ASSESSMENT REPORT

Describing

REVIEW OF GEOPHYSICAL SURVEY
By Jan Klein, Consulting Geophysicist
November 17, 2009

At the

GRAM PROPERTY

Gram 1-24	YC52446-YC52469
Gram 25-42	YC68104-YC68121

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

in the

Mayo Mining District
Yukon Territory

Prepared by
Laxey Mining Services Inc.

For
Richard A. Ewing
Registered Owner and
Hinton Syndicate

By
J.B. Smith
May 2010

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INTRODUCTION

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

A 274 line-km Versatile Time Domain Electromagnetic (VTEM) and magnetic survey was flown over the property by Geotech Ltd. on August 17, 18 and 19, 2007. Archer, Cathro & Associates (1981) Limited managed the program for Yukon Gold Corporation, Inc. and provided some logistical support.

The property was purchased from Yukon Gold Corporation, Inc. in April 2009 by Hinton Syndicate and the claims are held under the name of Richard A. Ewing the majority investor in the Syndicate.

The Syndicate engaged Jan Klein; an experienced Consulting Geophysicist; to review and interpret the results of the 2007 VTEM survey. This report describes the Interpretive Report of the data gathered in the 2007 survey, conducted by Jan Klein from October 27 to November 17, 2009.

PROPERTY LOCATION, CLAIM STATUS AND ACCESS

The Gram property consists of 42 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 (DWG. 1).

The claims are registered with the Mayo Mining Recorder in the name of Richard A. Ewing. The locations of individual claims are shown on Figure 2 while claim registration data are summarized as follows. (DWG. 2)

Claim Name	Grant Number	Expiry Date
Gram 1 – 24	YC52446 - YC52469	Sept. 7, 2010
Gram 25 – 42	YC68104 – YC68121	June 4, 2010

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.

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.

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.

In 2007 Archer Cathro carried out a short prospecting and soil sampling program followed up by the VTEM and magnetic survey that year flown by Geotech Ltd.

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. 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.

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 and interpreted geophysical data is presented in DWG. 3. Two lines were sampled east west across the property during the 2007 program which confirmed the presence of the 1965 anomalies.

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 sferic 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 nano Tesla 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 4.

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 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.

Hinton Syndicate then engaged Jan Klein to review and interpret the results of that survey in detail. This report addresses his findings which report can be found in APPENDIX 3.

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.

Jan Klein's Conclusion (See Full report in APPENDIX 4)

The VTEM-Magnetic data collected over the GRAM claim block do not show a direct correlation with the interesting Pb-anomaly on the property. Narrow south dipping conductors of considerable strike length show locally a weak magnetic association. These shallow magnetic anomalies appear disconnected from a much deeper sourced north trending magnetic low. N20-45ºW trending faults appear associated with this and other deeper sources, they can be followed to surface suggesting their rejuvenation through the overlying south dipping rocks. These faults bracket and offset parts of the Pb-anomaly. There are no interesting targets recognized in the VTEM and shallow magnetic responses. It is possible that there's a connection or relationship between the Pb-anomaly and the deeper magnetic source (= the deep magnetic low) but it is not understood what this connection is. This geophysical data set does not point to a specific source of the Pb anomaly.

Therefore, no further geophysical work can be recommended at this stage. Detailed mapping and prospecting may provide an understanding of the nature and source of the interesting PB anomaly.

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.

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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.

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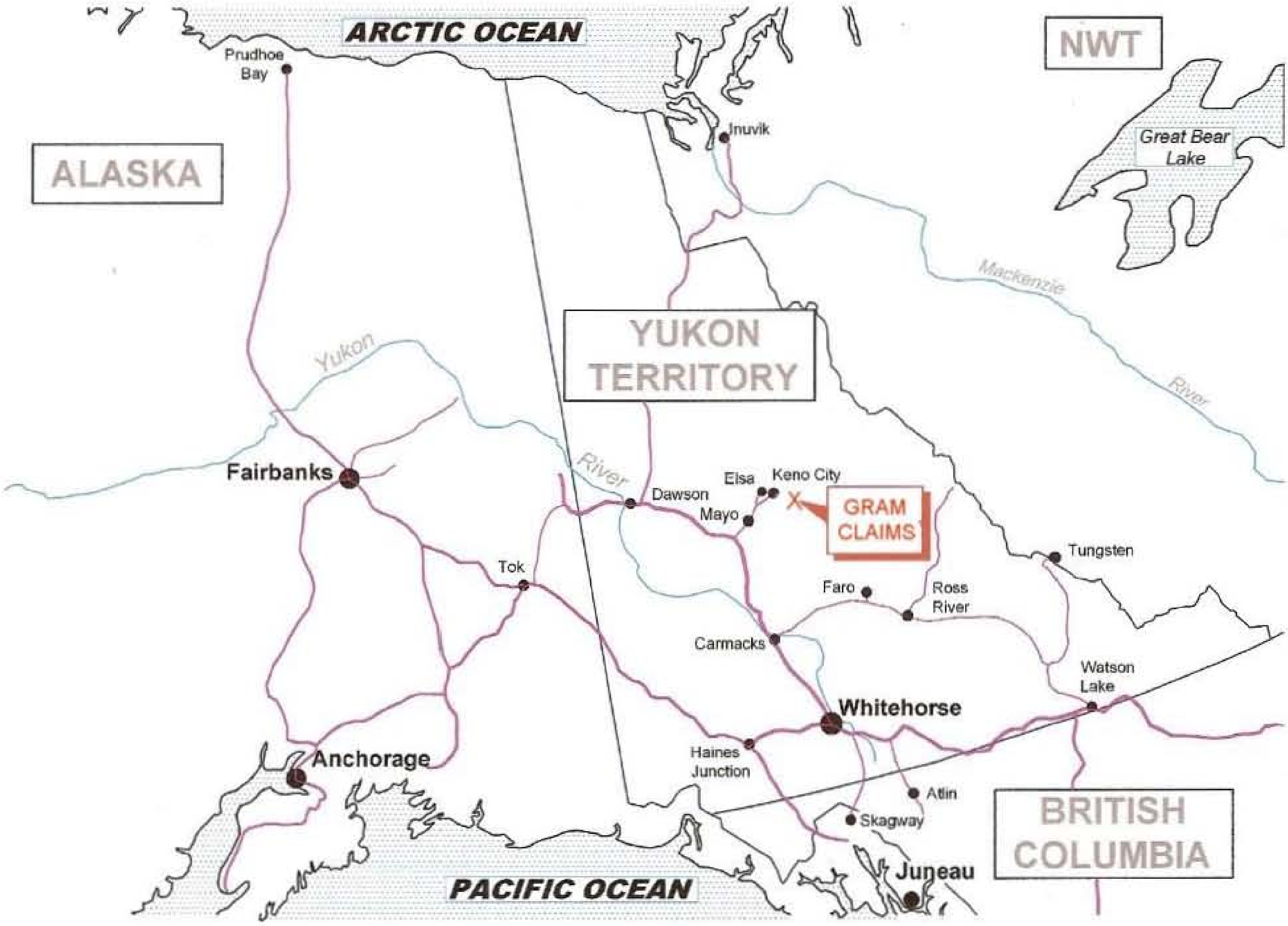
1965 Geological and geochemical report on the VU claim group, Assessment Report 019028

Wengzynowski, W.A.
2007 Unfiled Assessment Report on the 2007 VTEM survey flown by Geotech Ltd. Over the Gram claims in 2007

