

2903
GEOLOGICAL, GEOCHEMICAL AND GEOPHYSICAL

REPORT

ON THE

THUTADE CLAIM GROUP

(N.T.S. 94E)

OMINECA MINING DIVISION, BRITISH COLUMBIA

For

QUEBEC CARTIER MINING COMPANY

PORT CARTIER, QUEBEC

By

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Geologist

Supervised By: A. F. Reeve, P.Eng.
Geological Engineer

CORDILLERAN ENGINEERING LIMITED
1418 - 355 Burrard Street
Vancouver 1, B.C.

January 12, 1971

CLAIMS: THUTADE 3 - 12, 17 - 26, 31 - 40
LOCATION: 18 miles NW of McConnell Creek
57°03' North latitude, 126°52' West longitude
PERIOD: July 5th to September 15th, 1970.

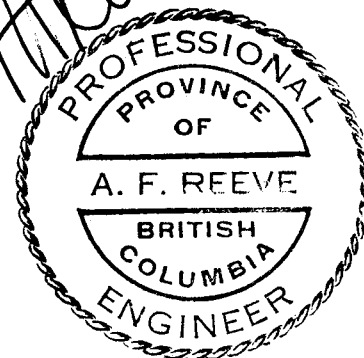


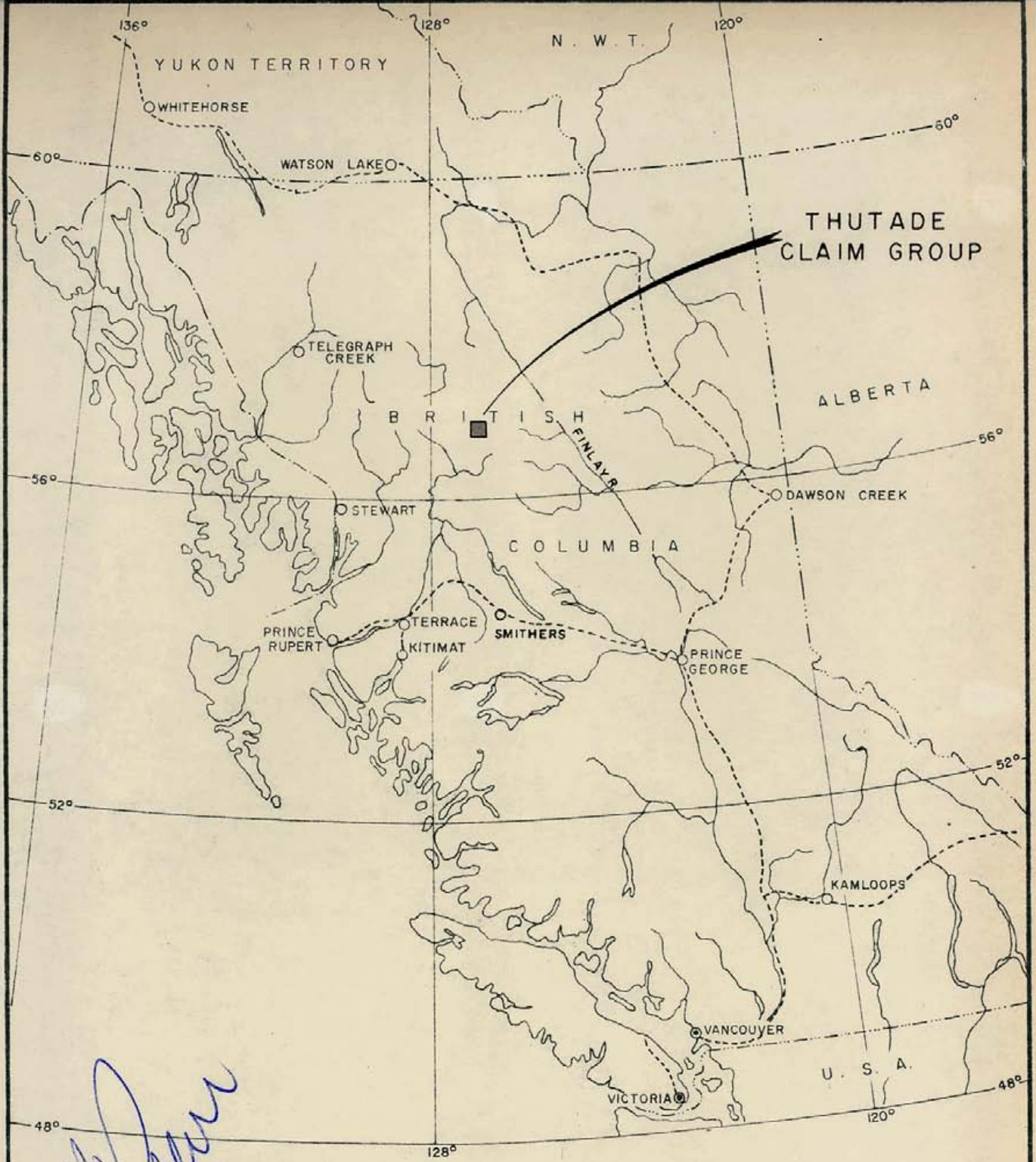
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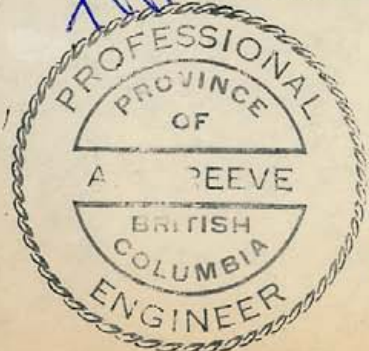
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QUEBEC CARTIER MINING COMPANY



**THUTADE CLAIM GROUP
PROPERTY LOCATION MAP**

BRITISH COLUMBIA
SCALE 1" = 125 MILES

BY

CORDILLERAN ENGINEERING LIMITED

1418-355 BARRARD ST.
VANCOUVER 1, B.C.

JANUARY, 1971

FIGURE 1

INTRODUCTION

This report summarizes the results of preliminary exploration performed on the Thutade Group of 44 mineral claims situated at the northeast end of Thutade Lake, northern British Columbia. The work described herein was undertaken in 1970 to investigate a ring-shaped magnetic anomaly outlined by an airborne EM-Magnetometer survey conducted as part of the 1969 "Toodoggone Project".

Crews of Cordilleran Engineering Limited, McPhar Geophysics Limited and Contract Exploration Services completed a program of geological mapping, geochemical soil and stream sediment sampling, magnetometer and induced polarization surveys, trenching and sampling during the period July 5th to September 15th, 1970. A report on the induced polarization survey is contained under a separate cover.

Certificates of qualifications, time and expense declarations, assay certificates and maps are appended.

PROPERTY

(Figure 2)

The property consists of 44 full-sized mineral claims in the Omineca Mining Division. Title is recorded in the name of Cordilleran Engineering Limited for Quebec Cartier Mining Company. The claims were staked in March, 1970.

Status of the claims is as follows:

<u>Claim</u>	<u>Record Number</u>	<u>Expiry Date</u>	<u>Title</u>
Thutade #1-44	87305 - 87348	8 April, 1971	Cordilleran Engineering Limited

Assessment work will be recorded on Thutade No.'s 3-12, 17-26 and 31-40.

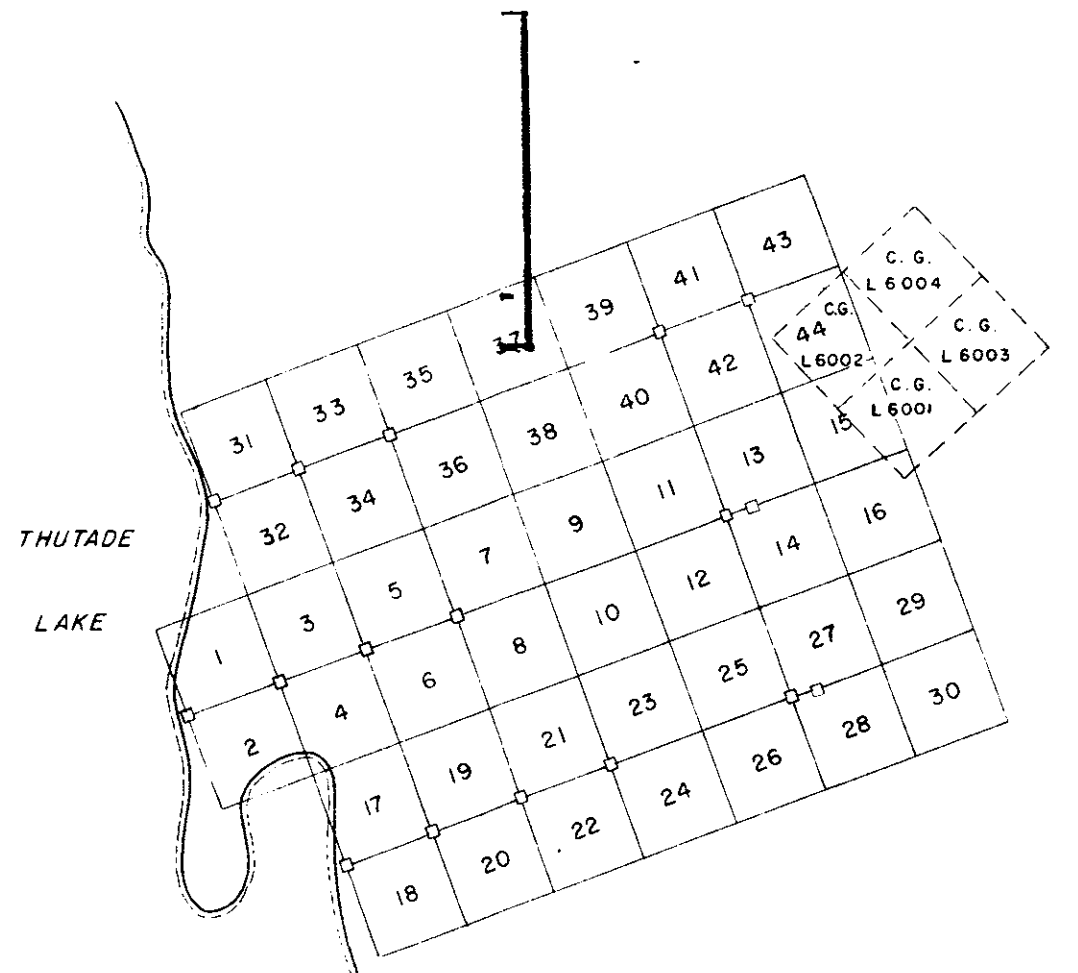
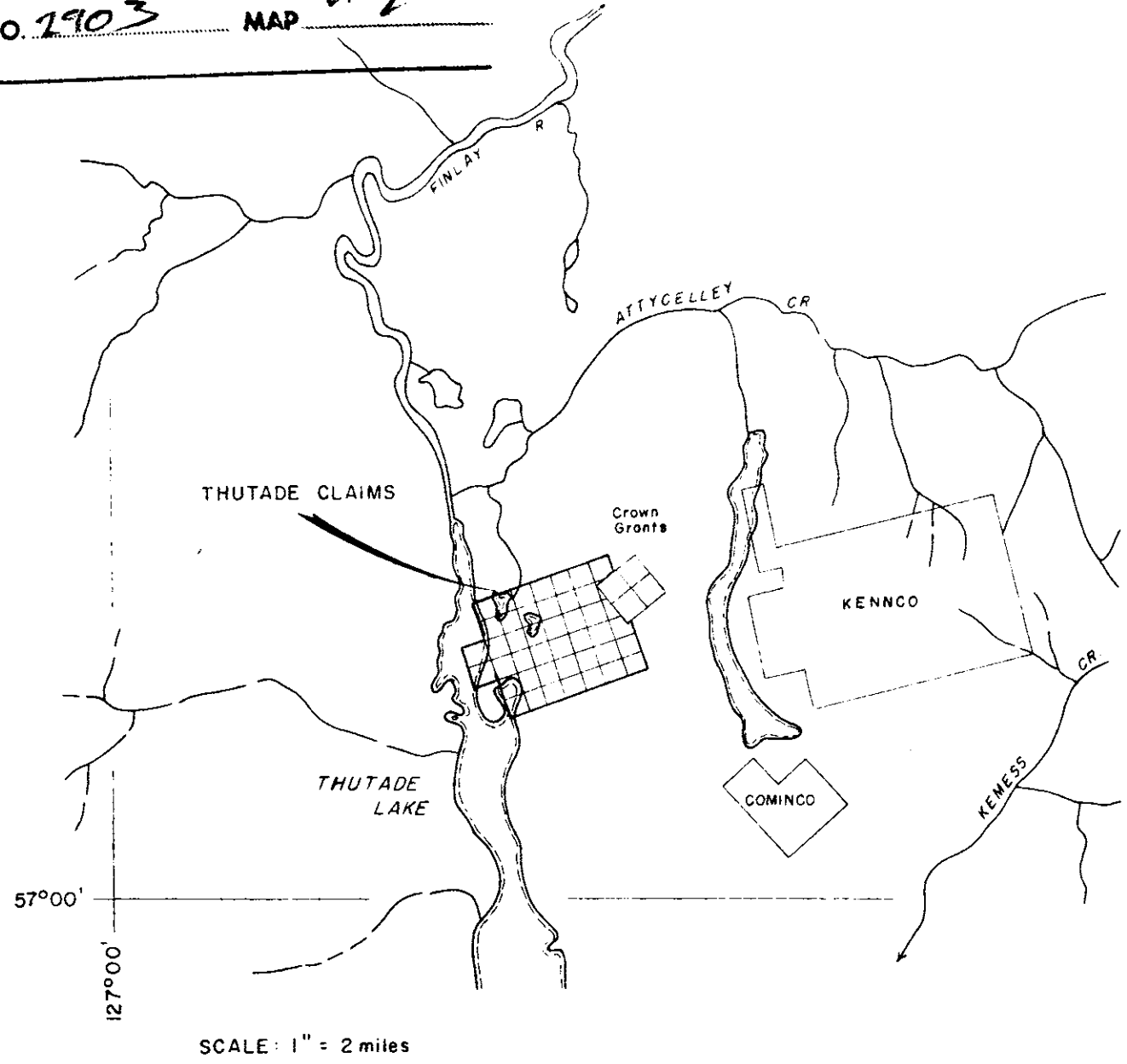
Parts of Thutade No.'s 15, 16, 43 and 44 mineral claims appear to adjoin and overlap Cairn No.'s 1 and 2 Crown-granted mineral claims to the northeast. These are part of a block of 4 Crown-grants owned by Oswood G. MacDonald of Vancouver.

