42A12NE2005 2.19006 MACDIARMID 010

2.19006

REPORT ON GEOPHYSICAL WORK

MACDIARMID 51
MACDIARMID TOWNSHIP

NTS: 42-A/12 PROJ # 8034

FOR
FALCONBRIDGE LIMITED

RECEIVED
NOV 20 1998
GEOSCIENCE ASSESSMENT OFFICE

NOVEMBER 1998

D. LONDRY
TIMMINS GEOPHYSICS LTD

SUMMARY AND RECOMMENDATIONS

HLEM and magnetic surveys were carried out over the Macdiarmid 51 property for Falconbridge Limited in September, 1998.

The magnetic survey mapped north-south striking diabase dikes and northwest striking ultramafics. The HLEM survey detected a number of northwest striking conductors. Two of the EM anomalies, B' and 'F', are mainly quadrature responses and probably do not have a bedrock source. Anomaly 'D' is also a quadrature anomaly but coincides with a high amplitude magnetic anomaly which represent ultramafics; this anomaly is located on strike with good conductivity to the southeast on the Canadian Johns Manviklle property.

Anomaly 'C' is poorly defined because of its position between anomalies 'A' and 'D' and the interpretation of anomaly 'E' is complicated because of a coincident bedrock high , however, there is no doubt that these anomalies have a bedrock source. They are both potential drill targets, however, the grid should be extended to the southeast of these zones to get a better idea of their strike length.

Anomalies 'A', 'G' and 'H' appear to be formational because of their strike length, however, it is recommended that anomaly 'A' is tested on Line 2400 East where the conductor widens, possibly due to a second conductor.

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INTRODUCTION

Magnetic and horizontal loop electromagnetic (HLEM) surveys were carried out on the Macdiarmid 51 property for Falconbridge Limited, in September 1998.

The property is located approximately 30 kilometres northwest of the city of Timmins (Figure 1(a)) in the northwest portion of Macdiarmid Township, Porcupine Mining Division. The grid can be accessed by all-terrain vehicle in the summer or snowmobile in the winter along bush roads which run east and then south from the Abitibi Camp 50 road which runs north from Kamiskotia Lake.

The surveys covered part of eleven mining claim (Figure 1(b)) which are described in Table 1. The HLEM survey was carried out by B. Pigeon and the author of this report and the magnetic survey was run by J. derWeduwen.

CLAIM #	# of UNITS	DUE DATE	TOWNSHIP
995399	1	Nov 23, 1998	Macdiarmid
995400	1	May 21, 1999	Macdiarmid
995401	1	May 21, 1999	Macdiarmid
995402	1	May 21, 1999	Macdiarmid
995403	1	May 21, 1999	Macdiarmid
995404	1	May 21, 1999	Macdiarmid
995447	1	May 21, 1999	Macdiarmid
995448	1	May 21, 1999	Macdiarmid
995449	1	May 21, 1999	Macdiarmid
1211721	4	May 29, 2000	Macdiarmid
1212996	3	July 29, 2000	Macdiarmid

