A Report on Airborne Test Geophysical Survey on the Nipigon Plate Property, of MAPLE MINERALS CORPORATION Burchell Lake Claim Group, Kashabowie Area Thunder Bay Mining Division, Ontario Province of Ontario

for Maple Minerals Corporation, Suite 2810, 130 King Street West Toronto, Ontario M5X 1A9

October 7th, 2003

Roger J Cavén, BASc, P Eng, Consulting Geophysicist RR# 5, 479 Ocean View Drive, Gibsons, British Columbia, CANADA V0N 1V5 Tel/Fax: (604) 886-0479, e-mail: roger_caven@telus.net (Sunshine Coast)
TABLE OF CONTENTS

Summary 3
Introduction 3
Location and Access 3
Previous Work 3
Property – Description and Location 4
Geology of the Claim Group and area 4
Airborne EM – Magnetic Survey 5
Discussion of Results 5
Distribution of Work Performed 6
Conclusions and Recommendations 6
References
   Reports 7
   Maps 7
Certificate of Author 8

Table 12.5 Metamorphic mineral assemblages of the Shebandowan greenstone belt, 2 pages.


Location Map
Claim Map
Geology Map
Reduced Airborne EM Profile Map with claims Scale 1:50,000
Reduced Airborne Magnetic/EM Profiles Scale 1:40,000

In Pocket
Airborne Stacked EM Profile Map with claims Scale 1:20,000
SUMMARY

Maple Minerals Corporation holds a group of claims south of the Kashabowie area in the Shebandowan greenstone belt, about 88 km WNW of Thunder Bay, Ontario, the Burchell Lake 220 claim units in 17 claims. The claims are located between and south of the Burchell and Greenwater Lakes, and south of the Kashabowie area. The survey is reported on as Deaty Creek Test lines by Geotech Ltd and flown together with the surveys over the East West properties to obtain preliminary information on the claim block area.

This report deals with the recent airborne geophysical survey over the Burchell claims group. On February 11th to 16th Geotech Ltd flew the Burchell property with the Helicopter-borne time domain electromagnetic/ magnetic survey system. This survey was intended to outline electromagnetic conductors and to obtain some magnetic information on the subsurface geology. Results of the survey are appended as a map with survey lines and profiles of the EM. Also presented are individual profile maps, which include the magnetic response with the EM.

INTRODUCTION

The Kashabowie area and the present Burchell property are in the Shebandowan greenstone belt in the Wawa subprovince. The Archean age Superior Province includes several greenstone belts with iron formations and sulphide occurrences, many with economic basemetal mineralization. The greenstone belts have been subject to exploration for many years, however, newer geophysical techniques have improved the discrimination of conductive features as well as providing a better depth penetration. Although helicopter borne geophysical surveys have been used for many years, they have been based on frequency domain systems, which have limited depth penetration, but generally good resolution of near surface features. The move to time domain electromagnetic systems began in the 1960’s with the Barringer Research INPUT® system. INPUT® improved depth penetration, although resolution was less. Several time domain systems have been developed since, among them the Fugro (formerly Geoterrex) Megatem® system with high power and very good depth penetration. Recently Geotech Ltd has developed and tested the helicopter borne Dream Catcher Time Domain Electromagnetic system. Test flights by Megatem® and Dream Catcher TDEM have shown comparable depth penetrations but better lateral resolution for the latter.

East West Resource Corporation decided to use the Dream Catcher TDEM system for a detail look at the Kashabowie area of the Shebandowan greenstone belt and extended the survey to the Burchell Lake property on behalf of Maple Minerals Corporation.

LOCATION AND ACCESS

The property is road accessible via Hwy 11 to Kashabowie situated ~88 km WNW of Thunder Bay. Local and forestry roads branch off the highway south to the property.

PREVIOUS WORK

Previous work on the property and surrounding areas are described in the references. Additional work is to be found among assessment work reports.
PROPERTY – DESCRIPTION AND LOCATION

BURCHELL LAKE PROPERTY

The Company has acquired a 100% owned 220 claim unit group covering parts of the area between Burchell Lake and Greenwater Lake and south thereof, at 48° 34' N latitude and 90° 35' W longitude (~ centre), about 20 km NE of the Deaty Creek block, approximately 88 km WNW of Thunder Bay, in the Thunder Bay Mining Division. The property is accessed from Hwy 11 via roads to the south.

<table>
<thead>
<tr>
<th>Claim no</th>
<th>Claim Map</th>
<th>Units</th>
<th>Recorded</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>3011095</td>
<td>Burchell</td>
<td>15</td>
<td>Jan22-2003</td>
<td>Jan22-2005</td>
</tr>
<tr>
<td>3011096</td>
<td>Burchell</td>
<td>15</td>
<td>Jan22-2003</td>
<td>Jan22-2005</td>
</tr>
<tr>
<td>3011097</td>
<td>Burchell</td>
<td>15</td>
<td>Jan22-2003</td>
<td>Jan22-2005</td>
</tr>
<tr>
<td>3011098</td>
<td>Burchell</td>
<td>15</td>
<td>Jan22-2003</td>
<td>Jan22-2005</td>
</tr>
<tr>
<td>3011099</td>
<td>Burchell</td>
<td>12</td>
<td>Jan22-2003</td>
<td>Jan22-2005</td>
</tr>
<tr>
<td>3011100</td>
<td>Burchell</td>
<td>08</td>
<td>Jan22-2003</td>
<td>Jan22-2005</td>
</tr>
<tr>
<td>3011101</td>
<td>Burchell</td>
<td>16</td>
<td>Jan22-2003</td>
<td>Jan22-2005</td>
</tr>
<tr>
<td>3011102</td>
<td>Burchell</td>
<td>16</td>
<td>Jan22-2003</td>
<td>Jan22-2005</td>
</tr>
<tr>
<td>3011103</td>
<td>Burchell</td>
<td>08</td>
<td>Jan22-2003</td>
<td>Jan22-2005</td>
</tr>
<tr>
<td>3011104</td>
<td>Burchell</td>
<td>16</td>
<td>Jan22-2003</td>
<td>Jan22-2005</td>
</tr>
<tr>
<td>3011126</td>
<td>Burchell</td>
<td>16</td>
<td>Jan22-2003</td>
<td>Jan22-2005</td>
</tr>
<tr>
<td>3011127</td>
<td>Burchell</td>
<td>16</td>
<td>Jan22-2003</td>
<td>Jan22-2005</td>
</tr>
<tr>
<td>3011128</td>
<td>Burchell</td>
<td>12</td>
<td>Jan22-2003</td>
<td>Jan22-2005</td>
</tr>
<tr>
<td>3011129</td>
<td>Burchell</td>
<td>12</td>
<td>Jan22-2003</td>
<td>Jan22-2005</td>
</tr>
<tr>
<td>3011130</td>
<td>Burchell</td>
<td>12</td>
<td>Jan22-2003</td>
<td>Jan22-2005</td>
</tr>
<tr>
<td>3011131</td>
<td>Burchell</td>
<td>12</td>
<td>Jan22-2003</td>
<td>Jan22-2005</td>
</tr>
<tr>
<td>3011456</td>
<td>Burchell</td>
<td>04</td>
<td>Jan22-2003</td>
<td>Jan22-2005</td>
</tr>
</tbody>
</table>