HISTORY

The claims were staked in the spring of 1970 to cover a ring-shaped magnetic anomaly resulting from the 1969 airborne geophysical survey over a portion of the Toodoggone Lake area. This survey included electromagnetic and magnetic measurements. Geological mapping, ground geophysics and a detailed geochemical survey were recommended. No mineralization was known to exist directly within the airborne anomaly, however, on its eastern side, 4 Crown-granted mineral claims cover copper-lead-zinc mineralization in a limestone horizon. Similar mineralization exists 2 1/2 miles northwest of camp. The interpretation suggested that this magnetic anomaly might represent a felsic pluton with a zone of hydrothermal alteration near its core. Monzonite porphyry containing some disseminated pyrite had been reported in the area. This, in addition to the lead-zinc occurrences on the flanks of the postulated intrusive, suggested zoning and supported the concept of a "porphyry" copper environment.

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

NO. 1903 MAP #2



CLAIM MAP SHOWING LOCATED POSTS
SCALE: 1" = 3000'



QUEBEC CARTIER MINING COMPANY
THUTADE CLAIM GROUP
OMINECA MINING DIVISION
BRITISH COLUMBIA

CLAIM LOCATION MAP

SCALE: AS SHOWN.
BY

CORDILLERAN ENGINEERING LIMITED
1418 - 355 BURRARD STREET, VANCOUVER 1, B.C.
OCTOBER, 1970

TO ACCOMPANY "GEOLOGICAL, GEOCHEMICAL AND GEOPHYSICAL REPORT ON THE THUTADE CLAIM GROUP, OMINICA MINING DIVISION, B.C.," BY M.H. SANGUINETTI, B.Sc., JANUARY 12, 1971

LOCATION AND ACCESS

(Figure 1)

The property is located at the northeast edge of Thutade Lake at latitude 57°03'N and longitude 126°52'W. This is 18 miles northwest of McConnell Creek and 52 miles southwest of Ware.

Access to the claims was by float-equipped aircraft from Smithers, 155 miles to the south and from Watson Lake, Y.T., 215 miles to the northwest.

PHYSIOGRAPHY, VEGETATION AND CLIMATE

Thutade Lake lies between the Spatsizi Plateau on the northwest and the Swannell Ranges of the Omineca Mountains on the east at an elevation of 3,624 feet above sea level. The claims extend northeastward from the lake to an elevation of about 5,500 feet. Surrounding hills and mountain slopes show results of severe glaciation in a direction parallel to the lake and the Finlay River. Parallel lines of beaver

PHYSIOGRAPHY, VEGETATION AND CLIMATE (CONT'D)

dams and swamps lie adjacent to the edge of the lake over the western half of the claim group.

The valley floor and slopes are heavily timbered to about 5,000 feet above sea level. Vegetation consists of medium-sized spruce, balsam, pine and aspen with dense thickets of alder and willow bordering beaver ponds and swamps. Underbrush is generally light or nonexistent away from water-courses.

Climate in this immediate area has not been accurately recorded, however, recent meteorological observations have been taken at Ware, 52 miles to the northeast. In 1968 recorded temperature extremes were -50°F and 86°F while the mean was 30°F . Precipitation averaged 14.71 inches of rain and 62.0 inches of snow.

REGIONAL GEOLOGY

The northeast corner of Thutade Lake is underlain by andesites, basalts, limestones and tuffs of the Takla Group (Upper Triassic and Jurassic) which have been intruded and altered by granitic stocks of the Omineca Intrusions (Upper Jurassic/Lower Cretaceous). Faults separate these rocks from Cretaceous sediments of the Sustut Group which are exposed along the west side of Thutade Lake and directly south of Kemess Creek (Crosby, 1970). A major fault extends north-south to the west of the claim group along Thutade Lake and the Finlay River while a second fault crosses northwesterly near the north end of the Lake and south of the claims.

LOCAL GEOLOGY

(Figure 3)

Mapping at 200 and 400 feet to the inch was carried out over the southern half of the claims where monzonite has intruded porphyritic andesite and limestone of

LOCAL GEOLOGY (CONT'D)

the Takla Group along a northerly trending contact. Outcrop is exposed over less than 25% of the entire claim area.

The intrusive rock lies along the central and eastern section of the claims and changes over short distances from monzonite to quartz monzonite, diorite and quartz diorite. Typically this rock is a medium to fine-grained, white or pink quartz monzonite which may contain up to 20% quartz, 20% mafics (hornblende, biotite, magnetite, augite ?) and in which potash feldspar is equal to or greater than plagioclase feldspar content. Slight chloritization of mafics was noted close to andesite or limestone contacts. Up to 3% magnetite is contained in some samples giving the rock a moderate to strong magnetic character. Fine disseminated pyrite occurs in amounts up to 5% in isolated occurrences. The contact of this intrusive is characterized by a chill margin of up to 30 feet wide in which relics of the country rock may be included.

The western side of the claims is underlain by volcanic rock of varying colour and texture. This rock is described as a purple to green andesite porphyry containing up to 25% white feldspar phenocrysts and which frequently contains

LOCAL GEOLOGY (CONT'D)

1 to 2% disseminated pyrite. Epidote was noted as phenocrysts in outcrop close to the intrusive contact. Small amounts of pyrite and chalcopyrite occur on fracture faces and associated with thin quartz stringers in green and purple andesite porphyry immediately north of camp (Figure 9).

White limestone occurs as an irregular, narrow band trending northerly, parallel to the intrusive contact. It varies from massive to medium-grained crystalline in texture and from white to buff in colour. Towards the west it grades into chert and chert breccia. Narrow bands up to 3 feet wide of greenish skarn, mineralized with galena, sphalerite and pyrite, occur within this limestone (Figures 10, 11). A narrow skarn zone, associated with minor faulting in andesite porphyry (Figure 12), has been mapped in the creek about 500 feet northeast of camp.

Apart from irregular jointing in all rock units and minor faults in the creek beside camp, no structure of major significance was mapped on surface.

RESULTS OF 1970 FIELD PROGRAM

A large grid, totalling 23 line miles of 400 and 800 foot spaced lines, was cut and picketed over the entire claim group. Using this grid for control a geochemical survey, magnetometer survey, induced polarization survey, and geological mapping were conducted. Detailed mapping, trenching and sampling were partially completed on four mineralized zones.

A smaller grid, totalling 3 line miles was cut over the area near the No. 1 Skarn Showing. This grid is indicated on Figure 3.

A. GEOCHEMICAL SURVEY (Figures 4, 5, 6)

The large grid on the property was geochemically soil sampled at 200 foot intervals. A total of 580 samples were collected from the B₁ soil horizon at an average depth of 1 foot. A grubhoe was used to dig the holes. Organic material was avoided. Samples were placed in kraft envelopes, numbered, packaged and shipped to the North Vancouver Laboratory of Bondar-Clegg & Company Ltd. for analysis for copper, lead and zinc. Sample sites were picketed and marked with corresponding numbers on orange flagging tape.

RESULTS OF 1970 FIELD PROGRAM
GEOCHEMICAL SURVEY (CONT'D)

At the laboratory the samples were dried and sieved to -80 mesh fraction. Values for copper, lead, and zinc were determined directly by atomic absorption methods after leaching the sample with a mixture of 1.5 mls conc. HNO_3 and 0.5 mls conc. HCl in a hot water bath for 2.5 hours and adjusting the final volume to 10 mls.

Statistical analyses of the results indicated the following value ranges:

	<u>Copper</u> <u>ppm</u>	<u>Lead</u> <u>ppm</u>	<u>Zinc</u> <u>ppm</u>
Background	0- 30	0-20	0-80
Possibly Anomalous	31- 90	21-50	81-170
Probably Anomalous	91-120	51-60	171-220
Anomalous	>120	>60	>220

Because of poor drainage on the property, only 15 stream sediment samples were collected.

Two significant areas, anomalous for copper, lead and zinc, are situated near the northern side of the claim group. These are centered at 72N, 0 BL (Anomaly I) and 80N,

RESULTS OF 1970 FIELD PROGRAM
GEOCHEMICAL SURVEY (CONT'D)

16W (Anomaly II). Anomaly I is approximately 1,000 feet wide, 1,200 feet long and open on the northwest. The area is entirely covered by overburden. Anomaly II is approximately 600 feet wide and 1,200 feet long. The No. 2 Skarn Showing (Figure 11) is situated on the northeast corner of this anomaly, to the west and south is mostly overburden-covered.

Smaller anomalies, coincident for lead and zinc only, are centered at 72N, 40W (Anomaly III), immediately east of camp at 56N, 50W (Anomaly IV), to the north side near the Crown Grants at 38N, 40E (Anomaly V) and on the east side at 8N, 6W (Anomaly VI).

Outcrop in the vicinity of Anomaly III is mainly pyritized, porphyritic, green and purple andesite. No lead or zinc mineralization was mapped. Anomaly IV is probably caused by skarny inclusions in volcanic rock such as in the Creek Showing (Figure 12). Anomaly V may be caused by the massive sulphide replacement in the limestone on the Crown-granted claims. The cause of Anomaly VI is unknown and there is no outcrop in the area.

RESULTS OF 1970 FIELD PROGRAM (CONT'D)

B. MAGNETOMETER SURVEY (Figure 7)

A magnetometer survey was conducted over the main grid with readings taken every 100 feet on lines spaced 800 feet apart. The instrument used was a Sharpe MF-1 fluxgate magnetometer.

A maximum magnetic relief of 4,250 gammas was encountered. Results contoured to the nearest thousand gammas indicate an arcuate wide band of higher readings opening to the northwest, with a relatively low magnetic area near the centre and northern side of the claims group.

This ground survey appears to correlate with the airborne magnetometer survey as regards shape of expression. However, the arcuate trend of the high values does not appear to coincide with the surface geology. It may represent the magnetically positive border phase of a partly obscured intrusive body.

C. INDUCED POLARIZATION SURVEY (Figure 8)

An induced polarization survey covering 17.6 line miles was conducted by McPhar Geophysics Limited during the



SAMPLING RESULTS

Trench No.	Sample No.	Width (ft.)	% Cu.
1	776	17	0.54
2	781	0-15	0.07
2	782	15-30	0.06
3	783	6	0.05
4	784	10	0.01
5	785	6	0.02
6	786	3	0.04
7	787	12	0.12
8	788	4	0.06
9	789	12	0.06
10	790	10	Tr.
11	791	20	0.10
12	792	20	0.03
13	793	10	Tr.
14	794	8	Tr.
15	795	18	Tr.
16	796	16	0.01
17	797	4	Tr.
PIT	798	3	Tr.

LEGEND:

- OUTCROP
- TRENCH
- MALACHITE
- CHALCOPYRITE
- PYRITE
- EPIDOTE

HOST ROCK IS PURPLE OR GREEN PORPHYRITIC ANDESITE, GENERALLY WELL FRACTURED AND OFTEN FINELY PYRITIZED. CHALCOPYRITE OCCURS ON FRACTURE FACES ACCOMPANIED BY PYRITE.