LIST OF DRAWINGS

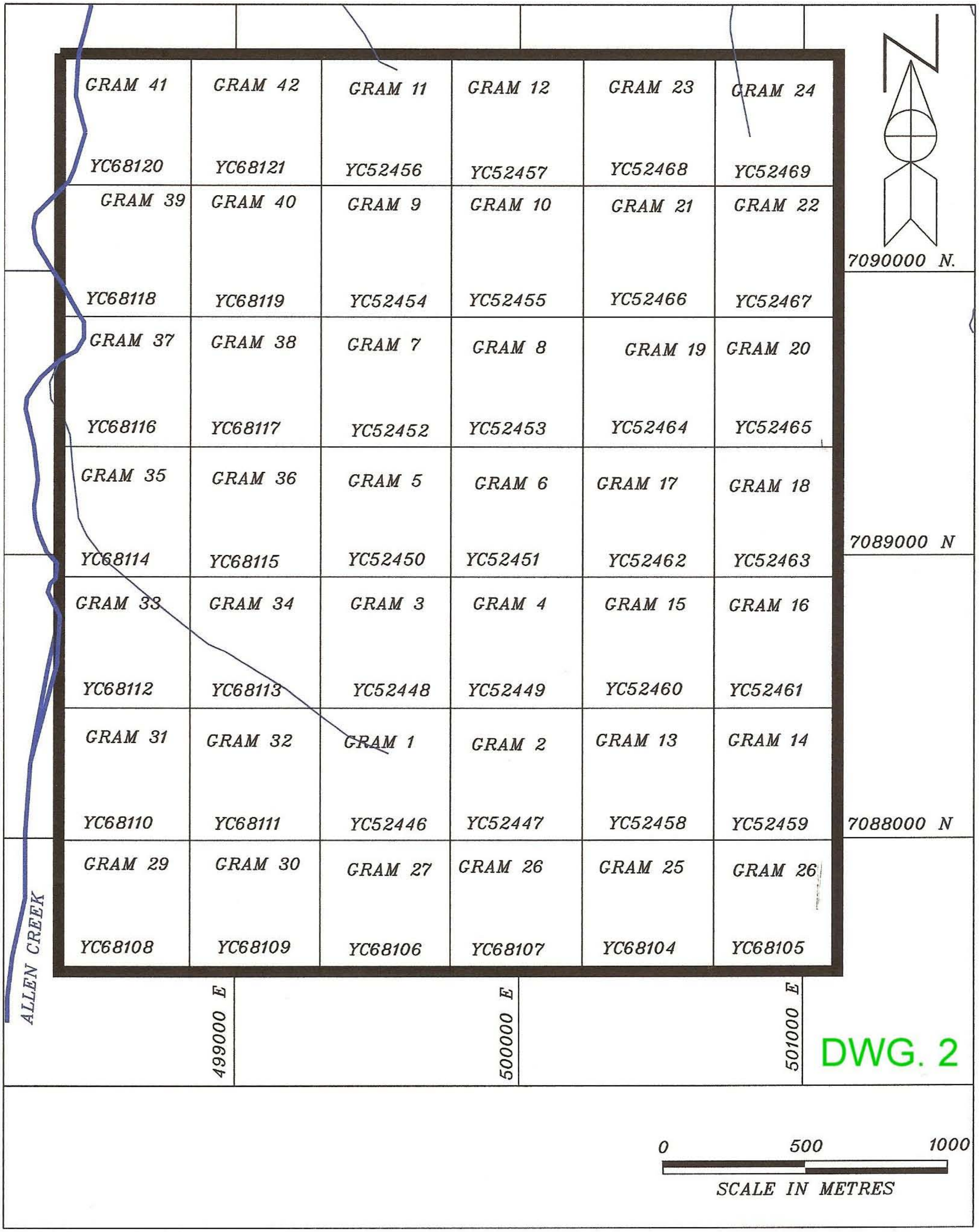


HINTON SYNDICATE

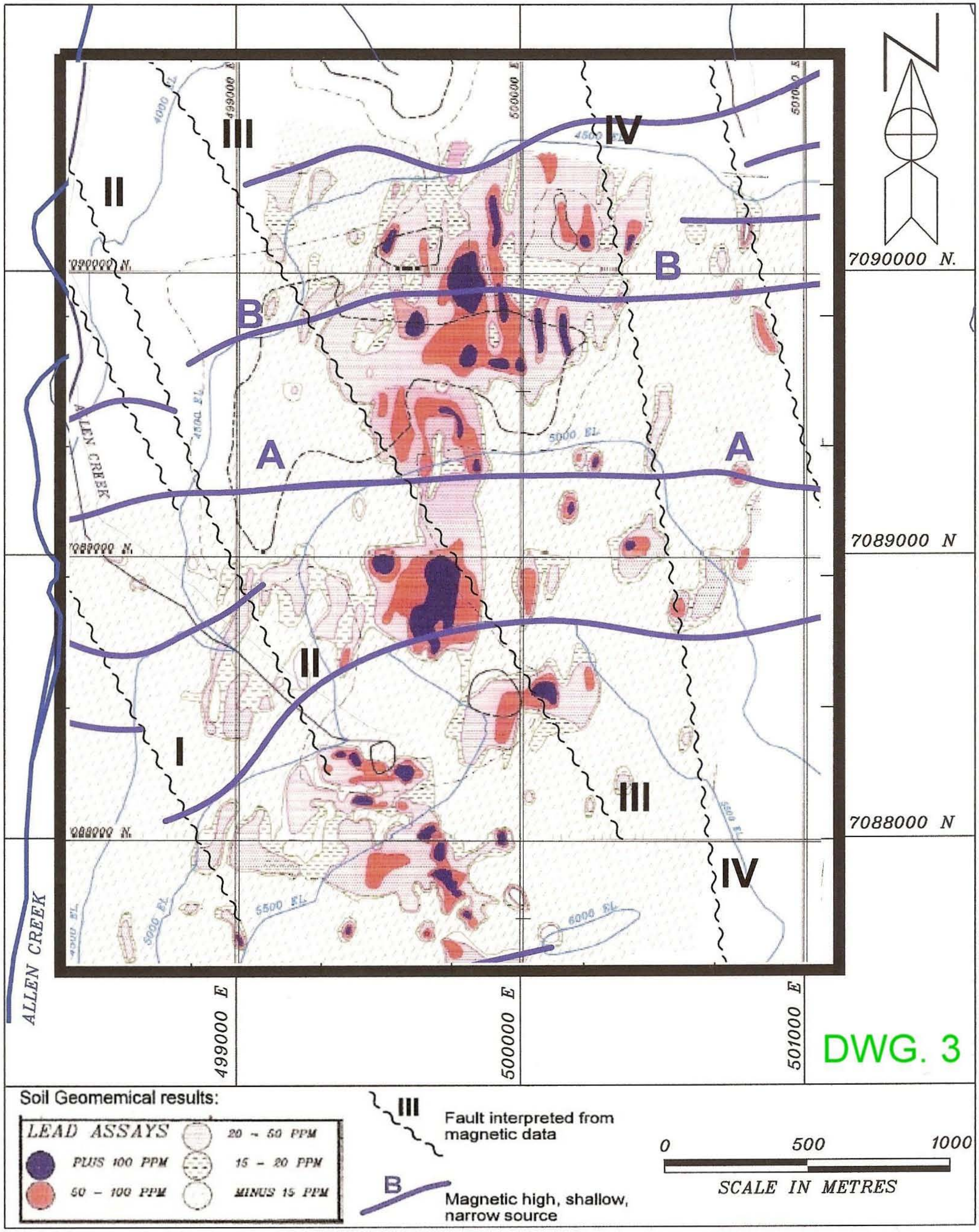
GRAM CLAIM BLOCK

MAYO MINING DISTRICT, YUKON TERRITORY

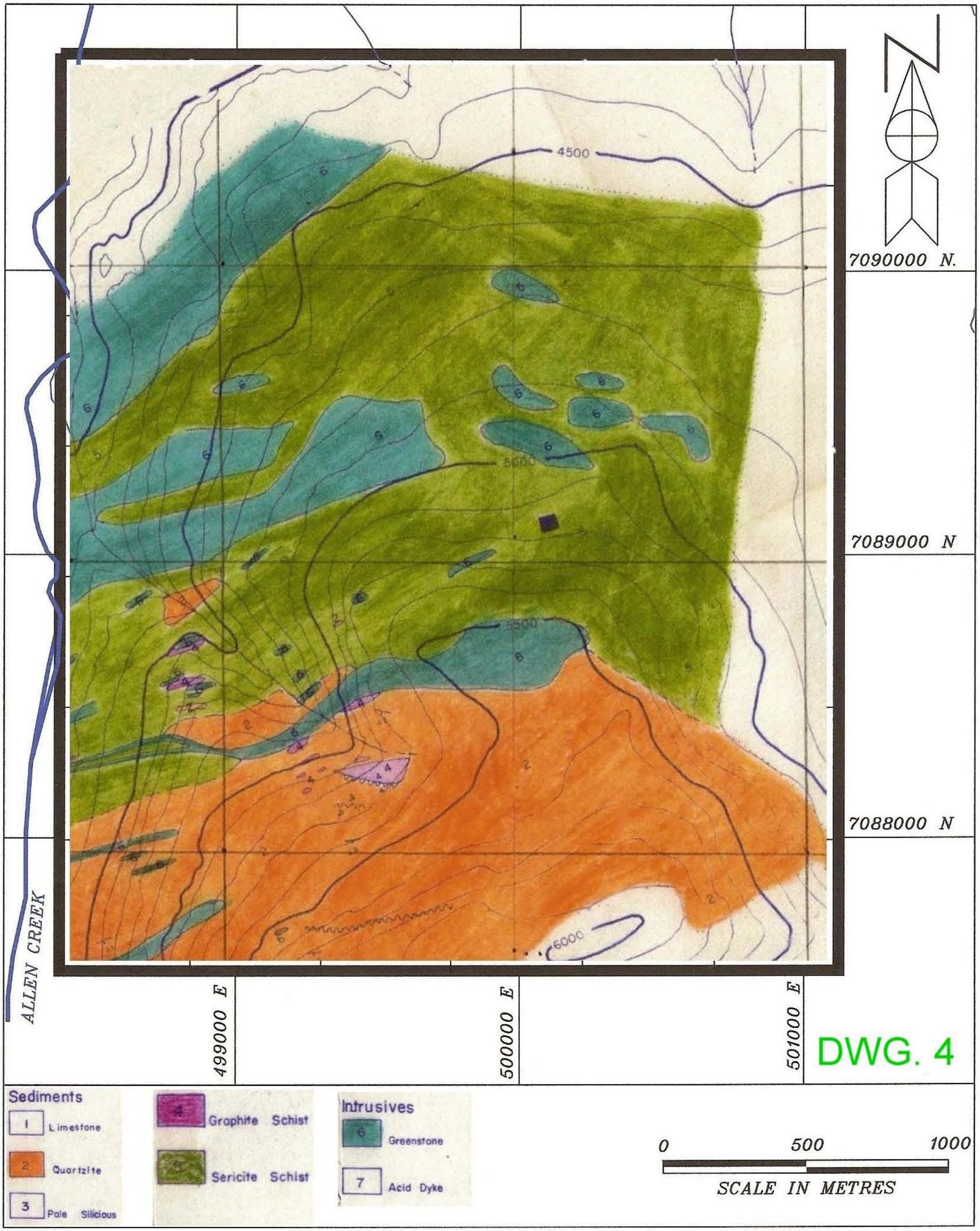
DWG. 1



Gram Claim Block – Showing Claim and Grant Numbers



Gram Claim Group – VTEM Magnetic Survey
Geochemistry and Magnetic Interpretation by J. Klein



