

MAM CLAIMS ASSESSMENT REPORT OF
TRENCHING AND GEOPHYSICAL SURVEYS
PERFORMED BETWEEN JULY 1, AND AUGUST 30, 1978

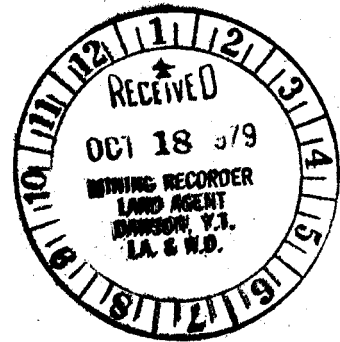
by AQUITAINE COMPANY OF CANADA

THE MAM CLAIMS ARE CENTERED ABOUT

138°03' WEST LONGITUDE

68°28' NORTH LATITUDE

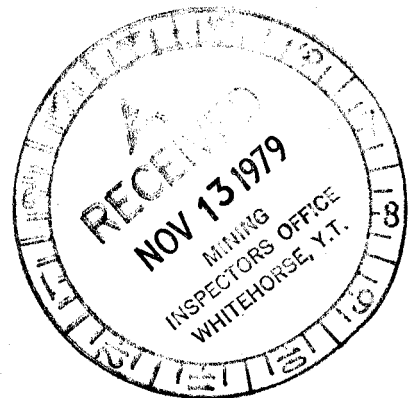
ON CLAIM SHEET 117A/6E



IN THE DAWSON MINING DISTRICT,
YUKON TERRITORY

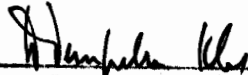
by D. NOAKES

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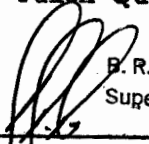
This report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of

\$ 1600



Resident Geologist or
Resident Mining Engineer

Considered as representation work under
Section 53 (4) Yukon Quartz Mining Act.


E. R. BAXTER
Supervising Mining Recorder



Commissioner of Yukon Territory

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1. Location of Main Claims
2. Location of Trenching and Geophysical Surveys
3. I.P. Survey on MAM Claims; Resistivity
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APPENDICES

- A. Total Value of Representation Work
- B. Trenching; the Value of Representation Work Performed
- C. Geophysical Survey; The Value of Representation Work Performed
- D. Detailed Outline of Costs Claimed as Representation Work

1.0 Introduction

This report serves to cover assessment work performed on the MAM Claims by Aquitaine Company of Canada in the summer of 1978. These claims lie near Mount Fitton in the headwaters of the Blow River in the Dawson Mining District in the northern Yukon Territory.

The original discovery of uranium and molybdenum mineralization was made during a ground traverse in 1977 and staked that summer. A preliminary investigation was performed that year to outline the extent of mineralization. Initial geologic, geophysical and trenching surveys were performed in 1978 as this report documents. Further geological, geophysical and soil sampling surveys are planned for the following year.

2.0 Claim Location and Status

The MAM Claims lie about a point at $138^{\circ}03'$ west longitude, $68^{\circ}28'$ north latitude on claim sheet 117A/6E in the Dawson Mining District in the Northern Yukon Territory (see fig. 1). The MAM Claims 1 to 8 inclusive (tag numbers YA 10764 to YA 10771) were staked under the regulations of the Yukon Quartz Mining Act on September 29, 1977. Application for a certificate of work to renew each of the 8 claims for 2 years was filed prior to the end of the claim year. Documentation of work performed is included as appendices

3.0 Geology

The MAM Claims encompass a contact between the Mount Fitton granitic stock (Devonian ?) and the intruded Road River Equivalent shales and quartzites (Silurian, Ordovician), as can be found as mapped in G.S.C. Open File 499 by D.K. Norris. Uranium, molybdenum and minor tungsten mineralization was found in a hornfels facies of the Road River formation as it lies in contact with a granitic dike, itself an element of the

Mount Fitton intrusive. Details of the mineralization are included in the description of trenching results.

