



32E13NE0006 2.13362 LOWER DETOUR LAKE

010

RECEIVED

JUN 11 1990

MINING LANDS SECTION

ATKINSON PROJECT

LIPTON (C-12)

ASSESSMENT REPORT ON LINECUTTING

AND GEOPHYSICS COMPLETED

DURING THE WINTER OF 1990

2.13362

N.T.S. 32 E/13

Latitude 49° 53'N

Longitude 79° 40'W

April 1990

Alan O'Connor, B.Sc.



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References

Certification

File Name: LIPTON.REP

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1.0 Summary:

The Lipton (C-12) property consists of 23 contiguous mining claims covering 368 ha in the Atkinson Lake district, Detour Lake Mine area in northeastern Ontario. The property is located 150 km NE of Cochrane, Ontario and 15 km south of the Detour Lake Mine.

Previous work on the property consisted of airborne and ground geophysics and diamond drilling completed by Getty Canadian Metals. During the summer of 1989, Westmin completed a program of linecutting (14.0 km) and geological mapping on the northern portion of the claim group.

The 1990 program consisted of linecutting (29.8 km) followed by magnetometer (38.9 km) and Max-Min II (39.9 km) surveys. In addition, 2 claims were staked to cover the southern extension of an electromagnetic anomaly located on the grid.

Table 1

Work Summary

Year	Cut-Line (km)	Mag (km)	Max-Min II (km)
1989	14.0	-	-
1990	29.8	38.9	39.9
Total:	43.8	38.9	39.9

2.0 Recommendations:

Results from both the previous diamond drilling and the 1990 geophysical program indicate that additional work in the form of diamond drilling (450m/3 holes) is required to test the economic potential of this property (table 1). Furthermore, the pickets from the winter-cut portion of the grid should be stood up during the summer in order to re-establish the grid for winter use. A budget of approximately \$75,000 is proposed.

3.0 Introduction:

This report details the work completed during the 1990 winter field program and presents an evaluation of the data collected. The report is based upon data gathered by Thibault Exploration Services of Timmins, Ontario during March and early April of 1990.

3.1 Location, Access and Topography

The Lipton property is located approximately 150 km northeast of Cochrane, Ontario (N.T.S. 32 E/13) at the Quebec-Ontario border 15 km south of the Detour Lake minesite (figs. 1,2). An all-weather gravel road connecting Cochrane with the Detour Lake mine site can be used to reach the general project area. From the mine site, a winter road which leads to Lac Gagnon near La Sarre, Quebec, passes within 2 km of the claim block. Although the road is no longer maintained, it is still in good condition. During the summer, an amphibious, tracked vehicle, such as an Argo, can be used for access while snowmobiles and heavy equipment (skidders, etc.) may be used in the winter. An old drill road joins the main road with the grid.

Topographically, the region is characterized by low relief with much of the area covered by fen and string bog. Outcrop is sparse due to a blanket of overburden and muskeg which extends over a large portion of this region. Vegetation is typical of the boreal forest with much of the region covered by stands of black spruce and small areas of poplar. To date, there has been no harvesting of trees in this vicinity. The area is drained by small creeks and rivers with the Detour River being the largest in the district.

3.2 Land Status

The Lipton (C-12) group consists of 23 contiguous mining claims which cover an area of 368 ha (fig.3). Westmin Mines Ltd. holds a 100% equity interest in the property (Table 2).

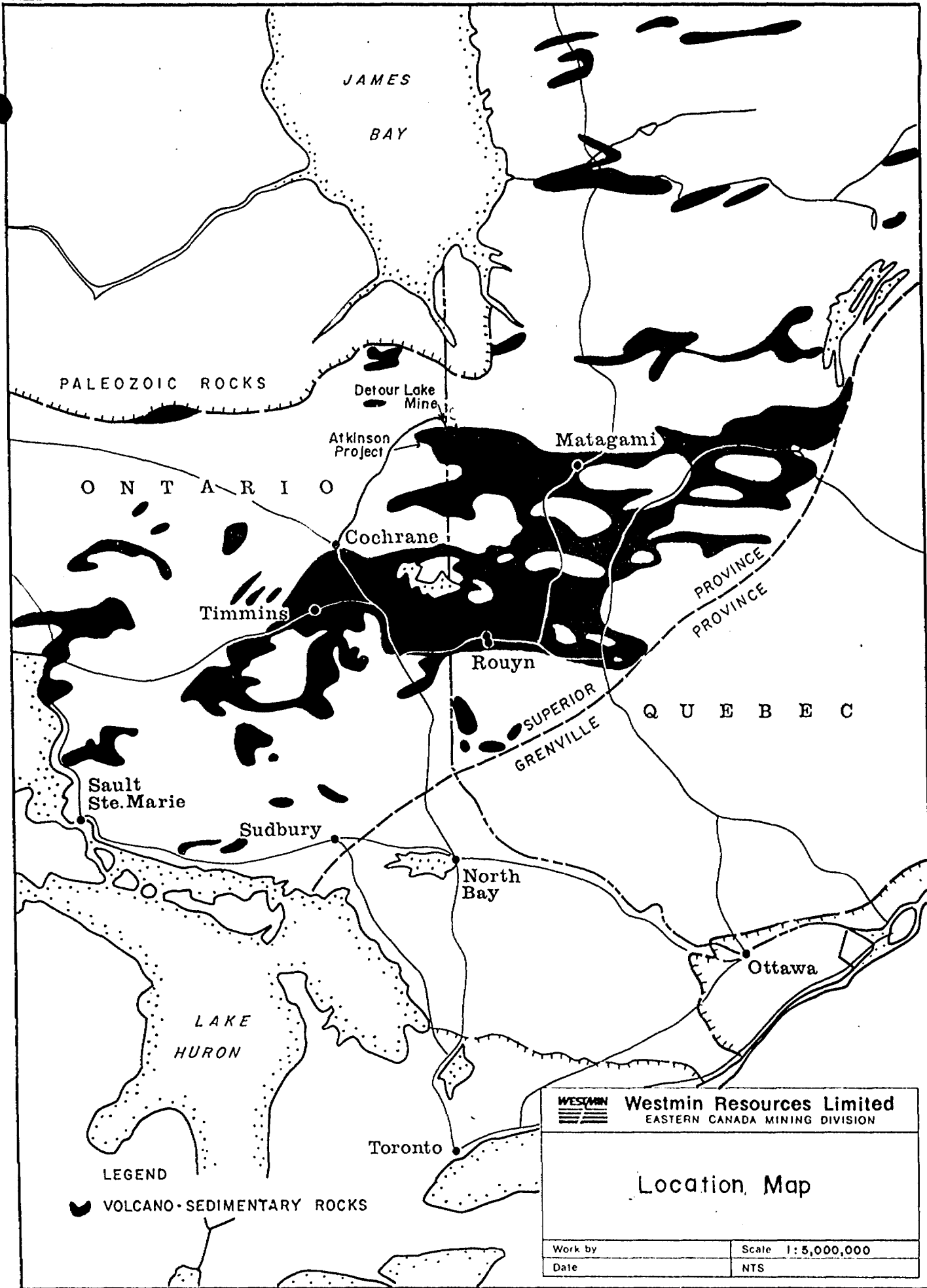
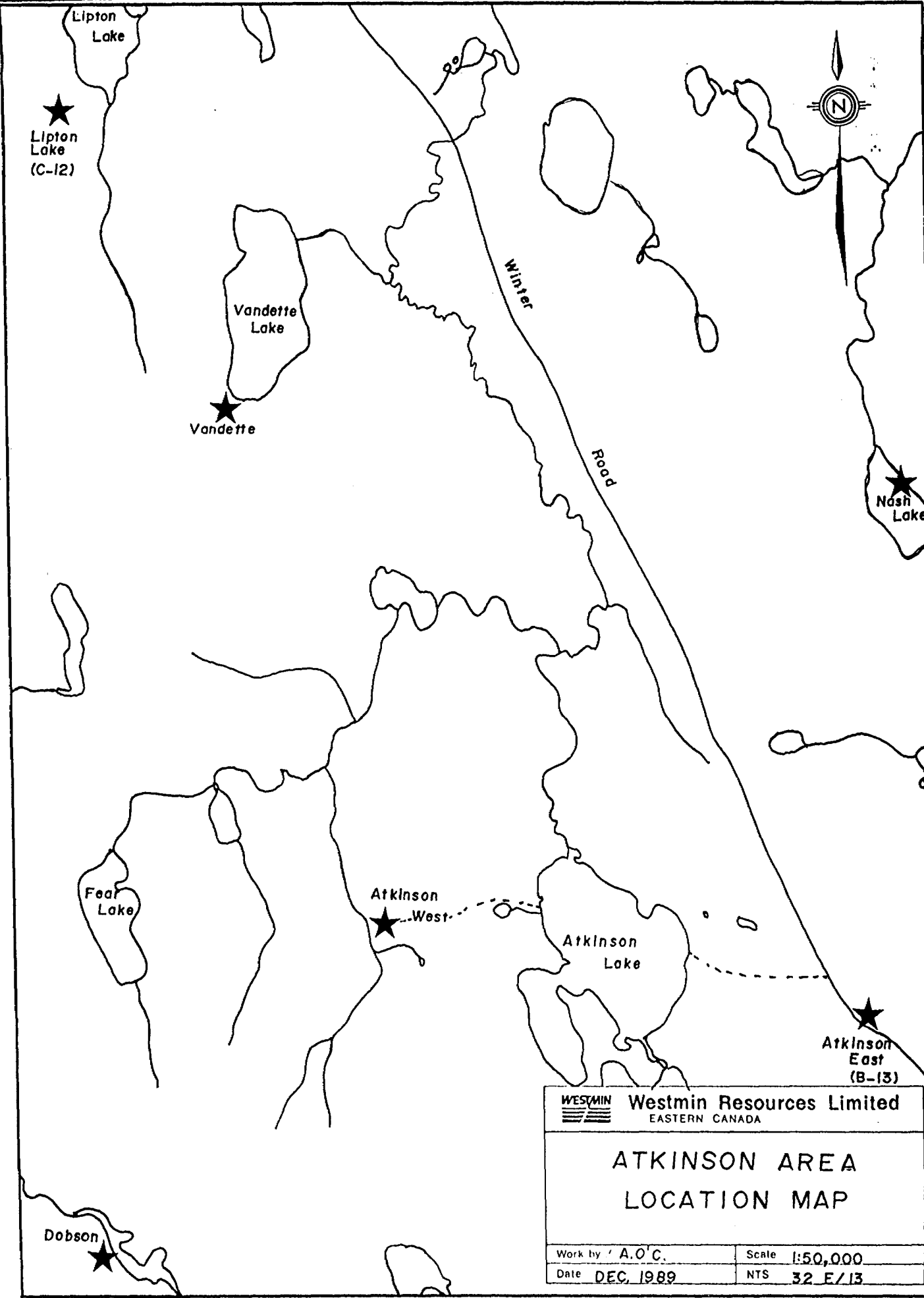


Figure 1



Lipton Lake

★
Lipton Lake
(C-12)

Vandette Lake

★
Vandette

Winter Road

★
Nash Lake

Fear Lake

★
Atkinson West

Atkinson Lake

★
Atkinson East
(B-13)

★
Dobson

WESTMIN Westmin Resources Limited
EASTERN CANADA

ATKINSON AREA LOCATION MAP

Work by A.O.C. Scale 1:50,000

Date DEC. 1989 NTS 32 E/13

LIPTON (ATKINSON C-12) CLAIMS - PROPERTY STATUS

Location: Lower Detour Lake (G-1647),
Porcupine Mining Division, Ontario
N.T.S. 32-E-13
Lat. 49 54'N
Long. 79 39'W

Equity: Westmin Mines Limited 100%

<u>Claims</u>	<u>Recording Date</u>	<u>Lease Due</u>	<u>Assessment Work Due</u>	<u>(days) Work Filed</u>	<u>Granted Extension</u>
P.1113716	25 April 1989	25 April 1995	25 April 1990	Nil	25 Oct.199
P.1113717	25 April 1989	25 April 1995	25 April 1990	Nil	25 oct.199
P.1113718	25 April 1989	25 April 1995	25 April 1990	Nil	25 Oct.199
P.1113719	25 April 1989	25 April 1995	25 April 1990	Nil	25 oct.199
P.1113720	25 April 1989	25 April 1995	25 April 1990	Nil	25 Oct.199
P.1113721	25 April 1989	25 April 1995	25 April 1991	40	-----
P.1113722	25 April 1989	25 April 1995	25 April 1991	40	-----
P.1113723	25 April 1989	25 April 1995	25 April 1991	40	-----
P.1113724	25 April 1989	25 April 1995	25 April 1991	40	-----
P.1113725	25 April 1989	25 April 1995	25 April 1990	Nil	25 Oct.199
P.1114013	25 April 1989	25 April 1995	25 April 1991	40	-----
P.1114014	25 April 1989	25 April 1995	25 April 1991	40	-----
P.1114015	25 April 1989	25 April 1995	25 April 1991	40	-----
P.1114016	25 April 1989	25 April 1995	25 April 1990	10	04 June 199
P.1114017	25 April 1989	25 April 1995	25 April 1991	20	-----
P.1114794	26 June 1989	26 June 1995	26 June 1990	Nil	
P.1114795	26 June 1989	26 June 1995	26 June 1991	40	-----
P.1114796	26 June 1989	26 June 1995	26 June 1991	40	-----
P.1114797	26 June 1989	26 June 1995	26 June 1990	Nil	
P.1114798	26 June 1989	26 June 1995	26 June 1990	Nil	
P.1114799	26 June 1989	26 June 1995	26 June 1990	Nil	
P.1128782	06 April 1990	06 April 1996	06 April 1991	Nil	-----
P.1128783	06 April 1990	06 April 1996	06 April 1991	Nil	-----

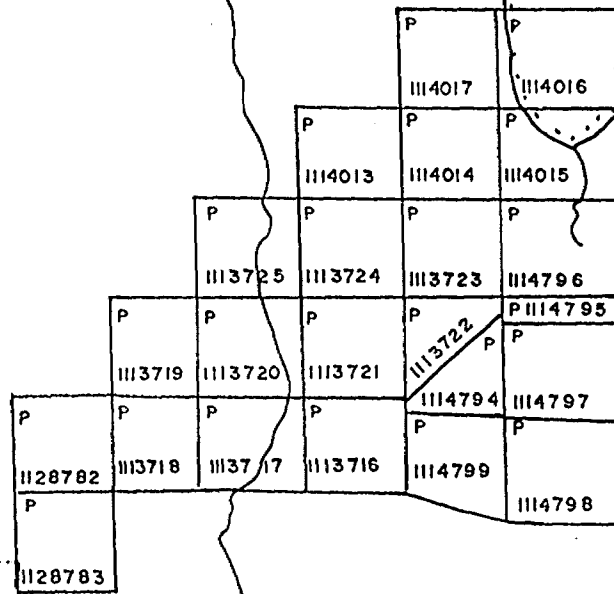
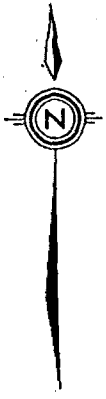
23 claims = 368 ha

* Approval pending.

