

42A03SE0012 OP92-376 ZAVITZ

010

**REPORT ON A MAGNETOMETER**

**AND VLF EM SURVEY**

**KITCHIMING LAKE PROPERTY**

**ZAVITZ TWP. ONT.**

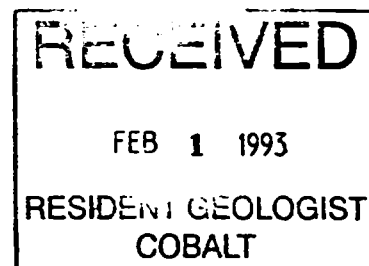
**FOR**

**N. MCBRIDE**

**JAN. 28, 1993**

**Longitude 81° 05'**

**Latitude 48° 04'**



**By: P. Lassila**  
**Bsc. Geol.**



42A03SE0012 OP92-376 ZAVITZ

010C

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## INTRODUCTION

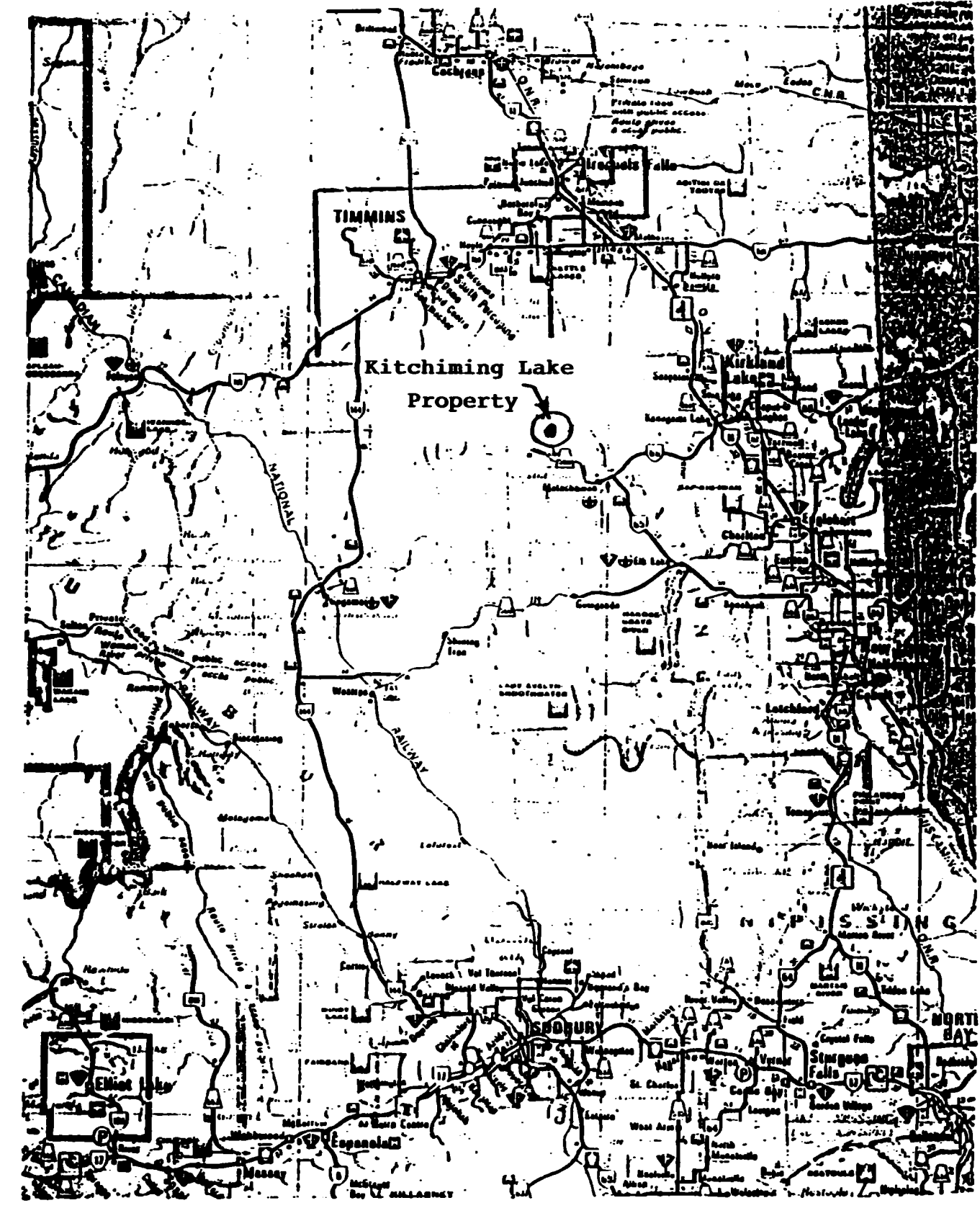
The purpose of this report is to provide a record of the work completed, results and conclusions on a magnetometer survey and a VLF electromagnetic (EM) survey on the Kitchiming Lake Property in the northeastern part of Zavitz Township, Ontario. Results of the two surveys are presented on three 1: 2500 scale maps (Maps 1, 2 and 3).

Financing for this geophysical program was largely provided by Norm McBride 1992 OPAP grant number OP92-376.

The gridline establishment and VLF EM survey was conducted under contract by Glen McBride during December 1992 and January 1993. P. Lassila, author of this report, completed the magnetometer survey in mid January 1993, as well as completed this report and enclosed maps. Results of the VLF EM survey (Map 3) are from field notes provided by Glen McBride.

