REPORT OF PRELIMINARY GRID WORK

ON THE HOT MINERAL CLAIMS

CLINTON MINING DIVISION

NTS 92P - 15E

LAT. 51° LONG. 120° 39'

Owned and Operated by Herb and Greg Wahl

PREPARED BY:

H. WAHL, P.ENG.
RR4 S12 C4
GIBSONS, B.C.
V0N 1V0
TEL: (604) 886-8522

JANUARY 1994

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SUMMARY

Current assessment work on the Hot Mineral Claims, Clinton Mining Division was completed in two phases being 8-13 July, and 13-20 October, 1993. Completed work consisted of:

4.98 km line cutting
200 ea humic soils and silts
14 ea rock (float) samples
18 square meters hand stripping
10 km (approximately) Beep Mat geophysical survey including 5 shallow pits averaging 50 cm depth.

Objective of the project was anomaly definition within the Hot #17 Claim area, where previous work identified a clustering of anomalous Zn, Cu, Cd silts and floats.

Within the subject area, the 1993 program identified a 700 x 700 meter humic soils anomaly. The anomaly is open-sided and contains peak values of PPM 37.2 Cd, PPM 7 Ag, PPM 447 Cu, and PPM 520 Zn. Higher Ba values in the 300-500 PPM range are also present. The broader anomaly contains a core zone measuring 700 x 100 meters embracing the highest Cd values which are 186X normal crustal abundance. The zone is oriented NW-SE and may continue under the waters of Hotfish Lake.

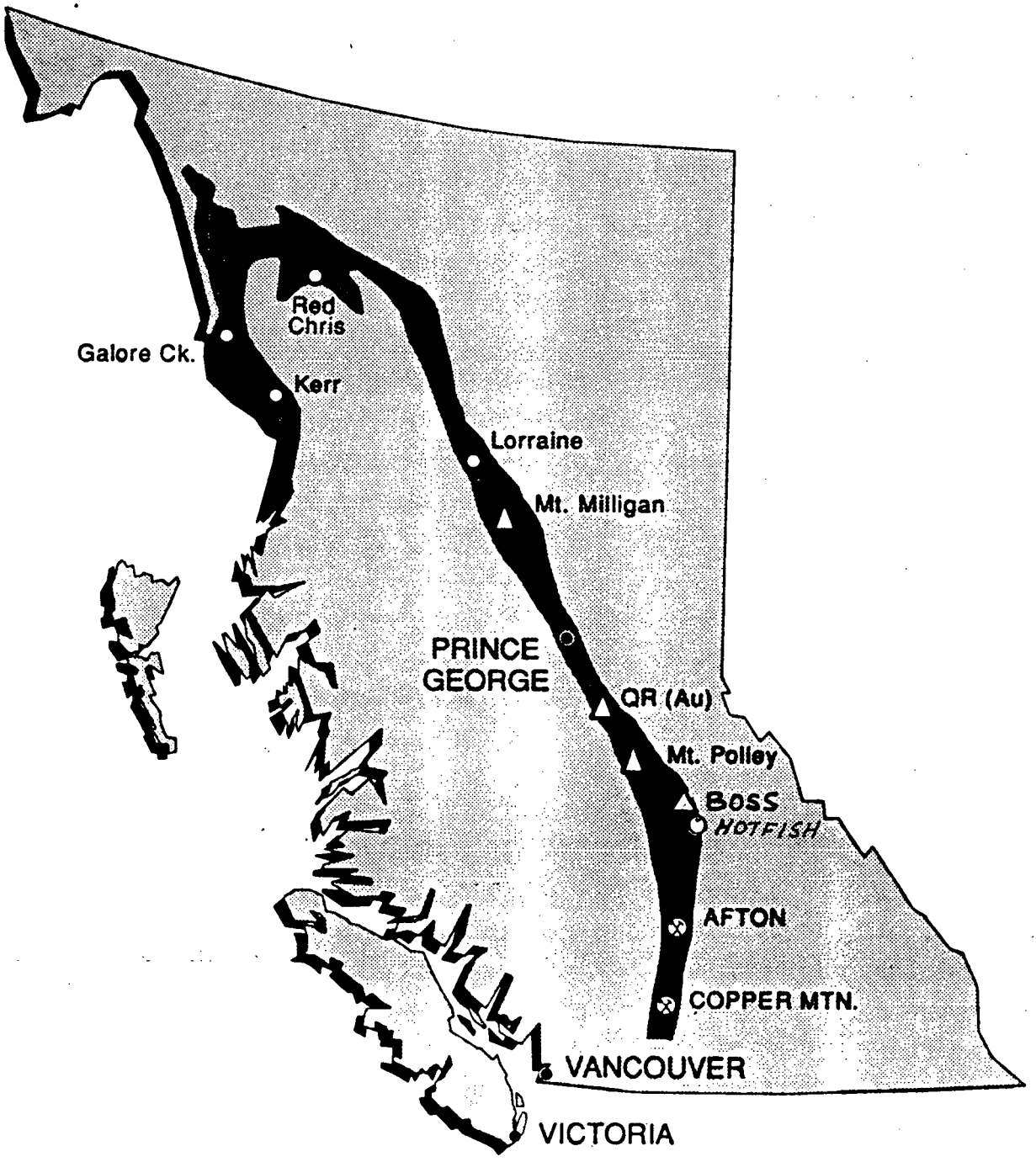
Within the broader outlines of the soil anomaly fortuitous discoveries of rusty floats returned one sample showing calamine and greenockite stain plus visible sphalerite that assayed PPM 620 Zn, PPM 1.6 Ag, and PPM 115.5 Cd.

The anomalous zone occupies thickly vegetated, low-lying swampy ground and is entirely covered with no rock exposure.

The metal signature is indicative of volcanic massive sulphide mineralization and/or significant vein/shear concentrations within biotite-altered volcanics. Cadmium is an important trace component in commercial ore deposits and onward work is recommended. Costs of the 1993 program totalled $15,615.64.

INTRODUCTION

The Hot mineral claims cover a new copper showing located in June 1990 in the Quesnel Trough geological belt, 57 km northeast of 100 Mile House, British Columbia. Pyrrhotite, pyrite, chalcopyrite and lesser bornite associated with intense silicification occur within a magnetically anomalous sequence of mafic tuffs adjacent to monzo-dioritic Cretaceous intrusive.



HOT CLAIMS

REGIONAL GEOLOGY LOCATION MAP

QUESNEL TROUGH VOLCANIC STRATIGRAPHY
AND ORE DEPOSITS

Figure 1

The 1993 program focused on the Hot #17 claim area where silt samples have returned values of (PPM) 630 Cu, 233 Zn, and 3.9 Cd from a low-lying, swampy valley along the east tier of claims. Angular, sub-banded, acid floats from overturned tree sites have reported values of (PMM) 178 Cu. 637 Zn, 26.3 Cd, and 2.7 Ag. These metal signatures and the siliceous floats may represent an exhalative horizon associated with VMS mineralization.

Costs for the current program total $15,615.64.

LOCATION AND ACCESS

The property is road accessible via provincial highway 97 to 100 Mile House, then by the Canim Lake Road to Eagle Creek, then via the Weldwood 6000 industrial logging road to Hendrix Creek, then via the Weldwood 6000 road to Burtt Creek and clearcut L89. Elapsed driving time from Vancouver to the showing is approximately 6-7 hours. Specific location details are:

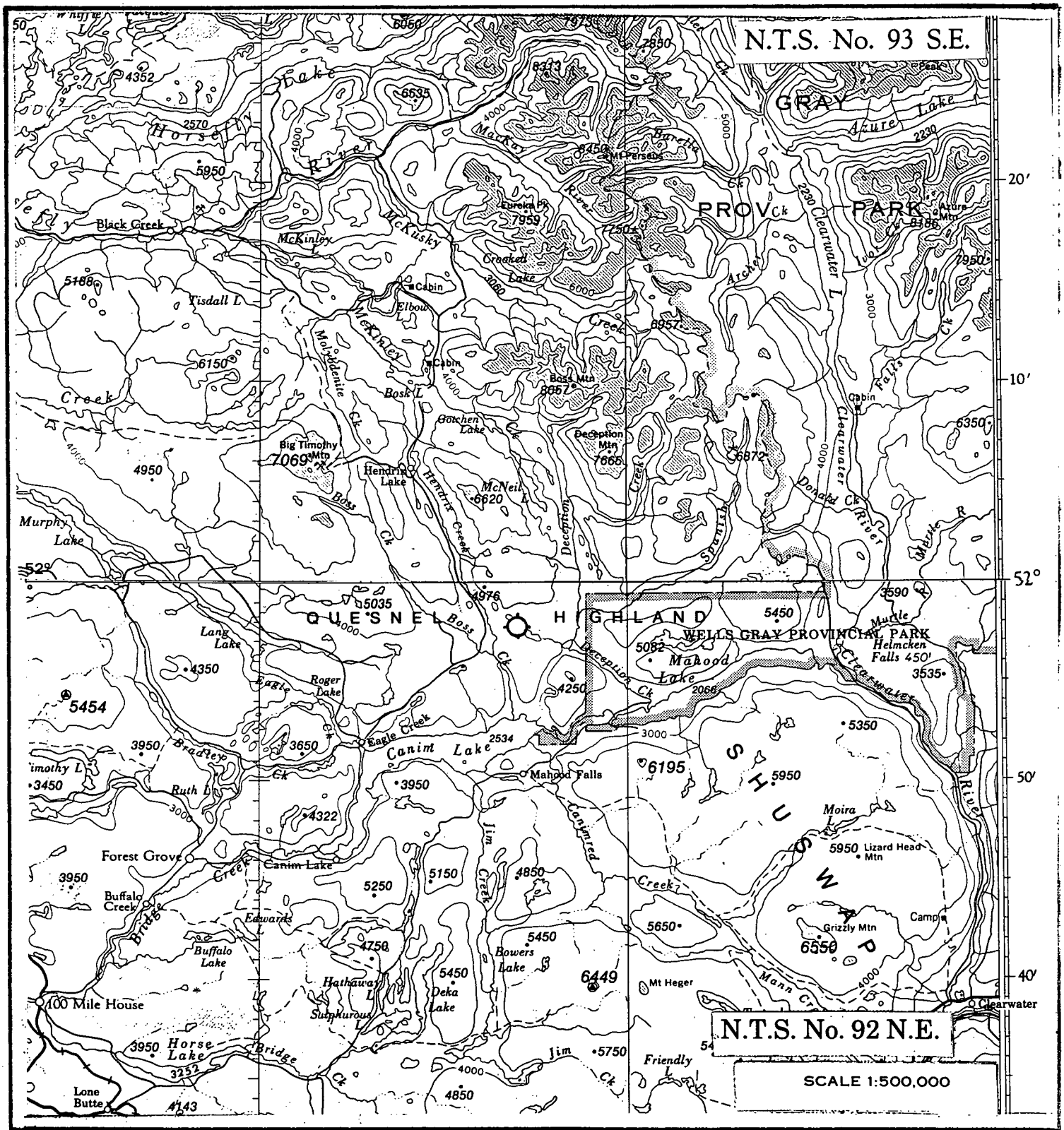
NTS 92P - 15E
Clinton Mining Division
Lat 51° degrees 58'
Long. 120° degrees 35'

PROPERTY (FIG. 3)

The property consists of twenty-six 2-post claims as follows:

Claim(s)	Tag/Nos.	Date Staked	Record Date/ Record Nos.
Hot-1 to 8	61456M-614573M	17 June	3350-3357
Hot-9 to 14	617677M-617682M	18 June	3358-3363
Hot-15 to 20	614574M-614579M	25 June	3364-3369
Hot-21 to 26	636504M-636509M	03 Sept	3421-3426

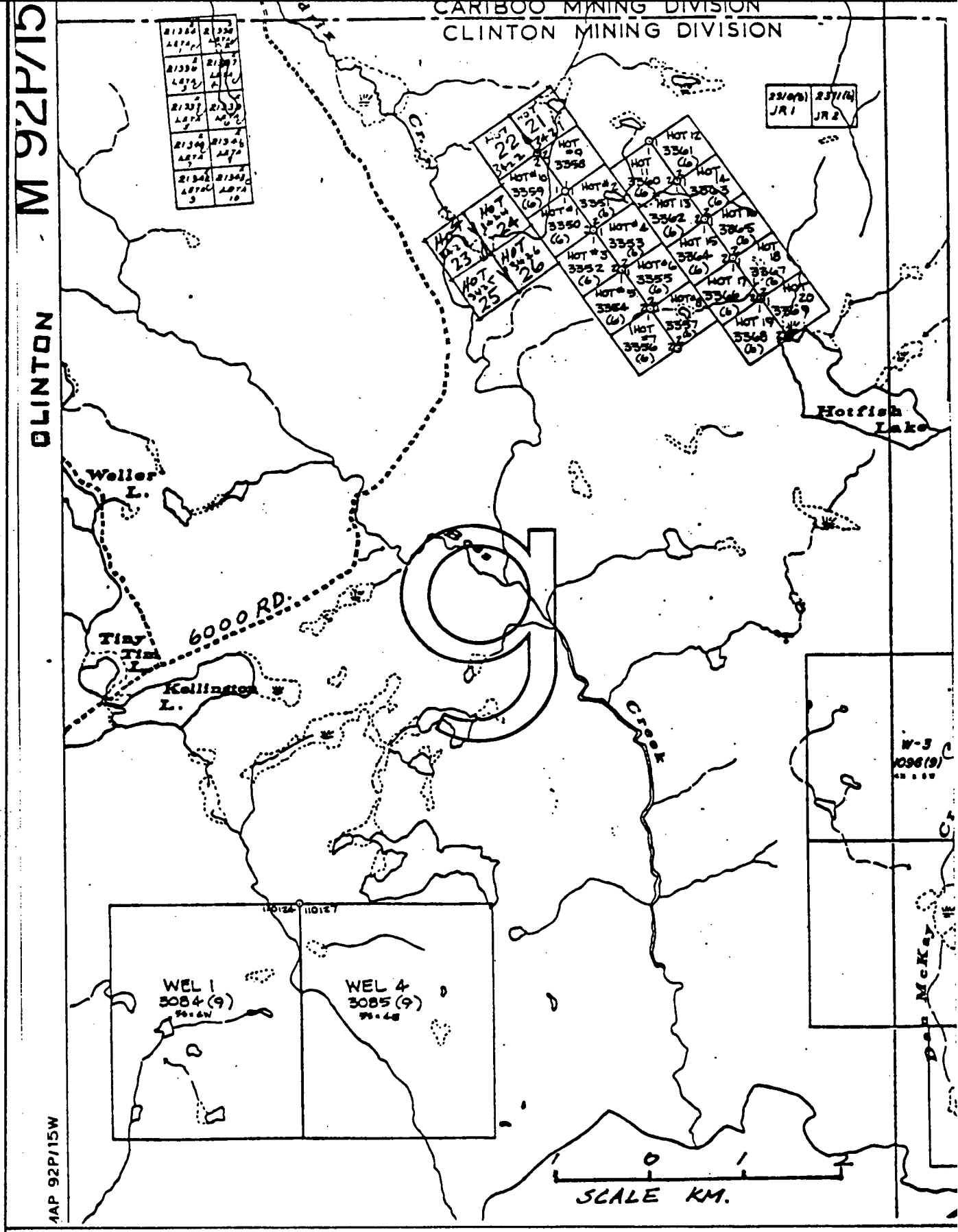
The above are all staked in accordance with current provincial mining regulations and are situated within the Clinton Mining Division. An annual assessment expenditure of $100/claim is required during the first 3 years of tenure, increasing to $200/claim/year thereafter. The claims were grouped into a 26 unit property on 11 June, 1991. The claims are owned 60% by H. Wahl and 40% by G.H. Wahl.



HOT CLAIMS

GENERAL LOCATION MAP

Figure 2



HOT CLAIMS

PROPERTY LOCATION MAP
SCALE 1:50,000

Figure 3

TERRAIN/TOPOGRAPHY

The Hot Claims are located within the Quesnel Highland division of the Fraser Plateau. Elevations on and around the claims range from 3,300 to 4,000 feet ASL. Terrain varies from rough rocky ridges to low, flat alder choked swampy areas.

Claims on which clear-cut logging has been performed include Hot 2 & 9, Hot 1, 3, and 4, Hot 14, and Hot 23 and 25. The unlogged claim area is covered by a dense spruce-pine-fir-cedar-aspen bush with abundant windfall. The swampy areas and ridge tops are thickly vegetated with tag alders. Overburden is variable, consisting of both sandy and clayey glacial drift.

