

ARIS SUMMARY SHEET

District Geologist, Kamloops

Off Confidential: 89.03.29

ASSESSMENT REPORT 17648

MINING DIVISION: Osoyoos

PROPERTY: Cliff  
LOCATION: LAT 49 16 00 LONG 119 52 00  
UTM 11 5460836 291452  
NTS 082E05W  
CLAIM(S): Cliff, Cliff 2, Great Eastern  
OPERATOR(S): Goldcliff Res.  
AUTHOR(S): Crooker, G.F.  
REPORT YEAR: 1988, 82 Pages

COMMODITIES

SEARCHED FOR: Gold, Silver, Copper

GEOLOGICAL

SUMMARY:

The property is located within the Intermontane belt of British Columbia. An ultramafic stock of Jurassic age has intruded marine sedimentary and volcanic rocks of the Triassic Apex Mountain Group. Gold mineralization is associated with brecciation quartz stockworks and carbonatization.

WORK

DONE:

Geological, Geochemical, Geophysical  
EMGR 19.0 km; VLF  
Map(s) - 2; Scale(s) - 1:2500  
GEOL 70.0 ha  
LINE 6.0 km  
MAGG 4.0 km  
ROCK 7 sample(s) ;ME  
SOIL 209 sample(s) ;ME

MINFILE:

082ESW017

0627

RD

FILE NO:
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GEOLOGICAL, GEOCHEMICAL and ~~GEOPHYSICAL~~ REPORT

on the

CLIFF, CLIFF 1 to 4 and GREAT EASTERN CLAIMS .

Hedley-Olalla Area  
Osoyoos Mining Division

82E-4W, 5W  
(49°16' N. Lat., 119°51' W. Long.)

for

GOLDCLIFF RESOURCES CORPORATION  
6976 Laburnum Street  
Vancouver, B.C.  
V6P 5M9  
(Operator)

GRANT F. CROOKER  
(OWNER)

by

GRANT F. CROOKER, B.Sc., F.G.A.C.  
Geologist

17,648

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

FILMED

May, 1988

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## SUMMARY AND RECOMMENDATIONS

The property is located five kilometers north of Keremeos at Olalla B.C.. GoldCliff Resources Corporation holds five mineral claims and one reverted Crown Grant with a total of 97 units.

The area has been the scene of exploration for base and precious metals since the late 1800's. Approximately 20 kilometers northwest of the property at Hedley, Mascot gold Mines Limited resumed production in the spring of 1987 at the Nickel Plate Mine. Ore reserves are in the order of 8,300,000 tons grading 0.14 ounces per ton gold with a milling rate of 2700 tons per day. Mining is by open pit methods.

A number of VLF EM conductors, gold and multi-element soil geochemical anomalies and favourable geological structures were outlined on the property by the fall 1986 program. The program outlined by this report was carried out to complete the surveys on several sections of the property not covered in 1986.

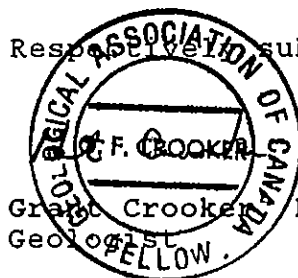
The surveys covered by this report indicated a number of VLF EM conductors and gold and multi-element soil geochemical anomalies on the property.

Recommendations are to continue exploration on the property.

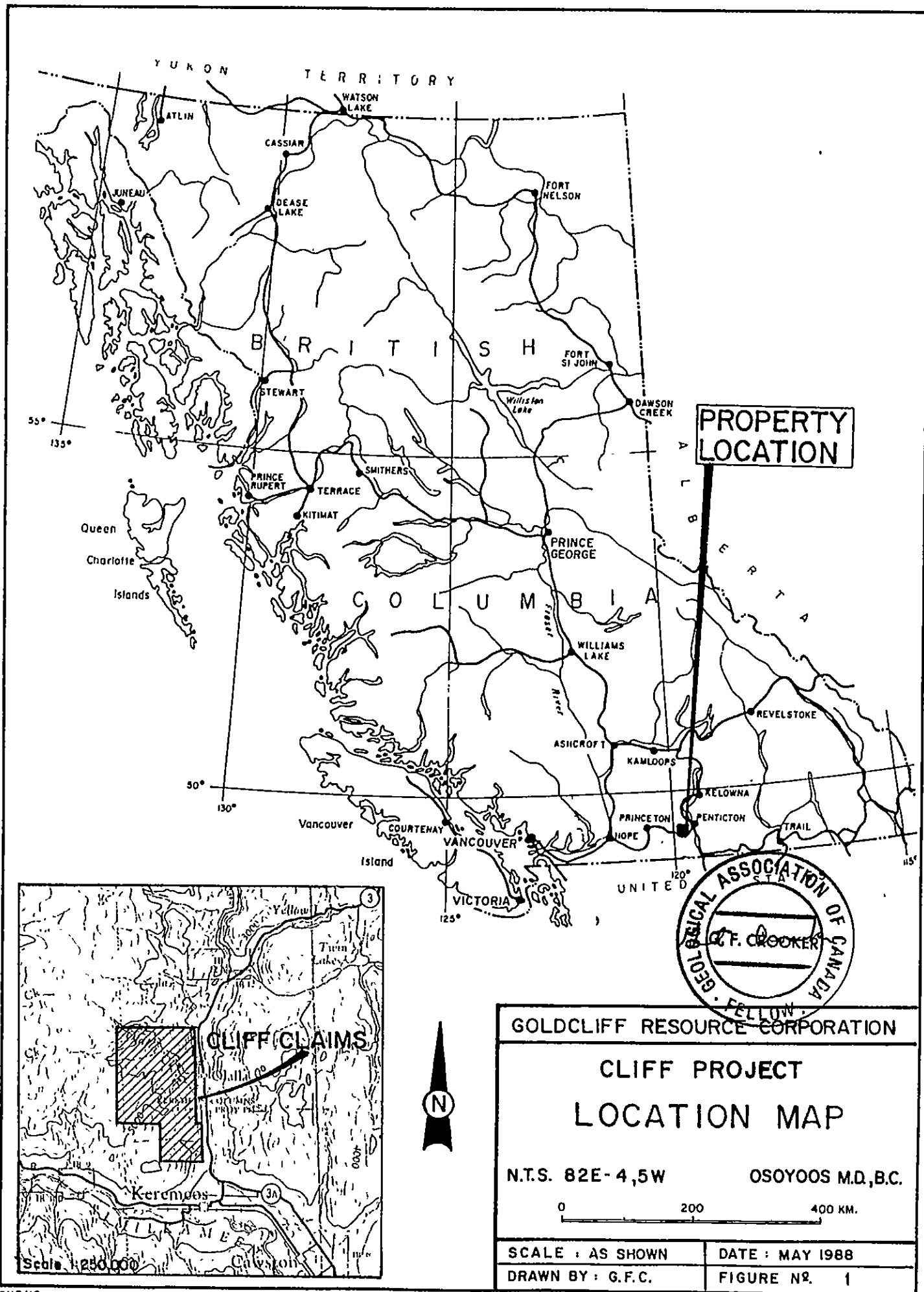
1) Follow-up prospecting and geological mapping should be carried out over favourable geological structures, gold and multi-element soil geochemical anomalies and coincidental VLF EM conductors outlined by the 1986 and 1988 programs.

2) The main target areas outlined also require investigation by I.P. surveying and trenching.

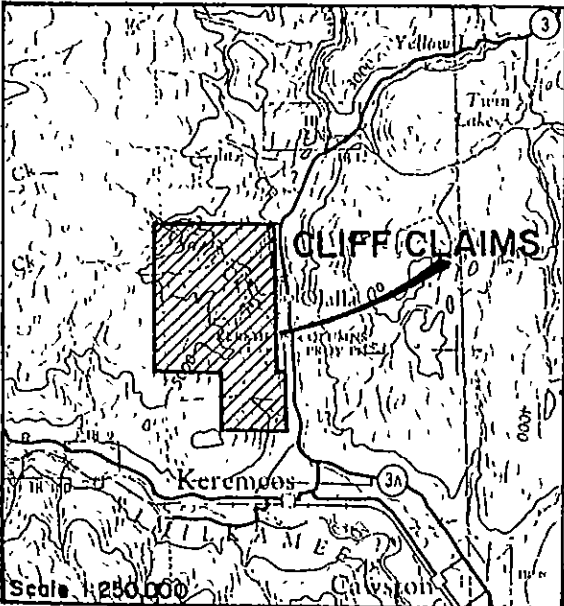
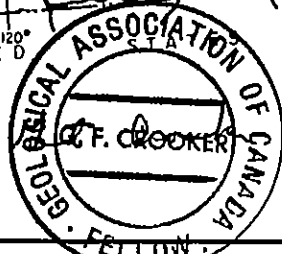
Respectfully submitted,



G. F. Crooker B.Sc., F.G.A.C.  
Geologist



**PROPERTY  
LOCATION**



GOLDCLIFF RESOURCE CORPORATION

**CLIFF PROJECT  
LOCATION MAP**

N.T.S. 82E-4,5W      OSOYOOS M.D., B.C.

0      200      400 KM.

SCALE : AS SHOWN	DATE : MAY 1988
DRAWN BY : G.F.C.	FIGURE NO. 1

## 1.0 INTRODUCTION

### 1.1 GENERAL

Field work was carried out on the Cliff Property from April 6th through 9th 1987, and March 17 through 27th 1988, by Grant Crooker, Geologist, and Frank Haidlauf and Lee Mollison, Field Assistants.

A grid was established over the Great Eastern Claim, and soil sampling, magnetometer and VLF EM surveying, geological mapping and prospecting were carried over the grid. Two lines were ran on the Cliff 2 Claim, and soil sampling, prospecting and geologically mapping were carried out. The VLF EM survey was also completed on the Cliff Claim

### 1.2 LOCATION AND ACCESS

The property (Figure 1) is located 5 kilometers north of Keremeos, near Olalla in southern British Columbia. The property lies between 49°13'15" and 49°17'15" north latitude and 119°49'30" and 119°53'15" west longitude (NTS 82E-4W, 5W).

Access to the property is via Highway 3A which passes immediately east of the property. A two wheel drive road along Olalla Creek gives access to the Cliff 2 and Cliff 3 Claims, while an old four wheel drive mining road gives access to the Cliff and Great Eastern Claims. A man made trail leads to the western section of the Cliff Claim and the Cliff 4 Claim.

### 1.3 PHYSIOGRAPHY

The property is located in the Okanagan Highlands of southern British Columbia. Elevation varies from 550 to 1830 meters above sea level. Topography is moderate to steep, with a number of precipitous cliffs.

Olalla and Shuttle Creeks flow through the property and have water all year long. Several springs also occur on the property.

Vegetation varies from open range land to a forest cover of pine and fir trees. Several sections have heavy deadfall.

#### 1.4 PROPERTY AND CLAIM STATUS

The Cliff, Cliff 1 to 4 and Great Eastern Claims (Figure 2) are owned by Grant Crooker of Keremeos, B.C., and are under option to and operated by GoldCliff Resources Corporation, 6976 Laburnum Street, Vancouver B.C., V6P 5M9. The property consists of six claims covering 97 units, although there is some overstaking of previous claims in the immediate vicinity of Olalla.

The claims are located in the Osoyoos Mining Division.

Claim	Units	Mining Division	Record No.	Expiry Date*
Cliff	20	Osoyoos	2399(4)	April 1, 1997
Cliff 1	16	Osoyoos	2529(10)	Oct. 30, 1997
Cliff 2	20	Osoyoos	2586(3)	Mar. 30, 1990
Cliff 3	20	Osoyoos	2587(3)	Mar. 30, 1990
Cliff 4	20	Osoyoos	2581(3)	Mar. 30, 1990
Great Eastern	1	Osoyoos	411(6)	June 1, 1997

\* Upon acceptance of this report.

#### 1.5 AREA AND PROPERTY HISTORY

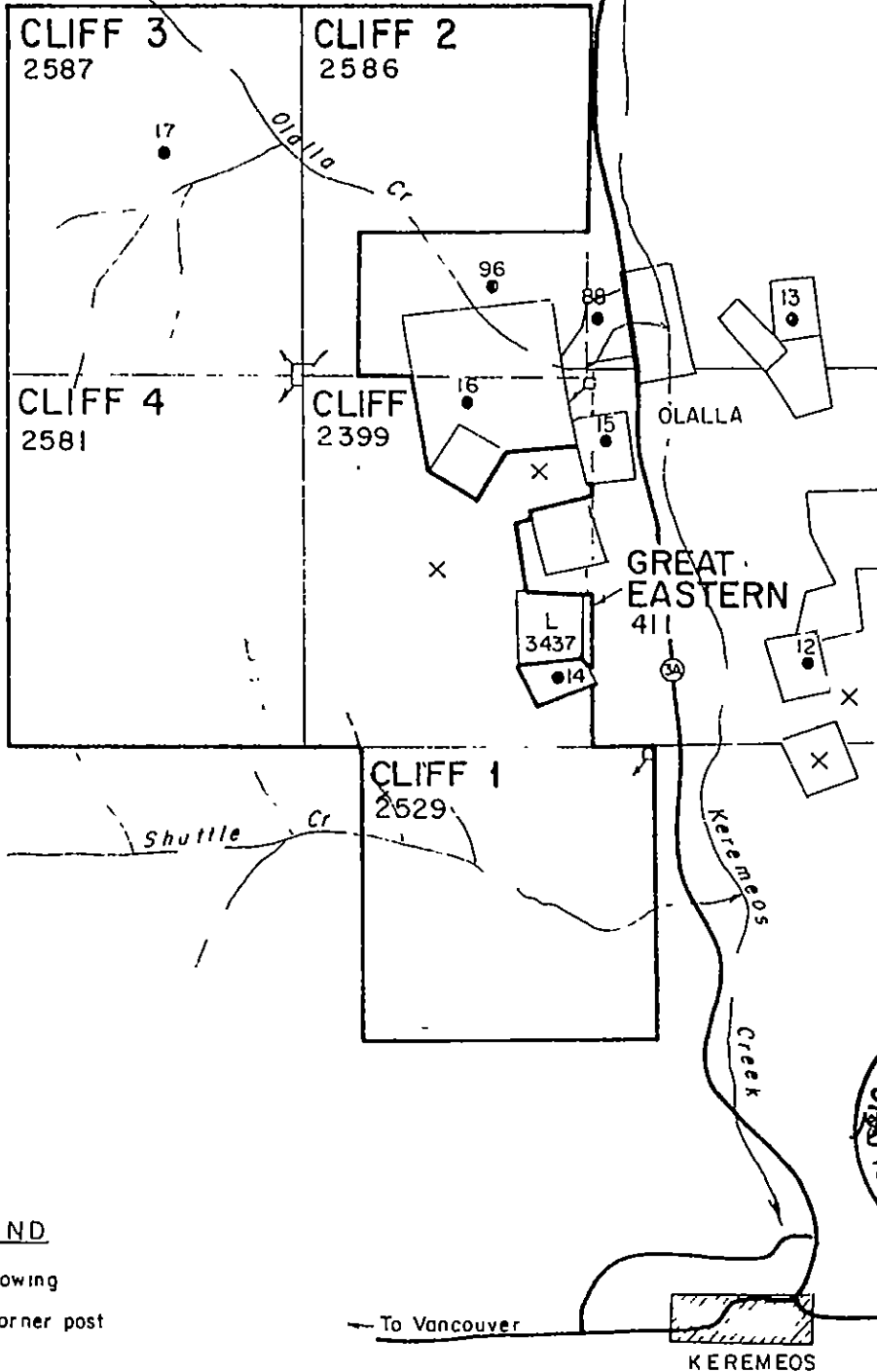
The property is located in the Olalla-Hedley Gold Camp in southern British Columbia. Mining activity has been carried out in this area since the 1880's. The property is located 20 kilometers southeast of Hedley, where Mascot Gold Mines Limited resumed production at the Nickel Plate Mine in the spring of 1987. Current ore reserves at Mascot Gold Mines are in the order of 8,300,000 tons of ore grading 0.14 ounces per ton gold and containing 1,000,000 ounces of recoverable gold. Additional ore reserves are being added on a continuing basis as exploration continues. Mining is by open pit methods.

A number of mining properties have been explored in the Olalla area since the 1880's. These include the Bullion, Dolphin, Golconda, Something Good and Shepard-Sunrise. Exploration has been oriented towards copper, molybdenum, silver and gold.

On the Something Good Property (Lot 1451, Minfile 82E-SW-014, figure 2) immediately east of the Cliff Claim, a carbonate shear and breccia zone occurs in argillaceous and cherty sediments near the contact of a large pyroxenite body. Calcite, quartz, and pyrite occur within the zone.

Three adits were driven on the zone in 1936-1937. The No. 1 adit (2541 feet ASL) was driven for 350 feet, and followed the footwall of the shear zone. The first 110 feet of the adit followed a well defined breccia zone. Samples taken by the resident geologist for the B.C. Dept. of mines in 1937 (M.S.





**LEGEND**

- × Gold showing
- Legal corner post

Min. File No.	Property name	Product
82E-5W-12	Dolphin	Cu, Ag
-13	Bullion	Au, Cu
-14	Something Good	Au
-15	Sunrise	Au
-16	Golconda	Cu, Mo, Au
-17	Dief	Mn, Ro
-88	Homestead	Cu
-96	Olalla	Ag, Au

**GOLDCLIFF RESOURCE CORPORATION**

**CLIFF PROJECT**

**CLAIM MAP**

N.T.S. 82E-4,5W      OSOYOOS M.D., B.C.

0      1      2      3 KM.

SCALE 1:50,000	DATE: MAY 1988
DRAWN BY: G.F.C.	FIGURE NO. 2

Hedley) ranged from 0.05 ounces per ton gold over 54 inches to 2.20 ounces per ton gold over 11 inches. Beyond this point the graphitic shear contained negligible gold values. The No. 3 adit (2342 feet ASL) was driven for 385 feet in the pyroxenite. Negligible gold values were encountered in the adit. Limited diamond drilling was also carried out, and some values were reported.

On the Golconda Property (Maxi 1-4, Minfile 82E-SW-016) located along the northern portion of the Cliff Claim, a shear zone up to five feet wide and made up of one or more slickensided and gouge filled fault planes cuts pyroxenite. A number of quartz lenses between 30 and 60 feet long and 12 to 50 inches wide occur within the shear zone. These zones appear to occur at changes in attitude in the structure. The quartz is crudely banded and contains pyrite, chalcopyrite, molybdenum, and minor galena. Values in gold and silver also occur within the structure.

Several adits follow the shear zone, which strikes south 56° east. Limited production has come from the property, and a small mill has operated several times.

The Shepard-Sunrise Property (Lot 18s, Minfile 82E-SW-015) located along the eastern boundary of the Cliff Claim appears to have the most economically significant mineralization in the Olalla Camp. Several mineralized quartz veins on the property have been explored by trenching, diamond drilling and several adits.

The diamond drilling was carried out in two phases, the first between 1946 and 1948 by Hedley-Monarch Mines Ltd., and the second during 1961 and 1962 by Friday Mines Ltd.. The work has indicated ore reserves of 2177.28 tonnes of 0.99 ounces per ton gold and 2.50 ounces per ton silver. It has been reported that 300 tons of ore averaging 0.53 ounces per ton gold and 0.45 ounces per ton silver were shipped during the 1946-1948 period.

The mineralization appears to be related to the east-west striking Valley Fault. During drilling on the quartz veins, a gold bearing pyritic-silicious breccia zone was discovered. This breccia zone also appears to be related to the Valley Fault, and reported drill hole intersections are as follows:

D.H. No.	Intersection	Width	oz Au	oz Ag	Location
H-5	315.6'-354.7'	39.1'	0.056	0.14	Shepard-Sunrise
H-8	383.0'-391.1'	8.1'	0.330	1.08	Shepard-Sunrise
H-8	365.2'-400.7'	35.5'	0.110	0.35	Shepard-Sunrise
H-10	354.9'-360.1'	5.2'	0.063	0.25	Shepard-Sunrise
H-10	403.8'-411.7'	7.9'	0.139	0.53	Shepard-Sunrise

These drill intersections are along the western edge of L 18s and appear to be within 100 meters of the Cliff Claim. The exact drill hole locations have been lost, and the western boundary of L 18s is not known exactly.

On the area covered by the Cliff Claim, hand trenching, cat trenching, Airborne VLF and magnetometer surveying, ground VLF surveying, geochemical soil sampling and diamond drilling have been carried out in the past. Freedom Resources Ltd. carried out the last significant exploration on the claim area during the 1981 through 1983 period. The Airborne VLF survey (1981) indicated two strong conductors, one associated with the Valley Fault, and a second in the area of hand trenching at approximately 9100N+9400E. The Airborne magnetometer survey delineated the pyroxenite stock. Follow-up soil sampling and ground VLF surveying were carried out over a small portion of the area. A significant gold geochemical anomaly with co-incidental VLF conductors was delineated at approximately 9000N to 9700N, and 9300E to 9800E. No follow-up work was carried out in this area.

