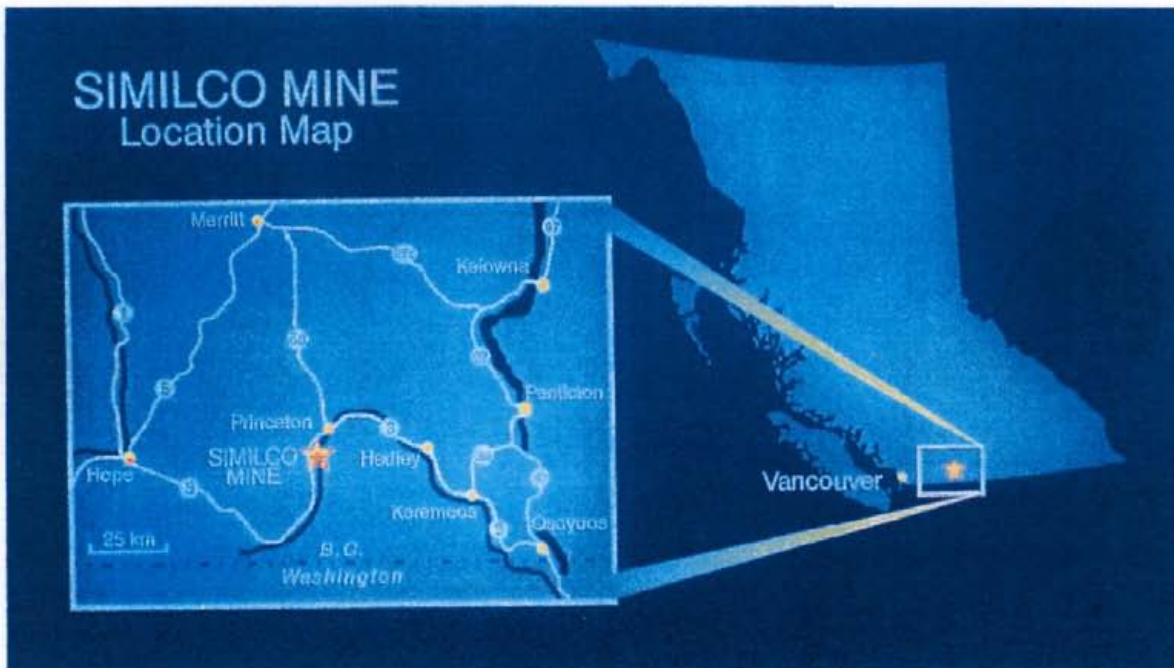


Figure 1.1 Property Location Plan

A significant part of the existing rock dumps at the mine site have been reclaimed. Envirogreen, a soil remediation company is spreading remediated sewage on the rock dumps which helps to provide a top soil for the establishment of various forms of plant life. Some of the reclaimed rock dumps are currently

being used for grazing cattle. A \$3 million reclamation bond is attached to the property and this bond is reported to be sufficient to cover current environmental liabilities.

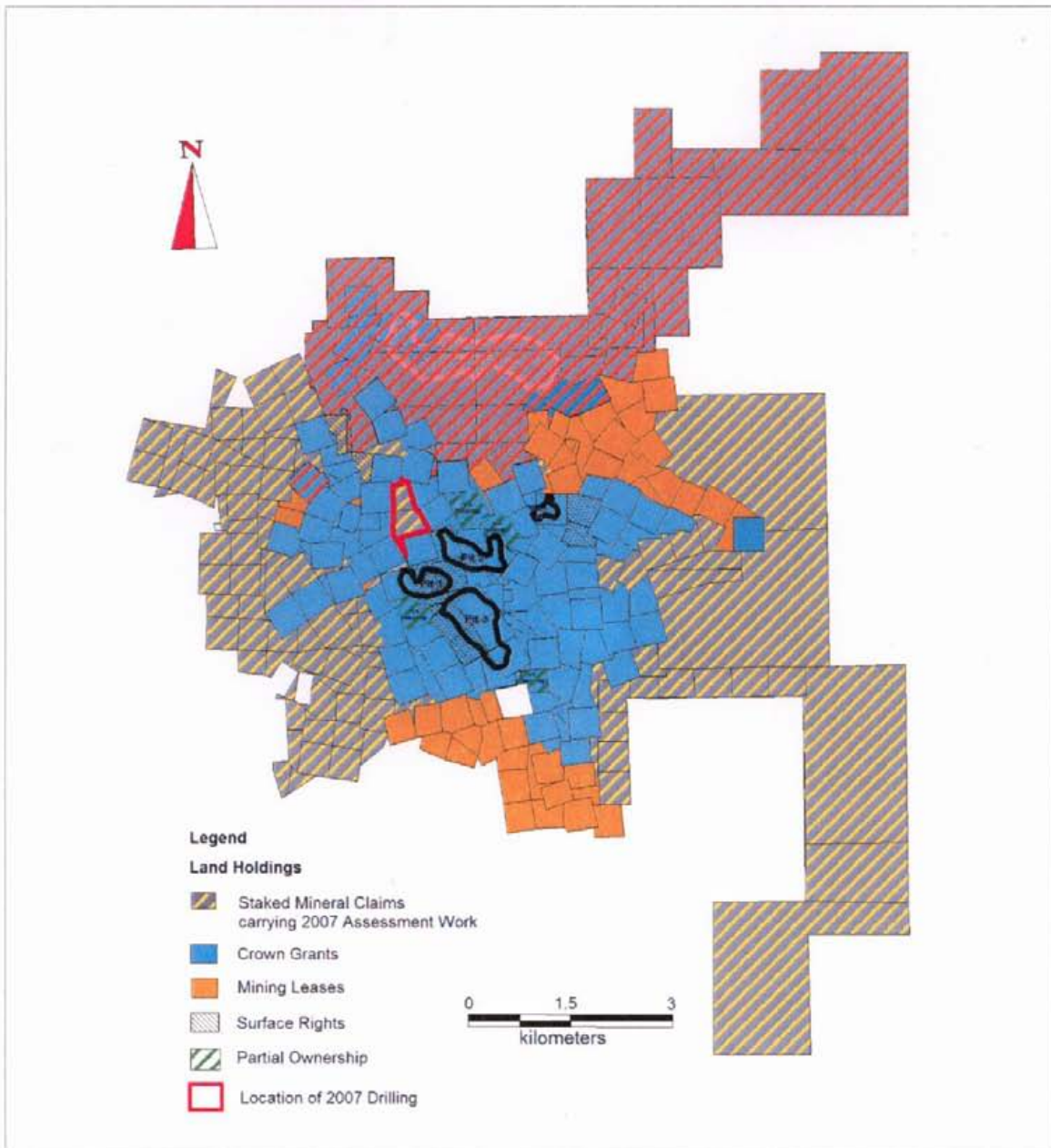
## **1.2 Accessibility, Climate, Local Resources, Infrastructure, & Physiography**

Almost all of the property area is accessible by highways, paved access road and local gravel roads remaining from previous mining activity. Topography is gentle to moderate over most of the plateau area of Copper Mountain, where elevations range from 1,050 m to 1,300 m, but becomes rugged in the Similkameen River Canyon. The elevation of the river is approximately 770 m and the canyon walls are steep.

The Copper Mountain area has a relatively dry climate, typical of the southern interior of British Columbia. Summers are typically warm and dry whereas the winters are cool with minor precipitation. Most of the precipitation during the winter months falls as snow with total snow fall of approximately 200 cm resulting in accumulated (compacted) snow depths of approximately 60-70 cm on the ground. Weather data from the mine-site has been collected from 1966 through to 1996. Temperatures range from an average annual high of 35°C and the average annual low of -29.5°C, with the annual mean temperature being 6 degrees. Total annual precipitation varies widely, ranging from a low of 253 mm to a high of 790 mm with the average being 400 mm. The bio-geoclimatic zones for the area are Ponderosa Pine - Bunch grass at the lower elevations, transitioning into Lodgepole Pine forests at the higher elevations.

The town of Princeton has a population of approximately 3,000 and has a diversified economy driven by ranching, forestry and tourism, although during the mine operation, Similco Mines was the predominate employer in the area. The town has services typical for its size, however the general proximity of Vancouver, 267 km to the west, allows many services to be obtained there.

Figure 1.2 Claim map





## 1.3 History

### 1.3.1 Project area, Exploration and Mining History

Initial exploration at Copper Mountain dates back to 1884. A number of attempts at initiating production were made during the period from 1892 to 1922 but were unsuccessful. In 1923, Granby Consolidated Mining, Smelting and Power Company (Granby) acquired the property, built a milling facility in Allenby adjacent to Princeton (Fig. 6.1) and extracted 31.5 million tonnes of ore with a grade of 1.08% copper, primarily from underground excavations, in, and below, what are now the Pit 1 and Pit 3 areas, during the periods from 1925 to 1930 and 1937 to 1957. Ore was transported from an adit on the east wall of the Similkameen River canyon along a rail line to the concentrator in the town of Allenby, adjacent to the town of Princeton. Mining operations were suspended in 1957, partly due to low metal prices and partly due to transportation charges on the ore by the owners of the rail line.

Modern exploration activity began in 1966 when Newmont Mining Corporation of Canada (Newmont) optioned claims opposite the historical Granby Mine on the west side of the Similkameen River. Newmont carried out geological mapping, soil sampling and geophysics which resulting in bulldozer trenching delineating a significant mineralized zone. Subsequent drilling defined sufficient resources to contemplate production. During this same time, Granby was drilling off open-pit reserves on Copper Mountain. In late 1967, Newmont purchased Granby's entire mining interest in the district, including a much needed tailings impoundment area (Smelter Lake), for US\$8M and 750,000 Newmont shares (trading price at the time was approximately \$4/share). Newmont continued exploration including an underground bulk sample from the Ingerbelle deposit. Production commenced from the Ingerbelle deposit in 1972. The predicted reserve at start-up was 67 million tons grading 0.55% Cu (and approximately 0.2 g/t gold). Actual mined grades were significantly less than the predicted grades and to change the strip ratio and reduce unit costs the cut-off grade was lowered to 0.2% Cu from 0.3% Cu and the mill was expanded from 13,600 T/day to 20,000 T/day.

In 1979, development of mineable reserves on the Copper Mountain side of the project commenced with the installation of a new primary crusher and conveyer system. The conveyer system was 2.1 km long, extending from the rotary cone crusher near Pit 1, along the east side of the Similkameen River for 1.4 km and then across the Similkameen canyon to the milling facility. Initial production on the Copper Mountain side was from Pit 2 with additional production from Pit 3 in 1983. Mining of Pit 2 ceased in 1985.

Newmont sold its Copper Mountain assets as part of a corporate re-structuring to reduce debt incurred by a US\$33 dividend/share paid out by Newmont in order to counter a takeover attempt by a junk bond syndicate headed by T. Boone Pickens. The entire property was sold to Cassiar Mining Corporation (later to become Princeton Mining Corp. (PMC)) in 1988 for US\$10 million and operated under the name Similco Mines Ltd. Similco continued mining from Pits 3 and 1 and later added a small tonnage from the Virginia Pit.

