REPORT ON THE

ELECTROMAGNETIC SURVEY

CY CLAIMS, WEIR MOUNTAIN AREA

ATLIN MINING DISTRICT, B.C.

FOR

MATTAGAMI LAKE MINES LIMITED

EXPLORATION DIVISION

AUTHORS

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CONSULTING GEOPHYSICIST

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JULY 4, 1978

Part 1 of 3

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1. INTRODUCTION

A Crone Shootback Electromagnetic Survey has been carried out over parts of four CY claims (i.e. CY 2, CY 4, CY 5 and CY6) of the Weir Mountain property. The claim group is located within the "Surprise Lake batholith", N.T.S. 104-N, approximately 65 km N60°E of Atlin, B.C. The approximate centre of the property is situated at 59 40 north latitude and 133 00 west longitude.

Access to the property is by helicopter from Atlin. A gravel road connects Atlin to the east shore of Surprise Lake, 15 km from Weir Mountain.

The purpose of the electromagnetic survey was to explore for conductive sphalerite and galena which are known to be assocated with uranium mineralization.

The surveying was carried out during the early part of June, 1978 by the crews of Mattagami Lake Mines Limited and covered a total of 31.9 line-kilometers. Field work was supervised by Franco Morra. (Certificate appended to report.)

A Crone CEM system, operating at 1830 Hz, was used for the survey. The Horizontal Shootback system was used to minimize the effects of steep topography. A coil separation of 25 meters and a 25 meter station interval was employed throughtout the survey.

2. DESCRIPTION OF PROPERTY

The property consists of the following claims held by Mattagami Lake Mines Limited, Suite 1110, 8 King Street East, Toronto, Ontario, M5C 1B5.

Claim Name	Units	Record No.
CY 1	6	224
CY 2	20	225
CY 3	16	226
CY 4	20	227
CY 5	20	228
CY 6	20	229
CY 7	20	230
CY 8	16	231
ENG 1	9	221
ENG 2	20	222
ENG 3	20	223

3. PRESENTATION OF RESULTS

The location of the grid and the reconnaissance traverses are shown on Figure 1 which is a plan at a scale of 1 to 50,000.

Map 1 shows the data on the grid at a scale of 1 to 5000.

Map 2 shows the results of profiles B-B, C-C and the Baseline at a scale of 1 to 5000.

4. GEOLOGY

The Weir Mountain properties are almost entirely located within igneous intrusive rocks that form a portion of a regional batholith (Surprise Lake Batholith) that extends eastward from Atlin, B.C. as a lobe of the Coast Range Batholith.

The rocks underlying most of the Mattagami properties have been mapped and designated as alaskite of Cretaceous age by the G.S.C. (Map 1082, Atlin, B.C.). The contact of the alaskite and Unit 6 of the Cache Creek Group, runs through the southern part of the property.

The whole Surprise Lake Batholith presents anomalous radioactive response and interesting radioactive showing with associated sphalerite and galena have been found in the alaskite.

5. DISCUSSION OF RESULTS

The horizontal shootback method usually yields strong dip angle responses (i.e. 20° to 50°) at 1830 Hz over highly conductive, shallow conductors. No strongly anomalous responses were encountered in the survey; in fact, few dip angles in excess of 10° were recorded in the survey and the average value is estimated at plus 5. Consequently, no highly conductive, shallow sources are expected on the grid.

There are however, a number of weaker, "possible" anomalous, effects with dip angle variations of 5^{o} to 10^{o} that may indicate shallow or narrow sources of weaker conductivity or possibly even deeper sources. These have been indicated on the grid map and traverse sections with the appropriate symbol.

Additional work should be carried out at these localities to check the importance of these weak indications. Short profiles, say 250 metres, over each locality with a VLF unit, is suggested for the initial check work. If these are positive, or if the geology suggests the sphalerite and galena associated with the uranium is disseminated, then a program of induced polarization should be considered.

6. SUMMARY & RECOMMENDATIONS

A Horizontal Shootback electromagnetic survey has been carried out over parts of four CY claims. No strong responses typical of shallow, highly conductive sources were encountered.

However, there are a number of low amplitude responses (i.e. 5^{o} to 10^{o}) that could represent shallow sources of low conductivity or possibly deeper conductors. It is recommended that these "possible" anomalies be checked with short (e.g. 250 metre VLF traverses. These results and the nature of the sphalerite and galena mineralization associated

with the uranium values should be reviewed. If there is a possibility of poorly conductive zones and/or disseminated sulphides in the mineral association, then a program of induced polarization and resistivity surveying should be considered.

Respectfully submitted,

T.R. Gledhill, B.A., P.Eng.

