

3758

GEOCHEMICAL AND GEOPHYSICAL REPORT
ON
EMERALD GROUP
(Emerald 1-15 and Emerald 16-18 Frs)

2½ miles southeast of Aspen Grove
LAT 49°55'N, LONG 120°36'W

by
M. K. Lorimer B.A.Sc., P. Eng.
27 July, 1972

for
KRANCOR OIL AND GAS LTD. (N.P.L.)

Work done 13-29 June, 1972

92H/15E

Department of	
Mines and Petroleum Resources	
ASSESSMENT REPORT	
NO. 3758	MAP

SUMMARY

Magnetometer and geochemical surveys were made of the Emerald Group, located two and one half miles southeast of Aspen Grove, in June, 1972.

The topography varies from open range land to precipitous ridges. Much of it is wooded and extensive areas have been logged or burnt over. Overburden covers most of it but outcrops are plentiful.

The underlying rocks are volcanics, chiefly basalts and breccias. Minor copper mineralization is widespread.

The magnetometer survey located one major fault zone and several areas of low intensity which are coincident with copper geochemical anomalies. Since some of these areas are known to be underlain by volcanic breccias they are considered to be of economic interest.

An induced polarization survey of a portion of the property is recommended at an estimated cost of \$5,360.

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L. J. MANNING & ASSOCIATES LTD.

CONSULTING MINING AND GEOLOGICAL ENGINEERS

610-890 WEST PENDER STREET VANCOUVER 1, B.C.

OFFICE PHONE:
683-5661

RESIDENTIAL PHONE:
L. J. MANNING • 985-5690

July 27, 1972.

REPORT ON
A GEOPHYSICAL AND GEOCHEMICAL SURVEY
OF THE
EMERALD GROUP
NICOLA MINING DIVISION

OBJECT:

This report is submitted for the purpose of describing, and recording the results of, magnetometer and geochemical surveys carried out over the Emerald Group of mineral claims in June, 1972, and for the purpose of recording the conclusions to be drawn from these results.

LOCATION:

The group is located immediately north and west of Miner Lake, the lake occupying part of the southeast claim of the property. It is about 2½ miles southeast of Aspen Grove, a settlement on the Merritt-Princeton Highway.

By road the centre of the group is about 6 miles from Aspen Grove. Access is gained by branching off the highway 3 miles south of Aspen Grove, following the Allegne Lake road for ¾ mile and then branching northerly on the Miner Lake road. Old logging roads and a transmission line road give fair access to most of the property by 4-wheel drive vehicle.

The average elevation is about 4000 feet, the geographic location is N49°55'; W120°36'; the area is 92 H15 E of the National Topographic System and the Mining Division is Nicola.

TITLE:

The property consists of 18 located claims and fractions as follows:

<u>CLAIMS</u>	<u>RECORD NOS.</u>	<u>EXPIRY DATE</u>	<u>OWNER</u>
EMERALD 1-15	42193-42207	22 Aug 72	Krancor Oil and
EMERALD 16 Fr	55386	21 June 73	Gas Ltd. (NPL)
EMERALD 17-18 Fr	55465-6	21 June 73	

A compass and chain survey of the property made in conjunction with the laying out of an exploration grid shows the claims to be as drawn on Map 2.

A power line reserve under Order-in-Council No. 1242, dated 14 April, 1970, runs northerly through the property. It covers an area one mile wide which includes most of the claims area. Under the terms of the Order-in-Council the chief restriction will be that no mining operations can be carried out within 500 feet of the power line without the permission of the Chief Inspector of Mines.

TOPOGRAPHY:

The topography varies from open range land in the southeast to precipitous outcrops in the north. The prevailing pattern is a series of ridges and gullies striking northerly. Many of the gullies contain swamps or minor water courses. Most of the area is wooded and much of it has been logged. The south central portion is covered with fallen fire-killed trees which make walking difficult. At least 90% of the area is overburden.

GEOLOGY:

The claims are underlain by the Nicola group of Triassic age, an assemblage of mainly volcanic rocks but containing lenses of tuffaceous and argillaceous rocks and occasional beds of limestone. The volcanics include andesite, basalt, tuff and volcanic breccia. Sericite schists also occur. Other common constituents are chlorite, epidote, hematite and calcite. Quartz is comparatively scarce.

The general structure is northerly, the claims being on the western limb of a broad geosyncline. The Allison fault, a major structural feature, lies about $1\frac{1}{2}$ miles to the west. The prevailing north-south orientation of ridges and gullies and the fault scarps to the north are surface manifestations of parallel faulting within the claims area.

Locally there are many minor showings of copper minerals, usually in shear zones. Several of these were prospected in the past but the resulting pits and trenches are now sloughed or filled with water. The excavated material usually shows malachite and minor chalcopyrite.

