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**GEOPHYSICAL REPORT**  
on a  
**MAGNETOMETER AND HLEM SURVEY**  
on the  
**MOSES LAKE PROPERTY**  
**MACBETH TOWNSHIP, SUDBURY MINING DIVISION**  
for  
**FALCONBRIDGE LIMITED**

Submitted by: Steve Anderson  
*VISION EXPLORATION*  
September 3, 1998



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## **INTRODUCTION**

The following report will deal with the results of magnetometer and HLEM surveys carried out on the Moses Lake Property. The property is held by Falconbridge Limited and covers or partially covers seven unpatented block and single unit mining claims, located in Macbeth Township, Sudbury Mining Division, District of Sudbury, Ontario. This work was carried out on a contract basis by Vision Exploration and took the form of a line-cutting program, which was followed up with magnetometer and HLEM (Max-Min) surveys. A total of 11.6 km. of grid lines were established and surveyed during the month of August 1998.

On September 17, 1997 the mining rights for the subject property came open for staking after having being withdrawn by the MNDM for more than 20 years as a result of the Temagami Land Caution. This has resulted in only a limited amount of exploration work having been carried out in the area. The property lies to the southwest and generally on strike with the town of Temagami, which has hosted a number of past base metal producers.

The purpose of this program was to provide ground geophysical data that would aid in the geological interpretation of the area. This included attempting to locate an isolated AEM conductor shown to occur in the area.



## LOCATION AND ACCESS

The Moses Lake Property Group is located in the north central portion of Macbeth Township, Sudbury Mining Division, Districts of Sudbury, Ontario. The property is situated approximately 70-km. northeast from the city of Sudbury or 40-km. southwest from the town of Temagami, Ontario. The northeast corner of the grid borders Aleck Lake.

Access to the work area is gained by taking Hwy 64 North from the town of Sturgeon Falls which is situated along the Trans Canada Hwy (Hwy 17) between the cities of North Bay and Sudbury. At the 22 km. point on Hwy 64 north is the village of Field and the junction of Hwy 539 to the village of River Valley. To this point the Hwy is paved and in fairly good condition. From the village of River Valley Hwy 805 can be used to access the Manitou Lake area.

Access to the grid was gained by taking the Grasse Lake Road which heads west from Hwy 805, just north of Brightwater Lake. This road heads in a northwesterly direction where at approximately the 8-km. point it crosses Kibble Creek. On the west side of Kibble Creek an ATV trail heads north to Kibble Lake. From here, a canoe needed to cross the lake was dragged into Kibble Lake using an ATV. The grid lies approximately 300 meters north of Kibble Lake and was accessed by foot from the north end of the lake.

## PERSONELL

The people directly involved with the geophysical program were all employed by Vision Exploration and are as follows:

Lanny Anderson.....	Crystal Falls, Ontario
Steve Polson.....	Timmins, Ontario
Randy Trembley.....	Timmins, Ontario

Steve Anderson supervised all work.

## **PREVIOUS WORK**

The assessment files show that there has been no previous work filed for the project area. A number of companies as well as individuals have worked in the general area, to the north around Emerald Lake and to the east around Manitou Lake. Exploration work in both these areas has reported encouraging base metal and gold values occur within 3 km. of the subject property.

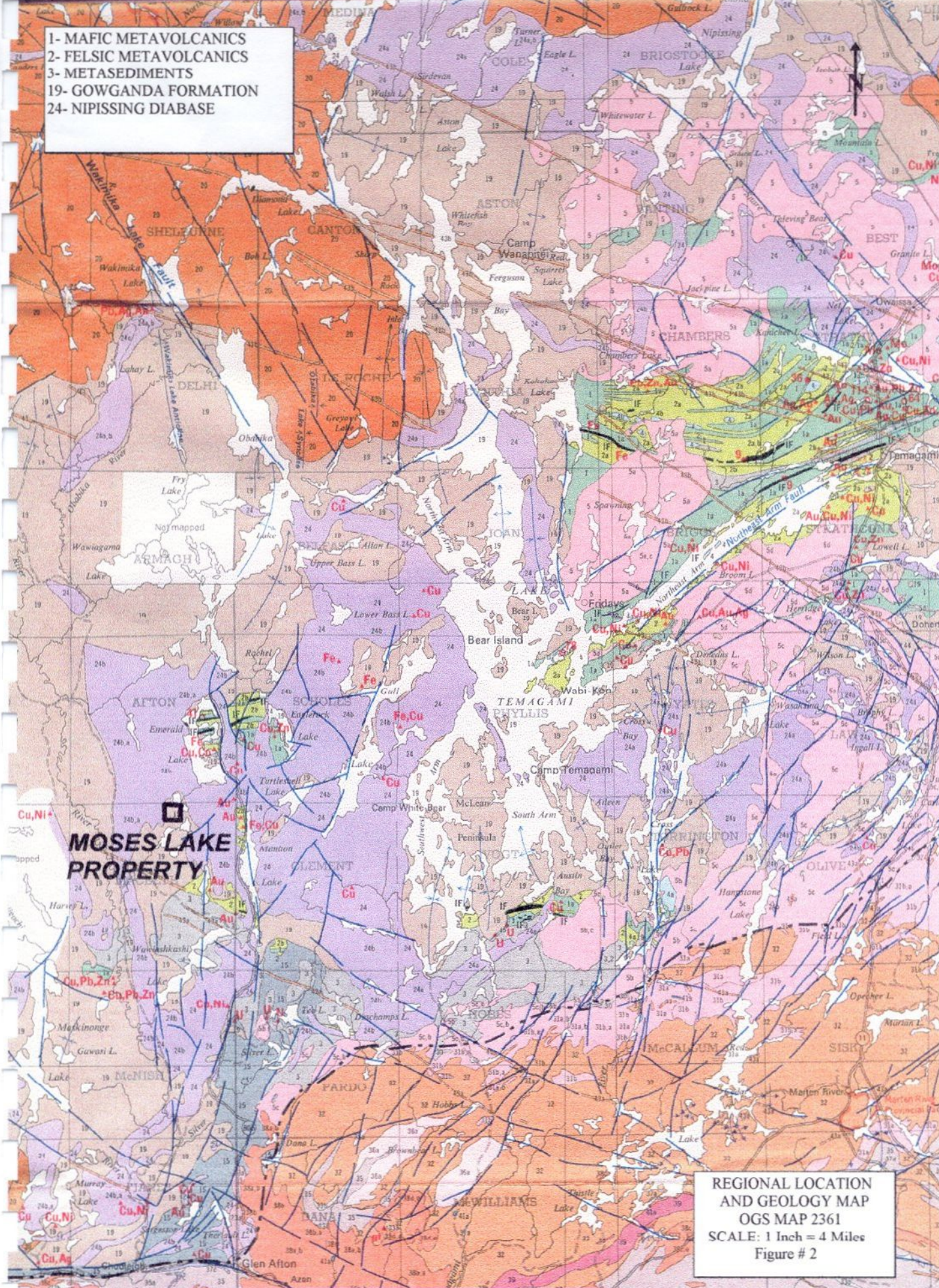
## **GENERAL GEOLOGY**

The geology of the area is described in OGS Report 170 "Geology of Afton, Scholes Macbeth and Clement Townships" as follows:

All bedrock exposed is of Precambrian age. The oldest rocks of the area are a sequence of Early Precambrian metavolcanics and metasediments with locally interbedded chert (jasper)-magnetite, and sulphide iron formation. These rocks are locally intruded by porphyries similar to the flows they intrude, and are intruded by diabase dikes. The early Precambrian sequence is unconformably overlain by Middle Precambrian Huronian sedimentary rocks of the Mississagi and Gowganda Formations. Sheet-like Nipissing Intrusions (tholeiitic gabbro) intruded by Huronian and older rocks. The youngest bedrock in the area consists of Late Precambrian diabase and olivine diabase dikes. Pleistocene and recent gravel, sand, silt and swamp deposits cover the area between exposures of Precambrian rock.

OGS Map 2386, shows the majority of the grid area to be underlain by Gowganda Formation, with the exception of the extreme western portion of the property which is underlain by Nipissing Diabase (Figure #4).

- 1- MAFIC METAVOLCANICS
- 2- FELSIC METAVOLCANICS
- 3- METASEDIMENTS
- 19- GOWGANDA FORMATION
- 24- NIPISSING DIABASE



REGIONAL LOCATION  
AND GEOLOGY MAP  
OGS MAP 2361  
SCALE: 1 Inch = 4 Miles  
Figure # 2

### CLAIMS

The grid cut over the Moses Lake property covered or partially covered seven unpatented block and single unit mining claims located in Macbeth Township, Sudbury Mining Division, District of Sudbury, Ontario. The claim numbers are as follows:

