TYPE OF REPORT [type of survey(s)]: Airborne Geophysical Survey   TOTAL COST: $226,059

AUTHOR(S): Ben Mossman   SIGNATURE(S): _Ben Mossman_

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S): _____   YEAR OF WORK: 2011

STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S): Jan 11 2012 - SOW - 5164265

PROPERTY NAME: BANKS ISLAND MINERAL PROPERTY

CLAIM NAME(S) (on which the work was done): 843425, 843426, 843428, 843429, 843430, 843432, 843438, 843442, 843443, 843444
843445, 843447, 843448, 843449, 843450, 843451, 843452, 843453, 843454, 843455, 843456

COMMODITIES SOUGHT: GOLD

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN: 103G024, 103G025, 130G026

MINING DIVISION: Skeena   NTS/BCGS: 103G08/103G.040

LATITUDE: 53 ° 22 '00 "   LONGITUDE: 130 ° 09 '00 " (at centre of work)

OWNER(S):
1) Selkirk Metals Corp.   2) _____

MAILING ADDRESS:
200-580 Hornby Street, Vancouver BC V6C 2B6

OPERATOR(S) [who paid for the work]:
1) Banks Island Gold Ltd.   2) _____

MAILING ADDRESS:
300-1055 W. Hastings St. Vancouver BC V6E 2E9

PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude):

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS:

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)			
Ground, mapping			
Photo Interpretation			
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic			
Electromagnetic			
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne	978.2 line-km	ALL	$226,059
GEOCHEMICAL (number of samples analysed for...)			
Soil			
Silt			
Rock			
Other			
DRILLING (total metres; number of holes, size)			
Core			
Non-core			
RELATED TECHNICAL			
Sampling/assaying			
Petrographic			
Mineralographic			
Metallurgic			
PROSPECTING (scale, area)			
PREPARATORY / PHYSICAL			
Line/grid (kilometres)			
Topographic/Photogrammetric (scale, area)			
Legal surveys (scale, area)			
Road, local access (kilometres)/trail			
Trench (metres)			
Underground dev. (metres)			
Other			
		TOTAL COST:	$226,059

VERSATILE ELECTROMAGNETIC TIME-DOMAIN AIRBORNE GEOPHYSICAL SURVEY

ON THE

BANKS ISLAND MINERAL PROPERTY

Located on Banks Island, BC

53°22'N, 130°09'W

NTS 103G/8E

BCGS 103G040

Skeena Mining Division

Mineral Tenures: 843425, 843426, 843428, 843429, 843430, 843432, 843438, 843442, 843443, 843444, 843445, 843447, 843448, 843449, 843450, 843451, 843452, 843453, 843454, 843455, 843456

Assessment Work Includes: 978 line-km VTEMplus Airborne Geophysical Survey

Operator: Banks Island Gold Ltd.

Owner: Selkirk Metals Corp.

VTEM Survey, Report & Analysis by: Geotech Ltd.

Assessment Report Prepared by: Benjamin Mossman, P.Eng

Effective Date: January 11, 2012

Report Submitted: March 13, 2012

DATE AND SIGNATURE

The undersigned prepared the foregoing Assessment Report entitled *"Versatile Electromagnetic Time-Domain Airborne Geophysical Survey on the Banks Island Mineral Property"*.

Signed:

"Signed and Sealed"

Benjamin Mossman, P.Eng.
March 13th, 2011

CERTIFICATE OF AUTHOR

I, Benjamin W. Mossman, P.Eng., do hereby certify that:

1. I am currently employed as President of:
    Banks Island Gold Ltd.
    Suite 300 – 1055 W Hastings St.
    Vancouver, BC
2. This certificate applies to the Assessment Report entitled "*"Versatile Electromagnetic Time-Domain Airborne Geophysical Survey on the Banks Island Mineral Property".*" dated March 13, 2012.
3. I am a graduate of the University of British Columbia (2001) with a B.A.Sc. degree in Mining and Mineral Process Engineering. I have practiced in my profession continuously for 11 years since my graduation.
4. I am a Professional Engineer registered with the Association of Professional Engineers and Geoscientists of the Province of British Columbia (#31171).
5. I am employed by the issuer, Banks Island Gold Ltd., and accordingly am not independent as described in Section 1.4 of NI 43-101.
6. As of the date of this certificate, to the best of my knowledge, information and belief, this Assessment Report contains all scientific and technical information that is required to be disclosed to make this Assessment Report not misleading.
7. I consent to the filing of this Assessment Report with any stock exchange or other regulatory authority, and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of this Assessment Report.

Dated this 13th day of March 2011.

"signed and sealed"

Benjamin Mossman, P.Eng.
Banks Island Gold Ltd.

TABLE OF CONTENTS

1.0   INTRODUCTION

1.1   INTRODUCTION

During August 27th to August 31st, 2011 Geotech Ltd. carried out a helicopter-borne geophysical survey over the Banks Island Mineral Property situated on Banks Island approximately 104 kilometers south of Prince Rupert, British Columbia.

The airborne geophysical survey was completed over the Mineral Tenures: 514644, 514646, 603539, 603540, 603543, *843425, 843426, 843428, 843429, 843430, 843432, 843438, 843442, 843443, 843444, 843450, 843451, 843455, 843456*

Principal geophysical sensors included a versatile time domain electromagnetic (VTEMplus) system, and horizontal magnetic gradiometer. Ancillary equipment included a GPS navigation system and a radar altimeter. A total of 978.2 line-kilometres of geophysical data were acquired during the survey. (Geotech, 2011)

In-field data quality assurance and preliminary processing were carried out on a daily basis during the acquisition phase. Preliminary and final data processing, including generation of final digital data and map products were undertaken from the office of Geotech Ltd. in Aurora, Ontario. (Geotech, 2011)

The processed survey results, procedures, maps, and interpretations prepared by Geotech Ltd. are presented in Appendix A of this report.

1.2 PROJECT LOCATION

The 12,025 hectare Banks Island Mineral Property is located in the Skeena Mining Division on Banks Island in northwestern British Columbia, as shown on the overview map and regional map in Figure 1-1 and Figure 1-2, respectively. The Property is located approximately 110 km south of the City of Prince Rupert (54°18'44"N, 130°19'38"W) and 120 km southwest of the town of Kitimat (54°03'17"N, 128°39'28"W). The Property, on NTS map sheet 103G/8E and 103H/05W and BCGS map sheet 103G040 and 103H031, is centred on 53°22'N, 130°09'W. Additionally, the UTM coordinates are 5,914,000N, 423,600E in Zone 9 (NAD 83).
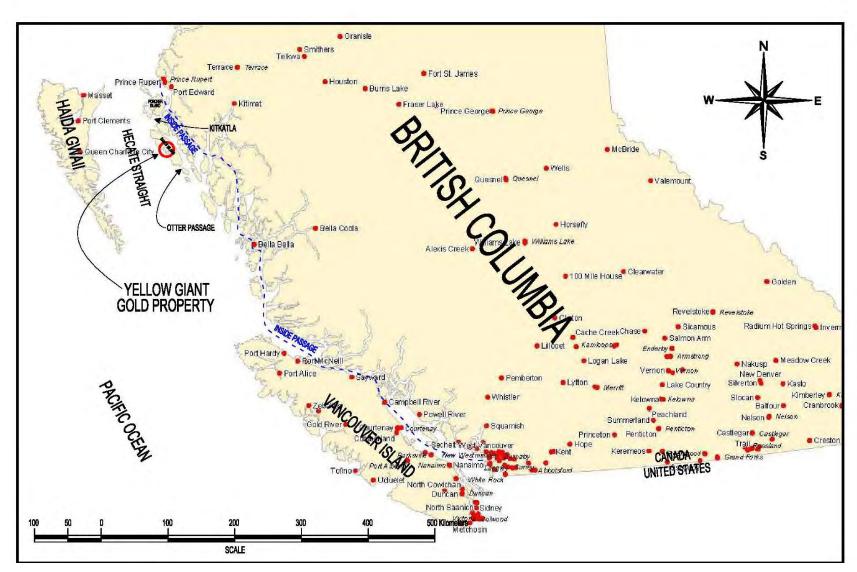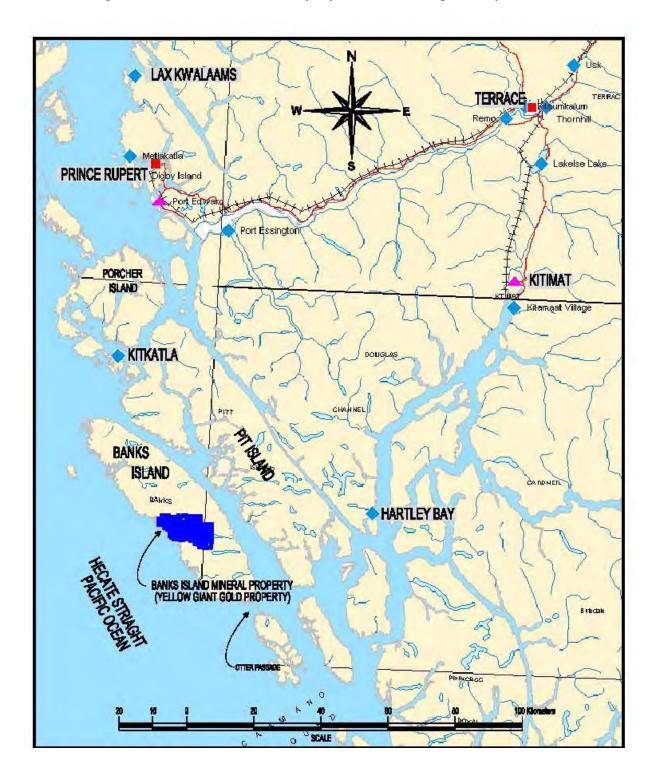
Figure 1-1   Property Location Overview

Figure 1-1   Banks Island Mineral Property Claim Location, Regional Map

1.3   PROPERTY DESCRIPTION

The Banks Island Mineral Property consists of 26 mineral claims (623 cells) totaling 12,025 hectares as shown in Figure 1-3 and detailed in Table 1-1. The original mineral claims that comprised the Yellow Giant Gold Property include claims with Tenure No. 514644, 514646, 603539, 603540, and 603543. On the 18th of January 2011, Selkirk Metals Corp. staked 21 additional mineral claims surrounding the original Yellow Giant claims, which together are referred to as the Banks Island Mineral Property. The recorded owner of the claims is Selkirk Metals Corp. The Property boundaries are located along claim limits as determined by the BC map staking system.

The original Yellow Giant mineral claims were staked at different times throughout the 1960s by various companies as described in detail in Section 1.11: History of this report. Through various agreements since the original staking, there has been a succession of ownership of the mineral claims.

The original Yellow Giant mineral claims are in good standing until the 1st of January 2014, while the remaining mineral claims (Claims B1 through B21) are in good standing until the 18th of January 2012. Under the BC Mineral Tenure Act, Banks Island Gold Ltd. can maintain the located mineral claims in good standing by filing assessment work in the amount of $4.00 per hectare per year for recently staked claims and $8.00 per hectare per year for older claims.

No significant factors or risk are known to exist which would affect access, title, or the right or ability to perform work on the Property.
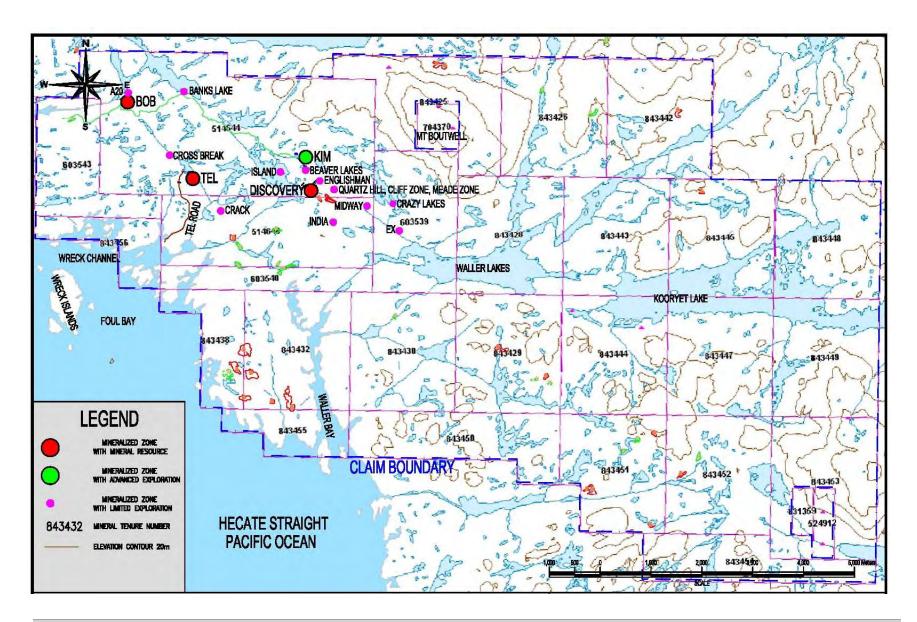
Table 1-1   Banks Island Property Mineral Tenures

BANKS ISLAND PROPERTY: MINERAL TENURES							Date:	Nov 11 2011	
							Tenures:	26	
OWNER:	Selkirk Metals Corp.		100.0%		BC Client No.	231261	Cells:	623	
							Area (ha):	12,024.73	
ROYALTY:	Advanced Primary Metals Corp.		1.5%	Net Smelter Return (on tenures 514644 and 514646)					
MINING DIVISION: Skeena									
LOCATION: on the west side of Banks Island 105 km south of Prince Rupert and 120 km southwest of Kitimat									
MAP NO.	NTS:	103G/08E, 103H/05W		GEOGRAPHIC COORDINATES:			53° 22.2′ N;	130° 08.9′ W	
	BCGS:	103G040, 103H031		UTM COORDINATES (NAD 83, ZONE 9):			5 914 000 N	423 600 E	

Tenure No.	Tenure Type	Claim Name	% Held	Map No.	Record Date	Good To Date	Cells	Area (ha)	Work
514644	Mineral		100.0%	103G040	2005/jun/17	2014/jan/1	73	1,408.10	$11,264.82
514646	Mineral		100.0%	103G040	2005/jun/17	2014/jan/1	30	578.92	$4,631.35
603539	Mineral		100.0%	103G040	2009/apr/28	2014/jan/1	24	463.11	$1,852.44
603540	Mineral		100.0%	103G040	2009/apr/28	2014/jan/1	10	193.01	$772.04
603543	Mineral		100.0%	103G040	2009/apr/28	2014/jan/1	18	347.25	$1,389.00
843425	Mineral	B1	100.0%	103G040	2011/jan/18	2012/jan/18	24	462.89	$1,851.56
843426	Mineral	B2	100.0%	103G040	2011/jan/18	2012/jan/18	25	482.21	$1,928.84
843428	Mineral	B3	100.0%	103G040	2011/jan/18	2012/jan/18	25	482.44	$1,929.76
843429	Mineral	B4	100.0%	103G040	2011/jan/18	2012/jan/18	25	482.67	$1,930.68
843430	Mineral	B5	100.0%	103G040	2011/jan/18	2012/jan/18	25	482.67	$1,930.68
843432	Mineral	B6	100.0%	103G040	2011/jan/18	2012/jan/18	25	482.67	$1,930.68
843438	Mineral	B7	100.0%	103G040	2011/jan/18	2012/jan/18	12	231.67	$926.68
843442	Mineral	B8	100.0%	103G040	2011/jan/18	2012/jan/18	25	482.21	$1,928.84
843443	Mineral	B9	100.0%	103G040	2011/jan/18	2012/jan/18	25	482.44	$1,929.76
843444	Mineral	B10	100.0%	103G040	2011/jan/18	2012/jan/18	25	482.67	$1,930.68
843445	Mineral	B11	100.0%	103G040	2011/jan/18	2012/jan/18	25	482.44	$1,929.76
843447	Mineral	B12	100.0%	103G040	2011/jan/18	2012/jan/18	25	482.67	$1,930.68
843448	Mineral	B13	100.0%	103H031	2011/jan/18	2012/jan/18	25	482.44	$1,929.76
843449	Mineral	B14	100.0%	103H031	2011/jan/18	2012/jan/18	25	482.67	$1,930.68
843450	Mineral	B15	100.0%	103G040	2011/jan/18	2012/jan/18	22	424.90	$1,699.60
843451	Mineral	B16	100.0%	103G040	2011/jan/18	2012/jan/18	23	444.27	$1,777.08
843452	Mineral	B17	100.0%	103G040	2011/jan/18	2012/jan/18	25	482.90	$1,931.60
843453	Mineral	B18	100.0%	103H031	2011/jan/18	2012/jan/18	25	482.91	$1,931.64
843454	Mineral	B19	100.0%	103G040	2011/jan/18	2012/jan/18	17	328.49	$1,313.96
843455	Mineral	B20	100.0%	103G040	2011/jan/18	2012/jan/18	10	193.13	$772.52
843456	Mineral	B21	100.0%	103G040	2011/jan/18	2012/jan/18	10	192.98	$771.92
TOTAL	**26**						**623**	**12,024.73**	**$56,047.02**

1.4   AGREEMENTS

Banks Island Gold Ltd. has had an active interest in the Banks Island Mineral Property since the beginning of 2011 and presently holds an option agreement with Selkirk Metals Corp., a subsidiary of Imperial Metals Corporation. The *Mineral Property Exploration & Option Agreement* (Option Agreement) dated the 1st of March, 2011, outlines the obligations that Banks Island Gold Ltd. must fulfill to earn 100% interest in the Property. Subject to certain details, Banks Island Gold Ltd. must carry out $3,250,000 in exploration work on the Property by the 31st of December 2014 and must issue to Selkirk Metals Corp. 5% of the fully diluted share capital of Banks Island Gold Ltd. upon closing.

1.5   PERMITS

An Exploration Activities and Reclamation Permit, with reference to a Notice of Work document, under Section 10 of the *Mines Act* has been obtained by Banks Island Gold Ltd. from the approving authority, the British Columbia Ministry of Energy, Mines and Petroleum Resources. This permit allows diamond drilling, trenching, geophysical surveys, underground development, road building, and the extraction of a 10,000 tonne bulk sample within specified work areas of the Banks Island Mineral Property, including the Bob Zone, Tel Zone, and Discovery Zone.

1.6   ROYALTIES

Future production from the Banks Island Mineral Property is subject to a 1.5% Net Smelter Return (NSR) royalty payable to Advanced Primary Minerals Corp. pursuant to the Advanced Primary Minerals Agreement dated the 17th of April, 2009 between Selkirk Metals Corp. and Advanced Primary Minerals Corp. Additionally, a 2.0% NSR royalty is payable to Selkirk Metals Corp. as defined in the Option Agreement.

As per the Option Agreement there is a "Royalty Purchase Option" whereby Banks Island Gold Ltd. has the option to purchase one-half (1.0% NSR) of the Selkirk Royalty from Selkirk for the price of $1,000,000. In addition, Banks Island Gold Ltd. has the right at any time to buy back one-third (0.5% NSR) of the Advanced Primary Minerals Royalty from Advanced Primary Minerals Corp. for the price of $300,000.

At any time after which Banks Island Gold Ltd. has completed the obligations of the Option Agreement and prior to succeeding in securing financing and commencing commercial production work, Selkirk Metals Corp. has the right to reacquire a 51% interest in the Property ("Back-In Option") whereby a Joint Venture Agreement will be exercised with Selkirk as the operator. Consequently, Selkirk will fund 100% of the subsequent Exploration Work until Selkirk has provided 2.5 times the monies expended on the Property by Banks Island Gold Ltd., and the Selkirk Royalty will no longer be a charge upon the Property.

1.7   ACCESSIBILITY

The Banks Island Mineral Property is situated on the west side of Banks Island, a coastal island located on the Hecate Straight approximately 110 km south of Prince Rupert and 120 km southwest of Kitimat. The location of the mineral claims with relation to the surrounding centres and communities is shown in Figure 4-2. Adjacent communities include Hartley Bay, which is located 55 km to the east on the mainland, and Kitkatla, which is located 55 km to the north on Dolphin Island.

Banks Island is uninhabited and presently the only access to Banks Island is by air or by boat. Access is easiest by float-plane or helicopter, which can be chartered from Prince Rupert. Barges and boats can access the island through the inside passage along the coast of British Columbia, as shown in Figure 1-1, and then around the outside of the island to Survey Bay or Wreck Bay on the west side of Banks Island. Survey Bay and Wreck Bay are the most suitable landing locations for barges servicing the Banks Island Mineral Property.

A few short roads were built on Banks Island during the exploration and development programs that were completed over the past couple decades. The pre-existing roads include short haul roads from barge landings at Survey Bay and Wreck Bay to the Bob Zone and Tel Zone, respectively. From many years of inactivity the roads had become overgrown with alders as shown in the aerial photo of the road to the Tel Zone (Figure 1-4) taken during the January 2011 site visit. Clearing of the Tel Access Road has now been completed by Banks Island Gold and the road is operational.

Figure 1-4   Existing Road to Tel Deposit and Typical Banks Island Landscape, January 2011 Site Visit

1.8   CLIMATE

Situated along the coast of British Columbia, the Yellow Giant Gold Property is located in the Coastal Western Hemlock Zone of the British Columbia's Ministry of Forests and Range Biogeoclimatic Ecosystem Classification (BC Ministry of Forests, 1995). The climate of Banks Island is characterized by high levels of precipitation, storms accompanied by strong winds, cool summers, and mild winters due to the influence of the Pacific Ocean. The average temperatures range from 4°C in the winter to 14°C in the summer. Banks Island has an average annual precipitation of 2120 mm, which is mainly rainfall. The weather statistics are representative of the past 30 years from the weather station at Bonilla Island located approximately 35 km northwest of the Yellow Giant Property (Weather Network, 2011).

The exploration season is year-round at Banks Island which is evident from past exploration activity that has occurred from summer months through to January.

1.9 PHYSIOGRAPHY

Banks Island is a coastal lowland area. Topographic elevations on the Yellow Giant Gold Property range from 0 m to a maximum elevation of 400 m at Mount Boutwell, towards the northeast. The Property is mainly hummocky coastal plain containing abundant shallow lakes and wetlands (particularly bogs), which are bisected by streams. Previous glaciation from the northeast has left exposed bedrock on ridges and deposited glacial till in some valleys. The landscape of the area is dominated by shallow organic and morainal surficial materials. Characteristic vegetation includes coastal muskeg and stunted coniferous forests of western hemlock, western red cedar, yellow cedar, amabilis fir, and shore pine. Figure 1-4 displays the typical landscape on Banks Island. The flat areas are typically underlain by intrusive rocks, which are characterized by coniferous muskeg. Moderately thick coniferous forests govern regions underlain by sedimentary rocks (Fersen, 2002).

1.10 INFRASTRUCTURE

Currently there are no permanent facilities on the Yellow Giant Gold Property. Previous camps used for exploration on the Property were reclaimed in 1998 by Doublestar Resources Ltd. The Ministry of Energy and Mines, Northwest Region, acknowledged the reclamation work completed in May 1998 on the Yellow Giant Gold Property (Graff, 1998).

Surface rights are owned by the Crown; permits have been obtained to perform exploration work and a mining lease from the Crown would be required for mining operations.

Grid electric power is not available on Banks Island.

Water is available from streams or lakes adjacent to the Yellow Giant Gold Property.

Some exploration and supporting personnel may be recruited from the adjacent communities. Skilled professionals not available in local communities could be transported from more distant centers to the Property.

There are abundant level locations within the Yellow Giant Gold Property that can act as rock storage locations. If tailings facilities are considered in the future, detailed studies will be required to determine disposal methods and suitable locations for such a facility.

1.11   HISTORY

1.11.1   *YELLOW GIANT PROPERTY*

Banks Island has a rich history of exploration work completed between 1960 and 1988 by various operators. The information presented here within has drawn from the history previously described in multiple geologic reports of the Property.

Gold mineralization was originally discovered in 1960 when geologically favorable contacts and the presence of limestone were identified during a routine reconnaissance by Ventures Ltd. (an exploration arm of Falconbridge Nickle Mines Ltd.) on the Yellow Giant Gold Property. Large quartz lodes in granite near Hepler Lake, in addition to the identified limestone, prompted the discovery of an auriferous vein (Bank vein) under a blanket of moss. Subsequently, Falconbridge staked 14 "Bank" claims to cover this showing, which is known as the Discovery Zone. By 1963 other companies learned of the Discovery showing on Banks Island. Additional staking by McIntyre Porcupine Mines Ltd., Banks Island Gold Mines (Torwest), Fort Reliance, and Silver Standard Syndicate were completed in 1963 around the original Falconbridge claims (McDougall, 1961).

Exploration on the Yellow Giant Gold Property from 1960 to 1988 consisted of surface prospecting, soil geochemistry, detailed geological mapping, hand and backhoe trenching, airborne geophysical surveys, ground geophysics (SP, IP and horizontal Loop EM), surface and underground diamond drilling, and underground drifting. The extensive exploration by Falconbridge, Hecate Gold, Sproatt Silver, McIntrye Porcupine Mines, and Trader Resources Corp. has led to partial delineation of several gold deposits on the Yellow Giant Gold Property. Four important gold zones were identified along with some twenty other showings. The geological mode of occurrence is disseminated mineralization with bulk tonnage potential and high-grade gold veins (Fersen, 2002).

Exploration activities, in addition to significant events, are described chronologically for the important gold zones on the Yellow Giant Gold Property. Although not identified as a resource in this current report, the Kim Zone bears significant history throughout the development of the Yellow Giant Gold Property and therefore is also described.

