


**Ministry of Energy & Mines**  
Energy & Minerals Division  
Geological Survey Branch

**ASSESSMENT REPORT  
TITLE PAGE AND SUMMARY**

<b>TITLE OF REPORT [type of survey(s)]</b> Geophysical Report on the Peaks Prospect	<b>TOTAL COST</b> \$182,690
--	--------------------------------

AUTHOR(S) P.E.Fox PhD,P.Eng SIGNATURE(S) 

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S) MX-10-211 YEAR OF WORK 2011

STATEMENT OF WORK - CASH PAYMENT EVENT NUMBER(S)/DATE(S) Event # 5127060 dated Nov 18 2011

PROPERTY NAME Peaks (Wiggins Creek)

CLAIM NAME(S) (on which work was done) 518840, 515606

COMMODITIES SOUGHT Copper, gold

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN 093A 5

MINING DIVISION Cariboo NTS 93A5

LATITUDE 52 ° 121 ' \_\_\_\_\_ " LONGITUDE 121 ° 42 ' \_\_\_\_\_ " (at centre of work)

OWNER(S)  
1) Eagle Peak Resources 2) \_\_\_\_\_

MAILING ADDRESS  
413-595 Burrard St  
Vancouver, BC V7X 1G4

OPERATOR(S) [who paid for the work]  
1) Eagle Peak Resources 2) \_\_\_\_\_

MAILING ADDRESS  
\_\_\_\_\_  
\_\_\_\_\_

PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude):  
Copper mineralization at the Peaks property consists of fine grained chalcopryrite aggregates disseminated in silicified and epidote and chlorite-altered latite porphyry associated with the emplacement of quartz-feldspar dikes.

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS Fox, P.E. 2009.Geological,geochemical and drilling report,Aris report 31168 . Bysouth, G.D., 1982:Diamond drill report of the Miocene mineral claim group; Aris report 10878.

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 _____ Meridian mapping lt 30 km		518840, 515606	10,261
Electromagnetic _____			
Induced Polarization _____ SJ Geophysics 3DIP 30 km		518840, 515606	124,079
Radiometric _____			
Seismic _____			
Other _____			
Airborne _____			
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		518840, 515606	48,350
Line/grid (kilometres) _____ 30 km			
Topographic/Photogrammetric (scale, area) _____			
Legal surveys (scale, area) _____			
Road, local access (kilometres)/trail _____			
Trench (metres) _____			
Underground dev. (metres) _____			
Other _____			
TOTAL COST			182,690

ASSESSMENT REPORT

GEOPHYSICAL REPORT

On the

PEAKS PROPERTY

Cariboo Mining Division

NTS93A5

Latitude 52° 21', Longitude 121°42'

UTM 10 5802000N, 588000E

For

EAGLE PEAK RESOURCES INC

413 - 595 Burrard St

Vancouver, BC

By

P. E. Fox, PhD., P.Eng

Richmond, B.C.

November 25, 2011

Event No. 5127060

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## **SUMMARY**

This report documents work done by Eagle Peak Resources Inc in 2011 on the Peaks prospect, part of the Miocene project claim block. Work included line cutting and geophysical surveys comprising a 3DIP and magnetometer surveys on the Peaks copper prospect 15 km south of Big Lake, British Columbia.

Most of the Peaks claim area is underlain by Triassic pyritic siltstone, sandstone and conglomerate, which are intruded by a sill-like body of latite porphyry. The latter is the host rock for the Hilltop and Azurite copper showings. The porphyry is cut by numerous northwest striking quartz-feldspar porphyry dikes of Cretaceous age. Copper mineralization at the Peaks property consists of fine grained chalcopyrite aggregates disseminated in epidote and chlorite-altered latite porphyry.

Work this year consisted of 30 km of line cutting, 30 km of 3D induced polarization work and 30 km of ground magnetometer surveying. The most significant finding from this program is the identification of a northwest-trending zone of coincident anomalies in the western portion of the survey area that comprise superimposed chargeability, resistivity low, and a magnetic low, probably due to abundant disseminated sulfides. This may reflect hydrothermal alteration associated with intrusion of a belt of latite porphyry bodies. A diamond drilling program is recommended.

Expenditures total \$ 182,690.

## **INTRODUCTION**

This report documents work done by Eagle Peak Resources Inc in 2011 on the Peaks prospect, part of a large claim block comprising 58 claims collectively known as the Miocene project. Work comprised 30 km of line cutting, 3D induced polarization work and ground magnetometer surveying. Results of the work programs are detailed herein and recommendations made for continuing work. Expenditures total \$ 182,690. Work was paid for by Eagle Peak Resources. The work is part of an overall program recommended by Price (2010)

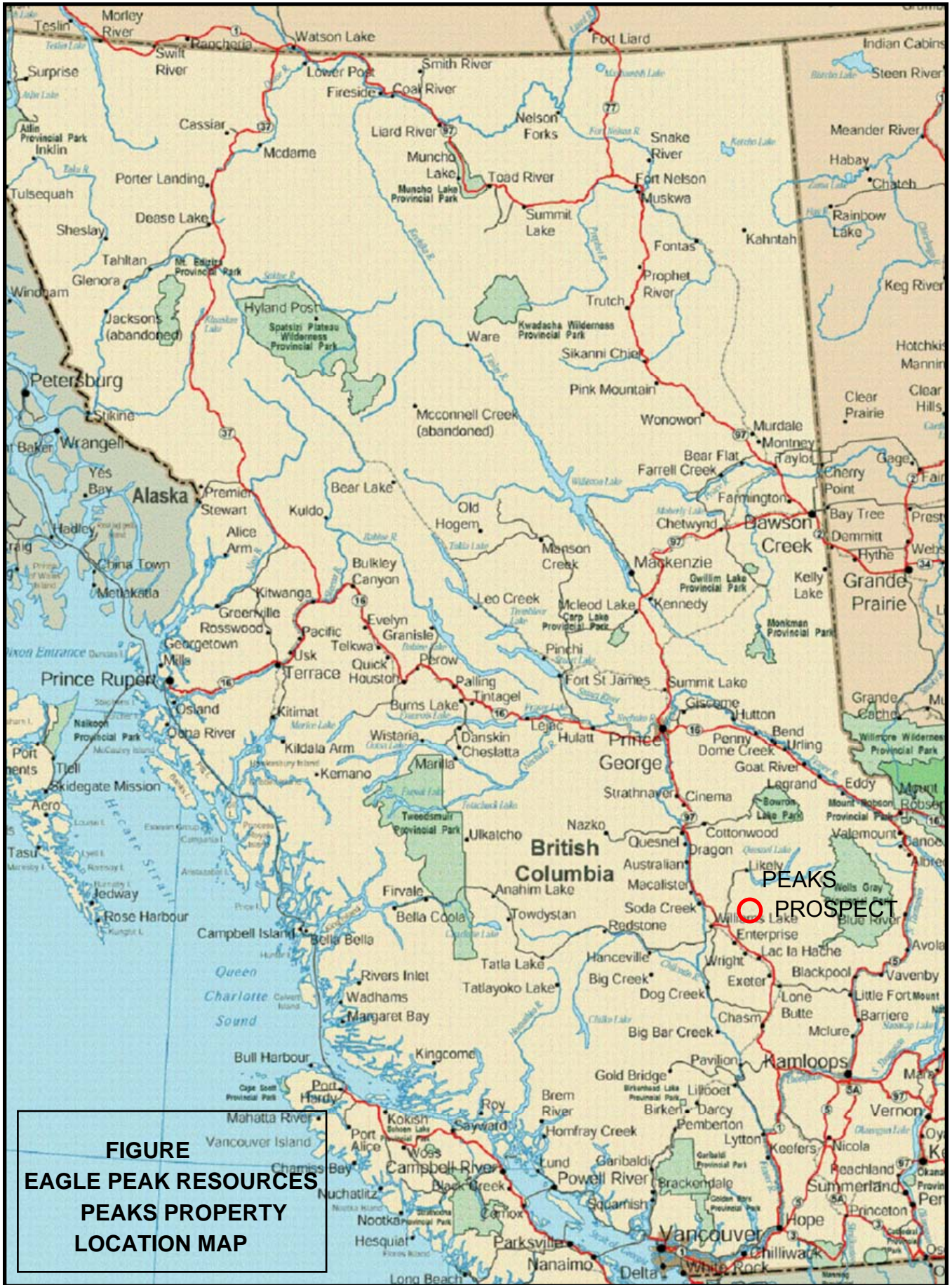
## **LOCATION**

The Peaks property lie in the Cariboo Mining Division on map sheet 093A/5 (Figure 1). The approximate centre of the Miocene claim group is at 5802000N, 588000E (UTM Zone 10). The claim block extends some 45 kilometers north-south and 18 kilometers east-west. The Peaks prospect lies near the Horsefly highway five km north of the community of Miocene some 25 km northeast of 150 Mile House on Provincial Highway #97. The Peaks showing is accessed via Swanson road and the gravel-surfaced Solomon BCFS road that branches south from Swanson Road three km from the Likely highway turnoff approximately three km south of Big Lake. The Peaks prospect is at km 17 at the end of the Solomon BCFS road, where logging trails and old tote roads provide access to most points on the Peaks property.

The claims lie in the Quesnel Highlands physiographic region of the Interior Plateau which is characterized by numerous lakes, broad valleys and low rolling hills and rocky escarpments. Local vegetation consists of pine, spruce, birch, alder and poplar interspersed with meandering streams, shallow lakes, grasslands and boggy wetlands. Glacial till, often thick, predominates and outcropping bedrock, generally Roche moutonee and rocky rubble, is rare.

## **CLAIMS**

The Property consists of 58 contiguous mineral tenures covering an area of 24,271





hectares (Figure 2, Table 1). Expiry dates assume the work documented herein is accepted for assessment requirements. Work was filed on November 18, 2011 under event # 5127060. Work was completed between July 31, 2011 and September 20, 2011 under Mine Permit MX-10-211 and was ongoing throughout that period.

## HISTORY

Placer and bedrock exploration of the Likely - Horsefly region began with the discovery of placer gold deposits in 1859. Government sponsored airborne geophysical

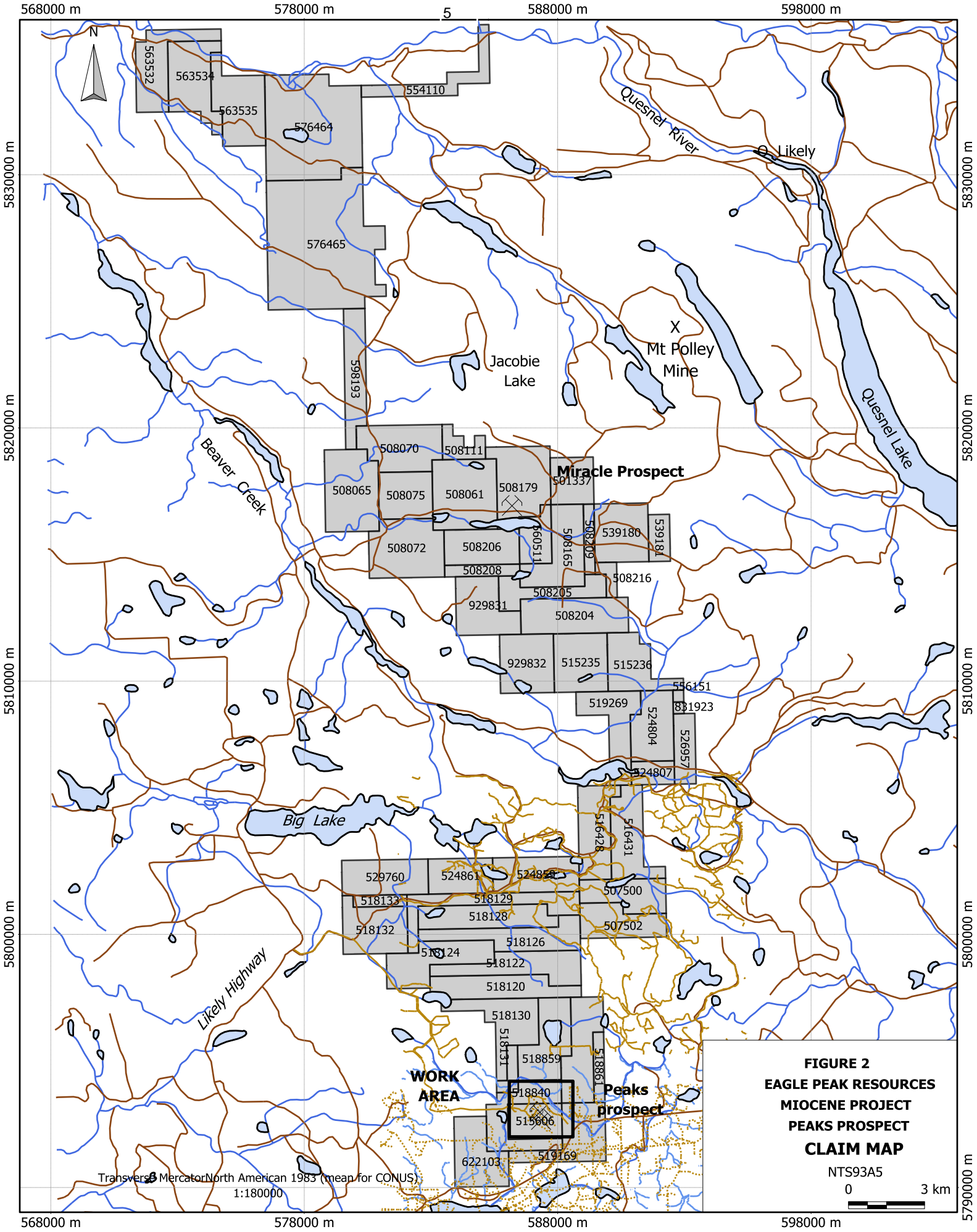
**TABLE 1. CLAIM LIST**

Tenure #	Name	Expiry	Area	Tenure #	Name	Expiry	Area
507500	VEITH	May 1 2013	395	508111	MIRACLE 9	May 1 2013	157
507502	VEITH 2	May 1 2013	395	508112	MIRACLE 10	May 1 2013	20
508061		May 1 2013	708	508165		May 1 2013	532
508070		May 1 2013	551	508179		May 1 2013	630
508072		May 1 2013	650	508204		May 1 2013	591
508075		May 1 2013	394	508205		May 1 2013	315
508206	MIRACLE 11	May 1 2013	413	515606	PEAKS	May 1 2013	297
508208	MIRACLE 12	May 1 2013	137	516428	VEITH 5	May 1 2013	493
508209	MIRACLE 13	May 1 2013	118	516431	VEITH 6	May 1 2013	493
508216	GOLD 3	May 1 2013	79	518120	VEITH 15	May 1 2013	494
515235	GOLD B	May 1 2013	493	518122	VEITH 16	May 1 2013	494
515236	GOLD C	May 1 2013	434	518124	VEITH 17	May 1 2013	494
518840	PEAKS 2	May 1 2013	455	518126	VEITH 18	May 1 2013	494
518133	VEITH 24	May 1 2013	99	518128	VEITH 19	May 1 2013	494
518859	VEITH 25	May 1 2013	494	518129	VEITH 20	May 1 2013	454
518860	VEITH 26	May 1 2013	494	518130	VEITH 21	May 1 2013	494
518861	VEITH 27	May 1 2013	118	518131	VEITH 22	May 1 2013	99
519169	VEITH 28	May 1 2013	495	518132	VEITH 23	May 1 2013	494
519269	GOLD G	May 1 2013	473	529760	VEITH 37	May 1 2013	474
524804	GOLD H	May 1 2013	473	539180	CREAM 1	May 1 2013	492
524807	GOLD J	May 1 2013	158	539181	CREAM 2	May 1 2013	157
524859	VEITH 34	May 1 2013	474	556151	VEITH 38	May 1 2013	20
524861	VEITH 35	May 1 2013	355	560511	MIRACLE 14	May 1 2013	256
526957	VEITH 36	May 1 2013	236	831923	VEITH 38	May 1 2013	20
929831	Fire 1	Nov 18 2012	473	929832	Fire 2	Nov 18 2012	492
554110	QR SE	May 1 2013	333	563532	MT-AC4	May 1 2013	490
563534	MT-AC5	May 1 2013	549	563535	MT-AC6	May 1 2013	569
576464	MC1	May 1 2013	1491	576465	MC2	May 1 2013	2160
598193		May 1 2013	432	508065		May 1 2013	669

surveys and regional geochemical surveys prompted extensive exploration activity. The QR gold deposit was discovered in 1975 and the Mount Polley mine, a few kilometers to the northeast of the claim area, was discovered in 1966 and commenced production in 1997. The first documented work on the Peaks Property was in 1969 when a soil geochemical survey was carried out on the Peaks prospect (also known as Wiggins Creek or Pontiac) by Grandeur Mines Ltd. (Philp, 1969). This was followed by geochemical surveying and geophysical work (Holcapek and Philp, 1970). Gibraltar Mines Ltd. optioned the claims and undertook an induced polarization survey (Walcott, 1982) and diamond drilling in 1982. Six diamond drill holes were completed (Bysouth, 1982). In 2006 Eagle Peak Resources Inc. carried out a geophysical survey consisting of magnetic and electromagnetic surveying along with property wide stream sediment sampling. The Company also completed a reconnaissance soil sampling program adjacent to the Peaks copper occurrences as well as limited rock chip sampling. Eagle Peak Resources carried out further airborne geophysical surveys including radiometric data in 2008 and 1,081 m of diamond drilling in 2009 (Fox, 2009).

## **REGIONAL GEOLOGY**

The Miocene claim group (Figure 3) lies along the Central Quesnel Terrane, a complex continent-margin basin forming a regional synclinal structure west of the North American plate during the Triassic-Jurassic (Panteleyev, 1996). Oldest strata are black shale, argillite, siltstone and sandstone of Middle Triassic age. These rocks underlie much of the Miocene claim area. Overlying this older unit are basaltic pillow lava and breccia of Norian age and still younger fault-bounded blocks of Lower Jurassic felsic breccia. Extensive beds of Jurassic pebble conglomerate, shale, siltstone and sandstone with thin red bed units underlie the southwest corner of the Miocene claim area and part of the Peaks property. These rocks are cut by numerous Cretaceous(?) granitic bodies and are overlain by regionally extensive flat lying Chilcotin group basalt flows of Miocene age. Geology of the Peaks prospect is given below.



**FIGURE 2**  
**EAGLE PEAK RESOURCES**  
**MIOCENE PROJECT**  
**PEAKS PROSPECT**  
**CLAIM MAP**

NTS93A5

0 3 km

Transverse Mercator North American 1983 (mean for CONUS)  
 1:180000

**WORK**  
**AREA**

**Peaks**  
**Prospect**

**Miracle Prospect**

Jacobie  
 Lake

X  
 Mt Polley  
 Mine

Quesnel River

Quesnel Lake

Beaver Creek

Big Lake

Lively Highway



## **WORK PROGRAM**

The 2011 work program comprised 30 km of line cutting completed by Company personnel based in Williams Lake, BC, 30 km of induced polarization surveys carried out by SJ Geophysics Ltd and 30 km of ground magnetometer work carried out by Meridian Mapping of Vernon, BC between July 31 and September 30, 2011. Results of this work are compiled and detailed below. Work was done under Permit MX-10-211.

## **GEOLOGY**

Geology for the Peaks property is provided in Figure 4. This work revises and updates previous work by Bailey and Livgard (2007) and Philp (1969), Fox (2009). Most of the Peaks claim area is underlain by pyritic siltstone, sandstone and conglomerate of the lower unit of the Quesnel Terrane (Figure 4 unit 1). Latite porphyry (Unit 2), is the host rock for the Hilltop and Azurite copper showings. This unit, a trachybasalt in composition, forms a low ridge in the central part of the claim area and is bounded to the east by Jurassic sandstone and maroon conglomerate and elsewhere by unit 1 siltstone. It is cut by a swarm of northwest-trending quartz-feldspar porphyry dikes probably of Cretaceous age.

The latite unit is an augite-plagioclase porphyry of prominent 2cm euhedral plagioclase phenocrysts set in a fine grained matrix of plagioclase laths and interstitial K-feldspar. The rock has a well developed trachytic texture of strongly aligned plagioclase crystals. Minor constituents are epidote, often abundant, chlorite, leucoxene, hematite and pyrite. Augite forms euhedral phenocrysts (5mm) commonly altered to epidote, chlorite, actinolite and rare chalcopyrite. Common alteration products are sericite, calcite, albite, silica and amorphous hematite. The latite unit forms an east dipping tabular body intrusive into the unit 1 pyritic siltstone. Drill holes 29 and 34 drilled by Gibraltar Mines in 1982 and holes 09-1 and 2 at the Hilltop zone and holes 09-4 and 6 at the Azurite showing 300m south all intersected unit 1 siltstones at the bottom of the holes indicating



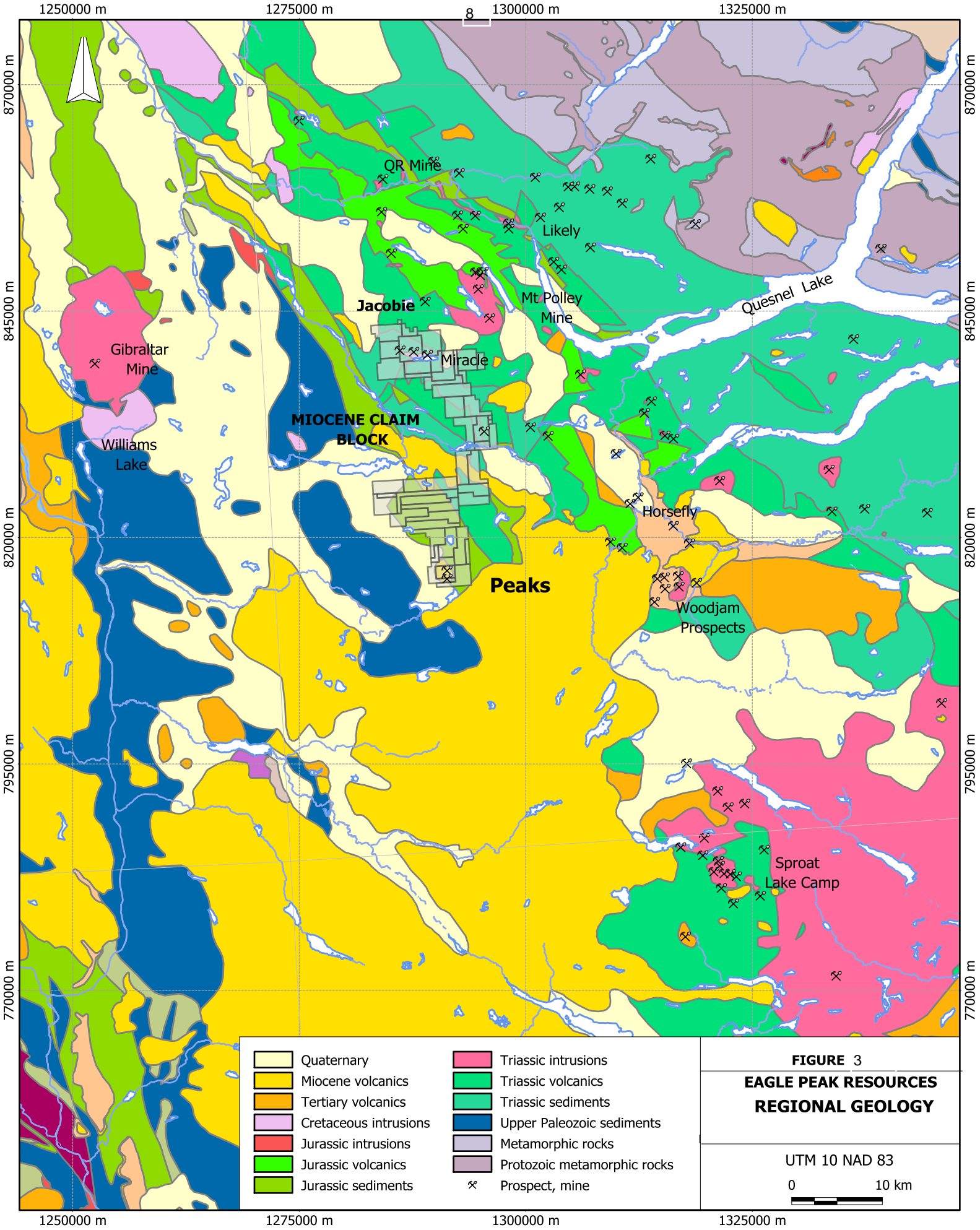
at a (vertical) depth of about 100m. The contact between the two units is either conformable to siltstone bedding or, more commonly, there is a complex contact breccia or mixed zone comprising fragments of both rock units and irregular breccias of latite, fragments of broken plagioclase crystals and black angular fragments all set in a clastic-looking greenish, epidote-rich matrix.

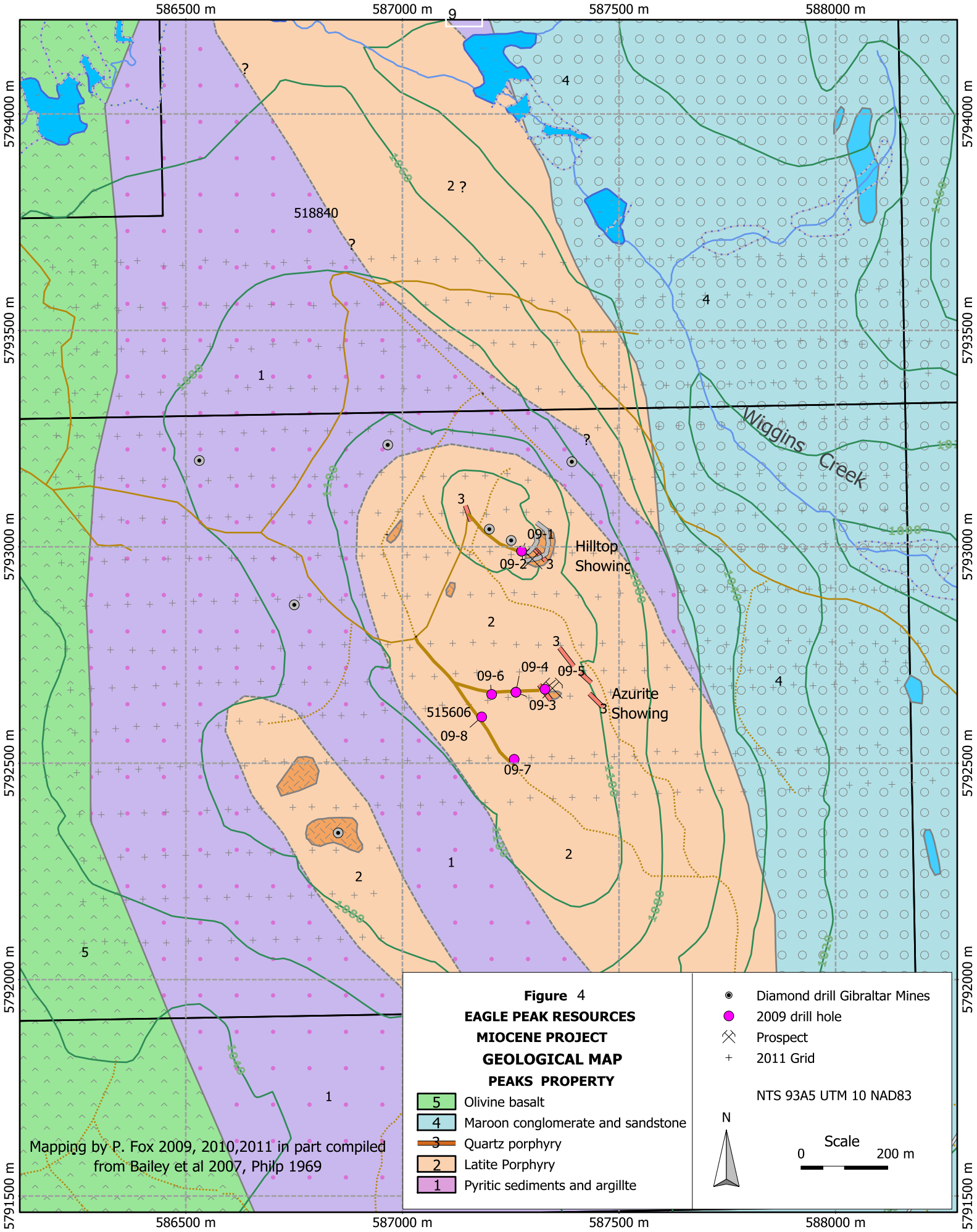
The latite unit is cut by numerous northwest striking quartz-feldspar porphyry dikes (Unit 3) probably of Cretaceous age based on similar rocks elsewhere. The dikes are commonly 2-4m thick usually seen in drill holes or rubble zones at surface. They consist of 20% 2mm quartz phenocrysts and 4mm stubby feldspar phenocrysts set in a very fine grained matrix. They are intensely altered to sericite and fine grained pyrite. Contacts with the latite porphyry are sharp and the host porphyry is often silicified to a hard, buff coloured unit in which the plagioclase and augite phenocrysts are largely destroyed.

Unit 4 comprises a poorly exposed maroon sandstone and conglomerate along Wiggins Creek valley. It appears to overlie Units 1 and 2 and is thought to be a young sequence of probable Jurassic age. Unit 5 lies to the west and comprises grey, massive basalt of the Chilcotion Group.

### **Mineralization**

Copper mineralization consists of fine grained chalcopyrite aggregates disseminated in chlorite-altered latite porphyry. Fracture coatings and thin seams are less common and more rarely in calcite veinlets. The Hilltop and Azurite showings have been sampled on various property examinations and are detailed in Bailey and Livgard (2007). A number of individual rock samples from trenches of the mineralized latite unit at the Hilltop showing returned assays of about 2% copper. A chip sample here returned a tenor of 0.44% copper over 25 m. Bailey and Livgard (2007) also report copper tenors of selected mineralization of 2.27% Copper, 0.02% copper and 2.74% copper from old





**Figure 4**  
**EAGLE PEAK RESOURCES**  
**MIOCENE PROJECT**  
**GEOLOGICAL MAP**  
**PEAKS PROPERTY**

- 5 Olivine basalt
- 4 Maroon conglomerate and sandstone
- 3 Quartz porphyry
- 2 Latite Porphyry
- 1 Pyritic sediments and argillite

- Diamond drill Gibraltar Mines
- 2009 drill hole
- Prospect
- + 2011 Grid

NTS 93A5 UTM 10 NAD83



Scale  
 0 200 m

Mapping by P. Fox 2009, 2010, 2011 in part compiled from Bailey et al 2007, Philp 1969

trenches on the Azurite showing 300m south of the Hilltop zone. Both the Hilltop and Azurite showings were targets for the 2009 drill program. Anomalous copper contents from the drill program prompted the current geophysical programs (Price, 2010).

## **GEOPHYSICS**

Results of the Magnetometer and Induced Polarization surveys are discussed below. Detailed technical reports complete with survey specifications and instrument data are given in Appendix I (Logistics Report on the Ground Magnetic Survey Miocene Project, Peaks Grid, November 2011) and Appendix II (Three Dimensional Induced polarization Survey on the Miocene Property, Peaks Prospect grid by C. Hermiston dated September 2011). The reader is directed to these reports for survey details.

### **Magnetometer Survey**

The magnetometer survey comprised a total of 27.2 kilometers surveyed over three field days. The magnetic survey was conducted by two operators using two GPS equipped GSM Ver 7.0 19W Overhauser walking magnetometers manufactured by GEM Systems of Richmond Hill, Ontario (see Appendix I for detailed instrument specifications). This instrument measures variations in the total intensity of the earth's magnetic field to an absolute accuracy of +/- 0.1 nT. They were used in "walking mode" and set to record a reading every 2 seconds. A third GSM 19 magnetometer was employed as a stationary base to measure the diurnal variations. Data was recorded at a 3 second interval at the base. Base data was used to apply diurnal correction to the rover data. A 200 meter length of overlap line was walked each morning by both units. Data from this overlap line was used to level the data between the two instruments as well as between survey days. For Locations, the GSM 19W magnetometers are equipped with Novatel SuperStar II DGPS boards. The GPS attaches 3-dimensional coordinates, differentially corrected in real-time using the WAAS service, to each magnetometer reading. Full survey specifications are given in Appendix I along with appropriate map products.

## Induced Polarization Survey

The 3DIP survey consisted of a single grid with 17 lines (100 m line spacing). Stations were flagged and marked every 50m. Line labels are L1700N starting at the northernmost line to L100N for the southernmost line. The station labels started at 10000E on the western edge of the grid and ended with station 12000E on the eastern edge. Lines 300N, 200N and 100N were trimmed to 700 m because of land use permission issues. All of the location information was recorded by the SJ Geophysics crew, including differential GPS control points. Specifications of these instruments and equipment parameters are summarized in Appendix II. The receiver lines of the potential array were connected using special 2-conductor cables, each 50 m long. At each receiver station, alternating wires from the 2-conductor cable were connected to potential electrodes, creating an interlaced array. For the receiver line, the electrodes consisted of stainless steel pins, 50 cm long and 10 mm in diameter, which were hammered into the ground. At each current station (50 m intervals), current was injected using two to four long (75 cm) stainless steel electrodes hammered into the ground. The remote current locations consisted of five 1 m stainless steel rods, 15 mm in diameter. . Full survey specifications are given in Appendix II along with appropriate map products.