Along the Valley Fault at approximately 9900N and 10050E, cat trenching and diamond drilling has been carried out. The trenching exposed a north-south striking quartz vein, as well as a section of silicified and carbonatized syenite. This zone is described as being the westward extension of the pyritic-silicious breccia zone on L 18s. During 1961 two diamond drill holes were drilled by Friday Mines Ltd. to test the zone. Drill hole C-1 returned the best intersection, 0.03 oz/ton Au, 0.087 oz/ton Ag, 0.026 % Cu, with a trace of molybdenum from 100.8-115.05 feet. A number of other intersections of "weakly mineralized" syenite were reported, with only trace values in Au and Ag.

Freedom Resources Ltd. drilled five holes along the Valley Fault structure. Drill hole F-1 was drilled north across the fault and into the syenite. Drill holes F-3 and F-4 were drilled in a northerly direction in an attempt to intersect the quartz vein north of the silicified and carbonatized zone. Two other holes, F-2 and F-5 were drilled along the structure further east. It is believed none of the drill holes encountered significant gold mineralization, although all of the records are lost.

D.H. No.	Grid Co-ord.	Azimuth	Angle	Depth
C-1	9936N+10056E	180°	-50°	442 feet
C-2	9875N+10038E	000°	-50°	740 feet
F-1	9812N+10064E	000°	-45°	500 feet
F-2	10132N+10520E	175°	-45°	497 feet
F-3	9922N+10076E	000°	-45°	500 feet
F-4	9892N+10074E	000°	-45°	505 feet
F-5	9996N+10550E	180°	-45°	500 feet

The fall 1986 exploration program was concentrated on the Cliff Claim. A grid was established over almost the entire claim, and soil sampling, VLF EM and magnetometer surveying, prospecting and geological mapping were carried out.

Favourable results were obtained from these surveys. A number of VLF EM conductors, gold and multi-element soil geochemical anomalies and favourable geological structures were outlined on the property. Several poorly exposed quartz stockwork and breccia zones gave values up to 1850 ppb gold in place, and up to 3400 ppb in float.

## 2.0 EXPLORATION PROCEDURE

A point at the northeast corner of Lot 3065 was chosen as 10000N and 10000E on the property. The main baseline was then picketed north and south from this point. Grid lines cover almost all of the Cliff and Great Eastern Claims. Two short lines have been ran on the Cliff 2 Claim.

### GRID PARAMETERS

- main baseline direction N-S along 10000E
- secondary baselines E-W, along 10000N and 10500N
- tieline N-S along 8600E
- survey lines perpendicular to baselines
- survey line separation 100 meters
- survey station spacing 25 meters, slope corrected
- survey total - 6.0 kilometers

### GEOCHEMICAL SURVEY PARAMETERS

- survey line spacing 100 meters
- survey sample spacing 25 meters
- survey totals - 6.0 kilometers
  - 209 soil samples
  - 7 rock samples
- all soil samples analyzed for Au and 31 element ICP
- all rock samples analyzed for Au and 31 element ICP
- sample depth 5 to 15 centimeters
- sample taken from brown B horizon

All samples were sent to Min-En Laboratories Ltd., 705 West 15th Street, North Vancouver, B.C. for geochemical analysis. Laboratory techniques for geochemical analysis consists of preparing samples by drying at 95° C, and seiving to minus 80 mesh or grinding to minus 150 mesh. A 31 element ICP analysis, and Au (fire assay, aqua-regia digestion, atomic adsorption finish) are then carried out on the samples.

Gold and arsenic were plotted on figures 5 and 6 and silver and copper on figures 7 and 8. All figures are at a scale of 1:2500.

## GEOPHYSICAL SURVEY PARAMETERS

### VLF Electromagnetic Survey

- survey line spacing 100 meters
- survey station spacing 25 meters
- survey totals - 19.0 kilometers
- Geonics EM-16 used for all survey
- transmitting station - Seattle - 24.8 KHz.
- direction faced southeasterly
- in-phase (dip angle) and out-of-phase (quadrature) components measured in percent at each station

### TOTAL FIELD MAGNETIC SURVEY

- survey line spacing 100 meters
- survey station spacing 25 meters
- survey totals - 4.0 kilometers
- Scintrex MP-2 magnetometer used for all survey
- measured total magnetic field in gammas
- instrument accuracy  $\pm 1$  gamma

A base station reading was taken at the beginning and ending of each day. These values were used to obtain standard values for all baseline readings. All loops ran off the baselines were then corrected to these standard values by the straight line method.

The geophysical data was plotted on figures 9 through 11, at a scale of 1:2500.

### 3.0 GEOLOGY AND MINERALIZATION

#### 3.1 REGIONAL GEOLOGY

The Cliff Property is located within the Intermontane Belt of British Columbia. Most of the property is underlain by marine sedimentary and volcanic rocks. An ultramafic to alkalic stock has intruded the eastern margin of the Cliff Claim, the Great Eastern Claim and the southern portion of the Cliff 2 Claim.

Early work in the area by Bostock and others described the marine sedimentary and volcanic sequence as belonging to the Old Tom, Shoemaker, Bradshaw, and Independence Formations. However as these formations do not form distinct, mappable units, Milford(1984) referred to the sequence as the Apex Mountain Group.

The Apex Mountain Group consists of five major lithofacies: massive and bedded chert, greenstone, chert breccia, argillite and limestone. Together they form a broadly folded, east dipping sequence that has an overall increase in age towards structurally higher rocks in the area. The maximum and minimum ages based on faunal ages in limestones and chert are Early Carboniferous and Middle to Late Triassic respectively.

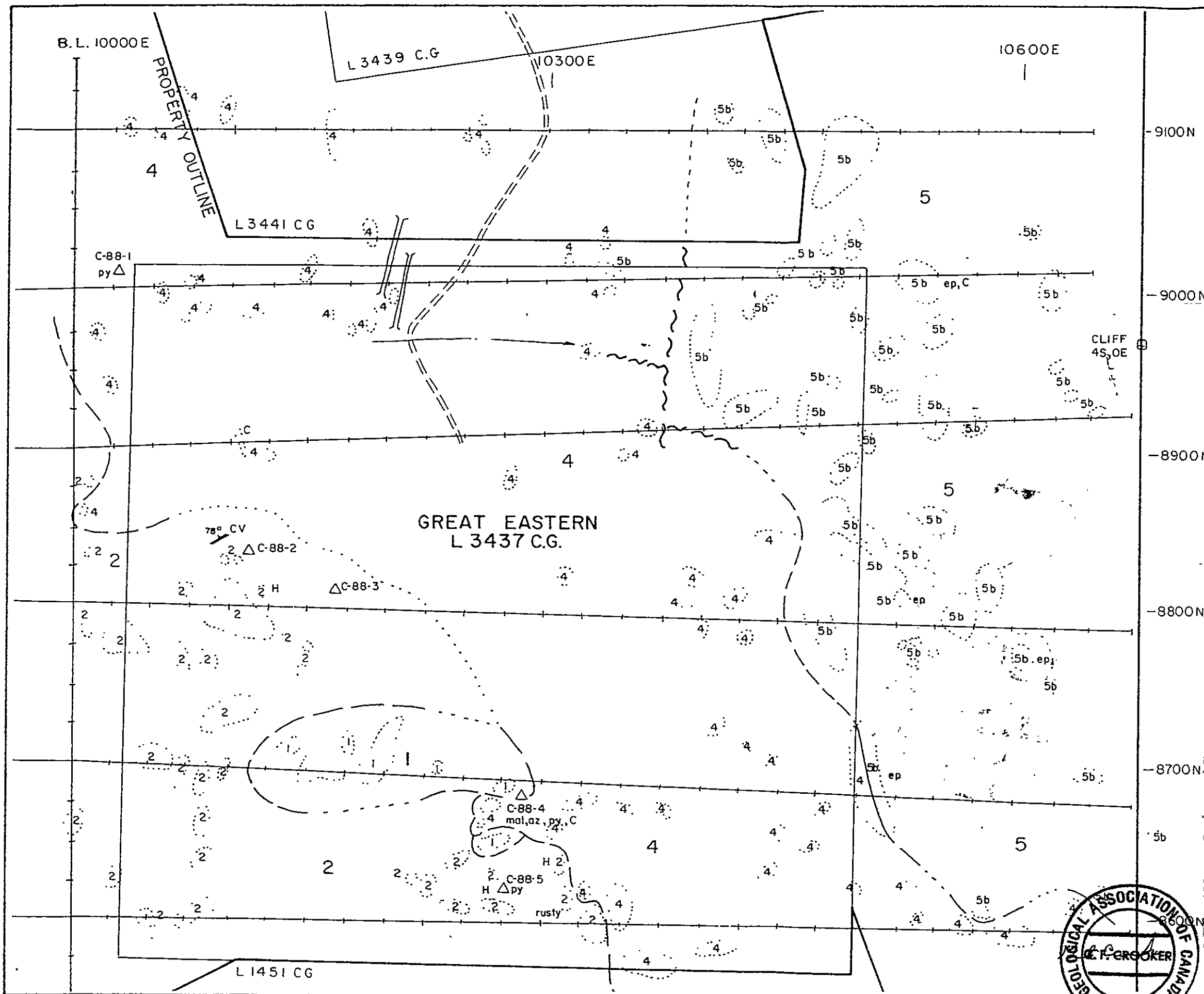
The depositional environment of the Apex Mountain Group is interpreted to be generally deep, open-ocean basin. Shallow water deposition occurred locally. The group is interpreted to represent at least part of an ancient subduction complex that formed by eastward directed underthrusting and accretion of successively younger slices of oceanic sedimentary and volcanic rocks.

Other assemblages possibly temporally correlative with the Apex Mountain Group include the Kobau, Chapperon, Harper Ranch, and Cache Creek Groups.

The ultramafic to alkalic stock occupies approximately six square miles and is of late Mesozoic age. The stock grades from a peripheral zone of pyroxenite, high in mafics and magnetite, to a magnetite deficient granitic core. Faulting with associated veining, brecciation and mineralization occurred as contemporaneous or post consolidation features.

#### 3.2 CLAIM GEOLOGY

The geology of the Great Eastern is shown on figure 3, and the two lines mapped on the Cliff 2 Claim on figure 4.



- LEGEND**
- Grid station
  - - - - Road, cat trail, foot trail
  - Creek
  - Trench
  - LCP Legal corner post
  - Cliff claim boundary
  - x Spring
  - 88-C-1 Δ Rock sample location
  - ~ Fault
  - - - Geological boundary - defined, approx, assumed
  - 30° Bedding - inclined, vertical, horizontal
  - 65 Jointing & dip
  - 54 Shearing & dip
  - qv Quartz vein or veinlet
  - cv Calcite " " "
  - d Dyke
  - Bx Breccia
  - C Carbonatite alteration
  - 8 Monzonite
  - 7 Mafic dyke
  - 6 Feldspar porphyry (dykes & sills)
  - 5 Syenite; a - coarse grained, b - fine grained
  - 4 Pyroxenite
  - SHOEMAKER FORMATION (Apex Mountain Group)**
  - 3 Limestone
  - 2 Greenstone (gabbro?)
  - 1b Chert breccia - sheared matrix
  - 1a " " - chert "
  - 1 Chert, minor tuff, quartzite (silicified tuff)
  - Quartz stockwork
  - mal Malachite
  - az Azurite
  - cpy Chalcopyrite
  - py Pyrite
  - ga Galena
  - po Pyrrhotite
  - mag Magnetite
  - gf Graphite
  - lm Limonite
  - S Sulphur
  - ep Epidote
  - H Hornfels alteration

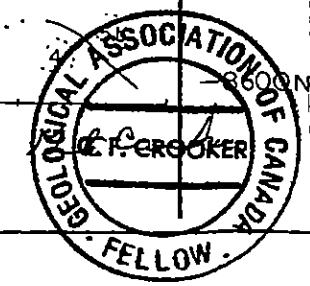
**GOLDCLIFF RESOURCE CORPORATION**

**CLIFF PROJECT  
GEOLOGY  
GREAT EASTERN - L3437**

N.T.S. 82E-4,5W OSOY00S M.D., B.C.

0 50 100 150 METRES

SCALE 1:2500	DATE MAY 1988
DRAWN BY G.F.C.	FIGURE Nº 3





Most of the property is underlain by marine sedimentary and volcanic rocks of the Apex Mountain Group. Units 1 through 3 are members of this unit.

Unit 1 consists of mainly chert, with minor tuff and quartzite. The chert is predominantly massive, although some sections show distinct bedding. The chert varies in color from black and green to blue. Bedding appears to be northeasterly with moderate dips to the northwest and small scale folding was noted in a few locations. Near the contact of the Olalla Stock and the Apex Mountain Group, the unit becomes more characteristic of a quartzite rather than a chert. Numerous tiny white quartz veinlets were observed in many locations.

Thin section interpretation of several rocks from this unit indicates a fine quartz matrix with a network of quartz veinlets cutting the fine quartz. There is a suggestion the unit may be a silicified tuff.

Unit 1a usually occurs within unit 1, and consists of poorly sorted, angular to subangular black or blue chert clasts within a microcrystalline matrix. The unit is usually no more than a few tens of meters thick, and occurs within the massive chert unit, often pinching out along strike.

Unit 1b consists of moderate to intense shearing with subrounded chert clasts. The unit often occurs near the emplacement of feldspar porphyry dykes and sills, and maybe related to the emplacement of the dykes and sills.

Unit 2 is a greenstone unit which occurs within the chert, possibly due to the local extrusion of lava in shallow water. The rocks are generally greenish, massive and finely crystalline. They are likely of basaltic or andesitic composition.

Thin section interpretation of one rock from this unit indicated it to be of gabbroic composition.

Unit 3 is a finely crystalline, light blue-grey limestone. The unit varies from a few centimeters to perhaps 10 meters in thickness, and occurs rarely on the property.

Units 4 through 8 all appear to be derivatives of the Olalla Stock.

Unit 4 is a fine to medium grained equigranular rock, consisting mainly of dark green augite pyroxene. Generally 5 to 10 % magnetite occurs within the pyroxenite.

Unit 5 is a syenite which has two modes of occurrence. Unit 5a is a coarse grained massive syenite, greyish-orange in color which occurs as narrow "veins" or as small bodies. Orthoclase is the

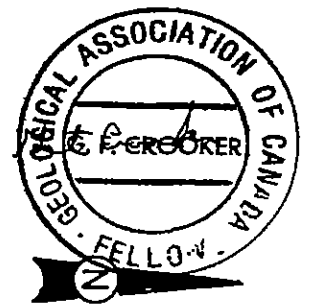
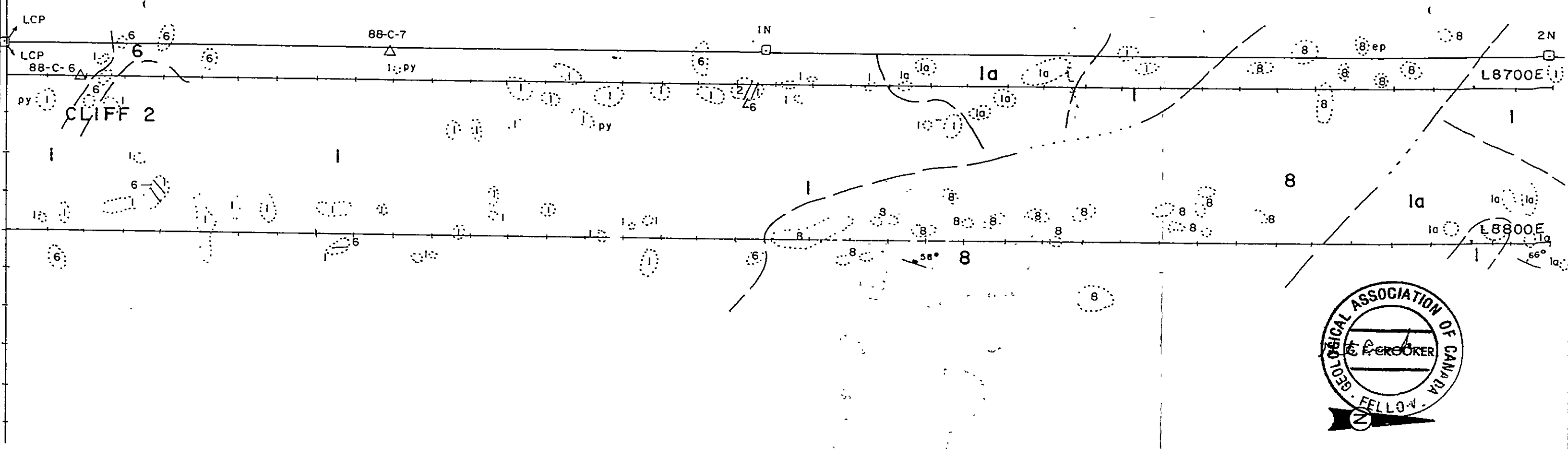
B.L. 10,500N

11,000 N

11,500N

CLIFF 3

CLIFF 2



LEGEND

- Grid station
- ==== Road, cat trail, foot trail
- - - - - Creek
- || Trench
- Y Adit
- o Diamond drill hole - C = Friday Mines  
F = Freedom Resources
- Q LCP Legal corner post
- Cliff claim boundary
- x Spring
- 88-C-1Δ Rock sample location

- TS-1 □ Thin section location
- ~ Fault
- - - - - Geological boundary - defined, approx., assumed
- 6/30 Bedding - inclined, vertical, horizontal
- 54 Shearing & dip
- 30 qv Quartz vein or veinlet
- cv Calcite " " "
- d Dyke
- Bx Breccia
- C Carbonatite alteration

- Quartz stockwork
- mal Malachite
- az Azurite
- cpy Chalcopyrite
- py Pyrite
- ga Galena
- po Pyrrhotite
- mag Magnetite
- gf Graphite
- lm Limonite
- S Sulphur
- ep Epidote
- H Hornfels alteration

- 8 Monzonite
- 7 Mafic dyke
- 6 Feldspar porphyry (dykes & sills)
- 5 Syenite; a - coarse grained, b - fine grained
- 4 Pyroxenite
- SHOEMAKER FORMATION (Apex Mountain Group)
- 3 Limestone
- 2 Greenstone (gabbro?)
- 1b Chert breccia - sheared matrix
- 1a " " - chert "
- 1 Chert, minor tuff, quartzite (silicified tuff)

GOLDCLIFF RESOURCE CORPORATION

CLIFF PROJECT  
GEOLOGY  
CLIFF 2

N.T.S. 82E-4,5W OSOYOOS M.D., B.C.

0 50 100 150 METRES

SCALE 1:2500 DATE: MAY 1988

DRAWN BY G.F.C. FIGURE Nº 4

main constituent, with 5% biotite and 2 to 5% magnetite. Unit 5b is a fine grained, light grey to buff to pink syenite occurring within the central portion of the stock. The main constituent is orthoclase, with augite being the main ferromagnesium mineral. The syenite is believed to be of metasomatic origin.

Unit 6 consists of feldspar porphyry dykes and sills. The dykes vary from less than 1 meter, up to 100 meters or more in width in the northwest corner of the claim. They are generally fine to medium grained with plagioclase phenocrysts in a plagioclase or K-spar groundmass. Hornblende, epidote and chlorite occur in varying concentrations within the unit. Bulk composition varies from latite to diorite.

Unit 7 is a massive hornblende dyke which occurs in only a few locations on the property.

Unit 8 is a dark grey, fine grained monzonite with a color index of approximately 60 %. It contains from 25 to 40 % augite which gives the rock its characteristic dark color. Orthoclase and plagioclase feldspars, with local olivine and hornblende form the remaining major constituents of the rock.

The Great Eastern Claim (figure 3) is mainly underlain by pyroxenite (Unit 4) and syenite (Unit 5b) of the Olalla Stock. They intrude sedimentary and volcanic rocks of the Apex Mountain Group in the southwestern corner of the claim.

The limited amount of geological mapping on the Cliff 2 Claim (figure 4) indicates it is mainly underlain by chert (Unit 1) and chert breccia (Unit 1a) of the Apex Mountain Group. Several narrow dykes of feldspar porphyry cut the sediments. A northwest trending body of monzonite varying from 150 to 200+ meters in width also intrudes the sediments on line 8700E between 11,200N and 11,450N, and on line 8800E between 11,000N and 11,350N.

### 3.3 MINERALIZATION

Mineralization on the property consists of gold bearing quartz veins, shear zones and breccia zones.

Seven rock samples were taken the course of the 1988 program and none of them returned anomalous gold values. However several interesting zones were found on the Great Eastern Claim.

A hornfels altered zone was found between lines 8600N and 8700N at the contact of the pyroxenite and sediments. The zones generally appear to be small pods and of limited size. Malachite, azurite, chalcopyrite and pyrite were seen in the zones. Samples 88-C-4 and 88-C-5 did not return anomalous gold values, but 88-C-4 returned anomalous values of 12.1 ppm Ag, 7927 ppm Cu and 1149 ppm Zn.

