## Report

## Tisdale Property $2 \cdot 5799$ <br> Grid Cutting and Magnetometer Survey



Prepared for:
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## By:

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P4N 4L7


## Introduction

Tisdale Property is held $50 \%$ by 6398651 Canada Inc. and $50 \%$ by local prospector, Ken Pye. This report covers grid cutting and magnetometer survey for the 2011 and 2012 work programs.

Amseco Exploration Limited has successfully completed all payments required under a property acquisition agreement, to acquire $100 \%$ interest in Tisdale Property. Transfer documents have been prepared and the transfer is expected to take place in June, 2012.

The property was staked June $1^{\text {st }}, 2007$, under competitive staking conditions. The property covers the historic Central Porcupine Property in the heart of the Porcupine gold camp, directly between Goldcorp's Superpit and the historic Hollinger Mine.

Details of past work performed on the Central Porcupine Property can be found in assessment file T-125, at the Porcupine MNDM office.

## Property Description

Claim Numbers 4216036, 4216037, 4216038 and 4216039, are located in Tisdale Twp - Porcupine Mining Division, approximately 900 m from Goldcorp's Superpit. Photo A below, shows proximity to Superpit. Refer to Figure 1 (Location and Access map) for claim locations.


## Photo A

Satellite image showing Tisdale property in blue, approx 900 m from Superpit. Credit: Virtual Earth - high resolution images provided by Tom Savage.


## Access

The property is accessed from Timmins, through Schumacher, by an all-weather road that leads to the Hydro One facility east of Schumacher. Refer to Figure 1 (Location and Access map) for more detailed access information.

## Work Program

Field Work was carried out between April 18th, 2011 and April 15th, 2012. All work was carried out on a contract basis, by True North Mineral Laboratories Inc, of Timmins, Ontario.

## Grid Cutting

Precise (centimeter level) survey control points were established on April 18th, 2011, near L350E / 8250N, using Ashtec Locus differential GPS receivers. The control points are tied into the Canadian Spatial Reference System (CSRS), such that local L350E falls on UTM, NAD83 Easting 480350 and local 8250 N falls on UTM, NAD83 Northing 5368250.

In this manner, hand-held GPS may be used throughout the grid, with reasonably close agreement to grid pickets.

On April 19th and 20th, 2011 electronic total station was used to lay-out (cut) L350E, TL8100N and Baseline 7650N. All other grid lines were turned-off using total station, to provide good directional control for the remainder of grid cutting.

Remaining grid lines were cut and picketed between April $21^{\text {st }}$ and April $25^{\text {th }}$, 2011, by a 2-man crew hired by True North Minerals. Refer to Figure 2 (Grid Location Map) for more detailed grid location.


Ashtec differential GPS at L350E / 8250N


Total Station on L350E


## Magnetometer Survev

Magnetometer survey was carried out on April 15, 2012 using 2 Geometrics, G-856 proton procession magnetometers. One unit operated as a base to provide diurnal correction, while the other unit was used to survey.

Figure 3 presents the magnetometer survey as a colourized contour map produced using Geosoft Target software. Appendix / presents the survey data in table format, including raw field readings along with diurnal correction.

Equipment specifications are found in Appendix II.

## Methods

## Field

Magnetometer readings were taken at 12.5 m intervals, along cut lines that are picketed every 25 m . Grid line spacing is 50 m , as shown on Figures 2 and 3 .

## Cultural Interference (from high voltage lines)

Tisdale Property is crossed in several directions by high voltage power lines and there is a main hydro substation along the western edge of the property (see Figure 2). Care was taken to exclude any readings that were obviously influenced by these features.

The G-856 magnetometers have a useful feature that lets you know when you are in an area with "steep magnetic gradient" - by emitting 3 short beeps, and truncating the reading to 1 nt .

During the survey, none of the truncated readings were recorded. Notes are included in Appendix I, as to where readings have been omitted.

## Only a portion of the grid was surveyed

Magnetometer survey was limited to the area shown on Figure 2 and 3, due to cultural interference and no access in water areas during the off-winter months.

As a result - this report will only claim the portion of grid-cutting costs that apply to the magnetometer survey. $47 \%$ of the grid was surveyed, as shown in Fig 2.

Other surveys (geochemical sampling and geological mapping) have been carried out over the entire grid, but will not be reported at this time. The remainder of grid-cutting costs may be claimed at some point in the future, once analysis has been completed on geochem samples.


