

92I/7E

GEOCHEMICAL REPORT

on

DES 1-98 MINERAL CLAIMS

50° 25'N; 120° 38'W

92 I 7E

(10 miles Southeast of Logan Lake, B.C.)

for

NEWCO VENTURES LTD.

Vancouver, B.C.

by

Charles A.R. Lammle, P. Eng.

Oct. 15, 1972

Work Performed July 13 - Oct. 3, 1972

4057

Department of
Mines and Technical Resources
ASSESSMENT REPORT
NO. 4057 MAP

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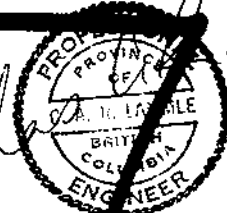
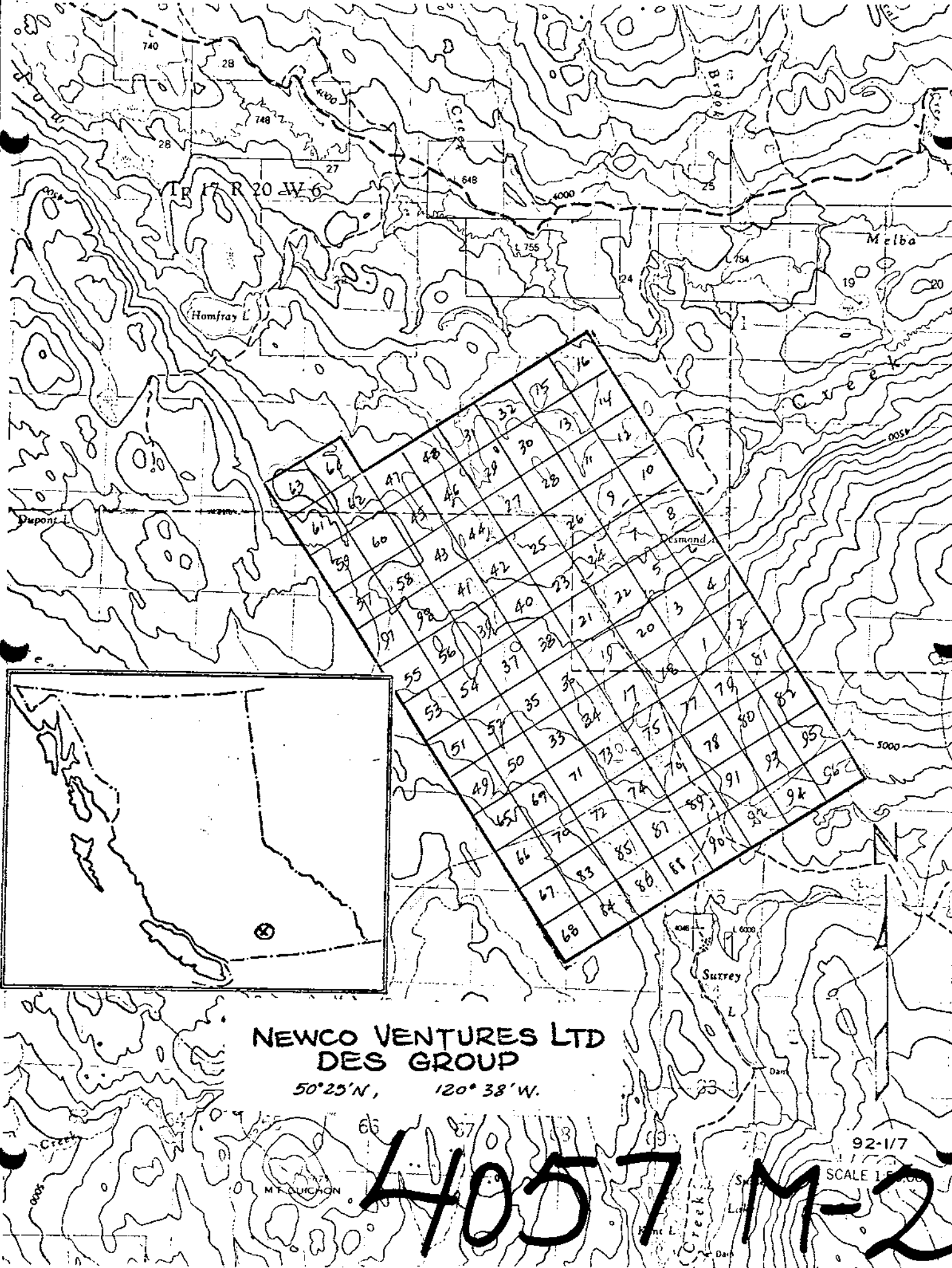
Charles A. R. Lammle


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**NEWCO VENTURES LTD
DES GROUP**

50°25'N, 120°38'W.

