42A16SE0004 OM92-068 CHESNEY BAY

REPORT ON THE HOTCHKIN LAKE DIAMOND PROPERTY
GRENFELL TOWNSHIP
LARDER LAKE MINING DIVISION
FOR
GREATER LENORA RESOURCES CORP.

S.J. Carmichael Consultants
Kirkland Lake, Ontario

JANUARY 11, 1993
NTS 42 A/1
PROJECT: L-037

SUMMARY

This report on the Hotchkin Lake (Leahy/Forbes option) diamond property has been prepared by S.J. Carmichael, B.Sc., FGAC, 42 Rand Avenue East, Kirkland Lake Ontario. It is a summary of exploration work completed on the Hotchkin Lake Option held by Greater Lenora Resources Corp.

This report will also be submitted to the Ministry of Northern Development and Mines for assessment credits.

The property comprises one staked 6-unit claim and two patented claims with a total area of approximately 128 Ha. The claims are located in the southwest corner of Grenfell Township, along the east shore of Hotchkin Lake and approximately 20 kilometres west of Kirkland Lake.

The option was taken on the Leahy/Forbes claims because of the presence of a strong circular elevated airborne magnetic anomaly which appeared to coincide with a circular topographic depression. This anomaly is also roughly up ice direction of kimberlite indicator minerals found on Greater Lenora's Eby Twp. property by an overburden drilling program completed in 1987.

A program of line cutting followed by detailed ground magnetometer and geological mapping was completed in July, 1992.

The circular magnetic feature was pin pointed by the magnetic survey, however, it is caused by small gabbroic plug or pod with an associated diabase dike. The topographic feature is located 600 metres south of this anomaly and does not have a magnetic expression, however, one basal till sample may be taken down-ice of this depression and tested for kimberlite indicator minerals.

Total expenditures this year were $1,800.00.

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Report on the Hotchkin Lake Diamond Property

Larder Lake Mining Division

For

Greater Lenora Resources Corp.

Introduction

This report on the Hotchkin Lake diamond property has been prepared by S.J. Carmichael Geological Consultants. It is a summary of work completed during the summer of 1992.

The author of this report completed the geological mapping and magnetic interpretation.

All field work was performed in July, 1992.

Property Location, Access and Facilities

The claim group is located in the southwest corner of Grenfell Township (NTS 42 A/1), District of Timiskaming and within the Larder Lake Mining Division, 20 kilometres west of Kirkland Lake. Access to the property is by highway 66 west from Kirkland Lake to Highway 11 and then north 4 kilometres to Grenfell Road. Grenfell Road (all weather) then winds around the east and north end of Kenogami Lake and then back down the west side of Kenogami Lake to Hotchkin Lake. The baseline crosses this road approximately 1.2 kilometres south of the Hotchkin Lake - Kenogami Lake narrows.

Topography

The claims are topographically flat, mostly covered by mixed forest and spruce. A spruce swamp (topographic depression) is centred between lines 2+00W and 3+00W, 300m south of the baseline. The magnetic anomaly is actually located on slightly higher ground,

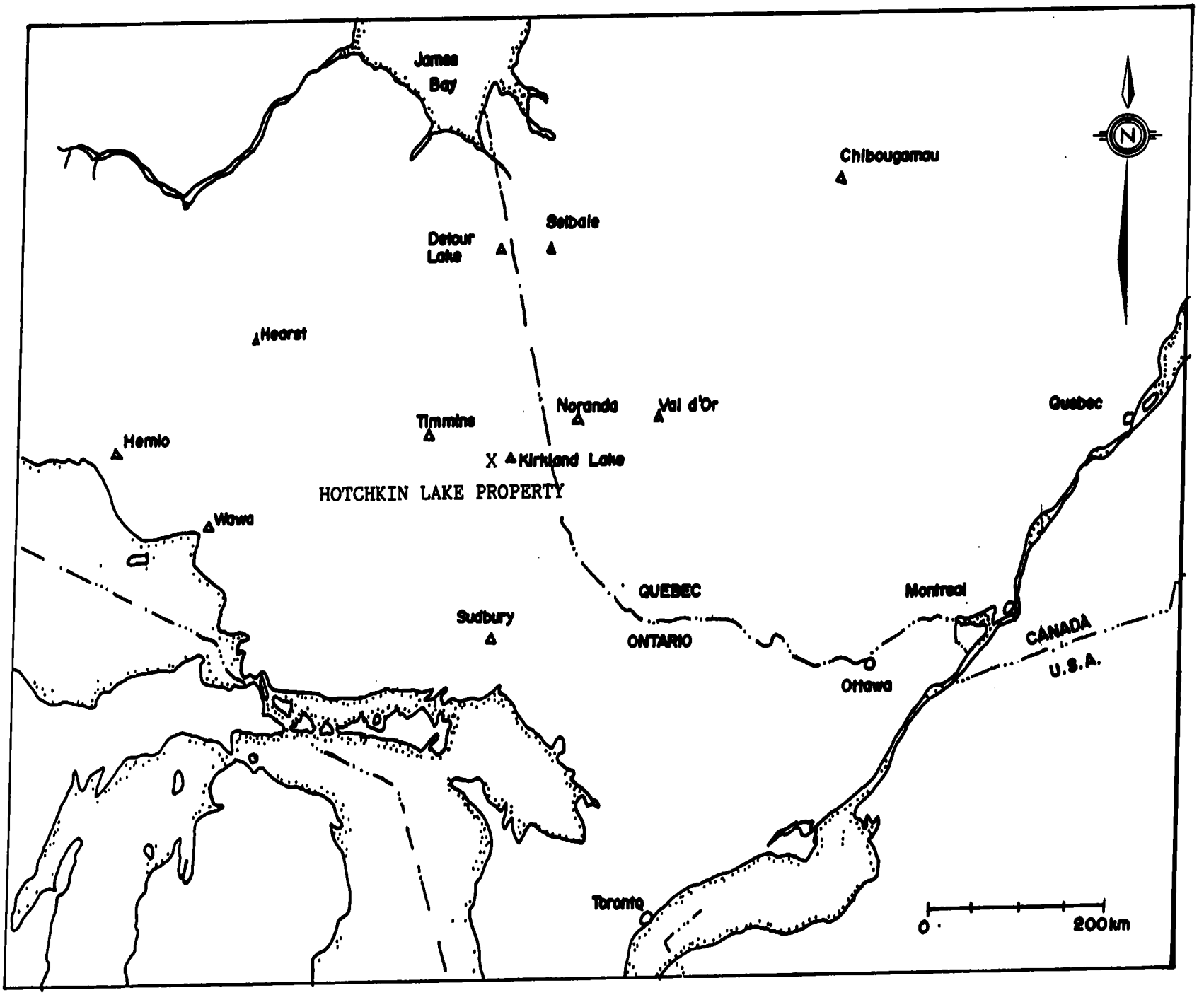


FIGURE 1 PROPERTY LOCATION PLAN

approximately 30 feet above Hotchkin Lake.

Land Tenure and Ownership

The Hotchkin Lake property comprises one staked 6-unit claim and two patented claims with a total area of approximately 128 Ha. These are held by Mike Leahy and Carl Forbes and are under option to Greater Lenora Resources Corp. Greater Lenora can earn a 60% interest in the property by carrying out $125,000.00 in work expenditures and cash payments by June 1, 1995.

Claim Number	Recorded Date	Applied Credit	Status
L-1186323	May 14, 1992	$0.00	requires $400.00 by May 14, 1994
9600	Patented	0.00	-
9599	Patented	0.00	-

PROPERTY HISTORY

No previous work has been recorded on the claims covered by the Leahy/Forbes option. Previous work in the immediate area includes Gren Teck Rsources Ltd. (c. 1983) which completed ground EM and magnetometer surveys over the central and south portions of Kenogami Lake. In 1987, Premier Explorations Inc. completed an airborne EM and magnetic survey over all of Kenogami Lake. Further south in Eby Township, Greater Lenora Resources Corp. (Mary Ellen Resources) has explored an eighty-nine claim property for gold between 1984-88. This work included overburden drilling which returned a number of samples containing kimberlite indicator minerals including pyrope garnets, chrome diopside and chromite.

Regional Geology

The property is underlain by mafic volcanics and sediments of Archean age belonging to the Kinojevis Group. These have been intruded by mafic to ultramafic plugs and dikes. Late Archean

PLAN

G-3212

TOWNSHIP

GRENFELL

M.N.R. ADMINISTRATIVE DISTRICT

KIRKLAND LAKE

MINING DIVISION

LARDER LAKE

LAND TITLES/REGISTRY DIVISION

TIMISKAMING

Scale 1:20 000

1000 Metres 0 1000 2000 Metres

1000 Feet 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 100

Contour Interval 10 Metres

EBY TOWNSHIP

1186323

1186604

1186605

1186602

1186603

Kenogami Lake

Hotchkiss Lake

KENOGAMI LAKE

Blanche

BONNE CHERE River

5330000mN

5328000mN

5540000mE

560000mE

48°06'

80°16

80°14'

SMD 3212

Timiskaming sediments are located 1/2 mile south of the Hotchkin Lake property and subsequently intruded by syenitic to lamprophyre dike and plugs. Proterozoic sediments of the Huronian Group unconformably overly the Archean sequences and may be found both immediately west and east of the Hotchkin Lake property. These have in turn been intruded by diabase dikes.

STRATIGRAPHIC COLUMN

Pleistocene Sediments*
---------- Unconformity
Huronian Sediments
---------- Unconformity (Archean/Proterozoic)
Diabase Dikes
---------- Intrusive Contact
Syenite, Lamprophyre*
---------- Intrusive Contact
Timiskaming Series
---------- Unconformity
Gabbro, diorite, peridotote*
---------- Intrusive Contact
Kinojevis Group*
Larder Lake Group

*Represents rock types located on the Hotchkin Lake option.

The area was mapped in 1962 by J. Grant with published report No. 30 (Bompas and Grenfell Townships, 1962, Map 2060). Grenfell Township was flown by a government funded AEM survey in 1979 (Preliminary Map P2262B).

1992 EXPLORATION PROGRAM

SUMMARY

The 1992 exploration program on the Hotchkin Lake property included line cutting at 100m centres over part of claim 1186323 and part of the two patents. A total of 500 metres of baseline and 3.7 kilometres of cross lines were cut at 100 metre centres.

The lines were then surveyed by magnetometer and geologically

mapped at a scale of 1:2500.

A) MAGNETOMETER SURVEY

A Geometrics G-826 Proton Precision magnetometer carried on staff was used with an accuracy of +- 5 NT. Readings were taken at 12.5 meter centres and contoured at an interval of 200 NT.

Two interesting magnetic features were located. The first is a circular magnetic feature centred on line 3+75W, 3+50N with a reading of 8,000 NT above background. This feature has a diameter of approximately 125 metres with a corresponding dipole low 75 metres north of the bullseye. Geological mapping indicates that this anomaly is caused by medium-grained magnetic (magnetite) gabbro.

The second magnetic feature is a northwest trending narrow linear feature. This appears to be a diabasic dike related to the gabbro. Although mapped as diabase, it probably is a fracture-related off-shoot of the plug and not part of the Matachewan dike swarm.

GEOLOGICAL MAPPING

Three distinct litholgies were delineated during the mapping. These include massive Mg-tholeiitic basalt, feldspar porphyry dikes and a gabbroic mass with a related diabase dike.

The basalt is dark green , fine-grained aphanitic and non-magnetic. It likely represents a Mg-Tholeiite of the Kinojevis Group. No pillows or structural features such as shearing/faulting were observed.

Feldspar porphyry dikes were observed on line 4+00W at 4+00S and 2+50N and are best exposed at the 4+00S location. They have a dark

purple/brown groundmass with white feldspar phenocrysts comprising 20% of the composition with a size averaging 2-5mm. A related fine-grained non-porphyritic syenite dike was located at 1+50W, 1+25N. Both of these dikes strike north northwest.

The gabbroic intrusive appears as a dark green to black fine to medium grained crystalline highly magnetic rock. The magnetism is caused by magnetite as no appreciable sulfides (pyrrhotite) were observed. The perimeter of the plug is finer grained than the core and resembles a typical diabase and probably extends at least 100 metres into Hotchkin Lake. The off-shooting dike is traced by magnetics and strikes roughly southeast. No outcrops were observed along the magnetic trend.

Conclusions and Recommendations For Further Work

The magnetometer survey located the bulls-eye magnetic anomaly which is caused by a small gabbroic plug. The topographic depression is located 600 metres south of the anomaly is does not have any magnetic expression. Although no indications of kimberlite or kimberlite related litholgies were found, one basal till sample may be taken down-ice of the depression and tested for kimberlite indicator minerals.

Respectfully Submitted

S. J. Carmichael

GEOLOGICAL ASSOCIATION OF CANADA FELLOW

Stewart Carmichael, B.Sc., FGAC

Appendix B

CERTIFICATE OF QUALIFICATIONS

I, Stewart J. Carmichael, of the Town of Kirkland Lake, in the District of Timiskaming, in the Province of Ontario, Canada, do hereby certify that:

1) I am a consulting geologist with address 42 Rand Avenue East, Kirkland Lake, Ontario, P2N 1X1.

2) I am a graduate of McMaster University, Hamilton, Ontario, having received the degree of Bachelor of Science, Geology from the Faculty of Science in 1982. I have since practised in the field of mineral exploration continuously since graduation.

3) I am a Fellow of the Geological Association of Canada.

4) I have no interest in the Greater Lenora Resources Corp. Hotchkin Lake property.

5) In addition to my personal knowledge of the area, I have made use of the records of the Ministry of Natural Resources of Ontario.

6) I conducted the geological mapping on the property.

Dated this 11 day of January, 1993

Stewart J. Carmichael

Stewart J. Carmichael, B.Sc., FGAC

Appendix C

Summary of Expenditures

Direct Costs

Labour, G. Kasner, 1 day @ $200.00/day	$200.00
SUB TOTAL	$200.00
OUTSIDE CONTRACTORS	
a) Line Cutting	$1,000.00
b) Geologist	600.00
SUB TOTAL	$1,600.00
TOTAL EXPENDITURES	**$1,800.00**

42A16SE0004 OM92-088 CHESNEY BAY

REPORT ON THE WESLEY TOWNSHIP PROPERTY
LARDER LAKE MINING DIVISION
FOR
GREATER LENORA RESOURCES CORP.

G.C. Kasner
Kirkland Lake, Ontario

December, 1992
NTS 42 A/16
OMIP # OM92-088

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Appendices

Appendix A - Diamond Drill Log W92-2
Appendix B - Summary of Expenditures

List of Plans and Sections

Map 1 - Drill Hole Section W92-2
Map 2 - Max MIn II Survey, 1777 Hz, 1:2500 Metric

SUMMARY

This report has been prepared to complete to OMIP reporting requirements under OMIP number OM92-088. A single diamond drill hole was drilled to test a western extension of a geophysical anomaly which had been previously delineated and diamond drilled.

Results of this hole were also disappointing in that, deep high-energy clastic sediments (turbitite sequence) of the Porcupine Group were intersected. This would indicate felsic volcanic-sedimentary contact at the top of the Hunter Mine Group. Contact lies to the south and that airborne input anomalies Max Min II and Maxi Probe EM Anomalies carried out in the above noted property, were the result of deep conductive overburden.

The total expenditures under the 1992 OMIP grant were $ 5,240.75.

Report on the Wesley Township Property
Larder Lake Mining Division

Introduction

This report on the Wesley Township mining exploration property has been prepared and is intended to fulfill OMIP final report obligations. Information on the property is derived from the records of the Ministry of Northern Development and Mines and publications by the Ontario Geological Survey. All work was performed in August, 1992.

Property Location, Access and Facilities

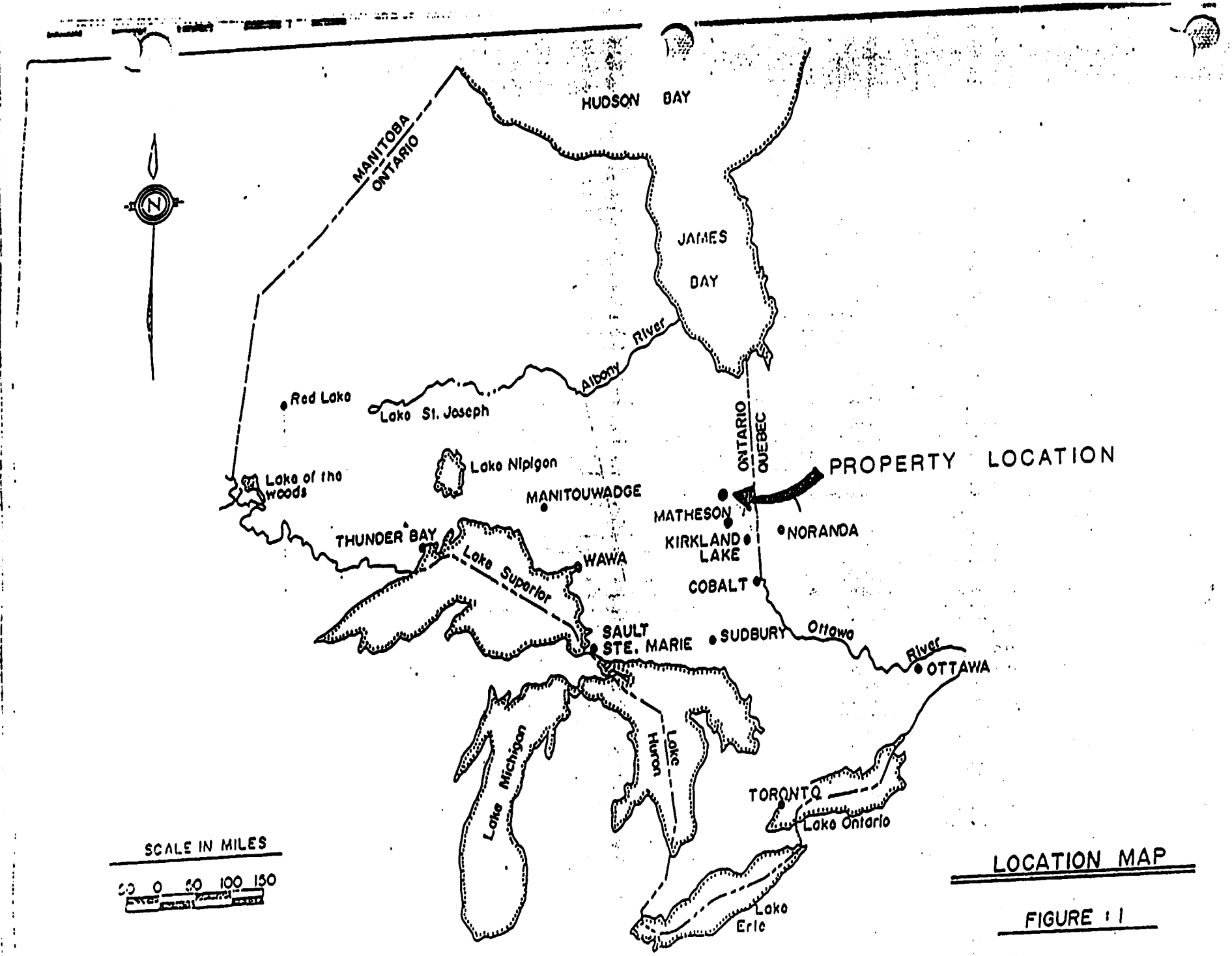
The property is located in the south central portion of Wesley Township (NTS 42 A/16), District of Cochrane and within the Larder Lake Mining Division, approximately 14 kilometres northeast of the Town of Iroquois Falls and 32 kilometres north of the Town of Matheson. Access to the area is limited although easy access may be gained by water using the Abitibi and Mistango Rivers.

Topography

The topography on the property is flat. There are no bedrock exposures and glacial lacustrine deposits are in excess of 30 meters in depth. Bedrock information in Wesley township, as well as the surrounding townships, is derived almost solely from diamond drilling.

Land Tenure and Ownership

The Wesley Township property comprises 1 staked, 6-unit mining claim (L-1186505) with a total area of approximately 240 acres.



LOCATION MAP

FIGURE 1 1

The claim is held by Glenn Kasner and was recorded on May 20, 1992 and was subsequently optioned to Greater Lenora Resources Corp., under terms of First Right of Refusal.

Property History

The property has received no work prior to the 1992 OPAP program completed by the author. (Report of the Wesley Township Property August 1992 NTS 42A/16 OPAP OM92-679-680). Previous work in the area includes, Cominco (c.1977) which drilled one hole located 1km southeast of the property and two hole drilled by Texas Gulf (c.1966) 2.5 km to the southeast. The Texas Gulf holes intersected significant volumes of sericitic rhyolitic flows containing disseminated to massive pyrite. The Cominco hole intersected intermediate tuffs and graphite.

Regional Geology

The property appears to be underlain by Archean meta-sediments and Porcupine Group. Drilling by Texas Gulf to the east intersected pyritic felsic volcanics, probably related to the Hunter Mine Group. The Porcupine sediments appear to dominate the stratigraphy through the central and north portions of Wesley Township and may extend as far north as Sherring Township, directly north of Wesley. The sediments trend roughly northwest-southeast with a steep dip. Potential base metal deposits are postulated to occur at the very top of the felsic pile capped by sediments. Such a contact between the Hunter Mine Group and the Porcupine Group, may be located in Wesley Township. It should be noted that the Kidd Creek Deposit located to the west occurs within the Kidd Rhyolites, roughly

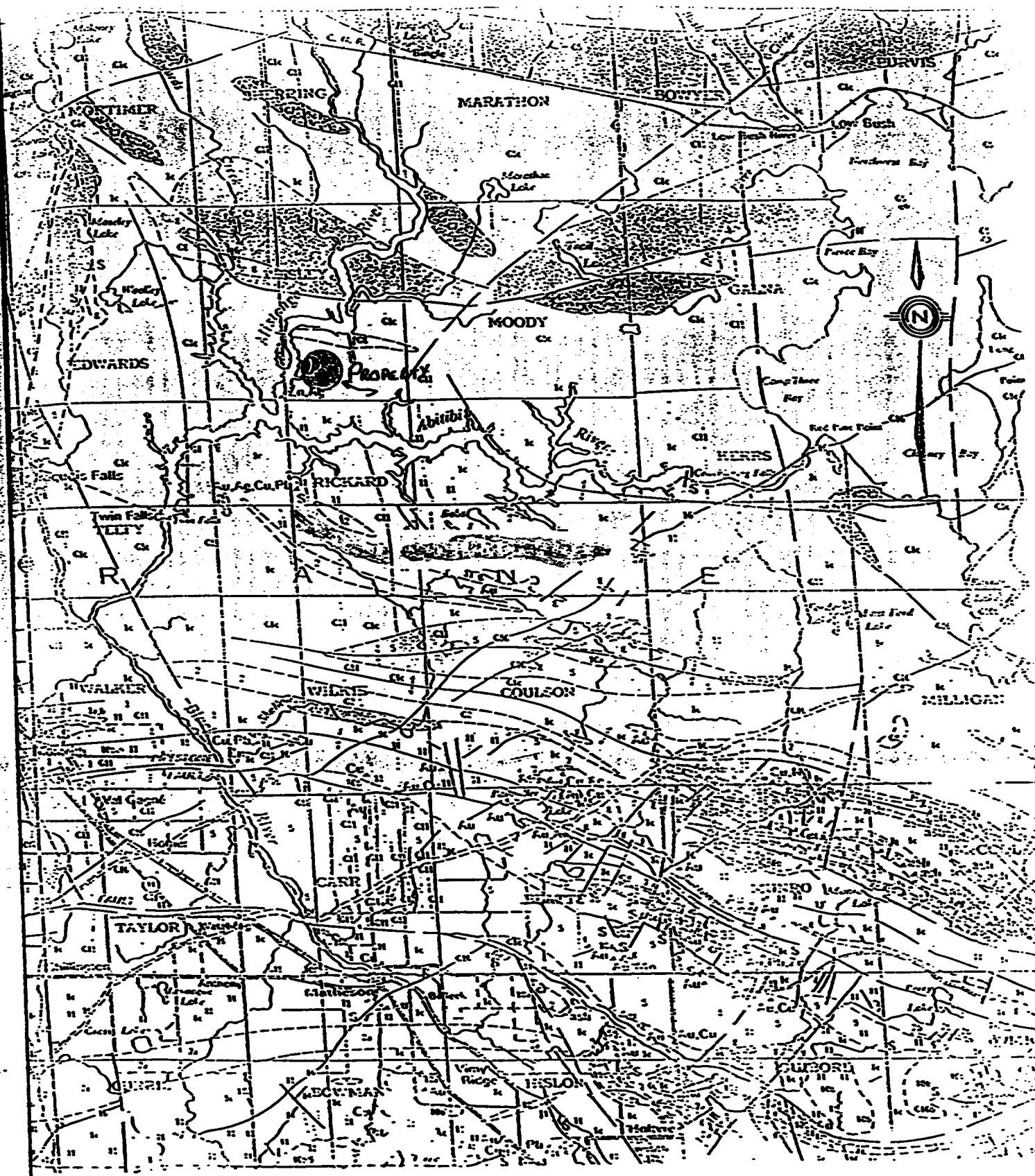


FIGURE 1A

LOCATION PLAN SCALE 1 inch=4 miles

Sketch in Ink

Part D

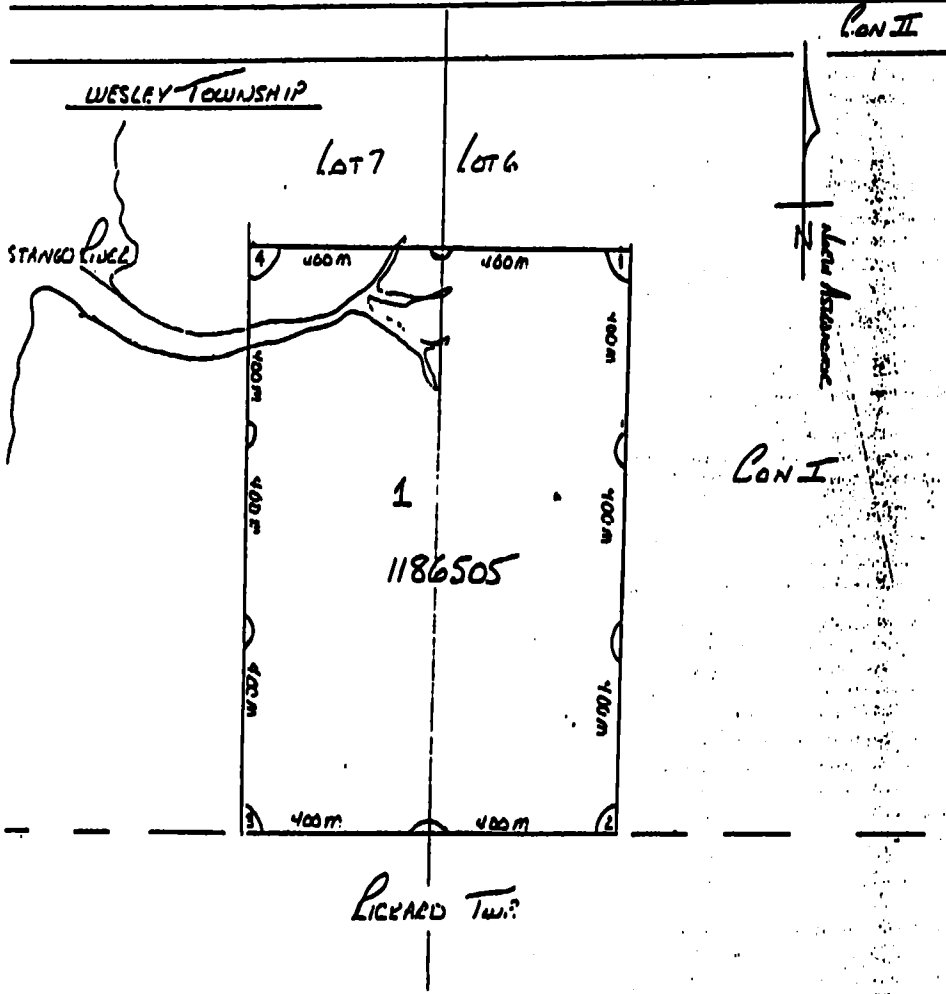
Magnetic Declination Used: 11

Scale: 1:2500

Sketch of claims listed on Part A.
Each or plan of the mining claim(s) must show the corner posts, witness posts, and line posts and the distances between the posts in metres.

Include topographic features such as lakes, rivers, creeks, ponds, etc. and developments such as hydro lines, highways, railways, pipelines, buildings, etc.

Refer to sample sketch on Part C.



Ministry of Northern Development and Mines
Ontario

Application to Record Staked Mining Claim(s)
Mining Act

Personal information collected on this form is obtained under the authority of the Mining Act. This information will be used to maintain a record and will be used for serving notices. Questions about this collection should be directed to the Provincial Manager, Mining Lands, Ministry of Northern Development and Mines, Fourth Floor, 159 Cedar St., Sudbury, Ontario, P3E 6A5, telephone (705) 670-7264.

Please Print Using Ink or Type

Name of Applicant: GLEN C KASHOR

Address: Street, City/Town/Village, Province, Postal Code: P.O. BOX 1053 KIRKLAND LAKE ONT. P2N 3K1

Transaction No.

License No.: K18421

Telephone No.

Name and Address for Service in Ontario (Required if Applicant Resides Outside of Ontario): SAME

Name of Recorded Holder: same as above OR

Telephone No.: 705 692 3083

Client No.: 150885

Address: Street, City/Town/Village, Province, Postal Code

Name and Address for Service in Ontario (Required if Recorded Holder Resides Outside of Ontario)

Mining Division: LARDER LAKE

Township(s) or Area(s) (Show Plan No.): WESLEY TWP M-613

Group Claim Number	Tag Number	No. of Mining Units Per Claim	Description if Staking in Subdivided Township (Lot No., Concession No., Section of Lot)	Staking: Post No.	Staking: Date	Staking: Time	Office Use
				Commenced			
1	1186505	6	N½ CON I SW¼ LOT 6 N½ CON I SE¼ LOT 7 S½ CON I NE SW¼ LOT 6	Post # 1	MAY 28/92	10:30	
				Completed			
				Post # 4	MAY 28/92	11:45	
			S½ CON I NE SE¼ LOT 7	Commenced			
				Completed			
				Commenced			
				Completed			
				Commenced			
				Completed			
				Commenced			
				Completed			
				Commenced			
				Completed			

Office Use Only:

FIGURE 2

contemporaneous with the Hunter Mine Group. Mineralization at the Kidd deposit is located at the top of a felsic pile, capped by sediments.

Property Geology

Since no bedrock outcrops on the property, the geology can be derived by diamond drilling only.

The one hole completed under the OMIP grant intersected high energy clastic greywacke sediments and laminated argillite and siltstone consistent with turbidite style of sedimentation. The sediments were subsequently intruded by mafic diabasic dikes. Tops directions based on flame structures and graded bedding from the drilling appear to be north. This would indicate that the felsic volcanic-sediment contact would lie to the south, assuming the stratigraphy has not been overturned.

1992 Exploration Program

Summary

Diamond Drilling

With the result of the Max Min II, 1777 Hz Survey indicating a weak conductor between lines 1+00 and 2+00 west at 0+50m north, a hole was spotted on base line 1+75 west (-60) at 20 east of grid north. Total overburden depth was 30.9 meters and the hole intersected sediments of siltstone and argillite. The hole was stopped at 71.65 meters as no conductor was indicated and the geology was not favourable for volcanogenetic massive sulfide type deposits.

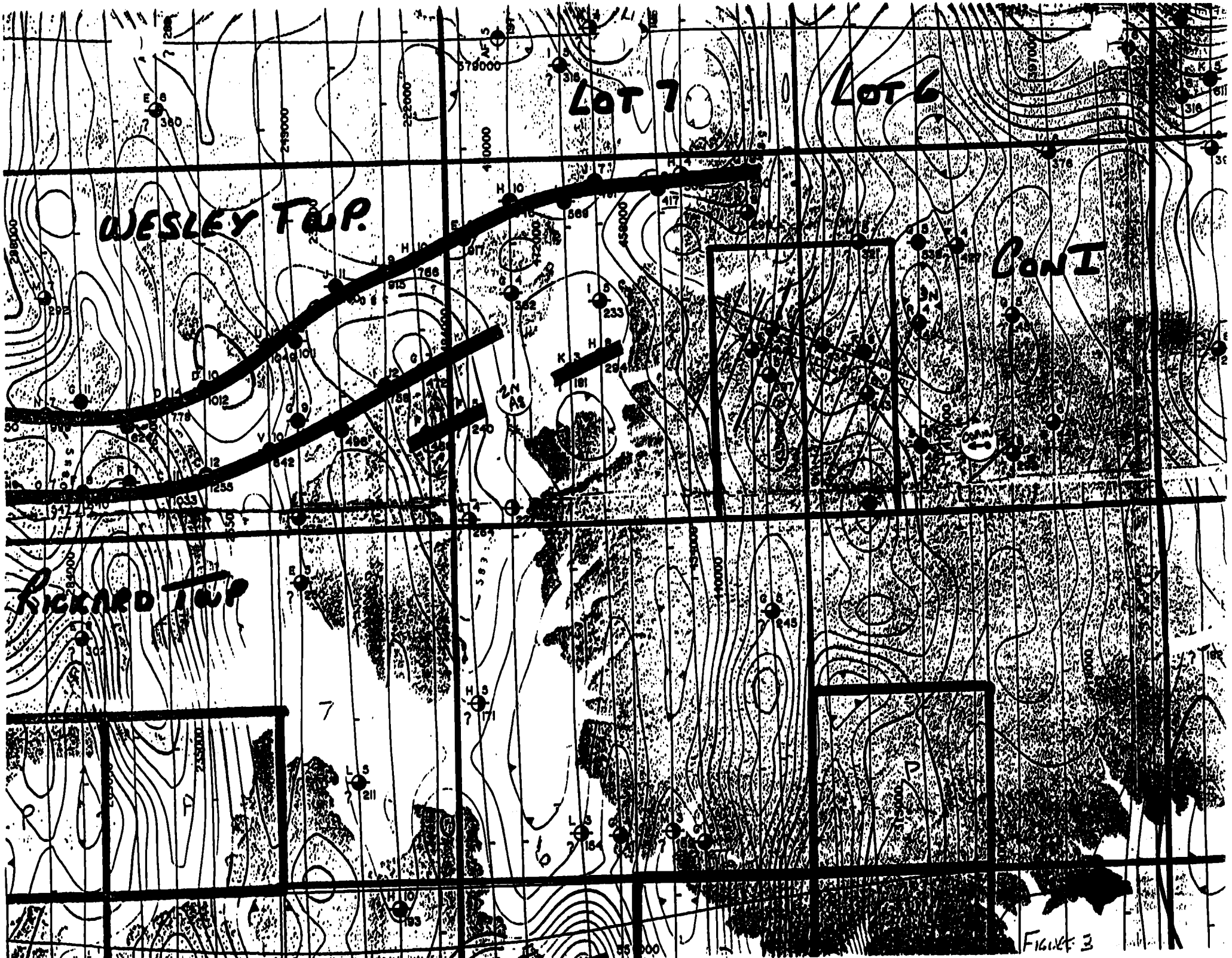


FIGURE 3

Conclusions and Recommendations For Further Work

The results of drill hole W92-2 were disappointing. The airborne input anomalies, Max Min II and Maxi Probe EM anomalies, were probably the result of deep conductive overburden. Rocks to the area are not concurrent to that of typical VMS deposits although the zinc, silver showing on the Mistango may warrant further thought. No further work is recommended on the property.

Respectfully submitted,

Glenn C. Kasner

Appendix A

DIAMOND DRILL LOG W92-2

Co-ords .0 N -175.0 E

Azimuth: 20.0

Dip: -60.0

Elevation 1000.0

Length: 71.7

DIAMOND DRILL RECORD

HOLE NO.: W92-2

Property: Kasner OPAP
Purpose: Test Max-Min II Anomaly
Drilled by: Heath and Sherwood
Date Started: August 5, 1992
Date Completed: August 8, 1992
Logged by: S.J. Carmichael, Aug. 11, 1992
Core Size: BQ
Claim Number: L-1186505

Dip Tests

from (m)	to (m)	Description	Sample No.	from (m)	to (m)	Length (m)	AU PPB	Au-2 oz/ton
.00	35.67	CASING						
35.67	39.14	GREYWACKE Coarse-grained dark green/grey wacke sediments. Mixed clast lithologies moderately stretched at 14 deg. To C.A. Generally massive with weak fracturing with quartz/calcite stringers. Trace sulfides throughout. Entire hole sequence may be turbiditic in origin. 37.41 37.53 Fine-grained diabase dike. 37.96 38.57 As above.						
39.14	47.47	MAFIC INTRUSIVE Medium-grained massive non-magnetic diabase dike. Feldspar phenocrysts up to 1cm in size. Upper and lower contacts are chilled and fine-grained.						
47.47	50.79	GREYWACKE Similar to upper unit except the clast have been less stretched with a relative lack of foliation. Clast litholgies are still mixed. Grain size shows a general decrease down section indicating tops are down-hole.						
50.79	57.44	SILTSTONE Light grey foliated siltstone. Gradational contactwith above wacke sediments. Foliation/bedding at 35 deg. To C.A.						
57.44	65.59	LAMINATED SILTSTONE AND ARGILLITE Rhythmic bedding consisting of basal wacke unit grading into siltstone capped by black carbonaceous						

from (m)	to (m)	Description	Sample No.	from (m)	to (m)	Length (m)	AU PPB	Au-2 oz/ton
		siltstone/argillite. Sequences occur from 57.44-58.05m, 58.05-58.84m, and 58.84-59.76m. Nil sulfides.						
65.59	69.02	ARGILLITE Buff grey/green laminated argillic sediments. Composition varies from carbonaceous to weakly carbonated. Laminations are at 47 deg. To C.A. Minor quartz veining throughout. Trace sulfides in carbonated sections.						
69.02	71.65	SILTSTONE Light grey massive siltstone. 1-2% black mud shards throughout. Bedding at 32 deg. To C.A. 71.65 End of Hole. Casing Pulled. Core Stored at Kenogami.						

Appendix B

SUMMARY OF EXPENDITURES

DIRECT COSTS		
A)	Labour	$ 800.00
B)	Outside Contractors	
	1) Geological Consultant	160.00
	2) Diamond Drilling	4,280.75
	Sub Total	$ 5,240.75
INDIRECT COSTS		
A)	Drill Mob and Demob	$ 0.00
B)	Travel	0.00
	Sub Total	$ 0.00
TOTAL		$ 5,240.75



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REPORT ON THE EBY TOWNSHIP DIAMOND PROPERTY
EBY TOWNSHIP
LARDER LAKE MINING DIVISION
FOR
GREATER LENORA RESOURCES CORP.

