

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
1016 - 510 West Hastings Street
Vancouver, B.C. V6B 1L8

Telephone: 604-688-2568

Fax: 604-688-2578

ASSESSMENT REPORT

describing

VTEM GEOPHYSICAL SURVEYS

at the

GRAM PROPERTY

Gram 1-24 YC52446-YC52469

NTS 105M/14 and 105M/15
Latitude 63°56'N; Longitude 135°00'W

in the

Mayo Mining District
Yukon Territory

prepared by

Archer, Cathro & Associates (1981) Limited

for

YUKON GOLD CORPORATION, INC

by

W.A. Wengzynowski, P.Eng.
December 2007

TABLE OF CONTENTS

	<u>PAGE</u>
INTRODUCTION	1
PROPERTY, LOCATION, CLAIM STATUS AND ACCESS	1
GEOMORPHOLOGY	1
EXPLORATION HISTORY	2
GEOLOGICAL SETTING	2
MINERALIZATION	3
SOIL GEOCHEMISTRY	3
2007 GEOPHYSICAL SURVEYS	3
CONCLUSIONS AND RECOMMENDATIONS	4
REFERENCES	5

APPENDICES

- I STATEMENT OF QUALIFICATIONS
- II GEOTECH LTD. VTEM GEOPHYSICAL SURVEY

LIST OF FIGURES

<u>No.</u>	<u>Description</u>	<u>Following Page</u>
1	Property Location	1
2	Claim Location	1
3	Tectonic Setting	2
4	Compilation Map	3

INTRODUCTION

The Gram property was originally staked to cover a silver-lead vein occurrence. Exploration in 2007 was managed by Archer, Cathro & Associates (1981) Limited on behalf of property owner Yukon Gold Corporation, Inc. Previous work programs outlined multi-element base metal soil geochemical anomalies. Follow up prospecting failed to discover the source of much of the elevated soil geochemical response.

This report describes airborne geophysical surveys conducted by Geotech Ltd. on August 17 to 19, 2007 from a base at the Mayo airport. A total of 274 line-km were flown. Archer, Cathro & Associates (1981) Limited managed the program and provided some logistical support. The author supervised the program and his Statement of Qualifications appears in Appendix I.

PROPERTY LOCATION, CLAIM STATUS AND ACCESS

The Gram property consists of 24 contiguous mineral claims located in central Yukon. The claim block is approximately centred at latitude 63°56' north and longitude 135°00' west on NTS map sheets 105M/14 and 106M/15 (Figure 1).

The claims are registered with the Mayo Mining Recorder in the name of Yukon Gold Corporation, Inc. The locations of individual claims are shown on Figure 2 while claim registration data are summarized as follows.

<u>Claim Name</u>	<u>Grant Number</u>	<u>Expiry Date</u>
Gram 1-24	YC52446-YC52469	Sept. 7, 2007

The property is located 14 km east of the village of Keno City and the nearest highway access. The nearest supply centre is Mayo, approximately 58 km to the southwest. A four-wheel drive road extends from Keno City to within 2 km of the claim group. In 2007, crew and survey gear were mobilized and demobilized daily from Mayo. The survey was conducted with an Astar 350 B3 contracted from TRK Helicopters Ltd.

GEOMORPHOLOGY

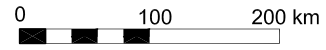
The Gram property straddles a low north facing ridge that lies east of Allen Creek. Elevations range from about 1780 m at the south end of the property to 1060 m at the north end.

Upper parts of the property are mantled with a thin veneer of frost-heaved felsenmeer and residual soils while lower elevations are covered with an unknown thickness of glacial till.

Treeline occurs at about 1200 m in this area so that the south central part of the property is only lightly vegetated with scrub brush and mosses. Lower elevations support a mixture of deciduous and evergreen forest with a thick understorey of willows in poorly drained areas. Permafrost is likely to be continuous over most of the property.

YUKON GOLD CORPORATION, INC.

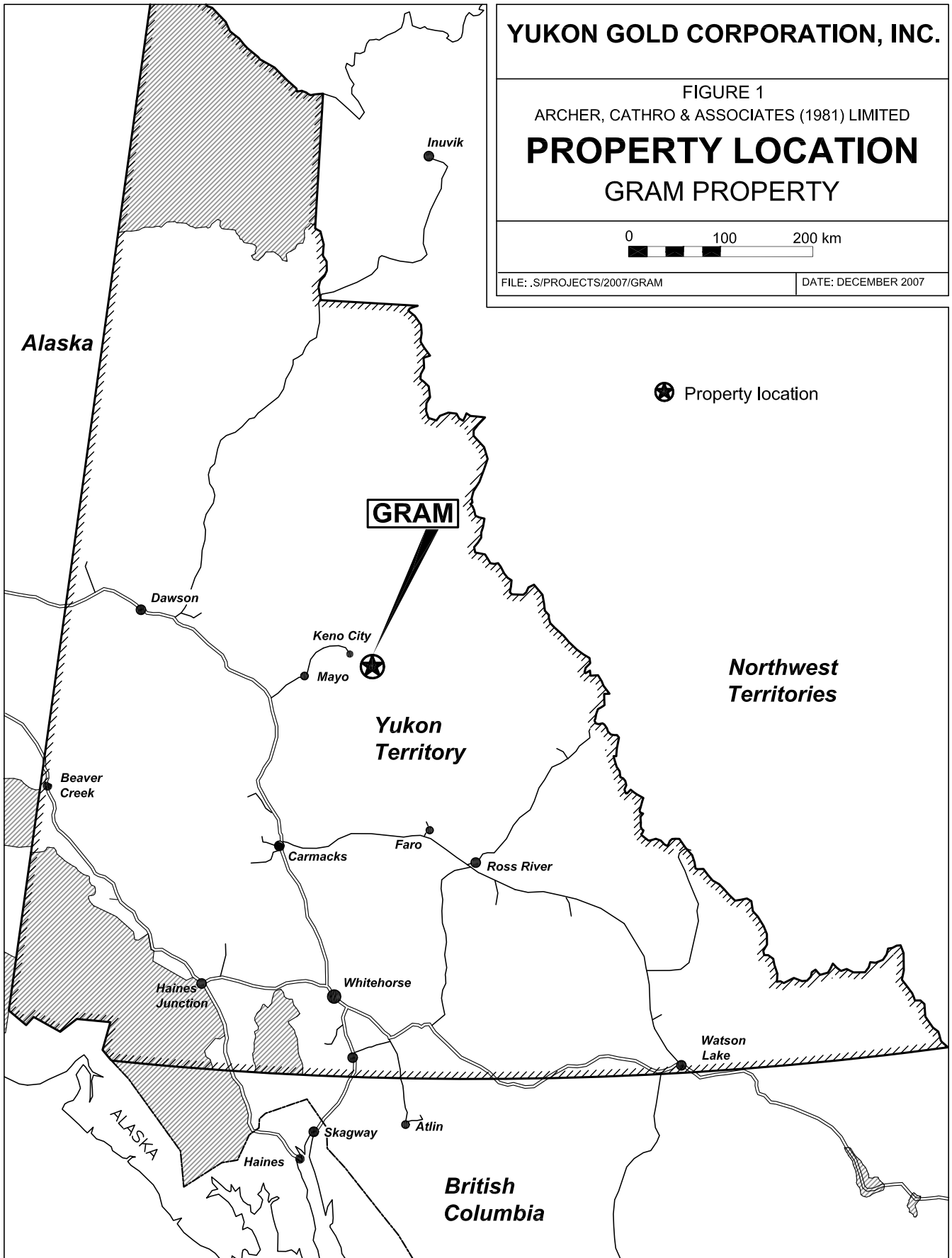
FIGURE 1
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
PROPERTY LOCATION
GRAM PROPERTY

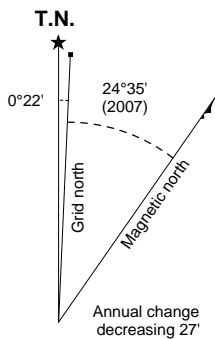
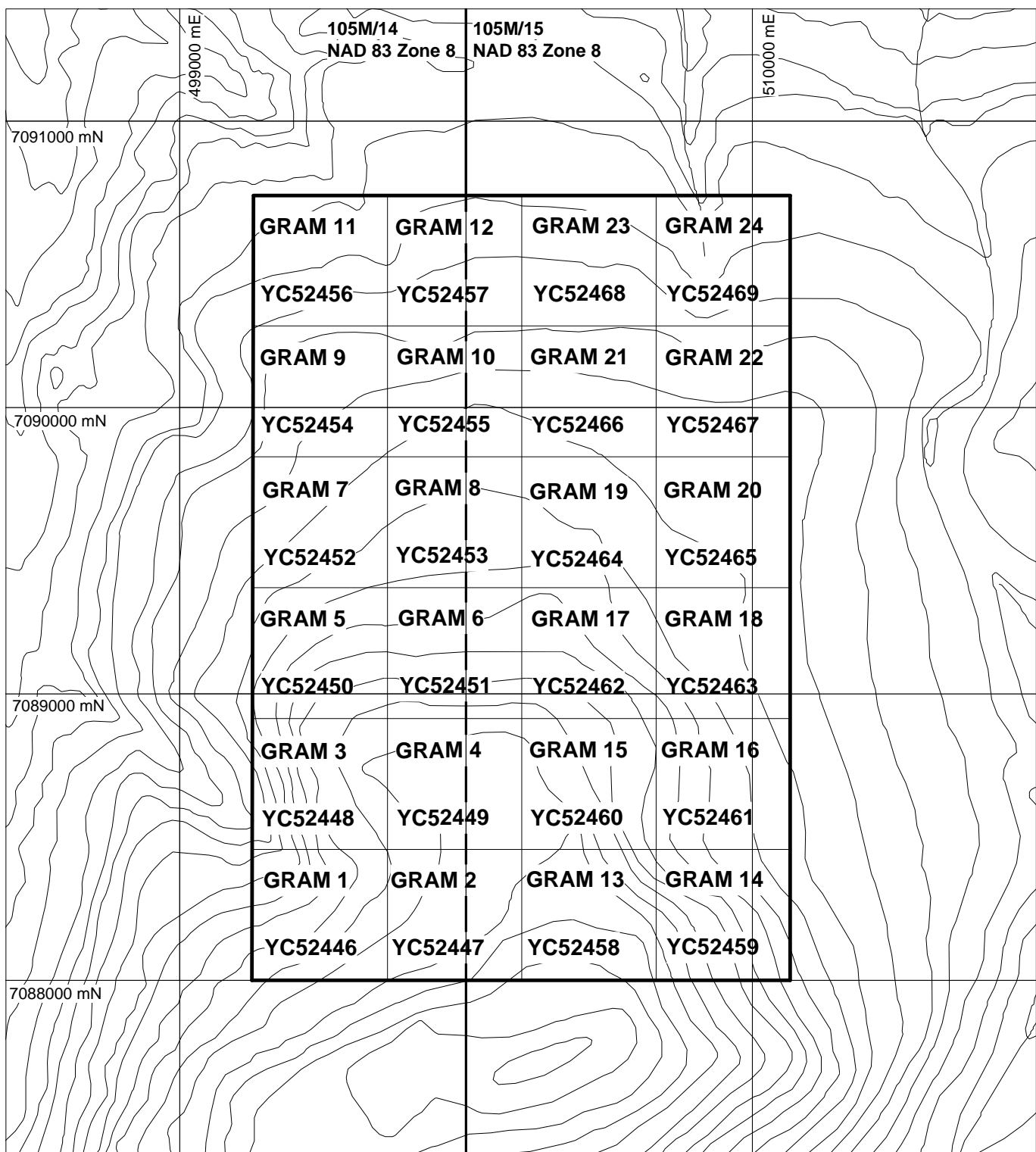


FILE: .S/PROJECTS/2007/GRAM

DATE: DECEMBER 2007

 Property location





YUKON GOLD CORPORATION, INC.