To be asked for an extension 26 May 1990: (P.1114794, P.1114797-799)

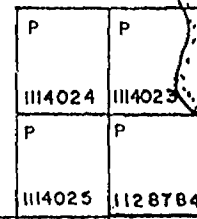
Date: 10 May 1990

Lipton C-12, Ont.

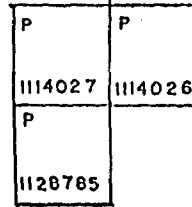


ATKINSON C-12

Vandette Lake



VANDETTE




	Westmin Resources Limited EASTERN CANADA MINING DIVISION
LIPTON C-12 PROJECT Claim Map	
Work by	Scale 1:31,680
Date	NTS 32-R-13

Fig. 3

3.3 Previous Work

- 1982 (2.4613): An airborne geophysical survey and a Max-Min II ground survey were completed by Getty Canadian Metals.
- 1983 (Reports 36,37): Getty Canadian Metals drilled 4 diamond drill holes for a total of 754 metres.
- 1986 (63.4663): Getty Canadian Metals drilled 2 diamond drill holes for a total metreage of 368.
- 1989: Westmin Mines Limited completed a program of linecutting (14.0 km) and geological mapping on the northern portion of the claim block. No outcrop was found.

3.4 1990 Work Program

During March and April of 1990, a field program consisting of linecutting (29.8 km) followed by magnetometer (38.9 km) and Max-Min II (39.9 km) surveys was completed on the Lipton (C-12) claim block. The objective of this program was to outline conductive and magnetic trends for the purpose of drill target delineation.

In addition to this work, 2 claims were added to the southern edge of the group in order to cover the extension of an electromagnetic conductor.

4.0 Regional Geology:

The Atkinson area is underlain by the northern belt of a folded supracrustal sequence with the main volcanic-sedimentary sequence occurring to the west in Quebec. The belt, which is Archean in age, has undergone regional and contact metamorphism ranging from upper greenschist to almandine-amphibolite facies rank.

The belt is composed of a metavolcanic-sedimentary sequence with a basal unit of felsic to intermediate volcanics. Overlying the felsic volcanics is a sequence of metasediments followed by mafic to intermediate flows and pyroclastics. Stratigraphically above this unit are interbedded felsic to intermediate volcanics and mafic to intermediate volcanics and metasediments. At the top of the stratigraphic sequence is a unit of metasediments with mafic flows and graphitic tuffs and metasediments which commonly contain anomalous concentrations of sulphides.

The area is surrounded by quartz-monzonite batholiths with a large gabbroic intrusion occurring in the Detour Lake area. Finally, the area possesses several diabase dykes which crosscut all other rocks and structures (Johns, 1982).

4.1 Economic Geology

The most significant ore deposit in the project area is the Detour Lake gold mine which is located 15 km to the north of the property. Currently this deposit contains 7.3 mt at 5.4 g/t Au.

The main zone of mineralization of the deposit is hosted within the basal part of the mafic flow sequence, the upper part of the ultramafic zone and within the intermediate and cherty tuff horizon located between the two preceding units. The gold is associated with chalcopyrite in the metavolcanic rocks as well as in the mineralized quartz veins which occur above the main zone (Johns, 1982).

Alteration in the vicinity of the deposit consists of:

- a) talc-carbonate alteration of the ultramafic rocks
- b) chloritic alteration of the basalts
- c) potassic alteration in the cherty tuff
- d) intense biotite alteration of the basalts

5.0 Linecutting:

14.0 km of line was cut on the Lipton (C-12) claim group during the spring field program. A base line was cut at 0 degrees with east-west crosslines put in at a 100 metre interval. Pickets were placed along the line at a 20 metre interval. With the 1989 linecutting included, the total amount of cut line on the Lipton (C-12) grid is 43.8 km.

6.0 Geophysical Program:

6.1 Magnetometer Survey (Figure 4)

A magnetometer survey, which covered the entire Lipton grid (38.9 km) was completed using a GEM 65M8 magnetometer. Readings were taken every 20m along the crosslines and along the baseline as well in order to determine the diurnal magnetic variation. The data was plotted and contoured using the Geopak software program. An anomalously high magnetic area occurs in the northern area of the grid. This may reflect a gabbroic intrusive source. Magnetic anomalies also occur on the east and west portions of the grid and probably reflect an iron formation source.

6.2 Max-Min II (Figures 5, 6)

A total of 39.9 km of Max-Min II was completed on the Lipton (C-12) grid with an Apex instrument and a cable length of 140m. Readings were taken at a 20 metre interval on two frequencies; 444 Hz and 1777 Hz.

Two convergent, northerly trending conductors occur on the Lipton grid and may define a folded iron formation. An interpretation of the Max-Min II survey suggests that the western portion of the grid is underlain by two conductive horizons.

Respectfully submitted by:



Alan J. O'Connor, B.Sc.

reviewed:

References

Johns, G.W., (1982): Geology of the Burntbush-Detour
Lake Areas. Ontario Geological
Survey Report #199.

Certification

I, Alan J. O'Connor, of 312 St. Clarens Avenue, Toronto, Ontario, M6H 3W2, certify that:

- (1) I hold a Bachelor of Science degree (geology) received in 1985 from the University of Western Ontario.
- (2) I have practised my profession as a project geologist in the mining industry on a full-time basis for four years.
- (3) I have conducted field work on this property, and supervised the geological, geochemical and geophysical work described in the report.
- (4) I have no financial interest in the property.

April 1990

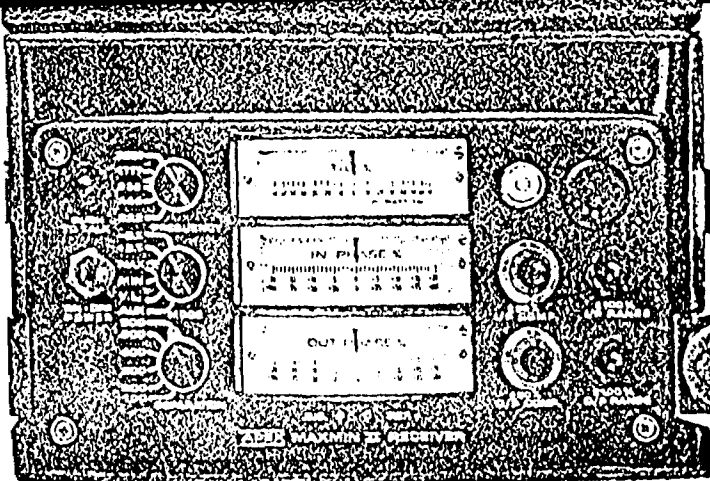
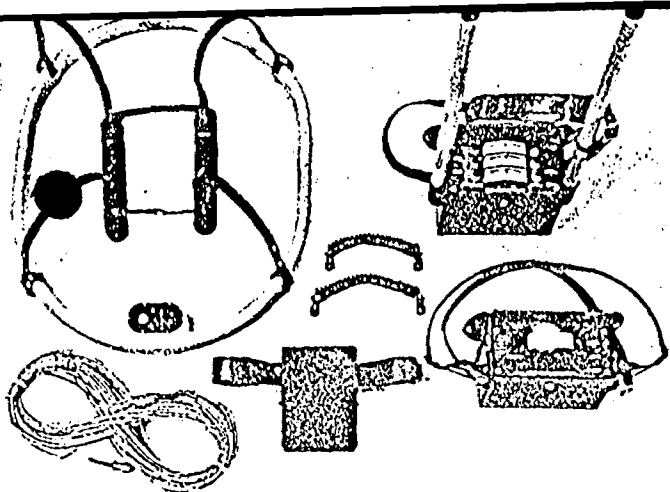


A. J. O'Connor, B.Sc.

GEM 65M8 Magnetometer

SPECIFICATIONS

RESOLUTION:	1 gamma or 0.5 gamma optional
ACCURACY:	± 1 gamma over operating range
RANGE:	20,000 - 100,000 gamma in 23 overlapping steps
GRADIENT TOLERANCE:	Up to 5000 gamma/meter
OPERATING MODES:	MANUAL PUSHBUTTON, new reading every 1.85 sec., display active between readings CYCLING, pushbutton initiated, 1.85 sec. period SELFTEST cycle, pushbutton controlled, 7 sec. period
OUTPUT:	VISUAL: 5 digit 1 cm (0.4") high Liquid Crystal Display, visible in any ambient light DIGITAL: Multiplied precession frequency and gating pulse ANALOG: 0-99 gamma (optional)
EXTERNAL TRIGGER:	Permits externally triggered cycling with periods longer than 1.85 sec. (cycling faster than once per sec. optional)
POWER REQUIREMENTS:	10-18V DC 8Ws per reading
POWER SOURCE:	INTERNAL: 12 V 0.75 Ah NiCd rechargeable battery, 3,000 readings from fully charged battery EXTERNAL: 12-18V
BATTERY CHARGER:	Input: 120/220 V 50/60 Hz, Output 75 mA DC constant current
OPERATING TEMPERATURE:	-40 to +55 C
DIMENSIONS:	CONSOLE: 15 x 8 x 15 cm (6 X 3¼ x 6") SENSOR: 14 x 7 cm dia (5¼ x 2¼" dia) STAFF: 175 cm (70") extended, 53 cm (21") collapsed or sectional 45 cm (18") each section
WEIGHT:	2.7 kg (6 lb) complete, 2.3 kg (5 lb) in back-pack mode
STANDARD PACKAGE:	CONSOLE, with batteries, carrying harness SENSOR, with cable STAFF, collapsible, or sectional
STANDARD ACCESSORIES:	BATTERY CHARGER, MANUAL, CARRYING CASE
GUARANTEE:	15 Months from the date of shipping



SPECIFICATIONS :

Frequencies: 222, 444, 888, 1777 and 3555 Hz.

Modes of Operation: MAX: Transmitter coil plane and receiver coil plane horizontal (Max-coupled; Horizontal-loop mode). Used with refer. cable.

MIN: Transmitter coil plane horizontal and receiver coil plane vertical (Min-coupled mode). Used with reference cable.

V.L. : Transmitter coil plane vertical and receiver coil plane horizontal (Vertical-loop mode). Used without reference cable, in parallel lines.

Coil Separations: 25, 50, 100, 150, 200 & 250m (MMII) or 100, 200, 300, 400, 600 and 800 ft. (MMIIF).
Coil separations in VL mode not restricted to fixed values.

Parameters Read:

- In-Phase and Quadrature components of the secondary field in MAX and MIN modes.
- Tilt-angle of the total field in VL mode.

Readouts:

- Automatic, direct readout on 90mm (3.5") edgewise meters in MAX and MIN modes. No nulling or compensation necessary.
- Tilt angle and null in 90mm edgewise meters in VL mode.

Scale Ranges:

In-Phase: $\pm 20\%$, $\pm 100\%$ by push-button switch.
 Quadrature: $\pm 20\%$, $\pm 100\%$ by push-button switch.
 Tilt: $\pm 75\%$ slope.
 Null (VL): Sensitivity adjustable by separation switch.

Repeatability: In-Phase and Quadrature: 0.25% to 0.5% ; Tilt: 1%.

Repeatability: $\pm 0.25\%$ to $\pm 1\%$ normally, depending on conditions, frequencies and coil separation used.

Transmitter Output:

- 222Hz : 220 Atm²
- 444Hz : 200 Atm²
- 888Hz : 120 Atm²
- 1777Hz : 60 Atm²
- 3555Hz : 30 Atm²

Receiver Batteries: 9V trans. radio type batteries (4).
Life: approx. 35hrs. continuous duty (alkaline, 0.5 Ah), less in cold weather.

Transmitter Batteries: 12V, 6Ah Gel-type rechargeable battery. (Charger supplied).

Reference Cable: Light weight 2-conductor teflon cable for minimum friction. Unshielded. All reference cables optional at extra cost. Please specify.

Voice Link: Built-in intercom system for voice communication between receiver and transmitter operators in MAX and MIN modes, via reference cable.

