

# 2812

GEOLOGICAL, GEOCHEMICAL, GEOPHYSICAL

REPORT

on the

ROYAL AND LOREX CLAIM GROUPS

near PIMAINUS and CALLING LAKES,

HIGHLAND VALLEY, 50° 121° S.E.

KAMLOOPS MINING DIVISION, B.C.

for

GREAT PLAINS DEVELOPMENT COMPANY OF CANADA LTD.

Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT

NO. **2812** MAP.....

by

W.R. BACON, Ph.D., P.Eng.

Vancouver, B.C.

December 31, 1970.

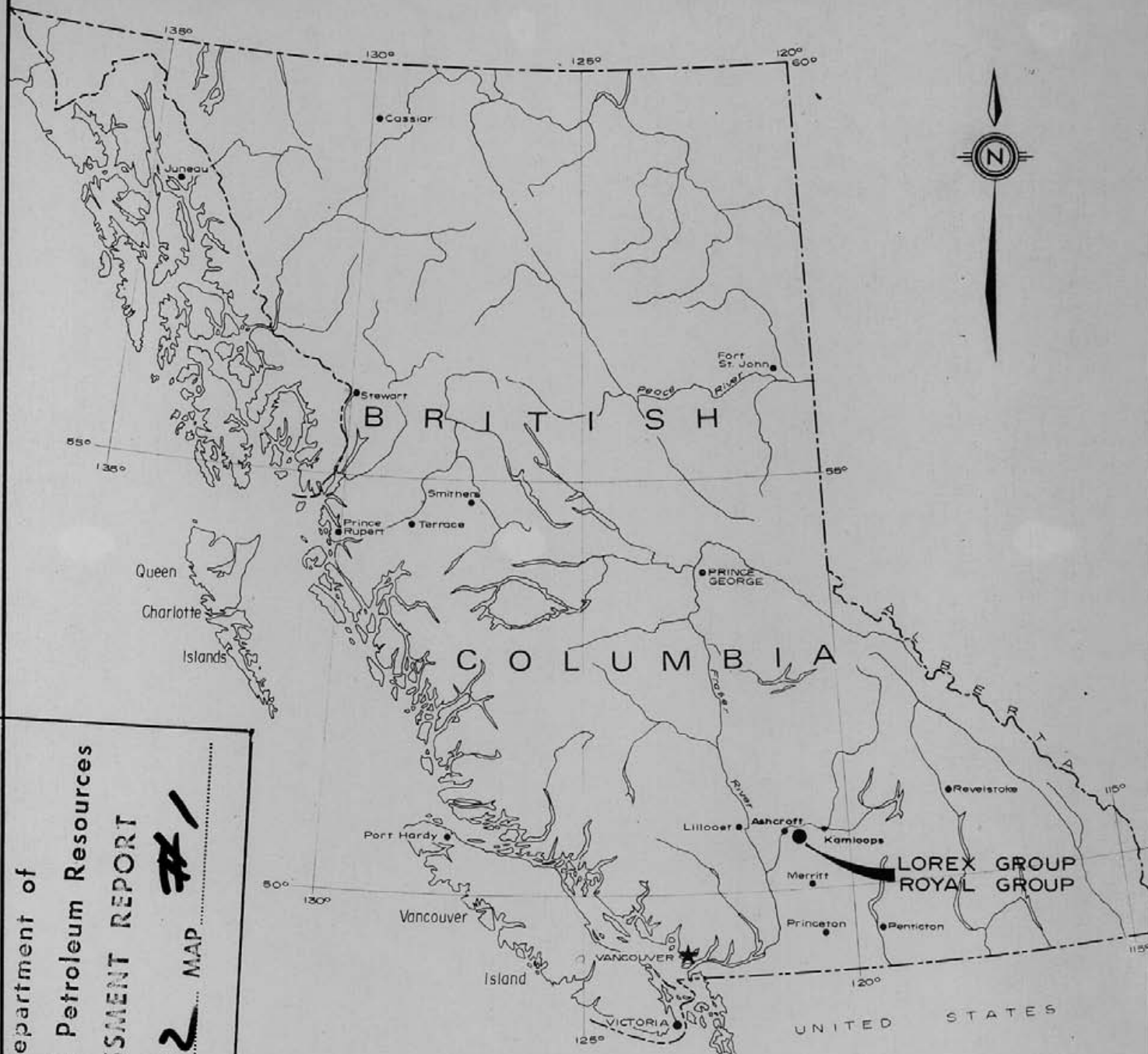
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Attachments: Induced Polarization & Resistivity Survey Reports  
on the Royal and Lorex Groups by McPhar Geophysics Ltd. -  
Oct. 9/70



Department of  
 Mines and Petroleum Resources  
 ASSESSMENT REPORT  
 NO. 2812 MAP #1

FIG. 1  
 BACON & CROWHURST LTD.  
 GREAT PLAINS DEVELOPMENT COMPANY OF CANADA LTD.  
 LOCATION MAP

ROYAL CANADIAN VENTURES-NORTHLODE EXPLORATION CLAIMS  
 HIGHLAND VALLEY AREA, KAMLOOPS M.D., B.C.

