

6087

GEOLOGICAL, GEOPHYSICAL AND GEOCHEMICAL REPORT

ON

THE 104P/12 CL GROUP

OF

CRAIGMONT MINES LIMITED

AT

CAPTAIN LAKE, B.C.

BY

N.B. VOLLO, P.ENG.

NOVEMBER 22nd, 1976

PIP
104P/12E

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT

NO. 6087

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Maps in Pocket

- Maps #* 1 Geological Map, 1:5000
2 Geochemical Map, Total Zinc, 1:5000
3 EM-16 Survey 1:5000

SUMMARY

Geological, geochemical, electromagnetic and magnetic surveys were carried out over 15 kms of grid to explore a zone of quartz-chalcopyrite mineralization in Cambrian sediments. Magnetic relief and geochemical response were extremely low. EM response suggests the zone does not extend beyond present exposure

GENERAL

The property is located on the south shore of Captain Lake, 110 kms southwest of Watson Lake, Y.T. Access is most convenient by float plane, though a winter tractor road extends into the area from the Cassiar highway some 25 kms to the east. A good tractor road leads from Captain Lake to the showing.

Elevations range from 1020 m at Captain Lake to a maximum of 1180 m above sea level. Most of the property is forested with open lodgepole pine but the area in the immediate vicinity of the showing is covered with stunted spruce and alpine fir.

CLAIMS

The property consists of three claims, all in the Liard Mining Division, as follows:

Pip 1,	18 units,	Record Number	72
Pip 2,	"	"	73
Pip 3,	"	"	74

HISTORY AND PREVIOUS WORK

Mineralization was discovered, probably by prospecting and more than 50 years ago, as hand pits, etc., dating back at least that far were seen. The prospect was acquired by Rackla River Mines in 1968 and they bulldozed a small grid and several trenches in 1969. No records of other work could be found. The claims lapsed, were staked by Exaton Resources in 1975 and optioned by Craigmont Mines Limited in 1976.

FIELD WORK

Approximately 15 km of grid was chained, blazed and flagged, magnetic and VLF-EM surveys completed and 385 soil samples taken. Three to four men were employed from July 12th to 30th.

GEOLOGY

Outcrop is extremely sparse, though the cover of glacial till is probably quite thin. The property is underlain by shale, shaly limestone, limestone and sandstone of the Ketchika and Atan groups (GSC Map 1110A, McDame, Price and Gabrielse, 1963). These strike northwesterly and dip southwesterly at low to moderate angles.

Mineralization consists of disseminated chalcopryrite in a heavily silicified zone which appears to be conformable with the enclosing limestone and shale. The zone has a maximum width of 40 m and is exposed over a strike length of 125 m. Dip is difficult to determine but if conformable, is to the southwest.

Five trenches were chip sampled and assayed for copper, gold, zinc and silver. Copper assays only are shown on the accompanying map (in pocket) as other assays were in trace amounts only.

GEOCHEMICAL SURVEY

Soil samples were taken at 50m intervals along lines roughly 100 m apart. A poorly developed podzol type soil profile is present and most samples were from unweathered grey till. They were taken with soil augers, placed in Kraft paper envelopes and sent to Kamloops Research and Assay Laboratories. Extraction was by hot aqua regia and analysis made for copper and zinc by atomic absorption.

Copper in soils has a background of about 20 ppm, with very little variation even in the immediate vicinity of the showing. Zinc has a background of about 50 ppm, with little change near the showing, but with a fairly consistent zone 2 to 3 times background along the north edge of the surveyed area. This higher zone probably indicates a change in rock type. Zinc analysis are shown on the accompanying map.

MAGNETIC SURVEY

Readings were taken at 25 m intervals along lines 100 m apart, using a Sharpe MF-1 Fluxgate magnetometer. Maximum relief over the entire surveyed area was less than 150 gammas and readings were accordingly not plotted.

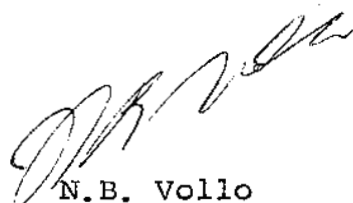
VLF-EM SURVEY

Readings were taken at 25m intervals along lines 100 m apart using a Ronka EM-16 unit and NPG, Jim Creek, Washington, as primary field source. Readings are shown on the accompanying map (in pocket) in profile form.

A significant crossover was obtained over the showing, probably reflecting the difference in conductivity between the silicified zone and the overlying (?) shale. Very little response, however, was obtained on lines to the east and west on strike. A moderate anomaly north of and parallel to the showing was also defined but its significance is not known.

CONCLUSIONS AND RECOMMENDATIONS

The magnetic and geochemical surveys were of no value in exploring the mineralized zone. The EM pattern suggests the zone does not extend past present exposures. Further exploration will require drilling.

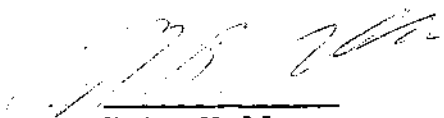


N.B. Vollo
P.Eng.