HISTORY:

The Emerald claims are in an area about eight miles long and two miles wide which was formerly known as the Aspen Grove Copper Camp. This camp was the scene of much activity in the early years of the century and has attracted attention periodically since. It is dotted with pits, trenches and shallow shafts that show significant copper mineralization but no producing mines were ever developed.

Within the claims area numerous small excavations are indicative of prospecting activity many years ago but, with the possible exception of a water-filled shaft estimated to be 30 or 40 feet deep on the eastern boundary, there is no evidence of thorough exploration. With most of the area covered by overburden it may reasonably be assumed that the property is virtually unexplored.

1972 PROGRAMME:

In June, 1972, the present owners embarked on an exploration programme consisting of a compass and chain property survey and magnetometer and geochemical surveys.

A grid was laid out with a base-line running north from the No. 1 post of the Emerald 1 and 2 claims. It was designated 40E. From it cross-lines were run east and west at 400-foot intervals with stations staked or flagged at 200-foot intervals. All lines were located by compass and the stations set by measurement with a nylon chain. The lines were marked by blazing, flagging and minor brush-cutting.

On this grid magnetometer readings and soil samples were taken as described below.

The work was done in two periods 13-18 June and 25-29 June, 1972.

The crew consisted of:

M. K. Lorimer, P. Eng.	Instrument Supervisor	11 days
K. Koppell	Line cutter	6 days
D. Lorimer	Line cutter	4 days
E. Lorimer	Line cutter & helper	7 days
K. Field	Soil sampler	5 days

A cost summary is given as Appendix A.

MAGNETOMETER SURVEY:

A. Procedure

The survey was done with a Scintrex MF-2 Flukgate Magnetometer, Serial 002192. This instrument has a sensitivity of 200 gammas per scale division on the 10,000-gamma scale used during this survey.

Control points were established along the base-line by taking a series of readings in both directions so that each point was read twice, then adjusting the readings for diurnal changes and averaging to get values to be used for the survey. During the survey check readings were taken at control points at approximately 1-hour intervals. Diurnal changes were slight.

B. Results

The adjusted magnetometer readings are plotted and contoured on Map 3.

In general the data indicate a northerly or north-northeasterly lineation which conforms to the lineation of the topography. A pronounced lineation of high readings runs from near the centre of the property to the northern boundary. This is interpreted as indicating a major fault zone. Copper mineralization has been noted along this line, particularly in the region of lines 76 and 80N.

The various "highs" and "lows" throughout the area reflect changes in rock types. Some of the low readings were obtained over volcanic breccias, and the higher readings on line 28N were obtained over red volcanics obviously rich in iron. Some of the "lows" may indicate peaks in the underlying intrusive.

GEOCHEMICAL SURVEY:

A. Procedure

Soil horizons are poorly developed in many places. The soil varies from deep humus in low-lying areas to shallow oxidized pockets in outcrop areas. Although every attempt was made to sample below the humus this was not always possible. In most cases samples were taken about 12 inches below the surface.

A small grub hoe was used for making holes and the sample was collected with a trowel and placed in a kraft bag.

Analyses for copper and molybdenum were done by General Testing Laboratories of Vancouver. The samples were dried at 100°C and screened at 80 mesh. Decomposition was by hot HNO_3 and HClO_4 . The analytic procedures were atomic absorption for copper and colorimetric for molybdenum.

Copies of the Certificates of Analysis are attached as Appendix B.

B. Results

The results are plotted and contoured separately for copper and molybdenum on Map 4.

1. Copper

A logarithmic plot of parts per million against cumulative percentages is given in Appendix C. This plot shows a break at approximately 100 parts per million. For the purposes of this report values of 100 p.p.m. and over are regarded as anomalous.

The main areas of interest are along the eastern boundary and in the northwestern corner. However, the highest individual reading was obtained in a small anomalous area in the south central portion.

The long anomaly extending northwesterly from 28N-52E may be partly due to the drainage pattern since the area is in a broad shallow valley with known copper mineralization on the slope to the east and an old shaft at 46N-52E. Similarly, the high reading at 52N-50E, near a swamp, probably reflects

the copper mineralization exhibited in pits near 52N-48E. The reading at 56N-48E appears reasonably valid but 56N-42E is near a swamp.

The anomalies centred about 76N-48E and those in the northwest corner are all on high ground. While they may be due, in part at least, to migration, they cannot be dismissed as drainage accumulations.

The anomalies along the eastern boundary of the property show good coincidence with magnetic lows. This coincidence is particularly good from 52N-50E to 56N-48E indicating that the high readings are not entirely due to drainage.

