

We are committed to providing [accessible customer service](#).  
If you need accessible formats or communications supports, please [contact us](#).

Nous tenons à améliorer [l'accessibilité des services à la clientèle](#).  
Si vous avez besoin de formats accessibles ou d'aide à la communication, veuillez [nous contacter](#).

REPORT ON SURVEYS AND PROSPECTING

OF

FOCH TOWNSHIP  
GRAPHITE CLAIMS

FOR 2254022 ONTARIO LTD.

Joe-Anne Salo  
April 2016

## INTRODUCTION:

The Foch Township claims were staked in the spring of 2014, during the time of the Zenyetta Graphite acclamation.

A total of 4 claims (27 units)

4270866- 1 unit

4275472- 6 units

4275473- 6 units

4275482- 14 units

In August 2015, Larry Salo and Don McKinnon went to the property to do a prospecting traverse to locate the known showing of graphite. During this time they did ribbon and compass lines for mapping and survey.

In October 2015, Larry and Joe-Anne Salo did the mapping and a VLF-Electromagnetic survey and a Scintillometer survey.

## LOCATION

The claims are located in the NE corner of Foch Township and cross the Foch/Lessard Township line. Leaving Connaught and travelling to Hornepayne Ontario, via Cochrane (412 km) From Hornepayne travelling south on Highway 631 to Hornepayne Creek Road (7 km), turning right at mileage marker 40 (25 km).

The road is a good lumber road with a solid bottom.

## HISTORY

Although the township has seen several airborne surveys in the early 1990's, the only work done directly on the claims was a stripping program by P. Miller. The assessment work on file consists of only a map. An MDI by A. Wilson is also on file (MDI-42F06SE00002). The stripping by Miller was difficult to find as a lot of flat lying outcrops are visible from the making of the lumber road.

## CURRENT WORK

In October 2015, Larry and Joe-Anne Salo drove from Connaught to the property. Using a Geonics EM-16 VLF, and a Exploranium GR-110 SAIC Radiation Detection Scintillometer surveyed the ribbon lines put in place during the summer.

This author has mapped the survey results and the outcropping results. Samples have been collected from the 2 visible graphite showings, (photos included) however no assays have been sent to date.

The majority of the outcropping is consists of E-W striking gneisses and cut by pegmatite dykes. The outcrops are very flat lying and contain visible graphite flakes up to 3 mm is size.

The assays taken by MNDM returned values of 30.4 and 30.3% C.

The 2 main graphite showings are located at :

West Showing -Zone 16- 637718E 5461498N

East Showing - Zone 16- 638825E 5461589N

Both showings are similar in apperance.

## RECOMMENDATIONS

The values from the Scintillometer survey and the VLF cross-overs appear to be the result of the pegmatite dykes.

This author feels that further work should be carried out in the form of

1. Perform proper line-cutting. Spacings should be lines cut at 100 m intervals N-S with 25m stations.
2. Perform a Magnetometer survey.
3. Blasting the 2 showings to obtain fresh, unweathered samples for assaying.

Respectfully Submitted



Joe-Anne G Salo  
M21106, Client #191078

PERSONNEL

By my signature below, I am indicating that I performed the work mention to my name>

Larry Salo  
Aug 14, 2015 and Aug 15, 2015  
Compass and ribbon lines

October 15, 2015 and Oct 16, 2015  
Mapping of outcrop, Survey work



---

Don McKinnon  
Aug 14, 2015 and Aug 15, 2015  
Compass and ribbon lines.



