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REPORT ON PHASES II AND III <sup>3/88</sup>  
GEOLOGY, GEOCHEMISTRY, GEOPHYSICS  
AND DIAMOND DRILLING  
ON THE

CHEM PROPERTY

VICTORIA MINING DIVISION, B.C.  
NTS M92C/16E AND M92B/13W  
48°52.7' N LATITUDE 123°59' W LONGITUDE

*Operator:* FOR INTERNATIONAL CHEROKEE DEVELOPMENTS LTD.  
FEBRUARY 27, 1987  
G. ALLEN, P.Geol.

*Owner(s):* L.A. Balak  
J. Simpson  
R. Watson

FILMED

PART 1 OF 3  
GEOLOGICAL BRANCH  
ASSESSMENT REPORT

16,053



## SUMMARY

An integrated exploration program was conducted on the Chem property in 1986 and 1987 by MPH Consulting Limited on behalf of International Cherokee Developments Ltd. The program consisted of geological mapping, prospecting, geochemical sampling, geophysical surveys and diamond drilling.

The Chem property is underlain by Paleozoic Sicker Group pyroclastic and sedimentary rocks of the McLaughlin Ridge and Cameron River Formations (formerly the Myra Formation and Sediment Sill Unit). An initial exploration program conducted in the spring of 1986 identified two areas of interest (Grids A and B) on which the present program was concentrated.

The A Grid, located in the northwest part of the property, contains a notable boulder composed of layered pyrite and magnetite-rich siliceous material. Samples of this boulder contained up to 4.80 g/t Au (0.140 oz/T) (sample 356). Subsequent mapping and prospecting led to the discovery of several other pieces of mineralized float. Analyses of some of this material are; 840 ppb Au, 830 ppm Zn and 420 ppm Ba (sample 1694), 1.84% Zn, (sample 1696) and 1200 ppb Au, assayed at 1.44 g/t or 0.042 oz/T (sample 14843).

A pyrite, magnetite and gold (up to 300 ppb) bearing hematitic chert (iron formation) horizon up to 10 m thick has been traced in this area for 700 m, with a possible continuation along strike of several kilometres. Several northeast trending fault zones cut this unit. Where exposed, these fault zones are enriched in Mn, Ba and Zn and contain anomalous Au values. It is possible that the source of the Au bearing boulder (sample 356, with 4.80 g/t or 0.140 oz/T Au) is a fault zone at its intersection with the iron formation.



Flagged and cut lines were established in area A (A Grid) to facilitate subsequent soil geochemical, biogeochemical, VLF-EM, magnetic and induced polarization surveys.

Soil geochemistry in this area has outlined a few zones with anomalous gold content apparently related to bedrock. The biogeochemical or conifer branch sample survey has also identified a few areas with anomalously high Au concentrations. No apparent correlation is observed between tree and soil sample results.

Three geophysical surveys were conducted on the A Grid. The magnetic survey outlined a zone of moderate, narrow, linear anomalies (Domain II) which may be related to ferruginous chert units. The VLF-EM survey delineated 23 northwest-trending conductive zones, the strongest of which correlate with argillite units. The IP/resistivity survey outlined 5 polarizable targets. Conductive IP sources are related to argillite (graphitic?) units; non-conductive IP responses may be caused by disseminated sulphides.

Two diamond drill holes totalling 213 m tested strong magnetic and induced polarization anomalies. A 10 m thick ferruginous chert or iron formation unit with 5-10% pyrite and a few percent magnetite was intersected in the first hole. Samples of this material contained anomalous Au values up to 130 ppb.

On the B Grid, located in the southwest part of the property, prospecting and mapping identified small shears with up to 1200 ppb Au and a small rhodonite occurrence. A soil geochemistry survey covering these showings outlined several Mn, Pb, Zn, As and Cu anomalies.

On the basis of these reasonably encouraging results further exploration of the Chem property is recommended.



A diamond drilling program is warranted on the A Grid to delineate and to test the iron formation, especially in areas where it is apparently cut by faults. A few rock sample sites with anomalous gold values require a more detailed investigation.

More detailed mapping on the B Grid is recommended to outline the extent of the rhodonite showing and to explain the cause of the soil geochemistry anomalies.

This program is estimated to cost approximately \$155,000.



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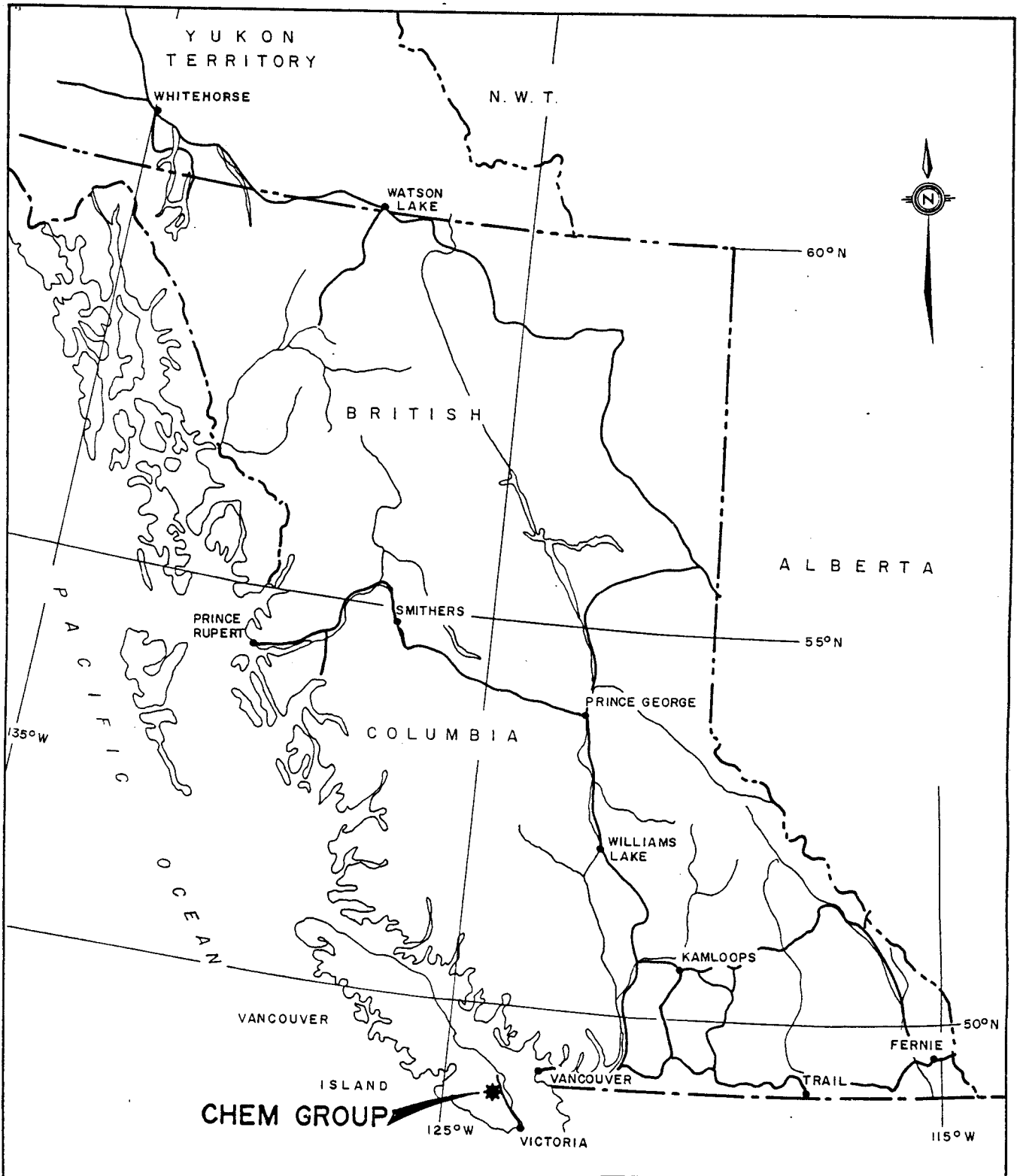


LIST OF ILLUSTRATIONS

Scale

B GRID

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INTERNATIONAL CHEROKEE  
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GENERAL LOCATION MAP  
**CHEM GROUP**  
VICTORIA MINING DIVISION

Project No.	V 239	By:	T. N.
Scale:	1 : 8 000 000	Drawn:	J. S.
Drawing No:	1	Date:	FEB. 1987



MPH Consulting Limited



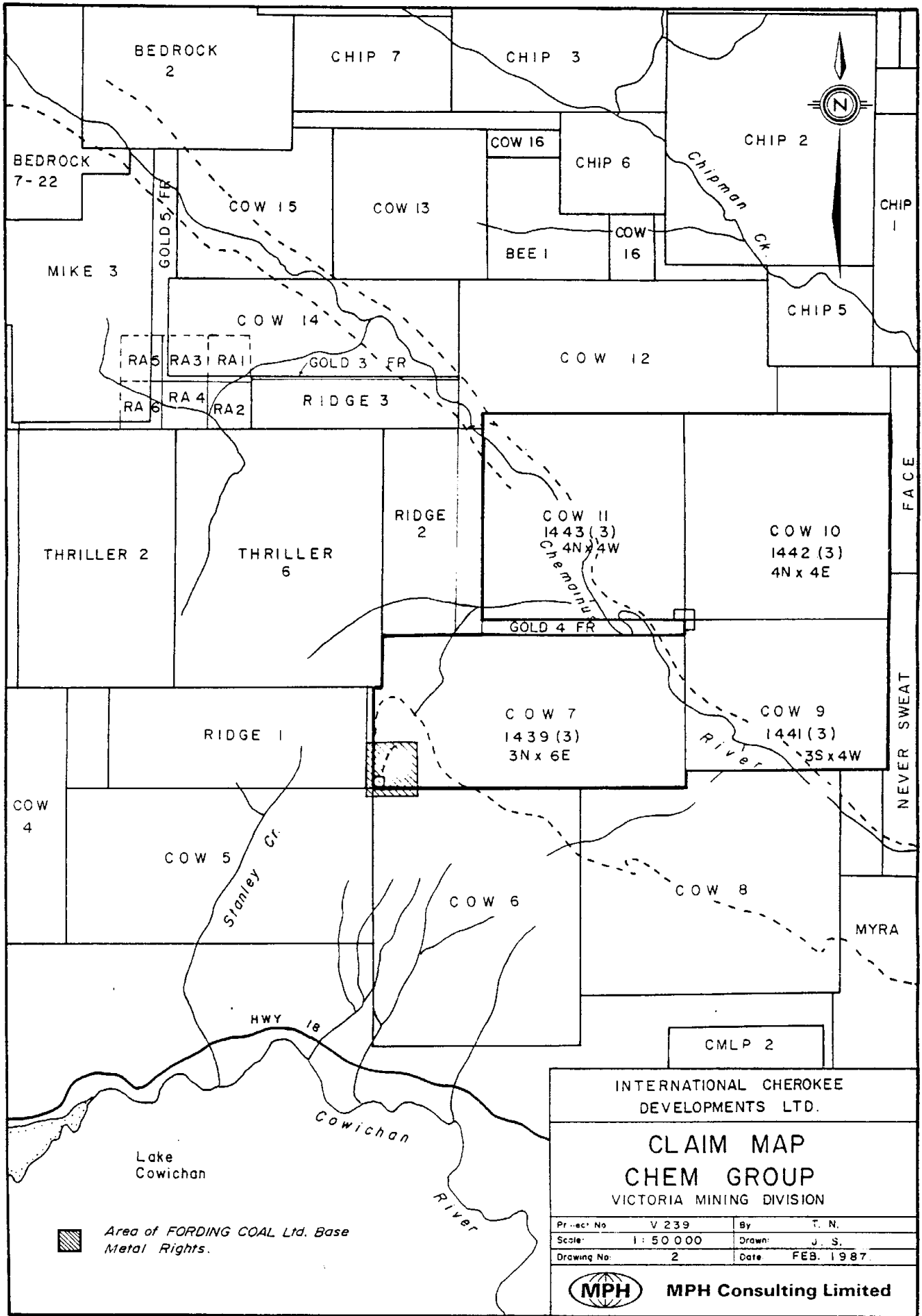
## 1.0 INTRODUCTION


This report on the Chem property (Cow 7, 9, 10 and 11 claims) has been prepared by MPH Consulting Limited at the request of International Cherokee Developments Limited. Two phases of mineral exploration work are covered by this report.

Phase II involved geological mapping at a scale of 1:2500; rock, soil, silt and conifer branch sampling; and VLF-EM, magnetic and induced polarization/resistivity surveys. This work was done between September 14, 1986 and January 11, 1987.

Phase III involved a 213 m diamond drilling program carried out between January 18 and January 30, 1987.

Both phases of work were performed by or under the supervision of MPH Consulting Limited staff.





 Area of FORDING COAL Ltd. Base Metal Rights.

INTERNATIONAL CHEROKEE DEVELOPMENTS LTD.

**CLAIM MAP**  
**CHEM GROUP**  
 VICTORIA MINING DIVISION

Project No	V 239	By	T. N.
Scale	1 : 50 000	Drawn	J. S.
Drawing No.	2	Date	FEB. 1987.


**MPH Consulting Limited**



## 2.0 PROPERTY LOCATION, ACCESS, TITLE

The Chem property is located in the Chemainus River valley approximately 23 km northwest of the city of Duncan on Vancouver Island, British Columbia (Figure 1). The property is in the Victoria Mining Division, on NTS sheets M92C/16E and M92B/13W and centred at approximately 123°59'W longitude, 48°52'N latitude (Figure 2).

Access to the property is via MacMillan Bloedel's all weather Copper Canyon Main road from Chemainus. Smaller logging roads provide reasonable access to much of the property although many of these are blocked to vehicle traffic.

The Chem property consists of four mineral claims totalling 62 units, as summarized below:

CLAIM	RECORD NUMBER	UNITS	ANNIVERSARY DATE	YEAR REGISTERED
Cow 7	1439 (3)	18	March 6, 1993	1985
9	1441 (3)	12	March 6, 1992	1985
10	1442 (3)	16	March 6, 1993	1985
11	1443 (3)	16	March 6, 1992	1985

The claims were grouped as the Chem Group on March 5, 1986.

Lee A. Balak, James Simpson and Richard Watson each own one-third of the Chem Group. International Cherokee Developments Ltd. has the right to earn a 50% interest in the property by virtue of an option agreement dated December 27, 1985.

Base metal rights of a small part of the southwest corner of the Cow 7 claim are owned by Fording Coal Ltd. by virtue of the E and N Land Grant (Figure 2).



### 3.0 HISTORY

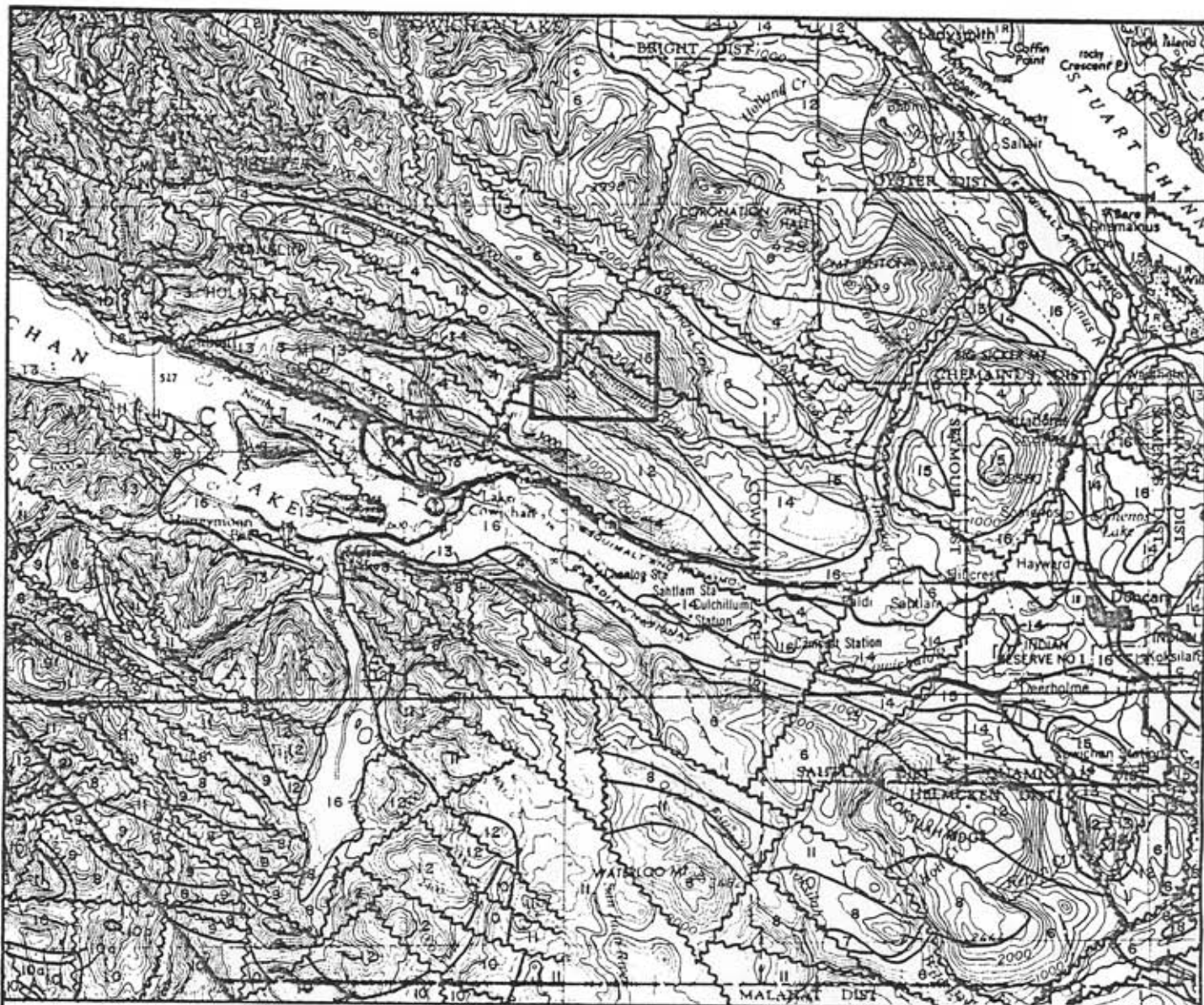
Little geological work has been conducted on the property prior to 1986.

Government geological work in the area includes work by J.T. Fyles (1955), J.E. Muller (1977, 1980a, 1980b, 1982) and Massey (1987).

The Stanley Creek rhodonite showing on the Cow 7 claim has been known since at least 1939, but little work has been done on the occurrence.

The first documented exploration program on the property was conducted by MPH Consulting Limited in March and April of 1986 (Neale, Hawkins and Getsinger, 1986). A few gold-bearing shears, a ferruginous chert bed with elevated gold values, and a rhodonite showing were discovered during the program.

This area of Vancouver Island has several rhodonite, massive sulphide (base metal) and gold occurrences (Figure 4), a few of which have been mined in the past. Details of the economic setting and mineral occurrences in the area are included in the report on Phase I exploration of the Chem property (Neale, Hawkins and Getsinger, 1986).



**QUATERNARY**

16 Glacial and alluvial deposits.

**UPPER CRETACEOUS**

**Nanaimo Group**

15 Extension - Protection Fm.: sandstone, conglomerate, minor siltstone, shale, coal.

14 Haslam Fm.: shale, siltstone, minor sandstone.

13 Comox Fm.: sandstone, conglomerate, minor siltstone, shale, coal.

**JURASSIC**

**Lower to Middle Jurassic**

12 Island Intrusions: granodiorite, quartz diorite

**Lower Jurassic**

11 Bonanza Group: basaltic to rhyolitic tuff, breccia, flows, sills, and dykes; minor argillite, greywacke.

**UPPER PALEOZOIC AND ? OR TRIASSIC AND JURASSIC**

10 Westcoast Complex: quartz diorite, diorite, tonalite, amphibolite, agmatite, minor metavolcanic and metasedimentary rocks. 10a: recrystallized limestone, skarn.

**TRIASSIC**

**Middle ? and Upper Triassic**

**Vancouver Group**

9 Quatsino Fm.: limestone

8 Karmutsen Fm.: pillow basalt, breccia, tuff, minor flows.

**PALEOZOIC**

**Sicker Group**

**PENNSYLVANIAN AND PERMIAN**

7 Buttle Lake Fm.: limestone, chert, greywacke, argillite.

**PENNSYLVANIAN AND MISSISSIPPIAN**

6 Sediment - Sill Unit: argillite, greywacke, chert, diabase sills.

**LOWER DEVONIAN AND OLDER**

5 Saltspring Intrusions: meta-granodiorite, meta-quartz porphyry, quartz-sericite schist.

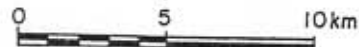
4 Myra Fm.: well bedded felsic tuff and breccia, argillite, rhyodacite in flows and sills, minor basic tuff, quartz-sericite schist, phyllite, massive sulphides.

3 Nitinat Fm.: pillow lava and breccia of augite (uralite) porphyry, basic tuff, minor chlorite-actinolite schist.

**LOWER PALEOZOIC (OR YOUNGER ?)**

2 Colquitz gneiss: quartz-feldspar gneiss

1 Wark gneiss: massive and gneissic metadiorite, metagabbro, amphibolite.



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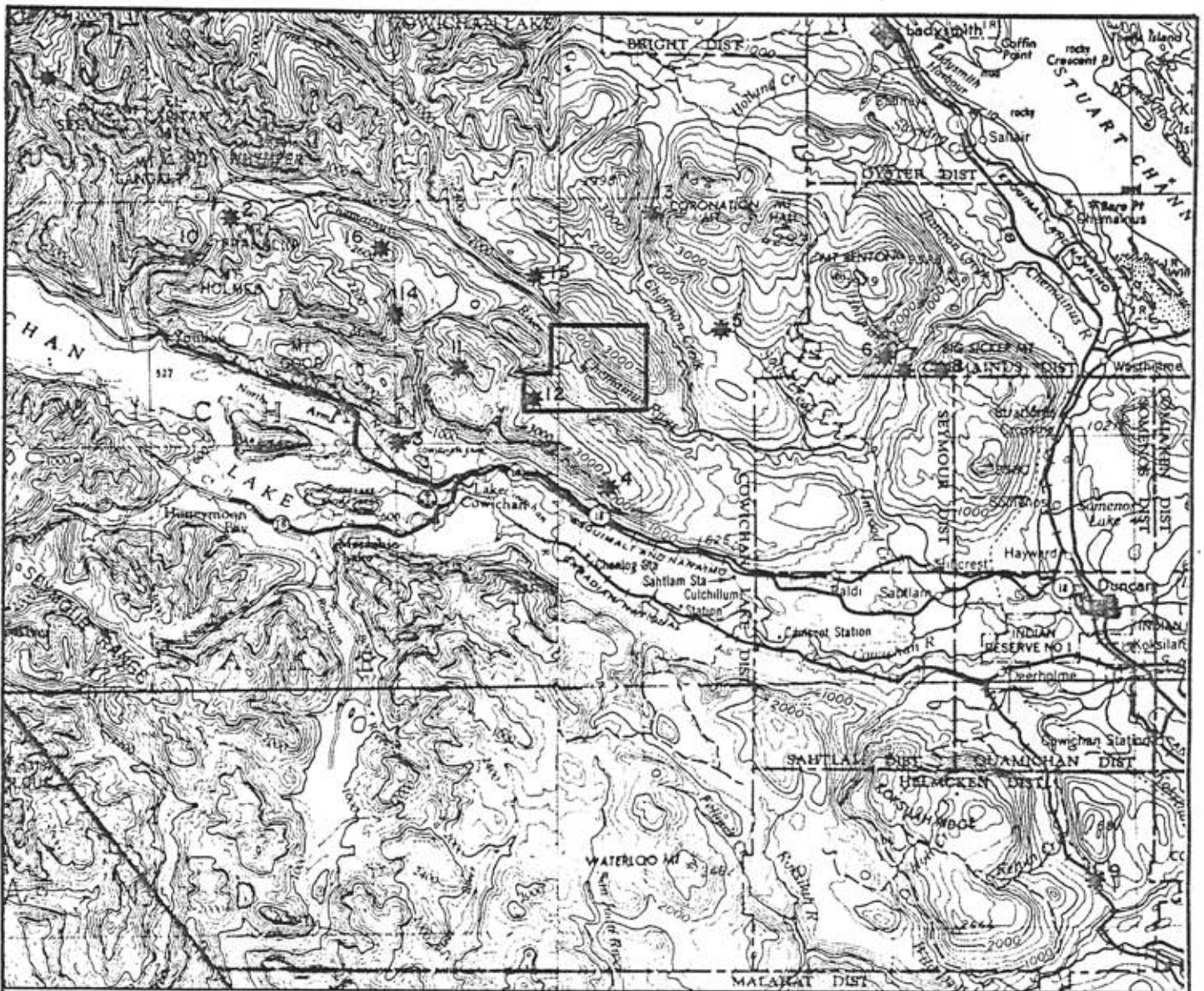
**REGIONAL GEOLOGY MAP  
CHEM GROUP**

VICTORIA MINING DIVISION

Project No:	V 239	By:	T. N.
Scale:	1 : 250 000	Drawn:	J. S.
Drawing No:	3	Date:	FEB. 1987



**MPH Consulting Limited**



GOLD OCCURRENCES

- 1. Amore
- 2. Comego
- 3. Meade Ck.
- 5. Lara
- 16. Mike

BASE METAL OCCURRENCES, DEPOSITS

- 6. Pauper
- 7. Copper Canyon
- 8. Twin J
- 9. King Solomon
- 14. Candy
- 15. Pogo

OTHER OCCURRENCES

- 4. Hill 60
- 10. Rocky
- 11. Meade
- 12. Stanley Ck.
- 13. Lady



INTERNATIONAL CHEROKEE  
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MINERAL OCCURRENCES  
LOCATION MAP  
CHEM GROUP

Project No. V 239	By: T. N.
Scale: 1:250 000	Drawn: J. S.
Drawing No. 4	Date: FEBRUARY 1987



MPH Consulting Limited



#### 4.0 REGIONAL GEOLOGY

This area between Duncan and Port Alberni (including the Chem property) is underlain by a west-northwest trending belt of Paleozoic rocks of the Sicker Group.

The Sicker Group has been divided into four formations. Historically these formations were named Nitinat, Myra, Sediment-Sill and Buttle Lake, by Fyles (1955) and Muller (1980) (Figure 3). Type sections for these formations are in the Cowichan Lake and Buttle Lake areas. There are some problems, however, applying these divisions to the entire Sicker Group belt since geological environments appear to have varied dramatically within the complex volcanic terrane.

N. Massey (1987) has recently been mapping in the Cowichan Lake area, and has divided the Sicker Group in this area as follows:

##### UPPER SILURIAN TO LOWER PERMIAN SICKER GROUP

###### BUTTLE LAKE SUB-GROUP

MOUNT MARK FORMATION (formerly Buttle Lake Formation)

CAMERON RIVER FORMATION (formerly Sediment-Sill Unit and/or Myra Formation)

###### YOUBOU SUB-GROUP

McLAUGHLIN RIDGE FORMATION (formerly Myra Formation and/or Nitinat Formation)

NITINAT FORMATION



Nitinat Formation rocks are typically pyroxene-rich pyroclastics and flows.

The McLaughlin Ridge Formation is composed predominantly of intermediate composition pyroclastics ranging from cherty tuffs to agglomerates.

The Cameron River Formation is predominantly sedimentary in nature, although many units have tuffaceous characteristics. Chert, argillite, siltstone, sandstone and conglomerate are the dominant rock types, with lesser amounts of limestone, pyroclastics and flows.

The Mount Mark Formation is composed of limestone and marble with minor amounts of chert, argillite, siltstone and sandstone.

The Sicker Group is weakly regionally metamorphosed to lower greenschist facies and folded about a northwest trending fold axis.

Sicker Group rocks have been intruded by gabbroic sills and dykes which are thought by Muller (1980) to be coeval with Upper Triassic Karmutsen Formation basalts.

Lower to Middle Jurassic grandodiorite and quartz diorite Island Intrusions cut both the Sicker Group and gabbroic rocks. Sicker Group sediments and pyroclastics are commonly hornfelsed and silicified near these intrusives.

South and north of the main Sicker Group 'greenstone' belt (and presumably overlying it) are extensive exposures of Karmutsen Formation basalt and Quatsino Formation limestone of the Triassic Vancouver Group and basalt of the Jurassic Bonanza Groups.



Shale, sandstone and conglomerate of the Cretaceous Nanaimo Group unconformably overlie all formations mentioned above.

A more detailed description of the regional geology is provided in the report on Phase I exploration of the Chem property (Neale, Hawkins and Getsinger, 1986).



## 5.0 1986-1987 PHASES II AND III EXPLORATION PROGRAM

### 5.1 WORK COMPLETED

#### 5.1.1 Phase II: Geology, Geochemistry and Geophysics

Field work for the Phase II exploration program on the Chem property was carried out between September 14, 1986 and January 11, 1987. A total of 6 geologists, 6 geophysical technicians, 7 field technicians and 1 field coordinator spent a total of 149 persondays on the property during this phase of the program.

Exploration activities were focused on the A and B Grids in the northeast and southwest parts of the property respectively (Plate 1).

#### **A Grid**

Geological mapping at a scale of 1:2500 was conducted along logging roads and selected areas of the grid. Approximately 300 hectares were covered. During this survey, 59 rock and 4 silt samples were collected.

The original or old A Grid, established in March, 1986, consists of 6.850 km of flagged lines. Grid coverage was increased in Phase II with an additional 22.625 km of line (new A Grid). Flagged lines were established at 100 m intervals with stations marked every 25 metres. A total of 3.5 km of the old grid was cut and re-stationed in preparation for the IP survey.

The old and new grids are not consistent in their coordinate systems. The baseline for the original or old grid was



established along B6A road with crosslines running grid west (Plate A-2). A baseline for the new grid was established along the airstrip and B6A9 (B6K) road. Crosslines run grid east to B6A road. Lines cut on the old grid were re-stationed in the new grid system.

A total of 658 soil samples was collected at 25 m intervals along the new grid lines. Between lines 10+00N and 25+00N only every second line was sampled.

Douglas fir (Pseudotsuga menziesii) and western hemlock (Tsuga heterophylla) branch samples were collected along two lines (BGC Lines 1 and 2; Plates A-2, A-4) which roughly parallel topographic contours. A total of 92 samples was analysed for 20 elements including Au.

A magnetic survey was conducted along 17.975 km of line, including both new and old grids. A total of 25.850 km of lines was included in a VLF-EM survey. An IP survey covered 3.175 km of lines in the old grid area.

## **B Grid**

Four 100 m spaced fill-in lines were established on the B grid in an area of anomalous Au, Mn, Ba and Cu mineralization. A total of 180 soil samples was taken at 25 m intervals along 4.425 km of lines.

Geological mapping at a scale of 1:2500 was conducted along 3.5 km of M1 road and limited areas of the grid.

During the course of these surveys, 9 rock samples were collected. Whole rock analyses were done on 4 of these samples.

### 5.1.2 Phase III: Diamond Drilling

A diamond drilling program totalling 213 m was conducted on the A Grid to test anomalous zones outlined in Phase II exploration surveys.

One geologist and one field technician spent a total of 20 mandays working on this phase of the program.

A total of 81 core samples was collected for analyses.

*The core is stored at the MPH office in Duncan, B.C.*

### 5.1.3 Analytical Techniques and Laboratories Used

The 828 soil, 4 silt, 68 rock and 81 core samples collected during these phases of the program were analysed for Au using an atomic absorption technique and for 30 elements using inductively coupled plasma-atomic emission spectroscopy (ICP).

Two samples were assayed for Au.

Whole rock analyses were performed on 4 samples.

A total of 92 conifer branch samples were analysed for 18 elements using a neutron activation technique and for Cu and Pb using an atomic absorption method.

Au geochemical analyses, Au assays and whole rock analyses were done by Rossbacher Laboratory Ltd. in Burnaby, B.C. The 30 element ICP analyses were done by Chemex Ltd. in North Vancouver and Acme Analytical Laboratories in Vancouver, B.C. Conifer branch samples were analysed by Bondar Clegg and Company Ltd. in



North Vancouver, B.C.

## 5.2 GEOLOGICAL MAPPING AND SAMPLING

### 5.2.1 Introduction

Phase II of the exploration program was designed to follow up anomalous mineralization discovered in Phase I activities on the A and B grids.

On the A Grid, the main objective was to locate the source of a pyrite and magnetite-rich boulder containing up to 4.80 g/t Au (0.140 oz/T) (sample no. 356, Plate A-2). Detailed geological mapping was done in an attempt to identify mineralized stratigraphic units or structures, and also to aid in the interpretation of geophysical and geochemical surveys. Geology of the A Grid is shown on Plate A-2. Analyses of rock and silt samples taken in the area are shown on Plate A-3.

On the B Grid, small mineralized shears are enriched in Au, Ag and Cu. A small rhodonite occurrence was also discovered near the property. Geological mapping was required to better understand the nature of the mineralization and to assess the potential of the area. Geology of part of the B grid area is shown on Plate B-2.

## A GRID

### 5.2.2 Geology, A Grid

The A Grid is located on the northeast part of the property, predominantly within the Cow 10 claim (Plates 1, A-2). It is underlain by sedimentary rocks of the Paleozoic Cameron River Formation (Sicker Group) and by Triassic and Jurassic intrusive rocks.

Sedimentary rocks in the A Grid area occur as a northwest-trending succession of interbedded argillite, cherty sediment, siltstone, and sandstone with minor conglomerate, crystal tuff and marble. Exposure in the area is poor but it appears that the sediments can be divided into three distinct assemblages.

The northwest part of the grid is underlain by slate and cherty argillite. They have a well-developed foliation or cleavage striking west-northwest (approximately 115°) and dipping steeply northeast. Bedding strikes parallel to cleavage and dips moderately to the southwest.

To the southwest of the slate is an assemblage approximately 500 m thick, composed predominantly of chert and cherty siltstone with argillite units up to 100 m thick. The cherty material is commonly weakly magnetic. One 10 m thick bed is ferruginous, sporadically hematitic red and could be an 'iron formation'.

The third or southwesternmost assemblage is composed predominantly of siliceous siltstone and sandstone with minor argillite, chert, marble, crystal tuff and conglomerate. Thickness of the horizon is estimated at 200 to 500 m. It is bounded by a few metre thick



discontinuous conglomerate unit on the northeast and by diorite and quartz diorite on the southwest.

Marble occurs as a discontinuous bed up to 10 m thick along the top of the ridge. The presence of marble or limestone suggests that the rocks are in the upper part of the Cameron River Formation (Massey, personal communication).

Sandstones and siltstones on the northwest part of the grid have been intruded by a 30 m wide gabbroic dyke presumably of Triassic age. In some places it appears to parallel stratigraphy, but is clearly crosscutting on the southeastern end of the exposure. The dyke generally has a medium-grained equigranular plutonic texture but in parts is strongly foliated parallel to its strike direction.

Southwest of the grid area is a plug of medium-grained quartz diorite and diorite. In general it parallels stratigraphy but in some places is slightly crosscutting. Fine grained diorite occurs as a 10-20 m wide margin separating quartz diorite from sandstone. The diorite appears to be crosscut by the quartz diorite suggesting that it is an early phase of a 'pulsing' intrusion.

Sediments in this area have been intruded by narrow easterly to southeasterly trending diabase and feldspar porphyry dykes. These may be related to the diorite and quartz diorite intrusives.

### 5.2.3 Lithology of Units of the Cameron River Formation, A Grid

The Cameron River Formation (Unit 4) was formerly mapped as the Myra Formation and/or Sediment-Sill Unit. It has been subdivided in the A grid area into the following units:

#### 4a - Argillite, Slate

Dark grey to black, thinly laminated to massive, soft to extremely hard argillite grades into both siltstone and cherty siltstone. It is commonly foliated, with slaty cleavage crosscutting bedding. Dark grey, subhedral, elongated chiastolite porphyroblasts commonly occur in the slate. They average 1 mm in length and can make up to 15% of the rock. The argillite generally contains 2-3% pyrite along fractures or as thin films on foliation surfaces.

Chiastolite porphyroblasts suggest that the rock has undergone contact metamorphism, probably from the intrusion of the nearby quartz diorite.

#### 4b - Chert, Cherty Siltstone, Iron Formation

Rocks in this unit are generally cryptocrystalline to very fine-grained granular, extremely siliceous, dark brown to light bluish-green and range from massive to thinly laminated. They commonly grade into argillite or siltstone. Several cherty beds are weakly magnetic.

One bed located in the 'middle horizon' mentioned in section 5.2.2 is strongly magnetic, sporadically jasperoidal and contains up to 5% each of fine-grained specular hematite, magnetite and pyrite ('iron formation'). One sample of this material (1620) contained 300 ppb Au.

#### 4c - Siltstone

This unit is dark grey to dark brown, massive to thinly laminated and generally very hard (silicified?, hornfelsed?). The siltstone is commonly interbedded with and grades into both sandstone and

argillite.

#### 4d - Sandstone

The sandstone is dark grey to dark brown and generally very fine to fine-grained. Rarely the sandstone contains graded beds which indicate 'tops up'.

#### 4e - Crystal Tuff, Tuffaceous Sediment

These tuffs are generally limited in extent, quite thin (beds to 5 cm) and interbedded with argillite and fine grained sandstone. They have a dark brown very fine-grained sandy groundmass with up to 10%  $\leq$  1 mm stubby to lath shaped, subhedral, white feldspar crystal fragments.

#### 4f - Heterolithic Conglomerate and Sedimentary Breccia

A conglomerate bed(s?) on the A Grid is generally discontinuous and only a few metres wide. It has a dark brown cherty fine-grained clastic groundmass with up to 20% subangular to subrounded feldspar porphyry and cherty siltstone(?) clasts up to 1 cm in diameter. The groundmass also contains traces of chalcopyrite and 2-3% each of pyrite and pyrrhotite. The rock may be partly tuffaceous in nature.

#### 4h - Marble

Two occurrences of marble located in the northwest part of the grid may be part of the same 2-3 m wide discontinuous bed. It is composed of medium-grained bluish-grey crystalline calcite interbedded with very fine-grained sandstone and cherty siltstone.

#### 5.2.4 Lithology of Intrusive Rocks, A Grid

##### 6) Triassic Karmutsen Formation

###### 6d - Gabbro

The gabbro is variable in texture. In parts it is a medium-grained equigranular plutonic rock with approximately 50% each of black hornblende and bluish-grey feldspar crystals up to 2 mm in length. In other parts it is strongly foliated. Mafic minerals appear to be totally altered to fine-grained chlorite and original textures have been destroyed. This foliation suggests that the gabbroic dyke has undergone some deformation along with the sediments it intruded.

##### 9) Jurassic Island Intrusives

###### 9b - Mafic Dykes

Diabase dykes in this area are generally southeast-trending and less than 2 metres in width. They have distinct chill margins, are rarely amygdaloidal and in some cases have acicular hornblende phenocrysts to 0.5 cm in length.

The dykes may be related to an early dioritic phase (9d) of the Island Intrusions.

#### 9d - Diorite

Diorite in this area occurs as a narrow margin up to 20 metres wide between the Cameron River Formation sediments and intruding Jurassic quartz diorite. The diorite is fine to medium-grained with 20-40% hornblende, and 50% (+) feldspar.

#### 9f - Feldspar Porphyry

Feldspar porphyry dykes in this area are generally less than 3 metres in width and strike from northeast to southeast. They contain 25% white stubby feldspar phenocrysts up to 1 cm (average 3-4 mm) in diameter, < 5% hornblende phenocrysts and rare rounded quartz phenocrysts in a fine-grained dark grey to brown groundmass.

These dykes may be offshoots from the nearby large plugs or sills of quartz diorite. On nearby properties they crosscut both Cameron River Formation sediments and Triassic gabbroic dykes.

#### 9q - Quartz Diorite

Quartz diorite plugs in this area are up to a kilometre wide and several kilometres long. They are typically medium-grained equigranular plutonics with 75% (+) feldspar (mainly plagioclase), 15% hornblende, up to 10% quartz, and minor amounts of biotite.

### 5.2.5 Structural Geology, A Grid

As described in section 5.2.2, the A Grid is underlain by sediments which can be divided into three basic northwest trending assemblages (Plate A-2).

- 1) Slate and cherty argillite on the northeast
- 2) Cherty sediments in the centre
- 3) Siltstones and sandstones on the southwest

Bedding in Assemblage 1 strikes at roughly  $115^{\circ}$  and dips steeply to the southwest. Slaty cleavage has roughly the same strike as bedding and dips moderately to the northeast. The bedding cleavage relationship suggests that this area is on the southwestern limb of an antiform.

VLF-EM data show a series of strong conductors which truncate along a linear trend suggesting that the southwest side of Assemblage 1 is fault bounded (Plates A-2, A-6).

Bedding in Assemblage 2 strikes parallel to subparallel to Assemblage 1 and generally dips moderately to the southwest. Two small, tight folds with fold axes striking at approximately  $115^{\circ}$  are exposed along B6A road (Plate A-2).

The southwest side of Assemblage 2 is roughly delineated by a northwest trending synform fold axis (Plate A-2). A narrow unit of pyrrhotite and pyrite bearing coarse-grained clastic (4f - conglomerate? lapilli?) also occurs along this zone. It is possible that this conglomerate marks a paleo erosion surface and that the apparent synform is actually an angular unconformity.

Assemblage 3 is composed mostly of sandstone and siltstone with

minor argillite, chert and limestone or marble. Bedding strike at approximately  $120^{\circ}$  and dips steeply to moderately to the northeast. A 30 m wide gabbroic dyke intrudes this horizon subparallel to bedding strikes and it is assumed that it also dips to the northeast.

Assemblage 3 is bound by diorite and granodiorite on the southwest. The contact also subparallels bedding strike and a northeast dip is assumed.

Sedimentary rocks in the grid area have been cut by series of easterly and northeasterly trending faults (Plate A-2). Surface traces of these faults have been picked from airphoto lineations and geophysical data. Where exposed, the faults are characterized by zones of intense shearing and limonitic gouge from a few centimetres to a few metres in width. Faults have not been traced either on airphoto or on the ground into Assemblage 3, supporting the hypothesis of an angular unconformity separating Assemblages 2 and 3.

Apparent offsets of magnetic sources (Plate A-5) are both right and left lateral. This could be explained by normal block faulting and erosion of dipping strata.

Bedrock exposure in the Grid A area is poor, making structural interpretations difficult.

#### **5.2.6 Mineralization, A Grid**

Several varieties of mineralization occur on the A Grid.

Specific interest in this area was initiated by the discovery on

B6A road of a siliceous, magnetite and pyrite-rich boulder (Plate A-2, sample 356) which contains up to 4.80 g/t Au (0.140 oz/T). Sulphides and magnetite occur in bands up to 5 cm thick which parallel compositional layering. A petrographic report on this material was prepared by J.S. Getsinger (1986) in which it is suggested that the sulphides and magnetite may be primary and that the rock is a recrystallized quartzose mudstone or chert. Deformation and alteration of the rock, however, has destroyed original textures and genesis of the sulphides is unclear.

A sample of fine-grained, siliceous, clastic float (Plate A-2, 0+00S, 4+25E - new grid, sample 1694) contained up to 5% disseminated pyrite, 840 ppb Au and anomalous Ba and Zn.

Another boulder from the same area contained up to 40% sulphide rich (pyrite, chalcopyrite and sphalerite) bands in a dark greenish-grey siliceous host. A sample of this material (1696) contained 1.84% Zn and anomalous Ag, Cu, Cd and Bi.

A sample of brecciated hematitic cherty sediment float (14843) collected at 14+00N, 1+00E contained 1200 ppb Au (1.44 g/t or 0.042 oz/T) and anomalous Ba and Zn. The area was investigated in response to a high Au-in-soil anomaly (840 ppb). The hematitic boulder is probably not far from its source. This area is underlain by cherty sediments cut by a southeast trending quartz feldspar porphyry.

A sample of fine-grained amphibole-rich intrusive float (sample 811; 23+00N, 3+50W) with 2-3% fine-grained pyrite contained 190 ppb Au, 0.6 ppm Ag, 1520 ppm Cu and 569 ppm V. The area is underlain by siliceous siltstones cut by a gabbroic dyke. The sampled material is likely from this dyke. Gabbros in this area are typically sporadically enriched in Au, Cu and V.





Several samples of rhodonite float were collected in the 3+00N to 4+00N, 11+00E (old grid) area (Plate A-2). The abundance of this material in a small area suggests a local source.

Exposures of fault zones were discovered in only two locations on the property: 0+00N, 6+00W (old grid) and 13+25N, 0+00E (Plate A-2). Samples of this material were consistently anomalous in Mn, Ba and Zn. If the hypothesis of an angular conformity between Assemblages 2 and 3 (section 5.2.5A) is correct, it is possible that the fault zones were conduits for hot springs responsible for the deposition of the above-mentioned rhodonite.

An approximately 10 m thick ferruginous chert ('iron formation') horizon has been traced in Assemblage 2 (section 5.2.5) for 700 m between 1+50S, 5+00E and 4+00N, 5+85W (old grid) (Plate A-2). This bed is generally composed of blue-grey cryptocrystalline quartz (sporadically jasperoidal) with up to 5% each of pyrite and specular hematite, and a few percent magnetite. One sample of this material (1620; 4+00N, 5+85W - old grid) contained 300 ppb Au.

It is possible that the source of the Au bearing boulder (sample 356) is an enriched part of this ferruginous horizon, possibly at its intersection with a mineralizing fault zone.

A few metre wide, apparently discontinuous unit of gossanous conglomerate or lapilli tuff is exposed on B6K road (Plate A-2) at 2+00N (old grid) and 11+50N (new grid). Up to 5% fine-grained pyrrhotite and pyrite is disseminated throughout the groundmass. Samples of this material contained up to 40 ppb Au, and weakly anomalous copper values.



## B GRID

### 5.2.7 Geology, B Grid

The B Grid is located on the southwest part of the property, mostly within the Cow 7 claim (Plates 1, B-2). It is predominantly underlain by sedimentary rocks of the Paleozoic Cameron River Formation and by Triassic intrusives.

Sedimentary rocks in the B Grid area are generally northwest-trending interbedded siltstone, sandstone and sedimentary breccia grading into cherty siltstone and chert. All of these sedimentary rocks may be in part tuffaceous.

Although mapping coverage is quite limited in the area, sediments appear to grade from coarse-grained clastics along M1 road to cherty sediments to the southwest.

These sediments have been intruded by a medium-grained gabbro, probably of Triassic age. The orientation of this intrusive is uncertain.

Narrow, 2-4 m wide rhyolite dykes also intrude the sediments. Their age relationship with the gabbro is not known.

### 5.2.8 Lithology of Units of the Cameron River Formation, B Grid

4b - Chert, Cherty Siltstone, Cherty Tuff, Rhodonite

These rocks are well bedded to massive, extremely siliceous and



composed predominantly of dark brown to light grey cryptocrystalline quartz. They generally contain fine-grained sand-sized feldspar crystal and lithic fragments. Commonly these cherty sediments are interbedded with, and grade into siltstone and sandstone.

Small lenses (1 m x few m x?) of rhodonite have been found associated with cherty sediments in this area.

#### 4c - Siltstone

This unit is dark grey to dark brown, massive to thinly laminated, generally very hard, and is commonly interbedded with and grades into cherty sediments and sandstones.

These siltstones commonly contain sedimentary features such as load casts, soft sediment deformation and graded bedding. In all cases where these features were observed, the beds are 'tops up', younging to the southwest.

#### 4d - Sandstone

This unit is similar to 4c, except that it ranges from fine to coarse-grained. Cross bedding observed in the southwest dipping sandstone indicates that the beds are younging up to the southwest.

#### 4e - Crystal Tuff, Tuffaceous Sediment

These rocks range from fine to coarse-grained, are dark grey to dark brown and contain up to 50% light grey feldspar crystal fragments to 1 mm.

#### 4f - Heterolithic Conglomerate and Sedimentary Breccia

This unit has a coarse-grained sandstone matrix and up to 35% subangular to subrounded chert (± bedding) and feldspar porphyry fragments ranging in size from a few millimetres to 10 centimetres (average 1-2 cm). Chert fragments commonly have a tabular shape and are possibly rip-up clasts.

### 5.2.9 Lithology of Intrusive Rocks, B Grid

#### 6) Triassic Karmutsen Formation (?)

##### 6d - Gabbro

This gabbro is a medium-grained plutonic rock with 50% each of black hornblende and dark blue-grey lath-shaped plagioclase up to 2 mm in length. It commonly contains up to 2% fine-grained pyrite. The rock is weakly magnetic.

#### 9) Jurassic Island Intrusive (?)

##### 9? - Rhyolite

Narrow 2-4 m rhyolite dykes intrude the sediments. They have a light greenish grey fine-grained crystalline groundmass with 5% rounded quartz phenocrysts up to 1 mm and 2-3% medium grained disseminated pyrite cubes.

Whole rock analyses of four of these dykes are included in



Appendix IV. Silica content averages 78% and  $\text{Na}_2\text{O}$  averages 2.4%. Sample 4654 contains over 90%  $\text{SiO}_2$  and only 0.7%  $\text{Na}_2\text{O}$ . This material may be a cherty tuff rather than a rhyolite.

#### 5.2.10 Structural Geology, B Grid

Sediments in the mapped area of the B Grid are relatively flat lying to moderately dipping, and gently folded. Bedding generally strikes northwest and dips to the southwest.

The sediments have been cut by a series of 10-20 cm wide, easterly trending, steeply dipping, limonitic shears.

#### 5.2.11 Mineralization, B Grid

Some limonitic, easterly trending shears up to 20 cm wide are mineralized with 5% pyrite and 2-3% chalcopyrite. A sample of one such shear on M1 road (sample 352, Phase I) contained 1260 ppb Au (1.4 gt or 0.041 oz/T), 17.6 ppm Ag, and 1.58% copper.

Lenses of rhodonite are hosted in cherty sediments in the area. One sample of such a lens (1611) was taken on an abandoned railway bed at the west end of line 19+00N. It contained 14.8% Mn, 3590 ppm Ba and 108 ppm Pb. The extent of this occurrence is not known.

The Stanley Creek rhodonite showing is reportedly located near the ridge top in the southwest part of the Cow 7 claim. It was not visited during this phase of the exploration program.



### 5.3 SOIL GEOCHEMISTRY

Soil geochemistry surveys were conducted on both the A and B grids. Soil samples were collected from the B horizon at an average depth of 20 cm. Horizon development in the grid areas is fair except on steep rocky slopes.

#### 5.3.1 Soil Geochemistry, A Grid

Au, Ag, As, Cu, Pb and Zn-in-soil analyses were plotted, and except for Au and Ag, contoured using the mean plus 2 standard deviations as an approximate anomalous threshold. Statistical information on the soil geochemistry data is included in Appendix IV.

The anomalies are generally weak and sporadic, and only the gold and silver plots have been presented (Plate A-4). Any Au and Ag values above the detection limits were taken as anomalous.

Gold-in-soil anomalies are one sample in extent with the exception of an area between 1+00S, 0+50E (90 ppb Au) and 2+00S, 0+75E (70 ppb Au). There is no outcrop in the area, and additional soil samples taken in the zone were not anomalous.

The most significant Au anomaly occurs at 14+00N, 1+00E. The sample site is located within a few metres of a cherty sediment - feldspar porphyry dyke contact. Au content in the initial sample was 840 ppb. Re-sampling and re-analyses have confirmed the validity of this anomaly. Soil samples within a few metres of the original site are not anomalous, suggesting a small, local source.



A sample of a brecciated, hematitic boulder of cherty sediment dug from a small pit at the initial sample site (14843) contained 1200 ppb Au (1.2 g/t or 0.042 oz/T) and weakly anomalous Ba and Zn.

Several soil sample sites with anomalous values of 20-50 ppb Au have not been investigated.

Similar to Au, Ag-in-soil anomalies are generally weak, sporadic and limited to one sample site in extent.

The highest Ag value is 2.4 ppm at 14+00N, 5+00E. The site appears to be near an old road and the anomaly could be due to contamination. The area has not been investigated.

One sample site at 12+00N, 2+25S on B6J road has weak coincident Au and Ag anomalies (20 ppb and 0.4 ppm). The area is underlain by a narrow argillite horizon. The reason for the anomaly is unknown.

Soil geochemistry has had limited success in outlining mineralized zones on the A Grid. The area has a fairly continuous cover of clay-rich till which may be acting as a barrier to the dispersion of metal ions from bedrock sources.

### 5.3.2 Soil Geochemistry, B Grid

A large soil sample grid with widely spaced lines (generally 400 m) was established on the southwest corner of the Chem property in the spring of 1986.

In the Phase II program, fill-in lines (13+00N to 15+00N and 17+00N) were established in the southwestern part of the grid in



an area of anomalous As, Cu, Pb and Zn-in-soil values. A rhodonite showing and a Au-Cu bearing shear zone (samples 1161 and 352 respectively, Plate B-2) also occur in this area.

Plots of As, Cu, Pb, Zn and Mn-in-soil values are shown in Plates B-3 and B-4. Except for one 40 ppb Au value at 14+00N, 11+75W, no Au or Ag anomalies occur in the recent sampling and plots of these data are not included with this report.

Anomalous zones on Plates B-3 and B-4 have been labelled 'a' through 'f', from grid east to west. Threshold values for Cu, Pb, Zn and As are similar to those calculated in the initial survey (Neale, Hawkins and Getsinger, 1986). The anomalous threshold value for Mn was arbitrarily picked at 1000 ppm.

Zone 'a' is a moderate arsenic anomaly extending from 14+00N, 0+50W (505 ppm As) to 15+00N, 1+75W (130 ppm As). The anomaly has no apparent associated bedrock mineralization but is near and parallel to shear zones with anomalous Au, Ag and Cu values (sample 352).

Zone 'b' is a 500 m long anomaly with coincident high As, Mn, Zn, Pb and Cu values. This anomalous zone is parallel to and just downhill from an old railway grade. A rhodonite showing (sample 1611) with 14.8% Mn and anomalous Pb occurs on this railway bed to the west. It is possible that some of this material was used as fill along the grade creating a transported anomaly. Bedding in the area does parallel the railway grade, however, and the anomaly may in fact be outlining a mineralized horizon.

Anomaly c-c' also has strong coincident As, Mn, Zn and Pb values. It trends toward the rhodonite showing and may be outlining a continuation of the zone.



Anomalies 'd', e-e' and 'f' are zones with high Mn  $\pm$  Pb and As values. The abundance of Mn anomalies in this area suggests that several rhodonite bearing horizons are included in the stratigraphy.

Metal-in-soil anomalies outlined in the initial soil geochemistry survey have not been investigated.

#### 5.4 BIOGEOCHEMISTRY, A GRID

The soil geochemistry survey on the A Grid appeared to be ineffective because of an impermeable clay layer covering most of the area. Conifer branch samples were taken in the hope that the root systems would penetrate this clay layer and pick up elements in concentrations reflective of bedrock geochemistry.

Two lines of samples were taken approximately 150 m apart. These lines (BGC Lines 1 and 2) are located roughly along the 730 m and 770 m topographic contours, directly above the Au bearing boulder (sample 356) discovered on B6A road. Samples of Douglas fir (Pseudotsuga menziesii) or western hemlock (Tsuga heterophylla) were taken every 25 metres. Approximately 20 cm of the ends of several branches was sampled from the largest tree available at each sample site. Samples were analysed for Pb and Cu using a standard atomic absorption technique and for 18 other elements using a neutron activation method.

A total of 92 samples was taken. With so few samples it was not practical to do statistical analyses of the data, and threshold values were visually estimated (Au - 1.0 ppb, As - 2.0 ppm, Pb - 10 ppm). Au, Ag and As analyses are plotted on Plate A-4.



Several strong Au and As anomalies were outlined by the survey.

A gold anomaly directly uphill from the Au bearing boulder (sample 356) extends between the two tree sample lines. An arsenic anomaly is adjacent to this zone on the lower line. No outcrop occurs in this area.

A second notable anomalous zone lies on line 1+00N (old grid) near 2+00W. It has coincident high Au, As and Pb values.

In general the Au anomalies are much stronger on the lower biogeochemical sample line (BGC Line 1). This line roughly follows a geophysically-indicated fault zone separating argillites from cherty sediments. The biogeochemical anomalies may reflect mineralized zones along this fault.

## 5.5 GEOPHYSICAL SURVEYS

The geophysical surveys conducted on the Chem property consisted of total field magnetic and VLF-EM surveys together with selected lines of IP coverage. The surveys were conducted on a grid with stations at 25 m intervals along lines 100 m apart.

### 5.5.1 Survey Procedures

#### Magnetic Survey

Base stations were established along the 0+00E baseline on B6K road (Plate A-5). Closed loop traverses were tied into these base stations and the data arithmetically corrected for diurnal



variation. Data collected on a small part of the grid were corrected to readings from a recording base station magnetometer (Scintrex MP-2) set up at the field office in Duncan.

Magnetic data were recorded at 25 m intervals except on lines 15+00N through 17+00N where fill-in readings were taken at intermediate stations.

### **VLF-EM Survey**

VLF-EM is a well established method for detecting shallow conductive mineralization and lithologies. The method utilizes the electromagnetic field created by distant U.S. Navy transmitters at frequencies ranging from 15 to 25 kHz. The presence of conductive features is indicated by distortions of the normally planar electromagnetic field.

The VLF-EM method generally permits only a qualitative interpretation. Although the responses from narrow bedrock sources can under some circumstances be distinguished from overburden sources, they are not universally separable.

This survey was executed using a Sabre 27 VLF-EM receiver which measures the dip angle (in degrees) of the ellipse of polarization and the relative horizontal field strength (in percent). The VLF signal from a transmitter in Seattle, Washington was used for this survey. The angle between the azimuth of the signal and the grid lines is approximately 76°, providing effective coupling to conductors striking across the grid.

### **Induced Polarization/Resistivity Survey**

The induced polarization/resistivity (IP) technique provides a measure of the earth's chargeability and resistivity. Values of



both parameters are directly related to the presence of certain polarizable sulphides and/or graphite. The technique requires separate transmitter and receiver units in contact with the ground through a variety of electrode arrays.

The IP survey on the Chem A Grid employed Hunttec time domain equipment, consisting of a 2.5 kW transmitter and a Mark IV receiver.

Measurements of the standard parameters of primary voltage ( $V_p$ ) and secondary voltage ( $V_s$ ) were made, from which the normal parameters of apparent resistivity (in ohm metres) and chargeability (in milliseconds) were obtained. Chargeability was measured over the interval from 100 milliseconds to 1100 milliseconds.

#### **5.5.2 Magnetic Survey Results**

Magnetic data have been corrected, plotted and contoured on Plate A-5. The survey outlined a series of weak to moderate, generally grid north (true northwest) trending linear anomalies.

Magnetic sources are all quite shallow, at depths of less than 15 m, reflecting a thin impersistent overburden cover. Dips of the magnetic sources cannot be determined with certainty, but they generally appear to be subvertical.

On the basis of the magnetic patterns and anomaly characteristics, the survey grid has been divided into three magnetic domains designated I through III from grid east to west (Plates A-5, A-11).



**Domain I**, which extends across the eastern part of the grid, displays a very limited magnetic relief with only a few comparatively isolated anomalies of more than 25 to 50 nT (1 nanotesla = 1 gamma). This domain corresponds to a unit of the Cameron River Formation which is predominantly composed of slaty argillites.

**Domain II**, which contains most of the magnetic sources detected on the survey grid, is composed of a series of narrow, impersistent, weak to moderate anomalies whose trend is dominantly grid north. The domain as a whole appears to be widest at its southern end where its eastern boundary is undefined by the present survey coverage. The domain narrows to the grid north and by line 16+00N it is only approximately 60 m wide.

A number of cross-faults are interpreted with varying degrees of confidence. The offset across these faults is indicated to be relatively small, not more than 100 m.

Domain II appears to correspond to units 4b and c of the Cameron River Formation, dominantly composed of chert and cherty siltstone. Several of the more pronounced magnetic anomalies are tentatively correlated with a narrow, magnetite bearing, jasperoidal 'iron formation.' A persistent anomaly extending between line 14+00N and 17+00N, near 3+50E occurs in an area essentially devoid of outcrop. It also could be related to an iron formation horizon.

**Domain III** covers the western third of the survey grid. Like Domain I, Domain III is largely devoid of significant local magnetic anomalies. It is underlain by cherty siltstones with minor argillite, conglomerate and tuffaceous sandstone.



### 5.5.3 VLF-EM Survey Results

The VLF-EM survey outlined 23 conductive zones. Data are shown on composite profiles (Plates A-7a to A-7d). Contoured Fraser filtered dip angles are shown on Plate A-6. Anomalies are numbered 1 through 23, the strongest of which are highlighted with a hexagonal symbol.

Most of the conductive zones are persistent over distances of 400 to 1000 m and exhibit trends that vary between grid south and grid east-southeast.

Interpreted cross-faults are comparatively rare. A disconformity or major shear zone however, is indicated near 4+50E by the oblique termination of a number of conductive zones.

Anomalous conductive zones 1 through 23 are summarized below:

**Zone 1** consists of weak anomalies detected near the western end of line 17+00N through 19+00N. The zone trends on average grid north (approximately  $316^\circ$  true). It may continue further to the north, beyond the limits of the present survey.

**Zone 2**, located approximately 125 m to the grid east of Zone 1, is a similarly weak, uncertain series of responses spanning line 17+00N through 19+00N. It also may continue further to the grid north beyond the limits of the present survey.

**Zone 3**, located approximately 150 m further to the grid east, just grid east of the B6K road, is defined by weak, uncertain responses spanning line 16+00N through 19+00N. The zone which trends nearly grid north-south may continue further to the north and south onto lines not covered in the present survey.



**Zone 4**, is defined by anomalies of moderate strength and character detected on lines 19+00N and 11+00N near 4+00W. The conductive zone, which trends approximately grid north-south, probably continues further both to the north and to the south onto lines not presently surveyed.

**Zone 5**, located approximately 150 m grid east of Zone 4, consists of two segments designated 5a and 5b separated by line 9+00W, which has not been surveyed. Zone 5 is presently defined to extend from line 7+00N to line 12+00N, and may well extend further to the north and south, beyond the limits presently surveyed.

**Zone 5a** has a moderately strong response on line 11+00N, with weaker, less credible anomalies defining northern and southern extensions.

**Zone 5b** consists of weak but possible responses on lines 7+00N and 8+00N.

**Zone 6**, located 150 m grid east of Zone 5, consists of weak but plausible responses on line 10+00N and 12+00N near 1+50W. The zone trends grid north-northwest, parallel to stratigraphy. It may well continue further to the north onto lines not presently covered.

It is speculated, in the absence of data on lines 13+00N through 15+00N, that Zones 1, 2, and 3 may be correlative to Zones 4, 5, and 6. Completion of VLF surveying on the above cited omitted lines is required to validate this hypothesis.

**Zone 7** consists of moderately strong to strong anomalies of well defined character detected on the western ends of lines 5+00S through 0+00S. The zone, which trends subparallel to the B6K road, likely continues further north and south of the surveyed



area. On the basis of its strength and character, anomaly 7 is presumed to be related to a bedrock conductor.

**Zone 8** consists of weak to moderate responses on lines 18+00N and 19+00N near 1+75E. The zone may extend further to the grid north beyond the limits of the present survey.

**Zone 9**, located to the grid south-southwest of Zone 8, consists of weak, rather poor character responses spanning lines 15+00N through 18+00N near 1+00E.

**Zone 10**, located several hundred metres grid south of Zone 9, is a long, persistent conductive feature extending from line 3+00N (old) near 2+50E, northwards to line 13+00N near 0+75E.

The individual anomalies constituting Zone 10 vary from weak to strong. The conductor is best defined over the interval from line 9+00N to 11+00N where a bedrock source is reasonably surmised.

One of the more important gold anomalies detected in the soil geochemical survey lies just beyond the northern limit of Zone 10 at 14+00N, 1+00E.

**Zone 11**, which flanks Zone 10 to the grid east, is of weak and uncertain character. This zone extends from line 2+00N (old) near 5+50W, grid northwards to line 9+00N near 2+50E.

**Zone 12**, which flanks Zone 10 approximately 75 m to the grid west, is a persistent conductive feature that can be traced from line 6+00N (old grid) near 7+50W, southward as far as line 5+00S near 4+00E on the new grid. The conductor likely extends further to the grid south beyond the present survey limits.

Zone 12 is predominantly composed of moderately strong to strong





anomalies, most of which probably have bedrock sources. In form, the anomaly exhibits a somewhat variable strike, ranging from grid north-northwest in the southern part to more nearly grid north-south in the northern part.

This strike is somewhat at odds with local stratigraphic and magnetic source trends, suggesting that the conductor may be a fault.

**Zone 13** is a conductor defined by weak anomalies detected on lines 0+00S (old) and 1+00N (old) near 6+00W. The contoured Fraser-filtered dip angle plot (Plate A-6) suggests an even weaker continuation several hundred metres further grid south, although anomaly definition on the profiles is largely lost.

**Zone 14**, located approximately 150 m grid west of Zone 13, is similarly composed of poor anomalies on lines 0+00 (new) and 0+00 (old). Zone 14 may be an offshoot of Zone 12.

**Zone 15**, located between lines 3+00S and 5+00S near 4+50E, forms a weaker subsidiary conductive feature to Zone 12. The constituent anomalies are largely weak and not particularly well resolved because of the stronger responses from Zone 12 to the west. In addition, several of the anomalies are located on the edge of the road where cultural contamination may be present. The southern part of the zone, which extends away from the road, is the more credible portion. It may extend further to the south beyond the limits of the present survey.

**Zone 16** is a strong, persistent, conductive feature extending from line 10+00N near 3+00E grid northwards to line 19+00N and undoubtedly extending further into the area presently unsurveyed. Most of the constituent anomalies are strong, definite responses and bedrock sources are probable.



Zones 8 through 16, discussed above, represent an ensemble of conductors which lie in a belt extending grid north-south across the entire area surveyed. They likely reflect a particular series of lithologic units constituting a distinct horizon of the Cameron River Formation. The stronger, more persistent conductive features may represent graphitic argillite horizons while the weaker zones could be thin argillite beds and/or shear zones.

**Zone 17** is a strong, persistent conductor extending from line 9+00N near 7+00E grid northwards to line 16+00N near 5+25E. An isolated response on line 18+00N near 4+50E is viewed as a probable continuation of this conductive trend. Individual component anomalies defining this zone are generally strong and definite and a bedrock source is readily surmised. The abrupt termination of the conductor grid north of line 18+00N suggests the possibility of a cross-fault.

**Zone 18**, a persistent conductor detected south of Zone 17, has a grid north-northwest strike and extends from 9+00N near 6+00E south-southeastwards to line 2+00N (old) near 0+25W, it may well extend further to the grid south-southeast onto presently unsurveyed ground.

The characteristics of the conductive zones on most lines are reasonably convincing as to a probable bedrock source. In addition, the asymmetric form of the field strength responses on a number of profiles suggest a shallow dip to the grid east.

**Zone 19**, located grid south and southwestward from Zone 18, consists of strong responses extending grid south from line 5+00N (old) to 0+00N (old) near 2+50W, and likely extends further south beyond the limits of the present survey. The constituent anomalies are generally strong and definite and probably have a bedrock source. As with Zone 18, the asymmetry of the horizontal



field strength profile suggests a comparatively shallow dip to the grid east.

It will be noted that Zones 17, 18 and 19 all terminate obliquely along a nearly north-south line located at approximately 5+00E on a number of the new grid lines. This oblique termination in strike is viewed as indicative of an unconformity or possibly a shear zone (thrust fault?) as has been speculatively interpreted on Plate A-6. This boundary corresponds reasonably closely to the boundary between magnetic Domains I and II, which lends support to the existence of a significant lithologic contact at this location.

**Zone 20** extends from line 4+00N near 0+50W on the old grid northwards to line 15+00N near 6+75E on the new grid. Individual anomalies vary from weak to moderately strong, with the strongest response detected on line 9+00N. The better responses probably have a bedrock source.

The nearly north-south strike of Zone 20 is somewhat oblique to the trends exhibited by Zones 17-19. It is possible that a fault or shear zone separates the grid southern end of Zone 20 from its oblique-trending neighbour, Zone 18.

**Zone 21** consists of weak to strong responses, detected near the eastern ends of line 6+00N on the old grid, and lines 8+00N and 9+00N on the new grid.

The stronger responses constituting Zone 21 probably have a bedrock source.

**Zone 22** consists of a series of anomalies spanning lines 8+00N through 13+00N near their eastern limits. The zone has been divided into a grid northern Subzone, 22a, and a grid southern



Subzone, 22b, to reflect the fact that the northern anomalies are generally weak and of lackluster character, while the southern portion contains rather strong and definite responses. In fact, as seen in plan form, the zone may actually consist of 2 distinct sources, possibly offset by a fault.

**Segment 22a**, which consists of weak, uncertain responses, is defined between lines 11+00N and 13+00N and may continue further to the grid north into an area presently unsurveyed.

**Segment 22b**, principally defined by strong anomalies on lines 8+00N and 9+00N, may well extend further to the grid south.

**Zone 23** is located in the grid northeast corner. The zone consists of rather weak, unimpressive responses detected on lines 17+00N through 19+00N. The conductive feature appears to follow an old road along which a cable is noted, suggesting that the responses may be due to cultural contamination.

Zones 20 through 22 of the preceding zones define a group, or system of conductors, which are generally parallel. Their nearly grid north-south trend is slightly oblique to the grid north-northwest trends of Zones 17, 18 and 19. This suggests, as noted previously, the possibility of a fault or some other discontinuity between the lithologies hosting the two sets of conductive sources.

#### **5.5.4 Induced Polarization/Resistivity Survey Results**

The IP/resistivity survey conducted on 5 lines in the centre of the A Grid disclosed a number of interesting chargeability highs and resistivity lows.



The data are displayed in standard pseudosection format, representing the values taken at increasing n separations (Plates A-10a through A-10e). The N=1 resistivity and chargeability data have also been plotted and contoured in plan (Plates A-8, A-9).

As seen in Plate A-9 and in the individual pseudosections, the chargeability data have delineated 5 significant polarizable horizons, designated Zones A through E. These are dominantly linear, strike generally grid north-northwest and range in amplitude from moderate to very strong. Several of these zones are accompanied by moderate to distinctly lower resistivities, as indicated on both the plan and pseudosections.

The resistivity data disclosed 7 significant resistivity lows, designated 'a' through 'f'. Like the chargeability features, these are dominantly narrow, linear in aspect and trend grid north-northwest (west-northwest true). Intrinsic resistivities are generally in the range of 200 to 500 ohm metres, as shown in Plate A-8.

As seen in Plate A-8, as well as in the pseudosections, resistivity lows 'a', 'b' and 'c' have associated chargeability highs.

It is also worth noting that resistivity low 'cc', a narrow zone at an estimated depth of 10 to 25 m, located to the grid west of zone 'c', may simply represent its down-dip continuation.

As seen on the compilation map A-11, there is generally good correlation between the resistivity lows outlined by the IP survey and the conductors detected by the larger scale VLF-EM survey.

VLF-EM Zone 18 corresponds precisely with resistivity low 'a', Zone 19 with Zone 'b', and Zone 12 with Zone 'e'. A somewhat



poorer correlation exists between resistivity low 'c' and VLF-EM Zone 11 which may indicate the presence of narrow, subsidiary resistivity features that are resolved less well by the resistivity survey than by the VLF-EM survey. In a number of instances the VLF-EM survey has detected the edge of a wider conductive feature.

The 5 principal chargeability zones are discussed in greater detail below.

**Zone A** is partially indicated at the eastern extremity of line 3+00N near 7+85E.

The anomaly is tentatively inferred to be quite strong and effectively at surface, although its full characteristics cannot be determined due to the limited survey coverage. It is apparently accompanied by a significant resistivity low ('a') and corresponds to a strong VLF-EM conductor (Zone 18).

