

87-510-16200



REPORT ON PHASE II
GEOLOGY, GEOCHEMISTRY AND GEOPHYSICS
ON THE 8/88

MNS PROPERTY (MYRA AND NEVER SWEAT CLAIMS)

VICTORIA MINING DIVISION, B.C.

NTS M92B/13W

48°51'^{48"}N LATITUDE 123°57'^{56"}W LONGITUDE
FOR 56'36"

Operator:

INTERNATIONAL CHEROKEE DEVELOPMENTS LTD.

JULY 30, 1987

G. J. ALLEN, P.Geol.

Owner(s): M. Swetz, A. Angus, International Cherokee Developments Ltd.

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

16,200

FILMED



MINERAL ACT

STATEMENT OF EXPLORATION AND DEVELOPMENT

| | | | |
|---|---|---|---|
| <p>Gordon Allen <small>(Name)</small> c/o 331 St. Julian Street, <small>(Address)</small> Duncan, B.C. V9L 1M3 <small>(Postal Code)</small></p> | <p>748-3183 <small>(Telephone Number)</small></p> | <p>International Cherokee Developments Ltd. Agent for M. Swetz and A. Angus <small>(Name)</small> c/o 402-1208 Wharf Street, <small>(Address)</small> Victoria, B.C. V8W 3B9 <small>(Postal Code)</small></p> | <p>388-6258 <small>(Telephone Number)</small></p> |
| Valid subsisting FM C. No. <u>279524 (ALLEGJ)</u> | Valid subsisting FM.C No. <u>299953 (SWETM)</u> <u>296160 (ANGUAE)</u> | | |

STATE THAT

1 I have done, or caused to be done, work on the Myra and Never Sweat Claims (MNS Group) Claim(s)

Record No(s) Myra - 1620(1), Never Sweat - 1568(9)

Situate at Chemainus River Valley in the Victoria Mining Division.

to the value of at least 30,000 dollars. Work was done from the 3rd day
of May 1987, to the 30th day of July 1987

2 The following work was done in the 12 months in which such work is required to be done

[COMPLETE APPROPRIATE SECTION(S) A, B, C, D, FOLLOWING]

A. PHYSICAL (Trenches, open cuts, adits, pits, shafts, reclamation, and construction of roads and trails)

(Give details as required by section 13 of regulations)

| | COST |
|-----------------------|------|
| | |
| TOTAL PHYSICAL | |

I wish to apply \$ _____ of physical work to the claims listed below
(State number of years to be applied to each claim, its month of record, and identify each claim by name and record number)

B. PROSPECTING (Details in report submitted as per section 9 of regulations)
(The itemized cost statement must be part of the report)

| | COST |
|--|------|
| | |

I wish to apply \$ _____ of this prospecting work to the claims listed below.
(State number of years to be applied to each claim, its month of record, and identify each claim by name and record number)

| | | |
|---|--|--------|
| C. DRILLING (Details in report submitted as per section 8 of regulations.) (The itemized cost statement must be part of the report.) | COST | |
| | | |
| D. GEOLOGICAL, GEOPHYSICAL, GEOCHEMICAL (Details in report submitted as per section 5, 6, or 7 of regulations.) (The itemized cost statement must be part of the report.) (State type of work in space below.) | Geological Mapping, Soil Geochemical Survey, VLF-EM Survey | |
| | | |
| | TOTAL OF C AND D | 30,000 |

Where the above statement requires a technical report as per section C of the Mineral Act Regulations, the author of the report shall complete both copies of the ASSESSMENT REPORT TITLE PAGE AND SUMMARY form and include the completed forms in the assessment reports.

Who was the operator (provided the financing)? Name International Cherokee Developments Ltd.
 Address 402-1208 Wharf Street
Victoria, B.C., V8W 3B9

| Portable Assessment Credits (PAC) Withdrawal Request | | AMOUNT |
|---|---------|--------|
| Amount to be withdrawn from owner(s) or operator(s) account(s): | | |
| Name of Owner/Operator | | |
| [May be no more than 30 per cent of value of the approved work submitted as assessment work in C and (or) D.] | 1. | |
| | 2. | |
| | 3. | |
| TOTAL WITHDRAWAL | | |
| TOTAL OF C AND (OR) D PLUS PAC WITHDRAWAL | | |

I wish to apply \$ 27,200 of this work to the claims listed below.
 (State number of years to be applied to each claim, its month of record, and identify each claim by name and record number.)

| | | | | |
|-------------|---------|------------|---------------|--------|
| Myra | 1620(1) | Units - 16 | 4 years @ 200 | 12,800 |
| Never Sweat | 1568(9) | Units - 18 | 4 years @ 200 | 14,400 |
| Total | | | | 27,200 |

Value of work to be credited to portable assessment credit (PAC) account(s).
 (May only be credited from the approved value of C and (or) D not applied to claims.)

| Name | AMOUNT |
|--|-----------------|
| 1. <u>International Cherokee Developments Ltd.</u> | <u>\$ 2,800</u> |
| 2. | |
| 3. | |

I, the undersigned Free Miner, hereby acknowledge and understand that it is an offence to knowingly make a false statement or provide false information under the *Mineral Act*. I further acknowledge and understand that if the statements made, or information given, in this Statement of Exploration and Development are found to be false and the exploration and development has not been performed, as alleged in this Statement of Exploration and Development, then the work reported on this statement will be cancelled and the subject mineral claim(s) may, as a result, forfeit to and vest back to the Province.

Gordon J. Allen
Signature of Applicant



SUMMARY

An integrated exploration program (Phase II) was conducted on the MNS property in 1987 by MPH Consulting Limited on behalf of International Cherokee Developments Limited. The program consisted of prospecting; rock, silt and soil sampling; geological mapping; and a VLF-EM survey.

The MNS property is underlain in the north and south-central parts by rocks of the Paleozoic Sicker Group; specifically fine-grained pyroclastics, possibly of the McLaughlin Ridge Formation, and fine-grained sediments of the Cameron River Formation (formerly mapped as Myra Formation and Sediment-Sill Unit). Sicker Group rocks have been intruded by Triassic gabbro or diorite, possibly correlative with the Karmutsen Formation, and Jurassic quartz diorite of the Island Intrusions. A large area in the central part of the property is underlain by mudstone and conglomerate of the Cretaceous Nanaimo Group.

A small part of the Myra claim was geologically mapped at a scale of 1:10,000. Rhodonite was discovered on the claim near its western boundary. Several lenses of rhodonite up to 1.5 m wide are exposed for 40 m within a sequence of poorly bedded chert and cherty sediment (tuff?) of the Cameron River Formation. This occurrence appears to be within the same general horizon hosting most of the rhodonite deposits in the Cowichan Lake area.

Geological mapping at a scale of 1:10,000 was conducted on most of the Never Sweat claim to determine the extent of the exposure of Sicker Group rocks in this area.

Most of the detailed work conducted during Phase II activities was done on the north part of the Never Sweat claim. A grid was established in this area in the Phase I exploration program to



trace a possible strike extension of a ferruginous chert horizon with elevated gold values exposed on the adjacent Chem property. The grid was expanded during Phase II to cover the entire package of Sicker Group rocks exposed in this part of the property. A total of 11.2 km of line was established during Phase II activities. Geological mapping, soil geochemistry and VLF-EM surveys were conducted on the grid.

Geological mapping at a scale of 1:2500 indicates that the grid area is underlain by a sequence of chert, argillite and siltstone beds folded into a broad synform with northwest trending limbs. The ferruginous chert horizon, although poorly exposed, was traced across the entire width of the property. It consists of thinly laminated, moderately magnetic chert and cherty siltstone with sporadic occurrences of jasper and at least one occurrence of rhodonite. No samples collected from this horizon contained anomalous amounts of gold.

Few anomalous gold values have been obtained on the property to date. Small pyritic lenses developed in sheared siltstone along a felsic dyke contact occur near the eastern boundary of the Never Sweat claim. A sample of this material collected during Phase I contained 170 ppb Au. Samples of similar material collected during Phase II contained up to 30 ppb Au and weakly anomalous amounts of Ag and Cu. A sample of pyritic (1-2%), dull purple chert float collected near the rhodonite occurrence on the Myra claim contained 70 ppb Au.

The VLF-EM survey clearly outlined the argillite horizons and was a useful mapping tool.

Four hundred fifty-one soil samples were collected on the grid during the Phase II program. A few interesting anomalous metal-in-soil zones were outlined. Several sporadic manganese anomalies



occur, some of which overlie the known rhodonite-bearing horizon. A coincident, moderate to strong gold and weak silver anomaly occurs along the eastern property boundary in an area underlain by argillite. No associated mineralization was observed. No gold anomalies were coincident with the ferruginous chert horizon.

The MNS property has potential to contain a gem-quality rhodonite deposit. Both rhodonite occurrences on the Never Sweat and Myra claims should be trenched to assess their size and the quality of the material. Detailed mapping and soil sampling on the Myra claim is recommended to delineate the rhodonite bearing horizon and generally to assess the mineral-bearing potential of Sicker Group rocks in this area.

This program is estimated to cost \$30,000.



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| CERTIFICATE Gordon J. Allen, P.Geol. | |
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PLATES - IN VOLUME II

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|---------|---|----------|
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1.0 INTRODUCTION

This report on the Phase II exploration program on the MNS property (Myra and Never Sweat claims) has been prepared by MPH Consulting Limited at the request of International Cherokee Developments Limited.

Fieldwork for the program was conducted between May 3 and May 19, 1987. It consisted of geological mapping at scales of 1:10,000 and 1:2500; rock, soil and silt sampling; and a VLF-EM survey.

All work was performed by or under the supervision of MPH Consulting Limited staff.



2.0 PROPERTY LOCATION, ACCESS, TITLE

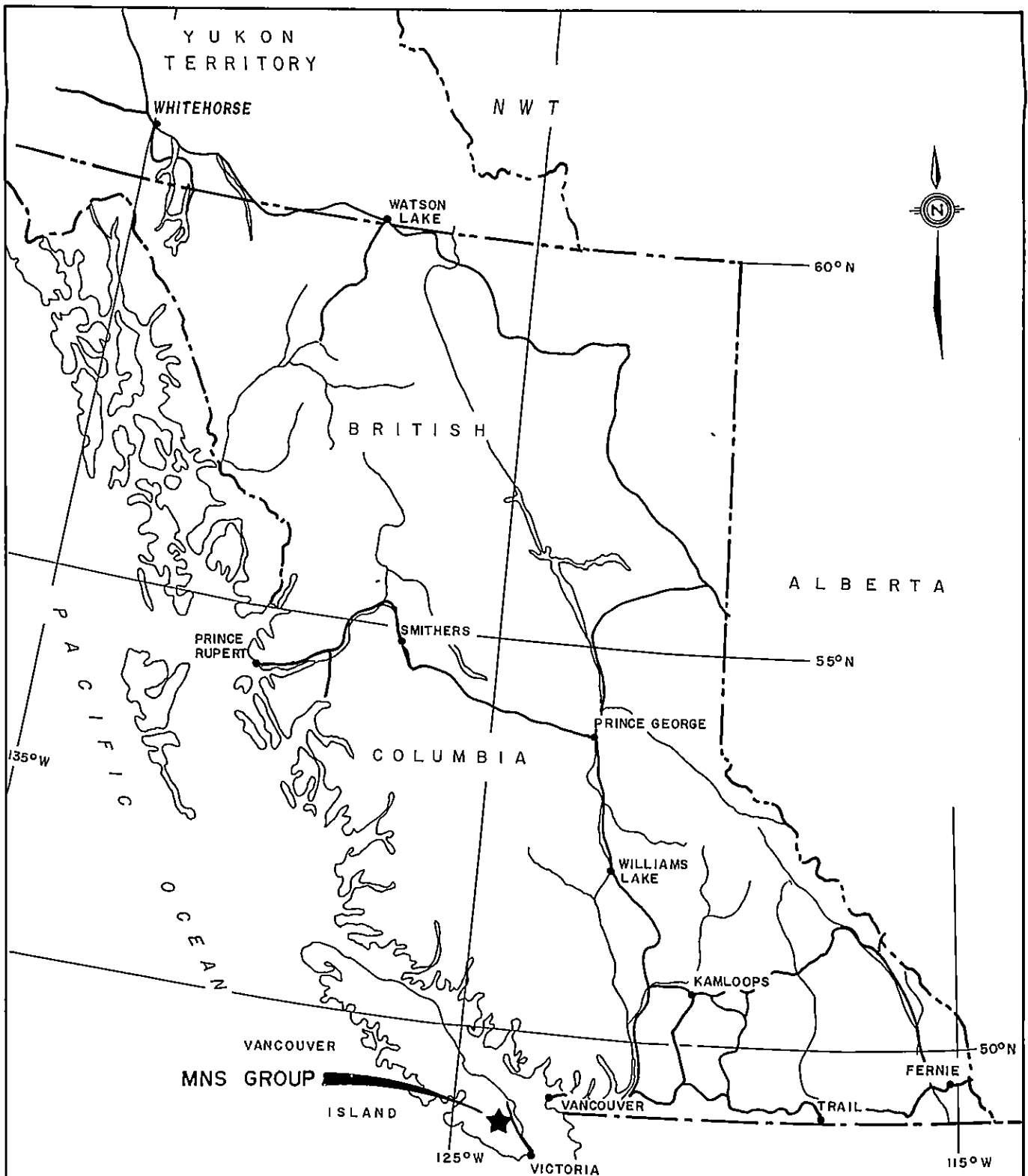
The MNS property is located in the Chemainus River valley approximately 20 km northwest of the city of Duncan, on Vancouver Island, British Columbia (Figure 1). The property is in the Victoria Mining Division, on NTS sheet 92B/13W and centred at approximately 48°51'N latitude and 123°57'W longitude (Figure 2).


Access to the Never Sweat claim is via MacMillan Bloedel's all weather Copper Canyon Main road from Chemainus, C-7 road (4.7 km northwest of the main camp), and B6 and Boulder Creek roads. The Myra claim, the majority of which lies south of the Chemainus River, is accessed via the Cowichan Valley Highway (Highway 18) and the Hill 60 Forest Service road.

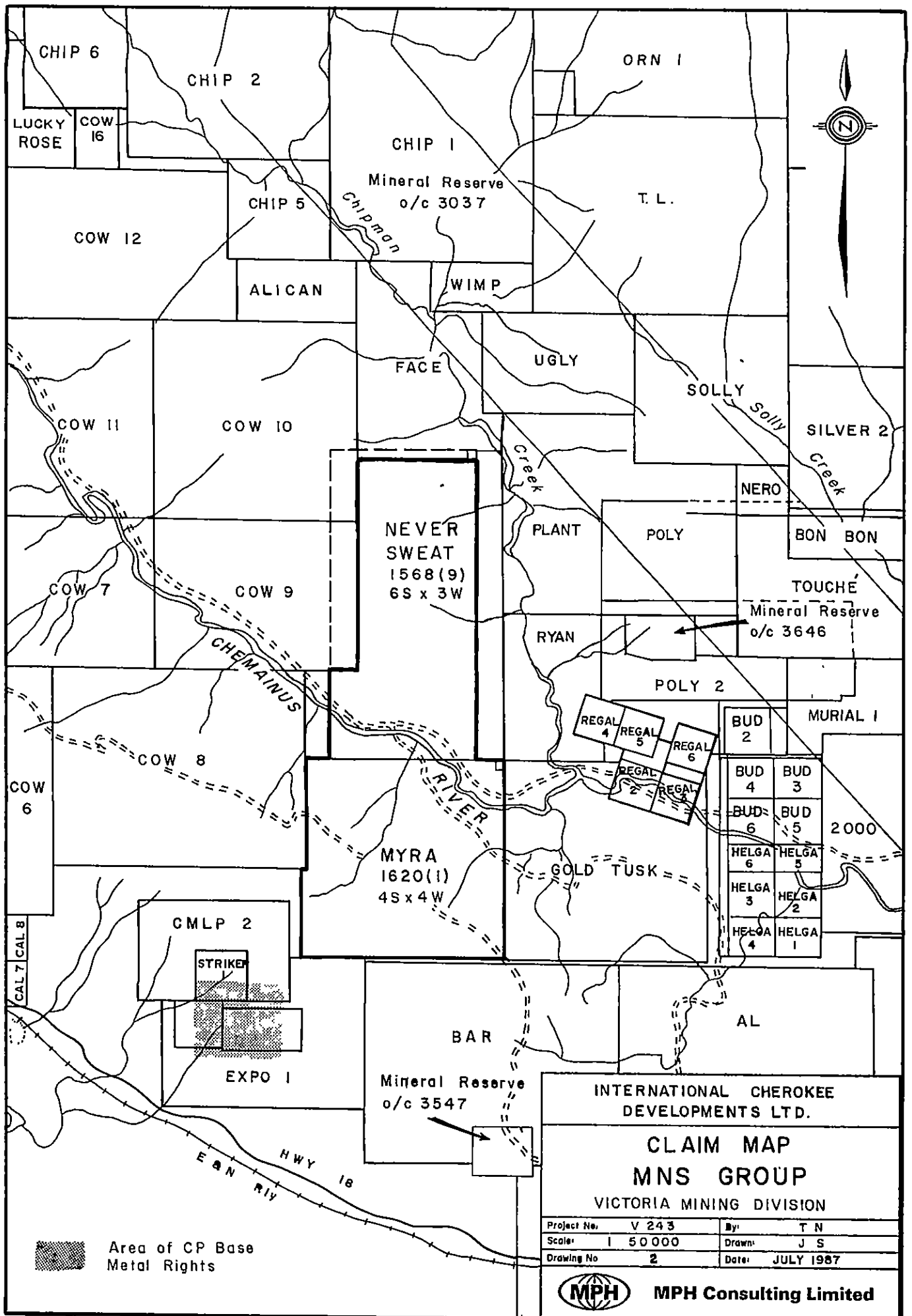
The MNS property consists of two mineral claims totalling 34 units, as summarized below:


| CLAIM | RECORD NUMBER | UNITS | ANNIVERSARY DATE | YEAR REGISTERED |
|-------------|---------------|-------|------------------|-----------------|
| Never Sweat | 1568 (9) | 18 | Sept. 16, 1995 | 1985 |
| Myra | 1620 (1) | 16 | Jan. 10, 1996 | 1986 |

Both claims are owned by International Cherokee Developments Limited. They were grouped as the MNS Group by a Notice to Group filed on September 15, 1986.



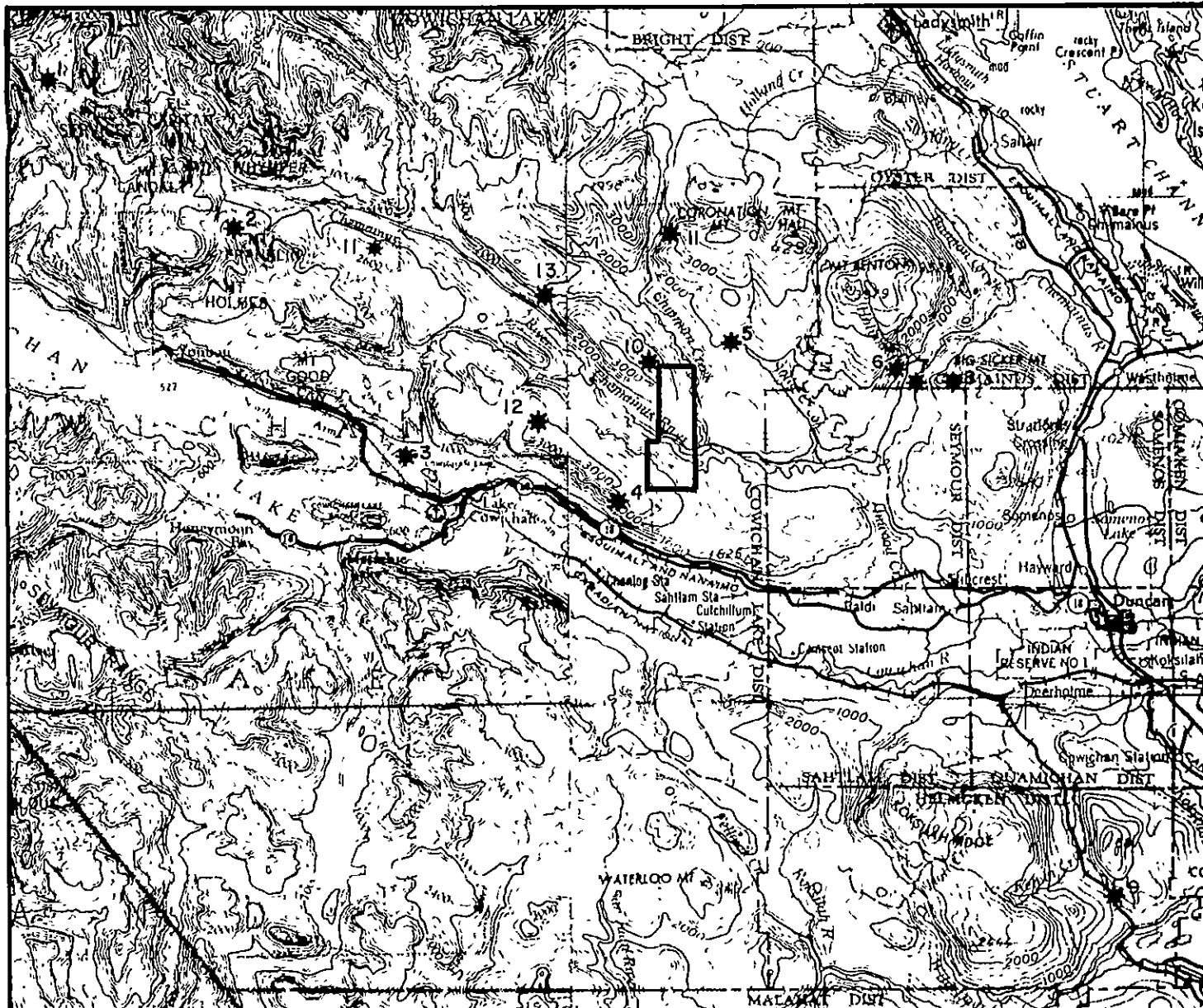
| | |
|---|-----------------|
| INTERNATIONAL CHEROKEE DEVELOPMENTS LTD. | |
| GENERAL LOCATION MAP MNS GROUP VICTORIA MINING DIVISION | |
| Project No. V 243 | By: T. N. |
| Scale: 1 : 8 000 000 | Drawn: J. S. |
| Drawing No. 1 | Date: JULY 1987 |
|  MPH Consulting Limited | |




 Area of CP Base Metal Rights

| | | | |
|--|----------|--------|-----------|
| INTERNATIONAL CHEROKEE DEVELOPMENTS LTD. | | | |
| CLAIM MAP | | | |
| MNS GROUP | | | |
| VICTORIA MINING DIVISION | | | |
| Project No. | V 243 | By: | T N |
| Scale: | 1 50 000 | Drawn: | J S |
| Drawing No. | 2 | Date: | JULY 1987 |


MPH Consulting Limited



GOLD OCCURRENCES

- 1. Amore
- 2. Comago
- 3. Meade Ck.
- 5. Lara
- 10. Chem
- 11. Mike

BASE METAL OCCURRENCES, DEPOSITS

- 6. Pauper
- 7. Copper Canyon
- 8. Twin J.
- 9. King Solomon
- 13. Pogo

OTHER OCCURRENCES

- 4. Hill 60, Mn
- 11. Lady A, C
- 12. Stanley Creek, Mn



INTERNATIONAL CHEROKEE
DEVELOPMENTS LTD.

**MINERAL OCCURRENCES
LOCATION MAP
MNS GROUP**

| | | | |
|-------------|-------------|--------|-----------|
| Project No: | V 243 | By: | T. N. |
| Scale: | 1 : 250 000 | Drawn: | J. S. |
| Drawing No: | 3 | Date: | JULY 1987 |



MPH Consulting Limited



Approximately 2 km to the east of the MNS property is the recently discovered Lara deposit (occurrence 5, Figure 3). It is a stratiform deposit between 1.5 and 8.2 m wide and over 1500 m long. Ore grade material from the zone averages 4.54% Zn, 4.11 g/t Au, 92.6 g/t Ag, 0.79% Cu and 0.83% Pb.

More details of the economic setting and mineral occurrences in the area are included in MPH Consulting Limited's 1986 assessment report on the MNS property (Getsinger, 1986).



4.0 REGIONAL GEOLOGY

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

The Sicker Group has been divided into four formations. Historically these formations were named Nitinat, Myra, Sediment-Sill and Buttle Lake, by Fyles (1955) and Muller (1980) (Figure 4). Type sections for these formations are in the Cowichan Lake and Buttle Lake areas. There are some problems, however, applying these divisions to the entire Sicker Group belt since geological environments appear to have varied dramatically within the complex volcanic terrane.

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

UPPER SILURIAN TO LOWER PERMIAN SICKER GROUP

BUTTLE LAKE SUB-GROUP

| | |
|-------------------------|--|
| MOUNT MARK FORMATION | (formerly Buttle Lake Formation) |
| CAMERON RIVER FORMATION | (formerly Sediment-Sill Unit and/or Myra Formation) |

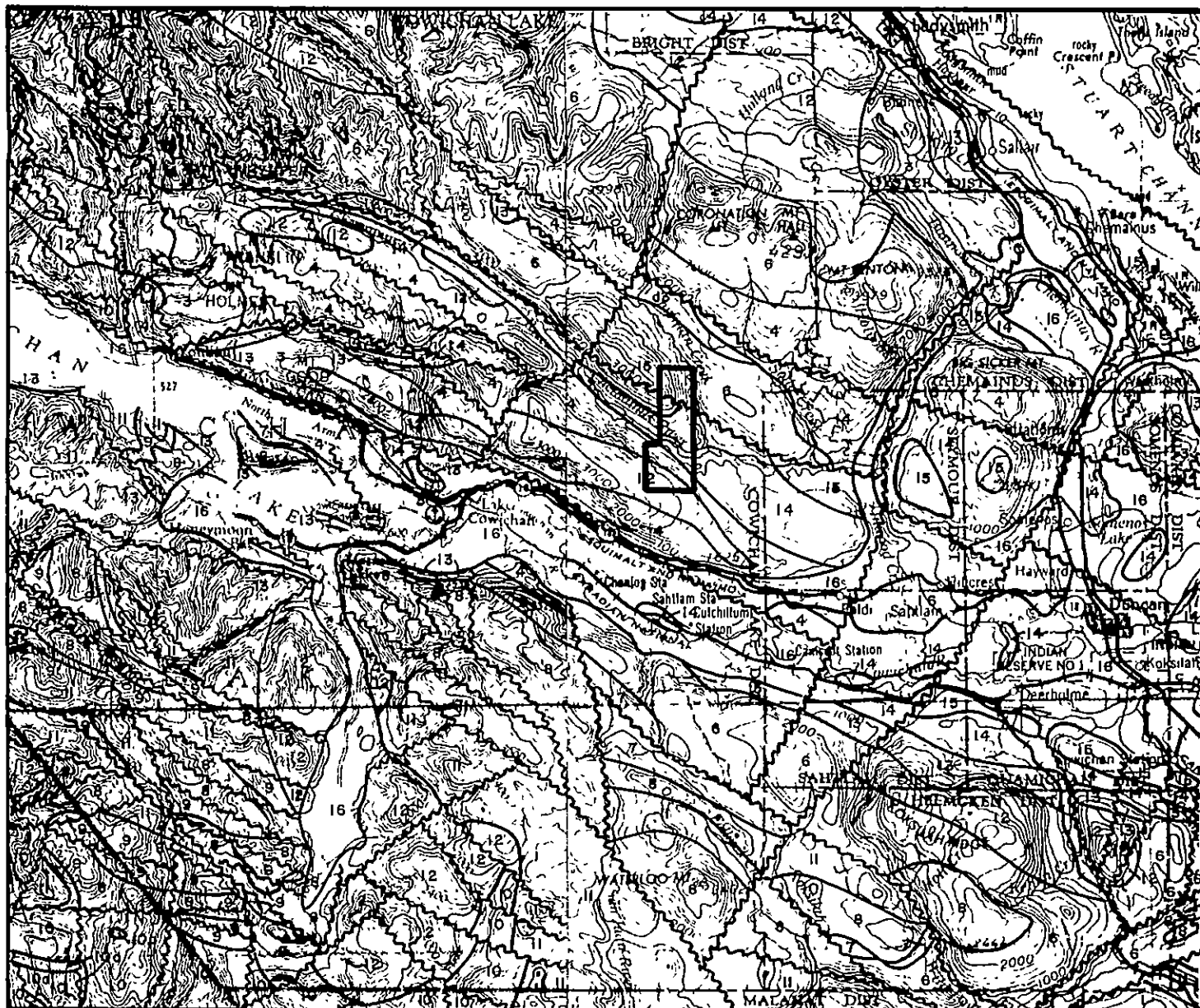
YOUBOU SUB-GROUP

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

NITINAT FORMATION

Nitinat Formation rocks are typically pyroxene rich pyroclastics and flows.

The McLaughlin Ridge Formation is composed predominantly of



QUATERNARY

16 Glacial and alluvial deposits

UPPER CRETACEOUS

Nanaimo Group

- 15 Extension - Protection Fm. sandstone, conglomerate, minor siltstone, shale, coal
- 14 Haslam Fm. shale, siltstone, minor sandstone.
- 13 Comox Fm. sandstone, conglomerate, minor siltstone, shale, coal.

JURASSIC

Lower to Middle Jurassic

12 Island Intrusions - granodiorite, quartz diorite

Lower Jurassic

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

UPPER PALEOZOIC AND ? OR TRIASSIC AND JURASSIC

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

TRIASSIC

Middle ? and Upper Triassic

Vancouver Group

- 9 Quatsino Fm. limestone
- 8 Karmutsen Fm. pillow basalt, breccia, tuff; minor flows.

PALEOZOIC

Sicker Group

PENNSYLVANIAN AND PERMIAN

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

PENNSYLVANIAN AND MISSISSIPPIAN

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

LOWER DEVONIAN AND OLDER

- 5 Saltspring Intrusions meta-granodiorite, meta-quartz porphyry, quartz-sericite schist
- 4 Myra Fm. well bedded felsic tuff and breccia, argillite, rhyodacite in flows and sills, minor basic tuff, quartz-sericite schist, phyllite, massive sulphides
- 3 Nihinat Fm. pillow lava and breccia of augite (uralite) porphyry, basic tuff; minor chlorite-actinolite schist

LOWER PALEOZOIC (OR YOUNGER ?)

- 2 Colquitz gneiss quartz-feldspar gneiss
- 1 Wark gneiss massive and gneissic metadiorite, metagabbro, amphibolite.

0 5 10km



INTERNATIONAL CHEROKEE DEVELOPMENTS LTD.

REGIONAL GEOLOGY MAP
MNS GROUP
VICTORIA MINING DIVISION

| | |
|-------------------|-----------------|
| Project No. V 243 | By: T.N. |
| Scale: 1:250 000 | Drawn: J.S. |
| Drawing No. 1 | Date: JULY 1987 |



MPH Consulting Limited

REF. GSC OPEN FILES 701 and 821.

intermediate composition pyroclastics ranging from cherty tuffs to agglomerates.

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

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

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

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

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

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

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



A more detailed description of the regional geology is provided in MPH Consulting Limited's assessment report on the MNS property (Getsinger, 1986).



5.0 1987 PHASE II EXPLORATION PROGRAM

5.1 WORK COMPLETED

Fieldwork for Phase II of the exploration program on the MNS property was performed between May 3 and May 9, 1987. One geologist, one geophysical technician and two field assistants spent a total of 38.5 mandays on the property during this phase of the program.

Geological mapping at a scale of 1:10,000 was conducted on most of the Never Sweat claim (approximately 275 hectares). Only a small area on the Myra claim was mapped during this phase of the exploration program.

The approximately 9 line km grid established on the north part of the Never Sweat claim during Phase I activities was extended with an additional 11.2 km of line. A total of 17.9 km of line was included in a VLF-EM survey on the grid. A total of 451 soil samples, 7 silt samples and 25 rock samples was collected on or in the vicinity of the grid. Geological mapping at a scale of 1:2500 covers approximately 150 hectares in the grid area.

5.2 GEOLOGICAL MAPPING AND SAMPLING

5.2.1 Introduction

Parts of the property were geologically mapped at a scale of 1:10,000 to identify areas warranting a more detailed investigation (specifically, those areas underlain by Sicker Group rocks). Geological mapping at a scale of 1:2500 was subsequently

conducted in one such area in the north part of the Never Sweat claim.

During the course of these geological surveys 7 silt samples and 25 rock samples were collected. An additional 9 rock samples were collected on the extreme west part of the Myra claim during an investigation of the adjacent Hill 60 group. Descriptions of these samples are included with this report.

5.2.2 General Geology of the MNS Property

Two areas of the property are underlain by rocks of the Paleozoic Sicker Group (Plate 1).

SICKER GROUP ON THE MYRA CLAIM

Sicker Group rocks exposed on the Myra claim form a northwest trending belt approximately 600 m wide, bounded by Jurassic quartz diorite to the southwest and Cretaceous Nanaimo Group sediments to the northeast.

The eastern part of the belt was mapped by Getsinger (1986) as argillite, cherty tuff and lithic volcanoclastic rocks. These rocks may be part of the McLaughlin Ridge Formation.

In the west, the belt is underlain by bedded chert, cherty siltstone (tuff?) and cherty argillite; probably of the Cameron River Formation. A discontinuous rhodonite horizon up to 1.5 m thick is contained within this package of sediments. This occurrence will be discussed in greater detail in section 5.2.8.

Little structural data were collected but rocks in the northwest



part of the belt dip steeply to the southwest and strike somewhat obliquely to the general trend of the exposure.

SICKER GROUP ON THE NEVER SWEAT CLAIM

The northern part of the Never Sweat claim is underlain by a sequence of chert, argillite and siltstone of the Cameron River Formation which has been folded into a synform with northwest trending limbs.

INTRUSIVES

Sicker Group sediments in this area have been intruded by Triassic gabbroic sill-like bodies. One such medium-grained intrusive on the Never Sweat Claim is 60 to 70 m wide and has been folded along with the host sediments.

Jurassic quartz diorite of the Island Intrusions also intrude Sicker Group rocks. These quartz diorites occur as tabular bodies commonly over a kilometre wide and several kilometres long. They are conformable on a regional scale but locally are clearly crosscutting stratigraphy.

Quartz diorite underlies most of the southern part of the Myra claim. A small part of the Never Sweat claim is also possibly underlain by quartz diorite.

NANAIMO GROUP

Most of the central part of the MNS property is underlain by Cretaceous Nanaimo Group mudstone and conglomerate. The conglomerate unit forms prominent cliffs north of the Chemainus river.



In the south, Nanaimo Group sediments unconformably overlies rocks of the Sicker Group. In the north it appears that the Nanaimo Group is in fault contact with the Sicker Group.

5.2.3 Lithology of Formations and Units of the Sicker Group

2) McLaughlin Ridge Formation (Formerly Myra Formation)

Mapping on the Myra claim has not been completed in enough detail to ascertain that rocks of the McLaughlin Ridge Formation occur on the property. The following units are, therefore, only tentatively assigned to this formation.

2a - Argillite

Black, thinly laminated argillite is interbedded with and grades into siltstone or fine-grained tuffs. The argillite generally contains 1-2% fine-grained pyrite and weathers to a dull rusty brown.

2b - Cherty Tuff

Rocks in this unit generally have a dark grey to dark brown cryptocrystalline groundmass and a few percent of dark grey very fine-grained sand sized particles. They are massive to well bedded and commonly grade into fine-grained tuff or tuffaceous siltstone.

2c - Tuffaceous Siltstone, Siltstone

This material may be sedimentary or pyroclastic. It is very fine-grained, dark grey to dark brown, massive to well-bedded and

commonly very hard.

2d - Lithic Tuff

This unit has a fine-grained, siliceous, dark grey to brown groundmass with medium-grained feldspar crystal fragments and quartz-feldspar lithic fragments up to 10 mm in diameter.

Lithology of Units of the Cameron River Formation

4) Cameron River Formation

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

4a - Argillite, Slate

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

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

4b - Chert, Cherty Siltstone, (rarely ferruginous chert, jasper and rhodonite)

Rocks in this unit are generally cryptocrystalline to very fine-grained granular, massive to thinly laminated, and extremely siliceous. Colour ranges from dark brown to light grey to blue-green to light purple. The purplish chert commonly contains up to 5% fine-grained disseminated crystalline magnetite.

In one location pale pink massive rhodonite is interlayered with thinly laminated jasper and tan-coloured chert.

4c - Siltstone

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

4d - Sandstone

The sandstone is dark grey to dark brown and generally very fine to fine-grained.

4e - Crystal Tuff, Tuffaceous Sediment

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

4f - Heterolithic Conglomerate and Sedimentary Breccia

A discontinuous, few metre wide conglomerate bed(s?) is exposed to the west of the MNS property and likely trends onto the Never Sweat claim. It has a dark brown cherty fine-grained clastic groundmass with up to 20% subangular to subrounded feldspar porphyry and cherty siltstone (?) clasts up to 1 cm in diameter. The groundmass also contains traces of chalcopyrite and 2-3% each of pyrite and pyrrhotite. The rock may be partly tuffaceous in nature.

5.2.4 Lithology of Intrusive Rocks

6) Triassic Karmutsen Formation

6d - Gabbro

Gabbro intruding the Cameron River Formation on the Never Sweat claim is fine to medium-grained, equigranular and massive. Hornblende, largely altered to chlorite, makes up 50% or more of the rock. Plagioclase occurs in small individual crystals or in clusters up to 2 mm in diameter, giving the rock a glomerophyric texture.

9) Jurassic Island Intrusions

9f - Feldspar Porphyry

Feldspar porphyry dykes in this area are generally less than 3 m

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

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

9q - Quartz Diorite

Quartz diorite stocks in this area are up to 1 km wide and several kilometres long. They are typically medium-grained equigranular plutonics with 75%(+) feldspar (mainly plagioclase), 15% hornblende, up to 10% quartz, and minor amounts of biotite.

5.2.5 Lithology of Formations of the Nanaimo Group

10) Cretaceous Nanaimo Group

Mudstone and Shale

This material is poorly indurated, very fine-grained, clay-rich and massive to thinly bedded.

Conglomerate

This unit has a fine to medium-grained grey to brown sandstone matrix with up to 70% subrounded to rounded pebbles up to 2 cm in diameter. The pebbles are composed predominantly of light to dark grey chert or felsic volcanic material (probably Cameron River

Formation) and rarely of basic lapilli tuff (probably Nitinat Formation).

5.2.6 Detailed Geology of the North Part of the Never Sweat Claim

Approximately 150 hectares of the north part of the Never Sweat claim was geologically mapped at a scale of 1:2500 (Plate 2).

This area of the property is predominantly underlain by sediments of the Cameron River Formation. Bedding in the sediments generally strikes between 90° and 140° and dips moderately to steeply to the southwest. Stratigraphic features observed on the adjacent Chem property suggests that these beds are tops up or younging to the southwest.

The rocks can be roughly divided into two lithologic assemblages. In the northeast part of the map area the property is underlain by a sequence of interbedded chert, cherty siltstone and argillite. These units are generally between 50 and 200 m thick and are continuous for over a kilometre across the property.

Within this assemblage is a 'ferruginous' chert horizon which carries anomalous amounts of gold (up to 300 ppb) on the adjacent Chem property. On the MNS property it is generally weakly magnetic, contains minor amounts of jasper and at least one occurrence of rhodonite. A more complete description of this horizon is given in section 5.2.8.

Southwest of and probably stratigraphically above the 'chert-argillite' assemblage is a thick unit of massive to poorly bedded siltstone with minor cherty and sandy components.

A 60-70 m wide fine to medium-grained glomerophytic, probably Triassic, gabbroic sill intrudes the Sicker Group siltstone. This intrusive body can be traced for approximately 1 km parallel to stratigraphy.

A large body of Jurassic quartz diorite exposed to the west of the Never Sweat claim may extend onto the property intruding the siltstone and sandstone of the upper assemblage.

Immediately south of the Sicker Group rocks, Nanaimo Group mudstone dips steeply to the north suggesting that the two rock groups are separated by an east-southeast trending fault.

5.2.7 Structural Geology of the North Part of the Never Sweat Claim

The Sicker Group sediments and the Triassic gabbroic sill have been folded into a synform (probably a syncline since graded bedding on the adjacent Chem property indicates that tops are up) with a fold axis trending at approximately 127° . The hinge area of the fold is exposed in the southeast part of the map area (Plate 2).

A 70 to 90° trending fault is located along Online Creek. Sicker Group rocks and the Triassic gabbroic sill have an apparent left lateral offset of approximately 230 m.

It is unclear if the Jurassic quartz diorite has been involved with either the folding or the faulting. A lack of foliation in the quartz diorite on the adjacent property suggests that it was emplaced after the folding episode.

5.2.8 Mineralization

The primary reason for conducting detailed work on the north part of the Never Sweat Claim was to trace a ferruginous chert horizon. On the adjacent Chem property this horizon is up to 10 m thick. It is composed of translucent grey chert and sporadically of dull red jasper. It contains a few percent magnetite, up to 8% fine-grained disseminated and fracture-filling pyrite and up to 300 ppb Au.

On the MNS property the horizon is not well exposed, but can be traced because of its position in the stratigraphy relative to an argillite horizon which is clearly delineated in the VLF-EM survey. The ferruginous unit does not have the same characteristics as seen on the Chem property. The horizon is represented by a zone of weakly magnetic dark blue-green to dull reddish-grey chert several tens of metres wide. One occurrence of pyritic (2-3%, fracture related) jasper was located at 12+67S, 9+35E (Plates 2, 3) but it contained no anomalous amounts of gold (samples 2916 and 2917).

One small occurrence of rhodonite was discovered at 10+95S, 8+67E. The rock is composed of massive pale pink rhodonite bands up to 2 cm wide interlayered with thinly laminated, dark brown chert or cherty siltstone and jasper. The rhodonite is highly fractured, contains up to 25% black MnO₂ and is not of carving quality. A sample of this material (2918) contained 15.62% Mn and 65 ppm As. The showing is poorly exposed and its width and lateral extent are not known.

Several pieces of rhodonite float occur on Online Creek approximately 300 m east-southeast of and on strike with the above mentioned showing. Rhodonite in these boulders is massive, in

bands up to 3 cm thick and interlayered with thinly laminated tan-colored chert. The tan-colored chert commonly contains 1-2% fine-grained disseminated pyrite. This material is fairly competent and could possibly be used for carving. A thin section description of some of this material (sample 2920) is included in Appendix III.

Samples of the rhodonite (2914, 2919 and 2920) contained up to 25.60% Mn and weakly anomalous amounts of Zn and Ni.

North of Online Creek near the eastern boundary of the Never Sweat claim, siltstones are intruded by two medium-grained porphyritic felsic dykes up to 15 m wide. They have a fine-grained crystalline groundmass with 5% hornblende in laths to 2 mm, 15% subhedral stubby plagioclase phenocrysts up to 3 mm in diameter, and rare rounded quartz phenocrysts. The host siltstone is sheared in zones approximately 30 cm wide along each contact. These shear zones are silicified, bleached and contain up to 5% pyrite across widths of a few centimetres.

Samples of this pyritic material contained up to 170 ppb Au and weakly anomalous amounts of copper (Samples 909-phase I, 2915 and 2921).

A rhodonite occurrence was discovered on the Myra claim near its western boundary (Plate 1). Several lenses of rhodonite and massive black MnO₂ up to 1.5 m wide are exposed for 40 m within a sequence of poorly bedded chert and cherty sediment (Figure 5). There appear to be two distinct manganese-bearing horizons separated by 1-2 m.

The lenses are typically composed of massive, blue-black MnO₂ with irregular patches of pale pink massive fine-grained crystalline rhodonite up to a few centimetres in diameter. MnO₂ also occurs

along abundant fractures in the host grey chert. The rhodonite is relatively unfractured and appears to have formed after the deformation causing fracturing in the adjacent chert. The quartz diorite contact lies approximately 20 m to the southwest of the showing and it is possible that the rhodonite is a contact metamorphic product of an originally manganese-rich sediment.

In some places the rhodonite is massive, pale to medium pink in colour and over 1 m in width.

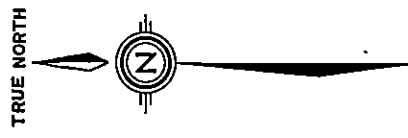
Seven chip samples were collected from the showing. Sample locations, widths, and manganese and gold analyses are shown in Figure 5.

A 5 cm wide piece of reddish-brown to maroon coloured chert float was found in the vicinity of the rhodonite occurrence on the Myra claim. A sample (2947) of this material contained 1-2% fine-grained disseminated pyrite and 70 ppb Au. No source for this material was found.

5.3 STREAM SEDIMENT GEOCHEMISTRY SURVEY

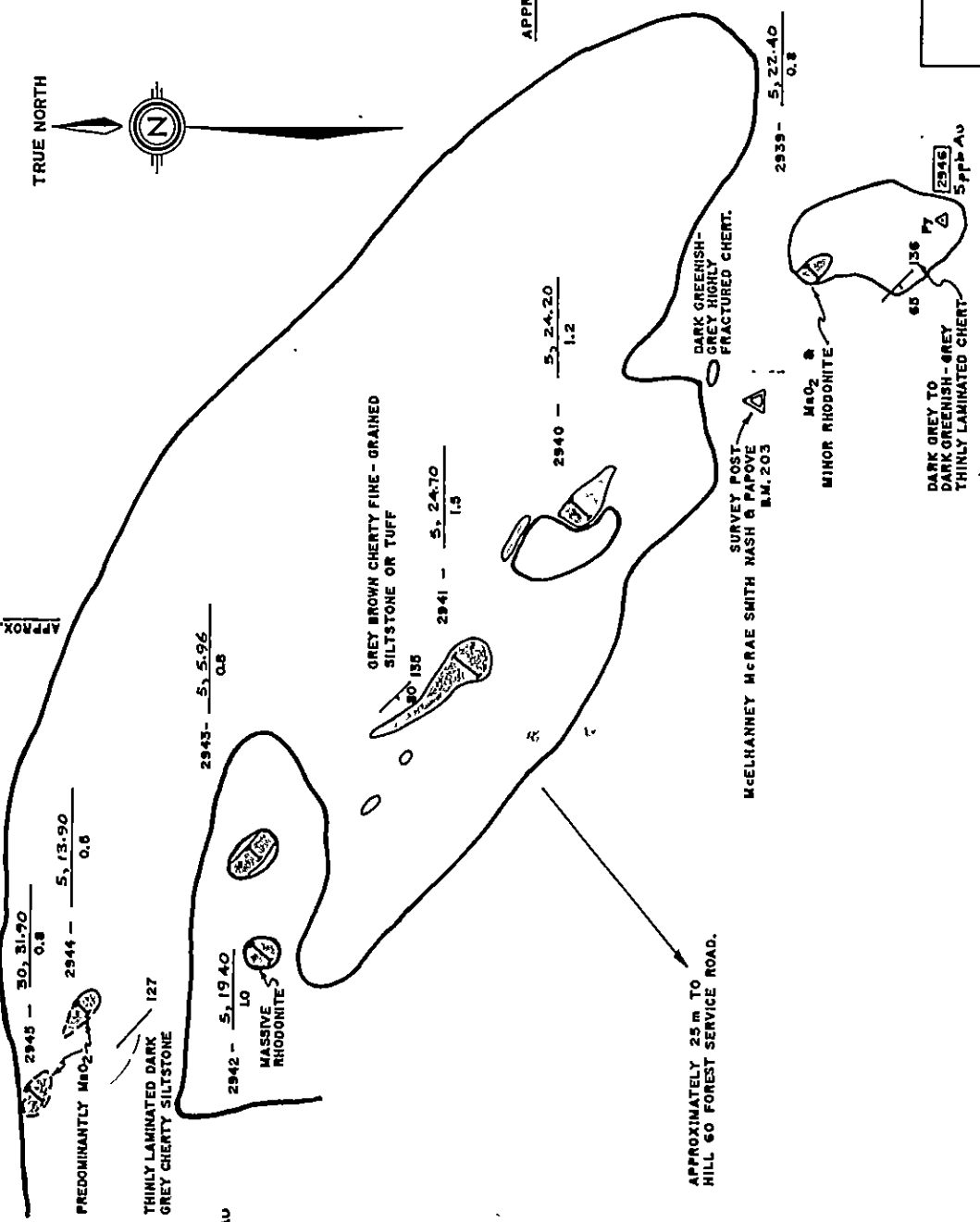
Seven stream sediment samples were collected on the Never Sweat claim from dry and flowing drainages. Samples consisted of dark brown to black organic material, silt, and fine to coarse-grained sand. Small amounts of sediment were collected from several locations along a few metres of stream bed in an attempt to get a representative sample.

Some analyses of the silt samples are given on Plate 3.



APPROX. 429 760E

APPROX. 5 409 980 N



INTERNATIONAL CHEROKEE DEVELOPMENTS LIMITED

RHODONITE - MnO₂ SHOWING
MYRA CLAIM
HILL 60 AREA
VICTORIA MINING DIVISION

| | | | |
|------------|-------|-------|-----------|
| Project No | V 243 | By | G.A. |
| Scale | 1:250 | Drawn | M.W. |
| Drawing No | 5 | Date | JULY 1987 |



MPH Consulting Limited

LEGEND

OUTCROP



MnO₂ LENS AND CHIP SAMPLE LOCATION

2941 - $\frac{5, 24, 70}{1, 5}$ $\frac{900 \text{ Au}, \% \text{ Mn}}{\text{SAMPLE WIDTH (m)}}$



Sample M7-Silt No. 1, collected on B3 road at 8+40S, 6+00E, contained 3729 ppm Mn. The area is underlain by blue-green chert and cherty siltstone. A soil sample collected at 8+00S, 6+00E contained 2079 ppm Mn and is underlain by the same cherty unit. A soil sample collected at 6+00S, 4+25E contained >9999 ppm Mn. This sample site is underlain by another cherty horizon and lies 280 m uphill from silt sample site M7-Silt No. 1. It is probable that the cherty units in this area contain Mn-rich beds and possibly rhodonite.