4057 M-2

92-17
SCALE 1:50,000

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MAP # 2

S-M 7204

TP. 18 R. 20
Logan

TP. 18 R. 20

TP. 18 R. 20



NEWCO VENTURES LTD
DES GROUP

SHEET 92 1/SE

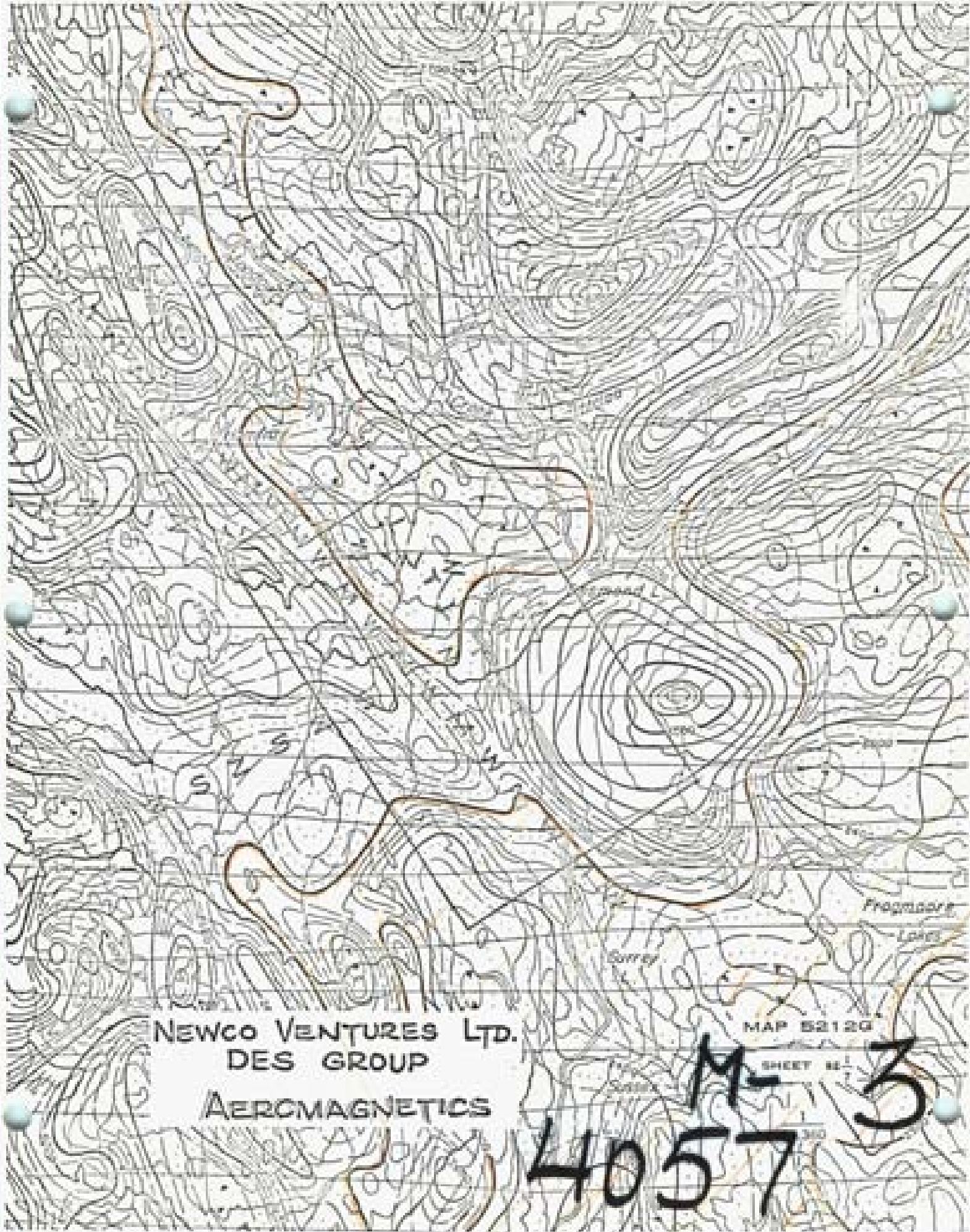
Scale 1:126,720

4057 M-1

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NO. 4057 MAP #1

1-M 7004



NEWCO VENTURES LTD.
DES GROUP

AEROMAGNETICS

MAP 5212G

SHEET 12

M-3
4057

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ASSESSMENT REPORT
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20

700H

GEOCHEMICAL REPORT

DES 1-98 MINERAL CLAIMS

92 I 7

INTRODUCTION

At the request of Newco Ventures Ltd., Vancouver, B.C., I made a preliminary geological examination of the DES copper prospect located near Desmond Lake, 22 air miles southwest of Kamloops, B.C. The examination was carried out during the period Sept. 6 - 9, 1972, with the guidance of W.T.A. Smith who staked, and supervised geochemical soil sampling of the property.

