Report on a Magnetometer Survey

Township of Havelock - Belmont - Methuen (Methuen Ward)

Southern Ontario Mining Division

For

Trigan Resources Inc.
West Gabbro Project

By

Oakridge Environmental Ltd.
Peterborough, Ontario
ORE File No. 07-1099

January 2008

ORE Hydrogeological and Environmental Services
Oakridge Environmental Ltd

January 22, 2007

Trigan Resources Inc.
c/o Oakridge Golf Course
General Delivery
Ashburn, Ontario
L9L 2A7

Attention: **Matt Anderson**

Re: Trigan Resources Inc. - West Gabbro Property
Magnetometer Survey
Claim Nos. 1240115; 1240130; 1240142; 124050; 1240154; 1240155
Township of Havelock-Belmont-Methuen (Methuen)
Our File No. 07-1099

Dear Mr. Anderson:

As per your request, in association with Mr. Don Phipps, P. Geo., we have completed the ground magnetometer survey over part of your Methuen Township claim group property.

Our report provides a summary of our findings, an interpretation of the data and our recommendations with respect to follow-up exploration.

If you have any questions, please contact our office.

Yours truly,
Oakridge Environmental Limited

Brian R. King, P. Geo.

380 Armour Road, Suite 127, Peterborough, Ontario K9H 7L7, (705) 745-1181, Fax (705) 745-4163, ore@sympatico.ca

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1.0 Introduction

Oakridge Environmental Limited is pleased to present our report covering the recently completed geophysical survey covering part of the West Gabbro claim group situated in west-central Methuen Township, Peterborough County (Figure 1).

The purpose of the survey is to provide geophysical data which will assist in the mapping of rock types and identification of anomalous and/or potentially economic mineralization.

2.0 Site Description, Access and Location

The total claim group includes the following contiguous claims:

1. 1240115
2. 1240130
3. 1240142
4. 1240150
5. 1240154
6. 1240155

Of these, the geophysical survey covers the majority of 1240115, 1240142, and parts of 1240130 and 1240154.

The location of the claims is provided in Figure 2. The claim group covers a total area of approximately 366 ha (904 acres). Much of this area contains both registered and unregistered hunting camps and recreation trails for ATV's and snowmobiles.

To access the site from Peterborough at Highway 115, continue eastward to the intersection of Highway 115 and Highway 7 (Figure 1). Proceed onto Highway 7 eastward to the intersection of Highway 134 and turn left

(northbound) onto Highway 134. Approximately 11 km north on Highway 134, Highway 28 is intersected (north of Lakefield). Proceed north on Highway 28 for approximately 0.75 km to County Road 6 (formerly known as Stony Lake Road). County Road 6 proceeds eastward, south of Stony Lake.

The nearest access trail is located approximately 4.5 km north of the intersection of County Road 6 and County Road 44 as indicated by Route A in Figure 2. The entrance to the access trail is situated just north of the intersection of County Road 6 and County Road 56. This trail is unmarked and is utilized by snowmobilers and hunters to enter the crown lands.

The claim group is located within a large expanse of Crown lands on the east end of Stony Lake. Several parcels of privately owned land occur between County Road 6 and the claim group, essentially isolating the site from any kind of public roadway access. Therefore, public access to these lands and the claim group is via a network of trails that start from County Road 6 or via the CN Railway off of County Road 44 and Fire Route 51 south of Long Lake.

3.0 Claim Holder

The subject claims are held by:

Trigan Resources Inc.
445 Beacon Hall Drive
Aurora, Ontario, L4G 3G8
Att. Mr. J. Regan

4.0 Previous Work

Previous exploratory work at the site has included a limited diamond drilling program, conducted in 2003, consisting of 10 vertical holes drilled to depths ranging from 31.9 m to 45.7 m. Representative samples from each borehole were submitted for aggregate testing (Phipps, 2003). The results of the those investigations indicated the presence of suitable aggregate materials.

A baseline hydrogeochemical study was subsequently conducted (King, 2005), for the purpose of comparing trace element concentrations (i.e., major ion and metals) in surface water and groundwater. That study revealed interesting and highly defined geochemical differences between the subwatersheds, potentially indicating future targets for metal exploration.

The most recent work included geological mapping of the claim group (King,

2006). The mapping revealed the presence of a small mafic pluton with a "core zone" of gabbro (metagabbro) surrounded by granite and granitic gneiss.

A wide contact zone (or "transition zone") occurs between the gabbroic core and the gneisses, consisting of intercalated metasediments, porphyritic granite, granodiorite, monzonite, migmatite and diorite bodies .

Pegmatites are relatively common throughout the claim group and in some locations, exhibit elevated radiometric signatures, suggesting the potential for uraniferous mineralization.

5.0 Topography and Drainage

The site is dominated by bedrock outcrop ridges overlain with pockets of thin, discontinuous granular overburden materials. Most low-lying areas tend to contain wetlands that have thick organic detritus and sandy silty bottoms. Based on the flow patterns, it is clear that the majority of the claim group is comprised of a relatively flat central area, surrounded by the high rock ridges and knolls.

The drainage pattern of the study area is typically angular to dendritic with a NNW-SSE and nearly E-W bias, likely reflecting jointing and fracture patterns. In this part of the Grenville Province, the dominant fabric is a NE-SW trend (foliation and gross bedding). In the study area, however, this does not appear to be prevalent.

The maximum local relief within the study area is approximately 40 m although the average relief is about 10 m. The topography is essentially dominated by the bedrock structure which consists of a metagabbroic pluton which is thought to be at the core of a local synform, according to published mapping (Kingston, 1985). The topography of the gabbro pluton is somewhat dome-like and as such, the drainage pattern tends to be roughly radial - outward from the north-centre of the claim group. Locally, the sequence of parallel rock ridges can distort flow patterns into narrow linear valleys.

6.0 Geological Setting

The claim group contains a sequence of granitic gneiss, metasediments, gabbro/metagabbro, diorite/metadiorite and pegmatite. Published mapping of the area (Kingston, 1985) shows the gabbro pluton as an oval shaped body with a generally east-west long axis. In the field, the pluton has a much more complex and irregular shape which includes a series of finger-like

granite porphyry bands that appear to extend into the pluton. All Precambrian rocks in the area have been metamorphosed to middle-upper amphibolite facies (Bartlett, 1982).

The contact relationships between the gabbro pluton and its surrounding rocks are relatively consistent, although irregular. A generalized traverse from outside to inside the pluton yields the following rock type succession:

- Porphyritic Granite (plus some granitic gneiss), occurring in linear bands, possibly intruding the original bedding planes of the host metasediments.

- Metasediments, which occur largely as small segmented inclusions, ranging up to distinct bands 3 m to 5 m thick and up to 50 m to 60 m in length.

- Transition Zone (meta-granodiorite / quartz monzonite, diorite) which is the contact zone between the gabbro pluton and the surrounding host country rock. In this zone, it is apparent that gabbro magma has reacted with the wall rocks creating a zone of hybrid rocks transitional between the gabbro and adjacent country rock. Overall, the transition between the mafic gabbro core to the porphyritic granites occur as below:

  1) Core of Pluton - Gabbro = lowland areas >

  2) Diorite = salt & pepper texture (proportions of hornblende to plagioclase changes with hornblende content higher nearest the metagabbro) >

  3) Porphyritic granite (outer edge) = more resistant, elongated ridges.

  Within the transition zone, inclusions of metasediment and other intrusive rocks are fairly common.

- Metadiorite and Metagabbro of the pluton, containing abundant inclusions of wall rock, including multiple occurrences of porphyritic granite and veins of late-stage fine grained granitic and coarse pegmatitic veins. The gabbroic rocks occur principally within a "core" zone situated in mid-northern Claim 1240130. Portions of the gabbro are weakly layered or foliated, however for the most part, the gabbro appears relatively unaffected by dynamic metamorphism.

All rocks in the claim group host minor quartz veining, typically on the order

of a few cm wide. The quartz veins are relatively nondescript, although commonly contain minor pyrite and hematite staining. Gabbro from the core zone of the pluton contains disseminated magnetite and presumably ilmenite (similar to the "East Gabbro" body). These rocks can be strongly magnetic. Noticeably absent are sulphide rich zones or gossans (with the exception of a few small, localized rusty zones).

7.0 Geophysical Survey

7.1 General

The objectives of a total field magnetic survey are the identification and description of spatial changes in the earth's magnetic field. These spatial variations (also referred to as "anomalies") may be detected and mapped over several metres to several kilometers. The causes of magnetic anomalies are occurrences of magnetic minerals (e.g., magnetite, ilmenite and pyrrhotite which may produce magnetic anomalies occurring with other sulphide mineralization. Magnetite occurs in all rock types from a fraction of a percent to several tens of percent, as in the case of magnetic iron ores.

Man-made ferrous (iron) objects and other cultural features can also be detected by strong magnetic responses and/or observed magnetic contrast. Total field magnetic data corrected for diurnal drift, are plotted on a plan map and contoured using contour intervals suitable to highlight magnetic features of interest.

Qualitative interpretation of magnetic survey data is relatively simple, however quantitative analysis of magnetic survey data can be complex. Correlation with other surveys can aid in magnetic interpretation.

