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MACBETH

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Final OPAP Submission

For

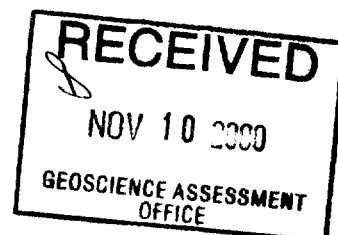
Ted Anderson

OPAP NO. 99-174

Written by

Ted Anderson

Jan. 2000





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## **1.0 Introduction**

During the Summer and Fall of 1999 a Geological and Geophysical Exploration program was carried on the Cucumber Lake Property. The property was staked during the September opening of the Temagami land caution in. A 20 km grid was cut on the property.

The Geology survey consisted of mapping and sampling of rock types. A Magnetometer and EM-VLF survey was also completed over the property.

The Geology survey is a separate report from the geophysics and will be added as an appendix to this report.

## **2.0 Project Location**

The project area is located approximately 30 Kilometers southwest of Temagami in the Township of Macbeth, Sudbury District & Mining Division, as shown on the appended Key Map, Prospecting/Geology and Claim Maps. The proposed prospecting area is 33 Units 5 +/- sq. km in size. His township can be found on 1:50,000 scale map 41 I/16. The center of the proposed area is Latitude 46 deg. 50 min., Longitude 80 deg. 20 min.

Access to the site is gained by driving North from Sturgeon Falls on Hwy. 64 to Field and to River Valley. From here Hwy. 805 is taken to the turnoff to Wawiashkashi Lake where a lumber road leads to Cucumber Lake.

## **2.1 Claims**

The claims covered in this report are 1223118 (1-unit), 1234932 (2-units), 1228687 (15-units), and 1224500 (15-units).

## **2.2 Personnel**

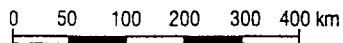
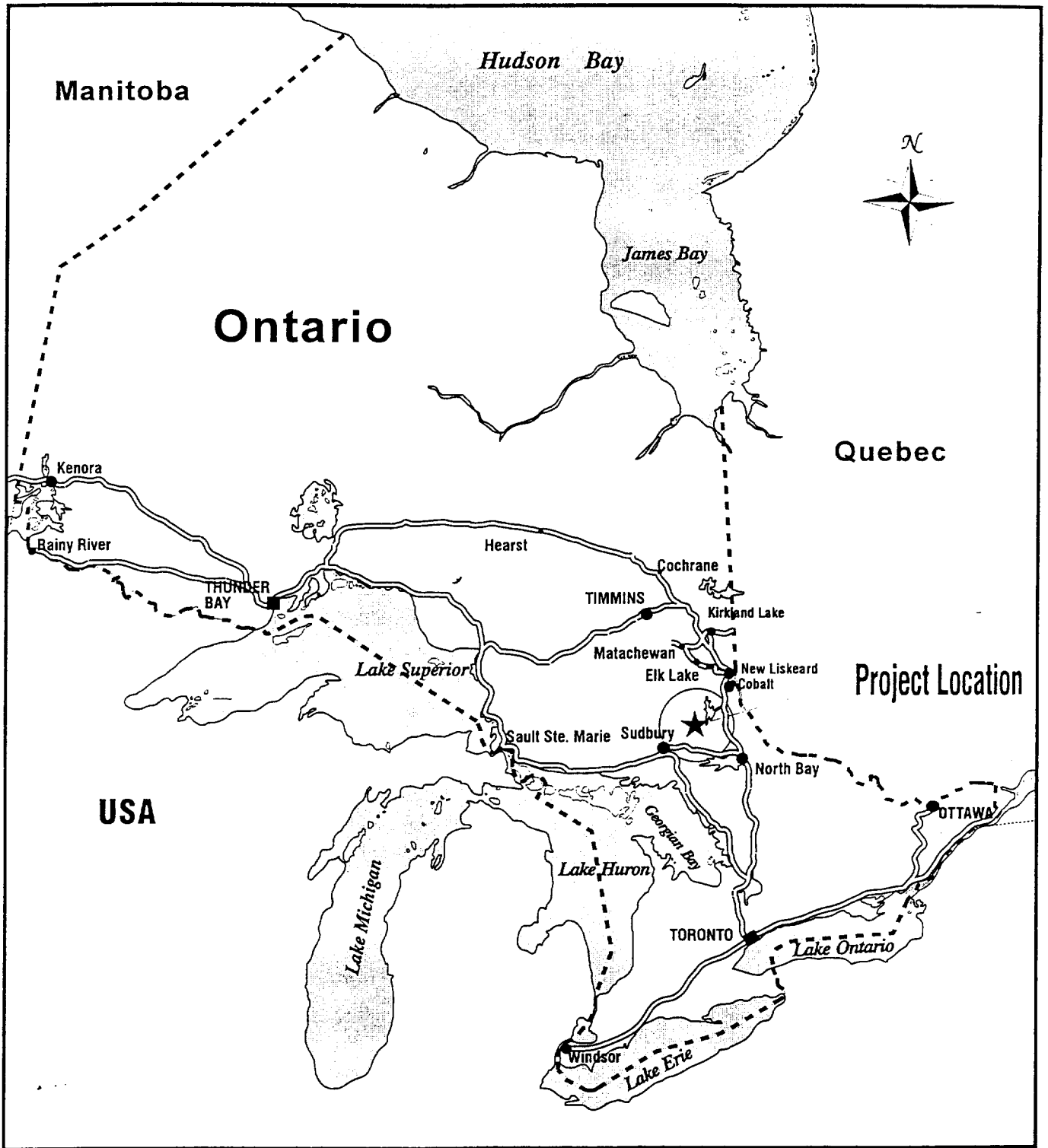
People involved with this project are:

Ted Anderson Smiths Falls, ON.

T.J. Quesnel Sturgeon Falls, ON.

Pierre Mallette Timmins, ON.

Lan Anderson Timmins, ON.



	<b>Ted Anderson</b> 1066 Perth Road, RR #6, Smith Falls, ON J7A 4S7 Tel. (613) 283-7837	
	<b>CUCUMBER LAKE PROPERTY</b> MacBeth Township Sudbury District, Ontario	
	<b>Key Map</b>	
	Scale: see bar scale	Date: May 1999
	Drawn by: TA	Figure: 1

### **3.0 Geology**

#### **3.1 Regional**

All the bedrock exposed is of Precambrian age. The oldest rocks of the map area are a sequence of Early Precambrian metavolcanics and metasediments with locally interbedded chert (jasper) magnetite, and sulphide iron formation. These rocks are locally intruded by porphyries similar to the flows they intrude, and are intruded by diabase dikes. The Early Precambrian sequence is unconformably overlain by Middle Precambrian Huronian sedimentary rocks of the Mississagi and Gowganda Formations. Sheet-like Nipissing Intrusions (tholeiitic gabbro) intrude the Huronian and older rocks. The youngest bedrock in the map-area have been regionally metamorphosed under lower greenschist facies conditions.

The former New Golden Rose Mine produced 43,359 ounces of gold and 8,296 ounces of Silver from quartz-ankerite veins in iron formation.

#### **3.2 Local Geology**

According to published OGS geology maps and the authors field reconnaissance, the area of concern is underlain by Early Precambrian felsic to intermediate metavolcanic which in turn are overlain by Mississagi Formation sediments to the south and Gowganda Formation sediments to the North. These sediments have been intruded by Nipissing Diabase intrusions, generally metagabbro and hornblende gabbro. A large diabase dike is purported to cross the project area in a northwesterly trend. The mapping area is bisected by a small fault (Cucumber Lake Fault which travels north towards the Golden Rose Mine).

### **4.0 Previous work**

According to the assessment files at the Mining Recorder in the Sudbury office, there has been very little, if any, work done on the project area with the exception of some shallow drilling and trenching on the Cucumber Lake occurrence. Work has been performed to the southwest of the project area, but due to the hiatus caused by the Temagami Land Caution, no work has been filed in the majority project area in well over 25 years. A copy of the assessment files index sheets are appended which show no assessment work over the majority of the area to be prospected and no geophysical surveys at all.

In the summer of 1998 a small sampling program was completed. The samples were from the trenches on the East side of Cucumber Lake and showed anomalous gold values.

## **5.0 Geophysics**

### **5.1 Magnetometer**

The magnetometer survey used in this property was a Geometric Model G 816 Portable Proton Magnetometer, see appendix for specification information on the magnetometer. The magnetometer data was corrected for diurnal drift using the baseline correction method. The drift was very minimal during the survey and little correction was required. The survey was performed on a 200m line interval with readings being taken at 25m intervals on each line. During the survey if suspect high or low readings were taken a second would be taken to verify the reading.

### **5.2 EM-VLF**

The Electromagnetic Very Low Frequency survey used a Geonics EM-16, see appendix for specification information on the EM-16. The station read was NAA Cutler, Maine, Frequency 17.8 kHz, co-ordinates 67W17-44N39. All readings were taken facing North with a 200m line interval and a 25m station interval.

## **6.0 Interpretation**

Several different anomalous zones have been identified with the magnetometer and em-vlf survey. They are labeled alphabetical and will be discussed on an individual basis.

### **6.1 Zone A**

This zone extends from Line 0, 500N to Line 18E 25N, it strikes in a Northwest-Southeast orientation. In the East the zone has a width of 150-200meters and pinches as it extends East down to about 50meters. The anomaly is in the range of 300-800 gamma's above background. The Vlf survey shows cross overs following the some strike but plots a little further south. With this anomaly being caused by a Diabase Dike, likely the VLF is picking up the contact between the Diabase and the metasediments.

### **6.2 Zone B**

This zone extends from Line 0, 200S to Line 14E,1100S, it also strikes Northwest-Southeast. This anomaly is caused be a Diabase dike as Zone A. Has a width in the West of 100meters and as it strikes East it falls off the grid to the South due to a large swamp and the claim boundary. The anomaly has a range from 300-900 gamma's above background. As Zone the VLF also tracks the southern contact of this anomaly.



### **6.3 Zone C**

This zone extends from Line 10E, 500S to 12E,500S with a width of about 50m. This anomaly has a range of 300-400 gamma's above background. There is no VLF anomaly associated with this Magnetometer responds. Although the strike is short on Zone C it may be related to zone D. This Zone may also be the contact between the metasediments and the metavolcanics.

### **6.4 Zone D**

Zone D being just Southeast of Zone C is likely associated. With a strike from Line 14E,675N to Line 16E,650S with a weak responds on Line 18E,625S. The Anomaly is 100m in width at the West Side and down to 25m at Line 18. The range on the east and West End is the 500gamma range, but line 16E is 4000 gamma's above background. This reading was taken several times and repeated consistently. No VLF is associated with this zone. Zone C may also be a result from the contact between the metasediments and the Metavolcanics.

### **6.5 Zone E**

Zone E located on L0,675S has a range of 1500 gamma's above background, with a weak VLF anomaly associated with it. This anomaly may be caused by the contact between the metasediments and the Gowganda Formation.

### **6.6 Zone F**

Zone F runs from Line 6E,600N to Line 18E,500N. This zone has a VLF anomaly running the entire strike but the magnetometer anomaly is only on L10E and 12E at 625N with a range of 200 gamma's above background. This anomaly may be the contact between the metavolcanics and the Gowganda Formation to the North.

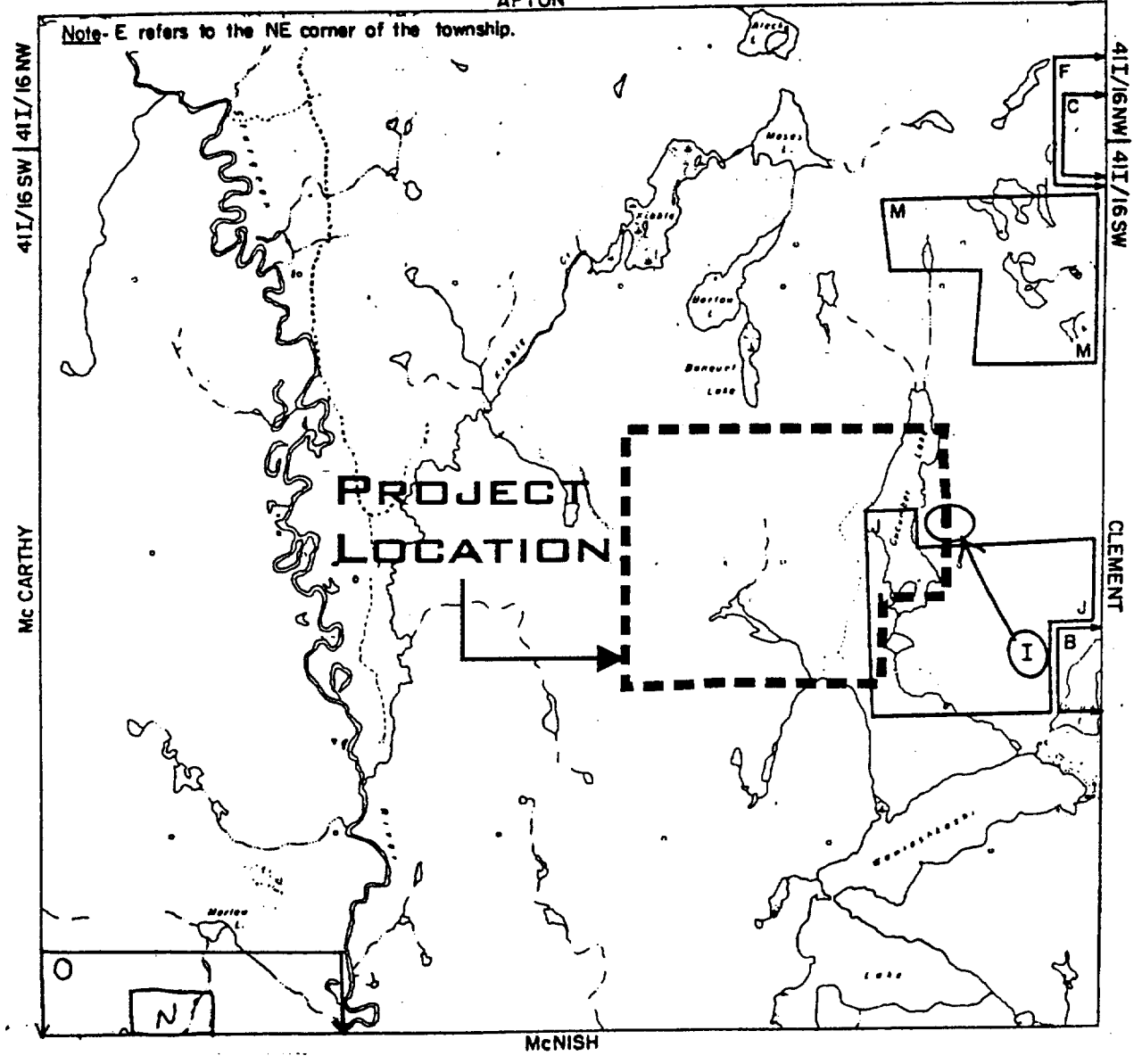
## **7.0 Recommendations & Conclusions**