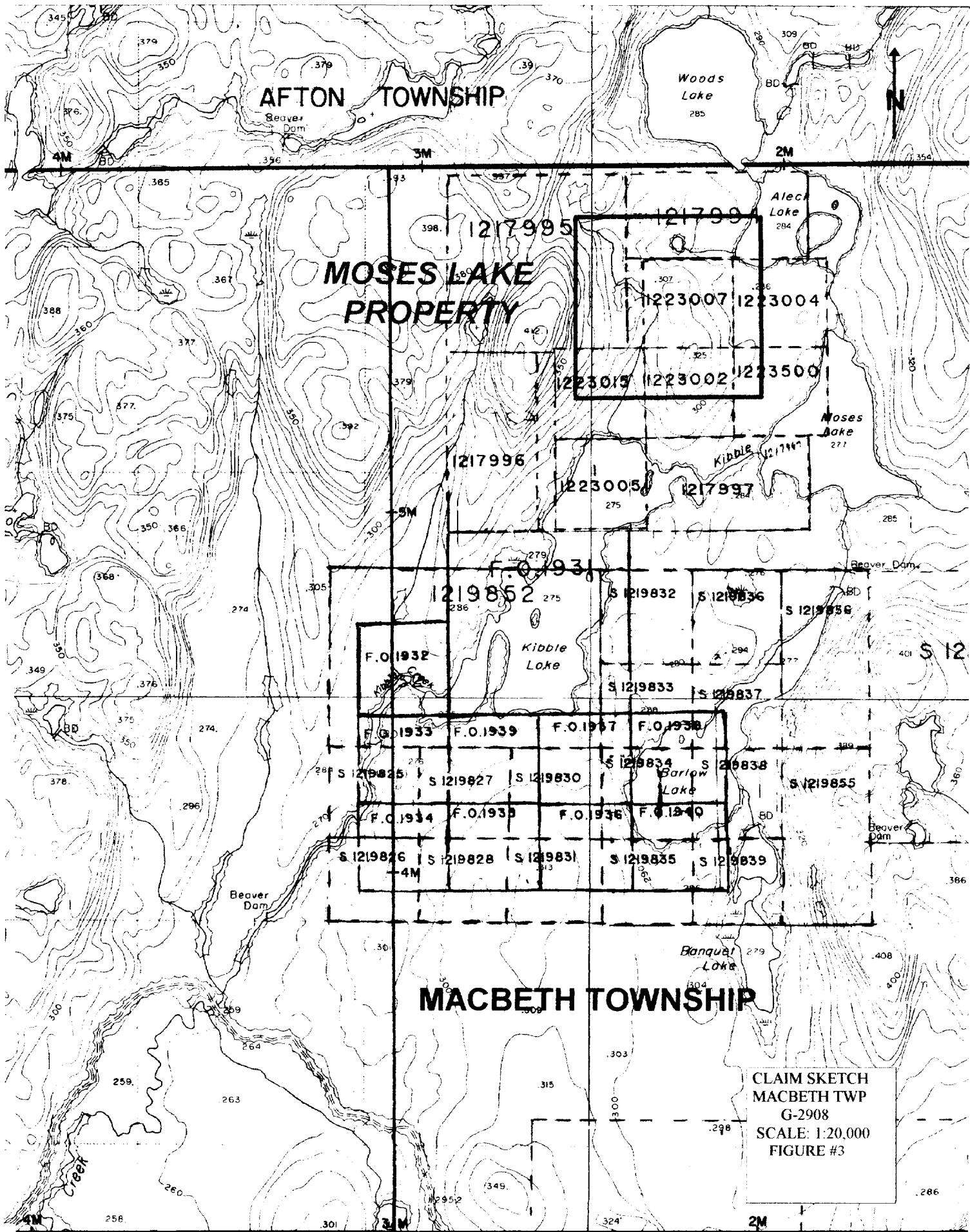
<u>CLAIM #</u>	<u># OF UNITS</u>	<u>TOWNSHIP</u>
1217994	2	MACBETH
1217995	4	MACBETH
1223002	1	MACBETH
1223004	1	MACBETH
1223007	1	MACBETH
1223015	1	MACBETH
1223500	1	MACBETH

### WORK PROGRAM

The first stage of this work program involved establishing a grid over which the geophysical surveys could be carried out. Falconbridge Limited set up the grid parameters with the base line and tie lines running in an east west direction and perpendicular cross lines. The line interval was set at 100 and 200 meters, with a 25 meters station interval. A total of 11.6 km. of chainsaw cut grid lines were established.

The grid was then surveyed with Magnetometer and HLEM, using a 12.5-meter reading interval for the magnetometer and 25 meter for the HLEM. This resulted in 11.6 km. of geophysical coverage. It should be noted that the topography in this area was fairly rugged, which had some affect of the HLEM survey. The following is a brief description of the geophysical methods and parameters used.





AFTON TOWNSHIP

**MOSES LAKE PROPERTY**

MACBETH TOWNSHIP

CLAIM SKETCH  
 MACBETH TWP  
 G-2908  
 SCALE: 1:20,000  
 FIGURE #3

# MOSES LAKE PROJECT AREA

# MACBETH

**MIDDLE PRECAMBRIAN**  
**MAFIC INTRUSIVE ROCKS**  
 NIPISSING DIABASE

- 7 Unsubdivided.
- 7a Diabase.
- 7b Gabbro.
- 7c Felsite.
- 7d Pegmatitic diorite.

INTRUSIVE CONTACT

**HURONIAN SUPERGROUP**  
**COBALT GROUP**  
**GOWGANDA FORMATION**

- 6 Unsubdivided.
- 6a Paraconglomerate.
- 6b Orthoconglomerate.
- 6c Mudstone, siltstone.
- 6d Laminated mudstone, ls siltstone.
- 6e Pebbly mudstone, pebbly stone.
- 6f Greywacke, sandstone, gr.
- 6g Arkose.

CONFORMABLE CONTACT, FAULTING

**HOUGH LAKE GROUP**  
**MISSISSAGI FORMATION**

- 5 Unsubdivided.
- 5a Orthoconglomerate.
- 5b Greywacke, quartzite, ark.
- 5c Mudstone, siltstone.

UNCONFORMITY

**EARLY PRECAMBRIAN**  
**MAFIC INTRUSIVE ROCKS**

- 4 Metadiabase, diabase.

INTRUSIVE CONTACT

**METAVOLCANICS AND METASEDIMENTS**  
**METASEDIMENTS**

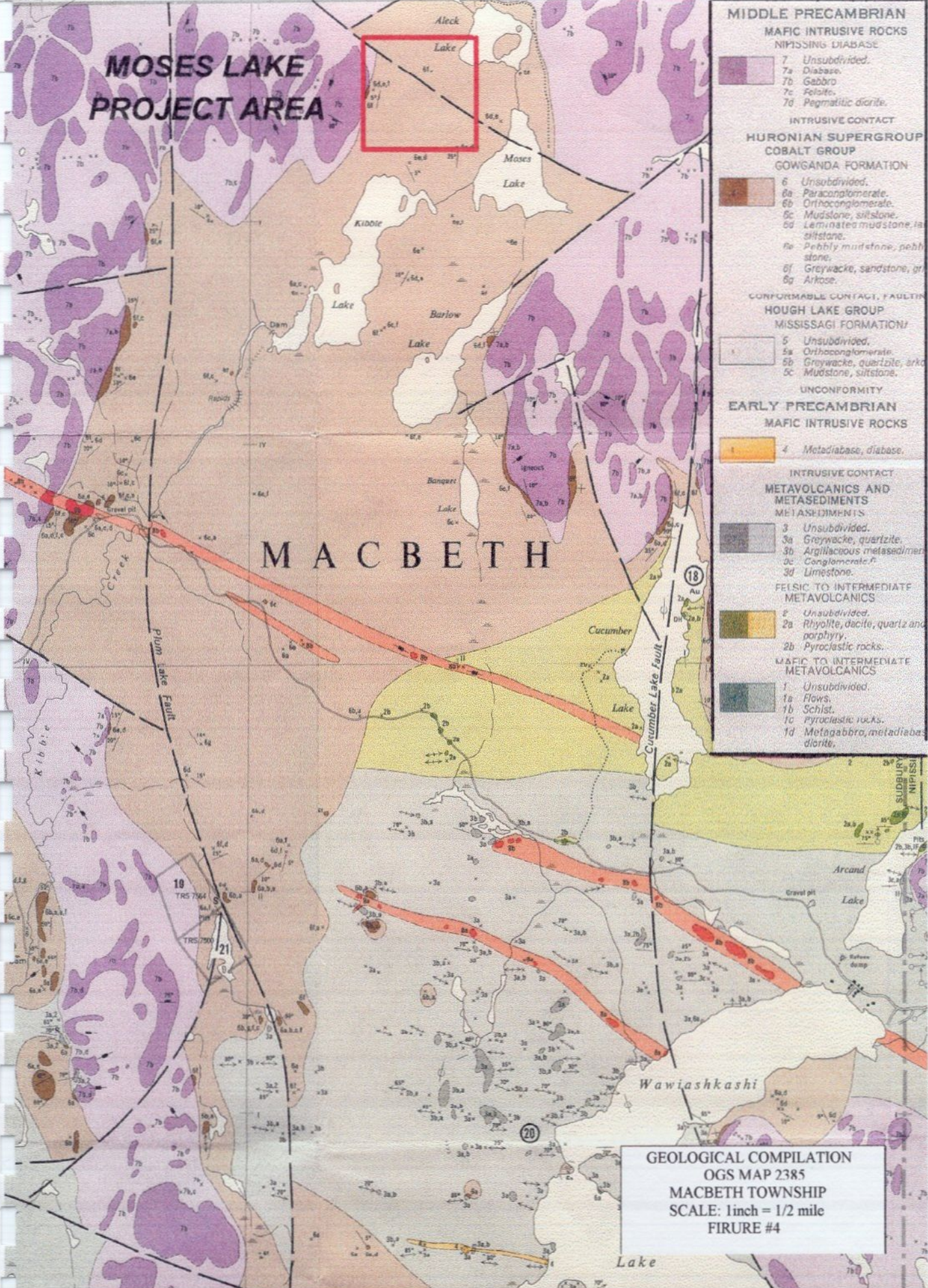
- 3 Unsubdivided.
- 3a Greywacke, quartzite.
- 3b Argillaceous metasediment.
- 3c Conglomerate.
- 3d Limestone.

FELSIC TO INTERMEDIATE METAVOLCANICS

- 2 Unsubdivided.
- 2a Rhyolite, dacite, quartz and porphyry.
- 2b Pyroclastic rocks.

MAFIC TO INTERMEDIATE METAVOLCANICS

- 1 Unsubdivided.
- 1a Flows.
- 1b Schist.
- 1c Pyroclastic rocks.
- 1d Metagabbro, metadiabase, diorite.



**GEOLOGICAL COMPILATION**  
 OGS MAP 2385  
 MACBETH TOWNSHIP  
 SCALE: 1 inch = 1/2 mile  
 FIGURE #4

## MAGNETOMETER SURVEY

A GEM GSMT-19 Proton Precession magnetometer was used to carry out the magnetometer survey. The instrument is synchronised with a GEM GSMT-19 recording base station to help eliminate magnetic diurnal variation. This should ensure an accuracy of less than 1.0 Nt.

The Proton Precession method involves energising a wire coil immersed in a hydrocarbon fluid. This causes the protons in the proton rich fluid to spin or precess simulating spinning magnetic dipoles. When the current is removed the protons precess about the direction of the earth's magnetic field, generating a signal in the same coil which is proportional to the total magnetic field intensity. In this way, the horizontal gradient of the earth's magnetic field can be measured and plotted in plan form with values of equal intensity joined to form a contour map.

This presentation is useful in correlating with other data sets to aid in structural interpretation. Individual magnetic responses can be interpreted for dip, depth and width estimates after profiling the data.

The following parameters were employed for the survey:

Instrument – GEM, GSMT-19 Proton Precession Magnetometer

Station Interval - 12.5m

Line Interval - 100m, 200m

Diurnal Correction Method – GEM GSMT-19 Recording Base Station

Data Presentation – Data posted and contoured plan map

- 1:5000 scale

- Contour interval: 20 nano-teslas

## HORIZONTAL LOOP SURVEY

The Horizontal Loop EM survey was carried out with an Apex Max-Min II instrument. These surveys are commonly called "Max-Min" surveys in recent times.

The Max-Min II instrument can operate at five frequencies (3555HZ, 1777HZ, 888HZ, 444HZ, 222HZ). and is capable of coil separations from 25 meters to 200 meters. Although it can be used in the vertical loop mode as well as minimum coupled, it is most often used in the Maximum Coupled, Co-Planer mode which is in effect a Horizontal Loop Electromagnetic Survey.