A carbonate altered zone striking 238° and dipping 78° north was found at 8875N and 10150E. Ankerite and calcite veinlets in a zone up to 3 meters wide and 50 meters long occur within a limey andesite. Sample 88-C-2 taken from the zone did not return any anomalous values.

Two rock samples were taken on the Cliff 2 Claim, with 88-C-07 taken from a sediment/dyke contact zone returning 5.6 ppm Ag.

## 4.0 GEOCHEMISTRY

## 4.1 SOIL SAMPLING

Two hundred and nine soil samples were collected from the Great Eastern and Cliff Claims. The background and anomalous values calculated for the 1986 geochemical survey, were also used for this survey.

ELEMENT	BACKGROUND	ANOMALOUS
Ag ppm	0.85	≥ 1.5
As ppm	9.10	≥ 18.0
Cu ppm	98.10	≥ 196.0
Au ppb	11.13	≥ 20.0

## Gold

Gold values range from 1 to 249 ppb and several small gold anomalies were outlined.

On the Great Eastern Claim a large number of samples on line 8600N were anomalous. The values ranged up to 249 ppb and occurred in both the Olalla Stock and the Apex Mountain Group. The only other large anomaly occurred on lines 8800N between 10,350E and 10,475E, and 8900N between 10,375E and 10,475E. This anomaly occurs near the contact of the pyroxenite and syenite.

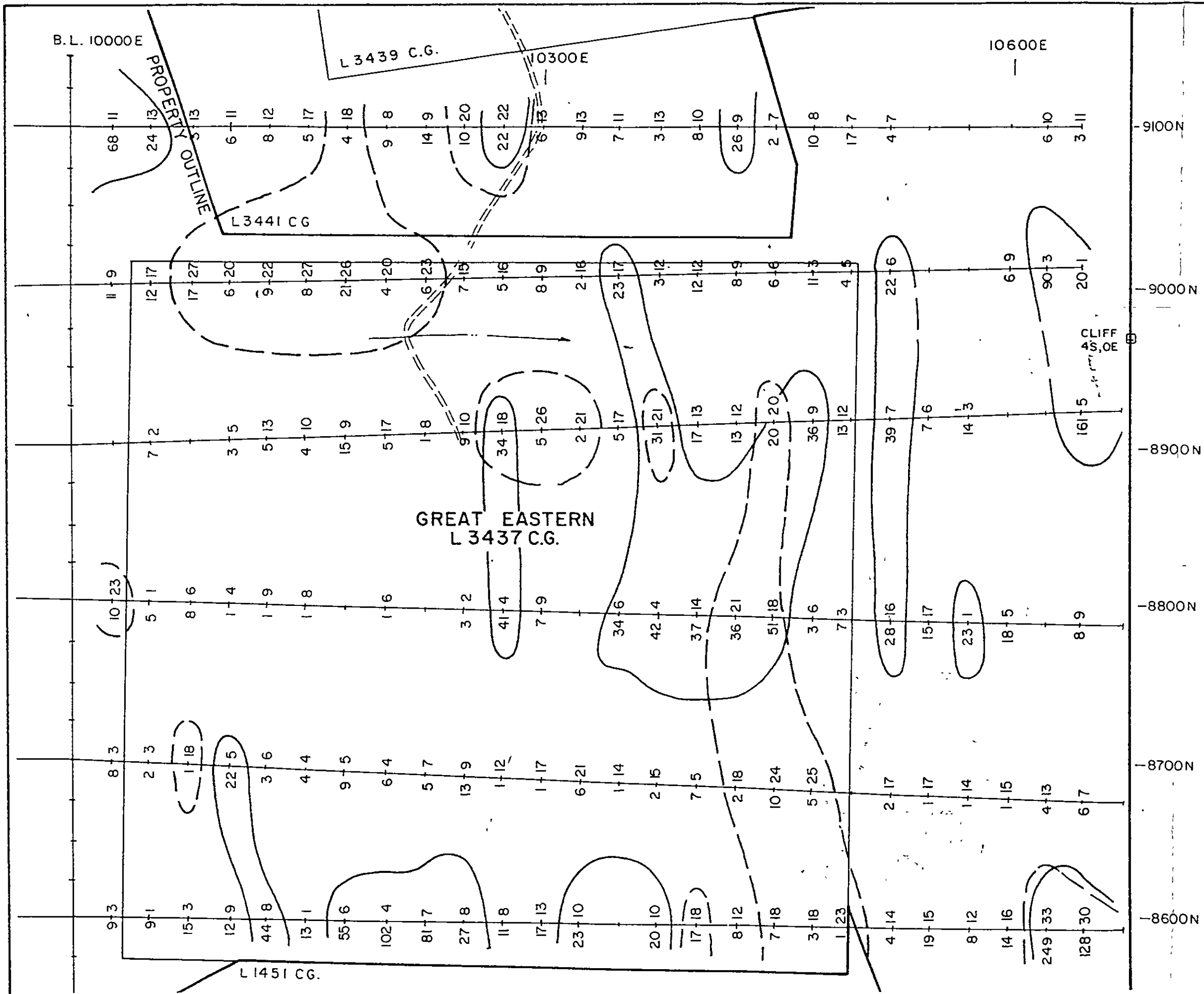
On the Cliff 2 Claim values ranged up to 176 ppb. One small anomaly occurred on lines 8700E between 10,550N and 10,650N, and 8800E between 10,600N and 10,650N. The highest value within the anomaly was 99 ppb, and the area is underlain by sedimentary rocks which have been intruded by feldspar porphyry dykes.

## Arsenic

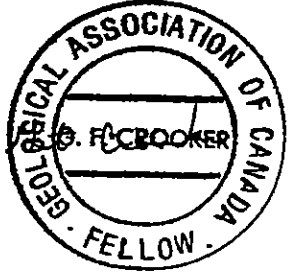
Arsenic values range from 1 to 33 ppm and several arsenic anomalies were outlined.

On the Great Eastern Claim two small arsenic anomalies were outlined. The first is a linear, north trending anomaly extending from line 8600N to 8900N at approximately 10,450E. The anomaly occurs near the contact of the pyroxenite and syenite. The second anomaly occurs on line 9000N between 10,075E and 10,225E. The area is underlain by pyroxenite.

On the Cliff 2 Claim only four isolated values were anomalous.



- LEGEND**
- Grid station
  - Road
  - Creek
  - As in ppm
  - Au " ppb
  - Au anomalous > 20 ppb
  - As " > 18 ppm



GOLDCLIFF RESOURCE CORPORATION

**CLIFF PROJECT**

**SOIL GEOCHEMISTRY - Au, As**

**GREAT EASTERN - L 3437**

N.T.S. 82E-4,5W      OSOYOOS M.D., B.C.

0      50      100      150 METRES

SCALE 1 2500	DATE : MAY 1988
DRAWN BY : G.F.C.	FIGURE Nº 5

CHONG

B.L. 10,500N

11,000 N

11,500N

CLIFF 3

LCP

LCP

IN



2N

CLIFF 2

L8700E

L8800E

LEGEND

- +— Grid station
- $\frac{12}{20}$  Au in ppb
- $\frac{20}{18}$  As in ppm
-  Au anomalous > 20 ppb
-  As " > 18 ppm



GOLDCLIFF RESOURCE CORPORATION

CLIFF PROJECT  
 SOIL GEOCHEMISTRY - Au, As  
 CLIFF 2

N.T.S. 82E-4,5W

OSOYOOS M.D., B.C.

0 50 100 150 METRES

SCALE 1:2500

DATE: MAY 1988

DRAWN BY: G.F.C.

FIGURE NO. 6

## Silver

Silver values ranged from 0.3 to 3.5 ppm.

On the Great Eastern Claim, one broad north trending anomaly occurs on lines 9100N and 9000N from 10,450E to 10,650E. The area is underlain by syenite and copper occurs coincidentally with the silver.

On the Cliff 2 Claim almost all of the silver values were anomalous with values up to 3.5 ppm. The area is mainly underlain by chert and monzonite.

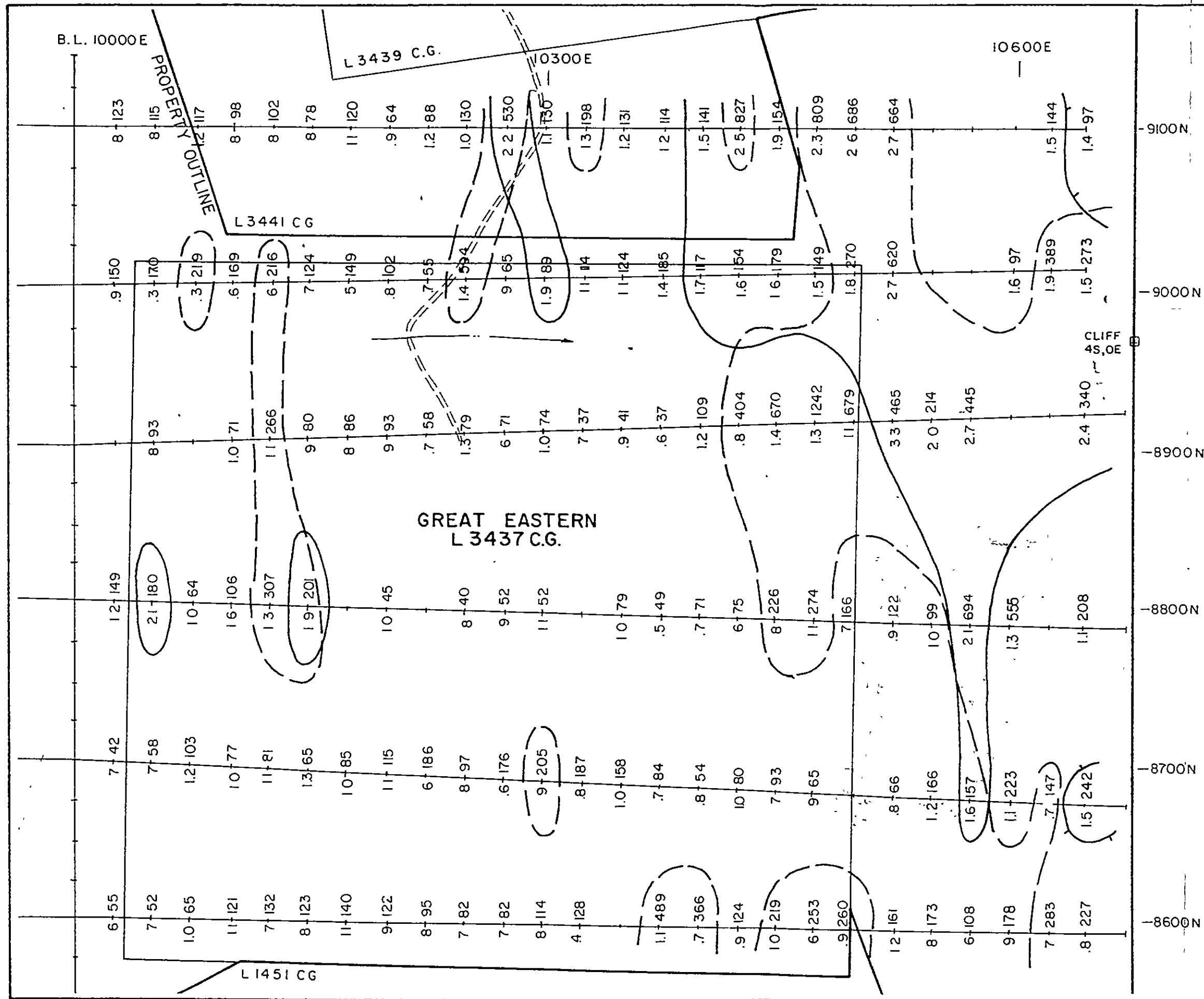
## Copper

Copper values range from 33 to 1242 ppm and several anomalies were outlined.

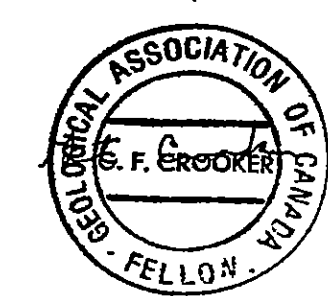
On the Great Eastern Claim a broad anomaly occurs from line 8600N to 9100N along the eastern section of the grid. Values ranged up to 1242 ppm and the anomaly is mainly underlain by syenite. Silver is also anomalous within the zone.

On the Cliff 2 Claim values ranged up to 558 ppm and two small anomalies were outlined. The anomalies occur along the northern section of lines 8700E and 8800E and the area is underlain by monzonite. Silver is also anomalous within the zone.





- LEGEND**
- ⊕ ⊕ Grid station
  - || || Road
  - ~ ~ Creek
  - 2.1-296 Cu in ppm
  - Ag " "
  - Ag anomalous >15 ppm
  - Cu " >196 "



GOLDCLIFF RESOURCE CORPORATION

CLIFF PROJECT

SOIL GEOCHEMISTRY - Ag, Cu

GREAT EASTERN - L3437

N.T.S. 82E-4,5W OSOYOOS M.D., B.C.

0 50 100 150 METRES

SCALE 1:2500 DATE MAY 1988

DRAWN BY G.F.C. FIGURE NO 7

B.L. 10,500N

11,000N

11,500N

CLIFF 3

LCP

IN

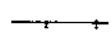
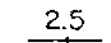
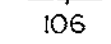
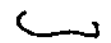

2N

2.9	2.3	2.1	1.6	1.8	1.8	1.9	1.9	2.2	1.8	1.7	1.2	1.8	1.9	1.7	2.6	1.6	1.9	2.0	1.6	1.4	1.4	1.9	2.6	2.3	1.5	3.0	2.3	7	1.2	1.6	2.4	1.7	1.4	L8700E
222	265	89	115	147	160	101	264	165	140	145	173	163	133	114	143	61	85	59	119	112	115	131	112	91	148	326	178	33	68	308	558	283	216	L8700E

CLIFF 2

1.4	1.4	1.9	1.7	1.8	1.7	1.5	1.5	2.4	2.4	1.7	1.9	2.1	2.5	2.8	2.8	3.5	2.0	3.3	2.1	2.8	2.1	1.6	2.1	1.5	1.0	1.5	2.3	1.6	1.6	1.5	1.5	1.7	L8800E
59	195	213	282	311	61	200	153	154	165	91	113	106	125	156	113	90	124	532	185	307	220	223	328	212	38	253	236	117	162	163	304	147	L8800E

LEGEND

-  Grid station
-  Ag in ppm
-  Cu " "
-  Ag anomalous >1.5 ppm
-  Cu " " >196 "



GOLDCLIFF RESOURCE CORPORATION

CLIFF PROJECT

SOIL GEOCHEMISTRY - Ag, Cu

CLIFF 2

N.T.S. 82E-4,5W OSOYOOS M.D., B.C.

0 50 100 150 METRES

SCALE 1:2500	DATE: MAY 1988
DRAWN BY: G.F.C.	FIGURE NO. 8

## 5.0 GEOPHYSICS

### 5.1 Magnetometer Survey

Magnetic contours show a strong magnetic response over most of the Great Eastern Claim with total field values ranging from less than 60,000 gammas to greater than 66,000 gammas. The southwestern section of the claim is relatively inactive with magnetic values ranging from 59,500 to around 60,000 gammas. Along the eastern border of the Cliff Claim magnetic values are also relatively inactive with values ranging from 58,500 to 60,000 gammas.

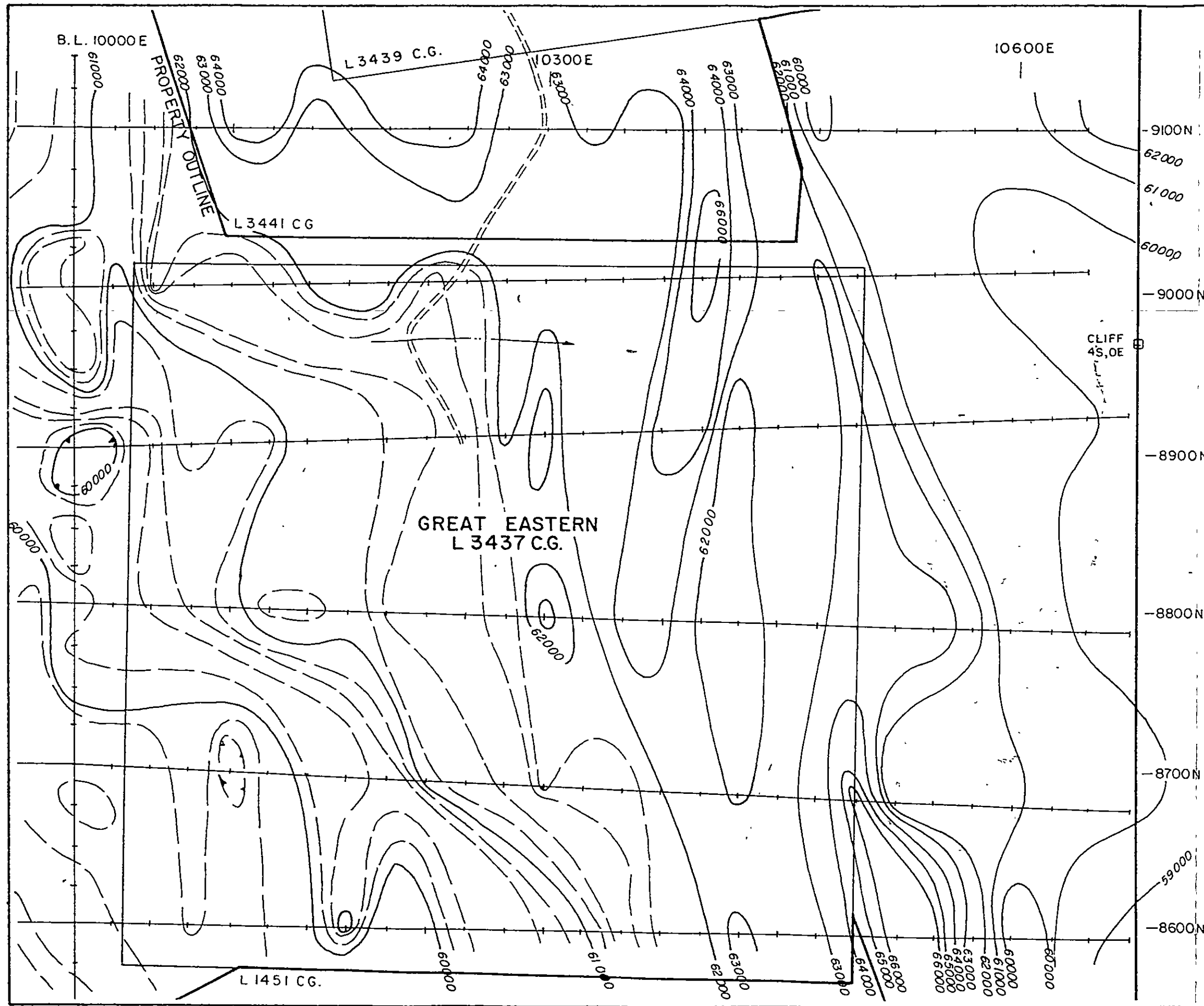
Magnetic data indicate that the Jurassic pyroxenite rocks in the central section of the claim are highly magnetic whereas the greenstone and Triassic sedimentary rocks in the southwestern corner are relatively nonmagnetic. The Jurassic syenite rocks are of weak to moderate magnetic strength.

### 5.2 VLF-EM Survey

The VLF EM survey initiated during 1986 was completed on the Cliff Claim by this program and the survey extended to the Great Eastern Claim. The general remarks concerning the 1986 survey are applicable to the current survey.

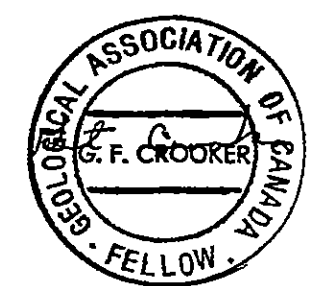
VLF-EM data profiles have, in many cases been influenced by topography in the form of a positive bias when the operator faced up hill and a negative bias when the operator faced down hill. Because the topography effect is relatively smooth, with a long wavelength, VLF EM anomalies will be superimposed on the bias and can be defined on the profiles. In-phase anomaly amplitude ranged from strong through moderate to weak amplitudes. Since most of the survey area is on a slope and because significant amounts of outcrop are present, shallow and/or resistive overburden conditions are believed to exist, thus allowing a reasonably confident interpretation of weak anomalies even with topographic bias.

VLF electromagnetic results show conductive features trending towards the northeast. VLF EM profile character indicates that most conductors exhibit moderate to low conductance and are believed to occur near surface. Moderate to low conductance suggests that much VLF EM conductivity in this area may be due to contacts between rock types (possibly weathered) as well as linear structural features, possibly containing narrow veins of sulphides and/or conductive material such as mineralized fluids or clay substances within structure.



