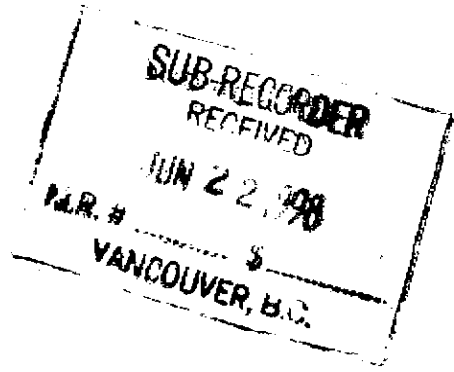


**REPORT**



on the

**COPPER MOUNTAIN SYNDICATE  
CMS GROUP  
Princeton Area  
Similkameen Mining Division, British Columbia**

**Latitude 49° 25' N., Longitude 120° 27' W.  
NTS map sheet 93H/8W**

by

**James W. McLeod, P.Geo.**

on behalf of

**Mr. Guy DeLorme**

**June 22, 1998**

**Delta, British Columbia GEOLOGICAL SURVEY BRANCH  
ASSESSMENT REPORT**

**25,554**

**REPORT**

**on the**

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CMS GROUP  
Princeton Area  
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**Mr. Guy DeLorme**

**June 22, 1998 (Revised September 21, 1998)  
Delta, British Columbia**

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## SUMMARY

During the summer of 1997 a diamond core drilling program was carried out on the Copper Mountain Syndicate - (CMS) group of claims situated just north of the Town of Princeton, B.C. in the Similkameen Mining Division, British Columbia. The purpose of the program was to drill test a mainly covered area in between two areas of known mineralization (inventories) of 600,000 tons of 0.25% - 0.30% copper on the east (Granby Zone) and 250,000 tons of 0.5% on the west (Regal Zone) all of which lie within the boundaries of the property.

The drilling program was concentrated in a moderately steep to rounded, open grass covered range area which appears to be underlain by a rather strongly altered bedrock. The writer conducted a VLF-EM and a magnetometer survey over the area prior to drilling which indicated an east-west trending underlying structure, bedrock assemblage or alteration zone.

A total of five NQ-wireline diamond drill holes were completed. Four of the holes were in the central area between the Granby zone and the Regal zone and one hole was drilled southeast of the magnetometer grid area (see Figure 2). The four centrally located holes cut sections of Nicola volcanics which reflect varying degrees of alteration and mineralization. Values ranged up to 0.9% copper, 0.05 oz/ton gold and 0.01 oz/t platinum group of which the ratio of platinum : palladium is approximately 1:15. This mineralized section appears to be very similar to some of the ore which was mined from the Ingerbelle deposit of the Princeton Mining Corporation in the Copper Mountain area which occurs 17 km. south-southwest of the property.

## **INTRODUCTION**

The current fieldwork programs were conducted during the period April 24 - June 1, 1997 under the writer's supervision.

The program began by establishing a grid over areas of interest between the eastern, Granby zone and the western, Regal zone (see Figure 3). This zone underwent a VLF-EM and a magnetometer survey, in an area with minimal rock exposure, prior to drill testing.

The current exploration program was conducted at the request of the owner of the mineral claims.

## **LOCATION AND ACCESS**

The general claim area may be located on NTS map sheet, 92H/8W at latitude 49° 25' north and longitude 120° 27' west. The property area is situated north of the Town of Princeton, B.C., on the generally westerly and northerly facing slopes of Miner Mountain (formerly Iron Mountain) and occurs in the Similkameen Mining Division, British Columbia.

Access to the mineral claims is gained by traveling 3 km. north of Princeton on the good all weather Allison Creek road and then to the east for 0.5 km. on the Iron Mountain road.

## **TOPOGRAPHICAL AND PHYSICAL ENVIRONMENT**

The mineral claims lie within the Dry Interior Belt and more particularly cover low rounded mountainous terrain with patches of conifer covered low plateau or terraced benches. The elevation of the claim areas range from 700 metres (2,300') to 1,310 metres (4,300). The easterly flowing Similkameen River valley is the most dominant feature in the area which forms the southern boundary of the claim area. Glacial and/or fluvial glacial cover appears to be very thin in the



claim area while it has been encountered in much thicker occurrences in some of the adjacent valley bottoms. The tree patches are often composed of Western Yellow pine (Ponderosa), Douglas fir (spruce) and Lodgepole pine. The stream valleys in the area often exhibit a north-south or east-west pattern and probably reflect underlying faults.

The general area experiences approximately 40 cm. of precipitation annually, of which 25-30% may occur as a snow equivalent. The winter weather generally lasts for less than four months, November - February. It is not uncommon for the property area to experience little or no snow and mild conditions throughout some winters.

## **PROPERTY AND OWNERSHIP**

The lode mineral claims comprise one contiguous claim group known as the Copper Mountain Syndicate (CMS) and are listed as follows:

| <u>Name</u> | <u>Tenure No.</u> | <u>Units</u>    | <u>Anniversary Date</u> |
|-------------|-------------------|-----------------|-------------------------|
| Guy 1-10    | 345479-88         | 10              | April 24                |
| Guy 11-14   | 345489-92         | 4               | April 27                |
| Del 2       | 345477            | 16              | April 30                |
| Del 3       | 345478            | <u>20</u>       | April 30                |
|             | <b>Total</b>      | <b>50 units</b> |                         |

The claim area totals approximately 850 hectares or 2,100 acres.

The above listed mineral claims are being held by G. DeLorme of Surrey, B.C. on behalf of Golden Kootenay Resources Inc. and Nustar Resources Inc. of Delta, British Columbia.

## **HISTORY**

The recorded mining history of the general area dates from the 1860's with the discovery of placer gold on the Tulameen and Similkameen rivers. Lode gold was discovered in the Hedley area, 32 km. due east of the property in 1894. By 1904 the Nickel Plate Mine, in the Hedley





Camp was producing for the first of three extended periods, the latest of which ended during the 1990's.

The large porphyry copper (gold and platinum group values) deposits of the Copper Mountain area were first discovered in 1884, but not staked until 1892 and did not actually reach production until 1925 when it was brought on stream by the Granby Consolidated Mining, Smelting and Power Company. The mines here operated between 1925 and 1930 and 1937 and 1957 producing 31.5 million tons of ore grading better than 1% copper. The latest episode of this areas production began in 1972 by the Newmont Mining Corporation on the westside of the Similkameen River at the adjacent Ingerbelle volcanic skarn deposit. Newmont later consolidated the Copper Mountain and Ingerbelle operations which were active under the Princeton Mining Corporation until 1996 as the Similco Operation.

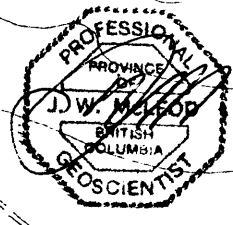
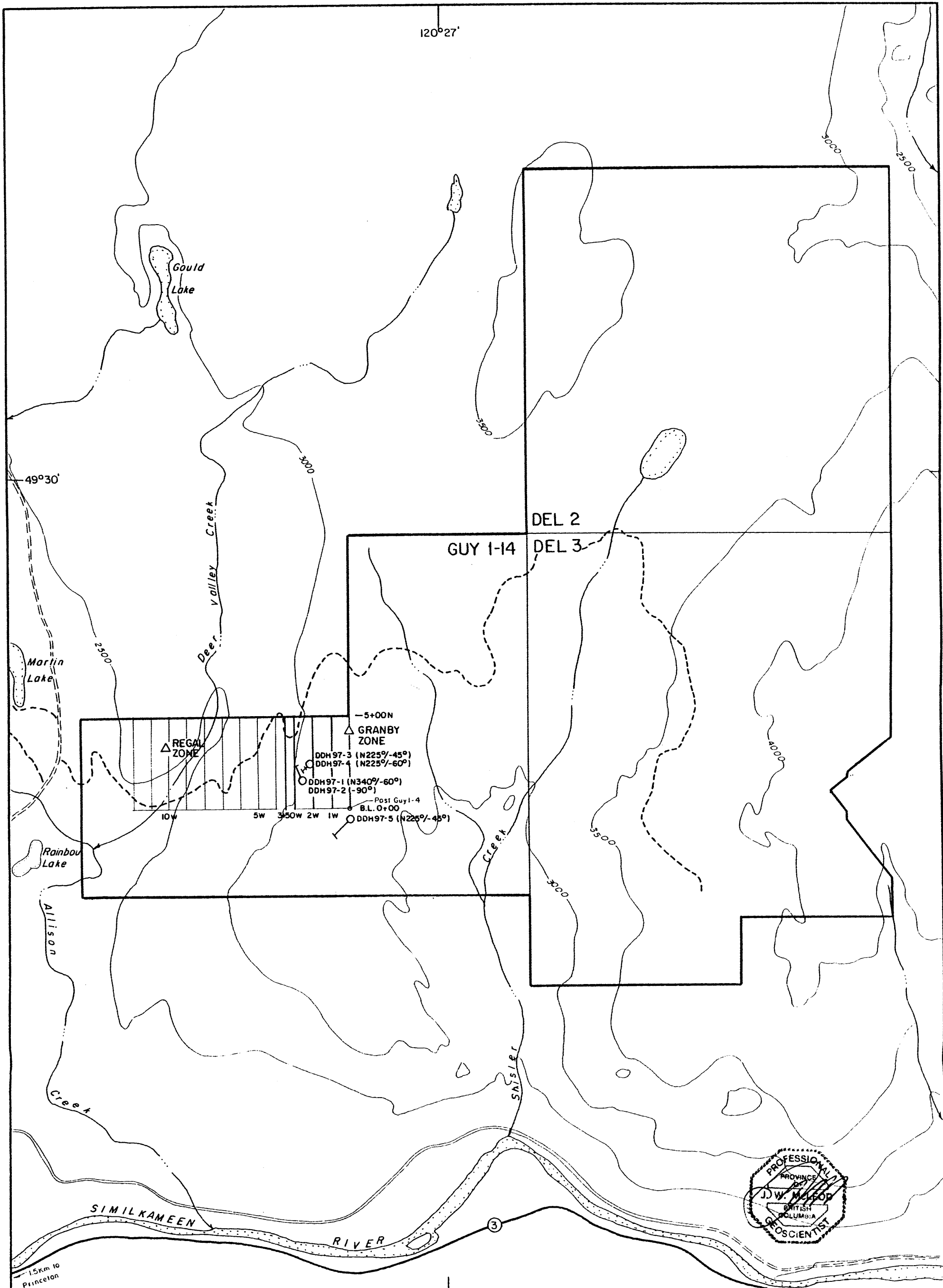
The northern CMS claim area has undergone exploration work intermittently since the 1950's (summaries of these events can be found in previous Assessment Reports).

## **REGIONAL GEOLOGY**

The regional geological setting of the area has been described by many parties since 1910 (see References). A synopsis by the writer is included as follows to outline the underlying setting as a guide to the current exploration program.

The oldest rocks in the general area are the Upper Triassic Nicola Group of volcanic flows and minor sediments. The Nicola Group is characterized by greenish (tight) andesites, coarser grained augite diorite and tuffaceous lavas with isolated occurrences of limestone and minor argillites. The Nicola Group is an elongated belt of eugeosynclinal rocks which occur from near the 49<sup>th</sup> parallel and trend northward for over 240 kilometres (150 miles). The width of the belt approaches 50 km. in places and is sometimes bound on its' east margin by older Paleozoic (often Permian) rocks and on its' west margin by rocks of the younger Coast Plutonic Complex.

The Nicola Group has been divided into three belts by Preto, 1972 and it is these descriptions and divisions which the writer tried to use when



- Highway
- Road, trail
- Creek
- Contour at 500m. interval
- Drill hole, surface trace - 1997
- Mineral inventory area
- Current grid
- Previous grid



**COPPER MOUNTAIN SYNDICATE**

**MINER MOUNTAIN PROJECT**  
**CLAIM-GRID-DRILL HOLE**  
**LOCATION MAP**

N.T.S. 92H-8,9      SIMILKAMEEN M.D., B.C.

0      400      800      1200 METRES

SCALE: 1:20,000      DATE: MAY 1998

assessing the Miner Mountain property. A brief synopsis is offered of his Western, Central and Eastern Belts:

a) **Western Belt:**

Plagioclase andesite to dacite flows, breccia, tuffs, massive to cherty limestone (often fossiliferous), calcareous (volcanic) conglomerate, sandstone and siltstone.

b) **Central Belt:**

Red-green augite-plagioclase andesite and basalt flows and autobrecciated equivalents, red and/or volcanic breccia and lahars, crystal and lithic tuffs, massive grey, fossiliferous limestone and well-bedded siltstone, sandstone, argillite, gritstone and conglomerate.

c) **Eastern Belt:**

Purple and grey analcite-bearing augite-plagioclase trachyandesite and trachybasalt porphyry flows and breccia, red-green tuffs, lahars and minor conglomerate.