QUEBEC CARTIER MINING COMPANY
 THUTADE CLAIM GROUP
 OMINECA MINING DIVISION
 BRITISH COLUMBIA
GEOLOGY AND SAMPLING RESULTS
OF CAMP SHOWING
 SCALE: 1" = 40 FEET
 BY
CORDILLERAN ENGINEERING LIMITED
 1418-355 BARRARD STREET, VANCOUVER 1, B.C.
 OCTOBER, 1970

TO ACCOMPANY "GEOLOGICAL, GEOCHEMICAL AND GEOPHYSICAL REPORT ON THE THUTADE CLAIM GROUP, OMINECA MINING DIVISION, B.C." BY M.H. SANGUINETTI, B.Sc., JANUARY 12, 1971

RESULTS OF 1970 FIELD PROGRAM
INDUCED POLARIZATION SURVEY (CONT'D)

period July 30th to September 7th, 1970. The report by M. A. Goudie and P. G. Hallof is under separate cover. The large number of anomalies in the 'probable' and 'possible' categories which were located are included in three zones, only one of which (Zone "C") coincides with a geochemical anomaly (Anomaly II) and known mineralization. It should be noted that significant concentrations of sphalerite would not be detected by the induced polarization method. The McPhar report suggests that the area is underlain by weakly mineralized rocks "with concentrations of mineralization being noted as anomalies". These concentrations are of very limited extent. The report also suggests four possible drill hole locations to test the source of these anomalies. These locations could be as follows:

Line 76N under 43W to a vertical depth of 200'
Line 76N under 25W to a vertical depth of 150'
Line 56N under 23W to a vertical depth of 225'
Line 48N under 27W to a vertical depth of 200'

D. MAPPING AND TRENCHING (Figures 3, 9, 10, 11, 12, Appendix "B")

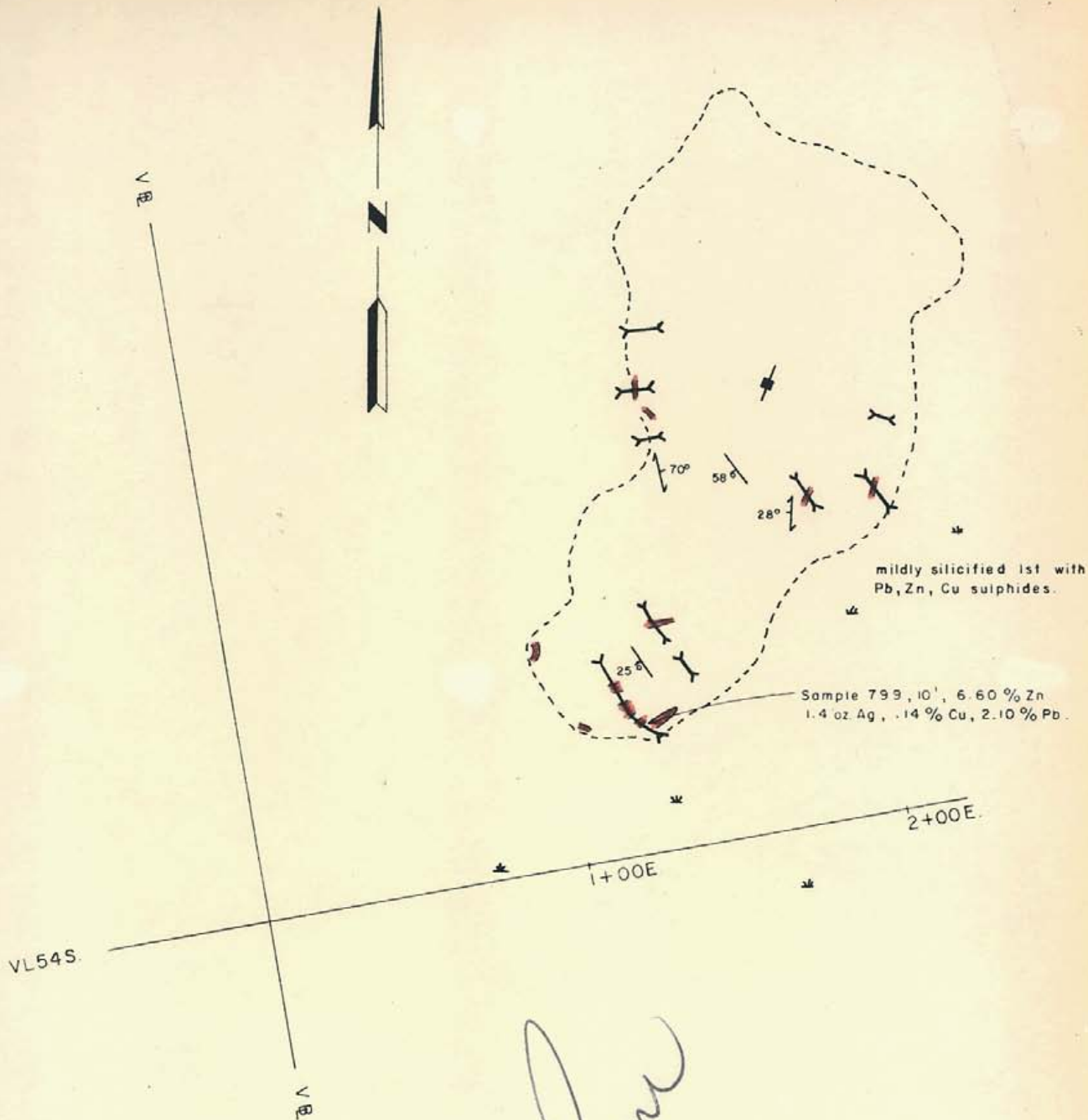
Mapping of outcrops on the lower portion of the claim group was completed at scales of 1 inch equal to 200 and

RESULTS OF 1970 FIELD PROGRAM
MAPPING AND TRENCHING (CONT'D)




400 feet. This mapping (Figure 3) is discussed under the heading "Local Geology".

Detailed mapping of the four mineral occurrences was carried out at scales of 1" = 10', 1" = 40' and 1" = 50'. Trenching of these showings was conducted to obtain representative samples for assay. A summary of the trenching is contained in Appendix "B".

The "Camp Showing" (Figure 9) is located approximately 600 feet north of camp at 60N, 45W. Chalcopyrite, pyrite and malachite occur as thin smears on fractures and in narrow veinlets in moderately altered, purple to green porphyritic andesite. This mineralization has been traced over an area of 300 feet by 150 feet. A total of 19 chip samples were taken in 18 blasted trenches. The best mineralized section, 0.54% Cu across 17 feet, was sampled in Trench 1, however, copper mineralization decreases noticeably to the north and east. Southwest of Trench 1 is overburden-covered. No anomalous magnetic or geochemical values were recorded, however, a



LEGEND

-  TRENCH
-  AREA OF >50% OUTCROP
-  SKARN MINERALIZATION;
galena, sphalerite, chalcocopyrite,
pyrite.

QUEBEC CARTIER MINING COMPANY
THUTADE CLAIM GROUP
OMINECA MINING DIVISION
BRITISH COLUMBIA

[Handwritten Signature]
A. F. REEVE
PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA

GEOLOGY OF No. 1 SKARN SHOWING
SCALE 1" = 50 feet
BY

CORDILLERAN ENGINEERING LIMITED
1418-355 BARRARD STREET, VANCOUVER 1, B.C. CANADA
OCTOBER, 1970

TO ACCOMPANY "GEOLOGICAL, GEOCHEMICAL AND GEOPHYSICAL REPORT ON THE THUTADE CLAIM GROUP, OMINICA MINING DIVISION, B.C." BY M.H. SANGUINETTI, B.Sc., JANUARY 12, 1971

RESULTS OF 1970 FIELD PROGRAM
MAPPING AND TRENCHING (CONT'D)

'probable' and 'possible' I.P. anomaly of 200 foot length occurs over this showing. This I.P. anomaly was not located over the adjacent lines.

The "No. 1 Skarn Showing" (Figure 10) is located at 63N, 23W (53S, 1+50E on the small grid). Mineralization consists of galena, sphalerite, chalcopyrite and pyrite in a gangue of calc-silicate mineralization cutting white massive and crystalline limestone as bands at irregular angles. A 10 foot chip sample from the southernmost trench assayed 6.60% Zn, 2.10% Pb, 0.14% Cu, 1.4 oz. Ag. This represented a sample of the best mineralization observed. An increase in alteration and mineralization was noted from north to south in this particular area. Mineralization in the southernmost trench continues to the south and east and is obscured by swamp. No geochemical, magnetic or induced polarization anomalies were observed in this area, thus it is felt that the mineralization may be of very limited extent.

The "No. 2 Skarn Showing" (Figure 11) occurs at 76N, 18W and consists of short narrow stringers of calc-silicate minerals and sulphides in a white to brown, cherty limestone.

RESULTS OF 1970 FIELD PROGRAM
MAPPING AND TRENCHING (CONT'D)

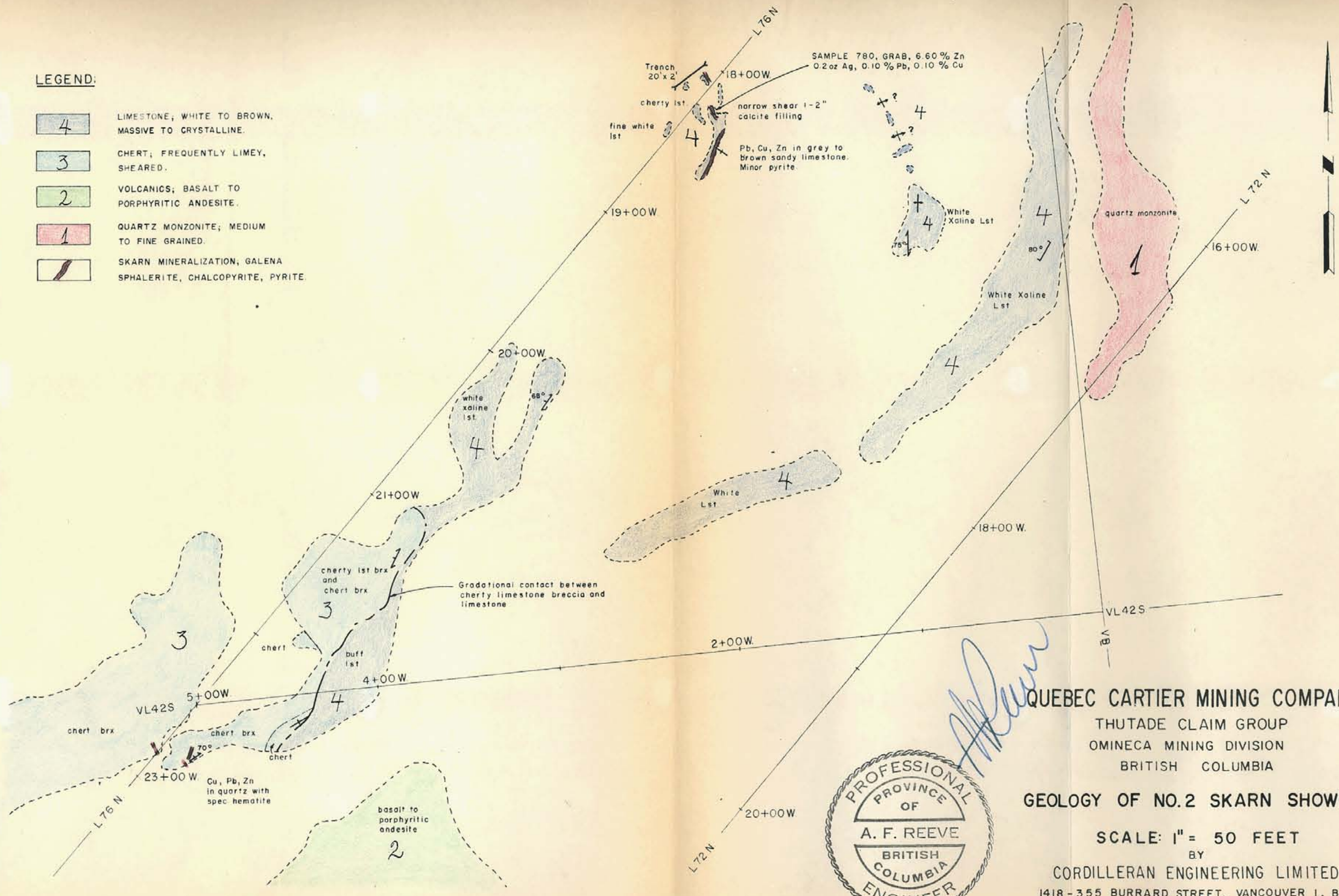
A specimen of the best material assayed 6.60% Zn, 0.10% Pb, 0.10% Cu, 0.2 oz. Ag. The mineralization appeared discontinuous and occurred only over a very small area. Further to the west, at 76N, 23W, the limestone grades into a limy chert breccia which has been intruded by thin quartz veins along shears. Minor sulphides occur in these veins.

No economic mineralization was observed to be associated with the contacts between the limestone and the andesite to the south or the quartz monzonite to the east. Only a very narrow (12") chill margin was noted along the quartz monzonite.

This showing is outside the boundary of the magnetometer survey, however, it is within the eastern side of geochemical anomaly No. II, anomalous for copper, lead and zinc. In addition, the induced polarization survey has indicated 'probable' and 'possible' anomalies on lines 72N and 76N in the vicinity of this showing. In the McPhar report it was suggested that a portion of this I.P. anomaly be tested by diamond drilling at 76N, 25W. This point is on the west side of the geochemical anomaly.

LEGEND:

- 4 LIMESTONE; WHITE TO BROWN, MASSIVE TO CRYSTALLINE.
- 3 CHERT; FREQUENTLY LIMEY, SHEARED.
- 2 VOLCANICS; BASALT TO PORPHYRITIC ANDESITE.
- 1 QUARTZ MONZONITE; MEDIUM TO FINE GRAINED.
- SKARN MINERALIZATION; GALENA, SPHALERITE, CHALCOPYRITE, PYRITE.



