

exploration Itd. GEOLOGY · GEOPHYSICS MINING ENGINEERING

06/87

Suite \$14-850 WEST HASTINGS STREET, VANCOUVER, B.C. TELEPHONE (604) 681-0191 V6C 1E1

1986 ASSESSMENT REPORT (geophysical)

on the

KITIMAT RIVER PROPERTY

(MAT 1 AND MAT 2 CLAIMS)

Skeena Mining Division - British Columbia

Lat. 54 0 08' N

Long. 128 ° 12' W.

N.T.S. 103 I/E

FILMED

GEOLOGICAL BRANCH ASSESSMENT PEPORT

bу

D.R. MacQuarrie, B.Sc. D.G. Allen, P.Eng.(B.C.) SUB-RECORDER

SEP 22 1986

VANCOUVER, B.C.

September 19, 1986

Vancouver, B.C.

TABLE OF CONTENTS

SUMMARY	1
CONCLUSION	1
INTRODUCTION	2
CLAIM DATA	2
LOCATION, ACCESS, PHYSIOGRAPHY	2
HISTORY	3
GEOLOGY	3
1986 WORK PROGRAM	4
REFERENCES	
CERTIFICATE	

FIGURES

Figure 1	Location Map	1:250,000	After p. 3
Figure 2	Claim Map	1:50,000	After p. 3
Figure 3	1986 Grid Location Map	1:5,000	In pocket
Figure 4	Genie SE-88 Profiles	1:2,500	After p. 5

APPENDIX

Appendix I Affidavit of Expenses

SUMMARY

Abo Resource Corp. owns 40 claim units, the MAT 1 and 2, covering a porphyry molybdenum-copper prospect 50 kilometres southeast of Terrace, British Columbia in the Kitimat River area. Access is by helicopter from Terrace. The property lies on the east side of the Coast Plutonic Complex, a geologically favourable setting for large tonnage, low-grade copper-molybdenum deposits.

Previous assessment reports have outlined the geological setting and verified the existence of low-grade copper-molybdenum mineralization.

In 1986, a horizontal loop electromagnetic survey was carried out to test for conductors in a previously outlined area of anomalous geochemical response.

CONCLUSION

The MAT claim group has potential in that it has identifiable geological characteristics associated with major porphyry copper-molybdenum deposits. Its geological setting and surface grades suggest that deep seated higher grade zones may exist.

No conductors were located in the present survey, however, a drill program is recommended as the next phase of work.

INTRODUCTION

Abo Resource Corp. holds two 20-unit claims, MAT 1 and 2, in the Kitimat River area. The claims cover a porphyry molybdenite prospect that lies in a belt of important molybdenite deposits on the east flank of the Coast Plutonic Complex of west central British Columbia. The most important deposit in the belt is the Kitsault Mine (about 100 million tons grading 0.2% MoS₂) 160 kilometres to the northwest.

This report summarizes the results of a horizontal loop electromagnetic survey carried out by Shangri-La Mineral Exploration Consultants, on June 21 and 22, 1986 for A & M Exploration Ltd.

CLAIM DATA

The Kitimat River Property comprises two 20-unit claims as follows (see Figure 2):

Claim Name	Record No.	No. of Units	Expiry Date*
MAT 1	3098	20	June 22, 1987
MAT 2	3099	20	June 22, 1987

The claims are registered in the name of Abo Oil Corporation, the former name of Abo Resource Corp.

LOCATION, ACCESS, PHYSIOGRAPHY

The Kitimat River property is situated 50 kilometres southeast of Terrace and 30 kilometres east-northeast of Kitimat (see Figure 1). The property lies on the west side of the upper reaches of the Kitimat River about 30 kilometres upstream from the intersection of the river and Highway 25. At present, access is by helicopter based in Terrace. Logging roads will provide access to the area in the future.

^{*} Assuming this report is accepted for assessment purposes.

The property lies in the Coast Range Mountains. Topography is rugged with steep slopes rising from the Kitimat River floor at 425 metres (1,400 feet) to elevations of 1,500 metres (5,000 feet) on nearby ridges. Three westerly-flowing tributaries of Kitimat River deeply dissect the valley walls covered by the claims. The molybdenite showing lies between elevations of 600 and 1100 metres in Gossan and Mantle Creeks.

