





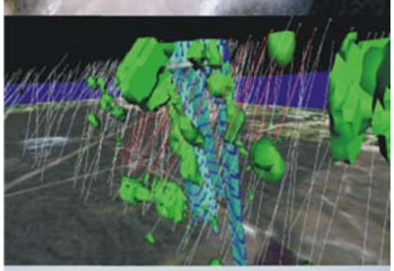


GROUND MAGNETICS REPORT

WATERSHED GOLD PROPERTY

Gogama, Ontario

SANATANA RESOURCES INC.
1925-925 West Georgia Street
Vancouver, BC, Canada
V6C 3L2

Date: August 14, 2013

Prepared By:

CARACLE CREEK INTERNATIONAL CONSULTING INC.
Julie Palich, M.Sc., P.Geo
Jenna McKenzie, Hon.B.Sc., P.Geo

Office Locations

Toronto
34 King Street East, 9th Floor
Toronto, ON
Canada, M5C 2X8
Tel: +1.416.368.1801
Canada@caraclecreek.com

Vancouver
409 Granville Street, Suite 1409
Vancouver, BC
Canada, V6C 1T2
Tel: +1.604.637.2050
Canada@caraclecreek.com

Sudbury
25 Frood Road
Sudbury, ON
Canada, P3C 4Y9
Tel: +1.705.671.1801
TF: +1.866.671.1801
Canada@caraclecreek.com

Puerto Plata
13 Pedro Clisante, El Batey, Sosua
Puerto Plata, Dominican Republic
Tel: +1-829-909-2242
Canada@caraclecreek.com

Johannesburg
7th Floor, The Mall Offices
11 Cradock Avenue, Rosebank
South Africa
Tel: +1.27 (0) 11.880.0278
Africa@caraclecreek.com

www.caraclecreek.com

This report has been prepared by

Caracle Creek International Consulting Inc. (Caracle Creek) on behalf of Sanatana Resources INC.

2013

Issued by: Toronto Office

TABLE OF CONTENTS

FIGURES

TABLES

1.0 INTRODUCTION

Caracle Creek International Consulting Inc. ("Caracle Creek") of Toronto, Ontario, Canada was contracted by Sanatana Resources INC. ("Sanatana") of Vancouver, B.C., Canada, to review the Watershed Gold Property ("The Property"), ground magnetics data. This report is intended to serve as an interpretation report to the ground magnetics surveys and has been written in an appropriate format to file with Ontario Ministry of Northern Development and Mines and Forestry (MNDMF) for assessment credit if required. This report summarises the results of the ground magnetics survey undertaken on the Property from March 1 – 12, 2012.

The objective of these surveys was to identify diabase dykes to assist with drill collar positioning, to avoid intersecting them where possible. This report summarizes the processing steps and interpretation.

2.0 PROPERTY DESCRIPTION AND LOCATION

2.1 Location

The Property is located ~165 km north of Sudbury, Ontario and ~ 130 km south of Timmins, Ontario at approximately 425000E and 5266322N, UTM Zone 17N NAD83 (Figure 2-1). The town of Gogama is approximately 26 km northeast of the Property. Access to the Property is via Highway 144 from Sudbury and Timmins or from Sultan Road, which begins at the intersection of Highway 144 and Highway 560. Several dirt roads heading west from Highway 144 and north from Sultan Road can be used to access the property.

The Property consists of 46 unpatented claims comprising 7,584 ha in the Porcupine Mining Division within the Yeo, Benneweis, and Chester Townships. All claims are owned by Sanatana Resources INC.

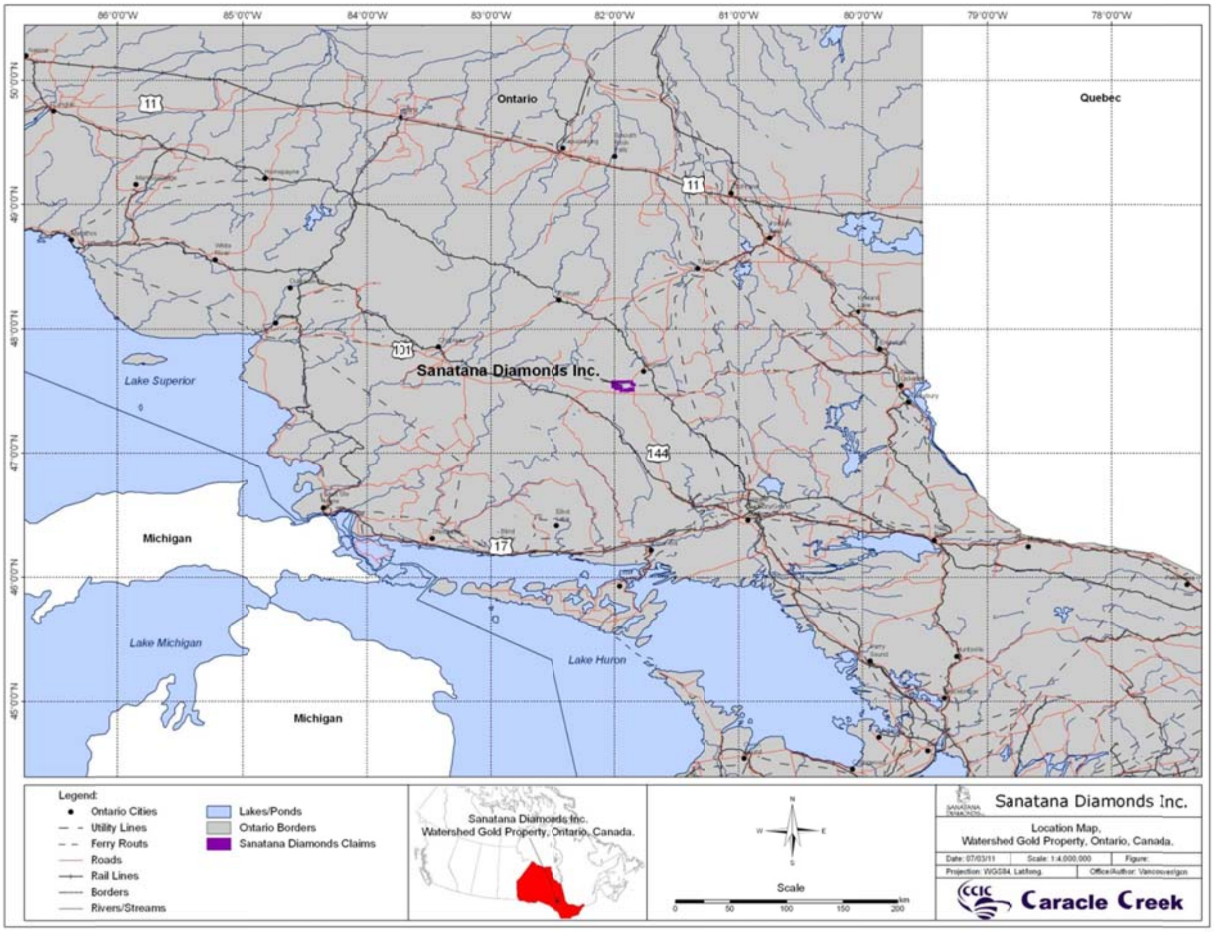

Figure 2-1. Location of Watershed Gold Property in Gogama, Ontario.

2.2 Description and Ownership

The ground magnetics survey was performed on claims 3017672, 3017665, 3017666, 3017667, 3017668 and 3011820. Details of these claims are summarized in Table 3-1. The location of the claims is shown in Figure 2-2.

Table 2-1. Watershed Property claims surveyed using ground magnetics

Claim Number	Claim Holder	Township	Units	Area (ha)	Claim Due Date
3017672	Sanatana Resources INC.100%	Yeo	10	160	17-Mar-2014
3017665	Sanatana Resources INC. 100%	Chester	3	48	25-Feb-2014
3017666	Sanatana Resources INC. 100%	Chester	3	48	25-Feb-2014
3017667	Sanatana Resources INC. 100%	Chester	3	48	25-Feb-2014
3017668	Sanatana Resources INC. 100%	Chester	6	96	25-Feb-2014
3011820	Sanatana Resources INC. 100%	Chester	1	16	20-Jan-2014

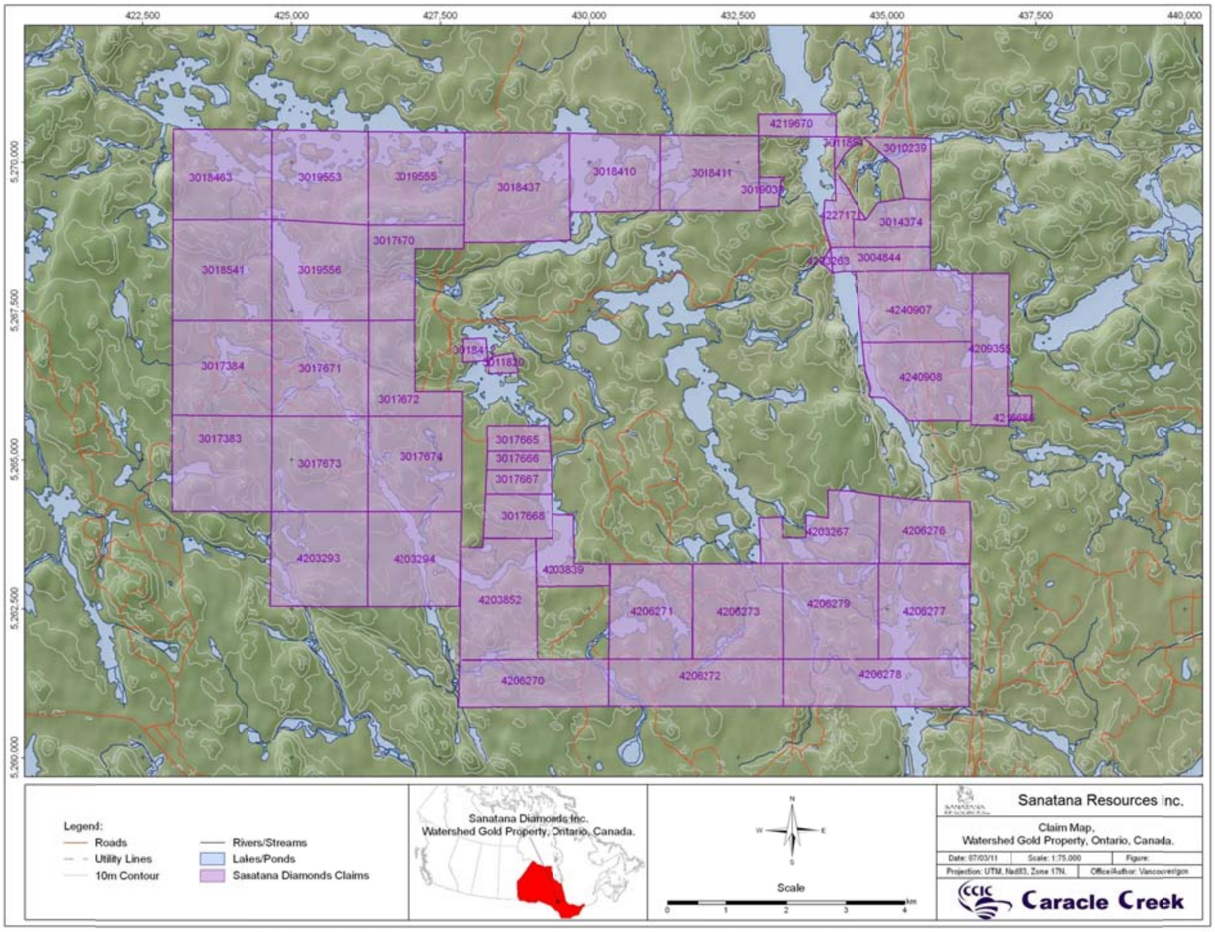

Figure 2-2. Watershed Gold Property claims in Gogama, Ontario.