---

Joe-Anne Salo  
Oct 15, 2015 and Oct 16, 2015  
Mapping and Surveys

April 15, 2016  
Report writing and map compilation



---

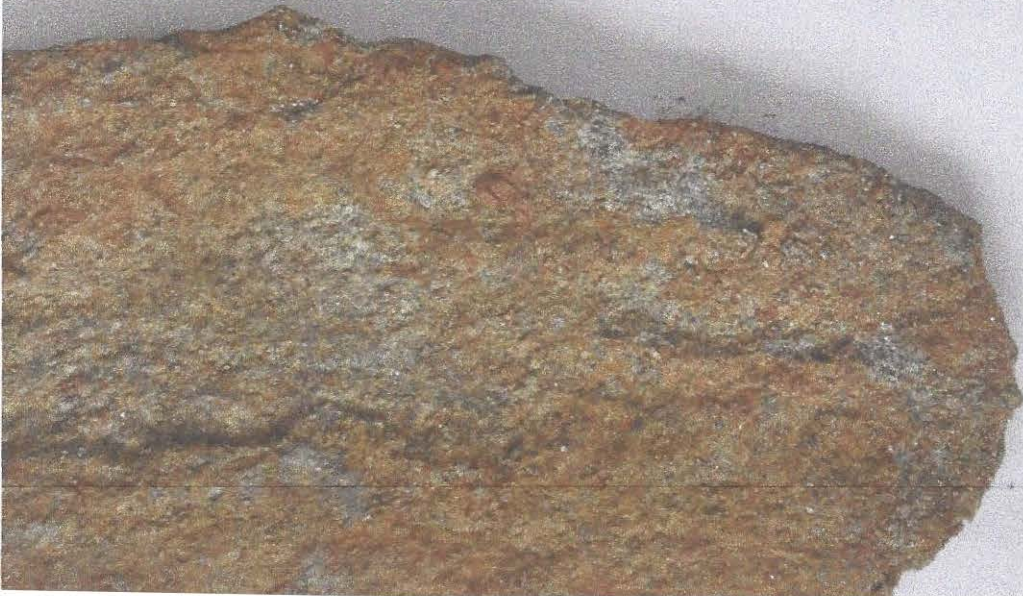
PHOTOGRAPHS



FOCH TWP



West



East



FOCHI WEST SHOWING



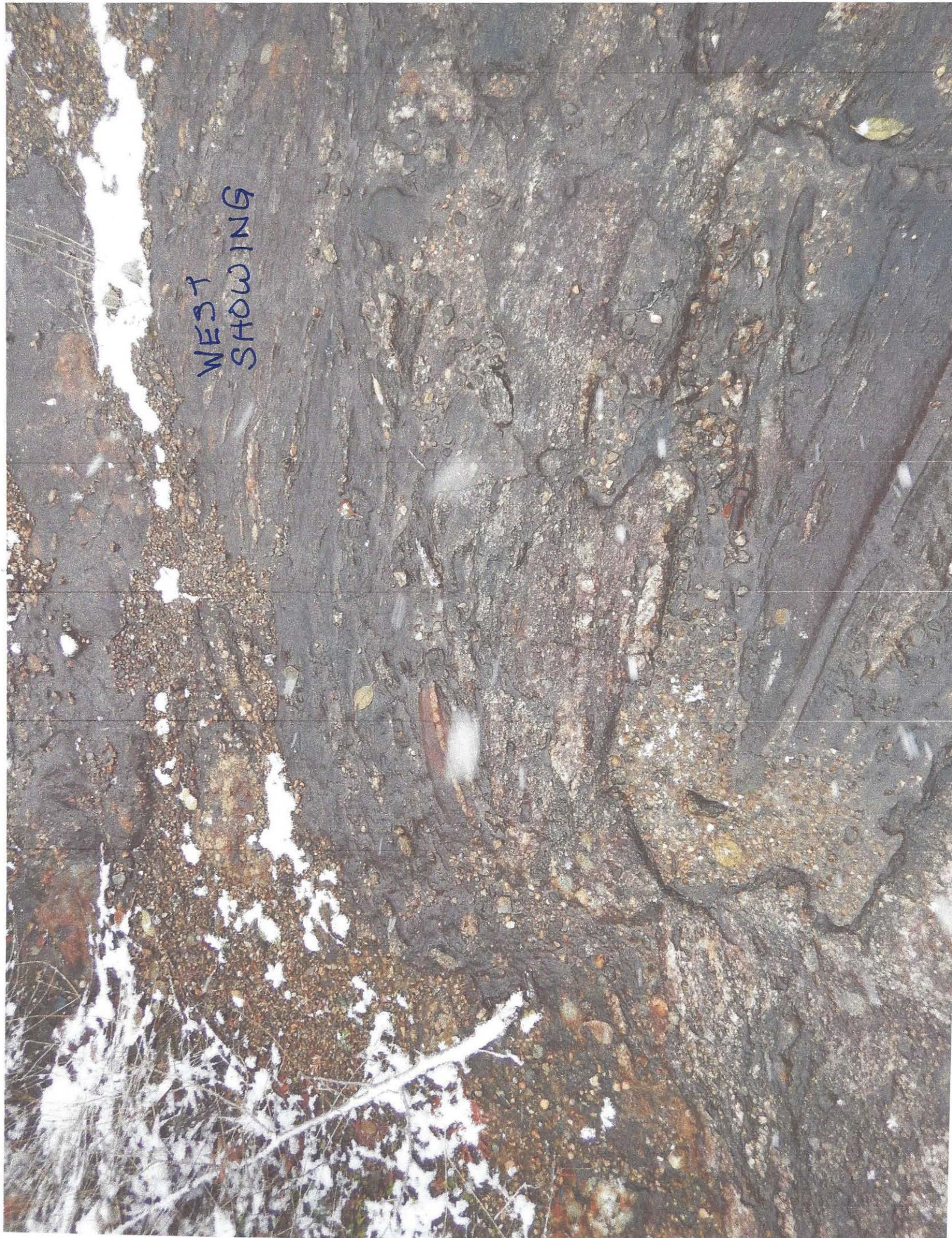


FOCH EAST SHOWING





WEST  
SHOWING





EAST  
SHOWING







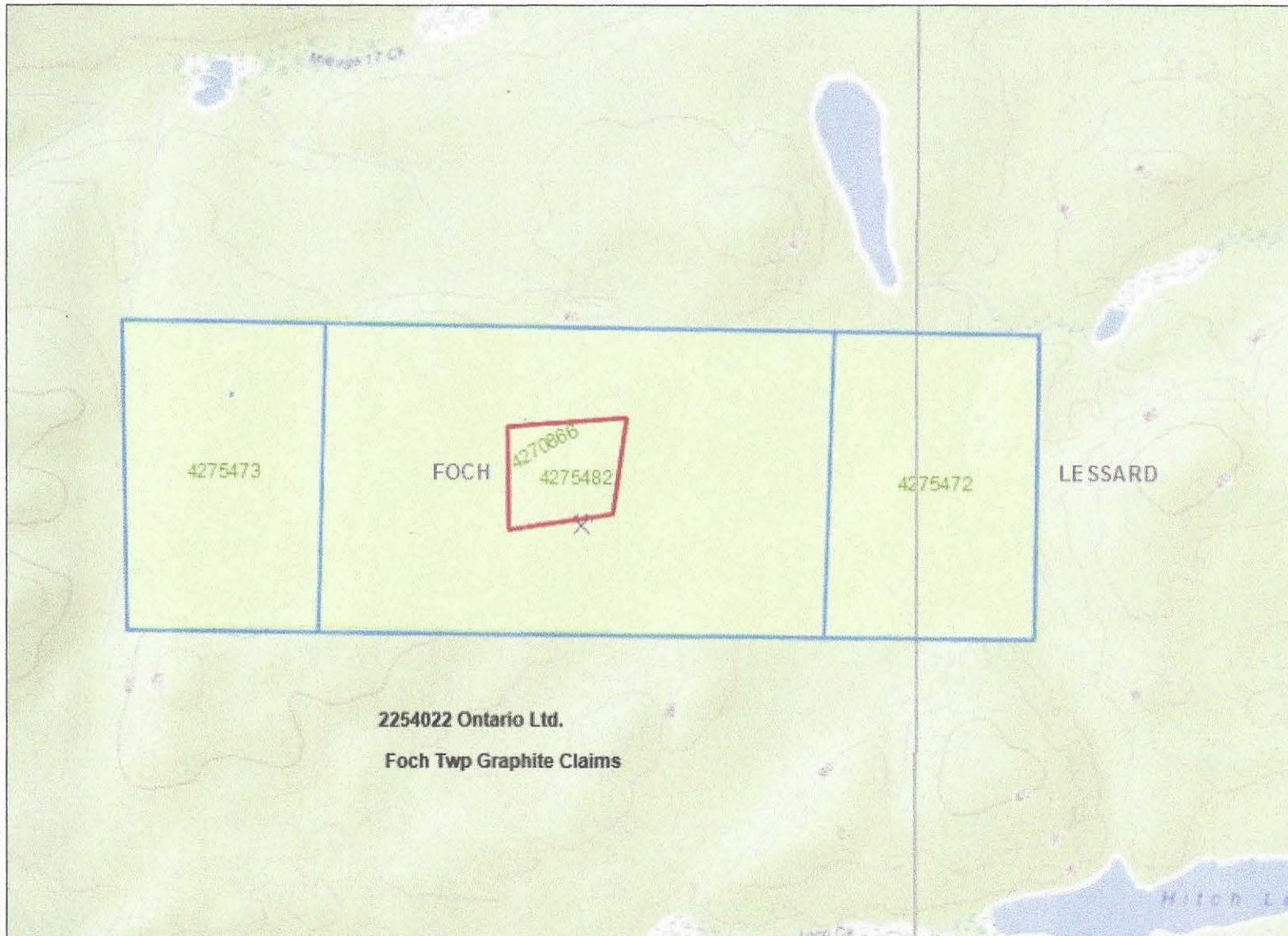
VLF Survey along baseline



MAPS

Claim map

Google view map



**Legend**

- Administration Boundaries**
  - Mining Divisions
  - Resident Geologist District
  - Townships and Areas
- Mineral Tenure Grid**
  - OMTG Tenure Grid