Table 1 : Property Description

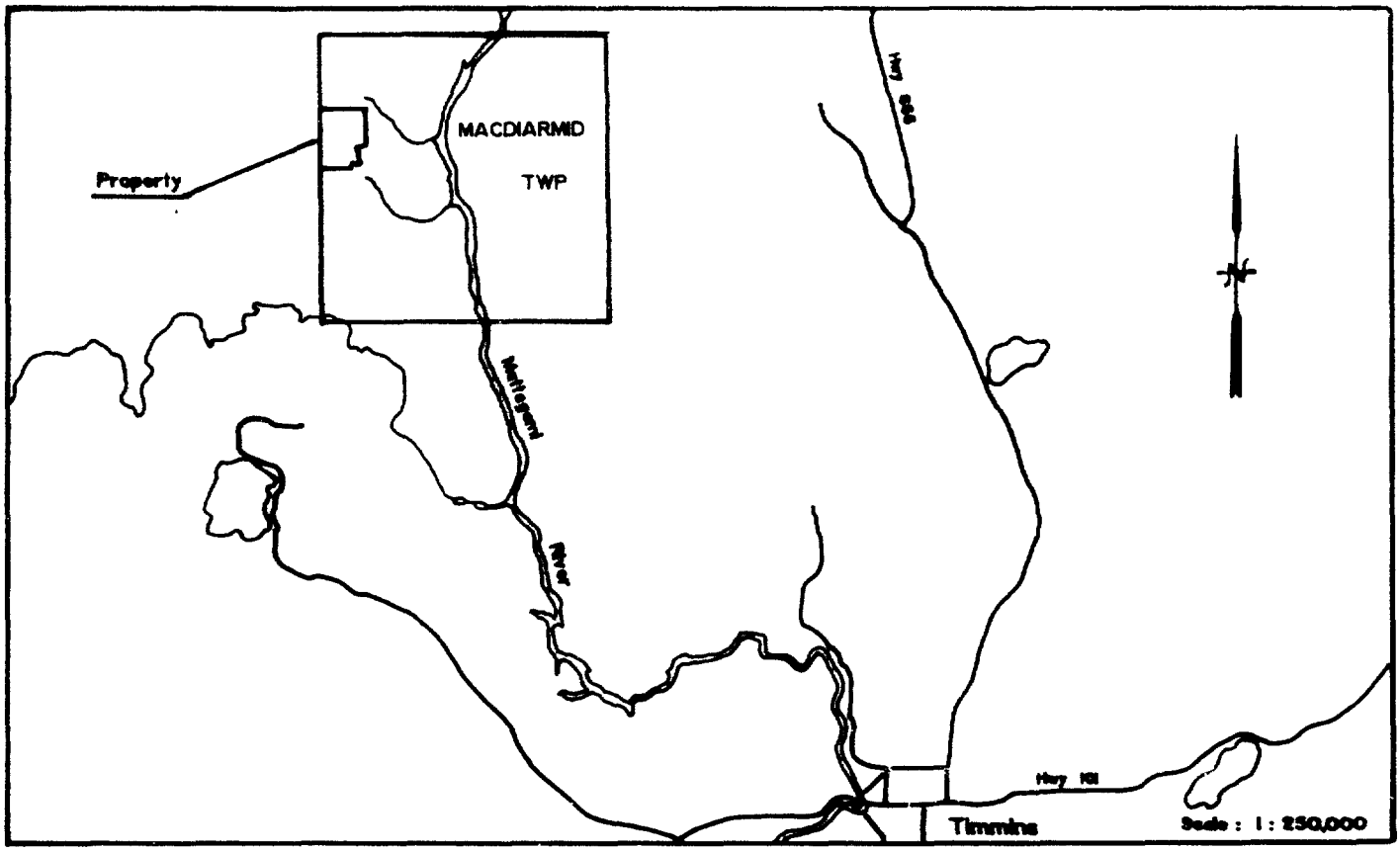

Figure 1 (a) : Location Map

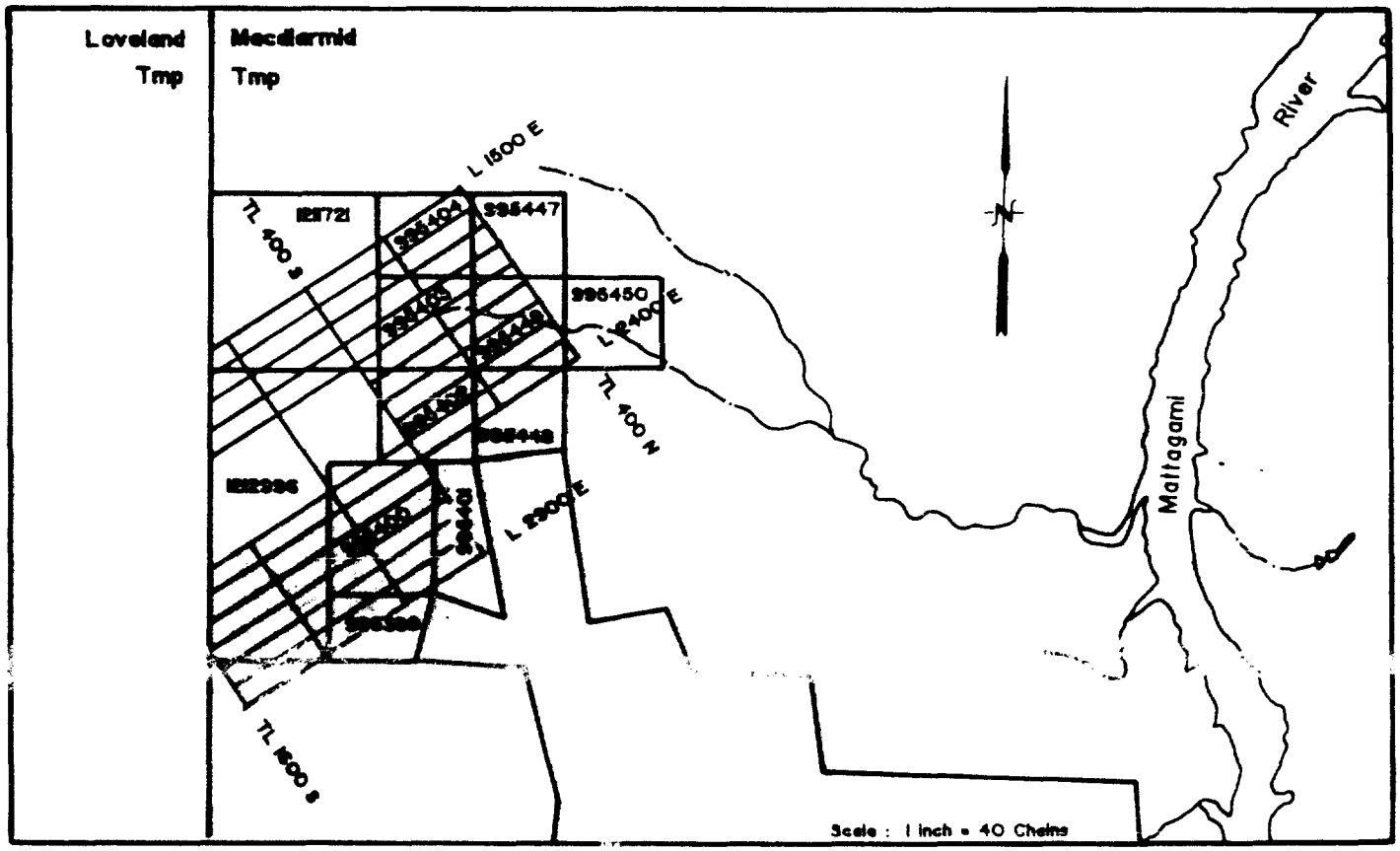

Figure 1 (b) : Claim Map

GENERAL GEOLOGY

Macdiarmid Township is located near the west end of the Abitibi greenstone belt which consists of predominantly east-west striking, steeply dipping Archean sediments and ultramafic to felsic volcanics. These rocks have been intruded by ultramafic to felsic bodies, north-south striking Matachewan diabase dikes and east northeast striking Keweenawan diabase dikes.

In 1970, the Ontario Division of Mines carried out a regional magnetic survey in Macdiaramid and Loveland Townships. These results were compiled with existing surveys, which were submitted for assessment work credits, and the geology of the two townships was interpreted from the magnetics on map 2288 at a scale of 1 inch to ½ mile (Middleton, 1974). The geology of Macdiarmid Township is also presented on map 2205 at a scale of 1 inch to 4 miles (Pyke, 1973) on map P3379 at a scale of 1:100,000 (Ayer etal, 1998).

Previous surveys and drilling in the vicinity of the Macdiarmid 51 property suggest that it is underlain by northwest striking acidic to intermediate volcanics and graphitic sediments. An ultramafic body, centered to the southeast on patented claims held by Canadian Johns Manville Company, trend northeast through the Macdiarmid property. All of the rocks have been intruded by north northwest striking diabase dikes.

PREVIOUS WORK

The following is a description of previous exploration work carried out on the property and submitted for assessment work credits (Table 2).

In 1964, Canadian Aero Mineral Surveys Limited flew a combined magnetic and EM survey over all of Kidd Township and most of Macdiarmid and Wark Townships for Conwest Exploration Ltd.; no followup ground work was filed in the vicinity of the present Falconbridge property.

In 1964, Silver-Miller Mines Limited held eight claims in Macdiarmid Township along the Macdiarmid-

YEAR	COMPANY	GEOPHYSICS	DRILL HOLES	AFRI FILE
1964	Conwest Exploration Ltd.	Amag, AEM		42A11NW0029
1964	Silver-Miller Mines Limited	Mag, HLEM		42A12NE0569
1965	Silver-Miller Mines Limited		SM-1 to 6	42A12NE0937
1964	Mistango River Mines Ltd.	Mag, HLEM		42A12NE0837
1964	North Rankin Nickel Mines Ltd.	Mag, HLEM		42A12NE0762
1965	North Rankin Nickel Mines Ltd.		NRK-65-1 to 7	42A12NE0538
1977	Phelps Dodge Corp of Canada Limited	Mag, HLEM		42A11NW0624
1977	Amax Potash Ltd	Amag		42A11NW0615
1978	Amax Minerals Exploration	Geology		42A11NW0614
1988	Falconbridge Limited	Mag, HLEM		42A12NE0509

Table 2. Summary of previous assessment work.

Loveland township line. They ran magnetic and HLEM surveys on northeast southwest lines spaced every 400 metres. The magnetic survey was run with a fluxgate magnetometer and the HLEM survey was run with a coil separation of 200 feet at a frequency of 876 Hertz. Five holes were drilled on what is now claims 995400 and 1212996 and one other was drilled just to the south. These holes were drilled to test EM anomalies although there were no conductors intersected.

In 1964, North Rankin Nickel Mines Ltd. ran magnetic and HLEM surveys to the northeast of the Silver-Miller property; eight holes were drilled to test EM anomalies.

In 1964, Lovejoy Mining and Exploration Limited and Mistango River Mines Limited ran magnetic and HLEM surveys on a property directly to the east of the Silver-Miller property; no drilling was reported.

In 1975, Phelps Dodge Corporation of Canada Limited ran geophysical surveys on four claim groups in Macdiarmid Township. The most western group consisted of three claims which are presently claims 995400, 995401 and 995402 on the Macdiarmid 51 property. Magnetic and HLEM surveys were run on these three claims, along lines oriented approximately northeast-southwest and spaced every 400 feet. The HLEM survey was run with a coil separation of 400 feet at a frequency of 1600 Hertz. Although no

drilling was filed, Amax reported finding a drill site and drill core in the middle of what is now claim 995400.

In 1977, Amax Potash Limited had a combined magnetic and INPUT EM survey flown over part of Macdiarmid Township to cover a number of claim blocks held by the company. The survey was flown along east-west lines spaced approximately every 660 feet. A geological survey was carried out on two claims which are presently 995400 and 995401.

In 1987, the Ontario Geological Survey carried out a combined airborne magnetic and EM survey in the Timmins area which included Macdiarmid Township (OGS, 1988). This survey was flown along north-south lines spaced approximately every 200 metres.