This report will describe my observations, and Newco's soil geochemical work and results. Conclusions and recommendations will be presented.

CLAIMS (see Claim Map 92 I 7, attached)

The property consists of 98 contiguous mineral claims, partly in Kamloops (K) Mining Division and partly in Nicola Mining Division, and all in the name of Newco Ventures Ltd., Vancouver, B.C. Pertinent details regarding these claims are tabulated below:

CLAIM	NO.	RECORD	RECORDING DATE
DES 1-32	(32) (K)	105480-105511	Feb. 16, 1972
DES 33-46	(14)	51231- 51244	Feb. 16, 1972
DES 47-48	(2) (K)	105512-105513	Feb. 16, 1972
DES 49-56	(8)	51593- 51600	April 11, 1972
DES 97-98	(2)	51601 - 51602	April 11, 1972
DES 57-96	<u>(40)</u>	51603 - 51642	April 11, 1972

98

HISTORY OF THE AREA

G.S.C. describes two copper showings in the vicinity of Des Group - the Ford and the Dupont Prospects. The initial work on these prospects was done in 1929.

The Ford is a copper showing in basalt along Meadow Creek Road, 6 miles northwest of Desmond Lake. A short adit has been driven into outcrop along the side of the road, and reportedly, a 30 ton shipment from the workings yielded 0.3 oz/ton Ag and 2.14% Cu.

The Dupont prospect is just west of Homfray Lake, 4 miles from Desmond Lake. A 75' shaft in fractured and mineralized rock has now been near obliterated by bulldozing. A short string of open cuts, 1500' west of the shaft, expose copper mineralization along a braided, southeast trending fracture zone. A five ton shipment is said to have been made from this prospect.

For the most part, Meadow Creek area was not seriously explored during the Highland Valley boom, but several shallow cat trenches, and a few small core diamond drill holes collars are evident on what is now Des Group.

LOCATION AND ACCESS (see Claim Map 92 I 7)

The property is located at Desmond Lake, 22 air miles southwest of Kamloops, B.C., or alternatively, 10 air miles east-southeast of the new community of Logan Lake. The Highland Valley orebodies of Bethlehem Copper Corporation, Lornex and Valley Copper are 17 miles distant, as is the orebody of Afton Mines. Cominco's Greenstone Mountain property, a copper-molybdenum prospect, lies 13 miles to the north.

Kaiser Resources are currently exploring an optioned copper prospect (Plug claims) immediately adjoining DES claims on the east. (Des claims may slightly overtake some of the Plug claims.) Other properties staked during the Afton "rush" adjoin the DES claims immediately to the north and to the west.

Access to the area is by the Lac Le Jeune - Meadow Creek road, and thence southerly by the four-wheel-drive Surrey Lake fishing camp road. A system of disused logging roads, interconnected with the fish camp road, provide convenient access.

The property hinterland is a relatively high, central portion of Thompson Plateau: the central part of the property lies around elevation 4500', the northern corner at 4000', and the eastern corner at 5000'. It is characterized by partly logged stands of fir dispersed in mature and second-growth lodge pole pine. Underbrush is light. Several small streams drain northerly, and except during very dry seasons, would provide some water for exploration purposes.

GENERAL GEOLOGY

Map 886A accompanying G.S.C. Memoir 249 shows the Desmond Lake area to be within a broad northerly belt of Upper Triassic Nicola Group rocks lying between Guichon Creek Batholith to the west and Central Nicola Batholith. Regionally, the Nicola Group consists mostly of intermediate to basic volcanic flows and breccias with minor amounts of greywacke, argillite and limestone. Guichon Creek Batholith is a concentrically zoned granodiorite; Central Nicola Batholith is granodiorite, often greissic textured and with marginal areas of schist and amphibolite.

Several small diorite-monzonite stocks, such as those at Greenstone Mountain, occur in the broad belt of Nicola rocks. Principal structures, as suggested by regional aeromagnetic lineaments, trend mostly in a northwesterly direction.

Guichon Creek Batholith and Nicola Group are well known for their economic importance. Small stocks within Nicola Group, because of the likelihood of copper and or molybdenum minerals occurring nearby, are economically significant as well.

