

2541

PROPERTY EVALUATION
HUB - PUB CLAIMS
ATLIN MINING DIVISION
BRITISH COLUMBIA

for

PANTHER MINES LTD.

by

JOHN R. POLONI

GEOLOGIST

CREST DEVELOPMENTS LTD.

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copy of report

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Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 2541

INTRODUCTION

A property evaluation was conducted on the Hub 1-8 and Pub 1-16 claims during the period July 1-8, 1970 by the author in accompaniment with Mr. Mike Nichiporick, the locator of the claims.

Access was facilitated by use of a 4X4 truck obtained in Whitehorse. Several compass traverses were conducted both east-west and north-south across the claim groups. Soil samples were taken at intervals of 300' on the east-west traverses to examine the area geochemically. Geological mapping was undertaken along the traverses where good rock exposures were found.

LOCATION AND ACCESS

The claim groups are located at approximately latitude 59° 40 minutes and longitude 133° 25 minutes, ^{19.} between Ruby and Cracker Creeks, at 3 miles north of Surprise Lake. (Map #1)

Access to the claims from Atlin is by Surprise Lake road a total of 16 miles to Ruby Creek. A road suitable for 4-wheel drive vehicles continues over Ruby Creek to the east, to Hub 6 and 7 claims, a distance of 1 mile.

A gravel airstrip is situated 5 miles east of Atlin along the Surprise Lake road. Float planes are based at Atlin.

Atlin, the only hamlet in the area, has very few facilities for accommodation or for obtaining supplies for exploration crews. The one small restaurant is inadequate to feed exploration

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personnel. Limited food supplies are obtainable from a small grocery store located in the village. Government facilities consisting of a liquor store, an R.C.M.P. detachment and a provincial land agent and mining recorder are present.

Atlin is connected to mile 866 on the Alaska Highway by a well-maintained gravel road, a distance of 61 miles. Whitehorse is at mile 914 a distance of 48 miles to the north, where all necessary supplies can be obtained.

HISTORY

Gold was first reported on Pine Creek in 1896, having been discovered by Fritz Miller and Kenneth McLaren. By 1899 the population of the immediate district reached 5,000 persons.

Examinations by the Geological Survey of Canada were initially undertaken in 1899 by J. C. Gwillim. Further work was undertaken by D.D. Cairnes (1913), W.E. Cockfield (1925), and J.D. Aitken 1951-58, Memoir 307 (1959).

Exploration activity was commenced in 1921 near Crater Creek, on silver-lead veins, on ground that became Atlin-Ruffner Mines Ltd. in 1930. In 1950 a tungsten showing was examined in detail at the head of Boulder Creek by Transcontinental Resources Ltd. Adanac molybdenite property located at the head of Ruby Creek is being extensively examined at the present time by Kerr Addison Mines Ltd.

The Hub 1-8 and Pub 1-16 claims are located approximately 1 1/2 miles east of the Adanac property.

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CLAIMS

<u>Claim No.</u>	<u>Record No.</u>	<u>Expirery Date</u>
Hub # 1	8819	April 17, 1970
" 2	8820	"
" 3	8821	"
" 4	8822	"
" 5	8823	"
" 6	8824	"
" 7	8825	"
" 8	8826	"
Pub # 1	13353 K	Aug. 8, 1970
" 2	13354 K	"
" 3	13355 K	"
" 4	13356 K	"
" 5	13357 K	"
" 6	13358 K	"
" 7	13359 K	"
" 8	13360 K	"
" 9	13361 K	"
" 10	13362 K	"
" 11	13363 K	"
" 12	13364 K	"
" 13	13365 K	"
" 14	13366 K	"
" 15	13367 K	"
" 16	13368 K	"

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Certificates of work # 6823 -
6830 inclusive were issued by the Mining Recorder in Atlin. The claims are located on Map No. 78 M1 of the Atlin Mining Division of British Columbia.

REGIONAL GEOLOGY (AFTER AITKEN 1959)

The oldest rocks of the map area as determined by Aitken (1959) are schists and gneisses of the Yukon group which are thick sequences of sedimentary rocks of Precambrian or Palaeozoic Age. The Sylvester group consisting of metamorphosed sedimentary and volcanic rocks may be of a similar age. These units were folded and metamorphosed, and the Yukon group was intruded by quartz monzonite. Subsequent deposition of volcanic and marine sedimentary rocks and intrusion of the Atlin ultramafic occurred during Pennsylvanian and Permian periods. Folding then occurred followed by the accumulation during the Triassic of the group termed undifferentiated, consisting mainly of volcanic rocks.