## PROPERTY

The property consists on a single 16 unit (256 hectare) unsurveyed mining claim P 1186039 (Fig. 2) which is 50% owned by Norm McBride of Notre Dame du Nord, Quebec and 50% owned by Glen McBride of New Liskeard, Ontario.



Location Map  
Kitchiming Lake Property

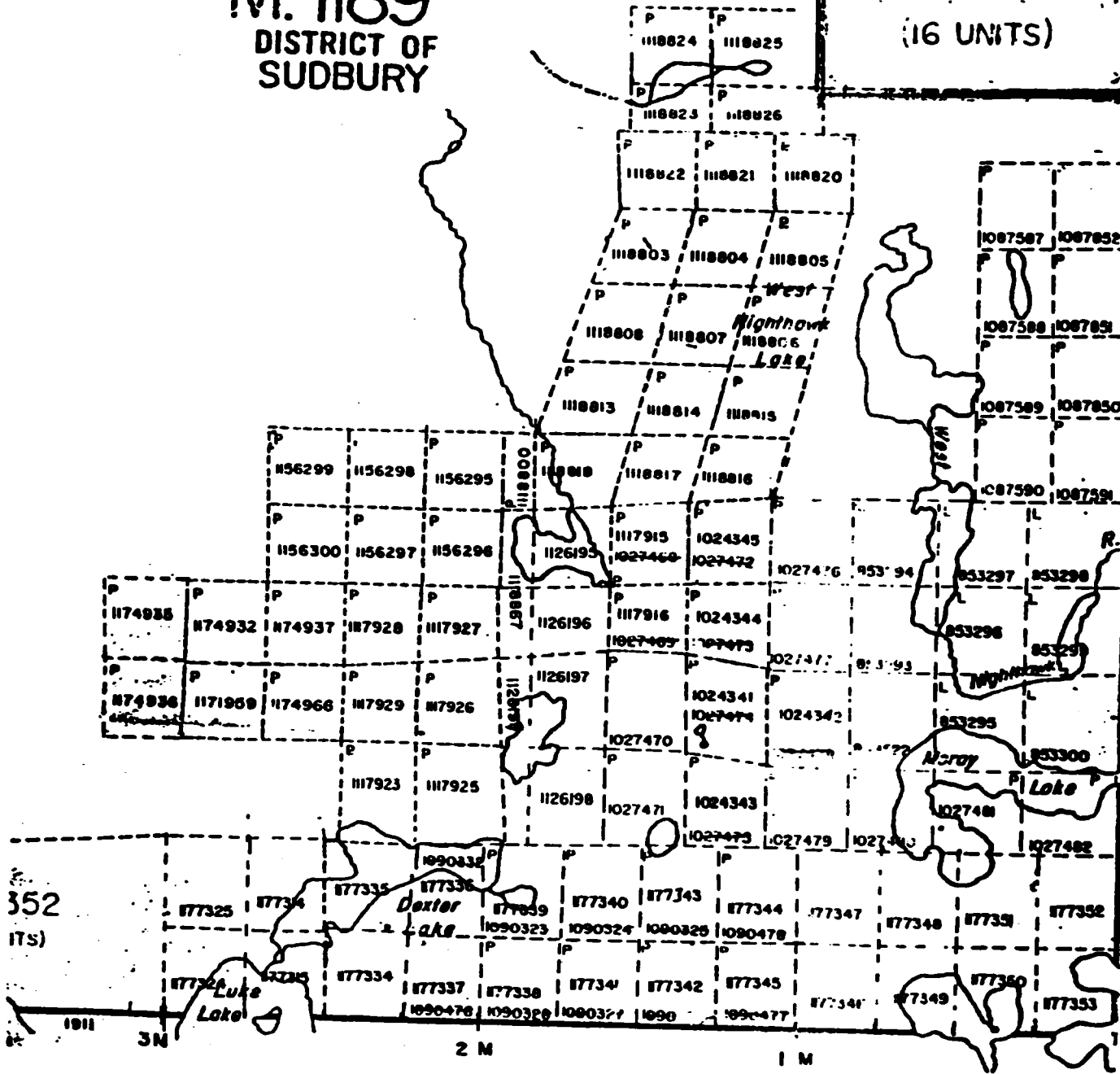
FIGURE 1

THE TOWNSHIP  
OF

**ZAVITZ**  
M. 1189  
DISTRICT OF  
SUDBURY

Kitchiming  
Lake  
Property  
1186039

(16 UNITS)



SCALE: 1-INCH = 40 CHAINS

CLAIM MAP

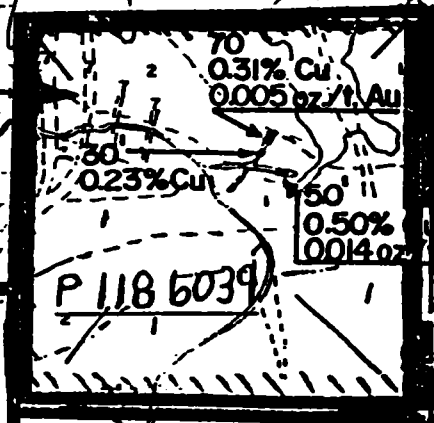
FIGURE 2

Kitchiming Lake Property

1992 OPAP Grant Area

16 unit claim

Norm McBride



1991  
OPAP Grant  
Area  
Glen McBride  
Norm McBride

ZAVITZ TWP.  
HINCKS TWP.

