1992 GEOLOGICAL ASSESSMENT ON THE CHEM PROPERTY (COW 7, 9, 10, 11)

Victoria Mining Division, B.C.
NTS M92C/16E and M92B/13W
48°52'N Latitude, 123°59'W Longitude

For

GLS Global Listing Service Ltd.

By

G. Yip, BSc.

March 6, 1992

SUMMARY

The Chem Group consists of the Cow 7, 9, 10 and 11 claims. The claims are underlain by the Paleozoic Sicker Group rocks.

Geological mapping, prospecting and soil sampling were conducted in several areas of the claim group.

Highlights from the prospecting included a grab sample from a fault within diorite which returned 13 000 ppb Au and 14.7 ppm Ag and a grab sample of ash tuff which returned 116 600 ppm As.

Soil sampling returned values of 18 to 102 ppm copper, 1 to 28 ppm lead, 46 to 133 ppm zinc and 5 to 260 ppb gold. The soil geochemistry survey defined a weak lead and gold anomaly trending at 150°.

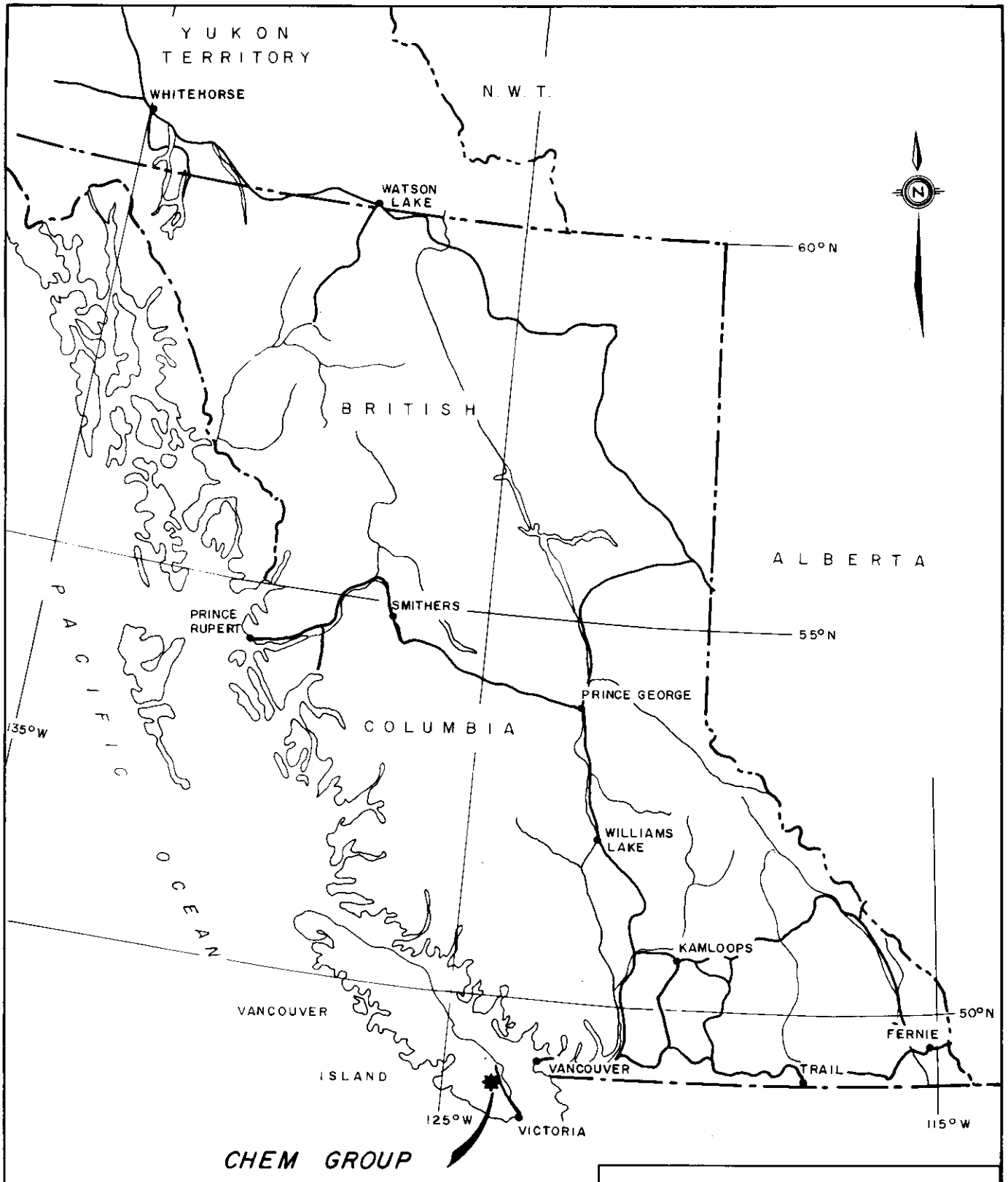
Recommendations include further prospecting and geological mapping in the areas where anomalous gold values were returned from rock samples, and further soil sampling in the area of the 1992 soil survey.

CME

TABLE OF CONTENTS

Appendices

Figures



GLOBAL LISTING SERVICE LTD.

GENERAL LOCATION MAP
CHEM GROUP
VICTORIA MINING DIVISION

Project No:	C 107	By:	T N
Scale:	1 : 8 000 000	Drawn:	J. S.
Drawing No:	1	Date:	March 1992.

CME CME Consulting Ltd.

1.0 INTRODUCTION

This report documents the geological fieldwork performed on the Chem Group of mineral claims (Cow 7, 9, 10 and 11) over the period of March 2 through March 5, 1992.

The work included geological mapping, prospecting and soil sampling. A total of 71 samples was collected, comprising 14 rocks and 57 soils. All samples were analyzed for gold by atomic absorption (AA) and a suite of 30 elements by inductively coupled plasma analysis (ICP).

2.0 PROPERTY LOCATION, ACCESS AND TITLE

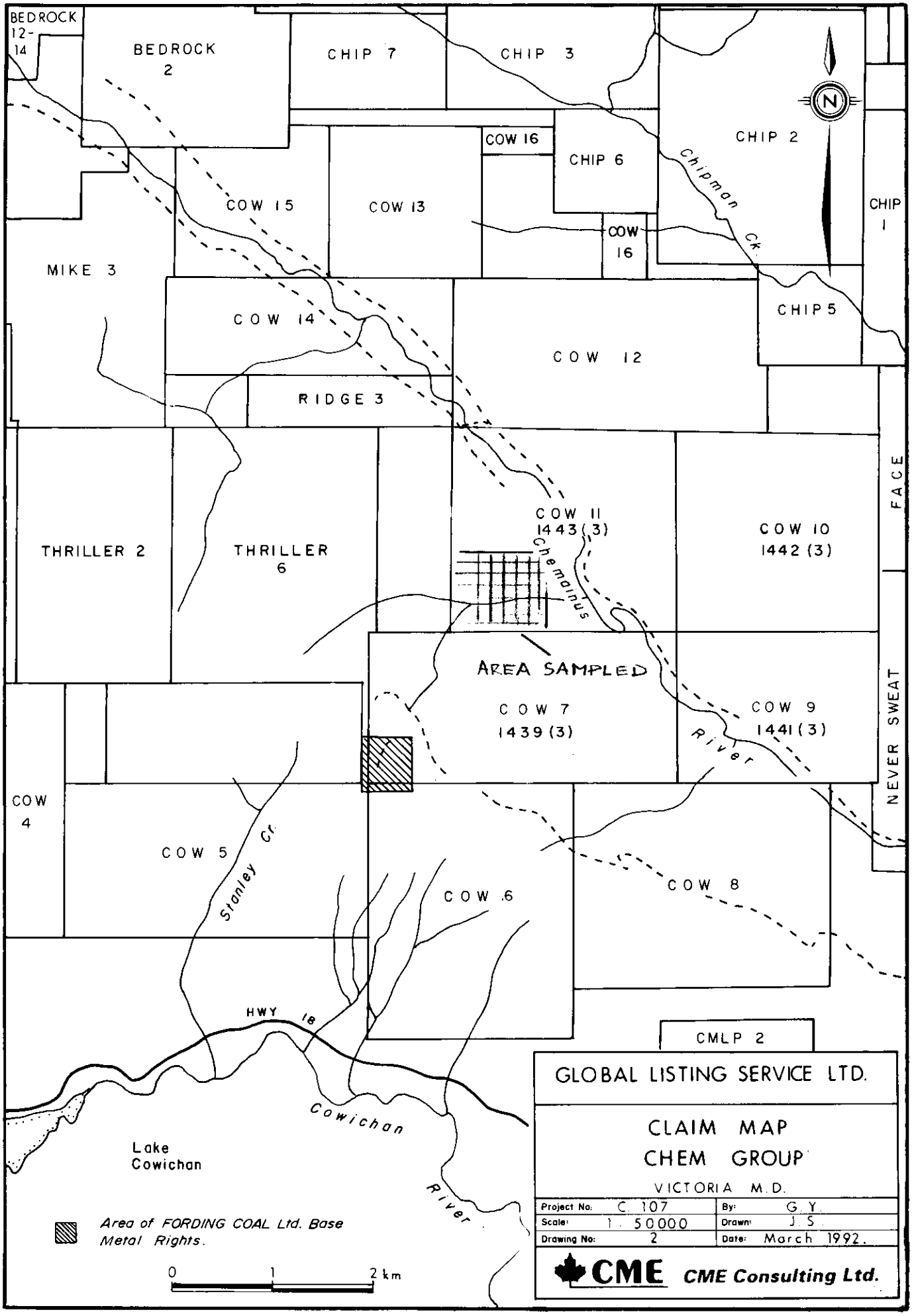
The Chem property is located in the Chemainus River valley approximately 23 km northwest of the city of Duncan on Vancouver Island, British Columbia (Figure 1). The property is in the Victoria Mining Division, on NTS mapsheets M92C/16E and M92B/13W and centred at approximately 123°59'W longitude, 48°52'N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

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

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

Claim	Tenure No.	Units	Anniversary Date	Year Registered
Cow 7	260644	18	March 6, 1993	1985
Cow 9	260645	12	March 6, 1993	1985
Cow 10	260646	16	March 6, 1993	1985
Cow 11	260647	16	March 6, 1993	1985
		62		

The claims were grouped as the Chem Group on March 5, 1986. They are owned by GLS Global Listing Service Ltd.