2. Molybdenum

A logarithmic plot of molybdenum parts per million against cumulative percentages is given in Appendix C. Since the first break is at approximately 1.0 part per million, readings above this figure are regarded as anomalous.

There are two major anomalies, one in the southwestern corner, the other near the northeastern corner.

The former is by far the larger but the values are lower. It occurs in an area where copper anomalies are, with one exception, unimpressive. Better coincidence is shown in the northeast where the anomaly is stronger but smaller. As with the copper, the molybdenum occurs in areas of low magnetic intensity.

CONCLUSIONS:

The claims area is underlain by volcanic rocks whose various types and phases are reflected as areas of varying magnetic intensity. Volcanic breccias give low readings while the red and purple basaltic rocks give medium to high readings.

A lineation of magnetic highs running northerly through the north-central portion has been interpreted as a major fault zone.

In general, coincidences between magnetic "lows" and geochemical copper anomalies are good, suggesting that breccias are favourable copper horizons. The same coincidences show that the copper is not associated with magnetite.

In the northeast part of the property there is a coincidence of copper and molybdenum anomalies with a magnetic low which is of interest. The large molybdenum anomaly in the south-west corner is probably of no economic importance since there appears to be a dearth of copper in this area.

The data obtained from the magnetometer and geochemical surveys indicate that the northern half and a strip along the eastern boundary merit further exploration.

RECOMMENDATIONS:

In accordance with the foregoing discussion and conclusions it is recommended:

1. That an induced polarization survey be made of the area from line 52N to line 88N inclusive and extending from the eastern to the western boundaries.
2. That test induced polarization traverses be run on lines 28, 36 and 44N from the base-line to the eastern boundary and that, if results are favourable, the intermediate lines be run as well.
3. That test drilling be carried out in any target areas located by this survey.

COSTS:

The estimated costs of the recommended programme are:

Reflagging and cutting lines to I.P. standards	\$ 500
I.P. survey: 7 line-miles @ \$400	2,800
Mobilization and demobilization	320
Truck rental	250
Engineering and supervision	1,000
Misc. and contingencies @ 10%	<u>490</u>
TOTAL	<u>\$5,360</u>

Yours truly,

L. J. MANNING & ASSOCIATES LTD.



M. K. Lorimer, P. Eng.

CERTIFICATE OF QUALIFICATIONS

I, MALCOLM KEITH LORIMER, of the City of Vancouver, Province of British Columbia, Mining Engineer, hereby certify:

1. THAT I am a practicing Mining Engineer and reside at 3082 West 27th Avenue, Vancouver, B.C.
2. THAT I am a graduate in Mining Engineering of the University of British Columbia, Bachelor of Applied Science, 1950 and have been practicing my profession for over twenty-two years.
3. THAT I am a member of the Association of Professional Engineers of the Province of British Columbia.
4. THAT I am a member of the Canadian Institute of Mining and Metallurgy.
5. THAT I am an associate of the firm of L. J. Manning & Associates Ltd., Consulting Mining Engineers, of 310 - 890 West Pender Street, Vancouver 1, B.C.
6. THAT the following is a true record of my employment and experience:

1950 - 52	General engineering, Consolidated Mining and Smelting Company of Canada Limited, Kimberley, B.C.
1952 - 56	Chief Engineer, Pioneer Gold Mines of B.C. Ltd., Pioneer Mines, B.C.
1956 - 57	Chief Engineer, Buchans Mining Co. Ltd. Buchans, Nfld.
1957 - 59	Chief Engineer and Mine Superintendent, Cowichan Copper Co. Ltd., Cowichan Lake, B.C.
1959 - 65	General Exploration work for various companies mostly in southern British Columbia.
1965 - Present	Associate, L. J. Manning & Associates Ltd., Vancouver.

7. THAT I have no direct or indirect interest in the properties or securities of Krancor Oil and Gas Ltd. (N.P.L.) or any of its affiliates nor do I expect to acquire any.

DATED at Vancouver, British Columbia, the 20th day of July, 1972



M. K. Lorimer, B.A.Sc., P. Eng.

COST SUMMARY

Field: M. K. Lorimer 12 $\frac{1}{4}$ days @ \$100	\$1,225.00
K. Rebel 62 hours @ \$3.75	232.50
D. Lorimer 40 hours @ \$3.75	150.00
E. Lorimer 72 hours @ \$3.75	270.00
K. Field 55 hours @ \$3.75	206.25
Vehicle rentals	263.62
Accommodation 95.55 + 35.70 + 54.60	185.85
Meals 66.00 + 186.00	252.00
Magnetometer rental	170.00
319 soil assays @ \$2.85	909.15
Miscellaneous supplies	48.44
Report: Field note reductions, plotting, contouring, interpretation and writing. 5 days @ \$150	750.00
Drafting, etc. 4 days @ \$50	<u>200.00</u>
TOTAL	\$4,862.81