The instrument records the "In-Phase" and "Out-of-Phase" components of the anomalous resultant field from a conductor as a percentage of the primary field strength. Both components are used in the interpretation of the results. Generally, the larger the ratio of peak negative responses between In-Phase and Out-of-Phase, the higher the conductivity of the anomaly. A ratio of 1:1 is considered a medium conductor.

The purpose of reading more than one frequency is to obtain more information about the conductor itself as well as the conductivity of the overburden etc. The higher frequencies will respond to weaker conductive features such as faults, conductive overburden etc. As a result the signal from these frequencies can attenuate very quickly, possibly not penetrating to the bedrock at all. The lower frequencies having a longer wavelength tend to penetrate deeper and generally only respond to anomalies with a higher order of conductance, Thus as with most geophysical techniques it is a trade off as to depth of penetration vs. conductance threshold detectable. The use of multi frequency surveys helps to alleviate this problem at a minimal extra cost.

The HLEM survey was carried out using the following parameters.

INSTRUMENT: Apex Parametrics, Max-Min II  
MODE: Co-planar  
PARAMETERS MEASURED: In-phase and quadrature  
COIL SPACING: 200 meters  
FREQUENCIES: 222Hz, 444Hz and 1777Hz.  
LINE INTERVAL: 100, 200 meters  
STATION INTERVAL: 25 meters  
DATA PRESENTATION: Profiled plan maps, 1:5000  
PROFILE SCALE: 1cm = 5%

## **SURVEY RESULTS**

The geophysical program conducted on the Moses Lake Property did not appear to outline any significant conductive zones.

The magnetics over the extreme western part of the grid are higher and more erratic than the remainder of the grid. This is most likely marking the magnetic contrast between the Nipissing Diabase and the Gowganda formation, which covers the majority of the property.

The magnetic background for the remainder of the property increases slightly within the northern half of the property. This might be suggesting an increase in the thickness of the Gowganda Formation from north to south or the contact between two separate geological units occurring beneath the Gowganda Formation.

The HLEM survey outlined what may be a very weak conductor on L 1400E at 2750N. This feature shows up primarily at the high frequency making its response questionable. This is however coincident with the AEM conductor previously outlined.

No other significant geophysical responses were outlined.

## **RECOMMENDATIONS AND CONCLUSIONS**

The geophysical program carried out on the Moses Lake Property was successful in outlining one weak conductor that may warrant follow-up work. Although weak, this feature would appear to be coincident with the AEM conductor previously outlined by Falconbridge Limited. It is possible that due to the amount of cover by the Gowganda Formation, the conductor in question occurs at the very limits of the HLEM effective search depth.

Although this conductor could be tested with diamond drilling at this point in time, due to its weak response additional information may be required. A large loop EM survey would have a greater search depth and would be much more effective in penetrating the Gowganda Formation.

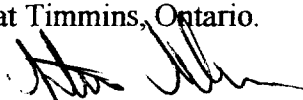
Due to the excellent base metal geological environment additional work to determine this zone's source should be considered.

CERTIFICATION

I, Steve Anderson of Timmins, Ontario hereby certify that:

1. I hold a three-year Technologist Diploma from Sir Sandford College, Lindsay, Ontario, obtained in May 1981.
2. I have been practising my profession since 1979 in Ontario, Quebec, Nova Scotia, New Brunswick, Newfoundland, NWT, Manitoba Saskatchewan and Greenland.
3. I have been employed directly with Asamera Oil Inc., Urangellschaft Canada Ltd., Nanisivik Mines Ltd., R.S. Middleton Exploration Services Ltd., Rayan Exploration Ltd and am currently an owner of Vision Exploration.
4. I have based conclusions and recommendations contained in this report on knowledge of the area, my previous experience and on the results of the fieldwork conducted on the property during 1998.

Dated this 2nd day of September 1998  
at Timmins, Ontario.



**APPENDIX A**  
**GEM GSM-19 MAGNETOMETER**

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## INSTRUMENT SPECIFICATIONS

### MAGNETOMETER / GRADIOMETER

Resolution:	0.01 nT (gamma), magnetic field and gradient.
Accuracy:	0.2 nT over operating range.
Range:	20,000 to 120,000 nT.
Gradient Tolerance:	Over 10,000 nT/m
Operating interval:	3 seconds minimum, faster optional. Readings initiated from keyboard, external trigger, or carriage return via RS-232-C.
Input/Output:	6 pin weatherproof connector, RS-232C, and (optional) analog output.
Power Requirements:	12 V, 200 mA peak (during polarization), 30 mA standby. 300mA peak in gradiometer mode.
Power Source:	Internal 12 V, 2.6 Ah sealed lead-acid battery standard, others optional. An External 12V power source can also be used.
Battery Charger:	<b>Input:</b> 110 VAC, 60 Hz. Optional 110/220 VAC, 50/60 Hz. <b>Output:</b> dual level charging.
Operating Ranges:	Temperature: <b>-40 °C to +60 °C.</b> Battery Voltage: <b>10.0 V minimum to 15V maximum.</b> Humidity: <b>up to 90% relative, non condensing.</b>
Storage Temperature:	-50°C to +65°C
Display:	<b>LCD:</b> 240 x 64 pixels, or 8 x 30 characters. Built in heater for operation below -20°C
Dimensions:	<b>Console:</b> 223 x 69 x 240mm. <b>Sensor staff:</b> 4 x 450mm sections. <b>Sensor:</b> 170 x 71mm dia. <b>Weight:</b> Console 2.1kg, Staff 0.9kg, Sensors 1.1 kg each.

### VLF

Frequency Range:	15 - 30.0 kHz.
Parameters Measured:	Vertical In-phase and Out-of-phase components as percentage of total field. 2 components of horizontal field. Absolute amplitude of total field.
Resolution:	0.1%.
Number of Stations:	Up to 3 at a time.
Storage:	Automatic with: time, coordinates, magnetic field/gradient, slope, EM field, frequency, in- and out-of-phase vertical, and both horizontal components for each selected station.
Terrain Slope Range:	0° - 90° (entered manually).
Sensor Dimensions:	14 x 15 x 9 cm. (5.5 x 6 x 3 inches).
Sensor Weight:	1.0 kg (2.2 lb).



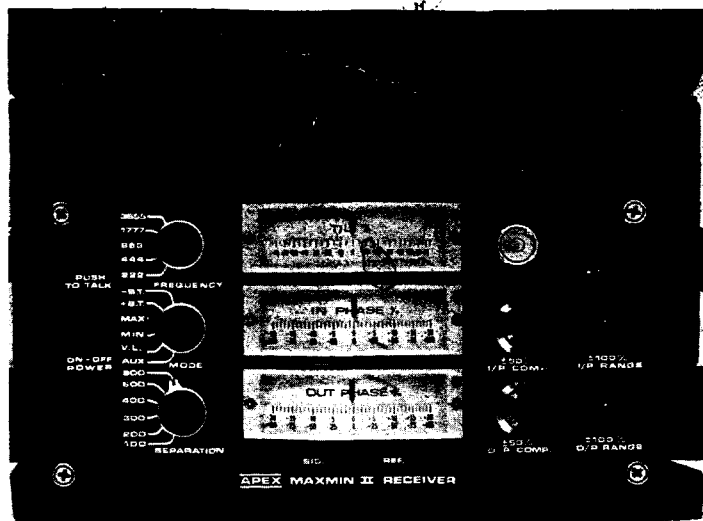
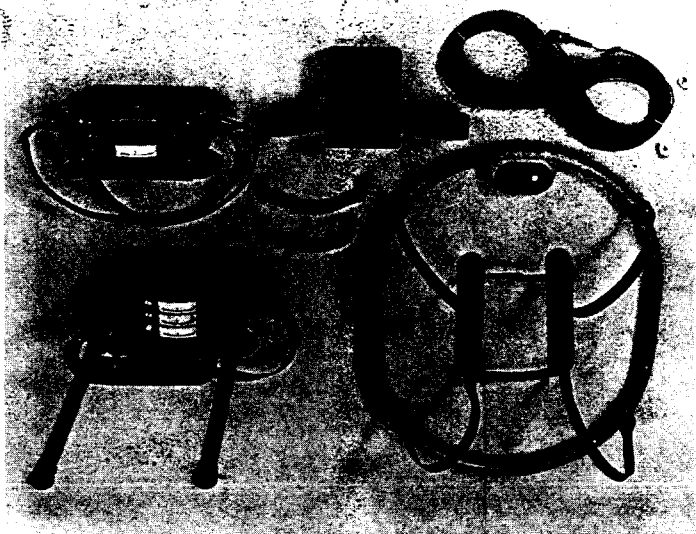
**APPENDIX B**  
**APEX MAX MIN II**

# APEX

# MAXMIN II PORTABLE EM

- Five frequencies: 222, 444, 888, 1777 and 3555 Hz.
- Maximum coupled (horizontal-loop) operation with reference cable.
- Minimum coupled operation with reference cable.
- Vertical-loop operation without reference cable.
- Coil separations: 25, 50, 100, 150, 200 and 250 m (with cable) or 100, 200, 300, 400, 600 and 800 ft.
- Reliable data from depths of up to 180m (600 ft).
- Built-in voice communication circuitry with cable.
- Tilt meters to control coil orientation.





