31M03NW0034 2 16576 SOUTH LORRAIN

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N.T.S.: 31 M/4

RPT. NO. S-94-3

Latitude: 47 13

Longitude: 79 30

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JUN 3 - 1996

MINING LANDS BRANCH

2.16576

EXPLORATION REPORT ON

S.L. MOR PROJECT

BEAVER CREEK PROPERTY

SOUTH LORRAIN TOWNSHIP

LARDER LAKE MINING DIVISION

ONTARIO

FOR

H.A. MOORE

Qual # (3. 2392)

DECEMBER 1994



010C

2

TABLE OF CONTENTS

	PA	GE
	SUMMARY	
1.0	INTRODUCTION	5
2.0	PROPERTY	5
	2.1 Claims 2.2 Location and Access 2.3 Topography	5 6 6
3.0	EXPLORATION HISTORY	7
4.0	GEOLOGY	9
	4.1 Regional Geology 4.2 Property Geology	9 9
5.0	MINERALIZATION	10
	5.1 Regional Mineralization 5.2 Property Mineralization	10 11
6.0	CURRENT WORK CARRIED OUT	13
	Beaver Creek Property	
	6.1 Line Cutting	13
	6.2 Geological Mapping	13
		14
	•	
	6.4 Magnetometer Survey	14
	6.5 VLF-EM Survey	15
7.0	DISCUSSION OF RESULTS	16
	Beaver Creek Property	4.0
	7.2 Geological Mapping	16
	7.3 Geochemical Survey	17
	7.4 Magnetometer Survey	18
	7.5 VLF-EM Survey	18
8.0	CONCLUSIONS AND RECOMMENDATIONS	19
9.0	REFERENCES AND SELECTED BIBLIOGRAPHY	20
100	CERTIFICATE OF QUALIFICATIONS: F J SHARPLEY	21

Appendix I:	LIST OF FIGURES	page	22
Figure 1:	Location Map		
Figure 1a:	Location Map-Topographic Map		
Figure 2:	Geological Location Map		
Figure 3:	Claim Map		
Figure 4:	Topographic Map-Grid Map		
Figure 5:	Geological Section 8+00 N (1:4,000)		
Appendix II:	List of Tables		23
Table 1:	Rock Samples-Beaver Creek Property		24
Table 2:	Exploration Summary-Beaver Creek Property		25
Appendix III:	INSTRUMENT SPECIFICATIONS		26
Appendix IV:	#SSAYS		27

LIST OF MAPS IN POCKET

Beaver Creek Property

Geology	1:2500
Soil Geochemistry - Arsenic ppm in Humus	1:2500
Soil Geochemistry - Nickel ppm in Humus	1:2500
Soil Geochemistry - Cobalt ppm in Humus	1:2500
Soil Geochemistry - Silver ppm in Humus	1:2500
Soil Geochemistry - Copper ppm in Humus	1:2500
Magnetometer Survey, Readings	1:2500
Magnetometer Survey, Contours	1:2500
VLF Electromagnetic Survey, NAA & NSS Profiles & Readings	1:2500
VLF Electromagnetic Survey, NAA Fraser Filter Contours	1:2500
VLF-Electromagnetic Survey, NSS Fraser Filter Contours	1:2500
Compilation Map	1:2500
Section 8+00 N	1:2000

SUMMARY

The Beaver Creek Property consists of 6 non-patented mining claims located in the South Lorrain area of the Larder Lake Mining Division of Ontario. The property lies on the eastern rim of the Cobalt Embayment where silver mining has produced 23 million ounces from 1908 to 1965.

During the period of November 1994, line cutting, geological, geophysical and geochemical surveys were carried out on the property to investigate possible northward extensions of the Keeley silver-cobalt-nickel veins.

A significant silver-cobalt-nickel geochemical anomaly was encountered associated with the Beaver Creek fault contact between Firstbrook quartzites and the Coleman conglomerate.

A program of humus geochemistry is recommended to evaluate the numerous north-south VLF-EM anomalies and faults, especially the ones in Keewatin volcanics, Coleman conglomerate and Nipissing diabase.

1.0 INTRODUCTION

Line cutting and geophysical surveys have been completed that were funded under the Ontario Prospectors Assistance Program by H.A. Moore on the Beaver Creek Property in South Lorrain Township, Larder Lake Mining Division, Ontario. The geological, geochemical and geophysical survey program was designed to investigate the Beaver Lake and Maidens Lake Faults for silver and cobalt mineralization.

The field work was carried out during November 1994.

2.0 PROPERTY

2.1 Claims

The Beaver Creek Property consists of 6 contiguous, non-patented mining claim units in South Lorrain Township in the Larder Lake Mining Division of Ontario.

The claims are numbered as follows:

L-1118571: 1 unit - South Lorrain Township

L-1118572: 1 unit

L-1118573: 1 unit

L-1118574: 1 unit

L-1198615: 1 unit

L-1198616: 1 unit

The claims total 240 acres or 97.13 hectares and are registered in the name of H.A. Moore.

2.2 Location and Access

The property is located 25 km southeast of Cobalt, Ontario and 4 km west of Lake Timiskaming. Access is from Highway 11B at North Cobalt and south on Highway 567 to South Lorrain for 27 km. The property straddles the highway. Ontario Hydro power lines pass within two miles of the property.

2.3 Topography

The topography on the property is mainly outcrop ridges with intervening swampy valleys. Topographic relief on the property is approximately 60 metres. There are two small beaver ponds on the Beaver Creek Property. The forest cover is mixed with spruce, birch, poplar, balsam and alders.

The climate is typical of northern Ontario with snow cover and cold weather from mid November until May.

3.0 EXPLORATION HISTORY

The first geological map covering South Lorrain was published by Barlow (1899) with his report on the Nipissing and Temiscaming Region. The first geological report devoted entirely to South Lorrain was by Burrows (1909) and Knight (1922). The first detailed geological report to cover the township was by Todd (1925). Aeromagnetic coverage of the area in 1965 was provided by the GSC. McIlwaine (1970) provided the most recent work in ODM Geological Report 83 on Geology of South Lorrain Township at a scale of one inch to 1/2 mile.

There is evidence of considerable pitting and trenching that probably occurred during the period from 1907-1913 and from 1921-30 (Thompson 1959). The present claims L-1118571 (formerly HS321), L-1118572 (formerly GF11), L-1118573 (formerly HS320), L-1118574 (formerly GF12 and part of BC100 or T55569), L-1198615 (formerly T50990) and L-1198616 (formerly T49654 or GF9) were all patented claims at one time.

Marathon Silver Mines Limited in 1910-11 put down two shafts on claim GF9 (now L-1198616) (McIlwaine 1970). On the east northeast part of the claim a shaft was sunk to a depth of 87 feet on a 4 inch cobalt-nickel-silver vein. On the northwest part of the claim a shaft was sunk to a depth of 35 feet on a quartz-calcite vein.

Sharp Lake Mines Limited in 1912 sunk a shaft (inclined at 65 degrees southwest) on claim BC100 (now L-118574) to a depth of 50 feet with drifts 145 feet south and 60 feet east (McIlwaine 1970 and O.B.M. Annual Report 1912, p. 147). A second shaft about 400 feet northwest is vertical and has a dump indicating a depth of 200 feet (400 feet northwest of claim L-118574).

In 1961, R.W. Christopher drilled one diamond drill hole to a depth of 121 feet (Az. 145 degrees and dip 50 degrees) on claim T49654 (now claim 1198616) south of the 35 foot shaft (250 feet south and 100 feet west of the shaft). The hole encountered Nipissing diabase

In 1963, J.F. Cooper drilled one diamond drill hole to a depth of 200 feet (Az. 273 degrees and dip of 55 degrees) on claim T50990 (now claim L-1198615) 326.5 feet south of the No. 4 post and 475 feet east (McIlwaine 1970). The hole encountered quartzite.

Mobiko Mines Limited in 1966 carried out a geological, magnetometer, Ronka EM-15 and limited I.P. surveys on the northern part of claim L-118574 (formerly part of BC100 and T55569) in the area of the Sharp Lake shafts.

4.0 GEOLOGY

4.1 Regional Geology

The S.L. Mor Project lies in the Abitibi Subprovince of the Superior Province of the Precambrian Shield. The project area is situated within the Cobalt Embayment and forms the part known as the South Lorrain or Silver Centre Mining Camp (Figure 1).

The Nipissing Diabase in the South Lorrain area forms a dome structure with the axis striking north-northeast. The older Keewatin metavolcanics, Coleman conglomerate, Firstbrook laminated quartzites and Lorrain feldspathic quartzites over and underlay the diabase sheet.

Prominent northwest faults (Maidens Lake) and north-northeast faults (Beaver Lake) cross the area.

4.2 Property Geology

The Beaver Creek Property lies within the Cobalt Embayment on the eastern rim (Figure 1) composed of Archean and Proterozoic rocks. The rocks on the property consist of Keewatin metavolcanics, Cobalt Group Coleman conglomerate, Firstbrook laminated quartzite, Lorrain arkose and Nipissing diabase.

The Maidens Lake fault and the Beaver Lake fault crosses the property. The formations are striking northerly and dipping at a shallow angle to the west (Section 8+00N).

5.0 MINERALIZATION

5.1 REGIONAL MINERALIZATION

Production from the South Lorrain Mining Camp from 1908 to 1965 totalled 23 million ounces of silver, 3.5 million pounds of cobalt, 63,450 pounds of nickel and 10,292 pounds of copper. The most production was from the years 1909 to 1913 and from 1922 to 1931 with the main production totalling 82 percent from the Keeley and Frontier Mines.

The silver occurs in the native state in carbonate veins and vein systems. These veins systems have a close relationship with the Huronian-Archean unconformity where Nipissing diabase sills and steeply dipping Archean volcanic sequences coincide. The vein systems are fault controlled.

In the South Lorrain area the production has come mainly from the 300 feet of metavolcanics overlying the diabase dome on the western flank in vein systems striking north or northeasterly but a minor production has come from the diabase. The ore is mainly

native silver, cobaltite and niccolite in calcite veins. The South Lorrain area has an unusual occurrence of secondary enrichment due to deep pre-glacial oxidation on the Wood's vein at the Keeley mine (McIlwaine 1970).

