

GEOCHEMICAL SURVEY
VANHALL AND DV CLAIMS
Gold River, B.C.

92E/16E, 92F/13W
15 November, 1972 D. Arscott
P. Fitzgibbon

3953

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. **3953** MAP

GEOCHEMICAL SURVEY

VANHALL AND DV CLAIMS,
Gold River, B.C.

[49°55'N, 126°00'W]

3953

FDR

MORESBY MINES LTD.

BY

D. Arscott, P. Eng.,

P. Fitzgibbon, Dipl. Tech.

Field Work:
10th to 22nd Oct. 1972

Report:
15th Nov. 1972

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Certificate

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* * * * *

INTRODUCTION

General

In order to evaluate further the nature and economic potential of the unusual mineralization present on the Vanhall and DV claims, a geochemical investigation was carried out in October 1972, involving the analyses of 548 soil samples, each for nine elements.

The property is a single group of forty contiguous claims, consisting of the Vanhall 1 to 6, DV 1 to 30, 73, 74, 76 and 78, situated $9\frac{1}{2}$ miles north of Gold River on Vancouver Island.

Access [Figure 1]

Access to the property is provided either by helicopter from Campbell River [a 25 minute flight] or via the Heber River logging road, which leaves the Campbell River - Gold River highway 7 miles east of Gold River. This latter access requires a one-hour hike along a moderately good foot trail from the end of the logging road. The road is in good condition and would be negotiable by most two-wheel drive vehicles.

Previous Work

Except for scattered prospecting, some trenching, and the preliminary geological sketching, very little work has been done on the property. Regional coverage is lacking

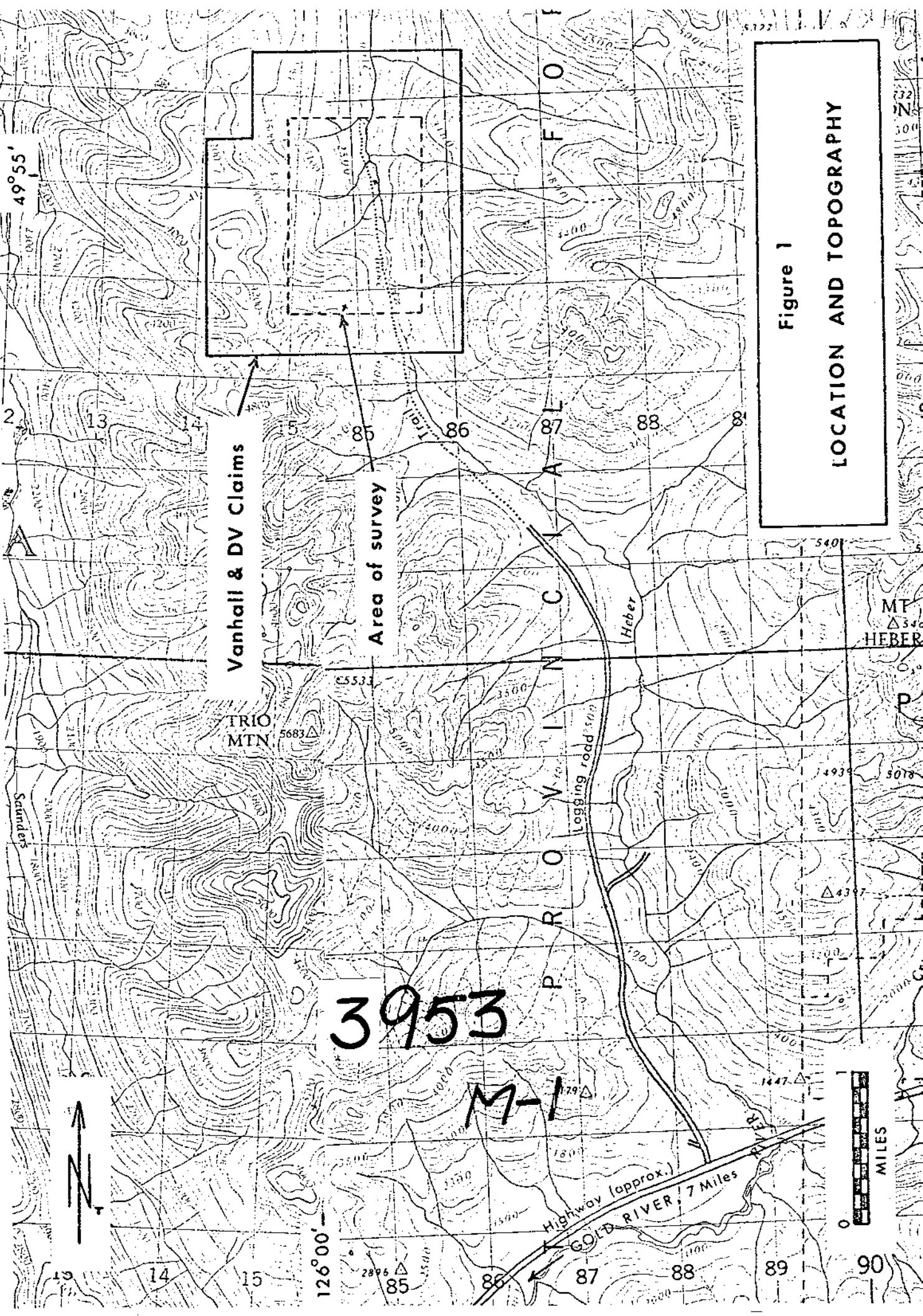


Figure 1

LOCATION AND TOPOGRAPHY

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NO. 3953 MAP #1.14

also. Half of the property lies in the geologically unmapped 49° - 126° quadrant, and government aeromagnetic surveying has yet to be carried out in this area.

Geography

The topography across the claims is generally steep, and in the south-west corner it is precipitous [see Figure 1]. However, traversing is eased somewhat by the relatively light underbrush.

The timber coverage consists of a very fine stand of spruce, fir, hemlock, and yellow cedar, except for the western edge of the claim block which is lake dotted "alpine" terrain. Devils Club occurs infrequently, and there are large quantities of a type of high bush blueberry of excellent taste.

The snow free period is normally mid June to the end of October.

GEOLOGY

General

The property is underlain mainly by the Karmutsen Formation, part of an extensive block of Upper Triassic volcanics. These rocks are relatively unfolded, having undergone only regional uplift and flexure during early Mesozoic deformation. [Muller & Carson 1968]

This flexure, in the vicinity of the claims, has a northwesterly trend, the anticlinal axis of which may well pass through the property [Map 17-1968]. In partial corroboration of this possibility is a stock of the Upper Jurassic Island Intrusions which lies immediately south-east of the property. The Island Intrusions are reported to have been preferentially intruded elsewhere along fold axial planes. [Muller]

A further stock, of quartz diorite or granodiorite composition, and of unknown but probably small dimensions, has been located on the eastern boundary of the DV claims. In addition a number of dioritic dykes are evident along Vanstone creek. The eastern contact of the major Island Intrusions batholith lies two miles to the south-west, and it seems likely that other small stocks and dykes will be located when the property is fully mapped.

Locally the volcanics vary in composition from basalt through to dacite, and are commonly porphyritic in texture. The diorites are mainly quartz-diorite or granodiorite. Lamprophyre and dacite porphyry dykes occur less frequently.

Alteration products are highly variable. Silicification and chloritization is commonly seen in the vicinity of Vanstone Creek, and epidotization along Della Creek. Potassium feldspar alteration is present mainly in or close to some of the dioritic dykes, and does not appear to be widespread. Saussuritic and chloritic alteration have been reported from thin sections of basaltic-andesites.

Extensive fracturing is evident over a length of some 3,000 feet along Vanstone Creek and extends up most of the tributaries. Coarse brecciation occurs near the Hall Creek confluence, and also on a tributary of Della Creek.

Mineralization

Coinciding with the fracturing, and roughly proportional to it, is widespread pyritization in amounts of 1 to 10%, constituting a zone, as defined by the creek outcrops, of about 3,000 feet by 1,000 feet. Several sets of pyritized rock samples have indicated sporadic copper

and silver highs from within this zone, although copper and silver minerals are rarely visible in hand specimens.

Some prospecting carried out this year has shifted attention to other, and probably more significant forms of mineralization. These are tentatively, and somewhat arbitrarily classified as follows:

- ✓
a2F-38
1. High grade chalcopryite. At 3+60N, 0+30W, 5% chalcopryite is disseminated in silicified andesite and in a dacite porphyry dyke. The zone is about 8 feet by 50 feet. [Sample DA-2]
2. Massive chalcopryite-sphalerite. A boulder in Silver Creek, some 14 inches in width, is composed entirely of somewhat banded chalcopryite and sphalerite. [Sample PF-2]
3. Massive magnetite-pyrite. A massive blue-grey mineral carrying blebs of pyrite and sometimes epidote, is present in several areas as narrow veins. Although the mineral is of relatively low magnetism, a sample assayed 47.5% iron. Copper [in this case 0.37%] is also common [PF-3].
4. Massive pyrrhotite. A narrow vein of this material yielded low values in copper, silver, and gold. [Sample 19558].

In addition, minor amounts of quartz-associated molybdenite have been observed.

Little can be said at this stage of the relationships of these mineralization types to each other, or to their hosts.

Pyrite stringers have been seen to cut, in four individual hand specimens, a breccia fragment, a quartz veinlet, some massive pyrrhotite, and an andesite-porphyry dyke contact. It seems likely that much of the pyritization is more recent than the other sulphides.

An attempt has been made to fit the mineralization into one of the types [Muller & Carson] prevalent in the Alberni Map Area. No type fits exactly, although the Western Mines Ltd. Lynx-Paramount-Price deposit appears to be the closest mineralogically.

Whatever the differences, and despite the lack of detailed prospecting, two facts stand out. One is that the property is highly copper positive. The other is that the strong fracture and breccia zones present in most Vancouver Island orebodies, are also present here.

GEOCHEMISTRY

Soils

The soils on the property are typically podzolic, and mostly residual. Some transported soils are present in the vicinity of the creeks and as small alluvial fans below the steeper gullies.

The residual soils have fairly well differentiated horizons, though not every horizon is present at every station. A full typical profile would be as follows:

- A. Humus [usually less than one foot in depth]
- B. Grey clay [several inches]
Brown loam
Red to ochre silt to silty loam
- C. Partly broken down bedrock

Ninety percent of the samples were taken from the top of the B horizon. The remainder are either humus or humus/clay mixtures.

The humus samples tend to be more erratic, but on average lower, in metal content, suggesting the leaching of the metals from the "A" horizon and their deposition in the underlying "B" horizon.

Data Treatment

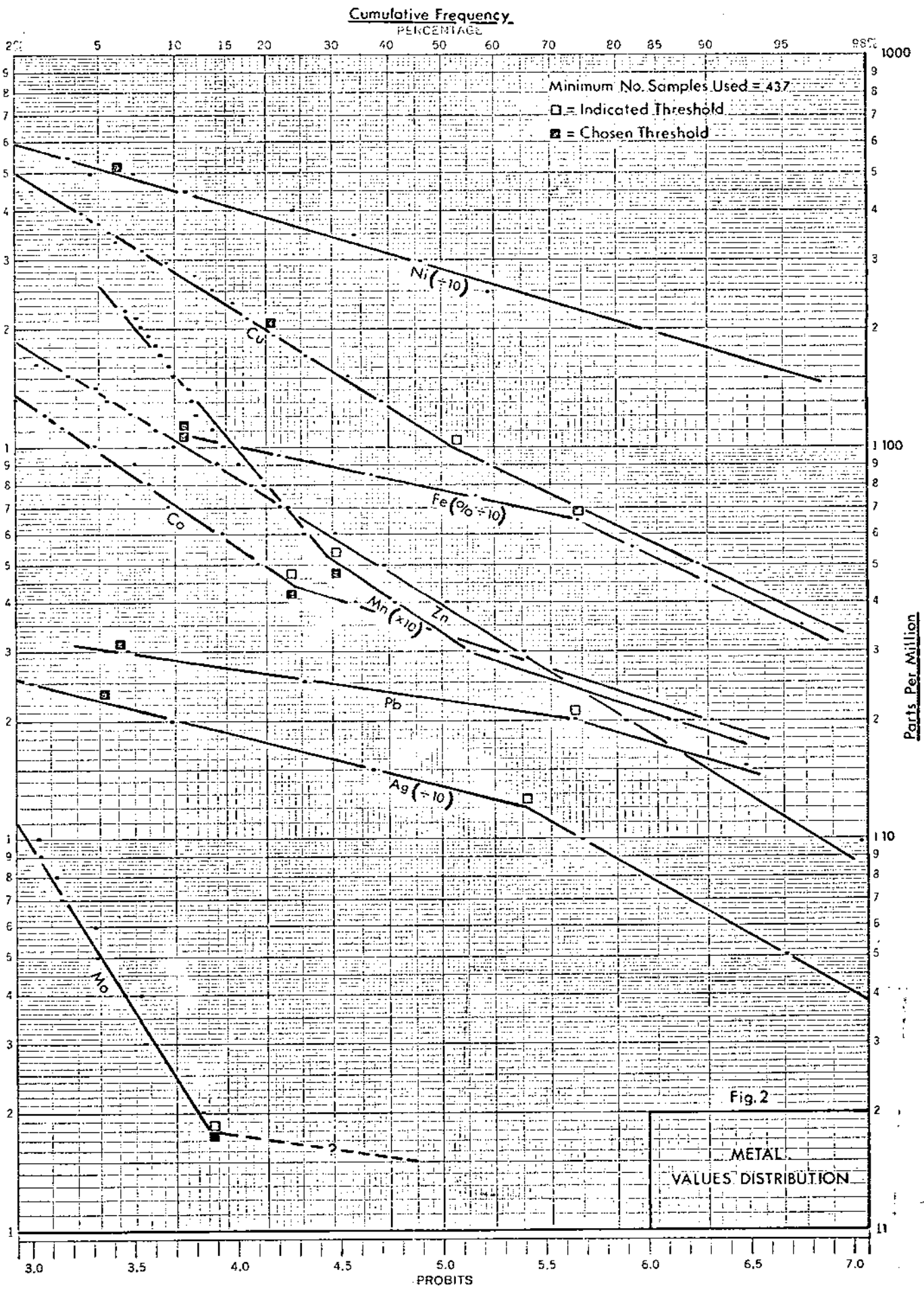
Cumulative logarithmic probability plots of the non-humus soils [Figure 2] were used to make a first estimate of threshold values for each metal.