## SPECIFICATIONS :

<b>Frequencies:</b>	222, 444, 888, 1777 and 3555 Hz.	<b>Repeatability:</b>	± 0.5% to ±1% normally, depending on conditions, frequencies and coil separation used.
<b>Modes of Operation:</b>	<p><b>MAX:</b> Transmitter coil plane and receiver coil plane horizontal (Max-coupled; Horizontal-loop mode). Used with refer. cable.</p> <p><b>MIN:</b> Transmitter coil plane horizontal and receiver coil plane vertical (Min-coupled mode). Used with reference cable.</p> <p><b>V.L.:</b> Transmitter coil plane vertical and receiver coil plane horizontal (Vertical-loop mode). Used without reference cable, in parallel lines.</p>	<b>Transmitter Output:</b>	<ul style="list-style-type: none"> <li>- 222 Hz : 175 Atm<sup>2</sup></li> <li>- 444 Hz : 160 Atm<sup>2</sup></li> <li>- 888 Hz : 100 Atm<sup>2</sup></li> <li>- 1777 Hz : 60 Atm<sup>2</sup></li> <li>- 3555 Hz : 30 Atm<sup>2</sup></li> </ul>
<b>Coil Separations:</b>	25, 50, 100, 150, 200 & 250m (MMII) or 100, 200, 300, 400, 600 and 800 ft. (MMIF). Coil separations in V.L. mode not restricted to fixed values.	<b>Receiver Batteries:</b>	9V trans. radio type batteries (4). Life: approx. 35 hrs. continuous duty (alkaline, 0.5 Ah), less in cold weather.
<b>Parameters Read:</b>	<ul style="list-style-type: none"> <li>- In-Phase and Quadrature components of the secondary field in MAX and MIN modes.</li> <li>- Tilt-angle of the total field in V.L. mode.</li> </ul>	<b>Transmitter Batteries:</b>	12V 7.5Ah Gel-Cell rechargeable batteries (2 x 6V in series).
<b>Readouts:</b>	<ul style="list-style-type: none"> <li>- Automatic, direct readout on 90mm (3.5") edge-wise meters in MAX and MIN modes. No nulling or compensation necessary.</li> <li>- Tilt angle and null in 90mm edge-wise meters in V.L. mode.</li> </ul>	<b>Reference Cable:</b>	Light weight 2-conductor teflon cable for minimum friction. Unshielded. All reference cables optional at extra cost. Please specify.
<b>Scale Ranges:</b>	<p><b>In-Phase:</b> ±20%, ±100% by push-button switch.</p> <p><b>Quadrature:</b> ±20%, ±100% by push-button switch.</p> <p><b>Tilt:</b> ±75% slope.</p> <p><b>Null (V.L.):</b> Sensitivity adjustable by separation switch.</p>	<b>Voice Link:</b>	Built-in intercom system for voice communication between receiver and transmitter operators in MAX and MIN modes, via reference cable.
<b>Readability:</b>	<p><b>In-Phase and Quadrature:</b> 0.5 %.</p> <p><b>Tilt:</b> 1%</p>	<b>Indicator Lights:</b>	Built-in signal and reference warning lights to indicate erroneous readings.
		<b>Temperature Range:</b>	-40°C to +60°C (-40°F to +140°F).
		<b>Receiver Weight:</b>	6kg (13 lbs.)
		<b>Transmitter Weight:</b>	13kg (29 lbs.)
		<b>Shipping Weight:</b>	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: 06-966773 NORDVIK TOR



Ministry of  
Northern Development  
and Mines

### Declaration of Assessment Work Performed on Mining Land

Mining Act, Subsection 65(2) and 66(3), R.S.O. 1990

Transaction Number (office use) <i>W9870.00536</i>
Assessment Files Research Imaging



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subsection 65(2) and 66(3) of the Mining Act. Under section 8 of the Mining Act, assessment work and correspond with the mining land holder. Questions about Northern Development and Mines, 3rd Floor, 933 Ramsey Lake Road, Sudbury,

Instructions: - For work performed on Crown Lands before recording a claim, use form 0240.  
- Please type or print in ink.

**2.18876**

**1. Recorded holder(s)** (Attach a list if necessary)

Name <b>FALCONBRIDGE LIMITED</b>	Client Number <b>130679</b>
Address <b>Suite 1200 - 95 Wellington Street West</b>	Telephone Number <b>(416) 956-5700</b>
<b>Toronto, Ontario, M5H 2V4</b>	Fax Number <b>(416) 956-5757</b>
Name	Client Number
Address	Telephone Number
	Fax Number

**2. Type of work performed:** Check (✓) and report on only ONE of the following groups for this declaration.

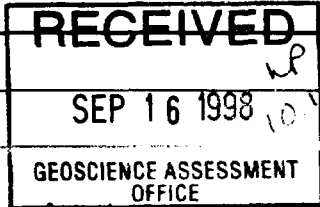
Geotechnical: prospecting, surveys, assays and work under section 18 (regs)       Physical: drilling stripping, trenching and associated assays       Rehabilitation

Work Type <b>Magnetic and Horizontal Loop Electromagnetic surveys; line cutting</b>	Office Use
	Commodity
	Total \$ Value of Work Claimed <b>7400</b>
Dates Work Performed From <b>10 08 1998</b> To <b>31 08 1998</b>	NTS Reference
Global Positioning System Data (if available)	Mining Division <i>Sudbury</i>
Township/Area <b>MacBeth Twp.</b>	Resident Geologist District <i>Sudbury</i>
M or G-Plan Number <b>G - 2908</b>	

Please remember to: - obtain a work permit from the Ministry of Natural Resources as required;  
- provide proper notice to surface rights holders before starting work;  
- complete and attach a Statement of Costs, form 0212;  
- provide a map showing contiguous mining lands that are linked for assigning work;  
- include two copies of your technical report.

**3. Person or companies who prepared the technical report** (Attach a list if necessary)

Name <b>Robert Foy</b>	Telephone Number <b>(705) 267 - 1188 ext. 243</b>
Address <b>PO Box 1140, Timmins, Ontario, P4N 7H9</b>	Fax Number <b>(705) 267 - 6080</b>
Name	Telephone Number
Address	Fax Number
Name	Telephone Number
Address	Fax Number



**4. Certification by Recorded Holder or Agent**

I, Robert Foy (Print Name), do hereby certify that I have personal knowledge of the facts set forth in this Declaration of Assessment Work having caused the work to be performed or witnessed the same during or after its completion and, to the best of my knowledge, the annexed report is true.

Signature of Recorded Holder or Agent <i>Robert Foy</i>	Date <b>September 15, 1998</b>
Agent's Address <b>PO Box 1140, Timmins, Ontario, P4N 7H9</b>	Telephone Number <b>(705) 267 - 1188 ext. 243</b>
	Fax Number <b>(705) 267 - 6080</b>

December 15/98

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5. Work to be recorded and distributed. Work can only be assigned to claims that are contiguous (adjacent) to the mining land where work was performed, at the time work was performed. A map showing the contiguous link must accompany this form.

W9870.00536

Mining Claim Number. Or if work was done on other eligible mining land, show in this column the location number indicated on the claim map.	Number of Claim Units. For other mining land, list hectares.	Value of work performed on this claim or other mining land.	Value of work applied to this claim.	Value of work assigned to other mining claims.	Bank Value of work to be distributed at a future date
1 1217994 ✓	2	\$1850	\$800	\$800 50	\$1000
2 1217995 ✓	4	\$900	\$1600	\$200 0	
3 1217996 ✓	2		\$800		
4 1217997 ✓	2		\$800		
5 1223002 ✓	1	\$900	\$400	\$500	
6 1223004 ✓	1	\$900	\$400	\$500	
7 1223005 ✓	1		\$400		
8 1223007 ✓	1	\$1850	\$400	\$1450	
9 1223015 ✓	1	\$900	\$400	\$100	
10 <del>1223500</del> ✓	1	\$500	\$400	\$100	
11 1214500 ✓					
12					
13					
14					
15					
16					
17					
18					
Column sub-Totals	16	\$7400	\$6400	2700 <del>\$200</del>	\$1000

I, Robert Fox (Print Full Name), do hereby certify that the above work credits are eligible under subsection 7 (1) of the Assessment Work Regulation 8/96 for assignment to contiguous claims or for application to the claim where the work was done.

Signature of Recorded Holder or Agent Authorized in Writing \_\_\_\_\_ Date September 15, 1998

6. Instruction for cutting back credits that are not approved.

Some of the credits claimed in this declaration may be cut back. Please check (✓) in the boxes below to show how you wish to prioritize the deletion of credits:

- 1. Credits are to be cut back from the Bank first, followed by option 2 or 3 or 4 as indicated.
- 2. Credits are to be cut back starting with the claims listed last, working backwards; or
- 3. Credits are to be cut back equally over all claims listed in this declaration; or
- 4. Credits are to be cut back as prioritized on the attached appendix or as follows (describe):

Note: If you have not indicated how your credits are to be deleted, credits will be cut back from the Bank first, followed by option number 2 if necessary.

For Office Use Only

Received Stamp	Deemed Approved Date	Date Notification Sent
	Date Approved	Total Value of Credit Approved
	Approved for Recording by Mining Recorder (Signature)	

0241 (03/97)

003/00

FALCONBRIDGE EXP

09/22/98 09:36 705 264 6080

Note: If you have not indicated how your credits are to be deleted, credits will be cut back from the Bank first, followed by option number 2 if necessary.

For Office Use Only

Received Stamp

**RECEIVED**  
SEP 16 1998  
GEOSCIENCE ASSESSMENT OFFICE

Deemed Approved Date	Date Notification Sent
Date Approved	Total Value of Credit
Approved for Recording by Mining Recorder (Signature)	

0241 (03/97)



Statement of Costs for Assessment Credit

Transaction Number (office use) W9870.00536

Personal information collected on this form is obtained under the authority of subsection 6 (1) of the Assessment Work Regulation 6/96. Under section 8 of the Mining Act, this information is a public record. This information will be used to review the assessment work and correspond with the mining land holder. Questions about this collection should be directed to a Provincial Mining Recorder, Ministry of Northern Development and Mines, 3rd Floor, 933 Ramsey Lake Road, Sudbury, Ontario, P3E 6B5.

2.18876

Table with 4 columns: Work Type, Units of work, Cost Per Unit of work, Total Cost. Rows include Line cutting, Magnetics Survey, Horizontal Loop EM Survey, Contractors Logistical/Technical Report, Sub-Total, Associated Costs, Geophysicist Interpretation, Geologist: Survey planning, supervision, Transportation Costs, Food and Lodging Costs, and Total Value of Assessment Work \$7400.

RECEIVED SEP 16 1993 10:15 AM GEOSCIENCE ASSESSMENT OFFICE

Calculations of Filing Discounts:

- 1. Work filed within two years of performance is claimed at 100% of the above Total Value of Assessment Work.
2. If work is filed after two years and up to five years after performance, it can only be claimed at 50% of the Total Value of Assessment Work.

TOTAL VALUE OF ASSESSMENT WORK x 0.50 = Total \$ value of worked claimed.

Note:

- Work older than 5 years is not eligible for credit.
- A recorded holder may be required to verify expenditures claimed in this statement of costs within 45 days of a request for verification and/or correction/clarification.

Certification verifying costs:

I, Robert Foy, do hereby certify, that the amounts shown are as accurate as may reasonably be determined and the costs were incurred while conducting assessment work on the lands indicated on the accompanying

Declaration of Work form as Agent (Project Geologist, Falconbridge Limited) I am authorized to make this certification.