5.2 Property Mineralization

On claim L-1198616 (formerly GF9 or T49654) there are two shafts in diabase. A report by Loring (1911) Marathon Silver Mines Limited states there are two zones of east-west calcite veining with cobalt, nickel and silver mineralization with secondary veining in a north-south direction.

The easterly shaft is reported to be 87 feet deep. Thompson (1959) reports two mineralized vein systems striking 50 degrees and 87 degrees with the dip at 73 degrees north. Loring (1911) reports a 4 inch calcite vein in the shaft striking easterly and westerly with considerable niccolite and smaltite.

The westerly shaft is reported to be to a depth of 35 feet on an inclined quartz-calcite vein striking 6 degrees and dipping at 75 degrees east.

On claim L-118574 (formerly BC100) an old shaft is collared in diabase and inclined at 65 degrees southwest. The Sharp Lake

shaft is collared on a quartz-carbonate vein striking 165 degrees and is reported to be 50 feet deep with a drift at this level running 145 feet south and 60 feet east (McIlwaine 1970). These workings would be toward the lower contact of the diabase. A quartz-carbonate vein with cobalt bloom is evident on the dump.

6.0 CURRENT WORK CARRIED OUT

6.1 Line Cutting

A picket line grid was cut on the Beaver Creek Property during November, 1994 for a total of 10.8 line kilometres by Glen McBride of New Liskeard, Ontario. The lines are spaced at 100 metre intervals and the stations at 25 metre intervals.

6.2 Geological Mapping

During the period from November 14-16,1994 the Beaver Creek Property was mapped geologically by the writer on a scale of 1:2500. The property has picket lines spaced at 100 metre intervals and stations at 25 metre intervals. The grid consists of 10.8 line km of picket line with the baseline oriented in a north-south direction.

The mapping consists of outlining the surface geology, topography, vegetation, soil cover, roads and claim posts. The outcrop areas outline the rock-type, structure, alteration and mineralization.

The geological mapping was plotted on one sheet on a scale of 1:2500.

6.3 Geochemical Survey

During the period from November 14-16,1994 the writer collected approximately 20 rock samples and on November 20,1994 collected 46 humus samples from the Beaver Creek Property.

The rock samples, four of which are mineralized, were analyzed for silver, cobalt, nickel and copper by Swastika Laboratories (a division of TSL/Assayers Inc.) at Swastika, Ontario. The results are shown in Table 1. The humus samples were analyzed for silver, arsenic, cobalt, nickel and copper using the fire assay and atomic absorption method. The results of the humus geochemical survey are plotted at a scale of 1:2500.

6.4 Magnetometer Survey

A Scintrex MP-2 proton total field magnetometer was used for the survey on the Beaver Creek Property. Magnetic diurnal variations were monitored by establishing base stations at 100 metre intervals along the baseline. Readings were taken along grid lines spaced at 100 metre intervals with readings at 12.5 metre intervals along the line. Magnetic diurnal variations were monitored by looping lines and checking into established baseline base stations at intervals of less than one and one half hours. Approximately 10.8 line kilometres of data were recorded in this way by the writer from November 17-19,1994.

Corrections to the magnetic field values recorded during the field survey were made using the approximate time and diurnal change information. The values were then plotted on the computer by R.W. Woolham at a scale of 1:2500 and contoured at 100 gamma intervals. The base value used is 57000 gammas.

6.5 VLF-EM Survey

The VLF-EM survey on the Beaver Creek Property was carried out by the writer from November 23-27,1994 using a Geonics EM-16 instrument to measure the secondary component produced by the VLF transmitter station at Cutler, Maine (NAA-24.0 KHz) and Annapolis Maryland (NSS-21.4 KHz). Measurements of the in-phase and quadrature values were taken every 12.5 metres along the survey lines spaced at 100 metres on the grid. A total of 9.5 line kilometres of data was collected in this manner.

The results are plotted in profile at a scale of 1:2500. A conductive response is indicated in a change of gradient from a positive to negative proceeding in a easterly direction, as shown on the map. The Fraser filter values were calculated for the inphase profiles. The values were plotted and contoured at 5 unit intervals. The results are compiled by R.W. Woolham using a computer and shown on maps at a scale of 1:2500.

7.0 DISCUSSION OF RESULTS

7.2 Geological Mapping

The Keewatin Volcanics (1) do not outcrop on the property although this rock-type is interpreted to occur on lines 6N, 7N, 8N and 9N at about 1+00W (Section 8+00N).

The Coleman Conglomerate (5) occurs in numerous outcrops along the baseline from section 0 to 5N. The rock-type is more of a pebble conglomerate with numerous 1" pebbles of granite in a greywacke matrix. Chlorite spots occur in the conglomerate at about 1+00E.

The Firstbrook Laminated Quartzite (6) is light green finely laminated quartzite. Numerous outcrops of this rock-type occur west of Beaver Creek.

The Nipissing Diabase (8) is a fine to coarse grained massive intrusive rock with disseminated magnetite. The rock-type is occasionally pinkish when there is an increase in K2O on lines 8N, 9N and 10N near the baseline.

The rock formations strike northerly and dip at about 15 degrees west.

The Maidens Lake fault strikes northwest across the property and

dipping southwest. The fault appears to offset the formations.

The Beaver Lake fault strikes north along Beaver Creek and appears to be offset by the Maidens Lake fault by about 200 metres.

7.3 Geochemical Survey

Of the 46 humus soil samples analyzed on the Beaver Creek Property, 14 are anomalous for arsenic, 5 for nickel, 4 for cobalt, 4 for silver and 7 for copper. The peak value for arsenic is 4280 ppm at 0-2+25W, for nickel is 208 ppm at 0-2+25W, for cobalt is 188 ppm at 0-2+25W, for silver is 5.5 ppm at 2N-2+25W and for copper is 129 ppm at 8N-3W. The background value for arsenic is 5 ppm, for nickel is 40 ppm, for cobalt is 10 ppm, for silver is .3 ppm and for copper is 40 ppm.

A strong geochemical humus anomaly for arsenic, nickel, cobalt, silver and copper occurs along Beaver Creek from line 0 to 3N at about 2+25W. Geologically this occurs along the Beaver Creek fault along the contact between the Firstbrook laminated quartzites and the Coleman conglomerates.

A weak geochemical humus anomaly for copper and locally nickel occurs on lines 8N, 9N and 11N at 3W to 5W along the Maidens Lake

fault.

7.4 Magnetometer Survey

The magnetometer survey is a good tool for outlining the diabase with readings of 3000 gammas above or below background. In conjunction with geological mapping it outlines the contact in more detail and indicating the areas of thickness and the rolls in the contact.

7.5 VLF-EM Survey

The Annapolis (NSS) is the best channel for this property. It is the best channel for picking the north-south structures. There are some strong north-south VLF-EM anomalies throughout the property (Compilation). The Cutler (NAA) station outlined some of the same anomalies but not as well.

8.0 CONCLUSIONS AND RECOMMENDATIONS

A significant silver, cobalt, nickel, arsenic and copper geochemical anomaly has been encountered over a strike length of 300 metres along Beaver Creek. Geologically the anomaly is along the Beaver Lake fault contact between Firstbrook laminated quartzites and Coleman conglomerate. The source of this anomaly may be silver-cobalt-nickel mineralization within the Beaver Lake fault. This creek drains the Keeley mine tailings pond which is over a mile up stream (1.7 km) so that the exact cause of this anomaly is not known. However we do know that humus geochemistry does work. This tool would be an excellent method to evaluate the numerous north-south VLF-EM conductor especially the anomalies that occur in Keewatin volcanics, Coleman conglomerate and Nipissing diabase.

A program of humus geochemistry is recommended to evaluate the numerous north-south VLF-EM anomalies in the Keewatin volcanics, the Coleman conglomerate and the Nipissing diabase as well as significant north-south faults in the diabase.

Respectfully submitted,

F.J. Sharpley

REFERENCES

Andrews A.J., Owsiacki L., Kerrich R., Strong D.F.

(1986) The silver deposits at Cobalt and Gowganda,
Ontario. I: Geology, petrography, and
whole-rock geochemistry.

Cunningham L.J.

(1963) Private Report for Nocana Mines Ltd.

Part of South Lorrain Silver Area

On file with O.D.M.

EMR Topographic Map: 31 M/4 (1983) Temagami; 1:50,000

EMR Topographic Map: 31 M/3 (1982) Fabre; 1:50,000

G.S.C. Fabre: Aeromagnetic Series Map 1481G (1965)

1 inch to 1 mile
Temagami: Aeromagnetic Series Map 1491G 1 inch to 1 mile

Knight C.W. Geology of the mine workings of Cobalt and South Lorrain silver areas;
Ontario Department of Mines,
Vol.31,pt.2, 374p.(published 1924)
and accompanying maps

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McIlwaine W.H. Geology of South Lorraine Township, (1970)
Geological Report 83,
Ontario Department of Mines
Map 2194: 1:31,680

OGS Sudbury Cobalt Sheet;
(1971) Geological Compilation Series
Map 2188

Thompson R. Report on Claim T-46550
(1959) South Lorrain; Resident Geologists Report Cobalt, Ontario. On file with the O.D.M.

Walker W. Report on Geophysical Surveys,
(1966) Mobiko Mines Limited
South Lorrain Township
On file with the O.D.M.

MNR Claim Map: G-3448: South Lorrain Township (1994)

CERTIFICATE OF QUALIFICATION

I, Frederick James Sharpley of the City of Burlington, Province of Ontario, do hereby certify:

1) That I am a consulting geologist and reside at 2372 Sinclair Circle, Burlington, Ontario, L7P 3C3.

2) That I graduated from the University of Saskatchewan, Saskatoon, Saskatchewan, holding a degree of Bachelor of Arts, Geology (1959).

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

4) That I have practised my profession as a mineral exploration geologist for a period of 35 years.