In 1988, Falconbridge Limited carried out magnetic and HLEM surveys over a large claim group which included the east half of the present Macdiarmid 51 property. The surveys were run along north-south lines spaced every 100 metres; the HLEM survey was run with a coil separation of 120 metres at frequencies of 444 and 177 Hertz. At least five drill holes were sunk to the east of the present property to test EM anomalies.

SURVEY DESCRIPTIONS

The surveys were run on grid lines spaced every 100 metres and oriented at 55° Az (Figure 1(b)). Tie lines were cut every 400 metres and all of the lines were picketed every 20 metres.

The magnetic readings were taken every 10 metres with a Scintrex IGS-2/MP-4. This instrument is a proton precession magnetometer which measures the earth's total magnetic field to an accuracy of 0.1 gammas. Diurnal variations were monitored every 10 seconds with a Scintrex MP-3 base station magnetometer, located off the grid at 10200 East, 10360 North; the base station value to which all of the readings were levelled is 59237 nT. A total of 2442 readings were taken along 23.6 kilometres of line.

The horizontal loop EM survey was carried out with the Apex Parametrics MaxMin I-5. This instrument measures the in-phase and quadrature components of the secondary field as a percentage of

the primary field; the depth of penetration is approximately half of the coil separation. Readings were taken every 20 metres along four of the grid lines using a coil separation of 200 metres and frequencies of 222, 444 and 1777 Hertz. A total of 797 stations were read along 18.6 kilometres of line.

HLEM RESULTS

The results of the HLEM survey are profiled on maps 1, 2 and 3 at a scale of 1:5000; the profile scale used is 1 cm = 20 % for all of the frequencies. The 444 Hertz results are also presented in Figure 2 at a scale of 1:12,500. The following is a description of the conductors which were detected in the surveys.

Anomaly 'A' strikes northwest between Lines 2300 and 2900 East at 1000 South. The source of the anomaly is a 20 to 35 metre wide zone of poor to good conductivity (Table 3). The width can not be determined on Line 2900 East because of interference from anomaly 'B' to the northeast. The depth to the source is 40 metres on Lines 2500 and 2600 East and increases to 60 metres to the northwest and southeast. The dip of the conductor is close to vertical or steep to the northeast.

LINE	ANOMALY CENTER	ANOMALY WIDTH (m)	IP (%)	Q (%)	DEPTH (m)	CONDUCTIVITY THICKNESS (mhos)	COMMENTS
2300 E	1000 S	narrow	-5	-6	64	6	
2400 E	980 S	40	-11	-10	54	11	
2500 E	985 S	30	-9	-12	40	6	
2600 E	990 S	20	-10	-13	40	6	
2700 E	990 S	20	-15	-9	58	20	
2800 E	990 S	20	-12	-9	60	16	
2900 E	1000 S	?	-4	-6	50	4	

Table 3: Anomaly 'A' Interpretation, 444 Hz, 200 metre coil separation.

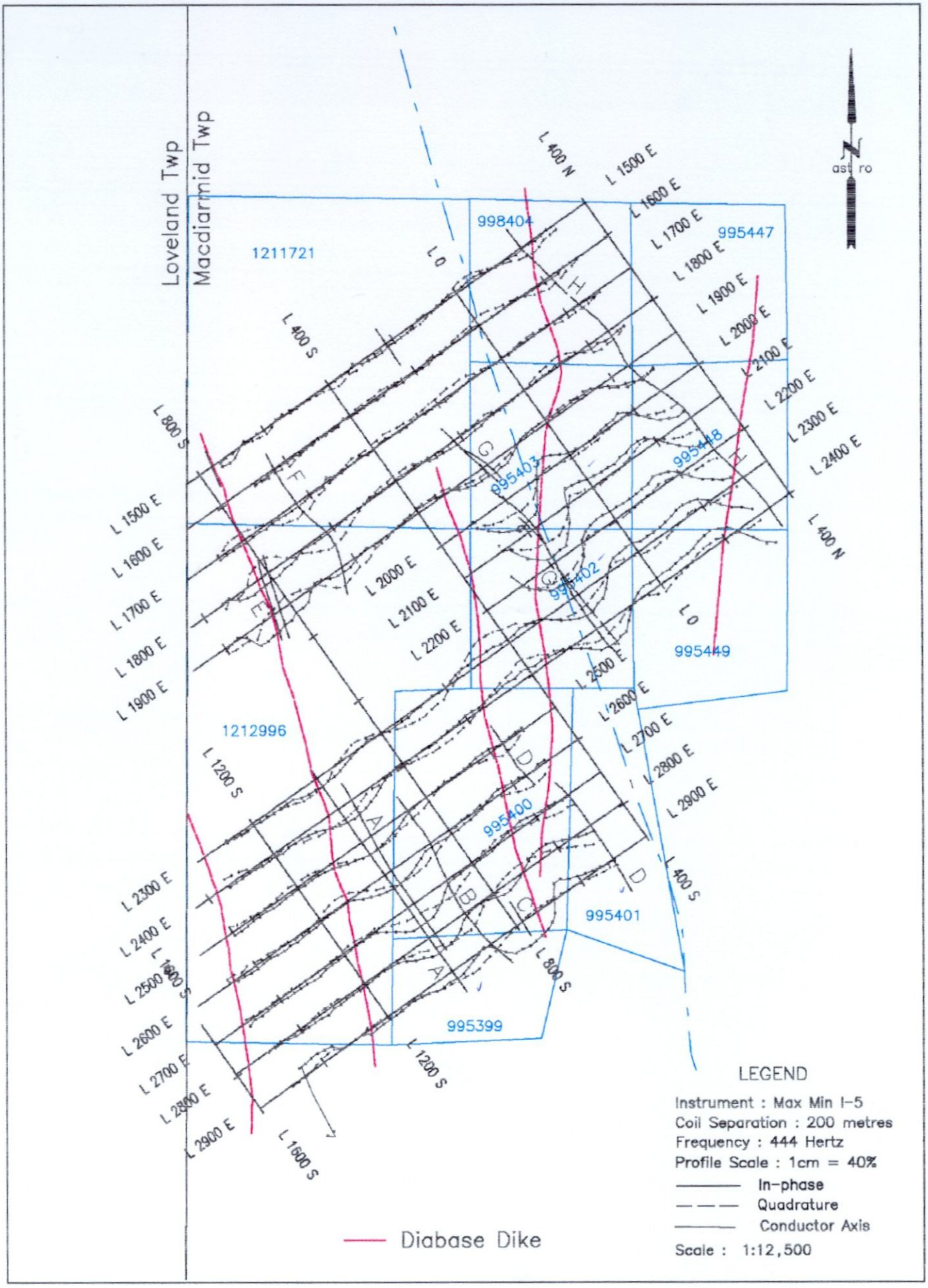

Figure 2 : HLEM Results, 444 Hertz, 200 metre coil separation, Macdiarmid 51

This conductivity appears to be formational, however, the larger width on Lines 2400 and 2500 East may be due to a second conductor on the flank of the main zone. The anomaly should be tested by diamond drilling on Line 2400 East.

Anomaly 'B' is a poorly defined anomaly on the northeast flank of anomaly 'A', between 860 South on Line 2500 East and 880 South on Line 2900 East. It is mainly a quadrature anomaly and therefore represents very poor conductivity. Since there is no in-phase component, no parameters were calculated for it.

