Sunday Lake Property

Report of Airborne Geophysical Program

February 2007

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Summary

The Sunday Lake Property consists of 8 claims, under option to Canstar Resources Inc, located 30 kilometers north of Thunder Bay Ontario. The area was staked owing to the presence of a large (3km diameter), unexplained, circular magnetic anomaly identified in airborne magnetic data published by the Ontario Geological Survey (OGS). Previous mapping in the area revealed no lithologies that might explain the highly anomalous, both positively and negatively, magnetic values.

In October 2006, a high-resolution airborne magnetic survey was flown by Terraquest Ltd in order to better delineate the magnetic anomaly and provide additional physical parameters. The data suggests indicates that the well-defined ring-shaped intrusive body was emplaced at shallow depths (less than 75m) and extends vertically for at least 750m. 3D inversion modeling of the magnetic data also indicates that the core of the complex is composed of strongly magnetic, but remnantly magnetized, material, which suggests a protracted period of igneous activity during the formation of the complex.

The Sunday Lake property, which lies only 30km north of Thunder Bay, represents an extremely interesting geophysical target and resembles a well-developed ring structure similar to those hosting intrusions of alkaline-affinity, i.e., carbonatite/kimberlite or mafic/ultramafic complexes. Both settings are economically significant and host the potential for large tonnage deposits of nickel, copper, niobium-tantalum and/or industrial minerals.

A first phase diamond drilling program is recommended, in order to establish the geological setting of the magnetic anomaly. Results will be used to plan further exploration programs designed to evaluate the economic potential of the property.

Abbreviations/Units

The Metric System or System International (SI) is the primary system of measure and length used in this Report. Conversions from the Metric System to the Imperial System are provided below and quoted where practical. Many of the geologic publications and more recent work assessment files now use the SI system but older work assessment files almost exclusively refer to the Imperial System. Metals and minerals acronyms in this Report conform to mineral industry accepted usage. Further information is available online from a number of sources including the world wide web at www.maden.hacettepe.edu.tr/dmmrt/index.html.

Conversion factors utilized in this Report include: 1 troy ounces/ton = 34.29 gram/tonne; 0.029 troy ounces/ton = 1 gram/tonne; 1 troy ounces/ton = 31.1035 gram/ton; 0.032 troy ounces/ton = 1 gram/ton; 1 gram = 0.0322 troy ounces; 1 troy ounce = 31.104 grams; 1 pound = 0.454 kilograms; 1 foot = 0.3048 metres; 1 mile = 1.609 kilometres; 1 acre = 0.405 hectares; and, 1 sq mile = 2.59 square kilometres. The term gram/tonne or g/t is expressed as “gram per tonne” where 1 gram/tonne = 1 ppm (part per million) = 1000 ppb (part per billion). Other abbreviations include ppb = parts per billion; ppm = parts per million; opt or oz/t = ounce per short ton; Moz = million ounces; Mt = million tonne; t = tonne (1000 kilograms); SG = specific gravity; lbs/t = pound/tonne; and, st = short ton (2000 pounds).

Structural data is given in degrees, using the right hand rule convention (dip is always to the right of the strike measurement). For planar features, strike measurement is always given first, followed by dip, and for linear features, such as fold axes, it is dip/dip angle. Other common abbreviations found in the text are defined as follows:

DDH	Diamond drill hole
UTM	Universal Trans Mercator (geographic)
NAD	North American Datum (geographic)
NTS	National Topographic System
---	Concentrations below detection (for ease in viewing geochemical data)
MSL	Mean Sea Level (0 m)
EM	Electromagnetic (geophysics)
AEM	Airborne Electromagnetic (geophysics)
HLEM	Horizontal Loop Electromagnetic (geophysics)
IP	Induced Polarization (geophysics)
TDEM	Time Domain Electromagnetics
γ	Gamma (1 gamma = 1 nanotesla), magnetic units
nT	nanotesla

Dollars are expressed in Canadian currency (CAD$) unless otherwise noted. Unless otherwise mentioned, all coordinates in this Report are provided as UTM datum NAD83 Zone 16 north for the Sunday Lake area.

Table of Contents

SUMMARY .... **III**

ABBREVIATIONS/UNITS .... **IV**

TABLE OF CONTENTS .... **V**

LIST OF FIGURES .... **VII**

LIST OF TABLES .... **VII**

APPENDICES .... **VII**

1. INTRODUCTION **1**

1.1 DISCLAIMER 1
1.2 PROPERTY LOCATION AND ACCESS 3
1.3 LAND TENURE 3
1.4 TOPOGRAPHY 5
1.5 PREVIOUS WORK 5
1.6 REGIONAL GEOLOGY 5
1.6.1Quetico Subprovince *6*
Wackes 8
Iron Formation 8
Conglomerate 9
Ultramafic-derived metasediments 9
Igneous Rocks 9
Volcanics 10
Ultramafic Intrusions 10
Gneissic Tonalite Suites 10
Granodiorite-Granite Suite 10
Peraluminous Granite 10
Diorite and Nepheline Syenite 11
Mafic Dyke Swarms 11
1.7 LOCAL GEOLOGY 11
1.8 STRUCTURAL GEOLOGY 11
1.8.1 Regional Structure *11*
Faulting 13
1.8.2 Local Structure *13*

2. GEOPHYSICAL RESULTS **14**

2.1 INTRODUCTION 14
2.2 LINE SPECIFICATIONS (FIG. X.X, APPENDIX 2) 14
2.3. SURVEY KILOMETERAGE 14
2.4 TOLERANCES 14
Traverse Line Interval *14*
Terrain Clearance: *17*
Diurnal Variation: *17*
GPS Data: *17*
2.5 NAVIGATION AND RECOVERY 17
2.6 AIRBORNE GEOPHYSICAL 17
Survey Aircraft *17*
Equipment Overview *18*
2.7 GEOPHYSICAL EQIPMENT SPECIFICATIONS 18
Magnetics: *18*

Cesium Vapour ... *18*
Magnetometer Counter ... *19*
Tri-Axial Fluxgate Magnetic Sensor ... *19*
Analog Processor ... *19*
Data Acquisition System ... *19*
Real-Time Correction GPS Receiver ... *20*
GPS Differential Receiver ... *20*
Navigation System ... *20*
Radar Altimeter ... *20*
Barometric Altimeter ... *20*
Video CD Recorder ... *21*
2.8 TESTS AND CALIBRATION ... 21
Magnetic Figure of Merit ... *21*
Magnetic Lag Test ... *21*
2.9 LOGISTICS ... 21
Field Operations ... *21*
2.10 DATA PROCESSING ... 22
Quality Control ... *22*
Final Processing ... *22*

3. DATA VERIFICATION ... 23

4. DISCUSSION ... 23

4.1 SOURCE ROCKS ... 26

5. RECOMMENDATIONS ... 26

6. CONCLUSIONS ... 27

7. REFERENCES ... 28

8. CERTIFICATION AND DATE ... 30

List of Figures

Figure 1.1 Location Map……………..…………………………………………..….….... p.2

Figure 1.2 Claim Location Map (OGS)………………………………………...….….…..p.4

Figure 1.3 Superior Province………..……………………………………….....….….... p.6

Figure 1.4 Regional Geology………..……………………………………….....….….... p.7

Figure 1.5 Property Geology……………..…………………………………...….….... p.12

Figure 2.1 Total Field Magnetics……..………………………………………...….….…..p.15

Figure 2.2 Airborne Survey flightpath…………………....……………………...….….... p.16

Figure 4.1 3D Inversion model – amplitude enhanced…....……………………...….….... p.24

Figure 4.2 3D Inversion model – east-west slice………...……………………...….….... p.25

Figure 4.3 3D Inversion model – horizontal slice………....……………………...….….... p.25

List of Tables

Table 1.1 Land Tenure Information……………....………..……………..……………… p.5

Appendices

Appendix I – Sunday Lake Total Field Magnetic map……………………………...……p.33

Appendix II – Sunday Lake flightpath…………….……………………………………… p.35

1. Introduction

The Sunday Lake Property is located approximately 30 km north of Thunder Bay, Ontario and comprises 8 claims covering an area of 1.28 km^2 (128 ha) (Fig. 1.1). The area was staked following interpretation of the Thunder Bay-Shebandowan geophysical survey by the Ontario Geological Survey (OGS), which delineated a large (3km diameter), circular magnetic anomaly showing concentric zoning, interpreted to be an alkaline intrusive complex. The area is underlain by metasediments, which have been intruded by granite to the north of the property and granodiorite to the south. No lithologies were observed, or have been reported, which can explain the observed magnetic anomaly and no published documents of previous exploration efforts are available for the area.

The magnetic anomaly is a concentrically zoned feature, distinguished by an inner core of low magnetic character and an outward zonation of high positive magnetics which grades into background values. The size and concentric nature of the anomaly suggests the potential for: 1) an alkalic ring complex of the silicate-carbonatite type; or 2) a mafic-ultramafic complex. Numerous smaller, circular lobes are defined in the geophysical data, and may represent multiple periods of intrusion.

1.1 Disclaimer

Land tenure information has been extracted from the Ontario Ministry of Northern Development and mines web site (www.mndm.gov.on.ca/MNDM), which contains the following disclaimer:

"Use this Internet service at your own risk. The Ministry of Northern Development and Mines disclaims all responsibility for the accuracy of information provided. Material in this service involves a new use of technology, which may cause errors and therefore the information may be inaccurate or incomplete.