BEDROCK 12-14
BEDROCK 2
CHIP 7
CHIP 3
CHIP 2
CHIP 1
CHIP 6
CHIP 5
COW 16
COW 15
COW 13
COW 16
MIKE 3
COW 14
COW 12
RIDGE 3
THRILLER 2
THRILLER 6
COW 11 1443 (3)
COW 10 1442 (3)
FACE
NEVER SWEAT
Chipman Ck.
Chemainus
AREA SAMPLED
COW 7 1439 (3)
COW 9 1441 (3)
River
COW 4
COW 5
Stanley Cr.
COW 6
COW 8
HWY 18
Cowichan
River
Lake Cowichan
Area of FORDING COAL Ltd. Base Metal Rights.
0 1 2 km
CMLP 2
GLOBAL LISTING SERVICE LTD.
CLAIM MAP
CHEM GROUP
VICTORIA M.D.
Project No: C 107
By: G.Y.
Scale: 1:50000
Drawn: J.S.
Drawing No: 2
Date: March 1992.
CME CME Consulting Ltd.

3.0 HISTORY

Little geological work was conducted on the property prior to 1986.

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

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

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

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

During the period of September 14, 1986 to January 11, 1987, geological mapping (1:2500), rock, soil, silt and biogeochemical sampling, VLF-EM, magnetic and induced polarization/resistivity surveys were conducted.

A 213 metre diamond drill program was carried out between January 18 and January 30, 1987.

4.0 GEOLOGY

4.1 Regional Geology

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

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

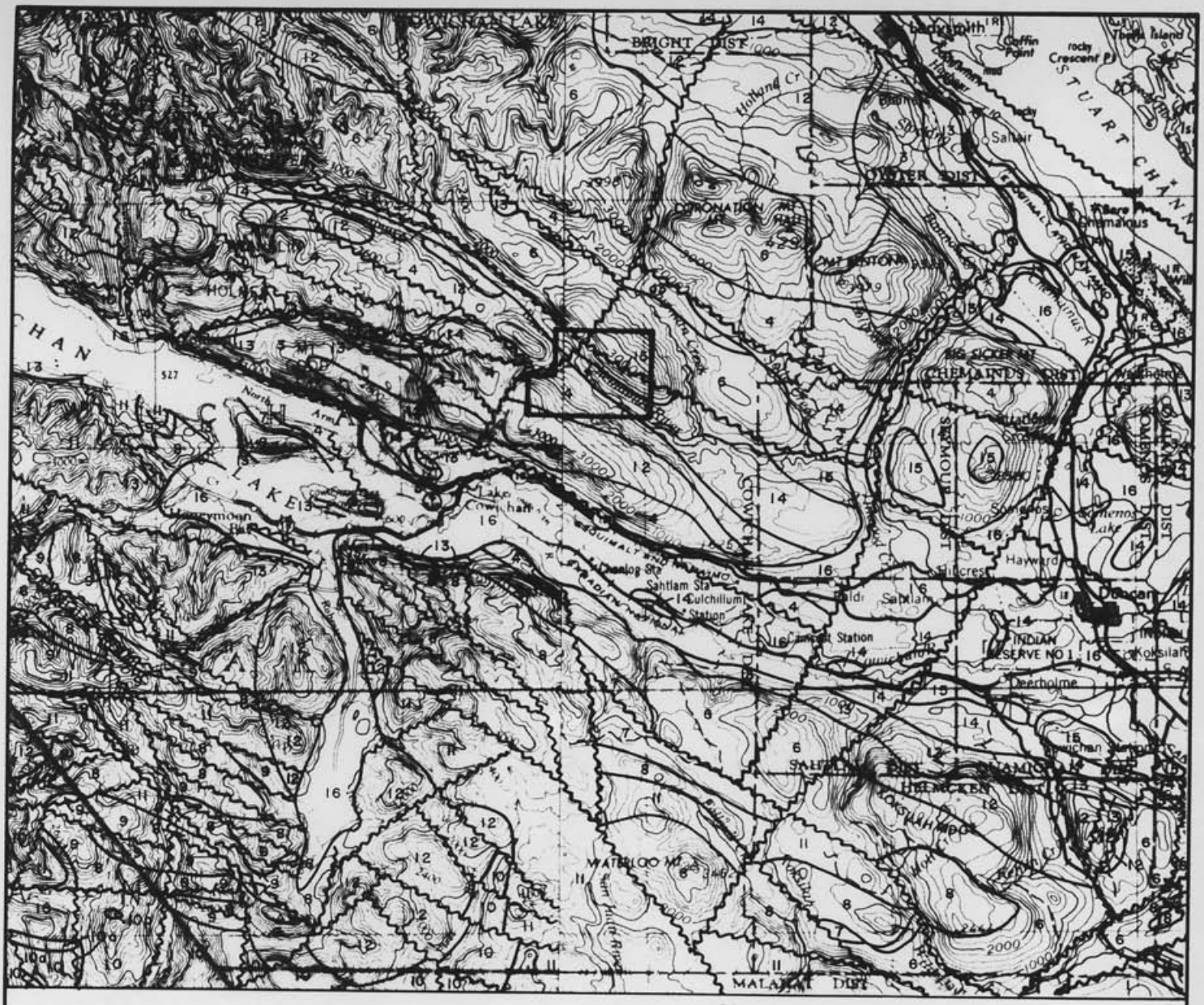
N. Massey (1987) mapped in the Cowichan Lake area, and divided the Sicker Group in this area as follows:

Upper Silurian to Lower Permian Sicker Group

Buttle Lake Sub-Group	
Mount Mark Formation	(formerly Buttle Lake Formation)
Cameron River Formation	(formerly Sediment-Sill Unit and/or Myra Formation)
Youbou Sub-group	
McLaughlin Ridge Formation	(formerly Myra Formation and/or Nitinat Formation)
Nitinat Formation	

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

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



QUATERNARY

16 Glacial and alluvial deposits.

UPPER CRETACEOUS

Nanaimo Group

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

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

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

JURASSIC

Lower to Middle Jurassic

12 Island Intrusions: granodiorite, quartz diorite

Lower Jurassic

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

UPPER PALEOZOIC AND ? OR TRIASSIC AND JURASSIC

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

TRIASSIC

Middle ? and Upper Triassic

Vancouver Group

9 Quatsino Fm.: limestone

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

PALEOZOIC

Sicker Group

PENNSYLVANIAN AND PERMIAN

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

PENNSYLVANIAN AND MISSISSIPPIAN

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

LOWER DEVONIAN AND OLDER

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

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

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

LOWER PALEOZOIC (OR YOUNGER ?)

2 Colquitz gneiss: quartz-feldspar gneiss

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

0 5 10km

N

GLOBAL LISTING SERVICE LTD.

REGIONAL GEOLOGY MAP
CHEM GROUP

VICTORIA MINING DIVISION

Project No:	C 107	By:	T. N.
Scale:	1 : 250 000	Drawn:	J. S.
Drawing No:	3	Date:	March 1992.

CME CME Consulting Ltd.

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

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

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

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

Lower to Middle Jurassic 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 basalt of the Jurassic Bonanza Groups.

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

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

4.2 Property Geology

(The detailed description of the property geology is taken from Allen's 1987 report.)

4.2.1 Lithology of Formations and Units of the Sicker Group

1) Nitinat Formation

Devonian or older pyroxene rich pyroclastics (tuffs to agglomerates, 1a,b) of the Nitinat Formation are exposed on the southwest part of the (Mike 1) claim.

These rocks are a dark to medium chloritic green colour overall. They generally have a fine-grained, dark green, siliceous, tuffaceous matrix with fine-grained feldspar and pyroxene crystal fragments up to 1 mm. Rounded to subangular coarse-grained feldspar pyroxene porphyry fragments up to several centimetres in diameter make up 20 to 90% of the rock. Intense epidote alteration is common throughout.

2. McLaughlin Ridge Formation
(formerly Nitinat and/or Myra Formations)

Pyroclastics of the McLaughlin Ridge Formation are exposed NE of a strong NW trending fault zone on ('M-8 Fault') the (Mike 3) claim. The formation in this area has been broken down into the following units.

