



## ASSESSMENT REPORT TITLE PAGE AND SUMMARY

### TITLE OF REPORT: AIRBORNE GEOPHYSICS INTERPRETATION PURCELL BLOCK MINERAL CLAIMS

**TOTAL COST:** \$7,253.13

AUTHOR(S): Roger Barlow  
SIGNATURE(S):

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S):  
STATEMENT OF WORK EVENT NUMBER(S)/DATE(S) : 5294359

YEAR OF WORK: 2012

PROPERTY NAME: Purcell Block

CLAIM NAME(S) (on which work was done):

COMMODITIES SOUGHT:

MINERAL INVENTORY MINFILE NUMBER(S),IF KNOWN:

MINING DIVISION: Ft Steele, Nelson

NTS / BCGS:

LATITUDE: \_\_\_\_\_ ° \_\_\_\_\_ ' \_\_\_\_\_ "

LONGITUDE: \_\_\_\_\_ ° \_\_\_\_\_ ' \_\_\_\_\_ " (at centre of work)

UTM Zone: 11      EASTING: 570,000      NORTHING: 5,485,000

OWNER(S): PJX Resources

Suite 5600  
100 King Street West  
Toronto, Ontario, M5X 1C9

OPERATOR(S) [who paid for the work]: PJX Resources

MAILING ADDRESS:

REPORT KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude. **Do not use abbreviations or codes**)

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	Interpretation		\$7,253.13
Airborne			
GEOCHEMICAL (number of samples analysed for ...)			
Soil			
Silt			
Rock			
Other			
DRILLING (total metres, number of holes, size, storage location)			
Core			
Non-core			
RELATED TECHNICAL			
Sampling / Assaying			
Petrographic			
Mineralographic			
Metallurgic			
PROSPECTING (scale/area)			
PREPATORY / PHYSICAL			
Line/grid (km)			
Topo/Photogrammetric (scale, area)			
Legal Surveys (scale, area)			
Road, local access (km)/trail			
Trench (number/metres)			
Underground development (metres)			
Other			
		<b>TOTAL COST</b>	<b>\$7,253.13</b>

3

ASSESSMENT REPORT  
ON  
AIRBORNE GEOPHYSICS INTERPRETATION  
PURCELL BLOCK MINERAL CLAIMS

Ft. Steele and Nelson Mining Divisions, SE B.C.

UTM

570,000/5,485,000

TRIM

082F 049/050/059/060

082G 032/041/042/051/052

BC Geological Survey  
Assessment Report  
33667

For

PJX Resources Inc.

Suite 5600

100 King Street West

Toronto, Ontario, M5X 1C9

By

Roger Barlow, B.Sc., M.Sc.

And

Sean Kennedy, Prospector

August, 2012

## TABLE OF CONTENTS

	Page
1.00 INTRODUCTION	3
1.10 Summary	3
1.20 Location and Access	3
1.30 Property	3
1.40 Physiography	3
1.50 History	3
2.00 REGIONAL GEOLOGY	4
3.00 STATEMENT OF COSTS	6
4.00 AUTHOR'S QUALIFICATIONS	7
APPENDIX- Eddy Airborne Survey II and Interpretation VTEM-Plus System	

## LIST OF ILLUSTRATIONS

Figure 1. Regional Location and Claim Map	2
---	---

## **1.0 INTRODUCTION**

### **1.10 Summary**

In the spring of 2012 PJX Resources contracted R. Barlow, B.sc, M.sc, to conduct an interpretation of previously collected airborne geophysical data (October, 2011). The 2011 airborne survey was flown over the Eddy North target area which is part of PJX Resources' larger contiguous Purcell Block located in southeastern BC. Important mineralizing systems in the area are structurally controlled and include both syn-sedimentary mesoproterozoic Pb-Zn-Ag deposits and younger (Cretaceous/Tertiary) intrusive related polymetallic systems. Based on this work a number of high priority drill targets were identified. The detailed report based on this work is included as Appendix 1.

### **1.20 Location and Access**

The property is located west and south of the city of Cranbrook in southeast BC. The property covers a large contiguous claim block approximately centered on the Perry Creek and Moyie River drainages. Access to the property is provided by a network of major Forest Service and secondary logging spur roads that branch off of major and secondary highways in the region.

### **1.30 Property**

The property consists of claims wholly owned by PJX Resources as well as some claims under option from Spirit Gold Inc. and Klondike Gold Inc. The claims, which comprise the Purcell Block, are outlined in Figure 1.

### **1.40 Physiography**

The Purcell Block is within the Moyie Range of the Purcell Mountains. Elevations on the property range from about 1000 to over 2400 meters and topography varies from gentle and moderate wooded slopes to steep rocky slopes. Forest cover includes mainly pine, fir and larch. Areas within the claim block have been clear-cut logged over the past 40 years or so and are in various stages of regeneration.

### **1.50 History**

The property encompasses a large area and has a long and varied exploration and development history. The current claim block has been held in smaller fragmented blocks and seen sporadic exploration for sedex Pb-Zn-Ag mineralization similar to that as at the giant Sullivan deposit located to the north at Kimberley. Gold exploration has had a similar sporadic past with many small lode gold showings related to shear zones and quartz veining discovered. The largest known lode gold deposit is located at the David prospect (pre 43-101 resource of 30,000 oz Au at 8 g/t Au, P. Klewchuk, personal communication) immediately southwest of PJX Resource's Purcell Block. The Purcell Block area was a major regional placer producer, many creeks and rivers in the area still are actively producing gold. Many small scale historical mines and workings are located on the property. The most advanced mineral target on the block is the Vine Vein; a Proterozoic massive sulphide base and precious metal deposit discovered by Cominco. The Vine has similar characteristics as both the Sullivan deposit and the St. Eugene deposit at

Moyie Lake. It has seen extensive exploration work including trenching and diamond drilling. A pre NI-43 101 resource has been developed at the Vine.

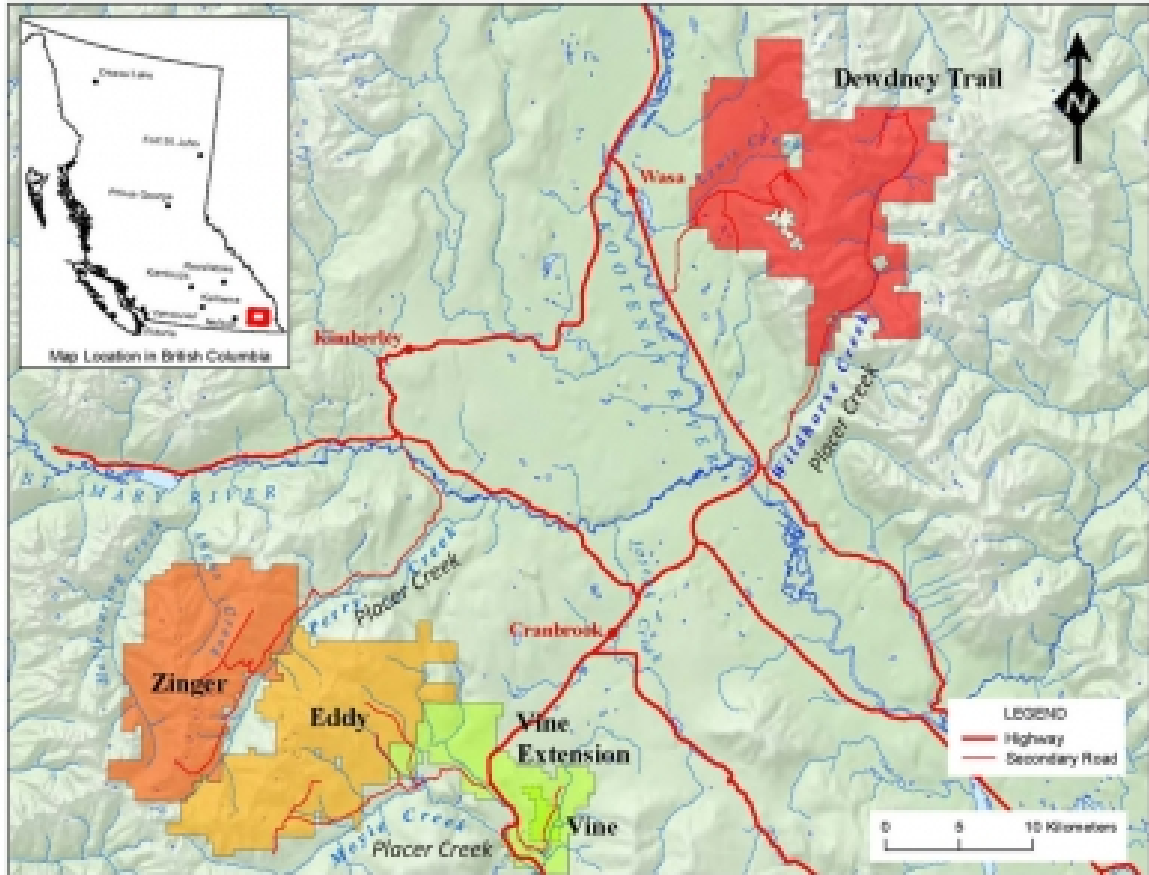


Figure 1. PJX Resource's East Kootenay claim map, regional location in top left; the Purcell Block forms the large contiguous block of claims in the southwest including the Zinger, Eddy, Vine Extension, and Vine claims.

## 2.00 REGIONAL GEOLOGY

Mapping by Reesor (1981), Hoy and Diakow (1982), and Hoy (1984) has developed a good understanding of the geology and structure of the Cranbrook area of southeastern British Columbia. This area, which includes the 'Purcell Block' claims, is part of the Purcell Anticlinorium, a geologic sub-province which lies between the Rocky Mountain Thrust and Fold Belt to the east and the Kootenay Arc to the west.

The mesoproterozoic Purcell Supergroup which occurs within the core of the anticlinorium includes up to 11 kilometers of dominantly fine-grained clastic and carbonate rocks.

The Purcell Block claims are underlain by rocks ranging in age from Precambrian to Cambrian. These include the Aldridge, Creston, Kitchener, Cranbrook and Eager Formations. These

formations are comprised of fine-grained clastic sedimentary rocks; the Aldridge Formation is a thick succession of predominantly impure quartzites and siltstones of turbidite affinity; the Creston Formation is a shallower water sequence of cleaner quartzites but with considerable siltstone and argillite; the Kitchener Formation is a sequence of siltstones and dolomitic siltstones; the Cranbrook Formation is characterized by thick, fairly clean white quartzites and the Eager Formation is made up largely of laminated siltstones and argillites with a minor carbonate component. The Aldridge Formation is intruded by a series of gabbro to diorite composition sills and dikes which are called the Moyie intrusions; a few dikes and sills extend into the Creston and Kitchener Formations.

In a broad regional manner, structure of the Cranbrook area is dominated by a series of NNE oriented faults, at least some of which are believed to have been active during sedimentation in the Precambrian and thus have locally modified the type, distribution and thickness of late Proterozoic and Paleozoic rocks (Leech, 1958; Lis and Price, 1976).

The Purcell Block claims sit within an area of increased structural complexity which is more or less centered on the three prominent placer gold streams in the Cranbrook area, namely Perry Creek and the Moyie and Wild Horse Rivers (the Wild Horse is located to the northeast in the Rocky Mountains). A series of NNE to NE oriented shear zones and a series of east to NE oriented transverse faults create the structurally complex, block-faulted area within which the placer gold occurs.

Cretaceous intrusions of granodiorite to syenite composition are scattered along a northeast trend through the general area of placer gold occurrence near Cranbrook. These young rocks may be the eastern limit of the Bayonne Magmatic Belt. Some of the syenite and quartz monzonite stocks carry appreciable pyrite, pyrrhotite and chalcopyrite and tend to be associated with anomalous gold; gold mineralization has been found within intrusions, proximal to them and at some distance from known intrusions.

### 3.00 STATEMENT OF COSTS

April 1 to 31, 2012

Roger Barlow B.sc, M.sc      Geophysical Interpretation      89.5 hours @ \$68.75/hr

Roger Barlow, B.sc, M.sc      Report Writing      16 hours @ \$68.75/hr

105.5 hours @ \$68.75/hr

Total \$7,253.13



#### 4.00 AUTHOR'S QUALIFICATIONS

As author of this report I, Roger Barlow, certify that:

1. That I am a geophysicist residing in Toronto, Ontario Canada with a business address as follows:  
Geosource Geoscience Consulting  
1136-3 Centre Street, Suite 213  
Thornhill, Ontario L4J 3M8
2. That after graduation from Michigan Technological University with a B.Sc. (Hons) 1972 and an M.Sc. 1973 I was employed by the Ontario Geological Survey as a geophysicist and as Chief, Geophysics and Geochemistry Section over a twenty year period.
3. That I have practised my profession continuously since 1973 in Canada and internationally in the USA, Spain, Egypt, Russia, Kazakhstan and China.
4. That I have published more than thirty papers and articles in geophysics and geochemistry and have been employed by three major airborne geophysical survey companies preparing reports and maps.
5. That my report "Airborne Geophysics Interpretation, Purcell Block Mineral Claims" is based on work carried out by me.
6. That I hold no specific or special interest in the described property and that I have been retained as a Consulting Geophysicist for "the property".

I, Sean Kennedy, certify that:

1. I am an independent prospector residing at 107 6<sup>th</sup> Ave, Kimberley, BC.
2. I have been actively prospecting in BC, Nevada, and Mexico for the past 15 years
3. I have been employed as a professional prospector by junior mineral exploration companies.
4. I own and maintain mineral claims in BC.

## APPENDIX

### Eddy Airborne Survey II and Interpretation VTEM-Plus System

# Eddy Airborne Survey II and Interpretation VTEM-PLUS System

## INTRODUCTION

During October 2011, an airborne survey was reflight over the Eddy Property North using a Eurocopter Aerospatiale (Astar) 350 B3 helicopter (C-GTEQ) owned and operated by Geotech Aviation and equipped with TEM and Magnetic sensors. East-West lines were flown over a preplanned grid using 75 meter line spacing and included North-South tie lines flown at 750 m spacing. Some 561.8 line kilometres were recorded and compiled over the claim group located near Cranbrook BC, for PJX Resources Inc. Due to technical problems with data from the first survey, a second survey was flown using a different configuration with lower noise levels and deeper penetration characteristics.

A VTEM- PLUS time domain electromagnetic system was used with a Geometrics cesium vapour magnetometer and a Geotech navigation system with a Mid-Tech WAAS GPS. Data was recorded using a Geotech LTD data acquisition system at 0.1 (TDEM and Magnetometer) and 0.2 (GPS Position and Radar Altimeter) second intervals. EM steaming data, magnetic, GPS and radar altimetry were recorded on removable hard drives and transferred to the base computer at the end of each flight. Similarly the base station magnetic data was transferred to the base computer and used to correct the aeromagnetic data for diurnal.

