**GEOPHYSICAL REPORT**
FOR
***MELKIOR RESOURCES INC.***
ON THE
***FRIPP CLAIM BLOCK 4216008***
FRIPP TOWNSHIP
PORCUPINE MINING DIVISION
NORTHEASTERN, ONTARIO

2.42516


Prepared by: J. C. Grant,
August 2009

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## INTRODUCTION:

The services of Exsics Exploration Limited were retained by Nathalie Hansen, on behalf of the Company, Melkior Resources Inc., to complete a line cutting and detailed total field magnetic survey over a block of 16 claims, the Fripp Property, located in Fripp Township of the Porcupine Mining Division of Northeastern Ontario. The purpose of this ground program was to located and outline an elongated magnetic high unit that covers the central west section of the grid just to the north of Quartz lake. This magnetic high has been outlined on the government airborne surveys flown in the past over this area.

## PROPERTY LOCATION AND ACCESS:

The Fripp Property is situated approximately 25 kilometers south southwest of the City of Timmins. The entire claim block is situated in the northwest section of Fripp Township of the Porcupine Mining Division, Northeastern Ontario.

More specifically the grid lies to the immediate north of Quartz Lake, to the south of Latimer Lake and east of the Grassy River. Line 0+00 of the cut grid represents the township line between Fripp and Price Townships.

Access to the grid during the survey period was ideal. Pine Street runs south from Timmins and continues as a good gravel road that runs south through Deloro and Adams Townships. There is a series of ingress gravel roads that run off of this main gravel road and cut into Price Township and on into the north section of Fripp. A good gravel road runs into an old quarry that covers a portion of the northeast section of the grid. Traveling time from Timmins to the grid is about 1.25 hours. Refer to Figures 1 and 2 of this report.

## CLAIM BLOCK:

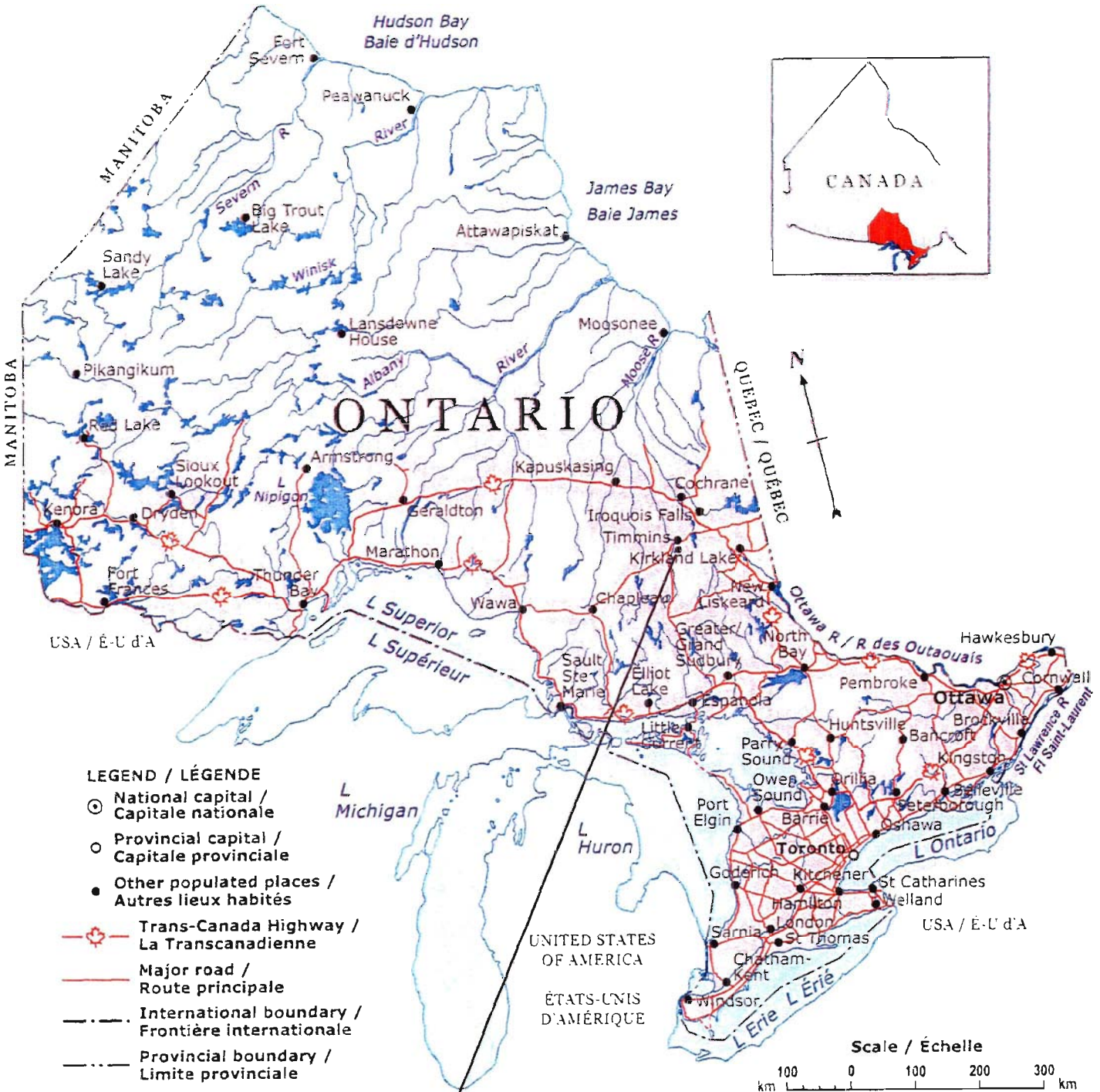
The claim number that represent the Fripp Property is P-4216008 which represents a 16 claim unit. The location of the claim and grid coverage can be found as Figure 3 of this report which is copied from the MNDM Plan map of Fripp Township.

## PERSONNEL:

The field crew directly responsible for the collection of all the raw data were as follows.

| | |
|---|---|
| R. Bradshaw | Timmins, Ontario |
| E. Jaakkola | Timmins, Ontario |

The work was completed under the direct supervision of J. C. Grant of Exsics.