**Zone B** is defined in the present survey by very strong chargeability anomalies on lines 3+00N and 4+00N near 6+50E. The individual anomalies are shallow or effectively at surface and are accompanied by distinct resistivity lows. This low ('b') also corresponds to VLF-EM conductive Zone 19.

Based on the present geologic mapping and prospecting, a zone of graphitic argillite may account for the geophysical response seen at this location.

**Zone C**, the most extensively defined and persistent chargeability feature detected in the present survey, extends from line 1+00N near 4+00E grid north-northwestward to line 5+00N near 3+20E. The zone likely continues further to the grid south and north beyond the limits of the present IP survey coverage.



The individual chargeability anomalies constituting Zone C are generally moderate in amplitude, narrow, and at the surface. Lower resistivities accompany the chargeability 'highs' on lines 2+00N through 4+00N. Elsewhere the chargeability features are apparently accompanied by higher resistivities suggesting a lower content of pyrite and/or graphite.

Zone C correlates in part with resistivity low 'c', although the locus of the lowest resistivities apparently lies approximately 30 m to the grid east.

The chargeability zone displays a similarly less than exact correlation with VLF-EM conductive Zone 11. It is suspected that some of this variability is due to the lesser resolution of the IP resistivity measurement as well as the uncertainties in interpreting VLF anomalies.

**Zone CC** flanks Zone C to the grid west. It consists of moderate to moderately strong chargeability responses detected on lines 3+00N and 4+00N near 2+40E. The zone appears to be at a depth of 35 to 40 m and is generally accompanied by high resistivities.

Zone CC may be a down dip extension of Zone C to the west or it may reflect a separate, unrelated chargeability source.

Resistivity low 'd' is close to or coincident with chargeability Zone CC. The resistivity feature reflects a very shallow source overlying the source of the chargeability anomaly and the two features may be unrelated.

**Zone D** is, in the present survey, solely indicated on line 5+00N near 2+00E as a moderate response at an estimated depth of 30 m. The zone may continue further to the north into the portion of



Grid A not covered by the present survey. High resistivities apparently accompany the anomalous chargeabilities.

Zone D is spatially close to resistivity low 'd'. The resistivity feature is, however, at surface (overburden?) and is probably unrelated to the deeper chargeability source.

Chargeability **Zone E** extends from line 3+00N near 0+60E to line 5+00N (old) near 0+70E. The anomaly amplitudes range from weak to moderate and accompanying resistivities are generally high.

The anomaly characteristics are best discerned on line 5+00N. The anomaly is only indicated at the western extremity of the survey coverage, while on line 3+00N the anomaly response is notably weaker suggesting a grid southern limit to the zone near this line.

Zone E is not directly related to any resistivity low. The resistivity low designated 'e' lies approximately 50 m to the east and is unrelated to the chargeability feature.

Those resistivity features which are persistent and appear to be related to a bedrock source but which are unaccompanied by any chargeability response may well reflect shears or fault zones which are lacking in any secondary sulphides. Resistivity low 'e' may be related to such a source. Zone 'e' is correlative to VLF-EM anomaly 12 (section 5.5.3) which appears to crosscut stratigraphy.

A correlation of geophysical and other surveys follows in section 5.7.





## 5.6 DIAMOND DRILLING

### 5.6.1 Drilling Objectives and Summary

The drilling program on the Chem property was designed to test two strong magnetic sources on lines 3+00N and 5+00N (old A Grid) (Plate A-5), an 'iron formation' horizon with anomalous Au values and an induced polarization chargeability anomaly on line 5+00N (Plates A-9, A-10e).

A total of 213 m of diamond drilling was completed in 2 holes.

Hole CH 87-1 intersected 23 m of ferruginous, magnetic chert with elevated Au values. Hole CH 87-1 intersected diabase and feldspar porphyry dykes, cherty sediments and argillite.

Drill logs are included in Appendix V and drill sections are shown on Plates 12a and 12b.

### 5.6.2 Lithologies and Mineralization in Drill Holes

#### HOLE CH 87-1

Hole CH 87-1 (Plate 12a) intersected cherty siltstone, ferruginous chert and minor amounts of feldspar porphyry dyke and sandstone.

The hole followed a strong fault zone to a depth of approximately 48 m. Cherty siltstone is sheared subparallel to the core axis and hosts a few narrow quartz stringers.



Sporadic anomalous Au values up to 100 ppb in the cherty siltstone appear to be related to fracture filling pyrite. Except for this minor pyrite mineralization the zone is barren.

A ferruginous chert or 'iron formation' horizon was intersected between 75 and 98 m (approximately 10 m true width). This material is translucent bluish-grey (sporadically jasper colored), massive and extremely hard. It is weakly to moderately magnetic and contains an average of 5% very fine-grained disseminated and fracture filling pyrite. The gold content of this horizon is consistently elevated, with values ranging from 20 to 130 ppb. Ag values are generally elevated in the zone, and a few intervals have anomalous amounts of Cu and As. (Note: Two samples with Au values of 600 ppb and 1130 ppb (samples 15151, 15152) were re-analysed and re-sampled. (Re-analysis values are 110 and 80, and re-sample values are 130 and 100 ppb Au respectively).

#### HOLE CH 87-2

Hole CH 87-2 was drilled to test magnetic and IP anomalies on line 5+00N (old grid) (Plate A-12b).

Diabase and feldspar porphyry were intersected to a depth of 35 m. Diabase appears to have intruded along both selvages of a feldspar porphyry dyke.

Cherty fine-grained sediments were intersected between 35 m and 69 m. This material is well-bedded at 30-40° to the core axis suggesting a possible true dip of 80° to the southwest. No significant mineralization was intersected in these cherty sediments.

Argillite was intersected from 69 m to 105 m (end of hole). This material is dark grey to black, well-bedded, and contains 1-2%



pyrite or marcasite as radiating crystalline films on fracture surfaces. The argillite appears to correspond to an induced polarization chargeability high outlined on line 5+00N at 3+00E to 3+25E (IP grid).

One anomalous gold value was obtained from a 0.5 m light green silicified zone in the argillite. The zone contains 2-3% pyrrhotite and 400 ppb Au (sample 15175).

No reason was found for the magnetic anomaly at 5+00N, 6+50W (old grid). A magnetic horizon at this location with a gentle to moderate dip to the southwest could have been truncated by the diabase and feldspar porphyry dykes.

#### **5.7 CORRELATION OF GEOPHYSICS, GEOCHEMISTRY AND GEOLOGY OF THE A GRID: A SUMMARY**

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A compilation of geology, mineralization, geochemical anomalies and geophysical features on the A Grid is shown on Plate A-11.

The A Grid is underlain predominantly by sedimentary rocks of the Cameron River Formation. These sediments can be roughly divided in this area into three assemblages based on dominant lithologies. From northeast to southwest these are:

- 1) Slate and cherty argillite
- 2) Chert and cherty siltstone with minor argillite and 'iron formation'
- 3) Siltstone and sandstone.

These assemblages correspond roughly to magnetic Domains I, II, and III. Domain II is a zone with abundant linear, weak to



moderately strong magnetic sources which are probably magnetic chert and 'iron formation' units. Domains I and III are zones of low magnetic relief.

An apparent offset of a strong magnetic feature between 3+00N and 4+00N at 2+50E may be fault related. The distortion may also be related to a small kink fold.

The VLF-EM survey has defined many conductive zones, the strongest of which are generally correlative with argillite or slate units. Geological Assemblage 1, composed predominantly of slate, is particularly well defined by a series of closely spaced conductors.

The VLF-EM survey has also outlined a few potential fault zones. Anomaly 12 appears to crosscut stratigraphy and may be fault related. Several conductors outlined in geological Assemblage 1 terminate along a linear trend and a fault or possibly an unconformity is suspected.

The IP/resistivity survey has outlined conductive and non-conductive zones of polarizable mineralization. The more conductive anomalies appear to correspond to units of graphitic argillite. Sources for the non-conductive polarizable responses (Zones D and E) remain undetermined, but could be disseminated sulphides.

A distortion of IP anomaly C between 3+00N and 4+00N may be related to faulting or kink folding.

Drilling tested magnetic and chargeability features in the vicinity of lines 3+00N to 5+00N near 2+50E. The drilling indicates that the magnetic anomalies may be related to a magnetite, pyrite-bearing chert, or iron formation unit and the



IP/resistivity anomalies to a graphitic argillite unit. The iron formation horizon was not defined by the IP survey. This may be because the unit is too narrow to be resolved by an IP survey with a 25 m dipole separation.

The soil geochemistry survey outlined a few small, sporadic and generally weakly anomalous zones. With few exceptions, these anomalies cannot be correlated with any specific lithological, structural or geophysical feature. A 2.0 ppm Ag anomaly at 14+00N, 5+00E, however, correlates with a geophysically indicated fault zone. This may be significant because the fault trends into an area uphill from a Au bearing boulder (sample 356).

A coincident weak Au and Ag anomaly at 12+00N, 2+25E is underlain by a strong VLF-EM conductor (16) thought to be outlining an argillite unit. No reason for the geochemical anomaly is known.

The most significant Au-in-soil anomaly in the area is located at 14+00N, 1+00E. Detailed sampling in the area indicates that the anomaly is very limited in extent. Brecciated, hematitic, siliceous siltstone float from the soil sample site contains 1200 ppb Au (sample 14843). This material may have come from a cherty siltstone-feldspar porphyry dyke contact zone which lies a few metres uphill from the mineralized boulder. The area has no anomalous geophysical features.

The biogeochemical survey outlined several Au and As anomalies, the strongest of which lies directly uphill from a Au bearing boulder (sample 356). This anomaly is coincident with a strong VLF-EM and IP resistivity indicated conductor (19 and B respectively) and is near to a geophysically indicated fault zone. It is also possible that a northwest-trending fault zone, intersected in CH 87-1 and apparently responsible for the offset of magnetic horizons, trends into this area. The multiple



coincident anomalies in a possible fault zone make this an interesting exploration target.



## 6.0 CONCLUSIONS

### 6.1 CONCLUSIONS, A GRID

The best mineralization discovered on the A grid to date is a pyrite, magnetite and Au-bearing (4.80 g/t or 1.40 oz/T - sample 356) boulder of siliceous material located on B6A road at 3+25N. Geological, geophysical and geochemical surveys were conducted on the grid in an attempt to locate the source of this mineralization. To date, this source has not been found.

The rock appears to be a sheared magnetic cherty sediment and several potential sources have been identified.

The most likely source for the mineralization is a fault zone crosscutting magnetic cherty siltstone or chert in magnetic Domain II.

Such an environment was tested in diamond drill hole CH 87-1 and although a ferruginous chert horizon contained elevated Au values, the mineralization was dissimilar to that seen in the boulder. Mineralogy may, however, change along strike or adjacent to a different structural break.

The ferruginous chert or 'iron formation' horizon appears to have a magnetic signature which can be followed for approximately 800 m. It is exposed in only two outcrops 700 m apart (possibly 2 different horizons) and has been tested with only one drill hole. It contains elevated Au values in two of the three sample locations, and it remains a high priority exploration target.

Cherty beds occur throughout the section and it is possible that



the boulder's source is outside of the main cherty horizon; perhaps even within the argillites in the vicinity of the boulder (geological Assemblage 1). A lack of magnetic sources in this area does not lend support to this theory, but if the magnetite is restricted to relatively narrow fault zones, it would not necessarily be detected by a magnetic survey.

One such interesting exploration target lies between lines 3+00N and 4+00N at 6+50E, 200 m uphill from the mineralized boulder (sample 356). It is underlain by a fault and has coincident biogeochemical and conductive anomalies.

Several other coincident Au and As biogeochemical anomalies occur downhill from cherty magnetic rocks of magnetic Domain II. These are also viable exploration targets.

A note of interest about the mineralized boulder (sample 356) is its relatively high vanadium content (581 ppm). Elevated vanadium values in magnetite bearing pyritic rocks have been observed in and adjacent to gabbroic intrusives elsewhere on the property. It is possible that the boulder comes from a mineralized zone along a gabbro-cherty sediment contact. No gabbro is seen in the vicinity of the boulder but a gabbroic dyke with high vanadium (samples 811 and 1625) exposed 2 km to the grid northwest appears to trend into the area.

Several pieces of rhodonite float occur near the ridge top (3+00N, 11+00W) in a zone underlain by chert and cherty siltstone. There is potential for a rhodonite deposit in this area.





## 6.2 CONCLUSIONS, B GRID

Mapping on the B Grid is rather limited in extent but the area observed in the northwest corner is underlain by coarse-grained clastic and cherty sediments of the Cameron River Formation which have been intruded by a gabbroic dyke and several small rhyolite dykes. These dykes are possibly Triassic and Jurassic in age respectively.

A few, small east-west trending pyritic shears near the gabbroic intrusive contain anomalous Au values up to 1260 ppb (0.041 oz/T or 1.41 g/t). Gold mineralization is found on the flanks of gabbroic dykes on the nearby Cow and Mike properties. There is fair potential for more gold mineralization on the B Grid peripheral to the gabbro dyke.

The soil geochemistry survey in the vicinity of a rhodonite showing in the northwest part of the grid has outlined numerous strong, linear, coincident Mn, As, Pb and Zn anomalies. Several rhodonite beds may occur in the area.

Au-in-soil anomalies from Phase I of the exploration program on the B Grid have not been investigated, and the potential for mineralization in these areas is yet to be assessed.



## 7.0 RECOMMENDATIONS

Phases I, II and III of the exploration program on the Chem property have identified several zones of anomalous Au mineralization in a variety of geological settings, both on the A and B Grids. At least two showings of rhodonite occur on the B Grid and some potential exists for similar deposits to occur on the A Grid. More work is warranted in order to better define these mineralized structures or horizons and to isolate within them zones of enrichment with some economic potential.

### 7.1 RECOMMENDED WORK PLAN

#### 7.1.1 Recommended Work Plan, A Grid

- a) More detailed mapping is needed on the A Grid to confirm the present interpretation of the stratigraphy. Mapping would be focused on the area outlined by magnetic Domain II with specific attention paid to areas around and uphill from mineralized float, and in areas of geophysical and/or biogeochemical anomalies. A second area requiring detailed mapping is in the vicinity of 3+00N, 11+00W where several pieces of rhodonite float have been found.
- b) The source for the Au bearing float at 14+00N, 1+00E has not been found, but soil geochemistry data defines a very restricted anomalous zone. Trenching in this area may help to locate the source of the mineralization and to define its nature.



- c) A jasper bearing, pyritic, magnetic chert unit ('iron formation') intersected in drill hole CH 87-1 has consistently elevated gold values (20-130 ppb). This horizon could be the source for the Au bearing boulder (sample 356) found on B6A road and it deserves further investigation. Several drill holes between 1+00S and 6+00N would be required to adequately test the horizon. A detailed magnetic survey in this area would assist in picking drill targets.
  
- d) An area 150 m uphill from the Au bearing boulder (sample 356) has a Au biogeochemical anomaly over a probable fault zone adjacent to a strong geophysically indicated conductor (VLF-EM survey-conductor 19, IP/resistivity survey - chargeability Zone B). This zone deserves a diamond drill hole.

Drilling recommended in sections 'c' and 'd' above would total approximately 750 m (2500') in 7 holes.

#### **7.1.2 Recommended Work Plan, B Grid**

- a) Metal-in-soil anomaly areas outlined in phase I of the exploration program on the B Grid should be mapped. If any encouragement is found, the density of soil sample coverage should be increased.
  
- b) Mapping along the flanks of the gabbro in the northwest part of the grid is warranted because of the association between gabbroic rocks and Au mineralization seen on adjacent properties.



- c) The rhodonite showings in the northwest corner should be mapped in order to assess their economic potential. Soil geochemical anomalies on this part of the grid suggest that there are several rhodonite bearing horizons in the area. Mapping is required to confirm this.

## 7.2 PROPOSED PHASE IV BUDGET

### FIELDWORK

<u>Personnel</u>	<u>No.</u>	<u>Days</u>	<u>Rate</u>	<u>Cost</u>	
Geologist	1	35	375	13,125	
Geologist	1	35	250	8,750	
Geophysical Tech.	1	5	200	1,000	
Core Cutter	1	25	150	<u>3,750</u>	
Total Personnel Cost				26,625	26,625

<u>Equipment Rental</u>	<u>No.</u>	<u>Days</u>	<u>Rate</u>	<u>Cost</u>	
4WD Truck	1	35	110	3,850	
4WD TRUCK	1	5	110	550	
Rock Saw	1	28	15	420	
Magnetometer	1	5	75	375	
Pajari	1	25	15	<u>375</u>	
Total Equipment Rental Cost				5,570	5,570

### Accommodation

100 Persondays @ 55 5,500

Disbursements

	<u>Rate</u>	<u>Cost</u>	
Drilling:			
750 m	80.00	60,000	
Analyses:			
350 Rock and Core (Au, ICP)	12.75	4,463	
20 Au Assay	6.00	120	
20 Mn Assay	8.50	178	
Thin Sections, 5 @	60.00	300	
Miscellaneous		<u>1,000</u>	
Disbursement Subtotal		66,053	
Administration (15%)		<u>9,908</u>	
Total Disbursements Cost		75,961	<u>75,961</u>
Fieldwork Subtotal			113,656
Contingency (15%)			<u>17,048</u>
Total Fieldwork Costs			130,704    \$130,704

CONSULTING

<u>Personnel</u>	<u>No.</u>	<u>Days</u>	<u>Rate</u>	<u>Cost</u>	
Geological					
Consultant	1	10	500	5,000	
Geophysical					
Consultant	1	2	500	<u>1,000</u>	
Total Personnel Cost				6,000	6,000
<u>Equipment Rental</u>					
4WD Truck	1	10	110		1,100
<u>Accommodation</u>					
10 Persondays @ 45					450

Disbursements

Miscellaneous	500		
Administration (15%)	<u>75</u>		
Total Disbursements Cost	575	<u>575</u>	
Consulting Subtotal		7,825	
Contingency (15%)		<u>1,174</u>	
Total Consulting Cost		8,999	\$ 8,999

REPORT

<u>Personnel</u>	<u>No.</u>	<u>Days</u>	<u>Rate</u>	<u>Cost</u>	
Geologist	1	20	350	7,000	
Geologist (Office Assistance)	1	2	250	500	
Geologist (Proofing)	1	2	375	<u>750</u>	
Total Personnel Cost				8,250	8,250

Disbursements

Drafting Supplies	300		
Drafting	1,700		
Copying, Reproductions	500		
Miscellaneous	<u>500</u>		
Disbursements Subtotal	3,000		
Administration (15%)	<u>450</u>		
Total Disbursements Costs	3,450	<u>3,450</u>	
Report Subtotal		11,700	
Contingency (15%)		<u>1,755</u>	
Total Report Cost		13,455	<u>\$ 13,455</u>

Estimated Total Project Cost \$153,158  
=====





#### 7.4 SUMMARY OF RECOMMENDATIONS

On the basis of the encouraging results from Phases I, II and III of the exploration program it is recommended that exploration work continue with Phase IV.

The Phase IV program on the A Grid would consist of geological mapping in specific areas, a limited magnetic survey, trenching and diamond drilling. A total of 750 m (2500') of drilling is needed to adequately test the outlined targets.

Continued exploration on and peripheral to the B Grid would consist of geological mapping in showing and anomaly areas.

The estimated cost of this program is \$155,000.

Respectfully submitted

MPH CONSULTING LIMITED

A handwritten signature in cursive script that reads "Gordon J. Allen".

Duncan, B.C.  
February 27, 1987

Gordon J. Allen, P.Geol.





### CERTIFICATE

I, Gordon J. Allen, do hereby certify;

- 1) I am a graduate in geology of the University of British Columbia (B.Sc. 1975).
- 2) I have practised as a geologist in mineral exploration for twelve years.
- 3) I am a member in good standing of the Association of Professional Engineers, Geologists and Geophysicists of Alberta.
- 4) Opinions, conclusions and recommendations contained herein are based on field work performed by myself and other MPH personnel between October 1986 and January, 1987.
- 5) I own no direct, indirect, or contingent interests in the subject property, or shares or securities of International Cherokee Developments Limited or associated companies.

A handwritten signature in cursive script that reads "Gordon J. Allen".

Duncan, B.C.  
February 27, 1987

Gordon J. Allen, P. Geol.



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**APPENDIX I**

**LIST OF PERSONNEL AND STATEMENT OF EXPENDITURES**



LIST OF PERSONNEL AND

STATEMENT OF EXPENDITURES

The following expenses have been incurred on the Chem property as defined in this report for the purposes of mineral exploration between the dates of September 14, 1986 and February 27, 1987.

PERSONNEL

T. G. Hawkins,

Geological Consultant, P.Geol.

8 Days @ 475 3,800.00

J. Roth,

Geophysical Consultant, M.A.

10 Hours @ 70 700.00

3 Days @ 450 1,350.00

G. Allen,

Project Manager, P.Geol.

39.5 Days @ 350 13,825.00

J. Getsinger, Geologist, Ph.D.

1 Day @ 350 350.00

5.25 Hours @ 40 210.00

T. Hayes, Field Coordinator

14 Days @ 250 3,500.00

D. Ames, Geologist, B.Sc.

7 Days @ 150 1,050.00



G. Royer, Geologist, B.Sc.				
1 Day @	150	150.00		
T. Neale, Geologist, B.Sc.				
3 Hours @	40	120.00		
B. Thomae, Geologist, B.Sc.				
0.5 Hours @	35	17.50		
H. Eijgel, Geologist, B.Sc.				
0.25 Hours @	35	8.75		
T. Naciuk, Geologist, B.Sc.				
3 Days @	150	450.00		
G. Roste, Geologist, B.Sc.				
8 Days @	150	1,200.00		
H. MacIsaac, Geop. Tech., B.Sc.				
12.5 Days @	150	1,875.00		
J.P. Slominski, Sr. Geop. Tech.				
10.5 Days @	250	2,625.00		
J. Harvey, Field Tech.				
7 Days @	150	1,050.00		
R. Fenske, Field, Tech.				
7 Days @	150	1,050.00		
T. Styan, Field Tech.				
7 Days @	150	1,050.00		



H. Chaudet, Field Tech.				
13.5 Days @	150	2,025.00		
P. Kelly, Field Tech.				
5 Days @	150	750.00		
D.S. Hawkins, Field Tech.				
11 Days @	150	1,650.00		
M. Wilkinson, Field Tech.				
1 Day @	150	150.00		
T. Wilkinson, Field Tech.				
9 Days @	150	1,350.00		
J. Elliot, Field Tech.				
7 Days @	150	1,050.00		
T. Auckland, Field Tech.				
1 Day @	150	150.00		
C. Campbell, Field Draftsperson				
28 Hours @	10	280.00		
L. Woodgate, Field Draftsperson				
9 Hours @	10	90.00		
A. Wardwell, Field Draftsperson				
31 3/4 Hours @	10	<u>317.50</u>		
Total Personnel Costs		42,193.75		\$42,193.75





EQUIPMENT RENTAL

4x4 Truck	69 Days @ 90	6,210.00	
Rock Saw	12 Days @ 15	180.00	
Pajari	10 Days @ 15	150.00	
Magnetometer	9 Days @ 15	135.00	
VLF-EM	10 Days @ 25	250.00	
IP Equipment	7 Days @ 300	2,100.00	
Core Splitter	7 Days @ 15	<u>105.00</u>	
Total Equipment Rental Costs		9,130.00	\$ 9,130.00

ACCOMMODATION AND FOOD

173 Persondays @ 40			\$ 6,920.00
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DISBURSEMENTS

Analyses

68 Rock (Au, ICP)	@ 12.75	867.00	
81 Core (Au, ICP)	@ 12.75	1,032.75	
828 Soil (Au, ICP)	@ 10.60	8,776.80	
4 Silt (Au, ICP)	@ 11.75	47.00	
4 Rock (WRA)	@ 32.00	128.00	
2 Rock (Assay)	@ 6.00	12.00	
92 Conifer Branch	@ 17.68	1,626.69	
Statistical Analysis		<u>85.75</u>	
		12,575.99	12,575.99



Drilling Costs

Drilling Contractor	10,103.43
Cat and Lowbed Charges	5,294.18
Custom Topographic Map Prep.	4,091.31
Cleaning Drill Sites	90.00

Report Preparation Cost

Drafting Supplies	253.00	
Drafting	1,575.00	
Typing	441.12	
Map Reproduction	985.94	
Copying and Binding Reports	<u>120.00</u>	
	3,374.94	3,374.94
Site Loss and Inspection Fee (MacMillan Bloedel)		575.00

Miscellaneous

(Gas, Phone, Courier, Maps, Supplies Etc.)	<u>1,759.68</u>	
Disbursements Subtotal	37,864.53	
Administration (15%)	<u>5,679.68</u>	
Total Disbursements	43,544.21	\$ <u>43,554.21</u>

Total Cost of Project \$101,787.96



APPENDIX II  
ROCK SAMPLE DESCRIPTIONS AND  
LITHOGEOCHEMICAL RESULTS



ABBREVIATIONS

MINERALS

AB	Albite
AS	Arsenopyrite
CB, CARB	Carbonate
CP	Chalcopyrite
CHL	Chlorite
CZ	Clinzoisite
DI	Diopside
EP	Epidote
FSP	Feldspar
GL	Galena
GT	Garnet
HM	Hematite
HB	Hornblende
LEUC	Leucoxene
MT	Magnetite
MC	Malachite
PLAG	Plagioclase
PY	Pyrite
PX	Pyroxene
PO	Pyrrhotite
QZ	Quartz
SER	Sericite
SL	Sphalerite

LITHOLOGY

AGGL	Agglomerate
ARG	Argillite
BAS	Basalt
CARB	Carbonate
CHT	Chert
CONG	Conglomerate
XLT	Crystal Tuff
DIAB	Diabase
DIOR	Diorite
FHP	Feldspar Hornblende Porphyry
FBX	Flow Breccia
GABB	Gabbro
HYAL	Hyaloclastite
LMST	Limestone
MAF	Mafic (Basalt, Andesite)
QFP	Quartz Feldspar Porphyry
SDST	Sandstone
STST	Siltstone
SKN	Skarn
VN, VNLT	Vein, Veinlet

COLOUR

BLK	Black
BLU	Blue
BRN, BN	Brown
GN	Green
GY	Gray
OL	Olive
RD	Red
WHT	White

TEXTURES AND ALTERATION

ALT'D	Altered
AMYG'L	Amygdaloidal
ANG	Angular
ANH	Anhedral
BDD	Bedded
BX'D, BX'N	Brecciated, Brecciation
CHTY	Cherty
CHL'C	Chloritic
XLLINE	Crystalline
DISS	Disseminated
EP'C	Epidotitic
EUH	Euhedral
FG	Fine Grained
MG	Medium Grained
CG	Coarse Grained
GRAD	Gradational
HM'C	Hematitic
LAM'D	Laminated
MSV	Massive
MED	Medium (Bedded), 2-10 mm
P	Porphyry, Phyrlic
PY'C	Pyritic
RDD	Rounded
SER'C	Sericitic
SIL, SIL'D	Siliceous, Silicified
SUB-ANG	Subangular
SBH	Subhedral
TK	Thick (Bedded), >10 mm
VES	Vesicular

GENERAL

ABDT	Abundant
AMYG	Amygdule
AV	Average
BDG	Bedding
BX	Breccia
BC	Broken Ground
CMT	Cement
CM	Chill Margin
XL	Crystal
CT	Contact
CA	Core Axis
Ø, DIA	Diameter
FRCR	Fracture
FRAG	Fragment
GO	Gouge
GND	Ground
GM	Groundmass
J	Joint
LAM	Laminated
MOD	Moderate
NIWK	Network
PHENO	Phenocryst
QCV	Quartz Carbonate Vein
QV	Quartz Vein
SHR	Shear
STG	Stringer
STR, STRLY	Strong, Strongly
SX	Sulphides
TR	Trace
W, w̄, W/	With



ROCK SAMPLE DESCRIPTIONS & LITHOGEOCHEMICAL RESULTS

<u>Sample No</u>	<u>Description</u>	<u>Au</u> ppb	<u>Ag</u> ppm	<u>As</u> ppm	<u>Cu</u> ppm	<u>Other</u> ppm
723	Location: 'A' Grid, between 19+00N and 20+00N on B6 Road, Cow 10 Claim  Rock Type: Sandstone (Tuff?) Occurrence Type, Size: Large  Banded maroon to black or dark grey, very fine-grained sandstone or tuff with traces of pyrite and pyrrhotite.	5	<u>0.4</u>	10	68	<u>320</u> Ba
724	Location: Old 'A' Grid (4+00N, 11+00E), Cow 10 Claim  Rock Type: Cherty Sediment (Tuff?) Occurrence Type, Size: Large  Banded blue-grey to dark maroon or black sediment with a small percentage of very fine-grained sand sized grains and 2 - 4% disseminated pyrite in a cherty matrix. The rock is cut by hairline quartz stringers.	5	<u>0.4</u>	5	45	<u>320</u> Ba
811	Location: "A" Grid (22+25N, 3+60W) Cow 11 Claim Rock Type: Gabbro (?) Occurrence Type, Size: Float, probably near source.  Dark green, fine-grained crystalline gabbroic material. Mafic minerals are mostly altered to chlorite. Fine-grained disseminated pyrite approximately 5%. The rock is moderately magnetic. This material is probably from a nearby gabbroic dyke.	<u>190</u>	<u>0.6</u>	5	<u>1520</u>	<u>569V</u>



<u>Sample No</u>	<u>Description</u>	<u>Au</u> ppb	<u>Ag</u> ppm	<u>As</u> ppm	<u>Cu</u> ppm	<u>Other</u> ppm
812	Location: 'A' Grid (13+40N, 2+25W) Cow 10 Claim Rock Type: Cherty Siltstone Occurrence Type, Size: Outcrop, few metres square.  Strongly gossanous buff to bluish-gray siliceous siltstone with 5% fine-grained disseminated pyrite and possibly pyrrhotite.	5	0.2	10	81	
813	Location: 'A' Grid (13+40N, 2+25W) Cow 10 Claim Rock Type: Cherty Siltstone Occurrence Type, Size: Outcrop, few metres square. Similar to sample 812.	20	0.2	10	45	
1305	Location: 'A' Grid Approximately (24+25N, 4+00W), Cow 11 Claim Rock Type: Quartz Diorite Occurrence Type, Size: Float  Equigranular, medium-grained intrusive. Mafics probably originally biotite. 5% dis- seminated and fracture filling Py.	<u>50</u>	<u>0.6</u>	10	<u>275</u>	



<u>Sample No</u>	<u>Description</u>	<u>Au</u> ppb	<u>Ag</u> ppm	<u>As</u> ppm	<u>Cu</u> ppm	<u>Other</u> ppm
1306	Location: 'A' Grid (24+68N, 3+90 W) Cow 11 claim Rock Type: Brecciated Cherty Sediment Occurrence Type, Size: Float  Mottled light gray to dark blue- grey cherty sediment (tuff ?) with 25-30% Py as a breccia filling.	<u>230</u>	<u>0.8</u>	<u>210</u>	<u>200</u>	<u>198</u> Zn
1961	Location: 'A' Grid (2+45S, 1+15W), Cow 10 claim Rock Type: Quartz Diorite Occurrence Type, Size: Large  Medium grained medium grey intrusive with 15-20% quartz, 65% feldspar and 15% chlorite after hornblende and/or biotite.	5	0.2	< 5	92	
1962	Location: Old 'A' Grid (3+94N, 11+08W) Cow 10 claim Rock Type: Rhodonite Occurrence Type, Size:  Banded ( 3-10 mm) pink to greenish brown interbedded rhodonite and cherty sediment with up to 3% disseminated and fracture filling pyrite.	<u>50</u>	0.2	5	128	> <u>9999</u> Mn
1963	Location: Old 'A' Grid (3+88N, 10+53W) Cow 10 claim Rock Type: Rhodonite Occurrence Type: Size:  As 1962 Bands (light green-tan) less continuous, 10-20mm long.	5	0.2	10	199	> <u>9999</u> Mn



<u>Sample No</u>	<u>Description</u>	<u>Au</u> ppb	<u>Ag</u> ppm	<u>As</u> ppm	<u>Cu</u> ppm	<u>Other</u> ppm
1964	Location: Old 'A' Grid (3+94N, 10+85W), Cow 10 Claim Rock Type: Cherty Tuff (?) Occurrence Type, Size:  Bluish-grey slightly hematitic cherty tuff with 3-5% fracture filling pyrite.	10	0.2	< 5	<u>316</u>	<u>6011</u> Mn
1965	Location: Old 'A' Grid, (2+59N,11+135W) Cow 10 Claim Rock Type: Gabbro Occurrence Type, Size: Float  Dark greenish-grey medium grained gabbro with 1-2% fracture filling pyrite and a trace of chalcopyrite.	<u>50</u>	<u>0.4</u>	< 5	<u>1255</u>	
1966	Location: Old 'A' Grid, (3+94N,11+08W) Cow 10 claim Rock Type: Diabase Occurrence Type, Size:  Very fine grained crystalline black intrusive with 3-5% pyrite,5% pyrrhotite and possibly magnetite. The rock is slightly magnetic.	<u>60</u>	<u>0.6</u>	< 5	77	
3413	Location: 'B' Grid, Cow 7 claim Rock Type: Diabase Occurrence Type, Size: Float Very fine grained dark green crystalline dyke with 5 disseminated pyrrhotite.	5	0.2	< 5	31	





<u>Sample No</u>	<u>Description</u>	<u>Au</u> ppb	<u>Ag</u> ppm	<u>As</u> ppm	<u>Cu</u> ppm	<u>Other</u> ppm
3414	Location: 'B' Grid, Cow 7 claim Rock Type: Cherty Siltstone (Tuff?) Occurrence Type, Size: Float  Very fine grained cherty groundmass with 10% vague rounded grains to 0.5 mm. Could be a tuff.	5	0.2	< 5	20	
3901	Location: 'A' Grid, (15+48N,2+40E) on B6J Road, Cow 10 claim Rock Type: Sandstone with Interbedded Mudstone Occurrence Type, Size: Outcrop, 0.5m wide unit.  Interbedded medium grained brown sandstone with fine grained black mudstone. Some sandstone fragments in mudstone. Appears barren.	5	< 0.2	5	69	<u>265 V</u> <u>100 Zn</u>
3902	Location: 'A' Grid, (4+92N,6+02W) on B6J Road, Cow 10 claim Rock Type: Sandstone Breccia Occurrence Type, Size: Outcrop, 5m x 1m  Brecciated light grey medium grained sandstone with infilling cherty, hematitic material.	5	< 0.2	< 5	1	
3903	Location: 'A' Grid, (4+66N,5+63W) on B6J Road, Cow 10 claim Rock Type: Cherty Sandstone Occurrence Type, Size: Outcrop  Dark grey to black very fine grained cherty sandstone with milky quartz stringers. Up to 3% pyrite occurs predominantly along fractures.	20	< 0.2	< 5	22	



<u>Sample No</u>	<u>Description</u>	<u>Au</u> ppb	<u>Ag</u> ppm	<u>As</u> ppm	<u>Cu</u> ppm	<u>Other</u> ppm
3904	Location: 'A' Grid, (4+54N,5+63W) on B6J Road, Cow 10 claim Rock Type: Chert Occurrence Type, Size: Float  Grey to brown chert with 2% pyrite as irregular lenses up to 1 cm in diameter.	5	<0.2	5	12	
3905	Location: 'A' Grid, (19+90N,3+75W), Cow 11 claim Rock Type: Sandstone Occurrence Type, Size: Outcrop  Medium grained grey-brown sandstone.	5	<0.2	5	83	
3906	Location: 'A' Grid, (17+72N,4+50W), Cow 10 claim Rock Type: Garnet Vein in Sandstone Host Occurrence Type, Size: Float  Narrow garnet and diopside bearing vein in sandstone.	5	<0.2	5	29	
3907	Location: 'A' Grid, (15+71N,4+03W), Cow 10 claim Rock type: Sandstone/Siltstone Occurrence Type, Size: Outcrop  Dark grey to black sandstone and inter- bedded siltstone. Beds up to 1 cm thick.	5	<0.2	<5	9	
3908	Location: 'A' Grid, (15+60N,4+04W), Cow 10 claim Rock Type: Siltstone Occurrence Type, Size: Float  Dark grey to black siltstone with narrow quartz stringers. Up to 1% phrrhotite associated with quartz. Rock is weakly magnetic.	5	<0.2	5	<u>868</u>	



<u>Sample No</u>	<u>Description</u>	<u>Au</u> ppb	<u>Ag</u> ppm	<u>As</u> ppm	<u>Cu</u> ppm	<u>Other</u> ppm
3909	Location: 'A' Grid, (7+12N,3+26W), Cow 10 claim Rock Type: Quartz Diorite Occurrence Type, Size: Outcrop, 2x3 m  Highly fractured gossanous quartz diorite dyke (?) with 2% amphibole.	5	< 0.2	< 5	7	
3910	Location: Old 'A' Grid (1+54N,12+00W), Cow 10 claim Rock Type: Siltstone Occurrence Type, Size: Outcrop  Dark grey to black siltstone with <1% disseminated pyrite.	5	< 0.2	5	95	
3911	Location: Old 'A' Grid, (1+23N,11+90W), Cow 10 claim Rock Type: Feldspar Porphyry, Occurrence Type, Size: Outcrop, 0.5 m wide dyke.  Fractured feldspar porphyry dyke with 20% 2 mm feldspar phenocrysts in a fine grained matrix.	5	< 0.2	< 5	30	
3912	Location: Old 'A' Grid, (0+36N,9+10W) on B6A8 Road, Cow 10 claim Rock Type: Argillite Occurrence Type, Size: Float  Dark gray fractured, limonitic argillite float near source.	5	< 0.2	5	78	<u>2327 Mn</u>



<u>Sample No</u>	<u>Description</u>	<u>Au</u> ppb	<u>Ag</u> ppm	<u>As</u> ppm	<u>Cu</u> ppm	<u>Other</u> ppm
3913	Location: Old 'A' Grid, (2+95N, 11+13W), Cow 10 claim Rock Type: Cherty Sediment (Tuff?) Occurrence Type, Size: Float  Medium bluish-grey cherty sediment (tuff?) with 10% vague, rounded very fine-grained sand particles.	5	0.2	5	95	
3914	Location: Airstrip, 'A' Grid, (baseline, between 4+00S and 9+00S), Cow 9 claim Rock Type: Siltstone/Sandstone Occurrence Type, Size: Float  Dark greyish-green to black siltstone to sandstone with 1% @ Py and Po. Sulphides associated with amphibole veinlet.	5	0.2	5	<u>616</u>	
3915	Location: Old 'A' Grid, (0+10S, 6+40W), Cow 10 claim Rock Type: Chert Breccia Occurrence Type, Size: Outcrop, 1 m Shear Zone  Brecciated maroon to white cherty sediment flooded with 40% white quartz. Appears to be barren, but fractures are rusty.	5	0.2	5	33	
3916	Location: Old 'A' Grid, (0+10S, 6+35W), Cow 10 claim Rock Type: Siltstone and Gouge Occurrence Type, Size: Outcrop  Dark greenish-grey sheared siltstone and clay gouge. Minor quartz veining in siltstone.	5	0.2	<u>45</u>	68	<u>230 Ba</u> <u>2274 Mn</u>



<u>Sample No</u>	<u>Description</u>	<u>Au</u> ppb	<u>Ag</u> ppm	<u>As</u> ppm	<u>Cu</u> ppm	<u>Other</u> ppm
3917	Location: Old 'A' Grid, (0+00N,6+19W), Cow 10 claim Rock Type: Cherty Siltstone and Gouge Occurrence Type, Size: Outcrop, 3m x 40m (+)  Sheared cherty siltstone and gouge with up to 1% Py.	5	< 0.2	5	45	<u>300 Ba</u>
4651	Location: 'B' Grid on M1 Road, (22+00N,7+30W), not on claim block Rock Type: Diorite to Gabbro Occurrence Type, Size: Outcrop  Medium grained hornblende gabbro (diorite?) with <1% fine grained disseminated and fracture related pyrite. Colour index approximately 40. Weakly magnetic.	5	<0.2	<5	38	
4652	Location: 'B' Grid on M1 Road (18+40N, 2+75W), Cow 7 claim Rock Type: Rhyolite Occurrence Type, Size: Outcrop, 3-4 m wide dyke  3-4 m wide rhyolite dyke (150/90). Very fine grained light greenish grey crystalline groundmass with ≤5% rounded quartz phenocrysts up to 1 mm. 2-3% medium grained ≤1 mm cubic, disseminated pyrite.	5	<0.2	<5	28	
4653	Location: 'B' Grid, on M1 Road, Cow 7 claim Rock Type: Rhyolite Occurrence Type, Size: Outcrop  Same as 4652	5	<0.2	<5	4	



<u>Sample No</u>	<u>Description</u>	<u>Au</u> ppb	<u>Ag</u> ppm	<u>As</u> ppm	<u>Cu</u> ppm	<u>Other</u> ppm
4654	Location: 'B' Grid, on M1 Road, Cow 7 claim Rock Type: Rhyolite? Cherty Tuff? Occurrence Type, Size: Outcrop  Very fine-grained, siliceous (cherty), light blue green groundmass. 5% vague rounded quartz phenocrysts (crystal fragments?) to 1 mm. Rock has a weakly banded texture (bedding?, flow banding?, alteration?)	5	0.2	5	9	
4655	Location: 'B' Grid, on M1 Road, Cow 7 claim Rock Type: Cherty Tuff (?) Occurrence Type, Size: Outcrop, 0.5 m weak fracture zone  Light greenish-grey to medium bluish-grey cherty tuff (?). 0.5 m zone of limonitic fractures healed with hairline quartz stringers with 1-2% chalcopyrite.	5	0.2	5	<u>626</u>	
4656	Location: 'B' Grid, (15+00N, 5+75W), Cow 7 claim Rock Type: Sedimentary Breccia Occurrence Type, Size: Float  Dark grey subrounded cherty (tuff?) fragments to 1 cm in a dark grey siliceous groundmass. 2-3% Py along hairline fractures.	5	0.2	5	67	
4657	Location: 'B' Grid, (15+00N, 6+00W), Cow 7 claim Rock Type: Cherty Tuff Occurrence Type, Size: Float  Dark grey to black cherty tuff cut by vuggy quartz stringers (30%) up to 1 cm. Quartz stringers contain 1% dark brownish- black metallic mineral.	5	0.2	10	17	



<u>Sample No</u>	<u>Description</u>	<u>Au</u> ppb	<u>Ag</u> ppm	<u>As</u> ppm	<u>Cu</u> ppm	<u>Other</u> ppm
4672	<p>Location: 'A' Grid, (7+50S, 1+50E), Cow 10 claim Rock Type: Tuff (?) Occurrence Type, Size: Float</p> <p>Dark greenish-grey chloritic groundmass with vague rounded clasts of fine-grained material (sediment?) to 5 mm, average 3 mm. Could be a conglomerate or lapilli tuff. Rock contains approximately 5% disseminated pyrite.</p>	5	0.2	5	<u>318</u>	
4673	<p>Location: 'A' Grid, (1+50S, 5+00E) on B6A Road, Cow 10 claim Rock Type: Jasper-bearing Chert Breccia Occurrence Type, Size: Outcrop</p> <p>A dark greenish-grey silicified fine-grained chloritic groundmass makes up approximately 25% of the rock. The groundmass may be a fine-grained clastic which contains subrounded to subangular, dark red to purplish-grey cherty jasper fragments to 2 cm. Approximately 1%, fine to medium-grained Py occurs in groundmass and jasper fragments. Moderately magnetic.</p>	5	0.2	5	16	
4674	<p>Location: New 'A' Grid, (0+58S, 4+00E), Cow 10 claim Rock Type: Chert, Jasper Occurrence Type, Size: Float, 20 cm x 40 cm x ?. Subangular boulder</p> <p>Mottled, translucent light grey to dark bluish-grey to dark hematitic red coloured cryptocrystalline quartz. The dark grey colour is likely due to fine-grained disseminated hematite and magnetite. ~1% Py in cubes to 1 mm. The rock is moderately magnetic.</p>	5	0.2	5	33	



<u>Sample No</u>	<u>Description</u>	<u>Au</u> ppb	<u>Ag</u> ppm	<u>As</u> ppm	<u>Cu</u> ppm	<u>Other</u> ppm
4675	Location: Old 'A' Grid, (2+35N, 1+95W), on B6 All Road, Cow 10 claim Rock Type: Argillite Occurrence Type, Size: Float  Dark blue grey, very fine-grained argillite, well foliated parallel to bedding. 5% Py in very thin films on foliation surfaces.	5	0.2	5	70	
4676	Location: 'A' Grid (B.L., 3+25S), Cow 10 claim Rock Type: Chert Breccia Occurrence Type, Size: Abundant, Angular Float  Composite sample of gossanous dark blue grey cherty float. Some pieces have distinct subangular to subrounded chert clasts to 1 cm in a cherty groundmass.	5	0.2	5	189	
4677	Location: 'A' Grid, (2+40S, B.L.0+00), Cow 10 claim Rock Type: Cherty Siltstone Occurrence Type, Size: Abundant, Angular Float  Dark greenish-grey to brownish-grey cherty material (vaguely clastic) with 10% very fine-grained crystals of pale green mica? (sericite?); probably porphyroblasts. 3-4% very fine-grained disseminated Po. Weakly magnetic.	<u>40</u>	0.2	5	76	





<u>Sample No</u>	<u>Description</u>	<u>Au</u> ppb	<u>Ag</u> ppm	<u>As</u> ppm	<u>Cu</u> ppm	<u>Other</u> ppm
4678	Location: 'A' Grid, (1+75S,B.L.0+00) on B6K Road, Cow 10 claim Rock Type: Cherty Breccia (Lapilli?) Occurrence Type, Size: Abundant Float  Dark Grey to pinkish-brown cherty groundmass with 5 - 15% chloritic masses and ~5% disseminated fine grained Py. Trace Po. Dark brown rounded cherty clasts to 2 cm with vague porphyritic texture. Could be lapilli.	5	<0.2	<5	<u>305</u>	
4679	Location: New 'A' Grid, (B.L.,2+20N), on B6K Road, Cow 10 claim Rock Type: Siliceous Siltstone Occurrence Type, Size: Outcrop.  Dark greenish-grey fine grained siliceous siltstone to fine grained sandstone. Some vague sand sized particles in a very fine grained siliceous groundmass with 2-3% fine grained disseminated Py.	5	<0.2	<5	137	<u>290</u> Ba
4680	Location: 'A' Grid, (9+09N,0+10W), on B6K Road, Cow 10 claim Rock Type: Tuff Occurrence Type, Size: Outcrop  Dark greenish grey chloritic siliceous groundmass with ~20% vague, light coloured subrounded feldspar crystal fragments to 0.5 mm. Vague dark clasts may be lithic fragments. Up to 5% disseminated Po and minor fracture filling pyrite.	<u>40</u>	<0.2	<5	128	<u>540</u> Ba



<u>Sample No</u>	<u>Description</u>	<u>Au</u> ppb	<u>Ag</u> ppm	<u>As</u> ppm	<u>Cu</u> ppm	<u>Other</u> ppm
4681	Location: 'A' Grid, (B.L.,10+75N), on B6K Road, Cow 10 claim Rock Type: Lapillistone Occurrence Type, Size: Float  Dark bluish grey very fine grained siliceous groundmass containing ~50%(+) porphyritic lithic fragments with poorly defined clast boundaries. Some feldspar crystal fragments in groundmass. 3-4% fine grained disseminated and fracture filling pyrite.	5	< 0.2	< 5	<u>283</u>	<u>260</u> Ba
4682	Location: 'A' Grid, (11+40N,0+05W), on B6K Road, Cow 10 claim Rock Type: Chert Breccia Occurrence Type, Size: Outcrop  Light grey cherty groundmass containing 2-3% disseminated pyrite and subangular to subrounded chert fragments to 0.5 cm (~50% of rock).	5	0.2	5	59	
4683	Location: 'A' Grid, (11+83N,0+10S) on B6K Road, Cow 10 claim Rock Type: Siliceous Siltstone to Argillite Occurrence Type, Size: Float 1m  Transitional rock between siliceous siltstone and argillite. Bedding and foliation at ~30 to each other.	5	0.2	10	73	



<u>Sample No</u>	<u>Description</u>	<u>Au</u> ppb	<u>Ag</u> ppm	<u>As</u> ppm	<u>Cu</u> ppm	<u>Other</u> ppm
4684	Location: 'A' Grid, (13+25N,B.L.) on B6K Road, Cow 10 claim Rock Type: Fault Gouge  Occurrence Type, Size: Outcrop, 20 cm wide fault zone.  Chip sample across a 20cm limonitic shear zone hosted in greenish grey siliceous siltstone. Shear at 104/90. Shear contains lenses of barren quartz up to 10 cm x 50 cm x ?. Shear developed along a feldspar porphyry dyke contact.	5	<0.2	5	199	<u>280</u> Ba <u>9010</u> Mn <u>162</u> Zn
4685	Location: 'A' Grid, (22+30N,3+45W), Cow 11 claim Rock Type: Siltstone Occurrence Type, Size: Outcrop, 1 cm shear in several metre outcrop.  Very fine grained moderately soft dark brown siltstone with trace disseminated Py. Rock cut by 1 cm gossanous shear with 10% Py.	5	0.2	5	133	<u>400</u> Ba
4686	Location: 'A' Grid, (22+20N,3+50W), Cow 11 claim Rock Type: Diabase Occurrence Type, Size: Outcrop, Less than 1 m exposed.  Dark green soft to moderately siliceous, fine grained chloritic, altered diabase. Taken across road from sample 811 with high vanadium. 10% very fine grained black metallic; probably ilmenite. Non-magnetic.	<u>100</u>	<0.2	5	190	<u>354</u> V



<u>Sample No</u>	<u>Description</u>	<u>Au</u> ppb	<u>Ag</u> ppm	<u>As</u> ppm	<u>Cu</u> ppm	<u>Other</u> ppm
4687	Location: 'A' Grid, (21+87N,3+85W), Cow 11 claim Rock Type: Siliceous Siltstone Occurrence Type, Size: Outcrop.  Siliceous siltstone to argillite. Weakly brecciated with carbonate filling and a trace of pyrrhotite.	5	< 0.2	< 5	92	
4688	Location: 'A' Grid, (23+75N,B.L.), on B6 Road, Cow 11 claim Rock Type: Conglomerate (Lapilli?) Occurrence Type, Size: Outcrop.  Dark greenish grey to brownish grey fine grained crystalline chloritic siliceous groundmass with 3-5% fine grained disseminated Py. Dark brown rounded clasts to 1 cm are very fine grained and could be siltstone or volcanic (Lapilli?).	5	< 0.2	< 5	147	610 Ba
4689	Location: 'A' Grid, (21+70N,4+02W), Cow 11 claim Rock Type: Diabase, Gabbro Occurrence Type, Size: Outcrop. Several metre wide dyke.  Fine grained equigranular intrusive with CI 25. Mafics altered to chlorite. Sample taken ~12 m from 1306 to see if elevated gold and vanadium values are related to basic dykes.	5	< 0.2	< 5	76	
4690	Location: 'A' Grid, (21+70N,4+02W), Cow 11 claim Rock Type: Diorite (?) Gabbro (?) Occurrence Type, Size: Float Probably from large dyke 30 m x 100's m.  Dark green equigranular medium grained diorite or gabbro cut by quartz stringers	5	< 0.2	< 5	149	



<u>Sample No</u>	<u>Description</u>	<u>Au</u> ppb	<u>Ag</u> ppm	<u>As</u> ppm	<u>Cu</u> ppm	<u>Other</u> ppm
4691	Location: 'A' Grid, (24+25N,4+37W), Cow 11 claim Rock Type: Foliated Diorite (?) Gabbro (?) Occurrence Type, Size: Outcrop  Dark green foliated gabbroic dyke similar to sample 0811. Rock appears to be mostly chlorite, with <1% Py streaked out parallel to foliation.	20	< 0.2	10	158	
4692	Location: 'A' Grid, (14+48N,1+95W), Cow 10 claim Rock Type: Siliceous Siltstone Occurrence Type, Size: Outcrop, 10cm bed  Medium grey silicious siltstone with 2% disseminated pyrite.	5	<0.2	5	98	
4693	Location: 'A' Grid, (13+55N, 2+08W), Cow 10 claim Rock Type: Cherty Siltstone Occurrence Type, Size: Float  Thinly laminated blue-gray cherty sediment (tuff?) with 3-5% Py disseminated along <1mm dark bands.	5	<0.2	<5	92	
4694	Location: New 'A' Grid, (0+15S, 2+90E), Cow 10 claim Rock Type: Sandstone (Tuff?) Occurrence Type, Size: Float, 20cm diameter boulder  Very fine grained, cherty, greyish-brown groundmass with vague light colored grains to 1mm. Could be a siliceous crystal tuff. 5% very fine grained disseminated Po.	5	< 0.2	<5	93	



<u>Sample No</u>	<u>Description</u>	<u>Au</u> ppb	<u>Ag</u> ppm	<u>As</u> ppm	<u>Cu</u> ppm	<u>Other</u> ppm
4695	<p>Location: New 'A' Grid, (0+78N, 3+48E), Cow 10 claim</p> <p>Rock Type: Rhodonite</p> <p>Occurrence Type, Size: Float, 10cm diameter angular boulder.</p> <p>Mottled and thinly laminated very fine grained, greyish brown cherty layers and pink rhodonite layers. Black manganese oxide developed along fractures and on weathered surfaces.</p>	5	0.2	5	4	<u>102</u> Zn <u>&gt;9999</u> Mn
4696	<p>Location: Old 'A' Grid, (0+10N, 5+50W), Cow 10 claim</p> <p>Rock Type: Siliceous Siltstone</p> <p>Occurrence Type, Size: Outcrop</p> <p>Medium bluish grey siliceous siltstone with 4% fine grained disseminated and fracture filling pyrite. Some rounded dark grey masses to 2mm may be chiastolite porphyroblasts.</p>	<u>40</u>	0.2	<5	39	<u>124</u> Zn <u>1040</u> Ba
4697	<p>Location: Old 'A' Grid, (0+10N, 5+60W),</p> <p>Rock Type: Cherty Silstone (Tuff?)</p> <p>Occurrence Type, Size: Float</p> <p>Highly fractured medium greenish-gray cherty siltstone, with 5% vague, very fine grained light colored clasts (?) and 3% fracture filling Py. Could be a tuff.</p>	5	0.2	5	126	<u>560</u> Ba <u>2026</u> Mn
14843	<p>Location: 'A' Grid, (14+00N, 1+00E)</p> <p>Rock Type: Sheared Siliceous Siltstone or Cherty Sediment</p> <p>Occurrence Type, Size: Float, subangular boulder 40cm in diameter</p> <p>Very fine grained siliceous to cherty sediment with earthy red hematite developed on shear surfaces and in zones of brecciation up to 1 cm wide. Follow up to 840 PPB Au in soil.</p>	<u>1200</u> (0.042 oz/T Au) (1.44 g/t Au)	0.2	5	86	<u>200</u> Ba <u>104</u> Zn



<u>Sample No</u>	<u>Description</u>	<u>Au</u> ppb	<u>Ag</u> ppm	<u>As</u> ppm	<u>Cu</u> ppm	<u>Other</u> ppm
14844	Location: 'A' Grid, (14+00N, 1+00E), Cow 10 claim Rock Type: Sheared Limonitic Cherty Sediment Occurrence Type, Size: Float  Grab of 2 cm limonitic shear zone in a boulder of cherty sediment or siliceous siltstone. Earthy limonite along shears with veinlets of goethite. 1 m uphill from original soil sample site 14+00N, 1+00E.	<u>100</u>	0.2	5	28	<u>202 Zn</u>
14845	Location: 'A' Grid, (14+00N, 1+00E), Cow 10 claim Rock Type: Cherty Sediment Occurrence Type, Size: Outcrop, Large  Grab of outcrop at bottom of 0.5 m deep hole, 1 m uphill from original anomalous sample site (840 ppb Au). Rather dull looking very fine-grained cherty sediment. No mineralization.	5	0.2	5	33	
14847	Location: 'A' Grid, (11+50N, B.L.), on B6 Road Rock Type: Brecciated Cherty Sediment Occurrence Type, Size: Float  Appears to be a silicified, cherty fine- grained sediment with 5% dark grey fine- grained metallic mineral. Limonite has developed along fracture surfaces and is probably an alteration of the metallics (?).	<u>420</u> (0.013 oz/T Au)	0.2 g/t Au)	10	54	<u>260 Ba</u>



<u>Sample No</u>	<u>Description</u>	<u>Au</u> ppb	<u>Ag</u> ppm	<u>As</u> ppm	<u>Cu</u> ppm	<u>Other</u> ppm
14848	Location: Old 'A' Grid, (4+00N, 5+85E), Cow 10 claim Rock Type: Jasper-bearing Cherty Sediment Occurrence Type, Size: Outcrop, 2 m thick  Dark grey to light grey to jasperoidal hematitic red, extremely siliceous moderately magnetic cherty sediment. The outcrop has been cut by a 5 cm(+) carb filled breccia as well as irregular quartz stringers. Pyrite occurs as m-cg disseminated cubes up to 1 mm. Resample of 1620 (300 ppb Au).	5	0.1	6	11	
14849	Location: Old 'A' Grid, (4+00N, 5+85E), Cow 10 claim Rock Type: Vein-Breccia Occurrence Type, Size: Outcrop, 5 cm wide vein - breccia  5 cm calcite filled breccia of jasperoid chert (14848). Breccia fragments to 1 cm.	5	0.1	10	22	





APPENDIX III  
CERTIFICATES OF ANALYSIS AND ASSAY



A list of all samples sent for analysis is included with the certificates of analysis and assay. All certificates (Au geochemistry, ICP, Au assay etc.) for a particular sample series have been kept together and arranged in numerical order using the certificate number of the Au geochemistry analyses.

LAB: Roszbacher

ANALYTICAL REQUESTS & RECEIPT

SAMPLE SERIES	SOURCE	# SACS	SAMPLE TYPE	DATE OUT	ANALYTIC REQUEST	AJ GEOCHEMISTRY		ICP		ASSAYS		RECHECKS	
						DATE	CERT# INV#	DATE	CERT# INV#	DATE	CERT# INV#	DATE	CERT# INV#
L4+00N 9+25W-11+00W	Grid A AREA	8	Soil	Sept 22/86		Oct 3/86	86485	Oct 17/86	A8618956				
L3+00N 7+00W-11+00W	"	9	Soil	"		"	"	"	"				
S1TN-54TN	"	4	Silt	"		"	"	"	"				
1305, 1306	"	2	Rock	"		"	"	"	"				
723, 724	"	2	Rock	"		"	"	"	"				
1961-1966	"	6	Rock	"		"	"	"	"				
L13+00N 0+25W-10+00W	Grid B	40	Soil	Oct 5/86		Sept. 17/86	86555	Oct. 22/86	A8619651			13N, 1W Dec 12/86	86712
L14+00N 0+50W-14+00W	"	54	"	"		Sept. 17/86	86555	Oct. 22/86	A8619651				
L15+00N 1+00W-13+00W	"	49	"	"		Sept. 17/86	86555	Oct. 22/86	A8619651				
L17+00N 3+00W-12+00W	"	37	"	"		Sept. 17/86	86555	Oct. 22/86	A8619651				
3413, 3414	"	2	Rock	"		Sept. 17/86	86555	Oct. 22/86	A8619651				
L4651-4657	B. GRID	7	Rock	Oct 6/86		Sept. 17/86	86555	Oct. 22/86	A8619651	WRA 4652-4655 Oct 20/86 86551.A			
L4+00S 0+00-6+50E	GRID A	27	Soil	Oct 10/86		Oct. 22/86	86569	Nov. 6/86	A8619953				
L3+00S 0+00-5+50E	"	23	"	"		Oct. 22/86	86569	Nov. 6/86	A8619953				
L2+00S 0+00-4+50E	"	19	"	"		Oct. 22/86	86569	Nov. 6/86	A8619953				
L0+00 0+00-5+50E	"	23	"	"		FEB 12/87	86569.A	Nov. 5/86	A8620024				
L1+00S 0+00-5+00E	"	21	"	"		Oct. 22/86	86569	Nov. 6/86	A8619953				
L9+00N 0+00-11+00E	"	45	"	"		Oct. 22/86	86569	Nov. 5/86	A8620024				
L8+00N 0+00-10+50E	"	45	"	"		Oct. 22/86	86569	NOV. 6/86	A8619953				
L1+00N 0+00-6+50E	"	27	"	"		Oct. 22/86	86569	Nov. 6/86	A8619953			140W 025E Dec 12/87	86712
L14+00N 0+00-7+50E	GRID A	31	Soil	Oct 13/86		Oct. 22/86	86569	Nov. 5/86	A8620024			14N, 1E	"
L15+00N 0+25W-7+00E	"	26	"	"					NOT ANALYSED				
L13+00N 0+00-9+00E	"	37	"	"					NOT ANALYSED				
L12+00N 0+00-10+00E	"	41	"	"		Oct. 22/86	86569	Nov. 5/86	A8620024				
L11+00N 0+00-11+00E	"	45	"	"					NOT ANALYSED				
L16+00N 1+50W-6+00E	"	31	"	"		Oct. 22/86	86569	Nov. 5/86	A8620024	150W-225E			

LAB: Rossbacher

ANALYTICAL REQUESTS & RECEIPT

SAMPLE SERIES	SOURCE	# SALS	SAMPLE TYPE	DATE OUT	ANALYTIC REQUEST	AU		ICP		ASSAYS		RECHECKS	
						DATE	CERT# INV#	DATE	CERT# INV#	DATE	CERT# INV#	DATE	CERT# INV#
L17+00N 1+75W - 7+50E	A GRID	38	Soil	Oct 13/86			NOT ANALYSED						
L10+00N 2+75E - 1+00E	"	34	"	"		Oct. 22/86 86569		2+75E - 7+00E Nov. 5/86 A8620024					
L22+00N 3+25W - 4+50W	CHEM A GRID	6	"	Oct 17/86		Nov. 5/86 86605		Nov. 25/86 A8620591					
L23+00N 3+25W - 4+50W	"	6	"	"			NOT ANALYSED						
L24+00N 3+50W - 4+50W	"	5	"	"		Nov. 5/86 86605		Nov. 25/86 A8620591			2AN, 4+50W DEC 12	86712	
L25+00N 3+25W - 6+50W	"	14	"	"			NOT ANALYSED						
G.A. silt 1-4	"	4	Silt	"		Nov. 5/86 86605		Nov. 25/86 A8620591					
G.A. Soil #1	"	1	Soil	"		Nov. 5/86 86605		Nov. 25/86 A8620591					
3901 - 3917	"	17	Rock	"		Oct. 26/86 86597		Nov. 17/86 A8620322					
4672 - 4697	"	26	"	"		4672 - 4697 Oct. 26/86 86597		4672 - 4697 Nov. 17/86 A8620322					
L11+00N 0+25W - 6+00W	"	24	Soil	"			NOT ANALYSED						
L12+00N 0+25W - 5+25W	"	21	"	"		Nov. 5/86 86605		Nov. 25/86 A8620591					
L13+00N 0+25W - 5+25W	"	21	"	"			NOT ANALYSED						
L14+00N 0+25W - 4+75W	"	19	"	"		Nov. 5/86 86605		Nov. 25/86 A8620591					
L15+00N 0+75W - 4+50W	"	16	"	"			NOT ANALYSED						
L16+00N 1+50W - 4+50W	"	13	"	"		Nov. 5/86 86605		Nov. 25/86 A8620591					
L17+00N 1+75W - 5+00W	"	14	"	"			NOT ANALYSED						
L18+00N 0+00 - 6+00W	"	24	"	"		Nov. 5/86 86605		Nov. 25/86 A8620591					
L18+00N 0+25E - 3+75E	"	15	"	"		Nov. 5/86 86605		Nov. 25/86 A8620591					
L18+00N 4+25E - 0+00E	"	16	"	"		Nov. 5/86 86605		Nov. 25/86 A8620591					
L6+00N 0+00 - 2+75W	"	12	"	"				Nov. 25/86 A8620591					
L7+00N 0+00 - 3+25W	"	14	"	"		Nov. 5/86 86605		Nov. 25/86 A8620591					
L8+00N 0+00 - 3+50W	"	15	"	"		Nov. 5/86 86605		Nov. 25/86 A8620591					
L9+00N 0+25W - 3+25W	"	13	"	"		Nov. 5/86 86605		Nov. 25/86 A8620591					
L10+00N 0+00 - 5+00W	"	21	"	"		Nov. 5/86 86605		Nov. 25/86 A8620591					
L10+00N 0+25E - 2+50E	"	10	"	"		Nov. 5/86 86605		Nov. 25/86 A8620591					

LAB: Lossbacher

## ANALYTICAL REQUESTS &amp; RECEIPT

No. 34

SAMPLE SERIES	SOURCE	# SALS	SAMPLE TYPE	DATE OUT	ANALYTIC REQUEST	AU		ICP		ASSAYS		RECHECKS	
						DATE	CERT# INV#	DATE	CERT# INV#	DATE	CERT# INV#	DATE	CERT# INV#
L19+00N B+00E - S+00W	A GRID	53	SOIL	Oct 17/86			NOT	ANALYSED					
L20+00N B+00E - S+00W		53	"	"		NOV.5/86	86605	NOV 25/86	A8620591			20N, 250E DEC. 12	86712
L21+00N Z+75W - 4+50W		8	"	"			NOT	ANALYSED					
L14+00N 1+00E - a, b, c		3	"	NOV 10/86		NOV. 21/86	86665					a, b DEC. 12	86712
14+00N, 1+00E d, g	A GRID	4	SOIL	DEC. 6		DEC. 17/86	86716	JAN. 7/87	I-8622241			JAN. 6/87	86724C11
1+00S, 0+50E (a)	"	1	"	"		"	"	"	"				
1+00N, 0+25E a, b	"	2	"	"		"	"	JAN. 7/87	I-8622241				
2+00S, 0+75E a	"	1	"	"		"	"	JAN. 7/87	I-8622241				
0+75E, 1+50S	"	1	"	"		"	"	JAN. 7/87	I-8622241				
0+75E 1+25S	"	1	"	"		"	"	"	"				
14943 - 14845	14+00N 1+00E CHEM 'A'	3	ROCK	"		"	"	"	"	14843 JAN 16/87	86747-A		
14847	B.L. 11+50N	1	ROCK	DEC. 18		JAN 02/87	86747	JAN 20/87	I-8710120	JAN 16/87	86747-A		
15061 - 15100	DDH CH 87-1	40	CORE	JAN 25/87		FEB 2/87	87025	FEB 3/87	87025			AVER- MAR. 20	RUNS 87025
15151 - 15168	"	18	"	"		"	"	"	"	RE SAMPLES: 15151, 52 MAR 29	87137	"	"
14848	4+00N CHEM 2+05 E GRID	1	ROCK	"		"	"	"	"			"	"
14849	"	1	"	JAN 30/87		FEB 4/87	87036	FEB 9/87	87036				
15169 - 15189	DDH CH 87-2	21	CORE	"		"	"	"	"				



**ROSSBACHER LABORATORY LTD.**

2225 S. SPRINGER AVENUE  
BURNABY, B.C. V5B 3N1  
TEL : (604) 299 - 6910

**CERTIFICATE OF ANALYSIS**

TO : MPH CONSULTING LTD.  
301-409 GRANVILLE STREET  
VANCOUVER B.C.  
PROJECT: V 239  
TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 86462  
INVOICE#: 6806  
DATE ENTERED: 86.09.25  
FILE NAME: MPH86462  
PAGE # : 1

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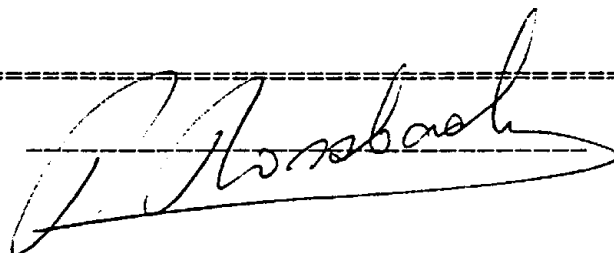
PRE FIX	SAMPLE NAME	PPB Au
A	0811	190
A	812	5
A	813	20
A	814	5
A	815	5
A	816	5

---

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CERTIFIED BY :



Ino # 6841



# Chemex Labs Ltd.

-Analytical Chemists    -Geochemists    -Registered Assayers

212 Brooksbank Ave.  
North Vancouver, B.C.  
Canada    V7J 2C1

Phone: (604) 984-0221  
Telex: 043-52597

## CERTIFICATE OF ANALYSIS

TO : ROSSBACHER LABORATORY LIMITED  
2325 SOUTH SPRINGER AVENUE  
BURNABY, B.C.  
V5B 3N1

CERT. # : A8618715-001-A  
INVOICE # : I8618715  
DATE : 3-OCT-86  
P.O. # : NONE  
V-339

### Semi quantitative multi element ICP analysis

Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sb, Ba, Be, Ca, Cr, Ga, La, Mg, K, Na, Sr, Tl, Ti, W and V can only be considered as semi-quantitative.

### COMMENTS :

Sample description	Al Z	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca Z	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe Z	Ga ppm	K Z	La ppm	Hg Z	Mn ppm	Mo ppm	Na Z	Ni ppm	P ppm	Pb ppm	Sb ppm	Sr ppm	Ti Z	Tl ppm	U ppm	V ppm	W ppm	Zn ppm		
0811	0.26	0.6	<5	30	<0.5	<2	0.60	<0.5	36	37	1520	10.17	30	<0.01	<10	0.09	95	<1	0.01	18	290	2	<5	<1	0.35	<10	<10	569	<5	42	--	--
0812	1.12	0.2	10	70	<0.5	<2	0.45	<0.5	15	81	81	4.22	10	0.14	<10	0.29	353	12	0.03	10	950	10	<5	22	0.07	<10	<10	29	<5	38	--	--
0813	0.94	0.2	10	80	<0.5	<2	0.42	<0.5	24	51	45	5.02	<10	0.19	<10	0.23	229	32	0.03	5	1330	10	<5	18	0.08	<10	<10	22	<5	14	--	--
0814	2.41	0.2	10	900	<0.5	<2	0.96	<0.5	13	76	95	4.69	10	1.56	10	1.17	1159	<1	0.04	11	660	6	<5	13	0.34	<10	<10	182	<5	84	--	--
0815	2.78	0.2	10	110	<0.5	<2	1.46	<0.5	22	241	68	3.22	10	0.25	<10	2.11	911	<1	0.17	78	930	8	<5	57	0.16	<10	<10	91	<5	48	--	--
0816	2.11	0.2	25	380	<0.5	<2	0.42	<0.5	62	100	211	4.87	10	0.14	<10	0.90	580	9	0.07	33	200	6	<5	28	0.05	<10	<10	129	<5	78	--	--

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Certified by ... *H. A. Bichler* ...



**ROSSBACHER LABORATORY LTD.**

2225 S. SPRINGER AVENUE  
 BURNABY, B.C. V5B 3N1  
 TEL : (604) 299 - 6910

**CERTIFICATE OF ANALYSIS**

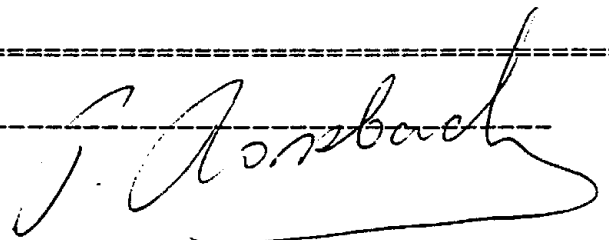
TO : MPH CONSULTING LTD.  
 301-409 GRANVILLE STREET  
 VANCOUVER B.C.  
 PROJECT: V 239  
 TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 86485  
 INVOICE#: 6828  
 DATE ENTERED: 86-10-03  
 FILE NAME: MPH86485  
 PAGE # : 1

PRE FIX	SAMPLE NAME	PPB Au
S	L 4N 925W	5
S	950W	5
S	975W	5
S	1000W	5
S	1025W	5
S	1050W	5
S	1075W	5
S	1100W	5
S	L 3N 900W	5
S	925W	5
S	950W	5
S	975W	5
S	1000W	5
S	1025W	5
S	1050W	5
S	1075W	5
S	1100W	5
S	S1 TN	5
S	S2 TN	5
S	S3 TN	5
S	S4 TN	5
A	1305	50
A	1306	230
A	723	5
A	724	5
A	1961	5
A	1962	50
A	1963	5
A	1964	10
A	1965	50
A	1966	60

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# Chemex Labs Ltd.