HISTORY

There is no record of any previous exploration within the claim area. During field work, an old claim post was located showing that Vanco Explorations formerly held 6 claims (FIG. H-2) just south of Burtt Creek, in 1972. As there was no logging activity in this area in 1972, the copper showing would be unknown to these operators. Within the interior of the Hot claims, there is no evidence of any previous mineral exploration activity, i.e. flagging, blazes, etc.

The current claim holders have submitted two reports covering work performed in the years 1991 and 1992 (ref. 2, 3).

WORK PERFORMED

An inspection trip was made on June 27-29 to the Hot #17 claim area to plan future work strategy. The actual 1993 work program was completed in two phases as follows:

<u>8 - 13 July, 1993</u>:

- Cut base line 0-500 NW, and 0-260 SE (total 760M)
- Cut line 2NW, 0-160 SW (total 160M)
- Humic Soil Sampling, 46 ea for 30 element ICP
- Silts, 1 only as above
- Rocks, 4 ea as above
- Hand stripping, panel measuring 3 x 6 meters, west side of road, original showing (Hot #1)

13 - 20 October, 1993:

- Line cutting, total of 4,057 meters
- Humic soils and silts, 153 for 30 element ICP Rock (float) samples, 10 ea for 30 element ICP plus fire assay
- Beep Mat survey, all grid lines, plus reconnaissance traverse

1993 Project Totals:

4,977 meters line cutting

200 ea humic soils and silts

14 ea Rock (float) samples

18 square meters, hand stripping

5 ea shallow bits on Beep Mat responses averaging 50 cm in depth

REGIONAL GEOLOGY (reference GSC map 1278C Bonaparte Lake)

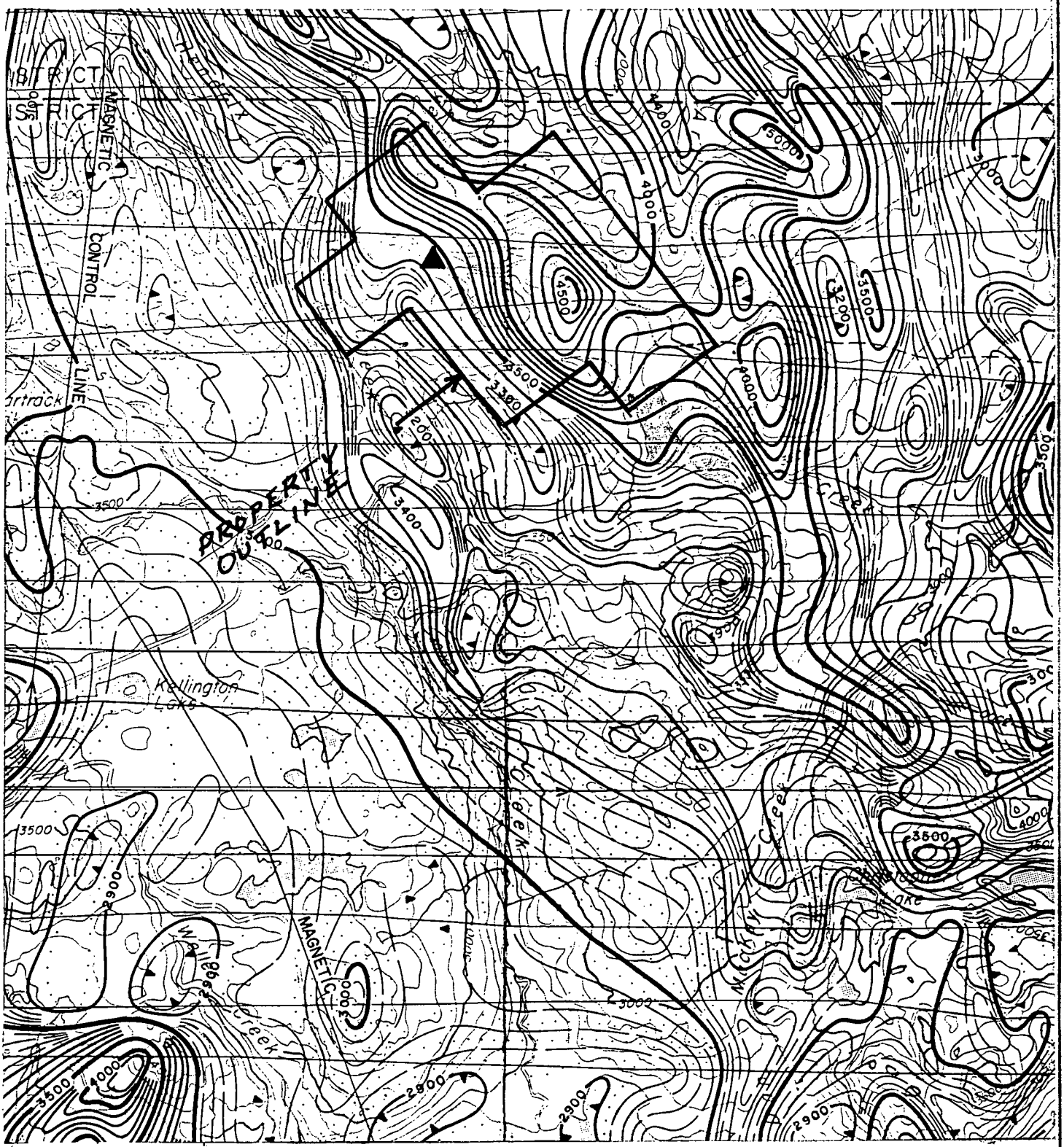
The Hot claims are located within the Quesnel Trough geological belt consisting of generally mafic to andesitic volcanic rocks of Triassic/Jurassic age intruded by plutons of similar or younger ages. The Quesnel Trough is a prolific mineral belt (FIG.2) hosting many intra-volcanic and intrusive hosted Cu, Mo, Ag, Au deposits. The Hot claims lie 24 km southeast of the former Boss Mountain molybdenum mine.

Some 90 km northwest of the property, the Mount Polley Cu-Au deposit has recently received a mine development certificate from the B.C. government. A 13,700 tpd operation is proposed for 1995.

PROPERTY GEOLOGY

As the 1993 work was concentrated in a low lying swampy area of the claims, there was no new gain in knowledge regarding overall geologic relationships. Acid, pyritic, and weakly mineralized floats continued to be found in the Claim #17 area and these are covered in the mineralization section, along with petrographic reports on selected specimens.

A description of the property geology is reproduced from the 1992 report to provide background.



HOT CLAIMS

LOCATION VS. REGIONAL AEROMAGNETICS
SCALE 1" = 1 mi

Figure 4

Findings of the 1992 traverses are as follows. To the north of the 7000 access road and east of Burtt Creek, massive featureless, augite bearing mafic volcanics predominate. These volcanics contrast with the dominantly intermediate composition tuffs and arenites found across the road in the south clear-cut area. This contrast is likely explained by a fault through Little Hot pond parallel to the 7000 road. A N-S fault is also projected to lie along the course of Burtt Creek. West of the creek, the strata are similar to the grey tuffs and arenites of the south clear-cut area, with the exception of zones of black shale and/or argillite up to 50 meters or more wide. Eastwards, along the 7000 road in the area of Hot claim #12, lies a large outcrop of quartz-feldspar-biotite geneiss with semi-augen texture. The foliation in this unit strikes NNW. Slightly east of this unit are large boulders of highly siliceous quartz biotite rock carrying 10-30% pyrite. Chalcopyrite is present on some fractures. Sample 92-R4 returned PPM 101 Cu, 206 Zn. Further along the 7000 road, on the north side, approximately 200 meters west of the Hotfish Lake access road, is an outcrop of dark greenish-grey, crudely banded felsite, highly siliceous, averaging 10-15% pyrite, with up to 20% Py in some zones. At the end of line 'B', on the ridge top, outcrop consists of a massive, featureless leucocratic volcanic, composed largely of soda feldspar and quartz with scattered augite crystals in a sub porphyritic texture. This rock has a buff-tan weathered surface, a medium grey fresh fracture and carries 5-10% pyrite. This unit extends northward about 200 meters to a steep-walled gulley.

In the south clear-cut area, more detailed observations indicate the following. From station 150-170S are outcrops of well fractured black shale in part silicified with abundant pyrite. Sample 92-R7 returned PPM 141 Cu and 48 Zn. The black shale does not appear to be a repository or sink for heavy metals, at least not zinc. Northeastward from station 190S lies a small gulley showing scattered outcrops, in part pyritic, of volcanic agglomerate. At station 300S is a small outcrop of pillowed andesite. From 300S to 850S are found various outcrops of light to dark grey, fine grained, massive mafic tuffs and arenites. Observed fracturing tends to strike easterly with south dips. South of the main showing area the abundance of pyrite decreases. In the clear cut area south of that shown in FIG. 7, are found occasional acid dikes up to 1m wide. Similar dikes are also present in the north clear cut.

Away from the Hot Claims proper, in clear-cut L88C, at the east end of Hotfish Lake, is a similar package of volcanics, overlain by a 4100 gamma aeromagnetic anomaly. A traverse through this cut for comparative purposes, showed the volcanics to be nearly devoid of sulphides.

In summary, the follow preliminary conclusions concerning the property geology are as follows. The claims are underlain by apparent Jurassic/Triassic age mafic to intermediate, fine grained, pyritic, massive volcanic units. A more mafic augite bearing sub-unit in the north clear cut appears to share a fault boundary with non augite-bearing tuff/arenites to the south.The large outcrop of augen gneiss on the 7000 road likely represents pre-volcanic basement and may also owe its position to the '7000' fault.

More siliceous, pyritic strata may underlie the eastern tier of claims and could extend under the swamp covered drainage into Hotfish Lake. This is also suggested by the anomalous Cu-Zn-Cd geochemistry. The latest intrusive events are the emplacent of the Cretaceous batholith to the north and random acid diking.

GEOCHEMISTRY (FIGS 6, 7, 8 & 9)

Humic soil samples were collected at 20M intervals along the cut lines as referenced in the above figures, using standard collection procedures. The collected samples were shipped to Acme Analytical Laboratories for 30 element ICP geochemical analysis.

Humic material was selected for the deep pumping capability of vegetative root systems, which access lower levels of ground water in contact with potential bedrock sulphides.

The resultant values show a substantial anomalous zone for Cd, Ag, Zn, and Cu in the humic soils measuring some 700 x 700 meters oriented in a NW-SE direction occupying the Hot #17 and 19 claim areas. A more defined Cd-Ag zone lies along and just west of the base line, measuring some 700 meters by 100 meters. The anomalous zone appears to continue under the waters of Hotfish Lake. Within the core area cadmium values reach a maximum of 37.2 PPM which is 186 times the normal crustal abundance (0.2 PPM) for this element. The highest silver values, 7 PPM, is 100 times normal crustal abundance (0.07 PPM). Peak values for Cu and Zn reach levels of 447 PPM and 520 PPM respectively. Low level anomalous values for Ni up to 143 PPM are generally co-associated with Cu-Zn, and all three metals were combined in FIG. 9 for purposes of data display. Higher Ba values in the range of 3-500 PPM also correlate with anomalous levels of Cd-Ag-Cu-Zn.

In summary, a significant soil anomaly has been identified within a low-lying swampy area devoid of outcrop. For the first time a float was located a ISE-122NE containing sphalerite with a Cd content of 155.5 PPM. The metal signature is indicative of VMS exhalative mineralization being present in the sub-surface. Additional line cutting and sampling are required to more accurately outline the ultimate limits of the anomaly area.

MINERALIZATION (Refer FIG. 6, Appendices 1-6)

The clustering of anomalous silt and float values documented in the report of November 1992, for the Claim #17 area, has been traced to a substantial Cd-Ag-Zn-Cu soil-anomalous zone. This entire area is covered with no outcrops. The float samples located to date have been fortuitous discoveries, and in the aggregate would represent less than 1% of the float rock composition in the near surface overburden.

For the first time visible, high cadmium sphalerite was seen in one float sample (LISE-122NE[R]), which returned values of 620 Zn, 1.6 Ag, and 155.5 Cd. Other floats of interest were:

LB-690SW 637 Zn, 2.7 Ag, 26.3 Cd

LC-834SW 456 Zn, 1.6 Ag, 37.0 Cd

None of the above were particularly large samples, and none were located in close proximity to the strongest portion of the Cd-Ag soils anomaly.

Petrographic analysis of several float samples, including two of the above, indicates that the subject floats are tuffaceous in origin and have been strongly deformed by tectonic granulation resulting in a brecciated cataclastic texture containing broken vein minerals and sulphides, plus a later fracturing element accompanied by minor sulphides.

At the original Cu showing on the Hot #7 claim, a 6 x 3 meter area was hand stripped (South Zone of ref. 3). The exposed rock is highly altered and pyritized tuffaceous volcanics. Alteration consists of silica, biotite, sericite, and carbonate in approximate order of abundance. The altered rock is highly fractured with minor shears and displays a random stockworks of pyrite-quartz veinlets to 1 cm thickness. These veinlets contain patchy, crystalline hydrothermal biotite with sparse chalcopyrite and bornite. Grab samples returned:

(PPM)	Cu	Zn	Ag	Cd	Au (PPB)
HWS-1	422	84	0.2	0.2	6
HWS-2	372	130	0.1	0.6	6

BEEP MAT SURVEY (refer appendix 7)

A manually towed EM unit (Beep Mat) was field tested on the Hot claims during the October work period. This unit can detect magnetic or sulphide bearing boulders in the overburden to depths of 1.5 meters. Positive scale readings indicate sulphides while negative readings reflect magnetic rocks. All the grid lines in the claim 17 area were traversed: a long traverse across the entire claim group was also conducted (FIG 5) amounting to some 4.5 km. Anomalous sites were investigated by hand-dug test pits.

RESULTS

Grid area - Strongest responses were located on L2SE and the BL as follows:

L2SE-58SW (600 beeps) Anomalous float was grey, very hard felsite containing disseminated pyrite and magnetite. Also present was a dark grey, cherty felsite with pyrite and trace chalcopyrite on odd fractures. A soil sample of glacial till at depth of 50 cm assayed. 33 Cu, 147 Zn, 0.7 Ag, 1.4 Cd.

l2SE-70SW (845 beeps) Beep source was 75 kg boulder of silicified intermediate volcanic with magnetite and disseminated pyrite. A soil sample of till at 50 cm depth assayed 47 Cu, 114 Zn, 0.1 Ag, 1.4 Cd.

L2SE-88SW (620 beeps) Beep source was 50 kg boulder bearing disseminated magnetite and pyrite. A soil sample of till from 50 cm depth assayed 46 Cu, 166 Zn, 0.2 Ag, 1.5 Cd.

BL 125SE (730 beeps) 1 ton boulder, mafic augite porphyritic boulder with magnetite.

BL 135SE (470 beeps) Magnetic granite boulder. 50 cm pit penetrated organic loam, overlying grey clay, with tan colored clay in the pit bottom which was sampled. 96 Cu, 251 Zn, 0.6 Ag, 2.2 Cd.

All the responses on the long traverse across the claim group were related to magnetite-bearing volcanic float.

CONCLUSIONS

The 1993 work program on the Hot Mineral Claims designed to follow-up recommendation #3 of the previous (1992) report, has identified a significant cadmium in humic soils anomaly some 700 x 700 meters in maximum dimensions, open to extensions. A number of fortuitous float discoveries have identified cadmium bearing sphalerite in hornfelsed and cataclastic tuffs. One float returned 620 Zn, 155.5 Cd, and 1.6 Ag (PPM). Most of the floats are some distance from the core zone of the soils anomaly, and given that the entire anomalous area is covered, their relationship to sub-surface mineralization is unknown. Within the anomaly core Cd values reach a maximum of 37.2 PPM or 186 times normal crustal abundance. Spotty, but anomalous levels of Cu, Zn, and Ag associate with the cadmium soil anomaly, as well as elevated levels of barite.

Given the importance of cadmium as a significant trace element in proven ore deposits, the potential is very high for important bedrock concentrations of sulphides in the form of volcanogenic massive sulphides and/or vein/shear occurrence.

RECOMMENDATIONS

Onward work to prove value on the property is recommended and in general format should follow the undernoted schedule:

(1) Expand the grid to define outward limits and intensity zones by additional humic soil sampling.

(2) On conclusion of (1) conduct hand or explosive-assisted trenching within metal intense zones to locate mineralized float and appraise overburden depth.

(3) Consider ground penetrating EM or IP survey to probe the sub-surface.

Prepared by

Herb Wahl, P. Eng. B.C.

