

42A13SE2010 2.22826

THORBURN

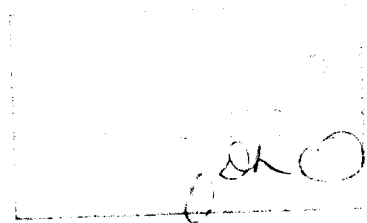
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**2001 ASSESSMENT REPORT  
HLEM SURVEY AND DIAMOND DRILL PROGRAM**

**LALONDE PROPERTY  
MOBERLY AND THORBURN  
TOWNSHIPS, ONTARIO**

**NTS: 42-A-12**

2.22826



D.P. Car  
Inco Technical Services Limited  
January 24, 2002

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## Summary

The Lalonde Property covers approximately 6 km of N-S trending stratigraphy in Moberly and Thorburn Townships. The property consists of eight claims totalling 93 units and was held under option by Inco Limited until shortly after completion of the of exploration program described in this report.

Access is provided by a series of logging roads extending from the northwestern terminus of Highway 576.

Between July 10 and 12, a Horizontal Loop EM (HLEM) survey was completed over a previously installed grid that covers most of the property. The grid had recently been covered by a UTEM survey that did not detect any strong conductors. The UTEM data was submitted in a previous report.

The HLEM survey detected a short, weak conductor that might possibly represent VMS mineralization.

The conductor was tested with a diamond drill hole in November 2001. The conductivity is due to narrow bands of semi-massive pyrrhotite associated with oxide facies iron formation. No significant base metal or gold assays were obtained.

## **Introduction**

The Lalonde Property covers a 6 km portion of N-S trending stratigraphy that may contain the source of numerous nickeliferous erratics referred to as the Loveland float.

The current program was designed to investigate an airborne EM conductor considered to be the possible source of the Loveland float.

## **Property**

### **Location and Access**

The property is located approximately 40 km northwest of Timmins, within Thorburn and Moberly Townships (Figure 1). It may be accessed via a series of logging roads that extend from the northwestern terminus of Highway 576.

### **Property Status**

The property consists of eight contiguous claims containing a total of 93 units (Figure 2). The claims were held by Inco Limited under option from Messers Lalonde, Godin and Renaudat until November 24, 2001.

<u>Claim</u>	<u>No. of Units</u>	<u>Due Date</u>
P1224391	4	November 28, 2002
P1224392	4	November 28, 2002
P1224373	16	November 24, 2002
P1224374	8	November 24, 2002
P1224368	16	November 24, 2002
P1224367	15	November 24, 2002
P1224371	14	November 24, 2002
P1224372	16	November 24, 2002

## **Exploration History**

### **Foreign Exploration**

1962: Canico completed an extensive airborne magnetometer and EM survey. The current Lalonde Property was included within this survey. No ground follow-up was carried out.

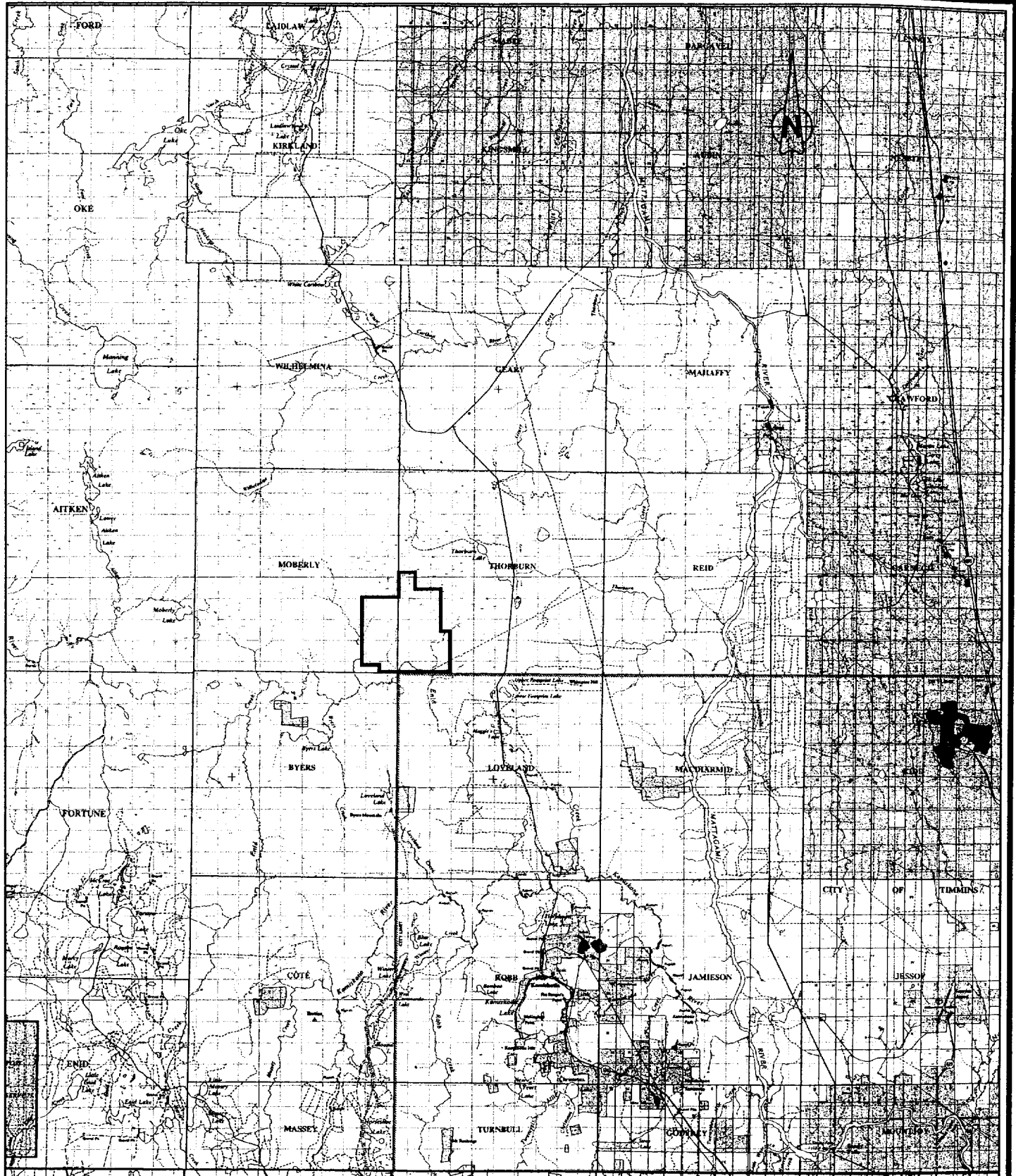
1988: The OGS covered the Lalonde Property as part of a regional airborne GEOTEM survey.

### **Exploration by Current Owners**

1999: Mr. Lalonde et al. carried out an induced polarization survey over a portion of the property.

### **Previous Exploration by ITSL**

2001: A total of 41.8 line km of grid was cut and/or refreshed (Figure 3).