S.J. Carmichael Consultants
Kirkland Lake, Ontario

December 28, 1993
NTS 42 A/1
PROJECT: M-002

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Figure 1 - General Location Plan (following page 1)
Figure 2 - Claim Location Plan (following page 2)

Appendices

Appendix A - Certificate of Qualifications
Appendix B - Summary of Expenditures
Appendix C - Till Sample Report by Lakefield Research
Appendix D - Diamond Drill Log M-92-1 + Assay Certificates

List of Plans and Sections

Map 1 - Compilation Plan Showing Basal Till Sample Locations, Drill Hole Locations and Geophysical Grid Coverage
Map 2 - Magnetometer Survey, Central Grid, 1:2500 Metric
Map 3 - Magnetometer Survey, Eby North Prospect, South 1/2 1:2500 Metric
Map 4 - Magnetometer Survey, Eby North Prospect, North 1/2 1:2500 Metric
Map 5 - Diamond Drill Hole Section M-92-1, 1:1000 Metric
Map 6 - Coloured Vertical Gradient (Re-interpretation)
Map 7 - Coloured Total Field Magnetics
Map 8 - Coloured Apparent Resistivity

SUMMARY

This report on the Eby Township diamond property has been prepared by S.J. Carmichael, B.Sc., FGAC, 42 Rand Avenue East, Kirkland Lake Ontario. It is a summary of exploration work completed during the 1992 season.

The property comprises an original group of 58 staked (single unit) unpatented and 20 patented mining claims. Additional staking by Greater Lenora south of and on Lake Kenogami added 10 claims (32 units) to the original block. The total area is now approximately 4,400 acres.

Previous exploration on the Eby claims included airborne magnetometer and EM surveys, ground VLF-EM, magnetometer, limited I.P. and diamond drilling. A reverse circulation program completed in 1987 returned several basal till samples containing kimberlite indicator minerals and identified a number of geophysical targets as possibly being related to kimberlite intrusives.

The 1992 exploration program consisted of additional reconnaissance basal till sampling, grid cutting and magnetometer work, a reinterpretation and treatment of previous magnetometer data and one diamond drill hole which tested a circular magnetic feature.

The 1992 basal till sampling program returned 5 samples which contained kimberlite indicator minerals and the geophysical surveys have delineated a number of circular magnetic features up-ice direction from the anomalous till sites.

A program of additional magnetic surveys over the Kenogami Lake area followed by diamond drilling is recommended at an estimated cost of $90,050.00.

1992 expenses incurred on the Eby property were 42,296.00

Report on the Eby Township Diamond Property

Larder Lake Mining Division

For

Greater Lenora Resources Corp.

Introduction

This report on the Eby Township diamond property has been prepared by S.J. Carmichael Geological Consultants. It is a summary of work completed during the summer of 1992 financed in part by an OMIP grant. This work included reconnaissance basal till sampling, detailed ground magnetometer, re-interpretation of previous magnetic data and diamond drilling. Further exploration for kimberlite on the Eby claims is highly recommended and should include additional magnetic surveying. till sampling and diamond drilling. This program is estimated to cost $90,050.00.

All field work was performed in the fall of 1992.

Property Location, Access and Facilities

The claim group is located in the north central portion of Eby Township and the southwest portion of Grenfell Township, (NTS 42 A/1), District of Timiskaming and within the Larder Lake Mining Division, 20 kilometres west of Kirkland Lake.

Access to the property is by highway 66 west from Kirkland Lake, and past Highway 11. The Boland Road provides access to the north part of the property and the West Road which runs along the concession III/IV line provides access to the south portion of the claims.

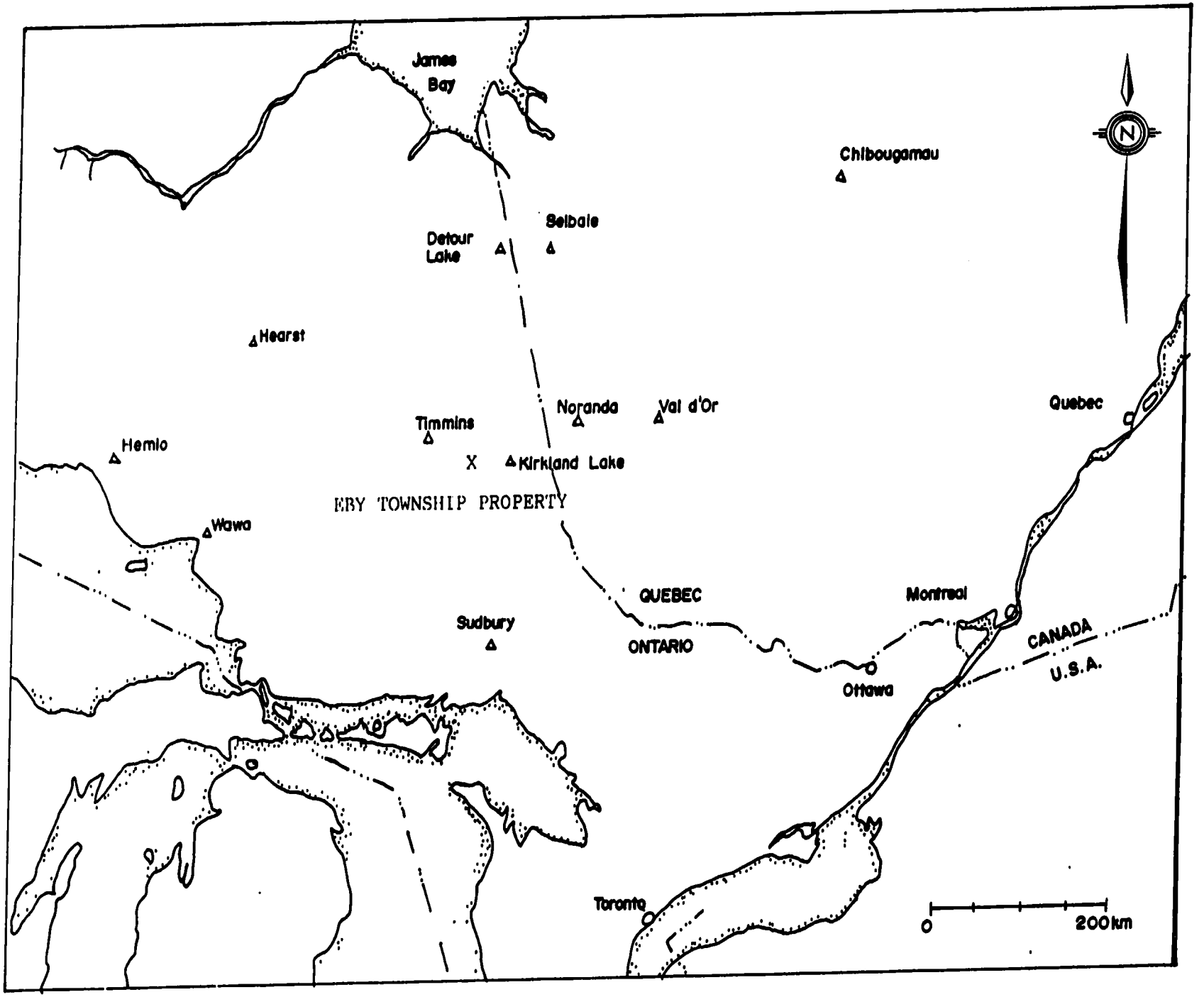


FIGURE 1 PROPERTY LOCATION PLAN

Topography

The claims are topographically flat, mostly covered by mixed forest and spruce. Kenogami Lake occupies the extreme north section of the property. Portions of the south section of the claims have been recently clearcut.

Land Tenure and Ownership

The property comprises an original group of 58 staked (single unit) unpatented and 20 patented mining claims. Additional staking by Greater Lenora south of and on Lake Kenogami added 10 claims (32 units) to the original block. The total area is now approximately 4,400 acres.

All of the original group, which were staked in January, 1982, have 200 days assessment work and are in good standing until January 29, 1994.

PROPERTY HISTORY

The claims were actively explored for gold between 1984 and 1988. This work included geological mapping, ground magnetometer and Em surveys, limited I.P. surveys, reverse circulation drilling (61 holes) and diamond drilling (29 holes).

Little encouragement was gained as a result of the diamond drilling with respect to gold mineralization. The reverse circulation program returned a number of important kimberlite indicator minerals from 7 of the holes drilled. Some of these samples were down-ice from circular magnetic anomalies, one of which was tested by diamond drilling in 1992 (M-92-1).

GREATER LENORA RESOURCES CORP.

EBY TOWNSHIP PROSPECT

CLAIM LOCATION PLAN

NTS: 42 A/SE	SCALE: 1" = 1/2 MILE
PROJECT:	DATE: DEC., 1992

SCALE: 1"=1/2 MILE

0 1/4 1/2 3/4 1 MILES

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Dec 28/92
FELLOW

BOMPAS TWP.

BURT TWP.

GRENFELL TWP.

EBY TWP.

ASTRONOMIC NORTH

HIGHWAY 11
TIMMINS

KENOGAMI LAKE

HIGHWAY 66
KIRKLAND LAKE

HIGHWAY 11
NORTH BAY

MATATCHEWAN

1186602 1186603 1186604 1186605
1186601 1186394 1186393 1186396 1186395 1186392 1186391
18637 18227 8802 8050
17402 17403
17404 12174
19129 16740 9846 12175
9848 17715
16750 16749
16769 16748 16751
640908 640903 640901 640900 640893 618673
640966 640904 640902 640899 640894 618674 618675 640905 640906
640965 640964 640898 640895 618677 618676
640962 640963 640897 640896 618678
640961 640952 640949 640948 620753 620751 620757 620747 620745 620743 640941 780582
640960 640951 640950 640947 620754 620752 620750 620748 620746 620744 640940 640944
640946 620755 640939 640942
640945 620756 640938 640943

CON. VI
CON. V
CON. V
CON 1V
CON. IV
CON III

LOT 4 | LOT 3 | LOT 2 | LOT 1 | LOT 12 | LOT 11 | LOT 10 | LOT 9 | LOT 8 | LOT 11 | LOT 6 | LOT 5 | LOT 4

PROPERTY GEOLOGY

The claims were originally staked for gold exploration as the west extension of the Kirkland Lake-Larder Lake Break passes through the property. The claims are underlain by mafic tholeiitic basalt of the Kinojevis Group with a wedge of ultramafic rocks of the Larder Lake Group lying adjacent to and south of the Break. A wedge of Timiskaming sediments mirrors the Larder Lake Group ultramafics north of the Break. Both the volcanics and Timiskaming have been intruded by syenite, lamprophyre and feldspar porphyry dikes. These porphyry intrusives are associated with anomalous, though sub-economical gold mineralization in the northeast portion of the claims. Final intrusive activity includes north-south trending diabase dikes.

REGIONAL STRATIGRAPHIC COLUMN

Pleistocene Sediments*
---------- Unconformity
Huronian Sediments
---------- Unconformity (Archean/Proterozoic)
Diabase Dikes*
---------- Intrusive Contact
Syenite, Feldspar Porphyry, Lamprophyre*
---------- Intrusive Contact
Timiskaming Series*
---------- Unconformity
Kinojevis Group*
Larder Lake Group*

*Represents lithologies located on the Eby Township property.

The area was first mapped in 1948 by J. Thomson (Vol. LVII, Part V, 1948) and by Lovell in 1972 (ODM Report 99, Map 2239).

1992 EXPLORATION PROGRAM

SUMMARY

The 1992 exploration program on the Eby claims consisted of

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S. J. Carmichael
Dec. 28/92
FELLOW

BOMPAS TWP.

GRENFELL TWP.

BURT TWP.

EBY TWP.

LEGEND

GRID COVERED BY 1992 MAGNETOMETER SURVEYS

11 ★ BASAL TILL SAMPLE

3 ● BASAL TILL SAMPLE WITH KIMBERLITE INDICATOR MINERALS

DIAMOND DRILL HOLE LOCATION

GREATER LENORA RESOURCES CORP.

EBY TOWNSHIP PROSPECT

SURFACE COMPILATION PLAN

NTS: 42 A/SE	SCALE: 1" = 1/2 MILE
PROJECT:	DATE: DEC., 1992

SCALE: 1"=1/2 MILE

0 1/4 1/2 3/4 1 MILES

(NORTH HALF)

EBY NORTH PROSPECT

(SOUTH HALF)

DDH M-92-1
AZIMUTH 160°
DIP -50°
DEPTH 304.9 M

CENTRAL GRID

KENOGAMI LAKE

ASTRONOMIC NORTH

HIGHWAY 11 TIMMINS

HIGHWAY 66 KIRKLAND LAKE

HIGHWAY 11 NORTH BAY

MATATCHEWAN

CON. VI

CON. V

CON. V

CON 1V

CON. IV

CON III

LOT 4 | LOT 3 | LOT 2 | LOT 1 | LOT 12 | LOT 11 | LOT 10 | LOT 9 | LOT 8 | LOT 11 | LOT 6 | LOT 5 | LOT 4

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

reconnaissance backhoe basal till sampling (19 samples), grid cutting and detailed magnetometer surveying (3 grids), a re-interpretation of previous airborne geophysics to include total field magnetics, vertical gradient and resistivity, and one diamond drill hole (304.9m)

A) BASAL TILL SAMPLE PROGRAM

A timberjack-mounted backhoe owned and operated by Greater Lenora collected 19 basal till samples from the Kenogami Lake area. Most of these were from Eby Township south of Lake Kenogami. Three were taken from Burt Township, west of the Eby claims. The sample sites are presented on the "Surface Compilation Plan". Two additional samples were taken, one off of the north shore of Hotchkin Lake and the other off of the northwest shore of Kenogami Lake. Each sample weighed approximately 30 kilograms +-.

The samples were then shipped to Lakefield Research for analysis. The results of the analysis are presented in appendix C. They show that two of the samples (#2,3) contained pyrope garnets classified as either G-9 or G-10. Three other samples (#3,4,8) contained picroilmenite. Samples #1,2, and 3 are down-ice direction from magnetic features delineated by ground magnetometer by Greater Lenora in 1992.

B) MAGNETOMETER SURVEYS

Three different grids were surveyed, including the Eby Central and Eby North Prospects (north and south halves). The various grid locations are shown on the compilation map.

A Geometrics G-826 Proton Precision magnetometer carried on staff

was used with an accuracy of +- 5 NT. Readings were taken at 12.5 meter centres and contoured at an interval of 100 Nano Teslas.

i) Central Grid

The central grid is characterised by highly variable magnetics indicative of iron tholeiitic flows. Two interesting magnetic anomalies are present on line 45+50W centred at 5+75S and 3+75S. They appear to be part of a north-south trending feature, possibly intrusive and likely caused by a diabase dike. Circular magnetic features, possibly representing kimberlite, do not appear to be present.

ii) EBY NORTH PROSPECT (south half)

The magnetics in this area are slightly elevated over the southeast corner. Interpretation of this data is made difficult by a lack of information to the east. A sharp magnetic break occurs between line 47+00W and 46+00W, possibly representing a north-south fault. The cause of the higher magnetics is unknown, possibly intrusive related. Expanding the grid both east and south would provide a better idea of the geometry of the anomaly.

A broad magnetic low centred between lines 49+00W and 50+00W is also worthy of investigation. Given the relatively high magnetic background (58,000 NT+), a possible kimberlite might be represented by a subtle magnetic low or high.

iii) EBY NORTH GRID (north half)

This part of the property is characterised by a roughly circular magnetic anomaly centred on line 51+00W, 18+75N, within Kenogami Lake. The presence of a dipole magnetic low to the north indicates

that his feature is probably intrusive in origin. The slightly elevated southeast trending feature may be a related dike. A smaller satellite intrusive is located on line 48+00W, 19+00N.

C) DIAMOND DRILLING

One diamond drill hole was completed in 1992. This hole tested a circular elevated magnetic feature defined by earlier geophysical surveys. This anomaly is centred on line 55+00W, 2+75S, roughly oval in geometry with a short axis width of 150 meters. The hole was collared at 55+20W, 2+12S, azimuth 16 deg. and a dip of -50 degrees.

The hole intersected Timiskaming sediments including conglomerate and greywacke. The wacke was massive, dark purple in colour, almost syenitic,and moderately to highly magnetic. A total lack of sedimentary features, possible obscured by hematite alteration, makes the rock resemble a mafic syenite rather than a sediment. Recognizable conglomerate sections down-hole are still moderately to weakly magnetic indicating the magnetism may be sedimentary in origin.

Because of the close proximity to the supposed location of the Larder Lake Break, it was decided to continue the hole to the Break. The break was intersected at 261 meters with corresponding alteration of Timiskaming sediments over a width of 85.4 meters. Rock types below the Break consisted of brecciated and highly altered ultramafic to mafic volcanics of the Larder Lake Group. Alteration included sericite/carbonate (buff colour) and quartz +- carbonate flooded basaltic komatiite flows (ultramafic carbonate).

This alteration is confined to the ultramafics distance of 39 meters from the Break. A sharp contact with tholeiitic basalts marked the end of the alteration. The hole ended in pristine tholeiitic basalt at 304.9 meters.

Quartz veining occurs within both the altered Timiskaming and the altered ultramafics, generally barren of sulfides. Although assayed for gold, neither the altered Timiskaming, altered ultramafics or quartz veins/stringers returned anomalous gold values.

Conclusions and Recommendations For Further Work

Basal till sampling by Greater Lenora has returned a number of samples containing kimberlite indicator minerals including either G-9, G-10 garnets, chrome diopside and picroilmenite. These samples are located close to the down-ice direction of circular magnetic features delineated by a re-interpretation of previous airborne magnetics and 1992 ground magnetometer survey.

One of the circular magnetic features was tested by one diamond drill hole in 1992. This hole intersected moderately magnetic Timiskaming greywacke and cut the west extension of the Kirkland Lake-Larder Lake Break.

Additional work is highly recommended to follow up the till sampling work and existing magnetometer surveys. This work should include:

1) A program of initial line cutting followed by detailed ground magnetometer is recommended on claim 1186391 and claims in Kenogami Lake. The re-interpreted airborne survey has located several circular magnetic features north of the existing grid.

2) Expanding the Eby North Prospect-south half grid to the east and south followed by magnetic surveys.

4) Additional till sampling, both on the Eby claims and within the general Kenogami Lake area.

3) Diamond drilling of previously delineated magnetic targets, particularly the lake anomaly on the Eby North Prospect, north half as well as targets defined on the lake claims and claim 1186391 above claim. This program is estimated to cost $90,050.00.

Line Cutting (1186391)	$1,600.00
Detailed Magnetometer, 6.5 km @ $70.00/km	450.00
Till samples, 10 sample @ $400.00/sample	4,000.00
Diamond drilling, 4,200' @ $20.00/ft all in	84,000.00
TOTAL BUDGET (includes overhead at 5%)	$90,050.00

The total expenses incurred during the 1992 program were $42,296.00

Respectfully Submitted,

Stewart Carmichael, BI Sc., FGAC

GEOLOGICAL ASSOCIATION OF CANADA
S. J. Carmichael
FELLOW

Appendix A

CERTIFICATE OF QUALIFICATIONS

I, Stewart J. Carmichael, of the Town of Kirkland Lake, in the District of Timiskaming, in the Province of Ontario, Canada, do hereby certify that:

1) I am a consulting geologist with address 42 Rand Avenue East, Kirkland Lake, Ontario, P2N 1X1.

2) I am a graduate of McMaster University, Hamilton, Ontario, having received the degree of Bachelor of Science, Geology from the Faculty of Science in 1982. I have since practised in the field of mineral exploration continuously since graduation.

3) I am a Fellow of the Geological Association of Canada.

4) I have no interest in the Greater Lenora Resources Corp. Eby Township property.

5) In addition to my personal knowledge of the area, I have made use of the records of the Ministry of Natural Resources of Ontario.

6) I conducted the magnetometer survey and geological mapping on the property.

Dated this 28 day of December, 1992

Stewart J. Carmichael

Stewart J. Carmichael, B.Sc., FGAC

Appendix B

Summary of Expenditures

Line Cutting	$3,180.00
Geophysical Surveys and Report	1,874.00
Sub Total	$5,054.00
Basal Till Sampling, Analysis and Gold Assays	$18,059.00
Sub Total	$18,059.00
Diamond Drilling (all in including report)	$17,169.00
TOTAL	$40,282.00
Overhead @ 5%	2,014.00
GRAND TOTAL	**$42,296.00**

Appendix C

Till Sampling Program By Lake field Research

LAKEFIELD RESEARCH

November 30, 1992

Greater Lenora Resources Corporation
6 Al Wende Avenue
P. O. Box 546
Kirkland Lake, Ontario
CANADA P2N 3J5

Attention: Mr. Glenn Kasner

Re: LR Project No. 8900-554

Dear Glenn:

With reference to the nineteen till/esker samples, submitted to the Lakefield Research mineralogical laboratory for processing to recover kimberlitic indicator minerals, two sample concentrates (#'s 2 and 3) contained pyrope garnets (one each), tentatively classified as G9 or G10 compositions as defined by Dawson and Stephens (1975), and sample #2 also contained a single grain of chrome diopside. Variable amounts of possible picroilmenite occurred in #'s 1, 2, 3, 4 and 8. The mineral grains (pyrope and diopside) are packaged in separate vials and will be retained for possible microprobe analyses.

A summary till processing flowsheet diagram has been attached. The indicator mineral examination was carried out on the -20+60 mesh concentrates. The resultant data are enclosed. Details of the product weight distributions can be provided if required.

The mineral concentrates are enclosed. Several sample fractions including heavy liquid and Magstream lights and hand magnetics are in storage and can be shipped upon request.

The results of the mineralogical examination are summarized in the attached tabulation. The final HLS concentrates were dominated by red-pink and lesser orange to pink-orange and amber almandine-dominant garnets, with oxides and lithic fragments.

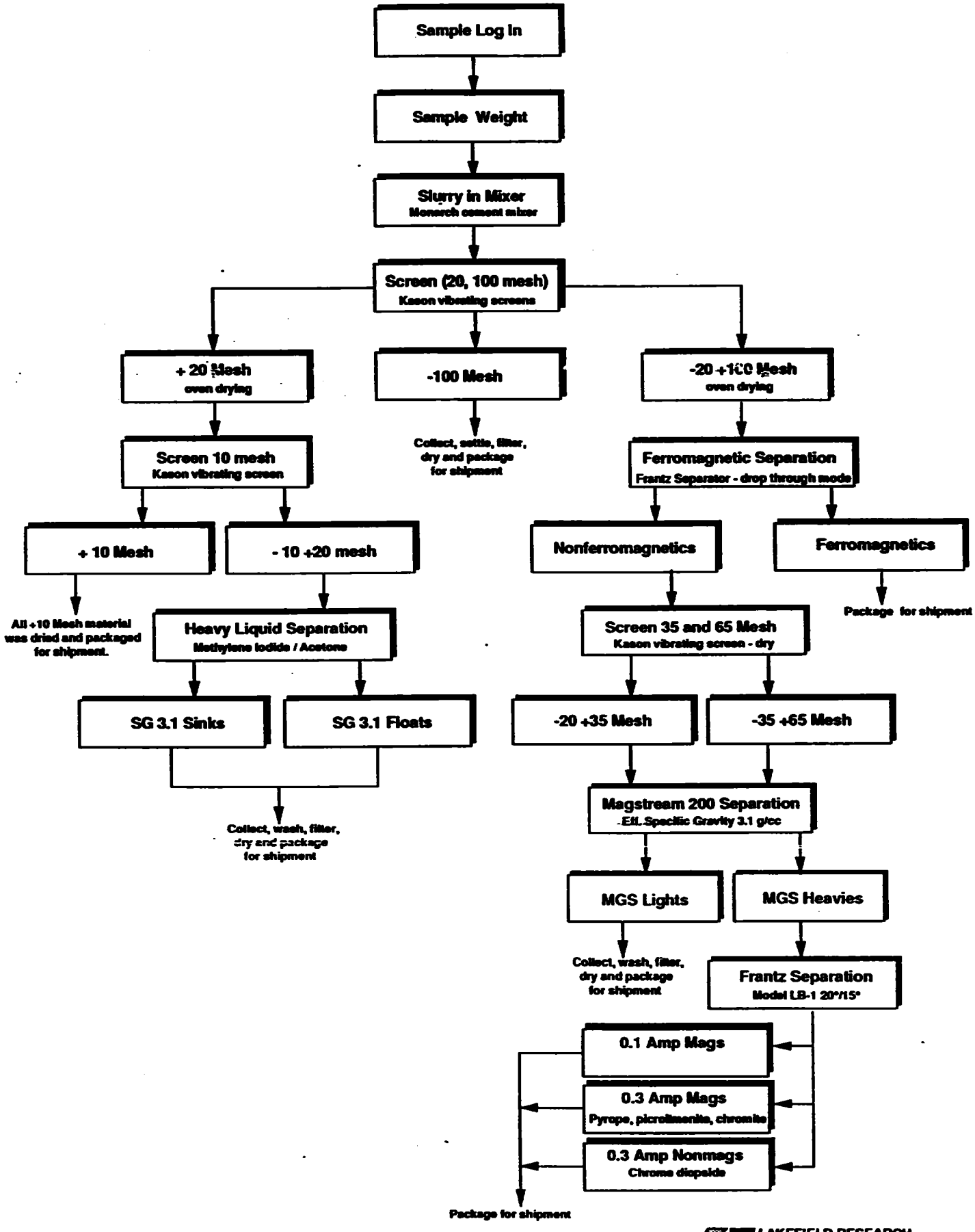
The invoice is attached. If there are any questions, please do not hesitate to call me.

Best regards,
LAKEFIELD RESEARCH

Greg Davison

J.G. Davison, M.Sc.,
Project Manager, Mineralogy

Microdiamond Flowsheet - Treatment of Exploration Samples (Glacial Tills, Eskers, Stream Sediments) by Density / Magnetic Separation



Project # 8900-554 November 30, 1992

INDICATOR MINERAL SPREADSHEET

Sample #	Indicator Minerals			Garnet								Comments
	Chrome Pyrope	Chrome Diopside	Ilmenite	Dark Amber	Light Amber	Orange	Pink-Orange	Pink	Red-Pink	Red ±Bm	Chpgn	
1			?		x	x	x	x		x		HL Conc.
2	1 mauve	1	x		x		x	x				HL Conc.
3	1 mauve		x		x	x	x	x		x		HL Conc.
4			?		x		x	x		x		HL Conc.
5						x	x	x				HL Conc.
6					x		xx	x		x		HL Conc.
7					x	x	x	x	x	x		HL Conc.
8			x			x	x	x				High rock frags
9				x		x	x	x				HL Conc.
10					x	x	x	x		x		HL Conc., oxides
11							xx	xx		x		HL Conc.
12						x	x	xx				Rock frags.
13						x	x	x				HL Conc.
14					x	x	x	x		x		Rock frags.
15							x	x				HL Conc.
16						x	x	x				
17					x	x	x	x		x		Rock frags.
18					x	x	x	x		x		HL Conc.
19					x	x	x	x				Rock frags.

x indicates presence

Project : 8900-554 **SAMPLE STATUS** November 30, 1992

Sample #	Weight (kg)	Processing Complete (+65mesh)	Microscopy	Shipping Date
1	74.4			Dec. 4, 1992
2	66.8			Dec. 4, 1992
3	27.2			Dec. 4, 1992
4	39.2			Dec. 4, 1992
5	29.4			Dec. 4, 1992
6	28.4			Dec. 4, 1992
7	42.0			Dec. 4, 1992
8	26.2			Dec. 4, 1992
9	33.4			Dec. 4, 1992
10	35.6			Dec. 4, 1992
11	30.6			Dec. 4, 1992
12	22.0			Dec. 4, 1992
13	45.0			Dec. 4, 1992
14	22.6			Dec. 4, 1992
15	14.0			Dec. 4, 1992
16	23.8			Dec. 4, 1992
17	17.0			Dec. 4, 1992
18	28.4			Dec. 4, 1992
19	26.8			Dec. 4, 1992

Indicates completion

Appendix D

Diamond Drill Log M-92-1 + Assay Certificates

GREATER LENORA RESOURCES CORP.

[illegible]

Purpose: Test Mag. Anomaly
Drilled by: Heath and Sherwood
Date Started: Dec. 17, 1992
Date Completed: Dec. 21, 1992
Logged by: [illegible]
Core Size: BQ
Claim Number: [illegible]

Dip: -50.0

Elevation: [illegible]

Length: 304.9

Dip Tests

304.0 180.0 -43.0

From (m)	To (m)	----Description----	Sample No.	From (m)	To (m)	Length (m)	Au ppb	Au-1 oz/ton

.00 [illegible] CASING

[illegible] [illegible] CONGLOMERATE

Dark green/grey Timiskaming conglomerate and greywacke. Locally fractured and weakly brecciated with [illegible] alteration. Mixed clast lithologies.
[illegible] Conglomerate.
[illegible] Greywacke.
[illegible] Fault Narrow seam of gouge, dip unobtainable.

[illegible] [illegible] HEMATIZED GREYWACKE

Dark green/purple wacke or tuff. Poorly bedded. Hematitic alteration may have destroyed primary textures. Moderately magnetic throughout (anomaly). [illegible] quartz/calcite stringers and veins throughout.
[illegible] Fault Brecciated, possible healed fault.

[illegible] [illegible] HEMATIZED CONGLOMERATE

[illegible]
[illegible] to [illegible].
[illegible] Fault Brecciated with a narrow seam of clay gouge.
[illegible] [illegible] Fault zone. Brecciated gouge at [illegible]
[illegible]

(m)	(m)		Sample No.	(m)	(m)	(m)	PPM	Carbon
	173.00	176.00 Laminated siltstone and wacke, bedding @ 174.0m at 58 deg. To C.A.						
176.00	201.44	ALTERED TUFFACEOUS SEDIMENTS						
		Contact of upper unit with an increase in sericite and carbonate alteration. Conglomerate sections are buff brown to tan. Wacke sections are are dark purple/mauve coloration. Occasional jasper pebbles throughout. 1% fuchsite clasts and seams.						
	190.91	197.00 Bedded siltstone and wacke.						
	197.60	Fault Narrow seam of gouge at 30 deg. To C.A.						
	199.15	209.71 Silicified/quartz-flooded.						
	209.46	210.51 Quartz vein, dip 47 deg. To C.A. - barren.						
	213.10	213.15 Quartz vein, dip 60 deg. To C.A. - barren.						
	222.10	223.11 Dark purple/brown wacke and conglomerate.						
	226.00	Fault Narrow seam of gouge, dip 40 deg. To C.A.						
	226.07	Fault Healed gouge, dip 55 deg. To C.A.						
	251.74	254.57 Ground core.						
	256.10	259.50 Intensely fractured above wacke. 5% quartz stringers and flooding. Trace pyrite in veins.	114311	256.00	256.50	1.50	2.0	nil
	[illegible]	[illegible]	114312	256.50	257.00	1.50	2.0	nil
	259.50	261.00 Becoming highly brecciated with sericite/carbonate alteration. 10% quartz flooding and stringers. Trace sulfides.	114313	259.50	261.00	1.50	9.0	nil
201.44	261.90	LARGE LAKE FAULT						
		Dark brown clay gouge. Lower silicified breccia contact at 65 deg. To C.A.						
261.90	319.00	ULTRAMAFIC BRECCIA						
		Dull green siltstone to sericite ultramafic breccia. 10-15% fragmented quartz +- carbonate flooding and stringers. Speckled with carbonated leucoxene. Local [illegible] with sericite alteration, [illegible] and stringers. Tr sulphides.						
	261.90	263. Breccia with 20% quartz/mauve flooding.	114314	261.90	263.00	1.10	12.0	nil
	[illegible]	[illegible] with 10% fragmental [illegible]	114315	263.00	264.50	1.50	5.0	nil
	[illegible]	[illegible]	114316	264.50	266.00	1.50	5.0	nil
	[illegible]	[illegible]	114317	266.00	267.00	1.50	15.0	nil
	[illegible]	as above.	114318	267.00	268.50	1.50	10.0	nil
	[illegible]	as above.	114319	268.50	270.00	1.50	5.0	nil

(m)	(m)		No.					
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		and brecciated.						
		[illegible]	114320	271.50	[illegible]	1.50	[illegible]	[illegible]
		brecciated.						
		274.20 Relic polysuturing.						
280.78	282.83	ULTRAMAFIC CARBONATE						
		Brok grey/green ultramafic carbonate. 10% shredded quartz. Mil sulfides.						
		282.00 283.30 As above.	114321	282.00	283.30	1.30	45.0	Nil
282.83	287.77	BUFF ULTRAMAFIC CARBONATE						
		Light tan carbonated ultramafic. 20-30% quartz flooding. Minor seams of at to 4% fine pyrite.						
		282.83 285.00 As above, trace pyrite.	114322	283.83	285.00	1.17	5.0	Nil
		285.00 286.00 As above. 1% disseminated pyrite.	114323	285.00	286.00	1.00	23.0	tr
		286.00 287.00 As above.	114324	286.00	287.00	1.00	9.0	tr
		287.00 287.77 Bleaching grey to color, 2% quartz flooding.	114325	287.00	287.77	.77	18.0	Nil
[illegible]	[illegible]	[illegible]						
		[illegible]						
		[illegible]						
		Buff tan coloration, 2% quartz flooding. Lark grey [illegible]						
		289.07 290.18 As above.	114331	289.07	290.18	1.11	7.0	tr
290.18	294.50	[illegible]						
		[illegible]						
[illegible]	[illegible]	[illegible]						
		[illegible]	114336	301.00	[illegible]	.97	15.0	Nil
300.97	[illegible]	[illegible]						
		[illegible]						

GEOLOGICAL ASSOCIATION OF CANADA
S. J. Carmichael
Dec 28/97
FELLOW

ACCURASSAY LABORATORIES
A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALE, ONTARIO
BOX 426
KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1
TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T

Certificate of Analysis

46517

Greater Lenora Resources
P.O. Box 546
KIRKLAND LAKE, Ontario
P2N 3L1

December 30 92

Work Order # : 920446
Project :

SAMPLE NUMBERS Accurassay	Customer	Gold ppb	Gold Oz/T	
261782	114313	<5	<0.001	
261783	114314	<5	<0.001	
261784	114315	<5	<0.001	
261785	114316	9	<0.001	
261786	114317	<5	<0.001	
261787	114318	12	<0.001	
261788	114319	5	<0.001	
261789	114320	5	<0.001	
261790	114321	<5	<0.001	
261791	114322	5	<0.001	
261791	114322	5	<0.001	Check
261792	114323	23	0.001	
261793	114324	9	<0.001	
261794	114325	<5	<0.001	
261795	114326	<5	<0.001	
261796	114327	<5	<0.001	
261797	114328	<5	<0.001	
261798	114329	<5	<0.001	
261799	114330	<5	<0.001	
261800	114331	5	<0.001	
261800	114331	9	<0.001	Check

GB 93-E93-I
Hole

Per: G. Duncan

LF-30

ORIGINAL

42A16SE0004 OM92-068 CHESNEY BAY

REPORT ON THE RICKARD TOWNSHIP PROPERTY
LARDER LAKE MINING DIVISION
FOR
GREATER LENORA RESOURCES CORP.

S.J. Carmichael Consultants
Kirkland Lake, Ontario

May, 1992
NTS 42 A/16

EXECUTIVE SUMMARY

This report on the Rickard Township property has been prepared by S.J. Carmichael, B.Sc., FGAC, 42 Rand Avenue East, Kirkland Lake Ontario. It is a summary of exploration work completed in 1992 including that by Glenn C. Kasner under an OPAP grant and subsequent follow-up work by Greater Lenora Resources Corp., the optioner of the original three-claim group.

Greater Lenora optioned the original three claims based on the results of the OPAP program and a report by geologist A. Beecham who recognized similarities between mineralization in the initial drill hole and typical VMS style mineralization.

Greater Lenora then proceeded to stake an additional group contiguous with the three claims giving a total of 27 claims with an area of 3152 Ha or 7880 acres. All but 448 Ha are located in Rickard Township with the remainder located in Knox Township.

The additional geophysical surveys and diamond drilling program (4 holes, 740.5m) indicates that the Zn/Pb mineralization is fracture related and remobilized from some source outside of the drilled area.

The whole rock geochemistry indicates that a major lithological break occurs within the area tested. The upper volcanic sequence is dominated by tholeiitic andesites/basalts and the lower (south side of the graphitic horizon) is dominated by more calc-alkaline intermediate to felsic volcanics. Sodium depletion and magnesium enrichment are absent from the area drilled indicating that if a VMS deposit is the ultimate source of the zinc and lead mineralization, it is still distal from the drilled area. However, the lithological break and metal values intersected require additional testing which may point towards a source area.

Other EM anomalies located by the Max Min survey should also be tested and further geophysics to locate possible deep-seated conductors and additional INPUT conductors, particularly close to known rhyolitic horizons, is highly recommended.

42A16SE0004 OM92-088 CHESNEY BAY

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VOLUME II

Report on geophysics by R. Meikle, Rayan Explorations Ltd.

Report on the Rickard Township Property

Larder Lake Mining Division

For

Greater Lenora Resources Corp.

Introduction

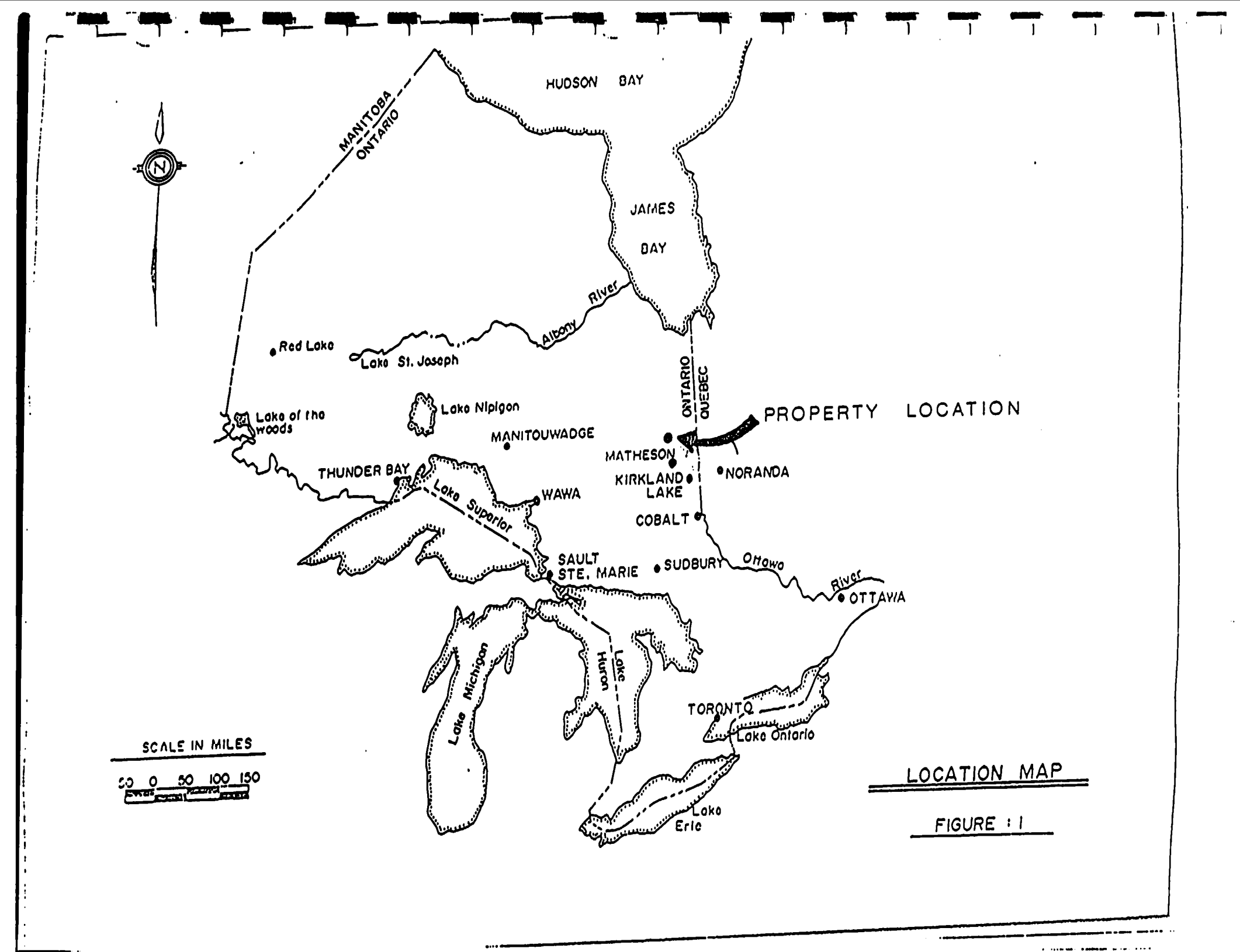
This report on the Rickard Township mining exploration property has been prepared by S.J. Carmichael Geological Consultants. It is a summary of exploration completed during the 1992 season and includes work on the original three claims completed by an OPAP grant and follow-up exploration by Greater Lenora.