With the completion of the geophysics and several anomalies being established, the first recommendation would be to cut the 100 Meter Lines in the grid to get a better detailed survey of Mag and VLF to track the anomalies. Although Zone A and B are associated with a Diabase Dike, Zone C,D,E and F should have follow up work. A winter grid could be put in on the lake to continue the data from the East to the West side of Cucumber Lake. An Induced Polarization survey over the old trenches on the East side of the lake as well as the anomalous area West of the Lake would be advised.



AFTON

Note- E refers to the NE corner of the township.

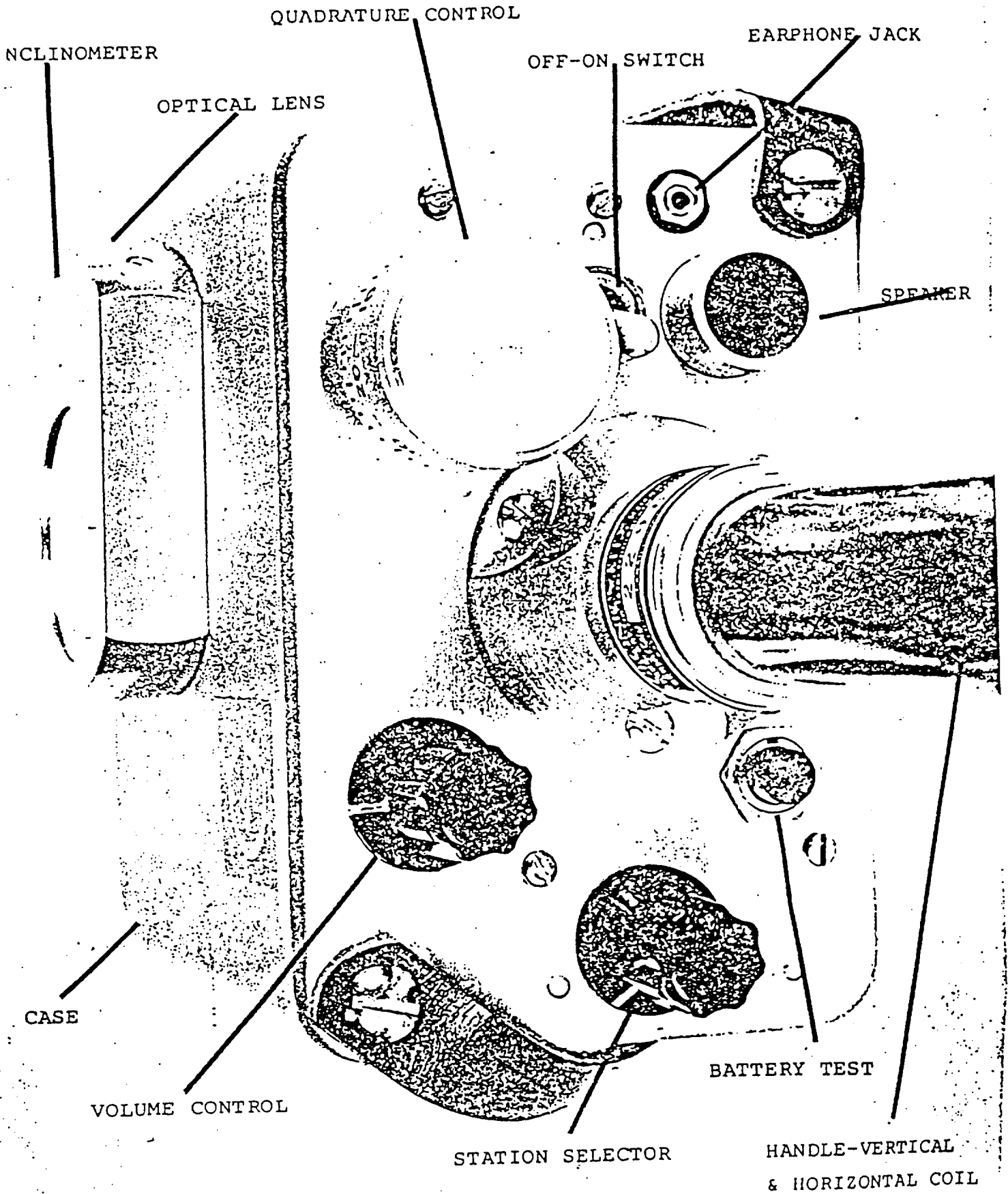


	<b>Ted Anderson</b> 1066 Perth Road, RR #6, Smith Falls, ON J7A 4S7 Tel. (613) 283-7837	
	<b>CUCUMBER LAKE PROPERTY</b> MacBeth Township Sudbury District, Ontario	
	<b>Assesment Index Map #2</b>	
	Scale: Not To Scale	Date: May 1999
	Drawn by: TA	

EM16 SPECIFICATIONS

MEASURED QUANTITY	In-phase and quad-phase components of vertical magnetic field as a percentage of horizontal primary field. (i.e. tangent of the tilt angle and ellipticity).
SENSITIVITY	In-phase : $\pm 150\%$ Quad-phase : $\pm 40\%$
RESOLUTION	$\pm 1\%$
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

FIG. 1 EM 16



NCLINOMETER

QUADRATURE CONTROL

EARPHONE JACK

OPTICAL LENS

OFF-ON SWITCH

SPEAKER

CASE

VOLUME CONTROL

BATTERY TEST

STATION SELECTOR

HANDLE-VERTICAL  
& HORIZONTAL COIL

### SELECTION OF THE STATION

The magnetic field lines from the station are at right angles to the direction of the station. Always select a station which gives the field approximately at right angles to the main strike of the ore bodies or geological structure of the area you are presently working on. In other words, the strike of geology should point to the transmitter. (See Figure 3). Of course,  $\pm 45^{\circ}$  variations are tolerable in practice.

Tuning of the EM16 to the proper transmitting station is done by means of plug-in units inside the receiver. The instrument takes two selector-units simultaneously. A switch is provided for quick switching between these two stations.

To change a plug-in unit, open the cover on top of the instrument, and insert the proper plug. (Figure 10) Close the cover and set the selector switch to the desired plug-in.

On the following pages is a variety of information on the most commonly used (i.e. reliable) VLF Transmitters including transmission frequency, geographical location and their scheduled maintenance periods.

NOTES ON VLF TRANSMISSIONS

	<u>STATION</u>	<u>LOCATION</u>	<u>FREQUENCY (kHz)</u>	<u>CO-ORDINATES</u>
N.AMERICA	NAA	Cutler, Maine	17.8	67W17-44N39
	NLK	Seattle, Washington	18.6	121W55-48N12
	NSS	Annapolis, Maryland	21.4	76W27-38N59
EUROPE	GBR	Rugby, England	16.0	01W11-52N22
	FUO	Bordeaux, France	15.1	00W48-44N65
	JXZ	Helgeland, Norway	16.4	13E01-66N25
	UMS	Moscow, U.S.S.R.	17.1	37E01-55N49
PACIFIC	NWC	North West Cape Australia	22.3	114E09-21S47
	NDT	Yosami, Japan	17.4	137E01-34N58
	NPM	Lualualei, Hawaii	23.4	158W09-21N25

November 9th, 1978.

VLF Transmitter Information

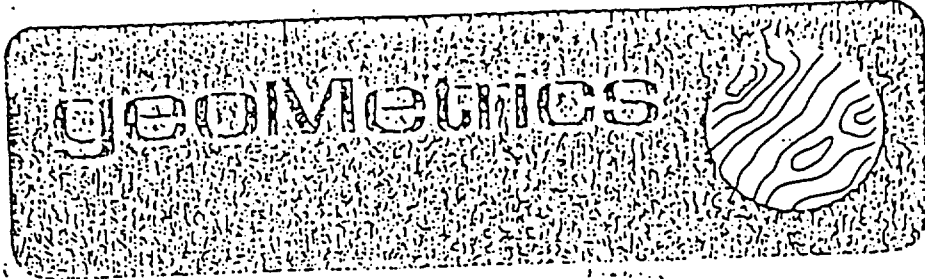
NAVY STATIONS OFF-AIR TIMES:

NAA Schedule off 1300 to 2300 UT daily 15 Nov. through 17 Nov.  
NDT Scheduled off twenty-four hours each day 28 Oct. and 29 Oct. (Local);  
ten hours each day Mon. through Sat. (Local) Beginning 14 Jan. 1979 at  
2300 UT and ending 6 Feb. at 0900 UT; Twenty-four hours each day Mon.  
through Sat. (Local) Beginning 6 Feb. at 2300 UT and ending 7 Mar. at  
0900 UT; Ten hours each day Mon. through Sat. (Local) Beginning 7 Mar.  
at 2300 UT and ending 13 Apr. at 0900 UT.  
NPM 19 Oct. 1800 to 2158 UT  
Scheduled off 1800 to 0200 UT Mon. through Fri. (Local) 15 Jan. 1979 to  
17 Mar.  
NSS Scheduled off 15 Oct. to 10 Nov. and 1200 to 2400 UT daily 21 Nov.  
through 24 Nov.  
NWC May be off intermittently until 24 Nov.

NORMAL MAINTENANCE PERIODS:

NAA Every Mon. 1400 to 1800 UT. If Holiday falls on Mon., maintenance will  
be performed on preceding Fri.  
NDT First Thu./Fri. of month 2200 to 0800 UT, other Thu./Fri. 2200 to  
0600 UT  
NLK Every Thu. 1600 to 2400 UT. During daylight saving time every Thu. 1500  
to 2300 UT.  
NPM Every Wed./Thu. 1800 to 0200 UT.  
NSS Every Tue. 1200 to 2000 UT.  
NWC Every Wed. 0000 to 0800 UT.

For further information the U.S. Naval Observatory, Time Service Division, Washington, D.C.,  
may be contacted at (202) 254-4548.



MODEL G 816  
PORTABLE PROTON MAGNETOMETER

MANUAL P/N 10017



Operating Manual  
Model G-816  
Portable Proton Magnetometer

2. Cycle the magnetometer a few times by depressing the READ button--releasing--and waiting for a reading each cycle.
3. Observe measurement readings. Each reading should repeat to  $\pm 1$  gamma. (A slow shift may occur over several minutes due to a diurnal change in the earth's field.)
4. Place the suspected article at the distance from the sensor expected during actual survey operation.
5. Cycle magnetometer several times and note the readings.
6. Remove the article and repeat steps 2 and 3 to check for diurnal shifts in the earth's field. If a diurnal shift is present, repeat entire test.
7. If the readings obtained in step 5 differ by more than  $\pm 1$  gamma (one count) from those obtained in steps 3 and 6, then the article is magnetic.

IF THE ARTICLE IS HIGHLY MAGNETIC, OR IF THE SENSOR IS INSIDE OR NEAR A BUILDING OR VEHICLE, THE PROTON PRE-SESSION SIGNAL WILL BE LOST, GIVING COMPLETELY ERRATIC READINGS AND LOSS OF  $\pm 1$  COUNT REPEATABILITY.



The magnetometer should not be operated in areas that are known sources of radio frequency energy, power line noise (transformers), in buildings or near highly magnetic objects. The sensor should always be placed on the staff above the ground, or in the "backpack". The sensor will NOT operate properly when placed directly on the ground.

### 1.3 SPECIFICATIONS

Sensitivity:	$\pm 1$ gamma throughout range
Range:	20,000 to 90,000 gammas (worldwide)
Tuning:	Multi-position switch with signal amplitude indicator light on display
Gradient Tolerance:	Exceeds 800 gammas/ft
Sampling Rate:	Manual pushbutton, one reading each 6 seconds.