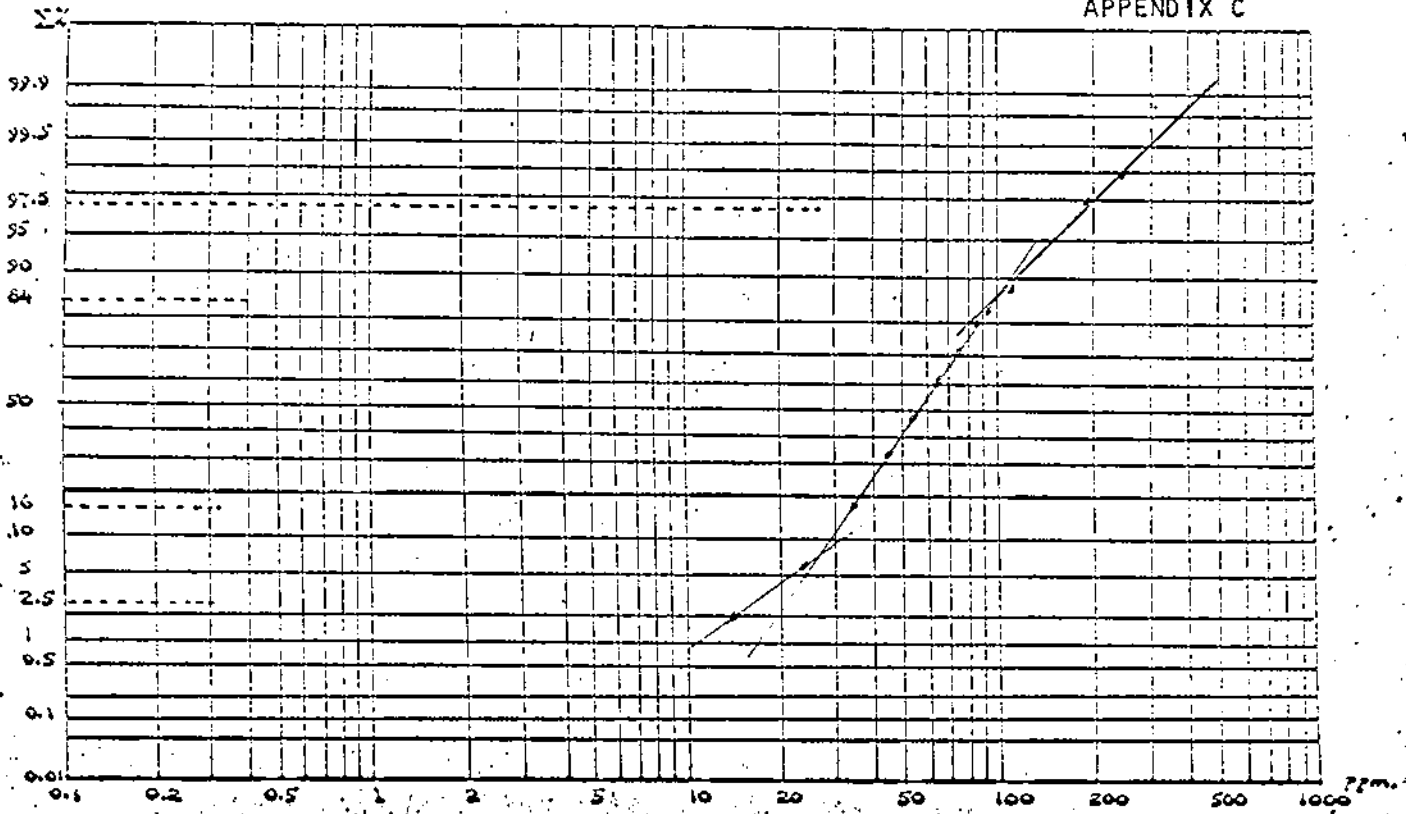
Declared before me at the *City*
of *Manowai*, in the
Province of British Columbia, this *1st*
day of *August* 19*72*, A.D.