## RESULTS

. The most significant geophysical feature is a northwest-trending chargeability high, associated with a resistivity low and a magnetic low, located on the western side of the grid, at a depth of approximately 100 – 200 m. This anomalous zone runs parallel to and coincides with a body of latite porphyry surrounded by pyritic sediments and argillite. This northwest-trending zone of geophysical anomalies likely represents a region anomalously rich in pyrite and clay compared to other parts of the survey area (Appendix III, Figures 2-7). A geological map showing key targets is given in Figure 5 and a chargeability map for the 150m depth slice showing a deep chargeability anomaly at the western part of the grid area is given in Figure 6. A near-surface anomaly 200m x 100m lies 300m northwest of the Hilltop zone entirely(?) within the latite porphyry unit.

## CONCLUSIONS AND RECOMMENDATIONS

The most significant finding from the 3DIP geophysical survey is the identification of a northwest-trending zone of coincident anomalies in the western portion of the survey area. These anomalies consist of superimposed chargeability, resistivity low, and a magnetic low, probably due to abundant disseminated sulfides. This interpretation is consistent with the existing geology and may reflect hydrothermal alteration associated with intrusion of a belt of latite porphyry bodies. Resistivity section plots (1200N) show gentle dips of the latite units consistent with results of the 2009 drill program. Diamond drilling of the deep target and the near-surface anomaly northwest of the Hilltop zone is highly recommended. Approximately 2,000m of core drilling will be needed.

## COST STATEMENT

Work expenditures are tabulated below in Table 2.

**TABLE 2. EXPENDITURES**

Peaks Project	Item	Rate	cost	totals
Labour: P.E.Fox	Supervision, 4 days	750	3000	
S Kana	Surveyor, 16 days	300	4800	
K Tattersall	Field supervisor, 10 days	3600	3500	
J. Coombs	Cutter, 16 days	300	4800	
J Tattersall	Field hand, 16 days	225	3600	
R. Wodsey	Cutter	300	4800	
A. Hayward	Field hand, 3 days	200	600	
Z. Ditoro	Field hand, 3 days	300	900	
P. McKeweon	Field hand, 14 days	200	2800	
M. Rujanacha	Field hand, 14 days	200	2800	31600
Accomodation,board	Sandman Inn, 46 days	175		8050
Equipment rentals:	4wd truck, 16 days	150	2400	
	4wd truck, 10days	150	1500	
	ATV quad, 16 days	125	5900	5900
Field supplies	Gas, saw rentals			900
Magnetometer survey	Meridian Mapping	30 line km		10261
Induced polarization	SJ Geophysics Ltd	30 line km		124079
Report preparation				1900
<b>TOTAL COSTS</b>				<b>182,690</b>

Program costs are partitioned as follows: magnetometer survey - \$10,261, 3DIP induced polarization survey by SJ Geophysics Ltd - \$124,079, Grid preparation and line cutting - \$46,450 (\$1,548/line km).

Prepared by



P.E. Fox PhD., P.Eng

November 25, 2011



## STATEMENT OF QUALIFICATIONS

I, Peter E. Fox of Richmond, British Columbia do hereby certify that I:

- am a graduate of Queens University in Kingston, Ontario with a Bachelor of Science and Master of Science degrees in Geological Sciences in 1959 and 1962, and a graduate of Carleton University, Ottawa, Ontario with a degree of Doctor of Philosophy in 1966.
- am a member of the Association of Professional Engineers and Geoscientists of British Columbia #8133.
- have practiced my profession since 1966.
- .am the author of the report entitled “Geophysical Report on the Peaks Prospect” and supervised all of the work therein.

Dated at Richmond, British Columbia this 25<sup>th</sup> Day of November, 2011.

Respectfully submitted,



---

Peter E. Fox PhD.,P.Eng.

November 25, 2011





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Hermiston, C., 2011. Three Dimensional Induced Polarization Survey on the Miocene Property, Peaks Grid. SJ Geophysics Ltd report, September, 2011, 19p.

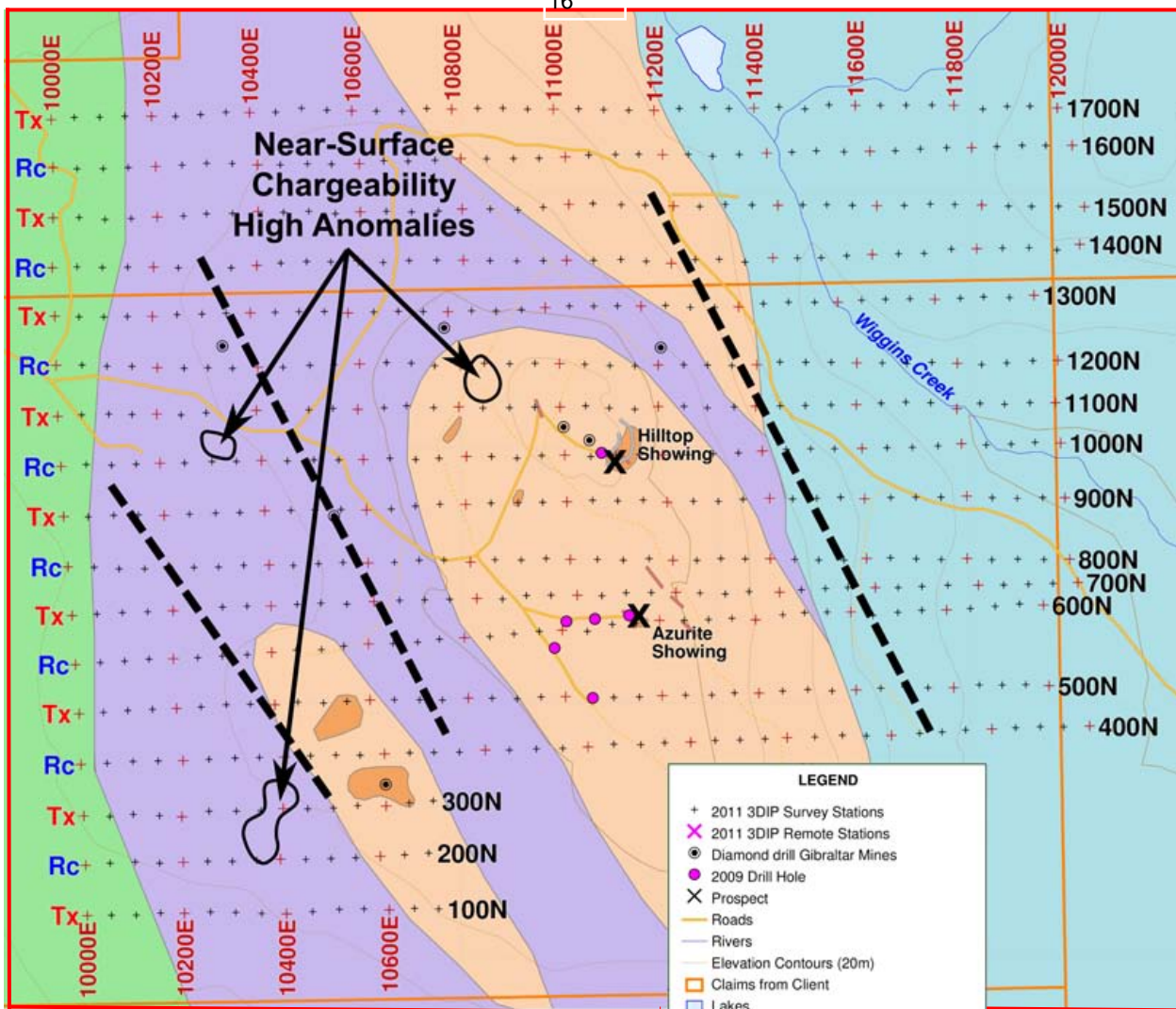
Holcapek, F. And Philp, R.H., 1970: Report on geological, magnetometer and geochemical surveys of the Miocene property, Grandeur Mines Ltd., Aris report 2475.

Panteleyev, A., Bailey, D.G., Bloodgood, M.A. and Hancock, K.D., 1996: Geology and mineral deposits of the Quesnel River - Horsefly map area, central Quesnel Trough, British Columbia; B.C. Ministry of Employment and Investment, Energy and Minerals Division, Geological Survey Branch, Bulletin 97, 155p.

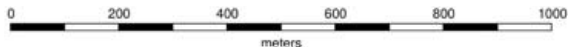
Philp, R.H.D., 1969: Report on a geochemical survey on the Miocene property; Grandeur Mines Ltd., Aris Report 2014.

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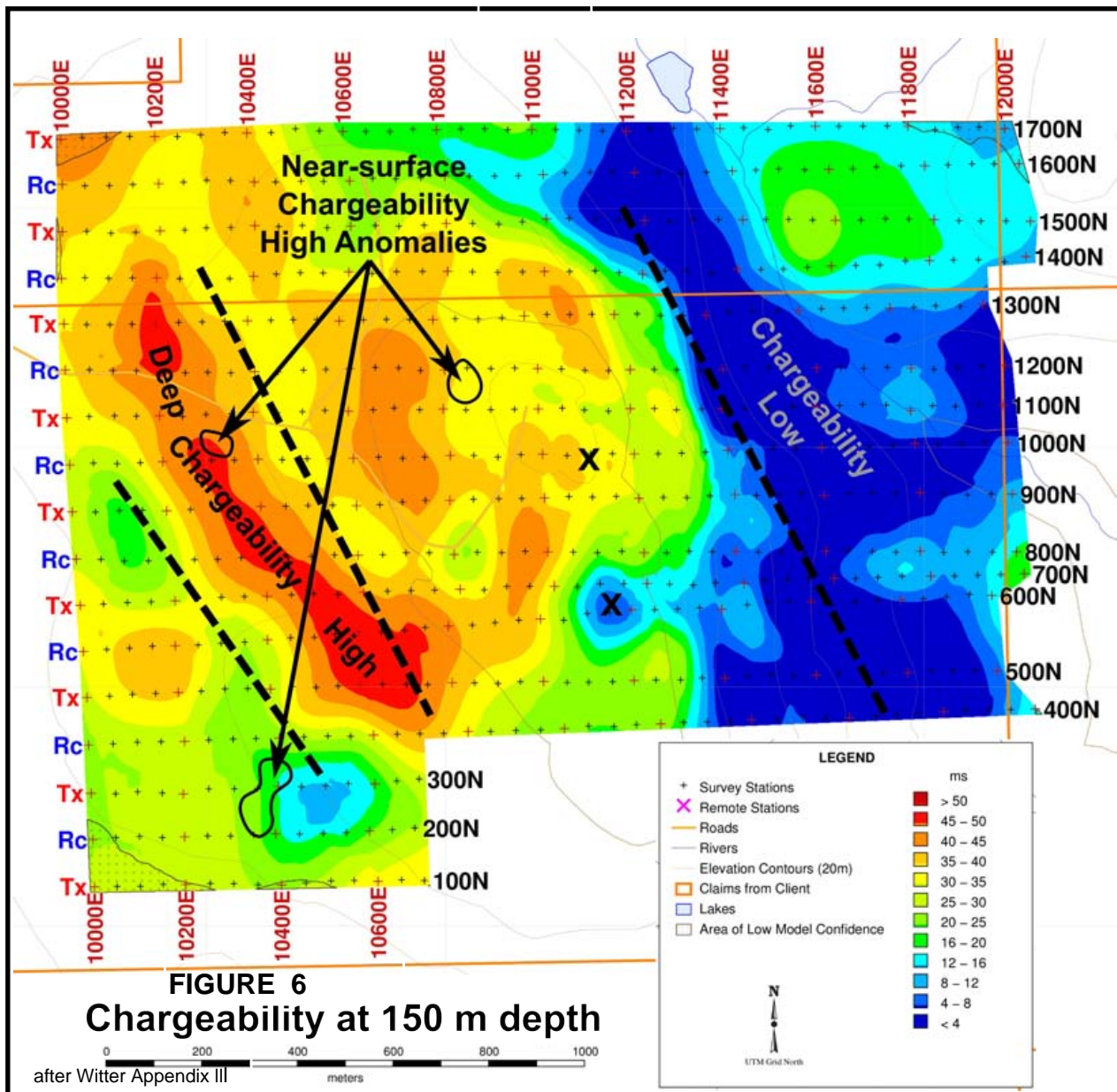
## Geologic Map



after Witter, Appendix III, Figure 1



**FIGURE 5**  
Interpretation Map



**APPENDIX I**

**REPORT ON THE GROUND MAGNETOMETER SURVEY  
BY MERIDIAN MAPPING SERVICES**



9400 Bel Air Drive, Coldstream, BC, V1B-1C3  
Tel: (250)558-5068 Fax: (250)558-5068  
www.MeridianMapping.ca

## LOGISTICS REPORT

On

### GROUND MAGNETIC SURVEY

MIOCENE PROJECT – PEAKS GRID  
CARIBOO MINING DISTRICT, BC  
52° 16" 50" N Lat, 121° 43" 20" W Long  
NAD 83 UTM Zone 10 587000E, 5793000N  
NTS Mapsheet: 93A/5  
BCGS Mapsheet: 093A.022

September 27<sup>th</sup> to 29<sup>th</sup> 2011

For

EAGLE PEAK RESOURCES INC.  
Suite 413, Bentall 3  
595 Burrard Street  
Vancouver, British Columbia  
V7X 1G4

By

Meridian Mapping Ltd.

Coldstream, British Columbia

November 2011

## **INTRODUCTION:**

Between September 27<sup>th</sup> and 29<sup>th</sup> 2011, Meridian Mapping Ltd. completed a ground magnetometer survey over the Peaks grid on the Miocene Property in the Cariboo Region of British Columbia for Eagle Peak Resources Inc.

## **PROPERTY LOCATION & ACCESS:**

The Miocene Property is located between the Likely Highway and Horsefly Road, approximately 33 kilometers northeast of the City of Williams Lake in the Cariboo Mining Division.

Access was gained from Williams Lake via highway 97 south to 150 Mile House, then travelling northeast on the Likely Highway to the Solomon Road. The Peaks grid is accessed by travelling 12 kilometers southeast on the Solomon forestry road which bi-sects the grid.

## **SURVEY SPECIFICATIONS:**

### *Survey Grid:*

An existing grid had recently been established and cut in the survey area. A total of 16 lines were surveyed on an azimuth of 90°. 13 lines were 2000m long and the 3 southern most lines were 800m long.

A total of 27.2 kilometers were surveyed over three field days.

### *Magnetic Survey:*

The magnetic survey was conducted by two operators using two GPS equipped GSM Ver 7.0 19W Overhauser walking magnetometers manufactured by GEM Systems of Richmond Hill, Ontario (see Appendix I for detailed instrument specifications). This instrument measures variations in the total intensity of the earth's magnetic field to an absolute accuracy of +/- 0.1 nT. They were used in „walking mode“ and set to record a reading every 2 seconds. A third GSM 19 magnetometer was employed as a stationary base to measure the diurnal variations in the earth's magnetic field. Data was recorded at a 3 second interval at the base. This base data was used to apply diurnal correction to the rover data. A 200 meter length of overlap line was walked each morning by both units. Data from this overlap line was used to level the data between the two instruments as well as between survey days.

### *Positional Control:*

The GSM 19W magnetometers are equipped with Novatel SuperStar II DGPS boards. The GPS attaches 3-dimensional coordinates, differentially corrected in real-time using the WAAS service, to each magnetometer reading. Accuracies of +/- 1.5m can be achieved in ideal conditions, however +/- 5m is more typical under tree canopy. Garmin GPSMap 60CSx units, which provide a similar accuracy, were also used for navigation and recorded track data at a 2 second interval for backup.

## **DATA PROCESSING:**

### *Preliminary Processing:*

Preliminary processing of the field data included:

- Diurnal correction of the rover data using data from the stationary base.
- Leveling of data from the individual units and multiple survey days using data from the overlap line.
- Cleaning GPS „spikes“ and extrapolating positions to fill GPS gaps.
- Trimming of unnecessary data.
- Preliminary QA/QC of both magnetic and positional data to ensure quality and completeness of field data prior to the field crew leaving the project.

### Final Processing:

Final processing of the total field magnetometer data was performed in Geosoft Oasis Montaj, and followed conventional processing techniques. Processing steps were as follows:

- Diurnally corrected total magnetic profile data was despiked either manually, or by a non-linear filter, as required. This step removes one-station spikes that are caused by instrument dropouts or sensor "knocks".
- The despiked data was then lightly smoothed using a 7 fiducial-long low pass filter. This step removed the 10 to 15nT saw-tooth noise which is inherent in walking magnetometer data.
- A total magnetic intensity (TMI) grid was generated by gridding the final filtered data using the minimum curvature algorithm, with a grid cell size typically 1/5 of the line separation.
- A calculated 1<sup>st</sup> vertical derivative (1VD) grid was generated from the TMI grid using a convolution grid filter.
- An analytic signal (AS) grid was generated from the TMI grid using a fast Fourier transform algorithm.
- Geotiff maps of TMI profiles, TMI colour grid, TMI B&W contours, 1VD colour grid, 1VD B&W contours, AS colour grid, AS B&W contours, and line path maps were exported.

### **DATA DELIVERABLES:**

Deliverable data includes:

1. Total Magnetic Intensity
2. Calculated 1<sup>st</sup> Vertical Derivative
3. Analytic Signal
4. B&W Contour Plots of above three.
5. Profiles of Total Magnetic Intensity
6. Survey Track Plot

Respectfully Submitted,  
Meridian Mapping Ltd.



Dugald Dunlop  
B.Sc. (Geology)

APPENDIX I – EQUIPMENT SPECIFICATIONS  
AND SURVEY MAPS





# Overhauser

Magnetometer / Gradiometer / VLF (GSM-19 v7.0)

Our World is **Magnetic.**

**GEM's unique Overhauser system combines data quality, survey efficiency and options into an instrument that takes the leading place in the industry.**

**And the latest v7.0 technology upgrades provide even more value:**

Data export in standard XYZ (i.e. line-oriented) format for easy use in standard commercial software programs

Programmable export format for full control over output

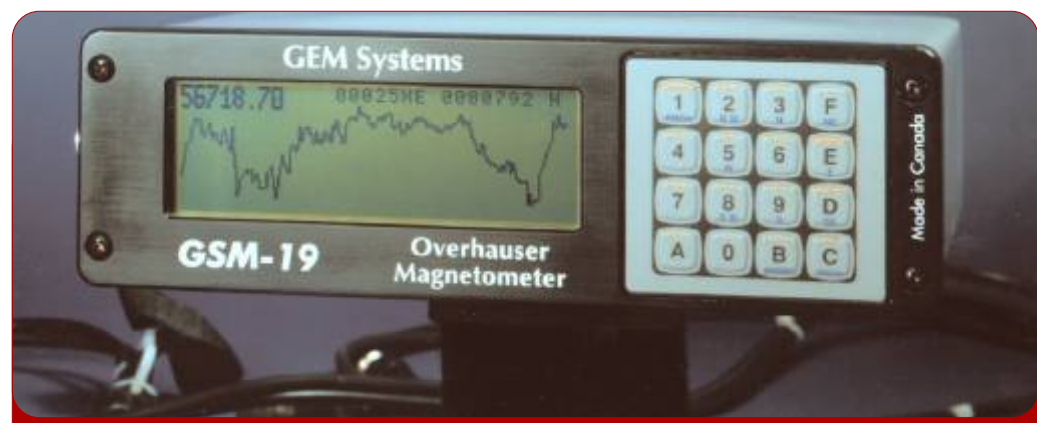
GPS elevation values provide input for geophysical modeling  
Enhanced GPS positioning resolution

Standard GPS:  
<1.5m SBAS (WAAS, EGNOS, MSAS)  
High resolution CDGPS Option:  
<0.6m SBAS (WAAS, EGNOS, MSAS)  
<0.6m CDGPS (Canada, USA, Mexico)  
<0.7m OmniStar VBS2

Multi-sensor capability for advanced surveys to resolve target geometry

Picket and line marking / annotation for capturing related surveying information on-the-go

**And all of these technologies come complete with the most attractive savings and warranty in the business!**



Overhauser (GSM-19) console with sensor and cable. Can also be configured with additional sensor for gradiometer (simultaneous) readings.

The GSM-19 v7.0 Overhauser instrument is the total field magnetometer / gradiometer of choice in today's earth science environment -- representing a unique blend of physics, data quality, operational efficiency, system design and options that clearly differentiate it from other quantum magnetometers.

With data quality exceeding standard proton precession and comparable to costlier optically pumped cesium units, the GSM-19 is a standard (or emerging standard) in many fields, including:

- **Mineral exploration** (ground and airborne base station)
- **Environmental and engineering**
- **Pipeline mapping**
- **Unexploded Ordnance Detection**
- **Archeology**
- **Magnetic observatory measurements**
- **Volcanology and earthquake prediction**

### Taking Advantage of the Overhauser Effect

Overhauser effect magnetometers are essentially proton precession devices - except that they produce an order-of-magnitude greater sensitivity.

These "supercharged" quantum magnetometers also deliver high absolute accuracy, rapid cycling (up to 5 readings / second), and exceptionally low power consumption.

The Overhauser effect occurs when a special liquid (with unpaired electrons) is combined with hydrogen atoms and then exposed to secondary polarization from a radio frequency (RF) magnetic field.

The unpaired electrons transfer their stronger polarization to hydrogen atoms, thereby generating a strong precession signal -- that is ideal for very high-sensitivity total field measurements.

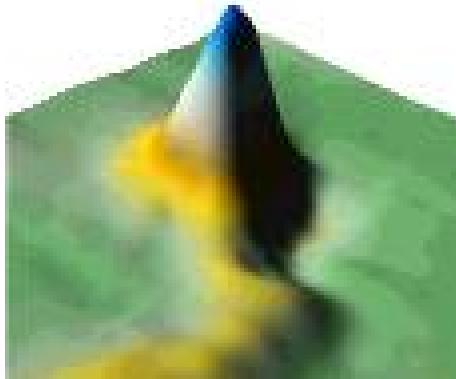
In comparison with proton precession methods, RF signal generation also keeps power consumption to an absolute minimum and eliminates noise (i.e. generating RF frequencies are well out of the bandwidth of the precession signal).

In addition, polarization and signal measurement can occur simultaneously - which enables faster, sequential measurements. This, in turn, facilitates advanced statistical averaging over the sampling period and/or increased cycling rates (i.e. sampling speeds).

Other advantages are described in the section called, "GEM's Commercial Overhauser System" that appears later in this brochure.

## Maximizing Your Data Quality with the GSM-19

Data quality is a function of five key parameters that GEM has taken into consideration carefully in the design of the GSM-19. These include sensitivity, resolution, absolute accuracy, sampling rates and gradient tolerance.



**Data from Kalahari Desert kimberlites. Courtesy of MPH Consulting (project managers), IGS c. c. (geophysical contractor) and Aegis Instruments (Pty) Ltd., Botswana.**

**Sensitivity** is a measure of the signal-to-noise ratio of the measuring device and reflects both the underlying physics and electronic design. The physics of the Overhauser effect improves sensitivity by an order of magnitude over conventional proton precession devices. Electronic enhancements, such as high-precision precession frequency counters (see the v6.0 & v7.0 - New Milestones section) enhance sensitivity by 25% or more.

The result is high quality data with sensitivities of  $0.02 \text{ nT} / \sqrt{\text{Hz}}$ . This sensitivity is virtually the same as the sensitivity of costlier optically-pumped cesium systems.

**Resolution** is the minimum step of the counter used to measure precession frequency and its conversion into magnetic field. It is generally higher than the sensitivity to avoid a contribution of the counter to overall system noise. The GSM-19 has unmatched resolution (0.01 nT).

This level of resolution translates into well-defined, characteristic anomalies; improved visual display; and enhanced numerical data for processing and modeling.

**Absolute accuracy** defines maximum deviation from the true value of the measu-

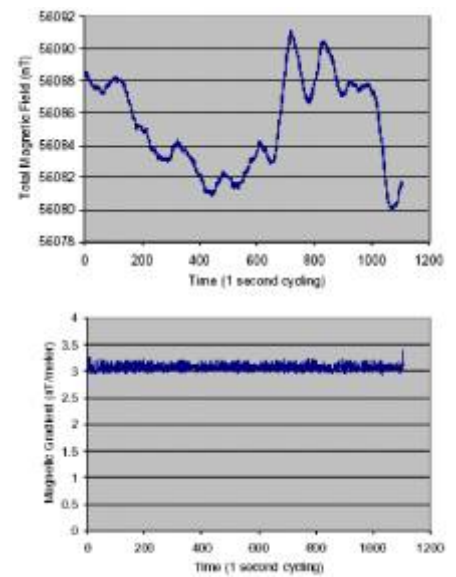
knows the true value of the field, absolute accuracy is determined by considering factors involved in determining the field value and their accuracy, including the gyromagnetic constant, maximum offset of the time base frequency, etc.

With an absolute accuracy of  $\pm 0.1 \text{ nT}$ , the GSM-19 is ideal for total field work and gradient measurements maintain the same high standard of quality. Both configurations are also specially designed to minimize overall system noise, so you can be sure that results truly reflect the geologic signal that is of most interest to you.

**Sampling rates** are defined as the fastest speed at which the system can acquire data. This is a particularly important parameter because high sampling rates ensure accurate spatial resolution of anomalies and increase survey efficiency.

GEM's Overhauser system has 3"measurement modes" or maximum sampling rates - "Standard" (3 sec. / reading), "Walking" (0.5 sec. / reading) and "Fast" (0.2 sec. / reading). These rates make the GSM-19 a versatile system for all ground uses (including vehicle-borne applications).

Gradient tolerance is the ability to obtain reliable measurements in the presence of extreme field variations. GSM-19 tolerance is maintained through internal

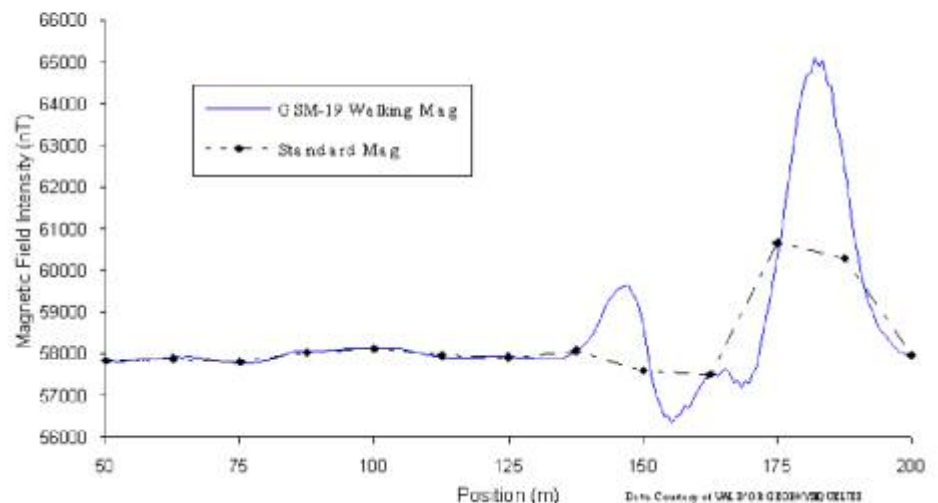


**Total Field and Stationary Vertical Gradient showing the gradient largely unaffected by diurnal variation. Absolute accuracy is also shown to be very high (0.2 nT/meter).**

signal counting algorithms, sensor design and Overhauser physics. For example, the Overhauser effect produces high amplitude, long-duration signals that facilitate measurement in high gradients.

The system's tolerance (10,000 nT/m) makes it ideal for many challenging environments, such as highly magnetic rocks in mineral exploration or near cultural objects in environmental, UXO or archeological applications.

## Near-Continuous Surveys Improve Definition of Magnetic Anomalies



**Much like an airborne acquisition system, the GSM-19 "Walking" magnetometer option delivers very highly-sampled, high sensitivity results that enable very accurate target location and / or earth science decision-making.**

## Increasing Your Operational Efficiency

Many organizations have standardized their magnetic geophysical acquisition on the GSM-19. This reflects enhancements such as memory capacity; light weight; GPS and navigation; no warm-up time; no dead zones or heading errors; easy dumping and processing.

**Memory capacity** controls the efficient daily acquisition of data, acquisition of positioning results from GPS and the ability to acquire high volumes of data to meet daily survey objectives.

V7.0 upgrades have established the GSM-19 as the commercial standard for memory with over 838,000 readings (based on a basic configuration of memory, a survey with time, coordinate and field values).

Optional increments of memory to over 2 million readings making the GSM-19 an ideal system for acquisition of data with integrated GPS readings (when required).

**Portability characteristics** (ruggedness, light weight and power consumption) are essential for operator productivity in both normal and extreme field conditions.

GEM's Overhauser magnetometer is established globally as a robust scientific instrument capable of withstanding temperature, humidity and terrain extremes. It has the reputation as the lightest and lowest power system available, reflecting Overhauser effect and RF polarization advantages.

In comparison with other systems, the GSM-19 is the choice of operators as an easy-to-use and robust instrument

**GPS and navigation options** are very important for earth science professionals. GPS technologies are revolutionizing data acquisition, productivity, increasing spatial resolution and providing a new level of data quality for informed decision-making.

GEM has made GPS a cornerstone of its magnetic R&D program. Real time GPS and DGPS options are now available in different survey resolutions. For more details, see the GPS and DGPS section.

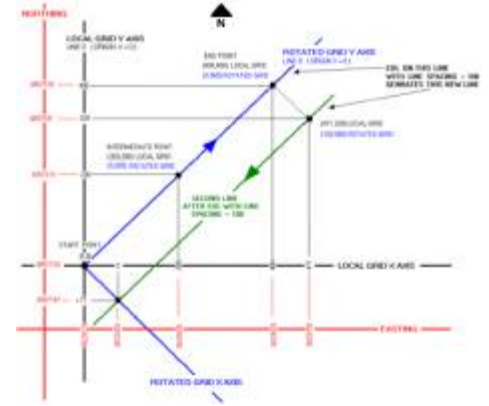
GEM has also developed a GPS Navigation feature with real-time coordinate transformation to UTM, local X-Y coordinate rotations, automatic end-of-line flag, guidance to the next line, and survey "lane" guidance with cross-track display and audio indicator.

Other enhancements include way point pre-programming of up to 1000 points. Professionals can define a complete survey on PC and download points to the magnetometer via RS-232 before leaving for the field.

The operator performs the survey using the way points as a survey guide. This capability decreases survey errors, improves efficiency and ensures more rapid survey completion.

Dumping and processing effectiveness is also critical consideration. Historically, up to 60% of an operator's "free" time can be spent on data dumping. Data dumping times are significantly reduced through GEM's implementation of high-speed, digital data links (up to 115 kBaud).

This functionality is facilitated through a new RISC processor and GEM's proprietary GEMLinkW acquisition/display software. This software serves as a bi-directional RS-232 terminal. It also has integrated processing functionality to streamline key processing steps, including diurnal data reduction. GEMLinkW is provided free to all GSM-19 customers. Regular updates are



## Navigation and Lane Guidance

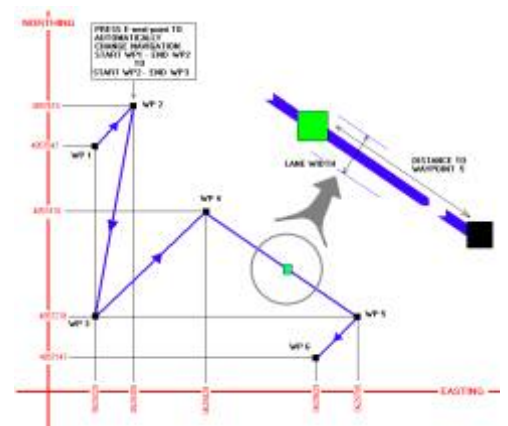
The figure above shows the Automatic Grid (UTM, Local Grid, and Rotated Grid). With the Rotated Grid, you can apply an arbitrary origin of your own definition. Then, the coordinates are always in reference to axes parallel to the grid. In short, your grid determines the map, and not the NS direction.

The Local Grid is a scaled down, local version of the UTM system, and is based on your own defined origin. It allows you to use smaller numbers or ones that are most relevant to your survey.

The figure below shows how programmable waypoints can be used to plan surveys on a point-by-point basis.

Initially, you define waypoints and enter them via PC in the office or via PC in the field or office. When you perform your survey, the unit guides you to each point.

While walking between waypoints, lane guidance keeps you within a lane of pre-defined width using arrows (< - or - >) to indicate left or right. The display also shows the distance (in meters) to the next waypoint.





## Adding Value through Options

When evaluating the GSM-19 as a solution for your geophysical application we recommend considering the complete range of options offered by GEM. These options can be added at time of original purchase or later to expand capabilities as your needs change or grow.

GEM's approach with options is to provide you with an expandable set of building blocks:

- o Gradiometer
- o Walking Magnetometer / Gradiometer
- o Fast Magnetometer / Gradiometer
- o VLF (3 channel)
- o GPS (built-in or external)

## GSM-19G Gradiometer Option

The GSM-19 gradiometer is a versatile, entry level system that can be upgraded to a full-featured "Walking" unit (model GSM-19GW) in future. The GSM-19G configuration comprises 2 sensors and a "Standard" console that reads data to a maximum of 1 reading every 3 seconds.