D.B. Sutherland, M.A., P.Eng.

July 10, 1978.

CERTIFICATE

I, Tom Gledhill, of the Borough of North York, in the Province of Ontario, hereby certify:

1. That I am a practicing Professional Egnineer with offices at 21 Sandalwood Place, Don Mills, Ontario.
2. I am a graduate of the University of Toronto with a B.A. Degree (1954) in Physics and Geology.
3. I am a member of the Association of Professional Engineers of the Province of Ontario and hold a non-resident licence for British Columbia. I have been practising my profession over 20 years.
4. I am a member of the Society of Exploration Geophysicsts and the European Association of Exploration Geophysicists.
5. I have no direct or indirect interest, nor do I expect to receive any direct interest directly or indirectly in the property or securities of Mattagami Lake Mines Limited or any affiliates.
6. The statements made in this report are based on a study of published geological literature and unpublished private reports.

Dated at Don Mills, Ontario, this 10th day of July, 1978.

Tom Gledhill

July 10, 1978

Tom Gledhill, B.A., P.Eng.

C E R T I F I C A T E

I, Don B. Sutherland, of the City of Toronto, Province of Ontario, do hereby certify that:

1. I am a geophysicist residing at 68 Cheltenham Ave., Toronto, Ontario.

2. I am a graduate of the University of Toronto with a B.A. Degree (1953) in Physics and Geology and an M.A. Degree (1954) in Physics.

3. I am a member of the Society of Exploration Geophysicists and the European Association of Exploration Geophysicists.

4. I am a Professional Geophysicist and a Consulting Geophysicist, registered in the Province of Ontario.

5. I have no direct or indirect interest, nor do I expect to receive any interest directly or indirectly, in the property or securities of Mattagami Lake Mines Limited or any affiliate.

6. The statements made in this report are based on a study of published geological literature and unpublished private reports.

Dated at Toronto, Ontario

this 5th day of July, 1978

D.B. Sutherland, M.A., P.Eng.

C E R T I F I C A T E

I, Franco P. Morra, of the Municipality of Edmonton, Alberta, DO HEREBY CERTIFY THAT: -

1. I am a geologist residing at 11234 - 72 Av., Edmonton, Alberta.

2. I am a graduate of the University of Alberta (1977), Master of Science and Geology.

3. I have been employed with Mattagami Lake Mines Limited in Edmonton, Alberta since January 1, 1977.

Dated at Edmonton, Alberta
this 4 day of July, 1978.

Franco P. Morra, M.S.

MATTAGAMI LAKE MINES LIMITED

(NO PERSONAL LIABILITY)

EXPLORATION DIVISION

SUITE 1110
8 KING STREET EAST
TORONTO, ONTARIO
M5C 1B5

TELEPHONE 362-1853

WORK PERFORMED BY OUR PERSONNEL IN THE
EXPLORATION OF OUR WEIR MOUNTAIN PROJECT - 1978

W. Mercer - $1,875.00/mo - June 10 - 16, Geological surveying and field supervision

F. Morra - $1,516.67/mo.
N. Ball - $ 810.00/mo.
L. Ball - $ 750.00/mo.
J. Biczok - $1,400.00/mo.

May 19 - June 26 - Geological, geochemical, electromagnetic and radiometric surveys, trenching.

All above salaries are subject to bush bonus and vacation pay.

STATEMENT OF COSTS

Salary cost, field	$ 7,868.53
Ground transportation	2,455.46
Aircraft support	2,764.20
Instrument rental	3,370.68
Analyses	1,951.35
Food, accommodation	2,099.53
Preparation of report	1,000.00
Other	462.00
	$21,971.75

CERTIFIED CORRECT

P. Battle
Chief Exploration Accountant

July 18, 1978.

MATTAGAMI LAKE MINES LIMITED

(NO PERSONAL LIABILITY)

EXPLORATION DIVISION

SUITE 1110
8 KING STREET EAST
TORONTO, ONTARIO
M5C 1B5

TELEPHONE 362-1853

WORK PERFORMED BY OUR PERSONNEL IN THE
EXPLORATION OF OUR WEIR MOUNTAIN PROJECT - 1977

W. Mercer - $1,766.67/mo. - September 8
- Field supervision

F. Morra - $1,400.00/mo
- Aug. 25 - Sept. 2 - Geochemical and geological surveys
- Sept. 8 - Geological
- Sept. 23, 27, 28, 29 - Report writing

W. Howard - $800.00/mo.
- Aug. 25 - Sept. 2 - Geochemical and geological surveys

All above subject to bush bonus and vacation pay.