FIGURE 2
 ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
CLAIM LOCATION
GRAM PROPERTY

0 1,000 m

UTM Zone 8, NAD83, NTS 105M14 & 15

EXPLORATION HISTORY

The area of the Gram claims was first staked in 1965 by United Keno Hill Mines Ltd. to cover the apparent source areas of Total Heavy Metal stream sediment anomalies in McKim and Allen Creeks that were outlined by a Geological of Canada survey released earlier in the year. The property was explored with geological mapping and grid soil sampling in 1965 and with hand trenching in 1966 (Deklerk and Traynor, 2005). The property was restaked in 1996 but there is no public record of any exploration that might have been carried out at that time.

GEOLOGICAL SETTING

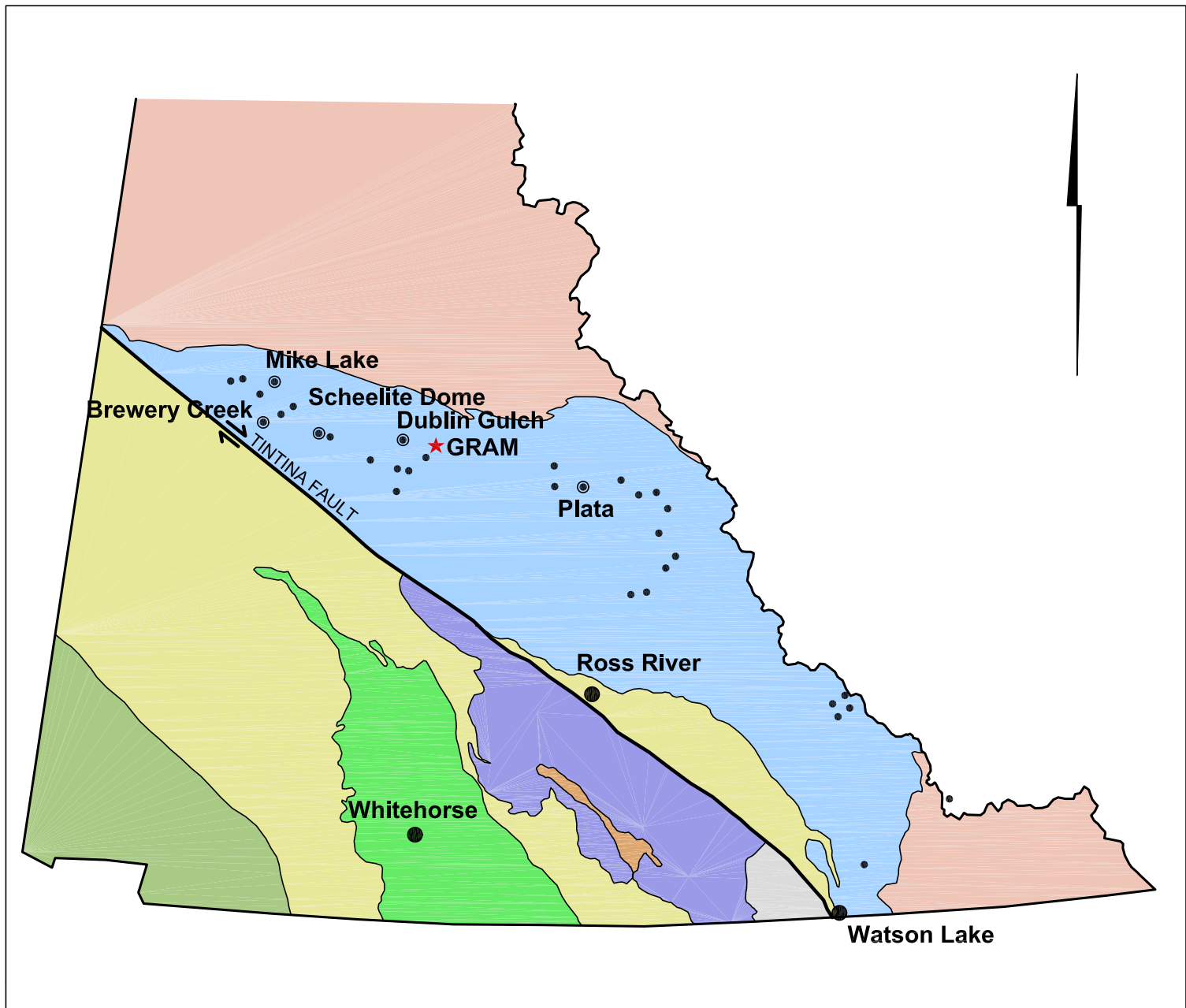
The region lies near the northern margin of Selwyn Basin, a region of deep-water off shelf sedimentation that persisted from late Precambrian to Middle Devonian time (Figure 3). The Gram property and the immediately adjacent areas of exploration interest lie within a sequence of south to southeast dipping strata that consist of intensely sheared and penetratively deformed lower to middle green schist facies Paleozoic metasedimentary and metavolcanic rocks. These are bracketed by two northerly directed regional scale thrust faults. Deformation, metamorphism and imbrication of the various tectonostratigraphic packages occurred during the Jurassic to Lower Cretaceous (190 to 120 million years ago).

The Paleozoic metamorphic package between the two thrust faults have been deformed by at least two, and locally, three phases of deformation (Turner and Abbott, 1990). The deformation varies in intensity with proximity to the major thrust faults (Gordey, 1990). The first and dominant phase of deformation (D1) is characterized by rodding and an intense mineral lineation, recumbent isoclinal folds and a strongly developed axial planar foliation. The second phase (D2) is an overprinting by upright, tight to isoclinal folds with steeply dipping, northerly trending axial planar cleavage (Turner and Abbott, 1990). A third phase of deformation (D3) consists of upright, open to tight, southwest-verging folds.












A pervasive, moderately south to southeast dipping foliation is the dominant fabric in ductile metasedimentary and metavolcanic rocks. In more resistant rocks, moderate to strong southeast plunging rodding or mineral lineation is present. Bedding cannot be traced for any appreciable distance in most rocks before it is disrupted by shears or dismembered fold limbs

The Gram property is underlain by the Middle to Late Devonian Earn Group and Early Carboniferous Keno Hill Quartzite (Roots, 1997). Earn Group rocks consist of carbonaceous phyllite, siliceous carbonaceous metasiltstone, rare calcareous greywacke and metaconglomerate. Keno Hill Quartzite consists of foliated dark grey quartzite and carbonaceous quartzite that are intercalated with a metavolcanic unit consisting of quartz+feldspar-phyric chloritic phyllite with thin limestone horizons.

The Roop Lake Stock, a composite pluton with granodiorite to quartz monzonite composition, lies 4 km southeast of the Gram property. The Roop Lake Stock is a member of the Mid-Cretaceous Tombstone Plutonic Suite.



TERRANE

- | | | | |
|--|----------------------|---|---|
|  | Quaternary |  | Significant Tombstone Gold Belt precious metal occurrence |
|  | Mackenzie Platform |  | Other Tombstone Gold Belt precious metal occurrence |
|  | Selwyn Basin |  | Property |
|  | Slide Mountain | | |
|  | Cassiar Platform | | |
|  | Yukon-Tanana Terrane | | |
|  | Intermontane | | |
|  | Insular | | |

YUKON GOLD CORPORATION, INC.

FIGURE 3

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

**TECTONIC SETTING
GRAM PROPERTY**



MINERALIZATION

United Keno Hill prospectors found a mineralized breccia or vein zone in an east west trending zone that cuts the host quartzite at a slight angle to bedding. Character grab samples returned values of 7.65% lead with 857 g/t silver and 0.21% lead with 446 g/t silver (Van Tassel, 1965)

SOIL GEOCHEMISTRY

The property was explored with grid soil sampling and prospecting by United Keno Hill in 1965. Colourometric determinations for copper, lead and zinc were carried out on the 3000 soil samples collected on the property. This work identified two nearby areas of moderate to strong lead geochemical response (up to 7100 ppm) in the central and south central parts of the property. Copper and zinc response was more subdued and widespread than the lead anomalies. A compilation of the historical geochemical data is presented in Figure 4.

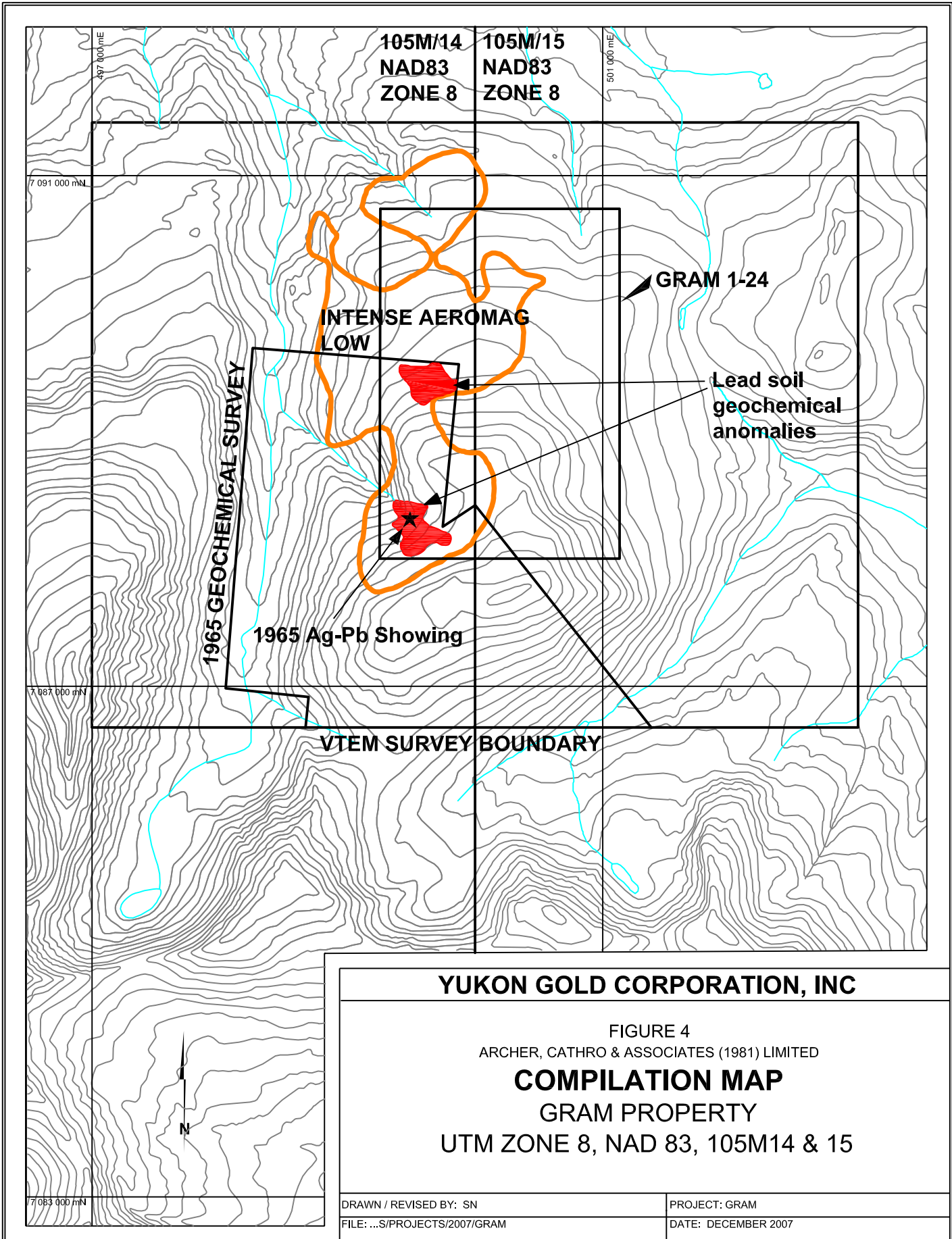
2007 GEOPHYSICAL SURVEYS

Geotech Ltd. of Ontario conducted helicopter-borne, Versatile Time Domain Electromagnetic (VTEM) and magnetic surveys over the property and adjacent areas on August 17, 18 and 19, 2007. A total of 274 line kilometres was flown. The VTEM system allows for deep penetration while maintaining high special resolution and resistivity discrimination. Principal geophysical sensors included a VTEM system and a high sensitivity cesium magnetometer. Ancillary equipment included a Global Positioning System (GPS) navigational system and a radar altimeter.

