

REPORT ON GEOPHYSICAL AND GEOCHEMICAL SURVEY

ON

DIADEM MINERAL CLAIM

OWNED BY: JAMES R. GLASS, VANCOUVER, M. D.

LAT.  $54^{\circ} 00'$  N                      LONG.  $124^{\circ} 00'$  W.

NTS. 92F/16E and 92K/1E

FOR:

FURY EXPLORATIONS LTD. (N. P. L.)

By: JAMES R. GLASS, P. ENG.

July 2, 1980.

MINERAL RESOURCES BRANCH  
ASSESSMENT REPORTS

8630

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A P P E N D I X

MAPS

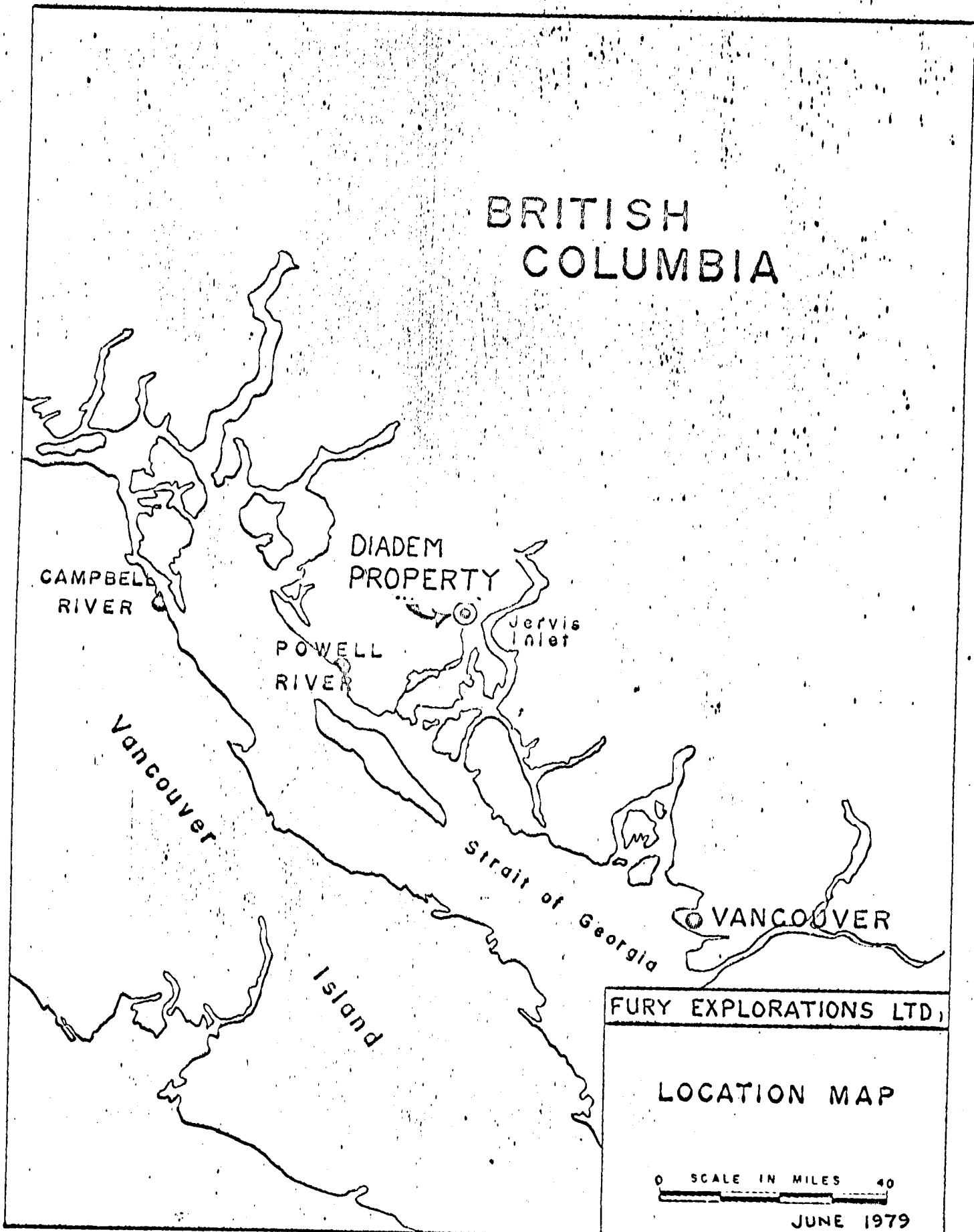
## SUMMARY

Fury Explorations Ltd. carried out a detailed VLF-EM survey and a rock chip geochemical survey over part of the Diadem Claim during September and October, 1979. Part of the old drill core stored on the property was assayed. This work was carried out by Amadeus Consultants Ltd. under the direction of the writer.