## Results

The magnetometer survey shows 2 obvious magnetic highs;

1) From 375 E to 525 E at approx 8200 N
2) From 410 E to 490 E at approx 8075 N

There are 2 small magnetic lows at $750 \mathrm{E} / 8080 \mathrm{~N}$ and $400 \mathrm{E} / 7912 \mathrm{~N}$.

## Recommendations

Magnetometer alone will not provide a definitive exploration target in this case. The same grid has been used to retrieve geochem samples, intended to be analyzed using SGH (Soil Gas Hydrocarbon) methods.

When the SGH results become available - it may be possible to identify trends that are common to both surveys.

It is recommended that Amseco Exploration Limited bring the SGH analysis to completion, once interest has been transferred.

## Appendix I

## Magnetometer Survey Data

| MARK | X | Y | READING | DIURNAL | TIME | Corrected | Notes (abbr H.V.L. = High Voltage Line) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 178 | 300.0 | 7975.0 | 56126.1 | -345.2 | 22:45.0 | 56154.8 | 7987.5N was under H.V.L. |
| 177 | 300.0 | 7962.5 | 56123.5 | -347.6 | 22:12.0 | 56152.4 |  |
| 176 | 300.0 | 7950.0 | 56113.5 | -356.8 | 20:25.0 | 56143.2 |  |
| 175 | 350.0 | 7850.0 | 56211.8 | -256.6 | 12:59.0 | 56243.4 | end of line - water |
| 174 | 350.0 | 7862.5 | 56210.5 | -258.0 | 12:35.0 | 56242.0 |  |
| 173 | 350.0 | 7875.0 | 56209.0 | -259.3 | 12:00.0 | 56240.8 |  |
| 172 | 350.0 | 7887.5 | 56207.0 | -261.2 | 11:36.0 | 56238.8 |  |
| 171 | 350.0 | 7900.0 | 56208.1 | -260.0 | 11:13.0 | 56240.0 |  |
| 170 | 350.0 | 7912.5 | 56204.1 | -264.9 | 10:48.0 | 56235.1 |  |
| 169 | 350.0 | 7925.0 | 56195.6 | -273.6 | 10:24.0 | 56226.5 |  |
| 168 | 350.0 | 7937.5 | 56190.8 | -277.9 | 09:59.0 | 56222.1 |  |
| 167 | 350.0 | 7950.0 | 56188.4 | -280.8 | 09:33.0 | 56219.2 |  |
| 166 | 350.0 | 7962.5 | 56181.2 | -287.8 | 09:08.0 | 56212.2 |  |
| 165 | 350.0 | 7975.0 | 56184.8 | -284.3 | 08:47.0 | 56215.7 |  |
| 164 | 350.0 | 7987.5 | 56187.7 | -280.4 | 08:22.0 | 56219.6 |  |
| 163 | 350.0 | 8000.0 | 56193.2 | -275.5 | 07:58.0 | 56224.6 |  |
| 162 | 350.0 | 8012.5 | 56186.3 | -283.9 | 06:47.0 | 56216.1 |  |
| 161 | 350.0 | 8050.0 | 56197.1 | -273.4 | 04:35.0 | 56226.6 | 8037.5 N and 8025 N were under H.V.L. |
| 160 | 350.0 | 8062.5 | 56197.2 | -273.4 | 04:09.0 | 56226.6 |  |