5.4 SOIL GEOCHEMISTRY SURVEY

Four hundred fifty-one B-horizon (average depth of 25 cm) soil samples were collected on 11.2 km of line during the Phase II program. Samples were collected at 25 m intervals on lines 100 m apart.

Contoured plots of Au, Ag and As (Plate 4a), and Mn (Plate 4b) are presented with this report. A plot of Cu, Pb, and Zn was made but not included because no significant anomalies were outlined.

Threshold values for Au, Ag and As are as those used on the adjacent Chem property (Allen, 1987). The threshold value for Mn was visually estimated at 2000 ppm.

Data from both Phase I and II are presented on the same plates. Doing a statistical analysis of the data is difficult because Phase I and II samples were analysed at different labs. Detection limits and sensitivities for specific elements are somewhat different at each lab.

Gold, silver, arsenic and manganese anomalies on Plates 4a and 4b



have been labelled A through T.

Anomaly A is located on line 1+00S at 4+25E. It consists of a single high Mn value of 4662 ppm. The area is underlain by chert and cherty siltstone and is close to the rhodonite-bearing ferruginous chert horizon.

Anomaly B is an irregularly shaped zone of high Mn values located on lines 7+00S and 8+00S between 6+25E and 7+00E. The highest Mn value is 5850 ppm. The anomaly overlies an argillite-chert contact and the rhodonite-bearing ferruginous chert horizon. Abundant outcrop occurs in the area but no manganese mineralization was observed.

Anomaly C is a zone of strongly anomalous manganese (5556 ppm) centred at 9+00S, 7+25E. The area also has semicoincident weakly anomalous gold, silver and arsenic values on lines 9+00S and 10+00S near 7+00E. Gold values range up to 40 ppb. The anomalous zone overlies the contact between argillite and chert units and may overlie the rhodonite-bearing ferruginous chert horizon. No outcrop occurs in the anomaly area.

Anomalies D and D' define a 75 m wide, strong, one-line zone of anomalous manganese on 11+00S from 8+00E to 8+75E. Anomaly D is approximately centred on the rhodonite showing at 10+95S, 8+67E. The high manganese content (5472 ppm) in soil at 11+00E, 8+50E, approximately 17 m uphill from the showing, suggests that the rhodonite-bearing horizon may have substantial size. Anomaly D' (3129 ppm Mn) overlies the chert-argillite contact as do anomalies B and C, suggesting that a second manganese-rich horizon occurs at this level in the stratigraphy.

Anomaly E (located at 4+00S, 3+50E) has a Mn value of 4625 ppm. The sample site is near a chert-argillite contact.



Anomaly F is located along the same lithologic contact as Anomaly B, and extends from 6+00S, 5+00E (>9999 ppm Mn) to 7+00S, 5+00E (2135 ppm Mn). No reason for the anomaly is known, but it is probable that a Mn rich and possibly rhodonite-bearing horizon is located at this position in the stratigraphy.

Anomalies G and I form a discontinuous linear anomalous manganese zone with values up to 3630 ppm. The anomalies overlies a narrow argillite horizon between 9+00S, 5+00E to 12+00S, 6+25E. Little outcrop was observed in the area. These anomalies are approximately 20 m downhill from the stratigraphic position overlain by anomalies E and F, suggesting that a second or possibly third Mn-rich horizon occurs here, approximately 250 m stratigraphically above (?) the known rhodonite occurrence.

Anomaly H extends from 9+00S, 5+25E (30ppb Au) to 10+00S, 6+25E (90 ppb Au). It subparallels stratigraphy and is underlain by chert and cherty siltstone. A weak arsenic anomaly (G) on lines 9+00S and 10+00S lies immediately grid west of anomaly H. It trends obliquely to stratigraphy and the two anomalies may not be related.

Anomaly J is a zone of low to moderately high Au values (up to 160 ppb) extending from 12+00S, 5+50E to 13+00S, 7+25E. The zone overlies and parallels a fault trending along Online Creek, and is underlain by argillite and cherty sediment. Argillite units in this area contain 1-2% pyrite but no reason for the anomaly is known.

Anomaly K is linear zone of strongly anomalous manganese extending from 9+00S, 2+50E to 10+00S, 3+00E. The zone crosses 'Online Fault' in an area underlain by gabbro and siltstone. No reason for the anomaly is known.



Anomaly L is a zone of moderately anomalous manganese extending from 12+00S, 2+75E to 13+00S, 3+00E. The area is underlain by siltstone. No reason for the anomaly was observed. No mineralization was observed in the area.

Anomaly M is an exceptionally long linear north-south trending zone of weak to moderately strongly anomalous manganese extending from 15+00S, 6+50E to 18+00S, 3+75E. The zone crosscuts stratigraphy and overlies argillite, siltstone and gabbro. It may be associated with a fault zone but no evidence for this was observed in the field.

Anomaly N is approximately 400 m long and extends from 14+00S, 8+00E to 17+00S, 7+00E. The zone across lines 16+00S and 17+00S contains moderately high Au values (up to 300 ppb) and has coincident weakly anomalous Ag values. Most of the anomalous zone is underlain by argillite. Outcrop is abundant in the area and no reason for the anomaly is known. The strongest part of the anomaly lies outside the property boundary.

Anomalies O, P and Q are linear zones with weakly to moderately anomalous Au and weakly anomalous Ag values. The zones extend between lines 18+00S and 20+00S from 1+00W to 4+75W. The zones parallel and crosscut stratigraphy, are underlain by siltstone and gabbroic intrusive, and are near the hinge area of a fold.

Abundant outcrop occurs in the area and no mineralization was observed. The area is of special interest because gold is apparently associated with gabbroic dykes on adjacent properties.

Anomalies R, R' and R'' form a semicontinuous linear zone of weakly to moderately anomalous manganese values extending from 20+00S, 1+50E to 8+00S, 0+25E. The zone overlies siltstone and closely follows the hinge of a synform. No reason for the anomaly is

known.

Anomalies S, S' and S'' form a discontinuous linear zone of weakly anomalous manganese values which subparallels zone R-R'' 120 m to 280 m to the northeast. The S-S'' zone parallels a postulated fault zone at a distance of 50 m. Fault zones in the property area are typically manganese rich, which may explain the S-S' zone.

Anomaly T is a 50 ppb Au value at 14+00S, 1+75W. No outcrop occurs in the area but it is apparently underlain by siltstone and sandstone.

5.5 MAGNETIC SURVEY

Parts of lines 3+00S to 13+00S were included in a magnetic survey conducted during the Phase I exploration program (Plate 5).

The magnetic characteristics on the adjacent Chem property were divided into three domains (I-III) (Allen, 1987). Domains II and III continue onto the MNS property.

Domain II is a zone of sporadic magnetic susceptibility up to 400 m wide. It is underlain by interbedded cherts, cherty siltstone and argillite. The strongest anomalies in the domain delineate the rhodonite-bearing ferruginous chert horizon. Parts of this horizon contain up to 5% fine-grained disseminated crystalline magnetite.

Domain III is largely underlain by siltstone. The 60-70 m wide gabbroic sill intruding the siltstone has no anomalous magnetic characteristics.

5.6 VLF-EM SURVEY

A VLF-EM survey was conducted on 17.9 km of line on the north part of the Never Sweat claim. The signal used for the survey was transmitted from Jim Creek (Seattle), Washington, with a frequency of 24.8 kHz. Direction from the grid area to the transmitter is 120°, providing effective coupling with stratigraphic units generally striking at 90° to 140°.

Fraser filtered dip angles are presented on Plate 6. Composite profiles are presented on Plates 7a to 7d. Conductive features are numbered 7, 12, and 24 through 39 to conform with the numbering system started on the adjacent Chem property (Allen, 1987).

Zone 7 is a strong, persistent feature which roughly follows the nose of the ridge except at its southeast end where it apparently deflects to the east. No lithologic cause for the feature is known and it may be caused by topographic effect. The deflection on the southeast end overlies the east-west trending 'Online Fault.'

Zone 12 is a strong feature extending from north of 1+00N to 8+00S. It is centred on a narrow (approximately 40 m wide) argillite unit.

Zone 24 is a strong, persistent feature extending from 9+00S, 4+10W to 20+00S, 1+00W. Sicker Group rocks are in apparent fault contact with Nanaimo Group mudstone in this area and it is likely that Zone 24 delineates this fault.

Zones 25 through 30 are weak, northwest-trending features in the nose area of the ridge between 2+00W to 3+00E. They are underlain



by siltstone and no lithology or structures were observed with which the zones could be related. They may be caused by topographic effect.

Zone 31 is an exceptionally strong feature extending from 7+00S, 1+75E to 18+00S, 5+75E. It follows the contact between argillite and cherty siltstone. Between 10+00S and 11+00S the conductive feature is clearly offset by the 'Online Fault', confirming an apparent left lateral offset. The abrupt end of the feature to the northwest may mark a facies change. Outcrop in the area, however, is poor.

Zone 32 is a moderately strong feature extending from 8+00S, 3+50E to 11+00S, 5+50E. It is apparently underlain by cherty siltstone but may be following the northeast contact of the argillite unit delineated in Zone 31.

Zone 33 is a weak feature extending from 13+00S, 6+50E to 17+00S, 7+00E. It is apparently underlain by argillite but may indicate that a narrow cherty horizon is contained within the larger argillite unit.

Zone 34 is a strong feature extending from 3+00S, 4+75E to 14+00S, 9+00E. It is centred on a 40 m wide argillite horizon.

Zones 36 to 38 are weak features in the northeast corner of the Never Sweat claim. They are underlain by chert and cherty siltstone.

Zone 39 is a strong feature extending from 10+00S, 11+75E to 11+00S, 12+00E. It corresponds to a chert-argillite contact.

In summary, the VLF-EM survey was extremely useful in tracing stratigraphy and fault zones.

5.7 CORRELATION OF GEOLOGY, GEOCHEMISTRY AND GEOPHYSICS:

A SUMMARY

A compilation of geology, mineralization, geochemical anomalies and geophysical features on the Never Sweat grid is shown on Plate 8.

Gold-in-soil above 50 ppb and manganese-in-soil above 3000 ppm have been included on the composite. Most gold anomalies are underlain by argillite and siltstone within 300 m of a gabbroic intrusive. No mineralization was observed in these areas. Manganese anomalies are somewhat sporadic but roughly define a few linear zones. Two and possibly three manganese rich horizons are postulated on the basis of anomalies A-B-C-D and E-F-G-I. Anomaly D overlies the known rhodonite occurrence. Some of the other manganese anomalies may be related to fault zones (i.e. anomalies K and S-S") which are commonly manganese rich in the property area.

The magnetic survey has outlined a zone of sporadically anomalous magnetic susceptibility. This zone (II) is largely underlain by argillite and chert, some of which contain up to 5% fine-grained disseminated magnetite. The highest magnetic anomalies are underlain by a ferruginous chert-jasper horizon.

Conductive features defined by the VLF-EM survey correspond to argillite-chert contacts, centres of thin argillite horizons, and fault zones. The survey was a great help in mapping the stratigraphy.



6.0 CONCLUSIONS

Sicker Group rocks are exposed on the central part of the Myra claim and on the north part of the Never Sweat claim. The southern panel is composed of fine-grained pyroclastic rocks, possibly of the McLaughlin Ridge Formation. Sicker Group rocks on the north part of the property are sediments of the Cameron River Formation.

Rhodonite occurs in both areas. The property near the southern occurrence has not been investigated in detail and the extent of the rhodonite horizon is not known. Soil geochemistry data in the area of the northern rhodonite showing suggest that two and possibly three manganese-rich horizons occur within a 250 m section of the stratigraphy. Potential exists in both areas of the occurrence of a gem-quality rhodonite deposit.

No significant gold-bearing mineralization has been observed on the property to date. A few gold-in-soil anomalies near a gabbroic intrusive on the Never Sweat claim indicate that some potential for mineralization exists in the area.

No base metal mineralization has been found on the property.

Sicker Group rocks on the Myra claim have not been investigated thoroughly. This part of the property is of special interest because it is possibly partially underlain by McLaughlin Ridge Formation pyroclastics. These rocks host volcanogenic base metal deposits in the Sicker Group belt.



7.0 RECOMMENDATIONS

7.1 RECOMMENDED WORK PLAN

1. The rhodonite showing on the Never Sweat claim should be exposed as much as possible by hand. Small trenches should be blasted into both the Myra and Never Sweat rhodonite showings to obtain unweathered samples of the material.
2. High manganese-in-soil anomalies on the Never Sweat claim should be investigated and possibly trenched. The area of the strongest manganese anomaly (>9999 ppm Mn at 6+00S, 4+25E) is easily accessible by cat.
3. Gold-in-soil anomalies N, O, P and Q on the Never Sweat grid should be investigated. If the ground to the east of the Never Sweat claim is open, staking may be warranted.
4. The area around the rhodonite showing on the Myra claim requires detailed mapping (1:2500).
5. Comprehensive mapping at a scale of 1:10,000 is needed in the area underlain by Sicker Group rocks on the Myra claim to assess the mineral potential of this part of the property.
6. Soil sampling in the Myra claim rhodonite showing area would assist in delineating the manganese rich horizon. Soil sampling may be warranted in other parts of the claim depending on the findings of the mapping program.

7.2 PROPOSED PHASE III BUDGETFIELDWORK

| <u>Personnel</u> | <u>No.</u> | <u>Days</u> | <u>Rate</u> | <u>Cost</u> | |
|----------------------|------------|-------------|-------------|-------------|-------|
| Geologist | | | | | |
| (Project Manager) | 1 | 12 | 425 | 5,100 | |
| Field Assistant | 1 | 12 | 150 | 1,800 | |
| Blaster | 1 | 2 | 250 | <u>500</u> | |
| Total Personnel Cost | | | | 7,400 | 7,400 |

| <u>Equipment Rental</u> | <u>No.</u> | <u>Days</u> | <u>Rate</u> | <u>Cost</u> | |
|-----------------------------|------------|-------------|-------------|-------------|-------|
| 4WD Truck | 1 | 12 | 110 | 1,320 | |
| 4WD Truck | 1 | 2 | 110 | 220 | |
| Rock Saw | 1 | 5 | 15 | 75 | |
| Plugger | 1 | 5 | 30 | <u>150</u> | |
| Total Equipment Rental Cost | | | | 1,765 | 1,765 |

Accommodation

26 Persondays @ 45 1,170

Disbursements

| | <u>Rate</u> | <u>Cost</u> | |
|--------------|-------------|-------------|-------|
| Analyses: | | | |
| 100 Rock | 14.00 | 1,400 | |
| 75 Mn Assay | 7.00 | 525 | |
| 10 Au Assay | 6.75 | 68 | |
| 200 Soil | 11.85 | 2,370 | |
| 10 Silt | 13.30 | 133 | |
| 5 Whole Rock | 25.00 | <u>125</u> | |
| | | 4,621 | 4,621 |



Thin Sections:

5 @ 60.00 300

Contractor:

Cat and Lowbed 1 Day 1,000

Powder and Caps 150

Miscellaneous 500

Disbursement Subtotal 6,571

Administration (15%) 986

Total Disbursements Cost 7,557

7,557

Fieldwork Subtotal 17,892

Contingency (15%) 2,684

Total Fieldwork Costs 20,575 \$ 20,575

CONSULTING

| <u>Personnel</u> | <u>No.</u> | <u>Days</u> | <u>Rate</u> | <u>Cost</u> |
|------------------|------------|-------------|-------------|-------------|
|------------------|------------|-------------|-------------|-------------|

| | | | | |
|-----------------------|---|---|-----|--------------|
| Geological Consultant | 1 | 3 | 600 | <u>1,800</u> |
|-----------------------|---|---|-----|--------------|

| | | | | | |
|----------------------|--|--|--|-------|-------|
| Total Personnel Cost | | | | 1,800 | 1,800 |
|----------------------|--|--|--|-------|-------|

Equipment Rental

| | | | | | |
|-----------|---|---|-----|--|-----|
| 4WD Truck | 1 | 3 | 110 | | 330 |
|-----------|---|---|-----|--|-----|

Accommodation and Food

| | | | | | |
|-------------------|--|--|--|--|-----|
| 3 Persondays @ 45 | | | | | 135 |
|-------------------|--|--|--|--|-----|

Disbursements

| | | | |
|------------------------|-----------|------------|----------|
| Miscellaneous | 200 | | |
| Administration (15%) | <u>30</u> | | |
| Disbursements Subtotal | 230 | <u>230</u> | |
| Consulting Subtotal | | 2,495 | |
| Contingency (15%) | | <u>374</u> | |
| Total Consulting Cost | | 2,869 | \$ 2,869 |

REPORT

| <u>Personnel</u> | <u>No.</u> | <u>Days</u> | <u>Rate</u> | <u>Cost</u> | |
|----------------------|------------|-------------|-------------|-------------|-------|
| Geologist | 1 | 6 | 425 | 2,550 | |
| Geologist (Proofing) | 1 | 1 | 500 | <u>500</u> | |
| Total Personnel Cost | | | | 3,050 | 3,050 |

Disbursements

| | | | |
|----------------------------------|------------|--------------|-----------------|
| Typing | 300 | | |
| Drafting Supplies | 100 | | |
| Copying and Reproduction of Maps | 500 | | |
| Xeroxing and Binding Reports | 350 | | |
| Drafting | 1,000 | | |
| Miscellaneous | <u>153</u> | | |
| Disbursements Subtotal | 2,403 | | |
| Administration (15%) | <u>360</u> | | |
| Total Disbursements Costs | 2,763 | <u>2,763</u> | |
| Report Subtotal | | 5,813 | |
| Contingency (15%) | | <u>872</u> | |
| Total Report Cost | | 6,685 | \$ <u>6,685</u> |

Estimated Total Project Cost \$ 30,129
=====



7.3 PROPOSED PHASE IV WORK SCHEDULE

| | WEEK | | | | | |
|-------------------------------|-------|-------|---|---|-------|-------|
| | 1 | 2 | 3 | 4 | 5 | 6 |
| GEOLOGIST | _____ | | | | | |
| - Project Management, Mapping | _____ | | | | | |
| - Report | | | | | | _____ |
| FIELD TECHNICIAN | _____ | | | | | |
| - Blasting | | _____ | | | | |
| FIELD ASSISTANT | _____ | | | | | |
| - Trenching, Sampling | _____ | | | | | |
| CAT WORK | | _____ | | | | |
| SAMPLE ANALYSES | | | | | _____ | _____ |



7.4 SUMMARY OF RECOMMENDATIONS

On the basis of encouraging results from the Phase II program it is recommended that exploration work be continued with Phase III.

The proposed program would concentrate on assessing the rhodonite occurrences and manganese-rich horizons discovered on the property. Gold-in-soil anomalies on the Never Sweat claim would be investigated. The exposure of Sicker Group rocks on the Myra claim would be mapped and assessed for mineral potential.

The estimated cost of this program is approximately \$30,000.

...

Respectfully submitted

MPH CONSULTING LIMITED

Gordon J. Allen

Duncan, B.C.
July 30, 1987

Gordon J. Allen, P.Geol.



CERTIFICATE

I, Gordon J. Allen, do hereby certify;

- 1) I am a graduate in geology of the University of British Columbia (B.Sc. 1975).
- 2) I have practised as a geologist in mineral exploration for twelve years.
- 3) I am a member in good standing of the Association of Professional Engineers, Geologists and Geophysicists of Alberta.
- 4) Opinions, conclusions and recommendations contained herein are based on field work performed by myself and other MPH personnel between May 3, 1987 and May 19, 1987.
- 5) I own no direct, indirect, or contingent interests in the subject property, or shares or securities of International Cherokee Developments Limited or associated companies.

Gordon J. Allen

Duncan, B.C.
July 30, 1987

Gordon J. Allen, P.Geol.



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APPENDIX I
LIST OF PERSONNEL AND STATEMENT OF EXPENDITURES



**LIST OF PERSONNEL AND
STATEMENT OF EXPENDITURES**

The following expenses have been incurred on the MNS property as defined in this report for the purposes of mineral exploration between the dates of May 3 and July 30, 1987.

PERSONNEL

| | | | | |
|--|---|-----|--|-----------|
| T. G. Hawkins, Geological Consultant, P.Geol. | | | | |
| 2 1/2 Days | @ | 600 | | 1,500.00 |
| | | | | |
| G. Allen, P.Geol. Project Manager | | | | |
| 25 Days | @ | 425 | | 10,625.00 |
| | | | | |
| J. Getsinger, Geologist, Ph.D. | | | | |
| 1/2 Day | @ | 500 | | 250.00 |
| | | | | |
| H. MacIsaac, B.Sc. Geophysical Technician | | | | |
| 11 Days | @ | 250 | | 2,750.00 |
| | | | | |
| D. Wardwell Field Assistant | | | | |
| 5 Days | @ | 150 | | 750.00 |
| | | | | |
| B. Maguire Junior Field Assistant | | | | |
| 9 1/2 Days | @ | 125 | | 1,187.50 |



| | |
|----------------------------|--------|
| Basemap Preparation | 146.14 |
| Flagging, Sample Bags Etc. | 228.65 |
| Courier and Freight | 171.85 |
| Blueprints and Photocopies | 48.09 |
| Gas | 129.79 |
| Typing | 3.50 |

Report Preparation Cost

| | | |
|-----------------------------|---------------|---------------------------|
| Drafting Supplies | 33.39 | |
| Drafting | 1,425.00 | |
| Typing | 300.00 | |
| Map Reproduction | 259.49 | |
| Copying and Binding Reports | <u>283.57</u> | |
| Report Preparation Total | 2,301.45 | <u>2,301.45</u> |
| Disbursements Subtotal | | 8,423.91 |
| Administration (15%) | | <u>1,263.59</u> |
| Total Disbursements | | \$ <u>9,687.50</u> |
| | | |
| Total Cost of Project | | <u><u>\$30,000.00</u></u> |



APPENDIX II
ROCK SAMPLE DESCRIPTIONS AND
LITHOGEOCHEMICAL RESULTS

ROCK SAMPLE DESCRIPTIONS AND LITHOGEOCHEMICAL RESULTS

| Sample Number | Description | Au ppb | Ag ppm | As ppm | Cu ppm | Other ppm |
|---------------|--|-----------|-----------|-----------|-----------|--------------|
| 2901 | <p>Location: Boulder Cr. Road, North side of Sorenson Cr., 400 m North of MNS property Phyllitic Siltstone</p> <p>Rock Type: Material Sampled and Sample Type: Grab Occurrence Size:</p> <p>Dark greenish-grey, very fine-grained, siliceous phyllitic siltstone with less than 1% pyrite along fractures.</p> | 5 | 0.1 | 2 | 71 | |
| 2902 | <p>Location: Boulder Cr. Road, as 2901 Siltstone, Quartz Vein, Gouge</p> <p>Rock Type: Material Sampled and Sample Type: Grab Occurrence Size: 5 cm wide zone</p> <p>The zone is composed of clay gouge, bleached and brecciated siltstone, and quartz stringers to 2 cm wide. The host is a fine-grained dark grey siliceous siltstone. Appears barren.</p> | 5 | 0.2 | 6 | 35 | |
| 2903 | <p>Location: Boulder Cr. Road, as 2901 Gouge and Siltstone</p> <p>Rock Type: Material Sampled and Sample Type: Grab Occurrence Size: 5 cm wide zone</p> <p>Epidotic green to limonitic brown gouge zone with white quartz veins up to a few mm wide. The zone is hosted in a dark greenish-grey phyllitic siltstone.</p> | 5 | 1.0 | 14 | 367 | 3826 Mn |





Sample Number Au ppb Ag ppm As ppm Cu ppm Other ppm

2904 5 0.1 2 12 12

Description

Location: B2ALA Road, 80 m North of B6A5 Road.
13+50S, 3+25E
Quartz Vein

Rock Type:
Material Sampled
and Sample Type:
Occurrence Size:

Float (near source), Grab
5 cm wide vein

Blue-grey translucent quartz vein material is hosted in a greenish-grey siliceous siltstone. Barren.

2905 5 0.1 5 99

Location: B2ALA Road; 14+62S, 3+00E
Jasper

Rock Type:
Material Sampled
and Sample Type:
Occurrence Size:

Float, Grab
10 cm diameter cobble

Bright red jasper cut by a vuggy white to translucent grey, specular hematite-bearing (20%) quartz.

2907 5 0.2 4 63

Location: B3 Road; 8+30S, 4+25E
Quartz Stringer in Cherty Siltstone

Rock Type:
Material Sampled
and Sample Type:
Occurrence Size:

Float, Grab
1 cm wide vein

Glassy, dark grey quartz stringer with traces of pyrite and chalcocopyrite, hosted in a dark grey cherty siltstone.

| Sample Number | Description | Au ppb | Ag ppm | As ppm | Cu ppm | Other ppm |
|---------------|---|-----------|-----------|-----------|-----------|--------------|
| 2908 | <p>Location: B3 Road; 8+65S, 4+55E Rock Type: Gouge and Sheared Siltstone Material Sampled: and Sample Type: Outcrop, Grab Occurrence Size: 1 m wide fault zone</p> <p>Chloritic green to limonitic brown intensely sheared siltstone(?).</p> | 5 | 0.1 | 11 | 92 | 2447 Mn |

Chloritic green to limonitic brown intensely sheared siltstone(?).

| | | | | | | |
|------|--|---|-----|---|----|--|
| 2909 | <p>Location: B3 Road; 6+30S, 7+75E Rock Type: Siliceous Siltstone Material Sampled: and Sample Type: Outcrop, Grab Occurrence Size: 1 cm wide lens of sulphides</p> <p>Dark brown siliceous siltstone with a 0.5 cm thick lens of earthy grey material in a cream coloured 'envelope'. The material is probably altered pyrite originally developed along a fracture. The cream coloured alteration halo suggests hydrothermal activity.</p> | 5 | 0.1 | 8 | 54 | |
|------|--|---|-----|---|----|--|

Dark brown siliceous siltstone with a 0.5 cm thick lens of earthy grey material in a cream coloured 'envelope'. The material is probably altered pyrite originally developed along a fracture. The cream coloured alteration halo suggests hydrothermal activity.

| | | | | | | |
|-------|--|---|-----|---|----|--|
| 2909a | <p>Location: B3 Road; 8+50S, 5+75E Rock Type: Chert Material Sampled: and Sample Type: Outcrop, Grab Occurrence Size: Few metre wide zone</p> <p>Grey, purplish-grey and greenish-grey chert with 1% disseminated and fracture filling pyrite. Poorly bedded: 126/83SW</p> | 5 | 0.1 | 8 | 36 | |
|-------|--|---|-----|---|----|--|

Grey, purplish-grey and greenish-grey chert with 1% disseminated and fracture filling pyrite. Poorly bedded: 126/83SW





Au ppm 5
 Ag ppm 0.1
 As ppm 2
 Cu ppm 44
 Other ppm

Description

Sample Number

2910
 Location: 8+00S, 7+50E
 Rock Type: Chert, Cherty Siltstone
 Material Sampled:
 and Sample Type: Outcrop, Grab
 Occurrence Size: Magnetite-bearing beds to 15 cm wide

 Interbedded white to purplish weathering blue-green cherty siltstone, chert, and greenish-grey weathering dark green siliceous siltstone. Beds up to 15 cm thick at 129/85SW. Cherty layers are weakly magnetic.

2911
 Location: 18+50S, 0+68W
 Rock Type: Siltstone
 Material Sampled:
 and Sample Type: Float (near source), Grab
 Occurrence Size: Few metre wide zone

 Strongly fractured grey to dark green cherty siltstone with hematite staining on fracture surfaces.

2912
 Location: 19+84S, 1+80E
 Rock Type: Siliceous Siltstone
 Material Sampled:
 and Sample Type: Outcrop, Grab
 Occurrence Size: 5 cm wide bed

 Dark grey to dark purplish-grey siliceous siltstone or chert. Weakly magnetic.

5 0.1 2 30

5 0.1 2 89



| Sample Number | Description | Au ppb | Ag ppm | As ppm | Cu ppm | Other ppm |
|---------------|---|-----------|-----------|-----------|-----------|--------------|
| 2913 | <p>Location: Online Creek; 13+83S, 9+25E Rock Type: Fault Breccia, Gouge Material Sampled and Sample Type: Outcrop, Grab Occurrence Size: 30 cm wide shear zone</p> <p>Light brown to dark grey angular chert or siliceous siltstone fragments up to 0.5 cm in diameter in a soft, limonitic brown to chloritic green matrix. Chert fragments make up approximately 60% of the rock.</p> | 5 | 0.1 | 7 | 95 | |

| | | | | | | |
|------|---|---|-----|---|----|--------------------------------------|
| 2914 | <p>Location: Online Creek; 13+83S, 9+27E Rock Type: Rhodonite, Chert Material Sampled and Sample Type: Float, Grab Occurrence Size: 20 cm diameter angular boulder</p> <p>Thinly laminated interlayered light pink rhodonite and tan chert(?) with 10% irregular black siliceous lenses to 0.5 cm wide. Manganese oxide developed on fracture surfaces. Rock is not badly fractured and could be semiprecious gem quality.</p> | 5 | 0.1 | 5 | 38 | 243 <u>117</u> Ni 15.30% Mn |
|------|---|---|-----|---|----|--------------------------------------|

| | | | | | | |
|------|--|----|-----|---|-----|--|
| 2915 | <p>Location: 13+56S, 9+10E Rock Type: Sheared Siliceous Siltstone Material Sampled and Sample Type: Outcrop, Grab Occurrence Size: 30 cm wide zone</p> <p>Medium grey to limonitic brown altered siltstone in a shear along a felsic dyke selvage. The rock appears to be bleached, is strongly limonitic on weathered surfaces and contains 2-3% very fine-grained disseminated pyrite and pyrrhotite.</p> | 30 | 0.7 | 2 | 242 | |
|------|--|----|-----|---|-----|--|



| Sample Number | Au ppb | Ag ppm | As ppm | Cu ppm | Other ppm |
|---------------|-----------|-----------|-----------|-----------|--------------|
| 2916 | 5 | 0.1 | 2 | 29 | |

Description

Location: 12+67S, 9+35E
Rock Type: Hematitic Chert, Jasper
Material Sampled and Sample Type: Outcrop, Grab
Occurrence Size: Several metre wide horizon

Dark greenish-grey to purplish grey thinly laminated cherty siltstone and chert with 1-2 mm jasper layers. The darker layers are moderately magnetic. Barren quartz stringers up to 5 mm cut the rock.

This is probably the same ferruginous chert horizon exposed and drilled on the Chem property to the northwest.

| | | | | | |
|------|---|-----|---|----|--|
| 2917 | 5 | 0.1 | 2 | 34 | |
|------|---|-----|---|----|--|

Location: 12+80S, 9+35E
Rock Type: Hematitic Chert, Jasper
Material Sampled and Sample Type: Outcrop, Grab
Occurrence Size: Several metre wide zone

Similar to 2916. 2-3% pyrite along hairline fractures parallel to bedding. The rock is dark purplish-grey and moderately magnetic.

Sample Number

Description

Au ppb 5 0.1 65 6 15.62% Mn
 Ag ppm
 As ppm
 Cu ppm
 Other ppm

2918

Location: 10+95S, 8+67E
 Rock Type: Rhodonite, Jasper, Chert
 Material Sampled:
 and Sample Type: Outcrop, Grab
 Occurrence Size: 0.5 m (+) horizon

Pale pink rhodonite horizons up to 2 cm wide interlayered with thinly laminated dark brown chert or cherty siltstone and jasper. The rhodonite is of poor quality and contains up to 25% irregular, siliceous black masses of manganese oxide.

The exposure is very small and the horizon could contain higher quality material.

2919

Location: Boulder Cr. Road; 13+95S, 9+90E
 Rock Type: Rhodonite, Chert
 Material Sampled:
 and Sample Type: Float, Grab
 Occurrence Size: 30 cm diameter boulder

5 0.1 4 9 179 Zn
102 Ni
 25.60% Mn

Interlayered rhodonite beds to 2 cm thick and thinly laminated brown chert. The rhodonite beds contain up to 20% irregular masses of siliceous manganese oxide. Fractures are coated with soft black oxide. The rock is similar to 2914.

2920

Location: Online Creek; 13+83S, 9+27E
 Rock Type: Rhodonite, Chert
 Material Sampled:
 and Sample Type: Float, Grab
 Occurrence Size: 30 cm diameter angular boulder

5 0.1 2 5 22.84% Mn

Similar to 2914 and 2919. Rhodonite beds up to 2 cm thick are bright pink, relatively unfractured and contain little manganese oxide. This material could be used for carving.



Sample
Number

Description

Au
ppb

Ag
ppm

As
ppm

Cu
ppm

Other
ppm

2921

Location: 13+66S, 9+25E
Rock Type: Siliceous Siltstone
Material Sampled
and Sample Type: Outcrop, Grab
Occurrence Size: 20 cm wide lens

5

0.1

2

235

Dark grey cherty or siliceous siltstone along the margin of a felsic intrusive has been sheared, flooded with 1-2 mm quartz stringers and contains up to 5% pyrite localized along fractures. This is a similar environment to that of sample 2915.

2922

Location: 10+78S, 8+60E
Rock Type: Chert, Cherty Siltstone
Material Sampled
and Sample Type: Outcrop, Grab
Occurrence Size: 2 cm wide magnetite bearing beds

5

0.1

2

5

3660 Mn
106 Ni

Thinly laminated greenish-grey cherty siltstone interlayered with dark purplish-brown cherty siltstone or chert. The dark layers contain up to 5% fine-grained disseminated magnetite and are strongly magnetic. This material is approximately 20 m to the northwest of, and on strike with the rhodonite showing (sample 2918).

2923

Location: 8+80S, 10+45E
Rock Type: Chert
Material Sampled
and Sample Type: Float (near source), Grab
Occurrence Size: Few metre wide zone (?)

5

0.1

7

31

Light grey to greenish-grey chert with 3-5% fine-grained and fracture filling pyrite.





| Sample Number | Location: | Au ppb | Ag ppm | As ppm | Cu ppm | Other ppm |
|---------------|----------------------------------|-----------|-----------|-----------|-----------|--------------|
| 2924 | 9+00S, 1+95W Felsic Intrusive | 5 | 0.1 | 4 | 64 | |

Description

Location: 9+00S, 1+95W
Rock Type: Felsic Intrusive
Material Sampled and Sample Type: Outcrop, Grab
Occurrence Size: Few metre (+) wide zone

Medium greenish-grey equigranular felsic intrusive (?). The rock is strongly fractured and 'healed' with hairline calcite stringers.

**PETROGRAPHIC REPORT**

by J.S. Getsinger, PhD

*J. S. Getsinger*For International Cherokee Ltd.Date June 1987Project V243 - MNSCollector G. AllenSample V243-2920Date Collected May 1987

Location: Never Sweat Claim, Victoria Mining Division, Vancouver Island, B.C.
(48°52.1'N Lat., 123°56.3'W Long.)

Rock Type: Rhodonite-bearing chert

Lithochemistry: 22.8% Mn; 98 ppm Ni

Hand Specimen: Laminated pink and olive grey to tan rhodonite with black submetallic Mn-stain on surfaces. Greenish-tan layers (<5 mm) host finely disseminated pyrite. Rusty pyritic areas react in HCl, indicating calcite. Pink, hard (>5) rhodonite-bearing layers do not react in HCl. Minor crosscutting fractures are stained black locally.

THIN SECTION (Polished No):

‡ (Approx.) MINERALS

- 45-50% Rhodonite (Mn,Ca,Fe)[SiO₃] - similar to clinopyroxene (may include some pyroxmangite): Z' to c = 25°; biref. = 0.020; pink in hand specimen but colourless; med.-high relief; strong extinction dispersion; r>v; (+)2V = 40-50°(?); grains are blocky, subhedral to anhedral; cleavage is not well developed; occurs as finer grains in pink layers and coarser in crosscutting veinlets, associated with quartz
- 35-45% Quartz - very fine-grained, along layers, probably chert; partly in crosscutting veinlets
- <5% Calcite - indicated by reaction to HCl, not positively identified in thin section due to extremely fine grain size
- 5-10% Opaques - pyrite, Mn-oxides: very fine-grained, disseminated along some layers

Rock Textures/Structures: Growth of crosscutting rhodonite appears to postdate layering, and may represent recrystallization and remobilization during contact metamorphism. Crosscutting veins of rhodonite emanate from rhodonite-rich layers. Veinlets are quartz-rich across quartzose layers, and relatively rhodonite-rich across rhodonite-bearing layers, indicating local origin of vein material, supporting interpretation of metamorphic remobilization of primary layered Mn-chert deposit.

Protolith: Manganese-rich chert.

Alteration/Mineralization: Rock is metamorphosed/remobilized rather than altered; mineralization includes minor pyrite; and abundant manganiferous silicates and lesser oxide.

Conditions of Formation: Deposition of manganese-rich chert in "exhalative" volcano-sedimentary marine environment; lithification; recrystallization, accompanied by minor remobilization, of quartz and rhodonite, during heating from contact metamorphism of nearby intrusion.



APPENDIX III
CERTIFICATES OF ANALYSIS AND ASSAYS

LAB: R. BACHER / ACME ANALYTICAL REQUEST & RECEIPT PROJECT V243-II ()

| SAMPLE SERIES | SOURCE | # SOLES | TYPE SUBSTRATE | DATE OUT | WAY DATE | | ALL | | I.C.P. | | ASSAYS | | RECHECKS | |
|-----------------------|----------|---------|----------------|----------|-----------------------|--------|------------|--------|------------|------|------------|------|------------|--|
| | | | | | ANALYTICAL REQUEST NO | DATE | CERT# INV# | DATE | CERT# INV# | DATE | CERT# INV# | DATE | CERT# INV# | |
| 2901-2909a | MNS GR10 | 9 | ROCK | MAY 10 | 55584 | MAY 19 | 87202 | MAY 19 | 87202 | | | | | |
| 2909-2912 | " | 4 | " | " | " | " | " | " | " | | | | | |
| M3-1 SILT | " | 1 | SILT | " | " | " | " | " | " | | | | | |
| M-7 SILT#1 | " | 1 | " | " | " | " | " | " | " | | | | | |
| M-8 SILT#1 | " | 1 | " | " | " | " | " | " | " | | | | | |
| M-10 SILT#13 | " | 3 | " | " | " | " | " | " | " | | | | | |
| 14+00S | " | 40 | SOIL | " | " | " | " | " | " | | | | | |
| 0+00E-9+75E | " | 36 | " | " | " | " | " | " | " | | | | | |
| 0+00E-8+75E | " | 36 | " | " | " | " | " | " | " | | | | | |
| 16+00S | " | 33 | " | " | " | " | " | " | " | | | | | |
| 0+25E-8+50E (2c-N.S.) | " | | " | " | " | " | " | " | " | | | | | |
| 10+00S | " | | " | " | " | " | " | " | " | | | | | |
| 0+25W-6+00W | MNS GR10 | 24 | SOIL | MAY 14 | 55588 | MAY 21 | 87208 | MAY 26 | 87208 | | | | | |
| 14+00S | " | 17 | " | " | " | " | " | " | " | | | | | |
| 0+25W-4+25W | " | | " | " | " | " | " | " | " | | | | | |
| 13+00S | " | 20 | " | " | " | " | " | " | " | | | | | |
| 0+25W-5+00W | " | | " | " | " | " | " | " | " | | | | | |
| 18+00S | " | 3 | " | " | " | " | " | " | " | | | | | |
| 0+00E-0+50E | " | | " | " | " | " | " | " | " | | | | | |
| 18+00S | " | 26 | " | " | " | " | " | " | " | | | | | |
| 0+75E-7+00E | " | | " | " | " | " | " | " | " | | | | | |
| 16+00S | " | 16 | " | " | " | " | " | " | " | | | | | |
| 0+25W-4+00W | " | | " | " | " | " | " | " | " | | | | | |
| 18+00S | " | 6 | " | " | " | " | " | " | " | | | | | |
| 0+25W-1+50W | " | | " | " | " | " | " | " | " | | | | | |
| 19+00S | " | 6 | " | " | " | " | " | " | " | | | | | |
| 0+25W-1+50W | " | | " | " | " | " | " | " | " | | | | | |
| 19+00S | " | 25 | " | " | " | " | " | " | " | | | | | |
| 0+00E-6+00E | " | | " | " | " | " | " | " | " | | | | | |
| 17+00S | " | 13 | " | " | " | " | " | " | " | | | | | |
| 0+00W-3+00W | " | | " | " | " | " | " | " | " | | | | | |
| 17+00S | " | 20 | " | " | " | " | " | " | " | | | | | |
| 3+00E-7+75E | " | | " | " | " | " | " | " | " | | | | | |
| 17+00S | " | 11 | " | " | " | " | " | " | " | | | | | |
| 0+25E-2+75E | " | | " | " | " | " | " | " | " | | | | | |
| 9+00S | " | 25 | " | " | " | " | " | " | " | | | | | |
| 0+00W-6+00W | " | | " | " | " | " | " | " | " | | | | | |
| 11+00S | " | 22 | " | " | " | " | " | " | " | | | | | |
| 0+25W-5+50W | " | | " | " | " | " | " | " | " | | | | | |
| 20+00S | " | 18 | " | " | " | " | " | " | " | | | | | |
| 0+25E-4+5E | " | | " | " | " | " | " | " | " | | | | | |
| 20+00S | " | 7 | " | " | " | " | " | " | " | | | | | |
| 0+00E-1+50W | " | | " | " | " | " | " | " | " | | | | | |
| 2913-2918 | " | 6 | ROCK | " | " | " | " | MAY 26 | 87208 | | | | | |

ROSSBACHER LABORATORY LTD.

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

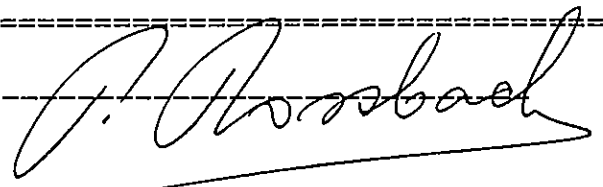
CERTIFICATE OF ANALYSIS

TO : MPH CONSULTING LTD.
 301-409 GRANVILLE STREET
 VANCOUVER B.C.
 PROJECT: V243
 TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 87202
 INVOICE#: 7615
 DATE ENTERED: 87-05-19
 FILE NAME: MPH87202
 PAGE # : 1

| PRE FIX | SAMPLE NAME | PPB Au |
|------------|-------------|-----------|
| \$ | 1400S 000E | 5 |
| \$ | 025E | 5 |
| \$ | 050E | 5 |
| \$ | 075E | 5 |
| \$ | 100E | 5 |
| \$ | 125E | 5 |
| \$ | 150E | 5 |
| \$ | 175E | 5 |
| \$ | 200E | 5 |
| \$ | 1400S 225E | 5 |
| \$ | 250E | 5 |
| \$ | 275E | 5 |
| \$ | 300E | 5 |
| \$ | 325E | 5 |
| \$ | 350E | 5 |
| \$ | 375E | 5 |
| \$ | 400E | 5 |
| \$ | 425E | 5 |
| \$ | 450E | 5 |
| \$ | 1400S 475E | 5 |
| \$ | 500E | 5 |
| \$ | 525E | 5 |
| \$ | 550E | 5 |
| \$ | 575E | 5 |
| \$ | 600E | 5 |
| \$ | 625E | 5 |
| \$ | 650E | 5 |
| \$ | 675E | 5 |
| \$ | 700E | 5 |
| \$ | 1400S 725E | 5 |
| \$ | 750E | 5 |
| \$ | 775E | 5 |
| \$ | 800E | 20 |
| \$ | 825E | 5 |
| \$ | 850E | 5 |
| \$ | 875E | 5 |
| \$ | 900E | 5 |
| \$ | 925E | 5 |
| \$ | 950E | 5 |
| \$ | 1400S 975E | 5 |

CERTIFIED BY :



ROSSBACHER LABORATORY LTD.

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

CERTIFICATE OF ANALYSIS

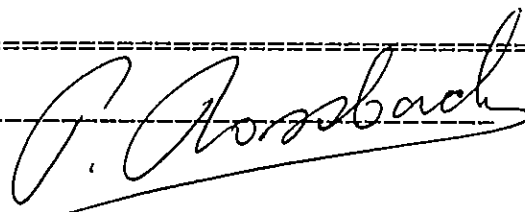
TO : MPH CONSULTING LTD.
 301-409 GRANVILLE STREET
 VANCOUVER B.C.

CERTIFICATE#: 87202
 INVOICE#: 7615
 DATE ENTERED: 87-05-19
 FILE NAME: MPH87202
 PAGE # : 2

PROJECT: V243
 TYPE OF ANALYSIS: GEOCHEMICAL

| PRE FIX | SAMPLE NAME | PPB Au |
|------------|-------------|-----------|
| S | 1500S 000E | 10 |
| S | 025E | 5 |
| S | 050E | 5 |
| S | 075E | 5 |
| S | 100E | 5 |
| S | 125E | 5 |
| S | 150E | 5 |
| S | 175E | 5 |
| S | 200E | 5 |
| S | 1500S 225E | 5 |
| S | 250E | 5 |
| S | 275E | 5 |
| S | 300E | 5 |
| S | 325E | 5 |
| S | 350E | 5 |
| S | 375E | 5 |
| S | 400E | 5 |
| S | 425E | 5 |
| S | 450E | 5 |
| S | 1500S 475E | 5 |
| S | 500E | 10 |
| S | 525E | 5 |
| S | 550E | 5 |
| S | 575E | 5 |
| S | 600E | 5 |
| S | 625E | 5 |
| S | 650E | 5 |
| S | 675E | 5 |
| S | 700E | 5 |
| S | 1500S 725E | 30 |
| S | 750E | 5 |
| S | 775E | 5 |
| S | 800E | 5 |
| S | 825E | 5 |
| S | 850E | 5 |
| S | 1500S 875E | 5 |
| S | 1600S 025E | 5 |
| S | 050E | 5 |
| S | 075E | 30 |
| S | 1600S 100E | 5 |

CERTIFIED BY :



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CERTIFICATE OF ANALYSIS

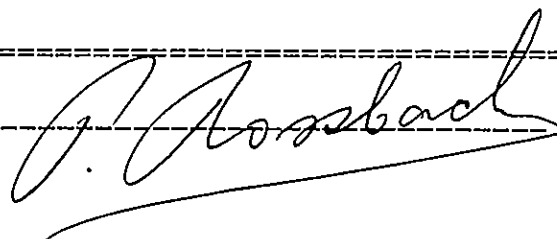
TO : MPH CONSULTING LTD.
 301-409 GRANVILLE STREET
 VANCOUVER B.C.

CERTIFICATE#: 87202
 INVOICE#: 7615
 DATE ENTERED: 87-05-19
 FILE NAME: MPH87202
 PAGE # : 3

PROJECT: V243
 TYPE OF ANALYSIS: GEOCHEMICAL

| PRE FIX | SAMPLE NAME | FPB Au |
|------------|-------------|-----------|
| S | 1600S 125E | 5 |
| S | 150E | 5 |
| S | 175E | 5 |
| S | 225E | 5 |
| S | 250E | 5 |
| S | 275E | 5 |
| S | 300E | 5 |
| S | 325E | 5 |
| S | 350E | 5 |
| A | 1600S 375E | 5 |
| S | 400E | 5 |
| S | 425E | 5 |
| S | 450E | 5 |
| S | 475E | 5 |
| S | 500E | 5 |
| S | 525E | 5 |
| S | 550E | 5 |
| S | 575E | 5 |
| S | 600E | 5 |
| S | 1600S 625E | 5 |
| S | 650E | 5 |
| S | 675E | 5 |
| S | 700E | 40 |
| S | 725E | 280 |
| S | 750E | 5 |
| S | 775E | 5 |
| S | 800E | 5 |
| S | 825E | 5 |
| S | 1600S 850E | 20 |
| A | 2901 | 5 |
| A | 2902 | 5 |
| A | 2903 | 5 |
| A | 2904 | 5 |
| A | 2905 | 5 |
| A | 2906 | 5 |
| A | 2907 | 5 |
| A | 2908 | 5 |
| A | 2909 | 5 |
| A | 2909A | 5 |
| A | 2910 | 5 |

CERTIFIED BY :



ROSSBACHER LABORATORY LTD.

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

CERTIFICATE OF ANALYSIS

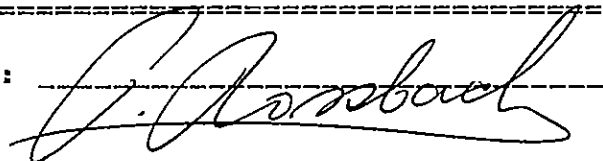
TO : MPH CONSULTING LTD.
301-409 GRANVILLE STREET
VANCOUVER B.C.

