



42A07NE0022 OP93-722 CURRIE

010

**OPAP  
FINAL SUBMISSION**

**D. CRITES  
CURRIE TOWNSHIP PROPERTY**

**DEVELOPMENT AND MINES**

**MAY 26 1994**

**INCENTIVES OFFICE**

**DENIS CRITES  
CONNAUGHT, ONTARIO**

**MAY 19, 1994**

A VERY SPECIAL THANKS GOES TO PAM SANGSTER OF THE TIMMINS  
RESIDENT GEOLOGISTS OFFICE FOR ALL HER ENCOURAGEMENT AND  
ADVICE. ALSO THANKS FOR LOGGING THE CORE. IT WAS GREATLY  
APPRECIATED.

---



42A07NE0022 OP93-722 CURRIE

010C

## TABLE OF CONTENTS

- i-TABLE OF CONTENTS
- 1-INTRODUCTION
- 2-PROPERTY
  - LOCATION
  - ACCESS
- 3-WORK HISTORY
- 4-REGIONAL GEOLOGY
- 5-PROPERTY GEOLOGY
- 6-PRESENT WORK PROGRAM
- 7-RESULTS
- 8-RECOMMENDATIONS

- APPENDIX I
  - DRILL LOG
  - DRILL SECTION
  - ASSAYS
  
- APPENDIX II
  - FIGURES 1-3
  
- APPENDIX III
  - OPAP FORMS
  - DAILY LOG
  - EXPENSES REPORT

INTRODUCTION:

THIS PROJECT WAS FUNDED BY THE ONTARIO PROSPECTORS ASSISTANCE PROGRAM UNDER GRANT OP93-722. THE PURPOSE OF THIS PROGRAM WAS TO DO GRASS ROOTS EXPLORATION. LINE CUTTING, GEOPHYSICS AND DIAMOND DRILLING WERE EMPLOYED.

PROPERTY:

LOCATION:

THIS PROPERTY CONSISTS OF ONE - FOUR UNIT CLAIM BLOCK  
NUMBERED L. 1201153, IN THE SOUTH HALF OF LOT 6 CONCESSION 2, CURRIE  
TOWNSHIP, LARDER LAKE MINING DIVISION, DISTRICT OF COCHRANE.

(see figure 1)

ACCESS:

ACCESS TO THIS PROPERTY IS VIA HIGHWAY 101 EAST FROM TIMMINS  
TO CURRIE ROAD 4. AT THE END OF THE GRAVEL ROAD IS A ATV (DRY  
WEATHER)/ SKIDOO (WINTER) TRAIL THAT LEADS TO THE LOT 5/6 LINE.  
TRAVELLING DOWN THE LOT LINE FOR ONE AND A THREE QUARTER MILE  
BRINGS YOU TO A DRILL ROAD. FOLLOWING THE DRILL ROAD FOUR ONE  
QUARTER MILE PUTS YOU ON THE EAST CENTER BOUNDARY OF THE CLAIM.

(see figure 2)

WORK HISTORY;

WORK WAS REPORTED AS EARLY AS 1931 BY SAMUEL REID . AS THE REGULATIONS AT THE TIME DID NOT REQUIRE ONE TO REPORT THE COMPLETE NATURE OF THE WORK, THE DETAILS ARE SKETCHY.

IN 1967, MIDRIM MINING COMPANY LTD. FILED TWO SURVEYS. THE FIRST A CRONE J.E.M ELECTROMAGNETIC AND A MCPHAR FLUXGATE MAGNETIC SURVEY DONE BY S. GUIMOND. THE SECOND BEING A CRONE RADEM SURVEY BY L. CUNNINGHAM IN 1976.

IN 1984, DORE EXPLORATIONS INC. PERFORMED A BARRINGER PROTON MAGNETOMETER SURVEY BY R.S. MIDDLETON AND A V.L.F. EM 16 AND GEOLOGICAL SURVEY BY B. KEEN.

IN 1991, J. SALO HELD PART OF THIS PROPERTY AND FILED A REPORT FOR PLUGGER WORK AND DRILLING. A 102.5 FOOT HOLE WITH 15 FEET OF OVERBURDEN WAS DRILL. THESE CLAIMS HAVE SINCE LAPSED.

---

REGIONAL GEOLOGY;

THE GOLD DEPOSITS IN THE IMMEDIATE AREA ARE FOUND IN THE KENOJEVIS GROUP OF VOLCANICS. THE BELT OF MAFIC VOLCANICS EXTENDS ONTO THIS PROPERTY.

THE CRITES CURRIE PROPERTY IS IN A FAVOURABLE GEOLOGICAL SETTING WITH GOOD LOCATION IN RESPECT TO OTHER PRODUCING MINES AND THE EXISTENCE OF SEVERAL GOLD OCCURENCES IN THE SURROUNDING TOWNSHIPS.

THE REID SHOWING HAS BEEN DISCUSSED BY SEVERAL AUTHORS IN REPORTS ON THE AREA. H.C. LAIRD (1931), E.J. LEAHY (1965) AND S. FERGUSON ET AL (1973) THE SHOWING IS LOCATED IN THE SE 1/4 OF THE S 1/2 OF LOT 6 CON 2 WITH VALUES OF .12 OPT AU BY REID AND .2 OPT REPORTED BY FERGUSON IN THE FORM OF QUARTZ STRINGERS IN HIGHLY ALTERED BASALTS. THE SHEARED HOST ROCKS ASSOCIATE WITH SPALERITE, CHALCOPYRITE AND PYRITE.

(see figure 3)

PROPERTY GEOLOGY:

OUTCROP IS ABUNDANT ON THE EAST SIDE OF THE PROPERTY FOR APPROXIMATELY FIFTY PERCENT . IT IS IN THE FORM OF LARGE MAFIC VOLCANICS WITH DIABASE DYKES INTRUDING. (see figure 3)

THE WESTERN SIDE OF THE PROPERTY IS LOWLAND AND SWAMP WITH GRINDSTONE CREEK RUNNING NORTH SOUTH THROUGHOUT.

THE OUTCROP ON THE PROPERTY IS MOSTLY LIGHT GREY MAFIC VOLCANICS INTERSECTED BY DIABASE DYKES. QUARTZ VEINLETS AND FELDSPAR STRINGERS RUN THROUGHOUT THE VOLCANICS.

THE DIABASE DYKES ARE OF DIFFERENT TEXTURES FROM FINE TO COARSE GRAINED. VERY FINE DISSEMINATED PYRITE IS VISIBLE IN THE DIABASE.