Gram Claim Group – Geology
Geological Mapping by UKHM during the 1965-66 Exploration Program

APPENDIX

APPENDIX 1 -	Statement of Qualifications
APPENDIX 2 -	Copy of Invoice and Cheque to Pay for services of J. Klein
APPENDIX 3 -	Report by Jan Klein, Consulting Geophysicist, November 17, 2009
APPENDIX 4 -	Report on a Helicopter-Borne Versatile Time Domain Electromagnetic (VTEM) Geophysical Survey – Gram Property – Yukon, Canada – by Geotech Ltd. – Flown in August 2007

APPENDIX 1

STATEMENT OF QUALIFICATIONS

I, James B. Smith, President of Laxey Mining Services Inc., with business address in Coquitlam, B.C. V3C 5R9 do certify that:

I engaged the Services of Jan Klein, Consulting Geophysicist of Delta, B.C V4K 5G6 in November 2009, to conduct a review of Geophysical data compiled during an aerial Geophysical Survey by Geotech Ltd., in 2007, and which covered the Gram Claim group. These claims are registered in the name of Richard A. Ewing and for Hinton Syndicate.

James B. Smith

JB Smith

President of Laxey Mining Services Inc.

2726 Mara Drive,

Coquitlam, BC

V3C 5R9

APPENDIX 2

Copy of Invoice and Cheque to Pay for services of J. Klein

JAN KLEIN
Consulting Geophysicist
5300 Admiral Way, Unit #20, DELTA, BC, V4K 5G6
ph or fax: (604) 946-4661, e-mail: janklein@dccnet.com

INVOICE

LAXEY MINING SERVICES INC.
2726 MARA DRIVE
COQUITLAM, BC, V3C 5R9
Attention: Mr. James Smith

November 20, 2009

Invoice # LMSI-09-002

Re: GRAM CLAIMS 2007 VTEM-MAG SURVE.REVIEW on behalf of the HINTON SYNDICATE.

Period October 27 – November 17, 2009

Re-processing VTEM/Magnetic data collected by Geotech Ltd over the GRAM grid, Yukon Territory (Geotech project #7067). Creating additional maps and profile plots and interpreting the data. Compiling a report.

Five and one half (5.5) days @ $900.00 per diem	$ 4,950.00
GST (Registration 89519 8901 RT001)	$ 247.50

Total.................... $ 5,197.50

LAXEY MINING SERVICES INC.
CO. NAME
2726 MARA DRIVE
ADDRESS
COQUITLAM, B.C. V3C5R9
CITY, PROVINCE, POSTAL CODE

018

DATE 08 12 2009
D D M M Y Y Y Y

PAY to the order of JAN KLEIN $ 5,197.50

— Five thousand one hundred & ~~fifty~~ ninety-seven $ 50/100 DOLLARS

Security features included.

TD Canada Trust
COMO LAKE VILLAGE SHOPPING CENTRE
1980-C COMO LAKE AVENUE
COQUITLAM, B.C. V3J 3R3

PER

PER

RE Re Invoice #LMSI-09-002

⑈018⑈ ⑆90760⑉004⑆ 0945⑉5205089⑈

APPENDIX 3

Report by Jan Klein, Consulting Geophysicist, November 17, 2009

INTERPRETIVE REPORT COVERING DATA COLLECTED DURING A VTEM-MAGNETIC SURVEY FLOWN DURING AUGUST 2007 OVER THE GRAM PROPERTY, MAYO M.D. YUKON TERRITORY.

INTRODUCTION

This interpretive report covers VTEM-Magnetic data collected during August 2007 by Geotech Ltd. on behalf of Yukon Gold Corporation Inc. This report is requested by the Hinton Syndicate. The survey was flown in an N-S direction along 61 lines 4200m long each, spaced at 100m interval, and along five E-W tie lines for a total of 274 line kms. The Gram claim block is positioned in the centre of the survey grid.

An operational report was provided by the contractor dated October 2007.[1] It describes the survey, data processing and archiving of data. Its Appendix D presents modeling of VTEM data and shows model curves over various target types. The information in that report is not repeated here. Archer, Cathro & Associates (1981) Limited produced an Assessment report covering the VTEM-Magnetic data; the claim block covered only 24 claims at the time of its compilation (Gram 1-24).[2] The claim block is currently enlarged to 42 claims (Gram 1-42). This assessment report also presents the geomorphology, exploration history, geology, mineralization and soil geochemical information of the property. Previous work (1965) on the property is described in YT assessment report # 019029.[3]

VTEM-MAGNETIC DATA AND ITS QUALITY

The VTEM-Magnetic data was made available in a Geosoft Database and is reprocessed by this reviewer. Profile plots for the lines across the Gram claimblock are produced and included[4]. Various grid images were constructed and relevant ones presented here as maps covering the whole survey grid (see Table 1).

The data, considering the rugged topography of the area, appears of good quality. The ruggedness means that the VTEM coil could not be kept at a relatively mean terrain clearance of 45m as described in the contractor's report. The mean helicopter clearance was 92.6 m in stead of 85m as is shown on the map: "Radar Altimeter All N-S Lines". The helicopter clearance ranges from 57 to 265m. This wide range has a strong influence on the response amplitudes of conductive and magnetic sources; these variations are

[1] Report on a Helicopter-borne Versatile Time Domain Electromagnetic (VTEM) Geophysical Survey, Gram Property by Geotech, Project 7067, October, 2007.
[2] Assessment Report describing VTEM Geophysical Surveys at the Gram Property, Gram 1-24, YC52446-52469, NTS 105M/14 and 105M/15, Lat 63º56'N, Long 135º00'W, Mayo M.D. prepared for Yukon Gold Corporation, Inc. by W.A. Wengzynowski, P. Eng., December 2007.
[3] Geological & Geochemical Report on the VU Claim Group, by Robert E. Van Tassel, April 7, 1966.
[4] See Table 3 for description of the profile plots.

taken into account when interpreting the results. The Radar Altimeter map shows locally strong variations in clearance between adjacent lines (e.g. SE part of the grid). It was therefore decided to separate VTEM-Magnetic data collected along north-flown lines from those flown south and present grid images for each direction when relevant for this report. The radar altimeter maps for these two directions are attached also.

MAGNETIC DATA

The magnetic values range from 56,661 – 58,130nT. It is obvious that large and much smaller sources are present; the latter appear relatively close to surface for their responses attenuate quickly when the data is upward continued. Two examples of upward continued data are presented: a linear contour plot for the 50m and a shadow plot for the 500m upward continued data. Especially the latter indicates large roughly north-south trending sources. Vertical gradient and tilt of magnetic derivatives try to enhance the edges and centers of magnetic sources mainly of those closer to surface. Both images show ~E-W oriented narrow features but also ~N20-45ºW breaks or edges[5]. The edges may reflect deeper faults or structures.

An attempt was made to separate the shallower from the deeper sources. Images of high pass filters with cut-offs at 50, 250 and 500m show only the effects of magnetic sources down to these depths. No effects of the deeper sources are visible suggesting that these deeper sources are present at depths grater than 500m. It is suggested that the shallower ~E-W trending sources are located in a thrust sheet (or sheets) above a deeper N20-45ºW trending “basement”.

Important magnetic features are shown on the “Interpretation” map. The ~N20-45ºW trending faults are suggested to be related to the deeper basement but some are visible in the “shallower” magnetic images (especially in the western part of the grid) and may indicate rejuvenated deeper faults. Axes of magnetic highs are shown as blue lines. The “shallowest” high pass filter (50m) show linear highs while the same magnetic highs become a bit more curvilinear employing the deeper filters. This may be related to folding at depth. Examples are magnetic highs “A” and “B”.

VTEM DATA

The VTEM data set contains numerous conductor intercepts[6] and it is obvious from the various grid images that nearly all conductors trend ~E-W. Most of the defined bands are still clearly visible at late decay time (channel 32); weaker late time responses are seen along the west side of the claim block and to its south. These more diffused, broader and weaker responses are most likely related to at-surface conductivities and of no apparent

[5] These breaks are also visible in the High Pass filtered images especially in the HP500 product.
[6] A conductor intercept is the conductive response along a single flight line and visible in a set of VTEM profiles, a conductor is the interconnection of conductor intercepts along adjacent flight lines.

interest. The one along the west side of the claim block correlates with an N-S oriented valley and the one in the south is along a broad slope.