An important GEM's design feature allows gradiometer sensors measure the 2 magnetic fields concurrently to avoid any temporal variations that could distort gradiometer readings. Other features, such as single-button data recording, are included for operator ease-of-use.

## GSM-19W / GW "Walking" Magnetometer / Gradiometer Option

GEM Systems pioneered the innovative "Walking" option that enables the acquisition of nearly continuous data on survey lines. Since introduction, the GSM-19W and GSM-19GW have become one of the most popular magnetic instruments in the world.

Similar to an airborne survey in principle, the system records data at discrete time intervals (up to 5 readings per second) as the instrument is carried along the line.

At each survey picket (fiducial), the operator touches a designated key. The system automatically assigns a picket coordinate to the reading and linearly interpolates the coordinates of all intervening readings (following survey completion during post-processing). A main benefit is that the high sample density improves definition of geologic structures and other targets (UXO, archeological relics, drums, etc.).

It also increases survey efficiency because the operator can record data almost continuously. Another productivity feature is the instantaneous recording of data at pickets. This is a basic difference between the "Walking" version and the GSM-19 / GSM-19G (the "Standard" mode version which requires 3 sec. to obtain a reading each time the measurement key is pressed).

## GSM-19W / GW Magnetometer

The GSM-19 reads up to 5 readings per sec. (sensors and console are the same as other models.) This system is ideal for vehicle-borne surveys, such as UXO, archaeological or some mineral exploration applications, where high productivity is required.

## GSM-19 "Hands-Free" Backpack Option

The "Walking" Magnetometer and Gradiometer can be configured with an optional backpack-supported sensor. The backpack is uniquely constructed - permitting measurement of total field or gradient with free hands.

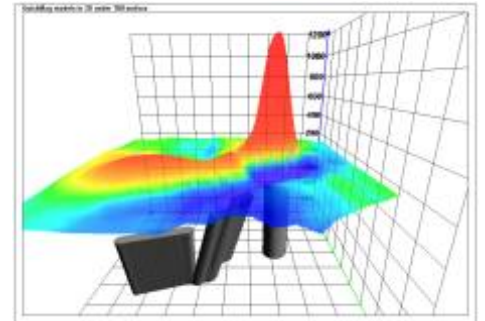
This option provides greater versatility and flexibility, which is particularly valuable for high-productivity surveys or in rough terrain.

## GSM-19V / GV "VLF" Option

With GEM's omnidirectional VLF option, up to 3 stations of VLF data can be acquired without orienting. Moreover, the operator is able to record both magnetic and VLF data with a single stroke on the keypad.

## 3rd Party Software - A One-Stop Solution for Your Potential Field Needs

Now it's even easier to take data from the field and quality control stage through to final map preparation and modeling.



**GEM-VIS provides links to fast 3D modeling via Encom's professional QuickPro software.**

GEM provides very comprehensive solution available for working with magnetometer data:

- o Free GEMLinkW Transfer and Internet Upgrade software
- o Optional, low-cost GEM-VIS Quality Control, Visualization and Analysis
- o Optional Data Processing
- o Optional QuickMag Pro Automated Modeling and Inversion



## V7.0 and V6.0 - Technology Developments

One of the main differences between GEM and other manufacturers is GEM's 30 years consistent focus on developing leading-edge magnetic technologies.

This commitment has led to many innovations in sensor technology; signal counting; firmware and software; and hardware and console design, culminating in the release of v7.0.

v7.0 and the previous release (v6.0) of the GSM-19 system provides many examples of the ways in which GEM continues to advance magnetics technologies for its customers.

### Enhanced data quality:

- o 25% improvement in sensitivity (new frequency counting algorithm)
- o new intelligent spike-free algorithm (in contrast to other manufacturers, GEM does not apply smoothing or filtering to achieve high data quality)

### Improved operational efficiency:

- o Enhanced positioning (GPS engine with optional integrated / external GPS and real-time navigation)
- o 16 times increase in memory to 32 Mbytes standard
- o 1000 times improvement in processing and display speed (RISC microprocessor with 32-bit data bus)
- o 2 times faster digital data link (115 kBaud through RS-232)

### Innovative technologies:

- o Battery conservation and survey flexibility (base station scheduling option with 3 modes - daily, flexible and immediate start)
- o Survey pre-planning (up to 1000 programmable waypoints that can be entered directly or downloaded from PC for greater efficiency)
- o Efficient GPS synchronization of field and base units to Universal Time (UTC)
- o Cost saving with firmware upgrades

## GEM's Proven Overhauser System

In a standard Proton magnetometer, current is passed through a coil wound around a sensor containing a hydrogen-rich fluid. The auxiliary field created by the coil (>100 Gauss) polarizes the protons in the liquid to a higher thermal equilibrium.

When the current, and hence the field, is terminated, polarized protons precess in the Earth's field and decay exponentially until they return to steady state. This process generates precession signals that can be measured as described below. Overhauser magnetometers use a more efficient method that combines electron-proton coupling and an electron-rich liquid (containing unbound electrons in a solvent containing a free radical). An RF magnetic field that corresponds to a specific energy level transition, stimulates the unbound electrons.

Instead of releasing this energy as emitted radiation, the unbound electrons transfer it to the protons in the solvent. The resulting polarization is much larger, leading to stronger precession signals.

Overhauser and proton precession, measure the scalar value of the magnetic field based on the proportionality of precession frequency and magnetic flux density (which is linear and known to a high degree of accuracy). Measurement quality is calculated using signal amplitude and its decay characteristics. Values are averaged over the sampling



As the world's experienced manufacturer of commercial Overhauser systems, GEM's technical focus on the GSM-19 has resulted in a superior magnetic measuring device with high sensitivity, high cycling speed, low noise, and very low power consumption over a wide temperature range.

With minor software modifications (i.e. addition of a small auxiliary magnetic flux density while polarizing), it can be easily configured for high sensitivity readings in low magnetic fields (for equatorial work).

## GPS - Positioning You for Effective Decision Making

The use of GPS technology is increasing in earth science disciplines due to the ability to make better decisions in locating anomalies, and in improving survey cost effectiveness and time management.



Examples of applications include:

- o Surveying in remote locations with no grid system (Arctic for diamond exploration)
- o High resolution exploration mapping
- o High productivity ferrous ordnance (UXO) detection
- o Ground portable magnetic and gradient surveying for environmental and engineering applications
- o Base station monitoring for observing diurnal magnetic activity and disturbances with integrated GPS time

GEM addresses requests for GPS and high-resolution Differential GPS (DGPS) through internal and external options. Customer units can also be integrated. GPS surveys return a variety of real data to the user, including Time, Latitude and Longitude, UTM, Elevation and # of Satellites. This data is available to be applied in various ways by the user. The table below shows GPS modes, ranges and services.

Description	Range	Services
GPS Option A		Time reception only
GPS Option B	< 1.5m	DGPS*
GPS Option C	< 0.6m	DGPS*, OmniStar
GPS Option D	< 0.6m < 0.6m < 0.7m	CDGPS, DGPS*, OmniStar
Output		
Time, Lat / Long, UTM, Elevation and number of Satellites		
*DGPS with SBAS (WAAS / EGNOS / MSAS)		



## Key System Components

Key components that differentiate the GSM-19 from other systems on the market include the sensor and data acquisition console. Specifications for components are provided on the right side of this page.

### Sensor Technology

GEM's sensors represent a proprietary innovation that combines advances in electronics design and quantum magnetometer chemistry.

Electronically, the detection assembly includes dual pick-up coils connected in series opposition to suppress far-source electrical interference, such as atmospheric noise. Chemically, the sensor head houses a proprietary hydrogen-rich

liquid solvent with free electrons (free radicals) added to increase the signal intensity under RF polarization.

From a physical perspective, the sensor is a small size, light-weight assembly that houses the Overhauser detection system and fluid. A rugged plastic housing protects the internal components during operation and transport.

All sensor components are designed from carefully screened non-magnetic materials to assist in maximization of signal-to-noise. Heading errors are also minimized by ensuring that there are no magnetic inclusions or other defects that could result in variable readings for different orientations of the sensor.

Optional omni-directional sensors are available for operating in regions where the magnetic field is near-horizontal (i.e. equatorial regions). These sensors maximize signal strength regardless of field direction.

### Data Acquisition / Console Technology

Console technology comprises an external keypad / display interface with internal firmware for frequency counting, system control and data storage / retrieval. For operator convenience, the display provides both monochrome text as well as real-time profile data with an easy-to-use interactive menu for performing all survey functions.

The firmware provides the convenience of upgrades over the Internet via the GEMLinkW software. The benefit is that instrumentation can be enhanced with the latest technology without returning the system to GEM -- resulting in both timely implementation of updates and reduced shipping / servicing costs.



## Specifications

### Performance

Sensitivity:	0.022 nT / $\sqrt{\text{Hz}}$
Resolution:	0.01 nT
Absolute Accuracy:	+/- 0.1 nT
Range:	20,000 to 120,000 nT
Gradient Tolerance:	< 10,000 nT/m
Samples at:	60+, 5, 3, 2, 1, 0.5, 0.2 sec
Operating Temperature:	-40C to +50C

### Operating Modes

Manual: Coordinates, time, date and reading stored automatically at minimum 3 second interval.

Base Station: Time, date and reading stored at 1 to 60 second intervals.

Remote Control: Optional remote control using RS-232 interface.

Input / Output: RS-232 or analog (optional) output using 6-pin weatherproof connector.

### Storage - 32 MB (# of Readings)

Mobile:	1,465,623
Base Station:	5,373,951
Gradiometer:	1,240,142
Walking Mag:	2,686,975

### Dimensions

Console:	223 x 69 x 240 mm
Sensor:	175 x 75mm diameter cylinder

### Weights

Console with Belt:	2.1 kg
Sensor and Staff Assembly:	1.0 kg

### Standard Components

GSM-19 console, GEMLinkW software, batteries, harness, charger, sensor with cable, RS-232 cable and USB adapter, staff, instruction manual and shipping case.

### Optional VLF

Frequency Range: Up to 3 stations between 15 to 30.0 kHz. Parameters: Vertical in-phase and out-of-phase components as % of total field. 2 components of horizontal field amplitude and total field strength in pT.

Resolution:	0.1% of total field
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## Our World is Magnetic.

### About GEM Advanced Magnetometers

GEM Systems, Inc. delivers the world's only magnetometers and gradiometers with built-in GPS for accurately positioned ground, airborne and stationary data acquisition. The company serves customers in many fields including mineral exploration, hydrocarbon exploration, environmental and engineering, Unexploded Ordnance Detection, archeology, earthquake hazard prediction and observatory research.

Key products include the Proton Precession, Overhauser and Optically-Pumped Potassium instruments.

Each system offers unique benefits in terms of sensitivity, sampling, and acquisition of high-quality data. These core benefits are complemented by GPS technologies that provide metre to sub-metre positioning.

With customers in more than 50 countries globally and more than 25 years of continuous technology R&D, GEM is known as the only geophysical instrument manufacturer that focuses exclusively on magnetic technology advancement.

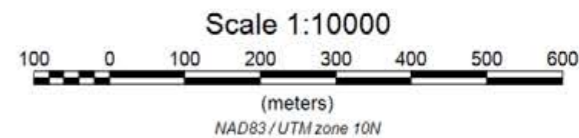
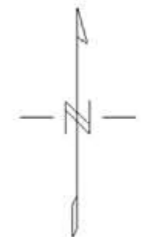
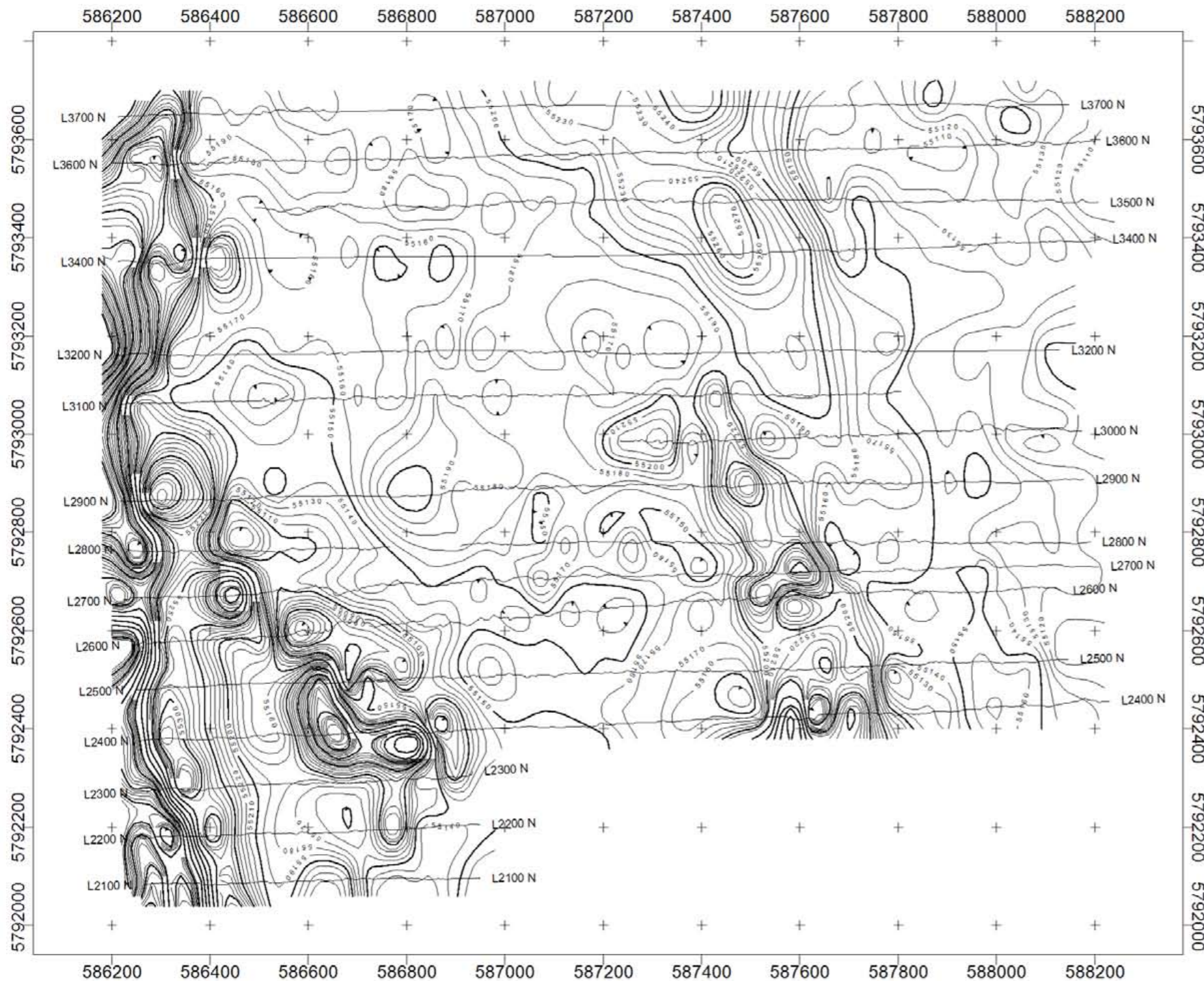
**GEM**  
SYSTEMS  
ADVANCED MAGNETOMETERS

### GEM Systems, Inc.

135 Spy Court Markham, ON Canada L3R 5H6

Phone: 905 752 2202 • Fax: 905 752 2205

Email: info@gemsys.ca • Web: www.gemsys.ca



**SURVEY SPECIFICATIONS:**  
 Survey Date: Sept 27 - 29, 2011  
 Nominal Line Spacing: 100 metres  
 Nominal Station Spacing: ~ 1 metre

**INSTRUMENTATION:**  
 GSM-19 Walking GPS (two) units  
 GSM-19 Base Station unit

**CONTOUR INTERVAL:**  
 10 & 50 nT

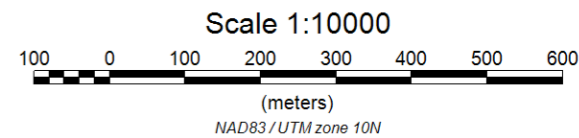
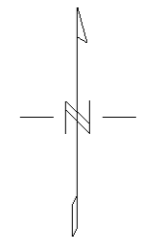
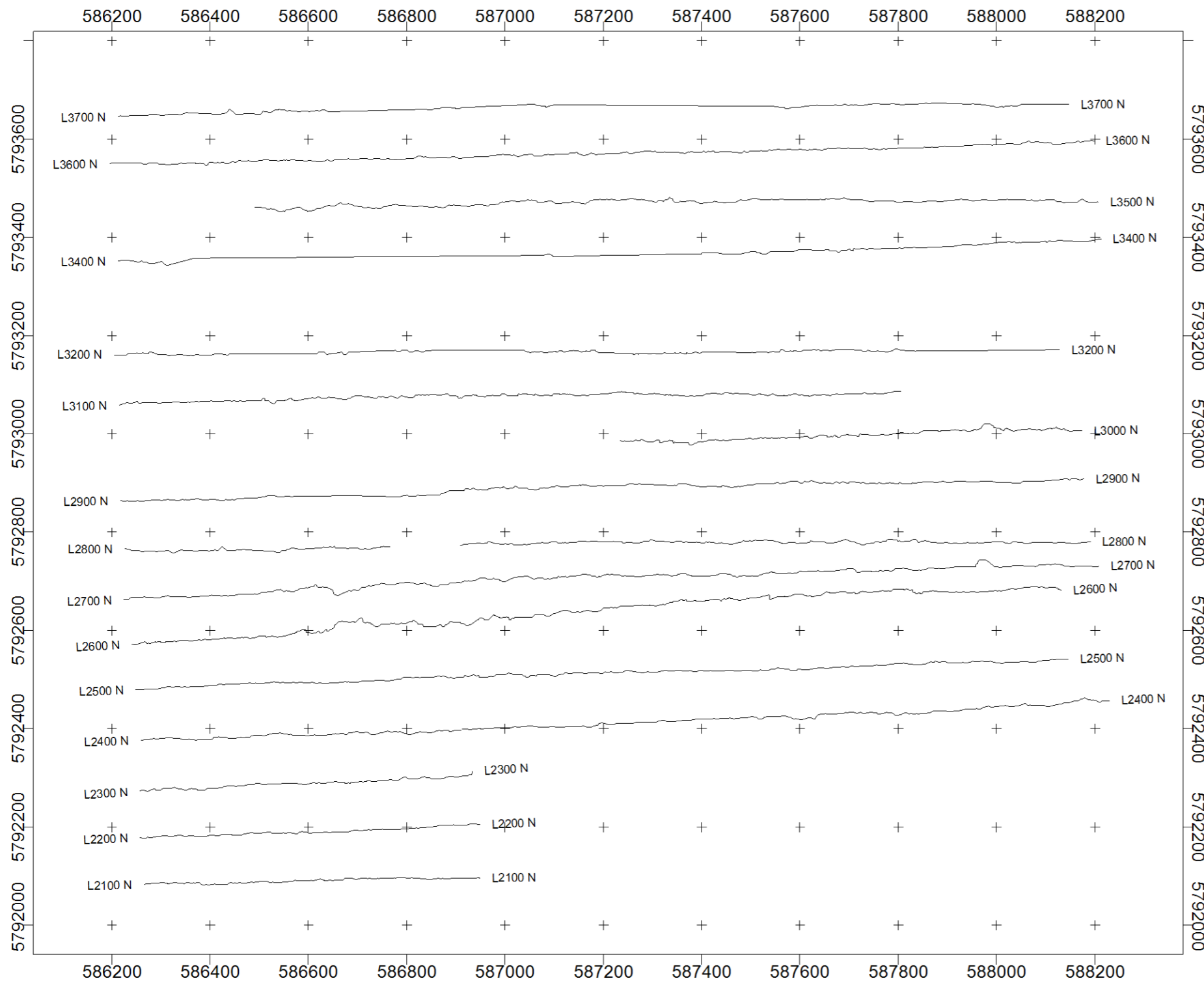
**EAGLE PEAK RESOURCES INC.**  
**Miocene Project: Peaks Prospect**  
 Williams Lake, British Columbia  
 NTS 93 A/5 Beaver Creek

**Total Magnetic Intensity**  
 Walking GPS Magnetometer Survey



November 2011





**SURVEY SPECIFICATIONS:**  
 Survey Date: Sept 27 - 29, 2011  
 Nominal Line Spacing: 100 metres  
 Nominal Station Spacing: ~ 1 metre

**INSTRUMENTATION:**  
 GSM-19 Walking GPS (two) units  
 GSM-19 Base Station unit

**CONTOUR INTERVAL:**  
 10 & 50 nT

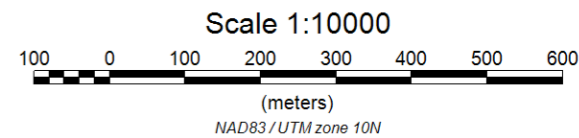
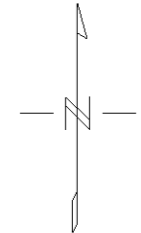
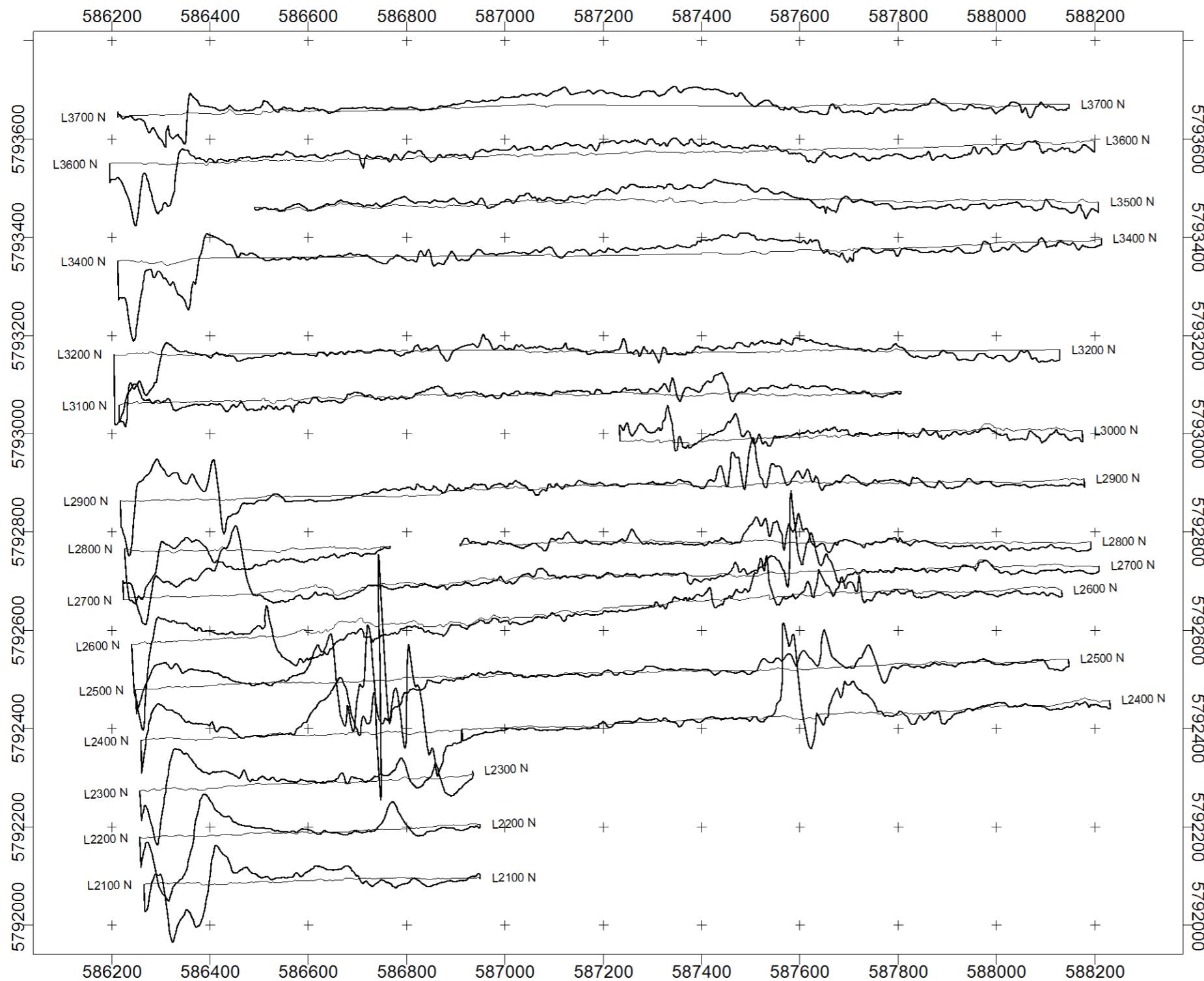
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**Miocene Project: Peaks Prospect**  
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 Walking GPS Magnetometer Survey



November 2011





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 Nominal Station Spacing: ~ 1 metre

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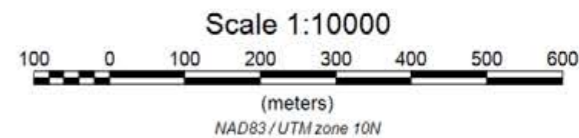
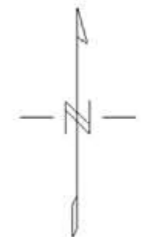
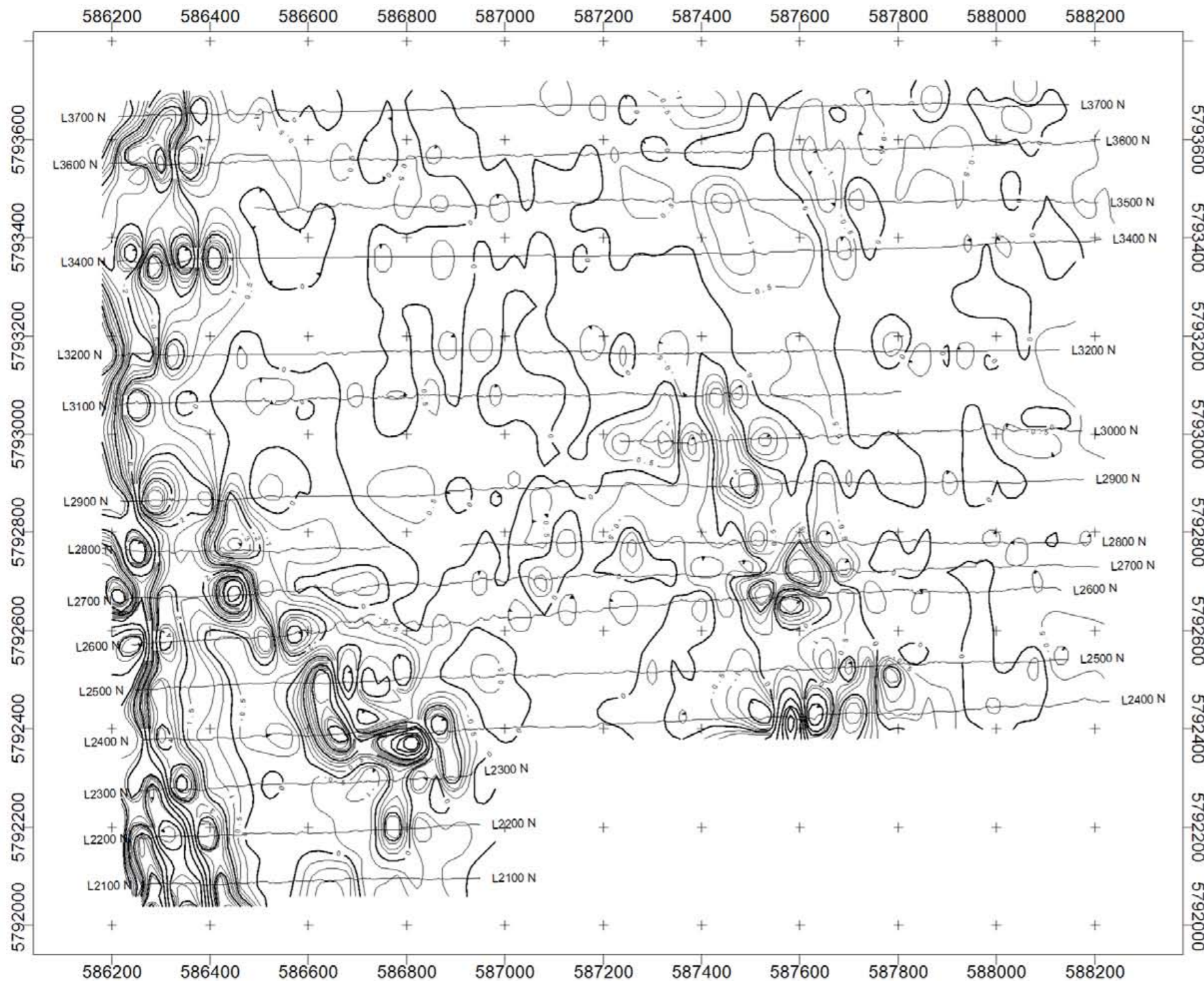
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 30 nT/mm (55,160 nT base level)

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**CONTOUR INTERVAL:**  
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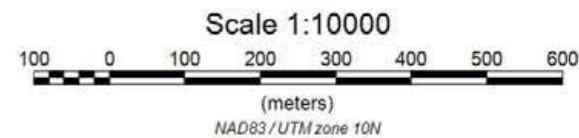
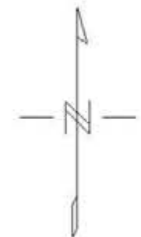
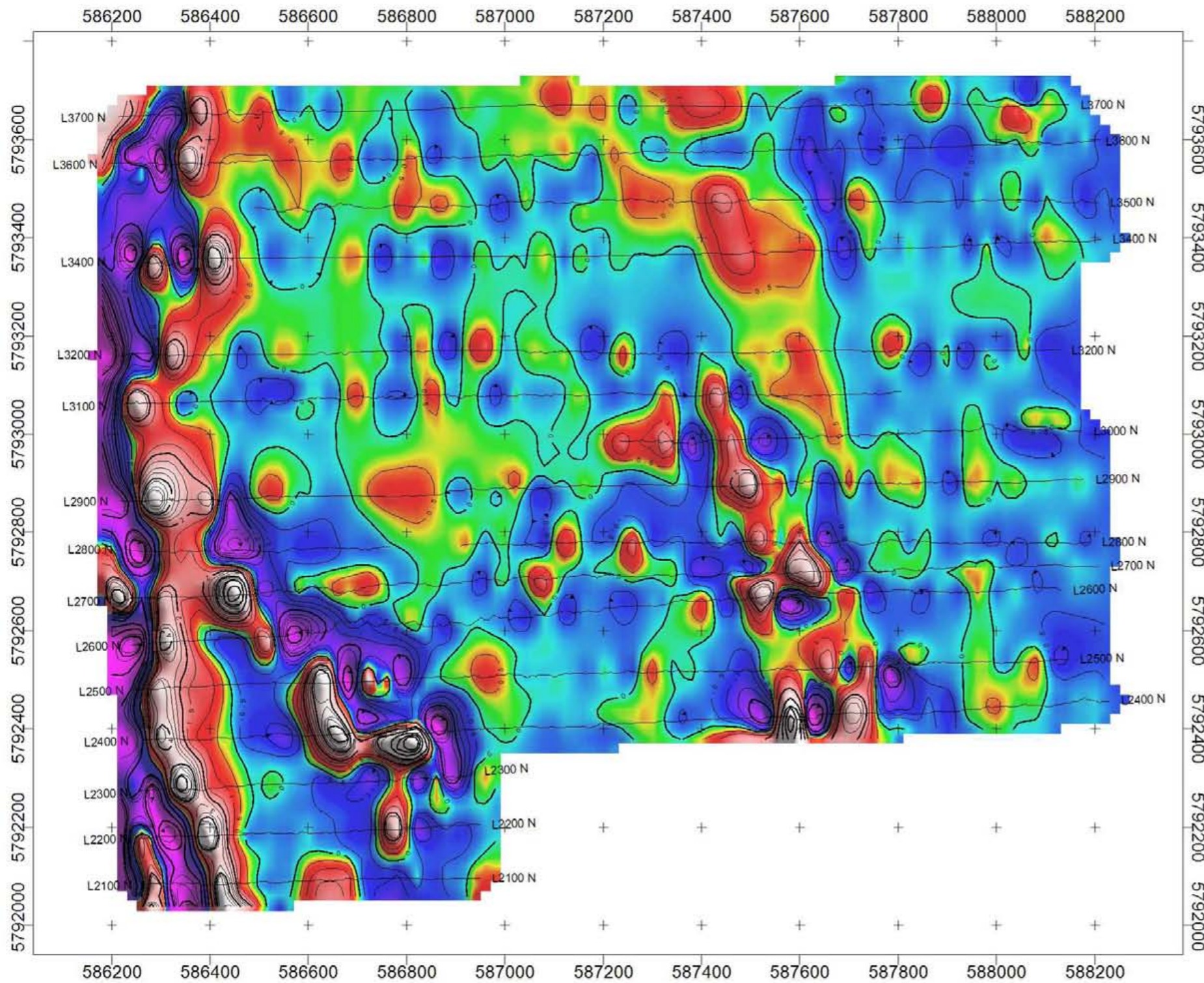
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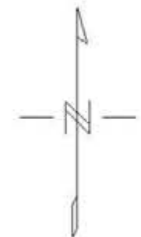
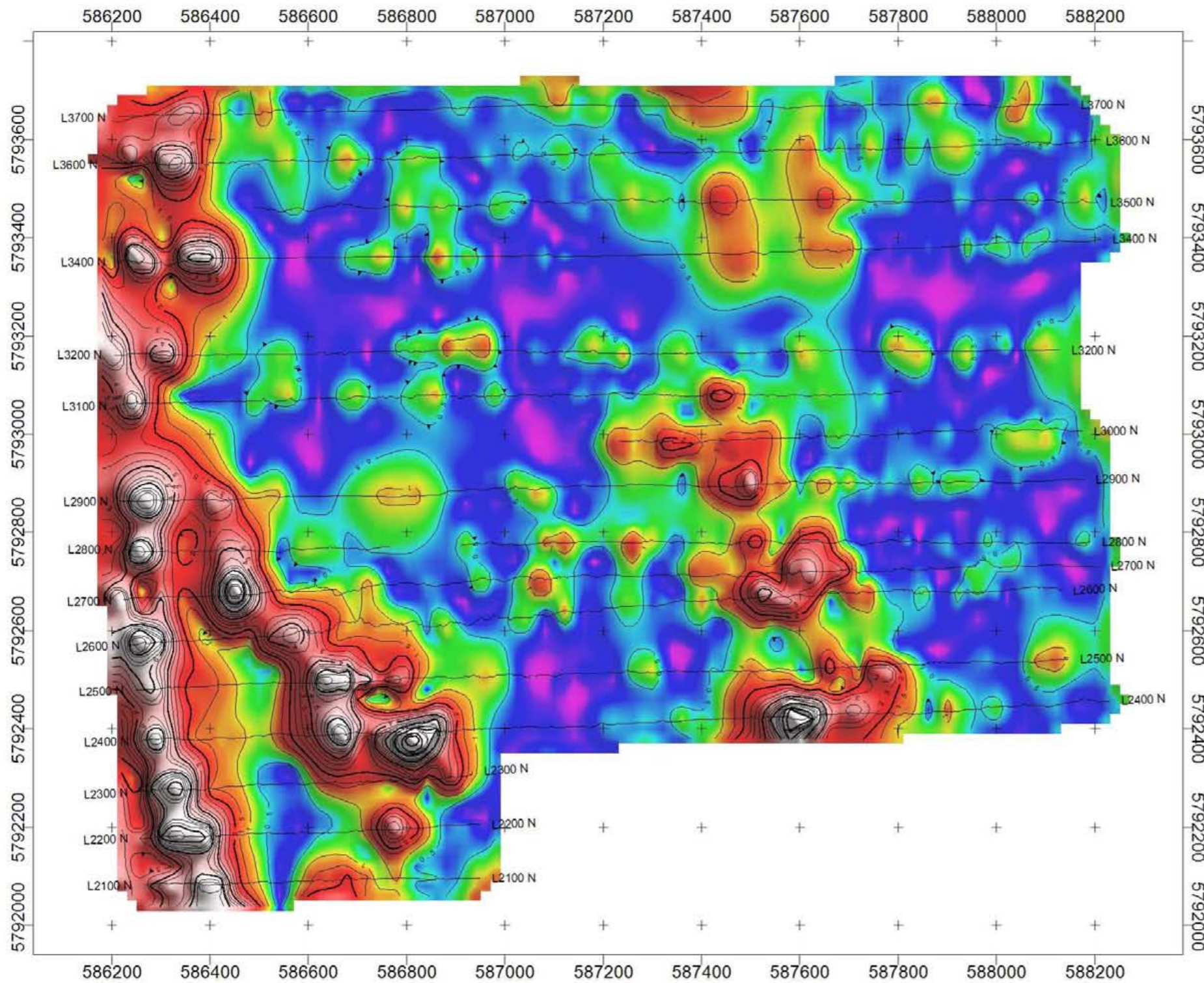
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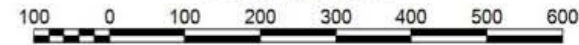