4.0 Trenching and Description of Exposed Mineralization

4.1 Introduction.

Uranium and associated molybdenum mineralization were located by ground prospecting-scintillometer survey and were exposed in shallow pits. These occurrences were located near the crest of a steep-sided ridge. Outcrop was rare thus it was necessary to trench to expose the mineralized rock. Naturally, the trench site was located near the ridge crest as overburden thickens as one proceeds downslope. One large trench plus several smaller excavations were made. Observations from the mineralization exposed were used as a basis for the I.P. survey detailed in chapter 5.0. Costs incurred from trenching are claimed directly as representation work as allowed by Section 5 (a) Schedule of Representation Work, Yukon Quartz Mining Act.

4.2 Results.

Trenching was successful in exposing mineralization. See fig. 2 for trench locations. The main trench excavated was approximately 7 meters long, 2 meters wide and between 2 and 2.5 meters deep. The soil and felsenmeer cover was very thin thus the bulk of material removed was fractured and weathered bedrock.

Mineralization was well exposed in the main trench and indicated in other pits. Molybdenum, coarse to fine-grained, was observed as discrete veins up to 3 cm thick and disseminated throughout the host. Strong radioactivity, due exclusively to uranium mineralization was associated with this sulphide. Traces of scheelite were noted as well. Assays were made of grab samples simply to confirm the presence of the minerals noted, and a more objective sampling

method is required to produce meaningful results.

ASSAYS

Sample Number	Oz./ton Ag	%U ₃ O ₈	%Thorium	%WO ₃	%MoS ₂
936	.10	.073	trace	.54	.056
937	.18	.059	trace	.14	.027
938	.10	.083	trace	.70	.060

Mineralization of uranium and molybdenum, as noted, was found in a 25 meter-wide zone of hornfels adjacent to a coarse-grained granitic dike which itself is adjacent to the Mount Fitton stock. As exposure downslope was extremely poor, no extensions were exposed.

4.3 Conclusions and Recommendations.

Trenching has exposed significant mineralization on the MAM claims. Molybdenum and uranium are associated in a rock formed by contact metamorphism.

Efforts should be made to determine the length and width of this mineralized zone and if other zones are present. To this end, detailed soil sampling and geological surveys are recommended, and if successful should be followed by detailed I.P. surveys and trenching programs.

5.0 GEOPHYSICAL SURVEY

5.1 Introduction.

Following discovery of molybdenum mineralization and the staking of the MAM claims, a preliminary geophysical survey was performed to outline the characteristics of the mineralized zone that could be revealed by I.P.

Two parallel survey lines were run in an east-west direction perpendicular to the strike of the zone of interest as located in fig. 2.

Instrumentation used was a Scintrex I.P.R. 8 receiver and 2.5 KVA transmitter used in a pole-dipole configuration with $a = 25$ meters, $n = 1$ and 3 with infinite electrode at 450 meters west on surveyed grid.