The initial work funded by OPAP included 6.8 km of magnetometer and Max Min II HEM (100 m coil) followed by one diamond drill hole (R92-1, 167.6 m, the "discovery hole"). The second phase of work by Greater Lenora included 39.6 km of magnetometer and Max Min II HEM (100 m coil) plus an additional 8 km of Max Min II over the southwest portion of the gridded property using a 200 m coil. This was followed by four diamond drill holes totalling 740.5 metres. Two of these holes (R92-3,4) were located 50 metres east and west of R92-1, one undercut of R92-1 (R92-2A) and one hole tested a weak HEM anomaly 900 metres east of R92-1. An initial attempt (R92-2) at undercutting R92-1 failed due to overburden problems.

A total area of 352 Ha were covered by line cutting representing approximately 11% of the total land package held by Greater Lenora. All field work was performed in March, 1992.

Property Location, Access and Facilities

The Greater Lenora property is located in Rickard and Knox



LOCATION MAP

FIGURE : 1

Townships, District of Cochrane, Larder Lake Mining Division. It lies approximately 13 km east of the town of Iroquois Falls and 22 km north of the town of Matheson. Access is through a logging road (Wilkie Twp. access road) located 2 km east of Matheson which leads north to within 4 km of the claims. A trail suitable for ATV and snowmobiles extends to the claims. Alternative ATV and snowmobile access is across the Twin Falls generating dam located 5 km to the west. The NTS number is 42 A/16.

Facilities capable of supporting a mining operation are not located on the property but may be found in Timmins to the west and Kirkland Lake to the southeast. Numerous flooded swamps and creeks provide adequate water for diamond drilling operations during the summer, however, many of the swamps were frozen to the bottom in the winter necessitating long water lines from a flowing creek located 1 km southeast of the drilling location.

Topography

The topography on the property is quite flat and generally covered by low wet ground with intervening poplar ridges. Bedrock outcroppings are limited and are located over the extreme east and northwest sections of the expanded claim group. One outcrop was located on line 3+00E, 4+00N.

Land Tenure and Ownership

The Rickard property comprises 27 staked claims with a total of 197 units or 3152 Ha (7880 acres). A summary of the claims follows:

CLAIM No.	UNITS	RECORDED DATE	TOWNSHIP	APPLIED WORK	DUE DATE
1185915*	1	92/01/05	RICKARD	0	94/01/05
1167996*	1	91/01/15	RICKARD	0	93/01/15

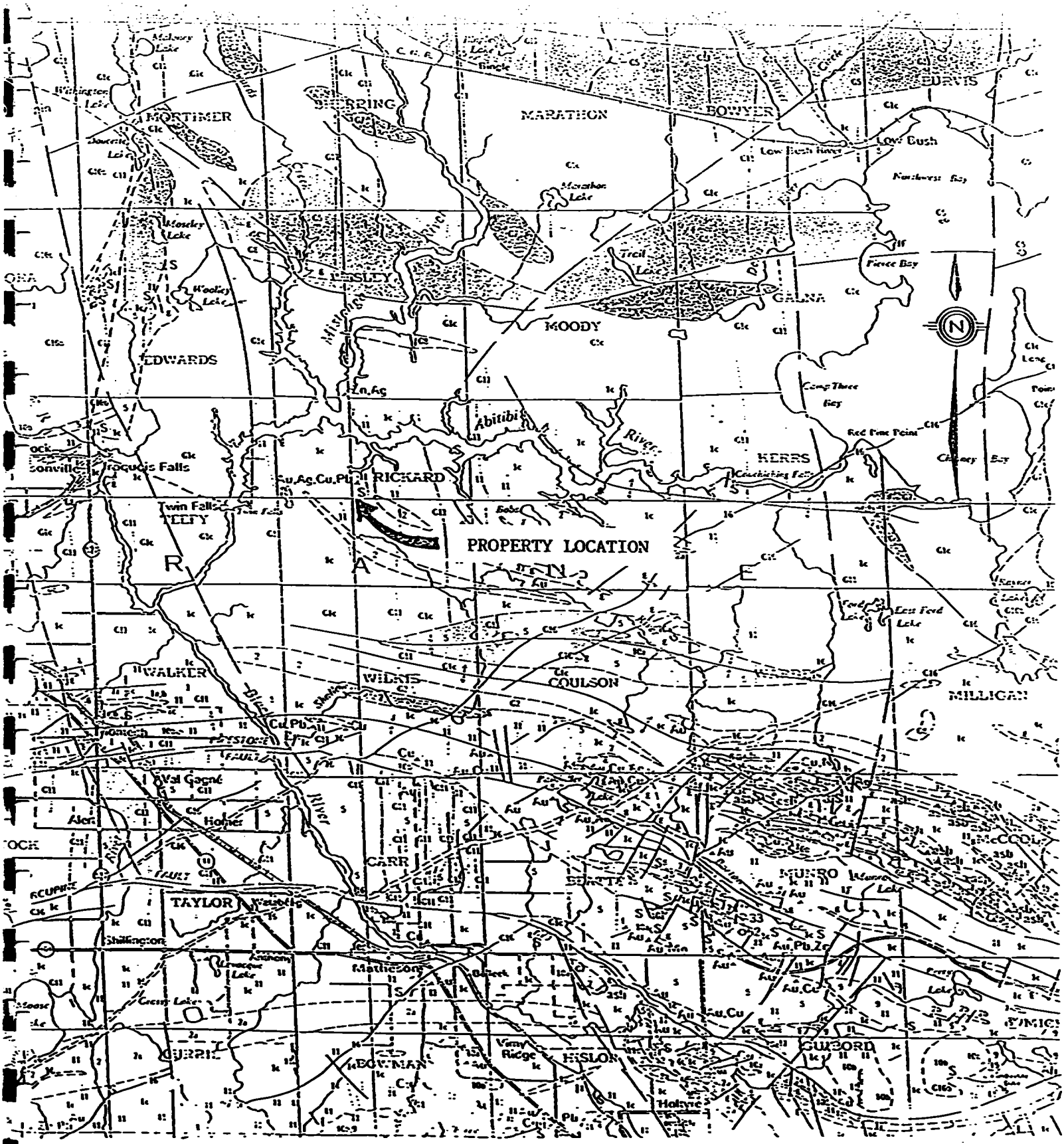


FIGURE 1A

LOCATION PLAN SCALE 1 inch=4 miles

CLAIM No.	UNITS	RECORDED DATE	TOWNSHIP	APPLIED WORK	DUE DATE
1167997*	1	91/01/15	RICKARD	0	93/01/15
1186104	8	92/02/21	RICKARD	0	94/02/21
1186078	9	92/02/21	RICKARD	0	94/02/21
1186063	2	92/02/21	RICKARD	0	94/02/21
1185799	2	92/02/21	RICKARD	0	94/02/21
1185989	8	92/02/21	RICKARD	0	94/02/21
1185814	8	92/02/21	RICKARD	0	94/02/21
1186079	1	92/02/21	RICKARD	0	94/02/21
1186080	10	92/02/21	RICKARD	0	94/02/21
1186061	1	92/02/21	RICKARD	0	94/02/21
1186084	8	92/02/21	RICKARD	0	94/02/21
1185921	8	92/03/21	RICKARD	0	94/03/21
1185922	1	92/03/21	RICKARD	0	94/03/21
1185923	8	92/03/21	RICKARD	0	94/03/21
1185924	16	92/03/21	RICKARD	0	94/03/21
1185925	6	92/03/18	RICKARD	0	94/03/18
1185926	12	92/03/18	KNOX	0	94/03/18
1185927	16	92/03/21	KNOX	0	94/03/21
1185928	8	92/03/18	RICKARD	0	94/03/18
1185929	12	92/03/21	RICKARD	0	94/03/21
1180040	4	92/03/21	RICKARD	0	94/03/21
1180041	10	92/03/21	RICKARD	0	94/03/21
1180042	8	92/03/21	RICKARD	0	94/03/21
1180043	16	92/03/21	RICKARD	0	94/03/21
1180044	12	92/03/21	RICKARD	0	94/03/21

27 CLAIMS 197 UNITS
*Optioned claims.

Property History

Gold was discovered in 1917 on the Twindyke property on present patented claim 18405, located 1 mile north of the Kasner claims. Two thousand feet of diamond drilling was followed by the sinking of a 100 foot deep shaft. High-grade gold values were encountered between five and fourteen feet, however, little gold was found below forty feet. Different owners have worked the property until 1958 with generally discouraging results. The property has remained dormant since that time. Other work in the area of the Kasner claims includes:

1) Twin Falls Syndicate (c.1964)

Three holes were completed over the southeast portion of present claim 1186080. A summary of these holes follows:

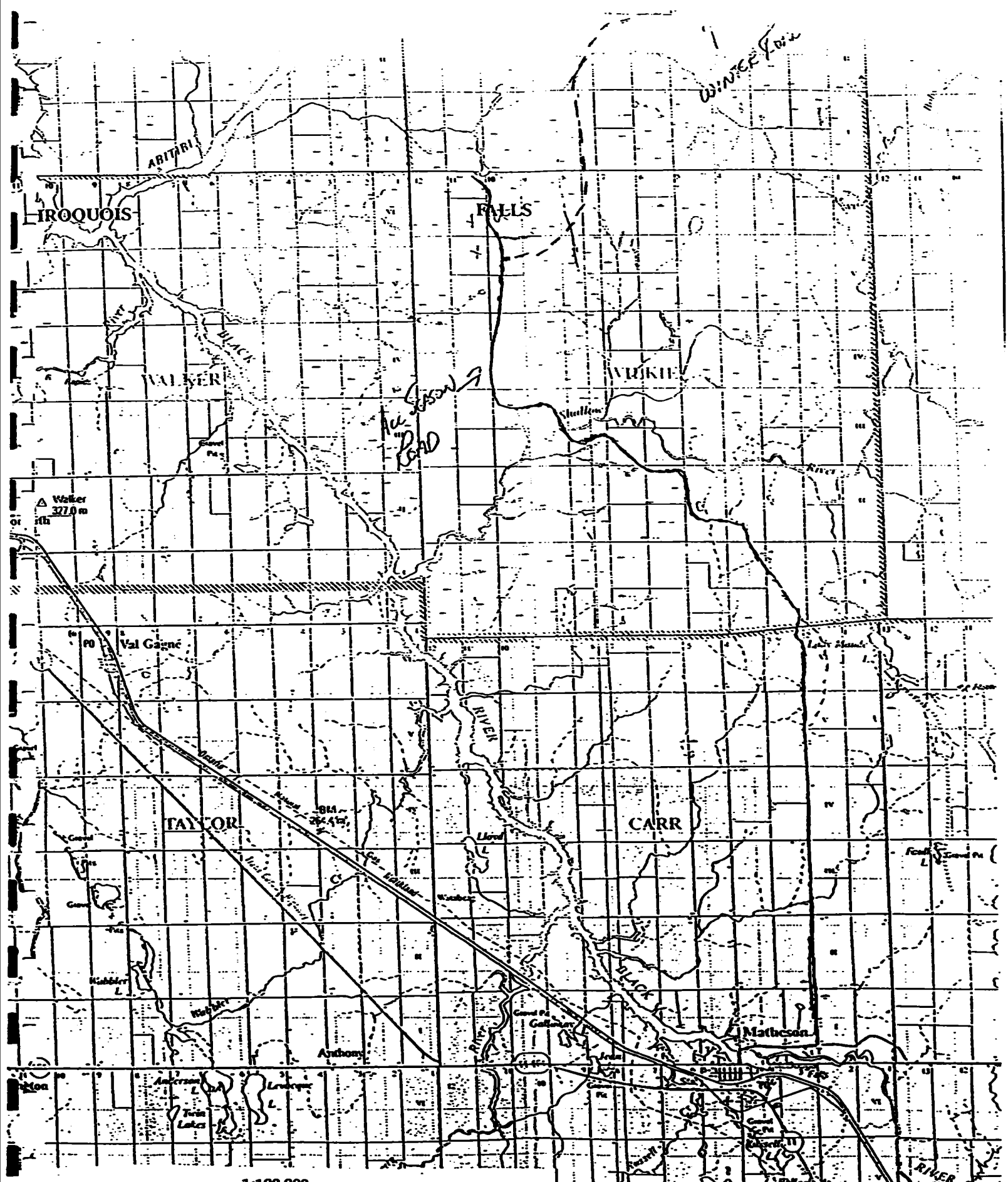


FIGURE 1B GENERAL ACCESS PLAN

IV

TEEFY TWP.

RICKARD TWP.

ABITIBI RIVER

TWINDYKE MINE PATENTS

ABITIBI RIVER

RICKARD TWP.

KNOX TWP.

III

1180041
10 units

1186078
9 units

1186080
10 units

1185799
2 units

1186079 1185915 1187998 1187997

1185980
8 units

1186084
8 units

1185924
16 units

1185925
6 units

1185926
12 units

II

1180042
8 units

1186063
2 units

1185914
8 units

1186704
8 units

1185928
8 units

1185927
16 units

ABITIBI PRICE PATENT

ABITIBI PRICE PATENT

I

1180044
12 units

1180040
4 units

1180043
16 units

1185921
8 units

1185923
8 units

WILKIE TWP.

COULSON TWP.

12 11 10 9 8 7 6 5 4 3 2 1 12 11

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FELLOW

CLAIM LOCATION PLAN

S.J. CARMICHAEL CONSULTANTS

1 1/4 1/2 3/4 1 mile

Scale: 1"=1/2 mile

DDH #1, depth 377.0'
This hole intersected interbedded siltstone, chert and graphitic shale with brecciated rhyolite. Traces of pyrite, chalcopyrite and pyrrhotite were noted, however no assays were given.
DDH #2 (same area as #1, depth 409')
This hole intersected mixed carbonaceous sediments with dacite, rhyolite and andesite. Sections up to 5' in width of 70% sulfides were noted, however no assays were given.

244.5-323.0': Brecciated rhyolite tuff and chert, 25% pyrite in layers and fractures.
323.0-328.0': Sulfide "sand"--70% disseminated pyrite, minor pyrrhotite and chalcopyrite.
352.0-356.0': Brecciated graphitic argillite, 25% sulfides, pyrite, pyrrhotite, trace chalcopyrite.
No assays were given for this hole.

DDH #3 (same area as #1, #2)
This hole intersected mixed rhyolite, dacite and gabbro.

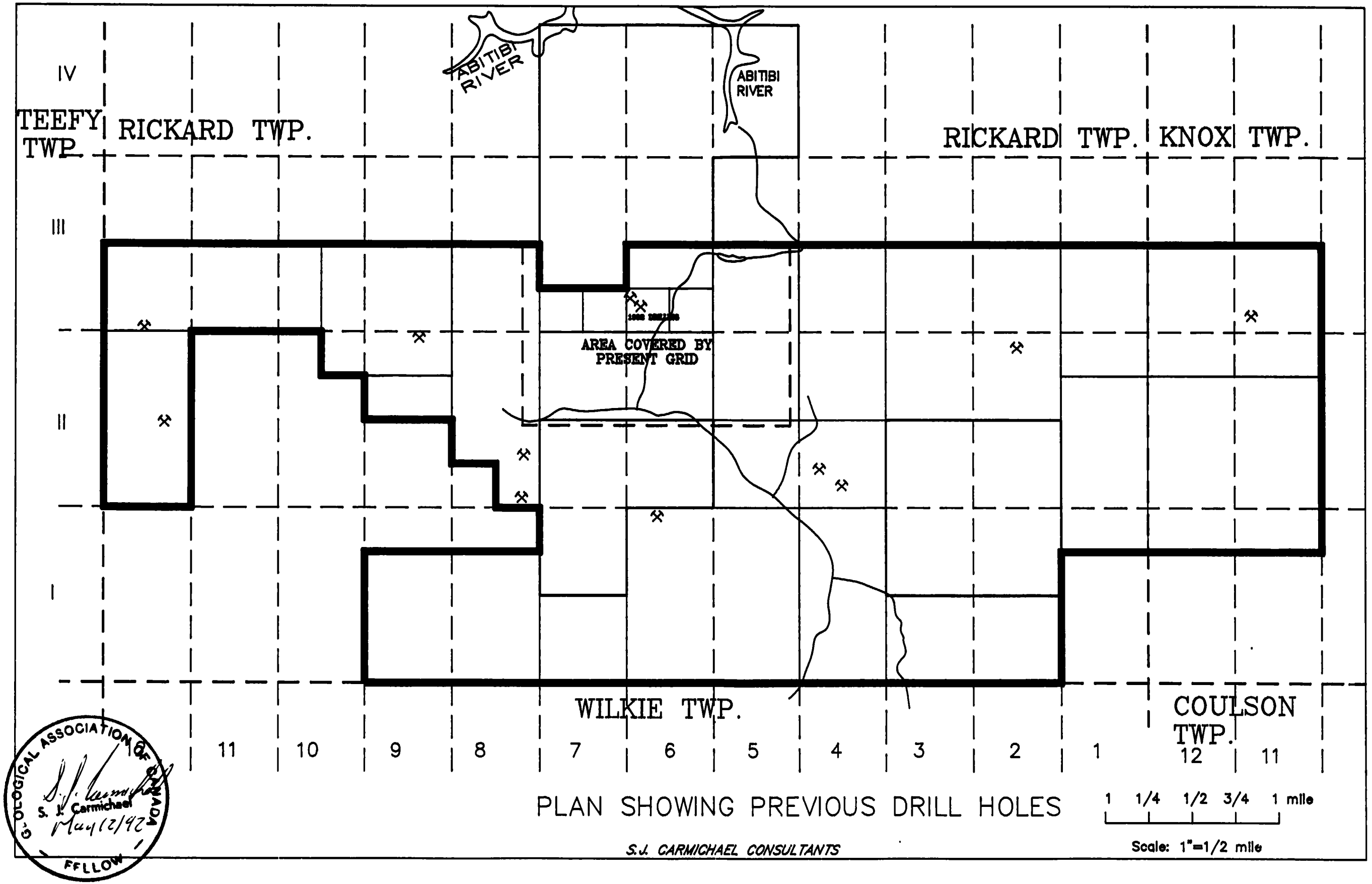
117.0-125.0': Sulfide zone, 35% in grey rhyolite with minor graphite.
129.0-132.0': Sulfide zone, 25% bands and concretions of pyrite and pyrrhotite with graphitic material.
No assays were given for this hole.

DDH #10 - Located in the northwest portion of present claim 1180043, depth 601'.
This hole intersected variably mineralized rhyolite throughout to 437' followed by chloritized andesite. Minor feldspar porphyry and graphitic shale was noted in the rhyolite.

DDH #11 - Located on the southeast portion of present claim 1186080, depth 392'.
This hole intersected intercalated andesite, rhyolite and minor graphite and chert cut by gabbro. No significant sulfide mineralization was noted.

2) Inco (c.1964)
Inco drilled one hole, located approximately 300 m northwest of R92-1. The target appears to have been the magnetic high located on line 7+00W, 4+40N. This hole intersected andesite, brecciated graphitic sediments and possible rhyolite. The best assay was a 2' section which ran 0.15% Cu, 0.34% Ni, 0.13% Zn and 0.013 oz/ton Pt & Pd.
Two additional holes were completed on the east central portion of present claim 1186104 which intersected dacite and intercalated dacite and graphitic shale. No assays were given in the log.

3) Texas Gulf (c.1972)
Texas Gulf completed a horizontal loop survey over the area covered in part by the Kasner claims. One strong anomaly with a strike



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length in excess of 1,000' was located (subsequently tested by the Kasner hole R92-1). This anomaly was recommended for drilling by Texas Gulf but the drilling program did not take place.

4) Canamax (c.1982)
Canamax Resources drilled one hole to further test the anomaly drilled by the Twin Falls Syndicate on present claim 1186080. This hole intersected anomalous zinc and copper, up to 0.19% Zn over 1.5 metres.
Additional drilling by Canamax includes:

DDH 1035-08-1 - North central border of present claim 1180042.
This hole intersected intercalated intermediate volcanics, pyritic graphitic shale and greywacke. Highly anomalous zinc and copper mineralization was intersected, the best assay being 0.3% Zn over 3 metres in sulfide-rich graphitic sediments. Copper assays up to 0.1% were also reported.

DDH 1035-04-1 - Southwest central portion of present claim 1185926 (Knox Twp.)
This hole intersected intercalated mafic volcanics and interbedded greywacke and graphitic shale. The best assay was o.6% Zn over 1.5 metres in a volcanoclastic agglomerate.

Rickard Township was mapped by ODM geologist P.S. Simony in 1965 (report No. 37, Map 2073) and an INPUT survey was flown by the Ministry of Northern Development and Mines in 1988 and published in 1989 as part of the Detour-Burntbush-Abitibi series.

Regional Geology

Eighty percent of the property is drift covered with a few ridges of outcrop, most of which are on the Twindyke gold prospect located 1 mile to the north. ODM Report No. 37 (c.1965) and map No. 2073 (c. 1965) indicates the rock lithologies are of Archean age belonging to the Abitibi Sub Province. The oldest rock types in the township range from mafic through intermediate and felsic volcanics. These include basalts, andesites, dacites, and rhyolites. Interflow sediments include chert, siltstones and carbonaceous/graphitic siltstones. The volcanic package has been

IV

TEEFY TWP

RICKARD TWP.

ABITIBI RIVER

ABITIBI RIVER

RICKARD TWP. KNOX TWP.

III

AREA COVERED BY PRESENT GRID

II

I

WILKIE TWP.

COULSON TWP.

11 10 9 8 7 6 5 4 3 2 1 12 11

LOCATION PLAN OF INPUT ANOMALIES

1 1/4 1/2 3/4 1 mile

S.J. CARMICHAEL CONSULTANTS

Scale: 1"=1/2 mile

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S. J. Carmichael

May 12/97

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intruded by ultramafic to mafic dikes. Later intrusives are irregular bodies of feldspar porphyry and north-south trending diabase dikes.

The stratigraphy appears to trend roughly east-west to northwest-southeast dipping steeply north. Although the volcanic package has been correlated with the Lower Tisdale Group (MERQ-OGS Map 2484), the lack of ultramafic flows and the considerable volume of calc-alkaline intermediate to felsic volcanics indicated that the stratigraphy is probably part of the Hunter Mine Group. In a regional sense, the Hunter Mine Group (2710 +-2) may be correlated with the volcanic sedimentary package which hosts the Kidd Creek Rhyolites (2708 +-2) located 40 miles to the west. However, the lack of exposure and geochemical data limits further interpretation.

Property Geology

According to ODM Map 2073, the bedrock exposure is limited to the northwest and east central portions of the property. To the northwest, a sequence of pillowed basalt is cut by north-trending feldspar porphyry and diabase dikes. The east section of the property appears to be underlain by andesites to rhyodacite volcanic flows as noted in the Inco drill logs. Drilling by the Twin Falls Syndicate both to the south and the west indicates a thick (<500') unit of felsic volcanics including rhyolite and dacite with interflow sediments, mostly graphitic in lithology. This unit(s) trends roughly northwest and underlies in part the northwestern and south central claims held by Greater Lenora.

Additional felsic units are present as indicated by Greater Lenora's drilling. The drill holes completed by Greater Lenora indicate that a geochemical as well as lithological 'break' occurs at the graphitic interflow unit. Volcanics north of the sediments are for the most part pillowed tholeiitic andesites or basalts. The flows south of the sediments appear to be more intermediate to felsic and of calc-alkaline chemistry.

1992 PROGRAM OUTLINE

Summary

As a follow-up to the discovery hole R92-1, additional line cutting and 39.6 km of Max Min II (100m coil) and magnetometer surveys were completed. 8 km of Max Min II at a 200m coil separation were also completed over the southwest portion of the claims where overburden masked anomalies tested with the 100m coil. The results of the geophysical surveys are given in volume 2.

Four additional diamond drill holes were completed totalling 740.5 metres, three of which were centred around the discovery hole R92-1 The hole locations are summarized in the following table:

Hole No.	Location	Dip	Azimuth	Depth	Target
R92-2*	6+00W, 3+42N	-50	180	55.2m	Undercut of R92-1
R92-2A	6+00W, 3+12N	-61	180	218.2m	Undercut of R92-1
R92-3	5+50W, 3+00N	-50	180	183.3m	50m step-out east from R92-1
R92-4	6+50W, 3+00N	-52	180	200.0m	50m step-out west from R92-1
R92-5	3+00E, 2+30N	-52	0	139.0m	Test Max Min II anomaly

* Hole terminated in overburden due to sanding of the rods.

Drill Hole Lithologies

The upper tholeiitic sequence is characterized by pillowed and flow brecciated basalt/andesite, moderately to heavily mineralized with

pyrrhotite. Lesser amounts of pyrite and trace chalcopyrite occur in association with the pyrrhotite. Semi-massive pyrrhotite was found in holes R92-1, R92-2A and to a lesser extent in R92-3; the mineralization tending to be localized in pillow selvages and sections of silicious flow top breccia. Strangely enough, R92-4 was the least mineralized with pyrrhotite and yet was closest to the centre of the magnetic high, probably caused by the pyrrhotite mineralization. Units of volcanic breccia intercalated with the pillowed flows were intersected in R92-3 and to a lesser extent in R92-4 and R92-2A which were not present in the original hole R92-1. Facies changes both at depth and along strike between drill holes indicates a rapidly changing active volcanic environment.

Silicification and weak chloritic alteration was observed in the upper volcanic sequence in holes R92-1, 2A and to a lesser extent in R92-4. The silicification increases towards the graphitic horizon in both R92-1 and 2A and is typically mineralized with 5-10% disseminated to massive pyrrhotite and pyrite. The silicification in R92-1 appears to be more intense than the undercut and is better mineralized with pyrite and pyrrhotite. An upper silicified section in R92-2A (102.4-113.5 m) was accompanied with albite/carbonate alteration and mineralized with up to 10% fine disseminated pyrite. This unit could not be correlated above or along strike.

The volcanic-graphitic contact in both R92-1 and 2A is marked by a narrow section of felsic crystal tuff which slightly increases in width at depth. In R92-1, this unit is underlain by 6 inches of

fine crystalline pyrite, possibly exhalative in origin. This unit was not present in either of the step out holes.

Two main graphitic shale horizons were cored. The upper, which was intersected only in R92-2A is a typical carbonaceous to graphitic siltstone, poorly laminated and mineralized with 10% disseminated and marcasitic pyrite.

The lower unit was intersected in all holes although R92-1 and 2A failed to reach the lower graphitic contact. The true width of this unit is approximately 30 metres and is the cause of the Max Min II anomaly. It is generally a massive carbonaceous to graphitic siltstone locally bedded with narrow argillaceous sections. Graded bedding was not observed, however, flame structures in R92-1 indicates that tops are up hole. 10% marcasitic and disseminated pyrite occurs throughout the graphitic shale units. The upper section of this unit in R92-4 was mineralized with 10 metres of 20% massive pyrite, as were narrow graphitic sections within silicified basalt in R92-1. A narrow 2.3 metre section of dacitic volcanics was observed within the lower portion of the shale in R92-4 but could not be correlated with any of the other holes.

The lower contact of the graphitic horizon is marked by a diabasic to dioritic dike with a true width of approximately 5 metres. Both upper and lower contacts are chilled with a coarser grained interior consisting of bladed pyroxene/amphibole phenocrysts up to 1cm in length. In R92-3, this intrusive takes on almost an ultramafic character with localized weak talcose alteration.

The intrusive appears to postdate all structural and mineralizing

events.

The lower volcanic sequence is dominated by calc-alkalic basalts and andesites with lesser rhyolites and chert/cherty siltstone. The one rhyolitic (?) unit was observed in R92-4 (190.9-193.9m) and is not a flow but a silicious breccia consisting of mixed angular felsic fragments up to 3cm in size set in a silicious matrix.

Mineralization

Fracture related zinc mineralization was intersected in both 50m step-out holes and the undercut of R92-1. The mineralization does not appear to be confined to any particular lithological unit but is most widespread within the graphitic shale. At least three individual mineralized units can be correlated between R92-1, the undercut and the hole 50m east. Two of the units may be traced through all four holes.

Zinc mineralization appears as both dark brown stringer sphalerite (semi-massive in R92-1) with little gangue, and as disseminated clusters of honey sphalerite in association with calcite +- quartz stringers. Galena mineralization is generally confined to calcite/quartz stringers.

The upper mineralized zone in R92-1 (3.2% Zn, 0.6% Pb over 3.2m) may be traced at depth in R92-2A where it narrows to 0.7% Zn, 0.1% Pb over 0.6m and to the east in R92-3 where it grades 3.0% Zn, 0.5% Pb over 0.5m. The mineralization is located in highly fractured andesitic breccia in R92-1 and in silicified quartz-flooded andesite in R92-2A. Although the undercut hole did not improve on grades or widths, four additional narrow mineralized sections were

intersected in the upper volcanics which could not be correlated with R92-1.

The second mineralized unit in R92-1 (0.3% Zn, 0.1% Pb over 13.3m) located at the volcanic/graphitic contact can be correlated both at depth in R92-2A (0.4% Zn, 0.1% Pb over 7.2m) and to the east in R92-3 (0.7% Zn, 0.2% Pb over 6.0m).

A lower mineralized unit was intersected in all of the holes except the undercut and is located approximately 9 metres above the lower graphitic contact. The undercut hole does not appear to have drilled deep enough to intersect this zone. The grades intersected are 0.3% Zn, Tr Pb over 1.5m in R92-1, 0.8% Zn, 0.1% Pb over 8.5m in R92-4 and 2.4% Zn, 0.8% Pb over 2.5m in R92-3. The mineralization in R92-4 includes both the graphitic shale and a 2.4m section of dacite. The mineralization in the dacite does not appear to be fracture related but more of a disseminated dark brown bladed sphalerite.

In R92-3, a continuously mineralized section within the graphitic shale assayed 0.5% Zn, 0.1% Pb over 29.5m and includes a middle and lower mineralized units.

An additional mineralized unit was intersected in R92- 3 located at the contact between calc-alkaline basalt and calc-alkaline andesite. The mineralization is again fracture related and assayed 0.5% Zn, 0.1% Pb over 3.1m.

A summary of the intersections is listed in the following table.

DDH R92-1	
84.60-87.80m, 2.7% Zn, 0.5% Pb, Tr Cu over 3.2m	**Upper Zone**
120.55-133.84m, 0.3% Zn, 0.1% Pb over 13.3m	**Upper Graphitic Zone**
157.64-159.17m, 0.3% Zn, Tr Pb over 1.5m	**Middle Graphitic Zone**

DDH R92-2A (undercut)

67.50-67.74m, 1.6% Zn, 0.3% Pb over 0.2m	**(In Basalt)**
75.70-76.10m, 0.6% Zn, 0.2% Pb over 0.4m	**(In Basalt)**
104.50-108.34m, 0.2% Zn, Tr Pb over 3.8m	**(In Silicified Basalt)**
126.50-127.00m, 0.3% Zn, 0.1% Pb over 0.5m	**(In Basalt)**
133.00-133.57m, 0.7% Zn, 0.1% Pb, 0.1% Cu over 0.6m	**Upper Zone**
186.30-193.50m, 0.4% Zn, 0.1% Pb over 7.2m	**Upper Graphitic Zone**

DDH R92-3 (50m east of R92-1)

84.46-84.95m, 3.0% Zn, 0.5% Pb, 0.1% Cu over 0.5m	**Upper Zone**
113.50-119.50, 0.7% Zn, 0.2% Pb over 6.0m	**Upper Graphitic Zone (straddles graphitic/volcanic contact)**
132.50-133.50m, 0.6 Zn, 0.2% Pb over 1.0m	**Middle Graphitic Zone**
149.70-155.20m, 2.4% Zn, 0.8% Pb over 2.5m	**Lower Graphitic Zone**
125.50-155.00m, 0.5% Zn, 0.1% Pb over 29.5m	**(includes above graphitic zones)**
171.90-175.00m, 0.5% Zn, 0.1% Pb over 3.1m	**Lower Zone (straddles basalt/andesite contact)**

DDH R92-4 (50m west of R92-1)

131.50-142.00, 0.2% Zn, Tr Pb over 10.5m	**Middle Graphitic Zone**
153.50-162.00m, 0.8% Zn, 0.1% Pb over 8.5m	**Lower Graphitic Zone (includes dacite unit)**

Drill hole R92-5 located 900 metres east of R92-1 tested a weak Max Min II anomaly. The anomaly appears to have been caused by a 5.2 metre section of graphitic shale. No significant base metal mineralization was intersected, however, a 1 metre section of silicified basalt located in the upper portion of the hole assayed 0.028 oz/ton Au.

Structure

Although only a small portion of the property was tested by diamond drilling, it would appear that the volcanic and sedimentary units trend east-west and dip very close to vertical. Flame structures in R92-1 indicated that tops may be up-hole or facing north. Absolute certainty of the tops direction could not be made due to a total lack of graded bedding and the distorted (slumping) nature of the beds.

Faulting is generally confined to the graphitic shale with at least two large faults and a number of associated weaker faults and shears. They appear to dip north at 60-80 degrees.

The fracture related mineralization does not appear to be associated with these structures, which are confined to the graphitic units and could not have influenced zinc mineralization located in the upper volcanic sequences which dip near vertical. Quartz-calcite stringers associated with the zinc mineralization are almost totally absent adjacent to the faults, the exception being R92-2A (Upper Graphitic Zone).

It would appear that the larger faults post-date the quartz-calcite stringers +- zinc/lead mineralization. Remobilization of zinc/lead sulfides from the graphitic shale does not adequately explain the mineralization in the upper and lower volcanic lithologies and an alternative source, either along strike or a depth is postulated.

Conclusions and Recommendations For Further Work

The results of the follow-up program did not define the possible source of the remobilized zinc/lead mineralization. Geochemical analysis indicates that a VMS style deposit, if present, is still distal to the drilled area. The metal values intersected, and the chemical/lithological break is encouraging, as are the lithological differences between each drill hole. Facies changes both at depth and along strike indicate an active marine volcanic environment with abundant sulphur and iron present as indicated by the volume of pyrrhotite and pyrite located in the pillowed upper volcanic series. Although large volumes of felsic volcanics were not intersected during this phase of drilling, previous work by the Twin Falls Syndicate indicates rhyolitic volcanics to the west and south. In addition, minor calc-alkaline felsic volcanics were

intersected on the south side of the graphitic horizon in hole R92-3 and 4.

Further exploration is highly recommended and should be aimed at following the metal values intersected in the last phase of diamond drilling, as well as testing additional targets on the property, both inside and outside of the presently gridded area.

The addition of the three Abitibi-Price patents to the south would be a definite asset as these claims have never been explored.

Respectfully Submitted,

S. J. Carmichael

Stewart Carmichael, B.Sc., FGAC

GEOLOGICAL ASSOCIATION OF CANADA
FELLOW

Appendix A

CERTIFICATE OF QUALIFICATIONS

I, Stewart J. Carmichael, of the Town of Kirkland Lake, in the District of Timiskaming, in the Province of Ontario, Canada, do hereby certify that:

1) I am a consulting geologist with address 42 Rand Avenue East, Kirkland Lake, Ontario, P2N 1X1.

2) I am a graduate of McMaster University, Hamilton, Ontario, having received the degree of Bachelor of Science, Geology from the Faculty of Science in 1982. I have since practised in the field of mineral exploration continuously since graduation.

3) I am a Fellow of the Geological Association of Canada.

4) In addition to my personal knowledge of the area, I have made use of the records of the Ministry of Natural Resources of Ontario.

5) I have no direct interest, nor do I expect to receive any in the Rickard Township property.