SCALE: 1"=136 MILES

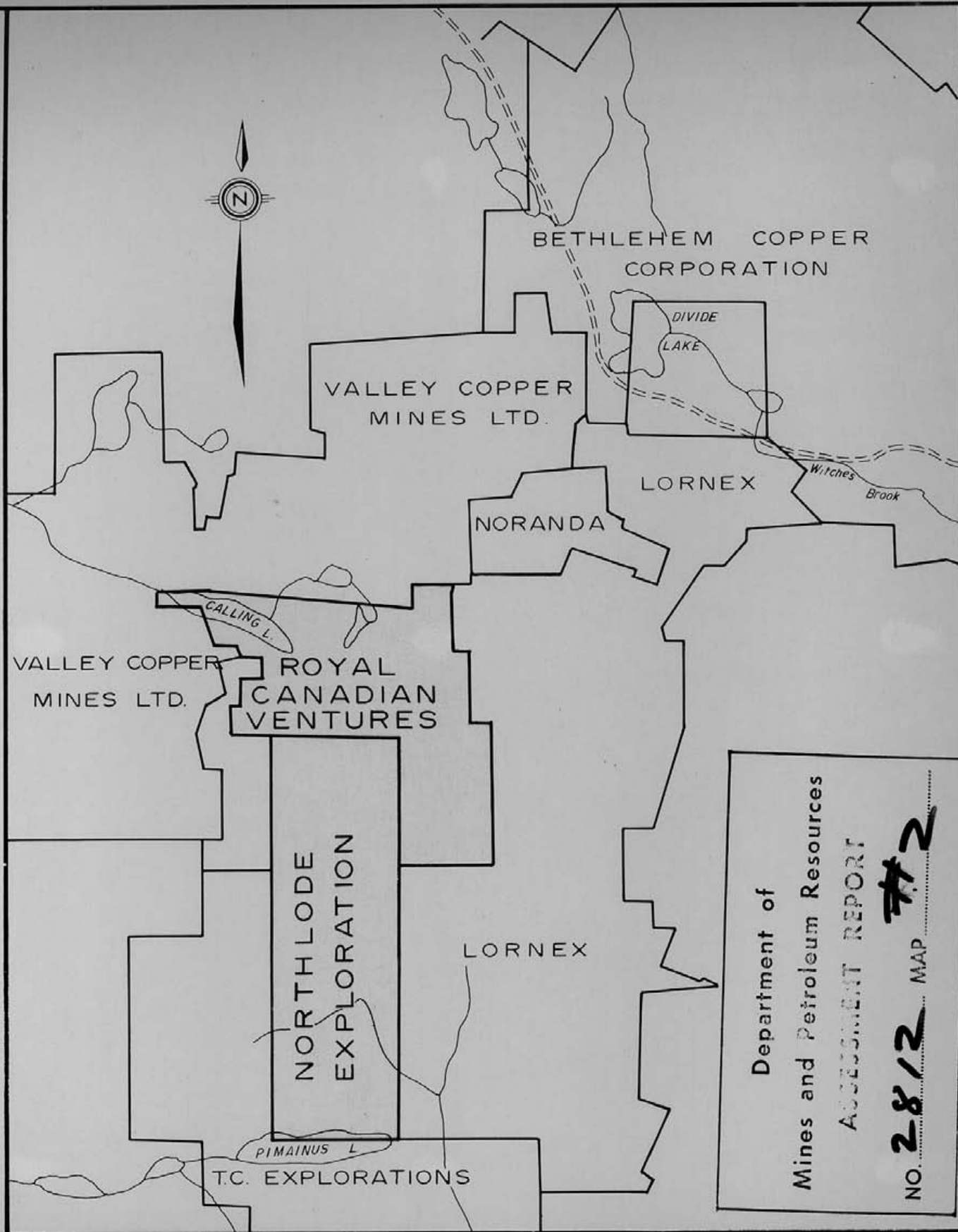


FIG. 2  
 BACON & CROWHURST LTD.  
 GREAT PLAINS DEVELOPMENT COMPANY OF CANADA LTD.  
 PROPERTY MAP  
 ROYAL CANADIAN VENTURES-NORTHLODE EXPLORATION CLAIMS  
 HIGHLAND VALLEY AREA, KAMLOOPS M.D., B.C.  
 SCALE IN MILES



### INTRODUCTION

The Royal and Lorex claim groups adjoin one another and are situated between Pimainus and Calling Lakes in the Highland Valley area of south central British Columbia. (See Figures 1, 2) The properties are bounded on the east by Lornex Mining Corporation Ltd., on the north and northwest by Valley Copper Mines Ltd., and on the south and southwest by T.C. Explorations Ltd.

Access is by 25 miles of paved road from Ashcroft via the Highland Valley road and then by about 15 miles of dirt road southerly to Pimainus Lake.

The topography of the area is one of generally moderate relief with elevations rising from 5000' at Pimainus Lake to over 5500' at locations about a mile east of Calling Lake. Spaist Mountain at an elevation of 6072' is a prominent topographic feature one mile south of Pimainus Lake. Glaciation has covered most of the countryside with an extensive mantle of bouldery till which may reach depths of several tens of feet on the uplands and to much greater depths in the gulleys. The percentage of bedrock exposed is believed to be less than 5%. The properties are covered by stands of lodgepole pine, spruce, thick secondary growth, and extensive windfall which occupy all but the swampy areas and outcroppings.

Exploration work in the form of linecutting, geologic mapping, soil sampling, magnetometer and induced polarization surveys was carried out during the period of June 1st to September 23rd, 1970,

on portions of the Royal and Lorex groups to investigate the possible occurrence of large low-grade copper-molybdenum deposits.

The Royal group consists of a contiguous block of 40 claims of which only 20 (Royal 21-40) were examined this summer. The remainder of the Royal group had been investigated by Royal Canadian Ventures Ltd. from 1966-1969 with geological, geochemical and geophysical surveys.

The Lorex group also consists of 40 contiguous claims and adjoins the Royal group on the south and west boundaries. Portions of the claim group had been investigated previously by soil sampling and magnetometer in 1969 by MacDonald Consultants Ltd. on behalf of Northlode Explorations Ltd. This summer the entire Lorex group was reconnaissance mapped and also tested by induced polarization surveys by McPhar Geophysics Ltd. In addition, those portions not previously tested by geochemistry and geophysics (i.e. mineral claims IL 1 and 2, Lorex 1, 2, 3, 21-29) were soil sampled and checked by magnetometer.

During the geologic mapping of both claim groups, those areas which were designated as anomalous by the McPhar induced polarization survey were scrutinized very carefully whereas non-anomalous areas were mapped in a reconnaissance fashion.

The register of the claims is as follows:

<u>Group Name</u>	<u>Claim Name</u>	<u>Record Numbers</u>	<u>Expiry Date as at Nov. 1970</u>
Royal	Royal 2	34820	Dec. 19/73
	4	34822	Dec. 19/73
	6	34824	Dec. 19/73
	8	<del>34826</del>	Dec. 19/74
	10	34828	Dec. 19/74
	12	34830	"
	13	34831	"
	14	34832	"
	16	34834	"
	17	34835	Dec. 19/73
	18	34836	Dec. 19/74
	19	34837	"
	20	34838	Dec. 19/73
	RC 1	51270	Aug. 19/73
	2	51271	"
	3	51272	"
	4	51273	"
	Royal A Fr.	59221	Aug. 5/73
	B Fr.	65524	Aug. 7/73
	C Fr.	65525	"
Royal	21	67484	Dec. 28/72
	22	67485	"
	23	67486	"
	24	67487	"
	25	67488	"
	26	67489	"
	27	67490	"
	28	67491	"
	29	67492	Dec. 28/71
	30	67493	"
	31	67494	"
	32	67495	"
	33	67496	"
	34	67497	Dec. 28/71
	35	68454	Mar. 11/71
	36	68455	"
	37	68456	"
	38	68457	"
	39	68458	"
	40	68459	"

<u>Group Name</u>	<u>Claim Name</u>	<u>Record Numbers</u>	<u>Expiry Date</u> <u>as at Nov. 1970</u>
Lorex	IL 1	46054	April 30/71
	2	46055	"
Lorex	1	46088	"
	2	46089	"
	3	46090	"
	4	46091	"
	5	46092	"
	6	46093	"
	7	46094	"
	8	46095	"
	9	46096	"
	10	46097	"
	11	46098	"
	12	46099	"
	13	46100	"
	14	46101	"
	15	46102	"
	16	46103	"
	17	46104	"
	18	46105	"
	21	46106	"
	22	46107	"
	23	46108	"
	24	46109	"
	25	46110	"
	26	46111	"
	27	46112	"
	28	46113	"
	29	46114	"
	30	46115	"
	31	46116	"
	32	46117	"
	33	46118	"
	34	46119	"
	35	46120	"
	36	46121	"
	37	46122	"
	38	46123	"
	39	46124	"
	40	46125	"



GEOLOGY AND MINERALIZATION  
(See Plates I, IV)

The Royal and Lorex claim groups lie wholly within the Guichon batholith, a complex pluton which intrudes the sedimentary and volcanic rocks of the Cache Creek and Nicola Groups. The Guichon batholith has long been known as a host to widespread mineralization (mainly copper with minor molybdenite) in an area popularly called the Highland Valley copper belt. The largest mineral deposits discovered to date in the Highland Valley camp are those of Valley Copper (Cominco) Lornex, Highmont, and Bethlehem. The Lornex deposit lies about 1 mile beyond the most easterly boundary of the Royal claims.