Marine sedimentary rocks of the Laberge group are thought by Aitken to have been deposited conformably on rocks of Triassic age. These rocks were folded prior to intrusion of the Surprise Lake batholith and Coast intrusions which occurred in the Triassic and Cretaceous epochs.

The Sloko group rocks, consisting of dikes and sills of basalt, andesite, rhyolite, dacite, tuff and breccia and derived conglomerate and sandstone sequences followed during the Cretaceous or Tertiary. Erosion followed, generally, except for minor extrusion of basalt.

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LOCAL GEOLOGY

The claims are underlain by rocks of Pennsylvanian, Permian, Cretaceous and Quaternary Ages consisting of gabbro, alaskite, serpentinized peridotite, chert, argillite, greenstone, volcanic breccia, and limestone. The units of interest at the Adanac property are alaskite and quartz monzonite where the presence of molybdenite is being investigated by drilling, and bulk sampling from underground drifting.

The Hub and Pub claims are located over the contact zones between alaskite-peridotite; alaskite-(gabbro; greenstone); alaskite-chert; and peridotite-(gabbro; greenstone). Map #2. These contact areas are places of interest for examination for molybdenite mineralization. Limestone was also noted in the field. A tungsten showing is shown in G.S.C. Map #1082A but this was not seen.

GEOCHEMICAL SAMPLING

A total of 55 soil samples were taken of material from the B horizon @ approximately 300' intervals on two traverses run over the Pub and Hub claims. These were assayed for copper-molybdenite content in ppm. Map #4. Profiles have been plotted for the copper values, which show interesting results on the Hub 3, 4 and Hub 7, 8 claims.

Samples of alaskite float containing molybdenite were found on Line 1 but no mineralization was found in place. Chalcopyrite and pyrrhotite in volcanic and sedimentary rocks were also found in float. Maps #3, 4.

GEOLOGICAL MAPPING

Limited geological mapping was conducted along the traverse lines to locate contacts and examine the rock types found on the claims. A geological sketch Map #5 is included to roughly indicate the location of the various units seen. Rock outcrops are abundant on the upper slopes covered by the claims, and it is felt that the scree or talus slopes form only a light cover over the buried rock units.

ECONOMIC GEOLOGY

Molybdenite mineralization has been discovered on the Adanac property to the west of the Hub and Pub claims. The host rock is a transitional type between alaskite and quartz monzonite. Alaskite in contact with sedimentary and ultra basic rocks is found on the Hub and Pub claims. Alaskite float with molybdenite mineralization has been found on the Hub claims. Sedimentary and volcanic float containing chalcopyrite and pyrrhotite has also been found. A minor zone of serpentization containing thin seams of asbestos is seen on line #1. This appears to be fault or contact controlled.

The tungsten showing reported on G.S.C. Map 1082A was not seen.

Veins, containing silver and lead, are reported to occur to the west of the tarn located on Pub #16, but these were not seen because of snow cover.

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CONCLUSIONS

The contact zones between Alaskite and the ultrabasic and sedimentary units are areas of interest for prospecting for molybdenite mineralization.

The results of the soils survey are sufficiently encouraging to indicate further geochemical surveying is necessary. Maps # 6, 7.

Molybdenite mineralization as found in Alaskite float, indicates that follow up geological mapping and prospecting is necessary.

A report of veins, containing silver-lead values, having been discovered on the Pub #15 and #16 claims requires further investigation.

RECOMMENDATIONS

A detailed examination of the Hub
and Pub claim is warranted.

Following is a summary of the expected
costs:

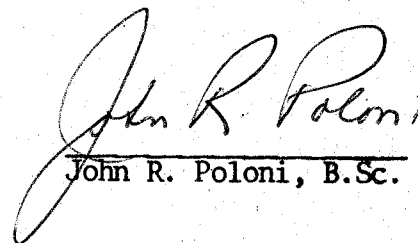
Line Cutting and Picketing 25 miles @ \$85.00	\$	2,125.00
Geological Mapping 25 miles @ \$100.00		2,500.00
Geochemical Sampling 25 miles @ \$100.00		2,500.00
Assaying 1,000 determinations @ \$2.00		2,000.00
Transportation		1,000.00
Camp Costs		4,000.00
Supervision 2 months @ \$1,200.00		2,400.00
Diamond Drilling 1000' @ \$12.00		<u>12,000.00</u>
Total	\$	28,525.00
Contingencies (10%)		<u>2,853.00</u>
	\$	31,378.00
Total Cost	\$	32,000.00 *****