(recorded holder, agent, or state company position with signing authority)

Signature [Handwritten Signature] Date SEP 15/90

November 2, 1998

FALCONBRIDGE LIMITED  
SUITE 1200, 95 WELLINGTON STREET WEST  
TORONTO, ONTARIO  
M5H 2V4

Visit our website at:  
[www.gov.on.ca/MNDM/MINES/LANDS/mlsmnpge.htm](http://www.gov.on.ca/MNDM/MINES/LANDS/mlsmnpge.htm)

Dear Sir or Madam:

**Submission Number:** 2.18876

**Status**

**Subject: Transaction Number(s):** W9870.00536 Deemed Approval

---

We have reviewed your Assessment Work submission with the above noted Transaction Number(s). The attached summary page(s) indicate the results of the review. WE RECOMMEND YOU READ THIS SUMMARY FOR THE DETAILS PERTAINING TO YOUR ASSESSMENT WORK.

If the status for a transaction is a 45 Day Notice, the summary will outline the reasons for the notice, and any steps you can take to remedy deficiencies. The 90-day deemed approval provision, subsection 6(7) of the Assessment Work Regulation, will no longer be in effect for assessment work which has received a 45 Day Notice. Allowable changes to your credit distribution can be made by contacting the Geoscience Assessment Office within this 45 Day period, otherwise assessment credit will be cut back and distributed as outlined in Section #6 of the Declaration of Assessment work form.

Please note any revisions must be submitted in DUPLICATE to the Geoscience Assessment Office, by the response date on the summary.

If you have any questions regarding this correspondence, please contact Bruce Gates by e-mail at [gatesb2@epo.gov.on.ca](mailto:gatesb2@epo.gov.on.ca) or by telephone at (705) 670-5856.

Yours sincerely,



ORIGINAL SIGNED BY  
Blair Kite  
Supervisor, Geoscience Assessment Office  
Mining Lands Section

# Work Report Assessment Results

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**Submission Number:** 2.18876

**Date Correspondence Sent:** November 02, 1998

**Assessor:** Bruce Gates

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<b>Transaction Number</b>	<b>First Claim Number</b>	<b>Township(s) / Area(s)</b>	<b>Status</b>	<b>Approval Date</b>
W9870.00536	1217994	MACBETH	Deemed Approval	October 30, 1998

**Section:**

14 Geophysical EM  
14 Geophysical MAG

**Correspondence to:**

Resident Geologist  
Sudbury, ON

Assessment Files Library  
Sudbury, ON

**Recorded Holder(s) and/or Agent(s):**

Robert Foy  
TIMMINS, ONTARIO, CANADA

FALCONBRIDGE LIMITED  
TORONTO, ONTARIO

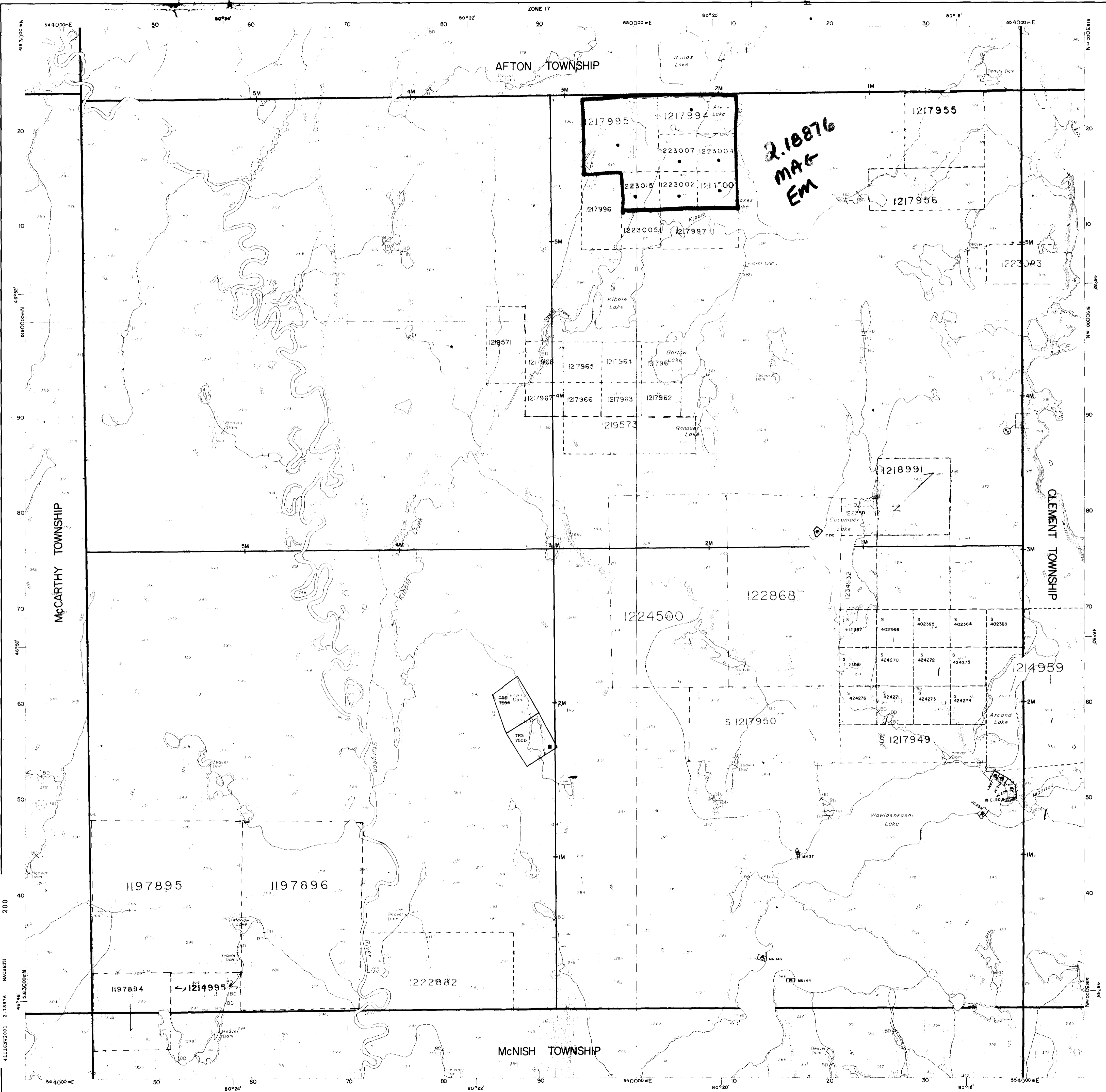
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C-520

WACBETH TWP

8095

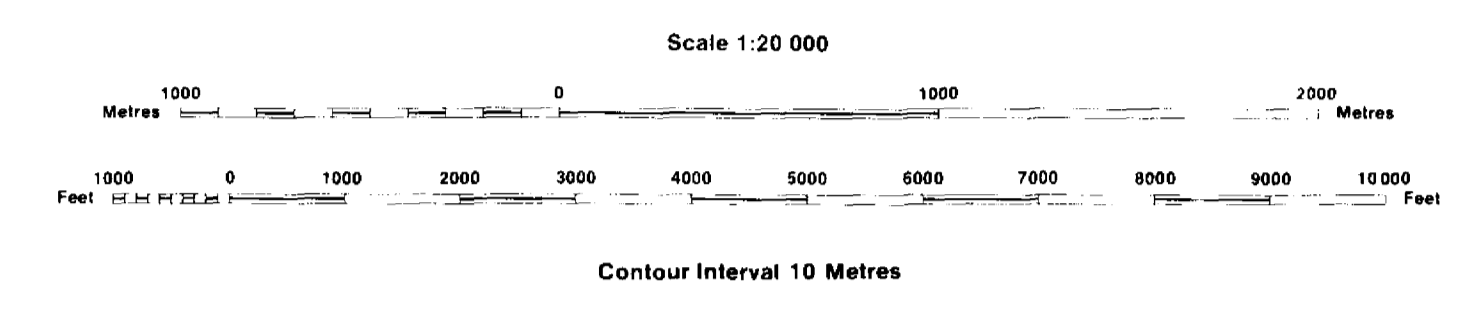


**INDEX TO LAND DISPOSITION**

PLAN  
 G-2908  
 TOWNSHIP

**MACBETH**

M.N.R. ADMINISTRATIVE DISTRICT  
 NORTH BAY  
 MINING DIVISION  
 SUDBURY  
 LAND TITLES/REGISTRY DIVISION  
 SUDBURY



**AREAS WITHDRAWN FROM DISPOSITION**

MRO - Mining Rights Only  
 SRO - Surface Rights Only  
 M - S - Mining and Surface Rights

Description	Order No.	Date	Disposition	File
1 C-35/90	0-5-22/96	07/25/96	M S	19500
1 M.L. CROWN LAND	W-67/92	06/11/96	M S	19510
3 C-35/90	W-6-10/96	08/08/96	SRO	19510
1 M-36/96	W-6/96	08/08/96	M S	140022
1 M-36/96	W-5-63/96	03/13/96	M S	

Part of order W 2195 REOPENED by order  
 O-M. 01/90 NER effective April 3, 1990 at 7:00 AM E.S.T.  
 1 M-36/96 W-3-24/96 JUNE 11/96 M S 19510

**SYMBOLS**

- Boundary
- Township, Meridian, Baseline
- Road allowance, surveyed
- shoreline
- Lot/Concession, surveyed
- unsurveyed
- Parcel, surveyed
- unsurveyed
- Right-of-way, road
- railway
- utility
- Reservation
- Cliff, Pit, Pile
- Contour
- Interpolated
- Approximate
- Depression
- Control point (horizontal)
- Flooded land
- Mine head frame
- Pipeline (above ground)
- Railway, single track
- double track
- abandoned
- Road, highway, county, township
- access
- trail, bush
- Shoreline (original)
- Transmission line
- Wooded area

**DATE OF ISSUE**

NOV 02 1998  
 PROVINCIAL RECORDING  
 OFFICE - SUDBURY

JUNE 11/95 - RE-OPEN TRS7564 O.G. MAY 13/95 PG. 1473.

**DISPOSITION OF CROWN LANDS**

- 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
- Cancelled
- Reservation
- Sand & Gravel

THE INFORMATION THAT  
 APPEARS ON THIS MAP  
 HAS BEEN COMPILED  
 FROM VARIOUS SOURCES,  
 AND ACCURACY IS NOT  
 GUARANTEED. THOSE  
 WISHING TO STAKE MIN-  
 ING CLAIMS SHOULD CON-  
 SULT WITH THE MINING  
 RECORDER, MINISTRY OF  
 NORTHERN DEVELOP-  
 MENT AND MINES, FOR AD-  
 DITIONAL INFORMATION  
 ON THE STATUS OF THE  
 LANDS SHOWN HEREON.