(see assays and drill log for results)



PRESENT WORK PROGRAM:

IN DECEMBER OF 1993, DENIS AND JENNIFER CRITES WERE PRESENT ON THE PROPERTY FOR THE PURPOSE OF LINE-CUTTING. AN EAST-WEST BASELINE WAS ESTABLISHED IN THE CENTER OF THE CLAIM BLOCK. USING THE EASTERN BOUNDARY AS LINE 0 NORTH SOUTH RUNNING LINES WERE CUT AT 100 METER INTERVALS AND PICKETED AT TWENTY-FIVE METER STATIONS. *A TOTAL OF 330 STATIONS.*

USING THIS GRID DENIS CRITES AND JOE-ANNE SALO PRESENTED THEMSELVES ON THE PROPERTY IN FEBRUARY OF 1994 TO PERFORM GEOPHYSICS.

A G.S.M. PROTON MAGNETOMETER WAS USED BY DENIS CRITES A CONTROL BSE STATION WAS ESTABLISHED FOR THE PURPOSE OF CONTROLLING DIURNAL DRIFT.

A GEONICS V.L.F. EM 16 UNIT WAS USED BY JOE-ANNE SALO FOR A ELECTROMAGNETIC SURVEY.

AFTER A DISCUSSION OF THE RESULTS WITH PAM SANGSTER OF THE PORCUPINE REGIONAL OFFICE, A RECHECK WAS PERFORMED ON SOME OF LINES IN APRIL. THIS WAS NECESSARY TO CHECK THE VALIDITY OF THE INSTRUMENT USED AND ITS READINGS.

A DRILL HOLE WAS LOCATED AND DIAMOND DRILLING OF BQ CORE WAS PUT INTO PLACE BY DENIS CRITES AND LARRY SALO EMPLOYING A BBS 2 DIAMOND DRILL.

THE CORE WAS LOGGED BY PAM SANGSTER AND ASSAYS WERE SENT TO SWASTIKA LABORATORIES..

RESULTS;

MAGNETOMETER SURVEY

THE MAGNETOMETER USED IN THIS SURVEY WAS A G.S.M. PROTON MAGNETOMETER. ITS VALUES ARE GIVEN IN GAMMAS. THE PROPERTY HAS A BASE VALUE OF 58000 GAMMAS. FOR THE PURPOSE OF DRAFTING THE READINGS WERE ALTERED TO NUMERICAL VALUE ABOVE AND BELOW 58000 GAMMAS.

THE HIGHEST VALUE OBTAINED WAS ~~69125~~ 69125 GAMMAS AND THE LOWEST VALUE OBTAINED WAS ~~57425~~ 57425 GAMMAS. THE CONTOUR MAP WAS DONE IN UNITS OF 100 GAMMAS.

LINE 8+00W SHOWS THE CENTER ? OF AN EAST-NORTH-EAST/WEST-SOUTH-WEST TRENDING STRUCTURE. IT IS APPEARS TO BE GRADUAL. AS THERE IS NO OUTCROP IN THIS AREA IT IS NOT POSSIBLE TO DEFINE THE CAUSE. THE EASTERN SIDE OF THE PROPERTY SHOWS SEVERAL ANOMALIES. THESE HOWEVER COULD BE CAUSED BY THE DIABASE DYKES AND THE AMOUNTS OF OVERBURDEN ( THIS SIDE OF THE PROPERTY HAS SEVERAL VERY LARGE OUTCROPS).

V.L.F. EM16 SURVEY;

THE VLF EM 16 SURVEY PERFORMED ON THIS PROPERTY CAME BACK WITH RESULTS NEVER SEEN BY THIS AUTHOR. THE RESULTS WERE TAKEN TO THE RESIDENT GEOLOGIST WHOM COULD NOT EXPLAIN THEM EITHER. FROM LINE 0 TO LINE 4+00W THE READINGS WERE VERY IRRATIC AND UN-UNIFORM. SEVERAL OF THE READINGS WERE NOT WITHIN THE ACCEPTABLE SCALE RANGE OF THE INSTRUMENT USED. LINE 5+00W TO LINE 8+00W WERE VERY FLAT.

DUE TO THE STRANGNESS OF THE VALUES OBTAINED, AN IDENTICAL INSTRUMENT WAS EMPLOYED ON LINES 4+00W AND LINE 5+00W. ALL THE READINGS ( BOTH IN-PHASE AND QUADRATURE) COULD BE DUPLICATED WITHIN 1 DEGREE.

AFTER DRILLING THE PROPERTY IT IS FELT THAT THE OVERBURDEN WAS THE CAUSE OF THE IRREGULAR VALUES AS THE OVERBURDEN WAS CLAY, THE CORE MAFIC VOLCANICS INTERSECTED BY A DIABASE DYKE.

#### DIAMOND DRILLING

A DRILL HOLE OF SIZE BQ CORE WAS DRILL AT 4+65W, 2+20S AT AN AZIMUTH OF 130° WITH A DIP ANGLE OF 50 DEGREES.

(see core log and drill section for results)

---

Pioneered and patented exclusively by Geonics Limited, the VLF method of electromagnetic surveying has been proven to be a major advance in exploration geophysical instrumentation.

Since the beginning of 1965 a large number of mining companies have found the EM16 system to meet the need for a simple, light and effective exploration tool for mining geophysics.

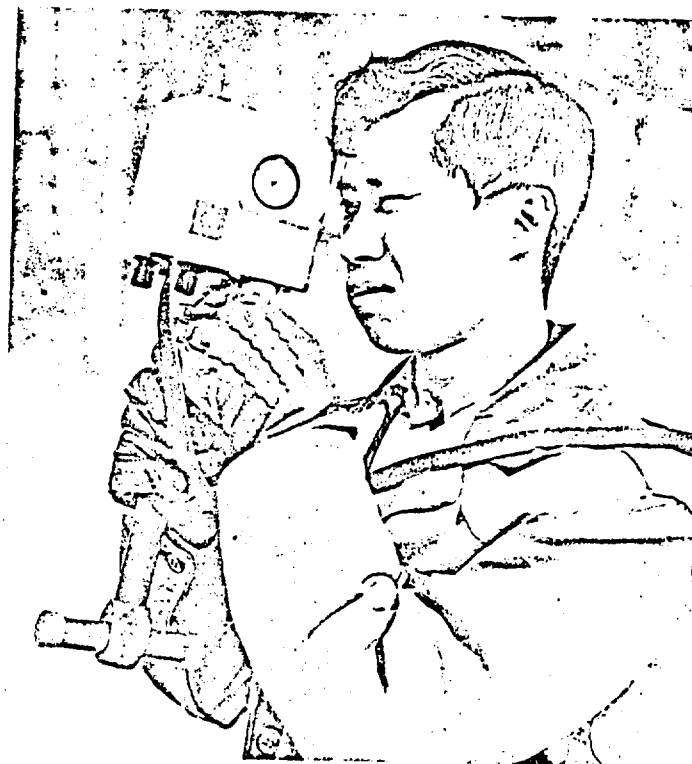
The VLF method uses the military and time standard VLF transmissions as primary field. Only a receiver is then used to measure the secondary fields radiating from the local conductive targets. This allows a very light, one-man instrument to do the job. Because of the almost uniform primary field, good response from deeper targets is obtained.