Total 17 claims = 220 units = 3520 ha

GEOLOGY OF THE CLAIM GROUP AND AREA

The Burchell claims in the Kashabowie area are in the Shebandowan greenstone belt of the Wawa Subprovince of the Superior Province. The age is Archean. The Shebandowan greenstone belt is arcuate in shape reflecting the curvature of the Quetico - Shebandowan greenstone belt boundary, approximately WSW – ENE as shown by the magnetic trends. The Shebandowan greenstone belt is subdivided into the Burchell and Greenwater assemblages, with a third suite of rocks, the Shebandowan assemblage, consisting of sedimentary and volcanic rocks which overlie unconformably the Burchell – Greenwater boundary, locally straddling it.

The Burchell assemblage is divided into three cycles, with cycle 1 intruded by the Shebandowan Lake intrusion. The lower part of cycle 1 comprises massive basalt flows locally altered to chlorite schist. Pillow lava underlies the dacite and rhyolitic units in the upper parts of the cycle. Near the base of this cycle are tabular, serpentinized, peridotite units that contain copper – nickel mineralization. Cycle 1 contains the most extensive basic intrusions in the greenstone belt. Cycle 2 also contains numerous mafic intrusions, but also distinguished by a thick unit of rhyolite to dacite which extends along the northern part of the belt. The main mass of this felsic unit located in and south of the Burchell area is displaced and separated from the more tuffaceous eastern part by right-handed transcurrent movement on the Crayfish Creek fault. (The geology information has been abstracted from “Geology of Ontario; OGS Special Volume 4, Pt1, 1991.”)

Appended is a two-page table: Table 12.5. Metamorphic mineral assemblages of the Shebandowan greenstone belt. Geology of Ontario; OGS Special Volume 4.
Metasedimentary

Late to post-tectonic granitoids
Tonalite–granodiorite gneiss
Metasediments
Metasediments–metavolcanics (Timiskaming-type)

Mafic to ultramafic intrusions
Intermediate to felsic metavolcanics
Mafic to ultramafic metavolcanics
Fault and Shear zones
Study areas (1991–1994)

Figure 43.2. Generalized geological map of west-central Shebandowan greenstone belt. Abbreviations are: BFZ=boundary fault zone; BLF=Burchell Lake fault; USSZ=Upper Shebandowan shear zone system; LSSZ=Lower Shebandowan Lake shear zone system; PF=Postans Fault; SGFZ=Squeer Lake–Greenwater Lake fault zone; TLFZ=Tinto Lake fault zone; CCF=Crayfish Creek fault; OS=Obadainaw stock; MLS=Moss Lake stock; BLS=Burchell Lake stock; HS=Hermia stock; HLS=Hood Lake stock; GLS=Greenwater Lake stock; LGP=Little Greenwater Lake pluton; PCS=Pinecone stock; KS=Kekekuab stock; SMUC=Star Lake mafic to ultramafic sill complex; PS=Peewatai stock; SS=Shebandowan stock; and HGC=Haines gabbroic complex. Mineral occurrences include: 1. Huronian Mine (past producer), 2. Snodgrass Lake prospect, 3. North Coldstream Mine (past producer), 4. Vanguard prospects, and 5. Shebandowan Mine.
<table>
<thead>
<tr>
<th>Area; References</th>
<th>Rock Type</th>
<th>Observed Assemblage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burchell Lake; Giblin 1964</td>
<td>Burchell assemblage felsic to intermediate volcanic rocks mafic volcanic rocks gabbro (north of Skimpole Lake, east of Burchell Lake) Greenwater assemblage banded tuff (northwest of Grouse Lake) and tuff in Quetico sedimentary rocks iron formation (north of Squeers Lake) gabbro (north side of Hood Lake syenite pluton)</td>
<td>quartz, albite, white mica, chlorite, carbonate; chlorite, hornblende, tremolite-actinolite, carbonate, albite, epidote ± quartz; hornblende is largely replaced by chlorite (typical of D2 domain); narrow chlorite schist bands with carbonate, white mica, albite and quartz hornblende, saussuritized plagioclase, quartz, carbonate, epidote, chlorite, apatite, magnetite, pyrite, pyrrhotite quartz and minor plagioclase alternating with biotite, minor magnetite and pyrite magnetite, quartz, amphibole ± carbonate ± epidote hornblende, labradorite, minor magnetite, very minor quartz; hornblende is poikiloblastic, reflects contact metamorphism sericitic schist matrix chlorite; pale amphibole in southeast and central area, hornblende in north; medium grained amphibolite southeast of Tinto Lake fault plagioclase, amphibole, chlorite, retrograded locally; local chloritic schist zones igneous assemblages retrograded; chlorite, secondary amphibole sericitized greenschist facies: shredded fine-grained chlorite, hornblende, sericite, saussurite, carbonate, albite, coarse-grained feldspar chlorite, epidote, hornblende, albite serpentine, minor talc, magnetite, carbonate quartz, feldspar, mica microcline, quartz, chlorite, carbonate Greenwater assemblage basalt</td>
</tr>
</tbody>
</table>
Table 12.5. Metamorphic mineral assemblages of the Shebandowan greenstone belt.