In November of 1993, Similco was shut-down to low metal prices and placed on a care and maintenance. Improving copper price, combined with a favourable US-Canadian dollar exchange rate, allowed the mine to re-open in August 1994. In conjunction with the re-opening a significant exploration effort was made to delineate additional deposits on the property. A property scale airborne magnetometer, electro-magnetic and radiometric survey was flown and followed up with mine scale

geological mapping, ground geophysics and diamond drilling. Drilling was initially focused on the Alabama zone where a large area of mineralization was identified and then shifted to extending mineralization to the east and at depth in the Ingerbelle deposit. In 1995, Similco returned to the Ingerbelle deposit, exploration having defined additional reserves at depth to the east of the deposit. The mine was closed down in late 1996 due to falling metal prices and a shortage of high grade-low strip reserves.

### 1.3.2 Recent Production History

Recent history of open pit mining at Copper Mountain was a battle against fluctuating and falling copper prices and rising costs. Due to the size of existing mining equipment and the relative costs associated with that equipment there was little leeway to increase the stripping ratio and maintain profitability when copper prices were below US\$1.00/lb. Consequently, mine planning was driven by stripping requirements as well as grades, metallurgical characteristics and waste haulage costs. Recent production statistics are given in table 6.1. The mine closed down in late 1993 and stayed on a "care and maintenance" basis until copper prices improved in mid 1994. A lack of low strip ratio reserves, rising production costs and necessary capital expenditures resulted in the mine closing down in November of 1996.

**Table 1.1 Similco: Recent Production Statistics**

	1996*	1995	1994**	1993***	1992
Ore Milled (tons x 1000)	7,154	8,958	3,034	7,416	8,132
Waste Mined (tons x 1000)	4,811	7,955	-	6,553	8,828
Head Grade (Cu %)	0.331	0.270	0.265	0.450	0.450
Recovery	85.9%	77.9%	77.2%	77.8%	77.2%
Copper Produced (lbs x 1000)	40,630	37,694	12,269	51,991	56,667
Gold Produced (ozs)	29,422	23,682	7,392	14,181	16,039
Silver Produced (oze)	85,943	95,565	32,829	370,129	314,490
Number of Employees (Dec 31)	35	287	198	32	274
Average Copper Price (US\$/lb)	1.09	1.38	1.11	0.92	1.07

\*10.5 months production; \*\*4.5 months production; \*\*\*11 months production

### 1.3.3 Exploration History

There is little documentation of the early exploration history on the property and most of this information must be inferred. Evidence of early workings such as trenches and adits indicate that early prospecting (1900-1940's) must have been fairly significant. By the mid 1950's Granby Mining was using diamond drilling in addition to percussion drilling for exploration. In the course of their exploration and production drilling, Granby located most known zones of mineralization with the possible exception of the Virginia and Alabama but did not define significant resources in all locations. Most of Granby's exploration took place along the Copper Mountain fault where grades were sufficient to support underground mining. Exploration was also conducted on the Voigt zone but this deposit was never developed, probably due to lower copper grades than those along the contact fault (the relatively

high gold grades would not have been that significant at the time). Due to the high diamond drilling costs relative to underground development costs during Granby's time, early drilling success was generally followed by underground development and underground drilling. The Wolf tunnel approximately 1 km southeast of the Oriole Zone is an example of this. A beneficial aspect of Granby's approach to later operators was that many of the underground drill holes were flat which allows for more accurate resource estimations of the predominately vertically oriented veins and fractures which control a majority of the mineralization.

Although Granby developed some small areas of open pit ore at a number of locations during the later stages of the mine life, their equipment was ill-suited for efficient open pit mining and a majority of their exploration was directed towards development of underground resources.

Newmont Mining Corp., initiated exploration on claims on the western side of the Similkameen River and were ultimately successful at delineating the Ingerbelle deposit. Following acquisition of Granby's Copper Mountain property, Newmont applied the same exploration techniques that had been successful in discovering the Ingerbelle deposit, namely Induced Polarization geophysical surveys and extensive diamond drilling. Newmont's IP surveys covered a significant part of the area east of the Copper Mountain fault between Pits 1 and 3 and resulted in focused exploration in the Pit 2 area. Most of Newmont's drilling on Copper Mountain was in the Pit 1 and Pit 2 areas. Newmont determined that the most effective method of drilling was to drill vertical drill holes, a practice that was debated at the time and still is. On one hand, vertical drilling does eliminate the problem of which direction to drill in – a difficult task in most of the mineralized areas due to two or more directions of vein and fracture hosted mineralization, on the other hand, vertical drilling commonly resulted in overestimating resource grades (by up to 25%, although this is known only in retrospect). In theory, angle drilling should provide better grade estimates provided that the holes are oriented approximately perpendicular to the main trend of mineralization. In areas with two or more significant directions angle drilling becomes problematic and it is probable that at least two directions of drilling are required. At present there is insufficient exploration and mining data to determine the effectiveness of angle drilling for estimating recoverable grades. Newmont did carry out a small exploration drilling program on the Voigt zone and here they used angle drilling.

Similco Mines carried out diamond drill programs during the periods of 1989-1991 and from 1993 to 1997. The early drill programs were located in the area extending from the eastern end of Pit 2 to the northeast through the Mill Zone across the Lost Horse Gulch and into the eastern end of the Alabama Zone. All holes encountered some mineralization with the most success coming from what would become the Virginia deposit. Although angle drilling was used for resource definition within the Virginia deposit, the orientation of the two fences of holes was parallel to the primary host structures which resulted in a modest overestimation of grades.

In 1993, a regional airborne electromagnetic (EM), magnetic (Mag) and radiometric (RM) survey was flown over the camp. The magnetic part of the survey was effective in mapping major lithological units and structures (see figure 7.4). The EM and RM parts of the survey appeared to have limited effectiveness, although this data may be of use in future geological compilations. The main limitation of the EM part of the survey is the limited size and conductivity of the individual mineralized structures within a mineralized zone. The effectiveness of RM part of the survey was constrained by the variable overburden and vegetative cover within the survey area. The regional airborne survey was followed up by deep a penetration IP survey (and inversion) along the northern edge of the Lost Horse Gulch. This survey indicated variable zones of chargeability which increased with depth below the Alabama ridge area. Follow-up drilling yielded favourable results, with an inferred resource being estimated for the Alabama area (29 Mt grading 0.35% Cu and 0.17 g/t Au) by the mine operators. The resource remains

open to the west and at depth. The mineralization is also open to the north but thickening cover of Tertiary volcanic rock precludes development of open pit mineralization in the northerly direction.

Drilling in the Ingerbelle area in 1994 and 1995 defined additional resources extending easterly, and at depth from the Ingerbelle deposit; the 'low-strip' part of these newly defined resources were mined through 1996. A significant drill program was undertaken in late 1996 and early 1997 to see if additional resources could be defined in the areas surrounding Pit 2 and Pit 3. Results of this drill program are not documented, presumably due to mine closure, and will require careful investigation prior to instigating further exploration on the property.

#### **1.4 Current Work**

The 2007 work program is predominately a diamond drilling program with the purpose of verifying the historical database of nearly 7,000 drill holes totalling approximately 400,000 m and defining additional resources in and around the existing open pits and in a number of target areas nearby. The three drill-holes that are the subject of this report were drilled on the Similco #1 FR and Similco #2 FR claims which are located on the upper part of the Similkameen River canyon between the Ingerbelle deposit, on the west side of the River and the Alabama deposit, on the east side of the river. The area of drilling is underneath the old conveyor system and although there are nearby indications of mineralization, this area had never been drill tested. The initial objective was to carry out 2,000 to 3,000 m of drilling in three to four holes in this area but due to very poor drilling conditions only 1,001 feet (305.1 m) of drilling was completed in three drill-holes. The holes were logged and core with indications of copper mineralization was split by diamond saw and sent for assay to Pioneer Laboratories of Vancouver. Analytical work consisted of multi-element ICP analysis and assays for copper values greater than 1000 ppm.

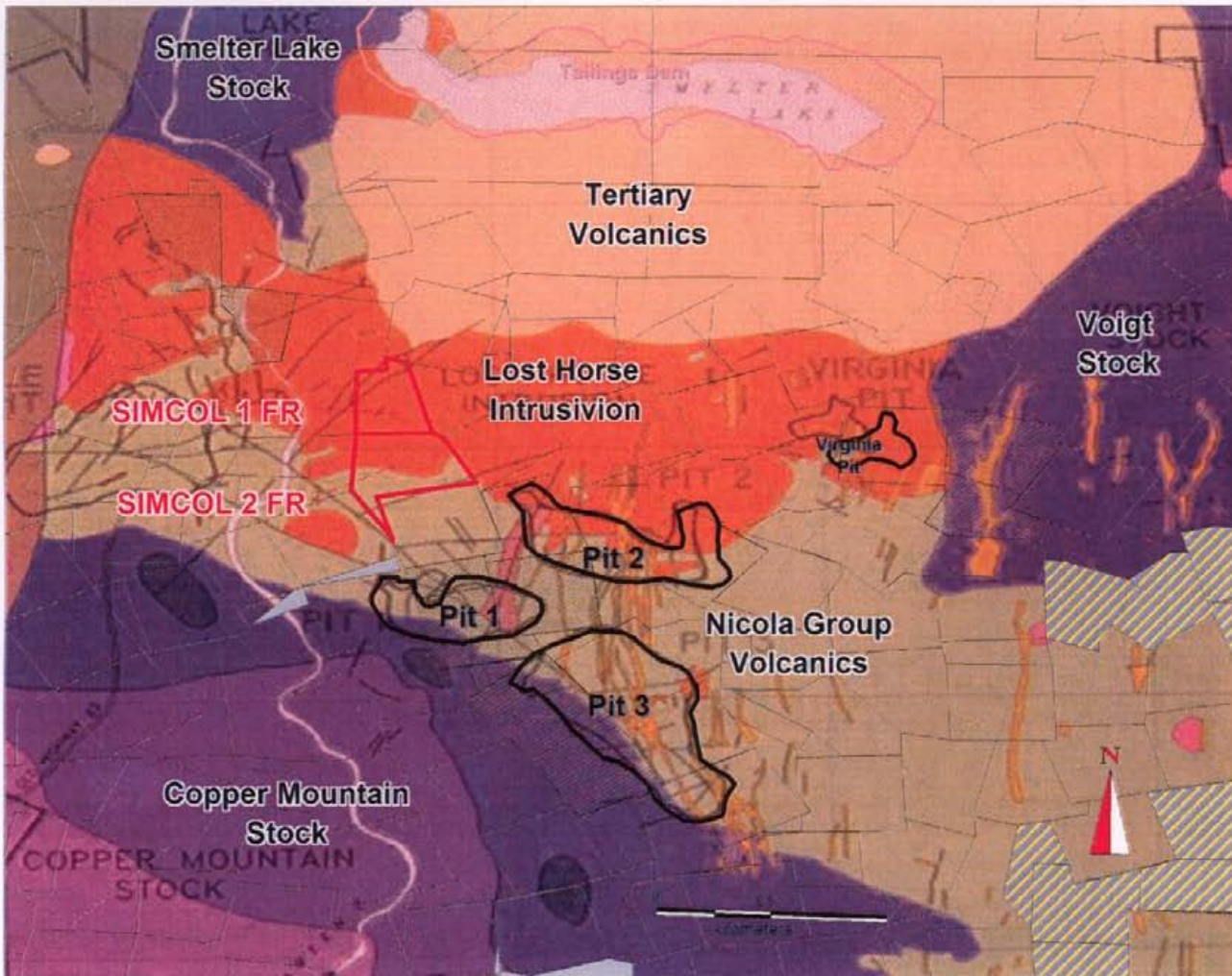


Figure 1.3 Generalized Geology, open pits and claim locations for Copper Mountain.