January 1994

Personnel employed - Statement of Costs

Herb Wahl, Professional Geologist, P. Eng. B.C.
RR4 S12 C4
Gibsons, B.C. V0N 1V0

Field work, organization, and reporting

Greg Wahl
1135 Rosser Avenue
Burnaby, B.C. V5C 6L9

Experienced field assistant, prospecting, sampling

Ross Wahl
39677 Government Road
Squamish, B.C.

Experienced field assistant, sampling, Beep Mat survey

Phase I - 8-13 July, 1993

2,400.00	H. Wahl, 6 days field work @ $400/day
1,050.00	Greg Wahl, 6 days @ $175/day
540.00	Field Vehicle, 1991 Cummins Dodge 4 x 4, Lic. No. 4086PP, 6 days @ $90/day.
353.15	Room and board
136.35	Vehicle operations
33.35	Field supplies
8.56	Maps and prints
7.75	Freight on samples
668.86	Assays, Acme Analytical Laboratories Invoice #93-1551
5,198.47	Sub-total

Phase II - 13-20 October, 1993

3,200.00	H. Wahl, 8 days field work @ $400/day
1,500.00	H. Wahl, 5 days reporting @ $300/day
1,400.00	Ross Wahl, 8 days @ $175/day
720.00	Field Vehicle, 1991 Cummins Dodge 4 x 4, Lic. No. 4086PP, 8 days @ $90/day.
426.65	Motel
342.87	Travel expenses
377.04	Field supplies
72.87	Maps and prints
16.59	Freight on samples
852.61	Beep Mat rental including freight
1,130.08	Assays, Acme Analytical Laboratories Nos.93-3003, 93-3055, 93-3003R
378.46	Vancouver Petrographics #930768
10,417.17	Sub-total

15,615.64 **Grand Total**

References

(1) GSC Map 1278A, Bonaparte Lake, scale 1:250,000.

(2) Report of Preliminary Prospecting on the Hot Mineral Claims by H. Wahl, April 1991.

(3) Report of Reconnaissance Geological and Geochemical Work on the Hot Mineral Claims by H. Wahl, November 1992.

SAMPLE DESCRIPTION LIST Appendix I

Reference FIGS 5 and 6 for locations.

L2NW-120SW Medium grey, moderately fractured, silicified volcanic felsite. Flecks of chloritized mafics, random quartz-chlorite-carbonate veinlets 1-3mm thick. 2-10% pyrite, pyrrhotite. Weakly magnetic. Sample is from +100 kg block angular float.

ASSAY	Cu	Zn	Ag	Cd	Au(PPB)
#1	57	44	0.1	<0.2	119
#2	75	36	0.4	0.5	362
#3	metallic screening				0.013 oz/t

BL, O+20SE, small float, up-turned root ball, angular, rusty surfaces. Light whitish-grey on fresh surface. Silicified rhyolite? 10-15% pyrite. Specks of bornite on some fracture surfaces, traces covellite. Moderately magnetic.

ASSAY	Cu	Zn	Ag	Cd	Au(PPB)
#1	195	393	2.3	17.5	18
#2	147	119	1.2	1.7	10

L2SE-150SW Small angular float. Dark grey silicified felsite, 5-10% pyrite, traces bornite and covellite.

ASSAY	Cu	Zn	Ag	Cd	Au(PPB)
	105	175	1.3	4.5	14

L1SE-122NE(R) Approximately 2 kg piece of angular float from root ball. Shows patchy calamine and greenockite stain related to surface exposures of Zns. Rock is dark greenish-grey with lighter irregular pale green patches: weakly magnetic scattered crystals of pyrite and pyrrhotite 1-5%. Scattered crystalline aggregates of dark brown sphalerite to 5 mm. 1-2%. Sample is very hard and silicified. (Refer Appendix 8 for petrographic report).

ASSAY	Cu	Zn	Ag	Cd	Au(PPB)
	35	620	1.6	155.5	12

LISE-122NE(2) Small angular float, rusty faces. Grey silicified felsite (rhyolite?) with blotchly pinkish alteration zones enclosing irregular pyrite aggregates to 3 cm. Non-magnetic.

ASSAY	Cu	Zn	Ag	Cd	Au(PPB)
	251	123	0.6	1.8	4

LC 8345W Fist-sized piece angular, rusty float. Pale whitish-grey with banded structure. Disseminated and space fillings of pyrite. Non-magnetic. Rhyolitic in appearance (refer petrographic report, Appendix 8).

ASSAY	Cu	Zn	Ag	Cd	Au(PPB)
	125	456	1.6	37.0	11

LB 945SW Small angular float from root ball. Non-magnetic, dark grey with vague pinkish discolorations. 10-15% Py disseminated and as lesser veinlets to 3mm. Traces of bornite.

ASSAY	Cu	Zn	Ag	Cd	Au(PPB)
	25	112	0.5	0.6	5

H 330NW-20SW Large boulders, very hard, semi-hornfelsed dark grey mafic volcanic. Irregular quartz seams to 1 or 2mm with disseminated pyrite.

ASSAY	Cu	Zn	Ag	Cd	Au(PPB)
	40	97	0.2	0.2	8

93-1R Outcrop. Located near north end small pond in Hot Claim #6. Rusty weathering quartz-soda feldspar rock. Fine grained medium to dark grey, 15-25% pyrite. Non-magnetic.

ASSAY	Cu	Zn	Ag	Cd	Au(PPB)
	83	54	0.2	0.6	11

HW5-5R 20 kg rusty boulder in small creek. Very hard, fine grained quartz-soda feldspar-augite rock with up to 25% pyrite. Non-magnetic. Located on Hot #7.

ASSAY	Cu	Zn	Ag	Cd	Au(PPB)
	43	65	0.4	0.7	27

HW-6R 12 kg angular rusty float 20 meters upstream from 5SR. Near total silica rock with irregular patches very fine chloritized mafics. 10-20% pyrrhotite, slightly magnetic, sulphide mostly disseminated, odd stringer and bleb.

ASSAY	Cu	Zn	Ag	Cd	Au(PPB)
	196	37	0.7	1.5	7

HW-7R 5-7 kg block rusty float from lower nose of ridge hosting main showing (FIG 5). Quartz-biotite (hydrothermal) altered rock 15-20% pyrite, traces of chalcopyrite. Non-magnetic. Sample from Hot #1.

ASSAY	Cu	Zn	Ag	Cd	Au(PPB)
	299	133	0.3	2.3	8

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

Herb Wahl PROJECT CC93-1 File # 93-1027 Page 1

R.R.-4, Gower Pt. Road, Gibson BC VON 1V0

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au** ppb
DL-1R	3	27	<2	34	<.1	6	3	395	1.72	<2	<5	<2	<2	25	<.2	<2	<2	22	.31	.034	<2	8	.50	130	.12	2	.70	.11	.23	2	5
DL-2R	1	25	<2	35	<.1	4	2	364	1.26	<2	<5	<2	<2	16	<.2	<2	2	8	.23	.026	<2	6	.29	45	.05	2	.52	.08	.10	2	4
HFL-R	21	14	6	104	.6	43	23	888	2.22	13	<5	<2	<2	248	5.6	8	4	53	7.37	.099	4	49	1.42	79	.01	4	.98	.08	.06	1	14
RE HFL-R	21	14	7	108	.7	44	24	911	2.28	13	<5	<2	<2	255	5.8	8	3	55	7.57	.101	4	51	1.46	82	.01	4	1.02	.08	.07	1	11
LB-690SW	11	166	10	126	2.1	67	31	317	5.36	2	<5	<2	2	120	5.1	3	<2	83	1.53	.143	7	32	1.23	28	.11	8	2.11	.32	.32	1	11
H 330NW 20SW	2	40	11	97	.2	54	17	329	3.19	20	<5	<2	2	118	.2	<2	<2	116	1.45	.126	8	62	1.36	127	.26	5	2.01	.22	1.25	1	8
BL 0+20SE	14	195	25	393	2.3	71	35	628	5.23	7	<5	<2	2	71	17.5	7	<2	116	.85	.148	11	49	1.02	57	.17	6	1.00	.11	.41	<1	18
BL 120NW 10SW	2	108	<2	55	<.1	29	19	454	3.63	11	<5	<2	<2	145	.4	3	<2	91	2.38	.103	4	45	1.03	195	.18	8	3.12	.45	.69	8	20
STANDARD C/AU-R	18	58	37	127	7.2	70	29	1021	3.96	39	20	7	36	53	17.6	18	21	55	.50	.083	37	57	.92	184	.09	34	1.88	.08	.16	12	485

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.
ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB
- SAMPLE TYPE: P1 ROCK P2 SILT AU** ANALYSIS BY FA/ICP FROM 20 GM SAMPLE. Samples beginning 'RE' are duplicate samples.

DATE RECEIVED: JUN 4 1993 **DATE REPORT MAILED:** June 10/93. **SIGNED BY** ..D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

APPENDIX 2.0

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au** ppb
CL-1	<1	438	<2	46	.8	25	15	256	3.87	13	<5	<2	<2	61	<.2	<2	<2	59	.88	.057	17	32	.63	166	.31	7	1.53	.04	.16	1	2
CL-2	1	588	<2	51	1.0	47	17	247	3.80	2	<5	<2	<2	83	<.2	<2	6	44	1.19	.085	17	29	.69	249	.26	<2	1.88	.04	.18	<1	3
DL-1	1	136	8	35	.4	16	11	911	2.63	3	<5	<2	<2	78	<.2	<2	6	45	1.05	.053	5	20	.54	140	.11	3	1.43	.03	.23	1	1
DL-2	<1	120	6	29	.4	13	13	1381	2.78	5	<5	<2	<2	79	<.2	<2	<2	43	1.07	.043	5	19	.50	152	.11	7	1.43	.02	.23	1	<1
RE DL-2	1	119	3	30	.4	11	15	1379	2.76	7	<5	<2	<2	78	<.2	<2	2	42	1.07	.041	5	17	.50	148	.11	5	1.41	.02	.23	<1	<1
93LZ-1	7	43	3	43	.1	3	1	1644	.28	25	<5	<2	<2	114	1.4	8	<2	117	4.67	.037	<2	26	.21	35	.01	21	.12	.02	.03	3	1
93LZ-2	1	69	<2	33	<.1	15	7	1996	1.49	7	<5	<2	<2	134	.9	<2	4	36	4.43	.054	2	12	.50	113	.10	17	1.15	.04	.04	1	3
93LZ-3	1	196	3	24	.7	35	8	418	.75	4	<5	<2	<2	126	.9	3	5	25	3.84	.172	13	26	.29	53	.04	19	1.05	.03	.05	1	6
93LZ-4	<1	27	10	123	.4	14	10	367	3.01	5	<5	<2	<2	58	<.2	<2	3	50	1.44	.055	5	23	.83	59	.15	7	2.61	.04	.12	<1	1
93LZ-5	1	25	8	101	.2	15	8	411	3.03	6	<5	<2	<2	54	<.2	<2	<2	57	1.29	.059	4	20	1.05	44	.17	5	2.26	.04	.07	<1	1
H93-1S	2	61	10	140	1.6	58	16	399	3.62	15	6	<2	<2	57	1.3	<2	5	65	1.07	.081	21	64	.89	204	.13	5	2.71	.03	.29	<1	6
H93-2S	3	211	9	156	2.1	67	13	842	3.19	29	6	<2	<2	101	4.3	2	<2	76	3.13	.078	30	48	.62	245	.08	13	1.88	.02	.27	<1	11
H93-3S	1	37	5	87	.4	33	11	426	2.83	13	<5	<2	<2	52	.8	<2	<2	67	.82	.072	12	44	.80	151	.13	5	1.27	.02	.20	7	6
H93-4S	1	36	<2	90	.6	26	10	491	2.77	11	<5	<2	<2	53	1.1	<2	3	66	.90	.072	12	43	.78	164	.13	5	1.39	.02	.19	1	6
STANDARD C/AU-S	20	62	42	140	7.3	72	32	1069	4.09	42	18	6	37	53	18.5	18	19	61	.49	.090	41	60	.93	185	.10	34	1.94	.07	.15	12	48

Sample type: SILT. Samples beginning 'RE' are duplicate samples.