The EM16 system provides the *in-phase* and *quadrature* components of the secondary field *with the polarities indicated*.

Interpretation technique has been highly developed particularly to differentiate deeper targets from the many surface indications.

#### Principle of Operation

The VLF transmitters have vertical antennas. The magnetic signal component is then horizontal and concentric around the transmitter location.



## Specifications

<b>Source of primary field</b>	VLF transmitting stations.	<b>Reading time</b>	10-40 seconds depending on signal strength.
<b>Transmitting stations used</b>	Any desired station frequency can be supplied with the instrument in the form of plug-in tuning units. Two tuning units can be plugged in at one time. A switch selects either station.	<b>Operating temperature range</b>	-40 to 50° C.
<b>Operating frequency range</b>	About 15-25 kHz.	<b>Operating controls</b>	ON-OFF switch, battery testing push button, station selector, switch, volume control, quadrature, dial $\pm 40\%$ , inclinometer dial $\pm 150\%$ .
<b>Parameters measured</b>	(1) The vertical in-phase component (tangent of the tilt angle of the polarization ellipsoid). (2) The vertical out-of-phase (quadrature) component (the short axis of the polarization ellipsoid compared to the long axis).	<b>Power Supply</b>	6 size AA (penlight) alkaline cells. Life about 200 hours.
<b>Method of reading</b>	In-phase from a mechanical inclinometer and quadrature from a calibrated dial. Nulling by audio tone.	<b>Dimensions</b>	42 x 14 x 9 cm (16 x 5.5 x 3.5 in.)
<b>Scale range</b>	In-phase $\pm 150\%$ ; quadrature $\pm 40\%$ .	<b>Weight</b>	1.6 kg (3.5 lbs.)
<b>Readability</b>	$\pm 1\%$ .	<b>Instrument supplied with</b>	Monotonic speaker, carrying case, manual of operation, 3 station selector plug-in tuning units (additional frequencies are optional), set of batteries.
		<b>Shipping weight</b>	4.5 kg (10 lbs.)



**GEONICS LIMITED**

Designers & manufacturers  
of geophysical instruments

subsidiary of  
Deering Milliken Inc.

2 Thorncliffe Park Drive,  
Toronto/Ontario/Canada  
M4H 1H2  
Tel: 425-1824  
Cables: Geonics

#### RECOMMENDATIONS

AS THE OVERBURDEN WAS VERY CONDUCTIVE AND THE DEPTH WAS GREATER THAN EXPECTED , A SURVEY USING MAX-MIN WOULD BE ADVISED.

AT THE SUGGESTION OF PAM SANGSTER, A LARGE SAMPLE OF THE OUTCROP SHOULD BE BROUGHT IN FOR TESTING AS BUILDING STONE.

THREE OR FOUR FURTHER DRILL HOLES WOULD BE WARRANTED AS BOTH DRILL HOLES ON THE PROPERTY NEVER REACHED THEIR TARGET. THE HOLE BY SALO ENDED IN ALTERATION AND THE HOLE BY CRITES ENDED IN THE DIABASE.

---

APPENDIX I

DRILL LOGS

DRILL SECTION

ASSAYS

---

Diamond Drill Core Log

PROPERTY: Denis Crites  
 CLAIM NO. 1201153  
 HOLE NO. CG-1-94 S 1/2 Lot IV  
 Don II Currie Twp.  
 Core size BQ

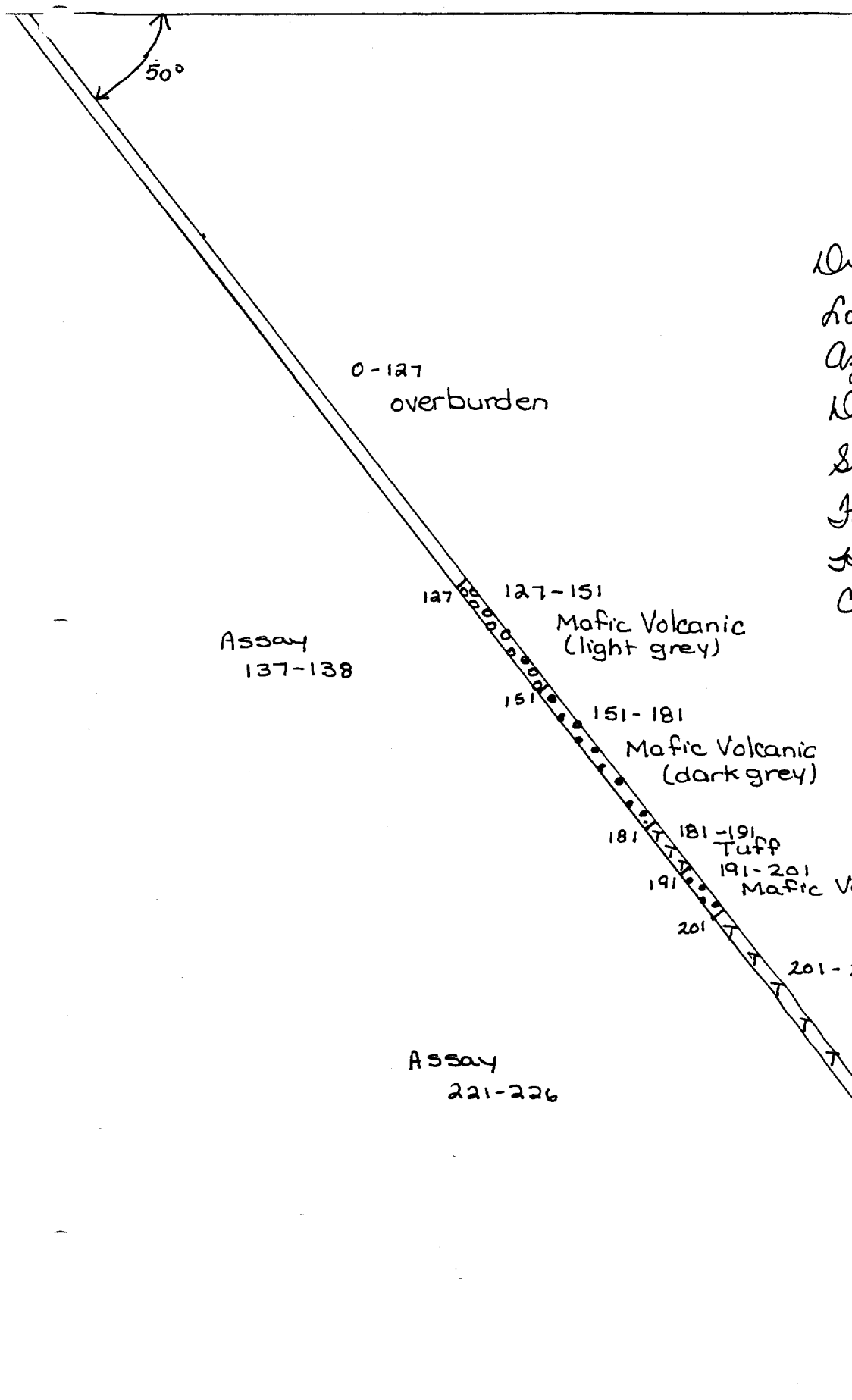
TOTAL DEPTH OF HOLE 536 ft.