7.2 Survey Instrumentation

The survey was conducted utilizing a GSM-19 v7.0 Overhauser Magnetometer which is essentially a proton precession device designed to produce an order of magnitude greater sensitivity. The unit has a manufacturer's stated resolution of 0.01mT and accuracy of +/-0.1 nT.

The magnetometer unit is outfitted with a built-in WAAS enabled GPS receiver (anticipated accuracy ~ 2 m) and on-board memory which stores x, y & z (i.e., UTM & total field) data. For our survey, the unit was programmed to collect data on a timed-interval basis, as opposed to manual readings at pre-determined line stations. This approach allowed greater flexibility with respect to traverse paths.

A base station unit (GSM-19) was also employed. The base station was set up at approximately 736661E, 4941655N and synchronized to collect and store total field data on a 2-second cycle. Data from the mobile and base units were downloaded at the end of each survey day and auto-corrected for diurnal drift. Typical daily variations of 20 nT were recorded during the survey.

The current survey was conducted between November 20th - 28th, 2007. In addition, pre-survey field inspections were conducted between November 15th - November 16th, 2007. Office analysis was conducted during December 2007 and January 2008.

7.3 Survey Results

The compiled and corrected survey data were initially analysed with respect to the type of distribution. As illustrated by Figure 3, the collected data exhibit a relatively normal type curve. A linear variogram (Figure 3) was also determined. From the data set, a grid file was created utilizing linear Kriging techniques. Duplicate points were either deleted or averaged, depending on filter settings. A final gaussian filter was then applied to the grid file to "smooth" the grid, since the data set included a large number of very closely spaced points. A total of 7,800 grid nodes were generated for plotting purposes. The grid file report is presented in Appendix C.

A total of 36,596 raw x,y,z data points were collected during the survey, representing a total of 11.1 line kilometres.[1] The extent of the survey is illustrated on Figures 4 and 5. (Note: data obtained close to the railway corridor which follows the western limit of the survey area and any data obtained with less than 99% accuracy, were excluded prior to processing to eliminate cultural effects)

7.4 Interpretation

The survey has revealed a generally increasing total field strength from northeast to southwest. In the southern half of the survey area, the total field strength is comparatively and generally uniform. This area appears to correlate with the northern edge of the main gabbro pluton. Given the gradual slope of the horizontal gradient, we would expect the pluton to have a gentle, southerly dip. Topographic effects may also be influencing the total field data in this case.

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[1] Initial filtering reduced that data set to 19,344 points.

The narrow, middle portion of the site consists of more variable total field strength with localized "highs" and "lows". This area appears to correlate with the inferred transition zone between the main gabbro pluton and the surrounding country rocks which consist of diorite, metasediment inclusions and a variety of minor intrusives, occurring over a width of several hundred metres.

The northern part of the survey area exhibits a plateau-like zone of comparatively high total field values, although lower in strength than the main gabbro body. The northern area appears to correlate with the distribution of porphyritic granite.

Within the data, several discrete anomalies occur. These are labelled "A", "B", "C" and "D". Anomaly "A" appears consistent with a gently northwest dipping body, likely a late intrusive associated with the main gabbro body or perhaps a topographically related feature.

Anomaly "B" appears to be a localized feature, consistent with a south or southwesterly dipping magnetic body with a higher total field intensity than anomaly A. Both A & B occur within a band previously mapped as a "Transition Zone" (i.e., contact zone) between the gabbro pluton and the surrounding country rocks. In this area, geological mapping (King, 2007) revealed a mix of dioritic and metasedimentary rocks with a variety of late stage intrusives. Disseminated magnetite and ilmenite are relatively common in the transition zone. Occasional rusty zones were also noted during the mapping, suggesting the possible presence of sulphide mineralization. Anomalies A & B may represent mineralized zones of that type, warranting follow-up exploration.

Anomaly "C" is a "magnetic low" situated well within the core of the gabbro pluton. The low may have a corresponding peak which is just off the survey area or may represent a discrete low, such as could be caused by a large inclusion of non-mineralized country rock or a thinner portion of the pluton. More detailed geophysical work (extending to the south) should be conducted to better define this anomaly.

Anomaly "D", situated along the inferred eastern contact of the gabbro pluton, is a "magnetic low" without an obvious associated magnetic peak. As such, Anomaly "D" may simply be a contact-related feature suggesting a westward dipping planar surface in the gabbro. More detailed geophysical work (extending to the east) should be conducted to better define this anomaly.

8.0 Conclusions and Recommendations

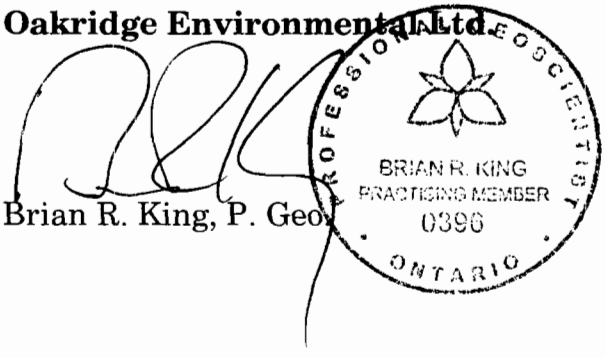
8.1 The total field magnetometer survey has demonstrated considerable usefulness with regard to better defining lithological contacts and especially, for defining the edge of the gabbro pluton in areas of limited outcrop. Therefore, the survey should be extended to cover the remainder of the site. It is also recommended that a vertical gradient magnetometer survey be included, to better define structure and anomalies.

8.2 Magnetic anomalies "A" and "B" have been identified in the central part of the survey area, representing potential mineralized zones occurring within the contact zone of the pluton. These anomalies should be further investigated by prospecting, geochemical and/or additional geophysical techniques.

8.3 Depending on the results of the extended magnetometer survey, anomalies "C" and "D" should be further evaluated by prospecting and/or other geophysical techniques.

* end of report *

Oakridge Environmental Ltd.



Brian R. King, P. Geo.

Selected References

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Easton, R.M.; *The Grenville Province and the Proterozoic History of Central and Southern Ontario*; in Geology of Ontario, Ontario Geological Survey, Special Volume 4, Part 2; 1992.

Holm, P.E., Smith, T.E., Huang, C.H., Gerasimof, M., Grant, B and McLaughlin, K.; *Geochemistry of Metavolcanic Rocks and Dykes from the Central Metasedimentary Belt, Grenville Province, Southeastern Ontario;* Geological Association of Canada Special Paper 31; 1986.

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Phipps, D (a); *Trigan Resources Assessment Report (Diamond drilling Report), West Gabbro Property, Methuen Township, Southern Ontario District;* August 31st, 2003.

Phipps, D (b); *Trigan Resources Assessment Report (Aggregate Testing), West Gabbro Property, Methuen Township, Southern Ontario District;* November 18th, 2003.

Statement of Qualifications

I, Brian R. King have been practising in the fields of environmental geology, hydrogeology and economic geology for more than 25 years. I am a Registered, Practising Professional Geoscientist (Ontario Reg. No. 0396). I have supervised the design of, collection of data for, and interpretive work involved in this study.

As a principal and the president of Oakridge Environmental Ltd., I am authorized to conduct and report on geological, hydrogeological and mineral exploration related studies and investigations.

My educational background includes completion of an Honours Bachelor of Science degree from Brock University, specializing in the geological sciences including economic geology, hydrogeology, geochemistry and environmental science. I have completed continuing education courses in groundwater contaminant assessment from the University of Waterloo and have completed the Ministry of Environment's "Hydrogeological Technical Information Requirements for Land Development Applications", among other environmental courses.

Brian King holds memberships in the following organizations:

> Practising Member of the Association of Professional Geoscientists of Ontario
> Member of the International Association of Hydrogeologists

It is further stated that neither Oakridge Environmental Ltd nor its employees have any ownership interest in the subject property and that the only remuneration to be received is monetary and that the remuneration is solely related to the work completed as outlined in this report.

Brian R. King, P. Geo.