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

Herb Wahl PROJECT HOT-93 File # 93-1551 Page 1

R.R.-4, Gower Pt. Road, Gibson BC V0N 1V0

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au** ppb
BL 0+300NW	2	34	8	87	.7	26	7	597	2.00	<2	<5	<2	<2	69	3.6	<2	<2	37	.99	.058	14	40	.45	151	.10	5	1.44	.04	.15	<1	3
BL 0+280NW	3	73	8	117	2.3	41	12	801	2.55	<2	10	<2	<2	140	8.8	<2	<2	44	2.22	.088	28	35	.55	218	.08	5	1.99	.03	.20	<1	7
BL 0+260NW	9	21	7	57	.7	15	5	254	1.37	3	<5	<2	<2	116	2.6	<2	<2	28	2.02	.067	6	20	.48	111	.05	7	.82	.04	.15	<1	2
BL 0+240NW	3	7	6	17	.1	2	1	34	.17	<2	<5	<2	<2	108	1.8	2	<2	2	2.39	.053	<2	2	.18	52	<.01	10	.09	.05	.05	<1	1
BL 0+220NW	1	90	3	66	.6	33	6	269	1.34	7	<5	<2	<2	102	4.4	<2	<2	22	2.98	.067	6	16	.21	148	.03	9	.67	.03	.11	<1	2
BL 0+200NW	2	42	6	66	.4	20	7	425	1.85	3	<5	<2	<2	80	1.5	<2	<2	38	2.06	.070	8	27	.54	139	.08	9	.99	.04	.17	<1	5
BL 0+180NW	2	26	7	82	.3	16	8	440	1.71	4	<5	<2	<2	96	3.3	<2	<2	35	1.87	.076	6	22	.54	146	.07	11	.76	.04	.22	<1	6
BL 0+160NW	4	29	4	83	.2	24	14	1463	3.14	11	<5	<2	<2	78	2.3	<2	<2	63	1.67	.071	10	38	.75	196	.11	7	1.45	.06	.22	<1	5
BL 0+140NW	1	41	5	68	.7	20	4	193	2.13	2	<5	<2	<2	54	4.4	<2	<2	44	1.22	.042	8	34	.47	144	.12	5	1.08	.03	.14	<1	7
BL 0+120NW	3	54	4	69	.6	26	8	621	2.70	10	<5	<2	<2	109	3.4	<2	2	44	2.95	.096	10	23	.42	186	.05	10	.92	.04	.13	<1	3
BL 0+100NW	1	32	5	97	.5	20	8	1257	2.35	2	<5	<2	<2	57	4.3	<2	<2	55	.97	.051	7	32	.60	269	.10	5	.92	.03	.27	<1	10
BL 0+80NW	1	32	3	76	.2	24	11	536	2.96	10	<5	<2	2	55	1.3	<2	<2	66	.65	.059	10	41	.89	149	.14	4	1.50	.04	.24	<1	6
BL 0+60NW	3	54	7	156	1.9	52	15	810	4.37	4	<5	<2	3	99	3.5	<2	<2	72	1.38	.109	14	63	.90	265	.16	6	3.35	.08	.42	<1	7
BL 0+40NW	5	100	11	202	1.9	66	15	695	4.76	8	<5	<2	3	72	3.9	<2	<2	69	1.03	.051	13	61	.82	315	.14	5	3.13	.04	.46	<1	3
BL 0+20NW	2	25	7	248	.3	35	11	260	3.26	4	<5	<2	<2	31	4.0	<2	<2	65	.43	.078	10	49	.78	132	.16	4	1.87	.03	.14	1	5
BL 0+00	7	30	11	39	.6	21	6	423	.62	<2	<5	<2	<2	129	13.2	<2	<2	12	2.33	.099	11	8	.28	116	.02	8	.52	.03	.12	1	<1
BL 0+20SE	8	12	9	126	.8	6	1	278	.25	3	<5	<2	<2	88	3.1	2	<2	4	2.02	.087	2	3	.18	159	.01	10	.16	.01	.13	<1	14
BL 0+40SE	7	56	13	135	1.7	39	11	446	2.18	12	7	<2	<2	74	8.7	<2	<2	46	1.42	.059	16	32	.48	119	.06	5	1.10	.02	.17	<1	2
BL 0+60SE	11	25	11	215	1.4	19	6	493	.80	<2	<5	<2	<2	123	23.5	<2	<2	14	2.75	.078	2	11	.38	143	.03	10	.33	.03	.13	<1	1
BL 0+80SE	4	63	7	168	1.1	54	12	650	2.98	8	<5	<2	<2	76	6.7	<2	<2	67	1.46	.065	16	51	.95	230	.12	6	1.98	.04	.32	<1	5
BL 0+100SE	8	99	10	116	2.4	62	8	536	2.49	4	<5	<2	<2	120	10.7	<2	2	42	2.78	.087	14	33	.51	255	.07	9	1.83	.05	.28	<1	4
BL 0+120SE	4	79	6	94	2.3	38	7	292	2.89	6	<5	<2	<2	86	6.8	<2	<2	41	1.84	.090	19	37	.36	238	.05	6	1.56	.03	.25	<1	3
BL 0+140SE	6	152	6	201	7.0	82	11	542	3.28	6	<5	<2	<2	115	13.5	<2	<2	49	2.70	.084	28	46	.65	359	.07	8	2.80	.03	.38	<1	8
BL 0+160SE	5	56	10	146	1.1	28	5	176	2.07	2	6	<2	2	33	7.4	<2	<2	55	.58	.029	9	31	.42	151	.13	3	1.06	.03	.15	<1	2
BL 0+180SE	3	17	9	171	.8	24	7	290	2.59	4	9	<2	3	15	1.4	<2	<2	61	.20	.068	11	38	.61	131	.15	3	1.31	.03	.11	<1	3
BL 0+200SE	3	22	8	144	.9	23	6	279	1.81	3	<5	<2	<2	19	5.0	<2	<2	45	.25	.024	9	28	.40	90	.12	3	.81	.02	.10	<1	3
BL 0+220SE	1	14	8	146	.4	20	6	451	2.17	<2	<5	<2	<2	20	2.0	<2	<2	50	.24	.129	11	40	.48	157	.12	4	1.10	.04	.18	<1	1
BL 0+240SE	10	350	8	449	5.9	143	22	1580	5.90	13	7	<2	2	96	17.3	<2	<2	94	1.85	.091	34	79	1.01	548	.11	5	4.71	.05	.67	<1	19
RE BL 0+240SE	10	347	10	446	5.7	143	22	1567	5.84	13	<5	<2	2	95	16.9	<2	<2	93	1.85	.091	34	78	1.01	542	.11	5	4.67	.05	.66	<1	21
BL 0+260SE	7	25	13	104	2.0	13	3	154	.48	<2	<5	<2	<2	75	6.0	<2	<2	8	1.56	.066	3	7	.18	118	.02	5	.32	.02	.10	<1	<1
200NW 20SW	4	84	8	28	.5	25	3	350	.67	4	6	<2	<2	98	4.5	2	<2	41	3.45	.087	7	9	.21	101	.02	17	.39	.03	.16	1	4
200NW 40SW	2	55	5	115	.9	35	13	1105	3.00	9	<5	<2	<2	65	2.7	2	<2	66	1.39	.056	10	43	.83	210	.13	6	1.58	.04	.26	<1	4
200NW 60SW	2	30	5	70	.2	19	8	403	2.68	9	<5	<2	<2	47	.9	2	<2	65	.66	.051	8	39	.61	125	.13	5	1.15	.02	.36	<1	12
200NW 80SW	1	53	5	152	.5	35	12	714	3.36	8	<5	<2	<2	54	1.8	2	<2	73	.97	.073	14	51	.97	216	.17	5	1.82	.04	.34	<1	8
200NW 100SW	1	54	5	112	.6	29	11	612	2.58	7	<5	<2	<2	60	3.7	<2	<2	59	1.10	.070	11	38	.77	181	.12	4	1.29	.04	.30	<1	8
200NW 120SW	1	18	7	80	<.1	8	3	258	.35	<2	<5	<2	<2	96	4.2	2	<2	7	3.23	.081	2	4	.20	87	.01	27	.16	.02	.14	<1	1
200NW 140SW	1	38	4	80	.3	28	13	617	3.11	9	<5	<2	3	47	1.3	<2	<2	74	.60	.062	12	45	.99	176	.16	3	1.53	.04	.32	<1	10
200NW 160SW	3	54	9	135	1.1	37	9	347	3.15	4	<5	<2	<2	34	3.7	<2	<2	56	.52	.036	11	44	.48	177	.14	3	1.85	.03	.21	<1	2
STANDARD C/AU-S	17	57	37	125	6.6	70	29	992	3.96	41	18	7	33	54	18.5	14	17	53	.52	.086	38	58	.91	193	.09	33	1.88	.09	.16	11	52

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.
ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB
- SAMPLE TYPE: P1 TO P2 SOIL P3 SILT P4 ROCK AU** ANALYSIS BY FA/ICP FROM 20 GM SAMPLE.
Samples beginning 'RE' are duplicate samples.

July 22/93

APPENDIX 3.0

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au** ppb
LB 1000SW	3	64	5	117	1.6	45	9	494	2.54	6	<5	<2	<2	104	5.3	<2	<2	46	1.90	.055	19	38	.62	234	.08	5	2.07	.03	.27	<1	11
LB 1020SW	3	33	7	118	1.1	28	12	457	2.43	3	<5	<2	2	50	3.0	<2	2	54	.69	.054	12	39	.66	167	.13	2	1.44	.03	.19	<1	4
LB 1040SW	2	21	6	206	.6	23	8	658	1.78	<2	<5	<2	<2	74	10.7	<2	<2	38	1.42	.097	8	30	.50	204	.09	8	1.03	.03	.16	<1	2
LB 1060SW	4	25	9	144	.4	17	6	776	1.09	<2	<5	<2	<2	80	30.4	<2	<2	19	1.29	.049	11	19	.25	134	.05	4	.48	.02	.09	<1	2
LB 1080SW	2	113	9	166	1.8	61	16	1236	3.45	3	5	<2	<2	109	9.8	<2	<2	74	1.32	.080	48	59	.95	270	.13	3	2.74	.04	.32	<1	9
LB 1100SW	2	12	5	38	.2	9	2	77	.93	<2	<5	<2	<2	35	2.7	<2	<2	24	.38	.025	6	16	.14	84	.08	2	.40	.02	.06	1	3
LB 1120SW	1	30	5	164	.3	32	11	311	2.78	3	<5	<2	3	24	1.8	2	<2	65	.22	.044	15	45	.79	118	.16	2	1.76	.03	.12	<1	5
LB 1140SW	2	14	7	126	.1	19	5	409	1.24	<2	<5	<2	<2	73	6.2	<2	<2	30	1.26	.045	5	24	.39	169	.08	3	.66	.02	.12	<1	2
LB 1160SW	1	31	5	217	.3	40	13	296	3.21	3	<5	<2	4	25	1.9	<2	<2	65	.29	.073	13	48	.82	139	.16	2	2.09	.03	.19	<1	3
RE LB 1160SW	1	31	4	220	.3	41	13	297	3.23	3	<5	<2	3	25	1.8	<2	<2	65	.28	.074	12	48	.84	140	.16	2	2.10	.03	.18	<1	4
STANDARD C/AU-S	17	58	37	127	6.4	70	30	1003	3.96	43	12	7	34	56	18.8	15	19	54	.52	.086	39	58	.92	183	.09	34	1.88	.09	.16	11	52

Sample type: SOIL, Samples beginning 'RE' are duplicate samples.

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au** ppb
J93-1S	1	47	4	104	.3	31	12	862	3.07	12	<5	<2	2	56	1.5	2	<2	65	.96	.070	12	45	.87	195	.13	4	1.61	.05	.29	<1	8

Sample type: SILT.

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au** ppb
HWS-1	6	422	<2	84	.2	23	23	847	5.63	344	<5	<2	2	90	<.2	2	<2	123	3.72	.220	9	4	.68	27	.10	<2	1.66	.19	.42	<1	6
HWS-2	11	372	4	130	.1	23	24	842	5.39	123	5	<2	2	76	.6	5	<2	152	2.16	.177	9	7	.73	34	.11	5	2.35	.27	.55	1	6
BL 0+20SE	1	147	4	119	1.2	62	17	294	6.01	6	<5	<2	2	110	1.7	<2	<2	87	1.25	.117	6	36	1.41	30	.15	4	2.37	.30	.41	2	10
200NW 120SWR	1	57	<2	44	.1	26	13	301	2.54	120	<5	<2	<2	87	<.2	7	<2	77	2.24	.109	4	36	.86	50	.17	4	2.20	.26	.29	6	119
RE 200NW 120SWR	1	57	<2	44	.1	24	12	291	2.41	115	<5	<2	<2	85	.3	8	<2	74	2.11	.104	4	34	.82	54	.17	6	2.13	.25	.29	7	118
STANDARD C/AU-R	16	58	37	120	6.7	67	28	1082	3.96	36	20	7	34	54	17.1	19	18	55	.50	.085	36	55	.89	192	.09	33	1.88	.06	.14	11	497

Sample type: ROCK. Samples beginning 'RE' are duplicate samples.

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

Herb Wahl File # 93-3003

R.R.-4, Gower Pt. Road, Gibson BC VON 1V0

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au** ppb
HW-5SR	3	43	9	65	.4	49	14	210	2.22	36	<5	<2	<2	68	.7	2	<2	36	.76	.088	7	44	.47	55	.15	5	.87	.23	.43	<1	27
HW-6R	1	196	3	37	.7	22	20	291	3.46	1133	<5	<2	<2	69	1.5	16	<2	64	2.05	.107	8	24	.53	46	.15	7	.90	.27	.28	9	7
HW-7R	2	299	5	133	.3	8	10	519	3.31	212	<5	<2	<2	63	2.3	12	<2	119	2.09	.185	7	5	1.05	32	.14	4	1.62	.35	.60	<1	8
L1SE 122NE(R)	2	35	<2	620	1.6	55	13	146	2.76	3	<5	<2	2	42	155.5	5	<2	92	1.06	.092	7	55	.71	291	.17	5	.91	.15	.48	7	12
L1SE 122NE(2)	2	251	2	123	.6	71	18	372	3.80	6	<5	<2	<2	63	1.8	<2	<2	199	1.09	.095	4	65	2.14	56	.20	<2	2.45	.32	1.69	<1	4
RE L1SE 122NE(2)	2	247	<2	115	.6	68	16	353	3.53	6	<5	<2	<2	62	1.8	<2	<2	189	1.03	.088	3	61	2.00	59	.19	<2	2.35	.31	1.67	<1	3
L2NW 120SW	2	75	<2	36	.4	29	14	267	2.40	144	<5	<2	2	75	.5	8	<2	78	1.89	.096	6	37	.80	51	.18	7	1.42	.21	.30	6	362
L2SE 150SW	4	105	17	175	1.3	93	26	528	4.27	5	<5	<2	<2	110	4.5	8	<2	94	.81	.102	5	132	1.64	48	.13	3	1.74	.24	.97	<1	14
LB 945SW	1	25	<2	112	.5	43	11	339	3.78	4	<5	<2	<2	47	.6	<2	<2	173	.48	.087	2	69	2.80	63	.29	2	2.86	.23	2.30	<1	5
LC 834SW	9	125	9	456	1.6	45	20	234	3.97	21	<5	<2	2	27	37.0	6	<2	122	.57	.104	9	48	1.33	76	.18	2	1.12	.12	.59	<1	11
93-1R	3	83	2	54	.2	3	10	839	5.38	132	<5	<2	<2	100	.6	<2	<2	127	1.76	.065	2	4	.46	99	.21	3	1.88	.31	1.07	<1	11
STANDARD C/AU-R	17	59	37	122	6.9	69	29	1033	3.95	39	13	7	35	52	17.4	14	17	57	.51	.085	40	58	.92	184	.09	34	1.89	.10	.16	10	469

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.
ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB
- SAMPLE TYPE: ROCK AU** ANALYSIS BY FA/ICP FROM 20 GM SAMPLE. Samples beginning 'RE' are duplicate samples.

DATE RECEIVED: OCT 22 1993 **DATE REPORT MAILED:** Oct 27/93. **SIGNED BY** ..... D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

APPENDIX 4.0

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

Herb Wahl File # 93-3003

R.R.-4, Gower Pt. Road, Gibson BC VON 1V0

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au** ppb
HW-5SR	3	43	9	65	.4	49	14	210	2.22	36	<5	<2	<2	68	.7	2	<2	36	.76	.088	7	44	.47	55	.15	5	.87	.23	.43	<1	27
HW-6R	1	196	3	37	.7	22	20	291	3.46	1133	<5	<2	<2	69	1.5	16	<2	64	2.05	.107	8	24	.53	46	.15	7	.90	.27	.28	9	7
HW-7R	2	299	5	133	.3	8	10	519	3.31	212	<5	<2	<2	63	2.3	12	<2	119	2.09	.185	7	5	1.05	32	.14	4	1.62	.35	.60	<1	8
L1SE 122NE(R)	2	35	<2	620	1.6	55	13	146	2.76	3	<5	<2	2	42	155.5	5	<2	92	1.06	.092	7	55	.71	291	.17	5	.91	.15	.48	7	12
L1SE 122NE(2)	2	251	2	123	.6	71	18	372	3.80	6	<5	<2	<2	63	1.8	<2	<2	199	1.09	.095	4	65	2.14	56	.20	<2	2.45	.32	1.69	<1	4
RE L1SE 122NE(2)	2	247	<2	115	.6	68	16	353	3.53	6	<5	<2	<2	62	1.8	<2	<2	189	1.03	.088	3	61	2.00	59	.19	<2	2.35	.31	1.67	<1	3
L2NW 120SW	2	75	<2	36	.4	29	14	267	2.40	144	<5	<2	2	75	.5	8	<2	78	1.89	.096	6	37	.80	51	.18	7	1.42	.21	.30	6	362
L2SE 150SW	4	105	17	175	1.3	93	26	528	4.27	5	<5	<2	<2	110	4.5	8	<2	94	.81	.102	5	132	1.64	48	.13	3	1.74	.24	.97	<1	14
LB 945SW	1	25	<2	112	.5	43	11	339	3.78	4	<5	<2	<2	47	.6	<2	<2	173	.48	.087	2	69	2.80	63	.29	2	2.86	.23	2.30	<1	5
LC 834SW	9	125	9	456	1.6	45	20	234	3.97	21	<5	<2	2	27	37.0	6	<2	122	.57	.104	9	48	1.33	76	.18	2	1.12	.12	.59	<1	11
93-1R	3	83	2	54	.2	3	10	839	5.38	132	<5	<2	<2	100	.6	<2	<2	127	1.76	.065	2	4	.46	99	.21	3	1.88	.31	1.07	<1	11
STANDARD C/AU-R	17	59	37	122	6.9	69	29	1033	3.95	39	13	7	35	52	17.4	14	17	57	.51	.085	40	58	.92	184	.09	34	1.89	.10	.16	10	469

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.
ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB
- SAMPLE TYPE: ROCK AU** ANALYSIS BY FA/ICP FROM 20 GM SAMPLE. Samples beginning 'RE' are duplicate samples.