Anomaly 'C' is located at 780 South on Line 2900 East. This is a strong in-phase anomaly, however there is an inversion in the quadrature component which suggests very conductive overburden. The positive quadrature component makes it difficult to calculate any parameters other than the axis (Table 4). The results using a frequency of 222 Hertz show that this zone likely continues to the northwest as far as 2600 East; the anomaly, to the northwest of Line 2900 East, in the higher frequency results is hidden in the northeast shoulder of anomaly 'A'.

LINE	ANOMALY CENTER	ANOMALY WIDTH (m)	IP (%)	Q (%)	DEPTH (m)	CONDUCTIVITY THICKNESS (mhos)	COMMENTS
2900 E	780 S	?	-17	?	?	?	

Table 4: Anomaly 'C' Interpretation, 444 Hz, 200 metre coil separation.

Anomaly 'D' is located along the northeast end of Lines 2500 to 2900 East It is a quadrature anomaly and therefore represents very poor conductivity. Since it is only partially defined and there is little in-phase component, it is difficult to interpret other than the location of the southwest edge of the

conductor and the fact that it is a poor conductor.

Anomaly 'E' is located between 810 South on Line 1800 and 840 South on Line 1900 East. There is a positive quadrature response associated with the anomaly which may be due to a bedrock high and no parameters can be calculated for the anomaly. In the high frequency results, the anomaly is displaced to the southwest, probably in response to the edge of the bedrock high rather than the bedrock conductor; the in-phase component is also positive over the bedrock high.

A partially defined anomaly at 765 South on Line 1500 East may be the extension of anomaly 'E', possibly separated from the anomaly on Lines 1800 and 1900 by the diabase dike.

LINE	ANOMALY CENTER	ANOMALY WIDTH (m)	IP (%)	Q (%)	DEPTH (m)	CONDUCTIVITY THICKNESS (mhos)	COMMENTS
1800 E	810 S	20	-7	?	?	?	
1900 E	840 S	20	-14	?	?	?	

Table 5: Anomaly 'E' Interpretation, 444 Hz, 200 metre coil separation.

Anomaly 'F' is mainly a quadrature anomaly and therefore represents poor conductivity. It is located on the northeast flank of the positive response from conductor 'E' and supports the interpretation that there is a bedrock high coincident with anomaly 'E'.

Anomaly 'G' strikes northwest between 220 South on Line 1800 East and 190 South on Line 2400 East. The source of the anomaly is good conductivity which is up to 20 metres wide (Table 6). The depth to the source is between 30 and 50 metres on Lines 2000 to 2400 East, however it gets much deeper to the west on Lines 1800 and 1900 East. The dip of the conductor is difficult to interpret

because not all of the profiles are complete; the anomalies on Lines 2300 and 2400 East suggest a steep northeast dip and the profile on Line 1800 East suggests the source is close to vertical.

The anomaly centered at 220 South on Line 1500 East is likely the continuation of the same horizon which has been segmented by a diabase dike.

LINE	ANOMALY CENTER	ANOMALY WIDTH (m)	IP (%)	Q (%)	DEPTH (m)	CONDUCTIVITY THICKNESS (mhos)	COMMENTS
1500 E	220 S	narrow	-4	?	?	?	
1800 E	220 S	narrow	-4	-3	100	14	
1900 E	195 S	15	-9	-7	74	16	
2000 E	200 S	?	-28	-14	34	34	
2100 E	185 S	20	-29	-16	26	27	
2200 E	190 S	narrow	-24	-14	36	21	
2300 E	195 S	15	-20	-11	48	23	
2400 E	190 S	20	-20	-9	52	43	

Table 6: Anomaly 'G' Interpretation, 444 Hz, 200 metre coil separation.

Anomaly 'H' is a partially defined anomaly along the northeast end of Lines 1500 to 2400 East. The conductivity of the source is very poor on Lines 1500 to 1800 East, however, it improves quickly to the east (Table 7). The depth to the conductor also increases from less than 20 metres in the west to 50 metres on Line 2200 East. The width and dip of the conductor can not be determined because the northeast half of the anomaly is incomplete.

LINE	ANOMALY CENTER	ANOMALY WIDTH (m)	IP (%)	Q (%)	DEPTH (m)	CONDUCTIVITY THICKNESS (mhos)	COMMENTS
1500 E	200 S	?	-2	-9	<20	1	
1600 E	220 S	?	-2	-8	<20	1	
1700 E	240 S	?	-1	-4	<20	1	
1800 E	260 S	?	-5	-8	40	4	
1900 E	255 S	?	-16	-14	40	11	
2000 E	285 S	?	-25	-16	30	18	
2100 E	305 S	?	-24	-11	44	40	
2200 E	305 S	?	26	-7	50	78	
2300 E	325 S	?	?	?	?	?	
2400 E	335 S	?	?	?	?	?	

Table 7: Anomaly 'H' Interpretation, 444 Hz, 200 metre coil separation.

MAGNETIC RESULTS

The magnetic results are contoured every 100 nT on map 4 at a scale of 1:5000. A colour image of the results is given in Figure 3 at a scale of 1:12,500.

The most prominent feature in the magnetic results is a very high amplitude anomaly which strikes northwest from Line 2900 East to 1900 East, immediately to the southwest of Tie Line 400 South. This anomaly, no doubt, represents the extension of an ultramafic body which is centered to the southeast on Canadian Johns Manville property.

To the southwest of the ultramafic, the magnetic field is uniformly low except for two linear north-south striking magnetic highs which represent diabase dikes. To the northeast of the ultramafic there are also at least two more north-south striking diabase dikes. Other linear magnetic high anomalies in this area, with the same amplitude as the dikes, strike northwest and may represent ultramafic intrusives or flows. They may also be diabase dikes which have been diverted parallel to stratigraphy at a geological