CERTIFICATE#: 87202
INVOICE#: 7615
DATE ENTERED: 87-05-19
FILE NAME: MPH87202
PAGE # : 4

PROJECT: V243
TYPE OF ANALYSIS: GEOCHEMICAL

| PRE FIX | SAMPLE NAME | PPB Au |
|------------|-------------|-----------|
| A | 2911 | 5 |
| A | 2912 | 5 |
| L | M3-1 | 5 |
| L | M-7 SILT#1 | 5 |
| L | M-8 SILT#1 | 5 |
| L | M-10 SILT#1 | 5 |
| L | M-10 SILT#2 | 5 |
| L | M-10 SILT#3 | 5 |

CERTIFIED BY :



GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG.C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
 THIS LEACH IS PARTIAL FOR Pb Fe Ca P CR Hg BA TI B AL MA K W SI ZR CE SR Y ND AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: SOLUTION

DATE RECEIVED: MAY 15 1987 DATE REPORT MAILED: *May 19/87* ASSAYER: *Deane Toyne* DEAN TOYNE, CERTIFIED B.C. ASSAYER

ROSSBACHER LABORATORY PROJECT - CERT#87202 File # 87-1295 Page 1 *V 243*

| SAMPLE# | NO | CU | PB | ZN | AS | NI | CO | MM | FE | AS | U | AU | TH | SR | CD | SB | BI | V | CA | P | LA | CR | HG | BA | TI | B | AL | MA | K | W |
|-------------|----|-----|----|-----|-----|----|----|------|------|----|----|----|----|----|----|----|----|-----|------|-------|----|-----|------|-----|-----|----|------|-----|-----|----|
| 2901 | 1 | 71 | 3 | 116 | .1 | 15 | 15 | 308 | 6.68 | 2 | 5 | ND | 3 | 7 | 1 | 2 | 2 | 63 | .36 | .058 | 5 | 39 | 1.24 | 77 | .20 | 10 | 2.55 | .04 | .23 | 1 |
| 2902 | 1 | 35 | 9 | 119 | .2 | 17 | 13 | 1904 | 3.30 | 6 | 8 | ND | 2 | 46 | 1 | 2 | 2 | 49 | 1.94 | .075 | 5 | 125 | .84 | 14 | .20 | 9 | 2.59 | .01 | .03 | 1 |
| 2903 | 6 | 367 | 11 | 115 | 1.0 | 4 | 8 | 3826 | 7.77 | 14 | 11 | ND | 2 | 45 | 1 | 2 | 2 | 93 | 2.03 | .063 | 3 | 33 | .85 | 30 | .29 | 6 | 3.14 | .02 | .07 | 1 |
| 2904 | 1 | 12 | 4 | 22 | .1 | 7 | 2 | 304 | 1.21 | 2 | 5 | ND | 1 | 10 | 1 | 2 | 4 | 26 | .21 | .018 | 3 | 245 | .35 | 18 | .07 | 4 | .59 | .03 | .02 | 1 |
| 2905 | 1 | 99 | 2 | 55 | .1 | 24 | 11 | 793 | 5.48 | 5 | 5 | ND | 1 | 2 | 1 | 3 | 5 | 135 | .07 | .028 | 2 | 259 | .20 | 28 | .01 | 2 | .24 | .01 | .02 | 1 |
| 2906 | 1 | 20 | 3 | 7 | .1 | 14 | 2 | 68 | 2.99 | 2 | 5 | ND | 1 | 1 | 1 | 4 | 2 | 16 | .01 | .014 | 2 | 125 | .02 | 7 | .01 | 2 | .11 | .01 | .01 | 1 |
| 2907 | 1 | 63 | 2 | 57 | .2 | 13 | 7 | 683 | 2.51 | 4 | 5 | ND | 1 | 23 | 1 | 2 | 2 | 46 | .75 | .022 | 2 | 126 | .65 | 421 | .17 | 2 | 1.35 | .10 | .61 | 1 |
| 2908 | 1 | 92 | 6 | 133 | .1 | 11 | 12 | 2447 | 5.37 | 11 | 6 | ND | 3 | 5 | 1 | 2 | 2 | 79 | .10 | .080 | 14 | 25 | 1.21 | 77 | .04 | 3 | 3.06 | .04 | .20 | 1 |
| 2909 | 2 | 54 | 8 | 51 | .1 | 40 | 17 | 309 | 2.34 | 8 | 8 | ND | 3 | 72 | 1 | 2 | 2 | 40 | 6.53 | 2.066 | 31 | 59 | .83 | 183 | .03 | 4 | 2.08 | .06 | .39 | 1 |
| 2909a | 1 | 36 | 2 | 40 | .1 | 9 | 5 | 1073 | 2.11 | 8 | 5 | ND | 1 | 4 | 1 | 2 | 4 | 29 | .22 | .057 | 2 | 143 | .83 | 64 | .08 | 2 | .95 | .02 | .06 | 1 |
| 2910 | 1 | 44 | 2 | 92 | .1 | 15 | 4 | 231 | 2.44 | 2 | 5 | ND | 1 | 20 | 1 | 2 | 2 | 21 | .30 | .012 | 3 | 97 | .89 | 454 | .10 | 9 | 1.24 | .03 | .15 | 1 |
| 2911 | 1 | 89 | 8 | 67 | .1 | 14 | 9 | 1006 | 2.67 | 2 | 5 | ND | 1 | 20 | 1 | 2 | 6 | 27 | .16 | .018 | 9 | 71 | .66 | 146 | .04 | 9 | 1.68 | .01 | .19 | 1 |
| 2912 | 1 | 30 | 6 | 35 | .1 | 10 | 14 | 409 | 3.72 | 2 | 5 | ND | 1 | 33 | 1 | 2 | 2 | 49 | .17 | .007 | 2 | 149 | .86 | 172 | .05 | 10 | 1.02 | .01 | .05 | 1 |
| AS-1 | 1 | 71 | 20 | 107 | .1 | 23 | 15 | 900 | 3.91 | 11 | 5 | ND | 1 | 35 | 1 | 2 | 2 | 74 | .92 | .057 | 12 | 45 | .89 | 284 | .21 | 8 | 2.85 | .02 | .09 | 1 |
| H-7 SILT#1 | 3 | 46 | 14 | 140 | .3 | 21 | 15 | 3729 | 3.32 | 12 | 5 | ND | 1 | 44 | 1 | 2 | 3 | 68 | 1.13 | .067 | 11 | 45 | .60 | 284 | .16 | 7 | 2.81 | .02 | .08 | 1 |
| H-8 SILT#1 | 1 | 31 | 10 | 135 | .2 | 56 | 12 | 1384 | 3.18 | 7 | 5 | ND | 1 | 92 | 1 | 2 | 2 | 61 | .99 | .045 | 10 | 85 | .57 | 200 | .06 | 7 | 2.46 | .02 | .09 | 1 |
| H-10 SILT#1 | 1 | 75 | 12 | 132 | .1 | 23 | 16 | 1071 | 4.07 | 17 | 5 | ND | 1 | 33 | 1 | 2 | 2 | 84 | .89 | .052 | 8 | 55 | .84 | 216 | .18 | 5 | 2.58 | .02 | .18 | 1 |
| H-10 SILT#2 | 1 | 59 | 12 | 101 | .1 | 20 | 13 | 796 | 3.61 | 6 | 5 | ND | 1 | 25 | 1 | 2 | 2 | 69 | .60 | .067 | 9 | 50 | .67 | 207 | .14 | 5 | 3.00 | .02 | .09 | 1 |
| H-10 SILT#3 | 1 | 74 | 17 | 126 | .1 | 22 | 14 | 1036 | 3.74 | 11 | 5 | ND | 1 | 33 | 1 | 2 | 2 | 74 | .71 | .068 | 10 | 75 | .80 | 266 | .18 | 6 | 2.91 | .02 | .12 | 1 |
| STD C | 19 | 59 | 39 | 132 | 6.9 | 66 | 28 | 995 | 3.97 | 42 | 15 | 8 | 34 | 47 | 17 | 16 | 20 | 61 | .48 | .101 | 38 | 57 | .88 | 176 | .08 | 37 | 1.72 | .06 | .14 | 13 |

ROSSBACHER LABORATORY PROJECT - CERT#87202 FILE # 87-1295

| SAMPLE | NO PPM | CU PPM | PB PPM | ZN PPM | AS PPM | FE PPM | NI PPM | CO PPM | MN PPM | CA PPM | V PPM | CR PPM | MG PPM | BR PPM | TI PPM | B PPM | AL PPM | MA PPM | K PPM | W PPM | | | | | | | | | |
|---------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|--------|--------|--------|--------|-------|--------|--------|-------|-------|-----|------|-----|------|------|------|------|------|-----|
| S 14+005 000E | 1 | 69 | 14 | 89 | -1 | 18 | 12 | 1183 | 3.64 | 6 | 5 | ND | 3 | 14 | 1 | 1 | .24 | .086 | 7 | 25 | .75 | 143 | -13 | 2 | 3.30 | -.01 | .10 | | |
| S 14+005 025E | 1 | 44 | 9 | 81 | -1 | 12 | 10 | 2413 | 3.37 | 5 | 5 | ND | 2 | 14 | 1 | 1 | .46 | .231 | 4 | 19 | .60 | 72 | .12 | 2 | 2.83 | -.01 | .05 | | |
| S 14+005 050E | 1 | 41 | 7 | 80 | -2 | 11 | 9 | 2079 | 2.88 | 6 | 5 | ND | 2 | 14 | 1 | 2 | .62 | .24 | .086 | 5 | 18 | .50 | 94 | -.14 | 2 | 2.62 | -.01 | .06 | |
| S 14+005 075E | 1 | 33 | 13 | 87 | -2 | 8 | 8 | 1072 | 2.57 | 2 | 5 | ND | 2 | 15 | 1 | 2 | .56 | .28 | .059 | 5 | 16 | .43 | 72 | .15 | 2 | 2.02 | -.01 | .04 | |
| S 14+005 100E | 1 | 42 | 7 | 99 | -2 | 10 | 9 | 803 | 2.74 | 3 | 5 | ND | 3 | 14 | 1 | 2 | .56 | .24 | .058 | 8 | 17 | .45 | 75 | .16 | 2 | 2.37 | -.01 | .05 | |
| S 14+005 125E | 1 | 18 | 6 | 61 | -2 | 6 | 5 | 304 | 1.91 | 2 | 5 | ND | 1 | 13 | 1 | 2 | .44 | .24 | .037 | 4 | 11 | .29 | 46 | -.14 | 2 | 1.45 | -.01 | .04 | |
| S 14+005 150E | 1 | 26 | 5 | 53 | -1 | 5 | 6 | 542 | 2.16 | 2 | 5 | ND | 1 | 13 | 1 | 2 | .48 | .22 | .028 | 4 | 13 | .34 | 65 | .13 | 3 | 1.70 | -.01 | .04 | |
| S 14+005 175E | 1 | 36 | 11 | 70 | -3 | 9 | 8 | 588 | 2.30 | 4 | 5 | ND | 1 | 11 | 1 | 2 | .48 | .19 | .050 | 4 | 13 | .39 | 71 | .13 | 2 | 2.03 | -.01 | .04 | |
| S 14+005 200E | 1 | 16 | 9 | 52 | -1 | 4 | 4 | 362 | 2.36 | 4 | 5 | ND | 1 | 11 | 1 | 2 | .52 | .19 | .051 | 5 | 12 | .25 | 36 | .13 | 2 | 1.39 | -.01 | .04 | |
| S 14+005 225E | 1 | 40 | 6 | 84 | -2 | 8 | 7 | 500 | 2.96 | 2 | 5 | ND | 2 | 13 | 1 | 2 | .57 | .19 | .041 | 6 | 17 | .31 | 86 | .14 | 4 | 2.91 | -.01 | .06 | |
| S 14+005 250E | 1 | 27 | 9 | 53 | -2 | 8 | 5 | 305 | 2.64 | 4 | 5 | ND | 1 | 11 | 1 | 2 | .56 | .15 | .044 | 5 | 13 | .31 | 55 | .11 | 2 | 1.80 | -.01 | .05 | |
| S 14+005 275E | 1 | 13 | 5 | 48 | -4 | 6 | 4 | 277 | 1.82 | 2 | 5 | ND | 2 | 11 | 1 | 2 | .39 | .16 | .031 | 4 | 10 | .23 | 51 | .10 | 2 | 1.23 | -.01 | .03 | |
| S 14+005 300E | 1 | 82 | 11 | 92 | -2 | 17 | 14 | 812 | 4.13 | 6 | 5 | ND | 2 | 13 | 1 | 2 | .85 | .18 | .048 | 7 | 23 | .90 | 194 | .18 | 2 | 3.46 | -.01 | .11 | |
| S 14+005 325E | 1 | 31 | 15 | 77 | -4 | 10 | 7 | 433 | 2.91 | 7 | 5 | ND | 3 | 14 | 1 | 2 | .60 | .21 | .041 | 5 | 16 | .43 | 78 | .15 | 2 | 2.33 | -.01 | .05 | |
| S 14+005 350E | 1 | 18 | 4 | 80 | -2 | 5 | 5 | 713 | 2.48 | 3 | 5 | ND | 1 | 12 | 1 | 2 | .50 | .19 | .063 | 5 | 15 | .35 | 59 | .14 | 2 | 1.79 | -.01 | .04 | |
| S 14+005 375E | 1 | 92 | 13 | 93 | -1 | 28 | 13 | 911 | 4.43 | 2 | 5 | ND | 1 | 14 | 1 | 2 | .79 | .18 | .038 | 6 | 33 | 1.05 | 209 | .18 | 3 | 4.30 | -.01 | .09 | |
| S 14+005 400E | 1 | 53 | 14 | 103 | -2 | 13 | 10 | 613 | 3.78 | 2 | 5 | ND | 2 | 13 | 1 | 2 | .70 | .23 | .076 | 5 | 32 | .54 | 77 | .17 | 2 | 4.12 | -.01 | .05 | |
| S 14+005 425E | 1 | 43 | 9 | 83 | -1 | 11 | 8 | 401 | 2.85 | 5 | 5 | ND | 2 | 13 | 1 | 2 | .56 | .21 | .054 | 6 | 17 | .42 | 74 | .15 | 3 | 2.51 | -.01 | .06 | |
| S 14+005 450E | 1 | 18 | 10 | 63 | -2 | 5 | 5 | 386 | 2.43 | 5 | 5 | ND | 1 | 12 | 1 | 2 | .51 | .22 | .028 | 5 | 12 | .34 | 61 | .13 | 2 | 1.44 | -.01 | .04 | |
| S 14+005 475E | 1 | 25 | 15 | 80 | -1 | 9 | 6 | 458 | 2.74 | 5 | 5 | ND | 1 | 16 | 1 | 2 | .55 | .27 | .033 | 5 | 15 | .45 | 93 | .15 | 3 | 1.90 | -.01 | .04 | |
| S 14+005 500E | 1 | 55 | 2 | 84 | -1 | 19 | 11 | 612 | 3.57 | 2 | 5 | ND | 1 | 13 | 1 | 2 | .67 | .20 | .044 | 5 | 20 | .68 | 133 | .15 | 7 | 3.19 | -.01 | .06 | |
| S 14+005 525E | 1 | 25 | 8 | 90 | -1 | 9 | 13 | 1671 | 2.42 | 2 | 5 | ND | 1 | 12 | 1 | 2 | .47 | .21 | .037 | 5 | 15 | .37 | 124 | .12 | 2 | 1.74 | -.01 | .05 | |
| S 14+005 550E | 1 | 17 | 20 | 104 | -3 | 8 | 7 | 1683 | 1.73 | 2 | 5 | ND | 1 | 17 | 1 | 2 | .37 | .29 | .089 | 5 | 11 | .23 | 168 | .09 | 2 | 1.25 | -.01 | .04 | |
| S 14+005 575E | 1 | 46 | 10 | 115 | -2 | 15 | 11 | 1126 | 3.45 | 2 | 5 | ND | 2 | 13 | 1 | 2 | .64 | .25 | .094 | 5 | 19 | .58 | 116 | .16 | 2 | 2.59 | -.01 | .05 | |
| S 14+005 600E | 1 | 58 | 11 | 96 | -2 | 22 | 10 | 512 | 4.10 | 3 | 5 | ND | 1 | 19 | 1 | 2 | .76 | .29 | .052 | 5 | 24 | .73 | 232 | .16 | 4 | 3.38 | -.01 | .08 | |
| S 14+005 625E | 1 | 91 | 9 | 103 | -1 | 23 | 15 | 708 | 4.51 | 7 | 5 | ND | 1 | 14 | 1 | 2 | .81 | .21 | .059 | 7 | 27 | .89 | 219 | .16 | 2 | 3.90 | -.01 | .12 | |
| S 14+005 650E | 1 | 50 | 11 | 92 | -1 | 17 | 12 | 841 | 3.87 | 2 | 5 | ND | 1 | 21 | 1 | 2 | .72 | .33 | .034 | 7 | 23 | .77 | 177 | .15 | 3 | 2.93 | -.01 | .09 | |
| S 14+005 675E | 1 | 83 | 10 | 81 | -1 | 20 | 13 | 549 | 4.35 | 2 | 5 | ND | 1 | 15 | 1 | 2 | .77 | .19 | .027 | 6 | 26 | 1.08 | 361 | .15 | 2 | 3.86 | -.01 | .12 | |
| S 14+005 700E | 1 | 59 | 6 | 96 | -1 | 17 | 12 | 781 | 3.66 | 5 | 5 | ND | 1 | 17 | 1 | 2 | .67 | .27 | .042 | 5 | 21 | .71 | 255 | .13 | 2 | 3.18 | -.01 | .09 | |
| S 14+005 725E | 1 | 53 | 9 | 104 | -1 | 15 | 10 | 685 | 3.63 | 2 | 5 | ND | 1 | 14 | 1 | 2 | .71 | .29 | .109 | 5 | 21 | .72 | 133 | .17 | 2 | 2.97 | -.01 | .06 | |
| S 14+005 750E | 1 | 79 | 8 | 91 | -1 | 19 | 14 | 752 | 4.09 | 6 | 5 | ND | 1 | 16 | 1 | 2 | .78 | .28 | .075 | 6 | 24 | .92 | 172 | .18 | 4 | 3.17 | -.01 | .11 | |
| S 14+005 775E | 1 | 63 | 18 | 92 | -1 | 18 | 11 | 732 | 3.53 | 2 | 5 | ND | 1 | 12 | 1 | 2 | .69 | .21 | .073 | 5 | 22 | .75 | 141 | .15 | 2 | 3.01 | -.01 | .06 | |
| S 14+005 800E | 1 | 45 | 14 | 93 | -2 | 11 | 9 | 837 | 3.16 | 6 | 5 | ND | 1 | 12 | 1 | 2 | .61 | .22 | .099 | 5 | 17 | .55 | 120 | .13 | 2 | 2.50 | -.01 | .05 | |
| S 14+005 825E | 1 | 44 | 12 | 79 | -1 | 15 | 9 | 454 | 3.60 | 2 | 5 | ND | 1 | 13 | 1 | 2 | .70 | .24 | .033 | 5 | 16 | .65 | 130 | .15 | 2 | 2.84 | -.01 | .05 | |
| S 14+005 850E | 1 | 36 | 6 | 75 | -1 | 11 | 8 | 819 | 2.93 | 5 | 5 | ND | 1 | 13 | 1 | 2 | .57 | .24 | .049 | 5 | 15 | .51 | 116 | .12 | 2 | 2.02 | -.01 | .05 | |
| S 14+005 875E | 1 | 32 | 12 | 78 | -2 | 7 | 7 | 583 | 2.41 | 2 | 5 | ND | 1 | 12 | 1 | 2 | .48 | .20 | .055 | 5 | 15 | .43 | 83 | .11 | 2 | 2.11 | -.01 | .05 | |
| S 14+005 900E | 1 | 40 | 16 | 88 | -1 | 15 | 10 | 717 | 3.31 | 2 | 5 | ND | 1 | 12 | 1 | 2 | .63 | .19 | .067 | 5 | 19 | .67 | 110 | .13 | 2 | 3.06 | -.01 | .05 | |
| S 14+005 925E | 1 | 33 | 15 | 72 | -1 | 10 | 6 | 1029 | 2.37 | 2 | 5 | ND | 1 | 12 | 1 | 2 | .49 | .18 | .052 | 4 | 13 | .43 | 98 | .10 | 2 | 1.77 | -.01 | .04 | |
| S 14+005 950E | 1 | 43 | 9 | 153 | -1 | 14 | 9 | 1054 | 3.84 | 4 | 5 | ND | 1 | 11 | 1 | 2 | .70 | .22 | .080 | 4 | 17 | .57 | 124 | .13 | 2 | 2.83 | -.01 | .06 | |
| S 14+005 975E | 1 | 84 | 11 | 98 | -1 | 21 | 12 | 548 | 4.06 | 4 | 5 | ND | 1 | 13 | 1 | 2 | .76 | .22 | .039 | 5 | 24 | .80 | 125 | .13 | 2 | 3.31 | -.01 | .08 | |
| STD C | 19 | 59 | 43 | 130 | 6.9 | 46 | 28 | 985 | 3.95 | 42 | 7 | 8 | 32 | 46 | 17 | 15 | 20 | 59 | .48 | .102 | 35 | 56 | .68 | 173 | .08 | 34 | 1.72 | -.06 | .14 |

ROSSBACHER LABORATORY PROJECT - CERT#87202 FILE # 87-1295

| SAMPLE# | NO PPK | CU PPK | PB PPK | ZK PPK | AS PPK | NI PPK | CO PPK | MN PPK | FE PPK | AS PPK | U PPK | AU PPK | TH PPK | SR PPK | CD PPK | SB PPK | BI PPK | V PPK | CA PPK | P PPK | LA PPK | CR PPK | MG PPK | BA PPK | TI PPK | B PPK | AL PPK | MA PPK | K PPK | W PPK |
|---------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|--------|--------|--------|--------|--------|--------|-------|--------|-------|--------|--------|--------|--------|--------|-------|--------|--------|-------|-------|
| S 15+005 000E | 1 | 39 | 21 | 84 | .1 | 13 | 8 | 2185 | 2.61 | 4 | 5 | ND | 1 | 14 | 1 | 2 | 2 | 57 | .21 | .108 | 5 | 18 | .46 | 98 | .10 | 5 | 2.32 | .01 | .04 | 1 |
| S 15+005 025E | 1 | 11 | 16 | 46 | .2 | 4 | 4 | 528 | 1.78 | 3 | 5 | ND | 1 | 15 | 1 | 2 | 2 | 41 | .24 | .055 | 5 | 11 | .17 | 49 | .09 | 2 | 1.20 | .01 | .03 | 1 |
| S 15+005 050E | 1 | 41 | 9 | 46 | .1 | 11 | 8 | 542 | 2.83 | 2 | 5 | ND | 1 | 15 | 1 | 2 | 2 | 44 | .23 | .062 | 7 | 18 | .46 | 60 | .15 | 2 | 2.48 | .01 | .04 | 1 |
| S 15+005 075E | 1 | 52 | 11 | 78 | .2 | 13 | 9 | 629 | 2.93 | 6 | 5 | ND | 2 | 16 | 1 | 2 | 2 | 63 | .26 | .059 | 6 | 17 | .50 | 74 | .16 | 2 | 2.77 | .01 | .05 | 1 |
| S 15+005 100E | 1 | 48 | 11 | 72 | .2 | 15 | 10 | 574 | 3.09 | 7 | 5 | ND | 1 | 15 | 1 | 2 | 2 | 71 | .25 | .045 | 6 | 23 | .60 | 82 | .18 | 2 | 2.88 | .01 | .05 | 1 |
| S 15+005 125E | 1 | 18 | 7 | 67 | .1 | 5 | 5 | 404 | 2.47 | 5 | 5 | ND | 1 | 15 | 1 | 2 | 6 | 55 | .24 | .087 | 5 | 14 | .31 | 54 | .13 | 2 | 1.91 | .01 | .03 | 1 |
| S 15+005 150E | 1 | 42 | 12 | 74 | .2 | 11 | 8 | 754 | 2.73 | 8 | 5 | ND | 2 | 16 | 1 | 2 | 6 | 61 | .20 | .040 | 6 | 16 | .43 | 85 | .15 | 4 | 2.54 | .01 | .05 | 2 |
| S 15+005 175E | 1 | 24 | 6 | 59 | .3 | 9 | 5 | 343 | 2.20 | 6 | 5 | ND | 1 | 16 | 1 | 2 | 3 | 51 | .22 | .029 | 7 | 13 | .28 | 55 | .13 | 4 | 1.86 | .01 | .04 | 1 |
| S 15+005 200E | 1 | 42 | 9 | 67 | .1 | 12 | 7 | 445 | 2.89 | 4 | 5 | ND | 1 | 12 | 1 | 2 | 4 | 61 | .16 | .050 | 5 | 15 | .48 | 78 | .13 | 4 | 2.72 | .01 | .04 | 2 |
| S 15+005 225E | 1 | 37 | 12 | 72 | .2 | 10 | 7 | 384 | 2.45 | 9 | 5 | ND | 1 | 15 | 1 | 2 | 3 | 55 | .20 | .032 | 5 | 14 | .41 | 63 | .12 | 5 | 2.80 | .01 | .05 | 1 |
| S 15+005 250E | 1 | 85 | 9 | 84 | .1 | 22 | 13 | 607 | 3.89 | 13 | 5 | ND | 2 | 14 | 1 | 2 | 2 | 86 | .18 | .054 | 7 | 24 | .84 | 174 | .19 | 4 | 4.02 | .01 | .07 | 1 |
| S 15+005 275E | 1 | 2 | 3 | 42 | .2 | 3 | 3 | 287 | 1.52 | 3 | 5 | ND | 1 | 13 | 1 | 3 | 2 | 34 | .19 | .027 | 6 | 9 | .17 | 43 | .12 | 4 | 1.07 | .01 | .03 | 2 |
| S 15+005 300E | 1 | 32 | 9 | 91 | .3 | 10 | 7 | 477 | 2.33 | 6 | 5 | ND | 1 | 14 | 1 | 2 | 2 | 51 | .20 | .042 | 6 | 15 | .39 | 65 | .14 | 2 | 2.39 | .01 | .04 | 1 |
| S 15+005 325E | 1 | 21 | 12 | 67 | .1 | 6 | 5 | 405 | 2.20 | 2 | 5 | ND | 1 | 17 | 1 | 2 | 2 | 51 | .22 | .033 | 6 | 12 | .33 | 54 | .16 | 2 | 1.94 | .01 | .04 | 1 |
| S 15+005 350E | 1 | 24 | 9 | 73 | .1 | 14 | 8 | 590 | 2.85 | 7 | 5 | ND | 1 | 16 | 1 | 2 | 4 | 61 | .22 | .051 | 5 | 23 | .42 | 67 | .17 | 5 | 2.75 | .01 | .04 | 1 |
| S 15+005 375E | 1 | 15 | 8 | 57 | .1 | 10 | 5 | 432 | 2.14 | 3 | 5 | ND | 1 | 16 | 1 | 3 | 2 | 49 | .24 | .045 | 5 | 20 | .37 | 41 | .14 | 2 | 1.61 | .01 | .03 | 1 |
| S 15+005 400E | 1 | 27 | 9 | 78 | .3 | 7 | 4 | 518 | 2.87 | 3 | 5 | ND | 1 | 14 | 1 | 2 | 2 | 61 | .22 | .041 | 6 | 14 | .31 | 52 | .16 | 4 | 2.12 | .01 | .04 | 1 |
| S 15+005 425E | 1 | 21 | 8 | 58 | .1 | 8 | 4 | 312 | 2.79 | 9 | 5 | ND | 1 | 12 | 1 | 2 | 2 | 58 | .19 | .072 | 5 | 16 | .36 | 50 | .15 | 2 | 2.22 | .01 | .03 | 1 |
| S 15+005 450E | 1 | 29 | 11 | 76 | .4 | 8 | 9 | 347 | 2.48 | 4 | 5 | ND | 1 | 11 | 1 | 2 | 2 | 47 | .18 | .059 | 6 | 15 | .38 | 68 | .11 | 5 | 2.02 | .01 | .04 | 1 |
| S 15+005 475E | 1 | 43 | 7 | 93 | .1 | 15 | 9 | 502 | 3.88 | 8 | 5 | ND | 1 | 14 | 1 | 2 | 2 | 72 | .25 | .168 | 5 | 22 | .62 | 87 | .14 | 7 | 3.04 | .01 | .06 | 1 |
| S 15+005 500E | 1 | 81 | 9 | 84 | .5 | 23 | 11 | 440 | 3.88 | 10 | 5 | ND | 1 | 14 | 1 | 2 | 2 | 81 | .25 | .044 | 6 | 24 | .84 | 110 | .20 | 2 | 3.57 | .01 | .07 | 1 |
| S 15+005 525E | 1 | 42 | 18 | 108 | .2 | 16 | 10 | 708 | 3.80 | 9 | 5 | ND | 1 | 15 | 1 | 2 | 2 | 79 | .20 | .091 | 5 | 24 | .66 | 116 | .19 | 2 | 3.82 | .01 | .06 | 1 |
| S 15+005 550E | 1 | 40 | 9 | 94 | .1 | 20 | 12 | 497 | 4.28 | 6 | 5 | ND | 1 | 16 | 1 | 2 | 2 | 89 | .23 | .042 | 7 | 29 | .78 | 142 | .21 | 3 | 4.16 | .01 | .08 | 1 |
| S 15+005 575E | 1 | 36 | 10 | 105 | .2 | 16 | 11 | 624 | 3.66 | 7 | 5 | ND | 1 | 17 | 1 | 2 | 2 | 78 | .28 | .032 | 7 | 23 | .59 | 137 | .18 | 3 | 3.00 | .01 | .07 | 1 |
| S 15+005 600E | 4 | 48 | 15 | 77 | .1 | 20 | 12 | 593 | 4.16 | 11 | 5 | ND | 1 | 20 | 1 | 2 | 2 | 90 | .35 | .023 | 6 | 25 | .85 | 155 | .22 | 4 | 3.59 | .01 | .06 | 1 |
| S 15+005 625E | 1 | 41 | 16 | 129 | .1 | 16 | 14 | 950 | 4.10 | 6 | 5 | ND | 1 | 17 | 1 | 2 | 2 | 79 | .31 | .096 | 6 | 20 | .56 | 119 | .19 | 2 | 2.44 | .01 | .06 | 1 |
| S 15+005 650E | 1 | 42 | 20 | 147 | .1 | 14 | 17 | 2256 | 3.76 | 5 | 5 | ND | 1 | 22 | 1 | 2 | 3 | 72 | .45 | .082 | 7 | 18 | .63 | 152 | .20 | 3 | 2.83 | .01 | .08 | 1 |
| S 15+005 675E | 1 | 45 | 17 | 142 | .1 | 18 | 15 | 1786 | 3.65 | 6 | 5 | ND | 1 | 18 | 1 | 2 | 2 | 70 | .29 | .050 | 6 | 19 | .64 | 197 | .17 | 4 | 2.75 | .01 | .08 | 1 |
| S 15+005 700E | 1 | 13 | 7 | 93 | .2 | 9 | 6 | 620 | 1.92 | 3 | 5 | ND | 1 | 15 | 1 | 2 | 4 | 40 | .25 | .032 | 5 | 12 | .29 | 91 | .11 | 4 | 1.51 | .01 | .04 | 1 |
| S 15+005 725E | 1 | 28 | 5 | 113 | .1 | 16 | 9 | 960 | 2.88 | 3 | 5 | ND | 1 | 20 | 1 | 2 | 3 | 60 | .31 | .077 | 6 | 16 | .45 | 105 | .15 | 10 | 2.28 | .01 | .05 | 1 |
| S 15+005 750E | 1 | 102 | 23 | 99 | .2 | 21 | 16 | 738 | 4.31 | 9 | 5 | ND | 1 | 22 | 1 | 2 | 2 | 75 | .39 | .070 | 8 | 27 | .92 | 130 | .19 | 4 | 3.46 | .01 | .09 | 1 |
| S 15+005 775E | 1 | 44 | 19 | 82 | .2 | 14 | 8 | 732 | 3.36 | 9 | 5 | ND | 1 | 14 | 1 | 2 | 2 | 67 | .24 | .062 | 5 | 19 | .61 | 95 | .15 | 2 | 2.49 | .01 | .05 | 1 |
| S 15+005 800E | 1 | 46 | 20 | 163 | .1 | 13 | 12 | 1357 | 3.65 | 4 | 5 | ND | 1 | 21 | 1 | 2 | 2 | 68 | .48 | .092 | 6 | 17 | .54 | 153 | .15 | 3 | 2.64 | .01 | .08 | 1 |
| S 15+005 825E | 1 | 83 | 6 | 105 | .1 | 23 | 12 | 602 | 4.19 | 7 | 5 | ND | 1 | 16 | 1 | 2 | 2 | 85 | .28 | .084 | 5 | 25 | .90 | 123 | .18 | 3 | 3.15 | .01 | .07 | 1 |
| S 15+005 850E | 1 | 23 | 8 | 110 | .1 | 12 | 10 | 594 | 3.50 | 4 | 5 | ND | 2 | 18 | 1 | 2 | 3 | 71 | .30 | .038 | 6 | 19 | .48 | 130 | .17 | 2 | 2.21 | .01 | .05 | 1 |
| S 15+005 875E | 1 | 39 | 20 | 102 | .1 | 13 | 10 | 1554 | 3.46 | 6 | 5 | ND | 1 | 30 | 1 | 2 | 2 | 73 | .44 | .042 | 7 | 20 | .54 | 195 | .14 | 2 | 2.51 | .01 | .07 | 1 |
| S 14+005 025E | 1 | 56 | 12 | 80 | .1 | 18 | 9 | 900 | 3.44 | 6 | 5 | ND | 1 | 18 | 1 | 2 | 2 | 77 | .28 | .049 | 5 | 22 | .64 | 79 | .15 | 6 | 3.47 | .01 | .06 | 1 |
| S 14+005 050E | 1 | 15 | 13 | 44 | .1 | 9 | 5 | 1764 | 1.97 | 2 | 5 | ND | 1 | 19 | 1 | 2 | 2 | 47 | .33 | .056 | 5 | 12 | .30 | 64 | .13 | 6 | 1.45 | .01 | .03 | 1 |
| S 14+005 075E | 1 | 10 | 2 | 45 | .1 | 7 | 4 | 349 | 1.66 | 2 | 5 | ND | 1 | 18 | 1 | 2 | 2 | 39 | .34 | .020 | 5 | 12 | .26 | 47 | .14 | 3 | 1.40 | .01 | .03 | 1 |
| S 14+005 100E | 1 | 33 | 14 | 57 | .1 | 15 | 7 | 1223 | 2.53 | 3 | 5 | ND | 2 | 17 | 1 | 2 | 2 | 57 | .30 | .048 | 4 | 16 | .43 | 64 | .12 | 6 | 2.15 | .01 | .05 | 1 |
| STD C | 19 | 57 | 43 | 131 | 6.7 | 67 | 28 | 998 | 3.97 | 41 | 6 | 8 | 32 | 46 | 17 | 15 | 20 | 16 | .48 | .097 | 35 | 57 | .88 | 174 | .08 | 36 | 1.72 | .07 | .12 | 13 |

ROSSBACHER LABORATORY PROJECT - CERT#87202 FILE # 87-1295

| SAMPLEN | NO | CU | PB | ZN | AG | NI | CO | MN | FE | AS | U | AU | TH | SR | CD | SB | BI | V | CA | P | LA | CR | ME | BA | TI | B | AL | MA | K | M |
|---------------|-----|-----|-----|-----|-----|-----|-----|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|------|-----|-----|-----|------|-----|-----|-----|
| | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | % | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | % | % | PPH | PPH | % | % | PPH | PPH | % | % | % | PPH |
| S 14+005 125E | 1 | 34 | 15 | 78 | .1 | 12 | 8 | 1338 | 2.95 | 8 | 5 | ND | 1 | 13 | 1 | 2 | 2 | 63 | .21 | .086 | 4 | 20 | .42 | 50 | .13 | 2 | 2.94 | .01 | .03 | 1 |
| S 14+005 150E | 1 | 16 | 11 | 55 | .1 | 6 | 4 | 301 | 2.53 | 6 | 5 | ND | 1 | 13 | 1 | 2 | 2 | 57 | .20 | .053 | 3 | 12 | .28 | 39 | .11 | 2 | 1.52 | .01 | .02 | 1 |
| S 14+005 175E | 1 | 54 | 17 | 91 | .1 | 13 | 9 | 982 | 3.01 | 8 | 5 | ND | 1 | 14 | 1 | 2 | 2 | 46 | .23 | .053 | 4 | 19 | .41 | 90 | .14 | 3 | 2.58 | .01 | .04 | 1 |
| S 14+005 225E | 1 | 14 | 14 | 67 | .1 | 8 | 4 | 307 | 2.22 | 4 | 5 | ND | 1 | 17 | 1 | 2 | 2 | 46 | .20 | .032 | 5 | 13 | .27 | 50 | .13 | 3 | 2.05 | .01 | .04 | 2 |
| S 14+005 250E | 1 | 46 | 13 | 84 | .1 | 14 | 8 | 614 | 3.05 | 2 | 5 | ND | 1 | 18 | 1 | 2 | 2 | 66 | .25 | .052 | 6 | 19 | .44 | 72 | .17 | 2 | 2.89 | .01 | .04 | 1 |
| S 14+005 275E | 1 | 31 | 20 | 85 | .3 | 12 | 8 | 1033 | 3.08 | 10 | 5 | ND | 1 | 18 | 1 | 2 | 2 | 68 | .26 | .040 | 5 | 16 | .34 | 99 | .15 | 2 | 2.32 | .01 | .05 | 1 |
| S 14+005 300E | 1 | 40 | 14 | 108 | .1 | 8 | 9 | 515 | 2.90 | 5 | 5 | ND | 1 | 21 | 1 | 2 | 2 | 63 | .29 | .054 | 5 | 16 | .33 | 84 | .16 | 4 | 2.22 | .01 | .04 | 1 |
| S 14+005 325E | 1 | 6 | 9 | 59 | .1 | 2 | 4 | 424 | 1.32 | 2 | 5 | ND | 1 | 23 | 1 | 2 | 2 | 34 | .29 | .017 | 6 | 9 | .18 | 36 | .16 | 2 | .95 | .01 | .02 | 1 |
| S 14+005 350E | 1 | 24 | 6 | 81 | .1 | 9 | 5 | 518 | 2.25 | 4 | 5 | ND | 1 | 21 | 1 | 2 | 2 | 50 | .27 | .032 | 5 | 17 | .33 | 51 | .16 | 4 | 1.85 | .01 | .03 | 1 |
| S 14+005 375E | 1 | 16 | 16 | 65 | .1 | 9 | 4 | 400 | 2.15 | 5 | 5 | ND | 1 | 17 | 1 | 2 | 2 | 49 | .27 | .032 | 5 | 16 | .30 | 56 | .16 | 2 | 1.41 | .01 | .04 | 2 |
| S 14+005 400E | 1 | 15 | 13 | 76 | .1 | 6 | 4 | 306 | 2.37 | 4 | 5 | ND | 1 | 14 | 1 | 2 | 2 | 50 | .20 | .030 | 5 | 15 | .30 | 47 | .12 | 2 | 1.94 | .01 | .03 | 1 |
| S 14+005 425E | 1 | 16 | 8 | 60 | .1 | 5 | 4 | 307 | 2.65 | 3 | 5 | ND | 1 | 13 | 1 | 2 | 2 | 55 | .18 | .036 | 4 | 17 | .31 | 46 | .12 | 2 | 2.04 | .01 | .02 | 1 |
| S 14+005 450E | 1 | 34 | 18 | 85 | .1 | 9 | 7 | 677 | 2.80 | 4 | 5 | ND | 1 | 15 | 1 | 2 | 2 | 59 | .23 | .051 | 4 | 19 | .47 | 71 | .14 | 3 | 2.25 | .01 | .04 | 1 |
| S 14+005 475E | 1 | 47 | 16 | 89 | .1 | 15 | 9 | 499 | 3.36 | 7 | 5 | ND | 1 | 15 | 1 | 2 | 2 | 66 | .22 | .045 | 5 | 26 | .46 | 97 | .17 | 3 | 3.45 | .01 | .05 | 1 |
| S 14+005 500E | 1 | 7 | 7 | 68 | .1 | 7 | 4 | 1257 | 1.88 | 3 | 5 | ND | 1 | 18 | 1 | 2 | 2 | 43 | .30 | .030 | 5 | 13 | .31 | 117 | .13 | 2 | 1.38 | .01 | .03 | 1 |
| S 14+005 525E | 1 | 13 | 9 | 98 | .1 | 7 | 7 | 2239 | 2.21 | 5 | 5 | ND | 1 | 18 | 1 | 2 | 2 | 46 | .29 | .051 | 5 | 16 | .30 | 125 | .14 | 2 | 1.79 | .01 | .03 | 1 |
| S 14+005 550E | 1 | 12 | 17 | 67 | .3 | 11 | 5 | 604 | 2.04 | 5 | 5 | ND | 1 | 14 | 1 | 2 | 2 | 44 | .24 | .032 | 5 | 14 | .31 | 65 | .12 | 2 | 1.40 | .01 | .03 | 1 |
| S 14+005 575E | 1 | 26 | 12 | 107 | .1 | 15 | 9 | 876 | 3.06 | 4 | 5 | ND | 1 | 15 | 1 | 2 | 2 | 60 | .22 | .059 | 5 | 23 | .50 | 107 | .16 | 2 | 2.97 | .01 | .04 | 1 |
| S 14+005 600E | 1 | 23 | 15 | 95 | .1 | 11 | 8 | 600 | 2.64 | 5 | 5 | ND | 1 | 14 | 1 | 2 | 2 | 51 | .24 | .046 | 4 | 16 | .48 | 93 | .13 | 2 | 1.96 | .01 | .05 | 1 |
| S 14+005 625E | 1 | 57 | 18 | 107 | .2 | 16 | 10 | 1029 | 3.66 | 5 | 5 | ND | 1 | 12 | 1 | 2 | 2 | 65 | .20 | .038 | 4 | 26 | .74 | 82 | .14 | 2 | 3.10 | .01 | .05 | 1 |
| S 14+005 650E | 1 | 56 | 15 | 158 | .1 | 19 | 14 | 1148 | 3.56 | 5 | 5 | ND | 1 | 17 | 1 | 2 | 2 | 64 | .28 | .066 | 6 | 25 | .60 | 147 | .11 | 2 | 3.07 | .01 | .07 | 1 |
| S 14+005 675E | 1 | 49 | 17 | 167 | .1 | 18 | 14 | 1393 | 3.45 | 8 | 5 | ND | 1 | 14 | 1 | 2 | 2 | 59 | .26 | .099 | 6 | 24 | .54 | 119 | .10 | 2 | 2.86 | .01 | .07 | 1 |
| S 14+005 700E | 1 | 122 | 17 | 138 | .7 | 28 | 21 | 893 | 4.38 | 10 | 5 | ND | 2 | 15 | 1 | 2 | 2 | 69 | .28 | .076 | 7 | 27 | .95 | 130 | .15 | 3 | 4.00 | .01 | .09 | 1 |
| S 14+005 725E | 2 | 141 | 25 | 133 | .5 | 27 | 26 | 1105 | 4.97 | 21 | 5 | ND | 1 | 27 | 1 | 2 | 4 | 78 | .43 | .066 | 8 | 29 | 1.00 | 127 | .17 | 4 | 3.58 | .01 | .09 | 1 |
| S 14+005 750E | 1 | 55 | 17 | 100 | .1 | 13 | 11 | 557 | 3.38 | 7 | 5 | ND | 1 | 19 | 1 | 2 | 3 | 61 | .36 | .051 | 4 | 20 | .63 | 121 | .13 | 3 | 2.19 | .01 | .06 | 1 |
| S 14+005 775E | 1 | 59 | 10 | 140 | .1 | 13 | 12 | 683 | 4.21 | 4 | 5 | ND | 1 | 15 | 1 | 2 | 2 | 76 | .27 | .093 | 4 | 23 | .77 | 107 | .15 | 2 | 3.08 | .01 | .05 | 1 |
| S 14+005 800E | 1 | 19 | 23 | 74 | .1 | 7 | 5 | 556 | 2.33 | 2 | 5 | ND | 1 | 19 | 1 | 2 | 2 | 53 | .28 | .021 | 6 | 17 | .28 | 97 | .13 | 2 | 1.49 | .01 | .03 | 1 |
| S 14+005 825E | 1 | 39 | 14 | 78 | .2 | 12 | 8 | 421 | 3.71 | 4 | 5 | ND | 1 | 24 | 1 | 2 | 2 | 81 | .29 | .036 | 5 | 23 | .60 | 69 | .21 | 2 | 2.06 | .01 | .04 | 1 |
| S 14+005 850E | 1 | 131 | 32 | 102 | .1 | 21 | 15 | 948 | 4.97 | 5 | 5 | ND | 1 | 29 | 1 | 2 | 2 | 108 | .35 | .081 | 6 | 30 | 1.16 | 129 | .25 | 5 | 3.04 | .01 | .06 | 1 |
| S10 C | 19 | 40 | 41 | 131 | 7.0 | 66 | 28 | 982 | 3.95 | 44 | 14 | 7 | 32 | 46 | 17 | 16 | 19 | 59 | .48 | .094 | 34 | 56 | .88 | 173 | .08 | 35 | 1.72 | .06 | .12 | 12 |

ROSSBACHER LABORATORY LTD.

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

CERTIFICATE OF ANALYSIS

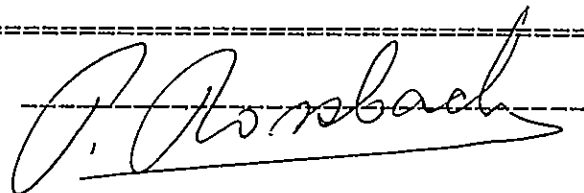
TO : MPH CONSULTING LTD.
#2406-555 W.HASTINGS ST. (BOX 12092)
VANCOUVER B.C.
PROJECT: V 243
TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 87200.A
INVOICE#: 7630
DATE ENTERED: 87-05-22
FILE NAME: MPH87202.A
PAGE # : 1

| PRE FIX | SAMPLE NAME | PPB Au I | PPB Au II* | Au II Wt.gm |
|------------|---------------|-------------|---------------|----------------|
| 3 | L 16+00S 675E | 5 | 5 | 6.00 |
| 3 | 700E | 40 | 5 | 2.00 |
| 3 | 725E | 280 | 300 | 4.00 |
| 3 | L 16+00S 750E | 5 | 5 | 4.00 |

* Au II VALUES CONVERTED TO 10.00 gm SAMPLE WEIGHT.

CERTIFIED BY :



ROSSBACHER LABORATORY LTD.

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

CERTIFICATE OF ANALYSIS

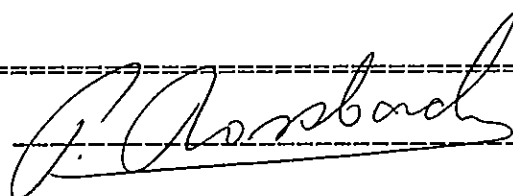
TO : MPH CONSULTING LTD.
 #2406-555 W. HASTINGS ST. (BOX 12092)
 VANCOUVER B.C.

CERTIFICATE#: 87208
 INVOICE#: 7624
 DATE ENTERED: 87-05-21
 FILE NAME: MPH87208
 PAGE # : 1

PROJECT: V 243
 TYPE OF ANALYSIS: GEOCHEMICAL

| PRE FIX | SAMPLE NAME | PPB Au |
|------------|-------------|-----------|
| S | 900S 000W | 5 |
| S | 025W | 5 |
| S | 050W | 5 |
| S | 075W | 5 |
| S | 100W | 5 |
| S | 125W | 5 |
| S | 150W | 5 |
| S | 175W | 200 |
| S | 200W | 5 |
| S | 225W | 5 |
| S | 250W | 5 |
| S | 275W | 5 |
| S | 300W | 5 |
| S | 325W | 5 |
| S | 350W | 5 |
| S | 375W | 5 |
| S | 400W | 5 |
| S | 425W | 5 |
| S | 450W | 5 |
| S | 900S 475W | 5 |
| S | 500W | 20 |
| S | 525W | 5 |
| S | 550W | 5 |
| S | 575W | 5 |
| S | 900S 600W | 5 |
| S | 1000S 025W | 5 |
| S | 050W | 5 |
| S | 075W | 5 |
| S | 100W | 5 |
| S | 125W | 5 |
| S | 150W | 5 |
| S | 175W | 5 |
| S | 200W | 5 |
| S | 225W | 5 |
| S | 250W | 5 |
| S | 275W | 5 |
| S | 300W | 5 |
| S | 325W | 5 |
| S | 350W | 5 |
| S | 1000S 375W | 5 |

CERTIFIED BY :



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 TEL : (604) 299 - 6910

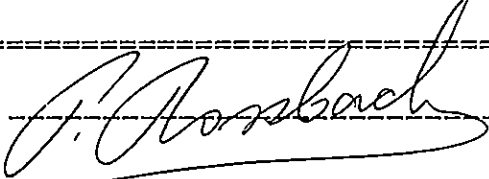
CERTIFICATE OF ANALYSIS

TO : MPH CONSULTING LTD.
 #2406-555 W. HASTINGS ST. (BOX 12092)
 VANCOUVER B.C.

CERTIFICATE#: 87208
 INVOICE#: 7624
 DATE ENTERED: 87-05-21
 FILE NAME: MFH87208
 PAGE # : 2

PROJECT: V 243
 TYPE OF ANALYSIS: GEOCHEMICAL

| PRE FIX | SAMPLE NAME | PPB Au |
|------------|-------------|-----------|
| S | 1000S 400W | 5 |
| S | 425W | 5 |
| S | 450W | 5 |
| S | 475W | 5 |
| S | 500W | 5 |
| S | 525W | 5 |
| S | 550W | 5 |
| S | 575W | 5 |
| S | 1000S 600W | 5 |
| S | 1100S 025W | 5 |
| S | 050W | 5 |
| S | 075W | 20 |
| S | 100W | 5 |
| S | 125W | 5 |
| S | 150W | 5 |
| S | 175W | 5 |
| S | 200W | 5 |
| S | 225W | 5 |
| S | 250W | 5 |
| S | 275W | 5 |
| S | 300W | 5 |
| S | 325W | 5 |
| S | 350W | 5 |
| S | 375W | 5 |
| S | 400W | 5 |
| S | 425W | 5 |
| S | 450W | 5 |
| S | 475W | 5 |
| S | 500W | 5 |
| S | 525W | 5 |
| S | 1100 550W | 5 |
| S | 1300 025W | 5 |
| S | 050W | 5 |
| S | 075W | 5 |
| S | 100W | 5 |
| S | 125W | 5 |
| S | 150W | 5 |
| S | 175W | 5 |
| S | 200W | 5 |
| S | 1300 225W | 5 |

CERTIFIED BY : 

ROSSBACHER LABORATORY LTD.