DATE RECEIVED: OCT 22 1993 **DATE REPORT MAILED:** Oct 27/93. **SIGNED BY** ..... D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

Herb Wahl File # 93-3055 Page 1

R.R.#4, Gower Pt. Road, Gibson BC VON 1V0

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm
B 560SW	15	39	16	45	2.6	35	7	200	1.75	4	<5	<2	<2	146	4.7	<2	<2	21	3.15	.067	27	20	.30	160	.04	5	1.45	.01	.14	2
B 580SW	16	47	11	66	1.5	40	10	436	2.08	<2	<5	<2	<2	103	6.6	<2	<2	28	1.96	.069	18	27	.37	159	.05	5	1.62	.01	.15	1
B 600SW	40	41	4	20	2.8	34	3	1061	.68	<2	6	<2	<2	164	8.7	4	<2	9	5.33	.095	28	9	.18	139	.01	7	.96	.01	.07	1
B 620SW	42	32	<2	35	1.1	21	3	738	.52	<2	<5	<2	<2	157	4.5	2	<2	7	5.73	.090	8	8	.15	133	.01	5	.65	.01	.05	1
B 640SW	29	45	6	81	1.8	32	4	555	.68	<2	<5	<2	<2	127	9.6	<2	<2	11	4.83	.078	11	9	.16	119	.01	8	.68	.01	.05	<1
B 660SW	18	41	8	79	1.5	30	6	1366	1.20	2	<5	<2	<2	90	4.4	3	<2	16	3.28	.071	7	18	.25	130	.03	5	.98	.01	.09	1
B 680SW	3	7	10	61	.4	8	3	151	1.31	<2	<5	<2	<2	30	.6	2	<2	38	.41	.014	5	15	.13	116	.09	5	.40	.01	.04	<1
B 700SW	4	23	5	134	1.6	15	2	1772	.30	<2	<5	<2	<2	160	6.5	<2	2	6	5.00	.056	3	4	.13	216	.01	14	.23	.01	.04	<1
B 720SW	4	29	10	18	1.3	18	4	684	.45	<2	<5	<2	<2	146	3.3	<2	<2	13	4.21	.061	7	7	.13	150	.01	9	.42	.01	.04	<1
B 740SW	1	6	9	31	.5	10	3	83	.77	<2	<5	<2	<2	27	1.8	2	<2	22	.55	.021	6	25	.21	56	.07	2	.34	.01	.04	1
RE B 740SW	1	7	8	32	.5	13	3	86	.80	<2	<5	<2	<2	28	1.8	<2	<2	23	.56	.022	6	27	.22	54	.07	2	.34	.01	.04	1
B 760SW	2	12	11	127	.2	28	6	186	1.48	<2	<5	<2	2	42	1.1	<2	<2	34	.96	.040	11	44	.67	111	.10	3	1.13	.01	.09	1
B 780SW	14	20	6	76	.6	15	4	177	.59	<2	<5	<2	<2	112	3.4	<2	<2	12	2.87	.128	4	10	.14	125	.02	9	.46	.01	.05	<1
B 800SW	5	35	16	52	.6	28	6	102	1.93	2	<5	<2	2	32	2.8	<2	<2	36	.70	.035	10	34	.31	97	.08	2	1.09	.02	.07	1
B 820SW	2	19	12	67	.9	24	7	1044	1.41	<2	<5	<2	<2	32	1.8	<2	<2	24	.32	.031	11	25	.25	113	.05	2	.82	.02	.08	<1
B 840SW	3	30	8	80	1.0	31	12	634	2.40	4	<5	<2	2	36	2.1	2	<2	43	.39	.062	13	42	.47	140	.07	2	1.34	.01	.13	1
B 860SW	2	35	9	134	.8	48	16	527	3.29	9	<5	<2	3	39	2.1	<2	<2	52	.33	.062	19	58	.80	149	.08	2	1.98	.01	.13	<1
B 880SW	2	6	7	35	.7	7	2	99	.45	<2	<5	<2	<2	35	1.8	<2	<2	11	.35	.026	8	11	.07	111	.02	3	.18	.01	.05	1
B 900SW	2	17	5	109	1.1	16	5	2500	1.21	<2	<5	<2	<2	22	4.9	<2	<2	26	.20	.036	8	16	.17	229	.06	2	.54	.01	.06	<1
B 920SW	2	24	6	53	.7	17	5	623	1.60	<2	<5	<2	2	28	2.5	<2	<2	42	.29	.020	9	24	.28	174	.10	<2	.71	.01	.08	<1
B 940SW	5	18	6	139	1.5	14	5	814	.85	<2	<5	<2	<2	81	10.2	<2	<2	18	1.23	.040	7	14	.14	230	.05	4	.31	.01	.06	<1
B 960SW	2	25	7	60	1.0	16	4	332	1.38	3	<5	<2	<2	41	3.4	<2	<2	25	.56	.030	11	19	.19	115	.05	2	.77	.01	.08	<1
B 1140SW	3	15	7	97	.2	19	6	246	1.45	<2	<5	<2	<2	60	5.1	<2	<2	37	.98	.031	8	31	.36	135	.10	<2	.64	.01	.08	1
B 1160SW	1	15	5	97	.3	16	6	391	1.60	<2	<5	<2	2	59	4.9	<2	<2	33	.88	.061	11	24	.27	162	.09	3	.68	.01	.12	<1
B 1180SW	2	24	6	77	.4	20	10	594	2.00	2	<5	<2	<2	58	3.3	<2	<2	50	.84	.039	11	30	.44	203	.09	2	1.03	.01	.10	1
B 1200SW	4	10	14	73	.3	11	5	637	.89	<2	<5	<2	<2	115	5.3	<2	<2	20	1.81	.054	4	12	.22	267	.05	6	.36	.01	.09	1
B 1220SW	2	35	8	124	.8	31	12	1202	2.17	6	<5	<2	2	51	14.9	<2	<2	47	1.04	.072	13	33	.38	157	.10	<2	1.40	.01	.14	<1
B 1240SW	2	26	10	117	.3	34	11	1258	2.01	3	<5	<2	2	46	4.2	<2	<2	52	.69	.042	13	34	.51	155	.11	3	1.23	.01	.12	1
B 1260SW	2	71	14	146	1.0	56	16	2292	3.36	5	<5	<2	3	58	10.4	<2	<2	69	1.07	.049	31	47	.57	284	.12	3	2.57	.02	.23	1
B 1280SW	2	17	8	92	.6	14	5	1139	1.03	3	<5	<2	<2	98	12.4	<2	<2	24	1.42	.055	4	16	.15	361	.05	5	.43	.01	.08	<1
B 1300SW	1	15	10	162	.2	21	10	1417	1.80	3	<5	<2	2	62	13.7	<2	<2	36	1.15	.078	8	26	.33	371	.09	2	.88	.01	.11	<1
B 1320SW	2	11	15	68	.4	7	4	1852	.79	<2	<5	<2	<2	51	3.5	2	<2	17	1.42	.049	4	10	.12	279	.05	7	.31	.01	.07	<1
B 1340SW	1	59	17	214	.2	20	13	3540	2.45	3	<5	<2	<2	93	4.2	<2	<2	60	2.23	.107	3	21	.83	881	.11	9	1.39	.01	.25	1
B 1360SW	1	7	9	73	.1	15	6	839	1.58	3	<5	<2	3	16	.9	2	<2	32	.31	.038	9	23	.31	138	.11	3	.73	.01	.08	1
B 1380SW	2	21	7	82	.3	35	9	246	2.80	4	<5	<2	5	19	.5	<2	<2	60	.21	.048	15	42	.75	106	.14	2	1.37	.01	.09	1
STANDARD C	18	61	37	126	6.8	67	32	1023	3.95	41	14	7	37	52	18.9	14	21	57	.49	.086	40	56	.93	184	.09	34	1.88	.06	.14	10

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.
- SAMPLE TYPE: SOIL Samples beginning 'RE' are duplicate samples.

DATE RECEIVED: OCT 25 1993 **DATE REPORT MAILED:** Nov 4/93 . **SIGNED BY**.....D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

APPENDIX 5.0

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm
B 0+1400SW	1	20	9	57	.1	6	3	117	1.22	3	<5	<2	<2	27	1.7	2	<2	26	.43	.034	2	7	.11	202	.04	2	.39	.01	.04	1
C 0+820SW	1	7	6	28	.2	8	2	40	.59	<2	<5	<2	<2	31	1.0	2	<2	12	.15	.024	7	13	.08	114	.03	<2	.33	.01	.03	1
C 0+840SW	2	9	8	71	.3	19	5	94	1.51	4	<5	<2	2	31	1.1	<2	<2	41	.30	.028	9	31	.40	105	.09	<2	.78	.01	.07	1
C 0+860SW	3	40	11	93	1.1	32	5	232	1.83	2	<5	<2	<2	87	5.6	<2	<2	39	1.14	.041	13	30	.45	176	.06	<2	1.22	.02	.10	1
C 0+880SW	3	33	10	107	1.0	36	7	148	2.04	<2	<5	<2	2	35	2.0	<2	<2	40	.38	.032	9	39	.54	170	.10	<2	1.83	.02	.16	1
C 0+900SW	4	50	12	139	2.0	48	9	220	2.92	3	<5	<2	<2	62	2.4	<2	2	53	.63	.065	13	54	.88	234	.09	3	2.59	.02	.25	2
C 0+920SW	5	28	11	155	1.1	31	10	1718	1.38	4	<5	<2	<2	130	6.1	<2	<2	33	2.00	.095	9	22	.48	249	.04	7	1.03	.02	.12	<1
C 0+940SW	2	12	8	138	.6	24	6	536	2.50	2	<5	<2	3	18	.6	<2	<2	62	.19	.089	11	43	.62	182	.13	<2	1.22	.01	.10	2
C 0+960SW	2	13	9	91	.1	15	5	271	1.37	<2	<5	<2	3	10	.7	<2	<2	35	.09	.034	12	27	.35	131	.09	<2	.81	.01	.05	1
C 0+980SW	9	66	7	103	1.2	50	13	342	2.01	5	<5	<2	<2	71	9.6	3	<2	61	1.20	.070	18	45	.63	206	.06	2	1.80	.02	.14	1
C 0+1000SW	14	69	7	124	.8	45	10	376	2.01	12	<5	<2	<2	69	10.8	3	<2	65	1.36	.083	12	41	.61	170	.06	3	1.32	.02	.13	1
C 0+1020SW	6	71	8	72	.7	40	7	332	2.17	3	6	<2	<2	98	6.5	2	2	60	1.92	.096	13	40	.60	177	.06	4	1.35	.03	.12	1
C 0+1040SW	7	73	5	118	.9	58	13	723	3.81	9	<5	<2	2	59	4.9	2	<2	86	.95	.096	17	65	1.06	192	.09	<2	2.22	.03	.20	2
RE C 0+1040SW	7	73	7	121	.9	55	14	732	3.86	7	<5	<2	2	59	5.2	2	2	87	.96	.097	17	66	1.08	195	.09	3	2.24	.03	.20	2
C 0+1060SW	8	56	12	138	.8	59	22	3476	5.47	23	<5	<2	3	73	12.0	<2	<2	89	1.22	.093	15	54	.87	241	.09	<2	2.05	.02	.18	2
C 0+1080SW	3	54	7	119	.7	53	12	224	2.92	8	<5	<2	3	58	3.9	<2	2	84	.92	.075	16	61	1.12	194	.12	<2	2.18	.03	.18	3
C 0+1100SW	3	59	9	126	.5	46	11	205	2.43	5	<5	<2	3	63	2.8	<2	<2	76	1.00	.070	16	55	1.00	193	.12	2	2.04	.02	.19	2
C 0+1120SW	4	56	8	47	.6	39	6	320	2.14	7	<5	<2	<2	112	4.8	2	<2	29	2.29	.116	11	28	.44	142	.04	5	1.09	.03	.12	1
C 0+1140SW	6	44	6	28	.3	23	7	413	2.59	7	<5	<2	<2	136	3.0	<2	<2	31	2.82	.073	7	14	.27	133	.03	10	.55	.02	.05	1
C 0+1160SW	5	46	7	41	.4	36	7	779	3.24	9	<5	<2	<2	174	1.5	<2	<2	27	3.62	.087	6	18	.37	191	.04	10	.72	.02	.08	1
C 0+1180SW	4	21	6	34	.2	19	2	124	1.19	3	<5	<2	<2	201	1.3	<2	<2	7	4.70	.094	<2	4	.19	178	.01	13	.15	.04	.03	<1
C 0+1200SW	17	7	<2	6	<.1	4	1	75	.44	2	<5	<2	<2	160	1.1	2	<2	4	3.62	.064	<2	2	.19	48	<.01	9	.08	.01	.03	<1
C 0+1220SW	16	6	4	8	<.1	4	1	88	.35	<2	<5	<2	<2	153	.8	<2	<2	4	2.45	.055	<2	2	.17	48	<.01	12	.07	.02	.03	<1
C 0+1240SW	17	12	7	14	<.1	4	1	999	.17	6	<5	<2	<2	219	1.1	<2	2	9	6.03	.071	<2	3	.17	105	<.01	34	.08	.02	.07	<1
BL 0+135SE	4	96	8	251	.6	56	14	443	3.46	11	<5	<2	5	42	2.2	3	<2	88	.54	.057	16	53	1.19	197	.14	<2	1.79	.02	.29	2
BL 0+280SE	3	24	6	60	1.5	10	1	31	.64	2	<5	<2	<2	28	3.7	<2	<2	19	.42	.016	5	9	.05	89	.04	4	.20	.01	.03	<1
BL 0+300SE	7	367	6	208	2.3	94	19	235	2.76	7	<5	<2	<2	174	31.1	<2	<2	25	3.99	.071	13	15	.26	289	.02	6	.75	.02	.10	<1
BL 0+320SE	6	57	9	177	.6	40	6	314	1.61	5	<5	<2	<2	141	5.7	<2	<2	15	3.46	.116	<2	5	.20	181	.01	8	.19	.02	.05	<1
BL 0+340SE	15	77	2	109	.3	36	2	171	.89	<2	<5	<2	<2	159	8.8	3	<2	11	3.84	.082	<2	2	.13	185	<.01	9	.11	.02	.02	<1
BL 0+360SE	10	66	3	96	.3	30	4	196	.86	2	<5	<2	<2	181	4.6	3	<2	12	4.37	.063	2	4	.17	204	.01	9	.20	.02	.02	<1
BL 0+380SE	8	69	5	87	.6	32	4	226	1.10	6	<5	<2	<2	115	4.6	<2	<2	29	2.56	.097	9	21	.30	149	.04	8	.75	.02	.08	1
BL 0+400SE	17	61	2	108	.3	34	7	375	1.64	6	<5	<2	<2	138	5.3	<2	4	33	2.99	.080	6	11	.22	169	.03	10	.48	.02	.05	<1
BL 0+320NW	4	58	8	55	1.4	38	5	553	1.24	<2	<5	<2	<2	218	3.7	3	<2	26	3.73	.096	45	19	.44	190	.03	10	1.15	.04	.13	1
BL 0+340NW	9	7	9	20	.4	5	<1	27	.22	<2	<5	<2	<2	113	4.3	<2	<2	4	1.70	.065	<2	5	.08	52	.01	7	.10	.01	.06	<1
BL 0+360NW	3	52	5	78	1.5	40	8	325	1.90	3	<5	<2	<2	188	4.1	2	3	36	3.13	.062	22	31	.57	201	.06	7	1.45	.03	.14	1
STANDARD C	18	62	39	126	6.8	67	31	1029	3.96	40	19	7	37	53	19.4	14	24	58	.50	.086	40	56	.94	184	.09	34	1.88	.06	.14	11

Sample type: SOIL. Samples beginning 'RE' are duplicate samples.