•Analytical Chemists •Geochemists •Registered Assayers

212 Brooksbank Ave.  
North Vancouver, B.C.  
Canada V7J2C1

Phone: (604) 984-0221  
Telex: 043-52597

## CERTIFICATE OF ANALYSIS

TO : ROSSBACHER LABORATORY LIMITED

2225 SOUTH SPRINGER AVENUE  
BURNABY, B.C.  
V5B 3N1

CERT. # : A8618956-001-A  
INVOICE # : I8618956  
DATE : 17-OCT-86  
P.O. # : NONE  
V239

Semi quantitative multi element ICP analysis

Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sb, Ba, Be, Ca, Cr, Ga, La, Mg, K, Na, Sr, Ti, Tl, W and V can only be considered as semi-quantitative.

COMMENTS :

Sample description	Al Z	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca Z	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe Z	Ga ppm	K Z	La ppm	Mg Z	Mn ppm	Mo ppm	Na Z	Ni ppm	P ppm	Pb ppm	Sb ppm	Sr ppm	Ti Z	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
LO4N 925W	3.84	0.2	10	70	<0.5	<2	0.07	<0.5	7	24	51	4.34	<10	0.03	<10	0.48	377	<1	<0.01	11	820	14	<5	4	0.16	<10	<10	98	<5	56
LO4N 950W	4.22	<0.2	15	70	<0.5	<2	0.09	<0.5	8	27	66	4.73	<10	0.03	<10	0.55	355	<1	<0.01	12	710	40	<5	5	0.18	<10	<10	113	<5	62
LO4N 975W	2.31	<0.2	<5	50	<0.5	<2	0.09	<0.5	4	17	28	3.40	<10	0.02	<10	0.19	280	<1	<0.01	6	1340	14	<5	5	0.14	<10	<10	91	<5	40
LO4N 1000W	2.88	<0.2	5	50	<0.5	<2	0.09	<0.5	7	22	51	4.05	<10	0.02	<10	0.35	301	<1	<0.01	11	830	18	<5	4	0.18	<10	<10	119	<5	52
LO4N 1025W	4.43	0.2	5	70	<0.5	<2	0.08	<0.5	9	32	69	4.87	<10	0.03	<10	0.49	413	<1	<0.01	16	1140	10	<5	5	0.12	<10	<10	101	<5	84
LO4N 1050W	5.64	<0.2	5	100	<0.5	<2	0.15	<0.5	13	45	81	4.89	<10	0.05	<10	0.82	988	<1	0.01	23	1560	10	<5	7	0.21	<10	<10	119	<5	86
LO4N 1075W	3.58	<0.2	5	50	<0.5	<2	0.11	<0.5	7	36	48	4.43	<10	0.04	<10	0.51	459	<1	<0.01	13	1480	12	<5	5	0.19	<10	<10	115	<5	50
LO4N 1100W	4.51	<0.2	5	50	<0.5	<2	0.10	<0.5	8	35	51	5.03	<10	0.03	<10	0.49	518	<1	<0.01	14	1270	10	<5	5	0.19	<10	<10	114	<5	70
LO3N 900W	3.77	<0.2	5	90	<0.5	<2	0.06	<0.5	9	21	70	4.09	<10	0.04	<10	0.47	523	<1	<0.01	12	720	8	<5	4	0.15	<10	<10	97	<5	66
LO3N 925W	2.84	<0.2	5	50	<0.5	<2	0.07	<0.5	4	23	46	4.05	<10	0.02	<10	0.29	296	<1	<0.01	7	690	6	<5	4	0.13	<10	<10	99	<5	50
LO3N 950W	3.37	0.2	5	80	<0.5	<2	0.10	<0.5	7	24	63	4.10	<10	0.05	<10	0.57	348	<1	<0.01	11	660	10	<5	5	0.16	<10	<10	96	<5	58
LO3N 975W	3.57	<0.2	5	70	<0.5	<2	0.11	<0.5	8	28	67	5.10	<10	0.04	<10	0.52	426	<1	<0.01	13	1260	10	<5	6	0.17	<10	<10	115	<5	64
LO3N 1000W	2.90	<0.2	5	50	<0.5	<2	0.09	<0.5	6	24	43	3.81	<10	0.02	<10	0.27	329	<1	<0.01	9	1050	2	<5	4	0.14	<10	<10	93	<5	52
LO3N 1025W	4.08	<0.2	5	80	<0.5	<2	0.15	<0.5	11	34	69	4.27	<10	0.05	<10	0.76	489	<1	<0.01	20	920	6	<5	7	0.20	<10	<10	108	<5	78
LO3N 1050W	3.89	<0.2	10	60	<0.5	<2	0.14	<0.5	11	36	58	3.89	<10	0.05	<10	0.73	485	<1	<0.01	17	1140	2	<5	7	0.24	<10	<10	101	<5	64
LO3N 1075W	2.26	<0.2	5	70	<0.5	<2	0.16	<0.5	5	21	35	2.76	<10	0.02	<10	0.30	583	<1	<0.01	10	980	22	<5	10	0.12	<10	<10	69	<5	46
LO3N 1100W	2.98	<0.2	5	70	<0.5	<2	0.10	<0.5	7	29	47	4.47	<10	0.03	<10	0.43	769	<1	<0.01	13	1150	12	<5	6	0.13	<10	<10	94	<5	60
S1 IN	3.31	0.2	10	290	<0.5	<2	0.86	<0.5	21	318	77	4.52	<10	0.15	10	0.96	932	<1	0.02	42	700	32	<5	47	0.14	<10	<10	107	<5	114
S2 IN	1.94	0.2	10	100	<0.5	2	1.07	<0.5	14	116	38	2.96	<10	0.06	10	0.53	1020	1	0.01	25	540	20	<5	31	0.06	<10	<10	76	<5	78
S3 IN	1.92	0.2	5	90	<0.5	<2	1.55	1.5	11	77	42	2.46	<10	0.05	10	0.49	1000	1	0.01	16	610	106	<5	56	0.07	<10	<10	67	<5	160
S4 IN	3.15	0.2	35	200	<0.5	2	0.77	<0.5	19	147	46	4.30	<10	0.12	10	0.80	1140	<1	0.02	34	520	28	<5	51	0.10	<10	<10	101	<5	100

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Certified by

*Hart Bickler*



# Chemex Labs Ltd.

Analytical Chemists • Geochemists • Registered Assayers

212 Brooksbank Ave.  
North Vancouver, B.C.  
Canada V7J 2C1

Phone: (604) 984-0221  
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## CERTIFICATE OF ANALYSIS

TO : ROSSBACHER LABORATORY LIMITED  
3225 SOUTH SPRINGER AVENUE  
BURNABY, B.C.  
V5B 3N1

CERT. # : A8619455-001-A  
INVOICE # : I8619455  
DATE : 23-OCT-86  
P.O. # : NONE  
V 239

Semi quantitative multi element ICP analysis

Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sb, Ba, Be, Ca, Cr, Ga, La, Mg, K, Na, Sr, Tl, Ti, W and V can only be considered as semi-quantitative.

COMMENTS :  
ATTN: P. ROSSBACHER

Sample description	Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm		
1305	1.07	0.6	10	60	<0.5	<2	0.34	<0.5	9	62	275	4.45	<10	0.02	20	0.26	555	2	0.05	1	300	10	<5	32	0.12	<10	<10	6	<5	76	--	--
1306	2.55	0.8	210	70	<0.5	<2	1.21	1.5	18	43	200	5.26	<10	0.04	10	0.65	705	15	0.02	8	680	18	<5	17	0.21	<10	<10	103	<5	198	--	--
723	2.48	0.4	10	320	<0.5	<2	1.52	<0.5	15	53	68	3.69	<10	0.76	10	0.92	816	<1	0.18	7	1170	18	<5	58	0.29	<10	<10	94	<5	126	--	--
724	1.43	0.4	<5	200	<0.5	<2	0.30	<0.5	8	109	45	2.60	<10	0.37	<10	0.86	878	<1	0.02	9	400	2	<5	7	0.12	<10	<10	55	<5	54	--	--
1961	2.16	0.2	<5	80	<0.5	<2	1.59	<0.5	14	62	92	3.19	10	0.10	20	0.94	717	<1	0.08	6	920	6	<5	18	0.11	<10	<10	61	<5	60	--	--
1962	0.27	0.2	5	20	<0.5	<2	3.95	<0.5	17	37	128	1.13	20	<0.01	<10	0.05	>9999	1	<0.01	36	490	8	<5	37	0.02	<10	<10	<1	<5	36	--	--
1963	0.16	0.2	10	30	<0.5	4	6.31	<0.5	18	17	199	1.30	20	<0.01	<10	0.07	>9999	1	<0.01	39	600	10	<5	27	0.01	<10	10	<1	<5	34	--	--
1964	0.87	0.2	<5	10	<0.5	<2	0.30	<0.5	10	138	316	4.67	<10	0.05	10	0.31	6011	<1	<0.01	16	350	6	<5	1	0.09	<10	<10	61	<5	32	--	--
1965	2.45	0.4	<5	10	<0.5	<2	2.52	0.5	45	13	1255	3.95	10	0.05	<10	1.00	1066	<1	0.10	34	1070	4	<5	9	0.29	<10	<10	227	<5	62	--	--
1966	0.66	0.6	<5	40	<0.5	<2	1.20	<0.5	21	17	77	6.57	10	0.05	10	0.50	350	<1	0.09	8	770	6	<5	<1	0.44	<10	<10	607	<5	50	--	--

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*Hart Bickler*

ROSSBACHER LABORATORY LTD.

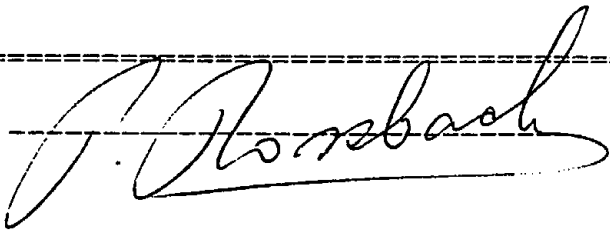
2225 S. SPRINGER AVENUE  
 BURNABY, B.C. V5B 3N1  
 TEL : (604) 299 - 6910

CERTIFICATE OF ANALYSIS

TO : MPH CONSULTING LTD.  
 301-409 GRANVILLE STREET  
 VANCOUVER B.C.  
 PROJECT: V 239 - GRID B  
 TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 86555  
 INVOICE#: 7040  
 DATE ENTERED: 86-09-17  
 FILE NAME: MPH86555  
 PAGE # : 1

PRE FIX	SAMPLE NAME	PPB Au
S	L 13N 0+25W	5
S	0+50W	5
S	0+75W	5
S	1+00W	240
S	1+25W	5
S	1+50W	5
S	1+75W	5
S	2+00W	5
S	2+25W	5
S	2+50W	5
S	2+75W	10
S	3+00W	5
S	3+25W	5
S	3+50W	5
S	3+75W	5
S	4+00W	5
S	4+25W	5
S	4+50W	5
S	4+75W	5
S	L 13N 5+00W	5
S	5+25W	5
S	5+50W	5
S	5+75W	5
S	6+00W	5
S	6+25W	5
S	6+50W	5
S	6+75W	5
S	7+00W	5
S	7+25W	5
S	7+50W	5
S	7+75W	5
S	8+00W	5
S	8+25W	5
S	8+50W	5
S	8+75W	5
S	9+00W	5
S	9+25W	5
S	9+50W	5
S	9+75W	5
S	L 13N 10+00W	5

CERTIFIED BY : 

**ROSSBACHER LABORATORY LTD.**

**CERTIFICATE OF ANALYSIS**

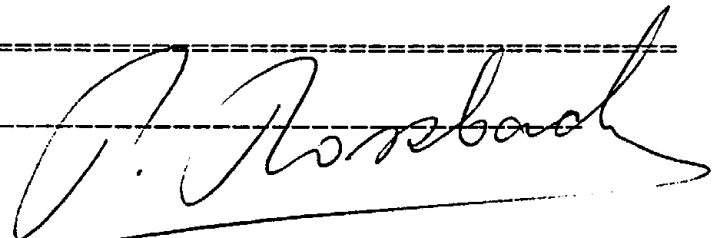
2225 S. SPRINGER AVENUE  
 BURNABY, B.C. V5B 3N1  
 TEL : (604) 299 - 6910

TO : MPH CONSULTING LTD.  
 301-409 GRANVILLE STREET  
 VANCOUVER B.C.  
 PROJECT: V 239 - GRID B  
 TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 86555  
 INVOICE#: 7040  
 DATE ENTERED: 86-09-17  
 FILE NAME: MPH86555  
 PAGE # : 2

PRE FIX	SAMPLE NAME	PPB Au
S	L 14N 0+50W	5
S	0+75W	5
	1+00W	5
	1+25W	5
S	1+50W	5
	1+75W	5
	2+00W	5
S	2+25W	5
	2+50W	5
	2+75W	5
S	3+00W	5
S	3+25W	5
	3+50W	5
	3+75W	5
S	4+00W	5
	4+25W	5
	4+50W	5
S	4+75W	5
	5+00W	5
	L 14N 5+25W	5
S	5+50W	5
S	5+75W	5
	6+00W	5
	6+25W	5
S	6+50W	5
	6+75W	5
	7+00W	5
S	7+25W	5
	7+50W	5
	7+75W	5
S	8+00W	5
S	8+25W	5
	8+50W	5
	8+75W	5
S	9+00W	5
	9+25W	5
	9+50W	5
S	9+75W	5
	10+00W	5
	L 14N 10+25W	5

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2225 S. SPRINGER AVENUE  
 BURNABY, B.C. V5B 3N1  
 TEL : (604) 299 - 6910

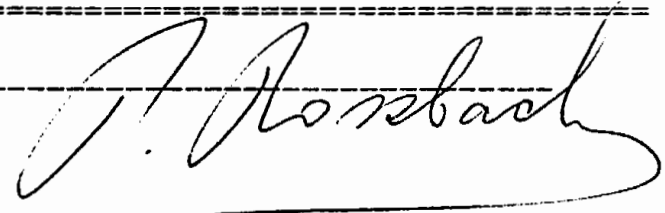
**CERTIFICATE OF ANALYSIS**

TO : MPH CONSULTING LTD.  
 301-409 GRANVILLE STREET  
 VANCOUVER B.C.  
 PROJECT: V 239 - GRID B  
 TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 86555  
 INVOICE#: 7040  
 DATE ENTERED: 86-09-17  
 FILE NAME: MPH86555  
 PAGE # : 3

PRE FI	SAMPLE NAME	PPB Au
S	L 14N 10+50W	5
S	10+75W	5
S	11+00W	5
S	11+25W	5
S	11+50W	5
S	11+75W	40
S	12+00W	5
S	12+25W	5
S	12+50W	5
S	12+75W	5
S	13+00W	5
S	13+25W	5
S	13+50W	5
S	13+75W	5
S	L 14N 14+00W	5
S	L 15N 1+00W	5
S	1+25W	5
S	1+50W	5
S	1+75W	5
S	L 15N 2+00W	5
S	2+25W	5
S	2+50W	5
S	2+75W	5
S	3+00W	5
S	3+25W	5
S	3+50W	5
S	3+75W	5
S	4+00W	5
S	4+25W	5
S	4+50W	5
S	4+75W	5
S	5+00W	5
S	5+25W	5
S	5+50W	5
S	5+75W	5
S	6+00W	5
S	6+25W	5
S	6+50W	5
S	6+75W	5
S	L 15N 7+00W	5

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**ROSSBACHER LABORATORY LTD.**

2225 S. SPRINGER AVENUE  
 BURNABY, B.C. V5B 3N1  
 TEL : (604) 299 - 6910

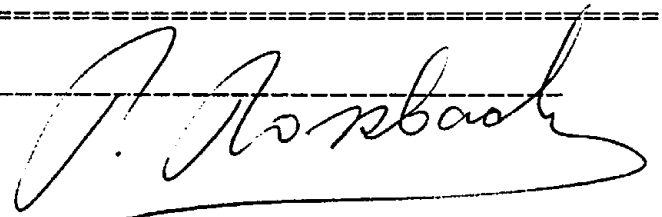
**CERTIFICATE OF ANALYSIS**

TO : MPH CONSULTING LTD.  
 301-409 GRANVILLE STREET  
 VANCOUVER B.C.  
 PROJECT: V 239 - GRID B  
 TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 86555  
 INVOICE#: 7040  
 DATE ENTERED: 86-09-17  
 FILE NAME: MPH86555  
 PAGE # : 4

PRE FIX	SAMPLE NAME	PPB Au
S	L 15N 7+25W	5
S	7+50W	5
S	7+75W	5
C	8+00W	5
S	8+25W	5
S	8+50W	5
S	8+75W	5
S	9+00W	10
S	9+25W	5
S	9+50W	5
S	9+75W	5
S	10+00W	5
S	10+25W	5
C	10+50W	5
S	10+75W	5
S	11+00W	5
S	11+25W	5
S	11+50W	5
S	11+75W	5
S	L 15N 12+00W	5
S	12+25W	5
S	12+50W	5
S	12+75W	5
C	L 15N 13+00W	5
S	L 17N 3+00W	5
S	3+25W	5
S	3+50W	5
S	3+75W	10
S	4+00W	5
S	4+25W	20
S	4+50W	5
S	4+75W	5
S	5+00W	5
S	5+25W	5
S	5+50W	5
S	5+75W	5
S	6+00W	5
S	6+25W	5
S	6+50W	5
S	L 17N 6+75W	5

CERTIFIED BY :



**ROSSBACHER LABORATORY LTD.**

2225 S. SPRINGER AVENUE  
 BURNABY, B.C. V5B 3N1  
 TEL : (604) 299 - 6910

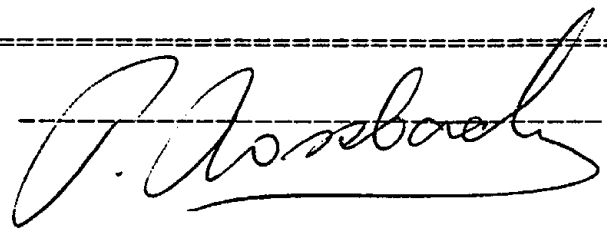
**CERTIFICATE OF ANALYSIS**

TO : MPH CONSULTING LTD.  
 301-409 GRANVILLE STREET  
 VANCOUVER B.C.  
 PROJECT: V 239 - GRID B  
 TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 86555  
 INVOICE#: 7040  
 DATE ENTERED: 86-09-17  
 FILE NAME: MPH86555  
 PAGE # : 5

PRE FIX	SAMPLE NAME	PPB Au
S	L 17N 7+00W	5
S	7+25W	5
S	7+50W	5
S	7+75W	5
S	8+00W	5
S	8+25W	5
S	8+50W	5
S	8+75W	5
S	9+00W	5
S	9+25W	5
S	9+50W	5
S	9+75W	5
S	10+00W	5
S	10+25W	5
S	10+50W	5
S	10+75W	5
S	11+00W	5
S	11+25W	5
S	11+50W	5
S	11+75W	5
S	L 17N 12+00W	5
T	3414	5
T	3414	5
T	4651	5
T	4652	5
T	4653	5
T	4654	5
T	4655	5
T	4656	5
T	4657	5

CERTIFIED BY :







# Chemex Labs Ltd.

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Canada V7J 2C1

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Phone: (604) 984-0221  
Telex: 043-52597

## CERTIFICATE OF ANALYSIS

TO : ROSSBACHER LABORATORY LIMITED

3225 SOUTH SPRINGBANK AVENUE  
BURNABY, B.C.  
V5B 3H1

CERT. # : A8619851-001-A  
INVOICE # : IS619651  
DATE : 22-OCT-88  
P.C. # : NONE  
V235 'B' GRID

Semi quantitative multi element ICP analysis

Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sb, Ba, Be, Ca, Cr, Ga, La, Mg, K, Na, Sr, Ti, Tl, W and V can only be considered as semi-quantitative.

COMMENTS :  
ATTN: P. ROSSBACHER

Sample description	Al	Ag	As	Bi	Br	Ca	Cd	Co	Cr	Cu	Fe	Ga	H	Li	Mg	Mn	Mo	Ni	Nb	P	Pb	Sb	Se	Ti	Tl	V	W	Zn	Other	
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
L13N 00+25W	3.99	0.1	25	110	0.5	0.22	0.5	19	20	52	4.36	10	0.08	10	0.65	666	1	0.01	19	690	8	0.5	22	0.17	110	110	120	0.5	120	--
L13N 00+50W	3.37	0.1	15	150	0.5	0.34	0.5	26	27	32	3.47	10	0.14	10	0.59	2756	1	0.02	14	520	10	0.5	28	0.17	110	110	112	0.5	94	--
L13N 00+75W	3.71	0.1	5	50	0.5	1.13	0.5	9	24	19	3.41	10	0.11	10	0.12	227	1	0.01	3	350	12	0.5	17	0.11	110	110	118	0.5	26	--
L13N 01+00W	3.61	0.1	16	70	0.5	0.69	0.5	9	18	35	3.73	10	0.23	10	0.27	233	1	0.01	7	350	1	0.5	9	0.22	110	111	81	0.5	40	--
L13N 01+25W	3.81	0.1	15	70	0.5	0.21	0.5	10	21	25	3.97	10	0.21	10	0.40	306	1	0.01	11	750	10	0.5	17	0.15	110	110	113	0.5	24	--
L13N 01+50W	3.97	0.1	25	90	0.5	0.17	0.5	16	31	56	3.93	110	0.07	110	0.58	425	1	0.01	18	990	6	0.5	18	0.16	110	110	114	0.5	100	--
L13N 01+75W	3.94	0.1	25	70	0.5	0.16	0.5	12	23	36	3.51	110	0.09	110	0.57	199	1	0.01	12	1130	8	0.5	18	0.15	110	110	93	0.5	74	--
L13N 02+00W	3.24	0.1	15	80	0.5	0.26	0.5	10	19	16	3.59	10	0.13	110	0.58	340	1	0.01	9	340	8	0.5	27	0.16	110	110	124	0.5	42	--
L13N 02+25W	3.31	0.1	20	100	0.5	0.19	0.5	10	21	33	3.92	110	0.12	110	0.57	256	1	0.01	12	580	9	0.5	19	0.16	110	110	111	0.5	46	--
L13N 02+50W	3.63	0.1	25	60	0.5	0.13	0.5	12	21	39	3.72	110	0.10	110	0.45	210	1	0.01	10	610	12	0.5	15	0.16	110	110	105	0.5	62	--
L13N 02+75W	3.85	0.1	25	110	0.5	0.25	0.5	15	19	32	3.12	10	0.29	10	0.45	284	1	0.01	10	760	5	0.5	19	0.13	110	110	103	0.5	76	--
L13N 03+00W	3.65	0.1	15	70	0.5	0.17	0.5	10	25	28	3.94	10	0.12	110	0.53	346	1	0.01	10	710	8	0.5	22	0.18	110	110	112	0.5	76	--
L13N 03+25W	3.57	0.1	15	60	0.5	0.15	0.5	12	27	40	4.30	110	0.12	110	0.66	355	1	0.01	14	640	4	0.5	16	0.18	110	110	114	0.5	78	--
L13N 03+50W	3.65	0.1	15	40	0.5	0.15	0.5	8	17	26	3.92	10	0.07	110	0.42	209	1	0.01	7	740	4	0.5	16	0.15	110	110	124	0.5	54	--
L13N 03+75W	3.75	0.1	10	10	0.5	0.17	0.5	6	10	10	3.01	110	0.27	110	0.29	215	1	0.01	7	510	10	0.5	11	0.12	110	110	121	0.5	26	--
L13N 04+00W	3.13	0.1	20	20	0.5	0.11	0.5	4	9	7	3.73	110	0.22	110	0.27	126	1	0.01	3	500	4	0.5	19	0.16	110	110	101	0.5	26	--
L13N 04+25W	3.11	0.1	50	210	0.5	0.59	0.5	22	12	30	3.55	10	0.29	10	0.39	2622	1	0.01	22	1130	20	0.5	21	0.11	110	110	96	0.5	210	--
L13N 04+50W	3.57	0.1	105	200	0.5	0.23	0.5	56	26	37	4.59	10	0.25	10	0.63	2799	1	0.01	29	1000	26	0.5	17	0.06	110	110	102	0.5	220	--
L13N 04+75W	1.37	0.1	100	130	0.5	0.19	0.5	4	16	11	3.92	10	0.13	110	0.25	195	3	0.01	6	360	16	0.5	10	0.03	110	110	101	0.5	44	--
L13N 05+00W	1.01	0.1	90	70	0.5	0.09	0.5	3	11	11	3.08	10	0.10	10	0.13	353	1	0.01	4	620	10	0.5	11	0.04	110	110	91	0.5	28	--
L13N 05+25W	2.25	0.1	20	100	0.5	0.11	0.5	9	13	27	3.41	10	0.14	10	0.25	1275	1	0.02	10	1210	14	0.5	17	0.06	110	110	72	0.5	32	--
L13N 05+50W	3.35	0.1	20	70	0.5	0.19	0.5	14	18	18	3.99	10	0.11	110	0.27	1260	1	0.01	10	760	12	0.5	12	0.09	110	110	96	0.5	94	--
L13N 05+75W	3.25	0.1	30	100	0.5	0.12	0.5	9	20	21	4.57	10	0.14	110	0.44	267	1	0.02	12	350	14	0.5	14	0.14	110	110	117	0.5	114	--
L13N 06+00W	3.01	0.1	15	80	0.5	0.29	0.5	6	10	12	3.30	110	0.06	110	0.24	513	1	0.01	6	390	12	0.5	12	0.05	110	110	68	0.5	36	--
L13N 06+25W	3.21	0.1	20	30	0.5	0.15	0.5	8	19	12	3.92	10	0.15	110	0.26	816	1	0.01	8	460	14	0.5	12	0.11	110	110	119	0.5	60	--
L13N 06+50W	3.22	0.1	20	150	0.5	0.54	0.5	19	25	29	4.57	10	0.06	10	0.58	1212	1	0.01	12	580	16	0.5	23	0.13	110	110	121	0.5	86	--
L13N 06+75W	3.35	0.1	20	70	0.5	0.12	0.5	12	29	44	4.66	110	0.07	110	0.79	440	1	0.01	17	450	15	0.5	13	0.16	110	110	96	0.5	35	--
L13N 07+00W	4.62	0.1	25	140	0.5	0.28	0.5	15	33	25	5.50	10	0.16	10	0.91	428	1	0.01	19	440	14	0.5	15	0.19	110	110	172	0.5	80	--
L13N 07+25W	1.99	0.1	15	100	0.5	0.20	0.5	9	17	24	3.41	10	0.13	110	0.41	765	1	0.01	11	490	12	0.5	12	0.10	110	110	106	0.5	64	--
L13N 07+50W	2.59	0.1	40	140	0.5	0.29	0.5	8	22	26	4.12	10	0.11	10	0.52	325	1	0.01	12	430	26	0.5	19	0.12	110	110	115	0.5	62	--
L13N 07+75W	1.52	0.1	10	60	0.5	0.08	0.5	4	16	12	4.22	10	0.10	110	0.24	187	1	0.01	5	450	9	0.5	7	0.11	110	110	126	0.5	26	--
L13N 08+00W	1.86	0.1	25	80	0.5	0.19	0.5	8	17	20	3.69	10	0.10	110	0.52	279	1	0.01	9	400	8	0.5	12	0.12	110	110	109	0.5	52	--
L13N 08+25W	2.22	0.1	10	110	0.5	0.17	0.5	16	26	40	3.52	110	0.12	10	0.57	418	1	0.02	11	390	10	0.5	11	0.12	110	110	82	0.5	32	--
L13N 08+50W	2.89	0.1	20	90	0.5	0.15	0.5	16	22	18	3.95	10	0.12	110	0.53	409	1	0.01	9	680	9	0.5	10	0.09	110	110	112	0.5	90	--
L13N 08+75W	2.32	0.1	25	50	0.5	0.29	0.5	9	22	23	5.15	10	0.11	10	0.71	272	1	0.01	11	1290	13	0.5	3	0.10	110	110	123	0.5	58	--
L13N 09+00W	4.01	0.1	20	160	0.5	0.21	0.5	15	22	22	7.99	20	0.14	110	0.36	394	1	0.01	8	1220	16	0.5	7	0.02	110	110	171	0.5	116	--
L13N 09+25W	3.77	0.1	10	130	0.5	0.16	0.5	22	34	26	4.72	10	0.11	110	0.39	582	1	0.01	18	560	19	0.5	12	0.10	110	110	99	0.5	126	--
L13N 09+50W	2.48	0.1	5	90	0.5	0.12	0.5	11	20	21	3.51	10	0.16	110	0.65	429	1	0.01	11	390	4	0.5	11	0.06	110	110	93	0.5	48	--
L13N 09+75W	2.22	0.1	15	70	0.5	0.12	0.5	7	22	19	4.22	10	0.10	110	0.39	426	1	0.02	7	730	9	0.5	12	0.07	110	110	112	0.5	46	--
L13N 10+00W	3.65	0.1	20	120	0.5	0.12	0.5	14	29	35	4.66	10	0.22	110	0.65	687	1	0.02	15	760	16	0.5	14	0.09	110	110	112	0.5	74	--

certified by *Hart B. Schler*



# Chemex Labs Ltd.

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## CERTIFICATE OF ANALYSIS

TO : ROSSBACHER LABORATORY LIMITED

2205 SOUTH SPRINGER AVENUE  
DURHAM, B.C.  
V5B 3H1

CERT. # : A8619651-002-A  
INVOICE # : 19619651  
DATE : 22-067-86  
P.O. # : NONE  
V229

Semi quantitative multi element ICP analysis

Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sb, Sn, Se, Co, Cr, Ga, La, Mg, K, Na, Sr, Ti, U and V can only be considered as semi-quantitative.

COMMENTS :  
ATTN: P. ROSSBACHER

Sample description	Al	Ag	As	Ba	Be	Bi	Cs	Cd	Co	Cr	Cu	Fe	Ga	K	La	Mg	Mn	Mo	Ni	P	Pb	Sb	Sr	Ti	Tl	U	V	Zn	Ca		
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm		
L148 02+50W	3.89	<0.1	150	150	<0.5	<0.20	<0.5	15	35	42	4.22	10	0.16	10	0.91	777	<1	0.22	15	710	6	<5	19	0.12	<10	<10	107	<5	58	--	--
L148 04+75W	3.66	<0.1	15	120	<0.5	<0.20	<0.5	13	32	46	4.09	10	0.14	10	0.50	465	<1	0.01	12	420	10	<5	19	0.12	<10	<10	109	<5	52	--	--
L148 01+50W	3.57	<0.1	10	70	<0.5	<0.20	<0.5	7	19	19	3.76	<10	0.12	<10	0.23	207	<1	0.02	6	450	8	5	17	0.12	<10	<10	110	<5	44	--	--
L148 01+25W	3.57	<0.1	15	70	<0.5	<0.20	<0.5	16	29	21	3.26	<10	0.12	<10	0.56	374	<1	0.01	9	450	4	<5	21	0.12	<10	<10	92	<5	74	--	--
L148 01+50W	3.57	<0.1	5	90	<0.5	<0.19	<0.5	16	28	55	3.99	<10	0.14	<10	0.70	612	<1	0.01	19	950	9	<5	19	0.12	<10	<10	101	<5	70	--	--
L148 01+75W	3.22	<0.1	25	100	<0.5	<0.25	<0.5	24	32	40	3.77	10	0.07	10	0.67	758	<1	0.01	16	790	12	<5	17	0.14	<10	<10	116	<5	78	--	--
L148 02+50W	3.61	<0.1	25	100	<0.5	<0.14	<0.5	21	27	45	4.44	10	0.11	10	0.97	428	<1	0.01	22	580	8	<5	10	0.11	<10	<10	119	<5	136	--	--
L148 02+50W	1.55	<0.1	15	90	<0.5	<0.19	<0.5	7	11	9	1.97	<10	0.11	10	0.20	417	<1	0.01	5	310	10	<5	16	0.07	<10	<10	63	<5	52	--	--
L148 02+50W	3.22	<0.1	15	100	<0.5	<0.25	<0.5	11	22	22	3.59	10	0.19	10	0.31	311	<1	0.02	11	460	12	<5	17	0.11	<10	<10	102	<5	93	--	--
L148 02+75W	2.91	<0.1	30	140	<0.5	<0.18	<0.5	15	17	25	3.49	<10	0.18	10	0.89	593	<1	0.02	14	520	12	<5	13	0.12	<10	<10	87	<5	123	--	--
L148 02+10W	3.25	<0.1	20	100	<0.5	<0.29	<0.5	22	20	27	3.29	<10	0.14	<10	0.59	1467	<1	0.01	12	990	14	<5	13	0.11	<10	<10	73	<5	145	--	--
L148 03+50W	3.56	<0.1	30	80	<0.5	<0.19	<0.5	17	28	42	4.37	<10	0.14	<10	0.82	482	<1	0.02	15	730	6	<5	20	0.19	<10	<10	120	<5	76	--	--
L148 03+50W	3.57	<0.1	25	80	<0.5	<0.16	<0.5	15	29	30	4.25	<10	0.15	<10	0.69	462	<1	0.02	14	910	8	<5	18	0.20	<10	<10	117	<5	102	--	--
L148 03+75W	3.68	<0.1	40	420	<0.5	<0.13	<0.5	19	38	36	4.19	<10	0.11	<10	1.07	416	<1	0.01	17	530	12	<5	12	0.15	<10	<10	111	<5	134	--	--
L148 04+50W	2.30	<0.1	10	120	<0.5	<0.19	<0.5	23	23	25	4.29	10	0.09	10	0.29	1517	<1	0.01	17	820	16	<5	11	0.12	<10	<10	111	<5	202	--	--
L148 04+50W	3.22	<0.1	45	120	<0.5	<0.25	<0.5	57	19	52	6.52	10	0.11	10	0.84	1966	2	0.01	26	1470	28	<5	14	0.14	<10	<10	120	<5	226	--	--
L148 04+50W	3.63	<0.1	5	70	<0.5	<0.26	<0.5	19	37	43	4.72	<10	0.06	20	1.00	747	2	0.01	12	930	26	<5	9	0.26	<10	<10	180	<5	228	--	--
L148 04+75W	4.25	<0.1	30	200	<0.5	<0.55	<0.5	43	30	39	7.75	20	0.16	10	0.42	8534	2	0.02	32	1640	28	<5	24	0.18	<10	<10	147	<5	436	--	--
L148 05+50W	3.31	<0.1	55	100	<0.5	<0.24	<0.5	20	25	28	3.60	10	0.16	10	0.69	2271	<1	0.02	28	460	14	<5	17	0.09	<10	<10	84	<5	220	--	--
L148 05+50W	3.21	<0.1	80	190	<0.5	<0.46	<0.5	15	27	39	3.55	10	0.15	20	0.59	2024	<1	0.02	29	920	22	<5	20	0.10	<10	<10	92	<5	126	--	--
L148 05+50W	2.61	<0.1	35	130	<0.5	<0.21	<0.5	9	26	32	4.27	10	0.14	10	0.52	644	1	0.02	14	520	18	<5	16	0.14	<10	<10	106	<5	38	--	--
L148 05+75W	3.20	<0.1	60	80	<0.5	<0.11	<0.5	14	26	28	4.23	<10	0.14	10	0.55	702	1	0.01	14	520	12	<5	14	0.15	<10	<10	120	<5	98	--	--
L148 06+50W	2.51	<0.1	50	90	<0.5	<0.12	<0.5	7	22	25	4.59	10	0.12	<10	0.47	547	2	0.01	10	640	16	<5	12	0.12	<10	<10	128	<5	52	--	--
L148 06+50W	2.23	<0.1	25	70	<0.5	<0.11	<0.5	7	22	19	4.90	10	0.12	<10	0.25	624	1	0.01	8	850	19	<5	11	0.16	<10	<10	120	<5	66	--	--
L148 06+50W	3.51	<0.1	20	70	<0.5	<0.10	<0.5	12	25	33	4.22	<10	0.11	<10	0.29	457	1	0.01	10	470	12	<5	11	0.18	<10	<10	114	<5	68	--	--
L148 06+75W	1.94	<0.1	25	40	<0.5	<0.10	<0.5	5	16	13	4.38	10	0.06	<10	0.25	369	<1	0.01	5	410	10	<5	9	0.15	<10	<10	114	<5	40	--	--
L148 07+50W	4.17	<0.1	20	90	<0.5	<0.12	<0.5	11	21	23	5.21	<10	0.14	<10	0.55	505	1	0.02	12	810	14	<5	12	0.16	<10	<10	124	<5	66	--	--
L148 07+50W	2.82	<0.1	25	80	<0.5	<0.10	<0.5	7	22	23	5.10	10	0.12	<10	0.42	212	<1	0.02	11	530	12	<5	10	0.12	<10	<10	141	<5	56	--	--
L148 07+50W	3.17	<0.1	20	70	<0.5	<0.10	<0.5	7	21	25	5.99	10	0.11	<10	0.53	215	2	0.01	11	990	14	<5	8	0.12	<10	<10	166	<5	35	--	--
L148 07+75W	3.19	<0.1	15	210	<0.5	<0.21	<0.5	17	32	29	3.90	10	0.15	10	1.29	749	<1	0.02	20	350	10	<5	15	0.14	<10	<10	124	<5	170	--	--
L148 08+50W	3.25	<0.1	45	170	<0.5	<0.45	<0.5	12	24	31	4.44	10	0.12	10	0.58	507	1	0.01	16	690	12	<5	17	0.11	<10	<10	99	<5	134	--	--
L148 09+50W	2.30	<0.1	50	190	<0.5	<0.26	<0.5	12	21	27	4.76	10	0.11	10	0.31	367	1	0.01	8	820	15	<5	14	0.12	<10	<10	127	<5	131	--	--
L148 09+50W	2.21	<0.1	40	190	<0.5	<0.29	<0.5	10	20	24	4.55	10	0.12	10	0.28	302	1	0.01	9	720	16	<5	12	0.12	<10	<10	124	<5	123	--	--
L148 09+75W	2.82	<0.1	70	250	<0.5	<0.21	<0.5	23	20	22	3.77	10	0.11	10	0.49	2031	<1	0.01	9	476	10	<5	14	0.11	<10	<10	99	<5	116	--	--
L148 09+50W	2.61	<0.1	30	180	<0.5	<0.19	<0.5	9	19	16	1.29	10	0.12	<10	0.12	402	<1	0.01	8	900	12	<5	12	0.14	<10	<10	123	<5	122	--	--
L148 09+50W	2.87	<0.1	20	170	<0.5	<0.15	<0.5	20	22	22	4.25	10	0.15	<10	0.91	1911	<1	0.01	15	840	16	<5	10	0.10	<10	<10	56	<5	110	--	--
L148 09+50W	3.28	<0.1	20	260	<0.5	<0.29	<0.5	19	31	58	3.78	10	0.10	10	1.00	3971	<1	0.02	26	570	12	<5	12	0.09	<10	<10	95	<5	112	--	--
L148 09+75W	5.62	<0.1	25	80	<0.5	<0.89	<0.5	12	30	51	5.19	10	0.19	<10	0.69	511	<1	0.02	12	810	8	<5	14	0.11	<10	<10	99	<5	82	--	--
L148 10+50W	4.11	<0.1	27	80	<0.5	<1.07	<0.5	27	20	36	4.35	<10	0.15	<10	0.32	1664	<1	0.02	7	1060	6	<5	11	0.07	<10	<10	67	<5	42	--	--
L148 10+50W	2.41	<0.1	21	70	<0.5	<0.25	<0.5	11	15	49	5.77	10	0.16	10	0.29	828	<1	0.01	8	610	15	<5	15	0.02	<10	<10	27	<5	74	--	--



# Chemex Labs Ltd.

Analytical Chemists • Geochemists • Registered Assayers

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## CERTIFICATE OF ANALYSIS

TO : ROSSBACHER LABORATORY LIMITED

3030 SOUTH SPRINGER AVENUE  
PURHAY, B.C.  
V5P 2M1

CERT. # : AS619651-003-A  
INVOICE # : IS619651  
DATE : 22-OCT-86  
P.O. # : NONE  
V239

Semi quantitative multi element ICP analysis

Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sb, Ba, Be, Ca, Cr, Ga, La, Mg, K, Na, Sr, Ti, Tl, W and V can only be considered as semi-quantitative.

COMMENTS :  
ATTN: P. ROSSBACHER

Sample Description	Al	Ag	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fa	Ga	K	La	Ni	Nb	Mo	Pb	Pt	Re	Sr	Ti	Tl	U	V	W	Zn	---	---		
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
L11N 10+50W	1.01	0.2	35	80	<0.5	<2	0.12	<0.5	6	17	7	3.94	10	0.12	<10	0.25	181	<1	0.02	4	360	6	15	0.04	<10	<10	27	<5	32	--	--	
L11N 10+75W	4.31	0.2	10	110	<0.5	<2	0.16	<0.5	32	32	38	4.30	10	0.14	10	0.48	3873	<1	0.02	12	910	12	<5	15	0.10	<10	<10	101	<5	82	--	--
L11N 11+00W	4.23	<0.2	20	50	<0.5	<2	0.12	<0.5	10	20	21	6.32	10	0.15	10	0.51	241	<1	0.02	12	1820	12	<5	11	0.12	<10	<10	119	<5	58	--	--
L11N 11+05W	3.44	0.2	30	30	<0.5	<2	0.16	<0.5	5	26	19	4.19	10	0.17	<10	0.20	182	<1	0.01	6	400	8	<5	11	0.09	<10	<10	127	<5	31	--	--
L11N 11+07W	2.92	0.2	15	50	<0.5	<2	0.10	<0.5	3	29	24	1.31	10	0.11	<10	0.60	177	<1	0.01	12	710	8	<5	12	0.10	<10	<10	129	<5	44	--	--
L11N 11+75W	3.56	0.2	5	70	<0.5	<2	0.09	<0.5	10	25	31	6.13	20	0.12	<10	0.20	290	<1	0.01	9	2590	10	<5	10	0.14	<10	<10	112	<5	58	--	--
L11N 12+00W	2.29	0.2	35	30	<0.5	<2	0.06	<0.5	5	27	13	4.40	10	0.06	<10	0.23	157	<1	0.01	5	390	10	<5	9	0.09	<10	<10	125	<5	24	--	--
L11N 12+05W	2.89	0.2	15	60	<0.5	<2	0.07	<0.5	4	25	17	3.98	10	0.12	<10	0.20	178	<1	0.02	5	710	4	<5	12	0.09	<10	<10	112	<5	28	--	--
L11N 12+07W	4.21	0.2	15	70	<0.5	<2	0.07	<0.5	3	22	29	5.44	10	0.13	<10	0.57	192	<1	0.02	12	1060	10	<5	12	0.10	<10	<10	115	<5	52	--	--
L11N 12+75W	3.84	0.2	21	70	<0.5	<2	0.05	<0.5	7	35	23	3.97	10	0.12	<10	0.41	190	<1	0.02	14	510	8	<5	8	0.05	<10	<10	114	<5	52	--	--
L11N 12+01W	3.19	<0.2	15	50	<0.5	<2	0.05	<0.5	5	12	20	1.39	10	0.12	<10	0.22	175	<1	0.01	4	700	4	<5	7	0.12	<10	<10	159	<5	26	--	--
L11N 12+25W	5.62	0.2	10	80	<0.5	<2	0.06	<0.5	9	27	38	4.71	<10	0.12	<10	0.62	257	<1	0.01	14	670	10	<5	9	0.10	<10	<10	107	<5	72	--	--
L11N 13+00W	1.62	0.2	5	10	<0.5	<2	0.09	<0.5	19	11	9	2.38	<10	0.09	<10	0.19	391	<1	0.01	4	400	9	<5	9	0.07	<10	<10	82	<5	22	--	--
L11N 13+75W	4.92	0.2	20	100	<0.5	<2	0.05	<0.5	9	24	31	4.45	10	0.14	<10	0.60	249	<1	0.01	14	810	8	<5	7	0.11	<10	<10	97	<5	72	--	--
L11N 14+00W	3.34	0.2	10	110	<0.5	<2	0.07	<0.5	10	26	37	3.38	<10	0.14	<10	0.65	250	<1	0.01	15	350	10	<5	12	0.08	<10	<10	121	<5	32	--	--
L11N 01+00W	3.49	0.2	10	80	<0.5	<2	0.12	<0.5	17	21	32	4.24	10	0.12	<10	0.27	424	<1	0.02	21	390	6	<5	14	0.07	<10	<10	99	<5	90	--	--
L11N 01+05W	2.25	<0.2	30	90	<0.5	<2	0.07	<0.5	11	20	16	2.42	<10	0.10	<10	0.20	262	<1	0.01	9	300	3	<5	8	0.01	<10	<10	80	<5	58	--	--
L11N 01+07W	2.18	<0.2	15	90	<0.5	<2	0.09	<0.5	14	27	49	3.78	<10	0.16	<10	0.71	583	<1	0.02	12	770	14	<5	17	0.10	<10	<10	101	<5	96	--	--
L11N 01+25W	2.85	<0.2	130	50	<0.5	<2	0.19	<0.5	2	15	15	2.51	<10	0.15	<10	0.45	283	<1	0.02	7	340	5	<5	18	0.08	<10	<10	94	<5	44	--	--
L11N 02+00W	2.74	<0.2	10	60	<0.5	<2	0.12	<0.5	9	20	20	2.72	10	0.22	<10	0.55	233	<1	0.02	7	670	2	<5	14	0.03	<10	<10	95	<5	46	--	--
L11N 02+05W	3.19	<0.2	5	50	<0.5	<2	0.24	<0.5	9	21	22	2.85	<10	0.13	<10	0.48	426	<1	0.02	7	730	6	<5	23	0.12	<10	<10	20	<5	56	--	--
L11N 02+07W	3.97	<0.2	5	70	<0.5	<2	0.15	<0.5	13	27	52	4.41	<10	0.12	<10	0.69	428	<1	0.01	14	630	8	<5	18	0.22	<10	<10	123	<5	82	--	--
L11N 02+75W	1.45	0.2	5	20	<0.5	<2	0.17	<0.5	4	9	9	1.84	<10	0.02	<10	0.22	141	<1	0.01	4	280	4	<5	19	0.09	<10	<10	67	<5	20	--	--
L11N 03+00W	3.12	<0.2	10	60	<0.5	<2	0.16	<0.5	10	24	27	3.85	<10	0.14	<10	0.59	302	<1	0.02	11	620	6	<5	20	0.14	<10	<10	102	<5	64	--	--
L11N 03+05W	2.92	<0.2	15	50	<0.5	<2	0.15	<0.5	10	22	24	3.22	<10	0.12	<10	0.59	481	<1	0.02	9	890	6	<5	20	0.14	<10	<10	96	<5	64	--	--
L11N 03+07W	3.62	<0.2	5	60	<0.5	<2	0.10	<0.5	11	26	31	4.30	<10	0.11	<10	0.57	575	<1	0.01	12	590	4	<5	23	0.16	<10	<10	114	<5	78	--	--
L11N 03+25W	2.76	0.2	30	50	<0.5	<2	0.18	<0.5	12	24	25	3.25	<10	0.19	<10	0.65	292	<1	0.01	11	590	10	<5	19	0.15	<10	<10	110	<5	60	--	--
L11N 04+00W	3.62	<0.2	15	70	<0.5	<2	0.14	<0.5	9	29	23	4.69	<10	0.14	<10	0.55	253	<1	0.02	10	920	12	<5	17	0.17	<10	<10	120	<5	60	--	--
L11N 04+05W	2.55	<0.2	20	50	<0.5	<2	0.12	<0.5	5	22	18	3.92	<10	0.12	<10	0.37	186	<1	0.02	7	1080	10	<5	14	0.15	<10	<10	116	<5	44	--	--
L11N 04+07W	4.06	<0.2	35	60	<0.5	<2	0.12	<0.5	9	21	36	5.11	<10	0.13	<10	0.61	259	<1	0.02	12	2890	8	<5	11	0.14	<10	<10	124	<5	68	--	--
L11N 04+25W	2.31	<0.2	15	50	<0.5	<2	0.12	<0.5	6	21	15	3.49	<10	0.12	<10	0.46	208	<1	0.02	7	350	4	<5	14	0.12	<10	<10	115	<5	40	--	--
L11N 05+00W	4.52	<0.2	20	130	<0.5	<2	0.14	<0.5	18	23	61	4.61	<10	0.17	10	1.08	401	<1	0.02	24	590	14	<5	16	0.17	<10	<10	124	<5	110	--	--
L11N 05+05W	3.22	<0.2	20	90	<0.5	<2	0.15	<0.5	16	24	29	4.78	<10	0.15	<10	1.21	467	<1	0.02	20	1260	12	<5	12	0.15	<10	<10	126	<5	36	--	--
L11N 05+07W	2.40	0.2	20	80	<0.5	<2	0.12	<0.5	12	14	22	5.71	10	0.09	<10	0.40	642	1	0.01	9	1610	20	<5	9	0.16	<10	<10	123	<5	90	--	--
L11N 06+00W	2.62	<0.2	25	110	<0.5	<2	0.19	<0.5	9	24	22	1.12	10	0.12	10	0.57	325	1	0.01	12	310	10	<5	16	0.11	<10	<10	122	<5	38	--	--
L11N 06+05W	2.42	0.2	20	210	<0.5	<2	0.08	<0.5	21	12	72	5.12	10	0.24	10	0.79	2650	<1	0.02	16	560	22	<5	17	0.14	<10	<10	112	<5	88	--	--
L11N 06+07W	3.92	0.2	65	100	<0.5	<2	0.15	<0.5	11	28	57	4.42	<10	0.18	<10	0.78	418	2	0.01	18	530	12	<5	14	0.11	<10	<10	92	<5	82	--	--
L11N 06+50W	2.77	<0.2	55	100	<0.5	<2	0.16	<0.5	12	27	59	3.87	<10	0.14	<10	0.82	444	1	0.01	22	480	14	<5	14	0.11	<10	<10	92	<5	82	--	--
L11N 06+75W	3.24	<0.2	35	70	<0.5	<2	0.12	<0.5	9	31	45	4.71	<10	0.11	<10	0.47	245	1	0.01	11	490	17	<5	11	0.17	<10	<10	123	<5	12	--	--
L11N 07+00W	2.10	<0.2	15	40	<0.5	<2	0.11	<0.5	4	20	18	4.12	10	0.05	<10	0.10	190	<1	0.01	5	410	9	<5	12	0.14	<10	<10	120	<5	48	--	--

*Stuart Buchler*



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## CERTIFICATE OF ANALYSIS

TO : ROSEBACHER LABORATORY LIMITED

2025 SOUTH SPRINGER AVENUE  
BURNABY, B.C.  
V5B 3H1

CERT. # : A8619651-004-A  
INVOICE # : 10819651  
DATE : 22-OCT-86  
P.C. # : NONE  
V2000

Semi quantitative multi element ICP analysis

Nitric-Hydro-Boric digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sb, Ba, Fe, Ca, Co, Cr, La, Mg, Ni, Na, Sr, Ti, Tl, W and Y can only be considered as semi-quantitative.

Comments:  
RETD: P. ROSEBACHER

Sample description	Al	Ag	As	Ba	Be	Bi	Cs	Cd	Co	Cr	Cu	Fa	Pb	K	La	Ni	Nb	Nm	Mo	Sr	Tl	Ti	U	V	Zn	...						
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm						
L15W 07+25U	3.11	<0.2	15	70	<0.5	<0.13	<0.5	7	28	38	5.18	<0.0	<0.03	<0.0	0.36	287	1	1.21	13	560	11	35	19	0.17	<10	<10	127	35	53	--	--	
L15W 07+50W	4.36	<0.2	15	70	<0.5	<0.09	<0.5	9	22	42	5.29	<0.0	<0.13	<0.0	0.55	325	3	0.01	15	880	18	5	16	0.15	<10	<10	110	35	70	--	--	
L15W 07+75W	3.37	<0.2	25	110	<0.5	12	3.12	<0.2	19	30	39	8.21	10	3.13	13	0.65	211	1	1.11	15	250	16	5	12	1.21	<10	<10	101	35	94	--	--
L15W 08+00U	1.85	<0.2	45	60	<0.5	12	0.15	<0.5	6	25	27	5.00	10	1.10	<0.1	0.36	301	2	0.01	9	941	11	35	9	0.13	<10	<10	158	35	104	--	--
L15W 08+25W	5.73	<0.2	31	250	<0.5	12	3.10	<0.5	50	45	17	5.74	15	3.07	20	2.15	1711	1	1.02	10	720	21	5	8	1.23	<10	<10	211	35	195	--	--
L15W 08+50W	1.82	<0.2	10	40	<0.5	<0.04	<0.5	5	16	17	4.20	10	0.09	<0.0	0.19	293	3	1.11	5	400	14	35	6	0.11	<10	<10	110	35	48	--	--	
L15W 08+75U	3.11	<0.2	45	70	<0.5	<0.15	<0.5	7	22	21	5.35	10	0.39	<0.0	0.37	343	1	0.01	3	540	10	35	10	0.20	<10	<10	115	35	96	--	--	
L15W 09+00U	4.61	<0.2	15	40	<0.5	<0.07	<0.5	11	27	41	4.02	<0.0	0.15	<0.0	0.64	292	1	0.01	10	670	8	35	6	0.15	<10	<10	21	35	52	--	--	
L15W 09+25U	5.25	<0.2	10	70	<0.5	<0.25	<0.5	105	15	81	3.13	<0.0	0.10	13	0.12	3245	1	1.31	7	3170	3	35	5	0.13	<10	<10	14	35	24	--	--	
L15W 09+50W	1.72	<0.2	10	20	<0.5	12	0.08	<0.5	4	17	14	4.67	10	0.26	<0.0	0.22	244	1	0.01	4	1140	10	5	7	0.15	<10	<10	128	35	24	--	--
L15W 09+75U	2.56	<0.2	20	60	<0.5	<0.20	<0.5	9	35	23	5.53	10	3.12	13	0.52	945	1	1.22	7	1010	12	35	6	0.10	<10	<10	153	35	50	--	--	
L15W 10+00U	1.62	<0.2	10	30	<0.5	<0.07	<0.5	5	12	15	2.42	10	0.12	<0.0	0.12	463	1	0.01	5	570	9	35	6	0.04	<10	<10	114	35	32	--	--	
L15W 10+25U	3.22	<0.2	60	60	<0.5	<0.05	<0.5	14	41	53	6.32	13	0.08	<0.0	0.26	192	1	2.21	20	640	10	35	4	0.31	<10	<10	169	35	63	--	--	
L15W 10+50U	10.09	<0.2	30	170	1.0	<0.13	<0.5	22	37	70	2.56	<0.0	0.26	10	0.21	2287	1	0.02	21	1730	4	35	7	0.07	<10	<10	27	35	140	--	--	
L15W 10+75U	2.66	<0.2	10	70	<0.5	<0.11	<0.5	11	17	50	1.29	10	0.15	10	0.16	1308	1	1.01	11	1320	21	5	10	0.24	<10	<10	37	35	15	--	--	
L15W 11+00U	4.20	<0.2	15	60	<0.5	<0.14	<0.5	12	34	69	4.75	<0.0	0.12	10	0.29	925	1	0.01	10	1240	10	35	15	0.15	<10	<10	117	35	71	--	--	
L15W 11+25U	2.41	<0.2	5	40	<0.5	<0.29	<0.5	7	16	19	3.76	10	0.25	10	0.20	422	1	1.11	5	520	3	35	12	0.29	<10	<10	29	35	24	--	--	
L15W 11+50W	1.47	<0.2	35	30	<0.5	<0.11	<0.5	3	9	10	3.08	<10	0.05	<10	0.14	206	1	0.04	2	290	4	35	15	0.06	<10	<10	78	35	24	--	--	
L15W 11+75W	4.21	<0.2	5	40	<0.5	<0.06	<0.5	9	47	25	5.91	10	0.12	<10	0.61	300	1	0.01	12	790	10	35	11	0.12	<10	<10	143	35	48	--	--	
L15W 12+00U	2.20	<0.2	5	30	<0.5	<0.07	<0.5	4	19	26	4.52	10	0.07	<10	0.22	247	1	0.01	6	540	10	35	13	0.12	<10	<10	119	35	26	--	--	
L15W 12+25U	1.71	<0.2	10	30	<0.5	13	0.23	<0.5	3	12	13	3.93	10	0.08	<10	0.20	166	1	1.31	5	760	6	35	13	0.10	<10	<10	112	35	28	--	--
L15W 12+50W	2.50	<0.2	5	70	<0.5	<0.08	<0.5	7	22	41	5.41	10	0.17	<10	0.55	269	1	0.01	5	720	10	35	11	0.10	<10	<10	112	35	58	--	--	
L15W 12+75U	2.75	<0.2	5	40	<0.5	<0.06	<0.5	6	22	23	4.74	10	0.07	<10	0.44	252	1	1.31	9	960	12	35	10	0.12	<10	<10	105	35	50	--	--	
L15W 13+00U	1.92	<0.2	5	40	<0.5	<0.09	<0.5	4	15	18	2.36	10	0.10	<10	0.30	247	1	0.01	6	710	12	35	10	0.10	<10	<10	79	35	40	--	--	
L17W 03+00U	2.35	<0.2	5	80	<0.5	<0.20	<0.5	15	28	52	2.36	10	0.12	<10	0.25	422	1	0.01	17	540	6	35	21	0.19	<10	<10	105	35	64	--	--	
L17W 03+25U	4.71	<0.2	5	80	<0.5	<0.16	<0.5	20	28	62	3.91	10	0.14	10	0.26	832	1	0.01	16	730	6	35	21	0.15	<10	<10	107	35	128	--	--	
L17W 03+50W	1.19	<0.2	5	20	<0.5	<0.12	<0.5	4	9	12	1.73	<10	0.07	<10	0.23	177	1	0.01	5	190	6	35	17	0.06	<10	<10	62	35	29	--	--	
L17W 03+75U	2.88	<0.2	5	50	<0.5	<0.19	<0.5	9	18	24	3.94	10	0.18	<10	0.28	354	1	0.01	9	490	6	35	22	0.11	<10	<10	110	35	66	--	--	
L17W 04+00U	1.35	<0.2	5	60	<0.5	<0.24	<0.5	14	28	34	4.32	10	0.11	<10	0.25	500	1	1.31	16	840	3	35	29	0.18	<10	<10	120	35	32	--	--	
L17W 04+25W	3.17	<0.2	5	50	<0.5	<0.13	<0.5	14	19	25	3.57	10	0.10	<10	0.52	341	1	0.01	12	530	4	35	15	0.08	<10	<10	105	35	96	--	--	
L17W 04+50W	4.74	<0.2	5	110	<0.5	<0.12	<0.5	12	26	45	3.93	<10	0.12	<10	0.25	162	1	0.01	32	670	4	35	24	0.08	<10	<10	112	35	74	--	--	
L17W 04+75W	3.26	<0.2	15	60	<0.5	<0.17	<0.5	8	22	32	2.99	<10	0.08	<10	0.52	315	1	0.01	11	680	8	35	24	0.10	<10	<10	89	35	52	--	--	
L17W 05+00U	1.08	<0.2	5	100	<0.5	<0.13	<0.5	13	27	62	3.58	<10	0.10	<10	0.22	153	1	1.31	13	840	10	35	12	0.12	<10	<10	113	35	78	--	--	
L17W 05+25U	4.91	<0.2	15	60	<0.5	<0.15	<0.5	12	36	42	4.73	<10	0.11	<10	0.82	362	1	0.01	14	1460	3	35	19	0.16	<10	<10	125	35	72	--	--	
L17W 05+50W	2.21	<0.2	25	50	<0.5	<0.11	<0.5	6	21	32	4.13	10	0.25	<10	0.12	203	1	1.31	7	490	2	35	13	0.12	<10	<10	121	35	50	--	--	
L17W 05+75U	1.89	<0.2	15	20	<0.5	<0.12	<0.5	5	15	16	3.25	10	0.04	<10	0.30	211	1	0.01	5	460	4	35	12	0.12	<10	<10	102	35	46	--	--	
L17W 06+00U	1.30	<0.2	5	30	<0.5	<0.09	<0.5	3	6	9	1.64	<10	0.10	10	0.19	178	1	0.01	3	210	4	35	11	0.25	<10	<10	66	35	22	--	--	
L17W 06+25W	2.96	<0.2	40	60	<0.5	<0.12	<0.5	9	20	29	5.27	10	0.14	<10	0.56	267	1	0.02	19	640	10	35	12	0.21	<10	<10	164	35	56	--	--	
L17W 06+50W	2.15	<0.2	15	30	<0.5	<0.12	<0.5	4	15	16	2.23	10	0.13	10	0.26	223	1	1.31	5	500	10	35	13	0.24	<10	<10	75	35	42	--	--	
L17W 06+75W	2.44	<0.2	25	120	<0.5	10	0.14	<0.5	20	22	30	3.86	10	0.12	10	0.62	275	1	0.01	10	200	10	35	15	0.12	<10	<10	111	35	51	--	--

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North Vancouver, B.C.  
Canada V7J 2C1

Phone: (604) 984-0221  
Telex: 043-52597

## CERTIFICATE OF ANALYSIS

TO : ROSSBACHER LABORATORY LIMITED

8005 SOUTH SPRINGER AVENUE  
BURNABY, B.C.  
V5B 3H1

CERT. # : A9619651-005-A  
INVOICE # : I9619651  
DATE : 22-OCT-86  
P.O. # : NONE  
V239

Semi quantitative multi element ICP analysis

Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sb, Ba, Be, Ca, Cr, Ga, La, Mg, K, Na, Sr, Ti, Tl, W and V can only be considered as semi-quantitative.