VLF Survey  
 Profile Data in %  
 Line Interval 200m  
 Station Interval 25m  
 20.3 km of line

AZIMUTH TRUE  
 NORTH

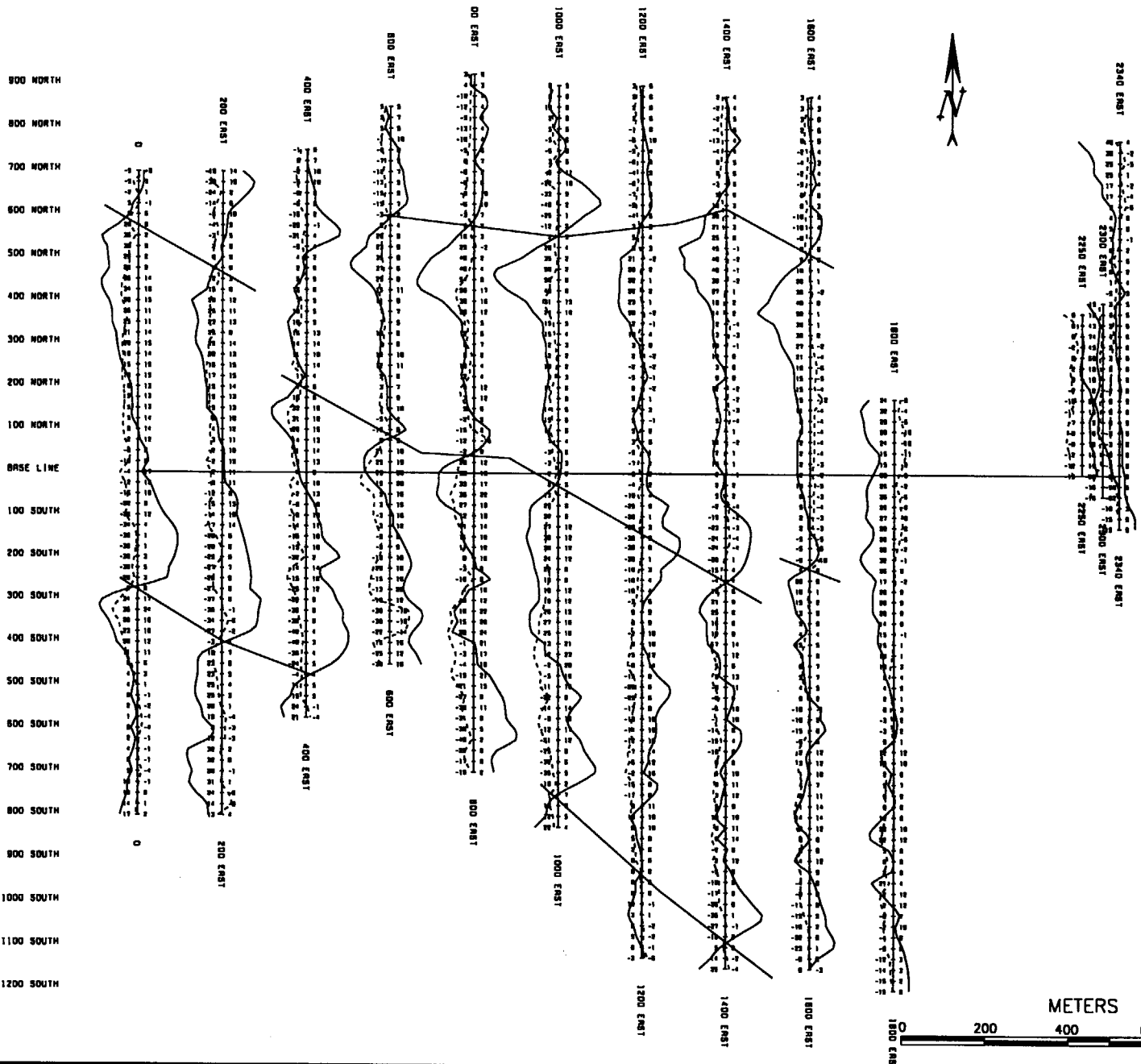
No.	Station/Profile	Date

GEONICS EM-18  
 READINGS IN %  
 OPERATOR  
 LANDERSON  
 STATION READ  
 NAA

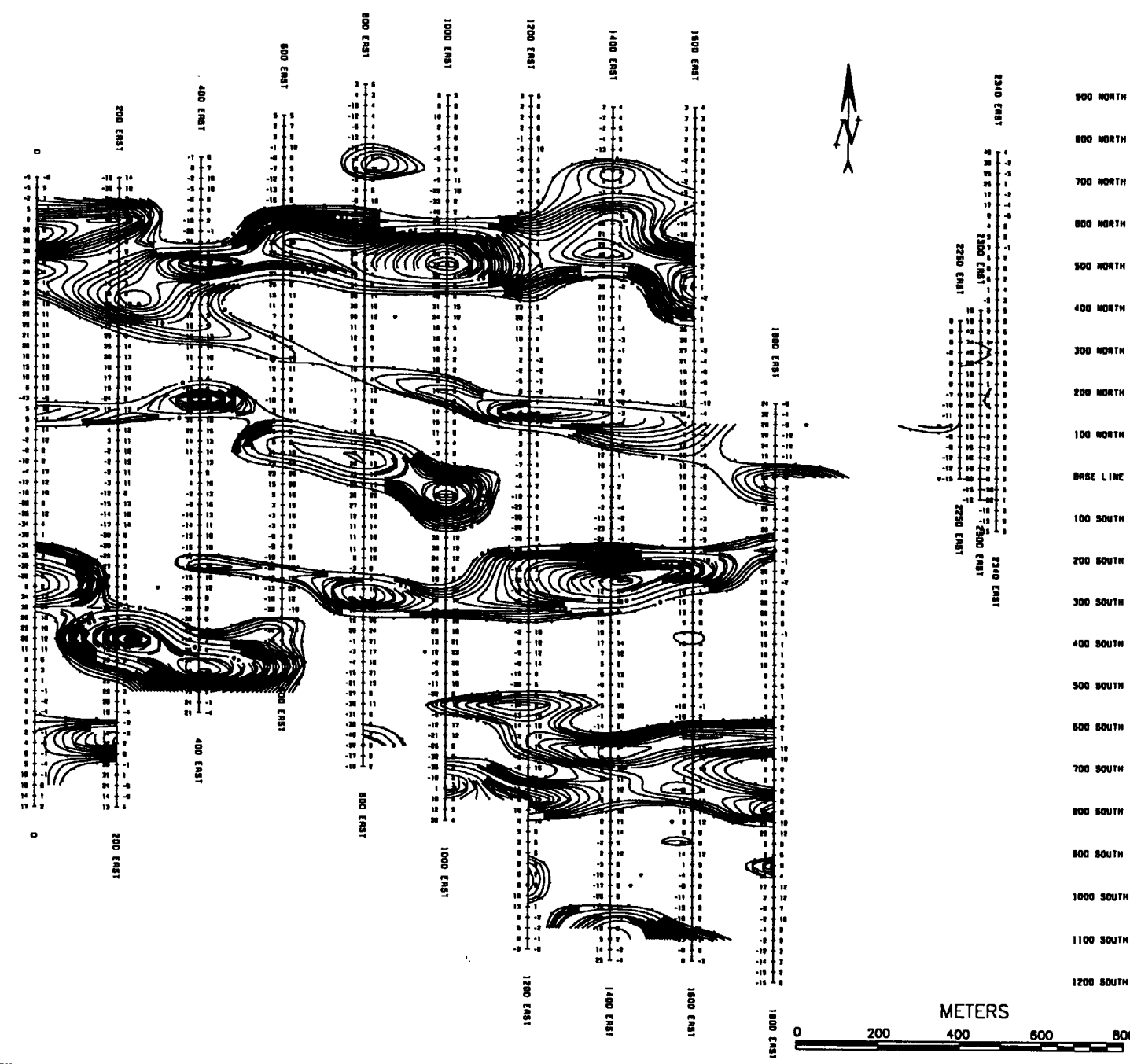
EM-VLF  
 PROFILES

*Cucumber Lake*  
*MacBeth Two*  
 1:200 1988

800 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  
 900 SOUTH  
 1000 SOUTH  
 1100 SOUTH  
 1200 SOUTH



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  
900 SOUTH  
1000 SOUTH  
1100 SOUTH  
1200 SOUTH



VLF Survey  
Fraser Filtered VLF  
Line Interval 200m  
Station Interval 25m  
20.3 km of line  
Contour Interval 2%  
Azimuth True North

No.	Reading/Phase	Dist.

GEONICS EM-16  
READINGS IN %  
OPERATOR  
LANDERSON  
STATION READ  
NAA

Fraser Filter  
EM-VLF

Cucumber Lake  
MacBeth Two  
1:200 200 2000

METERS  
0 200 400 600 800

Magnetometer Survey  
 Contour Interval 20  
 gammas  
 Line Interval 200m  
 Station Interval 25m  
 20.3 km of line

AZIMUTH TRUE  
 NORTH

No.	Station/Point	Mag.