FOOTAGE FROM	TO	DESCRIPTION SUMMARY LOG	SAMPLE NO.	ASSAYS		CORE LENGTH	
				AU OZ	AG OZ	%CU	%ZN
0	127	Overburden					
127	151	Light grey-green mafic volcanic rock. Vesicular Tr. py; Quartz veinlets & stringers w. brick red feldspar @ 20 + to core axis throughout Rare dk grey metallic mineral	1	NIL	NIL	NIL	NIL
151	181	Dark grey green amygdaloidal mafic volcanic rock - amygdaloid up to 1cm in diameter; generally 1/2 - .5cm Brick red feldspar veinlets roughly parallel to core axis throughout Occasional blebs of pyrite up to 0.5cm					
181	191	Light grey buffaceous rock Bedding at + 10 to core axis Occasional blebs pyrite Common brick red feldspar & quartz					
191	201	Dark grey green talcose mafic volcanic rock. @ 197 ft. 4cm quartz vein with brick red feldspar @ 60 to core axis Talc chlorite breccia zone Quartz veinlets and stringers throughout w. brick red feldspar. @ 196 ft. 2cm fault gouge?					
201	272	Light grey green to brown buffaceous rock - clastic texture up to 0.5cm, diameter fragments commonly 0.2cm	2	nil	0.4	70	41
272	273	Dark green mafic dyke with imm plagioclase crystals					
273	321	Finely bedded buffaceous rock as per 201-273 ft.					
321	334	Dark grey green amygdaloidal mafic volcanic rock Occasional brick red feldspar veinlets.					
334	336	Altered, brecciated, light green amygdaloidal mafic volcanic rock.					

336	378.5	Dark green amygdaloidal mafic volcanic rock. Amygduled - quartz & feldspar alteration haloes from 0.5cm to 1mm in diameter. @ 341 unit altered to light green and brecciated. @ 342 unit altered to light green and brecciated. @ 353 unit altered to light green and brecciated. @ 360 increasing number of quartz veinlets up to 1cm. Increasing number of brick red amygdules.	3	nil	0.2	62	60	365	370
378.5	447.7	Dark green mafic fine grained (diabase) dyke. Grain size increasing with depth @ 416 ft medium grained diabase. Finely disseminated pyrite throughout. 441 grain size decreasing to fine grained.							
447.7	460	Dark grey green amygdaloidal mafic volcanic rock. @ 455.5 noticeable epidote alteration.							
460	465	Dark grey green fine grained massive mafic volcanic rock.							
465	486	Medium grained diabase.							
486	538	Porphyritic dark green diabase with bright yellow green phenocrysts 4-1cm in diameter. Occasional pyrite throughout.	4	nil	0.2	166	37	519	524
	538	End of Hole.							

Core stored at L2 C6 German Jwp  
Connaught Out





### Drill Section

Location: 4165W 220S

Azimuth: 130°

Dip: 50°

Starting Date: Apr 5/94

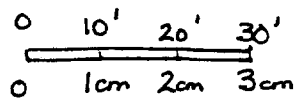
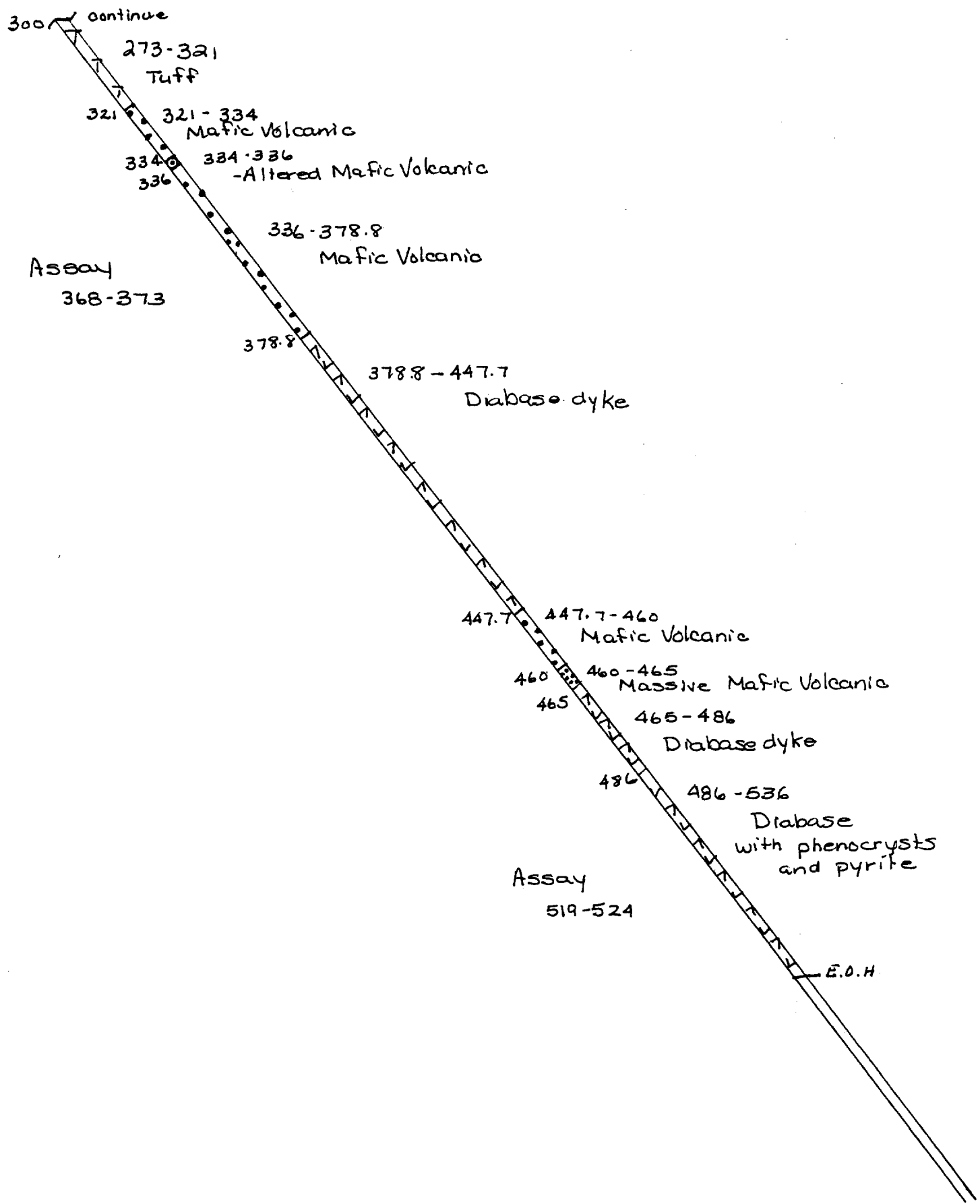
Finishing Date: Apr 11/94