Although the graphical plots were satisfactory statistically, they indicated an embarrassingly large number of anomalous values, especially in the cases of Cu, Ag, and Pb. Consequently it seemed wise to revise the percentage of anomalous values downwards to give more realistic figures, with the known relative amounts of bedrock mineralization in mind. For example, Pb and Ni, both believed to be rare in the bedrock mineralization, were de-emphasized the most. To accomplish this the threshold values were increased. The revisions are summarized in the following table:

<u>Metal</u>	<u>Apparent Threshold [from Fig. 2]</u>	<u>Apparent % Anomalous</u>	<u>Revised Threshold</u>	<u>Revised % Anomalous</u>
Cu	100 ppm	51	200 ppm	20
Ag	1.2 ppm	65	2.25 ppm	5
Zn	not obvious	-	100 ppm	10
Pb	20 ppm	73	30 ppm	7
Mo	<2 ppm	15	2 ppm	15
Co	45 ppm	23	45 ppm	23
Ni	not obvious	-	50 ppm	6
Fe	6.5%	74	10%	15
Mn	500 ppm	30	500 ppm	30

It is of interest that thresholds determined elsewhere on Vancouver Island have been reported at much

46 8080
 PROBABILITY
 X 3 LOG CYCLES
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NO. **3953** MAP **#2**

lower values than these revised figures. For example 100 to 150 ppm [parts per million] Cu, 1.5 ppm Ag, and 70 to 80 ppm Zn are common for this region.

The reason for the unusually high backgrounds is not known.

The revised thresholds were plotted as a single contour for each metal on Figures 3[a] to 3[e]. The development of a compilation anomaly map has been left until completion of the geochemical coverage for the entire property.

Zoning and Acidity

Reference to almost any of the anomaly maps indicates that there are far more anomalies towards the north end of the grid.

This apparent zoning is probably not a realistic picture of metal distribution since the south end of the grid is characterized by much higher acidities [lower pH values], and hence the metals are more likely to be leached out at this end.

Secondary Dispersion

An acidity contour at $\text{pH} = 5.3$ has been plotted on Figure 3[e], since this represents the approximate figure below which Cu becomes soluble and therefore mobile and

leachable. As it turned out this figure proved to be quite close to the solubility limit for several other metals also. Taking the acidity-metal correlations and other factors such as anomaly "sharpness" and relative peak displacements into account, specific effects may be summarized:

Mn, Mo	-	very low dependence on pH
Fe	-	low dependence on pH
Zn	-	moderately dependent on pH
Pb, Ni, Cu, Ag, Co	-	high dependence, anomalies limited to high pH zones [usually pH greater than 5.3]

Very little downslope dispersion seems likely in areas of higher pH. This conclusion is based primarily on the close proximity of Cu, Ag, Mo, and Zn anomaly peaks within these areas.

Metal Correlations

[1] With Mineralization

[a] The chalcopyrite showing at 3+60N, 0+30W is associated with a small anomaly. Soil values were Cu-520 ppm, Ag-2.0 ppm, Zn-120 ppm, Co-72 ppm, and Mn-640 ppm. This sample was taken from a residual soil above the gully in which the showing is located, and was collected prior to blasting at the showing.

A representative sample of the mineralized rock assayed 2% Cu and 0.06 oz/ton Ag.

- [b] The breccia zone at 68N 7W is accompanied by a large anomalous zone, high in Cu and Co. Rock samples from the breccia assayed 0.03 and 0.01% Cu.
- [c] The massive chalcopyrite-sphalerite float [11% Cu, 0.14% Zn, 2.5 oz/ton Ag] located at 42N 4W is at the end of a strong linear Cu-Zn-Fe soil anomaly, but may have originated in the vicinity of another similar anomaly 400 feet further up Silver Creek. A narrow pyrrhotite vein crosses the creek at about the location of the lower anomaly and is parallel to it.
- [d] A Cu-Fe-Ni-Co anomaly surrounds the heavy pyritic mineralization at the Hall Creek-Vanstone Creek confluence, rock samples of which have yielded assays of 0.5 and 0.01% Cu.

[2] Metal-Metal Correlations

The following correlations have been estimated from a perusal of the contour maps:

Strong positive correlation within the Cu-Mo-Mn suite and within the Co-Zn suite

Moderate positive correlation within the Cu-Ag-Zn-Co suite

Weak positive correlation within the Pb-Zn-Co suite
and within the Pb-Mn suite

Weak negative correlation within the Zn-Fe suite and
within the Mo-Fe suite

Moderate negative correlation within the Co-Fe suite

Strong negative correlation within the Fe-Mn suite

It should be emphasized that these correlations are within the soil and do not necessarily represent bed-rock mineralization suites.

Anomaly Priorities

It is not possible to be specific as yet about the relative value of individual anomalies. However two generally high anomalous zones are apparent when the contour maps are "added" together.

The first is a zone approximately 2,500 feet by 1,300 feet, centred at 56N 8W, characterized in varying degree by the sulphide metals, and open to the north.

The second is a similar zone, 2,200 feet by 1,400 feet, centred at 42N 14E and open to the east.

Within these zones the anomaly patterns are somewhat disrupted by areas of high soil acidity, suggesting that the anomalies may not represent the full extent of their theoretical size.

CONCLUSIONS

- 1] The prospecting, the available geological structures, and the large quantities of anomalous soil, all indicate a highly favourable environment for the presence of copper mineralization with associated values in zinc, silver, and molybdenum.
- 2] The soil sampling method is valid for this property as evidenced by the good soil anomaly/mineralization correlation.
- 3] Two large anomalous zones are present in the soil. These could be underlain by substantial quantities of bedrock mineralization. Numerous smaller anomaly zones could reflect high grade mineralization.
- 4] An interesting relationship exists between the pyritized zone along Vanstone Creek and the two main anomalous soil zones which flank it. This is reminiscent of the Island Copper ore zone which is flanked peripherally by pyritization [Muller & Carson, 1969].
- 5] Downslope dispersion of copper, zinc, silver, and molybdenum values in the soil does probably not exceed 50 to 100 feet in areas where the pH exceeds 5.3. In other areas the anomaly positions should be viewed with some suspicion.
- 6] Further soil sampling on the property could be limited to the analysis of two or three metals from each of several closely associated metal suites, plus acidity.

RECOMMENDATIONS

That further exploration of this property should be carried out is almost self-evident.

Continued soil sampling is best supplemented by Induced Polarization coverage of selected soil anomalies. With the completion of the soil sampling Factor Analysis and possibly Trend Surface Analysis should be considered in view of the importance that the soil sampling will have to assume in eventual drill target selection.

Thorough geological mapping is required and is best carried out concurrently with the geochemical and geophysical work, in order to aid anomaly interpretation. It will, for instance, be essential to separate out the effect of the widespread pyritization from the Induced Polarization anomalies.

Magnetometer coverage has been considered but may not be effective in view of the lack of correlation of soil content with other soil metals. An orientation survey at a later date might be of use in ascertaining the true effectiveness of such a survey.

Cordially submitted,

David Arscott

David Arscott, P. Eng.

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- | | | | |
|------|---------------------------|---|---|
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| 1968 | Muller, J. and Carson, D. | - | Geology and Mineral Deposits of the Alberni Map Area, GSC Paper 68-50 |
| 1969 | Muller, J. and Carson, D. | - | Geology and Mineral Possibilities of Vancouver Island Canadian Mining Journal, May 1969 |
| 1969 | Arscott, D. | - | Preliminary Examination of the Vanhall Claims, Oct. 1969 |
| 1970 | Muller, J. | - | Northern Vancouver Island, GSC Paper 70-1, pt.A, p.44 |

Maps:

"Alberni" Geology Map, #17-1968, 1:250,000

Buttle Lake Area, B.C. Department of Mines,
Preliminary Geology Map, 1963

Topographic Maps	"Alberni", 92F,	1:250,000
	"Nootka Sound", 92E,	1:250,000
	"Upper Campbell", 92F/13W	1: 50,000
	"Gold River, 92E/16E,	1: 50,000

Airphotographs:

BC 2095 : 53, 54, 55]	1 mile = 2 inches
BC 2096 : 45, 46, 47]	

[Also more recent sets are available]

PROCEDURES

A 400' by 100' grid was established by nylon chain and compass. Slope corrections allowed closure errors to be reduced to an average of 50 feet, or 0.06%. The base line stations were marked by pickets and the cross line stations by double marking tapes.

The soil samples were dug by shovel, mainly from the "B" horizon, at depths of one inch to one foot, transferred to paper bags, and the -80 mesh fraction analysed by standard atomic absorption methods in the Amax Exploration Inc. laboratory.

AMAX EXPLORATION INC. ANALYTICAL REPORT

BURNABY LABORATORY - 2225 SPRINGER AVE. - BURNABY 2, B.C.

DATE

Oct 25, 1972

TYPE SAMPLES

Soils

PROJECT

LOCATION

VANHOLL PROPERTY

REQUESTED BY

C. HODGSON / D. ARSCOTT

DISPOSITION OF REJECTS

No.	Sample	pH	Mo	Cu	Ni	Co	Mn	Fe%	Pb	Zn	Pb		No.
01	VANHOLL ON-4N	4.8	1	16	8	12	60	1.8	.5	12	8		01
02	6N	4.8	1	10	16	22	180	7.2	1.0	30	20		02
03	8N	4.6	1	20	12	12	120	3.0	.5	22	12		03
04	10N	4.6	1	54	20	16	220	4.1	1.0	22	20		04
05	12N	4.5	1	38	12	12	200	1.9	1.0	20	20		05
06	14N	4.4	1	32	10	8	200	1.5	.5	18	24		06
07	18N	4.2	1	16	16	16	240	5.1	.5	26	20		07
08	20N	4.6	1	18	14	12	300	3.2	1.0	20	20		08
09	22N	4.5	1	24	20	16	260	3.6	1.0	34	24		09
10	DN- 2E	4.4	1	8	6	4	40	0.5	.5	12	2		10
11	4E	4.4	1	7	6	4	40	0.4	.5	16	2		11
12	6E	4.1	1	8	6	4	40	0.4	.5	14	2		12
13	8E	5.2	1	184	32	24	280	5.0	1.5	16	18		13
14	10E	5.2	1	162	32	22	640	4.0	1.0	27	16		14
15	12E	5.4	1	172	34	32	1960	3.7	1.0	52	14		15
16	14E	5.5	1	166	20	68	1140	3.0	2.0	22	12		16
17	16E	5.2	1	90	12	16	140	2.7	1.5	20	8		17
18	18E	4.2	1	10	6	8	40	0.3	.5	22	2		18
19	20E	4.0	1	8	4	4	40	0.5	.5	14	2		19
20	2N- 2N	4.8	1	20	12	12	220	2.8	.5	26	18		20
21	VANHOLL 4N-ON	5.3	1	520	66	72	640	6.2	2.0	120	24		21
22	2N	5.0	1	24	52	36	440	7.1	1.5	56	24		22
23	4N	4.7	1	54	22	18	160	5.5	1.5	30	12		23
24	6N	4.7	1	58	24	18	240	4.2	1.5	32	20		24
25	8N	4.7	1	104	24	22	260	7.3	1.0	40	16		25
26	10N	5.0	1	220	24	26	300	6.5	1.5	30	22		26
27	12N	4.7	1	40	20	16	220	3.7	1.0	28	26		27
28	14N	4.7	1	34	22	24	380	3.4	1.0	32	20		28
29	16N	4.6	1	24	12	12	200	1.8	1.0	26	24		29
30	18N	4.3	1	12	14	12	200	3.7	1.0	20	32		30
31	20N	4.7	1	28	92	44	740	9.2	.5	80	8		31
32	22N	4.7	1	6	20	14	240	2.7	1.0	24	20		32
33	23N	4.3	1	60	28	30	120	2.10	1.5	32	20		33
34	4N- 2E	3.8	1	118	12	24	160	3.6	1.0	22	16		34
35	4E	4.6	2	140	16	22	160	4.5	2.5	28	12		35
36	6E	4.9	3	124	24	24	220	4.9	1.5	40	16		36
37	8E	4.9	3	260	24	162	1600	3.6	4.0	36	16		37
38	10E	4.4	1	100	20	26	180	5.6	1.5	22	16		38
39	12E	5.3	4	274	32	32	440	7.3	2.0	56	22		39
40	ON- 16N	4.3	1	22	14	16	240	3.4	.5	18	16		40

COMMENT:

DATE SAMPLES RECEIVED

DATE REPORTS MAILED

ANALYST

AMAX EXPLORATION INC. ANALYTICAL REPORT

BURNABY LABORATORY - 2225 SPRINGER AVE. - BURNABY 2, B.C.