QUEBEC CARTIER MINING COMPANY
 THUTADE CLAIM GROUP
 OMINECA MINING DIVISION
 BRITISH COLUMBIA

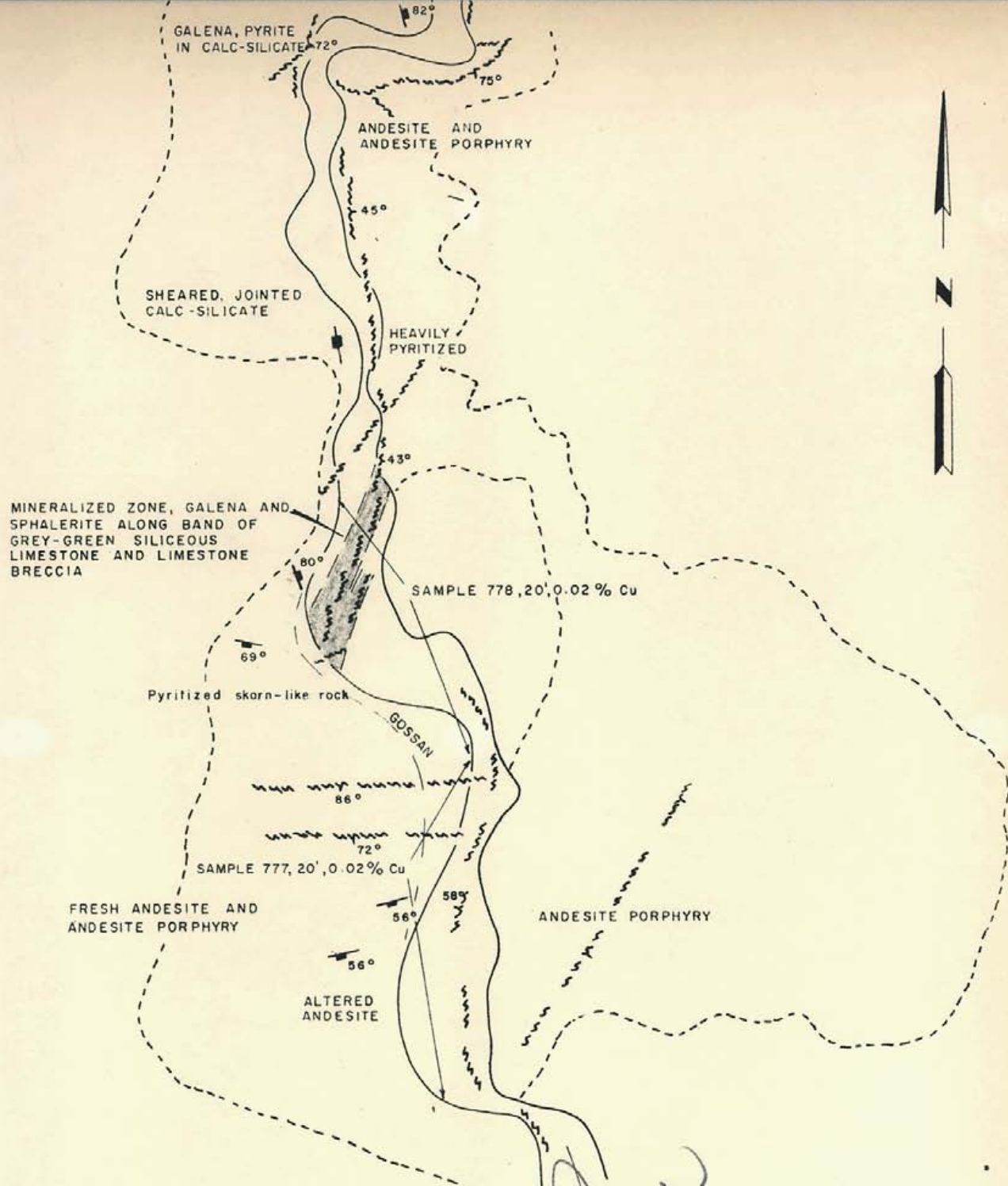
GEOLOGY OF NO.2 SKARN SHOWING

SCALE: 1" = 50 FEET

BY
CORDILLERAN ENGINEERING LIMITED
 1418-355 BURRARD STREET, VANCOUVER 1, B.C.
 OCTOBER, 1970

TO ACCOMPANY "GEOLOGICAL, GEOCHEMICAL AND GEOPHYSICAL REPORT ON THE THUTADE CLAIM GROUP, OMINECA MINING DIVISION, B.C.," BY M.H. SANGUINETTI, B.Sc., JANUARY 12, 1971

FIGURE 11



A. F. Reeve

QUEBEC CARTIER MINING COMPANY
 THUTADE CLAIM GROUP
 OMINECA MINING DIVISION
 BRITISH COLUMBIA
 GEOLOGY OF CREEK SHOWING
 SCALE 1" = 10 feet
 BY

CORDILLERAN ENGINEERING LIMITED
 1418-355 BURRARD STREET, VANCOUVER 1, B.C. CANADA
 OCTOBER, 1970

TO ACCOMPANY "GEOLOGICAL, GEOCHEMICAL AND
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 JANUARY 12, 1971

RESULTS OF 1970 FIELD PROGRAM
MAPPING AND TRENCHING (CONT'D)

The "Creek Showing" is located on the banks of a small creek, approximately 500 feet east of camp at 55N, 48W. Skarny bands, mineralized with galena and sphalerite, occur in fault zones in an altered, pyritized andesite porphyry. Trace amounts of chalcopyrite occur as smears on fractures in the altered rock and in thin discontinuous quartz stringers. A very short 'possible' I.P. anomaly (100 feet) occurs to the east of this mineralization. Geochemical anomaly No. IV, for lead and zinc only, encompasses this showing at its northern end, however, no additional mineralization other than along the creek was noted in mapping and prospecting in the vicinity of this anomaly.

SUMMARY AND CONCLUSIONS

1. Quebec Cartier Mining Company, through its consultants Cordilleran Engineering Limited, owns the Thutade No. 1-44 mineral claims in the Omineca Mining Division. These are located about 18 miles northwest of McConnell Creek at the northeast edge of Thutade Lake.
2. The Thutade claims were staked in 1970 to cover a ring-shaped magnetic anomaly outlined by an airborne EM-Magnetometer survey. Interpretation suggested the presence of a pluton with a zone of hydrothermal alteration near its core and lead-zinc sulphide occurrences on the flanks. It was felt that this represented zoning and the possibility of a "porphyry" copper environment.
3. The claims are underlain by porphyritic andesite and limestone of the Takla Group which have been intruded by a monzonite stock of the Omineca Intrusions. Mineralization consists of chalcopyrite on fractures in porphyritic andesite and of galena, sphalerite and chalcopyrite in skarn.

SUMMARY AND CONCLUSIONS (CONT'D)

4. A field program extending from July 5th to September 15th, 1970 was conducted by crews of Cordilleran Engineering Limited, Contract Exploration Services and McPhar Geophysics Limited. Work consisted of 26 miles of cut line in two grids, geochemical, magnetometer and induced polarization surveys, geological mapping, trenching and sampling.

5. The geochemical survey indicated two areas anomalous for copper, lead and zinc. Anomaly I, 1,000 feet by 1,200 feet, is entirely overburden covered and warrants further investigation. Anomaly II, 600 feet by 1,200 feet, is associated with the No. 2 Skarn Showing. Four smaller areas, anomalous for lead and zinc only, were indicated. The lack of extensive copper anomalies appears to preclude the occurrence of "porphyry" copper type mineralization in underlying intrusive rocks.

6. The results of a ground magnetometer survey reflected those of the airborne survey but could not be correlated directly with surface geology or mineral occurrences.

SUMMARY AND CONCLUSIONS (CONT'D)

7. An induced polarization survey was conducted by McPhar Geophysics Limited over 17.6 line miles. A large number of anomalies in the 'probable' and 'possible' categories were located. These have been included in three zones of which only Zone C coincides with a significant geochemical anomaly, Anomaly II, and known mineralization, the No. 2 Skarn Showing. No anomaly which could suggest the presence of significant concentration of disseminated sulphides was located.

8. Four mineralized areas, the Camp Showing, No. 1 Skarn Showing, No. 2 Skarn Showing and the Creek Showing, were mapped, trenched and sampled. Results indicate that the surface mineralization is sub-economic. Since much of each showing is covered by overburden, more detailed surface investigation may be warranted.

9. No economic mineralization was located in the intrusive rock on the immediate claims area. The lack of anomalous copper geochemical values and the weak irregular nature of the induced polarization anomalies appears to preclude the presence of a "porphyry" copper prospect within the survey area.

RECOMMENDATIONS

It is recommended that:

1. At least 4 years assessment be applied to Thutade No.'s 3-12, 17-26 and 31-40 mineral claims. The remainder should be allowed to expire.
2. A small program of detailed prospecting, mapping and trenching be conducted to investigate geochemical anomalies I and II and the induced polarization anomalies in Zones A and C. This work should be carried out at such time when a field crew is operating in the vicinity of the Thutade mineral claims.

Respectfully submitted,
CORDILLERAN ENGINEERING LIMITED

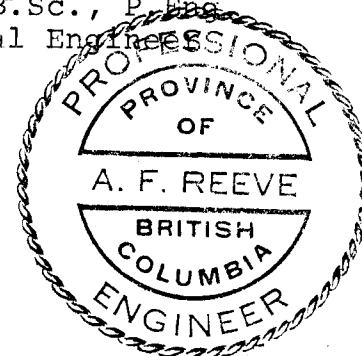
M. H. Sanguinetti

M. H. Sanguinetti, B.Sc.
Geologist

Supervised by:

A. F. Reeve
A. F. Reeve, B.Sc., P. Eng.
Geological Engineer

January 12, 1971



RESULTS OF 1970 FIELD PROGRAM
MAPPING AND TRENCHING (CONT'D)

The "Creek Showing" is located on the banks of a small creek, approximately 500 feet east of camp at 55N, 48W. Skarny bands, mineralized with galena and sphalerite, occur in fault zones in an altered, pyritized andesite porphyry. Trace amounts of chalcopyrite occur as smears on fractures in the altered rock and in thin discontinuous quartz stringers. A very short 'possible' I.P. anomaly (100 feet) occurs to the east of this mineralization. Geochemical anomaly No. IV, for lead and zinc only, encompasses this showing at its northern end, however, no additional mineralization other than along the creek was noted in mapping and prospecting in the vicinity of this anomaly.

SUMMARY AND CONCLUSIONS

1. Quebec Cartier Mining Company, through its consultants Cordilleran Engineering Limited, owns the Thutade No. 1-44 mineral claims in the Omineca Mining Division. These are located about 18 miles northwest of McConnell Creek at the northeast edge of Thutade Lake.
2. The Thutade claims were staked in 1970 to cover a ring-shaped magnetic anomaly outlined by an airborne EM-Magnetometer survey. Interpretation suggested the presence of a pluton with a zone of hydrothermal alteration near its core and lead-zinc sulphide occurrences on the flanks. It was felt that this represented zoning and the possibility of a "porphyry" copper environment.
3. The claims are underlain by porphyritic andesite and limestone of the Takla Group which have been intruded by a monzonite stock of the Omineca Intrusions. Mineralization consists of chalcopyrite on fractures in porphyritic andesite and of galena, sphalerite and chalcopyrite in skarn.

SUMMARY AND CONCLUSIONS (CONT'D)

4. A field program extending from July 5th to September 15th, 1970 was conducted by crews of Cordilleran Engineering Limited, Contract Exploration Services and McPhar Geophysics Limited. Work consisted of 26 miles of cut line in two grids, geochemical, magnetometer and induced polarization surveys, geological mapping, trenching and sampling.

5. The geochemical survey indicated two areas anomalous for copper, lead and zinc. Anomaly I, 1,000 feet by 1,200 feet, is entirely overburden covered and warrants further investigation. Anomaly II, 600 feet by 1,200 feet, is associated with the No. 2 Skarn Showing. Four smaller areas, anomalous for lead and zinc only, were indicated. The lack of extensive copper anomalies appears to preclude the occurrence of "porphyry" copper type mineralization in underlying intrusive rocks.

6. The results of a ground magnetometer survey reflected those of the airborne survey but could not be correlated directly with surface geology or mineral occurrences.

SUMMARY AND CONCLUSIONS (CONT'D)

7. An induced polarization survey was conducted by McPhar Geophysics Limited over 17.6 line miles. A large number of anomalies in the 'probable' and 'possible' categories were located. These have been included in three zones of which only Zone C coincides with a significant geochemical anomaly, Anomaly II, and known mineralization, the No. 2 Skarn Showing. No anomaly which could suggest the presence of significant concentration of disseminated sulphides was located.

8. Four mineralized areas, the Camp Showing, No. 1 Skarn Showing, No. 2 Skarn Showing and the Creek Showing, were mapped, trenched and sampled. Results indicate that the surface mineralization is sub-economic. Since much of each showing is covered by overburden, more detailed surface investigation may be warranted.

9. No economic mineralization was located in the intrusive rock on the immediate claims area. The lack of anomalous copper geochemical values and the weak irregular nature of the induced polarization anomalies appears to preclude the presence of a "porphyry" copper prospect within the survey area.

RECOMMENDATIONS

It is recommended that:

1. At least 4 years assessment be applied to Thutade No.'s 3-12, 17-26 and 31-40 mineral claims. The remainder should be allowed to expire.
2. A small program of detailed prospecting, mapping and trenching be conducted to investigate geochemical anomalies I and II and the induced polarization anomalies in Zones A and C. This work should be carried out at such time when a field crew is operating in the vicinity of the Thutade mineral claims.