Hole #: CS-1-94.

Claim: L. 1201153

3/2 L4C2

Currie Swp.



1cm = 10 feet

D. CRITIES

ATTN: D. CRITES

**TSL/ASSAYER Laboratories**

1270 FEWSTER DRIVE, UNIT 3 MISSISSAUGA, ONTARIO L4W-1A4

PHONE #: (905)625-1544

FAX #: (905)206-0513

REPORT No. : **M3382**

Page No. : 1 of 1

File No. : MY11RA

Date : MAY-11-1994

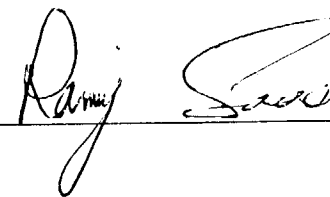
**I.C.A.P. TOTAL OXIDE ANALYSIS**

Lithium MetaBorate Fusion

4W-0861-RG1

SAMPLE #	SiO2	Al2O3	Fe2O3	CaO	MgO	Na2O	K2O	TiO2	MnO	P2O5	Ba	Sr	Zr	Y	Sc	Nb	Be	Ni	Cr	Cu	V	Co	Zn	LOI	TOTAL
	%	%	%	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%
1	58.53	15.36	7.00	5.83	4.53	4.34	1.28	0.83	0.18	0.22	250	320	130	24	21	< 30	1	140	505	95	170	110	180	1.61	99.70
2	55.24	16.63	6.43	4.80	5.47	3.27	2.74	0.95	0.09	0.24	350	230	140	26	25	< 30	2	85	590	40	185	40	20	1.80	97.67
3	58.30	16.63	7.26	6.74	4.48	4.18	0.94	0.91	0.13	0.38	200	210	140	24	23	< 30	2	90	400	2085	170	25	105	0.96	100.91
4	50.52	14.41	13.38	8.99	6.89	2.39	1.50	0.98	0.20	0.14	200	180	80	24	36	< 30	1	105	190	175	275	45	80	1.00	100.42

SIGNED :





Established 1928

# Swastika Laboratories

A Division of TSL/Assayers Inc.

Assaying - Consulting - Representation

## Geochemical Analysis Certificate

4W-0861-RG1

Company: **D. CRITES**

Date: MAY-06-94

Project:

Attn: D. Crites

We hereby certify the following Geochemical Analysis of 4 Core samples submitted APR-29-94 by D. Crites.

Sample Number	Au PPB	Au Check PPB	Ag PPM	Cu PPM	Zn PPM	WRA
1	Nil	-	-	-	-	Results
2	Nil	Nil	0.4	70	41	to
3	Nil	-	0.2	62	60	follow
4	Nil	-	0.2	166	57	