<table>
<thead>
<tr>
<th>Area; References</th>
<th>Rock Type</th>
<th>Observed Assemblage</th>
</tr>
</thead>
<tbody>
<tr>
<td>north of Crayfish Creek fault on Discovery Point; Morton 1982</td>
<td>Burchell assemblage, basalt</td>
<td>upper greenschist facies: actinolite, epidote, quartz; actinolite, epidote; fine-grained actinolite, microlites of plagioclase</td>
</tr>
<tr>
<td>south of Lower Shebandowan Lake; Morton 1982</td>
<td>basalt</td>
<td>lower greenschist facies: chlorite, quartz, carbonate, plagioclase (&lt;Ar&gt;30); chlorite, quartz ± carbonate, epidote, actinolite; chlorite, quartz, epidote, actinolite</td>
</tr>
<tr>
<td>southeast of Tinto Lake fault; Morton 1982</td>
<td>Shebandowan assemblage metasedimentary rocks</td>
<td>quartz, actinolite, plagioclase</td>
</tr>
<tr>
<td></td>
<td>ultramafic rocks</td>
<td>chrysotile, carbonate, chlorite, magnetite</td>
</tr>
<tr>
<td></td>
<td>Greenwater assemblage komatiitic volcanic rocks ultramafic rocks mafic rocks</td>
<td>chlorite, serpentinite, tremolite saussurite, quartz, chlorite</td>
</tr>
<tr>
<td></td>
<td>tholeiitic volcanic rocks mafic rocks intermediate rocks</td>
<td>sericitized plagioclase, chlorite, epidote, carbonate; albite, actinolite, biotite, saussuritized plagioclase, chlorite, carbonate; plagioclase, quartz, chlorite, epidote; sericite, albite, chlorite</td>
</tr>
<tr>
<td></td>
<td>calc-alkalic volcanic rocks mafic rocks</td>
<td>saussuritized plagioclase, quartz, carbonate; saussuritized plagioclase, quartz, clinozoisite, chlorite, carbonate</td>
</tr>
<tr>
<td>Shebandowan assemblage alcalic volcanic rocks mafic rocks intermediate rocks</td>
<td>Shebandowan assemblage alcalic volcanic rocks mafic rocks intermediate rocks</td>
<td>sericite, chlorite, carbonate sericitized plagioclase, epidote, actinolite, chlorite</td>
</tr>
</tbody>
</table>
Numerous mineral occurrences have been found in the area. A geology map of the area shows the results of studies by the Ontario Geological Survey and Natural Resources Canada, Northern Ontario Development Agreement, (copied from the “Summary Report 1995-1996, Canada/Ontario”, p104, in the paper: 43. West-Central Shebandowan Greenstone Belt, District of Thunder Bay, by I A Osmani).

AIRBORNE TIME DOMAIN MAGNETIC - ELECTROMAGNETIC SURVEY

On February 11th to 16th, 2003, a helicopter borne geophysical survey was flown over the property with a newly developed time domain electromagnetic system named “Dream Catcher TDEM system”. A total of 49.7 km as flown, some of it outside the claims for operational purposes as well to obtain a picture of the area as a whole. Navigation was by GPS and radar altimetry. The flying height was maintained at 80 m above ground, with sensor at 35 m above ground, and aircraft velocity was nominally 70 km/hour. The low altitude of the sensor and relatively slow speed of the aircraft, coupled with the superior depth penetration and sensitivity of a time domain electromagnetic system has produced survey results where closely located conductors have been discriminated. This is important in an area where graphitic conductors run alongside sulphide conductors, whether iron formations or economic sulphides, thus aiding in mapping the geology and drilling. Test flights over known mineral occurrences have compared favourably with results of fixed wing time domain systems, where the much higher altitude has caused adjacent conductors to merge.

Discussion of Results
The flight line direction was northwest-southeast with eight widely spaced lines. The data has been plotted as stacked EM profiles with claim outlines on the map by Geotech at a scale of 1:20,000. The Geotech original map has been modified by the addition of the claims. A set of profiles for each line is also included, and the magnetic response is plotted together with a set of EM profiles at a scale of approximately 1:40,000. A copy of the full Geotech Operations Report is appended with further details of the operation and equipment. The claim outlines have been digitized from the claim map and require ground verification. The map has also been reduced to a scale of 1:50,000 for quick overview and presented in colour. The full EM map was delivered with profile traces in colour, but has been reproduced as greyscale.
DISTRIBUTION OF WORK PERFORMED

The following work has been determined for each claim, with 10% added for work assigned to account for turnarounds and loops:

<table>
<thead>
<tr>
<th>Claim no</th>
<th>Claim Map Units</th>
<th>Recorded Due Date</th>
<th>In claims</th>
<th>Work Assigned</th>
</tr>
</thead>
<tbody>
<tr>
<td>3011095</td>
<td>Burchell 15</td>
<td>Jan22-2003</td>
<td>Jan22-2005</td>
<td>0.9</td>
</tr>
<tr>
<td>3011097</td>
<td>Burchell 15</td>
<td>Jan22-2003</td>
<td>Jan22-2005</td>
<td>3.8</td>
</tr>
<tr>
<td>3011099</td>
<td>Burchell 12</td>
<td>Jan22-2003</td>
<td>Jan22-2005</td>
<td>2.5</td>
</tr>
<tr>
<td>3011100</td>
<td>Burchell 08</td>
<td>Jan22-2003</td>
<td>Jan22-2005</td>
<td>2.65</td>
</tr>
<tr>
<td>3011101</td>
<td>Burchell 16</td>
<td>Jan22-2003</td>
<td>Jan22-2005</td>
<td>4.3</td>
</tr>
<tr>
<td>3011103</td>
<td>Burchell 08</td>
<td>Jan22-2003</td>
<td>Jan22-2005</td>
<td>1</td>
</tr>
<tr>
<td>3011104</td>
<td>Burchell 16</td>
<td>Jan22-2003</td>
<td>Jan22-2005</td>
<td>2.1</td>
</tr>
<tr>
<td>3011126</td>
<td>Burchell 16</td>
<td>Jan22-2003</td>
<td>Jan22-2005</td>
<td>1.6</td>
</tr>
<tr>
<td>3011128</td>
<td>Burchell 12</td>
<td>Jan22-2003</td>
<td>Jan22-2005</td>
<td>3.25</td>
</tr>
<tr>
<td>3011129</td>
<td>Burchell 12</td>
<td>Jan22-2003</td>
<td>Jan22-2005</td>
<td>1.45</td>
</tr>
<tr>
<td>3011131</td>
<td>Burchell 12</td>
<td>Jan22-2003</td>
<td>Jan22-2005</td>
<td>0.65</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>24.2 km</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>26.62 km</td>
</tr>
</tbody>
</table>

Total flight lines 49.7 km.

CONCLUSIONS AND RECOMMENDATIONS

The airborne geophysical survey using the Geotech helicopter borne Dream Catcher TDEM system has produced a number of results in the form of conductors. The survey lines were widely spaced and therefore only give an indication of what may be expected in a full survey. Some of these conductors may be eliminated through surface mapping as being either graphitic formations or non-economic sulphides. There will remain a number of features which can only be analyzed by drilling, particularly those at depth. The airborne survey was using a GPS based navigation system with UTM coordinates at NAD 27. The locations are therefore comparable with coordinates obtained by ground surveys, the use of which can thus be much reduced.


Roger J Caven, P Eng, FGAC
REFERENCES

Reports


Geology of Ontario; OGS Special Volume 4, Pt 1, 1991.


Maps


CERTIFICATE OF QUALIFICATIONS

I, Roger J Cavén, of 479 Ocean View Drive, Gibsons, British Columbia, hereby certify that:

1. I am a graduate of the University of Toronto, Faculty of Applied Science and Engineering, Engineering Science Course, Geophysics Option (1967).

2. I am a registered Professional Engineer in the Provinces of British Columbia and Ontario.

3. I am a Fellow of the Geological Association of Canada, and an Active Member of the Society of Exploration Geophysicists, the Australian Society of Exploration Geophysicists, the European Association of Geoscientists and Engineers, and IEEE.

4. I am presently employed as an independent Consulting Geophysicist, with address in Gibsons, British Columbia.

5. I have been employed in my profession since graduation, by Barringer Research Inc as a Senior Geophysicist, and with UMEX Inc as Chief Geophysicist in charge of exploration, and as a Consulting Geophysicist since 1983.

Dated at Gibsons, British Columbia, this 7th day of October, 2003.

Roger J Cavén, P Eng, FGAC
Consulting Geophysicist
REPORT ON A HELICOPTER-BORNE
TIME DOMAIN ELECTROMAGNETIC
GEOPHYSICAL SURVEY

Norton Lake, Linsey Bay,
Deaty Creek Blocks
Thunder Bay Area, Ontario

for

East West Resource Corporation
402-905 West Pender Street
Vancouver, British Columbia
Canada, V6C 1L6
Tel: (604) 681-3154
Fax: (604) 689-5930

by Geotech Ltd.

Survey flown in February 2003

Project A 2003
March, 2003
# TABLE OF CONTENTS

1. **INTRODUCTION**  
   3

2. **SURVEY AREA**  
   3

3. **SURVEY SPECIFICATIONS AND PROCEDURES**  
   6

4. **AIRCRAFT AND EQUIPMENT**  
   7
   4.1 Aircraft  
   7
   4.2 Electromagnetic System  
   7
   4.3 Airborne magnetometer  
   7
   4.4 Ancillary Systems  
   7
   4.5 Base station  
   8

5. **PERSONNEL**  
   9

6. **DELIVERABLES**  
   9

7. **DATA PROCESSING AND PRESENTATION**  
   10

8. **RESULTS**  
   12

9. **CONCLUSIONS**  
   13

**Figures**

**Figure 1:** Location map
1. INTRODUCTION

This report describes helicopter-borne geophysical survey carried out on behalf of East West Resource Corporation by Geotech Ltd. under an agreement dated January 2003. Principal geophysical sensors included a time domain electromagnetic system and a cesium magnetometer. Ancillary equipment included a GPS navigation system and a radar altimeter.

Three blocks, referred to as Norton Lake Block, Linsey Bay Block and Deaty Creek Block, and eight test lines in the Kashabowie area were surveyed. The Norton Lake Block is located approximately 215 km NNE of Armstrong in Ontario, the area of the block is 27.4 km², the total line kilometres flown for the block was 244.8 km. The Linsey Bay Block is located approximately 100 km north of Armstrong in Ontario, the area of the block is 79.7 km², the total line kilometres flown for the block was 475 km. The Deaty Creek Block is located approximately 110 km west of Thunder Bay (25 km SW of Kashabowie) in Ontario, the area of the block is 12.2 km², the total line kilometres flown for the block was 129.9 km. The eight test lines were located about 20 km north-east of the Deaty Creek Block, totalling 49.7 km flown.