2c Tuffaceous Siltstone, Siltstone

Rocks in this unit may be sedimentary or pyroclastic. They are very fine grained, dark grey to dark brown, massive to well bedded, commonly extremely siliceous, and may grade into feldspar crystal tuffs.

2e Crystal Tuff, Sandy Tuff

This unit is gradational to both units 2c and 2f. These rocks have a fine-grained, siliceous, grey to brown groundmass with up to 40% grey, subrounded to subangular to subhedral feldspar crystal fragments to 1 mm. Felty chloritic masses may be alterations of mafic crystal fragments. An average of 3 to 4% pyrite and/or pyrrhotite is commonly disseminated throughout.

2f Lapilli Tuff, Tuff Lapillistone, Agglomerate

These coarse-grained pyroclastics have a dark greyish brown siliceous, cherty to coarse-grained tuffaceous matrix with 20 to 70% <1 cm to >5 cm angular to rounded lithic clasts. Rock types of the clasts include: trachytic feldspar porphyry (andesite?), feldspar hornblende porphyry and fine-grained siliceous fragments which could be sedimentary or volcanic.

Up to 5% fine-grained disseminated pyrrhotite is common in the groundmass.

4) Cameron River Formation
(formerly Myra and/or Sediment-Sill Formations)

The greatest part of the Chem Group is underlain by sediments of this formation. It has been divided in this area into the following gradational units.

4a Argillite

Dark brown to black, thinly laminated to massive, soft to extremely hard argillite grades into both siltstone and cherty siltstone. It generally contains 1 to 2% fracture filling pyrite and weathers to a dull rusty brown.

4b Chert, Cherty Siltstone or Cherty Tuff

Rocks of this unit are generally cryptocrystalline to very fine-grained granular. They are siliceous, dark grey to dark brown, massive to well bedded and commonly grade into argillite (4a) or siltstone (4c).

4c Siltstone

This unit is dark grey to dark brown, massive to thinly laminated and generally very hard (silicified or hornfelsed?). These siltstones commonly contain sedimentary features such as load casts, soft sediment deformations, and graded beds. In most cases where these features were observed, the beds were 'tops up.'

4d Sandstone

This unit is similar to the siltstones (4c) previously described except that the grain size is slightly larger. The two units are gradational, commonly interlayered and together make up the predominant rock type on the property.

Silicification and/or hornfelsing may have been caused by the nearby granodioritic intrusives.

4f Heterolithic Conglomerate and Sedimentary Breccia

Conglomerate beds range in thickness from a few metres to greater than 100 m. They generally have a greenish grey coarse-grained sandstone matrix with 20 to 30% rounded to angular lithic fragments up to 30 cm (average 1-2 cm) in diameter. Clasts are composed of fine- to coarse-grained siliceous sediments (some well bedded), trachytic feldspar porphyry and hornblende feldspar porphyry.

4.2.2 Lithology of Intrusive Rocks

6) Triassic Karmutsen Formation

6d Gabbro

The gabbro intrusive (dyke?, sill?) mapped on the Chem property appears to be conformable with bedding in some places and to crosscut it in others. It is approximately 100 to 200 m thick and somewhat flat lying, dipping 20° to 40° to the northwest.

The gabbro is a medium-grained equigranular plutonic rock with a colour index of approximately 50 to 60. Original hornblende crystals are largely altered to chlorite and form a pseudo groundmass for 25% stubby white subhedral feldspar crystals averaging 2 mm in length.

The gabbro is metal rich. It contains 5% of a black submetallic, nonmagnetic mineral (probably ilmenite), 1-2% pyrite and traces of chalcopyrite. In some places it contains up to 5% pyrite and 2 to 3% pyrrhotite.

A chill margin a few metres wide is typically developed along the dyke selvage. In some places it has a distinctive flower porphyry texture.

9) Jurassic Island Intrusives

9b Mafic Dykes

These diabase dykes are generally less than 2 metres in width. They are southeast trending, have distinct chill margins, are commonly amygdaloidal and in some cases have acicular hornblende phenocrysts to 0.5 cm in length.

The dykes are found crosscutting all units previously mentioned and are possibly the youngest rocks observed on the property.

9f Feldspar Porphyry

Feldspar porphyry dykes in this area are generally less than 3 metres in width and strike approximately 90°. They contain 25% white stubby feldspar phenocrysts up to 1 cm (average 3-4 mm) in diameter, hornblende phenocrysts and rare rounded quartz phenocrysts in a fine-grained dark grey to brown groundmass.

These dykes may be offshoots from the nearby large plugs or sills of quartz diorite. They are seen crosscutting both Cameron River Formation sediments and Triassic gabbroic dykes.

9q Quartz Diorite

Quartz diorite intrusive bodies on and near the Chem property are up to a kilometre wide by several kilometres long. They are typically medium-grained, equigranular plutonic rocks with 75% (+) feldspar (mainly plagioclase), 15% hornblende, up to 10% quartz and minor amounts of biotite.

4.2.3 Structural Geology

Contacts between formations in the Sicker Group in this area appear to be fault related. On the eastern part of the claim group McLaughlin Ridge Formation pyroclastics are in fault contact with Cameron River Formation sediments. This fault is a shear zone several metres wide which shows up as a distinct lineation on airphotos. It has been named 'M8 Fault' because of its proximity to M8 road.

Bedding strikes to the northwest on both sides of 'M8 Fault' but dips are steep to the northeast on the northeast side and moderate to the southwest on the southwest side.

To the west, on the (Mike 1) claim, bedding strikes to the northeast indicating that a syncline with a fold axis at 230/38 trends through the

area. A second syncline from a later(?) folding event has a fold axis which lies at 30/32. Orientations of these folds were determined from stereonet plots but are only tentative because so few bedding attitudes were taken.

Both of these folds lie in a 700 m wide northeast trending belt of sediments between a gabbroic dyke on the southeast and a quartz diorite plug on the northwest. One syncline axis may continue along the entire length of this belt.

In summary, there have been at least three folding events in the Chem Group area. The main orogeny caused regional folding along a northwest trending axis. Two more folding events caused local distortion along northeast trending axes. It is possible that the gabbro dyke was folded during one of these later events.

Several northeast and northwest trending fault zones cut the property, the strongest of which appears to be the M8 Fault.

5.0 GEOLOGICAL ASSESSMENT WORK

The fieldwork performed on the Chem group included geological mapping at a scale of 1:10 000, prospecting, rock sampling and soil sampling. A total of 71 samples was collected, comprising 14 rocks and 57 soils, and analyzed for gold by AA and a suite of 30 elements by ICP.

5.1 Lithogeochemistry

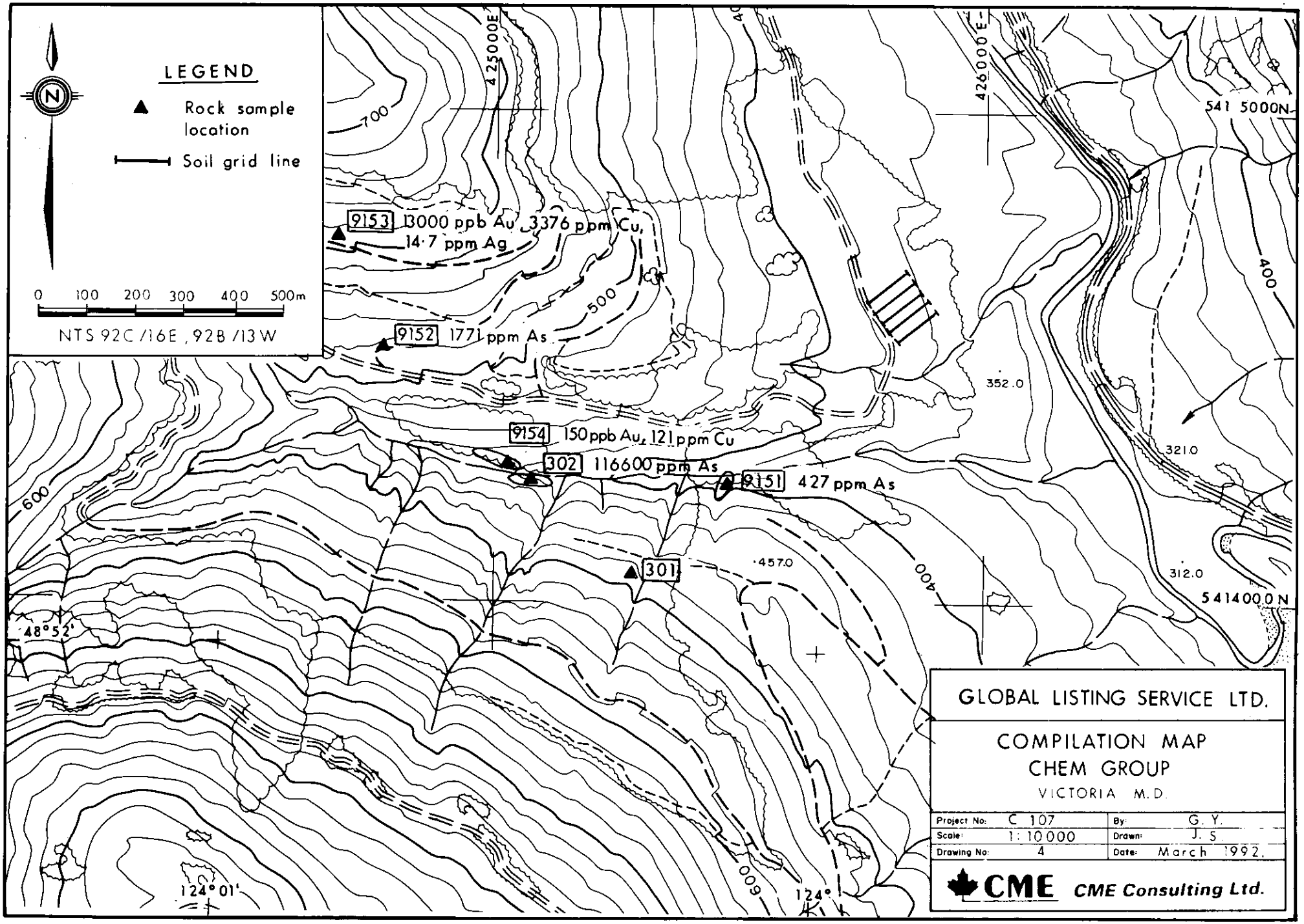
Geological mapping was primarily confined to the area of Waldon Creek. Due to thick overburden cover, little outcrop exposure was found. However, outcrops in this area were found to be of volcanoclastic rocks, possibly correlative to the Cameron River Formation. Analytical results can be found in Appendix 1 and sample locations on Figure 4. A sample of diorite (#9153) returned 13000 ppb Au, 14.7 ppm Ag, 3376 ppm Cu and 433 ppm As. Sample #9154, of ash tuff, returned 150 ppb Au, 121 ppm Cu and 140 ppm As. Ash tuff sample #92030303 returned 116600 ppm As. Several other samples reported anomalous arsenic (3611-427 ppm) values.