# INCO

INCO TECHNICAL SERVICES LIMITED

## DOUGLAS LALONDE OPTION PORCUPINE MINING DISTRICT Claim Location Map

SCALE : 1 : 250 000

42 A 12

May 25, 2001

Figure 1

ERLY

Thorburn Lake



TH

MOBERLY

1224372

1224371

1224367

THORNBURN

1224373

1224374

1224368

1224391

1224392

Byers

BYERS

Enid

LOVELAND

Maggie's Lake

Byers Lake

ERS

Loveland Lake



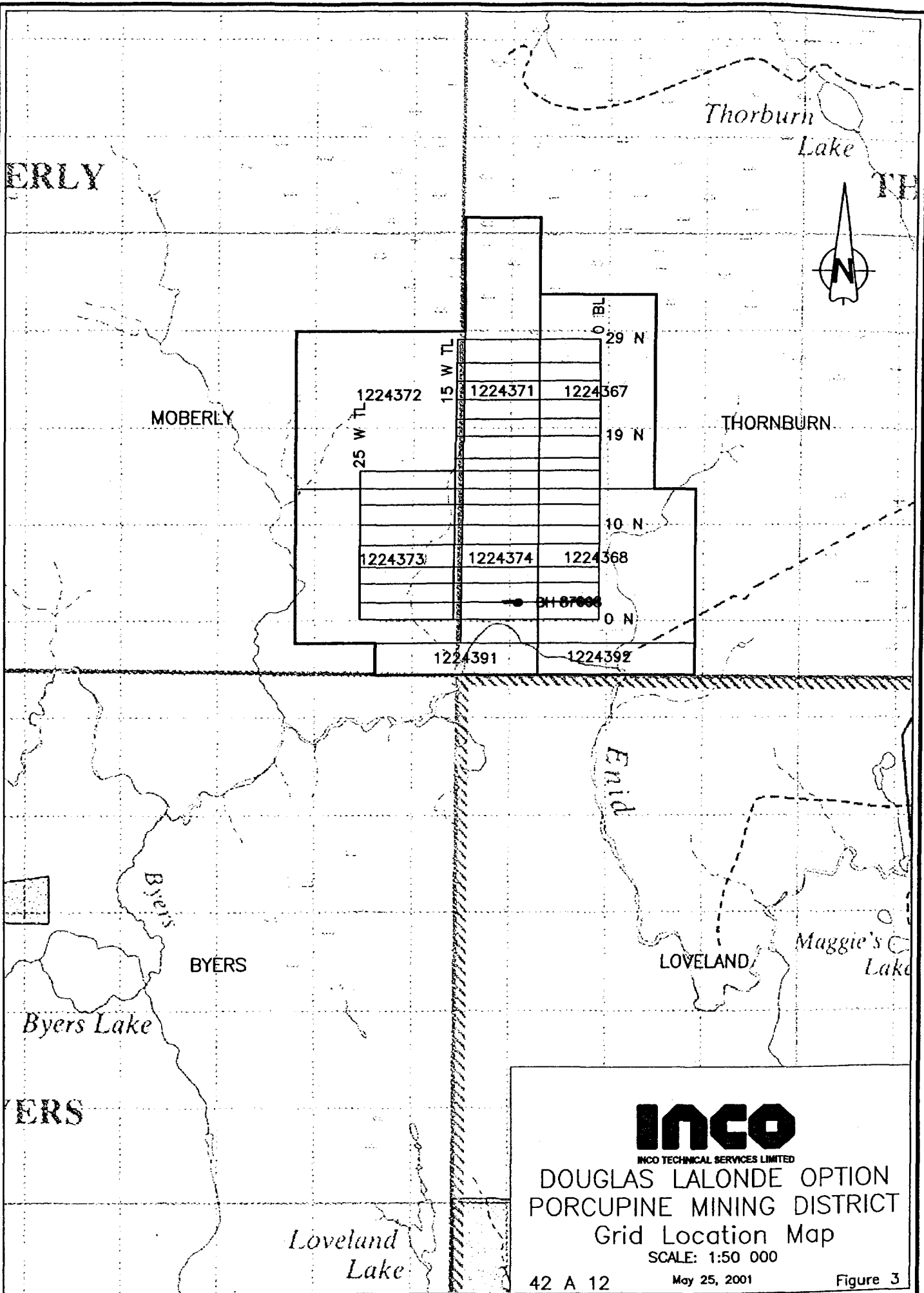
DOUGLAS LALONDE OPTION  
PORCUPINE MINING DISTRICT  
Claim Location Map

SCALE: 1:50 000

42 A 12

May 25, 2001

Figure 2



**INCO**  
INCO TECHNICAL SERVICES LIMITED

DOUGLAS LALONDE OPTION  
 PORCUPINE MINING DISTRICT  
 Grid Location Map  
 SCALE: 1:50 000

42 A 12      May 25, 2001      Figure 3

A UTEM-3 large-loop EM survey was conducted on the property by Lamontagne Geophysics Ltd. A total of 36.125 km of vertical field UTEM data was collected from three transmitter loops.

A few very weak responses were detected, but they were considered to be too insignificant to be drill tested.

### **Regional Geology**

The area is underlain by Archean metavolcanic rocks near the western limit of the Abitibi Belt. The metavolcanics are tightly folded and are intruded by granite. North-trending diabase dikes are common throughout the region. To date, several small uneconomic mineralized gabbro intrusives have been identified in the area.

### **Property Geology**

The property is completely covered by overburden. Consequently, no detailed geology can be described.

### **2001 Exploration Program – Phase 2**

#### **HLEM Survey**

The grid was covered with a Max-Min Horizontal Loop EM survey using a coil separation of 100 m. At each 25 m station, readings were taken using 222, 444, and 1,777 Hz frequencies. Instrument specifications are provided in Appendix 3 and individual frequency profiles are included in Appendix 4.

#### **Interpretation**

The low-frequency HLEM survey was essentially unresponsive, indicating no high quality conductors characteristic of pyrrhotite or chalcopyrite-dominated mineralization. A number of weak conductors were, however, apparent in the mid-level frequency data. The best of these is located at about 925W on line 200N coincident with the eastern margin of a resistive unit mapped by the UTEM. The response is consistent with a 25 Siemen, steeply dipping, thin conductor buried at a depth of 20 m. A number of lesser weak responses appears near the western edge of the grid on lines 200N-1600N in an area mapped by the UTEM as a complex set of contacts suggesting a sedimentary terrane. Some of these appear to be caused by moderately west-dipping conductors in the 1-10 Siemen conductance range.

#### **Drill Program**

Between November 13 and 15, a diamond drill hole totalling 149.0 m was completed by Bradley Brothers Limited. Mobilization and demobilization of the drill was carried out by helicopter.

The borehole was designed to test a weak HLEM conductor located at 925W on line 200N (Figure 4).

The hole intersected a volcanosedimentary sequence comprised of massive andesitic flows or sills, felsic lapilli tuff, intermediate debris flows, and banded oxide and sulphide facies iron formation.

The conductor was determined to be caused by a sulphide facies iron formation that is less than 1 m thick. It consists of 30% pyrrhotite and trace chalcopyrite interbedded with thin chert bands, with the pyrrhotite occurring as two semi-massive bands to 30 cm thick.



No significant gold or base metal values were obtained. The analyses are provided in the certificate of analysis contained in Appendix 6.

**Conclusions and Recommendations**

No further work is recommended for the property.

**References**

Kustra, C.R., Editor, 1974

Annual Report of Resident Geologists' Section, Geological Branch, 1973. Misc. Paper 57.  
Ministry of Natural Resources, Ontario Division of Mines.

Pye. E.G., Editor, 1975

Annual Report of the Regional and Resident Geologists, 1974. Misc. Paper 60, 1975. Ministry of  
Natural Resources, Ontario Division of Mines.

**STATEMENT OF EXPENDITURES**

Contract HLEM Survey	\$4,950.00
Contract Diamond Drilling	\$20,365.00
ITSL Employee Wages	\$2,440.00
Field Expenses	<u>\$584.00</u>
Total	\$28,339.00

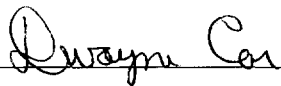
## APPENDIX 1

### CERTIFICATE OF QUALIFICATIONS

I, Dwayne Car of the Town of Nickel Centre, in the Province of Ontario, HEREBY CERTIFY:

1. That I reside at 1353 Dryden Road, Wahnapiatae, Ontario, Canada, P0M 3C0.
2. That I am a graduate of Laurentian University, Sudbury, Ontario, with a degree of Bachelor of Science (1974) and a graduate of the University of Manitoba, Winnipeg, Manitoba, with a degree of Master of Science (1980).
3. That I am an Area Geologist with Inco Technical Services, of Copper Cliff, Ontario, P0M 1N0.
4. That I have practiced my profession as a geologist since 1977, having worked in Labrador, Quebec, New Brunswick, Manitoba, the Northwest Territories, Ontario, British Columbia and Greenland.
5. That the work described in this report was carried out under my supervision.

Dated at Copper Cliff, Ontario, this 24th day of January, 2002.

  
\_\_\_\_\_

## APPENDIX 2

### LIST OF PERSONNEL

<u>Personnel</u>	<u>Work Period</u>	<u>Affiliation</u>
HLEM Survey Crew	July 10-12	M.C. Exploration Services Inc. 263 Lois Cr. Timmins, Ontario P4P 1G7
Bradley Bros. Drill Crew	November 13-16	P.O. Box 2367 Rouyn-Noranda, Quebec J9X 5A9
D.P. Car	November 13-16 November 20	Inco Technical Services Limited Hwy 17 West Copper Cliff, Ontario P0M 1N0
B. Polzer	July 20	Inco Technical Services Limited Hwy 17 West Copper Cliff, Ontario P0M 1N0

2. 228 26.