Many of the VTEM responses recorded during this survey appear to be caused by south dipping conductors. It is important to recognize that VTEM profile shapes caused by thin, and especially dipping, conductors can be complex. Appendix D to Geotech's report presents examples of responses over various types of conductors. Those from dipping thin conductor "E" and thick conductors "C", "F" and "I" are visible throughout the Gram data set. Two examples from the data set are used to illustrate some of the characteristics of these profiles. Figure 1 presents a detail portion of Line 5440E directly east of the claim block. The top panel displays the dB/dt (SF) profiles in linearlogarithmic format while the lower panel presents the B-field (BF) profiles in a linear way[7]. The main peak to the south of the trough shifts in that direction supporting the south dip of the thin conductor. The top of conductor intercept 202 is positioned below the trough not below the peak of the response. In most cases is the trough not well defined at early times (e.g. channels 12, 14 etc.) and the late time trough (channel 32) is used to select the location of the conductor. It has to be recognized that this position is somewhat down dip the conductor.

Figure 2 shows that it isn't always clear if the conductor represents a thick or thin dipping conductor. The position of the dipping thick conductor (intercept 124) is to the south of the choice of a thin conductor intercept (125). The position of the thin conductor correlates with the north edge of the thick conductor. The shape of profiles on adjacent lines may assist in the selection of the type of the source and therefore the position of the conductor intercept. Both possibilities (thin and thick) are shown on the interpretation map for conductor 3 between lines 5270 and 5340 (indicated as 3a and 3b). It has to be emphasized that the early channels show many more peaks than the later ones (clearly visible in figure 2); many of these early decay time peaks reflect uninteresting weak near surface conductivities and are ignored in the interpretation process.

Only obvious conductor intercepts are selected, they are divided in two groups those reflecting thin conductors (= a defined trough between two peaks) as red dots and the second group caused by tick conductors or thin ones with their response influenced by other conductors nearby (= broader or narrower peaks) as green dots (see Table 2.). Many conductors trend for one kilometer or more. The red lines on the interpretation map are the axes of the late time B-field grid image (channel 32) obviously closely correlating with the selected intercepts. The southern deflection of conductors "1" and "3" near the western boundary of the claim block is caused by the south dipping conductor running across the valley. Several conductors show a magnetic coincidence as indicated by the blue circles.

Some of the conductors can be traced for a long distance, e.g. conductor 3 is still open to the west of the grid suggesting a strong formational affinity. There is not much change in character between the various conductors other than to say that some have an obvious (though weak) magnetic association (conductor 1 east part, most of conductor 3 etc.)

[7] See table 3 for description of profile plots.

while others do not (west part of conductor 1 and conductor 2 etc.) Also some of the magnetic highs do not show an obvious conductive association like magnetic highs “A” and “B”. The linearity of “A” could indicate that it is caused by a fault. The northern conductors appear to dip steeper that the southern ones. VTEM amplitudes attenuate rather suddenly in the eastern part of the grid (lines 5560E and beyond); no particular reason can be given, it shows on both traverse and tie lines and is not caused by equipment problems but must have a “geologic” source e.g. change in alteration.

CROSS CORRELATION OF VTEM-MAGNETIC DATA WITH GEOLOGY AND GEOCHEMICAL RESULTS

Two maps are included showing relevant parts of the geophysical interpretation superimposed on geological and geochemical information. As is alluded to above there is no obvious correlation between the mainly south dipping E-W trending conductors and deep magnetic sources. There is some correlation between the conductors and weak thin magnetic bands closer to surface. There appears also no correlation between conductors and mapped patches of graphite schist suggesting that these patches have no substantial strike length. The conductors follow roughly the geological trends but it is still difficult to suggest the type of conductive material present. Some possibility is a combination of pyrite-pyrrhotite along contacts between greenstones and other rock types.

There is no apparent correlation either between geochemical anomalies and conductors. The strong Pb-anomaly at 499,700E-7,088.850N is just down slope to the north from a portion of south dipping conductor 3; this is more coincidental than considered causative. More interesting is the correlation between the geochemical pattern and the interpreted NW faults. Fault III may offset portions of the large Pb-anomaly. The other faults show similar but more diffused offsets. There is no correlation between geophysical data and the narrow N10ºW trending Pb-anomaly through 499.920E-7,090,000N.

CONCLUSION

The VTEM-Magnetic data collected over the GRAM claim block do not show a direct correlation with the interesting Pb-anomaly on the property. Narrow south dipping conductors of considerable strike length show locally a weak magnetic association. These shallow magnetic anomalies appear disconnected from a much deeper sourced north trending magnetic low. N20-45ºW trending faults appear associated with this and other deeper sources, they can be followed to surface suggesting their rejuvenation through the overlying south dipping rocks. These faults bracket and offset parts of the Pb-anomaly. There are no interesting targets recognized in the VTEM and shallow magnetic responses. It is possible that there’s a connection or relationship between the Pb-anomaly and the deeper magnetic source (= the deep magnetic low) but it is not understood what this connection is. This geophysical data set does not point to a specific source of the Pb anomaly.

Therefore, no further geophysical work can be recommended at this stage. Detailed mapping and prospecting may provide an understanding of the nature and source of the interesting Pb-anomaly.

Respectfully submitted,

Jan Klein, M.Sc., P.Eng., P.Geo.
Consulting Geophysicist
Delta, B.C., November 17, 2009

TABLE 1
MAPS PRESENTING DATA COLLECTED DURING A VTEM-MAGNETIC SURVEY EXECUTED IN 2007 OVER THE GRAM PROPERTY, YT
November 2009, Scale 1:10,000

In brackets the reference on the map and its Geosoft.map name

FLIGHT LINES and CLAIM OUTLINE (GRAM_FL_Lines.map, Copy (23) GRAM.map)

DIGITAL TERRAIN MAP (GRAM_DTM.map, Copy of GRAM.map)

RADAR ALTIMETER, ALL N-S LINES (GRAM_RADAR_NS Lines map, Copy (2) GRAM.map)

RADAR ALTIMETER, NORTH FLOWN LINES (GRAM_RADAR_North Lines.map, Copy (3) GRAM.map)

RADAR ALTIMETER, SOUTH FLOWN LINES (GRAM_RADAR_South Lines.map, Copy (4) GRAM.map)

MAGNETIC DATA (GRAM_MAG.map, Copy (5) GRAM.map)

MAGNETIC DATA UPWARD CONTINUED by 50m (GRAM_MagUp50m.map, Copy (7) GRAM.map)

SHADOW IMAGE of MAGNETIC DATA UPWARD CONTINUED by 500m (GRAM_ShMagUp500m.map, Copy (22) GRAM.map)

VERTICAL GRADIENT of MAGNETIC DATA UPWARD CONTINUED by 50m (GRAM_1VGMagUp50m.map, Copy (8) GRAM.map)

TILT of MAGNETIC DATA, SOUTH FLOWN LINES (GRAM_TiltMag3_South Lines.map, Copy (10) GRAM.map)

MAGNETIC DATA HP FILTERED 50m, NORTH FLOWN LINES (GRAM_Mag3_HP50_North Lines.map, Copy (20) GRAM.map)

MAGNETIC DATA HP FILTERED 250m, NORTH FLOWN LINES (GRAM_Mag3_HP250_North Lines.map, Copy (21) GRAM.map)

MAGNETIC DATA, HP FILTERED 500m, NORTH FLOWN LINES (GRAM_Mag3_HP500_North Lines.map, Copy (24) GRAM.map)

VTEM dB/dt (SF), CHANNEL 12, ALL N-S LINES (GRAM_SF12_NS lines.map, Copy (13) GRAM.map)

VTEM dB/dt (SF), CHANNEL 32, NORTH FLOWN LINES (GRAM_SF32_North Lines.map, Copy (14) GRAM.map)

VTEM dB/dt (SF), CHANNEL 32, SOUTH FLOWN LINES (GRAM_SF32_South Lines.map, Copy (15) GRAM.map)

VTEM B-Field (BF), CHANNEL 12, NORTH FLOWN LINES (GRAM_BF12_North Lines.map Copy (27) GRAM.map)

INTERPRETATION (GRAM_Interp.map, Copy (26) GRAM.map)

GEOCHEMISTRY and MAGNETIC INTERPRETATION (GRAM_GEOCH_MagInterp.map, Copy (30) GRAM.map)

GEOLOGY and CONDUCTOR INTERCEPTS (GRAM_GEOL_COND.map, Copy (31) GRAM.map)