Dated this 12 day of May, 1992

S. Stewart J. Carmichael

Stewart J. Carmichael, B.Sc., FGAC

Appendix C

Diamond Drill Log R92-1 to R92-5

Co-ords 300.0 N -600.0 E

Azimuth: 180.0

Dip: -50.0

Elevation 1000.0

Length: 167.6

DIAMOND DRILL RECORD

HOLE NO.: R92-1

Property: Rickard
Purpose: Test Max Min II Anomaly

Drilled by: Heath and Sherwood
Date Started: Jan. 21, 1992
Date Completed: Jan. 23, 1992
Logged by: S.J. Carmichael
Core Size: BQ
Claim Number: L-1167996

Dip Tests

167.6 180.0 -51.0

from (m)	to (m)	Description	Sample No.	from (m)	to (m)	Length (m)	AU PPB	Cu %	Pb %	Zn %	Ag oz/ton
.00	30.78	CASING									
30.78	82.91	BASALT Dark grey to black fine-grained basaltic flows and pillowed flow with flow top breccia. Moderately to highly fractured with quartz +- calcite stringers and flooding. Pillowed and flow top sections are well mineralized with semi-massive to massive pyrrhotite and pyrite. Local chlorite alteration in fractures.									
		32.49 33.07 Massive pyrite from 32.77-32.87m, minor pyrrhotite.	214551	32.49	33.07	.58	n/a	.02	nil	tr	.06
		35.36 35.97 Massive pyrrhotite from 35.61-36.34m in pillow selvage, 10% pyrrhotite, 2% pyrite remainder of section.	214552	35.36	35.97	.61	n/a	.02	nil	nil	.06
		35.97 37.34 Highly fractured basalt, 4% disseminated and stringer pyrite and pyrrhotite.	214553	35.97	37.34	1.37	n/a	.01	nil	tr	.03
		37.34 38.56 As above.	214554	37.34	38.56	1.22	n/a	.01	nil	tr	.03
		38.56 39.93 As above, 10% quartz/calcite stringers, possible flow contact at 39.18m tops up-hole. Trace chalcopyrite.	214555	38.56	39.93	1.37	n/a	.01	nil	.01	.06
		39.93 41.45 1-2% pyrrhotite in fractures.	214556	39.93	41.45	1.52	n/a	.02	nil	tr	.03
		41.45 42.37 Massive pyrrhotite with 1% chalcopyrite from 42.34-42.37m.	214557	41.45	42.37	.92	n/a	.04	nil	tr	.03
		42.37 43.89 5% massive pyrrhotite.	214558	42.37	43.89	1.52	n/a	.02	nil	tr	.03
			214559	46.02	47.55	1.53	n/a	.01	nil	.01	.06
		46.03 47.55 2% disseminated pyrite and pyrrhotite.									
		47.55 49.07 As above.	214560	47.55	49.07	1.52	n/a	.01	nil	.01	.03
		50.41 51.36 As above.	214561	50.41	51.36	.95	n/a	.01	nil	tr	.06
		51.36 53.03 As above, trace chalcopyrite.	214562	51.36	53.04	1.68	n/a	.02	nil	tr	.03
		53.03 54.56 Massive pyrrhotite from 53.23-53.29m, 53.41-53.51m, trace chalcopyrite.	214563	53.04	54.56	1.52	n/a	.02	nil	tr	.03
		59.44 60.20 Highly fractured with quartz/calcite stringers, minor sericite/carbonate alteration. Possible healed shear at	214564	59.44	60.20	.76	22.0	n/a	n/a	n/a	n/a

HOLE NO.: R92-1

from (m)	to (m)	Description	Sample No.	from (m)	to (m)	Length (m)	AU PPB	Cu %	Pb %	Zn %	Ag oz/ton
		60.06m with quartz/calcite flooding. Dip 45 deg. To C.A.									
60.20	60.96	15% quartz stringers, 1-2% pyrite.	4254	60.20	60.96	.76	5.0	n/a	n/a	n/a	n/a
61.17	61.57	Sericite/carbonate alteration with 4% pyrite.	214565	61.17	61.57	.40	31.0	n/a	n/a	n/a	n/a
61.57	62.79	Flow and flow top breccia, 2-4% disseminated pyrite.	214566	61.57	62.79	1.22	8.0	n/a	n/a	n/a	n/a
62.79	64.04	As above, 1-2% disseminated pyrite.	214567	62.79	64.01	1.22	12.0	n/a	n/a	n/a	n/a
67.36	68.89	5% pyrrhotite and pyrite.	4255	67.36	68.88	1.52	n/a	.01	nil	tr	.03
			4256	68.88	70.41	1.53	n/a	.01	nil	tr	.03
68.89	70.41	As above.									
72.24	73.76	As above.	4257	72.24	73.76	1.52	n/a	tr	nil	.01	.06
74.43	75.80	Quartz vein and flooding from 74.76-74.94m, 75.15-75.24m. 2% pyrite in flooding, 2-4% disseminated throughout.	214568	74.43	75.80	1.37	35.0	n/a	n/a	n/a	n/a
77.42	77.51	Brick brown fine grained magnetic dike?.									
82.91	87.78	MINERALIZED ZONE									
		Dull grey to brown flow top breccia or agglomerate. Moderately fractured throughout. Breccia groundmass and fragments are cut by quartz/calcite stringers, locally mineralized with sphalerite +- galena with minor chalcopyrite. Sphalerite mineralization becomes more abundant after 85.06m.									
82.91	84.13	Flow top breccia, quartz/calcite vein from 83.69-83.72m, 1-2% clusters of pyrite, trace honey sphalerite in vein.	214569	82.91	84.12	1.21	8.0	.01	tr	.02	.03
			214570	84.12	84.58	.46	6.0	tr	nil	.01	tr
84.13	84.58	Flow top breccia, 1% pyrite, 1% pyrrhotite, nil sphalerite.									
84.58	85.04	As above.	214571	84.58	85.04	.46	5.0	.03	.71	1.30	.06
85.04	85.65	Highly fractured and brecciated, probable fault zone. 20-30% quartz/calcite flooding, 1% honey sphalerite, trace chalcopyrite.	214572	85.04	85.65	.61	8.0	nil	.03	.14	.03
85.65	86.87	Moderately fractured flow top, 6-8% sphalerite stringers, trace chalcopyrite, 1% honey sphalerite, trace to 1% galena.	214573	85.65	86.87	1.22	31.0	.02	.36	2.03	.09
86.87	87.78	20% sphalerite from 87.20-87.50m, 4-6% remainder of section, trace to 1% galena, trace chalcopyrite.	214574	86.87	87.78	.91	9.0	.07	1.34	7.82	.12
87.78	98.36	BASALT									
		Dark grey/black fine grained basaltic flow and flow top breccia. Moderately fractured with quartz +- calcite +- chlorite stringers. 1-2% pyrrhotite and pyrite throughout.									
87.78	88.39	Flow top breccia to 88.11m, 1% pyrite.	214575	87.78	88.39	.61	n/a	.01	.02	.04	.06
88.39	89.92	Mixed flow top breccia and flow.	214576	88.39	89.92	1.53	n/a	.01	nil	.02	.03
93.12	93.27	Quartz vein, dip 48 deg. To C.A., barren.									
96.32	97.54	4% pyrrhotite and pyrite.	214577	96.32	97.54	1.22	n/a	.01	nil	.01	.06
97.54	98.36	Breccia from 97.56-97.80m, 2-4% pyrite throughout.	214578	97.54	98.36	.82	n/a	tr	nil	.06	.06

from (m)	to (m)	Description	Sample No.	from (m)	to (m)	Length (m)	AU PPB	Cu %	Pb %	Zn %	Ag oz/ton
98.36	101.25	SILICIFIED BASALT Silicious flow top breccia, probably a silicified basalt. 10-20% massive to semi massive pyrite and pyrrhotite throughout.									
		98.36 99.88 As above, 40% massive pyrrhotite from 99.60-99.76m.	214579	98.36	99.88	1.52	9.0	tr	tr	.04	.06
		99.88 101.25 Basalt from 99.91-100.76m, then silicified basalt with 40% massive pyrrhotite.	214580	99.88	101.25	1.37	n/a	tr	nil	.02	.03
101.25	102.96	GRAPHITIC SHALE AND MASSIVE PYRITE Laminated/bedded graphitic shale and carbonaceous siltstone. Laminations at 66 deg. To C.A. 50-60% massive marcasite pyrite, minor pyrrhotite.									
		101.25 102.41 As above.	214581	101.25	102.41	1.16	n/a	tr	.01	.04	.06
		102.41 102.96 As above.	214582	102.41	102.96	.55	n/a	nil	tr	.01	.06
102.96	103.94	SILICIFIED BASALT Pillowed silicified basalt. Mineralized throughout with 30-40% massive and disseminated pyrrhotite and pyrite. Trace chalcopyrite.									
		102.96 103.94 As above.	214583	102.96	103.94	.98	8.0	tr	tr	.04	.06
103.94	106.68	BASALT Dark grey fine grained pillowed basalt. Weakly fractured with 1% pyrrhotite+- pyrite stringers.									
		103.94 105.46 Quartz vein with pyrite from 104.63-104.73m, dip 30 deg. To C.A.	214584	103.94	105.46	1.52	n/a	tr	nil	.02	.03
		105.46 106.68 Becoming silicified, brecciated, 1% fine disseminated pyrite.	214585	105.46	106.68	1.22	n/a	tr	nil	.02	.06
106.68	108.26	SILICIFIED BASALT AND MASSIVE PYRITE Light grey silicified pillowed basalt with flow top breccia. 40% massive laminated crystalline and marcasite pyrite. 1-2% pyrrhotite.									
		106.68 107.35 As above.	214586	106.68	108.26	1.58	n/a	tr	tr	.02	.06
108.26	112.78	SILICIFIED BASALT Light grey moderately silicious pillowed and flow top brecciated basalt. 1-2% disseminated and semi massive clots of pyrite and pyrrhotite throughout.									
		108.26 109.36 As above.	214587	108.26	109.36	1.10	5.0	tr	nil	.02	.03
		109.36 110.34 Darker in colour, 1-2% disseminated pyrite and pyrrhotite. Quartz flooded and silicified from 109.76-110.06m in pillow selvage.	214588	109.36	110.34	.98	5.0	tr	nil	.01	.03
		110.34 111.56 Becoming lighter grey in colour, flow top brecciated. 1% disseminated pyrite and pyrrhotite.	214589	110.34	111.56	1.22	5.0	tr	nil	.03	.03

from (m)	to (m)	Description	Sample No.	from (m)	to (m)	Length (m)	AU PPB	Cu %	Pb %	Zn %	Ag oz/ton
		111.56 112.78 20% massive pyrrhotite and pyrite.	214590	111.56	112.78	1.22	n/a	.01	nil	.03	.06
112.78	114.00	GRAPHITIC SHALE AND MASSIVE PYRITE Black carbonaceous to graphitic mudstone/shale. 20-30% massive marcasite, 5% pyrrhotite. 112.78 114.00 As above.	214591	112.78	114.00	1.22	n/a	.01	tr	.04	.06
114.00	120.52	SILICIFIED BASALT Light grey silicified basalt and flow top breccia. 10-15% disseminated and semi massive pyrrhotite and pyrite. 114.00 115.52 As above.	214592	114.00	115.52	1.52	n/a	tr	nil	.02	.06
		115.52 117.04 As above.	214593	115.52	117.04	1.52	n/a	tr	nil	.02	.06
		117.04 118.57 As above.	214594	117.04	118.57	1.53	n/a	tr	nil	.01	.06
		118.57 119.51 As above, 1% sphalerite stringers from 119.21-119.51m.	214595	118.57	119.51	.94	n/a	tr	nil	.08	.06
		119.51 120.52 Silicious tuff, fine massive pyrite from 120.21-120.43m, 2-4% pyrite and pyrrhotite throughout.	214596	119.51	120.52	1.01	n/a	nil	nil	.02	.03
120.52	167.64	GRAPHITIC SHALE Dark grey to black laminated carbonaceous to graphitic shale and siltstone. Laminations at 57 deg. To C.A. Mineralized throughout with 2-4% disseminated to massive pyrite. Upper section is weakly fractured with calcite +- quartz stringers with.5-1% sphalerite +- galena. Fractures along C.A. Are mineralized, those cross cutting are barren. 120.52 121.55 Graphitic/carbonaceous shale, 4% pyrite, trace sphalerite.	214597	120.52	121.55	1.03	n/a	.01	.13	.58	.03
		121.55 122.53 Graphitic shale,.5-1% sphalerite stringers.	214598	121.55	122.53	.98	n/a	nil	.20	.74	.03
		122.53 123.20 As above, 1% sphalerite stringers.	214599	122.53	123.20	.67	n/a	nil	.31	.77	.03
		123.20 124.66 Graphitic shale, 1% pyrite.	214600	123.20	124.66	1.46	n/a	tr	.04	.17	.03
		123.28 133.81 As above.	4247	124.66	126.19	1.53	n/a	nil	.04	.21	tr
		124.66 126.19 As above, trace sphalerite stringers.	4248	126.19	127.71	1.52	n/a	.01	.18	.47	.03
		126.19 127.71 As above, trace sphalerite, trace chalcopyrite.	4249	127.71	129.24	1.53	n/a	nil	.06	.25	.03
		127.71 129.24 As above, trace sphalerite.	4250	129.24	130.76	1.52	n/a	nil	.05	.23	.03
		129.24 130.76 As above.	4251	130.76	132.28	1.52	n/a	tr	.04	.25	.03
		130.76 132.28 As above.	4252	132.28	133.81	1.53	n/a	tr	.04	.15	.03
		136.73 138.07.5% Sphalerite stringers.	4253	136.73	138.07	1.34	n/a	nil	.02	.15	tr
		140.76 140.88 Silicious cherty section, upper contact at 42 deg. To C.A. Possible dike.									
		145.09 145.12 Fault Zone Narrow seam of graphitic gouge, brecciated graphitic shale from 144.97-145.12m.									
		146.61 146.64 Weak shear, dip 53 deg. To C.A.									
		157.64 159.17.5% Quartz/calcite stringers with sphalerite.	4258	157.64	159.17	1.53	n/a	nil	.05	.32	tr
		160.11 160.32 Felsic dike with 10% disseminated									

from (m)	to (m)	Description	Sample No.	from (m)	to (m)	Length (m)	AU PPB	Cu %	Pb %	Zn %	Ag oz/ton
		pyrite. Upper contact at 12 deg. To C.A., lower contact at 39 deg. To C.A.									
161.70		Bedding at 56 deg. To C.A.									
162.28	162.82	Fault Zone Graphitic gouge, dip 40 deg. To C.A.									
166.27	166.30	Fault Zone Narrow seam of gouge at 44 deg. To C.A.									
167.64		End of Hole.									

Casing Pulled.

Core stored in core library.

GEOLOGICAL ASSOCIATION OF CANADA
S. L. Carmichael
May 12/92
FELLOW

Greater Lenora Resources Corp.

DIAMOND DRILL RECORD

HOLE NO.: R92-2

Co-ords 342.0 N -600.0 E

Azimuth: 180.0

Dip: -50.0

Elevation 1000.0

Length: 55.2

Property: Rickard
Purpose: Test Max Min II Anomaly
Drilled by: Heath and Sherwood
Date Started: March 12, 1992
Date Completed: March 15, 1992
Logged by: S.J. Carmichael
Core Size: BQ
Claim Number: L-1167996

Dip Tests

from (m)	to (m)	----------Description----------	Sample No.	from (m)	to (m)	Length (m)	AU PPB	Cu %	Pb %	Zn %	Ag oz/ton
.00	55.18	CASING									
	55.20	55.18 End of Hole.									
		Hole Terminated In Overburden.									

GEOLOGICAL ASSOCIATION OF CANADA
S. J. Carmichael
14/12/92
FELLOW

Co-ords 312.0 N -600.0 E

Azimuth: 180.0

Dip: -61.0

Elevation 1000.0

Length: 218.2

DIAMOND DRILL RECORD

HOLE NO.: (R92-2A

Property: Rickard

Purpose: Undercut of R92-1

Drilled by: Heath and Sherwood

Date Started: March 15, 1992

Date Completed: March 18, 1992

Logged by: S.J. Carmichael, 08/03/92

Core Size: BQ

Claim Number: L-1167966

Dip Tests

44.5	180.0	-61.0
129.9	180.0	-61.0
163.4	180.0	-60.0
214.3	180.0	-61.0

from (m)	to (m)	Description
.00	39.90	CASING
39.90	45.87	GRAPHITIC SHALE Dark grey to black carbonaceous siltstone. Fragmented and brecciated throughout, poorly laminated. Mineralized throughout with 10% disseminated and massive nodular pyrite. 39.90 41.00 As above. 41.00 42.50 5% nodular and disseminated pyrite. 42.50 44.00 Massive pyrite from 42.62-42.70m, 5% disseminated pyrite remainder of section. 44.00 45.50 10-15% disseminated and concretions of pyrite. 45.50 45.87 As above.
45.87	102.40	BASALT Fine-grained medium green coloured basalt. Appears to be pillowed and intercalated flows. Moderately fractured throughout with quartz +- calcite stringers. Locally silicified with albite/carbonate alteration. Mineralized throughout with 4-5% disseminated to semi-massive pyrite and pyrrhotite. Trace chalcopyrite associated with the pyrrhotite. 46.00 47.50 Buff highly silicious flow top. 10% disseminated and massive pyrite from 46.00-46.70m. 47.50 49.00 4-5% pyrite and pyrrhotite. 49.66 51.05 Highly fractured and brecciated with silicification and carbonate alteration. Coarse silicified breccia from 50.36-50.50m. 4% disseminated pyrite. 51.05 52.30 Decrease in silicification and alteration, 2% disseminated pyrite. 53.50 55.00 5% pyrite and pyrrhotite.

Sample No.	from (m)	to (m)	Length (m)	AU PPB	Cu %	Pb %	Zn %	Ag oz/ton
214751	39.90	41.00	1.10	n/a	tr	.02	.15	n/a
214752	41.00	42.50	1.50	n/a	tr	.06	.25	n/a
214753	42.50	44.00	1.50	n/a	nil	tr	.03	n/a
214754	44.00	45.50	1.50	n/a	tr	.06	.22	n/a
214755	45.50	45.87	.37	n/a	tr	.01	.05	n/a
214756	46.00	47.50	1.50	n/a	.01	nil	.01	n/a
214757	47.50	49.00	1.50	n/a	.02	nil	tr	n/a
214758	49.66	51.05	1.39	221.0	.01	tr	tr	n/a
214759	51.05	52.30	1.25	165.0	.03	nil	.01	n/a
214760	53.50	55.00	1.50	n/a	.02	nil	tr	n/a

from (m)	to (m)	Description	Sample No.	from (m)	to (m)	Length (m)	AU PPB	Cu %	Pb %	Zn %	Ag oz/ton
55.00	56.50	As above.	214761	55.00	56.50	1.50	n/a	.02	nil	tr	n/a
56.50	58.00	2% disseminated pyrite and pyrrhotite in fractures.	214762	56.50	58.00	1.50	n/a	.02	nil	.01	n/a
58.00	59.50	As above.	214763	58.00	59.50	1.50	n/a	.02	nil	tr	n/a
59.50	61.00	As above, moderately fractured with hairline qtz/calcite stringers along the C.A.	214764	59.50	61.00	1.50	n/a	tr	nil	tr	n/a
61.00	62.50	4% pyrite and pyrrhotite, trace chalcopyrite.	214765	61.00	62.50	1.50	n/a	tr	nil	tr	n/a
62.50	64.00	Becoming pillowed at 63.60m, 5% pyrrhotite.	214766	62.50	64.00	1.50	n/a	.01	nil	tr	n/a
64.00	65.00	Pillowed andesite, 10% massive pyrrhotite, trace chalcopyrite.	214767	64.00	65.00	1.00	n/a	.02	nil	tr	n/a
65.00	66.00	As above.	214768	65.00	66.00	1.00	n/a	.04	nil	tr	n/a
66.00	67.00	20% pyrrhotite and pyrite from 66.36-66.90m, trace chalcopyrite.	214769	66.00	67.00	1.00	n/a	.03	nil	.01	n/a
67.00	67.50	1-2% pyrite and pyrrhotite.	214770	67.00	67.50	.50	n/a	.03	.02	.03	n/a
67.50	67.74	2% sphalerite in fractures from 67.50-67.64m,.5% honey sphalerite, trace chlacopyrite, trace galena.	214771	67.50	67.74	.24	n/a	.03	.33	1.60	.06
67.74	68.50	Moderately fractured with 2% pyrrhotite.	214772	67.74	68.50	.76	n/a	.02	nil	tr	n/a
68.50	69.50	5% quartz/calcite fractures, 2% pyrite and pyrrhotite.	214773	68.50	69.50	1.00	n/a	.03	nil	.01	n/a
72.00	73.50	Brecciated flow top (?) from 72.50-73.20, flow remainder of section. 1-2% disseminated pyrrhotite.	214774	72.00	73.50	1.50	n/a	.02	nil	tr	n/a
73.50	75.70	Flow, quartz vein from 74.85-75.55, dip 38 deg. To C.A. 2% pyrite and pyrrhotite stringers.	214775	73.50	75.00	1.50	n/a	.02	nil	tr	n/a
			214776	75.00	75.70	.70	n/a	.02	nil	.01	n/a
75.70	76.10	Quartz/clacite stringers from 75.77-75.81m, dip 50 deg. To C.A. 5% honey sphalerite, 1-2% galena, trace chalcopyrite in stringers. 2% pyrite remainder of section.	214777	75.70	76.10	.40	n/a	.03	.19	.59	.06
76.10	77.00	Weakly fractured flow, quartz vein from 76.94-77.00m, dip 40 deg. To C.A. 1% pyrite and pyrrhotite.	214778	76.10	77.00	.90	n/a	.02	nil	tr	.06
77.00	78.00	Moderately fractured flow, 4-5% pyrrhotite stringers.	214779	77.00	78.00	1.00	n/a	.04	.01	.14	n/a
79.77	81.00	Flow, 4% pyrrhotite, trace chalcopyrite.	214780	79.77	81.00	1.23	n/a	.02	nil	tr	n/a
87.20	88.48	Pillowed section with minor flow top breccia. 1-2% disseminated pyrite. Silicious carbonate alteration with 10% disseminated pyrite from 87.33-87.91m.	214781	87.20	88.48	1.28	18.0	tr	nil	.02	n/a
88.48	89.10	Flow top breccia with minor tuff. Dark green to black chlorite/carbonaceous groundmass. 4-5% disseminated pyrite, trace pyrrhotite.	214782	88.48	89.10	.62	10.0	.02	nil	.03	n/a
90.60	91.30	Pillowed flow and flow top.									
92.30	92.53	Flow top breccia, from this section there is a decrease in pyrrhotite, becoming non-magnetic.									
96.54	97.74	Quartz vein from 96.60-96.71m, dip 55 deg. To C.A. 1% sphalerite in quartz stringer at 96.74m.	214783	96.54	97.74	1.20	nil	tr	.01	.05	n/a

from (m)	to (m)	Description
		97.74 98.70 Silicified flow top breccia, minor albite/carbonate alteration. 10-15% disseminated pyrite.
		99.40 100.60 Pillowed flow, 5% pyrite in selvages.
102.40	108.34	SILICIFIED BASALT Very fine-grained buff basalt or andesite. Highly fractured and brecciated. General random fracture pattern, may be in part interflow sediments with flow top breccia.
		102.40 103.40 Highly brecciated with quartz flooding/veining from 102.70-103.40, dip 17 deg. To C.A. 5% disseminated pyrite throughout.
		103.40 104.50 Mostly flow, weak silicification, trace-1% disseminated pyrite.
		104.50 106.00 As above.
		106.00 107.30 As above.
		107.30 107.66 Highly brecciated with 1% honey sphalerite in quartz/calcite stringers from 107.30-107.50m.
		107.66 108.34 Moderately fractured flow, silicification incresing down section, 1-2% disseminated pyrite.
108.34	113.50	SILICIFIED AND ALTERED BASALT Highly brecciated and silicified with minor sericite +- albite +- carbonate pervasive alteration. Sharp upper contact at 46 deg. To C.A. Alteration is pervasive from quartz fractures. General buff colour. Mineralized with 6% disseminated pyrite, local sections up to 10-15% fine pyrite.
		108.34 108.90 Dark grey/purple colour, highly fractured and silicified, 2-4% disseminated pyrite.
		108.90 110.00 Highly silicified with carbonate/sericite alteration, 8-10% finely disseminated pyrite. Alteration and mineralization appears to be along the C.A.
		110.00 111.00 Moderately silicified and altered, 1% disseminated pyrite.
		111.00 112.00 Decrease in silicification, 10% pyrite.
		112.00 113.50 Weak silicification and alteration, 4-5% pyrite clusters. Possible healed shear at 113.30m, trace sphalerite in stringers from 113.30-113.50m.
113.50	150.10	BASALT Dark green fine-grained basalt or andesite. Moderately fractured throughout with quartz/calcite stringers. Mineralized with 10% massive to

Sample No.	from (m)	to (m)	Length (m)	AU PPB	Cu %	Pb %	Zn %	Ag oz/ton
214784	97.74	98.70	.96	221.0	.01	tr	.02	n/a
214785	102.40	103.40	1.00	nil	tr	nil	.02	n/a
214786	103.40	104.50	1.10	8.0	tr	nil	.02	n/a
214787	104.50	106.00	1.50	16.0	tr	.04	.18	n/a
214788	106.00	107.30	1.30	8.0	nil	.02	.08	n/a
214789	107.30	107.66	.36	10.0	nil	.03	.17	n/a
214790	107.66	108.34	.68	49.0	.01	.08	.19	n/a
214791	108.34	108.90	.56	172.0	nil	nil	.01	n/a
214792	108.90	110.00	1.10	441.0	.02	tr	tr	n/a
214793	110.00	111.00	1.00	258.0	tr	nil	.01	n/a
214794	111.00	112.00	1.00	45.0	.01	nil	tr	n/a
214795	112.00	113.50	1.50	10.0	.05	nil	.01	n/a

from (m)	to (m)	Description	Sample No.	from (m)	to (m)	Length (m)	AU PPB	Cu %	Pb %	Zn %	Ag oz/ton
		semi-massive pyrrhotite and pyrite, trace chalcopyrite.									
114.40	115.90	As above, 10% pyrrhotite and pyrite, trace chalcopyrite at 115.00m.	214796	114.40	115.90	1.50	n/a	.05	nil	.01	n/a
115.90	117.40	2% pyrite and pyrrhotite.	214797	115.90	117.40	1.50	n/a	.02	nil	tr	n/a
117.40	118.00	As above, hairline sphalerite stringer at 117.46m.	214798	117.40	118.00	.60	n/a	.01	tr	.04	n/a
118.00	119.50	Flow brecciated from 119.30-119.40m, 10% pyrrhotite and pyrite.	214799	118.00	119.50	1.50	n/a	tr	nil	tr	n/a
119.50	121.00	Pillowed flow and flow top from 119.87-121.00m. 5% pyrite and pyrrhotite.	214800	119.50	121.00	1.50	n/a	.02	nil	tr	n/a
122.06	122.96	Massive pyrrhotite from 119.87-121.00m and from 122.80-122.96m, trace chalcopyrite in massive pyrrhotite.	214801	122.06	122.96	.90	n/a	.03	nil	tr	n/a
125.50	126.50	Weakly fractured basalt, 2% pyrrhotite.	214802	125.50	126.50	1.00	n/a	.02	nil	tr	n/a
126.50	127.00	2% sphalerite in stringers from 126.50-126.70m.	214803	126.50	127.00	.50	n/a	.01	.09	.25	n/a
127.00	128.50	8-10% pyrite and pyrrhotite, trace chlacopyrite.	214804	127.00	128.50	1.50	n/a	.04	nil	tr	n/a
128.50	130.00	4-5% pyrite and pyrrhotite, trace chalcopyrite.	214805	128.50	130.00	1.50	n/a	.02	nil	.01	n/a
130.00	131.50	As above.	214806	130.00	131.50	1.50	n/a	.02	nil	.02	n/a
131.50	133.00	2-4% pyrrhotite and pyrite.	214807	131.50	133.00	1.50	n/a	.02	nil	.01	n/a
133.00	133.57	Silicified/quartz flooded with 2-4% sphalerite, trace-.5% chalcopyrite. Quartz flooding at 18 deg. To C.A.	214808	133.00	133.57	.57	n/a	.12	.26	.69	.08
133.57	134.20	Moderately fractured with 10% quartz/clacite stringers. 2-4% pyrite, trace pyrrhotite.	214809	133.57	134.20	.63	n/a	.03	.02	.06	n/a
134.20	134.90	Highly fractured basalt with 8% pyrite and pyrrhotite.	214810	134.20	134.90	.70	n/a	.03	tr	.02	n/a
134.90	135.50	Highly fractured and silicified/albitized with 10% disseminated pyrite from 134.90-135.40m. Trace sphalerite at 133.50m.	214811	134.90	135.50	.60	96.0	.02	tr	.02	n/a
135.50	137.00	Weakly fractured basalt, 1-2% pyrite and pyrrhotite.	214812	135.50	137.00	1.50	n/a	.02	tr	.02	n/a
137.00	138.20	As above,.5cm quartz vein with 1% honey sphalerite at 137.64m, dip 24 deg. To C.A. 4-5% pyrite and pyrrhotite throughout.	214813	137.00	138.20	1.20	n/a	.03	.03	.10	n/a
138.20	139.64	Silicified/quartz-flooded from 139.25-139.64m, 5-6% pyrite and pyrrhotite throughout.	214814	138.20	139.64	1.44	n/a	.04	nil	tr	n/a
141.25	142.45	Flow top breccia, marked decrease in pyrrhotite and pyrite mineralization after this section.									
149.50	150.10	Flow top breccia, 4-5% pyrite and pyrrhotite.	214815	149.50	150.10	.60	n/a	tr	nil	.01	n/a
150.10	157.90	SILICIFIED BASALT Light creamy coloured flow brecciated andesite,									

from (m)	to (m)	Description	Sample No.	from (m)	to (m)	Length (m)	AU PPB	Cu %	Pb %	Zn %	Ag oz/ton
		Locally with quartz-eye texture. Moderately fractured throughout and mineralized with 10% pyrrhotite and pyrite with short sections of semi-massive pyrrhotite. Weak chloritic alteration as slips and fractures throughout. Trace chalcopyrite in association with the pyrrhotite.									
		150.10 151.00 4% pyrrhotite.	214816	150.10	151.00	.90	n/a	tr	nil	.01	n/a
		151.00 151.70 20% pyrrhotite, 1-2% chalcopyrite from 151.50-151.60m.	214817	151.00	151.70	.70	n/a	.01	nil	.01	n/a
		151.70 153.00 2-4% pyrite and pyrrhotite, trace chalcopyrite.	214818	151.70	153.00	1.30	n/a	tr	nil	.02	n/a
		153.00 154.13 5% pyrite and pyrrhotite. Quartz 'eye' at 132.20m. 2% chalcopyrite from 154.02-154.10.	214819	153.00	154.13	1.13	n/a	tr	nil	.03	n/a
		154.13 155.50 2-4% semi-massive and disseminated pyrite and pyrrhotite.	214820	154.13	155.50	1.37	n/a	tr	nil	.03	n/a
			214821	155.50	157.00	1.50	n/a	tr	nil	.02	n/a
		157.00 157.90 2% pyrite and pyrrhotite.	214822	157.00	157.90	.90	n/a	tr	nil	.02	n/a
157.90	163.50	BASALTIC BRECCIA									
		Intercalated volcanic breccia and carbonaceous wacke or tuff. Breccia fragments are coarse and angular up to 3-4cm in size. Groundmass is dark grey to black and silty. Weak foliation at approximately 50 deg. To C.A. 1% disseminated pyrite and pyrrhotite in flow top sections. Trace sulfides in the sediments.									
163.50	172.90	SILICIFIED BASALT									
		Light creamy coloured silicified basalt. Similar to unit at 150.10m. Silicification is most intense in pillowed sections. Erratic semi-massive pyrite and pyrrhotite mineralization throughout.									
		164.90 166.00 As above, 5% pyrite and pyrrhotite.	214823	164.90	166.00	1.10	n/a	tr	nil	.01	n/a
		166.00 167.50 As above, massive pyrrhotite from 166.90-167.20m.	214824	166.00	167.50	1.50	n/a	tr	nil	.01	n/a
		167.50 169.00 1% pyrite and pyrrhotite.	214825	167.50	169.00	1.50	n/a	tr	nil	.01	n/a
		169.00 170.50 2-4% pyrite and pyrrhotite.	214826	169.00	170.50	1.50	n/a	tr	nil	.02	n/a
		170.50 172.00 30% massive pyrrhotite from 170.87-171.40m. Trace chalcopyrite.	214827	170.50	172.00	1.50	n/a	.01	tr	.03	n/a
		172.00 172.90 5% pyrrhotite and pyrite.	214828	172.00	172.90	.90	n/a	tr	nil	.01	n/a
172.90	178.77	BASALT									
		Dark green moderately fractured basalt. Local weak silicification. Mineralized throughout with 5-8% pyrrhotite +- pyrite.									
		172.90 174.00 As above.	214829	172.90	174.00	1.10	n/a	tr	nil	.02	n/a
		174.00 175.50 As above.	214830	174.00	175.50	1.50	n/a	tr	nil	.01	n/a
		175.50 177.00 2% pyrrhotite.	214831	175.50	177.00	1.50	n/a	tr	nil	.01	n/a
		177.00 178.50 4-5% pyrrhotite.	214832	177.00	178.50	1.50	n/a	tr	nil	.01	n/a
		178.50 178.77 Trace pyrite and pyrrhotite.	214833	178.50	178.77	.27	n/a	tr	nil	.01	n/a
178.77	184.50	SILICIFIED BASALT									

from (m)	to (m)	Description	Sample No.	from (m)	to (m)	Length (m)	AU PPB	Cu %	Pb %	Zn %	Ag oz/ton
		Moderately to highly silicified pillowed flows and flow top breccia. Mineralized throughout with 10-15% semi-massive and massive pyrite. Trace chalcopyrite.									
178.77	180.00	As above, 10% pyrrhotite and pyrite.	214834	178.77	180.00	1.23	n/a	.01	nil	.02	n/a
180.00	181.50	As above, 15% pyrrhotite.	214835	180.00	181.50	1.50	n/a	tr	nil	.02	n/a
181.50	183.00	As above.	214836	181.50	183.00	1.50	n/a	tr	nil	.02	n/a
183.00	184.50	As above, 4-5% pyrrhotite and pyrite.	214837	183.00	184.50	1.50	n/a	tr	nil	.02	n/a
184.50	185.60	SILICIOUS TUFF AND CHERT									
		Intercalated light grey tuffaceous sediments and banded chert. Bedding at 49 deg. To C.A. Trace to 1% disseminated pyrite.									
184.50	185.60	As above.	214838	184.50	185.60	1.10	n/a	nil	nil	.01	n/a
185.60	218.20	GRAPHITIC SHALE									
		Dark grey to black carbonaceous siltstone. Locally graphitic. Core is blocky and broken to 190,00m. Sediments are moderately fractured with hairline quartz/calcite stringers, locally mineralized with minor sphalerite. Trace to 1% nodular pyrite throughout.									
185.60	186.30	Weakly fractured, nil sphalerite.	214839	185.60	186.30	.70	n/a	tr	tr	.06	n/a
186.30	186.31	Fault Zone Major graphitic fault, dip 66 deg. To C.A.	214840	186.30	187.50	1.20	n/a	.02	.14	.70	n/a
186.30	187.50	Fault Zone Blocky graphitic gouge from 186.31-186.60m. Trace quartz +- calcite stringers with honey sphalerite.									
187.50	189.00	Narrow seam of fault gouge at 187.88m, dip 53 deg. To C.A. Seam of fault gouge at 188.30m, dip 28 deg. To C.A. Trace to.5% sphalerite stringers throughout.	214841	187.50	189.00	1.50	n/a	tr	.06	.10	n/a
189.00	190.50	Graphitic shale, 2-4% pyrite. Core is blocky and broken, 80% recovery.	214842	189.00	190.50	1.50	n/a	tr	.03	.20	n/a
190.50	192.00	As above,.5% quartz stringers with honey sphalerite.	214843	190.50	192.00	1.50	n/a	tr	.06	.41	n/a
192.00	193.50	As above.	214844	192.00	193.50	1.50	n/a	tr	.10	.48	n/a
193.50	195.00	Narrow seam of fault gouge at 193.60m, dip 61 deg. To C.A. Trace quartz stringers.	214845	193.50	195.00	1.50	n/a	tr	.03	.09	n/a
210.26	210.27	Fault Zone 1cm of gouge at 38 deg. To C.A.									
218.20		End of Hole.									
		Casing Pulled.									
		Core stored at Kenogami Lake.									