DATUM SUBTRACT  
 57000 GAMMAS

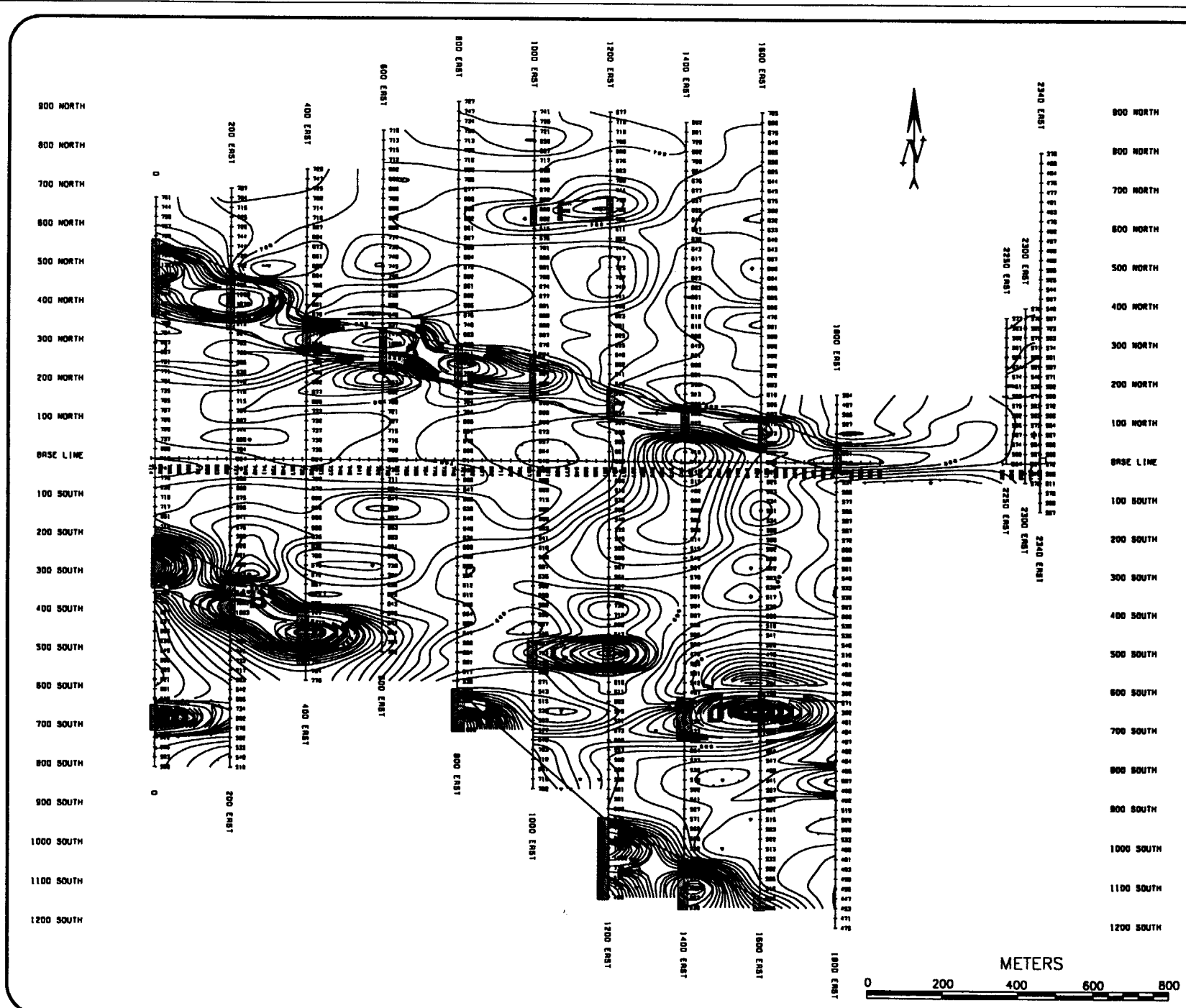
OPERATOR  
 T. ANDERSON

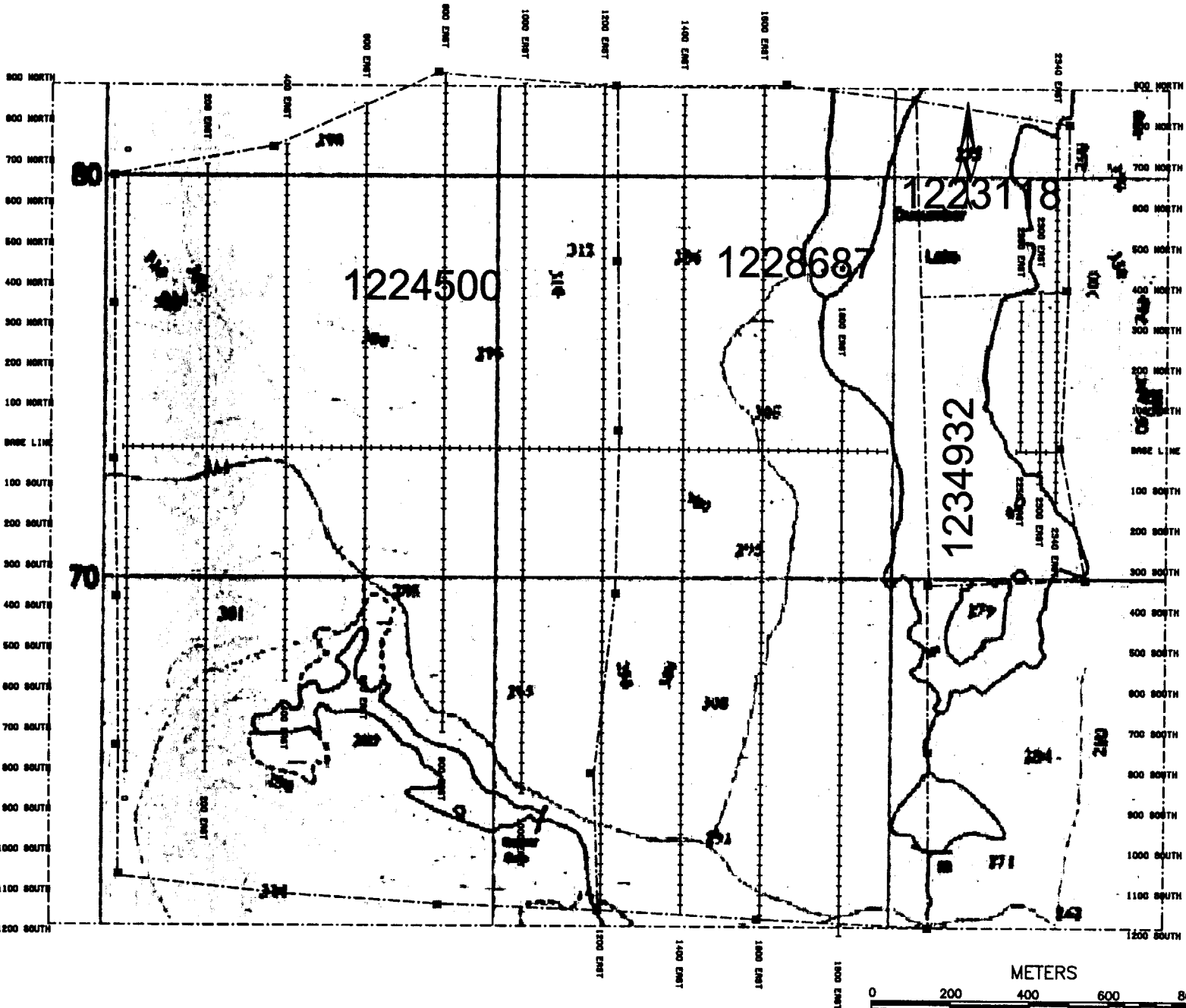
INSTRUMENT  
 GEOMETRICS  
 MODEL G-818

BASELINE  
 CORRECTED

ANOMALY  
 MAGNETOMETER  
 CONTOUR MAP

*Cucumber Lake*  
*MacBeth Twp.*  
 1:200





GRID MAP WITH CLAIMS AND TOPOGRAPHY  
 CLAIMS-122118, 122432, 122867,  
 AND 123493  
 LINES CUTTING AT 3 KM

No.	Area/Name	Area

**TED ANDERSON**  
 0807 8 20-04

*Crossmember Lake*  
**MacBeth Typ.**  
 1:200 JAN 2002 1:2000



# **Geological & Sampling Report Cucumber Lake Prospect**

TOWNSHIP OF MACBETH  
SUDBURY DISTRICT, ONTARIO

**Prepared for:**

Ted Anderson  
1066 Perth Road  
Smith Falls, ON J7A 4S7  
(613) 283-7837

**Prepared by:**

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1231 Hwy 17 West - P.O. Box 2288  
Sturgeon Falls, ON POH 2G0  
(705) 753-2387

## **PROJECT LOCATION**

The project area is located approximately 30 kilometers southwest of Temagami in the Township of Macbeth, Sudbury District & Mining Division, as shown on the appended Location Map, and Geology and Sampling Maps. The property size is 33 Units in size. This township can be found on 1:50,000 scale map 41 I/16. The center of the property area is at Latitude 46° 50', Longitude 80° 20'.

Access to the site is gained by driving North from Sturgeon Falls on Hwy 64 to Field and to River Valley. From here Hwy 805 is taken to the turnoff to Wawiashkashi Lake where a lumber road leads to Cucumber Lake

## **Property History**

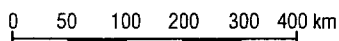
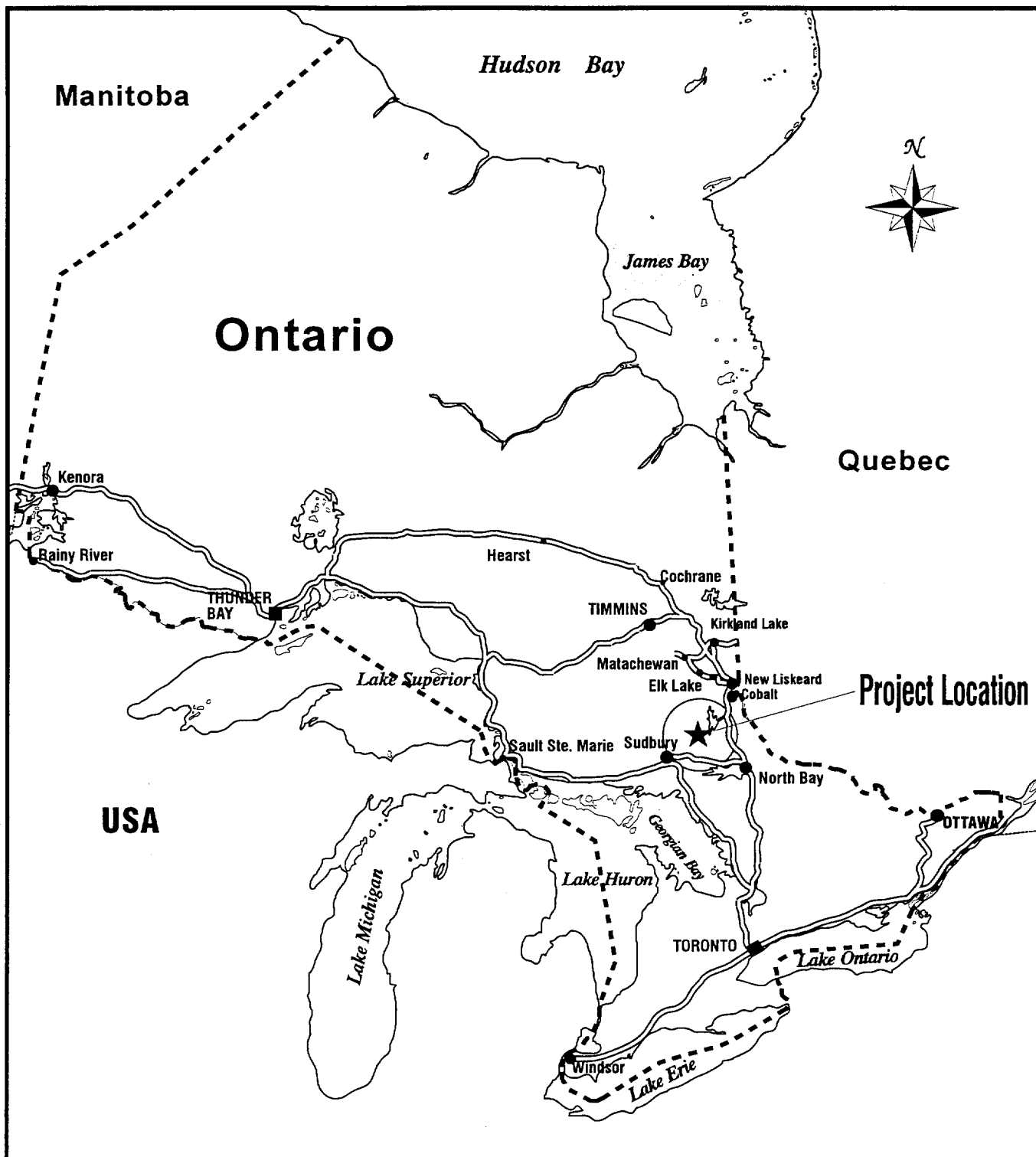
A quartz vein was discovered in 1959 on the eastern shore of Cucumber Lake. The vein was followed by trenching for a length of 64 m (210 feet). One diamond drill hole, 33.5 m (110 feet) was drilled in 1959 on the shore of Cucumber Lake, and encountered only porphyritic andesite. Five diamond-drill holes were also drilled in 1959 to explore the quartz vein and totaled 63.4 m (208 feet) in length. The vein is about 0.3 to 0.6 m (1 to 2 feet) thick, and strikes about W50°E and dips about 50 degrees to the northwest." This vein has been assayed at 1.76 oz/tom Au by OGS Geologists and has not been explored any further since the Temagami Land Caution. (>20 years). Drilling to date has been confined to the quartz vien and has only been shallow.

## **GEOLOGY**

### ***Regional***

All the bedrock exposed is of Precambrian age. The oldest rocks of the map area are a sequence of Early Precambrian metavolcanics and metasediments with locally interbedded chert (jasper) magnetite, and sulphide iron formation. These rocks are locally intruded by porphyries similar to the flows they intrude, and are intruded by diabase dikes. The Early Precambrian sequence is unconformably overlain by Middle Precambrian Huronian sedimentary rocks of the Mississagi and Gowganda Formations. Sheet-like Nipissing Intrusions intrude the Huronian and older rocks. The youngest bedrock in the map-area consists of Late Precambrian Nipissing diabase and olivine diabase dikes. Pleistocene and Recent gravel, sand, silt, and swamp deposits cover the area between exposures of Precambrian rock.

The Early Precambrian sequence is folded into a nearly vertical position. A bedding plane foliation occurs in the metasediments, and quartz veining, and brecciation occur in the iron formation. The Middle and Late Precambrian rocks have been block faulted and locally folded in close proximity to faults, but are otherwise quite undisturbed. With local exceptions near intrusions, shear, and fault zones, the rocks of the map-area have been regionally metamorphosed under lower greenschist facies conditions.



		<b>Ted Anderson</b> 1066 Perth Road, RR #6, Smith Falls, ON J7A 4S7 Tel. (613) 283-7837	
		<b>CUCUMBER LAKE PROPERTY</b> MacBeth Township Sudbury District, Ontario	
		<b>Key Map</b>	
Scale: see bar scale		Date: May 1999	
Drawn by: TA		Figure: 1	



## ***Local Geology***

The property is primarily underlain by intermediate Early Precambrian volcanic rocks which are generally massive or tuffaceous (photo 2). The volcanics gradually grade to metasediments which are commonly interbedded and gradually change to greywacke but more commonly dark argillaceous sediments on the south side of the claim group. Gowganda Formation metasediments (photo 1) are found in the northwestern portion of the claim group and occurs as massive, laminated or pebbly. A large medium grained, Nipissing diabase dike roughly 60 meters in width bisects the property from the northwest to the southeast. As shown on the OGS mapping for the area the Cucumber Lake Fault bisects Cucumber Lake. It is believed by the author that this faulting is the main structural factor for the quartz veining along the Lake. Reconnaissance mapping was carried out over 20 km of cut line at 200 m spacing and available outcrops were sampled for background geochemistry and assays where available. Outcrop on the property is sparse. Results indicate that the majority of outcropping is barren with the exception of the quartz vein showing on the east side of Cucumber Lake. (photo 3) This showing was sampled and has yielded encouraging results. (see sample descriptions and analysis below).

## **Sample Descriptions**

Sample #	Description	Au ppb	Ag ppm	Cu ppm
617001	Intermediate Volcanic, fine grained, massive.	<5	<0.2	49
617002	Intermediate volcanic tuff, fg	<5	<0.02	6
617004	Quartz veining, disseminated pyrite and pyrrhotite, from pit closest to shore	5160	1.4	403
617005	Highly silicified volcanic directly adjacent to quartz veining in pit 1 upto 3% sulphides (py & pyr)	4430	1.0	673
617006	Quartz veining, disseminated sulphides (<1%), from pit 2	1040	0.4	144
617007	Highly silicified andesite, green, mottled appearance. Up to 4% py	600	<0.2	139
617008	Intermediate massive volcanic fg, massive	<5	<0.2	33
617009	Dark siliceous argillaceous. sediment, trace pyrite	<5	<0.2	32
617010	Medium grained Nipissing diabase.	<5	<0.2	44
617011	Gowganda formation sediments, laminated bedding with large clasts	<5	<0.2	57

\*note Sample 617003 was not submitted for analysis

## Recommendations

The major occurrence is the quartz veining on Cucumber Lake. It is recommended that the shoreline of the lake be further investigated to see if any more of this mineralization is occurring along and possible under the Lake itself. Also due to the 200, line spacing of the grid was there is still a possibility that more mineralization will be found on the property with further prospecting.