Indicator Lights: Built-in signal and reference warning lights to indicate erroneous readings.

Temperature Range: -40°C to +60°C (-40°F to +140°F).

Receiver Weight: 6kg (13 lbs.)

Transmitter Weight: 13kg (29 lbs.)

Shipping Weight: Typically 60kg (135 lbs.), depending on quantities of reference cable and batteries included. Shipped in two field/shipping cases.

Specifications subject to change without notification.

APEX PARAMETRICS LIMITED
200 STEELCASE RD. E., MARKHAM, ONT., CANADA, L3R 1G2

Phone: (416) 495-1612 Cables: APEXPARA TORONTO

Telex: 06-956775 NORPMK TOR
NOTE OUR NEW TELEX NUMBER:
06-956775 APEXPARA MKHM

416 852-5875

W9006-60384

DOCUMENT W/9006



900

Report of Work (Geophysical, Geological and Geochemical Surveys) 2.13362

Technical reports and maps in duplicate should be submitted to Mining Lands Section, Mineral Development and Lands Branch

Type of Survey(s) Geophysical	Mining Division Porcupine	Township or Area Lower Detour Lake (G-1647)
Recorded Holder(s) Westmin Mines Limited	2.13362	Prospector's Licence No. T-4638
Address 25 Adelaide St. East, #1400, Toronto, Ont.		Telephone No. (416)364-8116
Survey Company Guy Thibault, Exploration Services, Timmins		
Name and Address of Author (of Geo-Technical Report) A.O'Connor, 25 Adelaide St. E., Toronto, Ont. M5C 1Y2		Date of Survey (from & to) 28 02 90 05 04 90 Day Mo Yr Day Mo Yr

Credits Requested per Each Claim in Columns at right

Mining Claims Traversed (List in numerical sequence)

Special Provisions	Geophysical	Days per Claim
For first survey: Enter 40 days (This includes line cutting)	- Electromagnetic - Magnetometer	20
For each additional survey using the same grid: Enter 20 days (for each)	- Other Max-Min	20
	Geological	
	Geochemical	
Man Days	Geophysical	Days per Claim
Complete reverse side and enter total(s) here	- Electromagnetic - Magnetometer - Other	
	Geological	
	Geochemical	
Airborne Credits		Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys	- Electromagnetic - Magnetometer - Other	

Mining Claim		Mining Claim		Mining Claim	
Prefix	Number	Prefix	Number	Prefix	Number
P	1113721				
	1113722				
	1113723				
	1113724				
	1114013				
	1114014				
	1114015				
	1114795				
	1114796				

RECORDED
MAY 17 1990

RECEIVED

JUN 29 1990

Total miles flown over claim(s):
18 May 1990
Recorded Holder or Agent (Signature): *S. Kuprejanov*

Total number of mining claims covered: 9
Report of work

MINING SURVEYS
LANDS SECTION

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in this Report of Work having performed the work or a forward signature and/or after its completion and approval by the holder.

Date and Address of Person Certifying:
S. Kuprejanov, 25 Adelaide Street East, Suite 1400
Toronto, Ontario M5C 1Y2 (416)364-8116

Certified By (Signature): *S. Kuprejanov*
16 May 1990

JUL 09 1990

For Office Use Only

Total Days or Recorded: 360
Date Received: MAY 17/90
Date Approved as Reported: 9 July 90
Mining Recorder: *White*
Mining Recorder: *W. Plan*

Received Stamp: MAY 17 1990
12:50 p.m.

DOCUMENT NO.
W 9006-60385
2.13362

Instructions
Please type or print.
- Refer to Section 77, the Mining Act for assessment work requirements and maximum credits allowed per survey type.
- If number of mining claims traversed exceeds space on this form attach a list.
- Technical Reports and maps in duplicate should be submitted to Mining Lands Section, Mineral Development and Lands Branch.

Report of Work
(Geophysical, Geological and Geochemical Surveys)

mining Act

Type of Survey(s) Geophysical	Mining Division Porcupine	Township or Area Lower Detour Lake (G-1647)
Recorded Holder(s) Westmin Mines Limited	2.13362	Prospector's Licence No. T-4638
Address 25 Adelaide St. East, #1400, Toronto, Ont.		Telephone No. (416)364-8116
Survey Company Guy Thibault, Exploration Services, Timmins		
Name and Address of Author (of Geo-Technical Report) A.O. Connor, 25 Adelaide St. E., Toronto, Ont. M5C 1Y2		Date of Survey (from & to) 28 02 90 05 04 90 Day Mo Yr

Credits Requested per Each Claim in Columns at right

Special Provisions	Geophysical	Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic - Magnetometer	40
For each additional survey using the same grid: Enter 20 days (for each)	- Other Max-Min Geological Geochemical	20
Man Days Complete reverse side and enter total(s) here	Geophysical - Electromagnetic - Magnetometer - Other Geological Geochemical	Days per Claim
Airborne Credits Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic Magnetometer Other	Days per Claim

Mining Claims Traversed (List in numerical sequence)

Mining Claim		Mining Claim		Mining Claim	
Prefix	Number	Prefix	Number	Prefix	Number
P	1113716				
	1113717				
	1113718				
	1113719				
	1113720				
	1113725				
	1114016				
	1114017				
	1114794				
	1114797				
	1114798				
	1114799				

RECORDED
MAY 17 1990

RECEIVED

JUN 29 1990

Total number of mining claims covered by this report of work.

12

Total miles flown over claim(s).
Date 16 May 1990
Recorded Holder or Agent (Signature) *S. Kuprejanov*

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in this Report of Work, and that the work or witnessed same during and/or after its completion and annexed report is true.

Name and Address of Person Certifying
S. Kuprejanov, 25 Adelaide Street East, Suite 1400
Toronto, Ontario M5C 1Y2 (416)364-8116

Telephone No. Date 16 May 1990
Certified By (Signature) *S. Kuprejanov*

MINING LANDS SECTION

For Office Use Only

Total Days Cr. Recorded 120	Date Recorded MAY 17 1990	Mining Recorder <i>S. White</i>
	Date Approved as Recorded 9 July 90	Mining Recorder Provincial Director, Mining Lands <i>W. Brown</i>

Received Stamp
12.50 p.m. MK



Westmin Mines Limited
Suite 1400, 25 Adelaide Street East
Toronto, Ontario, Canada
M5C 1Y2
416 364-8116 FAX: 416 364-4920

Mines Westmin Limitée
Bureau 1400, 25, rue Adelaide est
Toronto (Ontario), Canada
M5C 1Y2
(416) 364-8116 FAX: 416 364-4920

PRIORITY POST

June 7, 1990

Mining Land Section
Mineral Development and Lands Branch
880 Bay Street, 3rd Floor
Toronto, Ontario
M5S 1Z8

RECEIVED

JUN 11 1990

MINING LANDS SECTION

Dear Sir: RE: ASSESSMENT REPORT ON LINECUTTING AND
GEOPHYSICS COMPLETED DURING THE WINTER
OF 1990, ATKINSON PROJECT, LIPTON C-12

Please find enclosed in duplicate the above mentioned report and a form Technical Data Statement. Two forms Report of Work have been forwarded to the Mining Recorder in Timmins.

Thank you, and I hope you will find everything in order.

Yours truly,

WESTMIN MINES LIMITED

S. Kuprejanov
Administrative Geologist

SK/hmc
Encls.



GUY THIBAUT EXPLORATION SERVICES

Suite 22, Hollinger Building - P.O. Box 1670 Timmins, Ontario. P4N 7W8 - (705) 264-2977

April 5, 1990

Westmin Mines Limited
suite 1400, 25 Adelaide Street east
Toronto, Ontario
MSC 1Y2

INVOICE # 322

RE: Lower Detour and Atkinson lake project

Line Cutting:

Lipton lake grid,	29.767 Kms at \$ 218.00 per Km	\$ 6,489.21
Vandette lake grid,	10.066 Kms at \$ 218.00 per Km	\$ 2,194.39
Nash lake grid,	9.526 Kms at \$ 218.00 per Km	\$ 2,076.67
Total	49.359 Kms	Total \$10,760.27

Geophysics:

Max Min II Survey			
Lipton,	39.9 Kms at 112.00 per Km	\$ 4,460.80	4,468.80
Vandette	9.5 Kms at 112.00 per Km	\$ 1,064.00	
Nash	14.08 Kms at 112.00 per Km	\$ 1,576.96	
Total	63.48 Kms	Total \$ 7,100.96	7,109.76

Magnetic Survey			
Lipton	38.917 Kms at \$ 50.00 per Km	\$ 1,945.85	
Vandette	10.066 Kms at \$ 50.00 per Km	\$ 503.30	
Nash	15.875 Kms at \$ 50.00 per Km	\$ 793.75	
Total	64.858 Kms at \$ 50.00 per Km	\$ 3,242.90	

Claim Staking

22 Claims at 125.00 per recorded claim \$ 2,750.00

Line Cutting	\$ 10,760.27
Max Min II	\$ 7,109.96
Magnetic	\$ 3,242.90
Claims	\$ 2,750.00

23862.93

Total of invoice \$ 23,844.13

Less Advance \$ 9,000.00

Balance \$ 14,844.13

Yours Truly
Guy Thibault
Guy Thibault
GT/f1

- 182.25 Fuel
4051 x 0.45% = 182.25

14862.93 P.S.

DEPOSIT THIS AMOUNT IN
AT G. THIBAUT'S NAME
ADD ALSO FUEL & GROceries
FROM AL.

19:

total invoice = 14680.43



GEOPHYSICAL - GEOLOGICAL - GEOCHEMICAL
TECHNICAL DATA STATEMENT

2.13362

TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT
FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT
TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

Geophysical

Type of Survey(s) _____
Township or Area Lower Detour Lake (G-1647)
Claim Holder(s) Westmin Mines Limited
Guy Thibault Expl. Services
Survey Company _____
Author of Report A.J.O'Connor
Address of Author 25 Adelaide St.E., Toronto, Ont.
Covering Dates of Survey 28 Feb.-05 April 1990
(linecutting to office)
29.8 km
Total Miles of Line Cut _____

MINING CLAIMS TRAVERSED
List numerically

P 1113718

P (prefix) 1113717 (number)

P 1113718

P 1113719

P 1113720

P 1113721

P 1113722

P 1113723

P 1113724

P 1113725

P 1114013

P 1114014

P 1114015

P 1114016

P 1114017

P 1114794

P 1114795

P 1114796

P 1114797

P 1114798

P 1114799

TOTAL CLAIMS 21

SPECIAL PROVISIONS
CREDITS REQUESTED

DAYS
per claim.

ENTER 40 days (includes
line cutting) for first
survey.

ENTER 20 days for each
additional survey using
same grid.

Geophysical
-Electromagnetic _____
-Magnetometer 20 & 40
-Radiometric _____
-Other Max-Min 20
Geological _____
Geochemical _____

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)

Magnetometer _____ Electromagnetic _____ Radiometric _____
(enter days per claim)

DATE: 7 June 1990 SIGNATURE: Shurpjanov
Author of Report or Agent

Res. Geol. _____ Qualifications Therapist

Previous Surveys

File No.	Type	Date	Claim Holder

If space insufficient, attach list

OFFICE USE ONLY

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS -- If more than one survey, specify data for each type of survey

Number of Stations _____ Number of Readings _____

Station interval _____ Line spacing _____

Profile scale _____

Contour interval _____

MAGNETIC

Instrument _____ GEM GSM8 magnetometer

Accuracy - Scale constant _____ ± 1 gamma

Diurnal correction method _____ looping

Base Station check-in interval (hours) _____ N/A

Base Station location and value _____ N/A

ELECTROMAGNETIC

Instrument _____ Apex Parametrics Max-Min II

Coil configuration _____ Horizontal

Coil separation _____ 140 m

Accuracy _____ ± 0.5%

Method: Fixed transmitter Shoot back In line Parallel line

Frequency _____ 444 Hz and 1777 Hz
(specify V.L.F. station)

Parameters measured _____ In phase, quadrature

GRAVITY

Instrument _____

Scale constant _____

Corrections made _____

Base station value and location _____

Elevation accuracy _____

INDUCED POLARIZATION RESISTIVITY

Instrument _____

Method Time Domain Frequency Domain

Parameters - On time _____ Frequency _____

- Off time _____ Range _____

- Delay time _____

- Integration time _____

Power _____

Electrode array _____

Electrode spacing _____

Type of electrode _____

SELF POTENTIAL

Instrument _____ Range _____

Survey Method _____

Corrections made _____

RADIOMETRIC

Instrument _____

Values measured _____

Energy windows (levels) _____

Height of instrument _____ Background Count _____

Size of detector _____

Overburden _____

(type, depth – include outcrop map)

OTHERS (SEISMIC, DRILL WELL LOGGING ETC.)

Type of survey _____

Instrument _____

Accuracy _____

Parameters measured _____

Additional information (for understanding results) _____

AIRBORNE SURVEYS

Type of survey(s) _____

Instrument(s) _____

(specify for each type of survey)

Accuracy _____

(specify for each type of survey)

Aircraft used _____

Sensor altitude _____

Navigation and flight path recovery method _____

Aircraft altitude _____ Line Spacing _____

Miles flown over total area _____ Over claims only _____

GEOCHEMICAL SURVEY – PROCEDURE RECORD

Numbers of claims from which samples taken _____

Total Number of Samples _____

Type of Sample _____
(Nature of Material)

Average Sample Weight _____

Method of Collection _____

Soil Horizon Sampled _____

Horizon Development _____

Sample Depth _____

Terrain _____

Drainage Development _____

Estimated Range of Overburden Thickness _____

SAMPLE PREPARATION

(Includes drying, screening, crushing, ashing)

Mesh size of fraction used for analysis _____

General _____

ANALYTICAL METHODS

Values expressed in: per cent
p. p. m.
p. p. b.