HISTORY

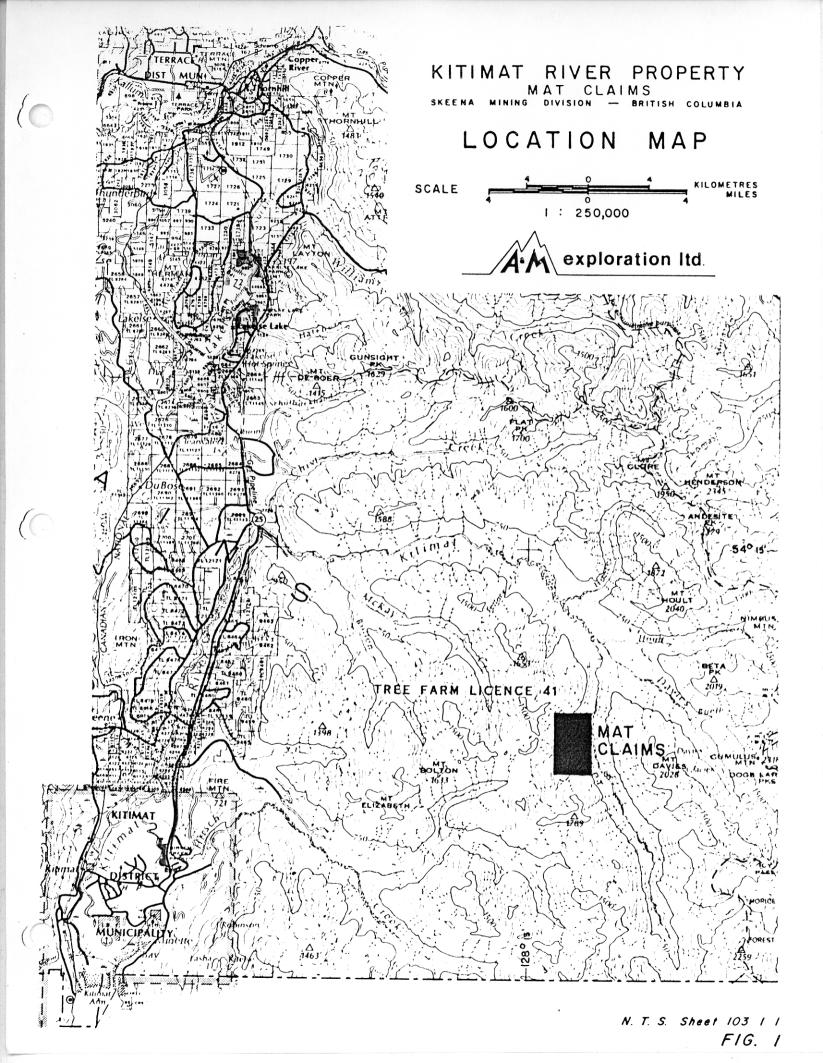
The property was staked originally by AMAX Exploration Inc. (now Canamax) in 1965. Work was carried out by AMAX and included prospecting, line cutting, geological mapping, soil and rock chip sampling and induced polarization surveys (Gambardella and Richardson, 1967; Bell and Sutherland, 1965; Allen, 1979).

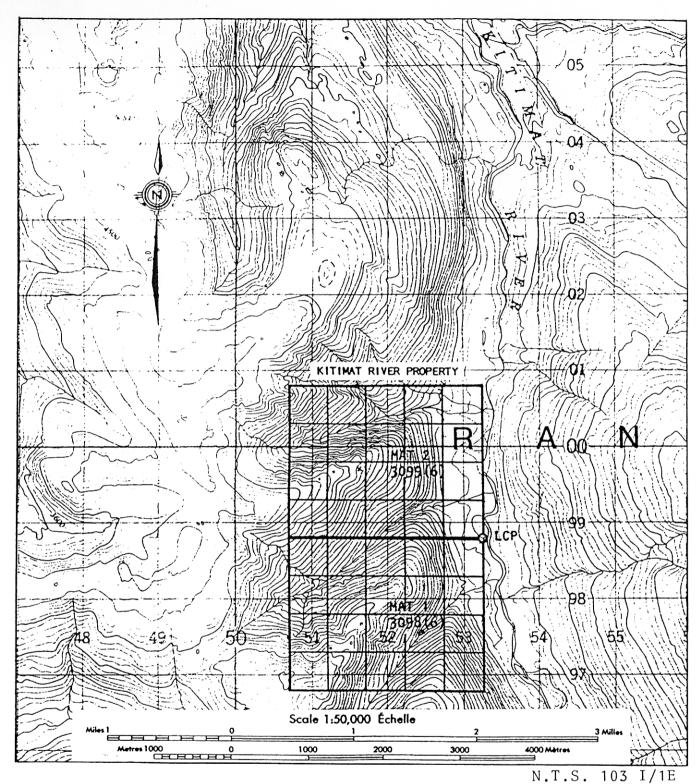
In 1984 and 1985, field work was carried out to confirm results of previous work, to investigate the precious metal and base metal potential, and to cover previously unsampled areas (Allen, D.G., 1984, and Allen, G.M., 1985).