The Ministry of Northern Development and Mines cannot and does not warrant the accuracy, completeness, timeliness, merchantability or fitness for a particular purpose of any information available through this service. Furthermore, the Ministry of Northern Development and Mines does not guarantee in any way that it is providing all the information that may be available. The Ministry of Northern Development and Mines shall not be liable to you or anyone else for any loss or injury caused in whole or part by the Ministry of Northern Development and Mines in procuring, compiling, or delivering this service and any information through the service. In no event will the Ministry of Northern Development and Mines be liable to you or anyone else for any decision made or action taken by you or anyone else in reliance on this service. Although the Ministry of Northern Development and Mines has used considerable efforts in preparing the information at this site, the Ministry of Northern Development and Mines does not warrant the accuracy, timeliness, or completeness of the information. Lastly,

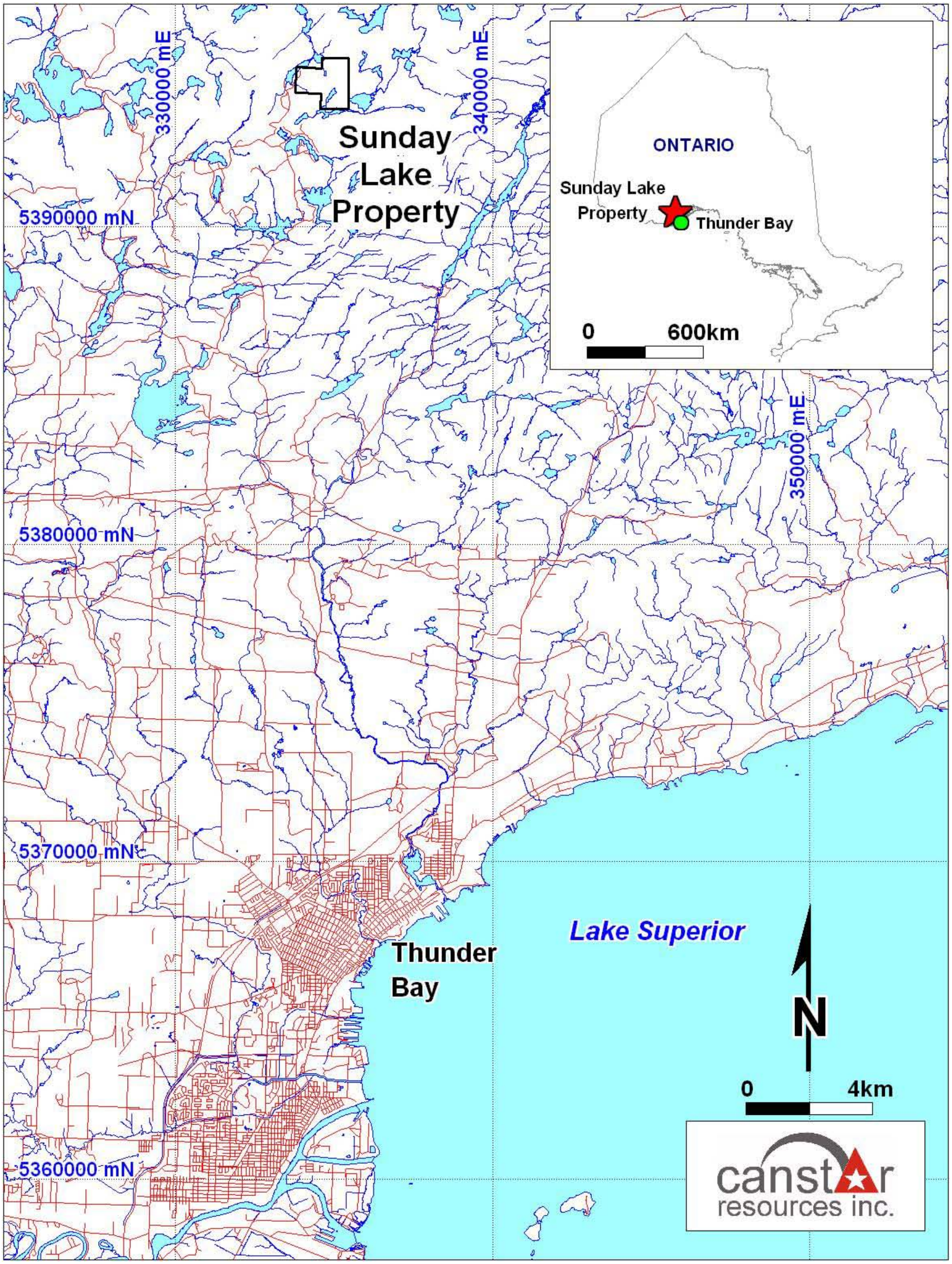


Figure 1.1 – Location of the Sunday Lake property

notwithstanding the foregoing, you agree that the liability of the Ministry of Northern Development and Mines , if any, arising out of any kind of legal claim (whether in contract, tort or otherwise) in any way connected with the service or its content shall not exceed the amount paid to the Ministry of Northern Development and Mines for use of the service."

Geological data and information used in this report have been gathered from government reports and provided by Probe Mines Limited. The author has declined use of previous interpretations and relies only on the data contained within the published and unpublished documents.

1.2 Property Location and Access

The Sunday Lake Property comprises eight claims, which cover a portion of the eastern half of the Sunday Lake magnetic anomaly, located approximately 30 km north of Thunder Bay, Ontario (Fig. 1.1).

Access to the property can be achieved by two routes both originating from Highway 17 which passes through Thunder Bay. The most straightforward is by way of Highway 589 North (Fig. 1.1), which passes through the town of Lappe, and then east along the graveled Dog Lake Road for approximately 5 kilometers until reaching the posted turnoff to Sunday Lake. The property is found at the end of the Sunday Lake Road, and is accessed by private logging roads, which can be traversed only with the permission of the owner (locked gate).

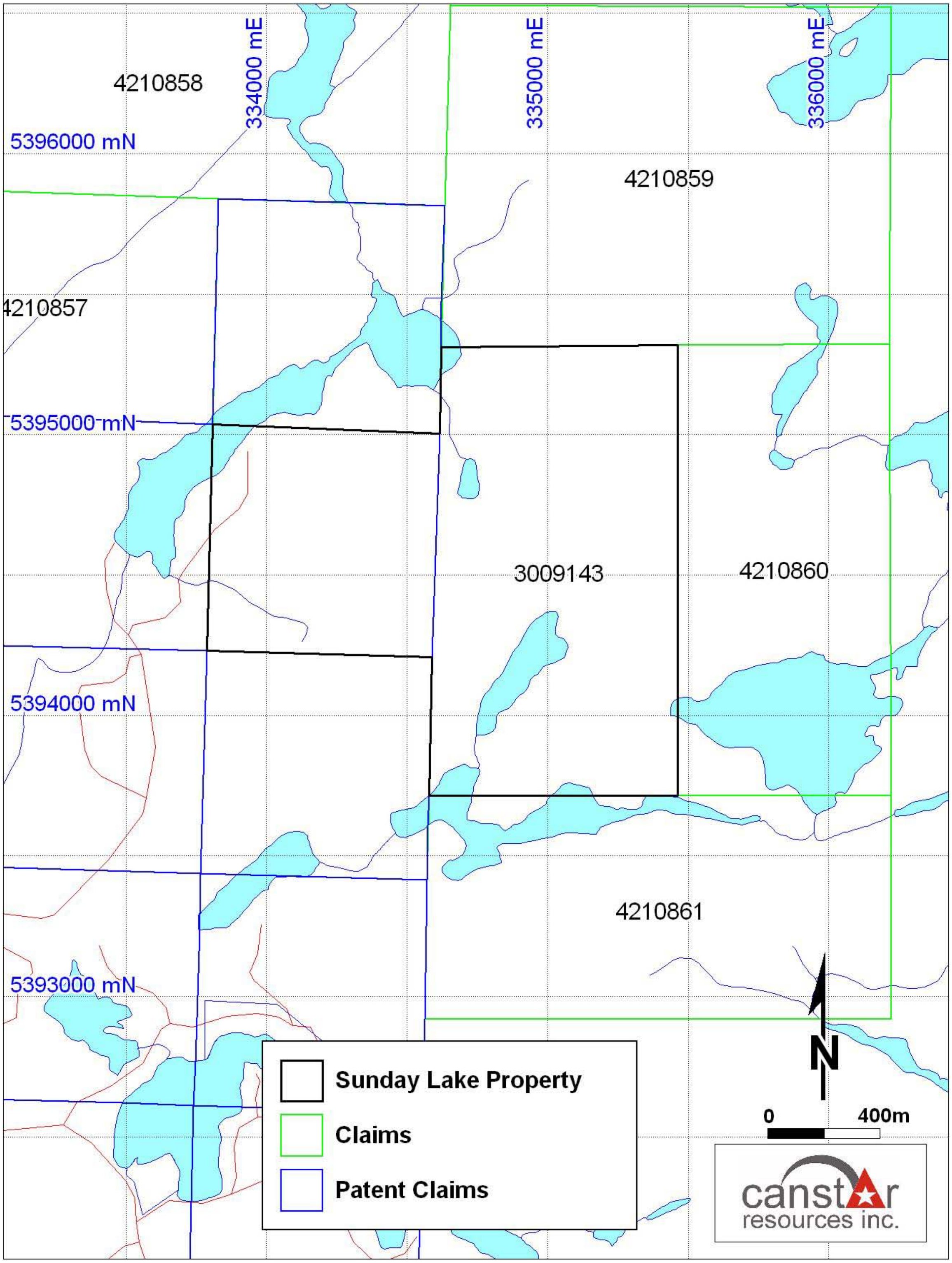
An alternate route is via Highway 527 North (Armstrong Highway), and logging roads (Spruce River Road), which access the property from the east. These roads are not posted and GPS use is recommended if this entry is attempted.

In most cases roads are well-maintained asphalt or gravel surfaces, which can be accessed by a two-wheel drive vehicle. The exceptions are the private logging roads in the immediate vicinity of the property, which have seen little upkeep and may be barred by fallen trees. A four-wheel drive vehicle is recommended for these areas.

1.3 Land Tenure

The eight contiguous claims comprise one mineral licenses (Fig. 1.2, Table 1.1), which grant the title-holder mineral rights to the area. All claims are recorded in the name of Robert De Carle, who has vended the property to Canstar Resources Inc. through an undisclosed agreement. Canstar also has an agreement on a patent claim to the west of the mineral claim with the Sunday Lake Syndicate

To the author's knowledge, there are no current or pending challenges to the mineral claims, and 100% ownership is maintained by Robert De Carle.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Sunday Lake Property
Claims
Patent Claims
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0
400m
canstar
resources inc.

No assessment reports have been previously submitted by Robert De Carle and $3200 in assessment credits or payment will be required to maintain all of the claims in good standing in the year following the respective due date (Table 1.1).

Table 1.1 Land Tenure information for the Sunday Lake Property

License No.	Claims	Township	Holder	Date Staked	Date Due	Work Required
3009143	8	Onion Lake	R. De Carle	11/02/05	11/02/07	$3200
Total	**8**					**$3200**

1.4 Topography

The area of the Sunday Lake claims is characterized by a gently rolling topography, characterized by northwest-trending ridges along which the majority of rock exposures are observed. The area of exposed rock is less than 5% in the Sunday Lake area. The property and surrounding area are moderately well drained, with hydrographic features being dominated by lakes of variable size (Fig. 1.1). Marshy areas are typically restricted to the shores of lakes and banks of drainage streams. Elevations in the immediate vicinity of the claims are approximately 500m above MSL, and vary less than 30m. The limits of the negative magnetic anomaly can be identified in airphotos, and corresponds to an area of slightly lower elevation.

1.5 Previous Work

A search of government databases revealed no previous work filed by exploration companies in the area of Sunday Lake, however, geophysical and geological programs were undertaken by the OGS in the vicinity of Sunday Lake. The only detailed geological study of the area was performed by MacDonald (1939), while the Shebandowan Geophysical Helicopter-borne survey (OGS Maps 81566-67), which delineated the magnetic anomaly, was flown in 1991.