Data acquisition was initiated on February 11th, 2003 and completed on February 16th, 2003.

This report describes the survey, the data processing and presentation.

2. SURVEY AREAS

The survey areas are shown in figure 1. The latitude-longitude of the centre of the Norton Lake Block is roughly 51° 55’ N and 87° 23’ W, of the Linsey Bay Block is 51° 11’ N and 88° 47’ W, of the Deaty Creek Block is 48° 30’ N and 90° 44’ W. The corner co-ordinates of the blocks in easting and northing are as follows.
Norton Lake Block (in UTM zone 16, NAD27):

1. 477750 5754425
2. 478725 5751550
3. 470100 5748800
4. 469125 5751650

Linsey Bay Block (in UTM zone 16, NAD27):

1. 384000 5676000
2. 384000 5673000
3. 381000 5673000
4. 375300 5669300
5. 368000 5672000
6. 367000 5672000
7. 367000 5676000

Deaty Creek Block (in UTM zone 15, NAD27):

1. 668816 5375478
2. 668816 5371678
3. 665116 5371678
4. 665116 5374078
5. 664416 5374078
6. 664416 5375478
Figure 1 - LOCATION MAP

[Map showing locations such as Burchell Block, Deaty Creek Block, and others related to Canada and Ontario.]
3. SURVEY SPECIFICATIONS AND PROCEDURES

The survey specifications are summarised in the following table:

<table>
<thead>
<tr>
<th>BLOCK NAME</th>
<th>AREA (KM²)</th>
<th>LINE SPACING</th>
<th>LINE KM</th>
<th>FLIGHT DIRECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Norton Lake</td>
<td>27.4</td>
<td>100-150m</td>
<td>244.8</td>
<td>N20W</td>
</tr>
<tr>
<td>Linsey Bay</td>
<td>79.7</td>
<td>200m</td>
<td>475.0</td>
<td>N-S</td>
</tr>
<tr>
<td>Deaty Creek</td>
<td>12.2</td>
<td>100m</td>
<td>129.9</td>
<td>N-S</td>
</tr>
<tr>
<td>TOTALS:</td>
<td><strong>119.3</strong></td>
<td></td>
<td><strong>849.7</strong></td>
<td></td>
</tr>
</tbody>
</table>

Table 1 - Survey Blocks

Nominal EM sensor terrain clearance was 35 m (EM bird height above ground, i.e. helicopter is maintained 80 m above ground). Nominal survey speed was 70 km/hour. The data-recording rates of the data acquisition was 0.1 second for electromagnetics and magnetometer, 0.2 second for altimeter, 1 second for GPS. This translates to a geophysical reading about every 2 metres along flight track. Navigation was assisted by a GPS receiver and data acquisition system, which reports GPS co-ordinates as latitude/longitude and directs the pilot over a pre-programmed survey grid.

The operator was responsible for monitoring of the system integrity. He also maintained a detailed flight log during the survey noting the times of the flight as well as any unusual geophysical or topographic feature.

On return of the aircrew to the base camp the survey data was transferred from a compact flash card (PCMCIA) to the data processing computer.
4. AIRCRAFT AND EQUIPMENT

4.1 Aircraft

An Astar BA helicopter - owned and operated by Canadian Helicopters was used for the survey. Installation of the geophysical and ancillary equipment was carried out by Geotech Inc. at the survey location in Kashabowie. The survey aircraft was flown at a nominal terrain clearance of 80 m.

4.2 Electromagnetic System

The electromagnetic system was a Geotech Dream Catcher Time Domain EM system. The receiver and transmitter coils were concentric and Z-direction oriented. The transmitter coil diameter was 18.5 metres, the number of turns was 5. The receiver coil diameter was 1.1 metre. The number of turns in the receiver coil was 30. The transmitter pulse repetition rate was 30 Hz. The peak current was 110 A. The duty cycle was 50%. The twenty-four measurement gates were used in the range from 130 µs to 6330 µs. The recording sampling rate was 10 samples per second. The EM bird was towed 45 m below the helicopter.

4.3 Airborne magnetometer

The magnetic sensor utilized for the survey was a Geometrics G-823A, optically pumped cesium vapor magnetic field sensor, mounted in a separate bird towed 15 m below the helicopter. The sensitivity of the magnetic sensor is 0.02 nanoTesla (nT) at a sampling interval of 0.1 seconds. The G-823A Magnetometer consists of a sensor head and sensor driver electronics with CM-201 counter joined by a cable. The magnetometer sends the measured magnetic field strength as nanoTeslas to the data acquisition system via the RS-232 port.

4.4 Ancillary Systems

Radar Altimeter

A Terra TRA 3000/TRI 40 radar altimeter was used to record terrain clearance. The antenna was mounted beneath the bubble of the helicopter cockpit.
GPS Navigation System

The navigation system used was a Geotech PC based navigation system utilizing an Ashtech GG24 navigation card, Geotech navigate software, a full screen display with controls in front of the pilot to direct the flight and an Ashtech GPS antenna mounted on the helicopter top assembly. The co-ordinates of the blocks were set-up prior to the survey and the information was fed into the airborne navigation system.