DATE Oct 25, 1972

TYPE SAMPLES Soil

PROJECT _____

LOCATION VANHALL PROPERTY

REQUESTED BY C. Hodgson / D. ARSCOTT

DISPOSITION OF REJECTS _____

No.	Sample	pH	Mo	Cu	Ni	Co	Mn	Fe	As	Zn	Pb	No.
01	Vanhall 1/4-1/4E	4.2	1	58	20	27	170	6.1	1.0	26	14	01
02	1/4E	4.3	1	14	12	12	200	3.7	1.5	20	12	02
03	1/8E	5.2	1	28	16	20	160	7.6	1.5	20	16	03
04	2/8E	5.3	1	62	24	22	320	5.7	1.5	27	16	04
05	Vanhall 8N-0/4E	5.1	1	112	40	36	320	2.9	1.0	56	20	05
06	2/4E	5.3	1	74	22	16	20	3.3	1.5	16	20	06
07	4/4E	5.2	1	60	24	28	160	>10	1.5	26	18	07
08	6/4E	4.7	1	24	12	12	140	4.5	1.0	22	22	08
09	8/4E	4.8	1	110	24	27	160	>10	1.5	26	24	09
10	10/4E	4.7	1	54	22	20	240	3.3	1.0	40	26	10
11	12/4E	4.6	1	104	20	16	240	6.0	1.5	28	12	11
12	14/4E	5.2	1	128	44	36	720	4.3	1.5	48	20	12
13	16/4E	4.9	1	72	32	28	320	6.8	1.5	40	18	13
14	18/4E	4.9	1	44	16	16	240	3.8	1.0	22	16	14
15	20/4E	4.7	1	62	24	96	560	7.0	1.0	22	20	15
16	22/4E	4.9	1	66	32	24	400	4.9	1.0	50	12	16
17	24/4E	4.5	1	46	24	20	200	7.6	1.0	50	20	17
18	26/4E	5.1	1	32	44	34	500	2.9	1.0	52	22	18
19	8N-2E	5.3	1	110	32	32	300	8.8	1.5	54	24	19
20	4E	5.2	1	94	42	32	270	10.0	2.0	56	22	20
21	6E	5.1	1	106	32	28	200	7.4	1.0	40	20	21
22	8E	5.3	1	347	44	42	1020	4.0	1.5	72	20	22
23	10E	4.3	1	120	32	32	1160	5.4	1.0	36	12	23
24	12E	4.9	1	132	32	36	200	6.6	1.5	66	20	24
25	14E	5.4	1	136	42	34	720	5.2	1.5	72	24	25
26	16E	5.1	16	1060	44	324	4400	4.1	1.5	72	22	26
27	18E	4.3	1	162	40	28	440	4.9	1.5	64	16	27
28	20E	4.3	1	77	22	22	320	6.3	1.0	52	20	28
29	Vanhall 13/4E	4.4	1	62	22	28	320	2.1	1.5	32	20	29
30	2/4E	4.0	1	10	10	6	40	0.2	1.5	12	2	30
31	4/4E	5.0	1	560	52	42	400	7.9	2.5	44	24	31
32	6/4E	3.9	1	20	24	20	200	3.8	1.0	12	16	32
33	8/4E	4.4	1	20	20	20	140	6.6	1.0	22	20	33
34	10/4E	4.5	1	50	30	32	170	>10	1.0	34	18	34
35	12/4E	4.1	1	32	16	22	100	>10	1.5	24	12	35
36	14/4E	4.1	1	16	8	12	100	0.7	1.0	16	8	36
37	16/4E	4.7	1	114	34	30	300	2.0	1.5	40	20	37
38	18/4E	4.5	1	92	24	22	210	5.6	1.0	30	18	38
39	20/4E	4.0	1	12	14	16	240	4.3	1.0	24	16	39
40	G 10		14	560	16	16	360	2.7	1.0	20	20	40

COMMENT:

DATE SAMPLES RECEIVED _____

DATE REPORTS MAILED _____

ANALYST _____

AMAX EXPLORATION INC. ANALYTICAL REPORT

BURNABY LABORATORY - 2225 SPRINGER AVE. - BURNABY 2, B.C.

DATE OCT. 25, 1971 TYPE SAMPLES SOIL
 PROJECT _____ LOCATION VANHALL PROPERTY
 REQUESTED BY C. HODGSON / D. ARSCOTT DISPOSITION OF REJECTS _____

No.	Sample	pH	Mo	Cu	Ni	Co	Mn	Fe%	As	Zn	Pb		No.
01	VANHALL 12N.22	4.3	1	32	14	16	160	4.3	1.0	24	14		01
02	24N	4.4	1	52	22	34	280	7.8	1.0	44	18		02
03	12N.2E	4.9	1	70	27	32	400	8.3	1.5	56	18		03
04	4E	5.5	1	110	32	30	320	9.3	1.5	56	24		04
05	6E	5.1	1	76	32	30	360	6.9	1.5	52	20		05
06	8E	4.9	10	92	30	56	2160	6.3	1.5	64	20		06
07	10E	5.0	10	72	32	67	1700	6.5	1.5	72	24		07
08	12E	5.3	4	64	22	32	2140	7.2	1.5	80	20		08
09	14E	5.2	2	124	42	40	200	4.5	1.0	24	20		09
10	16E	4.8	2	74	30	24	360	3.5	1.0	60	12		10
11	18E	4.5	1	42	24	22	340	4.2	.5	42	20		11
12	20E	4.9	1	116	24	20	240	4.9	1.0	40	16		12
13	VANHALL 16N.22	5.1	1	120	36	30	380	6.3	1.5	44	20		13
14	24N	5.1	1	66	22	22	120	>10	1.5	26	18		14
15	4N	4.2	2	44	8	12	160	1.3	1.5	14	10		15
16	6N	4.3	1	20	16	20	200	4.1	1.5	24	22		16
17	8N	4.4	1	22	16	20	160	5.9	1.0	22	20		17
18	10N	4.5	1	60	24	24	260	4.3	1.0	40	20		18
19	12N	4.5	1	26	16	20	160	3.3	.5	20	12		19
20	14N	4.9	1	32	12	60	220	5.2	1.0	22	16		20
21	16N	5.0	1	112	36	36	2100	5.6	1.0	52	20		21
22	18N	4.9	2	92	28	36	660	6.0	1.0	52	16		22
23	20N	4.9	1	70	32	54	1240	7.4	1.0	76	20		23
24	22N	3.8	1	14	4	10	20	0.2	1.5	40	4		24
25	24N	4.9	1	132	40	196	5600	4.6	1.0	20	16		25
26	16N.2E	5.5	1	60	28	40	420	9.2	1.5	52	20		26
27	4E	5.9	1	116	32	36	400	2.7	2.0	54	24		27
28	6E	5.7	1	112	42	42	2160	6.7	1.5	132	20		28
29	8E	5.7	1	72	24	40	540	7.9	1.5	72	26		29
30	10E	5.7	1	42	20	24	200	2.1	1.0	36	12		30
31	12E	5.3	1	64	22	34	270	>10	2.0	36	20		31
32	14E	5.2	1	200	40	36	540	4.9	1.5	62	16		32
33	16E	5.5	1	210	46	36	600	5.0	1.0	80	12		33
34	18E	5.2	1	216	40	32	520	5.0	1.0	76	20		34
35	20E	4.9	1	56	24	24	200	7.3	1.0	36	16		35
36	VANHALL 24N.22	5.0	1	144	40	36	500	6.3	1.5	64	20		36
37	14N	5.2	1	70	36	30	360	6.8	1.5	42	16		37
38	24N	4.9	1	42	26	24	240	9.0	1.0	32	16		38
39	34N	4.8	1	72	30	32	360	2.1	1.0	44	12		39
40	G.G.		42	362	260	24	320	1.8	3.0	324	>40		40

COMMENT:

DATE SAMPLES RECEIVED _____

DATE REPORTS MAILED _____

ANALYST _____

AMAX EXPLORATION INC. ANALYTICAL REPORT

BURNABY LABORATORY - 2225 SPRINGER AVE. - BURNABY 2, B.C.

DATE

Oct 25, 1972

TYPE SAMPLES

SOIL

PROJECT

LOCATION

VAN HALL

PROPERTY

REQUESTED BY

C. HODGSON / D. ARSCOTT

DISPOSITION OF REJECTS

No.	Sample	pH	Mo	Cu	Ni	Co	Mn	Fe	As	Pb	Pb	No.
01	VAN HALL 20H-4H	4.2	1	62	20	22	200	4.9	1.0	27	18	01
02	5H	5.2	1	44	22	26	160	8.7	1.5	27	18	02
03	6H	5.2	1	76	34	32	320	6.0	1.5	44	20	03
04	7H	4.8	1	62	36	22	520	4.1	1.0	54	20	04
05	8H	4.7	1	52	16	12	200	1.2	1.0	24	20	05
06	9H	4.5	1	16	20	22	200	7.0	1.0	24	16	06
07	10H	5.3	1	52	24	22	220	8.1	1.0	32	20	07
08	11H	4.7	1	42	24	32	210	>10	1.5	24	18	08
09	12H	4.3	1	12	2	12	160	1.6	1.0	16	18	09
10	13H	4.4	1	2	2	12	240	1.9	1.5	16	16	10
11	14H	4.2	1	40	16	20	200	3.5	1.5	24	16	11
12	15H	4.8	1	22	14	24	140	8.5	1.0	12	16	12
13	16H	4.8	1	80	22	26	300	7.2	1.0	36	20	13
14	17H	5.1	1	120	52	40	1140	6.5	2.0	104	24	14
15	18H	5.2	4	216	36	36	520	5.0	1.5	64	22	15
16	19H	4.2	1	16	6	4	120	0.9	1.5	24	8	16
17	20H	5.0	1	122	42	44	720	7.7	1.5	96	20	17
18	21H	4.9	1	66	24	26	400	5.2	2.0	60	16	18
19	22H	5.2	1	108	32	72	1400	5.2	1.5	74	16	19
20	23H	5.5	1	140	42	40	1000	7.2	1.5	104	20	20
21	24H	5.3	1	140	36	36	320	9.7	1.5	100	12	21
22	25H	4.7	1	60	22	22	200	8.0	1.0	30	12	22
23	20H-2E	5.4	1	142	44	36	360	7.3	1.5	44	20	23
24	4E	5.2	1	62	26	32	360	6.5	1.5	32	20	24
25	6E	5.3	1	120	44	42	440	7.6	1.5	64	20	25
26	8E	5.4	1	72	22	36	340	9.4	1.5	52	20	26
27	10E	5.1	1	76	22	32	260	7.4	1.0	44	12	27
28	12E	5.7	1	60	26	32	200	>10	1.5	30	22	28
29	14E	4.3	1	8	20	20	340	4.3	1.0	44	16	29
30	16E	4.0	1	10	14	14	220	3.4	1.5	24	10	30
31	18E	3.9	1	16	16	20	200	5.6	1.0	22	14	31
32	20E	4.9	1	76	22	16	160	2.0	1.5	32	16	32
33	VAN HALL 24H-BL	5.1	1	42	22	22	400	8.1	1.5	44	20	33
34	1H	5.0	1	60	20	18	200	8.7	2.0	32	12	34
35	2H	5.2	1	156	42	36	420	6.7	2.0	56	12	35
36	3H	5.3	1	116	22	22	360	7.4	1.5	46	16	36
37	4H	5.3	1	96	22	30	320	7.2	2.0	50	20	37
38	5H	5.5	1	224	40	140	1240	7.8	2.0	58	20	38
39	6H	5.1	1	112	36	30	320	4.2	1.5	56	12	39
40	G 7		20	200	22	14	120	1.1	1.5	72	62	40

COMMENT:

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ANALYST

AMAX EXPLORATION INC. ANALYTICAL REPORT

BURNABY LABORATORY - 2225 SPRINGER AVE. - BURNABY 2, B.C.