GEOLOGY

The property lies on the eastern margin of the Coast Plutonic Complex, eight kilometres inside the contact with the Jurassic Hazelton Group volcanic rocks. A roof pendant of Hazelton volcanics underlies part of the claim group and a roof pendant of Triassic limestone and volcanic rocks lies to the west of the property. Several phases of Coast Plutonic rocks have been mapped in the area including gabbro, hornblende biotite diorite, biotite granodiorite, soda granite and muscovite granite. Northwest trending dikes ranging in composition from diorite to quartz monzonite, suggest a tectonic weakness of regional extent.

Oldest rocks in the claim area are massive, medium to dark green





,

ABO OIL CORPORATION

CLAIM MAP

KITIMAT RIVER PROPERTY

Skeena Mining Division - British Columbia



andesite of the Hazelton Group.

Structure of the area is complex. Three main fault trends are north, northeast and northwest. Faults range in width from one centimetre to five metres. Quartz-molybdenite stockworks occur locally in granite and quartz feldspar porphyry in Gossan and Mantle Creeks. Intrusive breccias further complicate the structural picture.

Mineralization consists of pyrite, molybdenite and chalcopyrite occurring in narrow quartz veinlets and to a lesser extent as fracture coating and as fine disseminations. The mineralized zones occur in two separate areas 2,500 metres apart. In Mantle Creek, quartz-molybdenite stockworks occur discontinuously over a horizontal distance of 600 metres and, in Gossan Creek, three weakly mineralized stockworks, 15 to 50 metres wide, occur over a distance of 1,000 metres.

Surface sampling by AMAX in 1966 in the more accessible parts of the mineralized zones yielded the following results: Mantle Creek area, 0.025% MoS_2 and 0.26% Cu.; and Gossan Creek area, 0.019% MoS_2 . Best section overall was 50 metres of 0.03% MoS_2 .

Alteration consists of silicification, feldspathization and to a lesser extent sericitization. It is mainly structurally controlled, and is very intense along shear zones, faults and fractures.

1986 WORK PROGRAM

A Scintrex Genie SE-88 horizontal loop electromagnetic survey was carried out in the southeast corner of the claims in order to test the previously located soil geochemical anomaly.

The work was performed by Shangri-la Mineral Exploration Consultants, on June 21 and 22, 1986.

A total of 2.8 line kilometres of surveying was completed on four flagged lines. A loop separation of 50 metres, a frequency pair of 112/3037, and a 12.5 metre station separation were used for all observations.