Both claim groups are underlain by Bethsaida granodiorite (also called quartz monzonite) which forms the central core of the Guichon Creek batholith. The Bethsaida phase is considered to be one of the 'younger' of the several intrusives which form a nearly concentric arrangement within the batholith.

The Bethsaida granodiorite forms more than 99% of the rock exposures on the claim groups. Typically it is a leucocratic, slightly pinkish, coarse grained massive rock which is usually characterized by the presence of numerous 'books' of prismatic biotite crystals (up to 1 cm. in cross section) and large sub-rounded quartz eyes or phenocrysts. Preferential weathering of the softer minerals in the rock has often formed a rough, pebbly surface on the outcrops which is caused by the quartz grains and eyes standing out in relief.

Pink aplite dykes occur up to 15" wide, but more commonly 1" - 2" wide, and were found to intrude the Bethsaida with a northerly strike and generally a steep dip to the east.

On both claim groups, and particularly on the Royal group, many of the outcrops of Bethsaida exhibit fairly strong sericitization associated commonly with fracturing and jointing. This alteration was found to impart a greenish cast or colouration to the rock which at times could be superficially confused with malachite stain. All mineralization observed on both properties was found to be associated with, or at least in fairly close proximity to this alteration. Some epidote, chlorite, and limonite was often visible in some outcrops but secondary copper minerals such as malachite and azurite were extremely rare.

Copper mineralization was found to be very scarce on both properties and molybdenum was not observed at all. A few specks of bornite, chalcopyrite, and malachite were observed on mineral claims Royal 23, 24, 28, Lorex 9 and 34. The presence of several trenches (now caved or water-filled) on the properties suggest that copper mineralization may be more widespread and abundant than was observed this season.

GEOCHEMICAL SURVEY  
(See Plates II, V)

Sampling - Method & Analysis

Soil samples were collected at 100 foot intervals along picket lines spaced 400 feet apart employing a mattock and a stainless steel trowel. Plastic-coated gloves were used by collectors to clean the trowel and mattock after each sampling in order to minimize the possibility of contamination of succeeding samples.

The "B" horizon, buff to brown in colour, was sampled where possible and this horizon was reached at depths of 8 to 20 inches. Where the "B" horizon itself was not developed, the A<sub>2</sub> horizon was sampled. The bouldery nature of the ground often prevented sufficient depth penetration to reach the "B" soil horizon. In isolated cases where rock outcrop precluded soil development, no sample was taken. Much of the map area is swampy and consequently many of the samples contain a high proportion of relatively undecomposed organic material.

Sample collectors were required to record, on prepared sheets, all data related to topography, soil development and type of vegetation at the sample site; this information was taken into consideration in the final interpretation of the geochemical assay map.

A total of 1581 soil samples was collected on the claim groups under investigation and each was placed in a high wet strength kraft paper bag 3½" x 6-1/8" in size. These samples were permitted to dry at room temperature and then were packed for shipment to Chemex Labs Ltd., North Vancouver, for analysis of their copper and molybdenum content.

At Chemex Labs Ltd. the samples were sorted, recorded and dried at 60°C. The dried samples were then sieved to -80 mesh fraction with a nylon and stainless steel sieve. A 0.5 gram portion of the -80 mesh sample fraction was weighed, then placed in a test tube and digested with hot 70% perchloric and concentrated nitric acid. The digested sample was diluted to 25 ml. and then analyzed for copper using the Techtron A-A-3 Atomic Absorption Unit.

#### Results and Interpretation

No geochemical anomalies of significance were encountered on either property as a result of the soil sampling surveys.

The molybdenum content of the soil samples from both groups was found to be generally very low. The few isolated samples which contained molybdenum values were found to be so erratic and so widely distributed that it was considered impractical to attempt to contour them.

Examination of the copper results of all the soil samples suggests that the copper background value is about 30-40 ppm. The copper anomalies on the Lorex property were found to be relatively weak and in practically all cases were probably caused by the accumulation of copper ions in swampy ground. Several small, isolated values obtained on mineral claims IL 1 and 2 were considered to be of little importance because of their erratic distribution. One anomaly on lines 56S and 60S on Lorex 21 reached a maximum value of 320 ppm Cu (i.e. about 8 x background) in the vicinity of some caved trenches.

On the Royal group, the copper anomalies are similar in size and distribution to those occurring on the Lorex group and, like them occur in swampy ground. There are, however, two exceptions. One anomaly, centred at 6N on L90E, reaches a maximum value of 800 ppm Cu (about 20 x background); however, this anomaly is of rather limited dimensions (400' x 800'). The second anomaly at 33N on line 106E reaches a maximum value of 520 ppm Cu (i.e. 13 x background) and is located on the northeastern edge of the Royal claim group where it adjoins the Lornex property. This anomaly is also of limited dimension (300 ft. wide) and for the preceding reasons does not warrant more detailed investigation.

MAGNETOMETER SURVEY  
(See Plates III, VI)

Method

According to the aeromagnetic map #5211G published by the Department of Energy, Mines and Resources, Ottawa, the Lorex and Royal properties lie in an area of relatively low magnetic relief. Hence it was not totally unexpected that the ground magnetic surveys would not provide large magnetic anomalies.

A McPhar M700 fluxgate magnetometer was read at 100 foot stations on the picket-line grids of both claim groups. A main base station was established near the road at the west end of Pimainus Lake and the magnetometer set at a reading of 500 gammas. The magnetometer was read here hourly during the first day of the magnetic survey and a diurnal curve plotted from the recorded results. During the second day several sub-base stations were established at convenient locations

and their magnetometer readings recorded several times to arrive at an average reading for each sub-station. The sub-base stations were so located as to provide a convenient tie-in point at the beginning and end of each successive loop traversed by the magnetometer operator. At the end of each day's traverse all readings were diurnally corrected and recorded in a hard-covered field book.