DATE Oct, 25, 1977

TYPE SAMPLES Soil

PROJECT Van Hout

LOCATION Van Hout Property

REQUESTED BY C. Hodgson / D. Arscott

DISPOSITION OF REJECTS

No.	Sample	pH	Mo	Cu	Ni	Co	Mn	Fe%	Ag%	Zn	Pb		No.
01	Van Hout 24-70142	3.7	1	6	24	4	40	0.1	.5	14	4		01
02	81/1	3.7	1	8	2	4	10	0.3	.5	12	4		02
03	91/1	4.0	1	18	2	12	140	1.3	.5	20	6		03
04	101/1	3.8	1	8	2	4	40	0.1	.5	12	4		04
05	111/1	4.0	1	72	12	24	200	5.5	2.0	24	16		05
06	121/1	4.5	1	124	26	36	270	2.9	2.0	22	20		06
07	131/1	4.0	1	8	2	7	100	0.5	.5	12	2		07
08	141/1	3.7	1	20	4	12	120	1.7	.5	20	8		08
09	151/1	5.1	1	152	22	22	760	7.10	2.0	12	26		09
10	161/1	4.6	1	50	20	24	200	7.4	1.0	32	20		10
11	171/1	5.0	1	76	28	36	360	6.5	1.0	42	16		11
12	181/1	4.4	1	14	14	24	160	5.6	.5	18	10		12
13	191/1	4.5	1	42	22	32	240	7.10	1.5	32	12		13
14	201/1	4.9	1	40	20	24	220	2.9	1.0	26	16		14
15	211/1	5.4	1	222	60	44	520	2.2	2.0	20	20		15
16	221/1	4.8	1	42	12	24	300	6.5	1.5	22	12		16
17	231/1	4.7	1	56	26	32	400	7.4	1.5	44	12		17
18	241/1	5.0	1	90	20	26	120	5.9	2.0	22	12		18
19	251/1	4.9	1	4	2	10	40	0.2	.5	26	4		19
20	261/1	4.9	1	34	20	32	200	7.10	1.5	22	20		20
21	271/1	5.2	1	42	16	22	200	6.2	1.0	26	12		21
22	281/1	5.2	1	42	24	32	240	9.6	1.5	36	20		22
23	291/1	4.3	1	20	22	32	240	2.3	1.0	36	16		23
24	301/1	5.0	1	36	24	22	220	2.2	1.0	44	22		24
25	311/1	5.3	1	60	42	40	620	5.7	1.5	72	12		25
26	321/1	5.4	1	172	40	36	560	5.4	1.0	14	20		26
27	331/1	4.6	1	12	16	26	220	5.8	1.0	32	12		27
28	341/1	5.7	1	102	46	76	1240	6.7	2.0	18	22		28
29	351/1	6.2	1	12	36	34	220	4.4	2.5	104	22		29
30	Van Hout 281-01	5.6	1	176	26	232	3420	3.4	2.0	42	16		30
31	11/1	5.0	1	20	16	26	120	7.2	.5	12	10		31
32	21/1	4.6	1	32	16	32	240	7.10	1.5	20	16		32
33	31/1	5.2	1	42	12	26	320	6.2	1.0	36	16		33
34	41/1	5.7	1	22	22	40	220	8.8	1.5	44	20		34
35	51/1	5.4	1	56	24	34	300	9.8	1.5	32	16		35
36	61/1	5.5	1	200	44	42	140	7.0	1.5	78	12		36
37	71/1	5.0	1	160	56	42	760	7.9	2.0	110	24		37
38	81/1	5.2	1	96	36	40	360	7.10	2.5	52	20		38
39	91/1	4.9	1	74	32	40	220	7.10	2.0	44	20		39
40	98		4	40	12	10	200	2.4	.5	70	20		40

COMMENT:

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ANALYST

AMAX EXPLORATION INC. ANALYTICAL REPORT

BURNABY LABORATORY - 2225 SPRINGER AVE. - BURNABY 2, B.C.

DATE

Oct 25, 72

TYPE SAMPLES

SOIL

PROJECT

LOCATION

VANHALL PROPERTY

REQUESTED BY

C. HODGSON/D. ARSLANT

DISPOSITION OF REJECTS

No.	Sample	pH	Mo	Cu	Ni	Co	Mn	Fe	Pb	Zn	Mo	No.
01	VANHALL 20N	5.8	1	92	44	42	440	710	2.0	60	32	01
02	11N	5.3	1	160	52	42	560	2.9	2.0	80	28	02
03	12N	5.2	1	120	68	44	260	8.4	2.0	102	26	03
04	13N	4.7	1	40	20	36	210	7.9	1.5	32	16	04
05	14N	5.1	1	64	22	32	320	710	1.5	36	12	05
06	15N	5.1	1	72	20	32	240	710	1.5	40	20	06
07	16N	5.6	1	150	40	60	400	2.0	2.0	102	20	07
08	17N	5.8	1	234	56	48	520	7.3	2.0	72	22	08
09	18N	5.9	1	112	40	40	420	710	2.0	62	20	09
10	19N	4.6	1	24	34	36	320	710	1.5	42	16	10
11	20N	4.7	1	22	22	56	340	710	2.0	62	24	11
12	21N	5.1	1	130	32	40	320	8.1	2.0	64	22	12
13	22N	4.6	1	52	20	36	210	7.3	1.0	32	10	13
14	23N	4.0	1	36	16	32	220	6.1	1.0	32	20	14
15	24N	4.0	1	38	12	24	120	3.7	1.5	44	10	15
16	25N	4.9	1	52	20	40	120	710	1.5	36	24	16
17	26N-2E	4.7	1	22	10	24	300	7.7	1.0	22	20	17
18	4E	4.8	1	42	22	32	440	7.0	1.5	44	20	18
19	6E	4.8	1	34	22	26	300	6.2	1.0	52	12	19
20	8E	5.0	1	42	36	56	700	6.4	1.5	76	20	20
21	10E	5.1	1	112	52	54	2400	6.0	1.5	74	16	21
22	12E	4.9	1	140	50	44	640	7.5	1.5	74	16	22
23	14E	5.2	1	70	44	24	2600	7.9	2.0	80	20	23
24	16E	4.9	1	76	12	16	160	1.0	2.0	20	2	24
25	18E	5.4	1	64	12	32	200	6.0	1.5	76	12	25
26	20E	5.5	1	272	20	36	440	2.7	1.0	12	2	26
27	VANHALL 30N	5.5	1	42	38	36	400	6.3	2.0	44	16	27
28	11N	4.2	1	40	20	30	220	2.2	1.0	24	16	28
29	21N	5.2	1	60	28	30	220	3.4	1.5	40	16	29
30	31N	5.2	1	26	32	60	200	5.3	1.5	64	24	30
31	41N	5.3	1	26	32	60	1140	8.3	2.0	56	24	31
32	51N	4.7	1	58	20	22	260	6.2	1.5	40	20	32
33	61N	5.4	1	24	22	34	260	710	1.5	44	20	33
34	71N	5.4	1	64	22	22	360	6.0	2.0	46	24	34
35	81N	5.6	1	146	40	60	220	7.4	2.0	22	20	35
36	91N	5.5	1	102	42	52	520	710	1.5	72	26	36
37	101N	5.6	1	76	32	40	320	710	2.0	60	32	37
38	111N	6.3	1	16	14	20	220	5.2	1.5	22	12	38
39	121N	4.8	1	44	36	44	3300	2.4	2.0	44	20	39
40	9-9		12	220	10	2	160	1.0	1.5	7400	368	40

COMMENT:

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ANALYST

AMAX EXPLORATION INC. ANALYTICAL REPORT

7

BURNABY LABORATORY - 2225 SPRINGER AVE. - BURNABY 2, B.C.

DATE Oct 25, 72

TYPE SAMPLES Soil

PROJECT

LOCATION VAN HALL

PROPERTY

REQUESTED BY C. HODGSON / D. ARSCOTT

DISPOSITION OF REJECTS

No.	Sample	pH	Mo	Cu	Ni	Co	Mg	Fe	Mn	Zn	Pb		No.
01	VAN HALL 32N 13	4.7	1	30	34	30	600	10.0	2.5	40	26		01
02	14N	5.3	1	24	40	38	360	>10.0	2.5	64	32		02
03	15N	5.5	1	180	40	32	440	6.2	2.0	48	24		03
04	16N	4.6	1	76	24	24	220	7.0	1.5	38	22		04
05	17N	5.1	1	70	16	20	120	6.0	1.5	28	20		05
06	18N	4.9	1	24	32	32	300	2.3	2.0	60	24		06
07	19N	4.7	1	40	20	24	180	6.0	1.0	28	20		07
08	20N	4.8	1	64	26	28	240	6.9	1.5	32	22		08
09	21N	5.2	1	40	18	28	200	2.7	1.5	36	24		09
10	22N	5.0	1	36	12	24	200	6.5	1.5	24	22		10
11	23N	5.3	1	64	40	32	360	7.6	1.5	50	26		11
12	24N	5.6	1	52	32	28	260	7.9	1.5	40	26		12
13	25N	4.7	1	8	16	20	240	3.9	1.0	20	22		13
14	32N-8E	4.9	1	24	12	12	140	3.2	1.5	24	20		14
15	4E	5.5	4	162	40	32	340	7.3	2.0	44	24		15
16	6E	4.3	1	16	16	14	220	4.4	1.5	22	20		16
17	8E	5.3	1	38	24	54	1520	5.4	1.5	68	26		17
18	10E	4.9	1	22	24	26	270	6.8	1.5	36	20		18
19	12E	5.3	1	100	38	30	360	6.7	1.5	48	22		19
20	14E	4.9	1	40	24	28	160	9.4	1.5	30	24		20
21	16E	5.5	1	216	46	40	420	8.1	2.0	124	28		21
22	18E	5.6	1	176	44	96	8000	5.6	2.5	124	26		22
23	20E	5.6	10	264	56	52	680	7.3	2.5	156	34		23
24	VAN HALL 36N 8E	5.4	1	144	32	42	700	>10.0	2.0	40	32		24
25	11N	6.9	1	30	20	26	240	8.4	1.5	40	24		25
26	24N	5.3	1	140	26	32	200	>10.0	2.0	36	28		26
27	31N	5.1	1	120	22	32	160	>10.0	1.5	32	28		27
28	41N	5.4	1	40	18	20	220	3.2	1.0	40	24		28
29	51N	5.5	1	110	32	32	360	6.9	1.5	60	24		29
30	61N	5.2	1	120	34	32	360	4.9	1.5	70	22		30
31	71N	4.7	1	40	16	24	120	7.0	1.0	26	26		31
32	81N	5.4	1	240	52	48	3700	6.4	1.5	104	24		32
33	91N	4.6	1	44	20	28	170	8.6	1.5	28	24		33
34	101N	4.8	1	12	16	24	260	8.0	1.5	22	22		34
35	111N	5.1	1	30	24	28	220	8.1	1.5	32	26		35
36	121N	5.4	1	56	28	32	260	>10.0	2.0	44	28		36
37	131N	5.1	1	26	30	30	440	2.9	2.0	56	24		37
38	141N	5.5	1	76	32	32	180	9.9	2.5	56	28		38
39	151N	5.6	1	160	44	36	460	6.9	2.5	144	26		39
40	QAD		12	600	18	16	320	2.5	1.0	20	20		40

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AMAX EXPLORATION INC. ANALYTICAL REPORT

BURNABY LABORATORY - 2225 SPRINGER AVE. - BURNABY 2, B.C.

DATE

Oct 25, 1972

TYPE SAMPLES

Soil

PROJECT

LOCATION

VANHALL PROPERTY

REQUESTED BY

C. HODGSON/D. PRISON

DISPOSITION OF REJECTS

No.	Sample	pH	Mo	Cu	Ni	Co	Mn	Fe%	Ag%	Zn	Pb		No.
01	VANHALL 36H.15	4.5	1	52	16	12	120	3.6	1.0	4.4	12		01
02	16H	4.8	1	24	16	24	200	6.5	.5	22	16		02
03	17H	4.4	1	30	18	24	240	7.2	1.0	32	24		03
04	18H	4.7	1	64	20	24	260	6.7	1.5	58	20		04
05	19H	4.6	1	32	18	24	220	7.4	1.0	32	20		05
06	20H	4.7	1	26	22	22	220	8.5	1.5	36	24		06
07	21H	5.5	1	150	34	42	220	>10.0	2.0	92	28		07
08	22H	5.2	1	16	16	24	160	6.3	1.0	30	20		08
09	23H	5.5	1	120	56	58	136	7.1	1.5	160	24		09
10	24H												10
11	25H	5.1	1	104	32	62	6000	4.7	1.0	70	20		11
12	36N-2E	5.6	1	64	56	40	600	5.8	1.5	92	24		12
13	4E	5.5	1	88	22	32	160	>10.0	2.0	24	20		13
14	6E	5.2	1	76	24	24	320	4.2	1.0	44	24		14
15	8E	4.8	1	22	16	22	200	7.4	1.5	24	20		15
16	10E	5.1	1	132	40	36	400	6.7	1.5	56	20		16
17	12E	5.7	6	144	34	144	3000	7.7	2.0	74	26		17
18	14E	5.7	2	200	36	136	2740	7.1	2.0	94	28		18
19	16E	5.6	6	268	34	92	1440	5.5	2.5	116	28		19
20	18E	5.8	2	260	36	52	200	7.2	2.0	104	24		20
21	20E	5.8	6	310	44	96	2160	5.2	3.0	142	26		21
22	VANHALL 1/2H.1H	5.5	2	144	24	30	120	8.2	2.0	30	20		22
23	21H	5.4	1	312	26	26	200	6.9	2.0	28	22		23
24	21H	5.4	1	120	34	24	220	9.4	2.0	40	22		24
25	21H	5.1	1	28	24	36	200	>10.0	1.5	30	20		25
26	31H	5.1	1	32	18	26	240	6.4	1.0	22	20		26
27	61H	4.6	1	56	28	22	360	4.9	1.0	60	22		27
28	71H	4.9	1	116	40	40	340	>10.0	2.0	76	28		28
29	81H	6.4	1	242	60	52	500	7.4	2.0	72	28		29
30	91H	5.5	1	72	24	22	120	>10.0	2.0	44	24		30
31	101H	4.8	1	22	12	28	120	9.3	1.5	36	22		31
32	111H	5.3	1	128	32	32	260	8.8	2.5	52	22		32
33	121H	5.0	1	48	22	30	240	7.7	1.5	38	26		33
34	131H	6.9	1	60	28	22	260	7.5	1.5	40	24		34
35	141H	4.6	1	70	20	22	240	9.5	1.5	44	26		35
36	151H	5.0	1	42	30	30	320	7.9	1.0	40	24		36
37	161H	5.4	1	134	38	104	2260	7.1	1.5	20	24		37
38	171H	5.2	2	146	52	50	520	8.6	1.5	132	30		38
39	181H	5.4	1	140	28	60	2800	6.5	1.5	76	24		39
40	G6		68	256	20	26	320	1.7	4.0	328	74		40

COMMENT:

DATE SAMPLES RECEIVED

DATE REPORTS MAILED

ANALYST

17 AMAX EXPLORATION INC. ANALYTICAL REPORT

BURNABY LABORATORY - 2225 SPRINGER AVE. - BURNABY 2, B.C.