McLennan

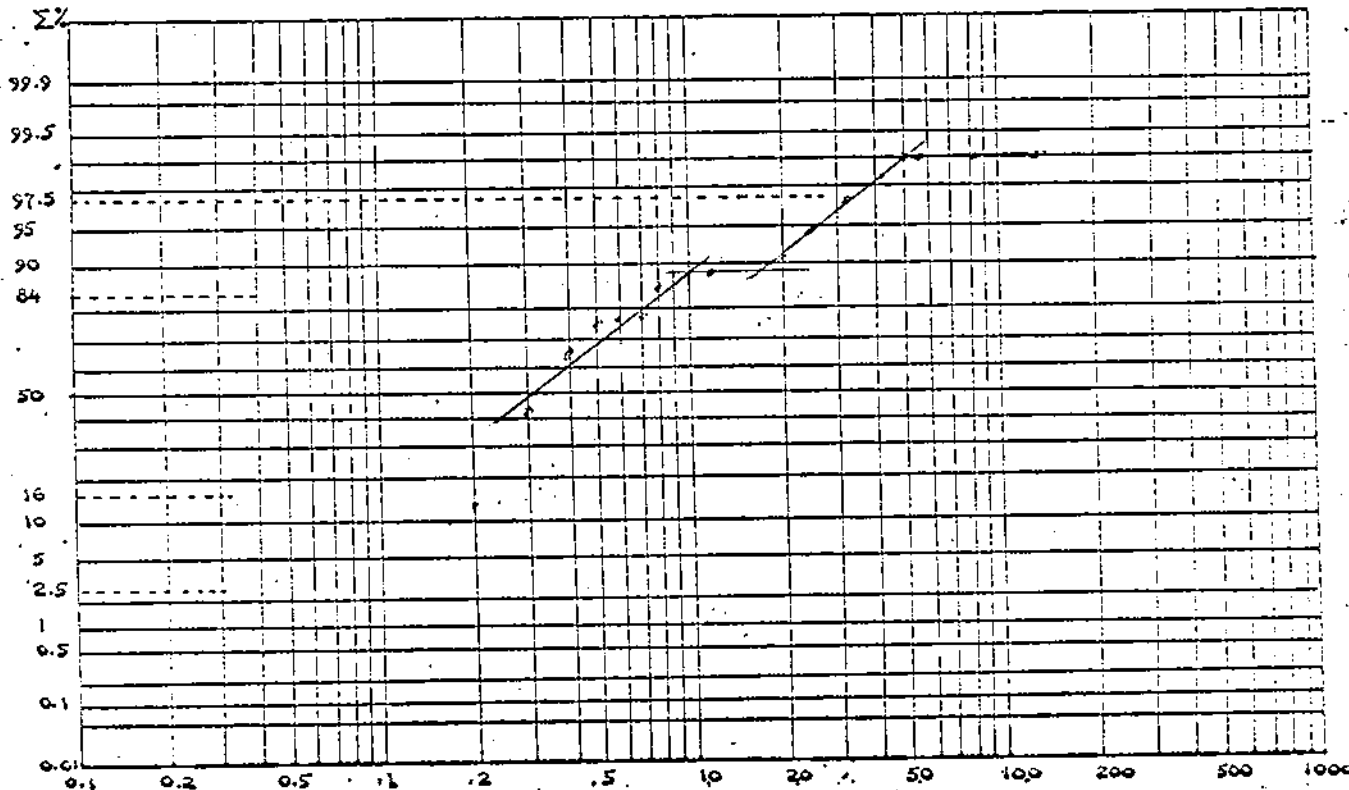
G. Phillips

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

SUB-MINING RECORDER



COPPER



MOLYBDENUM

Certificate of Analysis

APPENDIX B

GENERAL TESTING LABORATORIES DIVISION SUPERINTENDENCE COMPANY (CANADA) LTD.



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VANCOUVER MERCHANTS EXCHANGE

July 11, 1972

L. J. Manning & Associates
310 - 800 W. Pender St.
VANCOUVER, B.C.

No.7207 - 0518

ATTENTION: Mr. Les Manning

WE hereby certify that the following are the results of assays made by us upon submitted geochemical samples:

Mark	Copper (%) PPM	Molybdenum (%) PPM	Mark	Copper (%) PPM	Molybdenum (%) PPM
8 24	45	2.5	16 26	60	3.3
8 26	38	0.4	16 28	81	0.4
8 28	48	0.4	16 30	48	3.3
8 30	40	1.7	16 32	40	0.5
8 32	65	0.8	16 34	90	0.4
8 34	73	2.5	16 36	45	3.3
8 36	80	1.7	16 38	100	0.4
8 38	68	4.2	16 40	20	1.7
8 40	65	1.3	16 42	78	0.4
			16 44	70	1.7
12 24	48	4.2	20 22	65	2.5
12 26	43	0.4	20 24	88	3.3
12 28	48	0.4	20 26	100	3.3
12 30	60	0.4	20 28	75	1.3
12 32	50	2.5	20 30	75	4.3
12 34	78	0.2	20 32	65	4.2
12 36	73	2.5	20 34	145	1.3
12 38	70	5.0	20 36	73	3.3
12 40	88	2.5	20 38	70	2.5
12 42	53	4.2	20 40	453	2.5
12 44	75	0.4			
16 22	48	1.7	20 42	88	1.3
16 24	55	0.8	20 44	63	0.4
16 26	60	3.3	20 50	68	3.3
			20 52	53	2.5