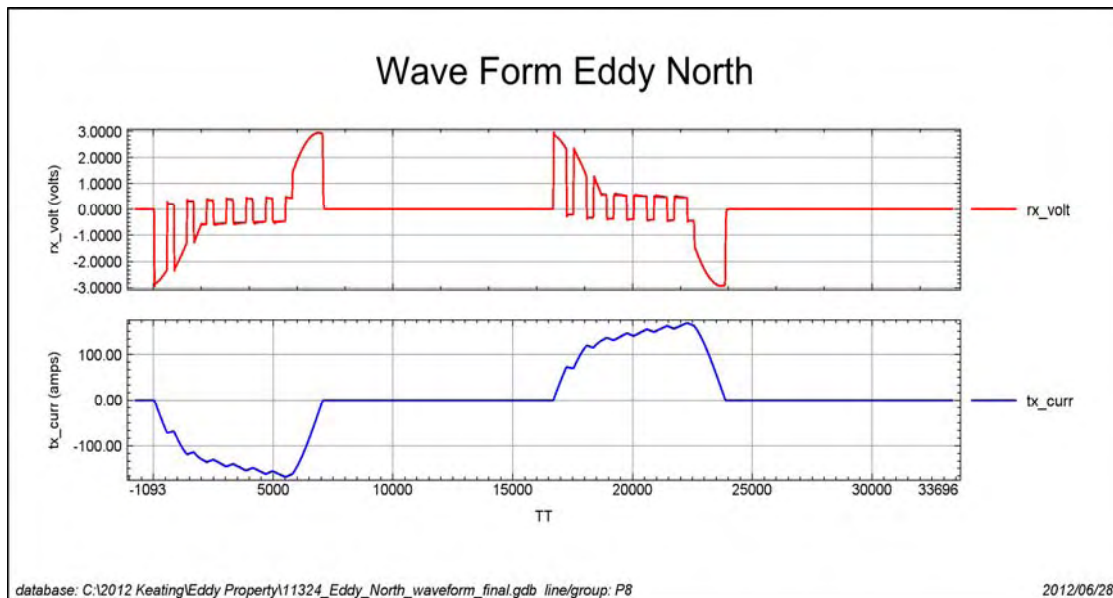


Figure 1.0 Showing the wave form properties used with the VTEM Plus system. The dB/dt voltage at the receiver shown in RED and the transmitter current shown in BLUE. Time in microseconds is plotted along the bottom.

Thirty-one active TDEM channels were recorded with a delay time range from 96 to 7036 microseconds following a 7.141 millisecond pulse using a primary frequency of 30 Hz and a 4 turn, 26 m transmitter loop yielding a dipole moment of about 360K nIA.

Total magnetic intensity data together with 31 channels of off-time, Z channels were used to produce a geologically oriented interpretation of the survey area. Both dB/dt and deconvolved dB/dt channels were used. Deconvolving the channels corrects the early-time EM data for the effect of the turn-off ramp and is a necessary step when using analytic expressions for resistivity and conductivity calculations. This data was imported into a Geosoft Oasis data base from which, a series of algorithms and procedures were used to determine the most relevant products for interpretation.

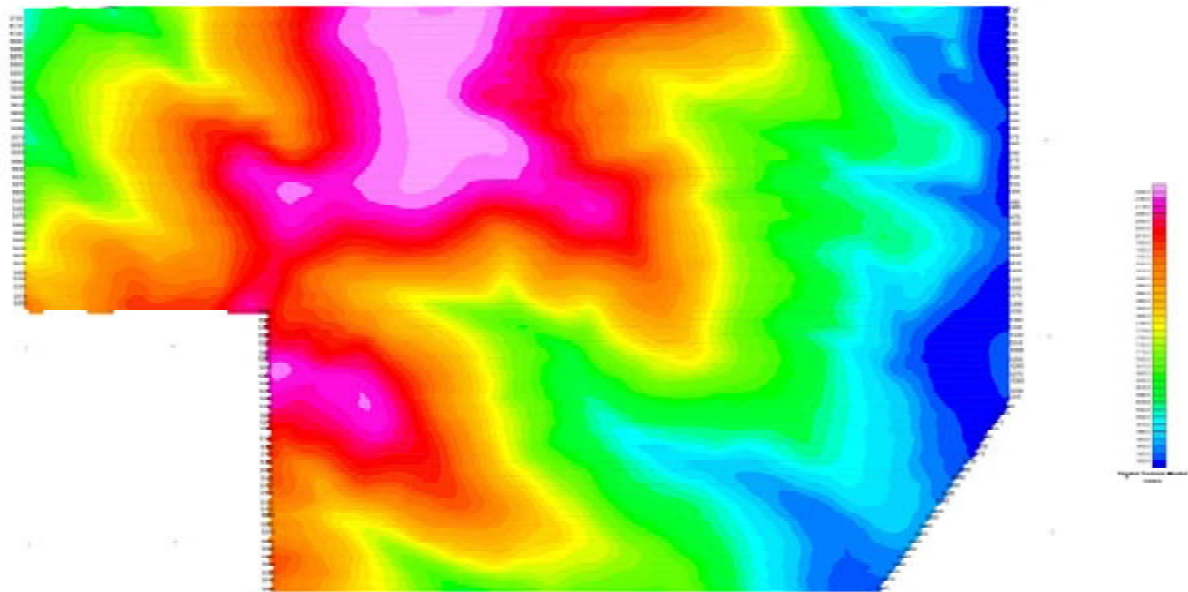


Figure 2.0 Showing elevations along flight path in the survey area. Elevations range from a high of 2205 meters above sea level to a low of 1355 meters above sea level.

One can see a general trend in the survey area to the north north-east with perhaps a minor trend to the north-west. The control of TX-RX altitude is not good over some parts of the survey area but is believed to be caused by strong prevailing westerlies over the peak resulting in turbulence and down drafting, rather than topographic gradient issues.

## MAGNETIC DATA

The data was profiled on a line by line basis and a fourth difference together with first and second vertical derivatives were calculated and compared with the levelled total field magnetic intensity data.

An Analytic Signal computation (using FFT) was used which complimented the Total Field because of its ability to portray anomalous areas with smooth anomalies over the targets. The use of the Analytic Signal in seismic processing is well documented in the literature. The complex modulus (square root of the sum of squares) is often used with equatorial magnetic survey data because of the low magnetic field strength of the vertical component.

The Analytic Signal formula is as follows:

$$AS = \sqrt{\left(\frac{dT}{dz}\right)^2 + \left(\frac{dT}{dx}\right)^2 + \left(\frac{dT}{dy}\right)^2}$$

Using Fourier methods, the initial transform is inversely transformed to yield a complex array and, when plotted, will show a symmetric bell shaped function, situated exactly over the top of the target with a half-maximum half-width equivalent to a crude depth to the top of the target. This is well explained by Nabighian, 1972, Geophysics, vol.37, no.3, P. 507-517.

When applied to the Eddy North survey, the amplitude content of the Total Magnetic Intensity data is well preserved and reveals a number of significant Analytic Signal Anomalies in the survey area.

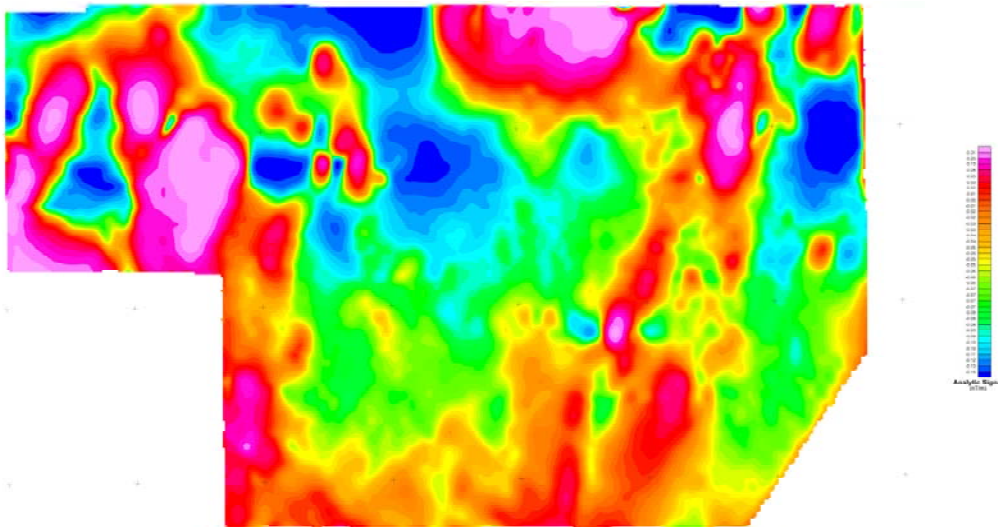


Figure 3.0: Showing the analytic signal map and numerous anomalies trending SSW in the survey area.

Anomalous areas of higher magnetization are preserved within a flat background and offer important information on detailed fault patterns in the survey area.

In this area, the tilt derivative is calculated from the definition given by Salem et al., 2007, Geophysics, vol.73, No. 1, P. L1-L10.

$$TD = \tan^{-1} \{ (dT/dz) / (dT/dh) \} \text{ where } dT/dh = \text{Total Horizontal Gradient}$$

In the arctan trigonometric function above, all tilt values are restricted to values between  $-\pi/2$  and  $\pi/2$  regardless of the amplitude of the vertical derivative or the absolute value of the total horizontal gradient. This makes the calculation of the tilt angle similar to an automatic gain control filter. An example of this is observed in the South-East quadrant of both the analytic signal (Fig 1) and the Tilt Derivative map (Fig 2). Anomalous areas in this area of the analytic signal map have variable peak intensities whereas the peak intensities in the tilt derivative map are constant.

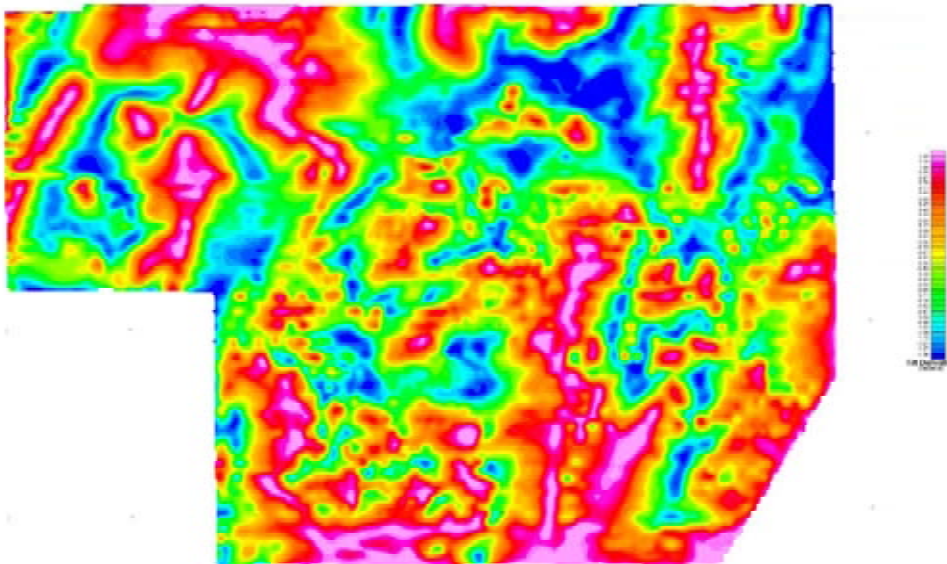


Figure 4.0: Showing the tilt derivative and the automatic gain control effect in the lower right quadrant of the map.

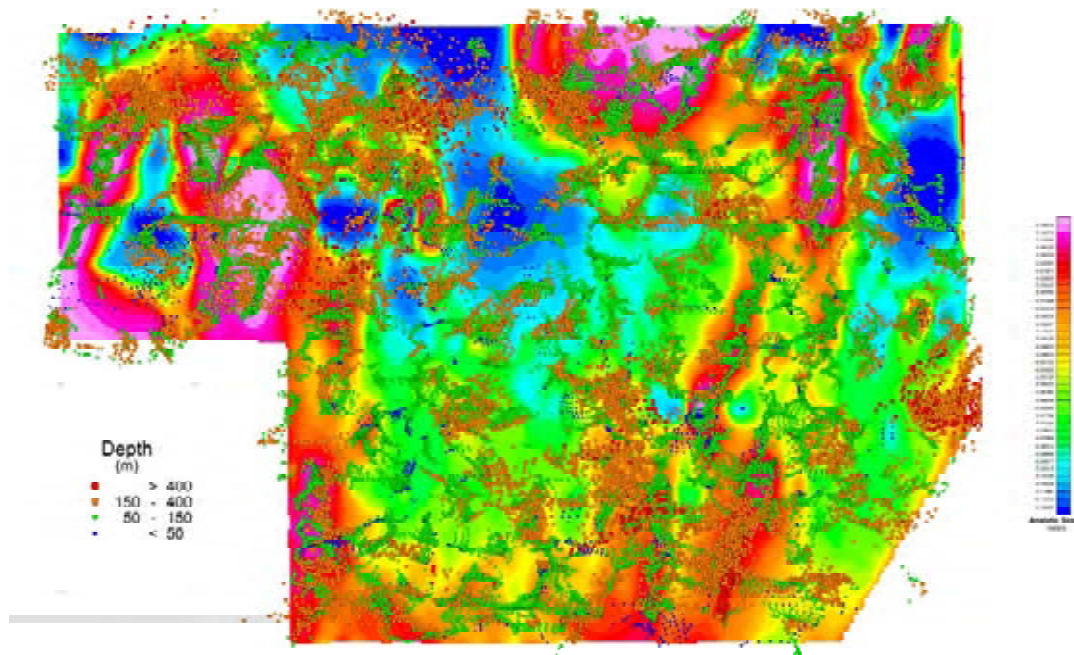


Figure 5.0 Euler Depths calculated using a structural index of 1.0 (window size 5 or 100 m) plotted over the analytic signal image.

The estimated depths to dike-like, sheet edge or limited throw faults are given by colour coded circles overlain on the above map (Figure 5.0). Reid et al (1990 geophysics vol.55, no.1 p80-91) have shown that a sill edge, dike or limited throw fault is best displayed using a structural index of 1.0 and in the case of a fault or sill edge, the depth would be to the mid point of the offset.

In the south-east quadrant, a step fault signature dominates the Total Field profile and is also located by the peak of the Analytic Signal as shown below:

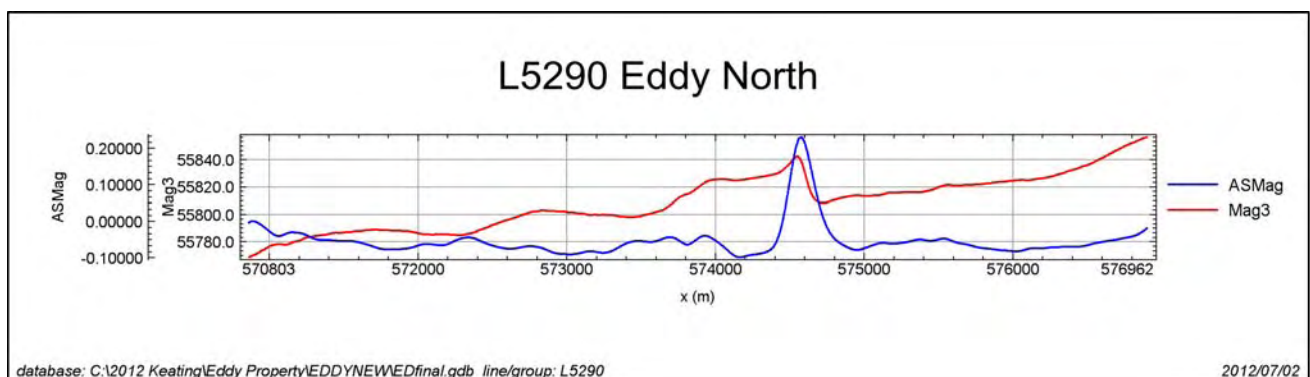


Figure 6.0 Profiles of the Total Field (RED) and the Analytic Signal (BLUE) over a step fault in the north part of the south-east quadrant. Using the HALF-WIDTH at HALF MAXIMUM RULE for the Analytic Signal estimated depth (AS depth = 145m).