The next oldest rocks in the general area are the Copper Mountain Intrusives which have been assigned a post Upper Triassic age and are characterized by intermediate composition alkaline intrusives which are seen to range in composition from syenite through gabbro and pyroxenite. This differentiated suite is intruded into the older Nicola rocks.

The next oldest rocks observed in the general area are the more acidic calc-alkaline intrusives which are seen to range in composition from granite through quartz diorite, these units have been assigned an Upper Cretaceous or Lower Tertiary age.

The youngest rocks observed in the claim area are those of the Princeton Group, assigned a Tertiary age and comprised of a lower volcanic unit of andesite or basalt and an upper sedimentary unit composed of shale, sandstone, conglomerate which are sometimes seen to contain economic occurrences of coal. The lower Princeton Group

volcanics has been observed in places to lie unconformably over portions on the Copper Mountain intrusions.

The Nicola Group is found in places to have been cut by small stocks and dykes of ages varying from late Triassic into the Tertiary.

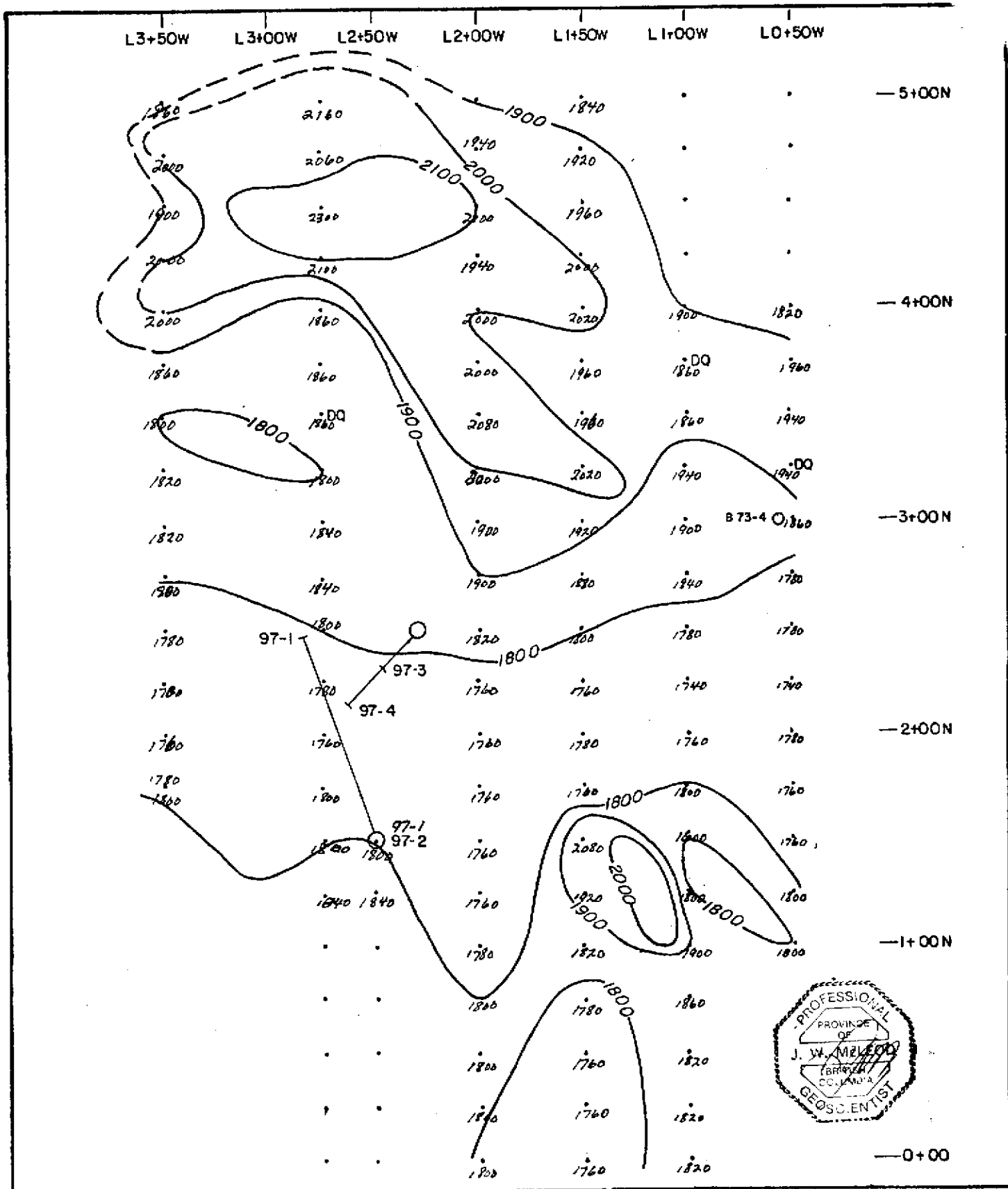
The general area has also experienced widespread faulting which exhibit an east-west and northwesterly trend which in turn have sometimes been cut by younger northerly trending faults. For example in the Copper Mountain-Ingerbelle Mines the western boundary of the Copper Mountain Stock is truncated by the north trending, west dipping "Boundary Fault". East of the "Boundary Fault" faulting is generally east-west, northwesterly and northeasterly. These faults appear to effect ore control.

Within the major southeastern lobe of the Nicola Group some 39 km. east-southeast of Princeton, B.C. occurs the famous lode gold mines of the Hedley area. These deposits are found to occur within metamorphosed limestone units (skarns) of the Nicola Group near diorite-gabbro intrusive contacts.


## **LOCAL GEOLOGY**


The area being described in this report deals with CMS - Miner (Iron) Mountain area to the east of the northerly trending Allison and Deer Valley creek valleys, just north of the Town of Princeton, B.C., situated on the north and west facing slopes of Miner Mountain. This area is seen to be underlain by Upper Triassic Nicola Group andesites and tuffs which are the oldest rock units observed in the area, as well as what appears to be a younger volcanic unit comprising a hornblende feldspar porphyritic diorite, possibly Cretaceous aged and minor sediments which may be coal bearing (Middle Eocene - Princeton Group).


Mineralization observed are generally copper occurrences as chalcopyrite, malachite, azurite, minor bornite all of which are often accompanied by pyrite and at times by secondary magnetite.



DQ      Coincident VLF-EM - dip - quadrature crossover

      Drill hole location


      Magnetic contour, nT (nano teslas)  
2100 = 52,100 nT



**COPPER MOUNTAIN SYNDICATE**

**MINER MOUNTAIN PROJECT**  
**MAGNETOMETER AND**  
**VLF-EM MAP**

N.T.S. 92H-8,9      SIMILKAMEEN M.D.B.C.



|                |                |
|----------------|----------------|
| SCALE: 1:2500  | DATE: MAY 1998 |
| DRAWN BY: J.M. | FIGURE NO. 4   |

The alteration products observed are as gypsum, calcite (dolomite), epidote, quartz, secondary potassium feldspar, and anhydrite? in order of decreasing abundance.

The area exhibits east-west faulting in the rock exposures in the vicinity of DDH 97 1-4 . This may also be the strike direction of the underlying rocks in this area.

## **PRESENT WORK PROGRAM**

The present fieldwork program was undertaken during April 24-June 1, 1997. The work program consisted of grid installation, where some of the grid was flagged and some was picketed especially in the open range areas where cattle were actively grazing. In the grazing areas the pickets and hip-chain thread was removed at the request of the rancher as some of his cattle had experienced leg cuts from the thread. Rock exposure mapping was carried-out. The gridded area underwent VLF-EM and magnetometer surveys at 50 metre line-spacing and 25 metre station intervals prior to drilling.

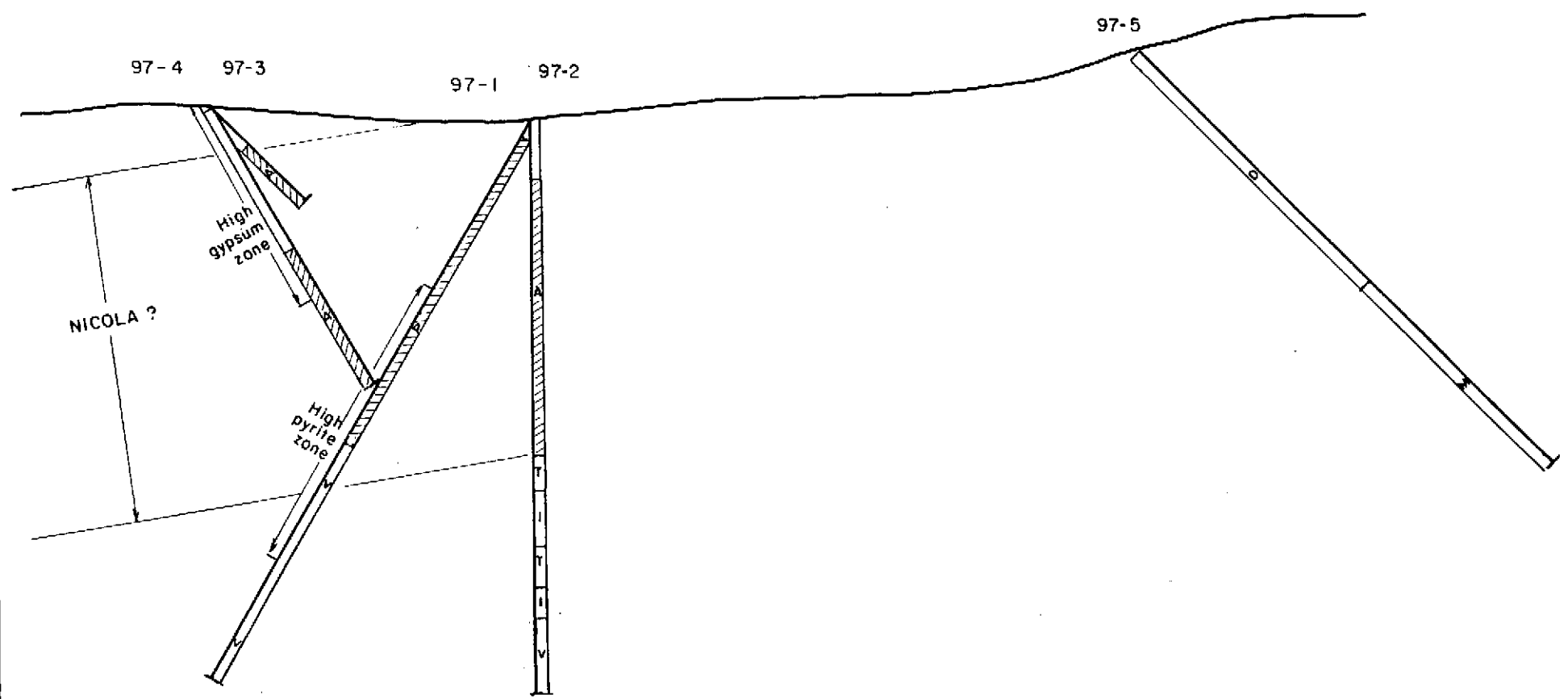
A total of 2.7 km. of grid were installed and station intervals were marked at 25 metres.

A total of 2.4 km. of VLF-EM and magnetometer surveying was conducted over the grid.

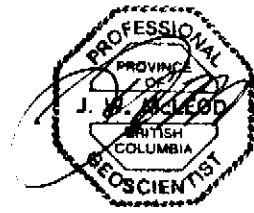
The instruments used were a Geonics EM-16, model 89 VLF-EM receiver detecting the 17.8 kHz signal from Cutler, Maine and a Scintrex fluxgate magnetometer, model MF-1. The magnetometer readings were diurnally corrected by closing-loops.

A total of five NQ-wireline diamond drill core holes were completed for a total of 718 metres (2,356') (see Appendix I - Drill Core Logs and Figure 5 - Geological Sections). The following is a list of the drill hole parameters:

0906



- Andesite
- Tuff
- Intrusive
- Dacite - basalt
- Microporphyry
- Fine grained crystalline volcanics



**COPPER MOUNTAIN SYNDICATE**

**MINER MOUNTAIN PROJECT**

**GEOLOGICAL CROSS SECTION**

N.T.S. 92H-8,9      SIMILKAMEEN M.D., B.C.