## 2. GEOLOGY AND MINERALIZATION

### 2.1 Regional Geology

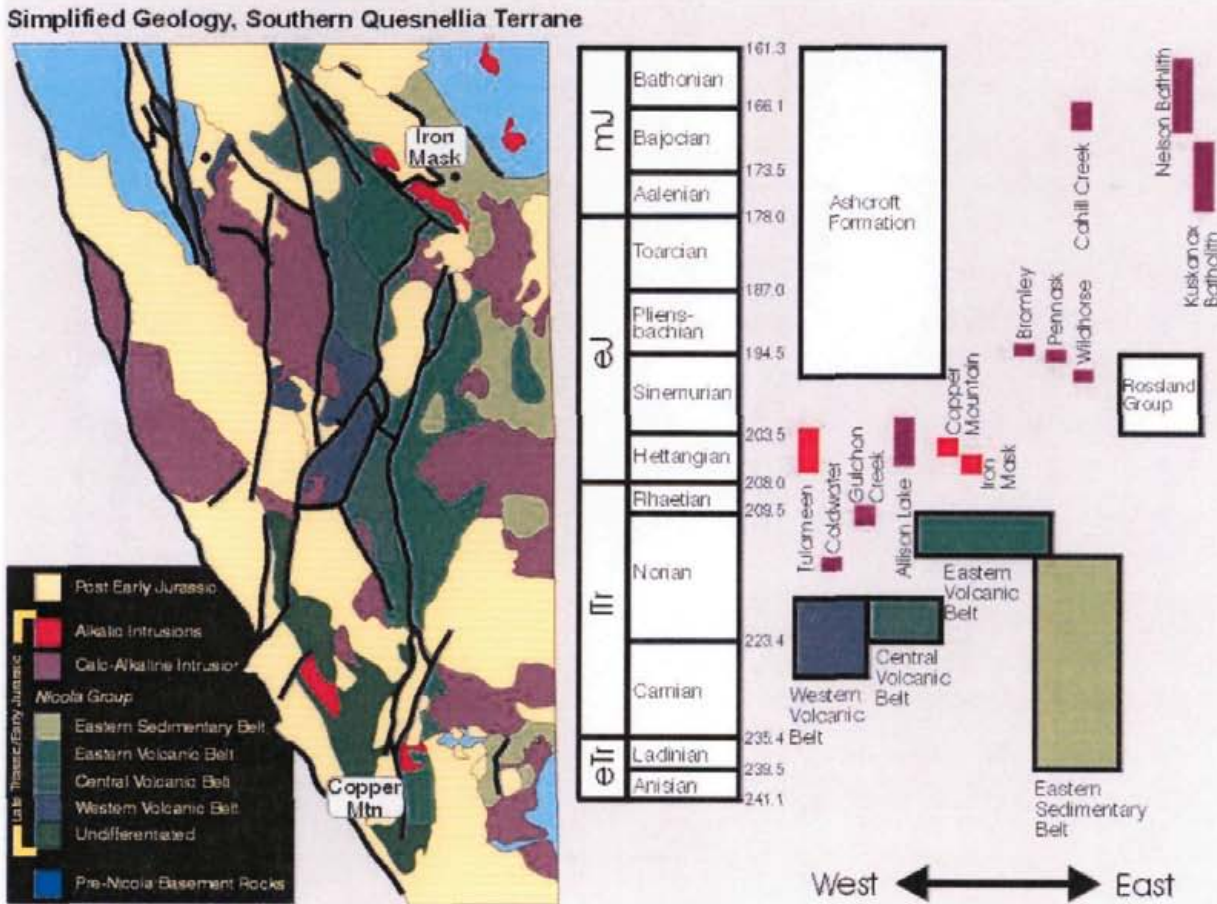
The Copper Mountain alkalic porphyry copper-gold camp is part of a northerly trending Mesozoic tectonostratigraphic terrane termed Quesnellia, composed of a volcanic arc with overlying sedimentary sequences, all of which were built on top of a deformed, oceanic sedimentary-volcanic complex (Harper Ranch and Okanogan sub-terrane). Quesnellia was formed off-shore to the southwest of continental North America and accreted, with other terranes, onto North America in late Mesozoic times (Monger et al., 1992). The principle rock formation of Quesnellia is the Late Triassic Nicola Group, a predominately subaqueous island-arc assemblage composed of volcanic and lesser sedimentary rocks that have been intruded by early Jurassic alkalic, calc-alkalic and zoned mafic (Alaska-type) plutons and batholiths (Preto, 1977; 1979).

The Nicola Group rocks have a stratigraphic thickness of approximately 7.5 km and form a 25 km wide band that extends from the Canada-U.S. border north to beyond Kamloops Lake. This band has been divided into four lithologic assemblages that are commonly bounded by sub-parallel fault systems (Monger, 1989). The 'western belt' is a steeply dipping, east-facing assemblage of sub-aqueous felsic to mafic rocks of calc-alkaline affinity that grade upwards into volcanoclastic rocks.

## 2.2 Property Geology

The Copper Mountain alkalic porphyry copper-gold camp occurs in the 'eastern volcanic belt' of the Nicola Group (Monger, 1989). These volcanic strata are intruded by a suite of early Jurassic alkalic dykes, sills, irregular plugs and zoned plutons of the Copper Mountain suite (Woodsworth et al., 1992), but other than local contact effects and alteration associated with mineralization, the stratified rocks are relatively fresh having undergone only lower greenschist metamorphism.

FIGURE 2.1

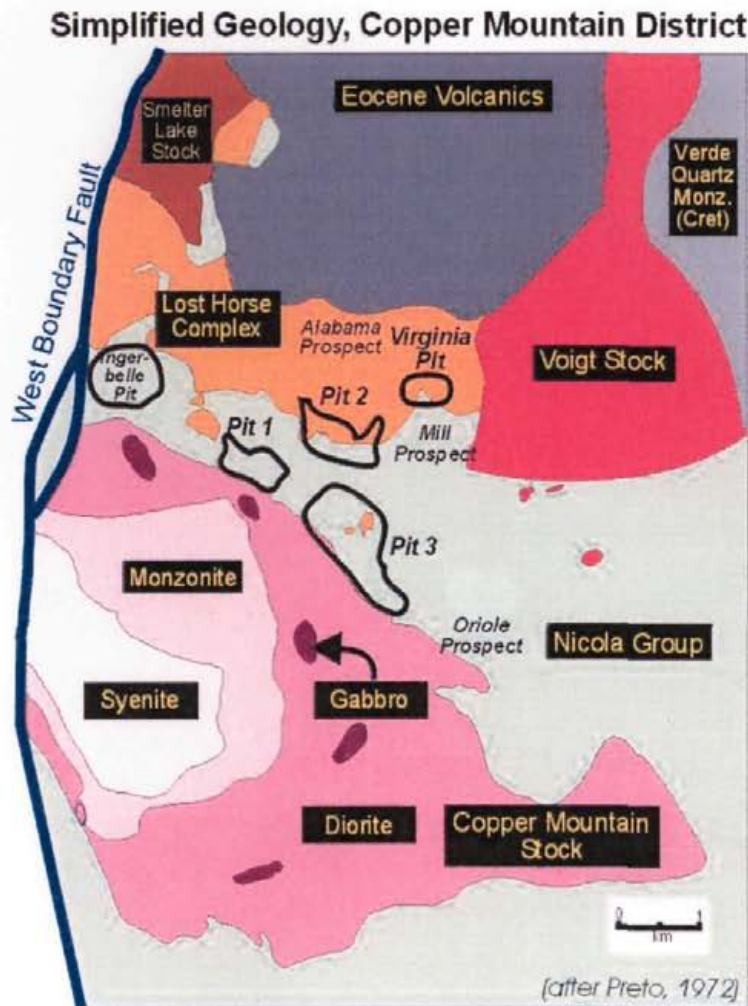


Simplified regional geological setting of the Copper Mountain and Iron Mask alkalic Cu-Au porphyry systems. The Nicola Group forms the principal component of the Quesnel tectonostratigraphic terrane in southern and central British Columbia, and hosts all known occurrences of alkalic Cu-Au porphyry mineralization including, to the north, Rayfield River, Mount Polley, Mount Milligan and deposits associated with the Hogem Batholith.

### 2.2.1 Stratigraphy

A stratigraphic sequence of volcanic and sedimentary rocks has not been defined for the Nicola Group within the Copper Mountain area, however, the Group includes: 1) massive and rarely pillowed mafic and intermediate flows and flow breccia; 2) coarse volcanic breccia with rounded clasts (agglomerate), sometimes containing hornblende-phyric monzodiorite clasts; 3) felsic and intermediate water-lain tuff (greywacke) and lapilli-tuff; 4) volcanic siltstone, sandstone, conglomerate and minor limestone. These

rocks are exposed in a northwesterly trending belt, approximately 1100 m wide and 4300 m long, sandwiched between various intrusive phases (Fig. 7.1). Bedding orientation is variable suggesting block faulting with rotation and/or possibly some folding.



**Figure 2.2 Copper Mountain Geology with pit outlines.**

Four predominant rock types are observed in the open pits and commonly form a major proportion of the economic mineralization. However, hydrothermal alteration and thermal contact effects from a number of intrusive phases obscures finer lithological details and contact relationships between the units is often not clear or difficult to interpret. In decreasing order of abundance the units are:

- 1) Coarse-grained agglomerates which are poorly sorted, sub-rounded and with varying abundance of clasts ranging from clast supported to matrix supported. Matrix is fine-grained, weakly porphyritic andesite, whereas clasts can be similar to the matrix, or consist of hornblende-phyric monzodiorite (commonly with aligned phenocrysts) and rare black mudstone. This unit is observed in all of the open pits.
- 2) Fine-grained, aphyric to sparsely plagioclase-porphyritic andesite flows of dark green to black colour. The plagioclase phenocrysts are zoned from calcic to sodic (rims). This unit is also observed in all of the pits.

- 3) Thinly bedded felsic tuffaceous epiclastic to sedimentary rocks. The most distinctive unit is a series of colour banded siliceous ash tuffs or chert.
- 4) Clast supported breccia with a medium grey mudstone matrix and clasts of sedimentary rocks from #3 above. This unit is interpreted to be a slump breccia and has only been observed in Pit 2 and the Virginia Pit, suggesting a limited depositional environment.

### 2.2.2 Intrusive Rocks

The Copper Mountain Stock (CMS) dominates the property in terms of size and exposure. The stock is concentrically zoned from a diorite margin with local gabbroic zones, through monzonite to a syenite core. The core is non-magnetic (as illustrated by the airborne magnetic data image of Figure 7.3), leucocratic, and locally pegmatite-textured. The zonation is believed to indicate a normal fractionation process as opposed to multiple intrusions (Montgomery, 1968). The CMS does not host significant mineralization, although minor zones of copper sulphide minerals occur in the core area and within shear zones in the outer phases. The south wall of Pit 3 cuts into the outer margin of the CMS and here one can observe mineralized veins within the volcanic rocks extending for a few metres into the diorite before pinching out.