**LEGEND**

- Grid station
- Road
- Creek
- 200 gammas contour intervals
- 1000 " " "



GOLDCLIFF RESOURCE CORPORATION	
CLIFF PROJECT	
<b>MAGNETOMETER SURVEY</b>	
GREAT EASTERN - L3437	
N.T.S. 82E-4,5W	OSOYOOS M.D., B.C.
SCALE 1:2500	DATE: MAY 1988
DRAWN BY: G.F.C.	FIGURE No. 10

CHONG

Significant conductor systems have been labeled for additional discussion. Systems "I" and "N" through "R" represent the stronger or noteworthy conductors as determined by profile character analysis or other attributes.

System "I" trends southerly and is a continuation of the system which passes through trenches C and E which have proven sulphide mineralization. The system also passes through the area where quartz float with 10% pyrite was found containing up to 3400 ppb gold.

System "M" occurs within an area of shearing and mixed rock types and may be caused by contact zones.

System "N" occurs along strike with a feldspar porphyry dyke and shearing and is probably caused by a contact zone.

Systems "O", "P" and "Q" are moderate to strong conductors occurring on a steep slope. A number of anomalous gold geochemical soil values occur coincidentally with the systems. This suggests the systems may represent gold bearing graphitic and carbonate altered shear zones as occur on the Something Good Crown Grant, located 100 meters north of line 8400N.

System "R" is a weak to moderate conductor occurring on the Great Eastern Claim. The northern portion of the conductor coincides with a mapped fault, so the system is probably structurally controlled.

### 5.3 Interpretation

The priority geophysical anomalies are as follows:

PRIORITY	CONDUCTOR SYSTEMS (VLF EM)
FIRST	I, P, Q
SECOND	O
THIRD	M, N, R

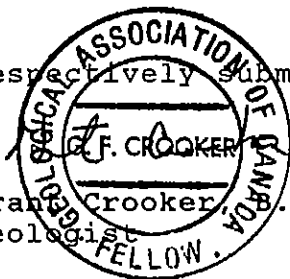
## 6.0 CONCLUSIONS AND RECOMMENDATIONS

The surveys covered by this report indicated a number of VLF EM conductors and gold and multi-element soil geochemical anomalies on the property. These are in addition to the target areas outlined by the 1986 program. Detailed exploration should be continued over the target areas. Recommendations are as follows:

- 1) Follow-up prospecting and geological mapping should be carried out over favourable geological structures, gold and multi-element soil geochemical anomalies and coincidental VLF EM conductors outlined by the 1986 and 1988 programs.
- 2) The main target areas outlined also require investigation by I.P. surveying and trenching.

Respectively submitted,

Geoffrey F. Crooker, B.Sc., F.G.A.C.  
Geologist



## 7.0 REFERENCES

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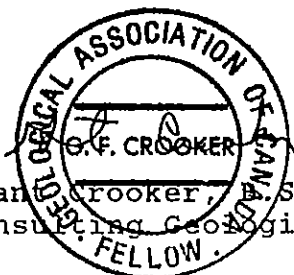


## CERTIFICATE OF QUALIFICATIONS

I, Grant F. Crooker, of Upper Bench Road, Keremeos, in the Province of British Columbia, hereby certify as follows:

1. That I graduated from the University of British Columbia in 1972 with a Bachelor of Science Degree in Geology.
2. That I have prospected and actively pursued geology prior to my graduation and have practised my profession since 1972.
3. That I am a member of the Canadian Institute of Mining and Metallurgy.
4. That I am a Fellow of the Geological Association of Canada.
5. That I am the owner of the Cliff, Cliff 1 to 4 and Great Eastern Claims.

Dated this 27th day of June, 1988, at Keremeos, in the Province of British Columbia.

  
Grant F. Crooker, B.Sc., F.G.A.C.  
Consulting Geologist  
FELLOW

Appendix I

CERTIFICATES OF ANALYSIS

MIN-EN LABORATORIES LTD.

Specialists in Mineral Environments

705 West 15th Street North Vancouver, B.C. Canada V7K 1T2

PHONE: (604)980-5814 OR (604)988-4524

TELEX: VIA USA 7601067 UC

Analytical Report

Company: GOLDCLIFF RESOURCES  
Project: 88 C 1 TO 7  
Attention: GRANT CROOKER

File: 8-357  
Date: APRIL 5/88  
Type: SOIL & ROCK

Date Samples Received : MARCH 29/88  
Samples Submitted by : GRANT CROOKER

Report on ..... 209 SOILS, 7 ROCK ASSAY CUT..... Geochem Samples  
.....  
..... Assay Samples  
.....

Copies sent to:  
1. GOLDCLIFF RESOURCES, KEREMEOS, B.C.  
2.  
3.

Samples: Sieved to mesh .....-80..... Ground to mesh .....-150.....

Prepared samples stored: .....X..... discarded: .....  
rejects stored: ..... discarded: .....X.....

Methods of analysis:  
31 ELEMENT TRACE ICP.  
AU-FIRE GEOCHEM.

Remarks

PROJECT NO: 88 C 1 TO 7

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2

FILE NO: R-357

ATTENTION: GRANT CROOKER

(604)980-5814 OR (604)988-4524

\* TYPE ROCK GEOCHEM \* DATE: APRIL 5, 1986

( PPM )	88 C 1	88 C 2	88 C 3	88 C 4	88 C 5	88 C 6	88 C 7
AG	.8	.8	.9	12.1	.3	.8	5.6
AL	1280	3210	5890	3150	570	11590	40690
AS	14	10	16	13	21	10	13
B	2	3	2	6	1	10	40
BA	25	120	700	64	76	91	394
BE	.2	1.0	.9	2.3	1.4	.7	1.5
BJ	1	5	8	3	1	4	36
CA	1720	96010	16130	28280	1980	13090	41520
CD	.5	2.6	.2	5.7	.4	.8	.3
CO	1	13	12	40	1	7	31
CU	12	10	63	7927	177	156	296
FE	6030	28130	26090	79720	46390	22520	43970
F	680	1540	3530	180	280	1850	6680
LI	b	12	6	4	1	5	16
MG	840	47090	7710	3500	750	4390	17110
MN	74	816	269	1121	95	261	614
MO	14	7	4	111	4	3	2
NA	40	140	940	700	50	1070	3060
NI	2	58	36	123	1	3	76
P	230	640	6860	2070	520	1810	5380
PPB	97	40	18	298	10	15	42
SB	1	1	1	11	1	1	5
SP	6	227	41	36	6	63	235
TH	1	1	1	1	1	1	1
U	1	1	1	1	1	1	1
V	4.8	47.6	57.4	106.7	39.1	50.9	97.3
ZN	27	47	34	1149	40	52	73
GA	1	1	1	1	1	1	1
SN	1	1	1	1	1	1	2
W	1	1	1	1	1	1	2
CF	266	215	238	128	359	219	182
QU-PPB	8	2	3	15	1	8	7

ATTENTION: GRANT CROCKER

(604)980-5814 OR (604)988-4524

\* TYPE SOIL BEDCHEM \*

DATE: APRIL 5, 1988

(VALUES IN PPM)	AG	AL	AS	B	BA	RE	BI	CA	CO	CU	FE	K	
8600N 10025E	.6	19350	3	21	320	1.7	3	5990	1.0	18	55	48400	5720
8600N 10050E	.7	30270	1	33	433	1.8	5	8580	.8	23	52	51270	6630
8600N 10075E	1.0	27050	3	27	254	1.5	4	5880	.9	19	65	43520	6250
8600N 10100E	1.1	34610	9	37	862	2.1	11	15390	1.4	38	121	59350	16500
8600N 10125E	.7	37990	8	38	535	2.1	10	11720	.7	34	132	60700	12480
8600N 10150E	.8	26770	1	37	459	2.0	5	15670	.8	27	123	54110	9460
8600N 10175E	1.1	32490	6	36	392	2.1	12	10350	.8	31	140	59580	11360
8600N 10200E	.9	28430	4	31	401	2.4	10	11510	.4	37	122	68730	10570
8600N 10225E	.8	23950	7	26	316	2.1	10	8740	.1	24	95	60330	7480
8600N 10250E	.7	21610	8	26	271	1.7	9	8810	.6	19	82	51480	8090
8600N 10275E	.7	18160	8	18	296	1.8	7	5780	.1	16	82	54480	4950
8600N 10300E	.8	20180	13	23	407	2.0	7	5840	.5	19	114	56950	5260
8600N 10325E	.4	13880	10	12	258	1.8	7	5470	.7	18	128	56720	5280
8600N 10375E	1.1	8520	16	2	293	1.3	2	19550	.8	37	499	36580	3630
8600N 10400E	.7	8780	18	3	398	1.2	1	22170	.6	35	366	37080	4660
8600N 10425E	.9	7550	12	4	477	.8	3	50670	.9	15	124	24530	5140
8600N 10450E	1.0	7880	18	4	365	.9	3	33460	.4	20	219	29930	4720
8600N 10475E	.6	10170	18	6	320	1.1	2	6840	.8	22	253	33530	5380
8600N 10500E	.9	10140	23	6	312	1.1	2	6310	.6	22	260	34660	5420
8600N 10525E	1.2	10140	14	6	383	1.0	6	28390	1.1	18	161	29510	5320
8600N 10550E	.8	9600	15	6	304	1.3	2	18600	1.1	19	173	41010	5550
8600N 10575E	.6	8330	12	8	188	1.8	6	5070	1.2	18	108	57320	3370
8600N 10600E	.9	12340	16	12	382	1.6	5	8780	1.2	23	178	45800	5120
8600N 10625E	.7	15100	33	18	538	1.9	2	7990	1.3	25	283	56200	4840
8600N 10650E 30M	.8	11290	30	13	458	1.4	1	10970	.9	21	227	40580	3830
8700N 10025E	.7	19670	3	24	392	1.5	9	7550	.6	13	42	42070	4380
8700N 10050E	.7	23630	3	26	550	1.6	11	9510	.1	20	58	47450	4160
8700N 10075E	1.2	33560	18	37	1806	1.7	10	9040	.2	25	103	48670	6630
8700N 10100E	1.0	19850	5	23	856	1.1	8	11780	1.0	17	77	32890	5150
8700N 10125E	1.1	27020	6	22	291	1.6	6	5630	.8	16	81	50810	3760
8700N 10150E	1.3	16890	4	16	248	1.7	5	4660	.8	17	65	55190	2470
8700N 10175E	1.0	20950	5	22	354	1.8	5	5030	.2	17	85	53730	3980
8700N 10200E	1.1	18730	4	16	257	1.5	3	6140	.4	18	115	42350	4350
8700N 10225E	.6	23520	7	27	303	1.0	6	8640	1.4	37	106	54900	8050
8700N 10250E	.8	18900	9	18	276	1.6	6	7910	.4	23	97	45850	7810
8700N 10275E	.6	13180	12	6	148	1.0	3	4130	.9	17	176	28050	4700
8700N 10300E	.9	8980	17	5	117	.8	1	6420	1.4	15	205	22770	3880
8700N 10325E	.8	9290	21	8	260	.9	1	8620	.6	20	187	25380	3930
8700N 10350E	1.0	9610	14	-	138	1.0	3	5570	1.2	19	158	27350	4060
8700N 10375E	.7	9960	13	12	129	1.2	4	5730	1.0	19	84	35620	4220
8700N 10400E	.8	7940	5	12	128	.9	3	41060	.1	14	54	27540	3230
8700N 10425E	1.0	10970	18	14	161	1.2	6	5730	.6	20	80	47520	3260
8700N 10450E	.7	8440	24	13	85	1.4	3	6610	1.5	29	93	40810	1790
8700N 10475E	.9	10360	25	12	115	1.6	6	7380	.5	25	65	48510	2740
8700N 10525E	.8	8930	17	7	97	1.2	4	4750	1.3	20	66	38360	2840
8700N 10550E	1.2	12520	17	22	155	2.0	5	15500	1.8	28	166	60240	5570
8700N 10575E	1.6	11190	14	11	130	2.5	9	10800	.9	32	157	80140	4060
8700N 10600E	1.1	13260	15	15	158	2.2	7	10350	.9	32	223	67470	4560
8700N 10625E	.7	10720	13	10	185	1.5	5	10010	1.7	22	147	47610	3860
8700N 10650E	1.5	21420	7	23	146	1.9	8	21620	.6	24	242	58550	8340
8800N 10025E	1.2	30370	23	15	1377	1.9	17	17110	.7	38	149	52970	9730
8800N 10050E	2.1	29430	1	36	4832	1.9	17	18920	.6	36	180	51830	10140
8800N 10075E	1.0	23020	6	23	600	1.7	13	6950	.4	27	64	49970	6180
8800N 10100E	1.6	26130	4	28	914	1.7	16	11020	.9	29	106	48470	8650
8800N 10125E	1.3	22980	9	24	641	1.8	9	11540	1.8	41	307	53100	10270
8800N 10150E	1.9	21980	8	25	515	2.1	16	10300	1.5	37	201	63190	12780
8800N 10200E	1.0	10840	6	15	234	.8	7	5880	.3	12	45	25050	5100
8800N 10250E	.8	10110	2	10	161	.8	6	5360	.7	11	40	23580	3930
8800N 10275E	.9	12250	4	12	168	1.4	7	5310	.2	13	52	45550	3570
8800N 10300E	1.1	11360	9	14	154	1.5	6	5290	.1	12	52	49170	3630

ATTENTION: BRANT CROWKER

(604)980-5814 OR (604)988-4524

\* TYPE SOIL GEOCHEM \*

DATE: APRIL 5, 1988

VALUES IN PPM )	LI	MG	MN	MO	NA	NI	P	PB	SR	SP	TH	U	V
8600N 10025E	22	13320	1271	1	160	50	1580	27	2	27	1	1	83.3
8600N 10050E	31	20970	1643	2	360	80	2480	40	5	38	1	1	89.7
8600N 10075E	24	14820	930	2	350	67	1380	27	3	37	1	1	63.7
8600N 10100E	34	47840	1487	3	240	171	6890	51	5	41	1	1	109.0
8600N 10125E	36	32280	1389	4	370	143	3780	41	6	48	1	1	101.4
8600N 10150E	29	19320	1727	3	330	101	3330	38	4	73	1	1	78.5
8600N 10175E	32	36380	1125	4	350	124	2570	42	5	38	1	1	104.8
8600N 10200E	31	22330	1761	4	340	86	2480	36	5	52	1	1	92.0
8600N 10225E	24	18820	1102	4	370	63	1790	28	5	40	1	1	100.0
8600N 10250E	24	13100	1130	3	330	54	2090	33	4	45	1	1	81.7
8600N 10275E	17	10520	962	2	320	44	1360	25	3	37	1	1	103.3
8600N 10300E	19	11900	918	3	380	44	1370	33	1	42	1	1	109.0
8600N 10325E	14	10710	632	2	260	43	1690	18	1	28	1	1	119.1
8600N 10375E	17	18860	564	8	220	130	2210	73	1	36	1	1	74.5
8600N 10400E	25	19140	583	4	230	101	2600	55	1	36	1	1	83.5
8600N 10425E	21	18310	363	2	240	49	2100	54	1	58	1	1	63.8
8600N 10450E	20	17660	414	3	230	73	2380	37	1	46	1	1	71.8
8600N 10475E	16	15810	541	3	230	82	2110	45	1	29	1	1	70.0
8600N 10500E	16	15320	531	2	230	86	2080	46	1	28	1	1	73.1
8600N 10525E	20	19110	384	2	260	66	2220	27	1	43	1	1	67.3
8600N 10550E	19	18940	354	2	230	66	2080	29	1	31	1	1	98.8
8600N 10575E	10	12410	500	1	200	46	1420	25	3	24	1	1	134.6
8600N 10600E	19	15430	849	3	230	83	2370	50	3	38	1	1	105.4
8600N 10625E	20	13000	1040	11	200	136	3390	37	1	49	1	1	119.6
8600N 10650E 40M	17	11260	957	7	150	105	2960	29	1	52	1	1	81.4
8700N 10025E	17	7780	1326	2	340	25	1720	21	1	43	1	1	83.4
8700N 10050E	23	13070	1226	1	550	44	2090	21	3	35	1	1	99.1
8700N 10075E	36	19060	1463	1	820	70	2430	30	2	32	1	1	88.5
8700N 10100E	23	10520	2539	2	460	43	2240	31	1	53	1	1	53.6
8700N 10125E	20	9540	778	1	340	36	1210	26	1	26	1	1	106.3
8700N 10150E	15	8390	1350	1	170	32	2290	24	3	73	1	1	119.3
8700N 10175E	19	9450	1697	2	210	34	2420	24	2	27	1	1	109.4
8700N 10200E	16	9260	2032	2	200	43	1700	30	3	35	1	1	82.4
8700N 10225E	26	22660	1152	4	310	130	1900	41	5	52	1	1	93.4
8700N 10250E	19	17670	1033	2	270	85	1360	32	1	39	1	1	79.5
8700N 10275E	13	16160	558	2	150	65	600	40	1	15	1	1	44.0
8700N 10300E	12	14710	428	2	150	69	650	54	1	10	1	1	73.8
8700N 10325E	19	24100	548	3	160	107	1370	77	1	19	1	1	34.2
8700N 10350E	16	21160	532	2	180	86	730	61	1	10	1	1	40.8
8700N 10375E	12	20210	508	2	180	104	530	37	1	29	1	1	55.4
8700N 10400E	10	18010	405	2	180	74	960	32	1	51	1	1	51.0
8700N 10425E	11	16060	632	2	210	75	860	79	1	26	1	1	88.4
8700N 10450E	10	27970	474	2	110	168	420	46	1	27	1	1	52.7
8700N 10475E	13	26920	645	2	160	139	700	40	1	39	1	1	82.2
8700N 10525E	9	18880	483	2	140	100	730	29	1	26	1	1	71.9
8700N 10550E	18	27530	723	2	260	83	1710	55	1	78	1	1	137.4
8700N 10575E	14	20490	585	2	250	33	1160	36	1	71	1	1	241.3
8700N 10600E	19	26890	746	2	270	67	1450	47	1	74	1	1	182.4
8700N 10625E	13	18960	732	2	200	53	1850	38	1	85	1	1	121.7
8700N 10650E	20	22280	1166	2	240	20	4150	42	4	126	1	1	194.6
8800N 10025E	44	24730	1553	2	1300	110	1850	40	1	68	1	1	102.2
8800N 10050E	45	27820	1214	3	880	108	3350	54	1	74	1	1	100.8
8800N 10075E	23	13700	1367	2	340	52	1020	27	3	33	1	1	91.4
8800N 10100E	34	17280	1492	2	550	81	2810	39	4	43	1	1	88.1
8800N 10125E	29	22100	1098	2	540	126	2950	34	1	39	1	1	93.4
8800N 10150E	28	22760	924	2	380	95	3500	41	5	36	1	1	113.6
8800N 10200E	9	6480	430	1	340	32	1730	18	1	41	1	1	40.2
8800N 10250E	10	9430	533	1	280	31	700	22	1	67	1	1	38.7
8800N 10275E	12	7690	642	1	260	25	900	24	2	31	1	1	94.9
8800N 10300E	10	7890	567	1	200	26	1170	19	3	27	1	1	103.3

ATTENTION: GRANT CROOKER

16041980-5814 BR 16041988-4524

\* TYPE SOIL BENCHEN \*

DATE: APRIL 5, 1988

VALUES IN PPM	ZN	GA	SM	W	CR	AU-PPB
8600N 10025E	85	1	1	1	113	9
8600N 10050E	113	1	1	2	155	9
8600N 10075E	69	1	1	1	94	15
8600N 10100E	94	2	1	2	255	12
8600N 10125E	93	2	1	2	184	44
8600N 10150E	92	1	1	2	109	13
8600N 10175E	86	1	1	2	171	55
8600N 10200E	87	1	1	2	124	102
8600N 10225E	78	1	1	1	126	81
8600N 10250E	105	1	1	1	92	27
8600N 10275E	86	1	1	1	106	11
8600N 10300E	88	1	1	1	109	17
8600N 10325E	65	1	1	1	138	23
8600N 10375E	81	1	1	1	167	20
8600N 10400E	66	1	1	1	214	17
8600N 10425E	46	1	1	1	267	8
8600N 10450E	54	1	1	1	274	7
8600N 10475E	67	1	1	1	260	3
8600N 10500E	68	1	1	1	257	1
8600N 10525E	49	1	1	1	265	4
8600N 10550E	47	1	1	1	258	19
8600N 10575E	53	1	1	1	218	8
8600N 10600E	97	1	1	1	202	14
8600N 10625E	204	1	1	1	123	249
8600N 10650E 40H	139	1	1	1	112	128
8700N 10025E	92	1	1	1	76	8
8700N 10050E	92	1	1	1	109	2
8700N 10075E	117	1	1	2	129	1
8700N 10100E	119	1	1	1	80	22
8700N 10125E	75	1	1	1	111	3
8700N 10150E	90	1	1	1	116	4
8700N 10175E	106	1	1	1	110	9
8700N 10200E	99	1	1	1	89	6
8700N 10225E	101	1	1	2	151	5
8700N 10250E	80	1	1	1	157	13
8700N 10275E	53	1	1	1	274	1
8700N 10300E	61	1	1	1	229	1
8700N 10325E	75	1	1	1	265	6
8700N 10350E	67	1	1	1	239	1
8700N 10375E	59	1	1	1	252	2
8700N 10400E	50	1	1	1	168	7
8700N 10425E	89	1	1	1	220	2
8700N 10450E	58	1	1	1	338	10
8700N 10475E	64	1	1	1	304	5
8700N 10525E	52	1	1	1	208	2
8700N 10550E	73	1	1	1	166	1
8700N 10575E	72	1	1	1	67	1
8700N 10600E	82	1	1	1	163	1
8700N 10625E	75	1	1	1	122	4
8700N 10650E	109	1	1	1	69	6
8800N 10025E	72	1	1	2	198	10
8800N 10050E	97	1	1	2	212	5
8800N 10075E	104	1	1	1	112	8
8800N 10100E	116	1	1	1	166	1
8800N 10125E	81	1	1	1	183	1
8800N 10150E	84	1	1	1	123	1
8800N 10200E	79	1	1	1	55	1
8800N 10250E	43	1	1	1	83	3
8800N 10275E	53	1	1	1	101	41
8800N 10300E	52	1	1	1	116	7