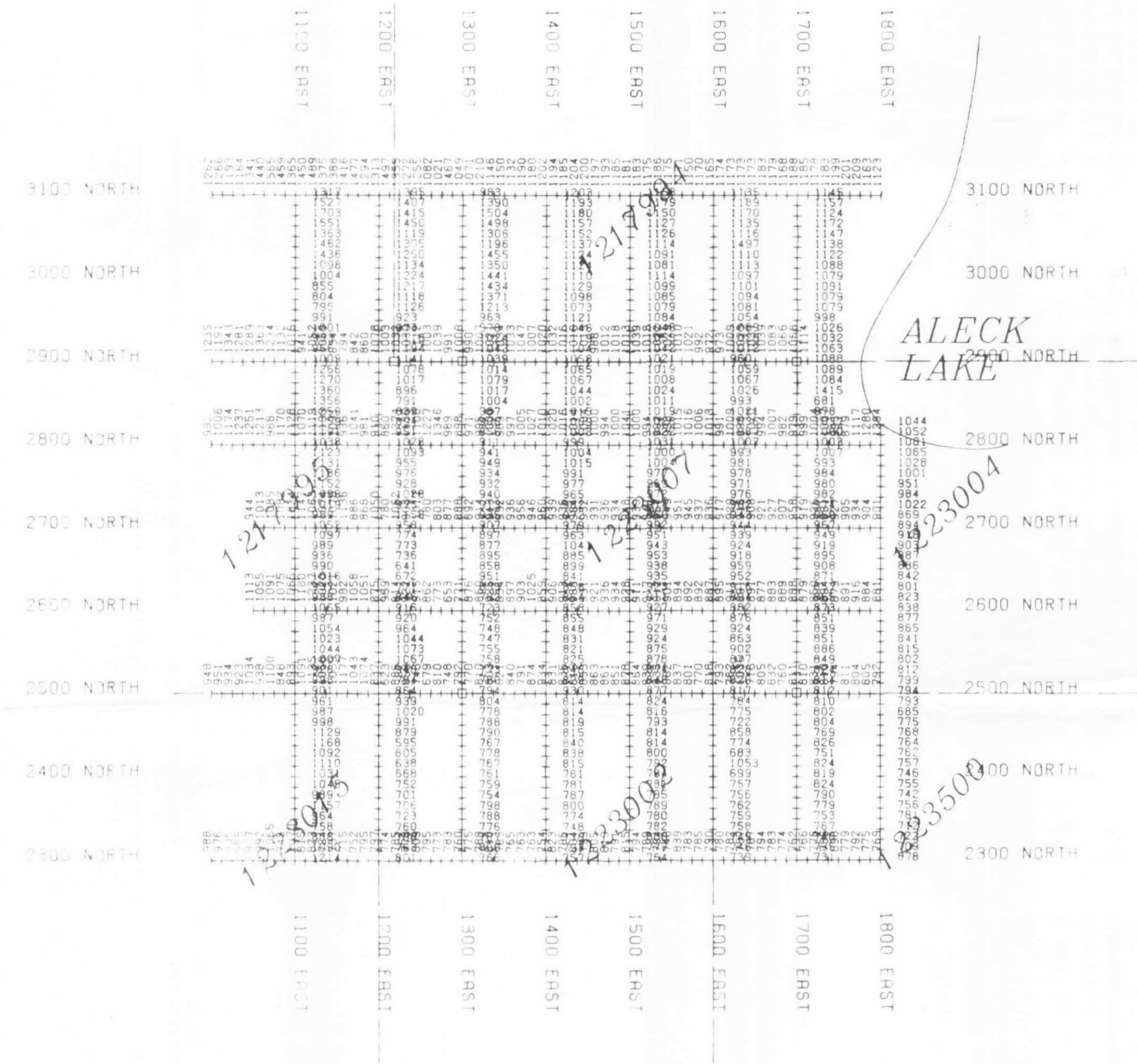
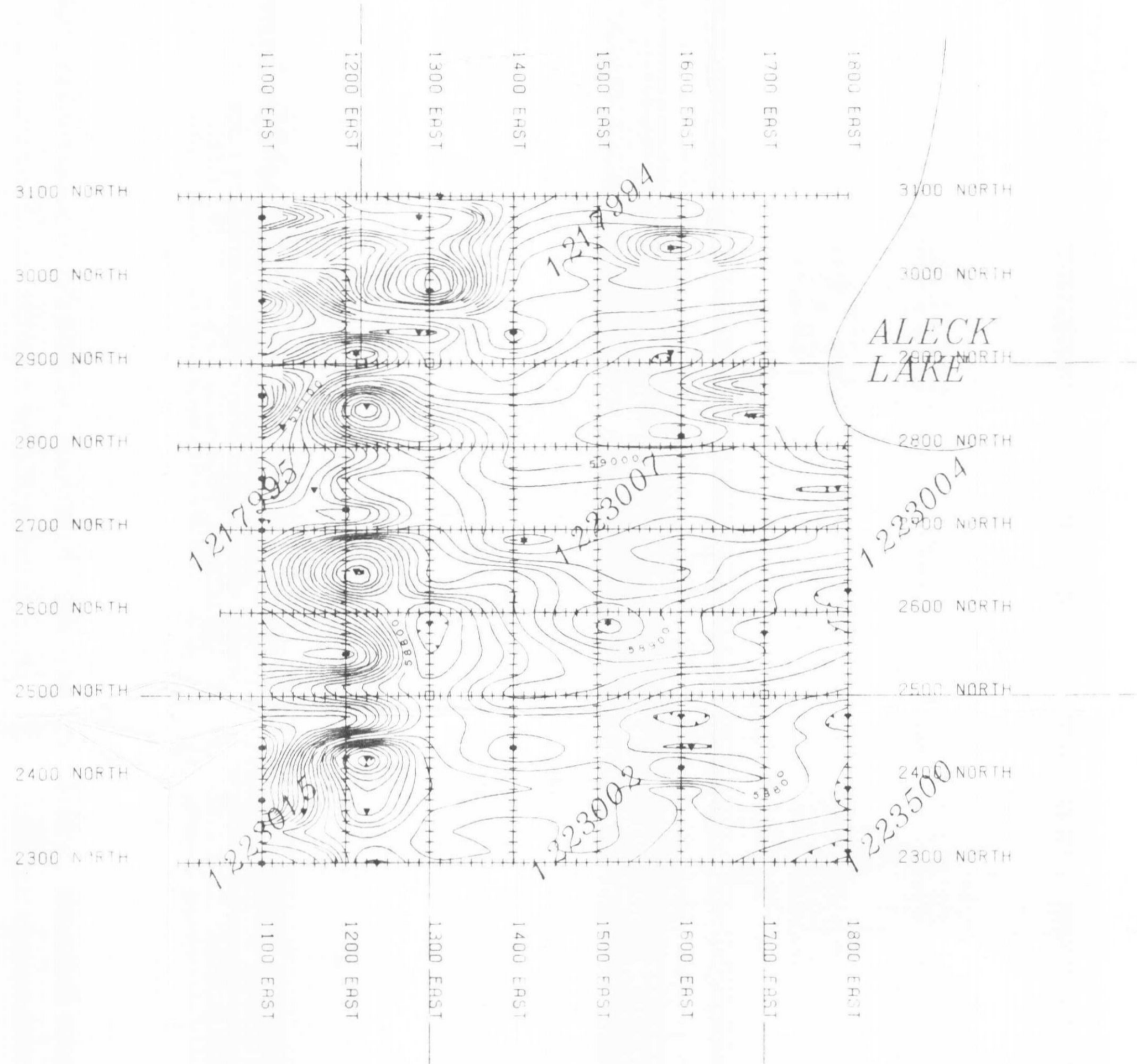
8095

WWT HTB3CAM

8095

MACBETH TWP

MACBETH TWP



2.18876



LEGEND

INSTRUMENT: GEM GSM-19 PROTON PRECESSION MAGNETOMETER  
 PARAMETERS MEASURED: EARTH'S TOTAL MAGNETIC FIELD (NANO-TESLAS)  
 READING INTERVAL: 12.5 M  
 CONTOUR INTERVAL: 20 nT  
 DIURNAL CORRECTION METHOD: RECORDING GEM GSM-19 BASE STATION  
 DATUM SUBTRACTED FROM ALL PLOTTED READINGS: 5800nT

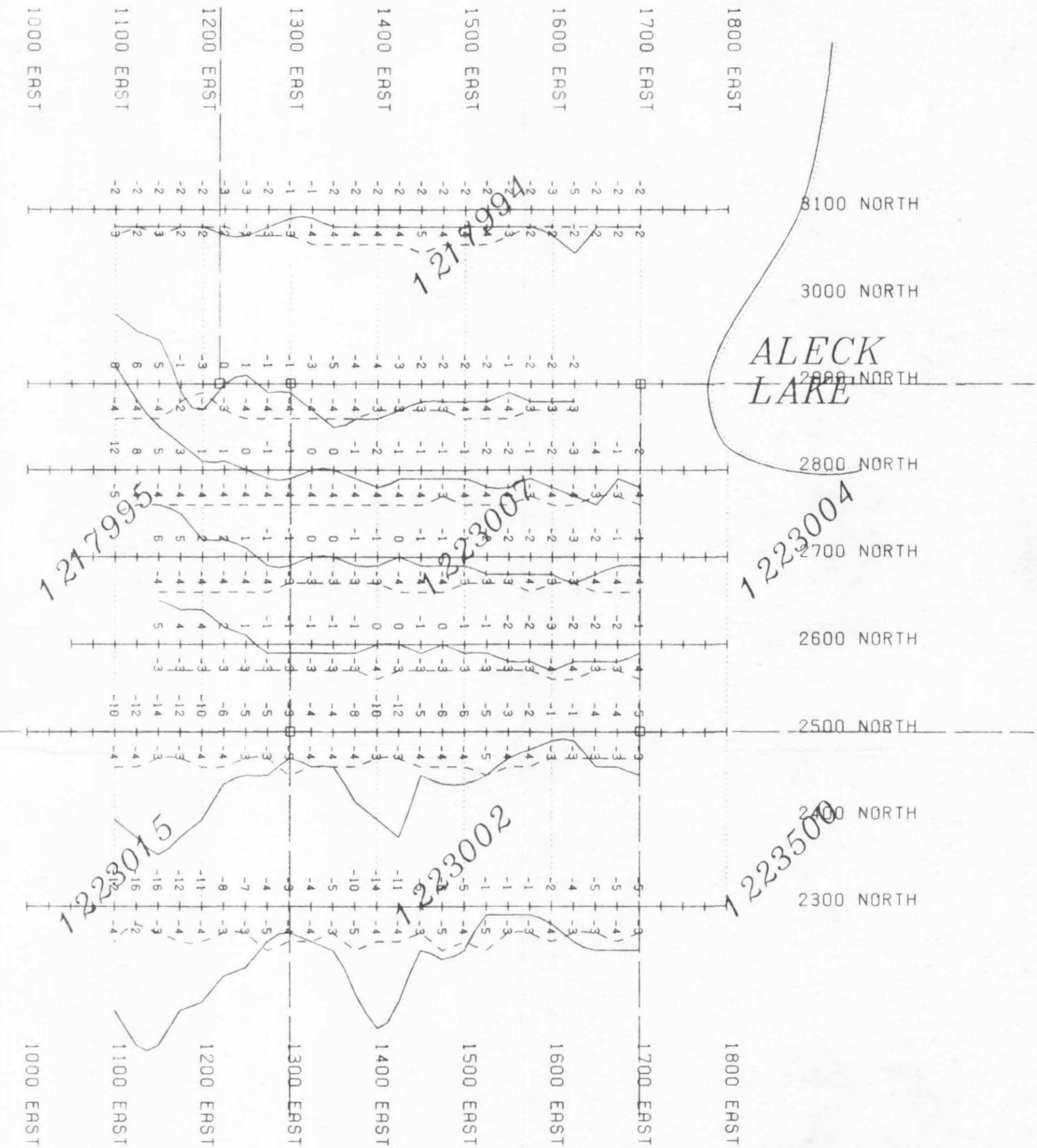
Client: FALCONBRIDGE LIMITED	
Property: MOSES LAKE PROPERTY-8031	
Title: POSTED AND CONTOURED MAGNETOMETER SURVEY	
Processed: SDA	Checked: SDA
Date: SEPT/98	Township: MACBETH
Province: ONT	N.T.S.:
Scale: 1:5000	Drawing: V39MAG