COMMENTS :  
WITH: P. ROSSBACHER

Sample description	Al	Ag	As	Ba	Ba	Bi	Cs	Cd	Co	Cr	Cu	Fe	Ga	K	La	Mg	Mn	Mo	Nb	Ni	P	Pb	Sb	Sr	Ti	Tl	U	V	W	Zn	
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
L17H 07+00W	2.61	<0.2	50	100	<0.5	<0.10	<0.5	7	17	19	3.90	<10	0.15	<10	0.39	220	3	0.02	8	640	32	<5	12	0.10	<10	<10	86	<5	83	--	--
L17H 07+05W	1.56	<0.2	50	56	<0.5	<0.07	<0.5	4	16	16	4.40	<10	0.08	<10	0.29	156	3	0.01	5	450	20	<5	10	0.11	<10	<10	195	<5	58	--	--
L17H 07+50W	3.66	0.2	125	280	2.0	<0.36	1.5	28	34	60	4.06	10	0.09	60	0.46	5064	1	0.01	43	980	34	<5	14	0.11	<10	<10	91	<5	294	--	--
L17H 07+75W	3.29	0.2	90	120	<0.5	<0.14	<0.5	16	25	55	6.27	<10	0.09	<10	0.62	750	5	0.01	24	740	20	<5	12	0.16	<10	<10	143	<5	142	--	--
L17H 08+00W	1.34	<0.2	35	110	<0.5	<0.11	<0.5	6	21	28	4.35	<10	0.05	<10	0.32	412	<1	0.01	3	400	10	<5	12	0.11	<10	<10	130	<5	52	--	--
L17H 08+05W	1.77	0.2	26	80	<0.5	<0.06	<0.5	8	13	37	2.45	<10	0.07	<10	0.18	901	<1	0.01	8	540	16	<5	7	0.06	<10	<10	49	<5	50	--	--
L17H 08+50W	5.36	<0.2	15	120	1.5	<0.04	<0.5	117	14	174	1.02	<10	0.06	30	0.07	>9999	1	0.01	12	2780	172	<5	4	0.02	<10	<10	15	<5	94	--	--
L17H 08+75W	1.75	<0.2	25	70	<0.5	<0.05	<0.5	5	15	20	3.94	<10	0.14	<10	0.29	564	<1	0.02	8	860	12	<5	9	0.05	<10	<10	90	<5	50	--	--
L17H 09+00W	1.56	0.2	75	90	<0.5	<0.05	<0.5	5	14	19	3.38	<10	0.13	10	0.16	407	1	0.02	7	500	18	<5	10	0.05	<10	<10	115	<5	73	--	--
L17H 09+05W	2.32	0.2	30	95	<0.5	<0.03	<0.5	5	29	22	3.36	10	0.10	<10	0.49	133	3	0.01	6	1000	12	<5	4	0.06	<10	<10	92	<5	54	--	--
L17H 09+50W	1.87	<0.2	5	70	<0.5	<0.02	<0.5	7	17	15	4.14	10	0.09	<10	0.42	230	<1	0.02	5	820	12	<5	5	0.20	<10	<10	130	<5	38	--	--
L17H 09+75W	2.76	<0.2	45	90	<0.5	<0.05	<0.5	7	28	22	5.37	10	0.13	<10	0.28	359	1	0.02	12	770	26	<5	8	0.22	<10	<10	174	<5	72	--	--
L17H 10+00W	2.90	<0.2	45	100	<0.5	<0.13	<0.5	16	29	54	5.03	<10	0.16	<10	1.20	819	<1	0.02	16	610	14	<5	12	0.18	<10	<10	133	<5	74	--	--
L17H 10+05W	4.78	<0.2	10	60	<0.5	<0.07	<0.5	9	36	24	6.69	10	0.13	<10	0.55	378	<1	0.01	8	1140	16	<5	7	0.24	<10	<10	158	<5	72	--	--
L17H 10+50W	1.46	<0.2	10	80	<0.5	<0.12	<0.5	19	25	37	6.22	10	0.16	10	1.50	955	<1	0.01	12	1190	12	<5	8	0.22	<10	<10	172	<5	103	--	--
L17H 10+75W	3.74	<0.2	<5	50	<0.5	<0.06	<0.5	9	24	15	5.76	<10	0.13	<10	0.62	516	1	0.01	8	1260	16	<5	6	0.21	<10	<10	136	<5	82	--	--
L17H 11+00W	1.76	<0.2	5	70	<0.5	<0.10	<0.5	11	16	9	4.52	10	0.11	10	0.34	702	5	0.01	6	1020	12	<5	7	0.15	<10	<10	141	<5	50	--	--
L17H 11+05W	3.66	0.2	25	100	<0.5	<0.04	1.0	10	54	35	11.27	<10	0.20	10	0.36	797	7	0.02	15	2700	36	<5	6	0.06	<10	<10	242	<5	164	--	--
L17H 11+50W	2.51	0.2	10	50	<0.5	<0.07	<0.5	9	22	30	4.46	10	0.12	<10	0.67	459	3	0.01	11	960	20	<5	6	0.10	<10	<10	92	<5	76	--	--
L17H 11+75W	3.53	<0.2	15	60	<0.5	<0.07	0.5	11	36	60	6.41	<10	0.16	<10	0.91	479	<1	0.01	17	1650	22	<5	6	0.11	<10	<10	121	<5	78	--	--
L17H 12+00W	1.11	<0.2	5	70	<0.5	<0.02	<0.5	14	22	38	6.55	<10	0.17	<10	1.12	537	1	0.01	14	1470	12	<5	10	0.19	<10	<10	148	<5	86	--	--
3413	3.23	0.2	<5	170	<0.5	<0.73	0.5	34	44	31	6.49	10	0.39	10	2.97	221	<1	0.03	16	1620	4	<5	3	0.36	<10	<10	287	<5	96	--	--
3414	0.72	0.2	<5	90	<0.5	<0.52	<0.5	3	47	20	1.40	<10	0.19	20	0.44	134	8	0.01	4	1910	4	<5	10	0.09	<10	<10	11	<5	16	--	--
4651	1.83	<0.2	<5	50	<0.5	<1.32	<0.5	26	23	38	4.35	10	0.12	10	1.33	494	<1	0.10	14	790	4	<5	3	0.37	<10	<10	196	<5	59	--	--
4652	0.47	<0.2	<5	60	<0.5	<0.02	<0.5	1	29	28	0.25	<10	0.25	<10	0.06	165	<1	0.02	2	90	<2	<5	3	0.01	<10	<10	1	<5	8	--	--
4653	0.40	<0.2	<5	80	<0.5	<0.16	<0.5	<1	35	4	0.30	<10	0.31	10	0.04	366	<1	0.02	1	120	<2	<5	6	0.01	<10	<10	1	<5	6	--	--
4654	0.38	<0.2	<5	60	<0.5	<0.05	<0.5	6	101	9	1.70	<10	0.10	<10	0.52	199	<1	0.01	9	190	2	<5	2	0.01	<10	<10	17	<5	20	--	--
4655	0.91	0.2	<5	60	<0.5	<0.65	<0.5	7	57	626	2.05	<10	0.12	<10	0.49	518	<1	0.01	8	210	<2	<5	8	0.01	<10	<10	14	<5	26	--	--
4656	1.51	<0.2	<5	230	<0.5	<0.29	0.5	11	59	67	2.95	<10	0.22	10	1.22	621	<1	0.01	23	690	18	<5	2	0.06	<10	<10	43	<5	114	--	--
4657	0.06	0.2	10	<10	<0.5	<0.01	<0.5	<1	112	17	1.22	<10	<0.01	<10	0.01	66	<1	<0.01	3	30	<2	<5	<1	<0.01	<10	<10	8	<5	6	--	--

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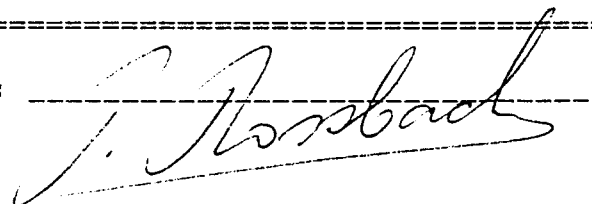
TO : MPH CONSULTING LTD.  
301-409 GRANVILLE ST.  
VANCOUVER, B.C.  
PROJECT: V 239  
TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 86551.A  
INVOICE#: 7050  
DATE ENTERED: 86-10-20  
FILE NAME: MPH86555.A  
PAGE # : 1 A

PRE FIX	SAMPLE NAME	% SiO2	% AlO3	% MgO	% Fe2O3	% CaO	% K2O	% Na2O	% TiO2	% MnO
A	4652	78.0	14.8	0.6	1.4	0.3	2.7	2.9	0.1	0.1
A	4653	76.0	14.6	0.5	1.3	0.3	2.9	2.7	0.1	0.1
A	4654	91.0	5.4	1.2	2.1	0.2	1.0	0.7	0.1	0.1
A	4655	81.5	9.7	1.2	3.4	0.8	1.6	1.8	0.2	0.1

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VANCOUVER, B.C.  
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CERTIFICATE#: 86551.A  
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DATE ENTERED: 86-10-20  
FILE NAME: MFH86555.A  
PAGE # : 1 B

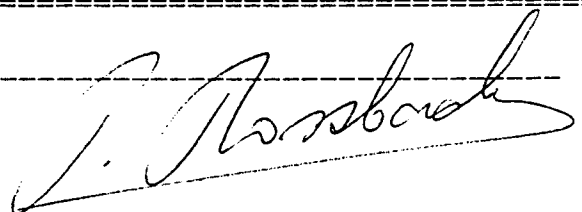
=====

PRE FIX	SAMPLE NAME	% LOI	TOTAL
A	4652	1.8	101.6
A	4653	1.8	100.3
A	4654	1.4	102.2
A	4655	2.4	102.8

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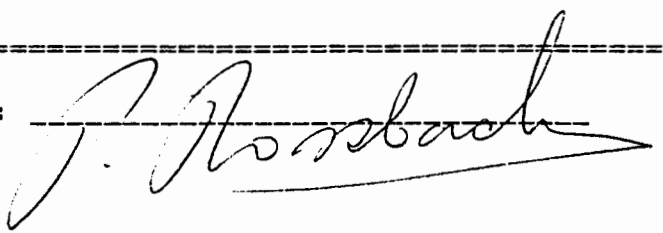
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TO : MPH CONSULTING LTD.  
 301-409 GRANVILLE STREET  
 VANCOUVER B.C.  
 PROJECT: V 239  
 TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 86569  
 INVOICE#: 7060  
 DATE ENTERED: 86-10-22  
 FILE NAME: MPH86569  
 PAGE # : 1

PRE FIX	SAMPLE NAME	PPB Au
S	L1S 000	5
S	025E	5
S	050E	90
S	075E	5
S	100E	5
S	125E	5
S	150E	5
S	175E	5
S	200E	5
S	225E	20
S	250E	5
S	275E	5
S	300E	5
S	325E	5
S	350E	10
S	375E	5
S	400E	5
S	425E	5
S	450E	5
S	475E	5
S	L 1S 500E	10
S	L 2S 000	20
S	025E	5
S	050E	5
S	075E	70
S	100E	5
S	125E	10
S	150E	5
S	175E	5
S	200E	5
S	225E	5
S	250E	5
S	275E	5
S	300E	5
S	325E	5
S	350E	20
S	375E	5
S	400E	5
S	425E	5
S	450E	5

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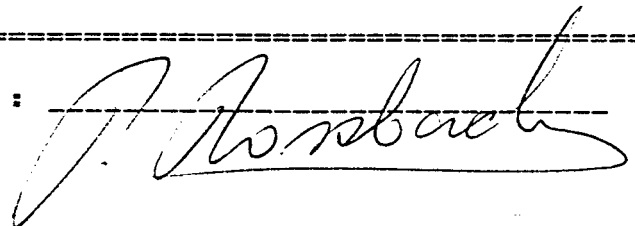
**CERTIFICATE OF ANALYSIS**

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 PROJECT: V 239  
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CERTIFICATE#: 86569  
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 FILE NAME: MPH86569  
 PAGE # : 2

PRE FIX	SAMPLE NAME	PPB Au
S	L 3S 000	5
S	025E	5
S	050E	5
S	075E	5
S	100E	5
S	125E	5
S	150E	5
S	175E	5
S	200E	5
S	225E	5
S	250E	5
S	275E	5
S	300E	5
S	325E	5
S	350E	5
S	375E	5
S	400E	5
S	425E	5
S	450E	5
S	475E	5
S	500E	5
S	525E	5
S	L 3S 550E	5
S	L 4S 000	5
S	025E	5
S	050E	10
S	075E	5
S	100E	5
S	125E	5
S	150E	5
S	175E	5
S	200E	5
S	225E	5
S	250E	5
S	275E	5
S	300E	5
S	325E	5
S	350E	5
S	375E	5
S	L 4S 400E	5

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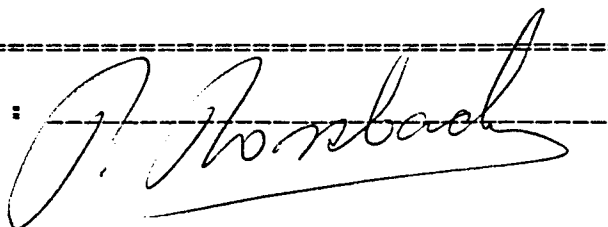
**CERTIFICATE OF ANALYSIS**

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 VANCOUVER B.C.  
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CERTIFICATE#: 86569  
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 DATE ENTERED: 86-10-22  
 FILE NAME: MPH86569  
 PAGE # : 3

PRE FIX	SAMPLE NAME	PPB Au
S	L 4S 425E	5
S	450E	10
S	475E	5
S	500E	5
S	525E	5
S	550E	5
S	575E	5
S	600E	5
S	625E	10
S	L 4S 650E	5
S	L 1N 000	5
S	025E	120
S	050E	5
S	075E	5
S	100E	5
S	125E	5
S	150E	5
S	175E	5
S	200E	5
S	225E	5
S	250E	5
S	275E	5
S	300E	5
S	325E	5
S	350E	5
S	375E	30
S	400E	5
S	425E	5
S	450E	5
S	475E	5
S	500E	5
S	525E	20
S	550E	5
S	575E	5
S	600E	5
S	625E	5
S	L 1N 650E	5
S	L 8N 000	5
S	025E	5
S	L 8N 050E	5

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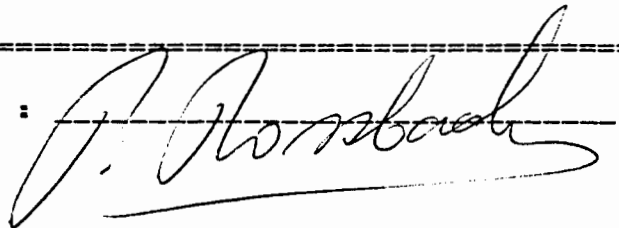
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TO : MPH CONSULTING LTD.  
301-409 GRANVILLE STREET  
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TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 86569  
INVOICE#: 7060  
DATE ENTERED: 86-10-22  
FILE NAME: MPH86569  
PAGE # : 4

PRE FIX	SAMPLE NAME	PPB Au
S	L 8N 075E	5
S	100E	5
S	125E	5
S	150E	50
S	175E	5
S	200E	5
S	225E	5
S	250E	5
S	275E	5
S	300E	5
S	325E	5
S	350E	5
S	375E	5
S	400E	5
S	425E	5
S	450E	5
S	475E	5
S	500E	5
S	525E	5
S	550E	5
S	575E	5
S	600E	5
S	625E	5
S	650E	5
S	675E	5
S	700E	5
S	725E	5
S	750E	5
S	775E	5
S	800E	5
S	825E	5
S	850E	5
S	875E	5
S	900E	5
S	925E	5
S	950E	5
S	975E	5
S	1000E	5
S	1025E	5
S	L 8N 1050E	5

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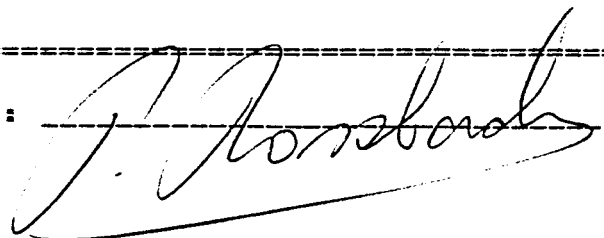
**CERTIFICATE OF ANALYSIS**

TO : MPH CONSULTING LTD.  
301-409 GRANVILLE STREET  
VANCOUVER B.C.  
PROJECT: V 239  
TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 86569  
INVOICE#: 7060  
DATE ENTERED: 86-10-22  
FILE NAME: MPH86569  
PAGE # : 5

PRE FIX	SAMPLE NAME	PPB Au
S	L 9N 000	5
S	025E	5
S	050E	5
S	075E	5
S	100E	5
S	125E	5
S	150E	5
S	175E	5
S	200E	5
S	225E	5
S	250E	5
S	275E	5
S	300E	5
S	325E	5
S	350E	5
S	375E	5
S	400E	5
S	425E	5
S	450E	5
S	475E	5
S	500E	5
S	525E	5
S	550E	5
S	575E	5
S	600E	5
S	625E	5
S	650E	5
S	675E	5
S	700E	5
S	725E	5
S	750E	5
S	775E	5
S	800E	5
S	825E	5
S	850E	5
S	875E	5
S	900E	5
S	925E	5
S	950E	5
S	L 9N 975E	5

CERTIFIED BY :



**ROSSBACHER LABORATORY LTD.**

2225 S. SPRINGER AVENUE  
 BURNABY, B.C. V5B 3N1  
 TEL : (604) 299 - 6910

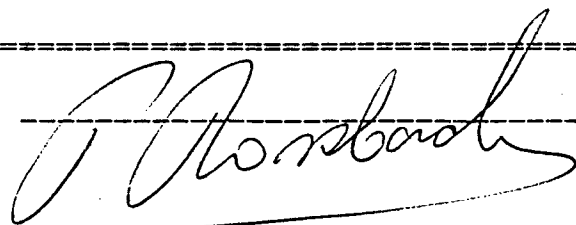
**CERTIFICATE OF ANALYSIS**

TO : MPH CONSULTING LTD.  
 301-409 GRANVILLE STREET  
 VANCOUVER B.C.  
 PROJECT: V 239  
 TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 86569  
 INVOICE#: 7060  
 DATE ENTERED: 86-10-22  
 FILE NAME: MPH86569  
 PAGE # : 6

PRE FIX	SAMPLE NAME	PPB Au
S	L 9N 1000E	5
S	1025E	5
S	1050E	5
S	1075E	5
S	L 9N 1100E	5
S	L 10N 275E	5
S	300E	5
S	325E	5
S	350E	5
S	375E	5
S	400E	5
S	425E	5
S	450E	5
S	475E	5
S	500E	5
S	525E	5
S	550E	5
S	575E	5
S	600E	5
S	625E	5
S	675E	5
S	L 10N 700E	5
S	L 12N 000	5
S	025E	5
S	050E	5
S	075E	5
S	100E	5
S	125E	5
S	150E	5
S	175E	5
S	200E	5
S	225E	20
S	250E	5
S	275E	5
S	300E	5
S	325E	5
S	350E	5
S	375E	5
S	400E	5
S	L 12N 425E	5

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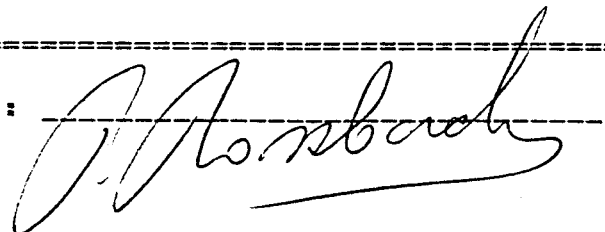
**CERTIFICATE OF ANALYSIS**

TO : MPH CONSULTING LTD.  
 301-409 GRANVILLE STREET  
 VANCOUVER B.C.  
 PROJECT: V 239  
 TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 86569  
 INVOICE#: 7060  
 DATE ENTERED: 86-10-22  
 FILE NAME: MFH86569  
 PAGE # : 7

PRE FIX	SAMPLE NAME	PPB Au
S	L 12N 450E	5
S	475E	5
S	500E	5
S	525E	5
S	550E	5
S	575E	5
S	600E	5
S	625E	5
S	650E	5
S	675E	5
S	700E	5
S	725E	5
S	750E	5
S	775E	5
S	800E	5
S	825E	5
S	850E	5
S	875E	5
S	900E	5
S	925E	5
S	950E	5
S	975E	5
S	L 12N 1000E	5
S	L 14N 000	5
S	025E	5
S	050E	5
S	075E	5
S	100E	840
S	125E	5
S	150E	5
S	175E	5
S	200E	5
S	225E	5
S	250E	5
S	275E	5
S	300E	5
S	325E	5
S	350E	5
S	375E	5
S	L 14N 400E	5

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BURNABY, B.C. V5B 3N1  
TEL : (604) 299 - 6910

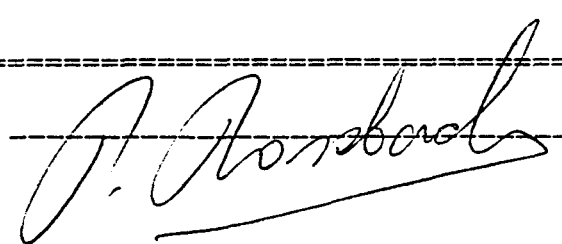
**CERTIFICATE OF ANALYSIS**

TO : MPH CONSULTING LTD.  
301-409 GRANVILLE STREET  
VANCOUVER B.C.  
PROJECT: V 239  
TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 86569  
INVOICE#: 7060  
DATE ENTERED: 86-10-22  
FILE NAME: MPH86569  
PAGE # : 9

PRE FIX	SAMPLE NAME	PPB Au
S	L 16N 500E	5
S	550E	5
S	525E	5
S	575E	5
S	L 16N 600E	5

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2225 S. SPRINGER AVENUE  
 BURNABY, B.C. V5B 3N1  
 TEL : (604) 299 - 6910

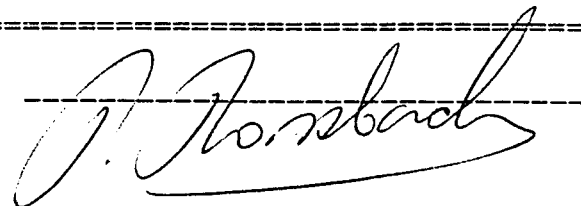
**CERTIFICATE OF ANALYSIS**

TO : MPH CONSULTING LTD.  
 301-409 GRANVILLE STREET  
 VANCOUVER B.C.  
 PROJECT: V 239  
 TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 86569  
 INVOICE#: 7060  
 DATE ENTERED: 86-10-22  
 FILE NAME: MPH86569  
 PAGE # : 8

PRE FIX	SAMPLE NAME	PPB Au
S	L 14N 425E	5
S	450E	5
S	475E	5
S	500E	5
S	525E	5
S	550E	5
S	575E	5
S	600E	5
S	625E	5
S	650E	5
S	675E	5
S	700E	5
S	725E	5
S	L 14N 750E	5
S	L 16N 150W	5
S	125W	5
S	100W	5
S	075W	5
S	050W	5
S	025W	5
S	000	5
S	025E	5
S	050E	5
S	075E	5
S	100E	5
S	125E	5
S	150E	5
S	175E	5
S	200E	5
S	225E	30
S	250E	5
S	275E	5
S	300E	5
S	325E	5
S	350E	5
S	375E	5
S	400E	5
S	425E	5
S	450E	5
S	475E	5

CERTIFIED BY :





ROSSBACHER LABORATORY LTD.

2225 S. SPRINGER AVENUE  
BURNABY, B.C. V5B 3N1  
TEL : (604) 299 - 6910

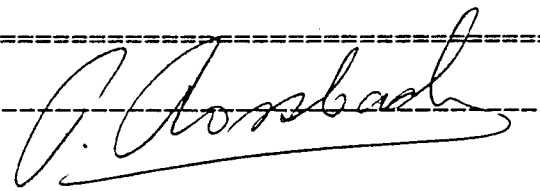
CERTIFICATE OF ANALYSIS

TO : MPH CONSULTING LTD.  
301-409 GRANVILLE STREET  
VANCOUVER B.C.  
PROJECT: V 239  
TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 86569.A  
INVOICE#: 7414  
DATE ENTERED: 87-02-12  
FILE NAME: MFH86569.A  
PAGE # : 1

PRE FIX	SAMPLE NAME	PPB Au
S	L O 000 E	5
S	025 E	5
S	050 E	5
S	075 E	5
S	100 E	5
S	125 E	5
S	150 E	5
S	175 E	5
S	200 E	5
S	225 E	5
S	250 E	5
S	275 E	5
S	300 E	5
S	325 E	5
S	350 E	5
S	375 E	5
S	400 E	5
S	425 E	5
S	450 E	5
S	475 E	5
S	500 E	5
S	525 E	5
S	L O 550 E	5

CERTIFIED BY :



RECEIVED FEB 13 1987



# Chemex Labs Ltd.

\*Analytical Chemists \*Geochemists \*Registered Assayers

212 Brooksbank Ave.  
North Vancouver, B.C.  
Canada V7J 2C1

Telephone: (604) 984-0221  
Telex: 043-52597

Semi quantitative multi element ICP analysis

Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sb, Ba, Be, Co, Cr, Ga, La, Mg, K, Na, Sr, Ti, Tl, W and U can only be considered as semi-quantitative.

TO : ROSEBACHER LABORATORY LIMITED

2205 SOUTH SPRINGER AVENUE  
PRIMABAY, B.C.  
USE DR1

ORDER # : AS619953-001-A  
INVOICE # : 19619953  
DATE : 6-NOV-86  
P.O. # : NONE  
VDDO

COMMENTS :  
ATTN: PETER ROSEBACHER

Sample Description	Al	Ag	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	K	La	Mg	Mn	Mo	Nb	Ni	P	Pb	Sb	Sr	Ti	Tl	U	V	W	Zn			
	%	ppb	ppm	ppb	ppb	ppb	%	ppb	ppb	ppb	ppb	%	ppb	%	ppb	%	ppb	ppb	%	ppb	ppb	ppb	ppb	ppb	%	ppb	ppb	ppb	ppb	ppb			
19 00+00	4.42	0.4	5	210	<0.5	<2	0.24	<0.5	16	35	73	4.57	<10	0.10	10	0.99	1361	<1	0.01	23	1730	12	<5	12	0.24	<10	<10	108	<5	118	--	--	
19 00+25E	4.06	<0.2	<5	200	<0.5	<2	0.14	0.5	15	30	68	4.00	<10	0.11	<10	0.79	1287	<1	<0.01	19	1280	20	<5	10	0.17	<10	<10	89	<5	108	--	--	
19 00+50E	3.42	0.4	5	100	<0.5	<2	0.11	0.5	10	20	40	3.42	<10	0.06	<10	0.47	588	<1	0.01	13	730	2	<5	8	0.15	<10	<10	27	<5	26	--	--	
19 00+75E	2.19	<0.2	5	80	<0.5	<2	0.14	<0.5	5	14	20	2.59	<10	0.05	<10	0.29	298	<1	0.01	9	610	14	<5	8	0.12	<10	<10	72	<5	54	--	--	
19 01+00E	3.11	<0.2	5	90	<0.5	<2	0.09	0.5	7	19	27	3.02	<10	0.04	<10	0.29	342	<1	0.01	10	660	5	<5	5	0.10	<10	<10	22	<5	58	--	--	
19 01+25E	nss	nss	nss	nss	nss	nss	nss	nss	nss	nss	nss	nss	nss	nss	nss	nss	nss	nss	nss	nss	nss	nss	nss	nss	nss	nss	nss	nss	nss	nss	nss	nss	nss
19 01+50E	1.08	0.4	<5	80	<0.5	<2	0.12	<0.5	5	15	25	2.94	<10	0.04	<10	0.25	440	<1	<0.01	7	780	8	<5	9	0.11	<10	<10	78	<5	54	--	--	
19 01+75E	3.61	<0.2	5	180	<0.5	<2	0.12	<0.5	13	26	56	3.85	<10	0.06	<10	0.72	692	<1	<0.01	19	630	12	<5	7	0.17	<10	<10	98	<5	84	--	--	
19 02+00E	4.14	<0.2	10	100	<0.5	<2	0.13	<0.5	13	21	45	4.30	<10	0.06	<10	0.63	452	<1	0.01	20	810	12	<5	8	0.17	<10	<10	93	<5	104	--	--	
19 02+25E	3.87	0.2	5	120	<0.5	<2	0.12	<0.5	14	26	57	3.69	<10	0.07	<10	0.74	671	<1	0.01	20	650	2	<5	7	0.16	<10	<10	91	<5	92	--	--	
19 02+50E	3.70	0.2	10	90	<0.5	<2	0.17	<0.5	7	19	30	3.22	<10	0.06	<10	0.29	502	<1	0.01	11	620	12	<5	8	0.15	<10	<10	25	<5	63	--	--	
19 02+75E	4.82	<0.2	10	110	<0.5	<2	0.14	<0.5	12	25	60	3.85	<10	0.05	<10	0.69	507	<1	<0.01	17	470	8	<5	8	0.20	<10	<10	94	<5	78	--	--	
19 03+00E	3.59	<0.2	10	150	<0.5	<2	0.13	<0.5	13	25	42	4.06	<10	0.07	<10	0.63	669	<1	<0.01	17	660	14	<5	7	0.19	<10	<10	106	<5	92	--	--	
19 03+25E	0.97	0.4	5	40	<0.5	<2	0.22	<0.5	3	8	13	1.26	<10	0.08	<10	0.19	278	<1	<0.01	5	700	14	<5	7	0.06	<10	<10	25	<5	44	--	--	
19 03+50E	4.13	<0.2	5	190	<0.5	<2	0.15	<0.5	15	32	65	4.63	<10	0.09	10	0.82	520	<1	0.01	24	730	5	<5	9	0.10	<10	<10	110	<5	92	--	--	
19 03+75E	2.25	0.4	10	90	<0.5	<2	0.14	<0.5	2	19	24	2.15	<10	0.05	<10	0.23	262	<1	0.01	10	770	16	<5	8	0.11	<10	<10	78	<5	88	--	--	
19 04+00E	4.14	<0.2	10	150	<0.5	<2	0.21	<0.5	17	29	62	3.87	<10	0.08	10	0.61	1227	<1	<0.01	22	930	29	<5	9	0.14	<10	<10	90	<5	90	--	--	
19 04+25E	2.60	0.6	<5	180	0.5	<2	0.43	0.5	130	13	44	1.92	<10	0.09	50	0.33	4662	<1	<0.01	11	820	24	<5	22	0.06	<10	<10	41	<5	68	--	--	
19 04+50E	5.53	<0.2	5	210	<0.5	<2	0.15	<0.5	10	41	68	5.19	<10	0.08	10	0.89	621	<1	0.01	29	410	12	<5	9	0.22	<10	<10	120	<5	110	--	--	
19 04+75E	4.00	<0.2	5	140	<0.5	<2	0.16	<0.5	11	31	37	4.81	<10	0.06	<10	0.62	434	<1	0.01	18	610	10	<5	9	0.19	<10	<10	121	<5	94	--	--	
19 05+00E	1.42	0.2	10	200	<0.5	<2	0.22	<0.5	21	40	90	5.37	<10	0.14	10	1.02	934	<1	0.01	21	340	12	<5	24	0.26	<10	<10	134	<5	114	--	--	
25 00+00	3.69	<0.2	10	190	<0.5	<2	0.20	<0.5	19	22	92	4.44	<10	0.10	10	0.96	1457	<1	0.01	22	1230	12	<5	10	0.21	<10	<10	122	<5	102	--	--	
25 00+25E	3.77	0.4	<5	90	<0.5	<2	0.16	<0.5	11	29	48	4.21	<10	0.05	<10	0.46	1262	<1	0.01	12	1920	10	<5	9	0.17	<10	<10	109	<5	92	--	--	
25 00+50E	3.47	0.4	10	170	<0.5	<2	0.17	<0.5	14	30	65	3.96	<10	0.09	10	0.65	844	<1	0.01	20	1050	20	<5	12	0.19	<10	<10	105	<5	96	--	--	
25 00+75E	2.72	<0.2	<5	80	<0.5	<2	0.12	<0.5	8	22	40	3.52	<10	0.04	<10	0.37	563	<1	<0.01	10	370	4	<5	9	0.16	<10	<10	93	<5	72	--	--	
25 01+00E	5.23	<0.2	<5	370	<0.5	<2	0.10	0.5	19	31	102	4.48	<10	0.14	10	1.06	747	<1	<0.01	26	530	4	<5	10	0.20	<10	<10	121	<5	108	--	--	
25 01+25E	3.72	<0.2	5	180	<0.5	<2	0.13	<0.5	14	24	65	4.15	<10	0.09	<10	0.76	714	<1	0.01	19	1370	5	<5	9	0.12	<10	<10	104	<5	92	--	--	
25 01+50E	2.29	<0.2	<5	100	<0.5	<2	0.13	<0.5	7	16	41	3.16	<10	0.04	<10	0.42	264	<1	0.01	10	390	4	<5	8	0.14	<10	<10	79	<5	56	--	--	
25 01+75E	3.27	<0.2	<5	110	<0.5	<2	0.10	<0.5	10	20	55	2.50	<10	0.05	<10	0.62	421	<1	0.01	14	930	2	<5	7	0.12	<10	<10	87	<5	72	--	--	
25 02+00E	4.45	<0.2	15	260	<0.5	<2	0.14	<0.5	21	37	106	5.00	<10	0.10	10	1.17	821	<1	0.01	31	820	10	<5	11	0.25	<10	<10	122	<5	106	--	--	
25 02+25E	4.27	<0.2	20	210	<0.5	<2	0.19	<0.5	18	36	89	5.13	<10	0.09	10	1.00	760	<1	0.01	27	790	14	<5	14	0.24	<10	<10	127	<5	109	--	--	
25 02+50E	2.41	<0.2	10	90	<0.5	<2	0.20	<0.5	13	22	32	3.75	<10	0.04	10	0.52	790	<1	<0.01	12	770	4	<5	15	0.19	<10	<10	103	<5	66	--	--	
25 02+75E	2.82	<0.2	<5	120	<0.5	<2	0.24	<0.5	12	24	22	2.73	<10	0.05	10	0.60	1205	<1	0.01	16	500	9	<5	19	0.17	<10	<10	87	<5	109	--	--	
25 03+00E	3.99	<0.2	<5	100	<0.5	<2	0.13	0.5	14	28	66	4.00	<10	0.04	<10	0.45	554	<2	0.01	16	520	8	<5	10	0.19	<10	<10	84	<5	110	--	--	
25 03+25E	2.39	0.2	<5	120	<0.5	<2	0.24	0.5	12	21	40	3.25	<10	0.05	10	0.45	979	<1	0.01	15	490	10	<5	14	0.12	<10	<10	82	<5	82	--	--	
25 03+50E	3.22	<0.2	10	150	<0.5	<2	0.16	<0.5	12	28	44	3.81	<10	0.06	<10	0.64	432	<1	<0.01	19	520	10	<5	15	0.19	<10	<10	90	<5	76	--	--	
25 03+75E	4.92	<0.2	5	250	<0.5	<2	0.13	<0.5	21	40	85	4.98	<10	0.08	<10	0.92	599	<1	<0.01	31	440	9	<5	11	0.23	<10	<10	110	<5	102	--	--	
25 04+00E	5.48	<0.2	15	180	<0.5	<2	0.15	<0.5	16	40	69	4.95	<10	0.07	<10	0.95	529	<1	<0.01	30	700	8	<5	9	0.21	<10	<10	109	<5	112	--	--	
25 04+25E	6.48	<0.2	20	200	<0.5	<2	0.12	<0.5	19	49	117	5.54	<10	0.07	<10	1.09	614	<1	0.01	34	650	10	<5	9	0.24	<10	<10	125	<5	119	--	--	
25 04+50E	1.99	<0.2	5	120	<0.5	<2	0.19	<0.5	25	16	10	2.57	<10	0.02	10	0.39	1837	<1	0.01	11	400	12	<5	12	0.12	<10	<10	86	<5	81	--	--	

SYSTEMS BUSINESS FORMS LIMITED VANCOUVER TRADING

*B. C. J.*



# Chemex Labs Ltd.

\*Analytical Chemists \*Geochemists \*Registered Assayers

212 Brooksbank Ave.  
North Vancouver, B.C.  
Canada V7J 2C1

Telephone: (604) 984-0221  
Telex: 043-52597

## CERTIFICATE OF ANALYSIS

TO : ROSSBACHER LABORATORY LIMITED

2225 SOUTH SPRINGER AVENUE  
BURNABY, B.C.  
V5B 3M1

CERT. # : A0010001 002-A  
INVOICE # : 18610052  
DATE : 6-NOV-86  
P.L.O. # : NONE  
V230

ICP analysis

Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sb, Ba, Be, Co, Cr, Ga, La, Mg, K, Na, Sr, Ti, Tl, W and V can only be considered as semi-quantitative.

COMMENTS :  
ATTN: PETER ROSSBACHER

Sample description	Al	Ag	As	Ba	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sr	Ti	Tl	U	V	W	Zn	
	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	
3S 00+00	3.44	<0.2	20	140	<0.5	<2	0.15	<0.5	14	29	59	4.00	<10	0.05	<10	0.72	1036	<1	0.01	17	1250	10	<5	6	0.16	<10	<10	106	<5	94	--
3S 00+25E	3.94	<0.2	5	120	<0.5	<2	0.14	<0.5	12	29	58	4.22	<10	0.04	<10	0.62	682	<1	0.01	18	1220	8	<5	7	0.14	<10	<10	93	<5	112	--
3S 10+50E	1.81	<0.2	10	260	<0.5	<2	0.11	<0.5	17	31	79	4.48	<10	0.03	<10	0.94	772	<1	0.01	24	580	4	<5	7	0.13	<10	<10	102	<5	96	--
3S 00+75E	3.81	<0.2	<5	110	<0.5	<2	0.10	<0.5	13	27	52	4.04	<10	0.05	<10	0.49	532	1	<0.01	16	750	12	<5	6	0.14	<10	<10	29	<5	96	--
3S 11+50E	2.79	<0.2	<5	70	<0.5	<2	0.10	<0.5	7	18	35	3.23	<10	0.04	<10	0.43	365	1	<0.01	11	440	2	<5	5	0.12	<10	<10	77	<5	64	--
3S 01+25E	3.02	<0.2	<5	120	<0.5	<2	0.12	<0.5	9	22	44	3.50	<10	0.05	<10	0.54	385	<1	0.01	15	860	18	<5	9	0.15	<10	<10	62	<5	94	--
3S 01+50E	3.75	<0.2	15	160	<0.5	<2	0.14	<0.5	14	24	53	4.11	<10	0.07	<10	0.71	719	<1	0.01	18	1300	8	<5	8	0.18	<10	<10	92	<5	110	--
3S 01+75E	3.49	<0.2	15	100	<0.5	<2	0.10	<0.5	8	23	36	4.75	<10	0.05	<10	0.47	385	<1	0.01	12	1220	12	<5	6	0.19	<10	<10	110	<5	92	--
3S 12+50E	4.27	0.2	5	140	<0.5	<2	0.13	<0.5	16	31	63	4.86	<10	0.06	<10	0.75	595	<1	0.01	21	1820	2	<5	9	0.21	<10	<10	108	<5	100	--
3S 02+25E	2.82	<0.2	10	60	<0.5	<2	0.12	<0.5	5	19	12	4.02	<10	0.04	<10	0.23	399	<1	0.01	8	900	16	<5	9	0.17	<10	<10	90	<5	56	--
3S 02+50E	4.46	<0.2	<5	270	<0.5	<2	0.12	<0.5	22	39	82	4.44	<10	0.09	<10	0.29	969	<1	0.01	24	690	6	<5	7	0.17	<10	<10	109	<5	94	--
3S 02+75E	4.60	<0.2	15	100	<0.5	<2	0.11	<0.5	12	31	45	4.51	<10	0.04	<10	0.49	486	<1	0.01	15	1120	10	<5	6	0.14	<10	<10	95	<5	102	--
3S 03+00E	2.43	<0.2	25	80	<0.5	<2	0.16	<0.5	8	18	16	3.76	<10	0.03	<10	0.37	302	<1	0.01	10	660	10	<5	11	0.16	<10	<10	86	<5	94	--
3S 03+25E	1.62	<0.2	15	60	<0.5	<2	0.09	<0.5	4	13	9	3.18	<10	0.02	<10	0.22	205	<1	0.01	7	280	10	<5	6	0.11	<10	<10	74	<5	48	--
3S 03+50E	1.75	<0.2	20	90	<0.5	<2	0.17	<0.5	7	16	8	3.19	<10	0.02	<10	0.30	427	2	0.01	9	280	4	<5	9	0.19	<10	<10	97	<5	62	--
3S 03+75E	3.22	<0.2	30	360	<0.5	<2	0.64	<0.5	21	23	20	4.45	<10	0.09	<10	0.43	1382	2	0.01	24	690	18	<5	29	0.14	<10	<10	102	<5	212	--
3S 04+00E	3.51	<0.2	20	130	<0.5	<2	0.15	<0.5	11	30	40	4.72	<10	0.05	<10	0.70	461	<1	0.01	21	630	2	<5	8	0.21	<10	<10	93	<5	92	--
3S 04+25E	3.22	<0.2	20	130	<0.5	<2	0.19	<0.5	12	29	36	4.20	<10	0.02	<10	0.58	698	<1	0.01	18	720	10	<5	11	0.15	<10	<10	93	<5	168	--
3S 04+50E	2.53	<0.2	20	90	<0.5	<2	0.19	<0.5	7	22	18	4.08	<10	0.03	<10	0.40	360	<1	0.01	12	650	6	<5	7	0.14	<10	<10	86	<5	68	--
3S 04+75E	4.06	<0.2	30	140	<0.5	<2	0.21	<0.5	17	30	77	4.80	<10	0.08	<10	0.83	640	<1	0.01	25	890	8	<5	10	0.26	<10	<10	105	<5	94	--
3S 05+00E	2.21	<0.2	15	100	<0.5	<2	0.15	<0.5	7	22	24	3.38	<10	0.02	<10	0.15	505	<1	0.01	12	640	12	<5	7	0.16	<10	<10	90	<5	70	--
3S 05+25E	2.82	<0.2	20	100	<0.5	<2	0.10	<0.5	9	24	26	3.98	<10	0.02	<10	0.49	234	<1	0.01	15	500	10	<5	6	0.12	<10	<10	85	<5	76	--
3S 05+50E	2.49	<0.2	15	90	<0.5	<2	0.12	<0.5	7	22	21	3.57	<10	0.04	<10	0.48	351	<1	0.01	14	570	16	<5	2	0.15	<10	<10	78	<5	63	--
4S 00+00	2.51	<0.2	20	100	<0.5	<2	0.18	<0.5	9	23	34	3.30	<10	0.05	<10	0.44	972	<1	0.01	13	810	20	<5	7	0.13	<10	<10	77	<5	78	--
4S 00+25E	3.34	<0.2	20	130	<0.5	<2	0.15	<0.5	14	34	58	4.57	<10	0.07	<10	0.93	823	<1	0.01	21	1100	10	<5	8	0.19	<10	<10	105	<5	90	--
4S 00+50E	3.25	<0.2	15	130	<0.5	<2	0.13	<0.5	11	26	52	3.80	<10	0.05	<10	0.63	747	<1	0.01	18	690	14	<5	7	0.16	<10	<10	87	<5	84	--
4S 10+75E	3.23	<0.2	20	150	<0.5	<2	0.13	<0.5	12	32	55	3.94	<10	0.06	<10	0.68	691	<1	0.01	18	780	8	<5	7	0.17	<10	<10	39	<5	84	--
4S 01+00E	4.81	<0.2	25	120	<0.5	<2	0.10	<0.5	12	29	53	4.65	<10	0.06	<10	0.56	505	<1	0.01	17	1930	16	<5	6	0.17	<10	<10	94	<5	120	--
4S 01+25E	4.50	<0.2	15	140	<0.5	<2	0.11	<0.5	12	26	54	4.83	<10	0.06	<10	0.65	472	<1	0.01	19	670	8	<5	2	0.19	<10	<10	90	<5	88	--
4S 01+50E	4.29	0.6	20	120	<0.5	<2	0.12	<0.5	8	24	38	4.36	<10	0.06	<10	0.42	357	<1	0.01	13	1060	14	<5	8	0.18	<10	<10	92	<5	96	--
4S 01+75E	3.50	<0.2	15	100	<0.5	<2	0.09	<0.5	10	24	37	3.96	<10	0.05	<10	0.40	366	<1	0.01	12	650	8	<5	7	0.15	<10	<10	89	<5	86	--
4S 02+00E	4.22	<0.2	20	210	<0.5	<2	0.11	<0.5	13	31	72	4.01	<10	0.07	<10	0.75	455	<1	0.01	24	490	2	<5	8	0.16	<10	<10	85	<5	90	--
4S 02+25E	5.47	<0.2	25	430	<0.5	<2	0.10	<0.5	23	34	113	5.25	<10	0.12	<10	1.11	838	<1	0.01	30	530	2	<5	9	0.22	<10	<10	122	<5	104	--
4S 02+50E	4.88	<0.2	30	290	<0.5	<2	0.11	<0.5	18	28	84	4.44	<10	0.08	<10	0.95	738	<1	0.01	26	620	12	<5	8	0.18	<10	<10	105	<5	102	--
4S 02+75E	4.21	<0.2	25	230	<0.5	<2	0.12	<0.5	16	30	71	4.11	<10	0.09	<10	0.79	784	<1	0.01	24	790	14	<5	8	0.19	<10	<10	104	<5	98	--
4S 03+00E	2.79	<0.2	15	80	<0.5	<2	0.15	<0.5	7	19	27	3.47	<10	0.03	<10	0.29	364	<1	0.01	8	1150	8	<5	8	0.16	<10	<10	79	<5	74	--
4S 03+25E	3.72	<0.2	25	100	<0.5	<2	0.15	<0.5	7	23	33	3.98	<10	0.04	<10	0.47	370	<1	0.01	14	460	14	<5	8	0.18	<10	<10	91	<5	64	--
4S 03+50E	2.45	<0.2	15	340	<0.5	<2	0.60	1.5	8	21	32	3.25	<10	0.12	<10	0.39	4625	2	0.01	16	2700	56	<5	39	0.14	<10	<10	107	<5	140	--
4S 03+75E	4.34	<0.2	25	150	<0.5	<2	0.12	<0.5	14	30	44	5.76	<10	0.07	<10	0.45	395	1	0.01	22	520	20	<5	2	0.21	<10	<10	129	<5	124	--
4S 04+00E	3.25	<0.2	20	140	<0.5	<2	0.18	<0.5	9	26	34	4.91	<10	0.04	<10	0.64	451	<1	0.01	19	420	10	<5	12	0.22	<10	<10	114	<5	96	--

Certified by *P. Cash*

RECEIVED NOV 11 1986



# Chemex Labs Ltd.

-Analytical Chemists -Geochemists -Registered Assayers

212 Brooksbank Ave.  
North Vancouver, B.C.  
Canada V7J 2C1

Telephone: (604) 984-0221  
Telex: 043-52597

Semi quantitative multi element ICP analysis

## CERTIFICATE OF ANALYSIS

TO : ROSSBACHER LABORATORY LIMITED

2005 SOUTH SPRINGER AVENUE  
SURREY, B.C.  
V3R 0R1

CERT. # : ADDITIONAL PAGE  
INVOICE # : IS610953  
DATE : 6-NOV-88  
P.O. # : NONE  
V000

Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, the following elements for Al, Cl, Br, Be, Ca, Cr, Ga, La, Mg, K, Na, Sr, Tl, Ti, W and V can only be considered as semi-quantitative.

COMMENTS :  
ATTN: PETER ROSSBACHER

Sample description	Al	Ag	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sr	Ti	Tl	U	V	W	Zn		
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm		
4S 04+2SE	5.26	<0.2	30	420	<0.5	<2	0.26	<0.5	20	22	68	4.34	<10	0.14	10	0.83	941	<1	0.02	29	460	12	<5	17	0.12	<10	<10	89	<5	96	--	--
4S 04+50E	3.14	<0.2	35	180	<0.5	<2	0.28	<0.5	17	24	60	3.92	<10	0.14	<10	0.81	760	<1	0.02	23	550	14	<5	14	0.12	<10	<10	80	<5	88	--	--
4S 04+7SE	3.39	<0.2	40	190	<0.5	<2	0.29	<0.5	15	24	51	3.72	<10	0.13	<10	0.74	796	<1	0.02	19	500	16	<5	16	0.12	<10	<10	77	<5	74	--	--
4S 05+00E	2.42	<0.2	40	150	<0.5	<2	0.19	<0.5	12	16	19	2.99	<10	0.11	<10	0.39	432	1	0.01	12	250	8	<5	12	0.12	<10	<10	71	<5	65	--	--
4S 05+2SE	2.64	<0.2	50	120	<0.5	<2	0.21	<0.5	7	22	16	4.29	<10	0.13	<10	0.41	268	1	0.01	11	470	9	<5	15	0.17	<10	<10	102	<5	58	--	--
4S 05+50E	3.13	<0.2	35	110	<0.5	<2	0.14	<0.5	10	27	35	3.91	<10	0.13	<10	0.62	363	<1	0.02	18	300	10	<5	9	0.12	<10	<10	81	<5	72	--	--
4S 05+7SE	3.90	<0.2	10	220	<0.5	<2	0.13	<0.5	16	35	65	4.13	<10	0.14	<10	0.36	495	<1	0.02	27	270	10	<5	10	0.14	<10	<10	82	<5	89	--	--
4S 06+00E	3.62	<0.2	20	90	<0.5	<2	0.12	<0.5	8	25	38	3.64	<10	0.10	<10	0.51	301	<1	0.01	15	550	14	<5	9	0.15	<10	<10	74	<5	66	--	--
4S 06+2SE	2.42	<0.2	20	30	<0.5	<2	0.11	<0.5	4	20	18	3.94	<10	0.10	<10	0.25	261	<1	0.01	9	720	16	<5	2	0.15	<10	<10	84	<5	70	--	--
4S 06+50E	2.22	<0.2	40	90	<0.5	<2	0.12	<0.5	8	16	16	3.22	<10	0.09	<10	0.39	226	<1	0.01	10	420	10	<5	7	0.12	<10	<10	70	<5	64	--	--
4N 00+00	3.25	<0.2	20	30	<0.5	<2	0.13	<0.5	2	21	46	3.30	<10	0.11	<10	0.44	400	<1	0.01	10	240	12	<5	2	0.12	<10	<10	89	<5	90	--	--
4N 00+2SE	2.62	<0.2	15	150	<0.5	<2	0.12	<0.5	12	24	58	3.44	<10	0.14	<10	0.79	641	<1	0.01	20	390	6	<5	9	0.17	<10	<10	72	<5	88	--	--
4N 00+50E	3.72	<0.2	30	160	<0.5	<2	0.09	<0.5	9	19	33	3.17	<10	0.11	<10	0.41	249	<1	0.01	13	490	8	<5	7	0.15	<10	<10	64	<5	79	--	--
4N 00+7SE	1.79	<0.2	15	120	<0.5	<2	0.18	<0.5	13	12	21	3.25	<10	0.09	<10	0.47	1194	<1	0.01	10	240	6	<5	10	0.10	<10	<10	51	<5	66	--	--
4N 01+00E	3.71	<0.2	5	120	<0.5	<2	0.11	<0.5	12	22	48	3.57	<10	0.12	<10	0.60	399	<1	0.02	16	460	2	<5	2	0.15	<10	<10	70	<5	93	--	--
4N 01+2SE	2.98	<0.2	15	90	<0.5	<2	0.08	<0.5	6	17	29	3.14	<10	0.11	<10	0.31	244	<1	0.01	9	280	4	<5	7	0.16	<10	<10	77	<5	64	--	--
4N 01+50E	3.71	<0.2	10	110	<0.5	<2	0.12	<0.5	10	18	32	2.99	<10	0.11	<10	0.48	509	<1	0.01	12	480	12	<5	9	0.12	<10	<10	64	<5	76	--	--
4N 01+7SE	3.61	<0.2	30	200	<0.5	<2	0.20	<0.5	21	28	37	4.39	<10	0.14	10	0.64	728	1	0.02	26	470	12	<5	11	0.16	<10	<10	94	<5	96	--	--
4N 02+00E	2.91	<0.2	40	120	<0.5	<2	0.15	<0.5	9	21	33	3.64	<10	0.10	<10	0.63	487	<1	0.01	16	460	6	<5	8	0.15	<10	<10	80	<5	74	--	--
4N 02+2SE	2.93	<0.2	30	140	<0.5	<2	0.15	<0.5	9	20	26	3.39	<10	0.11	<10	0.41	342	<1	0.01	13	400	8	<5	9	0.17	<10	<10	82	<5	74	--	--
4N 02+50E	3.43	<0.2	25	160	<0.5	<2	0.11	<0.5	10	20	31	3.99	<10	0.14	<10	0.59	422	<1	0.02	12	540	6	<5	3	0.16	<10	<10	97	<5	90	--	--
4N 02+7SE	3.21	<0.2	25	180	<0.5	<2	0.15	<0.5	12	22	42	3.70	<10	0.15	<10	0.65	622	<1	0.02	12	500	12	<5	9	0.14	<10	<10	85	<5	78	--	--
4N 03+00E	2.97	<0.2	25	120	<0.5	<2	0.12	<0.5	16	24	34	3.64	<10	0.14	<10	0.57	591	<1	0.02	17	550	10	<5	9	0.12	<10	<10	78	<5	86	--	--
4N 03+2SE	3.43	<0.2	30	160	<0.5	<2	0.11	<0.5	12	25	39	3.60	<10	0.17	<10	0.59	470	<1	0.02	18	610	4	<5	7	0.14	<10	<10	80	<5	88	--	--
4N 03+50E	3.93	<0.2	35	240	<0.5	<2	0.14	<0.5	16	33	62	4.19	<10	0.16	<10	0.30	691	<1	0.01	25	600	6	<5	9	0.14	<10	<10	92	<5	88	--	--
4N 03+7SE	2.69	<0.2	25	140	<0.5	<2	0.17	<0.5	11	21	23	3.02	<10	0.10	<10	0.46	711	<1	0.01	12	360	4	<5	10	0.14	<10	<10	71	<5	78	--	--
4N 04+00E	3.34	<0.2	30	160	<0.5	<2	0.16	<0.5	12	25	33	3.53	<10	0.07	<10	0.55	791	<1	0.01	16	560	10	<5	9	0.15	<10	<10	80	<5	82	--	--
4N 04+2SE	2.05	<0.2	30	210	<0.5	<2	0.17	<0.5	19	25	38	2.19	<10	0.09	<10	0.62	1101	<1	0.01	12	350	10	<5	9	0.12	<10	<10	74	<5	76	--	--
4N 04+50E	2.17	<0.2	30	220	<0.5	<2	0.12	<0.5	13	26	40	3.55	<10	0.20	<10	0.65	970	<1	0.02	19	630	9	<5	9	0.12	<10	<10	90	<5	90	--	--
4N 04+7SE	1.54	<0.2	10	200	<0.5	<2	0.16	<0.5	6	9	6	1.47	<10	0.15	<10	0.26	719	<1	0.02	6	230	4	<5	9	0.05	<10	<10	37	<5	50	--	--
4N 05+00E	4.76	<0.2	25	150	<0.5	<2	0.11	<0.5	14	24	45	4.20	<10	0.13	<10	0.76	563	<1	0.01	17	590	10	<5	7	0.16	<10	<10	95	<5	122	--	--
4N 05+2SE	4.04	<0.2	20	140	<0.5	<2	0.12	<0.5	11	22	31	3.84	<10	0.14	<10	0.61	437	<1	0.02	13	640	10	<5	8	0.16	<10	<10	87	<5	134	--	--
4N 05+50E	2.90	<0.2	30	230	<0.5	<2	0.24	<0.5	14	23	42	2.95	<10	0.10	<10	0.37	746	<1	0.01	12	300	16	<5	12	0.12	<10	<10	77	<5	98	--	--
4N 05+7SE	2.58	<0.2	25	120	<0.5	<2	0.12	<0.5	10	22	40	3.91	<10	0.11	<10	0.59	532	<1	0.01	17	670	14	<5	7	0.12	<10	<10	89	<5	74	--	--
4N 06+00E	2.58	<0.2	30	160	<0.5	<2	0.14	<0.5	9	26	39	3.82	<10	0.09	<10	0.52	438	<1	0.01	17	710	14	<5	7	0.12	<10	<10	89	<5	74	--	--
4N 06+2SE	4.47	<0.2	35	160	<0.5	<2	0.09	<0.5	11	26	64	4.03	<10	0.10	<10	0.67	358	<1	0.01	20	510	16	<5	7	0.12	<10	<10	81	<5	83	--	--
4N 06+50E	4.30	<0.2	30	190	<0.5	<2	0.10	<0.5	14	32	69	4.03	<10	0.08	<10	0.95	484	<1	0.01	27	290	10	<5	7	0.17	<10	<10	85	<5	96	--	--
8N 00+00	2.53	<0.2	20	90	<0.5	<2	0.08	<0.5	9	16	38	2.90	<10	0.06	<10	0.53	600	<1	0.01	12	460	4	<5	4	0.13	<10	<10	68	<5	74	--	--
8N 00+2SE	0.21	<0.2	10	50	<0.5	<2	0.20	<0.5	2	1	5	0.16	<10	0.04	<10	0.05	116	1	0.01	4	530	20	<5	10	0.01	<10	<10	5	<5	128	--	--
8N 00+50E	0.09	<0.2	10	20	<0.5	<2	0.22	<0.5	2	1	1	0.06	<10	0.02	<10	0.02	58	1	0.01	2	200	4	<5	5	0.01	<10	<10	1	<5	62	--	--

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*B. C. J.*



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## CERTIFICATE OF ANALYSIS

TO : ROSSBACHER LABORATORY LIMITED

3225 SOUTH SPRINGER AVENUE  
BURNABY, B.C.  
V5B 3H1

CERT. # : A8619903-004-A  
INVOICE # : I8619953  
DATE : 6-NOV-98  
P.O. # : NONE  
V239

Semi quantitative multi element ICP analysis

Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sb, Ba, Be, Ca, Cr, Ga, La, Mg, K, Na, Sr, Tl, Ti, W and V can only be considered as semi-quantitative.

COMMENTS :  
ATTN: PETER ROSSBACHER

Sample description	Al	Ag	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sr	Ti	Tl	U	V	W	Zn		
	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm		
BN 00+75E	0.71	<0.2	5	60	<0.5	<2	0.10	<0.5	1	5	8	1.58	<10	0.05	<10	0.10	112	<1	0.01	3	370	<2	<5	7	0.07	<10	<10	60	<5	40	--	--
BN 01+00E	0.28	<0.2	<5	20	<0.5	<2	0.05	<0.5	<1	3	3	0.44	<10	0.02	<10	0.02	89	<1	<0.01	1	100	<2	<5	4	0.04	<10	<10	21	<5	12	--	--
BN 01+25E	2.54	0.2	30	110	<0.5	<2	0.10	<0.5	7	16	42	3.60	<10	0.05	10	0.47	359	<1	0.01	9	450	8	<5	6	0.15	<10	<10	101	<5	79	--	--
BN 01+50E	0.44	0.2	<5	40	<0.5	<2	0.13	<0.5	1	3	4	0.62	<10	0.04	<10	0.05	146	<1	<0.01	2	210	6	<5	5	0.03	<10	<10	39	<5	20	--	--
BN 01+75E	0.76	<0.2	10	60	<0.5	<2	0.05	<0.5	1	4	5	1.14	<10	0.06	<10	0.09	117	<1	0.01	2	130	<2	<5	5	0.04	<10	<10	50	<5	30	--	--
BN 02+00E	3.08	<0.2	30	210	<0.5	<2	0.24	<0.5	25	21	36	3.46	<10	0.14	<10	0.64	1461	<1	0.02	17	480	8	<5	11	0.12	<10	<10	85	<5	106	--	--
BN 02+25E	2.40	0.2	30	80	<0.5	<2	0.14	<0.5	7	17	38	3.26	<10	0.04	<10	0.48	334	<1	0.01	12	440	8	<5	7	0.14	<10	<10	80	<5	76	--	--
BN 02+50E	1.97	0.2	20	70	<0.5	<2	0.09	<0.5	6	15	23	2.92	<10	0.05	<10	0.38	285	<1	0.01	10	470	8	<5	5	0.09	<10	<10	73	<5	62	--	--
BN 03+75E	2.36	0.2	40	90	<0.5	<2	0.11	<0.5	14	21	32	3.02	<10	0.08	<10	0.45	552	<1	0.01	12	710	8	<5	6	0.10	<10	<10	73	<5	78	--	--
BN 03+00E	3.40	<0.2	30	170	<0.5	<2	0.22	<0.5	16	26	65	4.07	<10	0.19	<10	0.92	732	<1	0.02	19	610	10	<5	11	0.12	<10	<10	90	<5	98	--	--
BN 03+25E	2.93	<0.2	15	100	<0.5	<2	0.15	<0.5	6	22	33	3.35	<10	0.12	<10	0.44	362	<1	0.01	12	460	6	<5	9	0.11	<10	<10	94	<5	78	--	--
BN 03+50E	2.84	<0.2	20	70	<0.5	<2	0.09	<0.5	4	18	23	3.54	<10	0.11	<10	0.31	244	<1	0.01	8	1210	8	<5	5	0.13	<10	<10	90	<5	74	--	--
BN 03+75E	5.41	0.4	30	160	<0.5	<2	0.11	<0.5	14	40	80	5.10	<10	0.08	<10	0.82	455	<1	0.01	28	1080	6	<5	8	0.18	<10	<10	117	<5	122	--	--
BN 04+00E	1.92	0.2	15	100	<0.5	<2	0.13	<0.5	3	15	19	2.68	<10	0.07	<10	0.27	182	<1	0.01	8	400	8	<5	8	0.10	<10	<10	73	<5	62	--	--
BN 04+25E	1.95	0.2	30	120	<0.5	<2	0.21	<0.5	5	14	27	2.26	<10	0.11	<10	0.34	212	<1	0.01	12	550	26	<5	10	0.09	<10	<10	58	<5	78	--	--
BN 04+50E	3.13	<0.2	30	70	<0.5	<2	0.10	<0.5	7	22	43	3.51	<10	0.10	<10	0.54	284	<1	0.01	14	400	2	<5	6	0.14	<10	<10	83	<5	74	--	--
BN 04+75E	0.26	0.2	30	60	<0.5	<2	0.30	<0.5	2	7	16	1.07	<10	0.06	<10	0.20	512	<1	0.01	6	550	24	<5	6	0.04	<10	<10	25	<5	54	--	--
BN 05+00E	3.06	<0.2	30	60	<0.5	<2	0.08	<0.5	6	21	34	3.46	<10	0.04	<10	0.53	390	<1	0.01	12	750	8	<5	5	0.11	<10	<10	80	<5	62	--	--
BN 05+25E	2.90	<0.2	25	80	<0.5	<2	0.12	<0.5	9	22	51	3.43	<10	0.05	<10	0.57	450	<1	0.01	15	760	8	<5	6	0.14	<10	<10	76	<5	82	--	--
BN 05+50E	3.08	<0.2	45	100	<0.5	<2	0.14	<0.5	7	20	36	3.55	<10	0.14	<10	0.56	457	<1	0.02	12	1320	6	<5	5	0.11	<10	<10	77	<5	74	--	--
BN 05+75E	1.33	<0.2	15	60	<0.5	<2	0.12	<0.5	2	9	16	1.38	<10	0.08	<10	0.22	211	<1	0.01	6	350	10	<5	7	0.09	<10	<10	66	<5	44	--	--
BN 06+00E	3.98	<0.2	30	90	<0.5	<2	0.10	<0.5	8	37	67	4.39	<10	0.12	<10	0.55	300	<1	0.01	18	780	12	<5	7	0.15	<10	<10	106	<5	90	--	--
BN 06+25E	0.36	0.2	30	30	<0.5	<2	0.56	<0.5	1	4	12	0.48	<10	0.13	<10	0.39	1270	<1	0.01	3	860	40	<5	5	0.02	<10	<10	15	<5	68	--	--
BN 06+50E	2.50	<0.2	15	110	<0.5	<2	0.18	<0.5	8	35	80	3.12	<10	0.10	<10	0.56	359	<1	0.01	23	370	8	<5	9	0.09	<10	<10	77	<5	94	--	--
BN 06+75E	1.31	0.4	55	100	<0.5	<2	0.26	<0.5	4	20	49	1.77	<10	0.08	<10	0.25	247	<1	0.01	13	590	20	<5	10	0.07	<10	<10	46	<5	76	--	--
BN 07+00E	2.12	<0.2	30	60	<0.5	<2	0.12	<0.5	5	31	79	3.00	<10	0.09	<10	0.40	235	<1	0.01	17	310	8	<5	7	0.09	<10	<10	81	<5	66	--	--
BN 07+25E	3.44	0.2	25	110	<0.5	<2	0.16	<0.5	10	29	67	3.52	<10	0.11	<10	0.55	455	<1	0.01	20	540	6	<5	9	0.10	<10	<10	82	<5	94	--	--
BN 07+50E	2.65	<0.2	25	90	<0.5	<2	0.14	<0.5	9	20	29	3.09	<10	0.08	<10	0.47	877	<1	0.01	14	570	20	<5	8	0.12	<10	<10	72	<5	91	--	--
BN 07+75E	3.25	0.2	25	150	<0.5	<2	0.16	<0.5	12	27	51	3.39	<10	0.09	<10	0.66	566	<1	0.01	20	550	12	<5	9	0.11	<10	<10	80	<5	94	--	--
BN 08+00E	2.97	<0.2	35	90	<0.5	<2	0.10	<0.5	8	20	34	3.20	<10	0.14	<10	0.48	381	<1	0.02	15	610	12	<5	6	0.10	<10	<10	75	<5	80	--	--
BN 08+25E	0.12	<0.2	<5	40	<0.5	<2	0.15	<0.5	<1	<1	5	0.09	<10	0.02	<10	0.02	39	<1	<0.01	1	200	6	<5	8	<0.01	<10	<10	3	<5	30	--	--
BN 08+50E	7.91	0.2	45	270	<0.5	<2	0.31	<0.5	18	52	65	7.04	<10	0.43	<10	1.04	1117	<1	0.05	32	1140	28	<5	21	0.17	<10	<10	161	<5	202	--	--
BN 08+75E	2.04	<0.2	25	50	<0.5	<2	0.17	<0.5	3	13	16	2.12	<10	0.12	<10	0.25	203	<1	0.01	3	470	10	<5	7	0.06	<10	<10	44	<5	76	--	--
BN 09+00E	0.33	0.4	10	70	<0.5	<2	0.22	<0.5	<1	2	7	0.30	<10	0.06	<10	0.04	166	<1	<0.01	3	530	22	<5	12	0.02	<10	<10	12	<5	40	--	--
BN 09+25E	2.11	0.2	20	70	<0.5	<2	0.14	<0.5	4	16	22	2.23	<10	0.11	<10	0.31	219	<1	0.01	9	480	10	<5	9	0.06	<10	<10	54	<5	59	--	--
BN 09+50E	4.00	<0.2	25	130	<0.5	<2	0.13	<0.5	11	27	58	3.65	<10	0.12	<10	0.70	521	<1	0.01	20	600	12	<5	8	0.12	<10	<10	86	<5	84	--	--
BN 09+75E	0.09	<0.2	5	10	<0.5	<2	0.14	<0.5	<1	<1	4	0.08	<10	0.02	<10	0.03	312	<1	<0.01	1	310	8	<5	2	<0.01	<10	<10	2	<5	16	--	--
BN 10+00E	1.87	0.2	25	80	<0.5	<2	0.19	<0.5	5	9	38	1.52	<10	0.06	<10	0.28	191	<1	0.01	10	610	4	<5	15	0.05	<10	<10	45	<5	68	--	--
BN 10+25E	0.29	0.2	35	40	<0.5	<2	0.14	<0.5	<1	3	9	0.30	<10	0.06	<10	0.04	524	<1	0.01	4	570	24	<5	12	0.02	<10	<10	10	<5	54	--	--
BN 10+50E	3.62	0.2	30	80	<0.5	<2	0.07	<0.5	5	19	25	3.69	<10	0.10	<10	0.37	372	<1	0.02	8	800	12	<5	8	0.08	<10	<10	62	<5	86	--	--

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## CERTIFICATE OF ANALYSIS

TO : ROSSBACHER LABORATORY LIMITED

2025 SOUTH SPRINGER AVENUE  
BURNABY, B.C.  
V5B 3N1

CERT. # : A8620024-001-A

INVOICE # : I8620024

DATE : 5-NOV-86

P.O. # : NONE

V 239

Semi quantitative multi element ICP analysis

Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sb, Ba, Be, Ca, Cr, Ga, La, Mg, K, Na, Sr, Ti, Tl, W and V can only be considered as semi-quantitative.

COMMENTS :  
ATTN: PETER ROSSBACHER

Sample description	Al	Ag	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	K	La	Mg	Mn	Mo	Nb	Ni	P	Pb	Sb	Sr	Ti	Tl	U	V	W	Zn		
	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	%	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm		
09N 00+00	2.10	<0.2	10	60	<0.5	<2	0.22	<0.5	5	13	23	3.45	10	0.04	<10	0.23	384	<1	<0.01	6	680	6	<5	4	0.22	<10	<10	99	<5	44	--	--
09N 00+25E	6.07	<0.2	30	280	<0.5	<2	0.09	<0.5	11	26	84	5.01	10	0.10	<10	0.59	803	1	<0.01	20	1260	14	<5	6	0.25	<10	<10	119	<5	124	--	--
09N 00+50E	2.22	<0.2	10	140	<0.5	<2	0.10	<0.5	12	18	49	3.51	10	0.04	<10	0.60	629	<1	<0.01	14	360	6	<5	7	0.19	<10	<10	94	<5	98	--	--
09N 00+75E	3.03	<0.2	20	100	<0.5	<2	0.11	<0.5	6	18	28	4.23	10	0.04	<10	0.36	382	1	<0.01	10	860	10	5	7	0.20	<10	<10	114	<5	66	--	--
09N 01+00E	1.03	<0.2	5	70	<0.5	<2	0.10	<0.5	3	8	9	1.67	10	0.02	<10	0.14	218	<1	<0.01	4	220	6	<5	6	0.16	<10	<10	64	<5	30	--	--
09N 01+25E	4.37	<0.2	25	180	<0.5	<2	0.21	<0.5	12	22	59	4.22	10	0.08	10	0.73	529	1	0.01	19	490	10	<5	14	0.25	<10	<10	104	<5	92	--	--
09N 01+50E	2.62	<0.2	15	70	<0.5	<2	0.12	<0.5	5	16	28	3.86	10	0.04	<10	0.21	243	<1	<0.01	7	380	4	<5	8	0.19	<10	<10	99	<5	52	--	--
09N 01+75E	2.17	0.2	15	660	1.0	<2	1.24	2.5	23	15	29	2.10	10	0.07	20	0.35	9999	4	0.01	25	1040	28	<5	42	0.10	<10	<10	56	<5	124	--	--
09N 02+00E	3.73	<0.2	20	110	<0.5	<2	0.25	<0.5	10	34	46	5.25	10	0.05	<10	0.67	424	<1	0.01	19	350	12	<5	12	0.24	<10	<10	127	<5	90	--	--
09N 02+25E	2.65	0.4	20	240	<0.5	<2	0.54	<0.5	10	25	26	3.81	10	0.06	10	0.53	565	<1	0.01	16	560	22	<5	23	0.25	<10	<10	91	<5	84	--	--
09N 02+50E	1.37	<0.2	15	120	<0.5	<2	0.21	<0.5	9	22	23	3.66	10	0.04	<10	0.27	412	<1	<0.01	9	360	6	<5	11	0.21	<10	<10	119	<5	58	--	--
09N 02+75E	4.40	<0.2	20	150	<0.5	<2	0.21	<0.5	16	29	66	4.91	<10	0.05	<10	0.89	591	<1	<0.01	16	760	10	<5	10	0.20	<10	<10	101	<5	112	--	--
09N 03+00E	4.08	<0.2	25	100	<0.5	<2	0.17	<0.5	9	29	41	5.73	<10	0.04	<10	0.57	350	<1	<0.01	14	750	8	<5	7	0.20	<10	<10	123	<5	89	--	--
09N 03+25E	3.02	<0.2	20	280	<0.5	<2	0.60	<0.5	17	30	60	4.07	10	0.09	10	0.84	1080	<1	0.01	20	600	10	<5	20	0.20	<10	<10	99	<5	94	--	--
09N 03+50E	3.04	<0.2	35	210	<0.5	<2	0.71	<0.5	14	28	48	3.67	10	0.07	10	0.70	965	<1	0.01	18	560	12	<5	21	0.17	<10	<10	92	<5	94	--	--
09N 03+75E	0.22	0.2	5	130	<0.5	<2	1.53	0.5	1	4	9	0.26	<10	0.02	<10	0.99	71	<1	<0.01	4	570	10	<5	41	0.33	<10	<10	11	<5	72	--	--
09N 04+00E	4.17	<0.2	25	120	<0.5	<2	0.19	<0.5	12	23	65	4.43	10	0.06	<10	0.67	415	<1	0.01	21	680	10	<5	10	0.21	<10	<10	109	<5	94	--	--
09N 04+25E	1.43	0.2	10	90	<0.5	<2	0.59	<0.5	4	12	24	1.69	10	0.05	<10	0.26	170	<1	<0.01	10	830	40	<5	18	0.11	<10	<10	45	<5	68	--	--
09N 04+50E	2.56	<0.2	10	80	<0.5	<2	0.20	<0.5	7	23	42	2.88	10	0.05	<10	0.50	489	<1	<0.01	15	650	12	<5	8	0.18	<10	<10	71	<5	68	--	--
09N 04+75E	4.39	0.4	25	120	<0.5	<2	0.24	<0.5	9	36	55	4.80	20	0.06	10	0.53	398	<1	0.01	17	660	10	<5	12	0.29	<10	<10	124	<5	94	--	--
09N 05+00E	3.53	<0.2	20	50	<0.5	<2	0.12	<0.5	6	25	29	4.51	<10	0.02	<10	0.34	229	<1	<0.01	9	1020	8	<5	6	0.16	<10	<10	101	<5	64	--	--
09N 05+25E	4.47	<0.2	30	180	<0.5	<2	0.15	<0.5	13	43	80	4.82	10	0.07	<10	0.94	521	<1	<0.01	29	910	6	<5	8	0.22	<10	<10	106	<5	112	--	--
09N 05+50E	3.37	<0.2	15	110	<0.5	<2	0.15	<0.5	11	32	74	4.09	10	0.05	<10	0.64	384	<1	<0.01	20	480	4	<5	7	0.18	<10	<10	96	<5	94	--	--
09N 05+75E	2.09	<0.2	15	70	<0.5	<2	0.10	<0.5	5	22	20	3.47	10	0.04	<10	0.39	253	<1	<0.01	10	320	4	<5	6	0.15	<10	<10	94	<5	54	--	--
09N 06+00E	4.34	<0.2	20	260	<0.5	<2	0.13	<0.5	14	21	74	4.75	10	0.12	<10	0.85	535	<1	0.01	25	580	6	<5	7	0.20	<10	<10	103	<5	112	--	--
09N 06+25E	5.87	<0.2	20	270	<0.5	<2	0.14	<0.5	21	38	109	4.99	10	0.09	10	0.98	536	<1	0.01	33	620	16	<5	11	0.23	<10	<10	115	<5	116	--	--
09N 06+50E	3.46	<0.2	15	100	<0.5	<2	0.16	<0.5	9	26	38	3.98	10	0.06	<10	0.49	366	<1	0.01	15	510	8	<5	9	0.19	<10	<10	96	<5	96	--	--
09N 06+75E	3.41	0.2	10	100	<0.5	<2	0.18	<0.5	7	29	28	4.65	10	0.04	<10	0.39	275	<1	<0.01	14	450	12	<5	9	0.18	<10	<10	124	<5	90	--	--
09N 07+00E	5.03	0.4	25	160	<0.5	<2	0.13	<0.5	14	26	68	5.00	10	0.06	10	0.59	474	<1	0.01	27	530	10	<5	11	0.18	<10	<10	118	<5	102	--	--
09N 07+25E	4.26	0.2	20	170	<0.5	<2	0.23	<0.5	15	32	66	4.23	10	0.09	10	0.74	545	<1	0.01	23	290	10	<5	14	0.31	<10	<10	109	<5	76	--	--
09N 07+50E	4.42	<0.2	20	430	<0.5	<2	0.84	<0.5	21	30	41	4.48	10	0.05	20	0.47	1745	<1	0.01	20	540	26	<5	30	0.19	<10	<10	112	<5	112	--	--
09N 07+75E	4.79	0.2	20	260	<0.5	<2	0.26	<0.5	23	17	79	3.78	<10	0.04	10	0.39	1108	1	0.01	21	540	16	<5	10	0.09	<10	<10	77	<5	102	--	--
09N 08+00E	3.41	<0.2	10	160	<0.5	<2	0.20	<0.5	13	27	62	3.96	<10	0.05	<10	0.46	847	1	0.01	20	570	18	<5	11	0.13	<10	<10	79	<5	92	--	--
09N 08+25E	3.27	<0.2	10	130	<0.5	<2	0.15	<0.5	13	29	67	4.16	<10	0.04	10	0.48	419	1	<0.01	19	490	10	<5	10	0.15	<10	<10	77	<5	90	--	--
09N 08+50E	3.09	<0.2	25	90	<0.5	<2	0.14	<0.5	9	24	53	2.47	<10	0.02	10	0.29	297	1	0.01	13	320	10	<5	9	0.10	<10	<10	65	<5	68	--	--
09N 08+75E	2.80	<0.2	15	60	<0.5	<2	0.15	<0.5	6	25	36	3.77	<10	0.02	10	0.33	256	<1	<0.01	11	280	4	<5	10	0.14	<10	<10	91	<5	60	--	--
09N 09+00E	2.63	0.2	5	90	<0.5	<2	0.16	<0.5	7	24	32	3.44	10	0.03	10	0.41	305	<1	0.01	12	240	6	<5	12	0.10	<10	<10	70	<5	66	--	--
09N 09+25E	2.93	0.2	5	60	<0.5	<2	0.12	<0.5	4	11	31	3.28	10	0.04	<10	0.26	279	<1	<0.01	5	260	10	<5	7	0.02	<10	<10	45	<5	62	--	--
09N 09+50E	4.10	<0.2	10	120	<0.5	<2	0.24	<0.5	12	23	82	4.17	<10	0.04	<10	0.61	412	<1	0.01	21	440	12	<5	14	0.21	<10	<10	100	<5	84	--	--
09N 09+75E	4.10	<0.2	5	110	<0.5	<2	0.19	<0.5	11	31	58	4.09	<10	0.04	<10	0.68	420	<1	<0.01	20	320	8	<5	11	0.22	<10	<10	90	<5	80	--	--

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Certified by: *P. Rossbacher*

SYSTEMS



# Chemex Labs Ltd.

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## CERTIFICATE OF ANALYSIS

TO : ROSSEBACHER LABORATORY LIMITED  
2225 SOUTH SPRINGER AVENUE  
BURNABY, B.C.  
V5E 3N1

CERT. # : A8620024-002-A  
INVOICE # : I8620024  
DATE : 5-NOV-86  
P.O. # : NONE  
V 239

Semi quantitative multi element ICP analysis

Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sb, Ba, Be, Ca, Cr, Ga, La, Mg, K, Na, Sr, Tl, Ti, W and V can only be considered as semi-quantitative.