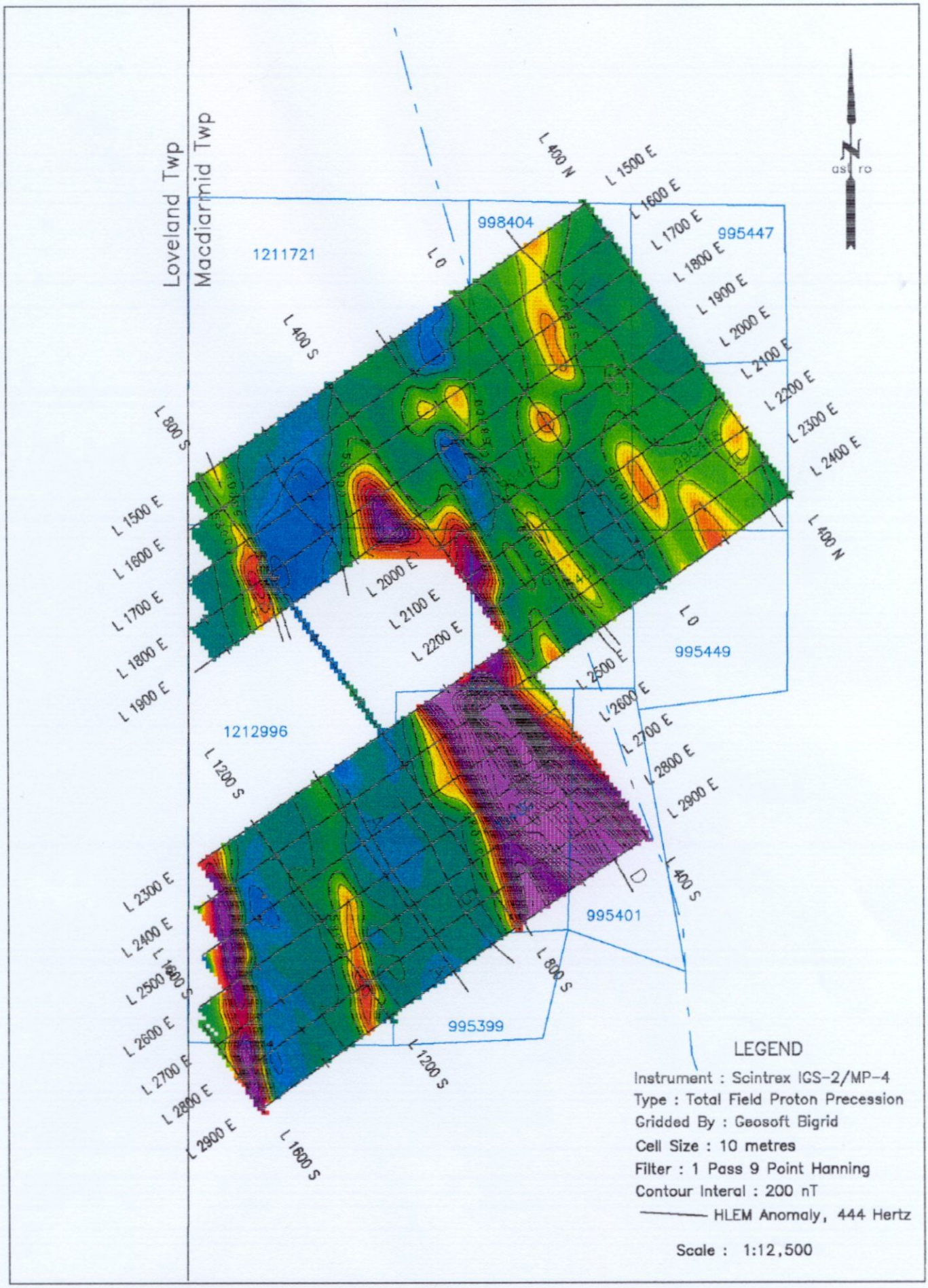

Figure 3 : Total Magnetic Field, Macdiarmid 51

contact or fault zone.

EM anomaly 'D' coincides with, and in places flanks, the large magnetic anomaly in the middle of the survey area. Anomaly 'E' is located on the flank of an anomaly which reflects a diabase dike and anomaly 'G' is located on the flank of a northwest striking magnetic high which likely represents an ultramafic.

Nov. 20, 1998
DATE

D. LONDRY
TIMMINS GEOPHYSICS LTD

REFERENCES

Ayer, J.A. and Trowell, N.F.
1998: Geological Compilation of the Timmins Area, Abitibi Greenstone Belt; Ontario Geological Survey, Preliminary **Map P.3379**, scale 1:100,000.

Middleton, R.S.
1974: Magnetic Survey of Loveland and Macdiarmid Townships, District of Cochrane; Ontario Division of Mines, GPR2, 26 p. Accompanied by **Map 2288**, scale 1 inch to ½ mile.

Ontario Geological Survey
1988: Airborne Electromagnetic and Total Intensity Survey, Timmins Area, Macdiarmid Township, Districts of Cochrane and Timiskaming Ontario; by Geoterrex Limited, for Ontario Geological Survey. Geophysical/Geochemical Series **Map 81061.** Scale 1:20,000. Survey and compilation from March 1987 to October 1987.

Pyke, D.R., Ayres, L.D. and Innes, D.
1973: Timmins-Kirkland Lake Sheet; Ontario Division of Mines, Geological Compilation Series, **Map 2205**, scale 1" = 4 miles.

Ontario 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)
W9860.00855
Assessment Files Research Imaging

42A12NE2005 2.19006 MACDIARMID 900

bsection 65(2) and 66(3) of the Mining Act. Under section 8 of the Mining Act, sesment work and correspond with the mining land holder. Questions about this thern 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.

2.19006

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

Name	Client Number
FALCONBRIDGE LIMITED	130679
Address	**Telephone Number**
571 MONETA AVE., BOX 1140	(705) 267-1188
TIMMINS, ONTARIO P4N 7H9	Fax Number (705) 264-6080
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	Office Use
LINECUTTING MAGNETIC SURVEY HLEM SURVEY	Commodity
	Total $ Value of Work Claimed $13,336
Dates Work Performed From Day 01 Month 07 Year 98 To Day 20 Month 11 Year 98 ✓	NTS Reference
Global Positioning System Data (if available) — Township/Area: MACDIARMID TWP. — M or G-Plan Number: G-3242	Mining Division Porcupine Resident Geologist District Timmins

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	Telephone Number
DOUGLAS LONDRY	(705) 523-5479
Address	**Fax Number**
347 LOACH'S ROAD, SUDBURY, ONTARIO P3E 2R3	
Name	**Telephone Number**
Address	**Fax Number**
Name	**Telephone Number**
Address	**Fax Number**

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4. Certification by Recorded Holder or Agent

I, Greg Collins (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		Date
		Nov 20, 1998
Agent's Address	**Telephone Number**	**Fax Number**
571 Moneta Ave, Timmins ON	(705) 267-1188	(705) 264-6080

0241 (03/97)

Deemed Feb. 18/1999

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

W9860-00855

	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
eg	TB 7827	16 ha	$26,825	N/A	$24,000	$2,825
eg	1234567	12	0	$24,000	0	0
eg	1234568	2	$ 8,892	$ 4,000	0	$4,892
1	995399	1	268.	1200.	–	–
2	995400	1	2000.	800.	932.	268.
3	995401	1	400.	800.	–	–
4	995402	1	1000.	800.	–	200.
5	995403	1	1200.	800.	400.	–
6	995404	1	934.	800.	–	134.
7	995447	1	267.	800.	–	–
8	995448	1	934.	800.	–	134.
9	995449	1	330.	800.	–	–
10	1211721	4	2133	1600.	533.	–
11	1212996	3	3870	1200.	470.	2200.
12						
13						
14						
15						
	Column Totals	16.	13336.	10400	2335.	2936.

I, Greg Collins (Print Full Name), do hereby certify that the above work credits are eligible under subsection 7 (1) of the Assessment Work Regulation 6/96 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
Greg Collins	Nov 29, 1998

6. Instruction for cutting back credits that are not approved. 2.19006

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):

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GEOSCIENCE ASSESSMENT OFFICE

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)

Ontario Ministry of Northern Development and Mines

Statement of Costs for Assessment Credit

Transaction Number (office use): W9860.00855

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.

Work Type	Units of work Depending on the type of work, list the number of hours/day worked, metres of drilling, kilometres of grid line, number of samples, etc.	Cost Per Unit of work	Total Cost
Linecutting	24.28km	$285.00/km	$6,907
Geophysical Survey	18.6km of HLEM	$165.00/km	$3,069
(Mag, HLEM 444,1777 Hz)	23.6 km of Mag	$100.00/km	$2360
Geophysical Report	1 Report	$500/Report	$500
Geological Consulting	2 days → Layout.	$250/day	$500.
+ Field Work.	+ Spot grid		
Associated Costs (e.g. supplies, mobilization and demobilization).			
Transportation Costs	2.19006		
Food and Lodging Costs			
		Total Value of Assessment Work	$13,336

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NOV 20 2000
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. If this situation applies to your claims, use the calculation below:

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. If verification and/or correction/clarification is not made, the Minister may reject all or part of the assessment work submitted.

Certification verifying costs:

I, Greg Collins (please print full name), 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 Senior Field Geologist (recorded holder, agent, or state company position with signing authority) I am authorized to make this certification.