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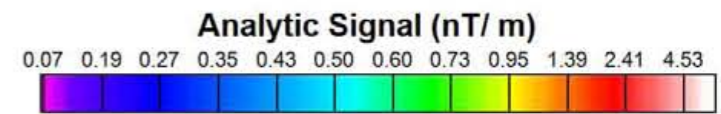


(meters)  
NAD83 / UTM zone 10N

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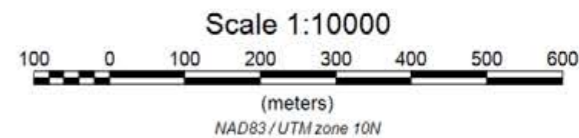
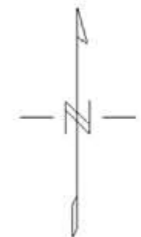
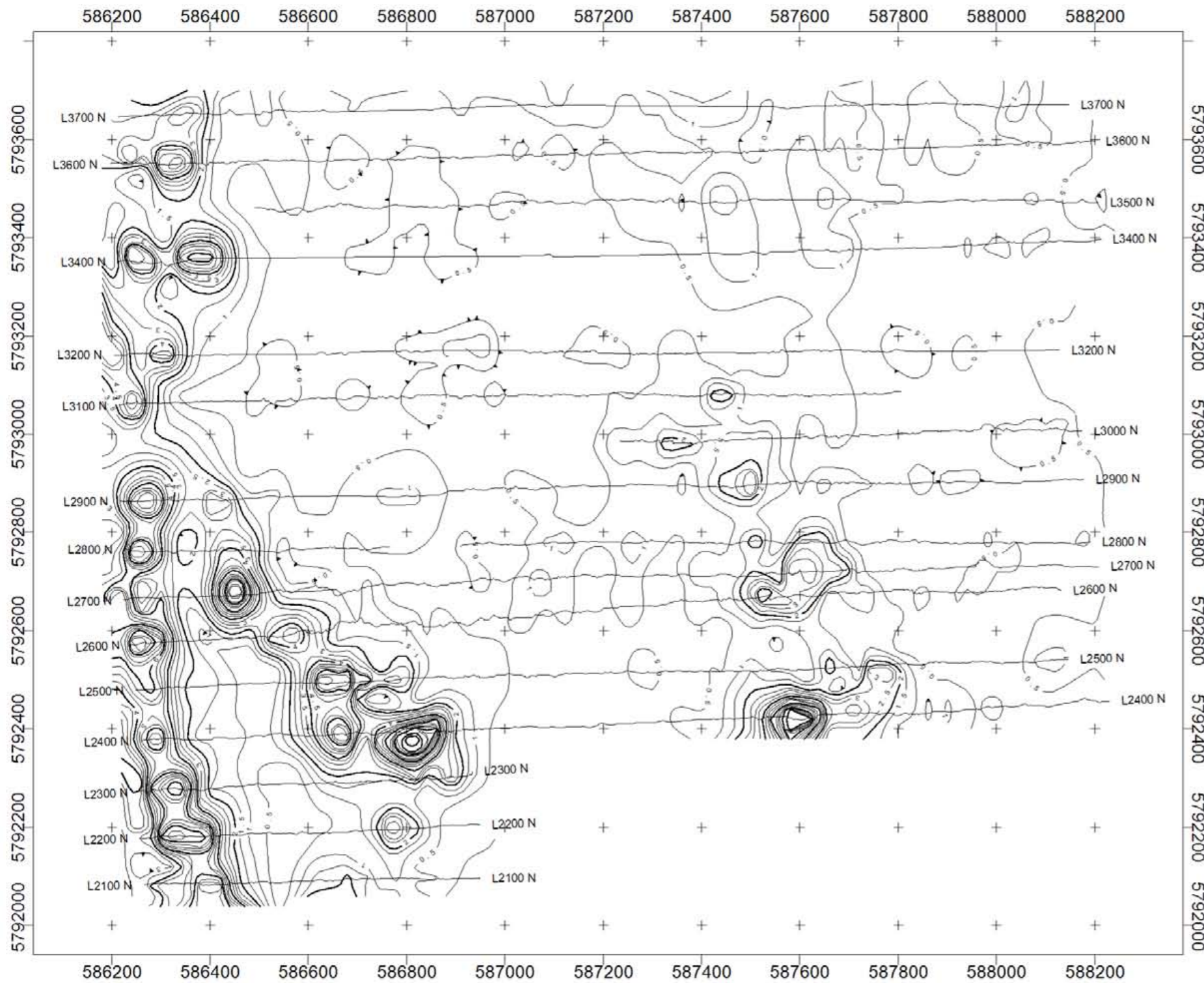
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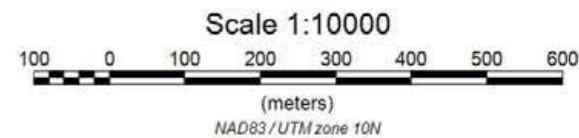
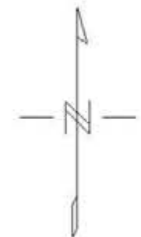
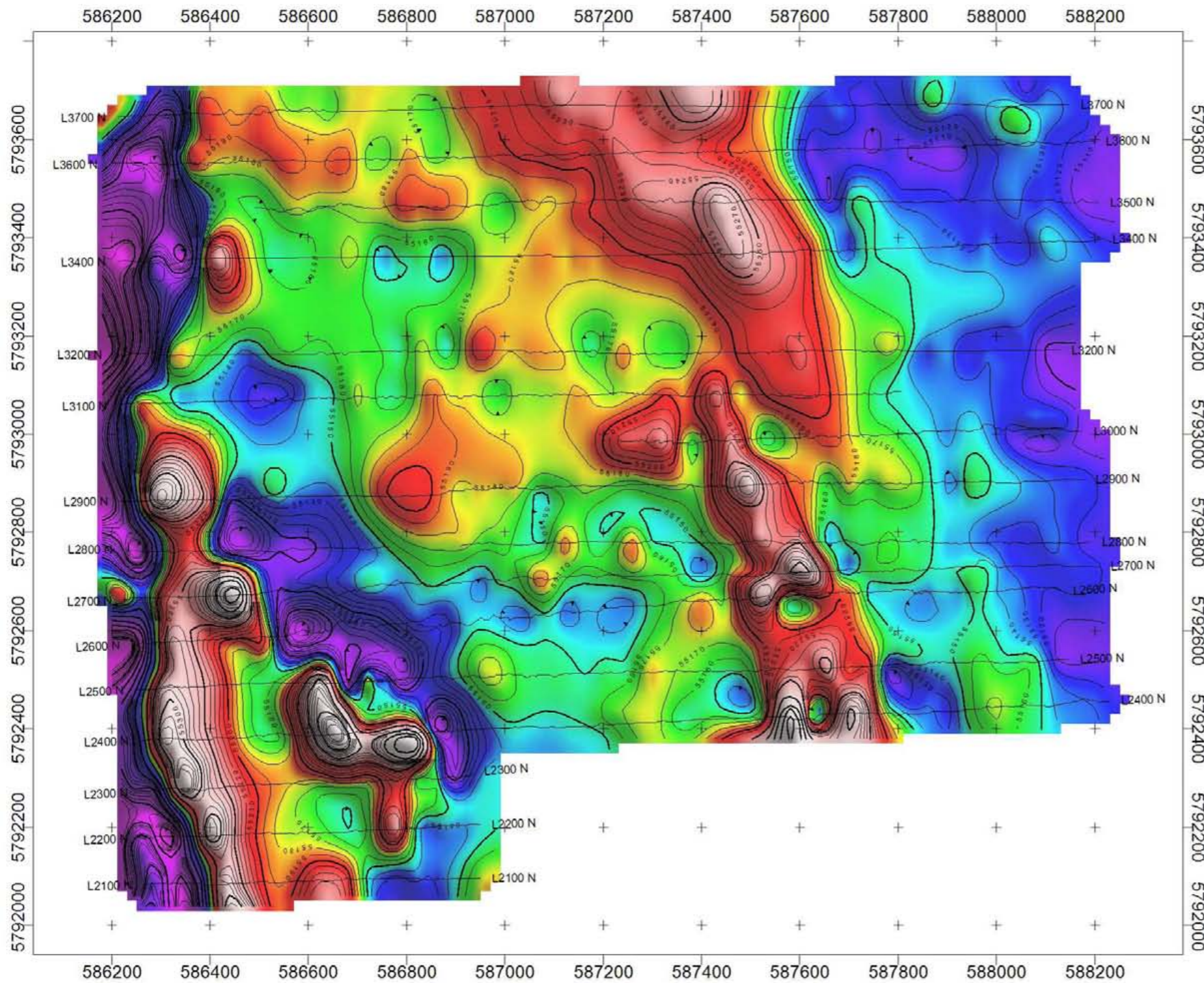
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 10 & 50 nT



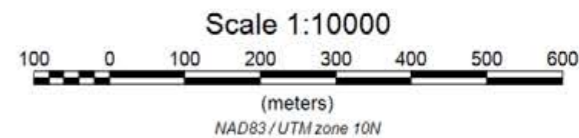
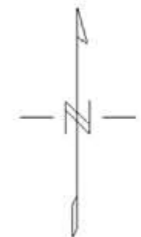
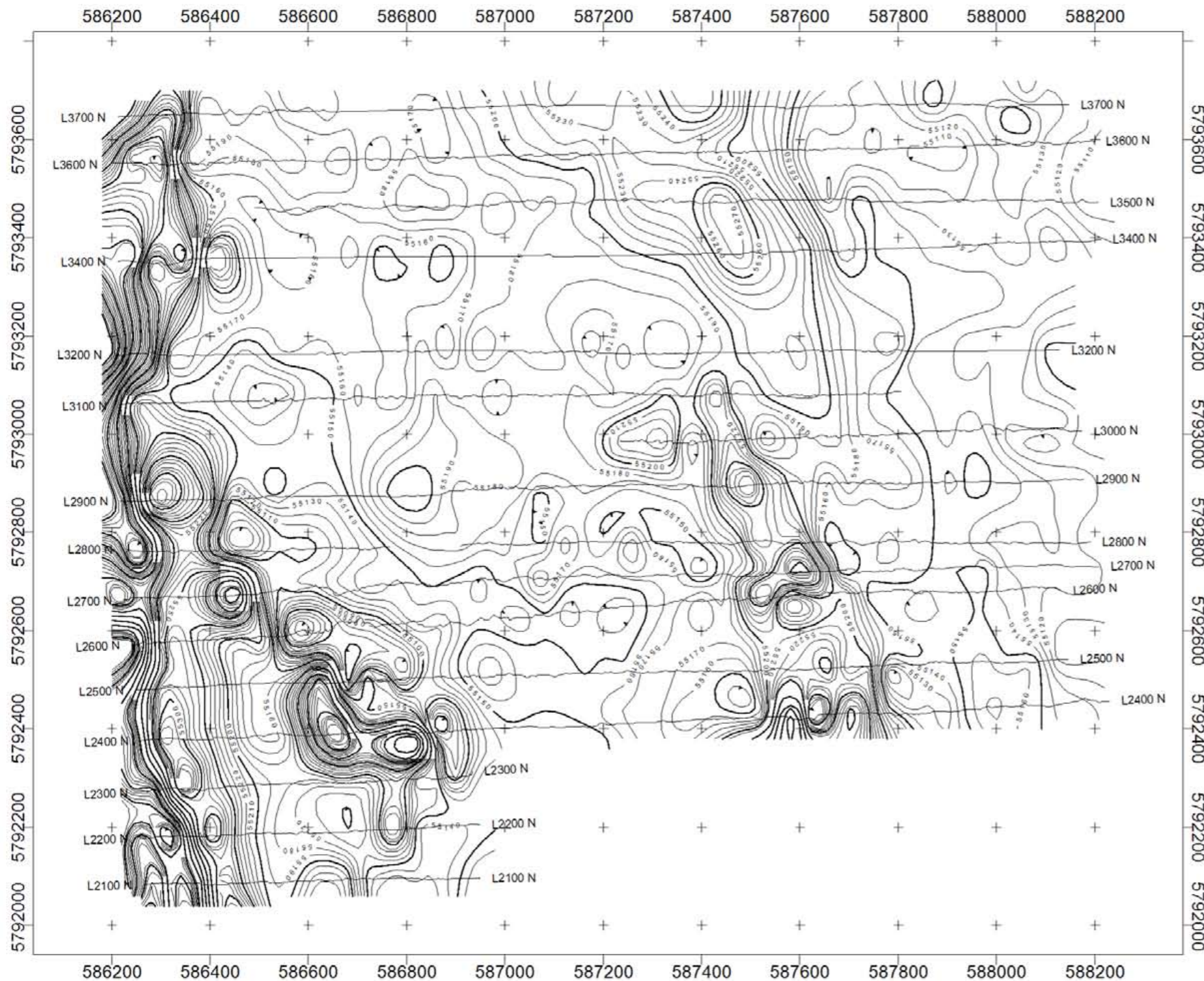
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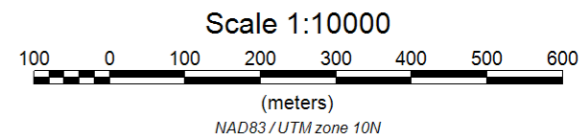
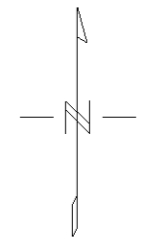
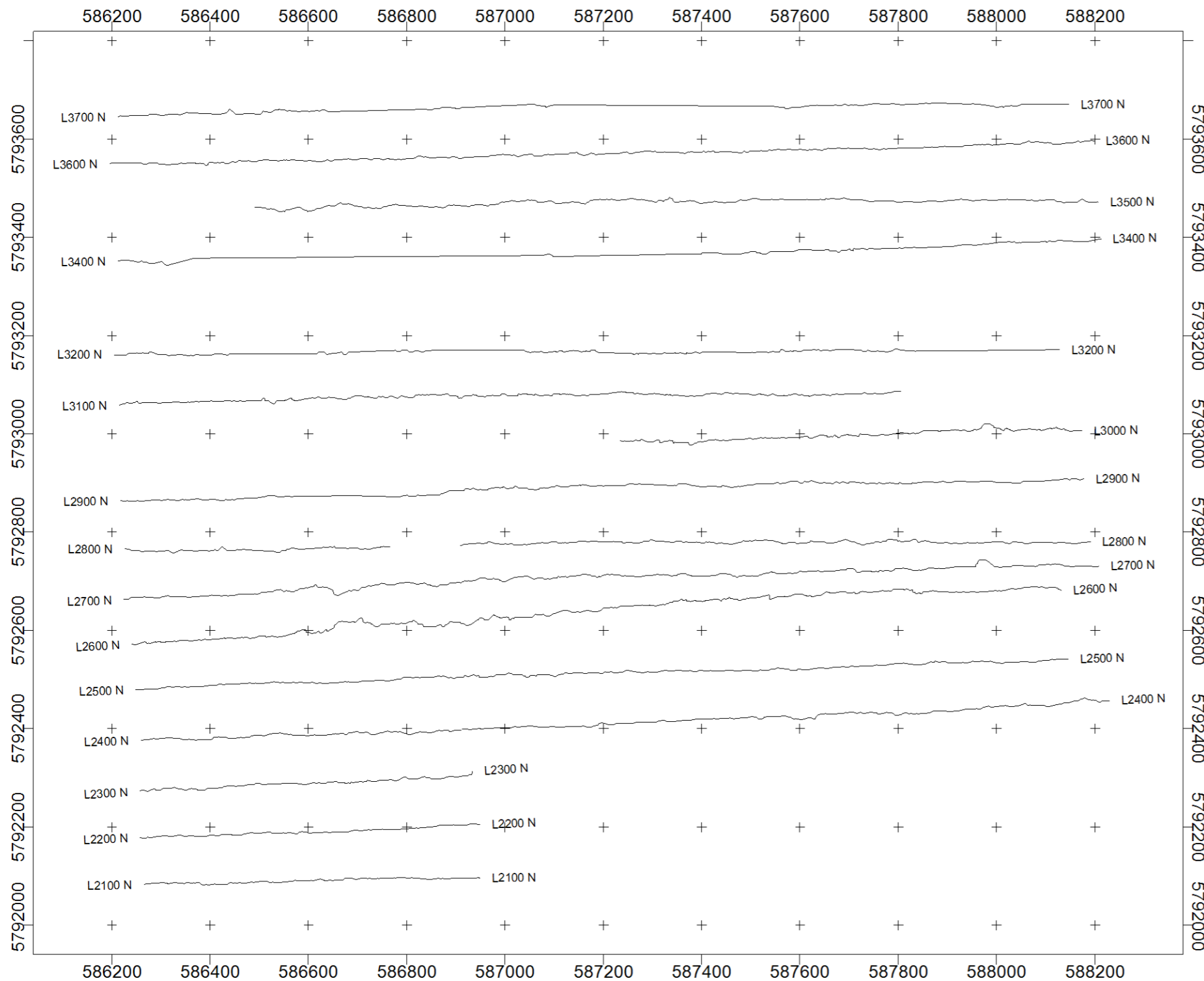
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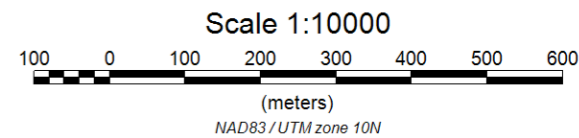
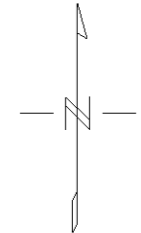
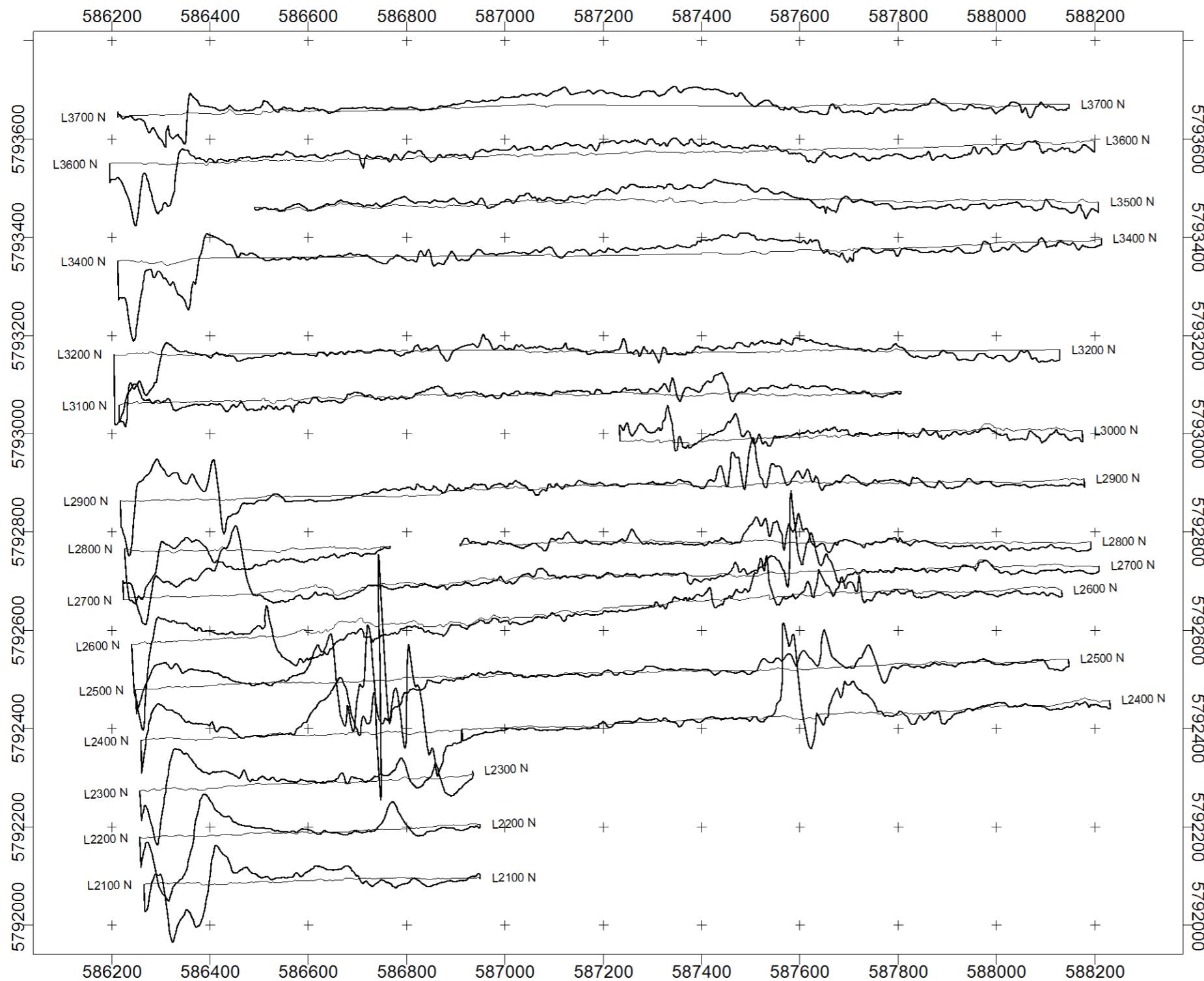
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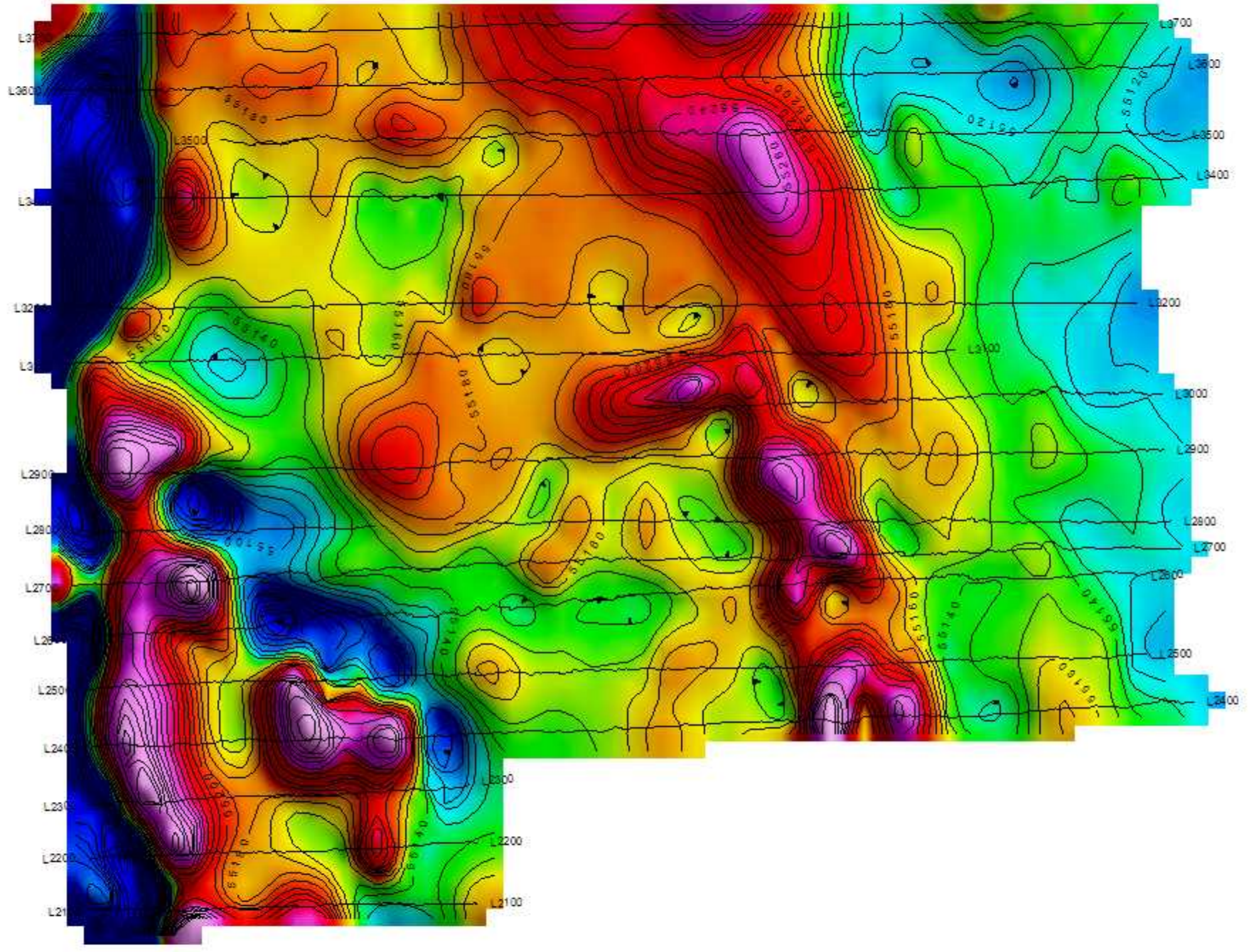
**PROFILE SCALE:**  
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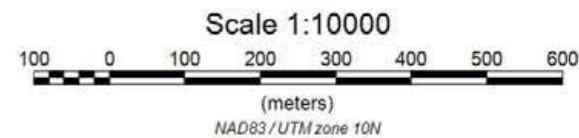
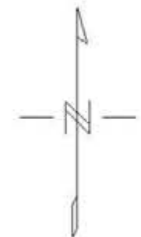
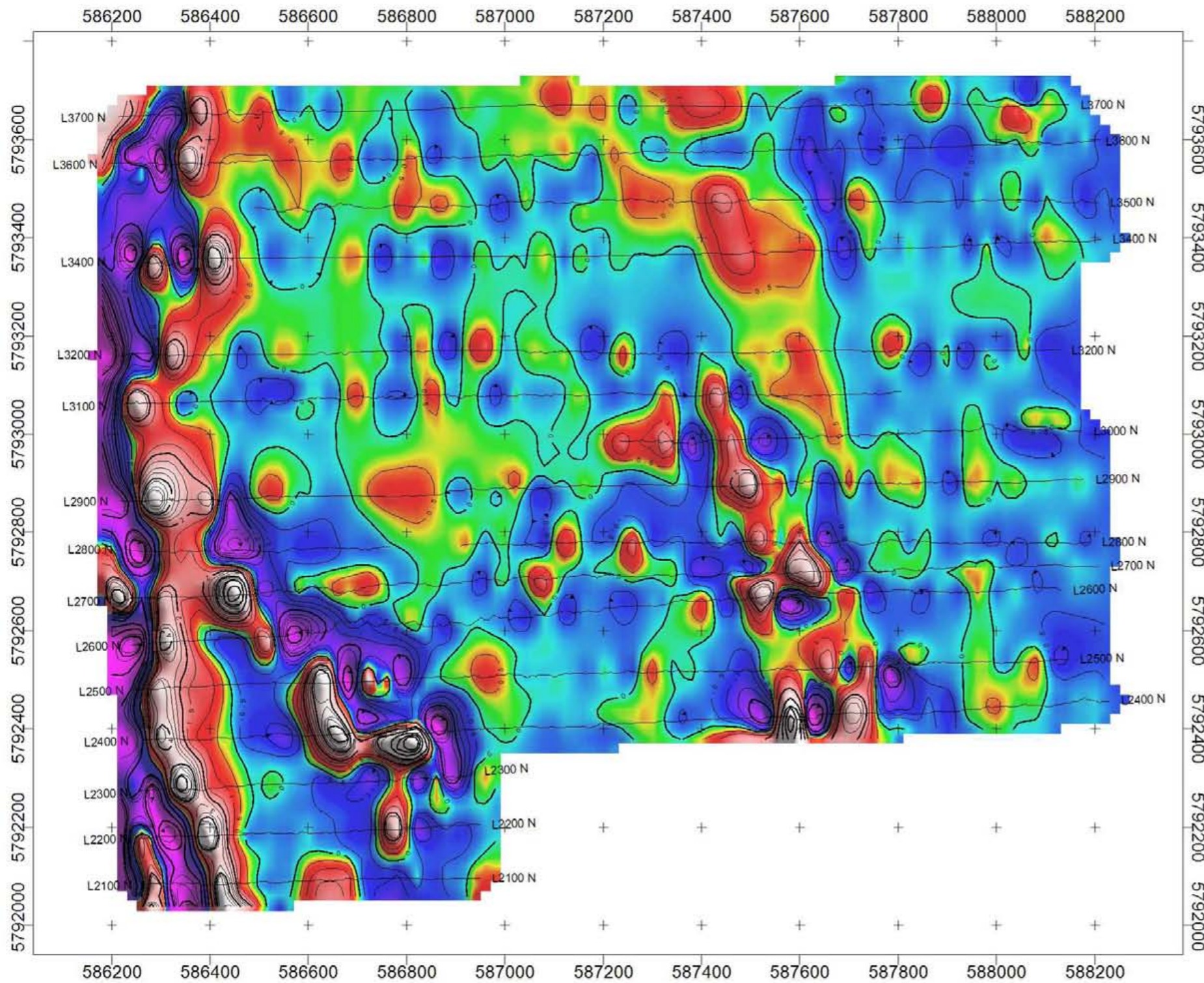
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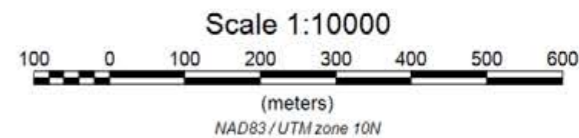
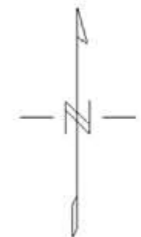
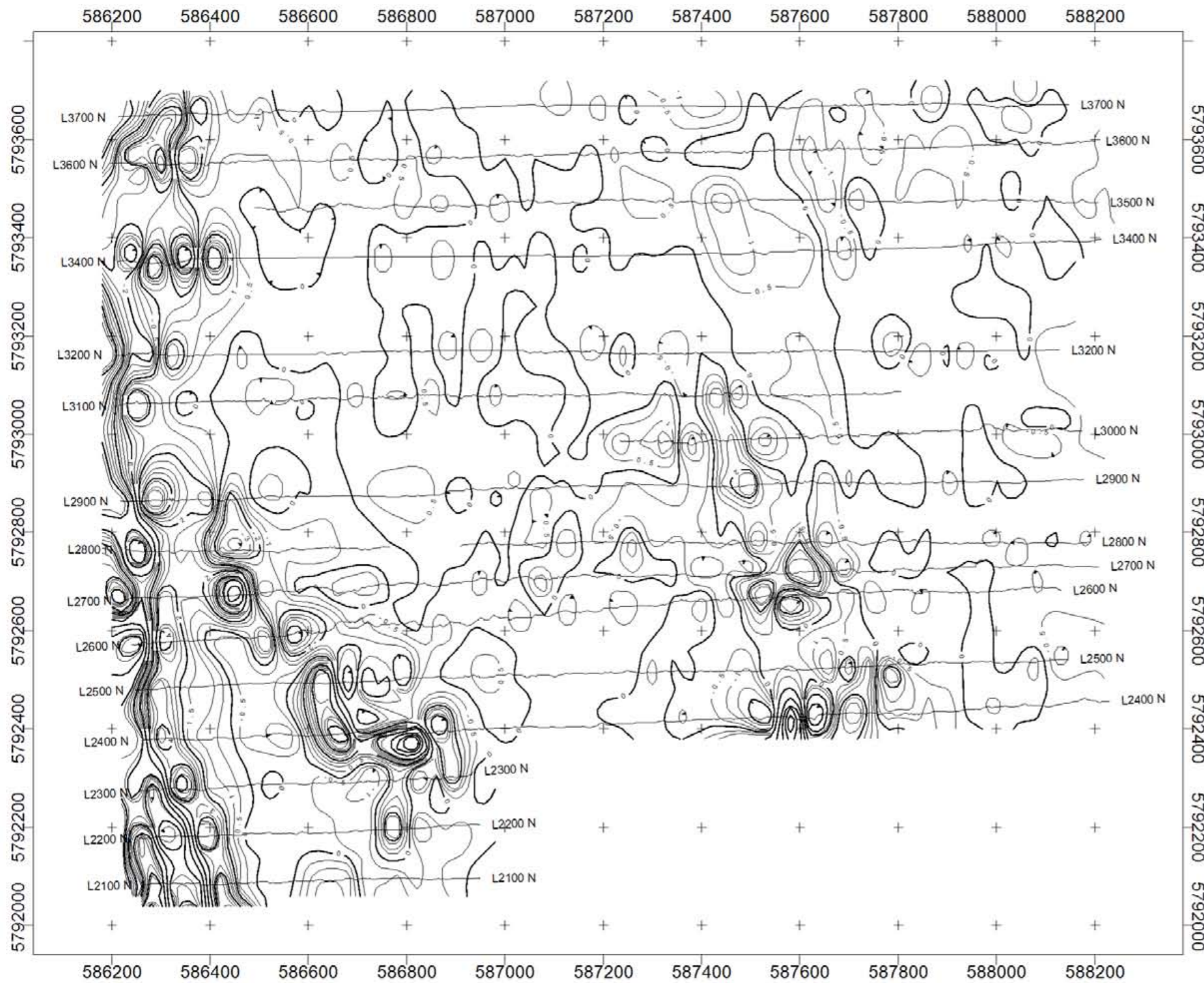
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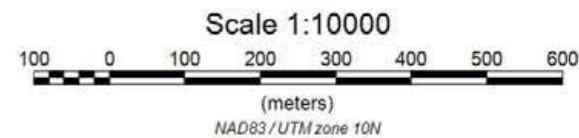
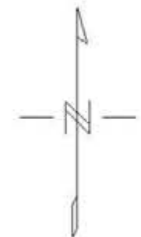
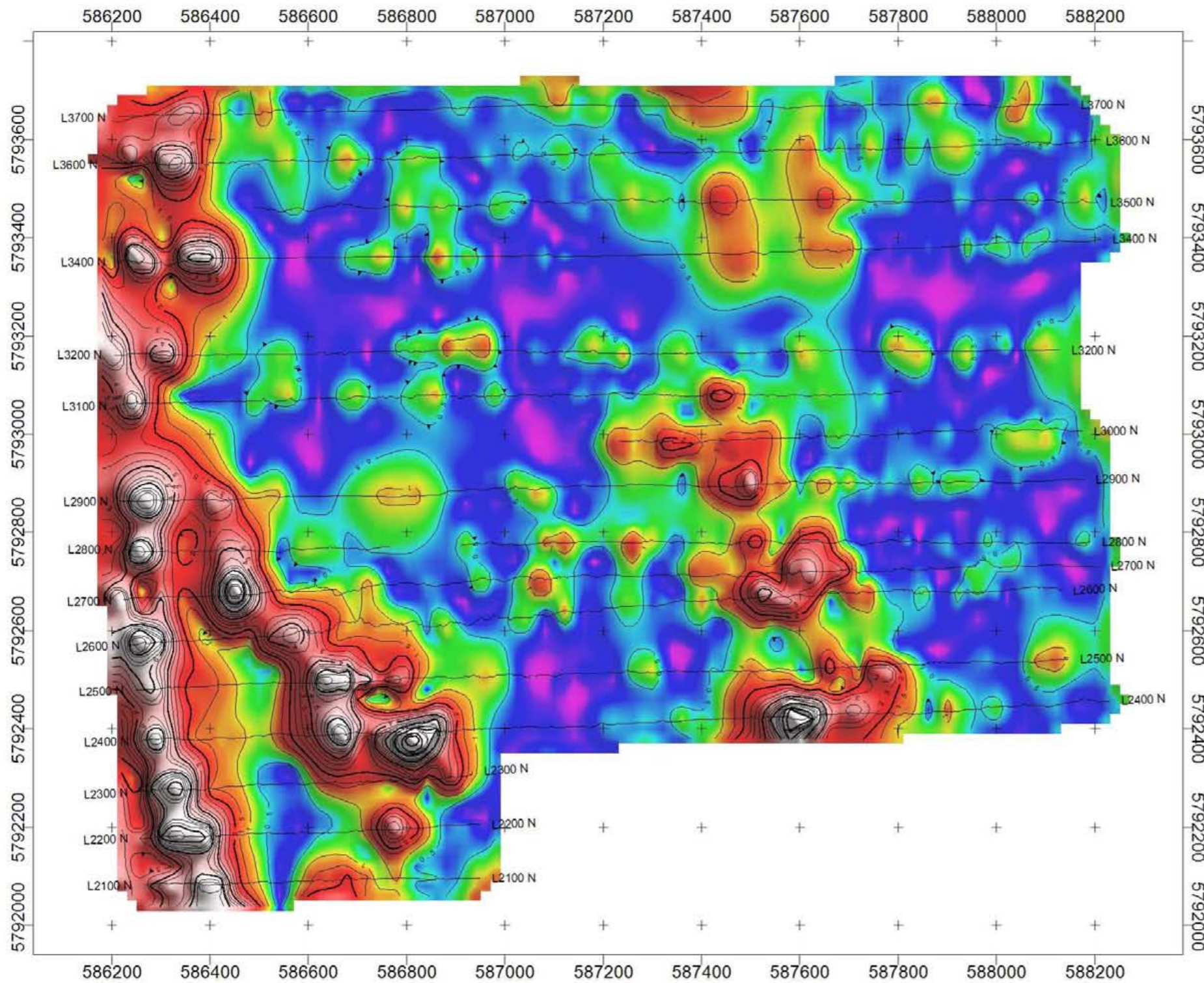
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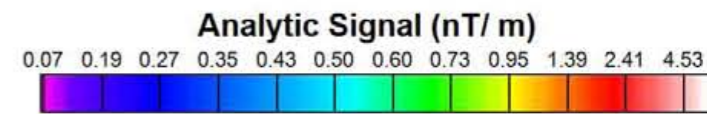