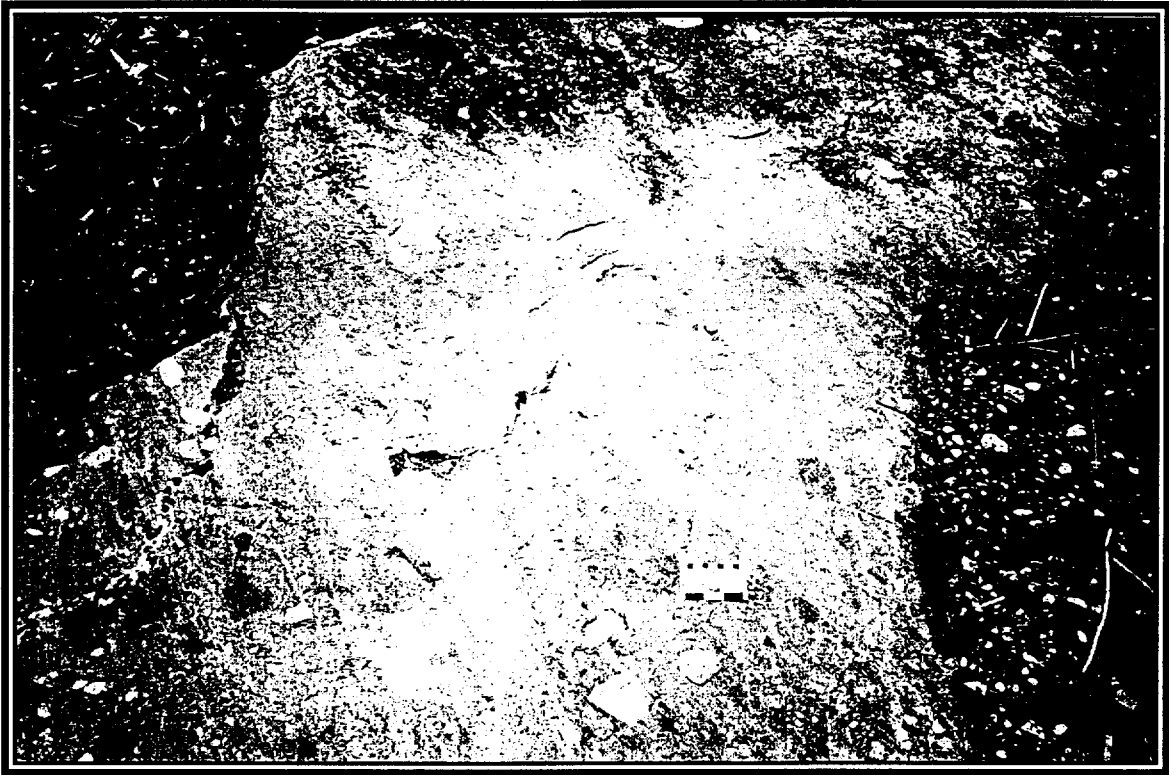


Photo 1 – Taken slightly north of Claim 1228687 photo shows Gowganda Formation with large 4 inch clasts

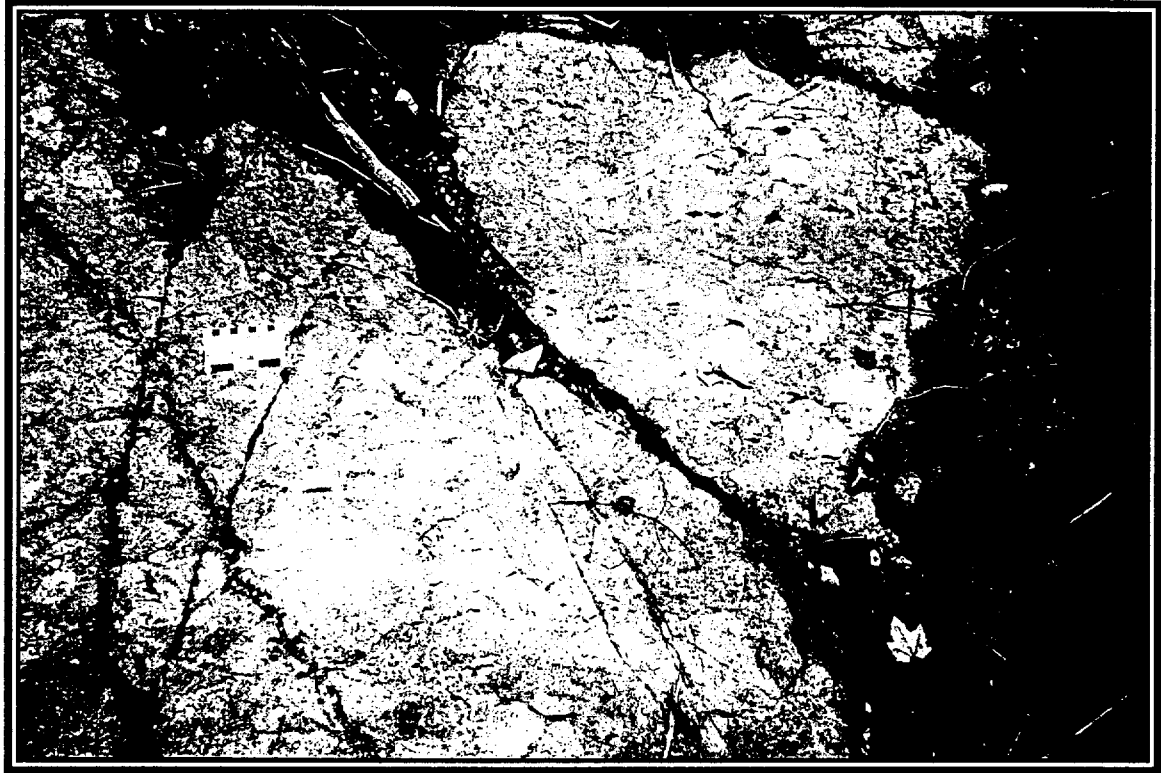
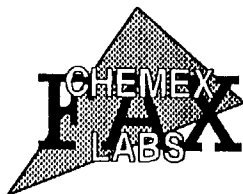


Photo 2 Intermediate volcanics showing large remnant pyroclastic breccia.



Photo 3. Cucumber Lake quartz vein showing – looking east, up to 1 meter wide quartz vein with up to 20% sulphides in some areas.



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 5175 Timberlea Blvd., Mississauga  
 Ontario, Canada L4W 2S3  
 PHONE: 905-824-2808 FAX: 905-824-6183

To: ANDERSON, TED

1086 PERTH RD., RR8  
 SMITH FALLS, ON  
 J7A 4S7

Page Number : 1-A  
 Total Pages : 1  
 Certificate Date: 24-DEC-99  
 Invoice No. : I9935954  
 P.O. Number : TJQ  
 Account : RRW

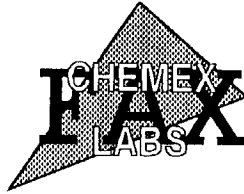
Project : CUMUMBEN  
 Comments: ATTN: TED ANDERSON CC: T.J. QUESNEL (mail)

## CERTIFICATE OF ANALYSIS A9935954

SAMPLE	PREP CODE		Au ppb	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %	La ppm	Mg %
	FA+AA																				
617001	205	226	< 5	< 0.2	1.59	28	< 10	30	< 0.5	< 2	1.17	< 0.5	11	277	49	2.35	< 10	< 10	0.06	20	1.56
617002	205	226	< 5	< 0.2	2.59	10	< 10	10	< 0.5	2	1.70	< 0.5	19	135	6	3.63	< 10	< 10	0.07	10	1.58
617003	--	--	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd
617004	205	226	5160	1.4	0.52	10	< 10	200	< 0.5	< 2	0.17	0.5	42	257	403	2.38	< 10	40	0.30	10	0.05
617005	205	226	4430	1.0	1.30	16	< 10	100	< 0.5	2	0.87	< 0.5	66	73	673	3.62	< 10	30	0.60	20	0.28
617006	205	226	1840	0.4	0.51	26	< 10	250	< 0.5	< 2	0.49	< 0.5	37	249	144	1.39	< 10	10	0.23	< 10	0.14
617007	205	226	680	< 0.2	1.36	4	< 10	270	< 0.5	< 2	1.87	< 0.5	13	149	139	1.92	< 10	< 10	0.46	10	0.44
617008	205	226	< 5	< 0.2	2.72	42	< 10	40	< 0.5	< 2	0.97	< 0.5	28	154	33	4.57	< 10	< 10	0.08	< 10	1.75
617009	205	226	< 5	< 0.2	3.91	28	< 10	260	< 0.5	< 2	0.44	< 0.5	21	195	32	4.95	10	< 10	1.20	< 10	2.25
617010	205	226	< 5	< 0.2	2.66	< 2	< 10	60	< 0.5	< 2	1.75	< 0.5	41	101	44	7.69	< 10	< 10	0.24	10	3.16
617011	205	226	< 5	< 0.2	3.29	8	< 10	100	< 0.5	< 2	0.95	< 0.5	24	311	57	4.47	10	< 10	0.47	10	2.35

01/20/99 10:06AM CHEMEX LABS VAX-FAX

PAGE 002



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 5175 Timberlea Blvd., Mississauga  
 Ontario, Canada L4W 2S3  
 PHONE: 905-624-2806 FAX: 905-624-6183

To: ANDERSON, TED  
 1086 PERTH RD., RR8  
 SMITH FALLS, ON  
 J7A 4S7

Page Number :1-B  
 Total Pages :1  
 Certificate Date: 24-DEC-99  
 Invoice No. :19935954  
 P.O. Number :TJQ  
 Account :RRW

Project : CUMUMBEN  
 Comments: ATTN: TED ANDERSON CC: T.J. QUESNEL (mail)

<b>CERTIFICATE OF ANALYSIS</b>	<b>A9935954</b>
--------------------------------	-----------------

SAMPLE	PREP CODE	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
617001	205 226	525	3	0.06	58	1740	< 2	< 0.01	< 2	4	40	0.11	< 10	< 10	45	< 10	44
617002	205 226	595	< 1	0.05	53	830	< 2	< 0.01	< 2	5	54	0.28	< 10	< 10	70	< 10	70
617003	-- --	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed
617004	205 226	50	6	< 0.01	23	80	24	1.48	< 2	< 1	7	0.01	< 10	< 10	10	< 10	104
617005	205 226	190	1	0.01	25	250	14	1.66	2	3	22	0.36	< 10	< 10	39	< 10	46
617006	205 226	115	3	< 0.01	29	170	6	0.58	< 2	1	10	0.03	< 10	< 10	12	< 10	34
617007	205 226	265	1	0.04	23	1140	< 2	0.11	2	4	76	0.23	< 10	< 10	39	< 10	24
617008	205 226	885	< 1	0.03	48	350	< 2	0.15	< 2	6	29	0.30	< 10	< 10	90	< 10	72
617009	205 226	445	< 1	0.07	73	880	2	0.07	4	10	42	0.14	< 10	< 10	73	< 10	98
617010	205 226	940	< 1	0.43	79	2010	2	0.05	4	3	138	0.17	< 10	< 10	97	< 10	94
617011	205 226	645	< 1	0.04	81	570	4	0.09	< 2	7	105	0.24	< 10	< 10	75	< 10	82

01/20/99 10:07AM CHEMEX LABS VAX-FAX

PAGE 003



41116SW2012 2.20704 MACBETH 900

Authority of subsections 65(2) and 66(3) of the Mining Act. Under section 8 of the Act, the Mining Recorder is authorized to review the assessment work and correspond with the mining land holder. Mining Recorder, Ministry of Northern Development and Mines, 6th Floor,

**Instructions:** - For work performed on Crown Lands before recording a claim, use form 0240.  
- Please type or print in ink.

1 2.20704

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

Name <u>Steve Anderson</u>	Client Number <u>102430</u>
Address <u>170 Second Ave</u>	Telephone Number <u>705-360-7722</u>
<u>Timmins, Ont P4N-1G1</u>	Fax Number <u>705-360-7733</u>
Name	Client Number
Address	Telephone Number
	Fax Number

**2. Type of work performed: Check (✓) and report on only ONE of the following groups for this declaration.**

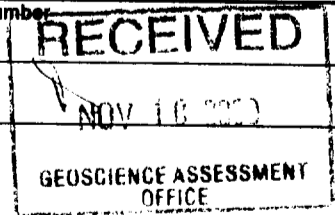
Geotechnical: prospecting, surveys, assays and work under section 18 (regs)       Physical: drilling, stripping, trenching and associated assays       Rehabilitation

Work Type	Office Use
	Commodity
	Total \$ Value of Work Claimed <u>3900</u>
Dates Work Performed From <u>15</u> <u>07</u> <u>99</u> To <u>10</u> <u>10</u> <u>99</u>	NTS Reference
Global Positioning System Data (if available)	Mining Division <u>Sudbury</u>
Township/Area <u>Macbeth Twp</u>	Resident Geologist District <u>Sudbury</u>
M of G-Plan Number	

Please remember to: - obtain a work permit from the Ministry of Natural Resources as required;  
- provide proper notice to surface rights holders before starting work;  
- complete and attach a Statement of Costs, form 0212;  
- provide a map showing contiguous mining lands that are linked for assigning work;  
- include two copies of your technical report.

**3. Person or companies who prepared the technical report (Attach a list if necessary)**

Name <u>Ied Anderson</u>	Telephone Number <u>613-283-7837</u>
Address <u>1066, Perth Road, Smiths Falls, Ont J7A-1S7</u>	Fax Number
Name <u>T.J. Oveshal</u>	Telephone Number <u>705-753-2387</u>
Address <u>Box 228, Sturgeon Falls, Ont P0H-2G0</u>	Fax Number
Name	Telephone Number
Address	Fax Number



**4. Certification by Recorded Holder or Agent**

I, Steve Anderson (Print Name), do hereby certify that I have personal knowledge of the facts set forth in this Declaration of Assessment Work having caused the work to be performed or witnessed the same during or after its completion and, to the best of my knowledge, the annexed report is true.