The block was flown at 100 m line spacing with two perpendicular tie lines 1000 m apart. Where possible, the helicopter maintained a terrain clearance of 85 m, which translated into an average height of 45 m above the ground for the VTEM system and 70 m for the magnetic sensor. Twenty-four measurement gates were used to record receiver decay in the range from 120 to 6578 microseconds. A three stage filtering process was used to reject major spheric events and to reduce system noise. The signal to noise ratio was further improved by the application of a low pass linear digital filter. The sensitivity of the magnetic sensor is 0.02 nanoTesla at a sampling interval of 0.1 seconds. Corrections for diurnal variation and tie line levelling were made during data processing.

Survey data and maps from Geotech are included as Appendix II. Data compilation and processing are scheduled to be carried out but the results were not available in time for inclusion into this report.

Preliminary examination of the data shows that electromagnetic response is variable over most of the property with broad, south dipping conductive zones that trend east-west. These most likely record conductivity contrasts between the various rock units underlying the survey area. The most remarkable result of the survey is an irregular, intense magnetic low that underlies the west part of the property, extending off the claim block to the west, south and north. Two of the most pronounced magnetic lows are over areas of strongest lead geochemical response. The third was not geochemically sampled in 1965. The magnetic lows are consistent with hydrothermal



YUKON GOLD CORPORATION, INC

FIGURE 4
 ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
COMPILATION MAP
 GRAM PROPERTY
 UTM ZONE 8, NAD 83, 105M14 & 15

DRAWN / REVISED BY: SN
 FILE: ...S\PROJECTS\2007\GRAM

PROJECT: GRAM
 DATE: DECEMBER 2007

alteration possibly associated with veining that hosts the silver-lead mineralization found by prospecting in 1965. Additional prospecting and geochemical surveys will be required to test for the presence of significant base or precious metal mineralization on the property and environs.

CONCLUSIONS AND RECOMMENDATIONS

Two areas of anomalous lead geochemical response have been outlined by previous work on the Gram property. Initial follow-up prospecting discovered argentiferous lead vein or breccia mineralization in one of the anomalous areas. No analyses were carried out for gold or common gold pathfinder elements. The VTEM survey carried out over the same area in 2007 did not outline any zones of anomalous conductivity but an intense magnetic low underlies the areas of the lead soil geochemical anomalies as well as unsampled areas. The magnetic low lies only 4 km from the Roop Lakes Stock, a Mid-Cretaceous Tombstone Suite composite granitic pluton. Sediment hosted gold deposits elsewhere in the Tombstone Gold Belt are characterized by intense magnetic lows. Additional work is warranted on the property to test for this exploration model. The full extent of the magnetic anomaly should be staked and the entire property should be explored with prospecting and grid soil sampling to be followed by diamond drilling if results of that work are positive.

Respectfully submitted,

ARCHER, CATHRO AND ASSOCIATES (1981) LIMITED.

W.A. Wengzynowski, P.Eng.

REFERENCES

- Deklerk, R. and Traynor, S.
2005 Yukon MINFILE 2005 - a database of mineral occurrences, Yukon Geological Survey; available at <http://www.geology.gov.yk.ca/minfile/index.html>
- Gordey, S. P.
1990 Geology and mineral potential, Tiny Island Lake map area, Yukon; in Current Research, Part E, Geological Survey of Canada Paper 90-1E, p. 23-29.
- Hunt, J.A.
2002 Volcanic-associated massive sulphide (VMS) mineralization in the Yukon-Tanana Terrane and coeval strata of the North American miogeocline, in the Yukon and adjacent areas. Exploration and geological Services Division, Yukon Region, Indian and Northern Affairs Canada, Bulletin 12, 107 p.
- Turner, R. J. W. and Abbott, G.
1990 Regional setting, structure, and zonation of the Marg volcanogenic massive sulphide deposit, Yukon; in Current Research, Part E, Geological Survey of Canada, Paper 90-1E, p. 31-41.
- Roots, C.F.
1997 Bedrock geology of Mayo map area, central Yukon (105M). Exploration and Geological Services Division, Indian and Northern Affairs Canada, Geoscience Map 1997-1, 1:250,000 scale.
- Van Tassel, R.E.
1965 Geological and geochemical report on the VU claim group, Assessment Report 019028

APPENDIX I
STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

I, William A. Wengzynowski, geological engineer, with business addresses in Vancouver, British Columbia and Whitehorse, Yukon Territory and residential address at 301 Fairway Drive, North Vancouver, British Columbia, V7G 1L4 do hereby certify that:

1. I am President of Archer, Cathro & Associates (1981) Limited.
2. I graduated from the University of British Columbia in 1993 with a B.A.Sc in Geological Engineering, Option 1, mineral and fuel exploration.
3. I registered as a Professional Engineer in the Province of British Columbia on December 12, 1998 (Licence Number 24119).
4. From 1983 to present, I have been actively engaged in mineral exploration in the Yukon Territory, Northwest Territories, northern British Columbia and Mexico.
5. I have personally participated in and supervised the fieldwork reported herein.

William A. Wengzynowski, P. Eng.

Yukon Gold Corp.

Gram Claims

Statement of Expenditures 2007



1-24 Gram Claims, Grant # YC52446 to YC52469 inclusive located in th Mayo Mining District near Keno City, NTS Sheets 105M/15 and 105M/16.

Yukon Gold Corp commissioned Geotech Ltd of Aurora, Ontario to fly a Versatile Time-Domain Electromagnetic (VTEM) geophysical survey over the property. The survey took about four days to fly and was completed by 24th August 2007. A total of 327 line kilometres were flown and the survey covered 28.5 km². The area covered exceeds the claim area because of the minimum flight line length requirement.

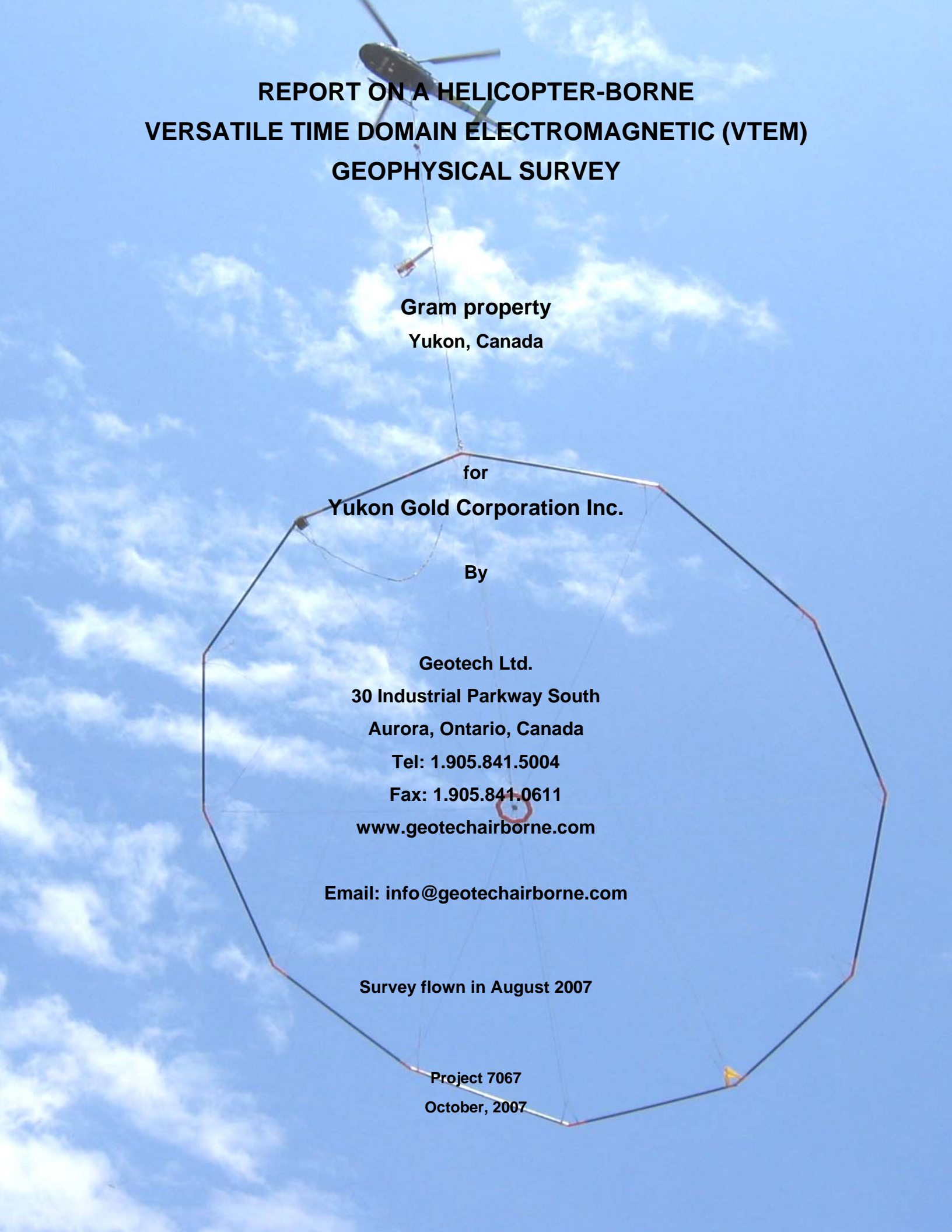
The contract with Geotech Ltd, requires Yukon Gold Corp to pay Geotech Ltd in excess of \$48,000 for this survey.

A handwritten signature in black ink, appearing to be 'Stew Fumerton'.