**APPENDIX 3**  
**INSTRUMENT SPECIFICATIONS**

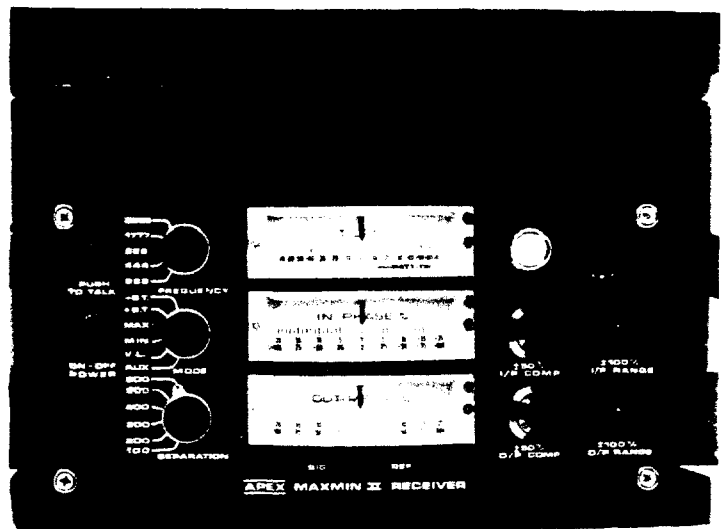
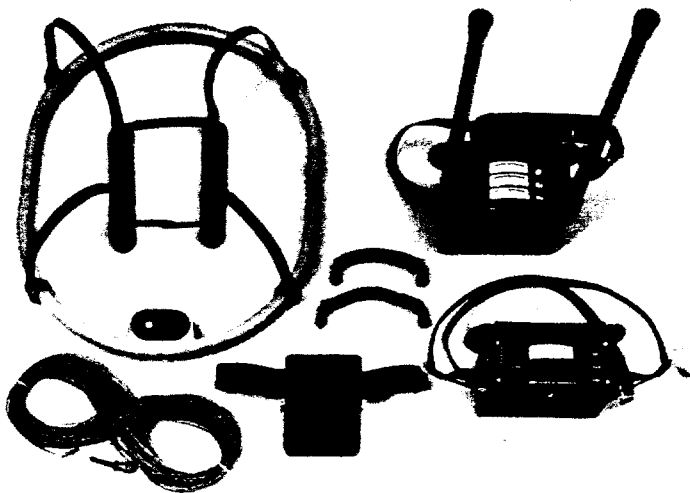
# APEX

# 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: 50, 100, 150, 200, 300 and 400 m (with cable) or 200, 400, 600, 800, 1200 and 1600 ft.
- Reliable data from depths of up to 300 m (1200 ft).
- Built-in voice communication circuitry with cable.
- Tilt meters to control coil orientation.

NOW ALSO ±4%  
QUADRATURE & IP  
FULL SCALE.





## 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:** 50, 100, 150, 200, 300 & 400m, or 200, 400, 600, 800, 1200 & 1600ft.

Coil separations in V.L. 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 V.L. 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 V.L. mode.

**Scale Ranges:** In-Phase:  $\pm 20\%$ ,  $\pm 100\%$  &  $\pm 4\%$  FS.  
Quadrature:  $\pm 20\%$ ,  $\pm 100\%$  &  $\pm 4\%$  FS.

NOW ALSO  $\pm 4\%$   
QUADRATURE & IP  
FULL SCALE.

Tilt:  $\pm 75\%$  slope.  
Null (V.L.): Sensitivity adjustable by separation switch.

**Readability:** In-Phase and Quadrature: 0.1% to 0.5%; Tilt: 1%.

**Repeatability:**  $\pm 0.1\%$  to  $\pm 1\%$  normally, depending on conditions, frequencies and coil separation used.

**Transmitter Output:** - 222Hz: 300 Atm<sup>2</sup>  
- 444Hz: 290 Atm<sup>2</sup>  
- 888Hz: 260 Atm<sup>2</sup>  
- 1777Hz: 200 Atm<sup>2</sup>  
- 3555Hz: 100 Atm<sup>2</sup>

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

**Transmitter Batteries:** 12V 13Ah Gel-type rechargeable battery. (Chargers 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:** 15 kg (33 lbs.)

**Shipping Weight:** Typically 75 kg (165 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

P.O. BOX 818, RR#1, UXBRIDGE, ONTARIO, CANADA L0C 1K0

Phone: (416) 852-5875

Cables: APEXPARA TORONTO

**APPENDIX 4**  
**DATA PROFILES**



**APPENDIX 5**  
**BOREHOLE LOG AND SECTION**

**INCO Technical Services Limited**  
**Borehole Log**

Borehole : 87608-0	Project : Lalonde	NTS/SECT.T.R. : -42-A-12	Drill Type : -Fly 25
Northing : 2.00	Property : Lalonde	Logging Started : -November 20, 2001	Core Size : -BQ
Easting : -840.00	Grid Name : -Thorburn	Logging Completed : -November 21, 2001	Baseline Azimuth : -360
Elevation : 1000.00 m	Claim # : -1224374	Logged By : -D. Car	Borehole Bearing : -270
Hole length : 149.00 m	Township/County : -Thorburn	Date Started : -November, 13, 2001	Section : -
Setup name:	Province/State : -Ontario	Date Completed : -November 15, 2001	Assayed For : -Pb, Zn, Cu, Au
Log	Country : -Canada	Drilled By : -Bradley Bros.	

Print Date:  
25-Jan-2002 12:36

**Survey Records**

depth	azm	dip	depth	azm	dip	depth	azm	dip	depth	azm	dip
0.00	270.00	-45.00	44.00	270.00	-44.00	101.00	270.00	-43.00	149.00	270.00	-42.00

**Comments:** -Collar is 1265 m south and 335 m east of #4 post of claim# 1224374

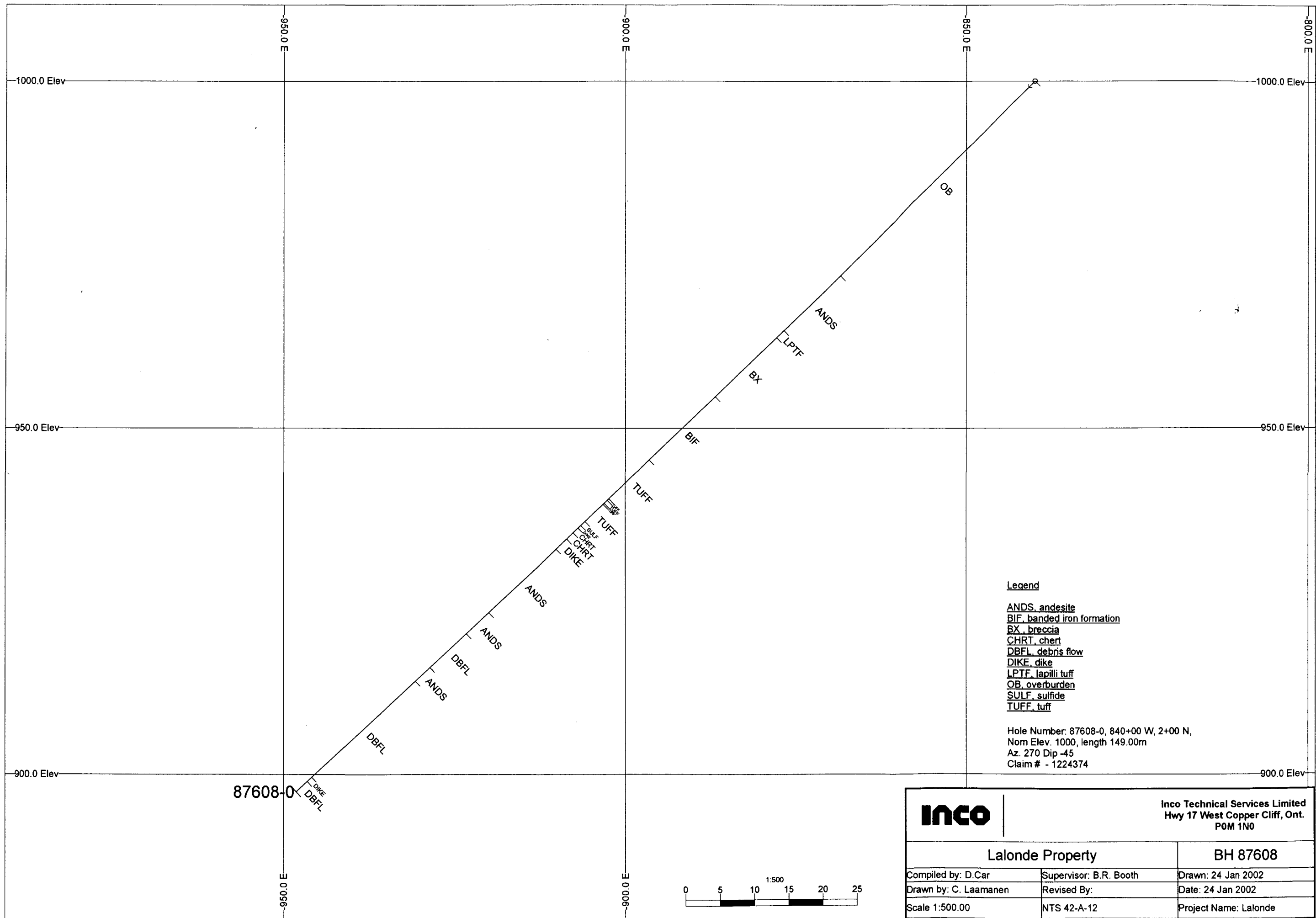
From m	To m	Description	From m	To m	Length m	Sample#	ZN %	CU %	AU ppb
<b>0.00</b>	<b>40.00</b>	<b>OVERBURDEN</b> Sand and a few boulders.	0.00	40.00	40.00	NS			
<b>40.00</b>	<b>51.40</b>	<b>ANDESITE</b> Massive medium grained highly magnetic massive flow or sill. The lower 1.5 m is very fine grained chill margin. less than 1percent anhedral plagioclase to 1 centimetre in diameter.	40.00	51.40	11.40	NS			
<b>51.40</b>	<b>52.90</b>	<b>LAPILLI TUFF</b> Felsic unbedded lapilli tuff with angular clasts to 2 centimetre long. Most clasts are rhyolite and some have white alteration rims to 2 millimetre wide. 20 centimetre wide very fine grained porphyritic andesite ? Dike at 53.10.	51.40	52.90	1.50	NS			
<b>52.90</b>	<b>65.30</b>	<b>BRECCIA</b> Very chaotic fragmental that may be a lahar. Rounded to angular clasts of beige, gray and pink rhyolite in a siliceous to siltstone matrix. Most of the unit is clast-supported. Epidote alteration in places. Trace pyrite as crystals to 8 millimetre.	52.90	65.30	12.40	NS			
<b>65.30</b>	<b>78.60</b>	<b>BANDED IRON FORMATION</b> Well bedded iron formation composed of of chert and magnetite beds to 5 centimetres thick, interbedded with some light green to gray tuff beds to 5 centimetres thick. Varies from magnetite-rich to magnetite-poor. Less than 2percent pyrrhotite as a few bands to 2 centimetre thick. Trace chalcopyrite as a few stringers to 1 millimetre wide in the pyrrhotite. Interesting load cast in tuff at 65.8. Some chert beds are boudinaged.	65.30	78.60	13.30	NS			