| 159 | 350.0 | 8075.0 | 56201.5 | -268.5 | 03:33.0 | 56231.5 |  |
| 158 | 350.0 | 8087.5 | 56196.2 | -273.8 | 03:09.0 | 56226.2 |  |
| 157 | 350.0 | 8100.0 | 56194.9 | -276.2 | 01:00.0 | 56223.8 | 337.5E was under H.V.L. |
| 156 | 362.5 | 8100.0 | 56208.2 | -263.1 | 00:27.0 | 56236.9 |  |
| 155 | 375.0 | 8100.0 | 56204.3 | -266.8 | 00:05.0 | 56233.2 |  |
| 154 | 387.5 | 8100.0 | 56219.9 | -251.7 | 59:25.0 | 56248.4 |  |
| 153 | 400.0 | 8100.0 | 56214.0 | -257.1 | 58:57.0 | 56243.0 |  |
| 152 | 412.5 | 8100.0 | 56210.9 | -259.5 | 58:25.0 | 56240.5 |  |
| 151 | 425.0 | 8100.0 | 56289.7 | -182.0 | 57:56.0 | 56318.0 |  |
| 150 | 437.5 | 8100.0 | 56213.9 | -257.4 | 57:36.0 | 56242.6 |  |
| 149 | 450.0 | 8100.0 | 56225.9 | -245.6 | 57:09.0 | 56254.5 |  |
| 148 | 462.5 | 8100.0 | 56235.6 | -235.9 | 56:46.0 | 56264.1 |  |
| 147 | 475.0 | 8100.0 | 56230.8 | -240.4 | 56:20.0 | 56259.6 |  |
| 146 | 487.5 | 8100.0 | 56231.2 | -239.7 | 55:56.0 | 56260.3 |  |
| 145 | 500.0 | 8100.0 | 56232.3 | -238.9 | 55:29.0 | 56261.1 |  |
| 144 | 512.5 | 8100.0 | 56229.9 | -241.0 | 55:03.0 | 56259.0 |  |
| 143 | 525.0 | 8100.0 | 56224.2 | -246.4 | 54:39.0 | 56253.6 |  |
| 142 | 537.5 | 8100.0 | 56227.2 | -243.4 | 54:15.0 | 56256.6 |  |
| 141 | 550.0 | 8100.0 | 56229.5 | -240.8 | 53:45.0 | 56259.2 |  |
| 140 | 562.5 | 8100.0 | 56229.5 | -240.9 | 53:22.0 | 56259.2 |  |
| 139 | 575.0 | 8100.0 | 56226.3 | -244.0 | 52:58.0 | 56256.0 |  |
| 138 | 587.5 | 8100.0 | 56221.7 | -248.5 | 52:33.0 | 56251.6 |  |
| 137 | 600.0 | 8100.0 | 56225.1 | -244.8 | 52:10.0 | 56255.2 |  |
| 136 | 612.5 | 8100.0 | 56229.8 | -240.2 | 51:41.0 | 56259.8 |  |
| 135 | 625.0 | 8100.0 | 56234.3 | -235.5 | 51:18.0 | 56264.5 |  |
| 134 \| | 637.5 | 8100.0 | 56237.2 | -232.4 | 50:47.0 | 56267.6 |  |
| 133 | 650.0 | 8100.0 | 56237.8 | -231.8 | 50:20.0 | 56268.2 |  |
| 132 | 662.5 | 8100.0 | 56231.7 | -237.9 ${ }^{\text {i }}$ | 49:58.0 | 56262.1 |  |
| 131 | 675.0 | 8100.0 | 56220.5 | -248.8 | 49:33.0 | 56251.3 |  |
| 130 | 687.5 | 8100.0 | 56217.1 | -251.7 | 49:06.0 | 56248.3 |  |
| 129 | 700.0 | 8100.0 | 56217.2 | -251.2 | 48:43.0 | 56248.8 |  |
| 128 | 712.5 | 8100.0 | 56221.4 | -246.8 | 48:20.0 | 56253.2 |  |
| 127 | 725.0 | 8100.0 | 56218.5 | -249.7 | 47:54.0 | 56250.3 |  |