TABLE 2
VTEM-MAGNETIC SURVEY OVER THE GRAM PROPERTY
CONDUCTOR INTERCEPTS

Line	Conductor intercept number	UTM_X	UTM_Y	Conductor type P=peak T=trough	Magnetic association
L5010	1	497003	7088242	P	
L5010	2	497001	7090539	T	X
L5020	3	497096	7088241	P	
L5020	4	497102	7088989	T	
L5020	5	497101	7090490	T	X
L5020	6	497104	7090744	P	
L5030	7	497198	7088951	T	
L5030	8	497201	7089900	T	X
L5030	9	497199	7090402	P	X
L5030	10	497199	7090725	P	X
L5040	11	497296	7088149	P	
L5040	12	497302	7088939	T	
L5040	13	497304	7090400	P	
L5040	14	497299	7090661	P	
L5050	15	497396	7087923	T	
L5050	16	497401	7088623	P	
L5050	17	497401	7090366	P	
L5050	18	497399	7090567	P	
L5060	19	497501	7088596	P	
L5060	20	497499	7089521	P	
L5060	21	497504	7090284	P	X
L5060	22	497498	7090553	P	X
L5060	23	497498	7090712	P	
L5070	24	497601	7087473	P	
L5070	25	497600	7088517	P	
L5070	26	497598	7090058	T	
L5070	27	497601	7090692	P	
L5070	28	497598	7090836	P	
L5080	29	497701	7087218	P	
L5080	30	497701	7088600	T	
L5080	31	497703	7090062	T	X
L5080	32	497701	7090656	P	X
L5080	33	497701	7090947	T	X
L5090	34	497802	7087117	P	
L5090	35	497793	7088364	T	
L5090	36	497802	7089968	P	
L5090	37	497799	7090624	P	
L5090	38	497797	7090947	T	X
L5100	39	497896	7087045	P	

L5100	40	497899	7088305	T	
L5100	41	497899	7089887	P	X
L5100	42	497896	7090885	T	X
L5110	43	498001	7086981	P	
L5110	44	497998	7088239	T	
L5110	45	497998	7089347	P	X
L5110	46	498003	7090553	P	
L5110	47	497997	7090823	T	X
L5120	48	498099	7086970	P	
L5120	49	498101	7087667	P	
L5120	50	498100	7088724	T	
L5120	51	498099	7089294	P	X
L5120	52	498102	7090401	P	X
L5120	53	498099	7090772	T	
L5130	54	498200	7086963	P	
L5130	55	498201	7087556	P	
L5130	56	498200	7087784	P	X
L5130	57	498199	7088701	T	
L5130	58	498196	7089426	T	
L5130	59	498202	7090343	P	
L5130	60	498203	7090508	P	
L5140	61	498301	7086967	P	
L5140	62	498300	7087519	T	
L5140	63	498297	7087906	T	
L5140	64	498296	7088631	T	X
L5140	65	498300	7089358	T	
L5140	66	498302	7090443	P	
L5150	67	498400	7087843	T	
L5150	68	498401	7088606	T	X
L5150	69	498403	7089352	T	
L5150	70	498402	7090466	P	X
L5150	71	498399	7091015	T	
L5160	72	498503	7087511	P	
L5160	73	498500	7087849	T	
L5160	74	498495	7088633	T	X
L5160	75	498501	7089333	T	
L5160	76	498500	7090487	P	
L5170	77	498598	7087901	T	X
L5170	78	498595	7088659	T	X
L5170	79	498599	7089363	T	
L5170	80	498604	7090518	P	
L5180	81	498696	7087954	T	X
L5180	82	498698	7088679	T	X
L5180	83	498702	7089411	T	X
L5180	84	498701	7090566	P	X
L5190	85	498798	7088061	T	X
L5190	86	498796	7088684	T	
L5190	87	498796	7089414	T	
L5190	88	498800	7090320	T	
L5200	89	498901	7088081	T	X

L5200	90	498904	7089422	T	
L5200	91	498900	7089978	P	
L5200	92	498899	7090279	T	
L5200	93	498899	7090693	P	
L5210	94	498997	7088144	T	X
L5210	95	498999	7089220	T	
L5210	96	498999	7089962	P	
L5210	97	498996	7090725	P	
L5220	98	499098	7088293	T	
L5220	99	499100	7090299	T	X
L5220	100	499101	7090682	P	
L5230	101	499204	7087825	P	
L5230	102	499196	7088162	P	X
L5230	103	499194	7088349	T	
L5230	104	499204	7090295	T	
L5230	105	499197	7090668	P	
L5240	106	499299	7088411	T	
L5240	107	499300	7090342	T	
L5240	108	499298	7090690	P	
L5250	109	499400	7087860	P	
L5250	110	499395	7088416	T	
L5250	111	499397	7090413	T	X
L5250	112	499400	7090671	P	
L5260	113	499498	7087498	P	
L5260	114	499498	7088598	T	
L5260	115	499498	7090437	T	
L5260	116	499497	7090646	P	
L5270	117	499601	7087480	P	X
L5270	118	499601	7087933	P	
L5270	119	499597	7088503	P	
L5270	120	499604	7088676	T	
L5270	121	499601	7090430	T	
L5270	122	499602	7090607	P	
L5280	123	499697	7087504	P	X
L5280	124	499702	7088552	P	
L5280	125	499705	7088668	T	
L5280	126	499702	7090184	P	
L5280	127	499694	7090500	T	
L5290	128	499797	7088554	P	
L5290	129	499800	7088676	T	
L5290	130	499796	7090125	P	
L5290	131	499801	7090733	T	
L5300	132	499897	7087553	P	
L5300	133	499897	7088575	P	
L5300	134	499901	7088663	T	
L5300	135	499896	7089600	P	
L5300	136	499901	7090770	T	
L5310	137	499998	7088564	P	
L5310	138	500003	7088675	T	
L5310	139	500002	7089595	P	

L5310	140	499999	7090130	P	
L5310	141	499998	7090768	T	X
L5320	142	500101	7088261	P	
L5320	143	500099	7088605	P	X
L5320	144	500100	7088734	T	
L5320	145	500099	7089620	P	
L5320	146	500097	7090308	P	
L5320	147	500099	7090743	T	
L5330	148	500203	7088295	P	
L5330	149	500202	7088610	P	
L5330	150	500203	7088749	T	
L5330	151	500200	7089606	P	
L5330	152	500201	7090476	P	
L5330	153	500202	7090674	T	
L5340	154	500303	7088314	P	
L5340	155	500301	7088603	P	
L5340	156	500299	7088772	T	
L5340	157	500299	7089639	P	
L5340	158	500301	7090653	T	
L5350	159	500395	7087254	P	
L5350	160	500402	7088279	P	
L5350	161	500401	7088600	P	
L5350	162	500402	7090630	T	
L5360	163	500502	7087361	P	X
L5360	164	500503	7088241	P	
L5360	165	500500	7088559	P	
L5360	166	500500	7089584	P	
L5360	167	500496	7090261	P	
L5360	168	500498	7090615	T	
L5370	169	500601	7087400	P	X
L5370	170	500602	7088264	P	
L5370	171	500603	7088569	P	
L5370	172	500601	7089581	P	
L5370	173	500602	7090223	P	
L5370	174	500601	7090406	P	X
L5380	175	500691	7087450	P	
L5380	176	500698	7088588	P	
L5380	177	500705	7089591	P	X
L5380	178	500703	7090204	P	X
L5390	179	500784	7087384	P	
L5390	180	500800	7088574	P	
L5390	181	500802	7089581	P	X
L5390	182	500808	7090143	P	X
L5390	183	500807	7090394	T	X
L5400	184	500901	7087431	P	
L5400	185	500898	7088582	P	
L5400	186	500897	7088680	T	
L5400	187	500897	7089613	P	X
L5400	188	500899	7089720	T	X
L5400	189	500898	7090119	P	X

L5400	189	500898	7090174	P	
L5410	190	500990	7087409	P	
L5410	191	501004	7088680	T	
L5410	192	501006	7089571	P	X
L5410	193	501000	7090073	P	X
L5420	194	501096	7087423	P	
L5420	195	501096	7088662	T	X
L5420	196	501096	7089657	T	
L5420	197	501099	7090097	P	X
L5430	198	501197	7088560	P	X
L5430	199	501199	7088636	T	X
L5430	200	501199	7089990	P	X
L5430	201	501206	7090229	T	X
L5440	202	501299	7088639	T	X
L5440	203	501297	7089877	P	
L5440	204	501297	7090371	T	X
L5450	205	501404	7088603	T	X
L5450	206	501397	7089856	P	X
L5450	207	501407	7090376	T	X
L5460	208	501501	7087342	P	
L5460	209	501501	7088565	T	X
L5460	210	501501	7089812	P	X
L5460	211	501505	7090351	T	X
L5470	212	501604	7087332	P	
L5470	213	501601	7088564	T	X
L5470	214	501603	7089847	P	X
L5470	215	501594	7090374	T	
L5480	216	501709	7087315	P	
L5480	217	501705	7088543	T	X
L5480	218	501702	7089244	P	
L5480	219	501699	7089838	P	X
L5480	220	501701	7090379	T	
L5490	221	501806	7087382	P	
L5490	222	501804	7088528	T	X
L5490	223	501805	7089250	P	
L5490	224	501795	7089884	P	X
L5490	225	501796	7090409	T	
L5500	226	501901	7087444	P	
L5500	227	501903	7088463	T	X
L5500	228	501901	7089254	P	
L5500	229	501902	7090010	T	
L5500	230	501901	7090374	T	
L5510	231	502008	7087493	P	
L5510	232	502002	7088482	T	X
L5510	233	502002	7089259	P	
L5510	234	501997	7090054	T	
L5520	235	502103	7087478	P	
L5520	236	502106	7088483	T	X
L5520	237	502096	7089228	P	
L5520	238	502099	7090050	T	X