Signature	Date
Greg Collins	Nov 19, 1998

0212 (03/97)

Ministry of Northern Development and Mines

Ministère du Développement du Nord et des Mines

Ontario

Geoscience Assessment Office
933 Ramsey Lake Road
6th Floor
Sudbury, Ontario
P3E 6B5

Telephone: (888) 415-9846
Fax: (877) 670-1555

Visit our website at:
www.gov.on.ca/MNDM/MINES/LANDS/mlsmnpge.htm

January 4, 1999

FALCONBRIDGE LIMITED
SUITE 1200, 95 WELLINGTON STREET WEST
TORONTO, ONTARIO
M5J-2V4

Dear Sir or Madam:

Submission Number: 2.19006

Subject: Transaction Number(s):		**Status**
	W9860.00855	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 Lucille Jerome by e-mail at lucille.jerome@ndm.gov.on.ca or by telephone at (705) 670-5858.

Yours sincerely,

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

Correspondence ID: 13234

Copy for: Assessment Library

Work Report Assessment Results

Submission Number: 2.19006

Date Correspondence Sent: January 04, 1999 **Assessor:** Lucille Jerome

Transaction Number	First Claim Number	Township(s) / Area(s)	Status	Approval Date
W9860.00855	995399	MACDIARMID	Deemed Approval	December 30, 1998

Section:
14 Geophysical MAG
14 Geophysical EM

Correspondence to:
Resident Geologist
South Porcupine, ON

Assessment Files Library
Sudbury, ON

Recorded Holder(s) and/or Agent(s):
Greg Collins
TIMMINS, ON, CAN

FALCONBRIDGE LIMITED
TORONTO, ONTARIO

F E R E N C E S

WITHDRAWN FROM DISPOSITION

.O. – MINING RIGHTS ONLY
O. – SURFACE RIGHTS ONLY
S. – MINING AND SURFACE RIGHTS

Order No.	Date	Disposition	File

NOTES

IES WITHIN THE MUNICIPALITY OF THE CITY OF

S ALONG MATTAGAMI RIVER RESERVED TO ONT
5

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 RECORDER, MINISTRY OF NORTHERN DEVELOPMENT AND MINES, FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON

REID TWP.

LOVELAND TWP.

KIDD TWP.

JAMIESON TWP.

2.19006
← 1224311
MAG, EM.

1M. 2M. 3M. 4M. 5M.
17M. 16M. 15M. 14M. 13M. 12M.

1224330 1219235 1219236 1226066 1224336 1219280 1224197 1219239 1219261 1219262 1212896 1219238 1219240 1219241 1219242 1219243 1219246 1219247 1219249 1211744 1227697 1227695 1228713 1228744 1219646 1219250 1219251 1219253 1219254 1219255 1229182 1219256

Creek, Mattagami River, Macdiarmid, ONT. HYDRO LINE

15 UNITS 112 UNITS 190179 (6 UNITS) 190088

48°37'30" 81°28'

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	R
CANCELLED	⊗
SAND & GRAVEL	S

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1913, VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 380, SEC. 63, SUBSEC 1

SCALE: 1 INCH = 40 CHAINS

FEET 0 1000 2000 4000 6000 8000
METRES 0 200 400 600 800 1000 2000 (2 KM)

DATE OF ISSUE
JAN 12 1999
PROVINCIAL RECORDING OFFICE - SUDBURY

TOWNSHIP

MACDIARMID

M.N.R. ADMINISTRATIVE DISTRICT

TIMMINS

MINING DIVISION

PORCUPINE

LAND TITLES / REGISTRY DIVISION

COCHRANE

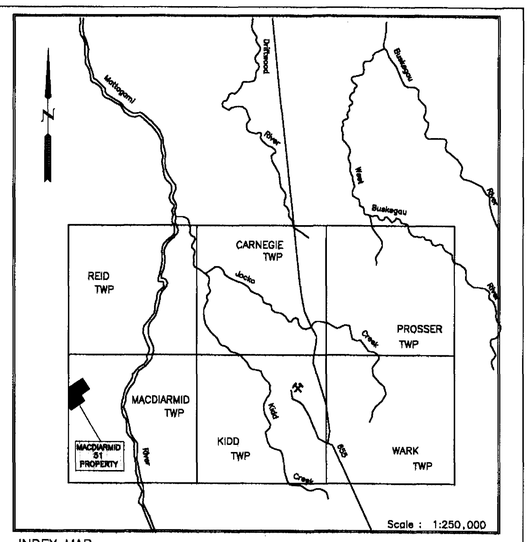
Ontario Ministry of Natural Resources — Land Management Branch

Date MARCH, 1985

Number G-3242

Surveyed L.P.
L.H.
Survey 4/85

42A12NE2005 2.19006 MACDIARMID

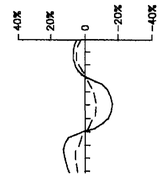


INDEX MAP

N
astro

LEGEND

Instrument : Apex Parametrics MaxMin I-5
Coil Separation : 200 metres
Frequency : 222 Hertz
Profile Scale : 1cm = 20%