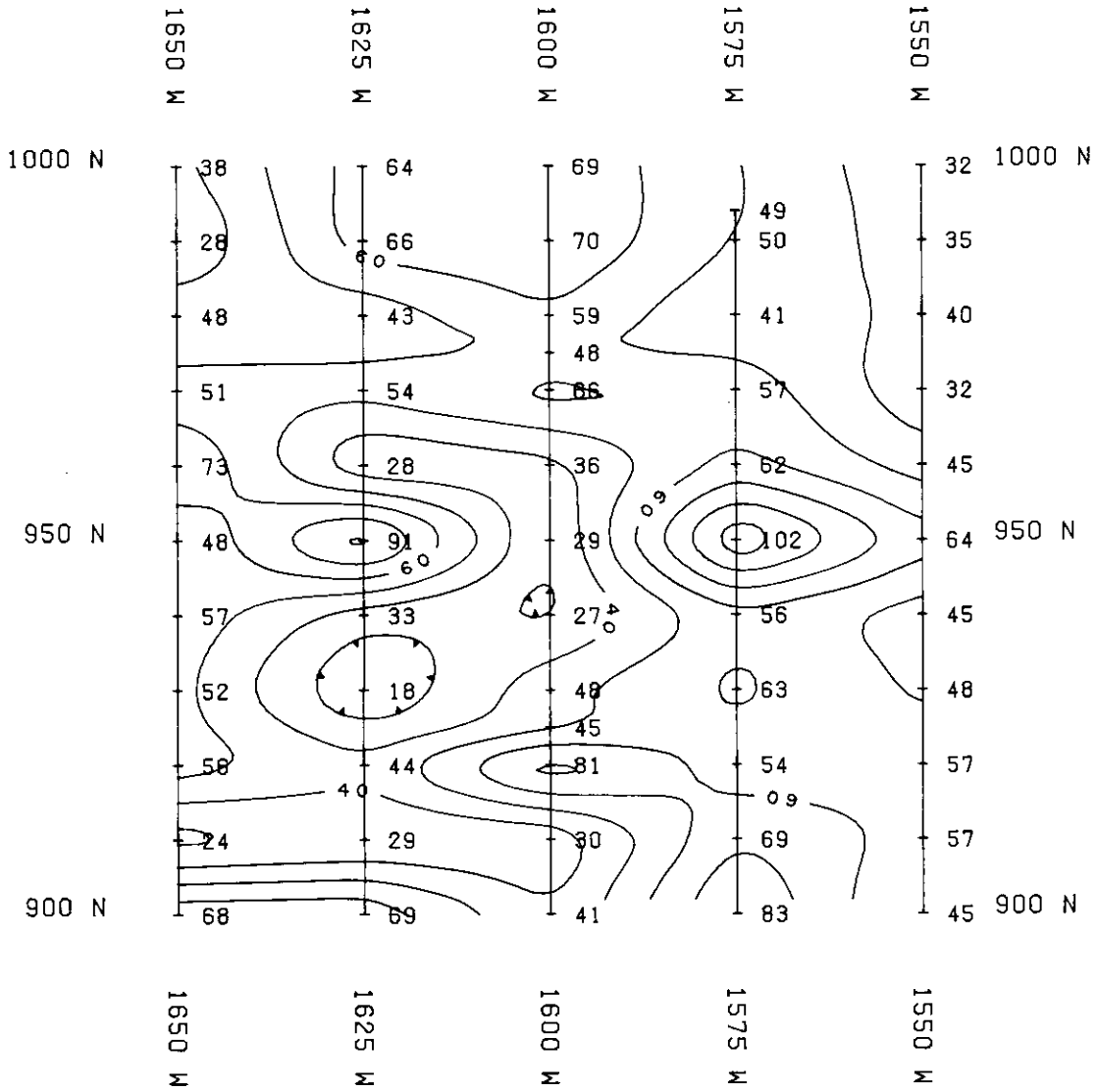
5.2 Soil Geochemistry

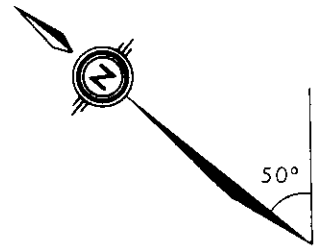
A detailed soil geochemistry grid was positioned over anomalous gold values from a soil geochemistry survey conducted in 1986 (Neale et al.). A 100 metre section of the original line was resampled with 10 metre stations. In addition, two lines were added to the north and two to the south, at 25 and 50 metre intervals. Samples taken from B horizon with grubhoe

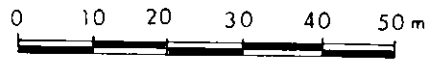
Copper, lead, zinc, and gold were plotted and contoured (Figures 5, 6, 7 and 8). Copper values ranged from 18 to 102 ppm, lead ranged from 1 to 28 ppm, zinc varied from 46 to 133 ppm and gold from 5 to 260 ppb.

Resampling of original gold highs (520 ppb and 150 ppb) returned 20 and 20 ppb.


LEGEND
Rock sample location
Soil grid line
0 100 200 300 400 500m
NTS 92C/16E, 92B/13W
425000E
426000E
541 5000N
700
500
400
600
9153 13000 ppb Au, 3376 ppm Cu, 14·7 ppm Ag
9152 1771 ppm As
9154 150 ppb Au, 121 ppm Cu
302 116600 ppm As
9151 427 ppm As
301
352.0
321.0
312.0
457.0
541400.0 N
48°52'
124°01'
124°
GLOBAL LISTING SERVICE LTD.
COMPILATION MAP
CHEM GROUP
VICTORIA M.D.
Project No: C 107
Scale: 1:10000
Drawing No: 4
By: G. Y.
Drawn: J. S.
Date: March 1992.
CME Consulting Ltd.