| 126 | 737.5 | 8100.0 | 56223.0 | -245.5 | 47:30.0 | 56254.5 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 125 | 750.0 | 8100.0 | 56211.0 | -257.4 | 47:04.0 | 56242.6 |  |
| 124 | 762.5 | 8100.0 | 56209.9 | -258.8 | 46:40.0 | 56241.2 |  |
| 123 | 775.0 | 8100.0 | 56202.0 | -266.6 | 46:13.0 | 56233.4 |  |
| 122 | 750.0 | 8125.0 | 56215.5 | -253.4 | 43:18.0 | 56246.7 |  |
| 121 | 750.0 | 8112.5 | 56217.0 | -252.1 | 42:54.0 | 56247.9 |  |
| 120 | 750.0 | 8100.0 | 56209.5 | -259.7 | 42:30.0 | 56240.3 |  |
| 119 | 750.0 | 8087.5 | 56186.3 | -282.4 | 41:58.0 | 56217.6 |  |
| 118 | 750.0 | 8075.0 | 56204.2 | -264.4 | 41:31.0 | 56235.6 |  |
| 117 | 700.0 | 8075.0 | 56227.4 | -241.3 | 38:31.0 | 56258.7 | 8087.5N was under H.V.L. |
| 116 | 700.0 | 8087.5 | 56222.5 | -246.8 | 38:05.0 | 56253.2 |  |
| 115 | 700.0 | 8100.0 | 56219.7 | -249.4 | 37:34.0 | 56250.6 |  |
| 114 | 700.0 | 8112.5 | 56221.3 | -248.5 | 37:08.0 | 56251.5 |  |
| 113 | 700.0 | 8125.0 | 56226.1 | -243.5 | 36:36.0 | 56256.5 |  |
| 112 | 700.0 | 8137.5 | 56234.3 | -235.2 | 36:06.0 | 56264.8 |  |
| 111 | 700.0 | 8150.0 | 56234.2 | -235.5 | 35:39.0 | 56264.5 |  |
| 110 | 700.0 | 8162.5 | 56235.4 | -233.9 | 34:21.0 | 56266.1 |  |
| 109 | 650.0 | 8162.6 | 56239.9 | -228.7 | 31:35.0 | 56271.3 | end of line - water |
| 108 | 650.0 | 8150.0 | 56239.6 | -229.4 | 30:54.0 | 56270.6 |  |
| 107 | 650.0 | 8137.5 | 56229.0 | -240.0 | 30:29.0 | 56260.0 |  |
| 106 | 650.0 | 8125.0 | 56222.5 | -246.0 | 30:00.0 | 56254.1 |  |
| 105 | 650.0 | 8112.5 | 56227.3 | -242.4 | 29:27.0 | 56257.6 |  |
| 104 | 650.0 | 8100.0 | 56237.3 | -233.3 | 29:03.0 | 56266.7 |  |
| 103 | 650.0 | 8087.5 | 56236.4 | -234.8 | 28:28.0 | 56265.2 |  |
| 102 | 650.0 | 8075.0 | 56234.8 | -237.2 | 27:18.0 | 56262.8 |  |
| 101 | 600.0 | 8075.0 | 56229.5 | -241.4 | 21:06.0 | 56258.6 | 8087.5N was under H.V.L. |
| 100 | 600.0 | 8087.5 | 56225.9 | -244.8 | 20:41.0 | 56255.2 |  |
| 99 | 600.0 | 8100.0 | 56228.2 | -242.1 | 20:15.0 | 56257.9 |  |
| 98 | 600.0 | 8112.5 | 56234.0 | -236.7 | 19:45.0 | 56263.3 |  |
| 97 | 600.0 | 8125.0 | 56237.2 | -233.9 | 19:19.0 | 56266.1 |  |
| 96 | 600.0 | 8137.5 | 56241.4 | -229.9 | 18:56.0 | 56270.1 |  |
| 95 | 600.0 | 8150.0 | 56243.6 | -227.7 | 18:31.0 | 56272.3 |  |
| 94 | 600.0 | 8162.5 | 56243.2 | -228.3 | 17:10.0 | 56271.7 |  |
| 93 | 550.0 | 8175.0 | 56239.6 | -233.6 | 13:54.0 | 56266.4 | end of line - water |
| 92 | 550.0 | 8162.5 | 56239.0 | -234.7 | 13:18.0 | 56265.3 |  |
| 91 | 550.0 | 8150.0 | 56234.1 | -239.8 | 12:53.0 | 56260.2 |  |
| 90 | 550.0 | 8137.5 | 56233.6 | -240.3 | 12:28.0 | 56259.7 |  |
| 89 | 550.0 | 8125.0 | 56227.7 | -246.3 | 12:06.0 | 56253.7 |  |
| 88 | 550.0 | 8112.5 | 56229.8 | -243.9 | 11:42.0 | 56256.1 |  |
| 87 | 550.0 | 8100.0 | 56231.9 | -242.3 | 11:09.0 | 56257.7 |  |
| 86 | 550.0 | 8087.5 | 56237.9 | -236.8 | 10:43.0 | 56263.2 |  |
| 85 | 550.0 | 8075.0 | 56242.0 | -232.7 | 10:19.0 | 56267.3 |  |
| 84 | 550.0 | 8062.5 | 56239.4 | -235.6 | 09:54.0 | 56264.5 |  |
| 83 | 500.0 | 8062.5 | 56227.8 | -248.4 | 02:39.0 | 56251.6 | 8050N was under H.V.L. |
| 82 | 500.0 | 8075.0 | 56242.7 | -233.6 | 01:51.0 | 56266.4 |  |
| 81 | 500.0 | 8087.5 | 56236.5 | -239.7 | 01:27.0 | 56260.3 |  |
| 80 | 500.0 | 8100.0 | 56238.3 | -238.1 | 00:59.0\| | 56261.9 |  |
| 79 | 500.0 | 8112.5 | 56245.6 | -231.0 | 00:25.0 | 56269.1 |  |
| 78 ! | 500.0 | 8125.0 | 56244.0 | -231.5 | 00:00.0 | 56268.5 |  |
| 77 | 500.0 | 8137.5 | 56240.1 | -236.2 | 59:35.0 | 56263.8 |  |
| 76 | 500.0 | 8150.0 | 56248.0 | -230.0 | 59:11.0 | 56270.0 |  |
| 75 | 500.0 | 8162.5 | 56257.2 | -220.7 | 58:47.0 | 56279.3! |  |
| 74 | 500.0 | 8175.0 | 56238.6 | -238.8 | 58:26.0 | 56261.2 |  |
| 73 | 500.0 | 8187.5 | 56283.9 | -193.3 | 58:05.0 | 56306.7 |  |