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm
BL 0+380NW	3	80	9	88	2.0	57	13	779	2.97	3	<5	<2	3	138	4.5	<2	<2	48	2.45	.113	31	43	.61	236	.09	5	2.25	.03	.22	2
BL 0+400NW	4	25	8	54	.5	27	5	234	1.12	3	<5	<2	<2	160	3.4	2	<2	24	2.63	.081	12	18	.35	125	.04	12	.77	.03	.10	1
BL 0+420NW	5	21	7	34	.3	13	1	251	.16	3	<5	<2	<2	245	2.7	<2	<2	7	4.48	.098	7	2	.33	101	.01	18	.15	.02	.06	1
BL 0+440NW	7	18	9	62	.2	11	1	177	.27	2	<5	<2	<2	194	2.6	<2	<2	9	3.63	.106	4	4	.28	107	.01	13	.21	.02	.09	<1
BL 0+460NW	10	15	8	40	.2	10	2	53	.21	2	<5	<2	<2	119	2.4	<2	<2	4	2.24	.058	2	3	.19	50	.01	5	.13	.02	.05	1
BL 0+480NW	4	13	6	42	.2	8	1	171	.12	2	<5	<2	<2	234	3.0	<2	<2	4	3.60	.086	13	2	.27	191	<.01	14	.13	.02	.06	1
BL 0+500NW	3	19	2	39	.3	16	3	134	.55	<2	<5	<2	<2	216	1.3	2	<2	13	4.06	.066	19	9	.34	142	.02	9	.42	.02	.07	2
L1SE BL00	7	246	8	203	4.7	119	16	927	4.30	8	<5	<2	4	121	25.7	<2	<2	70	2.44	.083	22	60	.72	370	.11	4	3.15	.02	.38	1
L1SE 20NE	4	77	10	333	3.2	47	11	1706	2.46	6	<5	<2	2	81	10.1	<2	<2	43	1.49	.083	11	29	.44	264	.09	7	1.52	.03	.18	<1
L1SE 40NE	3	40	8	139	.6	29	6	285	1.55	6	<5	<2	<2	34	5.8	<2	<2	32	.55	.027	8	25	.22	120	.06	2	.69	.01	.08	<1
L1SE 60NE	2	9	7	59	.7	7	2	73	.81	2	<5	<2	2	15	2.0	2	<2	20	.24	.014	10	11	.07	55	.06	3	.23	.01	.05	<1
L1SE 80NE	2	26	4	91	3.0	17	4	179	1.25	4	<5	<2	2	18	4.3	<2	<2	31	.20	.016	9	18	.19	109	.09	<2	.52	.01	.08	<1
L1SE 100NE	4	99	4	171	1.8	60	12	677	3.42	11	<5	<2	2	77	6.0	<2	<2	68	1.12	.075	18	46	.88	240	.09	2	2.11	.02	.27	2
L1SE 120NE	3	38	5	86	.4	35	13	615	3.14	12	<5	<2	4	45	1.3	<2	<2	72	.57	.036	13	45	.83	147	.12	<2	1.64	.02	.13	2
L1SE 120NE 'S'	1	31	<2	82	.4	28	9	339	2.20	10	<5	<2	3	49	1.3	<2	<2	50	.68	.061	12	32	.63	137	.09	2	1.08	.02	.16	2
L1SE 140NE	3	33	7	79	1.0	31	9	439	2.23	11	<5	<2	<2	95	2.8	2	<2	53	1.31	.081	16	32	.69	164	.08	4	1.28	.02	.17	2
L1SE 160NE	2	29	6	130	.4	35	8	242	2.83	6	<5	<2	4	41	2.1	2	<2	66	.40	.044	17	44	.71	165	.14	3	1.19	.01	.10	1
L1SE 180NE	5	43	10	128	1.1	33	20	1132	2.49	5	<5	<2	2	43	5.1	2	<2	43	.61	.046	12	28	.36	197	.07	2	1.42	.02	.13	1
L1SE 200NE	5	38	9	168	1.7	37	13	1270	3.01	6	<5	<2	2	49	5.3	<2	<2	49	.74	.052	11	34	.51	235	.07	3	1.81	.02	.17	1
L1SE 220NE	5	141	9	334	2.8	86	31	861	4.40	10	<5	<2	3	76	11.5	<2	<2	64	1.30	.081	28	55	.74	279	.09	3	3.22	.02	.29	1
L1SE 240NE	2	62	3	59	2.5	26	4	155	.86	4	<5	<2	<2	109	17.5	<2	<2	12	3.02	.072	14	12	.21	109	.02	7	.69	.01	.09	<1
L1SE 260NE	5	55	9	109	.7	40	9	330	2.59	7	<5	<2	<2	92	5.6	<2	<2	45	2.26	.087	13	36	.63	180	.08	5	1.52	.02	.19	1
L1SE 280NE	8	40	5	99	.4	40	16	691	3.53	11	<5	<2	3	73	2.7	<2	<2	64	1.44	.069	15	46	.87	140	.12	5	1.71	.02	.22	3
L1SE 300NE	8	55	3	107	.7	52	16	784	3.64	10	<5	<2	3	68	3.5	<2	<2	57	1.19	.075	23	42	.70	169	.09	3	1.59	.02	.18	2
RE L1SE 300NE	8	54	5	105	.7	48	16	753	3.58	14	<5	<2	3	67	3.3	3	<2	56	1.17	.076	22	41	.70	169	.09	4	1.57	.02	.18	2
L1SE 320NE	8	43	8	149	.7	47	26	3312	5.06	29	<5	<2	3	85	2.5	<2	<2	63	1.39	.093	16	46	.71	281	.09	5	1.85	.02	.21	2
L1SE 330NE 'S'	7	26	5	128	.4	40	20	2728	4.33	20	<5	<2	4	60	1.5	<2	<2	58	.83	.070	14	44	.70	239	.09	7	1.58	.02	.19	2
L1SE 340NE	11	85	9	126	.6	56	9	156	1.33	3	<5	<2	2	83	4.5	3	<2	62	1.47	.070	21	37	.59	179	.08	7	1.42	.02	.18	1
L1SE 360NE	2	21	9	66	.4	16	4	125	1.16	6	<5	<2	<2	50	4.2	2	2	21	.46	.033	12	15	.15	151	.04	3	.46	.01	.06	<1
L1SE 380NE	2	13	7	80	.4	24	6	230	1.98	7	<5	<2	5	27	1.0	2	<2	31	.35	.074	17	29	.36	93	.08	2	.85	.01	.10	1
L1SE 400NE	2	12	6	90	.5	9	3	130	.65	5	<5	<2	<2	54	2.7	<2	2	17	.60	.033	10	12	.12	110	.03	4	.29	.01	.05	<1
L1SE 420NE	2	26	12	69	.8	24	19	835	1.59	2	<5	<2	<2	41	3.1	<2	<2	29	.38	.038	17	23	.34	128	.06	2	1.09	.02	.08	1
L1SE 433NE 'T.L.'	1	17	10	53	.6	17	7	328	1.22	3	<5	<2	<2	37	1.5	<2	<2	23	.38	.042	14	20	.27	91	.05	3	1.00	.02	.08	<1
L1SE 20SW	4	119	10	188	2.3	80	15	792	3.81	6	<5	<2	3	52	10.2	<2	<2	80	.94	.053	22	54	.76	289	.12	4	2.45	.02	.27	1
L1SE 40SW	2	57	11	158	1.3	44	12	453	2.90	11	<5	<2	3	55	6.0	2	<2	66	1.04	.054	11	45	.69	266	.11	6	1.53	.01	.19	1
STANDARD C	18	61	38	126	6.6	68	32	1027	3.96	39	20	7	37	53	18.6	14	21	58	.49	.086	40	56	.93	184	.09	33	1.87	.06	.14	11

Sample type: SOIL. Samples beginning 'RE' are duplicate samples.

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm
L1SE 60SW	3	58	8	175	1.1	52	13	498	3.37	20	<5	<2	4	49	2.9	2	<2	79	.73	.052	13	55	.98	242	.14	2	1.99	.02	.27	1
L1SE 80SW #1	4	74	11	80	1.3	52	8	156	3.12	12	<5	<2	2	24	6.2	3	<2	71	.40	.028	9	43	.41	124	.15	4	1.42	.01	.17	<1
L1SE 80SW #2	4	35	8	81	.9	29	6	492	1.69	5	<5	<2	<2	94	7.4	2	<2	36	1.67	.047	11	25	.40	135	.06	2	.93	.01	.10	<1
L1SE 100SW	4	136	15	217	2.9	117	18	1760	4.30	16	<5	<2	3	111	13.7	2	<2	81	2.42	.092	32	66	.84	345	.13	5	3.73	.03	.41	1
L1SE 120SW	4	42	10	53	.5	24	4	72	2.08	7	<5	<2	2	12	1.6	2	<2	60	.14	.017	10	27	.13	71	.13	<2	.58	.01	.07	2
L1SE 140SW	3	87	11	154	1.4	63	13	862	2.63	10	<5	<2	<2	108	5.6	3	<2	61	2.67	.086	16	48	.72	256	.08	7	2.07	.02	.25	1
L2SE 20NE	6	447	11	362	6.0	128	18	886	4.60	19	9	<2	3	84	15.8	<2	<2	76	1.50	.054	36	66	.91	376	.10	7	3.41	.02	.40	<1
L2SE 40NE	2	26	7	142	.6	14	4	473	1.10	<2	<5	<2	<2	27	7.2	2	<2	29	.53	.023	6	17	.17	156	.06	<2	.38	.02	.06	<1
L2SE 60NE	8	255	10	520	3.0	105	18	954	3.91	19	<5	<2	2	67	23.7	2	<2	69	1.25	.055	25	53	.83	353	.10	5	2.82	.02	.28	<1
L2SE 80NE	8	241	8	184	1.9	87	5	242	1.21	4	<5	<2	<2	159	25.3	3	<2	30	3.53	.072	9	17	.31	229	.03	7	.93	.02	.14	<1
L2SE 100NE	11	188	8	205	1.7	59	6	183	2.07	6	<5	<2	<2	90	24.1	3	<2	41	1.77	.106	8	25	.36	232	.05	3	1.34	.02	.14	<1
L2SE BL00	2	16	8	73	1.2	11	3	138	.80	<2	<5	<2	<2	35	4.0	<2	<2	20	.37	.026	7	15	.16	146	.05	3	.32	.01	.04	1
L2SE 20SW	4	138	12	258	3.5	61	10	796	2.34	13	<5	<2	<2	134	37.2	<2	<2	39	2.55	.090	17	34	.44	335	.07	7	1.76	.02	.18	<1
L2SE 40SW	6	305	15	308	5.8	112	21	1423	4.25	15	<5	<2	3	93	34.6	<2	<2	73	1.38	.090	67	74	1.03	521	.10	3	3.27	.02	.32	1
L2SE 60SW	1	8	5	71	.3	7	3	267	.48	<2	<5	<2	<2	36	14.6	<2	<2	11	.42	.018	8	11	.09	140	.03	<2	.21	.01	.04	<1
L2SE 80SW	1	9	6	43	.5	11	3	68	1.00	2	<5	<2	<2	15	3.8	<2	<2	28	.19	.020	11	20	.16	82	.07	2	.40	.01	.05	1
L2SE 100SW	2	13	7	72	.4	13	5	1046	1.01	<2	<5	<2	<2	33	4.4	<2	<2	25	.41	.024	7	16	.14	151	.05	4	.34	.01	.05	<1
RE L2SE 100SW	3	15	6	74	.4	13	5	1098	1.04	<2	<5	<2	<2	35	4.8	<2	<2	26	.44	.026	8	17	.15	161	.05	3	.35	.01	.06	<1
L2SE 120SW	2	78	11	133	1.7	57	13	768	2.73	11	<5	<2	<2	115	6.4	2	<2	74	1.64	.074	49	45	.99	296	.10	4	2.09	.02	.24	1
L2SE 140SW	1	8	4	26	.2	5	3	188	.70	2	<5	<2	<2	26	2.4	<2	<2	20	.36	.027	2	7	.08	78	.06	3	.21	.02	.03	1
L2SE 160SW	1	17	12	159	.5	11	6	2909	.99	<2	<5	<2	<2	51	14.4	<2	<2	24	.84	.035	5	14	.14	342	.05	3	.33	.01	.07	<1
L2SE 180SW	1	11	7	98	.1	20	7	687	1.32	3	<5	<2	<2	17	1.3	<2	3	35	.25	.032	4	24	.47	119	.08	<2	.82	.01	.07	<1
T L2SE 58SW	2	33	7	147	.7	50	13	293	2.82	10	<5	<2	4	30	1.4	<2	<2	54	.31	.070	16	52	.91	132	.12	3	1.58	.02	.15	<1
T L2SE 70SW	2	47	7	114	.1	48	12	309	2.99	10	<5	<2	5	48	1.4	2	<2	69	.38	.065	18	50	1.15	157	.14	3	1.50	.02	.20	<1
T L2SE 88SW	1	46	9	166	.2	58	14	332	3.23	13	<5	<2	4	46	1.5	<2	4	76	.42	.075	16	56	1.22	180	.15	4	1.69	.02	.22	<1
L1NW 20NE	2	32	6	87	.3	25	10	290	2.19	10	<5	<2	3	51	1.1	2	<2	54	.75	.062	12	35	.71	154	.10	4	1.23	.02	.16	1
L1NW 40NE	3	40	7	98	.5	29	11	584	3.06	14	<5	<2	3	37	1.6	2	<2	71	.39	.060	14	41	.79	144	.13	2	1.61	.02	.13	1
L1NW 60NE	2	39	7	127	1.0	32	11	706	2.43	13	<5	<2	<2	90	2.1	3	<2	58	1.90	.075	8	34	.81	188	.10	6	1.33	.02	.15	<1
L1NW 80NE	2	21	9	129	.8	21	12	1829	1.62	6	<5	<2	<2	68	2.6	2	<2	40	1.03	.053	9	27	.42	389	.07	6	.86	.01	.10	<1
L1NW 100NE	1	5	5	47	.1	10	3	483	.87	3	<5	<2	<2	15	1.6	<2	<2	25	.13	.015	7	15	.22	141	.07	3	.40	.01	.08	1
L1NW 120NE	<1	3	4	29	.2	3	2	168	.28	<2	<5	<2	<2	15	3.3	<2	<2	8	.18	.012	4	5	.04	72	.02	<2	.12	.01	.03	1
L1NW 140NE	1	18	8	130	.2	30	11	872	2.38	6	<5	<2	3	28	1.1	<2	<2	45	.25	.067	11	45	.65	125	.11	3	1.21	.01	.11	<1
L1NW 160NE	<1	2	6	24	.4	6	1	305	.46	<2	<5	<2	2	10	<.2	<2	<2	13	.07	.012	10	10	.09	53	.07	2	.28	.01	.04	<1
L1NW 180NE	1	13	9	86	.2	22	5	146	2.31	7	<5	<2	4	24	<.2	<2	<2	51	.25	.079	15	33	.55	90	.13	3	1.20	.01	.10	<1
L1NW 200NE	29	41	7	93	.8	61	42	36733	3.73	18	<5	<2	2	115	4.3	4	2	23	2.53	.119	4	11	.16	1360	.02	8	.64	.02	.08	1
STANDARD C	18	61	38	124	6.6	66	31	1046	3.96	42	18	7	37	52	18.6	14	23	56	.50	.086	39	56	.93	184	.09	34	1.88	.06	.14	10

Sample type: SOIL. Samples beginning 'RE' are duplicate samples.

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm
L1NW 220NE	8	46	8	90	.2	30	7	945	1.32	5	<5	<2	<2	101	2.0	2	<2	20	3.20	.086	3	11	.22	123	.03	14	.39	.01	.06	1
L1NW 240NE	4	28	<2	125	.1	19	14	1024	9.56	91	<5	<2	<2	92	.8	<2	<2	28	2.27	.181	3	13	.22	250	.03	12	.51	.02	.06	<1
L1NW 260NE	5	24	<2	119	.3	18	14	1474	5.23	25	<5	<2	<2	114	1.0	<2	<2	36	2.61	.113	4	18	.41	199	.05	10	.75	.02	.07	<1
L1NW 280NE	15	48	6	68	1.1	17	8	512	1.24	2	<5	<2	<2	133	3.8	<2	<2	18	2.56	.094	10	10	.21	132	.02	5	.69	.01	.04	<1
L1NW 300NE	5	22	7	65	1.1	17	4	105	1.53	10	<5	<2	<2	68	2.7	<2	<2	26	1.12	.048	5	16	.23	101	.05	3	.78	.01	.10	<1
L1NW 320NE	5	19	3	72	.8	19	6	201	2.05	7	<5	<2	3	27	1.0	<2	<2	45	.34	.021	11	29	.40	95	.11	<2	1.14	.01	.09	<1
L1NW 340NE	5	13	6	57	.3	16	4	144	1.38	7	<5	<2	<2	30	.7	<2	<2	32	.32	.027	9	21	.27	70	.07	<2	.78	.01	.06	<1
L1NW 360NE	2	14	5	101	.4	22	5	121	2.16	7	<5	<2	4	16	.5	<2	<2	44	.17	.048	14	35	.51	77	.13	4	1.06	.01	.08	<1
L1NW 380NE	2	14	4	54	.5	11	5	205	.98	3	<5	<2	<2	29	1.7	<2	3	20	.29	.026	11	17	.20	120	.05	2	.48	.01	.05	1
L1NW 400NE	3	7	5	46	.4	9	2	69	1.22	3	<5	<2	3	11	.6	<2	<2	23	.12	.036	14	17	.16	59	.07	2	.48	.01	.06	1
L1NW 20SW	2	34	4	92	1.8	28	9	369	3.04	17	<5	<2	3	37	.9	<2	<2	71	.49	.075	11	41	.76	131	.11	3	1.45	.02	.25	<1
L1NW 40SW	2	32	<2	95	.3	27	12	524	2.80	14	<5	<2	3	68	1.2	<2	<2	71	.90	.066	11	38	.95	184	.12	2	1.38	.02	.29	<1
L1NW 60SW	5	111	10	309	3.0	64	14	1016	3.71	10	<5	<2	3	47	20.0	<2	2	65	.51	.049	25	52	.64	380	.11	3	2.58	.02	.25	<1
L1NW 100SW	3	27	6	67	.9	16	3	130	.80	<2	<5	<2	<2	82	9.7	<2	<2	20	1.34	.037	4	13	.17	121	.04	3	.28	.01	.06	<1
L1NW 120SW	5	66	9	154	4.2	47	14	753	2.24	8	<5	<2	<2	164	21.8	<2	<2	43	2.17	.078	22	34	.53	225	.03	5	1.81	.02	.21	<1
RE L1NW 120SW	5	69	12	157	4.4	49	15	763	2.28	8	5	<2	<2	170	22.0	<2	<2	44	2.23	.079	23	35	.54	234	.03	3	1.86	.02	.21	<1
L1NW 140SW	2	15	5	65	.5	18	4	88	1.49	8	<5	<2	2	30	2.9	<2	<2	40	.27	.021	13	25	.26	91	.09	<2	.54	.01	.08	<1
092-2SA	1	42	4	97	.3	29	11	277	2.30	10	<5	<2	2	62	1.4	2	<2	64	1.01	.067	11	36	.77	183	.12	6	1.38	.02	.23	<1
STANDARD C	18	60	38	126	6.9	66	32	1035	4.00	43	16	7	36	52	18.6	14	19	57	.50	.086	39	57	.94	183	.09	33	1.88	.06	.14	10

Sample type: SOIL. Samples beginning 'RE' are duplicate samples.