1.11.1.1   DISCOVERY ZONE

1960   Discovery showing was identified during prospecting. Falconbridge Nickel
           Mines Ltd. (Ventures Ltd.) located the Banker 1 to 4 claims to cover the

Discovery Zone (east of Hepler Lake). Falconbridge subsequently initiated an exploration program consisting of 11 packsack drill holes to investigate the topographic lineaments.

1963   Geochemical and geophysical (self-potential) surveys were completed at the Discovery Zone, along with 14 diamond drill holes.

1975   Limited self-potential (SP) and electromagnetic (EM) geophysical surveys and limited drilling completed on the Discovery Zone.

1984   Limited SP and EM geophysical surveys and limited drilling completed on the Discovery Zone (Payne, 1996).

1.11.1.2   TEL ZONE

1963   J.W. MacLeod staked the original Tel 23-32 two-post claims (West Group of Main Tel Zone) for McIntyre Porcupine Mines Ltd. to tie-on to the Falconbridge ground after high grade gold values were intersected by Falconbridge Nickel Mines Ltd. on the Discovery Zone. In addition, J.W. MacLeod staked the Tel 1-10 (North Group) and Tel 11-22 (East Group) claims to connect to the Falconbridge ground.

1963   Tel Main Zone was discovered by McIntyre Porcupine Mines Ltd. Tel deposit was mapped and surveyed with geophysics and geochemical identification.

1964   Trenching and drilling of 26 packsack drill holes totaling 537 m was completed on the Tel deposit.

1975   Tel claims were optioned by Sproatt Silver Mines Ltd. who subsequently drilled 300 m along the Tel Central and Tel Main Zone. In addition, Falconbridge completed limited orientation soil sampling in the area and samples were analyzed for zinc, silver, and arsenic, while White Geophysics conducted very low frequency (VLF) and induced polarization (IP) geophysical surveys.

1975   Outright sale of Tel 23, 24, 37, and 38 claims from McIntyre Porcupine Mines Ltd. to Sproatt Silver Mines Ltd. Sproatt Silver immediately completed 16 diamond drill holes in the Tel Zone totaling 998 m.

1977   Sproatt Silver Mines Ltd. changed its name to Hecate Gold Corporation.

1983   Trader Resource Corp, through United Mineral Services Ltd., concluded an option agreement with Host Venture Ltd. (successor company to Hecate Gold Corp.) for acquisition of the Tel claims. Under Trader

Resource Corp. past exploration data was re-evaluated, the property was surveyed, and detailed geological mapping was completed. A major drill program was initiated following reinterpretation of the historical data.

1983   Trader Resource Corp. completed a comprehensive "Prefeasibility Study". International Geosystems Corporation (IGC) calculated ore reserves based on the 1964 and 1975 drill results for the Main Tel Zone (Shearer et al., 1987).

1983-86   Exploration program on the Tel Zone was executed to include a reconnaissance, detailed geochemical surveys, geological mapping, and 91 diamond drill holes totaling 10,265 m. It was noted that drilling required follow-up work because of uncertainty in true width and continuity of the ore lenses.

1986   Mineral inventories and various reserve calculations by different methods were undertaken by several independent parties including Wright Engineers Ltd., H.A. Simons Consulting Engineers Ltd., and Montgomery Consultants Ltd. (Shearer et al., 1987).

1987   Approximately 300 m of trenching in the Tel Zone exposed an ore-bearing vein.

1987   Drill program was executed for Trader Resource Corp. by TVW Engineering Ltd. which defined the Tel deposit at depth (Crawford & Vulimiri, 1988).

2011   Drill program to executed by Banks Island Gold on the Tel Zone.

1.11.1.3   BOB ZONE

1963   Falconbridge prospectors discovered the Bob Zone and it was identified as an area with geologic potential.

1964-65   Exploration program for the Bob Zone was executed. Exploration included geological surveys, geophysical (SP) surveys, geological mapping, and 15 packsack drill holes were completed totaling 317 m.

1975   Geochemical survey was completed across the Bob Zone.

1976   Four diamond drill holes were drilled totaling 426 m.

1977-78   Hecate Gold Corp. optioned a portion of the Falconbridge ground and subsequently executed a major exploration program. Exploration included excavation of a 420 m decline along a major vein to a depth of 65 m below the ground surface. The decline was originally planned as a

spiral from hanging wall to footwall and intersection of the mineralization zone would occur at multiple levels. In contrast, the first two legs of the decline were driven along the vein, which resulted in slow and costly development. Subsequently, seven diamond drill holes were drilled from underground totaling 100 m (Michell, 1986).

1984-85   Exploration program was completed by Trader Resource Corp., which included backhoe trenching, geological mapping, soil sampling, and seven diamond drill holes totaling 865 m.

1987   Seven diamond drill holes were drilled totaling 1313 m.

1987   Joint venture agreement between Trader Resource Corp. and Rampage Resources Ltd. was entered to explore a 4 km^2 area surrounding the Bob deposit (Seaphim, 1987).

2011   Banks Island Gold Ltd. completed a 978 line-km VTEM airborne geophysical survey and drilled 563m of core at the Tel Zone.

1.11.1.4   KIM ZONE

1963   Falconbridge prospectors discovered the Kim Zone.

1963-64   Exploration program was executed which included geological mapping, trenching, and 63 diamond drill holes totaling 3651 m.

1984   Kim Zone was exposed by nine large trenches, the geology mapped, old drill holes were re-logged, and eight deep diamond drill holes were drilled totaling 1323 m.

1.11.2   *HISTORICAL OWNERSHIP*

Since 1988, activity on the Yellow Giant Gold Property has been limited to a survey program that was completed by Selkirk Metals Corp. in 2010. The control survey program was restricted to establishing UTM coordinate values for the old drill holes and facilities. During the interim, the following acquisitions and significant events related to the Yellow Giant Gold Property have occurred in chronological order:

1988   Gold prices begin to decline until approximately 2005.

1992   Royal Oak Mines Ltd. takes control of Trader Resource Corp.

1993   Trader Resource Corp. owns 90% of the Yellow Giant Property claims, while Falconbridge Nickel Mines Ltd. owns the remaining 10% of the claims.

1994   Trader Resource Corp. acquires Mountain Minerals Ltd. and Highwood Resources Ltd. and takes the name of Highwood Resources Ltd.

1996   Energex Minerals Ltd. acquires 51% of subject claims from Highwood Resources Ltd. (formerly Trader Resource Corp.).

1998   Doublestar Resources Ltd. acquired 51% of the subject claims previously held by Energex Minerals Ltd.

1998   Mr. Bruce Graff, P.Eng. of the Ministry of Energy and Mines – Northwest Region acknowledges and commends the reclamation work completed in May 1998 on the Yellow Giant Mineral Property in a letter addressed to Mr. Alan Savage of Doublestar Resources Limited on the 7th of July 1998 (Graff, 1998).

2000   Doublestar acquires Falconbride's portfolio of exploration properties in British Columbia which includes its 10% stake in Yellow Giant.

2002   Dynatec Corp. merges with Highwood Resources to form Beta Minerals Inc.

2007   Selkirk Metals Corp. (Selkirk) acquires 61% of Banks Island Property through acquisition of Doublestar Resources Ltd.

2009   Advanced Primary Minerals Corp. acquires 39% interest in the Property though the Reverse Takeover of Beta Minerals Inc.

2009   Advanced Primary Minerals Corp. entered into purchase agreement with Selkirk for the sale of 39% mineral interest in the Yellow Giant Gold Property, which gave Selkirk 100% mineral interest in the Property.

2009   Imperial Metals Corporation (Imperial) acquires all shares of Selkirk whereby Selkirk became a wholly-owned subsidiary of Imperial.

2.0 GEOLOGICAL SETTING AND MINERALIZATION

2.1 GEOLOGICAL SETTING

The Yellow Giant Gold Property is on the western edge of the Tertiary-Jurassic Coast Plutonic Complex characterized by northwest trending granitic bodies, mainly granodiorite-quartz monzonite and quartz diorite, which are separated by narrow, persistent Permian or older metasedimentary belts, mainly crystalline limestone, quartzite, skarn and schist. Figure 2-1 displays the lithology of bedrock units on the Banks Island Mineral Property. Lithology mapping and descriptions are derived from GSC and BSGS bedrock mapping.

Known mineralized zones are concentrated near two major faults known as the Arseno and Hepler Faults, which strike at 310 degrees and are central to the two metasedimentary belts. Many secondary faults or structures are also present on the property. Several orientations of these structures are present. The important mineralized zones located to date are hosted in east-west trending structures. Figure 2-2 displays the main structures and water cover over the Yellow Giant portion of the mineral claims. Structures are drawn from air photo lineaments and the Digital Elevation Model.

Figure 2-1   Claim Boundary and Lithology
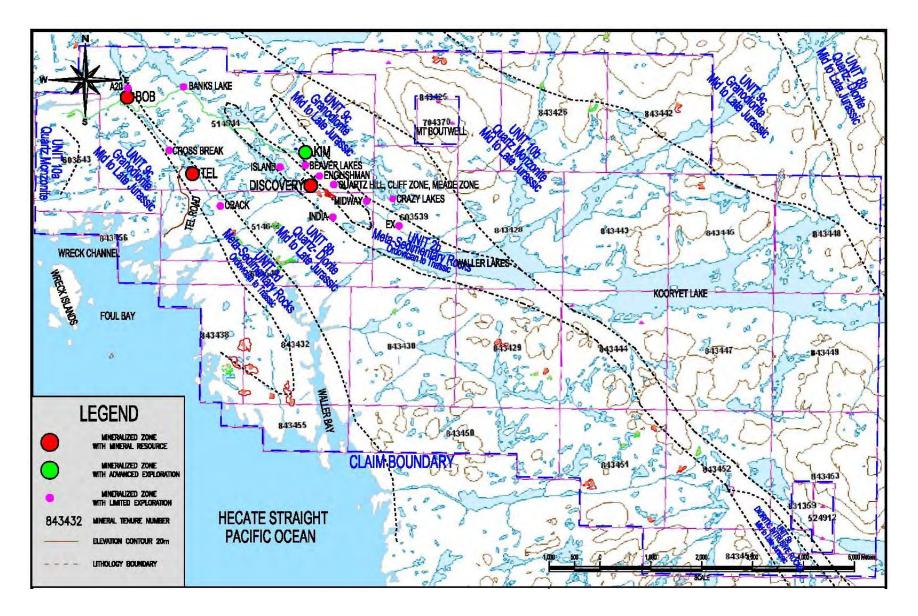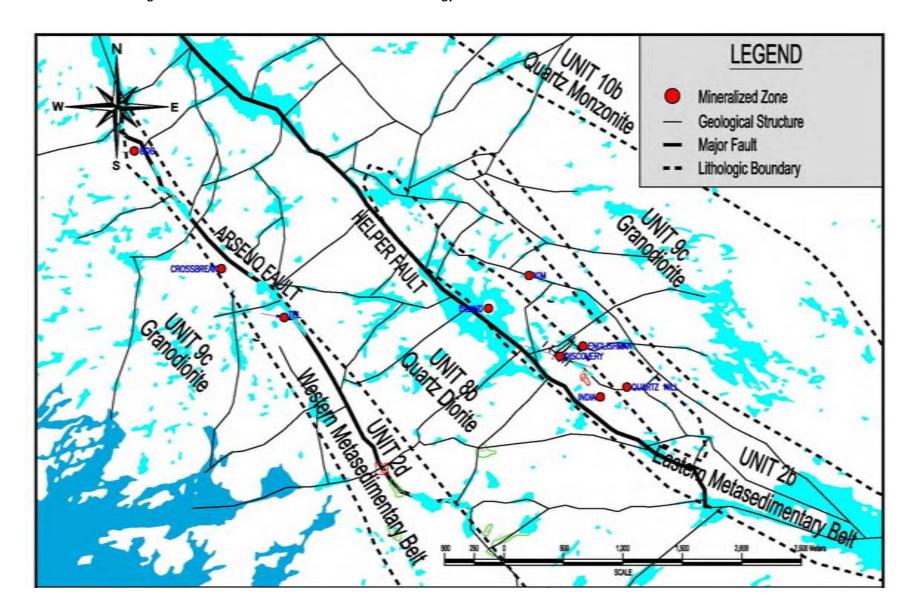
Figure 2-2   Yellow Giant Area - Structures and Lithology

2.1.1   REGIONAL GEOLOGY

Banks Island is located along the western edge of the Coast Plutonic Complex which is mainly Jurassic to Cretaceous in age on the regional scale. The plutons on Banks Island consist of multi-phase coalescing stocks. Two reported dates associated to the plutons are 120 Ma for the Hepler Lake diorite and 124 Ma for sericite in the altered rocks of the Kim pluton in the Kim Zone.

Carboniferous, marine, metasedimentary rocks of the Alexander Terrane form long narrow northwest-trending belts, which are folded tightly to isoclinally. Linear features, characteristic of Banks Island, are enhanced by glacial scouring and in much of the property are marked by furrows, streams, lakes, bluffs, and ridges that are aligned, soil filled, or bare. Many contacts between the sedimentary rocks and plutonic rocks are present along northwest-trending linear features. The contacts are loci for right-lateral, strike-slip faults. Other major structural features include second-order northeast-trending fracture zones and east-west faults, which cut the northwest linear features at regular intervals. The offset of the faults has been interpreted as left-lateral or alternatively, right lateral with offsets of 200m to 300m. Related to the faults are third and fourth order tensional fractures and subsidiary shear zones. Regional joint sets are typically parallel to the prominent structures.

Many of the mineral deposits are centred on or adjacent to intersections of first and second order structures (commonly under water or under glacial deposits). In two different types of deposits, skarn deposits located on contacts of marble and plutonic rocks and hydrothermally altered shear zones in plutonic rocks, the host rocks have been cut by quartz veins containing variable amounts of massive sulfides. The massive sulphides are dominated by pyrite, commonly with minor native gold, minor arsenopyrite, and sometimes other base metal minerals (Payne, 1996).

2.1.2   PROPERTY GEOLOGY

The geology of the Yellow Giant Gold Property is characterized by two long belts of marine sedimentary rocks with a northwesterly strike that are likely carboniferous.

The Western Belt lies along the Bank Barge lineament, and varies in width from 30m to 1km. Rock types of the Western Belt include pyritic argillaceous quartzite, massive to finely banded marble, siltstone, calcareous siltstone, and pyritic graphitic shale. Regional metamorphism produced intense deformation and a prominent schistosity with an orientation that is mainly parallel to the bedding. Subsequently, contact metamorphism against the plutonic rocks produced hornblende-biotite hornfels in pelitic units and skarn in calcareous units. The skarn contains the main assemblage of epidote-quartz, garnet, and actinolite-zoisite-diopside.

The Eastern Belt consists of the main body of the Kim pluton along with two narrow flanking northwest-trending bands of metasedimentary rocks similar to those found in the Western Belt. The sedimentary rocks were folded into isoclinal to close folds with a northwesterly trend. Plutonic rocks of the Eastern Belt include Upper Jurassic quartz monzonite, granodiorite, diorite/quartz diorite, and the Kim quartz monzonite. Most of the plutonic rocks are variably foliated. Several areas, most notably the Bob Deposit, contain intrusive breccias with small to very large fragments of marble and greywacke in quartz diorite or diorite.

Regional strike-slip faults trend northwest and likely have a right-lateral offset. Closely associated with the strike-slip faults are conjugate northeast and east-west trending faults, which are dilational in character. Brecciation is also associated with these zones. East-west trending faults are loci for quartz-pyrite vein mineralization, which is most notable where they intersect northwest-trending belts of metasedimentary rocks and parallel faults. In addition, these deposits sometimes contain minor zones of skarn (Payne, 1996).

2.2 MINERALIZATION

Mineralization is structurally controlled and is found in different host rocks. The Bob and Kim Zones are hosted in an igneous quartz monzonite. The Tel Zone is hosted in a metasedimentary limestone/marble. The Discovery Zone is hosted in a metasedimentary limestone/marble/skarn.

Gold mineralization at Yellow Giant occurs in massive sulphide veins with quartz/carbonate gangue. Gold is closely associated with pyrite but typically is non-refractory. Mineralized veins are steeply dipping with widths varying from 0.5m to 5.0m, high grade shoots with strike lengths of approximately 50m and known depths up to and exceeding 150m are present within mineralized zones.

The three most important mineralized zones, Tel, Discovery, and Bob Zones, are discussed below.

2.2.1 TEL ZONE

The Tel Zone consists of two distinct zones, the Tel Central Zone and the Tel Main Zone. Both zones are structurally controlled gold-rich massive sulphide veins and are hosted in limestone/marble wall rocks. It is possible that these two zones are the same vein and have been subjected to post mineralization deformation; however, there is evidence that these zones have been formed in separate structural features and are separate veins. The two zones have steep but opposite dip directions, with the Tel Central Zone dipping south and the Tel Main Zone dipping north. The Tel

Main Zone has noticeably higher zinc content with values in the range 6% to 12% Zn, based on historic assays. Zinc content in the Tel Central Zone is much lower, commonly less than 1% Zn. The Tel Main Zone and Tel Central Zone differ in strike direction by approximately 20 degrees.

The Tel Main Zone is near surface and outcrops to surface at the centre of the block. It is steeply dipping at approximately 80 degrees. The Tel Main Zone contains a high grade shoot with a known strike length of 55m, a known vertical dimension of 30m, and an average true width of 2.0m.

The main shoot at Tel Central Zone has a relatively short strike length of approximately 55m compared to its vertical dimension of 135m. The Tel Central Zone is steeply dipping at approximately 85 degrees with an average true width of 1.6m.

The Tel Zones are located in a stratigraphic sequence in the northwest trending belt of metasedimentary rocks which dip at 55° to 80° to the northeast and evidence suggests that the belt may be overturned. From northeast to southwest the stratigraphic section is as follows: massive coarse marble, grey wispy banded marble, light brown silty marble, and light grey medium grained marble. It is intersected by many faults and shears with chloritic slickensides, graphite seams, and gouge. Garnet-actinolite skarn is developed variably in all metasedimentary units.

Gold occurs in banded, quartz-sulfide veins and breccias which crosscut the bedding in the Tel Zones. Sulphides present include pyrite, arsenopyrite, sphalerite, chalcopyrite, minor galena, and pyrrhotite. Gold values correlate with total sulphide, particularly with pyrite. The main vein varies in width from a few centimetres to several metres and has a lensey nature, with individual lenses averaging 20m to 100m in length and depth. Lenses cross bedding and may be en echelon in nature. In addition, abundant post mineralization faults occur in the hanging wall (Payne, 1996).

2.2.2   DISCOVERY ZONE

The Discovery Zone consists primarily of two parallel steeply dipping veins. The dips of the veins are approximately 80 degrees. The veins are gold enriched massive sulphides in a quartz gangue. The hanging wall vein is hosted in a skarn which is adjacent to intrusive rocks located further into the hanging wall. The rocks between the veins and in the footwall of the vein are composed of limestone/marble. It is possible that these parallel veins are due to a fault repetition of a single vein; however, this cannot be confirmed will current available information. The hanging wall vein is of significantly higher gold grade than the footwall vein. The hanging wall vein is described as massive sulphide, whereas the footwall vein is described as

quartz/pyrite mineralization. The main Discovery Zone shoot has a strike length of 45m, a vertical dimension of 26m, and a combined average horizontal width of 5.1m which includes both veins and separating marble.

The Discovery Zone occurs between coarse, grey marble to the south and skarn to the northeast. Near the contact the skarn is green and compact, consisting of zoisite-actinolite-quartz. In the core of the skarn, the rock is coarser grained and consist of variations between dark green epidote-quartz skarn and deep red, almandine garnet-rich skarn. Additionally, there are scattered interstitial patches of medium to coarse grained quartz and/or calcite. Gold is associated with lenses and patches of massive sulfide dominated by pyrite, with less abundant pyrrhotite, arsenopyrite, sphalerite, and chalcopyrite (Payne, 1996).

2.2.3   BOB ZONE

The Bob Zone consists of a steeply dipping vein at approximately 80 degrees. The main shoot has a known strike length of 40m, a known vertical dimension of approximately 110m, and an average horizontal width of 3.7m. The Bob vein extends to a depth of at least 130m below surface.

The Bob Zone is a vein system in a dilational fault, the Bob Fault, which has a trend of 090°. Near the surface, the host rock is mainly pelitic metasedimentary rocks and skarn. At depth, the host rock is a quartz diorite breccia containing numerous blocks of metasedimentary rocks and marble skarn, especially along the trace of the Banks Barge linear structure, 100m east of the deposit. The veins are quartz-rich with very coarsely banded fine and coarse grained pyrite with minor chalcopyrite and trace to minor arsenopyrite, galena, sphalerite, and molybdenum. Total sulfide content over widths of 10cm ranges from 5-75%.

Type 1 veins are characterized by fine grained pyrite with minor chalcopyrite and arsenopyrite and are most common near the footwall and as brecciated fragments. Assays from the 1987 exploration program range from 0.15oz/t to 0.30 oz/t gold. Type 2 veins contain medium to very coarse grained pyrite, chalcopyrite, and traces of arsenopyrite, which are most common in hanging wall faults, alteration zones, and small veins away from the main zone. Locally, Type 2 veins cut those of Type 1, and may have formed in part by recrystallization of Type 1 veins. Erratic gold values are present in Type 2 veins and range from 0.2-10 oz/t. The footwall is typically sharp and defined by a dark, sulfide-rich mylonite against fresh, unaltered wall rocks. The hanging wall is commonly marked by a zone of bleached and altered diorite at least 1m in width. Thick high-grade Type 2 veins occur adjacent to angular xenoliths of marble and skarn in dilatant zones along the fault caused by the presence of the xenoliths. The marble xenoliths also would react with the hydrothermal fluids to produce skarn minerals, which could change the composition of the solutions sufficiently to cause deposition of sulfides and gold. Pods of high-

grade gold are common where hanging wall veins intersect the main zone. The nature of the mineralization and associated alteration suggest a deep mesothermal formation environment (Payne, 1996).

3.0   SUMMARY & RECOMMENDATIONS

A helicopter-borne versatile time domain electromagnetic (VTEM plus) geophysical survey has been completed over the Yellow Giant Property, located on Banks Island approximately 104 kilometres south of Prince Rupert, British Columbia.

The total area coverage for all properties is 81.93 km2. Total survey line coverage is 978.2 line kilometres. The principal sensors included a Time Domain EM system and a magnetometer. Results have been presented as stacked profiles, and contour color images at a scale of 1:20,000 and are presented in Appendix A. (Geotech, 2011)

The modeled targets are recommended for test drilling. (Geotech, 2011)

Prior to any new drilling campaign to test the priority targets, the Maxwell modeling results should be re-evaluated in the context of existing geological, geophysical and drilling data. If additional information for the targets becomes available, the Maxwell models can be revised or constrained, yielding new modeling results. (Geotech, 2011)

The recommended initial test drill holes for all Maxwell models are listed below. (Geotech, 2011)

Target	X	Y	Dip	Azimuth	Length ()
L1390	423590	5912430	50	225	200
L1275	422420	5914060	50	200	300
L1450	424136	5910520	55	150	220
T2820E	425868	5913262	45	225	300
T2820W	423198	5913228	45	245	300
L1640	426120	5913080	50	215	260
L1400	423688	5909406	45	200	220

4.0   ITEMIZED COST STATEMENT

The cost of conducting the Airborne Geophysical Survey from August 27-31 was $226,059 as displayed in Table 4.1.

Table 4-1   Cost of VTEM Airborne Geophysical Survey

Geophysical Survey - 978.2 Line-Km	$213,226
Helicopter JetA Fuel	$12,833
Total Cost	$226,059

5.0 REFERENCES

Crawford, S. A., & Vulimiri, M. R. (1988, March). *Report on the Tel Deposit 1987 Diamond Drilling.* TVW Engineering Ltd.

Fersen, N. von. (2002, March 12). *Summary Report on the Yellow Giant Claim Group.*

Geotech Ltd. (October 2011). *Report on a Helicopter-Borne Versatile Time Domain Electromagnetic (VTEM[Plus]) and Horizontal Magnetic Gradiometer Geophysical Survey.* (Prince Rupert, B.C.)

McDougall, J. J. (1961, January 26). *Report on Bank Gold Prospect.* (Vancouver.)

McDougall, J. J. (1965, April 30). *Report on Banks Island Gold 1964.*

Michell, J. G. B. (1986, January 21). *Report on Bob Deposit.*

Payne, J.G. (1996, May). Geological Report on the Yellow Giant Claim Group. John G. Payne Consultants Ltd. (North Vancouver, BC).

Seraphim, R. H. (1987, April 23). *Geological and Diamond Drilling Report on the Bob Deposit.*

Shearer, J. T. (1985, February 15). *Geological, Geochemical and Diamond Drilling Report on the Yellow Giant Project.* TRM Engineering Ltd. (Vancouver BC).

Shearer, J. T. (1986, July 8). *Report on the Tel Deposit.* TRM Engineering Ltd. (Vancouver, BC).

Shearer, J. T., Shore, G. A., & Gardiner, S. L. (1987, February 26). *Summary Report of Geological, Geophysical and Other Studies on the Tel Deposit.*

The Weather Network. (2011). *Statistics: Bonilla Island, BC, Canada.* Retrieved from http://www.theweathernetwork.com/statistics/summary/cl1060902.