- Alienations**
  - Withdrawal
  - Notice
- Unpatented Claim**
  - Active
  - Pending
- Disposition**
  - Disposition
- Disposition Symbols**
  - Camp
  - Disposition Unknown/Pending
  - Freehold Patent Mining Rights Only
  - Freehold Patent Surface Rights Only
  - Freehold Patent Surface and Mining Rights
  - Land Use Permit
  - Leasehold Patent Mining Rights Only
  - Leasehold Patent Surface Rights Only
  - Leasehold Patent Surface and Mining Rights
  - License of Occupation Mining Use Only
  - License of Occupation Surface Use Only
  - License of Occupation Surface and Mining Rights
  - License of Occupation Uses Not Specified
  - Order in Council
  - Tower
  - WPLA
- Geology Layers**
  - AMIS Sites
  - AMIS Features
  - Drill Holes
  - Mineral Occurrences



Projection: Web Mercator



The Ontario Ministry of Northern Development and Mines shall not be liable in any way for the use of, or reliance upon, this map or any information on this map. This map should not be used for: navigation, a plan of survey, routes, nor locations.

Imagery Copyright Notices: Ontario Ministry of Natural Resources and Forestry; NASA Landsat Program; First Base Solutions Inc.; Aéro-Photo (1961) Inc.; DigitalGlobe Inc.; U.S. Geological Survey.