Digital Acquisition System

A Geotech data acquisition system recorded the digital survey data on an internal compact flash card. Data is displayed on an LCD screen as traces to allow the operator to monitor the integrity of the system. Contents and update rates were as follows:

<table>
<thead>
<tr>
<th>DATA TYPE</th>
<th>SAMPLING</th>
</tr>
</thead>
<tbody>
<tr>
<td>TDEM</td>
<td>0.1 sec</td>
</tr>
<tr>
<td>Magnetometer</td>
<td>0.1 sec</td>
</tr>
<tr>
<td>GPS Position</td>
<td>1.0 sec</td>
</tr>
<tr>
<td>Radar Altimeter</td>
<td>0.2 sec</td>
</tr>
</tbody>
</table>

4.5 Base Station

A combine magnetometer/GPS base station was utilized on this project. A Scintrex CS-2 Cesium vapour magnetometer was used as a magnetic sensor with a sensitivity of 0.001 nT. The base station was recording the magnetic field together with the GPS time at 1 Hz on a base station computer. The base station magnetometer sensor was installed in Kashabowie (while surveying Deaty Creek Block) and in Armstrong (surveying Norton Lake Block and Linsey Bay Block) away from electric transmission lines and moving ferrous objects such as motor vehicles. The magnetometer base station’s data was backed-up to the data processing computer at the end of each survey day.
5. PERSONNEL

The following Geotech Ltd. personnel were involved in the project

Field
Geophysicists: Petr Kuzmin
Andrei Bagrianski
System Engineer/Operator: Pavel Tishin

Office
Data Processing/Reporting: Andrei Bagrianski
Petr Kuzmin

The survey pilot and the mechanic were employed directly by the helicopter operator – Canadian Helicopters.

Pilot: Philippe Leynaert
Mechanic: Robert Cote Junior

Overall management of the survey was carried out from the Aurora offices of Geotech Ltd. by Edward Morrison, President.

6. DELIVERABLES

The survey is described in a report, which is provided in two copies. The maps were produced at a scale of 1:20,000 for the Linsey Bay Block and the test lines, at a scale of 1:10,000 for the Norton Lake Block and the Deaty Creek Block.

MAPS

The results of the survey are presented in a series of colour maps. All maps, but the test lines map, contain skeletal topographic features, claims boundaries and the claim numbers. The basic coordinate/projection system used was NAD27, Universal Transverse Mercator, zone 15 for the Deaty Creek Block and zone 16 for the Norton Lake Block and the Linsey Bay Block. For reference the NAD27 latitude and longitude are also noted on the maps. All the maps show the flight path trace.
For each block the map products are as follows:

1. Total Field Magnetic contour map on the GPS flight path, on paper in two copies (black and white contours only)
2. Total Field Magnetic color contour map on the GPS flight path, on paper in two copies
3. Offset TDEM Profile Map of the twenty one gate times (205 – 6330 μs) on the GPS flight path, on paper in two copies

DIGITAL DATA on CD-ROM

A CD-ROM was prepared to accompany the report. It contains a digital file of the line data in ASCII format for each block in addition to the maps in Geosoft format. A readme.txt file may be found on the CD-ROM which describes the contents in more detail.

7. DATA PROCESSING AND PRESENTATION

Skeletal base

The skeletal base seen on the maps was derived from 1:50,000 topographic sheets by digitizing the main hydrological features (rivers, lakes) using AutoCAD. The map was then output as a DXF file and in turn imported in Geosoft Oasis Montaj.

The basic geographic projection/coordinate system used to create all the maps is the Universal Transverse Mercator system (UTM), NAD27.

Flight Path

The flight path, recorded by the acquisition program as WGS 84 latitude/longitude, was converted into the UTM co-ordinate system in Oasis Montaj.

The flight path was drawn using linear interpolation between x,y positions from the navigation system. Positions are updated every second and expressed as UTM eastings (x) and UTM northings (y).

Electromagnetic Data
A three stage digital filtering process was used to reject major sferic events and to reduce system noise. Local sferic activity can produce sharp, large amplitude events that cannot be removed by conventional filtering procedures. Smoothing or stacking will reduce their amplitude but leave a broader residual response that can be confused with geological phenomena. To avoid this possibility, a computer algorithm searches out and rejects the major sferic events. The filter used was a 16 point non-linear filter.

The signal to noise ratio was further improved by the application of a low pass linear digital filter. This filter has zero phase shift which prevents any lag or peak displacement from occurring, and it suppresses only variations with a wavelength less than about 1 second or 20 metres. This filter is a symmetrical 1 sec linear filter. The results are presented as stacked profiles of EM voltages for the gate times.

**Magnetic Data**

The processing of the magnetic data involved the correction for diurnal variations by using the digitally recorded ground base station magnetic values and the adjustment using the flight-line and tie-line information to level the survey data set. The base station magnetometer data was edited and merged into the Geosoft GDB database on a daily basis. The aeromagnetic data was corrected for diurnal variations by subtracting the observed magnetic base station deviations. The corrected magnetic line data from the survey was interpolated between survey lines using a random point gridding method to yield x-y grid values for a standard grid cell size of approximately 0.25 cm at the mapping scale. The Minimum Curvature algorithm was used to interpolate values onto a rectangular regular spaced grid.
8. RESULTS

Norton Lake Block

The TDEM survey over the Norton Lake Block yielded a number of anomalies. The magnetic map of the block is dominated by two strong magnetic highs. The southern high starts at the west end of the block and trends NEE. The northern high starts at the west and of the block, trends NEE along the north edge of the block, turns east in the middle of the block. Most of the EM anomalies are located along the southern border of the block forming a line trending SEE-NWW. The EM responses of the anomalies are moderate to strong on the west and weak to moderate on the east.

Linsey Bay Block

Most of the EM anomalies detected in the Linsey Bay Block are located along the south-east border of the block, corresponding with the magnetic high trending SWW-NEE. The responses of this group of anomalies are from moderate to strong. Other group of EM anomalies is located in the middle of the eastern in-fill area with the centre at 378505W, 5673991N. This group of anomalies is associated with the high magnetic field. The EM responses of this group are moderate. The western part of the block has no significant EM responses. There is only one group of three weak anomalies on lines 3090-3110 and a weak stand-alone anomaly on the line 3010.