COMMENTS :  
ATTN: PETER ROSSEBACHER

Sample description	Al	Ag	As	Ba	Be	Bi	Cs	Cd	Co	Cr	Cu	Fe	Ga	K	La	Hg	Hn	Mo	Na	Ni	P	Pb	Sb	Sr	Ti	Tl	U	V	W	Zn		
	Z	ppm	ppm	ppm	ppm	ppm	Z	ppm	ppm	ppm	ppm	Z	ppm	Z	ppm	Z	ppm	ppm	Z	ppm	ppm	ppm	ppm	Z	ppm	ppm	ppm	ppm	ppm	ppm		
09N 10+00E	3.51	<0.2	10	140	<0.5	<2	0.26	<0.5	10	27	46	3.86	<10	0.03	<10	0.45	315	<1	<0.01	15	330	6	<5	12	0.18	<10	<10	91	<5	86	--	--
09N 10+25E	5.24	<0.2	10	170	<0.5	<2	0.24	<0.5	16	40	72	5.13	<10	0.07	10	0.69	450	<1	<0.01	27	400	10	<5	14	0.27	<10	<10	116	<5	86	--	--
09N 10+50E	2.37	<0.2	5	50	<0.5	<2	0.26	<0.5	6	22	33	3.75	<10	0.04	<10	0.34	668	<1	<0.01	10	460	16	<5	10	0.19	<10	<10	89	<5	52	--	--
09N 10+75E	3.98	<0.2	10	60	<0.5	<2	0.19	<0.5	10	28	53	4.46	<10	0.04	<10	0.69	516	<1	<0.01	14	900	12	<5	9	0.30	<10	<10	86	<5	98	--	--
09N 11+00E	4.74	<0.2	15	100	<0.5	<2	0.20	<0.5	13	32	68	4.77	<10	0.05	<10	0.74	607	<1	<0.01	21	1770	12	<5	10	0.22	<10	<10	95	<5	100	--	--
10N 02+75E	3.07	0.2	20	140	<0.5	<2	0.38	<0.5	16	31	57	4.05	<10	0.10	10	0.85	773	<1	<0.01	21	440	6	<5	17	0.23	<10	<10	94	<5	84	--	--
10N 03+00E	3.50	<0.2	5	100	<0.5	<2	0.24	<0.5	11	29	54	4.66	<10	0.07	<10	0.64	517	<1	<0.01	16	700	12	<5	15	0.23	<10	<10	109	<5	90	--	--
10N 03+25E	3.27	0.2	10	110	<0.5	<2	0.22	<0.5	14	29	46	3.98	10	0.07	10	0.68	527	<1	<0.01	20	450	12	<5	14	0.23	<10	<10	92	<5	86	--	--
10N 03+50E	4.74	<0.2	10	170	<0.5	<2	0.22	<0.5	20	41	89	4.92	<10	0.09	10	1.00	769	<1	<0.01	31	500	6	<5	15	0.24	<10	<10	104	<5	116	--	--
10N 03+75E	3.90	<0.2	10	140	<0.5	<2	0.17	<0.5	13	35	64	4.27	<10	0.06	<10	0.80	500	<1	<0.01	24	530	8	<5	11	0.21	<10	<10	91	<5	96	--	--
10N 04+00E	3.97	<0.2	10	100	<0.5	<2	0.19	<0.5	13	34	63	4.63	<10	0.06	<10	0.71	489	<1	<0.01	21	620	4	<5	10	0.19	<10	<10	94	<5	100	--	--
10N 04+25E	3.64	<0.2	5	130	<0.5	<2	0.16	<0.5	13	36	66	4.08	<10	0.07	<10	0.87	577	<1	<0.01	25	870	24	<5	11	0.20	<10	<10	80	<5	94	--	--
10N 04+50E	0.83	0.2	10	50	<0.5	<2	0.16	<0.5	2	8	13	1.24	<10	0.05	<10	0.11	122	<1	<0.01	5	550	18	<5	9	0.08	<10	<10	31	<5	36	--	--
10N 04+75E	3.00	<0.2	<5	140	<0.5	<2	0.14	<0.5	9	25	52	3.53	<10	0.06	<10	0.55	386	<1	<0.01	17	400	8	<5	10	0.17	<10	<10	91	<5	68	--	--
10N 05+00E	1.92	<0.2	<5	80	<0.5	<2	0.23	<0.5	5	20	21	3.13	<10	0.04	<10	0.29	605	<1	<0.01	9	490	10	<5	11	0.21	<10	<10	82	<5	68	--	--
10N 05+25E	3.24	<0.2	5	290	<0.5	<2	0.42	<0.5	18	24	74	4.13	<10	0.14	10	0.80	1465	<1	<0.01	16	560	10	<5	13	0.24	<10	<10	109	<5	86	--	--
10N 05+50E	2.37	<0.2	10	70	<0.5	<2	0.30	<0.5	7	25	33	3.72	<10	0.03	<10	0.51	698	<1	<0.01	11	370	18	<5	11	0.19	<10	<10	95	<5	60	--	--
10N 05+75E	1.33	0.2	<5	40	<0.5	<2	0.23	<0.5	2	11	11	2.34	<10	0.02	<10	0.18	255	<1	<0.01	6	280	16	<5	10	0.16	<10	<10	65	<5	40	--	--
10N 06+00E	2.02	<0.2	10	70	<0.5	<2	0.29	<0.5	6	23	29	3.53	<10	0.03	<10	0.44	625	<1	<0.01	9	370	24	<5	10	0.17	<10	<10	94	<5	54	--	--
10N 06+25E	1.42	<0.2	<5	40	<0.5	<2	0.16	<0.5	3	13	12	2.67	<10	0.02	<10	0.20	170	<1	<0.01	5	260	10	<5	6	0.11	<10	<10	69	<5	38	--	--
10N 06+50E	1.99	<0.2	10	50	<0.5	<2	0.16	<0.5	4	17	20	3.88	<10	0.02	<10	0.29	191	<1	<0.01	8	350	20	<5	7	0.12	<10	<10	87	<5	48	--	--
10N 06+75E	0.99	<0.2	<5	20	<0.5	<2	0.14	<0.5	2	9	7	1.92	<10	0.02	<10	0.14	172	<1	<0.01	4	180	8	<5	6	0.11	<10	<10	64	<5	32	--	--
10N 07+00E	3.24	<0.2	10	150	<0.5	<2	0.23	<0.5	16	33	30	5.23	<10	0.04	<10	0.49	672	<1	<0.01	18	400	10	<5	12	0.19	<10	<10	118	<5	96	--	--
12N 00+00E	3.31	<0.2	15	80	<0.5	<2	0.12	<0.5	9	20	42	3.67	<10	0.05	<10	0.40	713	<1	<0.01	9	710	12	<5	8	0.18	<10	<10	82	<5	60	--	--
12N 00+25E	2.29	<0.2	10	110	<0.5	<2	0.16	<0.5	8	20	28	3.45	<10	0.05	<10	0.41	508	<1	<0.01	10	380	6	<5	10	0.16	<10	<10	94	<5	60	--	--
12N 00+50E	1.78	<0.2	5	90	<0.5	<2	0.26	<0.5	9	18	24	2.84	<10	0.06	10	0.42	549	<1	<0.01	9	320	14	<5	13	0.17	<10	<10	76	<5	72	--	--
12N 00+75E	3.04	<0.2	10	160	<0.5	<2	0.32	<0.5	13	28	45	3.90	<10	0.09	10	0.64	1216	<1	<0.01	18	690	26	<5	15	0.19	<10	<10	90	<5	102	--	--
12N 01+00E	2.97	<0.2	10	120	<0.5	<2	0.38	<0.5	9	29	41	3.54	<10	0.06	<10	0.55	624	<1	<0.01	15	700	16	<5	17	0.21	<10	<10	88	<5	80	--	--
12N 01+25E	0.92	0.2	<5	70	<0.5	<2	0.24	<0.5	2	9	14	1.33	<10	0.02	<10	0.15	273	<1	<0.01	4	260	8	<5	14	0.13	<10	<10	48	<5	23	--	--
12N 01+50E	2.40	0.2	<5	70	<0.5	<2	0.18	<0.5	6	21	24	3.17	10	0.04	10	0.38	314	<1	<0.01	10	320	2	<5	11	0.17	<10	<10	75	<5	62	--	--
12N 01+75E	3.91	0.2	15	150	<0.5	<2	0.22	<0.5	29	33	53	4.27	10	0.08	10	0.65	1161	<1	<0.01	20	420	14	<5	16	0.22	<10	<10	98	<5	126	--	--
12N 02+00E	3.85	0.2	20	160	<0.5	<2	0.43	<0.5	13	32	65	4.08	<10	0.07	10	0.68	637	<1	<0.01	21	570	14	<5	20	0.18	<10	<10	92	<5	92	--	--
12N 02+25E	3.85	0.4	10	140	<0.5	<2	0.51	<0.5	31	28	139	5.24	10	0.06	10	0.52	1074	<1	<0.01	18	1300	46	<5	22	0.20	<10	<10	121	<5	179	--	--
12N 02+50E	3.81	0.2	<5	160	<0.5	<2	0.67	<0.5	24	33	104	4.50	<10	0.11	10	0.97	1091	<1	<0.01	26	740	14	<5	39	0.21	<10	<10	91	<5	106	--	--
12N 02+75E	1.93	0.2	10	390	<0.5	<2	1.37	0.5	15	16	58	2.15	10	0.06	10	0.25	8243	3	<0.01	14	690	20	<5	43	0.12	<10	<10	53	<5	126	--	--
12N 03+00E	1.92	0.2	5	130	<0.5	<2	0.55	0.5	11	13	51	3.31	<10	0.08	<10	0.27	3167	1	<0.01	11	730	42	<5	12	0.10	<10	<10	75	<5	114	--	--
12N 03+25E	3.72	<0.2	5	120	<0.5	<2	0.23	<0.5	15	31	55	4.89	10	0.08	10	0.38	593	<1	<0.01	15	640	8	<5	11	0.19	<10	<10	107	<5	116	--	--
12N 03+50E	3.33	<0.2	10	110	<0.5	<2	0.22	<0.5	13	34	40	4.39	<10	0.06	<10	0.68	538	<1	<0.01	20	550	16	<5	13	0.21	<10	<10	98	<5	82	--	--
12N 03+75E	4.73	<0.2	15	250	<0.5	<2	0.20	<0.5	27	26	81	4.91	<10	0.09	10	0.89	841	<1	<0.01	31	710	14	<5	13	0.25	<10	<10	111	<5	136	--	--
12N 04+00E	4.30	<0.2	<5	200	<0.5	<2	0.23	<0.5	17	42	67	4.94	<10	0.08	10	0.95	583	<1	<0.01	28	530	12	<5	12	0.26	<10	<10	109	<5	98	--	--

Certified by *B. C. ...*

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## CERTIFICATE OF ANALYSIS

TO : ROSSBACHER LABORATORY LIMITED

2225 SOUTH SPRINGER AVENUE  
BURNABY, B.C.  
V5E 3H1

CERT. # : A8620024-003-A  
INVOICE # : I8620024  
DATE : 5-NOV-86  
P.O. # : NONE  
V 309

Semi quantitative multi element ICP analysis

Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sb, Ba, Be, Ca, Cr, Ga, La, Mg, K, Na, Sr, Tl, Ti, W and V can only be considered as semi-quantitative.

COMMENTS :  
ATTN: PETER ROSSBACHER

Sample description	Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm		
12N 04+25E	3.52	0.2	15	200	<0.5	<2	0.36	<0.5	17	23	55	4.33	10	0.07	10	0.91	910	<1	0.01	24	520	20	<5	16	0.22	<10	<10	101	<5	99	--	--
12N 04+50E	1.38	<0.2	5	120	<0.5	<2	0.27	<0.5	4	11	15	2.02	<10	0.04	<10	0.27	326	<1	<0.01	9	280	18	<5	11	0.19	<10	<10	75	<5	42	--	--
12N 04+75E	3.95	<0.2	15	180	<0.5	<2	0.26	<0.5	16	21	62	5.90	10	0.09	10	0.70	307	<1	0.01	19	1260	12	<5	14	0.27	<10	<10	103	<5	140	--	--
12N 05+00E	2.71	<0.2	5	130	<0.5	<2	0.19	<0.5	10	20	25	3.94	<10	0.04	<10	0.53	464	<1	0.01	10	610	6	<5	9	0.23	<10	<10	92	<5	116	--	--
12N 05+25E	3.56	<0.2	5	190	<0.5	<2	0.24	<0.5	16	26	57	4.39	<10	0.07	10	0.71	1040	<1	0.01	15	910	8	<5	12	0.22	<10	<10	102	<5	122	--	--
12N 05+50E	4.27	<0.2	15	340	<0.5	<2	0.33	<0.5	18	31	77	4.58	<10	0.14	10	1.04	940	<1	0.01	21	660	8	<5	14	0.29	<10	<10	119	<5	108	--	--
12N 05+75E	4.61	<0.2	15	390	<0.5	<2	0.47	<0.5	22	30	98	5.26	10	0.23	10	1.24	1431	<1	0.01	22	760	14	<5	19	0.28	<10	<10	136	<5	122	--	--
12N 06+00E	2.78	<0.2	5	300	<0.5	<2	0.39	<0.5	13	18	63	3.33	<10	0.17	<10	0.83	1075	<1	0.01	13	490	16	<5	14	0.25	<10	<10	90	<5	86	--	--
12N 06+25E	2.52	<0.2	5	90	<0.5	<2	0.20	<0.5	8	27	22	3.38	10	0.05	10	0.50	424	<1	0.01	11	210	9	<5	15	0.27	<10	<10	103	<5	56	--	--
12N 06+50E	7.04	0.4	5	390	<0.5	<2	0.29	<0.5	40	51	74	5.69	10	0.12	10	0.78	1578	<1	0.01	39	750	16	<5	19	0.25	<10	<10	150	<5	158	--	--
12N 06+75E	1.77	0.2	5	190	<0.5	<2	0.32	<0.5	9	16	24	2.35	<10	0.05	<10	0.25	378	<1	0.01	11	660	20	<5	15	0.13	<10	<10	56	<5	76	--	--
12N 07+00E	3.46	<0.2	<5	190	<0.5	<2	0.41	<0.5	16	34	41	4.56	<10	0.08	10	0.76	656	<1	0.02	23	620	12	<5	20	0.27	<10	<10	103	<5	108	--	--
12N 07+25E	3.23	<0.2	10	180	<0.5	<2	0.45	<0.5	18	37	38	4.40	<10	0.07	10	0.90	780	<1	0.01	23	710	10	<5	18	0.22	<10	<10	89	<5	106	--	--
12N 07+50E	3.66	<0.2	15	180	<0.5	<2	0.29	<0.5	20	40	45	4.99	<10	0.07	10	0.83	847	<1	0.01	24	640	18	<5	19	0.24	<10	<10	107	<5	108	--	--
12N 07+75E	3.74	0.2	15	170	<0.5	<2	0.44	<0.5	24	36	42	4.19	<10	0.06	10	0.24	977	1	0.01	25	470	16	<5	20	0.22	<10	<10	39	<5	94	--	--
12N 08+00E	4.53	<0.2	10	150	<0.5	<2	0.21	<0.5	21	47	55	5.27	10	0.09	10	1.14	651	<1	0.01	32	390	14	<5	21	0.22	<10	<10	117	<5	104	--	--
12N 08+25E	2.93	0.2	10	160	<0.5	<2	1.01	<0.5	16	33	48	3.91	10	0.07	10	0.74	1120	<1	0.01	21	670	16	<5	40	0.23	<10	<10	80	<5	104	--	--
12N 08+50E	3.20	<0.2	<5	130	<0.5	<2	0.21	<0.5	16	36	36	4.68	<10	0.04	<10	0.52	649	<1	0.01	20	560	10	<5	11	0.15	<10	<10	92	<5	98	--	--
12N 08+75E	3.28	<0.2	10	110	<0.5	<2	0.33	<0.5	15	41	47	4.86	<10	0.04	<10	1.04	590	<1	<0.01	26	500	12	<5	15	0.20	<10	<10	92	<5	98	--	--
12N 09+00E	2.61	<0.2	10	120	<0.5	<2	0.69	<0.5	15	34	36	4.26	10	0.04	10	0.72	844	<1	0.01	20	510	14	<5	27	0.16	<10	<10	94	<5	100	--	--
12N 09+25E	3.22	<0.2	10	140	<0.5	<2	0.29	<0.5	23	32	46	4.61	<10	0.04	10	0.59	1944	1	0.01	22	740	12	<5	13	0.15	<10	<10	91	<5	118	--	--
12N 09+50E	2.96	<0.2	10	130	<0.5	<2	0.40	<0.5	17	34	70	4.35	<10	0.06	<10	1.06	756	<1	0.01	25	460	6	<5	23	0.22	<10	<10	85	<5	82	--	--
12N 09+75E	3.23	<0.2	10	120	<0.5	<2	0.29	<0.5	20	34	47	4.61	<10	0.05	10	0.73	1290	<1	<0.01	22	630	10	<5	17	0.19	<10	<10	91	<5	105	--	--
12N 10+00E	2.69	<0.2	5	100	<0.5	<2	0.71	<0.5	15	26	40	3.81	<10	0.03	10	0.63	962	<1	<0.01	16	620	12	<5	25	0.15	<10	<10	72	<5	92	--	--
14N 00+00	2.83	<0.2	<5	70	<0.5	<2	0.08	<0.5	7	21	38	3.80	<10	0.03	<10	0.40	317	<1	<0.01	9	560	6	<5	6	0.16	<10	<10	84	<5	62	--	--
14N 00+25E	3.91	<0.2	15	40	<0.5	<2	0.07	<0.5	5	25	27	4.69	<10	0.02	<10	0.34	207	<1	<0.01	7	820	9	<5	5	0.16	<10	<10	102	<5	46	--	--
14N 00+50E	1.54	<0.2	5	40	<0.5	<2	0.18	<0.5	3	14	20	3.36	<10	0.03	<10	0.24	575	<1	<0.01	6	730	14	<5	6	0.13	<10	<10	93	<5	40	--	--
14N 00+75E	5.22	<0.2	15	70	<0.5	<2	0.19	<0.5	9	24	57	5.25	<10	0.04	<10	0.59	254	<1	<0.01	12	950	12	<5	7	0.19	<10	<10	111	<5	74	--	--
14N 01+00E	3.96	<0.2	15	80	<0.5	<2	0.14	<0.5	7	22	54	4.95	<10	0.04	<10	0.42	511	<1	<0.01	11	1840	24	<5	14	0.14	<10	<10	84	<5	130	--	--
14N 01+25E	6.29	<0.2	10	80	<0.5	<2	0.13	<0.5	12	47	80	5.76	<10	0.06	<10	0.74	464	<1	<0.01	20	1010	10	<5	9	0.19	<10	<10	114	<5	94	--	--
14N 01+50E	5.06	<0.2	5	100	<0.5	<2	0.14	<0.5	12	41	71	5.52	<10	0.07	10	0.75	461	<1	<0.01	19	730	6	<5	10	0.21	<10	<10	119	<5	88	--	--
14N 01+75E	2.71	<0.2	5	40	<0.5	<2	0.11	<0.5	5	23	22	4.20	<10	0.02	<10	0.29	248	<1	<0.01	7	370	4	<5	7	0.16	<10	<10	99	<5	52	--	--
14N 02+00E	3.36	<0.2	15	210	<0.5	<2	0.62	0.5	17	23	24	3.67	<10	0.06	20	0.67	2359	1	0.01	26	480	14	<5	25	0.14	<10	<10	94	<5	123	--	--
14N 02+25E	2.52	0.2	10	60	<0.5	<2	0.24	<0.5	10	23	26	3.93	10	0.05	10	0.50	540	<1	<0.01	11	480	6	<5	11	0.13	<10	<10	92	<5	82	--	--
14N 02+50E	3.73	<0.2	5	90	<0.5	<2	0.20	<0.5	21	55	117	3.96	<10	0.05	<10	0.92	715	<1	0.02	64	960	16	<5	16	0.16	<10	<10	85	<5	114	--	--
14N 02+75E	3.08	<0.2	<5	210	<0.5	<2	0.35	0.5	16	32	66	4.28	<10	0.09	10	1.04	704	<1	0.01	22	360	8	<5	20	0.21	<10	<10	99	<5	82	--	--
14N 03+00E	2.50	<0.2	<5	100	<0.5	<2	0.23	<0.5	15	27	36	3.23	<10	0.04	10	0.83	1449	<1	0.01	17	260	8	<5	11	0.17	<10	<10	75	<5	94	--	--
14N 03+25E	4.60	<0.2	5	200	<0.5	<2	0.14	<0.5	19	35	67	4.73	<10	0.06	<10	0.91	798	<1	<0.01	29	710	12	<5	9	0.19	<10	<10	93	<5	129	--	--
14N 03+50E	2.87	<0.2	5	70	<0.5	<2	0.12	<0.5	6	25	24	3.55	<10	0.03	<10	0.29	254	<1	<0.01	11	720	6	<5	6	0.13	<10	<10	77	<5	90	--	--
14N 03+75E	2.62	<0.2	5	70	<0.5	<2	0.12	<0.5	5	21	21	2.50	<10	0.02	<10	0.23	251	<1	<0.01	9	1000	8	<5	6	0.12	<10	<10	72	<5	72	--	--

Certified By: B.C. [Signature]





# Chemex Labs Ltd.

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## CERTIFICATE OF ANALYSIS

TO : ROSSBACHER LABORATORY LIMITED

2225 SOUTH SPRINGER AVENUE  
BURBANK, B.C.  
V5E 3N1

CERT. # : A8620024-004-A  
INVOICE # : 18620024  
DATE : 5-NOV-86  
P.O. # : NONE  
V 239

Semi quantitative multi element ICP analysis

Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sb, Ba, Fe, Ca, Cr, Ga, La, Mg, K, Na, Sr, Ti, Tl, W and U can only be considered as semi-quantitative.

COMMENTS :  
ATTN: PETER ROSSBACHER

Sample description	Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	K %	La ppm	Mg ppm	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm			
14N 04+00E	4.88	<0.2	<5	310	<0.5	<2	0.17	<0.5	23	41	58	5.13	<10	0.08	<10	0.89	779	<1	0.01	30	630	12	<5	11	0.21	<10	<10	110	<5	144	--	--
14N 04+25E	2.89	<0.2	<5	100	<0.5	<2	0.14	<0.5	9	21	33	3.25	<10	0.04	<10	0.44	341	<1	<0.01	14	510	6	<5	7	0.14	<10	<10	68	<5	92	--	--
14N 04+50E	2.95	0.2	15	150	<0.5	<2	0.15	<0.5	14	22	31	3.37	<10	0.06	<10	0.48	3139	<1	<0.01	17	710	14	<5	7	0.13	<10	<10	71	<5	102	--	--
14N 04+75E	3.32	0.2	5	130	<0.5	<2	0.16	<0.5	11	23	45	3.92	10	0.04	<10	0.57	572	<1	<0.01	14	610	10	<5	9	0.17	<10	<10	86	<5	94	--	--
14N 05+00E	4.27	2.4	10	810	<0.5	<2	0.57	<0.5	19	23	53	3.95	10	0.06	10	0.77	1532	<1	0.01	25	660	12	<5	33	0.18	<10	<10	104	<5	96	--	--
14N 05+25E	2.86	<0.2	10	170	<0.5	<2	0.27	<0.5	12	20	33	3.62	<10	0.03	<10	0.66	766	<1	<0.01	16	530	6	<5	13	0.15	<10	<10	75	<5	92	--	--
14N 05+50E	3.41	<0.2	10	200	<0.5	<2	0.16	<0.5	24	27	42	4.06	<10	0.04	<10	0.72	1094	<1	<0.01	20	390	12	<5	8	0.18	<10	<10	81	<5	120	--	--
14N 05+75E	3.80	<0.2	15	350	<0.5	<2	0.29	<0.5	26	27	55	4.42	<10	0.06	<10	0.66	1534	<1	<0.01	24	1200	20	<5	12	0.14	<10	<10	82	<5	136	--	--
14N 06+00E	3.54	<0.2	10	250	<0.5	<2	0.16	<0.5	15	21	56	3.89	<10	0.16	<10	0.87	766	<1	<0.01	19	590	12	<5	8	0.19	<10	<10	90	<5	106	--	--
14N 06+25E	3.12	<0.2	5	160	<0.5	<2	0.14	<0.5	14	31	44	3.99	<10	0.04	<10	0.62	480	<1	<0.01	18	530	6	<5	7	0.16	<10	<10	90	<5	102	--	--
14N 06+50E	3.29	<0.2	5	160	<0.5	<2	0.15	<0.5	15	24	52	4.26	<10	0.06	<10	0.66	619	<1	<0.01	21	890	3	<5	9	0.17	<10	<10	92	<5	102	--	--
14N 06+75E	4.48	<0.2	15	290	<0.5	<2	0.16	<0.5	20	35	88	4.74	<10	0.12	10	1.00	1068	<1	0.01	26	910	16	<5	9	0.21	<10	<10	108	<5	96	--	--
14N 07+00E	4.28	<0.2	10	360	<0.5	<2	0.20	<0.5	21	31	79	4.88	<10	0.15	10	0.99	1031	<1	0.01	25	780	8	<5	17	0.21	<10	<10	97	<5	102	--	--
14N 07+25E	4.64	0.4	20	320	<0.5	<2	0.20	<0.5	20	33	81	4.90	10	0.13	10	0.92	799	<1	0.01	26	940	10	<5	13	0.20	<10	<10	100	<5	108	--	--
14N 07+50E	0.20	<0.2	5	100	<0.5	<2	0.17	<0.5	3	9	15	1.20	<10	0.04	<10	0.19	111	<1	0.01	6	640	24	<5	26	0.06	<10	<10	29	<5	49	--	--
16N 02+50E	3.25	<0.2	10	40	<0.5	<2	0.11	<0.5	6	29	37	4.82	<10	0.03	<10	0.48	374	<1	<0.01	12	1460	9	<5	5	0.17	<10	<10	98	<5	76	--	--
16N 02+75E	5.29	<0.2	10	60	<0.5	<2	0.09	<0.5	8	41	39	5.27	<10	0.02	<10	0.50	304	<1	<0.01	17	1220	8	<5	6	0.17	<10	<10	39	<5	80	--	--
16N 03+00E	3.04	<0.2	<5	60	<0.5	<2	0.07	<0.5	4	25	36	4.47	<10	0.03	<10	0.26	216	<1	<0.01	8	940	6	<5	6	0.13	<10	<10	93	<5	52	--	--
16N 03+25E	3.86	<0.2	10	60	<0.5	<2	0.07	<0.5	6	26	48	5.26	<10	0.04	<10	0.39	232	<1	<0.01	10	1120	10	<5	5	0.11	<10	<10	83	<5	62	--	--
16N 03+50E	3.93	0.2	10	80	<0.5	<2	0.12	<0.5	8	30	49	3.95	<10	0.04	<10	0.54	311	<1	<0.01	18	810	6	<5	8	0.17	<10	<10	91	<5	70	--	--
16N 03+75E	2.25	<0.2	5	60	<0.5	<2	0.11	<0.5	8	38	32	3.83	<10	0.03	<10	0.52	269	<1	0.01	16	490	6	<5	7	0.16	<10	<10	75	<5	73	--	--
16N 04+00E	1.45	<0.2	<5	30	<0.5	<2	0.12	<0.5	2	12	10	2.20	<10	0.01	<10	0.21	216	<1	<0.01	5	130	4	<5	8	0.16	<10	<10	65	<5	34	--	--
16N 04+25E	1.26	<0.2	<5	20	<0.5	<2	0.11	<0.5	3	16	9	2.37	<10	0.02	<10	0.24	206	<1	<0.01	7	150	4	<5	7	0.13	<10	<10	67	<5	34	--	--
16N 04+50E	3.34	<0.2	<5	210	<0.5	<2	0.51	<0.5	16	26	77	3.94	10	0.05	10	1.12	620	<1	0.01	16	200	8	<5	18	0.21	<10	<10	114	<5	112	--	--
16N 04+75E	2.44	<0.2	5	200	<0.5	<2	0.25	<0.5	13	25	41	3.62	<10	0.06	<10	0.62	553	<1	<0.01	19	410	16	<5	14	0.17	<10	<10	96	5	123	--	--
16N 05+00E	3.88	<0.2	<5	170	<0.5	<2	0.16	0.5	18	28	59	4.22	<10	0.05	<10	0.52	662	1	<0.01	19	520	16	<5	10	0.18	<10	<10	105	5	114	--	--
16N 05+25E	1.75	<0.2	5	80	<0.5	<2	0.31	<0.5	9	19	29	3.16	<10	0.04	<10	0.34	956	<1	<0.01	9	910	10	<5	10	0.15	<10	<10	77	5	70	--	--
16N 05+50E	4.18	<0.2	5	120	<0.5	<2	0.17	<0.5	18	40	89	4.66	<10	0.05	<10	0.81	783	<1	<0.01	29	1010	10	<5	10	0.20	<10	<10	97	5	129	--	--
16N 05+75E	1.65	<0.2	<5	60	<0.5	<2	0.16	<0.5	5	16	19	2.39	<10	0.02	<10	0.24	340	<1	0.01	6	350	6	<5	8	0.13	<10	<10	62	<5	50	--	--
16N 06+00E	5.06	0.2	5	220	<0.5	<2	0.22	<0.5	22	49	106	4.99	<10	0.07	10	0.95	714	<1	0.01	36	760	14	<5	18	0.23	<10	<10	113	<5	118	--	--
LO 00+00	3.81	<0.2	5	110	<0.5	<2	0.17	<0.5	11	27	62	3.94	<10	0.05	10	0.59	779	<1	<0.01	14	800	14	<5	10	0.21	<10	<10	104	<5	82	--	--
LO 00+25E	3.22	<0.2	<5	100	<0.5	<2	0.14	<0.5	8	24	53	3.95	<10	0.06	<10	0.47	684	<1	<0.01	10	1130	12	<5	9	0.18	<10	<10	102	<5	80	--	--
LO 00+50E	2.08	<0.2	<5	50	<0.5	<2	0.09	<0.5	4	16	22	2.37	<10	0.02	<10	0.22	376	<1	0.01	4	720	3	<5	6	0.15	<10	<10	79	<5	40	--	--
LO 00+75E	2.77	<0.2	<5	120	<0.5	<2	0.14	<0.5	7	17	47	2.82	<10	0.06	<10	0.42	732	<1	<0.01	10	900	22	<5	11	0.12	<10	<10	69	<5	72	--	--
LO 01+00E	1.50	<0.2	5	30	<0.5	<2	0.09	<0.5	2	11	17	2.54	<10	0.02	<10	0.18	254	<1	0.01	4	460	4	<5	5	0.19	<10	<10	31	<5	32	--	--
LO 01+25E	1.28	<0.2	5	50	<0.5	<2	0.11	<0.5	2	11	18	2.79	<10	0.02	<10	0.14	370	<1	<0.01	5	510	8	<5	7	0.14	<10	<10	85	<5	40	--	--
LO 01+50E	2.29	<0.2	5	70	<0.5	<2	0.12	<0.5	5	15	32	3.94	<10	0.04	<10	0.21	431	<1	<0.01	7	410	10	<5	7	0.16	<10	<10	80	<5	54	--	--
LO 01+75E	1.14	0.2	5	100	<0.5	<2	0.29	<0.5	4	11	21	1.36	<10	0.07	<10	0.20	199	<1	0.01	7	740	40	<5	13	0.07	<10	<10	39	10	66	--	--
LO 02+00E	1.40	0.2	<5	80	<0.5	<2	0.19	<0.5	3	12	19	2.33	<10	0.05	<10	0.16	259	<1	0.01	5	830	22	<5	12	0.11	<10	<10	67	<5	74	--	--
LO 02+25E	4.79	<0.2	<5	240	<0.5	<2	0.18	<0.5	19	30	87	4.56	<10	0.14	10	0.90	1040	<1	0.01	21	710	14	<5	12	0.22	<10	<10	116	<5	104	--	--

SYSTEMS BUSINESS FORMS LIMITED VANCOUVER BRANCH

18620024 NOV 1986

ANALYZED BY B.C.C.



# Chemex Labs Ltd.

-Analytical Chemists    -Geochemists    -Registered Assayers

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Semi quantitative multi element ICP analysis

## CERTIFICATE OF ANALYSIS

TO : ROSSBACHER LABORATORY LIMITED  
3225 SOUTH SPRINGER AVENUE  
BURNABY, B.C.  
V5B 3N1

CERT. # : A8620024-005-A  
INVOICE # : I8620024  
DATE : 5-NOV-86  
P.O. # : NONE  
V 239

Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sb, Ba, Be, Ca, Cr, Ga, La, Mg, K, Na, Sr, Tl, Ti, W and V can only be considered as semi-quantitative.

COMMENTS :  
ATTN: PETER ROSSBACHER

Sample description	Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm		
L0 02+50E	4.32	0.2	10	260	<0.5	<2	0.16	0.5	19	28	89	4.66	<10	0.15	10	0.99	989	<1	<0.01	22	680	12	<5	11	0.21	<10	<10	101	<5	104	--	--
L0 02+75E	4.26	0.2	<5	240	<0.5	<2	0.17	0.5	16	31	71	4.22	<10	0.13	10	0.79	750	<1	<0.01	19	730	8	<5	11	0.22	<10	<10	92	<5	100	--	--
L0 03+90E	4.14	<0.2	<5	120	<0.5	<2	0.15	0.5	11	30	39	4.38	<10	0.07	<10	0.52	525	<1	<0.01	15	960	14	<5	9	0.20	<10	<10	103	<5	94	--	--
L0 03+25E	3.07	<0.2	5	170	<0.5	<2	0.17	<0.5	13	24	56	3.49	<10	0.10	<10	0.68	734	<1	<0.01	15	770	20	<5	10	0.16	<10	<10	87	5	94	--	--
L0 03+50E	4.09	<0.2	<5	220	<0.5	<2	0.25	<0.5	20	36	69	4.55	<10	0.10	10	0.95	826	<1	0.01	27	700	20	<5	14	0.22	<10	<10	109	5	122	--	--
L0 03+75E	4.43	<0.2	<5	260	<0.5	<2	0.18	0.5	21	39	81	4.77	<10	0.11	10	1.01	809	<1	<0.01	27	660	12	<5	13	0.25	<10	<10	112	5	108	--	--
L0 04+00E	4.89	<0.2	<5	260	<0.5	<2	0.16	0.5	22	41	91	4.81	<10	0.10	10	1.06	794	<1	<0.01	30	880	10	<5	11	0.24	<10	<10	109	5	114	--	--
L0 04+25E	4.05	0.2	<5	260	<0.5	<2	0.23	0.5	20	35	79	4.62	<10	0.15	10	0.96	882	<1	0.01	25	660	14	<5	14	0.24	<10	<10	115	5	96	--	--
L0 04+50E	3.67	<0.2	<5	170	<0.5	<2	0.19	<0.5	15	31	61	3.97	<10	0.09	10	0.73	643	<1	<0.01	19	660	12	<5	11	0.21	<10	<10	93	5	89	--	--
L0 04+75E	2.84	<0.2	<5	110	<0.5	<2	0.23	0.5	9	38	41	3.03	<10	0.07	<10	0.49	758	<1	<0.01	19	740	18	<5	9	0.16	<10	<10	75	5	92	--	--
L0 05+00E	2.06	<0.2	<5	100	<0.5	<2	0.27	<0.5	6	63	27	2.56	<10	0.04	<10	0.30	488	<1	<0.01	30	550	14	<5	12	0.13	<10	<10	69	5	58	--	--
L0 05+25E	3.34	<0.2	<5	230	<0.5	<2	0.37	<0.5	18	34	68	4.17	<10	0.14	10	0.92	921	<1	0.01	22	720	14	<5	17	0.21	<10	<10	101	<5	94	--	--
L0 05+50E	4.38	<0.2	<5	120	<0.5	<2	0.32	0.5	11	36	60	2.89	<10	0.07	<10	0.56	446	<1	<0.01	25	540	18	<5	12	0.16	<10	<10	72	5	74	--	--

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Certified by *B. [Signature]*



# Chemex Labs Ltd.

-Analytical Chemists -Geochemists -Registered Assayers

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Telex: 043-52597

## CERTIFICATE OF ANALYSIS

TO : ROSSBACHER LABORATORIES LIMITED  
2005 SOUTH SPRINGER AVENUE  
BURNABY, B.C.  
V5B 3N1

CERT. # : A8620322 001-A  
INVOICE # : 10630322  
DATE : 17-NOV-86  
P.O. # : NONE  
0239

Semi quantitative multi element ICP analysis

Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sb, Ba, Be, Ca, Cr, Ga, La, Mg, K, Na, Sr, Tl, Ti, W and V can only be considered as semi-quantitative.

COMMENTS :  
ATTN: P. ROSSBACHER

Sample description	Al	Ag	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sr	Ti	Tl	U	V	W	Zn		
	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm		
3901	4.26	<0.2	5	120	<0.5	<2	0.78	<0.5	34	90	69	7.10	10	0.05	10	2.22	992	<1	0.03	53	800	8	<5	6	0.50	<10	<10	265	<5	100	--	--
3902	0.42	<0.2	<5	90	<0.5	<2	0.04	<0.5	<1	43	1	0.28	<10	0.21	10	0.02	67	<1	0.03	2	80	12	<5	4	<0.01	<10	<10	2	<5	24	--	--
3902	0.09	<0.2	<5	<10	<0.5	<2	0.02	<0.5	1	106	22	2.66	<10	<0.01	<10	0.02	122	1	<0.01	3	100	2	<5	<1	<0.01	<10	<10	86	<5	4	--	--
3904	0.61	<0.2	5	180	<0.5	<2	0.06	<0.5	11	88	12	1.42	<10	0.04	<10	0.54	371	<1	<0.01	23	230	4	<5	5	<0.01	<10	<10	8	<5	18	--	--
3905	2.92	<0.2	5	120	<0.5	<2	0.33	<0.5	21	39	83	5.22	<10	0.16	<10	1.41	768	<1	0.02	13	530	12	<5	12	0.21	<10	<10	176	<5	36	--	--
3906	1.54	<0.2	5	30	<0.5	<2	2.57	<0.5	8	57	29	2.39	10	0.02	<10	0.32	1784	<1	0.01	4	2140	2	<5	29	0.11	<10	<10	41	<5	44	--	--
3907	0.57	<0.2	<5	10	<0.5	<2	1.03	<0.5	4	32	9	1.06	<10	0.06	<10	0.20	519	<1	0.07	4	860	<2	<5	5	0.18	<10	<10	37	<5	36	--	--
3908	1.04	<0.2	5	20	<0.5	<2	0.39	<0.5	18	57	868	4.47	<10	0.10	<10	0.41	345	23	0.05	18	640	6	<5	10	0.18	<10	<10	96	<5	52	--	--
3909	0.80	<0.2	<5	140	<0.5	<2	0.15	<0.5	2	30	7	1.12	<10	0.23	10	0.15	524	<1	0.02	2	500	2	<5	5	0.02	<10	<10	2	<5	24	--	--
3911	2.39	<0.2	<5	80	<0.5	<2	0.91	<0.5	9	77	30	2.93	<10	0.50	10	0.84	983	<1	0.12	3	620	6	<5	49	0.12	<10	<10	52	<5	56	--	--
3912	2.43	<0.2	5	180	<0.5	<2	0.23	<0.5	16	42	78	4.80	<10	0.13	10	1.26	2327	<1	0.05	11	420	10	<5	9	0.25	<10	<10	125	<5	90	--	--
3913	1.21	<0.2	<5	60	<0.5	<2	0.11	<0.5	3	52	95	3.73	<10	0.15	<10	0.51	1158	1	0.02	12	580	6	<5	5	0.10	<10	<10	50	<5	42	--	--
3914	1.03	0.2	<5	20	<0.5	<2	1.37	<0.5	27	99	616	2.71	<10	0.04	<10	0.18	397	<1	0.03	8	800	2	<5	45	0.18	<10	<10	29	<5	50	--	--
3915	0.19	<0.2	<5	40	<0.5	<2	0.01	<0.5	2	177	33	2.16	<10	<0.01	<10	0.10	660	1	<0.01	5	20	<2	<5	1	<0.01	<10	<10	30	<5	10	--	--
3916	1.09	<0.2	45	230	<0.5	<2	0.06	<0.5	29	109	68	3.58	<10	0.19	<10	0.29	2274	1	<0.01	30	170	4	<5	3	<0.01	<10	<10	48	<5	60	--	--
3917	1.37	<0.2	5	300	<0.5	<2	0.02	<0.5	9	62	45	2.94	<10	0.19	<10	1.14	542	<1	<0.01	11	120	4	<5	1	<0.01	<10	<10	22	<5	70	--	--
4673	0.36	<0.2	<5	110	<0.5	<2	0.06	<0.5	5	231	16	2.44	<10	0.01	<10	0.26	456	1	<0.01	8	40	<2	<5	2	0.02	<10	<10	34	<5	30	--	--
4674	0.05	<0.2	5	10	<0.5	<2	0.05	<0.5	<1	163	33	2.49	<10	<0.01	<10	0.02	139	1	<0.01	7	90	4	<5	<1	<0.01	<10	<10	44	<5	8	--	--
4675	2.11	<0.2	5	50	<0.5	<2	0.23	<0.5	15	42	70	4.41	<10	0.12	<10	1.25	394	<1	0.02	16	390	10	<5	2	0.21	<10	<10	54	<5	94	--	--
4676	2.41	<0.2	<5	170	<0.5	<2	1.07	<0.5	14	103	189	4.19	10	0.24	<10	0.60	607	<1	0.10	14	470	6	<5	23	0.18	<10	<10	95	<5	54	--	--
4677	2.17	<0.2	<5	100	<0.5	<2	1.43	<0.5	12	104	76	5.76	10	0.09	<10	0.67	1003	<1	0.04	13	340	4	<5	7	0.17	<10	<10	112	<5	72	--	--
4679	2.11	<0.2	<5	100	<0.5	<2	0.44	<0.5	16	70	305	4.89	<10	0.11	<10	0.73	492	<1	0.04	15	570	8	<5	12	0.12	<10	<10	74	<5	66	--	--
4679	2.81	<0.2	<5	290	<0.5	<2	0.44	<0.5	11	54	137	4.46	<10	0.25	<10	1.03	708	<1	0.05	13	500	6	<5	14	0.26	<10	<10	80	<5	68	--	--
4680	1.14	<0.2	<5	540	<0.5	<2	0.38	<0.5	16	66	123	3.22	<10	0.24	<10	0.62	618	<1	0.05	12	640	4	<5	5	0.22	<10	<10	104	<5	58	--	--
4681	3.15	<0.2	<5	260	<0.5	<2	1.38	<0.5	16	52	283	4.94	10	0.27	10	0.78	677	<1	0.10	31	3440	8	<5	28	0.42	<10	<10	67	<5	76	--	--
4682	1.69	0.2	5	100	<0.5	<2	0.93	<0.5	6	148	59	2.16	<10	0.09	<10	0.20	428	<1	0.03	11	470	18	<5	24	0.08	<10	<10	22	<5	68	--	--
4683	1.51	0.2	10	190	<0.5	<2	0.32	<0.5	9	52	73	2.75	<10	0.22	<10	0.52	563	<1	0.03	11	540	8	<5	15	0.18	<10	<10	32	<5	74	--	--
4684	4.24	<0.2	5	280	<0.5	<2	0.24	<0.5	23	36	199	8.96	<10	0.21	20	1.02	9010	<1	0.01	21	1270	16	<5	10	0.11	<10	<10	117	<5	162	--	--
4685	2.61	0.2	5	400	<0.5	<2	0.97	<0.5	11	80	133	4.92	<10	0.20	<10	0.75	1622	<1	0.03	19	250	14	<5	70	0.22	<10	<10	48	<5	90	--	--
4686	1.61	<0.2	5	70	<0.5	<2	1.80	<0.5	27	10	190	6.11	10	0.07	<10	0.86	625	<1	0.12	16	460	2	<5	2	0.29	<10	<10	354	5	78	--	--
4687	1.96	<0.2	<5	10	<0.5	<2	1.11	<0.5	12	93	92	3.63	10	0.02	10	0.91	564	1	0.05	37	410	4	<5	1	0.23	<10	<10	131	<5	56	--	--
4689	3.11	<0.2	<5	610	<0.5	<2	1.83	<0.5	12	79	147	3.30	10	0.47	<10	0.77	727	<1	0.19	12	370	6	<5	73	0.20	<10	<10	96	<5	79	--	--
4689	3.23	<0.2	<5	60	<0.5	<2	3.39	<0.5	27	266	76	3.67	10	0.16	<10	2.76	760	<1	0.18	95	1040	6	<5	50	0.27	<10	<10	114	5	52	--	--
4690	4.69	<0.2	<5	10	<0.5	<2	6.01	<0.5	24	49	149	3.79	20	0.05	<10	1.08	456	<1	0.37	40	250	6	<5	<1	0.16	<10	<10	109	<5	56	--	--
4691	2.66	<0.2	10	70	<0.5	<2	2.57	<0.5	17	29	158	3.07	10	0.10	<10	0.95	369	<1	0.19	24	660	6	<5	75	0.34	<10	<10	171	<5	32	--	--
4692	1.62	<0.2	5	90	<0.5	<2	0.97	<0.5	7	89	98	1.98	<10	0.12	<10	0.59	264	<1	0.12	11	410	2	<5	23	0.16	<10	<10	62	<5	66	--	--
4693	1.89	<0.2	<5	110	<0.5	<2	0.54	<0.5	13	67	92	3.54	<10	0.27	<10	0.84	553	<1	0.07	13	360	8	<5	20	0.19	<10	<10	80	<5	80	--	--
4693A	2.40	0.2	5	60	<0.5	<2	1.29	<0.5	11	92	71	2.85	<10	0.15	<10	0.24	403	7	0.16	14	610	10	<5	72	0.12	<10	<10	49	<5	78	--	--
4694	3.69	<0.2	<5	190	<0.5	<2	2.41	<0.5	14	64	93	4.01	10	0.42	<10	0.90	869	6	0.42	5	1110	8	<5	76	0.24	<10	<10	99	5	66	--	--

Certified by *Hart Buehler*



# Chemex Labs Ltd.

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## CERTIFICATE OF ANALYSIS

TO : ROSSBACHER LABORATORY LIMITED  
2225 SOUTH SPRINGER AVENUE  
BURNABY, B.C.  
V5E 3H1

CERT. # : A3620323-003-A  
INVOICE # : I9620323  
DATE : 17-NOV-86  
P.O. # : NONE  
V209

Semi quantitative multi element ICP analysis

Nitric-Aqua-Regis digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sb, Ba, Be, Ca, Cr, Ga, La, Mg, K, Na, Sr, Ti, Tl, W and V can only be considered as semi-quantitative.

COMMENTS :  
ATTN: P. ROSSBACHER

Sample description	Al	Ag	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	K	La	Mg	Mn	Mo	Nb	Ni	P	Pb	Sb	Sr	Ti	Tl	U	V	W	Zn		
	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm			
4695	0.39	0.2	5	90	<0.5	<2	0.92	<0.5	15	56	4	0.63	<10	0.01	<10	0.07	>9999	2	<0.01	53	530	14	<5	52	0.09	<10	10	4	<5	102	--	--
4696	2.31	0.2	<5	1040	<0.5	<2	0.44	<0.5	21	29	39	3.83	<10	0.29	<10	1.73	1125	<1	0.01	17	350	6	<5	31	0.27	<10	<10	42	<5	124	--	--
4697	0.21	0.2	5	560	<0.5	<2	0.25	<0.5	15	117	126	2.50	<10	0.05	<10	0.34	2026	6	0.02	12	520	6	<5	12	0.07	<10	<10	20	<5	38	--	--
16N 01+50W	4.61	<0.2	<5	200	<0.5	<2	0.10	0.5	11	20	67	4.36	<10	0.13	<10	0.75	577	<1	<0.01	18	1110	2	<5	6	0.22	<10	<10	97	<5	94	--	--
16N 01+35W	4.03	<0.2	5	90	<0.5	<2	0.09	<0.5	9	22	53	3.42	<10	0.06	10	0.48	368	<1	<0.01	10	880	10	<5	6	0.14	<10	<10	73	<5	58	--	--
16N 01+00W	2.07	0.2	15	60	<0.5	<2	0.14	<0.5	2	14	22	3.71	<10	0.02	<10	0.23	414	<1	<0.01	6	980	12	<5	8	0.16	<10	<10	96	<5	54	--	--
16N 00+75W	3.62	0.2	<5	110	<0.5	<2	0.14	<0.5	33	24	47	3.55	<10	0.06	<10	0.47	540	<1	0.01	12	490	14	<5	11	0.19	<10	<10	77	<5	74	--	--
16N 00+50W	2.12	<0.2	<5	50	<0.5	<2	0.13	<0.5	1	18	18	4.07	<10	0.03	<10	0.16	205	<1	<0.01	4	810	12	<5	10	0.20	<10	<10	105	<5	52	--	--
16N 00+35W	3.00	<0.2	5	50	<0.5	<2	0.11	<0.5	1	19	22	4.07	<10	0.02	<10	0.14	181	<1	<0.01	4	1410	12	<5	10	0.17	<10	<10	92	<5	38	--	--
16N 00+00	5.28	<0.2	15	110	<0.5	<2	0.23	<0.5	8	32	72	5.25	10	0.10	10	0.53	446	<1	0.01	15	750	10	<5	19	0.22	<10	<10	130	<5	98	--	--
16N 00+25E	3.22	<0.2	10	70	<0.5	<2	0.23	<0.5	2	22	35	3.79	<10	0.05	10	0.28	250	<1	0.01	9	580	12	<5	18	0.18	<10	<10	94	<5	60	--	--
16N 00+50E	2.54	0.2	5	80	<0.5	<2	0.23	<0.5	6	21	94	3.72	<10	0.07	10	0.37	557	<1	0.01	11	420	14	<5	17	0.11	<10	<10	72	<5	54	--	--
16N 00+75E	5.27	<0.2	15	120	<0.5	<2	0.15	<0.5	8	33	84	5.01	<10	0.08	<10	0.52	529	<1	<0.01	16	910	20	<5	12	0.16	<10	<10	97	<5	72	--	--
16N 01+00E	6.34	<0.2	10	120	<0.5	<2	0.16	<0.5	8	41	84	5.67	<10	0.09	<10	0.72	507	<1	<0.01	20	770	16	<5	12	0.17	<10	<10	103	<5	88	--	--
16N 01+25E	6.06	<0.2	10	120	<0.5	<2	0.17	<0.5	14	39	98	4.88	<10	0.10	10	0.38	668	<1	0.01	22	580	10	<5	12	0.20	<10	<10	104	<5	102	--	--
16N 01+50E	3.74	0.6	5	80	<0.5	<2	0.19	<0.5	5	25	37	5.43	<10	0.07	10	0.48	586	<1	<0.01	14	990	14	<5	12	0.17	<10	<10	107	<5	72	--	--
16N 01+75E	3.00	<0.2	<5	50	<0.5	<2	0.16	<0.5	5	22	30	2.18	<10	0.04	10	0.30	352	<1	<0.01	10	400	9	<5	12	0.19	<10	<10	85	<5	52	--	--
16N 02+00E	5.08	<0.2	10	140	<0.5	<2	0.18	<0.5	14	36	73	4.83	<10	0.10	10	0.78	752	<1	0.01	24	640	16	<5	13	0.25	<10	<10	112	<5	96	--	--
16N 02+25E	3.80	<0.2	5	60	<0.5	<2	0.17	<0.5	7	33	44	4.83	<10	0.06	<10	0.60	371	<1	<0.01	17	720	16	<5	12	0.23	<10	<10	104	<5	74	--	--

Certified by *Hart Bickler*

**ROSSBACHER LABORATORY LTD.**

2225 S. SPRINGER AVENUE  
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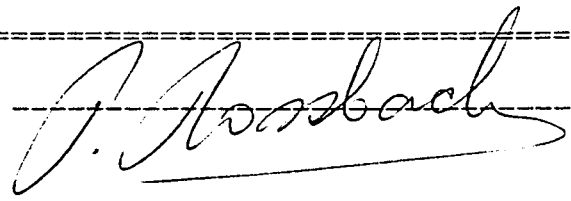
**CERTIFICATE OF ANALYSIS**

TO : MPH CONSULTING LTD.  
 301-409 GRANVILLE STREET  
 VANCOUVER B.C.  
 PROJECT: V 239  
 TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 86605  
 INVOICE#: 7151  
 DATE ENTERED: 86-11-05  
 FILE NAME: MPH86605  
 PAGE # : 1

PRE FIX	SAMPLE NAME	PPB Au
S	L 6N 0+00	5
S	0+25W	5
S	0+50W	5
S	0+75W	5
S	1+00W	5
S	1+25W	5
S	1+50W	5
S	1+75W	5
S	2+00W	5
S	2+25W	5
S	2+50W	5
S	L 6N 2+75W	5
S	L 7N 0+00	5
S	0+25W	5
S	0+50W	5
S	0+75W	5
S	1+00W	5
S	1+25W	5
S	1+50W	5
S	1+75W	5
S	2+00W	5
S	2+25W	5
S	2+50W	5
S	2+75W	5
S	3+00W	5
S	L 7N 3+25W	5
S	L 8N 0+00	5
S	0+25W	5
S	0+50W	5
S	0+75W	5
S	1+00W	5
S	1+25W	5
S	1+50W	5
S	1+75W	5
S	2+00W	5
S	2+25W	5
S	2+50W	5
S	2+75W	5
S	3+00W	5
S	L 8N 3+25W	5

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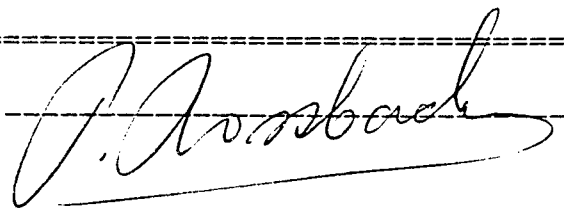
TO : MPH CONSULTING LTD.  
 301-409 GRANVILLE STREET  
 VANCOUVER B.C.  
 PROJECT: V 239  
 TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 86605  
 INVOICE#: 7151  
 DATE ENTERED: 86-11-05  
 FILE NAME: MPH86605  
 PAGE # : 2

PRE FIX	SAMPLE NAME	PPB Au
S	L 8N 3+50W	5
S	L 9N 0+25W	5
S	0+50W	5
S	0+75W	5
S	1+00W	5
S	1+25W	5
S	1+50W	5
S	1+75W	5
S	2+00W	5
S	2+25W	5
S	2+50W	5
S	2+75W	5
S	3+00W	5
S	L 9N 3+25W	5
S	L 10N 5+00W	5
S	4+75W	5
S	4+50W	5
S	4+25W	5
S	4+00W	5
S	3+75W	5
S	3+50W	5
S	3+25W	5
S	3+00W	5
S	2+75W	5
S	2+50W	5
S	2+25W	5
S	2+00W	5
S	1+75W	5
S	1+50W	5
S	1+25W	5
S	1+00W	5
S	0+75W	5
S	0+50W	5
S	0+25W	5
S	L 10N 0+00	5
S	0+25E	5
S	0+50E	5
S	0+75E	5
S	1+00E	5
S	L 10N 1+25E	5

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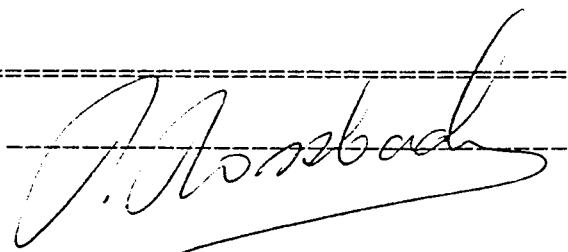
TO : MPH CONSULTING LTD.  
 301-409 GRANVILLE STREET  
 VANCOUVER B.C.  
 PROJECT: V 239  
 TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 86605  
 INVOICE#: 7151  
 DATE ENTERED: 86-11-05  
 FILE NAME: MPH86605  
 PAGE # : 3

PRE FIX	SAMPLE NAME	PPB Au
S	L 10N 1+50E	5
S	1+75E	5
S	2+00E	5
S	2+25E	5
S	L 10N 2+50E	5
S	L 12N 0+25W	5
S	0+50W	5
S	0+75W	5
S	1+00W	5
S	1+25W	5
S	1+50W	5
S	1+75W	10
S	2+00W	5
S	2+25W	5
S	2+50W	5
S	2+75W	5
S	3+00W	5
S	3+25W	5
S	3+50W	5
S	3+75W	5
S	4+00W	10
S	4+25W	5
S	4+50W	30
S	4+75W	5
S	5+00W	5
S	L 12N 5+25W	5
S	L 14N 0+25W	5
S	0+50W	5
S	0+75W	5
S	1+00W	5
S	1+25W	5
S	1+50W	5
S	1+75W	5
S	2+00W	5
S	2+25W	5
S	2+50W	50
S	2+75W	5
S	3+00W	5
S	3+25W	5
S	L 14N 3+50W	5

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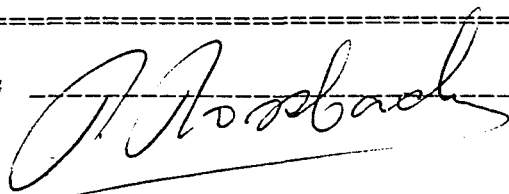
TO : MPH CONSULTING LTD.  
 301-409 GRANVILLE STREET  
 VANCOUVER B.C.  
 PROJECT: V 239  
 TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 86605  
 INVOICE#: 7151  
 DATE ENTERED: 86-11-05  
 FILE NAME: MPH86605  
 PAGE # : 4

PRE FIX	SAMPLE NAME	PPB Au
S	L 14N 3+75W	5
S	4+00W	5
S	4+25W	5
S	4+50W	5
S	L 14N 4+75W	5
S	L 16N 1+50W	5
S	1+75W	5
S	2+00W	5
S	2+25W	5
S	2+50W	5
S	2+75W	5
S	3+00W	5
S	3+25W	5
S	3+50W	20
S	3+75W	5
S	4+00W	5
S	4+25W	5
S	L 16N 4+50W	5
S	L 18N 6+00W	5
S	5+75W	5
S	5+25W	5
S	5+00W	10
S	4+75W	5
S	4+50W	5
S	4+25W	5
S	4+00W	5
S	3+75W	5
S	3+50W	5
S	3+25W	5
S	3+00W	5
S	2+75W	5
S	2+50W	5
S	2+25W	10
S	2+00W	5
S	1+75W	5
S	1+50W	5
S	1+25W	5
S	1+00W	5
S	0+75W	5
S	L 18N 0+50W	5

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**CERTIFICATE OF ANALYSIS**

TO : MPH CONSULTING LTD.  
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 VANCOUVER B.C.

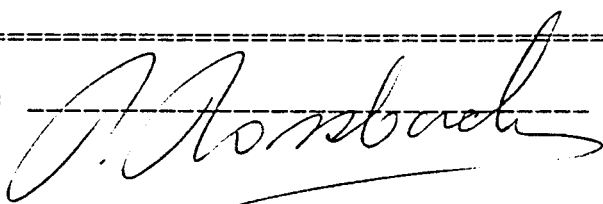
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 INVOICE#: 7151  
 DATE ENTERED: 86-11-05  
 FILE NAME: MPH86605  
 PAGE # : 5

PROJECT: V 239  
 TYPE OF ANALYSIS: GEOCHEMICAL

PRE FIX	SAMPLE NAME	PPB Au
S	L 18N 0+25W	5
S	L 18 0+00	30
S	0+25E	5
S	0+50E	5
S	0+75E	5
S	1+00E	5
S	1+25E	5
S	1+50E	5
S	1+75E	5
S	2+00E	5
S	2+25E	5
S	2+50E	5
S	2+75E	5
S	3+00E	5
S	3+25E	5
S	3+50E	5
S	3+75E	5
S	4+25E	5
S	4+50E	5
S	4+75E	5
S	5+00E	5
S	5+25E	5
S	5+50E	5
S	5+75E	5
S	6+00E	5
S	6+25E	5
S	6+50E	5
S	6+75E	5
S	7+00E	5
S	7+25E	5
S	7+50E	5
S	7+75E	5
S	L 18N 8+00E	5
S	L 20N 5+00W	5
S	4+75W	5
S	4+50W	5
S	4+25W	5
S	4+00W	5
S	3+75W	5
S	3+50W	5

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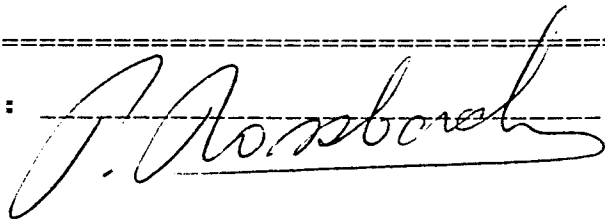
TO : MPH CONSULTING LTD.  
 301-409 GRANVILLE STREET  
 VANCOUVER B.C.  
 PROJECT: V 239  
 TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 86605  
 INVOICE#: 7151  
 DATE ENTERED: 86-11-05  
 FILE NAME: MFH86605  
 PAGE # : 6

PRE FIX	SAMPLE NAME	PPB Au
S	L 20N 3+25W	5
S	3+00W	5
S	2+75W	5
S	2+50W	5
S	2+25W	5
S	2+00W	5
S	1+75W	5
S	1+50W	5
S	1+25W	5
S	1+00W	5
S	0+75W	5
S	0+50W	5
S	0+25W	5
S	L 20N 0+00	5
S	0+25E	5
S	0+50E	5
S	0+75E	5
S	1+00E	5
S	1+25E	5
S	1+50E	5
S	1+75E	5
S	2+00E	5
S	2+25E	5
S	2+50E	170
S	2+75E	5
S	3+00E	5
S	3+25E	5
S	3+50E	5
S	3+75E	5
S	4+00E	5
S	4+25E	5
S	4+50E	5
S	4+75E	5
S	5+00E	5
S	5+25E	5
S	5+50E	5
S	5+75E	5
S	6+00E	5
S	6+25E	5
S	L 20N 6+50E	5

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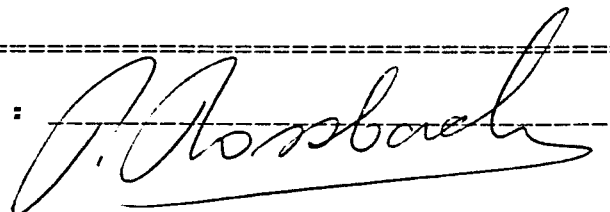
TO : MPH CONSULTING LTD.  
 301-409 GRANVILLE STREET  
 VANCOUVER B.C.  
 PROJECT: V 239  
 TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 86605  
 INVOICE#: 7151  
 DATE ENTERED: 86-11-05  
 FILE NAME: MPH86605  
 PAGE # : 7

PRE FIX	SAMPLE NAME	PPB Au
S	L 20N 6+75E	5
S	7+00E	5
S	7+25E	5
S	7+50E	5
S	7+75E	20
S	L 20N 8+00E	5
S	L 22N 3+25W	5
S	3+50W	5
S	3+75W	5
S	4+00W	5
S	4+25W	5
S	L 22N 4+50W	5
S	L 24N 3+50W	5
S	3+75W	5
S	4+00W	5
S	4+25W	5
S	L 24N 4+50W	140
S	G.A. SOIL #1	5
L	G.A. SILT #1	5
L	#2	5
L	#3	5
L	G.A. SILT #4	5

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# Chemex Labs Ltd.

\*Analytical Chemists \*Geochemists \*Registered Assayers

212 Brooksbank Ave.  
North Vancouver, B.C.  
Canada V7J2C1

Phone: (604) 984-0221  
Telex: 043-52597

## CERTIFICATE OF ANALYSIS

TO : ROSSBACHER LABORATORY LIMITED  
2025 SOUTH SPRINGER AVENUE  
BURNABY, B.C.  
V5E 3N1

CERT. # : A8620591-001-A  
INVOICE # : I8620591  
DATE : 25-NOV-86  
P.O. # : NONE  
V239

Semi quantitative multi element ICP analysis

Nitric-Aqua-Regis digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sb, Ba, Be, Ca, Cr, Ga, La, Mg, K, Na, Sr, Tl, Ti, W and Y can only be considered as semi-quantitative.

COMMENTS :  
ATTN: P. ROSSBACHER

Sample description	Al	Ag	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	K	La	Mg	Mn	Mo	Nb	Ni	P	Pb	Sb	Sr	Tl	Ti	U	V	W	Zn		
	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	%	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm		
LOGN 00+00	3.67	0.2	10	150	<0.5	<2	0.26	<0.5	11	22	50	4.00	<10	0.09	10	0.71	816	<1	<0.01	17	690	10	<5	13	0.23	<10	<10	101	<5	92	--	--
LOGN 00+25W	0.73	0.2	<5	70	<0.5	<2	0.35	<0.5	2	6	9	0.91	<10	0.03	<10	0.10	314	1	<0.01	3	300	16	<5	16	0.11	<10	<10	45	<5	40	--	--
LOGN 00+50W	3.94	0.2	<5	90	<0.5	<2	0.13	<0.5	6	21	20	4.37	<10	0.05	<10	0.29	643	<1	<0.01	8	700	13	<5	9	0.26	<10	<10	123	<5	50	--	--
LOGN 00+75W	4.11	0.4	10	90	<0.5	<2	0.17	<0.5	9	28	43	4.21	<10	0.07	<10	0.55	712	<1	<0.01	13	1010	16	<5	11	0.24	<10	<10	110	<5	68	--	--
LOGN 01+00W	2.49	0.2	5	60	<0.5	<2	0.13	<0.5	5	21	24	3.21	<10	0.05	<10	0.25	727	<1	<0.01	9	850	18	<5	9	0.19	<10	<10	86	<5	50	--	--
LOGN 01+25W	3.68	0.2	10	60	<0.5	<2	0.18	<0.5	13	29	40	4.61	<10	0.04	<10	0.42	1275	<1	<0.01	13	1340	14	<5	10	0.22	<10	<10	118	<5	76	--	--
LOGN 01+50W	6.29	0.2	25	90	<0.5	<2	0.23	<0.5	14	45	74	4.57	<10	0.06	10	0.72	838	<1	<0.01	20	1820	10	<5	10	0.23	<10	<10	109	<5	82	--	--
LOGN 01+75W	5.64	0.2	10	70	<0.5	<2	0.15	<0.5	11	45	35	5.08	<10	0.04	<10	0.59	918	<1	<0.01	17	1570	10	<5	8	0.24	<10	<10	110	<5	76	--	--
LOGN 02+00W	5.37	0.2	<5	70	<0.5	<2	0.16	<0.5	9	47	34	5.09	<10	0.05	<10	0.66	646	<1	<0.01	19	1600	8	<5	8	0.25	<10	<10	116	<5	92	--	--
LOGN 02+25W	2.46	0.2	5	30	<0.5	<2	0.16	<0.5	2	32	<1	4.62	<10	0.03	<10	0.21	231	<1	<0.01	6	945	14	<5	7	0.24	<10	<10	125	<5	32	--	--
LOGN 02+50W	5.23	0.2	15	70	<0.5	<2	0.33	<0.5	12	50	47	4.95	<10	0.06	10	0.71	590	<1	<0.01	23	1480	14	<5	15	0.29	<10	<10	129	<5	86	--	--
LOGN 02+75W	4.85	0.2	10	60	<0.5	<2	0.28	<0.5	8	43	32	4.36	<10	0.05	<10	0.44	475	<1	<0.01	14	1290	14	<5	11	0.23	<10	<10	102	<5	76	--	--
LOGN 00+00	3.28	0.2	5	160	<0.5	<2	0.21	<0.5	13	19	55	3.25	<10	0.12	10	0.73	890	<1	<0.01	15	880	10	<5	11	0.21	<10	<10	79	<5	76	--	--
LOGN 00+25W	3.51	0.2	25	130	<0.5	<2	0.21	<0.5	13	21	50	3.98	<10	0.10	10	0.78	907	<1	<0.01	16	780	10	<5	13	0.25	<10	<10	98	<5	86	--	--
LOGN 00+50W	3.10	0.2	10	110	<0.5	<2	0.19	<0.5	9	19	48	3.21	<10	0.08	10	0.67	632	<1	<0.01	13	420	8	<5	12	0.22	<10	<10	53	<5	60	--	--
LOGN 00+75W	3.66	0.2	10	130	<0.5	<2	0.19	<0.5	10	28	47	4.29	<10	0.08	10	0.71	717	<1	<0.01	16	730	14	<5	11	0.26	<10	<10	114	<5	76	--	--
LOGN 01+00W	3.13	0.2	10	100	<0.5	<2	0.15	<0.5	9	23	34	3.48	<10	0.14	<10	0.29	811	1	<0.01	11	960	10	<5	12	0.18	<10	<10	98	<5	64	--	--
LOGN 01+25W	4.05	0.2	15	80	<0.5	<2	0.16	<0.5	11	31	46	4.63	<10	0.05	<10	0.55	986	<1	<0.01	13	1210	16	<5	9	0.22	<10	<10	107	<5	84	--	--
LOGN 01+50W	4.10	0.2	5	70	<0.5	<2	0.16	<0.5	9	34	45	3.92	<10	0.05	<10	0.57	695	<1	<0.01	14	1280	8	<5	8	0.18	<10	<10	99	<5	68	--	--
LOGN 01+75W	3.70	0.2	15	70	<0.5	<2	0.19	<0.5	9	38	33	5.17	<10	0.04	<10	0.53	1026	<1	<0.01	17	1270	16	<5	9	0.26	<10	<10	135	<5	74	--	--
LOGN 02+00W	6.04	0.2	15	100	<0.5	<2	0.35	<0.5	12	48	55	4.98	<10	0.07	10	0.86	927	<1	<0.01	23	2070	10	<5	16	0.20	<10	<10	126	<5	92	--	--
LOGN 02+25W	3.74	0.2	15	110	<0.5	<2	0.28	<0.5	9	40	45	4.49	<10	0.08	<10	0.86	575	<1	<0.01	20	850	12	<5	15	0.26	<10	<10	122	<5	76	--	--
LOGN 02+50W	3.16	0.2	5	60	<0.5	<2	0.25	<0.5	7	21	29	3.41	<10	0.04	<10	0.43	568	<1	<0.01	13	810	8	<5	13	0.23	<10	<10	94	<5	60	--	--
LOGN 02+75W	4.76	0.2	5	70	<0.5	<2	0.45	<0.5	10	62	43	4.38	<10	0.06	10	0.60	591	<1	<0.01	23	940	14	<5	13	0.27	<10	<10	111	<5	78	--	--
LOGN 03+00W	3.84	0.2	10	60	<0.5	<2	0.25	<0.5	5	30	24	4.05	<10	0.05	<10	0.33	400	<1	<0.01	11	1040	12	<5	14	0.25	<10	<10	102	<5	62	--	--
LOGN 03+25W	4.22	0.2	10	70	<0.5	<2	0.32	<0.5	8	29	44	4.14	<10	0.06	<10	0.42	708	<1	<0.01	12	1720	18	<5	19	0.24	<10	<10	105	<5	70	--	--
LOGN 00+00	3.43	0.2	15	140	<0.5	<2	0.20	<0.5	12	21	47	3.82	<10	0.09	10	0.70	798	<1	<0.01	15	540	22	<5	13	0.24	<10	<10	98	<5	88	--	--
LOGN 00+25W	3.63	0.2	10	130	<0.5	<2	0.18	<0.5	15	21	47	3.73	<10	0.07	10	0.63	1008	<1	<0.01	17	540	10	<5	12	0.23	<10	<10	100	<5	94	--	--
LOGN 00+50W	3.29	0.2	5	90	<0.5	<2	0.16	<0.5	6	16	26	3.94	<10	0.05	<10	0.34	384	<1	<0.01	8	530	14	<5	10	0.16	<10	<10	83	<5	52	--	--
LOGN 00+75W	3.70	0.2	15	120	<0.5	<2	0.16	<0.5	11	28	49	4.54	<10	0.08	<10	0.77	978	<1	<0.01	17	900	20	<5	9	0.25	<10	<10	119	<5	80	--	--
LOGN 01+00W	4.03	0.2	15	160	<0.5	<2	0.28	<0.5	12	32	72	4.46	<10	0.13	10	0.97	873	<1	<0.01	20	960	12	<5	17	0.28	<10	<10	111	<5	96	--	--
LOGN 01+25W	5.77	0.2	20	100	<0.5	<2	0.24	<0.5	13	40	88	4.67	<10	0.08	10	0.76	1563	<1	<0.01	20	1500	8	<5	14	0.24	<10	<10	114	<5	104	--	--
LOGN 01+50W	4.70	0.2	10	100	<0.5	<2	0.25	<0.5	14	41	40	5.57	<10	0.07	10	0.74	1142	<1	<0.01	18	2020	12	<5	13	0.26	<10	<10	124	<5	84	--	--
LOGN 01+75W	5.95	0.2	10	100	<0.5	<2	0.27	<0.5	12	42	50	4.46	<10	0.07	10	0.63	1474	<1	<0.01	19	1100	14	<5	14	0.28	<10	<10	114	<5	96	--	--
LOGN 02+00W	5.72	0.2	5	90	<0.5	<2	0.30	<0.5	9	39	44	4.57	<10	0.07	12	0.53	885	<1	<0.01	15	2820	14	<5	14	0.24	<10	<10	107	<5	76	--	--
LOGN 02+25W	6.07	0.2	<5	90	<0.5	<2	0.28	<0.5	12	48	56	4.82	<10	0.05	10	0.65	993	<1	<0.01	15	1850	10	<5	13	0.24	<10	<10	102	<5	78	--	--
LOGN 02+50W	3.55	0.2	5	50	<0.5	<2	0.26	<0.5	4	32	12	4.56	<10	0.04	<10	0.39	364	<1	<0.01	10	2440	10	<5	12	0.24	<10	<10	104	<5	60	--	--
LOGN 02+75W	1.64	0.2	5	50	<0.5	<2	0.33	<0.5	3	28	9	2.60	<10	0.03	<10	0.16	866	<1	<0.01	7	470	14	<5	14	0.19	<10	<10	75	<5	40	--	--
LOGN 03+00W	3.57	0.2	5	50	<0.5	<2	0.24	<0.5	4	32	15	4.76	<10	0.04	<10	0.22	413	<1	<0.01	10	800	14	<5	9	0.24	<10	<10	125	<5	54	--	--
LOGN 03+25W	1.96	0.2	5	50	<0.5	<2	0.22	<0.5	5	47	11	3.17	<10	0.04	<10	0.27	552	<1	<0.01	16	460	16	<5	15	0.27	<10	<10	95	<5	44	--	--

Certified by *Hart Buchler*

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## CERTIFICATE OF ANALYSIS

TO : ROSSBACHER LABORATORY LIMITED  
2025 SOUTH SPRINGER AVENUE  
BURNABY, B.C.  
V5E 3M1

CERT. # : A8620591-002-A  
INVOICE # : 18620591  
DATE : 25-NOV-86  
P.O. # : NONE  
V239

Semi-quantitative element ICP analysis

Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sb, Ba, Be, Ca, Cr, Ga, La, Mg, K, Na, Sr, Tl, U and V can only be considered as semi-quantitative.