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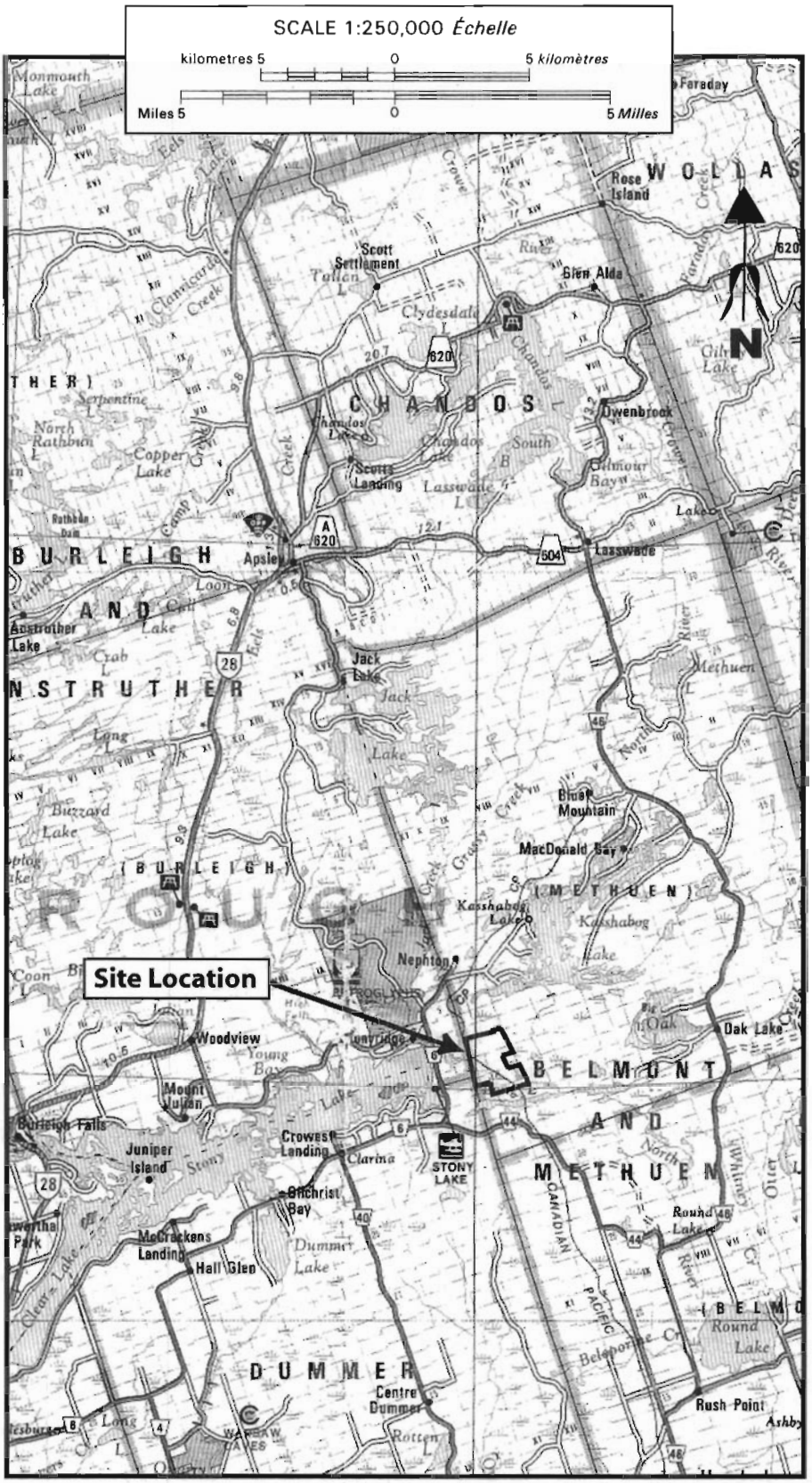
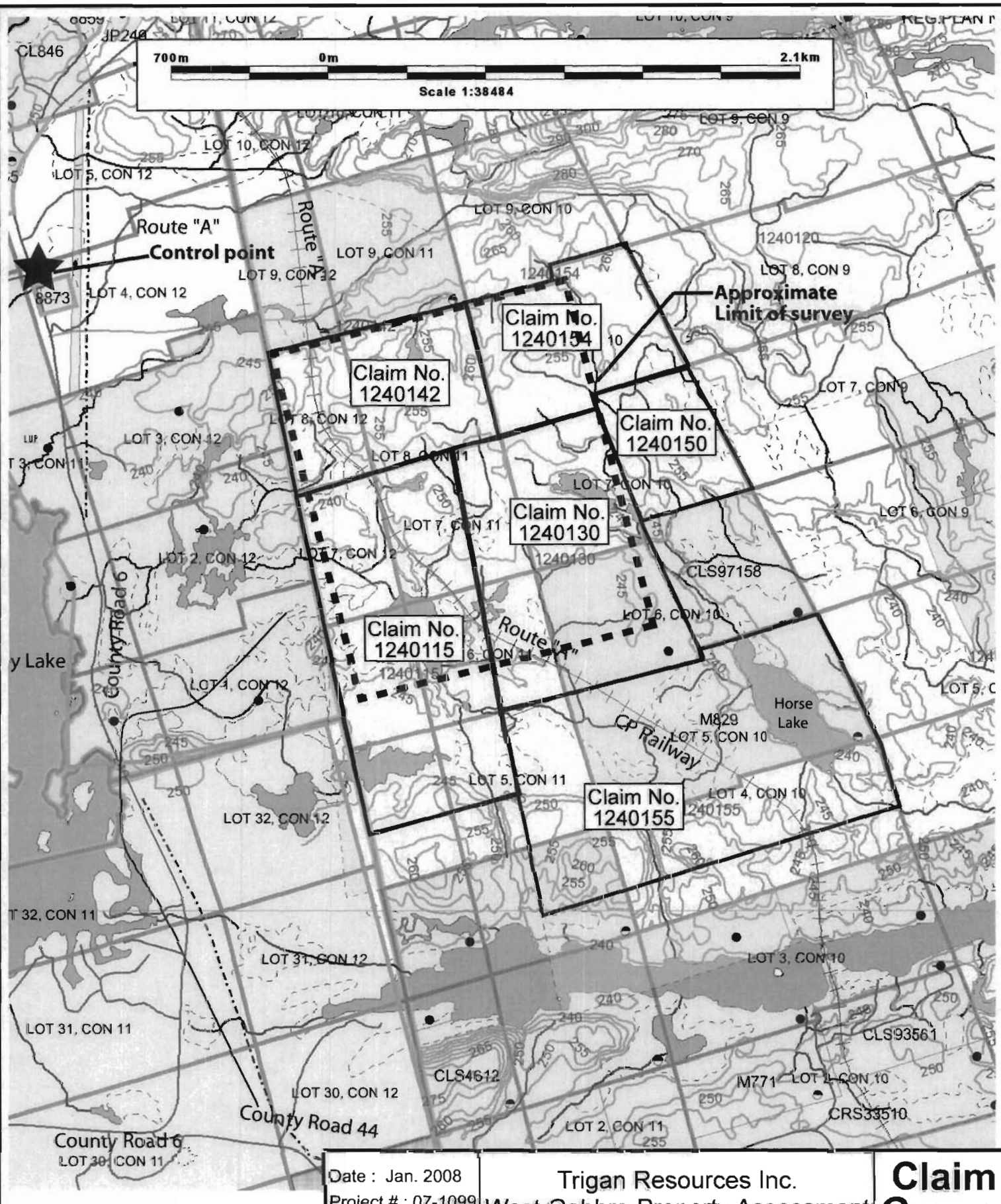
FIGURES