**INCO Technical Services Limited**  
**Borehole Log**

From m	To m	Description	From m	To m	Length m	Sample#	ZN %	CU %	AU ppb
Core angles are 55 degrees.									
<b>78.60</b>	<b>86.75</b>	<b>TUFF</b> Thinly to thick bedded very fine grained to fine grained felsic to intermediate tuff, interbedded with minor dark green siltstone and white chert. Some chert beds are highly boudinaged. Trace pyrrhotite as a few stringers to 1 centimetre thick. Trace chalcopyrite as a few stringers to 1 millimetre wide associated with the pyrrhotite.	78.60	86.75	8.15	NS			
<b>86.75</b>	<b>87.05</b>	<b>TUFF</b> Thin to thick bedded felsic tuff interbedded with 5percent pyrrhotite as semi-massive stringers to 2 centimetres wide. trace pyrite as a 2 millimetre wide stringer. Core angles are 55 degrees.	86.75	87.05	0.30	FX806501	0.05	0.03	7
<b>87.05</b>	<b>87.70</b>	<b>TUFF</b> As at 78.60	87.05	87.70	0.65	NS			
<b>87.70</b>	<b>87.90</b>	<b>TUFF</b> As at 86.75. Up to 10percent pyrrhotite.	87.70	87.90	0.20	FX806502	0.12	0.06	22
<b>87.90</b>	<b>91.55</b>	<b>TUFF</b> As at 78.60. The lower 1 medium is massive fine grained green tuff?	87.90	91.55	3.65	NS			
<b>91.55</b>	<b>92.35</b>	<b>SULFIDE</b> 30percent pyrrhotite as 2 semi-massive bands to 30 centimetres thick interbedded with contorted chert bands to 2 centimetres thick. Trace chalcopyrite as a few discontinuous stringers less than 1 millimetre wide. Trace pyrite as stringers and grains to 2 millimetre wide. The lower 10 centimetres are highly brecciated chert fragments in a calcite matrix.	91.55	92.35	0.80	FX806503	0.08	0.05	15
<b>92.35</b>	<b>92.90</b>	<b>DIKE</b> Very fine grained massive dark green mafic dike.	92.35	92.90	0.55	NS			
<b>92.90</b>	<b>93.90</b>	<b>CHERT</b> Highly brecciated chert bands to 3 centimetres wide in a chloritic matrix that forms less than 10percent of the unit. Trace pyrite as crystals less than 1 millimetre diameter and trace pyrrhotite and chalcopyrite as stringers less than 1 millimetre wide.	92.90	93.90	1.00	FX806504	0.01	0.01	3

**INCO Technical Services Limited**  
**Borehole Log**

From m	To m	Description	From m	To m	Length m	Sample#	ZN %	CU %	AU ppb
93.90	95.20	<b>CHERT</b> As above.	93.90	95.20	1.30	FX806505	0.00	0.00	1
95.20	97.35	<b>DIKE</b> Very fine grained purple brown highly amygdaloidal andesite dike with several inclusions of tuff. The amygdules are composed of calcite.	95.20	97.35	2.15	NS			
97.35	110.82	<b>ANDESITE</b> Massive fine grained highly magnetic andesite sill or massive flow, as at 40.00. The upper 50 cm and lower 20 cm are very fine grained chill margins.	97.35	110.82	13.47	NS			
110.82	115.30	<b>ANDESITE</b> Amygdaloidal fine grained andesite with highly variable concentrations of calcite amygdules to 6 millimetre in diameter.	110.82	115.30	4.48	NS			
115.30	122.50	<b>DEBRIS FLOW</b> Matrix -rich lahar with less than 10percent chert clasts to 4 centimetres long in a chlorite-rich matrix. Less than 1percent disseminated pyrite.	115.30	122.50	7.20	NS			
122.50	125.40	<b>ANDESITE</b> As at 110.82	122.50	125.40	2.90	NS			
125.40	145.90	<b>DEBRIS FLOW</b> As at 115.30. Less than 5 percent chert clasts to 6 centimetres in diameter in a variably chloritic fine grained to medium grained matrix. 10percent chlorite as irregular blebs to 8 millimetre long by 3 millimetres wide. Trace pyrite as euhedral crystals to 4 millimetres in diameter.	125.40	145.90	20.50	NS			
145.90	146.80	<b>DIKE</b> Fine grained massive intermediate dike	145.90	146.80	0.90	NS			
146.80	149.00	<b>DEBRIS FLOW</b> As at 125.40. Very chloritic in places. Foot of hole	146.80	149.00	2.20	NS			

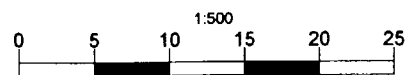


**Legend**

ANDS, andesite  
 BIF, banded iron formation  
 BX, breccia  
 CHRT, chert  
 DBFL, debris flow  
 DIKE, dike  
 LPTF, lapilli tuff  
 OB, overburden  
 SULF, sulfide  
 TUFF, tuff

Hole Number: 87608-0, 840+00 W, 2+00 N,  
 Nom Elev. 1000, length 149.00m  
 Az. 270 Dip -45  
 Claim # - 1224374

		Inco Technical Services Limited Hwy 17 West Copper Cliff, Ont. P0M 1N0	
		<b>Lalonde Property</b>	
		<b>BH 87608</b>	
Compiled by: D.Car	Supervisor: B.R. Booth	Drawn: 24 Jan 2002	
Drawn by: C. Laamanen	Revised By:	Date: 24 Jan 2002	
Scale 1:500.00	NTS 42-A-12	Project Name: Lalonde	



87608-0

**APPENDIX 6**  
**CERTIFICATE OF ANALYSIS**



# ALS Chemex

**EXCELLENCE IN ANALYTICAL CHEMISTRY**

Aurora Laboratory Services Ltd.  
212 Brooksbank Avenue  
North Vancouver BC V7J 2C1 Canada  
Phone: 604 984 0221 Fax: 604 984 0218

To: INCO LIMITED - TECHNICAL SERVICES  
FIELD EXPLORATION BLDG.  
HIGHWAY 17 WEST  
COPPER CLIFF ON P0M 1N0

Page #: 1  
Date : 23-Jan-2002  
Account: JWD

CERTIFICATE VA02000059	SAMPLE PREPARATION		
<p>Project : P.O. No: 123690-0310 This report is for 6 ROCK samples submitted to our lab in North Vancouver, BC, Canada on 10-Jan-2002. The following have access to data associated with this certificate: HERB MACKOWIAK</p>	ALS CODE	DESCRIPTION	
	LOG-22	Sample login - Rcd w/o BarCode	
	CRU-31	Fine crushing - 70% <2mm	
	SPL-21	Split sample - riffle splitter	
	PUL-31	Pulverize split to 85% 75micro	
<b>ANALYTICAL PROCEDURES</b>			
	ALS CODE	DESCRIPTION	INSTRUMENT
	Au-MS21	Au 30g FA ICP-MS Finish	ICP-MS
	ME-ICP41	34 element aqua regia ICP-AES	ICP-AES
	FA-FUS01	Fire Assay Fusion 30g	
	GEO-AR01	Aqua regia digestion	

To: INCO LIMITED - TECHNICAL SERVICES  
ATTN: HERB MACKOWIAK  
FIELD EXPLORATION BLDG.  
HIGHWAY 17 WEST  
COPPER CLIFF ON P0M 1N0

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature: \_\_\_\_\_

*J. Woodfield*



**ALS Chemex**  
**EXCELLENCE IN ANALYTICAL CHEMISTRY**  
 Aurora Laboratory Services Ltd.  
 212 Brooksbank Avenue  
 North Vancouver BC V7J 2C1 Canada  
 Phone: 604 984 0221 Fax: 604 984 0218

To: INCO LIMITED - TECHNICAL SERVICES  
 FIELD EXPLORATION BLDG.  
 HIGHWAY 17 WEST  
 COPPER CLIFF ON P0M 1N0

Page #: 2 - A  
 Total # of pages : 2 (A - C)  
 Date : 23-Jan-2002  
 Account JWD