COMMENTS :  
ATTN: P. ROSSBACHER

RETURN BUSINESS FORMS TO: CHEMEX LABS LTD., VANCOUVER, BRITISH COLUMBIA

Sample description	Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	K %	La ppm	Mg ppm	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm		
L09N 03+50W	3.61	0.2	5	90	<0.5	<2	0.14	<0.5	9	27	30	4.55	10	0.04	<10	0.45	489	<1	<0.01	11	690	12	<5	10	0.20	<10	<10	117	<5	74	--	--
L09N 00+25W	3.15	0.2	5	90	<0.5	<2	0.07	<0.5	9	18	29	4.19	10	0.04	<10	0.42	470	<1	<0.01	8	670	4	<5	5	0.17	<10	<10	110	<5	62	--	--
L09N 00+50W	3.09	0.2	10	70	<0.5	<2	0.08	<0.5	1	21	9	4.86	10	0.03	<10	0.24	346	<1	<0.01	6	1260	10	<5	6	0.19	<10	<10	125	<5	46	--	--
L09N 00+75W	3.67	0.2	5	90	<0.5	<2	0.09	0.5	7	27	47	4.96	<10	0.05	<10	0.65	481	<1	<0.01	12	1410	2	<5	6	0.16	<10	<10	119	<5	70	--	--
L09N 01+00W	3.72	0.2	10	90	<0.5	<2	0.10	0.5	7	27	33	4.88	10	0.04	<10	0.47	426	<1	<0.01	11	1290	10	<5	7	0.19	<10	<10	117	<5	74	--	--
L09N 01+25W	4.97	0.2	20	120	<0.5	<2	0.11	<0.5	14	33	65	4.71	10	0.06	<10	0.76	1313	<1	<0.01	16	1720	6	<5	7	0.20	<10	<10	119	<5	96	--	--
L09N 01+50W	2.66	0.2	5	60	<0.5	<2	0.11	<0.5	7	24	23	3.93	<10	0.05	<10	0.44	550	<1	<0.01	10	970	8	<5	6	0.15	<10	<10	109	<5	62	--	--
L09N 01+75W	2.35	0.2	20	70	<0.5	<2	0.14	<0.5	7	25	34	3.16	<10	0.03	<10	0.35	1057	<1	<0.01	11	950	10	<5	6	0.14	<10	<10	85	<5	58	--	--
L09N 02+00W	2.95	0.2	10	60	<0.5	<2	0.12	<0.5	6	31	31	3.97	<10	0.02	<10	0.42	466	<1	<0.01	12	1300	4	<5	8	0.13	<10	<10	97	<5	60	--	--
L09N 02+25W	4.66	0.2	<5	100	<0.5	<2	0.20	0.5	8	43	59	4.59	10	0.07	<10	0.90	605	<1	0.01	20	1540	2	<5	9	0.26	<10	<10	121	<5	86	--	--
L09N 02+50W	2.83	0.2	<5	50	<0.5	<2	0.14	<0.5	9	31	34	3.20	<10	0.02	<10	0.42	1074	<1	<0.01	13	700	4	<5	6	0.19	<10	<10	88	<5	62	--	--
L09N 02+75W	4.30	0.2	5	110	<0.5	<2	0.15	<0.5	10	35	63	3.73	<10	0.03	<10	0.73	479	<1	<0.01	19	480	2	<5	6	0.15	<10	<10	95	<5	96	--	--
L09N 03+00W	3.54	0.2	5	90	<0.5	<2	0.32	<0.5	9	49	56	3.83	<10	0.04	<10	0.68	573	<1	<0.01	20	750	4	<5	6	0.18	<10	<10	104	<5	70	--	--
L09N 03+25W	4.59	0.2	10	90	<0.5	<2	0.15	<0.5	6	36	64	5.28	10	0.06	<10	0.64	478	<1	<0.01	15	1780	2	<5	8	0.21	<10	<10	128	<5	90	--	--
L10N 05+00W	1.12	0.2	5	30	<0.5	<2	0.13	<0.5	4	10	10	1.85	<10	0.02	<10	0.12	261	<1	<0.01	2	320	6	<5	6	0.10	<10	<10	48	<5	40	--	--
L10N 04+25W	2.34	0.2	5	50	<0.5	<2	0.13	<0.5	8	18	25	3.19	<10	0.04	<10	0.35	474	<1	<0.01	8	800	6	<5	6	0.14	<10	<10	73	<5	64	--	--
L10N 04+50W	2.59	0.2	<5	60	<0.5	<2	0.13	<0.5	8	22	25	3.74	<10	0.05	<10	0.47	737	<1	<0.01	9	1120	<2	<5	6	0.15	<10	<10	82	<5	88	--	--
L10N 04+75W	3.45	0.2	<5	90	<0.5	<2	0.22	0.5	18	109	33	3.85	10	0.05	<10	0.93	2124	<1	0.01	38	1330	8	<5	10	0.24	<10	<10	97	<5	110	--	--
L10N 04+00W	4.29	0.2	5	230	<0.5	<2	0.13	<0.5	14	27	71	4.60	10	0.30	<10	0.91	822	<1	<0.01	15	950	10	<5	8	0.24	<10	<10	135	<5	96	--	--
L10N 03+75W	4.83	0.2	10	120	<0.5	<2	0.14	<0.5	7	26	63	5.09	10	0.14	<10	0.69	521	<1	<0.01	14	1180	6	<5	8	0.28	<10	<10	130	<5	108	--	--
L10N 03+50W	2.54	0.2	<5	60	<0.5	<2	0.14	<0.5	4	21	29	3.75	<10	0.03	<10	0.30	244	<1	<0.01	7	500	6	<5	6	0.18	<10	<10	110	<5	56	--	--
L10N 03+25W	2.59	0.2	5	60	<0.5	<2	0.20	<0.5	10	33	35	2.74	<10	0.02	<10	0.44	508	<1	<0.01	14	490	6	<5	4	0.16	<10	<10	78	<5	64	--	--
L10N 03+00W	2.44	0.2	<5	50	<0.5	<2	0.15	<0.5	5	27	30	3.16	<10	0.03	<10	0.39	411	<1	<0.01	10	760	6	<5	7	0.17	<10	<10	89	<5	54	--	--
L10N 02+75W	3.63	0.2	<5	50	<0.5	<2	0.18	0.5	7	41	39	3.81	<10	0.03	<10	0.49	274	<1	<0.01	15	800	6	<5	10	0.18	<10	<10	96	<5	64	--	--
L10N 02+50W	5.65	0.2	5	90	<0.5	<2	0.16	<0.5	8	42	84	4.28	10	0.03	<10	0.83	419	<1	<0.01	20	760	2	<5	7	0.23	<10	<10	114	<5	82	--	--
L10N 02+25W	3.48	0.2	10	50	<0.5	<2	0.16	<0.5	6	35	34	4.26	<10	0.02	<10	0.43	313	<1	<0.01	13	660	6	<5	5	0.19	<10	<10	113	<5	62	--	--
L10N 02+00W	2.37	0.2	5	40	<0.5	<2	0.08	<0.5	<1	22	23	4.03	<10	0.02	<10	0.29	200	<1	<0.01	5	640	6	<5	5	0.15	<10	<10	110	<5	48	--	--
L10N 01+75W	4.14	0.2	<5	50	<0.5	<2	0.06	0.5	3	28	21	5.40	10	0.02	<10	0.30	379	<1	<0.01	7	1290	2	<5	4	0.19	<10	<10	133	<5	52	--	--
L10N 01+50W	2.23	0.2	5	60	<0.5	<2	0.06	<0.5	<1	19	23	4.31	<10	0.03	<10	0.29	284	<1	<0.01	5	570	2	<5	4	0.14	<10	<10	114	<5	42	--	--
L10N 01+25W	2.40	0.2	5	60	<0.5	<2	0.07	<0.5	<1	17	30	3.73	<10	0.03	<10	0.32	410	<1	<0.01	6	660	6	<5	6	0.13	<10	<10	105	<5	46	--	--
L10N 01+00W	3.54	0.2	10	100	<0.5	<2	0.08	<0.5	9	21	63	4.02	<10	0.05	<10	0.65	916	<1	<0.01	11	680	4	<5	5	0.15	<10	<10	96	<5	62	--	--
L10N 00+75W	2.94	0.2	10	80	<0.5	<2	0.06	<0.5	6	18	33	4.34	<10	0.03	<10	0.40	439	<1	<0.01	7	780	2	<5	4	0.17	<10	<10	117	<5	58	--	--
L10N 00+50W	3.16	0.2	5	50	<0.5	<2	0.05	<0.5	<1	17	29	4.26	<10	0.02	<10	0.24	305	<1	<0.01	4	1010	6	<5	3	0.15	<10	<10	102	<5	52	--	--
L10N 00+25W	3.94	0.2	5	140	<0.5	<2	0.08	<0.5	9	20	56	3.97	<10	0.06	<10	0.63	582	<1	<0.01	12	1010	4	<5	6	0.18	<10	<10	99	<5	76	--	--
L10N 00+00	3.21	0.2	<5	180	<0.5	<2	0.10	0.5	9	19	52	4.20	<10	0.07	<10	0.63	320	<1	<0.01	10	930	8	<5	7	0.18	<10	<10	104	<5	72	--	--
L10N 00+25E	2.78	0.2	<5	80	<0.5	<2	0.09	<0.5	6	16	26	3.83	<10	0.03	<10	0.32	276	<1	<0.01	7	360	5	<5	5	0.18	<10	<10	102	<5	54	--	--
L10N 00+50E	1.73	0.2	5	60	<0.5	<2	0.08	<0.5	1	12	12	3.43	<10	0.02	<10	0.21	172	<1	<0.01	3	310	4	<5	5	0.13	<10	<10	89	<5	36	--	--
L10N 00+75E	3.55	0.2	5	90	<0.5	<2	0.09	0.5	6	20	20	4.28	<10	0.03	<10	0.32	283	<1	<0.01	8	1000	4	<5	6	0.14	<10	<10	72	<5	90	--	--
L10N 01+00E	3.81	0.2	5	140	<0.5	<2	0.12	0.5	10	18	49	4.37	<10	0.04	<10	0.58	456	3	<0.01	16	490	2	<5	7	0.12	<10	<10	78	<5	94	--	--
L10N 01+25E	3.66	0.2	15	240	<0.5	<2	0.29	<0.5	16	35	53	5.42	<10	0.07	10	1.02	949	<1	0.01	25	670	2	<5	14	0.19	<10	<10	115	<5	120	--	--

Certified by *Hart B. Baker*

V03 rev 11/85

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# Chemex Labs Ltd.

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## CERTIFICATE OF ANALYSIS

TO : ROSSBACHER LIMITED

2225 SOUTH SPRINGMOUNT AVENUE  
BURNABY, B.C.  
V5B 3H1

INVOICE # : 10620591  
DATE : 25-NOV-86  
P.O. # : NONE  
METHOD :

Sample prepared and analyzed by wet digestion ICP analysis

Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, only the elements listed below are reported. Ga, La, Mg, K, Na, Sr, Tl, U and V can only be considered as semi-quantitative.

COMMENTS :  
ATTN: P. ROSSBACHER

Sample description	Al %	Ag ppp	As ppp	Ba ppp	Be ppp	Bi ppp	Cl %	Cd ppp	Co ppp	Cr ppp	Cu ppp	Fe %	Ga ppp	K %	La ppp	Mg %	Mn ppp	Mo ppp	Na %	Ni ppp	P ppp	Pb ppp	Sb ppp	Sr ppp	Ti %	Tl ppp	U ppp	V ppp	W ppp	Zn ppp		
L10N 01+50E	2.73	0.2	5	80	<0.5	<2	0.26	<0.5	5	25	24	1.45	10	0.05	10	0.46	347	<1	<0.01	10	560	6	<5	14	0.22	<10	<10	114	<5	56	--	--
L10N 01+75E	4.05	0.2	10	70	<0.5	<2	0.16	0.5	7	32	32	4.95	<10	0.04	<10	0.41	303	<1	<0.01	10	990	4	<5	9	0.19	<10	<10	105	<5	98	--	--
L10N 02+00E	4.26	0.2	5	110	<0.5	<2	0.19	0.5	3	41	28	6.39	10	0.06	10	0.71	463	<1	<0.01	17	790	4	<5	14	0.27	<10	<10	152	<5	92	--	--
L10N 02+25E	3.48	0.2	45	160	<0.5	<2	0.31	<0.5	9	37	25	3.36	10	0.03	10	0.96	494	<1	<0.01	20	150	6	<5	22	0.23	<10	<10	112	<5	84	--	--
L10N 02+50E	2.95	0.2	5	140	<0.5	<2	0.37	<0.5	9	31	34	4.36	10	0.07	10	0.81	567	<1	<0.01	17	220	4	<5	20	0.28	<10	<10	139	<5	74	--	--
L10N 02+75W	6.51	0.2	25	200	<0.5	<2	0.22	<0.5	14	18	123	6.12	<10	0.08	10	0.88	1051	1	<0.01	22	1280	10	<5	10	0.15	<10	<10	97	<5	166	--	--
L10N 02+50W	3.51	0.2	20	80	<0.5	<2	0.13	<0.5	3	23	26	5.46	10	0.04	<10	0.28	260	<1	<0.01	7	1300	3	<5	9	0.22	<10	<10	129	<5	66	--	--
L10N 02+75W	4.37	0.2	10	60	<0.5	<2	0.11	0.5	4	25	34	5.37	<10	0.04	<10	0.37	497	<1	<0.01	7	1230	4	<5	8	0.20	<10	<10	111	<5	62	--	--
L10N 01+00W	2.95	0.2	45	80	<0.5	<2	0.11	0.5	6	19	29	3.99	10	0.05	<10	0.46	575	<1	<0.01	9	890	3	<5	8	0.20	<10	<10	107	<5	56	--	--
L10N 01+25W	1.25	0.2	5	40	<0.5	<2	0.12	<0.5	3	9	12	2.96	<10	0.03	<10	0.16	326	<1	<0.01	4	490	2	<5	7	0.15	<10	<10	64	<5	26	--	--
L10N 01+50W	4.42	0.2	45	100	<0.5	<2	0.15	1.0	7	25	48	4.62	10	0.06	10	0.62	546	<1	<0.01	12	750	2	<5	11	0.25	<10	<10	113	<5	72	--	--
L10N 01+75W	2.69	0.2	5	70	<0.5	<2	0.12	<0.5	7	19	37	3.61	<10	0.06	<10	0.44	541	<1	<0.01	7	840	10	<5	7	0.17	<10	<10	95	<5	50	--	--
L10N 02+00W	4.50	0.2	5	80	<0.5	<2	0.14	0.5	7	31	48	4.82	10	0.05	<10	0.63	523	<1	<0.01	12	840	4	<5	10	0.23	<10	<10	115	<5	72	--	--
L10N 02+25W	2.96	0.2	10	90	<0.5	<2	0.18	<0.5	9	29	56	3.57	<10	0.05	<10	0.68	463	<1	<0.01	14	500	4	<5	9	0.19	<10	<10	95	<5	64	--	--
L10N 02+50W	4.61	0.2	5	50	<0.5	<2	0.17	<0.5	6	23	42	4.54	10	0.03	<10	0.40	368	<1	<0.01	12	720	4	<5	10	0.21	<10	<10	115	<5	66	--	--
L10N 02+75W	4.80	0.2	10	60	<0.5	<2	0.17	<0.5	4	36	30	6.04	10	0.04	<10	0.49	309	<1	<0.01	9	1440	2	<5	11	0.27	<10	<10	129	<5	74	--	--
L10N 03+00W	3.09	0.2	10	40	<0.5	<2	0.20	<0.5	4	27	16	5.91	20	0.04	10	0.43	356	<1	<0.01	10	2000	10	<5	11	0.28	<10	<10	145	<5	52	--	--
L10N 03+25W	4.29	0.2	10	130	<0.5	<2	0.27	<0.5	9	46	67	4.15	10	0.08	10	0.83	993	<1	<0.01	23	890	8	<5	11	0.25	<10	<10	118	<5	94	--	--
L10N 03+50W	3.22	0.2	45	70	<0.5	<2	0.25	<0.5	9	39	42	3.14	<10	0.04	<10	0.61	428	<1	<0.01	17	820	4	<5	9	0.18	<10	<10	92	<5	60	--	--
L10N 03+75W	3.36	0.2	5	70	<0.5	<2	0.22	<0.5	8	32	41	4.00	10	0.05	<10	0.46	537	<1	<0.01	12	1280	10	<5	10	0.24	<10	<10	110	<5	82	--	--
L10N 04+00W	4.21	0.2	10	80	<0.5	<2	0.28	<0.5	13	27	53	4.24	10	0.07	10	0.54	344	<1	<0.01	12	1050	3	<5	15	0.23	<10	<10	107	<5	110	--	--
L10N 04+25W	3.95	0.2	45	100	<0.5	<2	0.20	<0.5	7	25	51	4.00	10	0.10	10	0.64	716	<1	<0.01	13	680	6	<5	12	0.29	<10	<10	111	<5	80	--	--
L10N 04+50W	3.04	0.2	5	60	<0.5	<2	0.15	<0.5	7	24	34	3.40	10	0.10	10	0.50	506	<1	<0.01	10	610	6	<5	6	0.25	<10	<10	99	<5	36	--	--
L10N 04+75W	3.56	0.2	45	70	<0.5	<2	0.16	<0.5	9	26	44	3.73	<10	0.07	10	0.54	1081	<1	<0.01	12	860	4	<5	8	0.21	<10	<10	93	<5	106	--	--
L10N 05+00W	4.64	0.2	10	100	<0.5	<2	0.21	<0.5	15	32	78	4.67	10	0.13	10	0.88	644	<1	<0.01	17	570	8	<5	13	0.29	<10	<10	127	<5	102	--	--
L10N 05+25W	2.97	0.2	45	60	<0.5	<2	0.21	<0.5	10	24	37	3.47	10	0.07	10	0.50	674	<1	<0.01	11	760	8	<5	10	0.21	<10	<10	94	<5	100	--	--
L14N 00+25W	0.90	0.2	5	40	<0.5	<2	0.11	<0.5	3	9	2	1.12	<10	0.01	<10	0.11	200	<1	<0.01	3	300	<5	<5	8	0.12	<10	<10	70	<5	13	--	--
L14N 00+50W	4.02	0.2	5	90	<0.5	<2	0.11	<0.5	7	25	40	4.60	10	0.05	<10	0.50	416	<1	<0.01	12	1050	8	<5	8	0.20	<10	<10	30	<5	72	--	--
L14N 00+75W	1.33	0.2	45	40	<0.5	<2	0.10	<0.5	1	15	10	3.27	10	0.02	<10	0.21	229	<1	<0.01	4	320	4	<5	5	0.27	<10	<10	123	<5	25	--	--
L14N 01+00W	3.85	0.2	45	90	<0.5	<2	0.12	0.5	7	25	43	4.30	<10	0.05	<10	0.59	464	<1	<0.01	12	510	4	<5	10	0.19	<10	<10	98	<5	62	--	--
L14N 01+25W	4.94	0.2	10	120	<0.5	<2	0.18	<0.5	11	31	49	5.07	<10	0.08	10	0.71	547	1	<0.01	17	540	12	<5	14	0.23	<10	<10	103	<5	70	--	--
L14N 01+50W	4.04	0.2	5	130	<0.5	<2	0.17	<0.5	9	28	53	4.48	<10	0.08	10	0.67	603	1	<0.01	15	810	12	<5	12	0.25	<10	<10	112	<5	72	--	--
L14N 01+75W	4.21	0.2	10	80	<0.5	<2	0.10	<0.5	6	27	20	5.32	<10	0.05	<10	0.39	303	1	<0.01	9	970	14	<5	7	0.26	<10	<10	123	<5	54	--	--
L14N 02+00W	4.12	0.2	5	70	<0.5	<2	0.15	<0.5	7	25	45	4.99	<10	0.06	<10	0.46	402	2	<0.01	11	850	10	<5	10	0.26	<10	<10	115	<5	64	--	--
L14N 02+25W	3.88	0.2	45	70	<0.5	<2	0.14	<0.5	9	22	22	3.72	<10	0.05	<10	0.46	436	<1	<0.01	11	630	12	<5	10	0.21	<10	<10	100	<5	48	--	--
L14N 02+50W	3.11	0.2	5	60	<0.5	<2	0.17	<0.5	9	28	37	3.80	<10	0.05	<10	0.48	350	1	<0.01	12	600	14	<5	12	0.22	<10	<10	100	<5	44	--	--
L14N 02+75W	3.54	0.2	5	70	<0.5	<2	0.18	<0.5	9	30	42	4.15	<10	0.04	<10	0.51	390	<1	<0.01	13	810	8	<5	11	0.22	<10	<10	104	<5	54	--	--
L14N 03+00W	3.57	0.2	45	80	<0.5	<2	0.20	<0.5	8	34	42	4.18	<10	0.05	10	0.57	452	<1	<0.01	17	840	14	<5	12	0.23	<10	<10	128	<5	58	--	--
L14N 03+25W	4.61	0.2	10	50	<0.5	<2	0.24	<0.5	12	68	73	5.04	<10	0.03	<10	0.76	334	1	<0.01	28	310	3	<5	10	0.24	<10	<10	124	<5	66	--	--
L14N 03+50W	2.49	0.2	15	120	<0.5	<2	0.29	<0.5	14	31	53	4.30	<10	0.11	10	0.68	1056	<1	<0.01	16	1020	16	<5	12	0.23	<10	<10	124	<5	70	--	--

Certified by *Hart B. Sellen*

W13 rev 11-85

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# Chemex Labs Ltd.

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## CERTIFICATE OF ANALYSIS

TO : ROSSBACHER LABORATORY LIMITED

3025 SOUTH SPRINGBROOK AVENUE  
BURNABY, B.C.  
V5F 3N1

CERT. # : A8620591-004-A  
INVOICE # : I8620591  
DATE : 20 NOV 80  
P.O. # : NONE  
V0339

Semi quantitative multi element ICP analysis

Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sb, Ba, Be, Ca, Cr, Ga, La, Mg, K, Na, Sr, Tl, Ti, W and V can only be considered as semi-quantitative.

COMMENTS :  
ATTN: P. ROSSBACHER

Sample description	Al	Ag	As	Ba	Be	Bi	Ca	Co	Cu	Cr	Cd	Fe	Ga	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sr	Ti	Tl	U	V	W	Zn		
	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm		
L14N 03+75W	3.24	0.2	5	40	<0.5	<2	0.21	<0.5	10	20	64	3.92	<10	0.02	<10	0.42	600	1	<0.01	15	1060	8	<5	8	0.16	<10	<10	82	<5	108	--	--
L14N 04+00W	3.66	0.2	10	110	<0.5	<2	0.13	<0.5	14	28	51	4.59	10	0.07	10	0.68	1037	1	<0.01	15	1190	10	<5	7	0.23	<10	<10	99	<5	112	--	--
L14N 04+05W	4.55	0.2	5	150	<0.5	<2	0.13	<0.5	14	25	62	4.42	10	0.15	10	0.57	498	<1	<0.01	15	580	12	<5	8	0.27	<10	<10	112	<5	98	--	--
L14N 04+50W	3.68	0.2	<5	140	<0.5	<2	0.14	<0.5	11	19	62	4.52	10	0.22	<10	0.59	350	<1	<0.01	10	380	10	<5	5	0.35	<10	<10	124	<5	82	--	--
L14N 04+75W	2.54	0.2	5	70	<0.5	<2	0.14	1.0	9	22	33	3.42	10	0.39	10	0.51	552	<1	<0.01	14	450	3	<5	6	0.20	<10	<10	79	<5	112	--	--
L16N 01+50W	3.18	0.4	5	100	<0.5	<2	0.16	<0.5	14	21	34	3.97	10	0.06	10	0.47	586	<1	<0.01	12	1030	10	<5	10	0.18	<10	<10	87	<5	58	--	--
L16N 01+75W	1.19	0.2	<5	50	<0.5	<2	0.21	<0.5	3	12	4	2.06	10	0.03	10	0.22	291	<1	<0.01	5	250	6	<5	13	0.15	<10	<10	69	<5	34	--	--
L16N 02+00W	1.24	0.2	<5	40	<0.5	<2	0.14	<0.5	3	11	7	2.35	10	0.03	<10	0.21	235	<1	<0.01	6	320	6	<5	10	0.13	<10	<10	76	<5	34	--	--
L16N 02+05W	4.66	0.2	15	70	<0.5	<2	0.15	<0.5	7	32	48	5.12	10	0.05	10	0.53	372	1	<0.01	15	950	10	<5	11	0.24	<10	<10	125	<5	76	--	--
L16N 02+50W	3.29	0.2	5	60	<0.5	<2	0.13	<0.5	4	16	20	0.91	10	0.02	20	0.12	116	<1	<0.01	5	670	12	<5	9	0.14	<10	<10	52	<5	32	--	--
L16N 02+75W	1.37	0.2	5	20	<0.5	<2	0.09	<0.5	4	12	7	2.14	<10	0.01	<10	0.21	118	<1	<0.01	5	210	6	<5	4	0.11	<10	<10	68	<5	24	--	--
L16N 03+00W	4.27	0.2	15	70	<0.5	<2	0.12	<0.5	7	33	19	4.91	<10	0.02	<10	0.48	301	<1	<0.01	14	690	12	<5	6	0.18	<10	<10	111	<5	92	--	--
L16N 03+25W	4.93	0.2	15	80	<0.5	<2	0.13	<0.5	9	38	26	5.20	<10	0.02	<10	0.56	348	<1	<0.01	18	720	10	<5	6	0.19	<10	<10	110	<5	106	--	--
L16N 03+50W	4.04	0.2	10	30	<0.5	<2	0.24	<0.5	10	38	69	4.17	<10	0.09	10	0.84	427	<1	<0.01	17	930	6	<5	9	0.27	<10	<10	112	<5	80	--	--
L16N 03+75W	5.22	0.2	25	50	<0.5	<2	0.16	<0.5	10	32	41	4.78	<10	0.08	10	0.34	847	<1	<0.01	13	1650	12	<5	8	0.27	<10	<10	107	<5	106	--	--
L16N 04+00W	4.69	0.2	10	90	<0.5	<2	0.17	<0.5	10	39	52	4.52	<10	0.09	10	0.70	672	<1	<0.01	17	950	6	<5	8	0.28	<10	<10	125	<5	92	--	--
L16N 04+05W	0.91	0.2	5	20	<0.5	<2	0.19	<0.5	1	9	<1	1.24	<10	0.02	<10	0.13	195	<1	<0.01	3	190	10	<5	4	0.14	<10	<10	55	<5	24	--	--
L16N 04+50W	1.72	0.2	<5	40	<0.5	<2	0.13	<0.5	4	17	10	2.65	<10	0.07	10	0.27	516	<1	<0.01	6	530	8	<5	6	0.20	<10	<10	75	<5	52	--	--
L16N 06+00W	3.23	0.2	10	100	<0.5	<2	0.38	<0.5	11	27	22	3.66	<10	0.07	10	0.66	748	<1	0.11	14	720	10	<5	29	0.20	<10	<10	88	<5	68	--	--
L16N 05+75W	2.48	0.2	5	70	<0.5	<2	0.50	<0.5	7	16	1	2.88	10	0.06	10	0.36	793	<1	0.01	5	770	4	<5	41	0.19	<10	<10	74	<5	52	--	--
L16N 05+25W	2.36	0.2	10	90	<0.5	<2	0.17	<0.5	7	19	33	2.71	<10	0.14	<10	0.50	516	<1	<0.01	10	610	10	<5	6	0.13	<10	<10	77	<5	64	--	--
L16N 05+00W	0.88	0.2	<5	50	<0.5	<2	0.23	<0.5	2	7	7	1.50	<10	0.05	<10	0.13	1168	<1	<0.01	3	990	10	<5	9	0.10	<10	<10	35	<5	36	--	--
L16N 04+75W	3.27	0.4	15	150	<0.5	<2	0.19	<0.5	10	29	43	4.07	<10	0.16	10	0.69	618	<1	<0.01	13	1130	8	<5	6	0.20	<10	<10	106	<5	90	--	--
L16N 04+50W	1.03	0.4	10	60	<0.5	<2	0.20	<0.5	2	11	9	1.53	<10	0.07	<10	0.22	516	<1	<0.01	6	570	24	<5	8	0.11	<10	<10	44	<5	36	--	--
L16N 04+25W	3.41	0.2	<5	180	<0.5	<2	0.42	0.5	59	36	31	3.42	<10	0.09	20	0.39	3457	<1	0.01	22	1190	48	<5	20	0.14	<10	<10	65	<5	130	--	--
L16N 04+00W	3.52	0.2	15	40	<0.5	<2	0.20	<0.5	7	30	24	4.73	<10	0.03	10	0.43	351	<1	<0.01	10	1360	8	<5	8	0.22	<10	<10	112	<5	62	--	--
L16N 03+75W	3.27	0.2	10	70	<0.5	<3	0.26	<0.5	9	37	30	3.91	<10	0.04	10	0.59	423	<1	<0.01	15	1190	14	<5	12	0.20	<10	<10	107	<5	70	--	--
L16N 03+50W	2.69	0.4	25	90	<0.5	<2	0.23	<0.5	6	27	19	3.52	<10	0.05	10	0.38	317	<1	<0.01	12	930	16	<5	12	0.19	<10	<10	97	<5	62	--	--
L16N 03+25W	5.16	0.2	20	100	<0.5	<2	0.19	<0.5	13	42	55	5.13	10	0.06	10	0.75	528	<1	0.01	21	930	6	<5	10	0.26	<10	<10	133	<5	86	--	--
L16N 03+00W	3.29	0.2	<5	70	<0.5	<2	0.19	0.5	5	24	21	4.37	10	0.05	10	0.35	407	<1	<0.01	7	990	<2	<5	12	0.18	<10	<10	111	<5	56	--	--
L16N 02+75W	2.81	0.2	<5	50	<0.5	<3	0.10	<0.5	7	19	38	3.57	<10	0.05	<10	0.61	287	<1	<0.01	11	490	6	<5	6	0.13	<10	<10	86	<5	66	--	--
L16N 02+50W	2.62	0.2	5	50	<0.5	<2	0.08	<0.5	5	22	13	3.71	<10	0.04	<10	0.44	312	<1	<0.01	8	760	10	<5	5	0.13	<10	<10	88	<5	46	--	--
L16N 02+05W	3.29	0.2	25	120	<0.5	<2	0.12	<0.5	7	21	33	4.26	<10	0.08	<10	0.59	747	<1	<0.01	11	920	12	<5	7	0.18	<10	<10	117	<5	64	--	--
L16N 02+00W	3.47	0.2	25	170	<0.5	<2	0.27	<0.5	7	20	37	4.28	<10	0.13	<10	0.57	1597	<1	0.01	10	1150	18	<5	10	0.20	<10	<10	124	<5	78	--	--
L16N 01+75W	5.10	0.2	35	180	<0.5	<2	0.39	<0.5	7	18	51	5.21	<10	0.09	10	0.70	429	<1	0.01	11	680	3	<5	6	0.27	<10	<10	147	<5	72	--	--
L16N 01+50W	2.53	0.4	20	20	<0.5	<2	0.12	<0.5	8	18	17	3.80	<10	0.04	<10	0.54	440	<1	<0.01	12	440	8	<5	8	0.18	<10	<10	91	<5	59	--	--
L16N 01+25W	2.25	0.2	15	50	<0.5	<2	0.14	<0.5	4	20	4	4.46	<10	0.05	<10	0.39	324	<1	<0.01	9	740	10	<5	8	0.18	<10	<10	104	<5	52	--	--
L16N 01+00W	0.62	0.4	5	50	<0.5	<2	0.13	<0.5	1	6	2	0.79	<10	0.02	<10	0.07	114	<1	<0.01	3	220	10	<5	9	0.09	<10	<10	37	<5	34	--	--
L16N 00+75W	2.32	0.2	20	70	<0.5	<2	0.10	<0.5	5	19	13	3.66	<10	0.02	10	0.26	254	<1	<0.01	7	660	8	<5	8	0.15	<10	<10	98	<5	64	--	--
L16N 00+50W	3.14	0.2	25	80	<0.5	<2	0.13	<0.5	4	15	15	2.80	<10	0.04	10	0.25	230	<1	<0.01	6	1170	14	<5	11	0.11	<10	<10	60	<5	50	--	--

*Hart Buhler*



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Semi quantitative multi element ICP analysis

## CERTIFICATE OF ANALYSIS

TO : ROSSBACHER LABORATORY LIMITED

2225 SOUTH SPRINGER AVENUE  
BURNABY, B.C.  
V5E 3N1

CERT. # : A8620591-005-A  
INVOICE # : I0620591  
DATE : 25-NOV-86  
P.O. # : NONE  
W339

Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sb, Ba, Be, Ca, Cr, Ga, La, Mg, K, Na, Sr, Ti, Tl, W and Y can only be considered as semi-quantitative.

COMMENTS :  
ATTN: P. ROSSBACHER

Sample description	Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Cs %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm		
L12N 00+25W	1.78	0.2	<5	50	<0.5	<2	0.15	<0.5	4	13	18	2.13	<10	0.04	<10	0.25	274	<1	<0.01	8	480	10	<5	12	0.10	<10	<10	51	<5	40	--	--
L12N 00+00	2.50	0.2	<5	70	<0.5	2	0.17	<0.5	5	13	23	2.71	<10	0.07	<10	0.29	263	<1	<0.01	13	520	6	<5	10	0.18	<10	<10	66	<5	54	--	--
L12N 00+25E	2.13	0.2	<5	40	<0.5	3	0.17	<0.5	3	19	12	3.72	10	0.34	10	0.24	294	<1	<0.01	7	690	8	<5	12	0.12	<10	<10	82	<5	44	--	--
L12N 00+50E	4.27	0.2	<5	70	<0.5	<2	0.17	0.5	7	36	24	5.52	<10	0.35	10	0.42	366	<1	<0.01	11	990	9	<5	12	0.25	<10	<10	115	<5	78	--	--
L12N 00+75E	5.57	0.2	5	210	<0.5	<2	0.33	<0.5	34	45	26	6.33	<10	0.17	10	1.31	1100	<1	<0.01	32	1100	19	<5	32	0.24	<10	<10	119	<5	129	--	--
L12N 01+02E	3.83	0.2	<5	70	<0.5	<2	0.21	<0.5	9	29	44	4.28	<10	0.07	10	0.59	414	<1	<0.01	16	740	8	<5	14	0.21	<10	<10	83	<5	76	--	--
L12N 01+25E	5.47	0.4	5	120	<0.5	<2	0.26	<0.5	12	37	42	5.31	<10	0.09	10	0.63	639	<1	<0.01	19	1260	8	<5	17	0.29	<10	<10	109	<5	116	--	--
L12N 01+50E	6.29	0.2	<5	110	<0.5	<2	0.22	0.5	17	39	70	5.47	<10	0.08	10	0.87	594	<1	<0.01	26	880	10	<5	15	0.28	<10	<10	100	<5	126	--	--
L12N 01+75E	5.10	0.2	<5	80	<0.5	<2	0.21	<0.5	12	36	46	4.95	<10	0.06	10	0.93	512	<1	<0.01	22	1000	6	<5	13	0.24	<10	<10	96	<5	90	--	--
L12N 02+00E	3.33	0.2	<5	130	<0.5	<2	0.26	<0.5	14	36	47	4.14	<10	0.07	10	0.77	571	<1	<0.01	17	880	10	<5	16	0.25	<10	<10	84	<5	84	--	--
L12N 02+25E	1.36	0.2	<5	50	<0.5	<2	0.21	<0.5	5	20	10	2.66	<10	0.05	10	0.39	222	<1	<0.01	10	370	8	<5	16	0.20	<10	<10	71	<5	54	--	--
L12N 02+50E	5.00	0.2	20	150	<0.5	<2	0.30	<0.5	20	43	60	5.25	<10	0.10	10	1.01	666	<1	<0.01	32	760	12	<5	20	0.26	<10	<10	113	<5	138	--	--
L12N 02+75E	4.12	0.2	<5	130	<0.5	<2	0.28	<0.5	14	36	41	4.55	<10	0.09	10	0.66	787	<1	<0.01	25	950	14	<5	17	0.23	<10	<10	105	<5	112	--	--
L12N 03+00E	3.45	0.2	5	110	<0.5	<2	0.26	<0.5	9	33	31	3.99	<10	0.06	10	0.57	515	<1	<0.01	18	520	10	<5	16	0.24	<10	<10	98	<5	78	--	--
L12N 03+25E	5.28	0.2	5	170	<0.5	<2	0.24	<0.5	17	47	60	5.36	<10	0.11	10	0.79	497	<1	<0.01	32	1010	8	<5	16	0.29	<10	<10	111	<5	153	--	--
L12N 03+50E	2.19	0.2	<5	70	<0.5	<2	0.21	<0.5	4	26	7	3.43	<10	0.04	10	0.23	310	<1	<0.01	8	280	2	<5	14	0.22	<10	<10	82	<5	62	--	--
L12N 03+75E	0.57	0.6	<5	180	<0.5	<2	3.85	1.0	3	8	19	0.51	10	0.04	<10	0.16	241	1	0.01	6	280	8	<5	116	0.23	<10	<10	20	<5	100	--	--
L12N 04+00E	3.86	0.2	<5	150	<0.5	<2	0.26	<0.5	12	29	35	4.65	<10	0.09	10	0.70	520	<1	<0.01	19	630	6	<5	12	0.28	<10	<10	102	<5	124	--	--
L12N 04+50E	3.83	0.2	10	150	<0.5	<2	0.21	<0.5	16	27	37	4.53	<10	0.10	<10	0.72	1179	<1	<0.01	16	1460	12	<5	11	0.23	<10	<10	99	<5	118	--	--
L12N 04+75E	4.14	0.2	<5	230	<0.5	<2	0.24	<0.5	16	27	59	4.55	<10	0.11	<10	0.73	1294	<1	<0.01	22	990	22	<5	10	0.24	<10	<10	106	<5	124	--	--
L12N 05+00E	4.14	0.2	15	300	<0.5	<2	0.24	<0.5	17	26	57	4.49	<10	0.16	10	0.39	1353	<1	<0.01	21	770	12	<5	13	0.33	<10	<10	99	<5	134	--	--
L12N 05+25E	2.92	0.2	<5	100	<0.5	<2	0.30	<0.5	9	24	22	3.58	<10	0.05	10	0.49	693	<1	<0.01	15	650	8	<5	15	0.24	<10	<10	84	<5	86	--	--
L12N 05+50E	3.21	0.2	10	90	<0.5	<2	0.34	<0.5	11	34	10	3.98	<10	0.05	10	0.57	505	<1	<0.01	15	360	10	<5	21	0.27	<10	<10	101	<5	84	--	--
L12N 05+75E	1.81	0.2	10	150	<0.5	<2	0.59	<0.5	6	21	16	2.39	<10	0.07	10	0.39	213	<1	<0.01	11	430	28	<5	26	0.14	<10	<10	69	<5	56	--	--
L12N 06+00E	4.65	0.2	15	230	<0.5	<2	0.30	<0.5	26	48	49	5.19	<10	0.07	10	1.00	992	<1	<0.01	33	460	6	<5	18	0.31	<10	<10	112	<5	114	--	--
L12N 06+25E	3.91	0.2	10	170	<0.5	<2	0.43	<0.5	14	34	28	3.96	<10	0.26	10	0.74	620	<1	<0.01	22	630	26	<5	20	0.25	<10	<10	83	<5	94	--	--
L12N 06+50E	4.59	0.2	<5	230	<0.5	<2	0.42	<0.5	34	48	40	5.23	<10	0.09	10	1.12	936	<1	<0.01	32	520	14	<5	22	0.28	<10	<10	101	<5	126	--	--
L12N 06+75E	2.77	0.2	5	140	<0.5	<2	0.30	<0.5	13	31	26	3.48	<10	0.06	10	0.64	595	<1	<0.01	19	490	16	<5	16	0.18	<10	<10	70	<5	88	--	--
L12N 07+00E	3.56	0.2	15	180	<0.5	<2	0.48	<0.5	22	45	53	5.30	<10	0.08	10	1.16	1937	<1	<0.01	30	780	16	<5	25	0.26	<10	<10	106	<5	102	--	--
L12N 07+25E	2.33	0.2	15	60	<0.5	<2	0.29	<0.5	9	36	9	3.90	<10	0.03	<10	0.58	365	<1	<0.01	16	490	6	<5	14	0.22	<10	<10	94	<5	72	--	--
L12N 07+50E	4.32	0.2	15	120	<0.5	<2	0.35	<0.5	16	48	52	5.11	<10	0.06	10	0.92	595	<1	<0.01	29	550	10	<5	23	0.26	<10	<10	107	<5	108	--	--
L12N 07+75E	4.43	0.2	20	140	<0.5	<2	0.40	<0.5	18	49	48	5.13	<10	0.08	10	1.02	814	<1	<0.01	31	950	12	<5	24	0.29	<10	<10	110	<5	114	--	--
L12N 08+00E	4.51	0.2	<5	140	<0.5	<2	0.29	<0.5	20	51	25	5.11	<10	0.09	10	0.98	619	<1	<0.01	29	570	6	<5	22	0.21	<10	<10	103	<5	112	--	--
L20N 05+00W	2.40	0.2	15	50	<0.5	<2	0.22	<0.5	7	22	10	3.43	<10	0.04	10	0.52	257	<1	<0.01	10	360	8	<5	15	0.30	<10	<10	112	<5	86	--	--
L20N 04+75W	2.29	0.2	15	50	<0.5	<2	0.21	<0.5	6	33	9	3.37	<10	0.02	10	0.51	346	<1	<0.01	9	330	8	<5	14	0.30	<10	<10	109	<5	96	--	--
L20N 04+50W	2.38	0.2	10	60	<0.5	<2	0.32	<0.5	9	31	12	3.46	<10	0.03	<10	0.36	398	<1	<0.01	13	430	8	<5	15	0.24	<10	<10	98	<5	88	--	--
L20N 04+25W	2.45	0.2	15	50	<0.5	<2	0.29	<0.5	6	27	15	3.33	<10	0.04	<10	0.38	262	<1	<0.01	11	1390	10	<5	13	0.19	<10	<10	95	<5	90	--	--
L20N 04+00W	3.77	0.2	10	80	<0.5	<2	0.79	<0.5	15	33	78	3.90	<10	0.07	10	0.66	1375	<1	<0.01	14	1790	18	<5	22	0.22	<10	<10	107	<5	92	--	--
L20N 03+75W	5.36	0.2	5	130	<0.5	<2	0.23	<0.5	10	44	66	4.16	<10	0.05	10	0.57	444	<1	<0.01	20	2700	4	<5	10	0.19	<10	<10	93	<5	82	--	--
L20N 02+50W	1.63	0.2	5	40	<0.5	<2	0.24	<0.5	3	17	17	0.29	<10	0.03	<10	0.22	195	<1	<0.01	10	450	4	<5	12	0.15	<10	<10	59	<5	62	--	--

Certified by *Hart Buehler*  
RECEIVED NOV 26 1986. V03 Rev 11/85





# Chemex Labs Ltd.

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## CERTIFICATE OF ANALYSIS

TO : ROSSBACHER LABORATORY LIMITED

2025 SOUTH SPRINGER AVENUE  
BURNABY, B.C.  
V5E 3N1

CERT. # : A8620591-006-A  
INVOICE # : I8620591  
DATE : 25-NOV-86  
P.O. # : NONE  
V239

Semi quantitative multi element ICP analysis

Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sb, Ba, Be, Ca, Cr, Ga, La, Mg, K, Na, Sr, Tl, Ti, W and Y can only be considered as semi-quantitative.

COMMENTS :  
ATTN: P. ROSSBACHER

Sample description	Al	Ag	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sr	Ti	Tl	U	V	W	Zn	
	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	
L20N 03+25W	3.47	0.4	25	70	<0.5	<0.21	<0.5	7	28	27	5.08	<10	0.04	10	0.47	331	<1	<0.01	14	1020	14	<5	13	0.22	<10	<10	123	<5	92	--	--
L20N 03+00W	4.44	0.2	<5	150	<0.5	<0.22	<0.5	14	31	58	4.29	<10	0.08	10	0.82	781	<1	<0.01	21	570	<2	<5	15	0.25	<10	<10	101	<5	106	--	--
L20N 02+75W	4.41	0.2	30	90	<0.5	<0.22	<0.5	12	31	54	5.25	10	0.36	10	0.58	959	<1	<0.01	16	1250	14	<5	14	0.28	<10	<10	126	<5	96	--	--
L20N 02+50W	5.04	0.2	5	90	<0.5	<0.20	<0.5	15	29	73	4.68	<10	0.06	10	0.64	866	<1	<0.01	14	1300	10	<5	12	0.26	<10	<10	104	<5	89	--	--
L20N 02+25W	5.46	0.2	20	130	<0.5	<0.14	<0.5	12	28	85	4.65	<10	0.13	10	0.67	845	<1	<0.01	13	920	8	<5	9	0.24	<10	<10	114	<5	84	--	--
L20N 02+00W	5.72	0.2	<5	100	<0.5	<0.14	0.5	15	56	70	5.05	<10	0.07	10	0.95	647	<1	<0.01	29	670	2	<5	10	0.25	<10	<10	99	<5	94	--	--
L20N 01+75W	3.02	0.4	10	70	<0.5	<0.12	<0.5	6	26	30	3.76	<10	0.03	10	0.37	315	<1	<0.01	11	830	6	<5	9	0.16	<10	<10	83	<5	58	--	--
L20N 01+50W	3.71	0.2	25	80	<0.5	<0.13	<0.5	12	28	52	4.03	<10	0.05	10	0.67	409	<1	<0.01	17	590	6	<5	9	0.18	<10	<10	84	<5	84	--	--
L20N 01+25W	2.44	0.2	10	70	<0.5	<0.09	<0.5	9	17	32	2.87	<10	0.04	<10	0.51	292	<1	<0.01	10	1050	6	<5	6	0.08	<10	<10	55	<5	60	--	--
L20N 01+00W	5.17	0.2	30	80	<0.5	<0.08	<0.5	9	28	47	4.43	<10	0.03	<10	0.52	366	<1	<0.01	13	1520	6	<5	5	0.14	<10	<10	88	<5	64	--	--
L20N 00+75W	3.27	0.2	10	100	<0.5	<0.21	<0.5	10	27	43	4.21	<10	0.08	10	0.59	585	<1	<0.01	13	830	19	<5	14	0.21	<10	<10	100	<5	68	--	--
L20N 00+50W	4.45	0.2	20	110	<0.5	<0.23	<0.5	13	35	61	5.29	<10	0.10	10	0.84	767	<1	0.01	18	1450	8	<5	14	0.25	<10	<10	109	<5	102	--	--
L20N 00+25W	4.12	0.2	5	130	<0.5	<0.24	<0.5	15	33	69	4.65	<10	0.10	10	0.90	647	<1	0.01	21	910	6	<5	13	0.24	<10	<10	96	<5	108	--	--
L20N 00+00	4.02	0.2	15	70	<0.5	<0.16	<0.5	7	30	18	5.04	<10	0.05	10	0.42	514	<1	<0.01	11	1280	10	<5	11	0.24	<10	<10	99	<5	96	--	--
L10N 00+25E	4.27	0.2	20	140	<0.5	<0.21	<0.5	18	31	56	4.94	<10	0.07	10	0.88	655	<1	0.01	22	520	6	<5	14	0.25	<10	<10	106	<5	146	--	--
L10N 00+50E	3.20	0.2	20	220	<0.5	<0.57	0.5	28	42	34	3.91	<10	0.07	20	0.32	2052	<1	0.01	23	530	2	<5	26	0.17	<10	<10	95	<5	106	--	--
L10N 00+75E	0.25	0.4	5	70	<0.5	<2.29	0.5	1	6	14	0.23	<10	0.05	<10	0.12	406	<1	<0.01	3	690	6	<5	57	0.01	<10	<10	15	10	110	--	--
L10N 01+00E	0.16	0.2	<5	60	<0.5	<2.24	0.5	<1	4	12	0.12	<10	0.07	<10	0.09	540	<1	<0.01	3	730	12	<5	53	<0.01	<10	<10	13	10	158	--	--
L10N 01+25E	3.00	0.2	25	80	<0.5	<0.17	<0.5	9	31	20	4.65	<10	0.05	10	0.62	359	<1	<0.01	16	470	14	<5	10	0.18	<10	<10	110	<5	76	--	--
L10N 01+50E	3.55	0.2	25	100	<0.5	<0.18	<0.5	12	32	27	4.99	<10	0.04	10	0.75	358	<1	<0.01	21	470	6	<5	8	0.16	<10	<10	112	<5	92	--	--
L10N 01+75E	5.68	0.2	40	250	<0.5	<0.34	<0.5	26	53	60	5.75	<10	0.10	20	1.18	694	<1	0.01	35	400	6	<5	21	0.33	<10	<10	138	<5	116	--	--
L10N 02+00E	4.69	0.2	30	120	<0.5	<0.28	<0.5	14	41	50	5.01	10	0.07	10	0.92	447	<1	0.01	27	620	6	<5	14	0.27	<10	<10	122	<5	110	--	--
L10N 02+25E	4.63	0.2	20	210	<0.5	<0.25	<0.5	16	41	72	5.05	10	0.12	10	1.00	570	<1	0.01	30	510	6	<5	14	0.30	<10	<10	112	<5	114	--	--
L10N 02+50E	3.58	0.2	45	260	<0.5	<0.58	<0.5	26	44	83	4.94	10	0.15	20	1.10	1098	<1	0.02	30	770	8	<5	25	0.33	<10	<10	131	<5	129	--	--
L10N 02+75E	3.16	0.2	<5	150	<0.5	<0.33	0.5	19	35	42	3.89	10	0.10	10	0.75	836	<1	0.01	20	530	2	<5	18	0.20	<10	<10	92	<5	106	--	--
L10N 03+00E	4.18	0.2	30	100	<0.5	<0.19	<0.5	13	31	56	4.42	<10	0.06	10	0.63	440	<1	0.01	24	530	10	<5	10	0.17	<10	<10	99	<5	106	--	--
L10N 03+25E	1.32	0.2	15	70	<0.5	<0.19	<0.5	4	13	19	1.99	<10	0.03	<10	0.26	246	<1	0.01	7	440	8	<5	10	0.14	<10	<10	65	<5	42	--	--
L10N 03+50E	4.93	0.2	45	90	<0.5	<0.16	<0.5	10	36	36	5.17	<10	0.04	10	0.60	319	<1	0.01	19	750	8	<5	10	0.18	<10	<10	108	<5	122	--	--
L10N 03+75E	5.67	0.2	45	250	<0.5	<0.20	<0.5	21	48	45	5.57	<10	0.38	10	0.89	579	<1	0.01	39	570	4	<5	14	0.21	<10	<10	125	<5	126	--	--
L10N 04+00E	3.80	0.2	30	80	<0.5	<0.18	<0.5	10	31	19	4.90	<10	0.04	<10	0.63	369	<1	0.01	18	810	2	<5	7	0.20	<10	<10	100	<5	104	--	--
L10N 04+25E	3.56	0.2	35	100	<0.5	<0.31	<0.5	10	31	22	4.01	10	0.06	10	0.52	421	<1	0.01	16	580	12	<5	17	0.25	<10	<10	104	<5	92	--	--
L10N 04+50E	4.54	0.2	25	120	<0.5	<0.26	<0.5	12	37	35	4.78	10	0.06	10	0.71	592	<1	0.01	23	590	6	<5	15	0.24	<10	<10	108	<5	110	--	--
L10N 04+75E	2.32	0.2	15	70	<0.5	<0.26	<0.5	6	21	10	2.82	10	0.34	10	0.41	455	<1	0.01	10	480	4	<5	15	0.25	<10	<10	78	<5	64	--	--
L10N 05+00E	4.11	0.2	35	100	<0.5	<0.21	<0.5	12	36	39	4.40	10	0.05	10	0.70	456	<1	0.01	20	890	8	<5	13	0.24	<10	<10	102	<5	104	--	--
L10N 05+25E	4.66	0.2	35	120	<0.5	<0.22	<0.5	16	42	47	4.89	10	0.36	10	0.91	622	<1	0.01	29	620	10	<5	16	0.26	<10	<10	110	<5	124	--	--
L10N 05+50E	4.58	0.2	25	150	<0.5	<0.21	<0.5	17	40	57	4.94	10	0.07	10	0.95	607	<1	0.01	27	670	6	<5	14	0.27	<10	<10	111	<5	116	--	--
L10N 05+75E	4.24	0.2	10	130	<0.5	<0.18	<0.5	14	36	48	4.38	10	0.06	10	0.81	555	<1	0.01	24	690	4	<5	10	0.22	<10	<10	98	<5	98	--	--
L10N 06+00E	3.16	0.2	35	70	<0.5	<0.17	<0.5	8	29	21	3.96	<10	0.04	10	0.55	396	<1	0.01	17	600	10	<5	10	0.19	<10	<10	95	<5	70	--	--
L10N 06+25E	2.91	0.2	30	70	<0.5	<0.16	<0.5	8	23	28	3.41	10	0.03	<10	0.49	523	<1	0.01	15	770	18	<5	7	0.15	<10	<10	73	<5	72	--	--
L10N 06+50E	2.24	0.2	25	70	<0.5	<0.18	<0.5	7	20	22	2.85	<10	0.33	<10	0.44	524	<1	0.01	14	570	12	<5	7	0.15	<10	<10	72	<5	56	--	--

certified by: *[Signature]*

RECEIVED NOV 26 1986

003 rev 11/85



# Chemex Labs Ltd.

Analytical Chemists    Geochemists    Registered Assayers

212 Brooksbank Ave.  
North Vancouver, B.C.  
Canada    V7J 2C1

Phone: (604) 984-0221  
Telex: 043-52597

## CERTIFICATE OF ANALYSIS

TO : ROSSBACHER LABORATORY LIMITED

2225 SOUTH SPRINGER AVENUE  
BURNABY, B.C.  
V5B 3R1

CERT. # : A8620591-007-A  
INVOICE # : I8620591  
DATE : 25-NOV-86  
P.O. # : NONE  
V239

Semi quantitative multi element ICP analysis

Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sb, Ba, Be, Ca, Cr, Ga, La, Mg, K, Na, Sr, Tl, Ti, W and V can only be considered as semi-quantitative.

COMMENTS :  
ATTN: F. ROSSBACHER

Sample description	Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sr ppm	Tl %	Ti ppm	U ppm	V ppm	W ppm	Zn ppm	
L20N 06+75E	2.79	0.2	30	190	<0.5	<2	0.65	<0.5	14	30	30	3.63	<10	0.05	10	0.79	1271	<1	0.01	20	500	22	<5	28	0.15	<10	<10	85	<5	94	--
L20N 07+00E	1.23	0.2	10	80	<0.5	<2	0.16	<0.5	6	14	8	1.52	10	0.02	<10	0.28	1169	<1	<0.01	8	180	4	<5	7	0.07	<10	<10	37	<5	44	--
L20N 07+05E	2.33	0.2	35	60	<0.5	<2	0.15	<0.5	6	24	13	4.15	10	0.05	<10	0.50	347	<1	0.01	13	550	4	<5	8	0.17	<10	<10	111	<5	64	--
L20N 07+50E	1.95	0.2	25	100	<0.5	<3	0.31	<0.5	12	20	51	2.91	<10	0.07	10	0.65	523	<1	0.01	16	670	4	<5	11	0.16	<10	<10	71	<5	62	--
L20N 07+75E	4.80	0.2	35	80	<0.5	<2	0.13	<0.5	12	26	56	4.56	<10	0.04	<10	0.62	640	<1	0.01	13	1230	6	<5	7	0.19	<10	<10	105	<5	74	--
L20N 08+00E	3.61	0.2	40	270	<0.5	<2	0.56	<0.5	27	45	83	4.98	10	0.16	10	1.12	1112	<1	0.02	31	770	8	<5	25	0.29	<10	<10	131	<5	128	--
L22N 03+25W	2.85	0.2	25	160	<0.5	<2	0.30	<0.5	10	27	41	3.70	10	0.11	<10	0.70	918	<1	0.01	14	1110	14	<5	13	0.20	<10	<10	108	<5	66	--
L22N 03+50W	4.27	0.2	10	80	<0.5	<2	0.30	<0.5	17	33	91	4.31	10	0.05	10	0.68	2146	<1	0.01	19	2930	6	<5	13	0.18	<10	<10	127	<5	112	--
L22N 03+75W	3.38	0.2	<5	90	<0.5	<2	0.29	<0.5	11	32	58	4.07	10	0.05	10	0.54	915	<1	0.01	17	570	4	<5	12	0.29	<10	<10	111	<5	90	--
L22N 04+00W	3.56	0.2	<5	110	<0.5	<3	0.27	<0.5	12	33	47	3.60	10	0.05	10	0.72	583	<1	0.01	19	370	2	<5	14	0.24	<10	<10	97	<5	100	--
L22N 04+25W	1.28	0.2	10	40	<0.5	<2	0.17	<0.5	4	15	13	2.55	<10	0.04	<10	0.25	469	<1	<0.01	7	620	16	<5	7	0.14	<10	<10	69	<5	44	--
L22N 04+50W	2.92	0.2	10	60	<0.5	<3	0.16	<0.5	8	37	35	3.33	10	0.05	<10	0.53	487	<1	0.01	15	1240	4	<5	6	0.15	<10	<10	83	<5	66	--
L24N 03+50W	3.21	0.2	40	80	<0.5	<2	0.11	<0.5	9	22	33	3.84	<10	0.03	<10	0.61	519	<1	<0.01	13	610	4	<5	6	0.13	<10	<10	94	<5	82	--
L24N 03+75W	2.86	0.2	40	50	<0.5	<2	0.10	<0.5	5	20	20	4.38	10	0.04	<10	0.51	330	<1	<0.01	9	840	8	<5	6	0.13	<10	<10	106	<5	62	--
L24N 04+00W	1.93	0.4	30	60	<0.5	<2	0.13	<0.5	4	19	5	4.28	10	0.03	<10	0.36	271	<1	<0.01	8	910	4	<5	8	0.20	<10	<10	127	<5	52	--
L24N 04+25W	1.30	0.8	15	80	<0.5	<2	0.32	<0.5	10	7	111	4.17	10	0.03	10	0.15	2566	<1	0.01	3	1340	8	<5	15	0.14	<10	<10	55	<5	68	--
L24N 04+50W	2.13	0.2	10	40	<0.5	<2	0.22	<0.5	5	21	35	3.23	10	0.04	<10	0.25	292	<1	0.01	9	710	6	<5	9	0.13	<10	<10	83	<5	46	--
G.A. SOIL #1	3.50	0.4	30	280	<0.5	<2	0.89	<0.5	17	30	36	3.46	10	0.06	20	0.63	1841	<1	0.01	21	700	10	<5	31	0.13	<10	<10	81	<5	98	--
G.A. SILT #1	3.12	0.2	30	180	<0.5	<2	0.45	<0.5	17	160	41	4.23	10	0.11	10	0.96	778	<1	0.02	26	480	8	<5	18	0.22	<10	<10	105	<5	100	--
G.A. SILT #2	3.59	0.2	40	240	<0.5	<2	0.44	<0.5	19	93	52	4.62	10	0.16	10	1.07	894	<1	0.02	28	590	8	<5	22	0.25	<10	<10	113	<5	98	--
G.A. SILT #3	2.57	0.2	20	100	<0.5	<2	0.97	<0.5	14	62	21	3.20	10	0.08	10	0.75	342	<1	0.02	18	490	6	<5	36	0.11	<10	<10	89	<5	114	--
G.A. SILT #4	2.57	0.2	30	130	<0.5	<2	0.95	<0.5	15	48	24	2.88	10	0.06	20	0.59	1931	1	0.01	17	610	14	<5	34	0.08	<10	<10	77	<5	74	--

Certified by *Hart Bichler* RECEIVED NOV 26 1986

**ROSSBACHER LABORATORY LTD.**

2225 S. SPRINGER AVENUE  
 BURNABY, B.C. V5B 3N1  
 TEL : (604) 299 - 6910

**CERTIFICATE OF ANALYSIS**

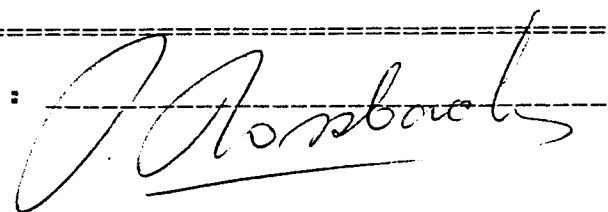
TO : MPH CONSULTING LTD.  
 301-409 GRANVILLE STREET  
 VANCOUVER B.C.  
 PROJECT: V 239  
 TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 86597  
 INVOICE#: 7085  
 DATE ENTERED: 86-10-26  
 FILE NAME: MPH86597  
 PAGE # : 1

PRE FIX	SAMPLE NAME	FPB Au
A	3901	5
A	3902	5
A	3903	20
A	3904	5
A	3905	5
A	3906	5
A	3907	5
A	3908	5
A	3909	5
A	3910	5
A	3911	5
A	3912	5
A	3913	5
A	3914	5
A	3915	5
A	3916	5
A	3917	5
A	4673	5
A	4674	5
A	4675	5
A	4676	5
A	4677	40
A	4678	5
A	4679	5
A	4680	40
A	4681	5
A	4682	5
A	4683	5
A	4684	5
A	4685	5
A	4686	100
A	4687	5
A	4688	5
A	4689	5
A	4690	5
A	4691	20
A	4692	5
A	4693	5
A	4693A	5
A	4694	5

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ROSSBACHER LABORATORY LTD.

2225 S. SPRINGER AVENUE  
BURNABY, B.C. V5B 3N1  
TEL : (604) 299 - 6910

CERTIFICATE OF ANALYSIS

TO : MPH CONSULTING LTD.  
301-409 GRANVILLE STREET  
VANCOUVER B.C.

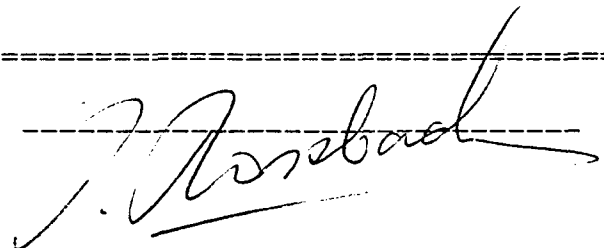
PROJECT: V 239  
TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 86665  
INVOICE#: 7211  
DATE ENTERED: 86-11-21  
FILE NAME: MPH86665  
PAGE # : 1

PRE FIX	SAMPLE NAME	PPB Au
S	L 14+00N 1+00E-A	650
S	L 14+00N 1+00E-B	5
S	L 14+00N 1+00E-C	5

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CERTIFICATE OF ANALYSIS

TO : MPH CONSULTING LTD.  
301-409 GRANVILLE STREET  
VANCOUVER B.C.

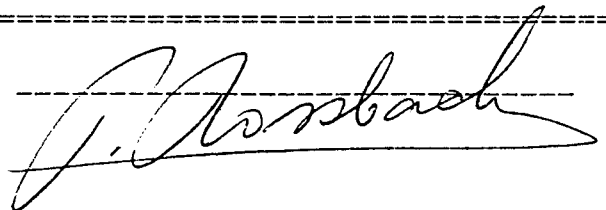
CERTIFICATE#: 86712  
INVOICE#: 7286  
DATE ENTERED: 86-12-12  
FILE NAME: MPHS6712  
PAGE # : 1

PROJECT: VAR  
TYPE OF ANALYSIS: GEOCHEMICAL

PRE FIX	SAMPLE NAME	PPB Au I	PPB Au II	PPB Au III	PROJ.#
S	L 1N 025E	120	20	20	V239
S	L13N 100W	240	5		"
S	L14N 100E	840	630	520	"
S	L14N 100E-A	650	800		"
S	L14N 100E-B	5	5		"
S	L20N 250E	170	5		"
S	L24N 450E	140	5		"

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**CERTIFICATE OF ANALYSIS**

2225 S. SPRINGER AVENUE  
BURNABY, B.C. V5B 3N1  
TEL : (604) 299 - 6910

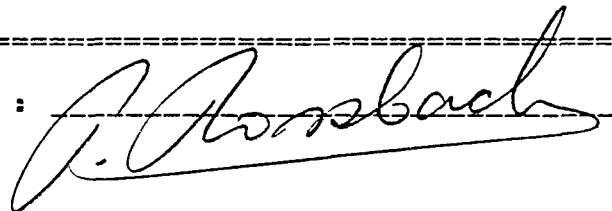
TO : MPH CONSULTING LTD.  
301-409 GRANVILLE STREET  
VANCOUVER B.C.  
PROJECT: V239  
TYPE OF ANALYSIS: GEOCHEMICAL

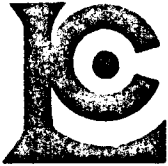
CERTIFICATE#: 86716  
INVOICE#: 7302  
DATE ENTERED: 86-12-17  
FILE NAME: MPH86716  
PAGE # : 1

PRE FIX	SAMPLE NAME	PPB Au
S	1400N 100E"d"	100
S	1400N 100E"e"	70
S	1400S 100E"f"	30
S	1400S 100E"g"	20
S	100S 050E"a"	5
S	100N 025E"a"	5
S	100N 025E"b"	5
S	075E 200S"a"	5
S	075E 150S	5
S	075E 125S	5
A	14843	1200
A	14844	100
A	14845	5

*rec'd Dec 19/86*

CERTIFIED BY :





# Chemex Labs Ltd.

Analytical Chemists • Geochemists • Registered Assayers  
212 BROOKSBANK AVE., NORTH VANCOUVER,  
BRITISH COLUMBIA, CANADA V7J-2C1  
PHONE (604) 984-0221

## CERTIFICATE OF ANALYSIS A8622241

To: ROSSBACHER LABORATORY LIMITED  
2225 SOUTH SPRINGER AVENUE  
BURNABY, B.C.  
V5B 3N1

Page No. : 1-A  
Tot. Pages: 1  
Date : 7-JAN-87  
Invoice #: I-8622241  
P.O. #: NONE

Project : V239 RACK E  
Comments: ATTN: P. ROSSBACHER

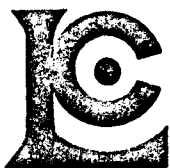
SAMPLE DESCRIPTION	PREP CODE		Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %
1400N-100E D	221	238	3.92	0.2	< 5	80	< 0.5	< 2	0.19	0.5	6	29	57	4.73	10	0.06	10	0.40	287	< 1	< 0.01
1400N-100E E	221	238	5.39	0.2	5	120	< 0.5	< 2	0.18	0.5	9	42	89	6.40	10	0.10	10	0.58	429	< 1	0.01
1400S-100E F	221	238	4.69	0.4	5	80	< 0.5	< 2	0.15	0.5	6	36	67	5.32	10	0.06	10	0.42	316	< 1	0.01
1400S-100E G	221	238	4.88	< 0.2	< 5	90	< 0.5	< 2	0.12	0.5	11	40	88	5.28	10	0.07	10	0.72	459	< 1	0.01
100S-050E A	221	238	3.75	0.2	< 5	140	< 0.5	< 2	0.11	< 0.5	13	24	67	3.33	10	0.07	< 10	0.55	742	< 1	< 0.01
100N-025E A	221	238	2.30	0.2	< 5	50	< 0.5	< 2	0.13	< 0.5	4	18	35	3.91	10	0.05	< 10	0.31	388	< 1	0.01
100N-025E B	221	238	4.67	0.8	< 5	290	0.5	< 2	0.24	0.5	17	37	91	4.76	10	0.13	10	0.95	1065	< 1	0.01
075E-200S A	221	238	5.17	0.6	5	130	< 0.5	< 2	0.20	0.5	11	35	76	4.54	10	0.11	10	0.61	521	< 1	0.01
075E-150S	221	238	3.23	0.4	< 5	140	< 0.5	< 2	0.15	< 0.5	7	21	53	3.58	10	0.09	10	0.47	461	< 1	0.01
075E-125S	221	238	3.01	< 0.2	5	130	< 0.5	< 2	0.16	< 0.5	6	22	57	3.55	10	0.10	< 10	0.45	400	< 1	< 0.01
14843	221	238	2.39	0.2	< 5	200	< 0.5	< 2	0.07	0.5	6	94	86	7.64	10	0.19	< 10	0.73	458	< 1	< 0.01
14844	221	238	1.07	0.2	< 5	150	0.5	< 2	0.86	2.0	8	107	28	2.81	< 10	0.07	10	0.54	2070	< 1	0.01
14845	221	238	0.94	0.2	< 5	140	< 0.5	< 2	0.17	< 0.5	4	131	33	1.57	< 10	0.13	< 10	0.38	373	< 1	0.02

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CERTIFICATION :

*B. Campbell*





# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 BROOKSBANK AVE., NORTH VANCOUVER,  
 BRITISH COLUMBIA, CANADA V7J-1C1  
 PHONE (604) 984-0221

## CERTIFICATE OF ANALYSIS A8622241

To : ROSSBACHER LABORATORY LIMITED

2225 SOUTH SPRINGER AVENUE  
 BURNABY, B.C.  
 V5B 3N1

Page No. : 1-B  
 Tot. Pages: 1  
 Date : 7-JAN-87  
 Invoice # : I-8622241  
 P.O. # : NONE

Project : V239 RACK E  
 Comments: ATTN: P. ROSSBACHER

SAMPLE DESCRIPTION	PREP CODE		Ni ppm	P ppm	Pb ppm	Sb ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm							
1400N-100E D	221	238	11	1340	10	< 5	27	0.19	< 10	< 10	95	< 5	86							
1400N-100E E	221	238	17	1570	8	< 5	19	0.23	< 10	< 10	118	< 5	100							
1400S-100E F	221	238	12	1280	6	< 5	14	0.18	< 10	< 10	106	< 5	82							
1400S-100E G	221	238	21	1000	8	< 5	11	0.21	< 10	< 10	114	< 5	92							
100S-050E A	221	238	16	960	2	< 5	9	0.17	< 10	< 10	84	< 5	84							
100N-025E A	221	238	7	770	2	< 5	10	0.20	< 10	< 10	95	< 5	44							
100N-025E B	221	238	27	1020	2	< 5	21	0.27	< 10	< 10	106	< 5	94							
075E-200S A	221	238	18	790	4	< 5	16	0.24	< 10	< 10	106	< 5	86							
075E-150S	221	238	12	570	4	< 5	12	0.19	< 10	< 10	90	< 5	56							
075E-125S	221	238	13	620	2	< 5	13	0.18	< 10	< 10	86	< 5	58							
14843	221	238	18	340	26	< 5	6	0.11	< 10	< 10	62	< 5	104							
14844	221	238	11	100	4	< 5	39	0.07	< 10	< 10	25	< 5	202							
14845	221	238	12	100	4	< 5	6	0.09	< 10	< 10	21	< 5	34							

CERTIFICATION : B. C. Angl

ROSSBACHER LABORATORY LTD.