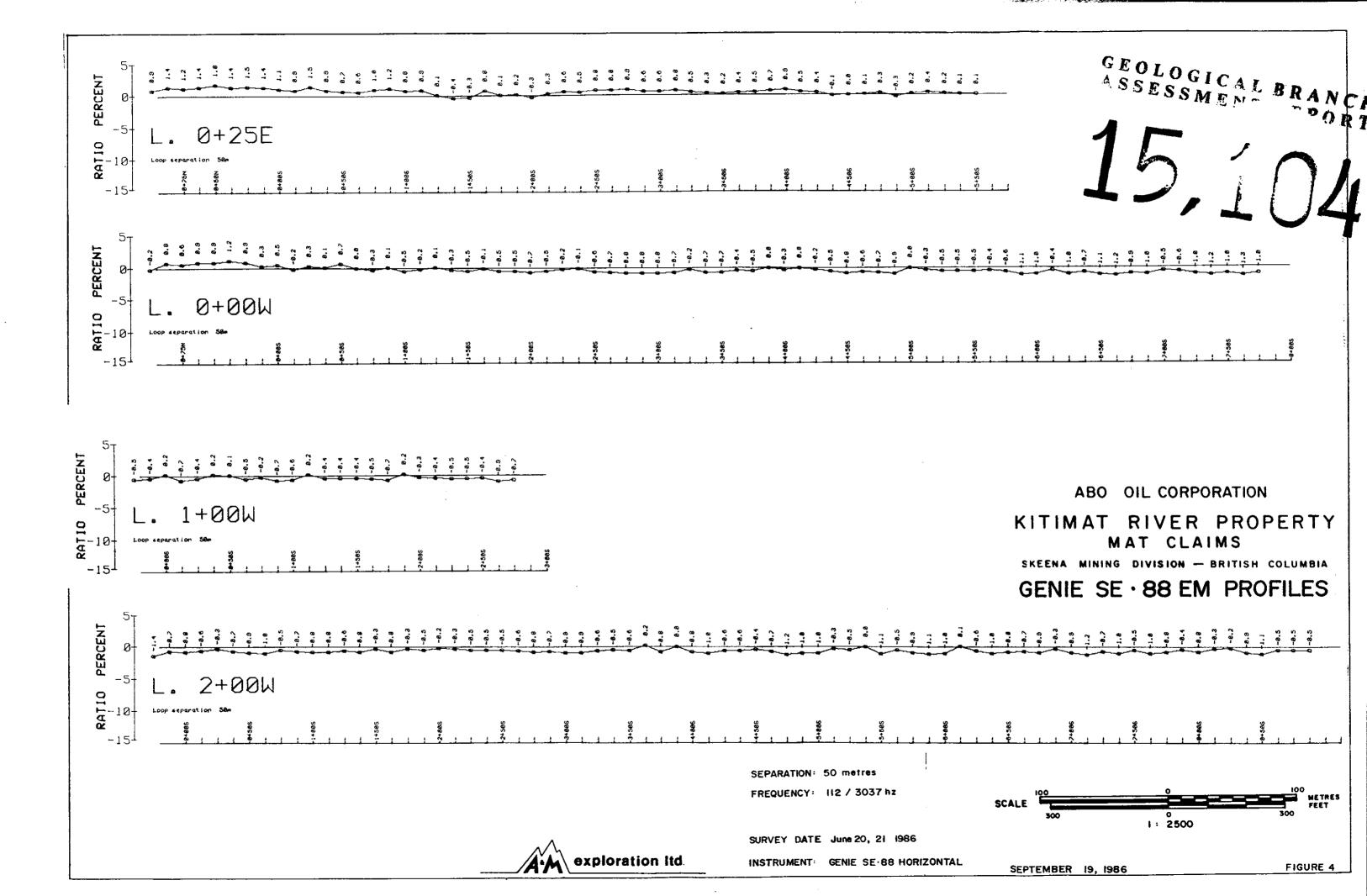
The data is presented at a scale of 1:2,500, in profile form, on

Figure 4, after this page.

No conductors were detected by the survey. This indicates that the soil geochemical anomalies are not related to massive sulphide type or massive sulphide stringer type conductors, and therefore are probably related to quartz stringer mineralization as seen elsewhere on the claims.

Respectfully submitted,

D.R. MacQuarrie, B.Sc.



REFERENCES

- Allen, G.M. (1985). 1985 Assesment Report, Kitimat River Property. B.C. Minister of Mines and Petroleum Resources.
- Allen, D.G.(1984). 1984 Assessment Report, Kitimat River Property.
 B.C. Minister of Mines and Petroleum Resources.
- Bell, R.A. and Sutherland, D.B. (1965). Report on the Induced Polarization Survey on the Kitimat River Group. B.C. Dept. Mines Assessment Report #775.
- Gambardella, A.C. and Richardson, P.W. (1967). 1966 Final Report, Kitimat River Property. B.C. Dept. Mines Assessment Report #1000.

CERTIFICATE

- I, Douglas R. MacQuarrie, certify that:
 - 1. I am a Consulting Geophysicist of A & M Exploration Ltd., with offices at Suite 614, 850 West Hastings Street, Vancouver, British Columbia.
 - I am a graduate of the University of British Columbia with a degree in Geology and Geophysics (B.Sc., 1975).
 - 3. I have been practising my profession since 1975 and have been active in the mining industry since 1971.
 - 4. I am an active member of the Canadian Institute of Mining and Metallurgy and a member of the British Columbia Geophysical Society.
 - 5. The field work was carried out on June 21 and 22, 1986 by Shangri-La Mineral Exploration Consultants under my direct supervision.
 - 6. I consent to the use of this report in a Statement of Material Facts or in a Prospectus in connection with the raising of funds for the project covered by this report.

September 19,1986 Vancouver, B.C.

Douglas R. MacQuarrie, B.Sc.