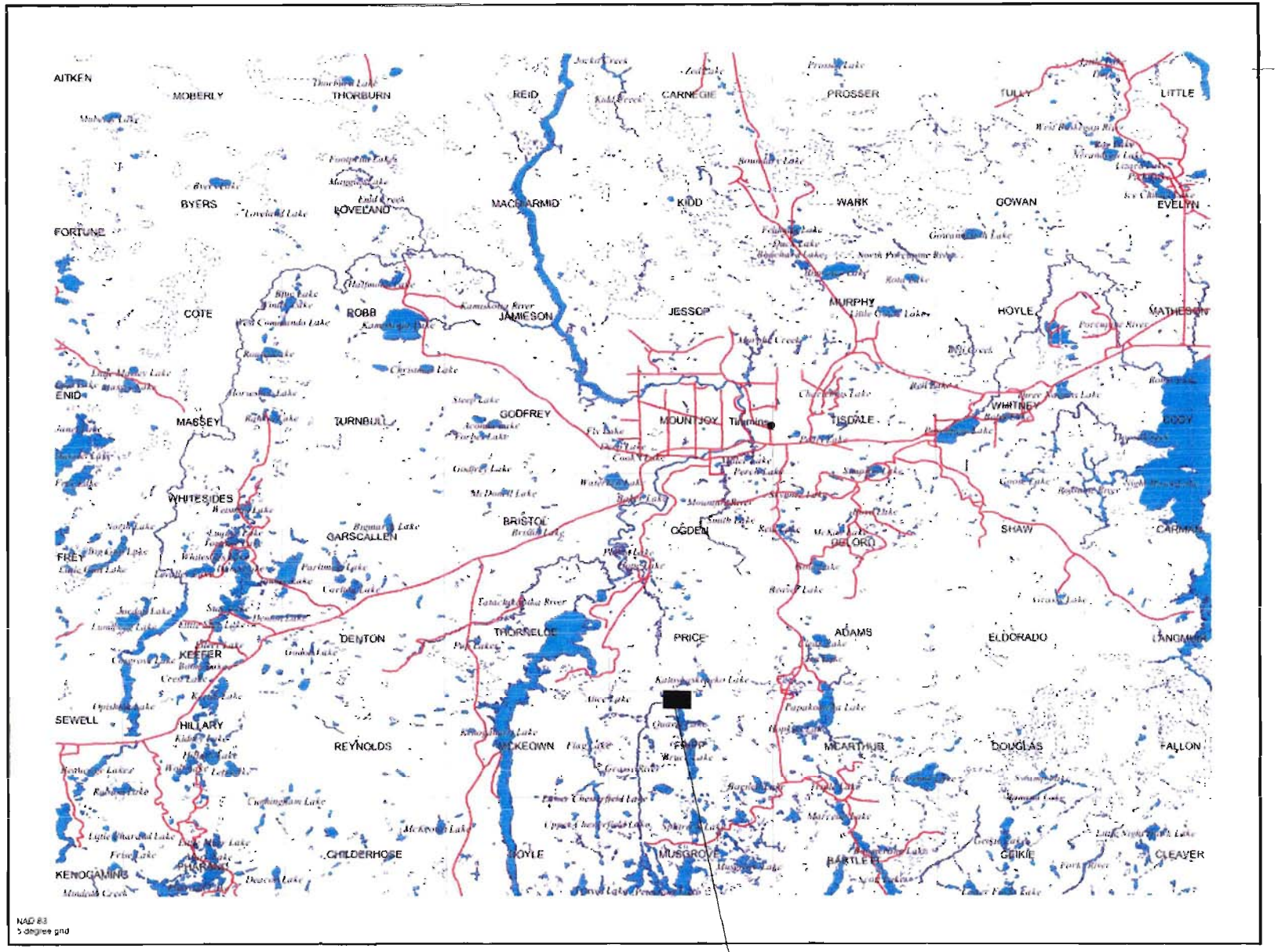



# MELKIOR RESOURCES INC

## CLAIM 4216008 FRIPP TOWNSHIP LOCATION MAP

FIGURE 1

***AUGUST 2009 EXSICS EXPLORATION LIMITED E-662***




Scale 1:2000

100 0 100 200 300 400 500 600

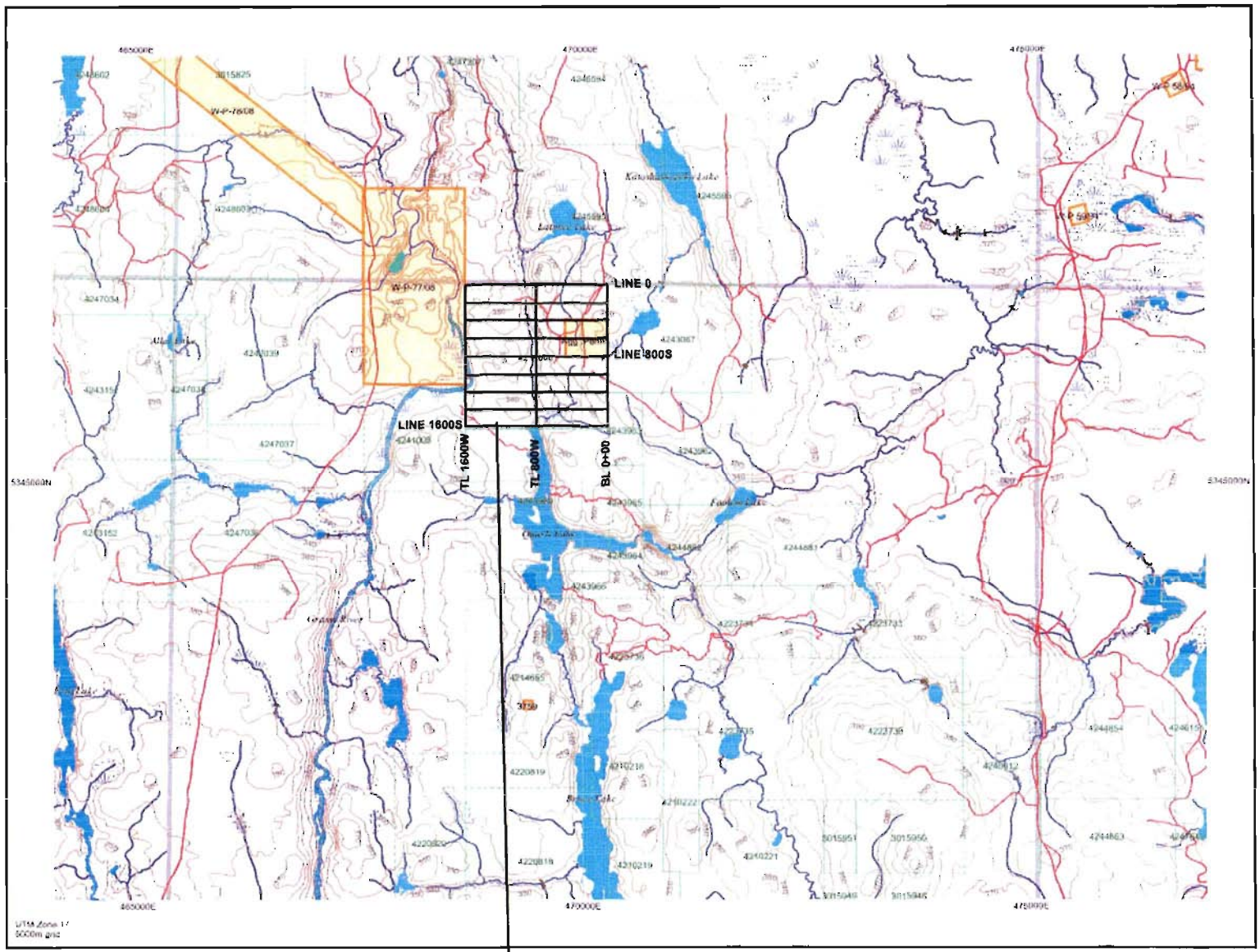
(meters)

MELKIOR RESOURCES INC.