DATE Oct 25, 1972TYPE SAMPLES SOIL

PROJECT

LOCATION VANHALL PROPERTYREQUESTED BY C. HODGSON / D. ARSCOTT

DISPOSITION OF REJECTS

No.	Sample	pH	Mo	Cu	Ni	Co	Mn	Fe%	Ag%	Pb	Pb	No.
01	VANHALL 10N.12	5.3	1	216	48	62	3480	5.1	1.5	110	26	01
02	20N.12	5.2	1	88	24	28	240	9.3	1.5	36	26	02
03	21N.12	5.8	1	322	64	56	3120	5.6	2.0	132	22	03
04	22N.12	5.1	1	72	22	32	240	9.3	1.5	34	26	04
05	23N.12	5.6	1	152	40	112	680	6.3	1.5	112	28	05
06	24N.12	5.6	1	128	32	32	340	2.4	2.0	44	32	06
07	25N.12	5.2	1	40	26	32	240	2.5	1.5	34	26	07
08	40N.00E	4.8	1	116	24	32	240	7.2	1.5	24	24	08
09	2E	5.5	1	220	40	40	400	6.2	1.5	42	24	09
10	4E	5.1	2	100	22	22	240	4.5	1.0	52	22	10
11	6E	5.6	22	600	64	62	720	6.7	1.5	60	28	11
12	8E	5.7	12	242	40	36	440	4.9	1.0	52	24	12
13	10E	5.5	14	148	32	32	320	6.9	1.5	42	26	13
14	12E	5.6	8	156	52	122	1420	4.2	2.0	50	24	14
15	14E	5.9	14	190	70	720	5600	5.2	2.0	22	30	15
16	16E	5.9	22	220	42	112	220	6.3	2.0	56	24	16
17	18E	5.9	7	140	40	36	220	6.9	2.0	50	24	17
18	20E	5.5	4	122	22	104	1640	6.0	1.5	76	28	18
19	40N-00E	5.9	2	144	24	40	160	7100	2.5	26	32	19
20	1N	5.6	1	122	24	36	220	5.5	1.5	32	22	20
21	21N	5.3	1	224	26	32	120	6.3	1.5	50	22	21
22	31N	5.4	1	366	32	120	1100	4.2	2.5	200	30	22
23	41N	5.2	1	122	22	40	160	7100	2.5	62	32	23
24	51N	5.2	1	112	24	36	1240	7.2	2.0	26	28	24
25	61N	5.3	1	96	30	32	240	7.2	1.5	64	20	25
26	71N	4.9	1	26	32	32	340	6.5	1.0	22	24	26
27	81N	5.6	1	304	40	92	10000	4.5	2.0	240	40	27
28	91N	5.9	4	320	40	102	760	2.0	2.0	220	42	28
29	101N	5.7	1	110	30	46	220	7.5	2.0	74	30	29
30	111N	5.5	1	176	32	34	320	7.6	2.0	52	22	30
31	121N	5.0	1	92	20	32	260	6.7	1.0	56	24	31
32	131N	4.8	1	62	20	22	200	2.2	1.5	36	26	32
33	141N	5.4	1	66	24	32	170	2.7	1.5	54	26	33
34	151N	5.6	1	136	40	40	440	6.0	1.5	52	22	34
35	161N	5.7	1	124	36	40	340	8.4	1.5	60	28	35
36	171N	5.0	1	120	36	32	260	2.5	1.5	64	22	36
37	181N	6.2	1	112	32	22	320	4.6	1.0	52	20	37
38	191N	5.6	1	44	20	28	210	7.5	1.0	36	24	38
39	201N	5.7	1	166	36	26	320	6.2	2.0	64	28	39
40	G-7		24	122	224	12	120	0.9	0.2	76	72	40

COMMENT:

DATE SAMPLES RECEIVED

DATE REPORTS MAILED

ANALYST

AMAX EXPLORATION INC. ANALYTICAL REPORT

BURNABY LABORATORY - 2225 SPRINGER AVE. - BURNABY 2, B.C.

DATE

Oct 25, 72

TYPE SAMPLES

Soil

PROJECT

LOCATION

VAN HALL PROPERTY

REQUESTED BY

C. HODGSON/D. ARSCOTT

DISPOSITION OF REJECTS

No.	Sample	pH	Mo	Cu	Ni	Co	Mn	Fe	As	Pb	Pl	No.
01	VAN HALL 4/11/21	5.8	1	*440	54	36	720	6.0	2.0	72	24	01
02	22/11	5.7	1	164	36	32	340	6.6	2.0	50	24	02
03	23/11	4.5	1	16	24	28	280	7.5	1.5	54	26	03
04	24/11	5.0	1	86	32	36	320	2.6	1.5	52	26	04
05	25/11	5.0	1	52	20	28	240	9.3	1.5	36	28	05
06	4/11 - 2E	5.4	1	312	32	48	220	4.5	1.5	72	24	06
07	8E	5.4	1	12	12	10	160	1.8	1.0	24	20	07
08	6E	5.2	40	*460	32	32	260	9.8	2.5	36	24	08
09	8E	5.5	4	304	20	56	220	2.4	1.5	32	12	09
10	10E	5.5	2	24	28	54	640	5.7	1.5	68	24	10
11	12E	5.7	54	*920	72	3100	*17200	5.2	2.0	52	24	11
12	14E	5.8	2	376	60	384	2480	6.6	1.5	76	24	12
13	16E	5.5	1	272	88	104	240	6.8	3.0	152	28	13
14	18E	5.7	1	168	56	44	480	6.9	2.5	32	30	14
15	20E	5.4	1	176	40	32	360	7.2	2.0	72	30	15
16	VAN HALL 1/21/21	5.5	1	152	24	36	220	8.9	4.0	48	28	16
17	11E	5.5	1	10	4	6	100	0.3	1.5	20	6	17
18	21E	5.5	1	260	24	34	200	7.2	2.5	114	28	18
19	31E	5.5	4	176	12	120	*5200	0.9	3.0	28	12	19
20	41E	5.6	1	368	26	32	260	4.5	1.5	132	24	20
21	51E	4.6	1	96	18	22	160	5.1	1.0	24	18	21
22	61E	5.5	1	116	24	22	200	6.5	1.5	48	24	22
23	71E	5.7	1	240	32	280	3400	6.7	1.5	108	28	23
24	81E	5.0	2	400	36	52	240	7.5	3.5	138	24	24
25	91E	5.6	1	148	36	30	*5200	6.4	2.0	128	28	25
26	101E	4.9	1	92	24	46	280	2100	2.0	80	52	26
27	111E	5.8	1	102	24	104	3700	6.0	2.0	108	28	27
28	121E	5.6	1	210	16	154	1820	5.6	2.5	88	22	28
29	131E	5.8	1	200	44	48	660	6.6	2.5	112	28	29
30	141E	5.1	1	72	24	32	300	7.2	1.5	110	32	30
31	151E	5.0	1	96	28	36	400	7.4	2.0	104	28	31
32	161E	5.0	1	52	24	32	220	8.6	1.5	48	24	32
33	171E	5.0	1	64	24	34	240	9.7	1.5	44	24	33
34	181E	5.3	1	106	32	44	220	7.3	2.0	70	26	34
35	191E	4.6	1	20	12	24	120	4.3	1.0	26	18	35
36	201E	4.8	1	94	36	46	670	6.9	2.0	76	28	36
37	211E	5.1	1	104	40	44	480	8.1	1.5	70	26	37
38	221E	5.2	1	112	34	42	560	6.9	1.5	74	24	38
39	231E	5.1	1	86	24	32	360	4.9	1.5	62	24	39
40	G 9		4	40	10	10	160	2.0	1.5	74	20	40

COMMENT:

DATE SAMPLES RECEIVED

DATE REPORTS MAILED

ANALYST

19

AMAX EXPLORATION INC. ANALYTICAL REPORT

BURNABY LABORATORY - 2225 SPRINGER AVE. - BURNABY 2, B.C.

DATE Oct. 25, 72 TYPE SAMPLES SOIL
 PROJECT _____ LOCATION VAN HALL PROPERTY
 REQUESTED BY C. HODGSON/D. ARSCOTT DISPOSITION OF REJECTS _____

No.	Sample	pH	Mo	Cu	Ni	Co	Mn	Fe	Ag	Pb	Pb	No.
01	VAN HALL 18N 2W	5.4	1	24	32	37	440	8.6	2.0	30	26	01
02	25W	5.3	1	92	32	114	2440	7.6	1.5	72	28	02
03	26W	5.1	1	90	36	46	1220	7.4	1.5	76	28	03
04	27W	5.5	1	104	38	58	1070	2.8	2.0	92	28	04
05	48N 2E	5.1	1	24	20	27	200	7.7	1.5	27	20	05
06	4E	5.0	1	52	20	32	190	7.00	1.5	24	28	06
07	6E	5.3	32	172	24	32	180	10.0	2.0	21	28	07
08	8E	4.8	1	38	12	27	200	8.2	1.5	34	24	08
09	10E	5.1	1	24	28	32	280	9.0	1.5	52	24	09
10	12E	5.4	1	160	40	44	420	8.9	1.5	97	30	10
11	14E	6.2	1	147	42	60	770	6.5	2.5	92	28	11
12	16E	6.2	1	316	80	64	670	7.3	2.5	124	30	12
13	18E	5.2	1	44	28	34	270	9.4	1.5	44	26	13
14	20E	5.6	1	77	24	32	240	6.3	2.0	52	28	14
15	VAN HALL 52N 13W	5.4	1	8	6	8	40	0.2	.5	16	6	15
16	1W	5.4	1	320	44	60	60	6.2	2.0	224	32	16
17	2W	5.5	1	272	28	36	300	7.2	1.5	156	28	17
18	3W	5.7	1	520	40	52	420	7.9	3.0	226	28	18
19	4W	6.8	1	122	20	22	160	9.5	1.5	32	32	19
20	5W	5.0	1	122	26	40	200	7.00	2.0	60	36	20
21	6W	5.4	1	252	26	32	240	9.5	2.0	160	28	21
22	7W	5.7	1	480	60	20	960	8.0	2.0	240	32	22
23	8W	5.5	1	256	32	64	1640	5.6	1.5	356	30	23
24	9W	5.5	1	136	20	20	300	3.2	2.0	152	24	24
25	10W	5.7	1	112	24	30	520	6.2	2.0	216	30	25
26	11W	5.7	1	127	32	70	920	2.4	1.5	124	28	26
27	12W	5.4	1	396	40	44	440	7.0	2.0	202	30	27
28	13W	5.7	4	272	44	92	10800	5.7	2.5	347	32	28
29	14W	5.9	1	176	40	60	2020	8.4	2.0	176	30	29
30	15W	5.4	1	120	36	64	1120	2.7	2.0	164	28	30
31	16W	5.8	1	204	40	70	720	6.2	1.5	136	28	31
32	17W	5.0	1	92	32	44	400	8.6	2.0	107	26	32
33	18W	5.3	1	67	24	32	270	7.7	1.5	62	26	33
34	19W	5.4	1	102	42	46	700	7.3	1.5	77	24	34
35	20W	5.5	1	130	36	70	4400	7.1	2.0	94	26	35
36	21W	5.4	1	77	26	42	200	7.3	1.5	72	24	36
37	22W	5.7	1	130	40	42	4000	7.1	2.0	156	28	37
38	23W	5.5	1	220	30	46	400	9.1	2.5	76	28	38
39	24W	5.2	1	30	20	24	400	6.0	1.0	27	22	39
40	25W	5.4	14	236	16	8	140	0.9	.5	2400	364	40

COMMENT:

DATE SAMPLES RECEIVED _____

DATE REPORTS MAILED _____

ANALYST _____

AMAX EXPLORATION INC. ANALYTICAL REPORT

BURNABY LABORATORY - 2225 SPRINGER AVE. - BURNABY 2, B.C.