1.6 Regional Geology

The Sunday Lake claims are located in the Superior Province of Northern Ontario, the largest craton in the world (1 572 000 km2), which represents 23% of the earth's exposed Archean crust (Thurston, 1991). The Superior Province is divided into numerous Subprovinces (Fig. 1.3), each bounded by linear faults and characterized by differing lithologies, structural/tectonic conditions, ages and metamorphic conditions. These Subprovinces can be classified as one of four types: 1) Volcano-plutonic, consisting of low-grade metamorphic greenstone belts, typically intruded by granitic magmas, and products of multiple deformation events; 2) Metasedimentary, dominated by clastic sediments and displaying low grade metamorphism at the subprovince boundary and amphibolite to granulite facies towards the centers; 3) Gneissic/plutonic, comprised of tonalitic gneiss containing early plutonic and volcanic mafic enclaves, and larger volumes of granitoid plutons, which range from sodic (early) to potassic (late); and 4) High-grade gneissic subprovinces, characterized by amphibolite to granulite facies igneous and metasedimentary gneisses intruded by tonalite, granodioritic and syenitic magmas (Card and Ciesieliski, 1986). The Sunday Lake Property lies at the southern boundary of the Quetico metasedimentary subprovince, near the Shebandowan Greenstone Belt (Wawa Subprovince) (Fig. 1.3).

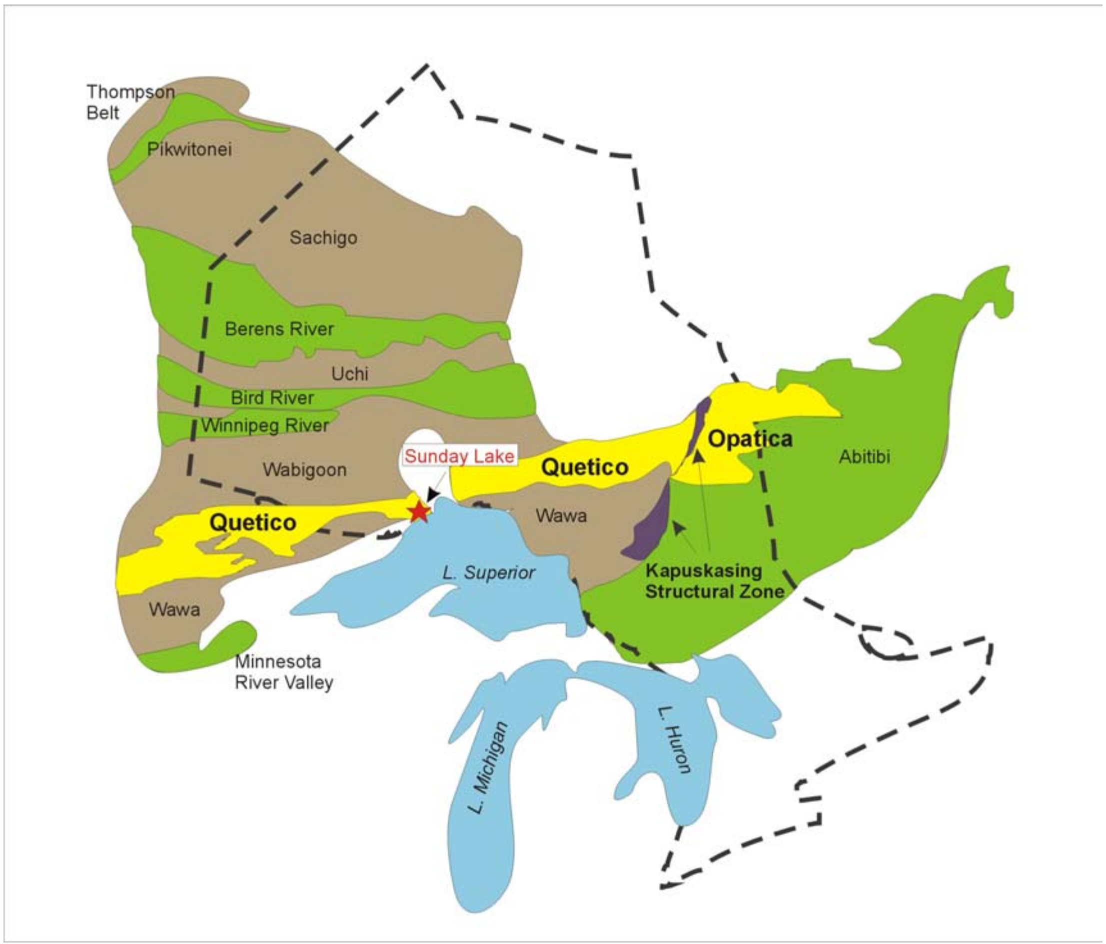

Figure 1.3 Superior Province of Ontario and subprovince boundaries

1.6.1Quetico Subprovince

The Quetico Subprovince is classified as a metasedimentary Subprovince (Card and Ciesieliski, 1986), and is dominated by Archean metasedimentary rocks hosting numerous granitoid intrusions (Fig. 1.4). The Subprovince is bounded to the north and south by the Wabigoon and Wawa Subprovinces respectively, and forms a long, narrow (70km) belt stretching 900km, from Minnesota to central Ontario, where it is bounded by

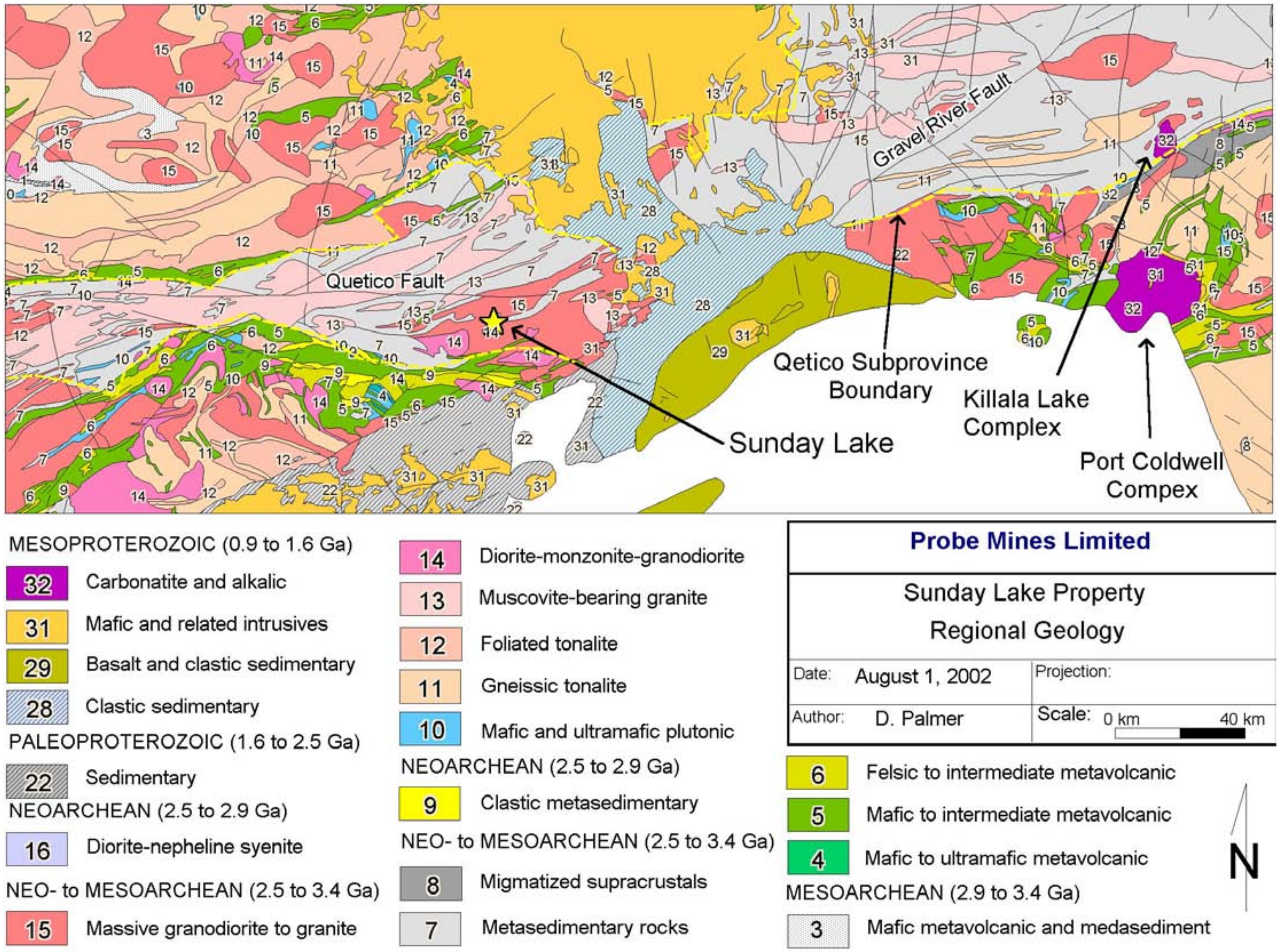

Figure 1.4 Regional geology of the Sunday Lake area

the Kapuskasing Structural Zone (KSZ) (Fig. 1.3). To the east of the KSZ, the metasedimentary belt continues as the Opatica Subprovince, with no significant changes in its geologic character. Boundaries marking the northern and southern limits of the ENE-trending Quetico Subprovince are typically steep and, although dominantly tectonic in origin, may be depositional in certain sections along the Wawa Subprovince contact. The Quetico is dominated by metasedimentary and migmatitic rocks, with precursors consisting of wackes, and siltstones, minor iron formation, conglomerate and ultramafic-derived metasedimentary rocks. Igneous rocks consist of biotite-hornblende- bearing granitoids, mixed mafic and felsic bodies with minor amounts of associated ultramafic rocks, and metaluminus to peraluminous one- and two-mica granites (Fig 1.4). Metasediments

Within the metasedimentary sequences four main lithological types are present and consist of wacke, iron formation, conglomerate and ultramafic wacke and siltstone. Monotonous layers of interbedded wacke and mudstone were present prior to metamorphism, consisting of alternating, meter-thick layers of graded to ungraded lithic and feldspathic arenites and siltstones. Iron formations are represented by centimeter-scale laminated chert-magnetite and chert-magnetite-mudstone rocks, while conglomerates consisted of up to 5m thick layers of dominantly volcanic clasts in a sandy matrix (Devaney and Williams, 1989; Williams, 1991). Ultramafic-derived sedimentary layers were comprised of predominantly serpentinized material.

Wackes

Wackes represent the dominant lithology in the Quetico Subprovince (Fig 1.4), and are interpreted as having been deposited in deep water as turbiditic flows (Williams, 1991). They are buff to grey-coloured and display meter-scale bedding of graded and ungraded character. Units show varying degrees of tectonism. Quartz-arenite members are rare, and wackes are typically composed of feldspar, lithic fragments and phyllosilicates. A typical bed consists of a micaceous arenite base, which grades into a homogeneous, rarely laminated, zone, which becomes finer-grained towards the top. These compositional types form turbidite Bouma sequences (Williams, 1991). Sedimentary structures are commonly preserved in the rocks and consist of loading and dewatering structures, scours, graded bedding and ripple marks, which generally point to a northern younging direction (Williams, 1991). Rock types are typically discontinuous on a regional scale, however, metamorphosed equivalents can be traced through the low-grade margins into the southern and central migmatite sections. The majority (80-90%) of the Quetico wackes are now paragneisses and migmatites.