**CLAIM 4216008 FRIPP TOWNSHIP**
**PROPERTY LOCATION MAP**

FIGURE 2

***AUGUST 2009 EXSICS EXPLORATION LIMITED E-RR-1***




Scale 1:40000

100 0 100 200 300 400 500 600

(meters)

| MELKIOR RESOURCES INC |
| --- |
| **CLAIM 4216008 FRIPP TOWNSHIP**<br>**CLAIM MAP - GRID SKETCH** |
| FIGURE 3 |
| ***AUGUST 2009 EXSICS EXPLORATION LIMITED E-662*** |

Ontario
MINISTRY OF NORTHERN DEVELOPMENT, MINES AND FORESTRY



Mining Claim Client Reports
| Main Menu | Back |

**PORCUPINE Mining Division - 402938 - MELKIOR RESOURCES INC. / RESSOURCES MELKIOR INC.**

| Township/Area | Claim Number | Recording Date | Claim Due Date | Status | Percent Option | Work Required | Total Applied | Total Reserve | Claim Bank |
|---|---|---|---|---|---|---|---|---|---|
| BMA 527853 | 4223013 | 2008-Feb-04 | 2010-Feb-04 | A | 100 % | $ 400 | $ 0 | $ 0 | $ 0 |
| BMA 527853 | 4223014 | 2008-Feb-05 | 2010-Feb-05 | A | 100 % | $ 800 | $ 0 | $ 0 | $ 0 |
| BMA 527853 | 4223062 | 2008-Jan-31 | 2010-Jan-31 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 527853 | 4223063 | 2008-Feb-04 | 2010-Feb-04 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 527853 | 4223064 | 2008-Feb-04 | 2010-Feb-04 | A | 100 % | $ 5,200 | $ 0 | $ 0 | $ 0 |
| BMA 527853 | 4223065 | 2008-Jan-31 | 2010-Jan-31 | A | 100 % | $ 4,800 | $ 0 | $ 0 | $ 0 |
| BMA 527853 | 4223066 | 2008-Feb-05 | 2010-Feb-05 | A | 100 % | $ 4,800 | $ 0 | $ 0 | $ 0 |
| BMA 527853 | 4223067 | 2008-Feb-05 | 2010-Feb-05 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 527853 | 4223068 | 2008-Feb-05 | 2010-Feb-05 | A | 100 % | $ 3,600 | $ 0 | $ 0 | $ 0 |
| BMA 527853 | 4223069 | 2008-Jan-31 | 2010-Jan-31 | A | 100 % | $ 800 | $ 0 | $ 0 | $ 0 |
| BMA 527853 | 4223070 | 2008-Feb-04 | 2010-Feb-04 | A | 100 % | $ 1,600 | $ 0 | $ 0 | $ 0 |
| BMA 527853 | 4223071 | 2008-Feb-04 | 2010-Feb-04 | A | 100 % | $ 1,600 | $ 0 | $ 0 | $ 0 |
| BMA 527853 | 4223072 | 2008-Feb-04 | 2010-Feb-04 | A | 100 % | $ 4,400 | $ 0 | $ 0 | $ 0 |
| BMA 527853 | 4223073 | 2008-Feb-04 | 2010-Feb-04 | A | 100 % | $ 4,000 | $ 0 | $ 0 | $ 0 |
| BMA 527853 | 4223074 | 2008-Feb-05 | 2010-Feb-05 | A | 100 % | $ 5,600 | $ 0 | $ 0 | $ 0 |
| BMA 527853 | 4223075 | 2008-Feb-05 | 2010-Feb-05 | A | 100 % | $ 2,800 | $ 0 | $ 0 | $ 0 |
| BMA 527853 | 4223082 | 2008-Feb-05 | 2010-Feb-05 | A | 100 % | $ 3,200 | $ 0 | $ 0 | $ 0 |
| BMA 527853 | 4223083 | 2008-Feb-05 | 2010-Feb-05 | A | 100 % | $ 3,200 | $ 0 | $ 0 | $ 0 |
| BMA 527853 | 4223084 | 2008-Feb-04 | 2010-Feb-04 | A | 100 % | $ 3,200 | $ 0 | $ 0 | $ 0 |
| BMA 527853 | 4223085 | 2008-Feb-04 | 2010-Feb-04 | A | 100 % | $ 3,600 | $ 0 | $ 0 | $ 0 |
| BMA 527853 | 4223094 | 2008-Feb-05 | 2010-Feb-05 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 527853 | 4223095 | 2008-Feb-05 | 2010-Feb-05 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 527853 | 4223401 | 2008-Apr-15 | 2010-Apr-15 | A | 100 % | $ 3,200 | $ 0 | $ 0 | $ 0 |
| BMA 527853 | 4223425 | 2008-Apr-15 | 2010-Apr-15 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 527853 | 4227591 | 2008-Feb-05 | 2010-Feb-05 | A | 100 % | $ 4,800 | $ 0 | $ 0 | $ 0 |
| BMA 527854 | 4223078 | 2008-Feb-08 | 2010-Feb-08 | A | 100 % | $ 3,200 | $ 0 | $ 0 | $ 0 |
| BMA 527854 | 4223079 | 2008-Feb-05 | 2010-Feb-05 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 527854 | 4223093 | 2008-Feb-05 | 2010-Feb-05 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| BMA 527854 | 4223294 | 2008-Feb-04 | 2010-Feb-04 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 527854 | 4227583 | 2008-Feb-04 | 2010-Feb-04 | A | 100 % | $ 5,600 | $ 0 | $ 0 | $ 0 |
| BMA 527854 | 4227694 | 2008-Jan-31 | 2010-Jan-31 | A | 100 % | $ 4,400 | $ 0 | $ 0 | $ 0 |
| BMA 527854 | 4227695 | 2008-Jan-31 | 2010-Jan-31 | A | 100 % | $ 3,600 | $ 0 | $ 0 | $ 0 |
| BMA 527854 | 4243102 | 2008-Jun-20 | 2010-Jun-20 | A | 100 % | $ 800 | $ 0 | $ 0 | $ 0 |
| BMA 528853 | 4219672 | 2008-Jan-24 | 2010-Jan-24 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528853 | 4219673 | 2008-Jan-24 | 2010-Jan-24 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528853 | 4219674 | 2008-Jan-24 | 2010-Jan-24 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528853 | 4219675 | 2008-Jan-24 | 2010-Jan-24 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528853 | 4219676 | 2008-Jan-31 | 2010-Jan-31 | A | 100 % | $ 5,600 | $ 0 | $ 0 | $ 0 |
| BMA 528853 | 4219677 | 2008-Feb-05 | 2010-Feb-05 | A | 100 % | $ 5,600 | $ 0 | $ 0 | $ 0 |
| BMA 528853 | 4219678 | 2008-Feb-05 | 2010-Feb-05 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528853 | 4219679 | 2008-Feb-05 | 2010-Feb-05 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528853 | 4219680 | 2008-Jan-31 | 2010-Jan-31 | A | 100 % | $ 3,200 | $ 0 | $ 0 | $ 0 |
| BMA 528853 | 4223054 | 2008-Jan-31 | 2010-Jan-31 | A | 100 % | $ 2,800 | $ 0 | $ 0 | $ 0 |
| BMA 528853 | 4223055 | 2008-Jan-31 | 2010-Jan-31 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528853 | 4223056 | 2008-Jan-31 | 2010-Jan-31 | A | 100 % | $ 4,800 | $ 0 | $ 0 | $ 0 |
| BMA 528853 | 4223057 | 2008-Feb-05 | 2010-Feb-05 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528853 | 4223058 | 2008-Feb-05 | 2010-Feb-05 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528853 | 4223059 | 2008-Jan-31 | 2010-Jan-31 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528853 | 4223060 | 2008-Jan-31 | 2010-Jan-31 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528853 | 4223061 | 2008-Feb-05 | 2010-Feb-05 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528853 | 4223096 | 2008-Feb-05 | 2010-Feb-05 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528853 | 4223099 | 2008-Jan-31 | 2010-Jan-31 | A | 100 % | $ 1,200 | $ 0 | $ 0 | $ 0 |
| BMA 528853 | 4223373 | 2008-Apr-14 | 2010-Apr-14 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528853 | 4223374 | 2008-Apr-15 | 2010-Apr-15 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528853 | 4223375 | 2008-Apr-15 | 2010-Apr-15 | A | 100 % | $ 6,000 | $ 0 | $ 0 | $ 0 |
| BMA 528853 | 4223376 | 2008-Apr-15 | 2010-Apr-15 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528853 | 4223396 | 2008-Apr-15 | 2010-Apr-15 | A | 100 % | $ 5,600 | $ 0 | $ 0 | $ 0 |
| BMA 528853 | 4223397 | 2008-Apr-15 | 2010-Apr-15 | A | 100 % | $ 5,600 | $ 0 | $ 0 | $ 0 |
| BMA 528853 | 4223398 | 2008-Apr-15 | 2010-Apr-15 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528853 | 4227592 | 2008-Jan-31 | 2010-Jan-31 | A | 100 % | $ 5,600 | $ 0 | $ 0 | $ 0 |
| BMA 528853 | 4227593 | 2008-Jan-30 | 2010-Jan-30 | A | 100 % | $ 6,000 | $ 0 | $ 0 | $ 0 |
| BMA 528853 | 4227594 | 2008-Jan-31 | 2010-Jan-31 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528853 | 4227595 | 2008-Jan-24 | 2010-Jan-24 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528853 | 4227596 | 2008-Jan-24 | 2010-Jan-24 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528853 | 4227597 | 2008-Jan-24 | 2010-Jan-24 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528853 | 4227598 | 2008-Jan-24 | 2010-Jan-24 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528853 | 4227599 | 2008-Jan-24 | 2010-Jan-24 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528853 | 4227600 | 2008-Jan-24 | 2010-Jan-24 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528853 | 4227601 | 2008-Jan-24 | 2010-Jan-24 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528853 | 4227602 | 2008-Jan-24 | 2010-Jan-24 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528853 | 4227603 | 2008-Jan-31 | 2010-Jan-31 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528853 | 4227604 | 2008-Jan-30 | 2010-Jan-30 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528853 | 4227605 | 2008-Feb-05 | 2010-Feb-05 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528853 | 4227683 | 2008-Jan-24 | 2010-Jan-24 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528853 | 4227684 | 2008-Jan-24 | 2010-Jan-24 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528853 | 4227685 | 2008-Jan-24 | 2010-Jan-24 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528853 | 4227686 | 2008-Jan-24 | 2010-Jan-24 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528853 | 4227687 | 2008-Jan-24 | 2010-Jan-24 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528853 | 4227688 | 2008-Jan-24 | 2010-Jan-24 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |

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|---|---|---|---|---|---|---|---|---|---|
| BMA 528853 | 4227690 | 2008-Jan-24 | 2010-Jan-24 | A | 100 % | $ 3,200 | $ 0 | $ 0 | $ 0 |
| BMA 528853 | 4227691 | 2008-Jan-31 | 2010-Jan-31 | A | 100 % | $ 2,800 | $ 0 | $ 0 | $ 0 |
| BMA 528853 | 4227692 | 2008-Jan-31 | 2010-Jan-31 | A | 100 % | $ 4,400 | $ 0 | $ 0 | $ 0 |
| BMA 528854 | 4219671 | 2008-Jan-24 | 2010-Jan-24 | A | 100 % | $ 2,800 | $ 0 | $ 0 | $ 0 |
| BMA 528854 | 4223291 | 2008-Jan-24 | 2010-Jan-24 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528854 | 4223292 | 2008-Jan-31 | 2010-Jan-31 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528854 | 4223293 | 2008-Jan-31 | 2010-Jan-31 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528854 | 4227178 | 2008-Jan-24 | 2010-Jan-24 | A | 100 % | $ 3,200 | $ 0 | $ 0 | $ 0 |
| BMA 528854 | 4227576 | 2008-Jan-24 | 2010-Jan-24 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528854 | 4227577 | 2008-Jan-24 | 2010-Jan-24 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528854 | 4227578 | 2008-Jan-24 | 2010-Jan-24 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528854 | 4227579 | 2008-Jan-24 | 2010-Jan-24 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528854 | 4227580 | 2008-Jan-24 | 2010-Jan-24 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528854 | 4227581 | 2008-Jan-31 | 2010-Jan-31 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528854 | 4227582 | 2008-Feb-05 | 2010-Feb-05 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528854 | 4227584 | 2008-Feb-05 | 2010-Feb-05 | A | 100 % | $ 4,800 | $ 0 | $ 0 | $ 0 |
| BMA 528854 | 4227585 | 2008-Feb-05 | 2010-Feb-05 | A | 100 % | $ 3,200 | $ 0 | $ 0 | $ 0 |
| BMA 528854 | 4227586 | 2008-Jan-24 | 2010-Jan-24 | A | 100 % | $ 3,200 | $ 0 | $ 0 | $ 0 |
| BMA 528854 | 4227587 | 2008-Jan-24 | 2010-Jan-24 | A | 100 % | $ 3,200 | $ 0 | $ 0 | $ 0 |
| BMA 528854 | 4227588 | 2008-Jan-24 | 2010-Jan-24 | A | 100 % | $ 1,600 | $ 0 | $ 0 | $ 0 |
| BMA 528854 | 4227589 | 2008-Jan-24 | 2010-Jan-24 | A | 100 % | $ 1,600 | $ 0 | $ 0 | $ 0 |
| BMA 528854 | 4227590 | 2008-Jan-24 | 2010-Jan-24 | A | 100 % | $ 2,400 | $ 0 | $ 0 | $ 0 |
| BMA 528854 | 4227679 | 2008-Jan-24 | 2010-Jan-24 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528854 | 4227680 | 2008-Jan-24 | 2010-Jan-24 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528854 | 4227681 | 2008-Jan-24 | 2010-Jan-24 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528854 | 4227682 | 2008-Jan-24 | 2010-Jan-24 | A | 100 % | $ 4,800 | $ 0 | $ 0 | $ 0 |
| BMA 528854 | 4227689 | 2008-Jan-24 | 2010-Jan-24 | A | 100 % | $ 2,800 | $ 0 | $ 0 | $ 0 |
| BMA 528854 | 4227696 | 2008-Jan-31 | 2010-Jan-31 | A | 100 % | $ 4,800 | $ 0 | $ 0 | $ 0 |
| BMA 528854 | 4227697 | 2008-Jan-31 | 2010-Jan-31 | A | 100 % | $ 6,000 | $ 0 | $ 0 | $ 0 |
| BMA 528854 | 4227698 | 2008-Jan-24 | 2010-Jan-24 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528854 | 4227699 | 2008-Jan-24 | 2010-Jan-24 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528854 | 4227700 | 2008-Jan-24 | 2010-Jan-24 | A | 100 % | $ 6,000 | $ 0 | $ 0 | $ 0 |
| BMA 528854 | 4227701 | 2008-Jan-24 | 2010-Jan-24 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528854 | 4227702 | 2008-Jan-24 | 2010-Jan-24 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528854 | 4227703 | 2008-Jan-24 | 2010-Jan-24 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| BMA 528854 | 4227704 | 2008-Jan-24 | 2010-Jan-24 | A | 100 % | $ 4,800 | $ 0 | $ 0 | $ 0 |
| BMA 528854 | 4227705 | 2008-Jan-24 | 2010-Jan-24 | A | 100 % | $ 1,600 | $ 0 | $ 0 | $ 0 |
| BMA 528854 | 4243101 | 2008-Jun-20 | 2010-Jun-20 | A | 100 % | $ 1,600 | $ 0 | $ 0 | $ 0 |
| BMA 528854 | 4243103 | 2008-Jun-20 | 2010-Jun-20 | A | 50 % | $ 1,200 | $ 0 | $ 0 | $ 0 |
| BMA 528854 | 4243104 | 2008-Jun-20 | 2010-Jun-20 | A | 50 % | $ 1,600 | $ 0 | $ 0 | $ 0 |
| BMA 528862 | 4243112 | 2008-Jun-20 | 2010-Jun-20 | A | 100 % | $ 5,200 | $ 0 | $ 0 | $ 0 |
| BMA 528862 | 4243113 | 2008-Jun-20 | 2010-Jun-20 | A | 100 % | $ 4,800 | $ 0 | $ 0 | $ 0 |
| BMA 531862 | 4243114 | 2008-Jun-20 | 2010-Jun-20 | A | 100 % | $ 5,600 | $ 0 | $ 0 | $ 0 |
| BMA 531862 | 4243115 | 2008-Jun-20 | 2010-Jun-20 | A | 100 % | $ 4,000 | $ 0 | $ 0 | $ 0 |
| BRISTOL | 4224651 | 2007-Sep-27 | 2009-Sep-27 | A | 100 % | $ 1,600 | $ 0 | $ 0 | $ 0 |
| BRISTOL | 4224652 | 2007-Oct-04 | 2009-Oct-04 | A | 100 % | $ 1,600 | $ 0 | $ 0 | $ 0 |
| BRISTOL | 4224653 | 2007-Oct-04 | 2009-Oct-04 | A | 100 % | $ 1,600 | $ 0 | $ 0 | $ 0 |
| CARMAN | 4215528 | 2007-Jun-01 | 2010-Jun-01 | A | 100 % | $ 3,200 | $ 3,200 | $ 0 | $ 0 |