3.0 GEOLOGICAL SETTING AND MINERALIZATION

The following geological description of the Watershed Gold Property is summarized from the *Independent Technical Report* prepared by Ronacher et al. (2011).

The Watershed Gold Property lies within the Swayze Greenstone Belt, which is part of the Western Abitibi Subprovince of the Superior Province. The age of the Abitibi Subprovince is between 2.75 and 2.67 Ga (Ronacher et al, 2011). This belt is interpreted to represent a deeper erosional level of the Abitibi Greenstone Belt. The southern Swayze Greenstone Belt is an ESE-trending syncline that extends from Ester to Brunswick townships. The outer limb of the syncline is composed of tholeiitic flows of greenschist facies. The inner part of the syncline is composed of tholeiitic and calc-alkaline metavolcanic rocks; and the core is composed of clastic metasediments that are the youngest rocks in the structure. Metasedimentary rocks occur in the west part of the belt and are intruded by the Jerome porphyry. Iron formation and subvolcanic gabbroic rocks are also present in the southern Swayze Greenstone Belt.

The Swayze Greenstone Belt has undergone polyphase folding, development of multiple foliation generations, high-strain zones and late brittle faulting. Eight major subparallel, sinistral NNW-trending and several NE-trending faults offset the syncline. Younger diabase dykes also strike NNW and NE to a lesser extent. Most of the rocks in the Swayze Greenstone Belt have undergone greenschist facies metamorphism. Amphibolite facies metamorphism is limited to the contact aureoles of felsic intrusion.

The Watershed Gold Property is underlain by the northern and southern limb of the syncline forming the Swayze Greenstone Belt. The eastern part and southern corner of the felsic pluton of the Chester Granitoid complex underlies the Chester, Yeo and Benneweis townships and hosts several gold occurrences mostly to the north of the Property boundary; and mafic intrusive rocks in the Chester Granitoid Complex surrounding the felsic pluton.

The Swayze Greenstone Belt is prospective for orogenic gold deposits (“shear zone hosted”, “mesothermal”, “greenstone-hosted quartz-carbonate vein” deposit). These deposits occur in deformed greenstone belts, particularly those that are characterized by tholeiitic basalts and ultramafic komatiites intruded by intermediate to felsic porphyritic intrusions. They are located along major compressional to transtensional crustal-scale fault zones marking convergent margins between major units but ore is typically hosted by second- and third order shears and faults and at jogs and changes in strike.

The Chester Gold occurrence (MNDMF Chester Gold Occurrence, 2005) is located in the southern Chester area (claim 3017665) of the Watershed Gold Property within the Chester Granitoid Complex. Gold is hosted by quartz veins in a stockwork of joints in granites of the Chester Granitoid Complex trending parallel to diabase dikes. In 1993, massive pyrite and visible gold was reported in the veins. However most of the pyrite is disseminated. Grab sample collected by the OGS in 1994 returned 143.16 g/t Au and 7.5 g/t Ag.

4.0 SURVEY DESIGN AND APPROACH

4.1 Magnetics Theory

Magnetometers are used in mineral exploration as a helpful tool to measure the strength and direction of magnetic features in the earth. Magnetic effects result from the magnetization induces in susceptible rocks by the Earth's magnetic field. Magnetic survey as typically used in mineral exploration to map features in igneous and metamorphic rocks, including faults, dikes, or other features that are associated with mineral concentrations and sensitive to the variability of magnetite concentrations in the host rock. While airborne magnetic surveying is popular to map structural features on a regional scale, surface magnetics surveys are used to provide detailed delineation areas of interest.

The ground magnetics method used for this survey applies the use of precession of spinning protons to measure the total magnetic intensity. In the Overhauser system, a proton rich fluid with a known frequency is used to cause the protons to precess about the direction of the earth's magnetic field. To calculate the total magnetic field intensity the gyromagnetic ratio frequency is used as the frequency in which the protons have been excited. The precession signal given out is continuous and allows data acquisition at a rate that can be used in a walking survey. The Overhauser unit is different from other systems because it can take very high sensitivity total field measurements that result in the highest level of standard proton precession available in the industry.

4.2 System Specifications and Survey Design

This ground magnetics survey was undertaken with the GSM-19W "Walking" Overhauser Magnetometer with DGPS and a GSM-19 base station (Table 5-1). A GSM-19 base station was located at an average location of 428,751mE, 5,265,525mN or 0.5 – 2.3 kilometers away. The survey consists of three different grids.

Table 4-1. Specifications of the Overhauser Magnetics system

Survey Item	**Specifications**
Survey Type	Magnetometer
Magnetometer System	Overhauser GSM-19W
Survey Configuration	Walking Magnetometer – 48.5 km lines
Line Spacing	25 m
Diurnal Monitoring	Overhauser GSM-19 Base station recorder
Record Interval	60+ 4 sec
Sensitivity	0.022nT/√Hz
Resolution	0.01nT
Absolute Accuracy	+/- 0.1 nT
Range	20,000 to 120,000 nT
Gradient Tolerance	< 10,000 nT/m

Sixty-one line surveys were planned over three separate grids with 25 m line spacing and a North orientation. The specifics of the three survey grids are detailed in Table 5-2.

Table 4-2. Specifications of the Ground Magnetics Survey

Grid	Location	Claims	Number of Lines	Line Kilometres	Line Spacing	Area (km²)
SAN_12_001 (Northwest)	Yeo Township, Claim Lakes	3017672	13	12.99	25 m	0.229
SAN_12_002 (Southeast)	Chester Township, Chester Area	3017665, 3017666, 3017667, 3017668	32	36.91	25 m	0.793
SAN_12_003 (Northeast)	Chester Township, Clam Lake	3011820	16	6.25	25m	0.124
TOTAL		6 claims	61	56.15	25 m	1.146

Figure 4-1 denotes the line paths and all three survey areas. The black lines are all data lines collected with GPS data but did not have matching diurnal data. The orange lines denote areas where partial sections of the walk-mag files did not have corresponding diurnal data. The blue lines are the final processed and diurnally corrected survey lines.

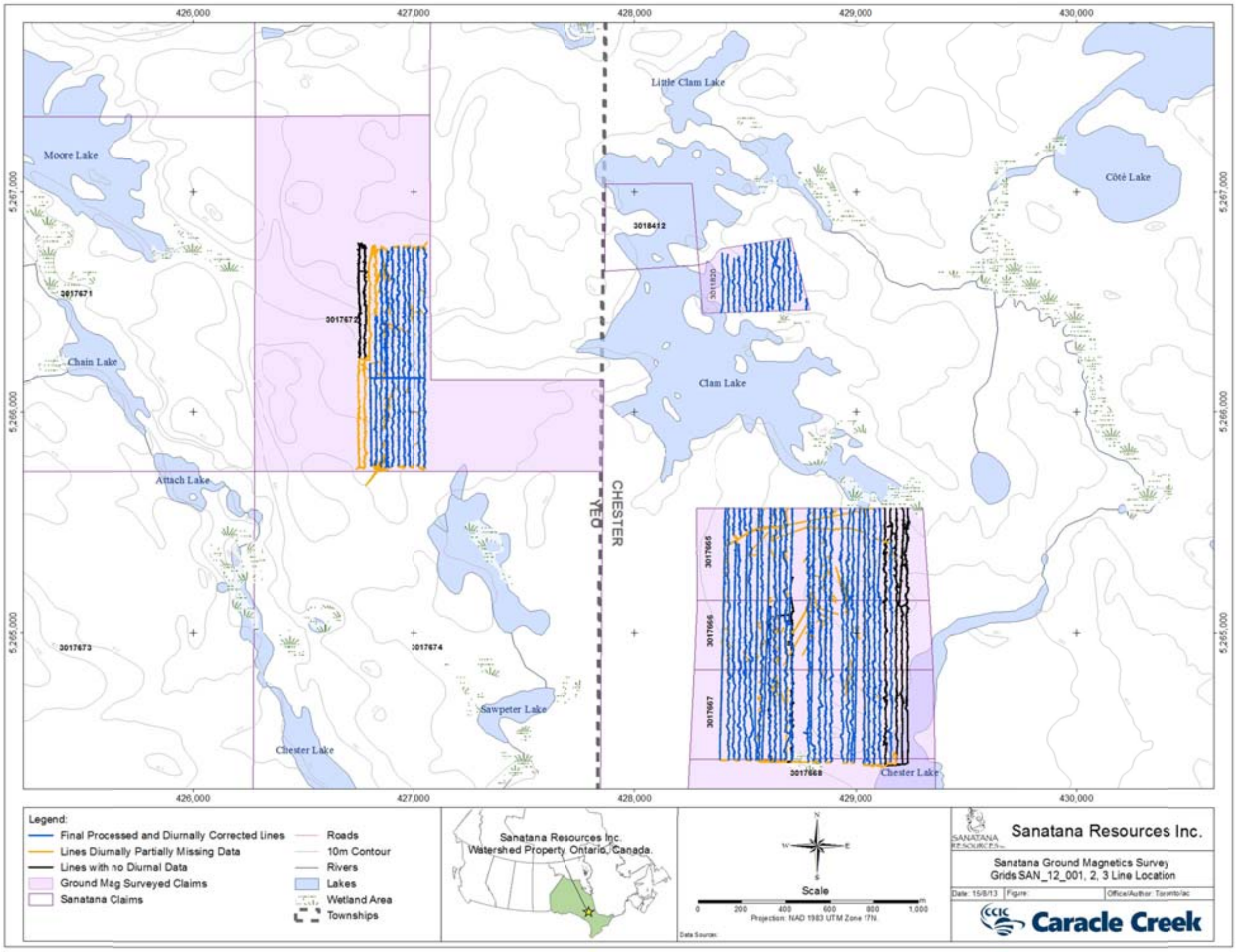

Figure 4-1. Survey Line Location of the 2012 Sanatana Ground Magnetic Survey

5.0 DATA PROCESSING AND PRESENTATION

Raw files for both walking magnetometers ("walk mag") and base magnetometers ("base mag") were provided by the client along with an Excel table summarising the start and end times of each data file for survey 001 and survey 002. It was noted in this file that one survey file (59II12_04Surveywm_No GPS.txt) was collected with no GPS and thus was excluded from processing. All lines were collected at 25m line spacing and were collected in NAD83, UTM Zone 17N.

All data files were edited in TextPad in preparation for importation to processing software Geosoft OasisMontaj. A Geosoft TBL file was created for all base mag data to apply the diurnal correction.