**CERTIFICATE OF ANALYSIS VA02000059**

Sample Description	Method Analyte Units LDR	AU-MS21	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	
		Au ppb	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm
		1	0.2	0.01	2	10	10	0.5	2	0.01	0.5	1	1	1	0.01	10
FX 806501		7	0.6	2.12	4	<10	10	<0.5	2	2.60	1.6	60	48	297	9.13	10
FX 806502		22	1.8	1.88	<2	<10	20	0.6	<2	3.57	6.6	64	38	622	>15.0	10
FX 806503		15	1.2	1.22	10	<10	20	0.6	<2	2.69	7.2	57	69	502	>15.0	10
FX 806504		3	<0.2	1.64	5	<10	20	<0.5	<2	1.44	<0.5	27	53	139	4.49	<10
FX 806505		1	<0.2	0.61	12	<10	<10	<0.5	<2	2.52	<0.5	18	61	19	1.72	<10
RX 310655		181	1.4	0.48	170	<10	130	<0.5	<2	0.16	0.8	7	45	505	1.57	<10





**ALS Chemex**  
**EXCELLENCE IN ANALYTICAL CHEMISTRY**  
 Aurora Laboratory Services Ltd.  
 212 Brooksbank Avenue  
 North Vancouver BC V7J 2C1 Canada  
 Phone: 604 984 0221 Fax: 604 984 0218

To: INCO LIMITED - TECHNICAL SERVICES  
 FIELD EXPLORATION BLDG.  
 HIGHWAY 17 WEST  
 COPPER CLIFF ON P0M 1N0

Page #: 2 - B  
 Total # of pages : 2 (A - C)  
 Date : 23-Jan-2002  
 Account JWD

**CERTIFICATE OF ANALYSIS VA02000059**

Sample Description	Method Analyte Units LOR	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	
		Hg ppm	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Tl %
		1	0.01	10	0.01	5	1	0.01	1	10	2	0.01	2	1	1	0.01
FX 806601		1	0.16	<10	1.27	916	4	0.01	254	350	15	2.85	2	3	31	0.03
FX 806602		<1	0.15	<10	1.11	934	6	0.01	243	280	24	4.40	<2	6	37	0.03
FX 806603		<1	0.11	<10	1.76	912	6	0.01	361	220	23	4.56	<2	3	46	0.02
FX 806604		<1	0.15	<10	0.89	688	1	0.01	103	310	5	1.03	<2	4	17	0.03
FX 806605		<1	0.02	<10	0.86	400	1	<0.01	80	60	5	0.89	4	1	29	0.01
RX 310855		4	0.07	<10	0.10	154	20	0.03	131	160	536	0.21	60	1	26	0.02



# ALS Chemex

**EXCELLENCE IN ANALYTICAL CHEMISTRY**

Aurora Laboratory Services Ltd.  
212 Brooksbank Avenue  
North Vancouver BC V7J 2C1 Canada  
Phone: 604 984 0221 Fax: 604 984 0218

To: INCO LIMITED - TECHNICAL SERVICES  
FIELD EXPLORATION BLDG.  
HIGHWAY 17 WEST  
COPPER CLIFF ON P0M 1N0

Page #: 2 - C  
Total # of pages: 2 (A - C)  
Date: 23-Jan-2002  
Account JWD

**CERTIFICATE OF ANALYSIS VA02000059**

Sample Description	Method Analyte Units LOR	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
		Tl	U	V	W	Zn
		ppm 10	ppm 10	ppm 1	ppm 10	ppm 2
FX 806501		<10	<10	30	<10	521
FX 806502		<10	<10	29	<10	1195
FX 806503		<10	<10	24	<10	790
FX 806504		<10	<10	24	<10	128
FX 806505		<10	<10	9	<10	42
RX 310855		<10	<10	168	<10	667

**Work Report Summary**

Transaction No: W0260.00136

Status: APPROVED

Recording Date: 2002-JAN-28

Work Done from: 2001-JUL-10

Approval Date: 2002-JAN-29

to: 2001-NOV-15

## Client(s):

156077 LALONDE, DOUGLAS JOSEPH  
186852 RENAUDAT, FRANKLIN  
303261 GODIN, RONALD GREGORY

## Survey Type(s):

EM PDRILL

**Work Report Details:**

Claim#	Perform	Perform Approve	Applied	Applied Approve	Assign	Assign Approve	Reserve	Reserve Approve	Due Date
P 1224367	\$519	\$519	\$0	\$0	\$0	0	\$519	\$519	2002-NOV-24
P 1224368	\$405	\$405	\$0	\$0	\$0	0	\$405	\$405	2002-NOV-24
P 1224371	\$1,236	\$1,236	\$0	\$0	\$0	0	\$1,236	\$1,236	2002-NOV-24
P 1224372	\$649	\$649	\$0	\$0	\$0	0	\$649	\$649	2002-NOV-24
P 1224373	\$1,419	\$1,419	\$0	\$0	\$0	0	\$1,419	\$1,419	2002-NOV-24
P 1224374	\$24,111	\$24,111	\$0	\$0	\$0	0	\$24,111	\$24,111	2002-NOV-24
	\$28,339	\$28,339	\$0	\$0	\$0	\$0	\$28,339	\$28,339	

Status of claim is based on information currently on record.



42A13SE2010 2.22826 THORBURN

900

Date: 2002-FEB-19

GEOSCIENCE ASSESSMENT OFFICE  
933 RAMSEY LAKE ROAD, 6th FLOOR  
SUDBURY, ONTARIO  
P3E 6B5

DOUGLAS JOSEPH LALONDE  
53 WAY AVENUE  
TIMMINS, ONTARIO  
P4N 3C4 CANADA

Tel: (888) 415-9845  
Fax: (877) 670-1555

**Submission Number:** 2.22826  
**Transaction Number(s):** W0260.00136

Dear Sir or Madam

**Subject: Approval of Assessment Work**

We have approved your Assessment Work Submission with the above noted Transaction Number(s). The attached Work Report Summary indicates the results of the approval.

At the discretion of the Ministry, the assessment work performed on the mining lands noted in this work report may be subject to inspection and/or investigation at any time.

If you have any question regarding this correspondence, please contact STEVEN BENETEAU by email at [steve.beneteau@ndm.gov.on.ca](mailto:steve.beneteau@ndm.gov.on.ca) or by phone at (705) 670-5855.

Yours Sincerely,



Ron Gashinski  
Senior Manager, Mining Lands Section

**Cc:** Resident Geologist

Douglas Joseph Lalonde  
(Claim Holder)

Franklin Renaudat  
(Claim Holder)

Assessment File Library

Douglas Joseph Lalonde  
(Assessment Office)

Ronald Gregory Godin  
(Claim Holder)



MINISTRY OF  
NORTHERN DEVELOPMENT  
AND MINES  
PROVINCIAL MINING  
RECORDS OFFICE

MINING LAND TENURE  
MAP

Date / Time of Issue Sep 8 2001 13:15h Eastern

TOWNSHIP / AREA  
THORBURN

PLAN  
G-3978

ADMINISTRATIVE DISTRICTS / DIVISIONS

Mining Division Porcupine  
Land Titles/Registry Division COCHRANE  
Ministry of Natural Resources District TIMMINS

TOPOGRAPHIC

- Administrative Boundaries
- Township
- Colossus Lot
- Private Path
- High Road
- Low Road
- Centre - Approx. Aerial Photo Base
- Water
- Mine Headframe
- Railway
- Road
- Trail
- Natural Gas Pipeline
- Hydro Line
- Telephone Line
- Wooded Area
- Municipal/Castrol Historical Monument

LAND TENURE

- Freehold Patent
  - Surface and Mining Rights
  - Surface Rights Only
  - Mining Rights Only
- Leasehold Patent
  - Surface and Mining Rights
  - Surface Rights Only
  - Mining Rights Only
- License of Occupation
  - Use Only License
  - Surface and Mining Rights
  - Surface Rights Only
  - Mining Rights Only
- Land Use Permit
- Open Pit License
- Water Power Lease Application
- Mining Claims

LAND TENURE WITHDRAWALS

- Areas Withdrawn from Description
  - Mining Act Withdrawal Types
    - Surface and Mining Rights Withdrawal
    - Surface Rights Only Withdrawal
    - Mining Rights Only Withdrawal
  - Order in Council Withdrawal Types
    - Surface and Mining Rights Withdrawal
    - Surface Rights Only Withdrawal
    - Mining Rights Only Withdrawal

