

A Report on the  
Geophysical  
VLF EM , Magnetic and Geological Survey  
On the  
Seine Bay Property  
For  
NuMax Resources Inc.

By

2.35119

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Consulting Geologist

June 4, 2007



## **Introduction**

A discovery of several zones of copper-nickel-PGM and gold bearing sulphides in layered gabbro was made in the fall of 2006. This discovery was made during the mechanical stripping of overburden in four separate areas. Three areas are located on the west and southwest shores of Lake 19. A fourth area is located on the west shore of Seine Bay further to the southwest. All stripping areas are located southwest of Bad Vermilion Lake near Mine Centre, Ontario.

These discoveries prompted Numax Resources Inc. to carry out, in 2007, a program of line cutting, geophysical surveys and prospecting. This program was initiated in April of 2007.

It was anticipated that the geophysical surveys would assist in defining the zones of magnetite and pyrrhotite, shear zones and the anothocite.

## **Property Location and Description**

The property is located in the Kenora Mining Division and consists of a total of 27 claims (256 units) comprising a total of approximately 4,096 hectares.

Figure - 1 - Property Boundary - East Part

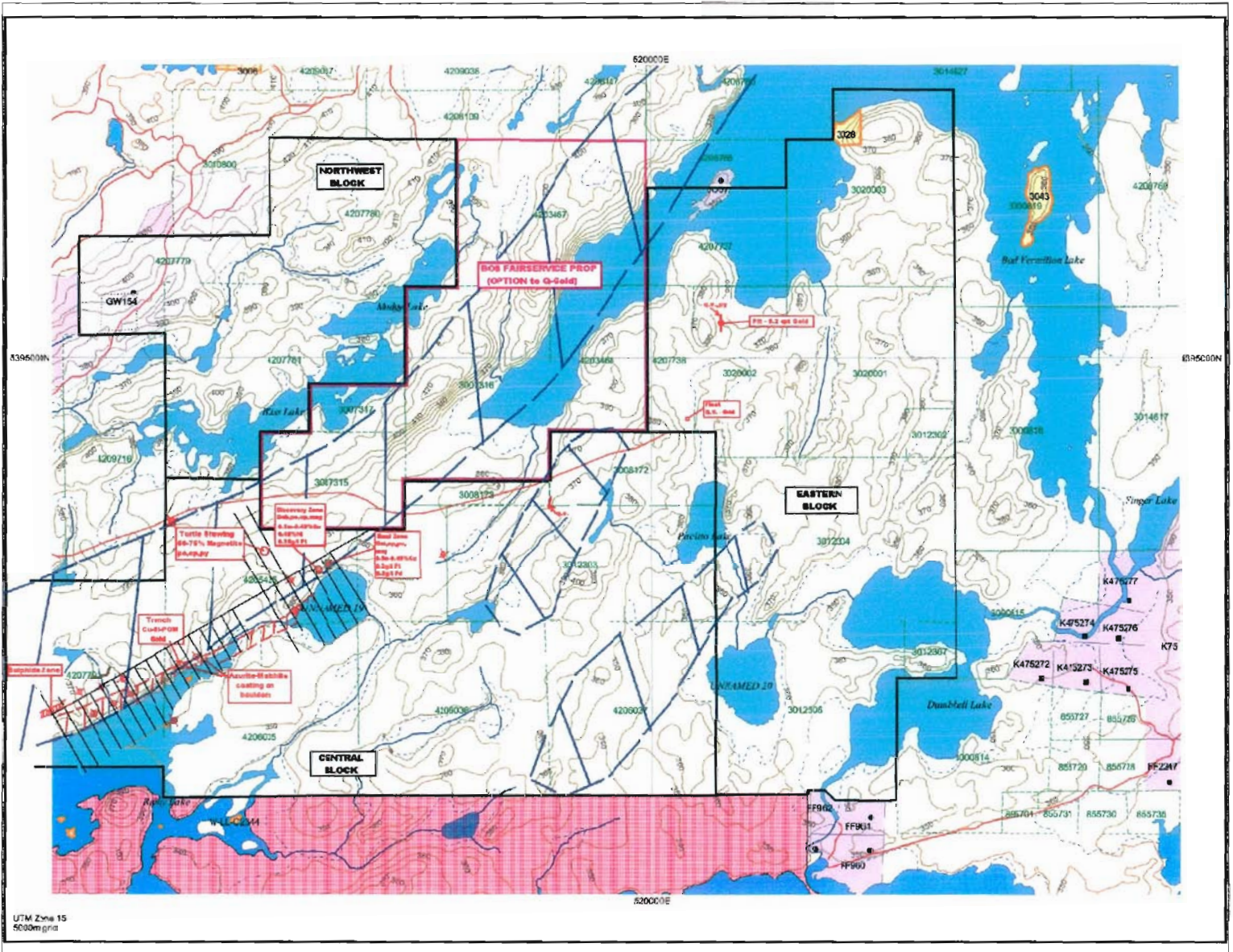
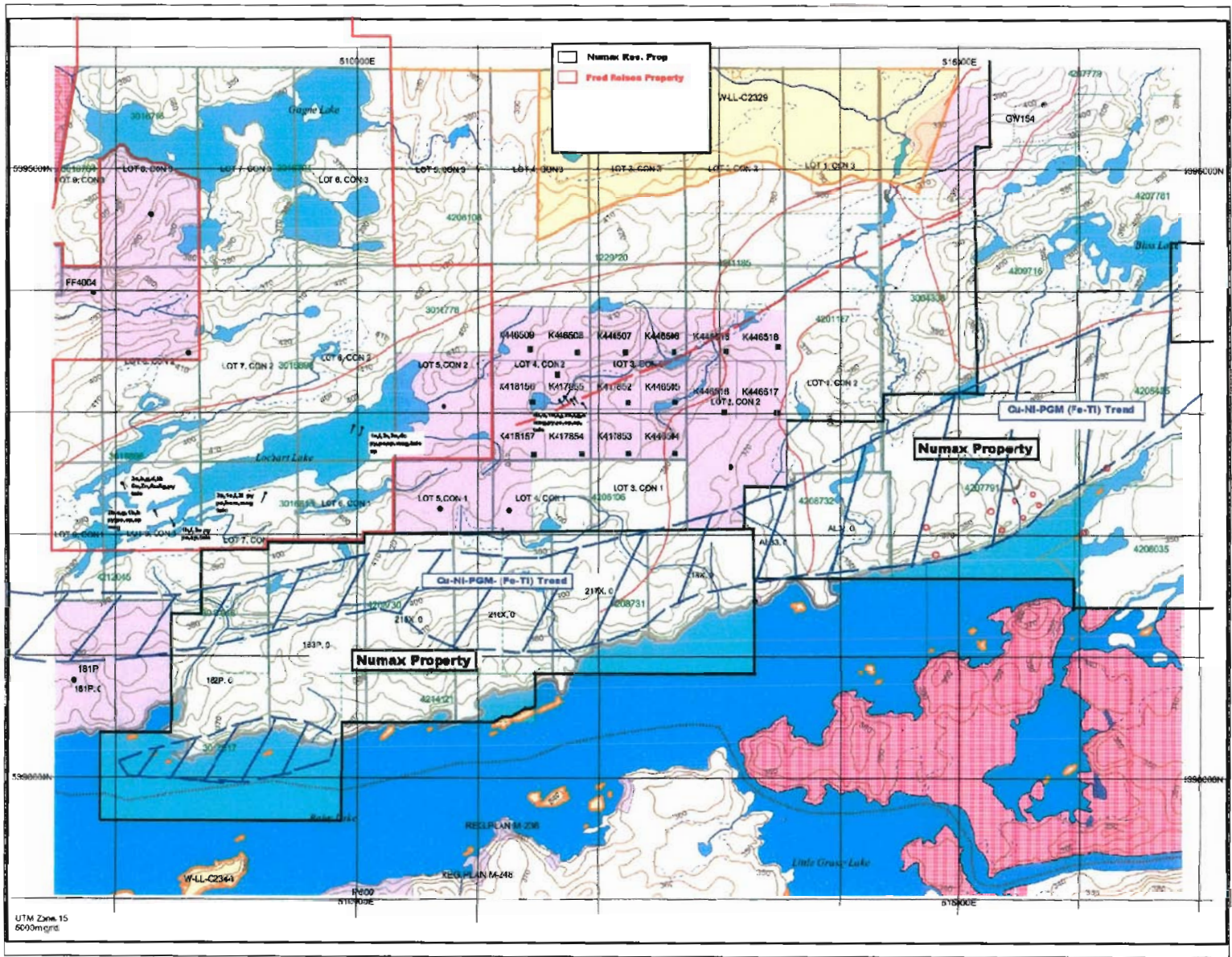


Figure - 2 - Property Boundary Map - West Part



The geology of the area was recently mapped by K.H. Poulsen for the Ontario Geological Survey, Mineral Deposits Circular 29, "Geological setting of Mineralization in the Mine centre Area, 2000".