STATEMENT OF COSTS

Salary cost, field	$ 822.45
Ground transportation	490.55
Aircraft support	2,422.63
Instrument rental	347.28
Analyses	284.45
Food & accommodation	51.10
Preparation of report	515.21
Other	80.16
	$5,013.94

CERTIFIED CORRECT

J. Wheatley

July 18, 1978.

Chief Exploration Accountant

CY 5

CY 7

CY 6

SNOW FIELD

CY 4

SNOW FIELD

1000 W
900 W
800 W
700 W
600 W
500 W
400 W
300 W
200 W
100 W
BL.00
100 E
200 E
300 E
400 E
500 E
600 E
700 E
800 E
900 E
1000 E

D1

Weir Mtn

Carbon Creek

Weir Creek

A

A'

700 S 600 S 500 S 400 S 300 S 200 S 100 S 00 100 N 200 N 300 N 400 N 500 N 600 N 700 N 800 N 900 N 1000 N

Map # 1

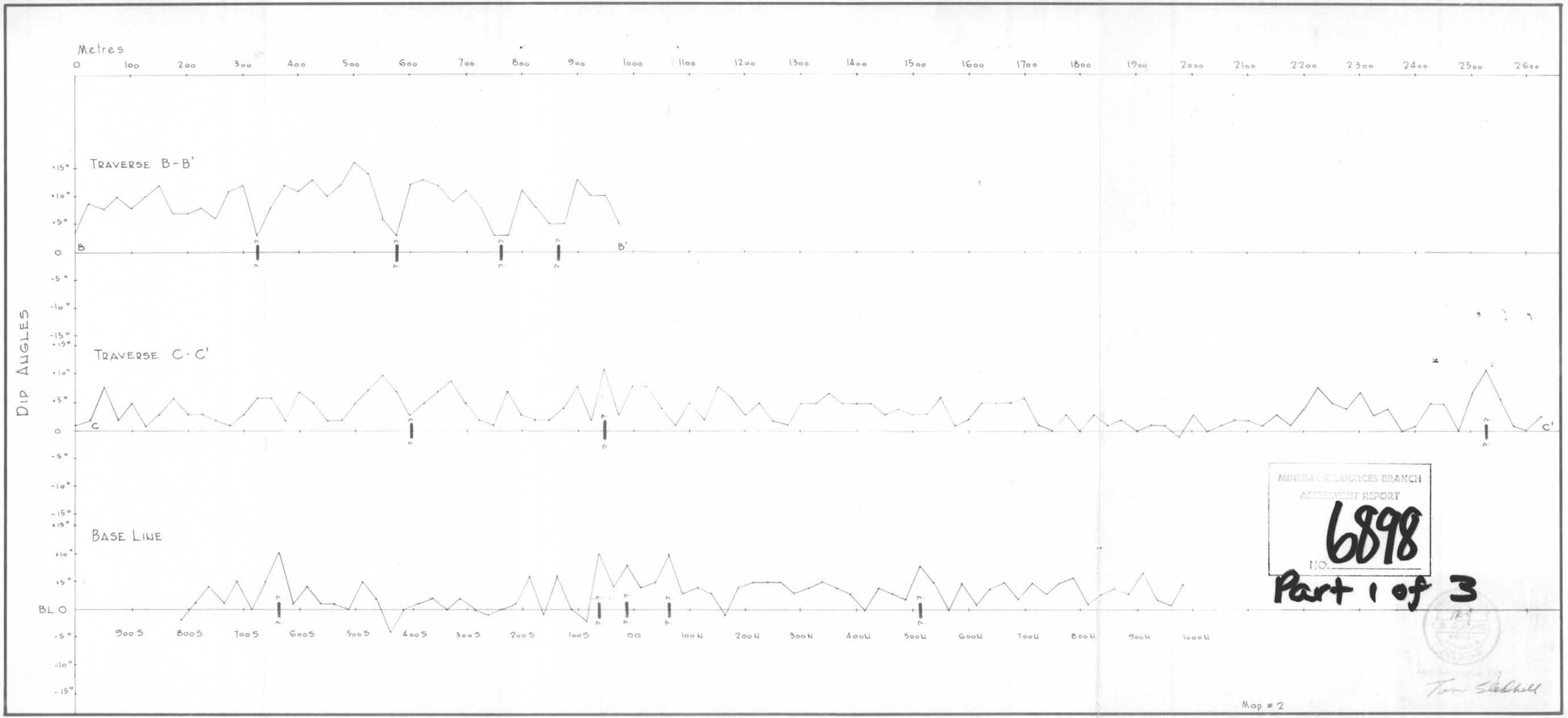
Frequency : 1830 Hz
Coil spacing : 25 m
Station interval : 25m
Profile scale : 1cm = 5°
A Alaskite outcrop
Uranium showing
CY 6 Name of claim
Possible conductor