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

CERTIFICATE OF ANALYSIS

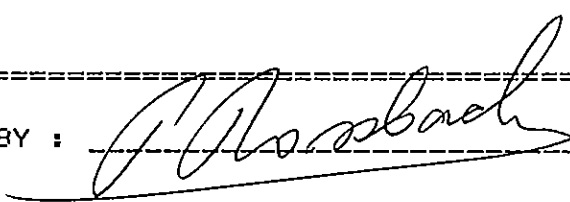
TO : MPH CONSULTING LTD.
 #2406-555 W.HASTINGS ST. (BOX 12092)
 VANCOUVER B.C.

CERTIFICATE#: 87208
 INVOICE#: 7624
 DATE ENTERED: 87-05-21
 FILE NAME: MPH87208
 PAGE # : 3

PROJECT: V 247
 TYPE OF ANALYSIS: GEOCHEMICAL

| PRE FIX | SAMPLE NAME | PPB Au |
|------------|-------------|-----------|
| S | 1300S 250W | S |
| S | 275W | S |
| S | 300W | S |
| S | 325W | S |
| S | 350W | S |
| S | 375W | S |
| S | 400W | S |
| S | 425W | S |
| S | 450W | S |
| S | 475W | S |
| S | 1300S 500W | S |
| S | 1400S 025W | S |
| S | 050W | S |
| S | 075W | S |
| S | 100W | S |
| S | 125W | S |
| S | 150W | S |
| S | 175W | 60 |
| S | 200W | S |
| S | 225W | S |
| S | 250W | S |
| S | 275W | S |
| S | 300W | S |
| S | 325W | S |
| S | 350W | S |
| S | 375W | S |
| S | 400W | S |
| S | 1400S 425W | S |
| S | 1600S 025W | S |
| S | 050W | S |
| S | 075W | S |
| S | 100W | S |
| S | 125W | S |
| S | 150W | S |
| S | 175W | S |
| S | 200W | S |
| S | 225W | S |
| S | 250W | S |
| S | 275W | S |
| S | 1600S 300W | S |

CERTIFIED BY :



ROSSBACHER LABORATORY LTD.

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

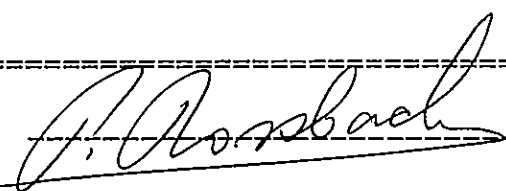
CERTIFICATE OF ANALYSIS

TO : MPH CONSULTING LTD.
#2406-555 W. HASTINGS ST. (BOX 12092)
VANCOUVER B.C.

CERTIFICATE#: 87208
INVOICE#: 7624
DATE ENTERED: 87-05-21
FILE NAME: MPH87208
PAGE # : 4

PROJECT: V 243
TYPE OF ANALYSIS: GEOCHEMICAL

| PRE FIX | SAMPLE NAME | PPB Au |
|------------|-------------|-----------|
| S | 1600S 325W | 5 |
| S | 350W | 5 |
| S | 375W | 5 |
| S | 1600S 400W | 5 |
| S | 1700S 775E | 5 |
| S | 750E | 5 |
| S | 725E | 40 |
| S | 700E | 30 |
| S | 675E | 30 |
| S | 650E | 5 |
| S | 625E | 5 |
| S | 600E | 5 |
| S | 575E | 5 |
| S | 550E | 5 |
| S | 525E | 5 |
| S | 500E | 5 |
| S | 475E | 5 |
| S | 450E | 5 |
| S | 425E | 5 |
| S | 400E | 5 |
| S | 375E | 5 |
| S | 350E | 5 |
| S | 325E | 5 |
| S | 300E | 5 |
| S | 275E | 5 |
| S | 250E | 5 |
| S | 225E | 5 |
| S | 200E | 5 |
| S | 175E | 5 |
| S | 150E | 5 |
| S | 125E | 5 |
| S | 100E | 5 |
| S | 075E | 5 |
| S | 050E | 5 |
| S | 025E | 5 |
| S | 1700S 000BL | 5 |
| S | 025W | 5 |
| S | 050W | 5 |
| S | 075W | 5 |
| S | 1700S 100W | 5 |

CERTIFIED BY : 

ROSSBACHER LABORATORY LTD.

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

CERTIFICATE OF ANALYSIS

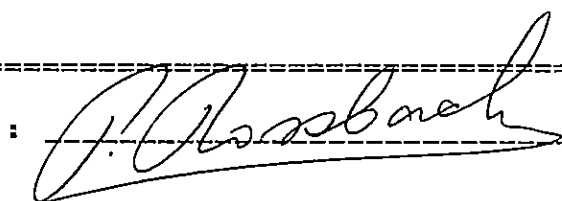
TO : MPH CONSULTING LTD.
 #2406-555 W. HASTINGS ST. (BOX 12092)
 VANCOUVER B.C.

CERTIFICATE#: 87208
 INVOICE#: 7624
 DATE ENTERED: 87-05-21
 FILE NAME: MPH87208
 PAGE # : 5

PROJECT: V 243
 TYPE OF ANALYSIS: GEOCHEMICAL

| PRE FIX | SAMPLE NAME | PPB Au |
|------------|-------------|-----------|
| S | 1700S 125W | 5 |
| S | 150W | 5 |
| S | 175W | 5 |
| S | 200W | 5 |
| S | 225W | 5 |
| S | 250W | 5 |
| S | 275W | 5 |
| S | 1700S 300W | 5 |
| S | 1800S 700E | 5 |
| S | 675E | 5 |
| S | 650E | 5 |
| S | 625E | 5 |
| S | 600E | 5 |
| S | 575E | 5 |
| S | 550E | 5 |
| S | 525E | 5 |
| S | 500E | 5 |
| S | 475E | 5 |
| S | 450E | 5 |
| S | 425E | 20 |
| S | 400E | 10 |
| S | 375E | 5 |
| S | 350E | 5 |
| S | 325E | 10 |
| S | 300E | 5 |
| S | 275E | 5 |
| S | 250E | 5 |
| S | 225E | 5 |
| S | 200E | 5 |
| S | 175E | 5 |
| S | 150E | 5 |
| S | 125E | 5 |
| S | 100E | 5 |
| S | 075E | 5 |
| S | 050E | 5 |
| S | 025E | 5 |
| S | 000BL | 5 |
| S | 025W | 5 |
| S | 050W | 5 |
| S | 1800S 075W | 5 |

CERTIFIED BY :



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2225 S. SPRINGER AVENUE
 BURNABY, B.C. V5B 3M1
 TEL : (604) 299 - 6910

CERTIFICATE OF ANALYSIS

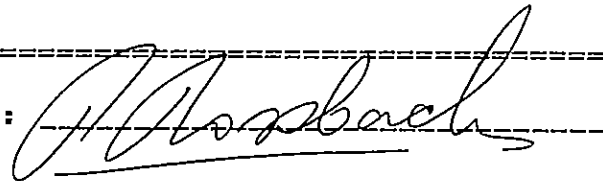
TO : MPH CONSULTING LTD.
 #2406-555 W.HASTINGS ST. (BOX 12092)
 VANCOUVER B.C.

CERTIFICATE#: 87208
 INVOICE#: 7624
 DATE ENTERED: 87-05-21
 FILE NAME: MPH87208
 PAGE # : 6

PROJECT: V 243
 TYPE OF ANALYSIS: GEOCHEMICAL

| PRE FIX | SAMPLE NAME | PPB Au |
|------------|-------------|-----------|
| S | 1800S 100W | 5 |
| S | 125W | 5 |
| S | 1800S 150W | 30 |
| S | 1900S 600E | 5 |
| S | 575E | 5 |
| S | 550E | 5 |
| S | 525E | 110 |
| S | 550E | 40 |
| S | 475E | 5 |
| S | 450E | 5 |
| S | 425E | 5 |
| S | 400E | 5 |
| S | 375E | 40 |
| S | 350E | 5 |
| S | 325E | 5 |
| S | 300E | 10 |
| S | 275E | 5 |
| S | 250E | 50 |
| S | 225E | 5 |
| S | 200E | 5 |
| S | 175E | 5 |
| S | 150E | 5 |
| S | 125E | 5 |
| S | 100E | 5 |
| S | 075E | 5 |
| S | 050E | 5 |
| S | 025E | 5 |
| S | 1900S 000BL | 5 |
| S | 025W | 5 |
| S | 050W | 5 |
| S | 075W | 5 |
| S | 100W | 5 |
| S | 125W | 5 |
| S | 1900S 150W | 5 |
| S | 2000S 450E | 5 |
| S | 425E | 30 |
| S | 400E | 5 |
| S | 375E | 5 |
| S | 350E | 5 |
| S | 2000S 325E | 30 |

CERTIFIED BY :



ROSSBACHER LABORATORY LTD.

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

CERTIFICATE OF ANALYSIS

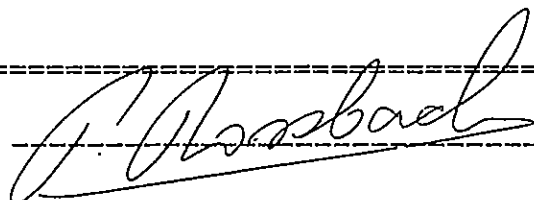
TO : MPH CONSULTING LTD.
#2406-555 W. HASTINGS ST. (BOX 12092)
VANCOUVER B.C.

CERTIFICATE#: 87208
INVOICE#: 7624
DATE ENTERED: 87-05-21
FILE NAME: MPH87208
PAGE # : 7

PROJECT: V 243
TYPE OF ANALYSIS: GEOCHEMICAL

| PRE FIX | SAMPLE NAME | PPB Au |
|------------|-------------|-----------|
| S | 2000S 300E | 230 |
| S | 275E | 5 |
| S | 250E | 5 |
| S | 225E | 5 |
| S | 200E | 20 |
| S | 175E | 10 |
| S | 150E | 5 |
| S | 125E | 20 |
| S | 100E | 70 |
| S | 075E | 5 |
| S | 050E | 5 |
| S | 025E | 5 |
| S | 200S 000BL | 5 |
| S | 025W | 5 |
| S | 050W | 5 |
| S | 075W | 5 |
| S | 100W | 5 |
| S | 125W | 5 |
| S | 2000S 150W | 5 |
| A | 2913W | 5 |
| A | 2914 | 5 |
| A | 2915 | 30 |
| A | 2916 | 5 |
| A | 2917 | 5 |
| A | 2918 | 5 |

CERTIFIED BY :



ACME ANALYTICAL LABORATORIES 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE 253-3158 DATA LINE 251-1011

GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-L-2 HCL-HNO3-H2O AT 95 DEG-C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
 THIS LEACH IS PARTIAL FOR NH FE CA P LA CR NI BA TI B W AND LIMITED FOR NA AND K. AU DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: SOLUTION

DATE RECEIVED: MAY 21 1987 DATE REPORT MAILED: *May 26/87* ASSAYER: *A. J. Jey*. DEAN TOYE, CERTIFIED B.C. ASSAYER

ROSSBACHER LABORATORY PROJECT - CERT#87208 File # 87-1360 Page 1 *V243*

| SAMPLE | ND | CU | PB | ZN | AS | NI | CO | MN | FE | AS | U | AU | TH | SR | CD | SB | BI | V | CA | P | LA | CR | NI | BA | TI | B | AL | NA | K | W |
|---------|-----|-----|-----|-----|-----|-----|-----|-------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|------|------|-----|-----|------|-----|-----|-----|
| | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH |
| AP 2913 | 2 | 95 | 12 | 132 | .1 | 14 | 12 | 1584 | 5.37 | 7 | 5 | ND | 2 | 9 | 1 | 2 | 2 | 125 | .30 | .073 | 13 | 41 | 1.43 | 107 | .07 | 5 | 2.34 | .07 | .14 | 2 |
| AP 2914 | 5 | 38 | 2 | 243 | .1 | 117 | 6 | 4878 | 1.15 | 5 | 5 | ND | 2 | 19 | 2 | 2 | 2 | 91 | .43 | .017 | 4 | 175 | .15 | 34 | .05 | 3 | .82 | .01 | .02 | 3 |
| AP 2915 | 87 | 242 | 18 | 44 | .7 | 6 | 7 | 813 | 5.73 | 2 | 7 | ND | 2 | 34 | 1 | 2 | 2 | 122 | .56 | .053 | 6 | 51 | .76 | 205 | .23 | 2 | 1.82 | .04 | .35 | 1 |
| AP 2916 | 1 | 29 | 2 | 22 | .1 | 10 | 4 | 351 | 2.84 | 2 | 6 | ND | 1 | 7 | 1 | 2 | 2 | 48 | .09 | .004 | 2 | 202 | .25 | 50 | .02 | 2 | .27 | .01 | .03 | 1 |
| AP 2917 | 15 | 34 | 2 | 29 | .1 | 11 | 6 | 311 | 4.27 | 2 | 5 | ND | 1 | 4 | 1 | 2 | 2 | 43 | .05 | .006 | 2 | 199 | .27 | 63 | .02 | 2 | .32 | .01 | .03 | 1 |
| AP 2918 | 7 | 6 | 3 | 48 | .1 | 47 | 2 | 94537 | .90 | 65 | 5 | ND | 2 | 48 | 1 | 3 | 2 | 84 | .32 | .015 | 4 | 148 | .11 | 1340 | .04 | 2 | .46 | .01 | .06 | 6 |
| STD C | 20 | 59 | 37 | 132 | 6.8 | 67 | 28 | 987 | 3.97 | 39 | 16 | 7 | 34 | 48 | 18 | 16 | 18 | 63 | .50 | .099 | 36 | 60 | .86 | 181 | .08 | 38 | 1.49 | .07 | .13 | 14 |

ROSSBACHER LABORATORY PROJECT - CERT#87208 FILE # 87-1360

| SAMPLER | NO | CU | PB | ZN | AG | NI | CO | MN | FE | AS | U | AU | TH | SR | CD | SB | BI | V | -CA | P | LA | CR | MG | BA | TI | B | AL | MA | K | W |
|---------------|-----|-----|-----|-----|-----|-----|-----|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|------|-----|-----|-----|------|-----|-----|-----|
| | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH |
| S 9+005 000W | 1 | 40 | 21 | 93 | .2 | 15 | 9 | 2443 | 3.07 | 2 | 5 | NO | 2 | 14 | 1 | 2 | 2 | 46 | .22 | .076 | 5 | 23 | .57 | 102 | .14 | 2 | 2.61 | .02 | .05 | 2 |
| S 9+005 025W | 1 | 59 | 14 | 90 | .1 | 18 | 10 | 1340 | 3.38 | 2 | 5 | NO | 2 | 13 | 1 | 3 | 2 | 75 | .19 | .073 | 6 | 24 | .68 | 123 | .16 | 2 | 2.77 | .02 | .04 | 2 |
| S 9+005 050W | 1 | 61 | 6 | 83 | .1 | 17 | 10 | 1884 | 3.80 | 2 | 5 | NO | 3 | 12 | 1 | 2 | 2 | 80 | .19 | .095 | 5 | 26 | .62 | 98 | .14 | 2 | 3.08 | .02 | .06 | 1 |
| S 9+005 075W | 1 | 51 | 7 | 100 | .2 | 21 | 11 | 460 | 4.24 | 3 | 5 | NO | 2 | 12 | 1 | 2 | 2 | 90 | .18 | .058 | 5 | 30 | .89 | 107 | .17 | 2 | 3.97 | .02 | .04 | 1 |
| S 9+005 100W | 1 | 17 | 11 | 74 | .1 | 9 | 8 | 1509 | 2.77 | 3 | 5 | NO | 1 | 13 | 1 | 2 | 2 | 56 | .21 | .089 | 5 | 17 | .33 | 72 | .12 | 2 | 1.77 | .01 | .05 | 1 |
| S 9+005 125W | 1 | 26 | 10 | 79 | .2 | 13 | 8 | 450 | 3.59 | 2 | 5 | NO | 2 | 13 | 1 | 2 | 2 | 76 | .19 | .050 | 5 | 23 | .44 | 75 | .16 | 2 | 3.15 | .02 | .05 | 1 |
| S 9+005 150W | 1 | 87 | 9 | 86 | .1 | 25 | 13 | 745 | 4.67 | 4 | 5 | NO | 2 | 13 | 1 | 2 | 2 | 102 | .15 | .029 | 7 | 37 | 1.02 | 234 | .21 | 2 | 4.05 | .02 | .09 | 1 |
| S 9+005 175W | 1 | 50 | 9 | 102 | .1 | 23 | 13 | 1331 | 3.79 | 2 | 5 | NO | 2 | 13 | 1 | 2 | 2 | 97 | .17 | .058 | 6 | 27 | .56 | 165 | .14 | 2 | 3.57 | .02 | .06 | 3 |
| S 9+005 200W | 1 | 40 | 23 | 148 | .1 | 21 | 17 | 5329 | 3.83 | 7 | 5 | NO | 2 | 18 | 1 | 2 | 2 | 80 | .28 | .204 | 5 | 18 | .40 | 236 | .11 | 2 | 3.16 | .02 | .07 | 1 |
| S 9+005 225W | 1 | 103 | 13 | 124 | .1 | 38 | 18 | 854 | 5.54 | 7 | 5 | NO | 3 | 15 | 1 | 2 | 2 | 125 | .19 | .087 | 7 | 36 | .77 | 144 | .17 | 2 | 5.27 | .02 | .09 | 1 |
| S 9+005 250W | 1 | 97 | 16 | 127 | .1 | 25 | 15 | 1505 | 5.04 | 5 | 5 | NO | 2 | 14 | 1 | 2 | 2 | 117 | .18 | .083 | 6 | 30 | .83 | 132 | .18 | 2 | 4.71 | .02 | .09 | 1 |
| S 9+005 275W | 1 | 56 | 11 | 97 | .1 | 20 | 14 | 2297 | 4.23 | 4 | 5 | NO | 2 | 15 | 1 | 2 | 2 | 90 | .17 | .075 | 8 | 26 | .68 | 206 | .12 | 2 | 3.42 | .02 | .07 | 1 |
| S 9+005 300W | 1 | 82 | 5 | 85 | .1 | 23 | 15 | 580 | 4.57 | 2 | 5 | NO | 3 | 15 | 1 | 2 | 2 | 97 | .16 | .038 | 17 | 29 | .85 | 150 | .17 | 2 | 3.74 | .02 | .09 | 1 |
| S 9+005 325W | 1 | 48 | 10 | 94 | .1 | 22 | 13 | 1566 | 4.12 | 3 | 5 | NO | 2 | 17 | 1 | 2 | 2 | 89 | .20 | .045 | 7 | 29 | .85 | 196 | .14 | 2 | 3.32 | .02 | .09 | 1 |
| S 9+005 350W | 1 | 83 | 8 | 83 | .1 | 21 | 15 | 1729 | 4.48 | 2 | 5 | NO | 3 | 22 | 1 | 3 | 2 | 103 | .24 | .076 | 10 | 25 | .89 | 228 | .17 | 2 | 3.82 | .02 | .13 | 1 |
| S 9+005 375W | 1 | 72 | 4 | 79 | .1 | 18 | 12 | 649 | 3.97 | 8 | 5 | NO | 3 | 21 | 1 | 2 | 2 | 92 | .25 | .047 | 7 | 23 | .78 | 139 | .16 | 2 | 3.15 | .02 | .07 | 1 |
| S 9+005 400W | 1 | 21 | 5 | 67 | .1 | 18 | 7 | 469 | 2.87 | 2 | 5 | NO | 1 | 18 | 1 | 2 | 2 | 60 | .24 | .106 | 5 | 15 | .30 | 98 | .08 | 2 | 1.78 | .01 | .03 | 1 |
| S 9+005 425W | 1 | 46 | 5 | 78 | .1 | 14 | 11 | 1282 | 3.54 | 2 | 5 | NO | 2 | 15 | 1 | 2 | 2 | 74 | .25 | .143 | 5 | 17 | .64 | 101 | .11 | 2 | 2.22 | .02 | .05 | 1 |
| S 9+005 450W | 1 | 32 | 12 | 82 | .1 | 12 | 8 | 949 | 3.59 | 3 | 5 | NO | 2 | 14 | 1 | 2 | 2 | 71 | .24 | .144 | 4 | 17 | .55 | 92 | .09 | 2 | 2.00 | .02 | .04 | 1 |
| S 9+005 475W | 1 | 30 | 7 | 88 | .1 | 12 | 10 | 1394 | 3.48 | 4 | 5 | NO | 1 | 19 | 1 | 2 | 2 | 76 | .33 | .086 | 5 | 14 | .49 | 106 | .11 | 2 | 1.88 | .02 | .05 | 1 |
| S 9+005 500W | 1 | 27 | 8 | 57 | .1 | 10 | 8 | 855 | 3.11 | 2 | 5 | NO | 1 | 21 | 1 | 2 | 2 | 77 | .39 | .031 | 4 | 16 | .40 | 87 | .11 | 2 | 1.63 | .02 | .04 | 1 |
| S 9+005 525W | 1 | 33 | 9 | 81 | .1 | 12 | 8 | 915 | 3.36 | 5 | 5 | NO | 1 | 16 | 1 | 2 | 2 | 69 | .24 | .151 | 4 | 19 | .50 | 82 | .09 | 2 | 1.93 | .02 | .04 | 1 |
| S 9+005 550W | 1 | 38 | 8 | 85 | .1 | 17 | 10 | 623 | 3.50 | 4 | 5 | NO | 2 | 15 | 1 | 2 | 2 | 75 | .20 | .087 | 4 | 22 | .64 | 91 | .11 | 2 | 2.44 | .02 | .04 | 1 |
| S 9+005 575W | 1 | 38 | 6 | 96 | .1 | 13 | 8 | 414 | 3.74 | 2 | 5 | NO | 2 | 17 | 1 | 2 | 3 | 79 | .24 | .192 | 4 | 18 | .48 | 109 | .09 | 2 | 2.19 | .02 | .05 | 1 |
| S 9+005 600W | 1 | 36 | 7 | 108 | .1 | 16 | 10 | 1482 | 3.23 | 5 | 5 | NO | 2 | 20 | 1 | 2 | 2 | 70 | .29 | .094 | 5 | 20 | .65 | 123 | .10 | 2 | 2.23 | .02 | .05 | 1 |
| S 10+005 025W | 1 | 22 | 9 | 70 | .2 | 9 | 7 | 924 | 2.41 | 2 | 5 | NO | 2 | 10 | 1 | 2 | 2 | 52 | .18 | .032 | 5 | 13 | .35 | 66 | .11 | 2 | 1.83 | .01 | .03 | 1 |
| S 10+005 050W | 1 | 37 | 12 | 67 | .1 | 12 | 7 | 923 | 3.04 | 2 | 5 | NO | 2 | 11 | 1 | 2 | 3 | 67 | .19 | .058 | 4 | 18 | .43 | 74 | .13 | 2 | 2.26 | .02 | .04 | 1 |
| S 10+005 075W | 1 | 38 | 10 | 69 | .1 | 12 | 9 | 671 | 3.28 | 2 | 5 | NO | 1 | 10 | 1 | 2 | 2 | 79 | .17 | .053 | 4 | 20 | .38 | 88 | .12 | 2 | 2.35 | .02 | .04 | 1 |
| S 10+005 100W | 1 | 47 | 10 | 62 | .1 | 14 | 8 | 1330 | 3.25 | 2 | 5 | NO | 2 | 12 | 1 | 2 | 2 | 72 | .20 | .053 | 5 | 19 | .54 | 91 | .13 | 2 | 2.59 | .02 | .06 | 1 |
| S 10+005 125W | 1 | 48 | 17 | 96 | .1 | 19 | 10 | 1259 | 3.95 | 4 | 5 | NO | 2 | 16 | 1 | 3 | 2 | 93 | .23 | .040 | 6 | 29 | .62 | 112 | .17 | 2 | 3.28 | .02 | .07 | 1 |
| S 10+005 150W | 1 | 46 | 10 | 77 | .1 | 15 | 10 | 717 | 3.47 | 3 | 5 | NO | 2 | 16 | 1 | 2 | 2 | 76 | .24 | .044 | 6 | 22 | .54 | 98 | .15 | 2 | 2.83 | .02 | .06 | 1 |
| S 10+005 175W | 1 | 35 | 4 | 89 | .1 | 15 | 11 | 1905 | 3.21 | 2 | 5 | NO | 1 | 14 | 1 | 2 | 2 | 69 | .20 | .115 | 5 | 20 | .52 | 113 | .13 | 2 | 2.57 | .02 | .05 | 1 |
| S 10+005 200W | 1 | 61 | 8 | 108 | .1 | 22 | 12 | 1206 | 4.11 | 4 | 5 | NO | 2 | 13 | 1 | 4 | 2 | 86 | .17 | .092 | 4 | 29 | .65 | 111 | .18 | 2 | 4.70 | .02 | .06 | 1 |
| S 10+005 225W | 1 | 69 | 9 | 90 | .1 | 20 | 11 | 1138 | 4.11 | 2 | 5 | NO | 2 | 18 | 1 | 2 | 2 | 93 | .23 | .051 | 6 | 29 | .79 | 132 | .18 | 2 | 3.91 | .02 | .09 | 1 |
| S 10+005 250W | 1 | 40 | 8 | 98 | .1 | 22 | 14 | 1058 | 4.09 | 2 | 5 | NO | 2 | 17 | 1 | 2 | 2 | 93 | .22 | .072 | 7 | 25 | .55 | 127 | .17 | 2 | 3.86 | .02 | .06 | 1 |
| S 10+005 275W | 1 | 45 | 10 | 112 | .1 | 12 | 14 | 3134 | 3.70 | 6 | 5 | NO | 2 | 17 | 1 | 2 | 2 | 83 | .28 | .184 | 6 | 16 | .41 | 154 | .12 | 2 | 2.78 | .02 | .06 | 1 |
| S 10+005 300W | 1 | 52 | 11 | 91 | .1 | 18 | 12 | 2701 | 3.88 | 4 | 5 | NO | 2 | 25 | 1 | 2 | 2 | 83 | .30 | .082 | 6 | 25 | .85 | 180 | .16 | 2 | 3.04 | .02 | .09 | 1 |
| S 10+005 325W | 1 | 89 | 5 | 80 | .2 | 22 | 17 | 752 | 4.58 | 5 | 5 | NO | 3 | 27 | 1 | 2 | 2 | 100 | .23 | .036 | 14 | 27 | 1.09 | 233 | .20 | 2 | 3.88 | .02 | .13 | 1 |
| S 10+005 350W | 1 | 61 | 6 | 100 | .1 | 20 | 14 | 1893 | 3.79 | 3 | 5 | NO | 2 | 16 | 1 | 2 | 2 | 81 | .19 | .079 | 7 | 23 | .64 | 196 | .12 | 2 | 2.96 | .02 | .08 | 1 |
| S 10+005 375W | 1 | 42 | 11 | 99 | .3 | 20 | 12 | 889 | 3.90 | 5 | 5 | NO | 3 | 19 | 1 | 2 | 2 | 82 | .25 | .108 | 7 | 26 | .59 | 114 | .92 | 2 | 3.13 | .02 | .06 | 1 |
| STD C | 20 | 58 | 37 | 132 | 6.8 | 67 | 28 | 981 | 3.97 | 39 | 17 | 7 | 34 | 48 | 17 | 15 | 21 | 63 | .51 | .048 | 36 | 59 | .86 | 180 | .08 | 37 | 1.75 | .07 | .13 | 13 |

ROSSBACHER LABORATORY PROJECT - CERT#87208 FILE # 87-1360

| SAMPLE# | NO PPH | CU PPH | PB PPH | ZK PPH | AE PPH | NI PPH | CO PPH | MN PPH | FE PPH | AS PPH | U PPH | AU PPH | TH PPH | SR PPH | CD PPH | SB PPH | BI PPH | V PPH | CA PPH | P PPH | LA PPH | CR PPH | MG PPH | BA PPH | TI PPH | B PPH | AL PPH | MA PPH | K PPH | W PPH |
|---------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|--------|--------|--------|--------|--------|--------|-------|--------|-------|--------|--------|--------|--------|--------|-------|--------|--------|-------|-------|
| S 10+005 400M | 1 | 46 | 5 | 84 | .1 | 17 | 12 | 1777 | 3.32 | 2 | 5 | ND | 1 | 16 | 1 | 2 | 2 | 71 | .24 | .046 | 7 | 22 | .63 | 142 | .12 | 2 | 2.73 | .02 | .07 | 1 |
| S 10+005 425M | 1 | 50 | 17 | 77 | .1 | 18 | 12 | 1204 | 3.48 | 5 | 5 | ND | 2 | 17 | 1 | 2 | 2 | 72 | .22 | .042 | 10 | 19 | .59 | 124 | .13 | 2 | 2.68 | .02 | .08 | 1 |
| S 10+005 450M | 1 | 42 | 3 | 78 | .1 | 16 | 12 | 1786 | 3.28 | 2 | 5 | ND | 2 | 17 | 1 | 2 | 2 | 70 | .23 | .045 | 9 | 21 | .54 | 109 | .13 | 2 | 2.68 | .02 | .04 | 1 |
| S 10+005 475M | 1 | 42 | 6 | 82 | .1 | 17 | 10 | 718 | 3.43 | 2 | 5 | ND | 2 | 17 | 1 | 2 | 2 | 75 | .28 | .051 | 5 | 20 | .63 | 86 | .13 | 2 | 2.86 | .02 | .05 | 1 |
| S 10+005 500M | 1 | 19 | 7 | 86 | .1 | 10 | 8 | 619 | 2.80 | 3 | 5 | ND | 1 | 16 | 1 | 3 | 2 | 59 | .24 | .122 | 4 | 10 | .36 | 89 | .08 | 2 | 1.48 | .02 | .03 | 1 |
| S 10+005 525M | 1 | 47 | 7 | 72 | .1 | 15 | 9 | 691 | 3.30 | 2 | 5 | ND | 2 | 19 | 1 | 2 | 2 | 74 | .27 | .047 | 5 | 18 | .62 | 84 | .13 | 2 | 2.48 | .02 | .03 | 1 |
| S 10+005 550M | 1 | 42 | 4 | 87 | .1 | 15 | 9 | 453 | 3.37 | 2 | 5 | ND | 2 | 16 | 1 | 2 | 2 | 69 | .20 | .078 | 4 | 21 | .44 | 98 | .10 | 2 | 2.33 | .02 | .03 | 1 |
| S 10+005 575M | 1 | 28 | 9 | 85 | .1 | 14 | 8 | 1423 | 2.97 | 2 | 5 | ND | 1 | 16 | 1 | 2 | 2 | 65 | .27 | .063 | 4 | 15 | .47 | 118 | .11 | 2 | 2.42 | .02 | .04 | 1 |
| S 10+005 600M | 1 | 29 | 3 | 116 | .2 | 17 | 10 | 464 | 3.44 | 2 | 5 | ND | 1 | 15 | 1 | 2 | 2 | 79 | .23 | .110 | 4 | 20 | .55 | 83 | .10 | 2 | 2.55 | .02 | .05 | 1 |
| S 11+005 025M | 1 | 61 | 6 | 70 | .1 | 16 | 7 | 394 | 3.80 | 3 | 5 | ND | 2 | 10 | 1 | 2 | 2 | 85 | .15 | .066 | 4 | 21 | .64 | 64 | .18 | 2 | 3.55 | .02 | .04 | 2 |
| S 11+005 050M | 1 | 69 | 6 | 89 | .1 | 17 | 9 | 678 | 3.90 | 3 | 5 | ND | 2 | 13 | 1 | 2 | 2 | 80 | .22 | .120 | 6 | 22 | .44 | 64 | .13 | 2 | 3.18 | .02 | .05 | 1 |
| S 11+005 075M | 1 | 41 | 6 | 79 | .1 | 13 | 8 | 949 | 3.47 | 3 | 5 | ND | 2 | 11 | 1 | 2 | 2 | 74 | .18 | .084 | 4 | 19 | .47 | 69 | .13 | 2 | 2.81 | .02 | .05 | 1 |
| S 11+005 100M | 1 | 46 | 2 | 79 | .1 | 14 | 9 | 711 | 3.81 | 3 | 5 | ND | 2 | 13 | 1 | 2 | 2 | 78 | .18 | .100 | 4 | 22 | .52 | 72 | .15 | 2 | 3.87 | .02 | .04 | 1 |
| S 11+005 125M | 1 | 9 | 6 | 51 | .1 | 6 | 5 | 398 | 1.74 | 4 | 5 | ND | 1 | 14 | 1 | 2 | 2 | 41 | .23 | .021 | 4 | 10 | .21 | 57 | .10 | 3 | 1.17 | .01 | .02 | 1 |
| S 11+005 150M | 1 | 92 | 6 | 87 | .1 | 27 | 13 | 653 | 4.62 | 3 | 5 | ND | 2 | 11 | 1 | 2 | 2 | 97 | .14 | .042 | 5 | 32 | 1.01 | 219 | .21 | 2 | 4.56 | .02 | .09 | 1 |
| S 11+005 175M | 1 | 46 | 7 | 74 | .1 | 16 | 9 | 644 | 3.19 | 2 | 5 | ND | 2 | 11 | 1 | 2 | 2 | 69 | .15 | .032 | 5 | 22 | .57 | 89 | .15 | 2 | 3.20 | .02 | .05 | 1 |
| S 11+005 200M | 1 | 66 | 13 | 86 | .1 | 16 | 10 | 1834 | 3.56 | 2 | 5 | ND | 2 | 15 | 1 | 2 | 2 | 85 | .19 | .058 | 6 | 18 | .64 | 126 | .15 | 2 | 3.27 | .02 | .08 | 1 |
| S 11+005 225M | 1 | 57 | 8 | 97 | .1 | 18 | 13 | 917 | 3.46 | 2 | 5 | ND | 2 | 13 | 1 | 2 | 2 | 85 | .18 | .084 | 5 | 19 | .44 | 101 | .13 | 2 | 3.54 | .02 | .04 | 1 |
| S 11+005 250M | 1 | 62 | 7 | 65 | .2 | 13 | 10 | 690 | 3.30 | 2 | 5 | ND | 2 | 14 | 1 | 2 | 2 | 78 | .19 | .055 | 5 | 15 | .60 | 139 | .15 | 2 | 3.08 | .02 | .06 | 1 |
| S 11+005 275M | 1 | 39 | 2 | 71 | .1 | 13 | 11 | 1286 | 3.62 | 3 | 5 | ND | 2 | 21 | 1 | 2 | 2 | 77 | .27 | .046 | 5 | 13 | .66 | 133 | .11 | 2 | 2.86 | .02 | .06 | 1 |
| S 11+005 300M | 1 | 33 | 12 | 104 | .2 | 15 | 13 | 2823 | 3.54 | 2 | 5 | ND | 1 | 28 | 1 | 2 | 2 | 75 | .33 | .048 | 8 | 18 | .51 | 158 | .12 | 2 | 2.81 | .02 | .08 | 1 |
| S 11+005 325M | 1 | 53 | 17 | 100 | .1 | 16 | 12 | 3221 | 3.28 | 3 | 5 | ND | 2 | 23 | 1 | 2 | 2 | 82 | .33 | .057 | 6 | 19 | .64 | 126 | .15 | 2 | 3.27 | .02 | .08 | 1 |
| S 11+005 350M | 1 | 86 | 4 | 110 | .1 | 23 | 16 | 1289 | 4.13 | 3 | 5 | ND | 2 | 17 | 1 | 2 | 2 | 89 | .22 | .123 | 5 | 25 | .79 | 150 | .14 | 3 | 3.63 | .02 | .08 | 1 |
| S 11+005 375M | 1 | 39 | 6 | 72 | .1 | 15 | 11 | 941 | 3.03 | 2 | 5 | ND | 2 | 22 | 1 | 2 | 2 | 69 | .29 | .044 | 6 | 17 | .57 | 160 | .13 | 3 | 2.65 | .02 | .06 | 2 |
| S 11+005 400M | 1 | 30 | 9 | 74 | .1 | 13 | 11 | 1350 | 2.83 | 5 | 5 | ND | 1 | 16 | 1 | 2 | 2 | 41 | .24 | .046 | 5 | 17 | .42 | 93 | .12 | 3 | 2.48 | .02 | .06 | 1 |
| S 11+005 425M | 1 | 19 | 4 | 81 | .1 | 10 | 8 | 641 | 2.68 | 2 | 5 | ND | 2 | 15 | 1 | 2 | 2 | 57 | .24 | .075 | 4 | 13 | .41 | 67 | .10 | 2 | 1.69 | .02 | .04 | 1 |
| S 11+005 450M | 1 | 28 | 9 | 63 | .1 | 9 | 8 | 1576 | 2.67 | 2 | 5 | ND | 2 | 14 | 1 | 2 | 2 | 40 | .25 | .093 | 4 | 10 | .40 | 82 | .09 | 2 | 1.60 | .02 | .04 | 1 |
| S 11+005 475M | 1 | 39 | 5 | 75 | .1 | 14 | 11 | 585 | 2.95 | 3 | 5 | ND | 2 | 14 | 1 | 2 | 2 | 43 | .19 | .029 | 8 | 16 | .35 | 110 | .13 | 2 | 2.73 | .02 | .05 | 1 |
| S 11+005 500M | 1 | 29 | 4 | 75 | .1 | 11 | 8 | 1560 | 2.77 | 2 | 5 | ND | 1 | 12 | 1 | 2 | 2 | 58 | .17 | .062 | 4 | 13 | .81 | 111 | .08 | 2 | 2.12 | .02 | .03 | 1 |
| S 11+005 525M | 1 | 62 | 5 | 74 | .1 | 21 | 11 | 598 | 3.80 | 7 | 5 | ND | 2 | 15 | 1 | 2 | 2 | 63 | .19 | .051 | 6 | 23 | .86 | 138 | .15 | 2 | 2.98 | .02 | .06 | 1 |
| S 11+005 550M | 1 | 89 | 9 | 103 | .2 | 30 | 15 | 580 | 5.04 | 2 | 5 | ND | 4 | 22 | 1 | 2 | 2 | 109 | .25 | .053 | 11 | 33 | .98 | 140 | .20 | 3 | 5.15 | .02 | .10 | 1 |
| S 13+005 025M | 1 | 34 | 11 | 94 | .1 | 12 | 9 | 1928 | 2.93 | 4 | 5 | ND | 2 | 14 | 1 | 2 | 2 | 67 | .24 | .099 | 6 | 17 | .43 | 101 | .14 | 3 | 2.39 | .02 | .05 | 1 |
| S 13+005 050M | 1 | 71 | 6 | 138 | .1 | 22 | 12 | 689 | 4.05 | 3 | 5 | ND | 3 | 17 | 1 | 2 | 2 | 88 | .23 | .045 | 6 | 25 | .80 | 128 | .20 | 2 | 3.90 | .02 | .07 | 1 |
| S 13+005 075M | 1 | 64 | 4 | 130 | .2 | 20 | 11 | 740 | 4.03 | 5 | 5 | ND | 3 | 18 | 1 | 2 | 2 | 88 | .23 | .058 | 8 | 23 | .76 | 110 | .19 | 3 | 3.53 | .02 | .07 | 1 |
| S 13+005 100M | 1 | 34 | 2 | 147 | .2 | 16 | 14 | 1014 | 2.84 | 3 | 5 | ND | 2 | 16 | 1 | 2 | 2 | 60 | .27 | .038 | 8 | 22 | .50 | 127 | .18 | 3 | 2.62 | .02 | .06 | 1 |
| S 13+005 125M | 1 | 53 | 5 | 124 | .1 | 19 | 14 | 1115 | 3.76 | 2 | 5 | ND | 2 | 13 | 1 | 2 | 2 | 76 | .18 | .069 | 12 | 22 | .43 | 172 | .16 | 3 | 3.32 | .02 | .07 | 1 |
| S 13+005 150M | 1 | 47 | 8 | 113 | .1 | 19 | 13 | 3352 | 3.35 | 2 | 5 | ND | 2 | 14 | 1 | 2 | 2 | 71 | .20 | .085 | 6 | 21 | .55 | 186 | .13 | 2 | 3.09 | .02 | .08 | 1 |
| S 13+005 175M | 1 | 68 | 5 | 88 | .1 | 23 | 11 | 1059 | 3.89 | 2 | 5 | ND | 2 | 10 | 1 | 2 | 2 | 83 | .14 | .040 | 7 | 24 | .62 | 127 | .13 | 2 | 3.97 | .02 | .07 | 1 |
| S 13+005 200M | 1 | 61 | 2 | 104 | .2 | 23 | 14 | 1009 | 3.91 | 2 | 5 | ND | 2 | 10 | 1 | 2 | 2 | 79 | .13 | .085 | 4 | 26 | .61 | 121 | .12 | 2 | 3.81 | .02 | .05 | 1 |
| S 13+005 225M | 1 | 67 | 8 | 129 | .2 | 41 | 14 | 1588 | 4.29 | 2 | 5 | ND | 2 | 11 | 1 | 2 | 2 | 91 | .15 | .157 | 5 | 47 | .74 | 151 | .14 | 2 | 3.94 | .02 | .05 | 1 |
| STD C | 19 | 58 | 37 | 131 | 6.8 | 68 | 28 | 991 | 3.97 | 40 | 18 | 7 | 34 | 47 | 18 | 16 | 20 | 63 | .46 | .099 | 35 | 58 | .86 | 178 | .08 | 34 | 1.75 | .07 | .13 | 14 |

ROSSBACHER LABORATORY PROJECT - CERT#B7208 FILE # 87-1360

| SAMPLE | NO | CU | PB | ZN | AS | NI | CO | NK | FE | AS | U | AU | TR | SR | CD | SB | BI | V | CA | P | LA | CR | MS | BA | TI | B | AL | MA | K | M |
|---------------|-----|-----|-----|-----|-----|-----|-----|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|
| | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH |
| S 13+005 250M | 1 | 55 | 8 | 87 | .1 | 18 | 11 | 1123 | 3.51 | 9 | 5 | ND | 1 | 15 | 1 | 2 | 2 | 75 | .19 | .053 | 5 | 24 | .71 | 140 | .15 | 2 | 3.45 | .02 | .06 | 3 |
| S 13+005 275M | 1 | 103 | 5 | 101 | .1 | 25 | 15 | 850 | 4.73 | 6 | 5 | ND | 3 | 9 | 1 | 2 | 2 | 106 | .11 | .111 | 4 | 34 | .82 | 188 | .18 | 2 | 4.56 | .02 | .10 | 1 |
| S 13+005 300M | 1 | 74 | 9 | 90 | .1 | 19 | 13 | 1267 | 3.84 | 6 | 5 | ND | 2 | 18 | 1 | 2 | 2 | 88 | .19 | .058 | 11 | 25 | .82 | 270 | .17 | 2 | 3.44 | .02 | .08 | 1 |
| S 13+005 325M | 1 | 47 | 7 | 79 | .1 | 20 | 10 | 787 | 3.99 | 3 | 5 | ND | 2 | 13 | 1 | 2 | 2 | 94 | .16 | .058 | 4 | 24 | .72 | 90 | .18 | 2 | 3.23 | .02 | .07 | 1 |
| S 13+005 350M | 1 | 25 | 4 | 41 | .2 | 9 | 8 | 454 | 2.94 | 4 | 5 | ND | 1 | 11 | 1 | 2 | 2 | 65 | .17 | .037 | 3 | 12 | .35 | 63 | .10 | 2 | 1.78 | .01 | .03 | 1 |
| S 13+005 375M | 1 | 48 | 10 | 44 | .1 | 24 | 9 | 419 | 3.52 | 6 | 5 | ND | 3 | 13 | 1 | 2 | 2 | 93 | .16 | .034 | 7 | 32 | .74 | 111 | .16 | 2 | 3.52 | .02 | .04 | 3 |
| S 13+005 400M | 1 | 37 | 4 | 40 | .1 | 16 | 7 | 453 | 3.04 | 3 | 5 | ND | 1 | 10 | 1 | 2 | 2 | 49 | .14 | .033 | 5 | 22 | .50 | 81 | .09 | 2 | 2.70 | .02 | .03 | 1 |
| S 13+005 425M | 1 | 15 | 5 | 76 | .1 | 9 | 6 | 789 | 1.95 | 2 | 5 | ND | 1 | 10 | 1 | 2 | 2 | 41 | .15 | .049 | 3 | 13 | .31 | 66 | .05 | 2 | 1.35 | .01 | .02 | 1 |
| S 13+005 450M | 1 | 21 | 5 | 64 | .1 | 11 | 9 | 624 | 2.51 | 3 | 5 | ND | 1 | 11 | 1 | 2 | 2 | 52 | .17 | .037 | 3 | 13 | .38 | 74 | .08 | 2 | 2.15 | .02 | .03 | 2 |
| S 13+005 475M | 1 | 20 | 16 | 69 | .1 | 12 | 8 | 917 | 3.04 | 5 | 5 | ND | 2 | 14 | 1 | 2 | 3 | 65 | .19 | .046 | 4 | 16 | .41 | 105 | .11 | 2 | 2.34 | .02 | .05 | 2 |
| S 13+005 500M | 1 | 50 | 7 | 93 | .1 | 19 | 12 | 567 | 4.08 | 5 | 5 | ND | 2 | 18 | 1 | 3 | 2 | 92 | .23 | .060 | 6 | 25 | .68 | 101 | .17 | 2 | 3.40 | .02 | .07 | 2 |
| S 14+005 025M | 1 | 42 | 3 | 75 | .2 | 14 | 8 | 1023 | 3.22 | 9 | 5 | ND | 1 | 11 | 1 | 2 | 2 | 70 | .16 | .118 | 5 | 19 | .53 | 86 | .12 | 3 | 2.33 | .02 | .05 | 2 |
| S 14+005 050M | 1 | 19 | 5 | 107 | .1 | 8 | 9 | 2213 | 2.41 | 2 | 5 | ND | 1 | 13 | 1 | 2 | 2 | 48 | .21 | .082 | 6 | 12 | .29 | 114 | .09 | 2 | 1.45 | .02 | .04 | 1 |
| S 14+005 075M | 1 | 13 | 5 | 121 | .4 | 10 | 9 | 1346 | 2.11 | 2 | 5 | ND | 1 | 13 | 1 | 2 | 2 | 46 | .22 | .075 | 4 | 13 | .37 | 81 | .09 | 3 | 1.46 | .01 | .04 | 1 |
| S 14+005 100M | 1 | 30 | 16 | 80 | .1 | 12 | 9 | 1937 | 2.80 | 5 | 5 | ND | 1 | 16 | 1 | 2 | 2 | 59 | .21 | .057 | 5 | 17 | .48 | 127 | .11 | 2 | 1.93 | .01 | .05 | 1 |
| S 14+005 125M | 1 | 34 | 10 | 95 | .1 | 15 | 10 | 1635 | 3.08 | 7 | 5 | ND | 1 | 14 | 1 | 2 | 2 | 62 | .19 | .054 | 6 | 20 | .45 | 145 | .11 | 2 | 2.23 | .01 | .06 | 1 |
| S 14+005 150M | 1 | 60 | 5 | 99 | .1 | 20 | 11 | 1023 | 3.90 | 6 | 5 | ND | 1 | 12 | 1 | 2 | 2 | 78 | .15 | .075 | 4 | 24 | .61 | 139 | .14 | 2 | 3.48 | .02 | .09 | 2 |
| S 14+005 175M | 1 | 83 | 6 | 97 | .1 | 23 | 14 | 909 | 4.37 | 5 | 5 | ND | 2 | 10 | 1 | 2 | 2 | 90 | .13 | .047 | 23 | 26 | .75 | 182 | .16 | 2 | 3.82 | .02 | .08 | 3 |
| S 14+005 200M | 1 | 50 | 13 | 100 | .1 | 18 | 11 | 3244 | 3.75 | 6 | 5 | ND | 1 | 13 | 1 | 2 | 2 | 77 | .17 | .092 | 6 | 21 | .52 | 188 | .11 | 2 | 3.08 | .02 | .06 | 2 |
| S 14+005 225M | 1 | 56 | 5 | 93 | .2 | 18 | 9 | 825 | 3.70 | 7 | 5 | ND | 2 | 11 | 1 | 2 | 2 | 74 | .15 | .061 | 6 | 21 | .61 | 107 | .14 | 2 | 3.17 | .02 | .05 | 2 |
| S 14+005 250M | 1 | 50 | 14 | 82 | .1 | 16 | 10 | 1318 | 3.44 | 8 | 5 | ND | 2 | 22 | 1 | 2 | 2 | 82 | .28 | .053 | 5 | 24 | .69 | 123 | .16 | 2 | 2.48 | .02 | .08 | 2 |
| S 14+005 275M | 1 | 29 | 12 | 97 | .1 | 13 | 10 | 1875 | 2.94 | 5 | 5 | ND | 1 | 18 | 1 | 2 | 2 | 40 | .24 | .092 | 4 | 15 | .49 | 115 | .10 | 3 | 2.09 | .02 | .05 | 1 |
| S 14+005 300M | 1 | 82 | 17 | 88 | .1 | 21 | 15 | 1280 | 4.26 | 11 | 5 | ND | 2 | 20 | 1 | 2 | 2 | 98 | .23 | .074 | 9 | 24 | .95 | 195 | .18 | 2 | 3.18 | .02 | .12 | 3 |
| S 14+005 325M | 1 | 51 | 7 | 87 | .1 | 21 | 11 | 979 | 3.38 | 7 | 5 | ND | 2 | 12 | 1 | 2 | 2 | 78 | .17 | .052 | 6 | 29 | .55 | 136 | .14 | 3 | 3.37 | .02 | .05 | 2 |
| S 14+005 350M | 1 | 20 | 22 | 64 | .1 | 9 | 7 | 1838 | 2.09 | 4 | 5 | ND | 1 | 14 | 1 | 2 | 2 | 48 | .22 | .055 | 4 | 13 | .30 | 97 | .09 | 2 | 1.44 | .01 | .04 | 1 |
| S 14+005 375M | 1 | 28 | 7 | 62 | .1 | 14 | 8 | 596 | 2.45 | 2 | 5 | ND | 2 | 11 | 1 | 2 | 2 | 53 | .15 | .032 | 4 | 19 | .41 | 74 | .10 | 2 | 2.49 | .01 | .04 | 1 |
| S 14+005 400M | 1 | 40 | 6 | 88 | .1 | 17 | 10 | 940 | 2.58 | 4 | 5 | ND | 1 | 10 | 1 | 2 | 2 | 35 | .14 | .048 | 4 | 20 | .54 | 87 | .12 | 2 | 2.55 | .02 | .04 | 1 |
| S 14+005 425M | 1 | 42 | 6 | 74 | .1 | 16 | 9 | 763 | 2.89 | 2 | 5 | ND | 2 | 11 | 1 | 2 | 2 | 43 | .14 | .036 | 5 | 21 | .50 | 88 | .12 | 2 | 2.87 | .02 | .05 | 1 |
| S 14+005 025M | 1 | 22 | 5 | 61 | .1 | 8 | 6 | 354 | 2.54 | 3 | 5 | ND | 1 | 9 | 1 | 2 | 3 | 53 | .15 | .042 | 3 | 11 | .32 | 57 | .10 | 2 | 1.73 | .01 | .03 | 1 |
| S 14+005 050M | 1 | 28 | 11 | 60 | .1 | 11 | 6 | 649 | 2.28 | 3 | 5 | ND | 1 | 12 | 1 | 2 | 2 | 51 | .19 | .029 | 4 | 11 | .44 | 66 | .12 | 3 | 1.62 | .02 | .04 | 1 |
| S 14+005 075M | 1 | 56 | 8 | 84 | .1 | 18 | 11 | 1119 | 3.53 | 7 | 5 | ND | 2 | 18 | 1 | 2 | 2 | 79 | .27 | .038 | 7 | 24 | .80 | 202 | .16 | 3 | 2.87 | .02 | .07 | 1 |
| S 14+005 100M | 1 | 51 | 7 | 90 | .1 | 16 | 10 | 1155 | 3.28 | 4 | 5 | ND | 2 | 15 | 1 | 2 | 2 | 75 | .21 | .064 | 6 | 22 | .65 | 123 | .17 | 2 | 2.55 | .02 | .06 | 1 |
| S 14+005 125M | 1 | 20 | 7 | 114 | .1 | 11 | 8 | 1704 | 2.51 | 2 | 5 | ND | 1 | 17 | 1 | 2 | 2 | 52 | .25 | .153 | 5 | 14 | .39 | 106 | .10 | 2 | 1.85 | .02 | .06 | 1 |
| S 14+005 150M | 1 | 27 | 6 | 104 | .1 | 13 | 10 | 1685 | 2.89 | 4 | 5 | ND | 1 | 16 | 1 | 2 | 2 | 62 | .26 | .074 | 6 | 19 | .49 | 126 | .13 | 2 | 2.20 | .02 | .05 | 1 |
| S 14+005 175M | 1 | 25 | 4 | 74 | .2 | 14 | 9 | 1381 | 2.70 | 3 | 5 | ND | 1 | 19 | 1 | 2 | 2 | 63 | .28 | .045 | 6 | 16 | .51 | 94 | .14 | 2 | 2.06 | .02 | .05 | 2 |
| S 14+005 200M | 1 | 55 | 6 | 111 | .1 | 16 | 10 | 2142 | 3.09 | 5 | 5 | ND | 1 | 19 | 1 | 2 | 2 | 72 | .26 | .135 | 4 | 18 | .48 | 128 | .14 | 3 | 3.03 | .02 | .06 | 3 |
| S 14+005 225M | 1 | 67 | 6 | 64 | .2 | 19 | 9 | 589 | 3.56 | 5 | 5 | ND | 2 | 18 | 1 | 2 | 2 | 86 | .24 | .032 | 5 | 23 | .72 | 88 | .19 | 2 | 3.03 | .02 | .05 | 3 |
| S 14+005 250M | 1 | 75 | 7 | 64 | .1 | 21 | 12 | 563 | 3.97 | 3 | 5 | ND | 3 | 16 | 1 | 2 | 2 | 94 | .23 | .044 | 7 | 23 | .80 | 120 | .18 | 2 | 2.91 | .02 | .08 | 2 |
| S 14+005 275M | 1 | 69 | 6 | 73 | .1 | 20 | 13 | 930 | 4.25 | 3 | 5 | ND | 2 | 17 | 1 | 2 | 2 | 99 | .23 | .055 | 7 | 23 | .81 | 137 | .17 | 2 | 2.78 | .02 | .08 | 1 |
| S 14+005 300M | 1 | 36 | 6 | 141 | .4 | 21 | 10 | 979 | 3.51 | 7 | 5 | ND | 2 | 16 | 1 | 2 | 2 | 75 | .25 | .096 | 5 | 21 | .63 | 87 | .14 | 2 | 3.11 | .02 | .05 | 1 |
| STD C | 21 | 59 | 37 | 131 | 6.8 | 67 | 28 | 996 | 3.98 | 39 | 18 | 7 | 34 | 48 | 17 | 16 | 21 | 63 | .49 | .099 | 36 | 58 | .92 | 182 | .08 | 34 | 1.48 | .07 | .13 | 12 |