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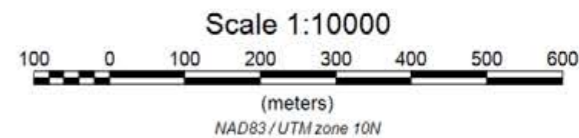
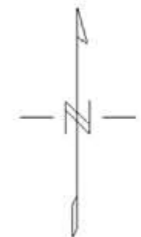
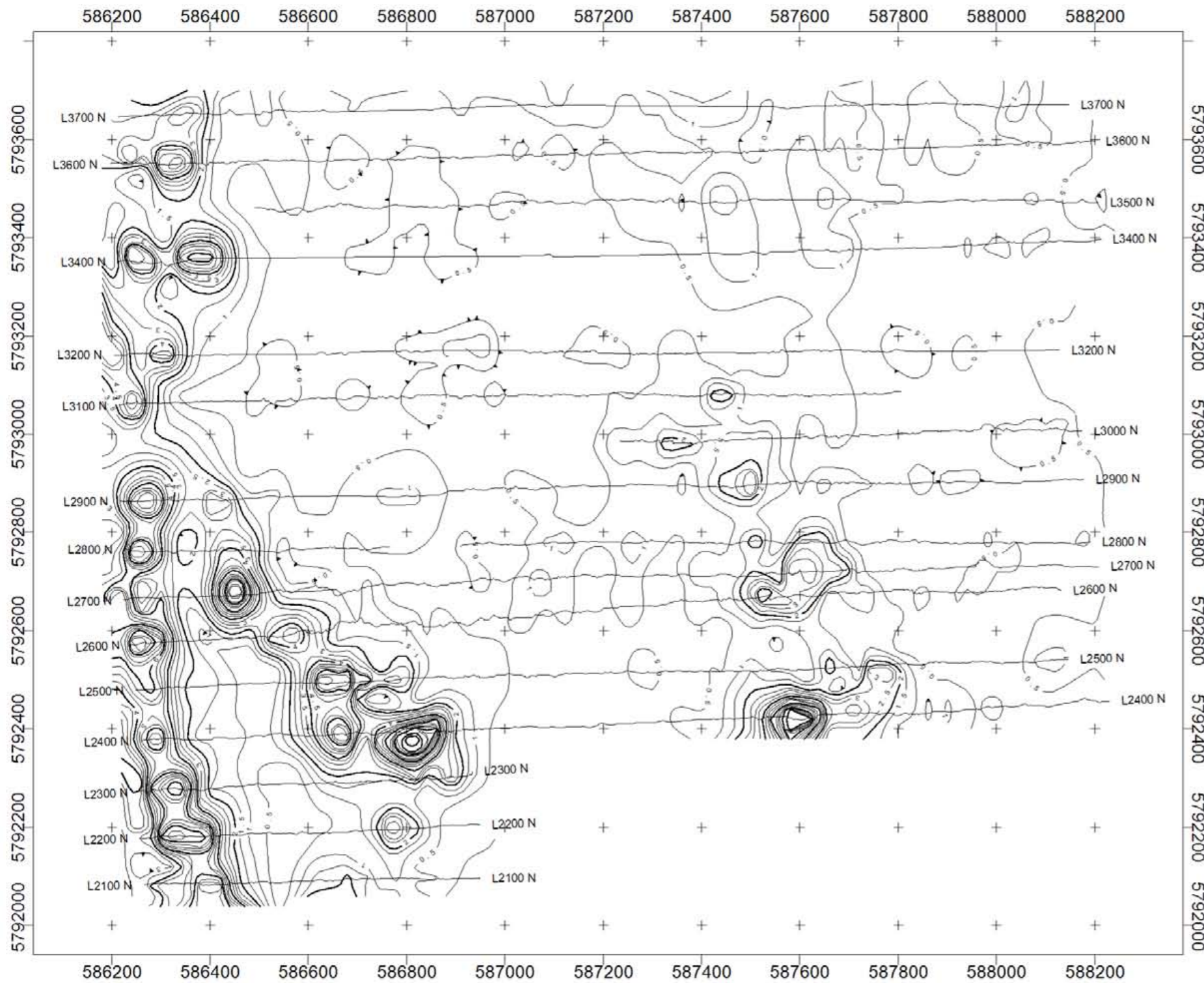
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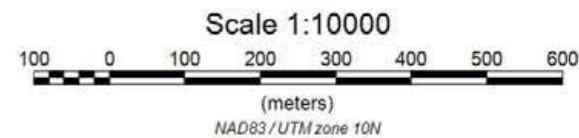
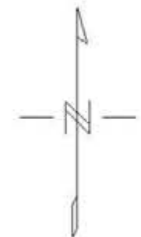
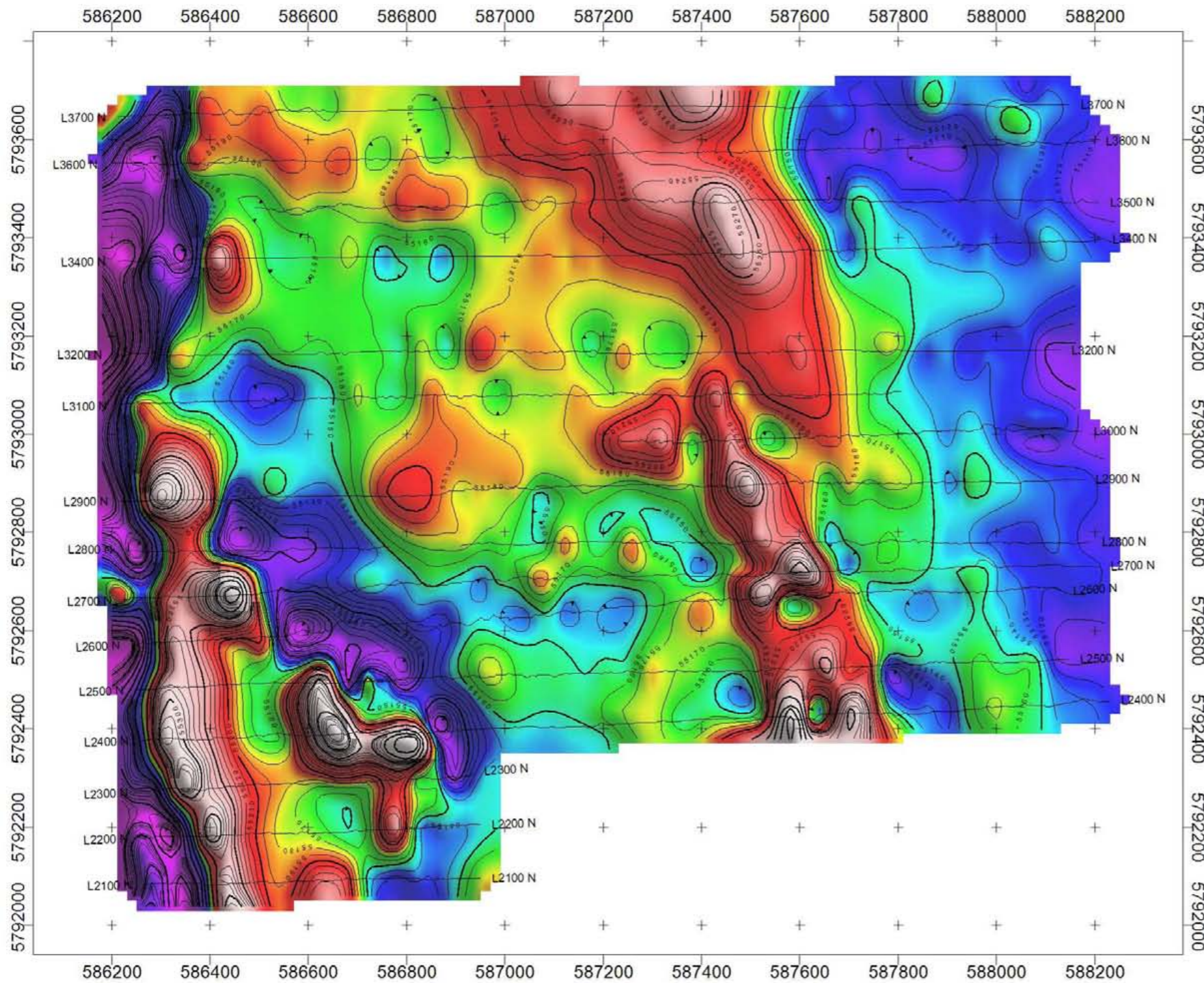
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**APPENDIX II**

**REPORT ON THE INDUCED POLARIZATION SURVEY**

**BY**

**SJ GEOPHYSICS**



**LOGISTICS REPORT PREPARED**  
**FOR**  
**EAGLE PEAK RESOURCES, INC.**

**THREE DIMENSIONAL INDUCED POLARIZATION SURVEY**  
**ON THE**  
**MIOCENE PROPERTY, PEAKS PROSPECT GRID**

WILLIAMS LAKE, B.C., CANADA  
LATITUDE: 52°16 ' N LONGITUDE: 121° 43' W  
BCGS SHEET: 093A022  
NTS SHEET: 093A05  
MINING DIVISION: CARIBOO

SURVEY CONDUCTED BY SJ GEOPHYSICS LTD.  
AUGUST - SEPTEMBER, 2011

REPORT PREPARED BY  
CHRIS HERMISTON  
SEPTEMBER 2011

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## 1. SURVEY DETAILS

SJ Geophysics Ltd. was contracted by Eagle Peak Resources, Inc. to acquire geophysical data on their Miocene project, Peaks Prospect grid. The following table provides a brief summary of the project.

<b>Client</b>	Eagle Peak Resources, Inc.
<b>Project Name</b>	Miocene project, Peaks Prospect grid
<b>Location</b>	Grid Location: 52°16 ' N Longitude: 121° 43' W 587000E, 5792800N, UTM NAD83, Zone 10
<b>Survey Type</b>	3D Induced Polarization (3DIP)
<b>Number of Survey Lines</b>	17
<b>Total Line Kilometres</b>	30.1 km
<b>Dates</b>	August 15 – September 2, 2011
<b>Objective</b>	SJ Geophysics was contracted to carry out a 3DIP survey with the purpose of providing 3D inverted models of resistivity and chargeability properties.

Table 1: Survey Details

This logistics report summarizes the operational aspects and methodologies of the geophysical survey. This report does not discuss or interpret the survey results.

## **2. LOCATION AND ACCESS**

The Miocene project is located in British Columbia, Canada (Figure 1). The closest major town to the survey area is Williams Lake, which is approximately 42 km southwest of the Miocene project. Travel time between the project area and Williams Lake was approximately 1 hour and 15 minutes. The project area can be accessed from Williams Lake by the following directions:

Take highway 97 south approximately 20 kilometers to the Horsefly/Likely highway exit. Turn onto the Likely highway and travel for approximately 35 kilometers. Take a right turn at the Stone Ranch and drive on a forestry road for approximately fifteen kilometers to reach the survey grid (Figure 2).

The area is characterized by spruce, fir and pine evergreen trees as well as a mix of deciduous vegetation. The local fauna include squirrels, rabbits, marmots and bears. The area is also used as ranch land, so several herds of cattle were roaming about the grid.





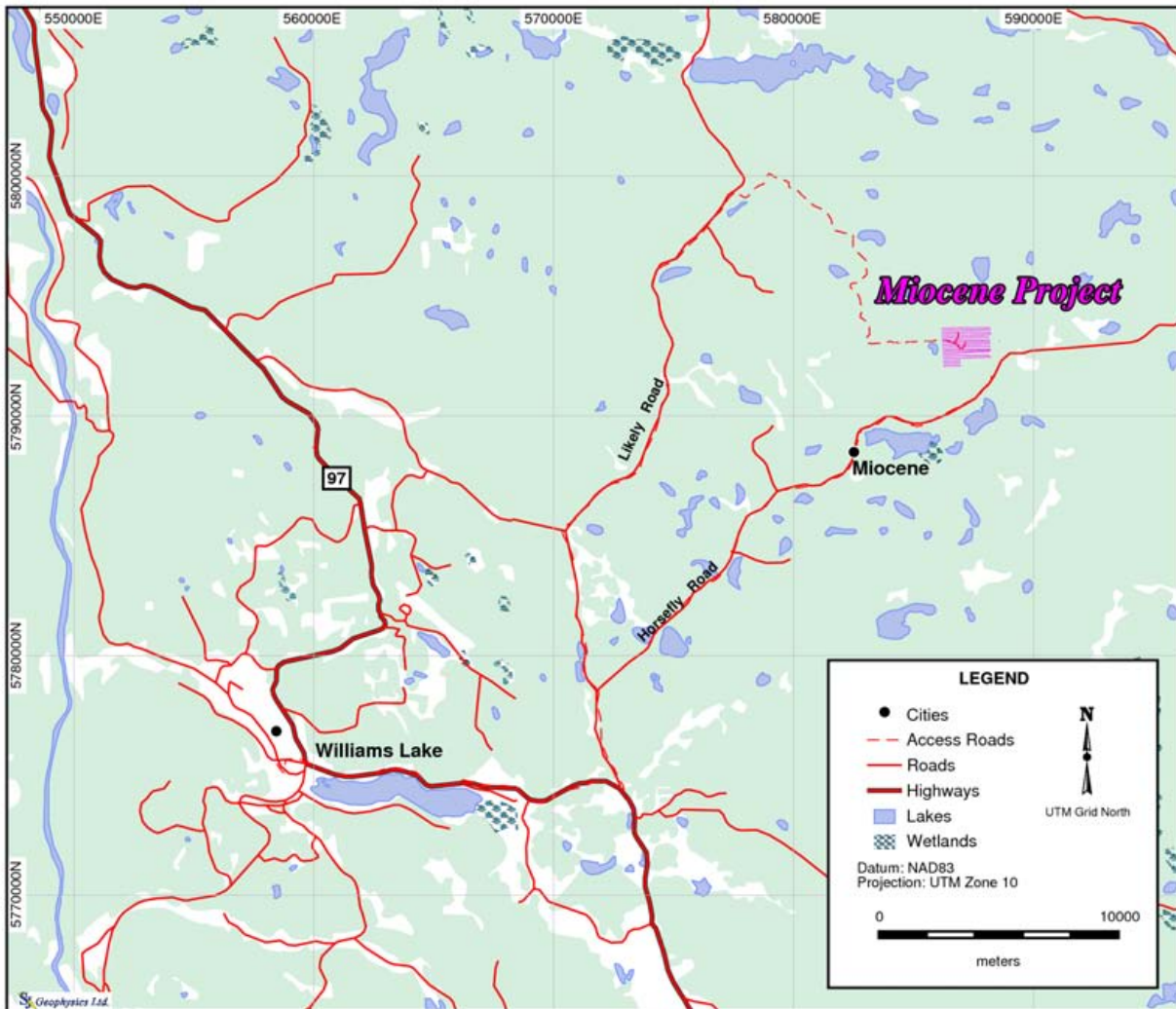


Figure 2: Location map for the Miocene Project.

### 3. GRID INFORMATION

<b>Grid</b>	Peaks Prospect
<b>Number of Lines</b>	17
<b>Survey Line Azimuth</b>	90°
<b>Line Spacing</b>	100 m
<b>Station Spacing</b>	50 m
<b>Elevation range</b>	990 m – 1120 m

Table 2: Grid parameters

The 3DIP survey on the Miocene project consisted of a single grid (Peaks Prospect) with 17 lines (100 m line spacing). Stations were flagged and marked every 50 m (Figure 3). Line and station labels were made up by the client with the most northern line being labeled L17 and the most southern line labeled as L1. The SJ Geophysics crew decided to rename the line labels to L1700N starting at the northernmost line down to L100N for the southernmost line. The station labels started at 10000E on the western edge of the grid and ended with station 12000E on the eastern edge. Originally the grid plan consisted of 17 full 2 km long lines; however, lines 300N, 200N and 100N had to be cut short to 700 m because of land use permission issues.

All of the location information was recorded by the SJ Geophysics crew, including differential GPS control points. Control points were recorded with Ashtech Promark Field differential GPS units in the UTM projection and NAD83 datum.

The Peaks prospect has small topographical gradients with one hill peaking central to the grid area with decreasing elevation moving outwards. The higher elevations consisted of dense evergreen forest stands with thin layers of soil; in contrast, the low elevations consisted of marsh lands and thick vegetation. The moderate slopes between the two regions made traversing the survey area less difficult. Temperature at the Miocene project ranged from around 10 °C at night up to 25 °C during the day. Precipitation was moderate at this time of year so the conditions were moist; this field season had much more precipitation than in other years.



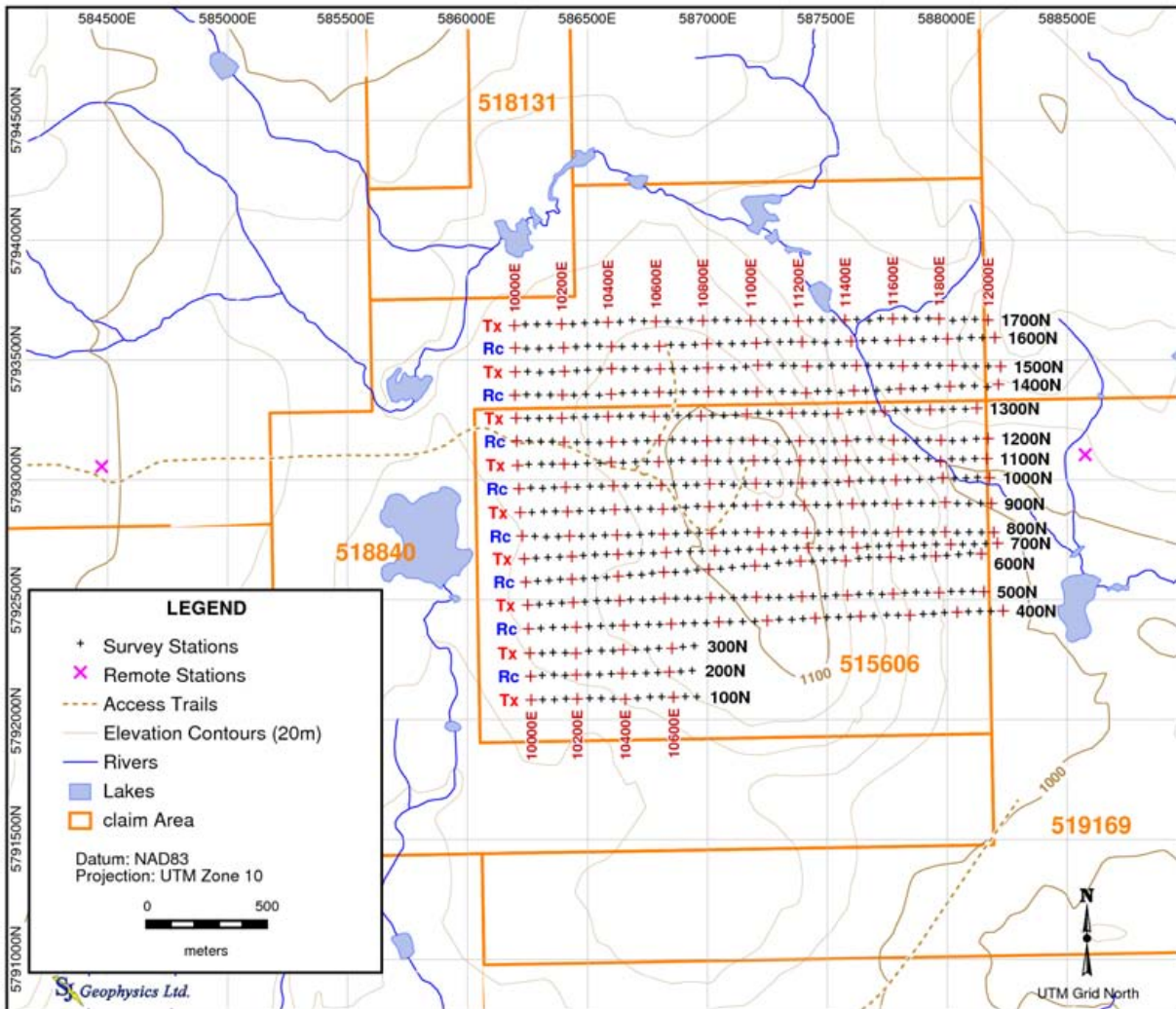


Figure 3: Grid Map showing the survey area for the Peaks Prospect grid.

## 4. FIELD WORK AND INSTRUMENTATION

### 4.1. Field Logistics

An SJ Geophysics field crew typically consists of at least two field geophysicists or technicians and at least four helpers to assist in the day-to-day operation of the survey. The field geophysicists and technicians oversee all operational aspects including field logistics, data acquisition and initial field data quality control. Table 3 lists the SJ Geophysics crew members on this project. No local helpers were hired by the client to assist the SJ Geophysics crew in the day-to-day operation of the survey.

The SJ Geophysics crew arrived at the Miocene project on August 14<sup>th</sup> and began production on August 15<sup>th</sup>, however, this day was a no-charge day. On September 2<sup>nd</sup> field operations on the Miocene project were completed, and on September 3<sup>rd</sup>, all remaining SJ Geophysics crew demobilized from the project.

<i>Crew Member Name</i>	<i>Role</i>	<i>Dates on Site</i>
Chris Hermiston	Field Geophysicist	August 17 to September 2
Jay Enns	Field Geophysicist	August 15 to August 26
Shane Smith	Field Geophysicist	August 15 to September 2
Douglas Maclean	Field Technician	August 17 to September 1
Ryan Halton	Field Technician	August 27 to September 2
Nick Chalykoff	Field Technician	August 27 to September 1
George Jordan	Field Helper	August 15 to August 26
Victor Kulla	Field Helper	August 15 to August 31

Table 3: Details of the SJ Geophysics crew dates on site

The SJ Geophysics crew was accommodated by the client in the Williams Lake Sandman Inn. The Inn had internet services, kitchen suites and maid service. Breakfast and lunch were prepared by the crew in the hotel room and dinner was taken at local restaurants around town. The town of Williams Lake had good cellular reception but once on the survey site reception was

not available; thus, there was no exterior contact once on grid.

The crew arrived on August 14<sup>th</sup> and normally would have begun setup for the 3DIP survey the following day; however, one of the crew vehicles, a blue 1993 Ford F-350, was stolen from the hotel overnight. In response Chris Hermiston flew back to Vancouver to pick up another truck and replacement equipment for the project. At this time, Douglas MacLean joined the crew. A 2010 Ford F-250 was driven up to Williams Lake on August 16<sup>th</sup> by Chris Hermiston and Douglas MacLean. The crew members that remained in Williams Lake surveyed all the location data on the grid while Chris Hermiston was away. The stolen vehicle was eventually recovered; however, some of the original equipment was missing. The most notable pieces of equipment that were missing were the two Honda generators and spine board with first aid kit. On August 26<sup>th</sup> Jay Enns drove the recovered F-350 back to Vancouver with the recovered equipment.

The approach used on this survey was somewhat typical of DABstix surveys. Instead of setting out DABstix receivers and wire that would only cover part of the length of the receiver line, the entire line was set up before surveying. This required the crew to set up all the wire on the receiver lines and current transmission lines the day before, then the next day the crew set up the DABstix receivers and surveyed the entire line. This tactic was preferred for several reasons. First, the client had mentioned that they were looking for more depth information so setting up the entire 2 km long receiver array was preferred. Second, as there was only six crew members and no dedicated processor, the set up day allowed the Field Geophysicist, Chris Hermiston, to stay back at the hotel and process data while the rest of the crew set up for the next day. If data processing finished early, Chris would drive to the grid to help the crew finish set up.

One major problem on the Miocene project was the number of cows residing on the grid. The cows would chew or break the wire frequently causing damage and lost survey time. Attempts were made to hang the wire high above the ground but in many areas there were no trees. The only other problem on the Miocene project was on August 25<sup>th</sup> when the crew found a broken mounting bracket on the Honda generator. The generator was replaced with a new one purchased in town and the broken one was sent back to Vancouver for warranty repair the next day.



## ***4.2. Survey Parameters and Instrumentation***

The geophysical instrumentation used to acquire the 3DIP data consisted of SJ Geophysics' full-waveform; 24-bit; single channel DABStix (Digital Acquisition Board) receivers and GDD Tx II transmitters. The specifications of these instruments are listed in Appendix A and the equipment parameters are summarized in Table 4 below.

The receiver lines of the potential array were connected using special 2-conductor cables, each 50 m long. At each receiver station, alternating wires from the 2-conductor cable were connected to potential electrodes, creating an interlaced array (Figure 4). For the receiver line, the electrodes consisted of stainless steel pins, 50 cm long and 10 mm in diameter, which were hammered into the ground. At each current station (50 m intervals), current was injected using two to four long (75 cm) stainless steel electrodes hammered into the ground. The remote current locations consisted of five 1 m stainless steel rods, 15 mm in diameter.