Part 1 of 3

MATTAGAMI LAKE MINES LTD.
EXPLORATION DIVISION

HORIZONTAL SHOOTBACK SURVEY
WEIR MOUNTAIN PROJECT
BRITISH COLUMBIA

DATE : JULY 1978	SCALE : 1: 5,000	MAP No.:
DRAWN BY:		



Map # 2

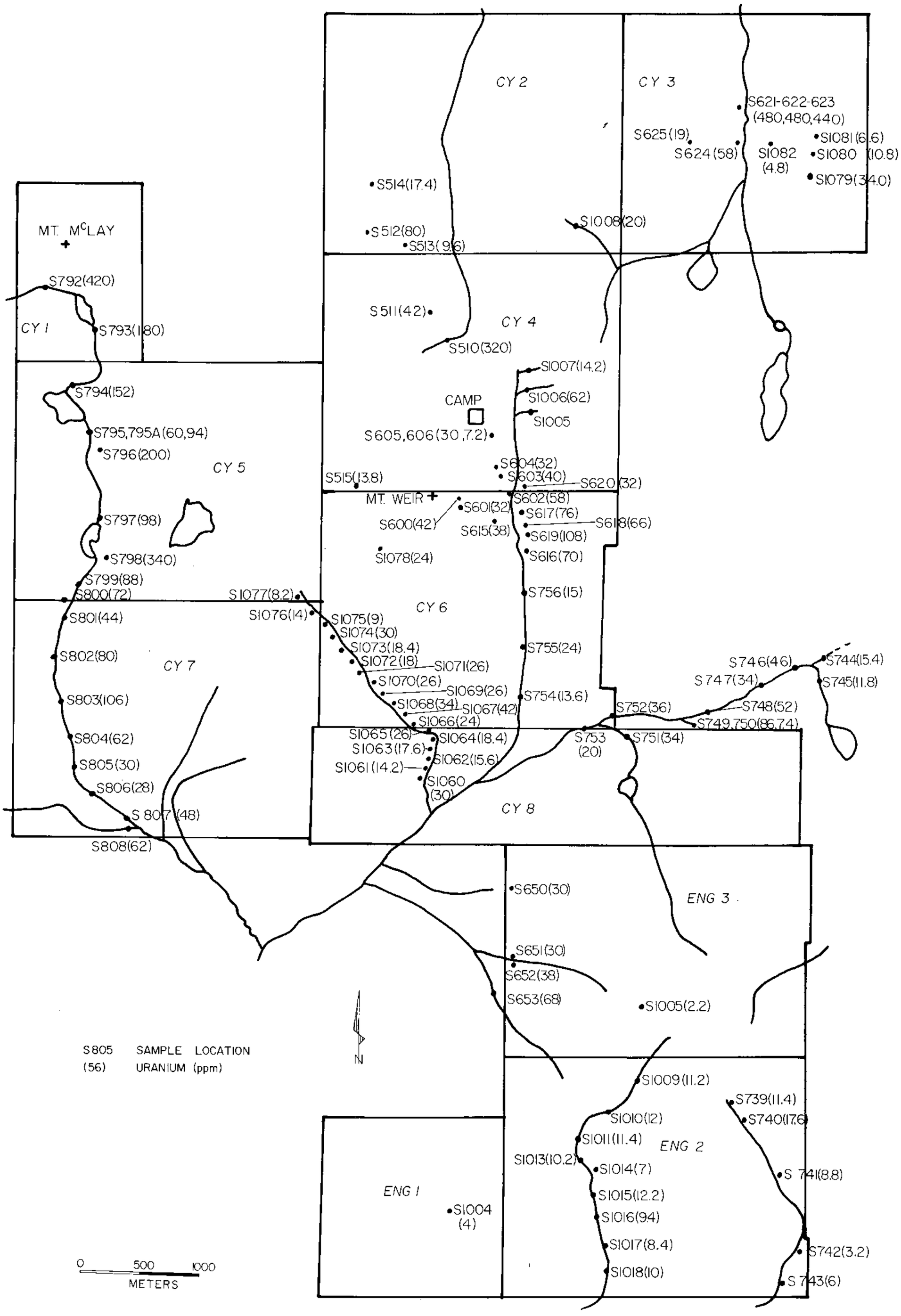


FIGURE 9

STREAM SEDIMENT SAMPLES

LOCATIONS AND RESULTS

Part 1 of 3