5) That I personally was involved with the technical supervision of the work and the report.

6) That I have no financial interest in the Beaver Creek Property.

Burlington Ontario

December 23,1994.

Thupley

F.J. Sharpley

APPENDIX I:

LIST OF FIGURES

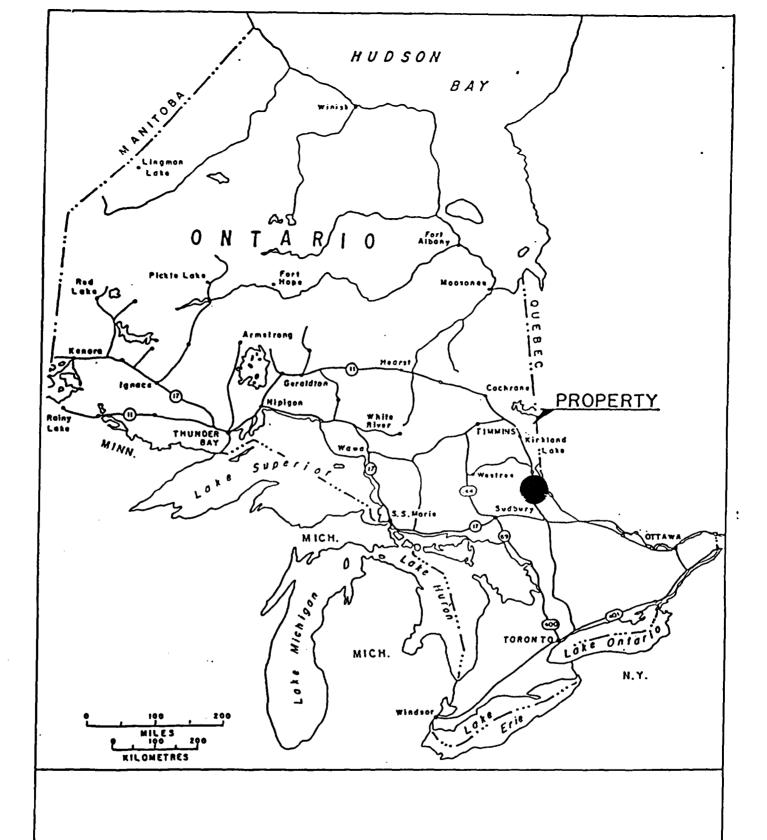
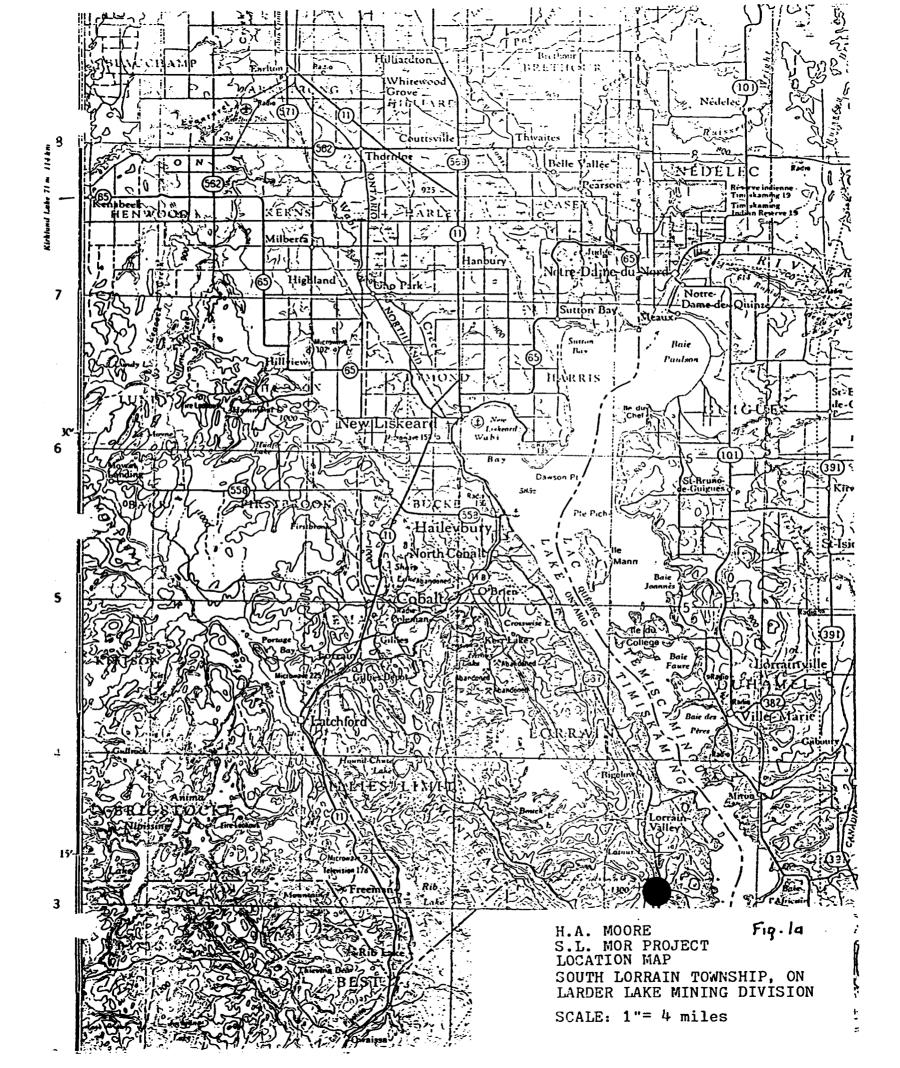


Fig. 1
H.A. MOORE
S.L. Mor Project
South Larrain TWP., ONTARIO
LOCATION MAP



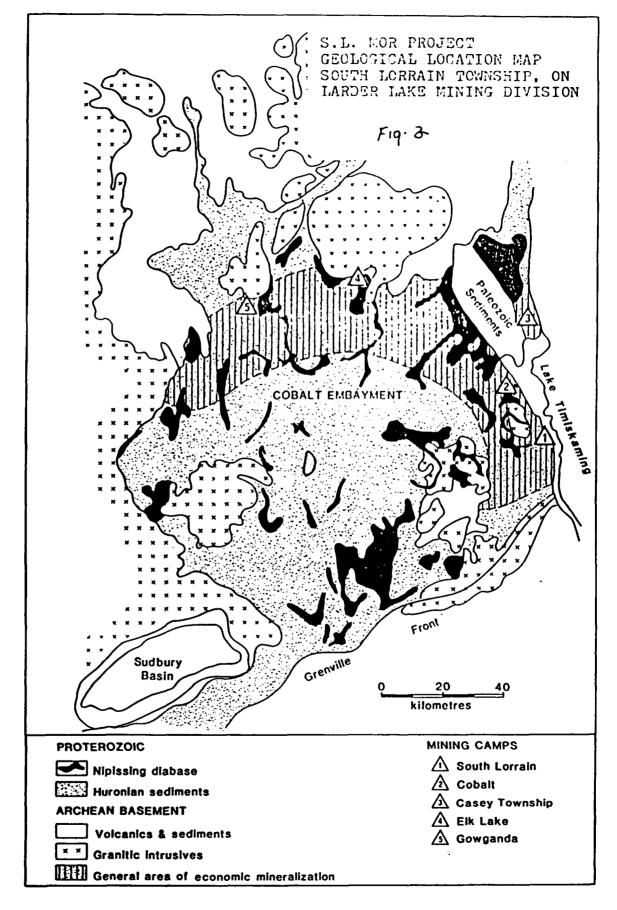
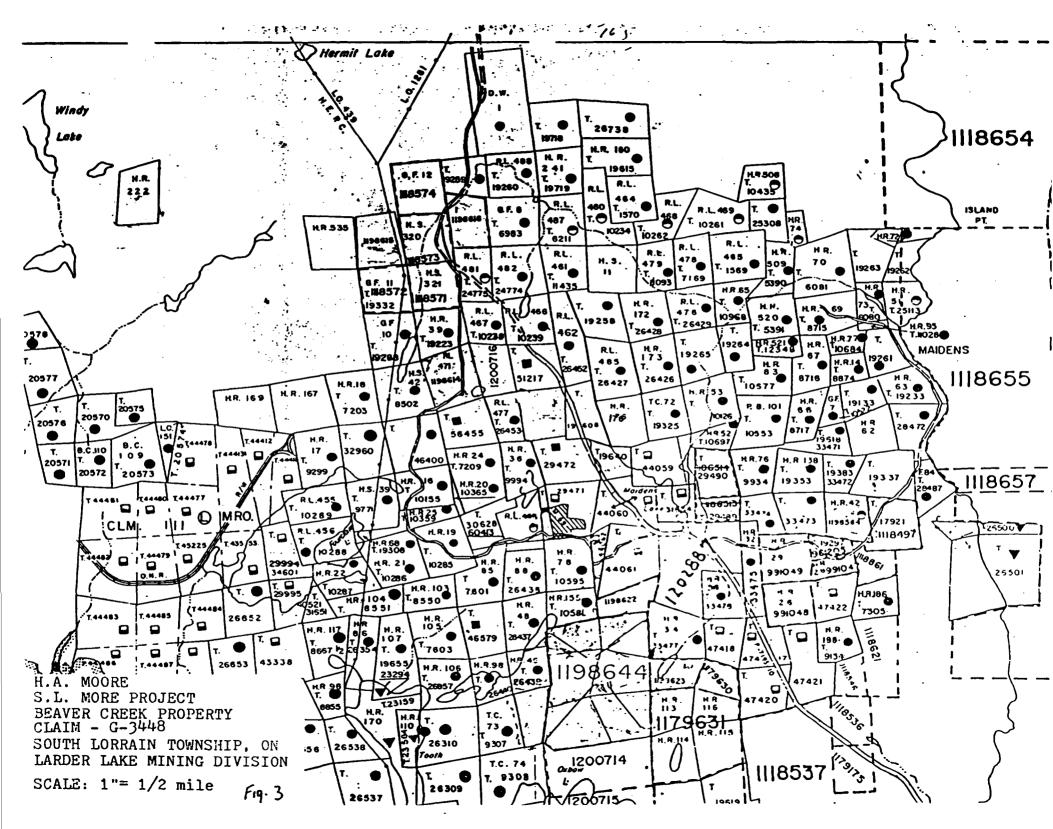


Fig. § Simplified geology of the Cobalt Embayment illustrating the general area encompassing economic deposits and most occurrences of Ag-sulpharsenide mineralization (modified from Ontario Geological Survey Map 2391).