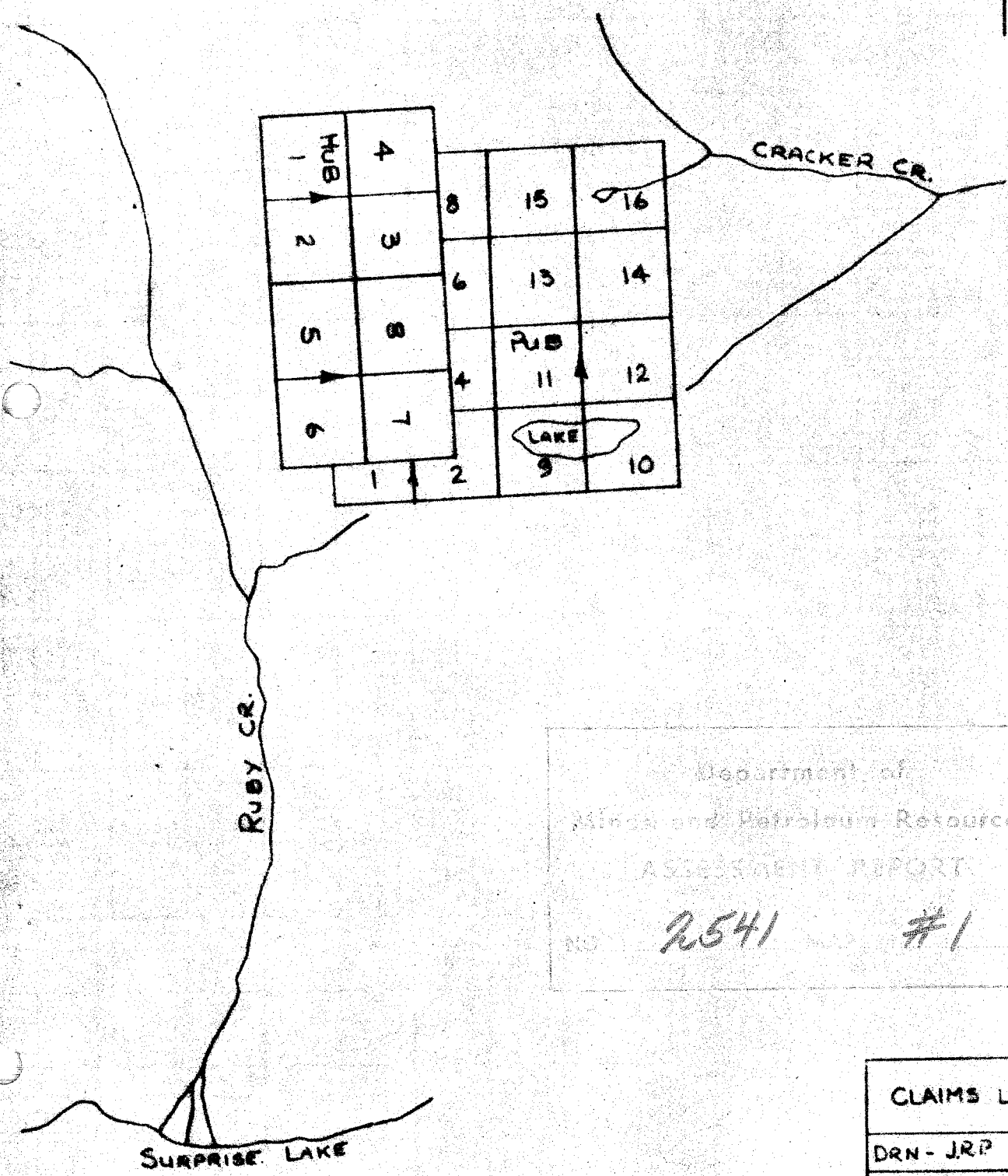
CERTIFICATION

I, John R. Poloni of 5502 8B Avenue,
Delta, B.C. DO HEREBY CERTIFY:

1. That I am a graduate of McGill University of Montreal, Quebec, where I obtained a Bachelor of Science degree in Geology in 1964.
2. That I have passed the qualifying examinations, for registration in the Association of Professional Engineers of British Columbia, written in April 1970.
3. That I have practiced my profession as a geologist for the past six years.
4. That I have personally examined the Hub 1-8 and Pub 1-16 in July 1970.