The Voigt and Smelter Lake stocks occur on the north edge of the Nicola Group volcanic rocks. These stocks are smaller than the CMS and do not exhibit any visible zonation, however, magnetic data indicate that the core of the Voigt Stock had lower magnetic susceptibility than the outer part, suggesting that it may be cryptically zoned. Both the Voigt and Smelter Lake stocks are petrologically similar to the diorite phase of the CMS, being equigranular, to sub-porphyrific, fine to medium grained monzodiorites.

Immediately to the north of the Nicola Group rocks, is an area of dykes, sills and irregular plugs known as the Lost Horse Intrusive Complex (LHIC; Montgomery, 1968; Preto, 1972). The LHIC is a multi-phase suite of diorite, monzonite, and syenite which intrude the Nicola volcanic rocks, and are, for the most part, younger than the CMS, Smelter Lake and Voigt stocks, as indicated by cross-cutting relationships and the presence of monzodiorite clasts within dykes of the LHIC. Within the area mapped as LHIC (Fig. 7.2) only about one half is actually intrusive, the rest being composed of screens and blocks of altered volcanic rocks, as indicated by exploration drilling in the Alabama area. The great variety of petrologically distinct intrusions which form the complex have been subdivided into four groups: LH1g, LH1b, LH2 and LH3 (Stanley, et al, 1996). LH1 intrusions are pre-mineral and are similar to the Voigt stock but lack the poikilitic K-spar and biotite. LH2 intrusions range in composition from monzonite to syenite, although the later composition may actually be a product of alteration, are mineralized and typically display a strong alignment. LH3 intrusions are leucocratic, very fine-grained, monzonite to syenite in composition and cross-cut mineralization.

To the northeast of the Copper Mountain camp is a large stock of calc-alkalic quartz-monzonite and granodiorite known as the Verde Creek stock. This stock is Cretaceous age and cuts the Voigt stock on its northern margin.

The youngest intrusions in the camp occur as a series of north trending, vertical dykes of probable Eocene age. These dykes are most prominent in the eastern part of the camp and are well exposed in Pit 2 where a number cross the pit. The dykes are pale pink to yellow and consist of flow-banded, quartz-



feldspar (+/- hornblende) porphyry 'felsite.' Dark green to black aphyric mafic dykes also occur but are subordinate to the felsic variety. Both types are interpreted to be feeders to Princeton Group volcanic rocks, that along with sedimentary rocks, filled extensional grabens during Eocene time (Monger, et al., 1992). Princeton Group volcanic rocks overlie the LHIC on the north side of the Alabama zone.

### 2.2.3 Structure

Structure has a great deal of significance to exploration as faults and fractures control both the location of mineral deposits and the distribution of mineralization within the deposits. Faults, along the north edge of the CMS (Copper Mtn fault) and south edges of the LHIC and Voigt Stock, control the location of the Oriole prospect, Pit 1 and Pit 3 deposits, the Ingerbelle deposit and the Pit 2 deposit. Another structure, approximately parallel to the south edge of the LHIC, is inferred to run through the Voigt zone, the Virginia deposit, the Alabama deposit and Orinoco prospect. Within Pit 3, the three cone shaped "high-grade" deposits (>1% copper) mined by underground methods are situated at the intersection of northeast trending faults with the Copper Mountain fault (Farhni, 1951). Within the deposits a high proportion of the mineralization is controlled by multidirectional, but predominately vertical, fractures.

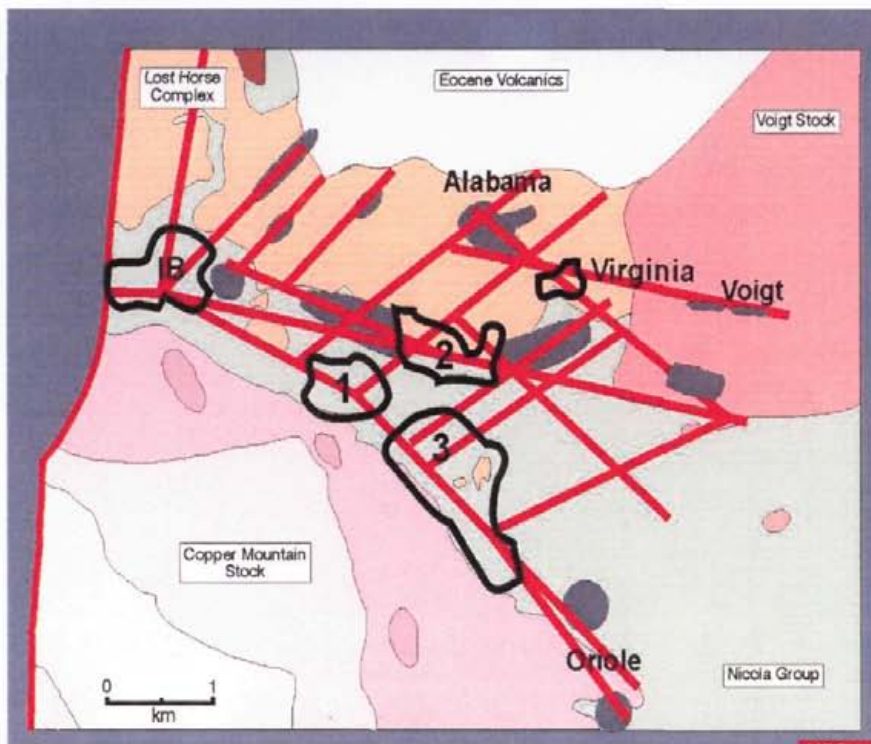


Figure 2.3. Geology of the Copper Mountain Camp showing the known and inferred major structures within the camp. Existing open pits are outlined in black, whereas the mineralized zones are shown in dark grey. The southernmost structure, the Copper Mountain fault is the most significant with the northeast trending structures being the next most significant in terms of controlling mineralization.

## 2.3 Deposit Type

The deposits of the Copper Mountain area are most commonly classified as porphyry copper (+/- gold) of the alkalic type. Porphyry deposits can be defined as large, low-grade, epigenetic, hypogene copper (plus associated metals) deposits that can be mined by bulk mining methods. Further description would also include disseminated and stockwork-vein hosted mineralization within or associated with acid igneous rocks usually with porphyritic textures. In terms of process of formation, porphyry copper deposits share a number of significant characteristics, of which the most important is that they are the result of igneous activity (although this characteristic is not demonstrable in all deposits). The causative igneous rocks generally range from diorite to granite with granodiorite and quartz monzonite being the most common. Supergene enrichment is an important feature in many porphyry districts around the world but is a relatively rare phenomenon in the mostly glaciated northern cordillera. Porphyry deposits have been subdivided into a variety of subtypes with porphyry copper and copper-molybdenum deposits of the calc-alkalic suite; porphyry copper deposits of the alkalic suite; and porphyry molybdenum deposits of the calc-alkalic suite being the three commonly accepted subtypes for British Columbia (1976, CIM Spec. Vol. 15).

The most common porphyry copper deposits, those of the calc-alkalic type, generally have a zonal alteration sequence. The inner part of the porphyry system may be characterized by potassic alteration which is distinguished by the mineral assemblage of muscovite-biotite-potassium feldspar, or at least two of the three with new (or secondary) biotite and K-feldspar being the key minerals. Moving outwards, an assemblage of quartz-muscovite (phyllitic alteration) is common followed by argillic alteration which is defined by the presence of clay minerals such as illite, montmorillonite or kaolinite, usually with abundant quartz. The outer alteration zone is termed propylitic alteration which is typified by the presence of chlorite, epidote, and calcite. Variations and local complexities to this alteration sequence are normal. Sulphide mineralization within typical porphyry systems include, in general order of abundance; pyrite, chalcopyrite, bornite, molybdenite, and minor sphalerite. Sulphide mineralogy may also display zonal variations within the hydrothermal system.

Alkalic porphyry deposits (Barr, et al., 1976) are quite distinct from the more common calc-alkalic genre and represent an important subclass of deposits. The alkalic deposits of British Columbia are spatially and genetically associated with the Upper Triassic Nicola-Takla-Stuhini volcanic assemblages and co-magmatic plutons. The plutons have similar chemistry to their volcanic host rocks and are commonly emplaced along regional scale, linear structures and are typically small and complex. The alkalic mineral deposits occur in zones of intense faulting, fracturing, brecciation, and hydrothermal alteration. Hypogene sulphide minerals which formed contemporaneously with the hydrothermal alteration of host rocks include pyrite, chalcopyrite, bornite, chalcocite and pyrrotite in decreasing order of abundance. Molybdenite may be present in trace amounts but gold and silver are usually economically significant. Compared to the calc-alkaline deposits, porphyry deposits of the alkaline suite commonly grade into pyrometamorphic or skarn-like deposits and the alteration assemblages are not sequentially zoned as they are in the calc-alkalic suite.

The alkalic porphyry classification for Copper Mountain is reasonable as the copper-gold-silver deposits are bulk mineable deposits with grades typical of porphyry copper deposits, mineralization is associated with complex intrusive activity localized along a regional structure, and locally the alteration and mineralization appears skarn-like. However, the Copper Mountain

deposits do display some unusual alteration and structural characteristics which do not fit particularly well into the porphyry copper model. Some of these features are similar to features of the Iron-oxide Copper-Gold (IOCG) model, and this model should be considered when looking at exploration methodologies for mineralization within the Copper Mountain district. The features of Copper Mountain mineralization that show similarities to Iron-Oxide deposits include the strong structural control on mineralization, an association of copper-gold mineralization with magnetite veins, pervasive sodic and potassic alteration, and an abundance of carbonate and calc-silicate minerals associated with mineralization.

The strong structural control on mineralization has significant implications for the orientation of drill holes as results can be extremely variable depending upon drill-hole orientation; zones of strong mineralization can be missed by incorrectly oriented drilling or grades can be overestimated by drilling along mineralized structures. The low amount of pyrite (relative to calc-alkalic porphyry systems) combined with an abundance of carbonate generally results in limited or no gossans associated with surface exposures of mineralization thereby making visual detection much more difficult.