All walk-mag files for survey SAN_12_001, SAN_12_002, and SAN_12_003 were loaded to a Geosoft database. A Geosoft TBL file was created by amalgamating all diurnal data to one file. This TBL file was used to associate a diurnal data point with each walk-mag data point. The diurnal correction was performed by subtracting the diurnal value from the raw total field.

As expected with ground magnetic surveys, the GPS data tended to be noisy and required some editing, to both split apart separate lines and remove single position spikes caused by poor satellite signal reception. A small degree of GPS wander was noted on grids SAN_12_001 and SAN_12_002; a larger degree of GPS wander was noted on grid SAN_12_003 but all data was deemed to be acceptable.

Figures 5-1 through 5-12 demonstrate the total magnetic intensity ("TMI"), first vertical derivative ("VD1"), analytic signal ("AS") and digital elevation model ("DEM") of each survey grid SAN_12_001, SAN_12_002, and SAN_12_003.

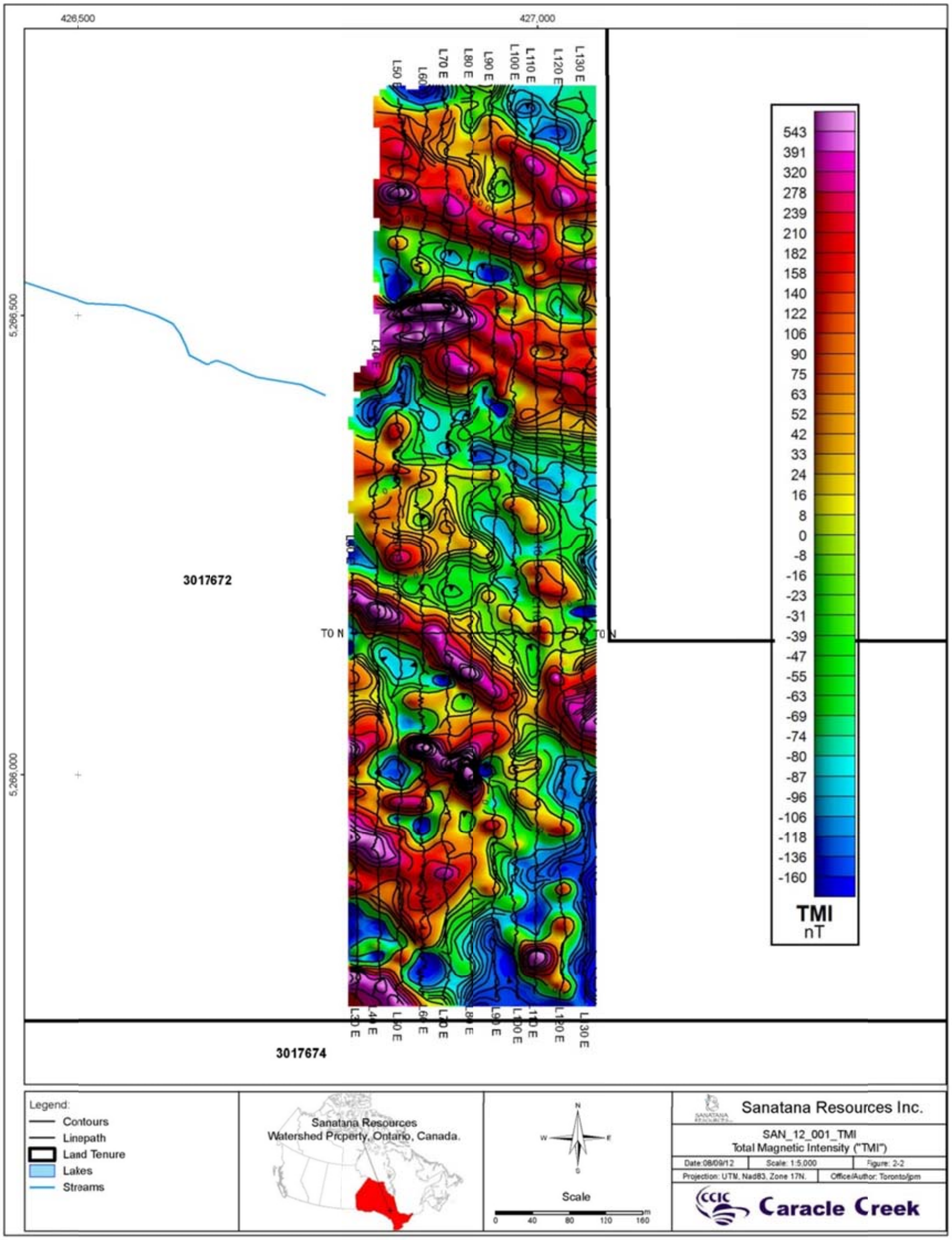

Figure 5-1. SAN_12_001_TMI – Total Magnetic Intensity

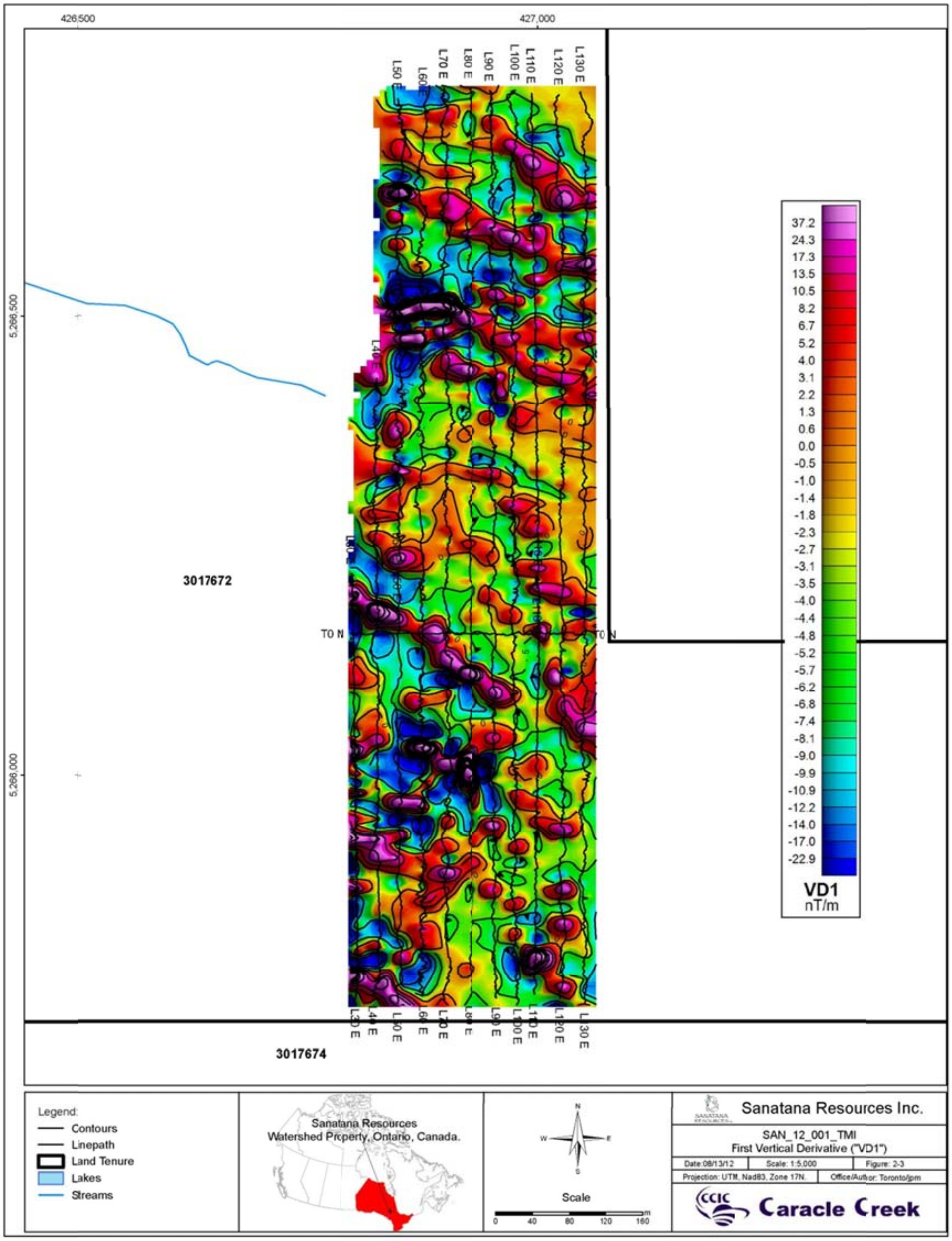

Figure 5-2. SAN_12_001_TMI – First Vertical Derivative

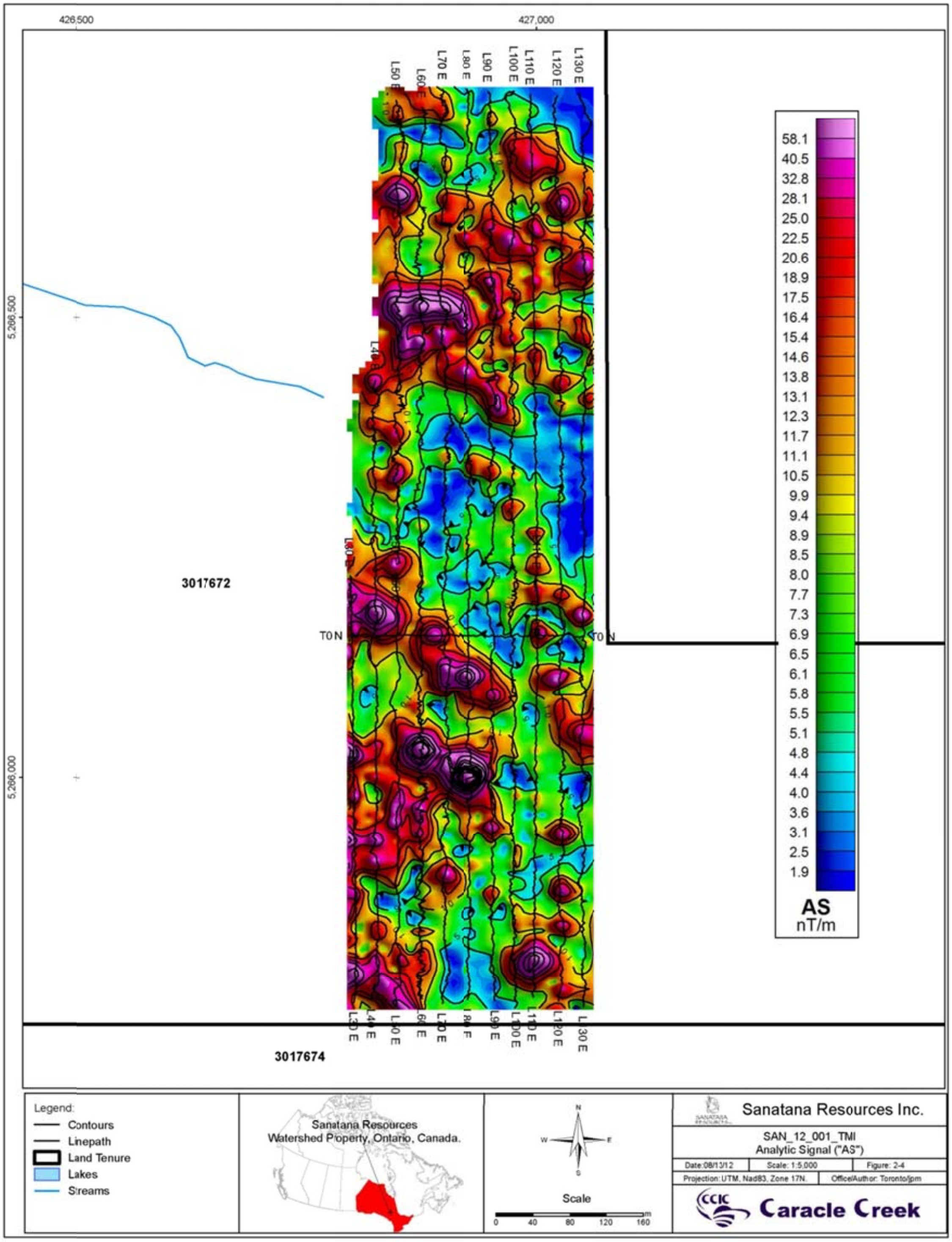

Figure 5-3. SAN_12_001_TMI – Analytical Signal

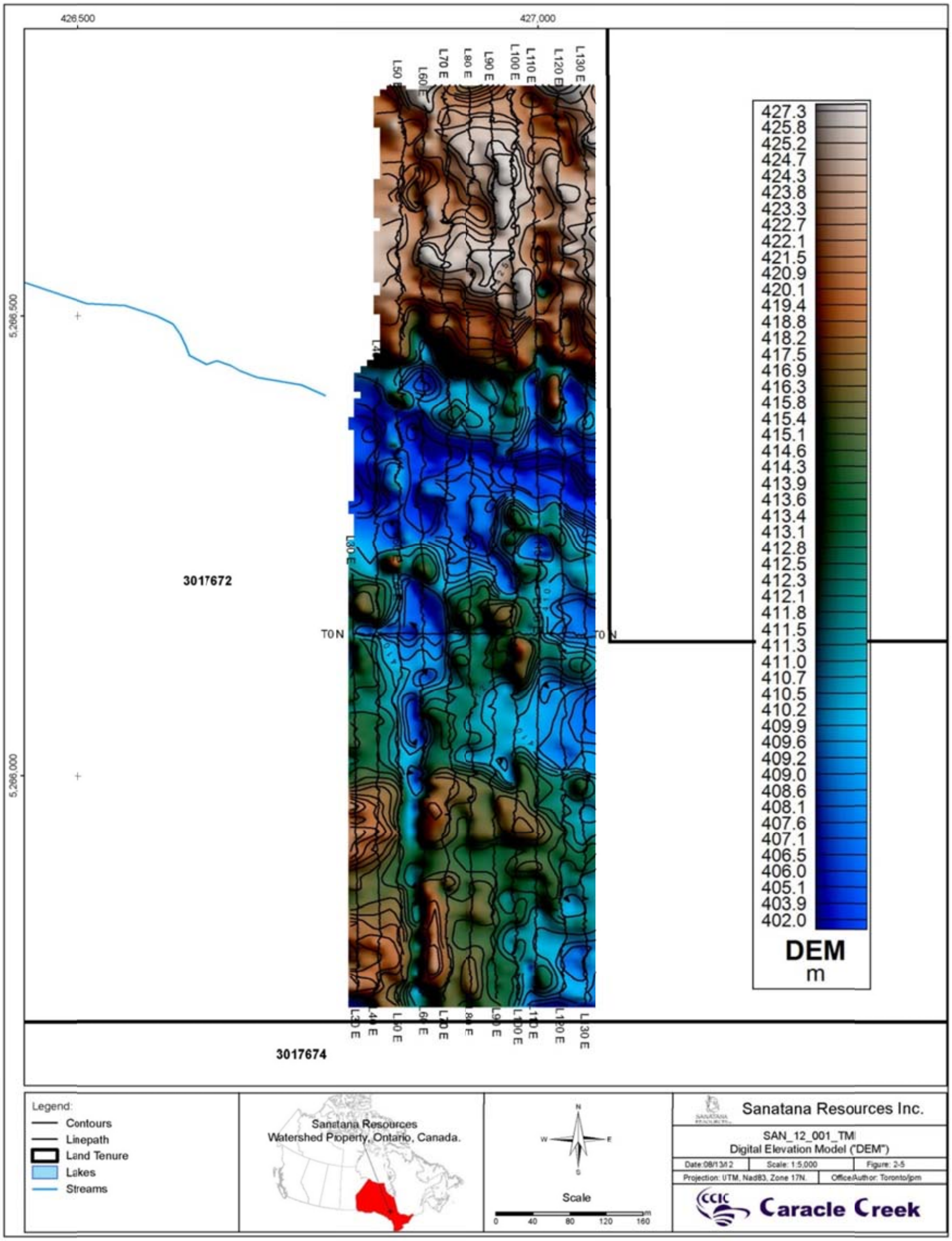

Figure 5-4. SAN_12_001_TMI – Digital Elevation Model

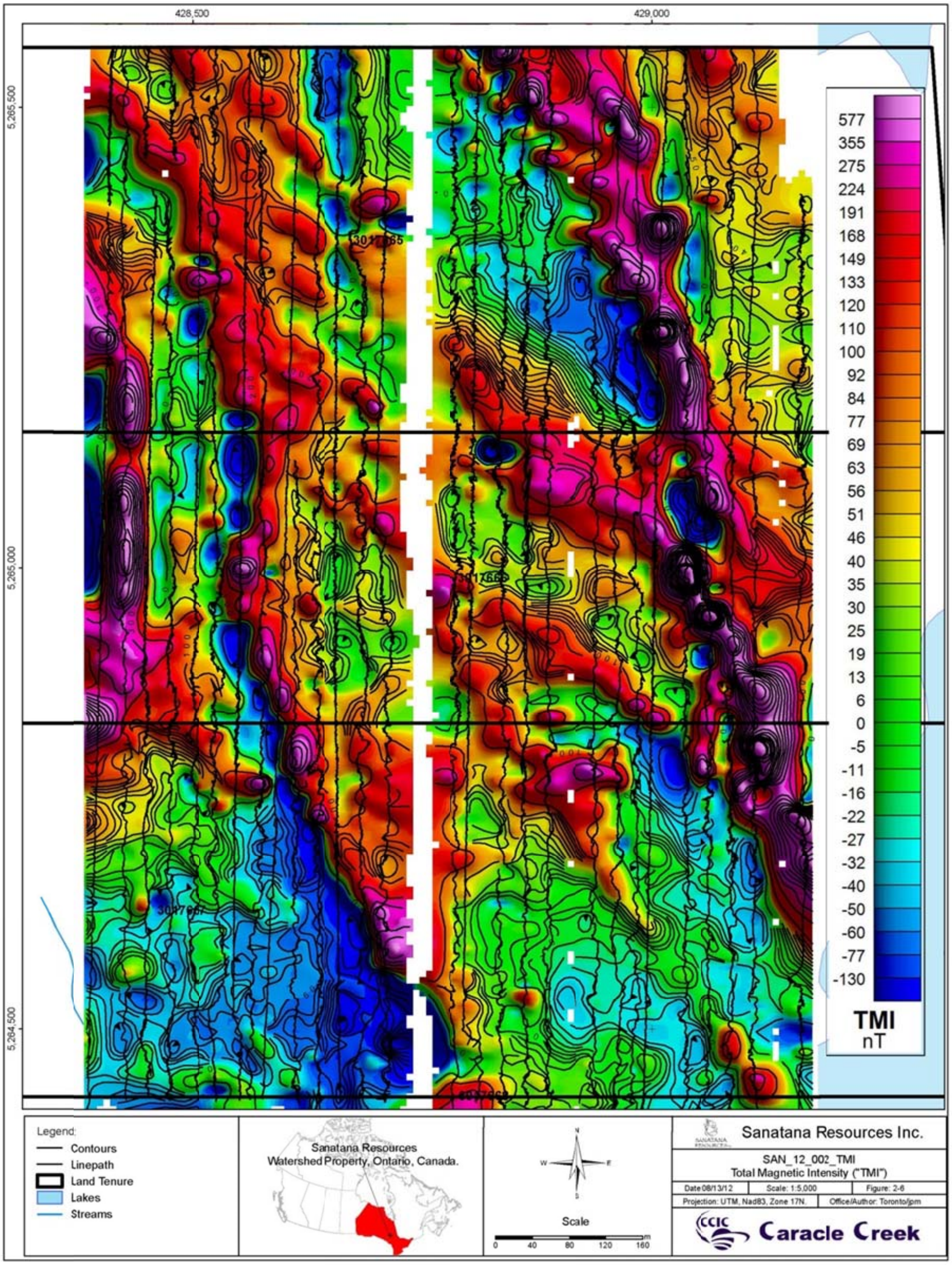

Figure 5-5. SAN_12_002_TMI – Total Magnetic Intensity

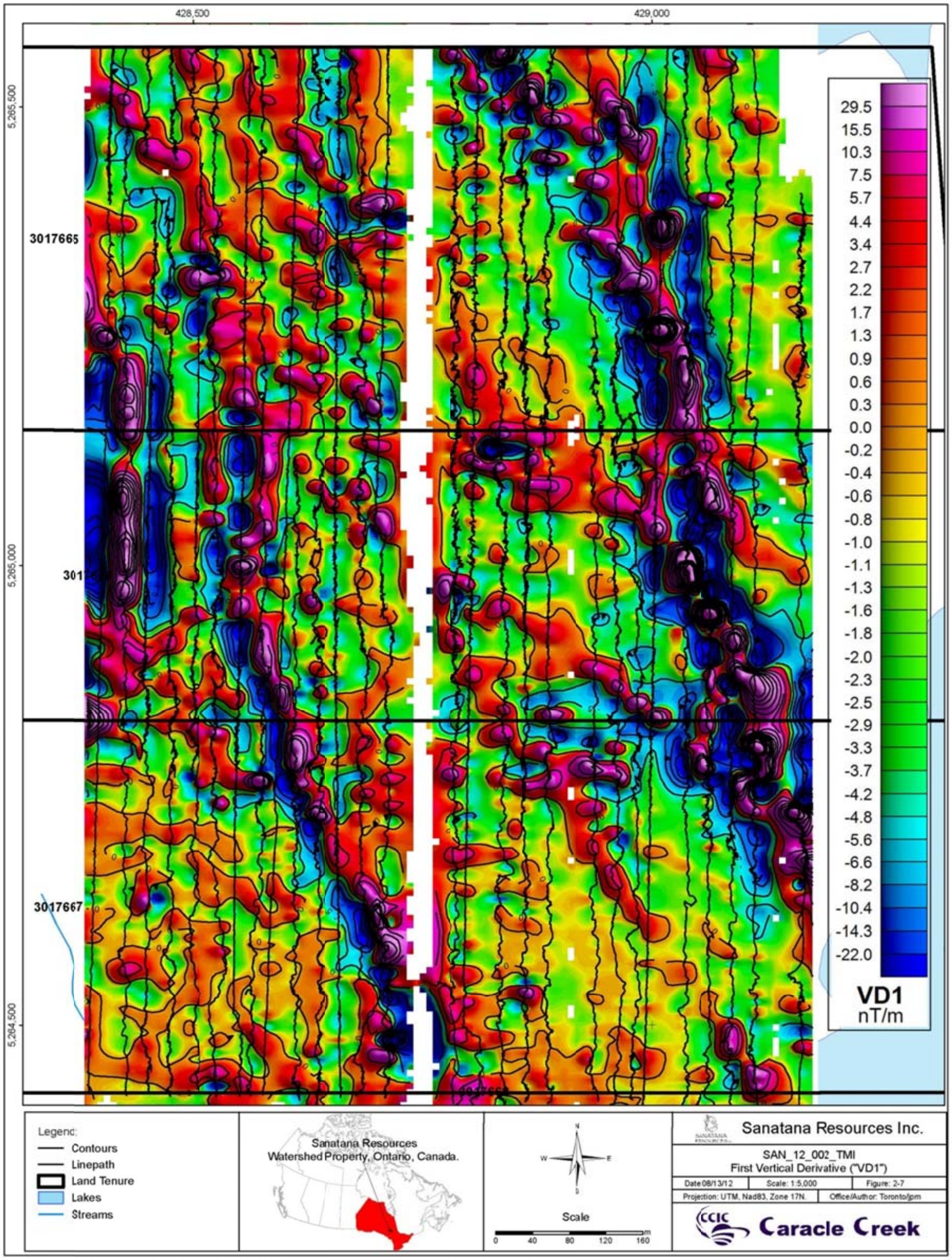

Figure 5-6. SAN_12_002_TMI – First Vertical Derivative

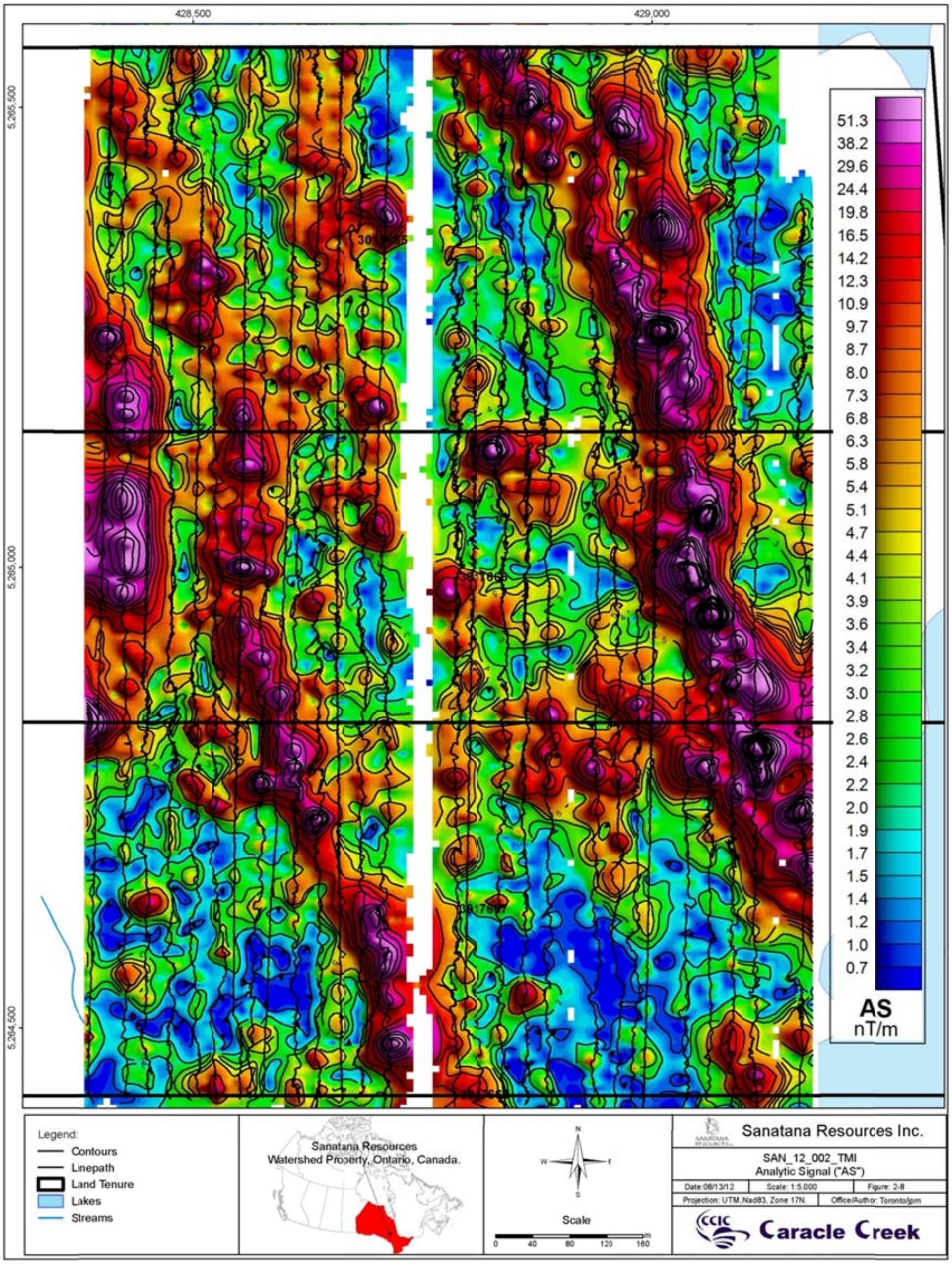

Figure 5-7. SAN_12_002_TMI – Analytical Signal

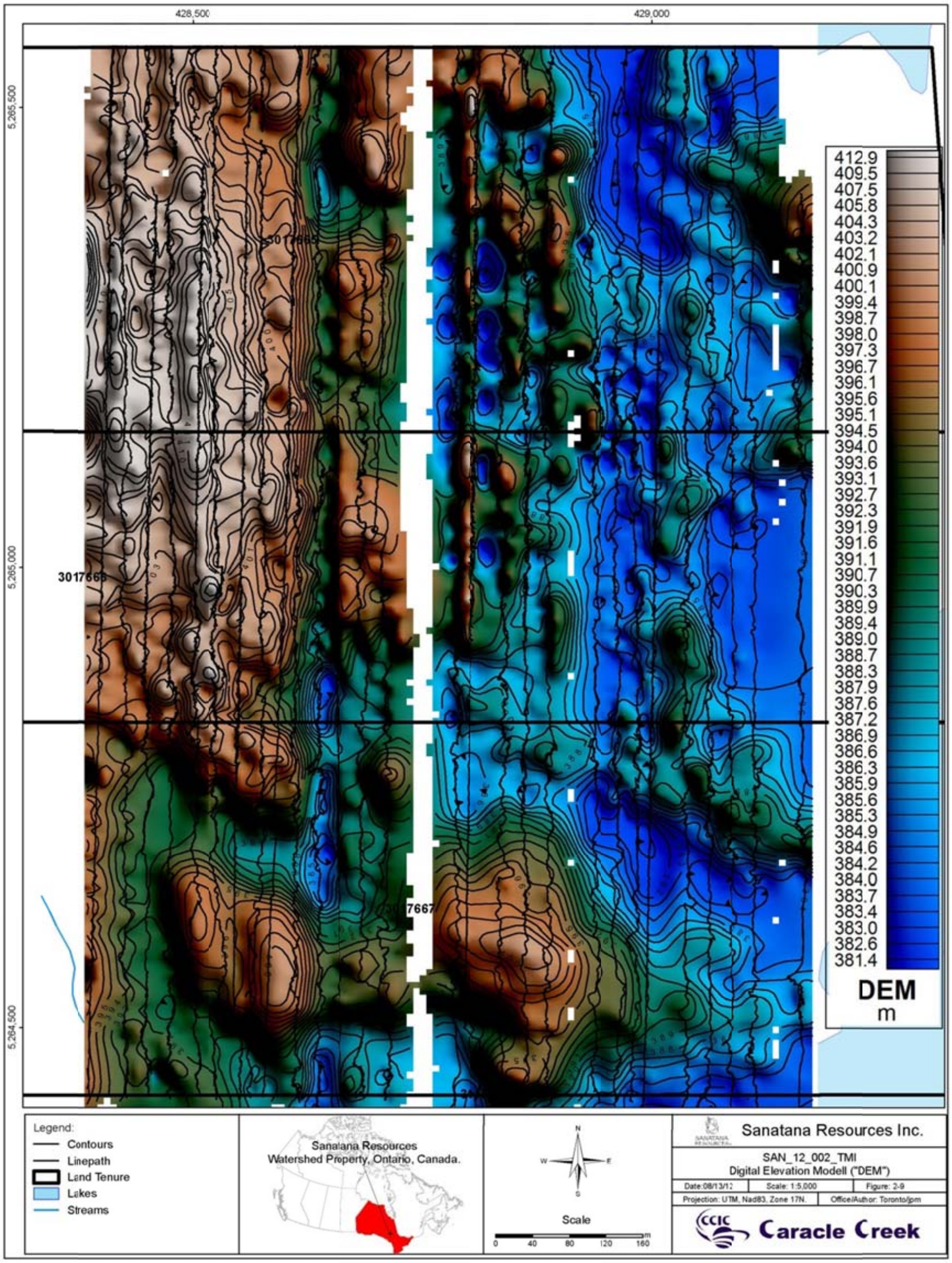

Figure 5-8. SAN_12_002_TMI – Digital Elevation Model