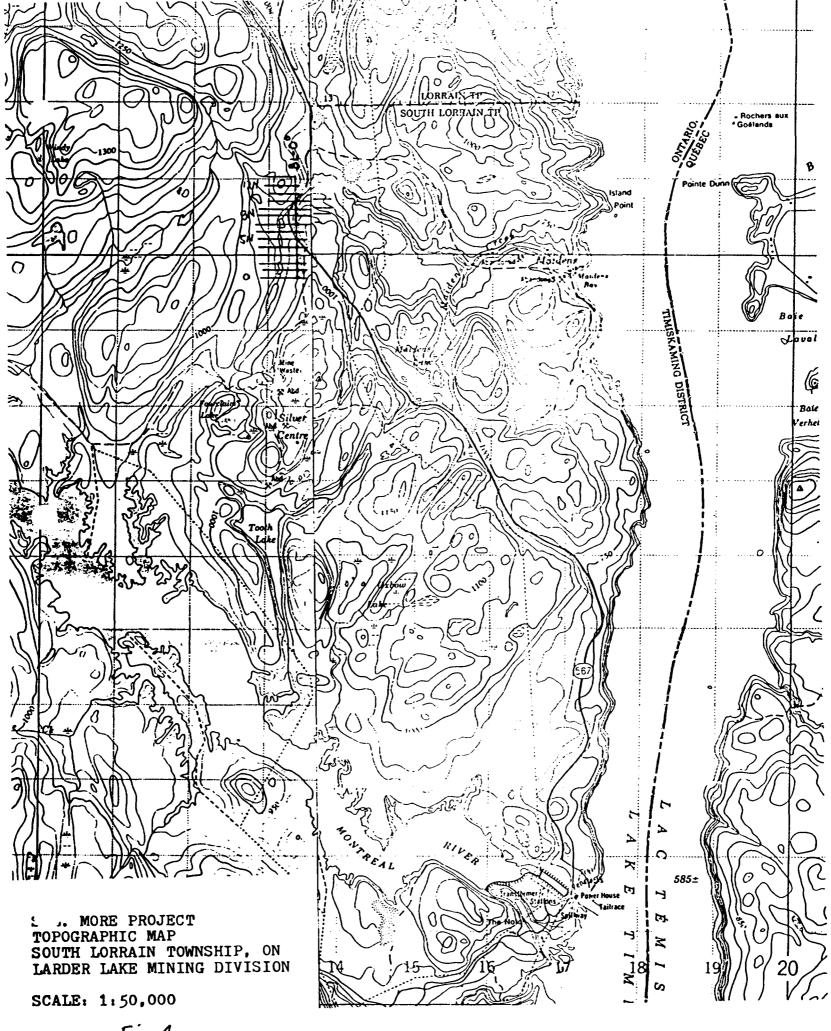
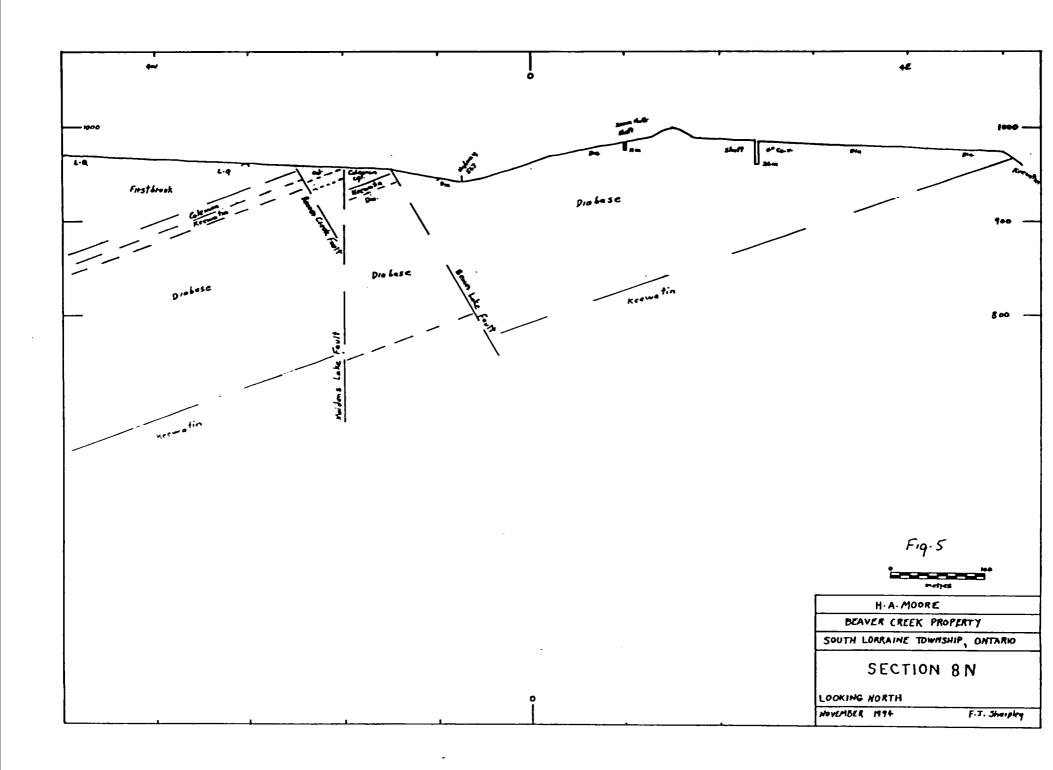


Fig. 4



APPENDIX II:

LIST OF TABLES

TABLE NO. 1

Beaver Creek Property
South Lorrain Township
Rock Geochemistry

SPL.NO.	CO-ORDIN 		ROCK TYPE	MINER 			AG oz		REMARKS
1	 0+00N- 0)+25 W	Cgl.Gwke	 	 	[]	 	 	
2	 0+00N- 1	+00W	Cgl.	; 	! 			• 	[]
3	1 0+00N- 2	+00W	Siltst.)) 	l i] -
4	 0+00N- 3	+00W	L.Q.	! !				!	
5	 1+25N- 0	+00N	Cgl.Gwke] 			! !		
6	1 1+00N- 1	+25E	Spot . Gwk	! !					
7	 2+00N- 1	+25E	H 11	; [! .] -		<u> </u>
8	 2+00N- 0)+50E	Ark.	! ! :				! !	
9	 4+00N- 1	+50N	**	! .] .] 		! 		
10	 5+00N- 4	+75 W	L.Q.	! !	 		, 	! !	
11	 5+00N- 1	+25E	Ark.	! !	! !		! 	 -	! !
12	 5+00N- 0)+50E	Dia.	! !] 		
F29128	 8+10N- 2	+20E			4.78	13.66	. 07	.005	ı İshaftdumç '
F2912 9	 8+10N- 2	+20E		Cp Co	 5.69	10.63	. 05	 . 005	,
13	 9+00N- 5	+50W	Arg.Q	; }		 	! 		
14	 10+00N-3	8+50E	Ark.Q	! ! !]] 	! !
F29126 F29127	1 13+20N-1 13+20N-1	 +50 w +5 0w	Dia. Dia.	 Co.QV sh.Co	0.06 0.03	0.068 0.190	 .01 .01	0.01 0.01	 sh.dump sh.dump

TABLE	NO.2	2			R CREEK		
	•	-	•	=	EM GEOL km		•
10.8	1.33	3 9.5	10.8	9.5	10.8	46	14

APPENDIX III:

INSTRUMENT SPECIFICATIONS

TECHNICAL DESCRIPTION OF MP-2 MAGNETOMETER



INTERNAL MEASURING PROGRAM EXTERNAL TRIGGE

1 Gamma.

± 1 Gamma over full operating range.

[20]000 to 100,000 gammas in 25 overlapping steps.

Single reading — 3.7 seconds. Recycling feature permits automatic repetitive readings at 3.7 seconds intervals.

External trigger input permits use of sampling intervals longer than 3.7 seconds.

5 digit LED (Light Emitting Diode) readout displaying total magnetic field in gammas or normalized battery voltage.

Multiplied precession frequency and gate time outputs for base-station recording using interfacing optionally available from Scintrex.

Up to 5000 gammas/metre.

8 alkaline "D" cells provide up to 25,000 readings at 25° C under reasonable signal/noise conditions (less at lower temperatures). Premium carbon-zinc cells provide about 40% of this number.

Omnidirectional spieroed, noise-cancelling dual ceil of miled or high gradient tolerance.

Complete for operation with staff or back pack sensor.

-35°C to +60°C.

Console, with batteries: 80 x 160 x 250mm. Sensor: 80 x 150mm.

Staff: 30 x 1550mm. (extended) 30 x 600 mm. (collapsed)

Console, with batteries: 1.8kg. Sensor: 1.3kg. Staff: 0.6kg.

SCINTREX LIMITED

EM16 SPECIFICATIONS

or vertical ma percentage of	quad-phase components agnetic field as a horizontal primary cangent of the tilt apticity).
---------------------------------	--

SENSITIVITY In-phase :±150%
Quad-phase :± 40%

RESOLUTION ±1%

OUTPUT

Nulling by audio tone. In-phase indication from mechanical inclinometer and quad-phase from a graduated dial.

OPERATING FREQUENCY 15-25 kHz VLF Radio Band. Station selection done by means of plug-in units.

OPERATOR CONTROLS

On/Off switch, battery test push button, station selector switch, audio volume control, quadrature dial, inclinometer.

POWER SUPPLY 6 disposable 'AA' cells.