PROJECT NO: 88 C 1 TO 7

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2

FILE NO: 8-357/P3+4

ATTENTION: GRANT CROOKER

(604)980-5814 OR (604)988-4524

\* TYPE SOIL GEOCHEM \*

DATE: APRIL 5, 1988

(VALUES IN PPH)	AG	AL	AS	R	BA	BE	BI	CA	CD	CO	CU	FE	K
8800N 10350E	1.0	10200	6	18	135	1.6	5	6400	.1	13	79	55710	3480
8800N 10375E	.5	14586	4	21	190	1.4	6	4800	.5	12	49	42130	3040
8800N 10400E	.7	11940	14	16	159	1.7	5	4280	.8	18	71	53280	2490
8800N 10425E	.6	10400	21	15	122	1.3	6	4330	1.0	21	75	40730	2190
8800N 10450E	.8	11470	18	17	137	1.3	2	6200	1.2	23	226	42300	3310
8800N 10475E	1.1	21230	6	26	134	2.1	8	20740	.8	22	274	62950	4970
8800N 10500E	.7	16430	3	21	214	1.5	5	10730	1.2	16	166	45030	5220
8800N 10525E	.9	8100	16	4	128	1.5	3	5860	1.0	15	122	48820	2720
8800N 10550E	1.0	10776	17	10	184	2.0	4	5170	.8	17	99	63380	2850
8800N 10575E	2.1	22940	1	27	160	2.0	1	28230	.7	25	694	58850	7370
8900N 10600E	1.3	18520	5	29	228	2.1	1	19140	.3	24	555	67040	7180
8900N 10650E	1.1	16540	9	19	313	1.8	3	8220	.8	18	208	55260	5300
8900N 10050E	.8	9150	2	35	372	.7	2	28690	3.3	14	93	19540	4340
8900N 10100E	1.0	10780	5	13	431	.9	1	24250	2.1	19	71	24170	3170
8900N 10125E	1.1	14270	13	15	163	1.5	1	6070	.6	19	266	44670	4210
8900N 10150E	.9	14390	10	17	216	1.9	1	7000	.1	16	80	59170	4040
8900N 10175E	.8	13030	9	15	205	2.1	1	7330	.1	16	86	67040	3950
8900N 10200E	.9	9670	17	11	154	1.2	1	5930	.6	21	93	37030	3720
8900N 10225E	.7	8730	8	24	122	.9	1	43380	.7	14	58	27020	5160
8900N 10250E	1.3	13180	10	25	187	1.9	1	18860	.6	19	79	57700	6920
8900N 10275E	.6	10070	18	9	130	1.7	1	10880	1.5	16	71	35570	4250
8900N 10300E	1.0	10060	26	15	167	1.3	1	8370	1.6	25	74	39780	3700
8900N 10325E	.7	9860	21	12	121	1.1	1	4910	1.1	24	37	33110	2370
8900N 10350E	.9	8360	17	6	90	1.3	1	3830	.8	19	41	37160	2780
8900N 10375E	.6	8600	21	11	75	.9	1	4190	1.2	18	37	27680	4910
8900N 10400E	1.2	8940	13	9	85	1.1	1	25880	.9	19	109	30730	2540
8900N 10425E 40M	.8	11590	12	28	224	1.6	1	11130	.7	20	404	47080	8920
8900N 10450E	1.4	27740	20	36	249	2.2	1	23970	.2	21	670	60570	6990
8900N 10475E	1.3	20190	9	28	188	2.4	1	12370	.5	24	1242	71560	7390
8900N 10500E	1.1	17950	12	22	230	2.0	1	14130	1.0	22	679	61570	8850
8900N 10525E	3.3	23030	7	36	283	2.2	4	15210	.2	25	465	69870	8240
8900N 10550E	2.0	15740	6	21	246	2.1	7	8220	.2	20	214	68580	5290
8900N 10575E	2.7	20170	3	28	291	1.8	2	18410	.2	22	445	54360	8070
9000N 10650E	2.4	19540	5	23	341	1.9	5	9940	.1	19	340	60040	5430
9000N 10025E	.9	10480	9	12	203	1.0	2	14240	.4	22	150	28880	3970
9000N 10050E 40M	.3	6470	17	4	72	.7	3	3490	1.0	16	170	21030	2890
9000N 10075E	.3	8460	27	12	72	1.4	5	3410	1.1	31	219	42630	2860
9000N 10100E	.6	10630	20	11	122	1.1	5	4890	1.4	27	169	32570	4660
9000N 10125E	.6	11070	22	7	129	1.1	5	4940	.6	23	216	32010	5120
9000N 10150E	.7	8510	27	4	124	1.1	7	4380	1.2	20	124	34360	3520
9000N 10175E	.5	8600	26	4	108	1.0	3	5910	.9	20	149	26920	2740
9000N 10200E	.8	7880	20	15	129	1.1	7	15640	1.1	27	102	31730	1560
9000N 10225E	.7	10270	23	13	130	1.2	10	7210	1.0	28	55	35070	2960
9000N 10250E 40M	1.4	7050	15	8	112	.9	1	22370	.7	23	594	27910	2100
9000N 10275E	.9	8620	16	7	117	1.3	8	5580	.3	21	65	41670	2470
9000N 10300E	1.9	6570	9	12	104	.9	4	53570	.7	18	89	26030	1990
9000N 10325E	1.1	9330	16	13	146	1.3	7	7090	.4	22	114	35140	4130
9000N 10350E	1.1	11240	17	13	174	1.4	7	7420	.6	21	124	43830	3680
9000N 10375E	1.4	13370	12	26	236	1.4	6	14090	1.2	22	185	42940	6880
9000N 10400E	1.7	11500	12	15	200	1.9	8	9040	.8	19	117	59400	4130
9000N 10425E	1.6	17240	9	17	222	1.8	5	6940	.4	15	154	52610	4300
9000N 10450E	1.6	17850	6	17	256	1.6	5	7040	.4	15	179	47580	4350
9000N 10475E	1.5	17830	3	19	237	1.6	5	7570	.4	15	149	49200	4780
9000N 10500E	1.8	21270	5	22	244	1.7	4	11650	.8	18	270	50150	6880
9000N 10525E	2.7	21690	6	26	208	2.4	1	22540	.6	25	620	68580	6860
9000N 10600E	1.6	9070	9	17	285	1.8	3	10440	.5	13	97	59720	3750
9000N 10625E	1.9	20750	3	25	298	1.9	1	7250	.2	16	389	53300	4860
9000N 10650E	1.5	17620	1	22	383	1.4	1	7640	.4	12	273	42150	4210
9100N 10025E	.8	13130	11	12	176	1.1	2	5620	1.5	14	123	32150	4150
9100N 10050E	.8	10980	13	8	176	1.0	1	4700	.6	14	115	26410	4150



ATTENTION: GRANT CROOKER

16041980-5014 OR 16041988-4524

# TYPE SOIL GEOCHEM #

DATE: APRIL 5, 1988

(VALUES IN PPM)	L1	H6	MN	MO	NA	NI	P	PB	SB	SR	TH	U	V
8800N 10350E	13	9110	444	1	180	38	1030	26	2	38	1	1	127.1
8800N 10375E	15	7320	641	1	180	25	1060	21	2	32	1	1	85.6
8800N 10400E	14	15230	584	1	160	67	1000	46	3	27	1	1	109.2
8800N 10425E	11	19510	589	2	130	118	750	37	1	19	1	1	63.8
8800N 10450E	12	19970	712	2	160	130	870	33	1	32	1	1	69.0
8800N 10475E	22	20760	1305	3	160	19	4570	41	4	196	1	1	221.3
8800N 10500E	15	12900	1146	2	240	22	2000	28	1	111	1	1	115.4
8800N 10525E	7	9830	520	1	130	32	1790	20	1	36	1	1	117.0
8800N 10550E	10	9700	721	2	170	44	1890	24	1	32	1	1	145.7
8800N 10575E	28	25120	1202	5	150	16	4900	54	1	137	1	1	183.4
8800N 10600E	20	20330	1178	3	170	9	6320	52	1	160	1	1	218.4
8800N 10650E	18	11760	1523	2	270	17	2320	38	1	96	1	1	144.1
8900N 10050E	9	10560	1585	2	190	48	6020	20	1	132	1	1	39.8
8900N 10100E	10	11600	2548	2	670	50	2790	29	1	135	1	1	40.5
8900N 10125E	18	18760	525	2	220	71	1040	30	1	24	1	1	83.5
8900N 10150E	14	10680	633	1	260	27	1050	34	1	25	1	1	131.3
8900N 10175E	12	11090	716	1	260	29	1200	19	4	24	1	1	157.2
8900N 10200E	15	22820	534	3	180	95	630	41	1	19	1	1	57.1
8900N 10225E	9	15690	522	2	230	57	730	25	1	100	1	1	37.7
8900N 10250E	11	15370	578	1	310	47	1260	21	1	66	1	1	115.8
8900N 10275E	11	19170	491	2	210	63	880	40	1	25	1	1	68.1
8900N 10300E	11	24430	694	3	210	114	1220	47	1	32	1	1	59.2
8900N 10325E	11	26900	513	2	130	127	690	28	1	25	1	1	40.5
8900N 10350E	9	20410	341	2	140	113	530	29	1	16	1	1	56.6
8900N 10375E	9	19220	453	2	160	76	480	25	1	33	1	1	35.9
8900N 10400E	15	19580	526	2	140	97	790	29	1	67	1	1	53.4
8900N 10425E 40M	14	19000	784	3	130	48	3310	41	1	124	1	1	135.4
8900N 10450E	24	21430	1515	2	1690	5	6530	121	6	256	1	1	205.1
8900N 10475E	23	17560	1396	13	190	5	5950	46	13	103	1	1	239.5
8900N 10500E	19	17450	1421	8	120	4	5560	50	7	106	1	1	204.9
8900N 10525E	27	17920	1790	2	210	6	6630	47	3	132	1	1	225.4
8900N 10550E	16	12980	991	2	200	30	3920	29	2	72	1	1	183.5
8900N 10575E	20	14740	1958	2	270	10	5210	45	4	261	1	1	176.6
8900N 10650E	19	11370	1535	1	290	17	3540	32	4	125	1	1	161.7
9000N 10025E	19	27810	624	2	180	108	1470	51	1	35	1	1	38.8
9000N 10050E 40M	12	23830	290	2	70	100	850	33	1	11	1	1	29.0
9000N 10075E	14	40470	445	1	80	198	820	37	2	11	2	1	55.2
9000N 10100E	14	27570	471	7	120	145	1120	63	1	16	1	1	38.8
9000N 10125E	20	28160	422	2	120	108	1160	35	1	17	1	1	51.4
9000N 10150E	13	22120	410	1	120	106	590	29	1	15	1	1	51.9
9000N 10175E	16	24790	398	2	120	110	750	31	1	18	1	1	35.7
9000N 10200E	12	45550	556	2	100	168	710	32	1	73	2	1	37.5
9000N 10225E	13	32110	655	2	160	171	470	27	2	29	2	1	37.9
9000N 10250E 40M	18	32360	458	2	100	133	1590	45	1	123	1	1	36.6
9000N 10275E	6	19400	585	1	160	103	600	23	1	26	1	1	65.3
9000N 10300E	27	25940	627	2	210	93	1350	28	1	246	1	1	38.1
9000N 10325E	14	25290	770	2	220	109	1030	29	1	58	1	1	52.5
9000N 10350E	13	20730	827	2	260	100	1100	28	2	77	1	1	80.5
9000N 10375E	19	23990	848	2	240	69	2510	35	2	369	1	1	101.0
9000N 10400E	9	12420	832	2	180	44	2750	20	2	61	1	1	141.5
9000N 10425E	12	9190	759	2	240	14	2890	14	1	95	1	1	129.3
9000N 10450E	12	9820	839	2	270	13	3140	22	1	85	1	1	123.4
9000N 10475E	14	10130	1016	1	220	12	3460	20	1	83	1	1	120.8
9000N 10500E	20	13580	1361	1	290	11	5210	28	1	129	1	1	150.7
9000N 10525E	22	25370	1614	3	200	7	8150	55	5	221	1	1	249.0
9000N 10600E	5	7970	1202	1	210	25	2700	70	2	99	1	1	146.0
9000N 10625E	19	10610	1592	2	320	15	2600	28	2	90	1	1	131.6
9000N 10650E	15	8580	1653	1	310	14	2020	27	1	98	1	1	92.3
9100N 10025E	15	14970	620	2	210	61	1260	33	1	26	1	1	57.7
9100N 10050E	11	14050	587	1	190	55	930	41	1	17	1	1	45.8

ATTENTION: GRANT CROOKER

(604)980-5814 OR (604)988-4524

\* TYPE SOIL GEOCHEM \* DATE: APRIL 5, 1988

VALUES (IN PPM)	ZN	BA	SN	N	CR	AU-PPB
8800N 10350E	54	1	1	1	125	34
8800N 10375E	60	1	1	1	92	42
8800N 10400E	54	1	1	1	195	37
8800N 10425E	60	1	1	1	297	36
8800N 10450E	72	1	1	1	209	51
8800N 10475E	109	1	1	1	77	3
8800N 10500E	96	1	1	1	78	7
8800N 10525E	47	1	1	1	115	28
8800N 10550E	61	1	1	1	153	15
8800N 10575E	129	1	1	1	49	33
8800N 10600E	121	1	1	1	58	18
8800N 10650E	116	1	1	1	95	8
8900N 10050F	228	1	1	1	73	7
8900N 10100E	127	1	1	1	97	3
8900N 10125E	69	1	1	1	212	5
8900N 10150E	74	1	1	1	112	4
8900N 10175E	70	1	1	1	108	15
8900N 10200E	57	1	1	1	259	5
8900N 10225E	43	1	1	1	174	1
8900N 10250E	58	1	1	1	128	9
8900N 10275E	59	1	1	1	255	34
8900N 10300E	59	1	1	1	360	5
8900N 10325E	51	1	1	1	346	2
8900N 10350E	43	1	1	1	273	5
8900N 10375E	48	1	1	1	287	31
8900N 10400E	49	1	1	1	207	17
8900N 10425E 40H	80	1	1	1	139	13
8900N 10450E	163	1	1	2	29	20
8900N 10475E	128	1	1	1	27	36
8900N 10500E	125	1	1	1	28	13
8900N 10525E	148	1	1	1	68	39
8900N 10550E	88	1	1	1	124	7
8900N 10575E	136	1	1	1	45	14
8900N 10650F	124	1	1	1	87	161
9000N 10025E	58	1	1	1	266	11
9000N 10050E 40H	38	1	1	1	229	12
9000N 10075E	47	1	1	1	418	17
9000N 10100E	65	1	1	1	345	6
9000N 10125E	40	1	1	1	284	9
9000N 10150E	46	1	1	1	378	8
9000N 10175E	49	1	1	1	401	21
9000N 10200E	45	1	1	1	348	4
9000N 10225E	54	1	1	1	365	6
9000N 10250E 40H	51	1	1	1	228	7
9000N 10275E	50	1	1	1	232	5
9000N 10300F	41	1	1	1	255	8
9000N 10325E	57	1	1	1	232	2
9000N 10350E	59	1	1	1	212	23
9000N 10375E	69	1	1	1	158	3
9000N 10400E	64	1	1	1	175	12
9000N 10425E	79	1	1	1	97	8
9000N 10450E	85	1	1	1	78	6
9000N 10475E	96	1	1	1	76	11
9000N 10500E	119	1	1	1	48	4
9000N 10525E	133	1	1	1	21	22
9000N 10600E	80	1	1	1	120	6
9000N 10625E	105	1	1	1	74	90
9000N 10650E	137	1	1	1	62	20
9100N 10025E	66	1	1	1	125	68
9100N 10050E	68	1	1	1	132	24

ATTENTION: GRANT CROOKER

(604)980-5814 OR (604)980-4524

# TYPE SOIL BEDCHEN #

DATE: APRIL 5, 1988

VALUES IN PPM	AG	AL	AS	B	BA	BE	BI	CA	CD	CO	CU	FE	K
9100N 10075E	1.2	8800	13	8	135	.7	1	7080	1.2	13	117	18830	4060
9100N 10100E	.8	9300	11	8	156	.7	5	6050	.1	16	98	20610	4490
9100N 10125E	.8	9980	12	8	168	.8	5	8090	2.0	19	102	23030	4260
9100N 10150E	.8	10350	17	11	191	1.5	5	5950	.4	18	78	48700	3260
9100N 10175E	1.1	12650	18	12	191	1.7	5	6890	1.5	21	120	54120	2880
9100N 10200E	.9	12230	8	9	211	1.6	4	5740	.7	16	64	53270	3240
9100N 10225E	1.2	12420	9	10	203	1.5	4	7060	.3	17	88	47450	3760
9100N 10250E	1.0	13520	20	15	249	1.8	6	9550	1.0	26	130	57340	4620
9100N 10275E	2.2	13290	22	12	268	2.0	1	29090	1.1	25	530	63500	5850
9100N 10300E	1.1	13150	13	8	250	1.6	4	8380	1.2	19	130	47890	5510
9100N 10325E	1.3	14830	13	11	273	1.6	3	7710	.7	19	198	50150	5510
9100N 10350E	1.2	15340	11	12	284	1.5	2	7610	1.4	17	131	44810	4890
9100N 10375E	1.2	16580	13	17	255	1.4	2	7130	1.2	17	114	43470	4820
9100N 10400E	1.5	14310	10	12	229	1.7	2	8240	.6	16	141	54300	3970
9100N 10425E	2.5	19050	9	16	238	2.3	1	9500	.3	21	827	69240	5420
9100N 10450E	1.9	18700	7	22	275	1.5	1	9840	.1	15	154	44730	4760
9100N 10475E	2.3	20710	8	22	208	2.0	1	13380	.1	21	809	59340	7190
9100N 10500E	2.6	22220	7	24	203	2.2	1	17940	1.4	22	686	64270	7770
9100N 10525E	2.7	21890	7	25	229	2.2	1	17550	1.5	23	664	63920	8970
9100N 10625E	1.5	14610	10	20	295	1.7	1	6970	.8	14	144	52480	6360
9100N 10650E	1.4	14130	11	11	230	1.8	1	5530	1.2	14	97	55540	3450
8700E 10525H	2.9	33340	10	33	638	1.9	2	7530	.9	25	222	53020	11580
8700E 10550H	2.3	33740	3	37	627	1.8	2	6320	.1	28	265	55130	11150
8700E 10575H	2.1	23990	8	23	334	1.5	2	8110	.3	18	89	45360	7270
8700E 10600H	1.6	33090	18	34	478	1.4	1	6690	.4	17	115	41880	4440
8700E 10625H	1.8	27740	11	31	556	1.8	1	6590	1.3	22	147	52640	9130
8700E 10650H	1.8	24420	10	24	880	1.8	1	6020	.5	22	160	55060	6640
8700E 10675H	1.9	24810	5	25	314	1.6	2	8620	.5	17	101	45980	5730
8700E 10750H 40H	1.9	30460	10	33	382	2.1	1	7410	.6	20	264	66970	8750
8700E 10775H 40H	2.2	26450	16	31	516	1.8	1	10620	1.5	37	165	52960	7040
8700E 10800H	1.8	28700	8	30	329	2.0	8	7560	1.6	27	140	58000	6780
8700E 10825H	1.7	33480	15	34	330	2.0	11	8190	.8	26	145	55940	9460
8700E 10850H 40H	1.2	36560	14	36	200	2.3	9	7090	.6	26	173	62760	3980
8700E 10875H	1.8	37340	5	36	318	2.1	11	5490	.3	35	163	59400	5160
8700E 10900H	1.9	33120	8	33	348	1.9	12	6400	1.1	26	133	54450	6040
8700E 10925H	1.7	27880	10	25	323	1.7	12	7010	.8	23	114	50110	6420
8700E 10950H	2.6	30860	10	30	427	2.0	13	11260	.1	31	143	56090	6870
8700E 10975H	1.6	28550	6	27	399	1.7	9	10020	2.7	16	61	50460	7490
8700E 11000H	1.9	24780	11	23	268	1.6	8	9640	1.0	17	85	47670	7180
8700E 11025H 40H	2.0	24700	6	33	251	1.6	8	18670	.5	17	59	47830	7370
8700E 11050H 40H	1.6	26250	8	27	194	1.6	6	9190	1.5	15	119	50000	5290
8700E 11075H	1.4	27270	13	27	230	1.5	7	8860	.1	14	112	46520	5210
8700E 11100H	1.4	24080	8	31	244	1.5	6	9790	.2	17	115	46380	7330
8700E 11125H	1.9	28550	15	31	316	1.8	8	9650	.6	21	131	54370	7320
8700E 11150H	2.6	30850	21	30	327	1.7	10	10340	1.7	24	112	53510	8370
8700E 11175H 40H	2.3	24760	4	34	303	1.3	4	13360	.2	14	91	35920	4390
8700E 11200H	1.5	27640	3	32	266	1.6	5	6230	.8	22	148	48840	3540
8700E 11225H	3.0	29470	14	36	387	2.3	9	10550	.6	30	326	71680	11290
8700E 11250H	2.3	27820	6	30	408	1.5	9	9540	.7	29	178	45090	6600
8700E 11275H	.7	12710	8	13	173	.5	3	5570	.7	5	33	15050	1850
8700E 11300H	1.2	18840	5	21	160	1.2	5	6240	.2	12	68	34680	4160
8700E 11325H	1.6	22780	13	26	202	2.1	4	9120	.1	21	308	69310	8900
8700E 11350H	2.4	18880	16	22	146	2.3	1	27420	1.5	17	558	76860	5450
8700E 11375H	1.7	27440	18	31	247	2.3	7	7790	.4	27	283	73590	7830
8700E 11400H	1.4	28660	4	29	1214	1.6	5	7290	.1	19	216	48040	3230
8800E 10525H 40H	1.4	27410	11	27	1955	1.3	8	10400	1.5	22	59	39060	5020
8800E 10575H 40H	1.4	30450	3	37	639	1.8	6	8950	1.0	25	195	52440	5050
8800E 10600H	1.9	31340	10	32	590	1.8	8	6840	.6	25	213	56560	9630
8800E 10625H 40H	1.7	40250	6	44	527	2.2	8	5190	1.2	31	282	69080	7350
8800E 10650H	1.8	26040	11	31	655	1.8	6	12120	.1	25	311	53700	10050