6.0 APPENDIX A – GEOTECH LTD. REPORT

REPORT ON A HELICOPTER-BORNE
VERSATILE TIME DOMAIN ELECTROMAGNETIC (VTEM^{plus}) AND
HORIZONTAL MAGNETIC GRADIOMETER GEOPHYSICAL SURVEY

Yellow Giant Property

Prince Rupert, British Columbia

For:

Banks Island Gold Ltd.

By:

Geotech Ltd.

245 Industrial Parkway North

Aurora, Ont., CANADA, L4G 4C4

Tel: 1.905.841.5004

Fax: 1.905.841.0611

www.geotech.ca

Email: info@geotech.ca

Survey flown during August 2011

Project 11184

October, 2011

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

APPENDICES

REPORT ON A HELICOPTER-BORNE
VERSATILE TIME DOMAIN ELECTROMAGNETIC (VTEM$^{\text{plus}}$) and HORIZONTAL MAGNETIC GRADIOMETER GEOPHYSICAL SURVEY

Yellow Giant Property
Prince Rupert, British Columbia

Executive Summary

During August 27$^{\text{th}}$ to August 31$^{\text{st}}$, 2011 Geotech Ltd. carried out a helicopter-borne geophysical survey over Yellow Giant Property situated on Banks Island approximately 104 kilometres south of Prince Rupert, British Columbia.

Principal geophysical sensors included a versatile time domain electromagnetic (VTEM$^{\text{plus}}$) system, and horizontal magnetic gradiometer. Ancillary equipment included a GPS navigation system and a radar altimeter. A total of 978.2 line-kilometres of geophysical data were acquired during the survey.

In-field data quality assurance and preliminary processing were carried out on a daily basis during the acquisition phase. Preliminary and final data processing, including generation of final digital data and map products were undertaken from the office of Geotech Ltd. in Aurora, Ontario.

The processed survey results are presented as the following maps:

- Electromagnetic stacked profiles of the B-field Z Component,
- Electromagnetic stacked profiles of dB/dt Z Component,
- Colour grids of a B-Field Z Component Channel,
- Colour grids of a dB/dt X Component Fraser Filter Channel,
- Total Magnetic Intensity (TMI), and
- EM Time-constant dB/dt Z Component (Tau)

Digital data includes all electromagnetic and magnetic products, plus ancillary data including the waveform.

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

1. INTRODUCTION

1.1 General Considerations

Geotech Ltd. performed a helicopter-borne geophysical survey over Yellow Giant Property situated on Banks Island approximately 104 kilometres south of Prince Rupert, British Columbia (Figure 1 and Figure 2).

Ben Mossman represented Banks Island Gold Ltd. during the data acquisition and data processing phases of this project.

The geophysical surveys consisted of helicopter borne EM using the versatile time-domain electromagnetic (VTEM^{plus}) system with Z and X component measurements and horizontal magnetic gradiometer using two caesium magnetometers. A total of 978.2 line-km of geophysical data were acquired during the survey.

The crew was based out of Prince Rupert (Figure 2) in British Columbia for the acquisition phase of the survey. Survey flying started on August 27th and was completed on August 31st, 2011.

Data quality control and quality assurance, and preliminary data processing were carried out on a daily basis during the acquisition phase of the project. Final data processing followed immediately after the end of the survey. Final reporting, data presentation and archiving were completed from the Aurora office of Geotech Ltd. in October, 2011.
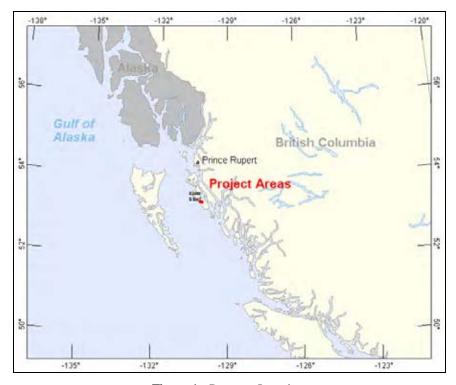
Figure 1 - Property Location.

1.2   Survey and System Specifications

The Yellow Giant Property situated on Banks Island approximately 104 kilometres south of Prince Rupert, British Columbia (Figure 2).

Figure 2 - Survey area location on Google Earth.

The survey property was flown in a north to south (N 0° E azimuth) direction, with traverse line spacing of 100 metres and 50 metres (Infills) as depicted in Figure 3. Tie lines were flown perpendicular to the traverse lines at a spacing of 1000 metres respectively. For more detailed information on the flight spacing and direction see Table 1.

1.3   Topographic Relief and Cultural Features

Topographically, the Yellow Giant Property exhibit a shallow relief with an elevation ranging from 0.9 to 390 metres above mean sea level over an area of 81.93 square kilometres (Figure 3).

The survey block has various rivers and streams running through the survey area which connect various lakes. There are no visible signs of culture located in the survey area.

Figure 3 - Flight path of Yellow Giant Property over a Google Earth Image.

The property is covered by numerous mining claims, which are shown in Appendix A, and are plotted on all maps. The survey area is covered by NTS (National Topographic Survey) of Canada sheet 103G08.

2. DATA ACQUISITION

2.1 Survey Area

The survey block (see Figure 3 and Appendix A) and general flight specifications are as follows:

Table 1 - Survey Specifications

Survey block	Traverse Line spacing (m)	Area (Km^2)	Planned[1] Line-km	Actual Line-km	Flight direction	Line numbers
Yellow Giant Property	Traverse: 100 and 50 (Infills)			914.4	N 0° E / N 180° E	L1000 – L2190
	Tie: 1000	81.93	978.2	80.8	N 90° E / N 270° E	T2800 – T2870
TOTAL		**81.93**	**978.2**	**995.2**		

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

2.2 Survey Operations

Survey operations were based out of Prince Rupert, British Columbia from August 19th to 31st, 2011. The following table shows the timing of the flying.

Table 2 - Survey schedule

Date	Flight #	Flown km	Block	Crew location	Comments
8-19-11				Prince Rupert, BC	Crew Arrived
8-20-11				Prince Rupert, BC	System assembly not started due to weather
8-21-11				Prince Rupert, BC	System assembly started
8-22-11				Prince Rupert, BC	System assembly not completed due to weather
8-23-11				Prince Rupert, BC	System assembly not completed due to weather
8-24-11				Prince Rupert, BC	System assembly completed
8-25-11				Prince Rupert, BC	Helicopter install & Ground and Air testing completed
8-26-11				Prince Rupert, BC	No production due to weather
8-27-11	1,2	146	Yellow Giant	Prince Rupert, BC	146km flown
8-28-11				Prince Rupert, BC	No production due to weather
8-29-11	3,4,5	344	Yellow Giant	Prince Rupert, BC	344km flown
8-30-11	6,7	337	Yellow Giant	Prince Rupert, BC	337km flown
8-31-11	8	151	Yellow Giant	Prince Rupert, BC	Remaining kms were flown- flying complete

---

[1] Note: Actual Line kilometres represent the total line kilometres in the final database. These line-km normally exceed the planned line-km's, as indicated in the survey NAV files.

2.3   Flight Specifications

During the survey the helicopter was maintained at a mean altitude of 81 metres above the ground with a nominal survey speed of 80 km/hour. This allowed for a nominal EM bird terrain clearance of 49 metres and a magnetic sensor clearance of 68 metres.

The on board operator was responsible for monitoring 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 features.

On return of the aircrew to the base camp the survey data was transferred from a compact flash card (PCMCIA) to the data processing computer. The data were then uploaded via ftp to the Geotech office in Aurora for daily quality assurance and quality control by qualified personnel.

2.4   Aircraft and Equipment

2.4.1 Survey Aircraft
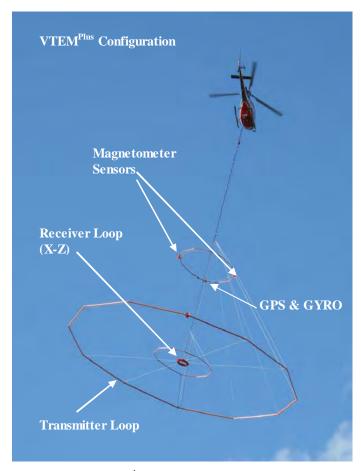
The survey was flown using a Eurocopter Aerospatiale (Astar) 350 B3 helicopter, registration C-GTEQ. The helicopter is owned and operated by Geotech Aviation. Installation of the geophysical and ancillary equipment was carried out by a Geotech Ltd crew.

2.4.2 Electromagnetic System

The electromagnetic system was a Geotech Time Domain EM (VTEM^{plus}) system. The configuration is as indicated in Figure 4.

The VTEM Receiver and transmitter coils were in concentric-coplanar and Z-direction oriented configuration. The receiver system for the project also included a coincident-coaxial X-direction coil to measure the in-line dB/dt and calculate B-Field responses. The EM bird was towed at a mean distance of 34 metres below the aircraft as shown in Figure 4 and Figure 6. The receiver decay recording scheme is shown diagrammatically in Figure 5.

Figure 4 - VTEM^plus Configuration, with magnetometer.
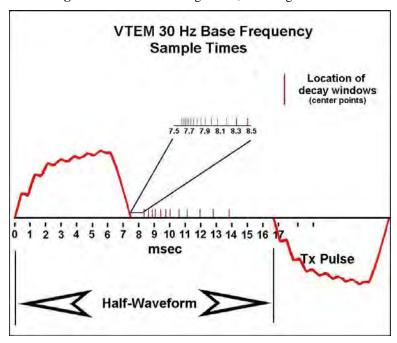
Figure 5 - VTEM Waveform & Sample Times.

The VTEM decay sampling scheme is shown in Table 3 below. Thirty-two time measurement gates were used for the final data processing in the range from 96 to 7036 µ sec.

Table 3 - Decay Sampling Scheme

VTEM Decay Sampling Scheme			
Index	Middle	Start	End	Window
	Microseconds			
14	96	90	103	13
15	110	103	118	15
16	126	118	136	18
17	145	136	156	20
18	167	156	179	23
19	192	179	206	27
20	220	206	236	30
21	253	236	271	35
22	290	271	312	40
23	333	312	358	46
24	383	358	411	53
25	440	411	472	61
26	505	472	543	70
27	580	543	623	81
28	667	623	716	93
29	766	716	823	107
30	880	823	945	122
31	1,010	945	1,086	141
32	1,161	1,086	1,247	161
33	1,333	1,247	1,432	185
34	1,531	1,432	1,646	214
35	1,760	1,646	1,891	245
36	2,021	1,891	2,172	281
37	2,323	2,172	2,495	323
38	2,667	2,495	2,865	370
39	3,063	2,865	3,292	427
40	3,521	3,292	3,781	490
41	4,042	3,781	4,341	560
42	4,641	4,341	4,987	646
43	5,333	4,987	5,729	742
44	6,125	5,729	6,581	852
45	7,036	6,581	7,560	979

VTEM system parameters:

Transmitter Section
- Transmitter coil diameter: 26 m
- Number of turns: 4
- Transmitter base frequency: 30 Hz
- Peak current: 173 A
- Pulse width: 7.130 ms
- Duty cycle: 43 %
- Wave form shape: trapezoid
- Peak dipole moment: 367,402.98 nIA
- Nominal EM Bird terrain clearance: 49 metres above the ground
- Effective coil area: 2123 m^2

Receiver Section
X-Coil
- X Coil diameter: 0.32 m
- Number of turns: 245
- Effective coil area: 19.69 m^2
Z-Coil
- Z-Coil coil diameter: 1.2 m
- Number of turns: 100
- Effective coil area: 113.04 m^2
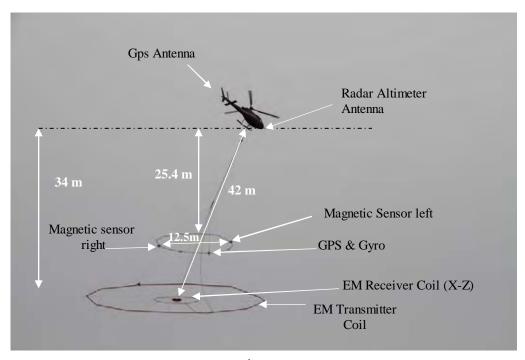
Figure 6 - VTEM^{plus} System Configuration.

2.4.3 Horizontal Magnetic Gradiometer

The horizontal magnetic gradiometer consists of two Geometrics split-beam field magnetic sensors with a sampling interval of 0.1 seconds. These sensors are mounted 12.5 metres apart on a separate bird, 10 metres above the EM bird. A GPS antenna and Gyro is installed to accurately record the tilt and position of the magnetic gradiomag bird.

2.4.4 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 (Figure 6).

2.4.5 GPS Navigation System

The navigation system used was a Geotech PC104 based navigation system utilizing a NovAtel's CDGPS (Canada-Wide Differential Global Positioning System Correction Service) 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 (Figure 6). As many as 11 GPS and two CDGPS satellites may be monitored at any one time. The positional accuracy or circular error probability (CEP) is 1.8 m, with CDGPS active, it is 1.0 m. The co-ordinates of the block were set-up prior to the survey and the information was fed into the airborne navigation system.

2.4.6 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.

Table 4 - Acquisition Sampling Rates

DATA TYPE	SAMPLING
TDEM	0.1 sec
Magnetometer	0.1 sec
GPS Position	0.2 sec
Radar Altimeter	0.2 sec

2.5 Base Station

A combined magnetometer/GPS base station was utilized on this project. A Geometrics Caesium 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 at the loop landing area (130° 09.8916' W, 53° 21.8914' N); away from electric transmission lines and moving ferrous objects such as motor vehicles. The base station data were 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:	Darren Tuck (Office)
Data QC:	Neil Fiset (Office)
Crew chief:	Paul Taylor
Operator:	Jan Dabrowski

The survey pilot and the mechanical engineer were employed directly by the helicopter operator – Geotech Aviation.

Pilot:	Guy Poirier
Mechanical Engineer:	Tyler McLellan

Office:

Preliminary Data Processing:	Neil Fiset
Final Data Processing:	ZiHao Han
Final Data QA/QC:	Alexander Prikhodko
Reporting/Mapping:	Liz Johnson

Data acquisition phase was carried out under the supervision of Andrei Bagrianski, P. Geo, Chief Operating Officer. Processing and Interpretation phases were carried out under the supervision of Alexander Prikhodko, P. Geo. The customer relations were looked after by Blair Walker.

4.   DATA PROCESSING AND PRESENTATION

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

4.1   Flight Path

The flight path, recorded by the acquisition program as WGS 84 latitude/longitude, was converted into the NAD83 Datum, UTM Zone 9 North 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 easting's (x) and UTM northing's (y).

4.2   Electromagnetic Data

A three stage digital filtering process was used to reject major sferic events and to reduce noise levels. 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 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 15 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 the B-field Z component and dB/dt responses in the Z component. B-field Z component time channel recorded at 2.021 milliseconds after the termination of the impulse is also presented as a color image. Fraser Filter X component is also presented as a colour image. Calculated Time Constant (TAU) with anomaly contours of Calculated Vertical Derivative of TMI is presented in Appendix D and F. Resistivity Depth Image (RDI) is also presented in Appendix D and G.

VTEM has two receiver coil orientations. Z-axis coil is oriented parallel to the transmitter coil axis and both are horizontal to the ground. The X-axis coil is oriented parallel to the ground and along the line-of-flight. This combined two coil configuration provides information on the position, depth, dip and thickness of a conductor. Generalized modeling results of VTEM data, are shown in Appendix E.

In general X-component data produce cross-over type anomalies: from "+ to – "in flight direction of flight for "thin" sub vertical targets and from "- to +" in direction of flight for "thick" targets. Z component data produce double peak type anomalies for "thin" sub vertical targets and single peak for "thick" targets.

The limits and change-over of "thin-thick" depends on dimensions of a TEM system.

Because of X component polarity is under line-of-flight, convolution Fraser Filter (Figure 7) is applied to X component data to represent axes of conductors in the form of grid map. In this case positive FF anomalies always correspond to "plus-to-minus" X data crossovers independent of the flight direction.
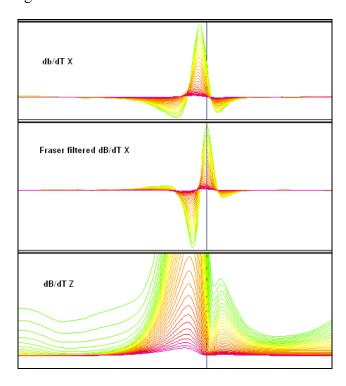
Figure 7 - Z, X and Fraser filtered X (FFx) components for "thin" target.

Graphical representations of the VTEM transmitter input current and the output voltage of the receiver coil are shown in Appendix C.

4.3 Horizontal Magnetic Gradiometer Data

The horizontal gradients data from the VTEM[plus] are measured by two magnetometers 12.5 m apart on an independent bird mounted 10m above the VTEM loop. A GPS and a Gyro help to determine the positions and orientations of the magnetometers. The data from the two magnetometers are corrected for position and orientation variations, as well as for the diurnal variations using the base station data.

The position of the centre of the horizontal magnetic gradiometer bird is calculated from the GPS utilizing in-house processing tool in Geosoft. Following that total magnetic intensity is calculated at the center of the bird by calculating the mean values from both sensors. In addition to the total intensity advanced processing is done to calculate the in-line and cross-line (or lateral) horizontal gradient which enhance the understanding of magnetic targets. The in-line (longitudinal) horizontal gradient is calculated from the difference of two consecutive total magnetic field readings divided by the distance along the flight line direction, while the cross-line (lateral) horizontal magnetic gradient is calculated from the difference in the magnetic readings from both magnetic sensors divided by their horizontal separation.

Two advanced magnetic derivative products, the total horizontal derivative (THDR), and tilt angle derivative and are also created. The total horizontal derivative or gradient is also called the analytic signal, is defined as:

THDR = sqrt (Hx * Hx + Hy * Hy), where Hx and Hy are cross-line and in-line horizontal gradients.

The tilt angle derivative (TDR) is defined as:

TDR = arctan (Vz / THDR), where THDR is the total horizontal derivative, and Vz is the vertical derivative.

Measured cross-line gradients can help to enhance cross-line linear features during gridding.

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 scale of 1:20, 000 for best representation of the survey size and line spacing. The coordinate/projection system used was NAD83 Datum, UTM Zone 9 North. All maps show the mining claims, flight path trace and topographic data; latitude and longitude are also noted on maps.

The preliminary and final results of the survey are presented as EM profiles, a late-time gate gridded EM channel, and a color magnetic TMI contour map. The following maps are presented on paper;

- VTEM dB/dt profiles Z Component, Time Gates 0.220 – 7.036 ms in linear – logarithmic scale.
- VTEM B-Field profiles Z Component, Time Gates 0.220 – 7.036 ms in linear – logarithmic scale.
- VTEM B-field late time Z Component Channel 36, Time Gate 2.021 ms color image.
- VTEM dB/dt X Component Fraser Filter Channel 22, Time Gate 0.290 ms color image.
- VTEM dB/dt Calculated Time Constant (TAU) with contours of anomaly areas of the Calculated Vertical Derivative of TMI
- Total magnetic intensity (TMI) color image and contours.

5.3   Digital Data

- Two copies of the data and maps on DVD were prepared to accompany the report. Each DVD contains a digital file of the line data in GDB Geosoft Montaj format as well as the maps in Geosoft Montaj Map and PDF format.

- DVD structure.

Data	contains databases, grids and maps, as described below.
Report	contains a copy of the report and appendices in PDF format.

Databases in Geosoft GDB format, containing the channels listed in Table 5.

Table 5 - Geosoft GDB Data Format

Channel name	Units	Description
X:	metres	UTM Easting NAD83 Zone 9 North
Y:	metres	UTM Northing NAD83 Zone 9 North
Longitude:	Decimal Degrees	WGS 84 Longitude data
Latitude:	Decimal Degrees	WGS 84 Latitude data
Z:	metres	GPS antenna elevation (above Geoid)
Radar:	metres	helicopter terrain clearance from radar altimeter
Radarb:	metres	Calculated EM bird terrain clearance from radar altimeter
DEM:	metres	Digital Elevation Model
Gtime:	Seconds of the day	GPS time
Mag1L:	nT	Measured Total Magnetic field data (left sensor)
Mag1R:	nT	Measured Total Magnetic field data (right sensor)
Basemag:	nT	Magnetic diurnal variation data
Mag2L:	nT	Diurnal corrected Magnetic field data (left sensor)
Mag2R:	nT	Diurnal corrected Magnetic field data (right sensor)
Mag2LZ	nT	Z corrected (w.r.t. loop center) and diurnal corrected magnetic field left mag
Mag2RZ	nT	Z corrected (w.r.t. loop center) and diurnal corrected magnetic field right mag
TMI2	nT	Calculated from diurnal corrected total magnetic field intensity of the centre of the loop
TMI3	nT	Microleveled total magnetic field intensity of the centre of the loop
Hgcxline		Measured cross-line gradient
Hginline		Calculated in line gradient
CVG	nT/m	Calculated Magnetic Vertical Gradient
SFz[14]:	$pV/(A*m^4)$	Z dB/dt 96 microsecond time channel
SFz[15]:	$pV/(A*m^4)$	Z dB/dt 110 microsecond time channel
SFz[16]:	$pV/(A*m^4)$	Z dB/dt 126 microsecond time channel
SFz[17]:	$pV/(A*m^4)$	Z dB/dt 145 microsecond time channel
SFz[18]:	$pV/(A*m^4)$	Z dB/dt 167 microsecond time channel
SFz[19]:	$pV/(A*m^4)$	Z dB/dt 192 microsecond time channel
SFz[20]:	$pV/(A*m^4)$	Z dB/dt 220 microsecond time channel
SFz[21]:	$pV/(A*m^4)$	Z dB/dt 253 microsecond time channel
SFz[22]:	$pV/(A*m^4)$	Z dB/dt 290 microsecond time channel
SFz[23]:	$pV/(A*m^4)$	Z dB/dt 333 microsecond time channel
SFz[24]:	$pV/(A*m^4)$	Z dB/dt 383 microsecond time channel
SFz[25]:	$pV/(A*m^4)$	Z dB/dt 440 microsecond time channel
SFz[26]:	$pV/(A*m^4)$	Z dB/dt 505 microsecond time channel
SFz[27]:	$pV/(A*m^4)$	Z dB/dt 580 microsecond time channel
SFz[28]:	$pV/(A*m^4)$	Z dB/dt 667 microsecond time channel
SFz[29]:	$pV/(A*m^4)$	Z dB/dt 766 microsecond time channel
SFz[30]:	$pV/(A*m^4)$	Z dB/dt 880 microsecond time channel
SFz[31]:	$pV/(A*m^4)$	Z dB/dt 1010 microsecond time channel
SFz[32]:	$pV/(A*m^4)$	Z dB/dt 1161 microsecond time channel
SFz[33]:	$pV/(A*m^4)$	Z dB/dt 1333 microsecond time channel
SFz[34]:	$pV/(A*m^4)$	Z dB/dt 1531 microsecond time channel
SFz[35]:	$pV/(A*m^4)$	Z dB/dt 1760 microsecond time channel
SFz[36]:	$pV/(A*m^4)$	Z dB/dt 2021 microsecond time channel
SFz[37]:	$pV/(A*m^4)$	Z dB/dt 2323 microsecond time channel
SFz[38]:	$pV/(A*m^4)$	Z dB/dt 2667 microsecond time channel
SFz[39]:	$pV/(A*m^4)$	Z dB/dt 3063 microsecond time channel

Channel name	Units	Description
SFz[40]:	$pV/(A*m^4)$	Z dB/dt 3521 microsecond time channel
SFz[41]:	$pV/(A*m^4)$	Z dB/dt 4042 microsecond time channel
SFz[42]:	$pV/(A*m^4)$	Z dB/dt 4641 microsecond time channel
SFz[43]:	$pV/(A*m^4)$	Z dB/dt 5333 microsecond time channel
SFz[44]:	$pV/(A*m^4)$	Z dB/dt 6125 microsecond time channel
SFz[45]:	$pV/(A*m^4)$	Z dB/dt 7036 microsecond time channel
SFx[20]:	$pV/(A*m^4)$	X dB/dt 220 microsecond time channel
SFx[21]:	$pV/(A*m^4)$	X dB/dt 253 microsecond time channel
SFx[22]:	$pV/(A*m^4)$	X dB/dt 290 microsecond time channel
SFx[23]:	$pV/(A*m^4)$	X dB/dt 333 microsecond time channel
SFx[24]:	$pV/(A*m^4)$	X dB/dt 383 microsecond time channel
SFx[25]:	$pV/(A*m^4)$	X dB/dt 440 microsecond time channel
SFx[26]:	$pV/(A*m^4)$	X dB/dt 505 microsecond time channel
SFx[27]:	$pV/(A*m^4)$	X dB/dt 580 microsecond time channel
SFx[28]:	$pV/(A*m^4)$	X dB/dt 667 microsecond time channel
SFx[29]:	$pV/(A*m^4)$	X dB/dt 766 microsecond time channel
SFx[30]:	$pV/(A*m^4)$	X dB/dt 880 microsecond time channel
SFx[31]:	$pV/(A*m^4)$	X dB/dt 1010 microsecond time channel
SFx[32]:	$pV/(A*m^4)$	X dB/dt 1161 microsecond time channel
SFx[33]:	$pV/(A*m^4)$	X dB/dt 1333 microsecond time channel
SFx[34]:	$pV/(A*m^4)$	X dB/dt 1531 microsecond time channel
SFx[35]:	$pV/(A*m^4)$	X dB/dt 1760 microsecond time channel
SFx[36]:	$pV/(A*m^4)$	X dB/dt 2021 microsecond time channel
SFx[37]:	$pV/(A*m^4)$	X dB/dt 2323 microsecond time channel
SFx[38]:	$pV/(A*m^4)$	X dB/dt 2667 microsecond time channel
SFx[39]:	$pV/(A*m^4)$	X dB/dt 3063 microsecond time channel
SFx[40]:	$pV/(A*m^4)$	X dB/dt 3521 microsecond time channel
SFx[41]:	$pV/(A*m^4)$	X dB/dt 4042 microsecond time channel
SFx[42]:	$pV/(A*m^4)$	X dB/dt 4641 microsecond time channel
SFx[43]:	$pV/(A*m^4)$	X dB/dt 5333 microsecond time channel
SFx[44]:	$pV/(A*m^4)$	X dB/dt 6125 microsecond time channel
SFx[45]:	$pV/(A*m^4)$	X dB/dt 7036 microsecond time channel
BFz	$(pV*ms)/(A*m^4)$	Z B-Field data for time channels 14 to 45
BFx	$(pV*ms)/(A*m^4)$	X B-Field data for time channels 20 to 45
SFxFF	$pV/(A*m^4)$	Fraser Filtered X dB/dt
NchanBF		Latest time channels of TAU calculation
NchanSF		Latest time channels of TAU calculation
TauBF	ms	Time constant B-Field
TauSF	ms	Time constant dB/dt
PLM:		60 Hz power line monitor

- Databases of selected anomalies in Geosoft GDB format, contains the channels described in Table 6.