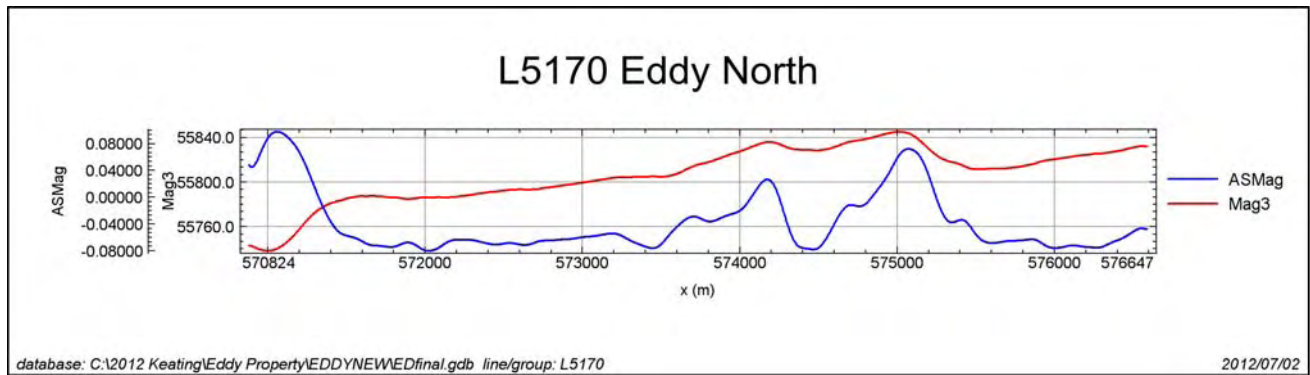


Figure 7.0 Profiles in the southern part of the south-east quadrant show two step fault signatures with AS depths = 190 m (left) and 215 m (right).

The estimated depth to the mid point of these faults is shallower in the north profile (L5290) than in the south profile where depths are estimated to be 190 m and 215 m (L5170). The calculated Euler depths from figure 5.0 and the shapes of the Total Field Profiles confirm this estimate.

#### CONDUCTIVITY AND RESISTIVITY CALCULATED FROM THE TIME DOMAIN DATA

The 31 channels of Z-component, off-time data were used to prepare resistivity maps and sections using a half-space algorithm discussed by McNeill D. Geonics Technical Note 7.0. A conductive body located in a resistive half-space will distort the lateral position of early and late time channels by a velocity decrease. The higher the conductivity of the body the higher the velocity decrease the late-time channels will undergo until the measuring time is exhausted.

The data was found to be well within the noise specifications and can be reliably used for this type of interpretation. The resistivity or conductivity maps are useful for outlining zones of weaker contrasting values of apparent resistivity or conductivity and can be applied to both maps and sections.

Higher values for resistivity may outline zones of silicification or, conversely, values with higher conductivities may outline zones with variable sulphide content. Both of these concepts are of value when exploring for epigenetic gold mineralization or for Sedex Type base metal occurrences.

The dB/dt EM channels were also used to pick bedrock conductors and calculate a variety of electrical parameters at each intercept point. Parameters such as conductance (conductivity-thickness) and tau (time constant) are useful for conductor classification and prioritization.

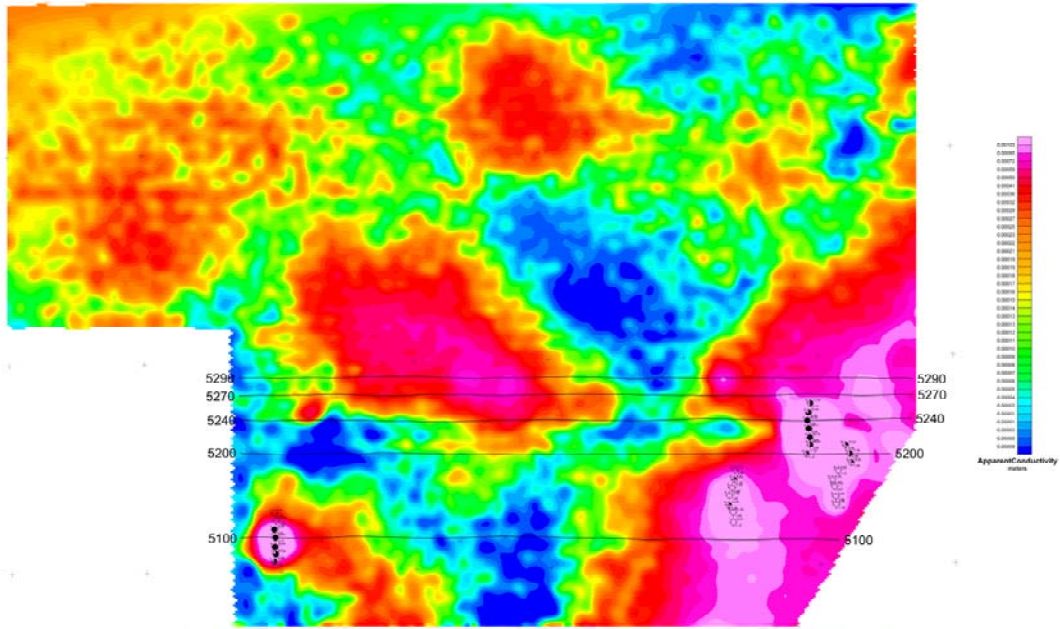


Figure 8.0 Showing the halfspace conductivity at 1100  $\mu$  Seconds after turnoff and as well as the picked conductors in the survey area. The locations of 5 lines of RDI vertical sections are shown.

LINE	COND	TAU	TYPE	EASTING	NORTHING
5070	10.62	1.6	3	571179.8	5479888.1
5080	18.37	2.8	4	571191.2	5479954.8
5090	24.73	3.7	5	571191.1	5480018.8
5100	27.74	4.2	5	571183.6	5480101.2
5110	22.28	3.3	5	571180.4	5480172.2
5120	9.13	1.4	2	575285.5	5480239.1
5120	10.88	1.6	3	571189.2	5480250.3
5130	6.20	0.9	2	576214.3	5480317.5

5130	9.63	1.4	2	575269.9		5480326.5
5130	4.86	0.7	2	571179.4		5480319.6
5140	5.33	0.8	2	572587.2		5480391.5
5140	10.41	1.6	3	575255.1		5480391.4
5140	6.67	1.0	2	576216.2		5480397.2
5150	6.00	0.9	2	576211.1		5480468.4
5150	10.52	1.6	3	575257.7		5480475.9
5160	9.41	1.4	2	575279.2		5480546.0
5160	5.33	0.8	2	576182.8		5480557.0
5170	5.33	0.8	2	576180.1		5480619.7
5170	8.34	1.3	2	575296.2		5480617.4
5180	4.00	0.6	2	575300.5		5480702.3
5180	5.33	0.8	2	576245.1		5480699.2
5190	12.43	1.9	3	576358.4		5480768.9
5200	15.16	2.3	3	576350.5		5480849.4
5210	13.78	2.1	3	576325.6		5480924.2
5210	20.35	3.1	5	575979.4		5480927.6
5220	30.82	4.6	5	575982.0		5480992.7
5230	36.91	5.5	5	575967.1		5481071.0
5240	2.26	0.3	2	571491.4		5481146.0
5240	35,68	5.4	5	575956.7		5481142.2

5250	28.07	4.2	5	575959.4		5481213.9
5250	2.87	0.4	2	571508.0		5481210.8
5260	6.67	1.0	2	571536.4		5481280.0
5260	14.26	2.1	3	575977.6		5481298.2
5270	4.00	0.6	2	575751.6		5481372.2
5280	6.00	0.9	2	575210.1		5481451.7
5290	3.56	0.5	2	575206.7		5481522.0
5290	3.94	0.6	2	572964.7		5481515.5
5300	3.88	0.6	2	572996.4		5481585.6
5300	5.47	0.8	2	575205.0		5481600.0

TABLE 1.0 Anomaly list for Eddy North

The units for conductance (Siemens) are equivalent to the conductivity X the thickness. The conductors are classified by conductance. The solid circles represent conductance's greater than 20 Siemens, three quarter filled circles are 16 to 20 Siemens, One half filled circles are from 10 to 16 Siemens, one quarter filled circles are from 4 to 10 Siemens and open circles represent less than 4 Siemens.

The survey area has four or five conductor trends all striking in a north-south direction. They have a wide range of conductances with moderate to high Tau values (see table 1).

#### RESISTIVITY DEPTH IMAGING (RDI)

Five RDI sections were prepared to help visualize the vertical distribution of the resistivity. By reversing the colour bar the sections outline the conductive anomalies. Profiles of the EM data as well as the Total Field and Analytic Signal are displayed over the sections.

The five lines are shown in figure 8.0

The sections are calculated using a two step process by first calculating the times and depths that will be used in the image inversion and then inverting the resistivity image associated with the time and depth. The sections have been limited to 500 m below the topographic surface and the upper resistivity has been capped at 10,000 ohm-m.

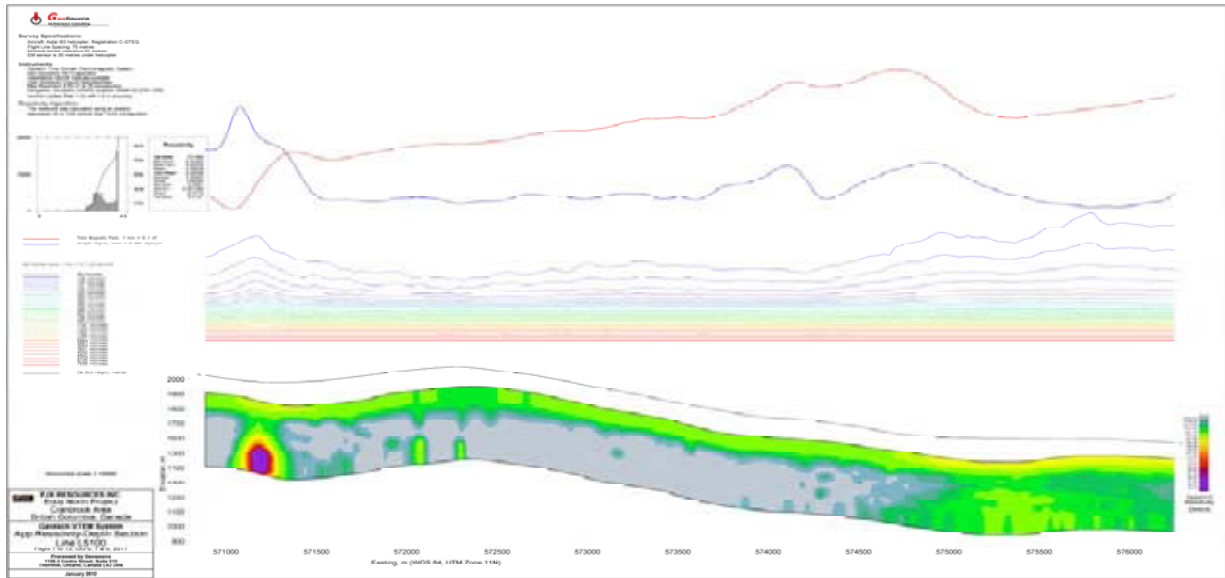


Figure 9.0 Line 5100 RDI showing a conductive anomaly in the lower west quadrant of the survey area. This anomaly has a coincident magnetic response.

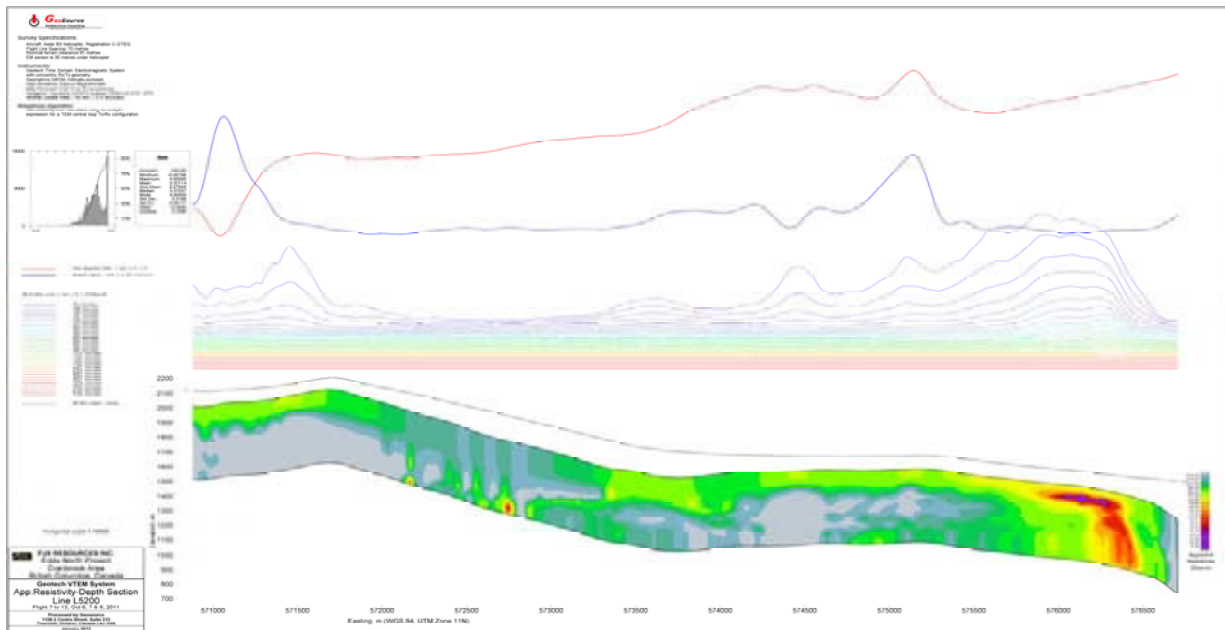


Figure 10.0 Line 5200 RDI showing a conductive anomaly in the lower east quadrant of the survey area.

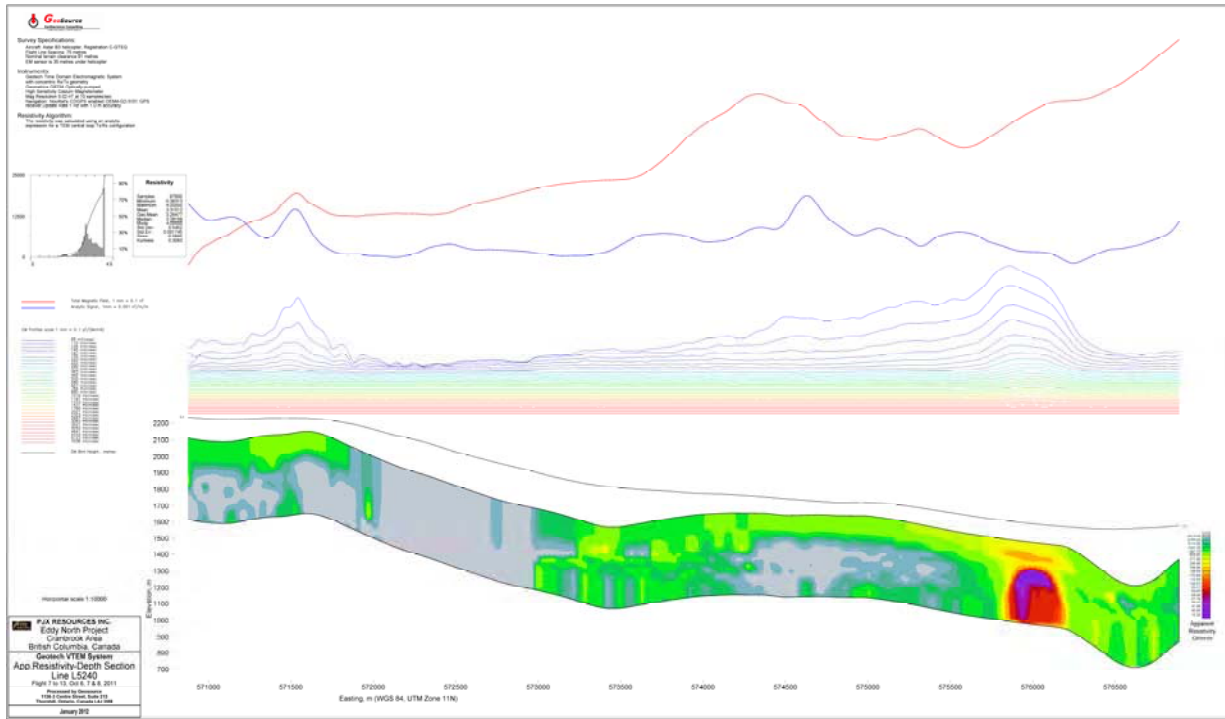


Figure 11.0 Line 5240 RDI showing a pronounced anomaly at the east end of the section