## PROPERTY

The Diadem mineral claim, consisting of nine units, was staked June 3, 1979 and is located on Lois River, near Mt. Diadem, west of Jervis Inlet in the Vancouver Mining Division at  $50^{\circ} 00'$  N. Lat. and  $124^{\circ} 05'$  W. Long. The claim is registered in the name of James R. Glass with Record Number 435. It is plotted on NTS Maps 92 K 1 E and 92 F 16 E.

# BRITISH COLUMBIA





## GENERAL GEOLOGY

The area surrounding the Claim is underlain by a series of steeply dipping volcanic and sedimentary rocks which have been intruded by and partially engulfed by part of the Coast Range Batholith. The age of the volcanic rocks and sediments is unknown, the intrusive rocks are Jurassic or later in age.

The sedimentary rocks which host the gold, silver, copper, zinc showings have a vertical thickness of 3900 feet on the Claim area. They consist of fine grained quartzites and shaley argillites intercolated with quartzite and greenstone flows of basaltic and andesitic composition. The rocks are very well banded with the argillite exhibiting the low grade or "green schist" type of metamorphism.

Mineral occurrences have been found on the Diadem Claim at the 2700' elevation and the 3700' elevation in the vicinity of Lois Creek. The intervening ground is largely masked by overburden and forest growth. The sulphide showings are localized and associated with shear zones and folds. They are mainly massive sphalerite and pyrrhotite with lesser amounts of chalcopyrite, magnetite and pyrite. The surrounding sediments contain disseminated pyrite and some pyrrhotite and exhibit a fairly prominent gossan.

The upper showing has returned high grade assays over widths of 17 feet and is associated with two parallel faults 300 feet apart.

## HISTORY

The property was mentioned in the B. C. Minister of Mines Annual Report for 1928 when Brittan River Mining Company was working the claim. Since that time a number of other companies have examined the showings. During 1967 and again in 1970, 1971 geochemical, geophysical and geological surveys were carried out and some small diameter diamond drilling was done. Assessment Reports Nos. 3329 and 2621 were filed. The Engineers in charge of this work recommended that more work be done but nothing more was recorded.

## PRESENT PROGRAM

The present program consisted of a detailed VLF-EM survey and rock chip geochemical sampling over the upper showing (elevation 3700') and assaying parts of the drill core which was stored on the property from the 1967 program. The control lines for the survey were chained and flagged, using pre-existing maps for orientation.

GEOPHYSICAL SURVEY

The electromagnetic survey was carried out using a Sabre Model 27 VLF-EM Receiver which was tuned to receive the signal from Seattle, Washington, on a frequency of 18.6 Khz. Readings were taken along east-west lines at 50 foot intervals with both horizontal field strength and the dip angle of the resultant field being recorded. The dip angle measurements are then filtered using the technique described by D. C. Fraser, 1969 (Geophysics, V.34, No. 6 P. 958 - 967) and the data presented on a contour map with the conductive areas defined.

A Map of scale 1" = 30.4 meters showing the contoured filtered readings is presented with this report.

A total of 2143 meters in twelve lines spaced 30.4 meters apart was surveyed and plotted.



## INTRODUCTION

The contoured readings show two sub parallel conductive zones, one of which is up to 60 m. wide extending northward from the old trench and the other about 30 meters wide which is located from 30 to 60 meters to the east. A very strong feature of these two conductive structures is the extremely high field strength readings which give confirmation to the anomalies.

## GEOCHEMICAL SAMPLING

A limited amount of geochemical rock chip sampling was done in an effort to define any undetected silver rich zones associated with the known showings and with the surrounding sulphide rich rocks.

Two lines of samples were taken north of the old trenches and three separate samples from the known mineralized area.

All samples were sent to Bondar-Clegg & Company Ltd. of Vancouver where they were analyzed for Cu. Pb. Zn. Ag.