- 1 mafic volcanic
- 2 intermed. volcanic
- 3 felsic volcanic
- 4 mafic intrusive
- 7 diabase dike

DDH's  
4' - 0.46% Cu  
0.33 oz/t Au  
5' - 0.91% Cu  
0.03 oz/t Au

HUTT TWP.

Road

NORM MCBRIDE	
<b>GENERAL GEOLOGY</b>	
KITCHIMING LAKE PROPERTY	
SCALE 1" = 1/2 Mile	DRAWN P. LASSILA
DATE JUN 27 1993	TRACED

#### LOCATION AND ACCESS

The property is located at longitude  $81^{\circ} 07'$ , latitude  $47^{\circ} 57'$  at the south side of Kitchiming Lake at the east edge of Zavits Township approximately 60 Km east southeast of Timmins and 30 Km northwest of Matchewan, Ontario (Figs. 1 and 2).

Access via all weather gravel road south from Timmins is possible to within 7 Km of the property, skidoo or boat access via a chain of lakes north from the road brings you to Kitchiming Lake at the property location, a nearly serviceable brush covered road cuts east and south through the property area (Maps 1 and 2).

#### PREVIOUS WORK

The only previous work recorded (E.G. Bright, Geology of the Ferrier Lake - Canoeshed Lake Area, pages 41 - 42, 1984 O.G.S. Report 231)

on the property area was by J. Helpert in 1971 who excavated two 230 m to 300 m long crosscutting trenches (Fig. 3 and maps 1 and 2) from which up to 0.5% copper and 0.014 oz/t gold was reported. The property was staked by Norm McBride (present part owner) to cover this reported occurrence and nearby area.

#### GENERAL GEOLOGY

The area has been mapped by E.G. Bright (1984 O.G.S. Report 231, Geology of the Ferrier Lake - Canoeshed Lake Area) who shows that the property is underlain by a nose of a westerly plunging syncline (Fig 3). East to west, across the property, along the synclinal axis, the geology changes from intermediate flows to mafic flows to intermediate flows.

The northeast and southeast parts of the property are underlain by mafic flows of the outer limbs of the syncline. Several northerly trending diabase dikes cut through the synclinal axis.

#### WORK PROGRAM

The geophysical surveys were conducted along chained, flagged, partially brushed out compass run lines north and south from base line 0+00. For VLF, a base station was established at 5+25W on the base line to daily check the field strength calibration. A Radem VLF with cutler Maine as a transmitter station, was utilized to take dip angle and field strength readings at 25m intervals on the 100m spaced lines. The field notes were presented to P. Lassila who prepared the VLF EM profile map 3 from these notes.

The magnetometer survey was conducted by P. Lassila during mid January 1993 along the established lines. An MP - 2 proton magnetometer was used to take readings at 12.5m stations. The results are presented on maps 1 and 2.

A base station was established at 5+<sup>0</sup><sub>W</sub> on BL 0+00 to test for diurnal drift, as well as at base line and traverse line intersections. Daily diurnal drift was generally less than 100 gammas (max. 129 gammas) and generally less than 40 gammas between lines (max 65 gammas between 0+00 and 1+00W). Due to the low drift factor readings are plotted uncorrected. Particulars of the two surveys are summarized as follows: Magnetometer survey;

- scintrex MP-2 Proton Magnetometer, - Operator, P. Lassila,
- Line Km run, 26,35, - Number of stations reads 2125.



- VLF EM survey; - Radem VLF Operator, Glen McBride;  
- Transmitter station, Cutler Maine, 24.2 KHz;  
- Line Km run, 26.35; - Number of stations read, 1066.

### RESULTS AND CONCLUSIONS

The results and conclusions are treated separately for each survey in the following text.

#### Magnetometer survey:

A central east-west trending zone of low magnetics cuts across the property. The north part of this magnetic low covers the area at the two long trenches (Map 1). This zone is apparently underlain by non-magnetic volcanic flows.

On the north 1/3 of the property a broad zone of variable magnetic relief reflects variably magnetic volcanic flows (58500γ to 6000γ). At 2+25 N to 3+50 N from 0+00 to 7+00 W, a narrow magnetic high (over 60000γ) likely indicates an easterly striking magnetic intrusive dike. Centrally (8+00 W to 10+00 W) a strongly magnetic zone (60000γ to 62000γ) suggest a northerly trending rather uniformly magnetic intrusive. In the northwest along lines 14+00 W and 16+00 W, two sizeable magnetic diabase dikes<sup>apparently</sup> follow these two lines

In the southwest, isolated magnetic highs (±0 over 60000γ) likely indicate small east-west trending magnetic intrusives. East of the bush road (8+00 W) the magnetic tenor changes into a broad zone of variable strong magnetic relief very similar to that in the northeast

Likely, as E.G. Brights mapping indicates, these are synclinal limbs of the same variably magnetic volcanic flow unit.

Except for the north trending magnetic intrusives, the magnetics suggest a general east-west orientation of the underlying geological units.