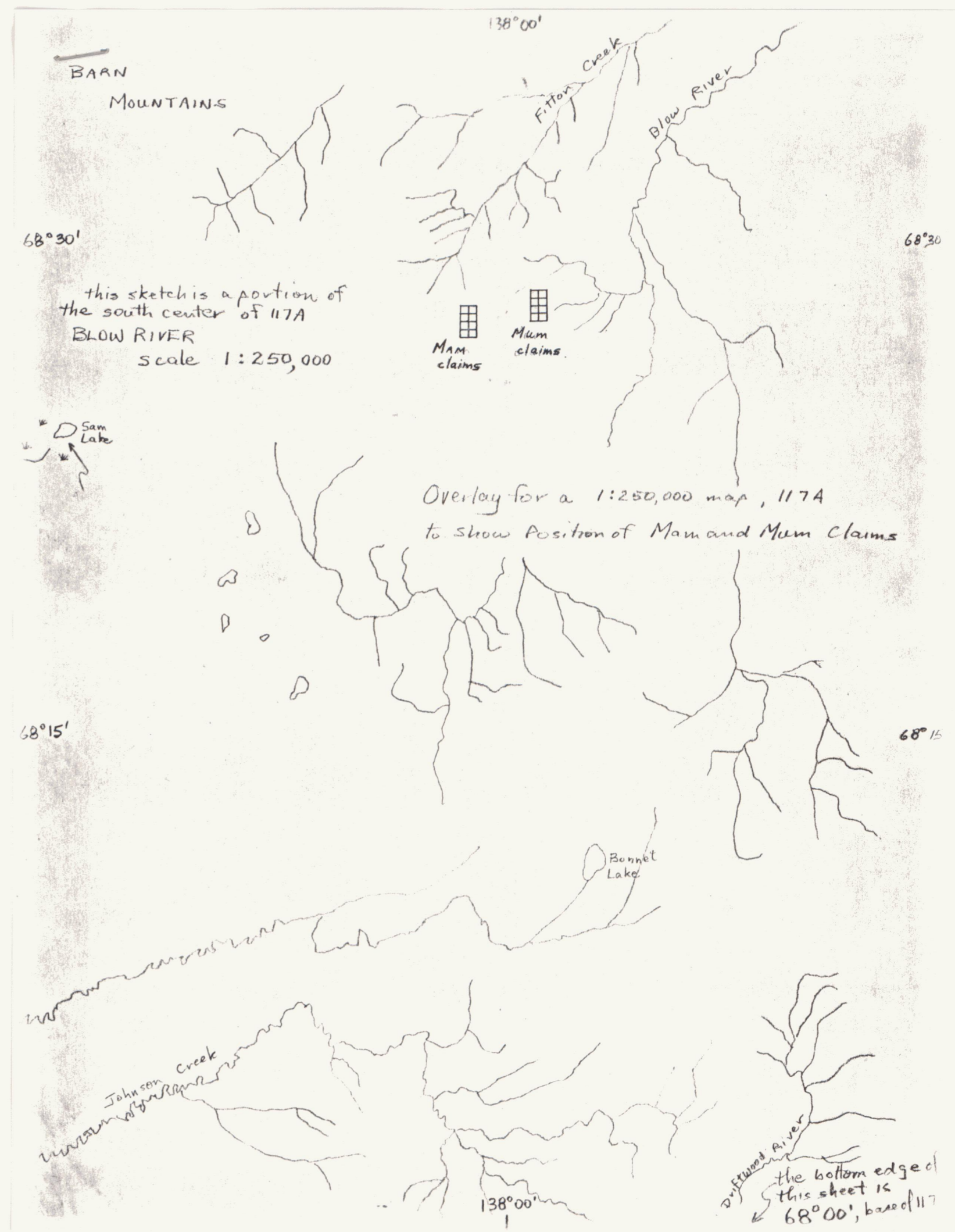