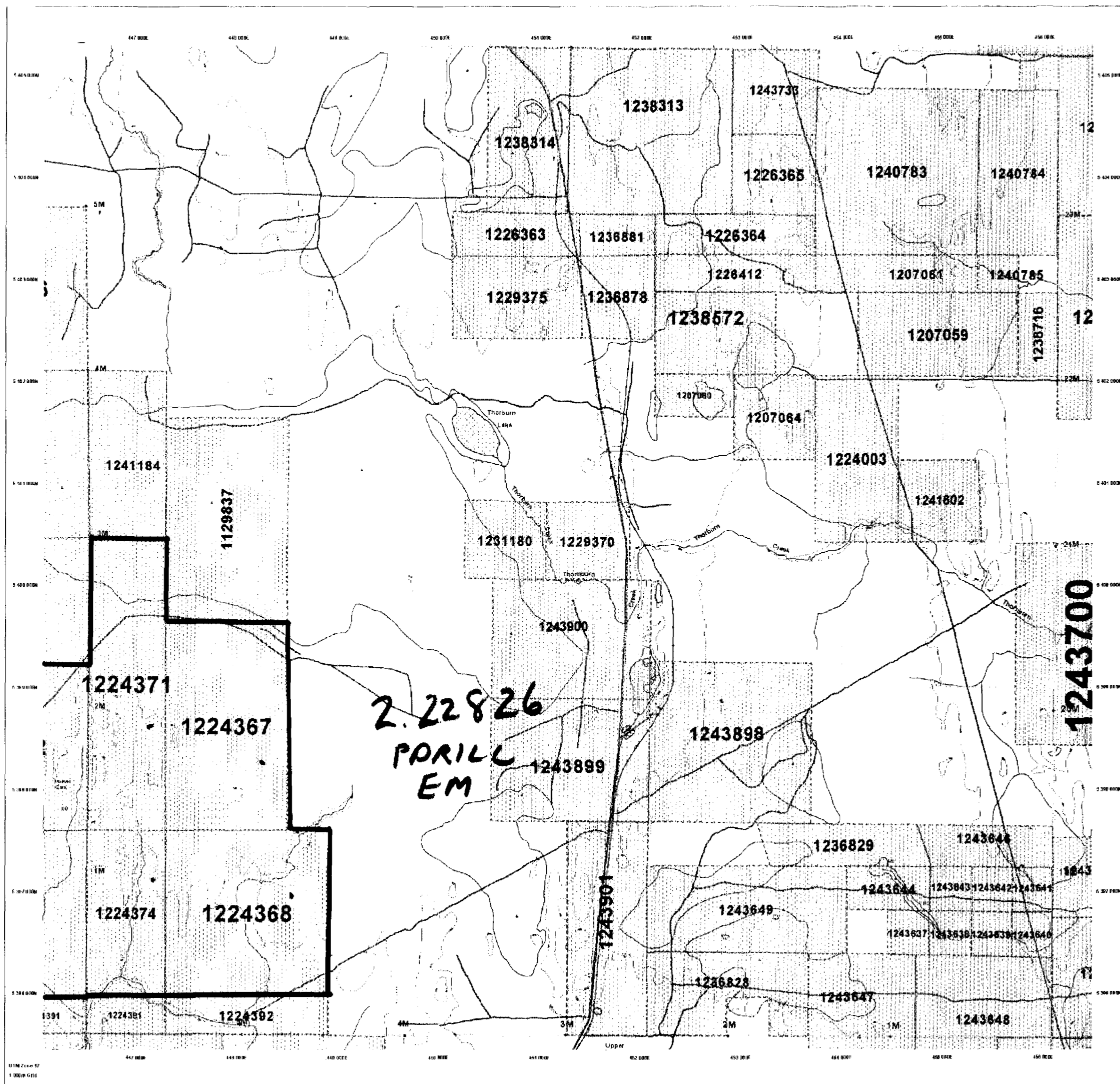
IMPORTANT NOTICES



LAND TENURE WITHDRAWAL DESCRIPTIONS

IMPORTANT NOTICES

These notices have exact legal force, effect and are subject to the Mining Act, its regulations, and other provincial legislation, including mineral development activities.



421382010 2.22826 THORBURN 200

These notices have exact legal force, effect and are subject to the Mining Act, its regulations, and other provincial legislation, including mineral development activities.

General Information and Limitations

Contact Information:  
Provincial Mining Records Office, 5th Floor  
Waterloo Mining Centre  
635 Wellington Street West  
Waterloo, ON N2L 2K5  
Phone: (877) 978-8444  
Fax: (519) 748-8444  
Home Page: [www.gov.on.ca/MNDM/MINE/SLANDS/SLANDS.htm](http://www.gov.on.ca/MNDM/MINE/SLANDS/SLANDS.htm)

Map Datum: NAD 83  
Projection: UTM  
Topographic Data Source: Land Information Ontario  
Mining Land Tenure Source: Provincial Mining Records Office

This map may not show uncompleted land tenure and interests. It may include certain patents, leases, easements, rights of way, mining rights, licenses, or other forms of dispositions of rights and interests in land. Please refer to the relevant legislation and regulations for a complete list of the types of land tenure that may be shown on this map.



MINISTRY OF  
NATURAL RESOURCES  
AND FORESTRY  
PROVINCIAL  
REGISTRAR'S OFFICE

MINING LAND TENURE  
MAP

Date / Time of Issue Sep 8 2001 12:50h Eastern

TOWNSHIP / AREA PLAN  
MOBERLY G-3961

ADMINISTRATIVE DISTRICTS / DIVISIONS  
Mining Division Porcupine  
Land Titles/Registry Division COCHRANE  
Ministry of Natural Resources District TIMMINS

<b>TOPOGRAPHIC</b>	<b>LAND TENURE</b>
Administrative Boundary	Freehold Patent
Township	Surface And Mining Rights
Section Line	Surface Rights Only
Provincial Park	Mining Rights Only
Water Feature	Landhold Patent
City or Village	Surface And Mining Rights
Contour	Surface Rights Only
Contour - Approx. Annual Depression	Mining Rights Only
Sheet	Licence of Occupation
Map Boundary	Unsplit Parcel
Road	Surface And Mining Rights
Trail	Surface Rights Only
Water Course	Mining Rights Only
Hydro Line	Land Use Easement
Communication Line	Order of Council
Wooded Area	Water Power Lease Agreement
Municipal/Regional District Boundary	Mining Claim
	<b>LAND TENURE WITHDRAWALS</b>
	Area Withdrawn from Distribution
	Mining Act Withdrawal System
	Land Use Withdrawal System
	Surface Rights Only Withdrawal
	Mining Rights Only Withdrawal
	Order of Council Withdrawal System
	Surface And Mining Rights Withdrawal
	Surface Rights Only Withdrawal
	Mining Rights Only Withdrawal
	<b>IMPORTANT NOTICES</b>



LAND TENURE WITHDRAWAL DESCRIPTIONS

Number	Type	Date	Description
WLL 41702	WPM	May 17 1999	Sec 29 WLLC-1702/00 ONT 174200 M & S

IMPORTANT NOTICES

Areas under which special agreements, easements or conditions exist that affect normal administration of the Ministry of Natural Resources activities.

2.22826  
PORILL  
EM



These mining or other mining claims should consult with the Provincial Mining Recorder's Office of the Ministry of Natural Resources and Forestry for additional information on the status of the claims shown hereon. This map is not intended for navigation, survey, or land title determination purposes and the information shown on this map is compiled from various sources. Completeness and accuracy are not guaranteed. Additional information may be obtained through the Land Titles and Registry Office, or the Ministry of Natural Resources. The information shown is derived from digital data available to the Provincial Mining Recorder's Office at the time of compilation from the Ministry of Natural Resources and Forestry.