DATE

Oct 25, 72

TYPE SAMPLES

Soil

PROJECT

LOCATION

VANHALL PROPERTY

REQUESTED BY

C. HODGSON / D. A. SCOTT

DISPOSITION OF REJECTS

No.	Sample	pH	Mo	Cu	Ni	Co	Mn	Fe	Mg	Zn	Pb	No.
01	Vanilla 52N 25E 4.9	4.9	1	24	14	12	225	5.1	1.0	24	24	01
02	26N 5.5	5.5	1	92	36	12	470	7100	2.0	52	22	02
03	27N 4.6	4.6	1	44	20	22	260	7100	2.0	38	28	03
04	52N 2E 5.1	5.1	1	112	24	24	160	9.6	2.5	32	26	04
05	4E 5.0	5.0	1	132	28	22	170	9.3	2.0	26	24	05
06	6E 5.4	5.4	52	222	46	40	520	7100	2.0	56	26	06
07	8E 4.4	4.4	1	32	16	24	180	8.6	2.0	34	22	07
08	10E 5.4	5.4	1	92	36	36	520	9.3	2.0	102	22	08
09	12E 5.7	5.7	1	104	42	36	400	9.2	3.0	62	30	09
10	14E 5.6	5.6	2	222	50	60	220	7.9	2.0	100	28	10
11	16E 5.5	5.5	2	122	36	32	320	7.0	2.0	70	24	11
12	18E 5.3	5.3	1	58	24	30	320	7.3	2.0	64	26	12
13	20E 5.2	5.2	1	44	12	38	340	3.6	2.0	30	16	13
14	56N 00E 5.0	5.0	2	42	12	26	160	3.9	1.5	24	12	14
15	21N 5.2	5.2	1	140	14	22	160	3.9	1.5	32	12	15
16	41N 6.5	6.5	1	320	36	32	260	7.4	2.5	46	22	16
17	61N 5.5	5.5	1	324	28	52	420	7100	2.5	72	22	17
18	81N 5.4	5.4	1	224	28	34	260	7100	3.0	42	30	18
19	101N 5.3	5.3	1	204	36	36	320	7100	2.5	62	26	19
20	121N 5.4	5.4	1	76	24	32	240	10.0	2.0	62	24	20
21	141N 5.5	5.5	1	114	32	64	2240	6.7	2.5	164	22	21
22	161N 6.4	6.4	1	164	42	40	560	7.1	2.0	112	24	22
23	181N 5.6	5.6	1	60	24	32	260	10.0	2.0	44	22	23
24	201N 6.0	6.0	1	20	30	44	1400	6.6	2.0	162	20	24
25	221N 5.9	5.9	1	131	60	60	3120	7.1	2.0	124	24	25
26	241N 5.6	5.6	1	116	26	44	200	5.6	2.0	72	22	26
27	261N 5.9	5.9	1	112	44	52	3020	4.8	2.0	130	22	27
28	56N 2E 5.8	5.8	16	212	38	100	3640	7100	2.0	62	24	28
29	4E 5.5	5.5	1	24	40	34	400	6.9	1.5	60	20	29
30	6E 5.4	5.4	1	10	22	24	270	4.6	1.5	50	20	30
31	8E 5.6	5.6	1	206	40	36	1160	6.2	2.0	172	26	31
32	10E 5.6	5.6	4	122	20	212	1740	2.2	2.0	156	24	32
33	12E 5.5	5.5	1	112	24	24	200	6.2	1.5	72	24	33
34	14E 5.4	5.4	1	154	16	44	200	7.3	2.0	50	20	34
35	16E 4.3	4.3	1	8	4	2	40	0.3	1.0	16	2	35
36	55N 18E 4.2	4.2	1	8	4	4	120	0.2	.5	22	2	36
37	56N 20E 5.2	5.2	1	264	42	36	2240	9.2	2.5	76	32	37
38	60N B.L 4.8	4.8	1	90	20	20	100	1.0	.5	40	10	38
39	21N 4.7	4.7	1	110	22	26	200	2.0	1.5	22	20	39
40	G-10		12	560	12	16	320	2.6	1.0	72	20	40

COMMENT:

DATE SAMPLES RECEIVED

DATE REPORTS MAILED

ANALYST

AMAX EXPLORATION INC. ANALYTICAL REPORT (15)

BURNABY LABORATORY - 2225 SPRINGER AVE. - BURNABY 2, B.C.

DATE

Oct. 25, 72

TYPE SAMPLES

SOIL

PROJECT

LOCATION

VAN HALL PROPERTY

REQUESTED BY

C. HODGSON / D. DRISCOLL

DISPOSITION OF REJECTS

No.	Sample	pH	Mo	Cu	Ni	Co	Mn	Fe%	Ag	Zn	Pb		No.
01	VAN HALL 60N-4W S3		1	108	22	22	240	>10	2.5	44	24		01
02	64N 4.6		1	80	12	18	120	9.2	2.0	22	20		02
03	81N 5.4		1	240	34	28	320	>10	2.5	48	24		03
04	101N 5.4		1	780	46	44	680	>10	3.0	104	26		04
05	121N 5.3		1	122	22	22	460	9.3	1.5	76	22		05
06	141N 5.3		1	58	20	22	240	>10	1.5	44	22		06
07	161N 5.4		1	76	24	22	220	>10	1.5	36	24		07
08	181N 4.5		1	12	16	14	160	7.6	1.0	24	16		08
09	201N 4.9		1	32	24	12	240	>10	1.5	34	20		09
10	221N 5.1		1	36	20	12	260	9.1	1.5	36	20		10
11	241N 5.6		1	122	46	32	400	7.2	2.0	48	24		11
12	261N 5.5		1	158	52	34	1760	6.5	2.5	88	20		12
13	60N-2E 5.5		8	280	48	36	560	8.4	2.0	92	20		13
14	4E 5.5		1	60	40	32	540	5.9	1.5	94	20		14
15	6E 4.6		1	22	24	22	200	>10	1.5	32	20		15
16	8E 5.0		1	62	28	20	220	9.5	1.5	40	18		16
17	10E 4.8		1	46	20	18	120	9.6	1.5	28	16		17
18	12E 5.2		1	62	24	20	200	7.3	2.0	34	12		18
19	14E 5.9		30	342	40	800	4800	3.2	3.0	34	20		19
20	16E 4.8		1	12	16	12	240	5.7	1.0	30	12		20
21	18E 5.4		1	100	40	40	420	10.0	2.5	90	26		21
22	20E 5.1		1	30	24	24	340	6.0	1.5	60	16		22
23	64N-B.L 5.3		4	260	40	98	2900	7.6	2.0	60	20		23
24	81N 5.3		2	292	56	72	1120	8.5	2.0	104	24		24
25	101N 5.3		2	362	44	64	1060	8.8	2.0	74	18		25
26	65N-61N 5.4		2	312	36	30	440	>10	2.5	46	20		26
27	81N 5.4		2	142	36	32	400	10.0	2.5	42	20		27
28	64N-101N 5.7		1	228	72	60	920	7.2	2.0	92	20		28
29	121N 4.8		1	36	18	20	240	7.9	1.0	28	16		29
30	141N 4.5		1	20	12	16	160	5.9	1.0	24	12		30
31	161N 5.0		1	60	24	28	240	>10	1.5	36	18		31
32	181N 4.6		1	26	20	24	240	9.6	1.0	30	20		32
33	201N 5.4		1	36	40	100	3220	5.1	1.5	136	20		33
34	221N 4.6		1	22	20	22	270	9.5	1.0	34	18		34
35	241N 5.5		1	116	42	40	1360	7.7	1.5	102	20		35
36	261N 5.6		1	62	16	20	6400	1.5	1.5	56	12		36
37	64N-2E 4.7		1	108	26	26	220	7.0	1.0	36	18		37
38	4E 5.5		4	122	52	36	600	2.3	2.0	28	22		38
39	6E 5.1		1	20	36	22	420	8.7	2.0	62	20		39
40	G 9		10	240	16	6	160	1.0	1.5	* 420	360		40

COMMENT:

DATE SAMPLES RECEIVED

DATE REPORTS MAILED

ANALYST

25

AMAX EXPLORATION INC. ANALYTICAL REPORT (14)

BURNABY LABORATORY - 2225 SPRINGER AVE. - BURNABY 2, B.C.

DATE Oct, 25, 72TYPE SAMPLES Soil

PROJECT

LOCATION VANILLA PROPERTYREQUESTED BY C. HODGSON / D. ALBERT

DISPOSITION OF REJECTS

No.	Sample	pH	Mo	Cu	Ni	Co	Mn	Fe	Pb	Zn	Pb	No.
01	VANILLA 60N 25	5.3	1	194	40	32	320	2.7	2.0	62	20	01
02	10E	5.4	1	124	40	32	400	2.8	2.0	60	20	02
03	12E	4.8	1	44	22	24	240	710	2.0	46	20	03
04	14E	5.5	1	372	66	660	3000	5.3	3.5	124	24	04
05	16E	4.5	1	30	16	16	200	6.1	1.0	24	14	05
06	18E	4.7	1	86	24	24	340	2.1	1.5	52	20	06
07	20E	5.1	1	56	30	30	710	7.9	2.0	52	20	07
08	68N B.1	5.2	2	440	42	60	1120	7.1	2.0	72	20	08
09	24W	5.1	1	264	40	44	2700	6.6	1.5	20	20	09
10	4W	5.1	1	256	40	38	1440	6.9	1.5	24	12	10
11	6W	5.5	2	320	50	60	1520	7.9	2.0	104	24	11
12	8W	5.5	2	500	60	48	520	7.4	2.0	50	20	12
13	10W	5.8	1	160	36	28	400	2.5	2.0	64	20	13
14	12W	6.1	1	620	36	44	1500	2.4	1.5	72	16	14
15	14W	6.2	1	1920	16	24	1200	2.6	1.0	46	12	15
16	16W	5.5	1	172	50	40	220	2.6	2.0	100	22	16
17	18W	5.4	1	100	32	26	480	2.2	1.5	44	12	17
18	20W	5.1	1	62	32	26	280	710	1.5	52	20	18
19	22W	5.5	1	108	32	30	1140	4.7	2.0	132	24	19
20	24W	4.5	1	8	4	4	20	0.3	.5	16	2	20
21	26W	5.0	1	60	28	24	200	710	1.5	34	16	21
22	68N-2E	5.1	1	332	60	72	1700	2.6	2.5	24	20	22
23	4E	5.5	6	232	56	60	1120	7.4	1.5	24	20	23
24	6E	5.5	8	56	32	32	560	6.7	1.5	92	24	24
25	8E	5.8	4	204	96	104	580	6.2	2.5	144	20	25
26	10E	5.0	2	50	24	28	140	710	2.0	40	20	26
27	12E	5.0	1	54	32	28	200	710	2.0	66	20	27
28	14E	5.6	6	122	56	64	240	7.2	2.0	116	20	28
29	16E	5.2	2	32	34	22	260	7.2	2.0	80	16	29
30	18E	5.6	2	52	46	44	440	710	2.5	62	24	30
31	20E	4.8	1	42	24	32	220	2.6	1.5	32	16	31
32												32
33												33
34												34
35												35
36												36
37												37
38												38
39												39
40												40

COMMENT:

DATE SAMPLES RECEIVED

DATE REPORTS MAILED

ANALYST

To: Mr. C. Arscott
PAGE No. 1

BONDAR-CLEGG & COMPANY LTD.

REPORT No. A2 354
DATE: November 1, 1972

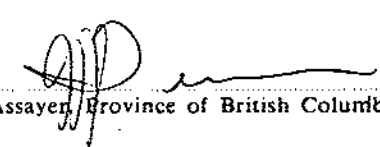
925 - 510 West Hastings Street
Vancouver 1, B. C.

CERTIFICATE OF ASSAY

Samples submitted: Oct. 26, 1972
Results completed: Nov. 1, 1972

I hereby certify that the following are the results of assays made by us upon the herein described ore samples.

MARKED	GOLD		SILVER	Cu	Zn	Fe					TOTAL VALUE PER TON (2000 LBS.)
	Ounces per Ton	Value per Ton	Ounces per Ton	Percent	Percent	Percent	Percent	Percent	Percent	Percent	
DA - 1	0.01		0.03	0.90	-	-					
2	0.04		0.06	2.06	-	-					
3	0.01		0.02	0.01	-	-					
DA - 4	0.005		0.01	0.03	-	-					
PF - 1	0.01		0.05	0.63	0.20	-					
2	1.27		2.5	11.44	0.14	-					
PF - 3	0.01		0.09	0.37	-	47.46					


Registered Assayer, Province of British Columbia

CHEMEX LABS LTD.

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA
TELEPHONE: 985-0648
AREA CODE: 604

CHEMISTS

GEOCHEMISTS

ANALYSTS

ASSAYERS

TO: Moresby Mines Ltd.,
1110 1055 W. Hastings,
Vancouver, B. C.

ATTN:

CERTIFICATE NO. 21762

INVOICE NO. 8572

RECEIVED Oct. 31/72

ANALYSED Nov. 3/72

SAMPLE NO.:	% Copper	% Nickel	Oz/Ton Silver	Oz/Ton Gold	
19553			< 0.01	< 0.003	PIT. 100' W. VANSTONA CR. ON HALL CR.
19554	0.48		0.31	0.008	PIT. 100' E. OF TRAIL ON HALL CR.
19555			< 0.01	< 0.003	PIT. 125' W. VANSTONA CR. ON HALL CR.
19556			< 0.01	< 0.003	SHAL 400' N. HALL CR. ON W. SIDE MOUNTAIN CR.
19558	0.48	< 0.01	0.67	< 0.003	CRAB TAKEN ABOVE FALLS ON SILVER CR.