LOCAL GEOLOGY

During the preliminary examination, a variety of Nicola Group volcanic rock types and some monzonites were noted in passing, but no attempt was made to systematically map these at the time. Volcanic rocks observed ranged from basic to intermediate, and consisted of black amygduloidal basalts, hematite red amygduloidal and porphyritic basalt, olivine basalt, gray green andesites occasionally pyritic and sometimes sheared or foliated. Quartz, epidote and calcite veinlets are present in places in the volcanic rock assemblage. Granitic rock types found were medium grained, equigranular monzonite to a monzonite with porphyry aspects, and some fine grained fresh looking latite dykes.

Volcanic rocks in proximity to the monzonite are pyritized and weakly hornfelsed. Trace amounts of chalcopyrite were found in both monzonite and hornfels.

Rocks observed were massive bedded and yielded little evidence as to their attitude. Regional aeromagnetic consideration and the distribution of some of the rock types indicate a dominant northwest trend, however. Some strong faults, indicated by wide crush zones exposed in road cuts, are suspected.

SOIL COPPER SURVEY

Exploratory work carried out to date on the Newco property has consisted of line cutting and a soil copper survey. This work was capably supervised by W.T.A. Smith. The lines were cut at 800' intervals from two northwest trending base lines spaced 6000' apart. Some fill in detail west of Desmond Lake was carried out.

Compassing and chaining imperfections, as indicated at the meshing of the two grids, are relatively small.

Soil Character

Soils on the property vary from powdery tan coloured silts to light brown limy clays, covered by a moss capped, thin humous horizon. The B horizon is relatively indistinct, and as the area is somewhat semi-arid and near the grass land - forest boundary, the soils are probably best grouped with the degraded chernozem class. Some gleyed and bog soils occur in marshes.

Sampling and Analytical Procedure

Samples were taken by hand from mattock holes dug at 200' intervals along the grid lines. The sampling interval on some fill-in lines was reduced to 100'. The samples were placed in labelled manila envelopes and forwarded to Bondar-Clegg and Co., North Vancouver, B.C., for analysis.

The intent of the soil samplers was to sample the upper part of the B soil horizon. To achieve this, the holes were dug to depths ranging generally between 8 and 14 inches. Where the B horizon was indistinct, the sample was taken from below the humous soils at the horizon where the most conspicuous colour change was found.

After drying at the laboratory, the samples were screened on 80 mesh stainless steel, and 1/2 gram portions of the under-size were dissolved in hot aqua regia. Then the solutes were homogenized and diluted to 20% acid. The copper content of the resulting liquids were then determined by AA4 Atomic Absorption Spectrophotometer, the instrument being kept in calibration by periodic use of prepared and natural soil standards.

Results of the Soil Copper Survey

The analytical results of 1128 analyses are shown planimetrically on Map 4, attached, and graphically on Appendix I.

The graph is a logarithmic probability plot of the analyses, a technique that theoretically should separate logarithmically distributed data into component populations, if they exist. Individual logarithmically distributed populations plot as separate straight lines on such charts. Imperfectly distributed data and overlap between populations causes some rounding of the plot at the intersections of the straight lines, which if reconstructed and projected to an intersection, can be used to indicate the boundary between the separate populations. Appendix I indicates the copper content in Des Group soils to consist of two principal populations, "A" and "B" on the chart, separated by the 25 ppm concentration. The higher 40% belong to population "B". The highest 2% percent of the samples appear to form a third population but the statistical approach fails because of the small number of samples at end-points, and the slope of the line reflecting these last few samples may not be meaningful.

The value of 25 ppm can be taken as a threshold value, and the higher 40% of the samples can be further evaluated by establishing a geometric progression with 25 ppm, and considering these samples.

Accordingly, on Map 4, the soil copper content has been contoured at 50, 100 and 200 ppm. Two principal anomalous areas - one west of Desmond Lake and the other southeast of the lake - and several linear chains of anomalous samples can be outlined in this way.

Pyritic volcanic rocks with trace amounts of chalcopyrite have been observed at the south end of the Central Anomaly (i.e. the anomaly west of the lake) but no causative materials were noted in proximity to the Southeast Anomaly. The north-west trending chains of anomalous samples likely reflect mineralized shears, such as that described on the Dupont Prospect at Homfray Lake.

The Central and Southeast anomalies, although somewhat irregular, are attractive exploration targets because of their size. If one considers the immobility of copper ions in limy soils and the masking effect the Desmond soils could have on copper, it becomes necessary to upgrade the significance of the two anomalies to remain conservative. Because of this, the two main anomalies require and justify further definitive work. If a degree of success is achieved, some of the other smaller anomalies would then warrant additional exploration work.