0      40      80      120 METRES

|                 |                |
|-----------------|----------------|
| SCALE: 1:2000   | DATE: MAY 1998 |
| DRAWN BY: J. M. | FIGURE NO. 5   |

**Table 1**

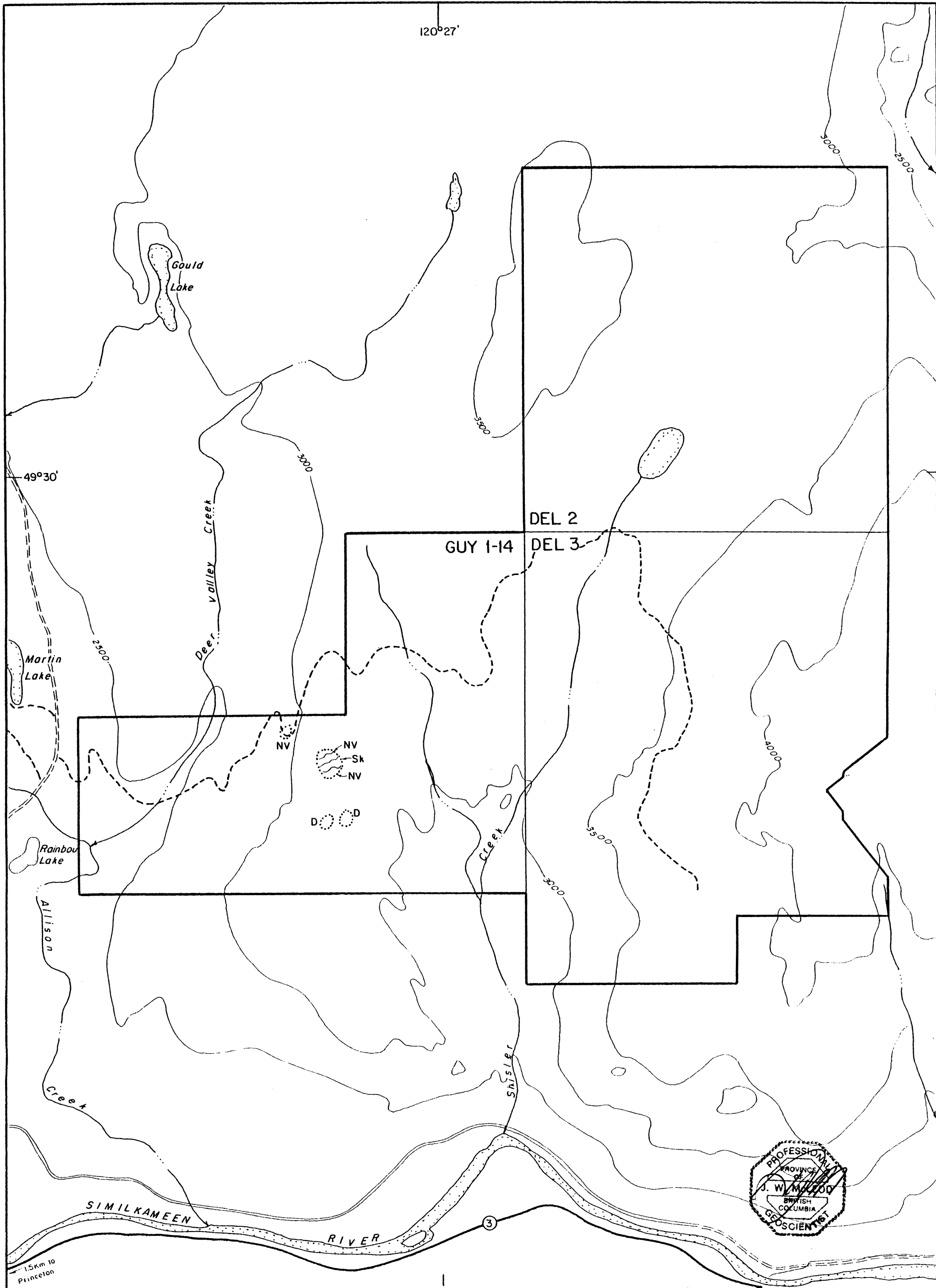
| <b>Hole No.</b> | <b>Grid Location</b> | <b>Azimuth</b> | <b>Dip</b> | <b>Length m. (Ft.)</b> |
|-----------------|----------------------|----------------|------------|------------------------|
| 97-1            | 2+50W-1+50N          | N340°          | -60°       | 205(672)               |
| 97-2            | 2+50W-1+50N          | Vertical       | -90°       | 186(612)               |
| 97-3            | 2+30W-2+50N          | N225°          | -45°       | 36(118)                |
| 97-4            | 2+30W-2+50N          | N225           | -60        | 98(322)                |
| 97-5            | 0+00W-0+50S          | N225           | -45        | 192(630)               |
|                 |                      | <b>TOTAL</b>   |            | <b>718(2,356)</b>      |

Most drill core sections were sawn with a water-cooled diamond saw and all of the core was logged. Selective sections of drill core were bagged and taken to the Acme Analytical Laboratories Ltd. in Vancouver, B.C. where they underwent analyses for multi-elements by inductive coupled plasma (ICP) and fire assay for gold and several PGE (see Appendix II).

## **CONCLUSIONS**

The current drilling program revealed a number of positive features which add to the overall character of the property and the increasing possibility of encountering economic copper-gold-(platinum group elements - PGE) occurrences on the property. A fairly thick, 110 metres (361') section of Nicola volcanics is indicated from the intercepts in DDH 97 1-4 (see Figure 5). The copper (gold and PGE) values appear concentrated in sections of the Nicola volcanics which have undergone more intense fracturing and alteration to a skarn. A section underlying the Nicola volcanic (skarn) exhibits strong pyritization and an abundance of gypsum, but very low copper and precious metal values. Gypsum is pervasive throughout the DDH 97 1-4 intercepts and is likely a regressive alteration product of anhydrite. Values are found to range up to 0.9% copper; 0.05 oz/t gold and 0.01 oz/t platinum group elements (PGE) of which the ratio of platinum to palladium is 1:15 or in the general range of some of the ore values encountered at the Ingerbelle deposit. Considerable dimensions exist between Regal Zone on the west and the Granby Zone on the east and the currently indicated copper mineralization lying intermediate to these zones. Room is available to host an economically significant ore zone within the indicated parameters.





**COPPER MOUNTAIN SYNDICATE**

**MINER MOUNTAIN PROJECT**

**GEOLOGY MAP**

N.T.S. 92H-8,9      SIMILKAMEEN M.D., B.C.

0      400      800      1200 METRES

SCALE: 1:20,000      DATE: MAY 1998

The writer recommends further drilling to be undertaken in the indicated trend of the Nicola skarn section between the currently drilled area and the western, Regal Zone and the eastern, Granby Zone.

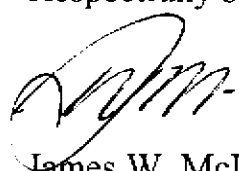
## RECOMMENDATIONS

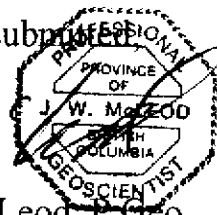
Further drilling is recommended in the area both west and east of the current drilling between the Regal and Granby zones, respectively to allow closure. Then step-outs to the north and possibly several check holes to the south could be undertaken. All drilling from this point on should have quality grid control (in three dimensions) to enable detailed calculations to be made from the acquired data.

## COST ESTIMATE

|   |                  |
|---|------------------|
| Geologist and field supervision for 3 months        | \$ 27,000        |
| Grid installation                                   | 12,000           |
| Magnetometer and VLF-EM surveys, of entire property | 12,000           |
| 1,500 metres NQ-wireline core drilling @ \$100/m.   | 150,000          |
| Camp and board                                      | 26,000           |
| Transportation rentals and fuel                     | 9,000            |
| Instrument rentals                                  | 2,500            |
| Core handling and sampling                          | 5,000            |
| Analyses and assays                                 | 7,000            |
| Permits, fees, filings, insurance, etc.             | 5,000            |
| Reports and maps                                    | 5,000            |
| Contingency   | <u>26,500</u>    |
| <b>TOTAL</b>  | <b>\$287,000</b> |

Respectfully submitted,

  
James W. McLeod, P. Geo.



## STATEMENT OF COSTS



|   |          |
|---|----------|
| Geology and supervision, J. McLeod, 10 days @ \$300/day   | \$ 3,000 |
| Instrument rental and supplies  | 250      |
| Magnetometer and VLF-EM surveys   | 500      |
| 718 metres of NQ-wireline diamond core drilling at<br>@ \$92/metre, G.D. Drilling, Surrey, B.C. | 66,056   |
| Room and board, 25days @ \$80/manday  | 2,000    |
| Equipment and supplies  | 200      |
| Transportation, two 4X4, for 26 days @ \$40/dayX2   | 2,080    |
| Analyses and assays   | 1,665    |
| Reports and maps  | 2,100    |
| TOTAL   | \$77,851 |

## CERTIFICATE

I, **JAMES W. McLEOD**, of the Municipality of Delta, Province of British Columbia, hereby certify as follows:

- 1) I am a Consulting Geologist with an office at #203 - 1318 56<sup>th</sup> Street, Delta, B.C., V4L 2A4.
- 2) I am a Professional Geoscientist registered in the Province of British Columbia and a Fellow of the Geological Association of Canada.
- 3) I graduated with a degree of Bachelor of Science, Major Geology, from the University of British Columbia in 1969.
- 4) I have practised my profession since 1969.
- 5) I am the President and CEO of both Nustar Resources Inc. (formerly Big I Developments Ltd.) and Golden Kootenay Resources Inc. who are beneficial owners of the Guy 1-14, Del 2 and Del 3 mineral claims.
- 6) The above report is based on personal field experience gained by working on the property at various times during the past 27 years, the latest in 1997.

DATED at Delta, Province of British Columbia this 22nd day of June, 1998.

  
  
James W. McLeod, P. Geol.  
Consulting Geologist

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## **APPENDIX I**

### **Diamond Drill Core Logs**

## DRILL CORE LOG

**Company:** Copper Mountain Syndicate  
**Project:** Miner (Iron) Mountain  
**Location:** 2+50W-1+50N  
**Area:** Similkameen Mining Division, British Columbia  
**Date:** May 15, 1998

**Hole No.:** DDH 97-1  
**Azimuth:** N340  
**Dip:** -60  
**Total Depth:** 205 metres (672')  
**Core Size:** NQ-wireline

| Interval<br>(metres) | (%)<br>Recovery | Description  |
|----------------------|-----------------|--|
| 0-5.03               | 0               | Casing.  |
| 5.03-5.49            | 0               | Fresh quartz monzonite "boulder" & f.(ine).gr.(ained). Dk(dark) . Gr'n(green) volc.(anic).   |
| 5.49-9.15            | 0               | Broken volc. particles.  |
| 9.15-10.98           | 15              | Fresh pebbles.   |
| 10.98-12.80          | 50              | Rusty, m.(edium) gr., cryst(alline) intrusive with secondary potassium feldspar(K2), ep.(idote), cal.(cite), Hi (high) Mn (manganese) stain, 2mm wide strgr. (stringer) of opalline quartz. Abundant strgs of gypsum and ep. |
| 12.80-14.33          | 45              | Gr'n (rusty), f-m gr. (Nicola), blebs of magnetite to 1 cm. Gypsum(4mm) veinlets. Sample No. 9351.   |
| 14.33-15.85          | 8               | Same matrix, rusty, abund(ant) gypsum crystals and minor calcite.  |
| 15.85-17.38          | 40              | Same matrix (Nicola).  |
| 17.38-18.90          | 40              | Same matrix (Nicola), gougey.  |
| 18.90-20.43          | 10              | Same matrix (Nicola), minor cal., mal(achite), sul(phides).  |
| 20.43-22.26          | 0               | Section missing pull casing for new shoe.  |
| 22.26-22.86          | 50              | Green X'stal rock, with minor mag' , calcite, gypsum, Mn and epidote.  |
| 22.86-24.54          | 63              | Nicola volc.s with weak cpy + malach. Sa. 9352   |
| 24.54-25.00          | 50              | Rubbly, pebbles to 2 cm. some with CaCO3.  |
| 25.00-26.52          | 40              | Less, rusty, grey-green, plus much py. Sample appears to brecciated or "crackled".   |
| 26.52-28.05          | 23              | Same grey-gr'n r'x.  |
| 28.05-29.88          | 32              | Same grey-gr'n r'x, bleached , x'satll'n with py plus abun. Gypsum.  |
| 29.88-31.10          | 90+             | Same, but altered with py and clayey (sericite).   |