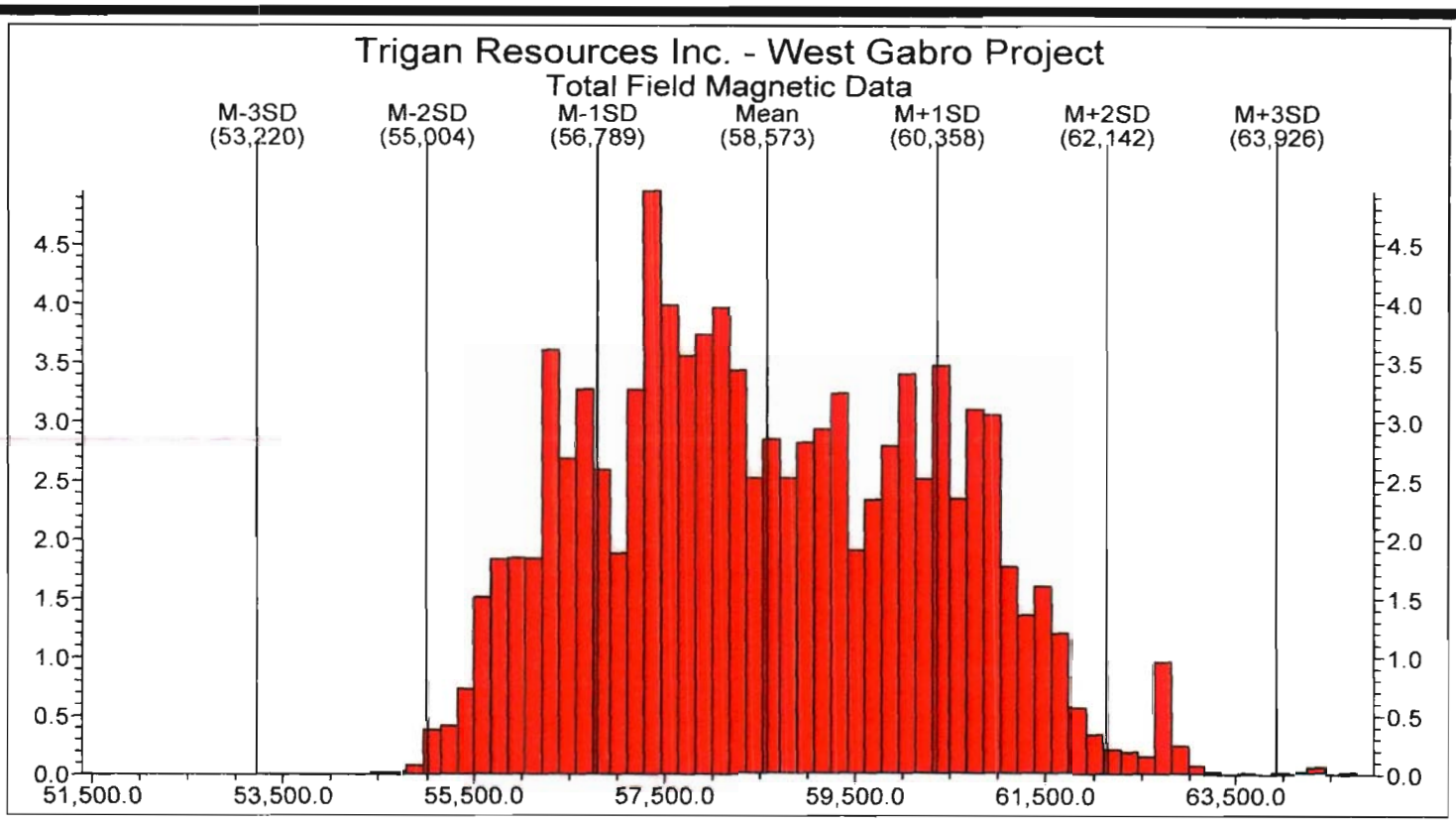


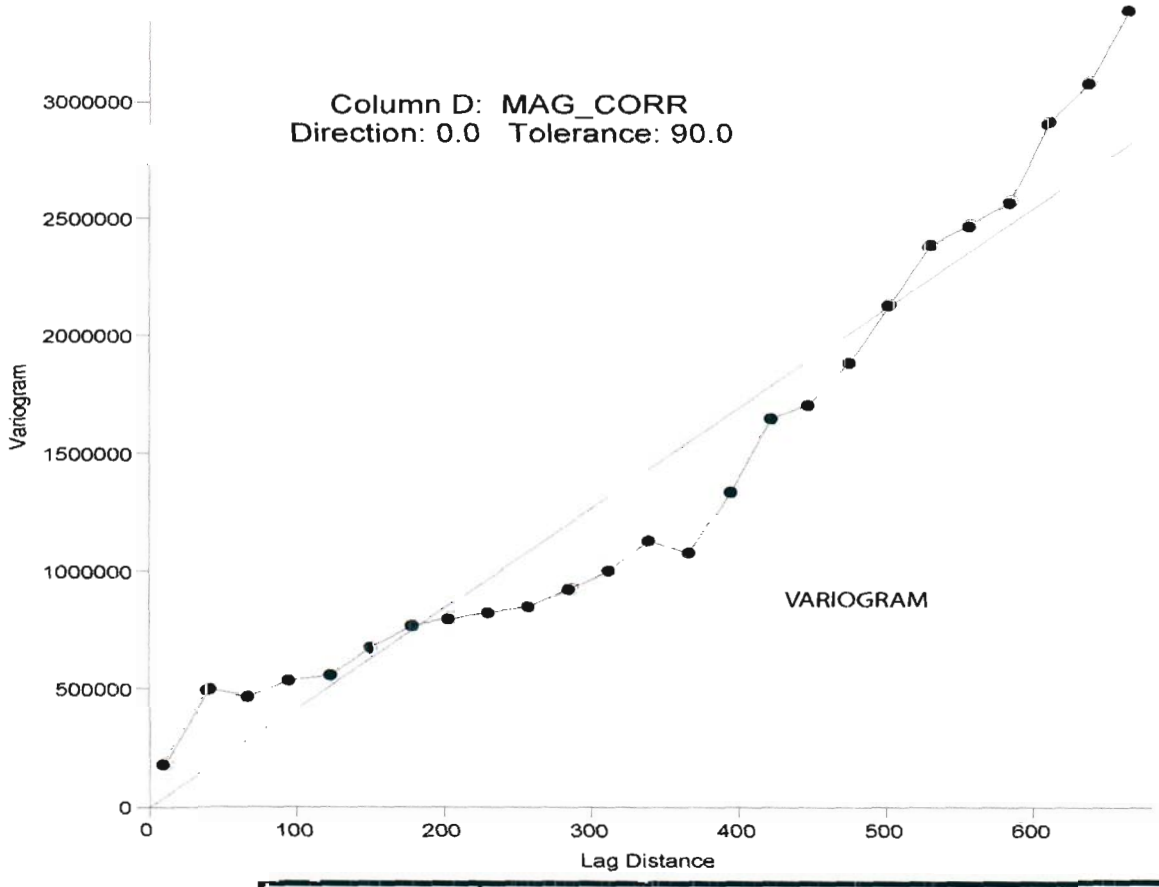
Date : Jan. 2008 Project # : 07-1099 Scale : 1:250,000	Trigan Resources Inc. West Gabbro Property Magnetometer Survey	**General Location Plan**
Oakridge Environmental Limited		Figure 1



Source: Ministry of Northern Development and Mines, Claim Map III Database

Date : Jan. 2008 Project # : 07-1099 Scale : 1:38,484	Trigan Resources Inc. West Gabbro Property Assessment Magnetometer Survey	**Claim Group Plan**
Oakridge Environmental Limited		Figure 2





Date : Jan 2008 Project # :07-1099	Trigan Resources Inc. West Gabbro Property Assessment Magnetometer Survey	**Field Data Statistics**
Oakridge Environmental Limited		Figure 3

Trigan Resources Inc.

SUPERVISORS: D. PHIPPS/B.KING	COMPILED BY: D. PHIPPS/B.KING
DRAWN BY: B.KING/J. OUELLETTE	DATE DRAWN: JANUARY 2008
SURVEYED: NOV. 2007	SURVEYORS: J. OUELLETTE/D. OUWENDYK/R. WEST

NOTES: Vector base layers from OBM and MNDM. Field waypoints aquired by means of differential global positioning system (dGPS +/- 2.0 m)

SURVEYED BY: OAKRIDGE ENVIRONMENTAL LTD.
380 ARMOUR RD., SUITE 127
PETERBOROUGH, ONTATIO
K9H 7L7

Astronomic

Claim #1240142

Claim #1240154

Claim #1240130

Claim #1240115

Lot 8, Concession 12

Lot 8, Concession 11

Lot 7, Concession 12

Lot 7, Concession 11

Lot 7, Concession 10

LEGEND

- Claim Lines
- Lot Lines
- Railway
- Waterbody
- Stream
- Wetland
- Dense Forest
- Magnetometer Data Points

Scale (1 : 5,000)

0m 100m 200m

Total Field Magnetic Survey
Traverse Lines
Figure 4

Northing UTM (m)

4942700 4942600 4942500 4942400 4942300 4942200 4942100 4942000 4941900 4941800 4941700 4941600 4941500

261300 261400 261500 261600 261700 261800 261900 262000 262100 262200 262300 262400 262500 262600 262700 262800

Easting UTM (m)

Trigan Resources Inc.

SUPERVISORS: D. PHIPPS/B.KING	COMPILED BY: D. PHIPPS/B.KING
DRAWN BY: B.KING/J. OUELLETTE	DATE DRAWN: JANUARY 2008
SURVEYED: NOV. 2007	SURVEYORS: J. OUELLETTE/D. OUWENDYK/R. WEST

NOTES: Vector base layers from OBM and MNDM. Field waypoints aquired by means of differential global positioning system (dGPS +/- 2.0 m)

SURVEYED BY: OAKRIDGE ENVIRONMENTAL LTD.
380 ARMOUR RD., SUITE 127
PETERBOROUGH, ONTATIO
K9H 7L7

Astronomic

Claim #1240142

Claim #1240154

Claim #1240130

Claim #1240115

"A"

"B"

"C"

"D"

Granite & Granite Porphyry

Transition Zone

Gabbro

Inferred
Lithological Contacts

Scale (1 : 5,000)

0m 100m 200m 300m 400m

Total Field (nT)
64500
63500
62500
61500
60500
59500
58500
57500
56500
55500
54500
53500

Northing UTM (m)
4942700
4942600
4942500
4942400
4942300
4942200
4942100
4942000
4941900
4941800
4941700
4941600
4941500

Easting UTM (m)
261300 261400 261500 261600 261700 261800 261900 262000 262100 262200 262300 262400 262500 262600 262700 262800

Total Field Magnetic Survey Interpretation
Figure 5

APPENDIX A

Magnetometer Specifications

Terraplus

GSM-19 v7.0

Overhauser Magnetometer / Gradiometer / VLF

Introduction

The GSM-19 v7.0 Overhauser instrument is the total field magnetometer / gradiometer of choice in today's earth science environment - representing a unique blend of physics, data quality, operational efficiency, system design and options that clearly differentiate it from other quantum magnetometers.

With data quality exceeding standard proton precession and comparable to costlier optically pumped cesium units, the GSM-19 is a standard (or emerging standard) in many fields, including:

* **Mineral exploration (ground and airborne base station)**
* **Environmental and engineering**
* **Pipeline mapping**
* **Unexploded Ordenance Detencion**
* **Archeology**
* **Magnetic observatory measurements**
* **Volcanology and earthquake prediction**

Taking Advantage of the Overhauser Effect

Overhauser effect magnetometers are essentially proton precession devices except that they produce an order-of magnitude greater sensitivity. These "supercharged" quantum magnetometers also deliver high absolute accuracy, rapid cycling (up to 5 readings / second), and exceptionally low power consumption.

The Overhauser effect occurs when a special liquid (with unpaired electrons) is combined with hydrogen atoms and then exposed to secondary polarization from a radio frequency (RF) magnetic field.

The unpaired electrons transfer their stronger polarization to hydrogen atoms, thereby generating a strong precession signal-- that is ideal for very high-sensitivity total field measurement.

In comparison with proton precession methods, RF signal generation also keeps power consumption to an absolute minimum and reduces noise (i.e. generating RF frequencies are well out of the bandwidth of the precession signal).