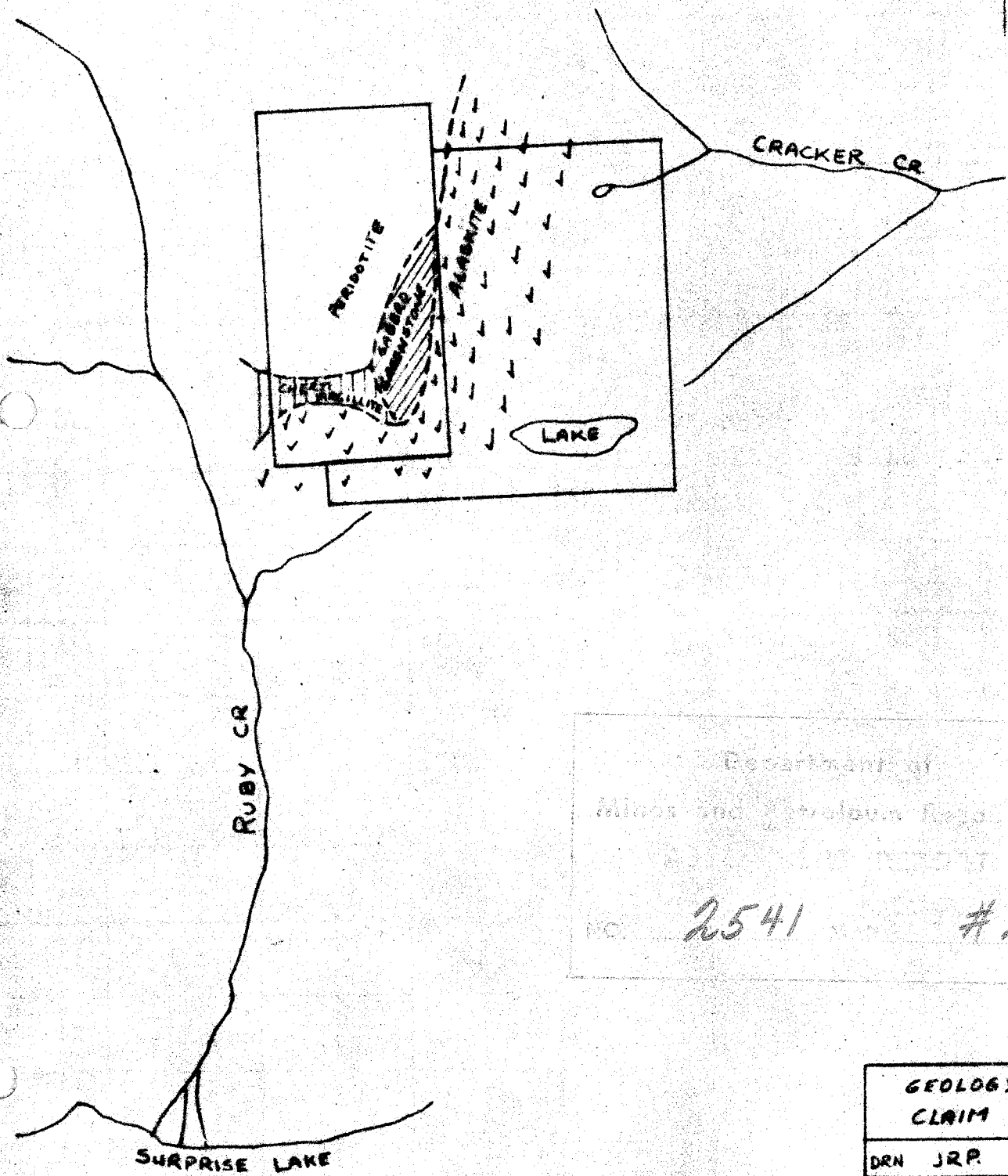
DATED THIS 7th DAY OF AUGUST 1970.


John R. Poloni, B.Sc.