| 72 | 500.0 | 8200.0 | 56317.4 | -159.4 | 57:28.0 | 56340.6 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 71 | 500.0 | 8212.5 | 56237.2 | -239.0 | 56:42.0 | 56261.0 |  |
| 70 | 500.0 | 8225.0 | 56242.0 | -232.8 | 55:32.0 | 56267.2 |  |
| 69 | 450.0 | 8250.0 | 56241.7 | -234.1 | 52:46.0 | 56265.9 | end of line - water |
| 68 | 450.0 | 8237.5 | 56238.2 | -238.6 | 52:13.0 | 56261.4 |  |
| $67^{1}$ | 450.0 | 8225.0 | 56226.6 | -250.4 | 51:40.0 | 56249.6 |  |
| 66 | 450.0 | 8200.0 | 56450.2 | -27.2 | 48:47.0 | 56472.8 | 8212.5 N on railway tracks - skipped |
| 65 | 450.0 | 8187.5 | 56243.1 | -234.3 | 48:19.0 | 56265.7 |  |
| 64 | 450.0 | 8175.0 | 56244.2 | -233.3 | 47:54.0 | 56266.7 |  |
| 63 | 450.0 | 8162.5 | 56241.5 | -235.5 | 47:30.0 | 56264.5 |  |
| 62 | 450.0 | 8150.0 | 56240.7 | -236.8 | 47:08.0 | 56263.2 |  |
| 61 | 450.0 | 8137.5 | 56239.9 | -237.2 | 46:44.0 | 56262.8 |  |
| 60 | 450.0 | 8125.0 | 56238.3 | -239.3 | 46:22.0 | 56260.7 |  |
| 59 | 450.0 | 8112.5 | 56247.2 | -230.6 | 45:55.0 | 56269.4 |  |
| 58 | 450.0 | 8100.0 | 56229.6 | -247.9 | 45:26.0 | 56252.1 |  |
| 57 | 450.0 | 8087.5 | 56225.1 | -252.2 | 44:58.0 | 56247.8 |  |
| 56 | 450.0 | 8075.0 | 56388.2 | -89.3 | 43:13.0 | 56410.7 |  |
| 55 | 450.0 | 8025.0 | 56206.2 | -269.7 | 39:42.0 | 56230.4 | could not get $8037.5 \mathrm{~N}, 8050 \mathrm{~N}$ and 8062.5 N due |
| 54 | 450.0 | 8012.5 | 56214.1 | -261.9 | 39:03.0 | 56238.1 |  |
| 53 | 450.0 | 8000.0 | 56222.4 | -253.3 | 38:30.0 | 56246.7 |  |
| 52 | 450.0 | 7987.5 | 56220.5 | -255.4 | 37:55.0 | 56244.6 |  |
| 51 | 450.0 | 7975.0 | 56210.4 | -266.6 | 37:25.0 | 56233.4 |  |
| 50 | 450.0 | 7962.5 | 56207.1 | -270.4 | 36:52.0 | 56229.7 |  |
| 49 | 450.0 | 7950.0 | 56211.7 | -266.1 | 36:25.0 | 56233.9 |  |
| 48 | 450.0 | 7937.5 | 56214.3 | -264.0 | 36:04.0 | 56236.0 |  |
| 47 | 450.0 | 7925.0 | 56223.4 | -255.1 | 35:37.0 | 56245.0 |  |
| 46 | 450.0 | 7912.5 | 56228.9 | -249.7 | 34:57.0 | 56250.3 |  |
| 45 | 450.0 | 7900.0 | 56228.2 | -250.4 | 34:19.0 | 56249.6 |  |
| 44 | 450.0 | 7887.5 | 56226.7 | -251.7 | 33:27.0 | 56248.3 |  |
| 43 | 450.0 | 7875.0 | 56211.2 | -263.6 | 31:21.0 | 56236.4 |  |
| 42 | 450.0 | 7862.5 | 56218.9 | -254.1 | 29:23.0 | 56245.9 |  |
| 41 | 450.0 | 7850.0 | 56211.5 | -263.0 | 27:31.0 | 56237.0 |  |
| 40 | 400.0 | 7850.0 | 56219.5 | -258.6 | 23:17.0 | 56241.5 | end of line - water |
| 39 | 400.0 | 7862.5 | 56219.5 | -258.5 | 21:46.0 | 56241.5 |  |
| 38 | 400.0 | 7875.0 | 56222.8 | -252.9 | 16:16.0 | 56247.1 |  |
| 37 | 400.0 | 7887.5 | 56213.1 | -263.7 | 15:28.0 | 56236.4 |  |
| 36 | 400.0 | 7900.0 | 56198.8 | -278.2 | 14:34.0 | 56221.8 |  |
| 35 | 400.0 | 7912.5 | 56190.0 | -286.7 | 14:11.0 | 56213.3 |  |
| 34 | 400.0 | 7925.0 | 56217.9 | -259.0 | 12:54.0 | 56241.0 |  |
| 33 | 400.0 | 7937.5 | 56224.5 | -253.0 | 11:38.0 | 56247.0 |  |
| 32 | 400.0 | 7950.0 | 56203.3 | -274.0 | 10:31.0 | 56226.0 |  |
| 31 | 400.0 | 7962.5 | 56200.2 | -276.7 | 09:38.0 | 56223.3 |  |
| 30 | 400.0 | 7975.0 | 56208.2 | -268.5 | 08:06.0 | 56231.5 |  |
| 29 | 400.0 | 7987.5 | 56225.3 | -252.1 | 07:05.0 | 56247.9 |  |
| 28 | 400.0 | 8000.0 | 56220.1 | -256.6 | 05:52.0 | 56243.4 |  |
| 27 | 400.0 | 8012.5 | 56215.0 | -263.5 | 03:27.0 | 56236.5 |  |
| 26 | 400.0 | 8025.0 | 56214.0 | -264.7 | 01:23.0 | 56235.3 |  |
| 25 | 400.0 | 8062.5 | 56219.3 | -257.4 | 50:15.0 | 56242.6 | could not get 8050 N and 8037.5 N due to H.V.L. |
| 24 | 400.0 | 8075.0 | 56225.5 | -251.8 | 49:07.0 | 56248.2 |  |
| 23 | 400.0 | 8087.5 | 56223.8 | -253.6 | 48:19.0 | 56246.4 |  |
| 22 | 400.0 | 8100.0 | 56222.8 | -254.8 | 46:13.0 | 56245.2 |  |
| 21 | 400.0 | 8112.5 | 56222.71 | -255.1 | 45:20.0 | 56244.9 |  |
| 20 | 400.0 | 8125.0 | 56219.7 | -257.5 | 44:30.0 | 56242.5 |  |
| 19 | 400.01 | 8137.5 | 56234.11 | -244.2 | 43:31.0 | 56255.8 |  |