| CARMAN | 4215532 | 2007-Jun-01 | 2010-Jun-01 | A | 100 % | $ 4,800 | $ 4,800 | $ 0 | $ 0 |
| CARSCALLEN | 1213580 | 1996-Jan-04 | 2011-Jan-04 | A | 100 % | $ 400 | $ 5,200 | $ 21 | $ 0 |
| CARSCALLEN | 3019020 | 2004-Sep-08 | 2012-Sep-08 | A | 100 % | $ 4,000 | $ 24,000 | $ 1,797 | $ 0 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CARSCALLEN | 3019021 | 2004-Sep-08 | 2012-Sep-08 | A | 100 % | $ 4,000 | $ 24,000 | $ 150,403 | $ 0 |
| CARSCALLEN | 3019022 | 2004-Sep-08 | 2012-Sep-08 | A | 100 % | $ 3,200 | $ 19,200 | $ 132,824 | $ 0 |
| CARSCALLEN | 3019114 | 2004-Sep-14 | 2012-Sep-14 | A | 100 % | $ 2,400 | $ 14,400 | $ 92,846 | $ 0 |
| CARSCALLEN | 3019115 | 2004-Sep-24 | 2012-Sep-24 | A | 100 % | $ 4,800 | $ 28,800 | $ 161,650 | $ 0 |
| CARSCALLEN | 3019116 | 2004-Sep-24 | 2012-Sep-24 | A | 100 % | $ 800 | $ 4,800 | $ 135 | $ 0 |
| CARSCALLEN | 3019118 | 2004-Nov-10 | 2012-Nov-10 | A | 100 % | $ 400 | $ 2,400 | $ 15,947 | $ 0 |
| CARSCALLEN | 4202150 | 2006-Jun-02 | 2014-Jun-02 | A | 100 % | $ 400 | $ 2,400 | $ 15,865 | $ 0 |
| CARSCALLEN | 4202649 | 2007-Feb-14 | 2010-Feb-14 | A | 100 % | $ 3,200 | $ 3,200 | $ 5,251 | $ 0 |
| CARSCALLEN | 4212369 | 2007-Feb-28 | 2010-Feb-28 | A | 100 % | $ 6,400 | $ 6,400 | $ 0 | $ 0 |
| CARSCALLEN | 4212370 | 2007-Feb-28 | 2010-Feb-28 | A | 100 % | $ 6,400 | $ 6,400 | $ 146 | $ 0 |
| CARSCALLEN | 4212371 | 2007-Feb-28 | 2010-Feb-28 | A | 100 % | $ 6,400 | $ 6,400 | $ 79 | $ 0 |
| CARSCALLEN | 4212372 | 2007-Feb-28 | 2010-Feb-28 | A | 100 % | $ 6,000 | $ 6,000 | $ 0 | $ 0 |
| CARSCALLEN | 4213967 | 2007-Jan-25 | 2010-Jan-25 | A | 100 % | $ 4,800 | $ 4,800 | $ 5,686 | $ 0 |
| CARSCALLEN | 4213969 | 2007-Jan-25 | 2010-Jan-25 | A | 100 % | $ 3,200 | $ 3,200 | $ 2,067 | $ 0 |
| CARSCALLEN | 4215559 | 2007-Jun-11 | 2010-Jun-11 | A | 100 % | $ 2,400 | $ 2,400 | $ 0 | $ 0 |
| CARSCALLEN | 4215560 | 2007-Jun-11 | 2010-Jun-11 | A | 100 % | $ 5,600 | $ 5,600 | $ 0 | $ 0 |
| DENTON | 3006573 | 2006-Jul-27 | 2013-Jul-27 | A | 100 % | $ 400 | $ 2,000 | $ 0 | $ 0 |
| DENTON | 3019117 | 2004-Sep-24 | 2010-Sep-24 | A | 100 % | $ 4,800 | $ 19,200 | $ 0 | $ 0 |
| ELDORADO | 4210997 | 2007-Jun-01 | 2011-Jun-01 | A | 100 % | $ 6,400 | $ 12,800 | $ 0 | $ 0 |
| ELDORADO | 4215526 | 2007-Jun-06 | 2010-Jun-06 | A | 100 % | $ 6,400 | $ 6,400 | $ 0 | $ 0 |
| ELDORADO | 4215533 | 2007-Jun-06 | 2010-Jun-06 | A | 100 % | $ 6,400 | $ 6,400 | $ 0 | $ 0 |
| ELDORADO | 4215565 | 2007-Jun-06 | 2010-Jun-06 | A | 100 % | $ 6,400 | $ 6,400 | $ 0 | $ 0 |
| ELDORADO | 4215566 | 2007-Jun-06 | 2011-Jun-06 | A | 100 % | $ 4,000 | $ 8,000 | $ 0 | $ 0 |
| ELDORADO | 4215567 | 2007-Jun-06 | 2010-Jun-06 | A | 100 % | $ 6,400 | $ 6,400 | $ 0 | $ 0 |
| ELDORADO | 4215569 | 2007-Jun-01 | 2011-Jun-01 | A | 100 % | $ 6,400 | $ 12,800 | $ 0 | $ 0 |
| ELDORADO | 4215570 | 2007-Jun-01 | 2011-Jun-01 | A | 100 % | $ 6,400 | $ 12,800 | $ 0 | $ 0 |
| ELDORADO | 4215571 | 2007-Jun-01 | 2010-Jun-01 | A | 100 % | $ 4,400 | $ 4,400 | $ 1,136 | $ 0 |
| ELDORADO | 4215572 | 2007-Jun-01 | 2011-Jun-01 | A | 100 % | $ 4,800 | $ 9,600 | $ 17 | $ 0 |
| ELDORADO | 4215573 | 2007-Jun-01 | 2011-Jun-01 | A | 100 % | $ 4,800 | $ 9,600 | $ 292 | $ 0 |
| ELDORADO | 4288068 | 2007-Jun-01 | 2011-Jun-01 | A | 100 % | $ 6,400 | $ 12,800 | $ 0 | $ 0 |
| FRIPP | 4216008 | 2007-Jul-05 | 2009-Sep-04 | A | 100 % | $ 6,400 | $ 0 | $ 0 | $ 0 |
| LANGMUIR | 4215530 | 2007-Jun-01 | 2010-Jun-01 | A | 100 % | $ 800 | $ 800 | $ 0 | $ 0 |
| LANGMUIR | 4215531 | 2007-Jun-06 | 2010-Jun-06 | A | 100 % | $ 2,400 | $ 2,400 | $ 0 | $ 0 |
| LANGMUIR | 4215564 | 2007-Jun-06 | 2010-Jun-06 | A | 100 % | $ 1,600 | $ 1,600 | $ 0 | $ 0 |
| LOVELAND | 4217853 | 2007-Oct-09 | 2009-Oct-09 | A | 100 % | $ 1,600 | $ 0 | $ 0 | $ 0 |
| LOVELAND | 4217854 | 2007-Oct-09 | 2009-Oct-09 | A | 100 % | $ 1,200 | $ 0 | $ 0 | $ 0 |
| LOVELAND | 4217855 | 2007-Oct-09 | 2009-Oct-09 | A | 100 % | $ 3,600 | $ 0 | $ 0 | $ 0 |
| LOVELAND | 4223275 | 2007-Oct-09 | 2009-Oct-09 | A | 100 % | $ 1,200 | $ 0 | $ 0 | $ 0 |
| LOVELAND | 4224655 | 2007-Oct-09 | 2009-Oct-09 | A | 100 % | $ 1,600 | $ 0 | $ 0 | $ 0 |
| LOVELAND | 4224656 | 2007-Oct-09 | 2009-Oct-09 | A | 100 % | $ 1,200 | $ 0 | $ 0 | $ 0 |
| LOVELAND | 4224657 | 2007-Oct-09 | 2009-Oct-09 | A | 100 % | $ 2,400 | $ 0 | $ 0 | $ 0 |
| LOVELAND | 4224658 | 2007-Oct-09 | 2009-Oct-09 | A | 100 % | $ 1,600 | $ 0 | $ 0 | $ 0 |
| LOVELAND | 4224659 | 2007-Oct-09 | 2009-Oct-09 | A | 100 % | $ 3,200 | $ 0 | $ 0 | $ 0 |
| SHAW | 4215527 | 2007-Jun-06 | 2010-Jun-06 | A | 100 % | $ 2,400 | $ 2,400 | $ 0 | $ 0 |
| SHAW | 4215529 | 2007-Jun-01 | 2010-Jun-01 | A | 100 % | $ 3,200 | $ 3,200 | $ 0 | $ 0 |