Deaty Creek Block

The EM anomalies detected in the Deaty Creek Block can be divided into four groups. The biggest group of anomalies is located just south-east of the centre of the block. The easting and nothing extension of this group is approximate 1 km. The second group is located at the northern ends of the lines 1610-1650. The EM responses of these two groups are moderate. The third group of anomalies is located in the north-west corner of the block. There are anomalies on the southern parts of lines 3080-3100 forming the forth group.
9. CONCLUSIONS

A time domain electromagnetic helicopter-borne geophysical survey has been completed over Norton Lake Block, Linsey Bay Block and Deaty Creek Block in Ontario. Areal coverage amounts to 119.3 km$^2$. Total survey line coverage is 4 line kilometres. Sensors included a Time Domain EM system and a magnetometer. Results have been presented as colour line maps at a scale of 1:20,000 or 1:10,000.

A number of EM anomaly groupings were identified. Ground follow-up of the EM anomalies should be carried out if favourably supported by other geoscientific data.

Respectfully submitted,

Andrei Bagrianski,
Geotech Ltd.

2. 27254
This CD-ROM contains digital data and maps to accompany technical report on helicopter-borne time-domain survey flown in February 2003 in Thunder Bay Area, Ontario.

Files:

Deaty Creek Block (directory DEATY)
1) DEATY.xyz - an ascii file of geophysical data
2) Deal.map - Total Field Magnetics Map in Geosoft map format
3) Deal.pdf - Total Field Magnetics Map in PDF format
4) Dealb&w.map - Total Field Magnetics Map (contours only) in Geosoft map format
5) Dealb&w.pdf - Total Field Magnetics Map (contours only) in PDF format
6) Dea2.map - Offset TDEM Voltage Profile Map in Geosoft map format
7) Dea2.pdf - Offset TDEM Voltage Profile Map in PDF format

Linsey Bay Block (directory LINSEY)
1) Linsey.xyz - an ascii file of geophysical data
2) Lin1.map - Total Field Magnetics Map in Geosoft map format
3) Lin1.pdf - Total Field Magnetics Map in PDF format
4) Linlb&w.map - Total Field Magnetics Map (contours only) in Geosoft map format
5) Linlb&w.pdf - Total Field Magnetics Map (contours only) in PDF format
6) Lin2.map - Offset TDEM Voltage Profile Map in Geosoft map format
7) Lin2.pdf - Offset TDEM Voltage Profile Map in PDF format

Norton Lake Block (directory NORTON)
1) Norton.xyz - an ascii file of geophysical data
2) Nor1.map - Total Field Magnetics Map in Geosoft map format
3) Nor1.pdf - Total Field Magnetics Map in PDF format
4) Norlb&w.map - Total Field Magnetics Map (contours only) in Geosoft map format
5) Norlb&w.pdf - Total Field Magnetics Map (contours only) in PDF format
6) Nor2.map - Offset TDEM Voltage Profile Map in Geosoft map format
7) Nor2.pdf - Offset TDEM Voltage Profile Map in PDF format

Test Lines in Kashabowie area (directory TESTDEATY)
1) Testdeaty.xyz - an ascii file of geophysical data
2) T_D2.map - Offset TDEM Voltage Profile Map in Geosoft map format
3) T_D2.pdf - Offset TDEM Voltage Profile Map in PDF format

See Technical Report for details.

Flown on behalf of:
East West Resource Corporation
402-905 West Pender Street
Vancouver, British Columbia
Canada, V6C 1L6
Tel: (604) 681-3154
Fax: (604) 689-5930
Burchell Line 1

database: M:\Maple Minerals\Burchell\TestDeaty.gdb  line/group: L1  2003/10/07
Burchell Line 3

database: M:\Maple Minerals\Burchell\TestDeaty.gdb line/group: L3

2003/10/07
Burchell Line 4

database: M:\Maple Minerals\Burchell\TestDeaty.gdb line/group: L4

2003/10/07
Burchell Line 5

database: M:\Maple Minerals\Burchell\TestDeaty.gdb line/group: L5

2003/10/07
This map shows the following land tenure withdrawals and restrictions:

- Township
- Concession Lot
- Provincial Park
- Water Reservoir
- Cliffs and Reserves
- Mines and Mine Shafts
- Mines and Mineshafts
- Roads
- Natural Sand Plains
- Utilities
- Townships

**General Information and Limitations**

- **Surveys and Information:**
  - Royal Ontario Provincial Survey Office
  - Survey Office 1 (SOI)
  - Survey Office 2 (SO2)

- **Mines and Mining Rights:**
  - Surface Rights Only
  - Mining Rights Only

- **Land Withdrawals:**
  - Area Withdrawn from Compensation

- **Land Tenure Withdrawals:**
  - Area Withdrawn from Compensation

**IMPORTANT NOTICES**

This map does not show all property boundaries, water bodies, or other natural features. It is intended for informational purposes only and may not be suitable for detailed land planning or location of property boundaries. Users are advised to consult the Ministry of Natural Resources for more detailed information.
**Work Report Summary**

**Transaction No:** W0440.00323  
**Recording Date:** 2004-FEB-27  
**Approval Date:** 2004-MAR-01  
**Status:** APPROVED  
**Work Done from:** 2003-FEB-11 to: 2003-FEB-16