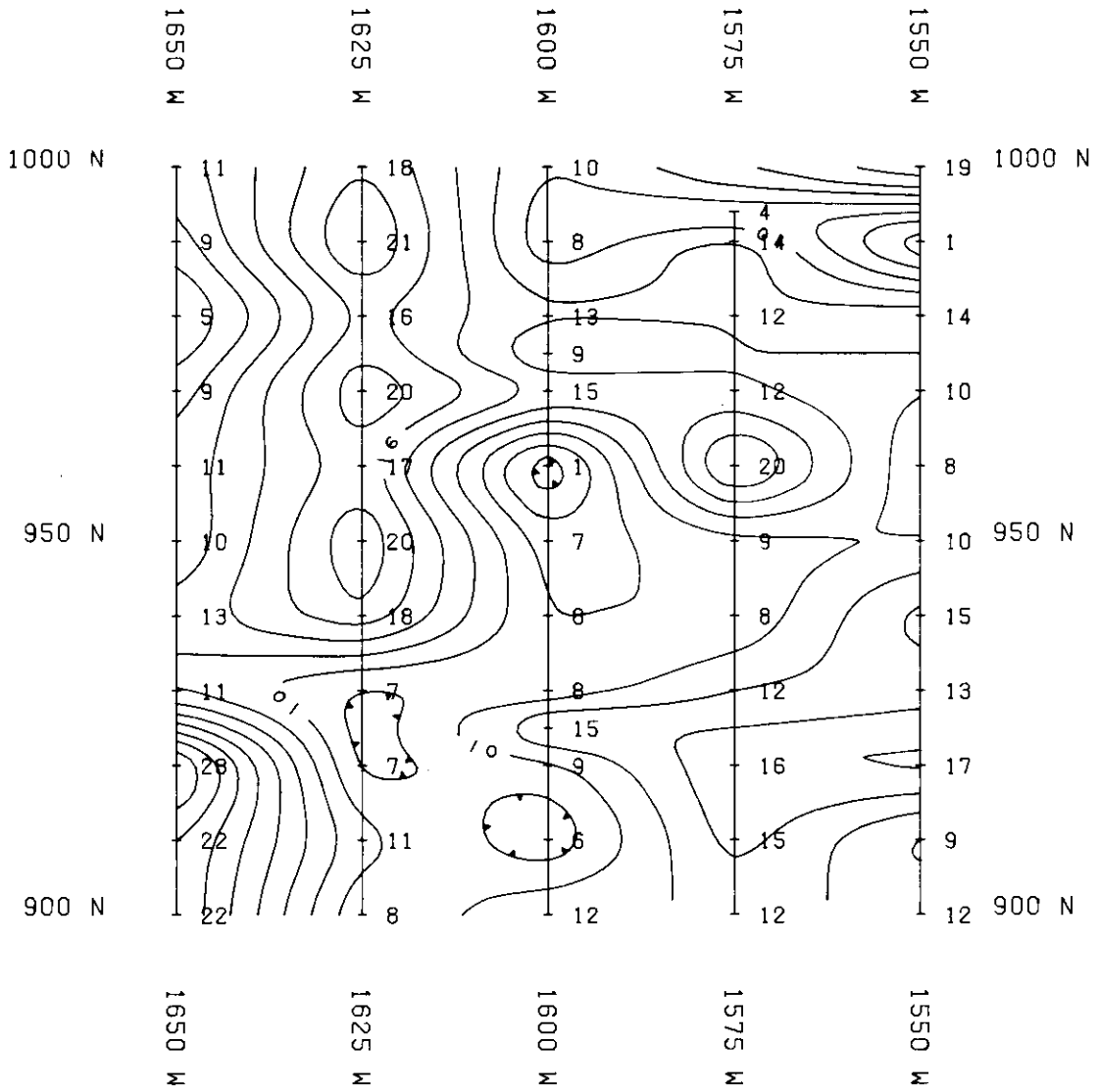


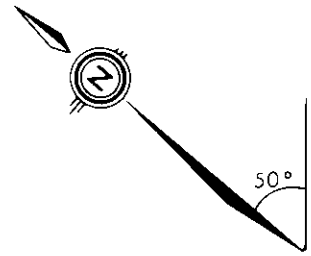
GLOBAL LISTING SERVICE LTD.

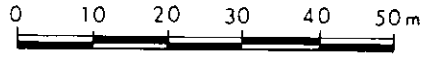
SOIL GEOCHEMISTRY
Cu (ppm)
CHEM GROUP
VICTORIA M.D.

Project No:	C-107	By:	G.Y.
Scale:	1:1000	Drawn:	J.S.
Drawing No:	5	Date:	March 1992

CME Consulting Ltd.





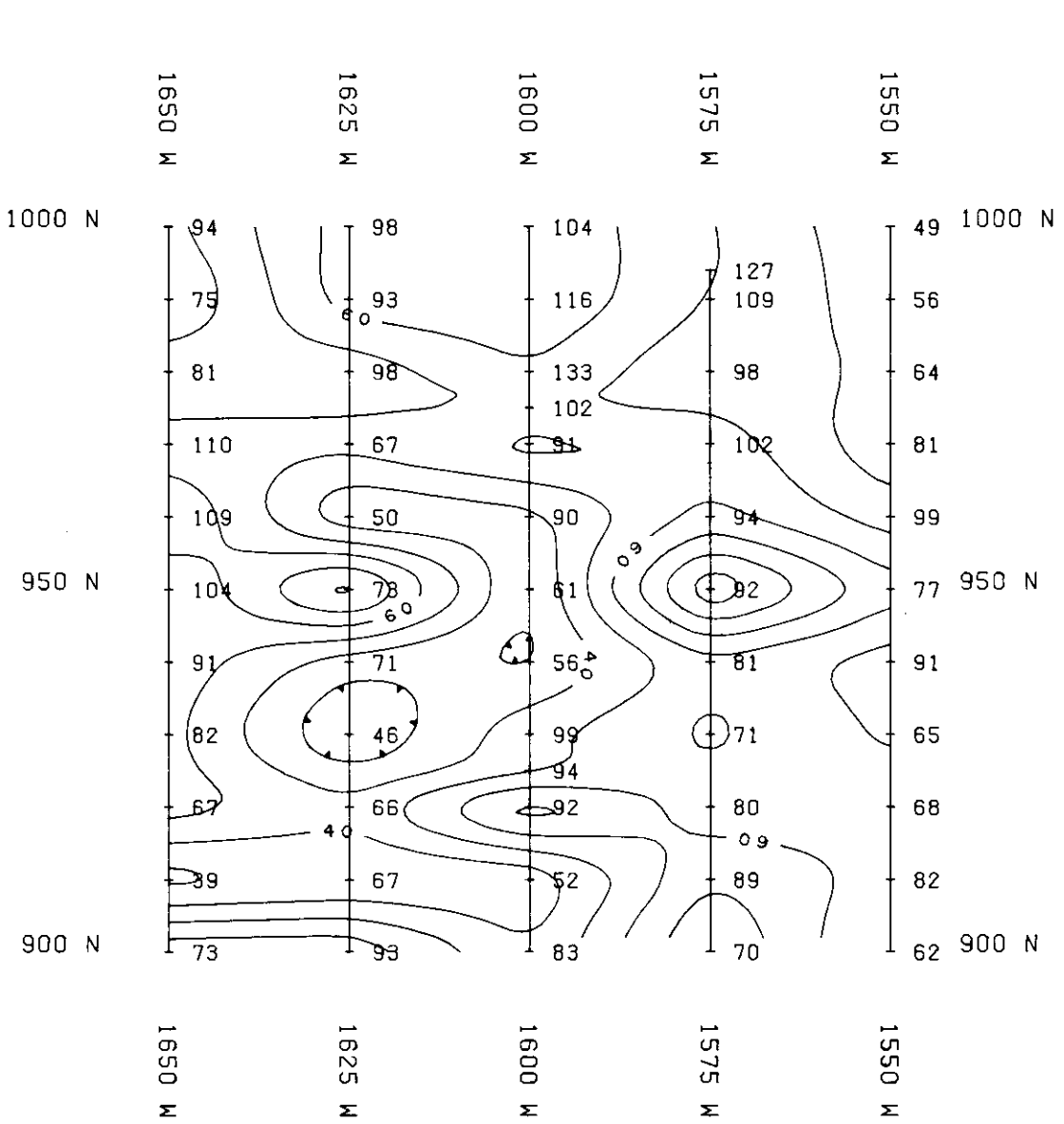


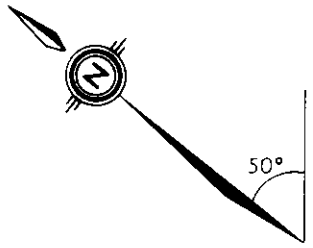
GLOBAL LISTING SERVICE LTD.

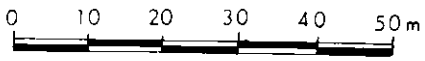
SOIL GEOCHEMISTRY
Pb (ppm)
CHEM GROUP
VICTORIA M.D.

Project No:	C 107	By:	G. Y.
Scale:	1:1000	Drawn:	J. S.
Drawing No:	6	Date:	March 1992.

CME CME Consulting Ltd.