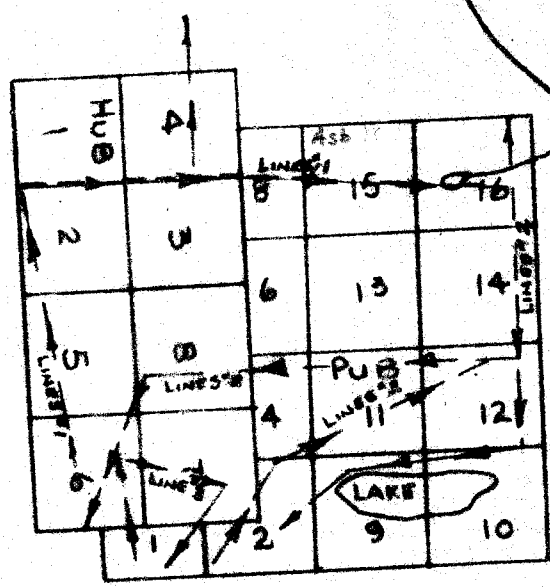
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ASSESSMENT REPORT
NO. 2541 #1

CLAIMS LOCATION	
DRN - JRP	MAP - 1
DATE July 70	SCALE 1" = 1/2 MI



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Mineral and Geotechnical Resources
NO. 2541 #2

GEOLOGY OF CLAIM BLOCKS	
DRN JRP	MAP-2
DATE JULY TO	SCALE 1"=500'



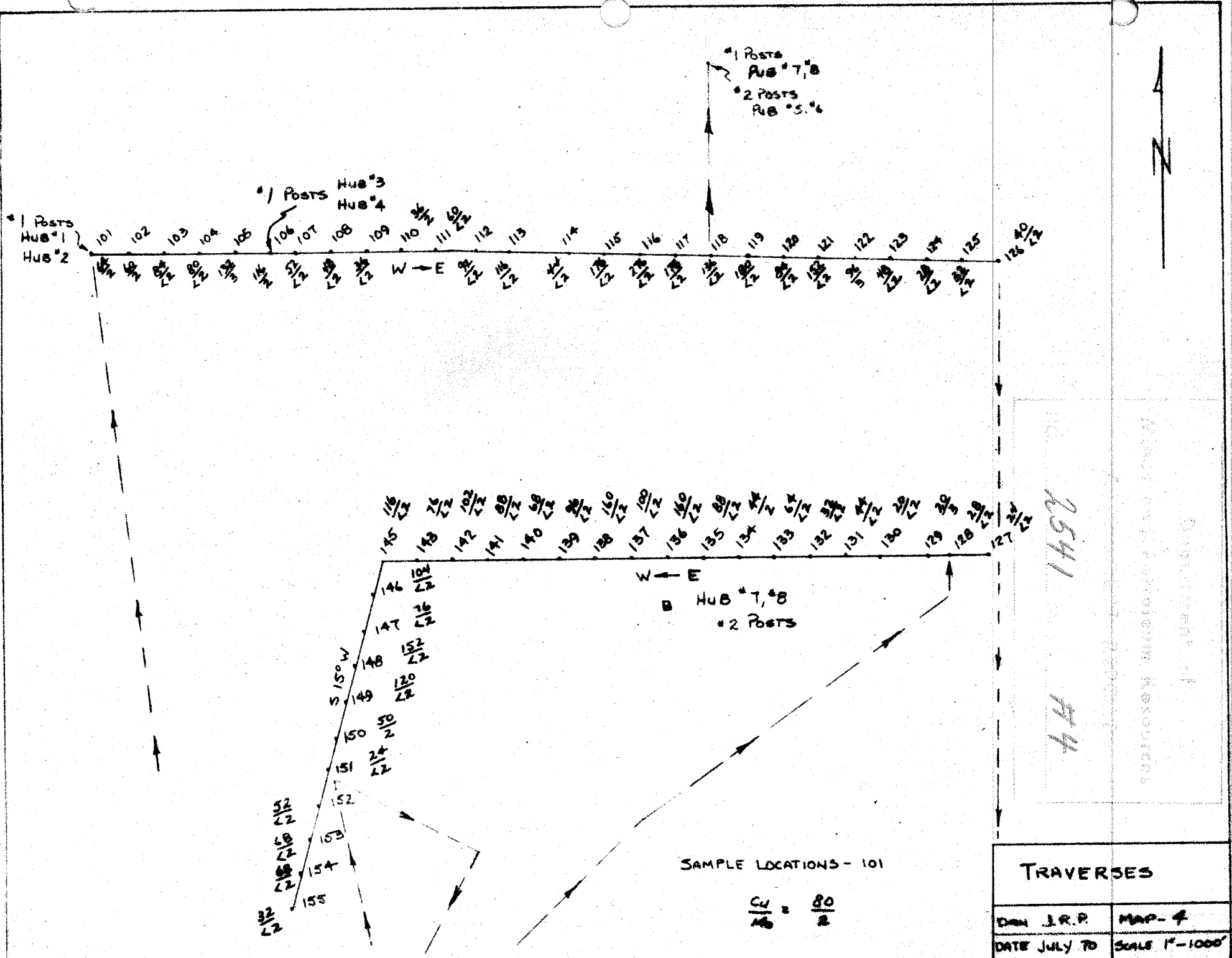
CRACKER CR.