GEOLOGICAL ASSOCIATION OF CANADA
S. L. Carmichael
May 12/92
FELLOW

Co-ords 300.0 N -550.0 E

Azimuth: 180.0

Dip: -50.0

Elevation 1000.0

Length: 183.3

DIAMOND DRILL RECORD

HOLE NO.: R92-3

Property: Rickard

Purpose: East Step-out From R92-1

Drilled by: Heath and Sherwood

Date Started: March 18, 1992

Date Completed: March 20, 1992

Logged by: S.J. Carmichael, 22/03/92

Core Size: BQ

Claim Number: L-1167996

Dip Tests

41.5	180.0	-50.0
102.4	180.0	-49.0
163.4	180.0	-45.0

from (m)	to (m)	Description	Sample No.	from (m)	to (m)	Length (m)	AU PPB	Cu %	Pb %	Zn %	Ag oz/ton
.00	40.20	CASING									
40.20	68.20	BASALT Dark grey fine-grained andesite or basalt. Intercalated flows and flow top breccia. Weakly to moderately fractured throughout with quartz/calcite hairline stringers. Mineralized with 2-4% disseminated pyrite and pyrrhotite. Local short sections of semi-massive pyrrhotite and pyrite.									
		45.50 46.50 Highly brecciated and silicified, possible healed fault. 2% pyrite, trace sphalerite.	214846	45.50	46.50	1.00	n/a	.01	tr	.04	n/a
		46.50 47.50 Flow top breccia, 10% pyrite and pyrrhotite.	214847	46.50	47.50	1.00	n/a	tr	nil	.01	n/a
		47.50 49.00 As above, interflow carbonaceous sediments at 48.90m. Bedding/foliation at 58 deg. To C.A. 5% disseminated pyrite and pyrrhotite throughout.	214848	47.50	49.00	1.50	13.0	n/a	n/a	n/a	n/a
		49.00 50.50 Flow top breccia from 50.00-50.50m. 2-4% disseminated pyrite and pyrrhotite throughout.	214849	49.00	50.50	1.50	n/a	tr	nil	.02	n/a
		52.73 53.00 Pillowed section, massive pyrrhotite in pillow selvage at 52.85m.									
		58.00 59.50 Flow brecciated with 4-5% pyrite and pyrrhotite.	214850	58.00	59.50	1.50	n/a	tr	nil	.01	n/a
		61.10 62.10 As above.	214851	61.10	62.10	1.00	n/a	tr	nil	.01	n/a
		62.10 63.50 Moderately fractured flow and flow top breccia. 1% pyrite and pyrrhotite, trace chalcopyrite.	214852	62.10	63.50	1.40	n/a	tr	nil	.01	n/a
		63.50 65.00 As above, trace to 1% pyrite and pyrrhotite, trace chalcopyrite.	214853	63.50	65.00	1.50	n/a	tr	nil	.01	n/a
		65.00 66.50 As above.	214854	65.00	66.50	1.50	n/a	tr	nil	.01	n/a
68.20	77.22	MAFIC FLOW TOP BRECCIA									

from (m)	to (m)	Description	Sample No.	from (m)	to (m)	Length (m)	Au PPB	Cu %	Pb %	Zn %	Ag oz/ton
		Light grey silicious flow top breccia. May be intermediate to felsic in origin or a silicified basalt. Pillow fragments locally show quartz amygdules. Mineralized throughout with 20% semi-massive pyrrhotite and pyrite in breccia groundmass. Weak chloritic seams throughout.									
68.20	69.50	Coarse breccia, 4% pyrrhotite and pyrite, weak silicification.	214855	68.20	69.50	1.30	n/a	tr	nil	.01	n/a
69.50	71.00	As above, becoming increasingly silicified. 5-8% pyrrhotite.	214856	69.50	71.00	1.50	n/a	tr	nil	.02	n/a
71.00	72.50	Silicious flow top breccia, 10-15% pyrrhotite.	214857	71.00	72.50	1.50	n/a	tr	nil	.02	n/a
72.50	74.00	As above.	214858	72.50	74.00	1.50	n/a	.01	nil	.02	n/a
74.00	75.50	As above.	214859	74.00	75.50	1.50	n/a	tr	nil	.01	n/a
75.50	76.50	As above.	214860	75.50	76.50	1.00	n/a	tr	nil	.01	n/a
76.50	77.22	As above.	214861	76.50	77.22	.72	n/a	.01	nil	.01	n/a
77.22	116.70	**BASALTIC BRECCIA** Dark grey non-silicious mafic volcanic breccia. Coarse fragments up to 5cm in size, average 1-2cm. Section is weakly fractured with 2-4% disseminated pyrite and pyrrhotite and stringers.									
79.00	80.50	As above, 4% sulfide stringers.	214862	79.00	80.50	1.50	n/a	tr	nil	.01	n/a
80.50	82.00	As above.	214863	80.50	82.00	1.50	n/a	tr	nil	.01	n/a
82.00	83.50	1% pyrite and pyrrhotite.	214864	82.00	83.50	1.50	n/a	tr	nil	.01	n/a
83.50	84.46	As above.	214865	83.50	84.46	.96	n/a	tr	nil	tr	n/a
84.46	84.95	Moderately fractured from 84.46-84.81m, 2% chalcopyrite from 84.46-84.57m, 4% sphalerite stringers from 84.57-84.82m. Trace galena.	214866	84.46	84.95	.49	n/a	.11	.46	3.04	.09
84.95	86.00	Moderately fractured flow top breccia. 2% pyrrhotite +- pyrite stringers.	214867	84.95	86.00	1.05	n/a	.01	nil	.02	.06
92.42	92.70	Quartz/calcite flooding, dip 12 deg. To C.A.									
96.52	96.63	Quartz vein, dip 58 deg. To C.A.									
109.00	109.01	1.5 cm wide quartz/epidote vein, dip 8 deg. To C.A. Barren.									
112.00	113.50	Moderately fractured flow top breccia. Quartz/epidote veins from 112.97-113.11, dip 90 deg. To C.A., vein from 113.22-113.38, dip 38 deg. To C.A. 2% pyrite stringers throughout. Trace sphalerite at 112.60m.	214868	112.00	113.50	1.50	n/a	tr	nil	.02	n/a
113.50	114.30	Moderately fractured flow top breccia, 1-2% quartz/calcite stringers,.5% sphalerite from 113.95-114.30m.	214869	113.50	114.30	.80	n/a	tr	.11	.37	n/a
114.30	114.31	Fault Zone Narrow seam of gouge at 52 deg. To C.A.	214870	114.30	115.50	1.20	n/a	tr	.08	.26	n/a
115.50	116.70	Flow top breccia to 116.25m, 2% sphalerite stringers from 115.70-116.10m. Possible chert from 116.26-116.60m. Trace sphalerite in this section.	214871	115.50	116.70	1.20	n/a	.02	.53	1.74	n/a

from (m)	to (m)	Description	Sample No.	from (m)	to (m)	Length (m)	AU PPB	Cu %	Pb %	Zn %	Ag oz/ton
116.70	159.70	**GRAPHITIC SHALE** Interbedded carbonaceous siltstone and argillaceous sediments. Weak bedding at 50 deg. To C.A. Generally massive, weakly fractured with <1% hairline quartz stringers. Mineralized throughout with 4% nodular and disseminated pyrite. Minor chert beds throughout.									
116.70	118.00	Siltstone from 116.70-118.00. 4-5% nodular pyrite.	214872	116.70	118.00	1.30	n/a	tr	.18	.62	n/a
			119362	118.00	119.50	1.50	n/a	.01	.03	.24	n/a
			119363	119.50	121.00	1.50	n/a	.01	nil	.09	n/a
			119364	121.00	122.50	1.50	n/a	.01	nil	.07	n/a
			119365	122.50	124.00	1.50	n/a	tr	nil	.03	n/a
			119366	124.00	125.50	1.50	n/a	nil	nil	.03	n/a
			119367	125.50	127.00	1.50	n/a	tr	.04	.26	n/a
			119368	127.00	128.50	1.50	n/a	tr	.08	.40	n/a
127.80	127.90	Fault Zone Fault gouge, crenulated core, dip 50 deg. To C.A.	119369	128.50	130.00	1.50	n/a	tr	.03	.14	n/a
			119370	130.00	131.50	1.50	n/a	tr	.10	.34	n/a
131.00	131.10	Quartz vein, irregular dip.	119371	131.50	132.50	1.00	n/a	nil	.05	.20	n/a
			119372	132.50	133.50	1.00	n/a	tr	.15	.56	n/a
			119373	133.50	134.50	1.00	n/a	tr	.06	.28	n/a
134.50	136.00	Graphitic shale, trace sphalerite in quartz stringers. <1% stringers.	214873	134.50	136.00	1.50	n/a	tr	.06	.24	n/a
136.00	137.50	As above.	214874	136.00	137.50	1.50	n/a	nil	.05	.20	n/a
137.50	139.00	As above.	214875	137.50	139.00	1.50	n/a	nil	.09	.29	n/a
139.00	140.50	As above, slight increase in sphalerite.	214876	139.00	140.50	1.50	n/a	nil	.05	.30	n/a
140.50	142.00	Trace sphalerite.	214877	140.50	142.00	1.50	n/a	tr	.06	.26	n/a
142.00	143.50	As above.	214878	142.00	143.50	1.50	n/a	tr	.15	.34	n/a
143.50	146.50	As above.	214879	143.50	145.00	1.50	n/a	tr	.04	.25	n/a
			214880	145.00	146.50	1.50	n/a	tr	.14	.45	n/a
146.50	148.00	As above.	214949	146.50	148.00	1.50	n/a	tr	.08	.34	n/a
148.00	149.70	As above.	214950	148.00	149.70	1.70	n/a	nil	.05	.24	n/a
149.70	151.00	10% nodular pyrite, 1% spahlerite and chlacopyrite at 150.35m.	214881	149.70	151.00	1.30	n/a	.02	.90	2.61	n/a
151.00	152.20	Trace sphalerite throughout, fault gouge at 152.06m, dip 50 deg. To C.A.	214882	151.00	152.20	1.20	n/a	.02	.59	2.08	n/a
152.20	153.50	Graphitic shale.	214946	152.20	153.50	1.30	n/a	nil	.02	.10	n/a
153.50	155.00	Blocky broken core, minor gouge, at 154.90m dip 50 deg. To C.A.	214947	153.50	155.00	1.50	n/a	tr	.04	.22	n/a
155.00	156.50	Coarse brecciated graphitic shale from 156.40-156.50m.	214948	155.00	156.50	1.50	n/a	n/a	n/a	n/a	n/a
156.50	158.00	Graphitic Shale.									
159.30	159.70	Silicified 'baked' alteration. 4% pyrite from 159.30-159.40m. Quartz vein/flooded from 159.60-159.70m.									
159.70	168.92	**MAFIC INTRUSIVE** Dull geen fine to medium grained diabase or diorite. Weakly to moderately fractured with quartz +- calcite stringers. Non-magnetic. Nil to trace sulfides.									
168.00	168.92	Fine-grained weak talcose alteration.									
168.92	170.60	**CHERT AND SILTSTONE** Interbedded light grey chert and siltstone. Bedding									

from (m)	to (m)	Description	Sample No.	from (m)	to (m)	Length (m)	AU PPB	Cu %	Pb %	Zn %	Ag oz/ton
		at 62 deg. To C.A. Cherty sections are moderately brecciated and fractured. Trace sulfides throughout.									
168.92	169.70	Chert, trace pyrrhotite and pyrite stringers.	214883	168.92	169.70	.78	n/a	tr	nil	.01	n/a
169.70	170.60	Siltstone from 169.70-170.00m followed by brecciated chert. Trace sphalerite in chert.	214884	169.70	170.60	.90	n/a	nil	tr	.03	n/a
170.60	173.43	BASALT									
		Dark green fine-grained brecciated and fractured basalt. 10-15% hairline quartz+- calcite stringers throughout except where noted.									
170.60	171.90	As above, nil sulfides.	214885	170.60	171.90	1.30	n/a	tr	tr	.03	n/a
171.90	172.76	As above, trace sphalerite stringers.	214886	171.90	172.76	.86	n/a	tr	.13	.60	n/a
172.76	173.43	Highly fractured with 4% sphalerite stringers from 172.76-172.94m, trace sphalerite remainder of section.	214887	172.76	173.43	.67	n/a	tr	.25	1.09	n/a
173.43	183.30	INTERMEDIATE VOLCANICS (Calc- Basalt)									
		Light brown-grey fine-grained andesite. Moderately fractured throughout with quartz +- calcite stringers. Trace sulfides throughout.									
173.43	175.00	As above, trace to.25% disseminated sphalerite.	214888	173.43	175.00	1.57	n/a	nil	.05	.27	n/a
175.00	176.00	Trace sphalerite and chalcopyrite.	214889	175.00	176.00	1.00	n/a	tr	.02	.08	n/a
176.00	177.50	Nil to trace sulfides. Flow becoming slightly coarser grained.	214890	176.00	177.50	1.50	n/a	.01	nil	.01	n/a
183.30		End of Hole.									
		Casing Pulled.									
		Core stored at Kenogami Lake.									

GEOLOGICAL ASSOCIATION OF CANADA
S. J. Carmichael
Mar 12/92
FELLOW

Greater Lenora Resources Corp.

HOLE NO.: R92-4

Co-ords 300.0 N -650.0 E

DIAMOND DRILL RECORD

Azimuth: 180.0

Dip: -52.0

Elevation 1000.0

Length: 200.0

Property: Rickard
Purpose: West Step-out From R92-1
Drilled by: Heath and Sherwood
Date Started: March 20, 1992
Date Completed: March 24, 1992
Logged by: S.J. Carmichael, 25/03/92
Core Size: BQ
Claim Number: L-1167996

Dip Tests

29.3	180.0	-52.0
90.2	180.0	-52.0
151.2	180.0	-51.0

from (m)	to (m)	Description	Sample No.	from (m)	to (m)	Length (m)	AU PPB	Cu %	Pb %	Zn %	Ag oz/ton
.00	28.00	CASING									
28.00	46.00	BASALT Dark grey fine-grained andesite or basalt. Weakly to moderately fractured throughout with quartz/calcite hairline stringers. Weakly mineralized with 1-2% clots and stringers of pyrite and pyrrhotite. Minor pillowed sections throughout. Sulphide mineralization is distinctly less than previous holes. 30.00 30.80 Pillowed section, massive pyrite with minor pyrrhotite from 30.26-30.37m. 44.75 46.00 Quartz/calcite vein from 44.75-45.10m., dip along the C.A. 10% euhedral pyrite in vein. Brecciated healed fault from 45.60-46.00m.	214891	44.75	46.00	1.25	10.0	.02	nil	tr	.06
46.00	53.70	SILICIFIED FLOW TOP BRECCIA Highly fractured and brecciated volcanics. Highly silicified throughout with sections of quartz flooding. Fractures show local pervasive carbonate alteration. Highly silicified sections are mineralized with 5-6% disseminated pyrite. 46.00 47.00 Moderately silicifed breccia, 4-5% disseminated pyrite.	214892	46.00	47.00	1.00	273.0	nil	nil	.01	n/a
		47.00 48.00 Highly silicified, coarse breccia with quartz flooding from 47.30-47.90. 4-5% disseminated pyrite.	214893	47.00	48.00	1.00	28.0	tr	nil	tr	n/a
		48.00 49.20 Weak brecciation and silicification, trace-1% disseminated pyrite.	214894	48.00	49.20	1.20	21.0	.01	nil	.01	n/a
		49.20 50.10 Moderately fractured and silicified. 4-5% disseminated pyrite.	214895	49.20	50.10	.90	37.0	tr	nil	tr	n/a
		50.10 51.20 Weak brecciation and silicification, trace pyrite.	214896	50.10	51.20	1.10	176.0	tr	nil	.02	n/a
		51.20 52.53 Moderately brecciated and weak	214897	51.20	52.53	1.33	34.0	tr	nil	.01	n/a

from (m)	to (m)	Description	Sample No.	from (m)	to (m)	Length (m)	AU PPB	Cu %	Pb %	Zn %	Ag oz/ton
		silicification. 4% disseminated pyrite.	214898	52.53	53.70	1.17	257.0	.01	nil	.01	n/a
53.70	93.45	BASALT									
		Dark grey/green fine-grained basalt. Locally vesicular with pinhead quartz/clacite amygdules. Moderately fractured throughout with quartz +- calcite stringers, locally with quartz/K-spar. May in part be pillowed with minor flow top breccia. 1-2% pyrrhotite throughout.									
		58.00 59.15 Moderately brecciated and silicified, 4-5% pyrite, 1% pyrrhotite.	214899	58.00	59.15	1.15	12.0	.01	nil	tr	n/a
		70.83 71.90 Highly brecciated with moderate silicification. Buff carbonate alteration from 71.40-71.90m. 1% disseminated pyrite throughout.	214900	70.83	71.90	1.07	12.0	tr	nil	.01	n/a
		90.10 90.20 Possible interflow sediments with flow top breccia.									
		91.66 91.75 Massive pyrrhotite.									
93.45	94.12	GRAPHITIC SHALE AND MASSIVE PYRITE									
		Flow top breccia from 93.45-93.50. Finely laminated graphitic siltstone from 93.50-93.76, dip 58 deg. To C.A. Massive pyrite mineralization from 93.76-94.12m.									
		93.45 94.12 As above.	214901	93.45	94.12	.67	n/a	.01	nil	.03	n/a
94.12	99.50	BASALT									
		Dark grey/green fine-grained andesite or basalt. Moderately fractured with hairline quartz/calcite stringers. Trace pyrrhotite mineralization to 96.3m, then becoming mixed flow and flow top breccia with 5-10% stringer and semi-massive pyrrhotite and pyrite.									
		94.12 95.50 Massive pyrrhotite in flow top breccia from 95.02-95.20m.	214902	94.12	95.50	1.38	n/a	tr	nil	.01	n/a
		95.50 97.00 20% pyrrhotite from 96.38-96.50m. 1% remainder of section.	214903	95.50	97.00	1.50	n/a	tr	nil	.01	n/a
		97.00 98.50 1-2% pyrite and pyrrhotite.	214904	97.00	98.50	1.50	n/a	.01	nil	.02	n/a
		98.50 99.50 4% pyrrhotite, becoming volcanic breccia.	214905	98.50	99.50	1.00	n/a	.01	nil	.02	n/a
99.50	101.53	BASALTIC BRECCIA									
		Dark grey coarse angular breccia. Groundmass is aphanitic carbonaceous. Trace to 1% pyrite and pyrrhotite in groundmass.									
101.53	102.70	GRAPHITIC SHALE									
		Dark grey carbonaceous siltstone. Weak laminations at 70 deg. To C.A. Mineralized with 10-15% nodular pyrite and pyrrhotite.									
		101.53 102.70 As above.	214906	101.53	102.70	1.17	n/a	tr	nil	.06	n/a

from (m)	to (m)	Description	Sample No.	from (m)	to (m)	Length (m)	AU PPB	Cu %	Pb %	Zn %	Ag oz/ton
102.70	107.70	BASALT									
		Greay/green aphanitic andesite. Locally with silicious flow top sections. Flow sections are mineralized with trace to 1% disseminated pyrite and pyrrhotite. Pillowed sections are are silicious and mineralized with 10% pyrrhotite and pyrite.									
	102.70 104.00	Pillowed flow from 102.70-103.00, then fine-grained flow. Trace to 1% pyrite and pyrrhotite.	214907	102.70	104.00	1.30	n/a	tr	nil	.01	n/a
	104.00 105.50	Flow, 8% pyrite and pyrrhotite from 104.60-104.90m. Trace sulfides remainder of section.	214908	104.00	105.50	1.50	n/a	tr	nil	.01	n/a
	105.50 107.00	Pillowed with 10-15% pyrite and pyrrhotite from 106.60-107.00m, trace chalcopyrite.	214909	105.50	107.00	1.50	n/a	.01	nil	.02	n/a
	107.00 107.70	Silicious pillowed section, 15% pyrite.	214910	107.00	107.70	.70	n/a	.02	nil	tr	n/a
107.70	117.70	GRAPHITIC SHALE AND MASSIVE PYRITE									
		Black fine-grained silicious carbonaceous siltstone. Locally fragmented and brecciated with possible cherty clasts. Mineralized throughout with 10-15% semi-massive nodular pyrite.									
	108.50 110.00	20% nodular pyrite.	214911	108.50	110.00	1.50	n/a	nil	nil	tr	n/a
	110.00 111.50	10% fine disseminated pyrite. Calcite vein from 111.20-111.50m, dip along the C.A.	214912	110.00	111.50	1.50	n/a	nil	nil	.01	n/a
	111.50 113.00	Brecciated with calcite +- quartz flooding from 111.50-111.90m. 10-15% nodualar pyrite throughout.	214913	111.50	113.00	1.50	n/a	nil	nil	tr	n/a
	113.00 114.50	10% nodular pyrite, trace sphalerite.	214914	113.00	114.50	1.50	n/a	nil	nil	.02	n/a
	114.50 116.00	20-30% nodualr pyrite, smokey quartz vein from 115.50-115.67m, dip 66 deg. To C.A.	214915	114.50	116.00	1.50	n/a	.01	nil	.01	n/a
	116.00 117.70	50% massive nodular pyrite.	214916	116.00	117.70	1.70	n/a	tr	nil	.06	n/a
117.70	158.40	GRAPHITIC SHALE									
		Black carbonaceous to graphitic siltstone. Massive, poorly laminated or bedded. Weakly to locally moderately fractured with hairline quartz +- calcite stringers. Trace to 1% pyrite.									
	124.00 124.01	Fault Zone Narrow seam of gouge, dip 62 deg. To C.A.									
	124.50 124.51	Fault Zone Narrow seam of gouge, dip 60 deg. To C.A.									
	124.62 124.63	Fault Zone Narrow seam of gouge, dip 54 deg. To C.A.	119376	131.50	133.00	1.50	n/a	.01	.03	.15	n/a
			119377	133.00	134.50	1.50	n/a	.01	.03	.15	n/a
			119378	134.50	136.00	1.50	n/a	.01	.04	.19	n/a
	136.00 137.50	1-2% quartz/calcite stringers, trace sphalerite.	214917	136.00	137.50	1.50	n/a	tr	.10	.47	n/a
	137.50 139.00	As above, 2% honey sphalerite in quartz/calcite stringer at 138.82m.	214918	137.50	139.00	1.50	n/a	tr	.03	.32	n/a
	139.00 140.50	1% quartz/calcite stringers, nil sphalerite.	214919	139.00	140.50	1.50	n/a	nil	.04	.27	n/a

from (m)	to (m)	Description	Sample No.	from (m)	to (m)	Length (m)	AU PPB	Cu %	Pb %	Zn %	Ag oz/ton
	140.50	142.00 2% quartz/clacite stringers, trace sphalerite in stringers.	214920	140.50	142.00	1.50	n/a	nil	.04	.16	n/a
	153.50	154.40 2% quartz/calcite stringers, nil sphalerite.	214921	153.50	154.40	.90	n/a	tr	.06	.23	n/a
	154.40	154.41 Fault Zone Gouge and blocky core, dip 50 deg. To C.A.	214922	154.40	155.70	1.30	n/a	nil	.07	.46	.03
	154.41	155.70 Highly fractured graphitic shale, trace sphalerite from 155.46-155.70m.									
	155.70	157.00 Highly fractured and blocky broken core throughout. Mineralized with 1-2% honey sphalerite and 1-2% pyrite. Probable fault zone.	214923	155.70	157.00	1.30	n/a	nil	.13	2.09	.03
	157.00	158.40 Blocky broken core, moderately fractured with trace to.5% honey sphalerite.	214924	157.00	158.40	1.40	n/a	tr	.23	1.24	.03
158.40	160.76	FELSIC VOLCANICS Light grey/green highly fractured dacite (?). Speckled throughout with quartz/chlorite amygdules. Moderately fractured throughout with hairline quartz stringers. Mineralized throughout with 1% disseminated pyrite with trace sphalerite blades. Core is blocky and broken due to faulting above.									
	158.40	159.50 As above.	214925	158.40	159.50	1.10	n/a	tr	.08	.40	n/a
	159.50	160.76 As above.	214926	159.50	160.76	1.26	n/a	.02	.10	.36	n/a
160.76	166.68	GRAPHITIC SHALE Dark grey black silicious graphitic siltstone. Weakly to locally moderately fractured and brecciated. 2-4% nodular and disseminted pyrite throughout.									
	160.76	162.00 Fault Zone As above, major fault with gouge at 161.3m, dip unobtainable. Fault gouge at 161.6m, dip 59 deg. To C.A. 164.70 166.00 Moderately silicified with 1-2% pyrite.	214927	160.76	162.00	1.24	n/a	.01	.04	.21	n/a
			214928	164.70	166.00	1.30	5.0	nil	nil	tr	n/a
	166.00	166.68 As above, trace pyrite.	214929	166.00	166.68	.68	5.0	tr	nil	.03	.03
166.68	175.30	MAFIC INTRUSIVE Light green/grey fine to medium grained diorite or diabase gike. Non-magnetic. Trace pyrite mineralization. Gradational upper and lower contacts. Coarser-grained sections show pyroxene blades up to.5cm in length.									
175.30	189.95	BASALT Dark grey/green fine-grained basalt or andesite. Erratic weak magnetism. Generally massive, 1% quartz/calcite hairline fractures. 1% disseminated pyrite and pyrrhotite throughout.									

from (m)	to (m)	Description
189.95	190.90	GRAPHITIC SHALE Finely laminated graphitic shale and chert. Bedding at 60 deg. To C.A. 2% pyrite laminations.
190.90	193.90	FELSIC VOLCANICS Light grey to brown silicious breccia. Clasts are sub-angular to rounded of mixed lithologies up to 3cm in size. Nil to trace sulfides. 190.90 192.00 As above. 192.00 193.50 As above.
193.90	196.00	GRAPHITIC SHALE Black laminated graphitic shale with minor chert. Chert content increases after 195.00m. 195.00 196.00 Cherty silicious graphitic shale, 1-2% disseminated pyrite.
196.00	198.13	MAFIC INTRUSIVE Coarse-grained diorite or diabasic dike. Coarse bladed pyroxene phenocrysts up to 1cm in length. Trace to 1% pyrite and pyrrhotite.
198.13	198.37	GRAPHITIC SHALE Dark grey silicious brecciated carbonaceous chert and shale. 2% disseminanted pyrite.
198.37	200.00	BASALT Light grey fine to medium grained andesite or basalt. May be cut by diabasic dike from 198.60-198.70m. Trace pyrite and pyrrhotite throughout. 200.00 End of Hole. Casing Pulled. Core stored at Kenogami Lake.

Sample No.	from (m)	to (m)	Length (m)	AU PPB	Cu %	Pb %	Zn %	Ag oz/ton
214930	190.90	192.00	1.10	n/a	.01	nil	.03	.06
214931	192.00	193.50	1.50	n/a	.01	tr	.04	.06
214932	195.00	196.00	1.00	7.0	tr	nil	tr	n/a

GEOLOGICAL ASSOCIATION OF CANADA
S. I. Carmichael
May 12/92
FELLOW

Greater Lenora Resources Corp.

DIAMOND DRILL RECORD

HOLE NO.: R92-5

Co-ords 230.0 N 300.0 E

Azimuth: 180.0

Dip: -52.0

Elevation 1000.0

Length: 139.0

Property: Rickard
Purpose: Test Max Min II Anomaly
Drilled by: Heath and Sherwood
Date Started: March 26, 1992
Date Completed: March 28, 1992
Logged by: S.J. Carmichael, 01/04/92
Core Size: BQ
Claim Number: L-1167997

Dip Tests

14.0 180.0 -52.0

from (m)	to (m)	Description	Sample No.	from (m)	to (m)	Length (m)	AU PPB	Cu %	Pb %	Zn %	Ag oz/ton
.00	12.20	CASING									
12.20	85.40	BASALT Light green fine-grained pillowed basalt. Non-magnetic throughout. Moderately fractured with 2% quartz/calcite hairline stringers. Minor hematite mineralization in stringers. Nil to trace pyrite throughout. 17.10 17.11 Fault Zone Narrow seam of gouge, dip along the C.A. 18.30 19.20 Pillowed flow and flow top breccia. 20% calcite flooding. 32.30 33.30 Dark purple weak to moderate silicification and brecciation. 1-2% finely disseminated pyrite. 37.40 Flow contact between pillowed flow and coarse grained diabasic flow. Tops down-hole(?). 41.00 41.50 Blocky broken core, possible fault zone. 49.80 49.90 Brecciated and sheared basalt with limonitic weathering. 79.10 79.38 Silicified/quartz flooded. Barren. 79.60 79.75 Quartz vein, dip 53 deg. To C.A. Barren.	119374	31.26	32.30	1.04	200.0	n/a	n/a	n/a	n/a
			214941	32.30	33.30	1.00	971.0	.01	nil	.01	n/a
			119375	33.30	34.30	1.00	9.0	n/a	n/a	n/a	n/a
85.40	90.60	GRAPHITIC SHALE Moderately brecciated graphitic shale intercalated with light grey volcanic tuff or wacke. Upper contact is irregular and brecciated at 8 deg. To C.A. Bedding at 33 deg. To C.A. Entire unit is highly brecciated with 10% quartz/calcite flooding and stringers. Mineralized with trace to 2% disseminated pyrite. 85.40 86.50 Carbonaceous siltstone from 85.40-86.10m, bedding at 4 deg. To C.A. Grey tuffaceous/wacke from 86.10-86.40m	214942	85.40	86.50	1.10	n/a	.01	nil	.08	n/a

from (m)	to (m)	Description	Sample No.	from (m)	to (m)	Length (m)	AU PPB	Cu %	Pb %	Zn %	Ag oz/ton
		followed by brecciated graphitic shale to 86.50m. Trace pyrite throughout.									
86.50	88.00	Pillowed flow from 86.80-87.00. Graphitic shale and wacke remainder of section. Fault gouge at 87.00m, dip at 2 deg. To C.A. Brecciated graphitic shale from 87.20-87.60m. 4% pyrite throughout.	214943	86.50	88.00	1.50	n/a	.02	nil	.02	n/a
88.00	89.40	Silicious chert from 88.00-89.00m. Highly fractured and brecciated with trace-1% disseminated pyrite. Graphitic shale from 89.05-89.30m, bedding at 12 deg. To C.A.	214944	88.00	89.40	1.40	9.0	tr	nil	.01	n/a
89.40	90.60	Light green/grey silicious flow or chert from 89.40-90.05m. Possible tuff from 90.05-90.30m. Contact at 18 deg. To C.A. Trace pyrite throughout.	214945	89.40	90.60	1.20	5.0	nil	nil	tr	n/a
90.60	139.00	BASALT									
		Light grey/green silicious flow top breccia from 90.60-91.20, then becoming light grey aphanitic flow. Unit appears to be a very fine-grained basalt grading down-hole into a coarser-grained diabasic textured flow. 4% quartz/calcite stringers throughout.									
92.30	93.60	Diabasic flow.									
93.60	94.60	Flow top breccia, poor core axis angle.									
95.30	95.31	Flow contact. Fine-grained to 105.00m then becoming coarser grained diabasic texture.									
119.60	119.90	Silicified with quartz + hematite flooding. Barren.									
122.20	125.30	Flow becoming speckled with leucoxene. Possible flow contact from 125.30-125.90m.									
139.00		End of Hole.									
		Casing Pulled.									
		Core Stored at Kenogami.									



Appendix D

Assay Certificates

ACCURASSAY LABORATORIES

A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALE, ONTARIO
BOX 426
KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1
TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

45064

Certificate of Analysis

Greater Lenora Explorations
Box 546
KIRKLAND LAKE, ON
P2N 3L1

April 10, 1992

Work Order # 920117

SAMPLE NUMBERS		Copper	Lead	Zinc
Accurassay	Customer	ppm	ppm	ppm
255000	119376	110	270	1500
255001	119377	110	290	1500
255002	119378	120	390	1900

ASSOCIATION OF THE CHEMICAL PROFESSION OF ONTARIO
CHARTERED
Dr. G. Duncan
CHEMIST

Per: G. Duncan

UF-30

ORIGINAL

ACCURASSAY LABORATORIES
A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALE, ONTARIO
BOX 426
KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1
TEL.: (705) 567-3361

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43950 # Certificate of Analysis

Greater Lenora Explorations
Box 546
KIRKLAND LAKE, ON
P2N 3L1

March 27th, 1992

Work Order # 920097

SAMPLE NUMBERS Accurassay	Customer	Silver ppm	Copper ppm	Lead ppm	Zinc ppm
254813	214796		500	46	130
254814	214797		220	31	82
254815	214798		140	90	370
254816	214799		62	20	60
254817	214800		190	30	96
254818	214801		330	39	52
254819	214802		160	21	65
254820	214803		110	860	2500
254821	214804		430	41	98
254822	214805		180	29	120
254823	214806		190	38	160
254824	214807		220	27	97
254825	214808	3	1200	2600	6900
254826	214809		340	210	550
254827	214810		280	56	150
254828	214812		170	63	180
254829	214813		250	260	1000
254830	214814		390	31	74
254831	214815		88	37	130
254832	214816		66	26	140
254833	214817		140	44	150
254834	214818		67	36	160
254835	214819		94	37	270
254836	214820		86	27	280
254837	214821		70	27	220
254838	214822		73	32	220
254839	214823		78	33	140
254840	214824		91	34	120
254841	214825		68	25	140
254842	214826		68	24	160
254843	214827		110	78	310
254844	214828		66	36	120

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Box 546
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March 27th, 1992

Work Order # 920096

SAMPLE NUMBERS		Gold	Gold	Copper	Lead	Zinc
Accurassay	Customer	ppb	Oz/T	ppm	ppm	ppm
254807	214791	172	0.005	45	34	110
254808	214792	441	0.013	160	55	98
254809	214793	258	0.008	89	34	100
254810	214794	45	0.001	140	37	96
254811	214795	10	<0.001	510	47	130
254812	214811	89	0.003	240	54	150
254812	214811 check	106	0.003			

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43948 Certificate of Analysis

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March 27th, 1992

Work Order # 920094A

ZINC-ASSAY

SAMPLE NUMBERS		Zinc
Accurassay	Customer	%
254796	214771	1.40

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43951 Certificate of Analysis

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March 30th, 1992

Work Order # 920098

SAMPLE NUMBERS		Copper	Lead	Zinc
Accurassay	Customer	ppm	ppm	ppm
254845	214829	66	40	160
254846	214830	71	27	140
254847	214831	77	25	140
254848	214832	95	26	120
254849	214833	80	16	130
254850	214834	100	26	190
254851	214835	93	28	200
254852	214836	78	26	230
254853	214837	88	24	190
254854	214838	29	13	140
254855	214839	73	57	630
254856	214840	150	1400	6700
254857	214841	51	620	910
254858	214842	76	320	1900
254859	214843	64	580	4100
254860	214844	62	1000	4800
254861	214845	82	290	940

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43945 # Certificate of Analysis

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P2N 3L1

March 25th, 1992

Work Order # 920093

SAMPLE NUMBERS Accurassay	Customer	Gold ppb	Gold Oz/T	Copper ppm	Lead ppm	Zinc ppm
254766	214758	221	0.006	100	57	96
254767	214759	165	0.005	280	34	110
254768	214781	18	0.001	75	36	160
254769	214782	10	<0.001	170	30	260
254770	214783	<5	<0.001	90	140	450
254771	214784	221	0.006	130	54	170
254772	214785	<5	<0.001	71	39	150
254773	214786	8	<0.001	56	30	170
254774	214787	16	<0.001	66	370	1800
254775	214788	10	<0.001	30	210	750
254775	214788 check	7	<0.001			
254776	214789	10	<0.001	47	270	1700
254777	214790	53	0.002	140	760	1900
254777	214790 check	45	0.001			

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March 25th, 1992

Work Order # 920094

SAMPLE NUMBERS		Silver	Copper	Lead	Zinc
Accurassay	Customer	ppm	ppm	ppm	ppm
254778	214751		80	170	1500
254779	214752		60	620	2500
254780	214753		35	50	250
254781	214754		83	550	2200
254782	214755		65	100	530
254783	214756		110	40	130
254784	214757		150	32	92
254785	214760		230	28	84
254786	214761		220	24	83
254787	214762		150	25	100
254788	214763		240	24	83
254789	214764		90	18	87
254790	214765		130	26	73
254791	214766		160	26	55
254792	214767		360	34	76
254793	214768		430	40	90
254794	214769		320	43	98
254795	214770		250	230	290
254796	214771	2	310	3300	1.60%
254797	214772		210	38	94
254798	214773		310	41	100
254799	214774		220	31	56
254800	214775		180	29	75
254801	214776		200	32	110
254802	214777	2	250	1900	5900
254803	214778	2	220	47	98
254804	214779		350	110	1400
254805	214780		180	28	69

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Box 546
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April 2, 1992

Work Order # 920110

SAMPLE NUMBERS		Silver	Copper	Lead	Zinc
Accurassay	Customer	ppm	ppm	ppm	ppm
254890	214846		120	51	400
254891	214847		98	7	140
254892	214849		79	4	180
254893	214850		72	1	130
254894	214851		89	2	150
254895	214852		76	2	140
254896	214853		87	4	140
254897	214854		82	2	100
254898	214855		83	2	110
254899	214856		80	5	150
254900	214857		94	4	240
254901	214858		120	5	180
254902	214859		98	2	140
254903	214860		85	3	140
254904	214861		100	2	120
254905	214862		92	2	110
254906	214863		92	6	140
254907	214864		86	3	110
254908	214865		94	4	88
254909	214866	3	1100	4600	2.84%
254910	214867	2	100	8	220
254911	214868		95	10	240
254912	214869		58	1100	9700
254913	214870		61	780	2600
254914	214871		210	5300	1.61%
254915	214872		58	1800	6200
254916	214873		39	610	2400
254917	214874		24	500	2000
254918	214875		36	880	2900
254919	214876		39	470	3000
254920	214877		62	640	2600
254921	214878		57	1500	3400
254922	214879		71	410	2500
254923	214880		50	1400	4500

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Box 546
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April 2, 1992

Work Order # 920110

SAMPLE NUMBERS		Silver	Copper	Lead	Zinc
Accurassay	Customer	ppm	ppm	ppm	ppm
254924	214881		160	9000	2.52%
254925	214882		200	5900	2.20%
254926	214883		56	22	130
254927	214884		25	19	200
254928	214885		70	52	330
254929	214886		92	1300	6000
254930	214887	2	95	2500	1.04%
254931	214888		18	480	2700
254932	214889		64	210	780
254933	214890		110	4	110

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Box 546
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April 2, 1992

Work Order # 920109

SAMPLE NUMBERS		Gold	Gold
Accurassay	Customer	ppb	Oz/T
254888	214848	13	<0.001
254889	214891	9	<0.001
254889	214891 Check	10	<0.001

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43988 # Certificate of Analysis

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Box 546
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April 2, 1992

Work Order # 920109A

SAMPLE NUMBERS		Copper	Lead	Zinc
Accurassay	Customer	ppm	ppm	ppm
254888	214829	85	7	130
254889	214830	46	180	700

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April 3 1992

Work Order # 920110A

ZINC-ASSAYS

SAMPLE NUMBERS		Zinc
Accurassay	Customer	%
254909	214866	3.04
254914	214871	1.74
254924	214881	2.61
254925	214882	2.08
254930	214887	1.09

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Box 546
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April 3, 1992

Work Order # 920113

SAMPLE NUMBERS Accurassay	Customer		Gold ppb	Gold Oz/T	Copper ppm	Lead ppm	Zinc ppm
254936	214892		273	0.008	33	27	130
254937	214893		28	0.001	69	16	88
254938	214894		21	0.001	100	13	130
254939	214895		37	0.001	68	34	90
254940	214896		176	0.005	96	36	160
254941	214897		34	0.001	92	12	110
254942	214898		257	0.007	130	20	99
254943	214899		12	<0.001	130	3	82
254944	214900		12	<0.001	93	18	130
254945	214928		<5	<0.001	17	4	57
254945	214928	check	5	<0.001			
254946	214929		6	<0.001	16	5	21
254947	214932		7	<0.001	76	5	52
254948	214941		971	0.028	130	6	100
254949	214944		9	<0.001	64	9	110
254950	214945		<5	<0.001	22	2	73
254950	214945	check	<5	<0.001			

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Box 546
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April 6, 1992

Work Order # 920114

SAMPLE NUMBERS		Silver	Copper	Lead	Zinc
Accurassay	Customer	ppm	ppm	ppm	ppm
254951	214901		100	18	250
254952	214902		84	2	120
254953	214903		86	1	120
254954	214904		110	4	150
254955	214905		100	3	150
254956	214906		66	22	620
254957	214907		80	2	140
254958	214908		74	2	110
254959	214909		130	3	200
254960	214910		170	9	83
254961	214911		27	3	80
254962	214912		28	3	130
254963	214913		23	3	75
254964	214914		24	4	160
254965	214915		110	24	130
254966	214916		88	28	640
254967	214917		54	1000	4700
254968	214918		54	280	3200
254969	214919		42	350	2700
254970	214920		28	390	1600
254971	214921		54	630	2300
254972	214922	1	30	660	4600
254973	214923	1	32	1300	>10000
254974	214924	1	63	2300	>10000
254975	214925		46	790	4000
254976	214926		150	1000	3600
254977	214927		140	380	2100
254978	214930		26	10	92
254979	214931		32	17	110
254980	214942		130	36	770
254981	214943		150	18	170

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April 8, 1992

Work Order # 920116

SAMPLE NUMBERS		Copper	Lead	Zinc
Accurassay	Customer	ppm	ppm	ppm
254984	214946	44	180	980
254985	214947	76	360	2200
254986	214949	50	770	3400
254987	214950	49	520	2400
254988	119362	110	250	2400
254989	119363	120	42	860
254990	119364	100	40	680
254991	119365	55	25	340
254992	119366	39	24	250
254993	119367	69	400	2600
254994	119368	72	750	4000
254995	119369	69	320	1400
254996	119370	80	1000	3400
254997	119371	43	450	1900
254998	119372	72	1500	5600
254999	119373	58	590	2800

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April 8, 1992

Work Order # 920115

SAMPLE NUMBERS		Gold	Gold
Accurassay	Customer	ppb	Oz/T
254982	119374	200	0.006
254983	119375	9	<0.001
254983	119375 check	8	<0.001

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Box 546
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April 7 1992

Work Order # 920114A

ZINC-ASSAYS

SAMPLE NUMBERS		Zinc
Accurassay	Customer	%
254973	214923	2.09
254974	214924	1.24

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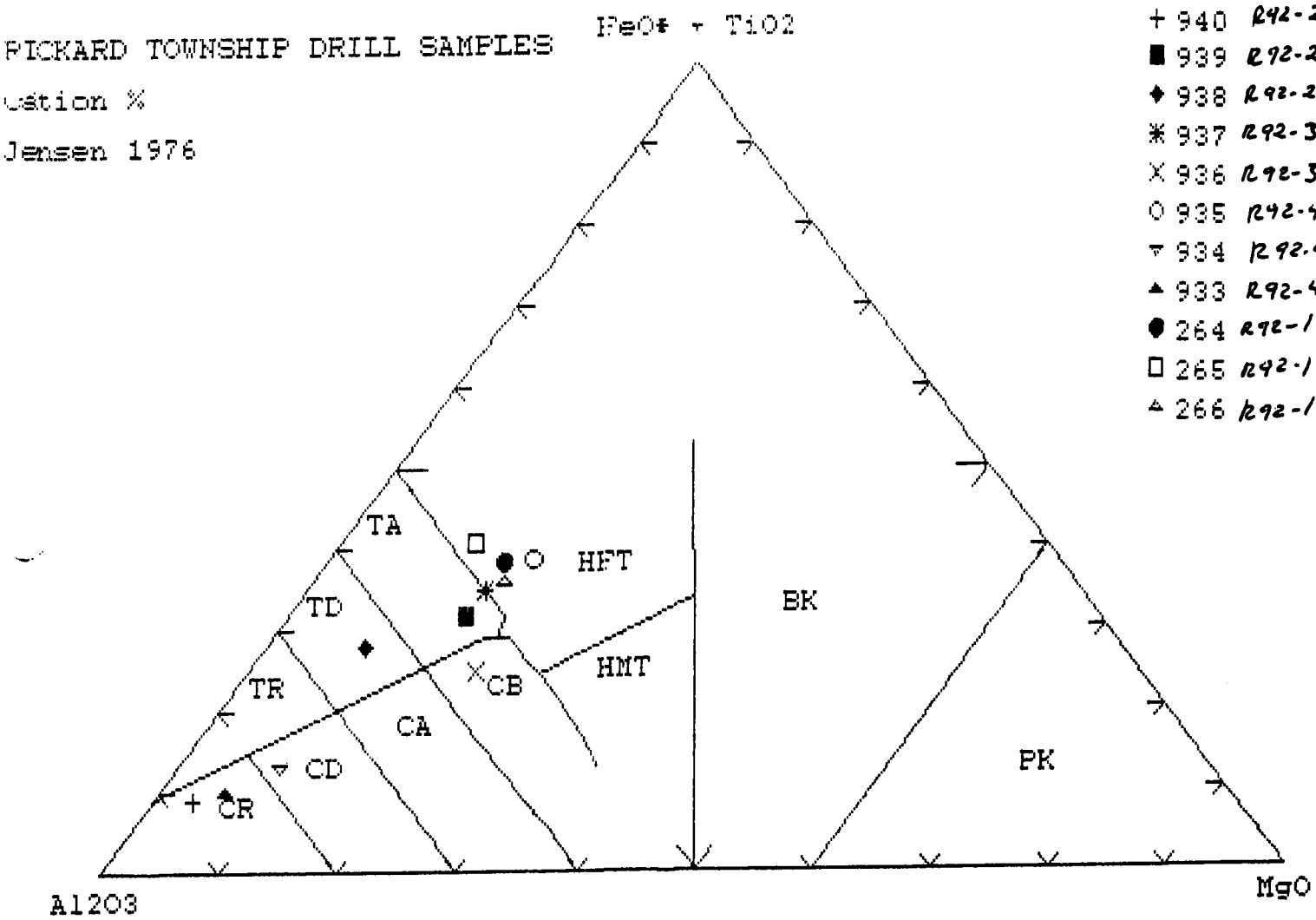
Appendix E