Poulsen describes the rocks of the area as follows:

*The rocks of the Mine Centre-Fort Frances area lies within a boundary zone between the Wabigoon and Quetico sub-provinces of the Superior Structural Province. In the Atikokan-Fort Frances area of Ontario and adjacent parts of Minnesota, this boundary is defined by a system of steeply dipping dextral faults, the largest of which are the Quetico and Rainy Lake-Seine River faults. These major wrench faults bound a "wedge" of crust that is structurally discordant from both provinces, but because of a gross lithologic similarity, is generally considered to be part of the Wabigoon sub-province.*

#### Wabigoon Sub-Province

*The structure of the Wabigoon granite-greenstone terrain is dominated by dome features of variable size. The largest of these, such as the Rainy Lake complex and the Irene-Eltrut Lake complex, are greater than 50 km in diameter and are composed of smaller gneissic domes, central batholiths and marginal crescent granitoid intrusions. Larger complexes and smaller gneissic domes have been interpreted as first- and second order gneiss diapirs, respectively, which are the product of gravitational, solid state remobilization of tabular batholiths beneath the supracrustal sequence (Schwertner et al. 1979)*

*Supracrustal metavolcanic and metasedimentary rocks now occupy the margins of the gneissic domes, with the largest stratigraphic thickness preserved between the first-order structures. Metavolcanic rock types dominate and consist of metabasalt flows with local accumulations of flows pyroclastic rocks and epiclastic rocks of intermediate to felsic composition. Metasedimentary rocks such as conglomerates, wacke, and mudstone and iron formation form units within the volcanic sequences. A dolomite unit with algal stromatolite mounds occurs within the Steep Rock Lake, north of Atikokan. Numerous stocks, commonly of quartz monzonite, intrude both metavolcanic and metasedimentary supracrustal rocks.*

*The Wabigoon Sub-province supracrustal rocks are metamorphosed to assemblage characteristic of the green schist and amphibolite facies (Ayles 1978) highest metamorphic grades*

The property is located at the boundary between the Wabigoon sub-province and the Quetico sub-province of the Canadian Shield.