AEROMAGNETICS

An intriguing aspect of the Des Group is its proximity to the intersection of five regional aeromagnetic lineaments which are known to be authentic regional geological features, and which are thought to have originated at the time of emplacement of Guichon Creek Batholith. The Valley and South Bethsaida Lineaments (NZ and SZ lineaments respectively) form north and south boundaries of the Bethsaida Quartz monzonite, and of course, the former lineament is economically important. Greenstone Lineament links two monzo-dioritic stocks, both with some associated copper mineralization, and Tunkwa lineament (or fractures sympathetic with it) contain copper mineralization at Homfray Lakes. The soil copper analyses indicate that this lineament is cupriferous on Des Claims as well. Another lineament between Tunkwa and Greenstone lineaments (marked T on Map 5212 G) is subparallel with the eastern contact of Guichon Creek Batholith and can be projected north-northwesterly through the Tunkwa Lake mercury showing.

The possible economic significance of these several lineaments is readily apparent as is the areas of their intersections.

GEOLOGICAL, SOIL COPPER AND AEROMAG LINEAMENT CORRELATIONS

The Central soil copper anomaly on DES GROUP lies along T lineament, and intrusive diorite with a pyritic halo containing trace chalcopyrite is exposed near the intersection of lineaments SZ and T.

This diorite is very likely an apophyses related to a zoned monzo-dioritic stock centered 1 1/2 miles southeast of Desmond Lake and responsible for the circular Desmond aeromagnetic anomaly, or at least this inference can be made from similar circumstances in the Roper-Diary Lakes region of Greenstone Mountain to the north. Geological structures giving rise to these lineaments probably controlled the emplacement of the stock.

SUMMARY AND CONCLUSIONS

The Des Group of claims, 22 miles southwest of Kamloops, B.C., has responded with encouragement to reconnaissance soil copper geochemistry. Two large soil anomalies of moderate intensity, but in masking limy soils, have been located in Nicola Group volcanic rocks in vicinity of interesting intrusive diorite. Also these anomalies are either subjacent to, or in the immediate proximity of an intriguing group of intersections of regional aeromagnetic lineaments, several of which are known to be economically significant. The degree of success achieved by the geochemical work on the property to date indicates the need for, and the justification for additional exploration work on the property.

RECOMMENDATIONS

In accordance with the above conclusions I recommend continued exploratory work on the Des Group. This work should consist of preliminary claim surveying, geological mapping, additional fill in geochemical work; magnetometer surveying carefully controlled to permit diurnal corrections, some induced polarization work, cat trenching and drill testing by percussion and diamond drill. With encouraging results a second phase of additional depth testing by diamond drill could be planned.

Estimated costs of the recommended program follow:

Preliminary Location Line Survey	\$ 1,500
Geological mapping, supervision	2,000
Additional fill in lines 10 mi. @\$100	1,000
Power sawing wind fall areas	1,000
Fill in geochemistry 10 mi. @\$65	650
Analyses	600
Magnetometer survey (McPhar M700)	
25 mi. @\$80	2,000
Induced Polarization 20 mi. @\$450/mi.	9,000
Roads, Cat Trenches 100 hr. @\$40/hr.	4,000
Percussion Drilling 8-250' holes @\$4/ft.	8,000
Diamond Drilling 3-500' holes @\$12/ft.	18,000
Accommodation	2,000
Transportation	1,000
Assays and Miscellaneous	2,000
Contingencies	<u>5,250</u>
 ESTIMATED COST OF RECOMMENDED WORK	 \$58,000

With encouraging results additional work could be planned.



Respectfully submitted

Chas. A. R. Lammie

Chas. A.R. Lammie, P.Eng.

TIME DISTRIBUTION AND ITEMIZED EXPENDITURES INCURRED

LINECUTTING

G. Siemens	July 12-30, 1972	Contract \$60/mi.	\$3720.00
D. Pigeon	July 12-30, 1972	"	
A. Newsome	July 12-25, 1972	"	
B. Carlisle	July 12-25, 1972	"	

SAMPLING

D. Tancowny	Aug 2 - Sept 16, 1972	Contract \$65/mi.	4430.00
E. Tancowny	Aug 2 - Sept 16, 1972	"	
W. Smith	Aug & Sept, intermittent	"	
D. Porter	Aug 16 - 20, 1972	"	
A Bagley	Aug 16 - 26, 1972	"	
T. Kostluk	Aug 27 - Sept 1, 1972	"	
J. Tancowny	Sept 1 - 4, 1972	"	

SUPERVISION

W.T.A. Smith	24 days @ \$50/day intermittent July, Aug, Sept 1972		1200.00
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ANALYSES

1280 samples @ \$1.20	1536.00
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ENGINEERING

C.A.R. Lammle	10 days @ \$75/day Sept. 1-10, 1972	\$750	
	Report fee	\$250	1000.00

TRUCK RENTAL

2 mo. @ \$450 mileage rate	\$300	1200.00
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ACCOMMODATION, MEALS

135 man days @ \$8/day	1080.00
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TYPING, XEROX, ETC.