Iron Formation

Oxide facies iron formation, composed of quartz and magnetite, although volumetrically limited in the Quetico, can be found scattered throughout the subprovince. Horizons are thin and rarely show on government magnetic surveys, however, they are laterally continuous and, in some cases, can be traced for tens of kilometers (Williams, 1989).

Some garnet-cummingtonite-bearing layers within metasediments may represent original silicate iron formation.

Conglomerate

Conglomerates within the Quetico Subprovince are typically polymictic and range between clast and matrix supported varieties, with fragments consisting of volcanic lithologies. The beds are usually meters thick, but occur only sporadically throughout the wacke layers. Owing to the infrequent occurrence of this unit, it is thought that they were formed by re-sedimentation of volcanic-derived material transported from volcanic centers of the Wawa Subprovince to the south (Williams, 1989).

Ultramafic-derived metasediments

Rocks falling into this category are found throughout the metasedimentary sequence, although are volumetrically less important than other metasedimentary types. Their origin is uncertain, however, it is thought they result from the accumulation of eroded material from mafic-ultramafic bodies nearby (Williams, 1991). Ultramafic wackes are pale to dark green in colour, dependant on the proportion of metamorphic chlorite in the matrix. Typical sequences consist of pale green, feldspathic wackes which grade into medium-green chloritic wackes containing ripples, scours and cross-lamination. Overlying these horizons are thick (10’s of meters) sections of massive to poorly stratified, chlorite-rich wackes containing fragments of quartz arenite/recrystallized chert. The strata often contain a network of quartz-carbonate veining. Breccias are present in some areas and consist of clasts of ultramafic and quartzo-feldspathic rock in a schistose ultramafic matrix.

More felsic wackes found near the ultramafic variety are often distinct from distal occurrences, displaying much more evidence of current reworking, as large ripples, discordances and cross-lamination (Williams, 1991). Overlying the ultramafic wacke, hosted by quartz-feldspathic wackes, is a thin (1m) mafic/ultramafic layer containing rounded fragments of gabbro and quartz-mica schist in an actinolite matrix.

Igneous Rocks

Igneous rocks within the Quetico Subprovince comprise abundant felsic to intermediate intrusions, rare mafic and felsic extrusive suites and scattered gabbroic and ultramafic bodies (Fig. 1.5). All but the younger peraluminous granitoids and leucogranites have undergone metamorphism, producing orthogneiss. The earliest igneous intrusives are composed of I-type (igneous-derived) hornblendites, diorites, syenites and tonalites, which contain mafic and ultramafic xenoliths composed of predominantly amphibole (Williams, 1991). These early intrusive rocks typically occur as inliers within large leucogranite plutons, comprised of one- and two-mica granites, of both I- and S-types (sedimentary origin).

Volcanics

Mafic volcanics are extremely rare in the Quetico Subprovince, although a few occurrences are known in Langemarck Township.

Felsic volcanics occur along the southern boundary of the subprovince, and were originally classified as conglomerates (Williams, 1991). They consist of pale, buff-coloured feldspar-phyric volcanic clasts in a pellitic matrix, and were probably derived from volcanics to the south in the Wawa Subprovince (Williams, 1989).

Ultramafic Intrusions

Numerous occurrences of ultramafic lithologies are known throughout metasedimentary layers of the Quetico Subprovince, and exist as plutons, pods and concordant and discordant layers. Metamorphism has caused significant alteration of the units, masking primary contact relationships in most exposures. Ultramafics are recognizable as masses of platy and fibrous chlorite , actinolite and biotite or larger hornblendite and peridotite intrusion, which grade into more feldspathic varieties (Pirie, 1978). Pervasive serpentinization, resulting from metamorphism, is obvious at several localities.

Gneissic Tonalite Suites

Concordant sheets of foliated, steeply dipping tonalite and diorite are common throughout the Quetico, and typically intrude paragneisses and migmatites in the central and southern sections of the subprovince (Percival, 1989).

Granodiorite-Granite Suite

Pink, magnetite-bearing biotite leucogranites are found within the high-grade paragneisses of the Quetico Subprovince, and are predominantly migmatitic in origin. In other sections of the Quetico, abundant feldspar-phyric granites and biotite leucogranites occur as concordant and crosscutting bodies and plutons. These lithologies often contain inclusions of paragneiss and mafic rocks, and are typically cut by younger peraluminous and muscovite-bearing granite.

Peraluminous Granite

The youngest, and volumetrically most important, igneous rocks in the Quetico consist of white to grey leucogranite containing cordierite, sillimanite and garnet, and accessory tourmaline, beryl and apatite. Isotopic data is consistent with a sedimentary source for many of these intrusions, and more specifically the host wackes (Percival and Sullivan, 1988).

Diorite and Nepheline Syenite

Silica undersaturated rocks are only found in the extreme western portion of the Quetico Subprovince and are comprised of syenite and nepheline syenite which were coeval with leucogranite.

Mafic Dyke Swarms

One of the most noticeable lithological and structural features of the Superior Province is the presence of more than twelve mafic dyke swarms, most of which were formed in a tensional tectonic environment associated with intraplate rifting or plate margin activity. Within the vicinity of the Sunday Lake claims mafic dykes belong to the Sudbury Swarm. In most cases they occur as narrow, typically 10m width and rarely exceeding 250m, vertically to sub-vertically dipping bodies composed of plagioclase-phyric quartz diabase (Osmani, 1991).

1.7 Local Geology

The only available geological reports from the area were published by the OGS in 1939 (Macdonald, 1939), and describe the area as being underlain by a sequence of metasedimentary mica schists, gneisses and massive siliceous sediments, interpreted as part of a turbiditic sequence. To the north of the property, metasedimentary rocks were intruded by grey, biotite granites, while in the south a single intrusion of coarse-grained quartz monzonite porphyry, the Barnum stock, was observed (Fig. 1.5). The latter is elliptical in form and produces a magnetic high owing to the presence of magnetite. Granitic gneisses also occur in the area.

Preliminary mapping of the property indicates that the area of the concentrically zoned anomaly, and particularly the magnetic-low core, is overlain by a monotonous section of greywacke-type metasediments, which strike at between 061º and 076º, and dip steeply to the southeast. Rocks consist of fine-grained, banded metasediments having a matrix comprised of equal proportions of biotite and quartz, and lesser feldspar. Metasediments typically contain up to 5% quartz veining/banding, which parallels foliation, often displaying boudinage texture. The rocks are magnetic and rarely contain minor Fe-sulphides along cross-cutting joint planes.

1.8 Structural Geology

1.8.1 Regional Structure

The Quetico Subprovince went through a protracted period of tectonic development from approximately 2700 to 2660 Ma (Williams, 1991). The earliest expression of tectonism was the soft-sediment deformation (D1), recumbent folding and slumping, which was

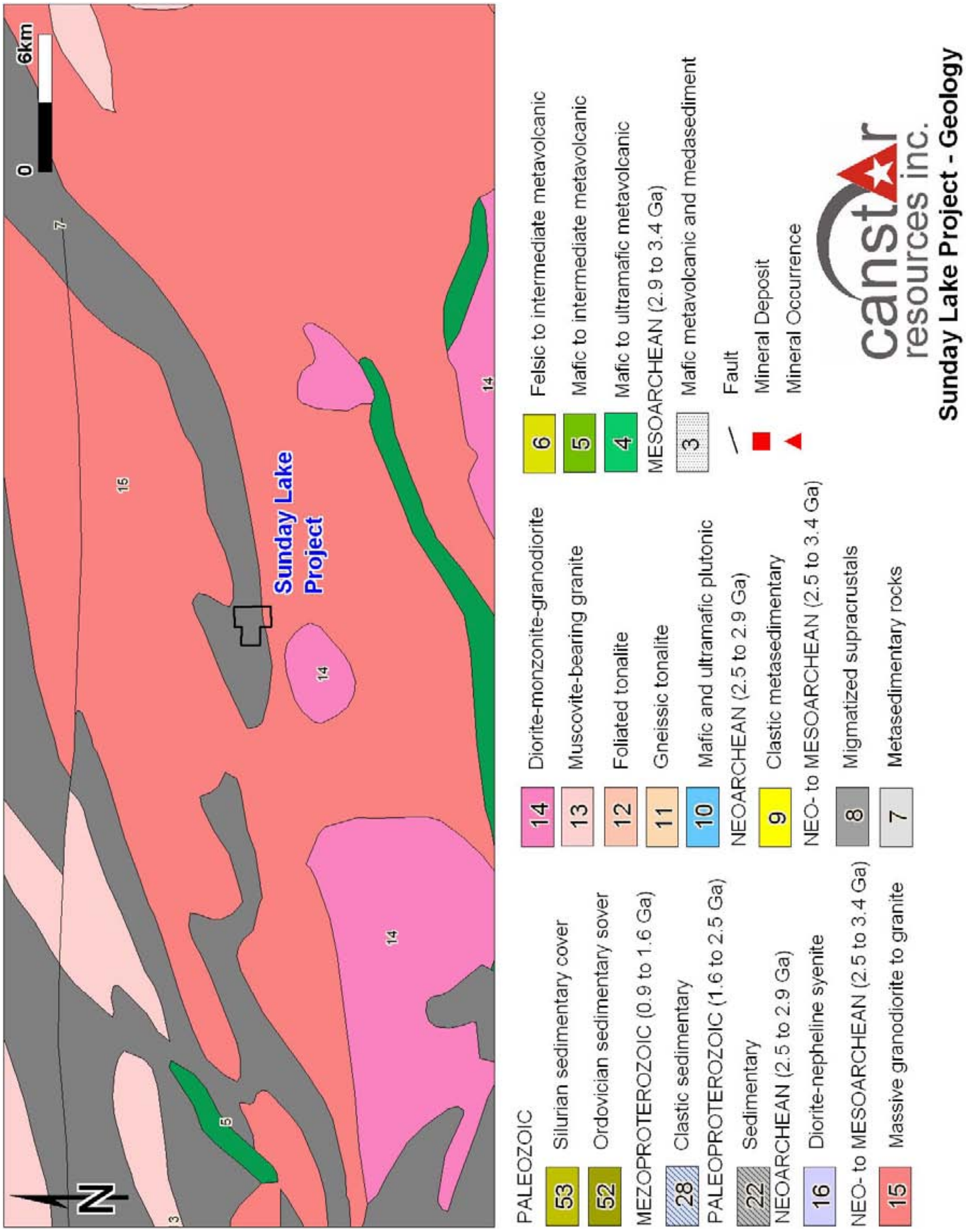

Figure 1.5 – Geology of the Sunday Lake area

followed by a D2 deformation event involving layer-parallel shearing and associated folding, which resulted in the development of a regional fabric. This newly formed fabric was then subjected to an upright, D3 folding event and localized shearing.