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

ASSAY CERTIFICATE

Herb Wahl File # 93-3003R

SAMPLE#	SAMPLE wt. gm	AU-100 oz/t	NATIVE Au mg	AVG. oz/t
L2NW 120SW	820	.010	.08	.013

-100 MESH AU BY FIRE ASSAY FROM 1 A.T. SAMPLE. NATIVE AU BY FIRE ASSAY FROM TOTAL SAMPLE.
- SAMPLE TYPE: ROCK REJ.

DATE RECEIVED: NOV 16 1993 **DATE REPORT MAILED:** Nov 19/93. **SIGNED BY**.....D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

APPENDIX 6

Instrumentation
GDD Inc.

3700, boul. de la Chaudière
Ste-Foy, Qc, Canada G1X 4B7
Tél.: (418) 877-4249
Fax: (418) 877-4054

BEEP MAT

Model BM-II-93

PURCHASE / RENTAL PRICE LIST
1993

The **BEEP MAT** is a miniaturized electromagnetic survey instrument that is, in a way, the simplified version of the helicopter-borne unicoil. The **BM-II-93** model consists of a unicoil inserted in a polyethylene shell and a separate readout module that allows the measurement of the relative value of the conductivity or susceptibility (magnetite content) of the underlying surface. Magnetite or conductive materials each have a different audio signal and their relative value is displayed. The **BEEP MAT** efficiently and inexpensively detects conductive outcrops (*pyrite, pyrrhotine, pyrrhotite, chalcopyrite (Cu), graphite, pentlandite (Ni), galena (Pb), etc.*), magnetic outcrops or boulders hidden under up to 1.5 meters of overburden.

	PURCHASE PRICE (Can. $)	RENTAL PRICE (Can. $)
MODEL BM-II-93	7 900 $*	70 $ / day*
OPTION: Spare cable	400 $*	included

* Shipping charges, customs fees, federal and/or provincial taxes are extra, if applicable.

PURCHASE OPTION: 80% of the rental fees of the last 4 months can be deducted from the purchase price of the rented instrument, if purchased.

RENTAL PERIOD: Starts on the day the instrument leaves our office in Sainte-Foy to the day of its return to our office.

WARRANTY: All instruments are guaranteed for one year. All repairs will be done free of charge at our office in Sainte-Foy (transportation fees excluded).

SERVICE: After the warranty has expired, a yearly maintenance contract, including parts and labour, is available for 790 $ per year and includes any technical updating which could be made to the instrument sold.

Prices are subject to modification without notice.

instrumentation
GDD inc.

3700, boul. de la Chaudière
Ste-Foy, Qc, Canada G1X 4B7
Tél.: (418) 877-4249
Fax: (418) 877-4054

BEEP MAT BM-II

APPENDIX 8.0

Vancouver Petrographics Ltd.

JAMES VINNELL, Manager
JOHN G. PAYNE, Ph.D. Geologist
CRAIG LEITCH, Ph.D. Geologist
JEFF HARRIS, Ph.D. Geologist
KEN E. NORTHCOTE, Ph.D. Geologist

P.O. BOX 39
8080 GLOVER ROAD,
FORT LANGLEY, B.C.
V0X 1J0
PHONE (604) 888-1323
FAX. (604) 888-3642

Herb Wahl
RR #4
Gower Point Road
Gibsons B.C. V0N 1V0
Tel (604) 886-8522

JOB # 930768
Dec. 10, 1993

Dear Mr. Wahl,

Re: 3 Samples for petrographic descriptions
L1 SE-122NE (R); LB-945 SW and LC-834 SW

Petrographic descriptions have been completed for the above three samples submitted by you.

The three appear to have a similar origin and have been affected by similar geologic processes since deposition although there are some differences in detailed mineralogy.

Geologic interpretation is difficult because of the extremely fine grain-size and hornfels (biotite and amphibole) overprint.

The protoliths appear to have been tuffaceous but textures suggest superimposed tectonic granulation and deformation leaving irregular tuffaceous fragments and streaks of granulated "vein" minerals as well as coarser angular fragments including sulphides in a granulated or cataclastic groundmass. There is also suggestion of later fracturing with deposition of minor sulphides and associated hematite.

This is reading a lot into three sections of about a square inch each but I have to call them the way I see them. It would be helpful to know regionally whether or not there is a major structure passing through the area where these samples were collected.

Yours very truly,

K.E. Northcote, Ph.D., P.Eng. [604] 796-2068

[1] L 1 SE-122 NE (R)
Amphibole hornfels (crystal tuff).

Summary description
Protolith composed of microgranular to very fine interlocking feldspathic (plagioclase) groundmass. Contains disseminated very fine/fine plagioclase and lesser quartz fragments. Variations in predominant grain-size produces an irregular bedded appearance with some of the finer laminae probably resulting from structural granulation. No evidence of K-feldspar in stained slab.

There is a superimposed microcrystalline to very fine amphibole hornfels overprint of varied intensity with a discontinuous fracture controlled diffuse network of slightly coarser amphibole grains. This overprint masks much of the original groundmass texture. Locally clusters of microcrystalline biotite is intermixed with amphibole.

A second fracture-controlled vein/segregation system of pyroxene (diopside) with lesser quartz and minor garnet, sulphides. Microcrystalline pyroxene (diopside) impregnates the wall rock with varied intensity at the margins of these systems.

Opaque minerals include partially altered pyrrhotite as fine disseminations in groundmass and coarser clusters in veins /segregations. Pyrrhotite shows partial alteration through an intermediate product to marcasite. Very minor pyrite, sphalerite, traces of chalcopyrite are associated with pyrrhotite in veins/segregations. Very minor very fine ilmenite is disseminated throughout groundmass.

Microscopic description
Tuffaceous groundmass

Plagioclase; 35-40%, anhedral (microgranular to .05 mm). Interlocking grains form groundmass. Masked by hornfels overprint of amphibole, pyroxene (diopside) and minor biotite. Some segregation into irregular layers by slight differences in predominant grain-size. Layered granulation by structure is suspected.

Crystal fragments

Plagioclase; 4-5%, anhedral (<.05 to 0.1 mm). Irregular shaped fragments. Dusted appearance as compared to quartz. Few grains with conspicuous twinning.

Quartz; 1.5-2%, anhedral (<.05 to 0.1 mm). Irregular shaped featureless fragments. Fairly uniformly disseminated throughout groundmass.

[1] Continued

Overprints
Fine

Amphibole; 15-18%, anhedral (microcrystalline to .05 mm). Loose felted masses, clusters of prismatic crystals, discontinuous irregular local fracture controlled networks. The disseminated crystals mask groundmass locally. Difficulty distinguishable from very fine pyroxene (diopside). Pale brownish green, prismatic.

Pyroxene (diopside?); 8-10%(?), anhedral (microcrystalline to .05 mm). Very pale bright green, granular as compared to amphibole. Appears to impregnate groundmass at contacts with coarser fracture-controlled pyroxene.

Biotite; 1-1.5%, anhedral, (microcrystalline to .05 mm). Scattered small felted clusters. Localized. Associated with amphibole hornfels.

Coarser overprint/fracture controlled/veins

Pyroxene (diopside?); 6-8%, anhedral (.05 to >0.5 mm). Interlocking grains. Fracture controlled forming diffuse irregular veins. Impregnation of groundmass by finer fraction. Associated quartz, opaques.

Amphibole; 8-10%, anhedral (.05 to 0.1 mm). Generally finer than pyroxene, prismatic. Forms diffuse, irregular fracture-controlled networks superimposed on groundmass.

Quartz; 3-4%, anhedral (.05 to >1.0 mm). Interlocking grains, fracture-controlled associated with pyroxene (diopside).

Garnet; <0.5%, anhedral to (>1.0 mm). Irregular grains in clusters in quartz-pyroxene veins. Pale brown colour.

Opaques; see below

Reflected light
Opaques; 6-8%

Pyrrhotite; 2.5-3%, anhedral (<.01 to >1.0 mm). Shows alteration to marcasite and hematite. Poorly developed birds-eye texture. Coarser grains in veins. Abundantly disseminated finer grains, small clusters of grains. Some disseminated grains partially to totally altered to marcasite.

Marcasite; 1-1.5%, anhedral (<.01 to .05 mm). Alteration of pyrrhotite rims and in fractures.

[1] Continued

Pyrite; traces, anhedral/subhedral (<.01 to 0.15 mm). Widely scattered grains associated with pyrrhotite and marcasite.

Chalcopyrite; traces, anhedral (<.01 to .05 mm). Irregular grains intergrown with pyrrhotite, marcasite and pyrite.

Sphalerite; <<0.5%, anhedral (<.01 to >0.2 mm). Irregular grains, clusters of grains. Associated with pyrrhotite.

Ilmenite(?); 0.5%, anhedral (<.01 to 0.1 mm). disseminated grains, clusters of a few grains [pale grey slight pinkish tint, anisotropic, distinct colour difference from pyrrhotite]

[2] LB 945 SW
Biotite hornfels (crystal tuff)

Summary description
Groundmass composed of microgranular feldspathic (?) grains with original textures almost completely masked by close-packed interlocking microcrystalline biotite hornfels overprint. Contains weakly to moderately disseminated fine crystal fragments of quartz, altered plagioclase and biotite. Structure appears to have played some role in producing the ultimate rock fabric.

Contains subrounded ovoids of associated microcrystalline and coarser quartz a few with K-feldspar segregations. Some siliceous ovoids are isolated and have diffuse microcrystalline margins which trail off into the general groundmass forming diffuse microgranular siliceous patches. It is not clear because of the biotite hornfels overprint, whether or not these patches are the result of impregnation or granulation streaking of early veins/segregations. Others ovoids are intersected by fracture controlled quartz and lesser K-feldspar and still lesser amphibole (tremolite) and opaques.

Opaques are associated with the quartz-K-feldspar-amphibole segregations/veins and in an incipient irregular discontinuous crackle fracture networks. Opaques in the latter are largely nonreflective, buried below the polished surface or are nonmetallic. Opaques include clusters altered pyrrhotite /marcasite; traces chalcopyrite fracture controlled in marcasite. Traces pyrite in altered pyrrhotite.

Microscopic description
Groundmass

Feldspars (plagioclase)?; 12-15%(?), anhedral (microgranular). Forms the original groundmass now nearly completely masked by microcrystalline biotite hornfels which obliterates original textures.

Crystal fragments

Quartz; 2-3%, anhedral (<.01 to 0.1 mm). Fragmental outlines. Widely disseminated throughout biotite hornfels groundmass.

Plagioclase; 1-2%, anhedral (<.01 to 0.1 mm). As for quartz but dusted appearance. Some grains show conspicuous polysynthetic twinning.

Hornfels overprint

Biotite; 60-65%, anhedral (microcrystalline to .05 mm). Close packed felted overprint that obliterates original groundmass. Biotite hornfels contains ovoid/lensoidal siliceous segregations/ fragments of coarser aggregates and is mottled by more diffuse trails of abundantly disseminated

[2] Continued

microgranular quartz. Biotite shows some streaking of more compact clusters along bedding/deformation(?) planes. Suggests some deformational component. Scattered clusters of coarser biotite grains and in irregular microveinlets.

Segregations/fragments

Quartz; 12-15%, anhedral (<.05 to >1.0 mm). Interlocking fragments of shattered coarser crystals showing varied intensity of shattering, commonly more intense/microgranular at margins. Trails off into diffuse irregular patches of minute grains in the groundmass. Suggestion of recrystallization locally. Ovoid outlines of uncertain origin. Structure appears to have played some role in producing their ultimate shape and distribution. In addition there are also obvious fracture controlled quartz veinlets/segregations associated with tremolite and opaque. Some of these intersect the ovoid forms.

K-feldspar; 0.5-1%, anhedral, (microcrystalline?) Conspicuous at margins of quartz segregations/fragments and in microfractures. Appears fracture controlled. Conspicuous in stained slab but not distinguishable with certainty in thin section. Appears pale brown, masked by alteration dusting.

Amphibole (tremolite?); 0.5-1%, anhedral (<.05 to 0.2 mm). Clusters of ragged prismatic crystals associated with quartz, sulphides, hematite in fracture controlled veins/segregations. [Biaxial (-), large 2V]

Reflected light
Opaques

Altered pyrrhotite; 1-2%, anhedral (<.01 to 0.5? mm) Altered to intermediate product rimmed by marcasite. Irregular lensoidal clusters in groundmass. Coarser clusters associated with quartz segregations and in veins.

Marcasite; 3-4%, anhedral (<.01 to >1.0 mm). Irregular shaped grains. Alteration of pyrrhotite to varied intensity ranging from unaltered, alteration of margins and in fractures leaving pyrrhotite cores, to complete replacement. Disseminated in groundmass and in quartz segregations.

Pyrite; 0.5-1%, anhedral/subhedral (<.01 to >0.2 mm). Smooth and grainy surfaces. Intergrown with altered pyrrhotite/marcasite associated with quartz. Strong fracture control.

Chalcopyrite; traces, anhedral (<.0025 to >0.2 mm). Veinlet controlled.

[3] LC 834 SW
Amphibole hornfels (crystal tuff/cataclasite???).

Summary description
Groundmass layered/cataclastic?, feldspathic microgranular to very fine-grained. Layering conspicuous by differences in predominant grain-size and by contorted streaking by microgranular to very fine granular siliceous component. Varied abundance of disseminated fine quartz and plagioclase crystal fragments. Stained slab shows patchy distribution of K-stain in stained slab. K-feldspar was not observed in thin section, nor evident in K-analysis [0.59%K]

Overprint of varied intensity of microcrystalline to very fine tremolite very minor chlorite alteration. Less conspicuous clusters of microcrystalline TiO_2(?) and carbonate.

Cataclastic? groundmass contains irregular tuff fragments, with disseminated small clusters of fine amphibole. Associated coarse quartz fragments/ clusters?, discontinuous vein segments; lesser coarser tremolite, chlorite clusters, opaques. Opaques include altered pyrrhotite/marcasite/ very minor pyrite; associated hematite. Very minor sphalerite, traces chalcopyrite.

Microscopic description
Cataclastic groundmass

Feldspar (plagioclase); groundmass percentage varied, anhedral (microgranular to 0.02 mm). Tight interlocking groundmass. Dusted. Microcrystalline tremolite(?) overprint. Contains tuffaceous lithic fragment remnants and associated assemblages. The cataclastic? layering conspicuous by its microgranular grain-size.

K-feldspar; not noted in thin section, nor indicated by assay. Patchy K-stain of stained slab.

Disseminated fine crystal fragments

Plagioclase; 0.5-1%, anhedral/subhedral (.02 to 0.1 mm). Disseminated grains coarser than general groundmass. Slight clouding as compared to quartz. Conspicuous twinning of some grains.

Quartz; <0.5%, anhedral (.01 to 0.1 mm). Isolated disseminated grains. Distinct from, segregations impregnations and veining.

Alteration overprint

Tremolite; 10-12%, anhedral (microcrystalline to 0.1 mm). Groundmass masked by disseminated microcrystalline grains, abundantly scattered slightly coarser grains, clusters of grains [Inclined extinction].

[3] Continued

TiO_2(?); <<0.5%, anhedral (microcrystalline) Disseminated small irregular clusters of minute grains. Lensoidal streaking along foliation/layering. Forms lensoidal clusters. [Reflective, high birefringence] Check trace element content.

Carbonate; <<0.5%, anhedral (microcrystalline). As for TiO_2 [but nonreflective]. Suspected, not confirmed.

Chlorite; 1-2%, anhedral (microcrystalline to 0.1 mm). Clusters of distinctly bladed grains. Light colour of fresh cut surface indicates low concentration.

Relict components

Tuff remnants; percentage and fagment size varied, conspicuous by slightly coarser grain-size and very irregular outlines in microgranular groundmass. Feldspathic as for groundmass with disseminated small clusters of felted amphibole. Associated coarser assemblage of quartz, amphibole, chlorite, opaques.