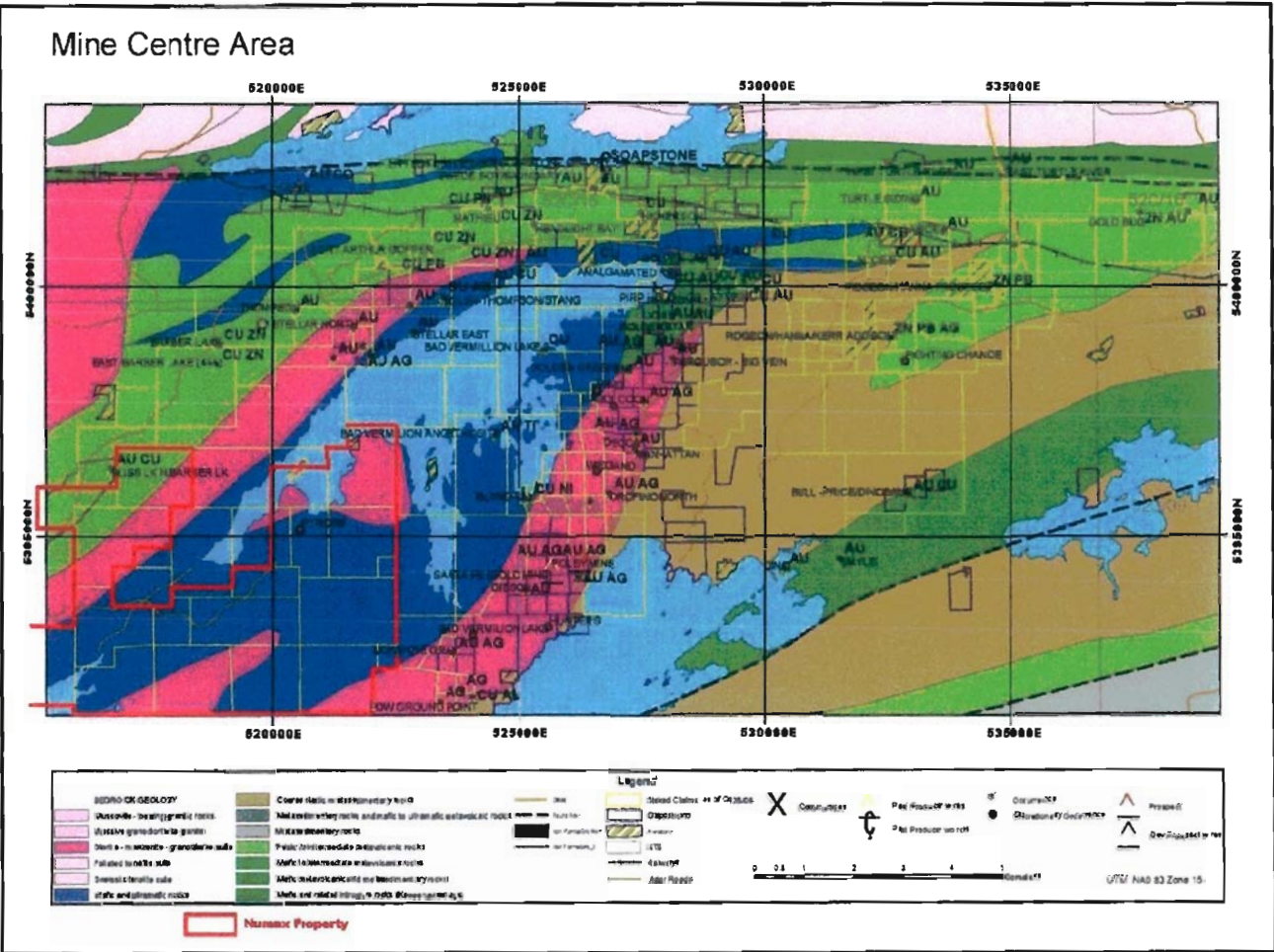
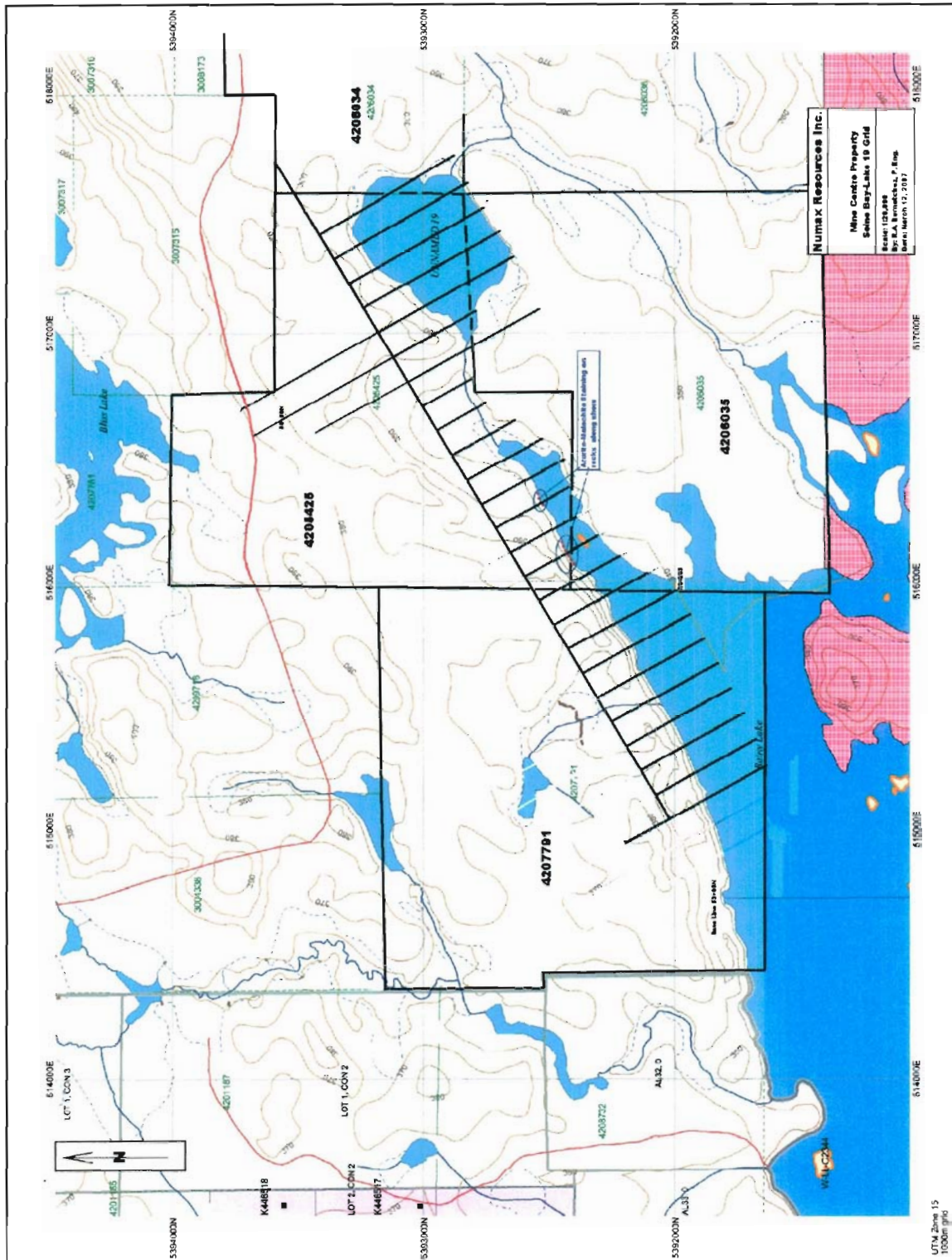