|              |     |   |
|--------------|-----|---|
| 31.10-32.62  | 90+ | Hard (indurated ?) siliceous, chalky white-grey with abund.py, st'r of gypsum. Sa. 9353.  |
| 32.62-33.84  | 50  | Same greyish r'x.   |
| 33.84-35.36  | 90  | Bleached, siliceous similar r'x with py and cpy? Sa. 9354.  |
| 35.36-36.58  | 70  | Similar, r'x with some mag'n blebs and 2-4 cm quartz. Sa. 9355  |
| 36.58-38.26  | 90+ | Similar, altered greyish, broken and clayey r'x.  |
| 38.26-39.33  | 90  | Same, broken, indurated angular, f.gr. greyish r'x with Mag'n, gypsum, malach., cpy, silic. Gyp st'r.   |
| 39.33-40.24  | 60  | Same 5 cm. malach.at end. Sa. 9356.   |
| 40.24-41.16  | 50  | Same r'x, rusty grey rubble. Sa. 9357.  |
| 41.16-42.99  | 90+ | Same grey frac., rusty r'x.   |
| 42.99-44.36  | 90+ | Silic. Grey breccia with py, sericite, K2   |
| 44.36-46.19  | 80  | Grey brec.(cia), rusty block frac.s   |
| 46.19-47.26  | 70  | F. gr. dark grey volc. With rustypy sect'ns.  |
| 47.26-50.61  | 90  | Same rusty grey py sect'ns.   |
| 50.61-52.13  | 90  | Same, but less py.  |
| 52.13-52.74  | 90  | Same, but broken rubble.  |
| 52.74-54.27  | -   | Broken unalt. appearance , but much ep., minor calcite, py, cpy & some blebs mag'n.   |
| 54.27-55.49  | 75  | Same as above (SAA), but not rusty.   |
| 55.49-56.25  | 90+ | Broken grey silic. With K2, py, 2- cm q'tz str'g & K2 45 degrees to core axis (c.a.).   |
| 56.25-57.47  | 75  | SAA.  |
| 57.47-58.54  | 90+ | Same grey X'stal'n "crackled" r'x with rusty py weld. Sa. 9358.   |
| 58.54-60.06  | 30  | SAA, some rusty rubble and cal+.  |
| 60.06-61.58  | 80  | Changing! Much ep-chl-K2-q'tz str'g- minor bl'k talc? on "slickenside" @ 30 deg(rees) to c.a. Sa. 9359.   |
| 61.58-64.63  | 90  | SAA to 65.24. Sa. 9360 and 9361.  |
| 64.63-66.16  | 90  | Changing. Grey f-m gr.int. or volc. Alter. With py, v.f.gr. minor cpy. Sa 9362.   |
| 66.16-73.17  | 95+ | SAA with minor cal. Py. Sa 9363.  |
| 73.17-93.29  | 95+ | Maybe Nicola skarn, ep-chl-bl'k NOT graph. "slips". Three SK a) cpy-ep-chl-K2-gpy. b) hem (1mm) str'g)-ep-chl. c) non-mag. Blk-g'rn. Sa. 9364-68. |
| 93.29-100.30 | 95  | Nicola skarn. Sa.9369.  |



|               |    |   |
|---------------|----|---|
| 100.30-106.10 | 95 | Changing! Very f.gr. cream-grey coloured r'x with py....this is the PYRITE-GYPSUM zone! Sa. 9370.                 |
| 106.10-163.11 | 90 | Same colour to chalky (indurated) white, sometime brec. Some pink anhydrite to 46 cm. @ 140-146 m. Sa. 9371-9380. |
| 163.11-204.88 | 90 | Dark gr'n v.f gr. to aphanitic volc.with cal.-ep-chl-gyp.-anhyd.-hem.-py-cyp. Sa. 9381-88. End-of Hole (EOH).     |

## DRILL CORE LOG

**Company:** Copper Mountain Syndicate  
**Project:** Miner (Iron) Mountain  
**Location:** 2+50W-1+50N  
**Area:** Similkameen Mining Division, British Columbia  
**Date:** May 15, 1998

**Hole No.:** DDH 97-2  
**Azimuth:** N/A  
**Dip:** -90  
**Total Depth:** 187 metres (612')  
**Core Size:** NQ-wireline

| Interval<br>(metres) | (%)<br>Recovery | Description   |
|----------------------|-----------------|---|
| 0-18.29              | 0               | Casing.   |
| 18.29-109.15         | 50-90+          | Nicola volcanics d'k gr'n f.gr. with some sections more altered than others - alteration as chl-q'tz str'gs to 0.5 cm.-some mag'n-cal.(dolo.)-ep-K2-gyp.(anhyd.)-py-cpy. Sa. 107229-242.  |
| 109.15-131.55        | 90              | Contact 40 to c.a. Very f. gr. br'n x'stal. Porphyry, alter. (clay) feldspar with cal. on frac's, some fault (mylonite) zones, i.e. some parallel to c.a. with bl'k graph. gouge on frac. Some py i.e. 123.48 m. X'stal Tuff. Sa. 107243-246. |
| 131.55-140.55        | 90              | Contact 45 to c.a. INTRUSIVE with K2-<1% q'tz-py-cpy-plus hematite str'g weld.brec. with chl-cal-2 mm. q'tz "eyes".Sa. 107247-249.  |
| 140.55-153.20        | 95              | Tuff with brick-red-green matrix - Hematite-(Mylonite)-TUFF.  |
| 153.20-164.33        | 95+             | INTRUSIVE BRECCIA - pink K-spar.-very low to nil q'tz.-non-mag. Sa 107250.  |
| 164.33-171.49        | 95+             | Green Mylonitic X'stal (flow) TUFF.   |
| 171.49-171.95        | 95+             | FAULT GOUGE).   |
| 171.95-182.93        | 95+             | Green-Purple Mylonitic MIX VOLC. Sa. 02547.   |
| 182.93-186.58        | 95+             | FAULT GOUGE - Gypsum-rich with py. Sa. 02548. EOH.  |

### DRILL CORE LOG

**Company:** Copper Mountain Syndicate  
**Project:** Miner (Iron) Mountain  
**Location:** 2+30W-2+50N  
**Area:** Similkameen Mining Division, British Columbia  
**Date:** May 15, 1998

**Hole No.:** DDH 97-3  
**Azimuth:** N225  
**Dip:** -45  
**Total Depth:** 36 metres (118')  
**Core Size:** NQ-wireline

| Interval<br>(metres) | (%)<br>Recovery | Description   |
|----------------------|-----------------|---|
| 0-13.11              | 0               | Casing.   |
| 13.11-15.55          | 45              | Nicola volcanics? - f.gr. grey, rusty, some gouge and some malachite stain.<br>Sa. 107224-225. EOH. |

## DRILL CORE LOG

**Company:** Copper Mountain Syndicate  
**Project:** Miner (Iron) Mountain  
**Location:** 2+30W-2+50N  
**Area:** Similkameen Mining Division, British Columbia  
**Date:** May 15, 1998

**Hole No.:** DDH 97-4  
**Azimuth:** N225  
**Dip:** -60  
**Total Depth:** 98 metres (322')  
**Core Size:** NQ-wireline

| Interval<br>(metres) | (%)<br>Recovery | Description   |
|----------------------|-----------------|---|
| 0-15.85              | 0               | Casing.   |
| 15.85-43.29          | 45              | Grey, bleached, clayey rubble.  |
| 43.29-47.86          | 45              | Start high gypsum.  |
| 47.86-60.67          | 45              | Nicola? - f.gr. gr'n volc. with some magnetite.                                     |
| 60.67-64.63          | 45              | SAA with pink-white, massive, str'gs of alter. material.                            |
| 64.63-98.17          | 60              | SKARN ZONE, Nicola? - much py and mag. plus minor cpy at 78.35-78.96 and 94.81 EOH. |

## DRILL CORE LOG

**Company:** Copper Mountain Syndicate  
**Project:** Miner (Iron) Mountain  
**Location:** 0+00W-0+50S  
**Area:** Similkameen Mining Division, British Columbia  
**Date:** May 15, 1998

**Hole No.:** DDH 97-5  
**Azimuth:** N225  
**Dip:** -45  
**Total Depth:** 192 metres (630')  
**Core Size:** NQ-wireline

| Interval<br>(metres) | (%)<br>Recovery | Description  |
|----------------------|-----------------|--|
| 0-1.52               | 0               | Casing.  |
| 1.52-110.00          | 95              | Light gr'n-grey X'stal'n volc. brecc. Pink feld. ep- hem.- anhydrite (pink)-cal str'g-some "in-&-out" in places much brecciation ep-K2-and replac. Feld.'s ep hem.(often Hardness>5.5, may be jasper)-generally gr'n-red volc. breccia. Writer originally called this a dacite-basalt, but the overall <10% quartz, abundance of K-spar, hornblende revises the type to a fine grained syenitic r'x, possibly Preto's trachyandesite he noted to the north of the Miner M'tn property on Summers creek.                                  |
| 110.00-192.00        | 95              | F. gr. brownish-red microporphyry (2 mm.). K-spar>2/3 total feld., <10% quartz, Colour Index (CI) =15-20, mafic - biotite, pyroxene and hornblende, slightly magnetic. Alteration wk-mod. chl, hematite plus calcite welded fractures. Brecciation observed may be in part very angular lithic particles. This rock unit is termed a crystal-lithic TUFF partly because of it's position in regard to the above lying trachyandesite unit . EOH. NOTE: both of these rock units may be included in the Nicola - Eastern Belt of (Preto). |

## **APPENDIX II**

### **Geochemical Analyses and Assays**



GEOCHEMICAL ANALYSIS CERTIFICATE



Omega Services Inc. PROJECT CMS(N) File # 97-2460 Page 1  
203 - 1318 - 56th St., Delta BC V4L 2A4