ROSSBACHER LABORATORY PROJECT - CERT#B7208 FILE # B7-1360

| SAMPLE# | NO PPM | CU PPM | PB PPM | ZN PPM | AG PPM | NI PPM | CO PPM | NH PPM | FE PPM | AS PPM | U PPM | AU PPM | TH PPM | SR PPM | CD PPM | SB PPM | BI PPM | V PPM | CA PPM | F PPM | LA PPM | CR PPM | MS PPM | BA PPM | TI PPM | B PPM | AL PPM | MA PPM | K PPM | M PPM |
|---------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|--------|--------|--------|--------|--------|--------|-------|--------|-------|--------|--------|--------|--------|--------|-------|--------|--------|-------|-------|
| S 16+005 325M | 1 | 24 | 10 | 142 | .3 | 17 | 10 | 1122 | 2.45 | 6 | 5 | ND | 2 | 20 | 1 | 2 | 2 | 60 | .29 | .090 | 5 | 19 | .47 | 115 | .14 | 3 | 2.38 | .02 | .07 | 2 |
| S 16+005 350M | 1 | 28 | 5 | 112 | .1 | 18 | 9 | 1213 | 2.89 | 5 | 5 | ND | 2 | 17 | 1 | 2 | 2 | 61 | .22 | .074 | 5 | 23 | .46 | 132 | .05 | 2 | 2.45 | .02 | .06 | 1 |
| S 16+005 375M | 1 | 26 | 8 | 76 | .1 | 12 | 8 | 1434 | 2.71 | 2 | 5 | ND | 1 | 21 | 1 | 2 | 2 | 59 | .33 | .043 | 5 | 17 | .45 | 116 | .09 | 2 | 1.73 | .02 | .04 | 1 |
| S 16+005 400M | 1 | 55 | 8 | 84 | .1 | 27 | 10 | 718 | 3.87 | 8 | 5 | ND | 3 | 20 | 1 | 3 | 2 | 88 | .23 | .030 | 6 | 28 | .70 | 144 | .15 | 2 | 3.29 | .02 | .08 | 1 |
| S 17+005 775E | 1 | 32 | 10 | 120 | .1 | 11 | 9 | 903 | 3.04 | 6 | 5 | ND | 2 | 16 | 1 | 3 | 2 | 63 | .32 | .032 | 6 | 20 | .52 | 112 | .14 | 2 | 2.07 | .02 | .06 | 1 |
| S 17+005 750E | 1 | 36 | 14 | 209 | .1 | 14 | 12 | 652 | 3.82 | 11 | 5 | ND | 2 | 14 | 1 | 2 | 2 | 67 | .27 | .108 | 6 | 21 | .60 | 120 | .13 | 2 | 2.75 | .02 | .07 | 1 |
| S 17+005 725E | 4 | 180 | 21 | 157 | .3 | 32 | 30 | 1752 | 5.38 | 24 | 5 | ND | 3 | 20 | 1 | 2 | 2 | 85 | .27 | .085 | 11 | 26 | .94 | 152 | .16 | 2 | 3.59 | .03 | .09 | 1 |
| S 17+005 700E | 2 | 62 | 12 | 149 | .2 | 23 | 16 | 656 | 4.38 | 12 | 5 | ND | 2 | 12 | 1 | 2 | 2 | 77 | .15 | .072 | 5 | 27 | .64 | 125 | .14 | 2 | 3.79 | .02 | .05 | 2 |
| S 17+005 675E | 2 | 86 | 18 | 130 | .4 | 21 | 14 | 1360 | 3.75 | 17 | 5 | ND | 2 | 10 | 1 | 2 | 2 | 59 | .14 | .074 | 5 | 21 | .64 | 112 | .08 | 2 | 2.76 | .02 | .03 | 1 |
| S 17+005 650E | 1 | 40 | 8 | 89 | .3 | 17 | 7 | 380 | 3.04 | 6 | 5 | ND | 2 | 12 | 1 | 2 | 2 | 56 | .15 | .043 | 5 | 23 | .55 | 67 | .12 | 2 | 2.78 | .02 | .03 | 1 |
| S 17+005 625E | 1 | 31 | 10 | 141 | .2 | 17 | 11 | 554 | 3.10 | 10 | 5 | ND | 2 | 15 | 1 | 3 | 2 | 61 | .22 | .047 | 6 | 26 | .57 | 149 | .14 | 2 | 3.08 | .02 | .05 | 1 |
| S 17+005 600E | 2 | 66 | 9 | 120 | .2 | 26 | 14 | 605 | 4.24 | 9 | 5 | ND | 2 | 13 | 1 | 2 | 2 | 79 | .18 | .052 | 5 | 29 | .95 | 137 | .18 | 2 | 3.67 | .02 | .05 | 1 |
| S 17+005 575E | 1 | 47 | 5 | 104 | .1 | 16 | 12 | 1109 | 3.30 | 8 | 5 | ND | 2 | 13 | 1 | 2 | 2 | 64 | .16 | .055 | 6 | 22 | .54 | 102 | .14 | 2 | 2.62 | .02 | .04 | 1 |
| S 17+005 550E | 1 | 12 | 6 | 84 | .1 | 8 | 7 | 713 | 1.79 | 2 | 5 | ND | 2 | 14 | 1 | 2 | 2 | 43 | .28 | .019 | 5 | 14 | .39 | 82 | .18 | 3 | 1.45 | .02 | .03 | 1 |
| S 17+005 525E | 1 | 28 | 3 | 110 | .1 | 13 | 9 | 711 | 2.62 | 3 | 5 | ND | 2 | 17 | 1 | 2 | 2 | 58 | .29 | .042 | 6 | 22 | .55 | 104 | .17 | 2 | 2.14 | .02 | .04 | 1 |
| S 17+005 500E | 1 | 85 | 10 | 121 | .3 | 21 | 15 | 1915 | 4.08 | 12 | 5 | ND | 1 | 18 | 1 | 2 | 2 | 97 | .32 | .104 | 4 | 27 | .64 | 118 | .17 | 2 | 2.94 | .02 | .04 | 1 |
| S 17+005 475E | 1 | 50 | 17 | 128 | .3 | 21 | 18 | 3008 | 3.89 | 6 | 5 | ND | 1 | 33 | 1 | 2 | 2 | 83 | .63 | .057 | 5 | 23 | .55 | 132 | .23 | 2 | 2.34 | .02 | .03 | 1 |
| S 17+005 450E | 1 | 90 | 13 | 101 | .1 | 23 | 13 | 1251 | 4.17 | 10 | 5 | ND | 1 | 27 | 1 | 2 | 2 | 108 | .43 | .073 | 4 | 33 | .58 | 109 | .20 | 2 | 3.32 | .02 | .04 | 1 |
| S 17+005 425E | 1 | 48 | 11 | 77 | .1 | 13 | 8 | 852 | 3.31 | 6 | 5 | ND | 2 | 19 | 1 | 2 | 2 | 79 | .29 | .058 | 5 | 22 | .33 | 71 | .15 | 2 | 2.22 | .02 | .03 | 1 |
| S 17+005 400E | 1 | 56 | 6 | 75 | .2 | 14 | 7 | 402 | 3.45 | 13 | 5 | ND | 2 | 13 | 1 | 2 | 2 | 74 | .18 | .048 | 4 | 21 | .53 | 66 | .17 | 2 | 2.97 | .02 | .03 | 1 |
| S 17+005 375E | 1 | 81 | 17 | 123 | .3 | 19 | 9 | 526 | 3.45 | 9 | 5 | ND | 2 | 17 | 1 | 3 | 2 | 72 | .23 | .051 | 4 | 34 | .57 | 80 | .06 | 2 | 3.39 | .02 | .04 | 1 |
| S 17+005 350E | 1 | 28 | 9 | 99 | .3 | 10 | 6 | 640 | 2.80 | 6 | 5 | ND | 2 | 17 | 1 | 2 | 2 | 58 | .21 | .049 | 5 | 21 | .34 | 83 | .13 | 2 | 2.17 | .02 | .04 | 1 |
| S 17+005 325E | 1 | 40 | 7 | 80 | .2 | 12 | 6 | 450 | 3.37 | 6 | 5 | ND | 2 | 15 | 1 | 2 | 2 | 70 | .17 | .060 | 5 | 22 | .44 | 63 | .14 | 2 | 2.73 | .02 | .04 | 1 |
| S 17+005 300E | 1 | 50 | 9 | 107 | .3 | 13 | 11 | 840 | 2.56 | 4 | 5 | ND | 2 | 16 | 1 | 2 | 2 | 60 | .21 | .051 | 5 | 20 | .44 | 87 | .15 | 3 | 2.38 | .02 | .03 | 1 |
| S 17+005 275E | 1 | 67 | 9 | 112 | .3 | 12 | 10 | 627 | 2.83 | 6 | 5 | ND | 2 | 15 | 1 | 2 | 2 | 67 | .18 | .050 | 5 | 16 | .44 | 90 | .17 | 2 | 2.66 | .02 | .04 | 2 |
| S 17+005 250E | 1 | 26 | 12 | 85 | .1 | 9 | 7 | 1657 | 2.14 | 8 | 5 | ND | 2 | 14 | 1 | 2 | 2 | 48 | .17 | .045 | 6 | 10 | .32 | 90 | .11 | 3 | 1.91 | .02 | .03 | 1 |
| S 17+005 225E | 1 | 33 | 7 | 86 | .1 | 12 | 8 | 503 | 2.74 | 6 | 5 | ND | 1 | 14 | 1 | 2 | 2 | 60 | .17 | .054 | 5 | 17 | .41 | 83 | .14 | 3 | 2.70 | .02 | .03 | 1 |
| S 17+005 200E | 1 | 46 | 11 | 90 | .1 | 19 | 8 | 334 | 3.31 | 5 | 5 | ND | 2 | 13 | 1 | 2 | 2 | 73 | .15 | .045 | 5 | 25 | .55 | 80 | .15 | 2 | 3.86 | .02 | .03 | 1 |
| S 17+005 175E | 1 | 22 | 7 | 83 | .1 | 11 | 6 | 391 | 2.73 | 5 | 5 | ND | 2 | 10 | 1 | 2 | 2 | 59 | .15 | .041 | 5 | 17 | .44 | 70 | .14 | 2 | 2.35 | .01 | .03 | 1 |
| S 17+005 150E | 1 | 10 | 7 | 59 | .1 | 4 | 3 | 577 | 1.66 | 2 | 5 | ND | 2 | 10 | 1 | 2 | 2 | 38 | .19 | .037 | 4 | 7 | .19 | 58 | .11 | 2 | 1.11 | .01 | .03 | 1 |
| S 17+005 125E | 1 | 18 | 8 | 69 | .1 | 7 | 5 | 576 | 1.72 | 2 | 5 | ND | 2 | 14 | 1 | 2 | 2 | 42 | .25 | .020 | 5 | 10 | .25 | 62 | .13 | 2 | 1.56 | .01 | .02 | 1 |
| S 17+005 100E | 1 | 77 | 3 | 76 | .1 | 18 | 9 | 451 | 3.69 | 5 | 5 | ND | 3 | 14 | 1 | 2 | 2 | 85 | .20 | .051 | 6 | 23 | .73 | 100 | .21 | 2 | 3.59 | .02 | .06 | 1 |
| S 17+005 075E | 1 | 27 | 7 | 86 | .1 | 9 | 7 | 1739 | 2.50 | 4 | 5 | ND | 1 | 14 | 1 | 2 | 2 | 54 | .22 | .064 | 5 | 14 | .36 | 85 | .12 | 3 | 1.96 | .02 | .03 | 1 |
| S 17+005 050E | 1 | 17 | 10 | 76 | .1 | 9 | 6 | 910 | 2.11 | 2 | 5 | ND | 1 | 14 | 1 | 2 | 2 | 47 | .24 | .045 | 4 | 10 | .29 | 88 | .11 | 2 | 1.46 | .01 | .03 | 1 |
| S 17+005 025E | 1 | 47 | 9 | 115 | .1 | 18 | 11 | 917 | 3.37 | 6 | 5 | ND | 2 | 13 | 1 | 2 | 2 | 70 | .20 | .110 | 6 | 23 | .58 | 127 | .14 | 3 | 3.42 | .02 | .06 | 1 |
| S 17+005 000E | 1 | 46 | 8 | 100 | .1 | 17 | 10 | 807 | 3.13 | 8 | 5 | ND | 2 | 17 | 1 | 2 | 2 | 71 | .25 | .047 | 7 | 21 | .52 | 135 | .19 | 2 | 3.22 | .02 | .06 | 2 |
| S 17+005 025M | 1 | 24 | 14 | 96 | .1 | 12 | 9 | 2274 | 2.59 | 6 | 5 | ND | 2 | 17 | 1 | 2 | 2 | 59 | .28 | .050 | 6 | 12 | .41 | 124 | .14 | 3 | 2.16 | .02 | .06 | 1 |
| S 17+005 050M | 1 | 30 | 4 | 106 | .1 | 14 | 9 | 2354 | 2.58 | 5 | 5 | ND | 1 | 14 | 1 | 2 | 2 | 57 | .20 | .052 | 5 | 15 | .41 | 129 | .12 | 3 | 2.33 | .02 | .04 | 1 |
| S 17+005 075M | 1 | 22 | 6 | 102 | .2 | 12 | 8 | 1266 | 2.43 | 4 | 5 | ND | 1 | 16 | 1 | 2 | 2 | 35 | .23 | .040 | 4 | 10 | .34 | 116 | .10 | 2 | 2.13 | .02 | .06 | 1 |
| S 17+005 100M | 1 | 50 | 8 | 91 | .1 | 15 | 9 | 1599 | 3.18 | 7 | 5 | ND | 1 | 20 | 1 | 2 | 2 | 67 | .22 | .034 | 6 | 13 | .40 | 216 | .13 | 3 | 2.77 | .02 | .11 | 1 |
| STD C | 20 | 58 | 37 | 129 | 6.8 | 67 | 27 | 981 | 3.76 | 42 | 14 | 6 | .34 | 48 | 17 | 15 | 19 | 62 | .45 | .098 | 36 | 57 | .90 | 179 | .08 | 36 | 1.70 | .07 | .13 | 12 |

ROSSBACHER LABORATORY PROJECT - CERT#B7208 FILE # 87-1360

| SAMPLE | MD | CU | PB | ZN | AS | FE | NH | CO | NI | CD | MN | SR | CD | SB | BI | V | CA | P | LA | CR | MG | BA | TI | B | AL | MA | K | Z | PPK | |
|---------------|----|-----|----|-----|-----|----|----|------|------|------|----|----|----|----|----|-----|-----|------|------|------|-----|-----|-----|-----|------|------|------|-----|-----|----|
| S 17+005 125W | 1 | 53 | 11 | 106 | .1 | 11 | 11 | 9 | 871 | 3.02 | 3 | 5 | NO | 1 | 71 | 1 | 65 | .30 | .055 | 4 | 17 | .43 | 154 | .08 | 2 | 3.16 | .02 | .05 | 1 | |
| S 17+005 150W | 1 | 9 | 7 | 48 | .1 | 6 | 5 | 5 | 574 | 1.76 | 3 | 5 | NO | 1 | 13 | 1 | 40 | .22 | .092 | 4 | 10 | .28 | 51 | .07 | 3 | 1.18 | .02 | .03 | 1 | |
| S 17+005 175W | 1 | 53 | 15 | 95 | .2 | 29 | 14 | 864 | 3.92 | 3 | 5 | NO | 1 | 2 | 2 | 78 | .20 | .053 | 6 | 27 | .79 | 89 | .09 | 2 | 2.54 | .02 | .04 | 1 | | |
| S 17+005 200W | 1 | 40 | 9 | 98 | .1 | 14 | 9 | 1288 | 3.21 | 2 | 5 | NO | 1 | 2 | 2 | 70 | .21 | .048 | 5 | 17 | .51 | 93 | .12 | 2 | 2.46 | .02 | .04 | 1 | | |
| S 17+005 225W | 2 | 38 | 10 | 130 | .1 | 29 | 11 | 533 | 4.11 | 2 | 5 | NO | 1 | 3 | 2 | 87 | .18 | .040 | 5 | 26 | .54 | 80 | .14 | 2 | 3.36 | .02 | .05 | 1 | | |
| S 17+005 250W | 1 | 21 | 6 | 86 | .1 | 16 | 7 | 942 | 3.11 | 2 | 5 | NO | 1 | 2 | 2 | 67 | .21 | .051 | 4 | 19 | .46 | 84 | .11 | 2 | 2.15 | .02 | .05 | 1 | | |
| S 17+005 275W | 1 | 52 | 7 | 111 | .1 | 24 | 11 | 427 | 4.54 | 4 | 5 | NO | 1 | 2 | 2 | 91 | .22 | .177 | 6 | 26 | .74 | 90 | .10 | 2 | 3.21 | .02 | .06 | 1 | | |
| S 17+005 300W | 1 | 9 | 5 | 92 | .1 | 9 | 7 | 953 | 1.92 | 2 | 5 | NO | 1 | 2 | 2 | 42 | .19 | .084 | 4 | 13 | .31 | 65 | .04 | 2 | 1.37 | .01 | .03 | 1 | | |
| S 18+005 700E | 1 | 84 | 11 | 95 | .1 | 24 | 15 | 825 | 4.23 | 7 | 5 | NO | 1 | 2 | 2 | 70 | .21 | .071 | 5 | 25 | .88 | 140 | .14 | 2 | 2.78 | .02 | .06 | 1 | | |
| S 18+005 675E | 3 | 103 | 12 | 92 | .1 | 25 | 19 | 796 | 4.25 | 8 | 5 | NO | 1 | 3 | 2 | 75 | .15 | .058 | 6 | 25 | .89 | 125 | .17 | 2 | 2.90 | .02 | .05 | 1 | | |
| S 18+005 650E | 2 | 110 | 13 | 104 | .2 | 24 | 21 | 709 | 4.26 | 8 | 5 | NO | 1 | 4 | 2 | 70 | .22 | .048 | 6 | 27 | .95 | 140 | .13 | 2 | 2.91 | .02 | .06 | 1 | | |
| S 18+005 625E | 1 | 23 | 13 | 102 | .1 | 11 | 9 | 1476 | 2.16 | 3 | 5 | NO | 1 | 2 | 2 | 46 | .28 | .047 | 5 | 16 | .41 | 168 | .12 | 2 | 1.71 | .02 | .05 | 1 | | |
| S 18+005 600E | 2 | 85 | 12 | 103 | .1 | 29 | 15 | 566 | 4.45 | 9 | 5 | NO | 1 | 2 | 3 | 88 | .20 | .055 | 6 | 30 | .99 | 172 | .20 | 2 | 3.40 | .02 | .06 | 1 | | |
| S 18+005 575E | 1 | 59 | 11 | 117 | .1 | 23 | 12 | 843 | 3.70 | 5 | 5 | NO | 1 | 2 | 2 | 72 | .26 | .076 | 5 | 27 | .48 | 110 | .13 | 2 | 2.31 | .02 | .06 | 1 | | |
| S 18+005 550E | 1 | 57 | 12 | 102 | .2 | 29 | 14 | 454 | 4.87 | 27 | 5 | NO | 1 | 3 | 2 | 110 | .23 | .056 | 6 | 38 | .71 | 100 | .19 | 2 | 3.78 | .02 | .05 | 1 | | |
| S 18+005 525E | 1 | 100 | 21 | 104 | .2 | 24 | 12 | 1241 | 3.76 | 12 | 5 | NO | 1 | 2 | 2 | 87 | .41 | .080 | 4 | 30 | .78 | 172 | .15 | 2 | 3.00 | .03 | .07 | 1 | | |
| S 18+005 500E | 1 | 96 | 17 | 89 | .2 | 29 | 12 | 996 | 3.36 | 10 | 5 | NO | 1 | 2 | 2 | 79 | .25 | .072 | 4 | 81 | .74 | 90 | .14 | 2 | 2.50 | .02 | .04 | 2 | | |
| S 18+005 475E | 1 | 69 | 8 | 89 | .1 | 18 | 10 | 719 | 3.05 | 4 | 5 | NO | 1 | 2 | 2 | 66 | .22 | .056 | 4 | 24 | .60 | 94 | .12 | 2 | 2.19 | .02 | .02 | 1 | | |
| S 18+005 450E | 1 | 55 | 10 | 79 | .1 | 22 | 10 | 954 | 3.33 | 8 | 5 | NO | 1 | 2 | 2 | 74 | .18 | .058 | 3 | 32 | .56 | 69 | .13 | 2 | 2.60 | .02 | .04 | 1 | | |
| S 18+005 425E | 1 | 66 | 12 | 89 | .2 | 18 | 10 | 553 | 3.40 | 4 | 5 | NO | 1 | 2 | 2 | 74 | .14 | .046 | 3 | 26 | .64 | 71 | .13 | 2 | 2.81 | .02 | .03 | 1 | | |
| S 18+005 400E | 1 | 92 | 12 | 100 | .1 | 23 | 12 | 735 | 3.99 | 5 | 5 | NO | 1 | 2 | 2 | 87 | .20 | .075 | 5 | 29 | .79 | 89 | .16 | 2 | 4.18 | .02 | .05 | 1 | | |
| S 18+005 375E | 1 | 45 | 27 | 117 | .1 | 15 | 9 | 4485 | 3.05 | 4 | 5 | NO | 1 | 3 | 2 | 64 | .40 | .104 | 4 | 21 | .48 | 176 | .08 | 2 | 2.46 | .02 | .05 | 1 | | |
| S 18+005 350E | 1 | 42 | 16 | 92 | .1 | 11 | 7 | 891 | 2.80 | 3 | 5 | NO | 1 | 2 | 4 | 61 | .24 | .080 | 4 | 15 | .50 | 79 | .07 | 2 | 2.21 | .02 | .05 | 1 | | |
| S 18+005 325E | 1 | 52 | 17 | 124 | .1 | 13 | 8 | 1728 | 3.26 | 4 | 5 | NO | 1 | 2 | 2 | 66 | .22 | .085 | 5 | 16 | .59 | 108 | .06 | 2 | 2.75 | .02 | .05 | 1 | | |
| S 18+005 300E | 1 | 19 | 5 | 103 | .1 | 8 | 7 | 604 | 2.31 | 2 | 5 | NO | 1 | 2 | 2 | 52 | .23 | .043 | 5 | 12 | .32 | 75 | .12 | 2 | 1.83 | .02 | .03 | 1 | | |
| S 18+005 275E | 1 | 22 | 8 | 104 | .1 | 11 | 8 | 648 | 2.39 | 3 | 5 | NO | 1 | 2 | 2 | 57 | .29 | .044 | 5 | 13 | .58 | 99 | .13 | 3 | 2.08 | .02 | .04 | 1 | | |
| S 18+005 250E | 1 | 30 | 33 | 103 | .1 | 10 | 7 | 2566 | 3.07 | 4 | 5 | NO | 1 | 2 | 2 | 63 | .21 | .099 | 4 | 13 | .31 | 164 | .07 | 2 | 1.98 | .01 | .05 | 1 | | |
| S 18+005 225E | 1 | 35 | 10 | 92 | .1 | 10 | 5 | 909 | 3.12 | 5 | 5 | NO | 1 | 2 | 2 | 59 | .14 | .101 | 3 | 15 | .34 | 108 | .04 | 2 | 2.05 | .01 | .03 | 1 | | |
| S 18+005 200E | 1 | 13 | 9 | 68 | .1 | 6 | 4 | 874 | 1.65 | 4 | 5 | NO | 1 | 2 | 2 | 35 | .13 | .046 | 3 | 11 | .24 | 59 | .07 | 3 | 1.13 | .01 | .03 | 1 | | |
| S 18+005 175E | 1 | 40 | 9 | 68 | .1 | 12 | 6 | 790 | 3.27 | 7 | 5 | NO | 1 | 2 | 2 | 69 | .13 | .080 | 3 | 16 | .44 | 68 | .10 | 2 | 2.94 | .01 | .03 | 1 | | |
| S 18+005 150E | 1 | 18 | 12 | 69 | .1 | 7 | 6 | 728 | 2.06 | 4 | 5 | NO | 1 | 2 | 3 | 41 | .24 | .046 | 5 | 13 | .19 | 65 | .10 | 3 | 1.48 | .02 | .05 | 1 | | |
| S 18+005 125E | 1 | 22 | 10 | 76 | .1 | 10 | 7 | 823 | 2.45 | 2 | 5 | NO | 1 | 2 | 4 | 54 | .26 | .046 | 5 | 14 | .38 | 69 | .16 | 3 | 2.05 | .02 | .05 | 1 | | |
| S 18+005 100E | 1 | 13 | 19 | 76 | .1 | 8 | 8 | 2293 | 1.92 | 3 | 5 | NO | 1 | 2 | 2 | 42 | .29 | .033 | 4 | 9 | .31 | 104 | .12 | 3 | 1.32 | .02 | .04 | 1 | | |
| S 18+005 075E | 1 | 27 | 10 | 88 | .1 | 14 | 9 | 1223 | 2.44 | 3 | 5 | NO | 1 | 2 | 2 | 54 | .24 | .040 | 5 | 20 | .47 | 124 | .12 | 2 | 2.21 | .02 | .04 | 1 | | |
| S 18+005 050E | 1 | 37 | 10 | 91 | .1 | 15 | 10 | 1504 | 2.86 | 5 | 5 | NO | 1 | 2 | 2 | 62 | .25 | .158 | 4 | 13 | .55 | 123 | .12 | 2 | 2.77 | .02 | .05 | 2 | | |
| S 18+005 025E | 1 | 48 | 7 | 81 | .1 | 19 | 9 | 675 | 2.76 | 6 | 5 | NO | 1 | 2 | 2 | 61 | .17 | .051 | 4 | 16 | .79 | 211 | .14 | 2 | 3.04 | .02 | .06 | 1 | | |
| S 18+005 000E | 1 | 33 | 8 | 76 | .1 | 12 | 9 | 921 | 2.68 | 3 | 5 | NO | 1 | 3 | 2 | 60 | .29 | .046 | 5 | 13 | .44 | 142 | .14 | 2 | 2.21 | .02 | .06 | 1 | | |
| S 18+005 025W | 1 | 55 | 10 | 87 | .1 | 14 | 8 | 776 | 3.31 | 2 | 5 | NO | 1 | 2 | 2 | 48 | .19 | .107 | 4 | 14 | .52 | 100 | .41 | 2 | 2.88 | .02 | .04 | 1 | | |
| S 18+005 050W | 1 | 14 | 8 | 71 | .1 | 6 | 9 | 2943 | 1.63 | 2 | 5 | NO | 1 | 2 | 2 | 33 | .16 | .046 | 3 | 5 | .19 | 115 | .05 | 2 | 1.27 | .01 | .03 | 1 | | |
| S 18+005 075W | 1 | 51 | 7 | 81 | .1 | 17 | 9 | 788 | 3.47 | 3 | 5 | NO | 1 | 2 | 2 | 75 | .20 | .057 | 5 | 18 | .63 | 116 | .14 | 2 | 2.90 | .02 | .06 | 1 | | |
| STD C | 19 | 57 | 36 | 132 | 6.8 | 68 | 27 | 986 | 4.04 | 42 | 18 | 7 | 34 | 48 | 17 | 16 | 19 | 63 | .49 | .097 | 35 | 58 | .90 | 179 | .08 | 38 | 1.75 | .07 | .13 | 13 |

ROSSBACHER LABORATORY PROJECT - CERT#87208 FILE # 87-1360

| SAMPLE | MO PPM | CU PPM | PB PPM | ZN PPM | AG PPM | NI PPM | CO PPM | MN PPM | FE PPM | AS PPM | U PPM | AU PPM | TI PPM | SR PPM | CD PPM | SB PPM | BI PPM | V PPM | CA PPM | P PPM | LA PPM | CR PPM | MS PPM | BA PPM | II PPM | B PPM | AL PPM | MA PPM | K PPM | M PPM |
|---------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|--------|--------|--------|--------|--------|--------|-------|--------|-------|--------|--------|--------|--------|--------|-------|--------|--------|-------|-------|
| S 18+005 100W | 1 | 18 | 12 | 92 | .2 | 9 | 6 | 1503 | 2.37 | 2 | 5 | ND | 1 | 18 | 1 | 2 | 2 | 57 | .29 | .013 | 4 | 11 | .31 | 72 | .11 | 3 | 1.47 | .02 | .04 | 1 |
| S 18+005 123W | 1 | 33 | 7 | 104 | .1 | 13 | 9 | 938 | 2.80 | 3 | 5 | ND | 2 | 19 | 1 | 2 | 2 | 65 | .28 | .083 | 4 | 16 | .50 | 58 | .11 | 2 | 2.22 | .02 | .04 | 1 |
| S 18+005 150W | 1 | 14 | 9 | 42 | .1 | 7 | 4 | 428 | 2.05 | 3 | 5 | ND | 1 | 52 | 1 | 3 | 2 | 55 | .34 | .038 | 5 | 10 | .37 | 53 | .12 | 2 | 1.79 | .02 | .04 | 1 |
| S 19+005 400E | 1 | 101 | 6 | 85 | .1 | 28 | 16 | 773 | 4.44 | 14 | 5 | ND | 3 | 26 | 1 | 2 | 2 | 99 | .32 | .051 | 9 | 37 | 1.11 | 214 | .22 | 2 | 3.22 | .02 | .08 | 1 |
| S 19+005 575E | 1 | 24 | 6 | 128 | .3 | 14 | 8 | 618 | 2.21 | 5 | 5 | ND | 2 | 24 | 1 | 2 | 2 | 56 | .37 | .086 | 6 | 30 | .45 | 77 | .14 | 3 | 2.11 | .02 | .03 | 1 |
| S 19+005 550E | 1 | 120 | 11 | 97 | .1 | 31 | 16 | 952 | 4.02 | 14 | 5 | ND | 2 | 25 | 1 | 2 | 2 | 94 | .41 | .092 | 6 | 41 | 1.04 | 161 | .18 | 3 | 3.10 | .02 | .08 | 1 |
| S 19+005 525E | 1 | 119 | 8 | 93 | .1 | 45 | 14 | 504 | 4.41 | 13 | 5 | ND | 2 | 23 | 1 | 2 | 2 | 112 | .30 | .080 | 5 | 48 | 1.00 | 142 | .18 | 2 | 4.41 | .02 | .03 | 1 |
| S 19+005 500E | 1 | 41 | 17 | 171 | .3 | 28 | 14 | 1026 | 3.95 | 9 | 5 | ND | 2 | 30 | 1 | 2 | 2 | 83 | .50 | .101 | 5 | 42 | .80 | 107 | .16 | 2 | 2.97 | .02 | .05 | 1 |
| S 19+005 475E | 1 | 51 | 21 | 170 | .4 | 33 | 15 | 786 | 4.15 | 12 | 5 | ND | 2 | 28 | 1 | 2 | 2 | 87 | .43 | .111 | 5 | 45 | .86 | 112 | .16 | 2 | 3.47 | .02 | .05 | 1 |
| S 19+005 450E | 1 | 94 | 15 | 152 | .1 | 37 | 19 | 1309 | 4.52 | 13 | 5 | ND | 1 | 26 | 1 | 2 | 2 | 103 | .35 | .089 | 4 | 63 | .70 | 117 | .18 | 2 | 3.12 | .02 | .04 | 1 |
| S 19+005 425E | 1 | 41 | 13 | 104 | .2 | 39 | 15 | 1579 | 3.93 | 10 | 5 | ND | 1 | 25 | 1 | 2 | 2 | 85 | .40 | .104 | 4 | 87 | .63 | 139 | .12 | 2 | 2.74 | .02 | .05 | 1 |
| S 19+005 400E | 1 | 44 | 15 | 104 | .1 | 24 | 10 | 1418 | 3.45 | 7 | 5 | ND | 1 | 25 | 1 | 2 | 3 | 79 | .31 | .094 | 4 | 37 | .52 | 123 | .12 | 2 | 2.52 | .02 | .04 | 1 |
| S 19+005 375E | 1 | 82 | 19 | 101 | .1 | 27 | 10 | 1323 | 3.84 | 10 | 5 | ND | 1 | 24 | 1 | 2 | 2 | 89 | .33 | .133 | 4 | 61 | .68 | 118 | .12 | 2 | 3.13 | .02 | .04 | 1 |
| S 19+005 350E | 1 | 64 | 10 | 93 | .2 | 17 | 9 | 745 | 3.42 | 6 | 5 | ND | 2 | 20 | 1 | 2 | 2 | 77 | .23 | .069 | 5 | 20 | .65 | 110 | .14 | 2 | 3.01 | .02 | .04 | 1 |
| S 19+005 325E | 1 | 44 | 11 | 86 | .1 | 13 | 8 | 856 | 2.99 | 5 | 5 | ND | 1 | 19 | 1 | 2 | 2 | 68 | .22 | .058 | 5 | 16 | .52 | 102 | .12 | 2 | 2.66 | .02 | .04 | 1 |
| S 19+005 300E | 1 | 24 | 9 | 124 | .1 | 9 | 10 | 793 | 1.88 | 3 | 5 | ND | 1 | 18 | 1 | 2 | 2 | 43 | .23 | .026 | 5 | 9 | .27 | 110 | .10 | 3 | 1.85 | .02 | .04 | 1 |
| S 19+005 275E | 1 | 20 | 8 | 90 | .1 | 8 | 7 | 425 | 2.18 | 3 | 5 | ND | 1 | 20 | 1 | 2 | 2 | 54 | .27 | .028 | 5 | 12 | .38 | 83 | .13 | 2 | 1.71 | .02 | .03 | 1 |
| S 19+005 250E | 1 | 51 | 9 | 92 | .2 | 14 | 8 | 343 | 4.62 | 11 | 5 | ND | 2 | 19 | 1 | 2 | 3 | 92 | .21 | .101 | 5 | 16 | .56 | 102 | .14 | 2 | 2.99 | .02 | .05 | 1 |
| S 19+005 225E | 1 | 39 | 18 | 91 | .1 | 12 | 8 | 2785 | 2.88 | 2 | 5 | ND | 1 | 21 | 1 | 2 | 2 | 65 | .28 | .077 | 5 | 15 | .44 | 176 | .11 | 2 | 1.95 | .02 | .04 | 1 |
| S 19+005 200E | 1 | 39 | 13 | 90 | .1 | 12 | 7 | 497 | 3.00 | 5 | 5 | ND | 1 | 18 | 1 | 2 | 3 | 44 | .21 | .091 | 5 | 18 | .48 | 118 | .12 | 2 | 2.50 | .02 | .04 | 1 |
| S 19+005 175E | 1 | 37 | 11 | 144 | .1 | 14 | 10 | 3755 | 3.14 | 7 | 5 | ND | 1 | 18 | 1 | 2 | 2 | 65 | .26 | .195 | 5 | 17 | .63 | 204 | .12 | 4 | 2.70 | .02 | .05 | 1 |
| S 19+005 150E | 1 | 22 | 8 | 76 | .1 | 9 | 6 | 608 | 2.48 | 6 | 5 | ND | 1 | 18 | 1 | 2 | 2 | 58 | .27 | .048 | 4 | 14 | .36 | 68 | .12 | 2 | 1.88 | .02 | .03 | 1 |
| S 19+005 125E | 1 | 22 | 4 | 87 | .1 | 11 | 7 | 440 | 2.34 | 4 | 5 | ND | 1 | 19 | 1 | 2 | 2 | 36 | .28 | .040 | 5 | 16 | .44 | 58 | .12 | 2 | 2.01 | .02 | .03 | 2 |
| S 19+005 100E | 1 | 32 | 10 | 88 | .2 | 11 | 7 | 381 | 2.90 | 7 | 5 | ND | 2 | 19 | 1 | 2 | 2 | 67 | .28 | .066 | 5 | 16 | .51 | 66 | .13 | 3 | 2.37 | .02 | .04 | 1 |
| S 19+005 075E | 1 | 40 | 9 | 69 | .1 | 15 | 9 | 505 | 3.63 | 9 | 5 | ND | 2 | 18 | 1 | 4 | 2 | 90 | .23 | .048 | 4 | 20 | .67 | 67 | .17 | 3 | 4.06 | .02 | .04 | 1 |
| S 19+005 050E | 1 | 39 | 4 | 75 | .4 | 11 | 7 | 402 | 3.27 | 9 | 5 | ND | 2 | 19 | 1 | 2 | 2 | 74 | .26 | .066 | 5 | 17 | .45 | 69 | .14 | 2 | 2.82 | .02 | .04 | 1 |
| S 19+005 025E | 1 | 26 | 16 | 87 | .1 | 12 | 8 | 3034 | 2.44 | 4 | 5 | ND | 1 | 19 | 1 | 2 | 2 | 60 | .23 | .126 | 4 | 15 | .45 | 140 | .12 | 2 | 2.45 | .02 | .04 | 1 |
| S 19+005 000E | 1 | 32 | 3 | 84 | .1 | 12 | 7 | 911 | 2.23 | 2 | 5 | ND | 2 | 18 | 1 | 2 | 2 | 50 | .19 | .043 | 4 | 13 | .41 | 138 | .10 | 2 | 2.55 | .01 | .05 | 1 |
| S 19+005 025W | 1 | 33 | 9 | 112 | .2 | 15 | 8 | 911 | 2.51 | 4 | 5 | ND | 2 | 19 | 1 | 2 | 2 | 55 | .25 | .050 | 5 | 15 | .47 | 136 | .11 | 3 | 2.48 | .02 | .04 | 1 |
| S 19+005 050W | 1 | 36 | 9 | 68 | .1 | 13 | 7 | 1225 | 2.68 | 2 | 5 | ND | 1 | 18 | 1 | 2 | 2 | 53 | .15 | .033 | 4 | 13 | .60 | 103 | .09 | 3 | 2.39 | .01 | .05 | 1 |
| S 19+005 075W | 1 | 24 | 5 | 145 | .2 | 13 | 10 | 1982 | 2.18 | 4 | 5 | ND | 1 | 23 | 1 | 2 | 2 | 52 | .29 | .047 | 5 | 13 | .45 | 163 | .07 | 2 | 2.49 | .01 | .07 | 1 |
| S 19+005 100W | 1 | 23 | 4 | 87 | .2 | 14 | 8 | 819 | 2.21 | 2 | 5 | ND | 2 | 19 | 1 | 2 | 2 | 54 | .27 | .077 | 6 | 19 | .37 | 68 | .10 | 2 | 1.99 | .02 | .03 | 1 |
| S 19+005 125W | 1 | 15 | 7 | 123 | .1 | 10 | 8 | 1217 | 2.39 | 4 | 5 | ND | 1 | 25 | 1 | 2 | 2 | 59 | .33 | .060 | 6 | 16 | .33 | 59 | .10 | 2 | 1.92 | .02 | .04 | 2 |
| S 19+005 150W | 1 | 16 | 9 | 93 | .5 | 13 | 7 | 759 | 2.14 | 7 | 5 | ND | 2 | 17 | 1 | 2 | 2 | 55 | .23 | .030 | 6 | 22 | .38 | 57 | .06 | 2 | 2.21 | .01 | .04 | 1 |
| S 20+005 450E | 1 | 108 | 22 | 100 | .2 | 37 | 16 | 764 | 4.33 | 17 | 5 | ND | 2 | 34 | 1 | 2 | 2 | 104 | .69 | .064 | 6 | 59 | 1.29 | 115 | .19 | 3 | 3.11 | .03 | .07 | 1 |
| S 20+005 425E | 1 | 48 | 8 | 138 | .2 | 43 | 15 | 442 | 3.97 | 6 | 5 | ND | 1 | 31 | 1 | 2 | 2 | 86 | .55 | .091 | 6 | 47 | 1.27 | 114 | .17 | 2 | 2.81 | .02 | .04 | 1 |
| S 20+005 400E | 1 | 47 | 19 | 119 | .1 | 28 | 13 | 1976 | 3.50 | 10 | 5 | ND | 1 | 24 | 1 | 2 | 2 | 78 | .38 | .120 | 5 | 44 | .79 | 139 | .14 | 2 | 2.55 | .02 | .04 | 1 |
| S 20+005 375E | 1 | 26 | 14 | 102 | .1 | 17 | 9 | 1350 | 2.47 | 6 | 5 | ND | 1 | 25 | 1 | 2 | 2 | 56 | .39 | .042 | 4 | 26 | .52 | 110 | .11 | 3 | 1.84 | .02 | .04 | 1 |
| S 20+005 350E | 1 | 28 | 12 | 227 | .2 | 16 | 12 | 1159 | 2.93 | 6 | 5 | ND | 2 | 26 | 1 | 2 | 2 | 61 | .36 | .101 | 6 | 23 | .43 | 128 | .14 | 3 | 2.52 | .02 | .05 | 1 |
| S 20+005 325E | 1 | 34 | 7 | 151 | .2 | 15 | 11 | 1976 | 2.99 | 9 | 5 | ND | 1 | 17 | 1 | 2 | 2 | 62 | .24 | .151 | 5 | 19 | .55 | 144 | .10 | 2 | 2.42 | .02 | .05 | 1 |
| STD C | 20 | 58 | 36 | 132 | 6.9 | 68 | 28 | 995 | 3.98 | 41 | 17 | 7 | 35 | 48 | 17 | 16 | 20 | 44 | .47 | .099 | 36 | 59 | .85 | 182 | .08 | 34 | 1.69 | .08 | .14 | 13 |

ROSSBACHER LABORATORY PROJECT - CERT#87208 FILE # 87-1360

| SAMPLE | MO PPM | CU PPM | PB PPM | ZN PPM | AS PPM | U PPM | AU PPM | TH PPM | SR PPM | CD PPM | SB PPM | BI PPM | V PPM | CA PPM | P PPM | LA PPM | CR PPM | MS PPM | BA PPM | TI PPM | B PPM | AL PPM | MA PPM | K PPM | W PPM | | | | | |
|---------------|--------|--------|--------|--------|--------|-------|--------|--------|--------|--------|--------|--------|-------|--------|-------|--------|--------|--------|--------|--------|-------|--------|--------|-------|-------|----|------|-----|-----|----|
| S 20+005 300E | 1 | 33 | 6 | 107 | .1 | 13 | 9 | 589 | 2.37 | 2 | 5 | NO | 1 | 18 | 1 | 2 | 2 | 52 | .25 | .048 | 5 | 16 | .51 | 136 | .10 | 2 | 2.12 | .02 | .03 | 1 |
| S 20+005 275E | 1 | 51 | 7 | 94 | .2 | 16 | 10 | 500 | 3.43 | 2 | 5 | NO | 2 | 21 | 1 | 2 | 2 | 74 | .27 | .081 | 5 | 19 | .74 | 101 | .13 | 2 | 2.41 | .02 | .05 | 1 |
| S 20+005 250E | 1 | 57 | 20 | 129 | .1 | 13 | 12 | 3492 | 3.14 | 10 | 5 | NO | 1 | 52 | 1 | 2 | 2 | 74 | .30 | .120 | 4 | 13 | .60 | 312 | .10 | 2 | 2.77 | .02 | .07 | 1 |
| S 20+005 225E | 1 | 46 | 11 | 147 | .3 | 14 | 10 | 674 | 3.41 | 5 | 5 | NO | 2 | 40 | 1 | 2 | 2 | 71 | .28 | .131 | 5 | 15 | .44 | 196 | .11 | 2 | 2.44 | .01 | .05 | 1 |
| S 20+005 200E | 1 | 100 | 16 | 102 | .5 | 21 | 13 | 1079 | 5.61 | 2 | 5 | NO | 2 | 29 | 1 | 2 | 2 | 129 | .17 | .115 | 5 | 19 | .57 | 180 | .12 | 2 | 4.51 | .01 | .05 | 1 |
| S 20+005 175E | 1 | 63 | 20 | 119 | .2 | 14 | 11 | 2407 | 4.17 | 5 | 5 | NO | 1 | 44 | 1 | 2 | 2 | 86 | .29 | .121 | 5 | 18 | .35 | 295 | .11 | 2 | 2.81 | .02 | .05 | 2 |
| S 20+005 150E | 1 | 73 | 17 | 100 | .2 | 18 | 12 | 2104 | 4.15 | 3 | 5 | NO | 1 | 36 | 1 | 2 | 2 | 84 | .25 | .122 | 5 | 18 | .31 | 240 | .13 | 2 | 2.49 | .01 | .05 | 1 |
| S 20+005 125E | 1 | 49 | 13 | 94 | .1 | 12 | 12 | 1295 | 3.12 | 4 | 5 | NO | 1 | 102 | 1 | 2 | 2 | 88 | .30 | .054 | 5 | 13 | .40 | 233 | .11 | 2 | 2.52 | .01 | .05 | 1 |
| S 20+005 100E | 1 | 50 | 20 | 108 | .1 | 11 | 7 | 1070 | 3.24 | 3 | 5 | NO | 1 | 109 | 1 | 2 | 2 | 86 | .31 | .049 | 4 | 12 | .45 | 213 | .10 | 2 | 3.01 | .01 | .05 | 1 |
| S 20+005 075E | 1 | 54 | 13 | 133 | .1 | 12 | 8 | 1284 | 3.14 | 3 | 5 | NO | 2 | 57 | 1 | 2 | 2 | 61 | .33 | .082 | 5 | 15 | .38 | 222 | .10 | 2 | 3.14 | .01 | .06 | 1 |
| S 20+005 050E | 1 | 38 | 6 | 156 | .2 | 11 | 10 | 2212 | 2.73 | 2 | 5 | NO | 2 | 45 | 1 | 2 | 2 | 57 | .30 | .071 | 5 | 14 | .33 | 170 | .11 | 2 | 2.59 | .01 | .05 | 1 |
| S 20+005 025E | 1 | 44 | 7 | 88 | .1 | 17 | 10 | 1145 | 3.14 | 4 | 5 | NO | 2 | 29 | 1 | 2 | 2 | 66 | .25 | .051 | 5 | 15 | .73 | 144 | .15 | 2 | 2.91 | .02 | .07 | 2 |
| S 20+005 000E | 1 | 56 | 6 | 44 | .1 | 14 | 9 | 190 | 3.03 | 3 | 5 | NO | 2 | 18 | 1 | 2 | 2 | 67 | .25 | .025 | 6 | 16 | .48 | 105 | .12 | 2 | 2.72 | .02 | .06 | 1 |
| S 20+005 025M | 1 | 52 | 11 | 105 | .2 | 21 | 12 | 1310 | 3.47 | 2 | 5 | NO | 2 | 19 | 1 | 2 | 2 | 74 | .24 | .083 | 5 | 24 | .63 | 139 | .08 | 2 | 3.01 | .02 | .06 | 1 |
| S 20+005 030M | 1 | 13 | 9 | 88 | .1 | 12 | 6 | 345 | 2.53 | 2 | 6 | NO | 2 | 22 | 1 | 2 | 2 | 61 | .27 | .020 | 6 | 18 | .31 | 59 | .05 | 2 | 1.88 | .01 | .06 | 1 |
| S 20+005 075M | 1 | 13 | 5 | 129 | .3 | 14 | 10 | 887 | 2.12 | 3 | 5 | NO | 2 | 12 | 1 | 2 | 2 | 55 | .16 | .062 | 5 | 24 | .35 | 85 | .01 | 2 | 2.47 | .02 | .05 | 2 |
| S 20+005 100M | 1 | 22 | 5 | 152 | .3 | 22 | 11 | 2322 | 2.61 | 2 | 5 | NO | 2 | 15 | 1 | 2 | 2 | 61 | .19 | .105 | 6 | 29 | .46 | 82 | .02 | 2 | 2.95 | .02 | .06 | 1 |
| S 20+005 125M | 1 | 15 | 10 | 117 | .5 | 15 | 8 | 2349 | 2.32 | 4 | 5 | NO | 2 | 18 | 1 | 2 | 2 | 55 | .24 | .098 | 5 | 17 | .38 | 69 | .06 | 2 | 1.91 | .02 | .05 | 2 |
| S 20+005 150M | 1 | 28 | 7 | 122 | .2 | 13 | 8 | 720 | 3.10 | 2 | 7 | NO | 2 | 20 | 1 | 2 | 2 | 71 | .29 | .044 | 5 | 17 | .44 | 42 | .08 | 2 | 2.31 | .02 | .05 | 2 |
| STD C | 20 | 57 | 34 | 129 | 4.7 | 67 | 27 | 977 | 3.95 | 39 | 21 | 7 | 34 | 47 | 17 | 16 | 19 | 42 | .45 | .097 | 35 | 54 | .88 | 174 | .08 | 40 | 1.74 | .07 | .13 | 13 |

ROSSBACHER LABORATORY LTD.