Respectfully submitted,
CORDILLERAN ENGINEERING LIMITED

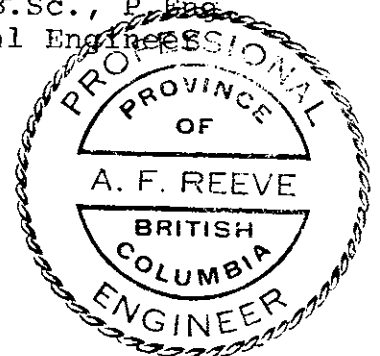
M. H. Sanguinetti

M. H. Sanguinetti, B.Sc.
Geologist

Supervised by:

A. F. Reeve
A. F. Reeve, B.Sc., P. Eng.
Geological Engineer

January 12, 1971



APPENDIX "A"

PERSONNEL AND TIME RECORD
STATUTORY DECLARATION OF EXPENDITURES

PERSONNEL AND TIME RECORDS

PERIOD: July 5th - September 15th, 1970

1. CORDILLERAN ENGINEERING LIMITED

			<u>Man Days</u>
A.F. Reeve, B.Sc., P.Eng.	Geol.Eng.	July 27-29	3
J.W. Stollery, B.Sc., P.Eng.	Geol.Eng.	Aug. 12-18	7
T.E. Kalnins, B.Sc.	Geologist	July 27-29, Aug. 10-15, Aug. 23 - Sept. 2, Sept. 14	21
M.H. Sanguinetti, B.Sc.	Geologist	Aug. 15-23, Sept. 2-7	15
D. Forgeron, B.Sc.	Geologist	Sept. 2-7	6
G. Heard	Labourer	July 5 - Aug. 10	37
P. Chance	Labourer	Aug. 10 - Sept. 7	29
L. Lotter	Labourer	Aug. 20 - Sept. 15	26
A. Clue	Cook	Aug. 26 - Sept. 7	13
J. Voiselle	Cook	July 5-31	<u>27</u>
Total Man Days			184

2. CONTRACT EXPLORATION SERVICES

G. Irving	Supervisor	July 5 - July 28	24
E. Cadotte	Labourer	July 5 - Sept. 7	65
B. Locke	Blaster	July 5 - Sept. 15	73
J. Clyne	Labourer	July 5 - July 28	<u>24</u>
Total Man Days			186

3. ADDITIONAL CONTRACTORS

McPhar Geophysics Limited, I.P. Crew July 30 - Sept. 7

B. C. Yukon Air Service,
Cessna, Beaver and Otter aircraft charter.

Canada

Province of British Columbia

To Wit:

In the Matter of

A geological, geochemical and geophysical report on behalf of Quebec Cartier Mining Company, Port Cartier, Quebec.

I, **Michael H. Sanguinetti**, for _____, of 1418 - 355 Burrard Street
Cordilleran Engineering Limited
Vancouver in the Province of British Columbia.

Do Solemnly Declare that geological mapping, trenching, a geochemical soil survey, and a magnetometer survey were conducted on the Thutade mineral claims (Thutade No.'s 3-12, 17-26, 31-40) in the Omineca M.D., located at the northeast end of Thutade Lake, 18 miles NW of McConnell Creek, B.C., during the period July 5th to September 15th, 1970.

The following expenses were incurred (these do not include the induced polarization survey^(new)):

1. Wages:	T.E. Kalnins	21 days	@\$900/mo.	-	\$712.50		
	M.H. Sanguinetti	15 days	@\$1000/mo.	-	500.00		
	D. Forgeron	6 days	@\$675/mo.	-	168.75		
	G. Heard	37 days	@\$450/mo.	-	562.50		
	P. Chance	29 days	@\$600/mo.	-	600.00		
	L. Lotter	27 days	@\$25/day	-	675.00		
	A. Clue	13 days	@\$600/mo.	-	300.00		
	J. Voiselle	27 days	@\$600/mo.	-	580.00		
	Plus 14% UIC, CPP, WCB, HP, etc. on \$4098.75			-	573.82	\$4672.57	
2.	Contract Exploration Services - 186 man days.						
	G. Irving	24 days	@\$45/day	-	1080.00		
	E. Cadotte	65 days	@\$35/day	-	2275.00		
	B. Locke	73 days	@\$35/day	-	2555.00		
	J. Clyne	24 days	@\$40/day	-	960.00	6870.00	
3.	Fixed Wing Aircraft (Watson, Pottah Lakes-Thutade Lake)						6454.40
4.	Food and Camp Expense, 470 man days @\$5.50/day						2585.00
5.	Geochemical Analysis						1556.26
6.	Assays						109.50
7.	Blasting supplies, fuel						225.00
8.	Consulting Services, Interpretation of Results						
	A.F. Reeve, P.Eng.						
	July 27-29	3 days	@\$125/day	-	375.00		
	J.W. Stollery, P.Eng.						
	Aug. 12-18	7 days	@\$125/day	-	875.00		
	Interpretation			-	250.00	1500.00	
9.	Report and Data Compilation						1697.62
	Total						\$25670.35

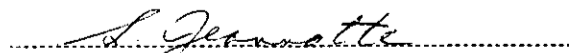
And I make this solemn Declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath, and by virtue of the Canada Evidence Act.

Declared before me

at **City of Vancouver**

in the Province of British Columbia.

this **28th** day of**January** A.D. 19 **71**



A Notary Public in and for the Province of British Columbia
 - A Commissioner for taking affidavits for British Columbia

APPENDIX "B"

SUMMARY OF TRENCHING

SUMMARY OF TRENCHING

<u>Trench No.</u>	<u>L x W x D</u> <u>(feet)</u>	<u>Volume</u> <u>(cu. ft.)</u>	<u>Sample No.</u>	<u>Sample Width</u> <u>(feet)</u>	<u>Cu</u> <u>%</u>	<u>Pb</u> <u>%</u>	<u>Zn</u> <u>%</u>	<u>Ag</u> <u>oz.</u>
<u>Camp Showing</u>								
1	17x4x3	204	776	17	0.54			
2	30x2x3	180	781	15	0.07			
			782	15	0.06			
3	6x2x2	24	783	6	0.05			
4	10x2x2	40	784	10	0.01			
5	6x2x2	24	785	6	0.02			
6	3x3x2	18	786	3	0.04			
7	12x3x3	108	787	12	0.12			
8	4x3x3	36	788	4	0.06			
9	12x4x3	144	789	12	0.06			
10	10x2x3	60	790	10	Tr.			
11	20x3x4	240	791	20	0.10			
12	20x2x3	120	792	20	0.03			
13	10x4x3	120	793	10	Tr.			
14	8x2x2	32	794	8	Tr.			
15	18x2x2	72	795	18	Tr.			
16	16x3x3	144	796	16	0.01			
17	4x2x2	16	797	4	Tr.			
Pit	3x3x1	9	798	3	Tr.			
	Total	1,591						
<u>No. 1 Skarn Showing</u>								
1	30x2x2	120	799	10	0.14	2.10	6.60	1.40
				grab	0.16	2.80	4.20	0.75
2	10x2x2	40						
3	5x2x2	20						
4	10x2x2	40						
5	10x2x2	40						
6	5x2x2	20						
7	10x2x2	40						
8	6x2x2	24						
9	5x2x2	20						
	Total	364						

SUMMARY OF TRENCHING (CONT'D)

<u>Trench No.</u>	<u>L x W x D</u> <u>(feet)</u>	<u>Volume</u> <u>(cu. ft.)</u>	<u>Sample No.</u>	<u>Sample Width</u> <u>(feet)</u>	<u>Cu</u> <u>%</u>	<u>Pb</u> <u>%</u>	<u>Zn</u> <u>%</u>	<u>Ag</u> <u>oz.</u>
<u>No. 2 Skarn Showing</u>								
1	20x2x1	40						
Grab			780	grab	0.10	0.10	6.60	0.20
<u>Creek Showing</u>								
1	40x3x5	600	777	20	0.02			
			778	20	0.02			

APPENDIX "C"

REFERENCES

REFERENCES

British Columbia

1932: Minister of Mines Annual Report.

Canadian Institute of Mining and Metallurgy

1966: "Tectonic History and Mineral Deposits of the Western Cordillera", CIM Geology Div., Special Vol. No. 8.

Crosby, R. O.

1970: "Report on Airborne Geophysical Surveys, Toodoggone Lake Area, British Columbia, on behalf of Cordilleran Engineering Limited", Private Report.

Goudie, M. A. and Hallof, P. G.

1970: "Report on the Induced Polarization and Resistivity Survey on the Linda Project, Thutade Lake Area, Omineca Mining Division, B. C. for Cordilleran Engineering Limited," Private Report.

Kalnins, T. E.

1970: "Project Toodoggone - 1969 - Regional Base Metals Investigations", Quebec Cartier Mining Company, Private Report.

Lord, C. S.

1948: "McConnell Creek Map-Area, Cassiar District, British Columbia", Geol. Surv. Can., Mem. 251.

Reeve, A. F.

- 1968: "Geology and Mineral Occurrences, Project Toodoggone - 1967", Quebec Cartier Mining Company, Private Report.
- 1969: "Project Toodoggone - 1968 - Regional Base Metals Investigations", Quebec Cartier Mining Company, Private Report.

APPENDIX "D"

CERTIFICATES OF QUALIFICATIONS

CORDILLERAN ENGINEERING LIMITED

MINERAL EXPLORATION
MANAGEMENT AND
ENGINEERING CONSULTANTS

1418-355 BURRARD STREET
VANCOUVER 1, B.C.
TELEPHONE (604) 681-8381

WRITER'S CERTIFICATE

I, MICHAEL H. SANGUINETTI, OF VANCOUVER

B. C. HEREBY CERTIFY THAT:

1. I am a geologist residing at 2960 West 32nd Avenue, and employed by Cordilleran Engineering Limited of 1418 - 355 Burrard Street, Vancouver 1, B.C.
2. I am a graduate of the University of British Columbia: B.Sc., in 1965, and have practiced my profession since that time.
3. I am the author of this report which is based on a study of various documents as well as a field program conducted by crews of Cordilleran Engineering Limited, Contract Exploration Services and McPhar Geophysics Limited during the period July to September, 1970.

CORDILLERAN ENGINEERING LIMITED

M. H. Sanguinetti

M. H. Sanguinetti, B.Sc.
Geologist

January, 1971
Vancouver, B. C.

CORDILLERAN ENGINEERING LIMITED

MINERAL EXPLORATION
MANAGEMENT AND
ENGINEERING CONSULTANTS

1418-355 BARRARD STREET
VANCOUVER 1, B.C.
TELEPHONE (604) 681-8381

SUPERVISOR'S CERTIFICATE

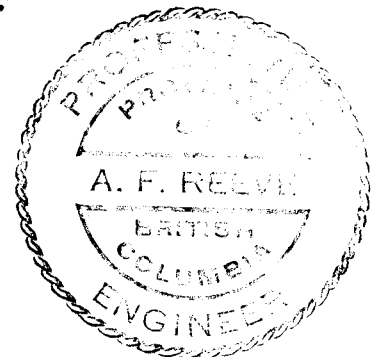
I, ALBERT F. REEVE, OF WEST VANCOUVER, B. C.
HEREBY CERTIFY THAT:

1. I am a geological engineer residing at 1090 Aubeneau Crescent.
2. I am employed by Cordilleran Engineering Limited with offices at 1418 - 355 Burrard Street, Vancouver, B.C.
3. I am a graduate of the Provincial Institute of Mining at Haileybury, Ontario, 1958, and received a Bachelor of Science degree from Michigan College of Mining & Technology at Houghton, Michigan in 1961.
4. I am a certified member of the Associations of Professional Engineers in the provinces of Ontario and British Columbia.
5. This report is based on a field program carried out on the Thutade claim group during the period July 5th to September 15th, 1970 by crews of Cordilleran Engineering Limited, Contract Exploration Services and McPhar Geophysics Limited.
6. This report, and the work upon which it is based, were conducted under my supervision.

Respectfully submitted,
CORDILLERAN ENGINEERING LIMITED


A. F. Reeve, P.Eng.

AFR:ifs
January, 1971



APPENDIX "E"

ASSAY CERTIFICATES

SEP 30 1970

BONDAR-CLEGG & COMPANY LTD.

1500 PEMBERTON AVENUE, NORTH VANCOUVER, B.C.

Phone 988-5315

geologists • geochemists • analysts • assayers

CERTIFICATE OF ASSAY

PROJECT NO.: QCM-Linda Sheet 207 - #5

TO Cordilleran Engineering Ltd.,
1418 - 355 Burrard St.,
Vancouver, B.C.

Report No.: A20 - 635
 Samples Rec'd: September 22, 1970
 Results Completed: September 29, 1970

that the following are the results of assays made by us upon the herein described Ore samples.

MARKED	GOLD		SILVER	Cu	Pb	Zn					TOTAL VALUE PER TON (2000 LBS.)
	Ounces per Ton	Value per Ton	Ounces per Ton	Percent	Percent	Percent	Percent	Percent	Percent		
Ores 776			---	.54	---	---					
777			---	.02	---	---					
778			---	.02	---	---					
779			.75	.16	2.80	4.20					
780			.20	.10	.10	6.60					
781			---	.07	---	---					
782			---	.06	---	---					
783			---	.05	---	---					
784			---	.01	---	---					
785				.02							
786				.04							
787				.12							
788				.06							
789				.06							
790				trace							
791				.10							
792				.03							
793				trace							
794				trace							

NOTE:
 Rejects retained two weeks
 Pulps retained three months
 unless otherwise arranged.

Gold & Silver values reported on these sheets
 have not been adjusted to compensate losses and
 gains inherent in fire assay methods.

Gold calculated at \$..... per ounce

Peter Kempe
 Registered Assayer, Province of British Columbia

CERTIFICATE OF ASSAY

I hereby certify that the following are the results of assays made by us upon the herein described Ore samples.

MARKED	GOLD		SILVER	Cu							TOTAL VALUE PER TON (2000 LBS.)
	Ounces per Ton	Value per Ton	Ounces per Ton	Percent	Percent	Percent	Percent	Percent	Percent		
Ores	795			trace							
	796			.01							
	797			trace							
	798			trace							

Peter Kempe

Registered Assayer, Province of British Columbia

To: Cor. Illeran Engineering Ltd.

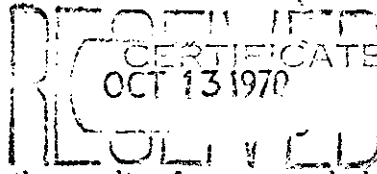
REPORT No. A20 703

PAGE No. One

BONDAR-CLEGG & COMPANY LTD.

DATE: Rec'd: October 6, 1970

Cordilleran Engineering Ltd.,
1418 - 355 Burrard St.,
Vancouver, B.C.