2225 S. SPRINGER AVENUE  
BURNABY, B.C. V5B 3N1  
TEL : (604) 299 - 6910

CERTIFICATE OF ANALYSIS

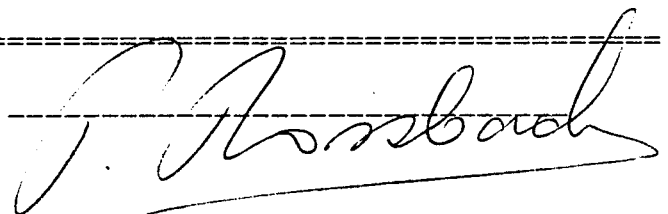
TO : MPH CONSULTING LTD.  
301-409 GRANVILLE STREET  
VANCOUVER B.C.  
PROJECT: AS MARKED  
TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: AuCHECK  
INVOICE#: 7367  
DATE ENTERED: 87-01-06  
FILE NAME: MPH86724.CH  
PAGE # : 1

PRE FIX	SAMPLE NAME	ORIGINAL PPB Au	CHECK Au PPB	PRO- JECT
S	1400N- 100E -d	100	120	V 239
S	1400N- 100E -e	70	50	
S	1400S- 100E -f	30	30	
S	1400S- 100E -g	20	5	

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2225 S. SPRINGER AVENUE  
BURNABY, B.C. V5B 3N1  
TEL : (604) 299 - 6910

CERTIFICATE OF ANALYSIS

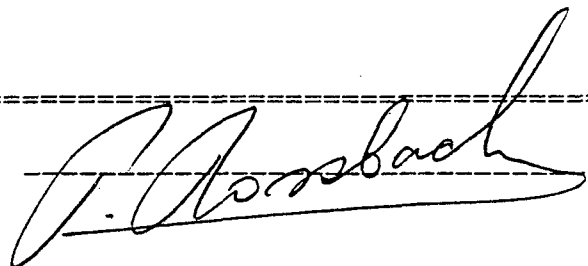
TO : MPH CONSULTING LTD.  
301-409 GRANVILLE STREET  
VANCOUVER B.C.  
PROJECT: V 239  
TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 86747  
INVOICE#: 7350  
DATE ENTERED: 87-01-02  
FILE NAME: MPH86747  
PAGE # : 1

PRE FIX	SAMPLE NAME	PPB Au
A	14847	420

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# Chemex Labs Ltd.

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BRITISH COLUMBIA, CANADA V7J-2C1

PHONE (604) 984-0221

## CERTIFICATE OF ANALYSIS A8710120

To : ROSSBACHER LABORATORY LIMITED

2225 SOUTH SPRINGER AVENUE  
BURNABY, B.C.  
V5B 3N1

Page No. : 1-A  
Tot. Pages: 1  
Date : 20-JAN-87  
Invoice # : I-8710120  
P.O. # : NONE

Project : RACK Y1 V239

Comments:

SAMPLE DESCRIPTION	PREP CODE	Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %
AP 14847	221 238	2.10	0.2	10	260	< 0.5	< 2	0.96	0.5	7	71	54	3.61	< 10	0.12	< 10	0.21	187	1	0.07

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CERTIFICATION : Haut/Bechler



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
212 BROOKSBANK AVE., NORTH VANCOUVER,  
BRITISH COLUMBIA, CANADA V7J-2C1  
PHONE (604) 984-0221

## CERTIFICATE OF ANALYSIS A8710120

To : ROSSBACHER LABORATORY LIMITED

2225 SOUTH SPRINGER AVENUE  
BURNABY, B.C.  
V5B 3N1

Page No. : 1-B  
Tot. Pages : 1  
Date : 20-JAN-87  
Invoice # : I-8710120  
P.O. # : NONE

Project : RACK Y1 V239  
Comments :

SAMPLE DESCRIPTION	PREP CODE	Ni ppm	P ppm	Pb ppm	Sb ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm							
AP 14847	221 238	10	240	< 2	< 5	60	0.10	< 10	< 10	25	< 5	94							

CERTIFICATION : Hart Bickler

ROSSBACHER LABORATORY LTD.

2225 S. SPRINGER AVENUE  
BURNABY, B.C. V5B 3N1  
TEL : (604) 299 - 6910

CERTIFICATE OF ANALYSIS

TO : MPH CONSULTING LTD.  
301-409 GRANVILLE STREET  
VANCOUVER B.C.

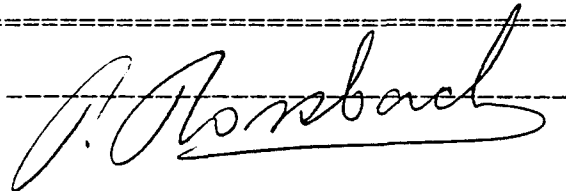
CERTIFICATE#: 86747.A  
INVOICE#: 7374  
DATE ENTERED: 87-01-16  
FILE NAME: MPH86747.A  
PAGE # : 1

PROJECT: V239  
TYPE OF ANALYSIS: ASSAY

PRE FIX	SAMPLE NAME	oz/t Au
A	14843	0.042
A	14847	0.013

RECEIVED JAN 19 1987

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**ROSSBACHER LABORATORY LTD.**

2225 S. SPRINGER AVENUE  
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**CERTIFICATE OF ANALYSIS**

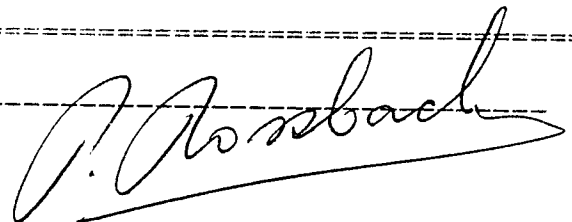
TO : MPH CONSULTING LTD.  
 301-409 GRANVILLE STREET  
 VANCOUVER B.C.

CERTIFICATE#: 87025  
 INVOICE#: 7416  
 DATE ENTERED: 87-02-02  
 FILE NAME: MPH87025  
 PAGE # : 1

PROJECT: V 239 III  
 TYPE OF ANALYSIS: GEOCHEMICAL

PRE FIX	SAMPLE NAME	PPB Au
A	15061	5
A	15062	5
A	15063	30
A	15064	5
A	15065	5
A	15066	5
A	15067	5
A	15068	5
A	15069	5
A	15070	10
A	15071	10
A	15072	5
A	15073	60
A	15074	5
A	15075	5
A	15076	5
A	15077	5
A	15078	5
A	15079	5
A	15080	5
A	15081	100
A	15082	5
A	15083	5
A	15084	10
A	15085	5
A	15086	5
A	15087	5
A	15088	5
A	15089	5
A	15090	5
A	15091	5
A	15092	130
A	15093	20
A	15094	20
A	15095	110
A	15096	40
A	15097	20
A	15098	30
A	15099	30
A	15100	50

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2225 S. SPRINGER AVENUE  
BURNABY, B.C. V5B 3N1  
TEL : (604) 299 - 6910

CERTIFICATE OF ANALYSIS

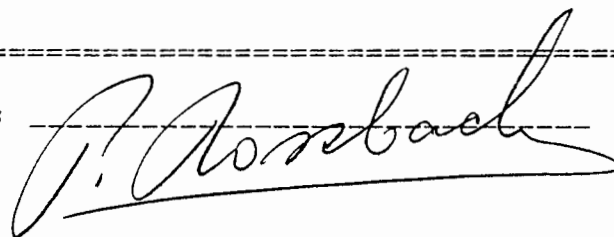
TO : MPH CONSULTING LTD.  
301-409 GRANVILLE STREET  
VANCOUVER B.C.

CERTIFICATE#: 87025  
INVOICE#: 7416  
DATE ENTERED: 87-02-02  
FILE NAME: MPH87025  
PAGE # : 2

PROJECT: V 239 III  
TYPE OF ANALYSIS: GEOCHEMICAL

PRE FIX	SAMPLE NAME	PPB Au	RE ANALYSIS PPB Au	RE-SAMPLE PPB Au
A	15151	600	110	130
A	15152	1130	80	100
A	15153	130		
A	15154	70		
A	15155	70		
A	15156	100		
A	15157	100		
A	15158	20		
A	15159	40		
A	15160	30		
A	15161	40		
A	15162	40		
A	15163	20		
A	15164	10		
A	15165	5		
	15166	60		
A	15167	20		
A	15168	5		
A	14848	5		

CERTIFIED BY :





**ROSSBACHER LABORATORY LTD.**  
**CERTIFICATE OF ANALYSIS**

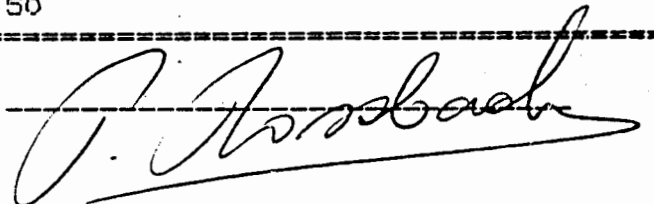
2225 S. SPRINGER AVENUE  
 BURNABY, B.C. V5B 3N1  
 TEL : (604) 299 - 6910

TO : MPH CONSULTING LTD.  
 301-409 GRANVILLE STREET  
 VANCOUVER B.C.  
 PROJECT: V 239 III  
 TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 87025  
 INVOICE#: 7416  
 DATE ENTERED: ~~87-02-02~~  
 FILE NAME: MPH87025  
 PAGE # : 1

	SAMPLE NAME	PPB Au	PPB Au RERUN	(MAR. 20)
A	15061	5	5	
A	15062	5	20	
A	15063	30	5	
A	15064	5	5	
A	15065	5	5	
A	15066	5	5	
A	15067	5	5	
A	15068	5	5	
A	15069	5	5	
A	15070	10	10	
A	15071	10	10	
A	15072	5	5	
A	15073	60	20	
A	15074	5	5	
A	15075	5	5	
A	15076	5	10	
A	15077	5	5	
A	15078	5	5	
A	15079	5	5	
A	15080	5	10	
A	15081	100	5	
A	15082	5	5	
A	15083	5	5	
A	15084	10	20	
A	15085	5	5	
A	15086	5	5	
A	15087	5	5	
A	15088	5	5	
A	15089	5	5	
A	15090	5	5	
A	15091	5	5	
A	15092	130	200	
A	15093	20	20	
A	15094	20	20	
A	15095	110	100	
A	15096	40	50	
A	15097	20	20	
A	15098	30	30	
A	15099	30	20	
A	15100	50	50	

CERTIFIED BY :





**ROSSBACHER LABORATORY LTD.**

2225 S. SPRINGER AVENUE  
BURNABY, B.C. V5B 3N1  
TEL : (604) 299 - 6910

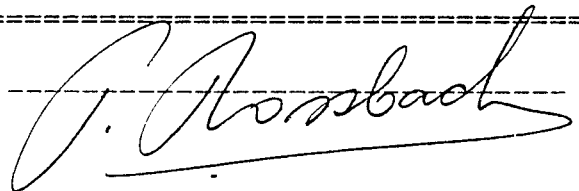
**CERTIFICATE OF ANALYSIS**

TO : MPH CONSULTING LTD.  
301-409 GRANVILLE STREET  
VANCOUVER B.C.  
PROJECT: V 239  
TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 87137  
INVOICE#: N.A.  
DATE ENTERED: 87-03-29  
FILE NAME: MPH87137  
PAGE # : 1

PRE FIX	SAMPLE NAME	FPB Au
A	15151 A	130
A	15152 B	100

CERTIFIED BY :



## GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO<sub>3</sub>-H<sub>2</sub>O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
THIS LEACH IS PARTIAL FOR MN, FE, CA, P, CR, MG, BA, TI, K, AL, NA, V, W, SI, ZF, CE, SM, Y, NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.  
- SAMPLE TYPE: SOLUTION

DATE RECEIVED: JAN 30 1987 DATE REPORT MAILED: Feb 3/87 ASSAYER: *A. Lopez* DEAN TOYE, CERTIFIED B.C. ASSAYER.

ROSSBACHER LABORATORY PROJECT - CERT#B7025 FILE # B7-200

PAGE 1

SAMPLED	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
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	%	PPM
15061	1	42	5	84	.1	12	10	439	3.56	2	5	ND	1	10	1	2	2	59	.43	.042	4	45	1.45	220	.01	2	1.70	.06	.07	1
15062	1	38	6	74	.4	8	6	683	2.56	2	5	ND	1	83	1	2	2	29	3.05	.048	6	42	.97	109	.01	3	1.28	.07	.08	1
15063	1	21	2	50	.1	8	5	249	1.99	2	11	ND	1	12	1	2	2	26	.35	.036	3	38	.89	164	.01	6	1.11	.04	.12	1
15064	1	103	3	42	.3	9	12	364	2.68	3	5	ND	1	20	1	2	2	28	1.30	.023	2	44	.90	382	.03	2	1.22	.07	.11	1
15065	1	33	3	53	.2	6	5	343	2.22	2	5	ND	1	19	1	2	2	49	1.08	.054	2	68	1.03	764	.08	3	1.28	.09	.20	1
15066	1	25	2	50	.1	8	7	239	1.95	2	5	ND	1	4	1	2	2	27	.15	.017	2	52	1.03	367	.05	3	1.15	.04	.10	1
15067	1	18	3	43	.4	7	5	285	2.01	2	5	ND	2	29	1	2	2	30	3.21	1.085	12	52	1.03	661	.07	4	1.18	.09	.11	2
15068	1	24	4	57	.3	8	7	266	2.32	2	5	ND	2	6	1	2	2	27	.17	.027	8	45	1.27	520	.04	4	1.41	.04	.17	1
15069	2	29	8	44	.4	12	14	294	1.71	16	5	ND	2	69	1	2	2	20	5.23	1.288	25	38	.68	489	.01	14	1.23	.08	.23	1
15070	1	29	4	57	.2	8	5	346	2.04	2	5	ND	1	28	1	2	2	31	1.02	.017	3	41	1.01	340	.03	4	1.17	.06	.12	1
15071	1	245	7	58	.3	34	16	290	2.95	2	5	ND	1	21	1	2	2	81	1.15	.085	2	37	1.02	163	.12	7	1.32	.11	.02	1
15072	1	127	10	39	.4	12	6	284	1.33	2	5	ND	1	58	1	2	2	35	5.59	.034	2	34	.49	1396	.10	6	1.03	.11	.03	1
15073	1	52	21	70	.3	6	4	252	1.68	2	6	ND	2	14	1	2	2	29	1.22	.013	2	50	.79	540	.05	4	.99	.07	.07	1
15074	1	15	10	66	.2	14	6	295	2.15	2	5	ND	2	10	1	2	2	26	.82	.010	4	50	.94	281	.01	3	1.16	.05	.07	1
15075	1	21	6	25	.3	5	3	307	.98	2	12	ND	3	55	1	2	2	14	2.10	.010	26	57	.47	844	.01	10	.78	.06	.19	1
15076	1	5	3	53	.2	6	6	311	2.25	2	10	ND	1	22	1	2	2	21	.69	.018	4	40	1.14	250	.03	3	1.28	.06	.11	1
15077	1	17	4	62	.1	5	7	370	2.36	2	5	ND	1	81	1	2	2	26	1.79	.021	4	39	1.18	162	.01	5	1.38	.07	.10	1
15078	1	14	2	66	.2	8	8	305	2.49	17	5	ND	3	39	1	2	2	16	.97	.053	8	15	1.17	331	.01	5	1.47	.06	.18	1
15079	1	25	6	59	.2	9	6	345	2.38	6	5	ND	1	71	1	2	2	29	1.19	.021	4	54	1.05	218	.01	4	1.26	.07	.09	1
15080	1	46	5	54	.3	9	5	324	2.21	3	9	ND	2	27	1	2	2	36	.86	.057	6	54	1.01	375	.01	4	1.22	.06	.11	1
15081	1	46	4	57	.3	10	6	338	2.19	2	12	ND	2	66	1	2	2	28	1.36	.019	4	40	1.00	287	.01	4	1.18	.06	.11	1
15082	1	33	2	56	.1	11	9	300	2.13	2	5	ND	1	33	1	2	2	27	.74	.016	3	44	1.01	337	.01	4	1.13	.06	.09	1
15083	1	26	3	50	.2	10	8	301	2.18	2	5	ND	1	18	1	2	2	37	.46	.020	4	61	1.01	440	.01	3	1.07	.05	.07	1
15084	1	12	3	59	.3	8	6	308	2.47	2	5	ND	2	25	1	2	2	34	.34	.014	2	70	1.11	810	.06	4	1.33	.06	.20	1
15085	1	35	5	59	.3	14	6	477	2.73	8	5	ND	1	49	1	2	2	39	1.14	.014	4	60	1.03	1009	.01	4	1.26	.07	.09	1
15086	1	34	6	62	.3	17	5	585	2.81	27	5	ND	1	97	1	2	2	19	1.64	.010	2	43	1.11	1206	.01	5	.92	.06	.10	1
15087	1	38	3	72	.3	13	6	713	3.33	4	5	ND	1	31	1	2	2	46	.65	.022	5	47	1.35	533	.02	3	1.55	.07	.11	1
15088	2	21	3	84	.3	17	5	697	3.59	3	5	ND	1	26	1	2	2	34	1.15	.014	3	55	1.23	209	.01	2	1.63	.06	.07	1
15089	2	4	13	204	.4	35	10	1478	8.60	2	5	ND	2	34	1	2	2	82	1.05	.027	4	22	2.70	271	.08	4	3.54	.09	.13	1
15090	2	9	7	89	.3	14	6	1089	3.89	12	5	ND	2	36	1	2	2	31	1.42	.036	7	48	1.04	341	.02	4	1.68	.09	.15	1
STD C	22	60	40	139	7.1	67	29	1051	3.99	38	17	8	36	51	18	16	21	61	.48	.105	38	59	.88	173	.09	37	1.72	.10	.15	14

RECEIVED FEB 5 1987

ROSSBACHER LABORATORY PROJECT - CERT#B7025 FILE # 97-200

PAGE 2

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	R	Al	Na	K	W
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM
15091	1	37	5	44	.4	25	14	634	2.27	2	5	ND	1	30	1	2	2	24	2.26	.006	2	73	.58	249	.01	2	.85	.06	.03	1
15092	1	62	3	16	.2	23	16	300	1.93	20	5	ND	1	13	1	2	2	59	.56	.001	2	101	.11	26	.01	2	.21	.03	.02	1
15093	1	40	4	7	.4	29	17	232	1.64	11	5	ND	1	7	1	4	2	59	.36	.001	2	96	.04	9	.01	2	.07	.02	.02	1
15094	1	53	3	13	.4	34	22	295	1.74	8	5	ND	1	8	1	3	2	56	.72	.001	2	110	.08	12	.01	2	.16	.03	.01	1
15095	1	64	3	18	.5	17	12	366	2.03	6	5	ND	1	15	1	4	2	60	1.72	.001	2	92	.09	8	.01	2	.18	.05	.01	1
15096	1	40	2	13	.1	21	11	344	2.03	11	6	ND	1	23	1	2	2	22	1.38	.002	2	113	.14	8	.01	2	.22	.04	.01	1
15097	1	149	2	90	.6	22	8	783	5.16	3	5	ND	1	29	1	2	2	77	1.05	.006	2	83	1.05	9	.01	2	1.47	.06	.01	1
15098	1	64	3	17	.4	11	2	316	3.13	18	5	ND	1	17	1	2	2	39	2.34	.003	2	113	.10	9	.01	2	.17	.05	.01	1
15099	1	31	5	31	.4	12	3	359	4.56	29	8	ND	2	19	1	2	2	47	3.57	.003	2	99	.15	12	.01	2	.35	.07	.02	1
15100	1	47	9	170	.6	52	10	1047	17.72	21	5	ND	2	63	1	2	2	134	.73	.004	2	47	1.63	9	.01	18	2.58	.08	.01	1
15151	1	59	4	28	2.0	10	2	389	4.82	7	5	ND	1	31	1	2	2	67	1.21	.003	2	117	.26	8	.01	2	.37	.05	.01	1
15152	2	116	5	22	.9	15	2	298	3.54	27	5	ND	1	17	4	2	2	68	.94	.003	2	115	.14	8	.01	2	.22	.04	.01	1
15153	1	38	2	7	.3	7	1	190	2.20	19	5	ND	1	29	1	2	2	64	.94	.004	2	149	.04	5	.01	4	.07	.04	.01	1
15154	1	38	2	7	.2	9	1	388	2.02	43	5	ND	1	15	1	2	2	22	1.61	.004	2	146	.03	4	.01	2	.04	.04	.01	1
15155	2	36	2	7	.4	10	1	240	2.93	40	5	ND	1	17	1	2	2	33	1.13	.006	2	152	.04	6	.01	2	.06	.04	.01	1
15156	2	31	5	7	.5	12	1	233	3.34	19	5	ND	1	19	1	2	2	38	.94	.004	2	168	.05	4	.01	2	.05	.04	.01	1
15157	1	249	2	32	1.3	13	3	401	3.79	15	10	ND	1	30	1	2	2	73	1.03	.003	2	128	.21	7	.01	2	.26	.04	.02	1
15158	1	304	4	26	.7	10	2	736	2.57	18	5	ND	2	323	1	2	2	23	15.53	.002	2	88	.13	19	.01	2	.07	.10	.01	1
15159	1	96	6	56	.6	19	5	899	6.65	4	12	ND	2	28	1	2	2	93	2.01	.004	2	101	.43	18	.01	2	.60	.07	.02	1
15160	2	67	5	8	.3	11	2	256	2.82	3	5	ND	1	13	1	2	2	22	.81	.007	2	128	.03	3	.01	2	.03	.03	.01	1
15161	2	46	3	8	.3	7	1	328	2.72	5	5	ND	1	15	1	2	2	23	.94	.005	2	145	.02	6	.01	2	.04	.03	.01	1
15162	2	66	2	7	.2	9	2	307	2.36	12	6	ND	1	12	1	2	2	16	1.00	.004	2	136	.03	2	.01	2	.05	.03	.01	1
15163	1	74	3	13	.2	10	2	293	2.50	3	5	ND	1	11	1	2	3	27	.58	.003	2	149	.06	3	.01	2	.13	.03	.01	1
15164	1	87	5	69	.4	13	10	686	2.56	2	5	ND	2	14	1	2	2	47	.62	.044	4	83	1.06	196	.10	3	1.34	.06	.13	1
15165	1	24	2	76	.2	10	9	982	2.52	2	5	ND	3	40	1	2	2	32	2.22	.056	4	82	.94	266	.13	7	1.38	.09	.16	1
15166	1	18	8	53	.2	2	5	925	2.11	3	7	ND	5	37	1	2	2	16	2.96	.061	7	37	.52	331	.03	5	1.09	.10	.22	1
15167	1	23	7	41	.3	4	6	1091	1.90	2	5	ND	4	119	1	2	2	12	6.44	.053	9	34	.47	336	.01	9	1.02	.11	.24	1
15168	1	24	4	79	.2	19	12	602	2.76	2	5	ND	2	17	1	2	2	20	1.04	.038	4	47	.97	330	.12	2	1.43	.07	.18	1
15169	1	11	2	4	.1	5	2	142	1.56	6	5	ND	1	1	1	2	3	25	.03	.004	2	142	.01	8	.01	4	.04	.01	.02	1
STD C	20	61	38	140	7.0	68	29	1067	3.99	40	19	8	36	51	18	16	20	62	.48	.107	38	58	.88	176	.09	37	1.71	.11	.15	12

ROSSBACHER LABORATORY LTD.

CERTIFICATE OF ANALYSIS

2225 S. SPRINGER AVENUE  
BURNABY, B.C. V5B 3N1  
TEL : (604) 299 - 6910

TO : MPH CONSULTING LTD.  
301-409 GRANVILLE STREET  
VANCOUVER B.C.

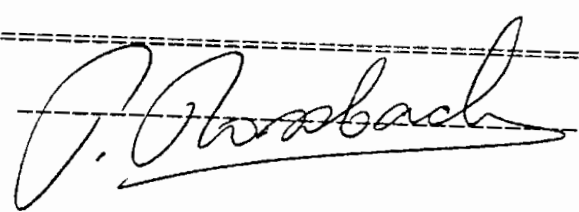
PROJECT: V 239 III  
TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 87036  
INVOICE#: 7431  
DATE ENTERED: 87-02-04  
FILE NAME: MPH87036  
PAGE # : 1

PRE FIX	SAMPLE NAME	FPB Au
A	14849	5
A	15169	5
A	15170	5
A	15171	5
A	15172	5
A	15173	5
A	15174	5
A	15175	400
A	15176	5
A	15177	5
A	15178	5
A	15179	5
A	15180	5
A	15181	5
A	15182	5
A	15183	5
A	15184	5
A	15185	5
A	15186	5
A	15187	5
A	15188	5
A	15189	5

RECEIVED FEB 5 1987

CERTIFIED BY :



## GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO<sub>3</sub>-H<sub>2</sub>O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR MN.FE.CA.P.CR.MG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SM.V.ND AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.  
 - SAMPLE TYPE: SOLUTION

DATE RECEIVED: FEB 4 1987 DATE REPORT MAILED: Feb 9/87 ASSAYER: *DeToye* DEAN TOYE. CERTIFIED B.C. ASSAYER.

SAMPLED	ROSSBACHER LABORATORY PROJECT - CERT#87036 FILE # 87-0245 <i>V387</i>																												PAGE 1		
	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
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM
14849	2	22	2	18	.1	7	5	496	2.73	10	5	ND	1	3	1	2	5	61	.05	.007	2	200	.14	69	.01	2	.59	.02	.01	1	
15169	1	17	5	66	.1	2	9	1224	4.12	7	5	ND	4	18	1	2	2	28	2.41	.101	18	20	.54	226	.01	6	1.78	.09	.30	1	
15170	1	28	5	63	.1	8	9	608	2.58	2	5	ND	2	23	1	2	2	49	1.88	.059	5	83	1.03	1499	.05	4	1.37	.08	.20	1	
15171	1	15	6	60	.1	6	4	441	2.05	2	5	ND	3	17	1	2	2	17	.60	.024	2	66	1.04	1062	.11	6	1.34	.06	.20	1	
15172	2	65	9	146	.1	5	4	1439	3.20	2	5	ND	1	81	1	2	2	32	14.06	.476	7	24	.66	297	.06	3	2.00	.18	.08	1	
15173	2	103	11	126	.2	11	9	758	3.79	4	5	ND	3	25	1	3	2	59	3.55	.037	5	35	.74	108	.20	5	2.89	.09	.16	1	
15174	4	74	11	70	.2	11	9	574	3.51	2	5	ND	5	47	1	2	2	52	5.42	.033	6	43	.70	663	.12	3	2.21	.18	.17	1	
15175	2	48	9	82	.1	10	8	799	4.00	4	5	ND	3	27	1	2	2	73	2.85	.091	7	38	.84	187	.13	2	2.47	.10	.11	1	
15176	2	95	12	108	.1	18	13	550	4.73	2	5	ND	2	44	1	2	3	80	2.88	.031	2	26	.96	74	.16	2	3.12	.09	.12	1	
15177	1	54	7	98	.1	12	11	665	4.47	5	5	ND	3	47	1	2	2	101	1.75	.061	2	39	.94	170	.12	2	2.54	.18	.21	1	
15178	1	63	8	110	.1	14	13	511	5.40	3	5	ND	2	14	1	2	2	115	.45	.053	3	34	1.05	155	.14	2	2.24	.09	.20	1	
15179	3	162	6	81	.2	17	11	575	4.12	2	5	ND	3	63	1	2	2	76	2.49	.245	4	66	1.30	115	.12	2	2.45	.20	.16	1	
15180	1	78	5	74	.2	11	9	600	3.77	4	5	ND	3	39	1	2	2	56	2.83	.042	3	37	.75	201	.13	4	2.19	.13	.25	1	
15181	2	69	10	90	.1	16	10	493	4.54	2	5	ND	3	38	1	3	2	101	1.76	.025	4	28	.92	194	.21	2	2.75	.10	.18	1	
15182	3	72	5	100	.1	16	14	483	4.83	8	5	ND	3	16	1	2	2	74	1.43	.031	3	27	.97	127	.17	2	2.33	.10	.25	1	
15183	3	90	9	121	.1	17	13	519	5.81	5	5	ND	3	13	1	2	2	96	.62	.029	3	27	1.09	115	.20	2	2.43	.09	.24	1	
15184	3	122	9	86	.1	19	15	764	5.17	4	5	ND	2	39	1	2	2	74	3.87	.407	5	23	.99	191	.11	3	2.42	.10	.20	1	
15185	2	66	13	113	.1	16	12	545	5.47	6	5	ND	3	17	1	3	2	92	.60	.035	4	25	1.14	158	.24	2	2.56	.09	.29	1	
15186	1	77	15	108	.1	18	11	639	4.84	2	5	ND	2	94	1	2	2	100	3.77	.029	3	31	.88	146	.30	4	3.96	.10	.30	1	
15187	2	98	19	116	.1	17	14	989	4.72	3	5	ND	2	38	1	2	2	69	3.56	.226	3	22	.85	233	.16	5	2.57	.13	.31	1	
15188	5	69	15	116	.2	19	14	644	4.84	3	5	ND	3	49	1	2	2	79	3.59	.028	2	28	.78	150	.23	5	3.02	.21	.29	1	
15189	2	78	12	130	.1	18	13	645	4.93	4	5	ND	2	27	1	2	2	71	1.93	.148	2	24	.92	128	.16	2	2.48	.11	.21	1	
STD C	21	60	41	137	7.1	70	29	1035	3.97	38	17	7	36	49	18	16	20	67	.48	.103	37	61	.88	187	.09	35	1.71	.10	.14	13	

Bondar-Clegg & Company Ltd.  
 130 Pemberton Ave.  
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 Telex: 04-112497



**BONDAR-CLEGG**

**Geochemical  
 Lab Report**

REPORT: 120-8625 ( COMPLETE )

REFERENCE INFO:

CLIENT: MPH CONSULTING LTD.  
 PROJECT: V239

SUBMITTED BY: S ALLEN  
 DATE PRINTED: 6-NOV-86

ORDER	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Au Gold	43	0.5 PPB		IND. NEUTRON ACTIV.
2	Sb Antimony	43	0.05 PPM		IND. NEUTRON ACTIV.
3	As Arsenic	43	0.2 PPM		IND. NEUTRON ACTIV.
4	Ba Barium	43	50 PPM		IND. NEUTRON ACTIV.
5	Br Bromine	43	0.5 PPM		IND. NEUTRON ACTIV.
6	Cd Cadmium	43	1 PPM		IND. NEUTRON ACTIV.
7	Cr Chromium	43	5 PPM		IND. NEUTRON ACTIV.
8	Co Cobalt	43	1 PPM		IND. NEUTRON ACTIV.
9	Ir Iridium	43	10 PPB		IND. NEUTRON ACTIV.
10	Mo Molybdenum	43	0.2 PPM		IND. NEUTRON ACTIV.
11	Ni Nickel	43	5 PPM		IND. NEUTRON ACTIV.
12	Se Selenium	43	1 PPM		IND. NEUTRON ACTIV.
13	Ag Silver	43	1 PPM		IND. NEUTRON ACTIV.
14	Ta Tantalum	43	0.3 PPM		IND. NEUTRON ACTIV.
15	Th Thorium	43	0.2 PPM		IND. NEUTRON ACTIV.
16	W Tungsten	43	0.5 PPM		IND. NEUTRON ACTIV.
17	U Uranium	43	0.05 PPM		IND. NEUTRON ACTIV.
18	Zn Zinc	43	10 PPM		IND. NEUTRON ACTIV.
19	Cu Copper	43	1 PPM	HNO3-HCL HOT EXTR	Atomic Absorption
20	Pb Lead	43	2 PPM	HNO3-HCL HOT EXTR	Atomic Absorption

SAMPLE TYPE	NUMBER	SIZE	RECTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
V VEGETATION	43	5	OTHER	43	MACERATING/BLENDING BRIGUETTING	43 0

REPORT COPIES TO: MR. GREG HAWKINS  
 MR. GORD ALLEN

INVOICE TO: MR. GREG HAWKINS

RECEIVED NOV 13 1986





REPORT: 125-5625

PROJECT: V239

PAGE 1A

SAMPLE NUMBER	ELEMENT UNITS	Au PPB	Sb PPM	As PPM	Ba PPM	Br PPM	Cd PPM	Cf PPM	Co PPM	Cr PPM	Pb PPM	Ni PPM
US BGC-1 0+00		7.6	0.72	3.1	190	7.4	<1	<5	<1	<10	<0.2	<5
US BGC-1 0+25N		1.3	0.09	0.6	92	1.7	<1	<5	<1	<10	<0.2	<5
US BGC-1 0+50N		<0.3	<0.05	0.4	95	3.4	<1	<5	<1	<10	<0.2	<5
US BGC-1 0+75N		0.9	<0.05	0.8	68	1.6	<1	<5	<1	<10	<0.2	<5
US BGC-1 1N		0.6	<0.05	1.9	73	4.6	<1	<5	<1	<10	<0.2	<5
US BGC-1 1+25N		<0.7	<0.05	1.0	160	5.3	<1	<5	<1	<10	0.3	<5
US BGC-1 1+50N		<0.5	<0.05	0.5	150	2.5	<1	<5	<1	<10	<0.2	<5
US BGC-1 1+75N		<0.6	<0.05	0.7	150	2.5	<1	<5	<1	<10	<0.2	<5
US BGC-1 2N		1.1	<0.05	0.3	130	6.8	<1	<5	<1	<10	<0.2	<5
US BGC-1 2+25N		5.7	<0.05	0.8	230	4.3	<1	<5	<1	<10	<0.3	<5
US BGC-1 2+50N		7.3	<0.05	1.2	150	2.7	<1	<5	<1	<10	<0.2	<5
US BGC-1 2+75N		<0.5	<0.05	3.8	130	1.9	<1	<5	<1	<10	<0.2	<5
US BGC-1 3N		1.0	<0.05	5.0	<50	2.2	<1	<5	<1	<10	<0.2	<5
US BGC-1 3+25N		<0.5	<0.05	0.3	71	1.7	<1	<5	<1	<10	<0.2	<5
US BGC-1 3+50N		0.6	<0.05	0.2	<50	2.5	<1	<5	<1	<10	<0.2	<5
US BGC-1 3+75N		<0.5	<0.05	0.4	110	2.5	<1	<5	<1	<10	<0.2	<5
US BGC-1 4N		0.6	<0.05	0.3	130	2.5	<1	<5	<1	<10	<0.2	<5
US BGC-1 4+25N		<0.5	<0.05	0.4	93	2.8	<1	<5	<1	<10	<0.2	<5
US BGC-1 4+50N		<0.3	<0.05	1.1	270	12.0	1	<5	<1	<10	<0.3	<5
US BGC-1 4+75N		<0.6	<0.05	3.0	99	5.1	<1	<5	<1	<10	<0.3	<5
US BGC-1 5N		<0.7	<0.05	3.2	150	6.2	<1	<5	<1	<10	<0.3	<5
US BGC-1 5+25N		<0.5	<0.05	2.9	73	2.2	<1	<5	<1	<10	<0.2	<5
US BGC-1 5+50N		<0.6	<0.05	1.4	76	2.8	<1	<5	<1	<10	<0.2	<5
US BGC-1 5+75N		<0.5	<0.05	1.8	86	3.2	<1	<5	<1	<10	<0.2	<5
US BGC-1 6N		0.8	<0.05	1.1	60	1.9	<1	<5	<1	<10	<0.2	<5
US BGC-1 6+25N		<0.5	<0.05	2.2	85	1.2	<1	<5	<1	<10	<0.2	<5
US BGC-1 6+50N		0.9	<0.05	0.9	130	2.5	1	<5	<1	<10	<0.2	<5
US BGC-1 6+75N		<0.5	<0.05	2.3	97	4.8	<1	<5	<1	<10	<0.2	<5
US BGC-1 7N		<0.5	<0.05	7.7	54	1.6	<1	<5	<1	<10	<0.2	<5
US BGC-1 7+25N		<0.5	<0.05	1.1	130	1.6	<1	<5	<1	<10	0.3	<5
US BGC-1 7+50N		<0.3	0.11	0.5	62	7.0	<1	<5	<1	<10	<0.3	<5
US BGC-1 7+75N		<0.7	<0.05	0.5	98	2.3	<1	<5	<1	<10	<0.2	<5
US BGC-1 8N		0.6	<0.05	0.8	92	2.4	<1	<5	<1	<10	0.5	<5
US BGC-1 8+25N		<0.8	<0.05	2.3	86	3.6	<1	6	<1	<10	<0.2	<5
US BGC-1 8+50N		<0.6	<0.05	0.8	170	3.5	<1	<5	<1	<10	<0.3	<5
US BGC-1 0+25S		2.2	<0.05	0.5	190	3.5	<1	<5	<1	<10	<0.3	<5
US BGC-1 0+50S		1.5	<0.05	1.0	140	2.4	<1	<5	<1	<10	0.5	<5
US BGC-1 0+75S		2.1	<0.05	0.7	150	2.0	<1	<5	<1	<10	<0.3	<5
US BGC-1 1+00S		0.7	<0.05	4.3	170	4.4	<1	<5	<1	<10	<0.3	<5
US BGC-1 1+25S		0.7	<0.05	2.6	100	1.6	<1	<5	<1	<10	<0.2	<5



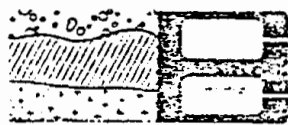
REPORT: 126-5605

PROJECT: V209

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SAMPLE NUMBER	ELEMENT UNITS	Sr PPM	Ag PPM	Ta PPM	Th PPM	W PPM	U PPM	Zn PPM	Cu PPM	Pb PPM
V5 BGC-1 0+00		<2	<1	<0.2	<0.2	<0.5	<0.05	26	7	15
V5 BGC-1 0+25N		<2	<1	<0.2	<0.2	<0.5	<0.05	<20	2	9
V5 BGC-1 0+50N		<2	<1	<0.2	<0.2	<0.5	<0.05	<20	2	6
V5 BGC-1 0+75N		<2	<1	<0.2	<0.2	<0.5	<0.05	<20	2	6
V5 BGC-1 1N		<2	<1	<0.2	<0.2	<0.5	<0.05	25	4	3
V5 BGC-1 1+25N		<2	<1	<0.2	<0.2	<0.5	<0.05	24	2	6
V5 BGC-1 1+50N		<2	<1	<0.2	<0.2	<0.5	<0.05	<20	2	7
V5 BGC-1 1+75N		<2	<1	<0.2	<0.2	<0.5	<0.05	29	2	9
V5 BGC-1 2N		<2	<1	<0.2	<0.2	<0.5	<0.05	<20	2	10
V5 BGC-1 2+25N		<2	<1	<0.2	<0.2	<0.5	<0.05	42	4	11
V5 BGC-1 2+50N		<2	<1	<0.2	<0.2	<0.5	<0.05	32	2	5
V5 BGC-1 2+75N		<2	<1	<0.2	<0.2	<0.5	<0.05	21	2	<2
V5 BGC-1 3N		<2	<1	<0.2	<0.2	<0.5	<0.05	49	2	4
V5 BGC-1 3+25N		<2	<1	<0.2	<0.2	<0.5	<0.05	27	2	5
V5 BGC-1 3+50N		<2	<1	<0.2	<0.2	<0.5	<0.05	<20	2	8
V5 BGC-1 3+75N		<2	<1	<0.2	<0.2	<0.5	<0.05	<20	2	6
V5 BGC-1 4N		<2	<1	<0.2	<0.2	<0.5	<0.05	32	2	9
V5 BGC-1 4+25N		<2	<1	<0.2	<0.2	<0.5	<0.05	21	2	8
V5 BGC-1 4+50N		<2	<1	<0.2	<0.2	<0.5	<0.05	42	1	10
V5 BGC-1 4+75N		<2	<1	<0.2	<0.2	<0.5	<0.05	46	2	7
V5 BGC-1 5N		<2	<1	<0.2	<0.2	<0.5	<0.05	22	1	4
V5 BGC-1 5+25N		<2	<1	<0.2	<0.2	<0.5	<0.05	32	2	4
V5 BGC-1 5+50N		<2	<1	<0.2	<0.2	<0.5	<0.05	27	1	8
V5 BGC-1 5+75N		<2	<1	<0.2	<0.2	<0.5	<0.05	31	1	3
V5 BGC-1 6N		<2	<1	<0.2	<0.2	<0.5	<0.05	40	2	5
V5 BGC-1 6+25N		<2	<1	<0.2	<0.2	<0.5	<0.05	<20	2	<2
V5 BGC-1 6+50N		<2	<1	<0.2	<0.2	<0.5	<0.05	42	2	5
V5 BGC-1 6+75N		<2	<1	<0.2	<0.2	<0.5	<0.05	<20	2	<2
V5 BGC-1 7N		<2	<1	<0.2	<0.2	<0.5	<0.05	23	2	4
V5 BGC-1 7+25N		<2	<1	<0.2	<0.2	<0.5	<0.05	<20	2	5
V5 BGC-1 7+50N		<2	<1	<0.2	<0.2	<0.5	<0.05	<20	2	<2
V5 BGC-1 7+75N		<2	<1	<0.2	<0.2	<0.5	<0.05	<20	2	<2
V5 BGC-1 8N		<2	<1	<0.2	<0.2	<0.5	<0.05	20	2	<2
V5 BGC-1 8+25N		<2	<1	<0.2	<0.2	<0.5	<0.05	38	2	3
V5 BGC-1 8+50N		<2	<1	<0.2	<0.2	<0.5	<0.05	23	2	<2
V5 BGC-1 0+25S		<2	<1	<0.2	<0.2	<0.5	<0.05	30	2	3
V5 BGC-1 0+50S		<2	<1	<0.2	<0.2	<0.5	<0.05	<20	1	2
V5 BGC-1 0+75S		<2	<1	<0.2	<0.2	<0.5	<0.05	34	2	<2
V5 BGC-1 1+00S		<2	<1	<0.2	<0.2	<0.5	<0.05	29	2	2
V5 BGC-1 1+25S		<2	<1	<0.2	<0.2	<0.5	<0.05	32	2	3

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# BONDAR-CLEGG

Geochemical  
 Lab Report

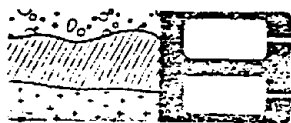
REPORT: 106-5505

PROJECT: V239

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SAMPLE NUMBER	ELEMENT UNITS	Au PPB	Sb PPM	As PPM	Se PPM	Bf PPM	Cd PPM	Cr PPM	Co PPM	Ir PPB	Nb PPM	Ni PPM
V5 BGC-1 1+50S		<0.6	<0.05	1.5	93	3.1	<1	<5	<1	<10	<0.2	<5
V5 BGC-1 1+75S		0.7	<0.05	0.9	200	2.0	<1	<5	<1	<10	<0.2	<5
V5 BGC-1 2S		1.4	<0.05	0.4	230	2.9	<1	5	<1	<10	<0.3	<5

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BONDAR-CLEGG

Geochemical  
Lab Report

REPORT: 126-5625

PROJECT: V239

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SAMPLE NUMBER	ELEMENT UNITS	Se PPM	Ag PPM	Ia PPM	Th PPM	W PPM	U PPM	Zn PPM	Cu PPM	Pb PPM
V5 BGC-1 1+50S		<2	<1	<0.2	<0.2	<0.5	<0.05	33	2	<2
V5 BGC-1 1+75S		<2	<1	<0.2	<0.2	<0.5	<0.05	28	2	2
V5 BGC-1 2S		<2	<1	<0.2	<0.2	<0.5	<0.05	28	2	6

Bondar-Clegg & Company Ltd.  
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 Telex: 04-35257



**BONDAR-CLEGG**

**Geochemical  
 Lab Report**

REPORT: 126-6493 ( COMPLETE )

REFERENCE INFO:

CLIENT: MPH CONSULTING LTD.  
 PROJECT: V239

SUBMITTED BY: UNKNOWN  
 DATE PRINTED: 12-DEC-86

ORDER	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Au Gold	49	0.5 PPB		IND. NEUTRON ACTIV.
2	Cu Copper	49	1 PPM	HNO3-HCL HOT EXTR	Atomic Absorption
3	Sb Antimony	49	0.05 PPM		IND. NEUTRON ACTIV.
4	Pb Lead	49	2 PPM	HNO3-HCL HOT EXTR	Atomic Absorption
5	As Arsenic	49	0.2 PPM		IND. NEUTRON ACTIV.
6	Ba Barium	49	50 PPM		IND. NEUTRON ACTIV.
7	Br Bromine	49	0.5 PPM		IND. NEUTRON ACTIV.
8	Cd Cadmium	49	1 PPM		IND. NEUTRON ACTIV.
9	Cr Chromium	49	5 PPM		IND. NEUTRON ACTIV.
10	Co Cobalt	49	1 PPM		IND. NEUTRON ACTIV.
11	Ir Iridium	49	10 PPB		IND. NEUTRON ACTIV.
12	Mo Molybdenum	49	0.2 PPM		IND. NEUTRON ACTIV.
13	Ni Nickel	49	5 PPM		IND. NEUTRON ACTIV.
14	Se Selenium	49	1 PPM		IND. NEUTRON ACTIV.
15	Ag Silver	49	1 PPM		IND. NEUTRON ACTIV.
16	Ta Tantalum	49	0.2 PPM		IND. NEUTRON ACTIV.
17	Th Thorium	49	0.2 PPM		IND. NEUTRON ACTIV.
18	W Tungsten	49	0.5 PPM		IND. NEUTRON ACTIV.
19	U Uranium	49	0.05 PPM		IND. NEUTRON ACTIV.
20	Zn Zinc	49	10 PPM		IND. NEUTRON ACTIV.

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
V VEGETATION	49	5 OTHER	49	MACERATING/BLENDING	49
				BRIQUETTING	49

REPORT COPIES TO: MR. GREG HAWKINS  
 MR. GORD ALLEN

INVOICE TO: MR. GREG HAWKINS

RECEIVED DEC 19 1986



REPORT: 126-6493

PROJECT: V239

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SAMPLE NUMBER	ELEMENT UNITS	Au PPB	Cu PPM	Sb PPM	Pb PPM	As PPM	Ba PPM	Br PPM	Cd PPM	Cr PPM	Co PPM	Ir PPB
V5 BGC-2 0+00N		0.8	4	0.06	7	1.6	62	4.2	<1	<5	<1	<10
V5 BGC-2 0+25N		<0.6	4	<0.05	7	3.4	110	7.5	<1	<5	<1	<10
V5 BGC-2 0+50N		0.7	4	<0.05	6	3.2	120	6.4	<1	<5	<1	<10
V5 BGC-2 0+75N		0.9	4	0.05	6	1.3	100	6.2	<1	<5	<1	<10
V5 BGC-2 1+00N		0.6	4	<0.05	5	1.1	90	5.4	<1	<5	<1	<10
V5 BGC-2 1+25N		<0.6	3	<0.05	5	2.9	92	8.3	<1	<5	<1	<10
V5 BGC-2 1+50N		<0.6	4	<0.05	5	2.1	110	10.0	<1	<5	<1	<10
V5 BGC-2 1+75N		0.6	5	<0.05	4	1.2	66	2.3	<1	<5	<1	<10
V5 BGC-2 2+00N		1.3	3	<0.05	5	6.4	91	21.0	<1	<6	<1	<10
V5 BGC-2 2+25N		<0.5	3	<0.05	6	1.8	61	4.4	<1	<5	<1	<10
V5 BGC-2 2+50N		<0.5	5	<0.05	6	0.7	100	3.9	<1	<5	<1	<10
V5 BGC-2 2+75N		<0.6	4	<0.05	6	1.8	57	11.0	<1	<5	<1	<10
V5 BGC-2 3+00N		2.7	4	<0.05	6	7.5	130	41.0	<1	<8	<1	<14
V5 BGC-2 3+25N		0.8	3	<0.05	5	1.7	<50	6.4	<1	<5	<1	<10
V5 BGC-2 3+50N		<0.5	4	<0.05	6	1.5	120	5.8	<1	<5	<1	<10
V5 BGC-2 3+75N		2.4	4	0.15	6	2.0	130	7.4	<1	<5	<1	<10
V5 BGC-2 4+00N		1.7	4	<0.05	7	0.7	110	2.5	<1	<5	<1	<10
V5 BGC-2 4+25N		<0.5	4	<0.05	8	0.2	<50	<0.5	<1	<5	<1	<10
V5 BGC-2 4+50N		0.7	4	0.05	7	0.4	<50	0.9	<1	<5	<1	<10
V5 BGC-2 4+75N		<0.5	3	<0.05	9	0.6	100	2.7	<1	<5	<1	<10
V5 BGC-2 5+00N		<0.5	4	<0.05	8	0.2	<50	1.3	<1	<5	<1	<10
V5 BGC-2 5+25N		<0.5	4	<0.05	8	0.2	110	2.0	<1	<5	<1	<10
V5 BGC-2 5+50N		<0.5	6	<0.05	6	<0.2	<50	0.5	<1	<5	<1	<10
V5 BGC-2 5+75N		<0.5	4	<0.05	9	0.9	190	2.3	<1	<5	<1	<10
V5 BGC-2 6+00N		<0.5	5	<0.05	7	0.4	200	1.0	<1	<5	<1	<10
V5 BGC-2 6+25N		<0.5	5	<0.05	6	4.8	75	3.4	<1	<5	<1	<10
V5 BGC-2 6+50N		<0.5	4	<0.05	6	2.5	210	5.4	<1	<5	<1	<10
V5 BGC-2 6+75N		0.6	6	<0.05	6	1.9	53	3.2	<1	<5	<1	<10
V5 BGC-2 7+00N		<0.5	6	<0.05	6	0.3	<50	<0.5	<1	<5	<1	<10
V5 BGC-2 7+25N		<0.5	4	<0.05	9	0.8	150	2.5	<1	<5	<1	<10
V5 BGC-2 7+50N		<0.7	4	<0.05	6	0.5	110	11.0	<1	<5	<1	<10
V5 BGC-2 7+75N		<0.5	4	<0.05	6	0.3	<50	0.6	<1	<5	<1	<10
V5 BGC-2 8+00N		<0.5	4	<0.05	10	0.7	140	2.1	<1	<5	<1	<10
V5 BGC-2 8+25N		<0.5	3	<0.05	7	1.0	130	4.2	<1	<5	<1	<10
V5 BGC-2 8+50N		1.2	4	<0.05	9	1.3	55	3.1	<1	<5	<1	<10
V5 BGC-2 8+75N		<0.5	3	<0.05	11	0.4	180	2.8	<1	<5	<1	<10
V5 BGC-2 9+00N		0.8	4	<0.05	8	0.2	<50	0.8	<1	<5	<1	<10
V5 BGC-2 9+25N		0.6	3	<0.05	10	0.3	130	5.7	<1	<5	<1	<10
V5 BGC-2 9+50N		<0.5	4	<0.05	7	1.0	120	3.9	<1	<5	<1	<10
V5 BGC-2 9+75N		<0.5	3	<0.05	8	0.3	150	2.8	<1	<5	<1	<10



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PAGE 1B

SAMPLE NUMBER	ELEMENT UNITS	Mo PPM	Ni PPM	Se PPM	Ag PPM	Ta PPM	Th PPM	W PPM	U PPM	Zn PPM
V5 BGC-2 0+00N		<0.2	<5	<2	<1	<0.2	<0.2	<0.5	<0.05	21
V5 BGC-2 0+25N		<0.2	<5	<2	<1	<0.2	<0.2	<0.5	<0.05	23
V5 BGC-2 0+50N		<0.2	<5	<2	<1	<0.2	<0.2	<0.5	<0.05	27
V5 BGC-2 0+75N		<0.2	<5	<2	<1	<0.2	<0.2	<0.5	<0.05	<20
V5 BGC-2 1+00N		<0.2	<5	<2	<1	<0.2	<0.2	<0.5	<0.05	35
V5 BGC-2 1+25N		<0.2	<5	<2	<1	<0.2	<0.2	<0.5	<0.05	32
V5 BGC-2 1+50N		<0.2	<5	<2	<1	<0.2	<0.2	<0.5	<0.05	<20
V5 BGC-2 1+75N		<0.2	<5	<2	<1	<0.2	<0.2	<0.5	<0.05	37
V5 BGC-2 2+00N		<0.2	<5	<2	<1	<0.2	<0.2	<0.5	<0.05	38
V5 BGC-2 2+25N		<0.2	<5	<2	<1	<0.2	<0.2	<0.5	<0.05	21
V5 BGC-2 2+50N		<0.2	<5	<2	<1	<0.2	<0.2	<0.5	<0.05	25
V5 BGC-2 2+75N		<0.2	<5	<2	<1	<0.2	<0.2	<0.5	<0.05	25
V5 BGC-2 3+00N		<0.3	<5	<2	<1	<0.2	<0.2	<0.5	<0.05	<23
V5 BGC-2 3+25N		<0.2	<5	<2	<1	<0.2	<0.2	<0.5	<0.05	21
V5 BGC-2 3+50N		<0.2	<5	<2	<1	<0.2	<0.2	<0.5	<0.05	35
V5 BGC-2 3+75N		<0.2	<5	<2	<1	<0.2	<0.2	<0.5	<0.05	22
V5 BGC-2 4+00N		<0.2	<5	<2	<1	<0.2	<0.2	<0.5	<0.05	<20
V5 BGC-2 4+25N		<0.2	<5	<2	<1	<0.2	<0.2	<0.5	<0.05	23
V5 BGC-2 4+50N		<0.2	<5	<2	<1	<0.2	<0.2	<0.5	<0.05	25
V5 BGC-2 4+75N		<0.2	<5	<2	<1	<0.2	<0.2	<0.5	<0.05	23
V5 BGC-2 5+00N		<0.2	<5	<2	<1	<0.2	<0.2	<0.5	<0.05	<20
V5 BGC-2 5+25N		<0.2	<5	<2	<1	<0.2	<0.2	<0.5	<0.05	<20
V5 BGC-2 5+50N		<0.2	<5	<2	<1	<0.2	<0.2	<0.5	<0.05	<20
V5 BGC-2 5+75N		<0.2	<5	<2	<1	<0.2	<0.2	<0.5	<0.05	37
V5 BGC-2 6+00N		0.3	<5	<2	<1	<0.2	<0.2	<0.5	<0.05	<20
V5 BGC-2 6+25N		<0.2	<5	<2	<1	<0.2	<0.2	<0.5	<0.05	23
V5 BGC-2 6+50N		<0.2	<5	<2	<1	<0.2	<0.2	<0.5	<0.05	26
V5 BGC-2 6+75N		<0.2	<5	<2	<1	<0.2	<0.2	<0.5	<0.05	24
V5 BGC-2 7+00N		0.2	<5	<2	<1	<0.2	<0.2	<0.5	<0.05	<20
V5 BGC-2 7+25N		<0.2	<5	<2	<1	<0.2	<0.2	<0.5	<0.05	<20
V5 BGC-2 7+50N		<0.2	<5	<2	<1	<0.2	<0.2	<0.5	<0.05	<20
V5 BGC-2 7+75N		<0.2	<5	<2	<1	<0.2	<0.2	<0.5	<0.05	<20
V5 BGC-2 8+00N		<0.2	<5	<2	<1	<0.2	<0.2	<0.5	<0.05	<20
V5 BGC-2 8+25N		<0.2	<5	<2	<1	<0.2	<0.2	<0.5	<0.05	25
V5 BGC-2 8+50N		<0.2	<5	<2	<1	<0.2	<0.2	<0.5	<0.05	21
V5 BGC-2 8+75N		<0.2	<5	<2	<1	<0.2	<0.2	<0.5	<0.05	26
V5 BGC-2 9+00N		<0.2	<5	<2	<1	<0.2	<0.2	<0.5	<0.05	<20
V5 BGC-2 9+25N		<0.2	<5	<2	<1	<0.2	<0.2	<0.5	<0.05	21
V5 BGC-2 9+50N		<0.2	<5	<2	<1	<0.2	<0.2	<0.5	<0.05	<20
V5 BGC-2 9+75N		<0.2	<5	<2	<1	<0.2	<0.2	<0.5	<0.05	21

Bondar-Clegg & Company Ltd.  
 130 Pemberton Ave.  
 North Vancouver, B.C.  
 Canada V7P 2R5  
 Phone: (604) 985-0681  
 Telex: 04-352667



**BONDAR-CLEGG**

**Geochemical  
 Lab Report**

REPORT: 126-6493

PROJECT: V239

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SAMPLE NUMBER	ELEMENT UNITS	Au PPB	Cu PPM	Sb PPM	Pb PPM	As PPM	Ba PPM	Br PPM	Cd PPM	Cr PPM	Co PPM	Ir PPB
V5 BGC-2 10+00N		<0.7	3	<0.05	10	0.7	94	6.9	1	<5	<1	<10
V5 BGC-2 10+25N		0.6	3	<0.05	12	0.4	150	3.4	<1	<5	<1	<10
V5 BGC-2 10+50N		0.6	3	<0.05	10	0.2	<50	1.3	<1	<5	<1	<10
V5 BGC-2 10+75N		<0.5	3	<0.05	11	<0.2	<50	2.3	<1	<5	<1	<10
V5 BGC-2 11+00N		0.6	3	<0.05	10	0.2	<50	0.7	<1	<5	<1	<10
V5 BGC-2 11+25N		<0.7	4	<0.05	6	1.1	89	12.0	<1	<5	<1	<10
V5 BGC-2 11+50N		0.5	4	<0.05	7	0.2	<50	0.7	<1	<5	<1	<10
V5 BGC-2 11+75N		<0.5	3	<0.05	7	0.3	<50	0.8	<1	<5	<1	<10
V5 BGC-2 12+00N		<0.5	3	<0.05	6	1.3	68	2.5	<1	<5	<1	<10





REPORT: 126-6493

PROJECT: V239

PAGE 2B

SAMPLE NUMBER	ELEMENT UNITS	Mo PPM	Ni PPM	Se PPM	Ag PPM	Ta PPM	Th PPM	W PPM	U PPM	Zn PPM
V5 BGC-2 10+00N		<0.2	<5	<2	<1	<0.2	<0.2	<0.5	<0.05	<20
V5 BGC-2 10+25N		<0.2	<5	<2	<1	<0.2	<0.2	<0.5	<0.05	37
V5 BGC-2 10+50N		<0.2	<5	<2	<1	<0.2	<0.2	<0.5	<0.05	<20
V5 BGC-2 10+75N		<0.2	<5	<2	<1	<0.2	<0.2	<0.5	<0.05	<20
V5 BGC-2 11+00N		<0.2	<5	<2	<1	<0.2	<0.2	<0.5	<0.05	30
V5 BGC-2 11+25N		<0.2	<5	<2	<1	<0.2	<0.2	<0.5	<0.05	25
V5 BGC-2 11+50N		<0.2	<5	<2	<1	<0.2	<0.2	<0.5	<0.05	<20
V5 BGC-2 11+75N		<0.2	<5	<2	<1	<0.2	<0.2	<0.5	<0.05	<20
V5 BGC-2 12+00N		<0.2	<5	<2	<1	<0.2	<0.2	<0.5	<0.05	20



**APPENDIX IV**  
**SOIL GEOCHEMISTRY STATISTICS**

**ROSSBACHER LABORATORY LTD.**

2225 S. SPRINGER AVENUE  
 BURNABY, B.C. V5B 3N1  
 TEL : (604) 299 - 6910

**STATISTICAL REPORT**

To: MPH CONSULTING LTD.  
 301-409 GRANVILLE ST.  
 VANCOUVER, B.C.

Project: V 239  
 Date: 87-02-19

Element: Ag

Sample Type: Soil

CLASS INTERVAL	CLASS FREQUENCY	RELATIVE FREQUENCY%	CUMULATIVE FREQUENCY%	CLASS MEAN
0.0 - 0.2	649	94.61	94.61	0.20
0.3 - 0.4	29	4.23	98.84	0.40
0.5 - 0.6	5	0.73	99.57	0.60
0.7 - 0.8	2	0.29	99.86	0.80
0.9 - 1.0	0	0.00	99.86	0.00
1.1 - 1.2	0	0.00	99.86	0.00
1.3 - 1.4	0	0.00	99.86	0.00
1.5 - 1.6	0	0.00	99.86	0.00
1.7 - 1.8	0	0.00	99.86	0.00
1.9 - 2.0	0	0.00	99.86	0.00
2.1 - 2.2	0	0.00	99.86	0.00
2.3 - 2.4	1	0.15	100.00	2.40

**For Statistics**

**For All Data**

Number of Samples:	686	686
Arithmetic Mean :	.22	N.A.
Standard Deviation :	.1	N.A.
Minimum Value :	.2	.2
Maximum Value :	2.4	2.4
Range :	.2 -- 10 PPM	.2 -- 2.4 PPM

**File(s) used for Statistics:**

V239STAT

**ROSSBACHER LABORATORY LTD.**

**STATISTICAL REPORT**

2225 S. SPRINGER AVENUE  
BURNABY, B.C. V5B 3N1  
TEL : (604) 299 - 6910

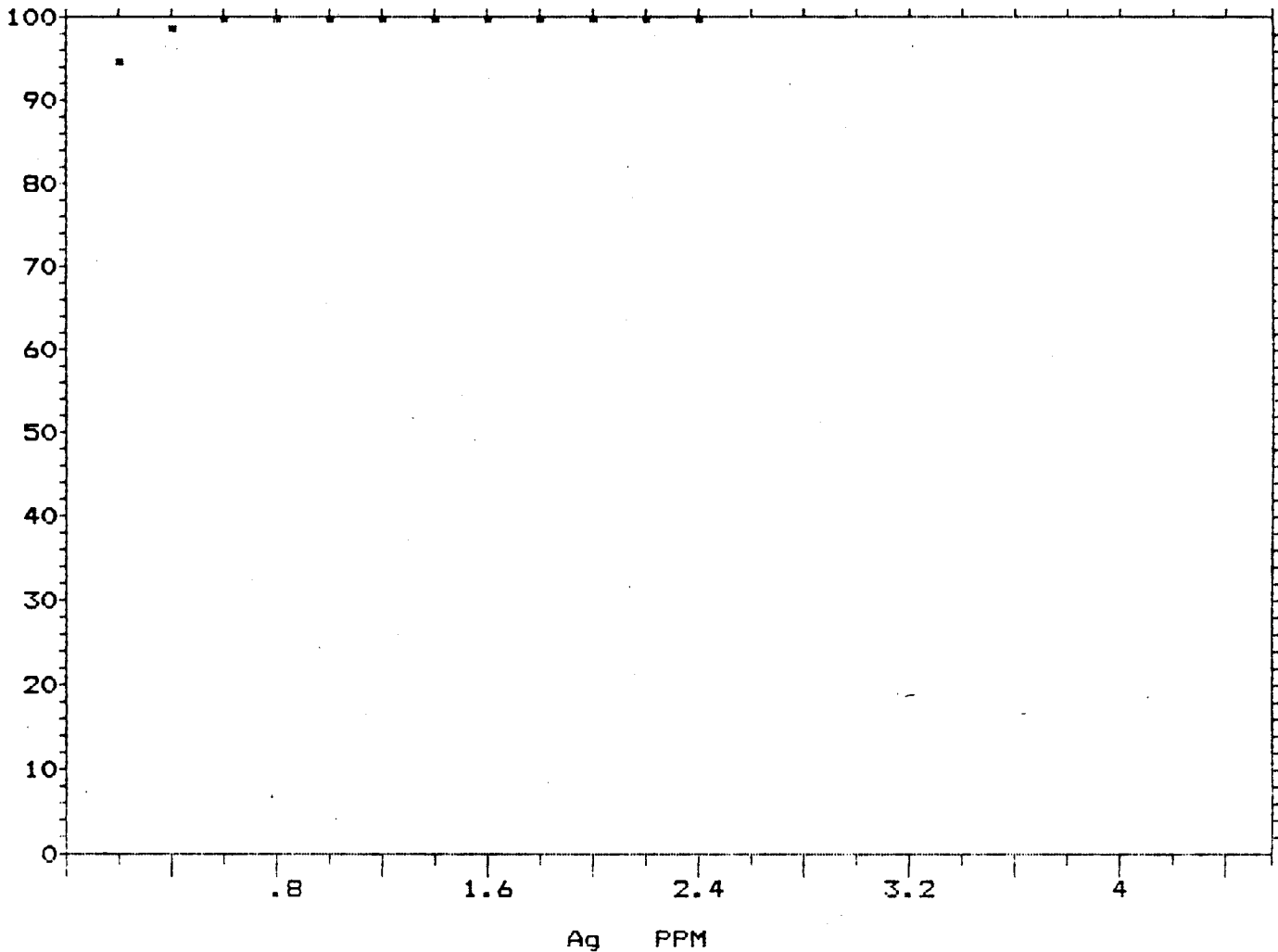
To: MPH CONSULTING LTD.  
301-409 GRANVILLE ST.  
VANCOUVER, B.C.

Project: V 239  
Date: 87-02-19

Element: Ag

Sample Type: Soil

Cumulative Frequency Histogram



**ROSSBACHER LABORATORY LTD.**

**STATISTICAL REPORT**

2225 S. SPRINGER AVENUE  
BURNABY, B.C. V5B 3N1  
TEL : (604) 299 - 6910

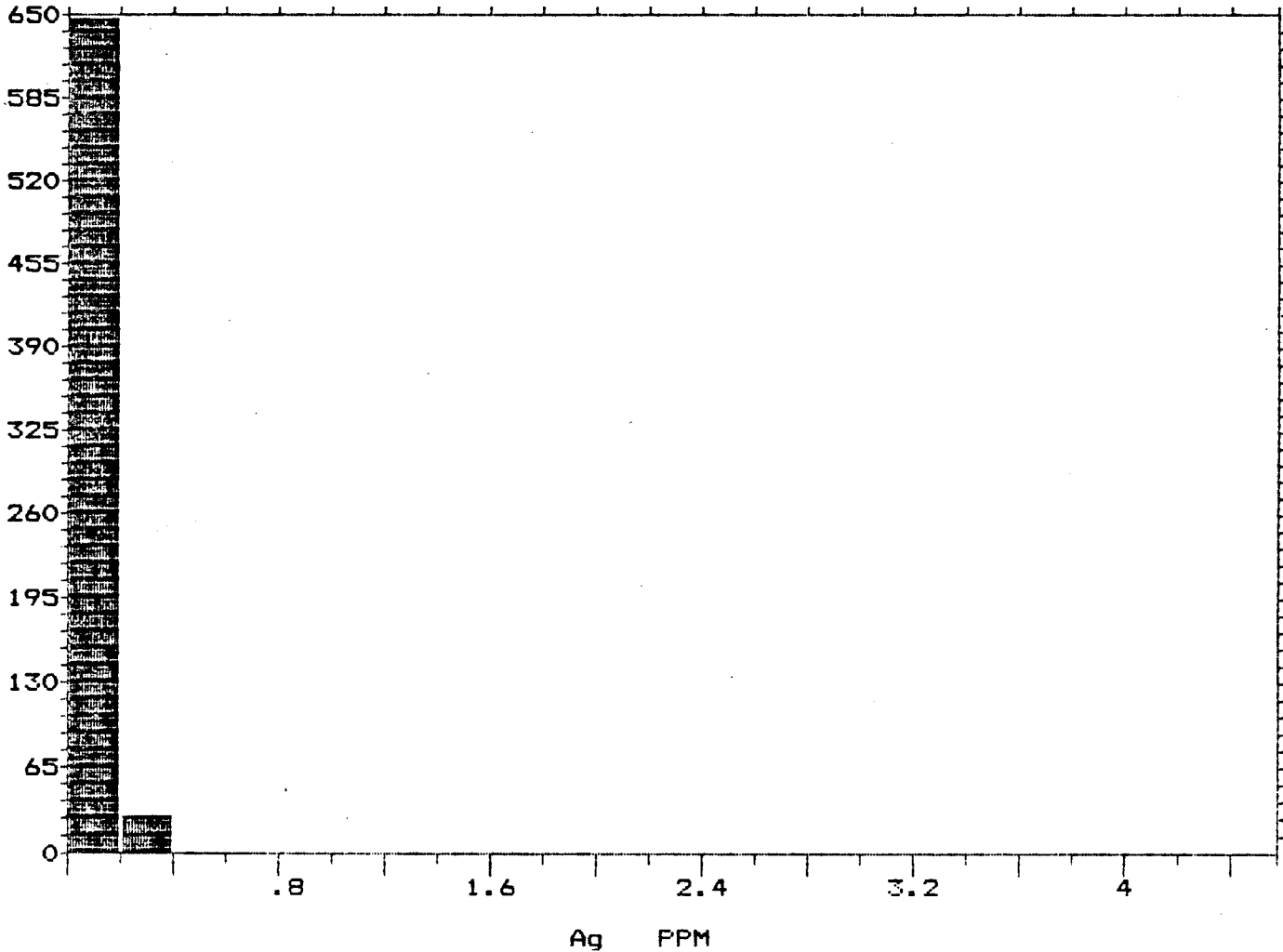
To: MPH CONSULTING LTD.  
301-409 GRANVILLE ST.  
VANCOUVER, B.C.

Project: V 239  
Date: 87-02-19

Element: Ag

Sample Type: Soil

Frequency Histogram



**ROSSBACHER LABORATORY LTD.**

2225 S. SPRINGER AVENUE  
 BURNABY, B.C. V5B 3N1  
 TEL : (604) 299 - 6910

**STATISTICAL REPORT**

To: MPH CONSULTING LTD.  
 301-409 GRANVILLE ST.  
 VANCOUVER, B.C.

Project: V 239  
 Date: 87-02-19

Element: As

Sample Type: Soil

CLASS INTERVAL	CLASS FREQUENCY	RELATIVE FREQUENCY%	CUMULATIVE FREQUENCY%	CLASS MEAN
0 - 2	0	0.00	0.00	0.00
3 - 4	0	0.00	0.00	0.00
5 - 6	312	45.48	45.48	5.00
7 - 8	0	0.00	45.48	0.00
9 - 10	130	18.95	64.43	10.00
11 - 12	0	0.00	64.43	0.00
13 - 14	0	0.00	64.43	0.00
15 - 16	77	11.22	75.65	15.01
17 - 18	0	0.00	75.65	0.00
19 - 20	55	8.02	83.67	20.00
21 - 22	0	0.00	83.67	0.00
23 - 24	0	0.00	83.67	0.00
25 - 26	41	5.98	89.65	25.00
27 - 28	0	0.00	89.65	0.00
29 - 30	36	5.25	94.90	30.00
31 - 32	0	0.00	94.90	0.00
33 - 34	1	0.15	95.05	34.00
35 - 36	15	2.19	97.24	35.00
37 - 38	0	0.00	97.24	0.00
39 - 40	10	1.46	98.70	40.00
41 - 42	0	0.00	98.70	0.00
43 - 44	0	0.00	98.70	0.00
45 - 46	6	0.87	99.57	45.00
47 - 48	0	0.00	100.00	0.00

**For Statistics**

**For All Data**

Number of Samples: 686  
 Arithmetic Mean : 12.55  
 Standard Deviation : 9.850001  
 Minimum Value : 5  
 Maximum Value : 56  
 Range : 1 -- 500 PPM

686  
 N.A.  
 N.A.  
 1  
 56  
 1 --- 56 PPM

**File(s) used for Statistics:**

V239STAT

**ROSSBACHER LABORATORY LTD.**

2225 S. SPRINGER AVENUE  
BURNABY, B.C. V5B 3N1  
TEL : (604) 299 - 6910

**STATISTICAL REPORT**

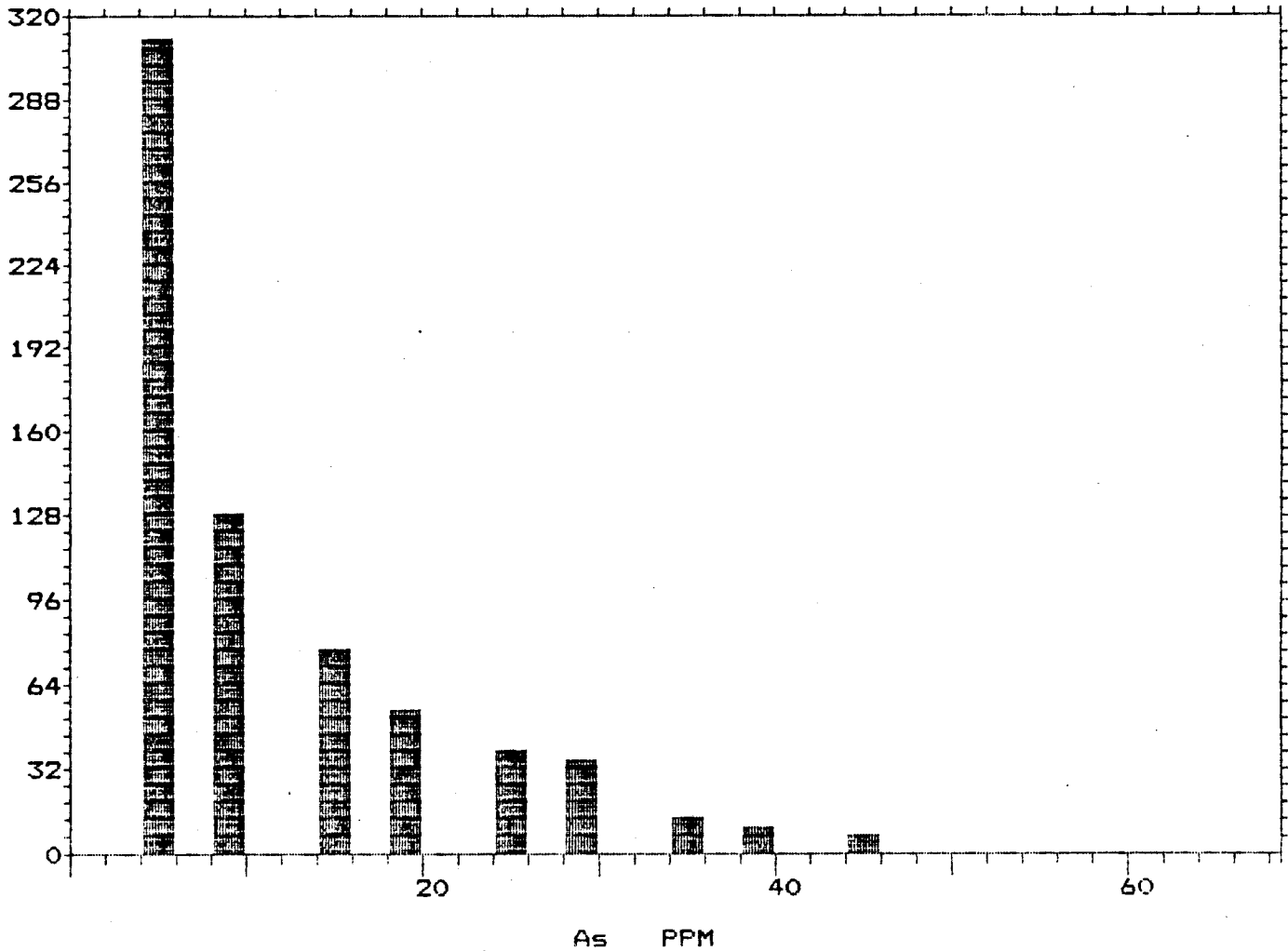
To: MFH CONSULTING LTD.  
301-409 GRANVILLE ST.  
VANCOUVER, B.C.