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

CERTIFICATE OF ANALYSIS

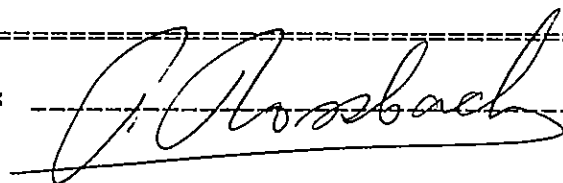
TO : MPH CONSULTING LTD.
#2406-555 W. HASTINGS ST. (BOX 12092)
VANCOUVER B.C.

CERTIFICATE#: 87208.A
INVOICE#: 7539
DATE ENTERED: 87-05-27
FILE NAME: MPH87208.A
PAGE # : 1

PROJECT: V 243
TYPE OF ANALYSIS: GEOCHEMICAL

| PRE FIX | SAMPLE NAME | ORIG. PPB Au | RERUN PPB Au |
|------------|---------------|-----------------|-----------------|
| 5 | L 9+00S 150W | 5 | 5 |
| 5 | L 9+00S 175W | 120 | 5 |
| 5 | L 9+00S 200W | 5 | 5 |
| 5 | L 17+00S 750E | 5 | 5 |
| 3 | L 17+00S 725E | 40 | 50 |
| 5 | L 17+00S 700E | 30 | 270 |
| 5 | L 17+00S 675E | 30 | 30 |
| 5 | L 19+00S 550E | 5 | 5 |
| 5 | L 19+00S 525E | 110 | 5 |
| 5 | L 19+00S 500E | 40 | 5 |
| 5 | L 19+00S 475E | 5 | 70 |
| 5 | L 20+00S 325E | 30 | 5 |
| 5 | L 20+00S 300E | 230 | 5 |
| 5 | L 20+00S 275E | 5 | 5 |
| 5 | L 20+00S 125E | 20 | 20 |
| 5 | L 20+00S 100E | 70 | 60 |
| 5 | L 20+00S 075E | 5 | 10 |

CERTIFIED BY :



ROSSBACHER LABORATORY LTD.

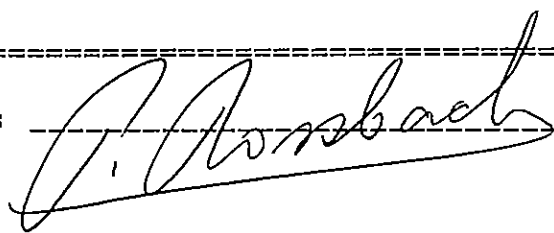
2225 S. SPRINGER AVENUE
 BURNABY, B.C. V5B 3N1
 TEL : (604) 299 - 6910

CERTIFICATE OF ANALYSIS

TO : MPH CONSULTING LTD.
 #2406-555 W.HASTINGS ST. (BOX 12092)
 VANCOUVER B.C.
 PROJECT: V243
 TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 87212
 INVOICE#: 7637
 DATE ENTERED: 87-05-25
 FILE NAME: MPH87212
 PAGE # : 1

| PRE FIX | SAMPLE NAME | PPB Au |
|------------|----------------|-----------|
| S | L9+00S 10+00E | 5 |
| S | 10+25E | 5 |
| S | 10+50E | 30 |
| S | 10+75E | 5 |
| S | 11+00E | 5 |
| S | 11+25E | 5 |
| S | 11+50E | 5 |
| S | 11+75E | 5 |
| S | 12+00E | 5 |
| S | L9+00S 12+25E | 5 |
| S | 12+50E | 5 |
| S | L9+00S 12+75E | 5 |
| S | L10+00S 10+00E | 5 |
| S | 10+25E | 5 |
| S | 10+50E | 5 |
| S | 10+75E | 5 |
| S | 11+00E | 5 |
| S | 11+25E | 5 |
| S | 11+50E | 180 |
| S | L10+00S 11+75E | 5 |
| S | 12+00E | 5 |
| S | 12+25E | 5 |
| S | 12+50E | 5 |
| S | 12+75E | 5 |
| S | L10+00S 13+00E | 5 |
| S | L11+00S 10+25E | 5 |
| S | 10+50E | 5 |
| S | 10+75E | 5 |
| S | 11+00E | 5 |
| S | L11+00S 11+25E | 5 |
| S | 11+50E | 5 |
| S | 11+75E | 5 |
| S | 12+00E | 5 |
| S | 12+25E | 5 |
| S | L11+00S 12+50E | 5 |
| S | L12+00S 10+25E | 5 |
| S | 10+50E | 5 |
| S | 10+75E | 5 |
| S | 11+00E | 5 |
| S | L12+00S 11+25E | 5 |

CERTIFIED BY : 

ROSSBACHER LABORATORY LTD.

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

CERTIFICATE OF ANALYSIS

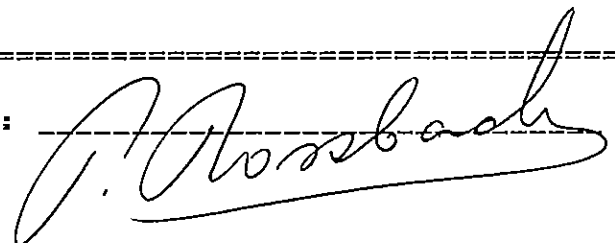
TO : MPH CONSULTING LTD.
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 VANCOUVER B.C.

CERTIFICATE#: 87212
 INVOICE#: 7637
 DATE ENTERED: 87-05-25
 FILE NAME: MPH87212
 PAGE # : 2

PROJECT: V243
 TYPE OF ANALYSIS: GEOCHEMICAL

| PRE FIX | SAMPLE NAME | PPB Au |
|------------|----------------|-----------|
| S | L12+00S 11+50E | S |
| S | L12+00S 0+25W | S |
| S | 0+50W | S |
| S | 0+75W | S |
| S | 1+00W | S |
| S | 1+25W | S |
| S | 1+50W | S |
| S | 1+75W | S |
| S | 2+00W | S |
| S | L12+00S 2+25W | S |
| S | 2+50W | S |
| S | 2+75W | S |
| S | 3+00W | S |
| S | 3+25W | S |
| S | 3+50W | S |
| S | 3+75W | S |
| S | 4+00W | S |
| S | 4+25W | S |
| S | 4+50W | S |
| S | 4+75W | S |
| S | L12+00S 5+00W | S |
| S | L13+00S 10+25E | S |
| S | 10+50E | S |
| S | 10+75E | S |
| S | L13+00S 11+00E | S |
| S | L15+00S 0+25W | S |
| S | 0+50W | S |
| S | 0+75W | S |
| S | 1+00W | S |
| S | L15+00S 1+25W | S |
| S | 1+50W | S |
| S | 1+75W | S |
| S | 2+00W | S |
| S | 2+25W | S |
| S | 2+50W | S |
| S | 2+75W | S |
| S | 3+00W | S |
| S | 3+25W | S |
| S | 3+50W | S |
| S | L15+00S 3+75W | S |

CERTIFIED BY :



ROSSBACHER LABORATORY LTD.

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

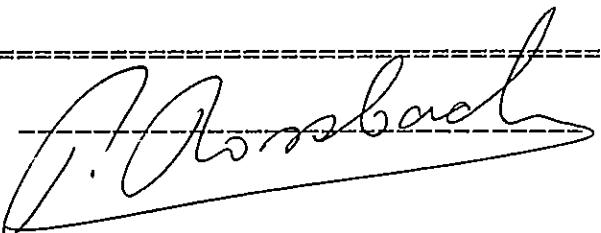
CERTIFICATE OF ANALYSIS

TO : MPH CONSULTING LTD.
#2406-555 W.HASTINGS ST. (BOX 12092)
VANCOUVER B.C.

CERTIFICATE#: 87212
INVOICE#: 7637
DATE ENTERED: 87-05-25
FILE NAME: MFH87212
PAGE # : 3

PROJECT: V243
TYPE OF ANALYSIS: GEOCHEMICAL

| PRE FIX | SAMPLE NAME | PPB Au |
|------------|---------------|-----------|
| S | L15+00S 4+00W | S |
| S | 4+25W | S |
| S | L15+00S 4+50W | S |
| L | M16-1 | S |
| A | 2919 | S |
| A | 2920 | S |
| A | 2921 | S |
| A | 2922 | S |
| A | 2923 | S |
| A | 2924 | S |

CERTIFIED BY : 

GEOCHEMICAL ICP ANALYSIS

500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG.C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
 THIS LEACH IS PARTIAL FOR NH FE CA P LA CR MG BA TI B AND LIMITED FOR NA AND K. AU DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: SOLUTION

DATE RECEIVED: MAY 22 1987 DATE REPORT MAILED: May 25/87 ASSAYER: *D. J. J.* DEAN TOYE, CERTIFIED B.C. ASSAYER

ROSSBACHER LABORATORY PROJECT - CERT#87212 File # 87-1586 Page 1 *ALCJC (1) W N 245*

| SAMPLE | NO PPM | CU PPM | PB PPM | ZN PPM | AS PPM | NI PPM | CO PPM | MN PPM | FE PPM | AS PPM | U PPM | AU PPM | TH PPM | SR PPM | CD PPM | SB PPM | BI PPM | V PPM | CA PPM | P PPM | LA PPM | CR PPM | MG PPM | BA PPM | TI PPM | B PPM | AL PPM | NA PPM | K PPM | |
|------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|--------|--------|--------|--------|--------|--------|-------|--------|-------|--------|--------|--------|--------|--------|-------|--------|--------|-------|----|
| S L9+00S 10+00E | 1 | 13 | 11 | 51 | .1 | 7 | 3 | 255 | 2.01 | 10 | 6 | ND | 1 | 4 | 1 | 2 | 2 | 42 | .10 | .042 | 2 | 12 | .35 | 54 | .06 | 2 | 1.14 | .01 | .01 | 1 |
| S L9+00S 10+25E | 1 | 12 | 6 | 56 | .1 | 8 | 5 | 477 | 2.19 | 5 | 5 | ND | 1 | 4 | 1 | 2 | 2 | 36 | .07 | .019 | 2 | 14 | .39 | 67 | .05 | 2 | 1.32 | .01 | .01 | 1 |
| S L9+00S 10+50E | 1 | 9 | 12 | 44 | .1 | 4 | 2 | 821 | 2.13 | 6 | 4 | ND | 1 | 3 | 1 | 2 | 2 | 36 | .07 | .048 | 2 | 9 | .15 | 59 | .05 | 2 | .84 | .01 | .01 | 2 |
| S L9+00S 10+75E | 1 | 47 | 12 | 84 | .1 | 12 | 7 | 1140 | 4.46 | 12 | 5 | ND | 2 | 5 | 1 | 2 | 2 | 69 | .08 | .288 | 3 | 23 | .39 | 98 | .07 | 2 | 2.91 | .01 | .03 | 1 |
| S L9+00S 11+00E | 2 | 104 | 12 | 90 | .1 | 29 | 10 | 459 | 4.56 | 18 | 5 | ND | 3 | 5 | 1 | 2 | 2 | 77 | .07 | .047 | 6 | 30 | .99 | 114 | .20 | 2 | 4.28 | .02 | .04 | 1 |
| S L9+00S 11+25E | 1 | 55 | 6 | 123 | .1 | 29 | 21 | 867 | 4.23 | 15 | 5 | ND | 2 | 8 | 1 | 2 | 2 | 64 | .13 | .046 | 4 | 25 | .65 | 122 | .14 | 2 | 2.54 | .02 | .03 | 1 |
| S L9+00S 11+50E | 1 | 56 | 6 | 98 | .2 | 26 | 14 | 752 | 4.54 | 11 | 5 | ND | 2 | 7 | 1 | 2 | 3 | 75 | .10 | .049 | 4 | 28 | .74 | 124 | .15 | 2 | 3.08 | .01 | .03 | 1 |
| S L9+00S 11+75E | 1 | 39 | 9 | 75 | .2 | 19 | 8 | 497 | 3.55 | 12 | 5 | ND | 1 | 8 | 1 | 2 | 2 | 62 | .13 | .041 | 2 | 22 | .58 | 89 | .15 | 2 | 2.77 | .01 | .03 | 1 |
| S L9+00S 12+00E | 1 | 59 | 5 | 75 | .2 | 21 | 10 | 378 | 3.86 | 13 | 5 | ND | 2 | 6 | 1 | 2 | 2 | 64 | .08 | .026 | 2 | 26 | .71 | 93 | .16 | 2 | 3.38 | .02 | .03 | 1 |
| S L9+00S 12+25E | 1 | 15 | 7 | 65 | .5 | 7 | 5 | 386 | 2.46 | 8 | 5 | ND | 1 | 6 | 1 | 2 | 2 | 41 | .09 | .042 | 2 | 14 | .51 | 49 | .08 | 3 | 1.41 | .01 | .01 | 1 |
| S L9+00S 12+50E | 1 | 51 | 5 | 82 | .2 | 18 | 10 | 339 | 3.61 | 7 | 5 | ND | 1 | 7 | 1 | 2 | 3 | 56 | .09 | .073 | 2 | 18 | .53 | 57 | .13 | 2 | 2.99 | .02 | .03 | 1 |
| S L9+00S 12+75E | 1 | 72 | 2 | 78 | .3 | 21 | 11 | 478 | 4.01 | 13 | 5 | ND | 2 | 7 | 1 | 3 | 2 | 66 | .07 | .044 | 4 | 26 | .79 | 82 | .16 | 2 | 3.11 | .02 | .03 | 1 |
| S L10+00S 10+00E | 1 | 14 | 4 | 48 | .2 | 8 | 4 | 279 | 2.59 | 6 | 5 | ND | 1 | 4 | 1 | 3 | 2 | 49 | .06 | .026 | 2 | 13 | .38 | 58 | .07 | 2 | 1.28 | .01 | .01 | 2 |
| S L10+00S 10+25E | 1 | 32 | 9 | 76 | .2 | 13 | 7 | 555 | 2.95 | 8 | 5 | ND | 1 | 5 | 1 | 2 | 2 | 53 | .11 | .054 | 2 | 14 | .50 | 79 | .10 | 2 | 1.85 | .01 | .02 | 1 |
| S L10+00S 10+50E | 1 | 8 | 5 | 48 | .1 | 5 | 3 | 200 | 1.77 | 2 | 5 | ND | 1 | 5 | 1 | 2 | 2 | 36 | .12 | .018 | 2 | 8 | .27 | 54 | .09 | 2 | .97 | .01 | .01 | 2 |
| S L10+00S 10+75E | 1 | 59 | 10 | 101 | .2 | 24 | 10 | 1057 | 4.15 | 13 | 5 | ND | 2 | 7 | 1 | 2 | 2 | 73 | .09 | .080 | 2 | 32 | .75 | 101 | .18 | 2 | 4.47 | .02 | .03 | 1 |
| S L10+00S 11+00E | 1 | 16 | 7 | 81 | .1 | 8 | 5 | 1057 | 2.60 | 5 | 5 | ND | 1 | 7 | 1 | 2 | 2 | 44 | .12 | .108 | 3 | 12 | .26 | 94 | .06 | 2 | 1.48 | .01 | .02 | 1 |
| S L10+00S 11+25E | 2 | 54 | 7 | 84 | .1 | 17 | 11 | 1758 | 3.89 | 8 | 5 | ND | 1 | 6 | 1 | 2 | 2 | 74 | .08 | .042 | 4 | 22 | .45 | 128 | .12 | 2 | 2.42 | .01 | .02 | 1 |
| S L10+00S 11+50E | 2 | 36 | 4 | 75 | .1 | 17 | 12 | 910 | 3.90 | 7 | 5 | ND | 1 | 6 | 1 | 2 | 2 | 69 | .11 | .017 | 4 | 18 | .47 | 114 | .13 | 2 | 2.16 | .01 | .02 | 1 |
| S L10+00S 11+75E | 3 | 46 | 6 | 88 | .2 | 21 | 12 | 564 | 4.05 | 13 | 5 | ND | 1 | 14 | 1 | 2 | 2 | 71 | .38 | .037 | 3 | 22 | .56 | 109 | .13 | 2 | 2.60 | .01 | .03 | 1 |
| S L10+00S 12+00E | 1 | 18 | 5 | 77 | .1 | 6 | 5 | 710 | 2.27 | 6 | 5 | ND | 1 | 6 | 1 | 2 | 2 | 34 | .09 | .080 | 2 | 10 | .22 | 100 | .05 | 2 | 1.45 | .01 | .01 | 2 |
| S L10+00S 12+25E | 1 | 16 | 11 | 94 | .4 | 11 | 6 | 1505 | 2.97 | 7 | 5 | ND | 1 | 9 | 1 | 2 | 3 | 43 | .13 | .110 | 2 | 20 | .39 | 114 | .08 | 2 | 1.98 | .01 | .03 | 1 |
| S L10+00S 12+50E | 3 | 52 | 10 | 107 | .3 | 19 | 11 | 725 | 4.18 | 13 | 5 | ND | 2 | 10 | 1 | 2 | 2 | 60 | .15 | .080 | 2 | 27 | .70 | 84 | .13 | 2 | 3.45 | .01 | .01 | 2 |
| S L10+00S 12+75E | 2 | 53 | 10 | 99 | .3 | 16 | 10 | 885 | 3.49 | 15 | 5 | ND | 1 | 22 | 1 | 2 | 2 | 54 | .40 | .097 | 3 | 20 | .58 | 106 | .13 | 2 | 2.48 | .01 | .03 | 1 |
| S L10+00S 13+00E | 2 | 70 | 5 | 83 | .1 | 22 | 11 | 397 | 4.08 | 13 | 5 | ND | 2 | 9 | 1 | 2 | 2 | 60 | .11 | .060 | 4 | 22 | .74 | 89 | .14 | 2 | 3.27 | .01 | .02 | 1 |
| S L11+00S 10+25E | 1 | 24 | 4 | 61 | .1 | 12 | 5 | 282 | 3.30 | 3 | 5 | ND | 1 | 7 | 1 | 2 | 2 | 62 | .13 | .019 | 3 | 18 | .57 | 64 | .13 | 2 | 1.96 | .01 | .02 | 1 |
| S L11+00S 10+50E | 1 | 49 | 9 | 84 | .1 | 18 | 8 | 492 | 3.60 | 10 | 5 | ND | 1 | 9 | 1 | 2 | 2 | 64 | .13 | .056 | 3 | 22 | .66 | 95 | .16 | 2 | 2.79 | .02 | .02 | 1 |
| S L11+00S 10+75E | 1 | 76 | 6 | 96 | .1 | 27 | 11 | 459 | 4.34 | 15 | 5 | ND | 1 | 8 | 1 | 2 | 2 | 78 | .10 | .057 | 4 | 31 | .90 | 119 | .22 | 2 | 4.28 | .02 | .03 | 1 |
| S L11+00S 11+00E | 1 | 42 | 6 | 93 | .1 | 17 | 10 | 875 | 3.46 | 9 | 5 | ND | 1 | 9 | 1 | 2 | 2 | 62 | .14 | .071 | 3 | 21 | .58 | 108 | .13 | 2 | 2.85 | .02 | .02 | 1 |
| S L11+00S 11+25E | 2 | 47 | 5 | 83 | .1 | 19 | 11 | 517 | 3.67 | 8 | 5 | ND | 1 | 10 | 1 | 2 | 2 | 67 | .14 | .041 | 4 | 25 | .61 | 97 | .14 | 2 | 2.83 | .02 | .04 | 1 |
| STD C | 21 | 59 | 36 | 133 | 6.9 | 68 | 28 | 993 | 3.99 | 40 | 15 | 7 | 35 | 48 | 17 | 16 | 22 | 64 | .48 | .099 | 36 | 57 | .88 | 182 | .08 | 36 | 1.72 | .07 | .14 | 13 |

ROSSBACHER LABORATORY PROJECT - CERT#B7212 FILE # 87-1386

| SAMPLE | NO | PPH | CU | PB | ZN | AG | NI | CO | MN | FE | AS | U | AU | TH | SR | CD | SB | BI | V | CA | P | LA | CR | MG | BA | TI | B | AL | MA | K | M |
|------------------|----|-----|----|-----|-----|----|----|------|------|----|----|----|----|----|----|----|----|----|----|-----|------|----|----|------|-----|-----|----|------|-----|-----|----|
| S L11+005 11+50E | 2 | 16 | 4 | 44 | .1 | 10 | 4 | 307 | 3.30 | 7 | 5 | NO | 1 | 1 | 8 | 1 | 2 | 2 | 44 | .18 | .019 | 3 | 13 | .40 | 54 | .06 | 2 | 1.77 | .01 | .03 | 1 |
| S L11+005 11+75E | 2 | 40 | 14 | 84 | .1 | 24 | 12 | 420 | 4.70 | 11 | 5 | NO | 1 | 23 | 1 | 2 | 2 | 2 | 78 | .32 | .049 | 4 | 23 | .58 | 173 | .11 | 2 | 3.23 | .02 | .04 | 1 |
| S L11+005 12+00E | 1 | 9 | 9 | 41 | .1 | 11 | 5 | 415 | 2.64 | 3 | 5 | NO | 1 | 10 | 1 | 2 | 2 | 2 | 47 | .18 | .023 | 2 | 14 | .28 | 90 | .07 | 2 | 1.09 | .01 | .03 | 1 |
| S L11+005 12+25E | 1 | 18 | 7 | 120 | .1 | 12 | 8 | 843 | 3.14 | 3 | 5 | NO | 1 | 10 | 1 | 2 | 2 | 2 | 45 | .19 | .043 | 2 | 17 | .48 | 130 | .09 | 2 | 1.92 | .01 | .02 | 1 |
| S L11+005 12+50E | 4 | 70 | 17 | 102 | .4 | 23 | 33 | 2440 | 4.23 | 12 | 5 | NO | 1 | 25 | 1 | 2 | 2 | 2 | 59 | .56 | .044 | 19 | 26 | .79 | 146 | .13 | 2 | 3.09 | .01 | .03 | 1 |
| S L12+005 10+25E | 1 | 52 | 15 | 100 | .1 | 21 | 10 | 1089 | 3.94 | 3 | 5 | NO | 1 | 12 | 1 | 2 | 2 | 2 | 70 | .22 | .046 | 3 | 22 | .85 | 126 | .18 | 2 | 2.54 | .02 | .03 | 1 |
| S L12+005 10+50E | 1 | 89 | 5 | 93 | .2 | 29 | 13 | 423 | 4.48 | 9 | 5 | NO | 3 | 13 | 1 | 2 | 2 | 2 | 84 | .19 | .070 | 5 | 31 | 1.15 | 135 | .25 | 2 | 3.32 | .02 | .04 | 2 |
| S L12+005 10+75E | 1 | 79 | 13 | 79 | .1 | 30 | 12 | 470 | 4.43 | 9 | 5 | NO | 2 | 12 | 1 | 2 | 2 | 2 | 80 | .13 | .030 | 5 | 33 | 1.07 | 142 | .25 | 2 | 3.57 | .02 | .05 | 1 |
| S L12+005 11+00E | 1 | 48 | 4 | 78 | .1 | 27 | 12 | 525 | 4.14 | 7 | 5 | NO | 2 | 13 | 1 | 2 | 2 | 2 | 74 | .16 | .032 | 5 | 26 | .99 | 114 | .25 | 2 | 2.91 | .02 | .04 | 1 |
| S L12+005 11+25E | 1 | 47 | 8 | 99 | .1 | 20 | 11 | 574 | 3.72 | 5 | 5 | NO | 2 | 14 | 1 | 2 | 2 | 2 | 65 | .18 | .102 | 4 | 24 | .61 | 76 | .17 | 2 | 3.13 | .02 | .03 | 1 |
| S L12+005 11+50E | 1 | 74 | 9 | 96 | .4 | 28 | 13 | 640 | 4.53 | 6 | 5 | NO | 3 | 12 | 1 | 2 | 2 | 2 | 75 | .15 | .050 | 6 | 33 | .97 | 97 | .17 | 2 | 3.58 | .02 | .04 | 1 |
| S L12+005 0+25M | 1 | 52 | 8 | 71 | .1 | 14 | 8 | 1359 | 3.29 | 4 | 5 | NO | 2 | 10 | 1 | 2 | 2 | 2 | 71 | .16 | .120 | 4 | 14 | .57 | 56 | .13 | 2 | 2.67 | .02 | .04 | 1 |
| S L12+005 0+50M | 1 | 53 | 10 | 79 | .2 | 16 | 10 | 1333 | 3.38 | 8 | 5 | NO | 2 | 12 | 1 | 2 | 2 | 2 | 76 | .17 | .054 | 4 | 24 | .59 | 74 | .15 | 2 | 3.16 | .02 | .07 | 1 |
| S L12+005 0+75M | 1 | 57 | 7 | 81 | .1 | 20 | 12 | 751 | 3.77 | 4 | 5 | NO | 2 | 11 | 1 | 2 | 2 | 2 | 89 | .17 | .057 | 5 | 30 | .67 | 112 | .19 | 2 | 3.67 | .02 | .04 | 1 |
| S L12+005 1+00M | 1 | 32 | 6 | 75 | .1 | 14 | 9 | 611 | 3.09 | 2 | 5 | NO | 2 | 14 | 1 | 2 | 2 | 2 | 67 | .21 | .031 | 4 | 14 | .57 | 78 | .14 | 2 | 2.54 | .02 | .04 | 1 |
| S L12+005 1+25M | 1 | 67 | 5 | 91 | .1 | 21 | 11 | 717 | 4.11 | 4 | 5 | NO | 2 | 11 | 1 | 2 | 2 | 2 | 94 | .15 | .030 | 7 | 24 | .85 | 161 | .19 | 2 | 4.05 | .02 | .07 | 2 |
| S L12+005 1+50M | 1 | 49 | 10 | 90 | .1 | 18 | 12 | 1498 | 3.80 | 5 | 5 | NO | 2 | 11 | 1 | 2 | 2 | 2 | 83 | .15 | .050 | 5 | 20 | .59 | 129 | .15 | 2 | 3.62 | .01 | .07 | 1 |
| S L12+005 1+75M | 1 | 54 | 10 | 91 | .1 | 20 | 12 | 1179 | 4.00 | 9 | 5 | NO | 2 | 9 | 1 | 2 | 2 | 2 | 85 | .13 | .047 | 4 | 22 | .54 | 117 | .13 | 2 | 3.44 | .01 | .04 | 2 |
| S L12+005 2+00M | 1 | 76 | 11 | 88 | .1 | 23 | 12 | 904 | 4.64 | 3 | 5 | NO | 3 | 7 | 1 | 2 | 2 | 2 | 98 | .09 | .093 | 4 | 28 | .61 | 118 | .13 | 2 | 4.66 | .02 | .04 | 1 |
| S L12+005 2+25M | 1 | 52 | 8 | 85 | .1 | 16 | 10 | 584 | 3.49 | 4 | 5 | NO | 2 | 10 | 1 | 2 | 2 | 2 | 72 | .12 | .048 | 4 | 19 | .43 | 115 | .08 | 2 | 3.62 | .01 | .04 | 1 |
| S L12+005 2+50M | 1 | 45 | 2 | 101 | .1 | 16 | 13 | 1084 | 3.20 | 3 | 5 | NO | 2 | 16 | 1 | 2 | 2 | 2 | 69 | .19 | .049 | 7 | 16 | .62 | 153 | .11 | 2 | 3.03 | .01 | .07 | 1 |
| S L12+005 2+75M | 1 | 50 | 6 | 105 | .1 | 14 | 12 | 3438 | 3.50 | 2 | 5 | NO | 2 | 14 | 1 | 2 | 2 | 2 | 70 | .18 | .126 | 8 | 14 | .33 | 182 | .10 | 2 | 2.78 | .02 | .09 | 1 |
| S L12+005 3+00M | 1 | 61 | 5 | 71 | .1 | 13 | 16 | 1047 | 4.46 | 6 | 5 | NO | 4 | 53 | 1 | 2 | 2 | 2 | 95 | .76 | .044 | 10 | 15 | 1.01 | 140 | .16 | 2 | 2.57 | .04 | .14 | 2 |
| S L12+005 3+25M | 1 | 77 | 7 | 95 | .1 | 21 | 14 | 1489 | 4.17 | 11 | 5 | NO | 3 | 19 | 1 | 2 | 2 | 2 | 91 | .29 | .076 | 5 | 22 | .83 | 151 | .16 | 2 | 3.28 | .02 | .11 | 1 |
| S L12+005 3+50M | 1 | 63 | 9 | 83 | .1 | 18 | 12 | 945 | 3.83 | 2 | 5 | NO | 3 | 18 | 1 | 2 | 2 | 2 | 86 | .23 | .051 | 8 | 19 | .76 | 160 | .14 | 2 | 3.27 | .02 | .09 | 1 |
| S L12+005 3+75M | 1 | 59 | 12 | 76 | .1 | 18 | 13 | 1674 | 3.85 | 5 | 5 | NO | 2 | 16 | 1 | 2 | 2 | 2 | 81 | .21 | .053 | 4 | 18 | .75 | 141 | .13 | 2 | 2.85 | .02 | .06 | 1 |
| S L12+005 4+00M | 1 | 25 | 8 | 66 | .1 | 11 | 9 | 1413 | 3.02 | 4 | 5 | NO | 2 | 14 | 1 | 2 | 2 | 2 | 63 | .21 | .088 | 4 | 15 | .46 | 92 | .09 | 2 | 2.11 | .02 | .03 | 1 |
| S L12+005 4+25M | 1 | 8 | 6 | 44 | .1 | 4 | 6 | 1819 | 1.64 | 2 | 5 | NO | 1 | 12 | 1 | 2 | 2 | 2 | 38 | .19 | .026 | 4 | 6 | .19 | 72 | .07 | 2 | .94 | .01 | .03 | 1 |
| S L12+005 4+50M | 1 | 28 | 12 | 81 | .2 | 16 | 10 | 1655 | 3.79 | 2 | 5 | NO | 2 | 13 | 1 | 2 | 2 | 2 | 76 | .20 | .127 | 3 | 18 | .48 | 104 | .11 | 2 | 3.87 | .02 | .05 | 1 |
| S L12+005 4+75M | 1 | 15 | 9 | 75 | .1 | 9 | 8 | 1251 | 2.38 | 2 | 5 | NO | 1 | 11 | 1 | 2 | 2 | 2 | 48 | .18 | .055 | 3 | 10 | .31 | 91 | .07 | 2 | 1.75 | .01 | .02 | 1 |
| STD C | 21 | 61 | 37 | 136 | 7.1 | 65 | 28 | 1011 | 3.97 | 43 | 15 | 7 | 35 | 49 | 18 | 16 | 19 | 19 | 65 | .50 | .103 | 37 | 60 | .92 | 185 | .08 | 32 | 1.76 | .08 | .14 | 13 |

ROSSBACHER LABORATORY PROJECT - CERT#87212 FILE # 87-1386

| SAMPLE# | NO | CU | PB | ZH | AG | NI | CO | NK | FE | AS | U | AU | TH | SR | CD | SB | BI | V | GA | P | LA | CR | HG | BA | TI | B | AL | MA | K | W |
|------------------|-----|-----|-----|-----|-----|-----|-----|-------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|-----|-----|------|-----|-----|-----|------|-----|-----|-----|
| | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | I | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | PPH | I | I | PPH | PPH | I | I | I | PPH | I | I | I | PPH |
| S L12+005 5+00W | 1 | 50 | 8 | 87 | .1 | 17 | 12 | 910 | 3.94 | 4 | 5 | ND | 3 | 18 | 1 | 2 | 2 | 89 | .23 | .062 | 6 | 20 | .64 | 104 | .15 | 2 | 3.52 | .02 | .06 | 1 |
| S L13+005 10+25E | 1 | 9 | 8 | 59 | .1 | 5 | 4 | 481 | 1.86 | 2 | 5 | ND | 1 | 8 | 1 | 2 | 2 | 44 | .14 | .022 | 4 | 9 | .24 | 104 | .06 | 2 | 1.19 | .01 | .03 | 1 |
| S L13+005 10+50E | 1 | 73 | 10 | 104 | .1 | 21 | 12 | 599 | 4.20 | 7 | 5 | ND | 2 | 10 | 1 | 2 | 2 | 81 | .23 | .065 | 4 | 23 | .77 | 172 | .17 | 2 | 3.46 | .02 | .04 | 1 |
| S L13+005 10+75E | 1 | 26 | 15 | 94 | .1 | 12 | 7 | 1614 | 3.51 | 5 | 5 | ND | 1 | 9 | 1 | 2 | 2 | 69 | .21 | .035 | 3 | 17 | .60 | 198 | .12 | 2 | 1.88 | .01 | .03 | 1 |
| S L13+005 11+00E | 1 | 25 | 10 | 77 | .1 | 10 | 6 | 537 | 2.96 | 4 | 5 | ND | 1 | 11 | 1 | 2 | 2 | 60 | .24 | .039 | 3 | 14 | .41 | 98 | .13 | 2 | 1.59 | .01 | .03 | 1 |
| S L15+005 0+25W | 1 | 32 | 7 | 83 | .1 | 11 | 7 | 1780 | 3.21 | 3 | 5 | ND | 1 | 7 | 1 | 2 | 2 | 63 | .12 | .097 | 3 | 14 | .41 | 75 | .11 | 2 | 2.55 | .01 | .02 | 1 |
| S L15+005 0+50W | 1 | 38 | 16 | 83 | .1 | 15 | 8 | 1345 | 3.21 | 4 | 5 | ND | 2 | 8 | 1 | 2 | 2 | 64 | .12 | .199 | 3 | 17 | .50 | 76 | .10 | 2 | 2.49 | .01 | .04 | 1 |
| S L15+005 0+75W | 1 | 19 | 3 | 114 | .2 | 12 | 9 | 1360 | 2.64 | 5 | 5 | ND | 1 | 7 | 1 | 2 | 2 | 48 | .13 | .153 | 4 | 12 | .45 | 97 | .07 | 2 | 1.84 | .01 | .03 | 1 |
| S L15+005 1+00W | 1 | 24 | 7 | 136 | .2 | 15 | 9 | 822 | 2.98 | 2 | 5 | ND | 2 | 9 | 1 | 2 | 2 | 50 | .16 | .193 | 4 | 14 | .57 | 132 | .07 | 2 | 2.11 | .01 | .07 | 1 |
| S L15+005 1+25W | 1 | 14 | 3 | 108 | .2 | 9 | 8 | 1582 | 1.90 | 2 | 5 | ND | 1 | 15 | 1 | 2 | 2 | 39 | .22 | .040 | 4 | 11 | .37 | 118 | .09 | 2 | 1.34 | .01 | .06 | 1 |
| S L15+005 1+50W | 1 | 32 | 11 | 97 | .1 | 15 | 10 | 3392 | 3.02 | 4 | 5 | ND | 1 | 19 | 1 | 2 | 2 | 64 | .27 | .081 | 4 | 16 | .68 | 121 | .11 | 2 | 2.08 | .02 | .06 | 1 |
| S L15+005 1+75W | 1 | 49 | 7 | 109 | .1 | 19 | 11 | 1460 | 3.55 | 2 | 5 | ND | 1 | 13 | 1 | 2 | 2 | 71 | .18 | .069 | 6 | 23 | .75 | 163 | .15 | 2 | 2.93 | .02 | .06 | 1 |
| S L15+005 2+00W | 1 | 90 | 8 | 88 | .1 | 18 | 12 | 329 | 4.61 | 9 | 5 | ND | 2 | 10 | 1 | 2 | 2 | 114 | .11 | .039 | 5 | 21 | 1.00 | 372 | .20 | 2 | 3.90 | .02 | .16 | 1 |
| S L15+005 2+25W | 1 | 57 | 7 | 88 | .1 | 20 | 12 | 1742 | 3.63 | 2 | 5 | ND | 2 | 9 | 1 | 2 | 2 | 72 | .12 | .062 | 6 | 22 | .68 | 137 | .13 | 2 | 3.18 | .02 | .06 | 1 |
| S L15+005 2+50W | 1 | 14 | 25 | 114 | .1 | 8 | 7 | 6495 | 2.11 | 6 | 5 | ND | 1 | 12 | 1 | 2 | 2 | 40 | .19 | .114 | 5 | 9 | .22 | 165 | .06 | 2 | 1.33 | .01 | .04 | 1 |
| S L15+005 2+75W | 1 | 33 | 16 | 83 | .1 | 11 | 8 | 1824 | 2.83 | 2 | 5 | ND | 1 | 9 | 1 | 2 | 2 | 59 | .15 | .081 | 3 | 13 | .40 | 91 | .09 | 2 | 2.06 | .01 | .03 | 1 |
| S L15+005 3+00W | 1 | 69 | 8 | 57 | .1 | 14 | 10 | 702 | 3.49 | 8 | 5 | ND | 2 | 8 | 1 | 2 | 2 | 78 | .15 | .071 | 4 | 14 | .66 | 84 | .13 | 2 | 2.39 | .02 | .03 | 1 |
| S L15+005 3+25W | 1 | 20 | 8 | 77 | .1 | 9 | 9 | 2122 | 2.38 | 2 | 5 | ND | 1 | 8 | 1 | 2 | 2 | 45 | .15 | .143 | 2 | 12 | .35 | 80 | .05 | 2 | 1.58 | .01 | .02 | 1 |
| S L15+005 3+50W | 1 | 12 | 6 | 63 | .1 | 8 | 6 | 914 | 1.77 | 3 | 5 | ND | 1 | 8 | 1 | 2 | 2 | 34 | .16 | .048 | 2 | 11 | .25 | 45 | .05 | 2 | 1.22 | .01 | .02 | 1 |
| S L15+005 3+75W | 1 | 11 | 8 | 66 | .1 | 7 | 8 | 1859 | 1.92 | 5 | 5 | ND | 1 | 7 | 1 | 2 | 2 | 37 | .13 | .045 | 3 | 9 | .24 | 55 | .05 | 2 | 1.26 | .01 | .01 | 1 |
| S L15+005 4+00W | 1 | 22 | 11 | 71 | .2 | 15 | 8 | 1205 | 2.24 | 3 | 5 | ND | 2 | 9 | 1 | 2 | 2 | 47 | .12 | .059 | 2 | 18 | .33 | 71 | .06 | 2 | 1.91 | .01 | .03 | 1 |
| S L15+005 4+25W | 1 | 24 | 9 | 73 | .1 | 10 | 8 | 1540 | 2.44 | 4 | 5 | ND | 1 | 6 | 1 | 2 | 2 | 51 | .11 | .093 | 2 | 12 | .48 | 62 | .04 | 2 | 1.57 | .01 | .02 | 1 |
| S L15+005 4+50W | 1 | 36 | 12 | 97 | .2 | 17 | 9 | 1415 | 2.94 | 2 | 5 | ND | 1 | 7 | 1 | 2 | 2 | 57 | .11 | .070 | 4 | 13 | .54 | 98 | .07 | 2 | 2.16 | .01 | .04 | 1 |
| L M14-1 | 1 | 69 | 10 | 91 | .1 | 28 | 14 | 936 | 3.88 | 5 | 5 | ND | 2 | 20 | 1 | 2 | 2 | 73 | .51 | .051 | 4 | 267 | .81 | 167 | .10 | 2 | 2.21 | .03 | .08 | 3 |
| A 2919 | 6 | 9 | 8 | 179 | .1 | 102 | 2 | 84777 | .64 | 4 | 5 | ND | 1 | 16 | 1 | 2 | 2 | 7 | .48 | .016 | 2 | 76 | .13 | 60 | .01 | 4 | .15 | .01 | .02 | 2 |
| A 2920 | 4 | 5 | 7 | 84 | .1 | 98 | 2 | 39821 | .40 | 2 | 5 | ND | 1 | 15 | 1 | 2 | 2 | 10 | .35 | .013 | 2 | 110 | .05 | 91 | .01 | 2 | .08 | .01 | .02 | 1 |
| A 2921 | 2 | 235 | 4 | 47 | .1 | 9 | 9 | 1040 | 4.26 | 2 | 5 | ND | 1 | 11 | 1 | 2 | 2 | 91 | .34 | .054 | 2 | 68 | .56 | 73 | .14 | 2 | 1.09 | .06 | .20 | 1 |
| A 2922 | 1 | 5 | 4 | 71 | .1 | 106 | 12 | 3660 | 2.35 | 2 | 5 | ND | 1 | 5 | 1 | 2 | 2 | 32 | .43 | .065 | 2 | 115 | 1.04 | 39 | .04 | 2 | 1.05 | .03 | .02 | 1 |
| A 2923 | 3 | 31 | 6 | 17 | .1 | 11 | 3 | 237 | 1.61 | 7 | 5 | ND | 1 | 2 | 1 | 2 | 2 | 11 | .02 | .009 | 2 | 192 | .12 | 81 | .01 | 2 | .23 | .01 | .08 | 1 |
| A 2924 | 1 | 44 | 7 | 74 | .1 | 10 | 11 | 987 | 4.02 | 4 | 7 | ND | 2 | 16 | 1 | 2 | 2 | 116 | 3.49 | .073 | 2 | 44 | .99 | 8 | .07 | 4 | 3.52 | .04 | .01 | 1 |
| STD C | 19 | 58 | 36 | 131 | 6.9 | 67 | 27 | 968 | 3.97 | 38 | 14 | 7 | 34 | 47 | 17 | 16 | 19 | 62 | .45 | .098 | 35 | 55 | .91 | 177 | .08 | 36 | 1.69 | .08 | .12 | 13 |

ROSSBACHER LABORATORY LTD.

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

CERTIFICATE OF ANALYSIS

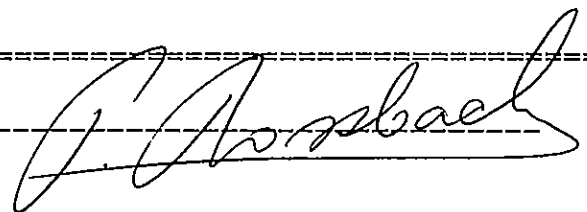
TO : MPH CONSULTING LTD.
#2406-555 W.HASTINGS ST. (BOX 12092)
VANCOUVER B.C.

CERTIFICATE#: 87212.A
INVOICE#: 7640
DATE ENTERED: 87-05-27
FILE NAME: MPH87212.A
PAGE # : 1

PROJECT: V 243
TYPE OF ANALYSIS: GEOCHEMICAL

| PRE FIX | SAMPLE NAME | ORIG. PPB Au | RERUN PPB Au |
|------------|-----------------|-----------------|-----------------|
| S | L 10+00S 11+25E | 5 | 5 |
| S | L 10+00S 11+50E | 180 | 5 |
| S | L 10+00S 11+75E | 5 | 5 |

CERTIFIED BY :



ROSSBACHER LABORATORY LTD.

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

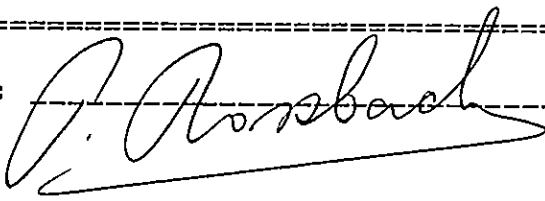
CERTIFICATE OF ANALYSIS

TO : MPH CONSULTING LTD.
#2406-555 W.HASTINGS ST. (BOX 12092)
VANCOUVER B.C.