ATTENTION: GRANT CROOKER

(604)980-5814 OR (604)988-4524

\* TYPE SOIL GEOCHEM \*

DATE: APRIL 5, 1988

(VALUES IN PPM)	LI	MG	HM	MO	NA	NI	P	PB	SR	SR	TH	U	V
9100N 10075E	13	15560	425	2	140	52	1030	56	1	21	1	1	27.3
9100N 10100E	12	19530	456	2	140	76	1130	53	1	17	1	1	27.1
9100N 10125E	12	23140	564	2	200	102	1420	56	1	41	2	1	30.9
9100N 10150E	7	14710	654	1	180	69	1570	34	1	24	1	1	97.1
9100N 10175E	11	22720	597	1	200	97	1620	36	2	30	1	1	107.7
9100N 10200E	7	11820	672	1	200	46	1440	15	1	42	1	1	113.8
9100N 10225E	9	14690	704	1	190	61	1660	29	1	44	1	1	95.7
9100N 10250E	24	31910	785	2	150	98	3220	40	2	63	2	1	131.0
9100N 10275E	14	25110	634	2	220	65	7310	30	2	242	1	1	180.2
9100N 10300E	10	19360	599	2	200	71	3410	33	1	62	1	1	108.2
9100N 10325E	10	14360	832	1	230	55	2750	19	1	88	1	1	109.8
9100N 10350E	11	14290	854	2	250	39	2840	22	1	104	1	1	93.4
9100N 10375E	11	11290	998	2	280	34	2800	31	1	161	1	1	86.8
9100N 10400E	10	13210	732	1	290	31	3390	24	1	80	1	1	126.7
9100N 10425E	14	14330	978	4	290	20	4860	27	3	105	1	1	191.4
9100N 10450E	15	10380	978	2	290	16	3360	25	1	93	1	1	105.2
9100N 10475E	22	18370	1302	2	380	10	5500	42	3	153	1	1	177.4
9100N 10500E	26	21110	1596	2	340	4	7530	44	4	168	1	1	212.7
9100N 10525E	23	20550	1872	2	370	5	6670	58	5	206	1	1	210.6
9100N 10625E	10	10210	1161	1	270	24	2130	26	1	81	1	1	109.9
9100N 10650E	9	7570	806	1	250	20	1280	18	2	59	1	1	123.6
8700E 10525N	24	21460	1797	2	230	54	2490	30	2	45	1	1	125.7
8700E 10550N	22	21550	1612	2	230	64	2590	28	2	41	1	1	109.1
8700E 10575N	17	15900	953	2	360	50	1950	25	2	41	1	1	87.0
8700E 10600N	24	10080	1115	1	290	25	2370	17	1	46	1	1	74.5
8700E 10625N	21	17860	1562	4	330	67	3070	26	1	33	1	1	91.7
8700E 10650N	20	14080	2182	1	230	45	2800	36	2	23	1	1	90.5
8700E 10675N	21	14880	1314	2	420	42	1980	21	2	26	1	1	82.4
8700E 10750N 40M	23	18200	1331	1	310	60	3130	34	3	45	1	1	80.8
8700E 10775N 40M	28	14130	3379	1	200	104	3160	41	2	58	1	1	73.0
8700E 10800N	32	15010	2855	2	180	50	3080	49	2	35	1	1	85.2
8700E 10825N	35	17590	1984	2	180	64	2990	49	1	44	1	1	94.9
8700E 10850N 40M	37	13740	1528	2	190	52	2060	43	3	39	1	1	82.8
8700E 10875N	33	13970	3028	3	190	58	3740	44	2	25	1	1	91.0
8700E 10900N	27	13860	2401	1	210	52	3140	30	1	29	1	1	48.8
8700E 10925N	23	13760	1829	1	220	45	2200	38	3	29	1	1	95.2
8700E 10950N	33	16290	3946	3	320	34	4160	46	3	58	1	1	109.7
8700E 10975N	29	21110	2204	1	240	31	3410	34	1	26	1	1	125.0
8700E 11000N	25	15670	1626	1	270	39	2310	35	1	29	1	1	97.5
8700E 11025N 40M	34	19410	2251	1	310	43	4510	29	2	48	1	1	102.3
8700E 11050N 40M	31	15400	943	2	270	49	1960	31	1	30	1	1	100.4
8700E 11075N	29	11170	1061	1	300	34	2120	32	1	39	1	1	82.6
8700E 11100N	21	11740	1977	1	330	40	2760	12	1	39	1	1	68.9
8700E 11125N	29	15880	3132	1	260	47	3010	38	2	37	1	1	82.6
8700E 11150N	30	20210	2254	2	270	77	3220	33	3	43	1	1	95.1
8700E 11175N 40M	28	10920	1596	1	270	33	2350	52	3	50	1	1	59.1
8700E 11200N	28	13280	1777	2	290	49	2260	36	1	31	1	1	87.5
8700E 11225N	24	19740	1730	7	340	72	3100	41	3	57	1	1	121.7
8700E 11250N	24	14350	1689	4	340	90	1520	27	2	55	1	1	86.9
8700E 11275N	11	2730	732	1	430	31	2600	1	1	39	1	1	22.6
8700E 11300N	24	8160	705	2	360	34	720	15	2	35	1	1	59.1
8700E 11325N	22	21310	1745	2	230	38	2140	43	3	37	1	1	163.3
8700E 11350N	24	31680	1598	4	190	31	3850	81	4	35	1	1	209.6
8700E 11375N	32	22770	1844	2	230	51	3050	41	2	27	1	1	198.2
8700E 11400N	24	12170	1858	1	230	23	2540	29	1	38	1	1	92.3
8800F 10525N 40M	20	16350	1668	2	270	63	2740	32	1	50	1	1	69.5
8800E 10575N 40M	26	12870	2198	2	250	142	5670	35	1	56	1	1	86.1
8800E 10600N	21	16020	2074	3	250	69	2810	40	3	42	1	1	110.6
8800E 10625N 40M	25	18150	1405	4	290	91	3500	27	3	33	1	1	115.8
8800E 10650N	18	15130	1854	3	230	60	3500	30	2	53	1	1	97.7

ATTENTION: GRANT CROOKER

16041980-5814 DR 16041988-4524

TYPE SOIL GEOCHEM \*

DATE: APRIL 5, 1988

(VALUES IN PPM)	ZH	GA	SN	N	CR	AU-PPB
9100N 10075E	61	1	1	1	149	3
9100N 10100E	59	1	1	1	198	6
9100N 10125E	72	1	1	1	225	8
9100N 10150E	66	1	1	1	178	5
9100N 10175E	63	1	1	1	272	4
9100N 10200E	66	1	1	1	136	9
9100N 10225E	65	1	1	1	143	14
9100N 10250E	68	1	1	1	179	10
9100N 10275E	69	1	1	1	134	22
9100N 10300E	64	1	1	1	128	6
9100N 10325E	79	1	1	1	120	9
9100N 10350E	82	1	1	1	104	7
9100N 10375E	89	1	1	1	99	3
9100N 10400E	70	1	1	1	138	8
9100N 10425E	98	1	1	1	102	26
9100N 10450E	106	1	1	1	82	2
9100N 10475E	128	1	1	1	54	10
9100N 10500E	139	1	1	1	35	17
9100N 10525E	141	1	1	1	32	4
9100N 10625E	116	1	1	1	90	6
9100N 10650E	70	1	1	1	100	3
8700E 10525N	113	1	1	2	85	18
8700E 10550N	121	1	1	2	109	20
8700E 10575N	108	1	1	1	96	21
8700E 10600N	109	1	1	1	49	26
8700E 10625N	137	1	1	1	110	22
8700E 10650N	113	1	1	2	74	99
8700E 10675N	115	1	1	1	77	17
8700E 10750N 40M	178	1	1	2	96	39
8700E 10775N 40M	224	1	1	1	86	13
8700E 10800N	175	1	1	2	67	11
8700E 10825N	175	1	1	2	94	18
8700E 10850N 40M	200	1	1	2	48	176
8700E 10875N	234	1	1	2	66	6
8700E 10900N	126	1	1	2	79	7
8700E 10925N	99	1	1	1	78	12
8700E 10950N	140	2	1	2	67	7
8700E 10975N	124	1	1	2	69	18
8700E 11000N	108	1	1	1	78	28
8700E 11025N 40M	141	1	1	1	77	11
8700E 11050N 40M	117	1	1	1	77	34
8700E 11075N	113	1	1	1	60	11
8700E 11100N	106	1	1	1	61	12
8700E 11125N	143	1	1	2	86	19
8700E 11150N	142	1	1	2	148	13
8700E 11175N 40M	146	1	1	1	53	8
8700E 11200N	133	1	1	1	56	10
8700E 11225N	118	1	1	2	134	27
8700E 11250N	109	1	1	1	88	9
8700E 11275N	52	1	1	1	13	2
8700E 11300N	63	1	1	1	48	9
8700E 11325N	117	1	1	2	108	18
8700E 11350N	173	2	1	1	105	82
8700E 11375N	132	1	1	2	155	17
8700E 11400N	115	1	1	2	57	9
8800E 10525N 40M	148	1	1	1	109	2
8800E 10575N 40M	277	1	1	2	59	10
8800E 10600N	149	1	1	2	95	21
8800E 10625N 40M	136	1	1	2	122	44
8800E 10650N	137	1	1	1	89	24

ATTENTION: GRANT CROOKER

(604)980-5814 OR (604)988-4524

\* TYPE SOIL GEOCHEM \*

DATE: APRIL 5, 1988

(VALUES IN PPM)	AB	AI	AS	B	BA	BE	BI	CA	CD	CO	CU	FE	K
8800E 10700N	1.7	13710	12	14	303	1.2	5	7100	.5	10	61	32900	4730
8800E 10725N	1.5	25150	18	28	487	2.0	6	8660	1.1	22	200	54780	8290
8800E 10750N	1.5	27920	11	30	435	1.9	11	7890	.8	17	153	57950	8750
8800E 10775N 40M	2.4	32450	14	33	516	2.1	13	7640	.4	23	154	64930	13020
8800E 10800N	2.4	32250	21	32	527	2.3	16	6430	1.0	30	165	67170	17050
8800E 10825N	1.7	22670	14	21	369	1.6	9	7600	.2	18	91	47300	7680
8800E 10850N	1.9	29650	11	32	477	1.8	11	8980	.8	23	113	49970	8970
8800E 10875N	2.1	29340	16	29	420	1.8	12	10450	2.1	24	106	53350	8350
8800E 10900N	2.5	32400	15	33	472	2.2	11	11810	1.6	37	125	58890	9460
8800E 10925N	2.8	35760	13	41	613	2.4	12	15030	1.8	32	156	65490	12690
8800E 10950N 40M	2.8	34790	20	38	591	2.4	14	14980	1.7	27	113	67450	14380
8800E 10975N	3.5	28160	17	30	282	2.0	13	15410	1.1	26	90	55140	9310
8800E 11000N	2.0	24790	15	28	215	1.9	6	8700	1.0	19	124	57220	7660
8800E 11075N	3.3	20820	20	27	278	2.3	1	22470	3.0	27	532	68960	2870
8800E 11050N	2.1	24720	14	29	310	2.0	6	12230	.3	22	185	61970	5330
8800E 11075N	2.8	20320	18	26	152	2.1	4	12080	.8	22	307	64260	6800
8800E 11100N	2.1	18670	17	21	165	2.1	6	8280	1.2	21	220	65540	7370
8800E 11125N 40M	1.6	16420	12	17	112	2.0	4	7070	1.5	18	223	63340	4740
8800E 11150N	2.1	18850	27	21	305	2.6	5	9500	.3	30	328	87540	4870
8800E 11175N	1.5	19000	22	21	293	2.0	5	6920	1.7	25	212	61680	6000
8800E 11225N	1.0	11290	3	11	245	.7	3	8250	.8	6	38	18240	2970
8800E 11250N	1.5	24340	9	24	215	2.1	7	7490	.5	25	253	64020	4110
8800E 11275N	2.3	22630	14	24	239	2.5	10	8460	.4	23	236	78750	4820
8800E 11300N	1.6	21730	15	23	198	1.9	12	6650	1.1	18	117	60530	6710
8800E 11325N	1.6	23270	15	25	236	2.1	11	6970	1.0	20	162	68120	7310
8800E 11350N	1.5	20210	10	19	174	1.9	9	6420	.4	17	163	59360	6290
8800E 11375N	1.5	20610	7	23	273	1.7	5	10340	.8	14	104	51650	5110
8800E 11400N	1.7	24780	8	27	346	1.6	13	7460	1.0	16	147	47310	7950
8800E 10325E	.9	13660	12	15	166	1.7	8	5230	.3	13	55	54130	3760

PROJECT NO: 88 L 1 10

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7N 1J2

FILE NO: B-337/P1

ATTENTION: GRANT CROCKER

(604)980-5814 OR (604)988-4524

\* TYPE SOIL GEOCHEM \*

DATE: APRIL 5, 1988

(VALUES IN PPM)	LI	MG	MN	MO	NA	NI	P	PR	SR	SR	TH	U	V
8800E 10700N	15	13230	684	3	300	28	2810	35	7	20	1	1	61.7
8800E 10725N	22	16990	1499	3	200	50	3270	27	1	44	1	1	84.0
8800E 10750N	24	19050	810	2	250	51	2890	22	1	39	1	1	96.9
8800E 10775N 40H	21	22490	1110	2	310	66	2450	32	2	31	1	1	113.4
8800E 10800H	20	24970	1520	1	230	81	2900	27	4	23	1	1	112.6
8800F 10825N	15	17490	1114	1	220	49	2020	20	1	37	1	1	86.8
8800E 10850H	21	16250	1833	2	280	69	3150	24	2	38	1	1	87.6
8800F 10875N	22	21040	1664	2	490	90	3540	42	1	50	1	1	103.3
8800E 10900H	25	27770	2090	1	530	170	3970	36	2	51	1	1	107.1
8800E 10925N	36	31070	2577	2	600	121	4610	50	4	57	1	1	126.2
8800E 10950H 40H	40	28500	1746	2	770	79	2670	38	5	56	1	1	133.7
8800F 10975N	28	21690	1760	2	1350	47	2970	26	4	69	1	1	104.5
8800E 11000H	18	14680	1330	2	360	44	1820	22	2	43	1	1	94.2
8800E 11025N	23	23070	3988	2	230	13	3900	58	5	62	1	1	176.7
8800F 11050N	22	14720	1455	1	410	14	2160	28	3	48	1	1	166.2
8800E 11075N	22	17850	1019	1	260	21	1650	36	2	36	1	1	152.2
8800E 11100H	16	18190	1151	1	290	30	1900	38	4	34	1	1	171.2
8800E 11125N 40H	13	12530	434	1	270	17	990	26	2	26	1	1	168.6
8800E 11150N	25	21900	1148	1	250	46	1920	36	4	31	1	1	257.6
8800E 11175N	22	16590	1056	1	330	90	1500	28	2	37	1	1	135.8
8800E 11225N	7	4410	640	1	450	11	3730	7	1	50	1	1	39.3
8800E 11250N	22	17660	2091	1	280	13	3240	29	4	29	1	1	142.5
8800E 11275N	21	16940	1410	1	240	14	2310	27	3	51	1	1	236.2
8800E 11300H	16	14840	851	1	270	30	1490	24	1	28	1	1	158.7
8800E 11325N	18	15190	901	1	270	24	2180	28	1	30	1	1	189.5
8800F 11350H	15	17770	809	1	280	20	1140	33	1	30	1	1	160.6
8800E 11375N	19	10020	1264	1	270	5	3140	19	2	52	1	1	125.8
8800E 11400H	22	14070	1572	2	280	41	2200	23	1	25	1	1	89.6
8800E 10375F	9	7740	659	1	230	33	990	19	1	32	1	1	112.8

ATTENTION: GRANT CROOKER

(604)980-5814 OR (604)988-4524

\* TYPE SOIL GEOCHEM \*

DATE: APRIL 5, 1988

(VALUES IN PPM)	ZH	GA	SN	M	CR	AU-PPB
BB00E 10700N	70	1	1	1	133	6
BB00E 10725N	118	1	1	1	94	5
BB00E 10750N	126	1	1	2	107	11
BB00E 10775N 40M	165	1	1	2	114	28
BB00E 10800N	153	2	1	2	141	18
BB00E 10875N	127	1	1	1	78	15
BB00E 10850N	174	1	1	2	86	19
BB00E 10875N	151	1	1	2	117	12
BB00E 10900N	190	2	1	2	148	35
BB00E 10925N	232	2	1	2	139	9
BB00E 10950N 40M	196	2	1	2	99	13
BB00E 10975N	96	1	1	2	164	3
BB00E 11000N	113	1	1	1	78	16
BB00E 11025N	155	2	1	1	45	28
BB00E 11050N	131	1	1	1	50	2
BB00E 11075N	116	1	1	1	88	6
BB00E 11100N	101	1	1	1	121	2
BB00E 11125N 40M	87	1	1	1	86	7
BB00E 11150N	115	1	1	1	174	21
BB00E 11175N	104	1	1	1	223	12
BB00E 11225N	264	1	1	1	26	8
BB00E 11250N	136	1	1	1	53	2
BB00E 11275N	170	1	1	1	75	9
BB00E 11300N	108	1	1	1	139	8
BB00E 11325N	124	1	1	1	89	6
BB00E 11350N	102	1	1	1	99	11
BB00E 11375N	117	1	1	1	48	30
BB00E 11400N	99	1	1	1	74	18
BB00E 10725E	54	1	1	1	116	21



Appendix II

GEOPHYSICAL EQUIPMENT SPECIFICATIONS

GEONICS LIMITED  
VLF EM 16

---

Source of Primary Field            VLF transmitting stations

Transmitting Stations Used:    Any desired station frequency can be supplied with the instrument in the form of plug-in tuning units. Two tuning units can be plugged in at one time. A switch selects either station.

Operating Frequency Range:    About 15-25 Hz.

Parameters Measured:            1- The vertical in-phase component (tangent of the tilt angle of the polarization ellipsoid).  
                                      2- The vertical out-of-phase (quadrature) component (the short axis of the polarization ellipsoid compared to the long axis).

Method of Reading:                In-phase from a mechanical inclinometer and quadrature from a calibrated dial. Nulling by audio tone

Scale Range:                        In-phase  $\pm 150\%$ ; quadrature  $\pm 40\%$

Readability:                         $\pm 1\%$

Operating Temperature Range:     $-40$  to  $50^\circ$  C.

Operating Controls:                ON-OFF switch, battery testing push button, station selector, switch, volume control, quadrature dial  $\pm 40\%$ , inclinometer  $\pm 150\%$

Power Supply:                        6 size AA alkaline cells  $\approx 200$  hrs.