Stew Fumerton, Ph.D., P.Geo
VP Exploration
Yukon Gold Corp



APPENDIX II
GEO TECH LTD. VTEM GEOPHYSICAL SURVEY



**REPORT ON A HELICOPTER-BORNE
VERSATILE TIME DOMAIN ELECTROMAGNETIC (VTEM)
GEOPHYSICAL SURVEY**

**Gram property
Yukon, Canada**

**for
Yukon Gold Corporation Inc.**

By

**Geotech Ltd.
30 Industrial Parkway South
Aurora, Ontario, Canada
Tel: 1.905.841.5004
Fax: 1.905.841.0611
www.geotechairborne.com**

Email: info@geotechairborne.com

Survey flown in August 2007

**Project 7067
October, 2007**

TABLE OF CONTENTS

Executive Summary	3
1. INTRODUCTION	4
1.1 <i>General Considerations</i>	4
1.2 <i>Survey and System Specifications</i>	4
1.3 <i>Data Processing and Final Products</i>	5
1.4 <i>Topographic Relief and cultural features</i>	5
2. DATA ACQUISITION	6
2.1 <i>Survey Area</i>	6
2.2 <i>Survey Operations</i>	6
2.3 <i>Flight Specifications</i>	7
2.4 <i>Aircraft and Equipment</i>	8
2.4.1 <i>Survey Aircraft</i>	8
2.4.2 <i>Electromagnetic System</i>	8
2.4.3 <i>Airborne magnetometer</i>	10
2.4.4 <i>Ancillary Systems</i>	10
2.4.4.1 <i>Radar Altimeter</i>	10
2.4.4.2 <i>GPS Navigation System</i>	10
2.4.4.3 <i>Digital Acquisition System</i>	11
2.4.5 <i>Base Station</i>	11
3. PERSONNEL	12
4. DATA PROCESSING AND PRESENTATION	13
4.1 <i>Flight Path</i>	13
4.2 <i>Electromagnetic Data</i>	13
4.3 <i>Magnetic Data</i>	14
5. DELIVERABLES	15
5.1 <i>Survey Report</i>	15
5.2 <i>Maps</i>	15
5.3 <i>Digital Data</i>	15
6. CONCLUSIONS	19

APPENDICES

A. Survey block location map	20
B. Survey block coordinates	22
C. Modeling VTEM data	23
D. VTEM Waveform	24

REPORT ON A HELICOPTER-BORNE VERSATILE TIME DOMAIN ELECTROMAGNETIC SURVEY

Gram property, Yukon, Canada

Executive Summary

This report describes the Helicopter-borne geophysical survey carried out on behalf of Yukon Gold Corporation Inc. by Geotech Ltd. over one block in Yukon, Canada.

Principal geophysical sensors included a versatile time domain electromagnetic (VTEM) system and a cesium magnetometer. Ancillary equipment included a GPS navigation system and a radar altimeter. A total of 274 line-km were flown.

In-field data processing involved quality control and compilation of data collected during the acquisition stage, using the in-field processing centre established in Mayo, Yukon. Preliminary and final data processing, including generation of final digital data products were done at the office of Geotech Ltd. in Aurora, Ontario.

The processed survey results are presented as electromagnetic stacked profiles and total magnetic intensity grid.

Digital data includes all electromagnetic and magnetic products plus positional, altitude and raw data.

1. INTRODUCTION

1.1 *General Considerations*

These services are the result of the Agreement made between Geotech Ltd. and Archer Cathro & Associates to perform a helicopter-borne geophysical survey over one block located in Yukon, Canada.

274 line-km of geophysical data were acquired during the survey.

Bill Wengzynowski acted on behalf of Yukon Gold Corporation Inc. during data acquisition and data processing phases of this project.

The survey block is as shown in Appendix A.

The crew was based in Mayo, Yukon for the acquisition phase of the survey, as shown in Section 2 of this report.

The helicopter was based at the Mayo, airport for the duration of the survey. Survey flying was completed on August 19th, 2007. Preliminary data processing was carried out daily during the acquisition phase of the project. Final data presentation and data archiving was completed in the Aurora office of Geotech Ltd. in October, 2007.

1.2. *Survey and System Specifications*

The survey block was flown at nominal traverse line spacing of 100 metres, at N0°E / N180°W direction. Tie lines were flown perpendicular to traverse lines.

Where possible, the helicopter maintained a mean terrain clearance of 85 metres, which translated into an average height of 45 metres above ground for the bird-mounted VTEM system and 70 metres for the magnetic sensor.

The survey was flown using an Astar B3 helicopter, registration C-GTFX. The helicopter was operated by TRK helicopters. Details of the survey specifications may be found in Section 2 of this report.

1.3. Data Processing and Final Products

Data compilation and processing were carried out by the application of Geosoft OASIS Montaj and programs proprietary to Geotech Ltd.

A database, grids and maps of final products were presented to Yukon Gold Corporation Inc.

The survey report describes the procedures for data acquisition, processing, final image presentation and the specifications for the digital data set.

1.4. Topographic Relief and cultural features

The survey block is located in Yukon, approximately 58 kilometers north-east of the town of Mayo.

Topographically, the survey area exhibits a challenging terrain, with elevation range from 1060 metres to 1920 metres above sea level. The area sits upon the north-easterly portion of Mount Hinton.



2. DATA ACQUISITION

2.1. Survey Area

The survey block (see location map, Appendix A) and general flight specifications are as follows:

Survey block	Line spacing (m)	Area (Km ²)	Line-km	Flight direction	Line number
GRAM	100	24	244	N0°E / N180°W	L5010 - L5610
	1000		30	N90°E / N270°W	T5910 - T5930

Table 1 - Survey block

Survey block boundaries co-ordinates are provided in Appendix B.

2.2. Survey Operations

Survey operations were based in Mayo, Yukon for the acquisition phase of the survey.

The following table shows the timing of the flying.

Date	Flight #	Flown KM	Block	Crew Location	Comments
17-Aug-07	56-58	160	GRAM	Mayo, Yukon	Production
18-Aug-07	59	49	GRAM	Mayo, Yukon	Production- aborted, bad weather
19-Aug-07	60	65	GRAM	Mayo, Yukon	Block finished

Table 2 - Survey schedule

2.3. Flight Specifications

The nominal EM sensor terrain clearance was 45 m (EM bird height above ground, i.e. helicopter is maintained 85 m above ground) due to rough terrain and helicopter crew safety. Nominal survey speed was 80 km/hour. The data recording rates of the data acquisition was 0.1 second for electromagnetics and magnetometer, 0.2 second for altimeter and 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, tracking the times of the flight as well as any unusual geophysical or topographic feature.

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

2.4. Aircraft and Equipment

2.4.1. Survey Aircraft

An Astar B3 helicopter, registration C-GTFX - owned and operated by TRK Helicopters Ltd. - was used for the survey. Installation of the geophysical and ancillary equipment was carried out by Geotech Ltd.

2.4.2. Electromagnetic System

The electromagnetic system was a Geotech Time Domain EM (VTEM) system. The configuration is as indicated in Figure 1 below.

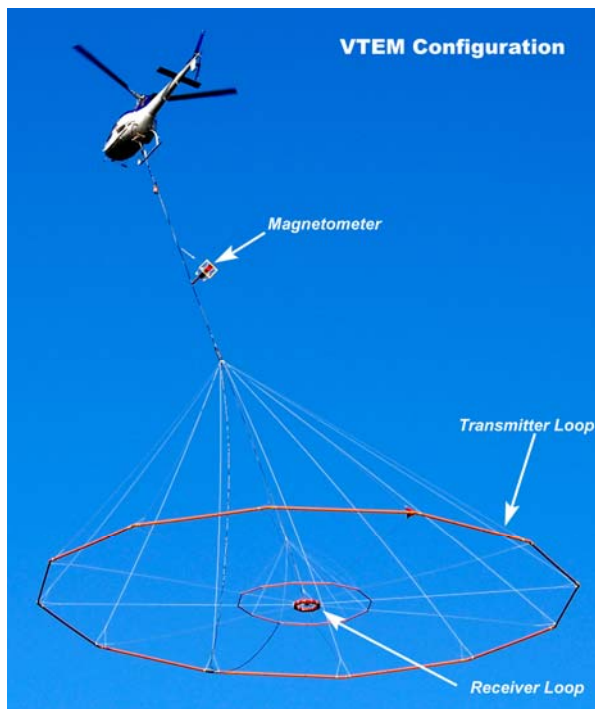


Figure 1 – VTEM configuration

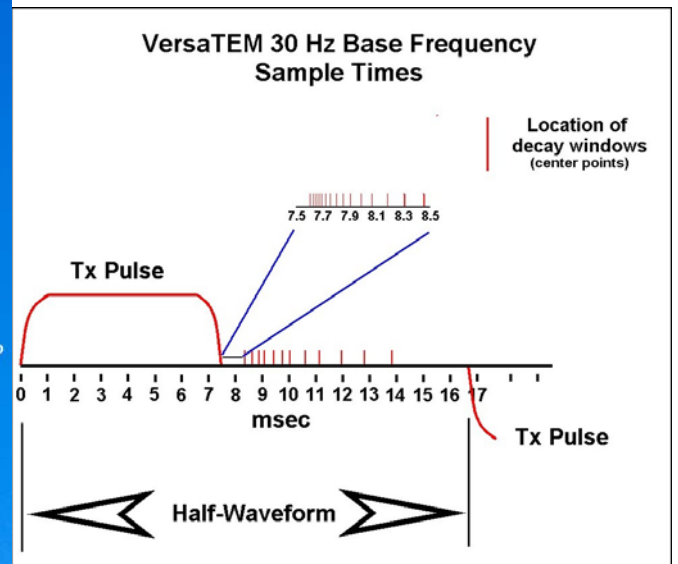


Figure 2 – Sample times

Receiver and transmitter coils are concentric and Z-direction oriented.
 The receiver decay recording scheme is shown diagrammatically in Figure 2.

Twenty-four measurement gates were used in the range from 120 μ s to 6578 μ s, as shown in Table 3.

VTEM Decay Sampling scheme				
Array Index	(Microseconds)			
	Time Gate	Start	End	Width
10	120	110	131	21
11	141	131	154	24
12	167	154	183	29
13	198	183	216	34
14	234	216	258	42
15	281	258	310	53
16	339	310	373	63
17	406	373	445	73
18	484	445	529	84
19	573	529	628	99
20	682	628	750	123
21	818	750	896	146
22	974	896	1063	167
23	1151	1063	1261	198
24	1370	1261	1506	245
25	1641	1506	1797	292
26	1953	1797	2130	333
27	2307	2130	2526	396
28	2745	2526	3016	490
29	3286	3016	3599	583
30	3911	3599	4266	667
31	4620	4266	5058	792
32	5495	5058	6037	979
33	6578	6037	7203	1167

Table 3 - VTEM decay sampling scheme

Transmitter coil diameter was 26 metres, the number of turns was 4.
Transmitter pulse repetition rate was 30 Hz.
Peak current was 192 Amp.
Pulse width was 7.13 ms
Duty cycle was 43%.
Peak dipole moment was 424,400 NIA.

Receiver coil diameter was 1.2 metre, the number of turns was 100.
Receiver effective area was 113.1 m²
Wave form – trapezoid.
Recording sampling rate was 10 samples per second.

The EM bird was towed 42 m below the helicopter.