Nov. 22/76

QUALIFICATIONS OF OPERATOR

LEO LORANGER is 46 years of age and completed Grade IX at Englehart, Ontario. He was employed from 1961 to 1966 by the Noranda Exploration Co., Matagami, Que., as a geophysical operator; from 1966 to 1967 by Scurry Rainbow Oils, Calgary, Alta., as a geophysical operator; from 1967 to 1972 by Royal Canadian Ventures Ltd., Kamloops, B.C., as a geophysical operator and has been employed by Craigmont Mines Limited since 1972 as a geophysical operator. He has been carefully instructed in the operation of the Sharpe MF-1 Magnetometer and the Ronka EM-16 VLF-EM unit by the undersigned, who knows his work to be carefully and reliably done.



N.B. Vollo

P.Eng.

Nov. 22nd, 1976

AFFIDAVIT ON EXPENDITURES

Topographic map, Pacific Survey Corporation, ----- \$1020.00
1409 West Pender St., Vancouver, B.C.

Air charter - B.C. Yukon Air Services, Watson
Lake, Y.T. ----- 657.50
Vehicle expense, 2640 miles at 22¢ ----- 580.80
Airfare, etc. ----- 302.35
Travel expense, meals, accomodation, groceries --- 294.27
Camp expense ----- 369.05
\$2203.97

Personnel

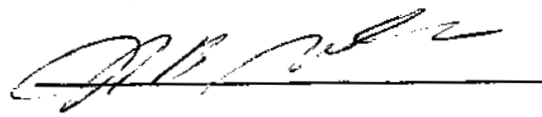
N.B. Vollo, P.Eng., supervision, geol-
ogical mapping, report, 5 days at \$135 ----- 675.00
L. Loranger, July 12th to 30th, 19 days
at \$75 ----- 1425.00
D. Cavanaugh, July 14th to 30th, 17 days
at \$66 ----- 1122.00
G. Jardine, July 14th to 30th, 17 days
at \$50 ----- 850.00
\$4072.00

Geochemical Analysis

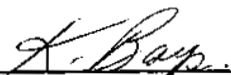
385 Samples, Kamloops Research & Assay
Laboratories Ltd., Kamloops, B.C. ----- 673.75

Total ----- \$7969.72

I, Nels B. Vollo, of the City of Kamloops in the Province
of British Columbia, make the above declaration, concient-
iously believing it to be true and knowing it is of the
same force and effect as if made under oath and by virtue
of the Canada Evidence Act.



Declared before me at the City of Kamloops in the Province
of British Columbia this 23 day of November, 1976,
A.D.



Commissioner for taking Affidavits
within British Columbia

A commissioner for taking affidavits for British Columbia



Analysis by Kamloops Research and Assay Laboratory
 Hot Aqua Regia Extraction
 Determined by AA
 Readings in ppm

--- Tractor road
 --- Trench
 □ Claim post, known assumed

MINERAL RESOURCES BRANCH
 ASSESSMENT REPORT
 NO. **6087**
 MAP NO. **#2**

CRAIGMONT MINES LIMITED
 KAMLOOPS, B.C.
104P/13 CL GROUP
GEOCHEMICAL PLAN
TOTAL Zn
 Scale: 1:5,000 Date: 22-11-76
 Drawn by: [Signature]