In-phase ———
Quadrature — — —

——— Diabase Dike

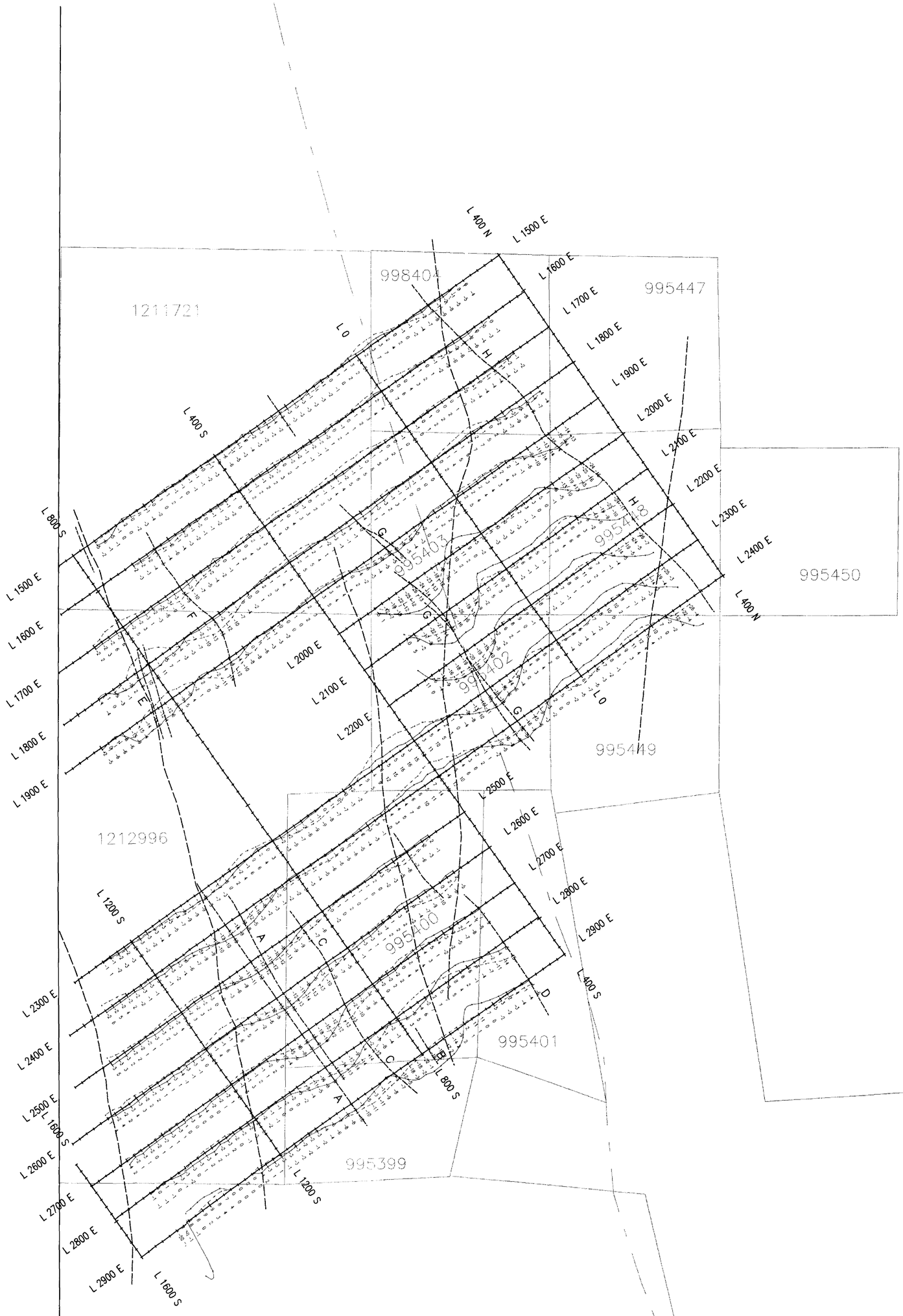
2.1

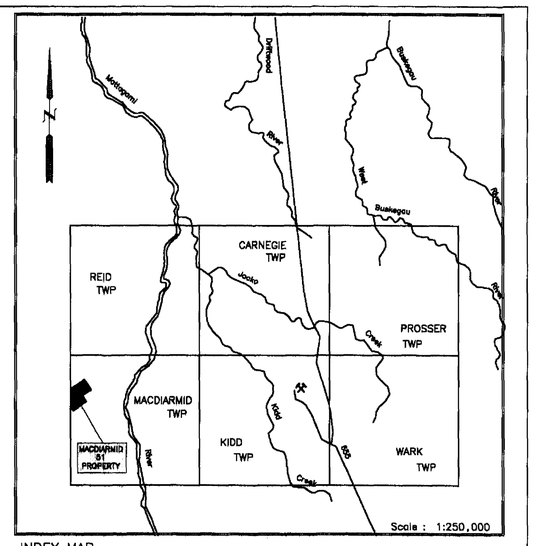
RECEIVED
NOV 20 1998
GEOSCIENCE ASSESSMENT OFFICE

0 100 m 200 m 300 m 400 m 500 m
Scale : 1:5000

FALCONBRIDGE LIMITED	
HLEM SURVEY (222 Hz)	
MACDIARMID 51	
MACDIARMID TOWNSHIP	
File : M51HL.XYZ	Date : September, 1998
NTS: 42-A/11	Proj # 8034
WORK BY : Timmins Geophysics Ltd.	

42A12NE2005 2.19006 MACDIARMID 210

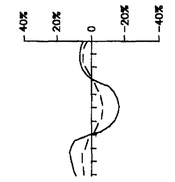




INDEX MAP

LEGEND

Instrument : Apex Parametrics MaxMin I-5
Coil Separation : 200 metres
Frequency : 444 Hertz
Profile Scale : 1cm = 20%



In-phase ——————
Quadrature — — — —

——— Diabase Dike

2.19006

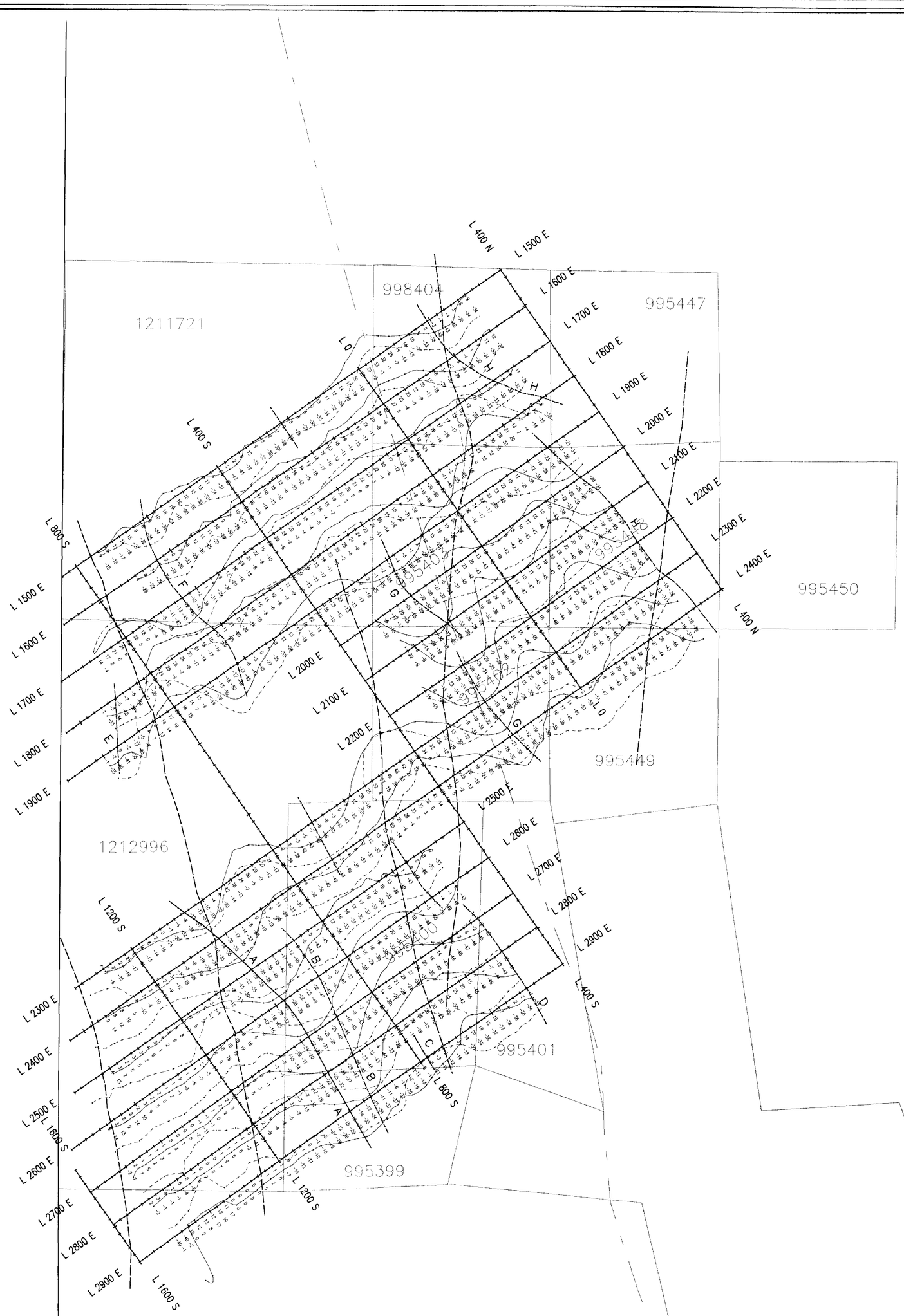
RECEIVED
NOV 20
GEOSCIENCE ASSESSMENT OFFICE

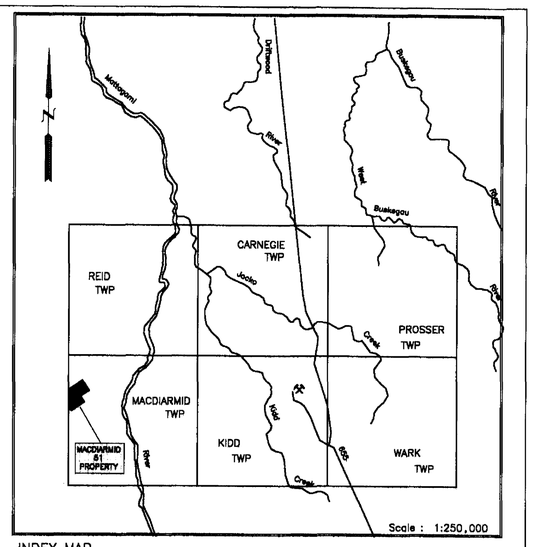
0 100 m 200 m 300 m 400 m 500 m
Scale : 1:5000

Loveland Twp
Macdiarmid Twp

FALCONBRIDGE LIMITED	
HLEM SURVEY (444 Hz)	
MACDIARMID 51	
MACDIARMID TOWNSHIP	
File : M51HL.XYZ	Date : September, 1998
NTS: 42-A/11	Proj # 8034
WORK BY : Timmins Geophysics Ltd.	