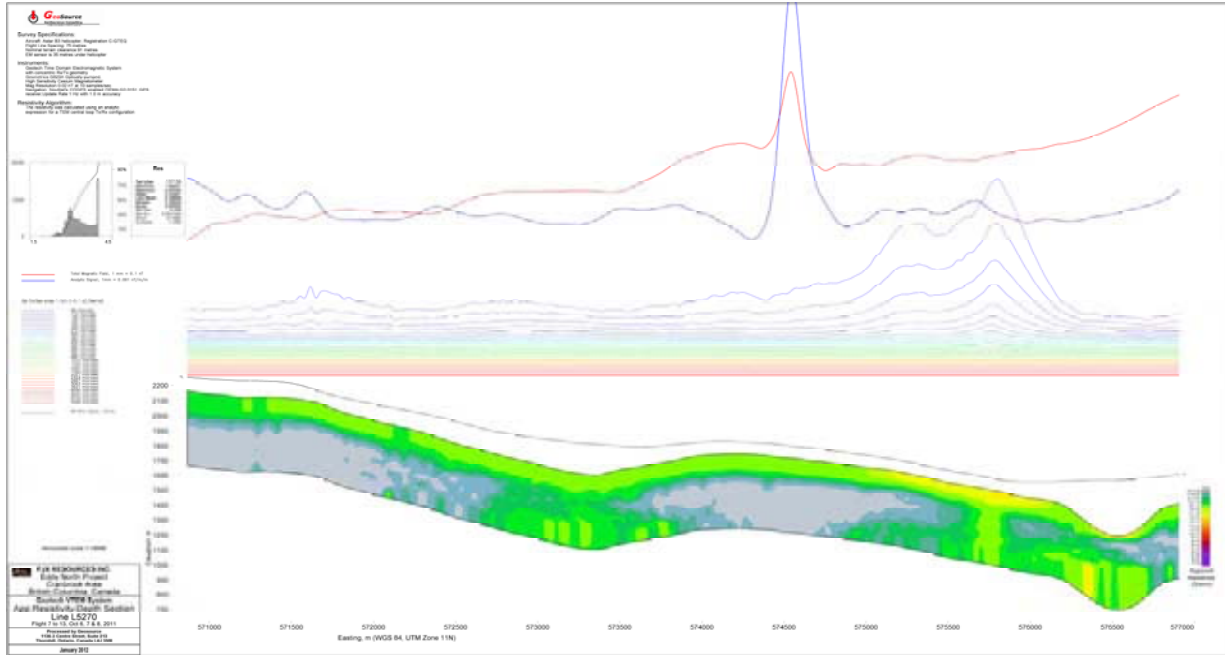


Figure 12.0 Line 5270 RDI showing a weaker anomaly at the east end of the section.

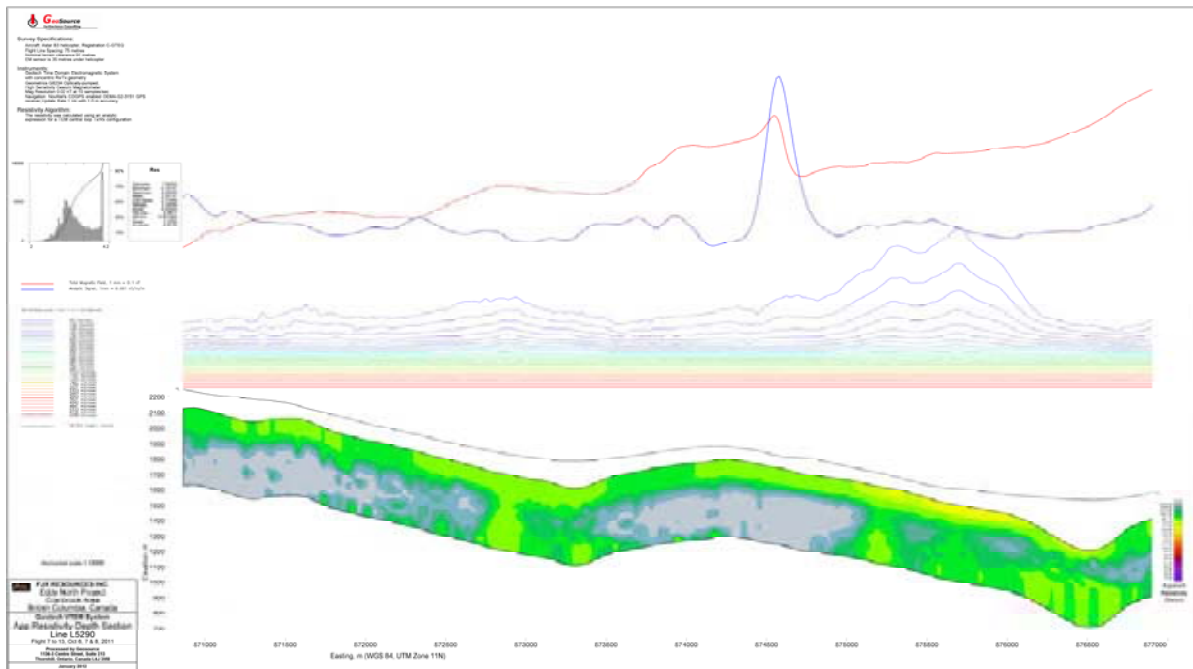
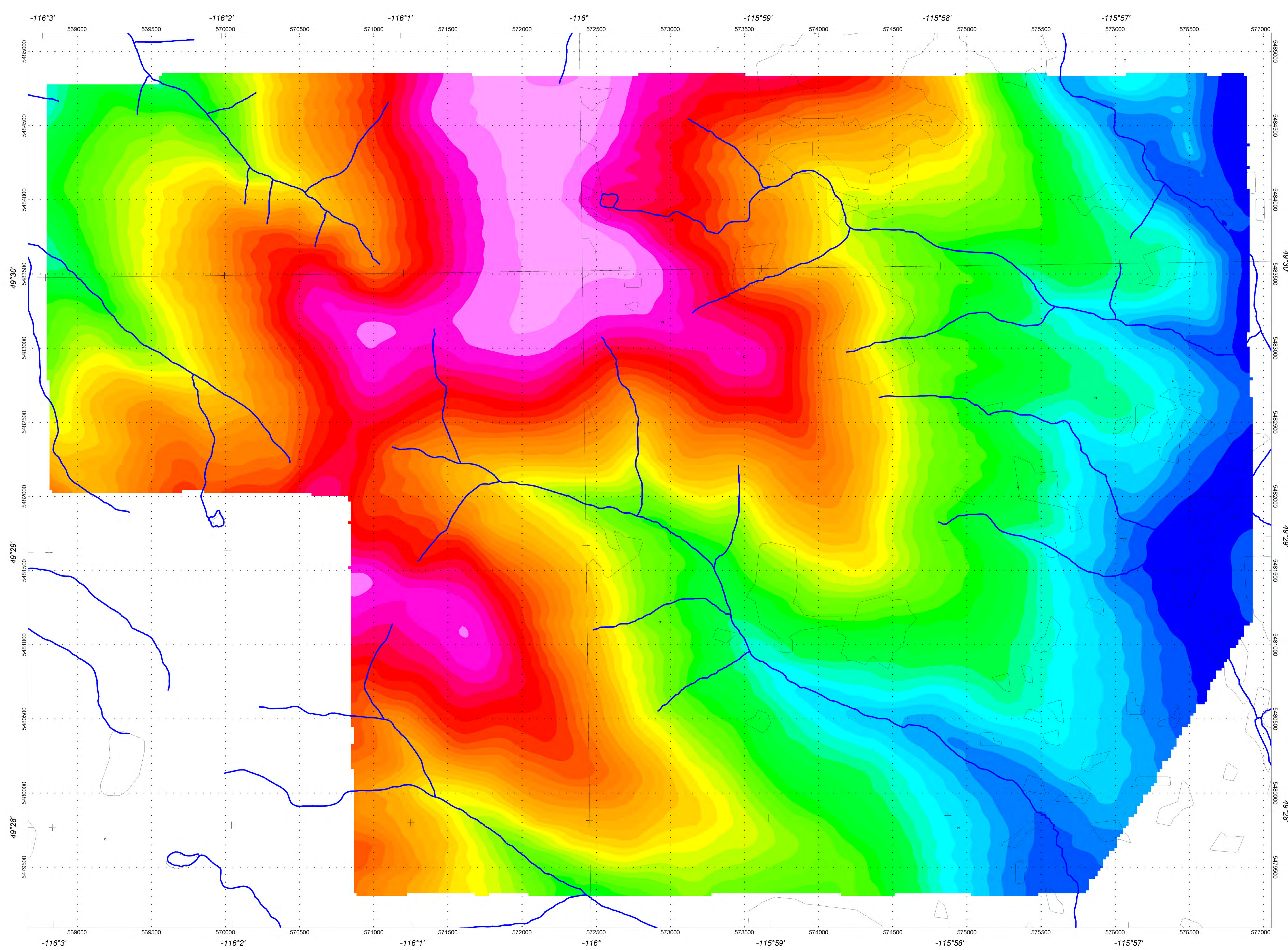


Figure 13.0 Line 5290 RDI showing several weak anomalies in the section.

## SUMMARY AND CONCLUSIONS

The processes used to develop the magnetic, conductivity, conductor picks and RDI's have outlined a very interesting array of targets in the survey area. Both the anomaly in the lower west quadrant and the cluster in the lower east quadrant rank high in the list of priorities for drill testing. These targets have not been tested previously.

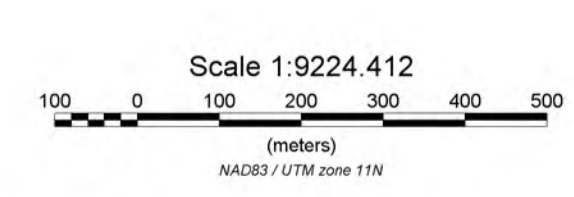
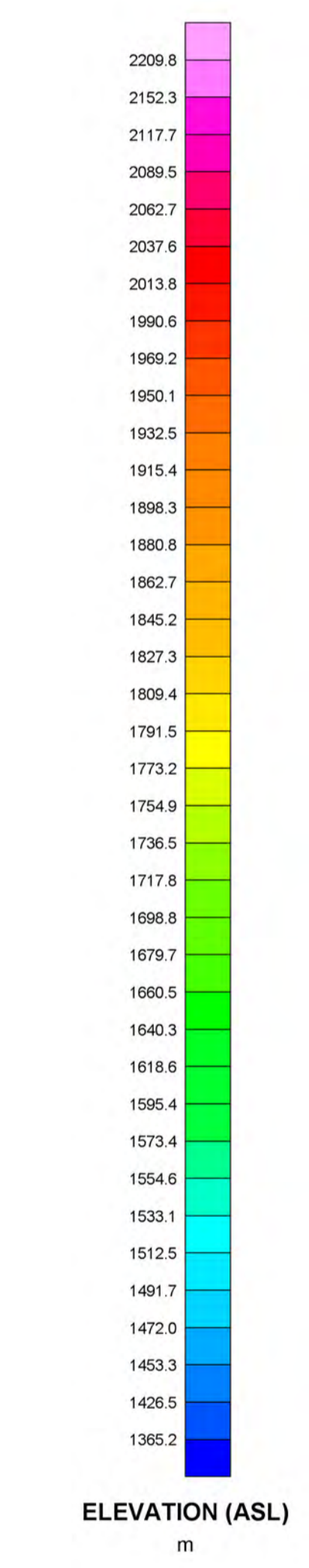
As well, the targets on Line 5290, although weaker in terms of conductivity, are near fault systems with regard to the east anomaly and on mineral trends.



Survey Specifications:  
 Aircraft: Astar B3 helicopter, Registration C-GTEQ  
 Flight Line Spacing: 75 metres  
 Nominal terrain clearance 31 metres  
 EM sensor is 35 metres under helicopter

Instruments:  
 Geotech Time Domain Electromagnetic System  
 with concentric Tx/Rx geometry  
 Geometrics G823A Cyclically pumped,  
 High Sensitivity Cesium Magnetometer  
 Mag Resolution 0.02 nT at 16 samples/sec  
 Navigation: Novatel's CCGPS-enabled OEM4 G2-3151 GPS  
 receiver Update Rate 1 Hz with 1.0 m accuracy

Resistivity Algorithm:  
 The resistivity was calculated using an analytic  
 expression for a TEM central loop Tx/Rx configuration

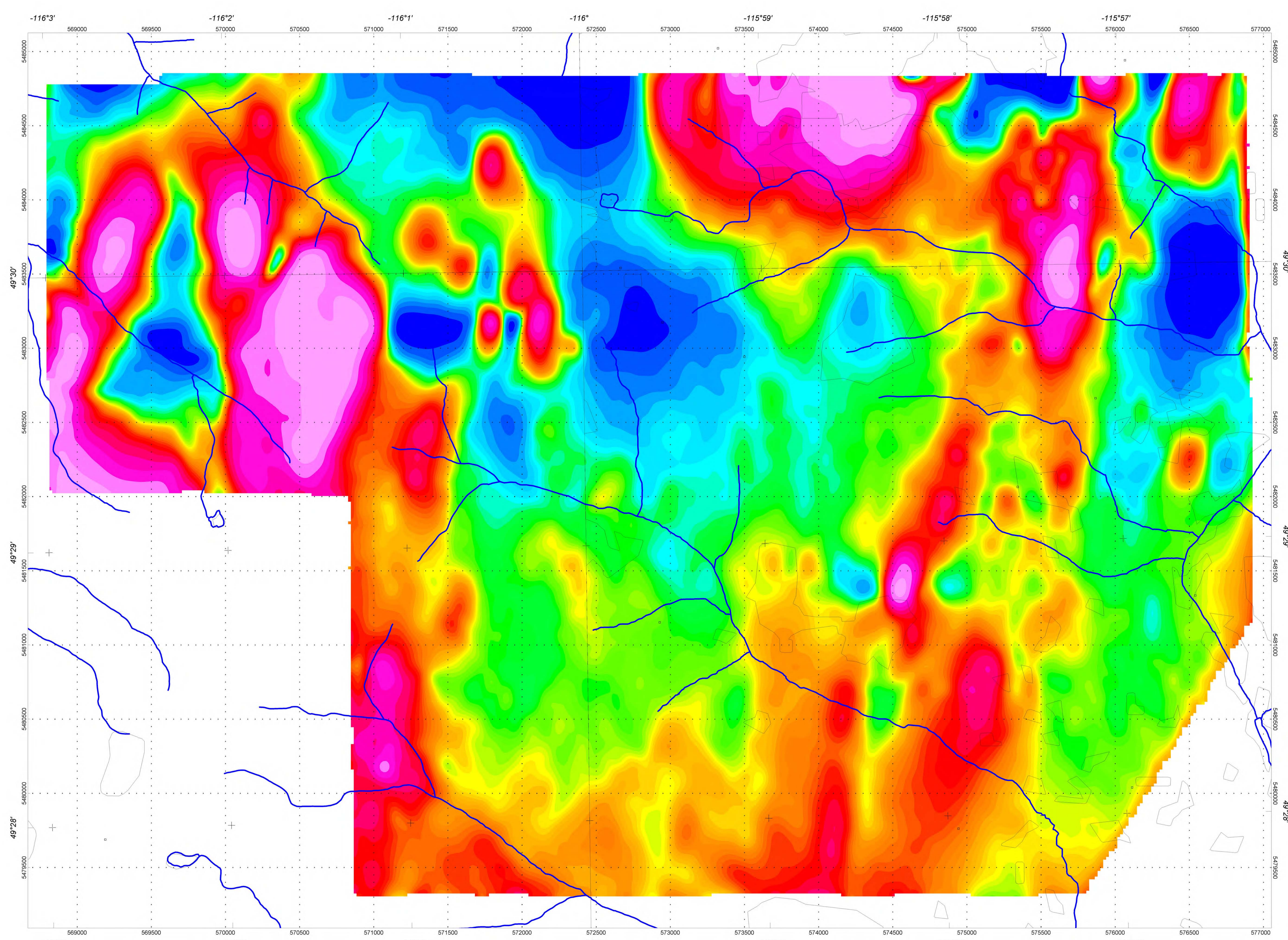


**PJX RESOURCES INC.**  
**Eddy Property**  
**SE British Columbia**

Geotech VTEM System  
**ELEVATION (ASL) Map**

Processed by Geosource  
 1136-3 Centre Street, Suite 213  
 Thornhill, Ontario, Canada  
 Geosource@sympatico.ca  
 Ref: Figure 2 in Report  
**August 2012**