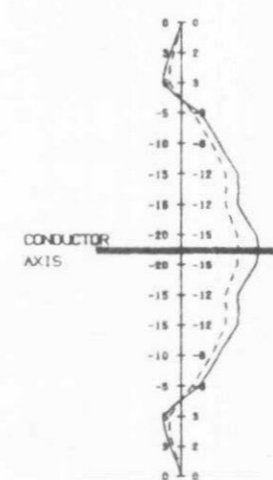
MACBETH TWP



MACBETH TWP



IN-PHASE QUADRATURE  
x 10 5 0 5 10 m



IN-PHASE  
QUADRATURE

LEGEND

METHOD: Horizontal Loop  
 MODE: Maximum Coupled  
 INSTRUMENT: Apex Max-Min II  
 SERIAL No. 1040  
 COIL SEPARATION: 200 METERS  
 READING INTERVAL: 25 Metres  
 FREQUENCY: 222 Hz  
 CONDUCTOR AXIS  
 PROFILE SCALE: 1cm=0.5%

GOOD  
 MEDIUM  
 POOR

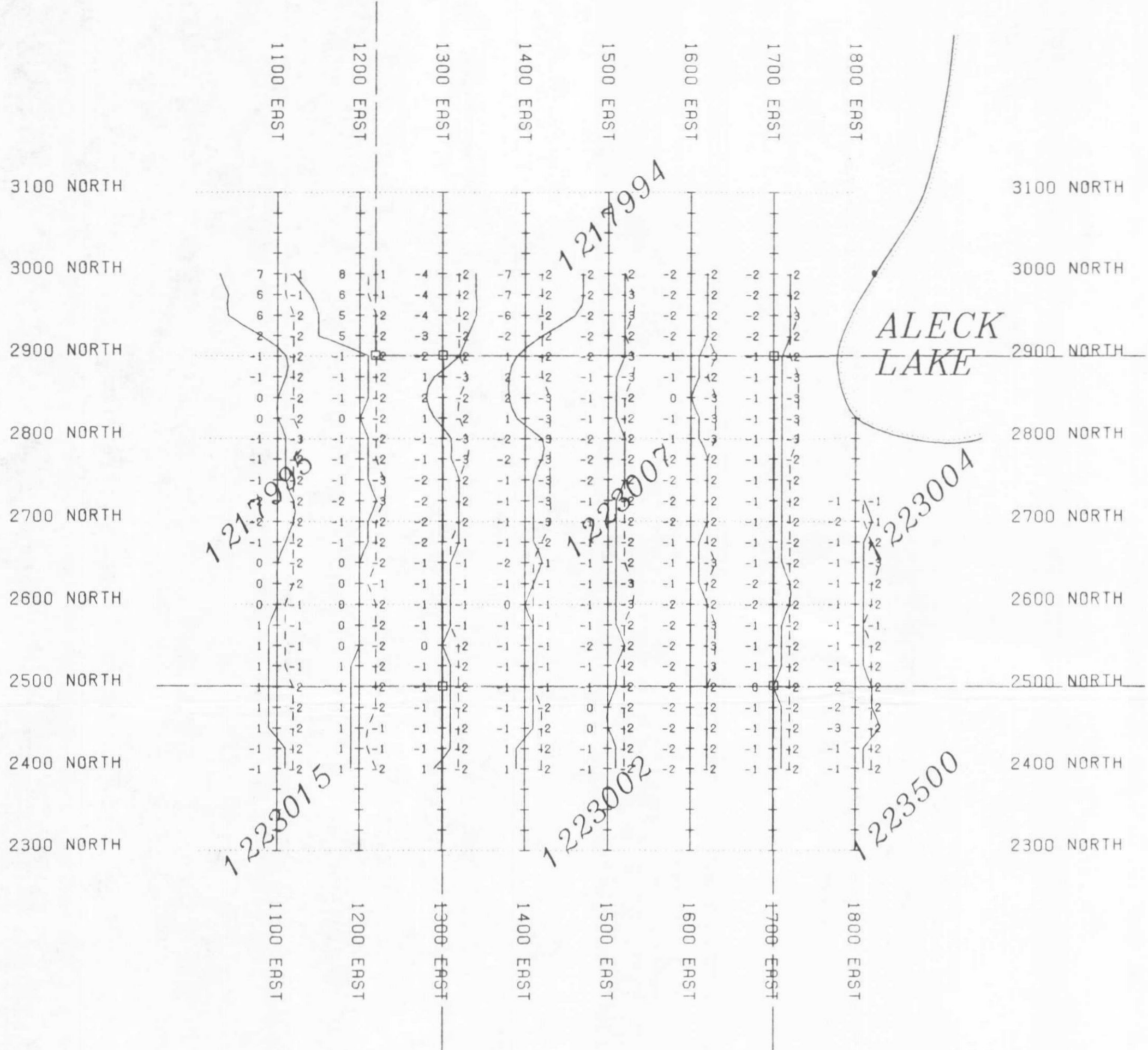
2.18876



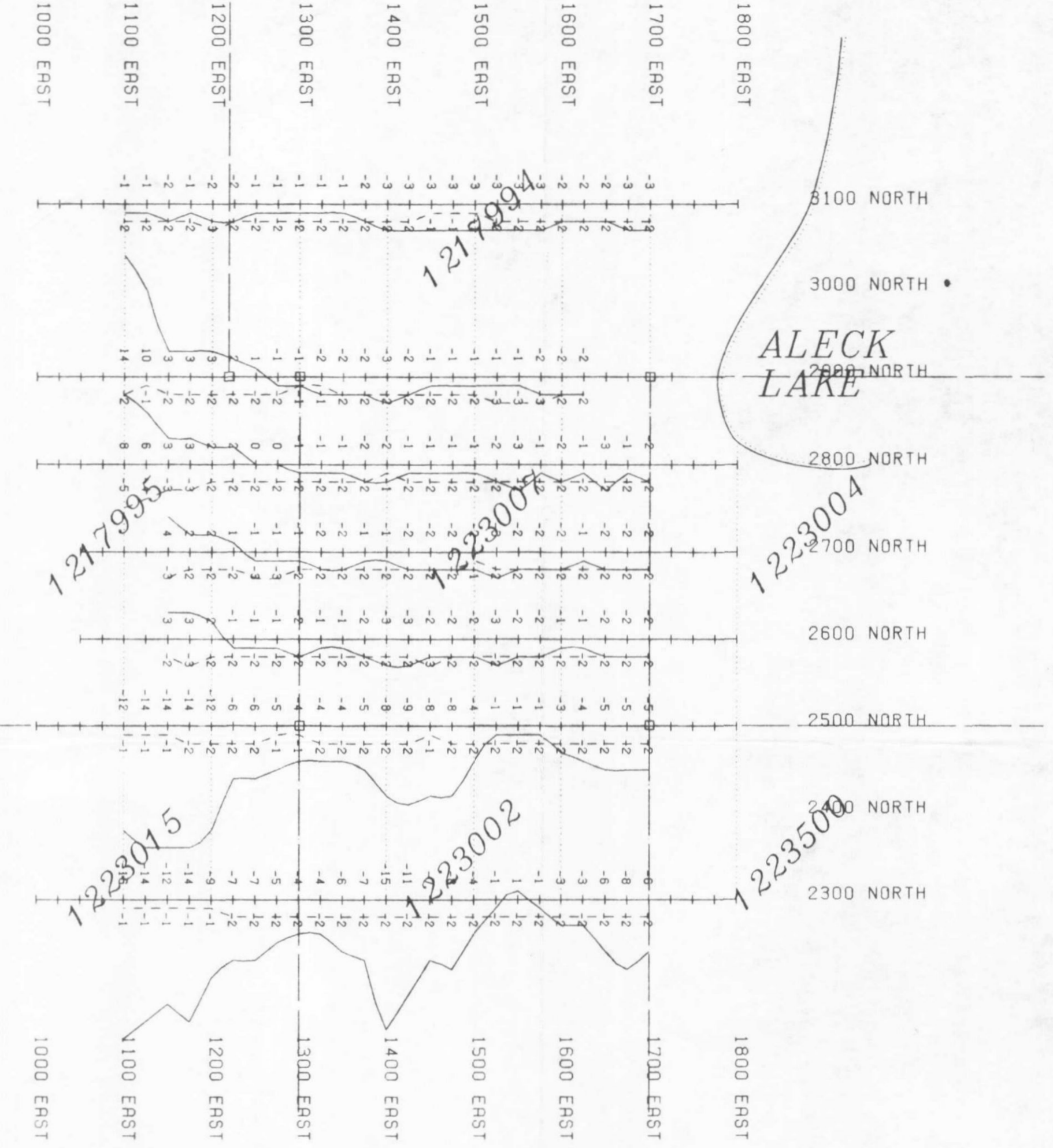
Client: FALCONBRIDGE LIMITED	
Property: MOSES LAKE PROPERTY-8031	
Title: POSTED AND PROFILED HLEM SURVEY 222 Hz	
Processed: SDA	Checked: SDA
Date: SEPT/98	Township: MACBETH
Province: ONT	N.T.S.:
Scale: 1:5000	Drawing: v39222