Cu, Pb, Zn, Ni, Co, Ag, Mo, As, (circle)

Others _____

Field Analysis (_____ tests)

Extraction Method _____

Analytical Method _____

Reagents Used _____

Field Laboratory Analysis

No. (_____ tests)

Extraction Method _____

Analytical Method _____

Reagents Used _____

Commercial Laboratory (_____ tests)

Name of Laboratory _____

Extraction Method _____

Analytical Method _____

Reagents Used _____

General _____

SUNDAY LAKE G-1677

REFERENCES

AREAS WITHDRAWN FROM DISPOSITION

- M.R.O. - MINING RIGHTS ONLY
- S.R.O. - SURFACE RIGHTS ONLY
- M+S - MINING AND SURFACE RIGHTS

Description	Order No.	Date	Disposition	File
(1) N.R.W. 1/81		15/1/81	S.R.O.	108511
(2) N.R.O. 27/85		27/7/85	S.R.O.	

THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES, AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING DIVISION, MINISTRY OF NORTHERN DEVELOPMENT AND MINES, FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.

LEGEND

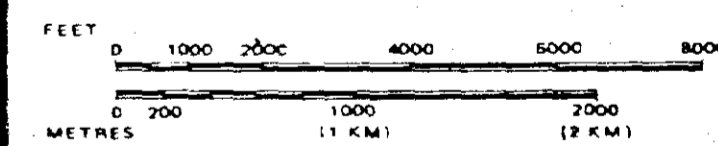
- HIGHWAY AND ROUTE No.
- OTHER ROADS
- TRAILS
- SURVEYED LINES:
 - TOWNSHIPS, BASE LINES, ETC.
 - LOTS, MINING CLAIMS, PARCELS, ETC.
- UNSURVEYED LINES:
 - LOT LINES
 - PARCEL BOUNDARY
 - MINING CLAIMS ETC.
- RAILWAY AND RIGHT OF WAY
- UTILITY LINES
- NON-PERENNIAL STREAM
- FLOODING OR FLOODING RIGHTS
- SUBDIVISION OR COMPOSITE PLAN
- RESERVATIONS
- ORIGINAL SHORELINE
- MARSH OR MUSKEG
- MINES
- TRAVERSE MONUMENT

DISPOSITION OF CROWN LANDS

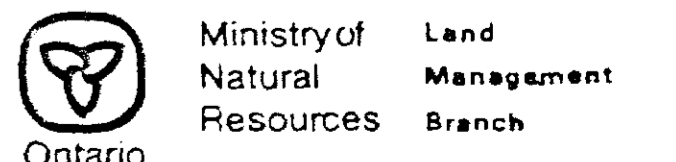
TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	●
" SURFACE RIGHTS ONLY	○
" MINING RIGHTS ONLY	◐
LEASE, SURFACE & MINING RIGHTS	■
" SURFACE RIGHTS ONLY	◼
" MINING RIGHTS ONLY	◻
LICENCE OF OCCUPATION	▼
ORDER-IN-COUNCIL	OC
RESERVATION	⊙
CANCELLED	⊗
SAND & GRAVEL	⊘

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1912, VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 380, SEC. 63, SUBSEC. 1

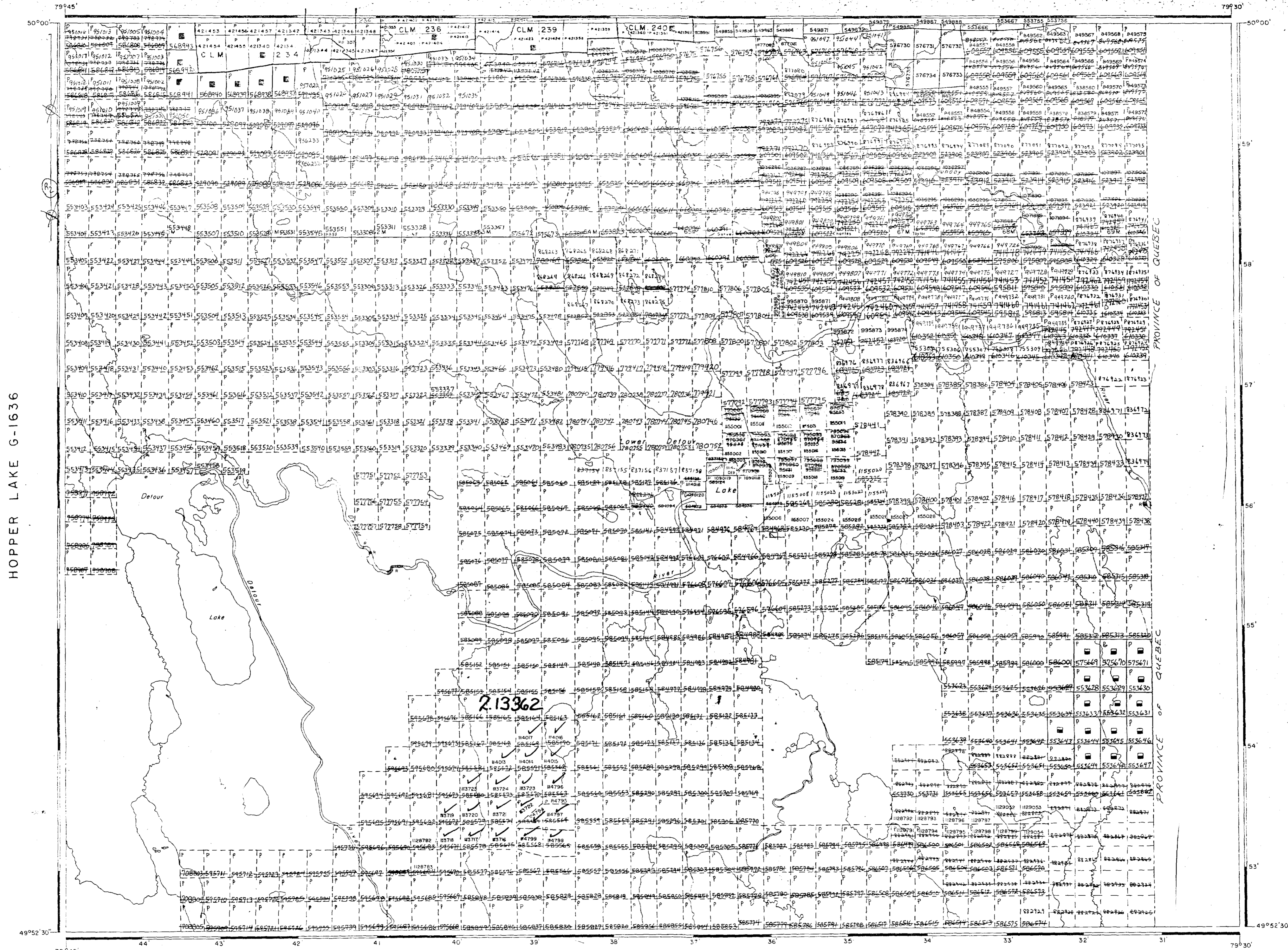
SCALE: 1 INCH = 40 CHAINS



AREA
LOWER DETOUR LAKE
 M.N.R. ADMINISTRATIVE DISTRICT
COCHRANE
 MINING DIVISION
PORCUPINE JUN 11 1982
 LAND TITLES / REGISTRY DIVISION
COCHRANE



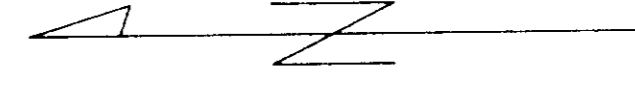
Date: DECEMBER 1982
 Number: **G-1647**



HOPPER LAKE G-1636

ATKINSON LAKE G-1626





SHEET No.



2.13362

WESTMIN MINES LTD.
EASTERN CANADIAN EXPLORATION

ATKINSON PROJECT

LIPTON (C-12) CLAIMS

MAGNETOMETER SURVEY

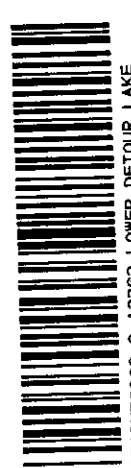
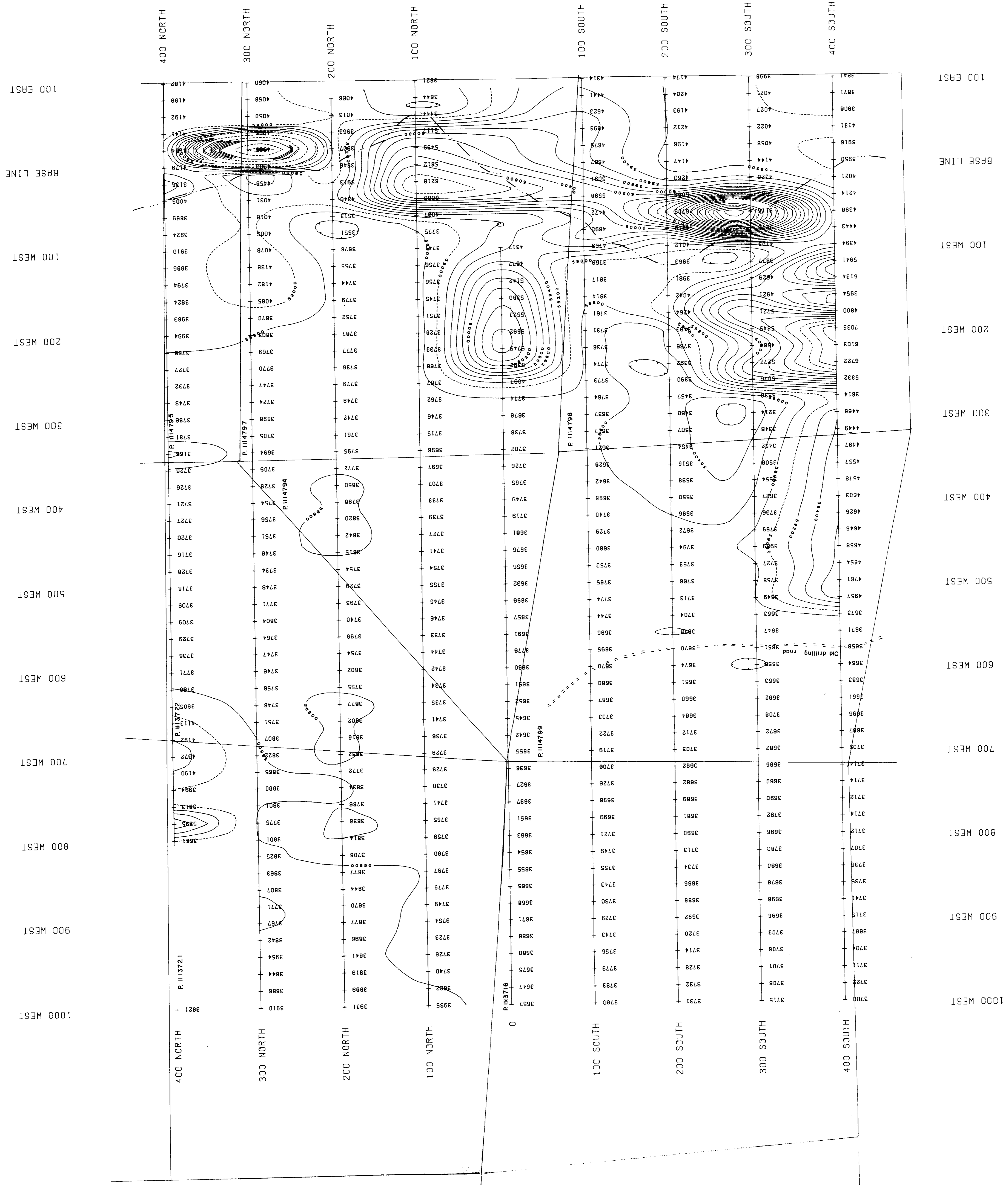
MARK BY: GUY THIBRAULT