Figure - 3 – The Regional Geology of Mine Centre Area.

Work Program

Lime Cutting

The work was carried out on claims numbered 4205425, 4206034, 4206035, and 4207791. A total of 14.94 km of line cutting was carried out between Lake 19 and Seine Bay. The base line was oriented at N 60 deg E. The base line was started near the main logging road at UTM coordinate (517000E, 5393600N). The base line was started at grid coordinate 10+00S, 20+00W and was extended to 10+00S, 47+00W. Pickets were established along the base line and picket lines at every 25 meters. Picket lines were established at 90 degrees to the base line at 100 meter intervals.



## VLF EM Survey

A VLF EM survey was carried out over this grid using a Geonics EM 16 unit. This unit was tuned to the Cutler, Maine submarine radio frequency, 21.8 kHz. This instrument



measures the in phase and out of phase quadrature response of this radio frequency, as it travels over the surface of the earth. When the radio wave intersects a conductive zone at or near surface, it induces a secondary wave around the conductive zone. The instrument measures the in-phase and out-of phase response of this conductor.

A total of 473 readings were taken with this instrument along 10 km of picket lines.

### Results

The survey has identified a total of 20 conductive zones. All conductors identified in the survey trend parallel to sub-parallel to the 1980 OGS total magnetic field of the area and the trend of the rock formations. The conductors also trend parallel to the strike of The Bad Vermilion Gabbro Intrusion, This gabbro intrusion exhibits layering.

The conductors are listed bellow:

Name	Strength	Location	Association
A – A	good C	4+25S, Line 28+00W L28+00W and 29+00W	Magnetite Zone
B – B	week	6+50S, L27+00W	unknown
C – C	moderate	7+75S, L28+00W	Magnetite Zone
D – D	moderate	9+00S, L28+00W	unknown
E – E	week	9+75S, L28+00W	unknown
G – G	moderate	11+30S, L28+00W, 29+00W	Sulphide mineralization
H – H	very strong	12+00S 4 lines 25+00W to 29+00W	unknown
K – K	week	13+25S, L23+00W	unknown
L – L	week	14+00S, L29+00W	unknown
M – M	moderate	15+00S, L29+00W	unknown
N – N	strong	15+25S, L23+00W	unknown

P – P week	11+75S, L31+00W	unknown
R – S week	11+00S, L31+00W	unknown
S – S week	11+25S, L34+00W	unknown
T – T moderate	12+00S L37+00W & 38+00W	unknown
U – U moderate	7+00S, L47+00W	magnetite, sulphides
V – V moderate To good	7 line conductor 9+80S to 11+00S L41+00W to 47+00W	sulphide zone
X – X moderate to good	5 line conductor 12+50S to 12+00S L39+00W to 43+00W	unknown
Y – Y week	13+00S, L42+00W	unknown
Z – Z strong	16+00S, L42+00W	possible sulphide bearing shear zone

### **Magnetic Survey**

A magnetic survey was carried out over the same grid using the Omni Plus magnetometer. A total of 328 readings were taken.