Project: V 239  
Date: 87-02-19

Element: As

Sample Type: Soil

Frequency Histogram



**ROSSBACHER LABORATORY LTD.**

2225 S. SPRINGER AVENUE  
BURNABY, B.C. V5B 3N1  
TEL : (604) 299 - 6910

**STATISTICAL REPORT**

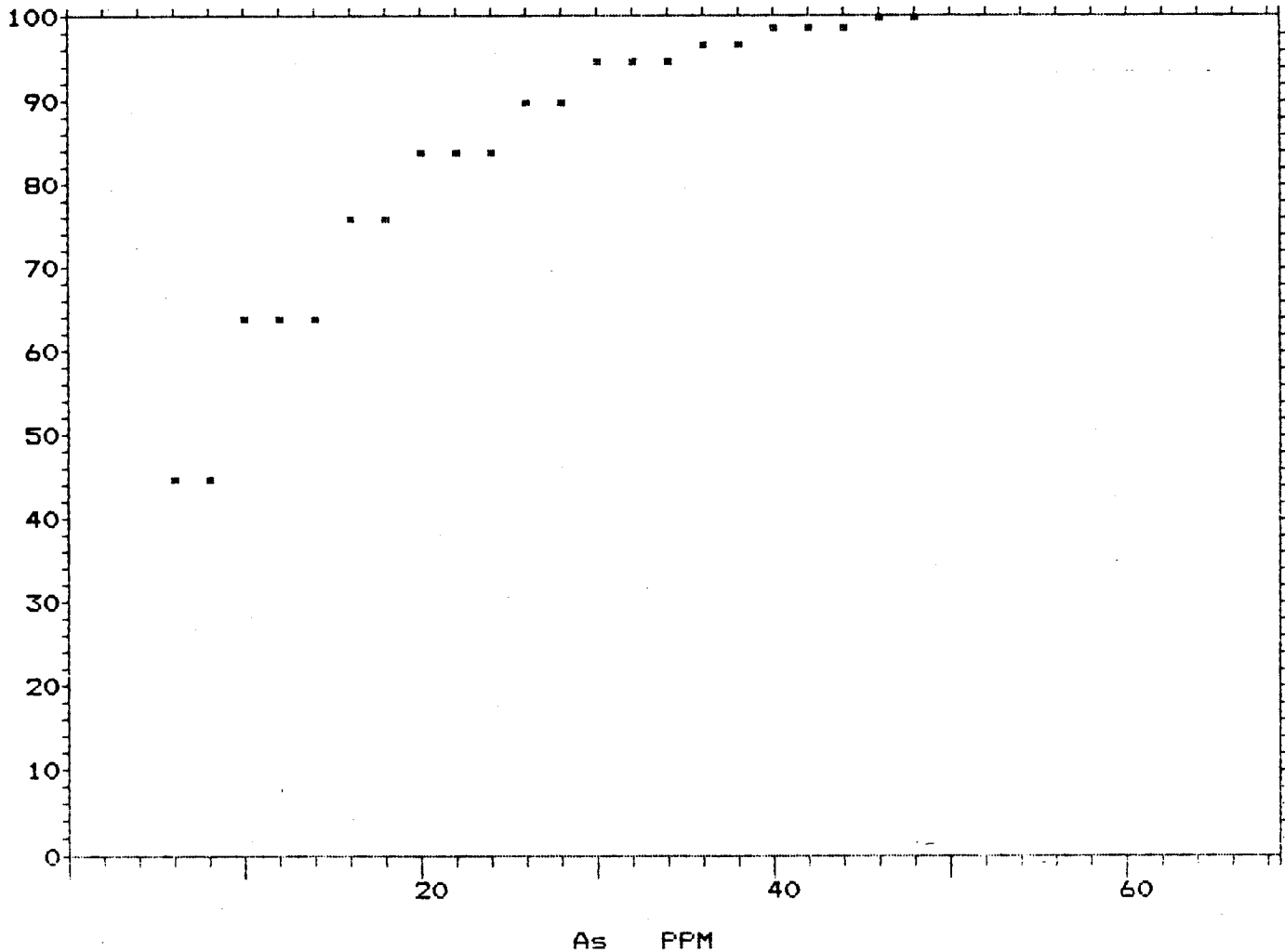
To: MPH CONSULTING LTD.  
301-409 GRANVILLE ST.  
VANCOUVER, B.C.

Project: V 239  
Date: 87-02-19

Element: As

Sample Type: Soil

Cumulative Frequency Histogram





**ROSSBACHER LABORATORY LTD.**

2225 S. SPRINGER AVENUE  
 BURNABY, B.C. V5B 3N1  
 TEL : (604) 299 - 6910

**STATISTICAL REPORT**

To: MPH CONSULTING LTD.  
 301-409 GRANVILLE ST.  
 VANCOUVER, B.C.

Project: V 239  
 Date: 87-02-19

Element: Cu

Sample Type: Soil

CLASS INTERVAL	CLASS FREQUENCY	RELATIVE FREQUENCY%	CUMULATIVE FREQUENCY%	CLASS MEAN
0 - 21	121	17.69	17.69	12.79
22 - 42	228	33.33	51.02	32.60
43 - 63	183	26.75	77.77	51.84
64 - 84	101	14.77	92.54	72.08
85 - 105	31	4.53	97.07	92.35
106 - 126	8	1.17	98.24	114.50
127 - 147	5	0.73	98.97	136.80
148 - 168	2	0.29	99.26	153.50
169 - 189	1	0.15	99.41	189.00
190 - 210	2	0.29	99.70	194.50
211 - 231	0	0.00	99.70	0.00
232 - 252	0	0.00	99.70	0.00
253 - 273	0	0.00	99.70	0.00
274 - 294	1	0.15	99.85	286.00
295 - 315	1	0.15	100.00	305.00
316 - 336	0	0.00	100.00	0.00
337 - 357	0	0.00	100.00	0.00
358 - 378	0	0.00	100.00	0.00
379 - 399	0	0.00	100.00	0.00
400 - 420	0	0.00	100.00	0.00
421 - 441	0	0.00	100.00	0.00
442 - 462	0	0.00	100.00	0.00
463 - 483	0	0.00	100.00	0.00
484 - 504	0	0.00	100.00	0.00

**For Statistics**

**For All Data**

Number of Samples:	684	686
Arithmetic Mean :	46.32	N.A.
Standard Deviation :	30.38	N.A.
Minimum Value :	1	1
Maximum Value :	305	868
Range :	1 -- 500 PPM	1 -- 868 PPM

File(s) used for Statistics:

V239STAT

**ROSSBACHER LABORATORY LTD.**

2225 S. SPRINGER AVENUE  
 BURNABY, B.C. V5B 3N1  
 TEL : (604) 299 - 6910

**STATISTICAL REPORT**

To: MPH CONSULTING LTD.  
 301-409 GRANVILLE ST.  
 VANCOUVER, B.C.

Project: V 239  
 Date: 87-02-19

Element: Cu

Sample Type: Soil

CLASS INTERVAL	CLASS FREQUENCY	RELATIVE FREQUENCY%	CUMULATIVE FREQUENCY%	CLASS MEAN
0 - 5	16	2.40	2.40	3.13
6 - 10	32	4.80	7.20	8.56
11 - 15	24	3.60	10.80	12.92
16 - 20	40	6.00	16.80	18.13
21 - 25	46	6.90	23.70	22.91
26 - 30	47	7.05	30.75	28.23
31 - 35	65	9.75	40.50	33.23
36 - 40	56	8.40	48.90	37.96
41 - 45	54	8.10	57.00	42.94
46 - 50	49	7.35	64.35	47.65
51 - 55	48	7.20	71.55	52.85
56 - 60	40	6.00	77.55	57.85
61 - 65	27	4.05	81.60	63.37
66 - 70	38	5.70	87.30	67.84
71 - 75	19	2.85	90.15	72.58
76 - 80	20	3.00	93.15	77.85
81 - 85	13	1.95	95.10	82.77
86 - 90	12	1.80	96.90	88.42
91 - 95	10	1.50	98.40	92.50
96 - 100	6	0.90	99.30	97.67
101 - 105	2	0.30	99.60	103.00
106 - 110	3	0.45	100.05	107.33
111 - 115	0	0.00	100.05	0.00
116 - 120	0	0.00	100.00	0.00

**For Statistics**

**For All Data**

Number of Samples:	667	686
Arithmetic Mean :	43.38	N.A.
Standard Deviation :	22.75	N.A.
Minimum Value :	1	1
Maximum Value :	110	868
Range :	1 -- 110 PPM	1 -- 868 PPM

File(s) used for Statistics:

V239STAT

**ROSSBACHER LABORATORY LTD.**

**STATISTICAL REPORT**

2225 S. SPRINGER AVENUE  
BURNABY, B.C. V5B 3N1  
TEL : (604) 299 - 6910

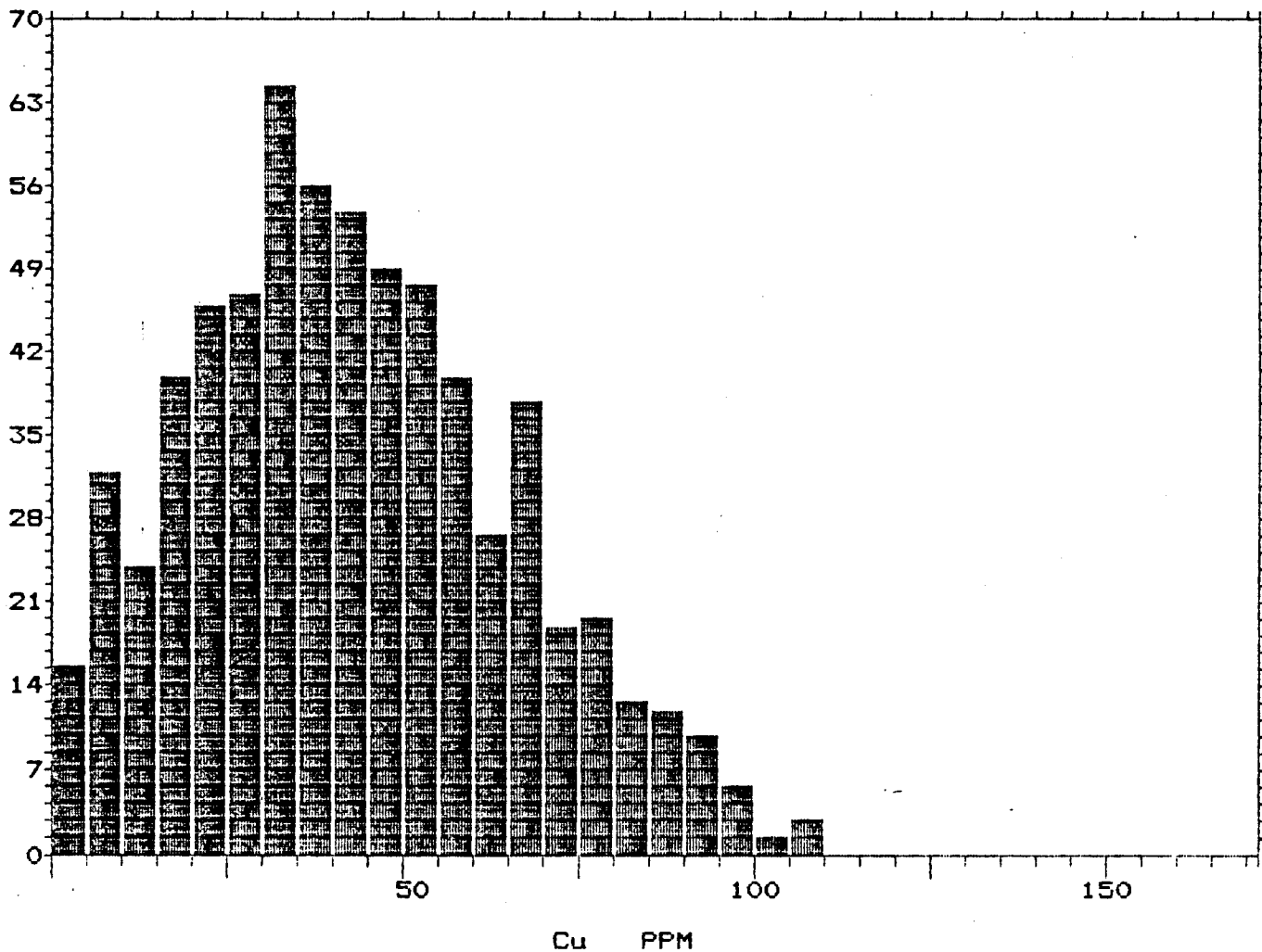
To: MPH CONSULTING LTD.  
301-409 GRANVILLE ST.  
VANCOUVER, B.C.

Project: V 239  
Date: 87-02-19

Element: Cu

Sample Type: Soil

Frequency Histogram



**ROSSBACHER LABORATORY LTD.**

**STATISTICAL REPORT**

2225 S. SPRINGER AVENUE  
BURNABY, B.C. V5B 3N1  
TEL : (604) 299 - 6910

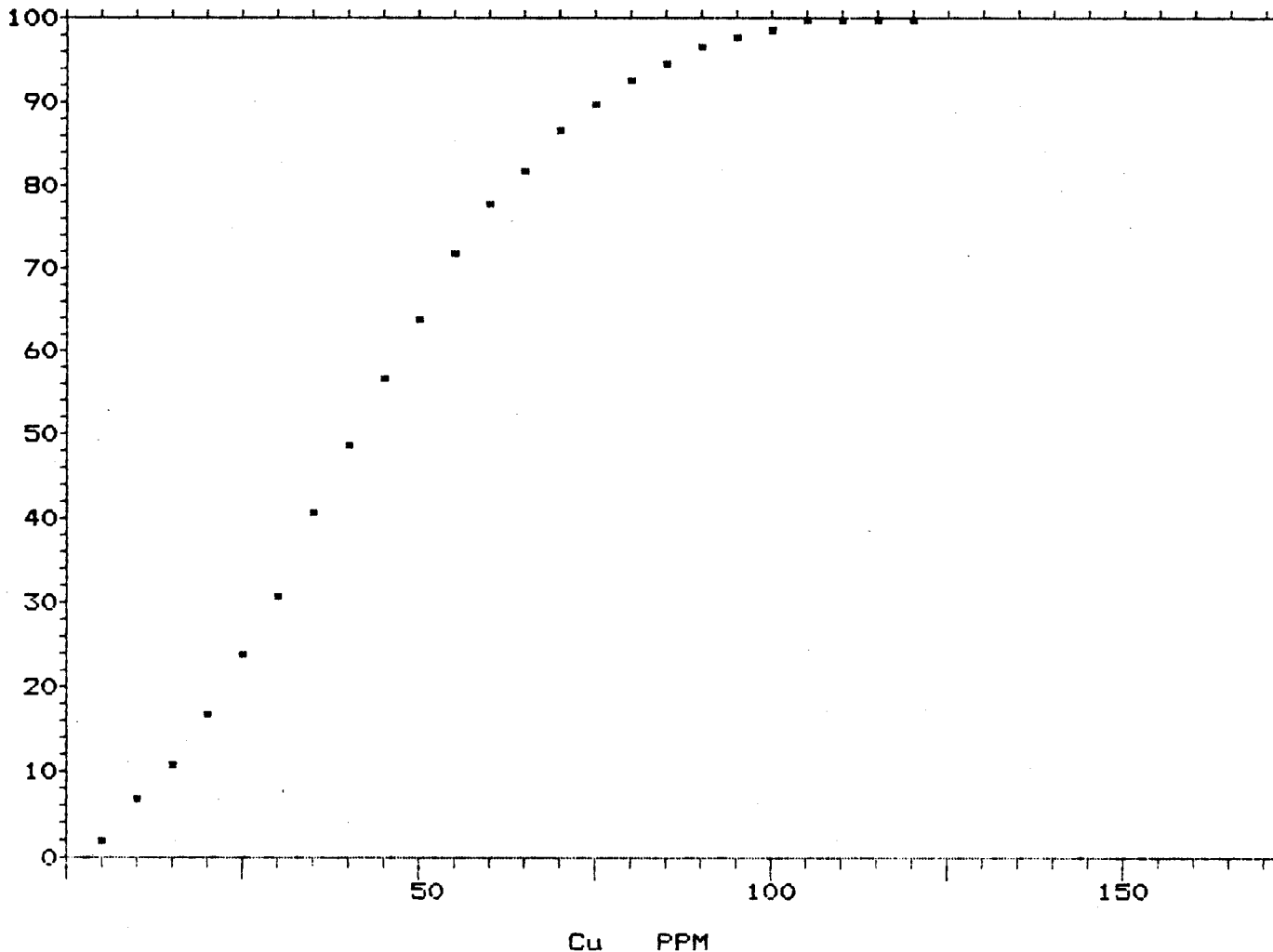
To: MPH CONSULTING LTD.  
301-409 GRANVILLE ST.  
VANCOUVER, B.C.

Project: V 239  
Date: 87-02-19

Element: Cu

Sample Type: Soil

Cumulative Frequency Histogram



# ROSSBACHER LABORATORY LTD.

## STATISTICAL REPORT

2225 S. SPRINGER AVENUE  
 BURNABY, B.C. V5B 3N1  
 TEL : (604) 299 - 6910

To: MPH CONSULTING LTD.  
 301-409 GRANVILLE ST.  
 VANCOUVER, B.C.

Project: V 239  
 Date: 87-02-19

Element: Pb

Sample Type: Soil

CLASS INTERVAL	CLASS FREQUENCY	RELATIVE FREQUENCY%	CUMULATIVE FREQUENCY%	CLASS MEAN
0 - 4	107	15.60	15.60	3.20
5 - 8	222	32.36	47.96	7.06
9 - 12	185	26.97	74.93	10.76
13 - 16	91	13.27	88.20	14.64
17 - 20	41	5.98	94.18	18.83
21 - 24	16	2.33	96.51	23.13
25 - 28	10	1.46	97.97	27.00
29 - 32	2	0.29	98.26	31.00
33 - 36	1	0.15	98.41	34.00
37 - 40	4	0.58	98.99	40.00
41 - 44	1	0.15	99.14	42.00
45 - 48	2	0.29	99.43	47.00
49 - 52	1	0.15	99.58	50.00
53 - 56	0	0.00	99.58	0.00
57 - 60	0	0.00	99.58	0.00
61 - 64	1	0.15	99.73	62.00
65 - 68	0	0.00	99.73	0.00
69 - 72	0	0.00	99.73	0.00
73 - 76	0	0.00	99.73	0.00
77 - 80	0	0.00	99.73	0.00
81 - 84	0	0.00	99.73	0.00
85 - 88	1	0.15	99.88	88.00
89 - 92	0	0.00	99.88	0.00
93 - 96	0	0.00	100.00	0.00

### For Statistics

### For All Data

Number of Samples:	686	686
Arithmetic Mean :	10.7	N.A.
Standard Deviation :	8.24	N.A.
Minimum Value :	2	2
Maximum Value :	106	106
Range :	1 -- 500 PPM	2 -- 106 PPM

### File(s) used for Statistics:

V239STAT

**ROSSBACHER LABORATORY LTD.**

2225 S. SPRINGER AVENUE  
 BURNABY, B.C. V5B 3N1  
 TEL : (604) 299 - 6910

**STATISTICAL REPORT**

Client: MPH CONSULTING LTD.  
 301-409 GRANVILLE ST.  
 VANCOUVER, B.C.

Project: V 239  
 Date: 87-02-19

Element: Pb

Sample Type: Soil

CLASS INTERVAL	CLASS FREQUENCY	RELATIVE FREQUENCY%	CUMULATIVE FREQUENCY%	CLASS MEAN
0 - 1	0	0.00	0.00	0.00
2 - 2	43	6.39	6.39	2.00
3 - 3	0	0.00	6.39	0.00
4 - 4	64	9.51	15.90	4.00
5 - 5	0	0.00	15.90	0.00
6 - 6	104	15.45	31.35	6.00
7 - 7	0	0.00	31.35	0.00
8 - 8	119	17.68	49.03	8.00
9 - 9	0	0.00	49.03	0.00
10 - 10	113	16.79	65.82	10.00
11 - 11	0	0.00	65.82	0.00
12 - 12	71	10.55	76.37	12.00
13 - 13	0	0.00	76.37	0.00
14 - 14	62	9.21	85.58	14.00
15 - 15	0	0.00	85.58	0.00
16 - 16	29	4.31	89.89	16.00
17 - 17	0	0.00	89.89	0.00
18 - 18	24	3.57	93.46	18.00
19 - 19	0	0.00	93.46	0.00
20 - 20	17	2.53	95.99	20.00
21 - 21	0	0.00	95.99	0.00
22 - 22	7	1.04	97.03	22.00
23 - 23	0	0.00	97.03	0.00
24 - 24	9	1.34	98.00	24.00

**For Statistics**

**For All Data**

Number of Samples:	673	686
Arithmetic Mean :	9.92	N.A.
Standard Deviation :	5.29	N.A.
Minimum Value :	2	2
Maximum Value :	30	106
Range :	1 -- 30 PPM	2 -- 106 PPM

**File(s) used for Statistics:**

V239STAT

**ROSSBACHER LABORATORY LTD.**

**STATISTICAL REPORT**

2225 S. SPRINGER AVENUE  
BURNABY, B.C. V5B 3N1  
TEL : (604) 299 - 6910

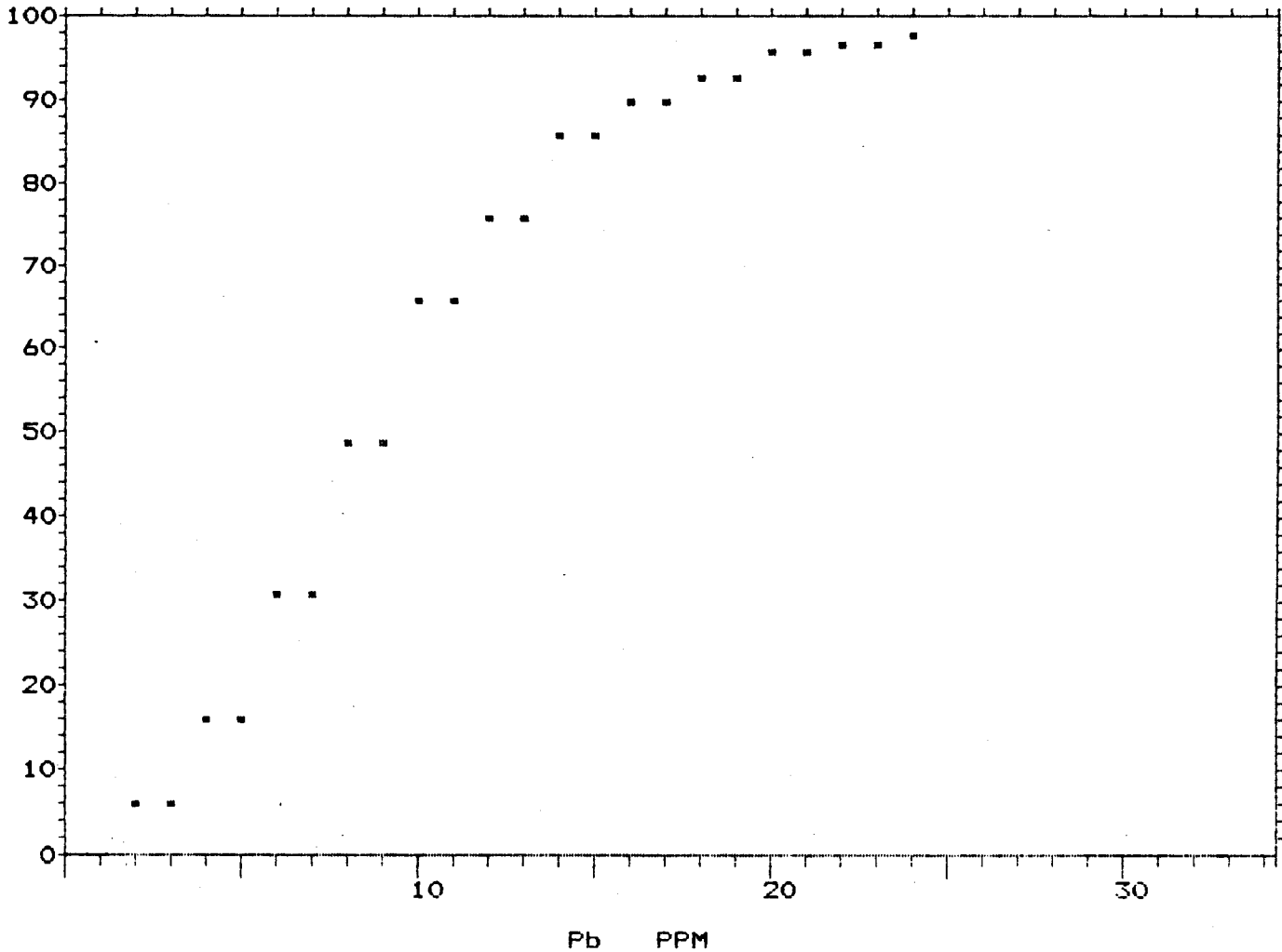
To: MPH CONSULTING LTD.  
301-409 GRANVILLE ST.  
VANCOUVER, B.C.

Project: V 239  
Date: 87-02-19

Element: Pb

Sample Type: Soil

Cumulative Frequency Histogram



**ROSSBACHER LABORATORY LTD.**

2225 S. SPRINGER AVENUE  
BURNABY, B.C. V5B 3N1  
TEL : (604) 299 - 6910

**STATISTICAL REPORT**

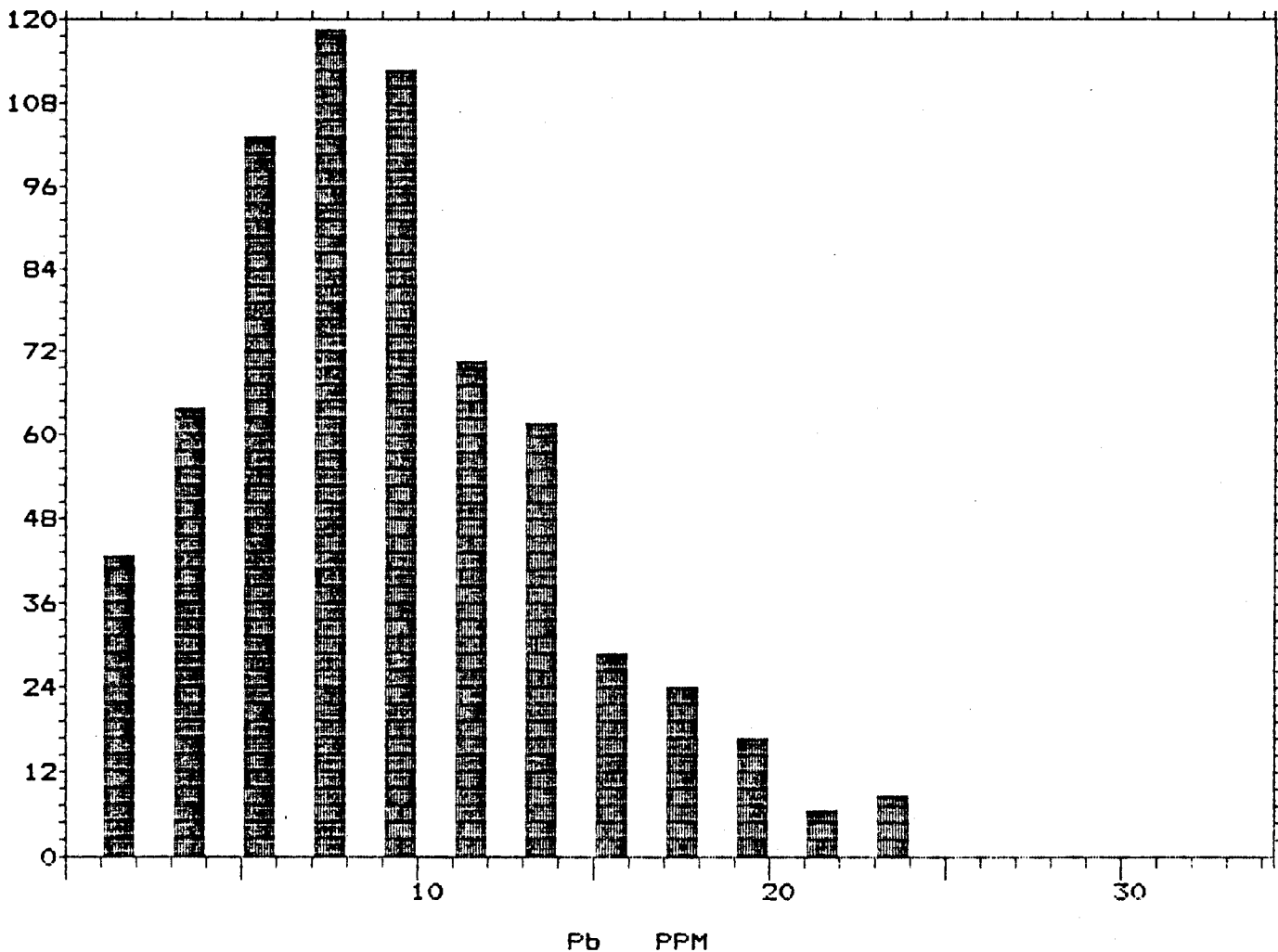
To: MPH CONSULTING LTD.  
301-409 GRANVILLE ST.  
VANCOUVER, B.C.

Project: V 239  
Date: 87-02-19

Element: Pb

Sample Type: Soil

Frequency Histogram





**ROSSBACHER LABORATORY LTD.**

2225 S. SPRINGER AVENUE  
 BURNABY, B.C. V5B 3N1  
 TEL : (604) 299 - 6910

**STATISTICAL REPORT**

To: MPH CONSULTING LTD.  
 301-409 GRANVILLE ST.  
 VANCOUVER, B.C.

Project: V 239  
 Date: 87-02-19

Element: Zn

Sample Type: Soil

CLASS INTERVAL	CLASS FREQUENCY	RELATIVE FREQUENCY%	CUMULATIVE FREQUENCY%	CLASS MEAN
0 - 9	3	0.44	0.44	6.00
10 - 18	5	0.73	1.17	14.80
19 - 27	6	0.87	2.04	24.67
28 - 36	24	3.50	5.54	32.67
37 - 45	28	4.08	9.62	41.50
46 - 54	54	7.87	17.49	51.33
55 - 63	63	9.18	26.67	59.56
64 - 72	89	12.97	39.64	67.73
73 - 81	78	11.37	51.01	76.72
82 - 90	90	13.12	64.13	86.09
91 - 99	90	13.12	77.25	94.67
100 - 108	64	9.33	86.58	104.00
109 - 117	39	5.69	92.27	112.72
118 - 126	24	3.50	95.77	122.58
127 - 135	12	1.75	97.52	129.50
136 - 144	7	1.02	98.54	139.00
145 - 153	3	0.44	98.98	148.67
154 - 162	3	0.44	99.42	160.00
163 - 171	2	0.29	99.71	168.00
172 - 180	0	0.00	99.71	0.00
181 - 189	0	0.00	99.71	0.00
190 - 198	0	0.00	99.71	0.00
199 - 207	1	0.15	99.86	202.00
208 - 216	1	0.15	100.00	212.00

**For Statistics**

**For All Data**

Number of Samples: 686  
 Arithmetic Mean : 80.45  
 Standard Deviation : 27.55  
 Minimum Value : 4  
 Maximum Value : 212  
 Range : 1 --- 750 PPM

686  
 N.A.  
 N.A.  
 2  
 212  
 2 --- 212 PPM

**File(s) used for Statistics:**

V239STAT

**ROSSBACHER LABORATORY LTD.**

2225 S. SPRINGER AVENUE  
 BURNABY, B.C. V5B 3N1  
 TEL : (604) 299 - 6910

**STATISTICAL REPORT**

To: MPH CONSULTING LTD.  
 301-409 GRANVILLE ST.  
 VANCOUVER, B.C.

Project: V 239  
 Date: 87-02-19

Element: Zn

Sample Type: Soil

CLASS INTERVAL	CLASS FREQUENCY	RELATIVE FREQUENCY%	CUMULATIVE FREQUENCY%	CLASS MEAN
0 - 6	2	0.30	0.30	5.00
7 - 12	3	0.44	0.74	10.00
13 - 18	3	0.44	1.18	17.33
19 - 24	4	0.59	1.77	24.00
25 - 30	8	1.19	2.96	28.50
31 - 36	18	2.67	5.63	33.78
37 - 42	18	2.67	8.30	40.11
43 - 48	21	3.11	11.41	45.71
49 - 54	43	6.37	17.78	52.37
55 - 60	39	5.78	23.56	58.05
61 - 66	61	9.04	32.60	63.74
67 - 72	52	7.70	40.30	69.77
73 - 78	65	9.63	49.93	76.06
79 - 84	46	6.81	56.74	82.22
85 - 90	57	8.44	65.18	87.82
91 - 96	73	10.81	75.99	93.89
97 - 102	45	6.67	82.66	99.91
103 - 108	36	5.33	87.99	106.28
109 - 114	32	4.74	92.73	112.00
115 - 120	13	1.93	94.66	117.23
121 - 126	18	2.67	97.33	123.89
127 - 132	10	1.48	98.81	128.60
133 - 138	5	0.74	99.55	135.60
139 - 144	3	0.44	100.00	139.67

**For Statistics**

**For All Data**

Number of Samples:	675	686
Arithmetic Mean :	79.06	N.A.
Standard Deviation :	25.39	N.A.
Minimum Value :	4	2
Maximum Value :	140	212
Range :	1 -- 140 PPM	2 -- 212 PPM

File(s) used for Statistics:

V239STAT

**ROSSBACHER LABORATORY LTD.**

2225 S. SPRINGER AVENUE  
BURNABY, B.C. V5B 3N1  
TEL : (604) 299 - 6910

**STATISTICAL REPORT**

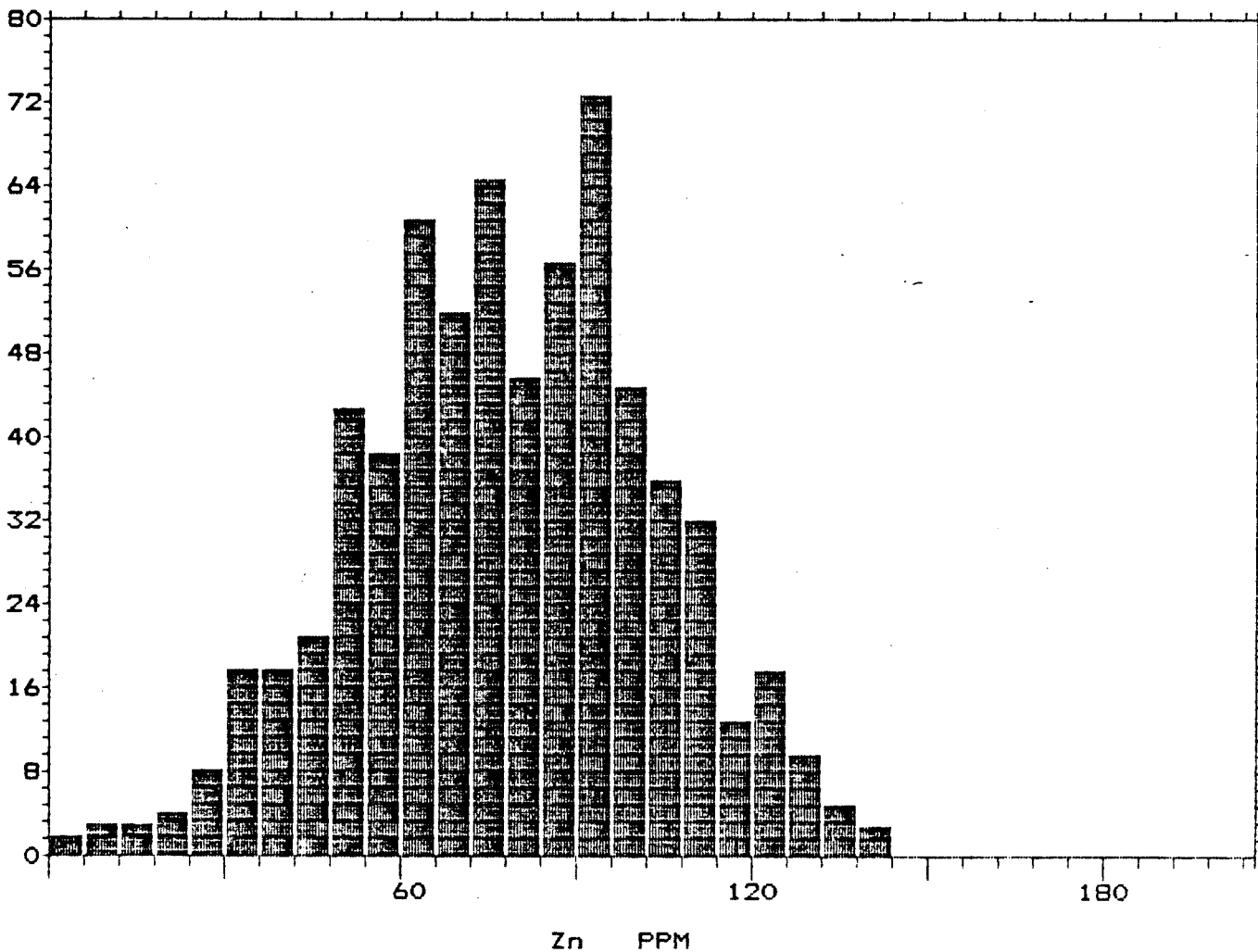
To: MPH CONSULTING LTD.  
301-409 GRANVILLE ST.  
VANCOUVER, B.C.

Project: V 239  
Date: 87-02-19

Element: Zn

Sample Type: Soil

Frequency Histogram



**ROSSBACHER LABORATORY LTD.**

**STATISTICAL REPORT**

2225 S. SPRINGER AVENUE  
BURNABY, B.C. V5B 3N1  
TEL : (604) 299 - 6910

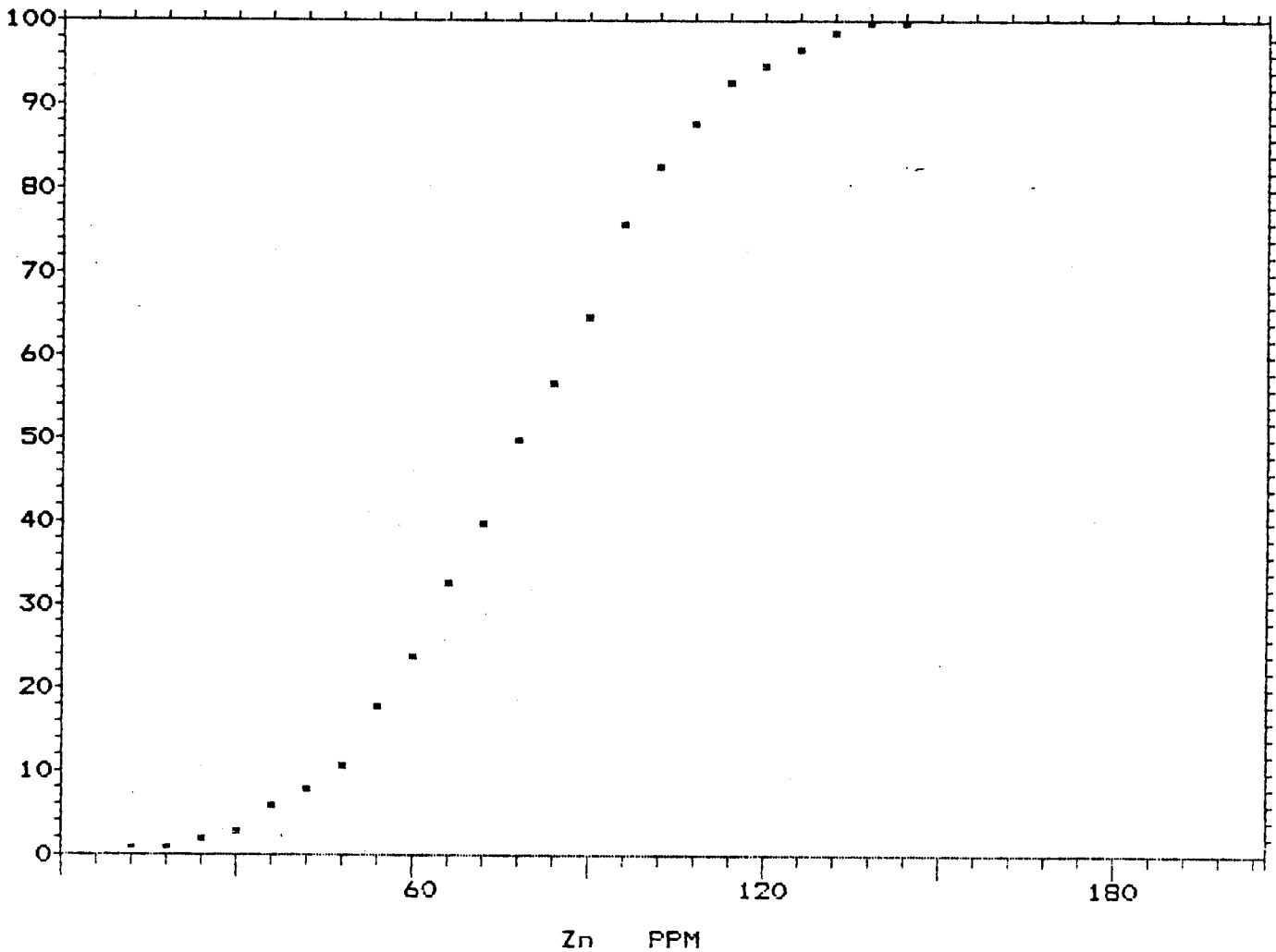
Client: MPH CONSULTING LTD.  
301-409 GRANVILLE ST.  
VANCOUVER, B.C.

Project: V 239  
Date: 87-02-19

Element: Zn

Sample Type: Soil

Cumulative Frequency Histogram





**APPENDIX V**  
**DIAMOND DRILL LOGS**

PROJECT: QEM V239-III

DIAMOND DRILL HOLE DATA

COMPANY: INTERNATIONAL GIERCKER

HOLE NO.	DRILLER	LATITUDE	DEPARTURE	ELEVATION (m)	HOLE LENGTH (m)	DIP	AZIMUTH	CASING DEPTH (m)	CORE SIZE	DATE STARTED	DATE COMPLETED	DOWN-HOLE SURVEY / REMARKS (LENGTH/DIP/AZI) TYPE: PAJARI
		(Old Grid)										
CH87-1	Roger's	3+50N	6+50W	7835	107.9	-43	080°30'	5.2	BQ	Jan. 18/87	Jan. 23/87	106.36 m / -40 / 081°
		(Old Grid)										
CH87-2	Roger's	4+96N	6+85W	7835	105.2	-45	046°	4.6	BQ	Jan. 24/87	Jan. 28/87	103.6 m / -42 / 045°
				Total	113.1							





## ABBREVIATIONS

MINERALS

AB	Albite
AS	Arsenopyrite
CB, CARB	Carbonate
CP	Chalcopyrite
CHL	Chlorite
CZ	Clinzoisite
DI	Diopside
EP	Epidote
FSP	Feldspar
GL	Galena
GT	Garnet
HM	Hematite
HB	Hornblende
LEUC	Leucoxene
MT	Magnetite
MC	Malachite
PLAG	Plagioclase
PY	Pyrite
PX	Pyroxene
PO	Pyrrhotite
QZ	Quartz
SER	Sericite
SL	Sphalerite

LITHOLOGY

AGGL	Agglomerate
ARG	Argillite
BAS	Basalt
CARB	Carbonate
CHT	Chert
CONG	Conglomerate
XLT	Crystal Tuff
DIAB	Diabase
DIOR	Diorite
FHP	Feldspar Hornblende Porphyry
FBX	Flow Breccia
GABB	Gabbro
HYAL	Hyaloclastite
LMST	Limestone
MAF	Mafic (Basalt, Andesite)
QFP	Quartz Feldspar Porphyry
SDST	Sandstone
STST	Siltstone
SKN	Skarn
VN, VNLT	Vein, Veinlet

COLOUR

BLK	Black
BLU	Blue
BRN, BN	Brown
GN	Green
GY	Gray
OL	Olive
RD	Red
WHT	White

TEXTURES AND ALTERATION

ALT'D	Altered
AMYG'L	Amygdaloidal
ANG	Angular
ANH	Anhedral
BDD	Bedded
BX'D, BX'N	Brecciated, Brecciation
CHTY	Cherty
CHL'C	Chloritic
XLLINE	Crystalline
DISS	Disseminated
EP'C	Epidotitic
EUH	Euhedral
FG	Fine Grained
MG	Medium Grained
CG	Coarse Grained
GRAD	Gradational
HM'C	Hematitic
LAM'D	Laminated
MSV	Massive
MED	Medium (Bedded), 2-10 mm
P	Porphyry, Phyric
PY'C	Pyritic
RDD	Rounded
SER'C	Sericitic
SIL, SIL'D	Siliceous, Silicified
SUB-ANG	Subangular
SBH	Subhedral
TK	Thick (Bedded), >10 mm
VES	Vesicular

GENERAL

ABDT	Abundant
AMYG	Amygdule
AV	Average
BDG	Bedding
BX	Breccia
BC	Broken Ground
CMT	Cement
CM	Chill Margin
XL	Crystal
CT	Contact
CA	Core Axis
Ø, DIA	Diameter
FRCR	Fracture
FRAG	Fragment
GO	Gouge
GND	Ground
GM	Groundmass
J	Joint
LAM	Laminated
MOD	Moderate
NIWK	Network
PHENO	Phenocryst
QCV	Quartz Carbonate Vein
QV	Quartz Vein
SHR	Shear
STG	Stringer
STR, STRLY	Strong, Strongly
SX	Sulphides
TR	Trace
W, w, w/	With

MPH CONSULTING LIMITED  
 CHEM PROJECT  
 Project No. V239-III  
 INTERNATIONAL CHEROKEE

Length (m): 107.9  
 Dip : -43°  
 Azimuth : 080.5°  
 Core Size : BQ  
 Casing : 5.2 m

Grid : A  
 Latitude : 3 + 50N  
 Departure : 6 + 50W  
 Collar elev.: 7835m  
 Remarks :

Drilled : 01/18-23/87  
 Contractor : Roger's  
 Logged by : G. Allen  
 Date logged : 01/20-25/87

Objective: To Test Postulated  
 Fault Zone and Mag Anomaly.

Hole No. **CH 87-1**  
 Hole Survey Type : Pajari  
 Depth 106.4m  
 Dip -40°  
 Azi 81°  
 (349°)

From - To meters	Lithology	Alteration	Mineralization/Sul- phides/Structure/ Core Condition	Sample No.	Interval m	lgth m	Au ppb - or ppb/oz/T	Ag ppm	Cu ppm	As ppm
0 - 5.9	NO RECOVERY	RECOVERIES	5.9-48							
5.9 - 14.0	CHERTY SEDIMENT	6.10-7.01 = 23%	B.C. - Abdt							
		7.01-7.62 = 61%	frcrs and go. sub							
		7.62-9.75 = 49%	parallel CA.							
	Dk gy to L gn-gy, v sil, massive to	9.75-10.67 = 93%		15061	10.90-12.50	1.60	5	0.1	42	2
	weakly banded v.f.g. sediment. Probably	10.67-12.50 = 63%	10.9-12.5 - Intensely							
	predominately Qz. Rdd, dk gn	12.5-13.72 = 94%	frcred core, subparallel	15062	12.50-13.50	1.00	5	0.4	38	2
	grains could be silicified fsp xl frags	13.72-15.24 = 88%	CA.							
		15.24-19.51 = 100%		15063	13.50-14.0	0.50	30	0.1	21	2
		19.51-20.42 = 51%	12.5-13.5 - 1/2 cm wuggy Qz							
		20.42-23.47 = 57%	stg subparallel CA. Tr Py.							
	10.6 - weakly banded - 20°-30° CA.	23.47-24.38 = 99%	Minor Qz flooded bx.							
	(bedding?) No traces of sulphides.									
	F.G. L bn mineral diss throughout and	6.10-23.47 = 72%								
	along frcrs. Sericite?									
14.0 - 14.74	SANDSTONE		14.0-14.74 - intensely							
	M gn gy to blu-gy mod soft, m.g. clastic.		frcred. Minor go along							
	V.f.g. blu-gy gn with:		frcrs 30° CA.							
	~40% f.g. to m.g. white, sub rdd fsp									
	xl frags. Tuff?									





From - To meters	Lithology	Alteration	Mineralization/Sul- phides/Structure/ Core Condition	Sample No.	Interval m	Lgth m	Au ppb - or ppb/oz/T	Ag ppm	Cu ppm	As ppm
14.74 - 74.67	CHERTY SEDIMENT		16.76-18.43 - Tr Py along frers.	15064	16.76-18.43	1.67	5	0.3	103	3
	Intensely frered to blocky. Mottled L bn gn gy to dk gn-gy. Generally v sil. Frers subparallel to 30° CA. Predom Qz and f.g. sericite. Weakly schistose in places, 20° CA.		18.43-20.42 - Tr diss PO. Minor carb stgs to 0.5cm Irregular.	15065	18.43-20.42	1.99	5	0.2	33	2
	Nbn mag.		RECOVERIES	15066	25.95-28.7	2.75	5	0.1	25	2
	14.9 - Banding (bedding?) ~45° CA.			15067	28.7-29.4	0.70	5	0.4	18	2
	20.4 - Banding, probably bedding, 20° CA.		25.9 - 31.24 = 70%	15068	29.4-31.53	2.13	5	0.3	24	2
	Dipping away from collar ~65°.		41.14 - 47.2 = 86%	15069	31.53-31.78	0.25	5	0.4	29	16
	19.2 - Banding (bedding?) ~65° CA.			15070	31.78-32.46	0.68	10	0.2	29	2
	22.7-2 cm bed at ~30° CA. C.G. clastic. Sub rdd to subang frags of v.f.g. bn sil material and to porphyritic frags to 1cm. Tuffaceous?		28.7-29.4 - L blu-gy sil band within gn to bn gy chty sed. Band ~1cm, 20° CA. 5-8% f.g. cubes Py - diss and frer related.							
	27 - Banded 20° CA.		31.53-31.78, 1 gy colour 2-3cm Qz-carb flooded zone 45° CA. 5% py over 2cm							
	29.6-30.1 - Extremely f.g., sil, Qz - sericite schist with 25% rdd, dk gn clasts (?) to 2mm. Could be altered plag xl frags or porphyroblasts? Foliated 20° CA.		31.78-32.46 - Sheared sub- parallel to CA.							
	36.9-40.0 - Dk gn-gy to black, v.f.g. cherty siltstone cut by a few carb stgs to 2mm, 60° CA. Tr CP.		39.64-39.99, 1cm carb stg zone subparallel CA.	15071	38.1-39.64	1.54	10	0.3	245	2
				15072	39.64-39.99	0.35	5	0.4	127	2



From - To meters	Lithology	Alteration	Mineralization/Sul- phides/Structure/ Core Condition	Sample No.	Interval m	lgth m	Au ppb - or ppb/oz/T	Ag ppm	Cu ppm	As ppm
14.74 - 74.67			42.74-42.89, Irregular	15073	39.99-41.14	1.15	60	0.3	52	2
(Cont'd.)	40.0 - v.f.g. gn gy to bn gy siliceous, chty sed.		L gn gy sil zone with ~2% Py	15074	41.14-42.74	1.60	5	0.2	15	2
	42.89-43.28 - Translucent blu-gn cherty sed.		46.99-47.24, wk carb filled bx.	15075	42.74-42.89	0.15	5	0.3	21	2
				15076	42.89-44.50	1.61	5	0.2	5	2
	47.24-47.8 - V.f.g. Qz sericite schist with ~20% dk gn rdd clasts (?) to 1mm.		47.44-48.82 - Carb stgs and crackle bx filling, Barren	15077	46.99-47.24	0.25	5	0.1	17	2
	47.8-50 - Gn gy to bn gy chty sed. Abdt hairline frcrs, tr py			15078	47.24-47.44	0.20	5	0.2	14	17
	52.12 - Banding (bedding?) 50° CA.		48.82-50.35 - carb stgs to 2mm. Vuggy 30-50° CA.	15079	47.44-48.82	1.38	5	0.2	25	6
				15080	48.82-50.35	1.53	5	0.3	46	3
	52.5 - Banding - probably bedding 45° CA.		51.8-53.3 - <1% Py on frcrs.	15081	50.35-51.8	1.45	100	0.3	46	2
	50-74.67 - Well bedded, gn-gy to bn gy, v.f.g. to mg cherty to moderately soft sediment. Ang to sub rdd clasts ≤ 1/2mm. Predom Qz - sericite. Weakly foliated parallel to bedding 20°-40° CA.			15082	51.8-53.3	1.50	5	0.1	33	2
			53.3-4.19 - 2% frcr py	15083	53.3-54.19	0.89	5	0.2	26	2
			58.83-62.48 = 12% recovery Mismatch.	15084	56.87-57.14	0.27	10	0.3	12	2
74.67 - 98.3	CHERT (IRON FORMATION)		71.8-74.67 - B.C.	15085	63.94-65.30	1.36	5	0.3	35	8
	Mottled dk blu-gy to lt gy translucent chert. Extremely siliceous, massive.		Sheared subparallel CA.	15086	65.30-65.96	0.66	5	0.3	34	27
	Abundant hairline frcrs and calcite stgs sub-parallel to 80° CA		74.98-77.72 - 60% recovery	15087	65.96-67.22	1.26	5	0.3	38	4
			84.52-84.7 - 10% py in frcrs							



From - To meters	Lithology	Alteration	Mineralization/Sul- phides/Structure/ Core Condition	Sample No.	Interval m	Lgth m	Au ppb - or ppb/oz/T	Ag ppm	Cu ppm	As ppm
74.67 - 98.3 (Cont'd.)	2-8% (av ~5%) v.f.g. diss and frcr Py. Weakly to moderately magnetic (probably due to f.g. diss magnetite). Tr CP. 88.65-89.8 - Sporadic jasperoid patches.		in chloritic zone 91.05 - 2cm white calcite 60° CA.	15088 15089 15090 15091 15092	71.63-72.97 72.97-73.46 73.46-74.75 74.75-75.7 75.7-78.22	1.34 0.49 1.29 0.95 2.52	5 5 5 5 130	0.3 0.4 0.3 0.4 0.2	21 4 9 37 62	3 2 12 2 20
98.3-100.28	CHERTY SEDIMENT M gy to L bn well bdd (~45°-50° CA) v.f.g. cherty sediment (tuff?)			15093 15094 15095	78.22-79.55 79.55-80.47 80.47-81.08	1.33 0.92 0.61	20 20 110	0.4 0.4 0.5	40 53 64	11 8 6
100.28-104.3	FELDSPAR PORPHYRY Ooagy shear zones ~70° CA on each selvage. Bn-gy v.f.g. sil, bn-gy gm with: ~ 20% stubby gn-gy anhedral plag (?) phenos to 3mm. ~5% vague chloritic patches; ~1-2% f.g. diss py			15096 15097 15098 15099 15100 15151	81.08-82.80 82.80-83.52 83.52-84.10 84.10-84.52 84.52-84.70 84.70-85.55	1.72 0.72 0.58 0.42 0.18 0.85	40 20 30 30 50 600	0.1 0.6 0.4 0.4 0.6 2.0	40 149 64 31 47 59	11 3 18 29 21 7
104.3-107.9	SILTSTONE TO SANDSTONE Dk gn-gy to bn gy, mod soft with cherty patches, well bedded ~30° CA, siltstone to f.g. sandstone.		104.2-104.3 - calcite bx  104.3-105.4 - sheared sub-parallel CA.	15152  15153 15154 15155 15156 15157 15158 15159	85.55-85.82  85.82-87.40 87.40-88.60 88.60-89.64 89.64-89.96 89.96-90.95 90.95-91.14 91.14-92.66	0.27  1.58 1.2 1.04 0.32 0.99 0.19 1.52	1130  130 70 70 100 100 20 40	0.9  0.3 0.2 0.4 0.5 1.3 0.7 0.6	116  38 38 36 31 249 304 96	27  19 43 40 19 15 18 4
107.9	END OF HOLE  SAMPLE 15151 - 600 ppb - Typical dark gray to light blue-gy translucent chert with: 3-5% Py in frcrs (F-CG), 2-3% v.f.g. diss Py. Weakly magnetic.									



From - To meters	Lithology	Alteration	Mineralization/Sul- phides/Structure/ Core Condition	Sample No.	Interval m	Lgth m	Au ppb - or ppb/oz/T	Ag ppm	Cu ppm	As ppm
	15152 - 1130 ppb. Similar to 15151.			15160	92.66-93.62	0.96	30	0.3	67	3
	Total Py 5 - 8%. Predom frcr set			15161	93.62-95.24	1.62	40	0.3	46	5
	70° - 80° CA.			15162	95.24-96.72	1.48	40	0.2	66	12
				15163	96.72-98.24	1.52	20	0.2	74	3
				15164	98.24-100.00	1.76	10	0.4	87	2
				15165	100.00-100.35	0.35	5	0.2	24	2
				15166	103.57-104.22	0.65	60	0.2	18	3
				15167	104.22-104.37	0.15	20	0.3	23	2
				15168	104.37-105.37	1.00	5	0.2	24	2



<b>MPH CONSULTING LIMITED</b>	Length (m): 105.15	Grid : Cham A	Drilled : 01/24-28/87	Objective: To Test Strong Mag	Hole No. <b>CI 87-2</b>
<b>CIEM PROJECT</b>	Dip : -45°	Latitude : 4 + 96N	Contractor : Roger's	+ Mod I.P. Anomaly on Line	Hole Survey Type : Pajari
<b>Project No. V239-III</b>	Azimuth : 046°	Departure : 6 + 85W	Logged by : G. Allen	5 + 00N	Depth Dip Azi
<b>INTERNATIONAL CHEROKEE</b>	Core Size : BQ	Collar elev.: ~835m	Date logged : 01/26-30/87		103.6 -43° 045°
	Casing : 4.57 m	Remarks :			

From - To meters	Lithology	Alteration	Mineralization/Sul- phides/Structure/ Core Condition	Sample No.	Interval m	lgth m	As ppb - or ppb/oz/T	Ag ppm	Cu ppm	As ppm
0 - 4.57	CASING		4.57-10.9 - B.C.							
4.57 - 12.55	DIABASE (?) Dk gn-gy v.f.g. xline massive, mod soft chloritic rock. Probably intrusive. Highly fractured subparallel to CA. Minor go.		12.55-17.8 - B.C.							
12.55 - 13.8	FELDSPAR PORPHYRY Gy bn sil crypto - crystalline gm with: 25% white to gn gy, stubby, subhedral feld phenos to 2mm. 5-10% chloritic patches after hb (?) to 2mm. Highly frer'd subparallel to 60° CA. Upper contact sharp at ~30° CA.									
13.8 - 16.76	ALTERATION - FAULT ZONE 13.8-15.2 - intense limonitic alt of feld p described in previous interval. Greenish feld phenocrysts in an orangey, v.f.g., limonitic, argillic gm. Minor, black, dendritic, manganese oxide.	13.8-16.76, Limonitic Alt.		15169	13.8-16.76	2.96	5	0.1	22	10



From - To meters	Lithology	Alteration	Mineralization/Sul- phides/Structure/ Core Condition	Sample No.	Interval m	Lgth m	Au ppb - or ppb/oz/T	Ag ppm	Cu ppm	As ppm
13.8 - 16.76 (Cont'd.)	15.2-16.76 - gouge. Angle to CA unclear, but could be subparallel.									
16.76 - 26.05	FELDSPAR PORPHYRY As 12.55-13.8. Few 0.5 cm calcite stgs 30° CA. Lower contact sharp 30° CA. No apparent chill margin.									
26.05 - 34.6	DIABASE Dk gn-gy f.g. xlline, chlorite rich diabase. Rare, light gy, sub hedral stubby feld phenocrysts to 1mm. Abdt 1-2mm carb. stgs 30° CA to 70° CA. Tr Py.									
64.92 - 66.73	HORNBLende-FELDSPAR PORPHYRY M blu-gy, v.f.g., sil gm. with: ~25% stubby, white, rdd to sub hedral plag phenocrysts to 3mm. (av 1-2mm). ~5-10% chloritic masses after Hb. Some lath - shaped Hb phenocrysts to 1mm. ≤ 1% f.g. diss Py. Upper contact in frcr zone. Lower contact sharp at 45°. No apparent chill margin.									



From - To meters	Lithology	Alteration	Mineralization/Sul- phides/Structure/ Core Condition	No.	Sample Interval m	Lgth m	Au ppb - or ppb/oz/T	Ag ppm	Cu ppm	As ppm
66.73 - 68.50	CHERTY SEDIMENT M gy to gy-bn fairly well bedded 45° CA. Some beds cherty, others appear to be f.g. clastics. Predominately gy with minor sericite.									
68.50 - 85.70	ARGILLITE M - dk blue-gy to blk, mod soft, well bedded argillite. Some beds to 10cm with 30% sub rdd, L gy chiastolite porphyroblasts to lmm. 72.5 - Bedding 60° CA. Py <1-2% as very thin, continuous films and circular patches with radiating crystals (Marcasite?) on fracture surfaces. Probably the cause of the I.P. anomaly. 73.23-73.40 - Sll L gn gy bed at 60° CA with 5% calcite frcr filling + 5% Po in masses to 0.5cm. Tr CP 76.6-77.19 - L gy to bn gy siliceous stst.  78.2-78.76 - L gn sil'd zone 80.24 - Bedding 85° CA. 82.7 - Load casts suggest tops up - hole. Bedding at ~ 85° CA, suggesting a dip of 50° towards collar.	78.2-78.76, Silicified	73.23-73.40- 5% Po, Tr CP 75.75-75.90 - 1cm carb stg 30° CA. 5% Po 177.6 - 2cm calcite vein 50° CA. Barren. 78.2-78.76 - silicified zone with 2-3% Po. 79.28-79.70 - Stg - frcr zone. Carb stgs ~20° CA. Barren.	15172 15173 15174 15175 15176 15177	73.23-73.40 75.75-75.90 77.54-77.72 78.2-78.76 79.28-79.70 79.70-81.38	0.17 0.15 0.18 0.56 0.42 1.68	5 5 5 400/ 5 5	0.1 0.2 0.2 0.1 0.1 0.1	65 103 74 48 95 54	2 4 2 4 2 5



From - To meters	Lithology	Alteration	Mineralization/Sul- phides/Structure/ Core Condition	No.	Sample Interval m	Lgth m	Au ppb - or ppb/oz/T	Ag ppm	Cu ppm	As ppm
68.50 - 85.70 (Cont'd.)			85.64-85.68 - 4cm Qz vein 80° CA. 2% Py.	15178	81.38-82.60	1.22	5	0.2	63	3
85.70-86.35	HORNBLende PORPHYRY - DIABASE f.g. m gn-gy, xlline chloritic gm with: ~15% euhedral, lath - shaped Hb phenocrysts to 4mm (av ~2mm) ~10% 1-2mm rdd masses of epidote  10cm chill margin at lower contact. Sharp at 45° CA.		94.40-94.80 - Shear zone 20° to subparallel CA. Minor Carb flooding, Py ~3%. 95.50-95.66 - Carb stg zone 30° CA.  93.3-93.6 - Carb flooded fracture zone, Py ~2%.	15179 15180 15181 15182 15183	85.62-85.74 94.40-94.80 95.50-95.66 97.30-97.60 97.60-98.45	0.12 0.40 0.16 0.30 0.85	5 5 5 5 5	0.2 0.1 0.1 0.1 0.1	162 78 69 72 90	2 4 2 8 5
86.35-105.15	ARGILLITE As 68.5-85.7, Py ~2% along frcrs. 94 - Bedded 60° CA.  99.66-102.9 - Broken Core. Fracturing subparallel to CA.  102.67-102.61 - FAULT ZONE. 2cm + go zone ~50° CA with associated 5cm carb vein - bx with 5% Py.		98.1-98.3, Py - 10% in masses to 1cm. Frcr control. 99.66-102.9 - B.C. 99.66-99.89 - Wk carb flooded frcr zone 45°-60° CA. Py to 5% in 0.5 cm masses along frcrs. 99.89-102.67 - B.C. frcrs subparallel CA. Py to 2% along frcrs. 102.67-102.81 - FAULT ZONE Carb vein - bx to 5cm with with 5% Py.	15184 15185 15186 15187 15188 15189	99.66-99.89 99.89-102.67 102.67-102.81 102.81-103.32 103.32-103.46 103.46-104.39	0.23 2.78 0.14 0.51 0.14 0.93	5 5 5 5 5 5	0.1 0.1 0.1 0.1 0.2 0.1	122 66 77 98 69 78	4 6 2 3 3 4





From - To meters	Lithology	Alteration	Mineralization/Sul- phides/Structure/ Core Condition	No.	Sample Interval m	Lgth m	Au ppb - or ppb/oz/T	Ag ppm	Cu ppm	As ppm
86.35-105.15 (Cont'd.)			103.32-103.46 - 3mm carb stg 40° CA with 10% Py.							
	105.5	END OF HOLE	103.46-104.39 - Minor carb flooding of frers with ~3-4% Py over interval.							





**APPENDIX VI**  
**CONVERSION FACTORS FOR METRIC UNITS**



### Conversion Factors for Metric Units

1 inch	= 25.4 millimetres	(mm)
	or 2.54 centimetres	(cm)
1 cm	= 0.394 inch	
1 foot	= 0.3048 metre	(m)
1 m	= 3.281 feet	
1 mile	= 1.609 kilometres	(km)
1 km	= 0.621 mile	
1 acre	= 0.4047 hectares	(ha)
1 ha	= 2.471 acres	
1 ha	= 100 m x 100 m = 10,000 m <sup>2</sup>	
1 km <sup>2</sup>	= 100 ha	
1 troy ounce	= 31.103 grams	(g)
1 g	= 0.032 troy oz	
1 pound (lb)	= 0.454 kilogram	(kg)
1 kg	= 2.20 lb	
1 ton (2000 lb)	= 0.907 tonne	(t)
1 tonne	= 1.102 ton = 2205 lb	
1 troy ounce/ton	= 34.286 g/t	
1 g/tonne	= 0.0292 troy oz/ton	
1 g/t	= 1 part per million	(ppm)
1 ppm	= 1000 parts per billion	(ppb)
10,000 g/t	= 1%	



**APPENDIX VII**

**ABBREVIATIONS USED IN ROCK SAMPLE DESCRIPTIONS  
AND DIAMOND DRILL LOGS**



ABBREVIATIONS

MINERALS

AB	Albite
AS	Arsenopyrite
CB, CARB	Carbonate
CP	Chalcopyrite
CHL	Chlorite
CZ	Clinzoisite
DI	Diopside
EP	Epidote
FSP	Feldspar
GL	Galena
GT	Garnet
HM	Hematite
HB	Hornblende
LEUC	Leucoxene
MT	Magnetite
MC	Malachite
PLAG	Plagioclase
PY	Pyrite
PX	Pyroxene
PO	Pyrrhotite
QZ	Quartz
SER	Sericite
SL	Sphalerite

LITHOLOGY

AGGL	Agglomerate
ARG	Argillite
BAS	Basalt
CARB	Carbonate
CHT	Chert
CONG	Conglomerate
XLT	Crystal Tuff
DIAB	Diabase
DIOR	Diorite
FHP	Feldspar Hornblende Porphyry
FBX	Flow Breccia
GABB	Gabbro
HYAL	Hyaloclastite
LMST	Limestone
MAF	Mafic (Basalt, Andesite)
QFP	Quartz Feldspar Porphyry
SDST	Sandstone
STST	Siltstone
SKN	Skarn
VN, VNLT	Vein, Veinlet

COLOUR

BLK	Black
BLU	Blue
BRN, BN	Brown
GN	Green
GY	Gray
OL	Olive
RD	Red
WHT	White

TEXTURES AND ALTERATION

ALT'D	Altered
AMYG'L	Amygdaloidal
ANG	Angular
ANH	Anhedral
BDD	Bedded
BX'D, BX'N	Brecciated, Brecciation
CHTY	Cherty
CHL'C	Chloritic
XLLINE	Crystalline
DISS	Disseminated
EP'C	Epidotitic
EUH	Euhedral
FG	Fine Grained
MG	Medium Grained
CG	Coarse Grained
GRAD	Gradational
HM'C	Hematitic
LAM'D	Laminated
MSV	Massive
MED	Medium (Bedded), 2-10 mm
P	Porphyry, Phyrlic
PY'C	Pyritic
RDD	Rounded
SER'C	Sericitic
SIL, SIL'D	Siliceous, Silicified
SUB-ANG	Subangular
SBH	Subhedral
TK	Thick (Bedded), >10 mm
VES	Vesicular

GENERAL

ABDT	Abundant
AMYG	Amygdule
AV	Average
BDG	Bedding
BX	Breccia
BC	Broken Ground
CMT	Cement
CM	Chill Margin
XL	Crystal
CT	Contact
CA	Core Axis
Ø, DIA	Diameter
FRCR	Fracture
FRAG	Fragment
GO	Gouge
GND	Ground
GM	Groundmass
J	Joint
LAM	Laminated
MOD	Moderate
NIWK	Network
PHENO	Phenocryst
QCV	Quartz Carbonate Vein
QV	Quartz Vein
SHR	Shear
STG	Stringer
STR, STRLY	Strong, Strongly
SX	Sulphides
TR	Trace
W, W̄, W/	With