**VLF EM survey:**

The VLF results are rather disappointing as they show no clearcut conductive zones. The results appear to be somewhat "noisy" but even so the magnitude of the readings are too low to suggest any significant VLF EM conductors, which would reflect dip angle reading changes of over 20% across a conductive zone. None such readings are evident here. Part of the irregularity in readings may be caused by swamp-outcrop-swamp nature of the topography and part probably is due to internal instrument eddy currents. Also this instrument (which was borrowed to cut costs) is an older model Radem Unit which has no lock on the field strength calibration knob. Although the field strength (FS) readings were checked daily at a base station (5+25 W BL0+00) it seems that calibration drift occurred at some locations (verbal communication with Glen McBride). This would account for abnormally high FS readings at some locations where no VLF conductor is reflected in the dip angle readings.

In summary, despite the noisy background reading level, it can be concluded that no significant strength VLF conductors underlie the property area.

### RECOMMENDATIONS

Apparently most of the prospecting conducted in 1992 (verbal communication with Norm McBride) was oriented toward locating new mineralized zones over the whole property area, and only a very cursory examination was given to the location of the trenches which have recorded copper and low gold values. These trenches should be given a good investigation (cleaning out and resampling) to confirm the reported values. Detailed prospecting should also be conducted east and west from these trenches. The nature of the linear east-west striking magnetic high (2+25 N to 3+50 N; 0+00 to 7+00 W) should also be investigated in outcrop exposure.

A small program with two men working for about two weeks should be sufficient for this work. About \$2000.00 should be enough to cover these costs plus an additional \$500.00 allocated for assay costs, for a total budget of \$2500.00. If good results are returned from effort then additional follow up work would be warranted.

*O. Laska*

*Jan. 29, 1993*

**AUTHOR'S DECLARATION**

I Pentti Lassila reside at 68 Albery Cresent, Ajax, Ontario and I am reponsible for the maps and report filed herewith.

I conducted the magnetometer survey (but not the VLF Em survey).

I have no interest in the property described in the report.

I am a graduate geologist with BS degree in 1968 from the University of North Dakota, U.S.A. and have conducted geological exploration, since that time in various parts of Canada.



P. Lassila

Consulting Geologist

PL/dmcb



42A03SE0012 OP92-376 ZAVITZ

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**PROSPECTING REPORT**

**KITCHIMING LAKE PROPERTY**

**ZAVITZ TWP, ONTARIO**

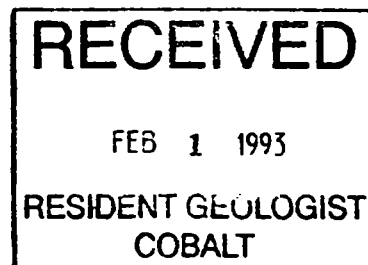
**CLAIM P 1186039**

**Long. 81° 05'**

**Lat 48° 04'**

**By: Norm McBride**

**January 27, 1993**





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PROSPECTING RESULTS MAP	
ASSAY DATA	

**KITCHIMING LAKE PROPERTY**

**PROPERTY**

The property consists of one 16 unit claim P 1186039  
(See claim Map).

**LOCATION AND ACCESS**

The property is located in the northeast part of Zavitz TWP. Ontario just south of Kitchiming Lake (Long, 81° 05', Lat, 48° 04') about 60 Km south of Timmins Ont. It can be reached by gravel road south from Timmins to within 1 Km of the property. This is where I set up my prospecting camp. An old bush road south across the property gives access by A.T.V. (All terrain vehicle) from my camp site.

GEOLOGY

The 1984 D.G.S report #.231 and map shows the geology of the property area to consist of mafic and intermediate volcanic flows and pillow lavas. The copper and minor gold mineralization reported from the trenches are in "mineralized amygdaloidal flows". Several diabase dikes also strike north in the property area.



THE PROSPECTING WORK AND RESULTS

Looking at the 1984 O.G.S. report #.231 and maps on the area, I noted that two large trenches were reported to contain copper mineralization with a little gold.

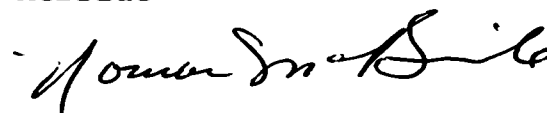
So I had the property staked and in June 12 to June 21 prospected the area. I spent most of the time looking over the whole property to see if I could find any other trenches or mineral showings but only found mainly mafic volcanics and some diabase dikes, mainly in the northwest.

I only spent one rainy day prospecting the trenches and took three samples for assay from rocks on the banks of the trench<sup>25</sup>. These had only pyrite mineralization. The trenches have filled with debris and brush growth and need to be cleaned out for a proper examination. I planned to come back with a couple helpers but never got to do this because of other summer work. I hoped to get back to get better samples from the trenches with copper mineralization when I did this, and so I did not send the three samples for assay until winter months (its the only samples I had) . I hired a geophysical survey to be done to see if that information would give a better idea where to prospect next year.