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## GROUND PROGRAM:

The ground program was completed in two phases. The first phase was to establish a detailed metric grid across the claims. This was done by establishing base line 0+00 at the northeast corner of the claim block and cutting the line south to the southeast corner of the claim block. Cross lines were then turned off of this base line at 100 meter intervals from line 0+00 to and including line 1600MS. All of these cross lines were then cut and chained at 25 meter station intervals to tie line 1600MW that was cut along the western boundary of the claim block. This 1600MW tie line was used to control the cross lines. A second tie line at 800MW was also completed to help in controlling the cross lines. In all a total of 32.0 kilometers of grid lines were cut across the claim block between July 7th and August 17th 2009.

Upon the completion of the line cutting the grid was then covered by a total field magnetic survey that was completed by Exsics Exploration. The survey was completed using the Scintrex Envi Mag system. Specifications for this unit can be found as Appendix A of this report.

In all, a total of 32.0 kilometers of grid lines were covered by the Magnetic survey between August 20th and the 24th of 2009. The following parameters were kept constant throughout the surveys.

| | |
|---|---|
| Line spacing | 100 meters |
| Station spacing | 25 meters |
| Reading intervals | 05 meters |
| Diurnal monitoring | Base station recorder |
| Base record intervals | 30 seconds |
| Unit accuracy | =+/- 0.1 gamma |
| Base reference field | |
| Datum subtracted | |

The collected data was then corrected, leveled and then plotted directly onto a base map at a scale of 1:5000 and then contoured at 25 gamma intervals wherever possible. A copy of this color contoured base map is included in the back pocket of this report.

## MAGNETIC SURVEY RESULTS:

The most predominant magnetic feature on the grid is a north south striking magnetic low that generally parallels the 800MW tie line. This feature relates to a well defined regional north northwest striking fault that runs through Quartz lake. The fault continues off of the grid in both directions.

The narrow and parallel magnetic highs that cover the eastern section of the grid relate to suspected diabase dike like units that lie within and along the contact between the felsics and mafic metavolcanics that underlie this section of the grid area.

The most interesting feature on the grid relates to a good magnetic high unit that is situated between lines 1400MS and 700MS and between stations 1200MW and 800MW. The unit ranges from several hundreds to several thousands of gammas above the general background of the grid and it appears to be near vertical in depth.

The eastern edge of the high lies along the western edge of the fault and also appears to have been folded around a magnetic low pushing into the high from the west.

The magnetic low striking from line 1600MS at 1000MW to line 1150MS at 1600MW most probably relates to the contact between the felsics to the east and the sediments to the west and southwest.

The narrow magnetic high that lies to the west of the fault and across lines 0+00 to and including 400MS may relate to the contact of the mafics to felsics that have been mapped in the area.

## CONCLUSIONS AND RECOMMENDATIONS:

The magnetic survey was successful in locating and outlining the geological characteristics of the grid area. The fault is of regional proportions and is well outlined on the grid. The dikes have been well defined and parallel the main structural trends.

The distorted magnetic high unit is the most interesting feature on the grid and it should be followed up further with ground geophysics to test its potential for gold and or base metal potential. It lies in close proximity to a regional north-northwest fault structure that runs through the main Destor Porcupine Fault zone to the north. The new Mine project of Lake Shore Gold and the Timmins West Gold property lies about 16 kilometers to the northwest of this grid area and to the immediate west of the same north-south regional fault zone.

A follow up program of Induced Polarization surveys across lines 900MS to 1200MS using a pole dipole array and six electrodes spaced 25 meters apart would be sufficient to detail the magnetic high as well as the main fault zone. Should this follow up program return conductive zones then diamond drilling should be considered as a final follow up to test these targets.

Respectfully submitted

J. C. Grant
August 2009

## CERTIFICATION

I, John Charles Grant, of 108 Kay Crescent, in the City of Timmins, Province of Ontario, hereby certify that:

1). I am a graduate of Cambrian College of Applied Arts and Technology, 1975, Sudbury Ontario Campus, with a 3 year Honors Diploma in Geological and Geophysical Technology.

2). I have worked subsequently as an Exploration Geophysicist for Teck Exploration Limited, (5 years, 1975 to 1980), and currently as Exploration Manager and Chief Geophysicist for Exsics Exploration Limited, since May, 1980.

3). I am a member in good standing of the Certified Engineering Technologist Association, (CET), since 1984.

4). I am in good standing as a Fellow of the Geological Association of Canada, (FGAC), since 1986.

5). I have been actively engaged in my profession since the 15th day of May, 1975, in all aspects of ground exploration programs including the planning and execution of field programs, project supervision, data compilation, interpretations and reports.

6). I have no specific or special interest nor do I expect to receive any such interest in the herein described property. I have been retained by the property holders and or their Agents as a Geological and Geophysical Consultant and Contract Manager.