DATE: MARCH, 1990

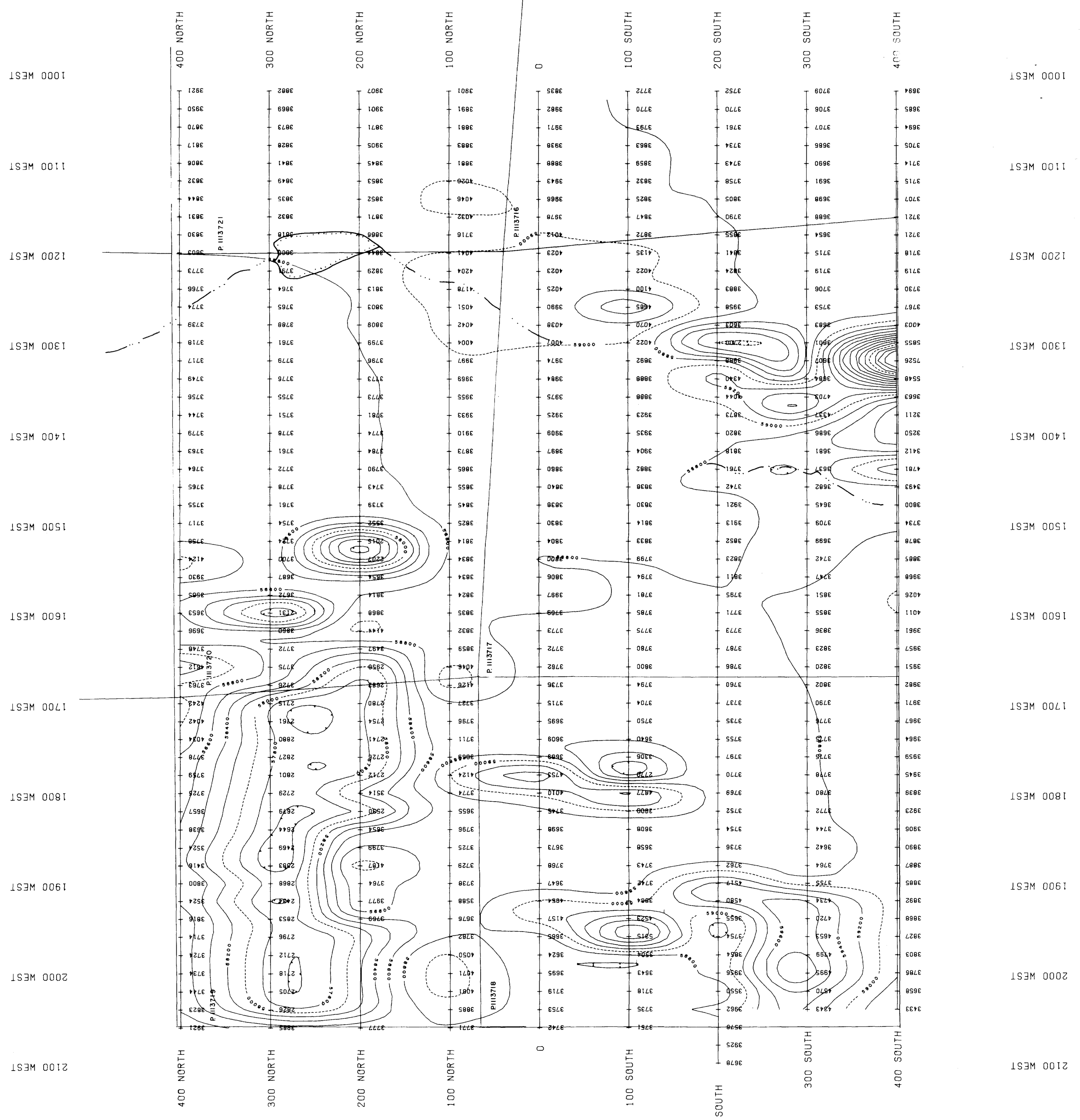
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N.T.S.: 32 E/13

Figure 4(2)

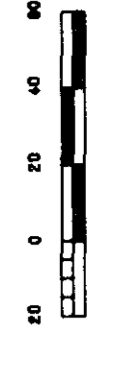


220
INSTRUMENT USED: GOM 6000
CONTROL INTERVAL: 200M
MAGNETOMETER SURVEY



INSTRUMENT USED: SGT. 6388
 CONTINENTAL MAGNET
 BASE VALUE: 550000

SHEET THREE



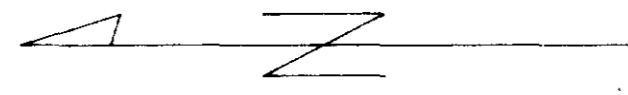
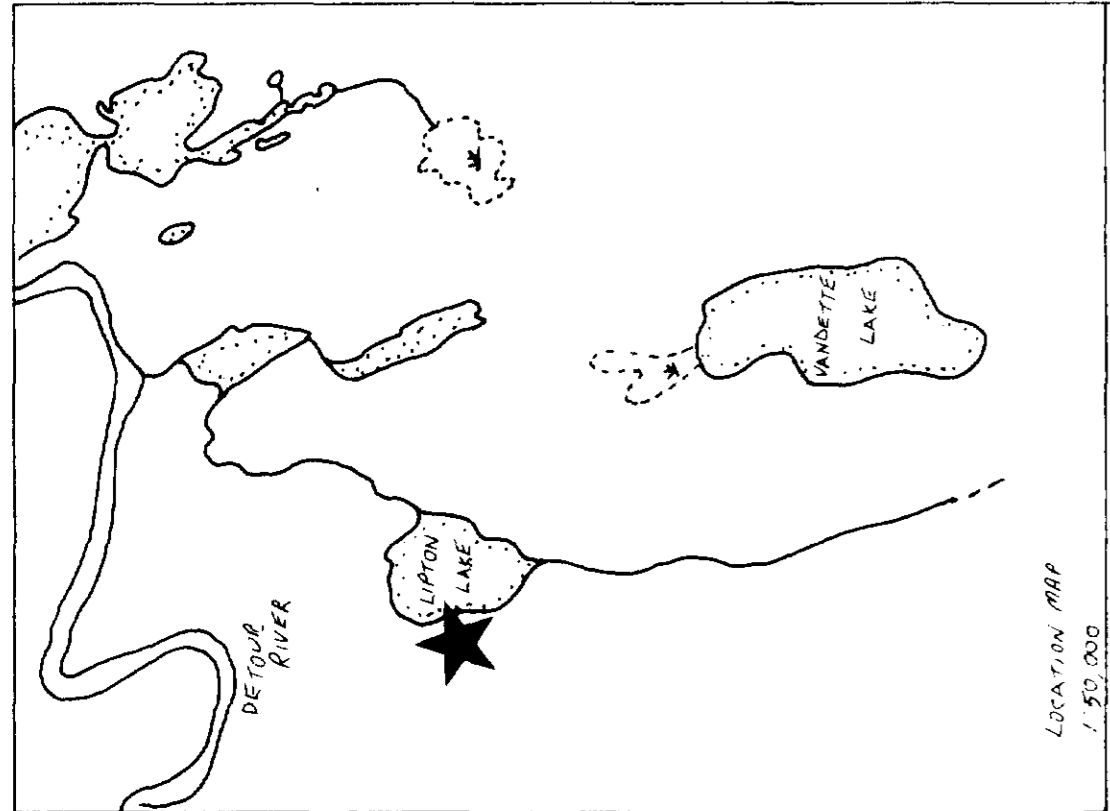
2.13362
 WESTMIN MINES LTD.
 EASTERN CANADA EXPLORATION

ATKINSON PROJECT
 LIPTON (C-12) CLAIMS
 MAGNETOMETER SURVEY

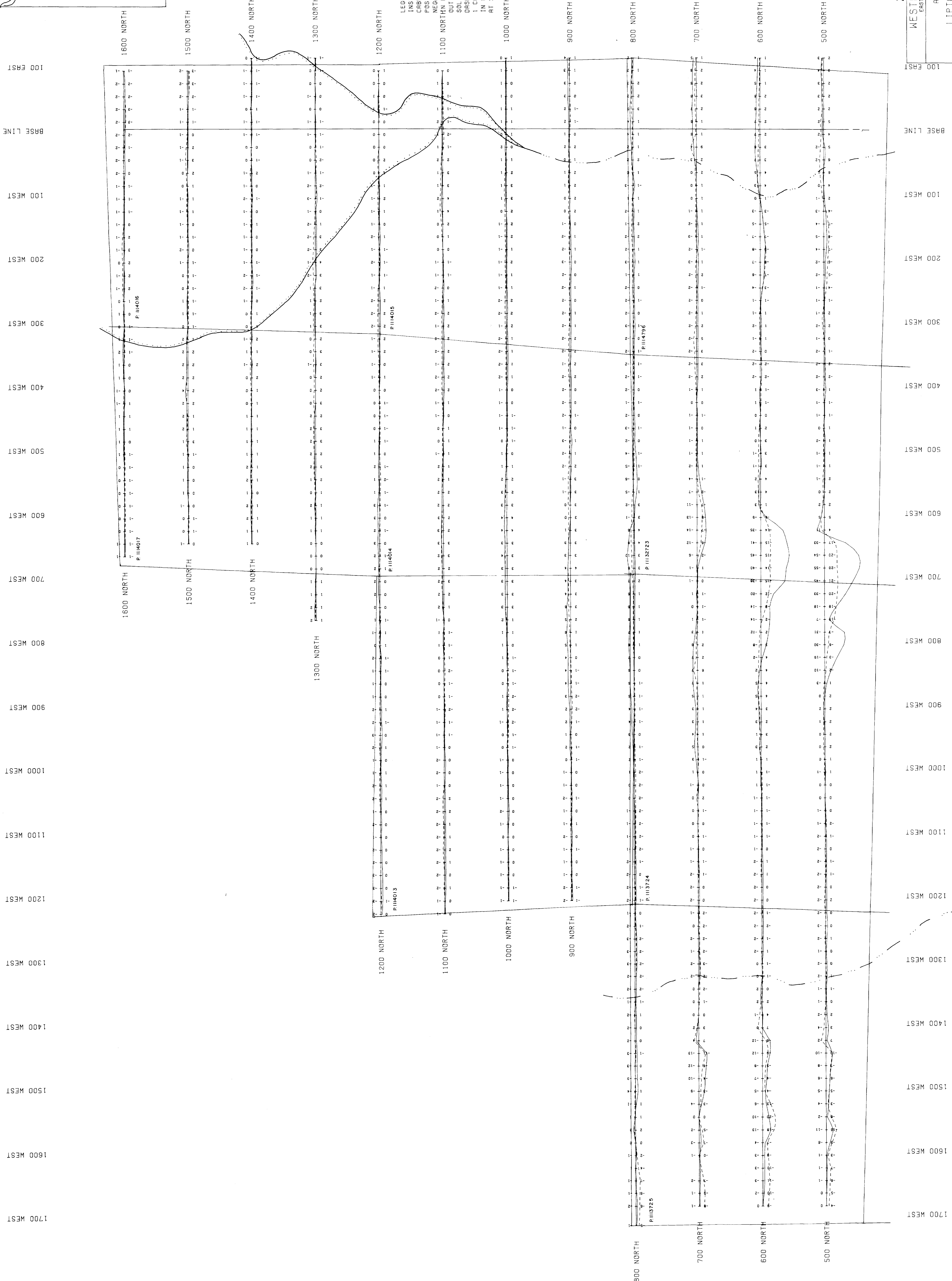
WORK BY: GUY THIBRAULT
 SCALE: 1:2,000
 NT.S. 22-F-12
 Figure 4(3)



2330



LEGEND
 INSTRUMENT USED: APEX MAX-MIN II
 CABLE LENGTH: 140M
 POSITIVE VALUES TO LEFT
 NEGATIVE VALUES TO RIGHT
 OUT OF PHASE TO THE RIGHT
 1100 NORTH PHASE ON LEFT
 SOLID LINE = IN PHASE
 DASHED LINE = OUT OF PHASE
 1 CM = 20V
 IN PHASE POTENTIOMETER SET
 AT 2.7



SHEET ONE

WESTMIN MINES LTD.
EASTERN CHANNEL EXPLORATION

2.13362

ATKINSON PROJECT

LIPTON (C-12) CLAIMS

MAX-MIN II SURVEY

444 HZ

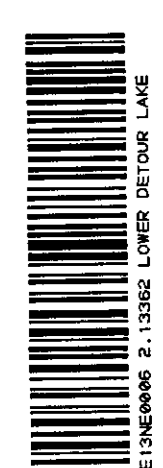
WORK BY: DUJ THIBOUT

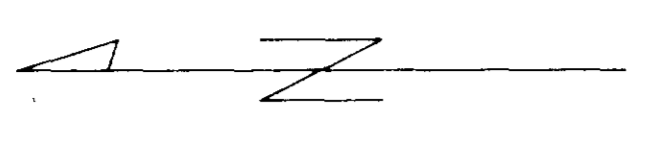
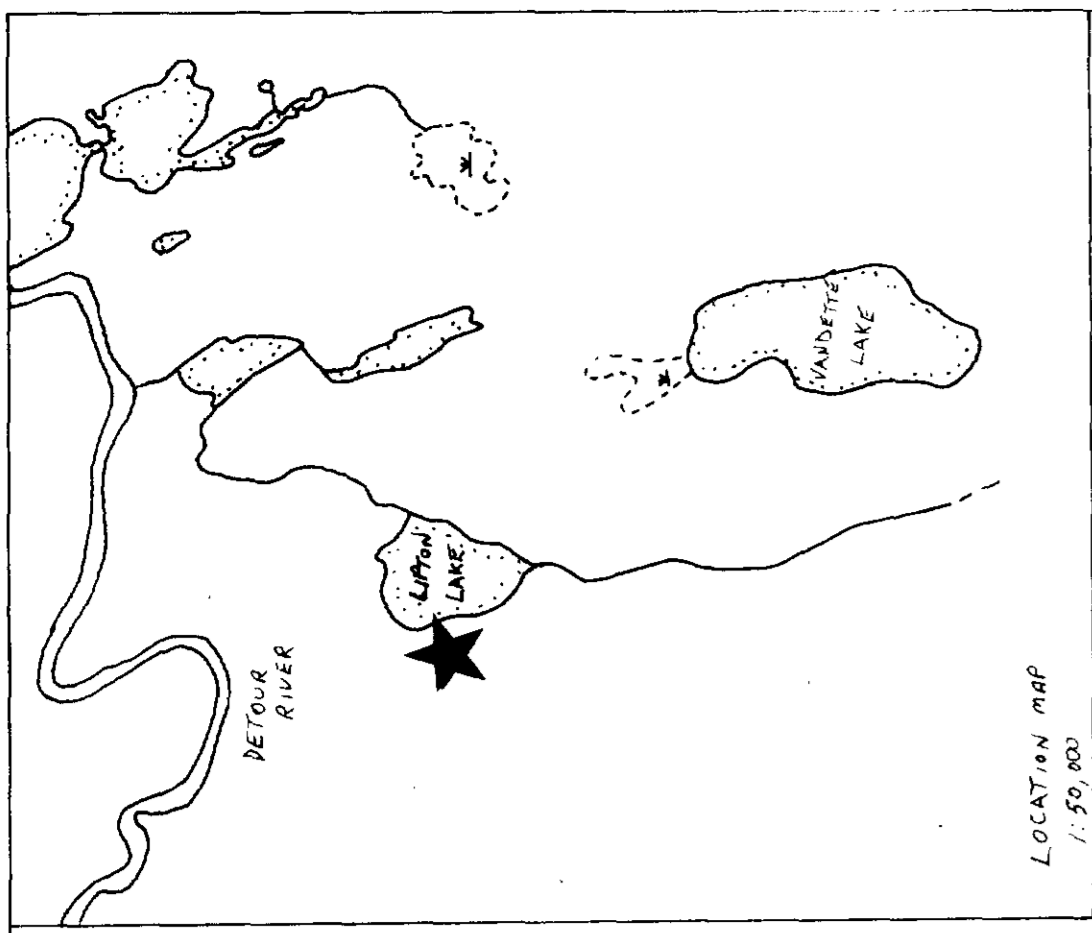
DATE: MARCH, 1990