45.00

TOTAL EXPENDITURES INCURRED \$14,111.00

Chas. A. R. Lammle 

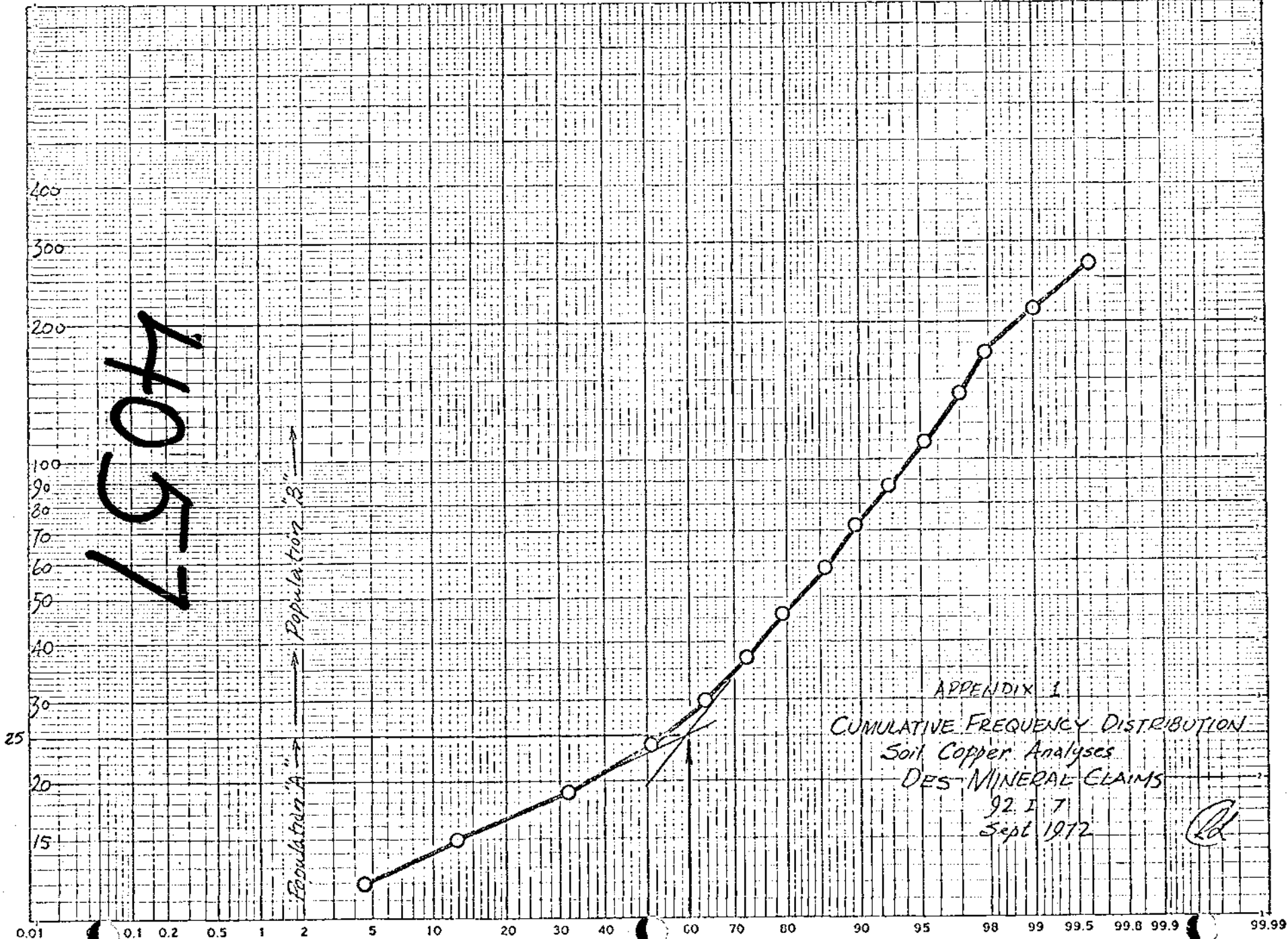
Declared before me at the *City*
of *Wharfedale*, in the
Province of British Columbia, this *17th*
day of *January*, 1973 A.D.