John Charles Grant, CET., FGAC.

# APPENDIX A

# SCINTREX

# ENVI-MAG Environmental Magnetometer/Gradiometer

## Locating Buried Drums and Tanks?

The ENVI-MAG is the solution to this environmental problem. ENVI-MAG is an inexpensive, lightweight, portable "WALKMAG" which enables you to survey large areas quickly and accurately.

ENVI-MAG is a portable, proton precession magnetometer and/or gradiometer, for geotechnical, archaeological and environmental applications where high production, fast count rate and high sensitivity are required. It may also be used for other applications, such as mineral exploration, and may be configured as a total-field magnetometer, a vertical gradiometer or as a base station.

### The ENVI-MAG

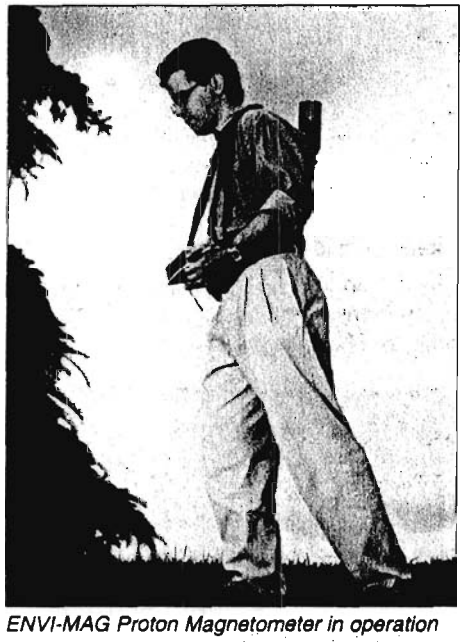
- easily detects buried drums to depths of 10 feet or more
- more sensitive to the steel of a buried drum than EM or radar
- much less expensive than EM or radar
- survey productivity much higher than with EM or radar

### Main features include:

- select sampling rates as fast as 2 times per second
- "WALKMAG" mode for rapid acquisition of data
- large internal, expandable memory
- easy to read, large LCD screen displays data both numerically and graphically
- ENVIMAP software for processing and mapping data

ENVI-MAG comprises several basic modules; a lightweight console with a large screen alphanumeric display and high capacity memory, a staff mounted sensor and sensor cable, rechargeable battery and battery charger, RS-232 cable and ENVIMAP processing and mapping software.

For gradiometry applications an upgrade kit is available, comprising an additional processor module for installation in the console, and a second sensor with a staff extender.



*ENVI-MAG Proton Magnetometer in operation*

For base station applications a Base Station Accessory Kit is available so that the sensor and staff may be converted into a base station sensor.

## Features and Benefits

### "WALKMAG" Magnetometer/Gradiometer

The "WALKMAG" mode of operation (sometimes known as "Walking Mag") is user-selectable from the keyboard. In this mode, data is acquired and recorded at the rate of 2 readings per second as the operator walks at a steady pace along a line. At desired intervals, the operator "triggers" an event marker by a single key stroke, assigning coordinates to the recorded data.

### True Simultaneous Gradiometer

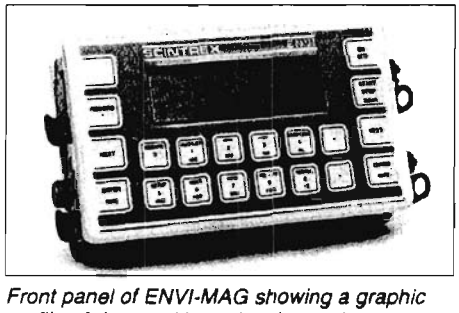
An optional upgrade kit is available to configure ENVI-MAG as a gradiometer to make true, simultaneous gradiometer measurements. Gradiometry is useful for geotechnical and archaeological surveys where small near surface magnetic targets are the object of the survey.

### Selectable Sampling Rates

0.5 second, 1 second and 2 second reading rates user selectable from the keyboard.

### Large-Key Keypad

The large-key keypad allows easy access for gloved-hands in cold-weather operations. Each key has a multi-purpose function.



*Front panel of ENVI-MAG showing a graphic profile of data and large-key keypad*

### Large Capacity Memory

ENVI-MAG with standard memory stores up to 28,000 readings of total field measurements, 21,000 readings of gradiometry data or 151,000 readings as a base station. An expanded memory option is available which increases this standard capacity by a factor of 5.

### Easy Review of Data

For quality of data and for a rapid analysis of the magnetic characteristics of the survey line, several modes of review are possible. These include the measurements at the last four stations, the ability to scroll through any or all previous readings in memory, and a graphic display of the previous data as profiles, line by line. This feature is very useful for environmental and archaeological surveys.

### Highly Productive

The "WALKMAG" mode of operation acquires data rapidly at close station intervals, ensuring high-definition results. This increases survey productivity by a factor of 5 when compared to a conventional magnetometer survey.

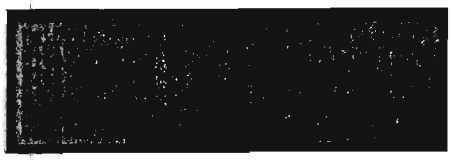
### "Datacheck" Quality Control of Data

"Datacheck" provides a feature wherein at the end of each survey line, data may be reviewed as a profile on ENVI-MAG's screen. Datacheck confirms that the instrument is functioning correctly and

allows the user to note the magnetic relief (anomaly) on the line.

### Large Screen Display

"Super-Twist" 64 x 240 dot (8 lines x 40 characters), LCD graphic screen provides good visibility in all light conditions. A display heater is optionally available for low-temperature operations below 0°C.



*Close-up of the ENVI-MAG screen showing data presented after each reading*

### Interactive Menus

The set-up of ENVI-MAG is menu-driven, and minimizes the operator's learning time, and on-going tasks.

*Close-up of display of ENVI-MAG showing interactive set-up menu*

### Rechargeable Battery and Battery Charger

An "off-the-shelf" lead-acid battery and charger are provided as standard. The low-cost "Camcorder" type battery is available from electronic parts distributors everywhere.

### HELP-Line Available

Purchasers of ENVI-MAG are provided with a HELP-Line telephone number to call in the event assistance is needed with an application or instrumentation problem.

### ENVIMAP Processing and Mapping Software

Supplied with ENVI-MAG, and custom designed for this purpose, is easy-to-use, very user-friendly, menu driven data processing and mapping software called ENVIMAP. This unique software appears to the user to be a single program, but is in fact a sequence of separate programs, each performing a specific task. Under the menu system, there are separate programs to do the following:

a) read the ENVI-MAG data and reformat it into a standard compatible with the ENVIMAP software
b) grid the data into a standard grid format
c) create a vector file of posted values
d) contour the gridded data
e) autoscale the combined results of the posting/surround step and the contouring step to fit on a standard 8.5 ins. wide dot-matrix printer
f) rasterize and output the results of step e) to the printer

with line and baseline identification that allows the user to add some title information and build a suitable surround

ENVIMAP is designed to be as simple as possible. The user is required to answer a few basic questions asked by ENVIMAP, and then simply toggles "GO" to let ENVIMAP provide default parameters for the making of the contour map. The user can modify certain characteristics of the output plot. ENVIMAP'S menu system is both keyboard and mouse operable. HELP screens are integrated with the menu system so that HELP is displayed whenever the user requests it.