Ontario Geological Survey



FOCH  
LESSARD



4275473

4270866

4275482

4275472

FOCH TOWNSHIP  
2254022 ONTARIO LTD.  
GRAPHITE CLAIMS

Google earth

© 2014 Cnes/Spot Image

2005

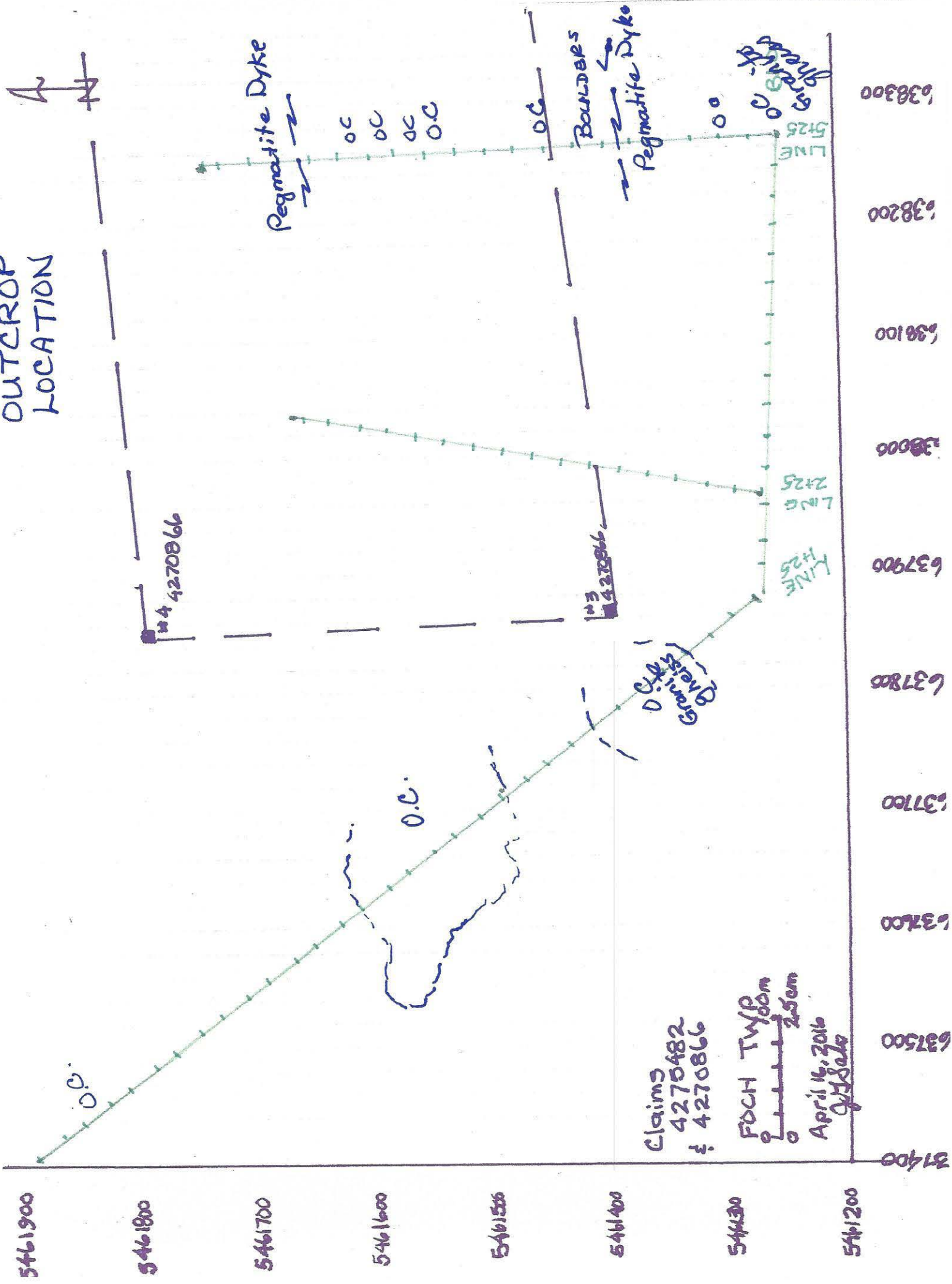
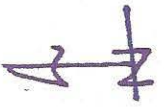
49°17'27.86" N 85°05'51.96" W elev 1313 ft eye alt 12341 ft



OUTCROP LOCATIONS



OUTCROP LOCATION



Claims  
4270482  
4270866

FOCH TWYP  
250m

April 16, 2016  
G. J. Saha

31400  
31750  
32100  
32450  
32800  
33150  
33500  
33800  
34150  
34500  
34850  
35200  
35550  
35900  
36250  
36600  
36950  
37300  
37650  
38000  
38300

GR-110 GAMMA-RAY SCINTILLOMETER SURVEY





# GR-110

## Gamma-Ray Scintillometer

### General

The GR-110 is a rugged, lightweight and portable scintillometer designed for the field geologist who requires the accuracy of a digital display, and large crystal volume for reliable statistics. Even under low light conditions, readings are easily visible on the large four digit Liquid Crystal display (LCD). In high sensitivity mode (0.08 to 3.0MeV) total counts are obtained at either 1 or 10 second intervals. For work where ground cover is highly variable, a 0.4 to 3.0MeV total count mode, "HE," provides significant geological information since the low energy portion of the spectrum is subject to the largest variations in Compton scatter absorption. The HE mode can also handle the high count rates found in drill core and mine face analysis applications.

Special calibration is not required to maintain high accuracy. The GR-110 uses digital counting and display of incoming radiation levels. All units are factory calibrated and are highly stable so that relative readings from unit to unit can be compared, or readings made at different times can be plotted on the same basis.

The small size and rugged construction of the GR-110, combined with its accuracy, ease of use, and operational features, make it a useful and advanced field portable scintillometer.

### Features

- \* Large internal crystal provides high sensitivity.
- \* Versatile data collection with 2 energy thresholds & 2 accumulation periods.
- \* Adjustable audio threshold.
- \* Audio level proportional to rate.
- \* Calibration test source.
- \* Large 4-digit LCD display for easy viewing.
- \* Small size and lightweight: 1.5kg.
- \* Rugged and watertight case.
- \* Efficient power provides over 100 hours operation on two "D" cell batteries.
- \* Adjustable leather carrying case.