Early sediment deformation generally resulted in northwest-facing, recumbent folding. It is possible that a S1 fabric was developed, but was incorporated by D2 shearing into the S2 fabric. The second period of deformation produced the dominant cleavage in the area (S2), and was developed parallel to lithological layering and the S1 cleavage. F2 folds are typically steeply plunging, except along the southern subprovince boundary where dextral boundary shearing may be superimposed on F2 fold axes. D2 deformation was heterogeneous and often resulted in narrow areas of high strain shearing separated by large sections exhibiting primary features. The D3 event is characterized by upright to inclined, easterly–trending shallow plunging folds, which deform primary features and S2 fabric (Williams, 1991). Plunge is typically to the east, however, some areas show evidence of westerly plunging folds. The event is interpreted by Williams (1989) to represent a transpressional event. The final period of deformation (D4) resulted in small-scale shearing, which cuts all earlier fabrics. Structural evidence for a south-southeast compressional event, associated with extension of the belt is found in extensional fractures, ductile shear zones and semi-brittle features such as kink bands (Sawyer, 1983; Williams, 1989).

Faulting

The Quetico Subprovince has four major faults, the easterly-trending Quetico Fault, which occurs to the north of the Sunday Lake, the Rainy Lake-Seine River Fault, the northeasterly-trending Gravel River Fault and the Kapuskasing Structural Zone (Williams, 1989). The Quetico Fault transects, and forms part of, the Wabigoon-Quetico Subprovince boundary, and consists of a regional-scale, dextral shear zone and fault (Fig. 1.4). The Rainy Lake-Seine River Fault is another easterly-trending structure, which is older than the Quetico Fault, and is interpreted to be an early dip slip fault. The Gravel River Fault is a northeast to east-northeast trending system, which displays a sinistral sense of movement (Williams, 1989) (Fig. 1.4). The largest structure, which is responsible for the eastern boundary of the Quetico Subprovince, is the Kapuskasing Structural Zone (KSZ), a north-northeast-trending upthrust block, which brings deep-level Quetico rocks to the surface (Fig. 1.3). Approximately 170km to the east of the property area the northeast-trending Trans-Superior Tectonic zone is expressed as the Thiel Fault, which forms the western boundary of the Port Coldwell alkalic complex and runs near the eastern boundary of the Killala Lake Alkalic Complex (Fig 1.4).

1.8.2 Local Structure

Property scale structures consist of expressions of D2 events such as strong S2 foliations and small scale F2 folding. S2 foliations show a consistent orientation throughout the Sunday Lake property of between 061º and 076º, which dip steeply (>80º) to the southeast or vertically. Local boudinaging of early (pre-D2) quartz veins suggest that extensional forces were at work within the Sunday Lake area, and may be related to hinges of F2 folds. Analysis of magnetic data indicates two interpreted major structures in the area of the Sunday Lake anomaly, trending North-South and East-West, which occur along the western boundary of the Barnum Stock and as a division between the Sunday Lake anomaly and the Barnum Stock, respectively (Fig. 1.5).

2. Geophysical Results

2.1 Introduction

Between October 3rd and 6th, 2006, Terraquest Ltd completed a 282 line kilometer airborne magnetic survey over the Sunday Lake area, in order to provide high resolution data for a large, circular magnetic anomaly of unknown origin. The survey was successful in delineating the geophysical anomaly, which has been interpreted to represent a multi-phase intrusive containing a core of remnantly magnetized material (Fig 4.1, Appendix 1).

2.2 Line Specifications (Fig. 4.2, Appendix 2)

Parameter	Specification	Instrument Precision
Sampling Interval	6m (10Hz)	
Survey Line Interval / Direction	100m / 0-360 degrees	+/- 3m
Control Line Interval / Direction	1 km / 090-270 degrees	+/- 3m
Aircraft & Sensor MTC	70 m *	+/- 5m

2.3. Survey Kilometerage

Survey Kilometers:
Survey Lines - 255 km
Control Lines - 27 km
Total - 282 km

2.4 Tolerances

Traverse Line Interval

Reflights would take place if the final corrected flight path was greater than 30 metres from the intended flight path over a distance greater than 1 kilometre.

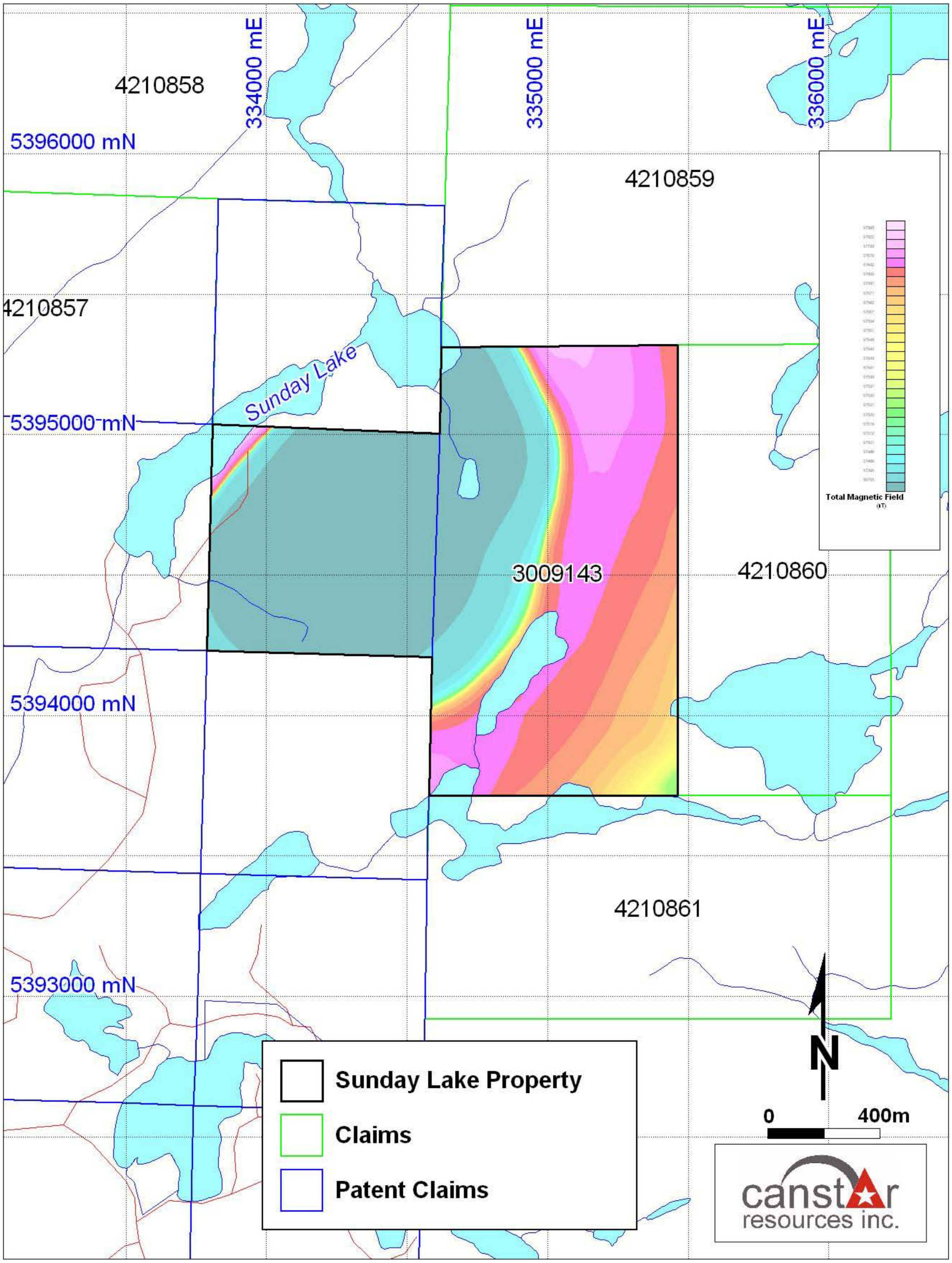

Figure 2.1 Colour-contoured Total Field magnetic map of the Sunday Lake property

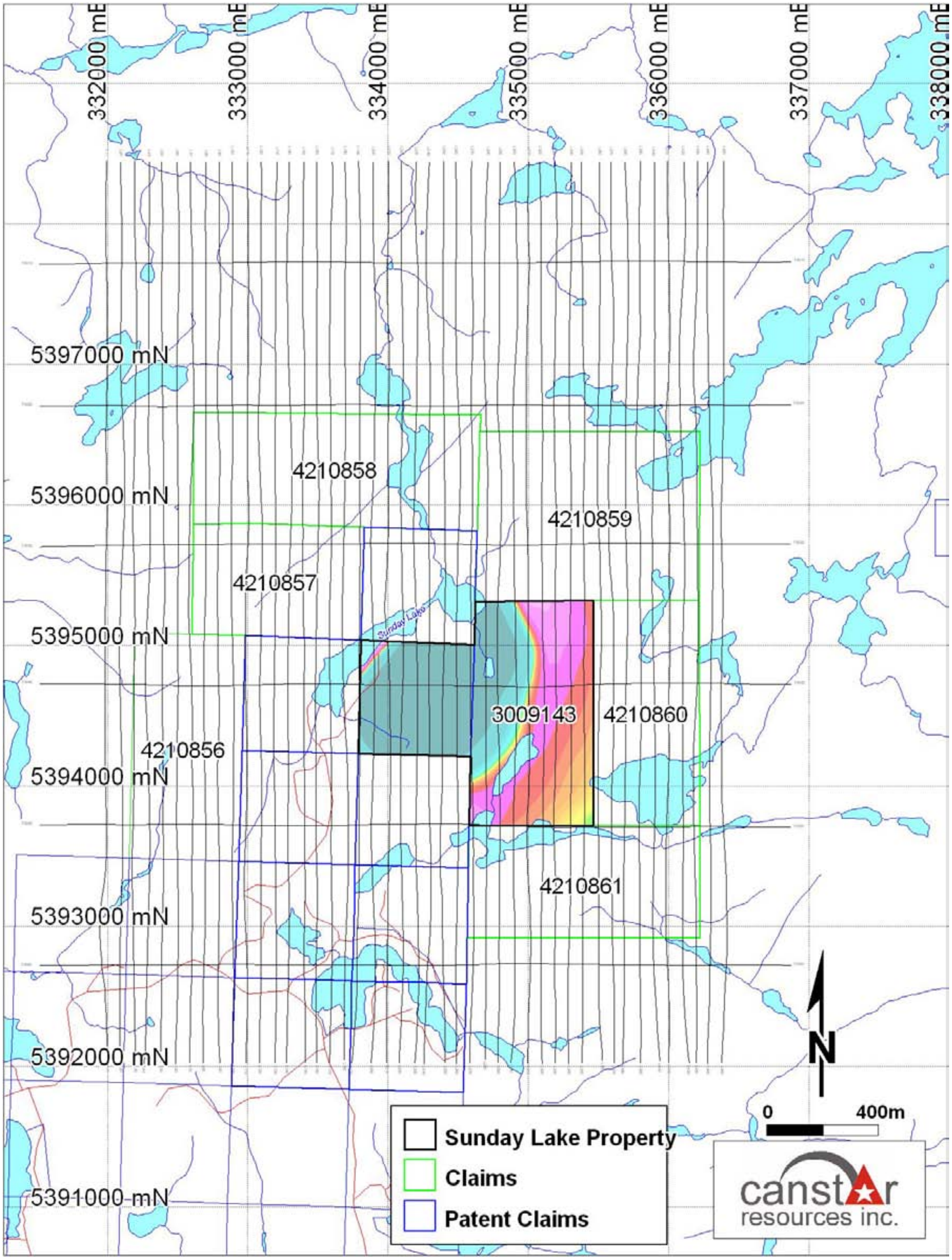

Fig 2.1 Sunday Lake magnetic survey – flightpath

Terrain Clearance:

The aircraft mean terrain clearance was designed to be at 70 metres MTC. Reflights were done if the final corrected altitude deviated from the specified flight altitude by +/- 10 metres over a distance of 3 kilometres or more if, in the pilot's decision it was safe to do so.