CERTIFICATE#: 87217
INVOICE#: 7635
DATE ENTERED: 87-05-25
FILE NAME: MPH87217
PAGE # : 1

PROJECT: V243
TYPE OF ANALYSIS: ASSAY

| PRE FIX | SAMPLE NAME | % Mn |
|------------|-------------|---------|
| A | 2914 | 15.30 |
| A | 2918 | 15.62 |
| A | 2919 | 25.60 |
| A | 2920 | 22.84 |

CERTIFIED BY : 

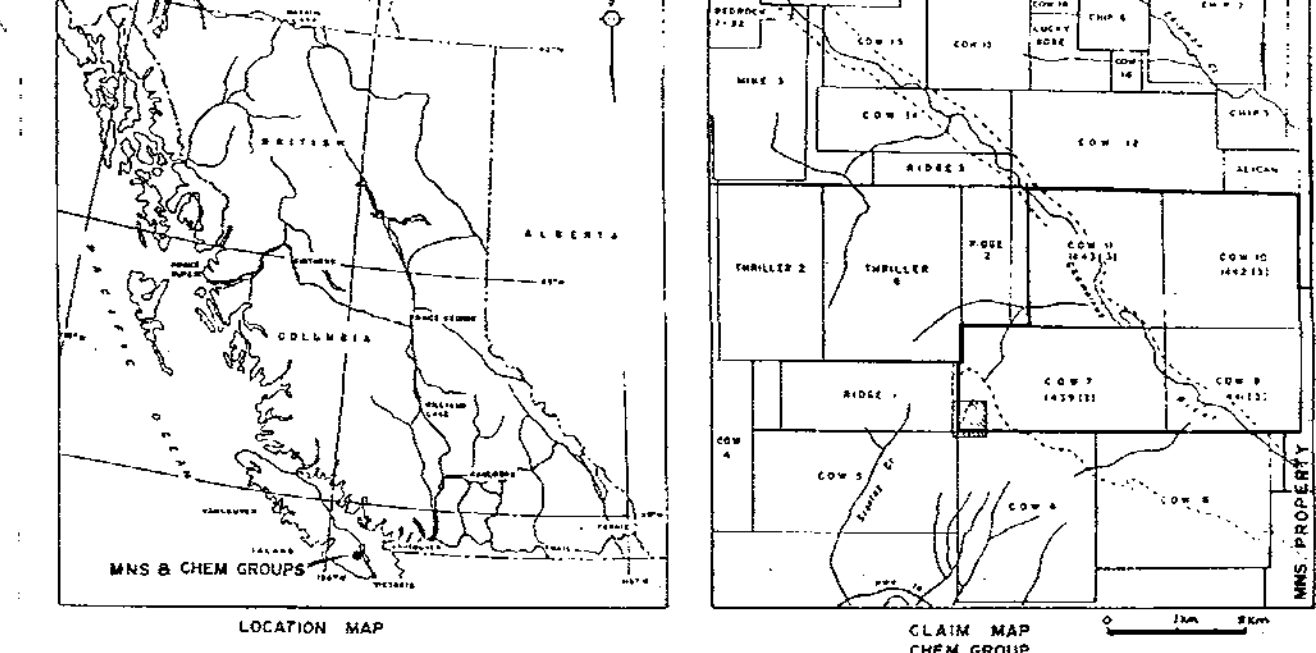


APPENDIX IV
ANALYTICAL TECHNIQUES AND LABORATORIES USED

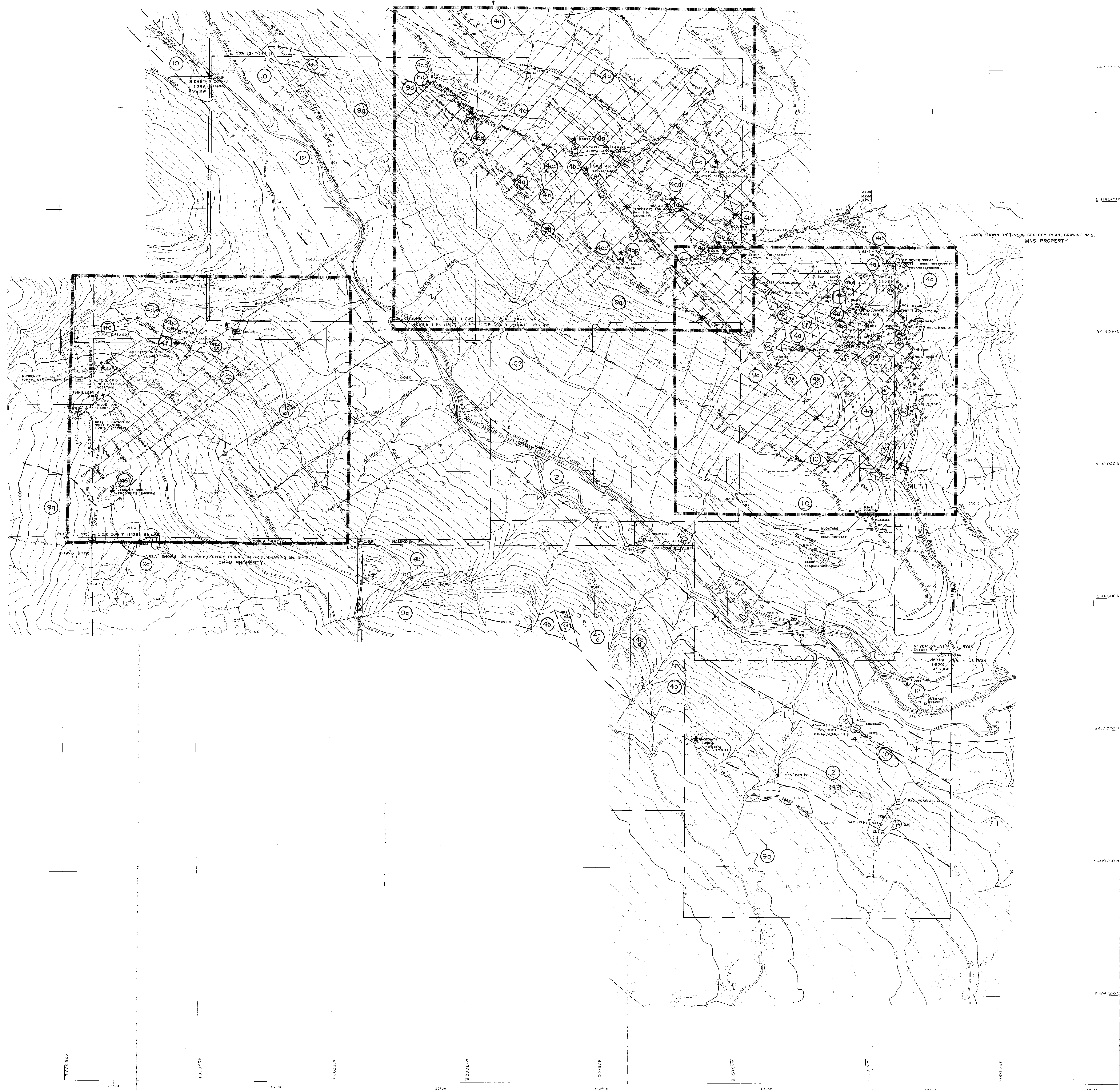


APPENDIX V
CONVERSION FACTORS FOR METRIC UNITS





AREA SHOWN ON 1:2500 GEOLOGY PLAN - A GRID, DRAWING No. A-2
CHEM PROPERTY



- LEGEND**
- CECROIC**
- QUATERNARY**
- 11 Unconsolidated sediments: glacial till, silt, and alluvium
- MESOZOIC**
- CRETACEOUS**
- 10 MANASSAS GROUP: conglomerate, sandstone, siltstone, shale, minor thin lignite interbeds
- JURASSIC**
- 9 ISLAND INTRUSIONS: 9a mafic dykes, 9b granite, 9c feldspar porphyry, 9d quartz diorite to quartzite
- TRASSIC**
- 8 Chambliss Formation: 8a granite, 8b gneiss and diorite porphyry
- PALEOZOIC**
- UPPER SILURIAN TO LOWER PERMIAN**
- SICKLER GROUP**
- 4a Chemung River Formation (formerly mapped as Mays and/or Salsbery and Formations): 4a argillite, shales & cherty porphyroblasts, 4b sandstone, shaly sandstone, cherty silt, locally ferruginous, shaly, 4c sandstone, locally horizontal, 4d sandstone, locally horizontal, 4e fossiliferous sandstone, sandstone, 4f fossiliferous sandstone, sandstone, 4g fossiliferous sandstone and sandstone, 4h green siltstone (sprawling calcareous), 4i shale
 - 4b Millwright Ridge Formation (formerly mapped as Mays and/or Mays Formations): 4b argillite, 4c shaly silt, shaly sandstone, 4d fossiliferous sandstone, sandstone, 4e fossiliferous sandstone, sandstone, 4f fossiliferous sandstone, sandstone, 4g fossiliferous sandstone, sandstone, 4h fossiliferous sandstone, sandstone, 4i fossiliferous sandstone, sandstone
 - 4c Salsbery Formation: 4c argillite, shaly silt, shaly sandstone, 4d argillite, shaly silt, shaly sandstone, 4e argillite, shaly silt, shaly sandstone, 4f argillite, shaly silt, shaly sandstone, 4g argillite, shaly silt, shaly sandstone, 4h argillite, shaly silt, shaly sandstone, 4i argillite, shaly silt, shaly sandstone
- NOTE:** Legend based in part on Moxley, B.C.M.P.R., of 1957/2 and Miller, 1980 a, C.S.C. Paper 79-30.

- SYMBOLS**
- Geologic Contacts: Dashed, approximately assumed, continuous
 - Surface trace of acid pipes
 - Surface, contour
 - Fault: Dotted, approximately assumed
 - Bedding: Dotted, approximately assumed
 - Zone
 - Shade
 - Geologic structure
 - View
 - Drop with field scale number
 - Drop
 - 100' "Never Sweet" claim
- Sample locations with sample numbers and orientable markers (N, S, E, W, etc.)

ABBREVIATIONS

| Minerals | Rock Types | Textures | General |
|------------------|---------------------|-------------------|-------------------|
| Aa orthopyroxene | Agg agglomerate | Ba breccia | Abt abundant |
| Ca chlorite | Ang argillite | Chp cherty | Cl crystal |
| Cl quartz | Cop carbonate | Co coarse grained | CoF fragmental |
| Em hematite | Cop conglomerate | FG fine grained | Frag fragmental |
| Ms muscovite | IF iron formation | MG medium grained | MG medium grained |
| Mc melanite | (ferruginous chert) | | |
| Pr garnet | Shp shaly | | Sh shaly |
| Py pyrite | Shp shaly | | Sh shaly |
| Qt quartz | Shp shaly | | Sh shaly |
| St staurolite | Shp shaly | | Sh shaly |

GEOLOGICAL BRANCH ASSESSMENT REPORT

16,200

INTERNATIONAL CHEROKEE DEVELOPMENTS LIMITED

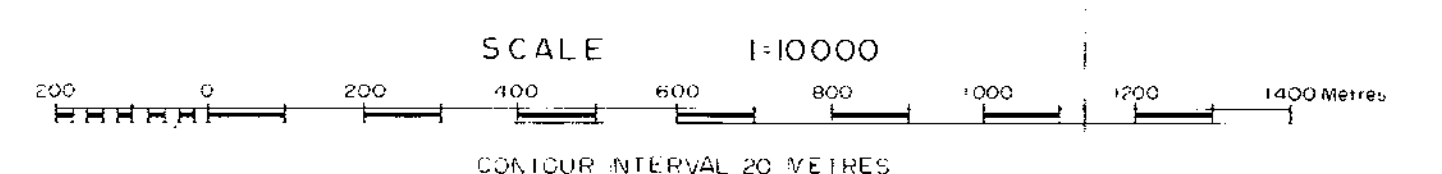
GEOLOGY MNS AND CHEM PROPERTIES

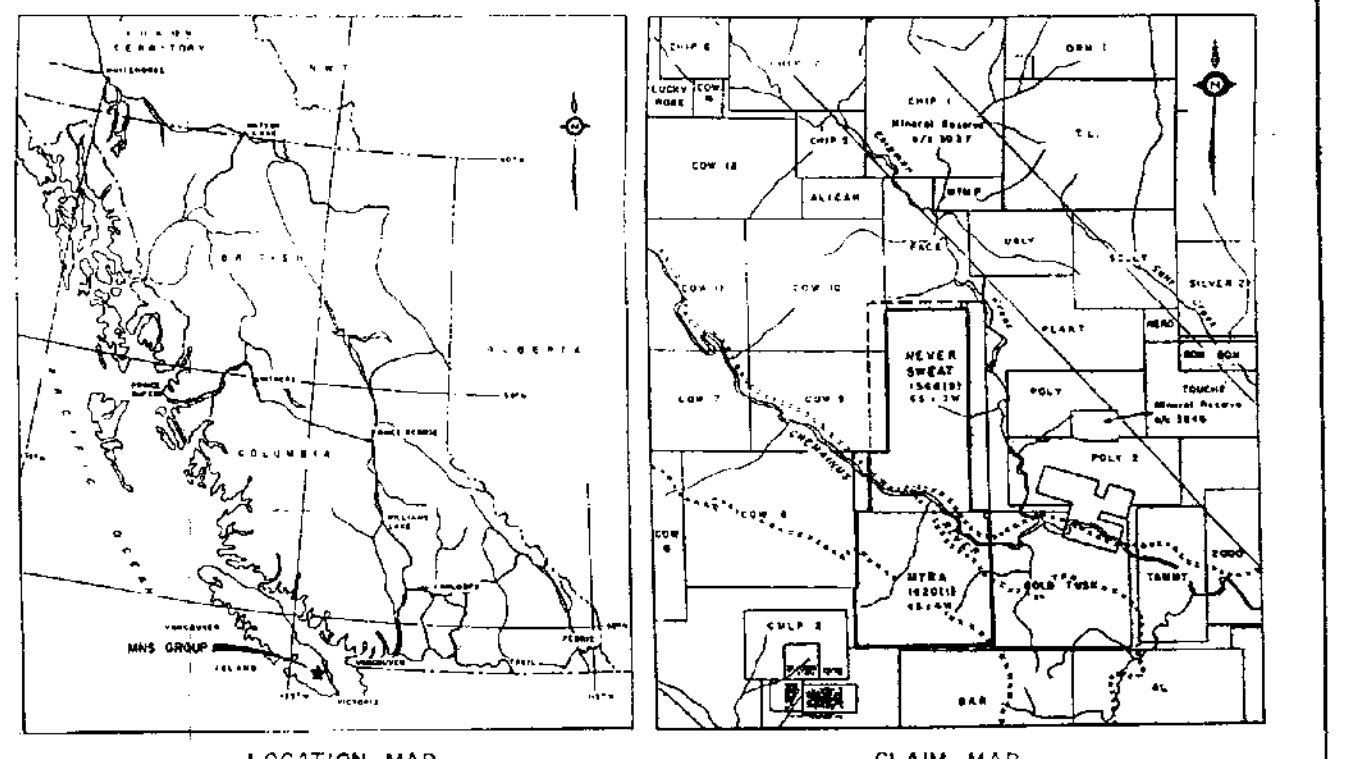
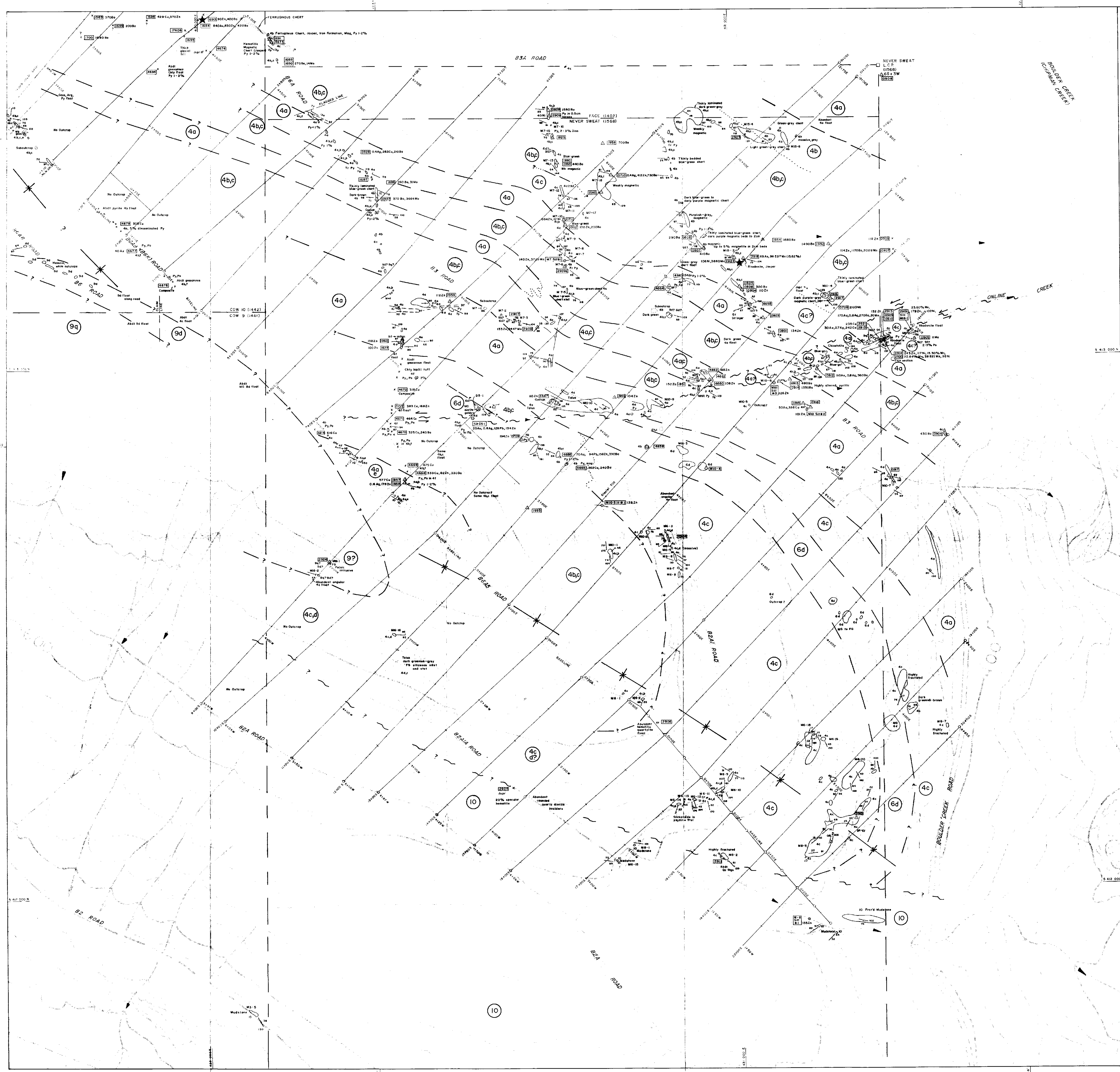
VICTORIA MINING DIVISION

Project No. V243, V239 By G.A.J.S.G.
Scale: 1:10,000 Drawn: M.W.
Drawing No. 1 Date: JUNE 1987



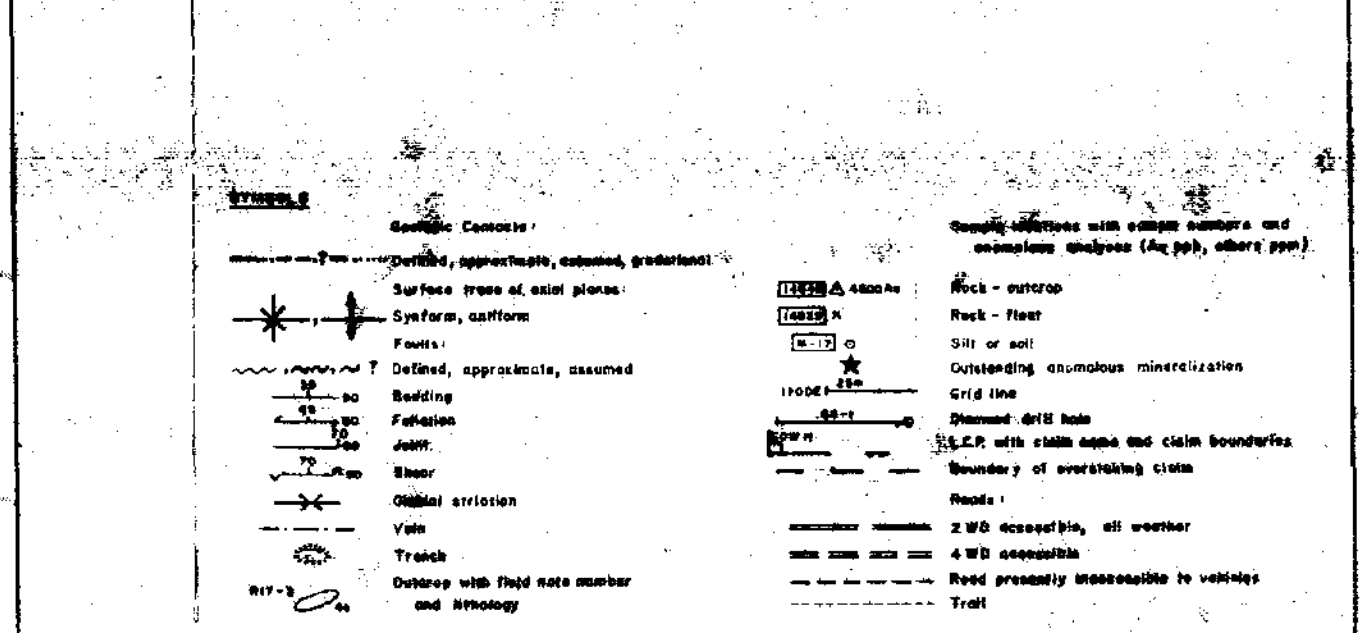
AREAS SHOWN ON 1:2500 GEOLOGY PLAN - A GRID, DRAWING No. A-2
CHEM PROPERTY



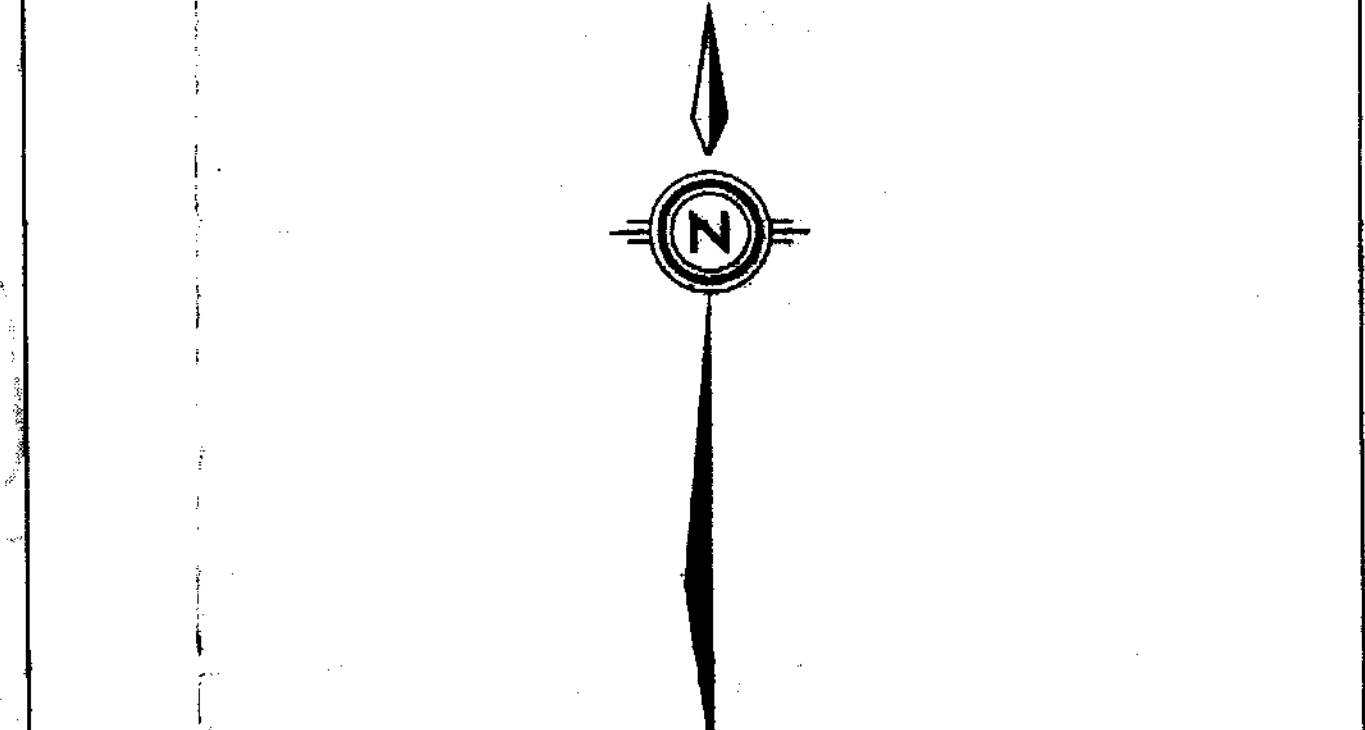


- LEGEND**
- CENOZOIC**
 - QUATERNARY**
 - 12 Unconsolidated sediments, glacial outwash, fill, and alluvium
 - MESOZOIC**
 - CRETACEOUS**
 - MANAWATU GROUP** (conglomerate, sandstone, siltstone, shale, minor local sandstone)
 - 10
 - JURASSIC**
 - ISLAND INTRUSIONS**
 - 11 Diabase
 - 12 Diorite
 - 13 Andesite porphyry
 - 14 Quartz diorite to granodiorite
 - TRIASSIC**
 - 15 Kaituma Formation (?) basaltic rocks
 - 15a Gabbro
 - 15b Gabbro and flow porphyry
 - PALEOZOIC**
 - UPPER SILURIAN TO LOWER PERMIAN**
 - SICKER GROUP**
 - 4a Sicker Formation (formerly mapped as Mt. and/or Sicker Sil. Formations)
 - 4a1 argillite, shale & chertiferous porphyroblasts
 - 4a2 chert, cherty argillite, cherty silt, locally lenticular, jagged
 - 4a3 siltstone, locally hardfaced
 - 4a4 sandstone, locally hardfaced
 - 4a5 argillite, locally hardfaced
 - 4a6 argillite, locally hardfaced
 - 4a7 argillite, locally hardfaced
 - 4a8 argillite, locally hardfaced
 - 4a9 argillite, locally hardfaced
 - 4a10 argillite, locally hardfaced
 - 16 Muloapua Ridge Formation (formerly mapped as Nihoa and/or Mt. Formations)
 - 16a argillite
 - 16b cherty silt, cherty siltstone
 - 16c siltstone, argillite, siltstone
 - 16d siltstone, argillite, siltstone
 - 16e argillite, sandy silt
 - 16f argillite, sandy silt
 - 16g argillite, sandy silt
 - 16h argillite, sandy silt
 - 16i argillite, sandy silt
 - 16j argillite, sandy silt
 - 16k argillite, sandy silt
 - 16l argillite, sandy silt
 - 16m argillite, sandy silt
 - 16n argillite, sandy silt
 - 16o argillite, sandy silt
 - 16p argillite, sandy silt
 - 16q argillite, sandy silt
 - 16r argillite, sandy silt
 - 16s argillite, sandy silt
 - 16t argillite, sandy silt
 - 16u argillite, sandy silt
 - 16v argillite, sandy silt
 - 16w argillite, sandy silt
 - 16x argillite, sandy silt
 - 16y argillite, sandy silt
 - 16z argillite, sandy silt
 - 17 Nihoa Formation
 - 17a argillite, sandy silt, argillite
 - 17b argillite, sandy silt, argillite
 - 17c argillite, sandy silt, argillite
 - 17d argillite, sandy silt, argillite
 - 17e argillite, sandy silt, argillite
 - 17f argillite, sandy silt, argillite
 - 17g argillite, sandy silt, argillite
 - 17h argillite, sandy silt, argillite
 - 17i argillite, sandy silt, argillite
 - 17j argillite, sandy silt, argillite
 - 17k argillite, sandy silt, argillite
 - 17l argillite, sandy silt, argillite
 - 17m argillite, sandy silt, argillite
 - 17n argillite, sandy silt, argillite
 - 17o argillite, sandy silt, argillite
 - 17p argillite, sandy silt, argillite
 - 17q argillite, sandy silt, argillite
 - 17r argillite, sandy silt, argillite
 - 17s argillite, sandy silt, argillite
 - 17t argillite, sandy silt, argillite
 - 17u argillite, sandy silt, argillite
 - 17v argillite, sandy silt, argillite
 - 17w argillite, sandy silt, argillite
 - 17x argillite, sandy silt, argillite
 - 17y argillite, sandy silt, argillite
 - 17z argillite, sandy silt, argillite

NOTE: Legend based in part on Moore, SCHEWPA, GP 1047/2 and Muller, 1980, CSC Paper 79-30.



| Abbreviation | Rock Type | Feature | Symbol |
|--------------|--------------------------|-------------|--------|
| 4a | Sicker Formation | Argillite | 4a1 |
| 4a2 | Sicker Formation | Chert | 4a2 |
| 4a3 | Sicker Formation | Siltstone | 4a3 |
| 4a4 | Sicker Formation | Sandstone | 4a4 |
| 4a5 | Sicker Formation | Argillite | 4a5 |
| 4a6 | Sicker Formation | Argillite | 4a6 |
| 4a7 | Sicker Formation | Argillite | 4a7 |
| 4a8 | Sicker Formation | Argillite | 4a8 |
| 4a9 | Sicker Formation | Argillite | 4a9 |
| 4a10 | Sicker Formation | Argillite | 4a10 |
| 16a | Muloapua Ridge Formation | Argillite | 16a |
| 16b | Muloapua Ridge Formation | Cherty silt | 16b |
| 16c | Muloapua Ridge Formation | Siltstone | 16c |
| 16d | Muloapua Ridge Formation | Siltstone | 16d |
| 16e | Muloapua Ridge Formation | Argillite | 16e |
| 16f | Muloapua Ridge Formation | Argillite | 16f |
| 16g | Muloapua Ridge Formation | Argillite | 16g |
| 16h | Muloapua Ridge Formation | Argillite | 16h |
| 16i | Muloapua Ridge Formation | Argillite | 16i |
| 16j | Muloapua Ridge Formation | Argillite | 16j |
| 16k | Muloapua Ridge Formation | Argillite | 16k |
| 16l | Muloapua Ridge Formation | Argillite | 16l |
| 16m | Muloapua Ridge Formation | Argillite | 16m |
| 16n | Muloapua Ridge Formation | Argillite | 16n |
| 16o | Muloapua Ridge Formation | Argillite | 16o |
| 16p | Muloapua Ridge Formation | Argillite | 16p |
| 16q | Muloapua Ridge Formation | Argillite | 16q |
| 16r | Muloapua Ridge Formation | Argillite | 16r |
| 16s | Muloapua Ridge Formation | Argillite | 16s |
| 16t | Muloapua Ridge Formation | Argillite | 16t |
| 16u | Muloapua Ridge Formation | Argillite | 16u |
| 16v | Muloapua Ridge Formation | Argillite | 16v |
| 16w | Muloapua Ridge Formation | Argillite | 16w |
| 16x | Muloapua Ridge Formation | Argillite | 16x |
| 16y | Muloapua Ridge Formation | Argillite | 16y |
| 16z | Muloapua Ridge Formation | Argillite | 16z |
| 17a | Nihoa Formation | Argillite | 17a |
| 17b | Nihoa Formation | Argillite | 17b |
| 17c | Nihoa Formation | Argillite | 17c |
| 17d | Nihoa Formation | Argillite | 17d |
| 17e | Nihoa Formation | Argillite | 17e |
| 17f | Nihoa Formation | Argillite | 17f |
| 17g | Nihoa Formation | Argillite | 17g |
| 17h | Nihoa Formation | Argillite | 17h |
| 17i | Nihoa Formation | Argillite | 17i |
| 17j | Nihoa Formation | Argillite | 17j |
| 17k | Nihoa Formation | Argillite | 17k |
| 17l | Nihoa Formation | Argillite | 17l |
| 17m | Nihoa Formation | Argillite | 17m |
| 17n | Nihoa Formation | Argillite | 17n |
| 17o | Nihoa Formation | Argillite | 17o |
| 17p | Nihoa Formation | Argillite | 17p |
| 17q | Nihoa Formation | Argillite | 17q |
| 17r | Nihoa Formation | Argillite | 17r |
| 17s | Nihoa Formation | Argillite | 17s |
| 17t | Nihoa Formation | Argillite | 17t |
| 17u | Nihoa Formation | Argillite | 17u |
| 17v | Nihoa Formation | Argillite | 17v |
| 17w | Nihoa Formation | Argillite | 17w |
| 17x | Nihoa Formation | Argillite | 17x |
| 17y | Nihoa Formation | Argillite | 17y |
| 17z | Nihoa Formation | Argillite | 17z |



GEOLOGICAL BRANCH ASSESSMENT REPORT

16,200

NOTE: Claim lines from L.C.P.'s scaled to 20 metre topographic contour interval.

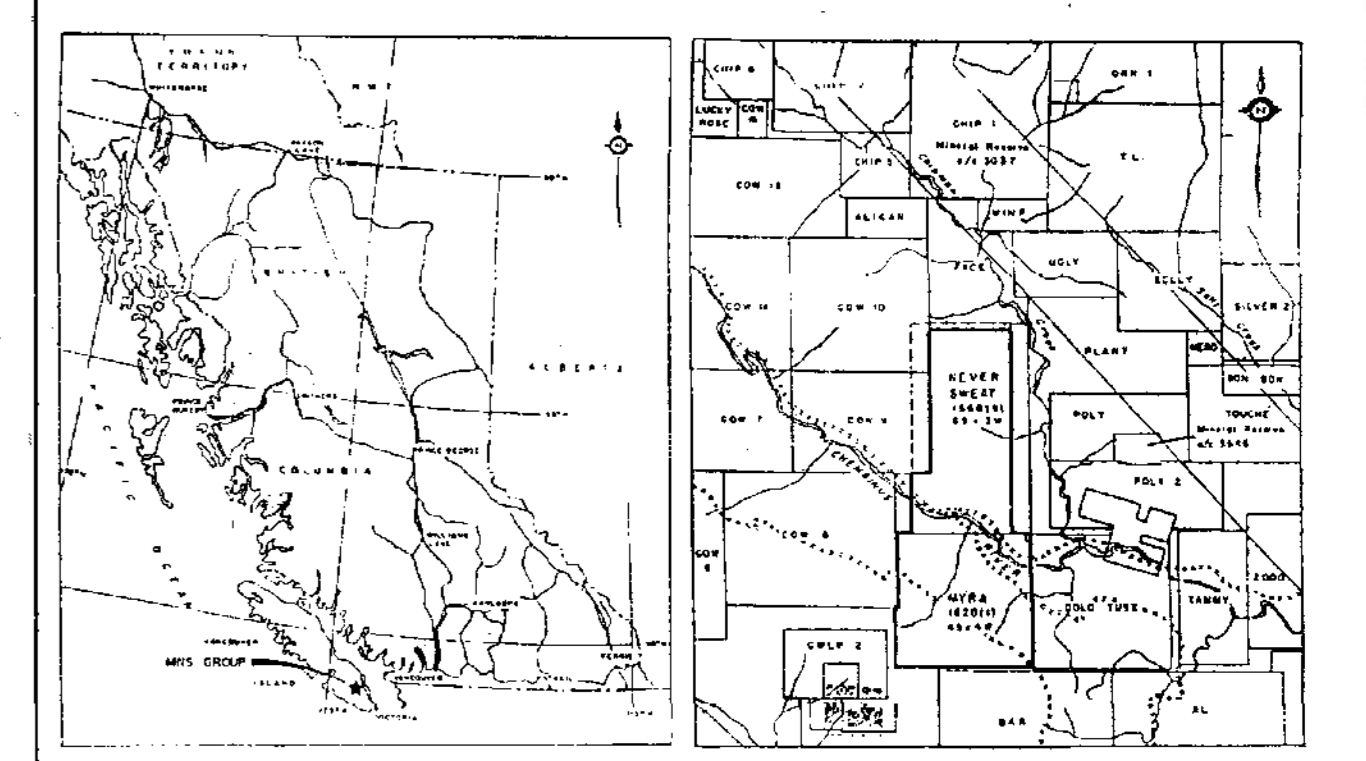
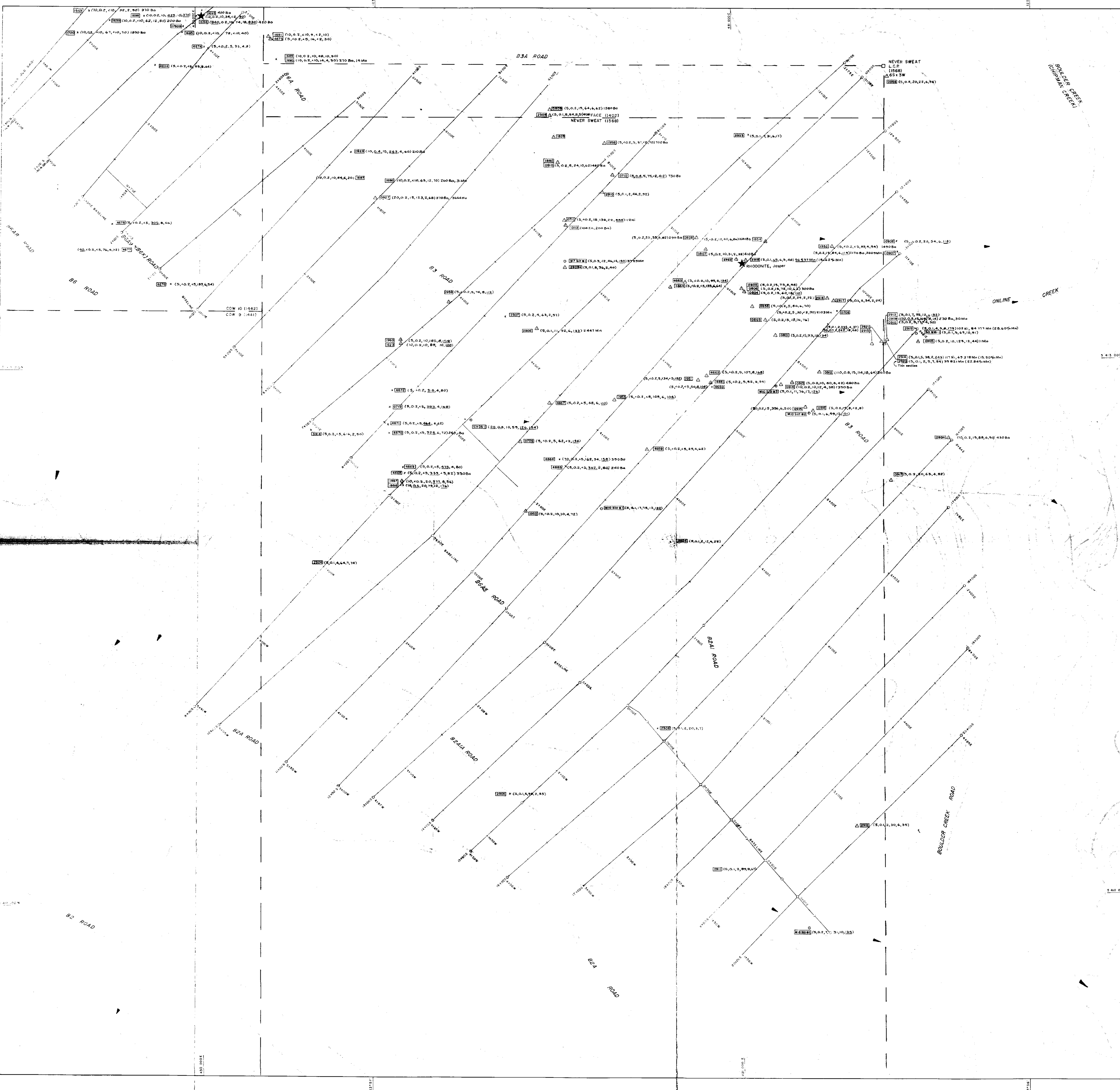
INTERNATIONAL CHEROKEE DEVELOPMENTS LIMITED

GEOLOGY

NORTH PART OF NEVER SWEAT CLAIM
MNS PROPERTY
VICTORIA MINING DIVISION

| | |
|-------------------|-----------------|
| Project No. Y 243 | By: G.A. |
| Scale: 1:2500 | Drawn: MW |
| Drawing No: 2 | Date: JULY 1987 |

MPH Consulting Limited



LEGEND

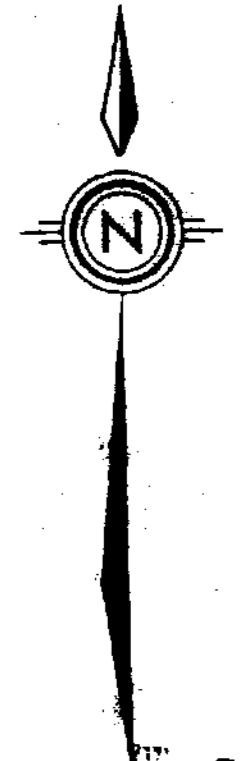
(1430) Δ Rock sample location (outcrop) with sample number
 (1431) X Rock sample location (float) with sample number
 (1432) O Silt sample location with sample number

ANALYSES
 (1430) Au, Ag, As, Cu, Pb, Zn (underlined values anomalous)
 (1431) Au, Ag, As, Cu, Pb, Zn (underlined values anomalous)
 (1432) Au, Ag, As, Cu, Pb, Zn (underlined values anomalous)

VALUES CONSIDERED ANOMALOUS IN ROCK
 Au ≥ 30 ppm
 Ag ≥ 0.4 ppm
 As ≥ 30 ppm
 Cu ≥ 200 ppm
 Pb ≥ 25 ppm
 Zn ≥ 100 ppm

VALUES PLOTTED
 Au ≥ 50 ppm
 V ≥ 250 ppm
 Sb ≥ 60 ppm
 Ba ≥ 200 ppm
 Mo ≥ 10 ppm
 W ≥ 10 ppm
 Mn ≥ 2000 ppm
 Ni ≥ 100 ppm

SYMBOLS
 * Fault
 ☆ Outcrop
 --- 20m contour interval
 --- 10m contour interval
 --- 5m contour interval
 --- 1m contour interval
 --- 0.5m contour interval
 --- 0.2m contour interval
 --- 0.1m contour interval
 --- 0.05m contour interval
 --- 0.02m contour interval
 --- 0.01m contour interval
 --- 0.005m contour interval
 --- 0.002m contour interval
 --- 0.001m contour interval
 --- 0.0005m contour interval
 --- 0.0002m contour interval
 --- 0.0001m contour interval
 --- 0.00005m contour interval
 --- 0.00002m contour interval
 --- 0.00001m contour interval



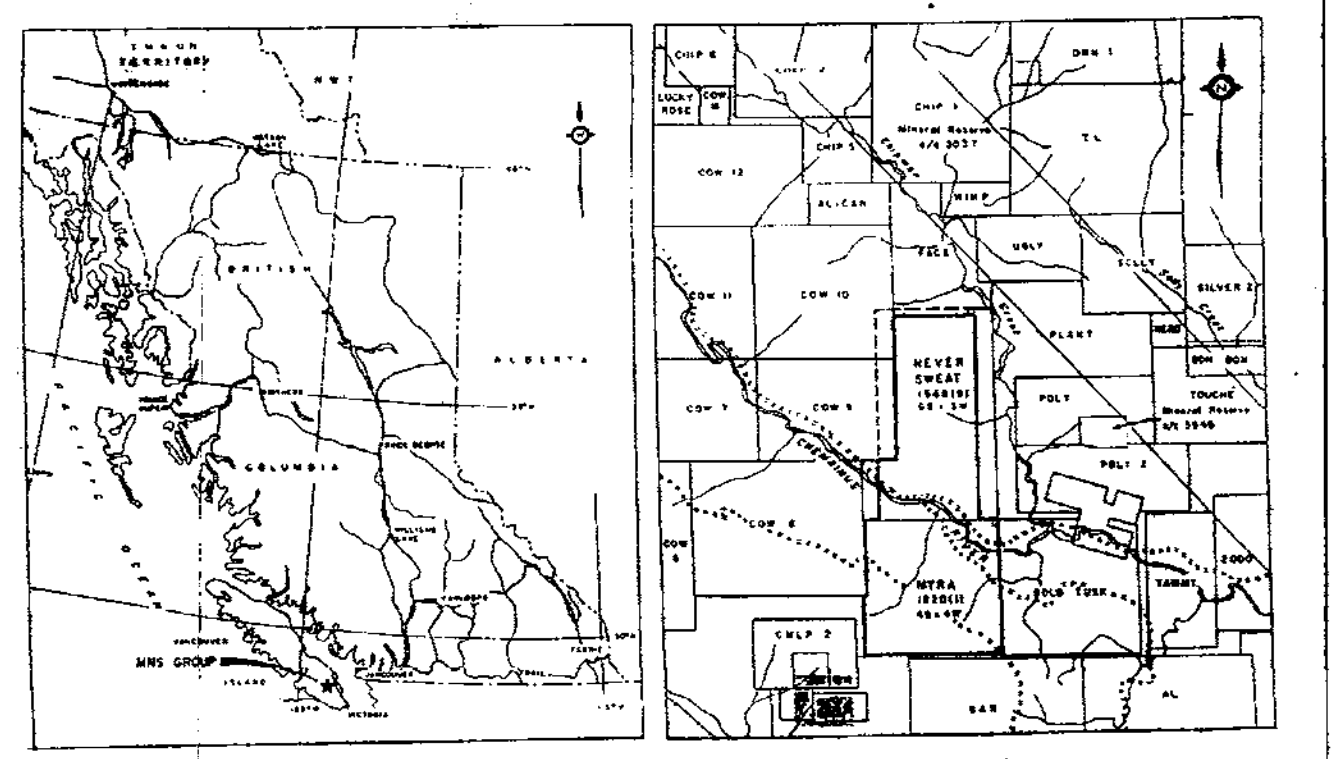
GEOLOGICAL BRANCH ASSESSMENT REPORT

16,200

NOTE: Claim lines from L.C.P.'s located in File 20 metre topographic contour interval

| | |
|--|-----------------|
| INTERNATIONAL CHEROKEE DEVELOPMENTS LIMITED | |
| ROCK AND SILT SAMPLE SITE LOCATIONS AND ANALYSES | |
| NORTH PART OF NEVER SWEAT CLAIM | |
| MNS PROPERTY | |
| VICTORIA MINING DIVISION | |
| Project No: V 243 | By: G.A. |
| Scale: 1:2500 | Drawn: M.W. |
| Drawing No: 3 | Date: JULY 1987 |





LEGEND

Rc - Reanalysis
 Rs - Resample
 NS - No Sample

THRESHOLDS

| | Au | Ag | As |
|--|-------|--------|-------|
| | 20ppb | 0.4ppm | 30ppm |

CONTOUR SYMBOLS

20Au 0.4Ag 30As

H Soil geochemical anomaly discussed in text

EXAMPLES

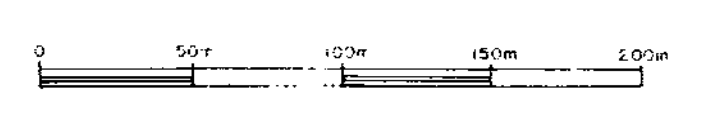
- Feasibility Study
- Reanalysis
- Resample
- No Sample
- 20m contour interval
- 4mD contour interval
- 20m contour interval
- 4mD contour interval



**GEOLOGICAL BRANCH
 ASSESSMENT REPORT**

16,200

NOTE: Claim boundaries from L.C.P.'s located in field.
 20 metre topographic contour interval.