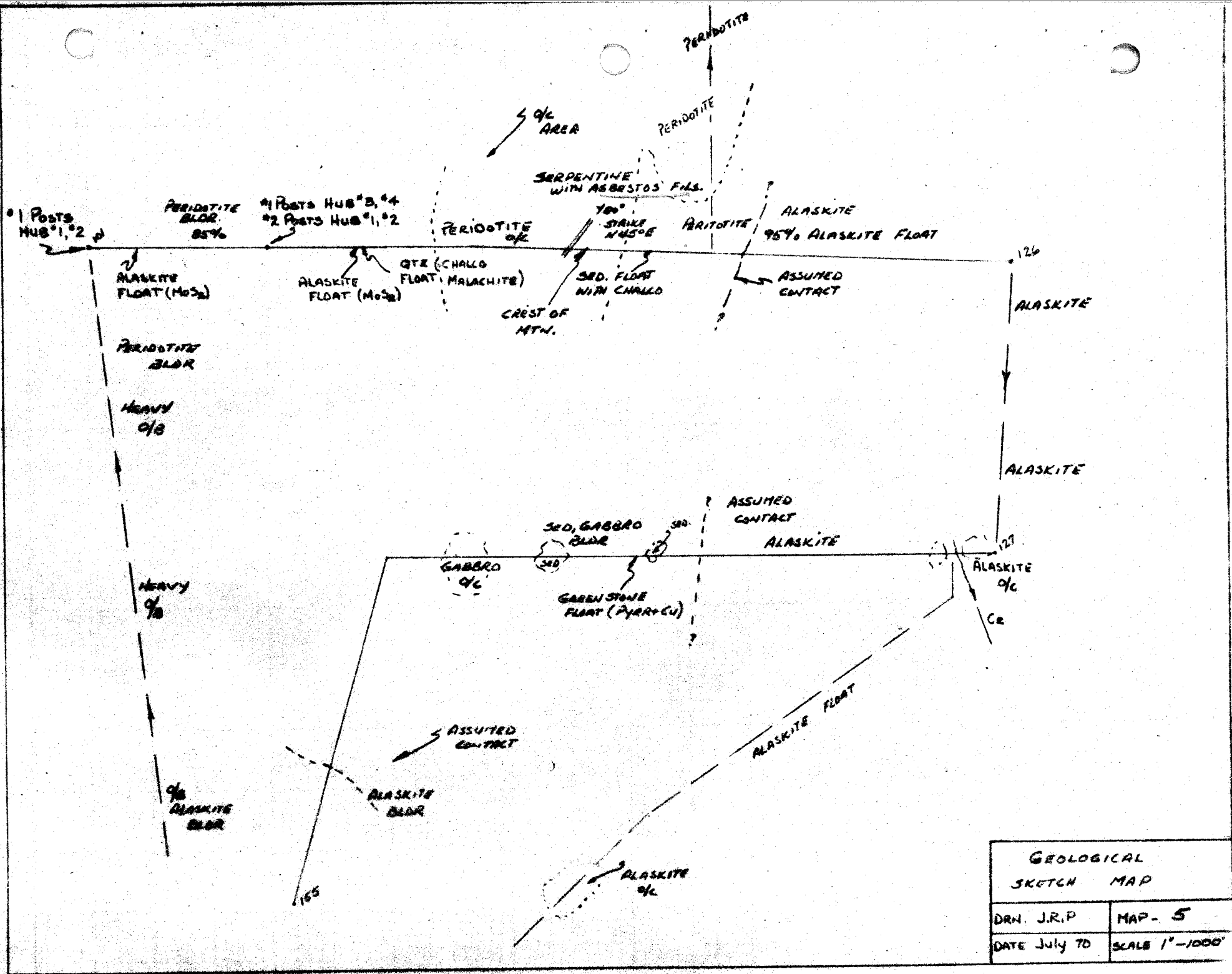
RUBY CR.