<b>Array Type</b>	3DIP – Offset Pole-Dipole
<b>Number of Dipoles</b>	27 to 39
<b>Dipole Length</b>	100 m interlaced, 50 m effective dipole size
<b>Array Length</b>	Up to 2000 m
<b>Current Interval</b>	50 m
<b>IP Transmitter</b>	GDD TxII (Serial #435, 439)
Duty Cycle	50%
Waveform	Square
Cycle and Period	2 sec on / 2 sec off; 8 second
<b>IP Receiver</b>	Full Waveform Digital DABStix Receiver
Reading Length	Minimum 85 seconds
Vp Delay, Vp Integration	1200 ms, 600 ms
Mx Delay, # of Windows Width (Mx Intergration)	200 ms, 20 36, 39, 42, 45, 48, 52, 56, 60, 65, 70, 75, 81, 87, 94, 101, 109, 118, 128, 140, 154 (200 ms – 1800 ms)
Properties Calculated	Vp, Mx, Sp, Apparent Res
<b>Differential GPS</b>	Ashtec ProMark GPS Receiver
Average Accuracy	< 1 meter
Base Unit Reading Interval	1 second
Datum / Projection	UTMNAD83, Zone 10
<b>GPS</b>	Garmin GPSMap 62s
Average Accuracy	5 m
Datum / Projection	UTMNAD83 Zone 10

Table 4: Instrument parameters

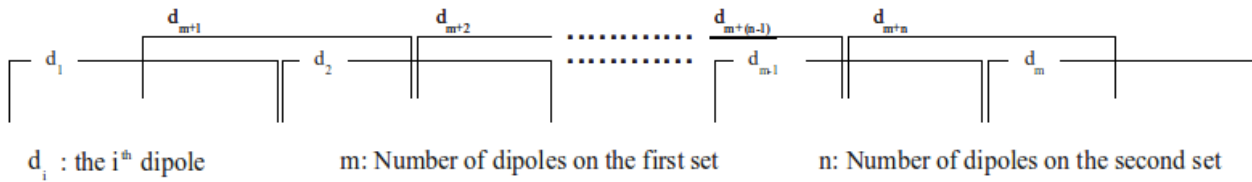


Figure 4: Schematic of the interlaced array used on the receiver lines.

Geographic locations of grid stations were collected at current injection points, dipole electrodes, and IP remote stations. The Ashtec receivers were set up following a base and rover configuration. Each morning a local base station receiver was placed near the transmitter site. The external antenna for the base receiver was mounted and leveled on a tripod at a measured height sufficiently high enough to ensure that there were no obstructions in the antenna's field of view. The base station was configured to collect raw GPS data at 1-second intervals and this location was defined as a control point. The rovers were used with an external antenna mounted on top of a 2 m monopod. Time on point for each station ranged from 30-60 seconds depending on “horizontal root mean square” (HRMS) error, and the “vertical root mean square” (VRMS) error. The “position dilution of precision value” (PDOP), a general measure of the anticipated location accuracy as a function of the satellites constellation geometry and signal strength, was also monitored to ensure that locations were not collected during unfavorable conditions. The number of satellites used at any one time typically ranged from 5 to 10, with Wide Area Augmentation Satellites (WAAS) being mostly visible.

Type	UTM Easting/NAD83 Zone 10	UTM Northing/NAD83 Zone 10
West Remote	584474	5793055
East Remote	588572	5793102

Table 5: 3DIP remote sites.



## **5. GEOPHYSICAL TECHNIQUES**

### **5.1 IP Method**

The time domain IP technique energizes the ground by injecting square wave current pulses via a pair of current electrodes. During current injection, the apparent (bulk) resistivity of the ground is calculated from the measured primary voltage and the input current. Following current injection, a time decaying voltage is also measured at the receiver electrodes. This IP effect measures the amount of polarizable (or “chargeable”) materials in the subsurface rock.

Under ideal circumstances, high chargeability corresponds to disseminated metallic sulfides. Unfortunately, IP responses are rarely uniquely interpretable as other rock materials are also chargeable, including some graphitic rocks, clays and some metamorphic rocks (e.g., serpentinite). Therefore, it is prudent from a geological perspective to incorporate other data sets to assist in interpretation.

IP and resistivity measurements are generally considered repeatable to within about five percent. However, changing field conditions, such as variable water content or electrode contact, reduce the overall repeatability. These measurements are influenced to a large degree by the rock materials near the surface or, more precisely, near the measuring electrodes. In the past, interpretation of a traditional IP pseudosection was often uncertain because strong responses located near the surface could mask a weaker one at depth.

### **5.2 3DIP Method**

Three dimensional IP surveys were designed to take advantage of recent advances in 3D inversion techniques. Unlike conventional 2DIP, the electrode arrays are not restricted to an in-line geometry. In the standard 3DIP configuration, a receiver array is established along a survey line while current electrodes are located on two adjacent lines. Current electrodes are advanced along the adjacent lines at fixed increments (25, 50, 100 or 200 m). A typical receiver array consists of 12 to 16 dipoles separated by the same interval as the current lines or by some multiple of that interval. These spacings are sometimes modified to compensate for local conditions, such as inaccessible sites and streams, or the overall conductivity of ground. Receiver arrays are typically established on every second line. By injecting multiple current

locations to a single receiver electrode array, data acquisition rates are significantly improved over conventional surveys.

## **6. QUALITY ASSURANCE**

### **6.1. Locations**

Good quality survey location data is crucial to successful analysis and interpretation of the collected geophysical data. The quality of the location data for this survey is generally high thanks to good satellite reception. GPS measurements (control points) were obtained for each survey station and no interpolation was necessary.

### **6.2. IP Data**

All geophysical data go through a series of quality assurance checks in the field and in the office to ensure data are of sufficiently good quality. Prior to field data acquisition, a contact resistivity test is performed using a DABStix receiver unit for each dipole in the array. This test allows the operator to identify areas of poor ground contact which could otherwise degrade input signal quality during data acquisition stages. Furthermore, this test allows the operator to inspect the raw data being recorded by the DABStix to ensure that there are no problems with the receiver and to ensure the receiver is synching to the appropriate GPS time.

During acquisition stages, a dedicated DABStix at the transmitter is used to monitor the current being injected at each station through the use of a current monitor. In doing so, the transmitter operator is able to inspect the quality of the input current and can easily identify when there may be current leakage problems or when a transmitter is not transmitting current cleanly or consistently. The DABStix at the transmitter is also used to obtain the GPS time when current is on.

Following field data collection, data are downloaded from each DABStix receiver unit and clipped to the GPS time windows used during acquisition as recorded by the transmitter DABStix. All processed data are inspected and any bad units or readings are flagged for removal. The data are then exported to an .xml format for further quality control.

Each evening, the analyzed data are imported into JavIP: a proprietary IP database

management system developed by S.J.V. Consultants Ltd. (SJV). This package integrates the locational information with each reading, thus allowing the calculation of the apparent resistivity and apparent chargeability. The package's interactive quality control tools include: plots of decay curves, tables of calculated parameters and a dot plot (a graphical display of data of the various parameters). These enable the field geophysicist to validate each data point. After the field geophysicist removes known bad points from field observations and other obvious outliers, the database is delivered to SJV for a second review.

The second review is more stringent; the data is scrutinized to ensure erroneous data points are not passed along to the next stage of processing: the inversion. SJV predominantly uses the UBC-GIF algorithms to invert their geophysical data.

The data collected on the Miocene project was of good quality. The Vp's, for the most part, were strong and the signals and resulting decay curves were mostly clean. With exception of the first receiver line, 1600N, the receiver array was set up along the entire line before surveying began. For the 2km long lines there were 39 DABstix receivers set up and for the 700 m lines only 12 DABstix receivers were needed. On the Miocene project most of the data flagged for removal was due to non-coupling. This phenomena is typical in IP surveys and is related to the survey configuration. Non-coupling occurs when the receiver dipole is sub-parallel to the equipotential lines which can result in a significant decrease in signal strength and lead to untrustworthy data. Occasionally there was some data lost due to broken wires, which were caused by cows roaming about the grid. Figure 5 below is a good representation of the overall data quality collected on the Miocene project.



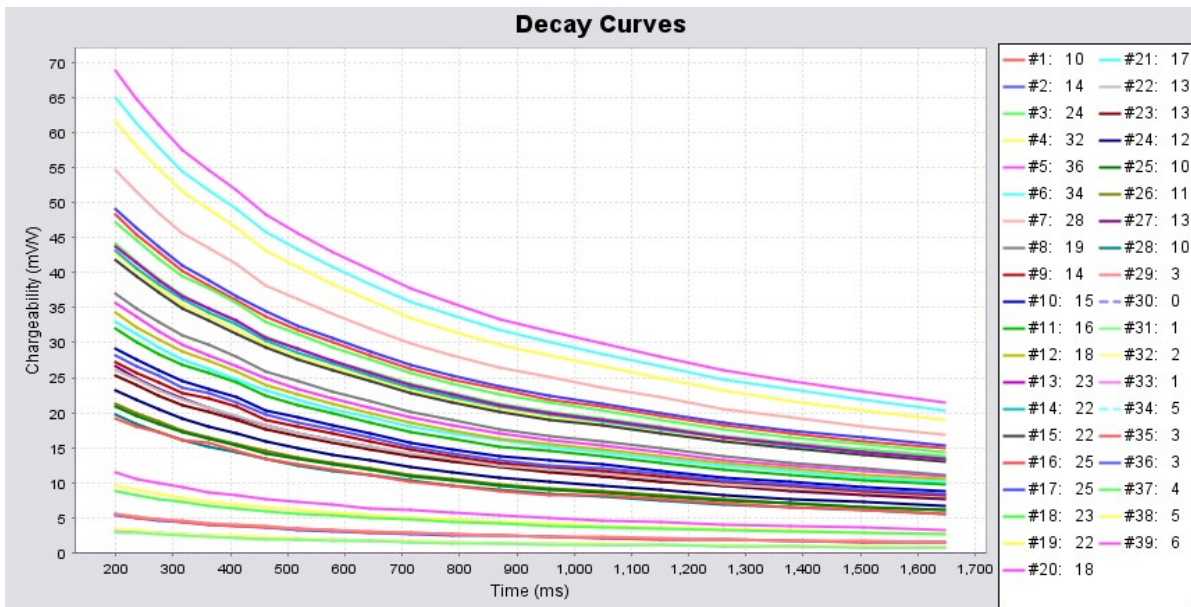


Figure 5: Clean decay curves collected on the Miocene project..

## 7. GEOPHYSICAL INVERSION

The purpose of geophysical inversion is to estimate the distribution of the physical properties of the rocks in the subsurface based on the geophysical data collected at the surface. Examples of physical properties include: density, resistivity, chargeability, and magnetic susceptibility. Geophysical measurements made at the surface are strongly influenced by the physical properties of rocks in the subsurface. Therefore, we can use mathematical algorithms to convert these surface measurements into a 3D picture of the subsurface. This process is called geophysical inversion. Unfortunately, the inversion process cannot provide a single unique solution. Indeed, there are many different possible subsurface 3D physical property models that could fit our surface geophysical measurements. Despite this limitation, inversion is a very powerful tool to help identify the main subsurface features which are required by the surface geophysical data. With the combination of high quality surface measurements and geophysical inversion, a much greater understanding of the subsurface can be obtained. Several geophysical inversion programs are available, but SJ Geophysics primarily uses the UBC-GIF algorithms (e.g. DCIP2D, DCIP3D, MAG3D, GRAV3D) which were developed by a consortium of major mining companies under the auspices of the UBC-Geophysical Inversion Facility.

It is SJ Geophysics standard practice to invert data from 3DIP surveys, and to do this we use the DCIP3D program which solves two inverse problems. First, the DC potentials are inverted to calculate the spatial distribution of electrical resistivity in the subsurface. Second, the chargeability data (IP) are inverted to recover the spatial distribution of IP polarizable particles in subsurface rocks. When available, additional information, such as geological boundaries and down-hole geophysical data, can be added to the inversion in order to constrain the inversion model. The inversion programs are generally applied iteratively to evaluate the output with regard to what is geologically known, estimate the depth of detection, and determine the viability of specific measurements.

The inversion result is then run through a series of quality control steps prior to final gridding and mapping. Inversion output is plotted to show the distribution of physical properties (e.g. resistivity, chargeability, etc.) in cross-sections as well as plan maps that are sliced at different depths beneath the surface. Inversion results are also visualized in 3D using the open source software packages Mayavi and Paraview. Using both 2D and 3D views, additional data (such as topography, geochemistry, and drillholes) can then be overlain to aid in interpretation and facilitate discussion of potential drilling targets.

Respectfully submitted,

per SJ Geophysics Ltd.



Chris Hermiston

## ***APPENDIX A: INSTRUMENT SPECIFICATIONS***

### ***SJ Full Waveform Digital DABstix Receiver***

#### **Technical:**

Input impedance:	10M $\Omega$
Input overvoltage protection:	5.6V
Internal memory:	Storage Capacity 6.9 GB, readings dependent on sample rate and duration
Number of dipoles:	1
Synchronization:	GPS
Programmable Gain (V/V):	1, 2, 4, 8, 16, 32, 64, 128
Selectable Sampling Rates (samples/second):	10, 100, 500, 1000, 1500, 2000, 2500, 3000, 3500, 4000, 4500, 5000, 7500, 10000, 12500, 15000, 17500, 20000, 20833
Common mode rejection:	More than 80 dB (for Rs=0)
Self potential (Sp):	Range:-2.048V to +2.048V Resolution: 0.24 $\mu$ V Proprietary intelligent stacking process rejecting strong non-linear SP drifts.
Primary voltage:	Range: -2.5 to 2.5V (24 bit) Resolution: 0.24 $\mu$ V Accuracy: typ. <1.0%
Chargeability:	Accuracy: typ. <1.0%

#### **General (4 dipole unit):**

Dimensions:	19.4 x 7 x 3.7cm
Weight:	0.4 kg
Battery:	12V external
Operating temperature range:	-5 $^{\circ}$ C to 40 $^{\circ}$ C

### ***GDD Tx II IP Transmitter***

Input voltage:	120V / 60 Hz or 240V / 50Hz (optional)
Output power:	3.6 kW maximum
Output voltage:	150 to 2200 V
Output current:	5 mA to 10 A
Time domain:	1, 2, 4, 8 second on/off cycle
Operating temp. range:	-40 $^{\circ}$ C to +65 $^{\circ}$ C
Display:	Digital LCD read to 0.001 A
Dimensions:	34 x 21 x 39 cm
Weight:	20 kg



## ***Ashtec ProMark GPS Receivers***

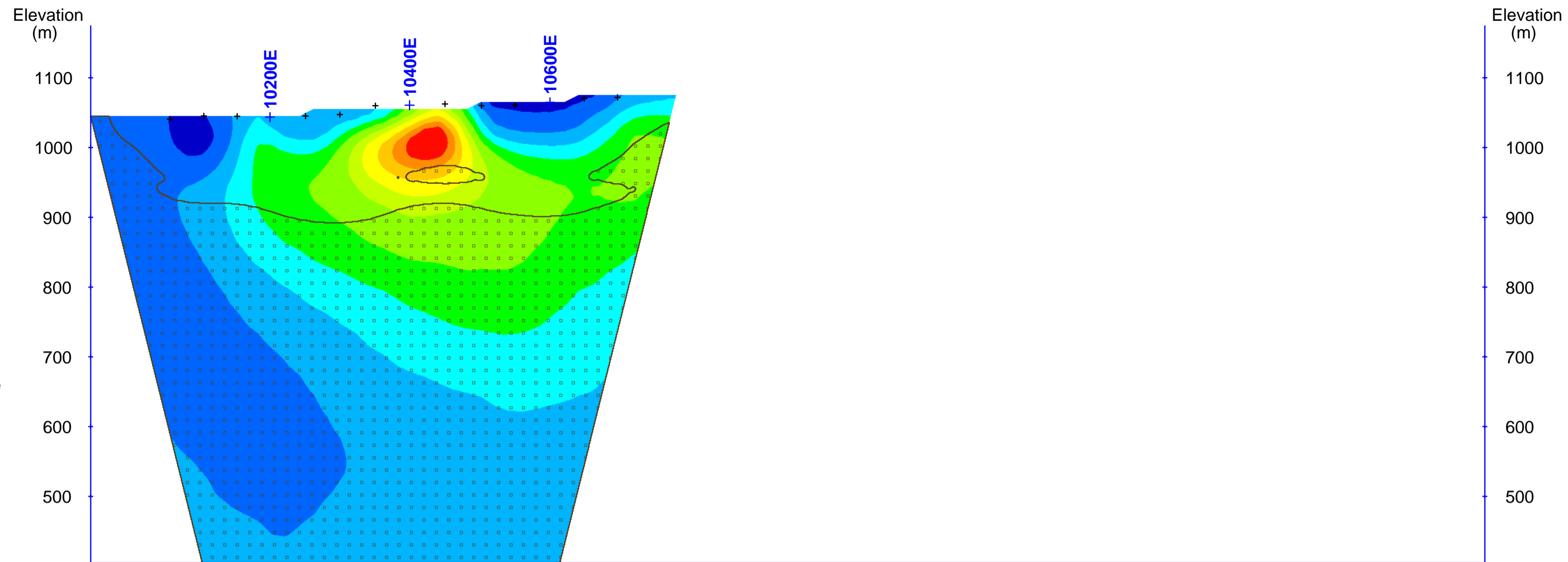
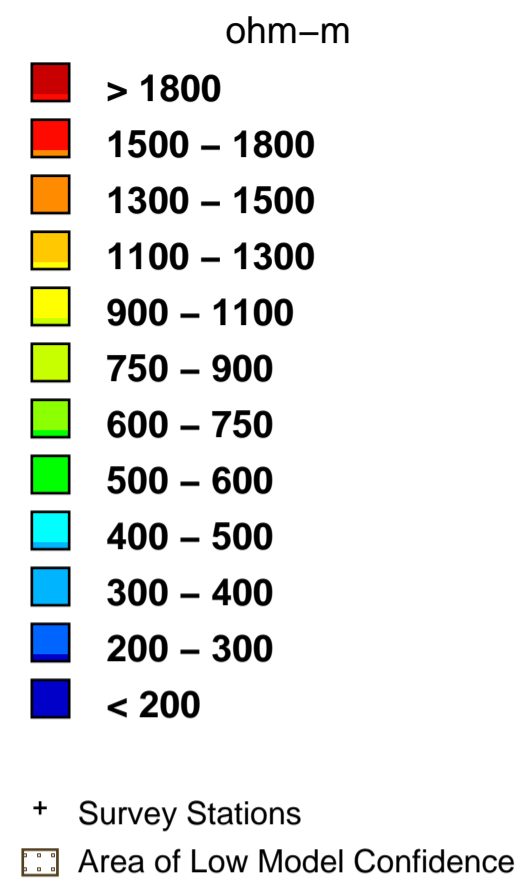
GNSS characteristics:	14 parallel channels L1 C/A code and carrier Integrated real-time WAAS/EGNOS Protocol: NMEA0183 RTCM SC-104 version 2.1
Static survey accuracy:	Horizontal: 0.005 m + 1 ppm Vertical: 0.001m + 2 ppm Azimuth: < 1 arc second Observation time ranges from 4 to 40 minutes depending on distance between ProMark receivers and other environmental factors
Kinematic survey accuracy:	Horizontal: 0.012 m + 2.5 ppm Vertical: 0.015 m + 2.5 ppm Recommended initializer bar occupation: 5 minutes
Real-time accuracy (RTK):	Fixed: 1cm +1ppm Float: 20cm +1ppm, convergence: 3 min
Real-time accuracy (SBAS [WAAS/EGNOS; rms]):	Horizontal: < 1m DGPS (Beacon or RTCM) (rms) Horizontal: < 1m
Datalogging characteristics:	Recording interval: 1-30 seconds Internal memory capacity: Up to 72 hours of 10 satellite data @ 1 second intervals
User interface:	Full colour advanced TFT LCD display with backlight 320 x 240 resolution with 262.144 colours Resistive touch panel Keyboard with backlight 20 buttons Audio: built-in speaker
Memory:	128 MB SDRAM, 128 NAND Flash memory Removable SD Card: up to 1 GM
Communication:	Bluetooth USB: host and slave RS232
Receiver:	Size: 19.5 x 9 x 4.6 cm Weight: 0.48 kg with battery Operating Temp: -10 °C to 60 °C Storage Temp: -20 °C to 70 °C
Antenna:	Size: 19 x 9.6 cm Weight: 0.45 kg Operating Temp: -55 °C to 85 °C
Radio:	License-free radio 500 mW, 869 MHz for Europe, 902-928 MHz for North America Size: 14.5 x 10 x 4 cm Operating Temp: -20 °C to 70 °C

**APPENDIX B: SURVEY SUMMARY TABLE**

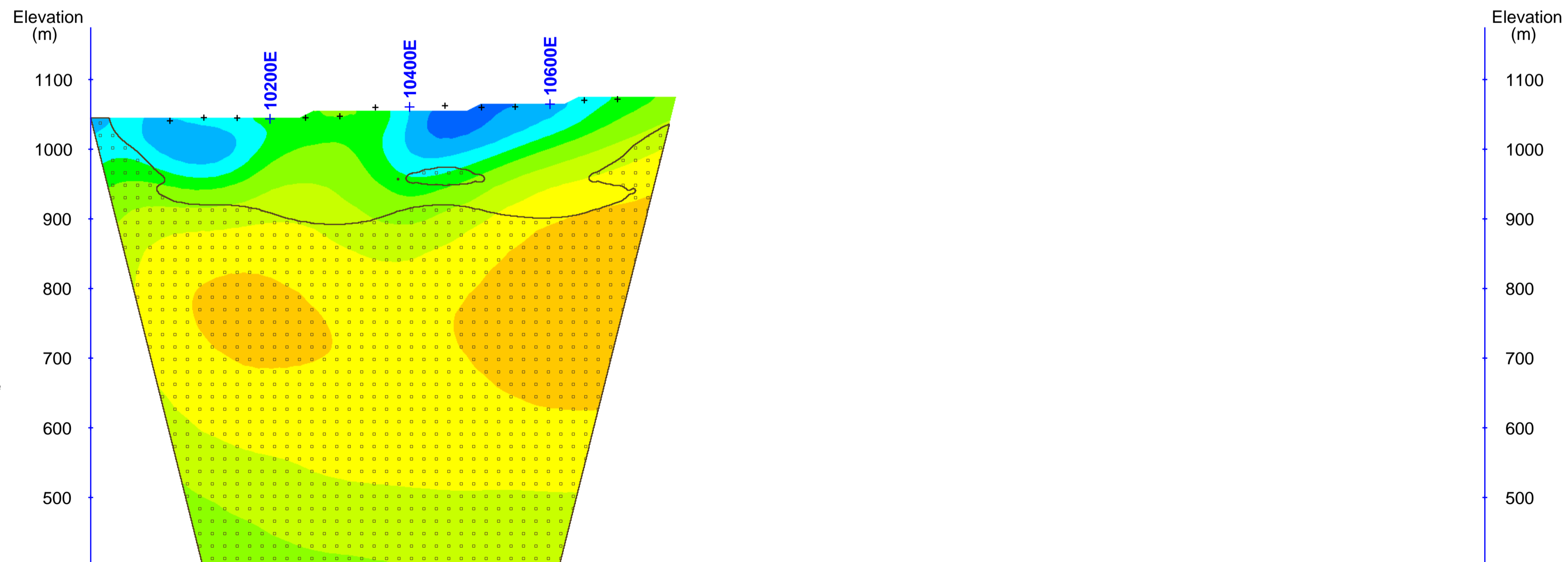
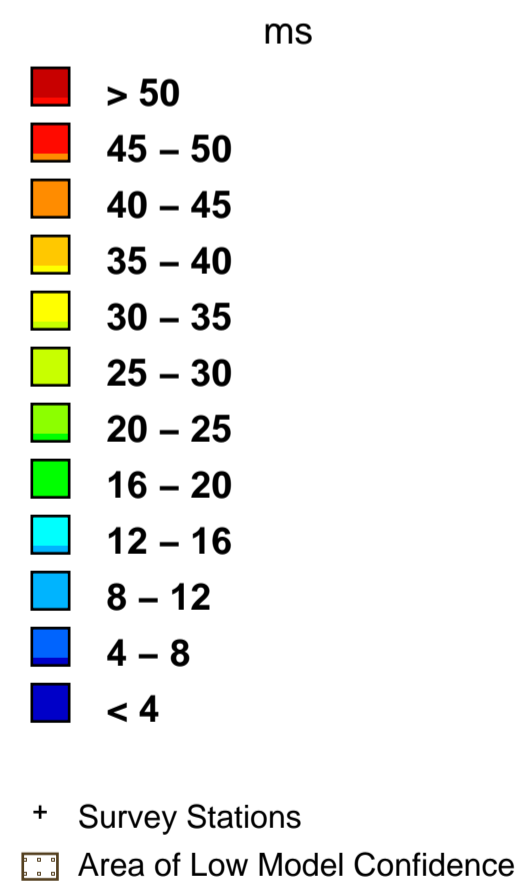
**Peaks Prospect Grid**

<i>Line</i>	<i>Series</i>	<i>Type</i>	<i>Start Station</i>	<i>End Station</i>	<i>Survey Length (m)</i>
100	N	Tx	10000	10700	700
200	N	Rx	10000	10700	700
300	N	Tx	10000	10700	700
400	N	Rx	10000	12000	2000
500	N	Tx	10000	12000	2000
600	N	Rx	10000	12000	2000
700	N	Tx	10000	12000	2000
800	N	Rx	10000	12000	2000
900	N	Tx	10000	12000	2000
1000	N	Rx	10000	12000	2000
1100	N	Tx	10000	12000	2000
1200	N	Rx	10000	12000	2000
1300	N	Tx	10000	12000	2000
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1700	N	Tx	10000	12000	2000

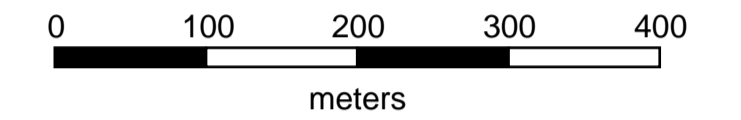
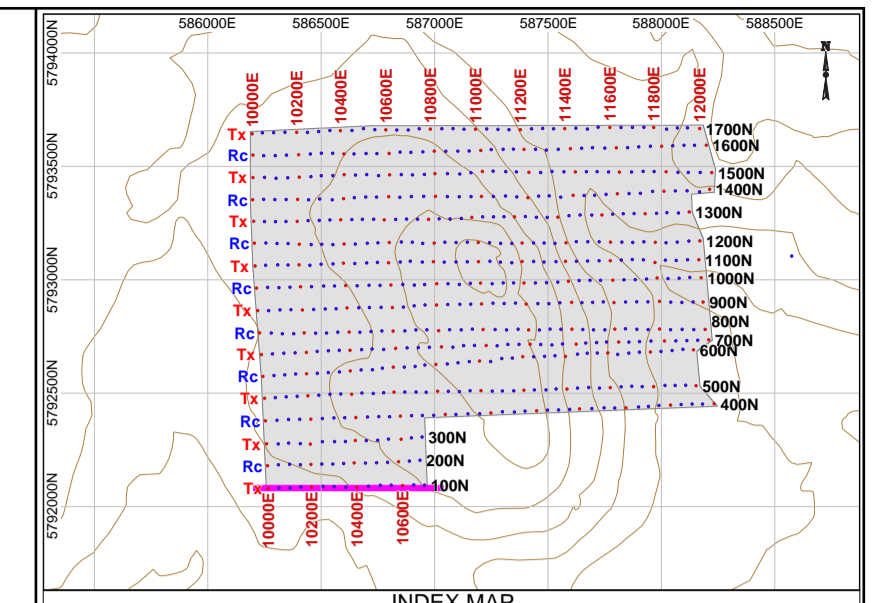
*Total Linear Metres = 30100*



Interpreted Resistivity (ohm-m)



Interpreted Chargeability (ms)



Project Information:  
 Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Survey Date: Aug.-Sept., 2011

Instrumentation:  
 Receiver: DABStix 24-bit Single Channel Receiver  
 Transmitter: GDD TX II  
 Array Type: 3D

Mapping Information:  
 Datum: NAD83  
 Projection: UTM Zone 10  
 Mapping Date: 13-Oct-2011

**Eagle Peak Resources Inc.**

**Miocene Property**

**Williams Lake, B.C.**

**3D Inversion Model**

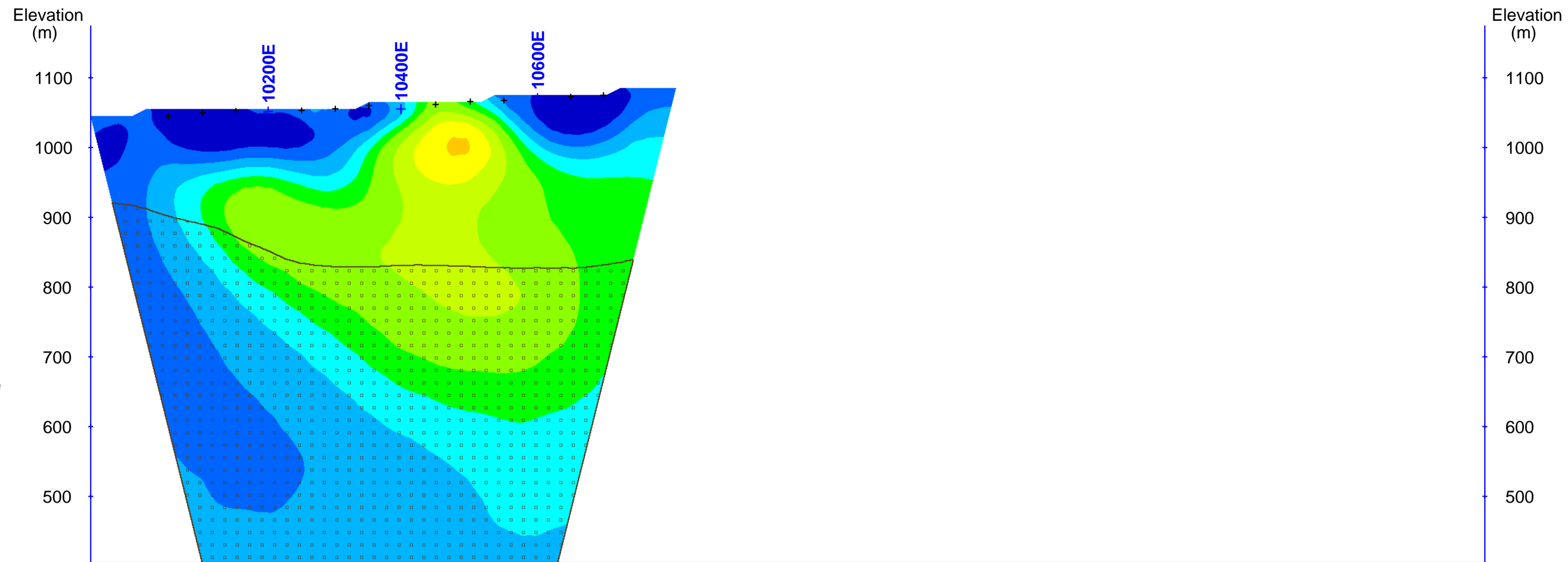
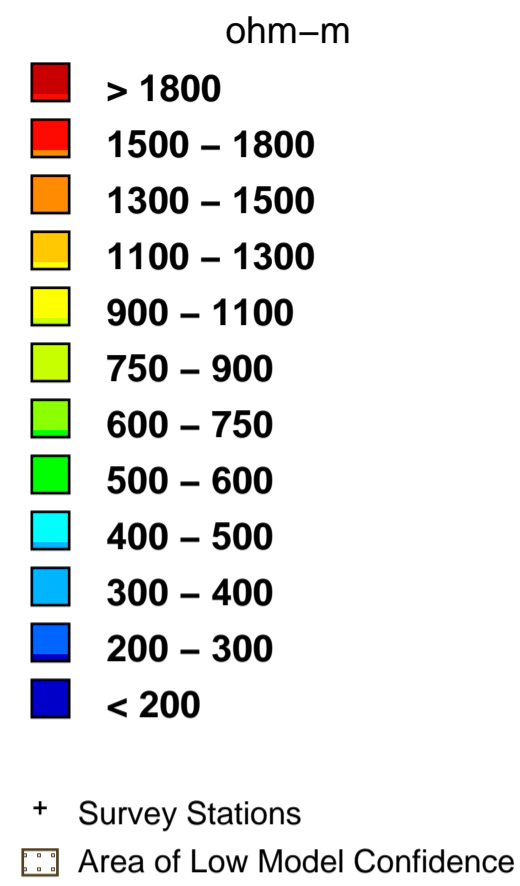
of