Table 6 - Geosoft database for selected EM anomalies

Channel name	Units	Description
Line		Line number
Anom_ID:		Letter indicating the Anomaly ID
Anom_Labels:		Anomaly type (K: thick, N: thin)
X:	metres	NAD83 / UTM zone 9 north
Y:	metres	NAD83 / UTM zone 9 north
AnConSF:	Siemens	Estimated conductance calculated from dB/dt Z data
AnConBF:	Siemens	Estimated conductance calculated from BFz data
AnTauSF:	milliseconds	Time constant (Tau), calculated from dB/dt Z data
AnTauBF:	milliseconds	Time constant (Tau), calculated from B-field data
Grade		Anomaly classification (1=weak; 6=strong).

Electromagnetic B-field and dB/dt Z component data is found in array channel format between indexes 14 – 45, and X component data from 20 – 45, as described above.

- Database of the VTEM Waveform "11184_waveform_final.gdb" in Geosoft GDB format, containing the following channels:

Time:	Sampling rate interval, 5.2083 microseconds
Rx_Volt:	Output voltage of the receiver coil (Volt)
Tx_Current:	Output current of the transmitter (Amp)

- Grids in Geosoft GRD format, as follows:

BFz36:	B-Field Z Component Channel 36 (Time Gate 2.021 ms)
CVG:	Calculated Magnetic Vertical Gradient (nT/m)
DEM:	Digital Elevation Model (metres)
Hgcxline:	Measured Cross-Line Gradient (nT/m)
Hginline:	Measured In-Line Gradient (nT/m)
SFxFF22:	Fraser Filtered dB/dt Channel 22 (Time Gate 0.290 ms)
TauBF:	B-Field Z Component, Calculated Time Constant (ms)
TauSF:	dB/dt Z Component, Calculated Time Constant (ms)
TMI:	Total Magnetic Intensity (nT)
Total_HGrad:	Total Magnetic Horizontal Gradient (nT/m)
Tiltdrv:	Tilt Magnetic derivative (radians)

A Geosoft .GRD file has a .GI metadata file associated with it, containing grid projection information. A grid cell size of 25 metres was used.

- Maps at 1:20, 000 in Geosoft MAP format, as follows:

11184_20k _dBdtz:	dB/dt profiles Z Component, Time Gates 0.220 – 7.036 ms in linear – logarithmic scale.
11184_20k _Bfield:	B-field profiles Z Component, Time Gates 0.220 – 7.036 ms in linear – logarithmic scale.
11184_20k _BFz36:	B-field late time Z Component Channel 36, Time Gate 2.021 ms color image.
11184_20k _SFxFF22:	dB/dt X Component Fraser Filter Channel 22, Time Gate 0.290 ms color image.
11184_20k _TMI:	Total magnetic intensity (TMI) color image and contours.
11184_20k _TauSF:	dB/dt Calculated Time Constant (Tau) with contours of anomaly areas of the Calculated Vertical Derivative of TMI
11184_20k _Total_HGrad:	Total Magnetic Horizontal Gradient color image.
11184_20k _TiltDrv:	Magnetic Tilt Derivative color image.

Maps are also presented in PDF format.

1:50,000 topographic vectors were taken from the NRCAN Geogratis database at; http://geogratis.gc.ca/geogratis/en/index.html.

- A Google Earth file *11184_Flight Path.kml* showing the flight path of the block is included. Free versions of Google Earth software from: http://earth.google.com/download-earth.html

6. SUMMARY OF INTERPRETATION

Upon requests from Banks Island Gold Ltd., the following additional products were prepared by Geotech LTD for Yellow Giant Property, located on Banks Island approximately 104 kilometres south of Prince Rupert, British Columbia and surveyed by VTEM system:

- EM anomaly picks over 978.2 line km (incl. as symbol overlays on all maps + digital format);

- Calculated time-constant (Tau) analysis of dB/dt;

- Resistivity-depth-Images (RDI) of 23 lines;

- 3D Voxel grid from the RDI;

- Resistivity depth slices at six different depths: surface, -50m,-100 m,-150m, -200m and -250m.

- Maxwell Plate modeling over 7 selected targets.

6.1 Time Constant TAU and Calculated Vertical Gradient CVG

The processed VTEM survey results are presented as a calculated dB/dt time constant (Tau)[2], which is an indicator of geological unit's electrical conductance.

An explanation of the EM time constant calculation is provided in Appendix F. The TAU dB/dt map is presented in Appendix D and in Figure 10. The map is accompanied by an overlay of the calculated vertical gradient of TMI (CVG) anomaly contours for tracing possible EM-MAG anomaly correlations.

The CVG contour layer, on the top of TAU color grid, generally is more representative of the smaller scale and shallower magnetic sources in comparison with the TMI. CVG is designed to emphasize the structures and lithological units that might not otherwise be seen on the TMI due to the nearby presence of stronger magnetic responses, showing a high resolution in terms of individual structures.

As can be seen from the combined TAU-CVG map, the most highly conductive targets (with maximal TAU) are strongly correlated with sources of magnetic anomalies.

6.2 EM Anomaly Picking

The EM data were subjected to an anomaly recognition process using all time domain geophysical channels for the B-Field and dB/dt profiles. The resulting EM anomaly picks are presented as overlays on the maps and correspond approximately to the position of the target's

---

[2] Note: An explanation of the EM time constant (Tau) approach to VTEM data is provided in Appendix F.

centre projected onto surface.

Each individual conductor pick is represented by an anomaly symbol classified according to calculated conductance[3]. Only local anomalies are selected. Identified anomalies were classified into one of six categories (Figure 8). The anomaly symbol is accompanied by postings denoting the calculated dB/dt conductance, calculated B-field conductance, and the anomaly thickness given by its EM response[4]. Each symbol is also given an identification letter label, unique to each flight line.
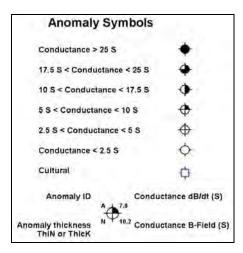
Figure 8 - EM Anomaly Symbols.
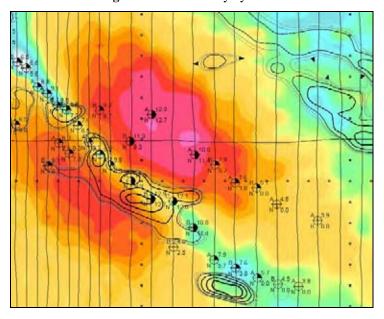
Figure 9 - VTEM pick anomalies for conductive targets ranged on conductance.

The anomalous responses have been picked, reviewed and edited by an interpreter on a line

---

[3] Note: Conductance values were obtained from the dB/dt and B-Field EM time constants (Tau) whose relationships to Tau were calculated using the oblate spheroid model of McNeill (1980, TN-7, "Applications of Transient EM Techniques").

[4] Anomalies with double-pick response are classified as Thin (N), while wider single-pick response is Thick (K).

by line basis to discriminate between bedrock, overburden and culture conductors. The new channels were created in each of the Geosoft "XYZ" tables for the block. The identified time domain electromagnetic VTEM anomalies are listed in Appendix H. The table below consist of conductance and TAU ranges for the picked anomalies.

Num of picked anomalies	Conductance, S dB/dT (min-max)	Conductance, S Bfield (min-max)	TAU dB/dT, msec, min-max	TAU Bfield, msec, min-max
257	1.33 - 42.03	0 - 88.34	0.07 - 2.26	0 - 4.75

6.3 Resistivity Depth Imaging

The basis of the Resistivity-Depth Image (RDI) method for TEM data presentation is described in Appendix G. Results of the RDI 1D fast transformation provide a geometric approximation and depth of the conductive targets and the depth of investigation, which depends on conductance of rocks.

23 lines that extend over conductive zones were subjected to the RDI procedure (Figure 10). The sections are accompanied in the report in a digital raster and Geosoft format.
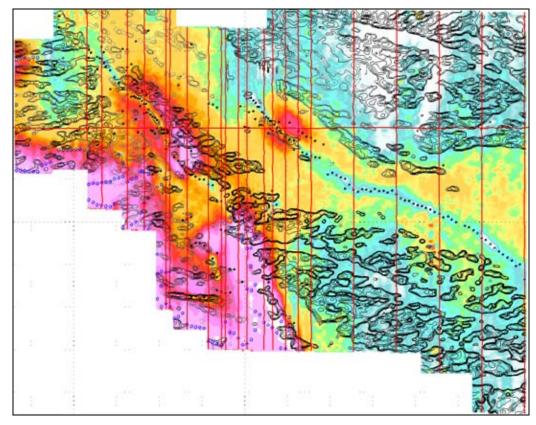
Figure 10 - TAU-CVG map with lines chosen for RDI sections (red).
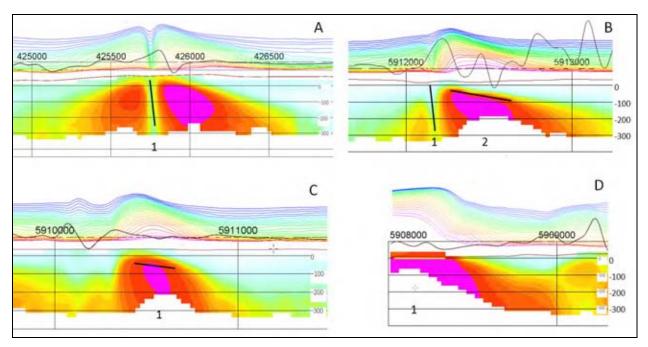
Figure 11 - Examples of RDI sections with assumed targets.

According to the forward models and corresponded resistivity distribution sections (Appendix G), it is possible to interpret the RDIs from the real data in terms of position and general geometry of conductive targets.

In general, there are three kinds of conductors in the area: 1. steeply dipping "structural" conductors (Figure 11, A1, B1), most likely with the tops of the conductive units close to the surface; 2. flat or slightly sloping lens similar conductors (Figure 11, B2, C1). The targets can be on different depths – from the surface up to 200 meters; 3. Salt water (Figure 11, D1), situated on SW boundary of the area over the sea/rivers at the ends of survey lines with very high level response (high conductivity).

6.4 Maxwell Plate Modeling

Based on the analysis of EM anomaly picking, EM time-constant and resistivity depth imaging, seven (7) anomalies were selected for Maxwell modeling (Figure 12). The results of Maxwell models are presented in Appendix D.
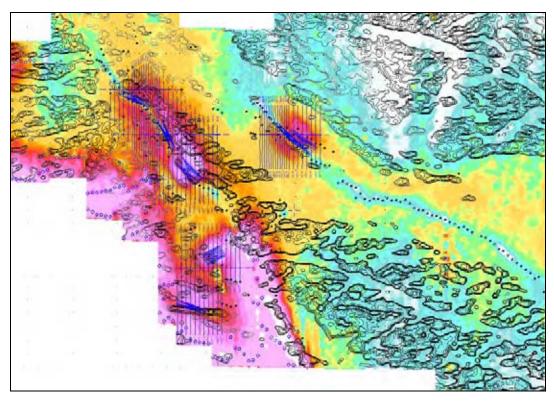
Figure 12 - TAU-CVG map with modeled plates projected to the surface (blue squares).

7. CONCLUSIONS AND RECOMMENDATIONS

7.1 Conclusions

A helicopter-borne versatile time domain electromagnetic (VTEM plus) geophysical survey has been completed over the Yellow Giant Property, located on Banks Island approximately 104 kilometres south of Prince Rupert, British Columbia.

The total area coverage for all properties is 81.93 km^2. Total survey line coverage is 995.2 line kilometres. The principal sensors included a Time Domain EM system and a magnetometer. Results have been presented as stacked profiles, and contour color images at a scale of 1:20,000.

7.2 Recommendations

The modeled targets are recommended for test drilling.

Prior to any new drilling campaign to test the priority targets, the Maxwell modeling results should be re-evaluated in the context of existing geological, geophysical and drilling data. If additional information for the targets becomes available, the Maxwell models can be revised or constrained, yielding new modeling results.

The recommended initial test drill holes for all Maxwell models are listed below.

Target	X	Y	Dip	Azimuth	Length
L1390	423590	5912430	50	225	200
L1275	422420	5914060	50	200	300
L1450	424136	5910520	55	150	220
T2820E	425868	5913262	45	225	300
T2820W	423198	5913228	45	245	300
L1640	426120	5913080	50	215	260
L1400	423688	5909406	45	200	220

Respectfully submitted[6],

_____   _____
Neil Fiset   Alexander Prikhodko, P. Geo
Geotech Ltd.   **Geotech Ltd.**

_____
ZiHao Han
Geotech Ltd.

October, 2011
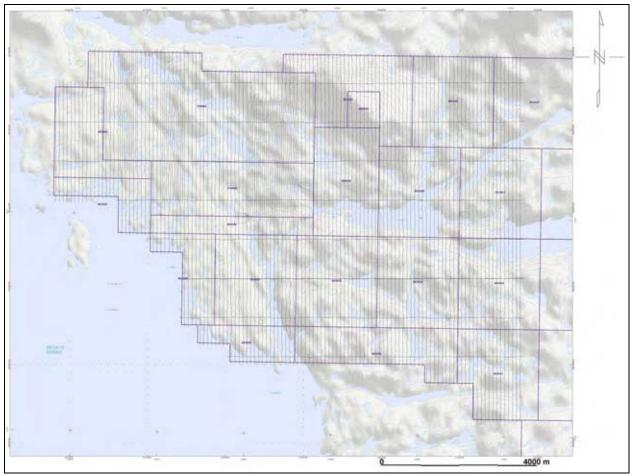
[6]Final data processing of the EM and magnetic data were carried out by ZiHao Han, from the office of Geotech Ltd. in Aurora, Ontario, under the supervision of Alexander Prikhodko, P.Geo., PhD, Senior Geophysicist, VTEM Interpretation Supervisor.

APPENDIX A

SURVEY BLOCK LOCATION MAP

Survey Overview of the blocks

Mining Claims for Yellow Giant Property

APPENDIX B

SURVEY BLOCK COORDINATES
(WGS 84, UTM Zone 9 North)
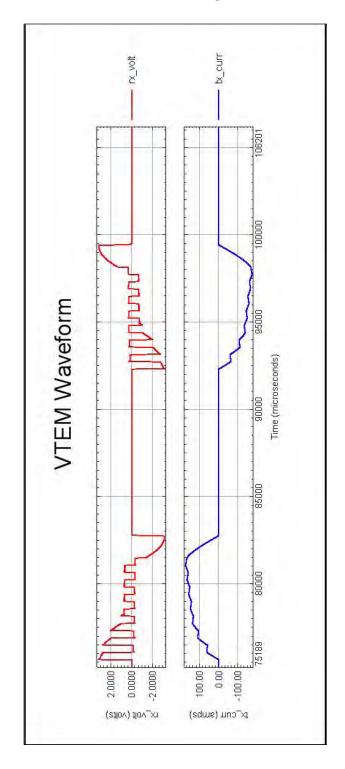
Yellow Giant Property

X	Y
420494.5	5916017.9
420479.0	5915090.9
419647.6	5915104.9
419600.5	5912323.9
421264.4	5912296.1
421249.0	5911369.0
422081.1	5911355.4
422073.5	5910891.9
422905.7	5910878.3
422875.7	5909024.3
423291.9	5909017.6
423284.5	5908554.0
424117.0	5908540.7
424109.7	5908077.2
429105.8	5908000.3
429098.9	5907536.8
430334.5	5907518.4
430334.5	5906591.4
431548.0	5906573.3
431548.0	5915825.7
425482.2	5915937.1
425475.0	5915473.6
423396.5	5915506.6
423404.0	5915970.1

APPENDIX C
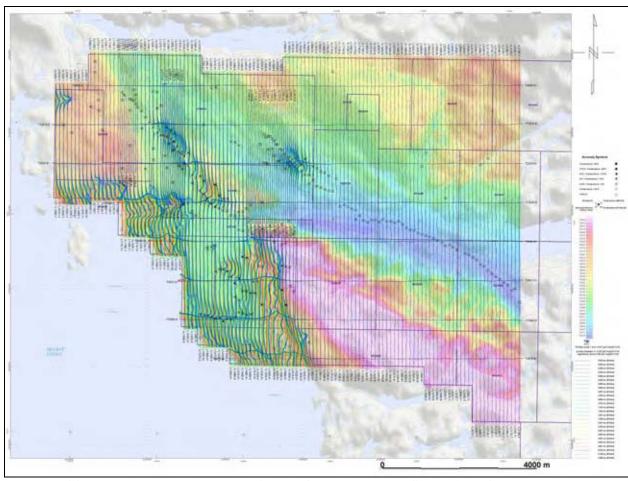
VTEM WAVEFORM

APPENDIX D

GEOPHYSICAL MAPS[1]
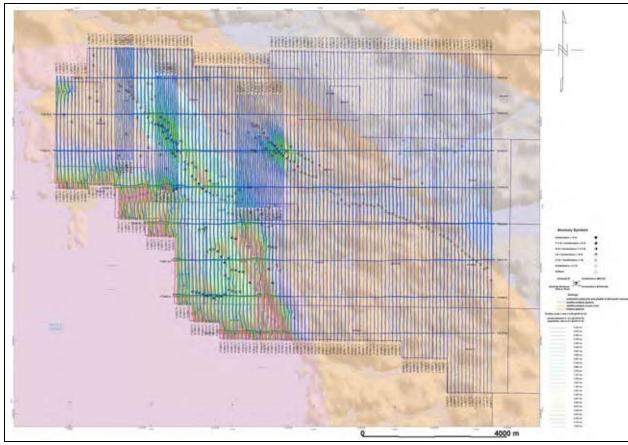
Yellow Giant Property - VTEM B-Field Z Component Profiles, Time Gates 0.220 to 7.036 ms

---
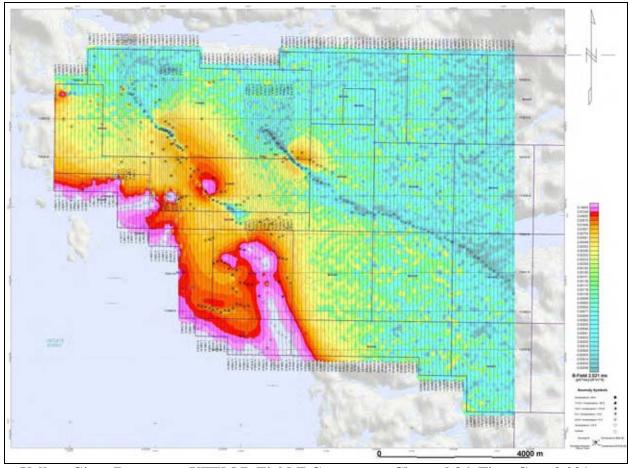
[1] Full size geophysical maps are also available in PDF format on the final DVD
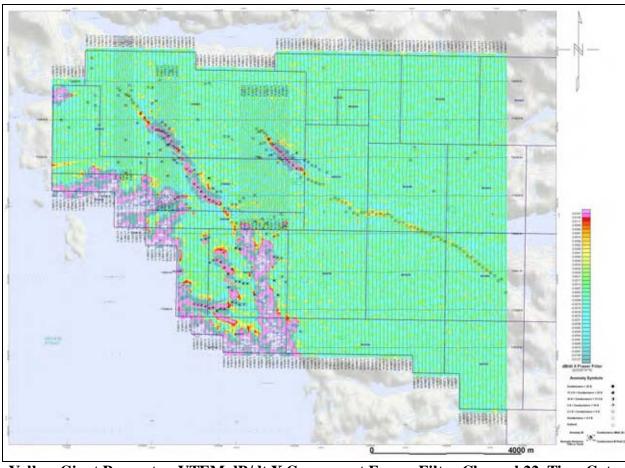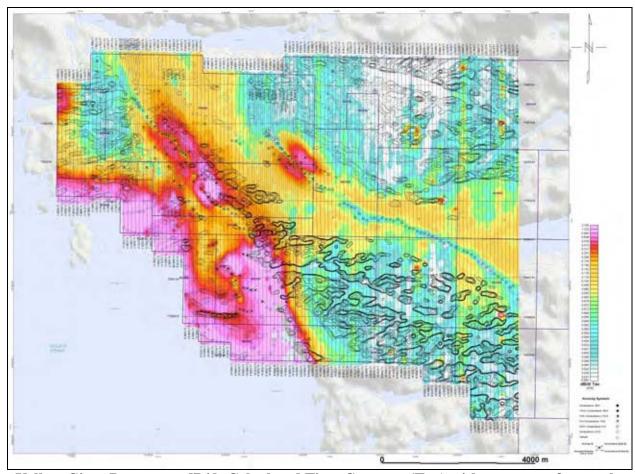
Yellow Giant Property - VTEM dB/dt Z Component Profiles, Time Gates 0.220 to 7.036 ms
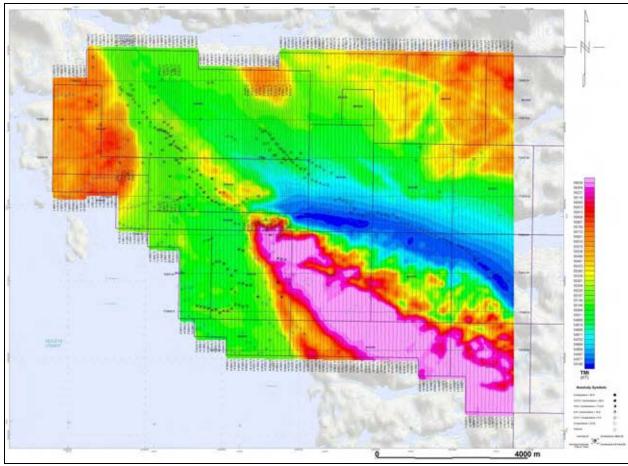
Yellow Giant Property - VTEM B-Field Z Component Channel 36, Time Gate 2.021 ms

Yellow Giant Property - VTEM dB/dt X Component Fraser Filter Channel 22, Time Gate 0.290 ms
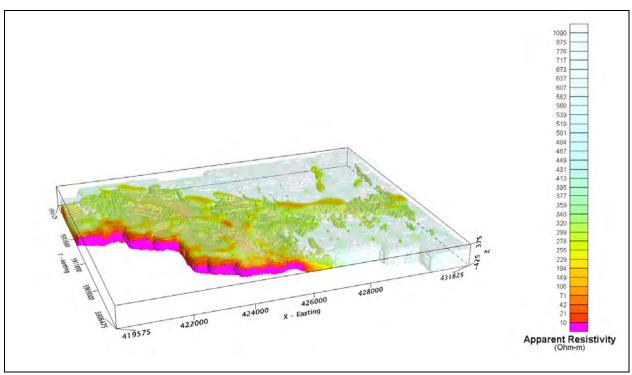
Yellow Giant Property - dB/dt Calculated Time Constant (Tau) with contours of anomaly areas of the Calculated Vertical Derivative of TMI

Yellow Giant Property - Total Magnetic Intensity (TMI)

3D Resistivity-Depth Images (RDI)

Yellow Giant Property

Line 1165

Line 1200

Line 1260

Line 1300

Line 1350

Line 1360

Line 1400

Line 1450

Line 1480

Line 1490

Line 1520

Line 1540

Line 1580

Line 1600

Line 1630

Line 1660

Line 1690

Line 1790

Line 1890

Line 1990

Line 2090

Line 2190

Tie 28200

Maxwell Models

TAU-CVG map with modeled plates projected to the surface
Modeled plates projections in blue

Target Plates Parameters

X (m)	422385
Y (m)	5913940
Depth to Top (m)	-32.7
Dip (deg)	67
Dip Direction (deg)	22.5
Rotation (deg)	0
Length (m)	700
Depth Extent (m)	320
Conductivity-Thickness (S)	15
Conductivity (S/m)	-
Thickness (m)	-

plan

X,Y – coordinates of projected top-center point of the target to the surface (point A on the plan)

Line L1275

Line L1275

Recommended Drillhole 1, X 422420, Y 5914060, Dip 50, Az 200, Length 300m

Line T2820W

Recommended Drillhole 1, X 423198, Y 5913228, Dip 45, Az 245, Length 300m

Line--T2820E & L1640

Target Plate Parameters

X (m)	425785
Y (m)	5913165
Depth to Top (m)	-4.0
Dip (deg)	77
Dip Direction (deg)	45
Rotation (deg)	0
Length (m)	700
Depth Extent (m)	350
Conductivity-Thickness (S)	11.5
Conductivity (S/m)	-
Thickness (m)	-

plan

X,Y – coordinates of projected top-center point
of the target to the surface (point A on the plan)

Line T2820E

Recommended Drillhole 1, X 425868, Y 5913262, Dip 45, Az 225, Length 300m

Recommended Drillhole 1, X 426120, Y 5913080, Dip 50, Az 215, Length 260m

Recommended Drillhole 1, X 423590, Y 5912430, Dip 50, Az 225, Length 200m

Line L1450

Target Plate Parameters

X (m)	424220
Y (m)	5910365
Depth to Top (m)	-36.8
Dip (deg)	26
Dip Direction (deg)	332.5
Rotation (deg)	0
Length (m)	450
Depth Extent (m)	300
Conductivity-Thickness (S)	15
Conductivity (S/m)	-
Thickness (m)	-

X,Y – coordinates of projected top-center point of the target to the surface (point A on the plan)

Line L1450

PLATE PARAMETERS

Recommended Drillhole, X 424136, Y 5910520, Dip 55, Az 150, Length 220 m

Line L1400

Recommended Drillhole1, X 423688, Y 5909406, Dip 45, Az 200, Length 220m

Parameters of recommended test drillholes.