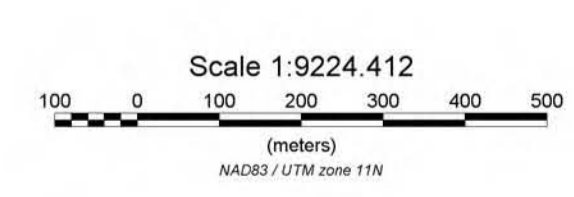
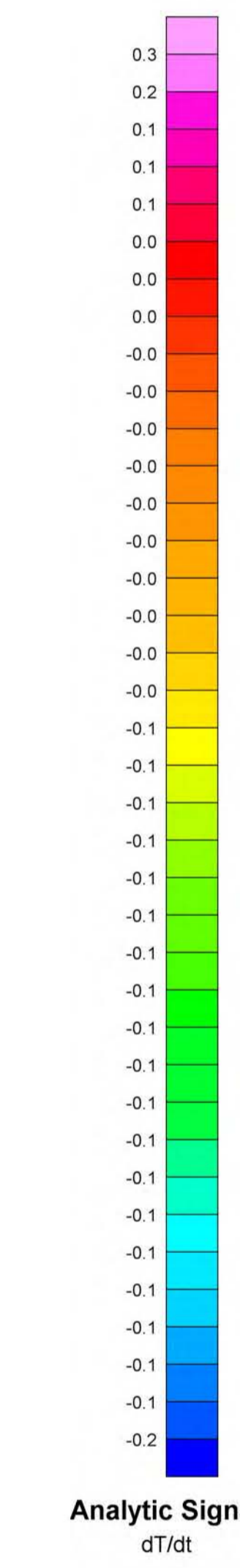




Survey Specifications:  
 Aircraft: Astor B3 helicopter, Registration C-GTEQ  
 Flight Line Spacing: 75 metres  
 Nominal terrain clearance 91 metres  
 EM sensor 35 metres under helicopter

Instruments:  
 Geotech Time Domain Electromagnetic System  
 with concentric Tx/Rx geometry  
 Geometrics G822A Cyclically pumped,  
 High Sensitivity Cesium Magnetometer  
 Mag Resolution 0.02 nT at 16 samples/sec  
 Navigation: Novatel's CCGPS enabled OEM4-G2-3151 GPS  
 receiver Update Rate 1 Hz with 1.0 m accuracy

Resistivity Algorithm:  
 The resistivity was calculated using an analytic  
 expression for a TEM central loop Tx/Rx configuration

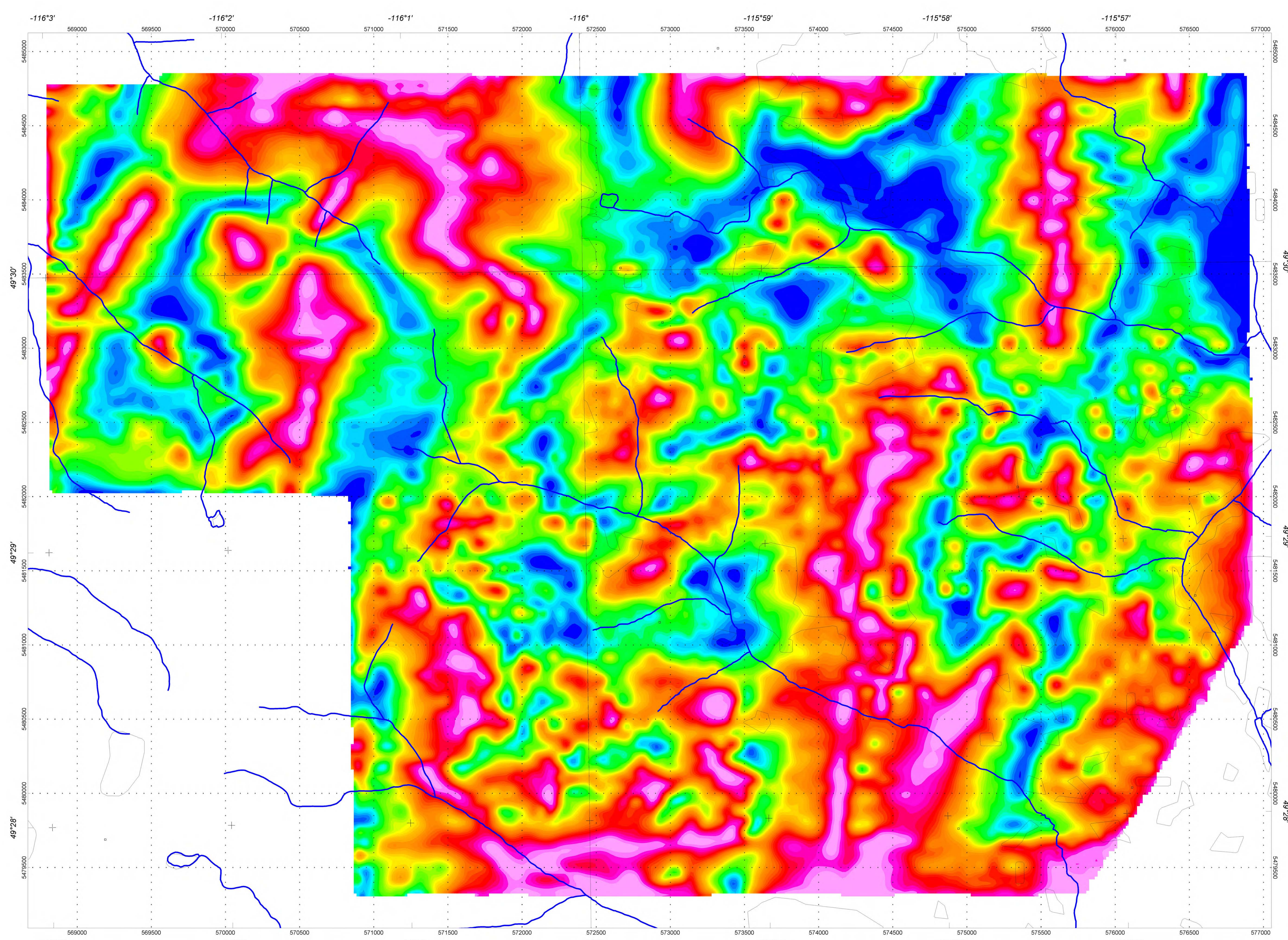


**PJX RESOURCES INC.**  
 Eddy Property  
 SE British Columbia

Geotech VTEM System  
 Analytic Signal Map

Processed by Geosource  
 1136-3 Centre Street, Suite 213  
 Thornhill, Ontario, Canada  
 Geosource@sympatico.ca  
 Ref. Figure 3 in Report

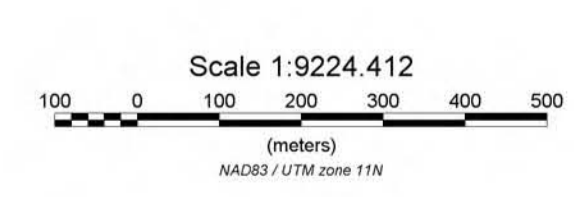
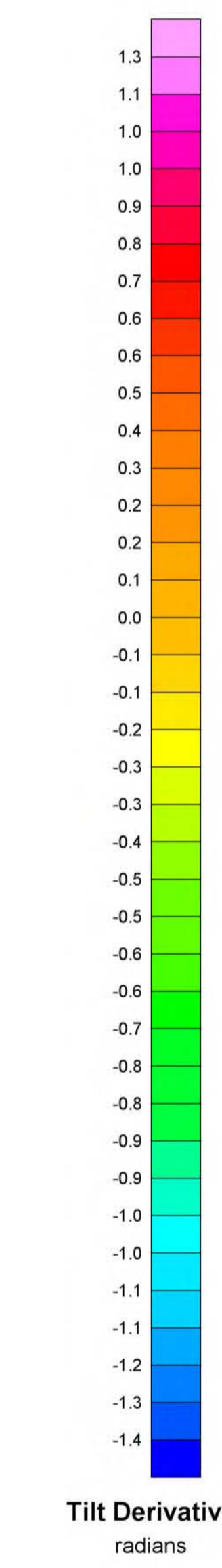
August 2012



Survey Specifications:  
 Aircraft: Astor B3 helicopter, Registration C-GTEQ  
 Flight Line Spacing: 75 metres  
 Nominal terrain clearance 91 metres  
 EM sensor 35 metres under helicopter

Instruments:  
 Geotech Time Domain Electromagnetic System  
 with concentric Tx/Rx geometry  
 Geometrics G823A Cyclically pumped,  
 High Sensitivity Cesium Magnetometer  
 Mag Resolution 0.02 nT at 16 samples/sec  
 Navigation: NovAtar's CCGPS-enabled OEM4.G2-3151 GPS  
 receiver Update Rate 1 Hz with 1.0 m accuracy

Resistivity Algorithm:  
 The resistivity was calculated using an analytic  
 expression for a TEM central loop Tx/Rx configuration

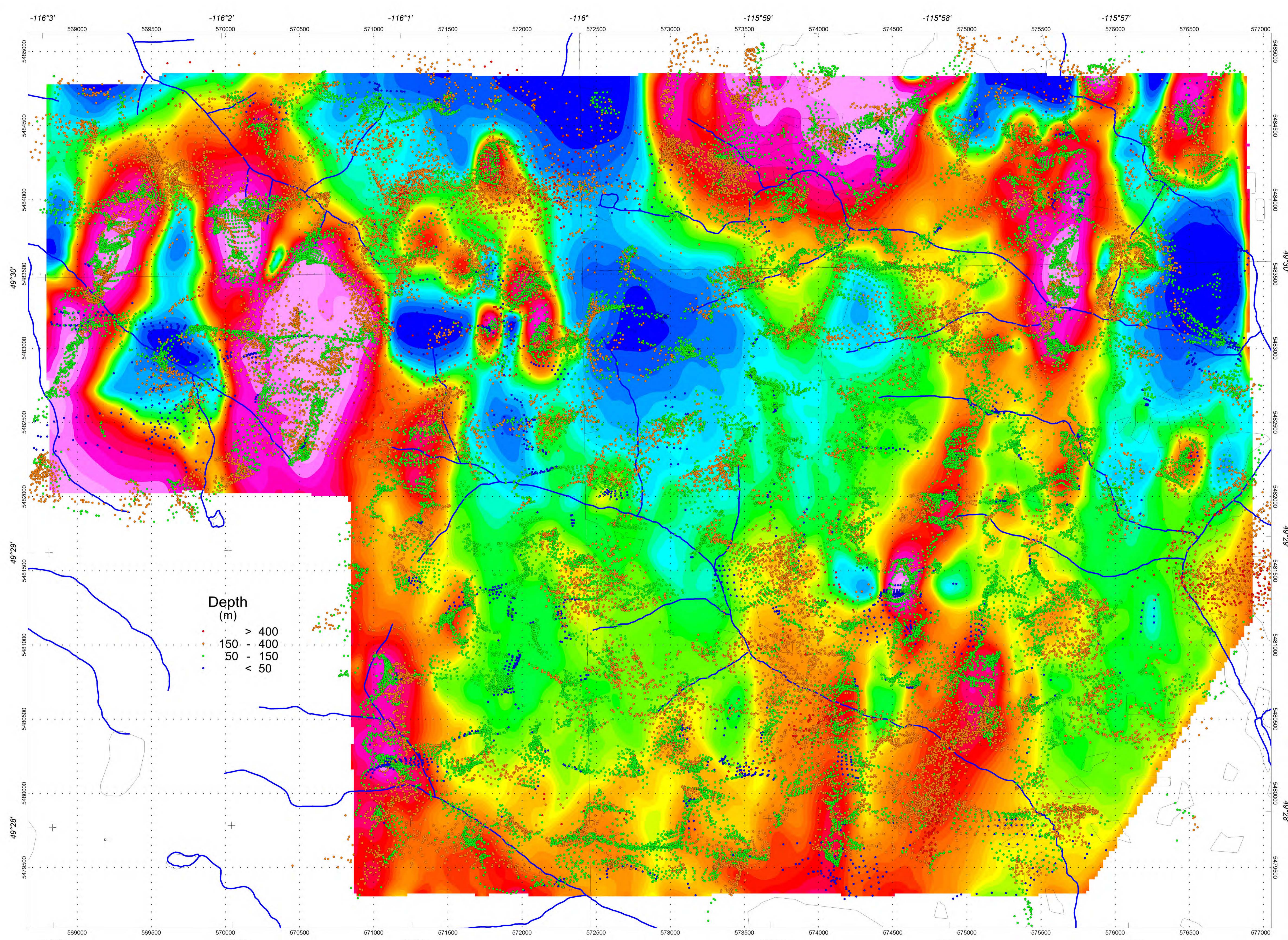


**PJX RESOURCES INC.**  
 Eddy Property  
 SE British Columbia

Geotech VTEM System  
 Tilt Derivative Map (radians)

Processed by Geosource  
 1136-3 Centre Street, Suite 213  
 Thornhill, Ontario, Canada  
 Geosource@sympatico.ca  
 Ref. Figure 4 in Report

August 2012



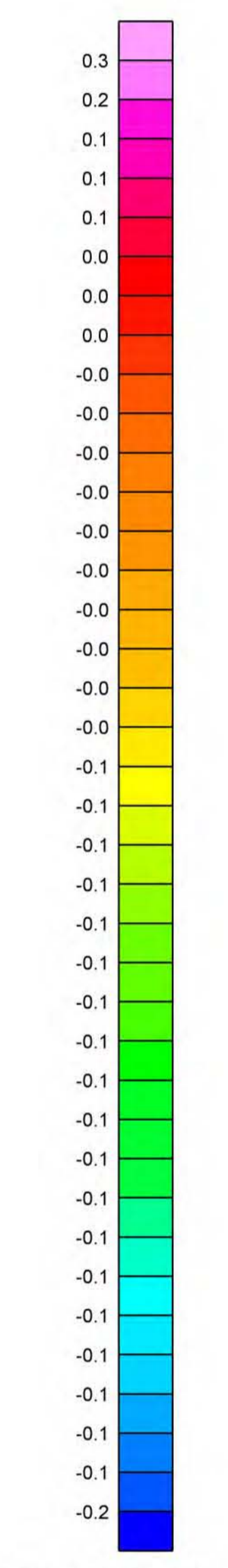
Depth  
(m)