SCALE: 1:2000

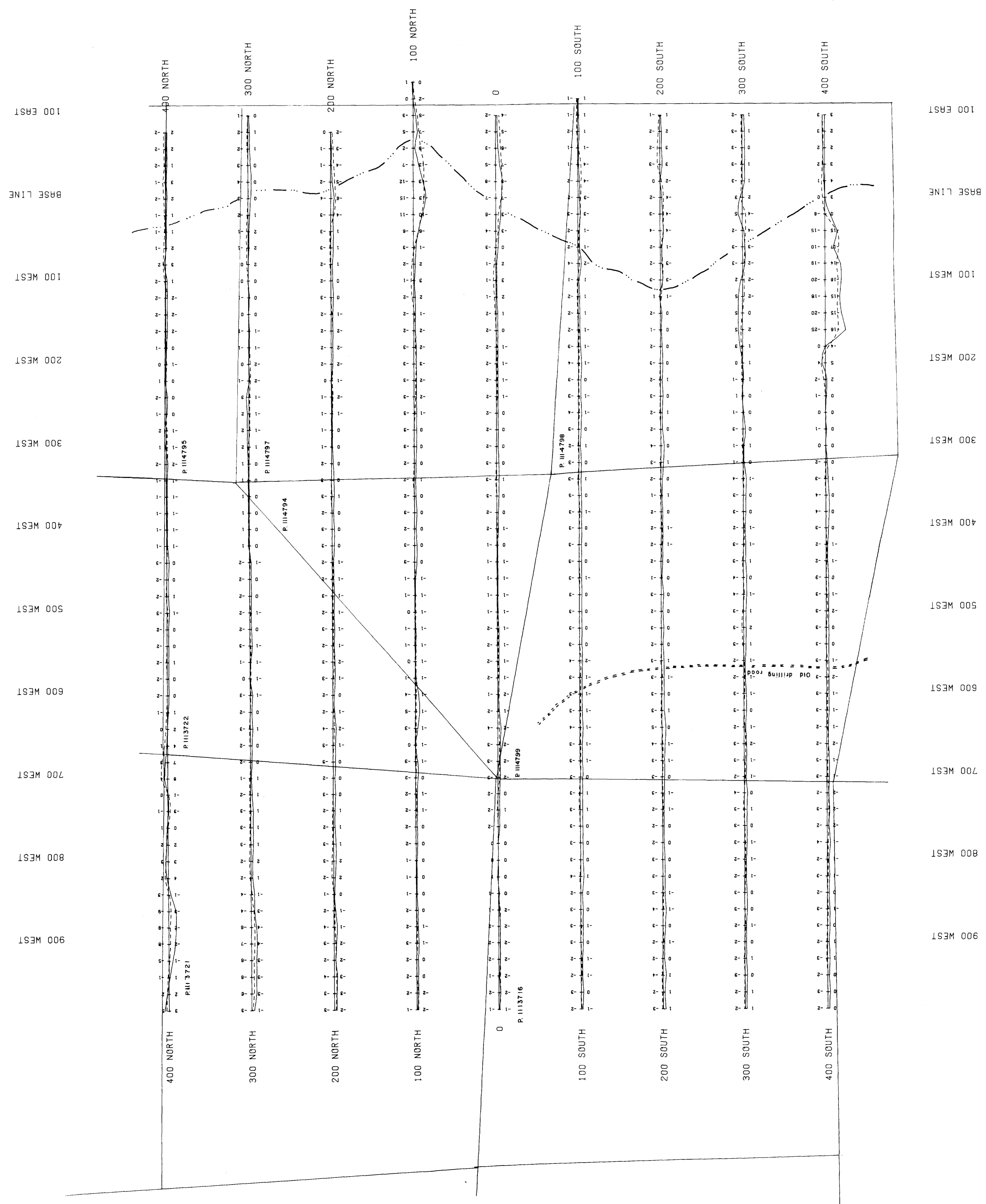
N. 15.1 32 E 13

Figure 5(C)

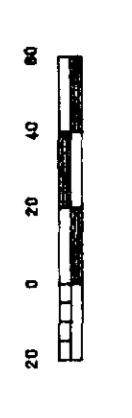




LEGEND
 INSTRUMENT USED: APEX MAX-MIN II
 CABLE LENGTH: 140M
 POSITIVE VALUES TO LEFT
 NEGATIVE VALUES TO RIGHT
 IN PHASE ON LEFT
 OUT OF PHASE TO THE RIGHT
 SOLID LINE = IN PHASE
 DASHED LINE = OUT OF PHASE
 1 CM = 20Z
 IN PHASE POTENTIOMETER SET
 AT 2.7



SHEET TWO



2.13362

WESTMIN MINES LTD.
 EASTERN CANADA EXPLORATION

ATKINSON PROJECT

LIPTON (C-12) CLAIMS

MAX-MIN II SURVEY

444 #2

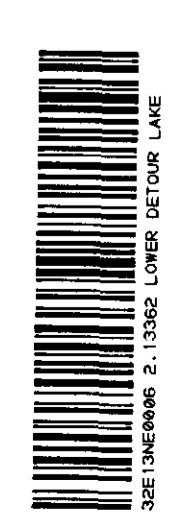
WORK BY: GUY THIBRAULT

DATE: MARCH, 1980

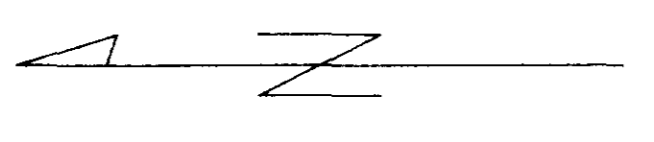
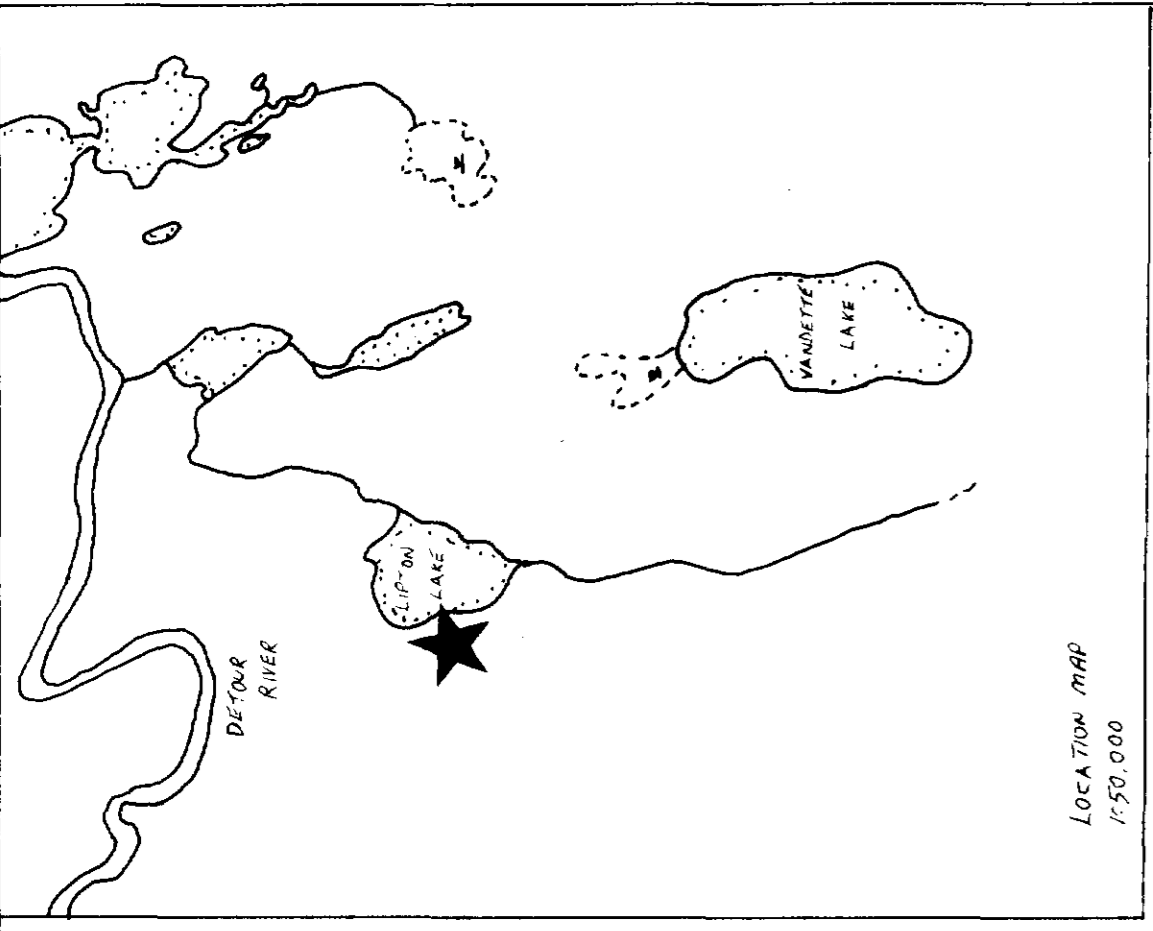
SCALE: 1:2000

N.T.S.: 32 E/13

Figure 5(2)

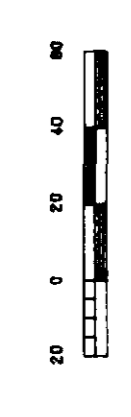


2500



LEGEND
 INSTRUMENT USED: APEX MAX-MIN II
 CABLE LENGTH: 140M
 POSITIVE VALUES TO LEFT
 NEGATIVE VALUES TO RIGHT
 IN PHASE ON LEFT
 OUT OF PHASE TO THE RIGHT
 SOLID LINE = IN PHASE
 DASHED LINE = OUT OF PHASE
 1 CM = 20%
 IN PHASE POTENTIOMETER SET
 AT 2.7

SHEET THREE



2.13362

WESTMIN MINES LTD.
 EASTERN CANADA EXPLORATION

ATKINSON PROJECT

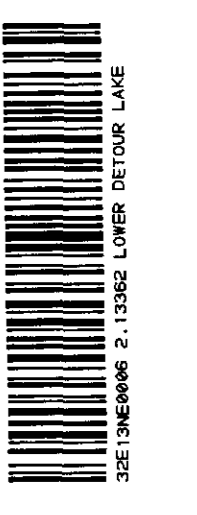
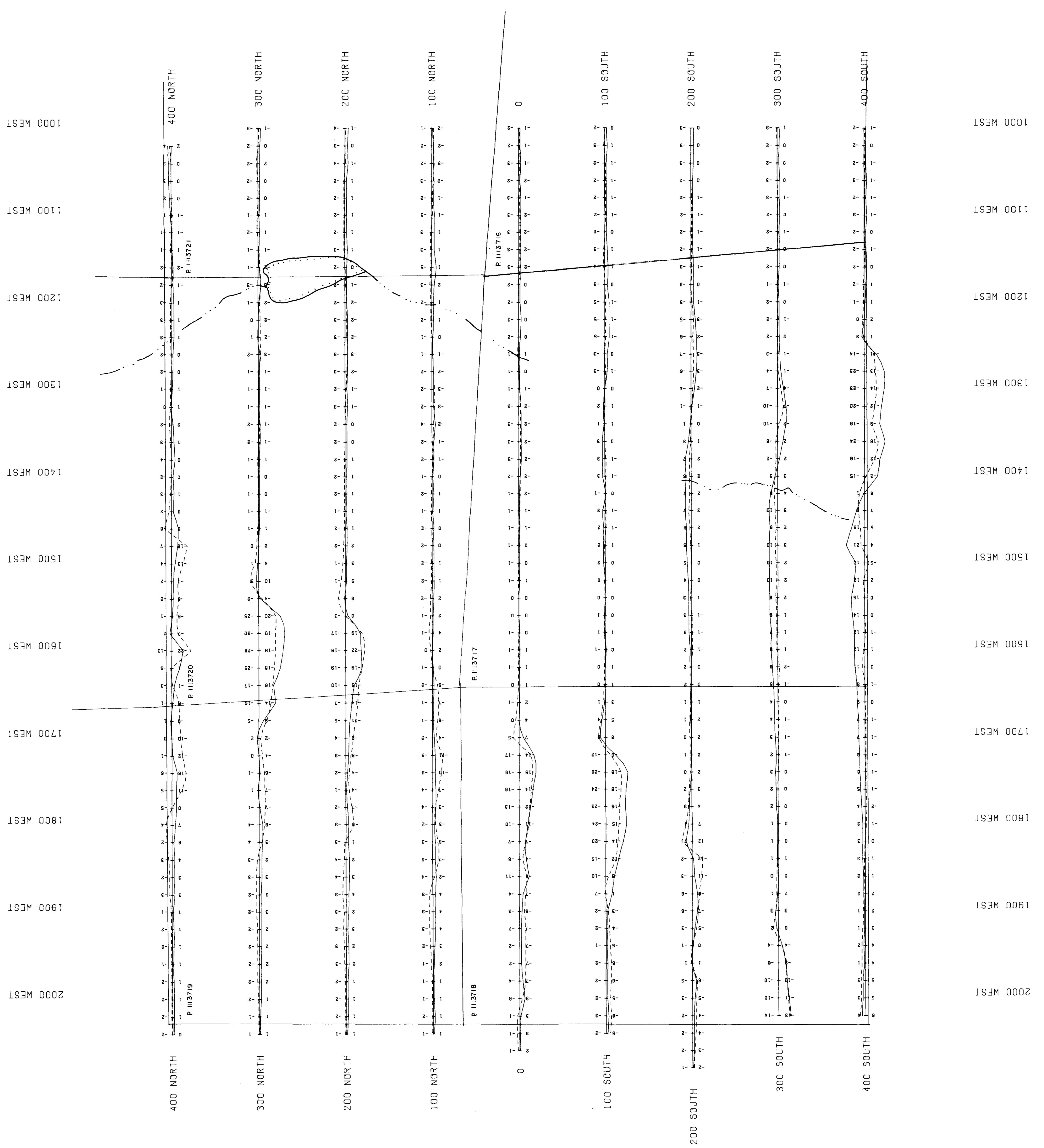
LIPTON (C-12) CLAIMS