Target	X	Y	Dip	Az	Length	D*
L1390	423590	5912430	50	225	200	102.7
L1275	422420	5914060	50	200	300	145.1
L1450	424136	5910520	55	150	220	112.8
T2820E	425868	5913262	45	225	300	148.1
T2820W	423198	5913228	45	245	300	162.8
L1640	426120	5913080	50	215	260	142.6
L1400	423688	5909406	45	200	220	146.4

* D - drillhole's down hole depth to the intersection point with the plate

The targets arranged according to conductivity - from highest (L1390) to lowest (L1400)

APPENDIX E

GENERALIZED MODELING RESULTS OF THE VTEM SYSTEM

Introduction

The VTEM system is based on a concentric or central loop design, whereby, the receiver is positioned at the centre of a transmitter loop that produces a primary field. The wave form is a bi-polar, modified square wave with a turn-on and turn-off at each end.

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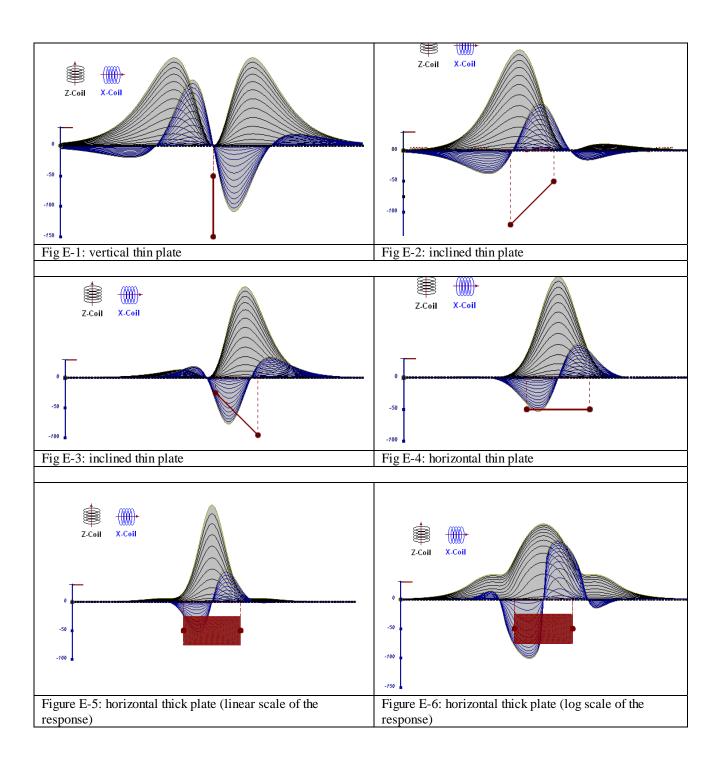
Efficient modeling of the results can be carried out on regularly shaped geometries, thus yielding close approximations to the parameters of the measured targets. The following is a description of a series of common models made for the purpose of promoting a general understanding of the measured results.

A set of models has been produced for the Geotech VTEM® system dB/dT Z and X components (see models E1 to E15). The Maxwell ^{TM} modeling program (EMIT Technology Pty. Ltd. Midland, WA, AU) used to generate the following responses assumes a resistive half-space. 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.
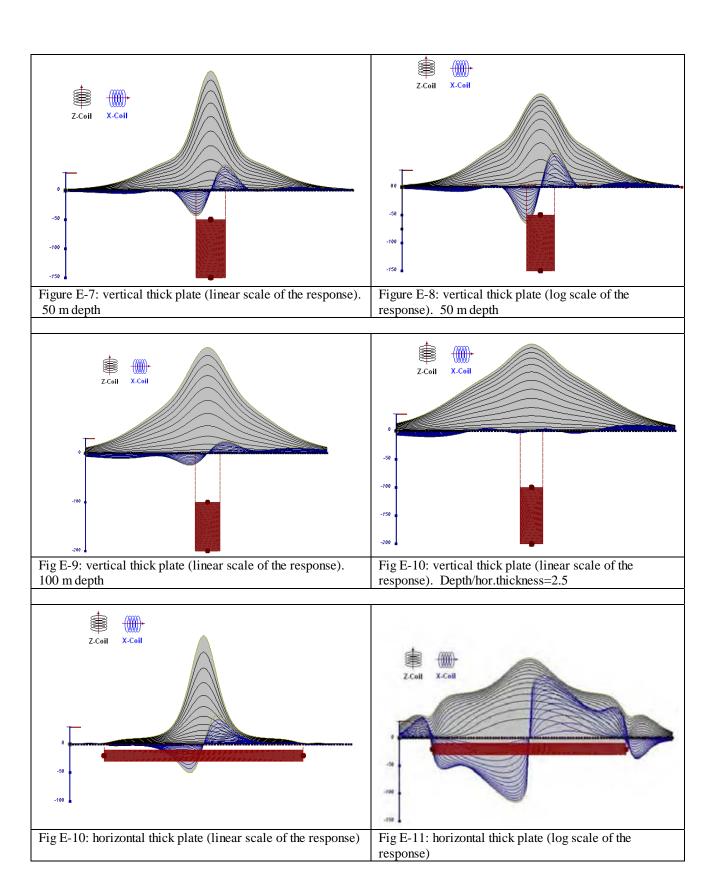
As the plate dips and departs from the vertical position, the peaks become asymmetrical.
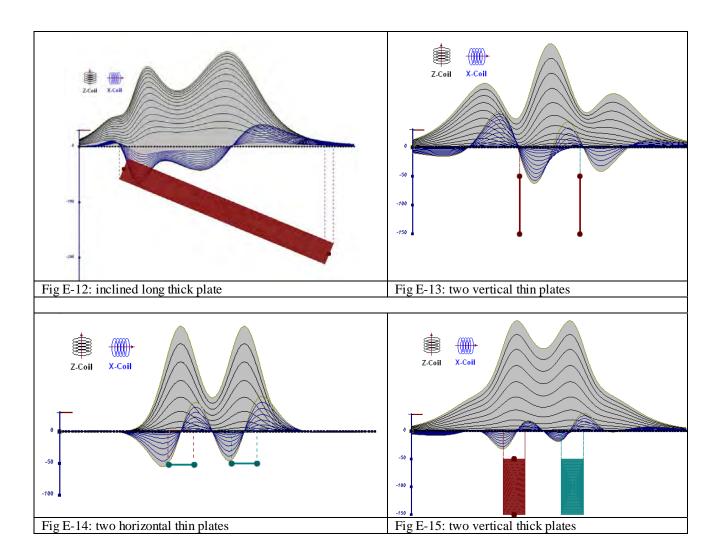
As the dip increases, the aspect ratio (Min/Max) decreases and this aspect ratio can be used as an empirical guide to dip angles from near 90º to about 30º. The method is not sensitive enough where dips are less than about 30º.

Fig E-1: vertical thin plate

Fig E-2: inclined thin plate

Fig E-3: inclined thin plate

Fig E-4: horizontal thin plate

Figure E-5: horizontal thick plate (linear scale of the response)

Figure E-6: horizontal thick plate (log scale of the response)

Figure E-7: vertical thick plate (linear scale of the response). 50 m depth

Figure E-8: vertical thick plate (log scale of the response). 50 m depth

Fig E-9: vertical thick plate (linear scale of the response). 100 m depth

Fig E-10: vertical thick plate (linear scale of the response). Depth/hor.thickness=2.5

Fig E-10: horizontal thick plate (linear scale of the response)

Fig E-11: horizontal thick plate (log scale of the response)

Fig E-12: inclined long thick plate

Fig E-13: two vertical thin plates

Fig E-14: two horizontal thin plates

Fig E-15: two vertical thick plates

The same type of target but with different thickness, for example, creates different form of the response:

"thin"	10 m thickness	15 m thickness
18 m thickness	20 m thickness	30 m thickness
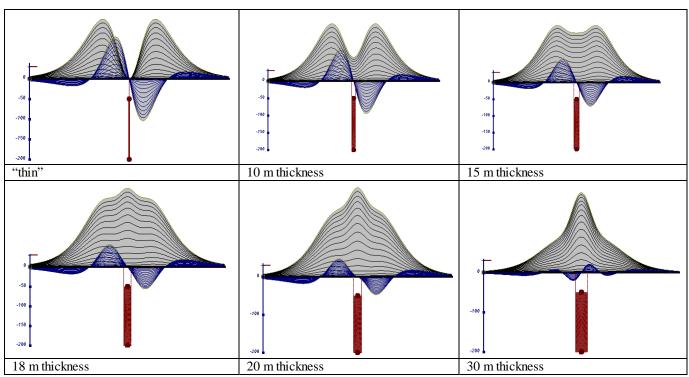
Fig.E-16 Conductive vertical plate, depth 50 m, strike length 200 m, depth extends 150 m.

Alexander Prikhodko, PhD, P.Geo
Geotech Ltd.

September 2010

APPENDIX F
EM TIME CONSTANT (TAU) ANALYSIS

Estimation of time constant parameter[1] in transient electromagnetic method is one of the steps toward the extraction of the information about conductance's beneath the surface from TEM measurements.

The most reliable method to discriminate or rank conductors from overburden, background or one and other is by calculating the EM field decay time constant (TAU parameter), which directly depends on conductance despite their depth and accordingly amplitude of the response.

Theory

As established in electromagnetic theory, the magnitude of the electro-motive force (emf) induced is proportional to the time rate of change of primary magnetic field at the conductor. This emf causes eddy currents to flow in the conductor with a characteristic transient decay, whose Time Constant (Tau) is a function of the conductance of the survey target or conductivity and geometry (including dimensions) of the target. The decaying currents generate a proportional secondary magnetic field, the time rate of change of which is measured by the receiver coil as induced voltage during the Off time.

The receiver coil output voltage (e_0) is proportional to the time rate of change of the secondary magnetic field and has the form,

$$e_0 \propto (1 / \tau) \, e^{-(t / \tau)}$$
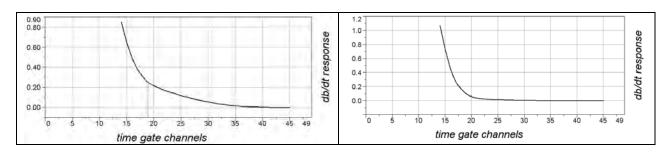
Where,

$\tau = L/R$ is the characteristic time constant of the target (TAU)
R = resistance
L = inductance

From the expression, conductive targets that have small value of resistance and hence large value of τ yield signals with small initial amplitude that decays relatively slowly with progress of time. Conversely, signals from poorly conducting targets that have large resistance value and small τ, have high initial amplitude but decay rapidly with time[1] (Fig. F1).

---

[1] McNeill, JD, 1980, "Applications of Transient Electromagnetic Techniques", Technical Note TN-7 page 5, Geonics Limited, Mississauga, Ontario.

Figure F1 Left – presence of good conductor, right – poor conductor.

EM Time Constant (Tau) Calculation

The EM Time-Constant (TAU) is a general measure of the speed of decay of the electromagnetic response and indicates the presence of eddy currents in conductive sources as well as reflecting the "conductance quality" of a source. Although TAU can be calculated using either the measured dB/dt decay or the calculated B-field decay, dB/dt is commonly preferred due to better stability (S/N) relating to signal noise. Generally, TAU calculated on base of early time response reflects both near surface overburden and poor conductors whereas, in the late ranges of time, deep and more conductive sources, respectively. For example early time TAU distribution in an area that indicates conductive overburden is shown in Figure 2.
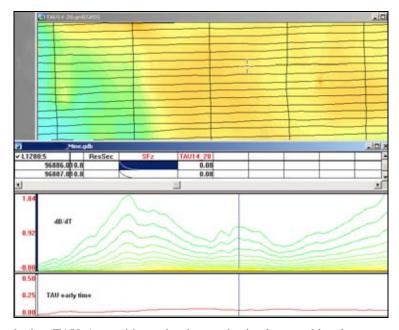
Figure F2 – Map of early time TAU. Area with overburden conductive layer and local sources.
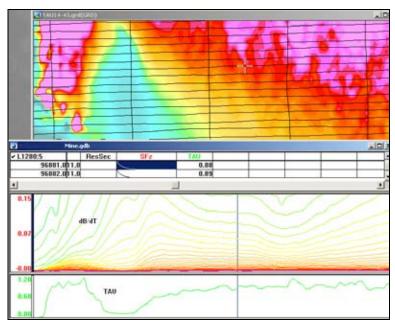
Figure F3 – Map of full time range TAU with EM anomaly due to deep highly conductive target.

There are many advantages of TAU maps:

- TAU depends only on one parameter (conductance) in contrast to response magnitude;
- TAU is integral parameter, which covers time range and all conductive zones and targets are displayed independently of their depth and conductivity on a single map.
- Very good differential resolution in complex conductive places with many sources with different conductivity.
- Signs of the presence of good conductive targets are amplified and emphasized independently of their depth and level of response accordingly.

In the example shown in Figure 4 and 5, three local targets are defined, each of them with a different depth of burial, as indicated on the resistivity depth image (RDI). All are very good conductors but the deeper target (number 2) has a relatively weak dB/dt signal yet also features the strongest total TAU (Figure 4). This example highlights the benefit of TAU analysis in terms of an additional target discrimination tool.
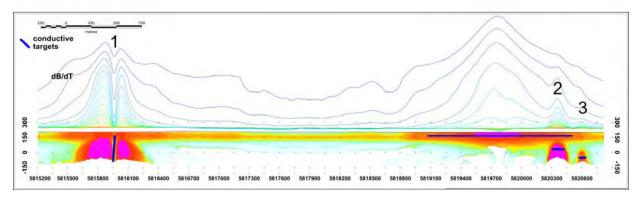
Figure F4 – dB/dt profile and RDI with different depths of targets.
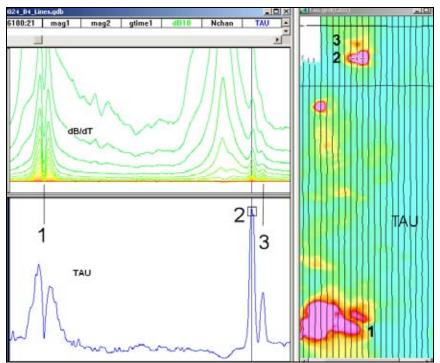
Figure F5 – Map of total TAU and dB/dt profile.

The EM Time Constants for dB/dt and B-field were calculated using the "sliding Tau" in-house program developed at Geotech[2]. The principle of the calculation is based on using of time window (4 time channels) which is sliding along the curve decay and looking for latest time channels which have a response above the level of noise and decay. The EM decays are obtained from all available decay channels, starting at the latest channel. Time constants are taken from a least square fit of a straight-line (log/linear space) over the last 4 gates above a pre-set signal threshold level (Figure F6). Threshold settings are pointed in the "label" property of TAU database channels. The sliding Tau method determines that, as the amplitudes increase, the time-constant is taken at progressively later times in the EM decay. Conversely, as the amplitudes decrease, Tau is taken at progressively earlier times in the decay. If the maximum signal amplitude falls below the threshold, or becomes negative for any of the 4 time gates, then Tau is not calculated and is assigned a value of "dummy" by default.

---

[2] by A.Prikhodko
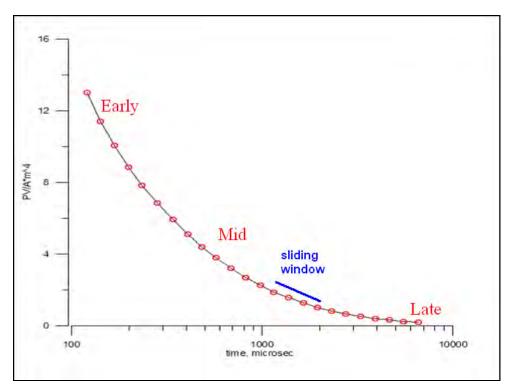
Figure F6 - Typical dB/dt decays of VTEM data

Alexander Prikhodko, PhD, P.Geo
Geotech Ltd.

September 2010

APPENDIX G

TEM Resistivity Depth Imaging (RDI)

Resistivity depth imaging (RDI) is technique used to rapidly convert EM profile decay data into an equivalent resistivity versus depth cross-section, by deconvolving the measured TEM data.
The used RDI algorithm of Resistivity-Depth transformation is based on scheme of the apparent resistivity transform of Maxwell A.Meju (1998)[1] and TEM response from conductive half-space. The program is developed by Alexander Prikhodko and depth calibrated based on forward plate modeling for VTEM system configuration (Fig. 1-10).

RDIs provide reasonable indications of conductor relative depth and vertical extent, as well as accurate 1D layered-earth apparent conductivity/resistivity structure across VTEM flight lines. Approximate depth of investigation of a TEM system, image of secondary field distribution in half space, effective resistivity, initial geometry and position of conductive targets is the information obtained on base of the RDIs.

Maxwell forward modeling with RDI sections from the synthetic responses (VTEM system)

Fig. 1 Maxwell plate model and RDI from the calculated response for conductive "thin" plate (depth 50 m, dip 65 degree, depth extend 100 m).

---

[1] Maxwell A.Meju, 1998, Short Note: A simple method of transient electromagnetic data analysis, Geophysics, **63**, 405–410.
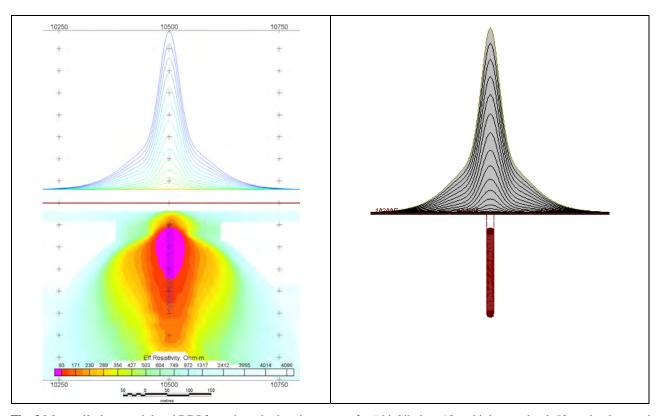
Fig. 2 Maxwell plate model and RDI from the calculated response for "thick" plate 18 m thickness, depth 50 m, depth extend 200 m).
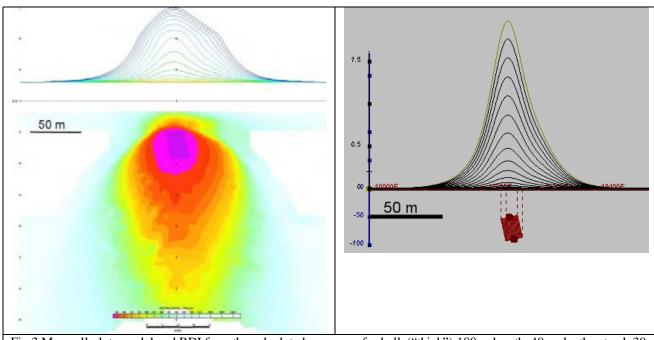
Fig.3 Maxwell plate model and RDI from the calculated response for bulk ("thick") 100 m length, 40 m depth extend, 30 m thickness
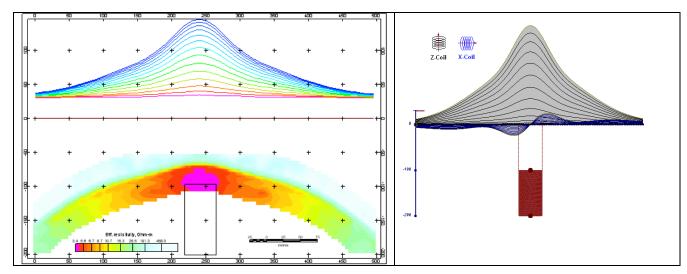
Fig. 4 Maxwell plate model and RDI from the calculated response for "thick" vertical target (depth 100 m, depth extend 100 m). 19-44 chan.