## Specifications

### Rotary Switch Controls:

- Battery check/display test
- 1 second accumulate: 0.08MeV - 3.0MeV
- 10 seconds accumulate: 0.08MeV - 3.0MeV
- 1 second accumulate: 0.40MeV - 3.0MeV

### Conversion Factors for Cesium:

- Range 1/10 (- B/G)-
- 1 cps =  $0.14 \times 10^{-3}$  mR/Hr  
=  $1.25 \times 10^{-3}$ ,  $\mu$ Sv/Hr
- Range HE (- B/G)
- 1 cps =  $0.36 \times 10^{-3}$  mR/Hr  
=  $3.23 \times 10^{-3}$ ,  $\mu$ Sv/Hr

### Temperature Ranges:

- Operating -25°C to 50°C
- Storage: -30°C to 70°C

<b>Audio Frequency Control:</b>	Allows output tone to be range adjusted. Increases in count rate results in an increase in audio frequency
<b>Internal Crystal:</b>	1.5 x 1.5 x 2.0 inch (4.5 cubic inches) square cross section NaI (TI) detector with PMT, magnetic shield, and shock mounting Display: Liquid crystal type (LCD), 0.5 x 2.0" 4-digit, displays a maximum value of 9999cps
<b>Audio Output:</b>	Audio (adjustable threshold tone proportional to rate) via high efficiency loudspeaker
<b>Time Constants:</b>	Audio: 0.5 seconds for 0 to 2,500cps change
<b>Construction:</b>	Hardened aluminum 1mm thick case
<b>Dimensions:</b>	Approximately 5.3 x 12.4 x 21cm
<b>Weight:</b>	1.5 kg
<b>Power:</b>	Two "D" Cells- 100 hours (Alkaline at 15°C)
<b>Alarm:</b>	Low battery alarm via audio and flashing display Signal alarm if threshold is exceeded.

## Standard Components

GR-110 gamma-ray scintillometer, leather case with belt clip and shoulder strap, test source, two "D" cell batteries, PVC storage case, and instruction manual.







Geonics VLF- EM16 Survey



# EM16

## VLF Electromagnetic Unit

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 1985 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

Source of primary field	VLF transmitting stations.	Reading time	10-40 seconds depending on signal strength.
Transmitting stations used	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 & switch selects either station.	Operating temperature range	-40 to 50° C.
Operating frequency range	About 18-26 kHz.	Operating controls	ON-OFF switch, battery testing push button, station selector, switch, volume control, quadrature, dial $\pm 40\%$ , inclinometer dial $\pm 150\%$
Parameters measured	(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).	Power Supply	6 size AA (penlight) alkaline cells. Life about 200 hours.
Method of reading	In-phase from a mechanical inclinometer and quadrature from a calibrated dial. Hitting by audio tone.	Dimensions	42 x 14 x 9 cm (16 x 5.5 x 3.5 in.)
Scale range	In phase $\pm 180\%$ ; quadrature $\pm 40\%$ .	Weight	1.6 kg (3.5 lbs.)
Readability	$\pm 1\%$ .	Instrument supplied with	Monotonic speaker, carrying case manual of operation, 3 station selector plug-in tuning units (additional frequencies are optional), set of batteries.
		Shipping weight	4.6 kg (10 lbs.)