CERTIFICATE OF ASSAY

Date Completed: October 9, 1970

PROJECT - LINDA - Thutade

I hereby certify that the following are the results of assays made by us upon the herein described Ore samples.

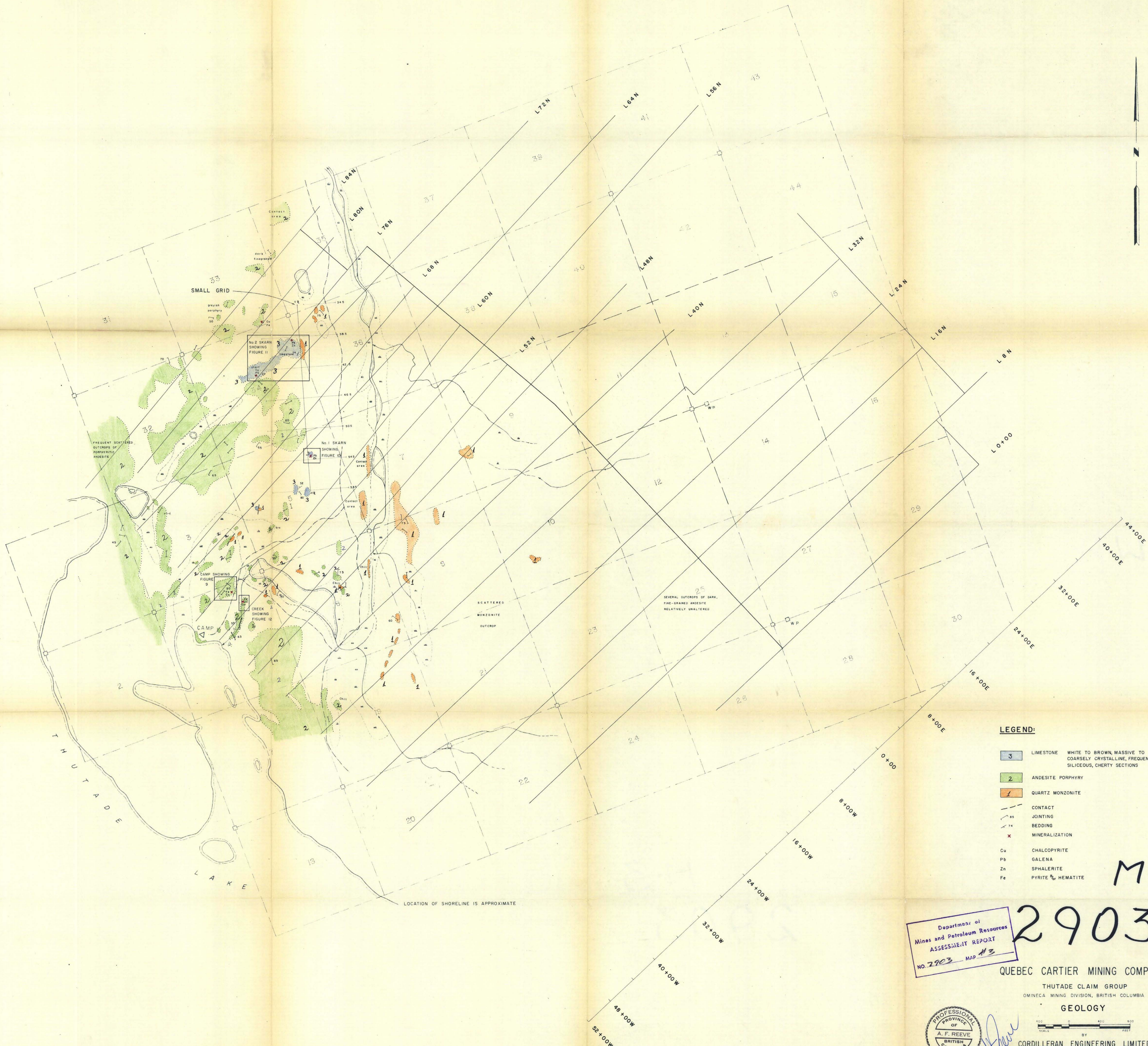
MARKED	GOLD		SILVER	Cu	Pb	Zn					TOTAL VALUE PER TON (2000 LBS.)
	Ounces per Ton	Value per Ton	Ounces per Ton	Percent	Percent	Percent	Percent	Percent	Percent		
re 799			1.4	.14	2.10	6.60					

Peter Kemp
Registered Assayer, Province of British Columbia

APPENDIX "F"

MAPS

- FIGURE 3 GEOLOGY
- 4 GEOCHEMISTRY - COPPER
- 5 GEOCHEMISTRY - LEAD
- 6 GEOCHEMISTRY - ZINC
- 7 MAGNETOMETER SURVEY
- 8 INDUCED POLARIZATION SURVEY



- LEGEND:**
- 3 LIMESTONE WHITE TO BROWN, MASSIVE TO COARSELY CRYSTALLINE, FREQUENTLY SILICEOUS, CHERTY SECTIONS
 - 2 ANDESITE PORPHYRY
 - 1 QUARTZ MONZONITE
 - CONTACT
 - JOINTING
 - BEDDING
 - x MINERALIZATION
 - Cu CHALCOPYRITE
 - Pb GALENA
 - Zn SPHALERITE
 - Fe PYRITE %, HEMATITE

M-3

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 2903 MAP #3

2903

QUEBEC CARTIER MINING COMPANY

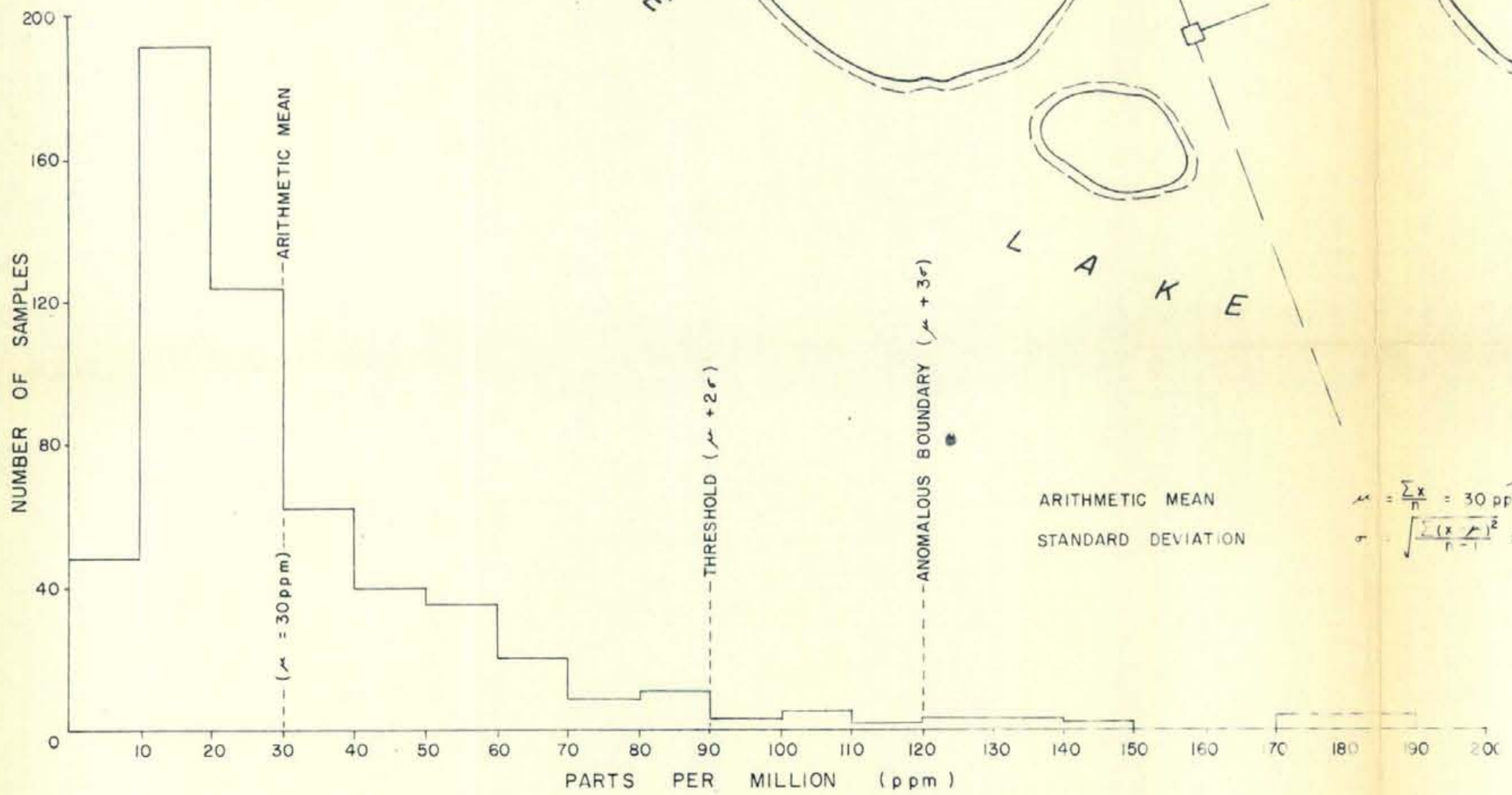
THUTADE CLAIM GROUP

OMINECA MINING DIVISION, BRITISH COLUMBIA

GEOLOGY



BY
CORDILLERAN ENGINEERING LIMITED
1418-355 BURRARD STREET, VANCOUVER 1, B.C.
OCTOBER, 1970



NOTE: SAMPLES ≥ 200 ppm OMITTED (18)

FREQUENCY DISTRIBUTION OF COPPER VALUES

- LEGEND:**
- SOIL SAMPLES**
- BACKGROUND 0-30 ppm
 - POSSIBLY ANOMALOUS 31-90 ppm
 - ◐ PROBABLY ANOMALOUS 91-120 ppm
 - ◑ ANOMALOUS > 120 ppm
- STREAM SEDIMENT SAMPLES**
- BACKGROUND
 - POSSIBLY ANOMALOUS
 - ◐ PROBABLY ANOMALOUS
 - ◑ ANOMALOUS