## **2.4 Mineralization and Alteration**

### **2.4.1 Mineralization**

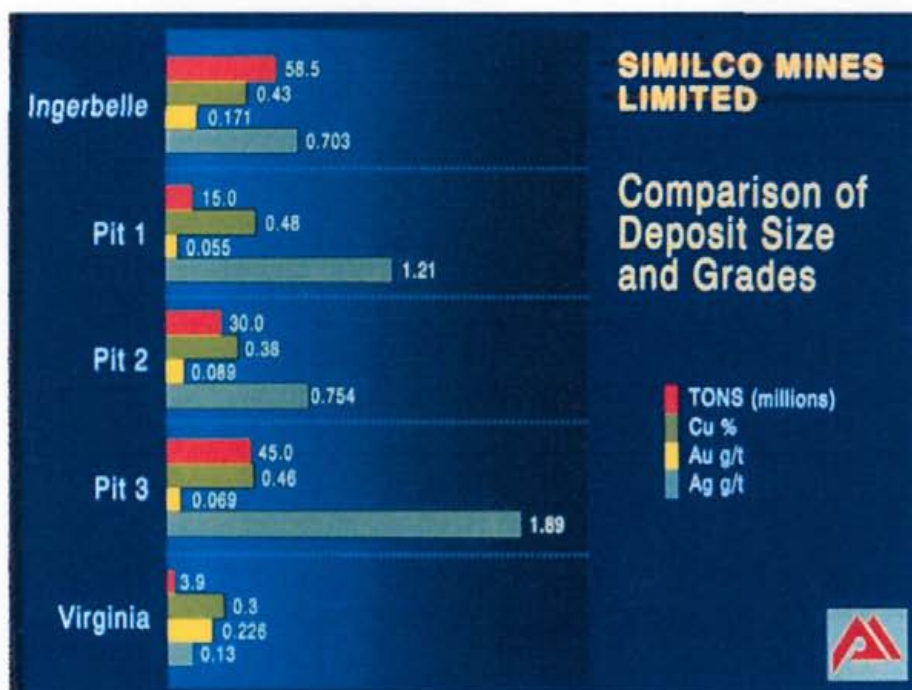
Mining at Copper Mountain from 1925 through to 1996 has produced approximately 1.7 billion pounds of copper, 9 million ounces of silver and 700,000 ounces of gold from both underground and open pit mining. Significant resources are still present at the property and potential for discovery and definition of additional resources is favourable. The mineralizing system at Copper Mountain is classified as an 'alkalic porphyry' system, and while this is the most appropriate classification, Copper Mountain mineralization and alteration has some unique or 'non-standard' characteristics.

As a broad simplification, mineralization at Copper Mountain consists of structurally controlled, multi-directional veins and vein stockworks. Preto (1972) subdivided the mineralization into four types, which have been slightly modified as follows: 1) disseminated and stockwork chalcopyrite, bornite, chalcocite and pyrite in altered Nicola and LHIC rocks; 2) hematite-magnetite-chalcopyrite replacements and/or veins; 3) bornite-chalcocite-chalcopyrite associated with pegmatite type veins and 4) magnetite breccias. Each mineralization type can be found in all pit areas, but each pit is unique with respect to the relative quantities and character of mineralization type. The alteration that is associated with each mineralization type has some degree of variation as well. Each pit area also has distinctive Cu:Ag:Au ratios (Figure 2.5) which may reflect the relative abundance of mineralization/alteration type or zonation caused by a camp scale thermal regime.

Pit 3 was excavated in the area of the Granby underground workings and hosted the largest amount of mineralization. Descriptions of this mineralization (Fahni, 1951) combined with underground stope plans indicate that much of the underground mineralization occurred as large, downward pointing, cone shaped stockwork vein and breccia zones centered on fault intersections. Dimensions of the cones were approximately 100-180 m in diameter, near their tops, at or near surface, with a vertical extent of approximately 350 m. Originally referred to as

“bornite ore”, remnants of this material found in collapsed material while open-pit mining were observed to contain considerable quantities of hypogene chalcocite. Veins, veinlets and disseminated sulphide mineralization surrounded the breccia cones and provided most of the mineralization subsequently mined by open-pit. The chalcopyrite to bornite ratio within the pit area is variable but is approximately 2:1 and the amount of copper sulphides is greater than the amount of iron sulphides (pyrite).

In contrast to Pit 3, the Ingerbelle deposit has chalcopyrite as the dominant copper species and may have contained more disseminated mineralization. The Ingerbelle deposit is centered on the intersection of at least two major structures, both of which appear to contain some massive to semi-massive sulphide veins at depth (as indicated by both historical drill holes and more recent exploration drilling in 1994). Geologically, the Ingerbelle pit area is significantly complex, being cut by three phases of dykes, only two of which are associated with mineralization, and all of which are superimposed on pre-existing, and overlapping mineralization and alteration. A significant magnetite breccia body, since mined out, occurred within the Ingerbelle Pit area and remnant pieces indicate angular to rounded, potassically altered fragments supported in a magnetite matrix. Dyke-like appendages of the magnetite breccia are locally visible in the pit walls. Scapolite fills many late stage fractures which can be observed in the southern wall of the pit.



**Figure 2.4** Comparison of production tonnage and grades from various deposits. Note the zonation northwards in decreasing silver and increasing gold from Pit3 through Pit1 to Ingerbelle and Pit 2 and finally Virginia. Data for precious metals are recovered grades whereas copper is the resource estimated grade (data from Stanely et al, 1996).

The Virginia deposit is formed by two parallel, west-northwesterly trending magnetite sulphide veins of 3 to 7 m in thickness. The veins are sub-continuous and surrounded by disseminated and fracture controlled chalcopyrite in potassically altered volcanic, sedimentary and intrusive rocks of the LHIC. Along the strike of the veins, to the east is the Voigt zone where historical drilling (circa 1940's) intersected grades between 1 and 7 g/t gold and 0.5 to 1.5% copper over

variable but relatively narrow widths within a magnetite rich vein-type structure. The Alabama deposit is unmined but was defined by drilling during the mid 1990's. Mineralization within the Alabama deposit is disseminated along structurally controlled zones that trend east-north-easterly and this deposit is unique in that it contains significantly more mineralized intrusive rocks than observed in any of the other pits (which is generally very little).

The Pit 2 area is similar to the Ingerbelle pit in geological complexity. A more pronounced structural control is evident with chalcopyrite mineralization occurring in east and northeast trending veins, vein stockworks and fracture fillings. Some disseminated mineralization is present peripheral to syenite dykes of the LHIC and in a magnetite breccia that occupied the north central part of the pit area. Very little bornite occurs within Pit 2 and that which does occur is located in the south-west corner of the pit, closest to Pit 3.

### **2.4.2 Alteration**

A large variety of alteration types, commonly overlapping, occur throughout the Copper Mountain Camp. Alteration can be classified according to its occurrence: either pervasive or structurally controlled, and its predominant mineral assemblage. The typical alteration assemblages associated with porphyry copper models (eg: Lowell and Guilbert, 1970) propylitic, phyllic, argillic, advanced argillic and potassic, and their zonal or spatial organization around a central intrusion are not present at Copper Mountain.

The earliest alteration assemblage at Copper Mountain is a hornfels produced within the volcanic rocks adjacent to the Copper Mountain Stock. The hornfels appears to affect only the intermediate to mafic volcanic flow and pyroclastic rocks while the sedimentary rocks are relatively unscathed. The hornfels is a dark purple-gray to black, hard, very fine-grained assemblage of diopside or biotite, plagioclase and magnetite, +/- other opaque oxide minerals (Preto, 1972). Volcanic fragments and matrix commonly react slightly differently to the hornfelsing event resulting in visually enhanced fragmental textures in some locations and virtually obscuring primary textures in other locations. The hornfelsing rocks seldom occur more than 700 m beyond the margin of the CMS. A spatial relationship between mineralization and hornfelsing was proposed by Farhni (1951), who suggested that the increased brittleness of the hornfels was more susceptible to fracturing and mineralization. Alternatively, or coincidentally, it may be that the fine-grained magnetite of the hornfels was quite reactive with the mineralizing fluids providing an iron source to form sulphide minerals.

Sodium metasomatism, or pervasive albitic alteration, appears to be pre-mineralization and occurs as a pervasive albite-epidote hornfels. In addition to albitization of feldspars and conversion of ferro-magnesium minerals to epidote (+/- diopside and chlorite), magnetite and opaque minerals are destroyed. This process results in 'bleaching' of the original rock and reduction in grain size, forming a pale gray or greenish gray, very competent rock with complete destruction of primary textures. Indeed, much of the rock affected by Na-metasomatism was originally mapped as intrusive due to its fine-grained leucocratic appearance. However, detailed mapping within the open-pits indicates that Na-metasomatism affects all rock types to varying degrees. Trace amounts of pyrite maybe present within this alteration. Na-metasomatism is

most pronounced along, and to the northeast of the Copper Mountain fault, and adjacent, or peripheral to, the hornfelsed rocks.

Pervasive potassium alteration is extensive throughout the district but tends to be outbound (northeast) of the previous alteration types, although it may locally overlap or crosscut both pervasive sodic alteration and hornfels. Potassic alteration replaces primary plagioclase with potassium feldspar and replaces ferro-magnesian minerals with biotite, epidote, calcite, chlorite and magnetite; typically producing rocks with a moderate to strong orange to pink colouration. Destruction of primary lithological textures occurs where the alteration is intense. Potassic alteration appears to be partly an outward zonation to the previous alteration types as well as being spatially associated with certain phases (LH2) of the Lost Horse Intrusive complex. Potassic alteration is temporally related to sulphide mineralization.

Numerous veins, vein envelopes and fracture-filling mineral assemblages and textures cross-cut, or occur within the pervasive alteration types (these vein types are listed in detail in Stanley et al. (1985)) but the more prominent ones are described below.

Magnetite veins: with or without copper sulphide minerals, of variable size from fine fracture filling to vein stockworks to sheeted vein swarms to 3-4m thick veins. These veins are not abundant in Pit 3 area but are significant in Pit 2 and comprise much of the ore within areas north of Pit2 and east of Ingerbelle.

"Pegmatite veins": coarse grained potassium feldspar, biotite, epidote and calcite (+/- albite, apatite, garnet, and quartz) these veins are distinctive and occur with, or without, sulphide minerals. The veins are of variable size (up to 2 m thick), of variable orientation, and occur in dilatant zones throughout the camp.

Potassium feldspar veins: these veins range in thickness from 1 mm to 1 m and are generally barren; filling fractures within dilatant zones across the camp.

Chlorite veins: these veins are fine, 1-10mm, discontinuous, late and occur throughout the camp.

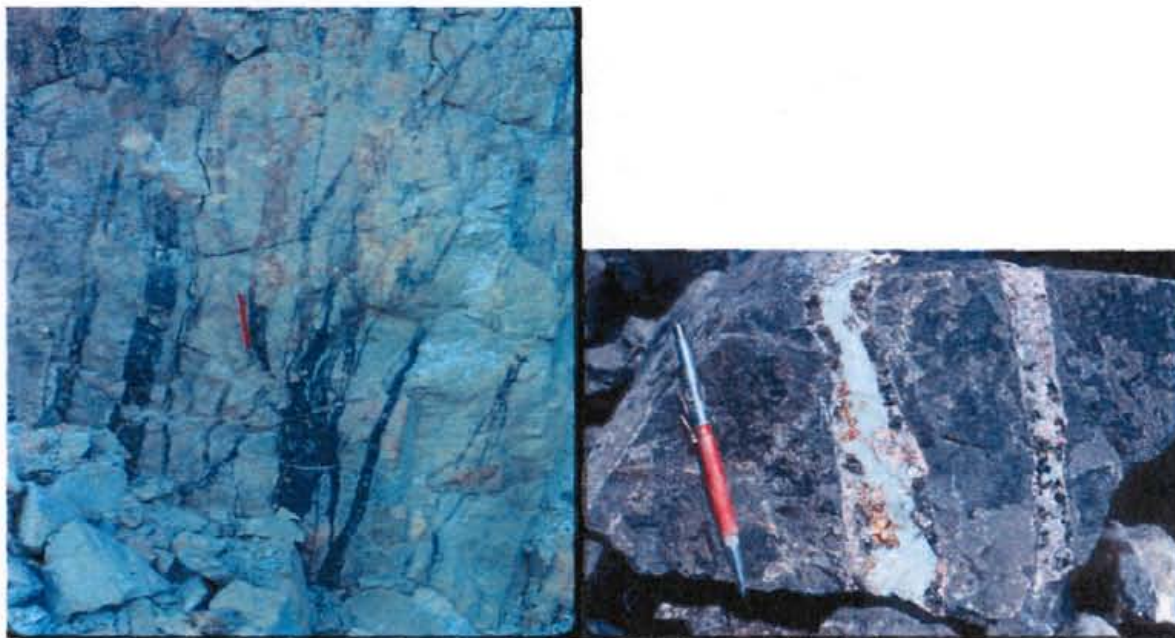


Figure 2.5a Above, shows vertical magnetite-chalcopyrite veinlets in north wall of Pit 2. Plate 2.5b Right, shows pegmatite type vein of coarse grained calcite, K-feldspar, biotite and chalcopyrite, from Pit 2 south wall.