The results of this sampling are plotted on a map of scale 1" = 30.4 metres included with this report.

The analysis indicate a weak to moderate copper anomaly peaking at 715 ppm, a moderate zinc anomaly and a moderate silver anomaly, which can be correlated somewhat with the geophysical anomaly.

### ASSAYING DRILL CORE

Some of the drill core from the 1967 program is stored on the property. The writer selected 0.4 to 2 metre sections, some of which contained good visible sulphides and some of which appeared to be low in sulphide content and assayed them for Cu. Pb. Zn. Ag.

Sections of Hole No. 4 returned good values in particular 42' - 45.5' (12.7 m - 13.8 m) assayed .03% Cu. 16% Pb. plus 2% Zn. and 0.85 oz/ton Ag. 106' - 108' (32.2 m - 32.8 m) which assayed 0.11% Cu. 0.10% Pb. 1.3% Zn. and 1.14 oz/ton Ag. and 115' - 119' (34.9 m - 36.4 m) which assayed 0.31% Cu. 0.26% Pb. 1.6% Zn. and 1.9 oz/ton Ag.

The significance of this added information is that the zone of possible economic mineralization is much wider than has been previously recognized.

### CONCLUSIONS

The E.M. survey shows a good conductive zone with extremely high field strength.

The limited geochemical rock sampling shows anomalous metal values associated with the E.M. anomaly. The possibility of a deep sulphide body should be further investigated.

Assaying of the old drill core shows ore grade intersections, particularly in silver between previously known mineralized sections of the hole.

STATEMENT OF COSTS

Helicopter Travel (50% of \$1278)	\$ 630.00
Supplies - Food, etc.	150.00
Assaying - Bondar Clegg & Co.	163.80
Engineering - Geophysical Survey, 4 dys. @ \$400 p/d.	800.00
Geochemical sampling & Line survey	<u>300.00</u>
	<u>\$2,044.00</u>

Personnel

James R. Glass, P. Eng. Sept. 20 - 24, 1979, Oct.10/79  
433 - 355 Burrard Street, Vancouver, B. C.

George H. Laycraft Sept. 20 - 24, 1979, Oct.10/79  
433 - 355 Burrard Street, Vancouver, B. C.

July, 1980.

Respectfully submitted,



James R. Glass, P. Eng.