DIMENSIONS 42 x 14 x 9cm

WEIGHT Instrument: 1.6 kg Shipping : 4.5 kg

APPENDIX IV:

ASSAYS



Established 1928

Swastika Laboratorie

A Division of TSL/Askayers Inc.

Assaying - Consulting - Representation

Assay Certificate

4W-4001-RA1

Company: MOORE MINING SERVICES

Date: DEC-01-94

Project:

Atta:

H. Moore

We hereby certify the following Assay of 4 Rock samples submitted NOV-28-94 by.

Sample	Ag	Co	Cu	Ni	
Number	oz/ton	%	%	%	
F-29126	0.01	0.068	0.01	0.06	
F-29127	0.01	0.190	0.01	0.03	
F-29128	0.07	13.66	0.005	4.78	
F-29129	0.05	10.63	0.005	5.69	

Certified by Denis Charles



Established 1928

Swastika Laboratories

Assaying - Consulting - Representation

Page 1 of 2

Geochemical Analysis Certificate

4W-4027-SG1

Company:

MOORE MINING SERVICES

Date: DEC-08-94

Project:

Attn:

Н. Мооге

We hereby certify the following Geochemical Analysis of 46 Humus samples submitted NOV-28-94 by.

Samp I e Numbe r	Ag PPM	As PPM	Co PPM	Cu PRM	Ni PPM	
0-2+00 _N	0.7	10	10	51	54	
0-2+00V	4.3	4280	188	86	208	
0-2+50 V	0.6	12	10	40	36	•
0-2+75W	Ü.s	10	6	56	38	
IN-1+75W	0.5	7	7	43	54	
1N-2+00 W	5.1	2540	110	107	152	
IN-2+25W	0.3	509	21	30	43	
1N-2+50W	0.7	10	26	41	34	
2N-2+00W	0.3	6	9	30	33	
2N-2+25W	5.5	1260	186	73	122	
2N-2+50W	0.5	18	6	41	38	
3N-2+00W	0.2	10	5	31	31	
3N-2+25W	1.3	2440	99	88	203	
3N-2+50W	0.3	148	12	36	49	
4N-1+75W	0.1	21	11	30	40	
4N-2+00W	0.4	23	7	37	37	
4N-2+25W	0.5	1230	24	26	37	
4N-2+50W	0.5	417	17	74	56	
5N-2+00W	0.5	285	6.	54	48	
5N-2+25W	2.1	1300	25	66	74	
5N-2+50W	G.?	1240	30	61	71	
5N-2+7 <i>5</i> W	9.3	321	14	34	46	
8N-2+00W	\mathbf{v}, \mathbf{I}	9	11	35	39	
8N-2+25W	0.2	<5	10	44	41	
8N-2+50W	0.:	<5	13	29	48	
8N-2+75W	0.2	7	13	62	55	
8N-3+00W	0.2	9	11	129	47	
8N-3+25W	0.3	<5	6	86	32	
9N-3+00W	0.1	<5	8	15	32	
9N-3+25W	0.1	<5	14	32	53	

P.O. Box 10, Swastika, Ontario POK 1T0

Telephone (705) 642-3244

FAX (705)642-3300



Established 1928

Swastika Laboratories

A Division of TSL/Assayers Inc.

Assaying - Consulting - Representation

Page 2 of 2

Geochemical Analysis Certificate

4W-4027-SG1

Compan

MOORE MINING SERVICES

Date: DEC-08-94

Project:

Attn:

H. Moore

We hereby certify the following Geochemical Analysis of 46 Humus samples submitted NOV-28-94 by .

Sample Number	Ag PPM	As PPM	Co PPM	Cu PPM	Ni PPM	
9N-3+50W	0.2	<5	19	42	55	
9N-3+75W	ΰ.i	<5	10	81	34	
9N-4+00V	0.2	<5	7	62	33	
11N-4+00V	0.1	<5	9	34	31	
1 IN-4+25W	0.3	<5	5	25	23	
1 IN-4+50W	0.2	· <5	4	28	31	
11N-4+75W	0.6	26	6	124	114	
11N-5+00W	0.2	<5	9	67	34	
11N-5+25W	0.2	<5	9	127	43	
11N-5+50V	0.3	<5	7	48	33	
11N-5+75W	0.1	<5	11	27	38	
12N-3+50V	0.3	<5	6	47	33	
12N-3+75W	0.4	<5	4	37	35	
12N-4+00V	0.3	12	5	57	41	
13+30N-4+00AV	0.3	8	11	50	30	
13+30N-4+25W	0.2	<5	7	25	22	

Certified by Dering Charles

, of nern Development and Mines

Report of Work Conducted After Recording Claim

Trans	00	Opporti:				-
	\mathcal{N}	9.36	- (10	18)

.10		Mining Ad	ct		
ersonal information collected is collection should be dire- adbury, Ontario, P3E 6A5, 1	cted to the Provincial Man	der the authority of the ager, Mining Lands, I	e Mining Act. This info Ministry of Northern D	ormation will be us Development and	ed for correspondence. Questions about
•	•				20016
istructions: - Please - Refer t	type or orint and sub	amit in diinlicate.		me	entwork occupsuit the Minn
Record	der.				
- A sepa - Techni					JUN 3 - 1996
- A sket	218402511410024.0.40	5576 SOUTH LORRAIN		900 his	form.
	···				MINING LANDS BRANCH
recorded Holder(s)	A. MOOR	!É			Telephone No.
38 Welli	NG TUN S	SIN			705-647-5179
Ining Division	a	Township/Area	LORRAI	N	M or G Plan No.
Dates Work From:	1	1-3-17-1	_		
Performed /	Hug 29/94			Dec. 24	(94
Vork Performed (Chec	ck One Work Group ()nly)		 	
Work Group			Type		
Geotechnical Survey	Geophysis	cs - MAG.	netomete	V + EN	OVEF.
Physical Work, Including Drilling	Line Cut	TING			
Rehabilitation					
Other Authorized Work	Geology &	Soil S	supling.		sec Chem.
Assays	SWASTIKA.	LAB B	& A HOR	120N G	see Chem.
Assignment from Reserve				377	00.400
Total Assessment Work	Claimed on the Atta	ched Statement (of Costs &		ag to pull
holder cannot v	erify expenditures cla	aimed in the state	ment of costs wi	thin 30 days o	rk submitted if the recorded f a request for verification.
Persons and Survey C		med the work (Give Name and 7	Address	mor or neport)
<u> </u>				7.00.000	
SWASTIKA L		SWASTI	KA Chi	·	
M'BRIDE	Glen.	New Lis	KEARD,	158 MA	1 ST.
SEAL RIVER	e Res		•	_	HINCTON DAT
tattach a schedule if nec	cessary)	<u> </u>			
Sertification of Benefi	cial Interest * See	Note No. 1 on re	everse side		
I certify that at the time the	 		Date 4	Recorded	Holder or Agent (Signature)
report were recorded in the c by the current recorded ho	current holder's name or held		1 # # 1	8 4	a. Moore
Certification of Work	Report		•		
	onal knowledge of the fact:	s set forth in this Wor	k report, having perfe	ormed the work o	witnessed same during and/or after
Name and Address of Person	Certifying A, Moo	015			
Telepone No.	Date	12	Certified By (Si	gnature)	
705-647-5	179 May	428/96		G, \mathcal{T}	Joan
For Office Use Only					
Total Value Cr. Recorded	Date Recorded	Michael	Recorder /	Receive	nd Stamp
		$\mathbf{a} = \mathbf{A}^{\mathbf{a}}$,	State of the state
3279	96 may 2	$\mathbf{a} = \mathbf{A}^{\mathbf{a}}$	goore		36 11. 26 1.11.11

									٤,									411	
									Ch.	-	6.		•	STA	XIO	The state of the s	NAM.	the	Diving Reserve
Total Number	5			LE	3 E	CE	IV	E	7			1198615	1198616	118574	11-18-13		-4-5-5-TM	1258/H	Claim Number (see Note 2)
I						UN S	- 19	96 BRANC	Н			\	\ X			•			Claim Units
Total Value Work		3270										16 and	16 3 tm	16 60	1600	72 //	1600	1600	Assessment Work Done on this Claim
Total Value		3279									1527	16 Fritton	(C 37 pho	16.00	166	いっかし	16 37 KAI	16 3 3 Mars	Applied to this Claim
Total Assigned					_														Assigned from this Claim
Total Reserve																			Work to be Claimed at a Future Date

1	I certify that the recorded holder had a beneficial interest in the patented	Signature	Date
- [or leased land at the time the work was performed.		
ı		<u> </u>	L

.iy of .rthern Development and Mines

Ministère du Développement du Nord et des mines

Statement of Costs for Assessment Credit

État des coûts aux fins du crédit d'évaluation

Mining Act/Loi sur les mines

Transaction No./Nº de transaction

2.165% 8

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 ongoing status of the mining claim(s). Questions about this collection should be directed to the Provincial Manager, Minings Lands, Ministry of Northern Development and Mines, 4th Floor, 159 Cedar Street, Sudbury, Ontario Dév P3E 6A5, telephone (705) 670-7264.

Les renseignements personnels contenus dans la présente formule sont recueillis en vertu de la Loi sur les mines et serviront à tenir à jour un registre des concessions minières. Adresser toute quesiton sur la collece de ces renseignements au chef provincial des terrains miniers, ministère du Développement du Nord et des Mines, 159, rue Cedar, 4^e étage, Sudbury (Ontario) P3E 6A5, téléphone (705) 670-7264.

1. Direct Costs/Coûts directs

Туре	Description	Amount Montant	Totals Total global
Wages Salaires	Labour Main-d'oeuvre		
	Field Supervision Supervision sur le terrain		
Contractor's and Consultant's Fees	Luye Catting	960	
Droits de l'entrepreneur et de l'expert- consell			980
Supplies Used Fournitures	TXO)+9	1100]
utili sées	EMULF.	330	
	Jampling	869	
			2299
Equipment Rental	Туре		
Location de matériel			
	Total Di	rect Costs	3279

FO

2. Indirect Costs/Coûts indirects

Note: When claiming Rehabilitation work Indirect costs are not allowable as assessment work.
Pour le remboursement des travaux de réhabilitation, les coûts indirects ne sont pas admissibles en tant que travaux d'évaluation.