42A12NE2005 2.19006 MACDIARMID 220



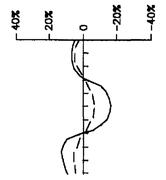


INDEX MAP

N
astro

LEGEND

Instrument : Apex Parametrics MaxMin I-5
Coil Separation : 200 metres
Frequency : 1777 Hertz
Profile Scale : 1cm = 20%



In-phase
Quadrature

Diabase Dike

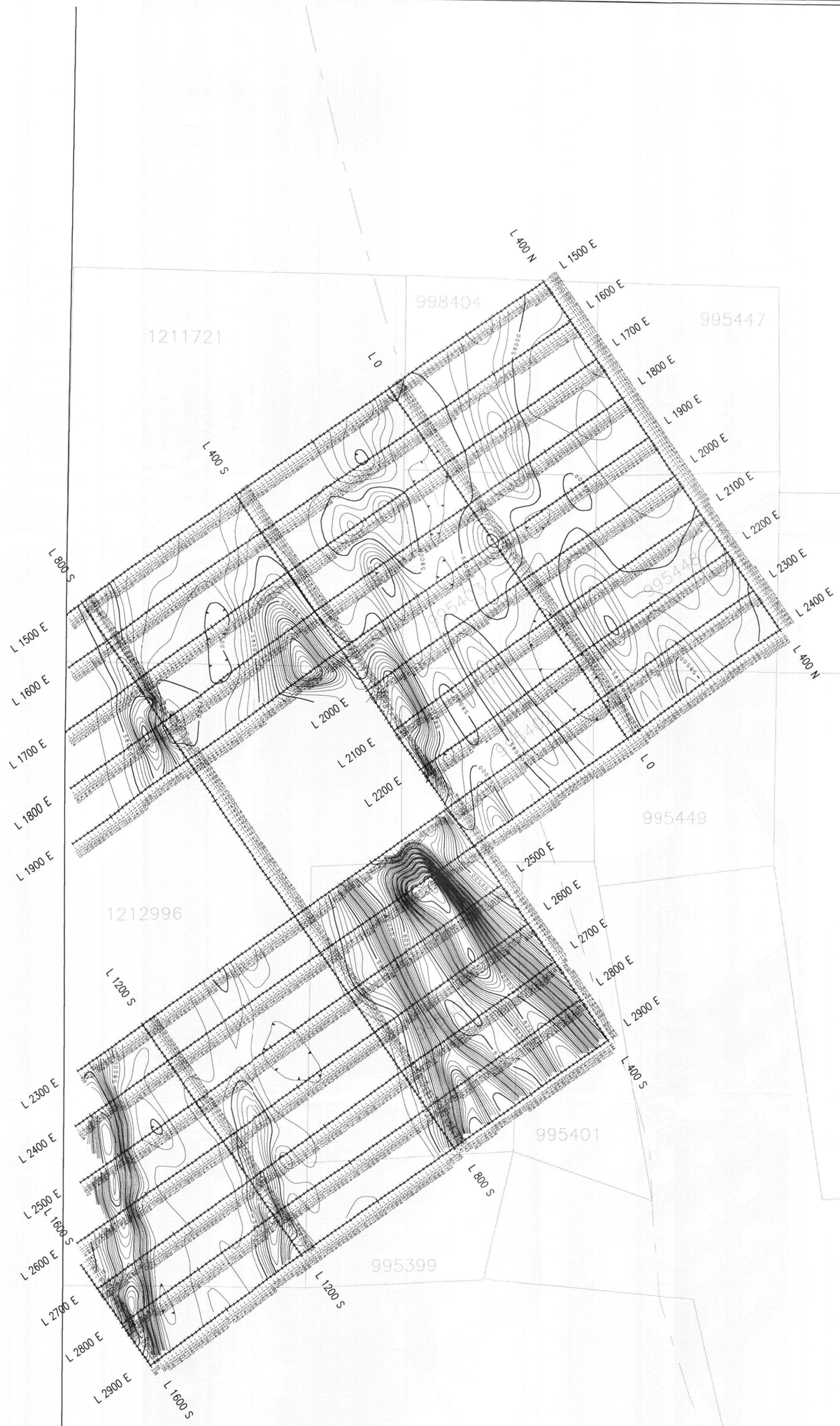
2.19006

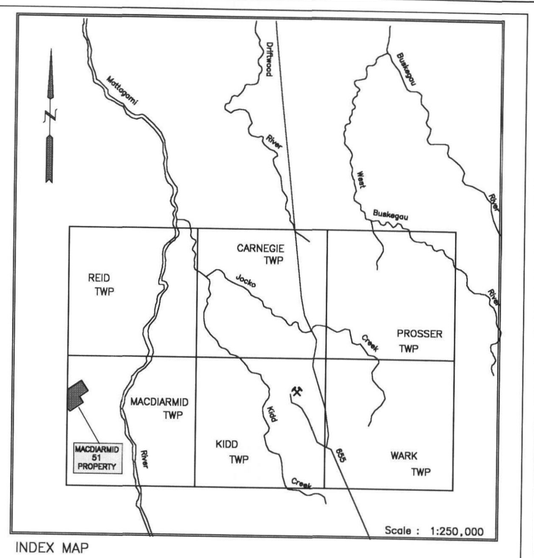
RECEIVED
NOV 20 1998
GEOSCIENCE ASSESSMENT OFFICE

0 100 m 200 m 300 m 400 m 500 m
Scale : 1:5000

FALCONBRIDGE LIMITED	
HLEM SURVEY (1777 Hz)	
MACDIARMID 51	
MACDIARMID TOWNSHIP	
File : M51HL.XYZ	Date : September, 1998
NTS: 42-A/11	Proj # 8034
WORK BY : Timmins Geophysics Ltd.	

42A12NE2005 2.19006 MACDIARMID 230





INDEX MAP

LEGEND

Instrument : Scintrex IGS-2/MP-4
Type : Total Field Proton Precession
Datum Level : 59000 nT
Contour Interval : 100 nT
Gridded By : Geosoft Bigrid
Cell Size : 10.0 metres
Filter : 1 Pass 9 Point Hanning
——— EM Anomaly, 444 Hertz

RECEIVED
NOV 20 19
GEOSCIENCE ASSESSMENT OFFICE
2.19006

0 100 m 200 m 300 m 400 m 500 m
Scale : 1:5000

FALCONBRIDGE LIMITED	
MAGNETIC SURVEY	
MACDIARMID 51	
MACDIARMID TOWNSHIP	
File : M51.XYZ	Date : September, 1998
NTS: 42-A/11	Proj # 8034
WORK BY : Timmins Geophysics Ltd.	

42A12NE2005 2.19006 MACDIARMID 240