Whole Rock Analysis and Major Element Plots

PICKARD TOWNSHIP DRILL SAMPLES

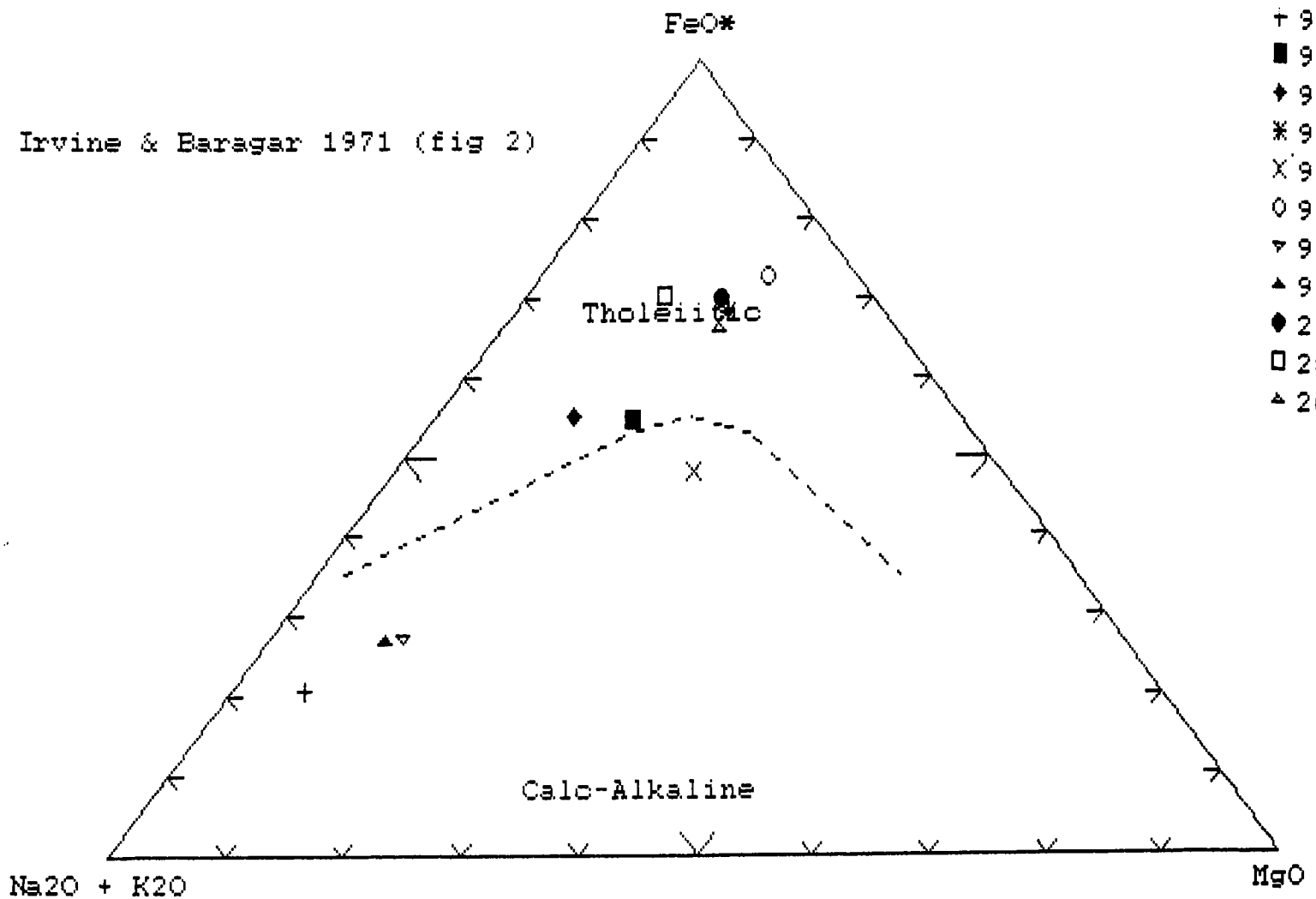
ustion %

Jensen 1976

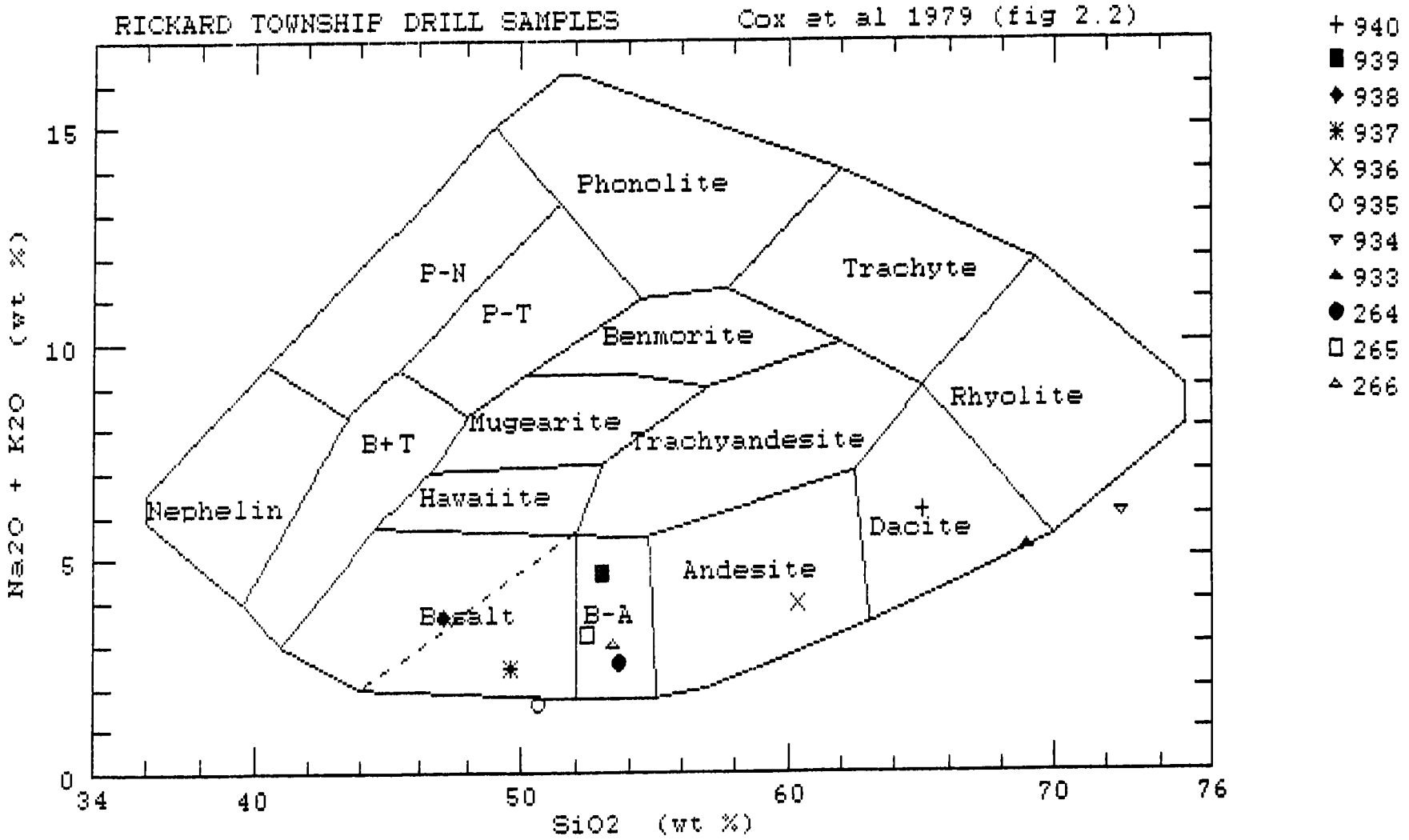


+ 940 R92-2A 185.0 - 185.6 m
■ 939 R92-2A 153.0 - 154.0 m
◆ 938 R92-2A 104.5 - 105.5 m
✳ 937 R92-3 46.0 - 47.0 m
× 936 R92-3 175.0 - 176.0 m
○ 935 R92-4 104.0 - 104.5 m
▽ 934 R92-4 159.0 - 160.0 m
▲ 933 R92-4 191.0 - 192.0 m
● 264 R92-1 50.0 - 53.0 m
□ 265 R92-1 116.5 - 119.0 m
△ 266 R92-1 80.0 - 83.0 m

Irvine & Baragar 1971 (fig 2)



+ 940 R92-2A 185.0-185.6
■ 939 R92-2A 153.0-154.0
♦ 938 R92-2A 104.5-105.5
✳ 937 R92-3 46.0-47.0
X 936 R92-3 175.0-176.0
○ 935 R92-4 104.0-104.5
▽ 934 R92-4 159.0-160.0
▲ 933 R92-4 191.0-192.0
● 264 R92-1 50.0-53.0
□ 265 R92-1 116.5-119.0
△ 266 R92-1 80.0-83.0


RICKARD TOWNSHIP DRILL SAMPLES
Cox et al 1979 (fig 2.2)
Phonolite
Trachyte
P-N
P-T
Benmorite
Rhyolite
Mugearite
B+T
Trachyandesite
Hawaiite
Nephelin
Dacite
Andesite
Basalt
B-A
Na2O + K2O (wt %)
SiO2 (wt %)
0
5
10
15
34
40
50
60
70
76
940
939
938
937
936
935
934
933
264
265
266

File Name C:\GEOCHEM\RICKARD.ROC
04-14-1992 16:14:07

Sample	940	939	938	937	936	935	934	933	264	26
Northing	185.0-185.	153.0-154.	104.5-105.	46.0-47.0	175.0-176.	104.0-105.	159.0-160.	191.0-192.	50.0-53.0	116.5-119
Easting	R92-2A	R92-2A	R92-2A	R92-3	R92-3	R92-4	R92-4	R92-4	r92-1	r92-1
Symbol	13	6	15	11	12	1	9	8	3	4
Sym Colour	10	14	1	2	4	12	14	4	1	2
Rock Type	CALC-RHY.	THOL-AND.	THOL-DAC.	THOL-BAS.	CALC-BAS	THOL-BAS	CALC-DAC	CALC-RHY.	THOL-BAS.	THOL-BAS.
SiO_2	65.00	53.00	47.00	49.60	60.30	50.60	72.50	69.00	53.60	52.40
TiO_2	0.64	1.99	1.72	1.93	1.82	1.92	0.36	0.42	1.77	1.43
Al_2O_3	16.20	12.70	12.30	14.30	14.10	14.00	12.70	15.70	13.30	12.00
Fe_2O_3*	1.94	10.00	6.76	13.80	8.04	17.30	2.99	2.52	15.30	14.50
MgO	0.51	2.85	1.31	3.38	3.85	4.21	1.12	0.83	3.37	2.25
CaO	4.24	7.23	12.80	8.55	3.18	6.94	2.60	4.64	9.12	9.80
Na_2O	4.23	3.95	1.97	2.13	3.42	1.39	4.69	3.75	2.16	2.94
K_2O	1.87	0.71	1.67	0.32	0.51	0.22	1.36	1.51	0.39	0.32
P_2O_5	0.20	0.27	0.24	0.27	0.24	0.28	0.19	0.20	0.17	0.16
Total	94.83	92.69	85.77	94.28	95.46	96.86	98.51	98.57	99.18	95.80
LOI	2.15	1.35	11.30	2.55	3.95	2.45	2.30	2.10	0.55	2.45
Mg #	34.24	36.08	27.73	32.66	48.67	32.52	42.59	39.48	30.37	23.51
Cr	725	570	197	510	188	449	1340	808	759	434
Ni	38	63	61	71	55	62	41	37	72	55
Co	-	8	25	24	27	22	-	-	-	-
V	103	451	354	389	385	383	76	68	371	303
Cu	22	73	76	58	14	73	30	23	68	64
Pb	11	16	649	10	408	-	169	18	15	6
Zn	62	159	2390	153	2390	155	985	50	110	342
Cd	-	-	12.00	-	11.00	-	4.00	-	-	-
Ba	312	276	272	139	312	54	249	375	124	104
Sr	255	92	88	118	110	103	147	198	111	136
Zr	53	88	81	93	78	90	85	95	111	101
Be	0.70	1.30	1.50	1.40	1.30	1.10	0.50	0.70	1.80	1.50
Density	2.37	2.49	2.53	2.55	2.45	2.56	2.35	2.37	2.54	2.53

File Name	C:\GEOCHEM\RICKARD.ROC
04-14-1992 16:14:20	
Sample	266
Northing	80.0-83.0
Easting	r92-1
Symbol	7
Sym Colour	4
Rock Type	THOL-BAS.
SiO_2	53.40
TiO_2	1.93
Al_2O_3	14.20
Fe_2O_3*	14.70
MgO	3.75
CaO	7.79
Na_2O	2.72
K_2O	0.27
P_2O_5	0.19
Total	98.96
LOI	1.40
Mg #	33.56
Cr	671
Ni	76
Co	-
V	395
Cu	68
Pb	10
Zn	124
Cd	-
Ba	103
Sr	86
Zr	125
Be	1.90
Density	2.53

BARRINGER LABORATORIES

5735 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
PHONE: (416) 890-8566
FAX: (416) 890-8575

13-Apr-92

GREATER LENORA EXPLORATIONS
P.O.Box 546.
Kirkland Lake ,ON
P2N 3L1

Page: 1
Copy: 1 of 1

Attn:
Project:

Received: 2-Apr-92 11:45
PO #: W/O 920108

Job: 921033

Status: Final

Sample	SiO2 ICAP %	Al2O3 ICAP %	Fe2O3 ICAP %	MgO ICAP %	CaO ICAP %	Na2O ICAP %	K2O ICAP %	TiO2 ICAP %	
214933	69.0	15.7	2.52	0.83	4.64	3.75	1.51	0.424	R92-4 171-172
214934	72.5	12.7	2.99	1.12	2.60	4.69	1.36	0.364	R92-4 157-160
214935	50.6	14.0	17.3	4.21	6.94	1.39	0.22	1.918	R92-4 104-105
214936	60.3	14.1	8.04	3.85	3.18	3.42	0.51	1.818	R92-3 175-176
214937	49.6	14.3	13.8	3.38	8.55	2.13	0.32	1.935	R92-3 46.00-47.00
214938	47.0	12.3	6.76	1.31	12.8	1.97	1.67	1.718	R92-24 104.5-105.5
214939	53.0	14.7	10.0	2.85	7.23	3.95	0.71	1.985	R92-24 153-154
214940	65.0	16.2	1.94	0.51	4.24	4.23	1.87	0.637	R92-24 183.5-183.6

Sample	P2O5 ICAP %	LOI FURN %	SUMOX CALC %	Ag ICAP ppm	Ba ICAP ppm	Be ICAP ppm	Cd ICAP ppm	Co ICAP ppm	Cr ICAP ppm	Cu ICAP ppm
214933	0.20	2.10	100.7	<1	375	0.7	<1	<5	808	23
214934	0.19	2.30	100.9	<1	249	0.5	4	<5	1340	30
214935	0.28	2.45	99.47	<1	54	1.1	<1	22	449	73
214936	0.24	3.95	99.50	<1	312	1.3	11	27	188	14
214937	0.27	2.55	96.86	<1	139	1.4	<1	24	510	58
214938	0.24	11.3	97.30	<1	272	1.5	12	25	197	76
214939	0.27	1.35	96.22	<1	276	1.3	<1	8	570	73
214940	0.20	2.15	97.01	<1	312	0.7	<1	<5	725	22

BARRINGER LABORATORIES

5735 McADAM ROAD
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CANADA L4Z 1N9
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13-Apr-92

Page: 2
Copy: 1 of 1

GREATER LENORA EXPLORATIONS
P.O.Box 546
Kirkland Lake ,ON
P2N 3L1

Attn:
Project:

Received: 2-Apr-92 11:45
PO #: W/O 920108

Job: 921033 Status: Final

Sample	Mo ICAP ppm	Mn ICAP ppm	Ni ICAP ppm	Pb ICAP ppm	Sr ICAP ppm	V ICAP ppm	Zn ICAP ppm	Zr ICAP ppm
214933	<20	497	37	18	198.	68	50	95
214934	<20	226	41	169	147.	76	985	85
214935	<20	2310	62	<5	103.	383	155	90
214936	<20	1250	55	408	110.	385	2390	78
214937	<20	2140	71	10	118.	389	153	93
214938	<20	1640	61	649	88.4	354	2390	81
214939	<20	1640	63	16	91.9	451	159	88
214940	<20	361	38	11	255.	103	62	53

Job approved by:

Signed:

.....
Agnes Love
Supervisor, Geochemistry/Fire Assay Services

APR 13 '92 15:26 FROM BARRINGER MISS PAGE.002

BARRINGER LABORATORIES

5735 McADAM ROAD
MISSISSAUGA, ONTARIO
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FAX: (416) 890-8575

28-Feb-92

GREATER LENORA
Ste.309
6 Tweedsmuir Rd, Box 546
Kirkland Lake ,ON
P2N 3J5

Attn:
Project:

Received: 25-Feb-92 16:52
PO #:

Job: 921024

Status: Final

Sample	SiO2 ICAP %	Al2O3 ICAP %	Fe2O3 ICAP %	MgO ICAP %	CaO ICAP %	Na2O ICAP %	K2O ICAP %	TiO2 ICAP %	P2O5 ICAP %	LOI FURN %
264	53.6	13.3	15.3	3.37	9.12	2.16	0.39	1.768	0.17	0.55
265	52.4	12.0	14.5	2.25	8.80	2.94	0.32	1.434	0.16	2.45
266	53.4	14.2	14.7	3.75	7.79	2.72	0.27	1.935	0.19	1.40

Sample	SUMOX CALC %	Ag ICAP ppm	Ba ICAP ppm	Be ICAP ppm	Cd ICAP ppm	Co ICAP ppm	Cr ICAP ppm	Cu ICAP ppm	Mo ICAP ppm	Mn ICAP ppm	Ni ICAP ppm	Pb ICAP ppm
264	99.87	<1	124	1.8	<1	<5	759	68	<20	2130	72	15
265	97.38	<1	104	1.5	<1	<5	434	64	<20	1660	55	6
266	100.4	<1	103	1.9	<1	<5	671	68	<20	2240	76	10

Sample	Sr ICAP ppm	V ICAP ppm	Zn ICAP ppm	Zr ICAP ppm
264	111.	371	110	111
265	136.	303	342	101
266	85.6	395	124	125

Abbreviations:

Parameters:

SiO2 : Silica
Al2O3 : Alumina
Fe2O3 : Ferric Oxide

42A16SE0004 OM92-068 CHESNEY BAY

GEOPHYSICAL PROGRAM REPORT

ON THE

RICKARD TWP.

FOR

GREATER LENORA RESOURCES

By: R.J. Meikle

Rayan Exploration Ltd.

42A16SE0004 OM92-088 CHESNEY BAY

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RESULTS	7 - 10
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Figure No. 3 - Line Cutting Sketch

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Map No. R60-1 - Proton Mag Survey, Data Posting 1:2500
Map No. R60-2 - Proton Mag Survey, Mag Contours 1:2500
Map No. R60-3 - Max-Min Survey, 1777Hz. 1:2500
Map No. R60-4 - Max-Min Survey, 444Hz. 1:2500

APPENDICES

Appendix A - Omni IV Magnetometer
Appendix B - Apex Max-Min II

INTRODUCTION

Rayan Exploration Ltd. conducted a horizontal loop survey on the Rickard Twp. property for Greater Lenora Resources. This program was carried out on a contract basis and was completed during the month of February 1992. Concurrent with it a Total Field Magnetometer survey was also conducted by Tom O'Bradivich.

The purpose of this survey was to locate airborne EM anomalies shown to exist in the area. This program was conducted as a follow-up survey to an earlier OPAP program carried out on the property. This geophysical program outlined an airborne EM response which was tested by diamond drilling and showed a massive sulphide zone as well as significant amounts of zinc mineralization occurring within the hole. For this reason, the surrounding area was covered with a HLEM and Magnetometer survey in order to outline any other similar geophysical responses.

This report deals with the results of both the HLEM and Magnetometer surveys. The plotting and interpretation were done by Rayan Exploration Ltd. Both regional and property geology will be dealt with by Greater Lenora personnel.

LOCATION AND ACCESS

The Rickard Twp. property is located within the Porcupine Mining Division, District of Cochrane, Ontario. (Fig. 1). It is approximately 70km north east from the City of Timmins, and 15km east of the Town of Iroquois Falls.

Access to the property was by truck from the Town of Matheson. Hwy 101 east from Matheson leads to Carr Road #2 at approximately the 3.5km mark. This road heads north from Hwy 101 at this point. A 25km ride north on this road will provide access by truck to within 5km of the property. From here, the grid was accessed by snowmobile, on a winter road. This road provided access to the central portion of the grid.

CLAIM STATUS

Claims were still being recorded at the time of the survey and claim status will be dealt with as an appendum to this report by Greater Lenora Personnel.

PERSONNEL

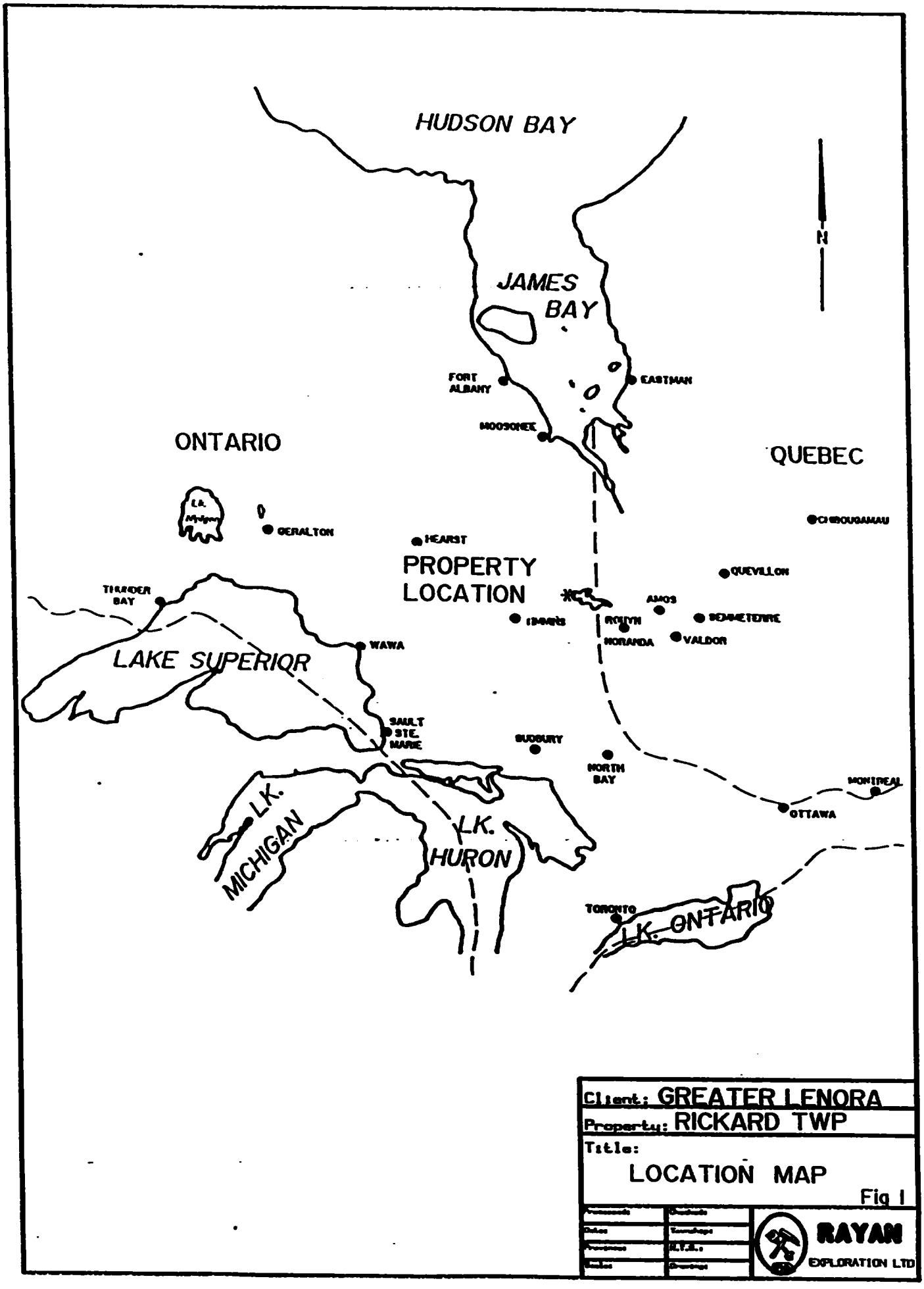
The following personnel were directly involved with the survey:

R.J. Meikle ..... Timmins, Ontario

S.D. Anderson ..... Timmins, Ontario

E. Brunet ..... Timmins, Ontario

T. O'Bradivitch ..... Kirkland Lake,Ontario



Client: GREATER LENORA

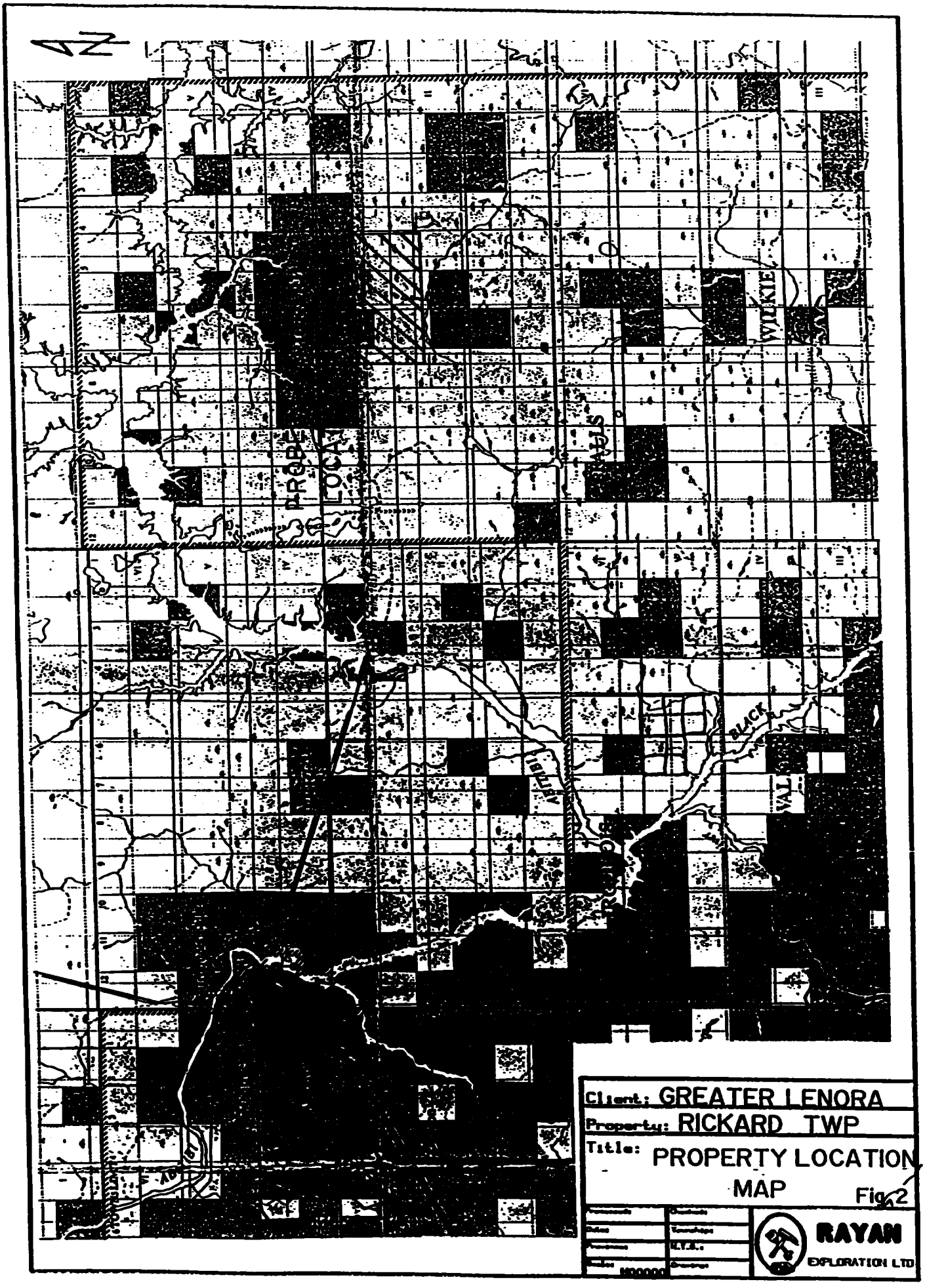
Property: RICKARD TWP

Title:

LOCATION MAP

Fig 1

RAYAN EXPLORATION LTD



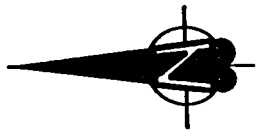
Client: GREATER LENORA

Property: RICKARD TWP

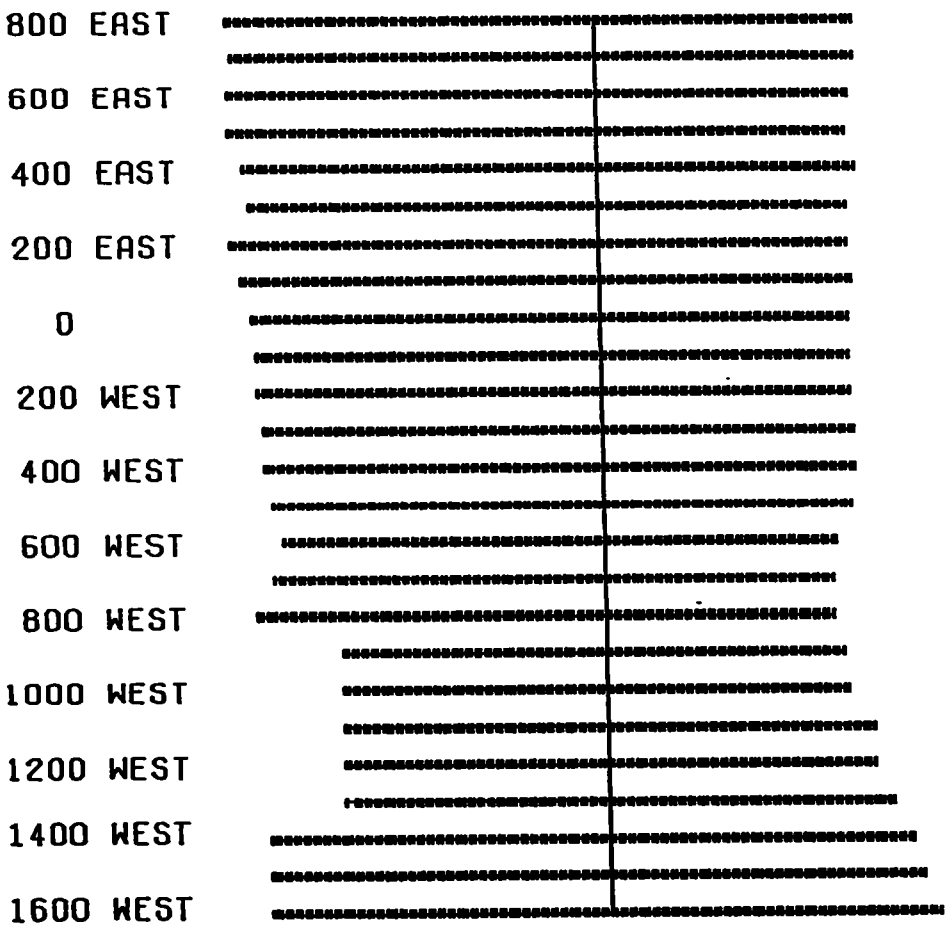
Title: PROPERTY LOCATION MAP

Fig. 2

RAYAN EXPLORATION LTD



800 NORTH
600 NORTH
400 NORTH
200 NORTH
BASE LINE
200 SOUTH
400 SOUTH
600 SOUTH
800 SOUTH



800 NORTH
600 NORTH
400 NORTH
200 NORTH
BASE LINE
200 SOUTH
400 SOUTH
600 SOUTH
800 SOUTH

Client: GREATER LENORA
Property: RICKARD TWP
Title: LINECUTTING SKETCH
Fig 3

RAYAN EXPLORATION LTD

GEOPHYSICAL PROGRAM

A total of 39km of cut-line was surveyed with magnetometer and Horizontal Loop. The magnetic survey was conducted over the entire grid using a 12.5m station interval. The Horizontal Loop was also completed over the entire grid using a 25m station interval and 100m coil separation. Selected areas of the grid were also covered with a 200m coil separation and 25m station interval. This survey was completed over areas where the overburden thickness was felt to be greater than the effective search depth of the 100m coil separation.

The survey method and parameters for each of these surveys will be discussed below.

HORIZONTAL LOOP EM 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 Max-Min survey was carried out using an Apex Max-Min II instrument reading 1777HZ, and 444HZ with a constant coil spacing of 100 and 200 meters. The Maximum Coupled mode was employed with the coils co-planer. A reading interval of 25 meters was used. Because of the very flat surface topography, no slope or topographic corrections were necessary. The entire survey was read with unit serial no. 1057 with twice daily phase mix testing to

ensure that the data would be consistent across the surveyed area.

The Max-Min data was recorded manually and entered in to an XYZ format using Watfile. The XYZ files were processed using Geopac software. Plotting was done on a Hewlett Packard draftpro pen plotter. A plan scale of 1:2500 was chosen with a profile scale of 1 cm = 10%. The results are presented on maps 3-6 in the back of this report.

Magnetometer Survey:

A EDA Omni IV Proton Precession magnetometer was used to carry out the magnetometer survey. The diurnal deviations were corrected from an EDA OMNI recording base station. This should ensure an accuracy of less than 10 Nt.

The Proton Precession method involves energizing 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 - EDA Omni IV Proton Precession Magnetometer

Station Interval - 12.5m

Line Interval - 100m

Diurnal Correction Method - EDA Recording Base Station

Data Presentation - Plan, contoured form

- Map No. 1,2 1:2500 scale

- Contour interval = 50 nano-teslas

SURVEY RESULTS

ZONE A:

This zone extends from L2W/250N to L9W/175N, with it's strongest response occurring between L5W and 7W. The only magnetics associated with this feature is a very weak coincidental magnetic low. Testing of this zone by means of diamond drilling has indicated some massive sulphides and graphite which would explain the conductor. However, this testing also involved a zone of sphalerite which occurs separate from the sulphides. This conductor has the strongest response over the entire grid.

ZONE B:

This zone occurs along the southern boundary of the grid. It is located from L9W/600S to L13W/700W. The HLEM response occurs roughly coincidental with a creek running through this area. There is a moderately strong bulls-eye magnetic high coincidental with this zone on L11 west, also there are weak lows flanking the conductor to the south on L10W and L12W. This zone has a fairly weak response and may be related to overburden associated with the creek. However, the magnetics associated with this zone suggest that the creek as well as the conductor may be structurally related.

ZONE C:

This is a one line conductor situated on L8W at 700N. It shows a weak quadrature response which may be the result of overburden. However, a moderate magnetic high flanking the zones to the south suggest that this zone may be a bedrock response and

should be further tested before it is dismissed as overburden.

ZONE D:

This zone is similar to zone C which is shown as a weak conductor with the primary response shown as a quadrature anomaly. Again this may be the result of overburden, but should not be dismissed as such, without further testing.

ZONE E:

This zone runs parallel to the south of zone C with the same characteristics as that zone. It extends from L11W to L13W at about 350N . As mentioned, both responses may be due to overburden troughs located between outcrop ridges. Once again these zones should be further tested.

ZONE F:

This feature extends from L8W to L9W at about 475N. This also appears to be an overburden response. However,if with further testing, these zone are found to be legitimate bedrock responses, this feature could be an offset extension of Zone D or E.

ZONE G:

This a one-line anomaly situated on L7W at 587N. This zone is similar to other anomalies in this area. However, as well as exhibiting the typical quadrature response, it also shows a weak in-phase response. This may suggests that this could be a legitimate bedrock responses.

ZONE H:

This again is a one-line anomaly located on L4W at 550N. This anomaly is similar to Zone G, showing a weak in-phase response with a moderately strong quadrature response.

ZONE I:

This feature strikes from L1W/737N to L8E/625N, remaining open to the east. As with a number of the previously mentioned zones, this zone occurs within an area with outcrop ridges and conductive overburden. This may suggest an overburden response. Although this zone is shown primarily as quadrature anomaly, L2W and L3W show moderate in-phase responses. This suggest a bedrock response, and further testing of this zone should be considered.

ZONE J:

This zone extends from L0/237N to L3W/312N and possibly as far as L7E/237N. This is mainly a quadrature anomaly with a weak in-phase response on L3E. Diamond drill testing of this zone on L3E where it shows a very strong quadrature anomaly, has shown that this anomaly is most likely due to graphitic sediments. However, the remainder of this zone is untested.

ZONE K:

This anomaly runs from L7E/400N to L8E/362N, and remains open to the east. Once again this is primarily a quadrature anomaly.

ZONE L:

This zone is a one line anomaly situated on L16W/875N, remaining open in both directions. This feature was tested with a 200m cable only, and occurs off the cut grid to the south. This line was extended using compass and pace, in order to get complete coverage of the anomaly. The magnetometer survey for this line was conducted only as far as the cut grid because the magnetometer survey was completed prior to the 200m max-min survey.

Although there is no complete magnetic coverage, it would appear that this anomaly occurs over a magnetic low. This zone shows a fairly strong conductivity and appears to be a legitimate bedrock response. This feature should be further tested by extending and surveying the grid lines on both sides of the conductor.

ZONE H:

This anomaly extends from L13W/150S to L5W/BL0, remaining open to the east. This feature did not show up on the 100m HLEM data, but shows up as a weak zone with the 200m HLEM. Because it is such a weak response, it would suggest that if this feature is a legitimate bedrock response, it is situated very deep. There is a weak magnetic signature associated with this zone.