horizontal plate forward model
and RDI section
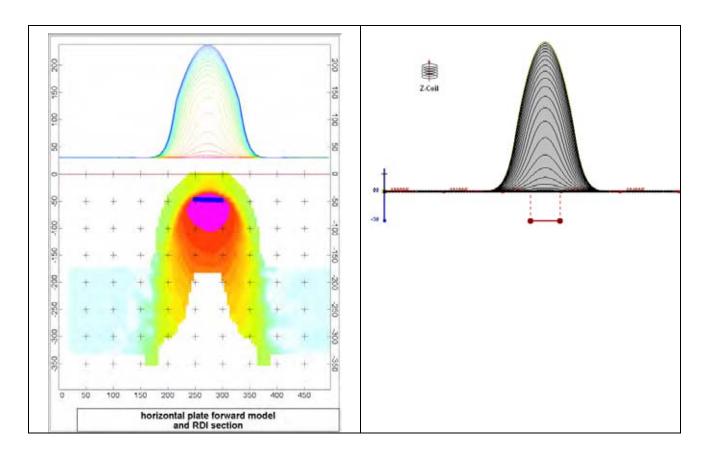
Fig. 5 Maxwell plate model and RDI from the calculated response for horizontal thin plate (depth 50 m, dim 50x100 m). 15-44 chan.
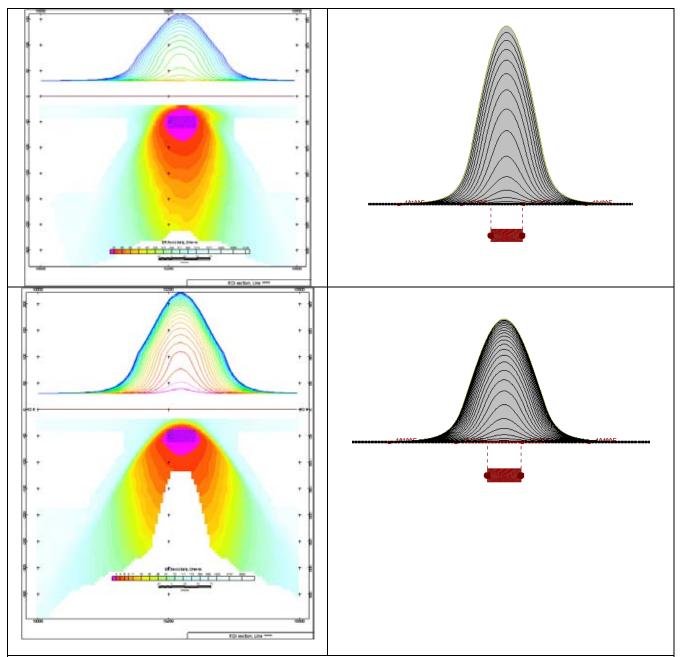
Fig.6 Maxwell plate model and RDI from the calculated response for horizontal thick (20m) plate – less conductive (on the top), more conductive (below)
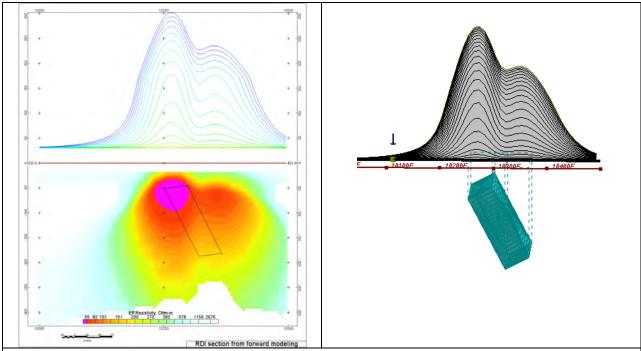
Fig.7 Maxwell plate model and RDI from the calculated response for inclined thick (50m) plate. Depth extend 150 m, depth to the target 50 m.
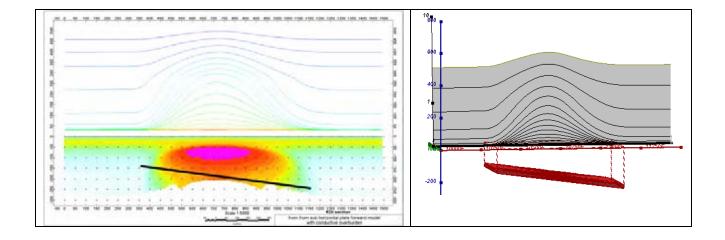
Fig.8 Maxwell plate model and RDI from the calculated response for the long, wide and deep sub horizontal plate (depth 140 m, dim 25x500x800 m) with conductive overburden.
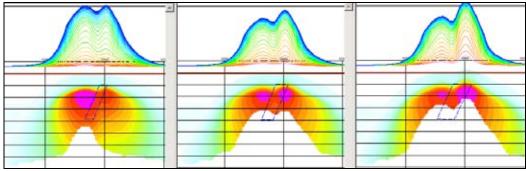
Fig.9 Maxwell plate models and RDIs from the calculated response for "thick" dipping plates (35, 50, 75 m thickness), depth 50 m, conductivity 2.5 S/m.
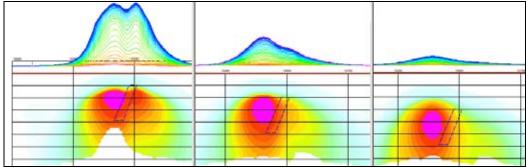
Fig.10 Maxwell plate models and RDIs from the calculated response for "thick" (35 m thickness) dipping plate on different depth (50, 100, 150 m), conductivity 2.5 S/m.
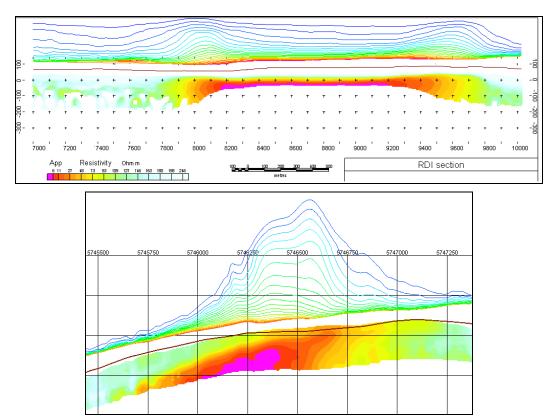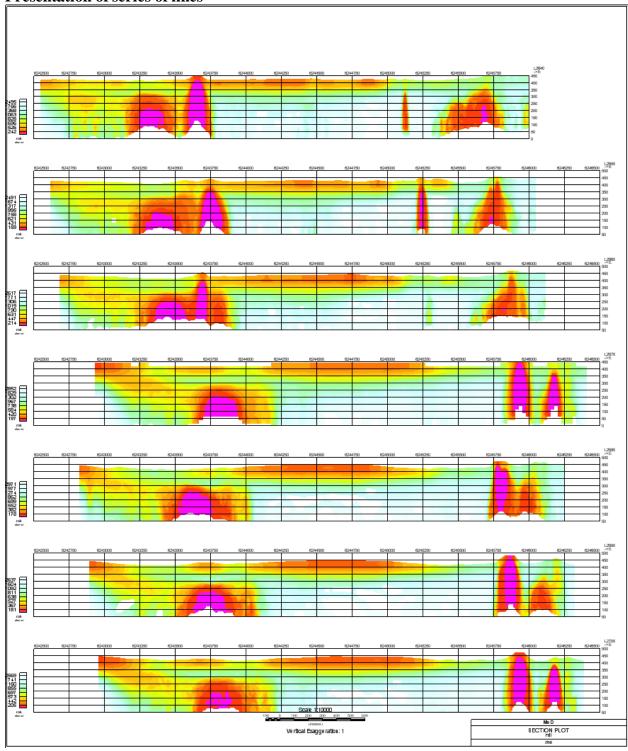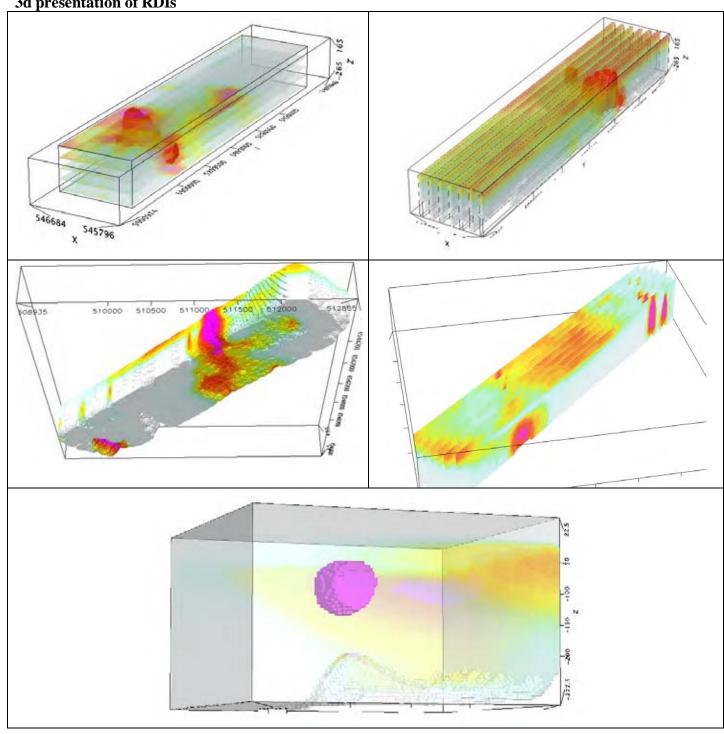
Fig.11 RDI section for the real horizontal and slightly dipping conductive layers

Forms of RDI presentation
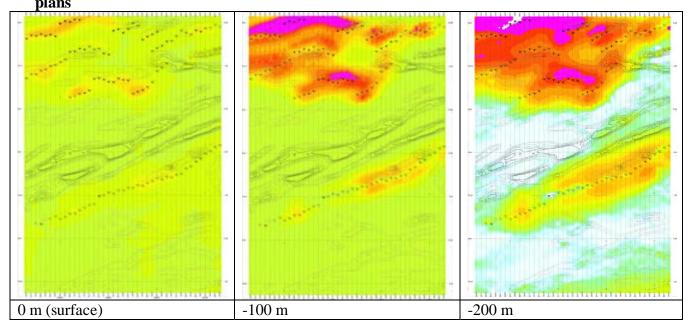
Presentation of series of lines

Scale 1:10000

Vertical Exaggeration: 1

MoD

SECTION PLOT
rdi
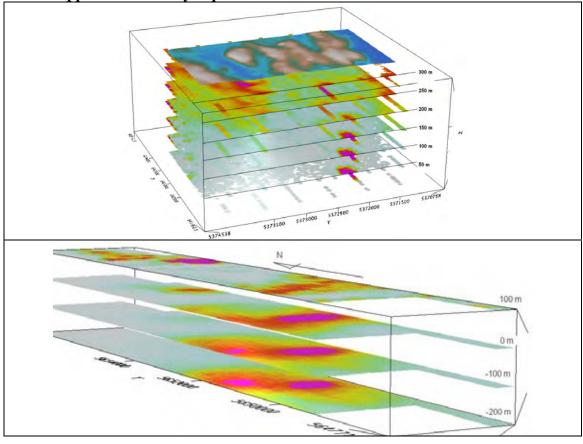
3d presentation of RDIs

Apparent Resistivity Depth Slices
plans

| 0 m (surface) | -100 m | -200 m |

3d views of apparent resistivity depth slices
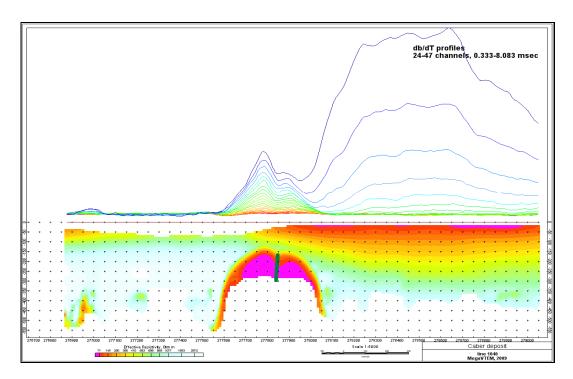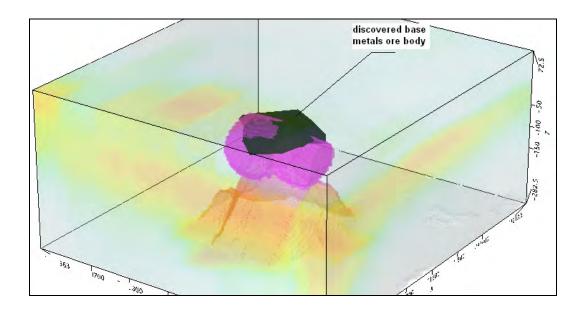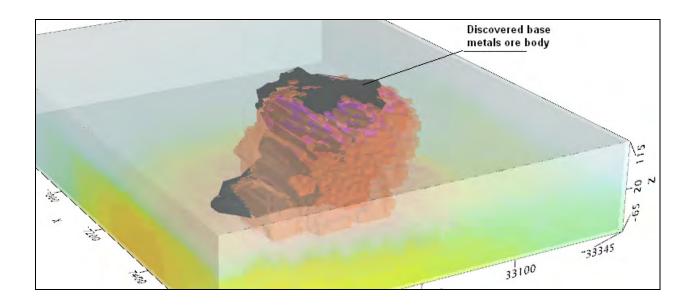
Real base metal targets in comparison with RDIs:

RDI section of the line over Caber deposit ("thin" sub vertical plate target and conductive overburden.

3d RDI voxels with base metals ore bodies (Middle East):

Discovered base metals ore body

Alexander Prikhodko, PhD, P.Geo
Geotech Ltd.
April 2011

APPENDIX H

ELECTROMAGNETIC ANOMALY LISTING

x	y	Line	AnConSF	AnConBF	AnTAUSF	AnTAUBF	Anom_ID	Anom_Labels	Grade
419850	5914192	1020	5.97	0.00	0.32	0.00	K	A	3
420057	5913996	1040	4.33	0.00	0.23	0.00	K	A	2
420548	5914658	1090	3.44	0.00	0.18	0.00	K	A	2
420653	5915552	1100	4.11	0.00	0.22	0.00	K	A	2
420654	5915823	1100	3.43	0.00	0.18	0.00	K	B	2
420744	5914835	1110	2.31	0.00	0.12	0.00	K	A	1
420747	5914573	1110	3.61	0.00	0.19	0.00	K	B	2
420849	5914060	1120	3.07	0.00	0.17	0.00	K	A	2
421353	5915030	1170	3.47	0.00	0.19	0.00	K	A	2
421349	5914840	1170	4.16	0.00	0.22	0.00	K	B	2
421352	5913078	1170	5.34	0.00	0.29	0.00	K	C	3
421402	5914963	1175	4.49	5.31	0.24	0.29	K	A	2
421547	5914864	1190	2.75	0.00	0.15	0.00	K	A	2
421552	5914572	1190	3.45	0.00	0.19	0.00	K	B	2
421551	5913668	1190	4.53	0.00	0.24	0.00	K	C	2
421548	5912793	1190	9.81	5.29	0.53	0.28	K	D	3
421603	5914837	1195	2.69	0.00	0.14	0.00	N	A	2
421654	5914818	1200	2.87	0.00	0.15	0.00	N	A	2
421648	5915098	1200	3.29	0.00	0.18	0.00	N	B	2
421704	5914726	1205	3.52	0.00	0.19	0.00	N	A	2
421700	5914972	1205	3.52	0.00	0.19	0.00	N	B	2
421748	5914640	1210	3.08	0.00	0.17	0.00	N	A	2
421854	5914109	1220	5.57	2.98	0.30	0.16	K	A	3
421849	5914549	1220	3.83	0.00	0.21	0.00	N	B	2
421949	5914386	1230	6.90	4.53	0.37	0.24	N	A	3
421947	5913065	1230	7.20	0.00	0.39	0.00	K	B	3
422054	5914250	1240	9.36	7.97	0.50	0.43	N	A	3
422143	5915052	1250	4.90	2.00	0.26	0.11	N	A	2
422146	5914124	1250	8.17	7.74	0.44	0.42	N	B	3
422146	5913590	1250	9.15	5.00	0.49	0.27	K	C	3
422153	5913294	1250	8.37	0.00	0.45	0.00	K	D	3
422254	5913984	1260	8.15	7.34	0.44	0.39	N	A	3
422250	5914620	1260	6.58	4.36	0.35	0.23	K	B	3
422252	5915040	1260	5.09	2.67	0.27	0.14	K	C	3
422348	5914693	1270	5.85	3.60	0.31	0.19	K	A	3
422344	5913929	1270	10.47	9.80	0.56	0.53	N	B	4

x	y	Line	AnConSF	AnConBF	AnTAUSF	AnTAUBF	Anom_ID	Anom_Labels	Grade
422403	5913935	1275	10.57	9.76	0.57	0.52	N	A	4
422448	5915232	1280	4.84	1.69	0.26	0.09	K	A	2
422446	5913910	1280	11.22	10.46	0.60	0.56	N	B	4
422450	5913402	1280	12.84	14.50	0.69	0.78	K	C	4
422498	5913094	1285	12.41	8.59	0.67	0.46	K	A	4
422499	5913893	1285	10.52	10.26	0.57	0.55	N	B	4
422498	5914130	1285	10.52	10.26	0.57	0.55	N	C	4
422552	5913712	1290	10.82	11.92	0.58	0.64	N	A	4
422545	5913879	1290	9.72	9.68	0.52	0.52	N	B	3
422599	5914058	1295	9.00	8.24	0.48	0.44	N	A	3
422599	5913832	1295	9.00	8.24	0.48	0.44	N	B	3
422648	5913759	1300	9.33	8.67	0.50	0.47	N	A	3
422649	5913539	1300	10.74	10.69	0.58	0.57	N	B	4
422650	5912719	1300	10.13	12.06	0.54	0.65	K	C	4
422701	5913555	1305	10.95	11.89	0.59	0.64	N	A	4
422691	5913761	1305	8.77	7.93	0.47	0.43	N	B	3
422697	5913969	1305	8.77	7.93	0.47	0.43	N	C	3
422752	5913634	1310	8.73	8.47	0.47	0.46	N	A	3
422747	5915478	1310	3.55	1.84	0.19	0.10	K	B	2
422801	5913504	1315	9.84	8.97	0.53	0.48	N	A	3
422800	5913147	1315	9.84	8.97	0.53	0.48	N	B	3
422845	5913464	1320	9.77	9.10	0.53	0.49	N	A	3
422846	5913131	1320	9.77	9.10	0.53	0.49	N	B	3
422845	5912108	1320	13.35	12.69	0.72	0.68	N	C	4
422905	5912150	1325	10.00	11.47	0.54	0.62	N	A	3
422897	5913061	1325	10.97	13.09	0.59	0.70	N	B	4
422900	5913439	1325	11.38	10.92	0.61	0.59	N	C	4
422952	5912168	1330	6.09	6.05	0.33	0.33	N	A	3
422949	5913191	1330	10.48	12.10	0.56	0.65	N	B	4
422946	5913380	1330	11.94	11.67	0.64	0.63	N	C	4
423046	5913476	1340	13.75	13.91	0.74	0.75	N	A	4
423047	5913156	1340	8.73	9.79	0.47	0.53	N	B	3
423040	5912186	1340	5.50	6.07	0.30	0.33	N	C	3
423147	5911977	1350	8.19	9.37	0.44	0.50	N	A	3
423155	5912700	1350	11.71	18.19	0.63	0.98	N	B	4
423155	5912903	1350	12.02	14.27	0.65	0.77	N	C	4
423244	5912834	1360	9.95	10.24	0.53	0.55	N	A	3
423246	5911865	1360	6.14	5.31	0.33	0.29	N	B	3
423354	5909346	1370	16.58	19.89	0.89	1.07	N	A	4

x	y	Line	AnConSF	AnConBF	AnTAUSF	AnTAUBF	Anom_ID	Anom_Labels	Grade
423353	5912509	1370	17.26	26.07	0.93	1.40	N	B	4
423354	5912880	1370	17.26	26.07	0.93	1.40	N	C	4
423446	5914201	1380	7.01	4.47	0.38	0.24	K	A	3
423449	5912756	1380	13.17	15.03	0.71	0.81	N	B	4
423444	5912420	1380	13.17	15.03	0.71	0.81	N	C	4
423454	5909327	1380	16.66	21.13	0.90	1.14	N	D	4
423540	5912304	1390	35.97	40.17	1.93	2.16	N	A	6
423543	5911036	1390	7.83	8.68	0.42	0.47	K	B	3
423546	5909316	1390	18.71	21.88	1.01	1.18	N	C	5
423653	5909285	1400	18.03	23.30	0.97	1.25	N	A	5
423651	5911061	1400	10.21	10.38	0.55	0.56	K	B	4
423647	5912173	1400	33.14	37.24	1.78	2.00	N	C	6
423650	5915144	1400	4.93	2.20	0.27	0.12	N	D	2
423752	5915158	1410	5.43	0.00	0.29	0.00	K	A	3
423745	5912659	1410	29.72	32.81	1.60	1.76	N	B	6
423745	5912090	1410	29.72	32.81	1.60	1.76	N	C	6
423743	5911104	1410	6.89	6.26	0.37	0.34	K	D	3
423757	5910440	1410	11.22	15.17	0.60	0.82	K	E	4
423751	5909244	1410	19.56	24.32	1.05	1.31	N	F	5
423851	5909257	1420	19.64	24.94	1.06	1.34	N	A	5
423853	5910502	1420	15.32	22.64	0.82	1.22	K	B	4
423848	5912051	1420	15.17	18.85	0.82	1.01	N	C	4
423844	5912384	1420	15.17	18.85	0.82	1.01	N	D	4
423948	5912299	1430	10.68	11.42	0.57	0.61	N	A	4
423941	5911990	1430	10.68	11.42	0.57	0.61	N	B	4
423947	5910504	1430	16.56	19.08	0.89	1.03	N	C	4
423949	5909168	1430	20.36	25.47	1.09	1.37	N	D	5
424050	5909226	1440	17.79	22.65	0.96	1.22	N	A	5
424055	5910450	1440	29.74	42.59	1.60	2.29	N	B	6
424049	5911986	1440	9.18	8.82	0.49	0.47	N	C	3
424054	5912304	1440	9.18	8.82	0.49	0.47	N	D	3
424151	5913762	1450	4.80	1.55	0.26	0.08	N	A	2
424148	5911872	1450	7.93	7.46	0.43	0.40	N	B	3
424150	5910308	1450	24.89	35.12	1.34	1.89	N	C	5
424152	5909218	1450	17.63	24.04	0.95	1.29	N	D	5
424252	5909278	1460	14.64	22.82	0.79	1.23	N	A	4
424252	5909790	1460	13.20	17.54	0.71	0.94	N	B	4
424246	5910140	1460	26.12	30.00	1.40	1.61	N	C	6
424249	5911851	1460	6.95	5.96	0.37	0.32	N	D	3

x	y	Line	AnConSF	AnConBF	AnTAUSF	AnTAUBF	Anom_ID	Anom_Labels	Grade
424257	5913745	1460	5.41	1.42	0.29	0.08	N	E	3
424351	5913674	1470	4.11	1.54	0.22	0.08	N	A	2
424349	5911962	1470	8.15	7.11	0.44	0.38	N	B	3
424344	5911497	1470	6.67	4.63	0.36	0.25	N	C	3
424353	5910265	1470	24.62	30.86	1.32	1.66	N	D	5
424349	5909701	1470	7.28	7.23	0.39	0.39	N	E	3
424352	5909393	1470	11.40	14.68	0.61	0.79	K	F	4
424452	5909368	1480	11.03	13.71	0.59	0.74	K	A	4
424446	5909945	1480	13.35	15.62	0.72	0.84	K	B	4
424445	5910820	1480	25.17	46.77	1.35	2.51	K	C	6
424453	5911475	1480	6.88	6.04	0.37	0.32	N	D	3
424453	5911963	1480	7.36	6.49	0.40	0.35	N	E	3
424545	5912046	1490	7.25	5.23	0.39	0.28	K	A	3
424553	5910792	1490	42.03	88.34	2.26	4.75	K	B	6
424550	5909935	1490	17.81	22.38	0.96	1.20	K	C	5
424546	5909330	1490	13.48	19.28	0.72	1.04	K	D	4
424659	5909343	1500	16.91	22.22	0.91	1.19	K	A	4
424650	5909890	1500	20.83	27.32	1.12	1.47	K	B	5
424650	5912135	1500	7.39	4.76	0.40	0.26	K	C	3
424754	5909888	1510	23.87	31.84	1.28	1.71	K	A	5
424900	5913704	1525	4.24	0.00	0.23	0.00	K	A	2
424946	5912206	1530	5.98	2.46	0.32	0.13	N	A	3
424951	5911520	1530	10.20	11.81	0.55	0.63	N	B	4
424942	5909592	1530	31.06	45.30	1.67	2.44	N	C	6
424999	5913959	1535	1.81	0.00	0.10	0.00	N	A	1
424997	5913222	1535	4.08	0.00	0.22	0.00	K	B	2
425052	5913210	1540	6.27	3.81	0.34	0.20	K	A	3
425046	5913878	1540	3.51	0.00	0.19	0.00	N	B	2
425097	5913197	1545	4.59	0.00	0.25	0.00	K	A	2
425101	5913566	1545	2.93	0.00	0.16	0.00	N	B	2
425100	5913903	1545	2.28	0.00	0.12	0.00	N	C	1
425147	5913903	1550	2.91	0.00	0.16	0.00	N	A	2
425145	5911593	1550	8.48	7.18	0.46	0.39	N	B	3
425150	5911324	1550	9.51	11.92	0.51	0.64	N	C	3
425202	5913588	1555	2.95	0.00	0.16	0.00	N	A	2
425205	5913838	1555	2.95	0.00	0.16	0.00	N	B	2
425254	5911190	1560	10.09	13.16	0.54	0.71	N	A	4
425251	5911467	1560	8.30	7.72	0.45	0.42	N	B	3
425248	5913404	1560	4.98	3.38	0.27	0.18	N	C	2