The magnetic datum used was 60,000 gammas. The readings ranged from a low of 48,362 to a high of 60,990 gammas.

The survey was done using the tie-in method of looping from line to line. The readings were corrected for diurnal variation.

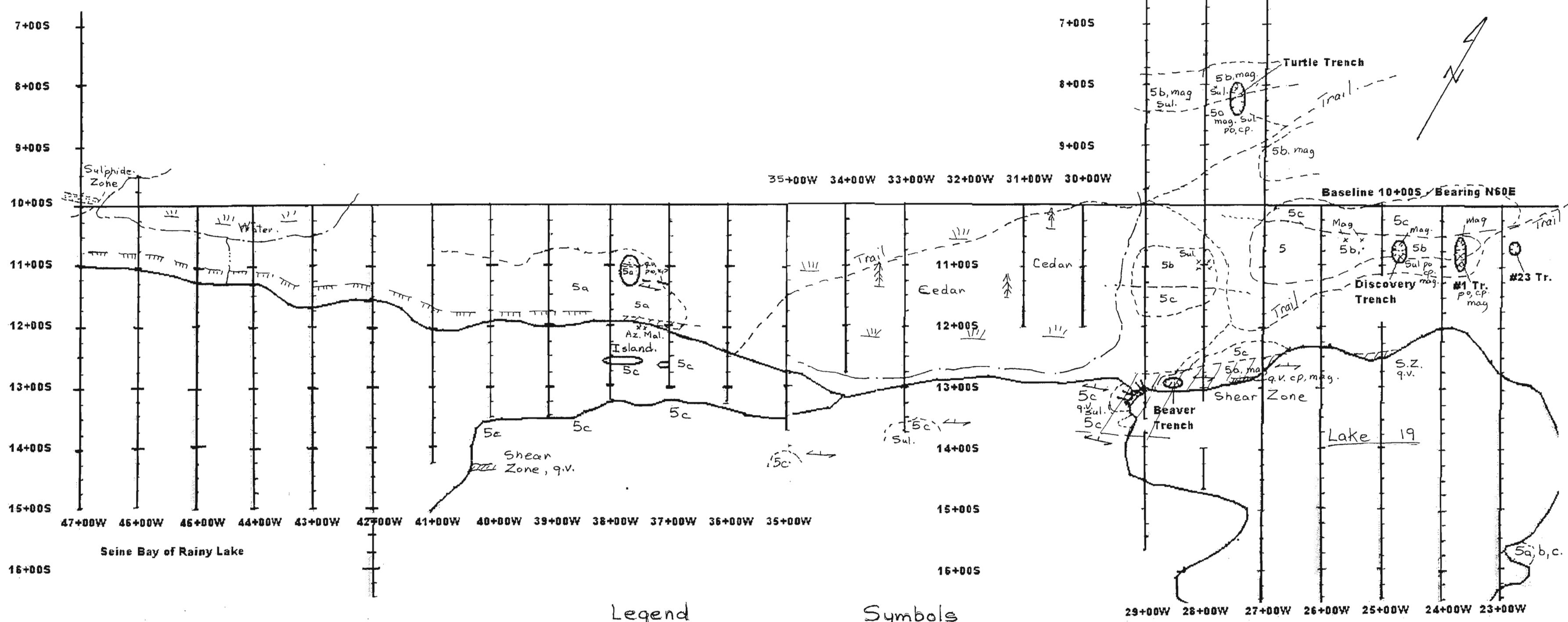
### **Results**

The survey outlined two areas of high magnetic readings. The first area is located north of the base line, on lines 27+00W, 28+00W and 29+00W northwest from 9+00S to 4+00S.

The second area is located at the southwest end of the grid, on lines 47+00W and 46+00W near the base line.

The high magnetic readings are caused by the presence of abundant magnetite within the layered gabbro. The presence of pyrrhotite may also cause the magnetic high readings. Local concentration of massive pyrrhotite has been found on the northwest shores of Lake 19. Samples of massive sulphides assayed up to 0.5% Cu and Ni with up to 0.35g/t platinum.

The magnetic survey was very useful in delineating the anorthocite. This rock type responds to a low magnetic resolution. However, the magnetic lows may also be caused by excessive alteration within the wide shear zones observed on the property. Such a shear zone has been observed along both shores of Seine Bay, along the creek bed leading to Lake 19 and along the southwest shore of Lake 19.