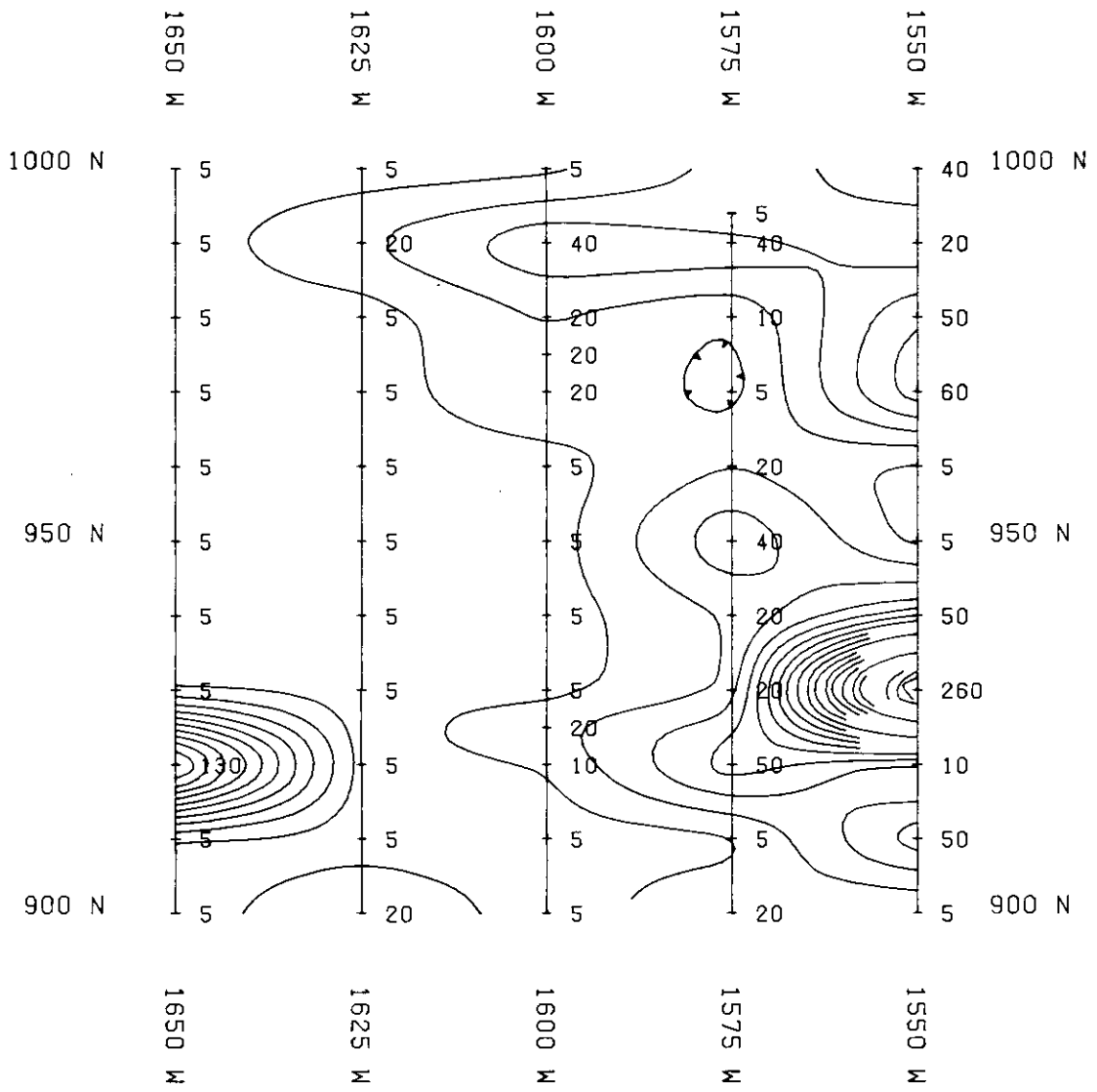


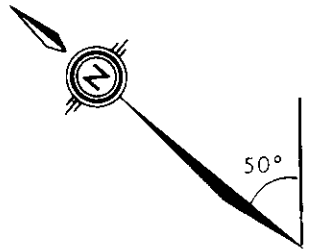
GLOBAL LISTING SERVICE LTD.

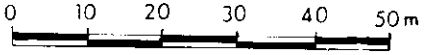
SOIL GEOCHEMISTRY
Zn (ppm)
CHEM GROUP
VICTORIA M.D

Project No:	C 107	By:	G Y
Scale:	1 1000	Drawn:	J. S.
Drawing No:	7	Date:	March 1992.

CME Consulting Ltd.







GLOBAL LISTING SERVICE LTD.

SOIL GEOCHEMISTRY
Au (ppb)
CHEM GROUP
VICTORIA M D

Project No:	C 107	By:	G Y
Scale:	1:1000	Drawn:	J. S.
Drawing No:	8	Date:	March 1992.

CME Consulting Ltd.

No strong trends can be interpreted from the data because of the small size of the data set. However, a weak trend perpendicular (150°) to the grid lines is present.

The data from the survey may also be affected by transport, possibly due to historical logging in the study area.

6.0 CONCLUSIONS

The area of Waldon Creek appears to be predominantly underlain by the Cameron River Formation.

Rock sampling in the area returned up to 13 000 ppb Au, 14.7 ppm Ag, 3376 ppm Cu and 116 600 ppm As, from a sample of diorite (#9153).

The soil survey did not clearly define any large anomalies, however anomalous gold values of up to 260 ppb were returned. There appears to be a geochemical trend perpendicular to the grid lines (150°).

Lead and gold values from the soil geochemistry survey give a broad trend at 150°. It is not known whether the overburden in the area has been transported over a distance of metres or hundreds of metres.

7.0 RECOMMENDATIONS

It is recommended that further prospecting and geological mapping be carried out to provide more information on the underlying geology, particularly in the area in which rock samples returned anomalous gold values.

A detailed soil geochemistry survey be carried out in the area of the 1992 survey. Augered soil samples should be taken to determine if the overburden has been transported.

A magnetometer and VLF-EM survey be conducted on the soil survey grid.

Respectfully submitted,

Gunther T. Yip, BSc.

March 6, 1992

CERTIFICATE

I, G. T. Yip, do hereby certify:

That I am a graduate in geology of Dalhousie University (BSc. 1987).

That I have practised as a geologist for the past four years.

That the opinions, conclusions and recommendations herein are based on the field work carried out on the property from March 2 to March 6, 1992.

That I own no direct, indirect or contingent interest in the subject property.

Gunther T. Yip, BSc.

March 6, 1992

REFERENCES

Allen, G. 1987 Report on Phases II and III - Geology, Geochemistry, Geophysics and Diamond Drilling on the Chem Property, February 27, 1987

-- 1987 Report on Phases I, II and III - Geology, Geochemistry, Geophysics and Diamond Drilling on the Mike Property, February 27, 1987

Fyles, J.T. 1955 Geology of the Cowichan Lake area, Vancouver Island, British Columbia; BCDM Bull. 37

Massey, N. 1987 Geology of the Cowichan Lake Area, NTS 92C/16; Province of British Columbia, Ministry of Energy, Mines and Petroleum Resources, Open File 1987/2

-- 1977 Geology of Vancouver Island (West Half); GSC Open File 463

-- 1980a The Paleozoic Sicker Group of Vancouver Island, British Columbia; GSC Paper 79-30

-- 1980b Geology, Victoria Map Area, Vancouver Island and Gulf Islands, British Columbia; GSC Open File 701

-- 1982 Geology of Nitinat Lake Map Area, British Columbia; GSC Open File 821

Neale, T., T.G. Hawkins, J.S. Getsinger 1986 Report on Phase I Geology and Soil Geochemistry, Chem Group (Cow 7, 9, 10, 11 Claims); for International Cherokee Developments Ltd., May 21, 1986

APPENDIX I

List of Personnel and Statement of Expenditures

CME

LIST OF PERSONNEL AND STATEMENT OF EXPENDITURES

Personnel:					
G. Yip, BSc.	9 days	@	$350/day	$3,150.00	
T. Hayes, Prospector	3 days	@	$350/day	1,050.00	
					$4,200.00
Food and Accommodation					304.89
Equipment Rental:					
Truck	3 days	@	$100/day	300.00	
Rocksaw	14 rocks	@	$ 1/rock	14.00	
					314.00
Disbursements:					
Transportation				100.60	
Fuel				147.88	
Phone				5.79	
Courier				4.75	
Drafting				107.00	
Reproduction				95.83	
Miscellaneous supplies				19.14	
					480.99
Analysis -					
57 soils	@	$12.50/sample		712.50	
14 rocks	@	$15.00/sample		210.00	
					922.50
Report Costs					87.28
Administration	@	15% (on $1490.77)			223.62
					$6,533.28

APPENDIX II

Certificates of Analyses

ROSSBACHER LABORATORY LTD.

CERTIFICATE OF ANALYSIS

2225 Springer Ave., Burnaby,
British Columbia, Can. V5B 3N1
Ph:(604)299-6910 Fax:299-6252

To : CME CONSULTING LTD.
#2405-555 WEST HASTINGS STREET
VANCOUVER, B.C.

Project: CHEM
Type of Analysis: ICP

Certificate: 92134.I
Invoice: 30087
Date Entered: 92-03-18
File Name: CME92134.I
Page No.: 1