L5520	239	502101	7090912	P	X
L5530	240	502203	7087575	P	
L5530	241	502206	7088498	T	X
L5530	242	502198	7089234	P	
L5530	243	502196	7090105	T	X
L5530	244	502201	7090888	P	X
L5540	245	502303	7088527	T	X
L5540	246	502302	7089218	P	X
L5540	247	502300	7090197	T	X
L5540	248	502299	7090861	P	X
L5550	249	502393	7089298	P	X
L5550	250	502395	7090233	T	X
L5550	251	502397	7090871	P	
L5560	252	502501	7090056	P	X
L5570	253	502594	7090071	P	X

TABLE 3
DESCRIPTION OF PROFILE PLOTS

Panel 1-4 from top to bottom

Panel 1: VTEM dB/dt (SF) profiles for Channel 12 to 32 (every fourth) data, linear scale from 0 – 25 pV/A*m^4 for all lines.

Panel 2: Same data with linear scale from 0 to1 pV/A*m^4 and logarithmic for higher values.

Panel 3: VTEM B-field (BF) profiles for Channel 12 to 32 (every fourth) data, linear scale from 0-10 (pV*ms)/(A*m^4) for all lines.

Panel 4: Magnetic and radar altimeter profiles, individual scale and range for each line to maximize panel height available.

Figures 1 and 2 display only portions of panels 2 and 3.

HINTON SYNDICATE, GRAM VTEM/MAG, Line 5440 flown North, Detail

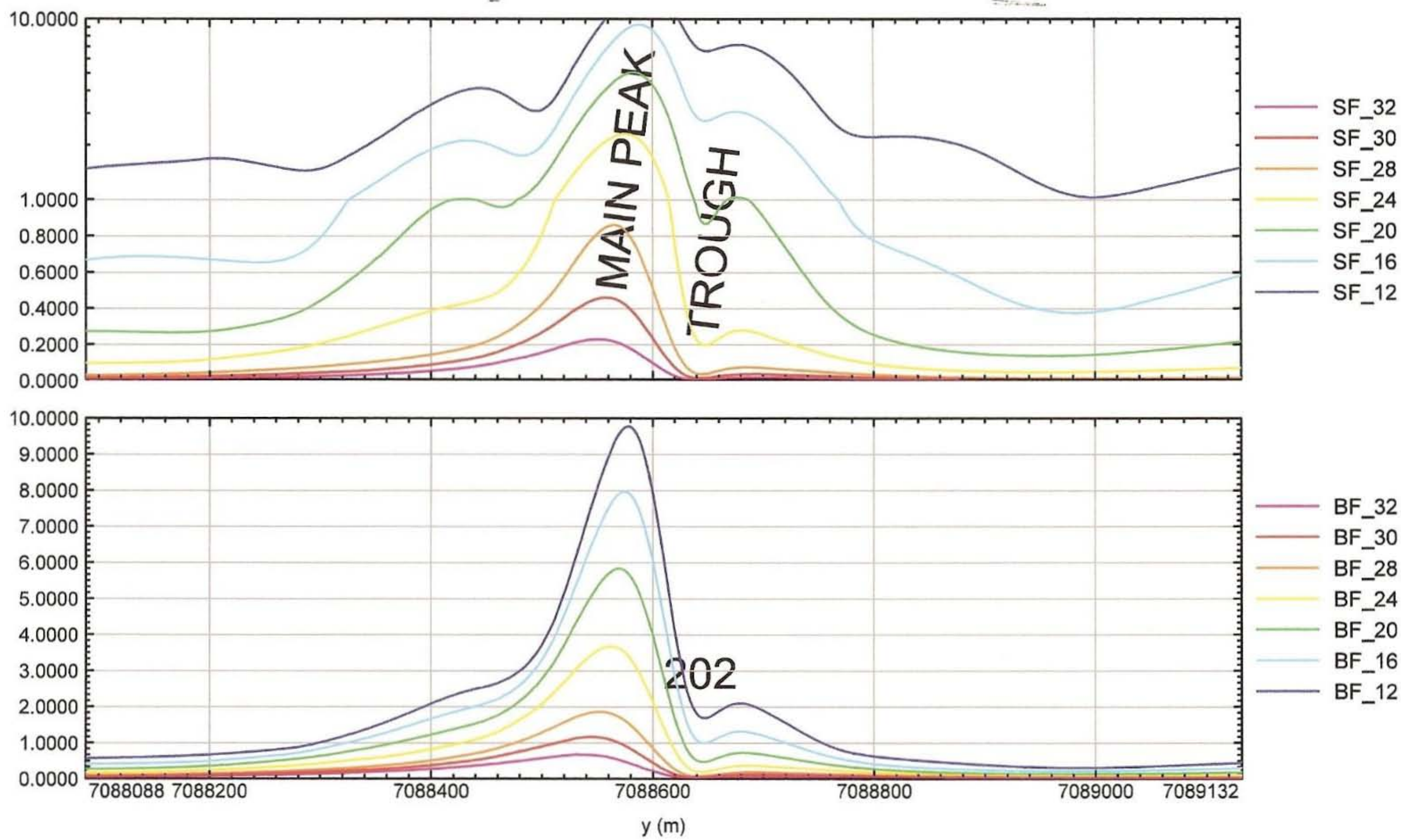
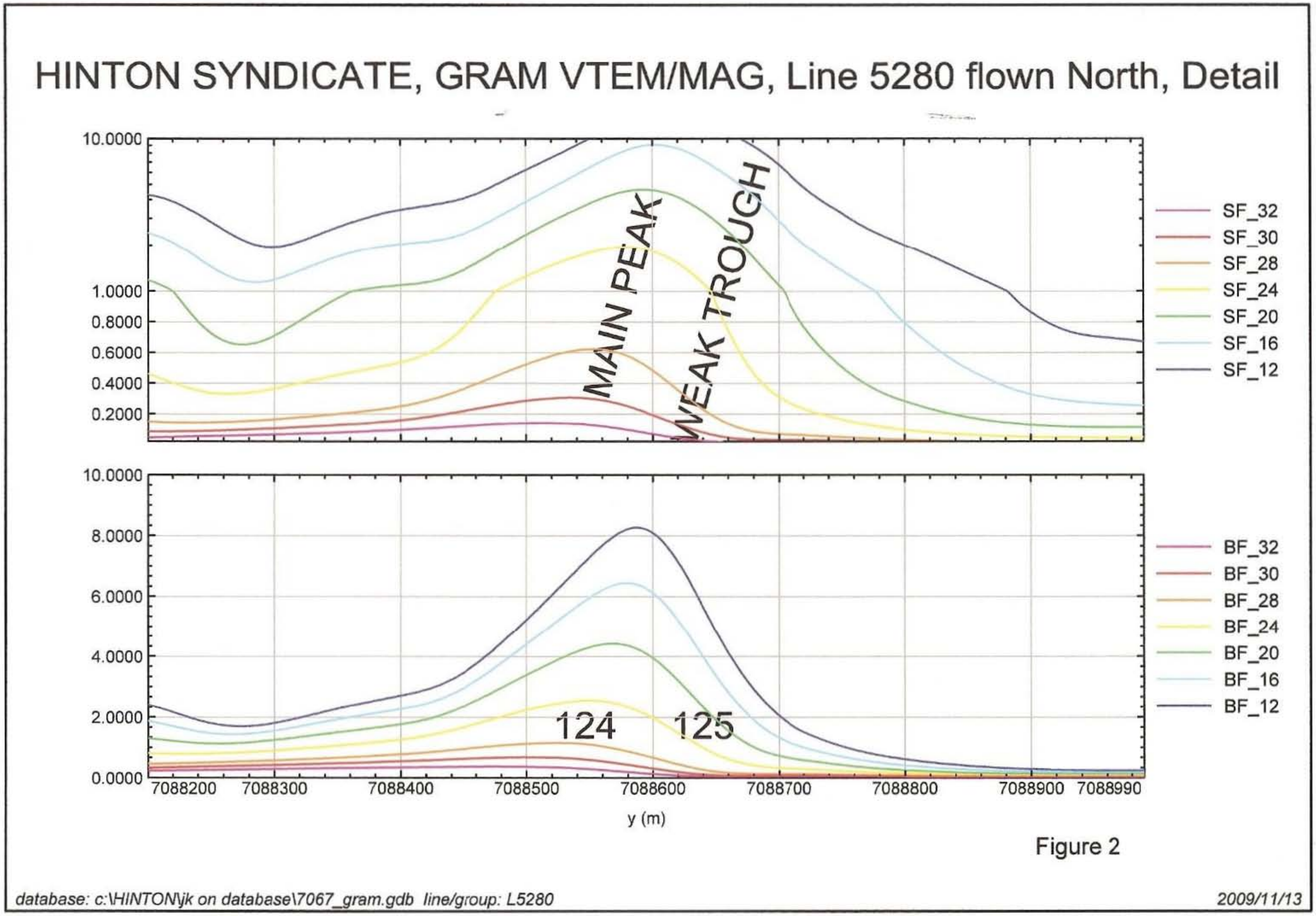