In addition, polarization and signal measurement can occur simultaneously - which enables faster, sequential measurements. This, in turn, facilitates advanced statistical averaging over the sampling period and/or increased cycling rates (i.e. sampling speeds).

The unique Overhauser unit blends physics, data quality, operational efficiency, system design and options into an instrumentation package that ... exceeds proton precession and matches costlier optically pumped cesium capabilities.

And the latest v7.0 technology upgrades provide even more value, including:

- **Data export in standard XYZ** (i.e. line-oriented) format for easy use in standard commercial software programs
- **Programmable export format** for full control over output
- **GPS elevation values** provide input for geophysical modeling
- **<1.5m standard GPS** for high-resolution surveying
- **<1.0 OmniStar GPS**
- **<0.7m for Newly introduced CDGPS**
- **Multi-sensor capability** for advanced surveys to resolve target geometry
- **Picket marketing / annotation** for capturing related surveying information on the go.

And all of these technologies come complete with the most attractive prices and warranty in the business!

Terraplus Inc.
52 West Beaver Cr. Rd. #12, Richmond Hill, ON. Canada L4B 1L9
Tel: 905-764-5505
Fax: 905-764-8093
Email: sales@terraplus.ca
Website: www.terraplus.ca

Maximizing Your Data Quality with the GSM-19

Data quality is a function of five key parameters that have been taken into consideration carefully in the design of the GSM-19. These include sensitivity, resolution, absolute accuracy, sampling rates and gradient tolerance.

Sensitivity is a measure of the signal-to noise ratio of the measuring device and reflects both the underlying physics and electronic design. The physics of the Overhauser effect improves sensitivity by an order of magnitude over conventional proton precession devices. Electronic enhancements, such as high-precision precession frequency counters enhance sensitivity by 25% over previous versions.

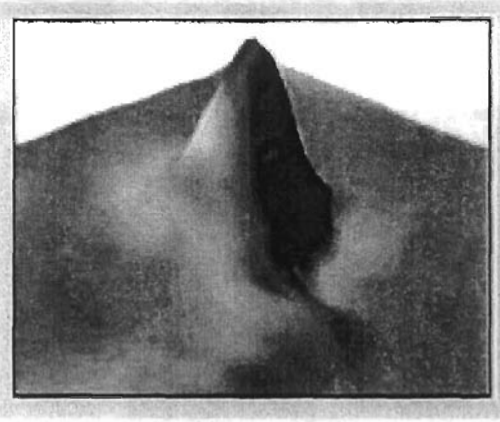
The result is high quality data with sensitivities of 0.022 nT / vHz. This sensitivity is also the same order-of magnitude as costier optically pumped cesium systems.

Resolution is a measure of the smallest number that can be displayed on the instrument (or transmitted via the download process). The GSM-19 has unmatched resolution (0.01mT)

This level of resolution translates into well-defined, characteristic anomalies; improved visual display; and enhanced numerical data for processing and modeling.

Absolute accuracy reflects the closeness to the "real value" of the magnetic field -- represented by repeatability of readings either at stations or between different sensors. With an absolute accuracy of +/- 0.1 nT, the GSM-19 delivers repeatable station-to-station results that are reflected in high quality total field results.

Similarly, the system is ideal for gradient installations (readings between different sensors do not differ by more than +/- 0.1 nT) -- maintaining the same high standard of repeatability.

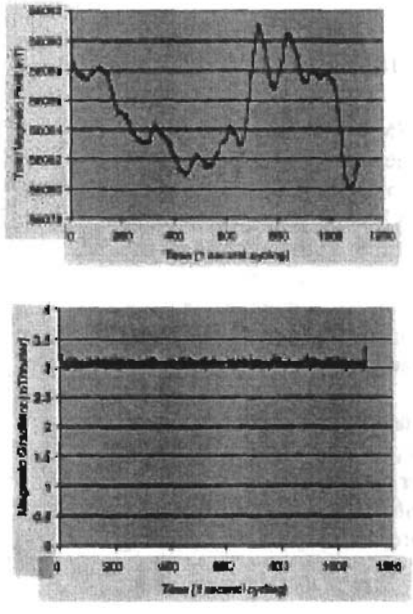


Data from Kalahari Desert kimberlites. Courtesy of MPH Consulting (project managers), IGS c. c. (geophysical contractor) and Aegis Instruments (Pty) Ltd., Botswana.

The GSM-19 gradiometer data are consistently low in noise and representative of the geologic environment under investigation.

Sampling rates are defined as the fastest speed at which the system can acquire data. This is a particularly important parameter because high sampling rates ensure accurate spatial resolution of anomalies and increase survey efficiency.

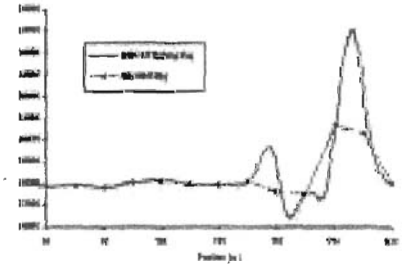
The GSM-19 Overhauser system is configured for two "measurement modes" or maximum sampling rates -- "Standard" (3 seconds / reading), and "Walking" (0.2 seconds / reading) These sampling rates make the GSM-19 a truly versatile system for all ground applications (including vehicle-borne applications).



Total Field and Stationary Vertical Gradient showing the gradient largely unaffected by diurnal variation. Absolute accuracy is also shown to be very high (0.2 nT/meter).

Gradient tolerance represents the ability to obtain reliable measurements in the presence of extreme magnetic field variations. GSM-19 gradient tolerance is maintained through internal signal counting algorithms, sensor design and Overhauser physics. For example, the Overhauser effect produces high amplitude, long-duration signals that facilitate measurement in high gradients.

The system's tolerance (10,000 nT / meter) makes it ideal for many challenging environments -- such as highly magnetic rocks in mineral exploration applications, or near cultural objects in environmental, UXO or archeological applications.



Much like an airborne acquisition system, the GSM-19 "Walking" magnetometer option delivers very highly-sampled, high sensitivity results that enable very accurate target location and / or earth science decision-making.

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Increasing Your Operational Efficiency

Many organizations have standardized their magnetic geophysical acquisition on the GSM-19 based on high performance and operator preference. This preference reflects performance enhancements such as memory capacity; portability characteristics; GPS and navigation; and dumping and processing.

Memory capacity controls the efficient daily acquisition of data, acquisition of positioning results from GPS, and the ability to acquire high resolution results (particularly in GSM-19's "Walking" mode).

V7.0 upgrades have established the GSM-19 as the commercial standard for memory with over 1,465,623 readings (based on a basic configuration of 32 Mbytes of memory and a survey with time, coordinate, and field values).

Portability characteristics (ruggedness, light weight and power consumption) are essential for operator productivity in both normal and extreme field conditions.

GSM-19 Overhauser magnetometer is established globally as a robust scientific instrument capable of withstanding temperature, humidity and terrain extremes. It also has the reputation as the lightest and lowest power system available -- reflecting Overhauser effect and RF polarization advantages.

In comparison with proton precession and optically pumped cesium systems, the GSM-19 system is the choice of operators as an easy-to-use and robust system.

GPS and navigation options are increasingly critical considerations for earth science professionals.

GPS technologies are revolutionizing data acquisition -- enhancing productivity, increasing spatial resolution, and providing a new level of data quality for informed decision-making.

The GSM-19 is now available with real-time GPS and DGPS options in different survey resolutions. For more details, see the GPS and DGPS section.

The GSM-19 can also be used in a GPS Navigation option with real-time coordinate transformation to UTM, local X-Y coordinate rotations, automatic end of line flag, guidance to the next line, and survey "lane" guidance with cross-track display and audio indicator.

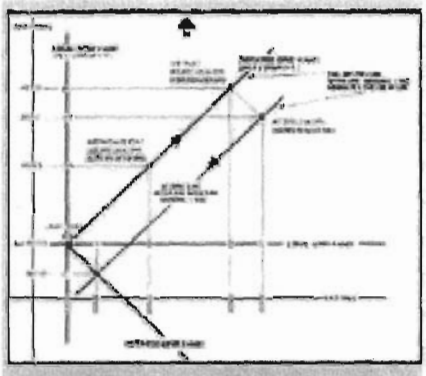
Other enhancements include way point pre-programming of up to 1000 points. Professionals can now define a complete survey before leaving for the field on their PC and download points to the magnetometer via RS-232 connection.

The operator then simply performs the survey using the way points as their survey guide. This capability decreases survey errors, improves efficiency, and ensures more rapid survey completion.

Dumping and processing effectiveness is also a critical consideration today. Historically, up to 60% of an operator's "free" time can be spent on low-return tasks, such as data dumping.

Data dumping times are now significantly reduced through GEM's implementation of high-speed, digital data links (up to 115 kBaud).

This functionality is faciliated through a new RISC processor as well as the new GSM-19 data acquisition / display software. This software serves as a bi-directional RS-232 terminal. It also has integrated processing functionality to streamline key processing steps, including diurnal data reduction. This software is provided free to all GSM-19 customers and regular updates are available.