2.4.3. Airborne magnetometer

The magnetic sensor utilized for the survey was a Geometrics optically pumped cesium vapour magnetic field sensor, mounted in a separated bird, towed 15 metres below the helicopter, as shown on figure 1. The sensitivity of the magnetic sensor is 0.02 nanoTesla (nT) at a sampling interval of 0.1 seconds. The magnetometer sends the measured magnetic field strength as nanoTeslas to the data acquisition system via the RS-232 port.

2.4.4. Ancillary Systems

2.4.4.1. 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.

2.4.4.2. GPS Navigation System

The navigation system used was a Geotech PC based navigation system utilizing a NovAtel's WAAS enable OEM4-G2-3151W GPS receiver, Geotech navigate software, a full screen display with controls in front of the pilot to direct the flight and an NovAtel GPS antenna mounted on the helicopter tail.

The co-ordinates of the block were set-up prior to the survey and the information was fed into the airborne navigation system.

2.4.4.3. 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. The data type and sampling interval as provided in table 4.

DATA TYPE	SAMPLING
TDEM	0.1 sec
Magnetometer	0.1 sec
GPS Position	0.2 sec
RadarAltimeter	0.2 sec

Table 4 - Sampling Rates

2.4.5. Base Station

A combine magnetometer/GPS base station was utilized on this project. A Geometrics 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 100 metres from the airport in Mayo, 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.

3. PERSONNEL

The following Geotech Ltd. personnel were involved in the project:

Field

Project Manager:	Harish Kumar
Operator:	Ioan Serbu
Crew chief / QC Geophysicist:	Sean Hayes

The survey pilot and the mechanic engineer were employed directly by the helicopter operator – TRK Helicopters Ltd.

Pilot:	Roy Stevenson
Engineer:	Darren Shipman Jeff Nagey

Office

Data Processing / Reporting:	George Lev
Data Technician:	Maria Jagodkin

Data acquisition and processing phases were carried out under the supervision of Andrei Bagrianski, Surveys Manager. Overall management of the project was undertaken by Edward Morrison, President, Geotech Ltd.

4. DATA PROCESSING AND PRESENTATION

4.1. *Flight Path*

The flight path, recorded by the acquisition program as WGS 84 latitude/longitude, was converted into the UTM coordinate 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).

4.2. *Electromagnetic Data*

A three stage digital filtering process was used to reject major spheric events and to reduce system noise. Local spheric 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 spheric 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 time gates, in linear - logarithmic scale for both B-field and dB/dt response.

Generalized modeling results of the VTEM system, written by Geophysicist Roger Barlow, are shown in Appendix C.

Graphical representation of the VTEM output voltage of the receiver coil and the transmitter current is shown in Appendix D.

4.3. Magnetic Data

The processing of the magnetic data involved the correction for diurnal variations by using the digitally recorded ground base station magnetic values. 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.

A micro-levelling procedure was applied to remove persistent low-amplitude components of flight-line noise remaining in the data. Where Tie lines were available, Tie line levelling was carried out by adjusting intersection points along the traverse lines.

The corrected magnetic data 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 0.1 cm at the mapping scale. The Minimum Curvature algorithm was used to interpolate values onto a rectangular regular spaced grid.

Due to a very rugged topography, the helicopter could not maintain a constant terrain clearance. Thus, significant altitude differences occurred in adjacent lines and resulted in variations of the geophysical data. Efforts were made to level the geophysical signal as much as possible, but in several cases levelling would have been meaningless as it would create an artificial signal not relevant to real situation.

5. DELIVERABLES

5.1. *Survey Report*

The survey report describes the data acquisition, processing, and final presentation of the survey results.

The survey report is provided in two paper copies and digitally in PDF format.

5.2. *Maps*

Final maps were produced at a scale of 1:10,000. The coordinate/projection system used was the WGS84, UTM zone 8N. All maps show the flight path trace and topographic data. Latitude and longitude are also noted on maps.

The following maps are presented on paper,

- dB/dt profiles, Time Gates 0.234 – 6.578 ms in linear - logarithmic scale
- B-field profiles, Time Gates 0.234 – 6.578 ms in linear - logarithmic scale
- Total Magnetic intensity contours and colour image

5.3. *Digital Data*

Two copies of DVDs were prepared.

There are two (2) main directories,

Data contains a database, grids and maps, as described below.

Report contains a copy of the report and appendices in PDF format.

a kmz file containing flightpath of the GRAM property.

A free version of Google Earth software can be downloaded from,
<http://earth.google.com/download-earth.html>

- Database in Geosoft GDB format, containing the following channels:

X:	X positional data (metres – WGS84, utm zone 8 north)
Y:	Y positional data (metres – WGS84, utm zone 8 north)
Lon:	Longitude data (degree – WGS84)
Lat:	Latitude data (degree – WGS84)
Z:	GPS antenna elevation (metres - ASL)
Radar:	Helicopter terrain clearance from radar altimeter (metres - AGL)
DEM:	Digital elevation model (metres)
Gtime1:	GPS time (seconds of the day)
Mag1:	Raw Total Magnetic field data (nT)
Basemag:	Magnetic diurnal variation data (nT)
Mag2:	Total Magnetic field diurnal variation corrected data (nT)
Mag3:	Leveled Total Magnetic field data (nT)
SF[10]:	dB/dt 120 microsecond time channel ($pV/A/m^4$)
SF[11]:	dB/dt 141 microsecond time channel ($pV/A/m^4$)
SF[12]:	dB/dt 167 microsecond time channel ($pV/A/m^4$)
SF[13]:	dB/dt 198 microsecond time channel ($pV/A/m^4$)
SF[14]:	dB/dt 234 microsecond time channel ($pV/A/m^4$)
SF[15]:	dB/dt 281 microsecond time channel ($pV/A/m^4$)
SF[16]:	dB/dt 339 microsecond time channel ($pV/A/m^4$)
SF[17]:	dB/dt 406 microsecond time channel ($pV/A/m^4$)
SF[18]:	dB/dt 484 microsecond time channel ($pV/A/m^4$)
SF[19]:	dB/dt 573 microsecond time channel ($pV/A/m^4$)
SF[20]:	dB/dt 682 microsecond time channel ($pV/A/m^4$)
SF[21]:	dB/dt 818 microsecond time channel ($pV/A/m^4$)
SF[22]:	dB/dt 974 microsecond time channel ($pV/A/m^4$)
SF[23]:	dB/dt 1151 microsecond time channel ($pV/A/m^4$)
SF[24]:	dB/dt 1370 microsecond time channel ($pV/A/m^4$)
SF[25]:	dB/dt 1641 microsecond time channel ($pV/A/m^4$)
SF[26]:	dB/dt 1953 microsecond time channel ($pV/A/m^4$)
SF[27]:	dB/dt 2307 microsecond time channel ($pV/A/m^4$)
SF[28]:	dB/dt 2745 microsecond time channel ($pV/A/m^4$)
SF[29]:	dB/dt 3286 microsecond time channel ($pV/A/m^4$)
SF[30]:	dB/dt 3911 microsecond time channel ($pV/A/m^4$)
SF[31]:	dB/dt 4620 microsecond time channel ($pV/A/m^4$)
SF[32]:	dB/dt 5495 microsecond time channel ($pV/A/m^4$)
SF[33]:	dB/dt 6578 microsecond time channel ($pV/A/m^4$)
BF[10]:	B-field 120 microsecond time channel ($pV*ms)/(A*m^4$)
BF[11]:	B-field 141 microsecond time channel ($pV*ms)/(A*m^4$)
BF[12]:	B-field 167 microsecond time channel ($pV*ms)/(A*m^4$)
BF[13]:	B-field 198 microsecond time channel ($pV*ms)/(A*m^4$)

BF[14]: B-field 234 microsecond time channel (pV*ms)/(A*m4)
 BF[15]: B-field 281 microsecond time channel (pV*ms)/(A*m4)
 BF[16]: B-field 339 microsecond time channel (pV*ms)/(A*m4)
 BF[17]: B-field 406 microsecond time channel (pV*ms)/(A*m4)
 BF[18]: B-field 484 microsecond time channel (pV*ms)/(A*m4)
 BF[19]: B-field 573 microsecond time channel (pV*ms)/(A*m4)
 BF[20]: B-field 682 microsecond time channel (pV*ms)/(A*m4)
 BF[21]: B-field 818 microsecond time channel (pV*ms)/(A*m4)
 BF[22]: B-field 974 microsecond time channel (pV*ms)/(A*m4)
 BF[23]: B-field 1151 microsecond time channel (pV*ms)/(A*m4)
 BF[24]: B-field 1370 microsecond time channel (pV*ms)/(A*m4)
 BF[25]: B-field 1641 microsecond time channel (pV*ms)/(A*m4)
 BF[26]: B-field 1953 microsecond time channel (pV*ms)/(A*m4)
 BF[27]: B-field 2307 microsecond time channel (pV*ms)/(A*m4)
 BF[28]: B-field 2745 microsecond time channel (pV*ms)/(A*m4)
 BF[29]: B-field 3286 microsecond time channel (pV*ms)/(A*m4)
 BF[30]: B-field 3911 microsecond time channel (pV*ms)/(A*m4)
 BF[31]: B-field 4620 microsecond time channel (pV*ms)/(A*m4)
 BF[32]: B-field 5495 microsecond time channel (pV*ms)/(A*m4)
 BF[33]: B-field 6578 microsecond time channel (pV*ms)/(A*m4)
 PLM: Power line monitor

Electromagnetic B-field and dB/dt data is found in array channel format between indexes 10 – 33, as described above.

- Database 7067GRAM_wform.gdb in Geosoft GDB format, containing the following channels:

Time: Sampling rate interval, 10.416 microseconds
 Volt: output voltage of the receiver coil (volt)

- Grids in Geosoft GRD format, as follow,

Gram_magfin: Total magnetic intensity (nT)
 Gram_DEM: Digital elevation model (m)

A Geosoft .GRD file has a .GI metadata file associated with it, containing grid projection information.

Grid cell size of 10 metres was used.

- Maps at 1:10,000 scale in Geosoft MAP format, as follow,

Gram_Magfin: Total magnetic intensity contours and colour image
 Gram_dBdt: VTEM dB/dt profiles, Time Gates 0.234 – 6.578 ms
 in linear - logarithmic scale
 Gram_EMLP: VTEM B-field profiles, Time Gates 0.234 – 6.578 ms
 in linear - logarithmic scale

- A *readme.txt* file describing the content of digital data, as described above.

6. CONCLUSIONS

A helicopter-borne versatile time domain electromagnetic (VTEM) geophysical survey has been completed over the GRAM property, located in Yukon, Canada.

The total area coverage is 11.24 km². Total survey line coverage is 274 line kilometres. The principal sensors included a Time Domain EM system and a magnetometer. Results have been presented as stacked profiles and contour colour images at a scale of 1:10,000.

Final data processing at the office of Geotech Ltd. in Aurora, Ontario was carried out under the supervision of Andrei Bagrianski, Surveys Manager.