Signature of Recorded Holder or Agent <u>[Signature]</u>	Date <u>Nov 7/00</u>
Agent's Address	Telephone Number
	Fax Number

#2803



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

W0070.00221

220704

Mining Claim Number. Or if work was done on other eligible mining land, show in this column the location number indicated on the claim map.	Number of Claim Units. For other mining land, list hectares.	Value of work performed on this claim or other mining land.	Value of work applied to this claim.	Value of work assigned to other mining claims.	Bank. Value of work to be distributed at a future date.
eg TB 7827	16 ha	\$26,825	N/A	\$24,000	\$2,825
eg 1234567	12	0	\$24,000	0	
eg 1234568	2	\$8,892	\$4,000	0	\$4,892
1 1223118	1	3900	2000		1900
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
<b>Column Totals</b>		3900	2000		1900

I, Steve Anderson, do hereby certify that the above work credits are eligible under subsection 7. (1) of the Assessment Work Regulation 6/96 for assignment to contiguous claims or for application to the claim where the work was done as stated in this declaration.

Signature of Recorded Holder or Agent Authorized in Writing: [Signature] Date: Nov 7/00

6. Instructions for cutting back credits that are not approved.

Some of the credits claimed in this declaration may be cut back. Please check (✓) in the boxes below to show how you wish to prioritize the deletion of credits:

1. Credits are to be cut back from the Bank first, followed by option 2 or 3 or 4 as indicated.

2. Credits are to be cut back starting with the claims listed last, working backwards; or

3. Credits are to be cut back equally over all claims listed in this declaration; or

4. Credits are to be cut back as prioritized on the attached appendix or as follows (describe):

RECEIVED  
NOV 10 2000  
GEOSCIENCE ASSESSMENT  
OFFICE

Note: If you have not indicated how your credits are to be deleted, credits will be cut back from the Bank first, followed by option number 2 if necessary.

**For Office Use Only**

Received Stamp: \_\_\_\_\_

Deemed-Approved Date: \_\_\_\_\_

Date Approved: \_\_\_\_\_

Total Value of Credit Approved: \_\_\_\_\_

Approved for Recording by Mining Recorder (Signature): \_\_\_\_\_

**Statement of Costs for Assessment Credit**

Transaction Number (office use)  
**W0070.00221**

Personal information collected on this form is obtained under the authority of subsection 6 (1) of the Assessment Work Regulation 6/98. Under section 8 of the Mining Act, this information is a public record. This information will be used to review the assessment work and correspond with the mining land holder. Questions about this collection should be directed to a Provincial Mining Recorder, Ministry of Northern Development and Mines, 3rd Floor, 933 Ramsey Lake Road, Sudbury, Ontario, P3E 6B5.

Work Type	Units of work Depending on the type of work, list the number of hours/days worked, metres of drilling, kilometres of grid line, number of samples, etc.	Cost Per Unit of work	Total Cost
Magnesium + VLF	1.5 Km		\$800
Line Cutting	1.5 Km		\$500
Geological Mapping			\$800
Assay			\$300
Geophysics Report			\$800
Geology Report			\$800
<b>Associated Costs (e.g. supplies, mobilization and demobilization).</b>			
<b>Transportation Costs</b>			
<b>Food and Lodging Costs</b>			
<b>Total Value of Assessment Work</b>			<b>3900</b>

**Calculations of Filing Discounts:**

Work filed within two years of performance is claimed at 100% of the above Total Value of Assessment Work. If work is filed after two years and up to five years after performance, it can only be claimed at 50% of the Total Value of Assessment Work. If this situation applies to your claims, use the calculation below:

TOTAL VALUE OF ASSESSMENT WORK  $\times 0.50 =$  Total \$ value of worked claimed.

Work older than 5 years is not eligible for credit. The recorded holder may be required to verify expenditures claimed in this statement of costs within 45 days of a request for verification and/or correction/clarification. If verification and/or correction/clarification is not made, the Minister may reject all or part of the assessment work submitted.

**Verification verifying costs:**

Steve Anderson (please print full name), do hereby certify, that the amounts shown are as accurate as may reasonably be determined and the costs were incurred while conducting assessment work on the lands indicated on the accompanying Statement of Work form as Recorded Holder I am authorized to make this certification.  
(recorded holder, agent, or state company position with signing authority)

Signature [Signature]

Date Nov 7/00

**RECEIVED**

NOV 10 2000

GEOSCIENCE ASSESSMENT OFFICE

March 14, 2001

STEVEN DEAN ANDERSON  
780 MCCLINTON DRIVE  
TIMMINS, ONTARIO  
P4N-4P8

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

Telephone: (888) 415-9845  
Fax: (877) 670-1555

Dear Sir or Madam:

**Submission Number: 2.20704**

**Status**

**Subject: Transaction Number(s):** W0070.00221 Approval After Notice

---

We have reviewed your Assessment Work submission with the above noted Transaction Number(s). The attached summary page(s) indicate the results of the review. **WE RECOMMEND YOU READ THIS SUMMARY FOR THE DETAILS PERTAINING TO YOUR ASSESSMENT WORK.**

If the status for a transaction is a 45 Day Notice, the summary will outline the reasons for the notice, and any steps you can take to remedy deficiencies. The 90-day deemed approval provision, subsection 6(7) of the Assessment Work Regulation, will no longer be in effect for assessment work which has received a 45 Day Notice. Allowable changes to your credit distribution can be made by contacting the Geoscience Assessment Office within this 45 Day period, otherwise assessment credit will be cut back and distributed as outlined in Section #6 of the Declaration of Assessment work form.

Please note any revisions must be submitted in **DUPLICATE** to the Geoscience Assessment Office, by the response date on the summary.

If you have any questions regarding this correspondence, please contact **JIM MCAULEY** by e-mail at [james.mcauley@ndm.gov.on.ca](mailto:james.mcauley@ndm.gov.on.ca) or by telephone at (705) 670-5858.

Yours sincerely,



ORIGINAL SIGNED BY  
Lucille Jerome  
Acting Supervisor, Geoscience Assessment Office  
Mining Lands Section

# Work Report Assessment Results

---

**Submission Number:** 2.20704

**Date Correspondence Sent:** March 14, 2001

**Assessor:** JIM MCAULEY

---

<b>Transaction Number</b>	<b>First Claim Number</b>	<b>Township(s) / Area(s)</b>	<b>Status</b>	<b>Approval Date</b>
W0070.00221	1223118	MACBETH	Approval After Notice	March 09, 2001

**Section:**

14 Geophysical MAG

14 Geophysical VLF

12 Geological GEOL

The 45 days outlined in the Notice dated January 23, 2001 have passed. The explanation of the breakdown of the work submission expenditures has been reviewed.

Assessment work credit has been approved as outlined on the attached Distribution of Assessment Work Credit sheet.

The assessment credit is being reduced by \$881. The TOTAL VALUE of assessment credit that will be allowed, based on the information provided in this submission, is \$3,019.

At the discretion of the Ministry, the assessment work performed on the mining lands noted in this work report may be subject to inspection and/or investigation at any time.

**Correspondence to:**

Resident Geologist  
Sudbury, ON

**Recorded Holder(s) and/or Agent(s):**

STEVEN DEAN ANDERSON  
TIMMINS, ONTARIO

Assessment Files Library  
Sudbury, ON

---

# Distribution of Assessment Work Credit

The following credit distribution reflects the value of assessment work performed on the mining land(s).

**Date:** March 14, 2001

**Submission Number:** 2.20704

---

**Transaction Number:** W0070.00221

<u>Claim Number</u>	<u>Value Of Work Performed</u>
1223118	3,019.00
<b>Total: \$</b>	<b>3,019.00</b>

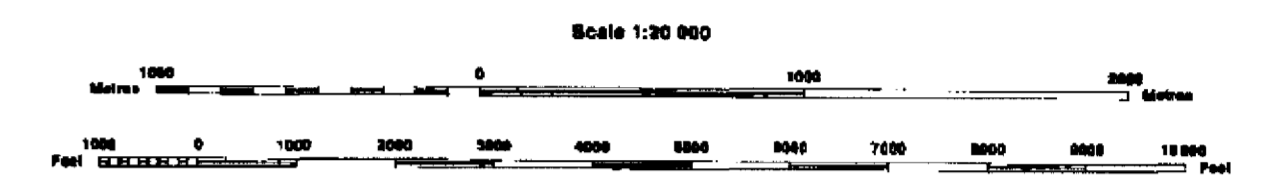
---

**INDEX TO LAND DISPOSITION**

PLAN  
G-2908  
TOWNSHIP

**MACBETH**

M.N.R. ADMINISTRATIVE DISTRICT  
**NORTH BAY**  
MINING DIVISION  
**SUDBURY**  
LAND TITLES/REGISTRY DIVISION  
**SUDBURY**



Contour Interval 10 Metres

**AREAS WITHDRAWN FROM DISPOSITION**

Description	Order No.	Date	Disposition	File
1236437	1236437	09/01/98	M+S	19980
1236438	1236438	09/01/98	M+S	19980
1236441	1236441	09/01/98	M+S	19980

Part of order W 8188 RESPONDED BY order  
O.M. 0790 PER effective April 8, 1999 at 7:00 AM EAST.

SEC. 35 W - LL - P173/99 ONT MAY 12/99 M+S

**SYMBOLS**

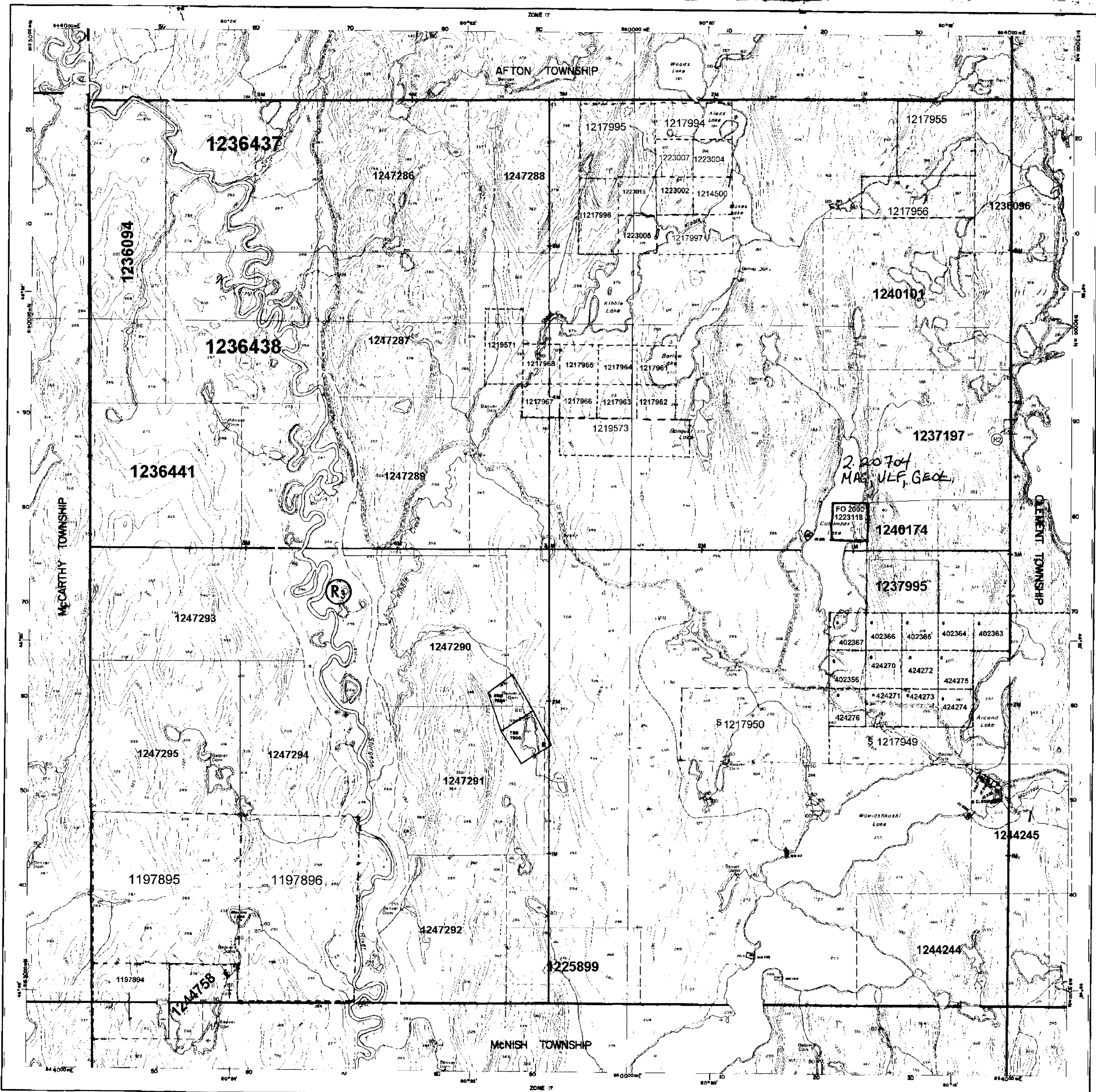
- Boundary
- Township, Meridian, Baseline
- Road allowance; surveyed
- shoreline
- Lot/Concession; surveyed
- unsurveyed
- Parcel; surveyed
- unsurveyed
- Right-of-way, road
- railway
- utility
- Reservation
- Cliff, P.L. Pile
- Contour
- Interpolated
- Approximate
- Depression
- Control point (horizontal)
- Flooded land
- Mine load frame
- Pipeline (above ground)
- Railway; single track
- double track
- abandoned
- Road; highway, county, township
- access
- trail, bush
- Shoreline (original)
- Transmission line
- Wooded area