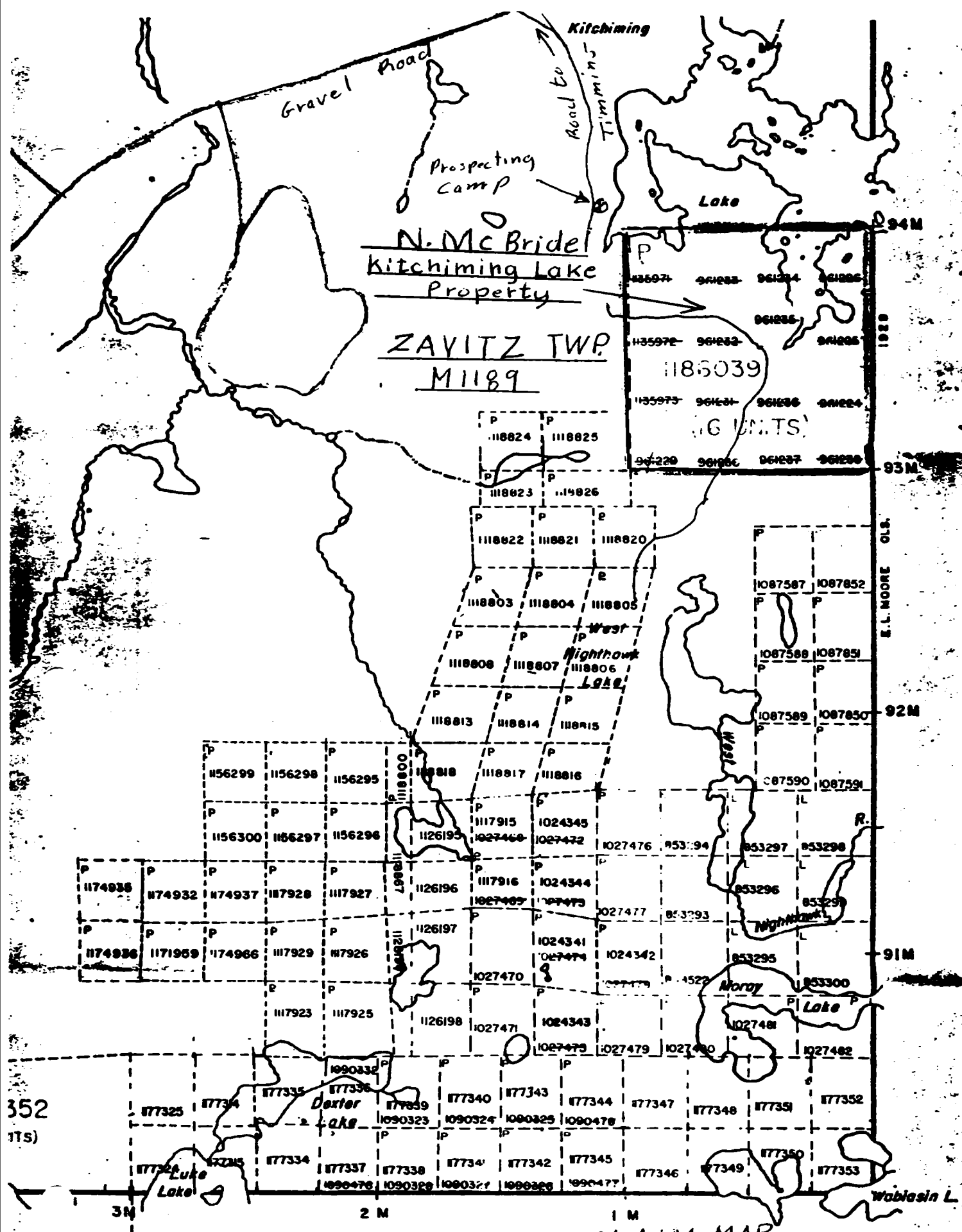
**PLANNED FUTURE WORK**

In June 1993 I plan to clean out the trenches to get better assay samples. Also I intend to do detailed prospecting east and west of the trenches.

Norm McBride

A handwritten signature in cursive script that reads "Norm McBride".

NMCB/dmcb



Hincks Twp. (M. 223)

CLAIM MAP

1 in. = 1/2 mi.  
scale

Figure 1

352  
Twp. (M. 943)



Ministry of  
Northern Development  
and Mines

Temiskaming  
Testing  
Laboratories

P.O. Box 799  
Presley St.  
Cobalt, Ontario  
POJ 1C0  
(705) 878-8313

Report Number

Laboratory Report

Date Jan 27/93

Issued To: NORM McBRIDE

Sample Number	Gold Oz. Per Ton	Silver Oz. Per Ton	<i>low PPM</i>
42757	<i>Tr</i>		110
42758	0.003		129
42759	0.009		145
<p><i>N. Mc Bride Prospecting Samples from Kitch. mining Lake Property P 118 6039 Zavitz Twp. ont (samples from old trunks)</i></p>			

Fees Received

\_\_\_\_\_  
Manager

Except by special permission, reproduction of these results must include any  
qualifying remarks made by this ministry with reference to any sample.

# Sample Data.

## Kitchiming Lake Property Prospecting.

Sample	Location	Results	Description.
42757.	west end of trench	Tn. gold 110. ppm cu.	Dark mafic volcanic with pyrite blebs and some Seaming.
42758.	east end of Trench.	0.003 gold. 129 ppm cu.	Dark mafic volcanic with greenish alteration Amophobles little sulphides.
42759.	North end of trench.	0.009 Au 145 ppm cu.	dark mafic volcanic. with sulphides along Silicified fractures.

Assay by Ministry. (52.96)

see attached results.