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No. 7207-0511/2

Mark	Copper (%)/PPM	Magnesium (%)/PPM	Mark	Copper (%)/PPM	Magnesium (%)/PPM
24 22	60	1.3	28 44	118	0.2
24 24	45	4.2	28 46	115	0.5
24 26	63	2.8	28 48	75	0.2
24 28	125	5.0	28 50	48	0.4
24 30	28	2.5	28 52	128	0.4
24 32	43	5.8	32 22	50	0.2
24 34	58	1.7	32 24	58	0.4
24 36	93	0.8	32 26	70	0.2
24 38	48	0.4	32 28	50	0.2
24 40	113	0.2	32 30	35	0.4
24 42	148	0.2	32 32	58	0.4
24 44	50	0.3	32 34	25	0.2
24 46	75	0.4	32 36	38	0.4
24 48	73	0.8	32 38	145	0.2
24 50	60	0.3	32 40	65	0.3
24 52	58	0.3	32 42	53	0.2
28 22	110	0.4	32 44	45	0.3
28 24	20	0.4	32 46	65	0.2
28 26	20	0.8	32 48	85	0.8
28 28	35	0.4	32 50	128	0.8
28 30	38	0.4	32 52	85	0.2
28 32	45	0.3	36 22	40	0.2
28 34	98	0.4	36 24	113	0.4
28 36	55	0.8	36 26	40	0.3
28 38	45	0.4	36 28	35	0.2
28 40	60	0.3	36 30	38	0.3
28 42	83	0.4			

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No. **7205-0518/3**

Mark	Copper (%)	Molybdenum (%)	Mark	Copper (%)	Molybdenum (%)
36 32	45	0.2	44 32	100	0.34
36 34	43	0.3	44 34	50	0.4
36 36	85	0.4			
36 38	85	0.4			
36 40	85	0.4			
36 42	85	0.4			
36 44	78	0.4			
36 46	78	0.4			
36 48	78	0.4			
36 50	78	0.4			
36 52	78	0.4			
36 54	78	0.4			
36 56	78	0.4			
36 58	78	0.4			
36 60	78	0.4			
36 62	78	0.4			
36 64	78	0.4			
36 66	78	0.4			
36 68	78	0.4			
36 70	78	0.4			
36 72	78	0.4			
36 74	78	0.4			
36 76	78	0.4			
36 78	78	0.4			
36 80	78	0.4			
36 82	78	0.4			
36 84	78	0.4			
36 86	78	0.4			
36 88	78	0.4			
36 90	78	0.4			
36 92	78	0.4			
36 94	78	0.4			
36 96	78	0.4			
36 98	78	0.4			
36 100	78	0.4			
44 22	43	0.4			
44 24	50	0.4			
44 26	73	0.3			
44 28	33	0.3			
44 30	60	0.3			

THIS COMPANY ACCEPTS NO RESPONSIBILITY EXCEPT FOR THE DUE PERFORMANCE OF INSPECTION AND/OR ANALYSIS IN GOOD FAITH AND ACCORDING TO THE RULES OF THE TRADE AND OF SCIENCE.

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July 12, 1972

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No. 7207-0518/4

Mark	Copper (GAL)PM	Molybdenum (MG)PM	Mark	Copper (GAL)PM	Molybdenum (MG)PM
52 22	58	0.4	56 44	70	0.3
52 24	50	0.3	56 46	75	0.3
52 26	65	0.2	56 48	263	0.4
52 28	78	0.4	56 50	63	0.3
52 30	70	0.3			
52 32	70	0.4	60 18	28	0.3
52 34	50	0.3	60 20	50	0.2
52 36	68	0.7	60 22	45	0.4
52 38	83	0.3	60 24	48	0.2
52 40	40	0.4	60 26	48	0.2
52 42	85	0.3	60 30	40	0.3
			60 32	75	0.2
52 44	58	0.3	60 34	65	0.3
52 46	70	0.3	60 36	50	0.4
52 48	50	0.2	60 38	68	0.5
52 50	225	0.2	60 40	50	0.3
			60 42	45	0.2
56 18	50	0.2	60 44	115	0.3
56 20	28	0.3	60 46	55	0.3
56 22	48	0.3	60 48	83	0.4
56 24	120	0.3	60 50	58	0.2
56 26	178	0.2			
			64 18	45	0.3
56 28	53	0.2	64 20	53	0.4
56 30	73	0.4	64 22	83	0.2
56 32	130	0.4	64 24	53	0.2
56 34	198	0.3	64 26	58	0.2
56 36	60	0.3	64 30	70	0.2
			64 32	30	0.2
56 38	103	0.3	64 36	55	0.3
56 40	38	0.3	64 38	55	0.3
56 42	280	0.2	64 40	73	0.3
			64 42	68	0.2

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July 11, 1972

L.J. Manning & Associates
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Vancouver, B.C.