#### Results and Interpretation

The magnetometer surveys indicate that the grids are underlain by rocks of relatively low magnetic susceptibility and this was substantiated by geologic mapping which showed that the entire area was occupied by Bethsaida granodiorite. The lack of sufficient magnetic contrast in the magnetometer readings made contouring of magnetic anomalies difficult. All magnetic anomalies found were very weak which was to be expected in view of the 'flat' response indicated by the aeromagnetic map described previously.

From the results of this survey, it would appear that the magnetometer failed to define target areas which might warrant further investigation.

INDUCED POLARIZATION

(See attached report by McPhar Geophysics Ltd. on the Lorex & Royal Groups)

An induced polarization geophysical survey was carried out over the properties by McPhar Geophysics Ltd. of Toronto, Ontario in the summer of 1970 for the purpose of locating and defining areas of interest which were not otherwise detectable.

On the Royal grid, IP anomaly, Zone A, as defined by McPhar Geophysics, correlates in part with a series of small discontinuous geochemical anomalies and also to an area where only a few specks of bornite and chalcopyrite were observed in sericitized Bethsaida granodiorite (See Plate I). Anomaly, Zone B, is almost completely underlain by swampy ground which is devoid of outcrop, and also correlates (rather poorly) with several small, erratically-distributed geochemical anomalies.

On the Lorex grid, the area of strongest IP response, Zone A, corresponds to a swampy area which parallels the drainage system between two small lakes. In this locality, outcrop was very scarce but what was present appeared to be locally altered with green sericite and epidote and occasionally with limonite stain. No copper minerals were observed in the outcrops. The geochemical response for this area is apparently negative as indicated by previous soil sampling by MacDonald Consultants Ltd. for Northlode Explorations Ltd. in the autumn of 1968.

There appears to be no positive geological or geochemical correlation to the IP anomalies, designated Zones B and C, on the Lorex group; however, there were some old trenches in the vicinity of Zone C which appeared to be barren of sulfides.

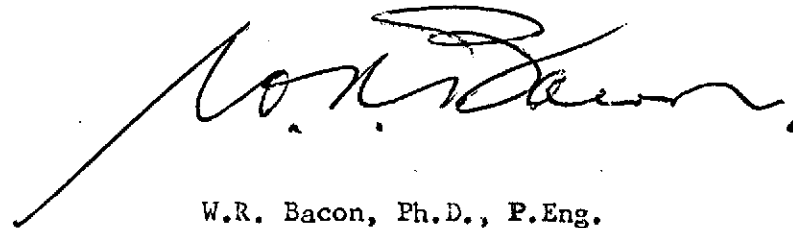
CONCLUSIONS

The results of the McPhar IP surveys indicated that all the anomalies discovered on the properties were very weak and irregular and could be caused by zones with a metallic content of less than 1% sulphides.

The magnetometer survey proved to be ineffective in locating any substantial anomalies which could have been caused by favourable geological contacts or by zones of hydrothermal alteration.

The geochemical survey produced a scattering of relatively weak, isolated and discontinuous copper anomalies, which were possibly caused by accumulations of copper ions in swamps.

Neither the geochemical and geophysical surveys nor the geology suggests that further work is warranted.



W.R. Bacon, Ph.D., P.Eng.



TABLE OF EXPENDITURES  
ON THE ROYAL GROUP (MINERAL CLAIMS ROYAL 21-40)  
IN THE HIGHLAND VALLEY AREA, KAMLOOPS M.D.  
(COMPILED BY G.D. DELANE OF BACON & CROWHURST LTD., VANCOUVER, B.C.)

I - LINECUTTING & PICKETING - by Amex Exploration Services Ltd., Kamloops

R. Spearman	)			
D. Siemens	)			
D. Ringer	)	June 1-29/70		
P. Imada	)			
C. MacDonald	)			
A. Ablett	)			
				<u>\$1,777.50</u>

II - MAGNETOMETER SURVEY

<u>Personnel</u>	<u>Dates Worked</u>	<u>No. of Days Worked</u>	<u>Rate/Day (Wages, Meals &amp; Accommodation)</u>	<u>Cost</u>
D. McNaughton	July 8, 10, 12-19	10	\$40.00	\$400.00
Rental of 4-Wheel Drive vehicle, rented 10 days @ \$20/day				200.00
Rental of McPhar M-700 Flux-gate magnetometer from McPhar Geophysics Ltd. for 10 days @ \$10/day				<u>100.00</u>
				<u>Total</u> <u>\$700.00</u>

III - GEOCHEMICAL SURVEY - SOIL SAMPLING

<u>Personnel</u>	<u>Dates Worked</u>	<u>No. of Days Worked</u>	<u>Rate/Day (Wages, Meals &amp; Accommodation)</u>	<u>Cost</u>
D. McNaughton	July 5, 30, 31 Aug. 2, 3	5	\$40.00	\$200.00
S. Stewart	July 30, 31 Aug. 2, 3, 4, 6-10	10	40.00	400.00
N. McPherson	Aug. 5-11	7	40.00	280.00
Rental of 4-Wheel Drive vehicle, 10 days @ \$20/day				200.00
Assaying & Analyses - by Chemex Labs Ltd., North Vancouver, 850 samples @ \$1.70 ea. (for Cu & Mo)				<u>1,445.00</u>
				<u>Total</u> <u>\$2,525.00</u>

IV - GEOLOGIC MAPPING - (1" = 400' scale)

<u>Personnel</u>	<u>Dates Worked</u>	<u>No. of Days Worked</u>	<u>Rate/Day (Wages, Meals &amp; Accommodation)</u>	<u>Cost</u>
G.D. Delane	Aug. 2, 3, 6-11	8	\$120.00	\$960.00
4-Wheel Drive truck rental, 8 days @ \$20/day				<u>160.00</u>
				<u>Total</u> <u>\$1,120.00</u>

V - INDUCED POLARIZATION SURVEY by McPhar Geophysics Ltd.

(See assessment details in accompanying McPhar IP Report on the Royal Group by P.G. Hallof, Ph.D., and Wm. H. Pelton, B.A.Sc., Oct. 9/70)

Total McPhar invoice for Royal Group \$4,734.37

TOTAL EXPENDITURES FOR ROYAL GROUP \$10,856.87

Declared before me at the *City*  
of *Vancouver*, in the  
Province of British Columbia, this *12th*  
day of *January*, 1971, A.D.

*C. D. Delan*

*A. Genovette*  
A Commissioner for taking Affidavits within British Columbia or  
A Notary Public in and for the Province of British Columbia.

**SUB-MINING RECORDER**

TABLE OF EXPENDITURES  
ON THE LOREX GROUP (MINERAL CLAIMS IL 1 & 2, Lorex 1-18, 21-40)  
IN THE HIGHLAND VALLEY AREA, KAMLOOPS M.D.  
(COMPILED BY G.D. DELANE OF BACON & CROWHURST LTD., VANCOUVER, B.C.)