MEMBER
CANADIAN TESTING
ASSOCIATION

REGISTERED ASSAYER, PROVINCE OF BRITISH COLUMBIA

GENERAL TESTING LABORATORIES

DIVISION SUPERINTENDENCE CANADA

1001 EAST PENDER STREET VANCOUVER B.C. CANADA
PHONE (604) 254-1647 TELETYPE 04-604164 CABLE SUPER

TO:

MORESBY MINES LTD.,
1110 - 1055 West Hastings Street,
Vancouver, B.C.
Attention: Mr. R.E. Dale

CERTIFICATE OF ASSAY

No. 7211-0126

DATE 3-11-72

We hereby certify that the following are the results of assays on: Ore Samples

MARKED	XXXXXXXXXXXXXXXXXXXX				COPPER	MOLYBDENITE	GOLD	SILVER
					(Cu) %	(MoS ₂) %	1/2 ST	1/2 ST
							XXXXXX	XXXXXX
16509	Grab-Della Tributary Breccia Zone				0.14	-	Trace	Trace
16551	Grab-Vanstone Cr. Breccia Rpt, 300' S. Hall Cr.				0.17	-	Trace	Trace
16552	Grab-FROM PIT BELOW FALLS ON HALL CR.				-	0.001	0.005	0.14
16557	Grab-400' N. HALL CR. ON W. SIDE VANSTONE CR.				-	-	0.005	0.03

REJECTS RETAINED ONE MONTH. PULPS RETAINED THREE MONTHS. ON REQUEST PULPS AND REJECTS WILL BE STORED FOR A MAXIMUM OF ONE YEAR.

ALL REPORTS ARE THE CONFIDENTIAL PROPERTY OF CLIENTS PUBLICATION OF STATEMENTS, CONCLUSION OR EXTRACTS FROM OR REGARDING OUR REPORTS IS NOT PERMITTED WITHOUT OUR WRITTEN APPROVAL. ANY LIABILITY ATTACHED THERETO IS LIMITED TO THE FEE CHARGED.

H. Sharples

PROVINCIAL ASSAYER

HS/sk

Analytical and Consulting Chemists, Bulk Cargo Specialists, Surveyors, Inspectors, Samplers, Weighers

MEMBER: American Society For Testing Materials • The American Oil Chemists' Society • Canadian Testing Association
REFERENCE AND/OR OFFICIAL CHEMISTS FOR: Vancouver Merchants Exchange • National Institute Of Oils And Products • The American Oil Chemists' Society
OF OILS AND PRODUCTS • The American Oil Chemists' Society • The American Oil Chemists' Society

VANHALL & DV CLAIMS
ROCK SAMPLE DESCRIPTIONS

<u>Sample No.</u>	<u>Location</u>	<u>Type</u>	<u>Description</u>
DA-1	Della Creek tributary 68N, 14+50W	Grab	Dacite? 3% chalcopyrite in splashes in quartz veinlets.
DA-2	1600' SW of main campsite	Rough chip across 8'	Andesite and dacitic feldspar porphyry, somewhat silicified? 2% chalcopyrite in quartz veinlets.
DA-3	Della Creek tributary 68N, 7W	Selected	Very highly sheared and pyritized material from breccia zone. Some specularite.
DA-4	Della Creek tributary 68N 7W	Grab. Roughly representative	Highly fragmented and pyritized material from same breccia zone as DA-3.
PF-1	Hall Creek 9N, 21+50W	Selected	Andesite, 20% pyrite, 2% chalcopyrite, quartz fragments. Mixture of bedrock and float.
PF-2	Silver Creek 42+50N, 4W	Selected	Boulder, almost entirely massive chalcopyrite, with 5% sphalerite. Boulder is 14 inches wide.
PF-3	Della Creek	Selected	Boulder. Massive magnetite? with pyrite. Not highly magnetic.

IN THE MATTER OF Geochemical Survey, Vanhall and
DV Claims, 10th to 22nd October, 1972.

I, DAVID PHILIP ARSCOTT of 925-510 West Hastings
Street, Vancouver 2, in the Province of British Columbia, do
solemnly declare that the following represents the true value
of the above survey:

Labour [See attached sheet for breakdown]

<u>Name</u>	<u>Position</u>	<u>Address</u>	<u>No. of days</u>	<u>Rate</u>	<u>Total Value</u>
D. Arscott	Geologist	As above	25	75.00	1,875.00
P. Fitzgibbon	Technol- ogist	6947 Walker Ave., Burnaby, B. C.	21½	50.00	1,062.50
M. Maybury	Sampler	2335 W. 6th Ave., Vancouver 9, B.C.	13	35.00	455.00
R. Schneider	Sampler	R.R. #1, Keremeos, B.C.	12½	35.00	437.50
					<u>3,830.00</u>
Expenses:	[See attached sheet]				<u>\$4,047.10</u>
				Total	<u>\$7,877.10</u>

Declared before me at the
of **VANCOUVER, B. C.** in the
Province of British Columbia, this
of **NOV 20 1972**, A.D.
Sub-Mining Recorder

David Arscott

COSTS BREAKDOWN

Labour

Field	\$2,047.50	
Travel	390.00	
Expediting	105.00	
Report	187.50	
Office	<u>475.00</u>	
	<u>\$3,830.00</u>	\$3,830.00

Expenses

Chemical	2,867.50	
Transport	614.38	
Food	244.10	
Field Supplies	139.87	
Hotels	87.95	
Reproduction	68.30	
Equipment rental	<u>25.00</u>	
	<u>\$4,047.10</u>	<u>4,047.10</u>

TOTAL

\$7,877.10

Declared before me at the

of

Province of British Columbia, this

May of

VANCOUVER, B. C. in the

NOV 20 1972 A.D.

[Signature]
Sub. Mining Recorder

David Anscott

CERTIFICATE

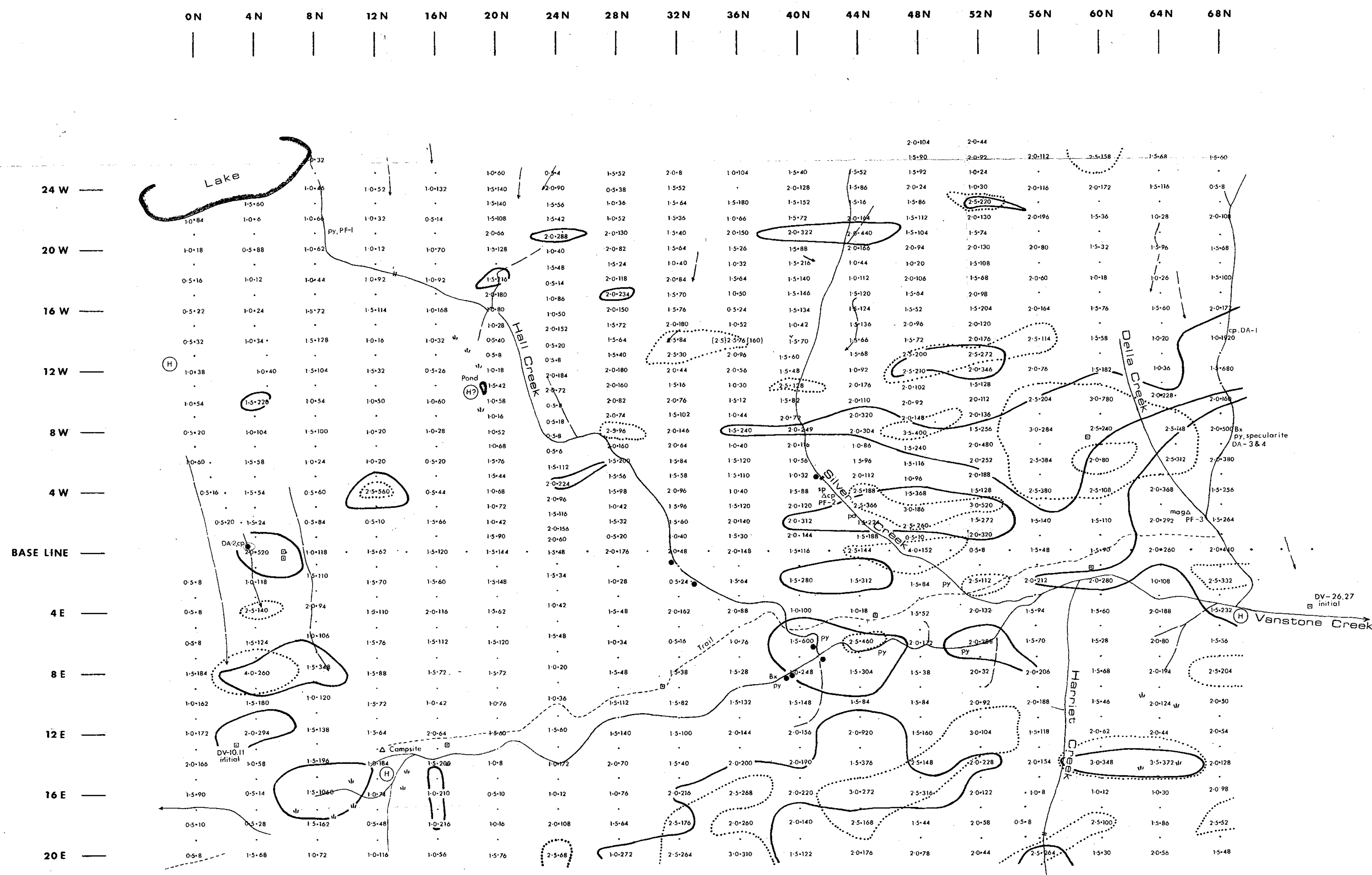
I, David Philip Arscott, of 925 - 510 West Hastings Street, Vancouver, am a Professional Engineer registered in the province of British Columbia.

I personally supervised the geochemical survey carried out on the Vanhall and DV claims in October 1972.

The lists of costs included in the appendix of this report represent the true value of the project.

David Arscott

David Arscott
15th November 1972



3953

M-3

	Creek, with waterfall	80-5	Ag+Cu	Soil content, parts per million
	Minor creek or gully		Cu	contour at 200 " " "
		Ag	" " " 1-75	" " "
sw	Swamp	py	Pyrite	
	Accessible by helicopter	cp	Chalcopyrite	
• •	Grid stations	mag	Magnetite	
	Current claim post	po	Pyrrhotite	
●	Trench or pit	DA-7	} Rock samples	
		PF-6		
Δ	Erratics	Bx	Breccia	

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3953 MRD #3

David Ascott

TO ACCOMPANY REPORT:
Geochemical Survey, Vanhall and
DV Claims, D. Arscott, P. Eng.
15th November 1972.

Figure 3 (a)

GEOCHEMICAL SURVEY

COPPER and SILVER

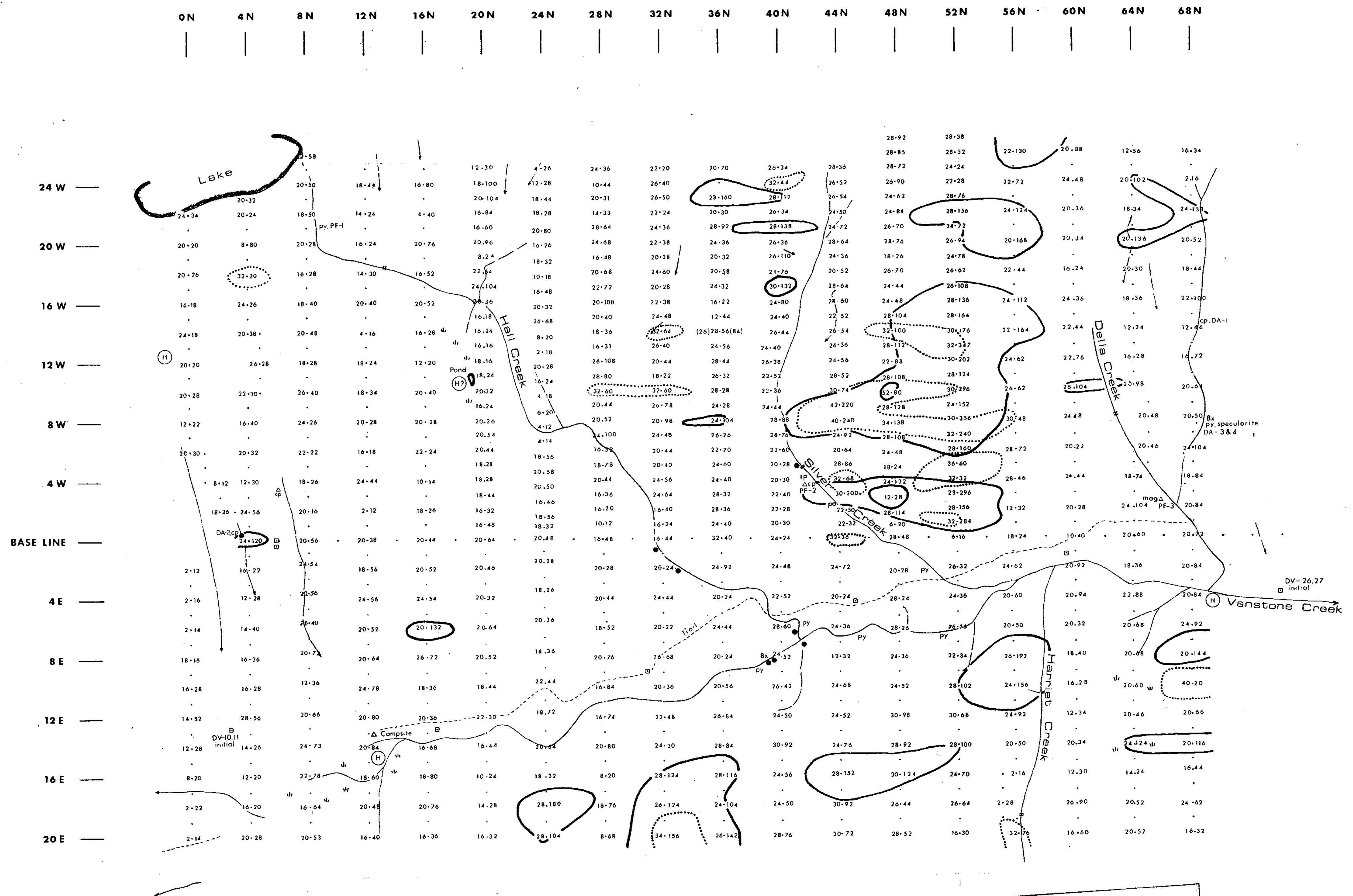
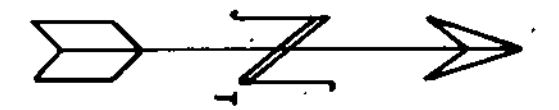
Vanhall and DV Claims

Gold River, B.C.