| 18 | 400.0 | 8150.0 | 56243.0 | -235.4 | $43: 02.0$ | 56264.7 |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | :--- |
| 17 | 400.0 | 8162.5 | 56241.1 | -237.5 | $42: 25.0$ | 56262.5 |  |
| 16 | 400.0 | 8175.0 | 56232.9 | -243.3 | $41: 57.0$ | 56256.8 |  |
| 15 | 400.0 | 8187.5 | 56238.1 | -240.2 | $41: 29.0$ | 56259.8 |  |
| 14 | 400.0 | 8200.0 | 56240.7 | -238.9 | $40: 59.0$ | 56261.1 |  |
| 13 | 400.0 | 8212.5 | 56297.4 | -182.8 | $40: 30.0$ | 56317.2 |  |
| 12 | 400.0 | 8225.0 | 56306.6 | -173.9 | $40: 05.0$ | 56326.1 |  |
| 11 | 400.0 | 8237.5 | 56164.9 | -315.3 | $39: 31.0$ | 56184.7 |  |
| 10 | 400.0 | 8250.0 | 56234.3 | -246.2 | $39: 01.0$ | 56253.8 |  |
| 9 | 400.0 | 8262.5 | 56244.8 | -234.9 | $38: 34.0$ | 56265.1 |  |
| 8 | 400.0 | 8275.0 | 56245.1 | -233.4 | $38: 07.0$ | 56266.6 |  |
| 7 | 400.0 | 8287.5 | 56244.6 | -234.8 | $37: 34.0$ | 56265.2 |  |
| 6 | 400.0 | 8300.0 | 56242.9 | -236.0 | $37: 04.0$ | 56264.0 |  |
| 5 | 350.0 | 8187.5 | 56191.7 | -285.8 | $26: 48.0$ | 56214.2 |  |
| 4 | 350.0 | 8200.0 | 56202.2 | -277.7 | $26: 04.0$ | 56222.3 |  |
| 3 | 350.0 | 8212.5 | 56188.3 | -291.8 | $24: 53.0$ | 56208.2 |  |
| 2 | 350.0 | 8225.0 | 56196.7 | -283.7 | $23: 54.0$ | 56216.3 |  |
| 1 | 350.0 | 8237.5 | 56330.2 | -149.6 | $22: 54.0$ | 56350.4 |  |
| 0 | 350.0 | 8250.0 | 56479.4 | -1.6 | $19: 58.0$ | 56498.4 |  |