MAX-MIN II SURVEY

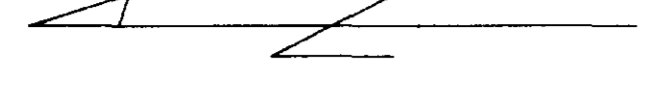
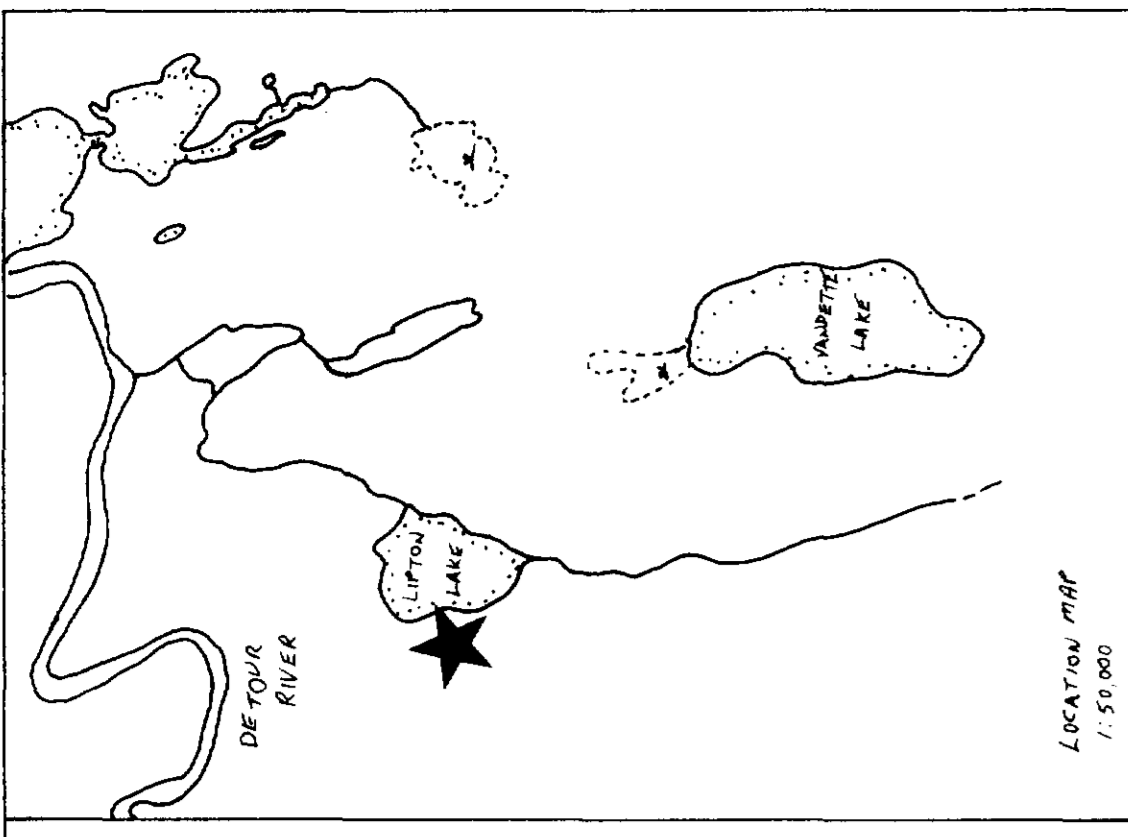
444 PE

WORK BY: GUY THIBAUT SCALE: 1:2000
 DATE: MARCH, 1990 N.T.S. 92 E/13

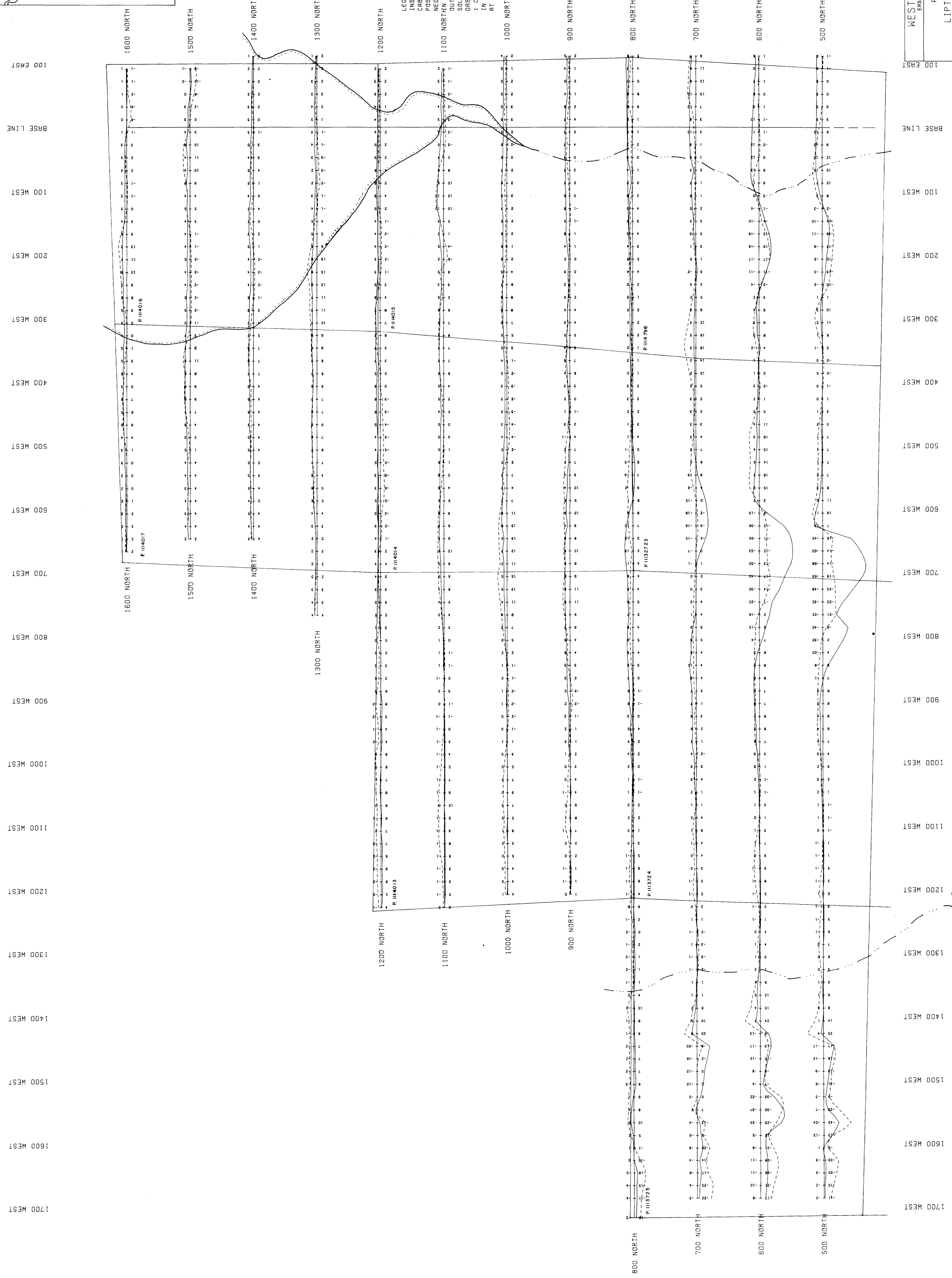
Figure 5/3



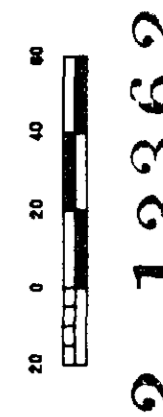
8660



LEGEND
 INSTRUMENT USED: APEX MAX-MIN II
 CABLE LENGTH: 140M
 POSITIVE VALUES TO LEFT
 NEGATIVE VALUES TO RIGHT
 50% OF PHASE TO THE RIGHT
 50% OF PHASE TO THE LEFT
 DASHED LINE = IN PHASE
 SOLID LINE = OUT OF PHASE
 CM 202
 IN PHASE POTENTIOMETER SET
 RT 2-7



SHEET ONE

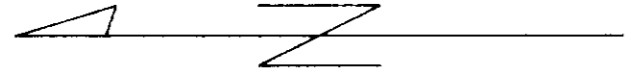
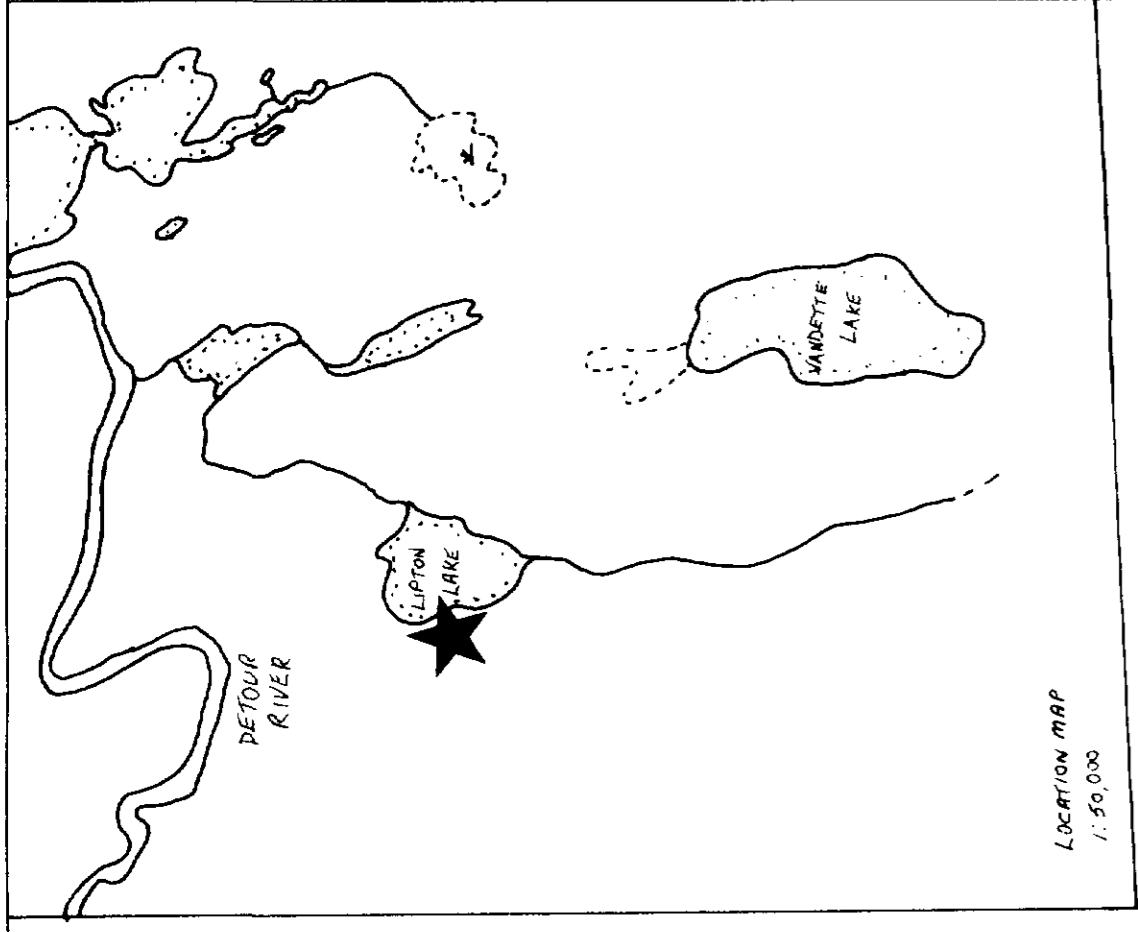