Diurnal Variation:

Diurnal activity was limited to 5 nT deviation from 60 sec. chord.

GPS Data:

GPS data shall include at least four satellites for accurate navigation and flight path recovery. There shall be no significant gaps in any of the digital data including GPS and magnetic data.

2.5 Navigation and Recovery

The satellite navigation system was used to ferry to the survey sites and to survey along each line. The flight path guidance accuracy is variable depending upon the number and condition (health) of the satellites employed. The selective availability normally imposed by the military was at a minimum during this period and consequently the accuracy was for the most part better than 10 metres. Real-time correction using the Trimble receiver and Omnistar broadcast services improves the accuracy to about 3 metres or less in the horizontal plane and 4-5 metres in the vertical direction.

A video camera recorded the ground image along the flight path with CD-ROM media. A video display screen in the cockpit enabled the operator to monitor the flight path during the survey. The video flight path is in a new format as it is recorded directly onto CD's. In order to record the immense volume of video data in a given time period, the image was compressed in real time as it was recorded using software by the name of DVIX. Windows Media Player cannot play these images without the appropriate driver; this can be done easily by downloading DVIX Player at no cost from www.DVIX .com and once installed one can use either DVIX or, better yet Windows Media Player (which has controls for focusing the image).

2.6 Airborne Geophysical

Survey Aircraft

The survey aircraft was a Cessna U206, registration C-GGLS, owned and operated by Terraquest Ltd. under full Canadian Ministry of Transport approval and certification for specialty flying including airborne geophysical surveys. The aircraft is maintained at base operations by a regulatory AMO facility, Leggat Aviation Inc. The aircraft has been specifically modified with long-range fuel cells to provide up to 7 hours of range, outboard tanks, tundra tires, cargo door, and avionics as well as an array of sensors to carry out airborne geophysical surveys. The cost of the fuel has been included in the line rate km.

Equipment Overview

The primary airborne geophysical equipment includes three high sensitivity cesium vapour magnetometers and an XDS-VLF-EM system. Ancillary support equipment includes a tri-axial fluxgate magnetometer, video camera with CD recorder, radar altimeter, barometric altimeter, GPS receiver with a real-time correction service, and a navigation system. The navigation system comprises a left/right indicator for the pilot and a screen showing the survey area, planned flight lines, and the real time flight path. All data were collected and stored by the data acquisition system. The following is a summary of the equipment specifications:

Equipment
- Magnetometers: CS-2&3 Cesium Vapour
- 3-axis Magnetometer: TFM100-LN
- GPS Receiver: Trimble AgGPS132
- Radar Altimeter: King KRA 10A
- Barometric Altimeter: Sensym LX18001AN
- Navigation: P2001
- Tracking Camera: Sanyo VCC5774 (Colour)

Specifications

Lateral Sensor separation:	13.5 metres
Longitudinal Sensor separation:	7.2 metres
FOM:	<1.5 nT
Sensitivity:	0.001 nT

The 13.75 volts aircraft power is converted to 27.5 volts DC for the geophysical equipment by an ABS power supply.

2.7 Geophysical Eqipment Specifications

Magnetics:

Three high-resolution cesium vapour magnetometers, manufactured by Scintrex, were mounted in a tail stinger and two wing tips extensions; the transverse separation was 13.5 metres and the longitudinal separation was 7.2 metres.

Cesium Vapour

Magnetometer Sensor (mounted in tail stinger and wing tip extensions)

Manufacturer:	Scintrex
Models:	CS-2, CS-3

Resolution:	0.001 nT counting at 0.1 per second
Sensitivity:	+/- 0.005 nT
Dynamic Range:	15,000 to 100,000 nT
Fourth Difference:	0.02 nT

Magnetometer Counter

Magnetometer Processor (Stand Alone Unit)

Model:	KMAG
Manufacturer:	KROUM VS Instruments Ltd.
Input Range:	3 ms – 10,000 ms
Input:	Four decouplers, four counters, GPS, pps signal
Sampling:	10ms to 1,000ms
Bandwidth:	No filtering
Resolution:	0.005 nT
Ports:	Two RS232 ports, one to GPS receiver, one to DAS instrument time, GPS, and up to 4 magnetic fields in pT
Output:	Instrument time, GPS, and up to 4 magnetic fields in pT

Tri-Axial Fluxgate Magnetic Sensor

The fluxgate tri-axial magnetometer was mounted in the rear of the aircraft cabin to monitor aircraft manoeuvre and magnetic interference. This was used to post-flight compensate the high sensitivity data.

Tri-Axial Fluxgate Magnetic Sensor For compensation, mounted in rear of cabin

Model:	TFM100-LN
Manufacturer:	Billingsley Magnetics
Description:	Low noise miniature triaxial fluxgate magnetometer
Axial Alignment:	> Orthogonality > +/- 0.5 degree
Accuracy:	< +/- 0.75% of full scale (0.5% typical)
Field Measurement:	+/- 100,000 nanotesla
Linearity:	< +/- 0.0035% of full scale
Sensitivity:	100 microvolt/nanotesla
Noise:	< 14 picotesla RMS/–Hz @ 1 Hz

Analog Processor

Model:	KANA8 (stand alone unit)
Manufacturer:	KROUM VS Instruments Ltd
Analog Processor Set-up:	Two KANA8's (total 16 differential analog channels) 24 bit capability, sample at 10Hz, resolution set to 1mV, also provides video overlay showing GPS time and lat/longitude

Data Acquisition System

Data Acquisition System Records digital data from all sensors (including GPS, MAG, and altimeter)

Model:	iPAQ 2410 Pocket PC
Manufacturer:	HP
Operating System:	Microsoft Windows Pocket 2003
Processor:	Samsung(2410) 203 Mhz processor
Memory:	32 MB SDRAM, 32 MB ROM
Software:	SDAS by Kroum VS Instruments Ltd.

Real-Time Correction GPS Receiver

The GPS receiver receives data from both the normal suite of navigational satellites to calculate the position of the aircraft, plus a specific beam from the Omnistar satellite which provides a real-time correction service (annual service subscription). This correction is applied to the positional information in real-time and improves the positional accuracy from approximately 10 metres to less than 3 metres.

GPS Differential Receiver

Model:	AgGPS132
Manufacturer:	Trimble
Serial Number:	02240-02249
Output:	NMEA string, PPS
Channels:	12 Channel DPGS, internal L-band
Position Update:	0.5 second for navigation
Correction Service:	Real time correction service subscription – Omnistar
Sample Rate:	Up to 10hz, set at 5 hz
Broadcast Services:	Omnistar Correction Service (AMSC) L band Broadcast (1556.8250 Mhz satellite band)

Navigation System

Model:	PNAV 2001
Supported by:	AGNAV Inc.
Operating System:	MSDOS
Microprocessor:	CPU Pentium based
Ports:	PCMIA for data storage and retrieval, COM ports for data input
Graphic Display:	LCF TFT color display, sun readable touch screen controls
Data Inputs:	Real Time processing of GPS output data

Radar Altimeter

Model:	KRA-10A
Manufacturer:	King
Serial Number:	071-1114-00
Accuracy:	5% up to 2,500 feet
Calibrate Accuracy:	1%
Output:	Analog for pilot, converted to digital for data acquisition

Barometric Altimeter

Model:	LX18001AN
Manufacturer:	Sensym

Video Camera (mounted in belly of aircraft)

Model:	DFW-VCC-5774
Manufacturer:	Sanyo
Serial Number:	58760177
Specifications:	½", 1.3LX, 12 VDC, C/CS, EI/ES, backlit compensation
Lens:	Rainbow 2/3", 1.3-3.6mm, auto iris

Video CD Recorder

Model:	PV330 portable digital video recorder
Manufacturer:	Taiwan Media
Serial Number:	PV3800(0)2040700008

2.8 Tests and Calibration

Magnetic Figure of Merit

Compensation calibration tests were undertaken to determine the magnetic influence of aircraft maneuvers and the effectiveness of the aircraft compensation method. The aircraft flew a square pattern in the four survey directions at a high altitude over a magnetically quiet area and perform pitches (± 5°), rolls (± 10°) and yaws (± 5°). The sum of the maximum peak-to-peak residual noise amplitudes in the total compensated signal resulting from the twelve maneuvers is referred to as the Figure of Merit (FOM) index. The FOM index for the Tail Stinger sensor should be less than 1.2 nT. The Magnetic Figure of Merit test could have been repeated if any major component of the data acquisition system or aircraft was modified or replaced during the course of field operations.

The recent FOM values for this aircraft were:

Left Magnetometer:	0.94 nT
Right Magnetometer:	1.03 nT
Tail Magnetometer:	0.76 nT

Magnetic Lag Test

A lag test was performed to verify directional parallax in the acquired magnetic readings. The test will consist of precise flying over a distinct magnetic anomaly (or group of anomalies) in reciprocal directions. A lag factor is then determined based on apparent positional shift in the two directions.

2.9 Logistics

Field Operations

The aircraft arrived at the base of operation in Thunder Bay October 3rd, 2006 and the operator and ground support vehicle arrived on October 4th. The survey was flown successfully in 1 flight on October 6th. Operations went smoothly. There were no chargeable standby days.

2.10 Data Processing

Quality Control

The data were transmitted to the office and examined for quality control and tolerances on all channels. This included any corrections to the flight path, making flight path plots, importing the base station data, creating a database on a flight-by-flight basis, and posting the data. All data were checked for continuity and integrity. Any errors or omission or data beyond tolerances were flagged for re-flight and the crew would have been notified immediately.

Final Processing

The final magnetic processing, performed by Scott Hogg & Associates, involved height corrections, tie line leveling and application of the G-T grid interpolation. Deviations from a smooth flying surface were determined and a correction profile was applied to the raw magnetic field. Levelling was performed by in the standard manner by tying to the tie lines; the intersections of traverse and control lines were calculated and the differences in observed magnetic values were attributed to diurnal variation. In some active areas, with steep magnetic gradients, the difference reflects not only diurnal, but also some error due to small inaccuracies in both horizontal and vertical position at the line intersection. If the implied diurnal correction at these intersections was inconsistent with adjacent diurnal indications, the indicated correction was ignored. The correction applied was a linear sloping datum connecting the interpreted diurnal value at each control line intersection.