William J. A. Smith

GP Phillips SUB-MINING RECORDER
A Commissioner of the Province of British Columbia or
A Notary Public in and for the Province of British Columbia



99.99 99.9 99.8 99.5 99 98 95 90 80 70 60 50 40 30 20 10 5 2 1 0.5 0.2 0.1 0.05 0.01



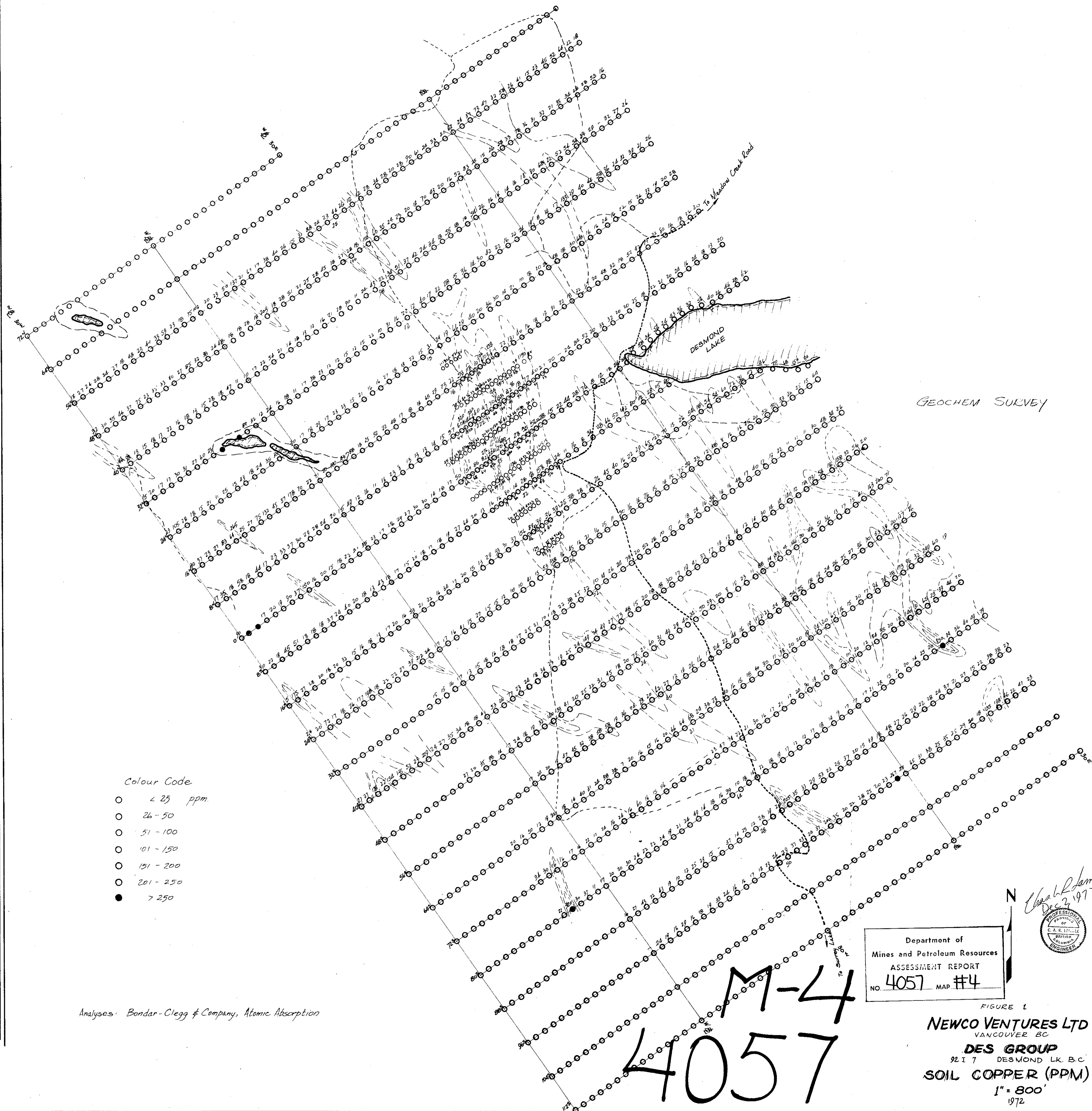
Copper (PPM)

CUMULATIVE PERCENT OF 1128 ANALYSES

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NO. 4057 MAP

7C04



GEOCHEM SURVEY

- Colour Code
- < 25 ppm.
 - 26 - 50
 - 51 - 100
 - 101 - 150
 - 151 - 200
 - 201 - 250
 - > 250