CONCLUSIONS AND RECOMMENDATIONS

The HLEM survey conducted on the property has outlined a number of areas of interest. Two of the zones discussed have been tested with diamond drilling. Zone A has revealed a sulphide zone with some graphite. However, it also shows a zone of sphalerite separate from the massive sulphides, which has almost no sulphide content. Zone J was also tested, revealing a zone of graphitic sediments. The remainder of the zones remain untested.

The majority of the zones outlined show up as primarily quadrature anomalies with little or no magnetic correlation. This is typical of a overburden response. The topography in the northern and eastern portion of this grid consists primarily of mature poplar stands with numerous outcrop ridges. This is where the majority of the zones discussed occur. Once again, this suggests clay filled troughs between outcrop ridges with a "current" channelling effect at the overburden/outcrop interface. One relatively inexpensive way to determine if this is the cause of the conductors is to re-survey the zone with a different cable separation. If the axis of the conductor shifts towards the suspected ridge with a shorter cable, then it is most probably not a bedrock conductor. However this is not always conclusive.

However, because Zone A was tested and indicated significant zinc values with very little sulphide content this brings into question all of these zones mentioned. None of these areas outlined should be dismissed as overburden responses without further testing.

To begin with, as mentioned, there is a small amount of outcropping in the area. Geological mapping should be conducted in these areas in order to try and explain some of the conductors outlined.

Since sphalerite is neither conductive nor magnetic and in this case would appear to have little or no sulphide association, further geophysical testing of this zone is very limited.

If the massive sulphides incurred on Zone A will act as a marker for the sphalerite zone, some Deep EM testing may prove to be effective. It has been proven in previous testing over sphalerite zones that Induced Polarization is a very effective tool over this type of mineralization. Although sphalerite is not conductive or magnetic, it is however very chargeable. Since many of the zones with quadrature response seem to occur in areas with very little overburden , it would be a very effective tool in further testing these zones.

At this point it is difficult to outline any priorities for the zones mentioned. However, either Deep EM or IP should be conducted over any areas of interest before further diamond drilling is conducted in order to better resolve the anomalies. This should indicate whether the anomalies are legitimate bedrock responses or overburden responses.

CERTIFICATION

I, Raymond Joseph Meikle of Timmins, Ontario hereby certify that:

1. I hold a three year Technologist Diploma from the Haileybury School of Mines, Haileybury, Ontario, obtained in May 1975.

2. I have been practising my profession since 1973 in Ontario, Quebec, Nova Scotia, New Brunswick, Newfoundland, NWT, Manitoba, Germany and Chile.

3. I have been employed directly with Teck Corporation, Metallgessellschaft Canada Ltd. Sabina Industries, .S. Middleton Exploration Services Ltd., self employed 1979-1985 (Rayan Exploration Ltd.) and currently with Rayan Exploration Ltd.

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 field work conducted on the property during 1990.

5. I hold no interest, directly or indirectly in this property, nor do I expect to receive any interest or considerations from Greater Lenora Resources.

Dated this 30th day of April, 1992
at Timmins, Ontario.

R.J. Meikle

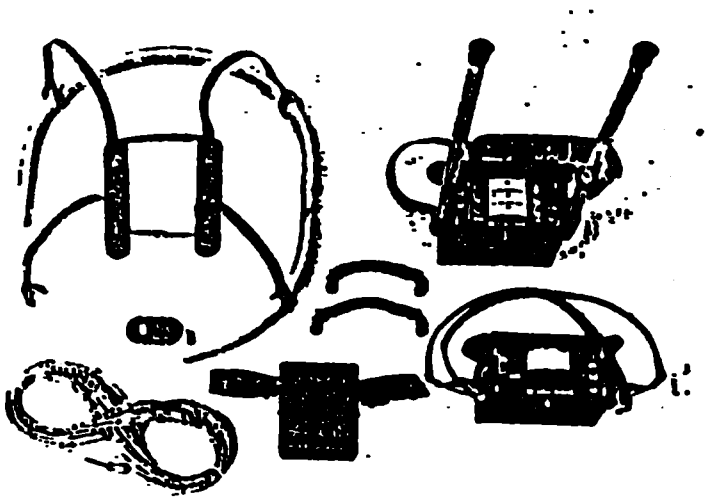


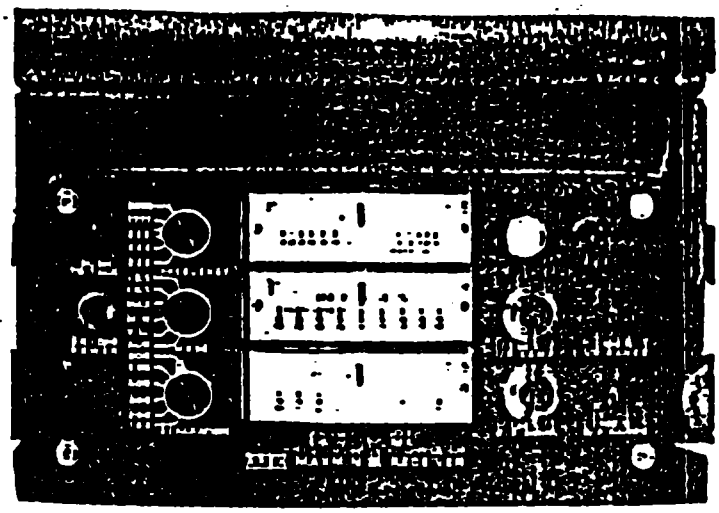
APPENDIX A

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 :

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

Modes of Operation:
- MAX: Transmitter coil plane and receiver coil plane horizontal (Max-coupled; Horizontal loop mode). Used with reference cable.
- MIN: Transmitter coil plane horizontal and receiver coil plane vertical (Min-coupled mode). Used with reference cable.
- V.L. : Transmitter coil plane vertical and receiver coil plane horizontal (Vertical-loop mode). Used without reference cable, in parallel lines.

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

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

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

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

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

Repeatability: ±0.2% to ±1% nominally, depending on conditions, frequencies and coil separation used).

Transmitter Output:
- 222 Hz : 25 (A-turn)²
- 444 Hz : 20 (A-turn)²
- 888 Hz : 12 (A-turn)²
- 1777 Hz : 6 (A-turn)²
- 3555 Hz : 3 (A-turn)²

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

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

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

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

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

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

Receiver Weight: 6kg (13 lbs.)

Transmitter Weight: 13kg (29 lbs.)

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

Specifications subject to change without notification.

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

Phone: (416) 495-1612 Cable: APEXPARA TORONTO Telex: 06 [illegible]

APPENDIX B

OMNI PLUS
VLF/Magnetometer System

EDA



Major Benefits of the OMNI PLUS

- Combined VLF/Magnetometer/Gradiometer System
- No Orientation Required
- Three VLF Magnetic Parameters Recorded
- Automatic Calculation of Fraser Filter
- Calculation of Ellipticity
- Automatic Correction of Primary Field Variations
- Measurement of VLF Electric Field

EDA

Specifications*

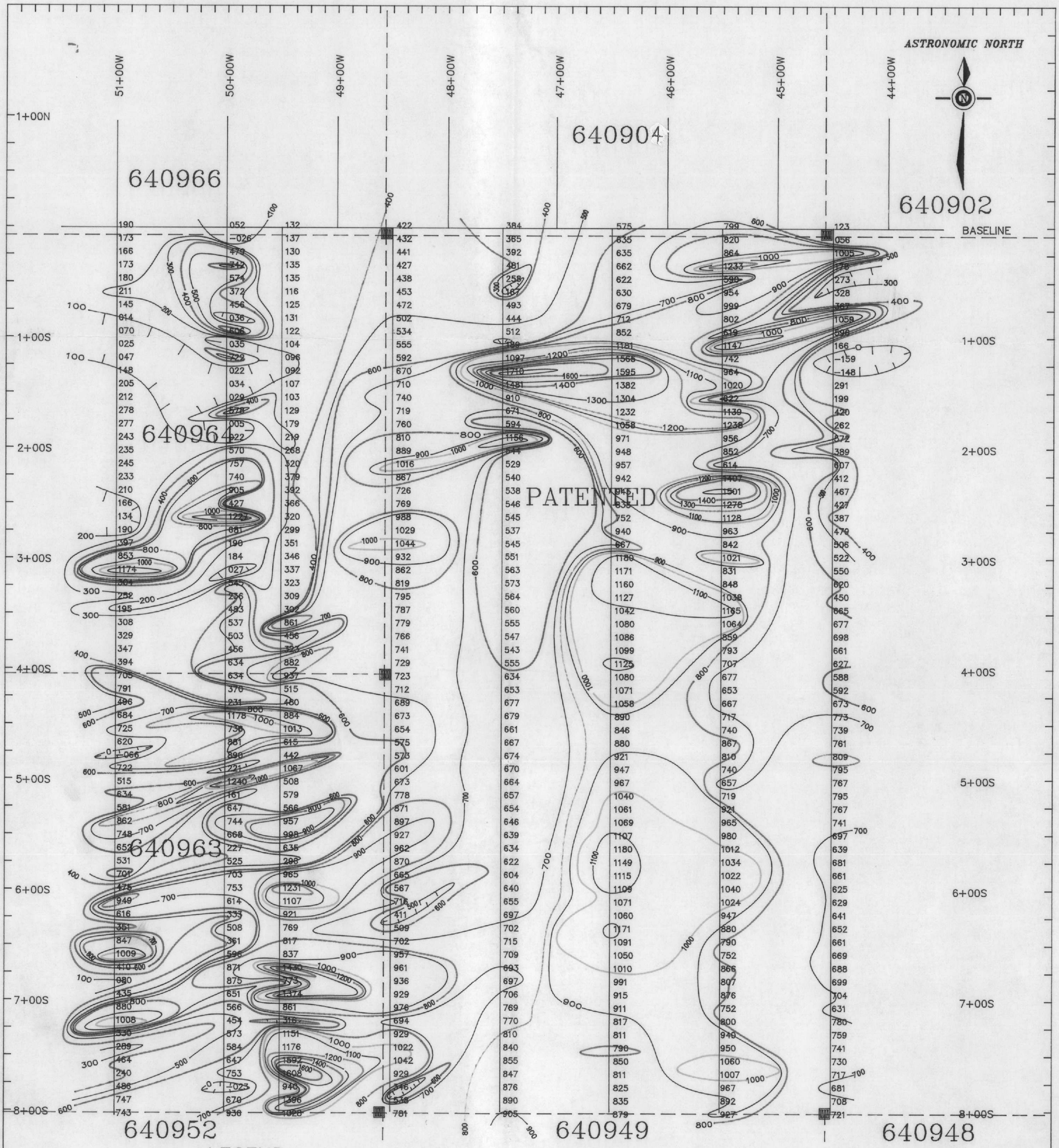
Frequency Tuning Range	15 to 30 kHz, with bandwidth of 150 Hz; tuning range accommodates new Puerto Rico station at 28.5 kHz
Transmitting Stations Measured	Up to 3 stations can be automatically measured at any given grid location within frequency tuning range
Recorded VLF Magnetic Parameters	Total field strength, total dip, vertical quadrature (or alternately, horizontal amplitude)
Standard Memory Capacity	800 combined VLF magnetic and VLF electric measurements as well as gradiometer and magnetometer readings
Display	Custom designed, ruggedized liquid crystal display with built-in heater and an operating temperature range from −40°C to +55°C. The display contains six numeric digits, decimal point, battery status monitor, signal strength status monitor and function descriptors.
RS232C Serial I/O Interface	2400 baud rate, 8 data bits, 2 stop bits, no parity
Test Mode	A. Diagnostic Testing (data and programmable memory) B. Self Test (hardware)
Sensor Head	Contains 3 orthogonally mounted coils with automatic tilt compensation
Operating Environmental Range	−40°C to +55°C; 0 − 100% relative humidity; Weatherproof
Power Supply	Non-magnetic rechargeable sealed lead-acid 18V DC battery cartridge or belt; 18V DC disposable battery belt; 12V DC external power source for base station operation only.
Weights and Dimensions	
Instrument Console	2.8 kg, 128 x 150 x 250 mm
Sensor Head	2.1 kg, 130 dia. x 130 mm
VLF Electronics Module	1.1 kg, 40 x 150 x 250 mm
Lead Acid Battery Cartridge	1.8 kg, 235 x 105 x 90 mm
Lead Acid Battery Belt	1.8 kg, 540 x 100 x 40 mm
Disposable Battery Belt	1.2 kg, 540 x 100 x 40 mm

*Preliminary

EDA Instruments Inc.,
4 Thorncliffe Park Drive,
Toronto, Ontario
Canada M4H 1H1
Telex: 06 23222 EDA TOR,
Cables: Instruments Toronto
(416) 425-7800

In USA,
EDA Instruments Inc.,
5151 Ward Road,
Wheat Ridge, Colorado
U.S.A. 80033
(303) 422-9112

Printed in Canada



LEGEND

INSTRUMENT: GEOMETRICS PROTON PRECISION MAGNETOMETER
SURVEY BY: R.D. KASNER

CONTOUR INTERVAL: 100 NANO TESLAS

- 400 NT
- 600 NT
- 800 NT
- 1000 NT
- 1200 NT
- 1400 NT
- 1600 NT

MAGNETIC DEPRESSION

ADD 58,000 NT TO EACH STATION

SCALE 1:2500

50 0 100 200

METRES

GEOLOGICAL ASSOCIATION OF CANADA
S. J. Carmichael
Dec 22/92

EBY TWP. PROSPECT

CENTRAL GRID
SURFACE MAGNETOMETER

EBY TOWNSHIP
DISTRICT OF TIMISKAMING, ONT.
LARDER LAKE MINING DIVISION

NTS: 42 A/SE	SCALE: 1:2500 M	DATE: DEC., 1992
PROJECT:	DRAWN BY: S.J.C.	DRAWING No. 2

200
42A16SE0004 OM92-088 CHESNEY BAY

1186601
3 UNITS

1186396
2 UNITS

1186395
3 UNITS

KENOGAMI LAKE

ASTRONOMIC NORTH

DECLINATION 11°30'W

51+00W | 50+00W | 49+00W | 48+00W | 47+00W | 46+00W | 45+00W | 44+00W

BASELINE

12+00N | 11+00N | 10+00N | 9+00N | 8+00N | 7+00N | 6+00N | 5+00N | 4+00N

PATENTED

PATENTED

LOT 11

LOT 10

CONC. VI

CONC. V

ROAD

LEGEND

INSTRUMENT: GEOMETRICS PROTON PRECISION MAGNETOMETER
SURVEY BY: R.D. KASNER

CONTOUR INTERVAL: 100 NANO TESLAS

0 NT
200 NT
400 NT
600 NT
800 NT
1000 NT

MAGNETIC DEPRESSION

ADD 58,000 NT TO EACH STATION

SCALE 1:2500

50 0 100 200

METRES

ASSOCIATION OF ONTARIO LAND SURVEYORS
S. I. Carmichael
Dec 22/92
FELLOW

EBY TWP. NORTH PROSPECT

SURFACE MAGNETOMETER

SOUTH HALF

EBY TOWNSHIP
DISTRICT OF TIMISKAMING, ONT.
LARDER LAKE MINING DIVISION

NTS: 42 A/SE	SCALE: 1:2500 M	DATE: DEC., 1992
PROJECT:	DRAWN BY: S.J.C.	DRAWING No. 3

210

42A16SE0004 OMR92-088 CHESNEY BAY

P-39696

P-19629

1186394
3 UNITS

1186601
3 UNITS

1186396
2 UNITS

1186395
3 UNITS

KENOGAMI LAKE

PATENTED

PATENTED

LOT 11

LOT 10

ROAD

CONC. VI

CONC. V

T.L. 24+00N

T.L. 12+25N

ASTRONOMIC NORTH

DECLINATION 11°30'W

LEGEND

INSTRUMENT: GEOMETRICS G-826 PROTON PRECISION MAGNETOMETER
SURVEY BY: R.D. KASNER

CONTOUR INTERVAL: 100 NANO TESLAS

- 0 NT
- 200 NT
- 400 NT
- 600 NT
- 800 NT
- 1000 NT

1:2500

METRES

ONTARIO GEOLOGICAL ASSOCIATION OF CANADA
S.J. Carmichael
Dec 22/92
FELLOW

EBY TWP. NORTH PROSPECT

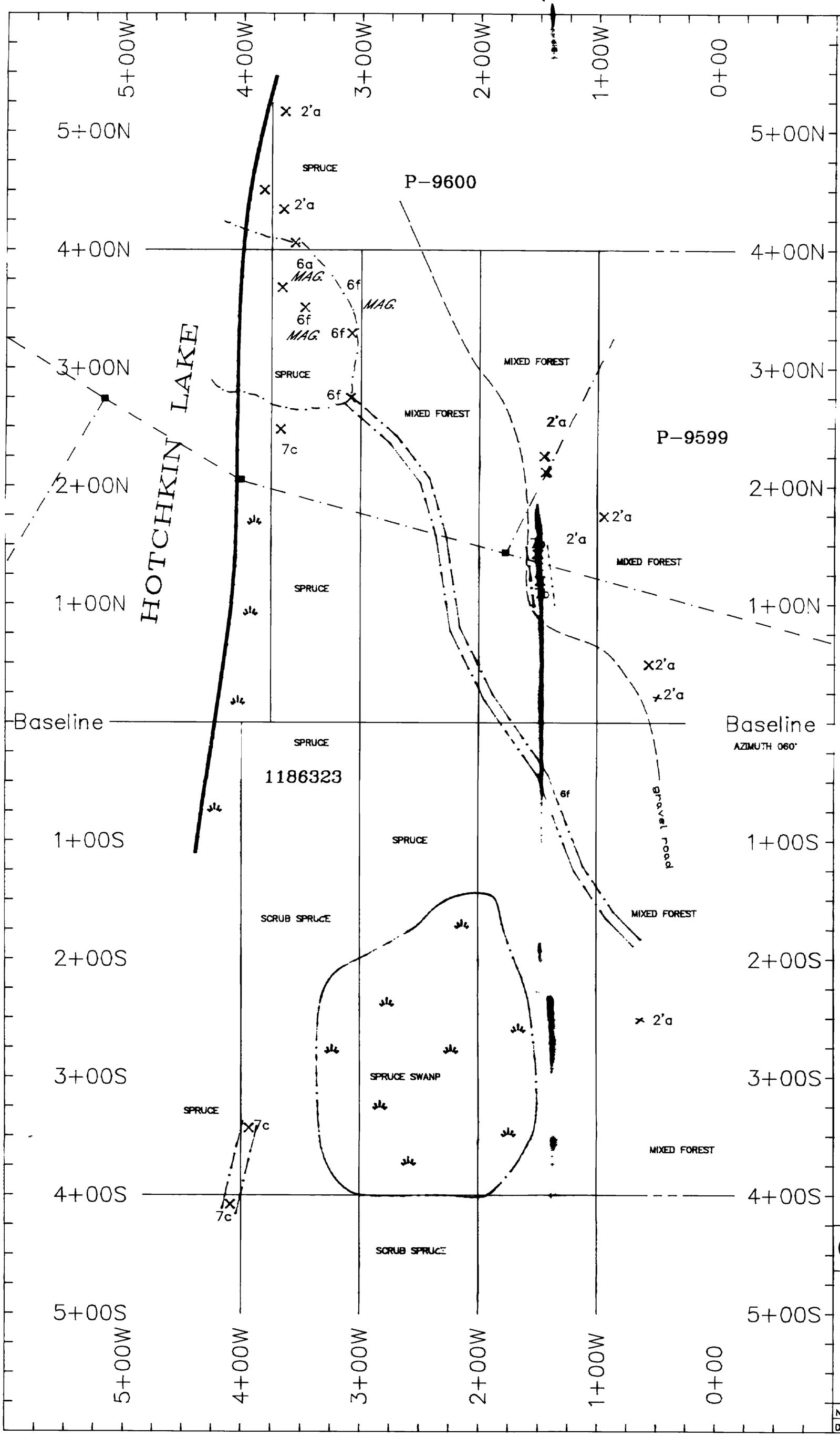
SURFACE MAGNETOMETER

NORTH HALF

EBY TOWNSHIP
DISTRICT OF TIMISKAMING, ONT.
LARDER LAKE MINING DIVISION

NTS: 42 A/SE	SCALE: 1:2500 M	DATE: DEC., 1992
PROJECT:	DRAWN BY: S.J.C.	DRAWING No. 4

220
42A16BE0004 OM92-068 CHESNEY BAY



ASTRONOMIC NORTH

30°

LEGEND

FELSIC TO INTERMEDIATE INTRUSIVE ROCKS

7 *Undivided*
7a Granite
7b Syenite
7c Feldspar Porphyry
7d Granodiorite
7e Diorite
7f Monzonite

MAFIC TO ULTRAMAFIC INTRUSIVE ROCKS

6 *Undivided*
6a Gabbro
6b Gabbro Anorthosite
6c Anorthosite
6d Pyroxenite
6e Peridotite
6f Diabase
6g Lamprophyre

MAFIC METAVOLCANICS

2 2' Fe Mg *Undivided*
2a Massive flows
2b Pillowed flows
2c Massive to well foliated coarse-grained flows
2d Variolitic flows
2e Tuff and lapilli-tuff
2f Flow-top breccia

INFERRED GEOLOGICAL CONTACT

MAG. Magnetic Attraction

SCALE 1:2500

50 0 50 100 150 200

METRES

GEOLOGICAL ASSOCIATION OF CANADA
S. J. Carmichael
Jan 11/93
FELLOW

S.J. CARMICHAEL CONSULTANTS

GREATER LENORA RESOURCES CORP.

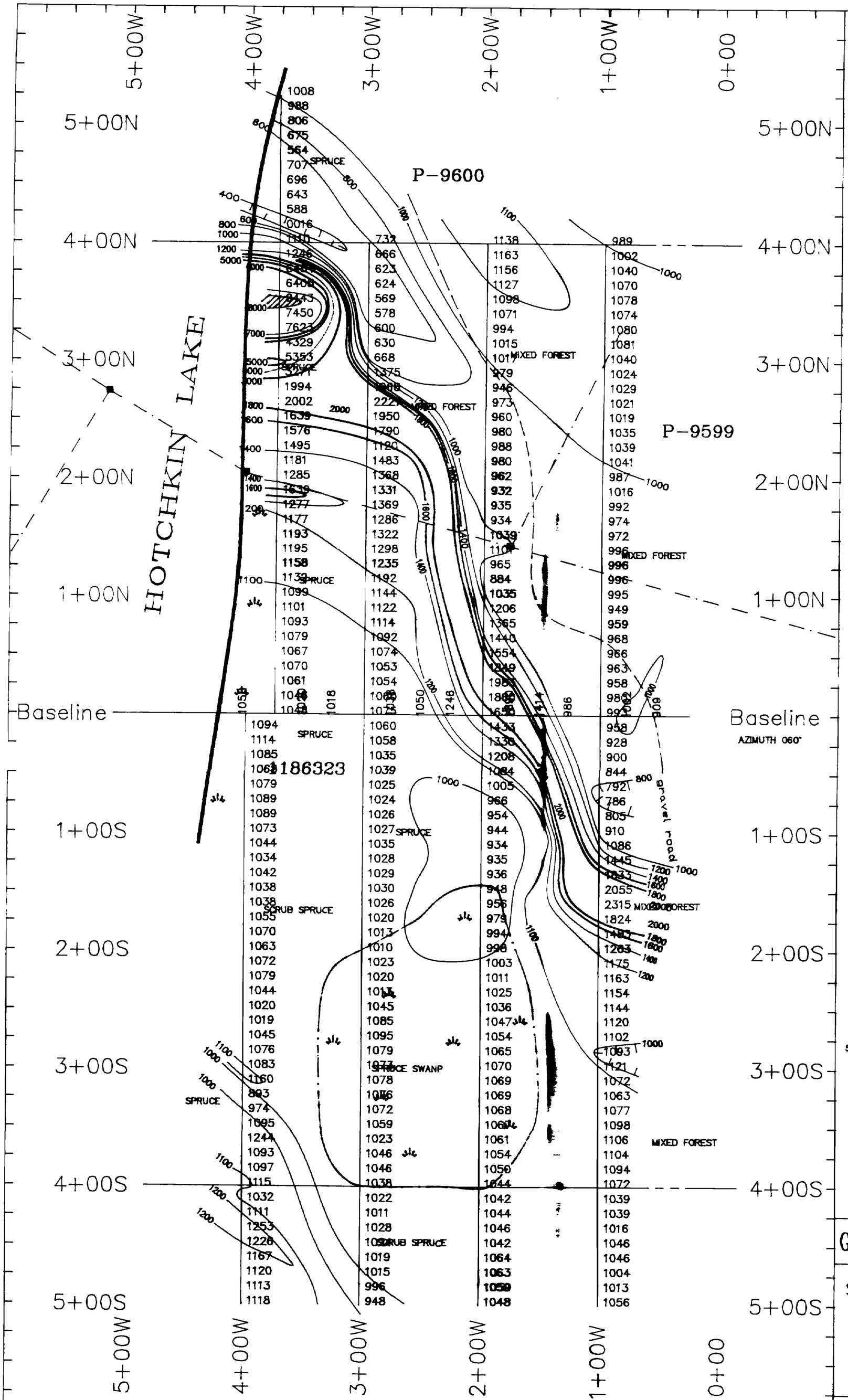
SURFACE GEOLOGY

GRENFELL TOWNSHIP
DISTRICT OF TIMISKAMING, ONT.
LARDER LAKE MINING DIVISION

NTS: 42 A/SE	SCALE: 1:2500 METRIC	REVISED: DATE: JULY, 1992
DRAWING No: 1	DRAWN BY: S.J.C.	PROJECT: L-037

230

42A16SE0004 OM92-088 CHESNEY BAY



ASTRONOMIC NORTH

30°

LEGEND

INSTRUMENT: GEOMETRICS G-826
PROTON PRECISION

BASE STATION: L1+00W, 0+00 SET TO 57993

57000 NANO-TESLAS REMOVED FROM EACH STATION.

CONTOUR INTERVAL = 200 NT INTERVAL UP TO 2000 NT
1000 NT INTERVAL ABOVE 2000 NT

- 1600 NT INTERVAL
- 1800 NT INTERVAL
- 2000 NT INTERVAL
- 3000 NT INTERVAL
- 4000 NT INTERVAL
- 5000 NT INTERVAL
- 6000+ NT INTERVAL

MAGNETIC DEPRESSION

SCALE 1:2500

50 0 50 100 150 200

METRES

S.J. CARMICHAEL CONSULTANTS

GREATER LENORA RESOURCES CORP.

SURFACE MAGNETOMETER SURVEY

GRENFELL TOWNSHIP
DISTRICT OF TIMISKAMING, ONT.
LARDER LAKE MINING DIVISION

NTS: 42 A/SE	SCALE: 1:2500 METRIC	REVISED: DATE JULY, 1992
DRAWING No: 2	DRAWN BY: S.J.C.	PROJECT: L-037

240

42A16SE0004 OM92-086 CHESNEY BAY

554000 E | 555000 E | 556000 E | 557000 E | 558000 E | 559000 E | 560000 E

5328000 N

5327000 N

5326000 N

5325000 N

5324000 N

5323000 N

5322000 N

5321000 N

42A16SE0004 OM92-088 CHESNEY BAY

250

554000 E | 555000 E | 556000 E | 557000 E | 558000 E | 559000 E | 560000 E

561000 E
562000 E
563000 E
564000 E

5328000 N
5327000 N
5326000 N
5325000 N
5324000 N
5323000 N
5322000 N
5321000 N



Square: Grid North
Star: True North
Arrow: Magnetic North

Angles presented are approximate mean deviations for centre of NTS sheet. Use diagram for reference only.

Grid North - True North: -0.58°
Grid North - Magnetic North: -11.0°
Annual change: -0.08° from 1980

FLIGHT PATH

Navigation and flight path recovery was conducted using a Mini-Ranger III dual transponder radar navigation system.

Lines were flown at an azimuth of 15-195°, with an average line spacing of 200m.

Average helicopter-terrain clearance of 60m was monitored by radar, and barometric altimeters.

VERTICAL GRADIENT

Vertical magnetic gradient contour data, calculated from the gridded total field magnetics data by an FFT algorithm.

Map contours are in nanoTeslas/metre, and are multiples of those listed below:

- 0.2 nT/m
- 1 nT/m
- 5 nT/m
- 25 nT/m
- 100 nT/m

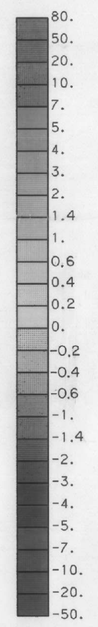
EM ANOMALIES

EM anomalies selected by computer algorithm and manually confirmed. Selection is based on the response correlation to theoretical sources such as a steeply dipping conductor.

Calculation of conductance is based on the response of the 4600 Hz coaxial data, and forms the basis for anomaly classification.

Letter codes are used to identify individual anomalies on a line, and the inphase amplitude of the 4600 Hz response is annotated opposite.

- 0 - 1 mhos
- 1 - 2 mhos
- 2 - 4 mhos
- 4 - 8 mhos
- 8 - 16 mhos
- 16 - 32 mhos
- > 32 mhos



GREATER LENORA RESOURCES

VERTICAL MAGNETIC GRADIENT

KIRKLAND LAKE
ONTARIO

SCALE 1:10 000

250 0 100 200 500 1000 metres

AERODAT LIMITED

Date Flown: February 1983
NTS Map Ref: 42-A
Project Ref: J93411-EBY TWP

554000 E | 555000 E | 556000 E | 557000 E | 558000 E | 559000 E | 560000 E

5328000 N

5327000 N

5326000 N

5325000 N

5324000 N

5323000 N

5322000 N

5321000 N

42A16SE0004 OM92-088 CHESNEY BAY
260

554000 E | 555000 E | 556000 E | 557000 E | 558000 E | 559000 E | 560000 E

561000 E | 562000 E | 563000 E | 564000 E

5328000 N | 5327000 N | 5326000 N | 5325000 N | 5324000 N | 5323000 N | 5322000 N | 5321000 N



Square: Grid North
Star: True North
Arrow: Magnetic North

Angles presented are approximate mean deviations for centre of NTS sheet. Use diagram for reference only.

Grid North - True North: -0.58°
Grid North - Magnetic North: -11.0°
Annual change: -0.08° from 1980

FLIGHT PATH

Navigation and flight path recovery was conducted using a Mini-Ranger III dual transponder radar navigation system.

Lines were flown at an azimuth of 15-195°, with an average line spacing of 200m.

Average helicopter-terrain clearance of 60m was monitored by radar, and barometric altimeters.

APPARENT RESISTIVITY

Apparent resistivity calculated from the measured 4600 Hz coaxial EM response, assuming a resistive half-space (200m) model. Average sensor elevation was 30m.

Map contours are in ohm·m, at logarithmic intervals, in multiples of those listed below:

- 0.1 log(ohm·m)
- 0.5 log(ohm·m)
- 2.5 log(ohm·m)

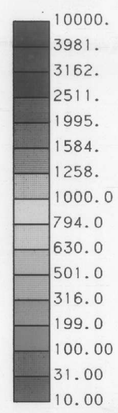
EM ANOMALIES

EM anomalies selected by computer algorithm and manually confirmed. Selection is based on the response correlation to theoretical sources such as a steeply dipping conductor.

Calculation of conductance is based on the response of the 4600 Hz coaxial data, and forms the basis for anomaly classification.

Letter codes are used to identify individual anomalies on a line, and the inphase amplitude of the 4600 Hz response is annotated opposite.

- 0 - 1 mhos
- 1 - 2 mhos
- 2 - 4 mhos
- 4 - 8 mhos
- 8 - 16 mhos
- 16 - 32 mhos
- > 32 mhos



GREATER LENORA RESOURCES

APPARENT RESISTIVITY

4600 Hz COAXIAL

KIRKLAND LAKE

ONTARIO

SCALE 1:10 000

250 0 100 200 500 1000 metres

AERODAT LIMITED

Date Flown: February 1983

NTS Map Ref: 42-A

Project Ref: J93411-EBY TWP

554000 E | 555000 E | 556000 E | 557000 E | 558000 E | 559000 E | 560000 E

5328000 N
5327000 N
5326000 N
5325000 N
5324000 N
5323000 N
5322000 N
5321000 N

42A16SE0004 OM92-088 CHESNEY BAY
270

561000 E
562000 E
563000 E
564000 E
5328000 N
5327000 N
5326000 N
5325000 N
5324000 N
5323000 N
5322000 N
5321000 N



Square: Grid North
Star: True North
Arrow: Magnetic North

Angles presented are approximate mean deviations for centre of NTS sheet. Use diagram for reference only.

Grid North - True North: -0.58°
Grid North - Magnetic North: -11.0°
Annual change: -0.08° from 1980

FLIGHT PATH

Navigation and flight path recovery was conducted using a Mini-Ranger III dual transponder radar navigation system.

Lines were flown at an azimuth of 15-195°, with an average line spacing of 200m.

Average helicopter-terrain clearance of 60m was monitored by radar, and barometric altimeters.

TOTAL FIELD MAGNETICS

Total field magnetic intensity contour data, measured by a cesium high sensitivity magnetometer at an average sensor elevation of 45m, and corrected for diurnal variation.

Map contours are in nanoTeslas, and are multiples of those listed below:

- 2 nT
- 10 nT
- 50 nT
- 250 nT
- 1000 nT

EM ANOMALIES

EM anomalies selected by computer algorithm and manually confirmed. Selection is based on the response correlation to theoretical sources such as a steeply dipping conductor.

Calculation of conductance is based on the response of the 4600 Hz coaxial data, and forms the basis for anomaly classification.

Letter codes are used to identify individual anomalies on a line, and the inphase amplitude of the 4600 Hz response is annotated opposite.

- A 0 - 1 mhos
- B 1 - 2 mhos
- C 2 - 4 mhos
- D 4 - 8 mhos
- E 8 - 16 mhos
- F 16 - 32 mhos
- G > 32 mhos

62000.
60500.
60250.
60000.
59800.
59650.
59550.
59470.
59400.
59340.
59290.
59240.
59200.
59170.
59140.
59120.
59100.
59080.
59060.
59030.
59000.
58970.
58940.
58900.
58850.
58800.
58700.
58500.

GREATER LENORA RESOURCES

TOTAL FIELD MAGNETICS

KIRKLAND LAKE

ONTARIO

SCALE 1:10 000

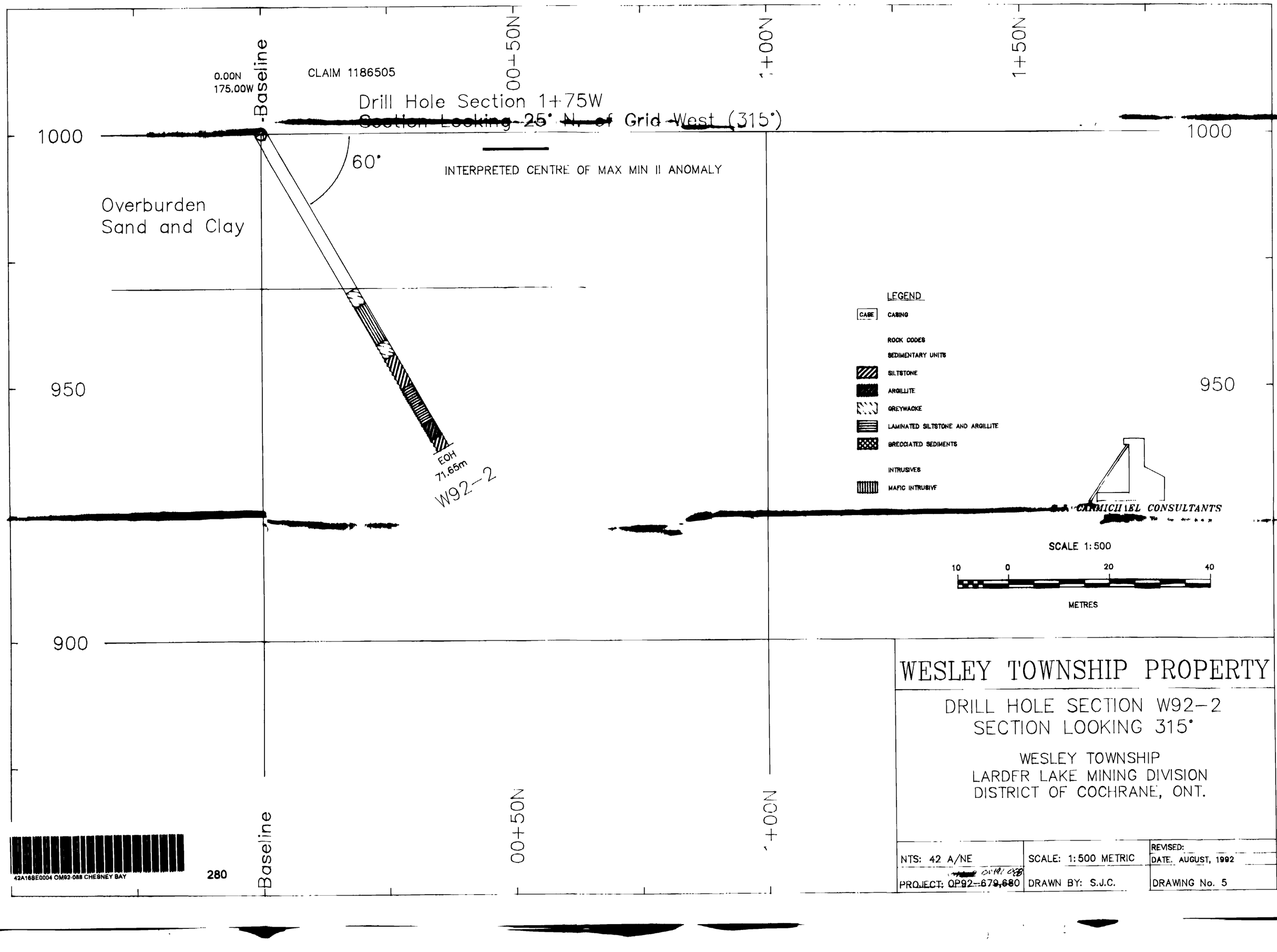
250 0 100 200 500 1000 metres

AERODAT LIMITED

Date Flown: February 1983

NTS Map Ref: 42-A

Project Ref: J93411-EBY TWP



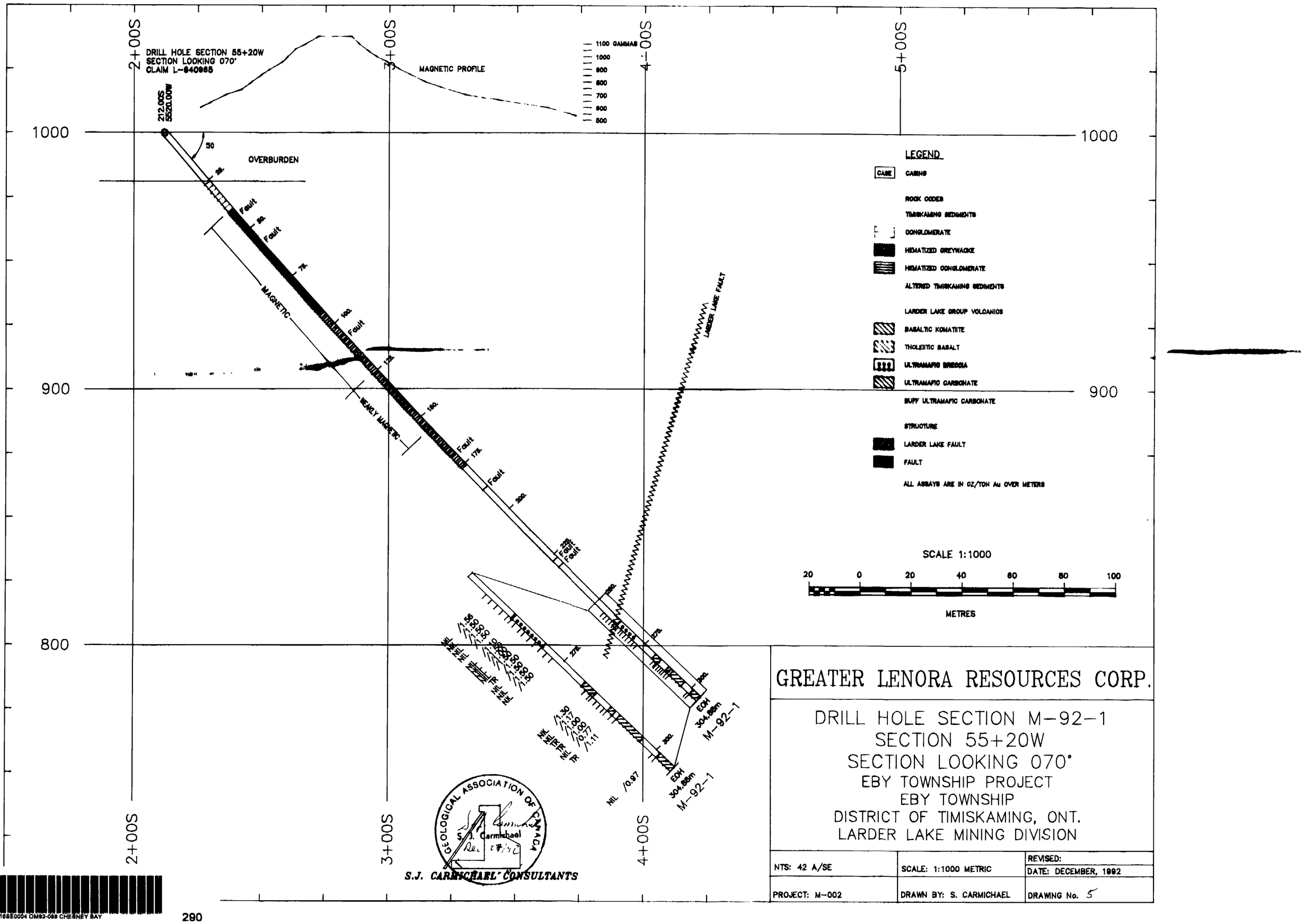
WESLEY TOWNSHIP PROPERTY

DRILL HOLE SECTION W92-2
SECTION LOOKING 315°

WESLEY TOWNSHIP
LARDER LAKE MINING DIVISION
DISTRICT OF COCHRANE, ONT.