x	y	Line	AnConSF	AnConBF	AnTAUSF	AnTAUBF	Anom_ID	Anom_Labels	Grade
425257	5913785	1560	3.35	1.67	0.18	0.09	N	D	2
425298	5913695	1565	4.23	2.49	0.23	0.13	N	A	2
425340	5913692	1570	5.50	4.47	0.30	0.24	N	A	3
425346	5913261	1570	5.50	4.47	0.30	0.24	N	B	3
425397	5913270	1575	6.52	5.00	0.35	0.27	N	A	3
425405	5913571	1575	6.52	5.00	0.35	0.27	N	B	3
425458	5909968	1580	33.96	50.85	1.83	2.73	N	A	6
425454	5910587	1580	12.17	17.91	0.65	0.96	N	B	4
425457	5911123	1580	6.81	7.51	0.37	0.40	N	C	3
425457	5911644	1580	4.74	0.00	0.25	0.00	N	D	2
425449	5913542	1580	6.56	5.62	0.35	0.30	N	E	3
425503	5913450	1585	6.84	6.08	0.37	0.33	N	A	3
425549	5913419	1590	9.08	8.14	0.49	0.44	N	A	3
425553	5913073	1590	9.08	8.14	0.49	0.44	N	B	3
425551	5911160	1590	4.48	3.21	0.24	0.17	N	C	2
425550	5910571	1590	11.23	15.77	0.60	0.85	N	D	4
425558	5909583	1590	30.55	60.84	1.64	3.27	N	E	6
425604	5913182	1595	8.04	7.45	0.43	0.40	N	A	3
425597	5913360	1595	8.04	7.45	0.43	0.40	N	B	3
425668	5910068	1600	9.46	18.87	0.51	1.01	N	A	3
425653	5910550	1600	8.01	7.70	0.43	0.41	N	B	3
425651	5911360	1600	4.34	1.65	0.23	0.09	N	C	2
425645	5911722	1600	4.66	0.00	0.25	0.00	N	D	2
425654	5913132	1600	8.04	7.28	0.43	0.39	N	E	3
425642	5913341	1600	8.04	7.28	0.43	0.39	N	F	3
425696	5913267	1605	7.41	6.47	0.40	0.35	N	A	3
425748	5913186	1610	9.10	8.18	0.49	0.44	N	A	3
425744	5911395	1610	3.09	0.00	0.17	0.00	N	B	2
425757	5909929	1610	5.17	7.01	0.28	0.38	N	C	3
425802	5913128	1615	9.19	8.67	0.49	0.47	N	A	3
425801	5913339	1615	9.19	8.67	0.49	0.47	N	B	3
425852	5913075	1620	9.83	8.93	0.53	0.48	N	A	3
425951	5913000	1630	11.29	9.32	0.61	0.50	N	A	4
425946	5913190	1630	11.29	9.32	0.61	0.50	N	B	4
426050	5913319	1640	12.89	12.68	0.69	0.68	N	A	4
426046	5912914	1640	12.89	12.68	0.69	0.68	N	B	4
426151	5908625	1650	7.65	13.44	0.41	0.72	K	A	3
426154	5912683	1650	4.59	2.46	0.25	0.13	N	B	2
426152	5912903	1650	12.12	11.97	0.65	0.64	N	C	4
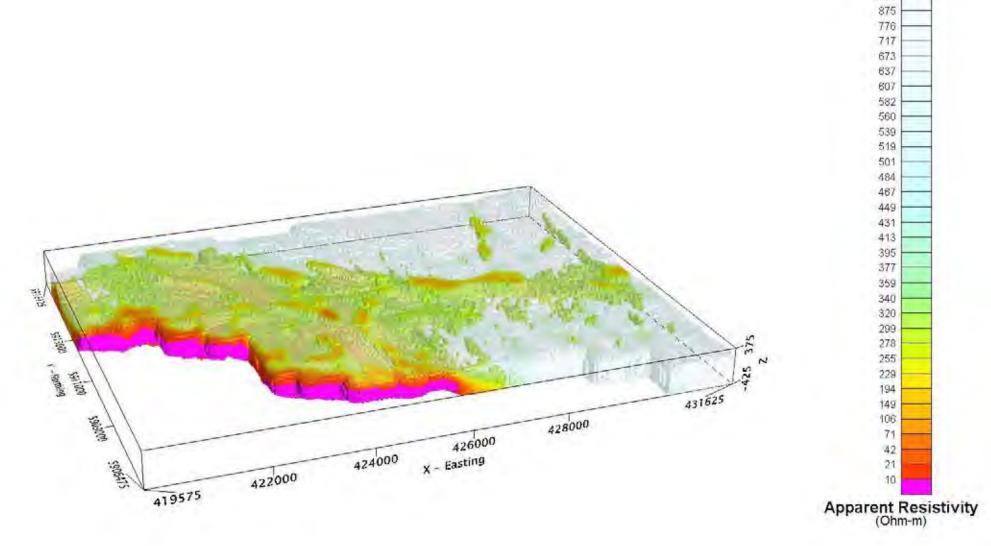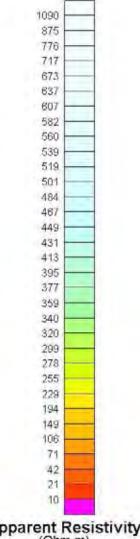
x	y	Line	AnConSF	AnConBF	AnTAUSF	AnTAUBF	Anom_ID	Anom_Labels	Grade
426256	5913125	1660	10.77	11.40	0.58	0.61	N	A	4
426248	5912776	1660	10.77	11.40	0.58	0.61	N	B	4
426349	5912622	1670	7.91	5.66	0.43	0.30	N	A	3
426353	5913077	1670	7.91	5.66	0.43	0.30	N	B	3
426449	5912991	1680	7.64	3.75	0.41	0.20	N	A	3
426452	5912582	1680	7.64	3.75	0.41	0.20	N	B	3
426556	5912536	1690	5.69	0.00	0.31	0.00	N	A	3
426552	5912967	1690	5.69	0.00	0.31	0.00	N	B	3
426649	5912889	1700	4.54	0.00	0.24	0.00	N	A	2
426655	5912505	1700	4.54	0.00	0.24	0.00	N	B	2
426753	5912495	1710	3.81	0.00	0.21	0.00	N	A	2
426757	5915563	1710	1.41	0.00	0.08	0.00	K	B	1
426844	5912809	1720	3.85	0.00	0.21	0.00	K	A	2
426946	5912103	1730	3.14	0.00	0.17	0.00	N	A	2
427053	5912143	1740	2.96	0.00	0.16	0.00	N	A	2
427152	5912091	1750	2.04	0.00	0.11	0.00	N	A	1
427246	5912039	1760	2.68	0.00	0.14	0.00	N	A	2
427347	5911771	1770	2.92	0.00	0.16	0.00	N	A	2
427350	5912005	1770	3.38	1.36	0.18	0.07	N	B	2
427447	5911865	1780	3.02	0.00	0.16	0.00	N	A	2
427547	5911743	1790	2.85	0.00	0.15	0.00	N	A	2
427653	5911698	1800	2.71	0.00	0.15	0.00	N	A	2
427752	5911756	1810	3.20	0.00	0.17	0.00	N	A	2
427846	5911751	1820	3.05	0.00	0.16	0.00	N	A	2
427951	5911706	1830	3.16	0.00	0.17	0.00	N	A	2
428046	5911762	1840	3.57	2.07	0.19	0.11	N	A	2
428149	5911714	1850	3.43	1.68	0.18	0.09	N	A	2
428253	5911719	1860	3.17	0.00	0.17	0.00	N	A	2
428346	5911679	1870	3.54	1.63	0.19	0.09	N	A	2
428452	5911726	1880	4.11	2.02	0.22	0.11	N	A	2
428553	5911639	1890	3.68	1.58	0.20	0.09	N	A	2
428653	5911543	1900	2.27	1.17	0.12	0.06	N	A	1
428751	5911494	1910	2.59	1.46	0.14	0.08	N	A	2
428850	5911481	1920	2.52	1.49	0.14	0.08	N	A	2
428950	5911416	1930	3.09	1.59	0.17	0.09	N	A	2
429045	5913133	1940	1.80	0.00	0.10	0.00	N	A	1
429051	5911377	1940	2.97	1.28	0.16	0.07	N	B	2
429151	5911357	1950	2.75	0.00	0.15	0.00	N	A	2
429150	5913488	1950	1.33	0.00	0.07	0.00	N	B	1
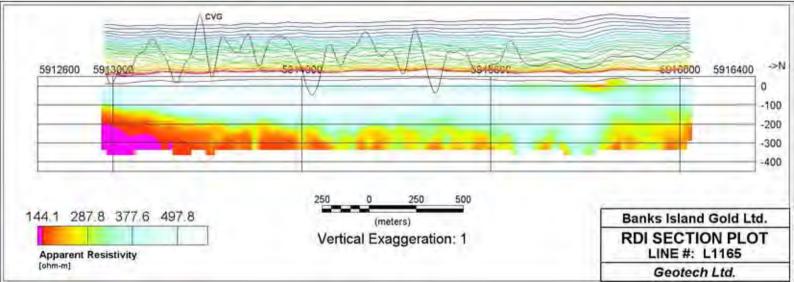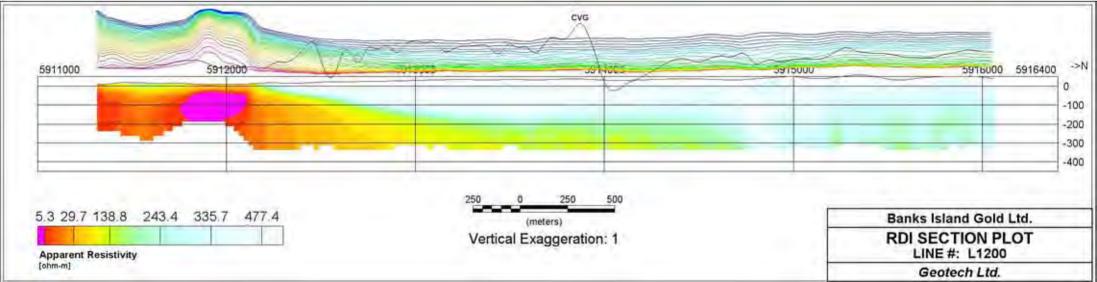
x	y	Line	AnConSF	AnConBF	AnTAUSF	AnTAUBF	Anom_ID	Anom_Labels	Grade
429243	5911315	1960	3.41	1.34	0.18	0.07	N	A	2
429345	5911279	1970	3.44	0.00	0.19	0.00	N	A	2
429446	5911222	1980	3.34	0.00	0.18	0.00	N	A	2
429557	5911178	1990	2.20	0.00	0.12	0.00	N	A	1
429651	5912316	2000	3.18	0.00	0.17	0.00	K	A	2
429649	5911098	2000	2.95	0.00	0.16	0.00	N	B	2
429764	5911117	2010	3.10	0.00	0.17	0.00	N	A	2
429845	5911054	2020	3.00	0.00	0.16	0.00	N	A	2
429948	5910994	2030	2.87	0.00	0.15	0.00	N	A	2
430156	5910908	2050	3.01	0.00	0.16	0.00	N	A	2
430249	5910873	2060	3.24	0.00	0.17	0.00	N	A	2
430355	5910804	2070	2.62	0.00	0.14	0.00	N	A	2
430446	5910737	2080	2.26	0.00	0.12	0.00	N	A	1
430549	5910618	2090	2.52	0.00	0.14	0.00	N	A	2
430544	5913172	2090	1.97	0.00	0.11	0.00	N	B	1
430643	5910578	2100	2.76	0.00	0.15	0.00	N	A	2
430750	5910480	2110	2.45	0.00	0.13	0.00	N	A	1
430744	5913336	2110	1.51	0.00	0.08	0.00	N	B	1
430847	5910391	2120	2.35	0.00	0.13	0.00	N	A	1
430950	5910309	2130	3.12	0.00	0.17	0.00	N	A	2
431046	5910238	2140	3.02	0.00	0.16	0.00	N	A	2
431150	5910164	2150	2.84	0.00	0.15	0.00	N	A	2
431254	5910089	2160	3.01	0.00	0.16	0.00	N	A	2
431352	5909963	2170	2.63	0.00	0.14	0.00	N	A	2
431441	5910003	2180	2.65	0.00	0.14	0.00	N	A	2
431552	5909653	2190	3.63	0.00	0.20	0.00	N	A	2

Apparent Resistivity
(Ohm-m)

CVG

5912600　5913000　5914000　5915000　5916000　5916400　->N

0
-100
-200
-300
-400

144.1　287.8　377.6　497.8

Apparent Resistivity
[ohm-m]

250　0　250　500
(meters)

Vertical Exaggeration: 1

Banks Island Gold Ltd.

RDI SECTION PLOT
LINE #: L1165

Geotech Ltd.

CVG

| 5911000 | 5912000 | 5913000 | 5914000 | 5915000 | 5916000 5916400 | ->N |

Vertical scale: 0, -100, -200, -300, -400

250   0   250   500

(meters)

Vertical Exaggeration: 1

5.3   29.7   138.8   243.4   335.7   477.4

Apparent Resistivity

[ohm-m]

Banks Island Gold Ltd.

RDI SECTION PLOT

LINE #: L1200

Geotech Ltd.

CVG

| 5910600 | 5911000 | 5912000 | 5913000 | 5914000 | 5915000 | 5916000 | 5916400 | ->N |

100
0
-100
-200
-300
-400

| 250 | 0 | 250 | 500 | 750 |

(meters)

Vertical Exaggeration: 1

8.0 19.9 59.6 93.5 150.9 207.5 410.3

Apparent Resistivity
[ohm-m]

Banks Island Gold Ltd.

RDI SECTION PLOT
LINE #: L1260

Geotech Ltd.

Banks Island Gold Ltd.

RDI SECTION PLOT

LINE #: L1300

Geotech Ltd.

Apparent Resistivity
[ohm-m]

5.1 17.9 50.5 80.2 155.9 306.0 455.7

Vertical Exaggeration: 1

(meters)

250 0 250 500 750

CVG

5910600 5911000 5912000 5913000 5914000 5915000 5916000 5916400 ->N

0 -100 -200 -300 -400

CVG

5908600 5909000 5910000 5911000 5912000 5913000 5914000 5915000 5916000 5916400 ->N

100
0
-100
-200
-300
-400

13.9 25.8 41.9 62.1 92.8 148.9 208.3 309.7

Apparent Resistivity
[ohm-m]

250   0   250   500   750   1000   1250
(meters)

Vertical Exaggeration: 1

Banks Island Gold Ltd.

RDI SECTION PLOT
LINE #: L1350

Geotech Ltd.

5908600 5909000 5909500 5910000 5910500 5911000 5911500 5912000 5912500 5913000 5913500 5914000 5914500 5915000 5915500 5916000 5916400

CVG

->N

100
0
-100
-200
-300
-400
-500

250 0 250 500 750 1000 1250
(meters)

Vertical Exaggeration: 1

20.0 30.1 48.1 78.3 119.5 195.7 249.1 360.6

Apparent Resistivity
[ohm-m]

Banks Island Gold Ltd.

RDI SECTION PLOT
LINE #: L1360

Geotech Ltd.

CVG

| 5908400 | 5909000 | | 5910000 | 5911000 | 5912000 | 5913000 | 5914000 | 5915000 | 5915800 ->N |

| 7.1 | 20.0 | 42.5 | 68.8 | 98.8 | 147.1 | 220.1 | 330.1 |

Apparent Resistivity
[ohm-m]

250   0   250   500   750   1000

(meters)

Vertical Exaggeration: 1

CVG

5908000 | 5909000 | 5910000 | 5911000 | 5912000 | 5913000 | 5914000 | 5915000 | 5915600 ->N

100 0 -100 -200 -300 -400

250 0 250 500 750 1000 1250
(meters)

Vertical Exaggeration: 1

7.8 24.1 47.9 81.4 117.1 202.9 289.0 340.1

Apparent Resistivity
[ohm-m]

Banks Island Gold Ltd.

RDI SECTION PLOT
LINE #: L1450

Geotech Ltd.

CVG

| 5908000 | 5909000 | 5810000 | 5911000 | 5912000 | 5913000 | 5914000 | 5815000 | 5915700 | ->N |

100
0
-100
-200
-300
-400

250   0   250   500   750   1000   1250

(meters)

Vertical Exaggeration: 1

13.5   24.6   40.9   99.4   144.3   247.6   349.8   451.3

Apparent Resistivity
[ohm-m]

Banks Island Gold Ltd.

RDI SECTION PLOT
LINE #: L1480

Geotech Ltd.

CVG

5908000 5909000 5910000 5911000 5912000 5913000 5914000 5915000 5915600 ->N

100
0
-100
-200
-300
-400

250 0 250 500 750 1000 1250
(meters)

Vertical Exaggeration: 1

9.2 20.3 34.5 96.4 137.4 260.9 389.5 485.7

Apparent Resistivity
[ohm-m]

Banks Island Gold Ltd.

RDI SECTION PLOT
LINE #: L1490

Geotech Ltd.

CVG

5908000 5909000 5910000 5911000 5912000 5913000 5914000 5915000 5915600 ->N

100
0
-100
-200
-300
-400

250 0 250 500 750 1000 1250

(meters)

Vertical Exaggeration: 1

5.3 13.9 26.2 93.2 154.9 285.5 387.0 531.8

Apparent Resistivity
[ohm-m]

Banks Island Gold Ltd.

RDI SECTION PLOT
LINE #: L1520

Geotech Ltd.

CVG

| 5908000 | 5909000 | 5910000 | 5911000 | 5912000 | 5913000 | 5914000 | 5915000 | 5915600 |

->N

100
0
-100
-200
-300
-400

250   0   250   500   750   1000   1250
(meters)

Vertical Exaggeration: 1

4.6   9.6 17.6 79.4 138.3   239.7   349.6   431.1

Apparent Resistivity
[ohm-m]

Banks Island Gold Ltd.

RDI SECTION PLOT
LINE #: L1540

Geotech Ltd.

CVG

->N

| 5908000 | 5909000 | 5910000 | 5911000 | 5912000 | 5913000 | 5914000 | 5915000 | 5915600 |

100
0
-100
-200
-300
-400

250   0   250   500   750   1000   1250
(meters)

Vertical Exaggeration: 1

2.1 19.8 72.9 135.4 205.0 329.2 464.3 654.9

Apparent Resistivity
[ohm-m]

Banks Island Gold Ltd.

RDI SECTION PLOT
LINE #: L1580

Geotech Ltd.

CVG

5908000 5909000 5910000 5911000 5912000 5913000 5914000 5915000 5916000

->N
200
100
0
-100
-200
-300
-400

5.4 52.0 102.8 183.7 278.8 391.9 544.9 727.5

Apparent Resistivity
[ohm-m]

250 0 250 500 750 1000 1250

(meters)

Vertical Exaggeration: 1

Banks Island Gold Ltd.

RDI SECTION PLOT
LINE #: L1600

Geotech Ltd.

CVG

| 5908000 | 5909000 | 5910000 | 5911000 | 5912000 | 5913000 | 5914000 | 5915000 | 5916000 |

->N

100
0
-100
-200
-300
-400

250 0 250 500 750 1000 1250
(meters)

Vertical Exaggeration: 1

18.0 76.7 180.9 246.4 350.3 450.9 558.8

Apparent Resistivity
[ohm-m]

Banks Island Gold Ltd.

RDI SECTION PLOT
LINE #: L1630

Geotech Ltd.

Apparent Resistivity [ohm-m]

48.5 206.2 273.0 342.0 424.6 523.2 675.7

Vertical Exaggeration: 1

250   0   250   500   750   1000   1250
(meters)

Banks Island Gold Ltd.

RDI SECTION PLOT
LINE #: L1660

Geotech Ltd.

Apparent Resistivity [ohm-m]

142.6 277.5 335.8 389.7 461.4 538.4 602.4

Vertical Exaggeration: 1

Banks Island Gold Ltd.

RDI SECTION PLOT
LINE #: L1690

Geotech Ltd.

CVG

5907650 5908000   5909000   5910000   5911000   5912000   5913000   5914000   5915000   5916000 ->N

400 300 200 100 0 -100 -200 -300 -400

250 0 250 500 750 1000 1250
(meters)

Vertical Exaggeration: 1

244.5   324.1   385.0   455.0   516.6   598.5   1020.2

Apparent Resistivity
[ohm-m]

Banks Island Gold Ltd.

RDI SECTION PLOT
LINE #: L1790

Geotech Ltd.

CVG

5907650 5908000   5909000   5910000   5911000   5912000   5913000   5914000   5915000   5916000   ->N

300 200 100 0 -100 -200 -300 -400 -500

250   0   250   500   750   1000   1250

(meters)

Vertical Exaggeration: 1

249.3   388.1   463.9   529.6   620.6   810.9   1069.7

Apparent Resistivity
[ohm-m]

Banks Island Gold Ltd.

RDI SECTION PLOT
LINE #: L1890

Geotech Ltd.

Banks Island Gold Ltd.
RDI SECTION PLOT
LINE #: L1990
Geotech Ltd.

Apparent Resistivity
[ohm-m]

300.3 440.5 528.0 611.0 692.8 832.1 1152.2

Vertical Exaggeration: 1

(meters)

CVG

| 5906500 | 5907000 | 5908000 | 5909000 | 5910000 | 5911000 | 5912000 | 5913000 | 5914000 | 5915000 | 5916000 |

->N

200
100
0
-100
-200
-300
-400

250 0 250 500 750 1000 1250 1500
(meters)

Vertical Exaggeration: 1

292.8 385.7 464.4 529.8 593.6 652.9 722.6

Apparent Resistivity
[ohm-m]

Banks Island Gold Ltd.

RDI SECTION PLOT
LINE #: L2090

Geotech Ltd.

RDI SECTION PLOT
LINE #: L2190

Banks Island Gold Ltd.

Geotech Ltd.

Apparent Resistivity [ohm-m]
200.4 279.3 361.6 435.4 528.5 665.1 967.6

Vertical Exaggeration: 1

CVG

36.2 87.8 154.6 293.4 409.5 523.1 628.0

Apparent Resistivity
[ohm-m]

250 0 250 500 750 1000 1250 1500

(meters)

Vertical Exaggeration: 1

Banks Island Gold Ltd.

RDI SECTION PLOT

LINE #: T2820

Geotech Ltd.

GEOTECH LTD.

SURVEY SPECIFICATIONS:
Survey Date: August 27th - 31st, 2011
Survey Base: Prince Rupert, British Columbia
Aircraft: Aerospatiale A-star 350 B3 C-GTEQ
Nominal Survey Line Spacing: 100 meters and 50 meters (Infills)
Nominal Survey Line Direction: N 0° E / N 180° E
Nominal Tie Line Spacing: 1000 meters
Nominal Tie Line Direction: N 90° E / N 270° E
Nominal Terrain Clearance: 81 meters
EM Loop: Towed at a mean distance of 35 meters below the Helicopter
Magnetic Sensor: Towed at a mean distance of 13 meters below the Helicopter

INSTRUMENTS
Geotech Time Domain Electromagnetic System (VTEM)
Concentric Rx/Tx Geometry
X-Coil Loop: Diameter 0.32 Meters, Base Frequency 30 Hz
Transmitter Loop: Diameter 26 Meters, Base Frequency 30 Hz
Dipole Moment: 367,402.98 nIA
Transmitter Wave Form: Trapezoid, Pulse Width 7.130 ms.
Geometrics High Sensitivity Cesium Magnetometer
Mag Resolution: 0.02 nT at 10 samples/sec

MAP PROJECTION
Datum: NAD83
Projection: Universal Transverse Mercator
Central Meridian: 129°W (Zone 9N)
Central Scale Factor: 0.9996
False Easting/Northing: 500,000m/0m
Major Axis: 6378137.000
Eccentricity: 0.081819191
NTS: 103G08

Anomaly Symbols

Conductance > 25 S
17.5 S < Conductance < 25 S
10 S < Conductance < 17.5 S
5 S < Conductance < 10 S
2.5 S < Conductance < 5 S
Conductance < 2.5 S
Cultural

Anomaly ID   Conductance dB/dt (S)
Anomaly thickness   Conductance B-Field (S)
Thin or Thick

TMI Contour Intervals:
——— 10 nT
——— 50 nT
——— 250 nT

TOPOGRAPHIC LEGEND:
——— Contours
——— Rivers / Lake Outlines
■ Lakes / Ponds
▧ Wetlands
▨ Mining Claims

TMI
(nT)

HECATE STRAIT

Scale 1:20000

The topographic data base was derived from 1:50,000 NRC (Natural Resources Canada) NTDB data.
Background shading is derived from NASA SRTM(Shuttle Radar Topographic Mission) data.
Inset data derived from Geocommunities 1:250,000 Canadian National Topographic database.
Mining Claims are derived from the Province of British Columbia Data Distribution Service database.
(www.geogratis.ca)(www.geocomm.com)(https://apps.gov.bc.ca/pub/dwds/honead)

Banks Island Gold Ltd.
Yellow Giant Property
Prince Rupert, British Columbia

Geotech VTEM System
Total Magnetic Intensity
(TMI)

Flown and processed by Geotech Ltd.
245 Industrial Parkway North,
Aurora, Ontario, Canada L4G 4C4
www.geotech.ca

October 2011

GEOTECH LTD.

Anomaly Symbols

Conductance > 25 S
17.5 S < Conductance < 25 S
10 S < Conductance < 17.5 S
5 S < Conductance < 10 S
2.5 S < Conductance < 5 S
Conductance < 2.5 S
Cultural

Anomaly ID
Conductance dBdt (S)
Anomaly thickness ThiN or ThicK
Conductance B-Field (S)

TOPOGRAPHIC LEGEND:
Contours
Rivers / Lake Outlines
Lakes / Ponds
Wetlands
Mining Claims

dB/dt Tau (ms)

2.100
1.225
0.842
0.649
0.519
0.413
0.317
0.251
0.206
0.174
0.148
0.132
0.119
0.110
0.104
0.098
0.093
0.088
0.083
0.079
0.075
0.072
0.069
0.066
0.064
0.060
0.056
0.053
0.051
0.048
0.046
0.042
0.038
0.031
0.000

HECATE STRAIT

Scale 1:70,000,000

Gulf of Alaska

British Columbia

Prince Rupert

Project Areas

Scale 1:20000
250 0 250 500 750 1000
(meters)
NAD83 / UTM zone 9N

Banks Island Gold Ltd.
Yellow Giant Property
Prince Rupert, British Columbia

Geotech VTEM System
dB/dt Calculated Time Constant (Tau)
with contours of anomaly areas of the
Calculated Vertical Derivative of TMI

Flown and processed by Geotech Ltd.
245 Industrial Parkway North,
Aurora, Ontario, Canada L4G 4C4
www.geotech.ca

October 2011

GEOTECH LTD.

Anomaly Symbols

| Conductance > 25 S |
| 17.5 S < Conductance < 25 S |
| 10 S < Conductance < 17.5 S |
| 5 S < Conductance < 10 S |
| 2.5 S < Conductance < 5 S |
| Conductance < 2.5 S |
| Cultural |

Profiles scale 1 mm = 0.07 (pV*ms)/(A*m^4)
(Linear between +/- 0.25 (pV*ms)/(A*m^4)
logarithmic above 0.25 (pVms)/(A*m^4)

TMI (nT)

0.220 ms (B-field)
0.253 ms (B-field)
0.290 ms (B-field)
0.333 ms (B-field)
0.383 ms (B-field)
0.440 ms (B-field)
0.505 ms (B-field)
0.580 ms (B-field)
0.667 ms (B-field)
0.766 ms (B-field)
0.880 ms (B-field)
1.010 ms (B-field)
1.161 ms (B-field)
1.333 ms (B-field)
1.531 ms (B-field)
1.760 ms (B-field)
2.021 ms (B-field)
2.323 ms (B-field)
2.667 ms (B-field)
3.063 ms (B-field)
3.521 ms (B-field)
4.042 ms (B-field)
4.641 ms (B-field)
5.333 ms (B-field)
6.125 ms (B-field)
7.036 ms (B-field)

TOPOGRAPHIC LEGEND:
Contours
Rivers / Lake Outlines
Lakes / Ponds
Wetlands
Mining Claims

Scale 1:20000

250   0   250   500   750   1000
(meters)
NAD83 / UTM zone 9N

Banks Island Gold Ltd.
Yellow Giant Property
Prince Rupert, British Columbia

Geotech VTEM System
VTEM B-Field Z Component Profiles
Time Gate 0.220 - 7.036 ms
over Total Magnetic Intensity

Flown and processed by Geotech Ltd.
245 Industrial Parkway North,
Aurora, Ontario, Canada L4G 4C4
www.geotech.ca

October 2011

HECATE STRAIT

GEOTECH LTD.