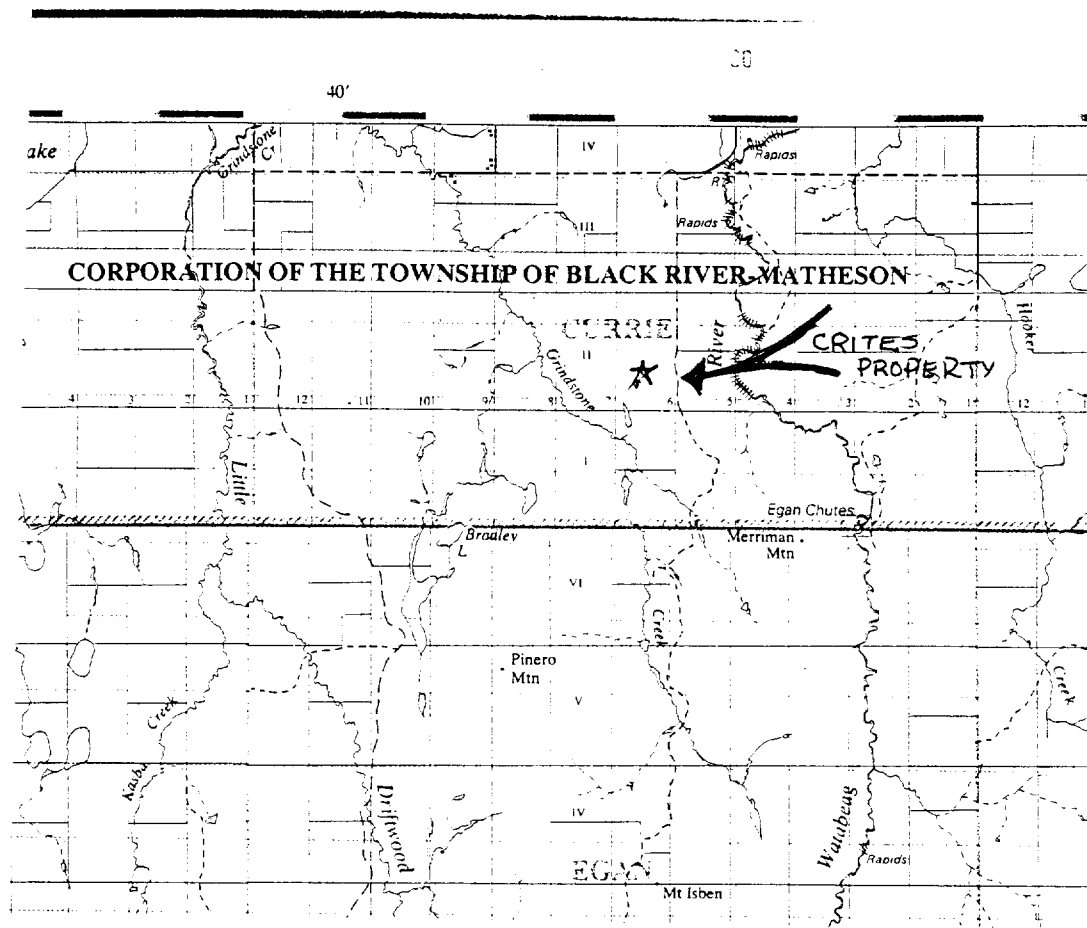
Certified by *Dennis Chantre*

P.O. Box 10, Swastika, Ontario P0K 1T0  
Telephone (705) 642-3244 FAX (705) 642-3300

APPENDIX II

FIGURE 1-3

•



Property Location

- section of N.T.S. 42 A11  
Kubland-Lake Sheet

Figure 1

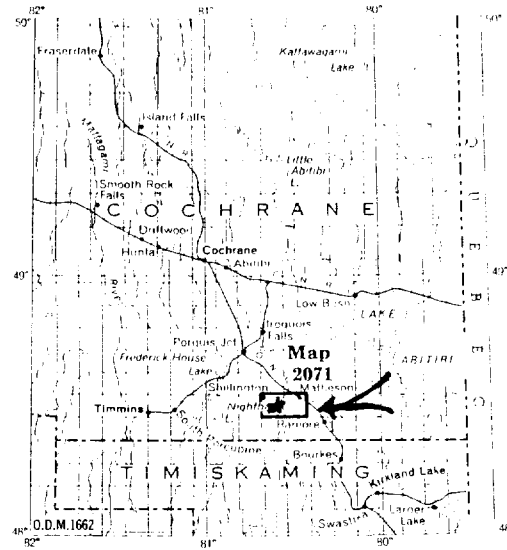
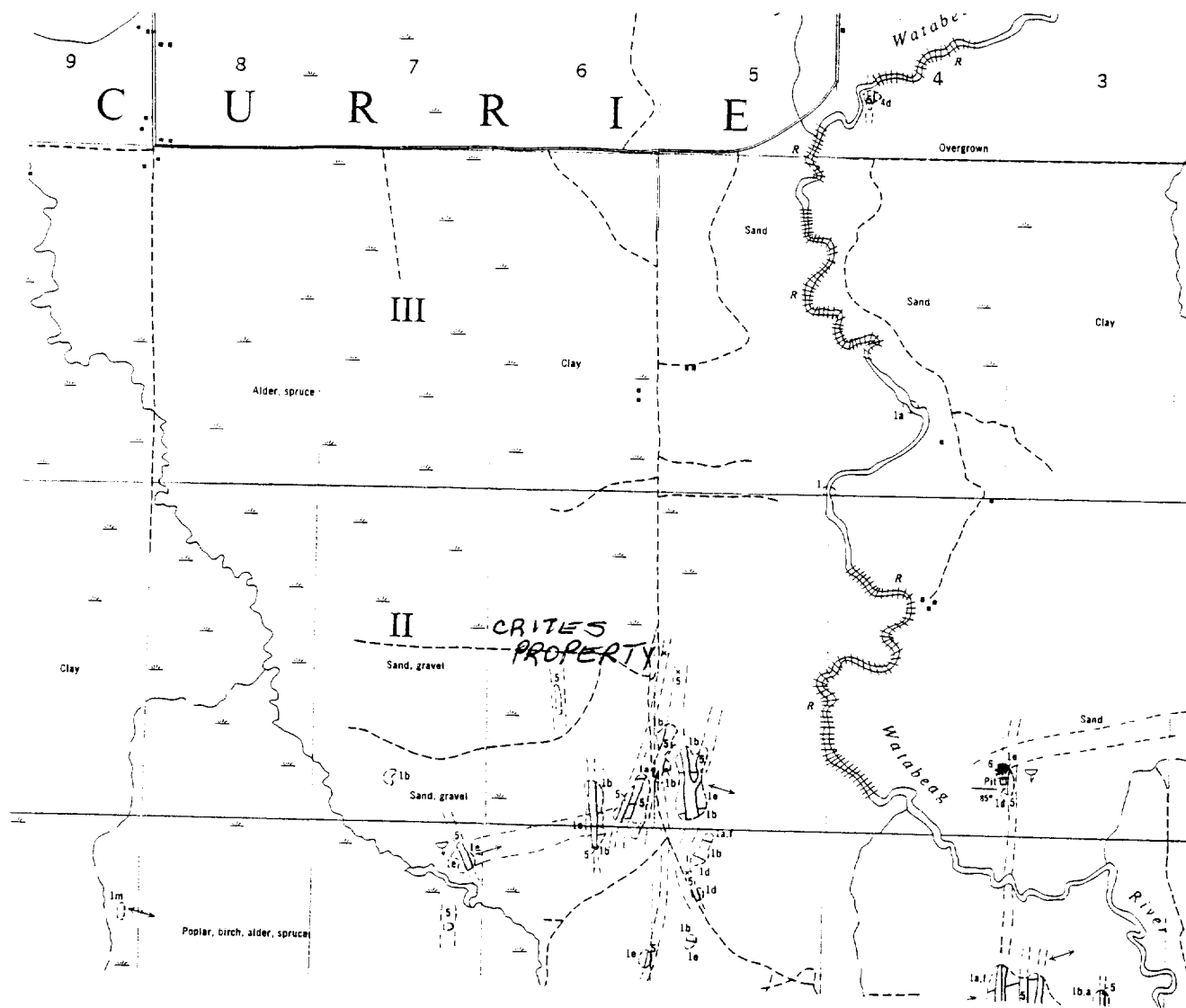


Fig. 1 Key-map showing the location of Currie and Bowman townships. Scale; 1 inch to 50 miles.

Property Access

Figure 2.