NTS: 42 A/NE	SCALE: 1:500 METRIC	REVISED: DATE: AUGUST, 1992
PROJECT: OP92-679,680	DRAWN BY: S.J.C.	DRAWING No. 5

42A16SE0004 OM92-088 CHESNEY BAY



GREATER LENORA RESOURCES CORP.

DRILL HOLE SECTION M-92-1
SECTION 55+20W
SECTION LOOKING 070°
EBY TOWNSHIP PROJECT
EBY TOWNSHIP
DISTRICT OF TIMISKAMING, ONT.
LARDER LAKE MINING DIVISION

NTS: 42 A/SE	SCALE: 1:1000 METRIC	REVISED: DATE: DECEMBER, 1992
PROJECT: M-002	DRAWN BY: S. CARMICHAEL	DRAWING No. 5

42A16SE0004 OM82-088 CHESNEY BAY

SECTION LOOKING EAST ON LINE 6+00W
CLAIM L-1167966

R92-2 R92-2A R92-1

MAX MIN ANOMALY

1000 900 800

3+00N 2+00N

50° 61° 50°

WR 264 WR 266 WR 938 WR 265 WR 939 WR 940

EOH 65.15m EOH 147.85m EOH 218.26m

LEGEND

CASE CASING

ROCK CODES

SEDIMENTARY UNITS

GRAPHITIC SHALE

GRAPHITIC SHALE WITH MASSIVE PYRITE

SILICIOUS TUFF AND CHERT

CHERT AND SILTSTONE

VOLCANIC UNITS

FELSIC VOLCANICS (undifferentiated)

INTERMEDIATE VOLCANICS (undifferentiated)

BASALT

BASALTIC BRECCIA

SILICIFIED BASALT

SILICIFIED FLOW TOP BRECCIA

SILICIFIED BASALT WITH MASSIVE PYRITE

SILICIFIED AND ALTERED BASALT

MINERALIZED ZONE

STRUCTURE

FAULT ZONE

1st Assay is % Zn, 2nd Assay is % Pb

Assays >0.5% Are in Red

Assays <0.05% Are Not Plotted

Histogram Scale (Zn) 1cm = 1%

SCALE 1:500

10 0 20 40

METRES

GREATER LENORA RESOURCES CORP.
RICKARD TOWNSHIP PROPERTY

DRILL HOLE SECTIONS R92-1, 2, 2A
SECTION 6+00W
SECTION LOOKING EAST

RICKARD TOWNSHIP
DISTRICT OF COCHRANE, ONT.
LARDER LAKE MINING DIVISION

GEOLOGICAL ASSOCIATION OF CANADA
S. J. Carmichael
May 12/92
FELLOW

S.J. CARMICHAEL CONSULTANTS

NTS: 42A/16	SCALE: 1:500 METRIC	REVISED: DATE: APRIL, 1992
PROJECT: L-029	DRAWN BY: S. CARMICHAEL	DRAWING NO: 7

300

42A16SE0004 OM92-089 CHESMEY BAY

SECTION LOOKING EAST ON LINE 6+50W
CLAIM L-1167996

3+00N

2+00N

1000

900

800

310

R92-4

52°

60.

100.

HW 935

0.05 NIL

0.05 NIL

120.

140.

0.2% Zn
10.5m

0.15 0.03
0.18 0.03
0.19 0.04
0.47 0.10
0.22 0.03
0.27 0.04
0.18 0.04

HW 934

1.7% Zn, 0.2% Pb
2.7m

0.5% Zn, 0.1% Pb
8.5m

160.

HW 933

200.

EOH
200.00m

LEGEND

CASE CASING

ROCK CODES

SEDIMENTARY UNITS

GRAPHITIC SHALE

GRAPHITIC SHALE WITH MASSIVE PYRITE

SILICEOUS TUFF AND CHERT

CHERT AND SILTSTONE

VOLCANIC UNITS

FELSIC VOLCANICS (undifferentiated)

INTERMEDIATE VOLCANICS (undifferentiated)

BASALT

BASALTIC BRECCIA

BASALTIC FLOW TOP BRECCIA

SILICIFIED BASALT

SILICIFIED FLOW TOP BRECCIA

SILICIFIED BASALT WITH MASSIVE PYRITE

SILICIFIED FLOW TOP BRECCIA WITH PYRITE

MINERALIZED ZONE

MAFIC INTRUSIVE

STRUCTURE

FAULT ZONE

1st Assay is % Zn, 2nd Assay is % Pb

Assays >0.05% Are in Red

Assays <0.05% Are Not Plotted

Histogram Scale (2h) 1cm = 1%

SCALE 1:500

10 0 20 40

METRES

GEOLOGICAL ASSOCIATION OF CANADA
S. J. Carmichael
May 16/92
FELLOW

S.J. CARMICHAEL CONSULTANTS

GREATER LENORA RESOURCES CORP.
RICKARD TOWNSHIP PROPERTY

DRILL HOLE SECTION R92-4
SECTION 6+50W
SECTION LOOKING EAST

RICKARD TOWNSHIP
DISTRICT OF COCHRANE, ONT.
LARDER LAKE MINING DIVISION

NTS: 42A/16	SCALE: 1:500 METRIC	REVISED:
PROJECT: L-029	DRAWN BY: S. CARMICHAEL	DATE: APRIL, 1992
		DRAWING NO: 8

42A16SE0004 DM92-088 CHESNEY BAY

SECTION LOOKING EAST ON LINE 5+50W
CLAIM L-1167966

R92-3

3+00N

2+00N

1000

900

800

320

50°

WR 937

WR 936

3.0% Zn, 0.5%
0.5m

1.2% Zn, 0.4% Pb
2.0m

0.7% Zn, 0.2% Pb
6.0m

0.6% Zn, 0.2% Pb
1.0m

0.5% Zn, 0.1% Pb
29.5m

2.4% Zn, 0.5% Pb
2.5m

0.5% Zn, 0.1% Pb
3.1m

LEGEND

CASE CASING

ROCK CODES

SEDIMENTARY UNITS

GRAPHITIC SHALE

GRAPHITIC SHALE WITH MASSIVE PYRITE

SILICEOUS TUFF AND CHERT

CHERT AND SILTSTONE

VOLCANIC UNITS

FELSIC VOLCANICS (undifferentiated)

INTERMEDIATE VOLCANICS (undifferentiated)

BASALT

BASALTIC BRECCIA

BASALTIC FLOW TOP BRECCIA

SILICIFIED BASALT

SILICIFIED FLOW TOP BRECCIA

SILICIFIED BASALT WITH MASSIVE PYRITE

SILICIFIED AND ALTERED BASALT

MINERALIZED ZONE

STRUCTURE

FAULT ZONE

1st Assay is % Zn, 2nd Assay is % Pb

Assays >0.05% Are in Red

Assays <0.05% Are Not Plotted

Histogram Scale (Zn) 1cm = 1%

SCALE 1:500

10 0 20 40

METRES

GEOLOGICAL ASSOCIATION OF CANADA
S. J. Carmichael
May 12/92
FELLOW

S.J. CARMICHAEL CONSULTANTS

GREATER LENORA RESOURCES CORP.
RICKARD TOWNSHIP PROPERTY

DRILL HOLE SECTION R92-3
SECTION 5+50W
SECTION LOOKING EAST

RICKARD TOWNSHIP
DISTRICT OF COCHRANE, ONT.
LARDER LAKE MINING DIVISION

NTS: 42A/16	SCALE: 1:500 METRIC	REVISED: DATE: APRIL, 1992
PROJECT: L-029	DRAWN BY: S. CARMICHAEL	DRAWING NO: 9

42A16SE0004 0802 ABS CHESNEY BAY

SECTION LOOKING WEST ON LINE 3+00E
CLAIM L-1167997

MAX MIN II ANOMALY

R92-5

52°

0.028 oz/ton
1.0m

20

40

60

100

120

1.0m 0.03%

1000

900

800

3+00N

2+00N

330

LEGEND

GABBRO

ROCK CODES

SEDIMENTARY UNITS

GRAPHITIC SHALE

GRAPHITIC SHALE WITH MASSIVE PYRITE

SILICIOUS TUFF AND CHERT

CHERT AND SILTSTONE

VOLCANIC UNITS

FELSIC VOLCANICS (undifferentiated)

INTERMEDIATE VOLCANICS (undifferentiated)

BASALT

BASALTIC BRECCIA

BASALTIC FLOW TOP BRECCIA

SILICIFIED BASALT

SILICIFIED FLOW TOP BRECCIA

SILICIFIED BASALT WITH MASSIVE PYRITE

SILICIFIED AND ALTERED BASALT

MINERALIZED ZONE

MAFIC INTRUSIVE

STRUCTURE

FAULT ZONE

1st Assay to 5 Zn, 2nd Assay to 5 Pb

Assays Below 0.01% Are Not Plotted

Histogram Scale (Zn) 1cm = 1%

SCALE 1:500

10 0 20 40

METRES

GEOLOGICAL ASSOCIATION OF CANADA
S. J. Carmichael
May 16/92
FELLOW

S.J. CARMICHAEL CONSULTANTS

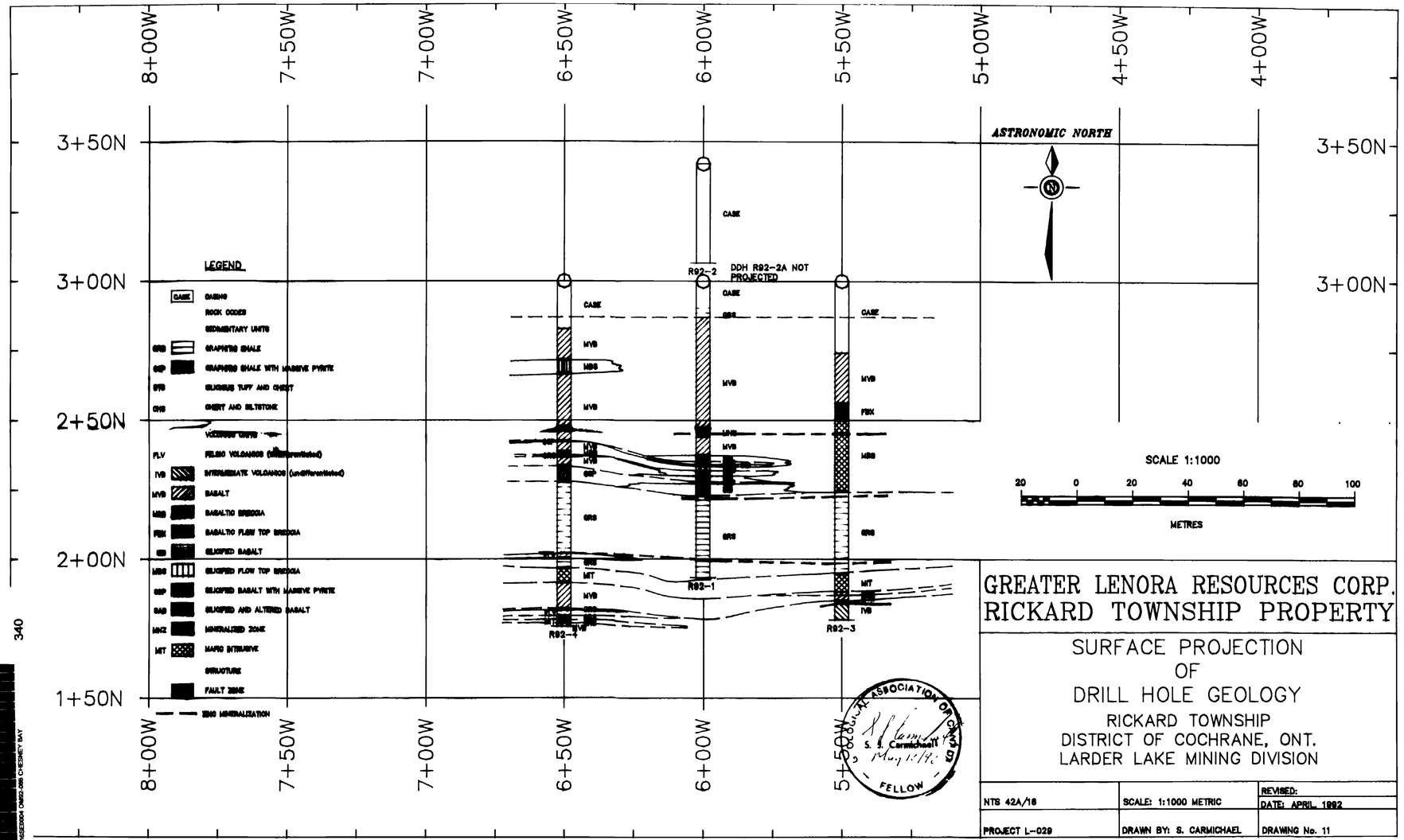
GREATER LENORA RESOURCES CORP.
RICKARD TOWNSHIP PROPERTY

DRILL HOLE SECTION R92-5
SECTION 3+00E
SECTION LOOKING WEST

RICKARD TOWNSHIP
DISTRICT OF COCHRANE, ONT.
LARDER LAKE MINING DIVISION

NTS: 42A/16	SCALE: 1:1500 METRIC	REVISED:
		DATE: APRIL, 1992
PROJECT: L-029	DRAWN BY: S. CARMICHAEL	DRAWING NO:

42A16SE0004 OM92-088 CHESNEY BAY


8+00W
7+50W
7+00W
6+50W
6+00W
5+50W
5+00W
4+50W
4+00W
3+50N
3+00N
2+50N
2+00N
1+50N
ASTRONOMIC NORTH
LEGEND
CASING
ROCK CODES
SEDIMENTARY UNITS
GRAPHITIC SHALE
GRAPHITIC SHALE WITH MASSIVE PYRITE
SILICEOUS TUFF AND CHERT
CHERT AND SILTSTONE
VOLCANIC UNITS
FELSIC VOLCANICS (undifferentiated)
INTERMEDIATE VOLCANICS (undifferentiated)
BASALT
BASALTIC BRECCIA
BASALTIC FLOW TOP BRECCIA
SILICIFIED BASALT
SILICIFIED FLOW TOP BRECCIA
SILICIFIED BASALT WITH MASSIVE PYRITE
SILICIFIED AND ALTERED BASALT
MINERALIZED ZONE
MAFIC INTRUSIVE
STRUCTURE
FAULT ZONE
ZINC MINERALIZATION
R92-2
DDH R92-2A NOT PROJECTED
R92-1
R92-4
R92-3
SCALE 1:1000
20 0 20 40 60 80 100
METRES
GREATER LENORA RESOURCES CORP.
RICKARD TOWNSHIP PROPERTY
SURFACE PROJECTION
OF
DRILL HOLE GEOLOGY
RICKARD TOWNSHIP
DISTRICT OF COCHRANE, ONT.
LARDER LAKE MINING DIVISION
NTS 42A/16
SCALE: 1:1000 METRIC
REVISED:
DATE: APRIL, 1992
PROJECT L-029
DRAWN BY: S. CARMICHAEL
DRAWING No. 11
ASSOCIATION OF CANADA
S. S. Carmichael
FELLOW

1186079
1UNIT

1185915
1UNIT

1600 WEST | 1500 WEST | 1400 WEST | 1300 WEST | 1200 WEST | 1100 WEST | 1000 WEST | 900 WEST | 800 WEST | 700 WEST | 600 WEST | 500 WEST | 400 WEST

100 NORTH

BASE LINE

100 SOUTH

200 SOUTH

300 SOUTH

400 SOUTH

500 SOUTH

600 SOUTH

700 SOUTH

800 SOUTH

900 SOUTH

1000 SOUTH

1100 SOUTH

DRILL ROAD

CREEK

M

B

L

P

1186080
10 UNITS

1185814
8 UNITS

LOT 8 LOT 7

LOT 7 LOT 6

LEGEND

FREQUENCY: 444 Hz
METHOD: Horizontal Loop
MODE: Maximum Coupled
INSTRUMENT: Apex Max-Min II
SERIAL No. 1040
COIL SEPARATION: 200 Metres
READING INTERVAL: 25 Metres
CONDUCTOR AXIS: GOOD ——— WEAK – – –

IN-PHASE QUADRATURE

%+20 10 0 10 20-%

CONDUCTOR AXIS

IN-PHASE ·····

QUADRATURE – – – –

200 100 0 50 100 150 200

Client **GREATER LENORA RESOURCES**

Property RICKARD TOWNSHIP PROPERTY

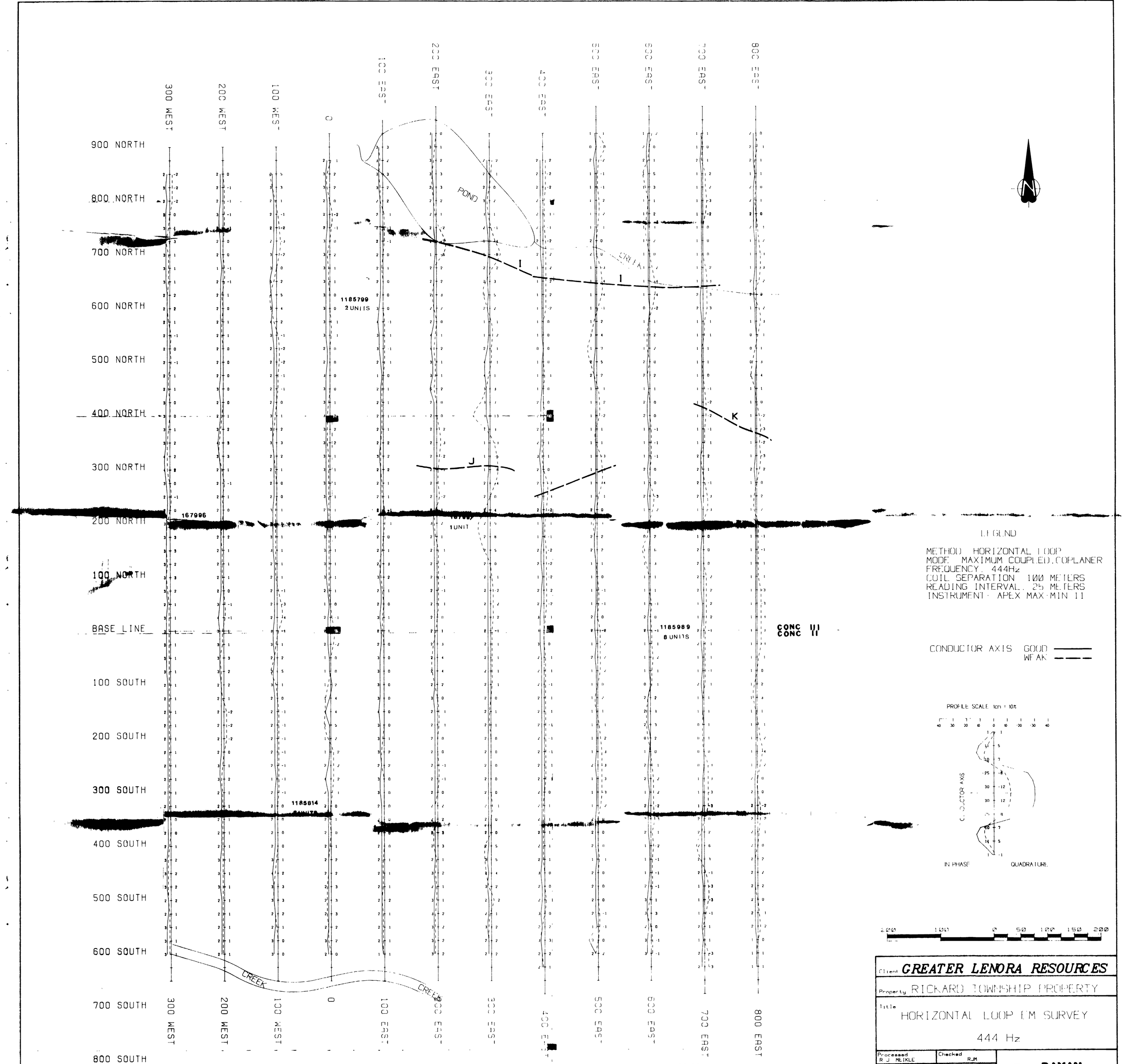
Title.
HORIZONTAL LOOP EM SURVEY
444 Hz - 200m

Processed R J MEIKLE	Checked RJM
Date MARCH 1992	Township RICKARD
Province ONTARIO	N.T.S 42 A/NE
Scale 1:2500	Drawing

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TIMMINS, ONTARIO
(705)-268-4886

42A16SE0004 OM92-088 CHESNEY BAY

350



LEGEND

METHOD HORIZONTAL LOOP
MODE MAXIMUM COUPLED, COPLANER
FREQUENCY 444Hz
COIL SEPARATION 100 METERS
READING INTERVAL 25 METERS
INSTRUMENT APEX MAX-MIN II

CONDUCTOR AXIS GOOD ——
WEAK — — —

PROFILE SCALE 1cm = 10%

200 100 0 50 100 150 200

Client GREATER LENORA RESOURCES

Property RICKARD TOWNSHIP PROPERTY

Title HORIZONTAL LOOP EM SURVEY

444 Hz

Processed R J MEIKLE	Checked RJM
Date MARCH 1992	Township RICKARD
Province ONTARIO	N T S 42 A/NE
Scale 1 2500	Drawing 444ST-2

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42A16SE0004 OM92-068 CHENEY BAY

900 NORTH
800 NORTH
700 NORTH
600 NORTH
500 NORTH
400 NORTH
300 NORTH
200 NORTH
100 NORTH
100 SOUTH
200 SOUTH
300 SOUTH
400 SOUTH
500 SOUTH
600 SOUTH
700 SOUTH
800 SOUTH

POND

1186080

1186079
1 UNIT

1185915
1 UNIT

CON III
CON II

DRILL ROAD

CREEK

LOT 8 LOT 7

LOT 7 LOT 6

1600 WEST
1500 WEST
1400 WEST
1300 WEST
1200 WEST
1100 WEST
1000 WEST
900 WEST
800 WEST
700 WEST
600 WEST
500 WEST
400 WEST

LEGEND

FREQUENCY: 444 Hz.
METHOD: Horizontal Loop
MODE: Maximum Coupled
INSTRUMENT: Apex Max-Min II
SERIAL No. 1040
COIL SEPARATION. 100 Metres
READING INTERVAL: 25 Metres
CONDUCTOR AXIS. GOOD ——
WEAK — — —

PROFILE SCALE 1cm = 10%

CONDUCTOR AXIS

IN PHASE QUADRATURE

200 100 0 50 100 150 200

Client **GREATER LENORA RESOURCES**

Property RICKARD TOWNSHIP PROPERTY

Title
HORIZONTAL LOOP EM SURVEY
444 Hz

Processed R J MEIKLE	Checked RJM
Date MARCH 1992	Township RICKARD
Province ONTARIO	N T S 42 A/NE
Scale	Drawing

RAYAN EXPLORATION LTD
CONTRACT/CONSULTING

42A11BSE0004 OM92-088 CHESNEY BAY

1186079 1185915
1 UNIT 1 UNIT

1600 WEST 1500 WEST 1400 WEST 1300 WEST 1200 WEST 1100 WEST 1000 WEST 900 WEST 800 WEST 700 WEST 600 WEST 500 WEST 400 WEST

100 NORTH
BASE LINE
100 SOUTH
200 SOUTH
300 SOUTH
400 SOUTH
500 SOUTH
600 SOUTH
700 SOUTH
800 SOUTH
900 SOUTH
1000 SOUTH
1100 SOUTH

1186080
10 UNITS

1185814
8 UNITS

DRILL ROAD

CREEK

M M M M M

B B B

L L

P

LOT 8 LOT 7

LOT 7 LOT 6

CONCESSION III
II

LEGEND

FREQUENCY 1777Hz.
METHOD: Horizontal Loop
MODE:: Maximum Coupled
INSTRUMENT: Apex Max Min II
SERIAL No. 1040
COIL SEPARATION: 200 Metres
READING INTERVAL: 25 Metres
CONDUCTOR AXIS GOOD ——— WEAK — — —

IN-PHASE QUADRATURE

%+20 10 0 10 20-%

CONDUCTOR AXIS

IN-PHASE .....
QUADRATURE - - - - -

200 100 0 50 100 150 200

Client GREATER LENORA RESOURCES

Property RICKARD TOWNSHIP PROPERTY

Title
HORIZONTAL LOOP EM SURVEY
1777 Hz - 200m

Processed R.J. MEIKLE	Checked R.J.M.
Date MARCH 1992	Township RICKARD
Province ONTARIO	N.T.S. 42 A/NE
Scale 1:2500	Drawing MM-5

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42A13NE0004 OM92-088 CHESNEY BAY

900 NORTH
800 NORTH
700 NORTH
600 NORTH
500 NORTH
400 NORTH
300 NORTH
200 NORTH
100 NORTH
BASE LINE
100 SOUTH
200 SOUTH
300 SOUTH
400 SOUTH
500 SOUTH
600 SOUTH
700 SOUTH
800 SOUTH

POND
A
B
C
D
E
F
G
H
1186080
1186079 1 UNIT
1185915 1 UNIT
ORTH ROAD
CREEK

LOT 8 LOT 7
LOT 7 LOT 6

1600 WEST
1500 WEST
1400 WEST
1300 WEST
1200 WEST
1100 WEST
1000 WEST
900 WEST
800 WEST
700 WEST
600 WEST
500 WEST
400 WEST

LEGEND

INSTRUMENT APEX MAX MIN II
MODE MAXIMUM COUPLED, COPLANER
FREQUENCY 1777 Hz
COIL SEPARATION 100 METERS
READING INTERVAL 25 METERS
CONDUCTOR AXIS. GOOD ———
WEAK — — —

PROFILE SCALE 1cm = 10%

CONDUCTOR AXIS

IN PHASE QUADRATURE

100 100 0 50 100 150 200

Client **GREATER LENORA RESOURCES**

Property RICKARD TOWNSHIP PROPERTY

Title
HORIZONTAL LOOP EM SURVEY
1777 Hz

Processed R J METKLE	Checked RJM
Date MARCH 1992	Township RICKARD
Province ONTARIO	N T S 42 A/NE
Scale 1 2500	Drawing HLEM-1

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42A168F0004 OM92-388 CHENEY BAY

900 NORTH

800 NORTH

700 NORTH

600 NORTH

500 NORTH

400 NORTH

300 NORTH

200 NORTH

100 NORTH

BASE LINE

100 SOUTH

200 SOUTH

300 SOUTH

400 SOUTH

500 SOUTH

600 SOUTH

700 SOUTH

800 SOUTH

1186080
10 UNITS

1186079
1 UNIT

1185915
1 UNIT

CONC III
CONC II

LOT 8 | LOT 7

LEGEND

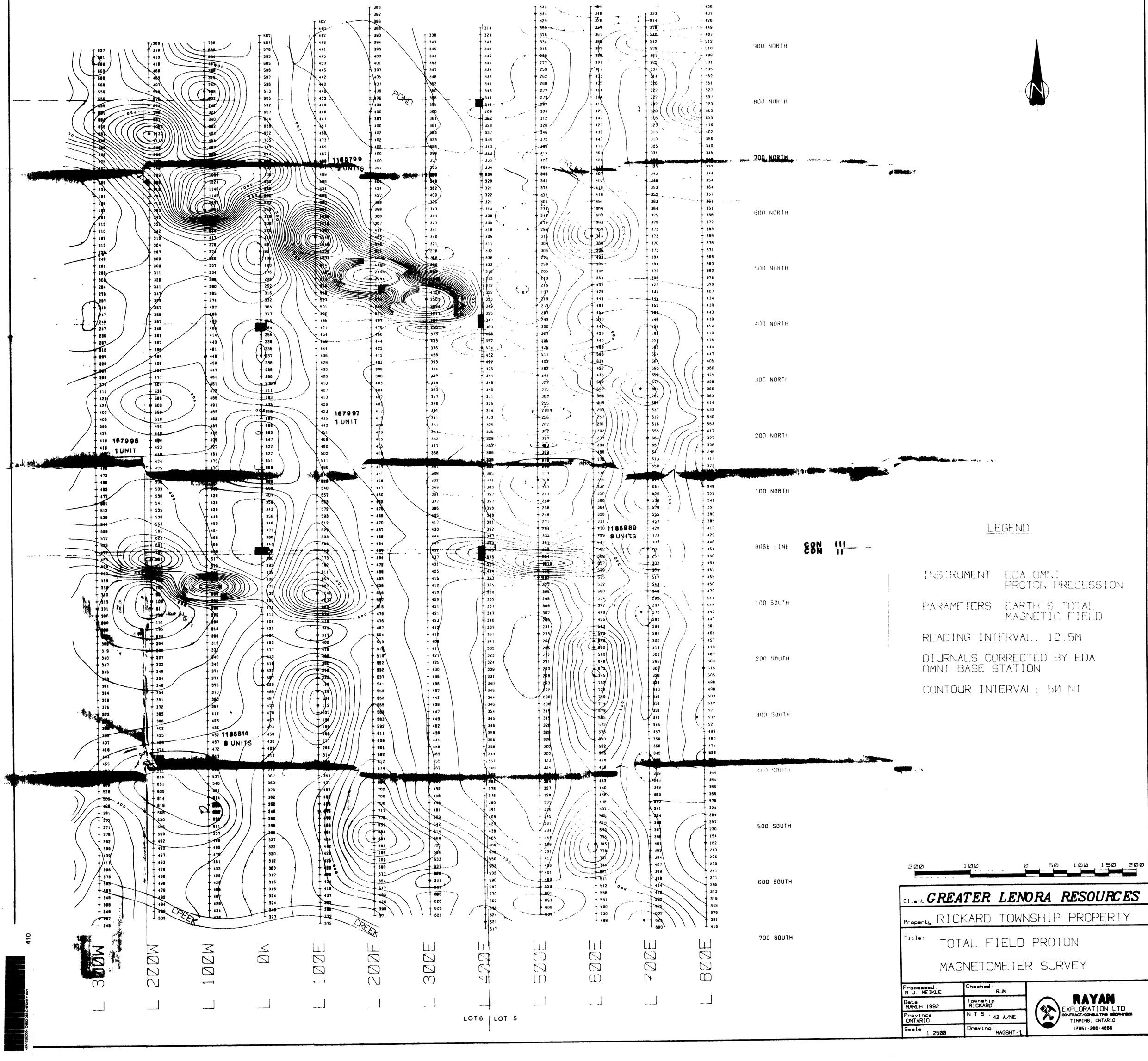
CONTOUR INTERVAL 50 M

Client GREATER LENORA RESOURCES

Surveyed	Checked RJM
Date MARCH 1992	Township RICKARD
Province ONTARIO	N T S 42 A/NE
Scale 1:2500	Drawing MAGSHT 1

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400



LEGEND

INSTRUMENT EDA OMNI
PROTON PRECESSION

PARAMETERS EARTH'S TOTAL MAGNETIC FIELD

READING INTERVAL 12.5M

DIURNALS CORRECTED BY EDA OMNI BASE STATION

CONTOUR INTERVAL : 50 NT

200 100 0 50 100 150 200

Client **GREATER LENORA RESOURCES**

Property RICKARD TOWNSHIP PROPERTY

Title: TOTAL FIELD PROTON MAGNETOMETER SURVEY

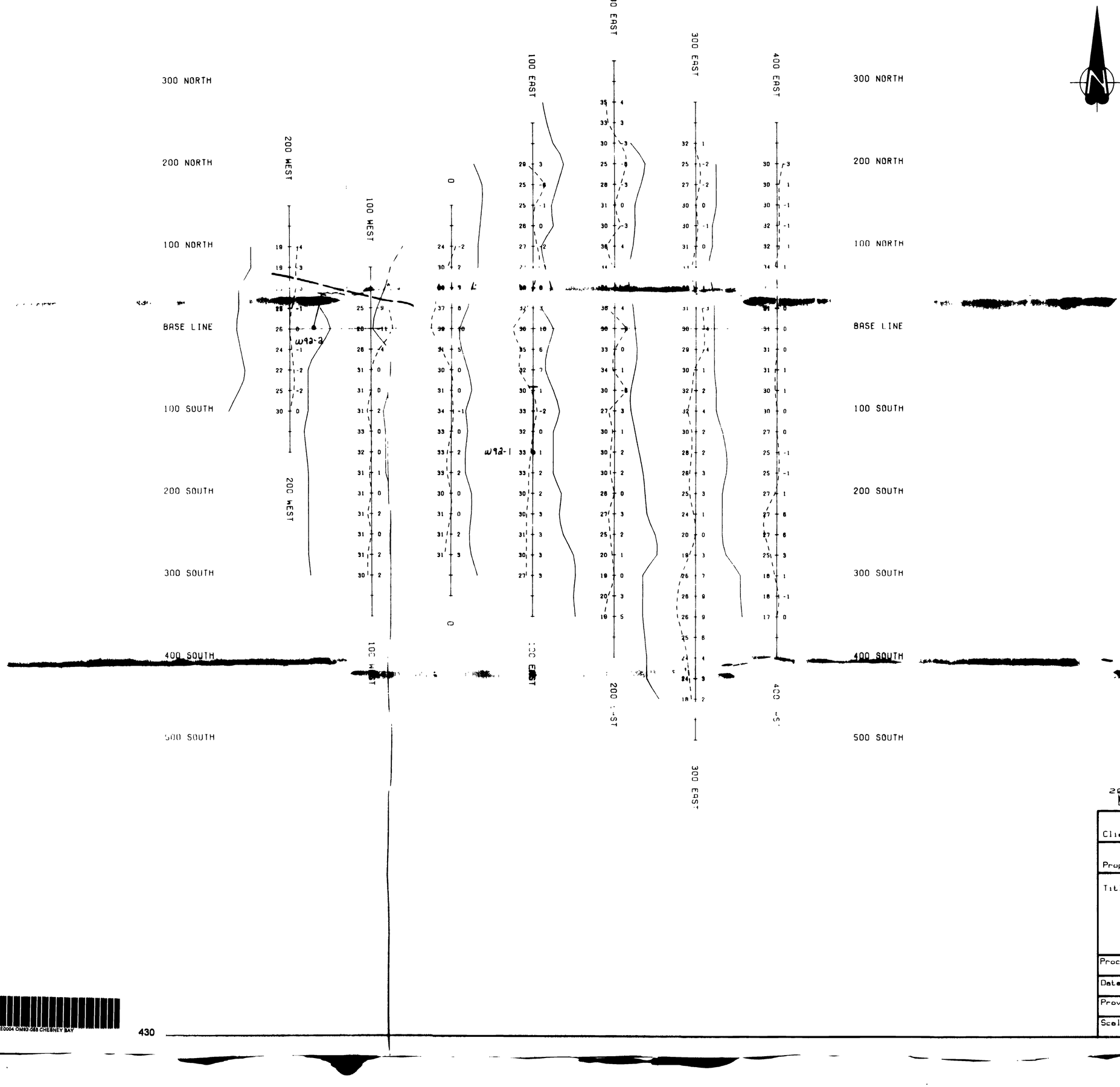
Processed. R J. METKLE	Checked: RJM
Date MARCH 1992	Township RICKARD
Province ONTARIO	N T S 42 A/NE
Scale 1:2500	Drawing: MAGSHT-1

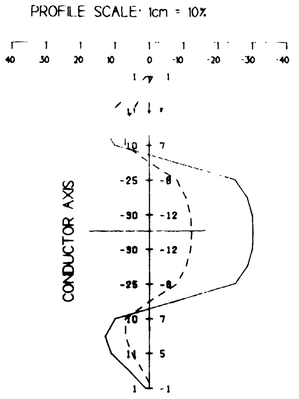
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410

43A15SE0004 CM92-006 CHESNEY BAY

300 EAST
200 WEST
100 WEST
0
100 EAST
200 EAST
300 EAST
400 EAST
500 EAST
600 EAST
700 EAST
800 EAST
POND
1185799
2 UNITS
1185969
3 UNITS
1185814
1186104
8 UNITS
CREEK
CREEK
J
K
LOT 6
LOT 5
GREATER LENORA RESOURCES
RAMAH





LEGEND

METHOD: Horizontal Loop
MODE: Maximum Coupled
INSTRUMENT Apex Max-Min II
SERIAL No. 1040
COIL SEPARATION 100 Metres
READING INTERVAL 25 Metres
FREQUENCY 1777 Hz
CONDUCTOR AXIS
GOOD
MEDIUM
POOR

200 100 0 50 100 150 200

Client **KASNER OPAP**

Property **MISTANGO RIVER PROPERTY**

Title HORIZONTAL LOOP SURVEY

1777 Hz.

Processed R J MEIKLE	Checked R J M
Date JUNE, 1992	Township WESLEY
Province ONTARIO	N T S
Scale 1 2500	Drawing: R102-EM1777

RAYAN
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42A10SE0004 OM92-068 CHEBNEY BAY