Туре	Description	Amount Montant	Totals Total global
Transportation Transport	Туре		
	RECE	√ E D	
	* JUN 3 -	199A	
	MINING LANDS	-SR-NCH	
Food and Lodging Nourriture et hébergement	Minute		
Mobilization and Demobilization Mobilisation et démobilisation			
	Sub Total of Total partiel des	Indirect Costs coûts indirects	
	(not greater than 20% (n'excédant pas 20 %	•)
Total Value of Ass (Total of Direct and Indirect costs)	Allowable d'évi (Tota	ur totale du crédit aluation I des coûts directs lirects admissibles	

Note: The recorded holder will be required to verify expenditures claimed in this statement of costs within 30 days of a request for verification. If verification is not made, the Minister may reject for assessment work all or part of the assessment work submitted.

Note: Le titulaire enregistré sera tenu de vérifier les dépenses demandées dans le présent état des coûts dans les 30 jours suivant une demande à cet effet. Si la vérification n'est pas effectuée, le ministre peut rejeter tout ou une partie des travaux d'évaluation présentés.

Filing Discounts

- 1. Work filed within two years of completion is claimed at 100% of the above Total Value of Assessment Credit.
- Work filed three, four or five years after completion is claimed at 50% of the above Total Value of Assessment Credit. See calculations below:

Total Value of Assessment Credit	Total Assessment Claimed
× 0.50 =	

Remises pour dépôt

- Les travaux déposés dans les deux ans suivant leur achèvement sont remboursés à 100 % de la valeur totale susmentionnée du crédit d'évaluation.
- 2 Les travaux déposés trois, quatre ou cinq ans après leur achèvement sont remboursés à 50 % de la valeur totale du crédit d'évaluation susmentionné. Voir les calculs ci-dessous.

Valeur totale du crédit d'évaluation	Evaluation totale demandée
× 0,50 =	

Certification Verifying Statement of Costs

I hereby certify:

that the amounts shown are as accurate as possible and these costs were incurred while conducting assessment work on the lands shown on the accompanying Report of Work form.

that as	(Departed Holder Acest Basins in Company)	I am authorized
	(Recorded Holder, Agent, Position in Company)	

to make this certification

Attestation de l'état des coûts

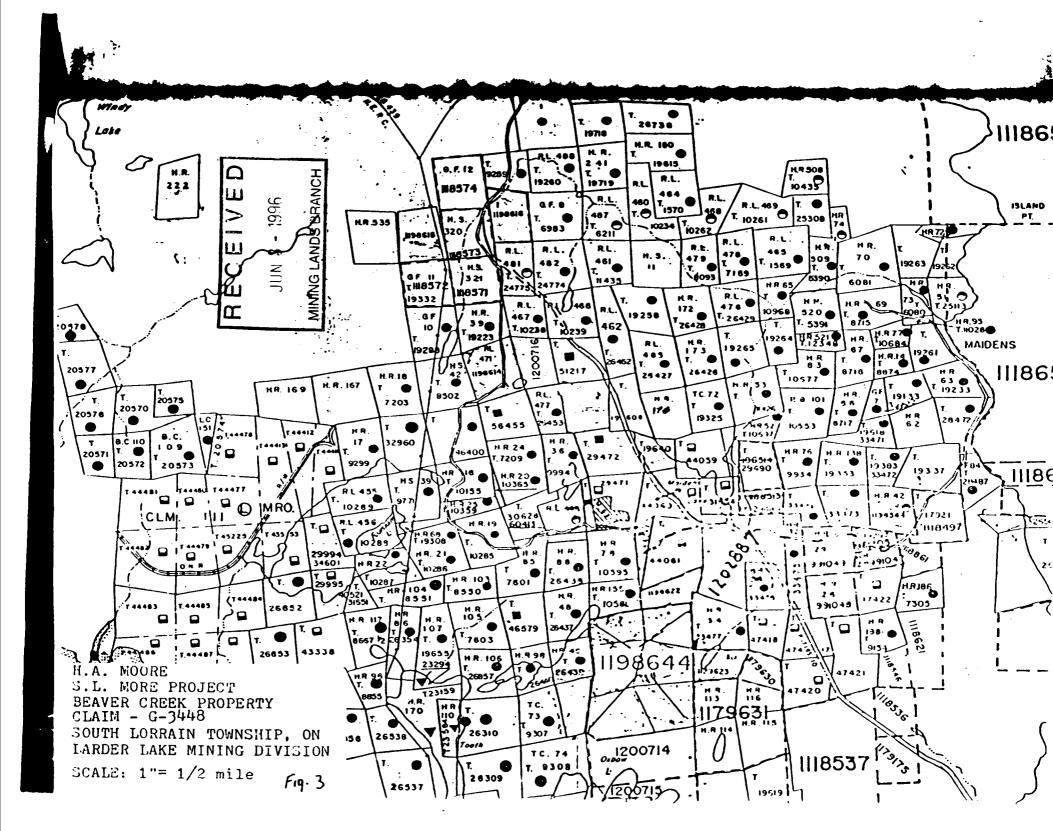
J'atteste par la présente :

que les montants indiqués sont le plus exact possible et que ces dépenses ont été engagées pour effectuer les travaux d'évaluation sur les terrains indiqués dans la formule de rapport de travail ci-joint.

Et qu'à titre de			ie suis autorisé
	représentant, poste	occupé dans la	compagnie)

à faire cette attestation

Signature (G)		Date
10/1/6/1	lesu	M)0428/9
100 477	/ = ====	1 / 1 / 2



Ministry of Northern Development and Mines Ministère du Développement du Nord et des Mines

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

Telephone: (705) 670-5853 Fax: (705) 670-5863

August 15, 1996

Our File: 2.16576

Transaction #: W9680.00283

Mining Recorder
Ministry of Northern Development & Mines
4 Government Road East
Kirkland Lake, Ontario
P2N 1A2

Dear Mr. Spooner:

SUBJECT: APPROVAL OF ASSESSMENT WORK CREDIT ON MINING LAND, CLAIMS L.1198616 & 1198615 IN SOUTH LORRAIN TOWNSHIP

Assessment work credit has been approved as outlined on the Declaration of Assessment Work Form accompanying this submission. The credit has been approved under Section 12, Geology, Section 14, Geophysics (MAG & VLF) and Section 17, Assays, of the Assessment Work Regulation.

The approval date is August 14, 1996.

If you have any questions regarding this correspondence, please contact Lucille Jerome at (705) 670-5858.

Yours sincerely, ORIGINAL SIENED BY:

Røk C. Gashinski

Senior Manager, Mining Lands Section

Mines and Minerals Division

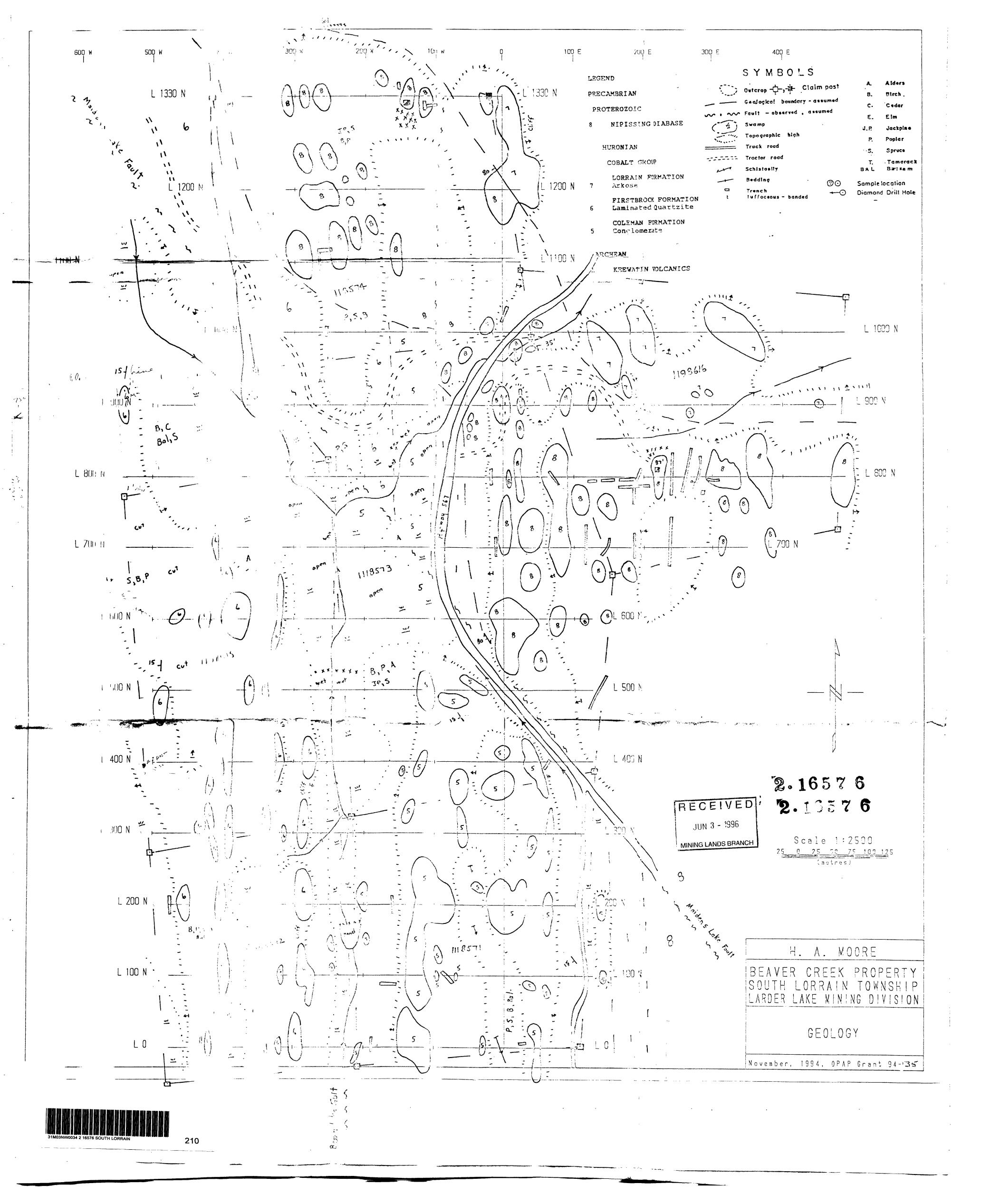
LBJ/jf

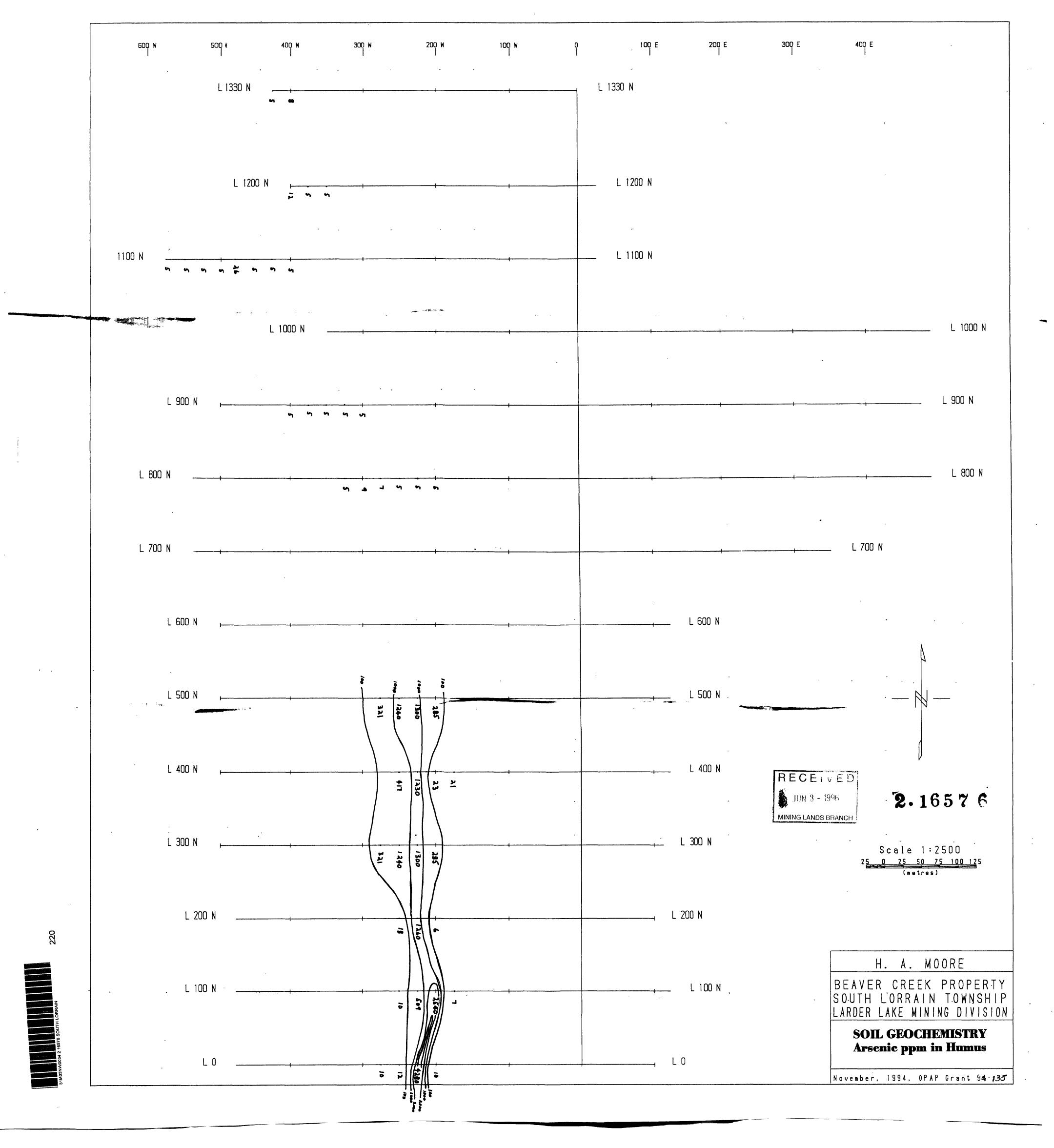
cc: Resident Geologist Cobalt, Ontario Assessment Files Library Sudbury, Ontario

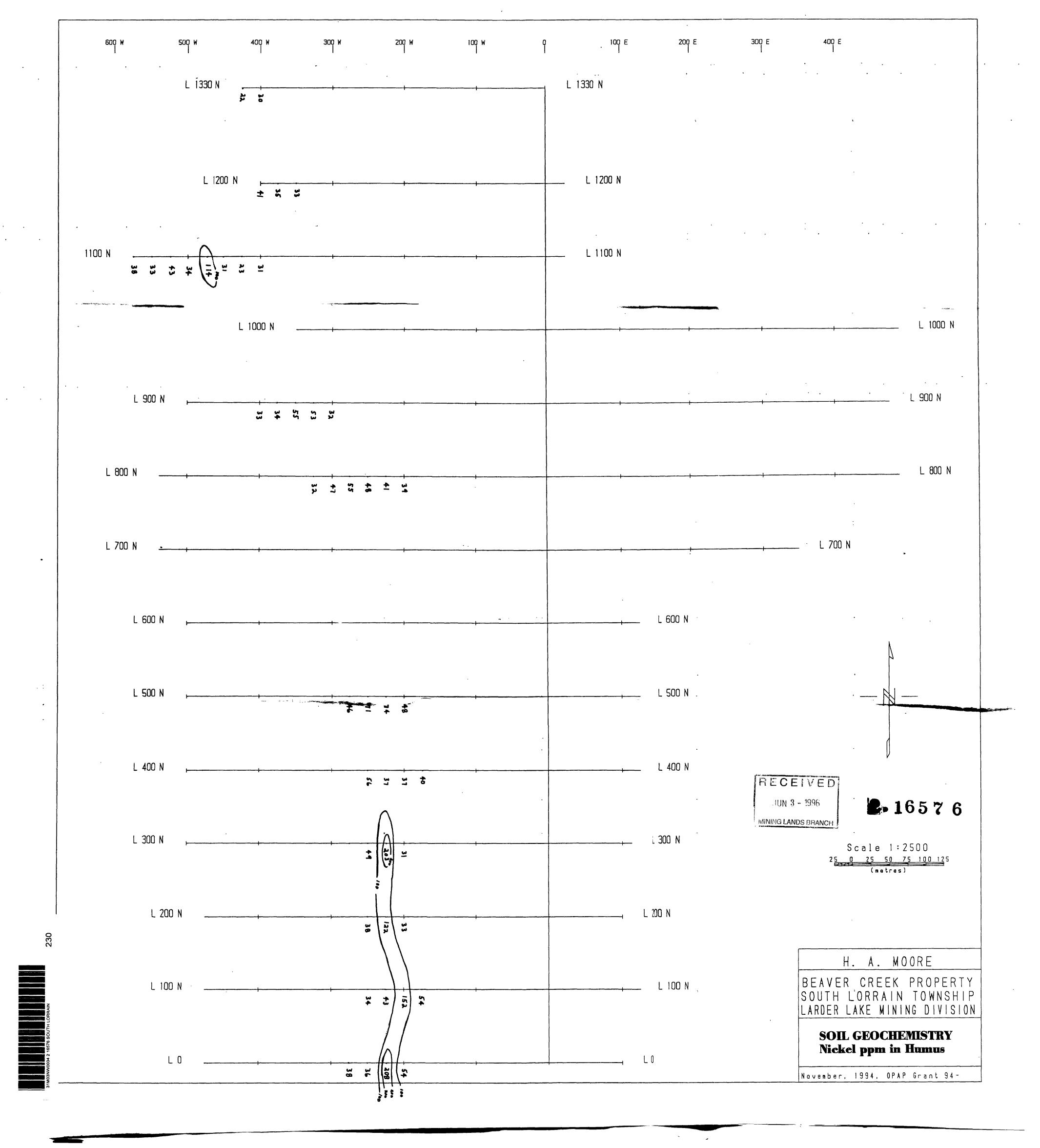
"THIS MAP SHOWS THE APPROXIMATE LOCATION OF THE BOUNDARIES OF THE AREA WHICH IS THE SUBJECT OF CURRENT