Regional Geology.

section of Map 2071  
Currie and Bowman Traps  
Report 40



I, JOE-ANNE SALO, OF GERMAN TOWNSHIP IN THE DISTRICT OF COCHRANE  
DO HEREBY DECLARE;

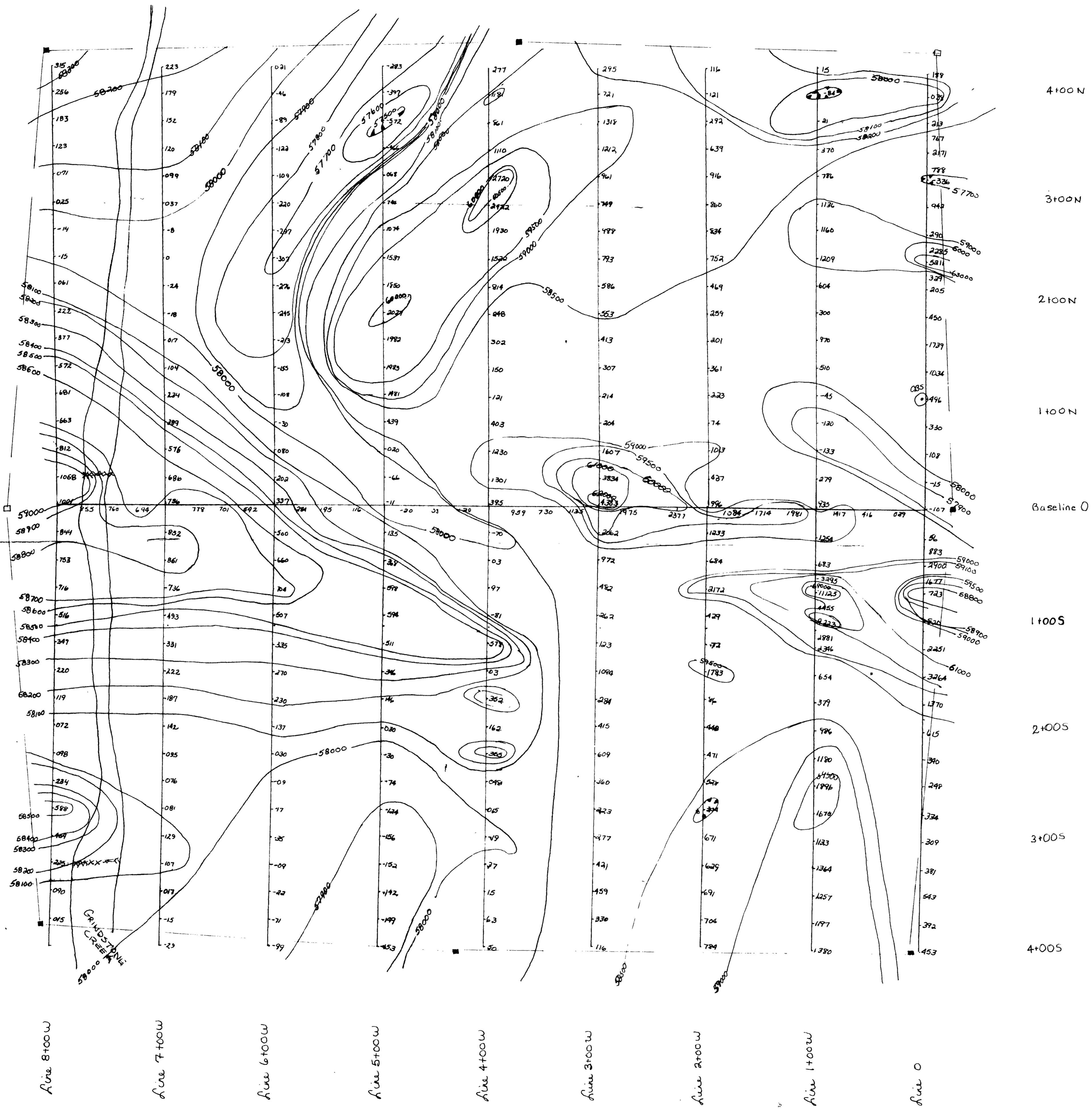
I HAVE OBTAIN THE EQUIVALENCE TO PROFESSIONAL COMPETENCY  
FROM THE MINISTRY OF NORTHERN DEVELOPMENT AND MINES.

I HAVE NO INTEREST AND WILL RECEIVED NO BENEFITS OTHER THAN  
WAGES FOR WORK PERFORMED ON THIS PROPERTY.

I WAS PRESENT AND HAVE PERSONAL KNOWLEDGE OF ALL WORK  
PERFORMED AND COVER IN THIS REPORT.

RESPECTFULLY YOURS

  
JOE-ANNE G. SALO



- Legend**
- Located Claim Post
  - Unlocated Claim Post
  - 672  
-351 Magnetic Value in gammas relative to 58000
  - Magnetic Contour (100 gammas)
  - ⊖ Magnetic Low
  - XXXXX Bearing Dam
  - ⊙ Control Base Station
- 0 25m 50m 100m  
0 1/2" 1" 2"  
1" = 50m