I - LINECUTTING & PICKETING - by Amex Exploration Services Ltd., Kamloops

B. Bried	C. MacDonald	)		
G. Reeves	J. Rotzien	)		
G. Lyall	G. Siemens	)		
D. Siemens	E. Gebhardt	)	May 16 - June 19/70	<u>\$3,226.72</u>
F. Froste	J. Zuska	)		
R. Spearman	A. Ablett	)		

II - MAGNETOMETER SURVEY

<u>Personnel</u>	<u>Dates Worked</u>	<u>No. of Days Worked</u>	<u>Rate/Day (Wages, Meals &amp; Accommodation)</u>	<u>Cost</u>
D. McNaughton	July 24-29	6	\$40.00	\$240.00
4-Wheel Drive vehicle rental, 6 days @ \$20.00/day				120.00
Rental of McPhar M-700 flux-gate magnetometer from McPhar Geophysics Ltd. for 6 days @ \$10/day				<u>60.00</u>
<u>Total</u>				<u>\$420.00</u>

III - GEOCHEMICAL SURVEY - SOIL SAMPLING

<u>Personnel</u>	<u>Dates Worked</u>	<u>No. of Days Worked</u>	<u>Rate/Day (Wages, Meals &amp; Accommodation)</u>	<u>Cost</u>
D. McNaughton	Aug. 19	1	\$40.00	40.00
S. Stewart	Aug. 12-17, 28	7	40.00	280.00
N. McPherson	Aug. 12-17	6	40.00	240.00
4-Wheel Drive truck rental, 7 days @ \$20/day				140.00
Assaying & Analyses by Chemex Labs Ltd., North Vancouver, 731 samples @ \$1.70 (for Cu & Mo)				<u>1,243.00</u>
<u>Total</u>				<u>\$1,943.00</u>

IV - GEOLOGIC MAPPING - (1" = 400' scale)

<u>Personnel</u>	<u>Dates Worked</u>	<u>No. of Days Worked</u>	<u>Rate/Day (Wages, Meals &amp; Accommodation)</u>	<u>Cost</u>
D. McNaughton	Aug. 12-17, 28	7	\$40.00	280.00
G.D. Delane	Aug. 12-17, Sept. 23	7	120.00	840.00
4-Wheel Drive vehicle rental, 7 days @ \$20/day				<u>140.00</u>
<u>Total</u>				<u>\$1,260.00</u>

V - INDUCED POLARIZATION SURVEY by McPhar Geophysics Ltd.

(See assessment details in accompanying McPhar IP Report on the Lorex Group by P.G. Hallof, Ph.D., and Wm. H. Pelton, B.A.Sc., Oct. 1/70)

Total McPhar invoice for Lorex Group \$14,435.63

TOTAL EXPENDITURES FOR LOREX GROUP \$21,285.35

10,816.17  
32142.22

Declared before me at the City  
of Vancouver, in the  
Province of British Columbia, this 12<sup>th</sup>  
day of January, 1971, A.D.

*C. S. Selan*

*L. Genette*  
.....  
A Commissioner for taking Affidavits within British Columbia or  
A Notary Public in and for the Province of British Columbia,

SUB-..... REORDER





**LEGEND**

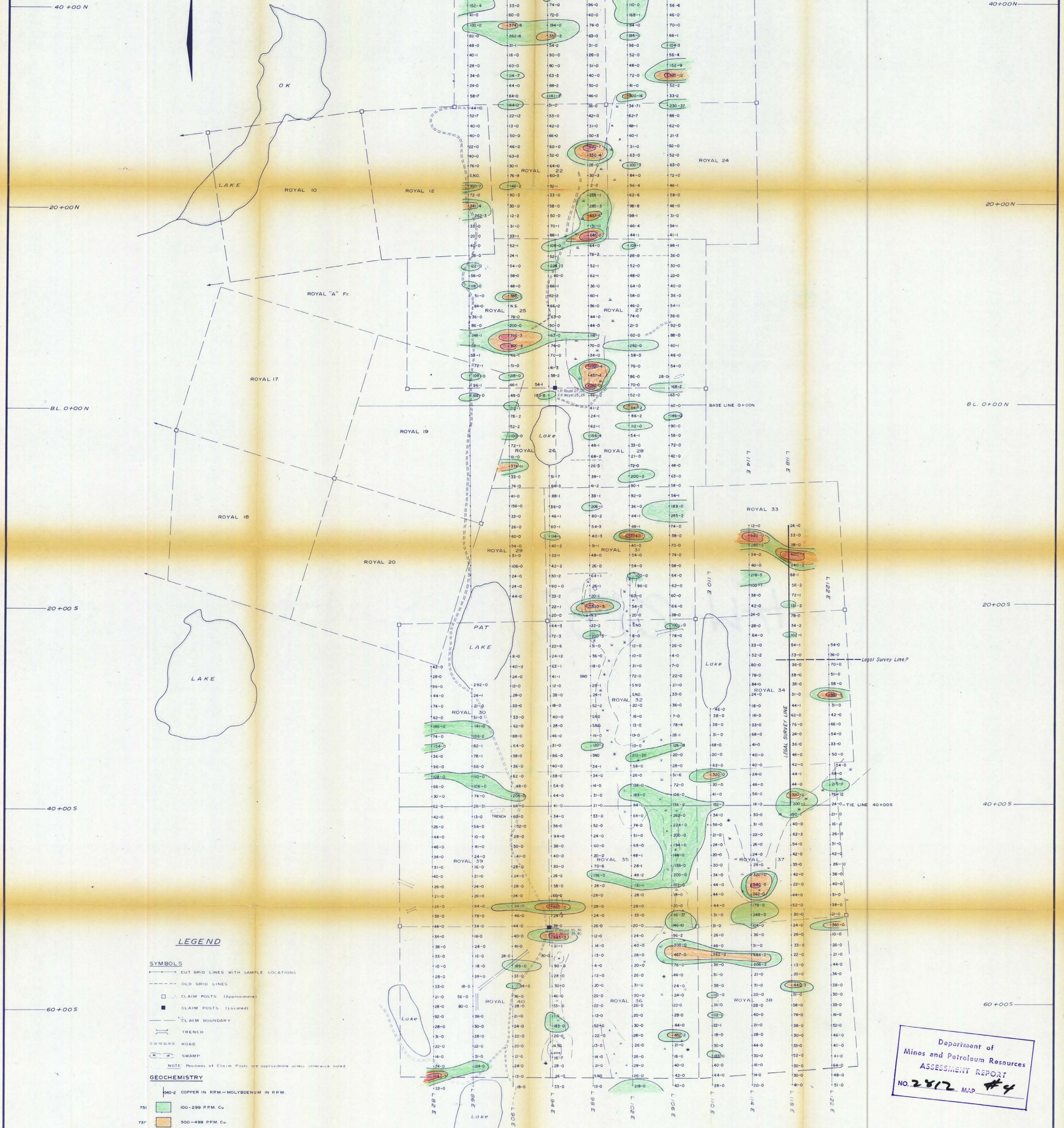
- GEOLOGY**
- BETHSAIDA GRANODIORITE
  - APLITE
  - FELDSPAR PORPHYRY
  - PYRITE, CHALCOPYRITE, BORNITE, MALACHITE
- SYMBOLS**
- CUT GRID LINES WITH SAMPLE LOCATIONS
  - OLD GRID LINES
  - CLAIM POSTS (Approximate)
  - CLAIM POSTS (Located)
  - CLAIM BOUNDARY
  - TRENCH
  - ROAD
  - SWAMP
  - OBSERVED OUTCROP
  - INFERRER OUTCROP
  - STRIKE & DIP OF JOINTS & FRACTURES
  - FAULTS (Inferred)
  - SECONDARY GROWTH TIMBER
  - GRID LINE WITH ELEVATION
- ABBREVIATIONS**
- py PYRITE
  - cpy CHALCOPYRITE
  - bor BORNITE
  - mal MALACHITE
  - No oc NO OUTCROP
  - bdry BOULDERY TILL
  - defl DEAD FALL

Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO 2812 M/P #3

PLATE I  
BACON & GROWHURST LTD.  
GREAT PLAINS DEVELOPMENT COMPANY OF CANADA LTD.  
GEOLOGICAL PLAN  
ROYAL GROUP  
ROYAL CANADIAN VENTURES PROPERTY  
HIGHLAND VALLEY AREA, KAMLOOPS M.D., B.C.  
SCALE 1" = 400'  
G.D. DELANE DEC. 1970

2812 M-3





**LEGEND**

- SYMBOLS**
- CUT GRID LINES WITH SAMPLE LOCATIONS
  - OLD GRID LINES
  - CLAIM POSTS (Approximate)
  - CLAIM POSTS (Located)
  - CLAIM BOUNDARY
  - TRENCH
  - == ROAD
  - ~ SWAMP
- NOTE: Positions of Claim Posts are approximate unless otherwise noted.
- GEOCHEMISTRY**
- 750 500-2 COPPER IN PPM-MOLYBDENUM IN PPM.
  - 751 100-299 PPM. Cu
  - 752 300-499 PPM. Cu
  - 745 500+ PPM. Cu
- NOTE: Molybdenum Samples Not Contoured
- SOIL SAMPLE COLLECTORS:**
- D. McNAUGHTON
  - S. STEWART
  - N. McPHERSON
  - G.D. DELANE
- S.N.O. SAMPLE NOT OBTAINABLE

Department of  
Mineral and Petroleum Resources  
ASSESSMENT REPORT  
NO. 2812 MAP #4

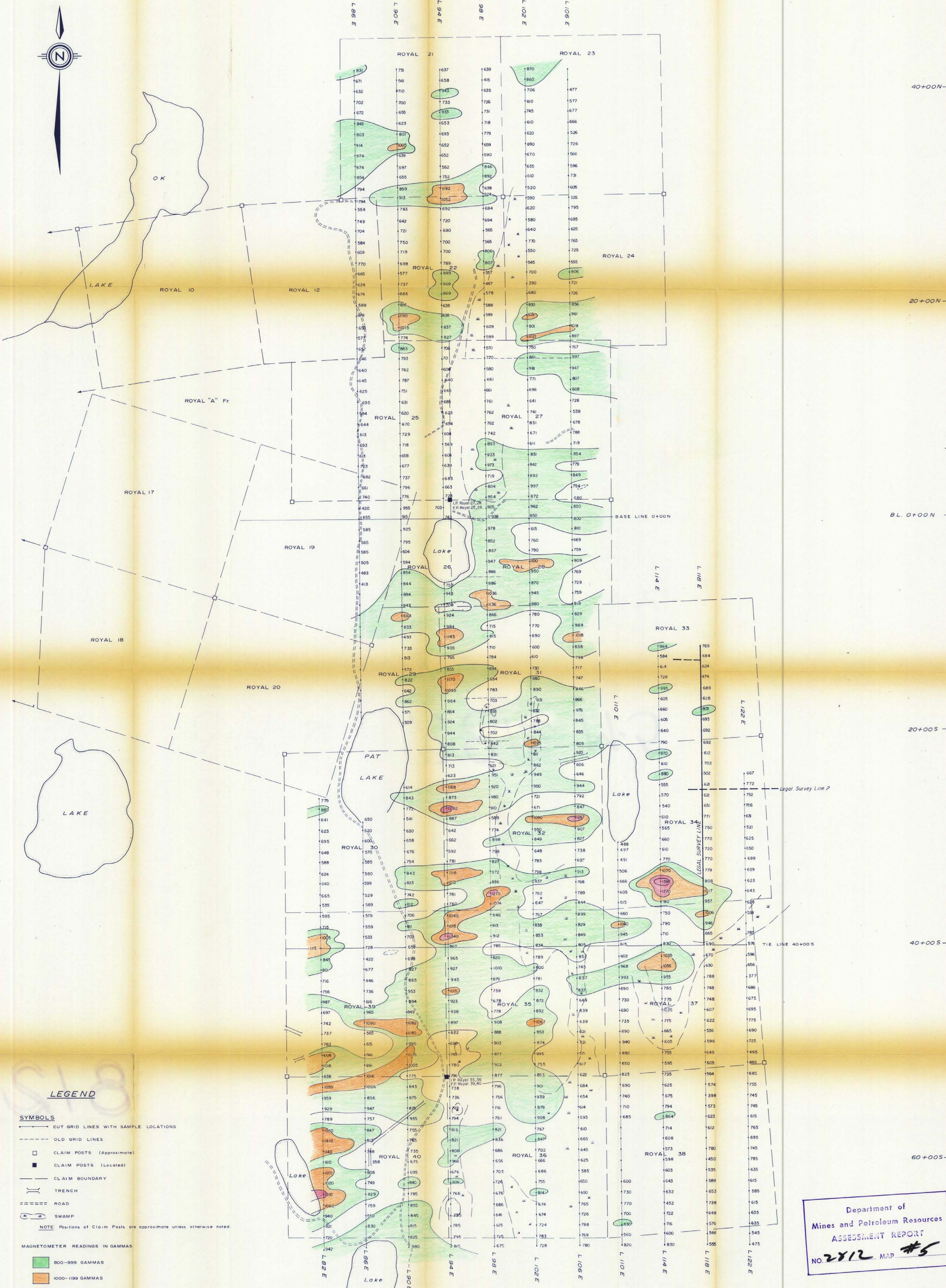
PLATE II  
BACON B. CROWHURST LTD.  
GREAT PLAINS DEVELOPMENT COMPANY OF CANADA LTD.  
GEOCHEMICAL SOIL SAMPLING ASSAY PLAN  
ROYAL GROUP  
ROYAL CANADIAN VENTURES PROPERTY  
HIGHLAND VALLEY AREA, KAMLOOPS M.D., B.C.