| SAMPLE#          | Mo     | Cu  | Pb  | Zn  | Ag  | Ni  | Co   | Mn   | Fe | As  | U   | Au  | Th  | Sr   | Cd  | Sb  | Bi  | V     | Ca    | P  | La  | Cr   | Mg  | Ba   | Ti | B    | Al   | Na   | K  | W   | Au* |
|------------------|--------|-----|-----|-----|-----|-----|------|------|----|-----|-----|-----|-----|------|-----|-----|-----|-------|-------|----|-----|------|-----|------|----|------|------|------|----|-----|-----|
|                  | ppm    | ppm | ppm | ppm | ppm | ppm | ppm  | ppm  | %  | ppm | ppm | ppm | ppm | ppm  | ppm | ppm | ppm | ppm   | %     | %  | ppm | ppm  | %   | ppm  | %  | %    | %    | %    | %  | ppm | ppb |
| G 9351           | 6 1288 | <3  | 64  | <.3 | 13  | 28  | 596  | 8.80 | 3  | <5  | <2  | 4   | 59  | 1.5  | <2  | 4   | 392 | 3.90  | .347  | 22 | 19  | 1.22 | 41  | .01  | 9  | 1.70 | .02  | .05  | <2 | 57  |     |
| G 9352           | 2 1222 | <3  | 87  | .6  | 11  | 23  | 1698 | 8.41 | 2  | <5  | <2  | 4   | 114 | 1.6  | 2   | 2   | 317 | 6.05  | .379  | 17 | 17  | 1.98 | 118 | .02  | 4  | 2.18 | .02  | .03  | <2 | 53  |     |
| G 9353           | 2 917  | <3  | 41  | <.3 | 6   | 33  | 744  | 4.77 | 4  | <5  | <2  | 2   | 55  | 1.1  | 4   | 2   | 151 | 3.55  | .209  | 28 | 3   | 2.08 | 40  | .01  | 5  | 1.57 | .03  | .07  | <2 | 28  |     |
| G 9354           | 1 766  | <3  | 48  | .3  | 13  | 23  | 761  | 6.37 | 4  | <5  | <2  | 5   | 98  | 1.2  | 2   | 5   | 203 | 5.27  | .376  | 27 | 9   | 1.62 | 51  | .02  | 3  | 1.64 | .03  | .08  | <2 | 97  |     |
| G 9355           | 1 795  | <3  | 28  | <.3 | 6   | 22  | 565  | 5.10 | <2 | <5  | <2  | <2  | 73  | 1.0  | <2  | 2   | 180 | 3.13  | .231  | 15 | 6   | 1.86 | 40  | .01  | 6  | 1.53 | .03  | .03  | <2 | 99  |     |
| G 9356           | 3 1325 | <3  | 26  | <.3 | 8   | 14  | 478  | 3.55 | 3  | <5  | <2  | 2   | 68  | .7   | <2  | 4   | 118 | 3.41  | .233  | 19 | 7   | 1.11 | 67  | .01  | 5  | .84  | .03  | .16  | <2 | 99  |     |
| G 9357           | 1 2683 | <3  | 72  | .6  | 11  | 24  | 1488 | 7.53 | 6  | <5  | <2  | <2  | 69  | 1.0  | <2  | 3   | 235 | 3.10  | .244  | 28 | 9   | 2.37 | 48  | .01  | 6  | 1.94 | .03  | .09  | <2 | 388 |     |
| G 9358           | 2 708  | <3  | 32  | <.3 | 4   | 24  | 443  | 4.48 | 2  | <5  | <2  | <2  | 91  | .7   | <2  | 3   | 172 | 3.62  | .191  | 9  | 3   | 1.94 | 57  | .02  | <3 | 1.69 | .03  | .02  | <2 | 23  |     |
| G 9359           | 2 2260 | <3  | 35  | <.3 | 9   | 19  | 492  | 4.69 | <2 | <5  | <2  | 3   | 287 | .9   | <2  | <2  | 166 | 4.61  | .360  | 11 | 21  | 2.38 | 46  | .06  | <3 | 2.17 | .01  | <.01 | <2 | 369 |     |
| G 9360           | 1 805  | <3  | 21  | <.3 | 10  | 16  | 364  | 3.86 | <2 | <5  | <2  | <2  | 536 | .7   | <2  | <2  | 140 | 5.54  | .356  | 11 | 11  | 1.71 | 54  | .13  | <3 | 1.62 | .02  | <.01 | <2 | 39  |     |
| G 9361           | 1 511  | <3  | 25  | <.3 | 11  | 19  | 427  | 4.03 | <2 | <5  | <2  | 3   | 241 | .7   | <2  | <2  | 136 | 5.14  | .457  | 14 | 8   | 2.01 | 21  | .14  | <3 | 1.85 | .02  | <.01 | <2 | 18  |     |
| G 9362           | 1 451  | <3  | 28  | <.3 | 17  | 27  | 528  | 4.98 | 12 | <5  | <2  | 11  | 267 | 1.0  | <2  | <2  | 201 | 6.09  | .875  | 28 | 36  | 2.16 | 46  | .15  | 4  | 2.00 | .03  | .02  | <2 | 16  |     |
| RE G 9362        | 1 454  | <3  | 27  | <.3 | 18  | 27  | 500  | 5.03 | 10 | 7   | <2  | 10  | 262 | .9   | <2  | <2  | 200 | 5.98  | .859  | 28 | 36  | 2.16 | 45  | .13  | <3 | 2.01 | .03  | .02  | <2 | 14  |     |
| RRE G 9362       | 2 494  | <3  | 29  | <.3 | 18  | 29  | 533  | 5.19 | 12 | <5  | <2  | 10  | 262 | .9   | <2  | <2  | 205 | 6.12  | .893  | 28 | 39  | 2.28 | 44  | .13  | 3  | 2.06 | .03  | <.01 | 2  | 14  |     |
| G 9363           | 2 1096 | <3  | 27  | <.3 | 4   | 17  | 293  | 3.61 | <2 | <5  | <2  | <2  | 290 | .5   | <2  | <2  | 198 | 2.96  | .224  | 13 | 5   | 2.32 | 44  | .03  | <3 | 1.83 | .04  | .08  | <2 | 12  |     |
| G 9364           | 3 743  | <3  | 41  | <.3 | 21  | 57  | 582  | 9.27 | <2 | 8   | <2  | 2   | 295 | 1.2  | <2  | 3   | 293 | 3.72  | .132  | 4  | 10  | 2.65 | 39  | .19  | <3 | 2.20 | .02  | .07  | <2 | 24  |     |
| G 9365           | 2 624  | <3  | 38  | <.3 | 17  | 39  | 638  | 9.38 | 9  | <5  | <2  | 31  | 567 | 1.5  | <2  | <2  | 367 | 11.48 | 2.677 | 81 | 16  | 2.09 | 87  | .03  | 3  | 1.76 | .03  | .33  | <2 | 26  |     |
| G 9366           | 3 944  | <3  | 25  | <.3 | 12  | 33  | 552  | 5.33 | <2 | <5  | <2  | 9   | 276 | .9   | <2  | <2  | 239 | 7.38  | .701  | 16 | 15  | 2.77 | 64  | .16  | <3 | 2.27 | .03  | .48  | <2 | 10  |     |
| G 9367           | 5 719  | <3  | 17  | <.3 | 9   | 13  | 367  | 5.16 | <2 | <5  | <2  | 2   | 321 | .6   | <2  | 2   | 185 | 4.36  | .204  | 6  | 13  | 2.08 | 69  | .26  | <3 | 2.00 | .03  | .92  | <2 | 32  |     |
| G 9368           | 3 601  | <3  | 29  | <.3 | 14  | 25  | 505  | 6.03 | <2 | <5  | <2  | 7   | 236 | .9   | <2  | <2  | 354 | 6.28  | .887  | 18 | 13  | 3.61 | 81  | .19  | <3 | 3.07 | .03  | 2.03 | <2 | 16  |     |
| G 9369           | 3 1281 | <3  | 12  | <.3 | 10  | 32  | 275  | 5.17 | <2 | 5   | <2  | 10  | 561 | .8   | <2  | 2   | 274 | 7.68  | 1.151 | 46 | 15  | 2.25 | 66  | .11  | <3 | 1.92 | .03  | .60  | <2 | 85  |     |
| G 9370           | 4 617  | <3  | 8   | <.3 | 10  | 22  | 143  | 2.77 | <2 | <5  | <2  | <2  | 635 | .3   | <2  | <2  | 179 | 5.88  | .183  | 5  | 12  | 1.54 | 55  | .19  | <3 | 1.21 | .02  | .18  | <2 | 15  |     |
| G 9371           | 5 329  | <3  | 15  | <.3 | 7   | 25  | 139  | 3.19 | <2 | <5  | <2  | <2  | 266 | .4   | 2   | <2  | 143 | 6.35  | .137  | 6  | 6   | 1.84 | 28  | .18  | <3 | 1.46 | .03  | .05  | <2 | 8   |     |
| G 9372           | 4 137  | <3  | 8   | <.3 | 6   | 35  | 143  | 3.17 | <2 | <5  | <2  | <2  | 381 | .4   | <2  | <2  | 156 | 6.24  | .149  | 1  | 3   | 2.03 | 38  | .01  | <3 | 1.53 | .02  | .05  | <2 | 4   |     |
| G 9373           | 3 27   | 3   | 2   | <.3 | 7   | 22  | 132  | 3.82 | <2 | <5  | <2  | <2  | 59  | .6   | <2  | 2   | 19  | 5.87  | .131  | 1  | 3   | 1.20 | 28  | <.01 | <3 | .39  | .03  | .18  | 2  | 1   |     |
| G 9374           | 2 85   | <3  | <1  | <.3 | 5   | 16  | 98   | 4.46 | 3  | 7   | <2  | <2  | 82  | .5   | <2  | 2   | 14  | 6.77  | .134  | 1  | 3   | .34  | 36  | <.01 | <3 | .38  | .01  | .20  | 2  | 4   |     |
| RE G 9374        | 2 77   | <3  | <1  | <.3 | 4   | 14  | 86   | 4.01 | <2 | <5  | <2  | <2  | 74  | .4   | <2  | 2   | 13  | 6.02  | .121  | 2  | 3   | .31  | 31  | <.01 | <3 | .34  | .01  | .17  | 2  | 5   |     |
| RRE G 9374       | 2 71   | <3  | <1  | <.3 | 5   | 13  | 81   | 3.88 | <2 | <5  | <2  | <2  | 78  | .5   | <2  | <2  | 15  | 6.29  | .110  | 1  | 5   | .30  | 42  | <.01 | <3 | .43  | .01  | .23  | 2  | 3   |     |
| G 9375           | 5 17   | <3  | 11  | <.3 | 5   | 18  | 109  | 2.36 | <2 | <5  | <2  | <2  | 64  | .2   | <2  | <2  | 26  | 4.82  | .125  | 1  | 3   | 1.24 | 33  | <.01 | <3 | .30  | .04  | .11  | <2 | 2   |     |
| G 9376           | 2 28   | <3  | 32  | <.3 | 4   | 15  | 198  | 3.23 | <2 | <5  | <2  | <2  | 38  | .4   | 2   | <2  | 43  | 4.33  | .125  | 3  | 4   | 1.81 | 15  | <.01 | <3 | .24  | .06  | .06  | 2  | 6   |     |
| G 9377           | 1 15   | <3  | <1  | <.3 | 12  | 21  | 17   | 3.75 | <2 | <5  | <2  | 3   | 427 | .3   | 2   | <2  | 8   | 4.27  | .120  | 4  | 3   | .12  | 27  | <.01 | <3 | .30  | .01  | .13  | <2 | <1  |     |
| G 9378           | 1 24   | <3  | 5   | <.3 | 10  | 14  | 26   | 4.39 | <2 | <5  | <2  | <2  | 399 | .4   | <2  | <2  | 68  | 3.71  | .123  | 2  | 7   | 1.46 | 17  | <.01 | <3 | 1.12 | .03  | .07  | 2  | <1  |     |
| G 9379           | 3 <1   | <3  | <1  | <.3 | <1  | <1  | <2   | .02  | <2 | 16  | <2  | <2  | 745 | <.2  | <2  | <2  | <1  | 9.62  | .003  | <1 | <1  | .01  | 2   | <.01 | <3 | .01  | <.01 | <.01 | <2 | <1  |     |
| G 9380           | <1 21  | <3  | <1  | <.3 | 6   | 17  | 4    | 2.65 | 3  | <5  | <2  | <2  | 132 | <.2  | 2   | <2  | 7   | 2.94  | .081  | 1  | 2   | .10  | 16  | <.01 | <3 | .20  | .01  | .09  | <2 | <1  |     |
| G 9381           | <1 844 | <3  | 29  | <.3 | 8   | 23  | 252  | 5.53 | 5  | <5  | <2  | <2  | 133 | .5   | 3   | <2  | 180 | 4.94  | .162  | 5  | 6   | 3.17 | 9   | .06  | <3 | 2.63 | .02  | <.01 | <2 | 5   |     |
| G 9382           | <1 244 | <3  | 15  | <.3 | 8   | 20  | 325  | 6.31 | <2 | <5  | <2  | <2  | 276 | .4   | <2  | <2  | 186 | 2.84  | .188  | 6  | 7   | 3.30 | 37  | .01  | <3 | 2.96 | .04  | .05  | <2 | <1  |     |
| STANDARD C3/AU-R | 25 66  | 30  | 151 | 5.1 | 35  | 11  | 724  | 3.29 | 49 | 15  | <2  | 19  | 29  | 19.4 | 14  | 20  | 83  | .60   | .090  | 17 | 165 | .61  | 150 | .10  | 20 | 1.92 | .04  | .15  | 14 | 455 |     |

INTERVALS  
 97-1  
 10.00-11.33  
 22.86-24.54  
 31.10-32.42  
 33.94-35.36  
 35.36-36.24  
 38.11-39.43  
 40.24-41.16  
 57.32-58.94  
 60.04-61.56  
 61.56-62.11  
 62.11-64.63  
 65.24-65.70  
 "  
 "  
 71.80-72.46  
 76.98-78.06  
 80.94-81.02  
 82.98-83.06  
 91.81-91.89  
 92.07-92.22  
 95.12-100.3  
 102.96-104.12  
 109.40-109.72  
 115.45-115.84  
 117.68-123.4  
 126.23-126.31  
 126.82-126.90  
 126.53-126.61  
 131.72-131.80  
 138.11-138.19  
 140.39-140.85  
 150.00-150.00  
 153.35-153.35  
 158.00-158.00  
 165.85-165.85  
 172.26-172.26