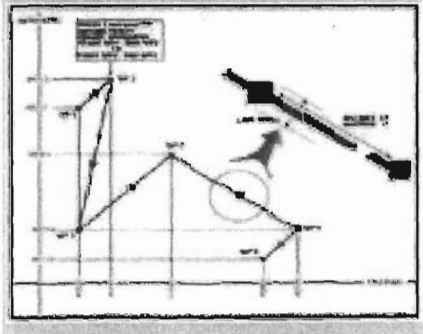


Navigation and Lane Guidance

The figure above shows the Automatic Grid (UTM, Local Grid, and Rotated Grid). With the Rotated Grid, you can apply an arbitrary origin of your own definition. Then, the coordinates are always in reference to axes parallel to the grid. In short, your grid determines the map, and not the NS direction.

The Local Grid is a scaled down, local version of the UTM system, and is based on your own defined origin. It allows you to use smaller numbers or ones that are most relevant to your survey.

The figure below shows how programmable-waypoints can be used to plan surveys on a point-by-point basis. Initially, you define waypoints and enter them via PC or the keyboard. In the field, the unit guides you to each point.



While walking between waypoints, lane guidance keeps you within a lane of predefined width using arrows (< - or - >) to indicate left or right. Within the lane, the display uses horizontal bars (- -) to show your relative position in the lane. The display also shows the distance (in meters) to the next waypoint.

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Adding Value through Options

When evaluating the GSM-19 as a solution for your geophysical application, we recommend considering the complete range of options described below. These options can be added at time of original purchase or later to expand capabilities as your needs change or grow.

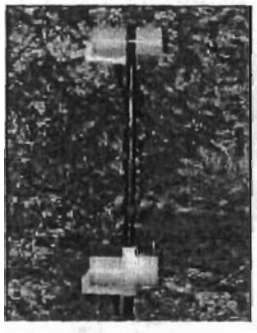
Our approach with options is to provide you with an expandable set of building blocks:

* **Gradiometer**
* **Walking- Fast Magnetometer / Gradiometer**
* **VLF (3 channel)**
* **GPS (built-in and external)**

GSM-19G Gradiometer Option

The GSM-19 gradiometer is a versatile, entry level system that can be upgraded to a full-featured "Walking" unit (model GSM-19WG) in future.

The GSM-19G configuration comprises two sensors and a "Standard" console that reads data to a maximum of 1 reading every three seconds.



An important GSM-19 design feature is that its gradiometer sensors measure the two magnetic fields concurrently to avoid any temporal variations that could distort gradiometer readings. Other features, such as single-button data recording, are included for operator ease-of-use.

GSM-19W / WG "Walking" Magnetometer / Gradiometer Option

The GSM-19 was the first magnetometer to incorporate the innovative "Walking" option which enables the acquisition of nearly continuous data on survey lines. Since its introduction, the GSM-19W / GSM-19WG have become one of the most popular magnetic instruments in the world.

Similar to an airborne survey in principle, the system records data at discrete time intervals (up to 5 readings per second) as the instrument is carried along the line.

At each survey picket (fiducial), the operator touches a designated key. The system automatically assigns a picket coordinate to the reading and linearly interpolates the coordinates of all intervening readings (following survey completion during post-processing).

A main benefit is that the high sample density improves definition of geologic structures and other targets (UXO, archeological relics, drums, etc.).

It also increases survey efficiency because the operator can record data almost continuously. Another productivity feature is the instantaneous recording of data at pickets. This is a basic difference between the "Walking" version and the GSM-19 / GSM-19G (the "Standard" mode version which requires 3 seconds to obtain a reading each time the measurement key is pressed).

GSM-19 "Hands-Free" Backpack Option

The "Walking" Magnetometer and Gradiometer can be configured with an optional backpack-supported sensor. The backpack is uniquely constructed - permitting measurement of total field or gradient with both hands free.

This option provides greater versatility and flexibility, which is particularly valuable for high-productivity surveys or in rough terrain.

GSM-19GV "VLF" Option

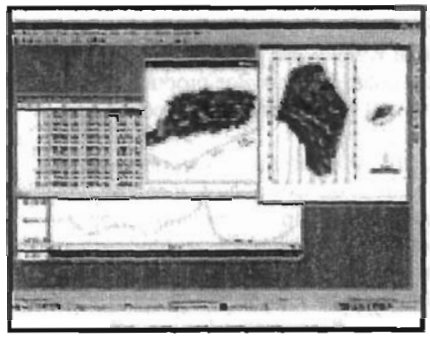
With its omnidirectional VLF option, up to 3 stations of VLF data can be acquired without orienting. Moreover, the operator is able to record both magnetic and VLF data with a single stroke on the keypad.

3rd Party Software - A One-Stop Solution for Your Potential Field Needs

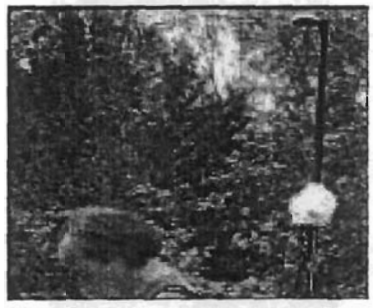
As part of its complete solution approach, Terraplus offers a selection of proven software packages. These packages let you take data from the field and quality control stage right through to final map preparation and modeling.

Choose from the following packages:

* **Contouring and 3D Surface Mapping**
* **Geophysical Data Processing & Analysis**
* **Semi-Automated Magnetic Modeling**
* **Visualization and Modeling / Inversion**



Geophysical Data Processing and Analysis from Geosoft Inc.



GSM-19 with internal GPS board. Small receiver attaches above sensor

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Version 7 -- New Milestones in Magnetometer Technology

The recent release of v7.0 of the GSM-19 system provides many examples of the ways in which we continue to advance magnetics technologies for our customers.

Enhanced data quality:

* 25% improvement in sensitivity (new frequency counting algorithm)
* new intelligent spike-free algo rithms (in comparison with other manufacturers, the GSM-19 does not apply smoothing or filtering to achieve high data quality)

Improved operational efficiency:

* Enhanced positioning (GPS engine with optional integrated / external GPS and real-time navigationl)
* 16 times increase in memory to 32 Mbytes
* 1000 times improvement in processing and display speed (RISC microprocessor with 32-bit data bus) 2 times faster digital data link (115 kBaud through RS-232)

Innovative technologies:

* Battery conservation and survey flexibility (base station scheduling option with 3 modes - daily, flexible and immediate start)
* Survey pre-planning (up to 1000 programmable waypoints that can be entered directly or downloaded from PC for greater efficiency)
* Efficient GPS synchronization of field and base units to Universal Time (UTC)
* Cost saving with firmware up grades that deliver new capabilities via Internet

More About the Overhauser System

In a **standard Proton magnetometer,** current is passed through a coil wound around a sensor containing a hydrogenrich fluid. The auxiliary field created by the coil (>100 Gauss) polarizes the protons in the liquid to a higher thermal equilibrium.

When the current, and hence the field, is terminated, polarized protons precess in the Earth's field and decay exponentially until they return to steady state. This process generates precession signals that can be measured as described below.

Overhauser magnetometers use a more efficient method that combines electronproton coupling and an electron-rich liquid (containing unbound electrons in a solvent containing a free radical). An RF magnetic field -- that corresponds to a specific energy level transition -- stimulates the unbound electrons.

Instead of releasing this energy as emitted radiation, the unbound electrons transfer it to the protons in the solvent. The resulting polarization is much larger, leading to stronger precession signals.

Both Overhauser and proton precession, measure the scalar value of the magnetic field based on the proportionality of precession frequency and magnetic flux density (which is linear and known to a high degree of accuracy). Measurement quality is also calculated using signal amplitude and its decay characteristics. Values are averaged over the sampling period and recorded.

With minor modifications (i.e. addition of a small auxiliary magnetic flux density while polarizing), it can also be adapted for high sensitivity readings in low magnetic fields. (ex. for equatorial work)

GPS - Positioning You for Effective Decision Making

The use of Global Positioning Satellite (GPS) technology is increasing in earth science disciplines due to the ability to make better decisions in locating and following up on anomalies, and in improving survey cost effectiveness and time management.

Examples of applications include: Surveying in remote locations with no grid system (for example, in the high Arctic for diamond exploration)

* **High resolution exploration mapping**
* **High productivity ferrous ordnance (UXO) detection**
* **Ground portable magnetic and gradient surveying for environmental and engineering applications**
* **Base station monitoring for observing diurnal magnetic activity and disturbances with integrated GPS time**

The GSM-19 addresses customer requests for GPS and high-resolution Differential GPS (DGPS) through both the industry's only built-in GPS (as well as external GPS).

Built-in GPS offers many advantages such as minimizing weight and removing bulky components that can be damaged through normal surveying. The following table summarizes GPS options.

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GPS Options:

Description	Range	Services
GPS Option A		Time Reception only
GPS Option B	<1.5m	DGPS*
GPS Option C	<1.0m	Ag 114 DGPS*, OmniStar
GPS Option D	<0.7m <1.2m <1.0M	CDGPS, DGPS *, OmniStar.
Output		
Time, Lat / Long, UTM, Elevation and number of Satellites		
*DGPS with SBAS (WASS/EGNOS/MSAS)		

Key System Components

Key components that differentiate the GSM-19 from other systems on the market include the sensor and data acquisition console. Specifications for components are provided on the right side of this page.