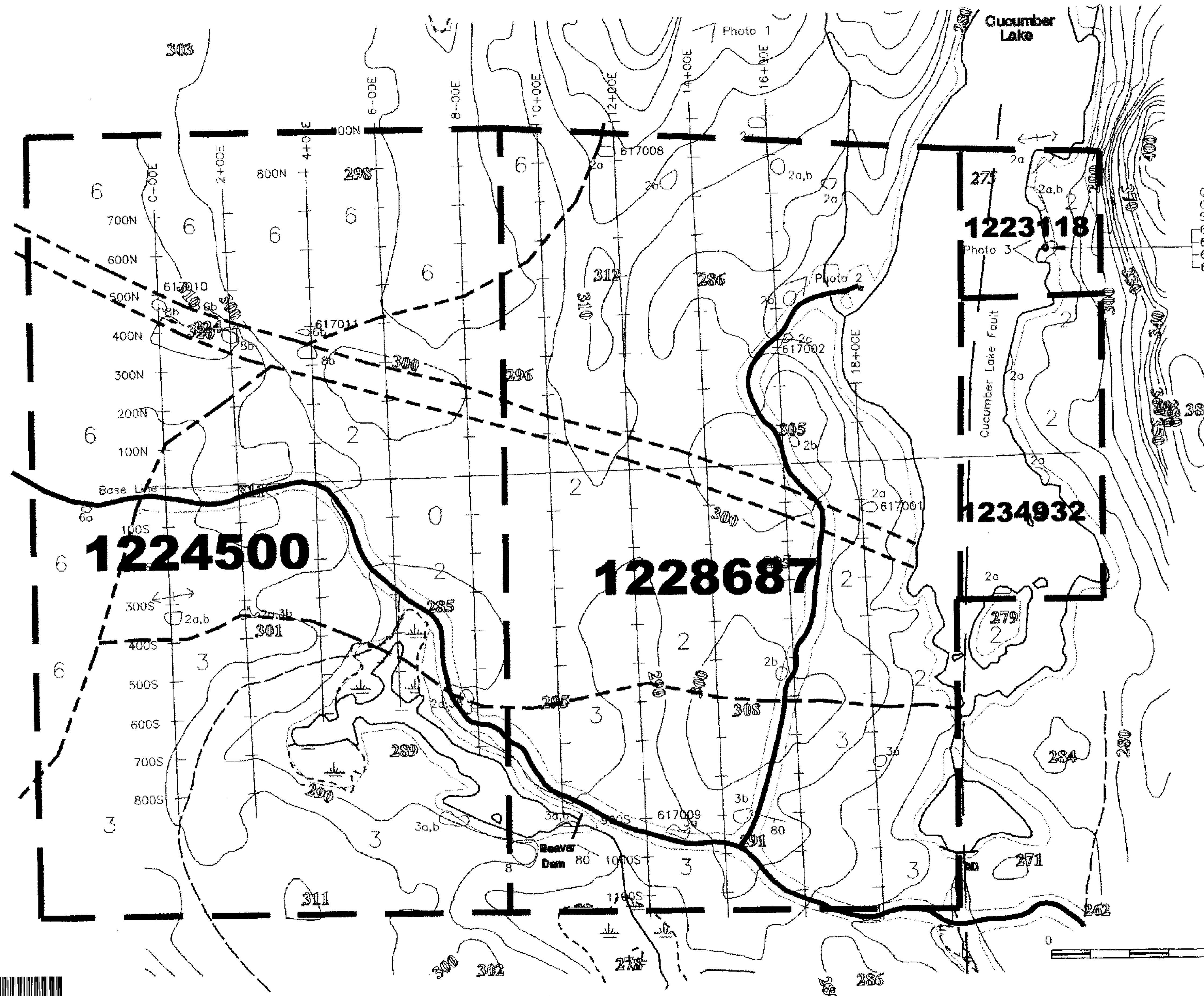
**DISPOSITION OF CROWN LANDS**

- Patent
- Surface & Mining Rights
- Surface Rights Only
- Mining Rights Only
- Lease
- Surface & Mining Rights
- Surface Rights Only
- Mining Rights Only
- Licence of Occupation
- Order-in-Council
- Cancelled
- Reservation
- Sand & Gravel
- LAND USE PERMIT

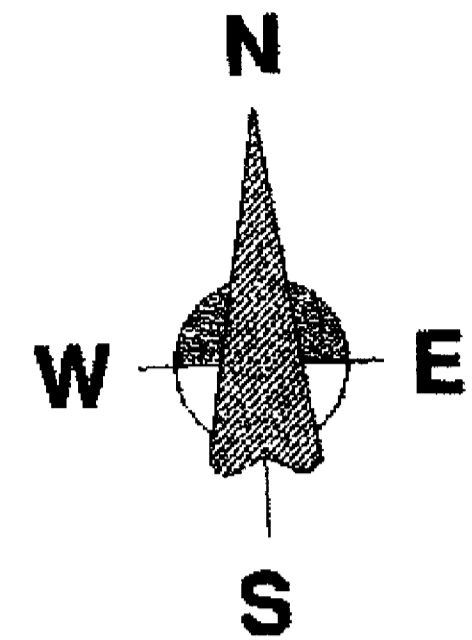
JUNE 1/98 - RE-OPEN T87864 O.M. MAY 13/98 PG. 147E

THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES, AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOPMENT AND MINES, FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREOF.





Quartz Vein Showing  
 Coord 552348E 5187879N  
 Samples  
 617004  
 617005  
 617006  
 617007

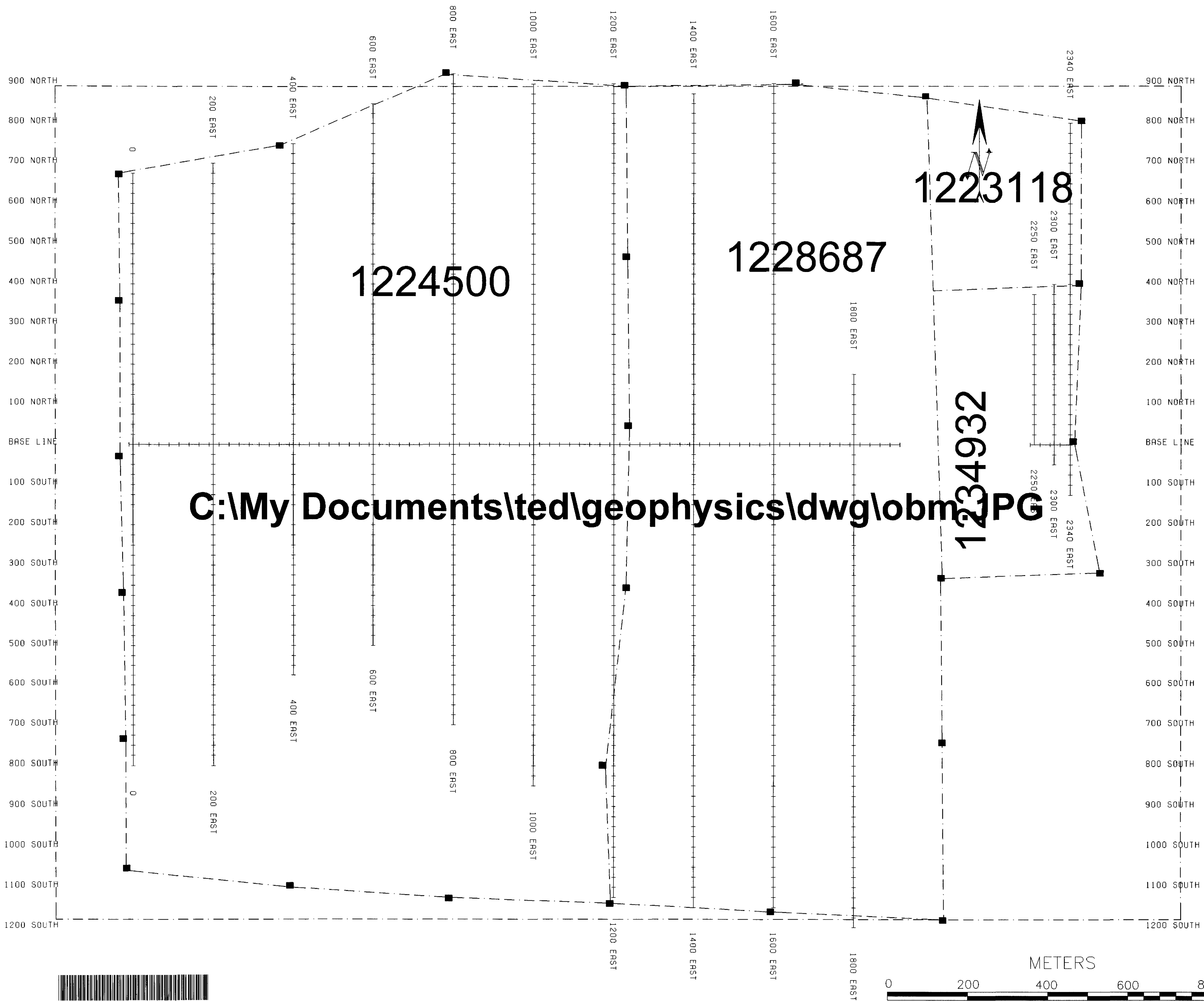


**Legend**

- 8a - Late Precambrian Mafic Intrusive  
Nipissing Diabase
- 6a - Huronian Supergroup, Cobalt Group  
Gowganda Formation
- 6a Massive Mudstone
- 6b Laminated
- 3 - Early Precambrian Metasediments
- 3a Greywacke
- 3b Argillaceous Metasediments
- 2 - Early Precambrian Intermediate Volcanics
- 2a Intermediate feldspar porphyry
- 2b Intermediate pyroclastic rocks

Project Name	
<b>Cucumber Lake Prospect</b>	
Macbeth Twp. District of Sudbury	
Ted Anderson 1066 Perth Road Smith Falls, ON J7A 1S7	
Scale 1:5,000	
Drawing Status	
Final	
Drawing Title	
<b>Geology &amp; Sampling Map</b>	
Drawing No.	Map and Notes Compiled by: T.J. Quesnel B.Sc. FGAC 1231 Hwy 17 West P.O. Box 2288 Sturgeon Falls, ON P0H 2C0 (705) 753-2327
1 of 1	





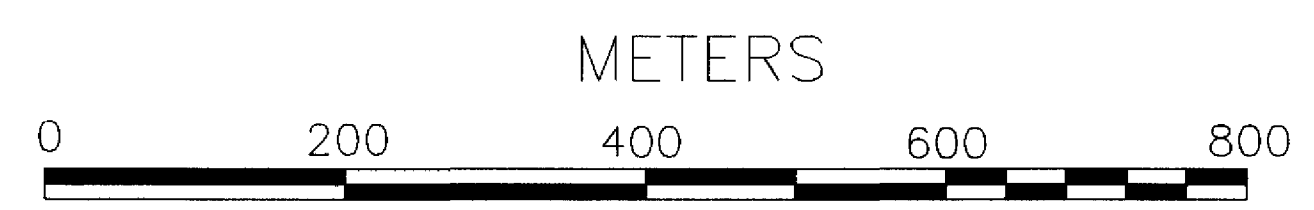
General Notes  
 GRID MAP WITH CLAIMS AND  
 TOPOGRAPHY  
 CLAIMS-1223118, 1234932, 1228687,  
 AND 1224500.  
 LINECUTTING 20.3 KM  
 AZIMUTH TRUE NORTH