**Interpreted  
 Resistivity & Chargeability**

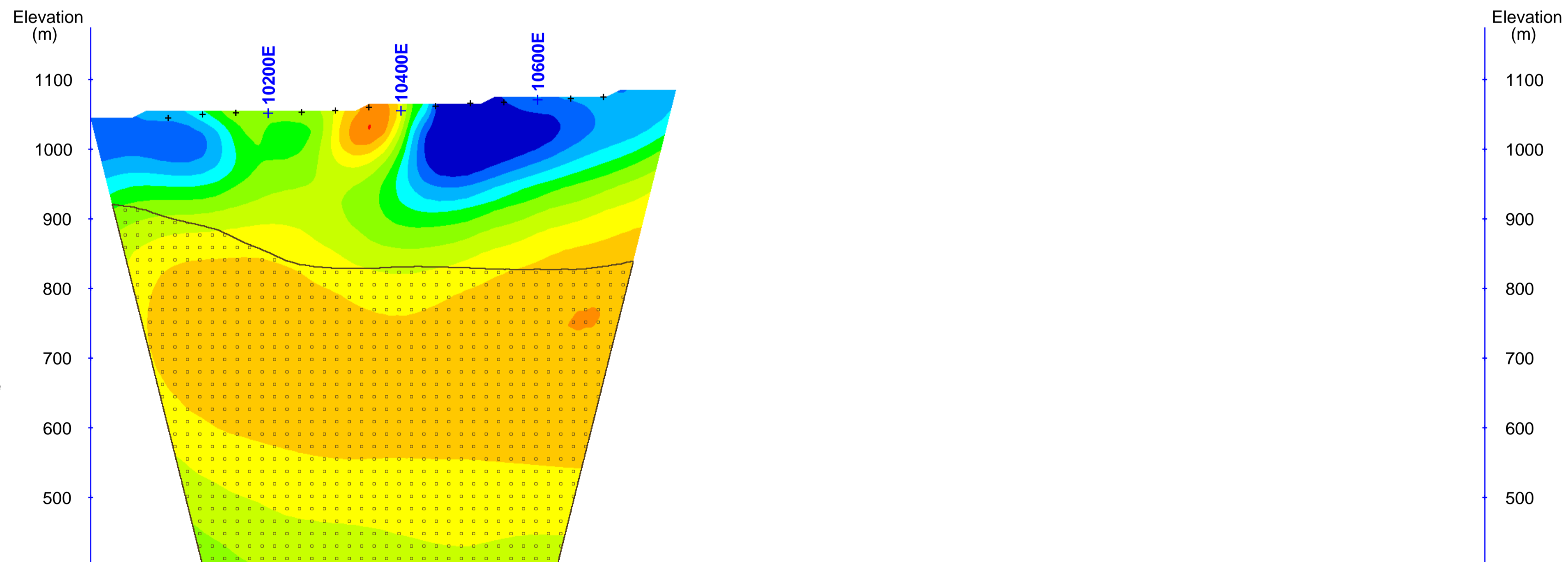
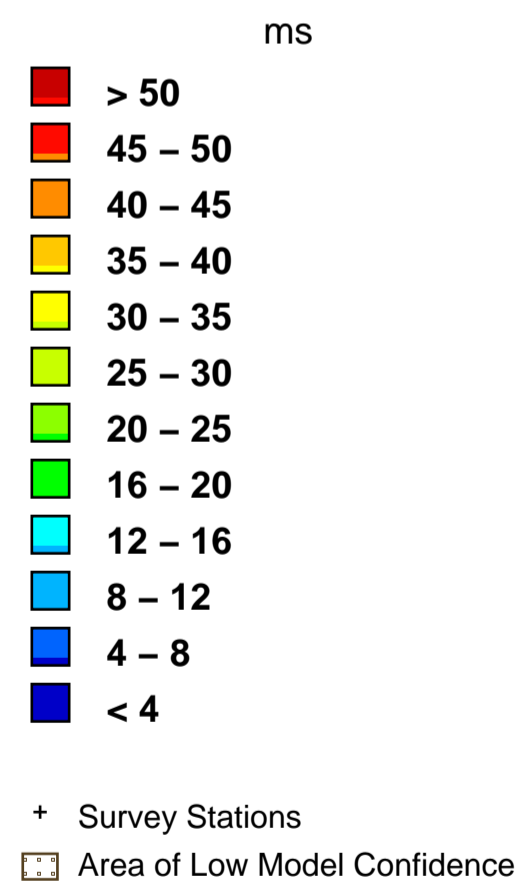
Cross Section Map

Section: 100N

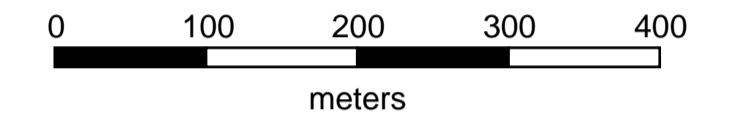
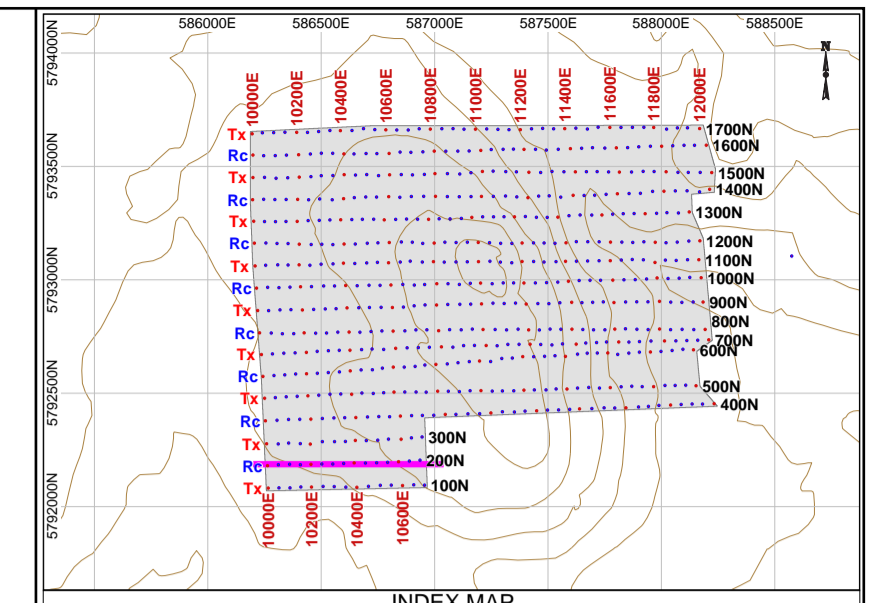




Interpreted Resistivity (ohm-m)



Interpreted Chargeability (ms)



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 Mapping Date: 13-Oct-2011

**Eagle Peak Resources Inc.**

**Miocene Property**

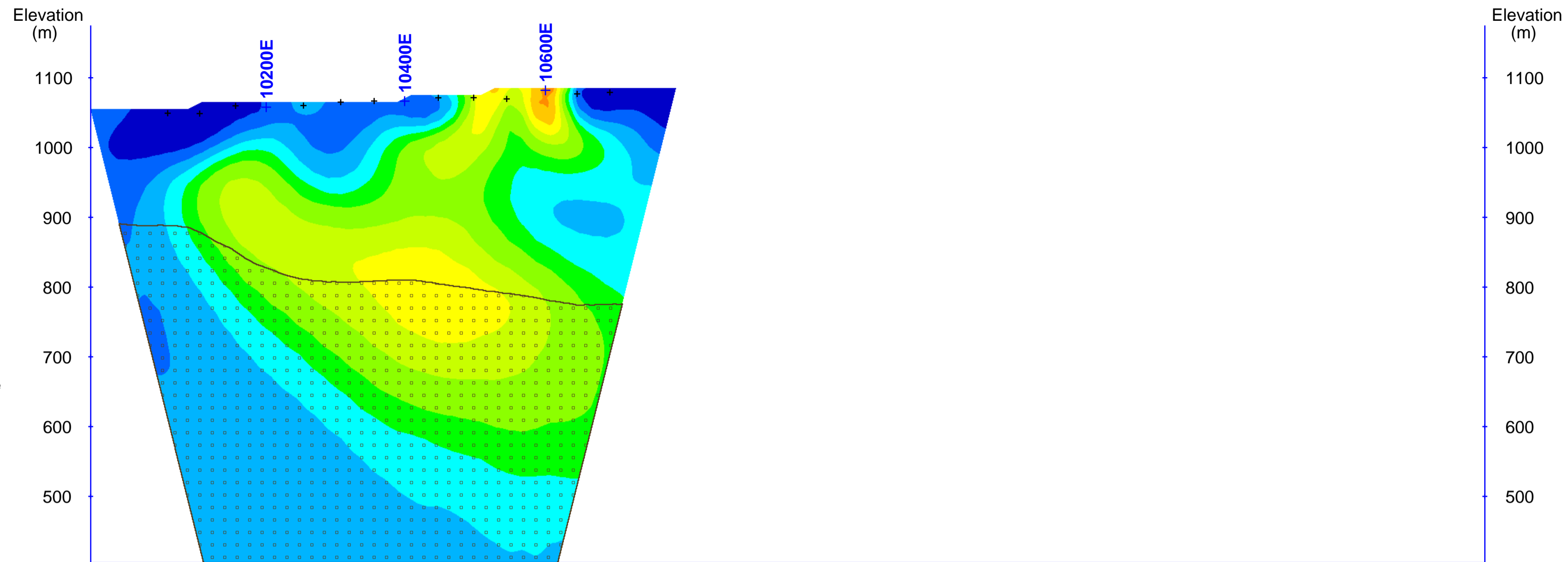
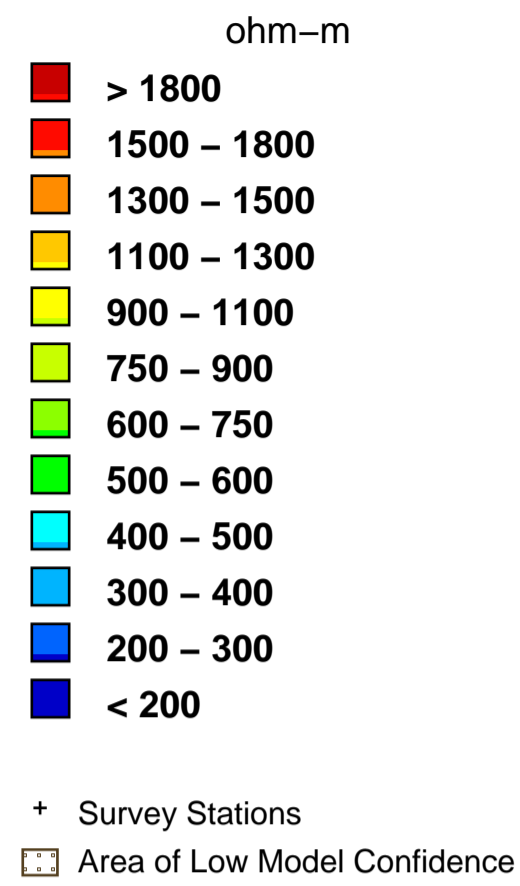
**Williams Lake, B.C.**

**3D Inversion Model**

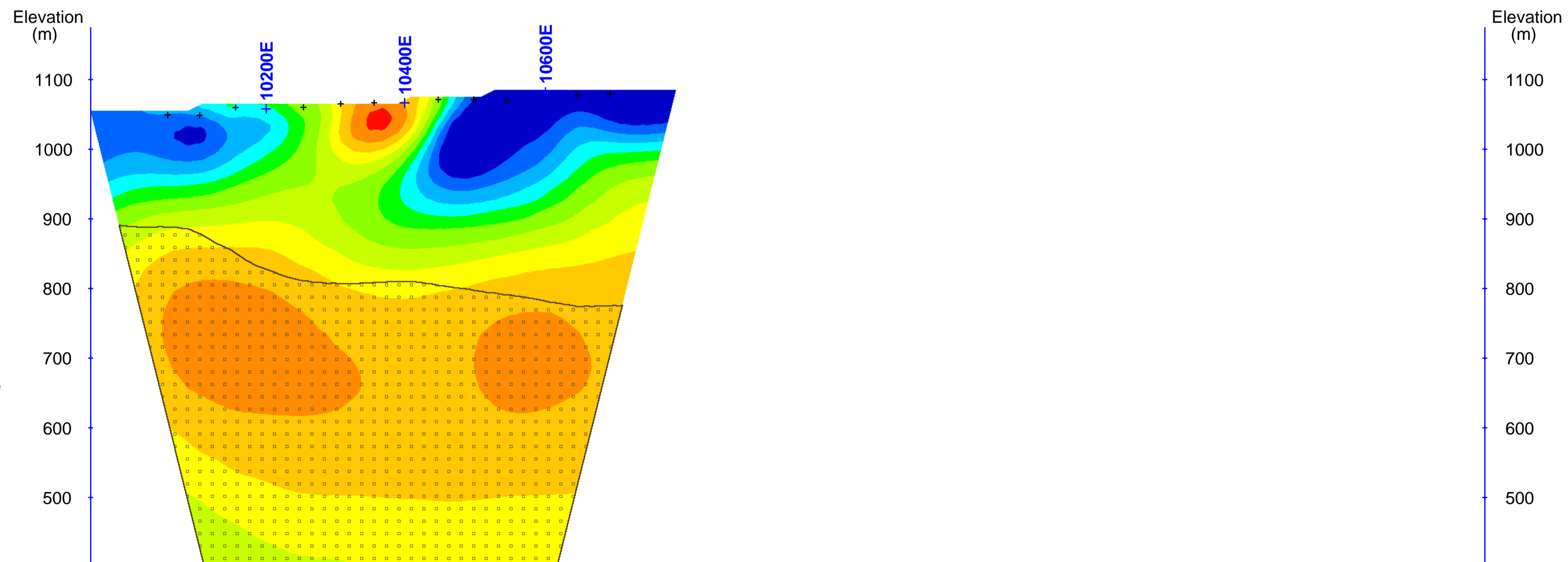
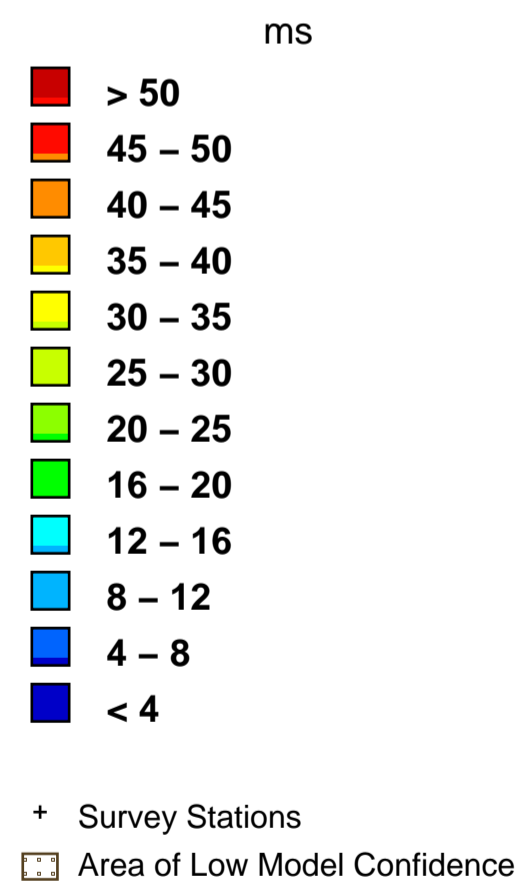
of  
**Interpreted  
 Resistivity & Chargeability**

Cross Section Map

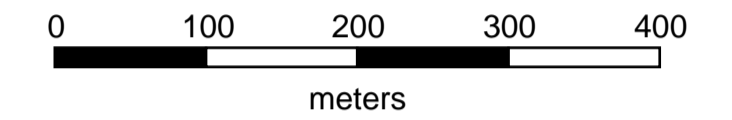
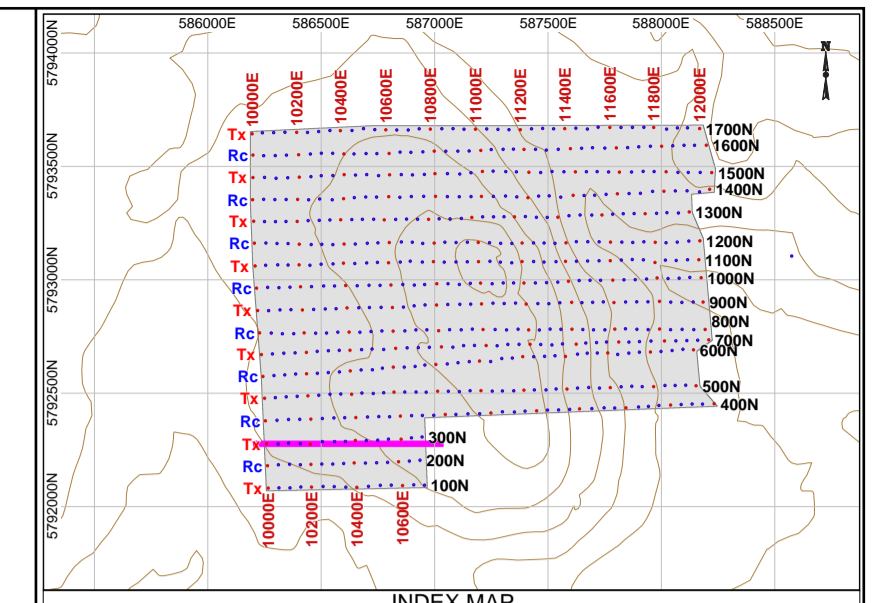
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Interpreted Resistivity (ohm-m)



Interpreted Chargeability (ms)



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 Array Type: 3D

Mapping Information:  
 Datum: NAD83  
 Projection: UTM Zone 10  
 Mapping Date: 13-Oct-2011

**Eagle Peak Resources Inc.**

**Miocene Property**

**Williams Lake, B.C.**

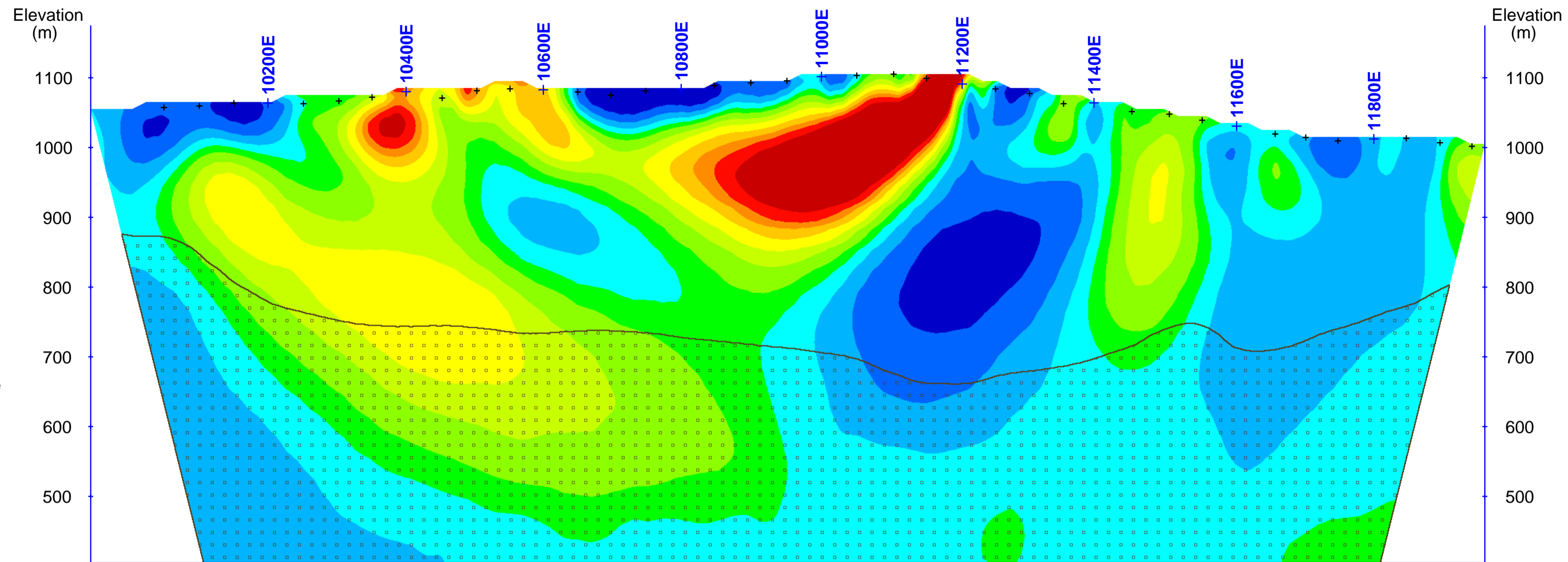
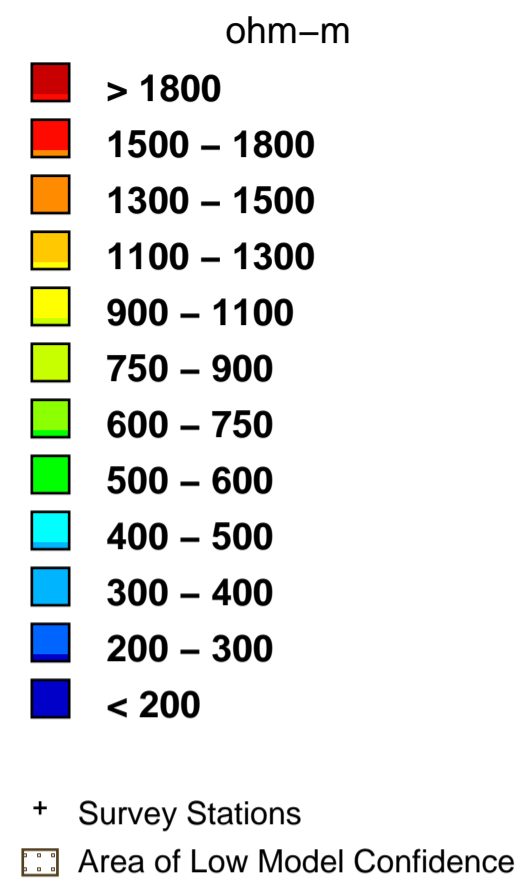
**3D Inversion Model**

of

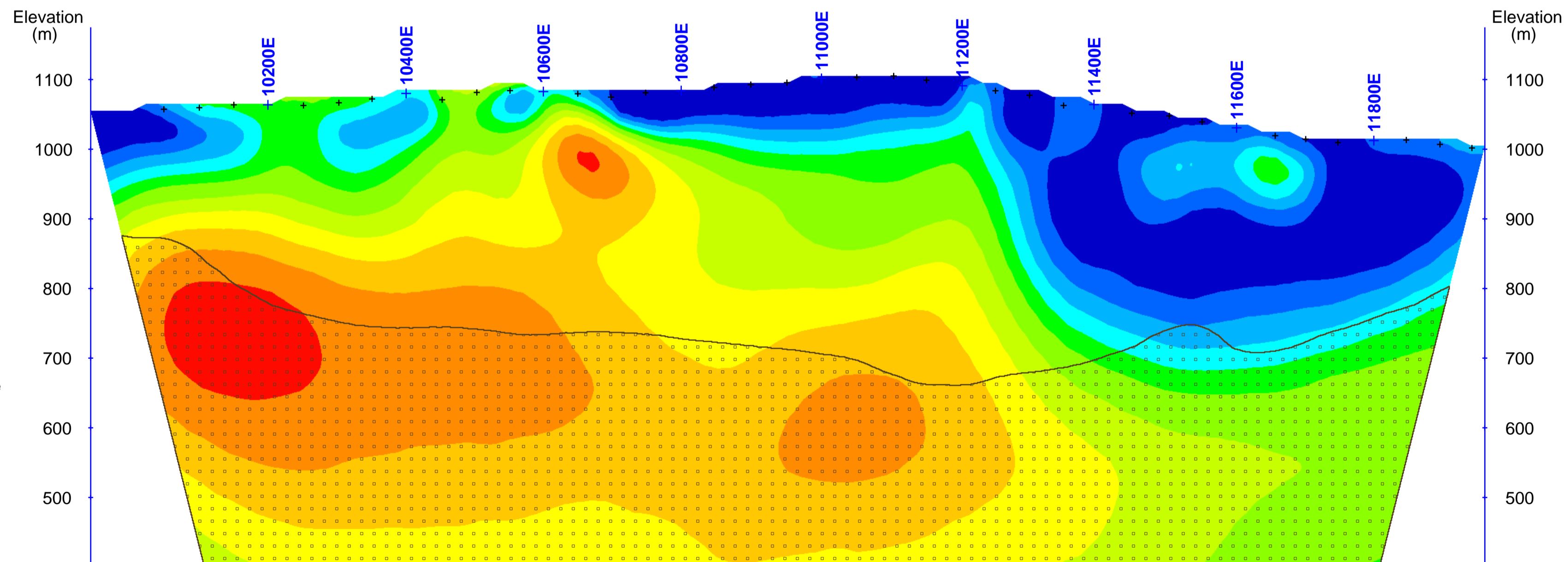
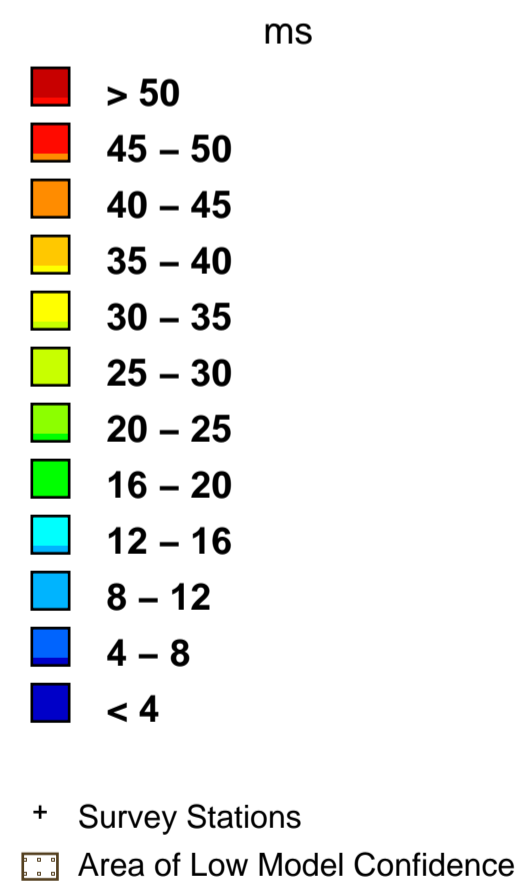
**Interpreted  
 Resistivity & Chargeability**

Cross Section Map

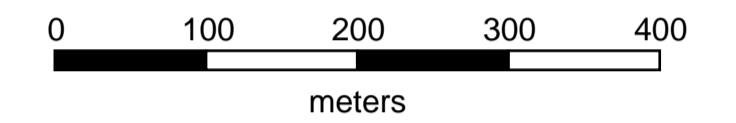
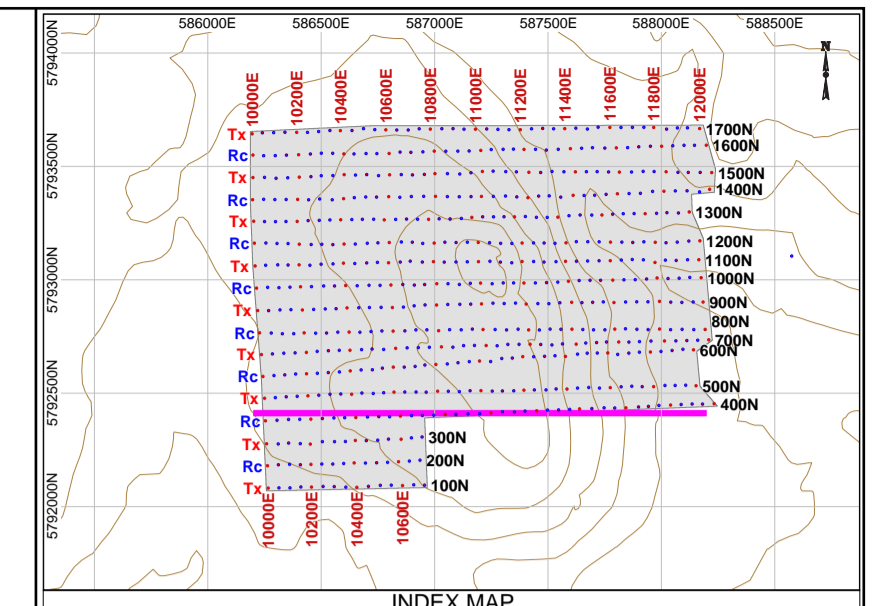
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**Miocene Property**

**Williams Lake, B.C.**

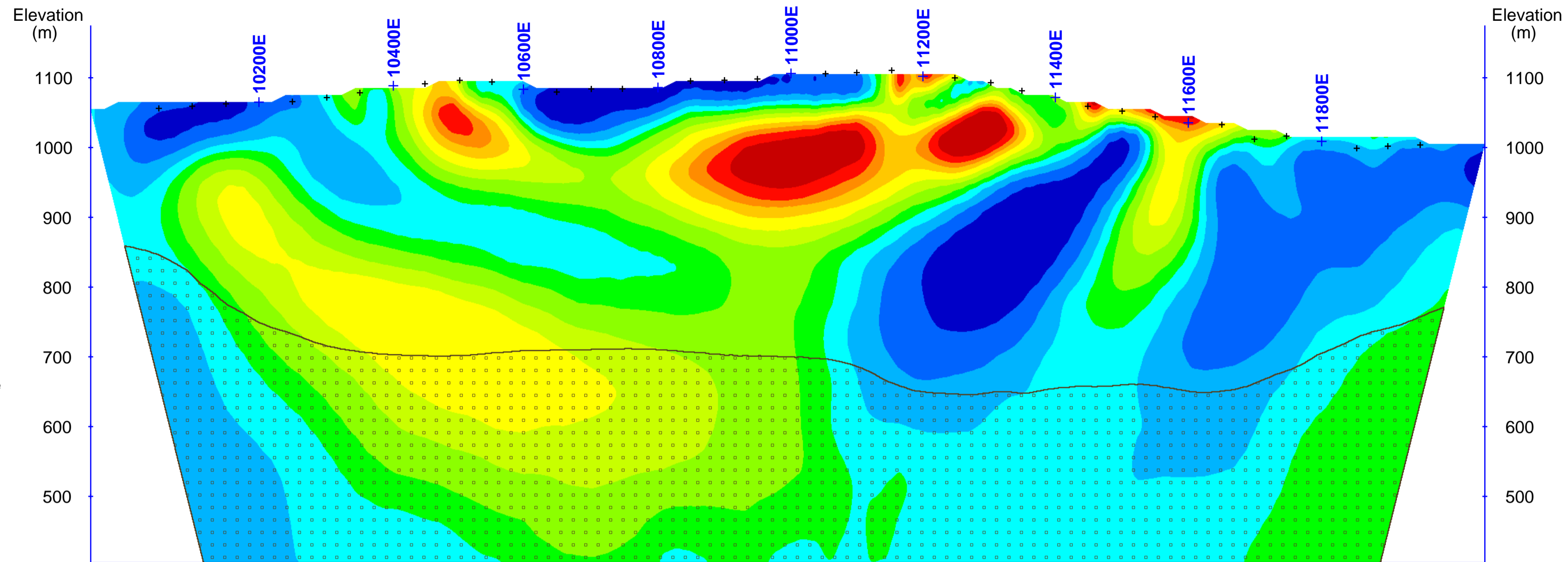
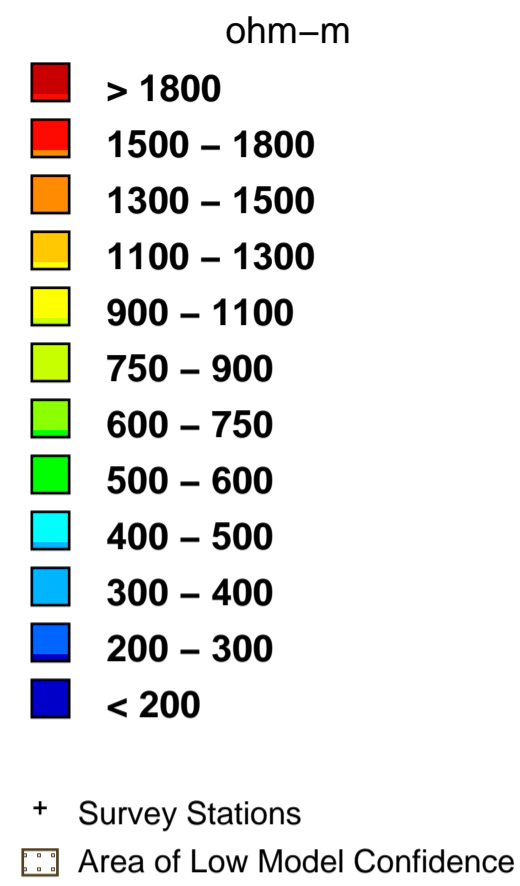
**3D Inversion Model**

of  
**Interpreted  
 Resistivity & Chargeability**

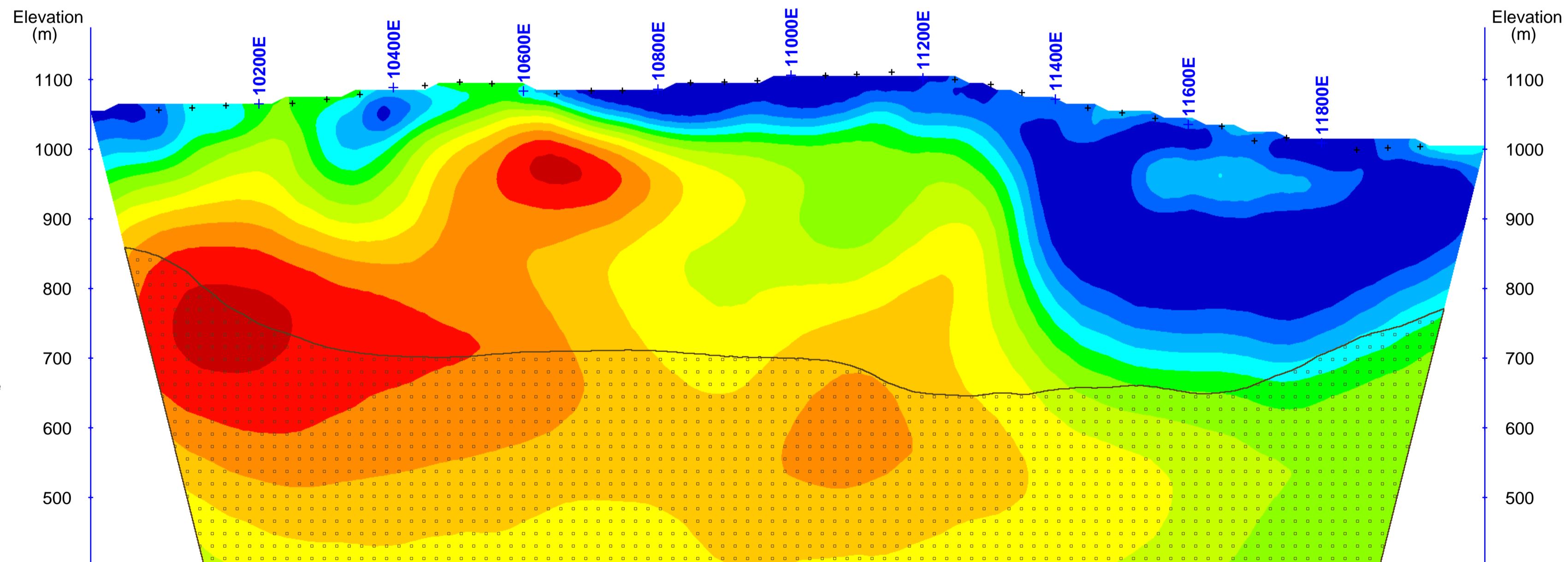
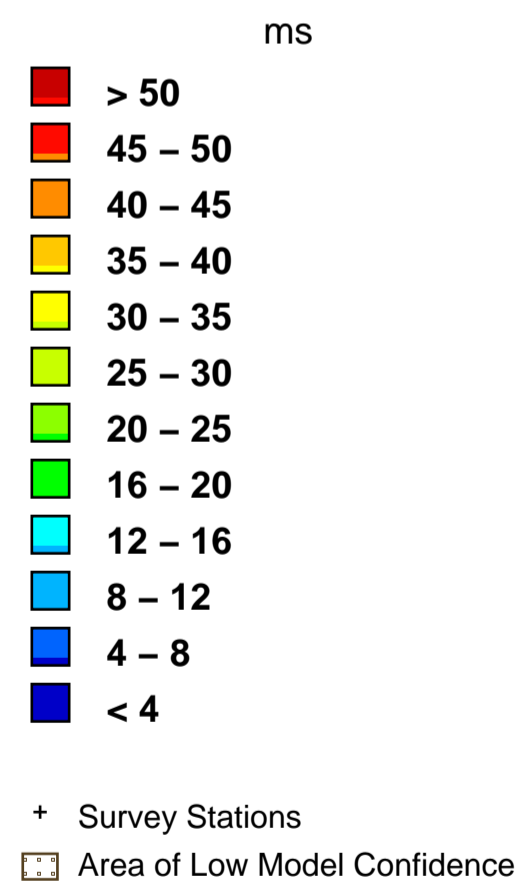
Cross Section Map