Figure 1

database: c:\HINTON\jk on database\7067_gram.gdb line/group: L5440

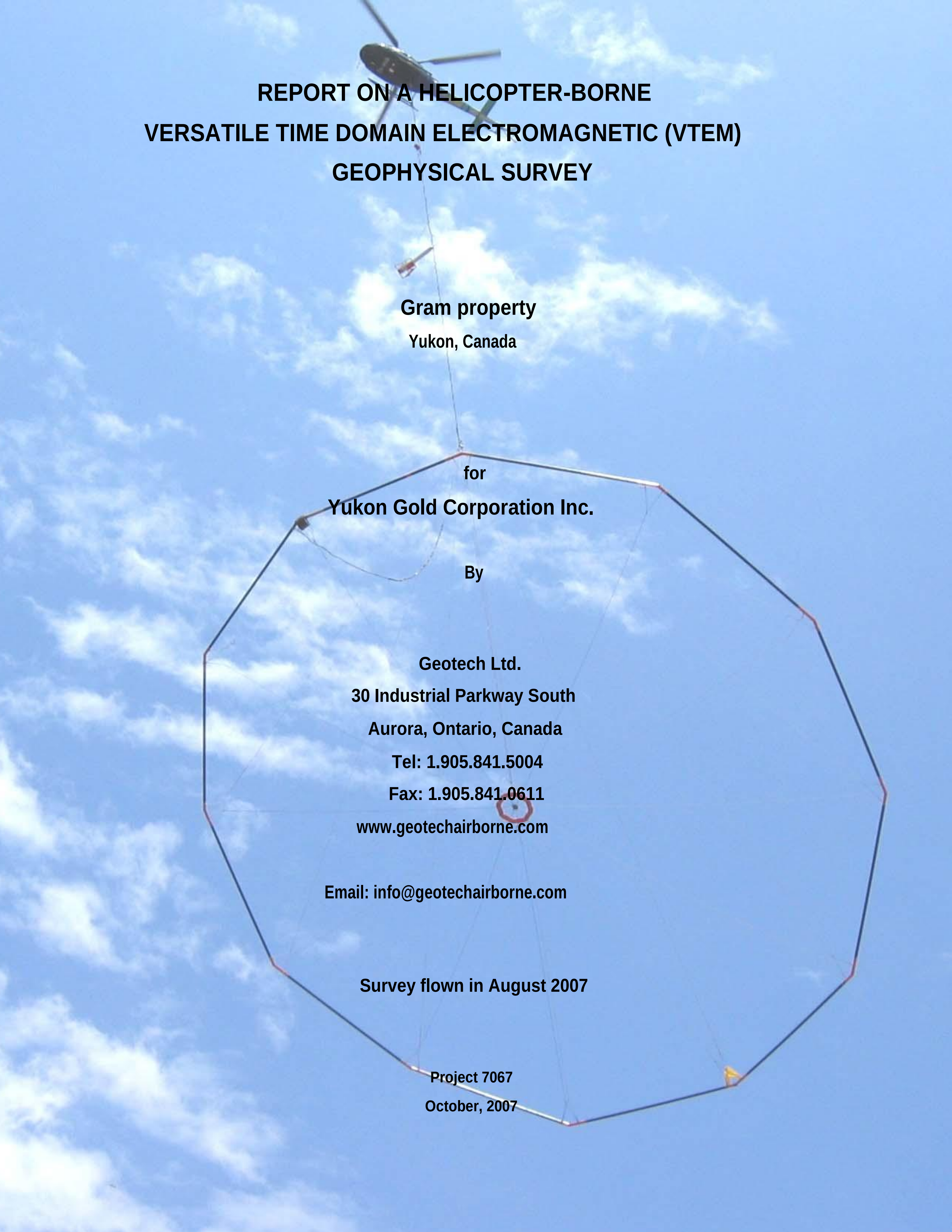
2009/11/13



HINTON SYNDICATE, GRAM VTEM/MAG, Line 5280 flown North, Detail
10.0000
1.0000
0.8000
0.6000
0.4000
0.2000
MAIN PEAK
WEAK TROUGH
SF_32
SF_30
SF_28
SF_24
SF_20
SF_16
SF_12
10.0000
8.0000
6.0000
4.0000
2.0000
0.0000
124
125
BF_32
BF_30
BF_28
BF_24
BF_20
BF_16
BF_12
7088200 7088300 7088400 7088500 7088600 7088700 7088800 7088900 7088990
y (m)
Figure 2
database: c:\HINTON\jk on database\7067_gram.gdb line/group: L5280
2009/11/13

APPENDIX 4

Report on a Helicopter-Borne
Versatile Time Domain Electromagnetic (VTEM) Geophysical Survey
– Gram Property – Yukon, Canada
– by Geotech Ltd. – Flown in August 2007



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

Gram property

Yukon, Canada

for

Yukon Gold Corporation Inc.

By

Geotech Ltd.

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Aurora, Ontario, Canada

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Survey flown in August 2007

Project 7067

October, 2007

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APPENDICES

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 (Km2)	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.

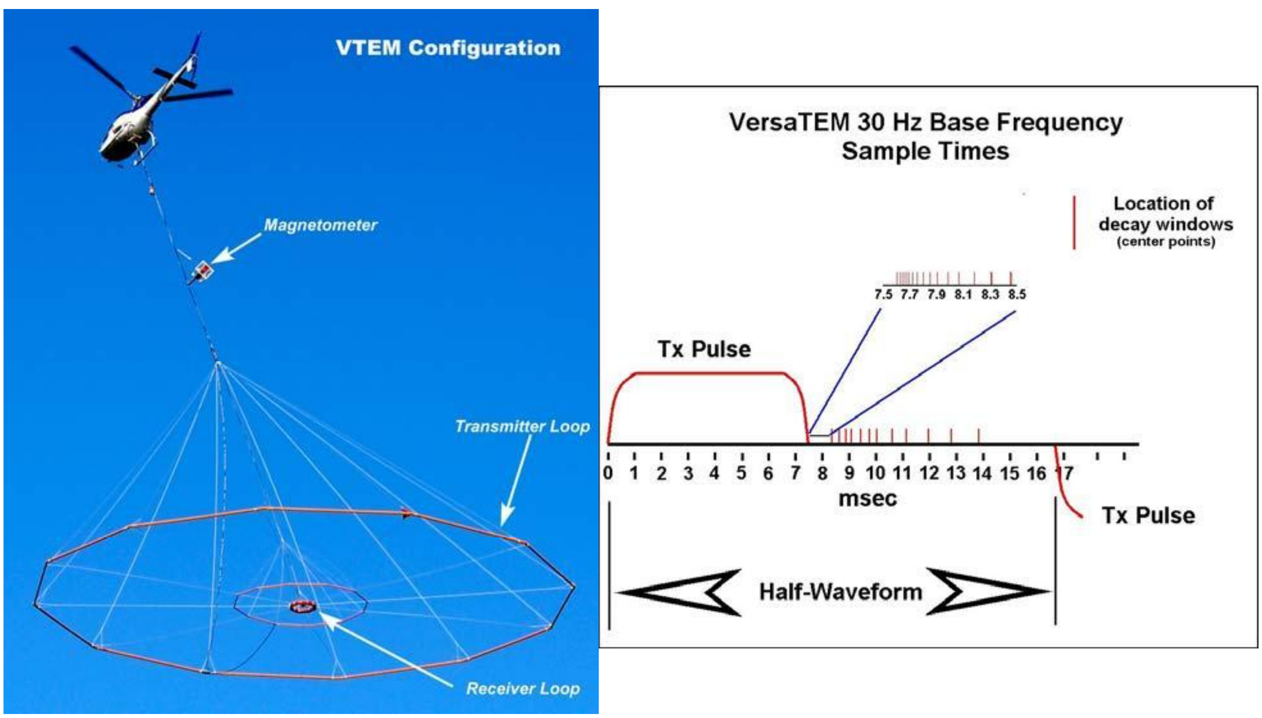

Figure 1 – VTEM configuration

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 µs to 6578 µs, 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	274 5 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 m^2
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 TYPESAMPLING	
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 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 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

□

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 274 5 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*m4)
BF[11]:	B-field 141 microsecond time channel (pV*ms)/(A*m4)
BF[12]:	B-field 167 microsecond time channel (pV*ms)/(A*m4)
BF[13]:	B-field 198 microsecond time channel(pV*ms)/(A*m4)

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)
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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 km^2. 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.