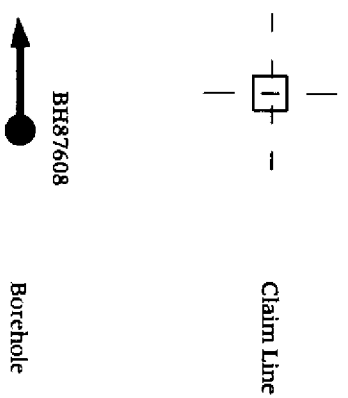
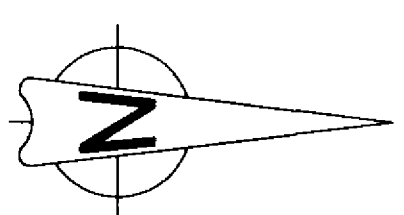
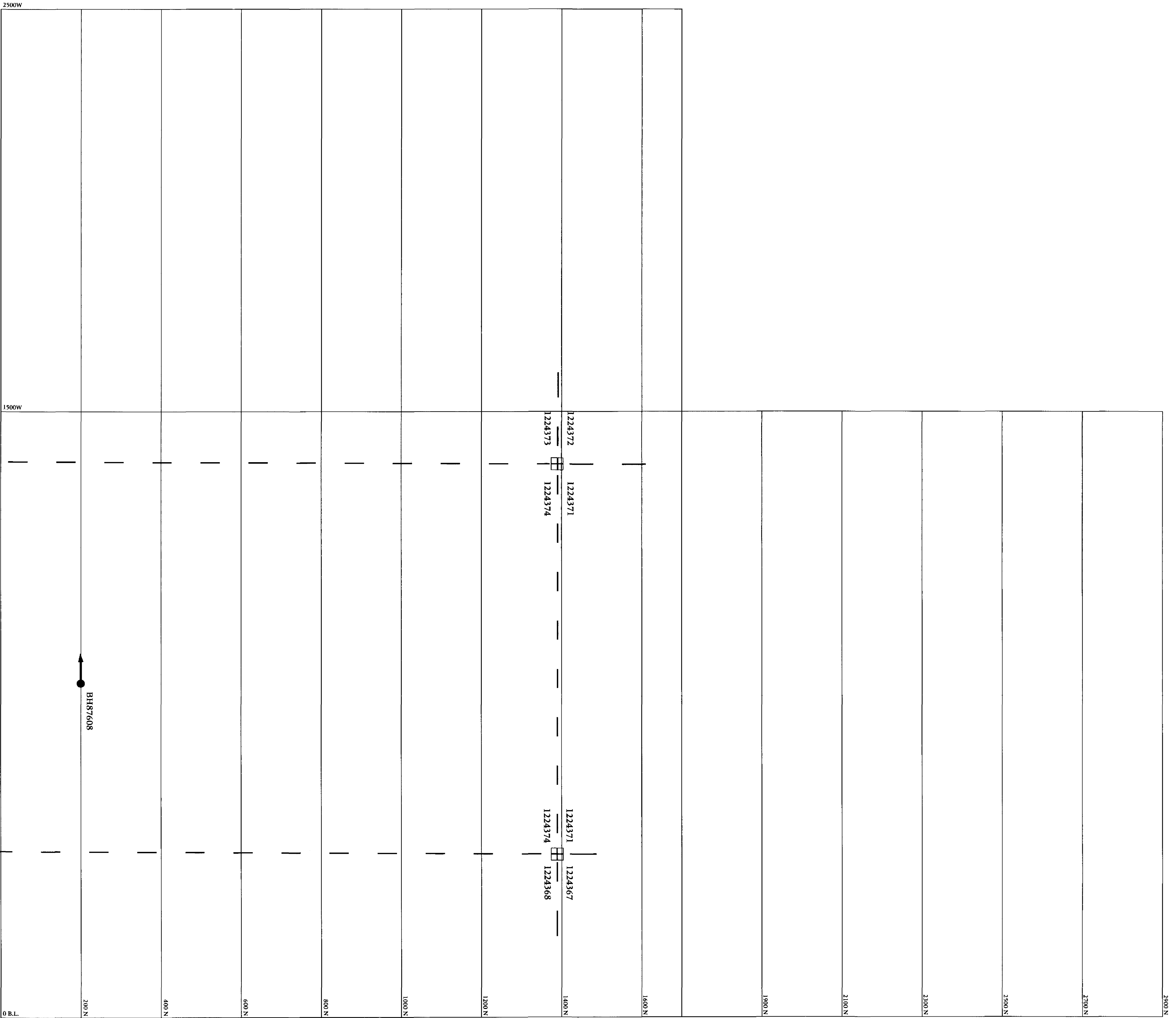
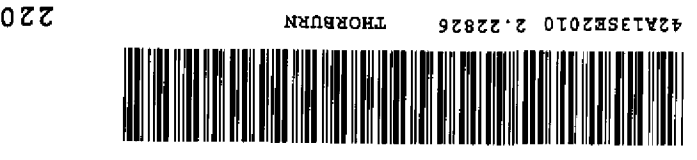
General Information and Limitations

Contact Information:  
Provincial Mining Recorder's Office 138 King  
Office Open House Centre Tel: (800) 415-8845  
25 St. George Street Fax: (905) 578-1414  
Sudbury, ON P3Y 6G5  
Home Page: <http://www.gov.on.ca/MNR/MINRES/AMU/3961map.asp>

Map Datum: NAD 83  
Scale: 1:1000 (1:1000 in digital)  
Topographic Data Source: Land Information Ontario  
Mining and Tenure Source: Provincial Mining Recorder's Office

This map may not show unpatented land tenure and interests in land including certain patents, leases, easements, right of way, mining rights, licences, or other forms of mineral rights and interests in the Crown. Also certain lease tenure and land use that require or provide an ability to stake mining claims may not be shown.





LEGEND

2008 08

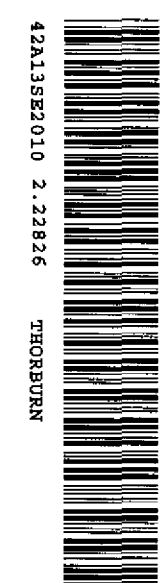
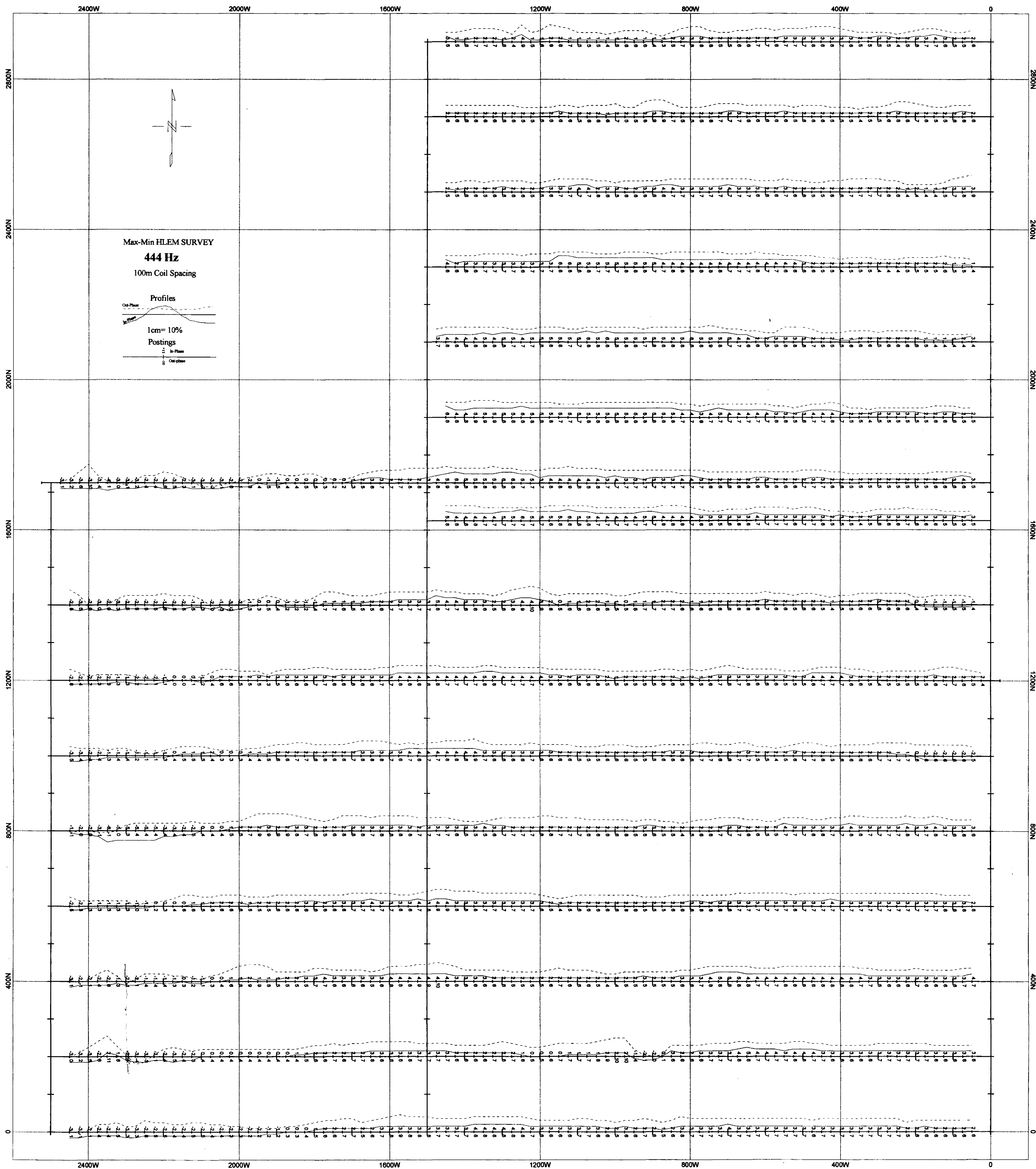