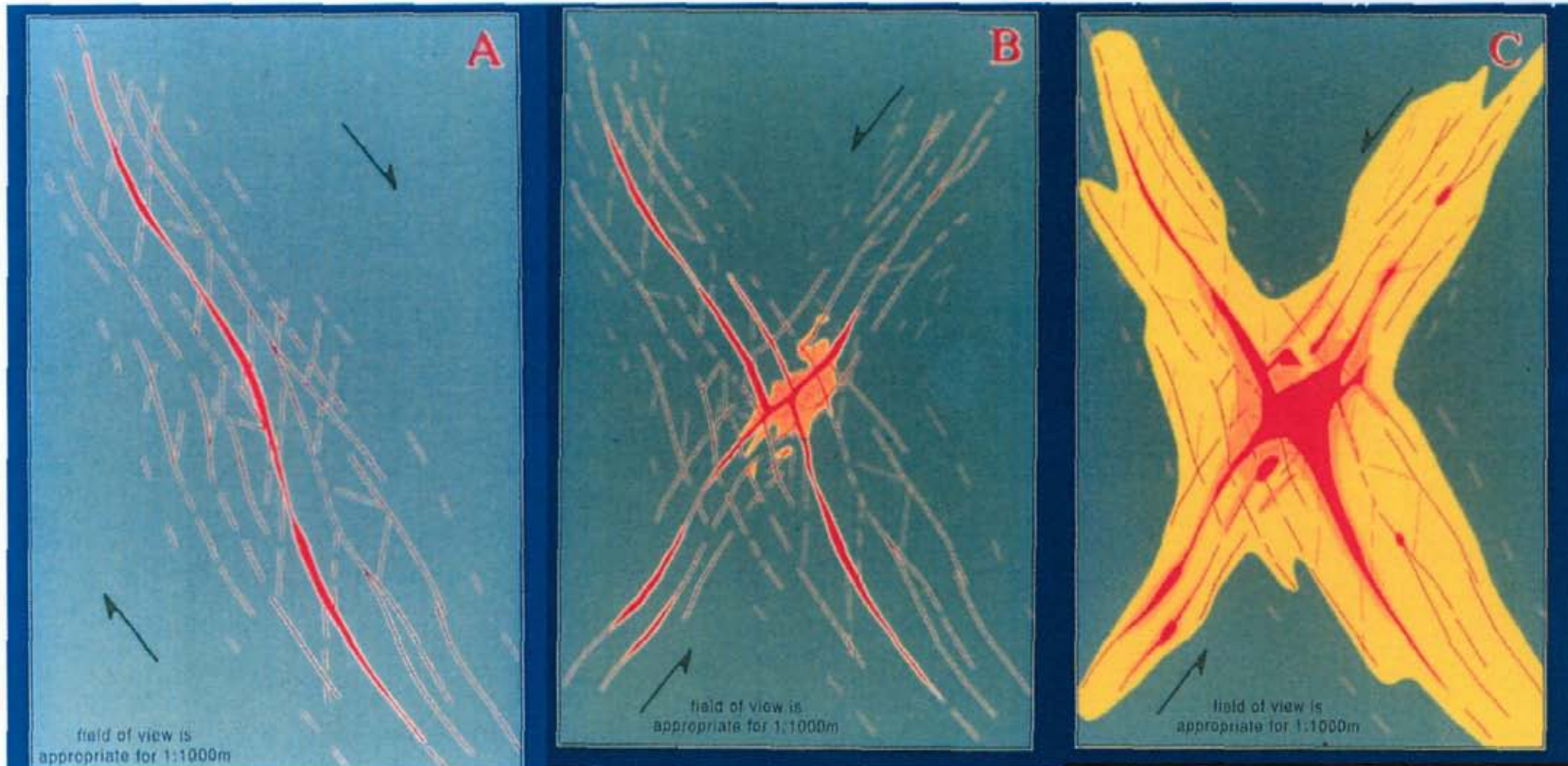


Figure 2.6 Fracture intersection model for mineralization. An example of the spatial distribution of grade (mineralization) relative to single (A) and intersecting structures (B) and development of breccia pipes with continued fluid flow at structural intersections (C). Red is equivalent to semi-massive to massive sulphide mineralization whereas the yellow and pale yellow denotes disseminated sulphide mineralization.

Late stage scapolite fracture filling is common in the Ingerbelle deposit but is rare elsewhere in the Copper Mountain area. The presence of the "pegmatite veins" and local calc-silicate alteration assemblages can give local areas the appearance of skarn formation, however the initial calcic minerals are themselves an alteration product and no carbonate rocks have been recognized within the local stratigraphy.

### **3. Diamond Drill Program**

#### **3.1 Introduction**

A total of 1,001 feet (305.1 m) of NQ core diamond drilling in three drill-holes was completed between April 13<sup>th</sup> and April 22<sup>nd</sup>, 2007 on the Similco #1 FR. and Similco #2 FR. claims of the Copper Mountain property. The purpose of this program was to drill test altered and mineralized rocks that are situated between the Ingerbelle and Alabama deposits. The area drilled is located under the conveyor system that was used to transport ore from the open pits on Copper Mountain to the milling facilities located on the other side of the Similkameen River from Copper Mountain. This area was never previously drilled as the presence of necessary infrastructure would prevent any mining from taking place there, however the revitalization of mining at Copper Mountain envisages a new milling complex located on Copper Mountain which makes the conveyor system obsolete and thereby allows for exploration to take place within the conveyor area.

#### **3.2 Description of Program and Sampling Methods**

The drilling program was designed to test an area approximately 500' wide between the number 2 and number 3 supports for the, now obsolete, ore-conveyor system. This area has some rock exposed in road cuts which displays favourable potassium feldspar alteration and the presence of copper oxide minerals. As this area is located between the Ingerbelle and Alabama deposits, two major mineralized systems within the camp it is suspected that this area could host additional near surface mineralization. Additional areas to the north and south are also very prospective but could not be accessed as easy with significant snow cover.

It is anticipated that mineralization connecting the Ingerbelle and Alabama deposits would have a vertical orientation (like almost everything in the camp) and a northeasterly trend. In order to intersect this trend of mineralization, drill-holes are normally drilled with azimuths in the northwesterly or southeasterly orientations with -45 degree dips. Due to topographic terrane and poor ground in this location the holes were steepened. Collar data for the drill holes are summarized in Table 3.1. Drill core is stored at the core farm, (UTM: 5467173N; 680339E ) located adjacent to the truck shop on the Copper Mountain Mine site.



Table 3.1 Drill collar data

Hole_ID	East_utm	North_utm	Elev_m	Azimuth	Dip	Depth
CMP207-29	678816	5468230	1075	335.0	-55	366
CMP207-30	678761	5468418	1048	135.0	-55	428
CMP207-31	678761	5468418	1048	15.0	-60	206

Samples are taken whenever mineralization is observed or intense alteration without mineralization. Samples are taken over 5-10 foot lengths with 'shoulder' samples at the start and end of mineralized intervals. Sample locations are marked during the core logging process and sample tags are inserted into the boxes at the appropriate locations. The core is photographed and then moved to the sawing room for cutting. Samples are cut with a diamond saw and placed in plastic bags which are sealed and then placed in rice bags for shipment to the assay laboratory. Samples are transported from the exploration site to Princeton by company employees and from Princeton to Pioneer Labs in Vancouver by a commercial trucking company. The use of commercial standards, blanks and duplicate assays is employed to maintain quality control. A standard or a blank sample are inserted into the sample stream every 10 samples. A total of 7 different standards are used which are inserted in random order. During various times of the drilling program approximately 5% of the sample pulps are collected and sent to a different lab for comparison purposes. More information on the QA/QC program and the results thereof are available technical report recently filed on SEDAR.

### 3.3 Results

The results of drill program are displayed on Figure 3.2. Weak copper mineralization, largely oxidized, and possibly partly leached, is associated with potassic alteration of the Lost Horse intrusion (LH2b) in drill-hole CMP207-29. Normally it would be expected that leaching would diminish with depth, but as this hole was drilled somewhat parallel with the slope direction so distance to surface only increased slightly with depth and the



Figure 3.1 Carbonate healed tectonic breccia in drill-core from CMP207-29. Interval is 61' long.

overall extent of fracturing increased with depth and proximity to the west and the probably Similkameen Canyon fault system.

Drill-hole CMP2-30 was drilled in the opposite orientation of P2-29 and intersected similar host rocks and alteration. This hole was relatively barren with respect to disseminated copper mineralization but was oxidized and possibly leached. A narrow zone of high grade copper occurs within carbonate breccia and is likely remobilized and therefore perhaps of limited significance. P2-30 was terminated prematurely in fault gouge. Drill-hole P2-31 was rotated and drilled more into the hill in an attempt to find less broken ground, unfortunately it appears to have been drilled directly down a fault zone (not visible on surface at the time due to snow cover) and intersected only rubble and gouge over its entire length of 206'.