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LEGEND

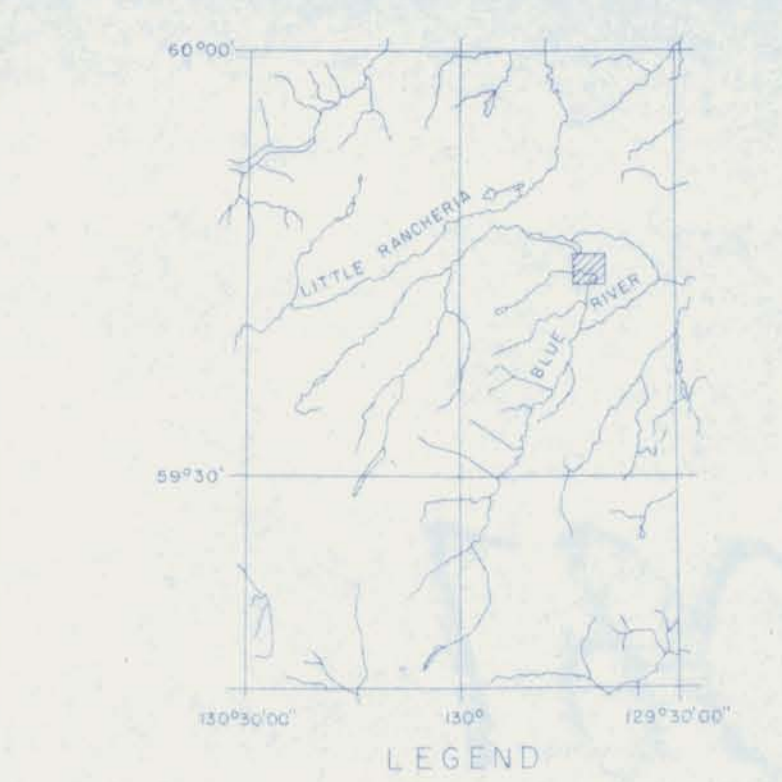
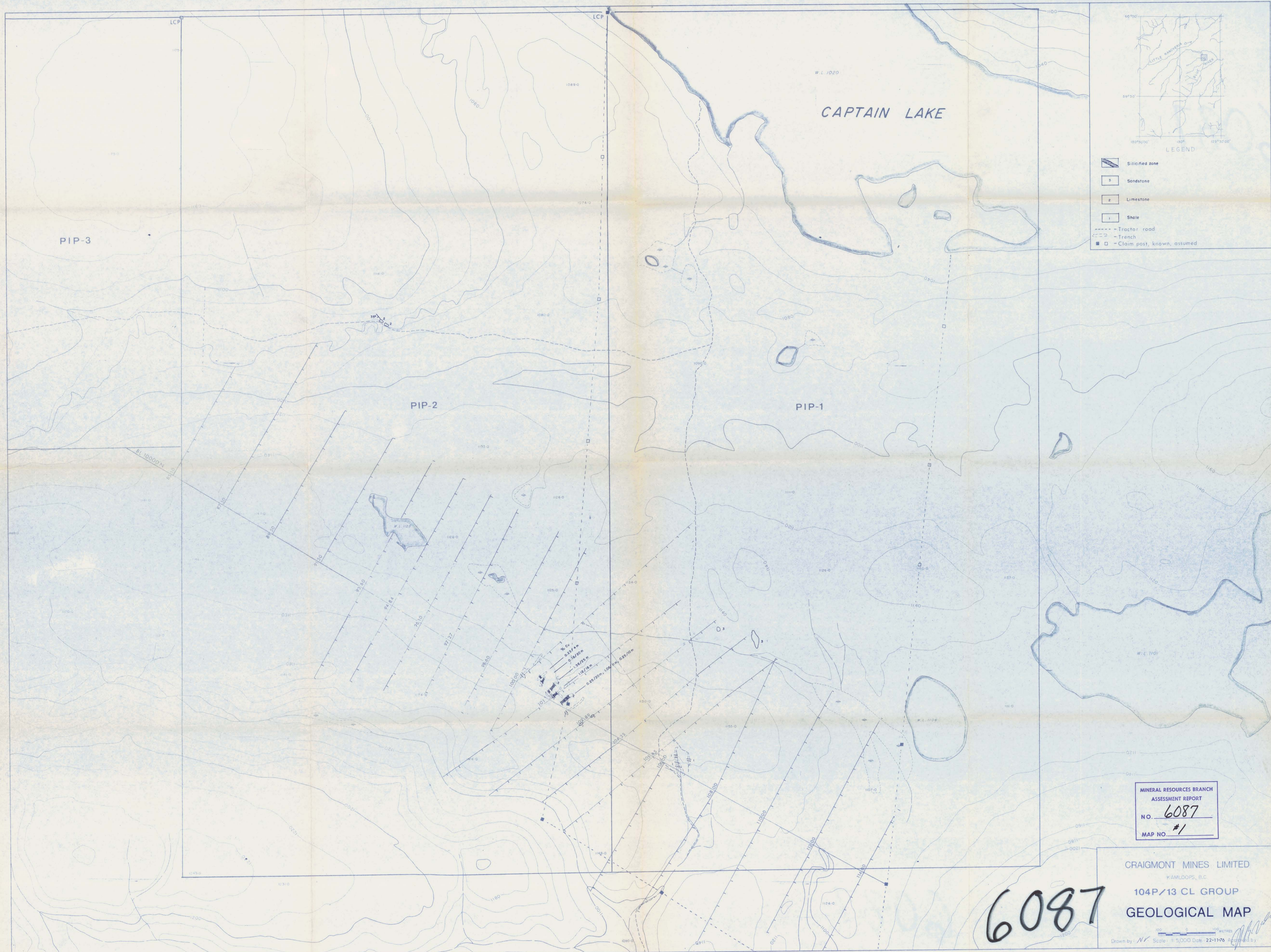
- +10° Quadrature
- In Phase in degrees
- 10° Quadrature
- Direction faced
- Tractor road
- Trench
- Claim post, known, assumed

MINERAL RESOURCES BRANCH
 ASSESSMENT REPORT
 NO. **6087**
 MAP NO. **#3**

CRAIGMONT MINES LIMITED
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 EM-16 SURVEY

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Scale: 1:5,000 Date: _____ Approved: _____



- LEGEND**
- Silicified zone
 - Sandstone
 - Limestone
 - Shale
 - Tractor road
 - Trench
 - Claim post, known, assumed

MINERAL RESOURCES BRANCH
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 NO. 6087
 MAP NO. #1

CRAIGMONT MINES LIMITED
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 GEOLOGICAL MAP

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Scale: 1:5000 Date: 22-11-76