Geochemical Lab Report

Extraction Hot Aqua Regia
Method Atomic Absorption
Fraction Used

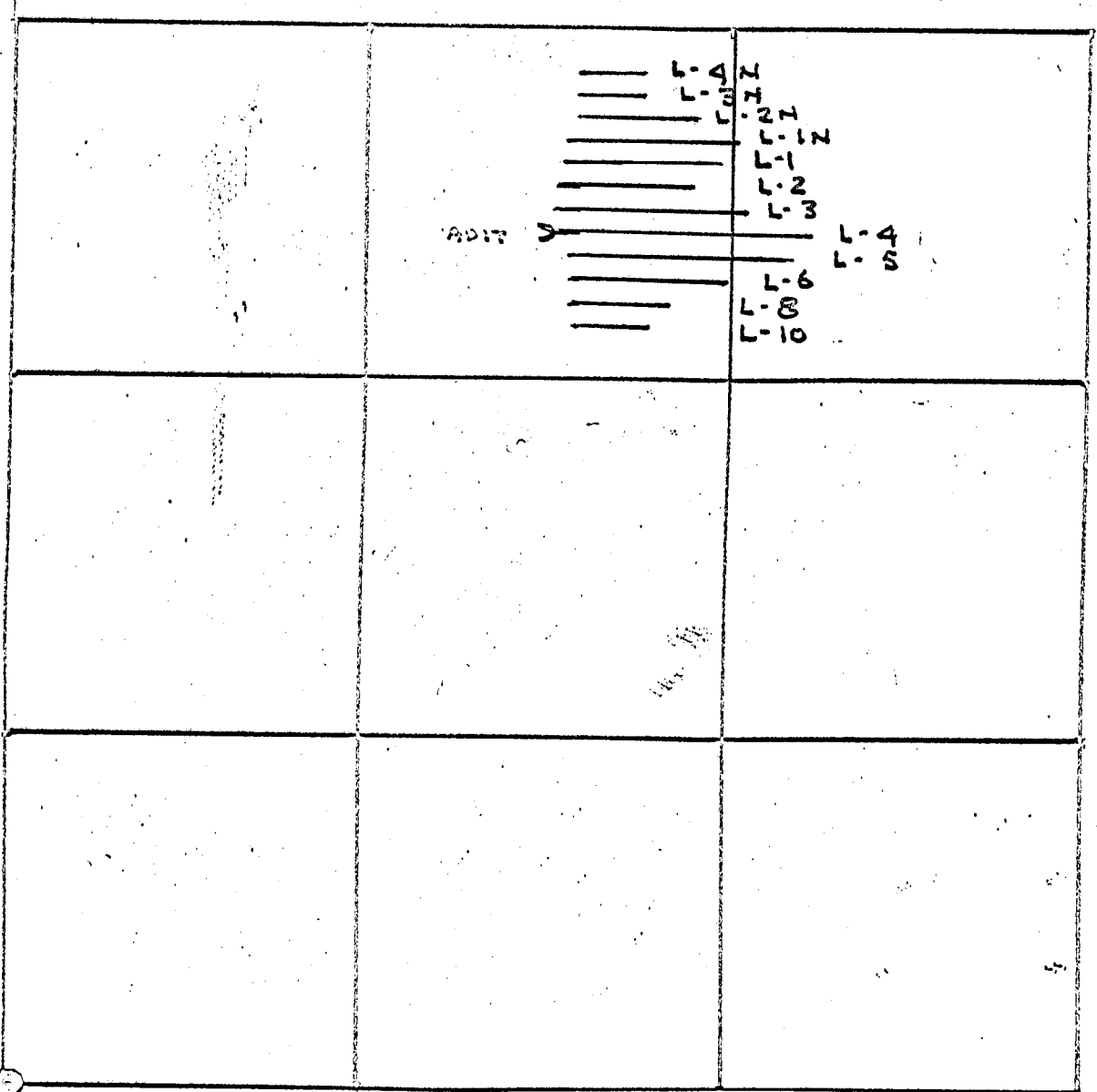
Report No. 29 - 2083 PROJECT: J. M. Glass
From Fury Explorations
Date October 5 19 79

Table with columns: SAMPLE NO., Cu ppm, Pb ppm, Zn ppm, Ag ppm, and a second set of columns for additional samples. Includes handwritten annotations like 'DIA ROCK 1', 'HOLE 4', and 'HOLE 3'.

RECEIVED
OCT - 2, 1979

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G denotes Greater than



I.P.

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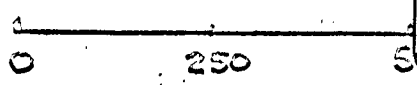
DIADEM CLAIM

KEY MAP

LINE LOCATION

E.M. SURVEY

Scale in Meters



Scale 1" = 250 M.

LOIS CREEK

CREEK



LINE 1

120	32	23	61	61	15	49	6
58	20	16	11	23	8	20	20
1540	8200	201	94	118	46	930	48
0.9	0.6	0.6	0.6	0.8	0.3	0.3	0.3

LINE 4

151	366	72	40	50	19	23	37	16	47
6	12	8	7	71	75	7	6	11	3
1580	107	510	194	379	144	46	32	20	32
0.8	1.4	0.3	0.2	1.9	1.5	0.2	0.4	0.3	0.3