Sensor Technology

Overhauser sensors represent a proprietary innovation that combines advances in electronics design and quantum magnetometer chemistry.

Electronically, the detection assembly includes dual pick-up coils connected in series opposition to suppress far-source electrical interference, such as atmospheric noise. Chemically, the sensor head houses a proprietary hydrogen-rich liquid solvent with free electrons (free radicals) added to increase the signal intensity under RF polarization.

From a physical perspective, the sensor is a small size, light-weight assembly that houses the Overhauser detection system and fluid. A rugged plastic housing protects the internal components during operation and transport.

All sensor components are designed from carefully screened non-magnetic materials to assist in maximization of signal-to-noise. Heading errors are also minimized by ensuring that there are no magnetic inclusions or other defects that could result in variable readings for different orientations of the sensor.

Optional omni-directional sensors are available for operating in regions where the magnetic field is near-horizontal (i.e. equatorial regions). These sensors maximize signal strength regardless of field direction.

Data Acquisition Console Technology

Console technology comprises an external keypad / display interface with internal firmware for frequency counting, system control and data storage / retrieval. For operator convenience, the display provides both monochrome text as well as real-time profile data with an easy to use interactive menu for performing all survey functions.

The firmware provides the convenience of upgrades over the Internet via its software. The benefit is that instrumentation can be enhanced with the latest technology without returning the system to us -- resulting in both timely implementation of updates and reduced shipping / servicing costs.

Performance

Sensitivity:	0.022 nT / vHz@1Hz
Resolution:	0.01 nT
Absolute Accuracy:	+/- 0.1 nT
Dynamic Range:	15,000 to 120,000 nT
Gradient Tolerance:	> 10,000 nT/m
Sampling Rate:	60+, 3, 2, 1, 0.5, 0.2 sec
Operating Temp:	-40C to +55C

Operating Modes

Manual:
Coordinates, time, date and reading stored automatically at minimum 3 second interval.

Base Station:
Time, date and reading stored at 3 to 60 second intervals.

Remote Control:
Optional remote control using RS-232 interface.

Input / Output:
RS-232 or analog (optional) output using 6-pin weatherproof connector

Storage - 32Mbytes (# of Readings)

Mobile:	1,465,623
Base Station:	5,373,951
Gradiometer:	1,240,142
Walking Magnetometer:	2,686,975

Dimensions

Console:	223 x 69 x 240 mm
Sensor:	175 x 75mm diameter cylinder

Weights

Console:	2.1 kg
Sensor and Staff Assembly:	1.0 kg

Standard Components

GSM-19 console, GEMLinkW software, batteries, harness, charger, sensor with cable, RS-232/USB cable, staff, instruction manual and shipping case.

Optional VLF

Frequency Range:	Up to 3 stations between 15 to 30.0 kHz
Parameters:	Vertical in-phase and out-of phase components as % of total field. 2 components of the horizontal field amplitude and total field strenght in pT
Resolution:	0.1% of total field

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APPENDIX B

Gridding Report

Gridding Report

Sun Jan 20 13:18:42 2008
Elasped time for gridding: 20.0 seconds

Data Source

Source Data File Name:	C:\Documents and Settings\Brian\Desktop\WestGabbro\All Mag Data Combined.xls
X Column:	B
Y Column:	C
Z Column:	D

Data Counts

Active Data:	17199
Original Data:	19344
Excluded Data:	0
Deleted Duplicates:	2145
Retained Duplicates:	910
Artificial Data:	0
Superseded Data:	0

Univariate Statistics

	X	Y	Z
Minimum:	261247.98505	4941442.95	51515.7
25%-tile:	261830.16622	4941808.42412	57150.88
Median:	262126.4753	4942113.43693	58266.26
75%-tile:	262284.46189	4942248.95494	60085.73
Maximum:	262859.35585	4942700.96381	64739.26
Midrange:	262053.67045	4942071.956905	58127.48
Range:	1611.3708	1258.0138099995	13223.56
Interquartile Range:	454.29566999996	440.53081999999	2934.85
Median Abs. Deviation:	213.56169	215.50150999986	1464.81
Mean:	262065.68287313	4942061.2623131	58537.285502064
Trim Mean (10%):	262064.57488252	4942059.1232611	58513.388574381
Standard Deviation:	354.96169825509	274.83315632981	1801.3157226325
Variance:	125997.80722814	75533.263818205	3244738.332603

Coef. of Variation:	0.030772108873566
Coef. of Skewness:	0.19480254891112

Inter-Variable Correlation

	X	Y	Z
X:	1.000	-0.385	0.701
Y:		1.000	-0.809
Z:			1.000

Inter-Variable Covariance

	X	Y	Z
X:	125997.80722814	-37539.912697059	448350.48485188
Y:		75533.263818205	-400395.53031626
Z:			3244738.332603

Planar Regression: Z = AX+BY+C

Fitted Parameters

	A	B	C
Parameter Value:	2.2611552642143	-4.0283272359277	19374206.118347
Standard Error:	0.017995890312498	0.023242669357406	116762.65408656

Inter-Parameter Correlations

	A	B	C
A:	1.000	-0.385	-0.419
B:		1.000	0.999
C:			1.000

ANOVA Table

Source	df	Sum of Squares	Mean Square	F
Regression:	2	45223819467.867	22611909733.934	36743
Residual:	17196	10582435114.93	615400.97202429	
Total:	17198	55806254582.797		

Coefficient of Multiple Determination (R^2): 0.81037188046316

Nearest Neighbor Statistics

	Separation	|Delta Z|
Minimum:	0.03176119011813	0
25%-tile:	0.055577451420055	5.0699999999997
Median:	0.4051019063403	23.589999999997
75%-tile:	0.91732104779691	66.970000000001
Maximum:	70.994461508136	8173
Midrange:	35.513111349127	4086.5
Range:	70.962700318018	8173
Interquartile Range:	0.86174359637686	61.900000000001
Median Abs. Deviation:	0.36538506230366	21.459999999999
Mean:	0.65946419678186	67.43607419036
Trim Mean (10%):	0.48323841717758	40.828706801886
Standard Deviation:	2.4046816736795	247.87275825151
Variance:	5.7824939517301	61440.90428321
Coef. of Variation:	3.646417326997	3.675670050896
Coef. of Skewness:	18.406477787639	18.30861468839
Root Mean Square:	2.4934688645674	256.88232400346
Mean Square:	6.2173869785673	65988.528385418

Complete Spatial Randomness

Lambda:	0.0084844227226393
Clark and Evans:	0.12148771590271
Skellam:	5700.5041022624

Exclusion Filtering

Exclusion Filter String: Not In Use

Duplicate Filtering

Duplicate Points to Keep:	First
X Duplicate Tolerance:	0.00019
Y Duplicate Tolerance:	0.00014
Deleted Duplicates:	2145
Retained Duplicates:	910
Artificial Data:	0

X	Y	Z	ID	Status
261264.1	4942166.5	56675.63	11117	Retained
261264.1	4942166.5	56732.27	11118	Deleted
261265.28	4942179	57188.55	11132	Retained
261265.28	4942179	57383.06	11133	Deleted
261354.4	4942082.3	57117.47	11001	Retained
261354.4	4942082.3	57123.14	11002	Deleted
261355.61	4942087.3	56818.19	10995	Retained
261355.61	4942087.3	56818.4	10997	Deleted
261355.61	4942087.3	56817.79	10996	Deleted
261372.53	4942136.8	56353.64	10939	Retained
261372.53	4942136.8	56316.24	10940	Deleted
261372.64	4942136.9	56436.18	10936	Retained
261372.64	4942136.9	56426.67	10937	Deleted
261387.04	4942037.9	57653.94	5298	Retained
261387.04	4942037.9	57662.81	5300	Deleted
261387.04	4942037.9	57654.17	5299	Deleted
261396.08	4942446.9	54974.04	11176	Retained
261396.08	4942446.9	54969.69	11178	Deleted
261396.08	4942446.9	54971.03	11177	Deleted
261399.46	4942097	57145.56	5474	Retained
261399.46	4942097	57144.99	5475	Deleted
261415.58	4942127.4	58179.38	10800	Retained
261415.58	4942127.4	58136.85	10802	Deleted
261415.58	4942127.4	58172.88	10801	Deleted

261422.29	4942243.3	55586.96	2	
	Retained			
261422.29	4942243.3	55539.49	3	Deleted
261425.49	4942242.5	55443.2	21	
	Retained			
261425.49	4942242.5	55452.33	22	Deleted
261425.66	4942242.5	55485.78	24	
	Retained			
261425.66	4942242.5	55483.22	25	Deleted
261427.4	4942009.9	56563.21	5363	
	Retained			
261427.4	4942009.9	56485.47	5364	Deleted
261427.71	4942009.1	56628.53	5356	
	Retained			
261427.71	4942009.1	56562.27	5358	Deleted
261427.71	4942009.1	56601.63	5357	Deleted
261427.71	4942009.1	56591.08	5359	
	Retained			
261427.71	4942009.1	56610.3	5360	Deleted
261428.01	4942242	55448.79	42	
	Retained			
261428.01	4942242	55434.17	43	Deleted
261428.57	4942011.3	56388.21	5366	
	Retained			
261428.57	4942011.3	56407.29	5367	Deleted
261447.84	4942121.9	56435.56	10747	
	Retained			
261447.84	4942121.9	56433.51	10748	Deleted
261447.88	4942121.9	56427.63	10749	
	Retained			
261447.88	4942121.9	56414.83	10750	Deleted
261447.92	4942121.9	56420.93	10751	
	Retained			
261447.92	4942121.9	56452.22	10753	Deleted
261447.92	4942121.9	56437.99	10752	Deleted
261447.95	4942121.9	56459.58	10754	
	Retained			
261447.95	4942121.9	56454.12	10755	Deleted
261447.98	4942121.9	56460.12	10756	
	Retained			
261447.98	4942121.9	56595.89	10760	Deleted
261447.98	4942121.9	56547.42	10759	Deleted
261447.98	4942121.9	56536.89	10758	Deleted