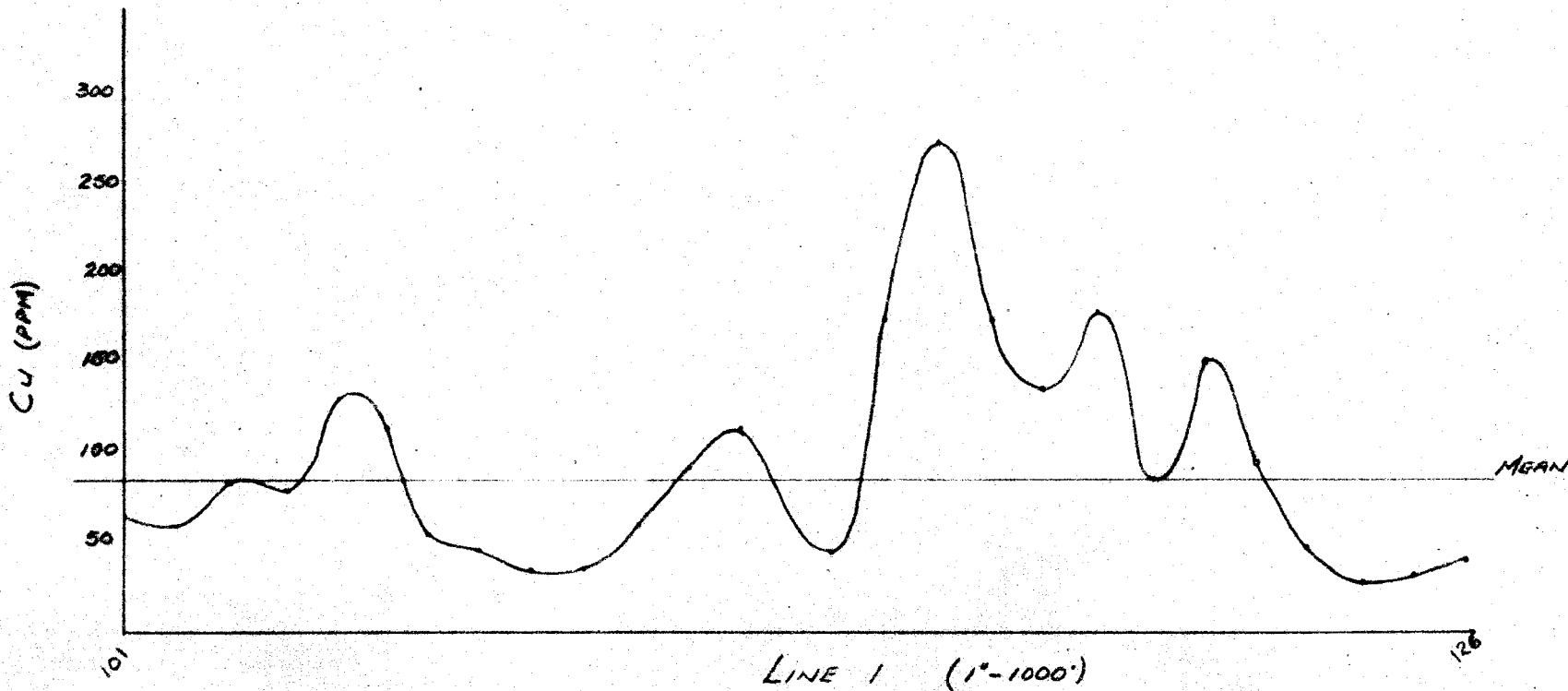
SURPRISE LAKE

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 Mines and Geology Resources
 No. 2541 #3