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.  
 ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB  
 - SAMPLE TYPE: P1 TO P2 CORE P3 ROCK AU\* - IGMITED, AQUA-REGIA/MIBK EXTRACT, GF/AA FINISHED.(10 GM)  
 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: MAY 28 1997 DATE REPORT MAILED: June 2/97 SIGNED BY: [Signature] D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS  
 All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only. Data FA



| SAMPLE#   | Mo<br>ppm | Cu<br>ppm | Pb<br>ppm | Zn<br>ppm | Ag<br>ppm | Ni<br>ppm | Co<br>ppm | Mn<br>ppm | Fe<br>% | As<br>ppm | U<br>ppm | Au<br>ppm | Th<br>ppm | Sr<br>ppm | Cd<br>ppm | Sb<br>ppm | Bi<br>ppm | V<br>ppm | Ca<br>% | P<br>% | La<br>ppm | Cr<br>ppm | Mg<br>% | Ba<br>ppm | Ti<br>% | B<br>ppm | Al<br>% | Na<br>% | K<br>% | W<br>ppm | Au*<br>ppb | 97/ |
|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|---------|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|---------|--------|-----------|-----------|---------|-----------|---------|----------|---------|---------|--------|----------|------------|-----|
| G 9383    | <1        | 464       | <3        | 18        | .6        | 9         | 16        | 419       | 5.29    | <2        | 5        | <2        | 4         | 178       | .5        | <2        | <2        | 140      | 4.72    | .176   | 9         | 5         | 3.10    | 18        | .01     | <3       | 2.79    | .04     | .06    | <2       | 5172.86    | Out |
| G 9384    | <1        | 823       | <3        | 42        | .7        | 8         | 18        | 406       | 6.25    | <2        | <5       | <2        | 4         | 83        | .3        | <2        | <2        | 216      | 1.59    | .195   | 14        | 8         | 3.64    | 44        | .01     | <3       | 2.79    | .06     | .03    | <2       | 8178.91    | Out |
| G 9385    | 1         | 447       | <3        | 73        | .5        | 9         | 22        | 596       | 4.30    | <2        | <5       | <2        | 3         | 510       | .4        | 3         | <2        | 268      | 7.34    | .145   | 17        | 12        | 3.10    | 52        | .04     | <3       | 2.52    | .02     | <.01   | <2       | 1181.30    | Out |
| G 9386    | <1        | 87        | <3        | 85        | <.3       | 8         | 15        | 638       | 4.42    | <2        | <5       | <2        | 3         | 608       | .4        | 2         | <2        | 302      | 5.52    | .164   | 13        | 7         | 3.52    | 72        | .20     | <3       | 2.60    | .04     | .03    | <2       | 1181.63    | Out |
| G 9387    | <1        | 91        | <3        | 58        | .4        | 9         | 16        | 521       | 6.30    | 2         | 12       | <2        | 4         | 335       | .5        | <2        | <2        | 301      | 5.32    | .163   | 13        | 7         | 3.22    | 64        | .15     | <3       | 2.41    | .02     | .03    | <2       | 1200.00    | Out |
| G 9388    | <1        | 361       | <3        | 27        | .6        | 16        | 28        | 415       | 9.97    | <2        | 7        | <2        | 3         | 476       | .8        | <2        | 2         | 372      | 5.02    | .155   | 7         | 6         | 4.06    | 95        | .13     | <3       | 2.83    | .04     | .09    | <2       | 1204.28    | Out |
| RE G 9388 | <1        | 384       | <3        | 29        | .4        | 16        | 30        | 441       | 10.60   | <2        | 12       | <2        | 3         | 513       | 1.0       | <2        | <2        | 397      | 5.32    | .163   | 7         | 7         | 4.27    | 110       | .14     | <3       | 2.99    | .04     | .10    | <2       | 1204.28    | Out |

Sample type: CORE. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.





## GEOCHEM PRECIOUS METALS ANALYSIS



Omega Services Inc. PROJECT CMS(N) File # 97-2460R  
203 - 1318 - 56th St., Delta BC V4L 2A4

| SAMPLE# | Au**<br>ppb | Pt**<br>ppb | Pd**<br>ppb | <u>97-1</u>   |
|---------|-------------|-------------|-------------|---------------|
| G 9357  | 443         | 5           | 94          | 40.24 - 41.16 |
| G 9364  | 34          | 1           | 8           | 76.98 Grab    |

30 GRAM SAMPLE FIRE ASSAY AND ANALYSIS BY ULTRA/ICP.  
- SAMPLE TYPE: CORE PULP

DATE RECEIVED: AUG 1 1997 DATE REPORT MAILED: Aug 11/97 SIGNED BY: C. Leong D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



GEOCHEMICAL ANALYSIS CERTIFICATE



Omega Services Inc. File # 97-4178

203 - 1318 - 56th St., Delta BC V4L 2A4 Submitted by: Jim McLeod

| SAMPLE#    | HOLE INT. (m) | Mo ppm | Cu ppm | Pb ppm | Zn ppm | Ag ppm | Ni ppm | Co ppm | Mn ppm | Fe % | As ppm | U ppm | Au ppm | Th ppm | Sr ppm | Cd ppm | Sb ppm | Bi ppm | V ppm | Ca %  | P %  | La ppm | Cr ppm | Mg % | Ba ppm | Ti % | B ppm | Al % | Na % | K % | W Au** ppm oz/t |
|------------|---------------|--------|--------|--------|--------|--------|--------|--------|--------|------|--------|-------|--------|--------|--------|--------|--------|--------|-------|-------|------|--------|--------|------|--------|------|-------|------|------|-----|-----------------|
| 02547      | 97-2          | 1      | 233    | 14     | 89     | .3     | 60     | 29     | 1844   | 5.47 | <2     | <8    | <2     | <2     | 437    | .3     | <3     | <3     | 154   | 9.65  | .166 | 10     | 162    | 3.01 | 673    | .01  | 3     | 2.66 | .04  | .17 | <2<.001         |
| 02548      | 136-58        | 3      | 20     | 4      | 8      | <.3    | 7      | 18     | 26     | 1.61 | 2      | <8    | <2     | 2      | 663    | <.2    | <3     | <3     | 13    | 13.49 | .117 | 2      | 1      | .35  | 30     | <.01 | 4     | .46  | .02  | .14 | <2<.001         |
| 107237     | 98-63         | 1      | 1296   | 14     | 73     | .7     | 10     | 21     | 1083   | 4.02 | <2     | <8    | <2     | <2     | 226    | <.2    | <3     | <3     | 143   | 15.91 | .013 | 5      | 11     | 1.92 | 50     | .21  | <3    | 1.60 | .03  | .08 | <2<.003         |
| 107238     | 99-54         | 3      | 987    | 11     | 67     | .3     | 15     | 44     | 990    | 7.02 | 3      | <8    | <2     | <2     | 425    | <.2    | <3     | <3     | 286   | 6.41  | .057 | 5      | 22     | 3.95 | 40     | .29  | <3    | 3.05 | .03  | .18 | <2<.002         |
| 107239     | 101-47        | 2      | 2540   | 13     | 59     | .8     | 17     | 40     | 1037   | 5.80 | 3      | <8    | <2     | 2      | 499    | .5     | <3     | <3     | 186   | 6.79  | .174 | 11     | 17     | 3.70 | 70     | .05  | 5     | 3.30 | .03  | .09 | <2<.003         |
| 107240     | 103-05        | 2      | 594    | 14     | 78     | .4     | 10     | 30     | 1489   | 6.57 | 2      | <8    | <2     | <2     | 288    | <.2    | <3     | <3     | 291   | 7.44  | .129 | 5      | 8      | 4.11 | 66     | .15  | 4     | 3.34 | .03  | .05 | <2<.001         |
| 107241     | 104-92        | 2      | 408    | 7      | 82     | .3     | 8      | 29     | 1115   | 6.79 | 2      | <8    | <2     | 2      | 356    | <.2    | <3     | <3     | 285   | 8.43  | .274 | 15     | 5      | 2.91 | 64     | .06  | <3    | 2.71 | .03  | .07 | <2<.001         |
| 107242     | 106-10        | 5      | 2090   | 13     | 121    | .7     | 10     | 43     | 996    | 5.66 | 3      | <8    | <2     | 2      | 418    | .2     | <3     | <3     | 303   | 9.40  | .217 | 10     | 4      | 2.85 | 31     | .01  | <3    | 2.39 | .03  | .03 | <2<.012         |
| 107243     | 114-02        | 2      | 135    | 13     | 94     | .3     | 18     | 28     | 1571   | 4.98 | 31     | <8    | <2     | <2     | 502    | .5     | <3     | <3     | 81    | 9.44  | .141 | 8      | 13     | 2.72 | 127    | <.01 | 10    | 1.94 | .03  | .38 | <2<.001         |
| 107244     | 116-46        | <1     | 153    | 18     | 111    | .3     | 12     | 22     | 1489   | 5.51 | 25     | <8    | <2     | <2     | 1330   | .5     | <3     | <3     | 82    | 8.74  | .137 | 7      | 9      | 2.59 | 34     | <.01 | 8     | 2.13 | .02  | .30 | <2<.001         |
| 107245     | 118-77        | 10     | 123    | 12     | 91     | .5     | 19     | 31     | 1822   | 5.29 | 14     | <8    | <2     | <2     | 800    | .9     | <3     | <3     | 77    | 10.54 | .130 | 8      | 20     | 3.09 | 39     | <.01 | 9     | 1.66 | .03  | .32 | <2<.001         |
| 107246     | 122-43        | <1     | 32     | 12     | 84     | <.3    | 17     | 22     | 1082   | 4.37 | 3      | <8    | <2     | <2     | 400    | .2     | <3     | <3     | 173   | 6.53  | .181 | 10     | 29     | 2.18 | 290    | .02  | 6     | 1.93 | .06  | .15 | <2<.001         |
| 107247     | 130-64        | 4      | 164    | 20     | 59     | .7     | 38     | 38     | 1213   | 3.12 | 29     | <8    | <2     | 2      | 971    | .3     | <3     | <3     | 59    | 8.67  | .154 | 8      | 54     | .97  | 44     | <.01 | 14    | 1.77 | .03  | .53 | <2<.001         |
| RE 107247  | 131-65        | 4      | 158    | 18     | 56     | .6     | 37     | 37     | 1173   | 3.05 | 29     | <8    | <2     | 2      | 957    | .5     | <3     | <3     | 56    | 8.43  | .150 | 8      | 52     | .94  | 44     | <.01 | 15    | 1.71 | .03  | .52 | <2<.001         |
| RRE 107247 | "             | 4      | 163    | 19     | 57     | .6     | 37     | 37     | 1191   | 3.07 | 29     | <8    | <2     | <2     | 968    | .5     | <3     | <3     | 59    | 8.52  | .152 | 8      | 50     | .96  | 54     | <.01 | 13    | 1.75 | .03  | .53 | <2<.001         |
| 107248     | 133-84        | 60     | 1751   | 13     | 63     | 1.0    | 5      | 20     | 1214   | 4.31 | 7      | <8    | <2     | <2     | 553    | .5     | <3     | <3     | 117   | 7.85  | .145 | 11     | 9      | 1.90 | 63     | <.01 | 8     | 2.12 | .04  | .21 | <2<.001         |
| 107249     | 140-24        | <1     | 118    | 13     | 77     | <.3    | 22     | 32     | 1313   | 6.28 | <2     | <8    | <2     | 2      | 423    | .2     | <3     | <3     | 240   | 7.33  | .131 | 5      | 60     | 4.03 | 814    | .01  | 7     | 3.59 | .03  | .06 | <2<.001         |
| 107250     | 152-96        | <1     | 97     | 63     | 133    | .6     | 6      | 24     | 1307   | 5.44 | 65     | <8    | <2     | 2      | 888    | 1.8    | <3     | <3     | 136   | 5.64  | .163 | 11     | 7      | 2.11 | 92     | .01  | 9     | 2.39 | .04  | .24 | <2<.001         |
| STANDARD   | C3/AU-1       | 24     | 61     | 41     | 169    | 5.6    | 37     | 13     | 743    | 3.39 | 56     | 24    | 3      | 18     | 31     | 24.3   | 17     | 20     | 79    | .62   | .092 | 18     | 158    | .69  | 138    | .09  | 22    | 2.01 | .04  | .16 | 17 .097         |

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.  
 ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB  
 - SAMPLE TYPE: CORE AU\*\* BY FIRE ASSAY FROM 1 A.T. SAMPLE.  
 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: AUG 8 1997

DATE REPORT MAILED: Aug 18/97

SIGNED BY: *C. Leong* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



## GEOCHEM PRECIOUS METALS ANALYSIS



Omega Services Inc. PROJECT CMS File # 97-3667R  
203 - 1318 - 56th St., Delta BC V4L 2A4

| SAMPLE# | Au**<br>ppb | Pt**<br>ppb | Pd**<br>ppb |                             |
|---------|-------------|-------------|-------------|-----------------------------|
| 107232  | 1611        | 22          | 274         | <u>97-2</u><br><u>69.21</u> |

30 GRAM SAMPLE FIRE ASSAY AND ANALYSIS BY ULTRA/ICP.  
- SAMPLE TYPE: CORE PULP

DATE RECEIVED: AUG 1 1997 DATE REPORT MAILED: *Aug 11/97* SIGNED BY: *C. Leong* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