2903 M-4

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO 2903 MAP #4

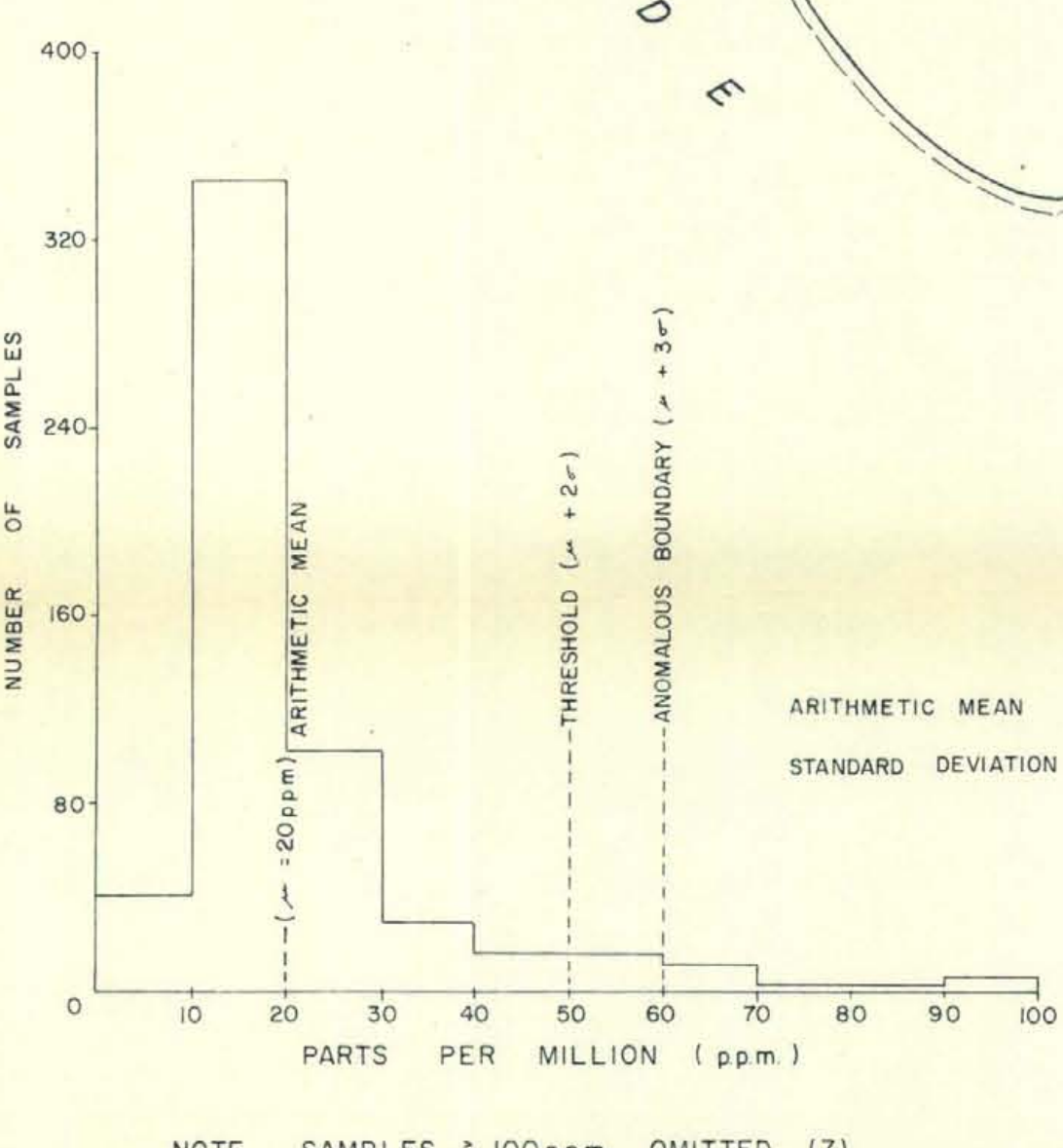
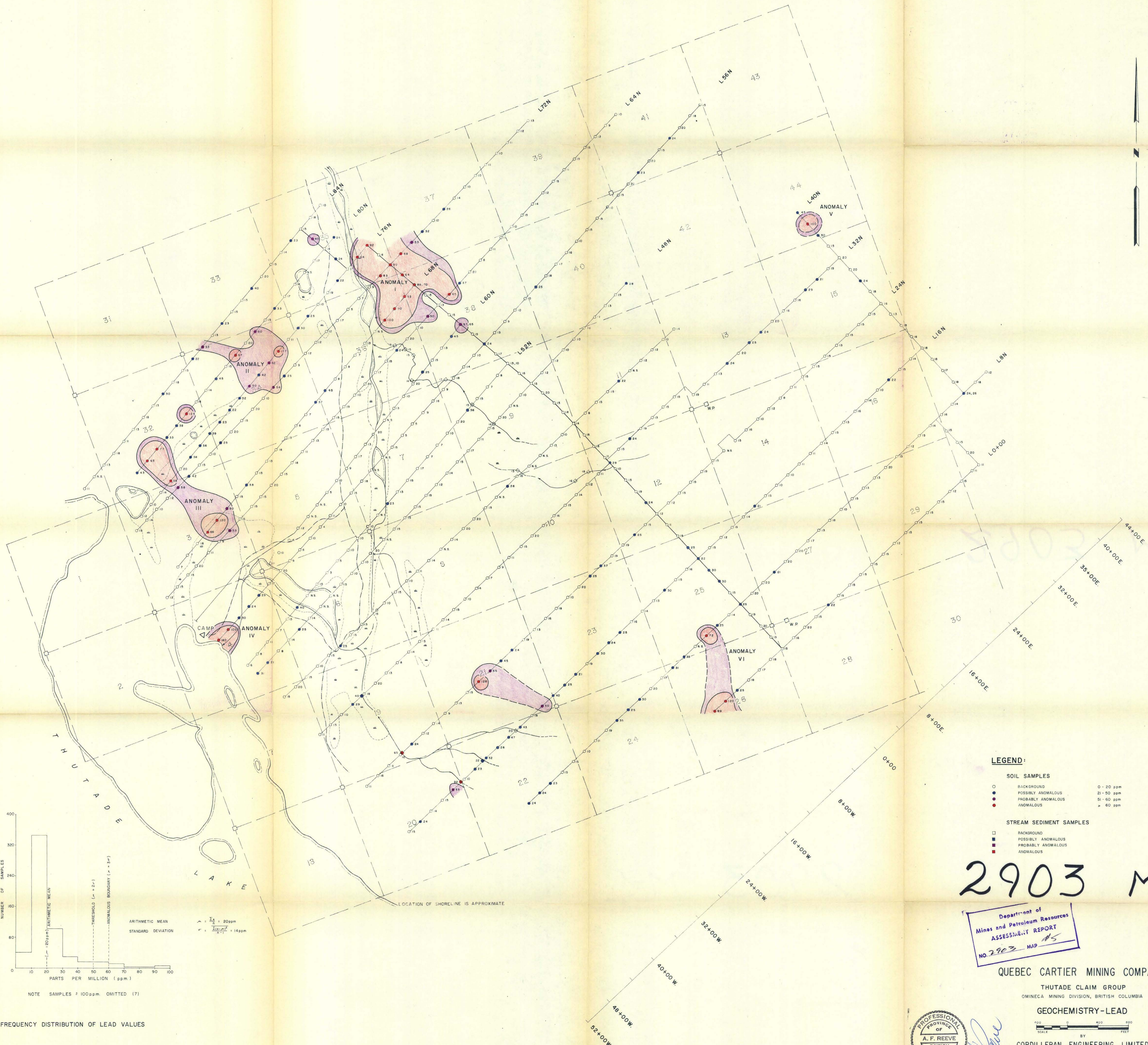
QUEBEC CARTIER MINING COMPANY
THUTADE CLAIM GROUP
OMNECA MINING DIVISION, BRITISH COLUMBIA

GEOCHEMISTRY - COPPER

SCALE 1:50,000



BY
CORDILLERAN ENGINEERING LIMITED
1418-355 BURNARD STREET, VANCOUVER 1, B.C.
OCTOBER, 1970



FREQUENCY DISTRIBUTION OF LEAD VALUES

- LEGEND:**
- SOIL SAMPLES**
- BACKGROUND 0 - 20 ppm
 - POSSIBLY ANOMALOUS 21 - 50 ppm
 - ◐ PROBABLY ANOMALOUS 51 - 60 ppm
 - ◑ ANOMALOUS > 60 ppm
- STREAM SEDIMENT SAMPLES**
- BACKGROUND
 - ◐ POSSIBLY ANOMALOUS
 - ◑ PROBABLY ANOMALOUS
 - ◒ ANOMALOUS