Fine component

Siliceous component; 12-15%, anhedral, (microcrystalline to <.05 mm). Forms diffuse masses, lesser sinuous, contorted, discontinuous streaks in plane of layering in groundmass. Product of structure (cataclasis)?. Broken up coarser quartz ?

Coarser components

Quartz; 22-25%, anhedral (microcrystalline to >1.0 mm). Broken crystals, disrupted veins, diffuse clusters.

Tremolite; 4-5%, anhedral/subhedral (.01 to >0.5 mm). In clusters with quartz, chlorite, sulphides. [Biaxial (-), inclined extinction]

Chlorite; 2-3%, anhedral/subhedral (<.05 to 0.2 mm). Felted bladed clusters with quartz, tremolite.

Reflected light
Opaques

Altered pyrrhotite; 1-2%, anhedral (<.01 to 0.5 mm). Clusters of irregular grains showing crystallographic controlled dustings by alteration of pyrrhotite to an intermediate product. Associated marcasite alteration product of pyrrhotite. Disseminated small clusters in groundmass, coarser grains/clusters in quartz clusters.

[3] Continued

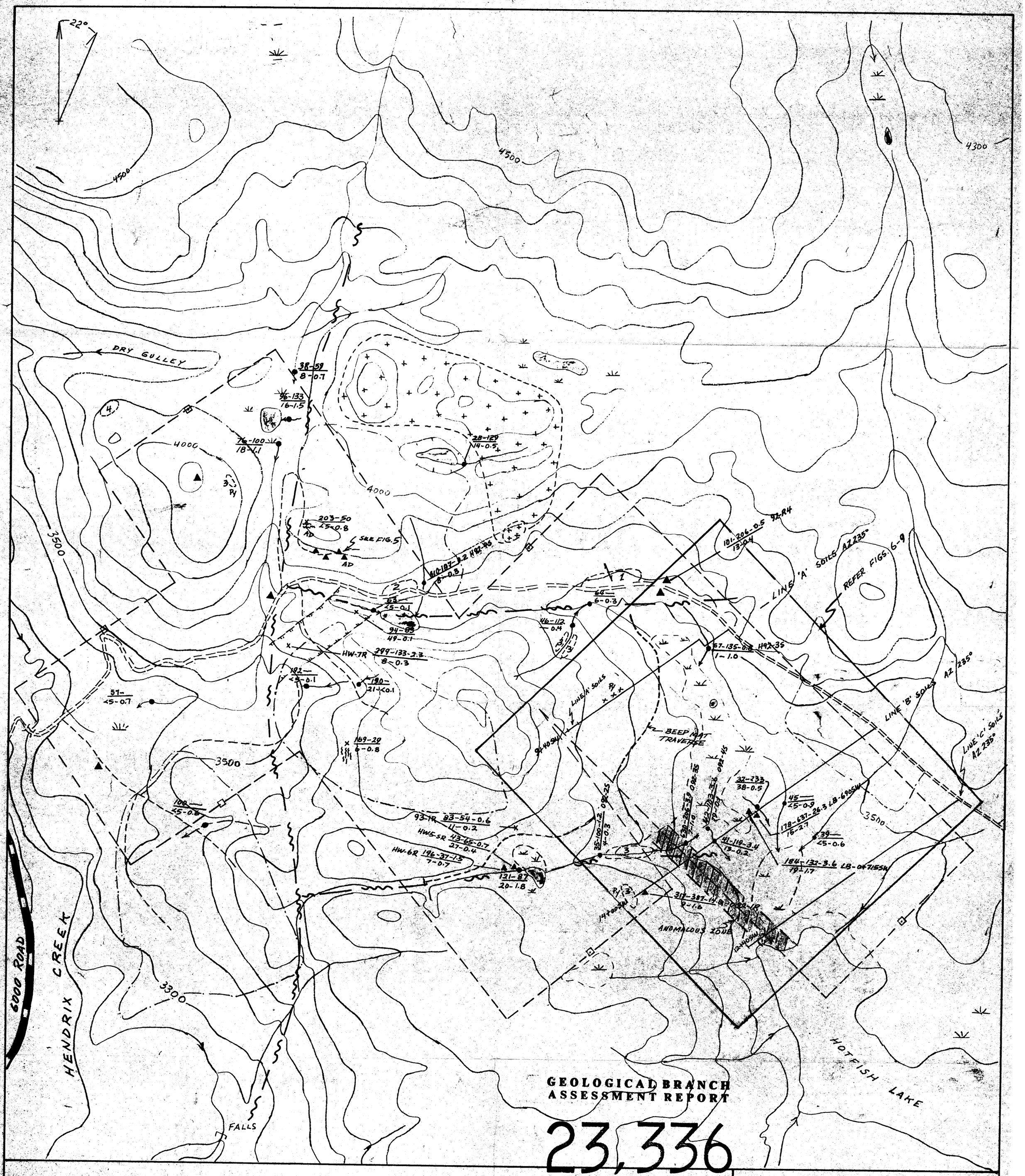
Marcasite; 0.5-1%, anhedral (<.01 to >0.2 mm). Disseminated grains, clusters of grains. Forms rims on altered pyrrhotite. [Clearly anisotropic]

Pyrite/marcasite; <<0.5%, anhedral/subhedral (<.01 to 0.8 mm) Coarser grains with quartz segregations. Some clearly isotropic pyrite. Disseminated finer grains, shows strong concentration in diffuse clusters. [Suggestion of anisotropism of some grains indicating marcasite]

Chalcopyrite; traces 9=0, anhedral (<.01 to 0.1 mm). Widely disseminated grains, commonly clusters of a few grains associated with altered pyrrhotite-marcasite.

Sphalerite; <<<0.5%, anhedral, (<.01 to .05 mm). Difficulty distinguishable from hematite. Similar internal reflection but more uniform colour.

Hematite; <<<0.5%, anhedral, (<.01 to 0.2(?) mm). Pseudomorphous after pyrrhotite(?). Occurs in cores of altered pyrrhotite. Mottled blue-grey colour. Some beaded/continuous fracture control. Networks in veins/segregations.



GEOLOGICAL BRANCH
ASSESSMENT REPORT

23,336

LEGEND

- OUTLINE CLEAR-CUT AREA
- FAULT, PHOTO-LINEAR, SHEARING
- SILT SAMPLE SITE *
  Cu-Zn / Au-Ag OR Cu-Zn-Cd / Au-Ag
  VALUES IN PPM EXCEPT AU IN PPB
- OUTCROP, FLOAT SITE, SAME NOMENCLATURE AS FOR SILTS
- * SAMPLE I.D. OMITTED FOR PRE 1992 SAMPLES

- FRACTURE/ALTERATION ZONE
- AD — ACID DIKES
- MONZONITE
- 4 — BLACK SHALE, ARGILLITE
- 3 — INTERMEDIATE VOLCANICS
- 2 — MAFIC VOLCANICS (AUGITE RICH)
- 1 — AUGEN GNEISS (BASEMENT COMPLEX ??)

500 0 500
SCALE 1:10,000
METERS

HOT CLAIMS
CLINTON M.D.
NTS 92P-15E

RECONNAISSANCE
GEOLOGY - GEOCHEMISTRY MAP

REVISED DEC. 1993
H. WANG NOV. 1992

FIG. 6

CUT BLOCK 186C

Cu Zn Ag Cd (ppm)
8-101-0.7-0.3
6-55-0.8-0.2
8-72-0.3-1.0
22-189-0.6-0.7
19-161-1.0-0.9
6-147-0.4-0.6
29-93-1.0-3.0
87-82-0.6-1.0
50-82-0.4-1.2
66-117-0.4-1.1
61-91-0.4-1.3
62-110-0.2-0.8
98-210-0.6-1.1
NS
23-51-0.1-1.1
65-119-0.1-2.0
30-267-0.6-1.6
8-54-0.1-0.2
157-167-3.1-6.3
65-160-1.2-2.0
32-157-0.9-2.5
40-181-0.5-0.8

LINE 'A' AZ 235°

22°

OLD HORSE TRAIL APPROX.

7000 RD.

H93-1S
300NW
BL330NW-205W
092-2S
CLAIM SIDE LINE
L2NW-120SW
H93-2S
H93-1S
H93-3S
L2NW
092-3S
H93-4S
L1NW
HOT-17
HOT-18
Lower Augite Por. Flow? Intr.?
Pyroxt (Altered)
1400SW
092-4S
LB 945SW
092-1S
LB-715SW
LB-690SW
H92-2S
H92-1S
BL 0+20SE
LINE 'B' AZ 235°
L1SE-122NE(R)
L1SE-122NE(2)
330NE'S'
H25-2S
L1SE
120NE'S'
L2SE-150SW
L2SE
H25-3S
HOT-19
HOT-20
ART CREEK
CUT BLOCK L84C
OLD BLAZE LINE (N-S)
LOCATION LINE
LC-834SW
1250SW
LINE 'C' AZ 235°
BASE LINE AZ 325°
HOTFISH LAKE
(N.W. CORNER)

SILT SAMPLE RESULTS

SAMPLE #	Cu	Zn	Au (ppb)	Ag	Cd
H92-1S	40	146	4	0.6	1.2
H92-2S	32	233	38	0.5	0.4
H25-2S	45	—	<5	0.9	— *
H25-3S	39	—	<5	0.6	— *
092-1S	41	119	13	0.2	3.4
092-2S	35	100	4	0.3	1.2
092-3S	630	206	7	1.0	3.9
092-4S	42	103	19	0.1	3.6
SILTS 1993					
J93-1S	47	104	8	0.3	1.5
H93-1S	61	140	6	1.6	1.3
H92-2S	211	156	11	2.1	4.3
H92-3S	37	87	6	0.4	0.8
H92-4S	36	90	6	0.6	1.1
L1SE-120NE'S'	31	82		0.4	1.3
L1SE-330NE'S'	26	128		0.4	1.5

* BONDAR-CLEGG ASSAYS, NO Cu-Zn RESULTS

FLOAT SAMPLE RESULTS

SAMPLE #	Cu	Zn	Au (ppb)	Ag	Cd
LB-715SW	184	132	19	1.7	3.6
LB-690SW	178	637	15	2.7	26.3
FLOATS 1993					
LB-690SW	166	126	11	2.1	5.1
BL330NW-205W	40	97	8	0.2	0.2
BL-0+20SE	195	393	18	2.3	17.5
BL 120NW-105W	108	55	20	<0.1	0.4
L1SE-122NE(R)	35	620	12	1.6	155.5
L1SE-122NE(2)	251	123	3	0.6	1.8
L2NW-120SW	75	36	362	0.4	0.5
L2SE-150SW	105	175	14	1.3	4.5
LB-945SW	25	112	5	0.5	0.6
LC-834SW	125	456	5	1.6	37

SILT SAMPLE LOCATION

▲ FLOAT SAMPLE LOCATION

☼ BEEPMAT TEST PIT

GEOLOGICAL BRANCH
ASSESSMENT REPORT

23,336

100 0 100 200
SCALE 1:2500

NTS 92P 15E

HOT MINERAL CLAIMS
CLINTON M.D.

SILT/FLOAT ASSAY RESULTS

H. Wahl Jan 1994

H. WAHL P.ENG. B.C.	NOV. 1993	FIG. 6

CUT BLOCK L86C

Cu Zn Ag Cd (ppm)

16.5 P4 | 16. | 16.5 P4

8-101-0.7-0.3
6-53-0.8-0.2
8-72-0.3-1.0
22-189-0.6-0.7
19-161-1.0-0.9
6-47-0.4-0.6
29-93-1.0-3.0
87-92-0.6-1.0
50-92-0.4-1.2
64-117-0.4-1.1
67-91-0.4-1.3
62-110-0.2-0.8
95-210-0.6-41
N5
23-51-0.1-1.1
65-119-0.1-2.0
30-267-0.6-1.6
8.5%-0.1-0.2
157-167-3.1-6.3
65-160-1.2-2.0
32-157-0.9-2.5
40-181-0.5-0.8

LINE 'A' AZ 235°

22°

OLD HORSE TRAIL APPROX.

7000 RD.

500 NW

1.3
3.0
2.4
2.6
2.7
3.4
4.5
4.1
4.3
3.7
3.6
3.8
2.6
1.8
4.4
1.5
3.3
2.3
4.4
3.4
4.3
1.3
3.5
3.9
4.0
3.2
3.1
8.7
23.5
6.7
5.8
6.8
13.5
7.4
1.4
2.0
17.8
6.0
8.7
3.1
5.7
8.8
4.6
4.6
5.3
3.0

CLAIM SIDE LINE

L2NW

L1NW

L1SE

L2SE

HOT-17 HOT-18

HOT-19 HOT-20

LINE 'B' AZ 235°

ART CREEK

CUT BLOCK L84C

LOCATION LINE

OLD BLAZE LINE (N-S)

LINE 'C' AZ 235°

1400 SW

1250 SW

BASE LINE AZ 325°

HOTFISH LAKE
(N.W. CORNER)

GEOLOGICAL BRANCH
ASSESSMENT REPORT

23,336

100 0 100 200

SCALE 1:2500

SILT SAMPLE LOCATION

▲ FLOAT SAMPLE LOCATION

NTS 92P 15E

HOT MINERAL CLAIMS
CLINTON M.D.

DISTRIBUTION OF Cd IN SOILS
CONTOURS AT 2-4-6-12-24+ PPM

H. WAHL P.ENG. B.C. | Nov 1993 | FIG. 7

CUT BLOCK L86C

Cu Zn Ag Cd (PPM)
8-101-0.7-0.3
6-53-0.8-0.2
8-72-0.3-1.0
22-189-0.6-0.7
19-161-1.0-0.9
6-47-0.4-0.6
29-93-1.0-3.0
87-92-0.6-1.0
50-82-0.4-1.2
44-177-0.4-1.1
41-91-0.4-1.3
62-110-0.2-0.8
98-210-0.6-4.1
NS
23-51-0.1-1.1
65-119-0.1-2.0
30-267-0.6-1.6
8-54-0.1-0.2
157-167-3.1-6.3
65-160-1.2-2.0
32-157-0.8-2.5
40-181-0.5-0.8

LINE 'A' AZ 235°

22°

OLD HORSE TRAIL APPROX.

CLAIM SIDE LINE

7000 R.D.

500 NW

0.3 0.2 0.2 0.2 0.3 0.5 2.0 1.5 0.4 1.4 0.7 2.3 0.7 0.1 0.6 0.4

HOT-17 HOT-18

L2NW

L1NW

LEICA AUGITE PYR. FLOW? INTR.? PYROX (ALTERED)

1400 SW

L1SE

L2SE

HOT-19 HOT-20

ART CREEK

CUT BLOCK L84C

LINE 'B' AZ 235°

LOCATION LINE

OLD BLAZE LINE (N-S)

1250 SW

LINE 'C' AZ 235°

BASE LINE AZ 325°

HOTFISH LAKE
(N.W. CORNER)

SILT SAMPLE LOCATION

FLOAT SAMPLE LOCATION

GEOLOGICAL BRANCH
ASSESSMENT REPORT

23,336

100 0 100 200

SCALE 1:2500

NTS 92P 15E

HOT MINERAL CLAIMS
CLINTON M.D.

DISTRIBUTION OF Ag IN SOILS
CONTOURS AT 0.5-1.0-2.0-5.0+ PPM

H. WAHL P.ENG. B.C. | NOV. 1993 | FIG. 8

CUT BLOCK L86 C

LINE 'A' AZ 235°

OLD HORSE TRAIL APPROX.

CLAIM SIDE LINE

7000 RD.

HOT-17 HOT-18

HOT-19 HOT-20

ART CREEK

CUT BLOCK L84C

LINE 'B' AZ 235°

LINE 'C' AZ 235°

LOCATION LINE

OLD BLAZE LINE (N.S)

L2NW

L1NW

L1SE

L2SE

1400SW

500NW

1250SW

BASE LINE AZ 325°

HOTFISH LAKE
(N.W. CORNER)

LEGEND AUGITE PORPHYRY DYKE (ALTERED)

22°

SILT SAMPLE LOCATION

FLOAT SAMPLE LOCATION

GEOLOGICAL BRANCH
ASSESSMENT REPORT

23,336

100 0 100 200

SCALE 1:2500

NTS 92P 15E

HOT MINERAL CLAIMS
CLINTON M.D.

DISTRIBUTION OF Cu+Zn+Ni IN SOILS
CONTOURS AT 100-200-400+PPM

H. WAHL P.ENG. & G. | NOV. 1992 | FIG. 9