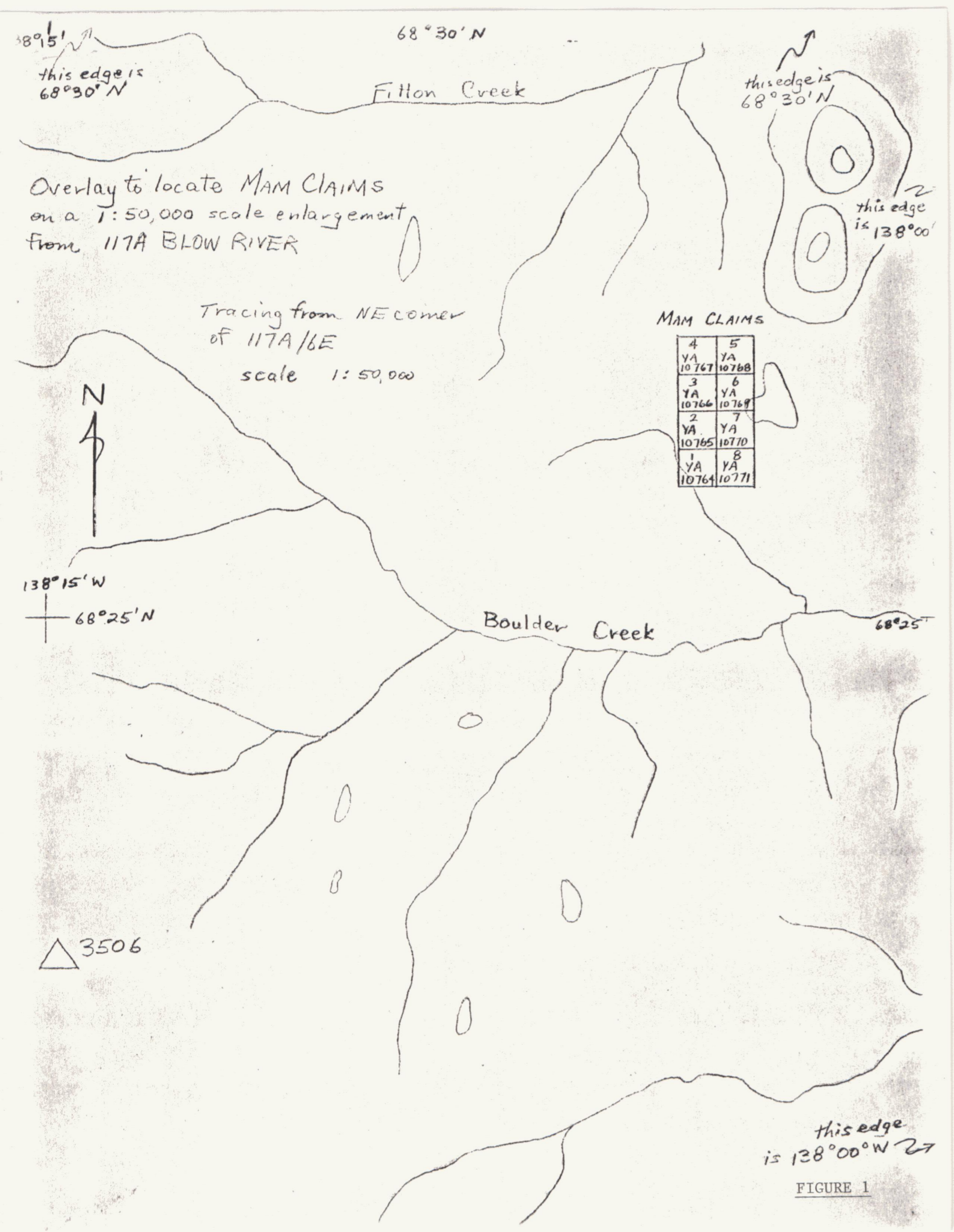
5.2 Results.