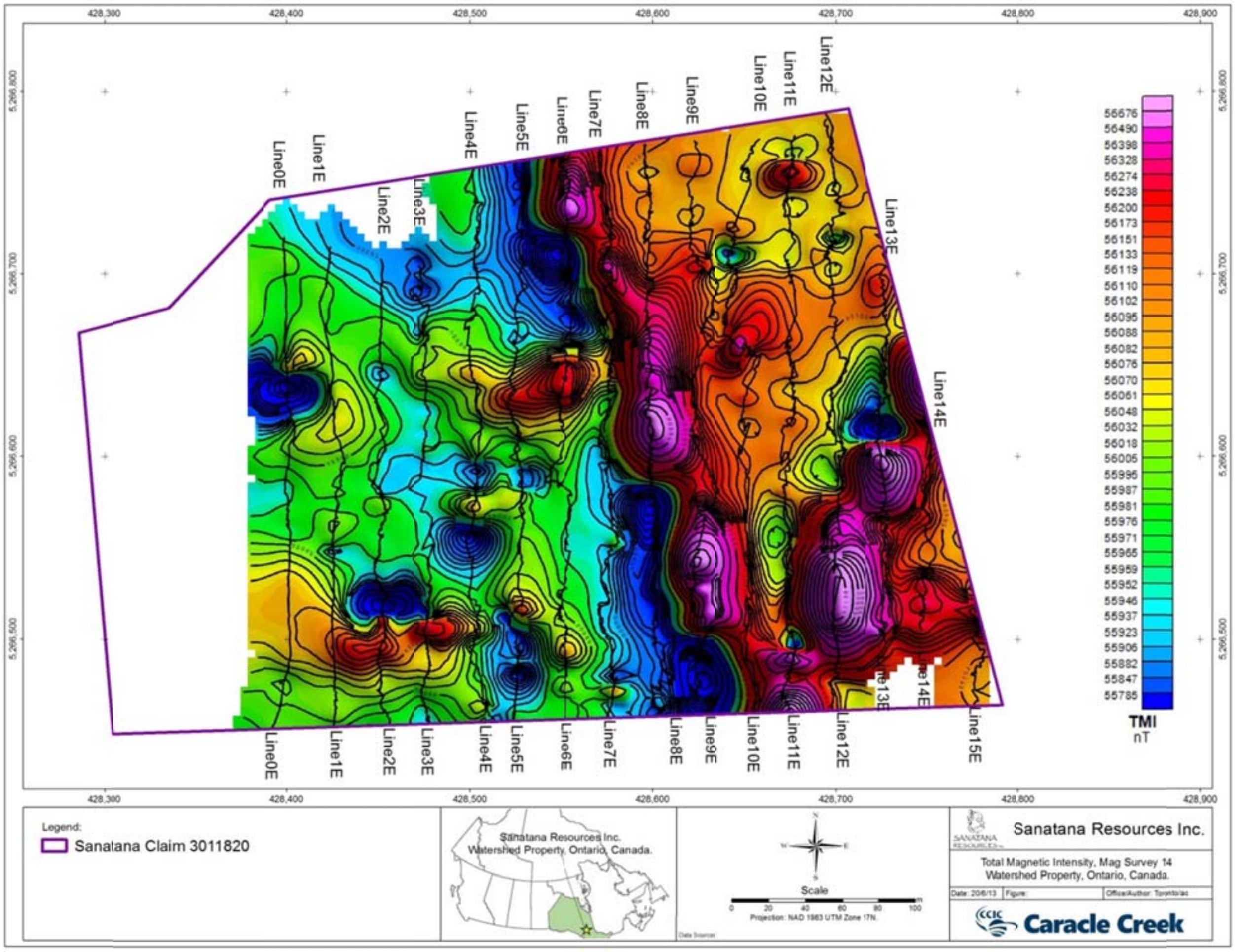

Figure 5-9. SAN_12_003_TMI – Total Magnetic Intensity

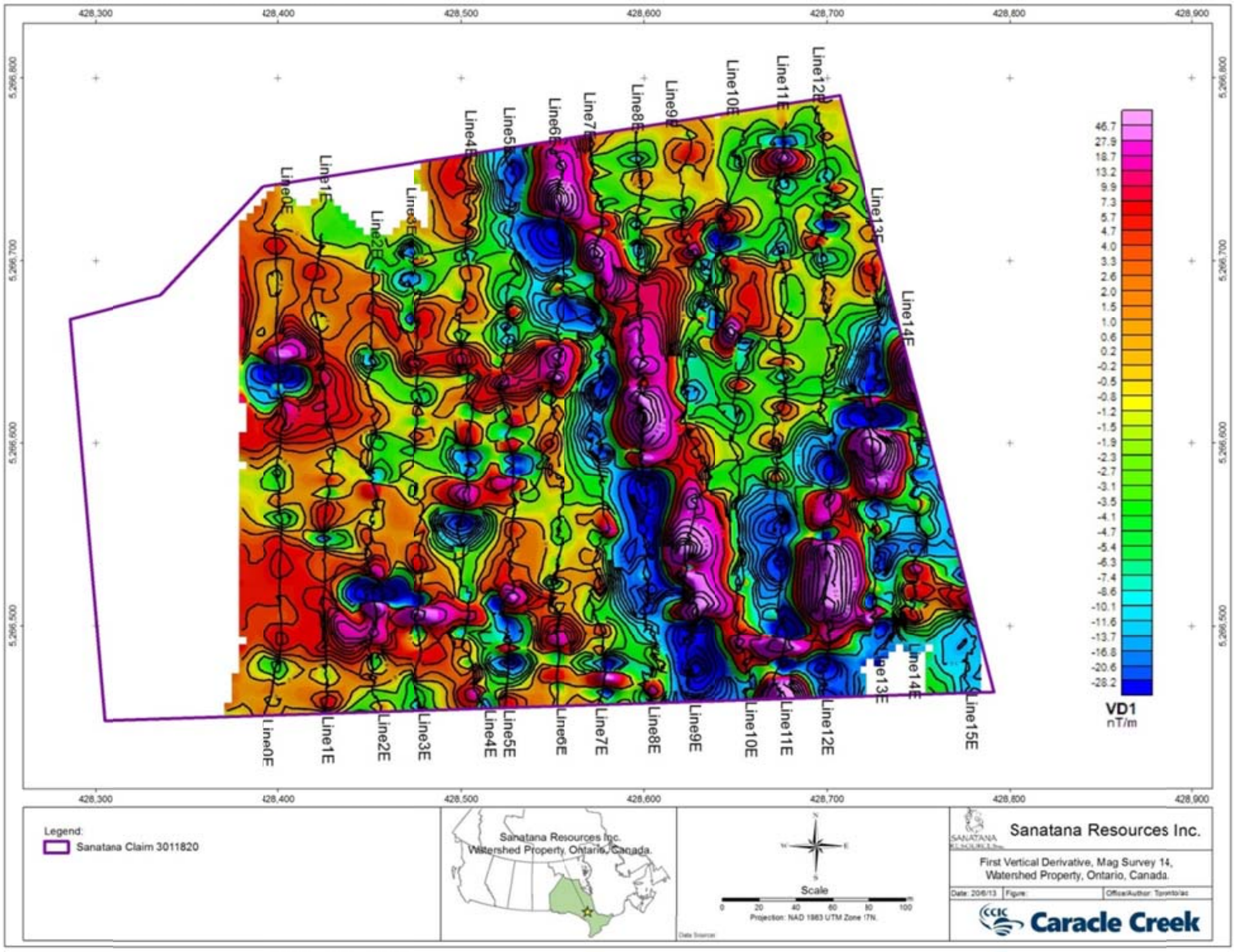

Figure 5-10. SAN_12_003_TMI – First Vertical Derivative

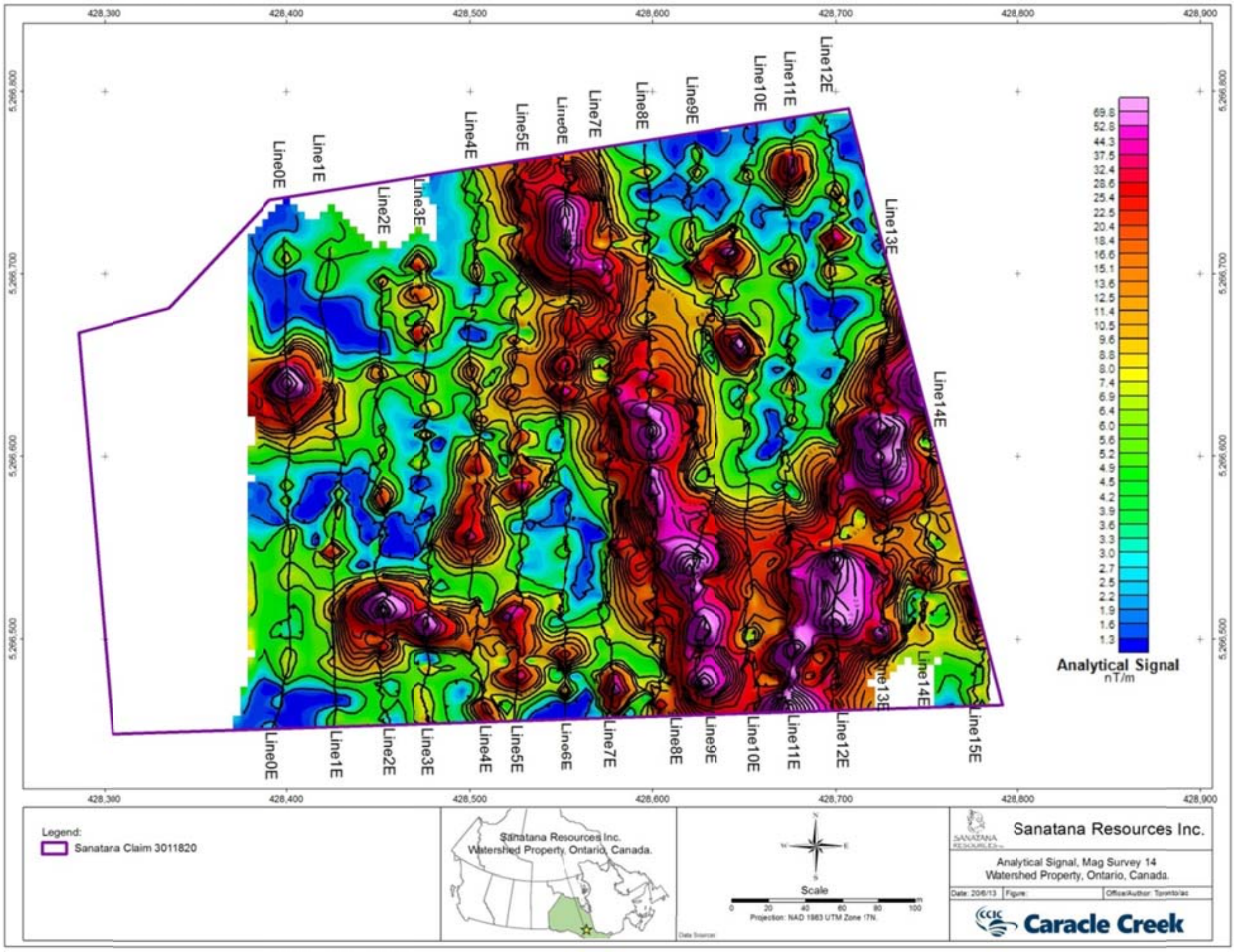

Figure 5-11. SAN_12_003_TMI – Analytical Signal

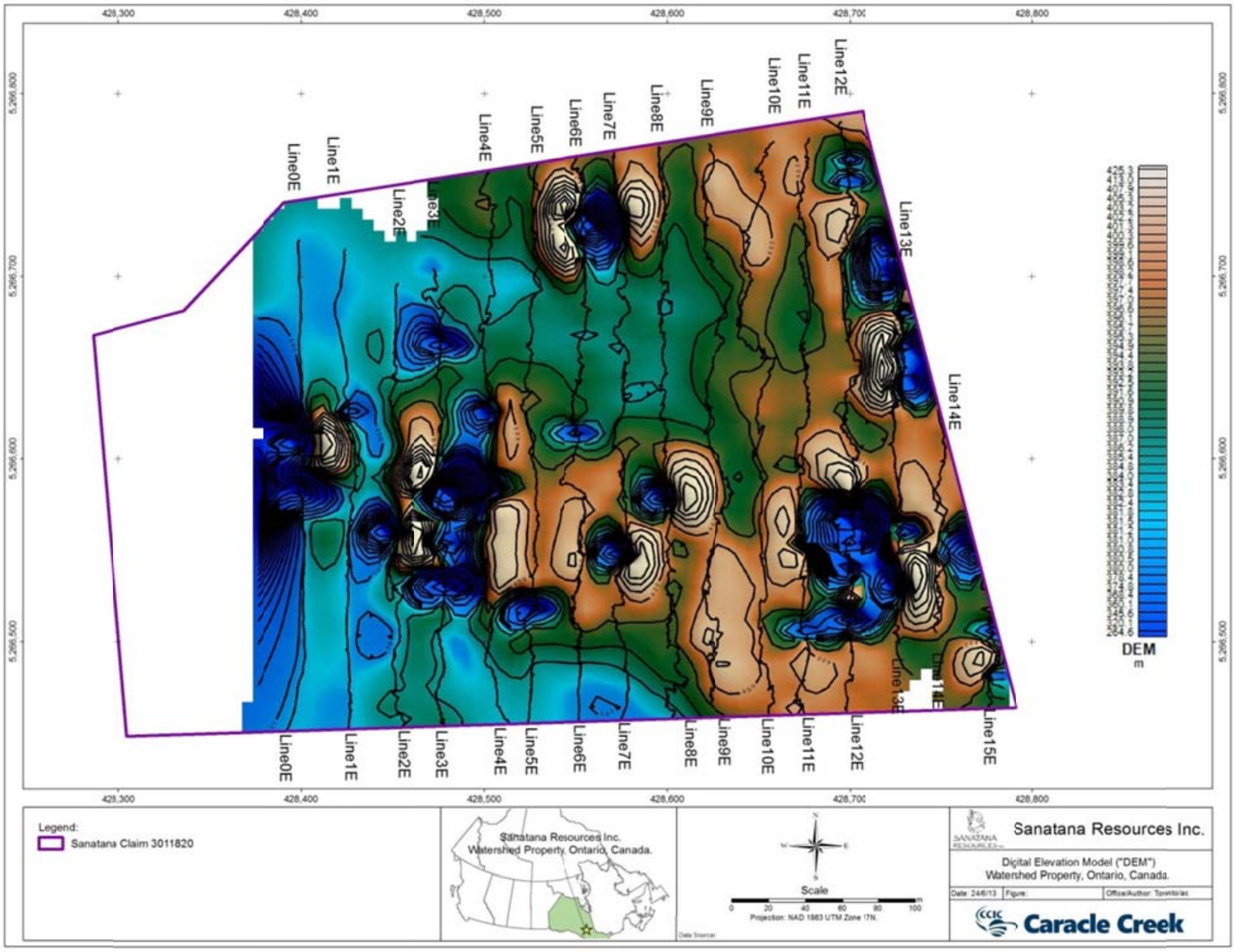

Figure 5-12. SAN_12_003_TMI – Digital Elevation Model

6.0 RESULTS AND INTERPRETATIONS

6.1 Previous Diabase Dykes Study

An airborne magnetic survey clipped from the Gogama DIGHEM survey flown in 2007 which was primarily used for observation and a ZTEM resistivity model provided by Geotech Ltd. were used by McKenzie and Wetherup (2011) to identify diabase dykes on the Sanatana property.

The following interpretation for this survey has been based on and summarized from McKenzie and Wehterup (2011).