Customer's Copy/Reçu du Client

No. de commande 411	No. de facture 411
------------------------	-----------------------

Description des articles		Quantité		Prix unitaire		Total	
ASSAULT FEES		22	19.04			419.50	
C.S.T. N.R. 2463614		2	19.11			37.46	
6.4. Inc. Dues						529.96	

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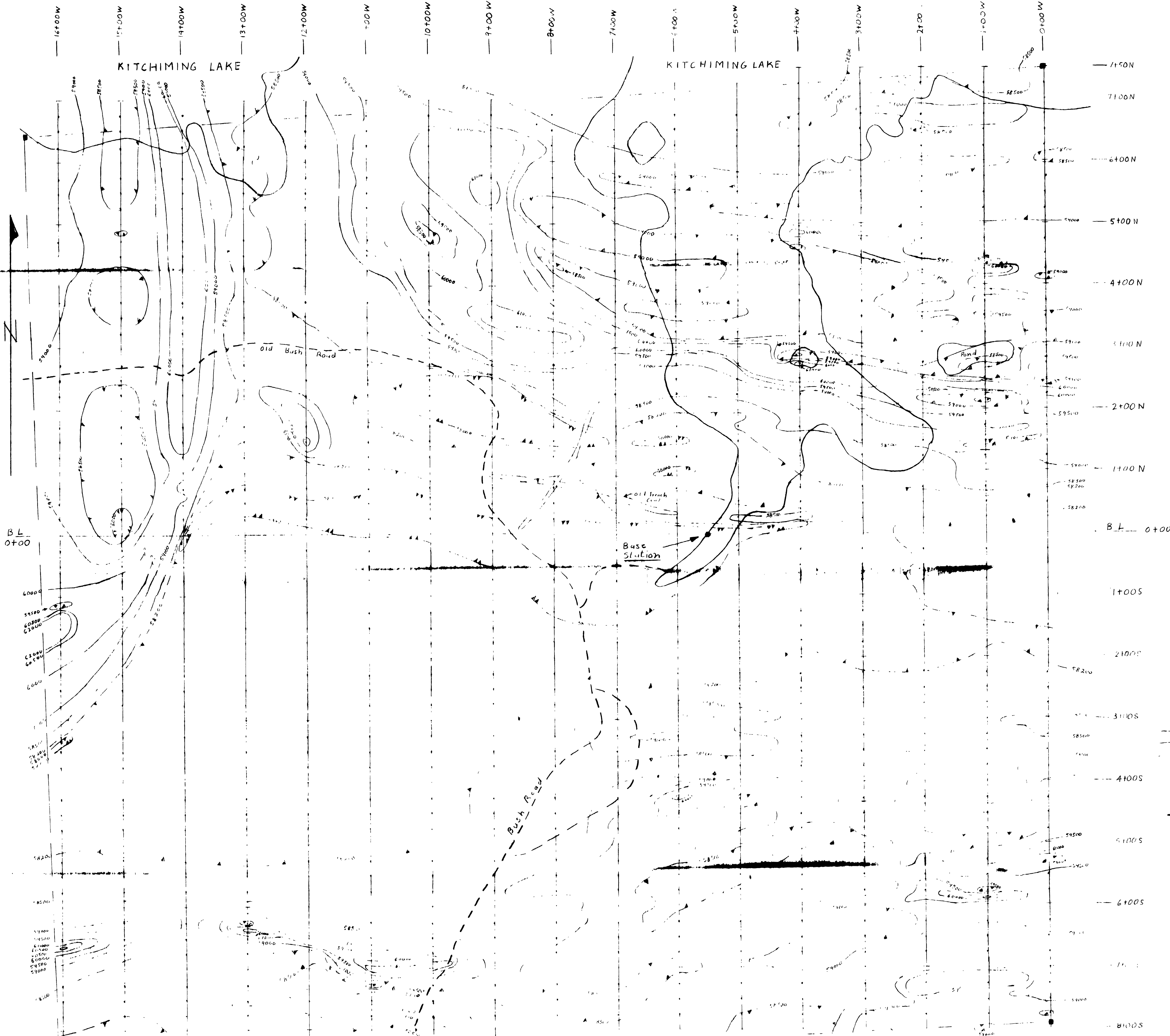
OFFICE RECEIPT  
 RECEIPT OFFICE

1

A2685

KITCHIMING LAKE

KITCHIMING LAKE



Units:  
Scintrex MP-2  
Proton Magnetometer

Contour Intervals  
 - - - 20000 at 1000'  
 - - - 20000 at 500'  
 - - - 1000'

▲ Magnetic low  
 ▲▲ Magnetic low  
 Less Than 58000  
 - - - Bush Road

Station spacing 12.5 m  
 Infil line km = 24.55  
 total readings = 125  
 Operator: P Lassila