OCTOBER 1972

D. ARSCOTT,
P. FITZGIBBON



LEGEND

- | | | | |
|--|--------------------------|--|--|
| | Creek with waterfall | | Pb-Zn, Soil content, parts per million |
| | Minor creek or gully | | Zn contour at 100 " " " |
| | Swamp | | Pb " " 30 " " " |
| | Accessible by helicopter | | Pyrite |
| | Grid stations | | Chalcopyrite |
| | Current claim post | | Magnetite |
| | Trench or pit | | Pyrrhotite |
| | Erratics | | Rock samples |
| | | | Rock samples |
| | | | Breccia |

NOTE:

Grid established by chain and compass, with allowances for slope.
Average grid line closure error at base line was 35 feet or 0.6%.

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3953 MAP #4

David Arscott

TO ACCOMPANY REPORT:

Geochemical Survey, Vanhall and
DV Claims, D. Arscott, P. Eng.
15th November 1972.

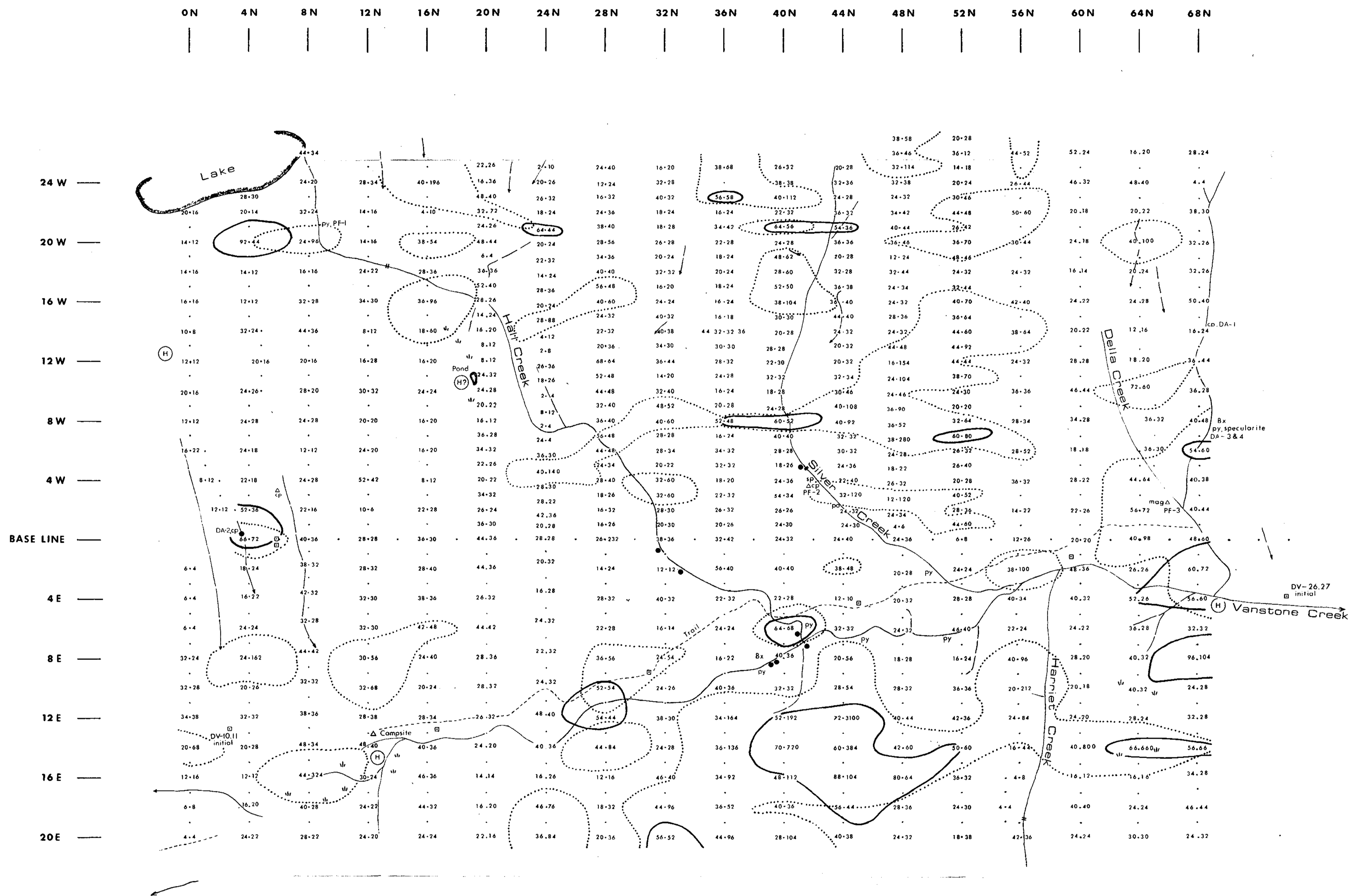
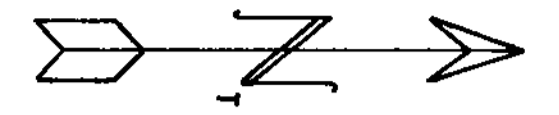
Figure 3 (b)

GEOCHEMICAL SURVEY
LEAD and ZINC
Vanhall and DV Claims
Gold River, B.C.

0 200 400
feet

OCTOBER 1972

D. ARSCOTT,
P. FITZGIBBON



LEGEND

- | | | | |
|--|--------------------------|------|---|
| | Creek, with waterfall | 80+5 | Ni - Co Soil content, parts per million |
| | Minor creek or gully | | Ni contour at 50 |
| | Swamp | | Co " " 45 |
| | Accessible by helicopter | py | Pyrite |
| | Grid stations | cp | Chalcopyrite |
| | Current claim post | mag | Magnetite |
| | Trench or pit | po | Pyrrhotite |
| | Erratics | DA-7 | Rock samples |
| | | PF-6 | |
| | | Bx | Breccia |

NOTE:
Grid established by chain and compass, with allowances for slope.
Average grid line closure error at base line was 35 feet or 0.6%.

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3953 MAP #5

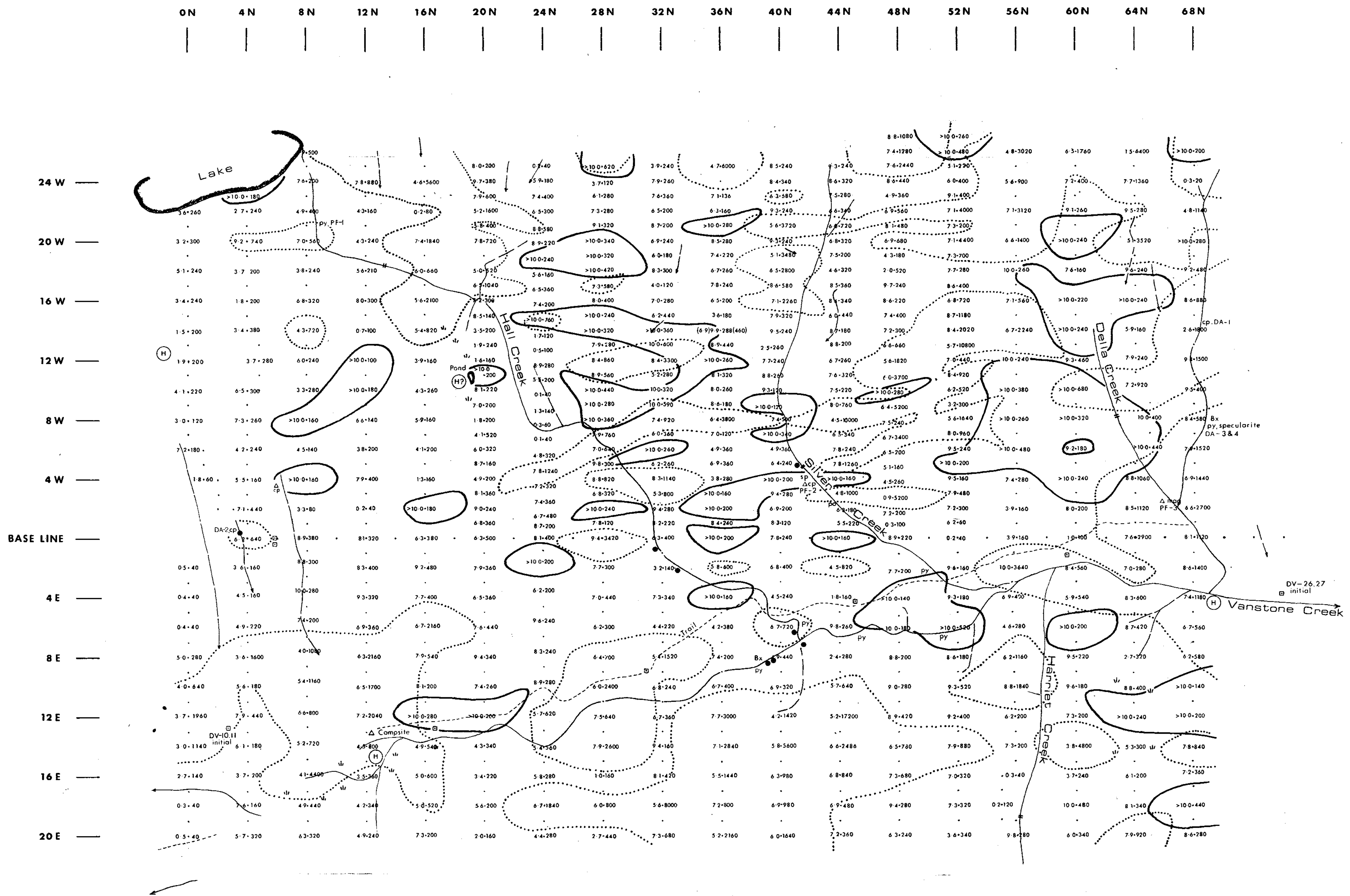
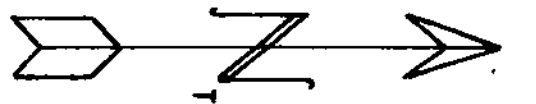
David Arscott

TO ACCOMPANY REPORT:
Geochemical Survey, Vanhall and
DV Claims, D. Arscott, P. Eng.
15th November 1972.

Figure 3 (c)
GEOCHEMICAL SURVEY
NICKEL and COBALT
Vanhall and DV Claims
Gold River, B.C.



OCTOBER 1972
D. ARSCOTT
P. FITZGIBBON



LEGEND

- | | | | |
|--|--------------------------|------|---|
| | Creek, with waterfall | 80+5 | Fe-Mn Soil content, Fe in % parts per million |
| | Minor creek or gully | | Contours at 10% and 500 p.p.m. |
| | Swamp | py | Pyrite |
| | Accessible by helicopter | cp | Chalcopyrite |
| | Grid stations | mag | Magnetite |
| | Current claim post | po | Pyrrhotite |
| | Trench or pit | DA-7 | Rock samples |
| | Erratics | PF-6 | Rock samples |
| | | Bx | Breccia |

NOTE:

Grid established by chain and compass, with allowances for slope.
Average grid line closure error at base line was 35 feet or 0.6 %.

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3953 MAP #6

David Arscott

TO ACCOMPANY REPORT:

Geochemical Survey, Vanhall and
DV Claims, D. Arscott, P. Eng.
15th November 1972.

Figure 3 (d)

GEOCHEMICAL SURVEY
IRON and MANGANESE
Vanhall and DV Claims
Gold River, B.C.

0 200 400
Feet

OCTOBER 1972

D. ARSCOTT,
P. FITZGIBBON