- > 400
- 150 - 400
- 50 - 150
- < 50

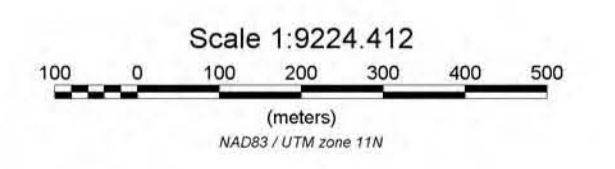
Survey Specifications:  
 Aircraft: Astar B3 helicopter, Registration C-GTEQ  
 Flight Line Spacing: 75 metres  
 Nominal terrain clearance 81 metres  
 EM sensor is 35 metres under helicopter

Instruments:  
 Geotech Time Domain Electromagnetic System  
 with concentric Rx/Tx geometry  
 Geometrics G822A Cyclically pumped,  
 High Sensitivity Cesium Magnetometer  
 Mag Resolution 0.02 nT at 10 samples/sec  
 Navigation: Novatel C-CGPS enabled OEM4-G2-3151 GPS  
 receiver, Update Rate 1Hz with 1.0 m accuracy

Resistivity Algorithm:  
 The resistivity was calculated using an analytic  
 expression for a TEM central loop Tx/Rx configuration



Analytic Signal  
(dT/dt)

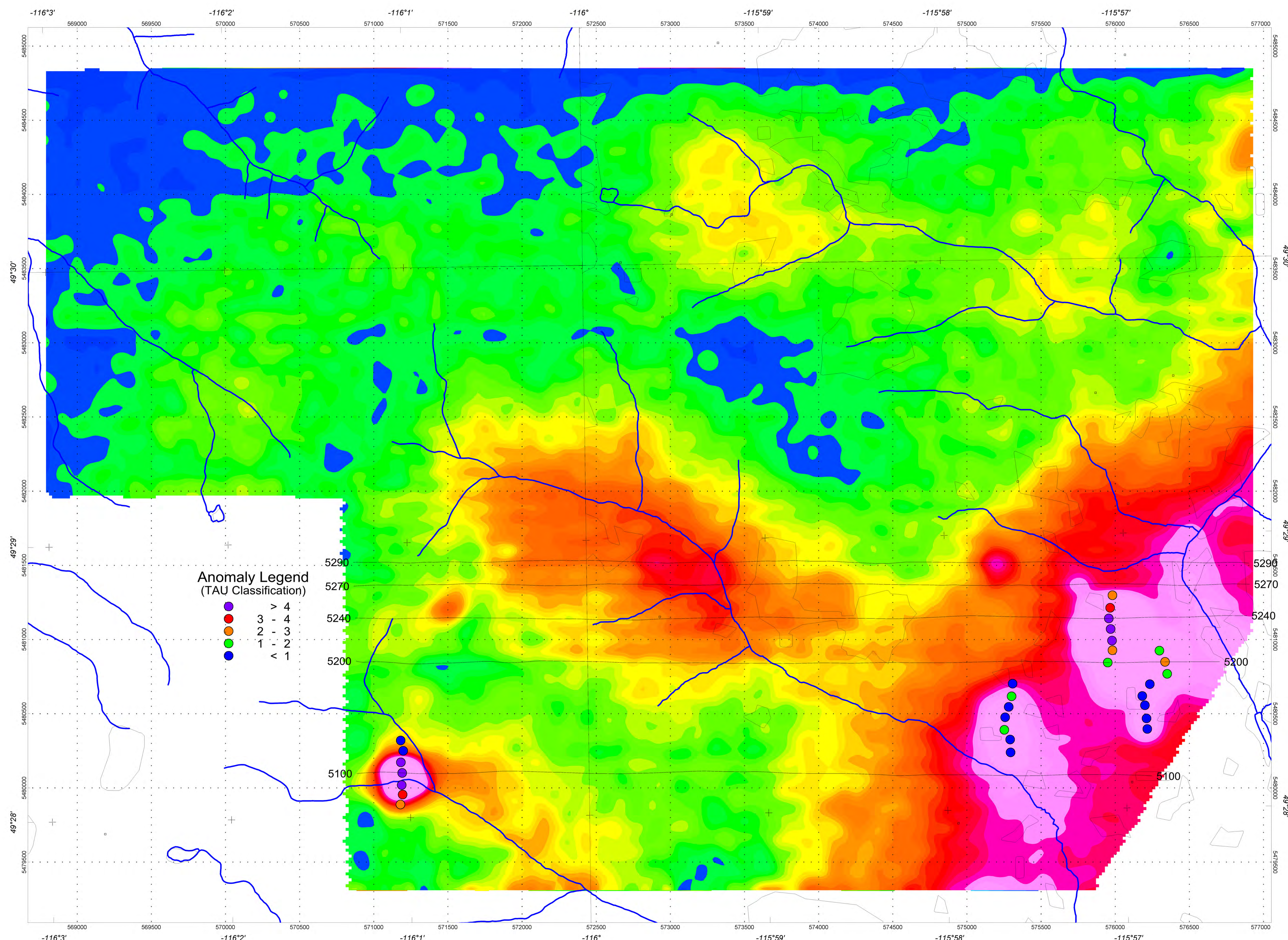


**PJX RESOURCES INC.**  
 Eddy Property  
 SE British Columbia

Geotech VTEM System  
 Euler Depths/AS Map

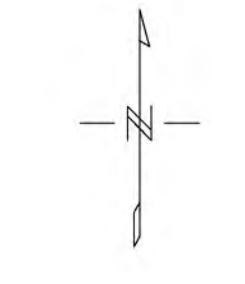
Processed by Geosource  
 1136-3 Centre Street, Suite 213  
 Thornhill, Ontario, Canada  
 Geosource@sympatico.ca  
 Ref: Figure 5 in Report

August 2012



**Anomaly Legend  
(TAU Classification)**

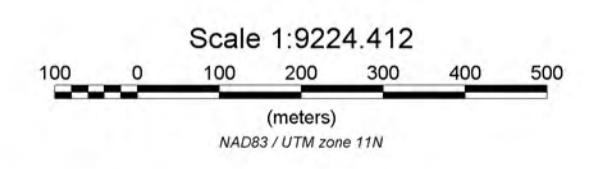
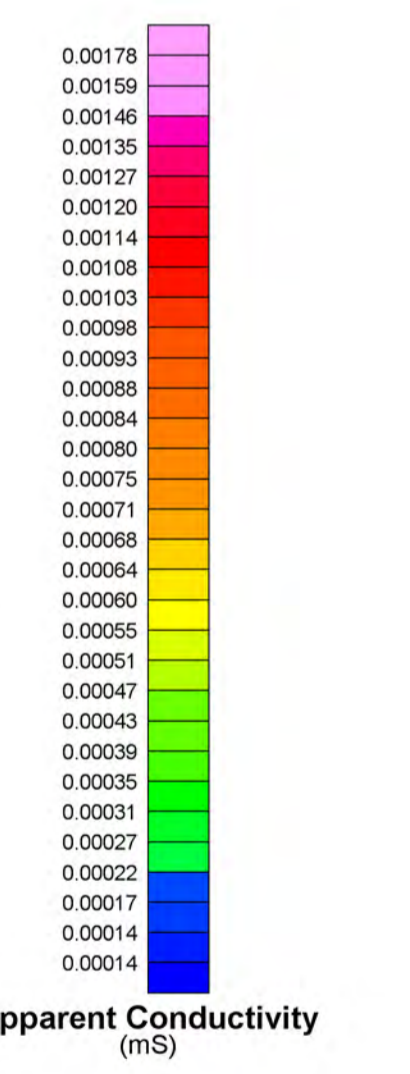
●	> 4
●	3 - 4
●	2 - 3
●	1 - 2
●	< 1



**Survey Specifications:**  
 Aircraft: Astor B3 helicopter, Registration C-GTEQ  
 Flight Line Spacing: 75 metres  
 Nominal terrain clearance 91 metres  
 EM sensor is 35 metres under helicopter

**Instruments:**  
 Geotech Time Domain Electromagnetic System  
 with concentric Tx/Rx geometry  
 Geometrics G823A Optically pumped,  
 High Sensitivity Cesium Magnetometer  
 Mag Resolution 0.02 nT at 16 samples/sec  
 Navigation: Novatel's CCGPS enabled OEM4 G2-3151 GPS  
 receiver Update Rate 1 Hz with 1.0 m accuracy

**Resistivity Algorithm:**  
 The resistivity was calculated using an analytic  
 expression for a TEM central loop Tx/Rx configuration



**PJX RESOURCES INC.**  
 Eddy Property  
 SE British Columbia  
 Geotech VTEM System  
 App Conductivity (1100us) Map

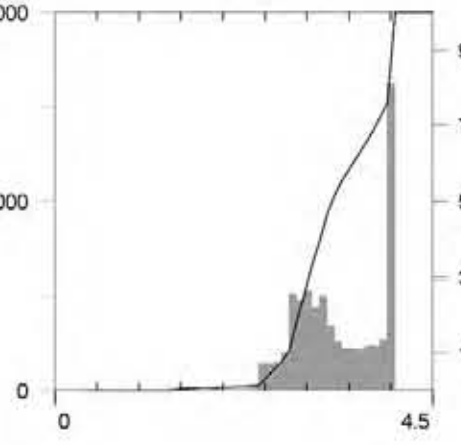
Processed by Geosource  
 1136-3 Centre Street, Suite 213  
 Thornhill, Ontario, Canada  
 Geosource@sympatico.ca  
 Ref: Figure 4 in Report

August 2012

**Survey Specifications:**  
 Aircraft: Astar B3 helicopter, Registration C-GTEQ  
 Flight Line Spacing: 75 metres  
 Nominal terrain clearance 91 metres  
 EM sensor is 35 metres under helicopter

**Instruments:**  
 Geotech Time Domain Electromagnetic System  
 with concentric Rx/Tx geometry  
 Geometrics G823A Optically-pumped,  
 High Sensitivity Cesium Magnetometer  
 Mag Resolution 0.02 nT at 10 samples/sec  
 Navigation: NovAtel's CDGPS enabled OEM4-G2-3151 GPS  
 receiver, Update Rate 1 Hz with 1.0 m accuracy

**Resistivity Algorithm:**  
 The resistivity was calculated using an analytic  
 expression for a TEM central loop Tx/Rx configuration



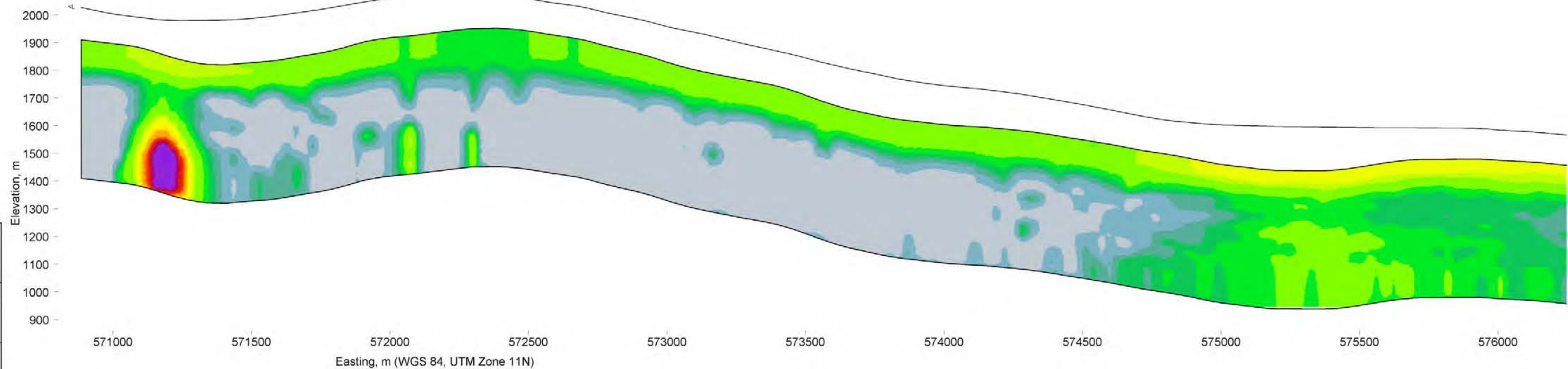
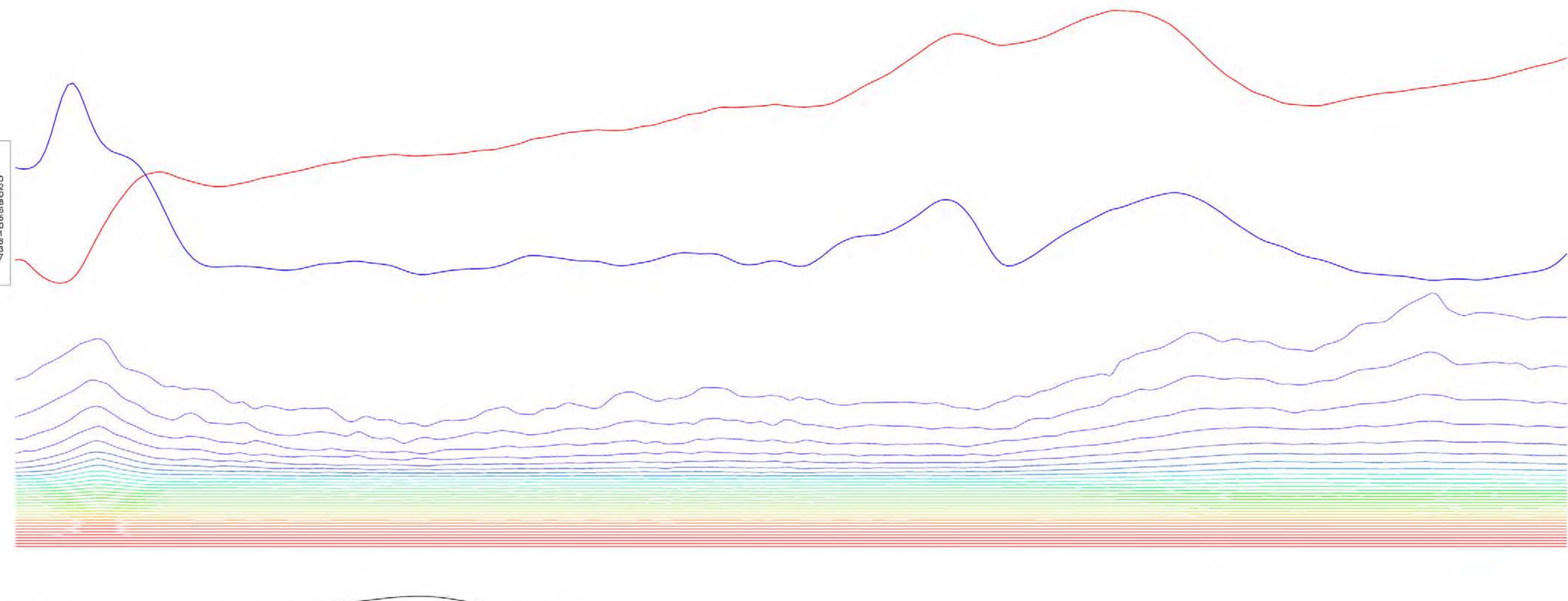
Resistivity	
Samples:	101400
Minimum:	0.42982
Maximum:	4.00000
Mean:	3.36549
Geo. Mean:	3.32536
Median:	3.29085
Mode:	4.00000
Std. Dev.:	0.5081
Std. Err.:	0.001598
Skew:	-0.3173
Kurtosis:	-0.3127

— Total Magnetic Field, 1 mm = 0.1 nT  
 — Analytic Signal, 1mm = 0.001 nT/m/m

EM Profiles scale 1 mm = 0.1 pT/(A·m<sup>4</sup>)