GEOCHEMICAL ANALYSIS CERTIFICATE



Omega Services Inc. PROJECT CMS File # 97-3667

203 - 1318 - 56th St., Delta BC V4L 2A4 Submitted by: Jim McLeod

| SAMPLE#          | HOLE<br>ID#(m) | Mo<br>ppm | Cu<br>ppm | Pb<br>ppm | Zn<br>ppm | Ag<br>ppm | Ni<br>ppm | Co<br>ppm | Mn<br>ppm | Fe<br>% | As<br>ppm | U<br>ppm | Au<br>ppm | Th<br>ppm | Sr<br>ppm | Cd<br>ppm | Sb<br>ppm | Bi<br>ppm | V<br>ppm | Ca<br>% | P<br>% | La<br>ppm | Cr<br>ppm | Mg<br>% | Ba<br>ppm | Ti<br>% | B<br>ppm | Al<br>% | Na<br>% | K<br>% | W<br>ppm | Au*<br>ppb |
|------------------|----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|---------|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|---------|--------|-----------|-----------|---------|-----------|---------|----------|---------|---------|--------|----------|------------|
| 107226           | 92-5<br>150.04 | 1         | 110       | 5         | 117       | <.3       | 10        | 27        | 1383      | 6.23    | 12        | <8       | <2        | <2        | 396       | .8        | <3        | <3        | 180      | 5.73    | .116   | 7         | 13        | 2.29    | 260       | .02     | <3       | 2.38    | .05     | .13    | <2       | 2          |
| 107227           | 147.38         | <1        | 68        | <3        | 143       | <.3       | 28        | 29        | 1982      | 5.21    | 2         | <8       | <2        | <2        | 447       | .5        | <3        | <3        | 146      | 5.05    | .079   | 4         | 76        | 3.91    | 3         | .12     | 4        | 3.07    | .05     | .01    | <2       | 1          |
| 107228           | 113.87         | <1        | 52        | <3        | 90        | <.3       | 19        | 30        | 1614      | 6.86    | 6         | <8       | <2        | <2        | 88        | .2        | <3        | <3        | 234      | 4.63    | .123   | 6         | 42        | 3.53    | 24        | .22     | <3       | 2.41    | .05     | .07    | <2       | 1          |
| 107229           | 205-3165       | 2         | 746       | <3        | 79        | .3        | 10        | 39        | 1175      | 6.18    | 5         | <8       | <2        | 3         | 164       | .3        | <3        | <3        | 190      | 4.40    | .280   | 14        | 8         | 3.26    | 50        | .02     | 6        | 1.76    | .07     | .05    | <2       | 51         |
| 107230           | 15.10-5186     | 1         | 822       | 3         | 66        | .3        | 6         | 32        | 1072      | 7.19    | <2        | <8       | <2        | 4         | 431       | .7        | <3        | 9         | 223      | 6.56    | .428   | 16        | 14        | 2.79    | 44        | .04     | <3       | 2.24    | .04     | .07    | <2       | 98         |
| RE 107230        | "              | 1         | 815       | <3        | 64        | .3        | 12        | 31        | 1062      | 7.09    | <2        | <8       | <2        | 4         | 458       | .6        | <3        | <3        | 223      | 6.94    | .431   | 17        | 14        | 2.77    | 44        | .04     | <3       | 2.27    | .04     | .07    | <2       | 97         |
| RRE 107230       | "              | 1         | 794       | <3        | 66        | .3        | 9         | 31        | 1051      | 6.99    | <2        | <8       | <2        | 3         | 405       | .7        | <3        | <3        | 216      | 6.65    | .390   | 16        | 13        | 2.70    | 38        | .04     | <3       | 2.21    | .04     | .07    | 2        | 100        |
| 107231           | 67.8-67.99     | 4         | 1488      | <3        | 55        | <.3       | 8         | 24        | 791       | 3.60    | <2        | <8       | <2        | 2         | 280       | <.2       | <3        | <3        | 172      | 5.29    | .274   | 9         | 8         | 2.82    | 65        | .16     | <3       | 1.92    | .03     | .06    | <2       | 133        |
| 107232           | 69.21          | <1        | 8898      | <3        | 45        | 1.7       | 33        | 52        | 758       | 27.22   | <2        | <8       | <2        | 2         | 359       | <.2       | <3        | <3        | 1099     | 3.38    | .124   | 5         | 4         | 2.05    | 44        | .28     | <3       | 1.70    | .02     | .02    | 2        | 1640       |
| 107233           | 79.27          | 2         | 3096      | <3        | 65        | .5        | 9         | 19        | 784       | 5.25    | <2        | <8       | <2        | 2         | 554       | .6        | <3        | <3        | 213      | 3.66    | .158   | 7         | 5         | 3.39    | 42        | .10     | <3       | 2.58    | .05     | .44    | <2       | 273        |
| 107234           | 80.79          | <1        | 364       | 5         | 56        | <.3       | 19        | 22        | 702       | 11.04   | <2        | <8       | <2        | 3         | 409       | .6        | <3        | 4         | 565      | 8.79    | .606   | 10        | 6         | 2.29    | 43        | .12     | <3       | 1.77    | .03     | .03    | <2       | 65         |
| 107235           | 89.63          | 3         | 596       | <3        | 36        | .3        | 8         | 22        | 704       | 4.54    | 5         | <8       | <2        | 5         | 351       | .8        | <3        | <3        | 217      | 8.34    | .649   | 22        | 9         | 2.78    | 55        | .05     | <3       | 2.09    | .03     | .09    | <2       | 33         |
| 107236           | 94.82          | 3         | 2127      | 4         | 71        | .6        | 7         | 20        | 780       | 5.24    | 3         | <8       | <2        | 3         | 570       | .4        | <3        | <3        | 232      | 5.38    | .384   | 15        | 12        | 3.01    | 56        | .04     | 5        | 2.28    | .04     | .06    | <2       | 214        |
| STANDARD C3/AU-R |                | 26        | 67        | 35        | 169       | 5.7       | 34        | 11        | 753       | 3.60    | 53        | 21       | <2        | 19        | 31        | 22.5      | 17        | 22        | 83       | .61     | .088   | 19        | 172       | .65     | 138       | .10     | 23       | 2.04    | .04     | .17    | 18       | 536        |

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.  
 ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB  
 - SAMPLE TYPE: CORE AU\* - IGNITED, AQUA-REGIA/MIBK EXTRACT, GF/AA FINISHED.(10 GM)  
 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUL 17 1997 DATE REPORT MAILED: July 22/97 SIGNED BY: C. L. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



GEOCHEMICAL ANALYSIS CERTIFICATE



Omega Services Inc. File # 97-3057 Page 1

203 - 1318 - 56th St., Delta BC V4L 2A4 Submitted by: Jim McLeod

| SAMPLE#          | NOLE<br>TWT(L) | Mo<br>ppm | Cu<br>ppm | Pb<br>ppm | Zn<br>ppm | Ag<br>ppm | Ni<br>ppm | Co<br>ppm | Mn<br>ppm | Fe<br>% | As<br>ppm | U<br>ppm | Au<br>ppm | Th<br>ppm | Sr<br>ppm | Cd<br>ppm | Sb<br>ppm | Bi<br>ppm | V<br>ppm | Ca<br>% | P<br>% | La<br>ppm | Cr<br>ppm | Mg<br>% | Ba<br>ppm | Ti<br>% | B<br>ppm | Al<br>% | Na<br>% | K<br>% | W<br>ppm | Au**<br>ppb |
|------------------|----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|---------|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|---------|--------|-----------|-----------|---------|-----------|---------|----------|---------|---------|--------|----------|-------------|
| G 9389           | 167-6.21       | <1        | 15        | <3        | 100       | <.3       | 4         | 14        | 865       | 2.99    | <2        | <5       | <2        | <2        | 211       | <.2       | 2         | <2        | 65       | 2.78    | .148   | 8         | 5         | 1.38    | 45        | .03     | 6        | 1.90    | .04     | .14    | <2       | 10          |
| G 9390           | 671-12.20      | 1         | 443       | <3        | 134       | <.3       | 4         | 15        | 1165      | 3.61    | <2        | <5       | <2        | <2        | 160       | .3        | <2        | <2        | 80       | 3.31    | .149   | 8         | 6         | 1.59    | 72        | .01     | 7        | 2.14    | .04     | .07    | <2       | 3           |
| G 9391           | 12.20-18.20    | <1        | 26        | <3        | 110       | <.3       | 2         | 16        | 1030      | 3.58    | <2        | <5       | <2        | <2        | 174       | <.2       | <2        | <2        | 80       | 2.84    | .162   | 7         | 5         | 1.76    | 55        | .03     | 8        | 2.06    | .04     | .11    | <2       | 5           |
| G 9392           | 18.20-28.28    | <1        | 113       | 3         | 79        | <.3       | 3         | 16        | 931       | 3.24    | <2        | <5       | <2        | <2        | 225       | <.2       | <2        | <2        | 76       | 2.57    | .138   | 6         | 5         | 1.77    | 95        | .02     | 12       | 2.18    | .04     | .06    | <2       | 3           |
| G 9393           | 28.28-28.26    | <1        | 61        | 3         | 82        | <.3       | 3         | 17        | 1059      | 3.99    | <2        | <5       | <2        | <2        | 417       | .4        | <2        | <2        | 105      | 4.08    | .150   | 6         | 5         | 1.89    | 54        | .03     | 8        | 2.12    | .04     | .03    | <2       | 19          |
| G 9394           | 82.26-34.40    | <1        | 343       | 6         | 83        | <.3       | 3         | 17        | 1135      | 3.99    | <2        | <5       | <2        | <2        | 414       | 1.1       | <2        | <2        | 127      | 3.88    | .162   | 6         | 4         | 2.15    | 66        | .07     | 5        | 1.98    | .03     | .05    | <2       | 3           |
| G 9395           | 34.40-34.24    | <1        | 394       | <3        | 88        | <.3       | <1        | 16        | 1172      | 3.78    | <2        | <5       | <2        | <2        | 427       | .7        | <2        | <2        | 105      | 3.40    | .131   | 8         | 4         | 2.05    | 31        | .02     | 4        | 2.32    | .04     | .04    | <2       | 3           |
| G 9396           | 34.24-46.12    | <1        | 34        | 5         | 75        | <.3       | <1        | 15        | 1126      | 3.85    | 2         | <5       | <2        | <2        | 240       | .4        | <2        | <2        | 96       | 3.95    | .138   | 9         | 5         | 1.74    | 42        | .02     | 12       | 1.92    | .04     | .12    | <2       | <2          |
| G 9397           | 46.12-50.20    | <1        | 19        | 3         | 76        | <.3       | 4         | 15        | 847       | 3.32    | <2        | <5       | <2        | <2        | 273       | .3        | <2        | <2        | 85       | 2.15    | .131   | 6         | 6         | 1.73    | 30        | .02     | 10       | 2.07    | .04     | .05    | <2       | 2           |
| G 9398           | 50.20-50.49    | <1        | 412       | <3        | 92        | <.3       | 4         | 18        | 971       | 3.53    | <2        | 6        | <2        | <2        | 263       | <.2       | <2        | <2        | 79       | 2.11    | .141   | 6         | 5         | 2.00    | 24        | .02     | 9        | 2.15    | .04     | .03    | <2       | <2          |
| RE G 9398        | "              | <1        | 417       | <3        | 95        | <.3       | 6         | 17        | 988       | 3.59    | <2        | <5       | <2        | <2        | 267       | <.2       | <2        | <2        | 79       | 2.14    | .142   | 6         | 6         | 2.04    | 18        | .02     | 6        | 2.20    | .04     | .04    | <2       | <2          |
| RRE G 9398       | "              | <1        | 459       | <3        | 96        | <.3       | 8         | 19        | 1012      | 3.74    | <2        | <5       | <2        | <2        | 276       | <.2       | <2        | <2        | 83       | 2.20    | .141   | 7         | 6         | 2.06    | 24        | .02     | 11       | 2.27    | .06     | .04    | <2       | <2          |
| G 9399           | 50.49-60.36    | <1        | 178       | 4         | 105       | <.3       | 3         | 21        | 1172      | 3.91    | <2        | 5        | <2        | <2        | 341       | .5        | <2        | 4         | 91       | 3.16    | .156   | 7         | 5         | 2.30    | 27        | .02     | 9        | 2.11    | .04     | .04    | <2       | 6           |
| G 9400           | 60.36-66.86    | <1        | 132       | <3        | 94        | <.3       | 6         | 20        | 1167      | 4.38    | 2         | <5       | <2        | <2        | 427       | .3        | <2        | <2        | 120      | 3.55    | .162   | 7         | 8         | 2.43    | 44        | .04     | 10       | 2.03    | .06     | .04    | <2       | 3           |
| B 107214         | 66.86-82.28    | <1        | 1356      | 7         | 71        | 2.3       | 99        | 26        | 1388      | 5.11    | 10        | <5       | <2        | 2         | 197       | 1.0       | <2        | <2        | 185      | 6.35    | .198   | 14        | 245       | 4.01    | 27        | .12     | 4        | 2.40    | .04     | .03    | <2       | 19          |
| B 107215         | 82.28-107.07   | 1         | 265       | <3        | 77        | .4        | 22        | 21        | 1184      | 5.02    | 7         | <5       | <2        | <2        | 133       | .6        | <2        | <2        | 167      | 5.24    | .176   | 9         | 47        | 2.60    | 44        | .13     | 4        | 1.80    | .06     | .07    | <2       | 2           |
| B 107216         | 107.07-119.61  | <1        | 60        | 4         | 85        | <.3       | 25        | 29        | 1338      | 6.65    | 4         | <5       | <2        | <2        | 136       | 1.0       | <2        | <2        | 219      | 3.72    | .119   | 5         | 79        | 3.11    | 20        | .22     | 8        | 2.17    | .05     | .06    | <2       | <2          |
| B 107217         | 119.61-132.93  | <1        | 5         | <3        | 96        | <.3       | 11        | 24        | 958       | 4.76    | 3         | <5       | <2        | <2        | 399       | .3        | <2        | <2        | 99       | 2.12    | .128   | 4         | 18        | 2.90    | 14        | .22     | 11       | 2.18    | .06     | .03    | <2       | <2          |
| B 107218         | 132.93-146.24  | 1         | 312       | 6         | 94        | <.3       | 5         | 15        | 1247      | 3.79    | <2        | <5       | <2        | <2        | 399       | .3        | <2        | <2        | 78       | 5.64    | .125   | 9         | 14        | 1.55    | 272       | .02     | 6        | 1.98    | .04     | .15    | <2       | <2          |
| B 107219         | 146.24-163.80  | <1        | 57        | 5         | 126       | <.3       | 14        | 22        | 938       | 4.59    | 13        | <5       | <2        | <2        | 150       | .5        | <2        | <2        | 107      | 5.59    | .133   | 6         | 15        | .89     | 54        | <.01    | 3        | 1.77    | .07     | .21    | <2       | 2           |
| B 107220         | 163.80-171.95  | <1        | 136       | 5         | 94        | <.3       | 12        | 43        | 1155      | 5.99    | 4         | <5       | <2        | <2        | 226       | 1.0       | <2        | <2        | 132      | 6.20    | .137   | 7         | 16        | 2.31    | 76        | .01     | 3        | 2.53    | .04     | .15    | <2       | <2          |
| B 107221         | 171.95-186.16  | <1        | 1068      | 9         | 64        | 1.1       | 9         | 9         | 1486      | 3.48    | 3         | <5       | <2        | <2        | 351       | .8        | <2        | <2        | 133      | 10.14   | .189   | 11        | 17        | .81     | 171       | <.01    | 3        | 1.30    | .05     | .35    | <2       | <2          |
| RE B 107221      | "              | <1        | 1067      | 6         | 63        | 1.0       | 9         | 9         | 1476      | 3.46    | 2         | <5       | <2        | <2        | 349       | .6        | <2        | <2        | 132      | 10.06   | .183   | 12        | 18        | .80     | 160       | <.01    | <3       | 1.30    | .05     | .34    | <2       | <2          |
| RRE B 107221     | "              | <1        | 888       | 7         | 61        | .9        | 8         | 9         | 1435      | 3.27    | 2         | <5       | <2        | <2        | 331       | .7        | <2        | <2        | 126      | 10.02   | .187   | 11        | 17        | .79     | 150       | <.01    | 5        | 1.20    | .05     | .31    | <2       | <2          |
| B 107222         | 186.16-180.03  | 1         | 90        | 5         | 79        | <.3       | 5         | 16        | 958       | 3.76    | 24        | <5       | <2        | <2        | 360       | <.2       | <2        | <2        | 77       | 5.97    | .101   | 5         | 8         | 1.28    | 112       | <.01    | 4        | 1.46    | .05     | .26    | <2       | 11          |
| B 107223         | 180.03-192.07  | <1        | 22        | 3         | 107       | <.3       | 18        | 22        | 1198      | 4.67    | <2        | <5       | <2        | <2        | 195       | .5        | <2        | <2        | 196      | 5.79    | .175   | 13        | 36        | 3.18    | 34        | .02     | 4        | 2.25    | .07     | .08    | <2       | 2           |
| B 107224         | 192.07-221.30  | 2         | 551       | 3         | 51        | <.3       | 11        | 30        | 651       | 4.73    | <2        | 6        | <2        | <2        | 58        | .3        | <2        | <2        | 119      | 2.55    | .171   | 9         | 2         | 1.49    | 117       | <.01    | 5        | 1.25    | .07     | .19    | <2       | 30          |
| B 107225         | 221.30-231.55  | 7         | 329       | 5         | 16        | <.3       | 3         | 7         | 104       | 2.15    | <2        | <5       | <2        | <2        | 50        | <.2       | <2        | <2        | 65       | 1.24    | .197   | 20        | 5         | .60     | 251       | <.01    | <3       | .74     | .04     | .21    | <2       | 8           |
| STANDARD C3/AU-R |                | 26        | 64        | 33        | 165       | 5.5       | 31        | 11        | 721       | 3.55    | 55        | 27       | 2         | 18        | 32        | 23.2      | 15        | 25        | 82       | .60     | .090   | 18        | 169       | .65     | 152       | .10     | 22       | 1.94    | .04     | .16    | 16       | 481         |