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

Respectfully submitted,

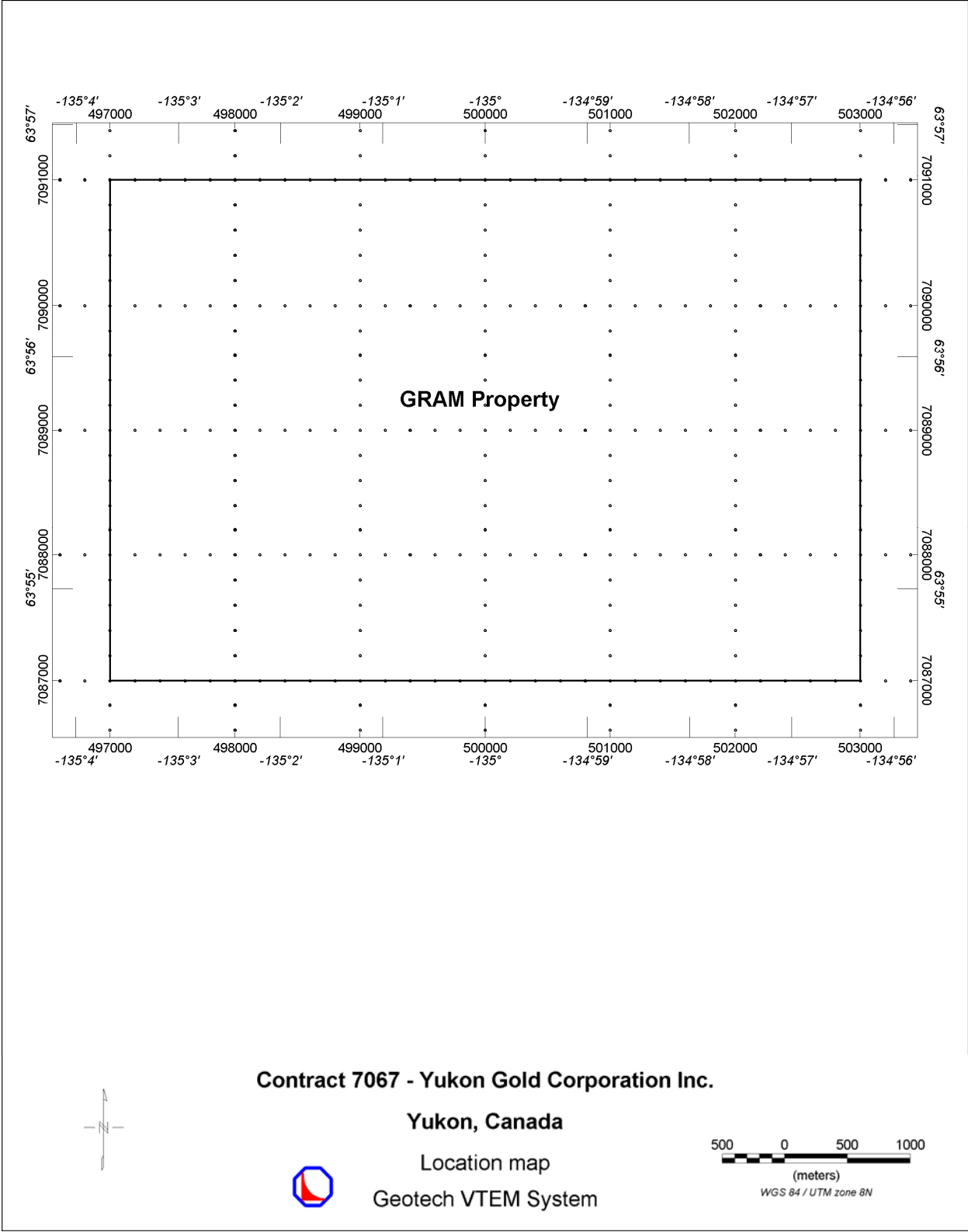
George Lev
Geotech Ltd.
October, 2007



APPENDIX A

SURVEY BLOCK LOCATION MAP





APPENDIX B

SURVEY BLOCK COORDINATES (WGS 84, UTM zone 8 north)

GRAM PROPERTY

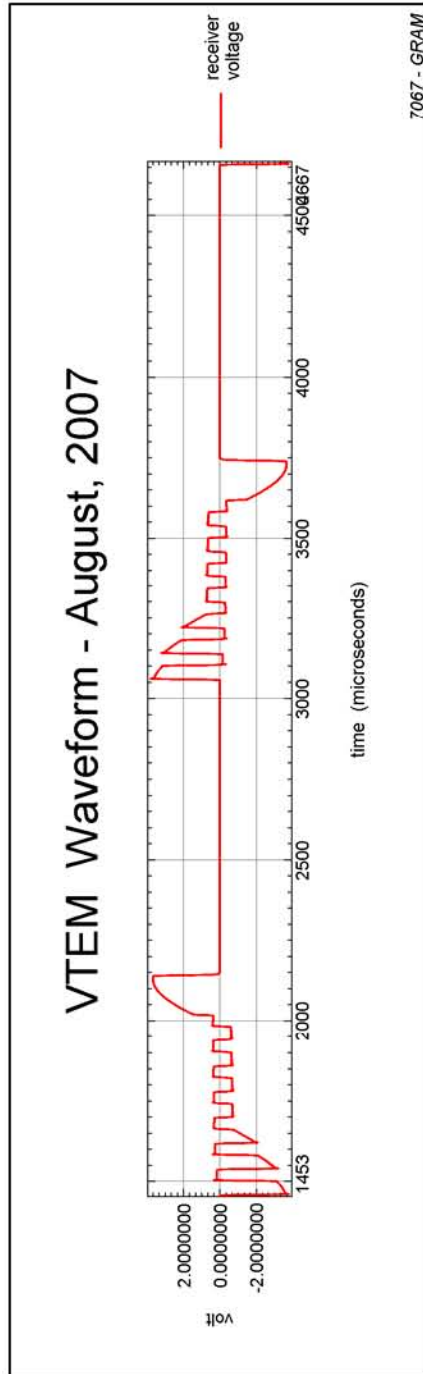
Easting	Northing
x	y
503000	7091000
503000	7087000
497000	7087000
497000	7091000

APPENDIX C

MODELING VTEM DATA

APPENDIX D

VTEM WAVEFORM



MODELING VTEM DATA

Introduction

The VTEM system is based on a concentric or central loop design, whereby, the receiver is positioned at the centre of a 26.1 meters diameter transmitter loop that produces a dipole moment up to 625,000 NIA at peak current. The wave form is a bi-polar, modified square wave with a turn-on and turn-off at each end. With a base frequency of 30 Hz, the duration of each pulse is approximately 7.5 milliseconds followed by an off time where no primary field is present.

During turn-on and turn-off, a time varying field is produced (dB/dt) and an electro-motive force (emf) is created as a finite impulse response. A current ring around the transmitter loop moves outward and downward as time progresses. When conductive rocks and mineralization are encountered, a secondary field is created by mutual induction and measured by the receiver at the centre of the transmitter loop.

Measurements are made during the off-time, when only the secondary field (representing the conductive targets encountered in the ground) is present.

Late in 2006, Geotech Ltd. incorporated a B-Field measurement in the VTEM system. The B-Field measurements have the advantage of containing more spectral energy at low spectral frequencies than the dB/dt measurements; hence, greater amplitudes and accuracies when encountering targets with higher conductances (> 500 Siemens). The converse is true at higher spectral frequencies where dB/dt measurements are best applied. The B-field is most widely used in nickel exploration where a small percentage of targets are extremely conductive (> 2500 Siemens) and less resolvable or invisible (below the noise threshold) using dB/dt measurements.

Efficient modeling of the results can be carried out on regularly shaped geometries, thus yielding close approximations to the parameters of the measured targets. The following is a description of a series of common models made for the purpose of promoting a general understanding of the measured results.

Variation of Plate Depth

Geometries represented by plates of different strike length, depth extent, dip, plunge and depth below surface can be varied with characteristic parameters like conductance of the target, conductance of the host and conductivity/thickness and thickness of the overburden layer.

Diagrammatic models for a vertical plate are shown in figures A and G at two different depths, all other parameters remaining constant. With this transmitter-receiver geometry, the classic **M** shaped response is generated. Figure A shows a plate where the top is near surface. Here, amplitudes of the dual peaks are higher and symmetrical with the zero centre positioned directly above the plate. Most important is the separation distance of the peaks. This distance is small when the plate is near surface and widens with a linear relationship as the plate (depth to top) increases. Figure G shows a much deeper plate where the separation distance of the peaks is much wider and the amplitudes of the channels have decreased.

Variation of Plate Dip

As the plate dips and departs from the vertical position, the peaks become asymmetrical. Figure B shows a near surface plate dipping 80° . Note that the direction of dip is toward the high shoulder of the response and the top of the plate remains under the centre minimum.

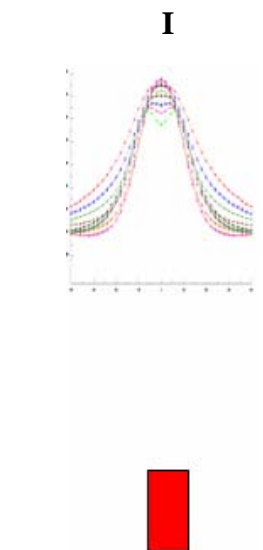
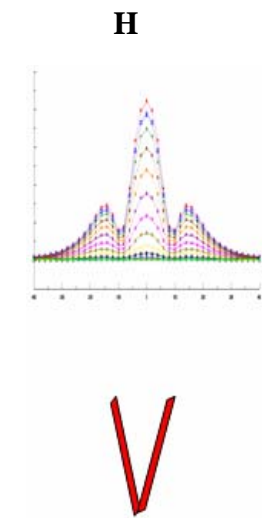
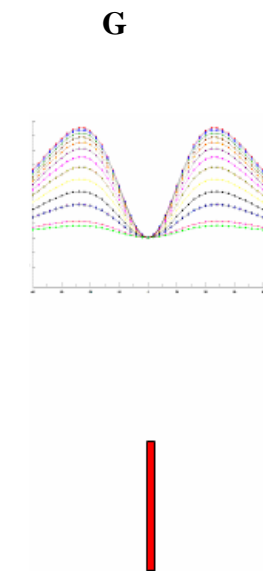
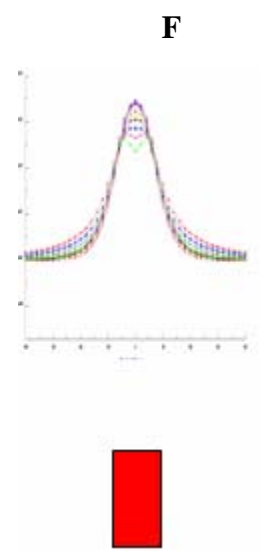
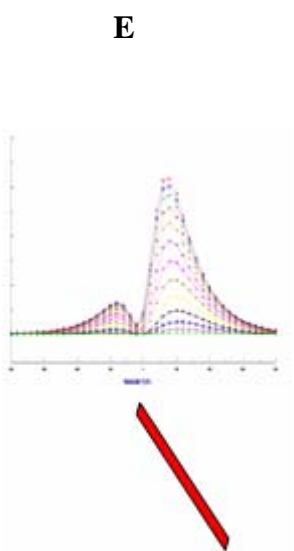
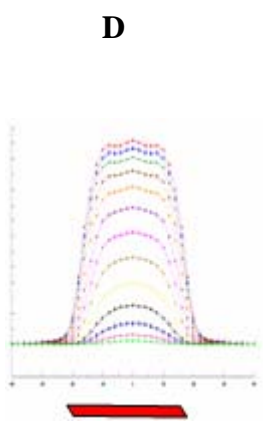
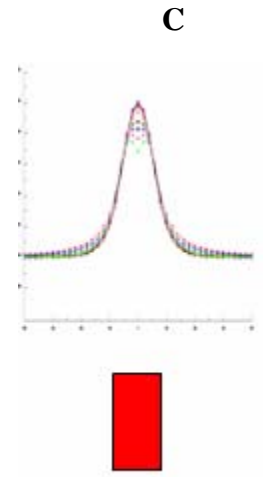
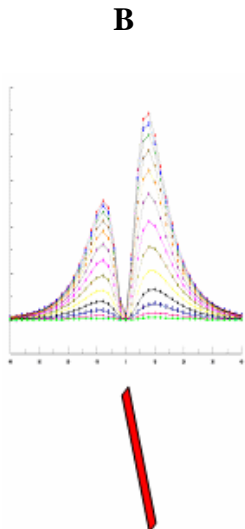
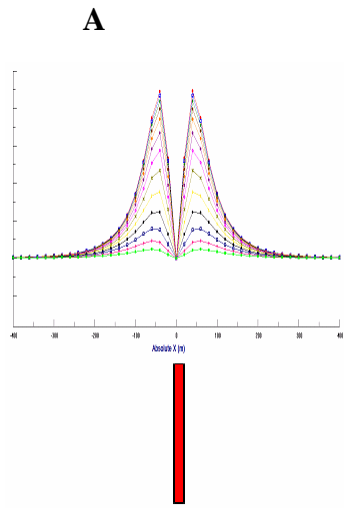
As the dip increases, the aspect ratio (Min/Max) decreases and this aspect ratio can be used as an empirical guide to dip angles from near 90° to about 30° . The method is not sensitive enough where dips are less than about 30° . Figure E shows a plate dipping 45° and, at this angle, the minimum shoulder starts to vanish. In Figure D, a flat lying plate is shown, relatively near surface. Note that the twin peak anomaly has been replaced by a symmetrical shape with large, bell shaped, channel amplitudes which decay relative to the conductance of the plate.