A-M S18 2812 M-4

SCALE 1" = 400'  
G.D. DELANE  
DEC. 1970

To accompany geological, geochemical and geophysical report by W.R. Bacon, Ph.D., P.Eng on the Royal Claim Group, Highland Valley, B.C., Kamloops M.D. Dec. 31, 1970





**LEGEND**

- SYMBOLS**
- CUT GRID LINES WITH SAMPLE LOCATIONS
  - OLD GRID LINES
  - CLAIM POSTS (Approximate)
  - CLAIM POSTS (Located)
  - CLAIM BOUNDARY
  - TRENCH
  - ==== ROAD
  - SWAMP
- NOTE: Positions of Claim Posts are approximate unless otherwise noted.
- MAGNETOMETER READINGS IN GAMMAS**
- 800-999 GAMMAS
  - 1000-1199 GAMMAS
  - 1200+ GAMMAS
  - MAGNETIC DEPRESSION
- INSTRUMENT - McPHAR M700 FLUXGATE MAGNETOMETER  
 OPERATOR - D. McNAUGHTON  
 COMPUTATIONS - D. McNAUGHTON  
 PLOTTING & CONTOURING - G.D. DELANE

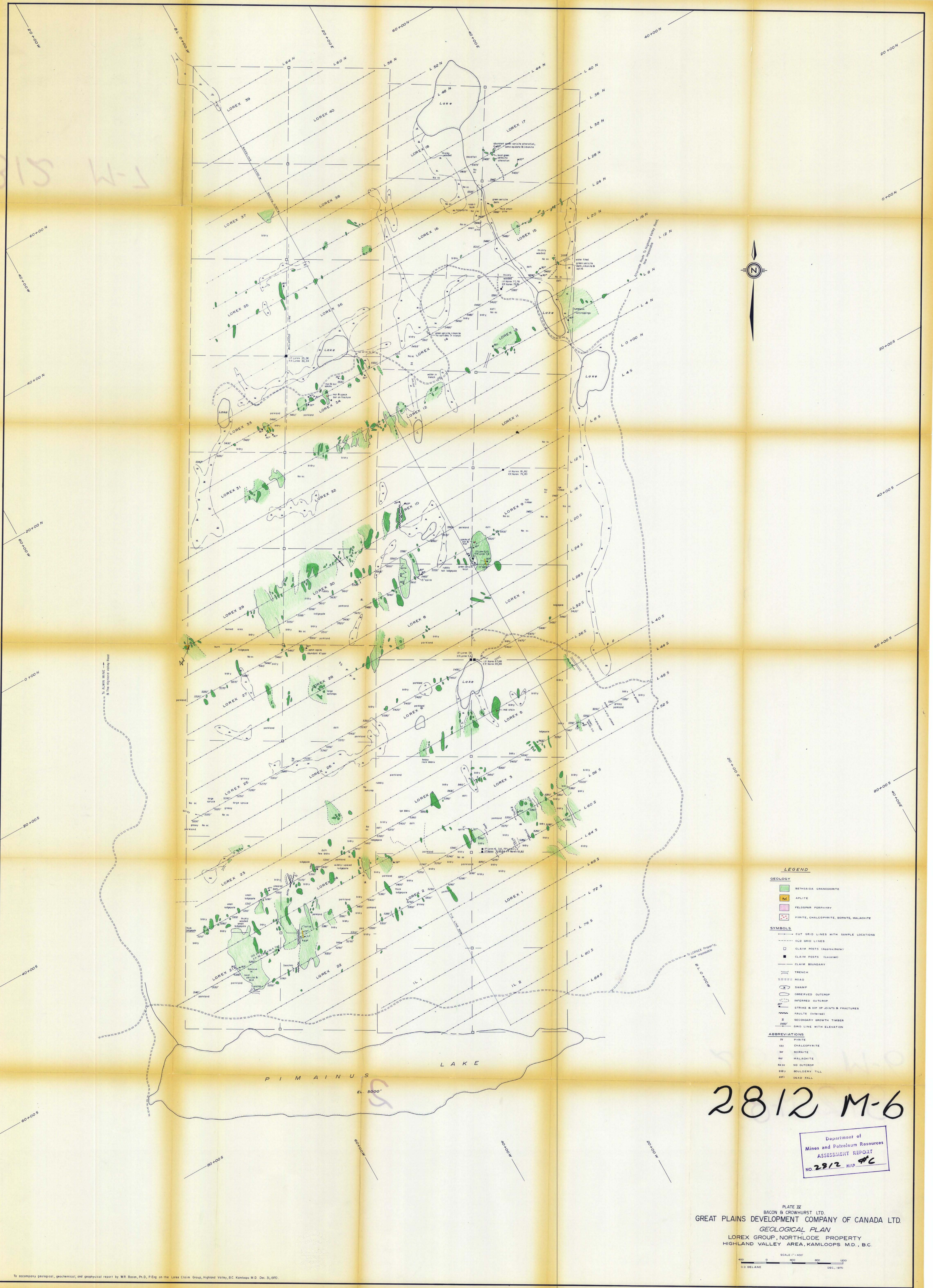
Department of  
 Mines and Petroleum Resources  
 ASSESSMENT REPORT  
 NO. 2812 MAP #5

PLATE III  
 BACON & CROWHURST LTD.  
 GREAT PLAINS DEVELOPMENT COMPANY OF CANADA LTD.  
 MAGNETOMETER SURVEY PLAN  
 ROYAL GROUP  
 ROYAL CANADIAN VENTURES PROPERTY  
 HIGHLAND VALLEY AREA, KAMLOOPS M.D., B.C.