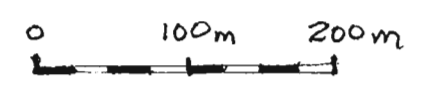
**Legend**

- 5a- Gabbro, f.g.g.
- 5b- Gabbro, c.g.
- 5c- Anorthosite

**Symbols**

- ⊙ Trench, stripping
- mag- Magnetite
- po - Pyrrhotite
- cp - Chalcopyrite
- ▨ - Shear Zone
- S.Z. - Shear Zone
- sul.- sulphides
- q.v. - Quartz veining.
- ↔ - Foliation.
- ▤ - Steep Cliff
- ♣ - Swamp, trees.

Scale  
1:5000



R. A. Bernatchez P. Eng.

Numax Resources Inc.  
 Geology  
 Lake 19, Area  
 By: R.A. Bernatchez, P. Eng.  
 Date: June 4, 2007

Numax Resources Inc.

VLF-EM Survey  
Lake 19 Area

By: R.A. Bernatchez, P.Eng.

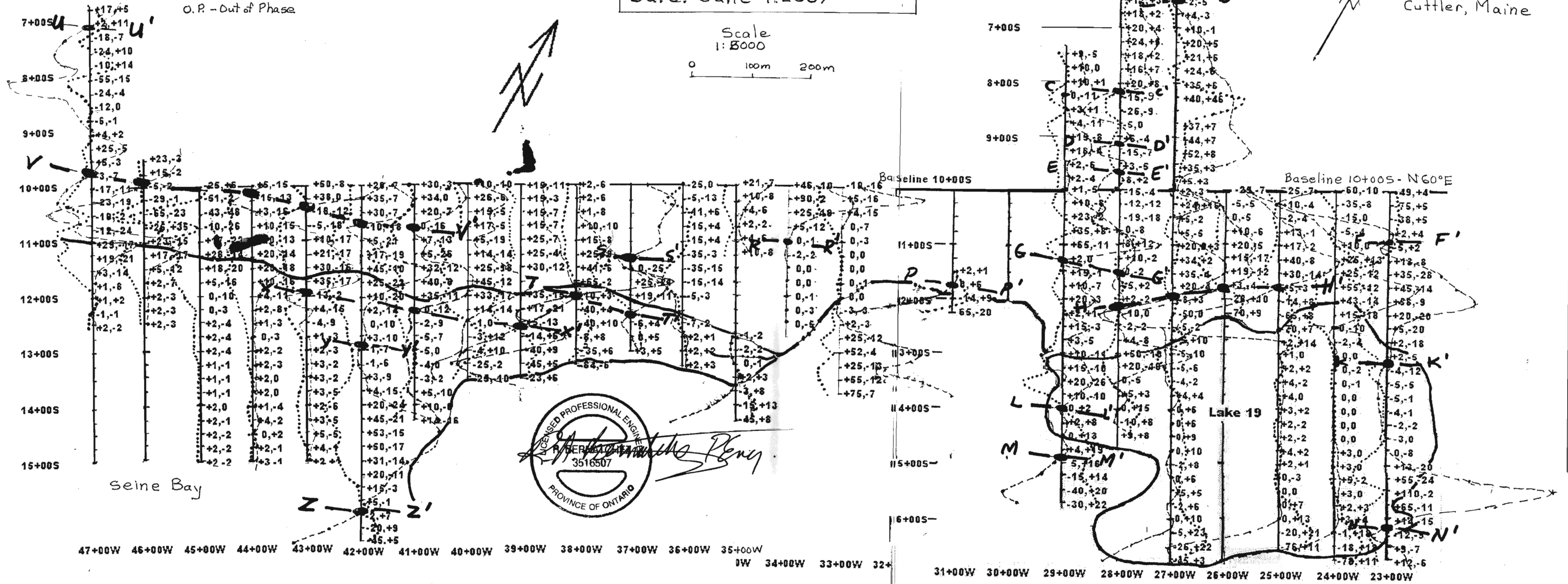
Date: June 4, 2007

Instrument  
Geonics-EM-16  
Readings Range -150% to +150%

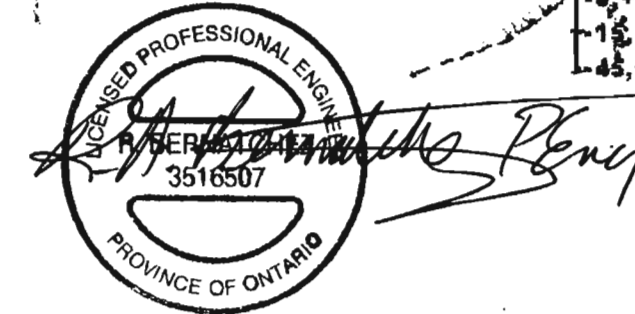
--+  
I.P., O.P.  
+17,+5  
+2,+11  
-18,-7  
-24,+10  
Scale: 1cm=20%