Copper Cliff, Ontario  
 P0M 1N0

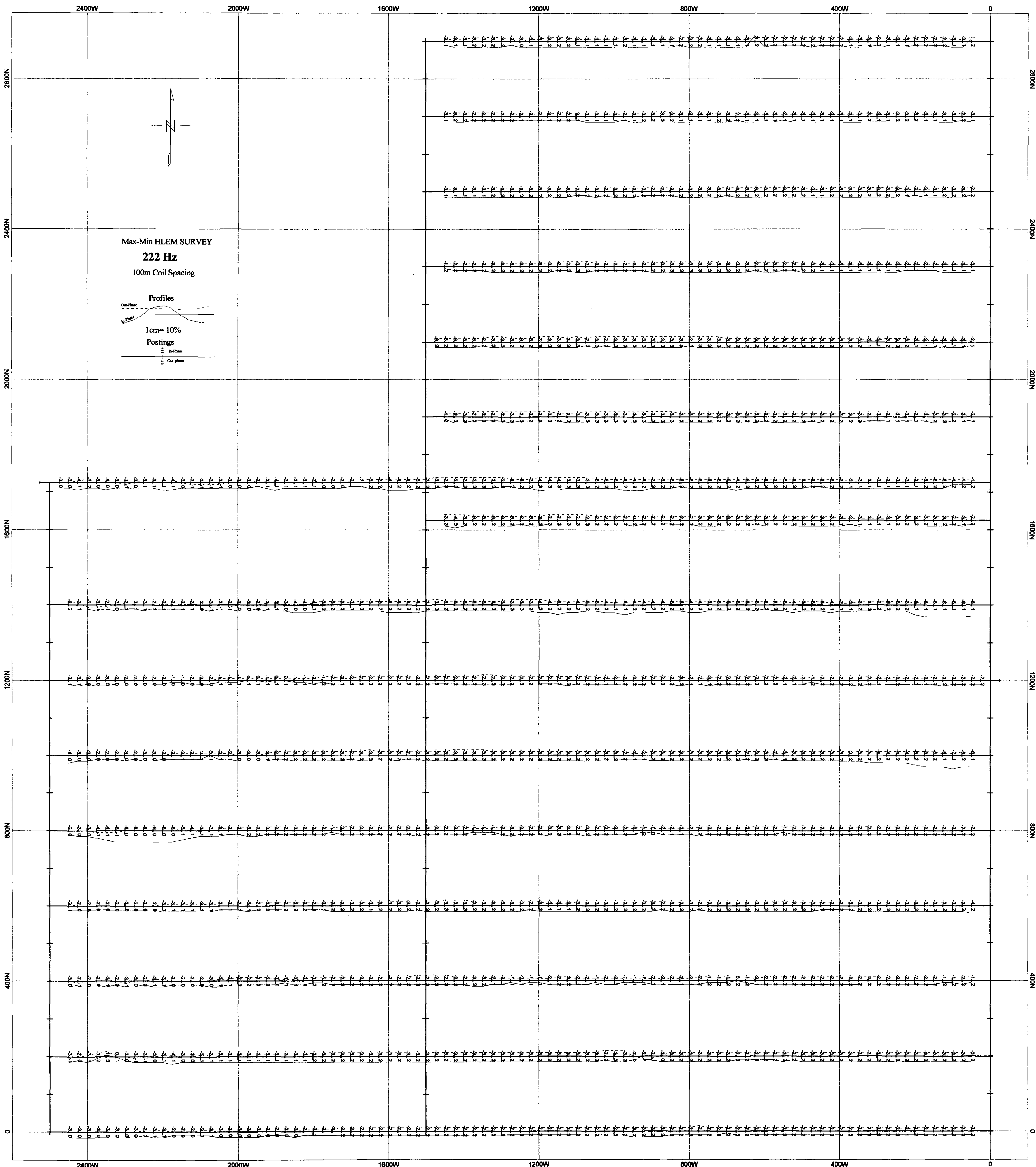
Project: Loida Option Area: Timmins, Porcupine Mining District

**BOREHOLE LOCATION MAP (Figure 4)**

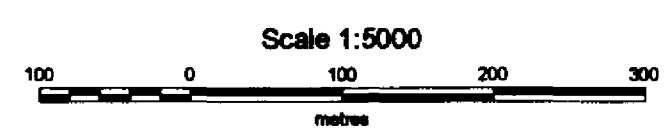
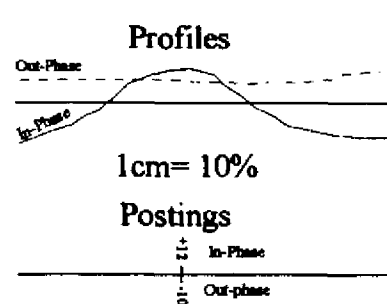
Completed by: D. Car  
 Drawn by: B. Satchell  
 Supervisor: B. Boeh  
 Scale: 1:5000  
 Date drawn: Jun. 17, 2002  
 Reviewed:  
 File: Borehole Location Map



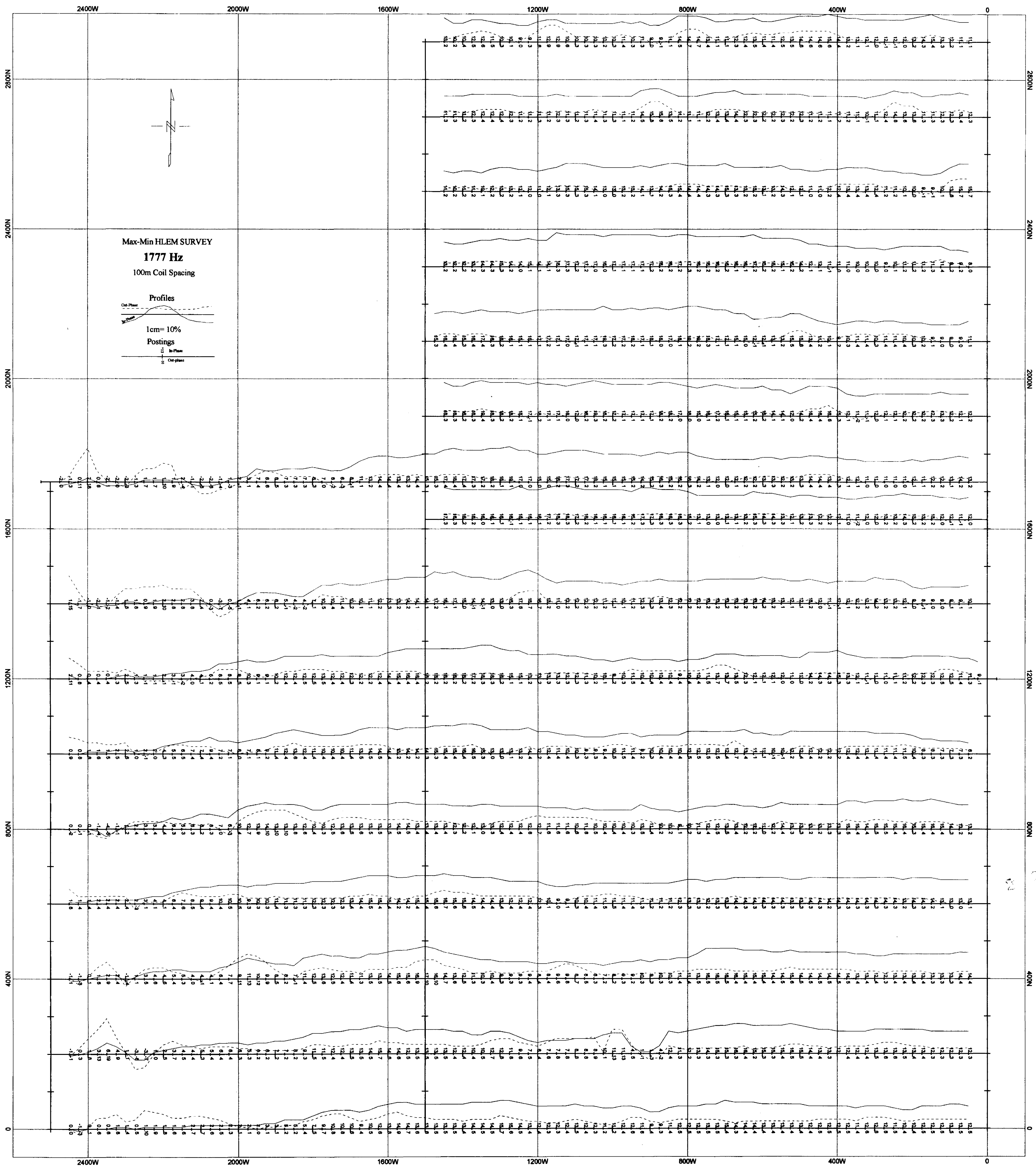




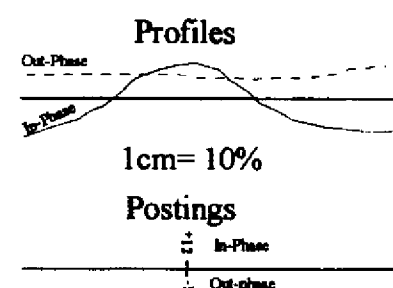
Max-Min HLEM SURVEY  
 222 Hz  
 100m Coil Spacing



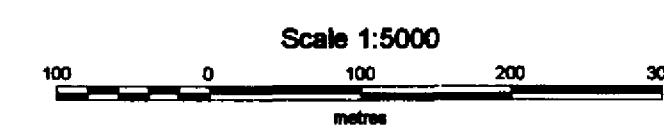
INCO Thorburn Lalonde Option  
 HLEM Survey  
 Moberly & Thorburn Townships  
 Porcupine Mining Division  
 District of Cochrane  
 M C Exploration Services Ltd July 2001



Max-Min HLEM SURVEY  
**1777 Hz**  
 100m Coil Spacing



2 285 95



**INCO Thorburn Lalonde Option**  
 HLEM Survey  
 Moberly & Thorburn Townships  
 Porcupine Mining Division  
 District of Cochrane  
 M C Exploration Services Ltd July 2001