Figure H shows a special case where two plates are positioned to represent a synclinal structure. Note that the main characteristic to remember is the centre amplitudes are higher (approximately double) compared to the high shoulder of a single plate. This model is very representative of tightly folded formations where the conductors were once flat lying.

Variation of Prism Depth

Finally, with prism models, another algorithm is required to represent current on the plate. A plate model is considered to be infinitely thin with respect to thickness and incapable of representing the current in the thickness dimension. A prism model is constructed to deal with this problem, thereby, representing the thickness of the body more accurately.

Figures C, F and I show the same prism at increasing depths. Aside from an expected decrease in amplitude, the side lobes of the anomaly show a widening with deeper prism depths of the bell shaped early time channels.



General Modeling Concepts

A set of models has been produced for the Geotech VTEM® system with explanation notes (see models A to I above). The reader is encouraged to review these models, so as to get a general understanding of the responses as they apply to survey results. While these models do not begin to cover all possibilities, they give a general perspective on the simple and most commonly encountered anomalies.

When producing these models, a few key points were observed and are worth noting as follows:

- For near vertical and vertical plate models, the top of the conductor is always located directly under the centre low point between the two shoulders in the classic **M** shaped response.
- As the plate is positioned at an increasing depth to the top, the shoulders of the **M** shaped response, have a greater separation distance.
- When faced with choosing between a flat lying plate and a prism model to represent the target (broad response) some ambiguity is present and caution should be exercised.
- With the concentric loop system and Z-component receiver coil, virtually all types of conductors and most geometries are most always well coupled and a response is generated (see model H). Only concentric loop systems can map this type of target.

The modelling program used to generate the responses was prepared by PetRos Eikon Inc. and is one of a very few that can model a wide range of targets in a conductive half space.

General Interpretation Principals

Magnetics

The total magnetic intensity responses reflect major changes in the magnetite and/or other magnetic minerals content in the underlying rocks and unconsolidated overburden. Precambrian rocks have often been subjected to intense heat and pressure during structural and metamorphic events in their history. Original signatures imprinted on these rocks at the time of formation have, in most cases, been modified, resulting in low magnetic susceptibility values.

The amplitude of magnetic anomalies, relative to the regional background, helps to assist in identifying specific magnetic and non-magnetic rock units (and conductors) related to, for example, mafic flows, mafic to ultramafic intrusives, felsic intrusives, felsic volcanics and/or sediments etc. Obviously, several geological sources can produce the same magnetic response. These ambiguities can be reduced considerably if basic geological information on the area is available to the geophysical interpreter.

In addition to simple amplitude variations, the shape of the response expressed in the wave length and the symmetry or asymmetry, is used to estimate the depth, geometric parameters and magnetization of the anomaly. For example, long narrow magnetic linears usually reflect mafic flows or intrusive dyke features. Large areas with complex magnetic patterns may be produced by intrusive bodies with significant magnetization, flat lying magnetic sills or sedimentary iron formation. Local isolated circular magnetic patterns often represent plug-like igneous intrusives such as kimberlites, pegmatites or volcanic vent areas.

Because the total magnetic intensity (TMI) responses may represent two or more closely spaced bodies within a response, the second derivative of the TMI response may be helpful for distinguishing these complexities. The second derivative is most useful in mapping near surface linears and other subtle magnetic structures that are partially masked by nearby higher amplitude magnetic features. The broad zones of higher magnetic amplitude, however, are severely attenuated in the vertical derivative results. These higher amplitude zones reflect rock units having strong magnetic susceptibility signatures. For this reason, both the TMI and the second derivative maps should be evaluated together.

Theoretically, the second derivative, zero contour or colour delineates the contacts or limits of large sources with near vertical dip and shallow depth to the top. The vertical gradient map also aids in determining contact zones between rocks with a susceptibility contrast, however, different, more complicated rules of thumb apply.

Concentric Loop EM Systems

Concentric systems with horizontal transmitter and receiver antennae produce much larger responses for flat lying conductors as contrasted with vertical plate-like conductors. The amount of current developing on the flat upper surface of targets having a substantial area in this dimension, are the direct result of the effective coupling angle, between the primary magnetic field and the flat surface area. One therefore, must not compare the amplitude/conductance of responses generated from flat lying bodies with those derived from near vertical plates; their ratios will be quite different for similar conductances.

Determining dip angle is very accurate for plates with dip angles greater than 30°. For angles less than 30° to 0°, the sensitivity is low and dips can not be distinguished accurately in the presence of normal survey noise levels.

A plate like body that has near vertical position will display a two shoulder, classic **M** shaped response with a distinctive separation distance between peaks for a given depth to top.

It is sometimes difficult to distinguish between responses associated with the edge effects of flat lying conductors and poorly conductive bedrock conductors. Poorly conductive bedrock conductors having low dip angles will also exhibit responses that may be interpreted as surficial overburden conductors. In some situations, the conductive response has line to line continuity and some magnetic correlation providing possible evidence that the response is related to an actual bedrock source.

The EM interpretation process used, places considerable emphasis on determining an understanding of the general conductive patterns in the area of interest. Each area has different characteristics and these can effectively guide the detailed process used.

The first stage is to determine which time gates are most descriptive of the overall conductance patterns. Maps of the time gates that represent the range of responses can be very informative.

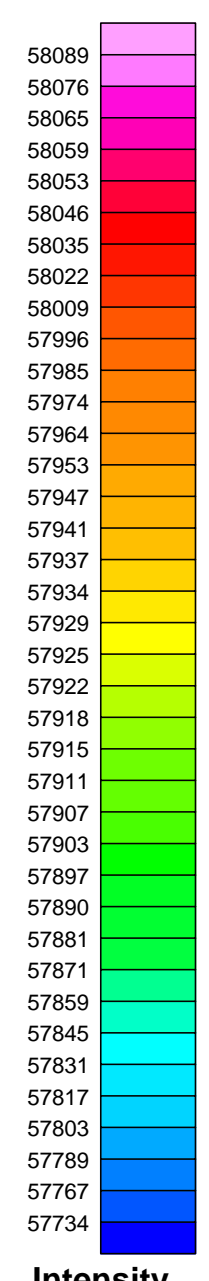
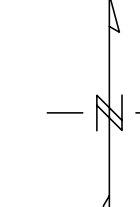
Next, stacking the relevant channels as profiles on the flight path together with the second vertical derivative of the TMI is very helpful in revealing correlations between the EM and Magnetics.

Next, key lines can be profiled as single lines to emphasize specific characteristics of a conductor or the relationship of one conductor to another on the same line. Resistivity Depth sections can be constructed to show the relationship of conductive overburden or conductive bedrock with the conductive anomaly.

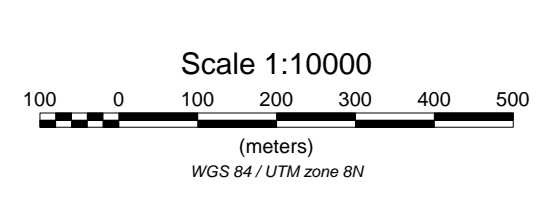


Survey Specifications:
Dates From: August 17 - August 19, 2007
Survey Base: Mayo, YT
Aircraft: Asiar 53 helicopter Registration C-GTFX
Nominal Flight Line Spacing: 100 metres
Nominal Flight Line Direction: N00°E180°W
Nominal Tie Line Spacing: 1000 metres
Nominal Tie Line Direction: N00°E120°W
Nominal helicopter terrain clearance: 85 metres
EM Loop is 40 metres under helicopter
Magnetic sensor is 15 metres under helicopter