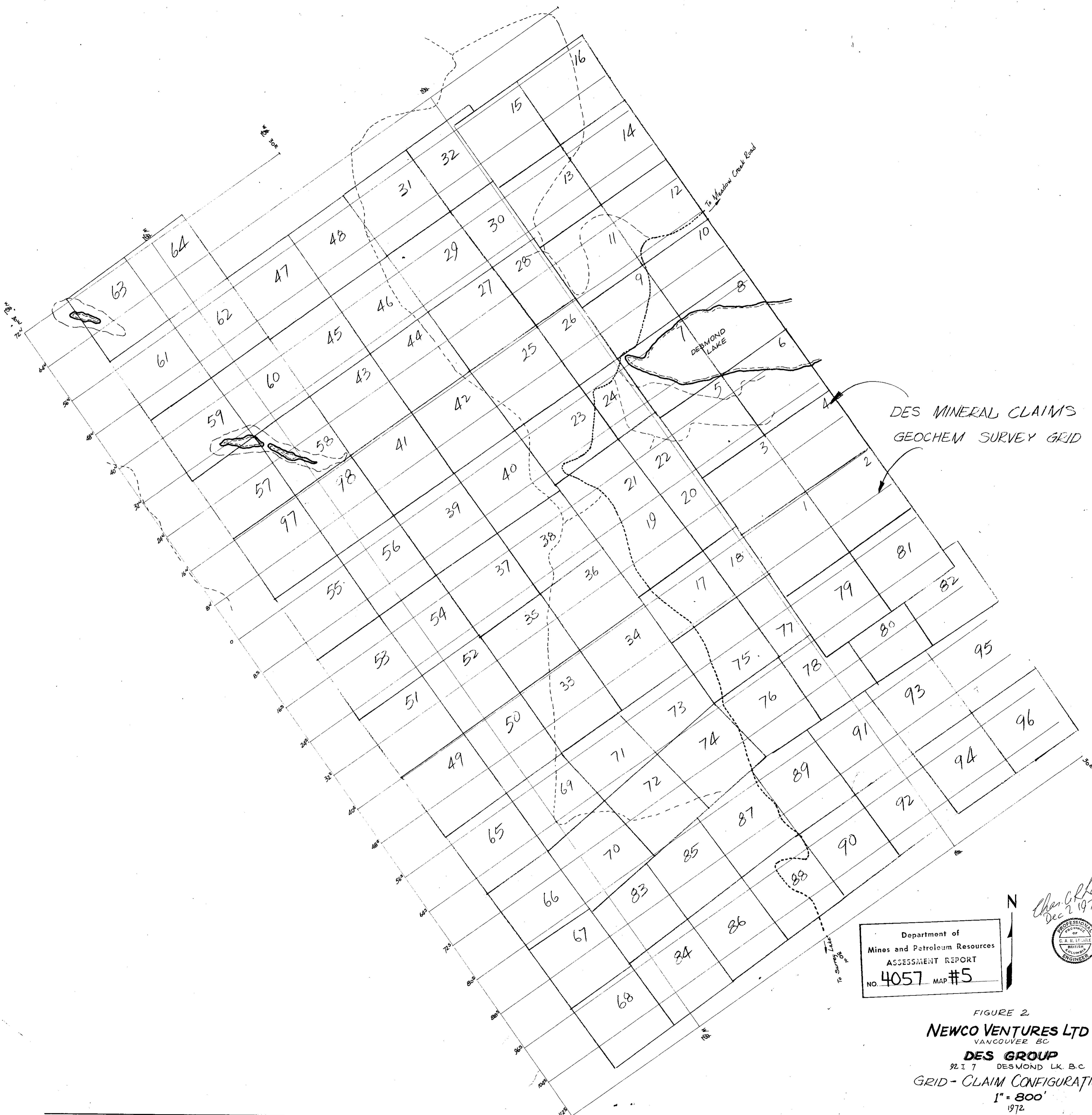
Analyses: Bondar-Clegg & Company, Atomic Absorption

M-4
4057

Department of
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ASSESSMENT REPORT
NO. 4057 MAP #4

Charles R. Lemme
Dec 2 1972
PROFESSIONAL
ENGINEER
C. R. LEMME
BRITISH
COLUMBIA

FIGURE 1
NEWCO VENTURES LTD
VANCOUVER BC
DES GROUP
9217 DESMOND LK. B.C.
SOIL COPPER (PPM)
1" = 800'
1972



DES MINERAL CLAIMS
GEOCHEM SURVEY GRID

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 4057 MAP #5

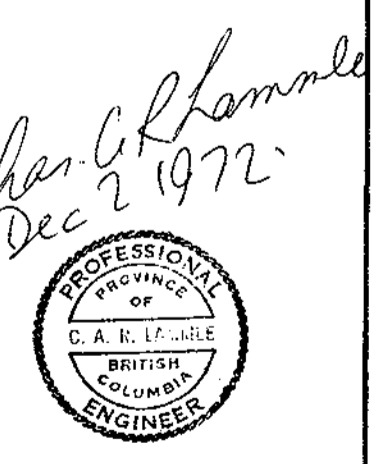


FIGURE 2
NEWCO VENTURES LTD
VANCOUVER BC
DES GROUP
9217 DESMOND LK. B.C.
GRID - CLAIM CONFIGURATION
1" = 800'
1972