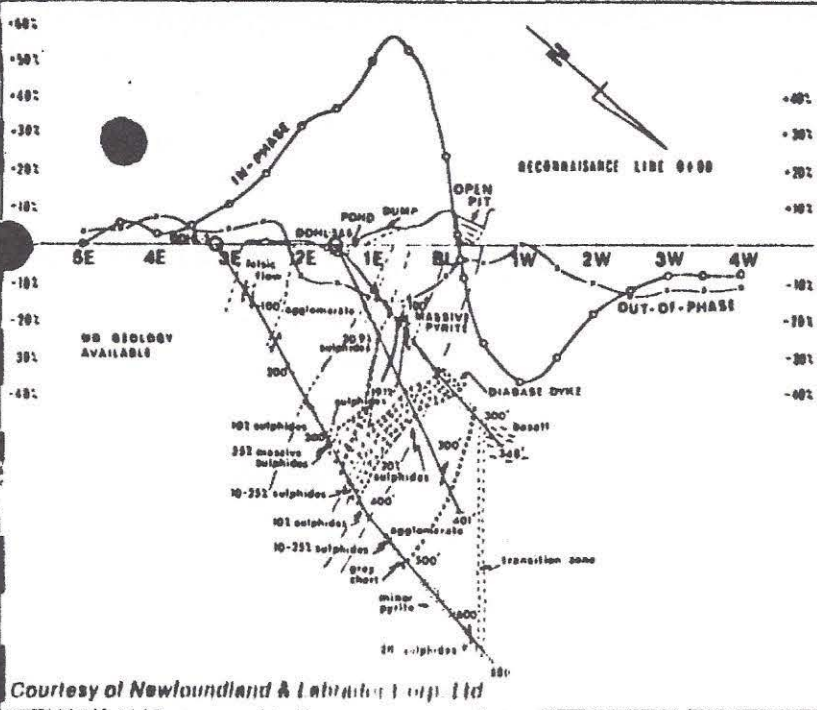
GEONICS LIMITED

Designers & manufacturers  
of geophysical instruments

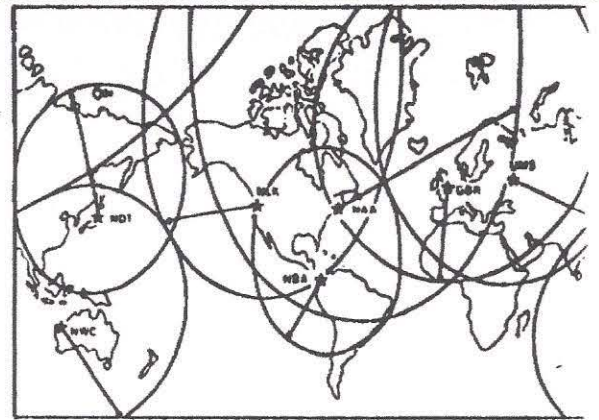
subsidiary of  
Deering Milliken Inc.

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



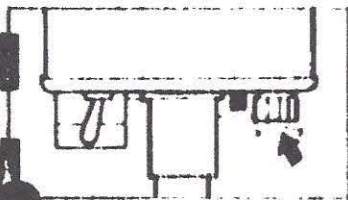


Courtesy of Newfoundland & Labrador Corp. Ltd

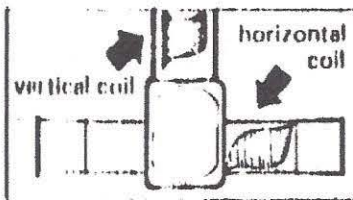


**Areas of VLF Signals**  
 Coverage shown only for well-known stations. Other reliable, fully operational stations exist. For full information regarding VLF signals in your area consult Geonics Limited. Extensive field experience has proved that the circles of coverage shown are very conservative and are actually much larger in extent.

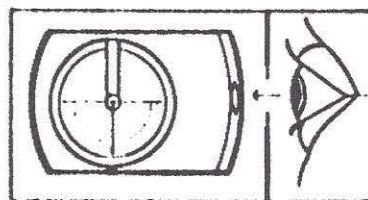
**EM 16 Profile over Lockport Mine Property, Newfoundland**  
 additional case histories on request



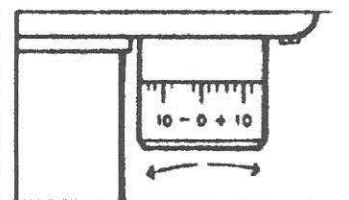
**Station Selector**  
 Two tuning units can be plugged at one time. A switch selects either station.



**Receiving Coils**  
 Vertical receiving coil circuit in instrument picks up any vertical signal present. Horizontal receiving coil circuit, after automatic 90° signal phase shift, feeds signal into quadrature dial in series with the receiving coil.



**In-Phase Dial**  
 shows the tilt-angle of the instrument for minimum signal. This angle is the measure of the vertical in-phase signal expressed in percentage when compared to the horizontal field.



**Quadrature Dial**  
 is calibrated in percentage markings and nulls the vertical quadrature signal in the vertical coil circuit.

By selecting a suitable transmitter station as a source, the EM 16 user can survey with the most suitable primary field azimuth.

The EM 16 has two receiving coils, one for the pick-up of the horizontal (primary) field and the other for detecting any anomalous vertical secondary field. The coils are thus orthogonal, and are mounted inside the instrument "handle".

The actual measurement is done by first tilting the coil assembly to minimize the signal in the vertical (signal) coil and then further sharpening the null by using the reference signal to buck out the remaining signal. This is done by a calibrated "quadrature" dial.