No. 7207-0518/5

ATTENTION: Mr. Lou Manning

WE HEREBY CERTIFY that the following are the results of assays made by us upon submitted geochemical samples:

Marks	Copper (Cu) PPM	Niobium (Nb) PPM	Marks	Copper (Cu) PPM	Niobium (Nb) PPM
64 44	40	0.3	72 18	88	85
64 46	38	0.5	72 20	60	0.4
64 48	80	0.3	72 22	88	0.3
64 50	40	0.3	72 24	98	0.5
68 18	68	0.4	72 26	118	0.3
68 20	95	0.3	72 28	97	0.3
68 22	48	0.4	72 30	63	0.2
68 24	53	0.4	72 32	46	0.5
68 26	45	0.2	72 34	65	0.3
68 28	88	0.3	72 36	90	0.7
68 30	158	0.3	72 38	110	0.3
68 32	260	0.2	72 40	90	0.3
68 34	35	0.8	72 42	78	0.5
68 36	90	0.3	72 44	70	0.3
68 38	28	0.4	72 46	143	0.3
68 40	88	0.2	72 48	98	0.5
68 42	43	0.4	72 50	50	0.4
68 44	98	0.3	76 18	103	0.3
68 46	55	0.3	76 20	100	0.3
68 48	60	0.3	76 22	113	0.8
68 50	133	0.3	76 24	65	0.3
76 40	50	0.2	76 26	58	0.3
76 42	53	0.5	76 28	70	0.3
76 44	50	12.1	76 30	40	0.4
76 46	45	8.4	76 32	30	0.4
76 50	168	0.8	76 34	58	0.4
			76 36	53	0.5
			76 38	30	0.4

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7207-0518/6

No.

Marks	Copper (Gm) PPM	Molybdenum (PPM) PPM	Marks	Copper (Gm) PPM	Molybdenum (PPM) PPM
80 18	103	0.7	92 40	70	0.2
80 20	55	0.5			
80 22	123	0.3			
80 24	40	0.7	84 18	135	0.3
80 26	25	1.7	84 20	25	0.8
			84 22	45	0.3
80 28	68	1.7	84 24	145	0.5
80 30	65	0.8	84 26	55	0.8
80 32	50	0.8			
80 34	178	1.2	84 28	75	0.8
80 36	38	0.7	84 30	65	0.3
			84 32	13	0.3
80 38	83	0.8	84 34	33	0.3
80 40	99	0.5	84 36	190	0.3
80 42	83	0.8			
80 44	228	1.2	84 40	113	0.5
80 46	83	0.8	84 44	55	0.3
			84 46	50	0.8
80 48	215	0.5	84 48	70	0.3
80 40	55	0.3	84 50	48	1.2
80 44	70	0.4			
80 46	150	0.5			
80 50	80	1.2			
92 18	75	0.4	88 18	178	0.8
92 20	100	0.8	88 20	30	0.3
92 22	40	0.5	88 22	65	0.8
92 24	28	0.3	88 24	115	0.4
92 38	85	0.3	88 26	158	0.8