Air magnetics survey observations were recorded from the total magnetic field and first vertical derivative ("1VD"). This exercise primarily gives a sense of the major trends of the data and begins the process of highlighting subtle but significant structures.

Figure 6-1 illustrates the observations from the 1VD and demonstrates that the magnetics are dominated by a 160 º trending dyke swarm (light grey) postulated to be the Matachewan and Hearst swarms. This is crosscut by a younger 110 º (orange) Sudbury swarm. The oldest trend at 45º (red) is found in the north-western portion of the survey and is interpreted to be the Preissac swarm (MNDMF, 2000). These observations were then used to guide identification of possible dykes found in the ground magnetics survey.

Table 6-1. Dyke swarms observed in the magnetic data

Order (Oldest – Youngest)	Age	Orientation	Colour
Preissac swarm	1.6 – 2.5 Ga	45º	Red
Matachewan and Hearst	1.6 – 2.5 Ga	160º	Grey
Sudbury swarm	0.9 – 1.6 Ga	110º	Orange

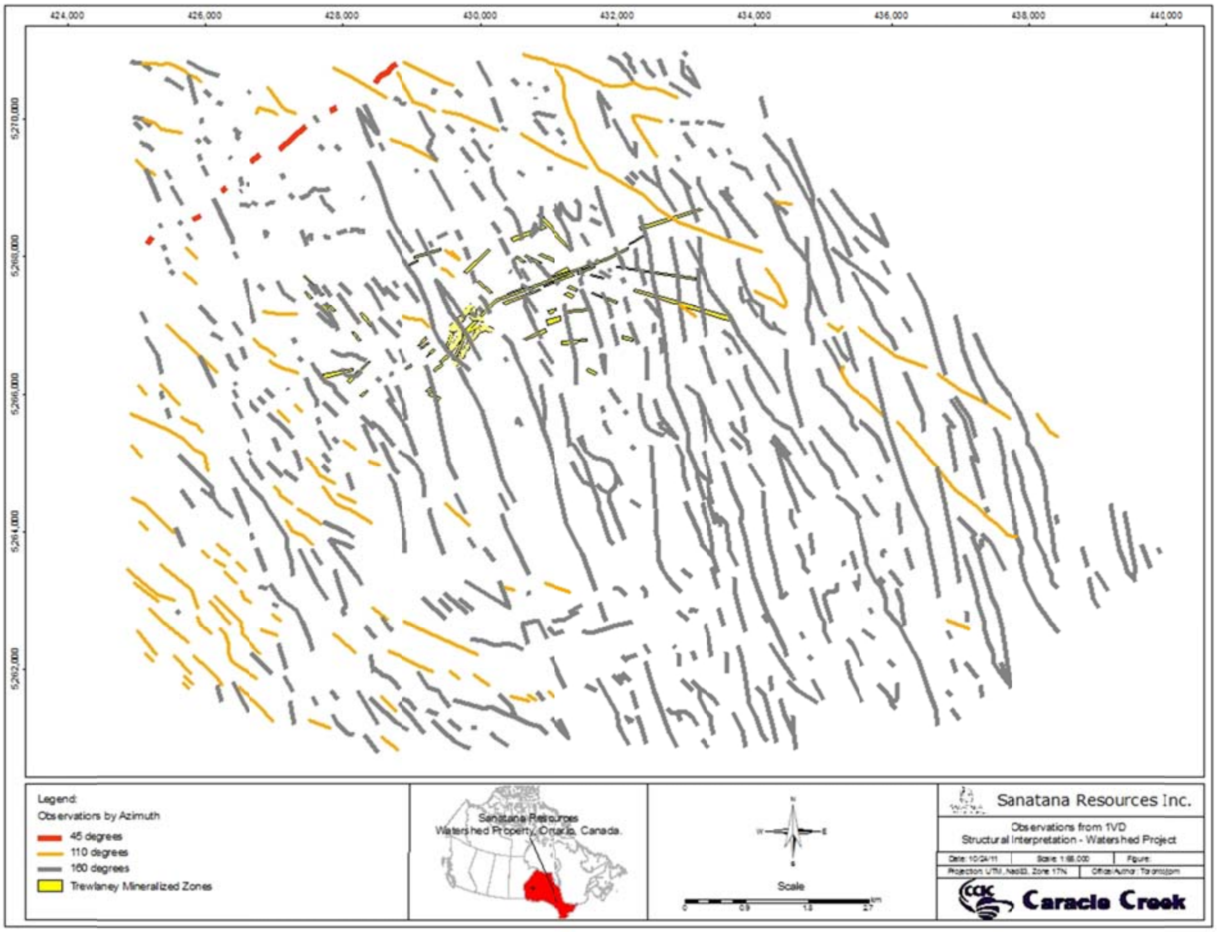

Figure 6-1. Observed form lines from First Vertical Derivative

6.2 Ground Magnetics Interpretation

All three grids were successful in identifying diabase dyke magnetic signatures, with SAN_12_002_TMI providing a better sense of the east-west extent due to its larger size. Similar to SAN_12_001_TMI, SAN_12_003_TMI shows a more limited ability to identify a trend in the diabase dyke magnetic signatures due to the extent of the surveyed area.

Interpretation of the major diabase dykes can be found in Figures 6-2 to 6-4 in yellow. Other, minor magnetic observations are noted in black. The interpretation of the Sudbury Swarm (110^{o}) and Matachewan and Hearst swarm (160^{o}) are also noted in orange and grey respectively (MNDMF, 2000; McKenzie and Wetherup, 2011).