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.  
 ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB  
 - SAMPLE TYPE: P1 CORE P2 ROCK AU\*\* ANALYSIS BY FA/ICP FROM 30 GM SAMPLE.  
 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUN 23 1997 DATE REPORT MAILED: Jun 30/97 SIGNED BY [Signature] D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



GEOCHEM PRECIOUS METALS ANALYSIS



Omega Services Inc. File # 97-3057R

203 - 1318 - 56th St., Delta BC V4L 2A4

| SAMPLE#  | Au**<br>ppb | Pt**<br>ppb | Pd**<br>ppb | <u>97-5</u> |
|----------|-------------|-------------|-------------|-------------|
| B 107214 | 19          | 5           | 7           | 86.28       |

30 GRAM SAMPLE FIRE ASSAY AND ANALYSIS BY ULTRA/ICP.  
- SAMPLE TYPE: CORE PULP

DATE RECEIVED: AUG 1 1997

DATE REPORT MAILED:

*Aug 5/97*

SIGNED BY.....D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

## **APPENDIX III**

### **Magnetometer and VLF-EM Data with Interpretation and Evaluation**

## MAGNETOMETER AND VLF-EM DATA

| <u>(Line)</u><br><u>Station</u> | <u>Mag.</u> | <u>C-Dip</u> | <u>C-Quad.</u> |
|---------------------------------|-------------|--------------|----------------|
| <u>L0+50W</u>                   |             |              |                |
| 1+00N                           | 51800       | -15          | -22            |
| 1+25N                           | 51800       | -25          | +15            |
| 1+50N                           | 51760       | -10          | -13            |
| 1+75N                           | 51760       | -10          | -13            |
| 2+00N                           | 51780       | -20          | +08            |
| 2+25N                           | 51740       | -15          | +16            |
| 2+50N                           | 51780       | -30          | 0              |
| 2+75N                           | 51780       | 0            | -5             |
| 3+00N                           | 51860       | -15          | +2             |
| 3+25N                           | 51940       | +15          | +3             |
| 3+50N                           | 51940       | +10          | -22            |
| 3+75N                           | 51960       | +15          | -18            |
| 4+00N                           | 51820       | +10          | -6             |
| <br><u>L1+00W</u>               |             |              |                |
| 0+00N                           | 51820       | -5           | -13            |
| 0+25N                           | 51820       | +10          | -10            |
| 0+50N                           | 51820       | +25          | -21            |
| 0+75N                           | 51860       | -5           | -29            |
| 1+00N                           | 51900       | 0            | -10            |
| 1+25N                           | 51800       | +20          | -20            |
| 1+50N                           | 51800       | -10          | -11            |
| 1+75N                           | 51800       | -5           | -17            |
| 2+00N                           | 51760       | -25          | +4             |
| 2+25N                           | 51740       | -20          | -22            |
| 2+50N                           | 51780       | -40          | -12            |
| 2+75N                           | 51840       | -35          | -14            |
| 3+00N                           | 51900       | 0            | -10            |
| 3+25N                           | 51940       | -5           | 0              |
| 3+50N                           | 51860       | 0            | +12            |
| 3+75N                           | 51860       | 0            | -26            |
| 4+00N                           | 51900       | +5           | -20            |



**L1+50W**

|       |       |     |     |
|-------|-------|-----|-----|
| 0+00N | 51760 | +2  | -17 |
| 0+25N | 51760 | -24 | -28 |
| 0+50N | 51760 | 0   | -7  |
| 0+75N | 51780 | -10 | -38 |
| 1+00N | 51820 | +45 | -27 |
| 1+25N | 51920 | 0   | -12 |
| 1+50N | 52080 | +15 | -11 |
| 1+75N | 51760 | -50 | -22 |
| 2+00N | 51780 | -70 | -18 |
| 2+25N | 51760 | -60 | -12 |
| 2+50N | 51800 | -60 | -10 |
| 2+75N | 51880 | -20 | -24 |
| 3+00N | 51920 | -65 | +7  |
| 3+25N | 52020 | -25 | +10 |
| 3+50N | 51960 | -45 | +10 |
| 3+75N | 51960 | -40 | +1  |
| 4+00N | 52020 | -30 | 0   |
| 4+25N | 52000 | -15 | -3  |
| 4+50N | 51960 | -10 | -2  |
| 4+75N | 51920 | -80 | +1  |
| 5+00N | 51840 | -35 | -6  |

**L2+00W**

|       |       |      |     |
|-------|-------|------|-----|
| 0+00N | 51800 | +15  | -19 |
| 0+25N | 51800 | +10  | -11 |
| 0+50N | 51800 | +15  | -26 |
| 0+75N | 51800 | -15  | -42 |
| 1+00N | 51780 | +5   | -12 |
| 1+25N | 51760 | -5   | -28 |
| 1+50N | 51760 | +5   | -42 |
| 1+75N | 51760 | +110 | -7  |
| 2+00N | 51760 | 0    | -20 |
| 2+25N | 51760 | +70  | -26 |
| 2+50N | 51820 | 0    | -13 |
| 2+75N | 51900 | +5   | -24 |
| 3+00N | 51900 | -25  | -13 |
| 3+25N | 52000 | -15  | -27 |
| 3+50N | 52080 | -15  | -16 |

|       |       |     |     |
|-------|-------|-----|-----|
| 3+75N | 52000 | -25 | -3  |
| 4+00N | 52000 | -5  | -10 |
| 4+25N | 51940 | -20 | -13 |
| 4+50N | 52100 | -10 | -20 |
| 4+75N | 51940 | 0   | -4  |

L2+75W

|       |       |     |     |
|-------|-------|-----|-----|
| 1+25N | 51840 | +25 | -16 |
| 1+50N | 51800 | +30 | -9  |
| 1+75N | 51800 | +5  | -14 |
| 2+00N | 51760 | +5  | -7  |
| 2+25N | 51780 | -25 | -13 |
| 2+50N | 51800 | -25 | -20 |
| 2+75N | 51840 | -55 | -15 |
| 3+00N | 51840 | -20 | -25 |
| 3+25N | 51800 | -15 | -14 |
| 3+50N | 51860 | -20 | +2  |
| 3+75N | 51860 | +25 | -7  |
| 4+00N | 51860 | -10 | -18 |
| 4+25N | 52100 | +13 | -12 |
| 4+50N | 52300 | -12 | -8  |
| 4+75N | 52060 | +70 | -10 |
| 5+00N | 52160 | +15 | -21 |

L3+50W

|       |       |     |     |
|-------|-------|-----|-----|
| 1+65N | 51800 | -30 | -40 |
| 1+75N | 51780 | +45 | -20 |
| 2+00N | 51760 | +35 | -21 |
| 2+25N | 51780 | +15 | -25 |
| 2+50N | 51780 | -25 | -29 |
| 2+75N | 51800 | -20 | -8  |
| 3+00N | 51820 | -30 | -8  |
| 3+25N | 51820 | -15 | -8  |
| 3+50N | 51800 | -25 | +4  |
| 3+75N | 51860 | -15 | -1  |
| 4+00N | 52000 | 0   | -21 |
| 4+25N | 52000 | -35 | -10 |
| 4+50N | 51900 | -30 | -15 |
| 4+75N | 52000 | +25 | -16 |
| 5+00N | 51860 | -10 | -15 |

## INTERPRETATION AND EVALUATION

The writer generally interprets the east-west trending magnetometer and to a lesser degree the VLF-EM dip-quadrature pairs as responses to several different, but related causes. These will be described from viewing Figure 4 from south to north as follows:

- 1) The localized magnetic "high" and adjacent "low" on the north between L1+00W and L1+50W from stations 1+00N to 1+50N may reflect a significant increase in the magnetite content of the underlying rocks possibly near the contact of a highly altered section (Gypsum - Pyrite zone) of Nicola andesite.
- 2) The east-west trending magnetic "low" crossing the entire grid between 1+00N and 3+00N is thought to reflect an alteration "low" and not necessarily a rock type change. Evidence of the strong gypsum zone is evident in the core from DDH 97 1-4.
- 3) The next adjacent higher magnetic zone to the north of the altered zone and in the vicinity of Bethlehem 73-4 drill hole (on the eastside of the grid at 3+00N) **may offer the best east-west zone in which to try and cut an less altered, but mineralized section of Nicola andesites** and further indications of this be the irregular dip-quadrature "pairs" reflecting areas of underlying alteration.
- 4) The broad east-west high magnetic zone **irregularly occurring** between 3+00N and 5+00N may reflect a more highly magnetic and less altered underlying rock type, i.e. like the rock observed along the main property road near L3+50W - 1+65N.