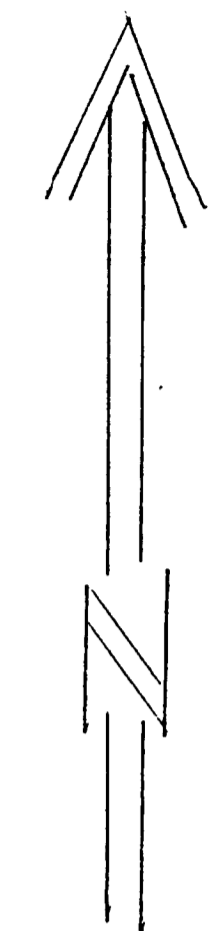
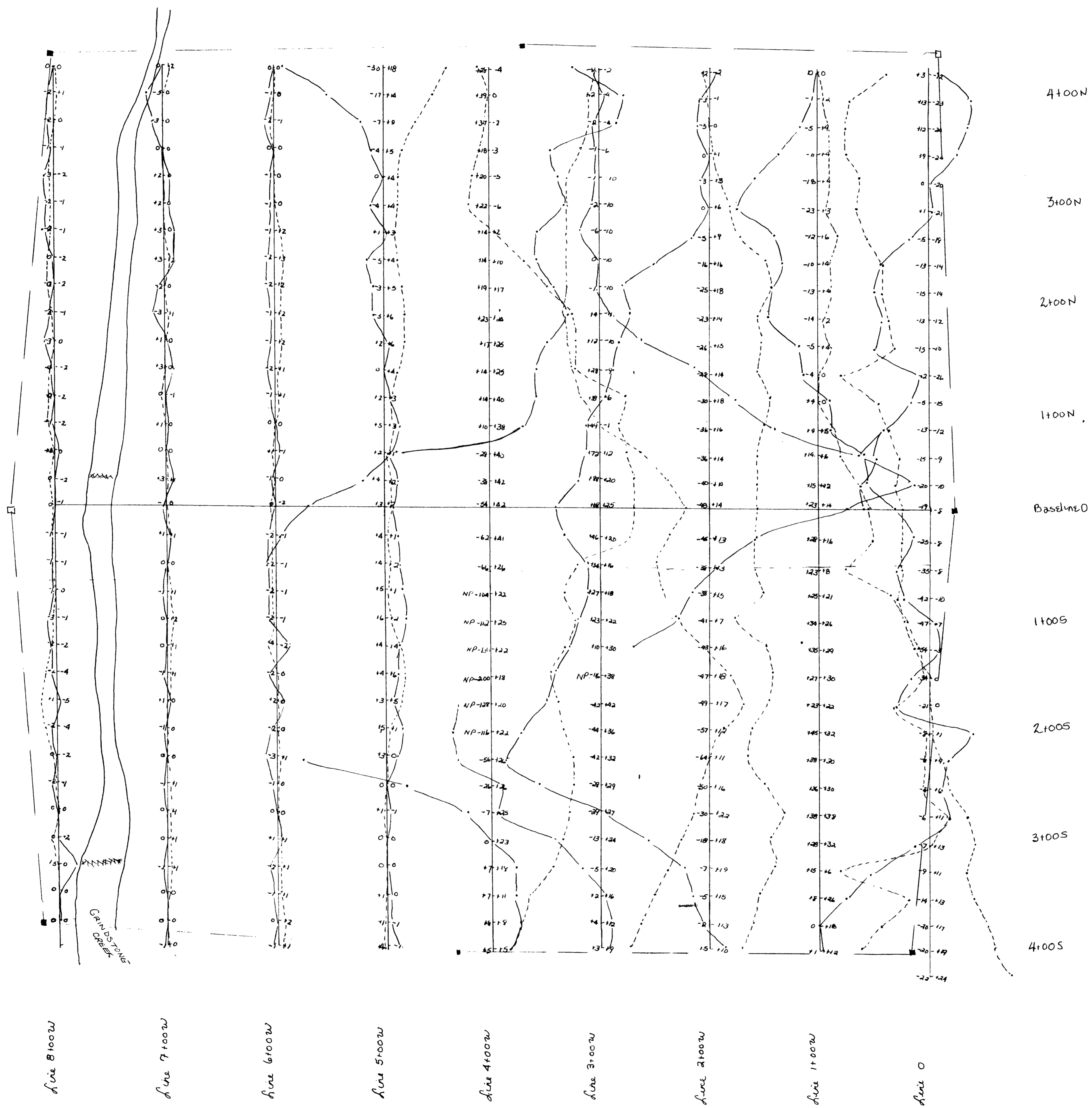
Claim  
L 1201153  
S1/2 L6C2  
CURRIE TOWNSHIP

CON II  
CON I

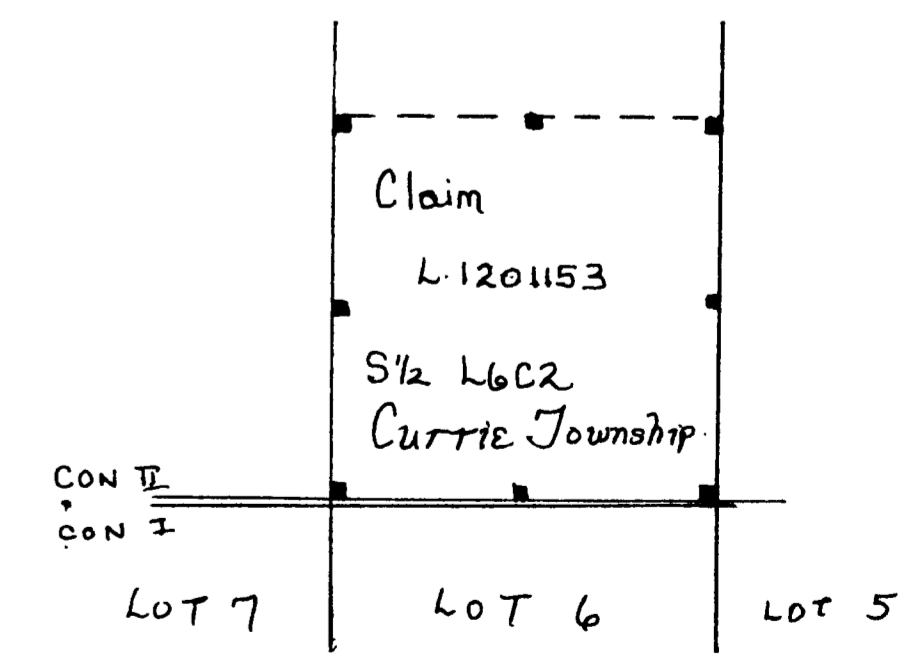
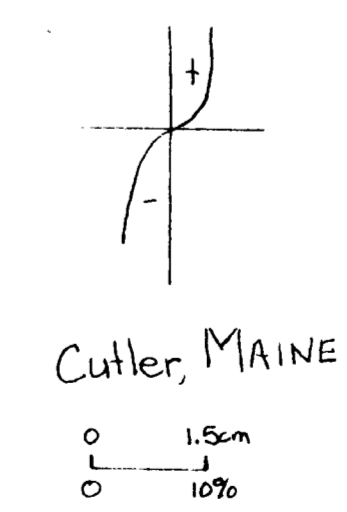
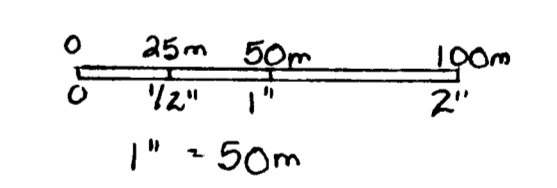
LOT 7      LOT 6      LOT 5

<b>D. CRITES PROPERTY</b>		
SCALE	APPROVED BY	DRAWN BY
DATE May 1994	J.G. SALO	J.G. SALO
<b>CURRIE TOWNSHIP</b>		
Magnetometer Contour Map		DRAWING NUMBER
		OP93722-1





- Legend**
- Located Claim Post
  - Unlocated Claim Post
  - 127 In-Phase Reading
  - 120 Quadrature Reading
  - In-Phase Profile
  - - - Quadrature Profile
  - NP1100 Not Plotted
  - xxxx Beaver Dam



<b>D. CRITES PROPERTY</b>		
SCALE	APPROVED BY	DRAWN BY
DATE May 1994	J.G.S.H.	J.G.S.H.
<b>CURRIE TOWNSHIP</b>		
V.L.F. E.M. 16-PROFILE MAP		DRAWING NUMBER
		093722-2