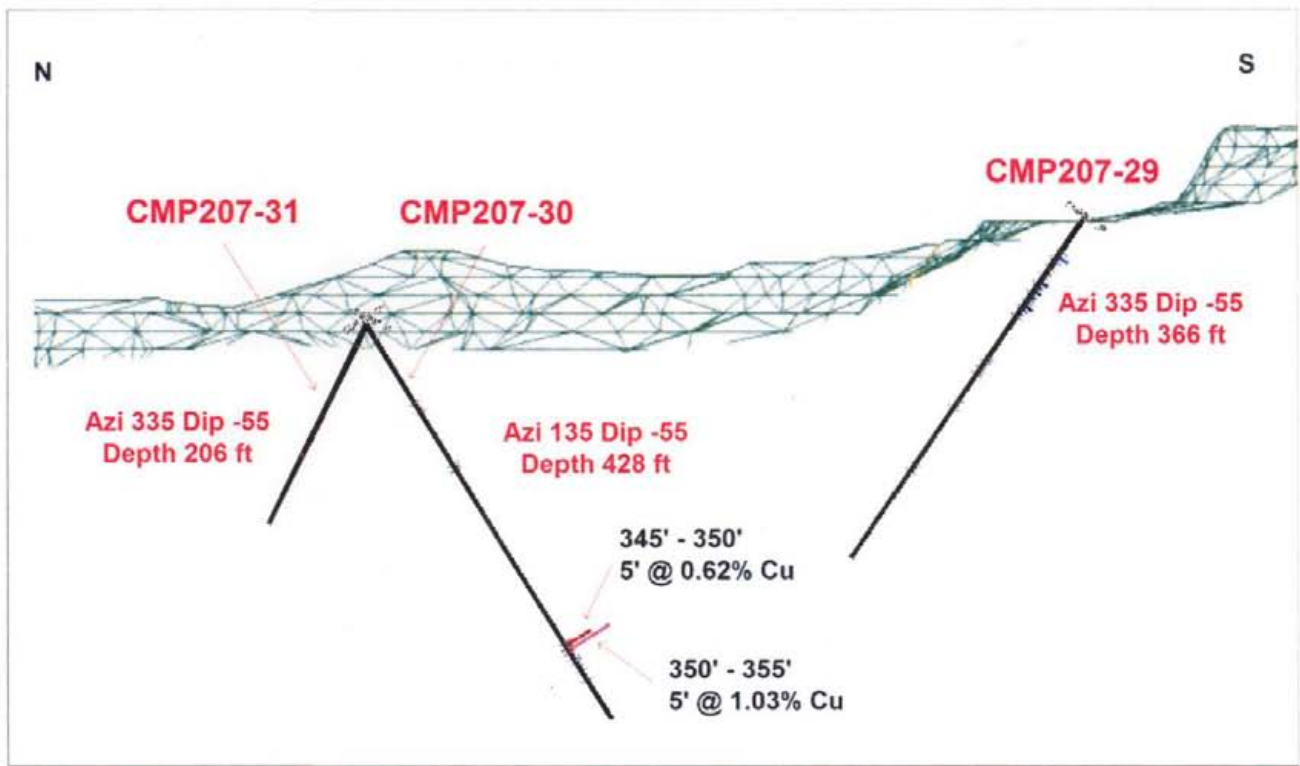


Figure 3.2 Cross section showing surface topography, drill holes and copper grades as histograms.

## **4.0 Conclusions and Recommendations**

### **4.1 Conclusions**

Drill core and analytical results indicates that favourable potassic alteration and host rocks (biotite bearing Lost Horse Intrusive or LH2b) with localized weak mineralization occur in the drilled area. However, the extent a faulting and fracturing of the bed rock, likely due to overall proximity to the Similkameen Canyon fault system and the effects of surface weathering on the steep slopes prevents a reasonable assessment of grade potential for this area. Steep slopes make it difficult to construct drill pads that would allow for drilling directly into the hill and this orientation is likely to be too close to the orientation of structures hosting the mineralization. Due to the favourable geology and alteration the area merits further testing but this will likely have to done with selectively situated, and longer, drill holes from further up the hillside.

### **4.1 Recommendations**

Drill testing of the area indicates that the steep slopes underneath the conveyor belt host favourable geology and alteration for porphyry copper mineralization but that the extensive fracturing and weathering renders shallow drill holes of limited value. Additional drill testing is warranted but should be done from suitable locations further up the slope in attempted to get away from the effects of the Similkameen canyon fault system. The presence and dominance of Lost Horse intrusive rocks in the area, as opposed to the more common ore hosts, mafic volcanic rocks of the Nicola Group, indicates that chargeability values from induced polarization geophysical surveys may be very useful in targeting future drill-holes.

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### Statement of Expenditures

Item	Description	Days/ Units	Rate/ Unit Cost	Total
Geologists	B. Laird P. Geo - Supervision, drill moves and setups, core logging	9	475	\$4,275.00
	M. Rein - spotting drill holes	1		\$0.00
	R Joyes - drill plan layout	1		\$0.00
Core Cutting	Steve Boyd	2	170	\$340.00
Vehicles and Fuel	Truck rental and fuel	10	100	\$1,000.00
Drill & Cat Fuel	9 days at 450L/day	4050	0.89	\$3,604.50
Core boxes	49 core boxes	49	10	\$490.00
Assays and shipping	59 samples ICP and Au	59	13.95	\$823.05
	Sample shipping			\$166.73
			Sub Total	\$10,699.28
Drilling	Hole CMP207-29 Drilling Footage Cost			\$9,325.64
	Hole CMP207-29 Drilling Additional Cost			\$8,720.58
	Hole CMP207-30 & 31 Drilling Footage Cost			\$16,183.32
	Hole CMP207-30 & 31 Drilling Additional Cost			\$10,888.67
<b>Total</b>				<b>\$55,817.49</b>

### **Certificate of Qualifications**

I, Peter M. Holbek with a business address of 550 – 800 West Pender Street, Vancouver, British Columbia, V6C 2V6, do hereby certify that:

1. I am a professional geologist registered under the Professional Engineers and Geoscientists Act of the Province of British Columbia and a member in good standing with the Association of Professional Engineers and Geoscientists of British Columbia.
2. I am a graduate of The University of British Columbia with a B.Sc. in geology 1980 and an M.Sc. in geology, 1988.
3. I have practiced my profession continuously since 1980.
4. I am Vice President, Exploration for Copper Mountain Mining Corp. having a business address as given above.
5. I supervised the work program on the Copper Mountain (Similco) property, and prepared this report.

---

Peter Holbek, M.Sc., P.Geol.

**APPENDIX I**

**MINERAL CLAIM, AND CROWN GRANT INFORMATION**



<b>Legacy Mineral Claim Summary</b>				
<b>Tenure Number</b>	<b>Type</b>	<b>Claim Name</b>	<b>Claim / Lease Location</b>	<b>Area (ha.)</b>
248603	Mineral	SIMCOL #1 FR.	Verified	25
248604	Mineral	SIMCOL #2 FR.	Verified	25
248640	Mineral	DOT FR	Verified	25
248723	Mineral	ALPINE #1	Verified	75
248724	Mineral	ALPINE FR.	Verified	25
248778	Mineral	BULLET #1 FR.	Verified	25
248779	Mineral	BULLET #2 FR.	Verified	25
248782	Mineral	REFER TO LOT TABLE	Surveyed	25
248783	Mineral	NM #1 FR.		25
248784	Mineral	NM #2 FR.	Verified	25
248785	Mineral	NM #3 FR.	Verified	25
248786	Mineral	NM #4 FRACTION	Verified	25
248787	Mineral	NM #5 FR.	Verified	25
248788	Mineral	NM #6 FR.		25
249233	Mineral	ALPINE 3		500
249234	Mineral	ALPINE 4		500
249235	Mineral	ALPINE 5		25
249264	Mineral	ALPINE 6 FR		25
249265	Mineral	ALPINE 7 FR		25
250157	Mineral	PENNY NO. 1 FR.		25
250159	Mineral	MAY #1	Verified	25
250160	Mineral	MAY #2	Verified	25
250161	Mineral	MAY #5 FR.	Verified	25
250162	Mineral	RAY NO. 1	Verified	25
250163	Mineral	RAY NO. 2	Verified	25
250164	Mineral	RAY NO. 7	Verified	25
250165	Mineral	RAY NO. 8	Verified	25
250166	Mineral	QUEEN D. FR.	Verified	25
250167	Mineral	QUEEN E. FR.	Verified	25
250168	Mineral	QUEEN G. FR.	Verified	25
250169	Mineral	QUEEN H. FR.	Verified	25
250170	Mineral	QUEEN J. FR.	Verified	25
250174	Mineral	R.R. FR.	Verified	25
250175	Mineral	R FR.	Verified	25
250176	Mineral	ELEPHANT NO.1	Surveyed	25
250177	Mineral	ELEPHANT NO. 2 FR.	Verified	25
250178	Mineral	ELEPHANT NO. 3	Verified	25

Tenure Number	Type	Claim Name	Claim / Lease Location	Area (ha.)
250179	Mineral	ELEPHANT NO. 4	Verified	25
250182	Mineral	"E.M." FR	Surveyed	25
250183	Mineral	"E.M." NO.3	Verified	25
250184	Mineral	"E.M." NO.4	Verified	25
250185	Mineral	"BEM" NO.1	Verified	25
250186	Mineral	"BEM" NO.3	Verified	25
250187	Mineral	"BEM" NO.5	Verified	25
250188	Mineral	"BEM" NO.7	Verified	25
250195	Mineral	RAD NO.1	Verified	25
250196	Mineral	RAD NO.2	Verified	25
250197	Mineral	RAD NO.3	Verified	25
250198	Mineral	RAD NO.4	Verified	25
250199	Mineral	RAD NO.5	Verified	25
250200	Mineral	RAD NO.6	Verified	25
250201	Mineral	RAD NO.7	Verified	25
250202	Mineral	RAD NO.8	Verified	25
250204	Mineral	RAD NO.10	Verified	25
250205	Mineral	BRIAN H. FR.	Verified	25
250206	Mineral	SER #3		25
250207	Mineral	SER #4		25
250208	Mineral	SER #5	Verified	25
250209	Mineral	SER #6	Verified	25
250210	Mineral	SER #7	Verified	25
250211	Mineral	SER #8	Verified	25
250212	Mineral	SER #9	Verified	25
250213	Mineral	SER #10	Verified	25
250214	Mineral	SER #11	Verified	25
250215	Mineral	SER #12	Verified	25
250216	Mineral	SER #13	Verified	25
250217	Mineral	SER #14	Verified	25
250218	Mineral	SER #15	Verified	25
250219	Mineral	SER #16	Verified	25
250220	Mineral	SER #17	Verified	25
250221	Mineral	SER #18	Verified	25
250222	Mineral	SER #19 FR.	Verified	25
250223	Mineral	SER #20	Verified	25
250224	Mineral	SER #21 FR.	Verified	25

## Legacy Mineral Claim Summary Page 3

Tenure Number	Type	Claim Name	Claim / Lease Location	Area (ha.)
250225	Mineral	SER #22	Verified	25
250226	Mineral	SER #23	Verified	25
250227	Mineral	SER #24 FR.	Verified	25
250228	Mineral	SER #25 FR.	Verified	25
250229	Mineral	NUT #7	Verified	25
250230	Mineral	NUT #8	Verified	25
250231	Mineral	NUT #9	Verified	25
250232	Mineral	NUT #10	Verified	25
250233	Mineral	NUT #11	Verified	25
250235	Mineral	NUT #13	Verified	25
250236	Mineral	NUT #14	Verified	25
250240	Mineral	RAY 13 FR	Verified	25
250243	Mineral	COPPER BLUFF FR.	Verified	25
250244	Mineral	MCB #1	Verified	25
250245	Mineral	MCB #2	Verified	25
250246	Mineral	MCB #3	Verified	25
250247	Mineral	MCB #4	Verified	25
250248	Mineral	MCB #5	Verified	25
250249	Mineral	MCB #6	Verified	25
250250	Mineral	DEEP #1	Verified	25
250251	Mineral	DEEP #2	Verified	25
250252	Mineral	DEEP #3	Verified	25
250253	Mineral	DEEP #4	Verified	25
250254	Mineral	DEEP #5	Verified	25
250255	Mineral	DEEP #6	Verified	25
250256	Mineral	DEEP #7	Verified	25
250257	Mineral	DEEP #8	Verified	25
250258	Mineral	DEEP #9	Verified	25
250259	Mineral	DEEP #10	Verified	25
250262	Mineral	FRIEDA FR	Verified	25
250268	Mineral	ANNIE FR.	Verified	25
250269	Mineral	RAD #1 FR.	Verified	25
250270	Mineral	BETH #1 FR	Verified	25
250271	Mineral	BETH #2 FR	Verified	25
250272	Mineral	BETH #3 FR	Verified	25
250273	Mineral	BETH #5 FR	Verified	25
250274	Mineral	BETH #4 FR	Verified	25

Tenure Number	Type	Claim Name	Claim / Lease Location	Area (ha.)
250275	Mineral	BETH #6 FR	Verified	25
250276	Mineral	BETH #7 FR	Verified	25
250277	Mineral	BETH #8 FR.	Verified	25
250278	Mineral	BETH #9 FR.	Verified	25
250279	Mineral	BETH #10 FRACTIONAL	Verified	25
250280	Mineral	DEN #1 FR.	Verified	25
250281	Mineral	DEN #2 FR.	Verified	25
250321	Mineral	DEEP NO.1 FR	Verified	25
250322	Mineral	DEEP NO.2 FR	Verified	25
250323	Mineral	DEEP NO.3 FR	Verified	25
250324	Mineral	DEEP NO.4 FR	Verified	25
250325	Mineral	DEEP NO.5 FR	Verified	25
301376	Mineral	WR 1		25
301377	Mineral	WR 2		25
301378	Mineral	WR 3		25
301379	Mineral	WR 4		25
301380	Mineral	WR 5		25
301381	Mineral	WR 6		25
301394	Mineral	WES 1		375

All above claims are in the Similkameen Mining District  
 Are on Map Sheet 092H038  
 Have Expiry Date of April 26, 2008\*  
 Are owned 100% by Similco Mines Ltd.