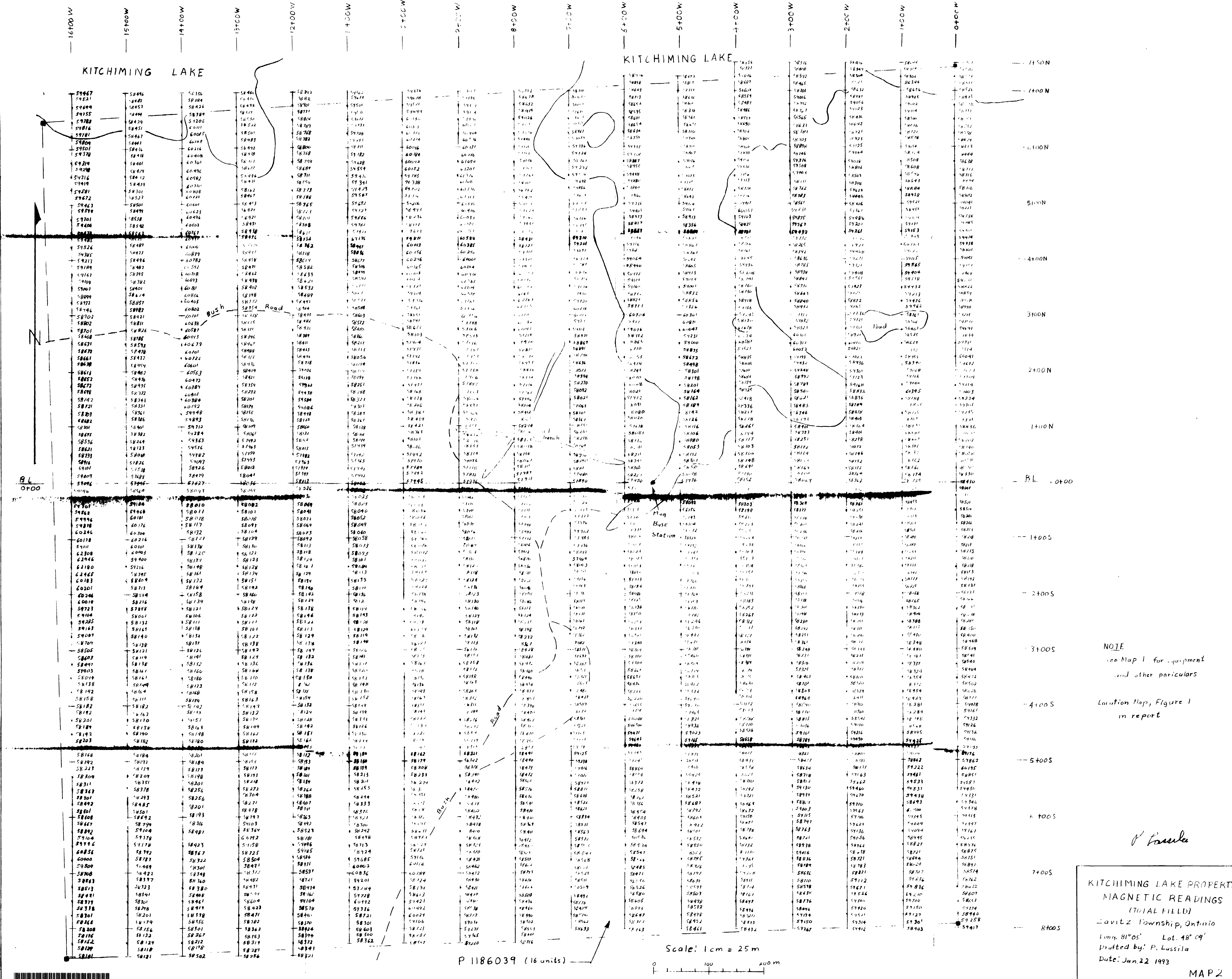
Location Map, Figure 1  
 in Report

KITCHIMING LAKE PROPERTY  
 MAGNETIC CONTOUR MAP  
 (TOTAL FIELD)  
 Zavitz Township, Ontario  
 Long. 81°05' Lat. 48°04'  
 Drafted by: P Lassila Date: Jan 24, 1993  
 MAP 1

P 1186034 (16 units)