TRAVERSES	
DRN J.R.P.	MAP-3
DATE JULY TO	SCALE 1"=1/2 MI

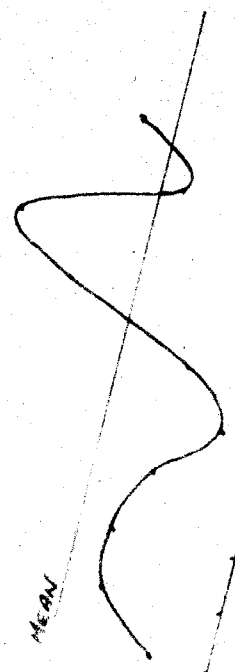
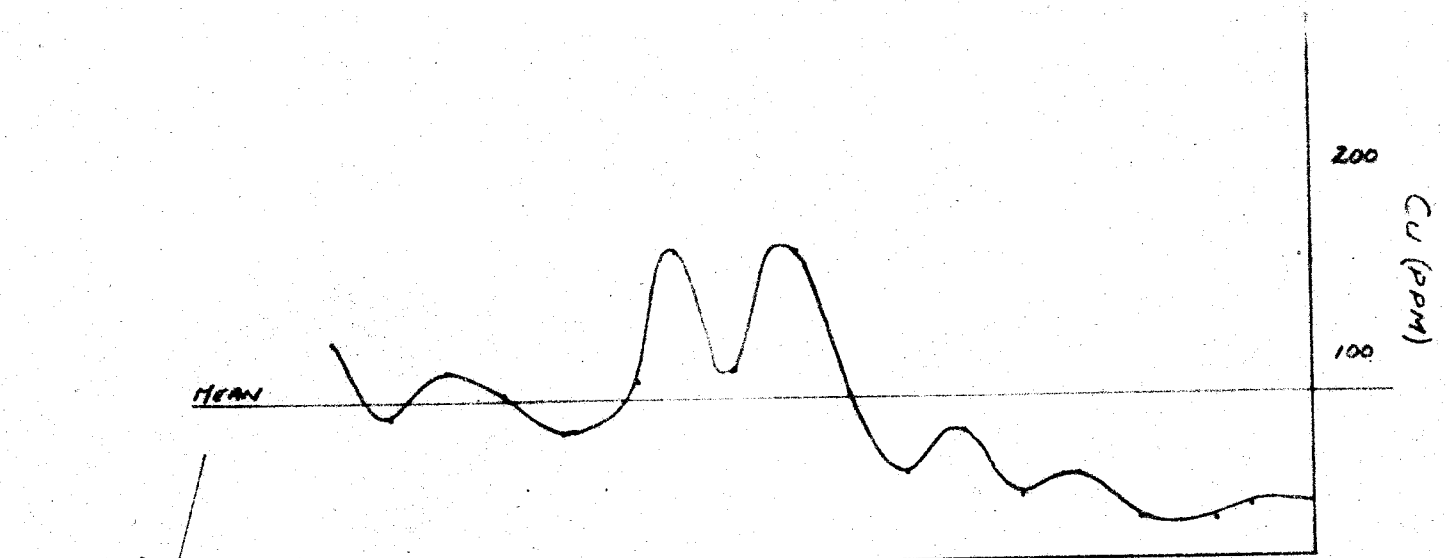






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 2541 #6

GEOCHEMICAL PROFILE (Cu)	
DRN JRP	MAP - 6
DATE JULY 90	SCALE



LINE 2 (1" - 1000')

Department of
 Michigan Petroleum Resources
 200000
 NO. 2541 MAP #7

GEOCHEMICAL PROFILE (Cu)	
DRAWN J.R.P.	MAP-7
DATE JULY 70	SCALE

CREST LABORATORIES (B.C.) LTD.B.C. REGISTERED ASSAYERS
GEOCHEMISTS1068 HOMER STREET,
VANCOUVER 3, B.C.

July 14, 1970

Crest Developments Ltd.
333 - 885 Dunsmuir Street
VANCOUVER, B.C.*HUB & PUB CLAIMS
ATLIN B.C.*Lot No. 270 (b) G: Geochemical Analysis for Molybdenum and Copper:Mesh Size: -80
Analytical Method: Atomic Absorption & Colourmetric
Digestion Method: HClO₄ - HNO₃

Sample Number:	Molybdenum ppm	Copper ppm	Sample Number:	Molybdenum ppm	Copper ppm
101	2	64	121	-2	152
102	2	60	122	3	96
103	-2	84	123	-2	48
104	-2	80	124	-2	28
105	3	132	125	-2	32
106	2	116	126	-2	40
107	-2	52	127	-2	24
108	-2	48	128	-2	28
109	-2	36	129	3	20
110	2	36	130	-2	20
111	-2	60	131	-2	44
112	-2	92	132	-2	32
113	-2	116	133	-2	64
114	-2	44	134	2	44
115	-2	176	135	-2	88
116	-2	276	136	-2	160
117	-2	176	137	-2	100
118	-2	136	138	-2	160
119	-2	180	139	-2	96
120	-2	84	140	-2	68

Crest Developments Ltd.
Lot No. 270 (b) G
July 14, 1970
Page 2...

Sample Number:	Molybdenum ppm	Copper ppm
141	-2	88
142	-2	102
143	-2	76
145	-2	116
146	-2	104
147	-2	76
148	-2	152
149	-2	120
150	-2	50
151	-2	24
152	-2	52
153	-2	68
154	-2	68
155	-2	32

Yours truly,
CREST LABORATORIES (B.C.) LTD.

Bruce Graham

Bruce Graham
Chemist

BG/seb