I.P. - In-Phase  
O.P. - Out of Phase

Scale  
1:5000  
0 100m 200m



Station  
Cutler, Maine

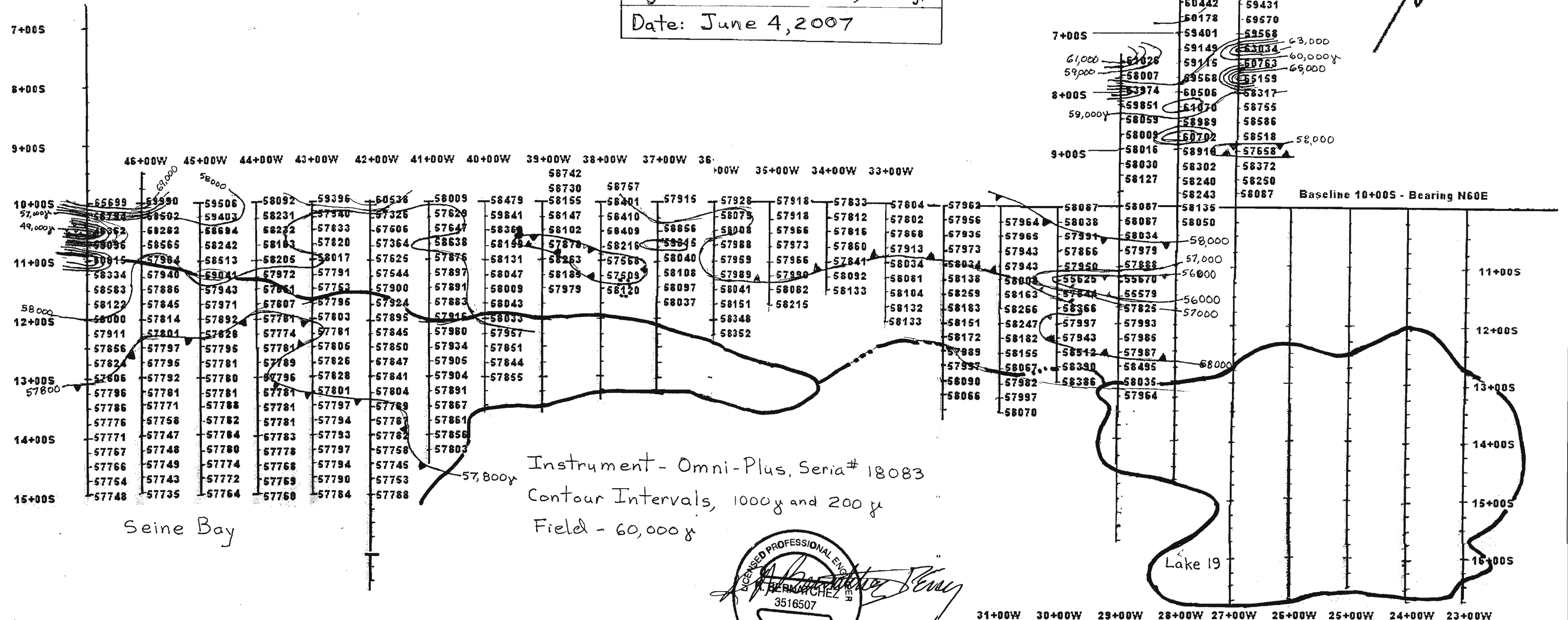


Numax Resources Inc.

Magnetic Survey  
Total Field  
Lake 19 Area

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Date: June 4, 2007



Instrument - Omni-Plus, Serial# 18083  
Contour Intervals, 1000γ and 200γ  
Field - 60,000γ



31+00W 30+00W 29+00W 28+00W 27+00W 26+00W 25+00W 24+00W 23+00W