Scale: 1 cm = 25 m  
 0 100 200 m





KITCHIMING LAKE

KITCHIMING LAKE

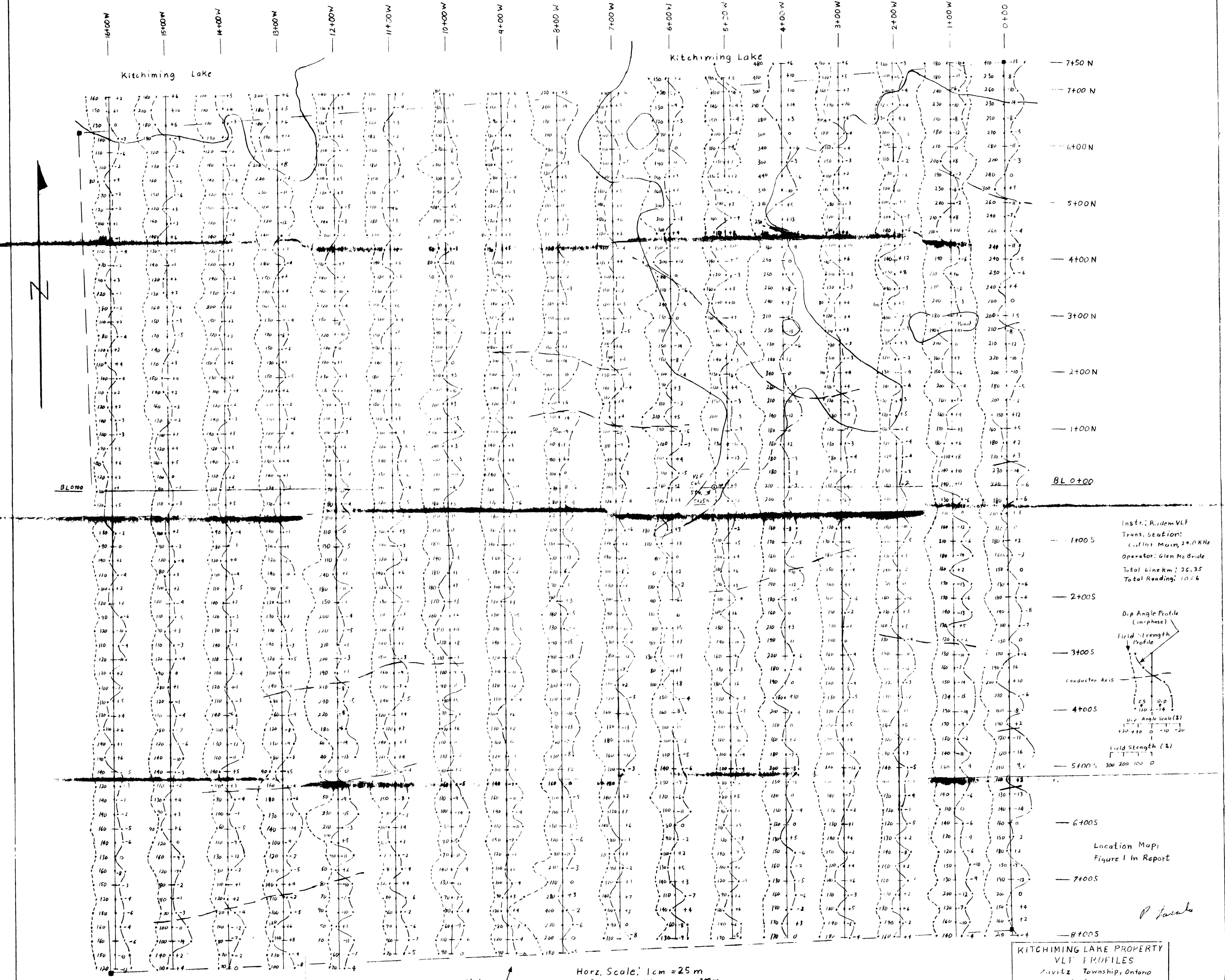
KITCHIMING LAKE PROPERTY  
 MAGNETIC READINGS  
 (TOTAL FIELD)  
 Lantz Township, Ontario  
 Long. 81°05' Lot. 48°09'  
 Drafted by: P. Lussila  
 Date: Jan. 22 1993  
 MAP 2

Scale: 1 cm = 25 m

P 1186039 (16 units)

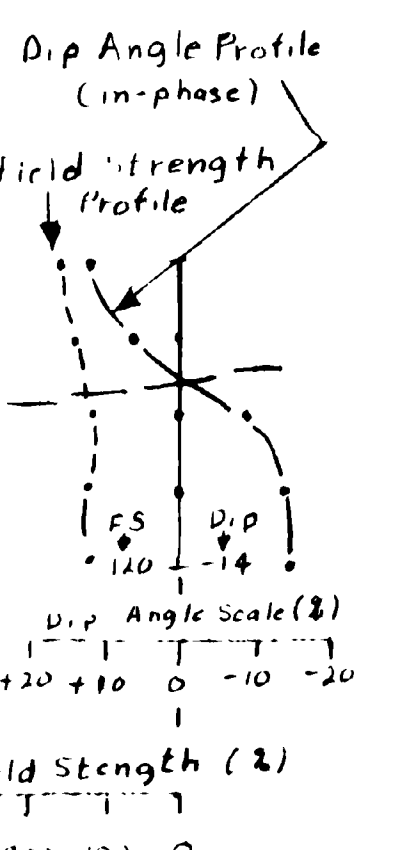
NOTE  
 see Map 1 for equipment  
 and other particulars  
 Location Map, Figure 1  
 in report





7+50 N  
 7+00 N  
 6+00 N  
 5+00 N  
 4+00 N  
 3+00 N  
 2+00 N  
 1+00 N  
 BL 0+00  
 1+00 S  
 2+00 S  
 3+00 S  
 4+00 S  
 5+00 S  
 6+00 S  
 7+00 S  
 8+00 S

Instn: Ridem VLF  
 Trans. station:  
 Collet Main, 24.0 KHz  
 Operator: Glen McBride  
 Total Line km: 26.35  
 Total Reading: 1076



Location Map  
 Figure 1 in Report

*P. Lassila*

KITCHIMING LAKE PROPERTY  
 VLF PROFILES  
 Zuvitz Township, Ontario  
 Long: 81°05' Lat: 48°04'  
 Drafted by: P. Lassila  
 Date: Jan. 25, 1993  
 MAP 3

Horz. Scale: 1cm = 25 m

P 1186039 (16 units)





← ③ Prospecting Traverse  
 X Sample Location  
 MV metamorphic volcanic  
 IMV intermediate volcanic  
 D Diabase  
 S native copper  
 = swamp area

Scale 1cm = 50m

McBRIDE  
 PROSPECTING MAP  
 KITCHIMING LAKE  
 PROPERTY  
 ZAVITZ TWP. CNT  
 June 27, 1992  
 N. McBride

Prospected  
 June 12, 1992  
 to  
 June 21, 1992  
 P 1186039  
 DPAP 0972 367

Map made on photo  
en large ment

Scale 1" = 235'  
1cm = 50m