A calculated vertical gradient of the control line leveled total field was computed and a micro-leveling procedure was applied to the control line leveled profile data. The correction applied was limited to a +/-10 nT range with wavelengths no less than 1.5 kilometre.

The measured horizontal gradient was obtained as follows. a) The raw transverse gradient is the value from the left sensor minus the value from the right sensor divided by their separation. b) The raw longitudinal gradient is the difference between the tail sensor and the average of the left and right sensors, and divided by the longitudinal separation. c) The raw gradients are then DC shifted to account for line heading effects and differences in the sensors. d) The gradients are then rotated from aircraft centric components to true geographic components; these are the final North and East gradients. The GT-Grid grid interpolation process (developed by Scott Hogg & Associates Ltd.) was applied. The input to GT-Grid is the profile data of leveled total field as well as the east(X) and north (Y) measured gradients. The grid produced by the process is exactly consistent with the profile data provided. This means that at any point along a flight line the total field and horizontal gradient information of the total field GT-GRD will be the same as that in the three profiles. The amplitude of all total field variations, short wavelength or regional is fully preserved as in a conventional total field grid. The difference between the conventional and GT-Grid process is evident by the improved coherence of high frequency detail and the improved location and resolution one-line anomalies as well as narrow linear features. The grid cell size is 25 metres. The XDS VLF-EM data were not processed.

3. Data Verification

The author has taken factual information from a number of Ontario Government publications that are assumed to be accurate and complete. In the author's experience, published documents of the Ontario Geological Survey have been through numerous reviews from supervisory and/or editorial committees, and represent reliable facts and interpretations of data. Data from private reports have been scrutinized by the author and found to be reasonable in presentation of data and interpretations. Analytical data taken from these reports is considered at "face value", and no external checks have been attempted.

Geophysical data has been taken from the present survey, and compared against digital archives produced by the Government of Ontario, and show a continuum of coherent readings, and are considered valid measurements by the author. The anomalies represented by the data are therefore considered real and accurate depictions of physical features found at these locations.

Geological information for the immediate property area was confirmed by the author and reflect previously published geological maps.

4. Discussion

The geophysical data for Sunday Lake defines an isolated circular anomaly, which is similar in size to those found over alkalic complexes of the silicate-carbonatite type, such as the Cargill and Clay-Howell complexes. Although the size of the Sunday Lake anomaly is typical of carbonatite complexes (3-4 km), the magnetic character is in direct opposition, with carbonatite complexes in the area typically showing an increase in magnetic values from the outer silicate lithologies to the magnetite bearing carbonate rocks found near the core. Although magnetite is a common constituent of carbonatite, oxidized or magnetite-poor varieties do exist, and may explain the anomalously low magnetic values seen in the core of the Sunday Lake anomaly. An alternative explanation is emplacement of the causative body during a period of reversed magnetic polarity, which is most probable. The strong circular zoning of the anomaly is more reminiscent of alkalic silicate ring complexes, however, examples occurring in the area, i.e., Killala Lake and Port Coldwell, are much larger in size, ranging from 10 to 30km in diameter.

One noticeable feature of the magnetic low core at Sunday Lake is the occurrence of three, distinct magnetic lobes, each approximately 250-300m in diameter (Fig. 2.1). No explanation for these lobes is currently available, however, it has been suggested that they represent individual intrusive bodies.

Given the complex nature of the anomaly the data was sent to a geophysical consultant for further interpretation. The data for the Sunday Lake area was examined in profile and by 3D inversion.

Profiles suggest the body is a between 95 metres and 180 metres depth below surface. The scatter in the profile depths arises on different lines. This may be caused by variances in the body margin as indicated below.

3D inversion models were generated for Sunday Lake magnetics, using 25 metre cells for the vertical. Figure 4.1 shows an amplitude enhanced image of the magnetics. The large blue negative shows the negative anomaly extending 4,100 nT below background. This is a very strong anomaly indicating a strongly magnetic body, but remnantly magnetized

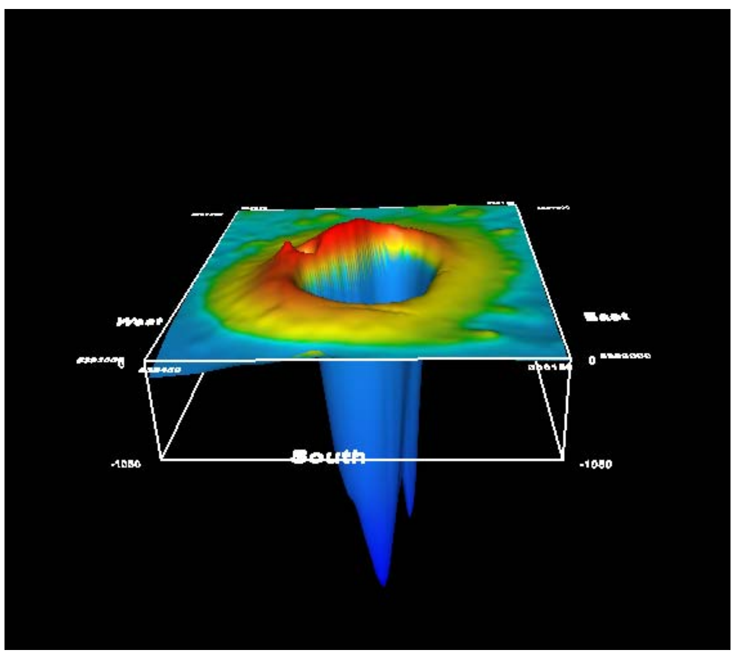

Figure 4.1 3D Inversion model – amplitude enhanced

The 3D image sliced through east-west (Fig. 4.2), looking north contains the strong blue profile and the 3D inversion body shown in purple. This suggests a body extending 700 metres below surface.

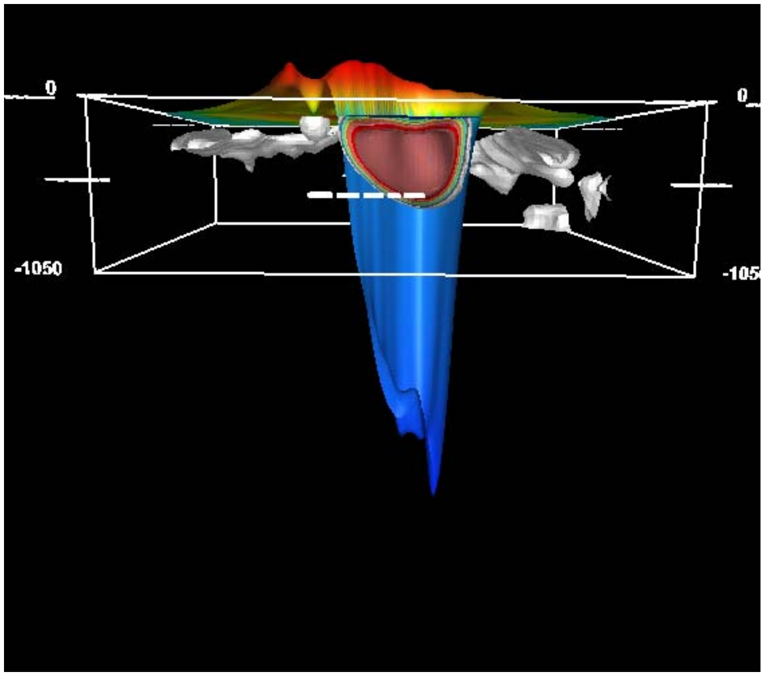

Figure 4.2 3D Inversion model – East-West slice

The 3D image looking from above (Fig 4.3) shows a horizontal slice through the model at 75 metres depth. The strong image at this depth suggests a shallower to top source than the profiles. There is a stronger magnetic event on the rim of the intrusion than in the centre, indicating two magnetic phases as seen by the magnetics.

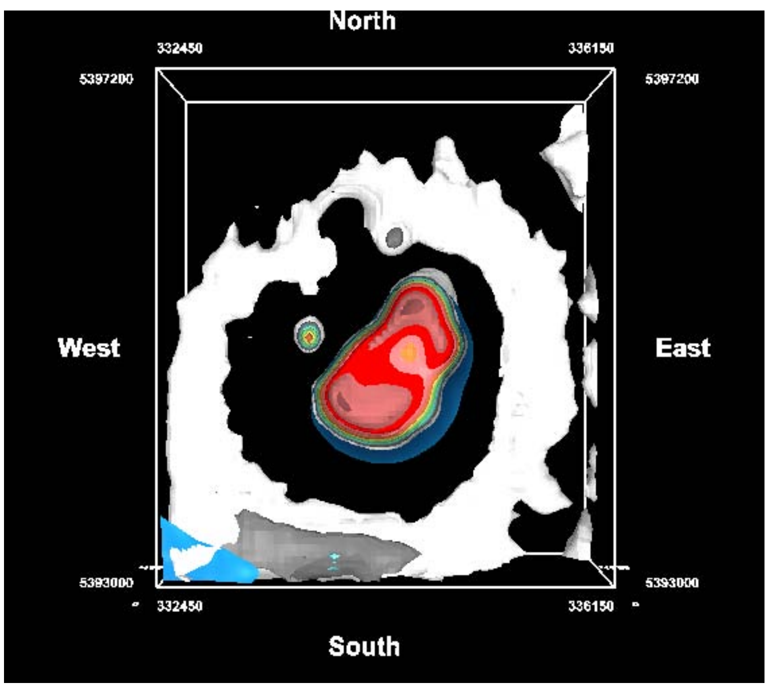

Figure 4.3 3D Inversion model – Horizontal slice (75m)

4.1 Source Rocks

Features of the Sunday Lake anomaly, its large size and strongly negative magnetic character (-5000γ anomaly), argue against kimberlite as a source of the anomalies. The three smaller magnetic lobes within the core are of similar size to known kimberlites, however, the geological setting (within a ring structure) is unlikely for kimberlite emplacement. A similar geological setting does occur in the Pilansberg Alkaline Complex in South Africa, although in this case younger kimberlite appears to have exploited late faults, which cut the complex. One small magnetic feature, with coincident EM anomaly, located within the western portion of the magnetic high zone, closely resembles the geophysical signature of kimberlite, including the overburden EM response which is typical of clays developed in weathered kimberlite.