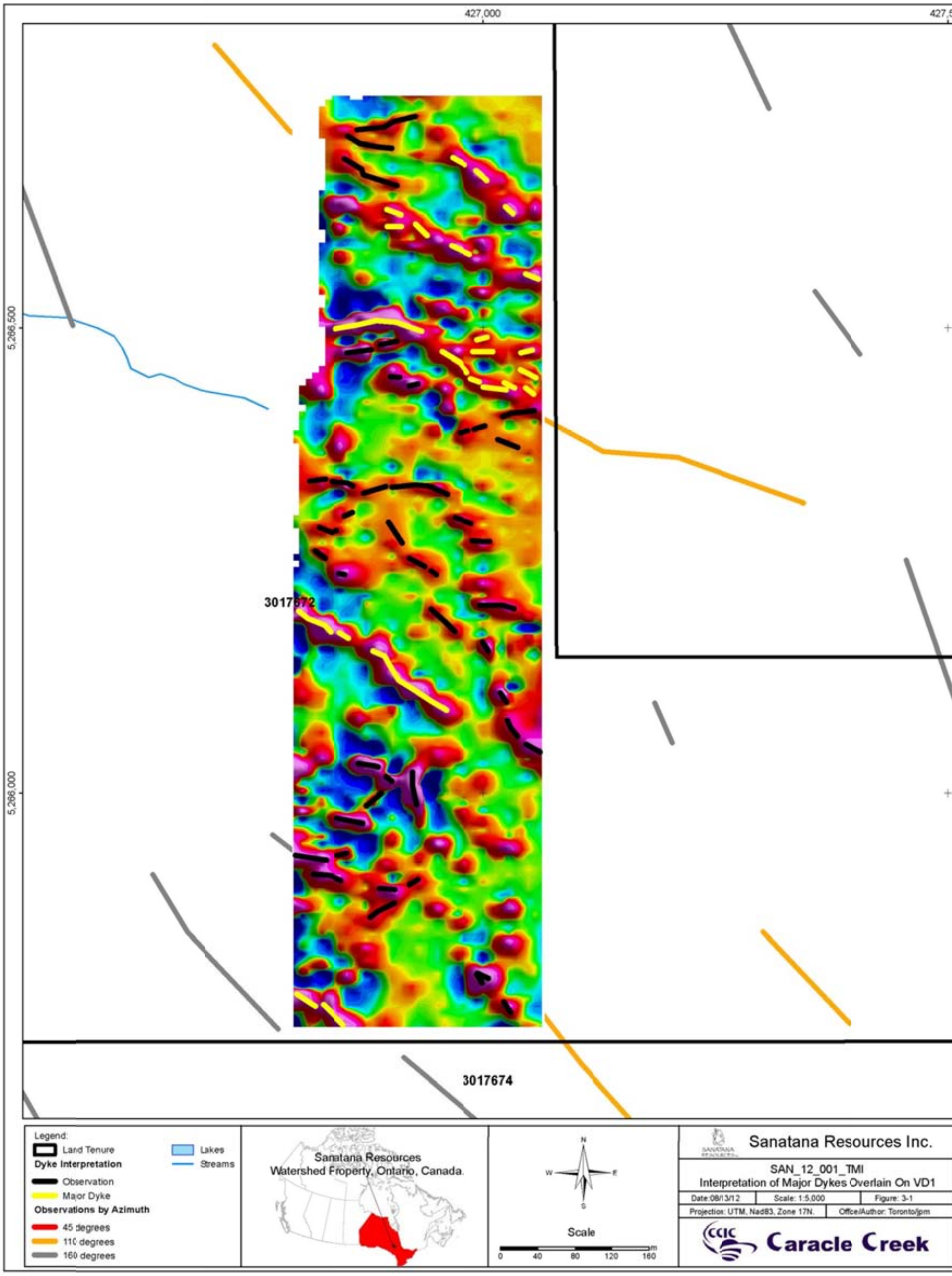

Figure 6-2. – Interpretation of major dykes on SAN-12-001-TMI

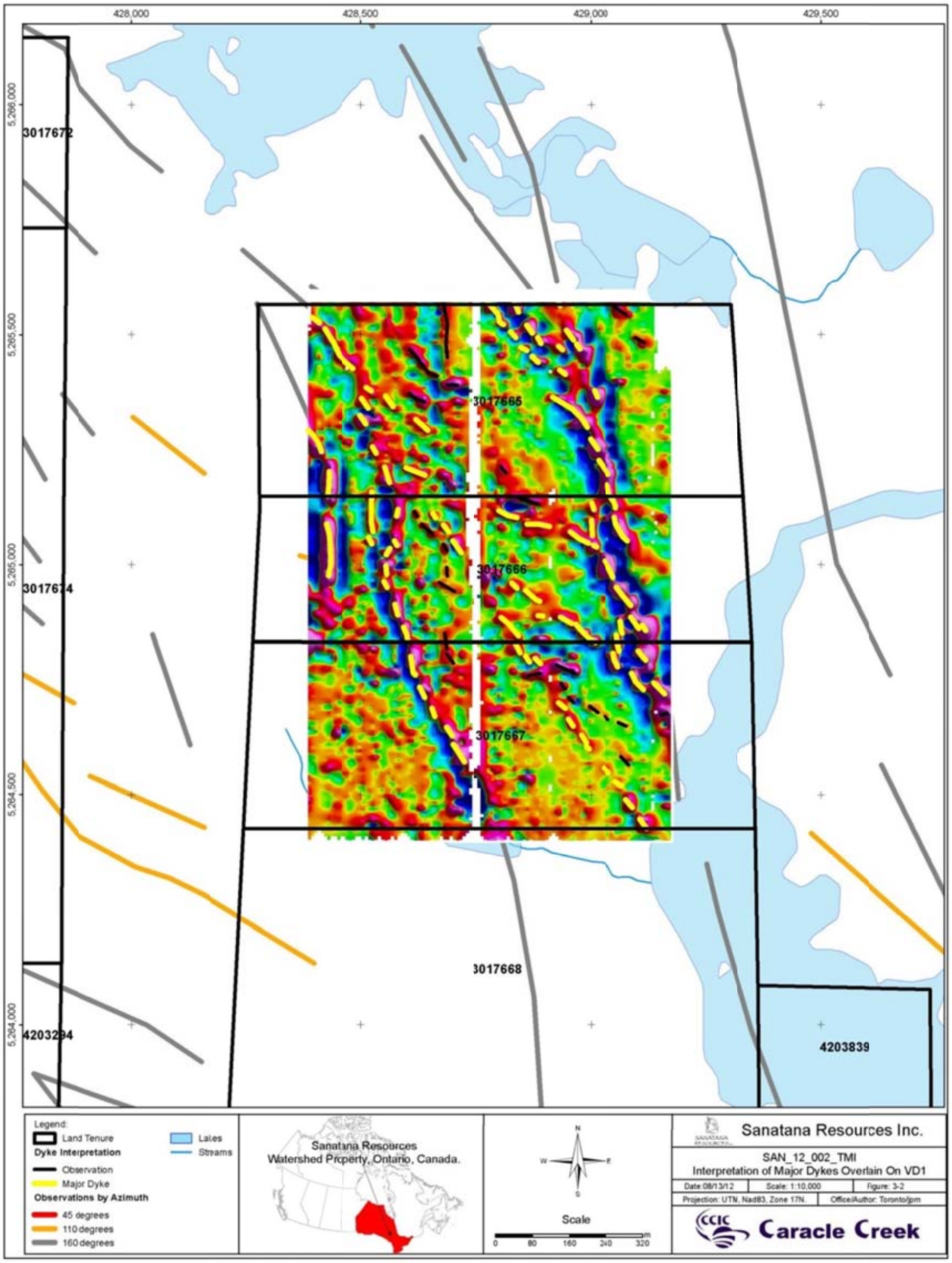

Figure 6-3. – Interpretation of major dykes on SAN-12-002-TMI

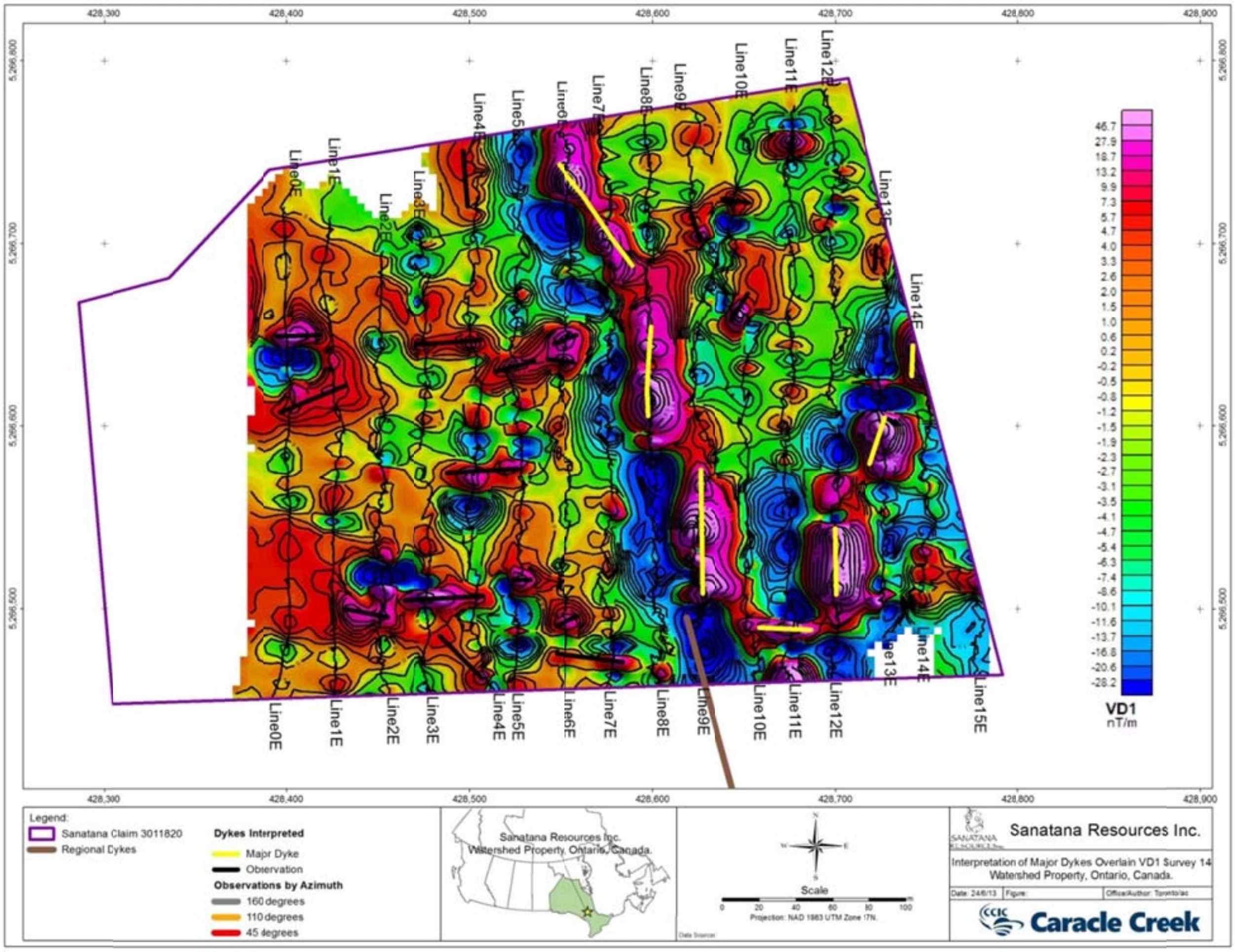

Figure 6-4. – Interpretation of major dykes on SAN-12-003-TMI

7.0 CONCLUSIONS AND RECOMMENDATIONS

Sanatana Resources Inc. conducted three ground magnetic surveys on the Watershed Property totaling 48.5 line-km and covering an area of 1.146 km^2 at 25m line-spacing. The purpose of these surveys was to identify diabase dykes to assist with drill collar positioning, with the intention of avoiding them where possible.

Overall, the ground magnetic surveys were found to contain noisy data, likely due to tree cover and difficult walking conditions. The data was successfully processed and probable diabase dykes have been identified.

Grid SAN_12_001 could benefit from being extended on both the eastern and western sides to better understand the extent of the magnetic diabase dykes. It is also recommended to resurvey the central missing line of SAN_12_002 to tie both portions of the grid together, especially if drill holes are planned to be sited in the vicinity.

8.0 REFERENCES

McKenzie, J., Wetherup, S. (2011). *Structural Interpretation Report of the Watershed Gold Property, Ontario Canada*. Prepared for Sanatana Resources Inc. by Caracle Creek International Consulting Inc.

MNDMF Earth Resources and Land Information System Data Sets (2000). *Bedrock Geology of Ontario, Seamless Coverage, 1993*, Re-released March 2000.

Ronacher, E., Magyarosi, Z., and Tucker, M. (2011). *Independent Technical Report, Watershed Gold Property, Ontario, Canada.* Prepared for Sanatana Resources Inc. by Caracle Creek International Consulting Inc. Effective date: February 14, 2011.

9.0 STATEMENT OF AUTHORSHIP

This Report, titled "Ground Magnetics Report, Watershed Gold Property, Ontario, Canada", and dated August 14, 2013 was prepared and signed by the following authors:

Jenna McKenzie

____
Geophysicist, Hon B.Sc., P.Geo.
August 14, 2013
Toronto, Ontario

Julie Palich

____
Geophysicist, M.Sc., P.Geo.
August 14, 2013
Toronto, Ontario