- 88 microsec
- 110 microsec
- 126 microsec
- 145 microsec
- 167 microsec
- 192 microsec
- 220 microsec
- 253 microsec
- 290 microsec
- 333 microsec
- 383 microsec
- 440 microsec
- 504 microsec
- 577 microsec
- 659 microsec
- 750 microsec
- 850 microsec
- 1010 microsec
- 1161 microsec
- 1333 microsec
- 1531 microsec
- 1760 microsec
- 2021 microsec
- 2323 microsec
- 2667 microsec
- 3053 microsec
- 3481 microsec
- 4042 microsec
- 4641 microsec
- 5333 microsec
- 6125 microsec
- 7036 microsec

— EM Bird Height, metres



Horizontal scale 1:10000

**PJX RESOURCES INC.**  
 Eddy North Project  
 Cranbrook Area  
 British Columbia, Canada

**Geotech VTEM System**  
 App. Resistivity-Depth Section  
 Line L5100  
 Ref: Figure 9 in Report

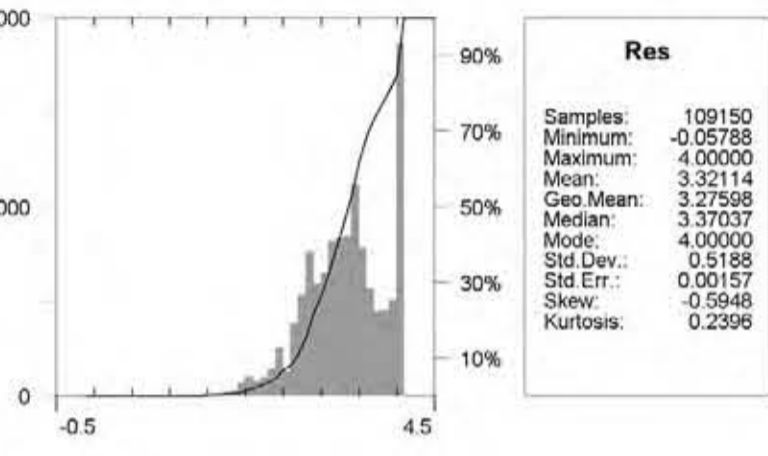
Processed by Geosource  
 1136-3 Centre Street, Suite 213  
 Thornhill, Ontario, Canada L4J 3M8

August 2012

**Survey Specifications:**  
 Aircraft: Astar B3 helicopter, Registration C-GTEQ  
 Flight Line Spacing: 75 metres  
 Nominal terrain clearance 91 metres  
 EM sensor is 35 metres under helicopter

**Instruments:**  
 Geotech Time Domain Electromagnetic System  
 with concentric Rx/Tx geometry  
 Geometrics G823A Optically-pumped,  
 High Sensitivity Cesium Magnetometer  
 Mag Resolution 0.02 nT at 10 samples/sec  
 Navigation: NovAtel's CDGPS enabled OEM4-G2-3151 GPS  
 receiver, Update Rate 1 Hz with 1.0 m accuracy

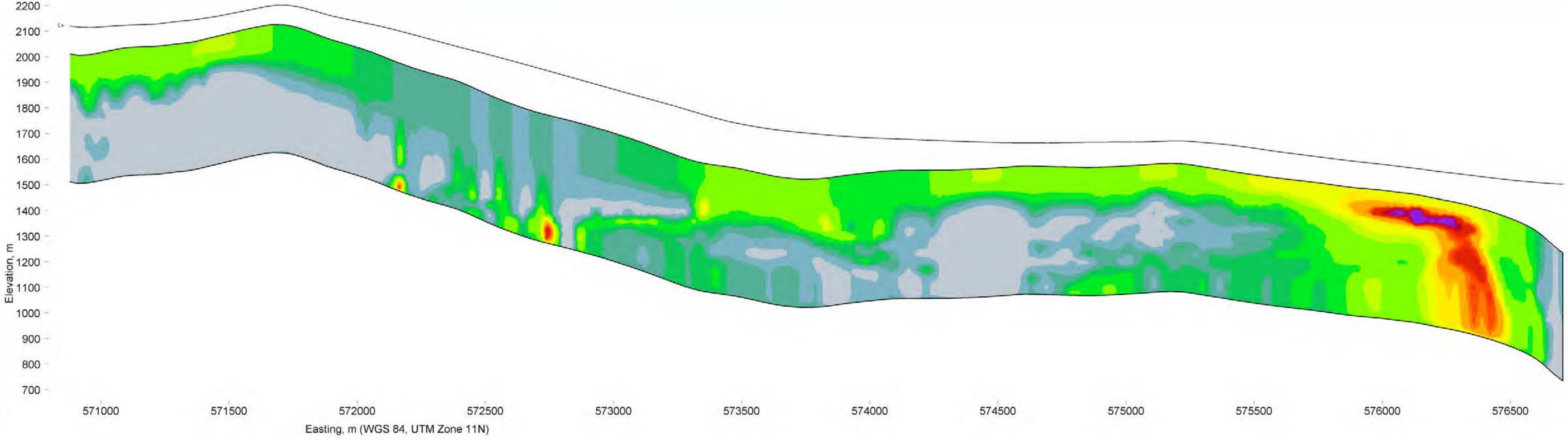
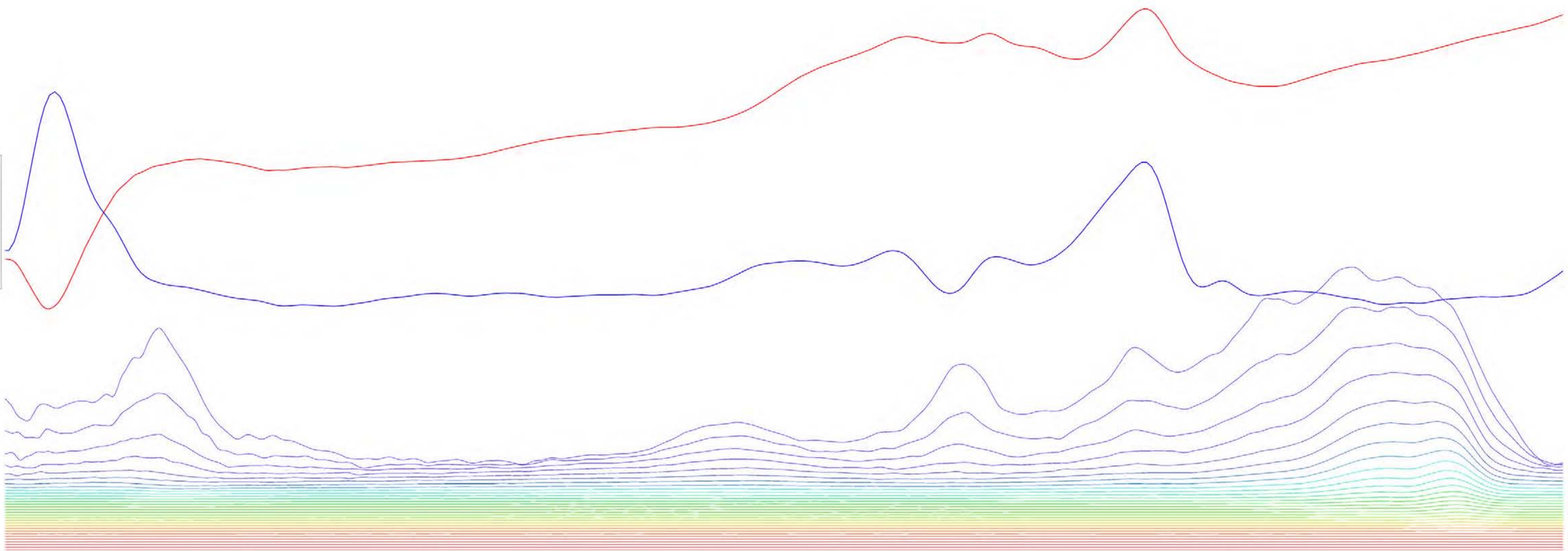
**Resistivity Algorithm:**  
 The resistivity was calculated using an analytic  
 expression for a TEM central loop Tx/Rx configuration



— Total Magnetic Field, 1 mm = 0.1 nT  
 — Analytic Signal, 1mm = 0.001 nT/m/m

EM Profiles scale 1 mm = 0.1 pT/(A·m<sup>4</sup>)

- 96 microsec
  - 110 microsec
  - 128 microsec
  - 148 microsec
  - 172 microsec
  - 196 microsec
  - 228 microsec
  - 264 microsec
  - 304 microsec
  - 352 microsec
  - 408 microsec
  - 480 microsec
  - 568 microsec
  - 672 microsec
  - 800 microsec
  - 960 microsec
  - 1168 microsec
  - 1424 microsec
  - 1728 microsec
  - 2080 microsec
  - 2496 microsec
  - 3008 microsec
  - 3632 microsec
  - 4384 microsec
  - 5280 microsec
  - 6336 microsec
  - 7664 microsec
  - 9280 microsec
- EM Bird Height, metres



Horizontal scale 1:10000

**PJX RESOURCES INC.**  
 Eddy North Project  
 Cranbrook Area  
 British Columbia, Canada

**Geotech VTEM System**  
 App. Resistivity-Depth Section  
 Line L5200  
 Ref: Figure 10 in Report

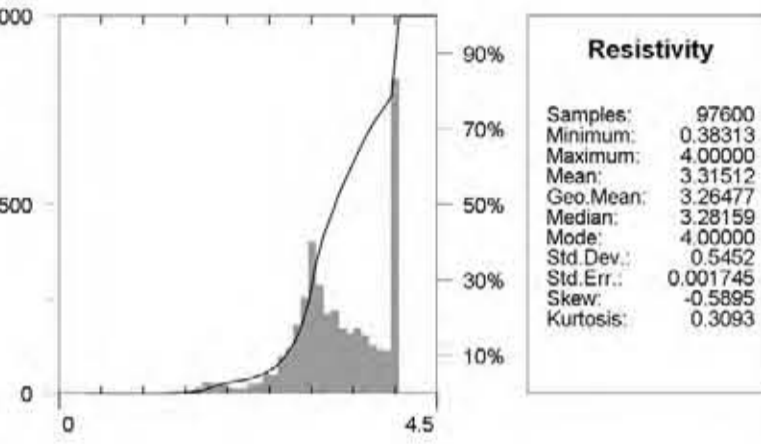
Processed by Geosource  
 1136-3 Centre Street, Suite 213  
 Thornhill, Ontario, Canada L4J 3M8

August 2012

**Survey Specifications:**  
 Aircraft: Astar B3 helicopter, Registration C-GTEQ  
 Flight Line Spacing: 75 metres  
 Nominal terrain clearance 91 metres  
 EM sensor is 35 metres under helicopter

**Instruments:**  
 Geotech Time Domain Electromagnetic System  
 with concentric Rx/Tx geometry  
 Geometrics G823A Optically-pumped,  
 High Sensitivity Cesium Magnetometer  
 Mag Resolution 0.02 nT at 10 samples/sec  
 Navigation: NovAtel's CDGPS enabled OEM4-G2-3151 GPS  
 receiver.Update Rate 1 Hz with 1.0 m accuracy

**Resistivity Algorithm:**  
 The resistivity was calculated using an analytic  
 expression for a TEM central loop Tx/Rx configuration



— Total Magnetic Field, 1 mm = 0.1 nT  
 — Analytic Signal, 1mm = 0.001 nT/m/m

EM Profiles scale: 1 mm = 0.1 pT/(Amm<sup>2</sup>)

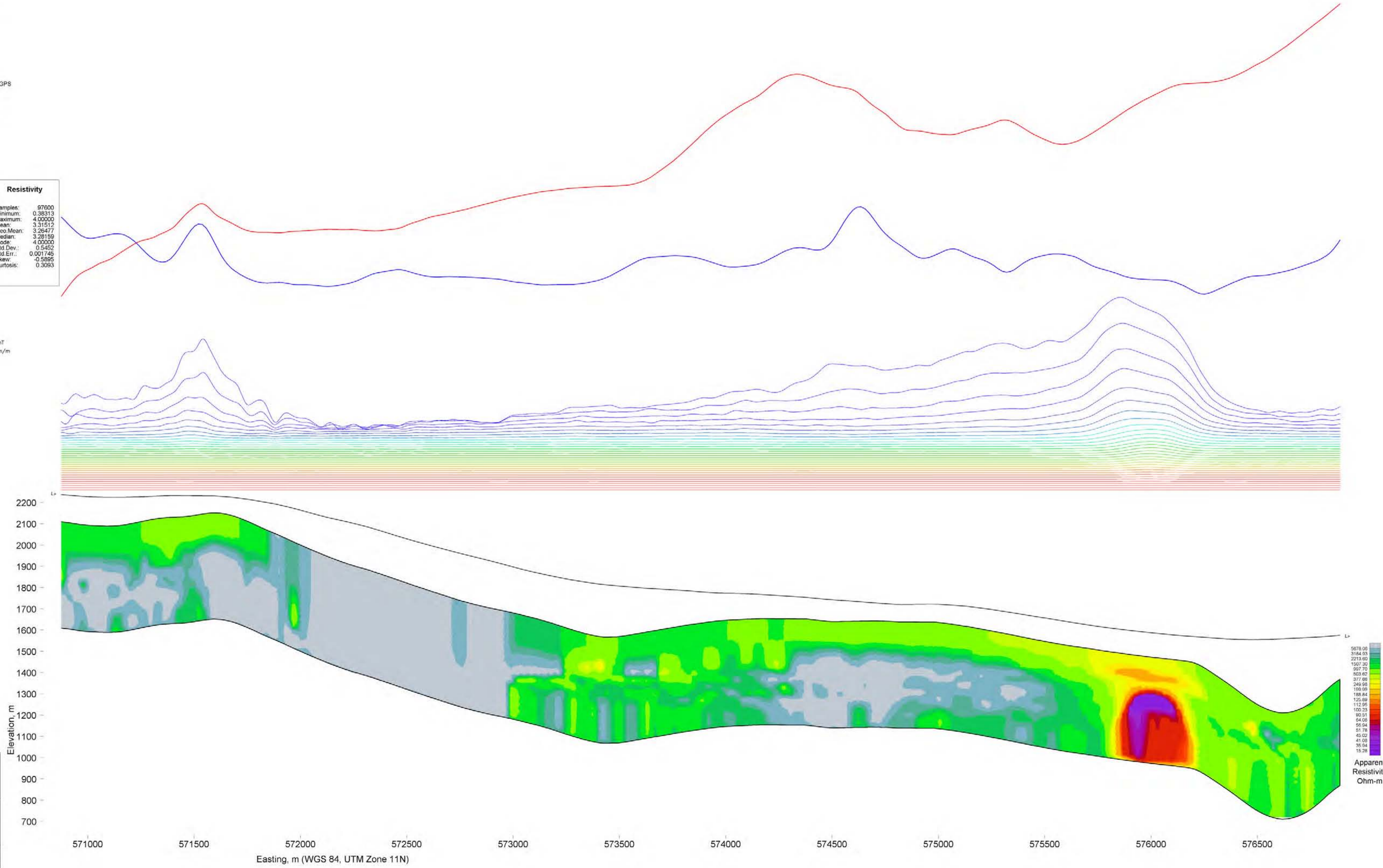
- 96 microsec
  - 110 microsec
  - 126 microsec
  - 144 microsec
  - 164 microsec
  - 186 microsec
  - 210 microsec
  - 236 microsec
  - 264 microsec
  - 294 microsec
  - 336 microsec
  - 384 microsec
  - 440 microsec
  - 504 microsec
  - 576 microsec
  - 660 microsec
  - 768 microsec
  - 896 microsec
  - 1050 microsec
  - 1230 microsec
  - 1440 microsec
  - 1680 microsec
  - 2000 microsec
  - 2370 microsec
  - 2880 microsec
  - 3520 microsec
  - 4290 microsec
  - 5200 microsec
  - 6360 microsec
  - 7770 microsec
  - 9450 microsec
- EM Bird Height, metres