2903 M-5

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 2903 MAP #5

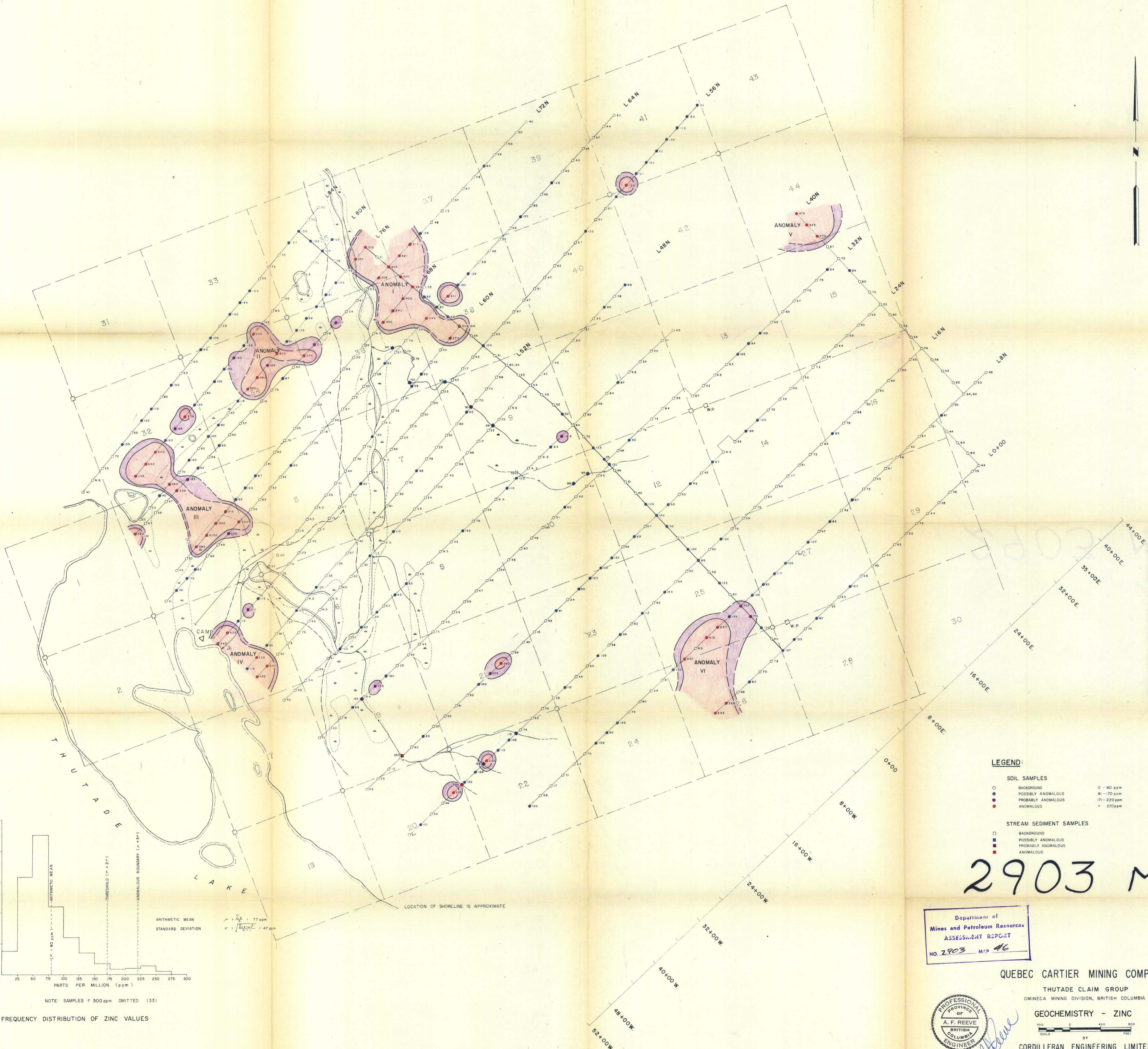
QUEBEC CARTIER MINING COMPANY

THUTADE CLAIM GROUP
OMINECA MINING DIVISION, BRITISH COLUMBIA

GEOCHEMISTRY-LEAD

BY
CORDELLERAN ENGINEERING LIMITED
1418-355 BARRARD STREET, VANCOUVER 1, B.C.
OCTOBER, 1970





2903 M-6

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 2903 M.P. 46

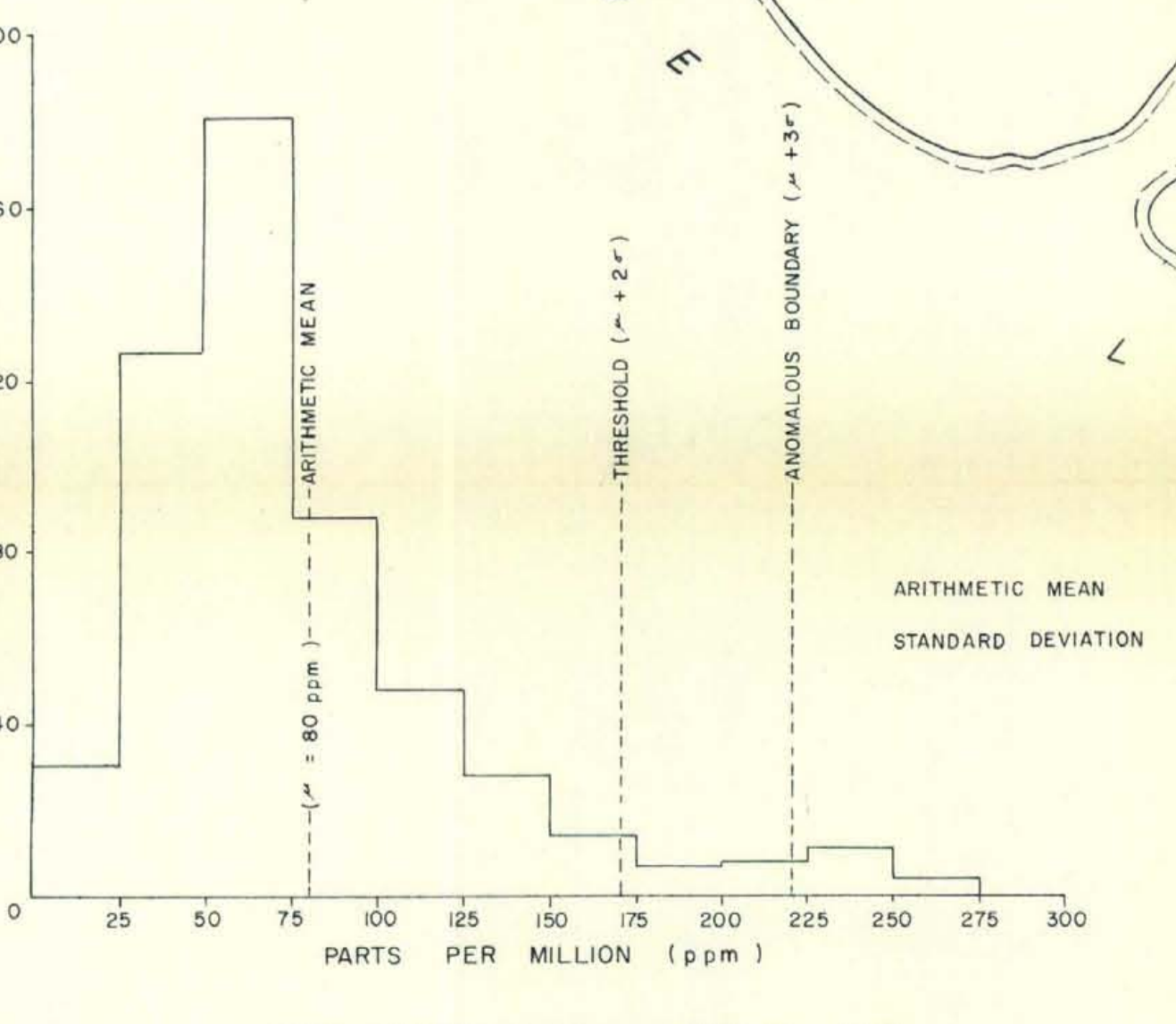
QUEBEC CARTIER MINING COMPANY

THUTADE CLAIM GROUP
OMINECA MINING DIVISION, BRITISH COLUMBIA

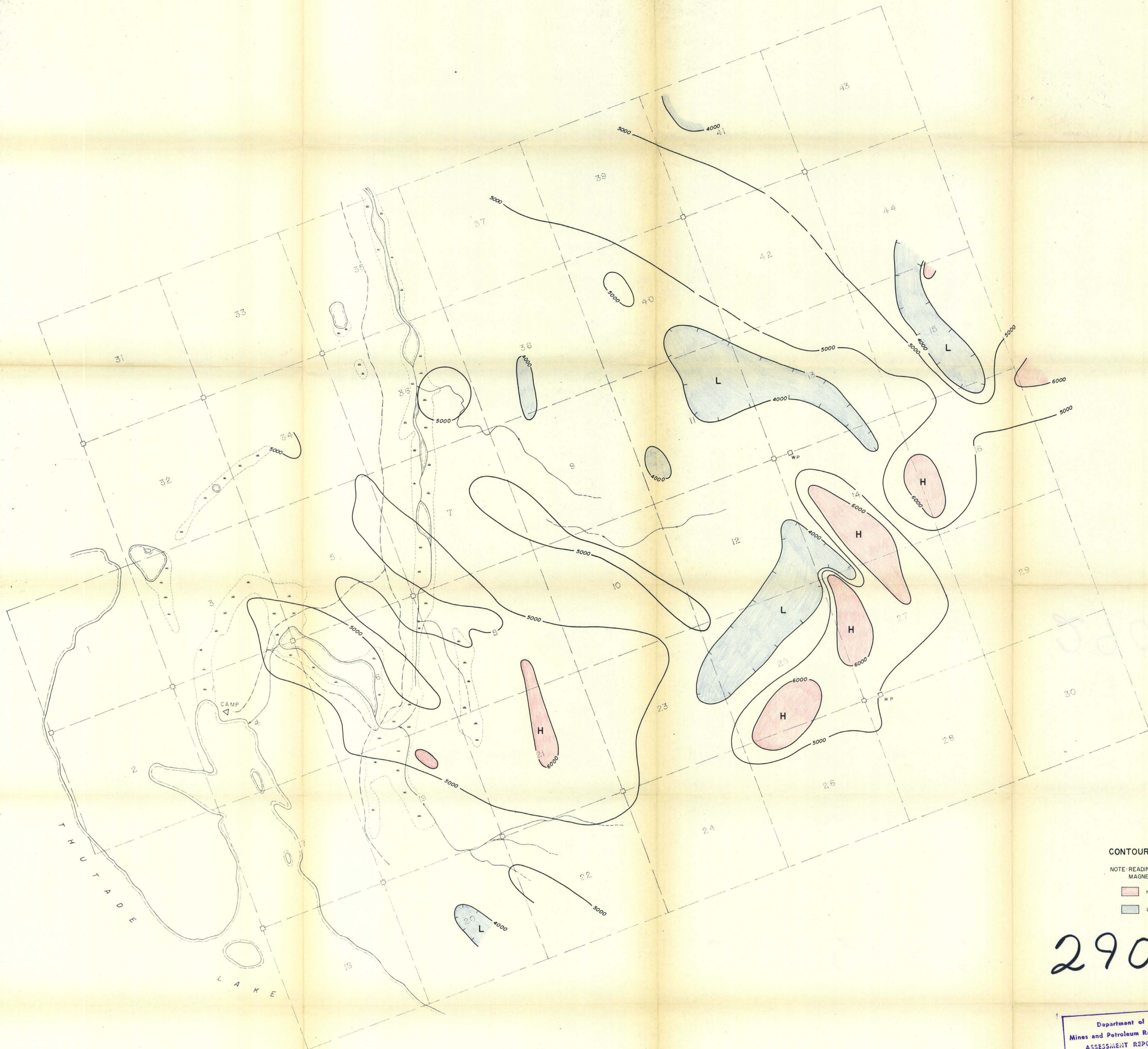
GEOCHEMISTRY - ZINC



BY
CORDILLERAN ENGINEERING LIMITED
1418-355 BURNARD STREET, VANCOUVER 1, B.C.
OCTOBER, 1970



NOTE: SAMPLES ≥ 300 ppm OMITTED (35)
FREQUENCY DISTRIBUTION OF ZINC VALUES



CONTOUR INTERVAL - 1000 GAMMAS

NOTE: READINGS TAKEN WITH A SHARPE MF-1 FLUXGATE MAGNETOMETER AT 100 FOOT STATIONS.

- HIGHER THAN 6000 GAMMAS
- LOWER THAN 4000 GAMMAS

2903 M-7

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 2903 MAP #7

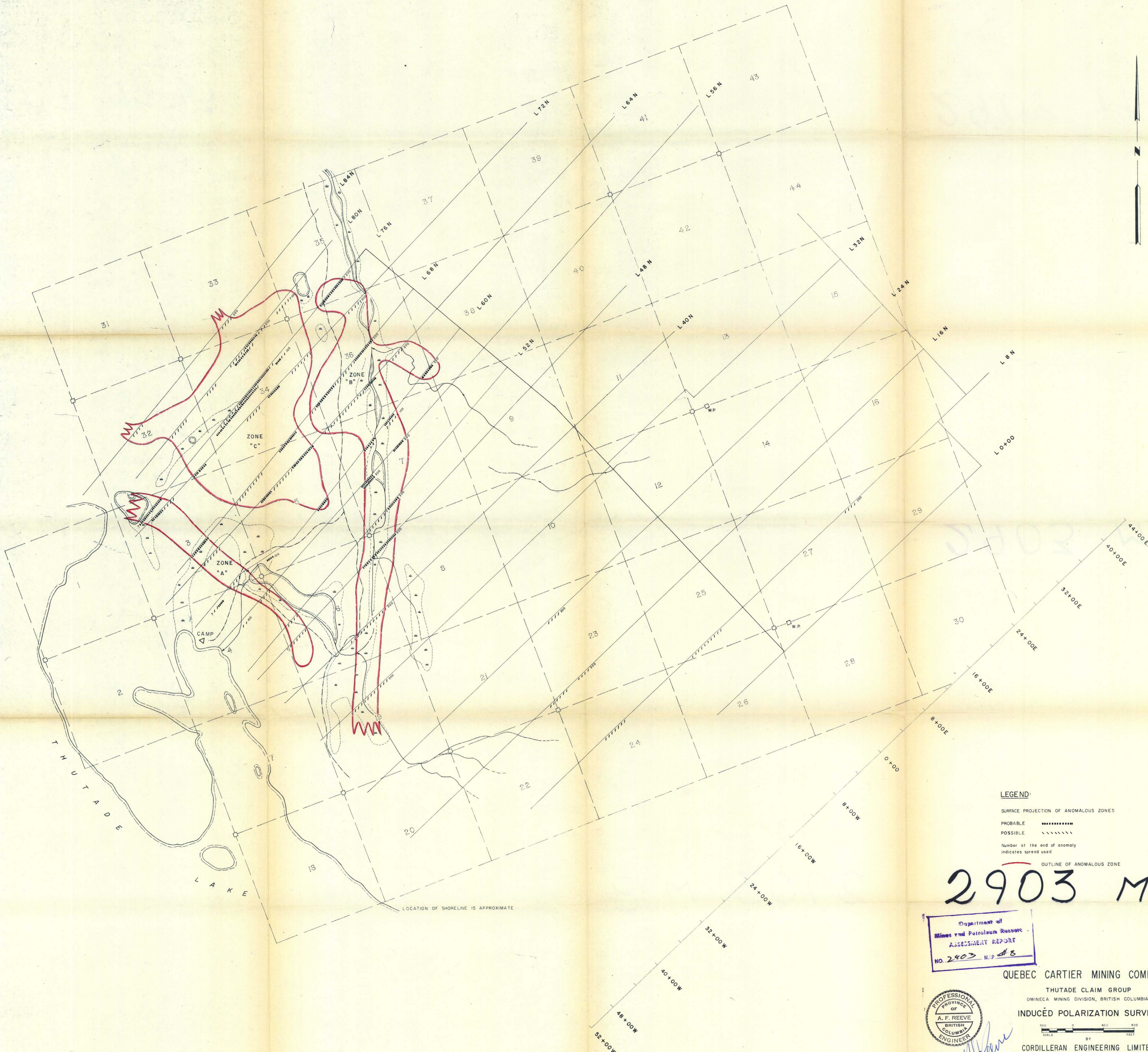
QUEBEC CARTIER MINING COMPANY

THUTADE CLAIM GROUP
OMINECA MINING DIVISION, BRITISH COLUMBIA

MAGNETOMETER SURVEY



BY
CORDILLERAN ENGINEERING LIMITED
1418-355 BURRARD STREET, VANCOUVER 1, B.C.
OCTOBER, 1970



LEGEND:
 SURFACE PROJECTION OF ANOMALOUS ZONES
 PROBABLE
 POSSIBLE
 Number at the end of anomaly indicates spread used

OUTLINE OF ANOMALOUS ZONE
2903 M-8

Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 2903 M.P. 48

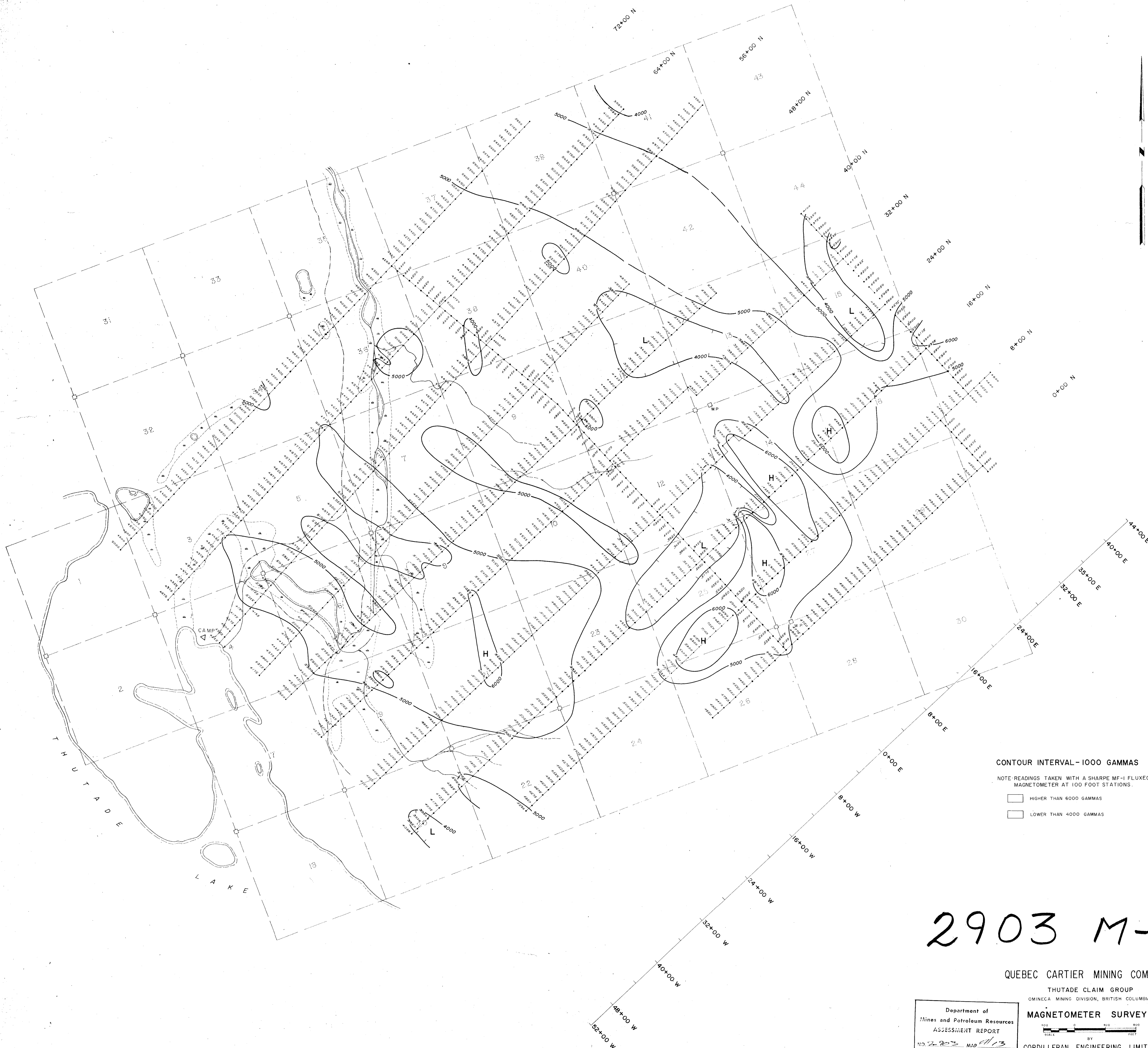
QUEBEC CARTIER MINING COMPANY

THUTADE CLAIM GROUP
 Omineca Mining Division, British Columbia

INDUCED POLARIZATION SURVEY



BY
 CORDILLERAN ENGINEERING LIMITED
 1418-355 BARRARD STREET, VANCOUVER 1, B.C.
 OCTOBER, 1970



CONTOUR INTERVAL - 1000 GAMMAS

NOTE: READINGS TAKEN WITH A SHARPE MF-1 FLUXGATE MAGNETOMETER AT 100 FOOT STATIONS.

- HIGHER THAN 6000 GAMMAS
- LOWER THAN 4000 GAMMAS

2903 M-13

QUEBEC CARTIER MINING COMPANY

THUTADE CLAIM GROUP

OMINECA MINING DIVISION, BRITISH COLUMBIA

MAGNETOMETER SURVEY

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 2903 MAS 113

BY
CORDILLERAN ENGINEERING LIMITED
1418-355 BURNARD STREET, VANCOUVER 1, B.C.
OCTOBER, 1970