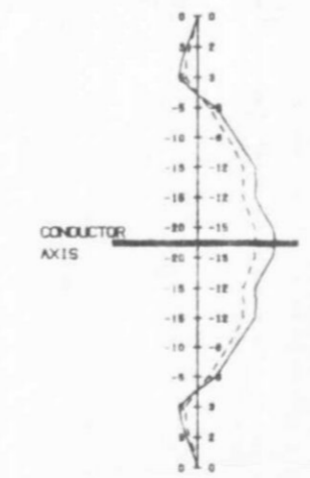
MACBETH TWP



MACBETH TWP



IN-PHASE QUADRATURE  
x 10<sup>-5</sup> 5 0 5 10<sup>-5</sup>



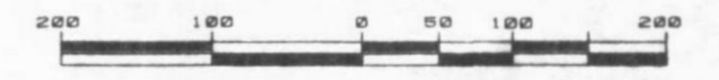
IN-PHASE  
QUADRATURE

LEGEND

METHOD: Horizontal Loop  
 MODE: Maximum Coupled  
 INSTRUMENT: Apex Max-Min II  
 SERIAL No. 1040  
 COIL SEPARATION: 200 METERS  
 READING INTERVAL: 25 Metres  
 FREQUENCY: 444 Hz.  
 CONDUCTOR AXIS  
 PROFILE SCALE: 1cm=0.5%

GOOD  
 MEDIUM  
 POOR

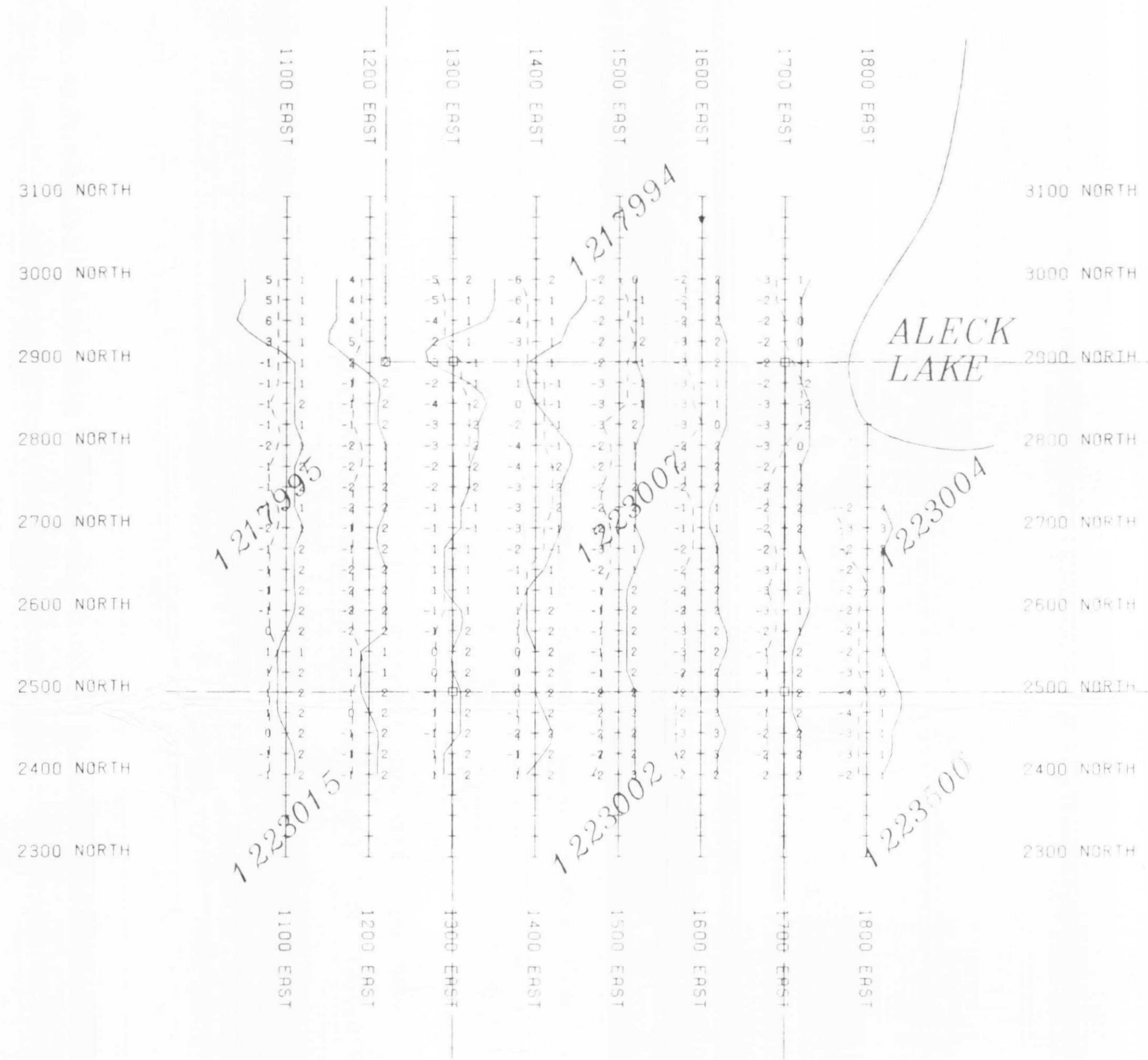
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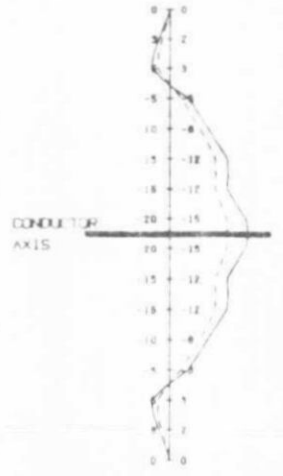
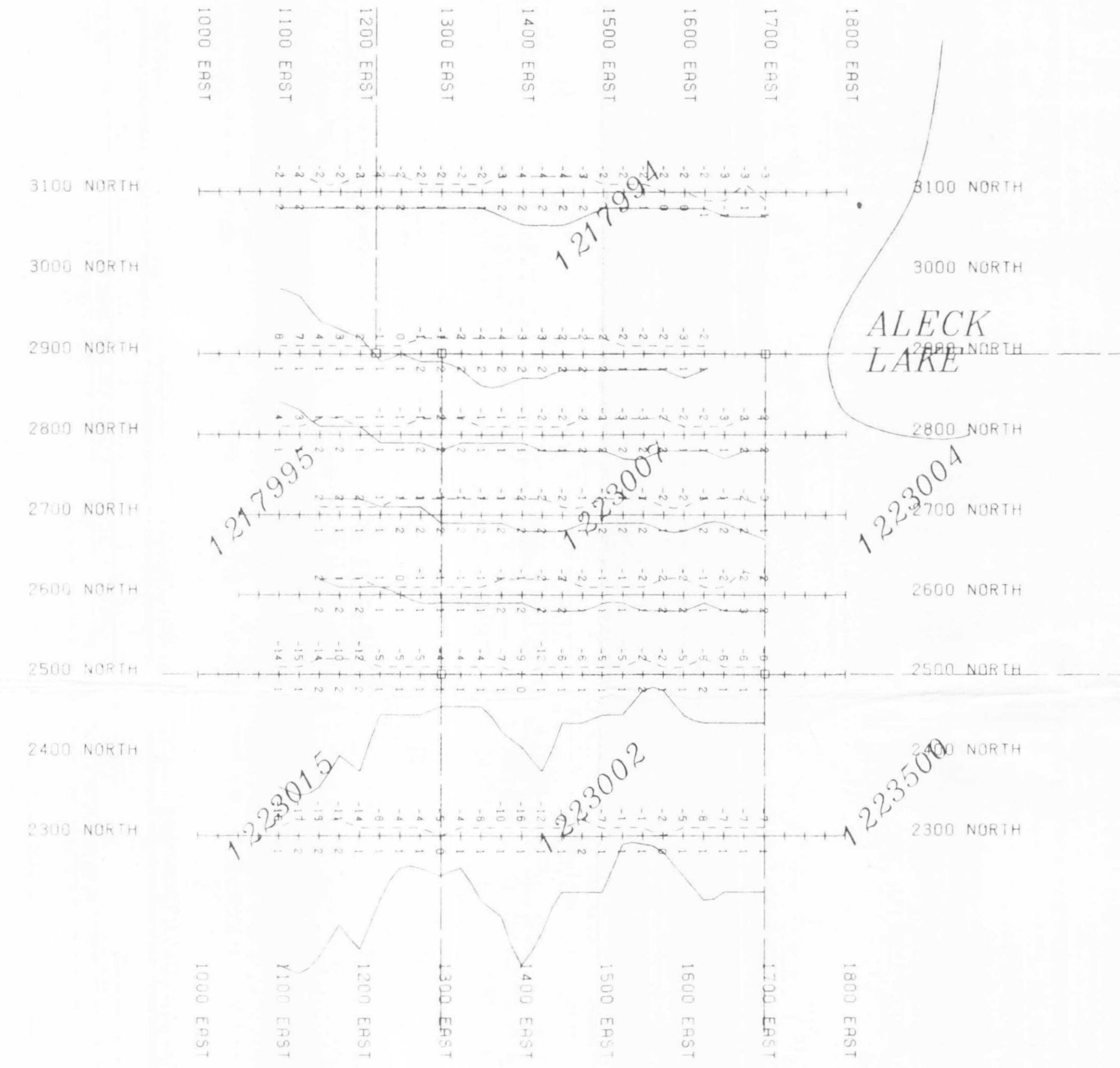
Client: FALCONBRIDGE LIMITED	
Property: MOSES LAKE PROPERTY-8031	
Title: POSTED AND PROFILED HLEM SURVEY 444 Hz	
Processed: SDA	Checked: SDA
Date: SEPT/98	Township: MACBETH
Province: ONT	N.T.S.:
Scale: 1:5000	Drawing: V39444



MACBETH TWP



MACBETH TWP



LEGEND

METHOD: Horizontal Loop  
 MODE: Maximum Coupled  
 INSTRUMENT: Apex Max-Min II  
 SERIAL No. 1040  
 COIL SEPARATION: 200 METERS  
 READING INTERVAL: 25 Metres  
 FREQUENCY: 1777 Hz  
 CONDUCTOR AXIS  
 PROFILE SCALE: 1cm=0.5%

GOOD ———  
 MEDIUM ———  
 POOR - - - - -

2.18876



Client: FALCONBRIDGE LIMITED	
Property: MOSES LAKE PROPERTY-8031	
Title: POSTED AND PROFILED HLEM SURVEY 1777 Hz	
Processed: SGA	Checked: SGA
Date: SEPT/98	Township: MACBETH
Province: ONT	N.T.S.
Scale: 1:5000	Drawing: V39177