2812 M-5





2812 M-6

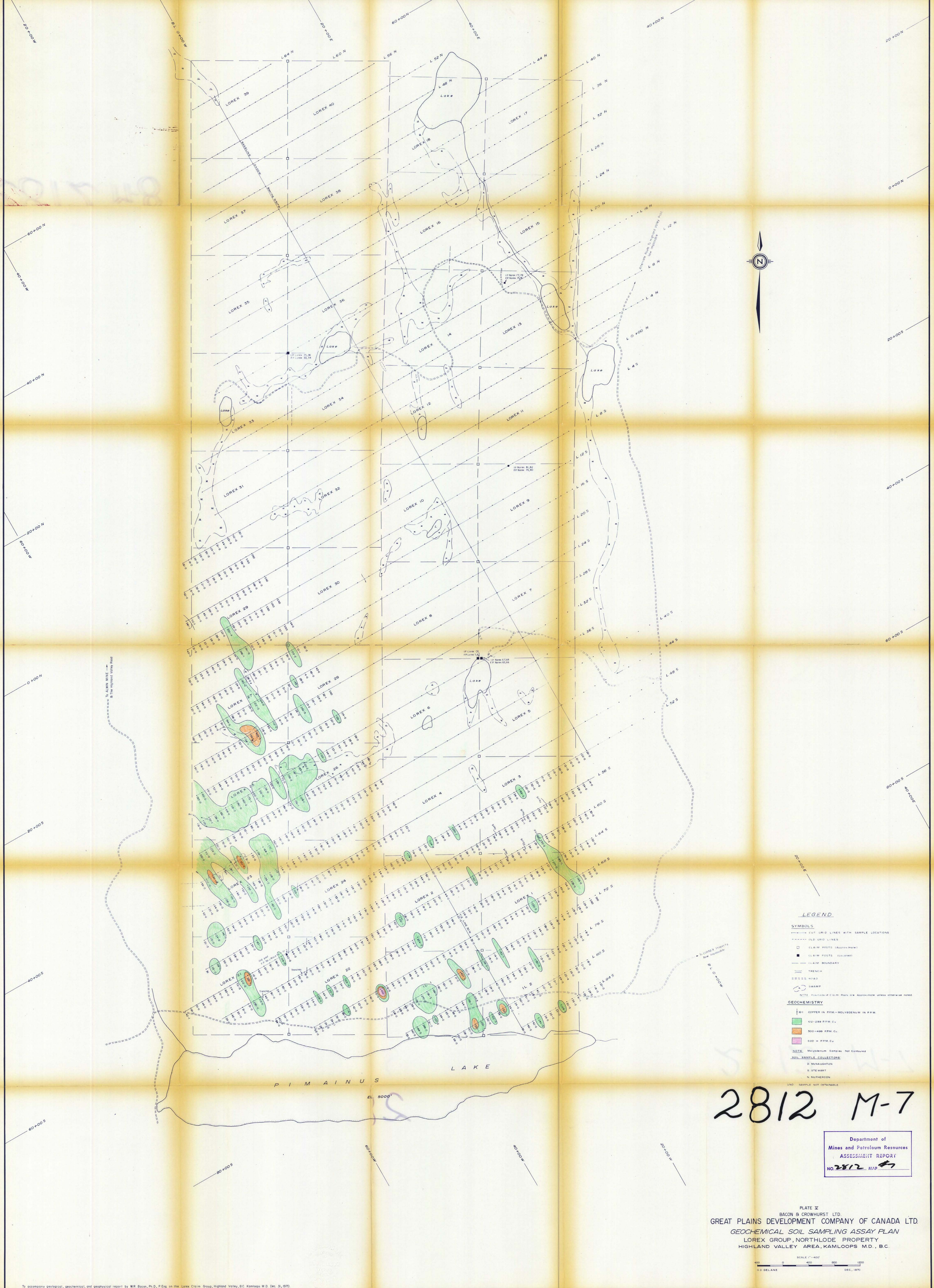
Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 2812 MAP #C

PLATE IX  
BACON & CROWHURST LTD.  
GREAT PLAINS DEVELOPMENT COMPANY OF CANADA LTD.  
GEOLOGICAL PLAN  
LOREX GROUP, NORTHLOPE PROPERTY  
HIGHLAND VALLEY AREA, KAMLOOPS M.D., B.C.

SCALE 1" = 400'  
0 400 800 1200  
D.D. DELANE DEC. 1970

To accompany geological, geochemical, and geophysical report by W.R. Bacon, Ph.D., P.Eng. on the Lorex Claim Group, Highland Valley, B.C. Kamloops M.D. Dec. 31, 1970.



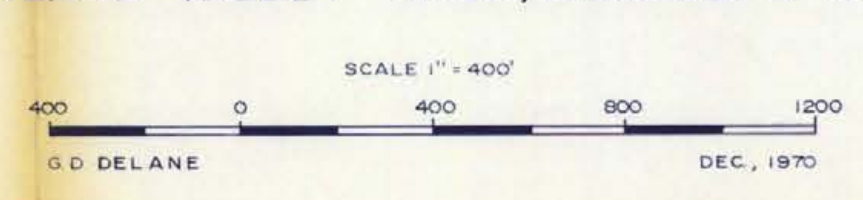


2812 M-7

- LEGEND**
- SYMBOLS**
- Solid line with dots: SURVEY LINES WITH SAMPLE LOCATIONS
  - Dashed line: OLD SURVEY LINES
  - Square with dot: CLAIM POSTS (ASBESTOS)
  - Square: CLAIM POSTS (ILLUSTRATED)
  - Line: CLAIM BOUNDARY
  - Line with cross-ticks: TRENCH
  - Circle with cross-ticks: SWAMP
  - Circle with dot: NOTE: POSITION OF CLAIM POSTS OR APPROXIMATE UNLESS OTHERWISE NOTED
- GEOCHEMISTRY**
- Green: COPPER IN PPM - MOLYBDENUM IN PPM
  - Light Green: 100-299 PPM CU
  - Orange: 300-499 PPM CU
  - Pink: 500+ PPM CU
- NOTE:** Molybdenum Samples Not Collected
- SOIL SAMPLE COLLECTION:**
- D: DRILLING
  - S: STEADY
  - N: NON-STEADY
  - ND: SAMPLE NOT OBTAINABLE

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PLATE IV  
BACON & CROWHURST LTD.  
GREAT PLAINS DEVELOPMENT COMPANY OF CANADA LTD.  
GEOCHEMICAL SOIL SAMPLING ASSAY PLAN  
LOREX GROUP, NORTHLODE PROPERTY  
HIGHLAND VALLEY AREA, KAMLOOPS M.D., B.C.



To accompany geological, geochemical, and geophysical report by W.R. Bacon, Ph.D., P. Eng. on the Lorex Claim Group, Highland Valley, B.C. Kamloops M.D. Dec. 9, 1970.

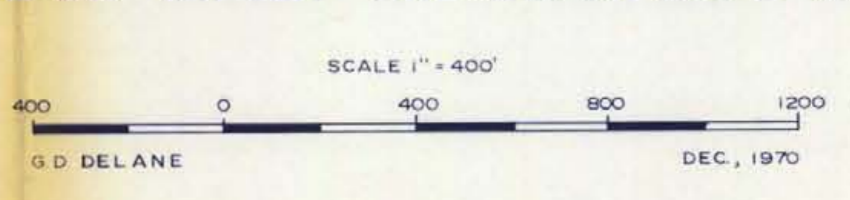




2812 M-8

Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 2812 MAP #8

PLATE III  
BACON & CROWHURST LTD.  
GREAT PLAINS DEVELOPMENT COMPANY OF CANADA LTD.  
MAGNETOMETER SURVEY PLAN  
LOREX GROUP, NORTHLODE PROPERTY  
HIGHLAND VALLEY AREA, KAMLOOPS M.D., B.C.



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