2.13362

WESTMIN MINES LTD.
 EASTERN CANADA EXPLORATION
 ATKINSON PROJECT
 LIPTON (C-12) CLAIMS
 MAX-MIN II SURVEY
 1777 HE

WORK BY: GUY THIBAUT
 DATE: MARCH, 1990
 SCALE: 1:12000
 N.T.S.: 32 E/13





LEGEND
 INSTRUMENT USED: APEX MAX-MIN II
 CABLE LENGTH: 140M
 POSITIVE VALUES TO LEFT
 NEGATIVE VALUES TO RIGHT
 IN PHASE ON LEFT
 OUT OF PHASE TO THE RIGHT
 SOLID LINE = IN PHASE
 DASHED LINE = OUT OF PHASE
 1 CM = 20V
 IN PHASE POTENTIOMETER SET
 RT 2.7

SHEET TWO



2.13362

WESTMIN MINES LTD.
 EASTERN CANADIAN EXPLORATION

ATKINSON PROJECT

LIPTON (C-12) CLAIMS

MAX-MIN II SURVEY

1777 NZ

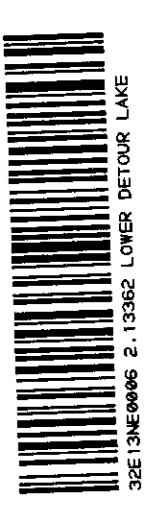
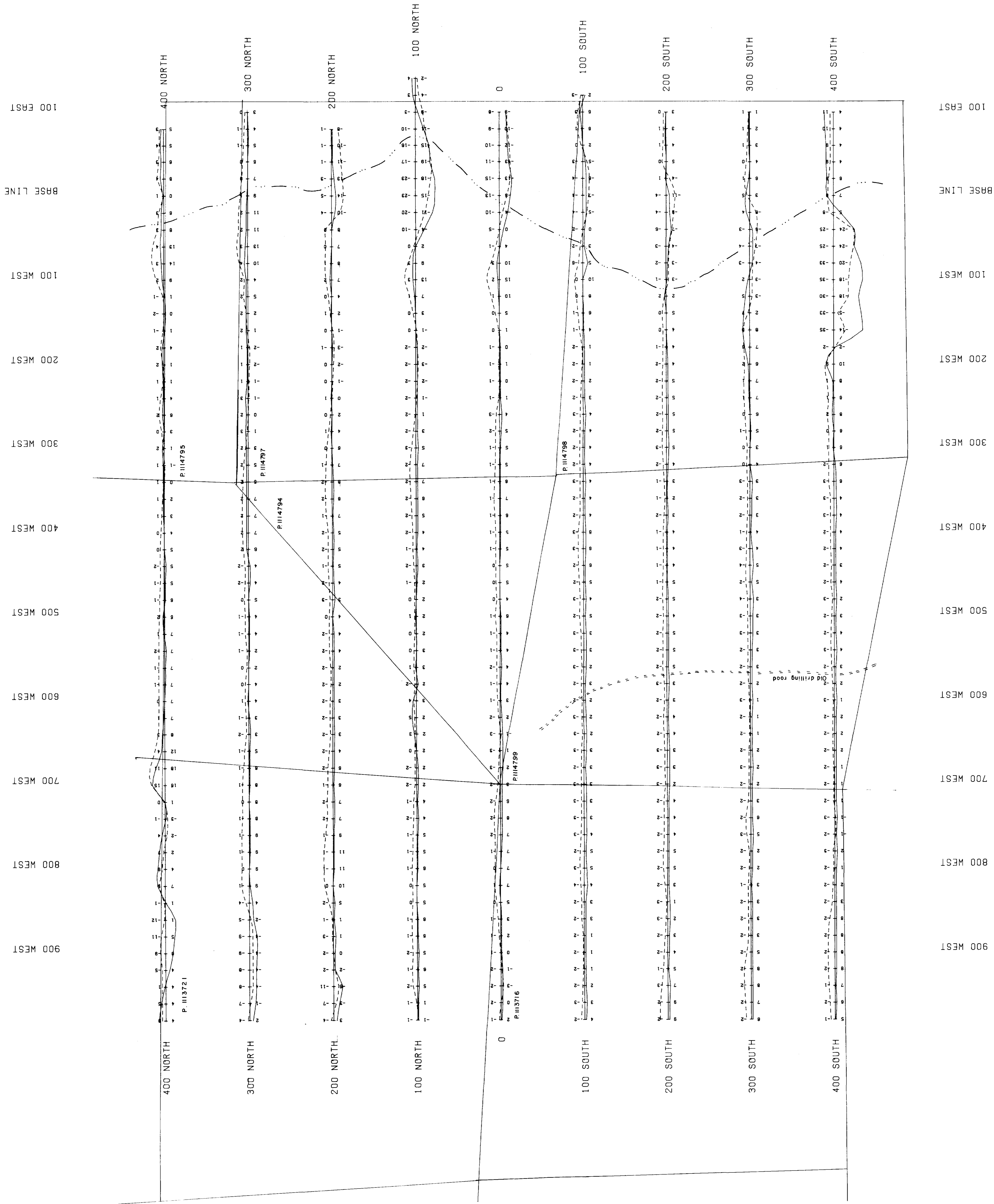
WORK BY: GUY THIBault

DATE: MARCH, 1990

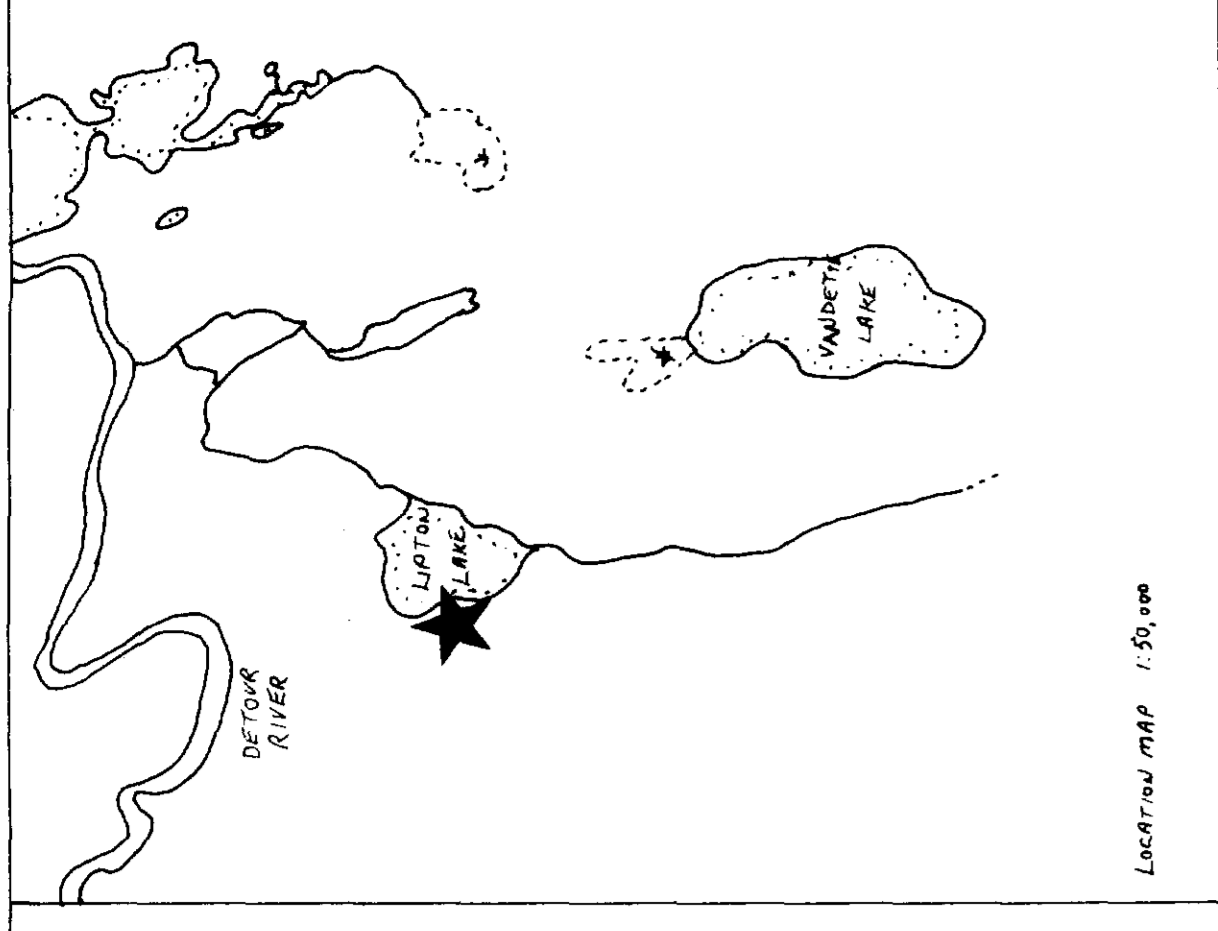
SCALE: 1:2000

N.T.S.: 32 E/13

Fr 6 (2)



280



LEGEND MAP 1:50,000

LEGEND
 INSTRUMENT USED: APEX MAX-MIN II
 CABLE LENGTH: 140M
 POSITIVE VALUES TO LEFT
 NEGATIVE VALUES TO RIGHT
 IN PHASE ON LEFT
 OUT OF PHASE TO THE RIGHT
 SOLID LINE = IN PHASE
 DASHED LINE = OUT OF PHASE
 IN PHASE POTENTIOMETER SET
 RT 2.7

SHEET THREE



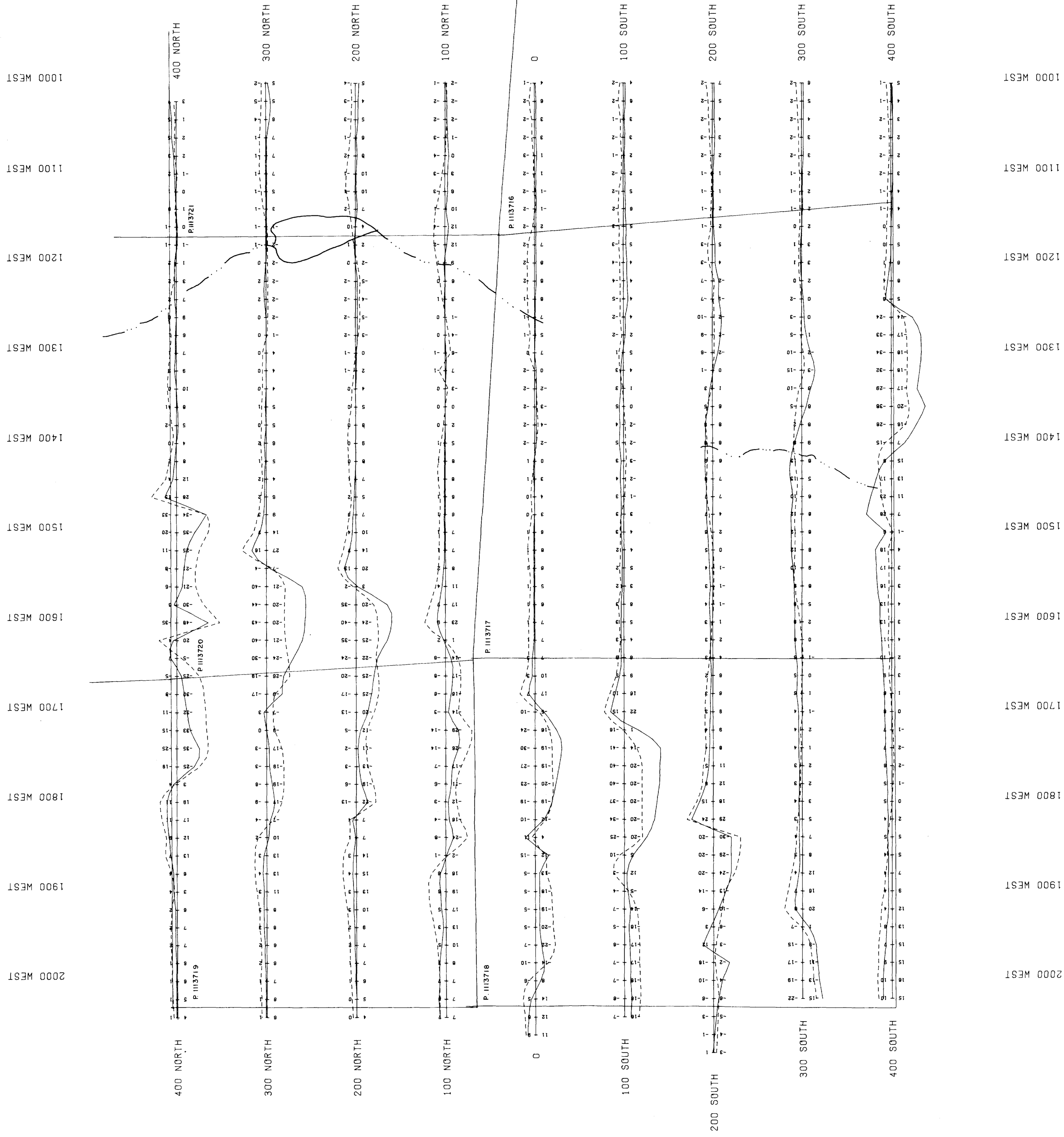
2.13362

WESTMIN MINES LTD.
 EASTERN CANADA EXPLORATION

ATKINSON PROJECT
 LIPTON (C-12) CLAIMS
 MAX-MIN II SURVEY
 1777 RE

WORK BY: GUY THIBAUT
 DATE: MARCH, 1990
 SCALE: 1:2000
 N.T.S.: 92 E/13

Figure 6 (3)



280