No.	Revision/Issue	Date

**TED  
 ANDERSON**  
 OPAP # 99-174

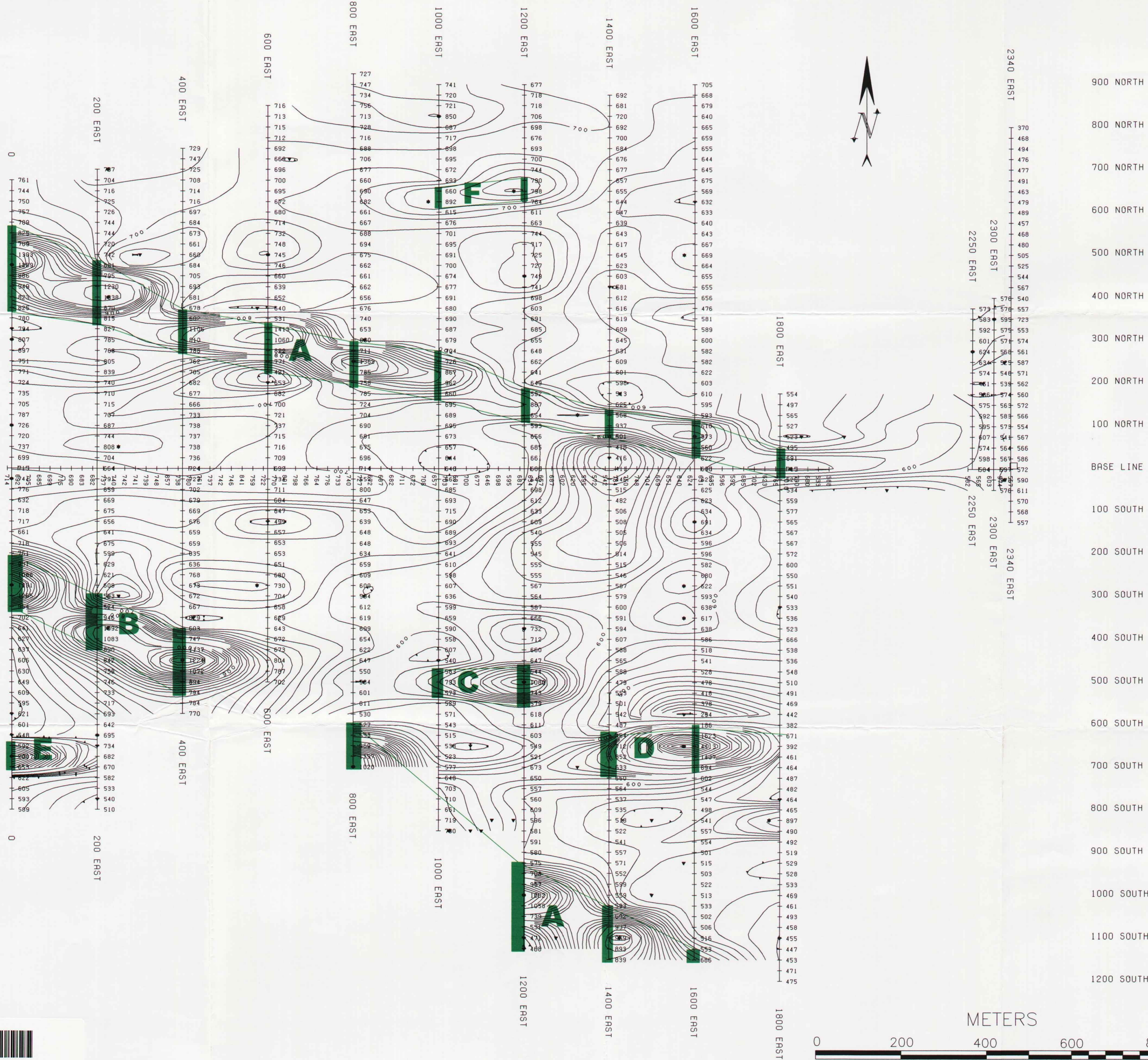
**GRID,  
 TOPOGRAPHY  
 and CLAIM MAP**

Map Site  
*Cucumber Lake*  
 Location  
*MacBeth Twp.*  
 Scale: 1:50 Date: JAN, 2000 Drawn by: T. Anderson





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  
900 SOUTH  
1000 SOUTH  
1100 SOUTH  
1200 SOUTH



General Notes  
Magnetometer Survey  
Contour Interval 20  
gammas  
Line Interval 200m  
Station Interval 25m  
20.3 km of line  
  
AZIMUTH TRUE  
NORTH

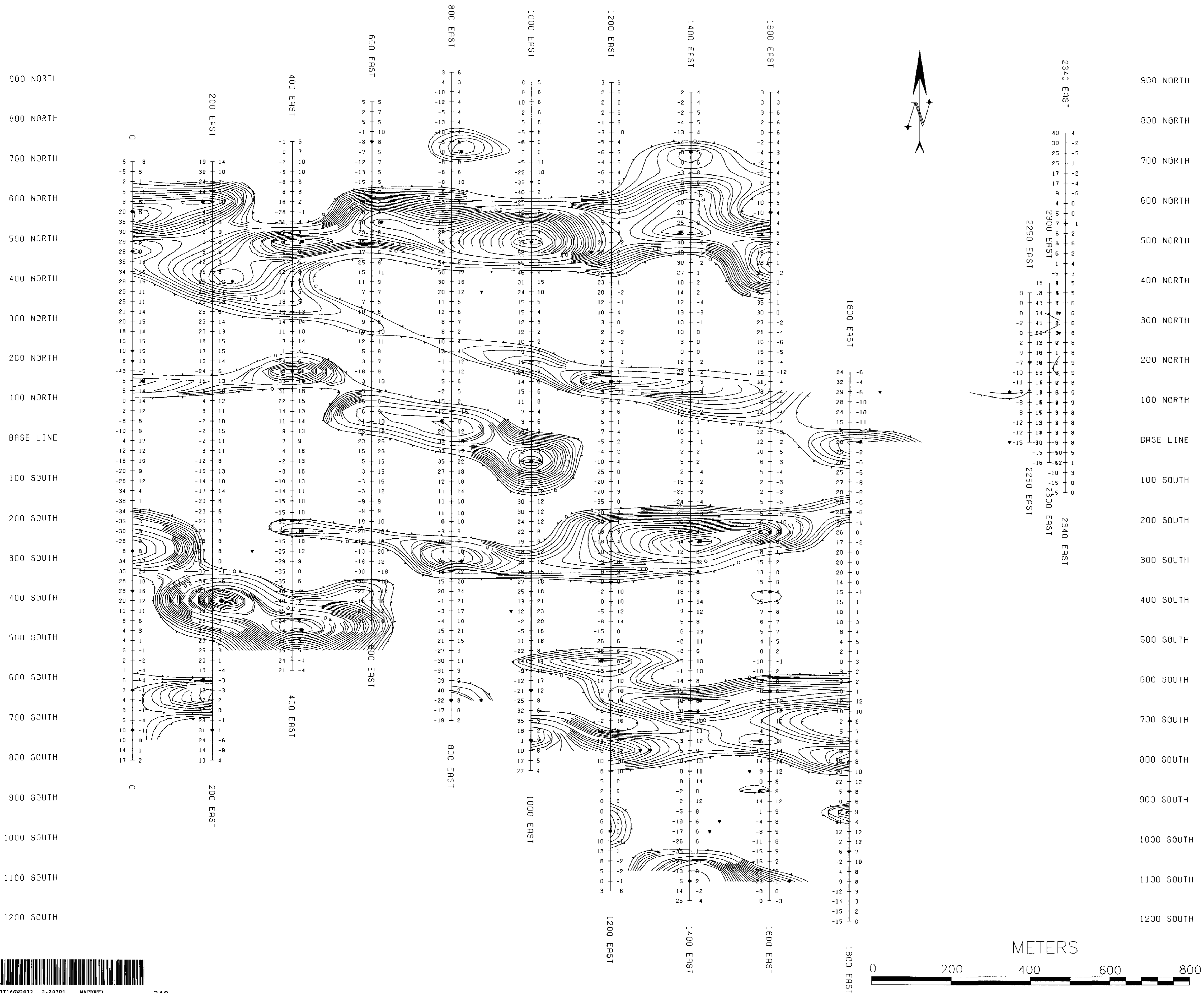
No.	Revision/Issue	Date

DATUMN SUBTRACT  
57000 GAMMAS  
  
OPERATOR  
T. ANDERSON  
INSTRUMENT  
GEOMETRICS  
MODEL G-816  
BASELINE  
CORRECTED

ANNOMALLY         
**MAGNETOMETER  
CONTOUR MAP**

Map Site  
*Cucumber Lake*  
Location  
*MacBeth Twp.*  
Scale: 1:50 Date: JAN. 2000 Drawn By: T. Anderson





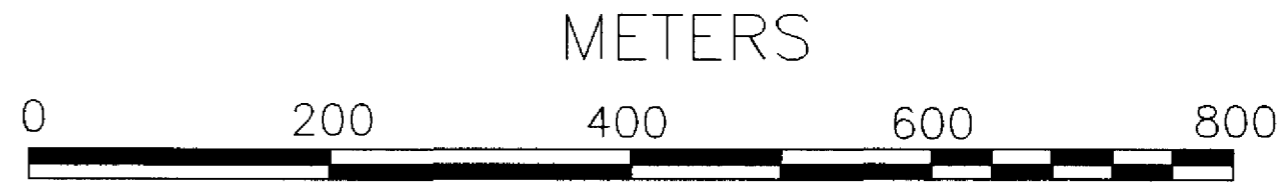
General Notes  
**VLF Survey**  
 Frazer Filtered VLF  
 Line Interval 200m  
 Station Interval 25m  
 20.3 km of line  
 Contour Interval 2%  
 Azimuth True North

No.	Revision/Issue	Date

GEONICS EM-16  
 READINGS IN %  
 OPERATOR  
 LANDERSON  
 STATION READ  
 NAA

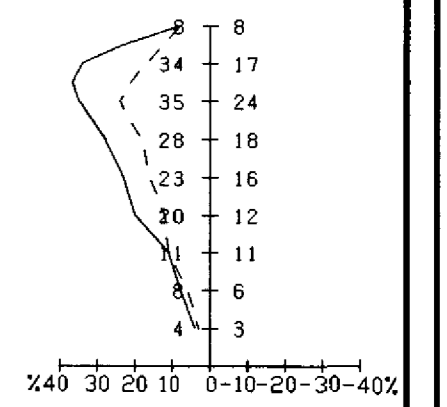
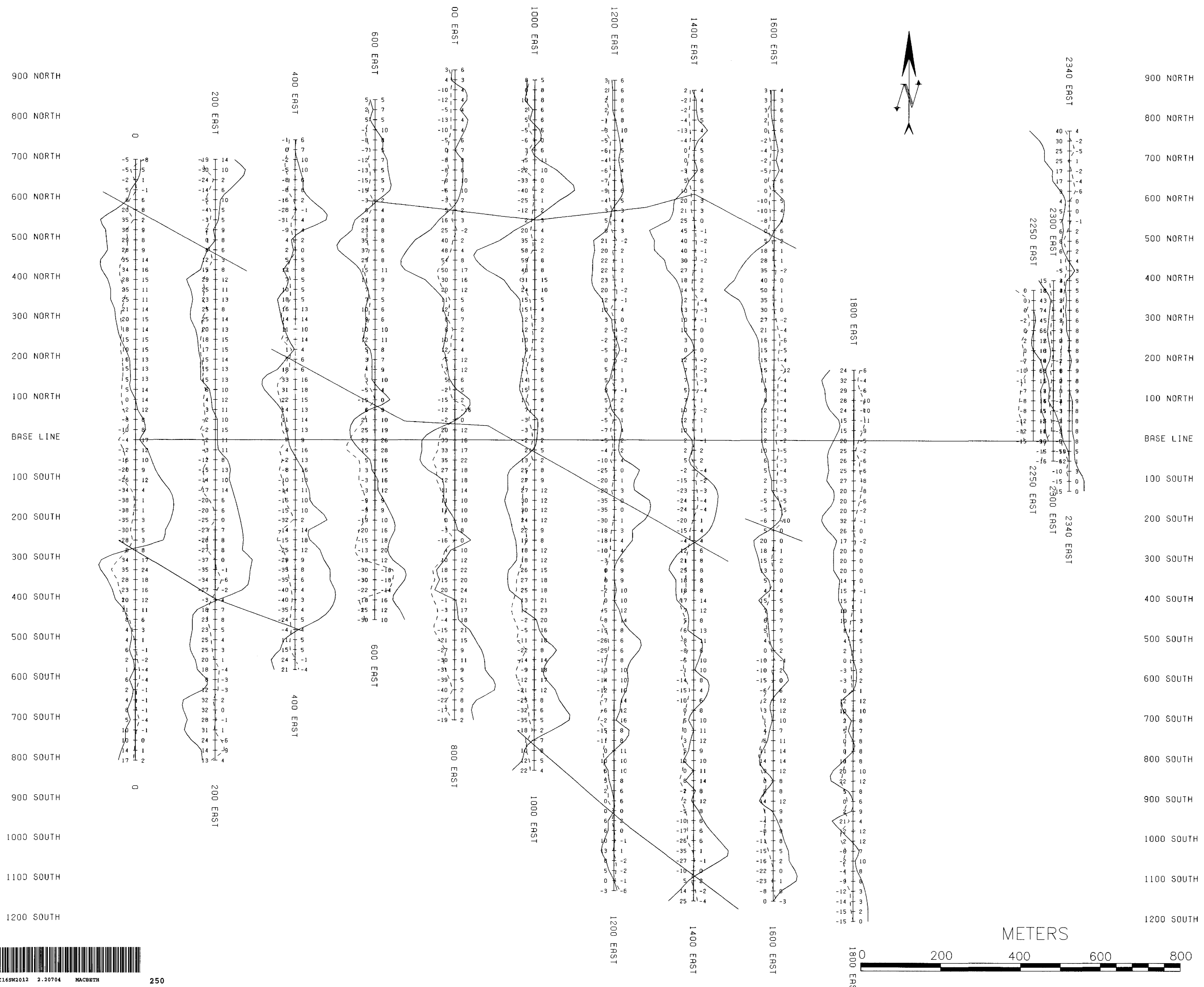
**Frazer Filter**  
**EM-VLF**

Site: *Cucumber Lake*  
 Location: *MacBeth Twp.*  
 Scale: 1:50  
 Date: JAN 2000  
 Drawn by: T. Anderson



VLF Survey  
Profile Data in %  
Line Interval 200m  
Station Interval 25m  
20.3 km of line

AZIMUTH TRUE  
NORTH



No.	Revision/Issue	Date

GEONICS EM-16  
READINGS IN %  
OPERATOR  
L.ANDERSON  
STATION READ  
NAA

**EM-VLF  
PROFILES**

Map Site:  
*Cucumber Lake*  
Location:  
*MacBeth Twp.*  
Scale: 1:50 Date: JAN, 2000 By: T. Anderson