**Client(s):**  
137052 MAPLE MINERALS CORP.

**Survey Type(s):** AEM

**Work Report Details:**

<table>
<thead>
<tr>
<th>Claim#</th>
<th>Perform</th>
<th>Perform Approve</th>
<th>Applied</th>
<th>Applied Approve</th>
<th>Assign</th>
<th>Assign Approve</th>
<th>Reserve</th>
<th>Reserve Approve</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>TB 3011095</td>
<td>$180</td>
<td>$180</td>
<td>$0</td>
<td>$0</td>
<td>$180</td>
<td>180</td>
<td>$0</td>
<td>$0</td>
<td>2005-JAN-22</td>
</tr>
<tr>
<td>TB 3011097</td>
<td>$463</td>
<td>$463</td>
<td>$0</td>
<td>$0</td>
<td>$463</td>
<td>463</td>
<td>$0</td>
<td>$0</td>
<td>2005-JAN-22</td>
</tr>
<tr>
<td>TB 3011099</td>
<td>$318</td>
<td>$318</td>
<td>$0</td>
<td>$0</td>
<td>$318</td>
<td>318</td>
<td>$0</td>
<td>$0</td>
<td>2005-JAN-22</td>
</tr>
<tr>
<td>TB 3011100</td>
<td>$308</td>
<td>$308</td>
<td>$3,200</td>
<td>$3,200</td>
<td>$0</td>
<td>0</td>
<td>$0</td>
<td>$0</td>
<td>2005-JAN-22</td>
</tr>
<tr>
<td>TB 3011101</td>
<td>$519</td>
<td>$519</td>
<td>$0</td>
<td>$0</td>
<td>$519</td>
<td>519</td>
<td>$0</td>
<td>$0</td>
<td>2005-JAN-22</td>
</tr>
<tr>
<td>TB 3011103</td>
<td>$147</td>
<td>$147</td>
<td>$0</td>
<td>$0</td>
<td>$147</td>
<td>147</td>
<td>$0</td>
<td>$0</td>
<td>2005-JAN-22</td>
</tr>
<tr>
<td>TB 3011104</td>
<td>$304</td>
<td>$304</td>
<td>$0</td>
<td>$0</td>
<td>$304</td>
<td>304</td>
<td>$0</td>
<td>$0</td>
<td>2005-JAN-22</td>
</tr>
<tr>
<td>TB 3011126</td>
<td>$255</td>
<td>$255</td>
<td>$0</td>
<td>$0</td>
<td>$255</td>
<td>255</td>
<td>$0</td>
<td>$0</td>
<td>2005-JAN-22</td>
</tr>
<tr>
<td>TB 3011128</td>
<td>$391</td>
<td>$391</td>
<td>$0</td>
<td>$0</td>
<td>$391</td>
<td>391</td>
<td>$0</td>
<td>$0</td>
<td>2005-JAN-22</td>
</tr>
<tr>
<td>TB 3011129</td>
<td>$216</td>
<td>$216</td>
<td>$0</td>
<td>$0</td>
<td>$216</td>
<td>216</td>
<td>$0</td>
<td>$0</td>
<td>2005-JAN-22</td>
</tr>
<tr>
<td>TB 3011131</td>
<td>$138</td>
<td>$138</td>
<td>$39</td>
<td>$39</td>
<td>$99</td>
<td>99</td>
<td>$0</td>
<td>$0</td>
<td>2005-JAN-22</td>
</tr>
</tbody>
</table>

**External Credits:** $0

**Reserve:** $0 Reserve of Work Report #: W0440.00323

---

$0 Total Remaining

Status of claim is based on information currently on record.
Dear Sir or Madam

Subject: Approval of Assessment Work

We have approved your Assessment Work Submission with the above noted Transaction Number(s). The attached Work Report Summary indicates the results of the approval.

At the discretion of the Ministry, the assessment work performed on the mining lands noted in this work report may be subject to inspection and/or investigation at any time.

If you have any question regarding this correspondence, please contact STEVEN BENETEAU by email at steve.beneteau@ndm.gov.on.ca or by phone at (705) 670-5855.

Yours Sincerely,

Ron C. Gashinski
Senior Manager, Mining Lands Section

Cc: Resident Geologist
Maple Minerals Corp.
(Claim Holder)

Robert Stuart Middleton
(Agent)

Assessment File Library
Maple Minerals Corp.
(Assessment Office)
Those wishing to stake mining claims should consult with the Provincial Mining Recorder's Office of the Ministry of Natural Resources for additional information on the status of the lands shown. This map may not show unregistered land tenure and interests in the lands shown. The information shown is derived from digital data available in the Provincial Mining Recorder's Office at the time of downloading from the Ministry of Northern Development and Mines website. For additional information, contact the Ministry of Natural Resources, Willet Green Miller Centre 933 Ramsey Lake Road Thunder Bay, ON P3E 2B5, Telephone 1 (888) 415-9845, Facsimile 570-3490, E-mail miningclaims@mnr.gov.on.ca. This map is not designed for navigational, survey, or land title purposes.

Important Notices:
- Land tenure withdrawals can be requested by writing to the Ministry of Natural Resources, Willet Green Miller Centre 933 Ramsey Lake Road Thunder Bay, ON P3E 2B5.
- Information on the status of the lands shown hereon is compiled from various sources. Completeness and accuracy are not guaranteed. Additional information may be obtained from the local Land Titles or Registry Office, or the Ministry of Natural Resources, Willet Green Miller Centre 933 Ramsey Lake Road Thunder Bay, ON P3E 2B5.
- The Information shown is derived from digital data available in the Provincial Mining Recorder's Office at the time of downloading from the Ministry of Northern Development and Mines website.

Date and Time of Issue: May 29, 2004 13:08:29 EST
Survey Specifications:
- Aircraft: Astar BA helicopter. Registration C-GLNE
- Nominal terrain clearance 80 metres
- EM sensor is 45 metres under helicopter

Instruments:
- Dream Catcher Time Domain Electromagnetic System, with concentric Rx/Tx geometry
- Geometrics G823A Optically-pumped, High Sensitivity Cesium Magnetometer
- Mag Resolution 0.02 nT at 10 samples/sec
- Navigation: Ashtech GG24 Board 4 Sensor, Update Rate 1 Hz

East West Resource Corporation
Burchell L, Kashabowie Area
Thunder Bay, Ontario

Dream Catcher TDEM System
Voltage Profiles
Channels z.205 - z.6330

Flown and processed by Geotech Ltd.
30 Industrial Parkway S.,
Aurora, Ontario, Canada L4G 3W2

March 2003