Dimensions:                         42 x 14 x 9 cm (16 x 5.5 x 3.5 in)

Weight:                                1.6 kg. (3.5 lbs)

Instrument Supplied With:        Monotonic speaker, carrying case, manual of operation, 3 station selector plug-in tuning units (additional frequencies are optional) set of batteries.

Manufacturer:                        Geonics Limited  
                                          1745 Meyerside Drive/Unit 8  
                                          Mississauga, Ontario  
                                          L5T 1C5

SCINTREX  
MP-2 PROTON PRECESSION MAGNETOMETER

Resolution: 1 gamma

Total Field Accuracy:  $\pm$  gamma over full operating range

Range: 20,000 to 100,000 gammas in 25 overlapping steps.

Internal Measuring Program: A reading appears 1.5 seconds after depression of Operate Switch & remains displayed for 2.2 secs. Recycling feature permits automatic repetitive readings at 3.7 sec. intervals.

External Trigger: External trigger input permits use of sampling intervals longer than 3.7 seconds.

Display: 5 digit LED readout displaying total magnetic field in gammas or normalized battery voltage.

Data Output: Multiplied precession frequency and gate time outputs for base station recording using interfacing optionally available from Scintrex.

Gradient Tolerance: Up to 5,000 gammas/meter.

Power Source: 8 size D cells  $\approx$ 25,000 readings at 25° C under reasonable conditions.

Sensor: Omnidirectional, shielded, noise-cancelling dual coil, optimized for high gradient tolerance.

Harness: Complete for operation with staff or back pack sensor.

Operating Temperature Range: -35 to +60° C.

Size: Console, 8 x 16 x 25 cm; Sensor, 8 x 15 cm; Staff 30 x 66 cm;

Weights: Console, 1.8 kg; Sensor, 1.3 kg; Staff, 0.6 kg;

Manufacturer: Scintrex  
222 Snidercroft Road  
Concord, Ontario

Appendix III

ROCK SAMPLE LOCATIONS

## ROCK SAMPLE LOCATIONS

Sample No.	Grid Co-ord.	Description
88-C-01,	9010N+10035E	-float, 8 ppb Au, 0.8 ppm Ag, greyish quartzite, 4 mm quartz vein, 2% py
88-C-02,	8875N+10150E	-grab, 2 ppb Au, 0.8 ppm Ag, limey andesite, ankerite, calcite veinlets
88-C-03,	8800N+10185E	-float, 3 ppb Au, 0.9 ppm Ag, grey quartzite, hornfels altered, 2-3% py
88-C-04,	8670N+10290E	-grab, 15 ppb Au, 12.1 ppm Ag, 7927 ppm Cu, 1149 ppm Zn, contact of sediments and pyroxenite, hornfels, mal, az, py, sheared
88-C-05,	8610N+10300E	-grab, 1 ppb Au, 0.3 ppm Ag, quartzite, hornfels, 1% py
88-C-06,	8720E+10550N	-grab, 8 ppb Au, 0.8 ppm Ag, feld. porp. dyke, 2-4% py
88-C-07,	8685E+10750N	-grab, 2 ppb Au, 5.6 ppm Ag, sediment/dyke contact, skarn? 5% py

Appendix IV

MAGNETIC DATA

300  
2  
1  
1

Apr 19 1987  
C. H. Hiler

9200 Section

Inch Quad

102000 -15 -10

102000 -17 -11

103000 -22 -12

10325 -24 -13

10350 -34 -21

10375 -38 -19

10400 -25 -18

10425 -29 -18

10450 -21 -15

10475 -17 -18

10500 -18 -20

10525 -18

10550 -18

10575 -18

10600 -18

10625 -18

10650 -18

10675 -18

10700 -18

10725 -18

10750 -18

10775 -18

10800 -18

Level

Station In-Pk	Quad	87 CCN Station In-Pk	Seattle Quad
10675	9	10100E	-7
10625	7	10075	-7
10625	4	10050	-4
10600	0	10025	-11
10575	-6	10000	-13
10550	-9		-27
10525	-2		-32
10500	-14		-42
10475	-22		-24
10450	-21		-17
10425	-23		-15
10400	-25		-14
10375	-27		-14
10350	-25		-10
10325	-23		-10
10300	-22		-8
10275	-14		-11
10250	-10		-7
10225	-16		-10
10200	-10		-6
10175	-8		-5
10150	-4		-7
10125	-5		-5
10100	-4		-5

Station In-Pk	Quad	Station In-Pk	Quad
10000E	-13	10575E	25
10025	-12	10600	18
10050	-11	10625	7
10075	-10	10650	-7
10100	-12	10675	-10
10125	-11	10700E	-12
10150E	-12		
10175	-10		
10200	-3		
10225	-4		
10250	-9		
10275	-9		
10300	-12		
10325	-15		
10350E	-25		
10375	-27		
10400	-31		
10425	-28		
10450	-18		
10475E	-12		
10500	-8		
10525	13		
10550	20		

H O P R I M A R I L I D M A D E - I N - C A N A D A  
D R A S M A K W A T E R P R O O F

LEVEL (S)



MAF 2 J:88  
Line 8800N  
CLIFF  
Station  
Quad

Station	Quad	Clear	Seattle	Quad
10000E	-5V	-2	-14	-20
10025	-4	-2	-12	-19
10050	-12	-6	-9	-17
10075	-11	-6	0	-16
10100	-10	-6	0	-15
10125	-8	-6		
10150	-3	-3		
10175	1	0		
10200	-4	-3		
10225E	-8	-9		
10250E	-9	-7		
10275	-7	-4		
10300	-5	-2		
10325	-4	0		
10350	-12	-2		
10375	-14	-1		
10400	-15	-3		
10425	-19	-4		
10450	-22	-7		
10475	-24	-22		
10500	-26	-28		
10525	-24	-22		
10550	-19	-22		

Line 8900N  
Station  
Quad

Station	Quad	Station	Quad
10575E	-4	10575E	-16
10600E	-1	10600E	-13
10625E	-2	10625E	-14
10650E	0	10650E	-11
10675E	-3	10675E	-13
10700E	0		
10725E	-3		
10750E	-2		
10775E	-6		
10800E	-8		
10825E	-11		
10850E	-15		
10875E	-12		
10900E	-17		
10925E	-19		
10950E	-35		
10975E	-34		
11000E	-40		
10430	-35		
10475	-32		
10500	-27		
10525	-22		
10550	-20		

Line 9000N	Station	In-Pk	Quad	Station	In-Pk	Quad
(	10325E	-37	-7	10175E	-33	-6
	10300E	-37	-8	10200	-21	-6
	10275	-33	-7	10225	-17	-6
	10250	-38	-11	10250	-24	-8
	10225	-37	-9	10275	-26	-7
	10200	-35	-8	10300	-24	-4
	1025E	-33	-10	10325	-17	0
(	1022	-32	-10	10350	-17	3
	1015	-31	-12	10375E	-20	8
	1020	-29	-11	10400E	-28	1
	10075E	-29	-12	10425	-38	-10
	10050E	-36	-16	10450	-32	-10
	10025E	-44	-20	10475	-30	-8
	10000	-41	-14	10500E	-28	-7
	L-9100N			10525	-23	-8
(	10000E	-24	-9	10550	-22	-8
	10025	-26	-8	10575	-18	-7
	10050	-25	-7	10600E	-15	-7
	10075	-27	-10	10625	-19	-6
	10100	-27	-8	10650	-17	-5
	10125E	-30	-8	10675E		
	10150	-25	-7			

MADE IN CANADA  
 PAPER  
 100% RECYCLED

LEVEL(S)

Line	Sta.	Time	Scale	Reading
9000N	10.000E	9:50	61	61277
9100N	10.000E	10:00	61	60815
	10.025			61069
	10.050			61341
	10.075			62288
	10.100			64000
	10.125		61	64776
	10.150			62472
	10.175			63257
	10.200			63920
	10.225	10:10	61	66522
	10.250			64639
	10.275			62258
	10.300			62622
	10.325			64134
	10.350			62394
	10.375			62644
	10.400	10:20	61	64773
	10.425			62155
	10.450			62324
	10.475	10:30	61	59846
	10.500			60341
9100N	10.525			60183

R D PENWELL LTD. MADE IN WINDSOR, CANADA

LEVEL (S)

line	Start	Time	Scale	Read
9100N	10550E	10:40	61	60188
	10575			60183
	10600			60166
	10625			61225
9100N	10650E	10:50	61	61938
	10650E	11:00	61	59244
	10625			59365
	10600			59485
	10575	11:10	61	60126
	10550			60414
	10525	11:20	61	60492
	10500	11:30		61189
	10475			62924
	10450			62539
	10425			63792
	10400			65466
	10375			61133
	10350	11:40	61	62451
	10325			62384
	10300			62287
9100N	10275			62182

line	Start	Time	Scale	Read
9000N	10250E	11:50	61	61595
	10225	12:15		61360
	10200			62002
	10175	12:25	61	62252
	10150			61931
	10125			61513
	10100	12:35	61	61350
	10075			61298
	10050			61721
	10025			60850
9000N	10000E	12:45	61	61254
	10000E	12:55	61	59704
	10000E			59944
	10050			60249
	10025			60760
	10100E	1:05	61	60581
	10125			60640
	10150			61005
	10175			60934
	10200			61172
8900N	10225E			61252

0 0 PERMITS MADE IN CANADA  
 DURSBANK WATERPROOF

LEVEL (S)

line	station	Time	Scale	Reading
8700N	10000E	9:25	61	59632
8800N	10000E	9:35	61	60001
	10025E			60171
	10050			60427
	10075			60638
	10100	9:45		60874
	10125			61321
	10150			61315
	10175			61040
	10200	9:55	61	61373
	10225E			62073
	10250			61473
	10275			61683
	10300			63048
	10325			61774
	10350			63432
	10375	10:05	61	63032
	10400	10:15		61600
	10425			61702
	10450			62786
	10475E			62863
	10500			63123
	10525			63660

line	station	Time	Scale	Reading
8900N	10250E	1:15	61	61370
	10275E			61870
	10300			61491
	10325			62235
	10350			62664
	10375	1:25	61	64029
	10400			64850
	10425			61105
	10450	1:35		62581
	10475			62064
	10500			63021
	10525			61639
	10550E			60016
	10575	1:45	61	60517
	10600			60370
	10625	1:55		60065
8900N	10650E			59893
	10675E	2:05		58993
9000N	10650E	2:10	61	59220

NO PERMIT TO TAKE WATER FROM  
 THIS WATERFORK

LEVEL (S)



Line	Station	Time	Scale	Reading
8600N	10225E		61	59817
	10250	1:10		60415
	10275			60402
	10300			60525
	10325	1:15		60983
	10350	1:25		61449
	10375			61801
	10400			61894
	10425	1:35		63614
	10450			62679
	10475			62341
	10500E			63908
	10525E			66408
	10550			65971
	10575	1:45	61	62350
	10600			59497
	10625			60258
	10650			59336
	10675			58895
	10700E	1:55		58381
8700N	10675E	2:00		60711

Appendix V

VLF-EM DATA



April 6, 1987

Level	Imp. Dh	Dist	
9850	-27	-18	V STOP
9845	-29	-14	
9850	-29	-14	
9855	-34	-13	
9860	-23	-7	
9865	-11	-12	
9870	+3	-11	
9875	-6	-17	
9880	-13	-18	
9885	-13	-19	
9890	-11	-18	V STOP
9895	-18	-13	
9900	-25	-9	
9905	-34	-11	9875 passibility 2.5
9910	-21	-4	
9915	-20	-8	
9920	-20	-12	
9925	-19	-14	
9930	-20	-8	
9935	-24	-7	
9940	-32	-8	V STOP
9945	-33	-3	

N D PERALL LTD MADE IN VANCOUVER CANADA  
 DIMS AND WATERPROOF

LEVEL (S)

April 6, 1987  
 6:40

Time	Tx-Rx	Quad	
8:51	-36	-4	
9:05	-38	-4	
9:20	-39	-2	
9:35	-40	-6	
9:50	-42	-3	
10:05	-45	-5	
10:20	-40	+3	
10:35	-40	+3	
10:50	-45	+5	
11:05	-54	+2	
11:20	-56	+4	
11:35	-53	+1	
11:50	-52	0	
12:05	-51	+1	
12:20	-52	0	
12:35	-52	-1	
12:50	-37	+10	
1:05	-33	+11	
1:20	-35	+12	
1:35	-32	+13	
1:50	-35	+14	
2:05	-35	+9	

↓ mod  
up

↓ level

↓ mod  
down

April 6, 1987  
 6:40

Time	Tx-Rx	Quad	
8:51	-39	+6	
9:05	-45	+5	
9:20	-58	-1	
9:35	-64	+1	
9:50	-59	+6	
10:05	-67	+4	
10:20	-75	+1	
10:35	-75	+3	
10:50	-68	+7	
11:05	-66	+8	
11:20	-54	+12	
11:35	-41	+13	
11:50	-30	+10	
12:05	-28	+6	
12:20	-27	+10	
12:35	-34	+6	
12:50	-40	+4	

M.D. PERVAL LTD. MADE IN VANCOUVER, CANADA  
 DUNSMUIR WATERPROOF

LEVEL (S)

	April 6, 1987	
1-84N	In-rod	up
9050E	-31 +2	
9075	-29 +7	
9100	-33 +6	
9125	-40 +6	
9150	-37 +5	
9175	-40 +2	↓ mod down
9200	-39 -1	
9225	-41 -1	
9250	-47 -10	
9275	-45 -6	
9300	-44 -5	↓ mod up
9325	-43 -2	
9350	-44 +1	
9375	-47 0	↓ mod down
9400	-62 -2	
9425	-59 +2	↓ mod up
9450	-39 +14	
9475	-30 +17	
9500	-34 +12	
9525	-47 +7	
9550	-47 +6	
9575	-49 +6	↓ mod down

	April 6, 1987	
1-84N	In-rod	Down
9050E	-53 +4	
9075	-53 -1	
9100	-51 -2	
9125	-44 +1	
9150	-47 -3	
9175	-53 -4	
9200	-55 -3	
9225	-55 -3	
9250	-46 0	↓ level
9275	-41 +2	
9300	-44 -3	
9325	-42 -6	
9350	-39 -4	
9375	-40 -3	
9400	-44 -5	
9425	-42 -3	
9450	-44 -2	
9475	-48 -3	
9500	-46 -4	
9525	-44 -2	
9550	-45 -4	
9575	-44 -6	

M O P E N T L D M A D E I N W A S H I N G T O N C A N A D A  
 P U S H W H I T E P R O O F

Apr: 16, 1987

Apr: 17, 1987

LEVEL (S)	Apr: 16, 1987	Apr: 17, 1987
182.1	-43	-23
182.05	-36	-9
182.0	-36	-11
181.95	-35	-15
181.9	-38	-19
181.85	-37	-30
181.8	-38	-42
181.75	-38	-29
181.7	-35	-29
181.65	-36	-32
181.6	-36	-30
181.55	-41	-20
181.5	-46	-27
181.45	-48	-53
181.4	-59	-68
181.35	-43	-53
181.3	-31	-18
181.25	-26	-14
181.2	-19	-26
		-22
		-10
		-30

mod down

steep

LEVEL (S)

R. O. PERWILL LTD. MADE IN VANCOUVER, CANADA  
DUKSAAM WATERPROOF

April 7, 1987

Time	In-Ath	Depth	Notes
1300	-34	-30	↓ ground level
1325	-48	-27	
1350	-48	-28	
1400	-53	-30	
1415	-61	-14	
1430	-70	-10	
1445	-68	-12	
1455	-48	+8	
1510	-59	+4	
1525	-59	+8	
1540	-46	+5	
1555	-60	+2	
1610	-62	+7	
1625	-55	0	
1640	-48	+4	
1655	-44	+1	
1710	-41	+2	
1725	-33	-3	
1740	-31	-2	
1755	-33	+1	
1810	-36	-1	↓ level
1825	-40	-2	

April 7, 1987

Time	In-Ath	Depth	Notes
1300	-46	-6	↓ level
1315	-46	-2	
1330	-54	-8	
1345	-48	-3	
1355	-37	+4	
1410	-28	+5	↓ level
1425	-26	+5	
1440	-21	+6	
1455	-20	+2	
1510	-17	0	
1525	-21	0	
1540	-22	+2	
1555	-15	+10	
1610	-21	+10	
1625	-39	+4	
1640	-47	0	
1655	-47	+2	
1710	-52	0	
1725	-58	-4	
1740	-40	-1	
1755	-39	-5	
1810	-32	+1	

R.D. PENNELL LTD. MADEIRA WATERSHED, CANADA

LEVEL (S)

April 17, 1987

Level (S)	In-Ph	Set-Te	Notes
1-801			
1150	-31	-2	
9125	-36	-3	
9130	-30	+1	
9135	-30	+6	
9140	-33	+14	mod down
9145	-39	+16	
9150	-52	+9	
9155	-61	+2	
9160	-61	-3	↑ level
9165	-59	-9	
9170	-41	-4	
9175	-38	-8	
9180	-50	-13	starting gen. -7
9185	-49	-7	
9190	-54	-3	
9195	-56	-2	↑ level
9200	-55	-1	
9205	-58	-4	
9210	-68	-11	
9215	-70	-6	
9220	-52	-4	
9225	-48	-3	X
9230	-49	-1	

April 17, 1987

Level (S)	In-Ph	Set-Te	Notes
1-801			
9200	-42	-2	
9205	-36	-2	
9210	-29	0	
9215	-25	-2	
9220	-29	+1	11:10
9225	-24	-2	
9230	-30	0	
9235	-36	-1	
9240	-33	+3	
9245	-36	+2	
9250	-38	-1	mod down
9255	-39	-2	
9260	-45	-6	
9265	-44	-7	
9270	-44	-6	
9275	-45	-3	
9280	-45	-2	
9285	-53	-1	↑ level
9290	-61	0	

R.D. PENNELL LTD. MADE IN VANCOUVER, CANADA

April 17, 1987		Section	Quad	Level (S)
L-8821	In-Pk	Quad		
9400	-43	-5		
9425	-44	-5		
9450	-39	-4		
9475	-36	-1		
9500	-47	-4		
9525	-50	-4		
9550	-35	-3		
9575	-33	-2		
9600	-38	-7		
9625	-35	-5		
9650	-35	-5		
9675	-38	-6		
9700	-42	-7		
9725	-42	-7		
9750	-47	-4		
9775	-63	-9		
9800	-59	-7		
9825	-61	-4		
9850	-59	-11		
9875	-53	-11		
9900	-38	-15		
9925	-16	-20		

R.D. PERKINS LTD. MADE IN WINNIPEG, CANADA  
DRIKEM VIALTEK 1000

April 17, 1987		Section	Quad	Level (S)
L-8821	In-Pk	Quad		
8850	-65	+4		
8875	-69	#0		
8900	-68	+6		
8925	-52	+7		
8950	-49	+7		
8975	-53	+5		
9000	-52	+5		
9025	-50	+2		
9050	-51	-1		
9075	-49	0		
9100	-51	-2		
9125	-58	-8		
9150	-63	-10		
9175	-62	-9		
9200	-60	-10		
9225	-60	-7		
9250	-59	-5		
9275	-59	-3		
9300	-58	-3		
9325	-47	-2		
9350	-40	-1		
9375	-41	-4		

LEVEL (S)