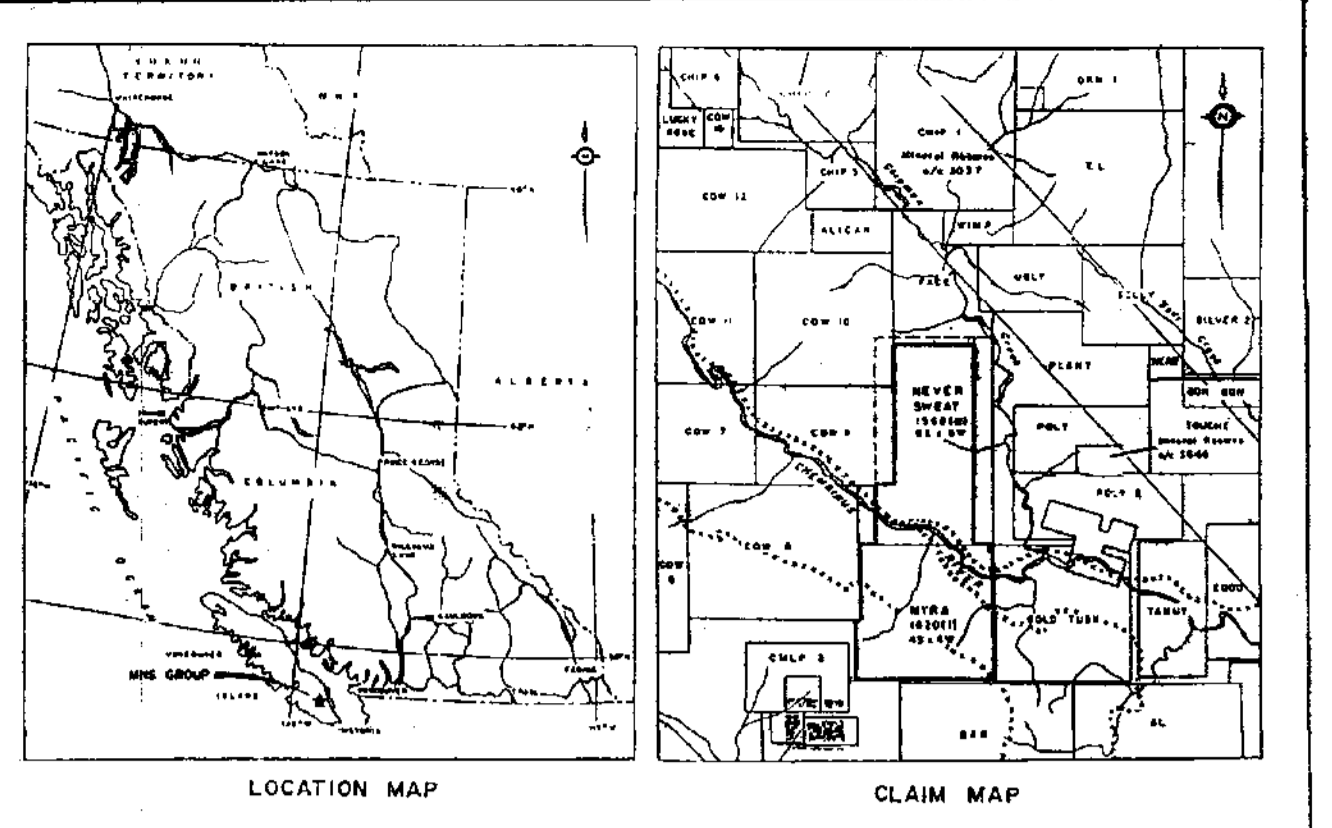
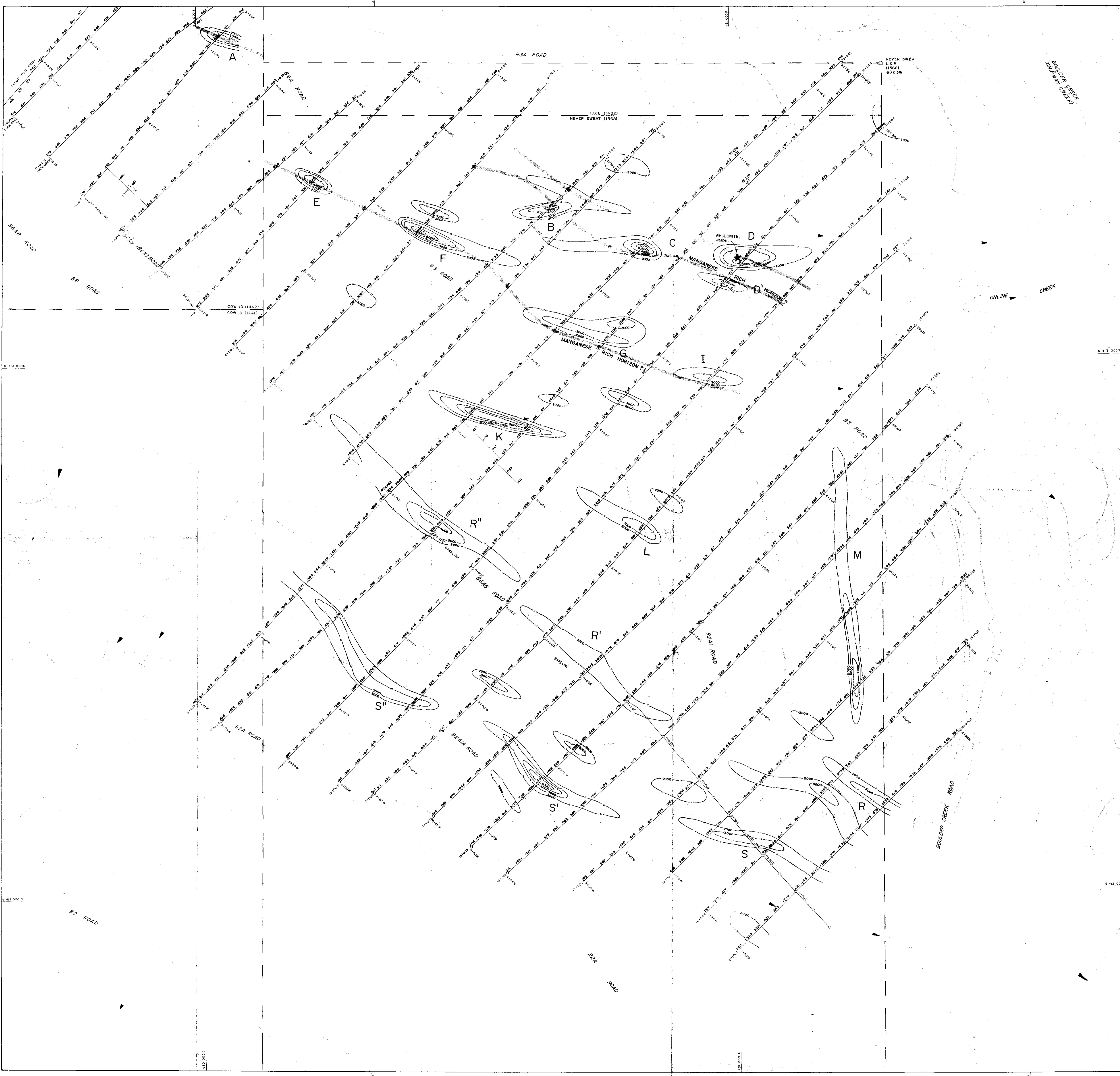


INTERNATIONAL CHEROKEE DEVELOPMENTS LIMITED

SOIL GEOCHEMISTRY SURVEY
 Au, Ag, As
 NORTH PART OF NEVER SWEAT CLAIM
 MNS PROPERTY
 VICTORIA MINING DIVISION

| | | | |
|-------------|----------|--------|-----------|
| Project No: | V 243 | By: | G.A. |
| Scale: | 1 : 2500 | Drawn: | M.W. |
| Drawing No: | 4a | Date: | JULY 1987 |

MPH MPH Consulting Limited



LEGEND

Ro - Reanalysis
 Ra - Reanalysis
 NS - No Sample

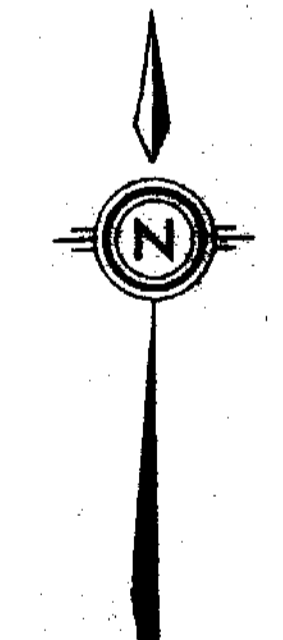
THRESHOLD Mn 2000ppm

CONTOUR SYMBOL 2000Mn

H Soil geochemical anomaly discussed in text.

SYMBOLS

Face Contour interval 20m
 Grid line 20m
 Road 2m
 Stream 2m
 Dashed with line 2m
 Legal survey with claim area and claim boundary 2m
 Boundary of neighbouring claim 2m

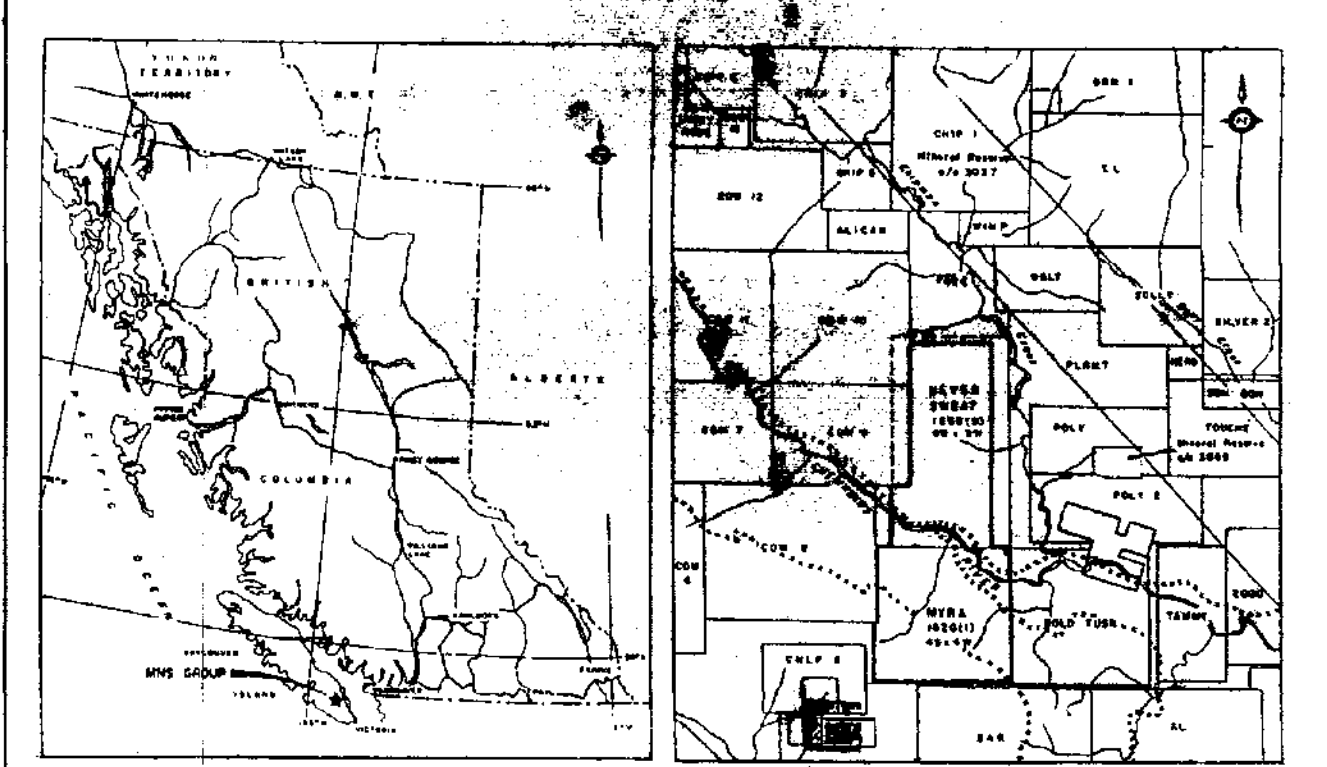
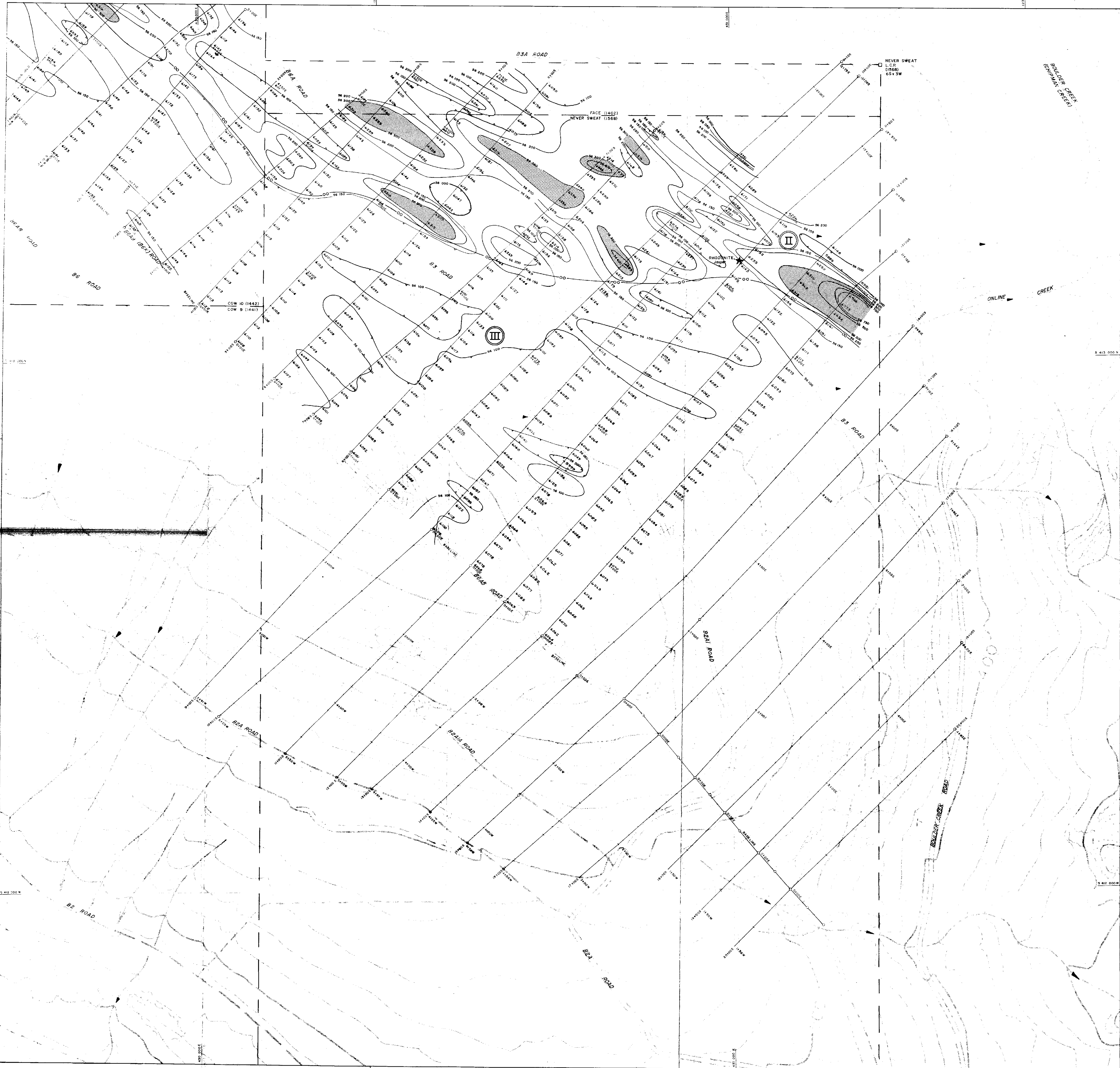


GEOLOGICAL BRANCH ASSESSMENT REPORT

16,200

NOTE: Claim boundaries from L.C.P. are shown in thin 20 metre topographic contour interval.

| | | | |
|---|----------|-------------------------------|-----------|
| INTERNATIONAL CHEROKEE DEVELOPMENTS LIMITED | | | |
| SOIL GEOCHEMISTRY SURVEY | | | |
| Mn | | | |
| NORTH PART OF NEVER SWEAT CLAIM | | | |
| MNS PROPERTY | | | |
| VICTORIA MINING DIVISION | | | |
| Project No: | V 243 | By: | G.A. |
| Scale: | 1 : 2500 | Drawn: | M.W. |
| Drawing No: | 4b | Date: | JULY 1987 |
| | | MPH Consulting Limited | |



LEGEND

INSTRUMENT - SCINTREX MP-2
 PARAMETER - TOTAL MAGNETIC FIELD (nT) (INT + 19)
 (N.B. + 50 000 AT SUBTRACTED FROM READINGS)

INTERPRETATION:

MAGNETIC SOURCES:

- Medium susceptibility
- Magnetic domain
- Magnetic domain boundary
- Magnetic low

SYMBOLS

Fact

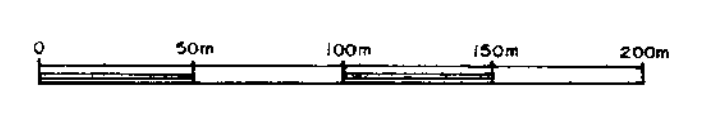
- Boundary of magnetic claim
- Road
- Trail
- Stream
- Contour line
- Magnetic domain boundary
- Magnetic domain
- Magnetic low
- Magnetic susceptibility
- Rhodonite
- Face
- Never Sweat
- Online Creek
- Boulder Creek
- B21 Road
- B2A Road
- B2B Road
- B2C Road
- B2D Road
- B2E Road
- B2F Road
- B2G Road
- B2H Road
- B2I Road
- B2J Road
- B2K Road
- B2L Road
- B2M Road
- B2N Road
- B2O Road
- B2P Road
- B2Q Road
- B2R Road
- B2S Road
- B2T Road
- B2U Road
- B2V Road
- B2W Road
- B2X Road
- B2Y Road
- B2Z Road
- B3A Road
- B3B Road
- B3C Road
- B3D Road
- B3E Road
- B3F Road
- B3G Road
- B3H Road
- B3I Road
- B3J Road
- B3K Road
- B3L Road
- B3M Road
- B3N Road
- B3O Road
- B3P Road
- B3Q Road
- B3R Road
- B3S Road
- B3T Road
- B3U Road
- B3V Road
- B3W Road
- B3X Road
- B3Y Road
- B3Z Road



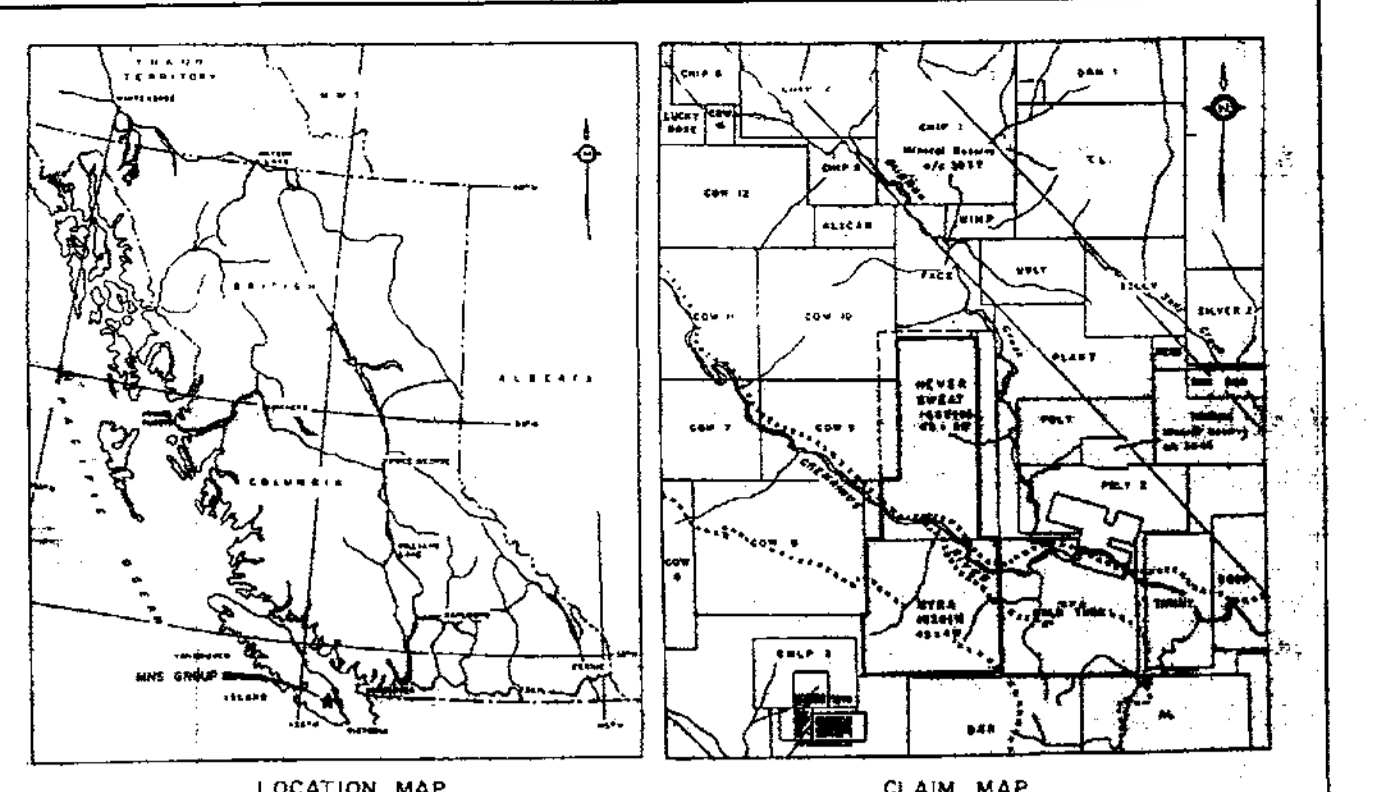
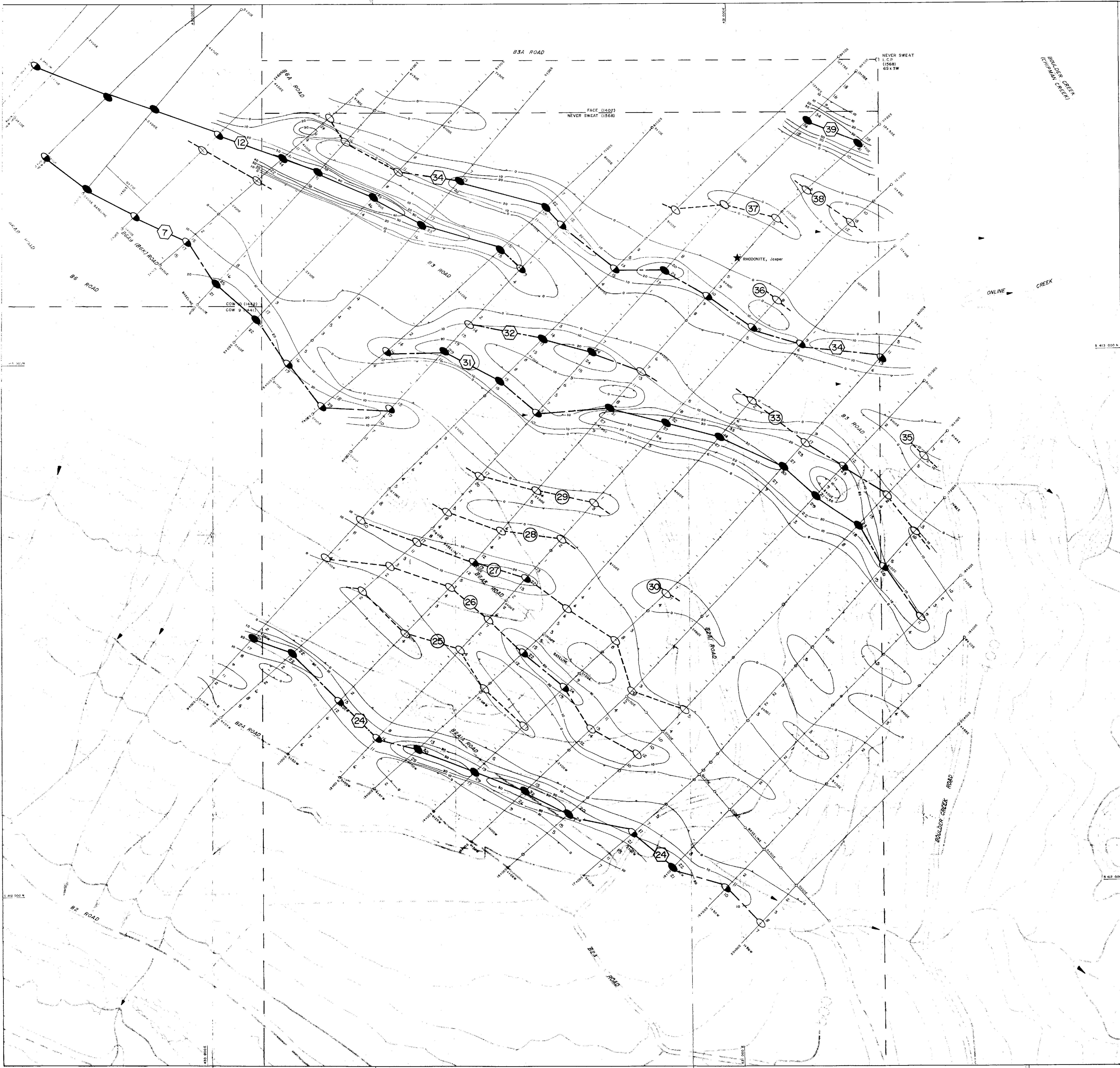
**GEOLOGICAL BRANCH
 ASSESSMENT REPORT**

NOTE: Claim boundaries from L.C.P.'s location file
 20 metre topographic contour interval

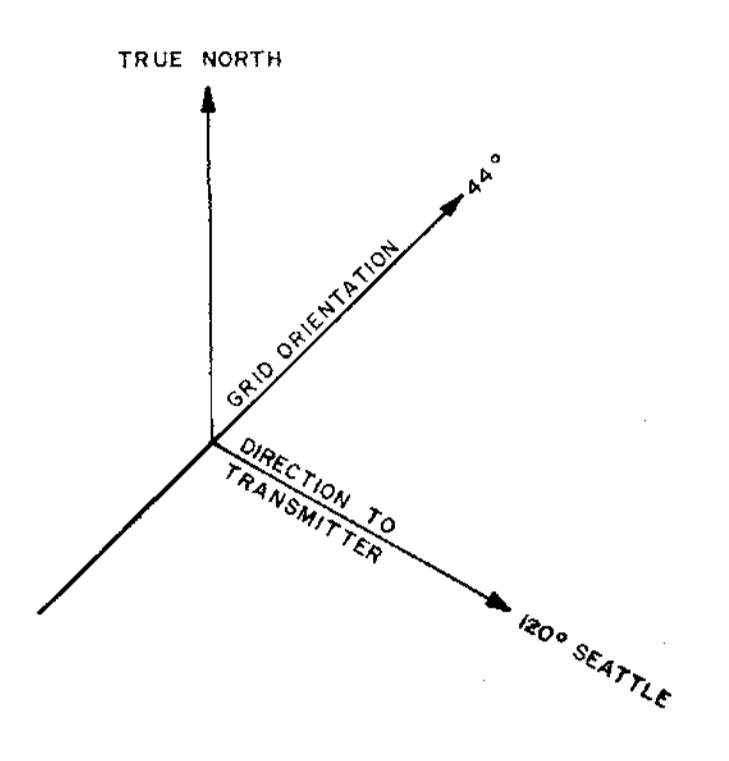
16,200



| | |
|---|-----------------|
| INTERNATIONAL CHEROKEE DEVELOPMENTS LIMITED | |
| MAGNETIC SURVEY | |
| NORTH PART OF NEVER SWEAT CLAIM MNS PROPERTY VICTORIA MINING DIVISION | |
| Project No: V 243 | By: G.A. |
| Scale: 1:2500 | Drawn: M.W. |
| Drawing No: 5 | Date: JULY 1987 |
| MPH Consulting Limited | |



RELATIVE ORIENTATION OF GRID TO TRUE NORTH AND DIRECTION TO TRANSMITTER



LEGEND

- GRID LINE
- Negative Fraser Filtered Dip Angle -
- Positive Fraser Filtered Dip Angle +

INTERPRETATION

- Conductors:
 - Strong - Definite
 - Moderate - Probable
 - Weak - Possible
 - Cultural - Cables, power lines, etc.
- Conductor Continuity:
 - Definite
 - Probable
 - Possible
- Conductive Zones:
 - Probable Bedrock Conductor
 - Other

INSTRUMENT - Saba 27 VLF-EM Receiver

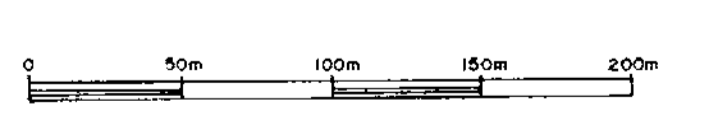
- Symbol:
 - Topographic contours
 - Grid lines
 - Water bodies
 - Boundaries of mining claims
 - Other



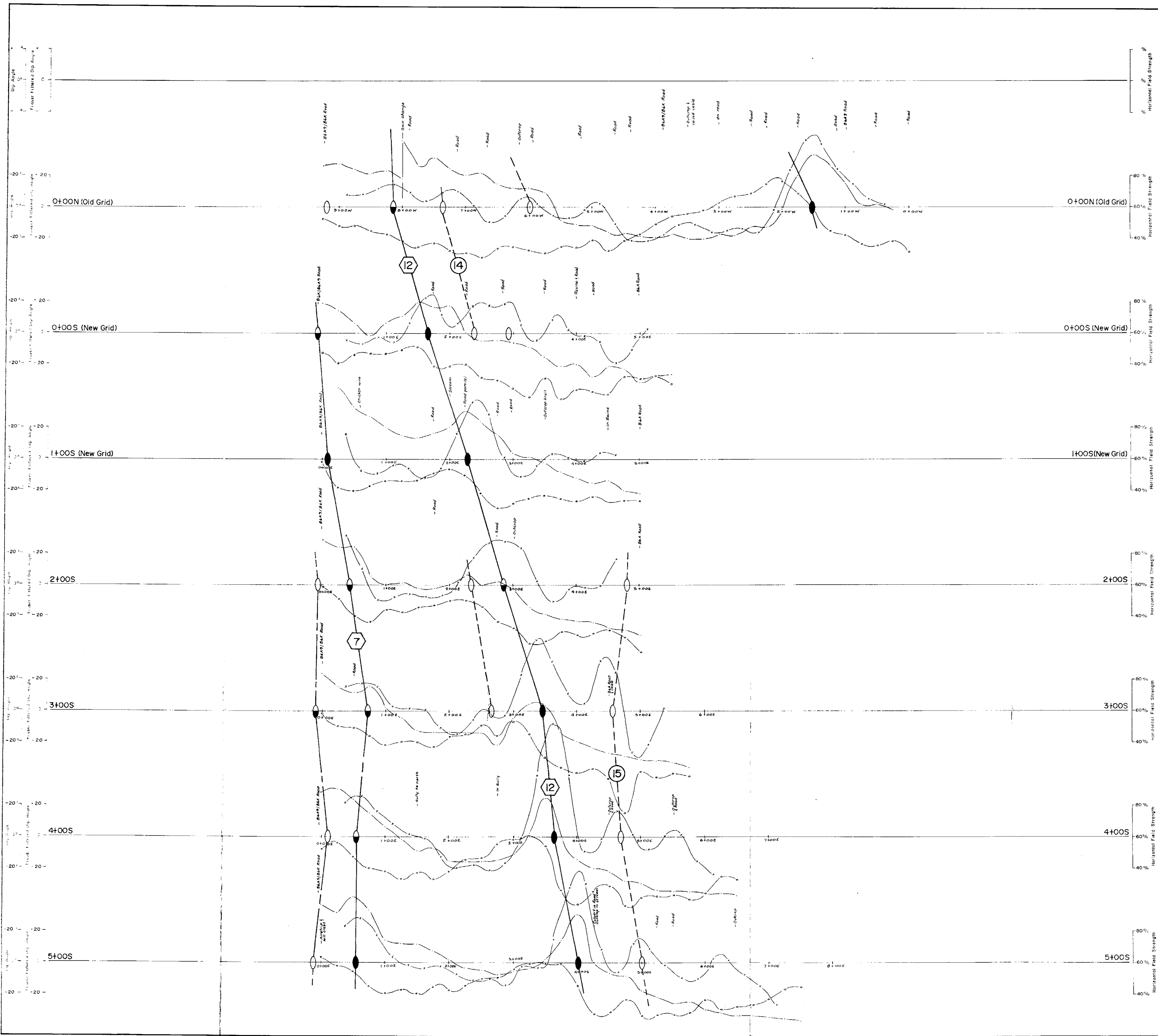
GEOLOGICAL BRANCH ASSESSMENT REPORT

16,200

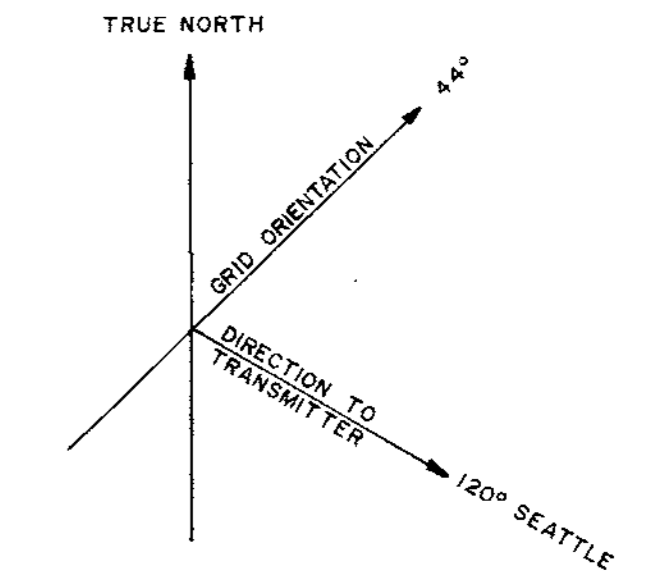
NOTE: Claim boundaries from L.C.P.'s location 20 metre topographic contour interval



| | |
|---|-----------------|
| INTERNATIONAL CHEROKEE DEVELOPMENTS LIMITED | |
| VLF - EM SURVEY FRASER FILTERED DIP ANGLES NORTH PART OF NEVER SWEAT CLAIM MNS PROPERTY | |
| VICTORIA MINING DIVISION | |
| Project No: V 243 | By: G.A. |
| Scale: 1 : 2500 | Drawn: M.W. |
| Drawing No: 6 | Date: JULY 1987 |
| MPH MPH Consulting Limited | |



RELATIVE ORIENTATION OF GRID TO TRUE NORTH AND DIRECTION TO TRANSMITTER



LEGEND

- GRID LINE -
- Negative Fraser Filtered Dip Angle -
- Positive Fraser Filtered Dip Angle -

PROFILES:

- Horizontal Field Strength (in percent)
- Dip Angle (in degrees)
- Fraser Filtered Dip Angle

INTERPRETATION:

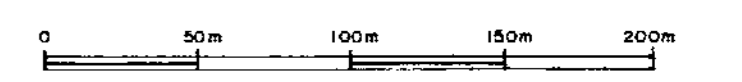
- Conductors:**
 - Strong - Definite
 - Moderate - Probable
 - Weak - Possible
 - Contact
 - Cultural - Cables, power lines, etc.
- Conductive Zones:**
 - Probable Bedrock Conductor
 - Other
- Conductor Continuity:**
 - Definite
 - Probable
 - Possible

INSTRUMENT - Sabre 27 VLF-EM Receiver

GEOLOGICAL BRANCH ASSESSMENT REPORT

16,200

NOTE: HORIZONTAL FIELD STRENGTH is 40%, 60%, 80%, this drawing ONLY.



INTERNATIONAL CHEROKEE DEVELOPMENTS LIMITED

VLF-EM SURVEY PROFILES

LINES 0+00(OLD GRID) - 5+00(S NEW GRID)

NORTH PART OF NEVER SWEAT CLAIM

MNS PROPERTY

VICTORIA MINING DIVISION

V 243 H.M., G.A.

1:2500 M.W.

7a JULY 1987

MPH MPH Consulting Limited



RELATIVE ORIENTATION OF GRID TO TRUE NORTH AND DIRECTION TO TRANSMITTER.

TRUE NORTH
DIRECTION TO TRANSMITTER
100° SEATTLE

LEGEND

GRID LINE

Negative Fraser Filtered Dip Angle

Positive Fraser Filtered Dip Angle

PROFILES:

- Horizontal Field Strength (in percent)
- Dip Angle (in degrees)
- Fraser Filtered Dip Angle

INTERPRETATION:

Conductors:

- Strong - Definite
- Moderate - Probable
- Weak - Possible
- Contact
- Cultural - Cables, power lines, etc.

Conductive Zones:

- Probable Bedrock Conductor
- Other

Conductor Continuity:

- Definite
- Probable
- Possible

INSTRUMENT - Sabre 27 VLF-EM Receiver

NOTE: LINE 10+00S - LINE 13+00S

GEOLOGICAL BRANCH
ASSESSMENT REPORT

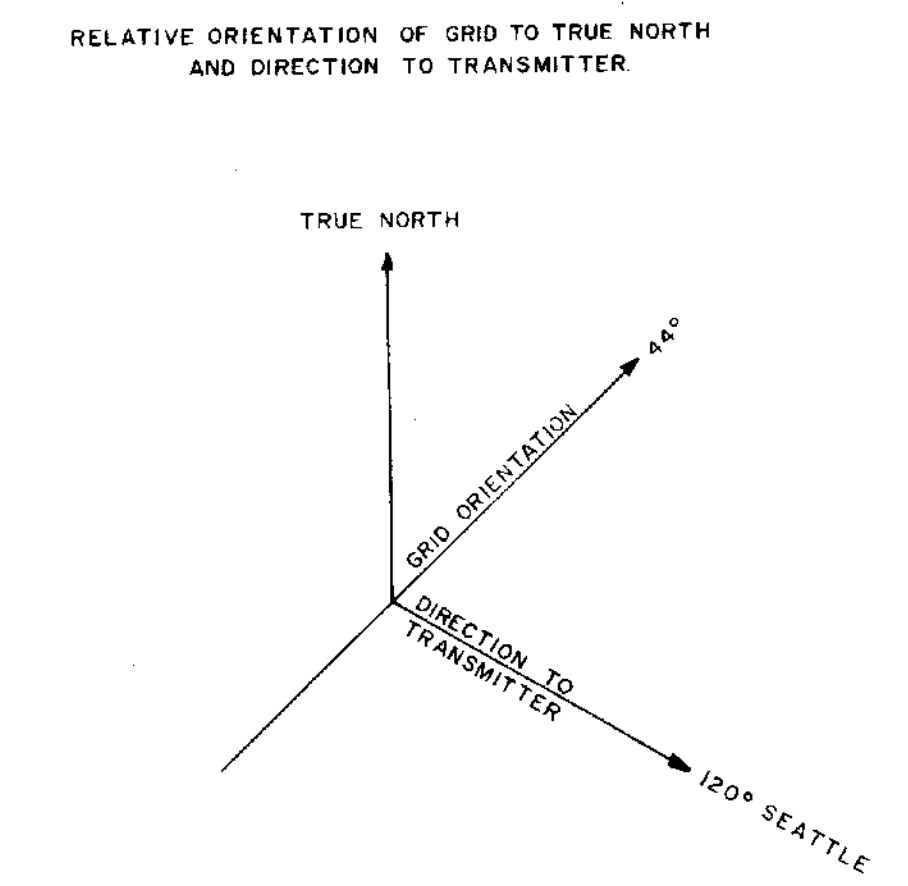
16,200

0 50m 100m 150m 200m

INTERNATIONAL CHEROKEE DEVELOPMENTS LIMITED

VLF-EM SURVEY
PROFILES
LINE 6+00S - 13+00S
NORTH PART OF NEVER SWEAT CLAIM
MNS PROPERTY
VICTORIA MINING DIVISION

V 243 HM, GA
I: 2500 M.W.
7b JULY 1987



LEGEND

PROFILES

- Horizontal Field Strength (in percent)
- Dip Angle (in degrees)
- Foster Filtered Dip Angle

INTERPRETATION:

Conductors:

- Strong - Definite
- Moderate - Probable
- Weak - Possible
- Contact
- Cultural - Cables, power lines, etc.

Conductive Zones:

- Probable Bedrock Conductor
- Other

Conductor Continuity:

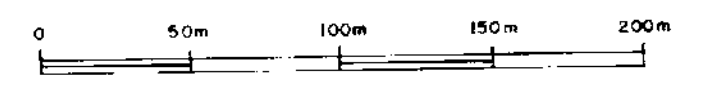
- Definite
- Probable
- Possible

INSTRUMENT - Sabre 27 VLF-EM Receiver

NOTE: LINE 10+00S - LINE 13+00S INCLUSIVE

GEOLOGICAL BRANCH
ASSESSMENT REPORT

16,200



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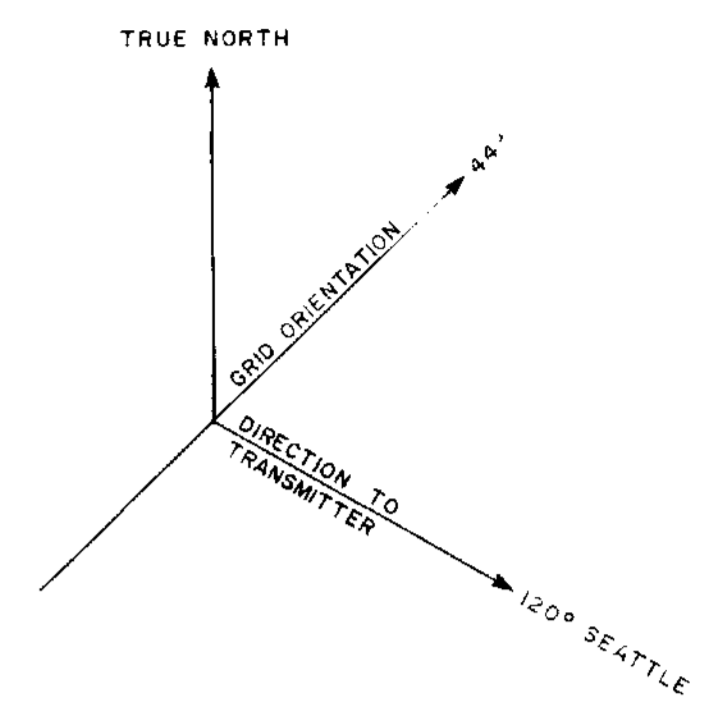
VLF-EM SURVEY
PROFILES
LINES 10+00S - 13+00S (EAST PART)
NORTH PART OF NEVER SWEAT CLAIM
MNS PROPERTY
VICTORIA MINING DIVISION

V 243 HM, G.A.
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7c JULY 1987

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RELATIVE ORIENTATION OF GRID TO TRUE NORTH AND DIRECTION TO TRANSMITTER.



LEGEND

PROFILES:

- Horizontal Field Strength (in percent)
- o Dip Angle (in degrees)
- x-x-x Fraser Filtered Dip Angle

INTERPRETATION:

- Conductors:**
- Strong - Definite
 - ◐ Moderate - Probable
 - ◑ Weak - Possible
 - ⊥ Contact
 - x Cultural - Cables, power lines, etc.

- Conductive Zones:**
- ① Probable Bedrock Conductor
 - ② Other

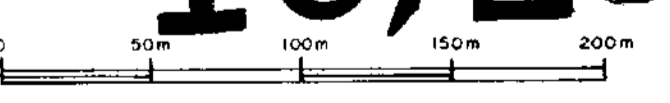
Conductor Continuity:

- Definite
- - - Probable
- Possible

INSTRUMENT - Sabre 27 VLF-EM Receiver

GEOLOGICAL BRANCH ASSESSMENT REPORT

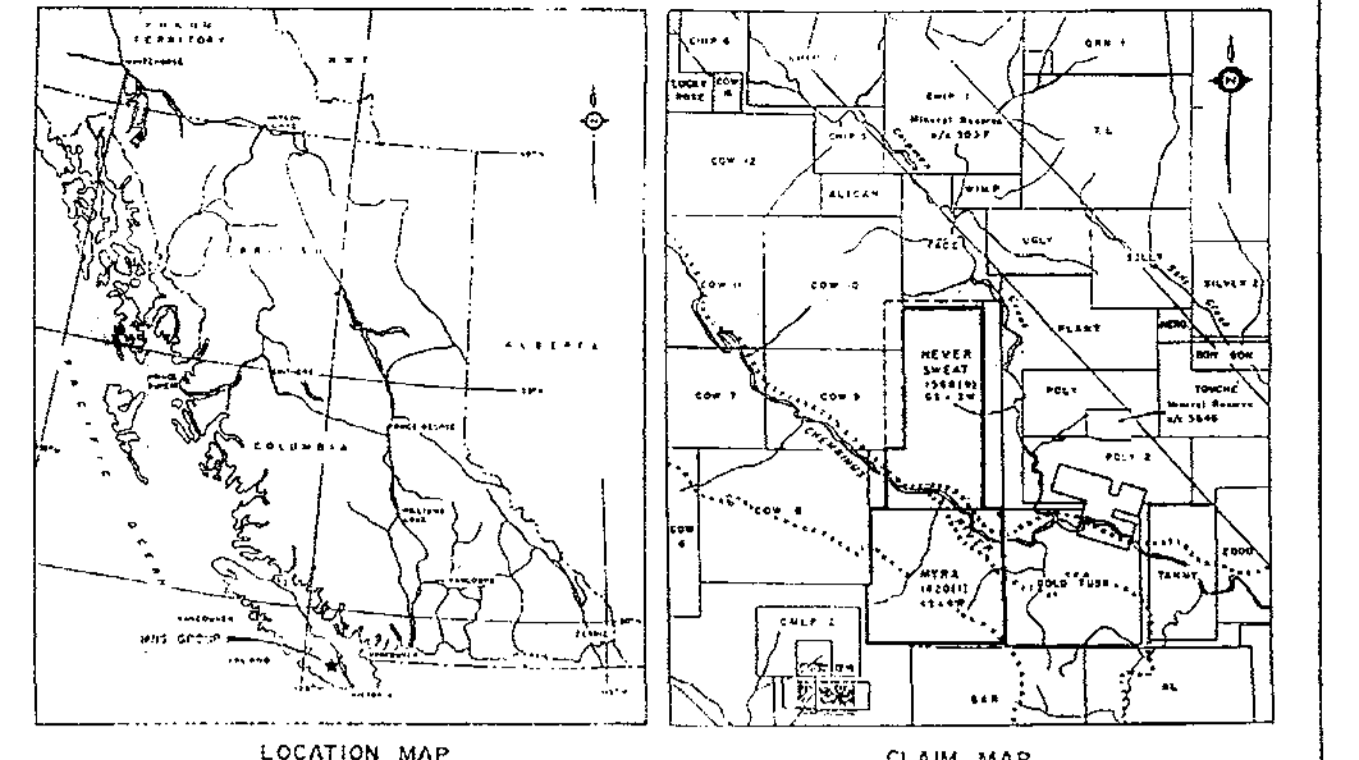
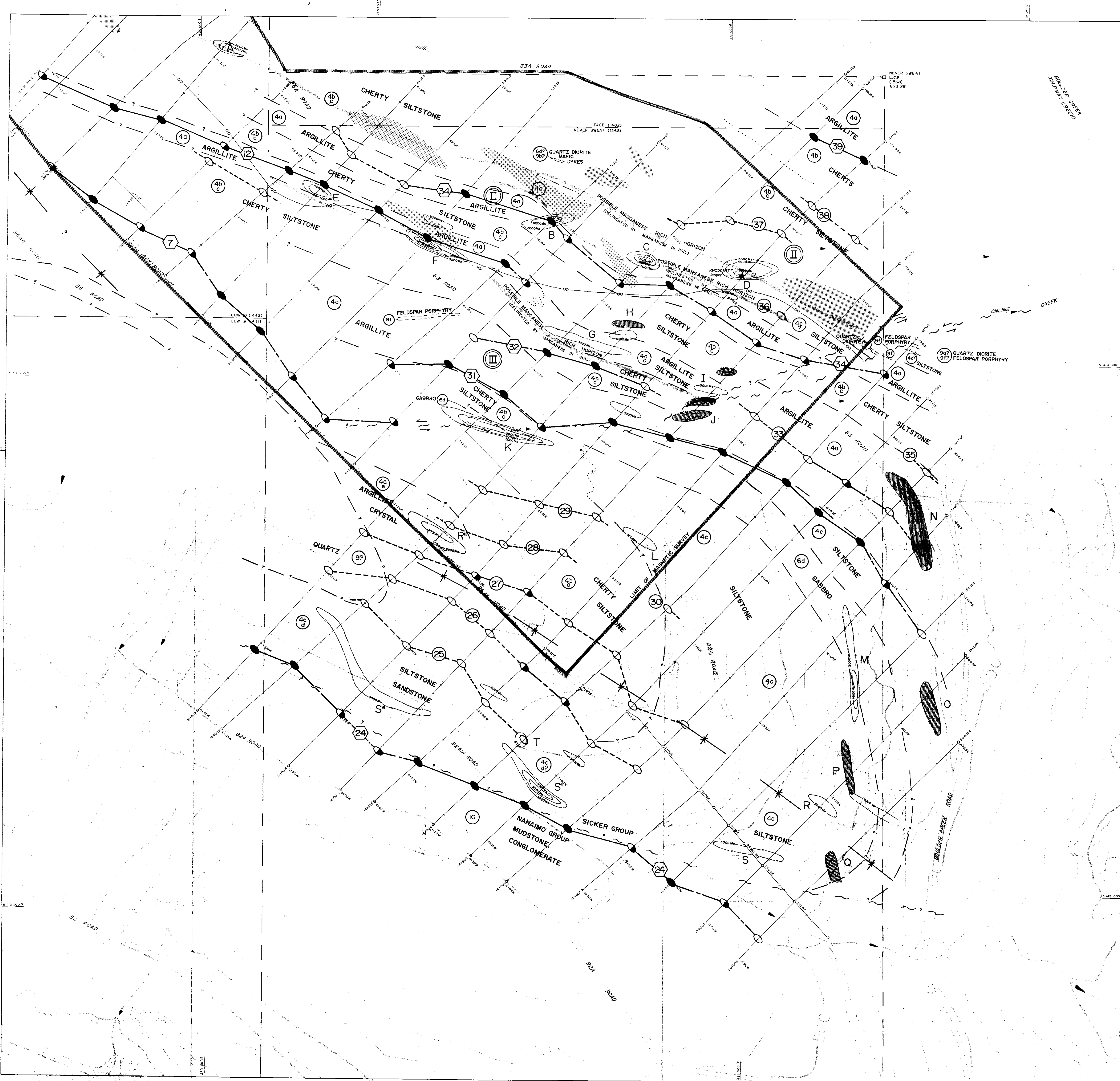
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INTERNATIONAL CHEROKEE DEVELOPMENTS LIMITED
VLF-EM SURVEY
 PROFILES
 LINE 14+00 S - 20+00 S
 NORTH PART OF NEVER SWEAT CLAIM
 MNS PROPERTY
 VICTORIA MINING DIVISION

V 243 H.M., G.A.
 I: 2500 M.W.
 7d JULY 1987

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LEGEND

GEOLOGY

MEZOZOIC
 JURASSIC - 9 quartz dioritic intrusive
 TRASSIC - 6 gabbro intrusive

PALEOZOIC SICKER GROUP
 - 4 Cameron River Formation Sediments
 - 2 McLaughlin Ridge Formation Pyroclastics
 - 1 Nitinat Formation Basic Volcanics

SYMBOLS

Geological Contact
 Fold Axis
 Fault

ANOMALOUS ROCK SAMPLES

Bedrock
 Fract
 Analyses as indicated

SOIL GEOCHEMICAL ANOMALIES

Au (ppb)
 Ag (ppm)
 As (ppm)
 Mn (ppm)
 Soil geochemical anomaly discussed in text

BIOCHEMICAL ANOMALIES

Au (ppb) in conifer branch samples (Douglas Fir and Western Hemlock)

GEOPHYSICAL ANOMALIES

Magnetic Survey
 Magnetic source
 Magnetic domain
 Magnetic domain boundary

VLF - EM Survey
 Conductivity: weak, moderate, strong
 Conductive zones:
 Probable bedrock
 Other
 Conductor continuity:
 Definite
 Probable
 Possible

SCHEMATIC

From
 Identifiable interpretation with sample number
 Base
 1:5000 scale
 1:10000 scale
 1:20000 scale
 1:40000 scale
 1:80000 scale
 1:160000 scale
 1:320000 scale
 1:640000 scale

NOTE: Claim boundaries from L.C.P.'s located in field.
 20 metre topographic contour interval

**GEOLOGICAL BRANCH
 ASSESSMENT REPORT**

16,200

INTERNATIONAL CHEROKEE DEVELOPMENTS LIMITED

GEOLOGY, GEOCHEMISTRY AND GEOPHYSICS COMPOSITE

NORTH PART OF NEVER SWEAT CLAIM
 MNS PROPERTY
 VICTORIA MINING DIVISION

| | |
|-------------------|-----------------|
| Project No: V 243 | By: G.A. |
| Scale: 1 : 2500 | Drawn: M.W. |
| Drawing No: 8 | Date: JULY 1987 |

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