## Appendix II

## Magnetometer Specifications

# G-856AX Memory-Mag ${ }^{\text {TM }}$ Proton Precession Magnetometer <br> P/N 18101-02 Rev. E 

# Operation Manual 

GEOMETRICS, INC.<br>2190 Fortune Drive, San Jose, CA 95131 Phone: (408) 954-0522<br>Fax: (408) 954-0902<br>Email: sales@mail.geometrics.com<br>Web: www.geometrics.com

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Figure 23. Internal reset switch.

## Specifications

- Displays - Six digit display of magnetic field to resolution of 0.1 gamma or time to nearest second. Additional three-digit display of station, day of year, and line number.
- Resolution - Typically 0.1 gamma in average conditions. May degrade to lower resolution in weak fields, noisy conditions or high gradients.
- Absolute accuracy - One gamma, limited by remnant magnetism in sensor and crystal oscillator accuracy.
- Clock - Julian clock with stability of 5 seconds per month at room temperature and 5 seconds per day over the temperature range of -20 to +50 degrees Celsius.
- Tuning - Push button tuning from keyboard with current value displayed on request. Tuning range 20 to $90 \mu \mathrm{~T}$.
- Gradient - Tolerates gradients to 1800 gammas/meter. When high Tolerance gradients truncate count interval, maintains partial reading to an accuracy consistent with data.
- Cycle Time - Complete field measurement in three seconds in normal operation. Internal switch selection for faster cycle ( 1.5 seconds) at reduced resolution or longer cycles for increased resolution.
- Manual Read - Takes reading on command. Will store data in memory on command.
- Memory - Stores more than 5700 readings in survey mode, keeping track of
time, station number, line number day and magnetic field reading. In base station operation, computes for retrieval but does not store time of recording designated by sample interval, allowing storage of up to 12,000 readings.
- Output - Plays data out in standard RS-232 format at selectable baud rates. Also outputs data in real time byte parallel, character serial BCD for use with digital recorders.
- Inputs - Will accept an external sample command.
- Special - An internal switch allows:
- adjustment of Functions polarization time and count time to improve
performance in marginal areas or to improve resolution or speed operation - three count averaging
- choice of lighted displays in auto mode.
- Physical -
- Instrument console: $7 \times 101 / 2 \times 31 / 2$ inches $(18 \times 27 \times 9 \mathrm{~cm}), 6 \mathrm{LB}(2.7 \mathrm{~kg})$
- Sensor: $31 / 2 \times 5$ inches $(9 \times 13 \mathrm{~cm}), 4 \mathrm{LB}(1.8 \mathrm{~kg})$
- Staff: 1 inch $\times 8$ feet $(3 \mathrm{~cm} \times 2.5 \mathrm{~m}), 2$ LB ( 1 kg )
- Environmental: Meets specifications from 1 to $40^{\circ} \mathrm{C}$. Operates satisfactorily from -20 to $50^{\circ} \mathrm{C}$.
- Power - Depending on version, operates from internal rechargeable Gel-cells or 9 D-cell flashlight batteries. May be operated from external power ranging from 12 to 18 volts external power. Power failure or replacement of batteries will not cause loss of data stored in memory.
- Standard system (P/N 16600-02) components:
- Sensor (P/N 16076-01) and sensor cable (P/N 16134-01)
- Console (P/N 16601-01)
- Staff, one top section (P/N 16535-01), two middle sections (P/N 16536-01) and 1 bottom section ( $\mathrm{P} / \mathrm{N}$ 16537-01)
- Carry harness ( $\mathrm{P} / \mathrm{N} 16002-02$ )
- Two sets of rechargeable batteries (P/N 16697-01) and battery charger (P/N 16699-01)
- Carrying case (P/N 16003-01)
- Download cable (P/N 16492-01)
- Hardcopy operation manual (P/N 18101-02)
- Magnetometer CD (P/N 26648-01)
- Optional accessories:
- Tripod kit for base-station operation (P/N 16708-02)
- Gradiometer kit (P/N 166651-0l)
- Gradiometer carry/storage case (16003-01)