...7

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No. **7207-0518/7**

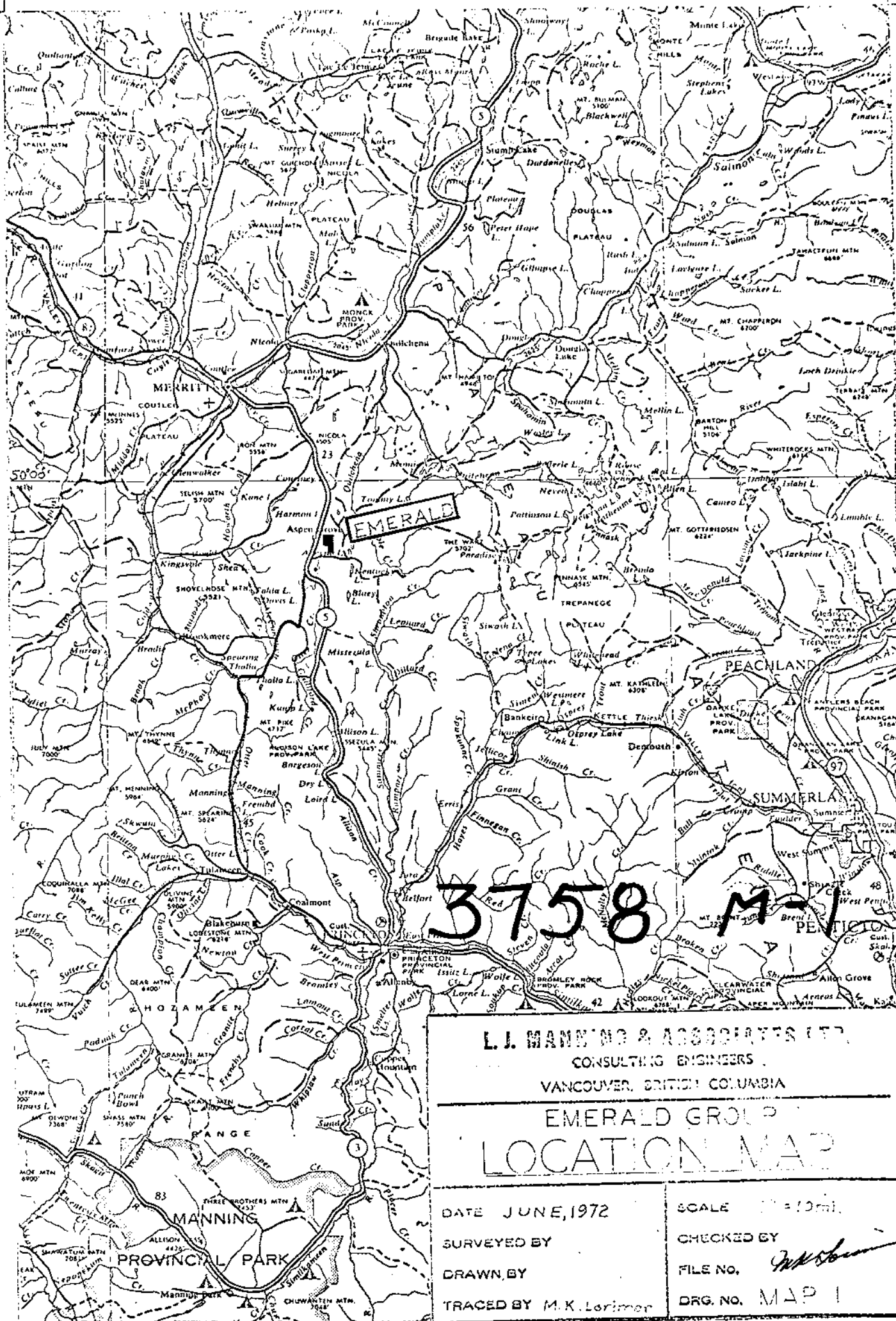
L.J. Manning
& Associates

Marka	Copper (G/L)	Molybdenum (PPM)
88 28	93	0.3
88 30	73	0.8
88 32	58	0.8
88 34	53	0.8
88 36	18	0.2
88 38	55	0.3

DECOMPOSITION - HOT - HNO_3 $HClO_4$
PROCEDURE - Gs AA
No Colorimetric

GENERAL TESTING LABORATORIES DIVISION
SUPERINTENDENCE COMPANY (CANADA) LTD.

per H. Sharples
H. Sharples - Provincial Assayer



3758 M-V

<p>L. J. MANNING & ASSOCIATES LTD. CONSULTING ENGINEERS VANCOUVER, BRITISH COLUMBIA</p>	
<p>EMERALD GROUP LOCATION MAP</p>	
<p>DATE JUNE, 1972</p>	<p>SCALE 1" = 10mi.</p>
<p>SURVEYED BY</p>	<p>CHECKED BY</p>
<p>DRAWN BY</p>	<p>FILE NO. <i>W. J. Manning</i></p>
<p>TRACED BY M. K. Lorimer</p>	<p>DRG. NO. MAP 1</p>

3758

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3758 MAP #1

Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 3758 MAP #2



MAP 2
 WARRIOR OIL AND GAS LTD (WOG)
 EMERALD GROUP
 PROPERTY MAP
 Scale: 1"=1000'
 Drawn: M.K. Lorimer July, 1972
 LITTONING AND ASSOCIATES LTD

Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 3758 MAP #3

LEGEND
 2000-2500
 2500-3000
 3000-3500
 Above 3500
 Contour Interval 100

Adrian



MAP 3
 SECTION 34 & 35 (100' INT.)
 EMBUDO GROUP
 MAGNETOMETER SURVEY
 Scale 1"=100'
 Drawn: M.A. Larimer July 1952
 Litho: J. HARRIS & ASSOCIATES LTD.

3758 MOLYBDENUM

M-4 GEOCHEMICAL SURVEY

EMERALD GROUP
Scale: 1" = 1000'
Drawn: M. K. Lorrimer
July, 1952
LEMMING AND ASSOCIATES, LTD.



MAP 4



COPPER

[Handwritten signature]