PREFIX	SAMPLE NAME	PPM MO	PPM CU	PPM PB	PPM ZN	PPM AG	PPM NI	PPM CO	PPM MN	% FE	PPM AS	PPM U	PPM AU	PPM HG	PPM SR	PPM CD	PPM SB	PPM BI	PPM V	% CA	% P	PPM LA	PPM CR	% MG	PPM BA	% TI	% AL	% NA	% S	PPM W	PPM BE	PPB AU	AA
S	1550N 900E	1	45	12	62	0.1	13	4	350	3.30	12	5	ND	ND	12	1	1	6	81	0.12	0.07	4	23	0.56	64	0.14	2.69	0.03	0.01	4	2	5	
S	1550N 910E	1	57	9	82	0.1	17	9	374	3.96	2	5	ND	ND	14	1	1	1	94	0.11	0.07	5	28	0.74	80	0.21	3.88	0.04	0.02	1	2	50	
S	1550N 920E	1	57	17	68	0.2	20	23	2571	3.12	5	5	ND	ND	25	1	1	1	74	0.50	0.07	25	20	0.44	126	0.16	3.81	0.04	0.03	1	4	10	
S	1550N 930E	1	48	13	65	0.3	17	20	1794	3.18	6	5	ND	ND	26	1	1	6	76	0.50	0.05	17	22	0.49	112	0.15	2.92	0.04	0.01	4	3	260	
S	1550N 940E	2	45	15	91	0.2	22	21	1169	3.72	6	5	ND	ND	20	1	1	1	95	0.36	0.06	8	26	0.64	106	0.21	3.13	0.04	0.01	1	3	50	
S	1550N 950E	1	64	10	77	0.5	23	19	1491	3.77	7	5	ND	ND	16	1	1	1	89	0.26	0.08	12	26	0.66	106	0.18	3.95	0.04	0.02	1	3	5	
S	1550N 960E	1	45	8	99	0.1	16	8	323	4.31	4	5	ND	ND	12	1	1	1	95	0.15	0.18	6	28	0.60	74	0.15	3.42	0.03	0.02	1	2	5	
S	1550N 970E	1	32	10	81	0.1	12	6	286	3.60	7	5	ND	ND	19	1	1	1	80	0.32	0.17	5	24	0.44	74	0.13	2.51	0.03	0.01	2	2	60	
S	1550N 980E	1	40	14	64	0.3	12	5	302	3.74	7	5	ND	ND	15	1	1	6	92	0.21	0.16	5	28	0.41	59	0.15	3.22	0.03	0.03	1	2	50	
S	1550N 990E	1	35	1	56	0.1	9	1	213	4.10	4	5	ND	ND	10	1	1	1	99	0.10	0.15	4	27	0.39	39	0.14	2.99	0.03	0.02	1	2	20	
S	1550N 1000E	1	32	19	49	0.1	6	1	163	3.66	6	5	ND	ND	9	1	1	6	89	0.09	0.23	4	22	0.31	34	0.15	2.82	0.02	0.03	5	2	40	
S	1575N 900E	3	83	12	70	0.1	21	13	460	3.61	4	5	ND	ND	12	1	1	6	99	0.14	0.06	9	25	0.71	96	0.21	3.63	0.03	0.02	2	3	20	
S	1575N 910E	1	69	15	89	0.1	23	24	1873	3.76	2	5	ND	ND	20	1	1	1	97	0.29	0.08	18	27	0.68	125	0.20	3.63	0.04	0.02	2	4	5	
S	1575N 920E	1	54	16	80	0.1	21	16	1793	3.39	2	5	ND	ND	26	1	1	2	85	0.46	0.06	12	23	0.66	125	0.17	3.21	0.04	0.01	5	3	50	
S	1575N 930E	1	63	12	71	0.1	19	21	3019	3.75	2	5	ND	ND	22	2	1	1	86	0.36	0.08	19	23	0.44	125	0.20	4.44	0.04	0.05	3	5	20	
S	1575N 940E	1	56	8	81	0.1	23	14	1939	3.76	2	5	ND	ND	20	1	1	2	91	0.35	0.07	11	25	0.52	111	0.19	4.37	0.04	0.04	3	4	20	
S	1575N 950E	1	102	9	92	0.1	28	8	530	4.27	9	5	ND	ND	14	1	1	1	100	0.21	0.07	8	32	0.89	100	0.18	4.41	0.04	0.02	1	3	40	
S	1575N 960E	1	62	20	94	0.1	25	12	832	4.29	2	5	ND	ND	17	1	1	2	107	0.26	0.06	8	29	0.65	116	0.19	3.95	0.04	0.01	1	4	20	
S	1575N 970E	1	57	12	102	0.1	25	7	599	4.47	4	5	ND	ND	16	1	1	1	107	0.26	0.08	6	33	0.65	106	0.21	3.95	0.04	0.01	2	3	5	
S	1575N 980E	1	41	12	98	0.1	19	13	756	4.04	2	5	ND	ND	13	1	1	1	88	0.22	0.09	6	26	0.44	85	0.21	4.06	0.04	0.03	2	4	10	
S	1575N 990E	1	50	14	109	0.1	7	4	500	4.30	2	5	ND	ND	11	1	1	1	96	0.15	0.13	5	23	0.35	89	0.21	4.10	0.02	0.03	1	3	40	
S	1575N 994E	1	49	4	127	0.1	10	10	801	4.42	7	5	ND	ND	12	1	1	1	97	0.16	0.28	5	23	0.50	107	0.22	4.49	0.02	0.02	1	3	5	
S	1600W 900N	1	41	12	83	0.5	2	1	316	3.86	8	5	ND	ND	12	1	1	1	88	0.14	0.18	5	18	0.50	57	0.14	3.54	0.01	0.02	1	2	5	
S	1600W 910N	1	30	6	52	0.1	1	2	222	2.82	4	5	ND	ND	11	1	1	1	72	0.13	0.13	4	13	0.32	39	0.17	2.36	0.01	0.02	3	2	5	
S	1600W 920N	1	81	9	92	0.1	6	1	685	4.48	4	5	ND	ND	9	2	1	1	102	0.10	0.22	8	24	0.62	64	0.24	7.87	0.02	0.07	1	3	10	
S	1600W 925N	1	45	15	94	0.1	4	7	661	4.73	4	5	ND	ND	19	2	1	1	117	0.26	0.14	10	22	0.67	115	0.20	2.93	0.02	0.01	1	3	20	
S	1600W 930N	1	48	8	99	0.1	6	15	789	3.38	3	5	ND	ND	16	1	1	1	85	0.21	0.07	18	15	0.70	97	0.16	2.95	0.02	0.01	1	3	5	
S	1600W 940N	1	27	8	56	0.1	1	2	337	3.25	6	5	ND	ND	12	1	1	1	82	0.21	0.11	4	12	0.37	48	0.18	2.26	0.01	0.02	2	2	5	
S	1600W 950N	1	29	7	61	0.1	1	9	818	3.48	3	5	ND	ND	13	1	1	1	90	0.16	0.04	6	14	0.41	72	0.16	1.88	0.01	0.01	1	2	5	
S	1600W 960N	1	36	1	90	0.1	5	19	2506	3.11	2	5	ND	ND	17	1	1	1	78	0.25	0.05	14	14	0.45	109	0.17	2.68	0.02	0.01	1	4	5	
S	1600W 970N	1	66	15	91	0.1	21	12	908	3.87	9	5	ND	ND	17	1	1	4	87	0.28	0.07	7	30	0.86	93	0.18	3.04	0.02	0.01	1	3	20	
S	1600W 975N	1	48	9	102	0.5	16	16	2217	3.47	2	5	ND	ND	20	2	1	1	76	0.32	0.10	12	24	0.45	114	0.18	3.59	0.02	0.02	1	3	20	
S	1600W 980N	1	59	13	133	0.5	15	21	4680	3.47	2	5	4	ND	25	2	1	1	81	0.34	0.16	21	24	0.44	185	0.19	3.39	0.03	0.02	1	4	20	
S	1600W 990N	1	70	8	116	0.3	19	16	1880	3.90	8	5	ND	ND	18	1	1	1	86	0.25	0.13	11	33	0.55	113	0.18	4.07	0.03	0.03	1	3	40	
S	1600W 1000N	1	69	10	104	0.1	20	14	571	4.29	5	5	ND	ND	14	1	1	1	97	0.19	0.08	6	34	0.52	90	0.21	4.27	0.03	0.02	1	3	5	
S	1625W 900N	1	69	8	93	0.3	16	7	528	4.14	11	5	ND	ND	12	1	1	1	90	0.11	0.11	5	31	0.88	57	0.18	4.27	0.02	0.02	1	2	20	
S	1625W 910N	1	29	11	67	0.7	6	2	241	3.01	7	5	ND	ND	11	1	1	1	69	0.11	0.11	5	21	0.40	45	0.12	2.98	0.01	0.02	1	2	5	
S	1625W 920N	1	44	7	66	0.2	6	3	296	3.60	5	5	ND	ND	11	1	1	1	78	0.12	0.20	4	24	0.43	51	0.13	3.56	0.01	0.03	1	2	5	
S	1625W 930N	2	18	7	46	0.4	5	3	182	2.70	8	5	ND	ND	13	1	2	1	76	0.13	0.06	5	18	0.35	38	0.10	1.63	0.01	0.01	1	2	5	
S	1625W 940N	1	33	18	71	0.1	10	7	491	3.81	3	5	ND	ND	13	1	1	1	94	0.16	0.11	4	24	0.47	59	0.17	2.75	0.01	0.01	5	2	5	

CERTIFIED BY :

CME

ROSSBACHER LABORATORY LTD.

CERTIFICATE OF ANALYSIS

2225 Springer Ave., Burnaby,
British Columbia, Can. V5B 3N1
Ph:(604)299-6910 Fax:299-6252

To : CME CONSULTING LTD.
#2405-555 WEST HASTINGS STREET
VANCOUVER, B.C.