Apr 18 1987

Station	Time	Depth
L-81N	10:00	0
	10:05	7.5
	10:10	7.5
	10:15	22.5
	10:20	70.0
	10:25	125
	10:30	150
	10:35	125
	10:40	50.0
	10:45	50.0
	10:50	50.0
	10:55	50.0
	11:00	10.5
	11:05	4.5
	11:10	4.5
	11:15	4.5
	11:20	4.5
	11:25	4.5
	11:30	4.5
	11:35	4.5
	11:40	4.5
	11:45	4.5
	11:50	4.5
	11:55	4.5
	12:00	4.5
	12:05	4.5
	12:10	4.5
	12:15	4.5
	12:20	4.5
	12:25	4.5
	12:30	4.5
	12:35	4.5
	12:40	4.5
	12:45	4.5
	12:50	4.5
	12:55	4.5
	13:00	4.5
	13:05	4.5
	13:10	4.5
	13:15	4.5
	13:20	4.5
	13:25	4.5
	13:30	4.5
	13:35	4.5
	13:40	4.5
	13:45	4.5
	13:50	4.5
	13:55	4.5
	14:00	4.5
	14:05	4.5
	14:10	4.5
	14:15	4.5
	14:20	4.5
	14:25	4.5
	14:30	4.5
	14:35	4.5
	14:40	4.5
	14:45	4.5
	14:50	4.5
	14:55	4.5
	15:00	4.5
	15:05	4.5
	15:10	4.5
	15:15	4.5
	15:20	4.5
	15:25	4.5
	15:30	4.5
	15:35	4.5
	15:40	4.5
	15:45	4.5
	15:50	4.5
	15:55	4.5
	16:00	4.5
	16:05	4.5
	16:10	4.5
	16:15	4.5
	16:20	4.5
	16:25	4.5
	16:30	4.5
	16:35	4.5
	16:40	4.5
	16:45	4.5
	16:50	4.5
	16:55	4.5
	17:00	4.5
	17:05	4.5
	17:10	4.5
	17:15	4.5
	17:20	4.5
	17:25	4.5
	17:30	4.5
	17:35	4.5
	17:40	4.5
	17:45	4.5
	17:50	4.5
	17:55	4.5
	18:00	4.5
	18:05	4.5
	18:10	4.5
	18:15	4.5
	18:20	4.5
	18:25	4.5
	18:30	4.5
	18:35	4.5
	18:40	4.5
	18:45	4.5
	18:50	4.5
	18:55	4.5
	19:00	4.5
	19:05	4.5
	19:10	4.5
	19:15	4.5
	19:20	4.5
	19:25	4.5
	19:30	4.5
	19:35	4.5
	19:40	4.5
	19:45	4.5
	19:50	4.5
	19:55	4.5
	20:00	4.5
	20:05	4.5
	20:10	4.5
	20:15	4.5
	20:20	4.5
	20:25	4.5
	20:30	4.5
	20:35	4.5
	20:40	4.5
	20:45	4.5
	20:50	4.5
	20:55	4.5
	21:00	4.5
	21:05	4.5
	21:10	4.5
	21:15	4.5
	21:20	4.5
	21:25	4.5
	21:30	4.5
	21:35	4.5
	21:40	4.5
	21:45	4.5
	21:50	4.5
	21:55	4.5
	22:00	4.5
	22:05	4.5
	22:10	4.5
	22:15	4.5
	22:20	4.5
	22:25	4.5
	22:30	4.5
	22:35	4.5
	22:40	4.5
	22:45	4.5
	22:50	4.5
	22:55	4.5
	23:00	4.5
	23:05	4.5
	23:10	4.5
	23:15	4.5
	23:20	4.5
	23:25	4.5
	23:30	4.5
	23:35	4.5
	23:40	4.5
	23:45	4.5
	23:50	4.5
	23:55	4.5
	00:00	4.5

M. D. PERMILL LTD. MADE IN MANITOBA, CANADA

LEVEL (S)

CLIF

April 18, 1987

Station	TS-Ph	Ground	TS-Ph	Ground
1-310	9700E	-49	-49	-9
	9575	-47	-47	-6
	9550	-51	-51	-6
	9525	-56	-56	-8
	9500	-56	-56	-2
	9475	-57	-57	-1
	9450	-55	-55	+3
	9425	-44	-44	+4
	9500	-49	-49	+3
	9475	-48	-48	+7
	9450	-53	-53	+6
	9425	-54	-54	+5
	9400	-55	-55	+2
	9375	-58	-58	+2
	9350	-59	-59	+2
	9325	-58	-58	+4
	9300	-55	-55	+4
	9275	-58	-58	-5
	9250	-56	-56	+3
	9225	-54	-54	-2
1-310	9250E	-45	-45	-7

LEVEL (S)

NO PERMITS MADE BY WATERSHED DISTRICT/CMADA

April 18, 1987

Station	TS-Ph	Ground	TS-Ph	Ground
1-810	10,250E	-30	-30	-19
	9225	-25	-25	-17
	9200	-62	-62	-26
	9175	-77	-77	-8
	9150	-90	-90	-2
	9125	-54	-54	-3
	9100	-58	-58	-8
	9075	-51	-51	-18
	9050	-47	-47	-13
	9025	-65	-65	-10
	9000E	-66	-66	-8
	8975	-52	-52	-4
	8950	-36	-36	+3
	8925	-42	-42	+2
	8900	-50	-50	-4
	8875	-59	-59	-2
	8850	-67	-67	-2
	8825	-66	-66	-10
	8800	-66	-66	-8
	8775	-65	-65	-7
	8750	-49	-49	-11
1-310	9250E	-47	-47	-8

9250E  
up

\*

9115

April 8, 1987

L-BIN	Stat	In-Ph	Quint
	9156E	-27	-1
	9135	-24	+1
	9150	-27	-1
	9075	-28	0
	9050	-36	-3
	9025	-39	-5
	9150		
	8975		
	8950		
	8925		
	8900		
	8875		
	8850		
	8825		
	8800	-78	-8
	8775	-67	-4
	8750	-52	-1
	8725	-39	+2
	8700	-39	0
	8675	-36	-2
	8650	-31	-3
L-BIN	9625	-30	-5

April 10, 1987

L-BIN	Stat	T. Ph	Quint
	8500E	-20	-3
	8475	-21	-6
	8450	-25	-5
	8425	-23	0
	8400E	-19	+5
L-BIN	8500E	-20	+6
	8525	-20	+5
	8550	-30	+3
	8575	-31	+2
	8600	-36	+2
	8625	-35	+2
	8650	-35	-2
	8675	-39	-3
	8700	-42	-6
	8725	-46	-6
	8750	-47	-7
	8775	-50	-8
	8800	-51	-3
	8825	-68	-1
L-BIN	9625	-70	+2

941647

↑ mud up

↑ 1000

↑ level

April 8, 1987

(S)TREET

LEAD Start	First Quad	
8225	-82	+9
8230	-64	+10
8235		
8240		
8245		
8250	-52	-8
8255	-50	-9
8260	-47	-10
8265	-46	-11
8270	-44	-8
8275	-41	-6
8280	-42	-11
8285	-37	-11
8290	-32	-6
8295	-29	-5
8300	-29	-2
8305	-33	-2
8310	-39	+1
8315	-44	0
8320	-54	-1
8325	-51	-1

Handwritten notes: "L/S" and "mod down" with arrows pointing to specific rows.

D D PENALL LTD. MADE IN VIKOVEL CANADA  
DURABLE WATERPROOF

April 18, 1987

8330	-55	-1
8335	-50	+2
8340	-45	0
8345	-42	0
8350	-43	-3
8355	-39	-1
8360	-37	0
8365	-40	+1
8370	-43	+1
8375	-46	+5
8380	-50	+3
8385	-62	-5
8390	-65	-4
8395	-59	-7
8400	-48	-8
8405	-45	-10
8410	-42	-10
8415	-41	-11
8420	-35	-16
8425	-32	-17
8430	-29	-17
8435	-31	-12

Handwritten note: "Sent to office" with an arrow pointing down.

	April 8, 1987	(LEVEL(S))
9955	-47	-16
9950	-40	-13
9945	-24	-13
9940	-25	-14
9935	-34	-20
9930	-22	-9
9925	-15	-11
9920	-20	-12
9915	-11	-13
9910	-16	-5
9905	-26	0
9900	-27	-6
9895	-22	-7
9890	-18	-8
9885	-18	-10
9880	-7	-4
9875	-17	-3
9870	-44	-6
9865	-32	-10
9860	-21	-8
9855	-26	-15

H D PEIRHALL LTD. MADE IN VANCOUVER, CANADA  
DUNSBARK WATERPROOF

	April 8, 1987
9955	-16
9950	-15
9945	-32
9940	-27
9935	-27
9930	-25
9925	-21
9920	-24
9915	-9
9910	
9905	
9900	
9895	
9890	
9885	
9880	
9875	
9870	
9865	
9860	
9855	
9850	
9845	
9840	
9835	
9830	
9825	
9820	
9815	
9810	
9805	
9800	

Apr: 19, 1987

L-2900E	Section		Inch	Dund	Inch	Dund
	Inch	Dund				
( 9700N	-30	-10				
9700H	-35	-11				
9700E	-38	-14	←	50		
9725	-27	+4				
9750	-11	+4				
( 9775	-15	-2				
9800	-17	-9				
9825	-10	-12				
( 9850	-11	-13				
9875	-11	-14				
9900	-15	-6				
9925	-14	+1				
9950	-14	.4				
9975	-34	-10				
10,000	-31	-7				
10,025	-30	-10				
( 10,050	-31	-10				
10,075	-28	-9				
10,100	-31	-12				
( 10,125	-27	-8				
10,150	-27	-9				
10,175	-28	-7				
( 10,200	-23	-5				
10,225	-22	-7				
LEVEL (S)						

See U. 10.000

M D PENNELL LTD. MADE IN VANCOUVER CANADA

April 19, 1987		Curtis	
Seed	Drum	Tr-Ph	Quad
10,250E	-21	-5	
10,275	-16	-4	
10,300	-13	-1	
10,325	-12	+2	
10,350	-8	0	
10,375	-8	+2	
10,400	-6	+1	
10,425	-7	0	
10,450	-11	-2	
10,475	-12	-1	
10,500			

April 19, 1987		Curtis	
Seed	Drum	Tr-Ph	Quad
10,500E			
10,525	-6	-1	STS-111
10,550	-7	-2	↓
10,575	-10	-3	
10,600	-12	-5	
10,625	-11	-4	mod 0
10,650	-15	-9	↓
10,675	-26	-14	100E ↓
10,700	-27	-16	
10,725	-25	-13	
10,750	-24	-10	
10,775	-27	-12	
10,800	-26	-12	
10,825	-34	-13	
10,850	-35	-16	
10,875	-32	-15	
10,900	-22	-12	mod 0
10,925	-26	-14	↓
10,950	-18	-9	
10,975	-8	-2	
10,990	-8	-5	
10,975N	-9	-3	

April 9, 1987

Level (S)	Time	Inch	Quand	Inch	Quand
	9.0500	-14	-10		
	9.025	-21	-9		
	9.020	-19	-8		
	9.375	-16	-10		
	9.350	-19	-12		
	9.325	-38	-14		
	9.300	-27	-9		
	9.275	-26	-6?		
	9.250	-22	-14		
	9.225				
	9.200				
	9.175				
	9.150				
	9.125				
	9.100				
	9.075				
	9.050				
	9.025				
	9.000				

LEVEL (S)

R D PENNELL LTD. MADE IN VANCOUVER, CANADA  
DUNSBARK WATERPROOF

April 19, 1987

Level (S)	Time	Inch	Quand	Inch	Quand
	10.000	-21	-8		
	10.075	-26	-11		
	10.150	-34	-13		
	10.225	-34	-10		
	10.300	-34	-11		
	10.375	-34	-12		
	10.450	-40	-14		
	10.525	-39	-13		
	10.600	-40	-14		
	10.675	-40	-11		
	10.750	-33	-10		
	10.825	-35	-12		
	10.900	-38	-14		
	10.975	-33	-12		
	11.050	-24	-8		
	11.125	-24	-7		
	11.200	-19	-6		
	11.275	-9	-2		
	11.350	-19	-9		
	11.425	-15	-6		
	11.500	-16	-9		
	11.575	-13	-8		

LEVEL (S)

R D PENNELL LTD. MADE IN VANCOUVER, CANADA  
DUNSBARK WATERPROOF



Appendix VI

COST STATEMENT

## COST STATEMENT

### SALARIES

- Grant Crooker, Geologist April 6-9, 1987 March 17-20, 22, 23, 27, 1988 11 days @ \$ 350.00/day	\$ 3,850.00
- Ed Rockel, Geophysicist April 24, 1987 1 day @ \$ 350.00/day	350.00
- Frank Haidlauf, Field Assistant March 17-19, 22, 23 1988 5 days @ \$ 150.00/day	750.00
- Lee Mollison, Field Assistant March 17-19, 22, 23, 1988 5 days @ \$ 150.00/day	750.00

### MEALS and ACCOMMODATION

- Grant Crooker - 9 days @ \$ 60.00/day	540.00
- Frank Haidlauf - 5 days @ \$ 60.00/day	300.00
- Lee Mollison - 5 days @ \$ 60.00/day	300.00

### TRANSPORTATION

- Vehicle Rental(Ford 3/4 ton 4x4) April 6-9, 1987 March 17-19, 22, 23, 1988 9 days @ \$ 60.00/day	540.00
- Gasoline	35.00

### EQUIPMENT RENTAL

- Magnetometer - Scintrex MP-2 March 17-19, 22, 1988 4 days @ \$ 25.00/day	100.00
- VLF EM - Geonics EM 16 April 6-9, 1987 March 18, 19, 22, 23, 1988 8 days @ \$ 25.00/day	200.00

### SUPPLIES

- Hipchain thread, flagging, etc.	107.12
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FREIGHT 14.75

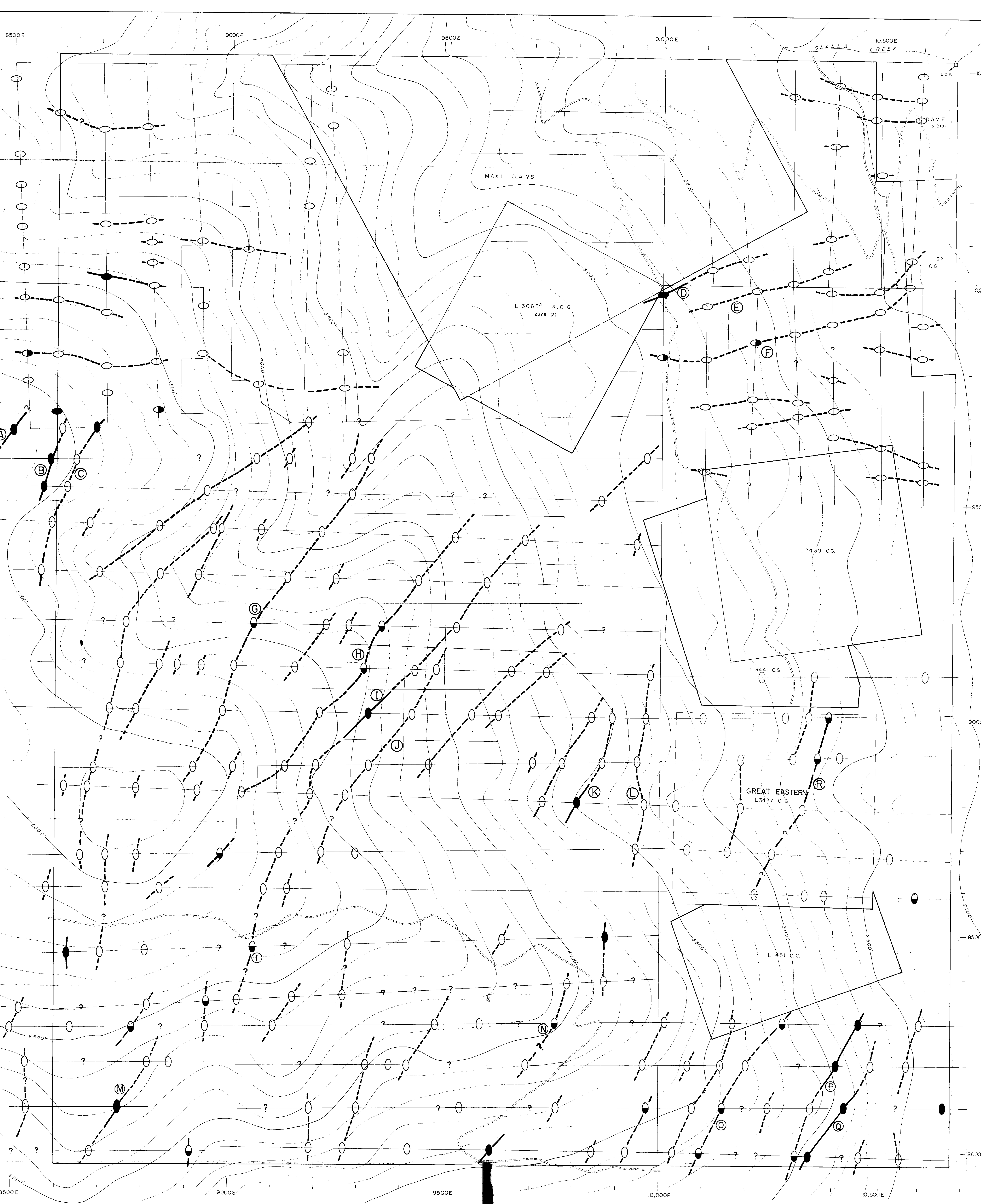
ANALYSIS

- 7 rock samples, 31 element ICP, Au-fire @ \$ 16.25/ sample 113.75
- 209 soil samples, 31 element ICP, Au-fire @ \$ 14.15/ sample 2,957.35

'DRAUGHTING 200.00

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TOTAL \$ 11,107.97



○---○ VLF-EM CONDUCTOR  
 ●---● RATE  
 ●---● STRIKE

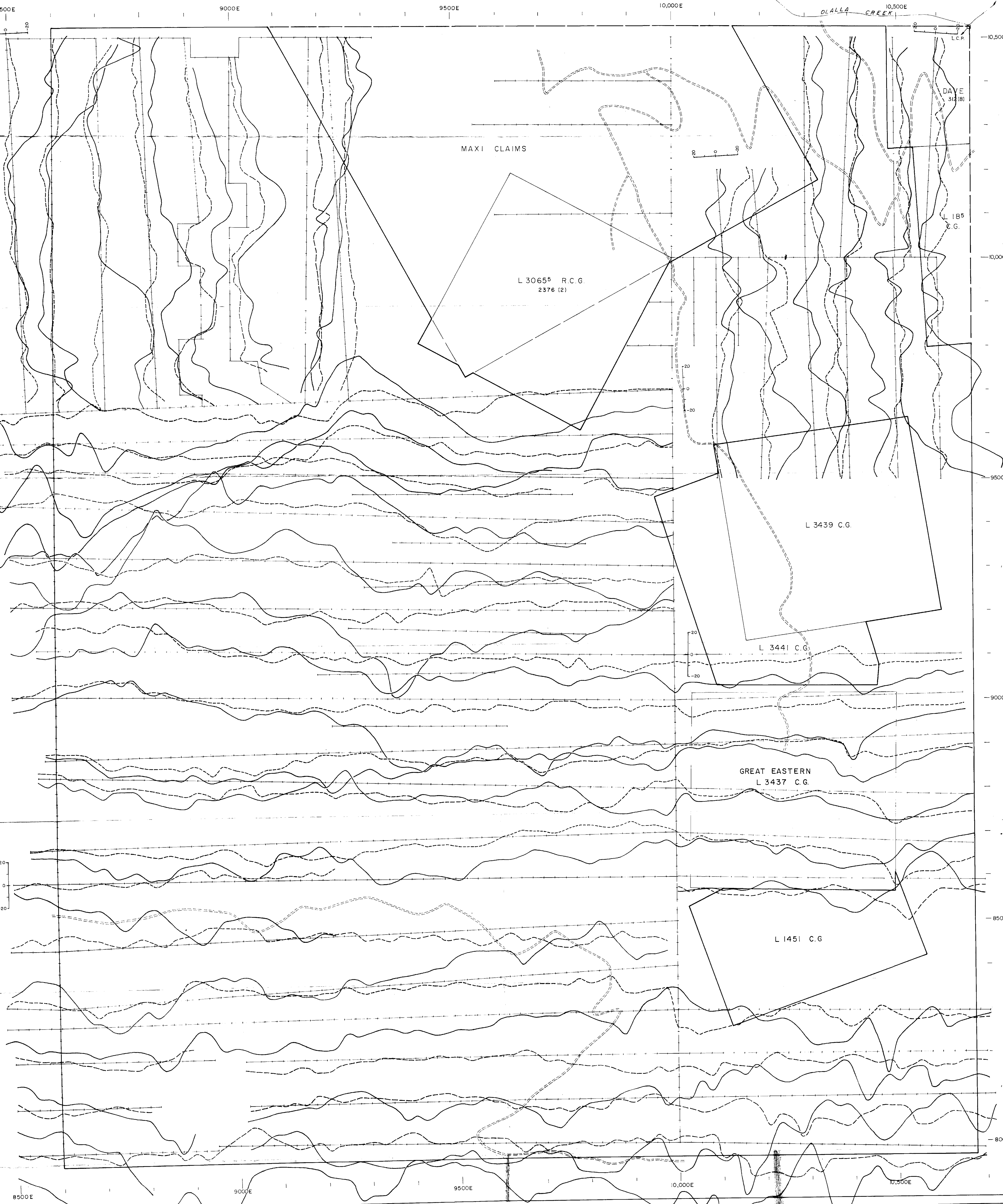
GEOLOGICAL BRANCH  
ASSESSMENT REPORT

17,648

Contours at 100' intervals  
 0 50 100 200 metres



GOLDCLIFF RESOURCE CORPORATION  
 CLIFF PROJECT  
 N.T.S. 82E-4.5W 49°15', 119°5' OSOYOOS M.D.  
**GEOLOGICAL INTERPRETATION MAP**  
 SCALE 1:2500  
 DRAWN BY G.C. MAY 1988



**LEGEND**  
 — Grid station  
 --- Road  
 ~~~ Creek  
 — In-phase  
 - - - Quadrature

GEOLOGICAL BRANCH  
 ASSESSMENT REPORT

17,648



GOLDCLIFF RESOURCE CORPORAT  
 CLIFF PROJECT  
 N.T.S. 82E-4.5W 49°15', 119°5' OSOYOOS

VLF-EM PROFILES  
 (SEATTLE)

SCALE 1:2500

DRAWN BY: G.C. MAY 1988 FIGUR