## Qualifications and Experience

## 1982 Graduated from Timmins High and Vocational School

1983 Studied photography at Humber College, Toronto, Ontario
1984 to 1988 Worked for family owned transportation business in Moosonee, Ontario
1988 to $1990^{*}$ Studied Survey at Northern College, South Porcupine, Ontario
1990* Graduated with Survey Engineering Technician Diploma

1990* to 2001
Owned and operated General Surveys and Exploration based in Timmins, Ontario. The company provided contract survey, computer and information management services to the exploration and mining industry. Software includes Acad, Gemcom and Surpac, with specialization in using computers for the mining and exploration industry.

Work included volumetric survey of land areas to be used as tailing basins, where computerized 3D models were utilized. Diamond drillhole, underground engineering and mechanical design/construction surveys were common contracts for mining and exploration companies. Significant accomplishments include the design and construction of the 110 km winter road from Attawapiskat to the Victor Project.

Clients included;
DeBeers Canada Exploration (Monopros), Southernera Resources, Dome Exploration, Placer Dome Detour Lake, Musselwhite and Dome Mines, Exall Glimmer Mine, Claude Rundle Gold Mine, TVX Mines' projects in Northern Greece, Moneta Porcupine Mines, Black Pearl Minerals, St. Andrew Goldfields, Battle Mountain Gold, Pentland Firth, Kinross Gold, Band-Ore Resources, McKinnon Prospecting and many other companies and individual prospectors.

## 2000 to 2005

Began collaborative work with Brian K. Polk (Polk Geological Services) and established a private exploration company called Big Red Diamond Company. This small company began to stake property near Attawapiskat and Coral Rapids. Eventually the survey business was put aside to focus full time on diamond exploration.

Big Red Diamond Company entered into a Joint Venture with a private company owned by Dr. Charles Fipke of Kelowona, B.C. on a group of properties near DeBeers' Victor Project in the Attawapiskat region. Dr. Fipke is the renowned geologist who found Canada's first diamond mine, the Ekati Mine in Northwest Territories.

Since 2001 the author has been exposed to all aspects of diamond exploration including;
Claim staking, fieid work, camp construction, airborne and ground magnetometer survey, planning and management of large scale geophysical programs, planning, management and interpretation of regional and property scale sampling programs.

Exposure to the industry includes training and field work under the discretion of Dr. Fipke. Introduction to kimberlite mineral identification from Dr. Fipke was expanded by personal research and study, which continues to current and lead to the establishment of True North Mineral Laboratories in Timmins, Ontario.

Advanced analysis, beyond the stage of heavy mineral separation, or observation using binocular microscope, is handled by other certified analytical laboratories, such as CF Minerals, of Kelowona, B.C.

2002
Big Red Diamond Company became a publicly traded corporation.
The author is one of the co-founders of Big Red Diamond Corporation, which trades on the TSX Venture Exchange under the symbol DIA.

The author continues to actively stake mining claims and process sample material for private and public companies.

## 2005 to 2009

Established True North Mineral Laboratories, at 475 Railway Street, Timmins, Ontario and added Actlabs-Timmins in early 2006. Lab processes, equipment setup and procedures are now supervised by Actlabs, based in Ancaster, Ontario.

The management and employees of True North Mineral Laboratories / Actlabs-Timmins, receive ongoing support and training directly from Actlabs - Ancaster. The laboratory processes fall under Actlabs certification, providing analysis is carried out by the main facility in Ancaster. In this capacity, True North Mineral Laboratories acts as a preparation facility for Actlabs and is qualified to handle material preparation prior to direct analysis by Actlabs.

## 2009 to current

Sold prep facility to Cattarello Assayers Inc., who now operate a gold fire assay facility at 475 Railway Street, Timmins. True North Mineral Laboratories opened a small, private facility at 68 Bruce Avenue, South Porcupine in early 2011.

True North Mineral Laboratories utilizes the services of Actiabs and CF Mineral Research, for projects where an accredited laboratory is required. True North Mineral Laboratories continues to offer a wide range of field services to the exploration Industry.

# TryE NORTH MINERAL fo LABORATORIES 

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Phone (705) 264-0812

## Report Completion Date:

June 1, 2012