### Options Available

- True simultaneous gradiometer upgrade
- Base station upgrade
- Display heater for low temperature operations
- External battery pouch

## Specifications

**Total Field Operating Range**
20,000 to 100,000 nT (gammas)

**Total Field Absolute Accuracy**
+/- 1nT

**Sensitivity**
0.1 nT at 2 second sampling rate

**Tuning**
Fully solid state. Manual or automatic, keyboard selectable

**Cycling (Reading) Rates**
0.5, 1 or 2 seconds, up to 9999 seconds for base station applications, keyboard selectable

**Gradiometer Option**
Includes a second sensor, 20 inch (½m) staff extender and processor module

**"WALKMAG" Mode**
0.5 second for walking surveys, variable rates for hilly terrain

**Digital Display**
LCD "Super Twist", 240 x 64 dots graphics, 8 line x 40 characters alphanumerics

**Display Heater**
Thermostatically controlled, for cold weather operations

**Keyboard Input**
17 keys, dual function, membrane type

**Notebook Function**
32 characters, 5 user-defined MACRO's for quick entry

**Standard Memory**
Total Field Measurements: 28,000 readings
Gradiometer Measurements: 21,000 readings
Base Station Measurements: 151,000 readings

**Expanded Memory**
Total Field Measurements: 140,000 readings
Gradiometer Measurements: 109,000 readings
Base Station Measurements: 750,000 readings

**Real-Time Clock**
Records full date, hours, minutes and seconds with 1 second resolution, +/- 1 second stability over 12 hours

**Digital Data Output**
RS-232C interface, 600 to 57,600 Baud, 7 or 8 data bits, 1 start, 1 stop bit, no parity format. Selectable carriage return delay (0-999 ms) to accommodate slow peripherals. Handshaking is done by X-on/X-off

**Analog Output**
0 - 999 mV full scale output voltage with keyboard selectable range of 1, 10, 100, 1,000 or 10,000 nT full scale

**Power Supply**
Rechargeable "Camcorder" type, 2.3 Ah, Lead-acid battery.

12 Volts at 0.65 Amp for magnetometer, 1.2 Amp for gradiometer,

External 12 Volt input for base station operations

Optional external battery pouch for cold weather operations

**Battery Charger**
110 Volt - 230 Volt, 50/60 Hz

**Operating Temperature Range**
Standard 0° to 60°C
Optional -40°C to 60°C

**Dimensions**
Console - 10 x 6 x 2.25 inches
(250 mm x 152 mm x 55 mm)
T.F. sensor - 2.75 inches dia. x 7 inches
(70 mm x 175 mm)
Grad. sensor and staff extender - 2.75 inches dia. x 26.5 inches (70 mm x 675 mm)
T.F. staff - 1 inch dia. x 76 inches (25 mm x 2 m)

**Weight**
Console - 5.4 lbs (2.45 kg)
with rechargeable battery
T. F. sensor - 2.2 lbs (1.15 kg)
Grad. sensor - 2.5 lbs (1.15 kg)
Staff - 1.75 lbs (0.8 kg)

SCINTREX

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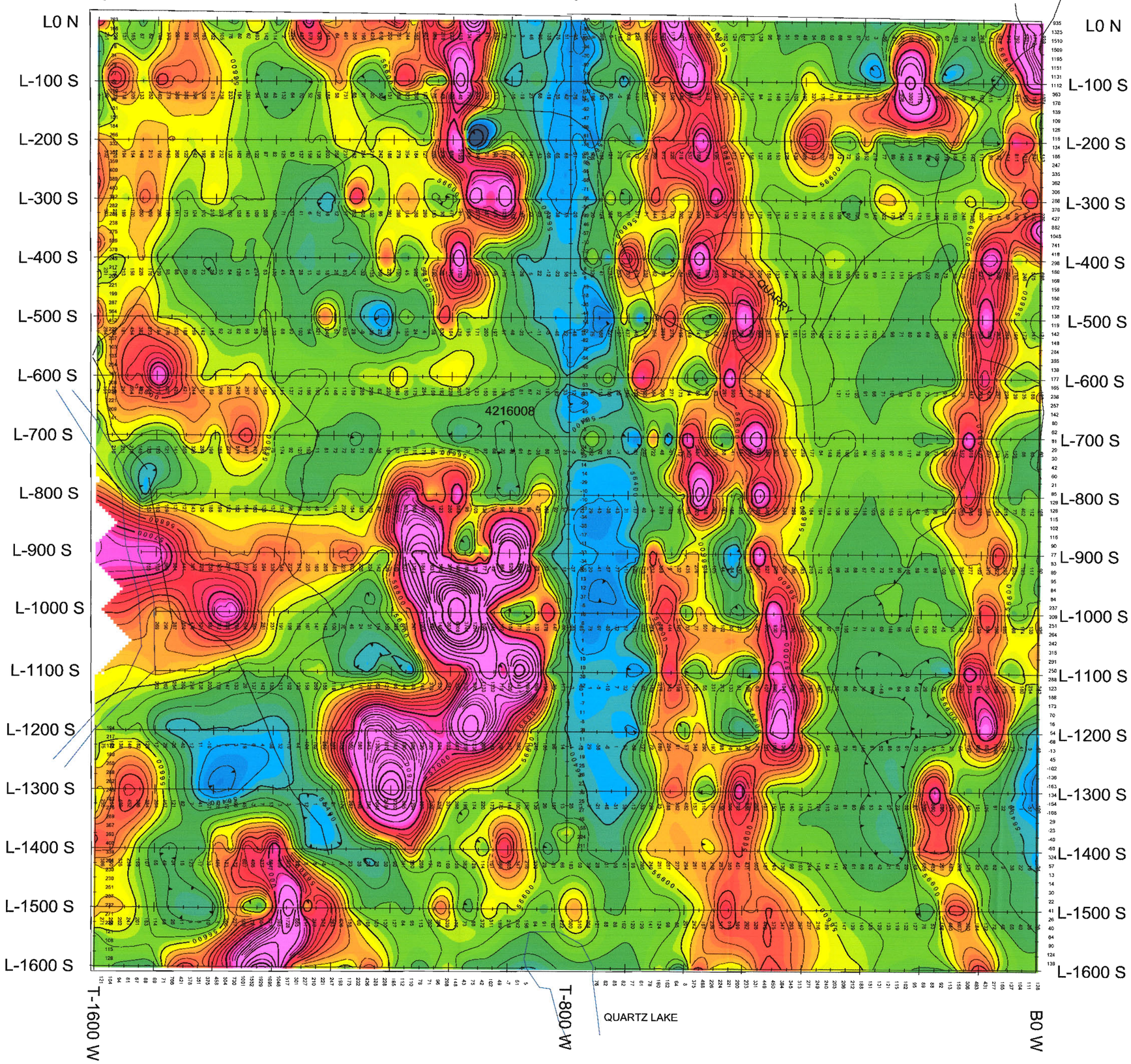
**In the USA:**
Scintrex Inc.
85 River Rock Drive
Unit 202
Buffalo, NY 14207
Telephone: (716) 298-1219
Fax: (716) 298-1317




Scale 1:5000

100 0 100 200 300

(meters)

**TOTAL FIELD MAGNETICS**

BASE 56200nT

56100 56225 56325 56375 56425 56475 56525 56575 56625 56675 56725 56775 56825 56875 56925 57025 57150

| MELKIOR RESOURCES INC |
|---|
| **CLAIM 4216008 FRIPP TOWNSHIP**<br>**TOTAL FIELD MAGNETIC SURVEY** |
| SCINTREX ENVI MAG SYSTEM<br>CONTOURED |
| ***AUGUST 2009 EXSICS EXPLORATION LIMITED E-662*** |