Project: CHEM
Type of Analysis: ICP

Certificate: 92134.I
Invoice: 30087
Date Entered: 92-03-18
File Name: CME92134.I
Page No.: 2

PRE FIX	SAMPLE NAME	PPM MO	PPM CU	PPM PB	PPM ZN	PPM AG	PPM NI	PPM CO	PPM MN	% FE	PPM AS	PPM U	PPM AU	PPM HG	PPM SR	PPM CD	PPM SB	PPM BI	PPM V	% CA	% P	PPM LA	PPM CR	% MG	PPM BA	% TI	% AL	% NA	% S	PPM W	PPM BE	PPB AU	AA
S	1625W 950N	1	91	20	73	0.1	17	18	1319	3.61	2	5	ND	ND	12	1	1	2	84	0.15	0.25	7	26	0.62	73	0.19	5.88	0.02	0.06	2	2	5	
S	1625W 960N	2	28	17	50	0.2	8	10	291	2.59	4	5	ND	ND	16	1	4	2	72	0.23	0.05	10	17	0.30	63	0.10	1.85	0.01	0.01	6	2	5	
S	1625W 970N	3	54	20	67	0.3	13	95	2426	2.29	5	5	ND	ND	16	1	2	2	63	0.22	0.07	26	15	0.41	85	0.11	2.58	0.01	0.02	5	3	5	
S	1625W 980N	1	43	16	98	0.2	15	16	536	3.93	8	5	ND	ND	16	1	1	2	92	0.22	0.13	11	25	0.54	107	0.16	2.88	0.01	0.01	6	2	5	
S	1625W 990N	3	66	21	93	0.3	23	20	775	4.38	12	5	ND	ND	17	1	1	2	97	0.28	0.13	10	28	0.90	96	0.20	3.66	0.02	0.03	7	3	20	
S	1625W 1000N	1	64	18	98	0.2	20	22	927	4.10	7	5	ND	ND	14	1	1	2	94	0.20	0.14	11	26	0.56	83	0.21	3.94	0.02	0.03	8	3	5	
S	1650W 900N	2	68	22	73	0.2	21	14	582	4.10	9	5	ND	ND	25	1	1	2	100	0.43	0.13	8	23	0.75	113	0.16	3.26	0.02	0.02	8	2	5	
S	1650W 910N	2	24	22	39	0.2	9	5	267	2.80	9	5	ND	ND	17	1	3	2	84	0.23	0.05	6	13	0.31	54	0.11	1.65	0.01	0.01	9	2	5	
S	1650W 920N	3	56	28	67	0.2	18	13	538	3.61	14	5	ND	ND	22	1	5	2	95	0.37	0.11	6	20	0.60	101	0.15	2.19	0.02	0.02	9	2	130	
S	1650W 930N	1	52	11	82	0.2	9	6	415	3.85	12	5	ND	ND	14	1	1	2	93	0.19	0.13	5	19	0.38	70	0.11	2.79	0.03	0.03	8	2	5	
S	1650W 940N	1	57	13	91	0.4	13	9	420	3.95	13	5	ND	ND	12	1	1	3	86	0.15	0.16	5	20	0.57	64	0.17	3.51	0.03	0.03	9	2	5	
S	1650W 950N	1	48	10	104	0.1	11	10	414	4.05	14	5	ND	ND	14	1	6	2	90	0.14	0.15	5	19	0.51	82	0.15	3.42	0.03	0.03	7	2	5	
S	1650W 960N	2	73	11	109	0.3	17	11	866	5.16	14	5	ND	ND	15	1	4	4	107	0.22	0.35	6	25	0.64	111	0.19	5.56	0.04	0.07	11	3	5	
S	1650W 970N	1	51	9	110	0.4	9	7	365	4.01	13	5	ND	ND	14	1	6	7	89	0.16	0.16	6	17	0.42	83	0.13	3.58	0.03	0.04	10	2	5	
S	1650W 980N	2	48	5	81	0.1	13	7	438	4.28	12	5	ND	ND	13	1	5	1	102	0.14	0.18	5	20	0.54	65	0.18	4.01	0.03	0.06	9	2	5	
S	1650W 990N	2	28	9	75	0.1	12	13	1646	2.73	9	5	ND	ND	15	1	1	6	63	0.21	0.08	8	13	0.47	97	0.13	1.95	0.03	0.01	4	2	5	
S	1650W 1000N	1	38	11	94	0.1	13	10	399	3.47	9	5	ND	ND	16	1	2	5	79	0.22	0.08	9	16	0.38	85	0.19	2.72	0.04	0.02	6	2	5	
A	9203 0301	1	94	14	107	0.1	18	17	1513	5.35	20	5	ND	ND	79	1	1	4	115	0.80	0.07	3	31	1.47	272	0.24	2.92	0.13	0.09	8	2	5	
A	9203 0302	1	64	15	102	0.3	18	11	666	3.94	15	5	ND	ND	65	1	5	13	32	1.25	0.54	10	13	1.15	156	0.15	1.94	0.09	0.11	9	1	5	
A	9203 0303	3	27	28	51	0.1	10	1	259	5.74	116600	5	ND	9	127	1	341	11	7	0.48	0.02	1	27	0.04	227	0.01	0.30	0.05	0.02	14	1	5	
A	9203 0401	3	71	10	21	0.1	26	14	135	2.18	1887	5	ND	ND	21	1	18	3	24	1.03	0.12	5	21	0.15	38	0.08	0.91	0.09	0.04	10	1	5	
A	9203 0501	3	14	12	59	0.1	10	10	620	3.65	3611	5	ND	ND	26	1	18	9	48	0.32	0.10	12	44	1.01	740	0.10	1.63	0.06	0.02	9	1	5	
A	9151	3	9	17	51	0.1	15	11	784	2.94	427	5	ND	ND	6	1	8	6	33	0.10	0.04	6	39	0.77	191	0.01	1.60	0.04	0.10	7	1	5	
A	9152	1	55	1	97	0.1	5	7	1424	4.46	1771	5	ND	ND	544	1	1	1	34	14.60	0.13	7	10	0.89	45	0.01	2.01	0.05	0.04	1	2	5	
A	9153	14	3376	57	214	14.7	182	315	338	22.33	433	5	ND	6	12	2	31	33	192	0.30	0.03	4	75	0.71	45	0.07	1.58	0.06	0.06	8	4	13000	
A	9154	1	121	15	60	0.1	56	35	1355	5.41	140	5	ND	ND	215	1	1	1	79	6.74	0.13	10	31	2.00	92	0.01	2.36	0.05	0.08	1	3	150	

CERTIFIED BY : Rossbacher

CME

APPENDIX III

Rock Descriptions

		Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm
9151	Rock type: Ash tuff Medium green, medium to fine-grained ash tuff. Moderately silicified, and friable. Located adjacent to a 15 cm wide fault trending 315/70N. No visible sulphide mineralization. Weathered surfaces, earthy brown-black in colour.	5	0.1	9	17	51	427
9152	Rock type: Cherty tuffs Light grey, very fine-grained cherty tuff with localized milky white quartz stringers (<1 cm). Some stringers are rimmed with a fine-grained, black mineral. Traces of finely disseminated pyrite (<1 mm) occur locally within the black mineral. Weathered surfaces are dark brown.	5	0.1	55	1	57	177
9153	Rock type: Diorite Rusty brown gossan. Sample taken from within a fault trending 303/68S approximately 15 cm wide. Host rock is an altered grey-green diorite with euhedral and anhedral white feldspar crystals and altered green, anhedral mafic crystals supported by a dark green, fine-grained groundmass. Original textures are no longer present. Weathered surfaces are rusty brown. No visible sulphide mineralization. Alteration halo 15 cm on hanging wall and footwall of fault.	13000	14.7	3376	57	214	443
9154	Rock type: Ash tuff Medium green, fine-grained, ash tuff. Moderately fractured, with yellow-white carbonate infilling. With 1% very finely disseminated pyrite throughout. Weathered surfaces are rusty brown in colour.	150	0.1	121	15	60	140
92030301	Rock type: Chert Dark grey, very fine-grained chert, with a trace of very finely disseminated pyrite (<1 mm). Weathered surfaces vary from off-white to rusty brown.	5	0.1	94	14	107	20

CME

		Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm
92030302	Rock type: Cherty ash tuff Dark, blue-green, cherty ash tuff. Very intensely silicified with 3% anhedral to subhedral, finely disseminated pyrite (<1 mm). Weathered surfaces are orange to earthy brown in colour.	5	0.3	64	15	102	15
92030303	Rock type: Ash tuff Dark, blue-grey ash tuff. Very fine-grained, intensely silicified with vuggy, white quartz flooding. Vugs appear to be the result of weathered sulphides. Mineralization occurs as 1% finely disseminated pyrite (<1 mm) and arsenopyrite (<1 mm); all visible sulphides are anhedral and occur within the ash tuff. Weathered surfaces are orange-brown in colour due to weathering of sulphides from within the quartz.	5	0.1	27	28	51	116600
9203401	Rock type: Lapilli tuff Medium green lapilli tuff with 3% rounded-subangular feldspar fragments (<5 mm) supported by a very fine-grained matrix. Sample is very intensely silicified sulphide mineralization, includes 1-2 mm blebs of disseminated pyrrhotite (<1%) and very finely disseminated pyrite (<1 mm). Weathered surfaces are earthy brown in colour.	5	0.1	71	10	21	1887
92030501	Rock type: Sandstone Blue-green, poorly sorted sandstone. With (<5 mm) 15% angular-rounded, white quartz clasts, 3% muscovite (<3 mm) and 1% rounded mafic crystal fragments ($\leq$3 mm), supported by a very fine-grained, grey matrix. Trace-1% finely disseminated pyrite throughout. Weathered surfaces orange to earthy brown in colour.	5	0.1	14	12	59	3611

CME