CLIFFS

LINE 8

144	715
36	15
475	81
6.1	4.2

LINE 10

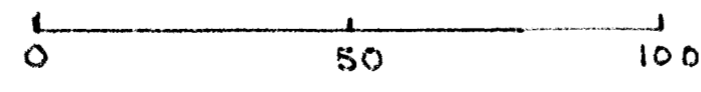
11
15
138
0.7

LEGEND

120	Cu	p.p.m.
58	Pb	p.p.m.
1540	Zn	p.p.m.
0.9	Ag	p.p.m.

CLIFFS

Scale in Meters



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DIADEM CLAIM

ROCK CHIP SAMPLING

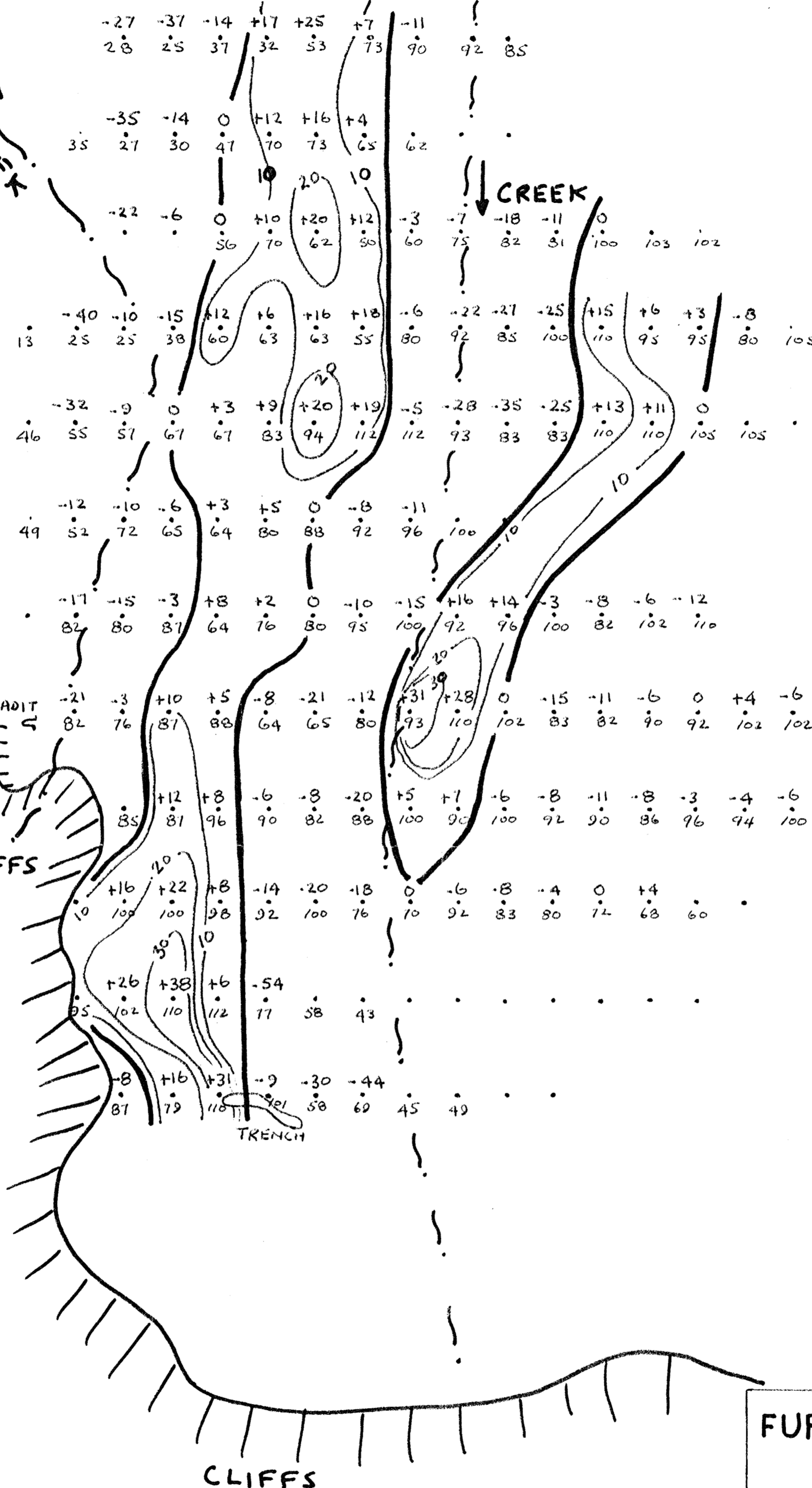
Scale 1" = 30.4 M.

July 2, 1980

LINE 4N  
 LINE 3N  
 LINE 2N  
 LINE 1N  
 LINE 1  
 LINE 2  
 LINE 3  
 LINE 4  
 LINE 5  
 LINE 6  
 LINE 8  
 LINE 10

LOIS CREEK

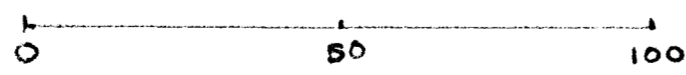
CREEK



LEGEND  
 +36 FILTERED DIP ANGLE  
 88 FIELD STRENGTH

FURY EXPLORATIONS LTD.  
 DIADEM CLAIM  
 VLF- E.M. SURVEY

Scale in Meters



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Scale 1" = 30.4 M.

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