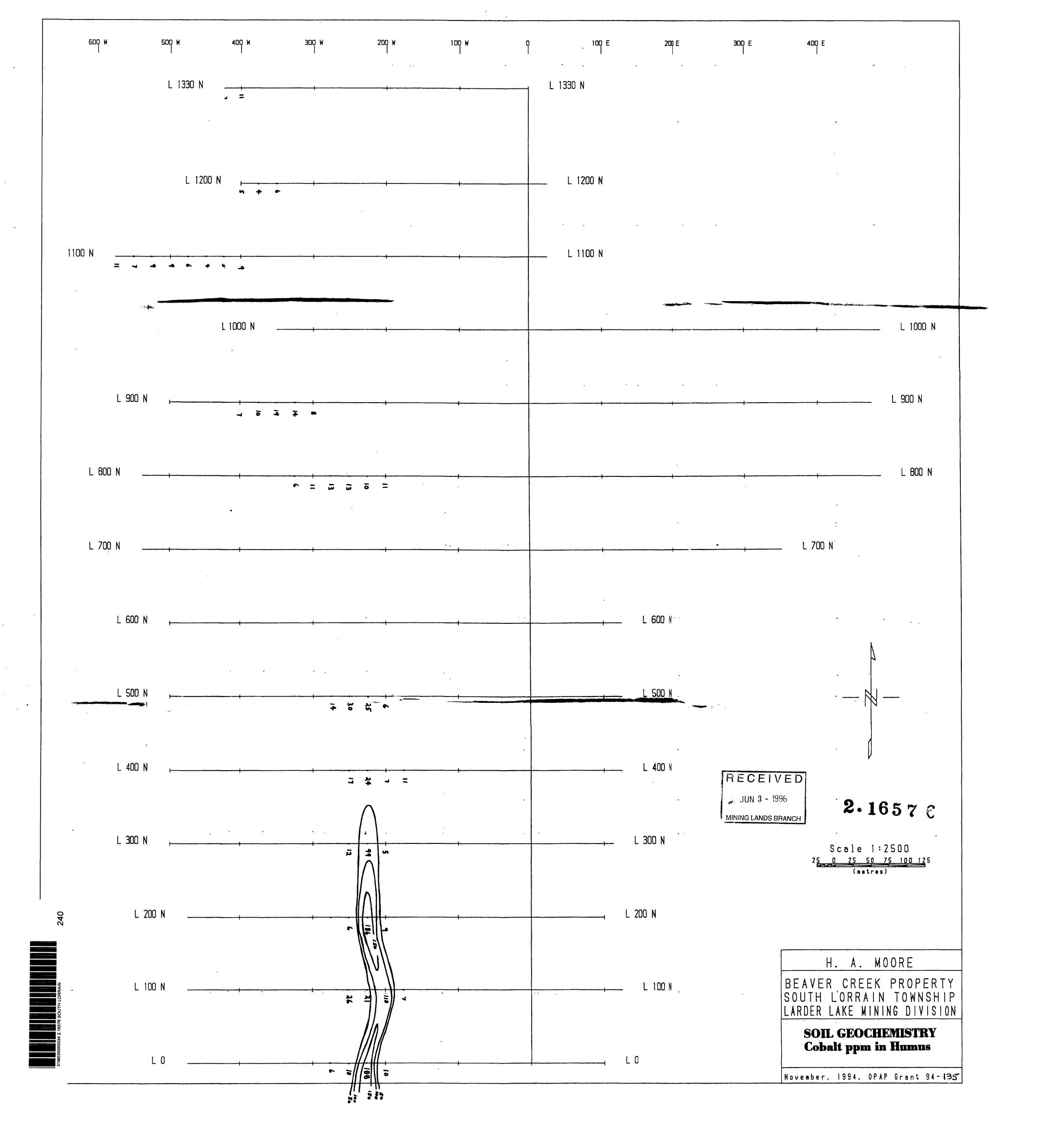
LOCATION WILL BE
SHOWN FOLLOWING
CONFIRMATION BY THE
PARTIES TO THE ACTION."

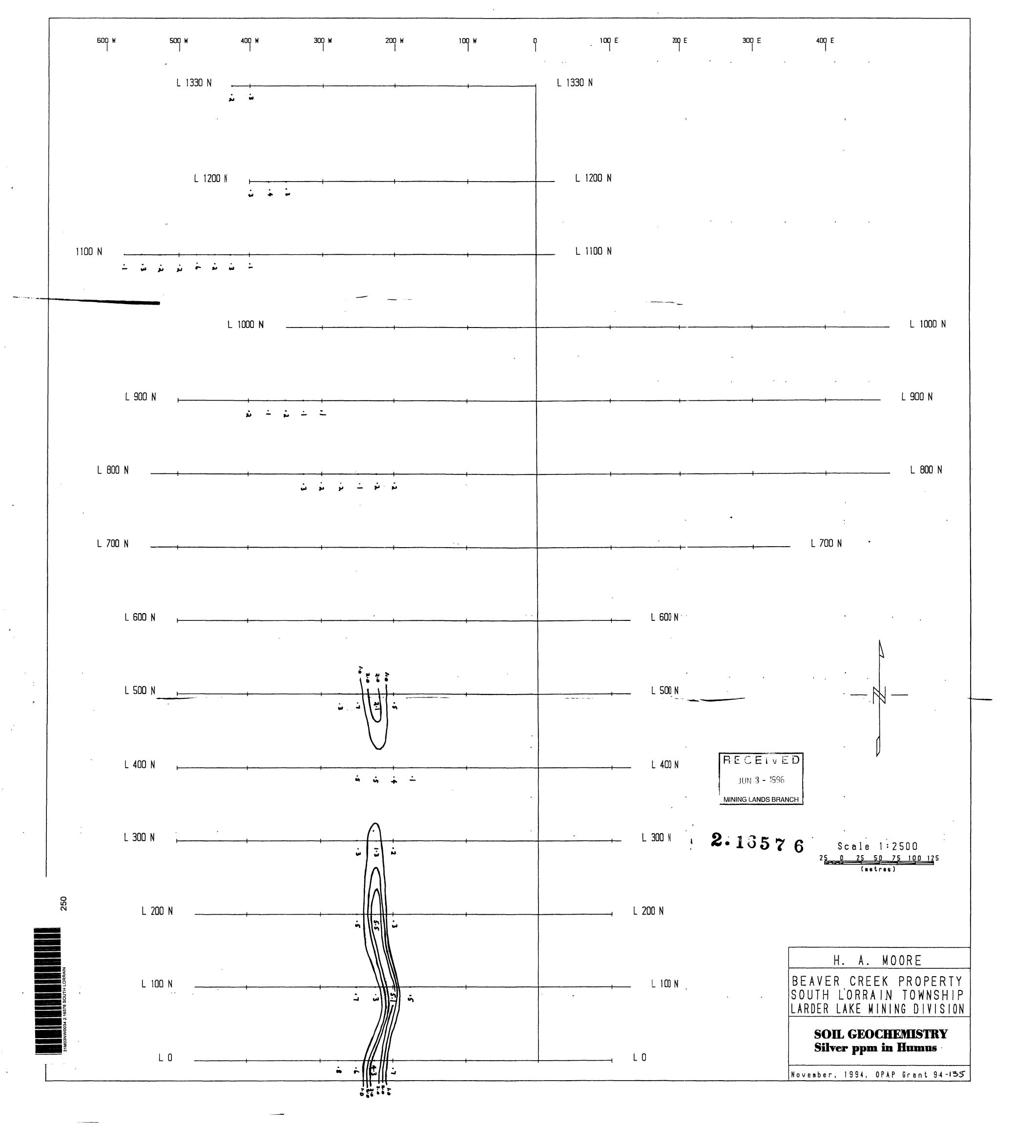
OUTH LORRAIN TWP.

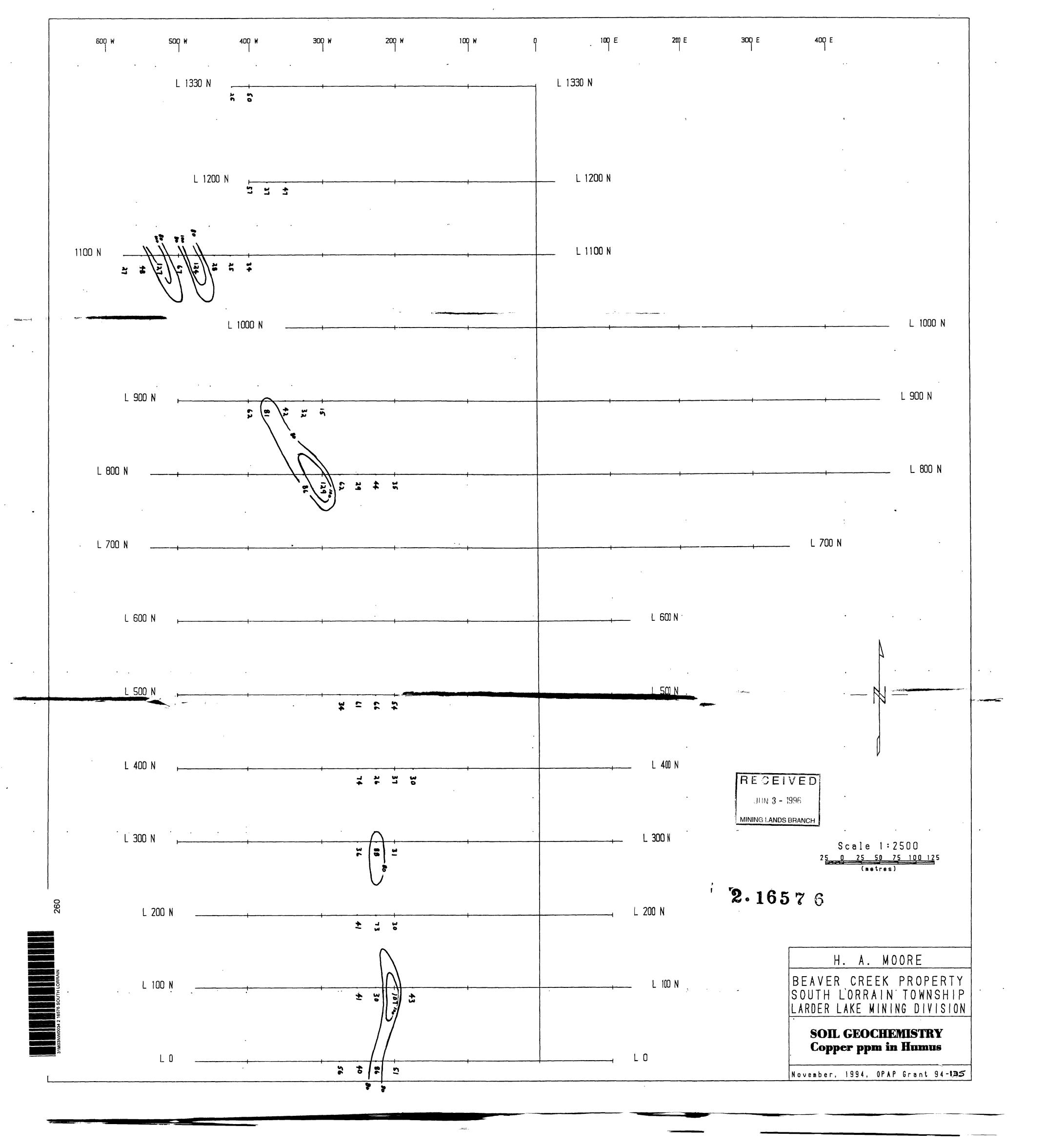












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