APPENDIX I

AFFIDAVIT OF EXPENSES

AFFIDAVIT OF EXPENSES

This will certify that the work program covered by this report was carried out during the period June 21 and 22, 1986 on the MAT 1 and 2 mineral claims, in the Kitimat River area, Skeena Mining Division, British Columbia, to the value of the following:

Mobilization and Fieldwork

Contract	labour
----------	--------

Shangri-La Minerals Ltd. includes all mob-demob wages, helicopter, room and board charges

\$5,007.70

Equipment Rental

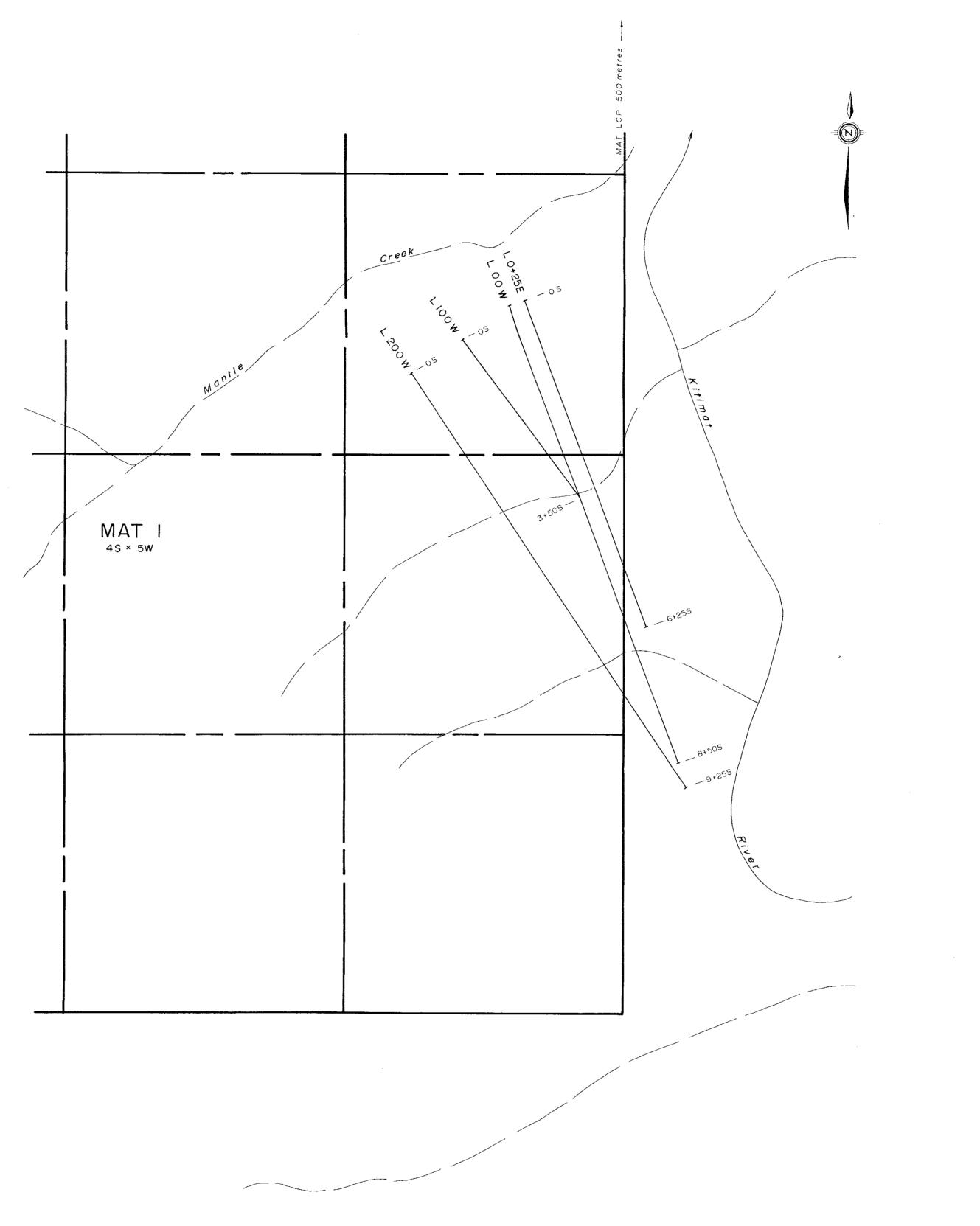
Genie SE-88 EM Unit

500.00

Report Preparation

D. MacQuarrie 1 day @ \$400/day	400.00
Maps, photocopying	15.00
Drafting	75.00
Typing, compilation	150.00

TOTAL \$6,147.70



GEOLOGICAL BRANCH ASSESSMENT REPORT

ANO DIL CORPORATION

KIT MAT FIVER PROPERTY

MAT CLAIMS

SKEENA MINING DIVISION - BRITISH COLUMBIA

1986 GRID LOCATION MAP