Resistivity and chargeability results are shown as contoured plots in fig. 3 and 4. The mineralized zone has been sketched on fig. 2 and appears as a poorly defined resistivity zone. Chargeability as shown on fig. 4 is not anomalous - in fact several other zones appear anomalous where no mineralization was noted.

5.3 Conclusions and Recommendations.

Results of the I.P. survey do not indicate a zone of high chargeability or low resistivity associated with the mineralization noted. Several other anomalous zones are shown.

As it has been noted that mineralization is significant, it is recommended that a detailed geologic survey be undertaken to outline potentially mineralized zones and to allow interpretation of the geophysical characteristics calculated. Well located soil sampling surveys would be of value prior to performing any additional geophysical surveys.

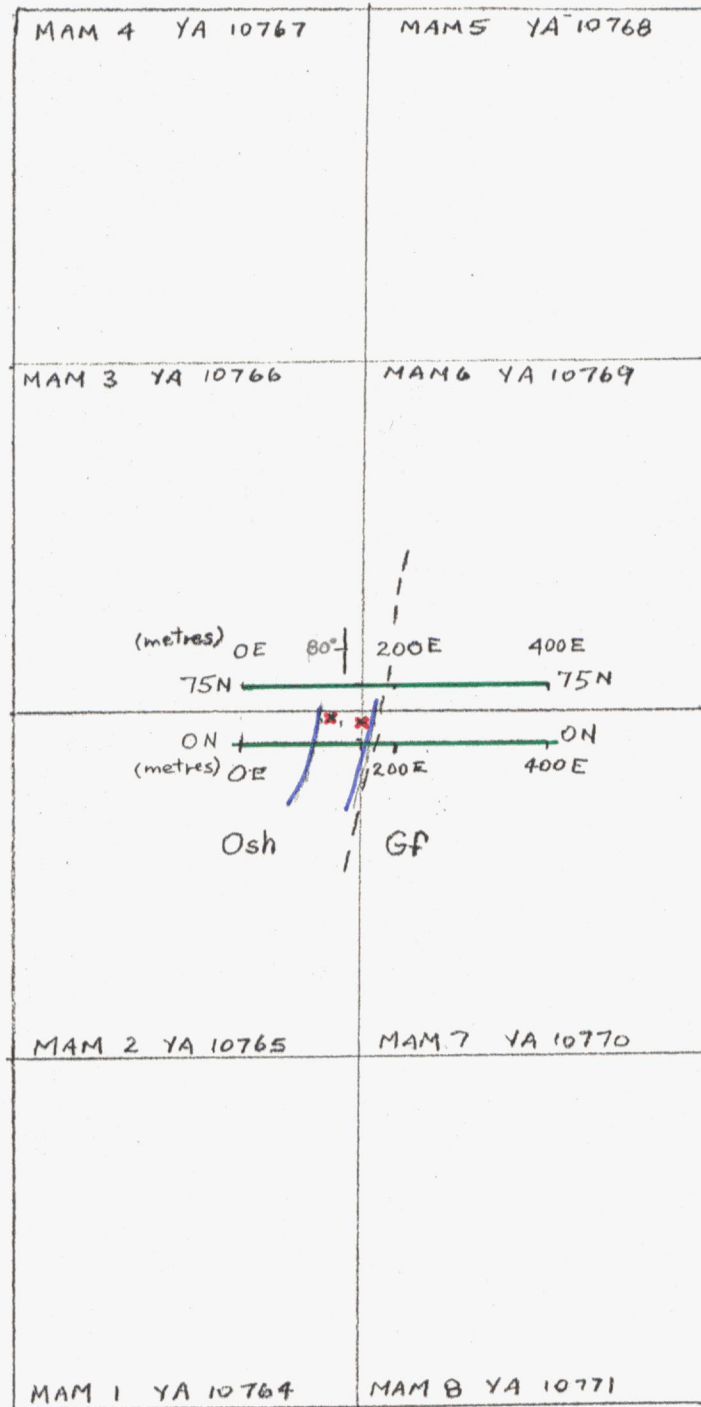


MAM CLAIMS

LOCATION OF GEOPHYSICAL SURVEY and TRENCHES

ARVITAINE COMPANY OF CANADA LIMITED
1978

scale 1:10,000



Legend

Geophysical Survey Lines

Trench

Mineralized Zone

Geologic Contact (Approx.)

Geology

- GF MOUNT FITTON GRANITE DEVONIAN ?
- Osh ROAD RIVER EQUIVALENT shales and quartzites ORDOVICIAN - SILURIAN

Location of geophysical grid:

intersection point of Mam 2, 3, 6 & 7 is located at:

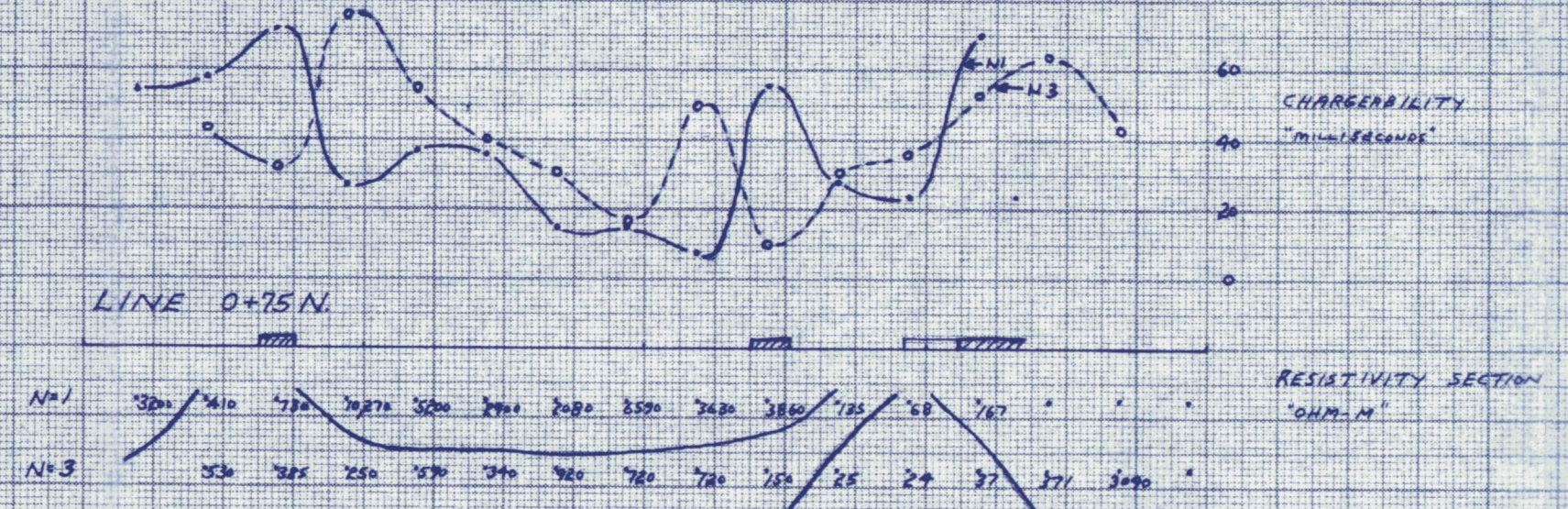
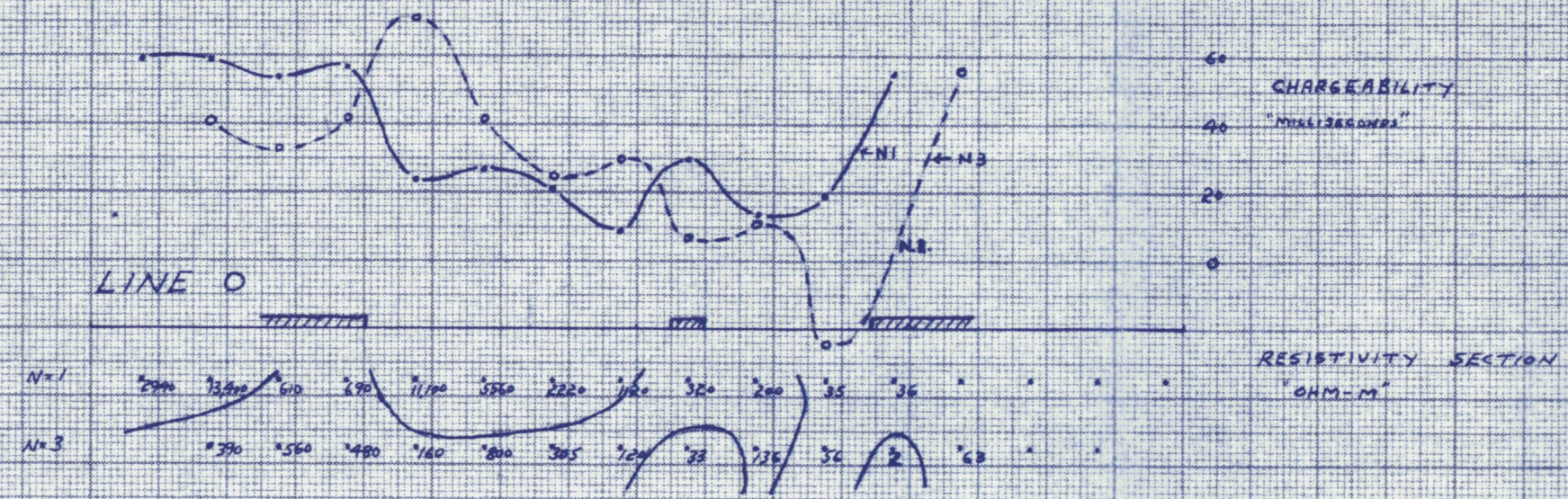
North 35 meters
East 153 meters

Trench Locations:

(main)
East 160 meters
North 25 meters

(smaller)
North 30 meters
East 115 meters

FIGURE 2



- HIGH RESISTIVITY SURFACE LAYER PROBABLY DUE TO PERMAFROST
- OVERBURDEN IS NEGLIGIBLE
- LINES ARE LOCATED ON TOP AND PARALLEL TO MOUNTAIN RIDGE

METHOD
POLE-DIPOLE
a = 25M, N = 143, INFINITE ELECTRODE LOCATED 45 DEGREES WEST OF 0+00 ON LINE 0+75N
EQUIPMENT
SCINTREX I.P.A. B
SCINTREX 2.5KV TRANSMITTER

AQUITAINE COMPANY OF CANADA LTD.

INDUCED POLARIZATION SURVEY

MAM CLAIMS, YUKON

FIGURE 3 & 4

SCALES
1cm = 25m.
1cm = 20 MILLISECONDS

— ANOMALY LOCATION

SURVEY BY ACC. PLOTTED BY G.H.
DATE JULY, 1978 A.F.E. AX-78