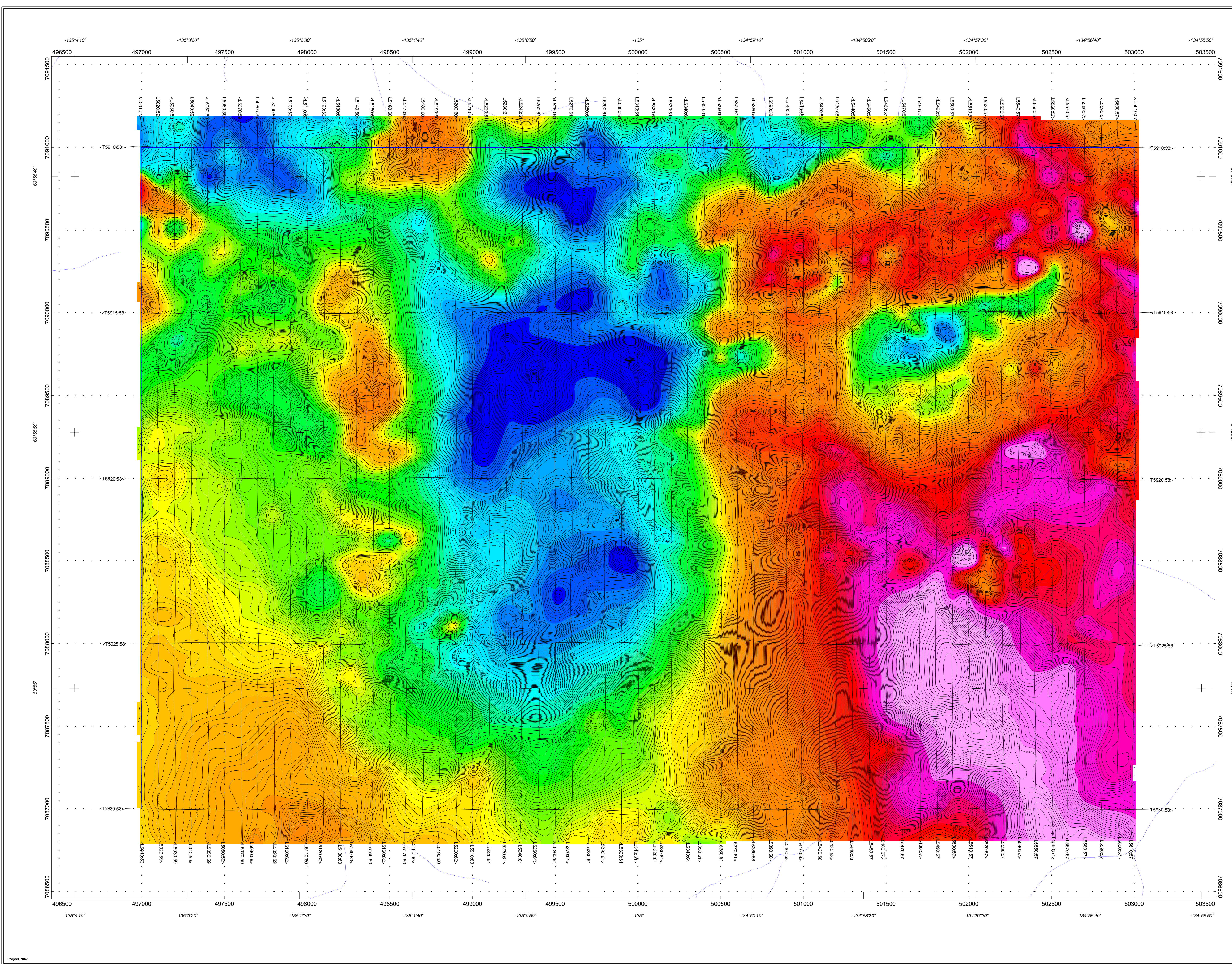
Instruments:
Geotech Time Domain Electromagnetic System (VTEM) with concentric Rx/Tx geometry
Transmitter Loop Diameter: 26 m, Base Frequency: 30 Hz
Dipole Moment: 424,400 NA
Transmitter Wave Form: Triangular, Pulse Width: 7.13 ms
Geometrics: Optically pumped
High Sensitivity Cesium Magnetometer
Magnetometer Resolution: 0.02 nT at 10 samples/sec



Legend:
— Roads
— Lakes, Rivers
— Topographic contour



Yukon Gold Corporation Inc.
Block GRAM
Yukon, Canada
Geotech VTEM System
Total Magnetic Intensity
Flown and processed by Geotech Ltd.
30 Industrial Parkway South
Aurora, Ontario, Canada
www.geotechairborne.com
October 2007





Survey Specifications:
Date: From: August 17 - August 19, 2007
Survey Base: Mayo, YT
Aircraft: Asiar 53 helicopter, Registration C-GTFX
Nominal Flight Line Spacing: 100 metres
Nominal Flight Line Direction: N00°E/W100°W
Nominal Tie Line Spacing: 1000 metres
Nominal Tie Line Direction: N00°E/W270°W
Nominal helicopter terrain clearance: 85 metres
EM Loop is 40 metres under helicopter
Magnetic sensor is 15 metres under helicopter

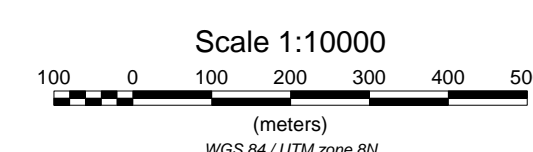
Instruments:
Geotech Time Domain Electromagnetic System (VTEM) with concentric Rx/Tx geometry
Transmitter Loop Diameter: 26 m, Base Frequency: 30 Hz
Dipole Moment: 424,400 NA
Transmitter Wave Form: Triangular, Pulse Width: 7.13 ms
Geometrics: Optically-pumped
High Sensitivity Cesium Magnetometer
Magnetometer Resolution: 0.02 nT at 10 samples/sec



Profiles scale 1 mm = 0.1 pVIA/m⁴
(Linear between ±0.4 pVIA/m⁴
logarithmic above 0.4 pVIA/m⁴)

- 0.234 ms
- 0.281 ms
- 0.339 ms
- 0.406 ms
- 0.484 ms
- 0.573 ms
- 0.682 ms
- 0.818 ms
- 0.974 ms
- 1.151 ms
- 1.370 ms
- 1.641 ms
- 1.953 ms
- 2.307 ms
- 2.745 ms
- 3.286 ms
- 3.911 ms
- 4.630 ms
- 5.465 ms
- 6.578 ms
- 7.828 ms

Legend:
Roads
Lakes, Rivers
Topographic contour

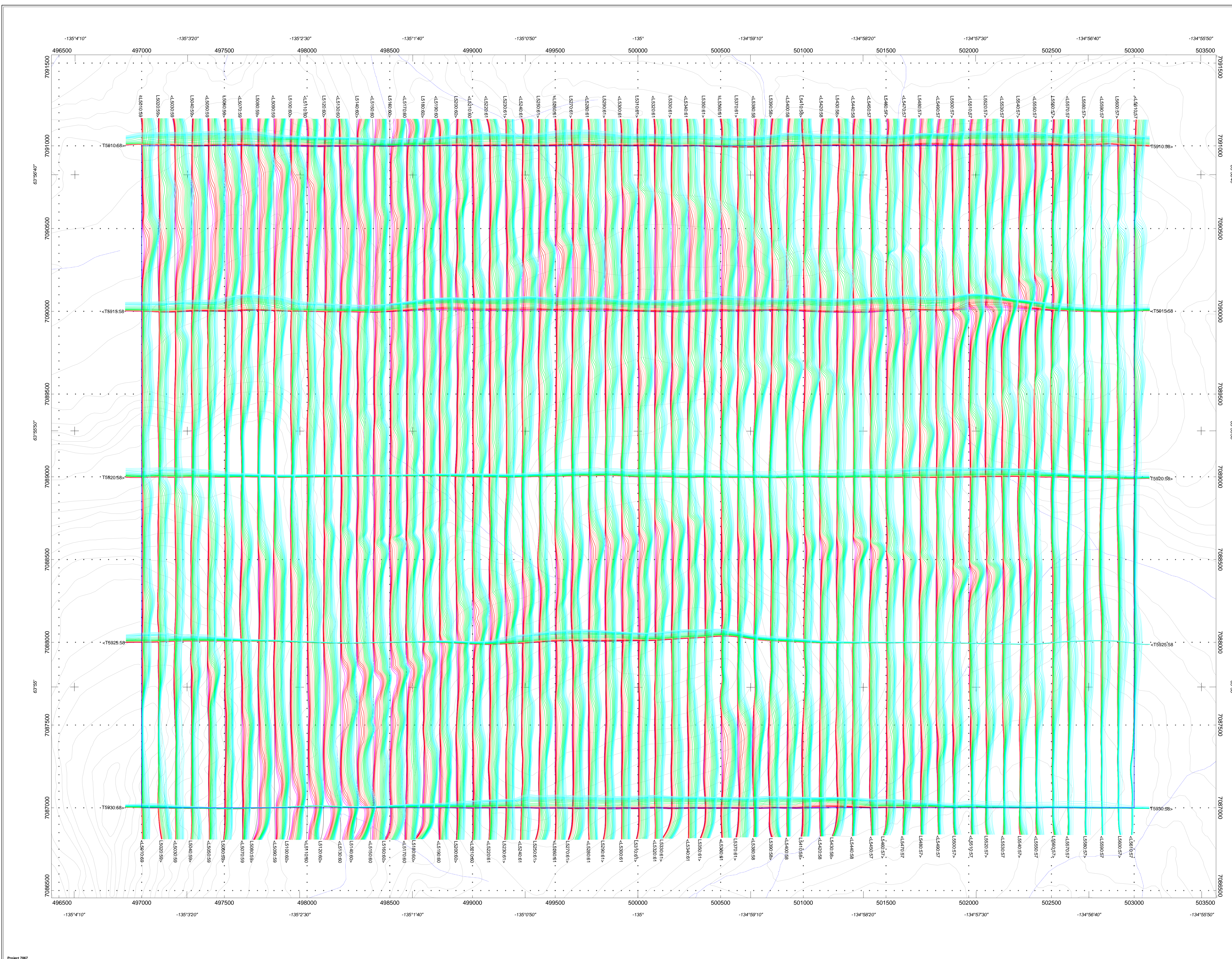


Yukon Gold Corporation Inc.
Block GRAM
Yukon, Canada

Geotech VTEM System
EM dB/dt Pseudolog Profiles
Time Gates 0.234-7.828 ms

Flown and processed by Geotech Ltd.
30 Industrial Parkway South
Aurora, Ontario, Canada
www.geotechairborne.com

October 2007





Survey Specifications:
Dates From: August 17 - August 19, 2007
Survey Base: Mayo, YT
Aircraft: Asler S3 helicopter, Registration C-GTFX
Nominal Flight Line Spacing: 100 metres
Nominal Flight Line Direction: N00°E±10°W
Nominal Tie Line Spacing: 1000 metres
Nominal Tie Line Direction: N00°E±20°W
Nominal helicopter terrain clearance: 85 metres
EM Loop is 40 metres under helicopter
Magnetic sensor is 15 metres under helicopter

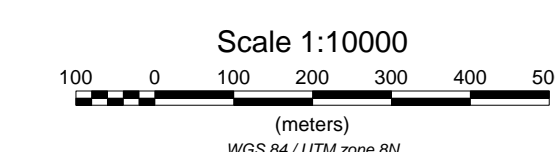
Instruments:
Geotech Time Domain Electromagnetic System (VTEM) with concentric Rx/Tx geometry
Transmitter Loop Diameter: 26 m, Base Frequency: 30 Hz
Dipole Moment: 424,400 NA
Transmitter Wave Form: Triangular, Pulse Width: 7.13 ms
Geometrics: Optically pumped
High Sensitivity Cesium Magnetometer
Magnetometer Resolution: 0.02 nT at 10 samples/sec



Profiles scale 1 mm = 0.1 (pV*ms)/A/m⁴
(Linear between ±0.4 (pV*ms)/A/m⁴
logarithmic above 0.4 (pV*ms)/A/m⁴)

- 0.234 ms (B-field)
- 0.261 ms (B-field)
- 0.330 ms (B-field)
- 0.405 ms (B-field)
- 0.484 ms (B-field)
- 0.573 ms (B-field)
- 0.682 ms (B-field)
- 0.818 ms (B-field)
- 0.974 ms (B-field)
- 1.151 ms (B-field)
- 1.370 ms (B-field)
- 1.641 ms (B-field)
- 1.953 ms (B-field)
- 2.307 ms (B-field)
- 2.745 ms (B-field)
- 3.286 ms (B-field)
- 3.911 ms (B-field)
- 4.620 ms (B-field)
- 5.485 ms (B-field)
- 6.578 ms (B-field)
- 7.828 ms (B-field)

Legend:
Roads
Lakes, Rivers
Topographic contour



Yukon Gold Corporation Inc.
Block GRAM
Yukon, Canada

Geotech VTEM System
EM B-field Pseudolog Profiles
Time Gates 0.234-7.828 ms

Flown and processed by Geotech Ltd.
30 Industrial Parkway South
Aurora, Ontario, Canada
www.geotechairborne.com

October 2007