Horizontal scale 1:10000

**PJX RESOURCES INC.**  
 Eddy North Project  
 Cranbrook Area  
 British Columbia, Canada

**Geotech VTEM System**  
 App.Resistivity-Depth Section  
 Line L5240  
 Ref: Figure11 in Report

Processed by Geosource  
 1136-3 Centre Street, Suite 213  
 Thornhill, Ontario, Canada L4J 3M8  
 August 2012



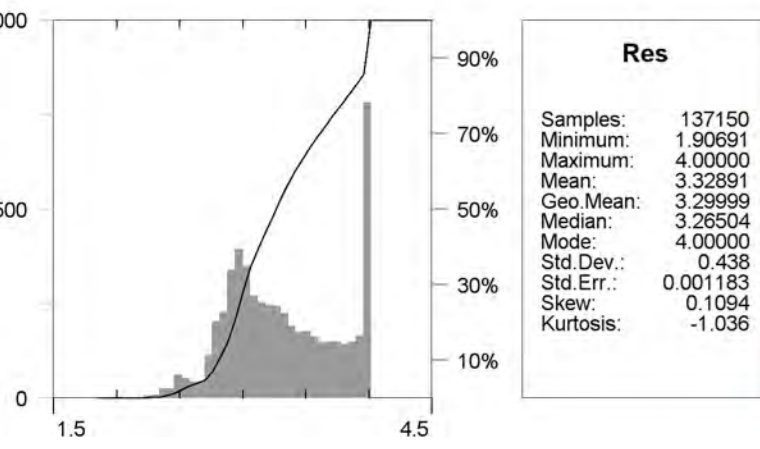
Apparent Resistivity Ohm-m

5678.06
3164.03
2213.00
1507.30
907.70
523.62
377.06
249.95
169.95
188.84
125.89
112.95
100.23
84.08
56.94
45.02
41.08
36.04
18.28

**Survey Specifications:**  
Aircraft: Astar B3 helicopter, Registration C-GTEQ  
Flight Line Spacing: 75 metres  
Nominal terrain clearance 91 metres  
EM sensor is 35 metres under helicopter

**Instruments:**  
Geotech Time Domain Electromagnetic System  
with concentric Rx/Tx geometry  
Geometrics G823A Optically-pumped,  
High Sensitivity Cesium Magnetometer  
Mag Resolution 0.02 nT at 10 samples/sec  
Navigation: NovAtel's CDGPS enabled OEM4-G2-3151 GPS  
receiver, Update Rate 1 Hz with 1.0 m accuracy

**Resistivity Algorithm:**  
The resistivity was calculated using an analytic  
expression for a TEM central loop Tx/Rx configuration



— Total Magnetic Field, 1 mm = 0.1 nT  
— Analytic Signal, 1mm = 0.001 nT/m/m

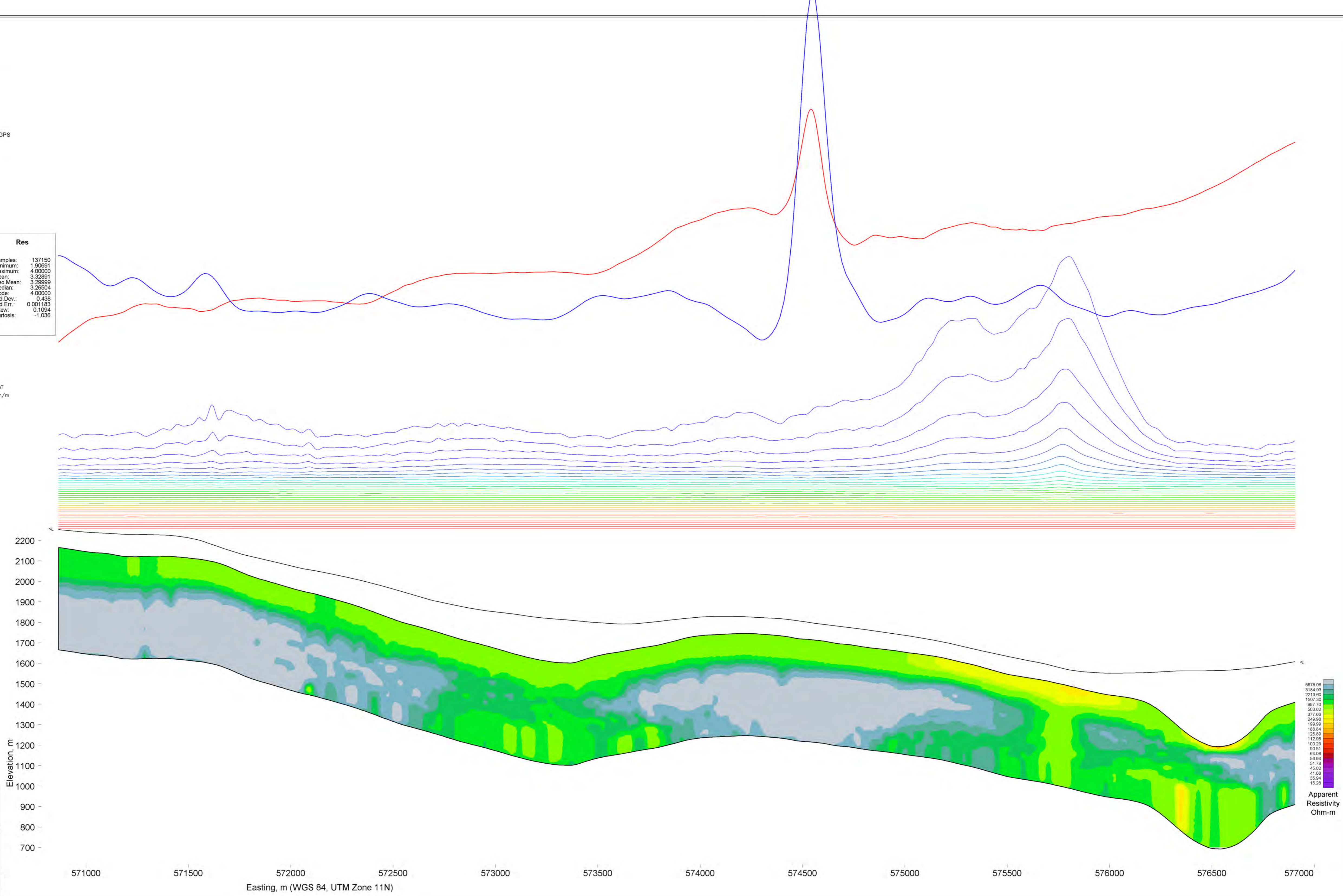
- EM Profiles scale 1 mm = 0.1 pT/(A·m<sup>4</sup>)
- 98 microsec
  - 110 microsec
  - 126 microsec
  - 145 microsec
  - 167 microsec
  - 192 microsec
  - 220 microsec
  - 253 microsec
  - 290 microsec
  - 333 microsec
  - 383 microsec
  - 440 microsec
  - 502 microsec
  - 580 microsec
  - 667 microsec
  - 766 microsec
  - 880 microsec
  - 1010 microsec
  - 1161 microsec
  - 1333 microsec
  - 1533 microsec
  - 1760 microsec
  - 2020 microsec
  - 2323 microsec
  - 2667 microsec
  - 3063 microsec
  - 3521 microsec
  - 4042 microsec
  - 4631 microsec
  - 5291 microsec
  - 6026 microsec
  - 6838 microsec
- EM Bird Height, metres

Horizontal scale 1:10000

**PJX RESOURCES INC.**  
Eddy North Project  
Cranbrook Area  
British Columbia, Canada

**Geotech VTEM System**  
App. Resistivity-Depth Section  
Line L5270  
Ref: Figure 12 in Report

Processed by Geosource  
1136-3 Centre Street, Suite 213  
Thornhill, Ontario, Canada L4J 3M8  
August 2012



Apparent Resistivity Ohm-m

- 5678.06
- 3184.93
- 2218.60
- 1507.30
- 997.70
- 525.62
- 377.66
- 246.98
- 168.98
- 108.84
- 72.89
- 48.51
- 32.04
- 21.28
- 14.08
- 9.24
- 5.94
- 3.92
- 2.58
- 1.72
- 1.14
- 0.75
- 0.50
- 0.33
- 0.22
- 0.15
- 0.10
- 0.07
- 0.05
- 0.03
- 0.02
- 0.01

Easting, m (WGS 84, UTM Zone 11N)

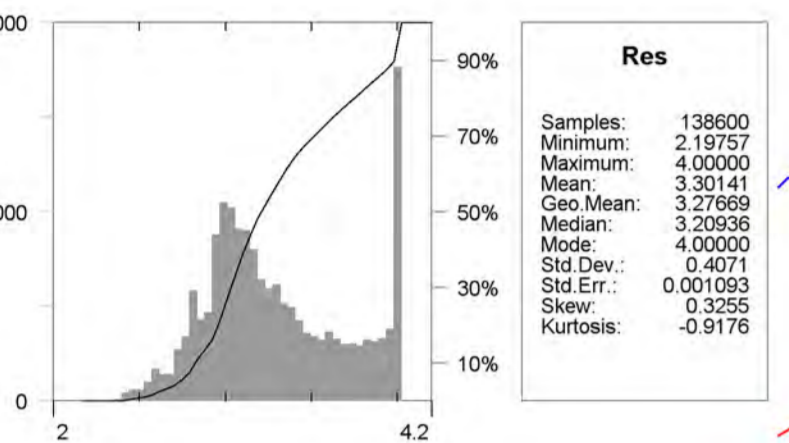
Elevation, m



**Survey Specifications:**  
 Aircraft: Astar B3 helicopter, Registration C-GTEQ  
 Flight Line Spacing: 75 metres  
 Nominal terrain clearance 91 metres  
 EM sensor is 35 metres under helicopter

**Instruments:**  
 Geotech Time Domain Electromagnetic System  
 with concentric Tx/Rx geometry  
 Geometrics G823A Optically-pumped,  
 High Sensitivity Cesium Magnetometer  
 Mag Resolution 0.02 nT at 10 samples/sec  
 Navigation: NovAtel's CDGPS enabled OEM4-G2-3151 GPS  
 receiver, Update Rate 1 Hz with 1.0 m accuracy

**Resistivity Algorithm:**  
 The resistivity was calculated using an analytic  
 expression for a TEM central loop Tx/Rx configuration



Res	
Samples:	138600
Minimum:	2.19757
Maximum:	4.00000
Mean:	3.30141
Geo. Mean:	3.27669
Median:	3.20936
Mode:	4.00000
Std. Dev.:	0.4071
Std. Err.:	0.001093
Skew:	0.3255
Kurtosis:	-0.9176

— Total Magnetic Field, 1 mm = 0.1 nT  
 — Analytic Signal, 1 mm = 0.001 nT/m/m

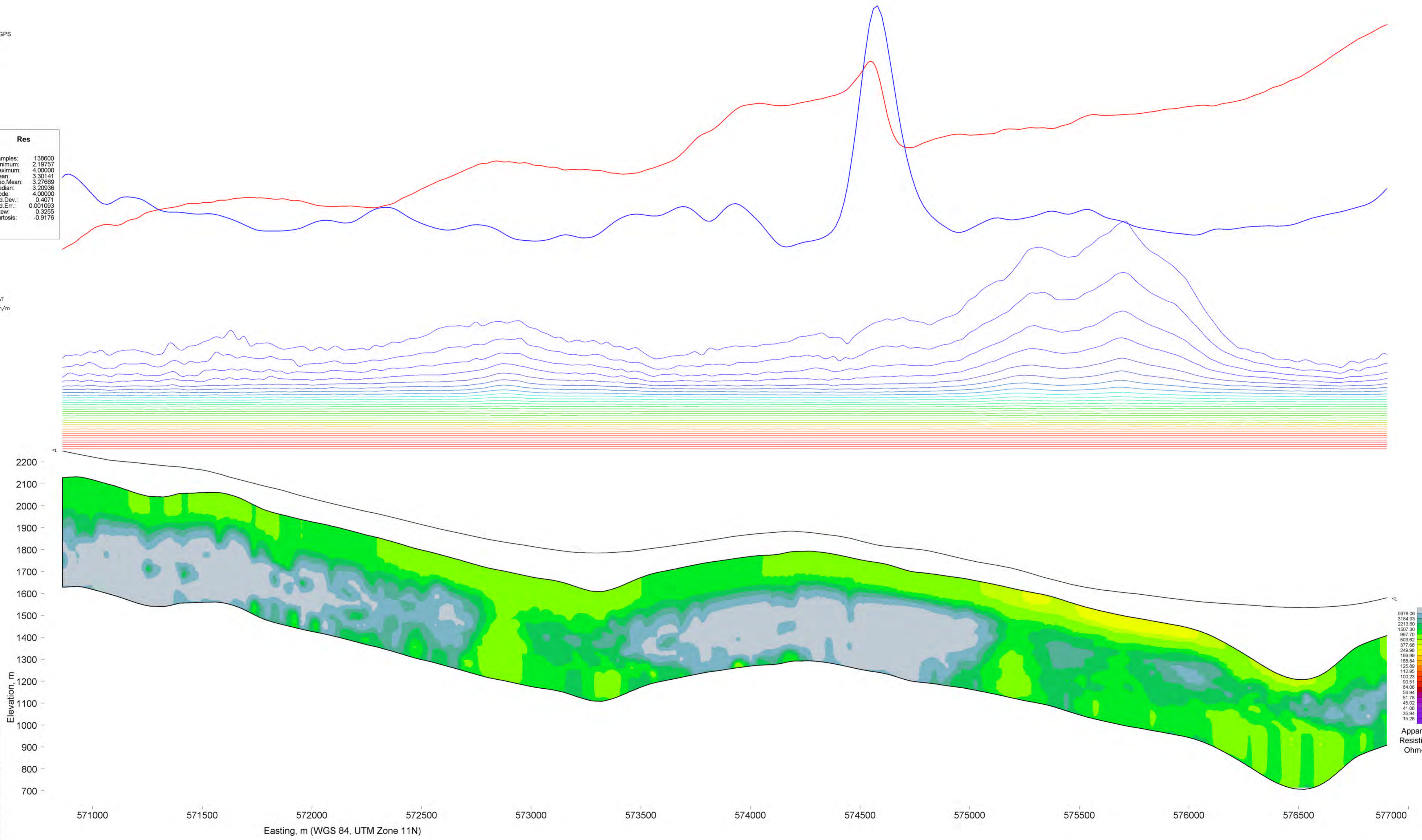
- EM Profiles scale 1 mm = 0.1 pT/(A\*mm<sup>4</sup>)
- 96 microsec
  - 110 microsec
  - 125 microsec
  - 145 microsec
  - 167 microsec
  - 192 microsec
  - 223 microsec
  - 253 microsec
  - 293 microsec
  - 333 microsec
  - 383 microsec
  - 440 microsec
  - 505 microsec
  - 580 microsec
  - 667 microsec
  - 766 microsec
  - 880 microsec
  - 1010 microsec
  - 1161 microsec
  - 1333 microsec
  - 1531 microsec
  - 1750 microsec
  - 2021 microsec
  - 2323 microsec
  - 2667 microsec
  - 3053 microsec
  - 3521 microsec
  - 4042 microsec
  - 4641 microsec
  - 5333 microsec
  - 6125 microsec
  - 7036 microsec
- EM Bird Height, metres

Horizontal scale 1:10000

**PJX RESOURCES INC.**  
 Eddy North Project  
 Cranbrook Area  
 British Columbia, Canada

**Geotech VTEM System**  
 App. Resistivity-Depth Section  
 Line L5290  
 Ref: Figure 13 in Report

Processed by Geosource  
 1136-3 Centre Street, Suite 213  
 Thornhill, Ontario, Canada L4J 3M8  
 August 2012



Elevation, m

Easting, m (WGS 84, UTM Zone 11N)

Apparent Resistivity Ohm-m