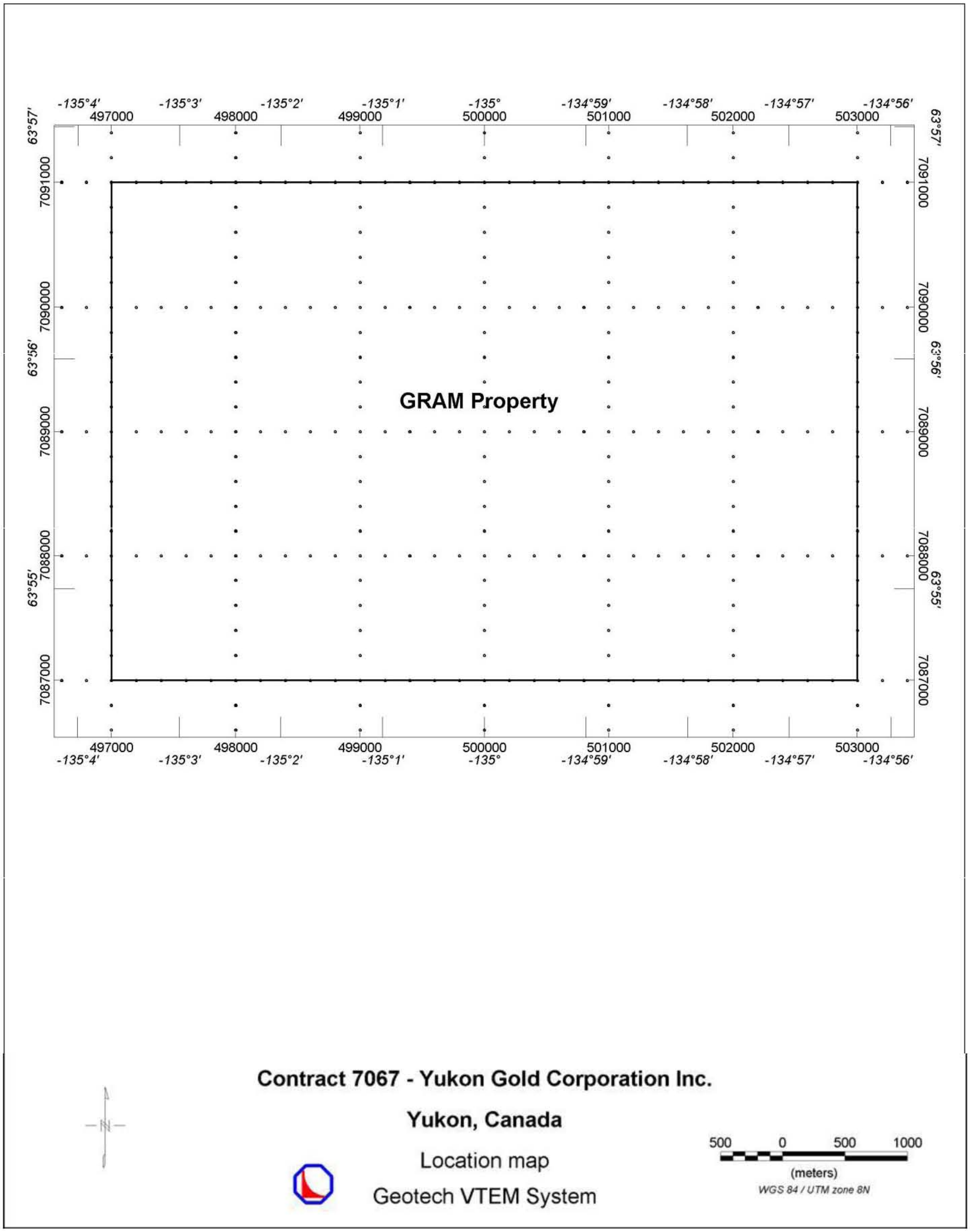
A number of EM anomaly groupings were identified. Ground follow-up of those anomalies should be carried out if favourably supported by other geoscientific data.

Respectfully submitted,

George Lev
Geotech Ltd.
October, 2007

APPENDIX A

SURVEY BLOCK LOCATION MAP


-135°4' -135°3' -135°2' -135°1' -135° -134°59' -134°58' -134°57' -134°56'
497000 498000 499000 500000 501000 502000 503000
63°57'
63°56'
63°55'
7091000
7090000
7089000
7088000
7087000
GRAM Property
Contract 7067 - Yukon Gold Corporation Inc.
Yukon, Canada
Location map
Geotech VTEM System
500 0 500 1000
(meters)
WGS 84 / UTM zone 8N

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

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 duel 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 80º. 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 90º to about 30º. The method is not sensitive enough where dips are less than about 30º. Figure E shows a plate dipping 45º 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.

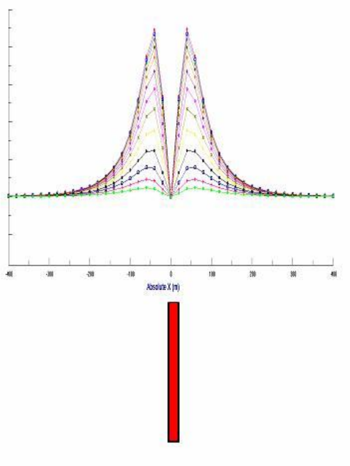
Figure H shows a special case where two plates are positioned to represent a synclinal structure. Note that the main characteristic to remember is the centre amplitudes are higher (approximately double) compared to the high shoulder of a single plate. This model is very representative of tightly folded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

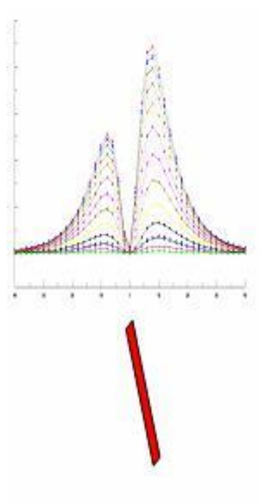
Variation of Prism Depth

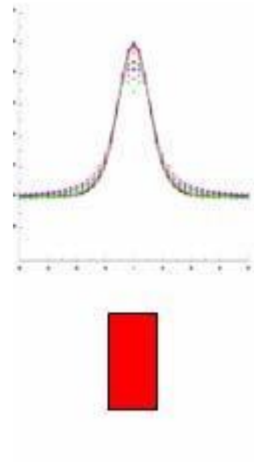
Finally, with prism models, another algorithm is required to represent current on the plate. A plate model is considered to be infinitely thin with respect to thickness and incapable of representing the current in the thickness dimension. A prism model is constructed to deal with this problem, thereby,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

A **B** **C**

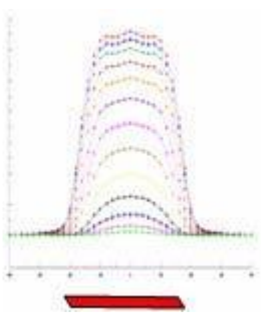


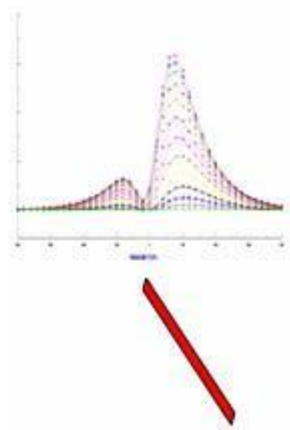


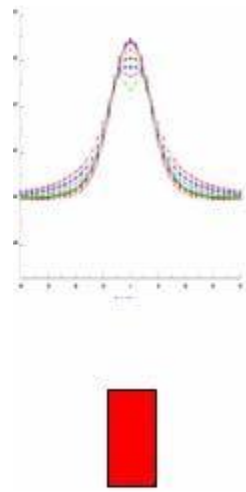


D

E F

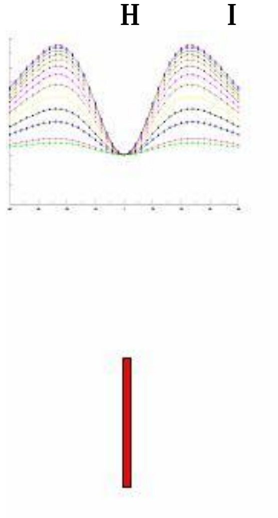


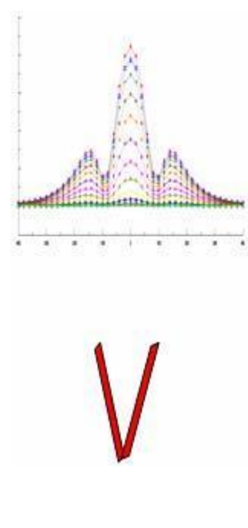


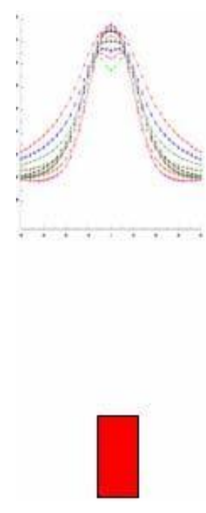


G

H **I**







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, it 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 30º. For angles less than 30º to 0º, 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 surfacial 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.

APPENDIX D

VTEM WAVEFO