The size and strength of the Sunday Lake magnetic anomaly most closely resembles those of silicate-carbonatite complexes, however, the pattern of zoning is at odds with other known carbonatite complexes in Northern Ontario. The unexpected magnetic anomaly may be explained simply by a lack of magnetite in a carbonatitic core, or the replacement of magnetite by martite, through oxidation, a process known to have occurred in other Ontario carbonatites, i.e., Martinson Lake. The magnetic highs surrounding the core suggest magnetite bearing mafic/ultramafic rocks, which are more resistant to weathering than the carbonatite, allowing magnetite preservation. More likely, however, is that core intrusion took place at a period of reverse magnetic polarity, and the low magnetic values reflect this time of polar reversal.
A third possibility is that the Sunday Lake anomaly represents a mafic-ultramafic intrusive complex. The intrusives' strongly magnetic character, in both the rim and remnantly magnetized core, would be similar to mafic-ultramafic complexes observed elsewhere.

5. Recommendations

The Sunday Lake anomaly represents a blind exploration target that still remains unsatisfactorily explained. Given the indications of either an alkaline complex, i.e., silicate/carbonatite, or mafic/ultramafic complex, the value of the exploration target is high given the current, and proposed, exploitation of phosphate resources in alkaline and carbonatite complexes in Ontario, such as Cargill and Martinson Lake, and anomalous concentrations of REE, Cu, Ni and PGE observed in other complexes, i.e., Port Coldwell, Killala Lake and niobium at the Argor Carbonatite Complex (Sage, 1991).

It is recommended that further exploration be undertaken in the Sunday Lake area in order to explain the magnetic anomaly. As a first phase, a limited diamond drilling program (450-600m) should be undertaken in order to gain a better geological understanding of the complex. Three holes, targeting the core, core-rim contact and rim, are suggested. Following Phase I drilling, exploration programs can be designed to better evaluate the deposit model, based on the geological setting.

6. Conclusions

The Sunday Lake property consists of a large (3 km diameter), concentrically zoned, circular magnetic anomaly, which grades from a strong, positive magnetic outside rim, to a central core displaying very low magnetic susceptibility. The anomaly falls within an area of low topography, which conforms to the outside margin of the negative magnetic core.

Based upon the geophysical anomaly, the source is most likely an alkaline or mafic-ultramafic complex, with the core representing a strongly, though remnantly magnetized, magnetic source.

Further exploration is indicated for the Sunday Lake Property given its potential for hosting alkaline silicate/carbonatite-type or mafic-ultramfic complexes and a first phase program of between 450 and 600m of diamond drilling is recommended.

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8. Certification and Date

I hereby certify:

1. that I am a consulting geologist and reside at 91 Empress Avenue, Toronto, Ontario, M2N 3T5

2. that I graduated from St. Francis Xavier University with a Bachelor of Science degree in 1991, McGill University with a Master of Science Degree in 1994 and McGill University with a Doctor of Philosophy degree in 1998

3. that I have been practicing my profession in Canada and Internationally for 18 years

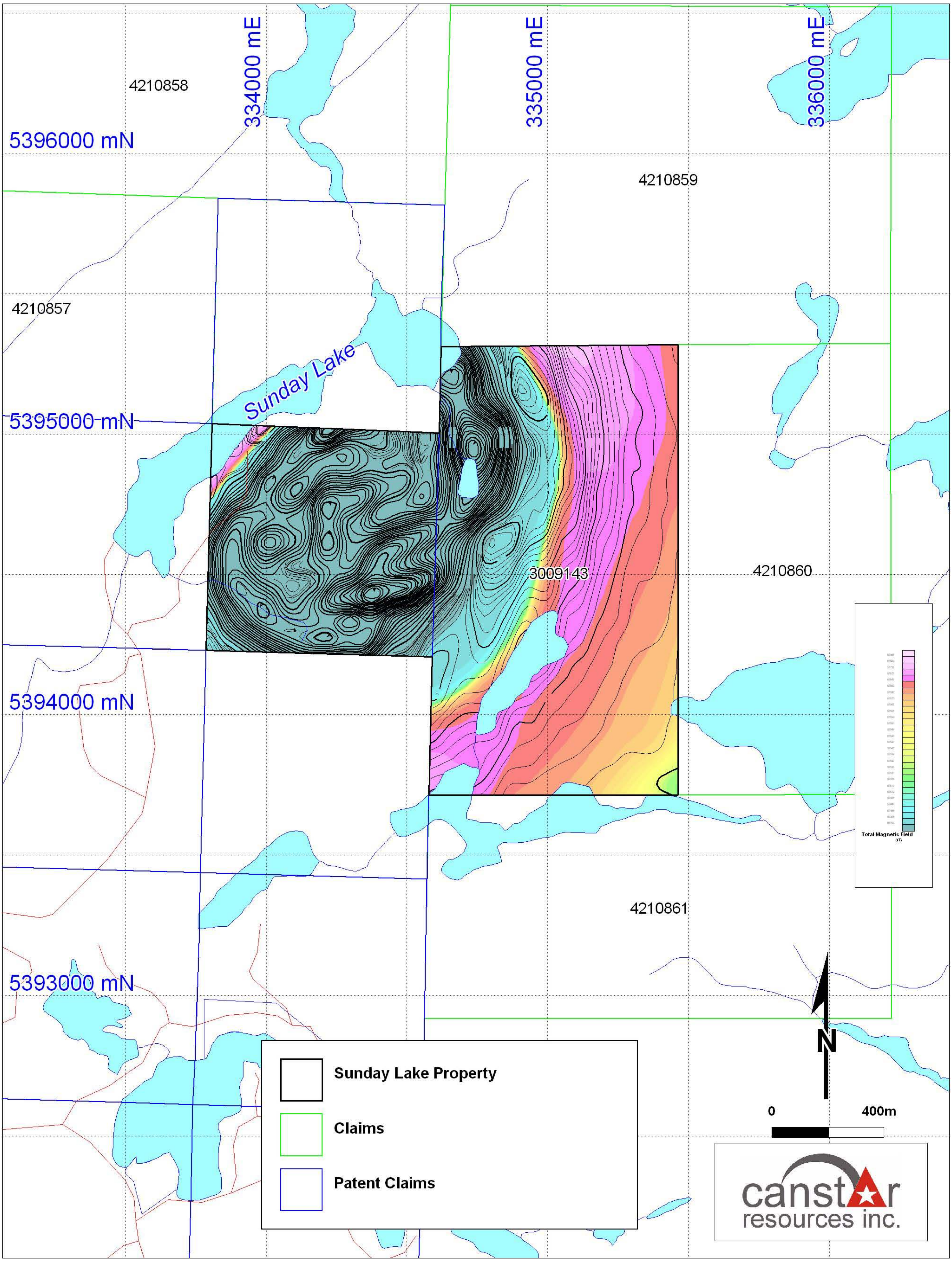
4. that the accompanying report is based on personal knowledge related to the property, a site visit to the Sunday Lake Property, and a review of available private and public documents pertaining to the property.

Toronto, Ontario
February 6, 2007

David Palmer, Ph.D., P.Geo
President
Canstar Resources Inc

APPENDIX I

Sunday Lake Total Field Magnetic Map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335000 mE
336000 mE
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4210857
Sunday Lake
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3009143
4210860
Total Magnetic Field
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4210861
5393000 mN
N
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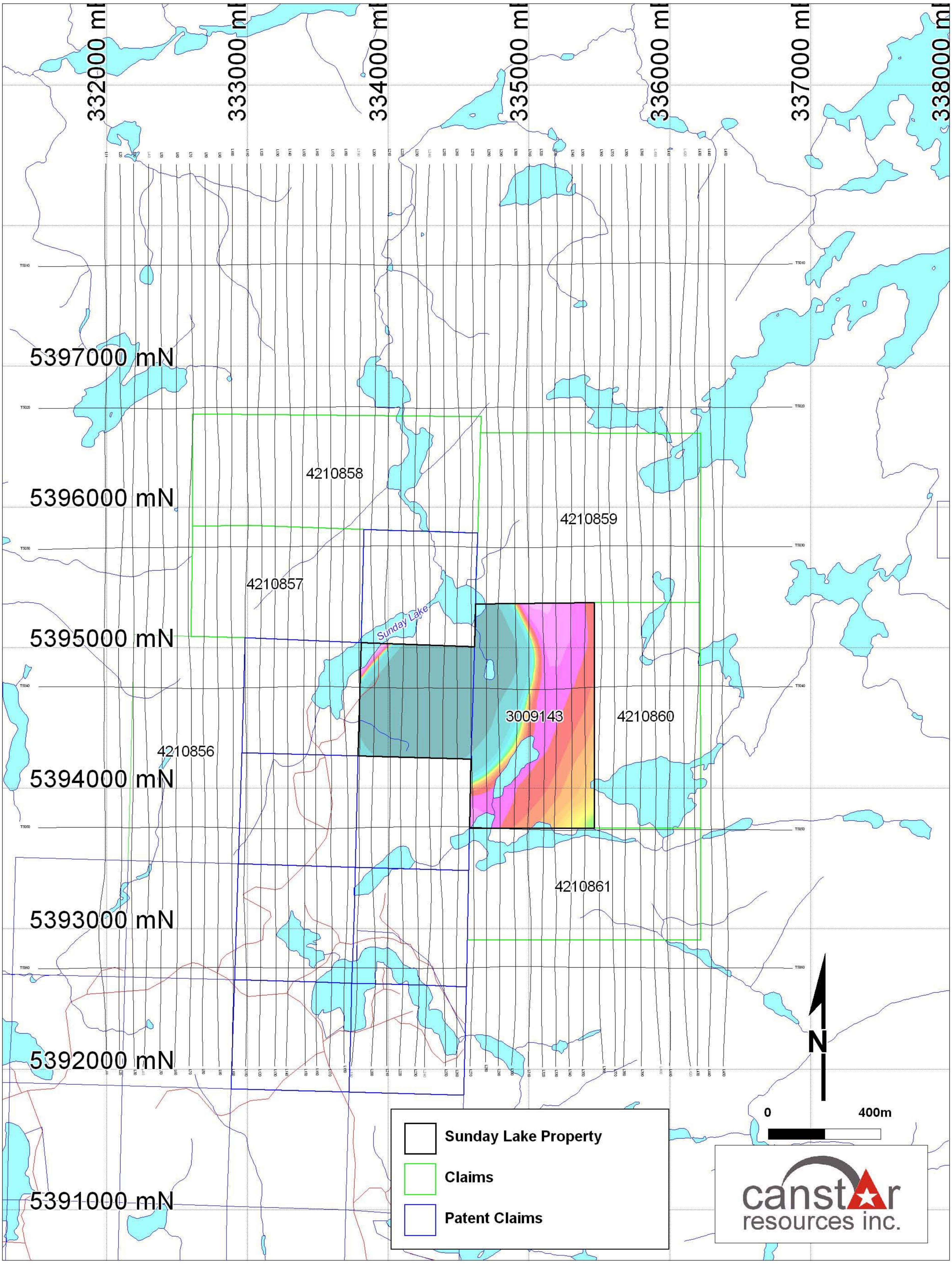
400m
Sunday Lake Property
Claims
Patent Claims
canstar
resources inc.

APPENDIX II

Sunday Lake Flightpath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400m
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Claims
Patent Claims
canstar
resources inc.