261447.98	4942121.9	56509.14	10757	Deleted
261490.95	4942285.3	55274.63	11841	
261490.95	4942285.3	55277.34	11842	Deleted
261491.35	4942112.8	55698.12	5589	
261491.35	4942112.8	55699.83	5590	Deleted
261492.44	4942329.2	56396.09	11783	
261492.44	4942329.2	56384.17	11784	Deleted
261492.54	4942329.1	56401.45	11779	
261492.54	4942329.1	56400.03	11780	Deleted
261492.7	4942329	56392.8	11772	
261492.7	4942329	56396.41	11773	Deleted
261492.8	4942328.9	56383.37	11768	
261492.8	4942328.9	56393.24	11769	Deleted
261492.96	4942328.8	56385.89	11762	
261492.96	4942328.8	56393.8	11763	Deleted
261493.23	4942328.6	56400.6	11753	
261493.23	4942328.6	56398.69	11754	Deleted
261498.59	4942246.8	56000.45	11895	
261498.59	4942246.8	56018.05	11896	Deleted
261505.97	4942209.5	56274.76	12038	
261505.97	4942209.5	56269.06	12043	Deleted
261505.97	4942209.5	56279.65	12042	Deleted
261505.97	4942209.5	56276.96	12041	Deleted
261505.97	4942209.5	56274.98	12040	Deleted
261505.97	4942209.5	56274.7	12039	Deleted
261506.01	4942209.5	56275.28	12035	
261506.01	4942209.5	56275.14	12036	Deleted
261506.04	4942209.5	56274.62	12030	
261506.04	4942209.5	56275.47	12034	Deleted
261506.04	4942209.5	56274.74	12033	Deleted
261506.04	4942209.5	56272.81	12032	Deleted
261506.04	4942209.5	56274.22	12031	Deleted

261506.07	4942209.5	56277.31	12026	
	Retained			
261506.07	4942209.5	56276.6	12029	Deleted
261506.07	4942209.5	56276.66	12028	Deleted
261506.07	4942209.5	56275.98	12027	Deleted
261506.11	4942209.5	56274.94	12022	
	Retained			
261506.11	4942209.5	56278.59	12025	Deleted
261506.11	4942209.5	56278.17	12024	Deleted
261506.11	4942209.5	56274.9	12023	Deleted
261506.11	4942209.6	56274.89	12016	
	Retained			
261506.11	4942209.6	56274.94	12021	Deleted
261506.11	4942209.6	56274.32	12020	Deleted
261506.11	4942209.6	56274.81	12019	Deleted
261506.11	4942209.6	56275.2	12018	Deleted
261506.11	4942209.6	56275.27	12017	Deleted

More ...

—

Breakline Filtering

Breakline Filtering: Not In Use

Gridding Rules

Gridding Method: Kriging
Kriging Type: Point

Polynomial Drift Order: 0
Kriging std. deviation grid: no

Semi-Variogram Model
Component Type: Linear
Anisotropy Angle: 0
Anisotropy Ratio: 1
Variogram Slope: 1

Search Parameters
Search Ellipse Radius #1: 1020
Search Ellipse Radius #2: 1020
Search Ellipse Angle: 0

Number of Search Sectors: 4
Maximum Data Per Sector: 16
Maximum Empty Sectors: 3

Minimum Data: 8

Maximum Data:	64

Output Grid

Grid File Name:	C:\Documents and Settings\Brian\Desktop\WestGabbro\All Mag Data Combined Kriging.grd
Grid Size:	78 rows x 100 columns
Total Nodes:	7800
Filled Nodes:	7800
Blanked Nodes:	0

Grid Geometry

X Minimum:	261247.985
X Maximum:	262859.3559
X Spacing:	16.276473737374
Y Minimum:	4941442.95
Y Maximum:	4942700.964
Y Spacing:	16.337844155838

Grid Statistics

Z Minimum:	53292.401353751
Z 25%-tile:	57713.685499729
Z Median:	59104.346390354
Z 75%-tile:	60227.234744373
Z Maximum:	64333.920208336
Z Midrange:	58813.160781044
Z Range:	11041.518854585
Z Interquartile Range:	2513.5492446443
Z Median Abs. Deviation:	1248.2444660336
Z Mean:	58970.626237824
Z Trim Mean (10%):	58992.547859922
Z Standard Deviation:	1687.3615663357
Z Variance:	2847189.0555468
Z Coef. of Variation:	0.028613594156702
Z Coef. of Skewness:	-0.19316431909596
Z Root Mean Square:	58994.762038139
Z Mean Square:	3480381947.9367

APPENDIX C

Magnetometer Survey Data

METADATA - Files linked to the following report:

Since the number of data points utilized in this survey are too numerous to apply to paper, electronic versions (with the file extension .pdf) are included. Raw survey data has been assigned UTM co-ordinates in order to locate each point. The files area listed under 'Raw Data'.

West Gabbro Magnetometer Survey - Metadata Updated January 24, 2008

Submitter Information:
Mr. D. Phipps on behalf of Trigan Resources Inc.
Tel: 905-668-8259

Survey Conducted by:
Oakridge Environmental Limited
380 Armour Road, Suite 127
Peterborough, Ontario
K9H 7L7
Project #: 07-1099

Survey Name: West Gabbro Magnetometer Survey -
Survey Area: 2.1 km^2

Total Line-km: 11.1 line km Corrected Using base station at UTM (Zone 17) co-ordinates: 736661E, 4941655N
Rugged terrain prevented conventional grid format

Equipment:
Rover - GSM-19 v7.0 Overhauser Magnetometer with WAAS enabled GPS (+/- 2.0 m)
resolution = 0.01 mT; accuracy of +/- 0.1 nT
sample interval set to 1 reading every 2 seconds
Base - GSM-19G Overhauser Magnetometer
resolution = 0.01 mT; accuracy of +/- 0.1 nT
sample interval set to 1 reading every 5 seconds

Magnetometer height above ground: 2.0 m

Survey dates: November 20, 23, 26, 27 and 28, 20007.

Total number of survey points: 36,596

Raw Data:

Digital File Name:	Description:
Gab_corrected_no_filter.pdf	TMI corrected for diurnal fluctuations
Gab_corrected_filtered.pdf	TMI filtered for redundancy

Shapes: claim_outline_poly.shp Georeferenced claim map boundary image from Ontario
CLAIMaps system (full reference in report)

Grids:
all_mag_data_combined_kriging_smoothed.grd Digital terrain model

Survey Maps: Map Year: 2008 (all)
Map Scale: 1:5,000 (all)

Digital File Name:	Map Title:
Figure_4_Survey_Traverse_Plan.pdf	Survey Traverse Plan
Figure_5_Total_Field_Interpretation_Plan.pdf	Total Field Interpretation Plan

Other Figures: Figure Year: 2008 (all)

Digital File Name:	Figure Title:	Scale:
Figure_1_General_Location.pdf	General Location Plan	1:250,000
Figure_2_Claim_Map.pdf	Claim Group Plan	1:38,484
Figure_3_Total_Field_Data_Statistics.pdf	Total Field Data Statistics	NTS

Magnetic Data:
Gab_corrected_no_filter.xls
Gab_corrected_filtered.xls

Channel Name and description:

UTM_X (m)	Easting – NAD83, UTM zone 18 (metres)
UTM_Y (m)	Northing – NAD83, UTM zone 18 (metres)
Lon_dd	Longitude (WGS84) (degree)
Lat_dd	Latitude (WGS84) (degree)
Acc	Accuracy
Date	Survey Date (DDMMYY)
UTC_sec	UTC time (start of day) (seconds)
GPS_sec	GPS time (start of day) (seconds)

WPT_ID	Identification number of reading
Base	Magnetic Base Station (Diurnal) (nT)
Mag_notcorr	Total magnetic intensity (TMI) not corrected
Mag_corr	Total magnetic intensity corrected and tie lines leveled (nT)

Report: 07-1099_Mag_Survey_Report-1.pdf

Title: Report on a Magnetometer Survey
Sub-title: Township of Havelock - Belmont - Methuen
Sub-title: (Methuen Ward)
Sub-title: Southern Ontario Mining Division for Trigan Resources Inc.
Sub-title: West Gabbro Project
Year: 2008
# of Pages: 39 (including figures and appendices)
Author: Oakridge Environmental Limited
Company work performed for: D. Phipps of Trigan Resources Inc.

Appendicies:

Digital File Name:	Appendix Title:
Appendix_A_Instument_Specs.pdf	Instrument Specifications
Appendix_B_Metadata.pdf	Metadata
Appendix_c_Gridding_Report.pdf	Gridding Report