\*pending acceptance of this report

301395	Mineral	WES 2		375
301396	Mineral	WES 3		300

Both of the above claims are in the Similkameen Mining District  
 Are on Map Sheet 092H028  
 Have Expiry Date of April 26, 2008  
 Are owned 100% by Similco Mines Ltd.

<b>Total:</b>	<b>132</b>	<b>Tenures</b>		<b>5,275.00</b>
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### Mineral Cell Claim Summary

<b>Tenure No.</b>	<b>Tenure Type</b>	<b>Claim Name</b>	<b>Map No.</b>	<b>Good To Date</b>	<b>Area (ha.)</b>
507835	Mineral	ING 1	092H	2007/apr/26	21.047
507837	Mineral	ING 2	092H	2007/apr/26	21.049
507839	Mineral	CM 1	092H	2007/apr/26	400.031
507842	Mineral	CMT 2	092H	2007/apr/26	63.149
507845	Mineral	CMT 3	092H	2007/apr/26	42.117
507848	Mineral	CMT 4	092H	2007/apr/26	42.098
517244	Mineral		092H	2007/apr/26	399.936
517303	Mineral	ING CU	092H	2007/apr/26	84.212
<b>Total:</b>	<b>8</b>	<b>Tenures</b>		<b>Hectares:</b>	<b>1,073.64</b>

**All of the above claims are registered in the name of Compliance Coal Corporation**

APPENDIX II : ANALYTICAL DATA

HOLE-ID	FROM (ft)	TO (ft)	INTERVAL	SAMPLE NO	Cu%	AG_GMT
CM07P2-29	13	23	10	21982	0.01	
CM07P2-29	23	33	10	21983	0.01	
CM07P2-29	33	43	10	21984	0.22	0.2
CM07P2-29	43	51	8	970748	0.02	
CM07P2-29	51	61	10	21985	0.06	
CM07P2-29	61	71	10	21986	0.13	0.1
CM07P2-29	71	81	10	21987	0.11	0.2
CM07P2-29	81	88	7	21988	0.07	
CM07P2-29	88	96	8	970750	0.17	
CM07P2-29	96	104	8	21989	0.05	
CM07P2-29	138	144	6	970751	0.01	
CM07P2-29	144	148	4	970752	0.01	
CM07P2-29	148	153	5	970753	0.06	
CM07P2-29	153	161	8	970754	0.02	
CM07P2-29	161	168	7	970755	0.03	
CM07P2-29	195	204	9	970756	0.02	
CM07P2-29	204	215	11	970757	0.01	
CM07P2-29	215	221	6	970758	0.01	
CM07P2-29	221	228	7	970760	0.01	
CM07P2-29	228	234	6	970761	0.01	
CM07P2-29	234	241	7	970762	0.01	
CM07P2-29	241	247	6	970763	0.01	
CM07P2-29	247	265	18	970764	0.01	
CM07P2-29	265	273	8	970765	0.02	
CM07P2-29	273	277	4	970766	0.01	
CM07P2-29	277	288	11	970767	0.01	
CM07P2-29	288	293	5	970768	0.01	
CM07P2-29	293	302	9	970770	0.01	
CM07P2-29	302	306	4	970771	0.01	
CM07P2-29	306	310	4	970772	0.01	
CM07P2-29	310	314	4	970773	0.01	
CM07P2-29	314	321	7	970774	0.01	
CM07P2-29	321	327	6	970775	0.01	
CM07P2-29	327	338	11	970776	0.01	
CM07P2-30	75	85	10	970777	0.01	
CM07P2-30	85	95	10	970778	0.02	
CM07P2-30	95	103	8	970780	0.01	

CM07P2-30	103	108	5	970781	0.01	
CM07P2-30	108	115	7	970782	0.01	
CM07P2-30	146	151	5	970783	0.01	
CM07P2-30	151	158	7	970784	0.06	
CM07P2-30	208	215	7	970785	0.01	
CM07P2-30	215	220	5	970786	0.01	
CM07P2-30	220	225	5	970787	0.01	
CM07P2-30	225	232	7	970788	0.01	
CM07P2-30	232	240	8	970790	0.01	
CM07P2-30	240	248	8	970791	0.01	
CM07P2-30	248	255	7	970792	0.01	
CM07P2-30	255	260	5	970793	0.01	
CM07P2-30	345	350	5	970794	0.62	
CM07P2-30	350	355	5	970795	1.03	
CM07P2-30	355	361	6	970796	0.02	
CM07P2-30	361	366	5	970797	0.09	
CM07P2-30	366	375	9	970798	0.04	
CM07P2-30	375	385	10	970800	0.02	
CM07P2-30	385	394	9	970801	0.01	
CM07P2-30	394	400	6	970802	0.1	
CM07P2-30	400	407	7	970803	0.01	
CM07P2-30	407	412	5	970804	0.01	
CM07P2-30	412	422	10	970805	0.01	
CM07P2-31	135	138	3	970806	0.01	



APPENDIX III: DRILL LOGS

## Diamond Drill Log

CM07P2-29

Logged by P. Holbek

Flag	From	To	Recov	RQD	Lithology	Colour	Alteration	Mineralization	Comments
	0	10			CASE				
	10	97	96	50	LH2B	light grey-pink	10% Patchy K-spar 10% perv Albite	0.1% diss Py; 0.2% diss Cp	Fine to med grained Fx-Bi porphyritic monz. Moderate alteration with patches of pink k-spar overprinting pervasive pale green albitization. FLTZ@96-97'. Magnetite oxidized to hematite. Diss and fracture controlled Py & Cp but weak. Malachite present to 55'.
	97	145	95	60	LH2B	light grey-green	3% K-spar; 5% Alb	Trace diss Py	Less altered and less mineralized than above. Seriate porphyry with fuzzy boundaries on crystals.
FLT	145	157	60	10	FLTZ - LH2b	light green-pink			Very broken core, but similar to 10-97' interval. Xenos of volc rock form small frags.
	157	218	94	30	LH2B	light green-pink	20% patchy K-spar; 15% perv Alb	0.1% diss Py & Cp	Variablely altered and oxidized. Pale green albitized rock - pink where k-spar altered. Locally very fractured and oxidized.
FLT	218	277	50	0	FLTZ - LH2b	light pink-brown	Limonitic, some clay		Rubble core to clay-limonite gouge. Healed and rebroken tectonic breccia.
	277	338	88	65	TTBX	light grey	carbonate matrix		A tectonic breccia derived from albitized volcanic sediment (???) Aphanitic rock with blobs and clots of biotite. Locally limonitic fractures and clay gouge.
	338	367	92	30	LH2b- FLTZ	med grey	5% perv albite	none	Very fine grained Fs-Bi porphyry or microphorphyry, perhaps similar rock but much less altered than above (?). Core is still badly broken and locally oxidized

EOH

Diamond Drill Log		CM07P2-30		Logged by B. Laird		Tests @ 361' Azi = 124.5 Dip -56			
Flag	From	To	Recov	RQD	Lithology	Colour	Alteration	Mineralization	Comments
	0	12			CASE				
	12	51	60	0	Rubble	Med gray-green			Not overburden but badly broken and ground-up rock
	51	88	80	70	ANDS	Med gray-green			Plag crystal tuff with rare lithic fragments. Trace disseminated magnetite
FLT	88	108	80	10	FLTZ/ANDS		carb veining	0.1% Py Cp	Fault Zone within the above lithology. Minor dissem. sulphide minerals.
	108	175	95	80	LH2B	light grey-green			Weakly porphyritic plag with in an seriate to equigranular matrix. Mafic minerals washed out. Rare volc xenoliths. Local carb veinlets with rare Py and Cp.
	175	208	90	10	FLTZ	medium orange	Limonitic		
	208	233	99	90	LH2B	Med. Grey-brown	Pervasive K-spar		As 108-175 but with chlorite-magnetite stockwork veinlets (3mm)
	233	260	100	85	LH2B	Med. Grey-brown	Pervasive K-spar 40% plus 20% carb veinlets		Locally bleached with 3-5% disseminated magnetite
FLT	260	266	90	5	FLTZ / LH2B				"Crushed" equivalent of above.
	266	345	100	80	LH2B	Med grey-brown	Perv Kspar + Cb vein		Strongly porphyritic with 1% diss mag and rare Cp in carb veinlets
MIN	345	359	100	80	LH2B	Light grey-green			Local Carb Breccia with Cp in veins and breccia fillings @ 352'
FLT	359	361	100	0	FLTZ				
	361	380	100	70	LH2B	Med grey-brown	Perv Kspar		Porphyritic plag with 20% K-spar flooding in matrix. 1-3% dissem mag.
	380	407	100	50	VCFR	Med grey-brown	Perv Kspar	Chlorite on fractures	Fragmental volcanic rock, pervasive k-spar alteration and late chlorite selvages
	407	422	100	70	LH2B	Light grey-brown	Perv Kspar		Porphyritic with rare xeno liths (might be altered fragmental volcanic)
EOH	422	428	30	0	FLTZ				Clay gouge zone.

## Diamond Drill Log

CM07P2-31

Logged by B. Laird

Tests: None hole will not stay open

Flag	From	To	Recov	RQD	Lithology	Colour	Alteration	Mineralization	Comments
	0	24			CASE				
	24	48	20	0	Rubble	med dark orange			Broken rubble
	48	78	50	0	VCFR	med grey			Bleached, oxidized rubble
FLT	78	105	10	0	FLTZ	med orange			Fault Zone
	105	121	70	0	LH2B	med grey-brown	Limonic		Weakly porphyritic plag rock, broken, gougey, bleached and limonite stained
FLT	121	135	40	0	FLTZ	med grey	Limonic		Rubble
	135	138	70	0	LH2B	light grey	Pervasive K-spar		Broken rock minor quartz veinlets
	138	206	40	0	FLTZ		Clay plus 20% carb veinlets		Granular rubble and clay gouge. Hole terminated.
EOH									