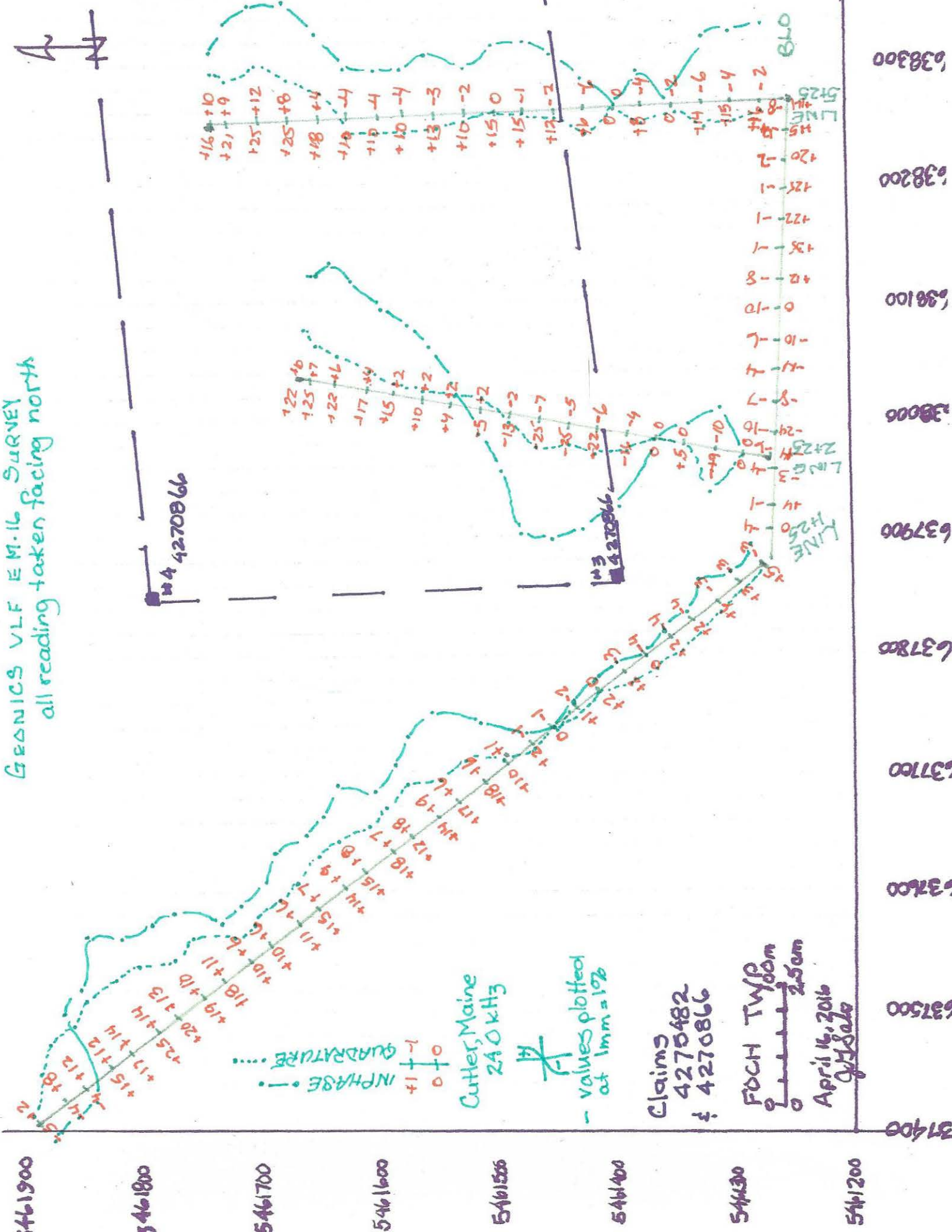
The tangent of the tilt angle is the measure of the vertical in-phase component and the quadrature reading is the signal at right angles to the total field. All readings are obtained in percentages and do not depend on the absolute amplitude of the primary signals present.

The "null" condition of the measurement is detected by the drop in the audio signal emitted from the patented resonance loudspeaker. A jack is provided for those preferring the use of an earphone instead.

The power for the instrument is from 6 penlight cells. A battery tester is provided.



GEONICS VLF EM-16 SURVEY  
all reading taken facing north



Cutter, Maine  
240 kHz

values plotted  
at 1mm = 10g

Claims  
4270482  
4270866

FOCH TWP  
2.5cm

April 16, 2016  
J. H. Sala

5461900  
5461800  
5461700  
5461600  
5461500  
5461400  
5461300  
5461200

637400  
637500  
637600  
637700  
637800  
637900  
638000  
638100  
638200  
638300