SURVEY SPECIFICATIONS:
Survey Date: August 27th - 31st, 2011
Survey Base: Prince Rupert, British Columbia
Aircraft: Aerospatiale A-star 350 B3 C-GTEQ
Nominal Survey Line Spacing: 100 meters and 50 meters (Infills)
Nominal Survey Line Direction: N 0° E / N 180° E
Nominal Tie Line Spacing: 1000 meters
Nominal Tie Line Direction: N 90° E / N 270° E
Nominal Terrain Clearance: 81 meters
EM Loop: Towed at a mean distance of 35 meters below the Helicopter
Magnetic Sensor: Towed at a mean distance of 13 meters below the Helicopter
INSTRUMENTS
Geotech Time Domain Electromagnetic System (VTEM)
Concentric Rx/Tx Geometry
X-Coil Loop: Diameter 0.32 Meters, Base Frequency 30 Hz
Transmitter Loop: Diameter 26 Meters, Base Frequency 30 Hz
Dipole Moment: 367,402.98 nAm
Transmitter Wave Form: Trapezoid, Pulse Width 7.130 ms.
Geometrics High Sensitivity Cesium Magnetometer
Mag Resolution: 0.02 nT at 10 samples/sec
MAP PROJECTION
Datum: NAD83
Projection: Universal Transverse Mercator
Central Meridian: 129°W (Zone 9N)
Central Scale Factor: 0.9996
False Easting/Northing: 500,000m/0m
Major Axis: 6378137.000
Eccentricity: 0.081819191
NTS: 103G08

Anomaly Symbols

Conductance > 25 S
17.5 S < Conductance < 25 S
10 S < Conductance < 17.5 S
5 S < Conductance < 10 S
2.5 S < Conductance < 5 S
Conductance < 2.5 S
Cultural

Anomaly ID   Conductance dB/dt (S)
Anomaly thickness   Conductance B-Field (S)
Thin or Thick

TOPOGRAPHIC LEGEND:
Contours
Rivers / Lake Outlines
Lakes / Ponds
Wetlands
Mining Claims

B-Field 2.021 ms
(pV*msl)/(A*m^4)

Scale 1:20000

250   0   250   500   750   1000
(meters)
NAD83/ UTM zone 9N

The topographic data base was derived from 1:50,000 NRC (Natural Resources Canada) NTDB data.
Background shading is derived from NASA SRTM(Shuttle Radar Topographic Mission)data.
Inset data derived from Geocommunities 1:250,000 Canadian National Topographic database.
Mining Claims are derived from the Province of British Columbia Data Distribution Service database.
(www.geogratis.ca)(www.geocomm.com)(https://apps.gov.bc.ca/pub/dwds/home.so)

Banks Island Gold Ltd.
Yellow Giant Property
Prince Rupert, British Columbia

Geotech VTEM System
VTEM B-Field Z Component
Channel 36
Time Gate 2.021 ms

Flown and processed by Geotech Ltd.
245 Industrial Parkway North,
Aurora, Ontario, Canada L4G 4C4
www.geotech.ca

October 2011

HECATE STRAIT

Gulf of Alaska

British Columbia

Prince Rupert

Project Areas

Scale 1:10,000,000

GEOTECH LTD.

SURVEY SPECIFICATIONS:
Survey Date: August 27th - 31st, 2011
Survey Base: Prince Rupert, British Columbia
Aircraft: Aerospatiale A-star 350 B3 C-GTEQ
Nominal Survey Line Spacing: 100 meters and 50 meters (infills)
Nominal Survey Line Direction: N 0° E / N 180° E
Nominal Tie Line Spacing: 1000 meters
Nominal Tie Line Direction: N 90° E / N 270° E
EM Loop: Towed at a mean distance of 35 meters below the Helicopter
Magnetic Sensor: Towed at a mean distance of 13 meters below the Helicopter
Nominal Terrain Clearance: 81 meters
INSTRUMENTS
Geotech Time Domain Electromagnetic System (VTEM)
Concentric Rx/Tx Geometry
X-Coil Loop: Diameter 0.32 Meters, Base Frequency 30 Hz
Transmitter Loop: Diameter 26 Meters,Base Frequency 30 Hz
Dipole Moment: 367,402.98 nIA
Transmitter Wave Form: Trapezoid, Pulse Width 7.130 ms.
Geometrics High Sensitivity Cesium Magnetometer
Mag Resolution: 0.02 nT at 10 samples/sec
MAP PROJECTION
Datum: NAD83
Projection: Universal Transverse Mercator
Central Meridian: 129°W (Zone 9N)
Central Scale Factor: 0.9996
False Easting/Northing: 500,000.00m
Major Axis: 6378137.000
Eccentricity: 0.081819191
NTS: 103G06

Profiles scale 1 mm = 0.08 (pV/A*m^4)
Linear between +/- 0.1 (pV/A*m^4)
logarithmic above 0.1 (pV/A*m^4)

	ms
	0.220
	0.253
	0.290
	0.333
	0.383
	0.440
	0.505
	0.580
	0.667
	0.766
	0.880
	1.010
	1.161
	1.531
	1.760
	2.021
	2.323
	2.667
	3.063
	3.521
	4.042
	4.641
	5.333
	6.125
	7.036

Anomaly Symbols

Conductance > 25 S	
17.5 S < Conductance < 25 S	
10 S < Conductance < 17.5 S	
5 S < Conductance < 10 S	
2.5 S < Conductance < 5 S	
Conductance < 2.5 S	
Cultural	

Anomaly ID   Conductance dB/dt (S)
Anomaly thickness   Conductance B-Field (S)
ThkX or ThkiX

TOPOGRAPHIC LEGEND:
Contours
Rivers / Lake Outlines
Lakes / Ponds
Wetlands
Mining Claims

Geology:
undivided sediments and phyllite in Alexander terrane
undifferentiated plutons
undifferentiated ocean crust
foliated plutons

Scale 1:20000
250   0   250   500   750   1000
(meters)
NAD83 / UTM zone 9N

The topographic data base was derived from 1:50,000 NRC (Natural Resources Canada) NTDB data.
Background shading is derived from NASA SRTM (Shuttle Radar Topographic Mission) data.
Inset data derived from Geocommunities 1:250,000 Canadian National Topographic database.
Mining Claims are derived from the Province of British Columbia Data Distribution Service database.
(www.geogratis.ca)(www.geocomm.com)(apps.gov.bc.ca/pub/bwds-homeza)

Banks Island Gold Ltd.
Yellow Giant Property
Prince Rupert, British Columbia

Geotech VTEM System
VTEM dB/dt Z Component Profiles
Time Gate 0.220 - 7.036 ms
over Geology

Flown and processed by Geotech Ltd.
245 Industrial Parkway North,
Aurora, Ontario, Canada L4G 4C4
www.geotech.ca

October 2011

HECATE
STRAIT

GEOTECH LTD.

SURVEY SPECIFICATIONS:
Survey Date: August 27th - 31st, 2011
Survey Base: Prince Rupert, British Columbia
Aircraft: Aerospatiale A-star 350 B3 C-GTEQ
Nominal Survey Line Spacing: 100 meters and 50 meters (Infills)
Nominal Survey Line Direction: N 0° E / N 180° E
Nominal Tie Line Spacing: 1000 meters
Nominal Tie Line Direction: N 90° E / N 270° E
Nominal Terrain Clearance: 81 meters
EM Loop: Towed at a mean distance of 35 meters below the Helicopter
Magnetic Sensor: Towed at a mean distance of 13 meters below the Helicopter

INSTRUMENTS
Geotech Time Domain Electromagnetic System (VTEM)
Concentric RxTx Geometry
X-Coil Loop: Diameter 0.32 Meters, Base Frequency 30 Hz
Transmitter Loop: Diameter 26 Meters,Base Frequency 30 Hz
Dipole Moment: 367,402.98 nIA
Transmitter Wave Form: Trapezoid, Pulse Width 7.130 ms.
Geometrics High Sensitivity Cesium Magnetometer
Mag Resolution: 0.02 nT at 10 samples/sec

MAP PROJECTION
Datum: NAD83
Projection: Universal Transverse Mercator
Central Meridian: 129°W (Zone 9N)
Central Scale Factor: 0.9996
False Easting/Northing: 500,000m/0m
Major Axis: 6378137.000
Eccentricity: 0.081819191
NTS: 103G08

Anomaly Symbols

Conductance > 25 S
17.5 S < Conductance < 25 S
10 S < Conductance < 17.5 S
5 S < Conductance < 10 S
2.5 S < Conductance < 5 S
Conductance < 2.5 S
Cultural

Anomaly ID   Conductance dB/dt (S)
Anomaly thickness   Conductance B-Field (S)
ThiN or ThickR

TOPOGRAPHIC LEGEND:
Contours
Rivers / Lake Outlines
Lakes / Ponds
Wetlands
Mining Claims

dB/dt X Fraser Filter
(pV)/(A*m^4)

0.0147
0.0125
0.0111
0.0098
0.0088
0.0081
0.0074
0.0068
0.0062
0.0056
0.0051
0.0045
0.0040
0.0035
0.0030
0.0026
0.0021
0.0017
0.0013
0.0007
0.0001
-0.0006
-0.0010
-0.0015
-0.0020
-0.0025
-0.0031
-0.0036
-0.0042
-0.0048
-0.0054
-0.0061
-0.0069
-0.0078
-0.0091
-0.0105
-0.0120

Scale 1:20000
250   0   250   500   750   1000
(meters)
NAD83 / UTM zone 9N

HECATE STRAIT
Gulf of Alaska
British Columbia
Prince Rupert
Project Areas
Scale 1:10,000,000

The topographic data base was derived from 1:50,000 NRC (Natural Resources Canada) NTDB data.
Background shading is derived from NASA SRTM (Shuttle Radar Topographic Mission) data.
Inset data derived from Geocommunities 1:250,000 Canadian National Topographic database.
Mining Claims are derived from the Province of British Columbia Data Distribution Service database.
(www.geogratis.ca)(www.geocomm.com)(https://apps.gov.bc.ca/pub/dwds/home.so)

Banks Island Gold Ltd.
Yellow Giant Property
Prince Rupert, British Columbia

Geotech VTEM System
VTEM dB/dt X Component
Fraser Filter Channel 22
Time Gate 0.290 ms

Flown and processed by Geotech Ltd.
245 Industrial Parkway North,
Aurora, Ontario, Canada L4G 4C4
www.geotech.ca

October 2011

Banks Island Gold Ltd.
Yellow Giant Property
Prince Rupert, British Columbia

Geotech VTEM System
Magnetic Tilt
Derivative
(TiltDrv)

Flown and processed by Geotech Ltd.
245 Industrial Parkway North,
Aurora, Ontario, Canada L4G 4C4
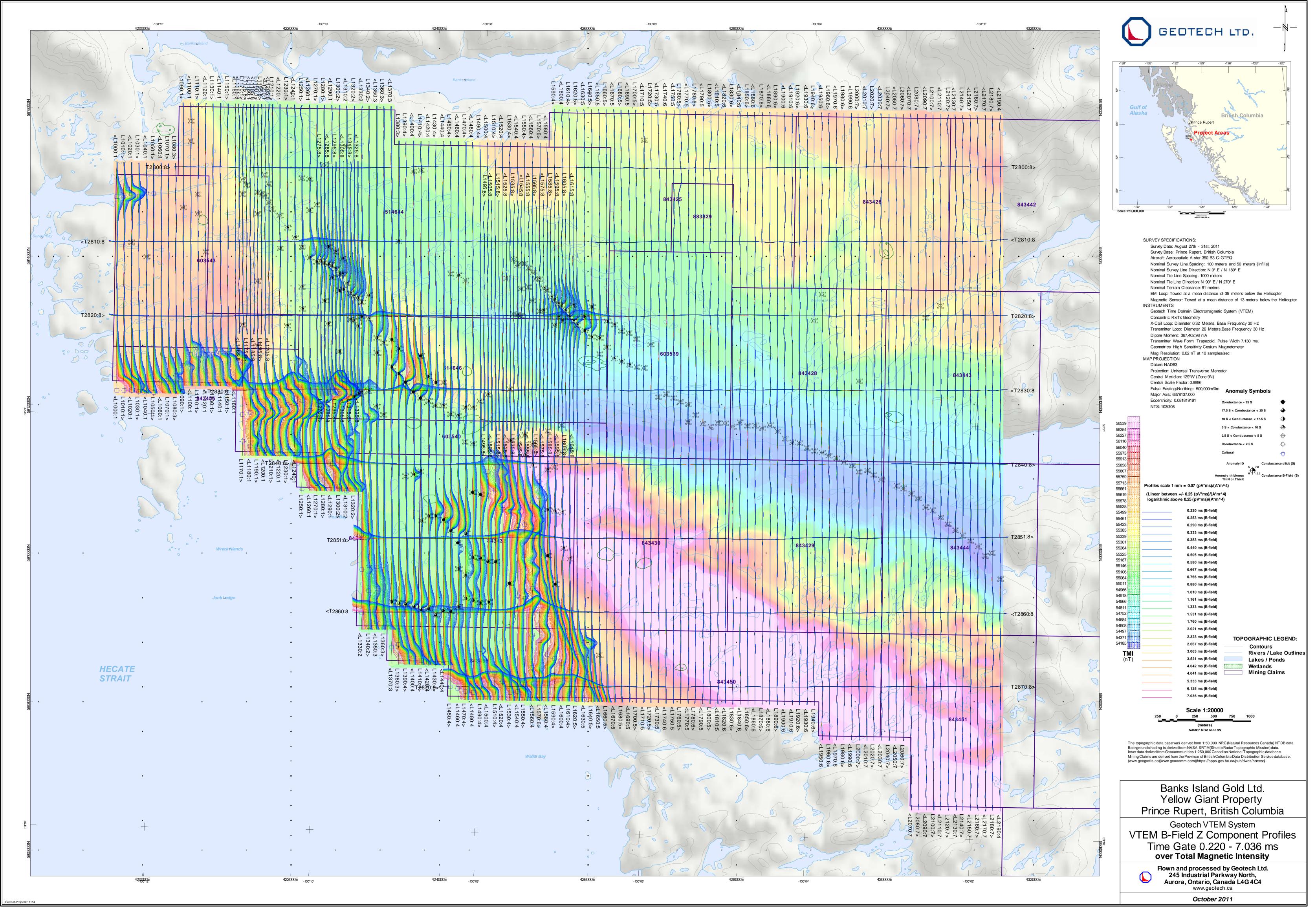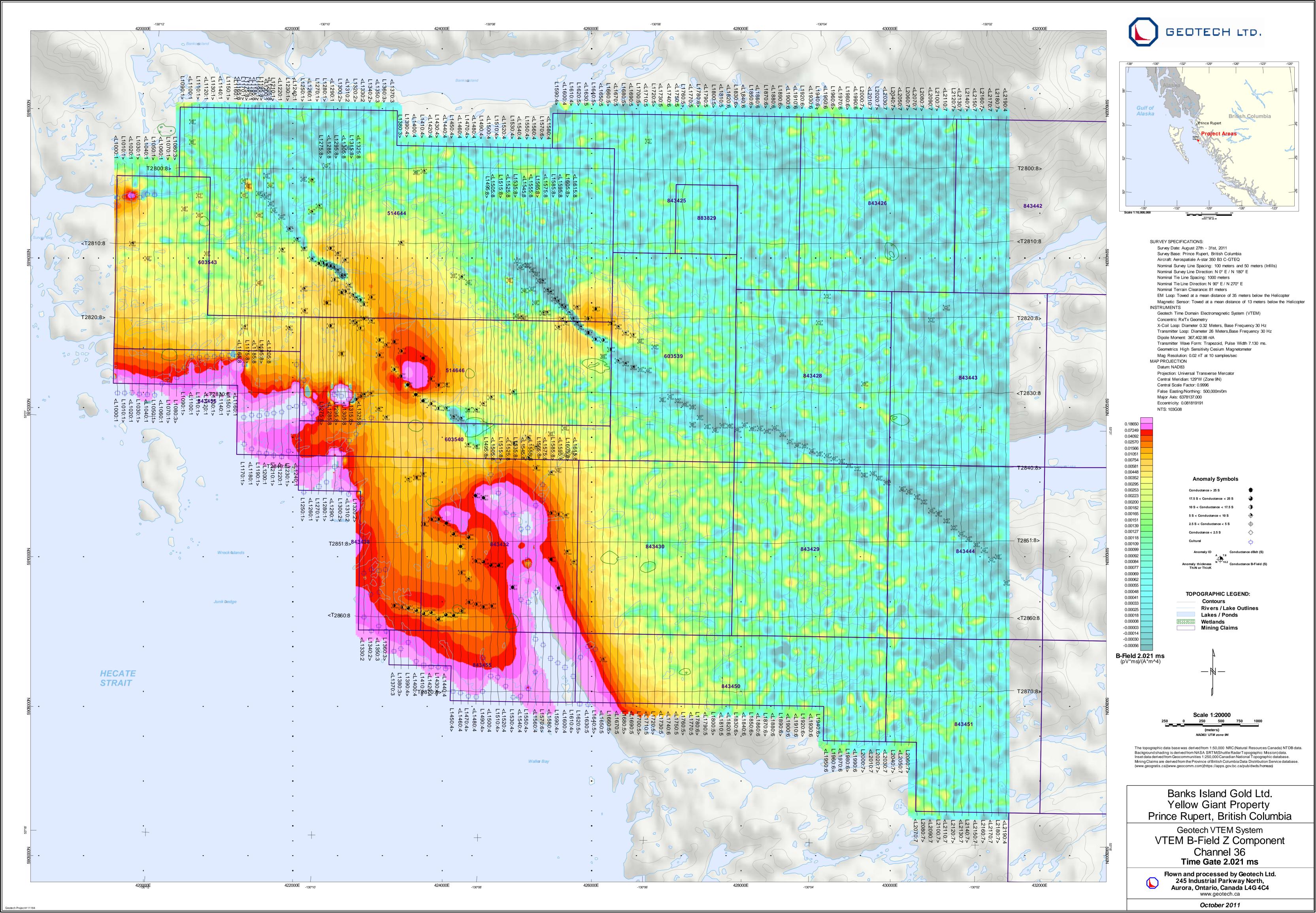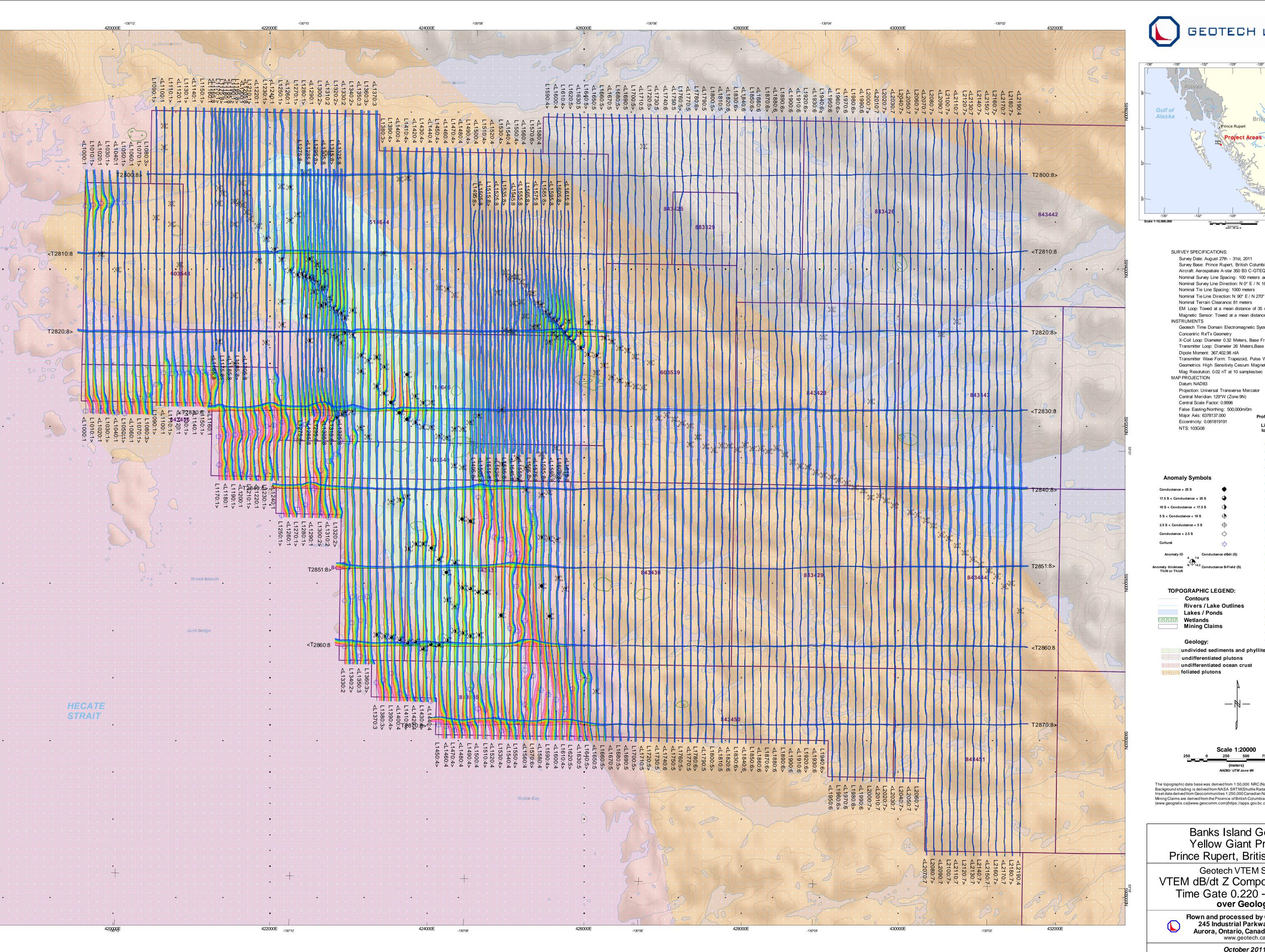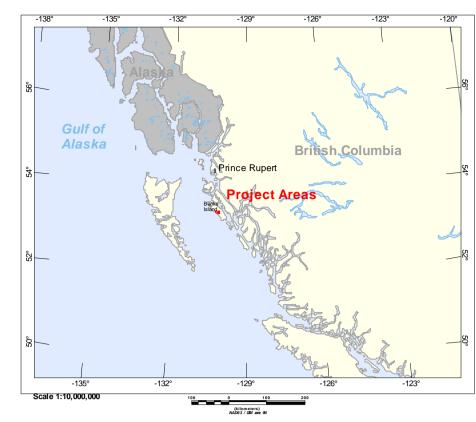www.geotech.ca

October 2011

GEOTECH LTD.

SURVEY SPECIFICATIONS:
Survey Date: August 27th – 31st, 2011
Survey Base: Prince Rupert, British Columbia
Aircraft: Aerospatiale A-star 350 B3 C-GTEQ
Nominal Survey Line Spacing: 100 meters and 50 meters (Infills)
Nominal Survey Line Direction: N 0° E / N 180° E
Nominal Tie Line Spacing: 1000 meters
Nominal Tie Line Direction: N 90° E / N 270° E
Nominal Terrain Clearance: 81 meters
EM Loop: Towed at a mean distance of 35 meters below the Helicopter
Magnetic Sensor: Towed at a mean distance of 13 meters below the Helicopter
INSTRUMENTS
Geotech Time Domain Electromagnetic System (VTEM)
Concentric Rx/Tx Geometry
X-Coil Loop: Diameter 0.32 Meters, Base Frequency 30 Hz
Transmitter Loop: Diameter 26 Meters,Base Frequency 30 Hz
Dipole Moment: 367,402.98 nA
Transmitter Wave Form: Trapezoid, Pulse Width 7.130 ms.
Geometrics High Sensitivity Cesium Magnetometer
Mag Resolution: 0.02 nT at 10 samples/sec
MAP PROJECTION
Projection: Universal Transverse Mercator
Datum: NAD83
Central Meridian: 129°W (Zone 9N)
Central Scale Factor: 0.9996
False Easting/Northing: 500,000m/0m
Major Axis: 6378137.000
Eccentricity: 0.081819191
NTS: 103G08

Total_HGrad
(nT/m)

Anomaly Symbols

Conductance > 25 S
17.5 S < Conductance < 25 S
10 S < Conductance < 17.5 S
5 S < Conductance < 10 S
2.5 S < Conductance < 5 S
Conductance < 2.5 S
Cultural

Anomaly ID
Conductance dB/t (S)
Anomaly thickness
ThiN or ThicK
Conductance B-Field (S)

TOPOGRAPHIC LEGEND:

Contours
Rivers / Lake Outlines
Lakes / Ponds
Wetlands
Mining Claims

Scale 1:20000

250   0   250   500   750   1000
(meters)
NAD83 / UTM zone 9N

Banks Island Gold Ltd.
Yellow Giant Property
Prince Rupert, British Columbia

Geotech VTEM System
Total Magnetic
Horizontal Gradient
(Total_HGrad)

Flown and processed by Geotech Ltd.
245 Industrial Parkway North,
Aurora, Ontario, Canada L4G 4C4
www.geotech.ca

October 2011

The topographic data base was derived from 1:50,000 NRC (Natural Resources Canada) NTDB data.
Background shading is derived from NASA SRTM(Shuttle Radar Topographic Mission)data.
Inset data derived from Geocommunities 1:250,000 Canadian National Topographic database.
Mining Claims are derived from the Province of British Columbia Data Distribution Service database.
(www.geogratis.ca)(www.geocomm.com)(https://apps.gov.bc.ca/pub/dwds/home)

Scale 1:10,000,000

Gulf of Alaska
British Columbia
Prince Rupert
Project Areas

HECATE STRAIT