Section: 400N

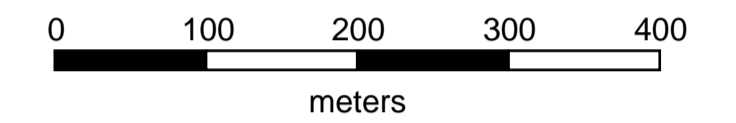
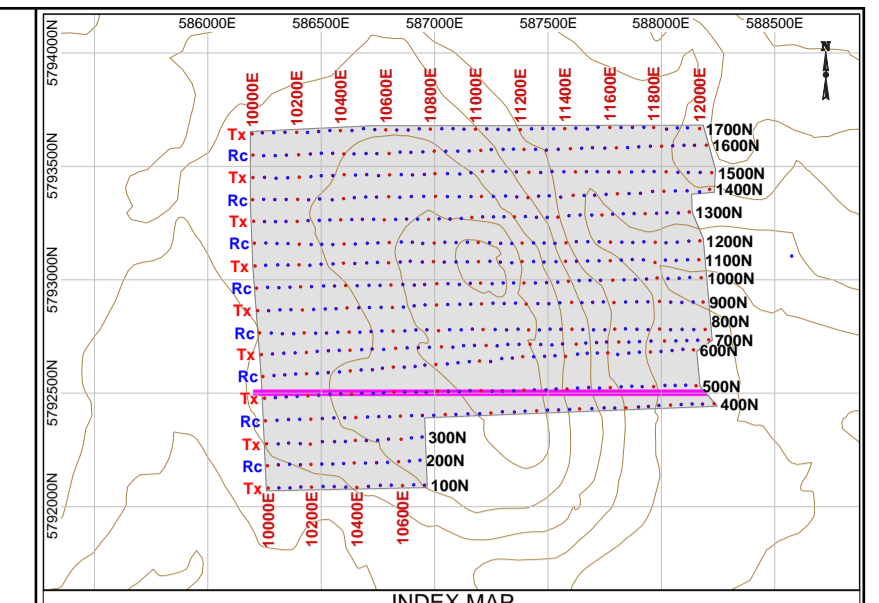




Interpreted Resistivity (ohm-m)



Interpreted Chargeability (ms)



Project Information:  
 Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Survey Date: Aug.-Sept., 2011

Instrumentation:  
 Receiver: DABstix 24-bit Single Channel Receiver  
 Transmitter: GDD TX II  
 Array Type: 3D

Mapping Information:  
 Datum: NAD83  
 Projection: UTM Zone 10  
 Mapping Date: 13-Oct-2011

**Eagle Peak Resources Inc.**

**Miocene Property**

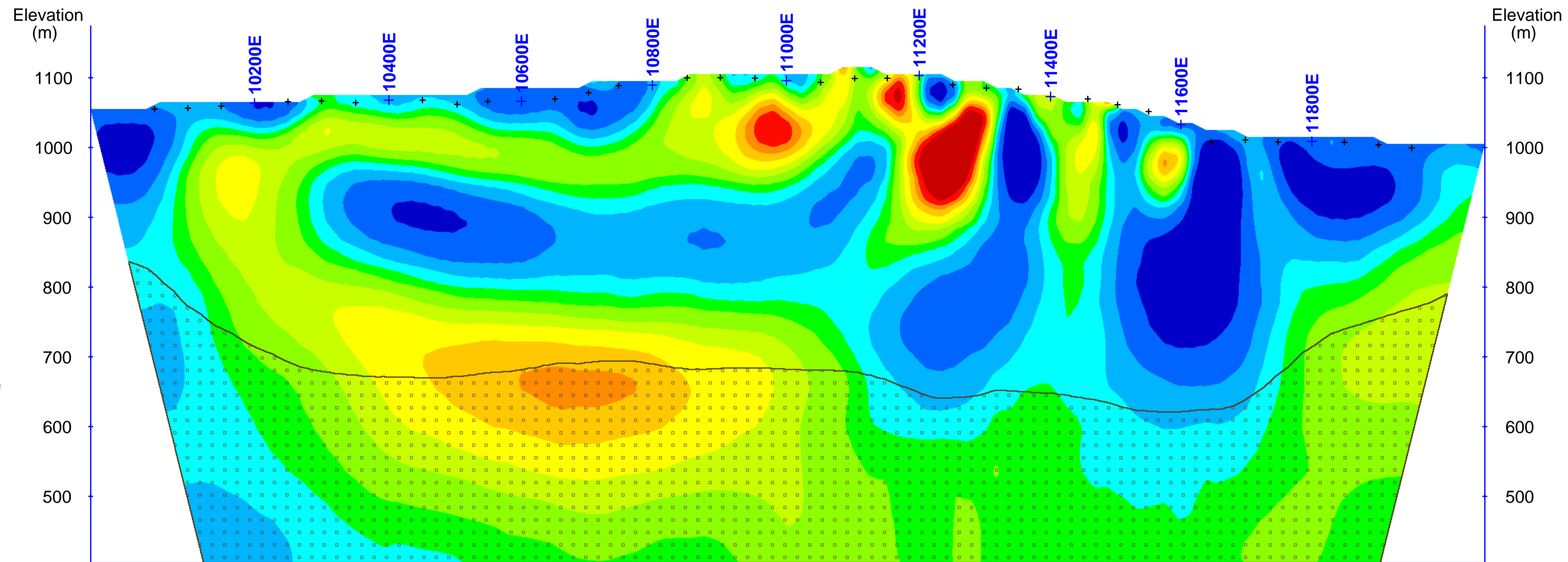
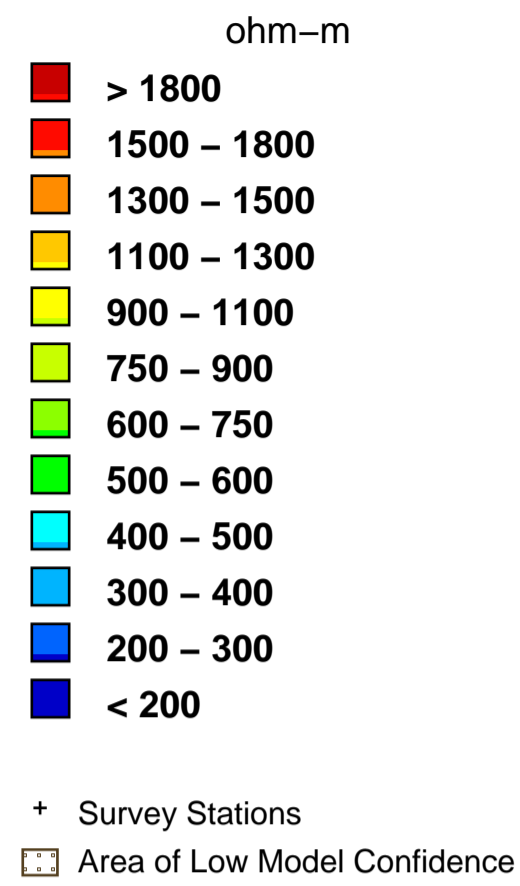
**Williams Lake, B.C.**

**3D Inversion Model**

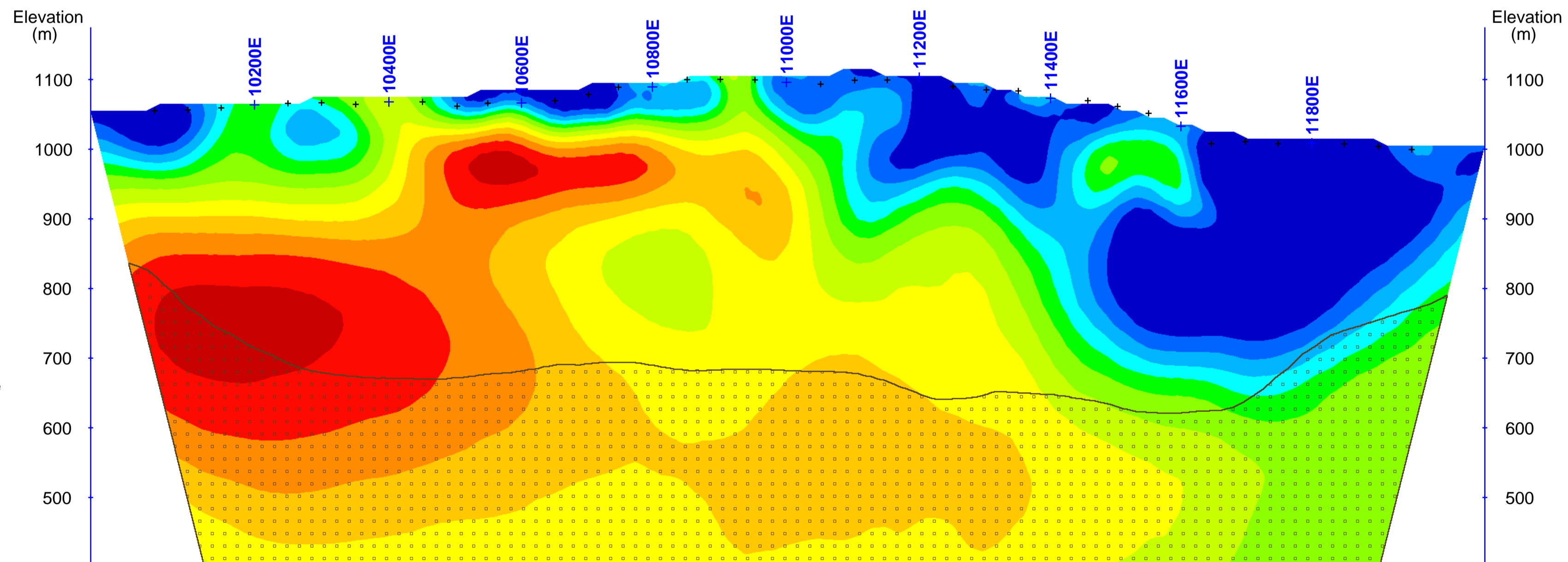
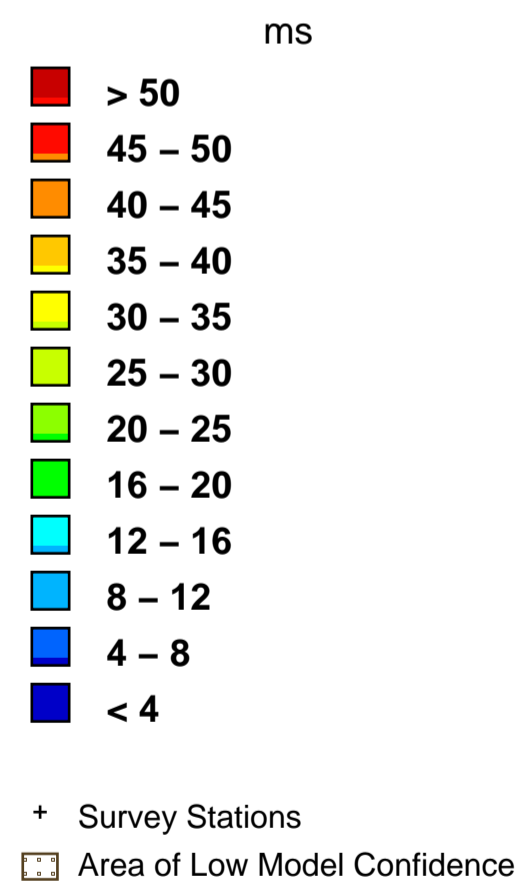
of  
**Interpreted  
 Resistivity & Chargeability**

Cross Section Map

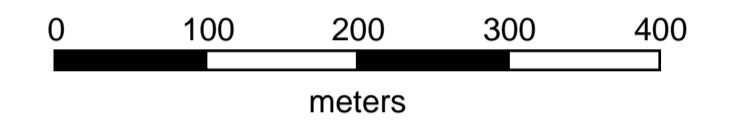
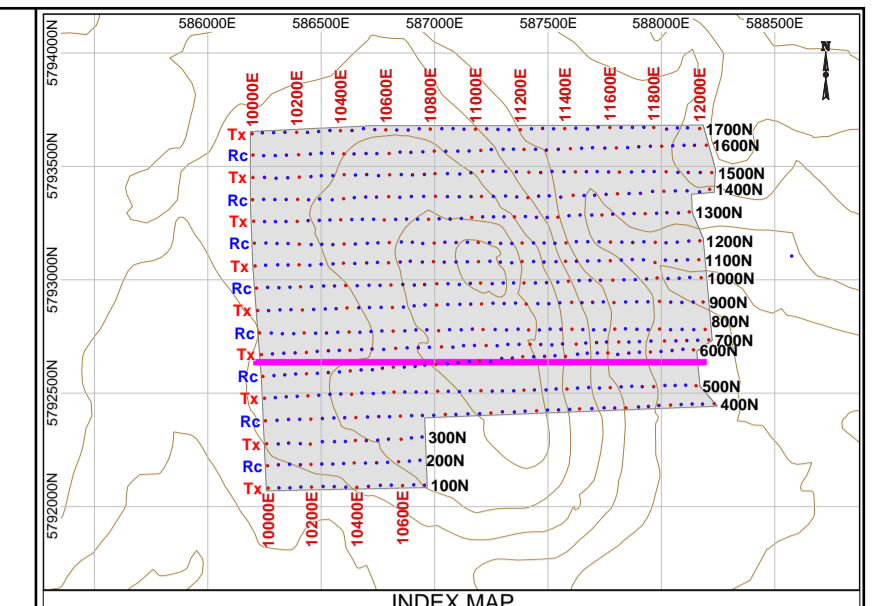
Section: 500N



Interpreted Resistivity (ohm-m)



Interpreted Chargeability (ms)



Project Information:  
 Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Survey Date: Aug.-Sept., 2011

Instrumentation:  
 Receiver: DABStix 24-bit Single Channel Receiver  
 Transmitter: GDD TX II  
 Array Type: 3D

Mapping Information:  
 Datum: NAD83  
 Projection: UTM Zone 10  
 Mapping Date: 13-Oct-2011

**Eagle Peak Resources Inc.**

**Miocene Property**

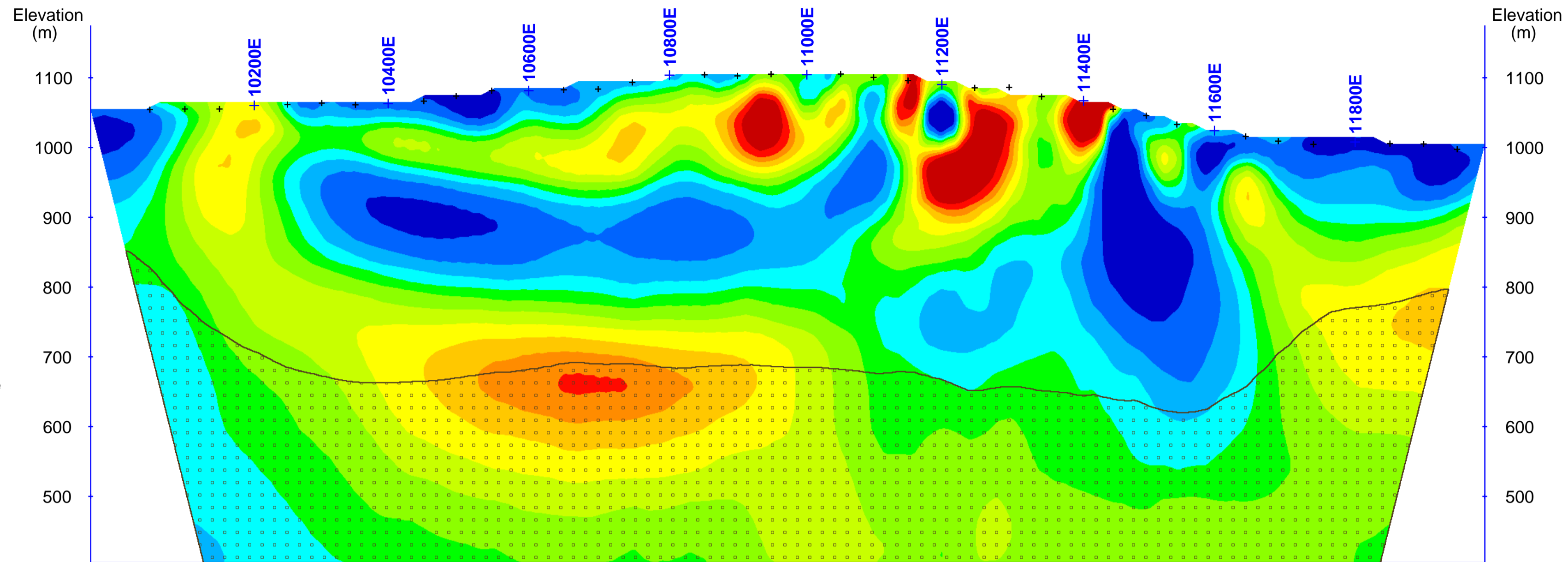
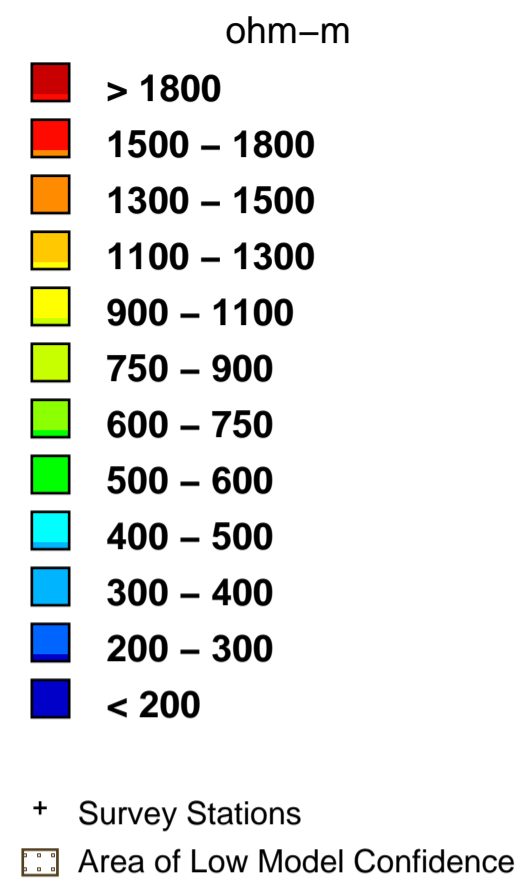
**Williams Lake, B.C.**

**3D Inversion Model**

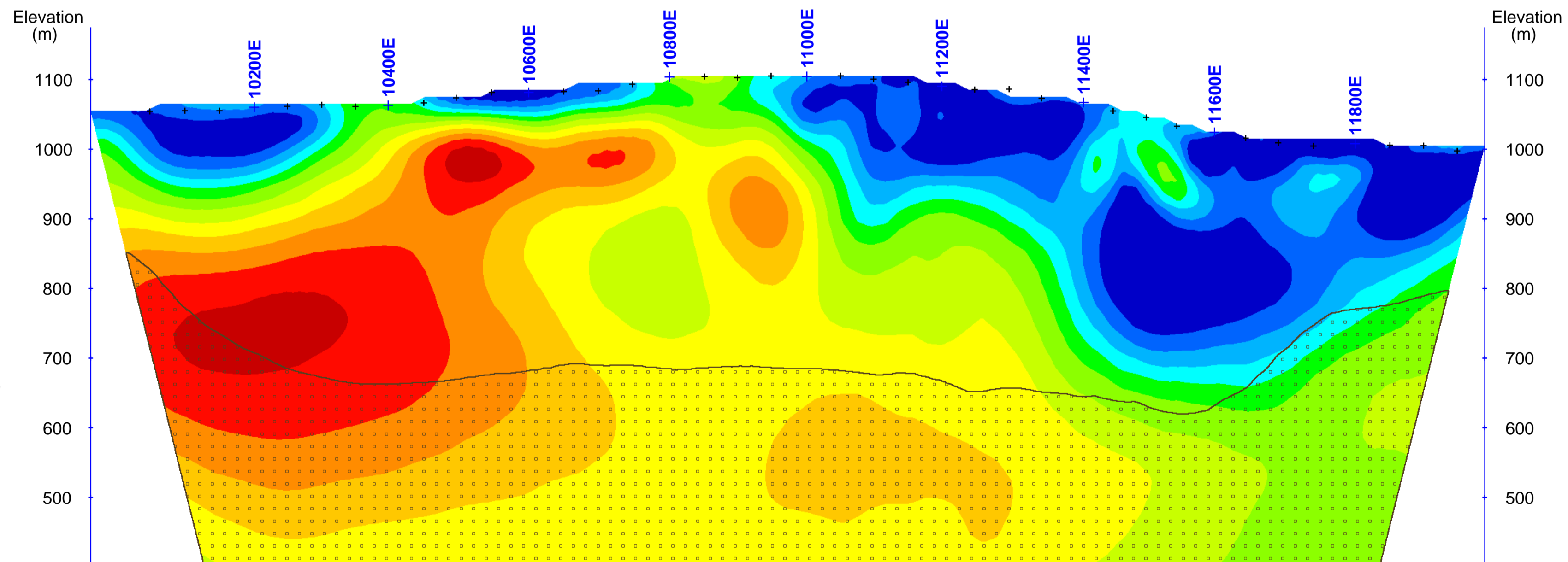
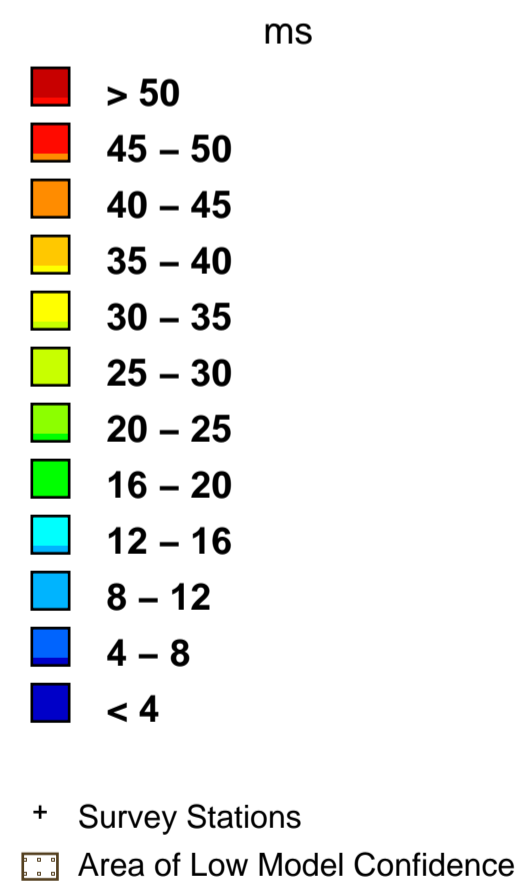
of  
**Interpreted  
 Resistivity & Chargeability**

Cross Section Map

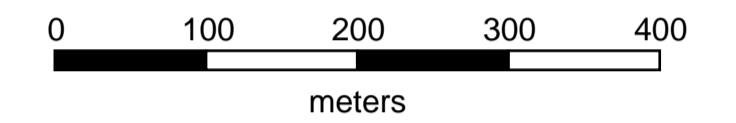
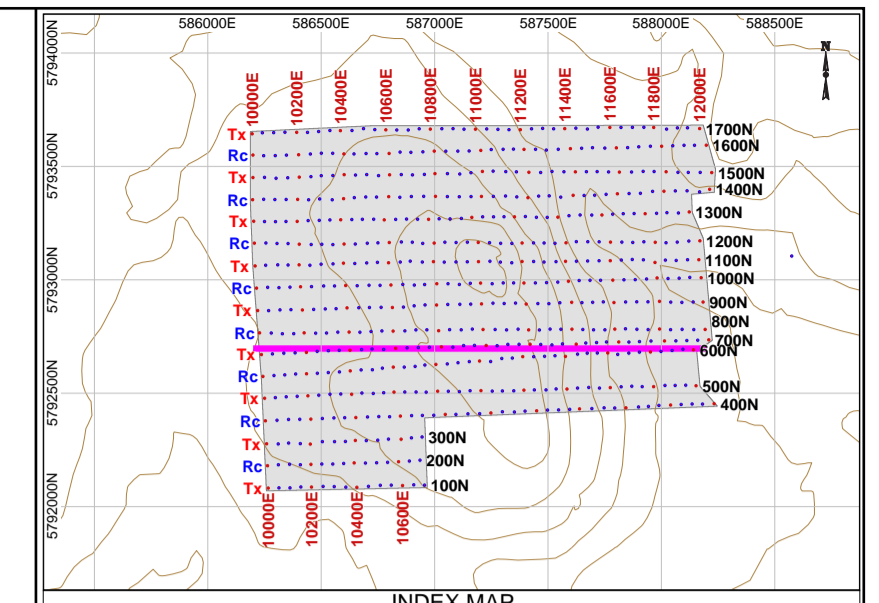
Section: 600N



Interpreted Resistivity (ohm-m)



Interpreted Chargeability (ms)



Project Information:  
 Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Survey Date: Aug.-Sept., 2011

Instrumentation:  
 Receiver: DABstix 24-bit Single Channel Receiver  
 Transmitter: GDD TX II  
 Array Type: 3D

Mapping Information:  
 Datum: NAD83  
 Projection: UTM Zone 10  
 Mapping Date: 13-Oct-2011

**Eagle Peak Resources Inc.**

**Miocene Property**

**Williams Lake, B.C.**

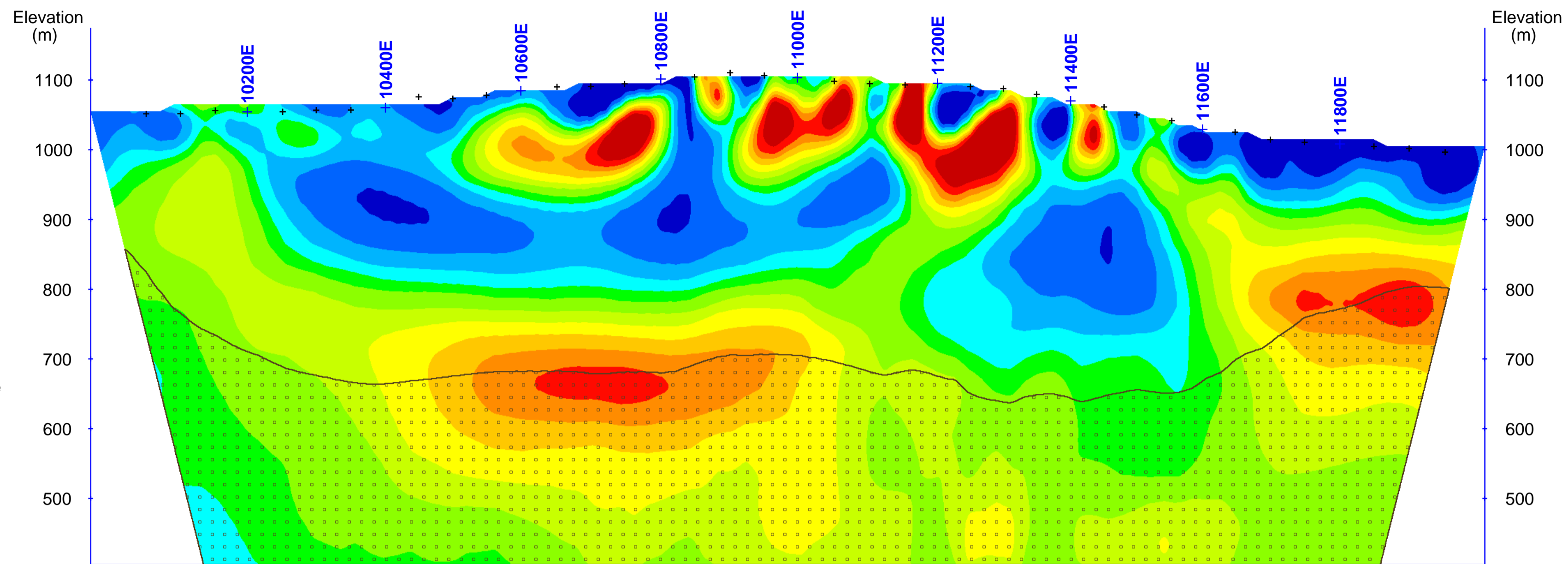
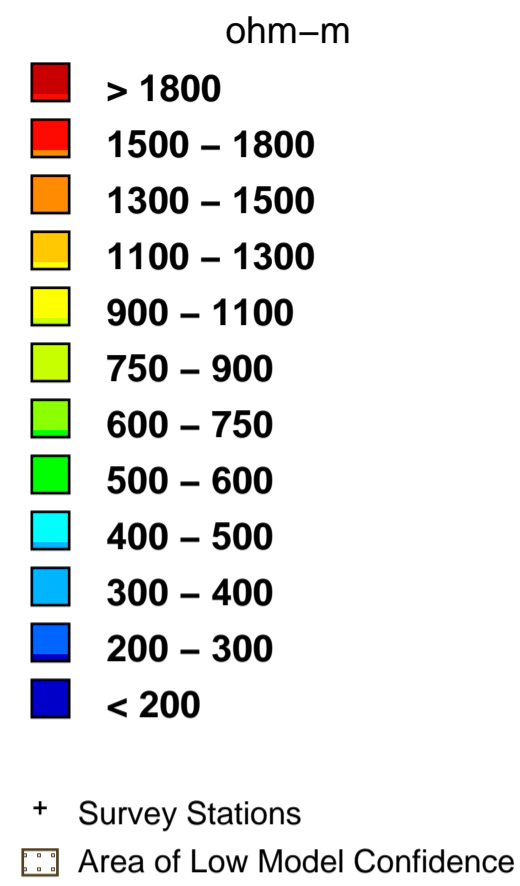
**3D Inversion Model**

of  
**Interpreted  
 Resistivity & Chargeability**

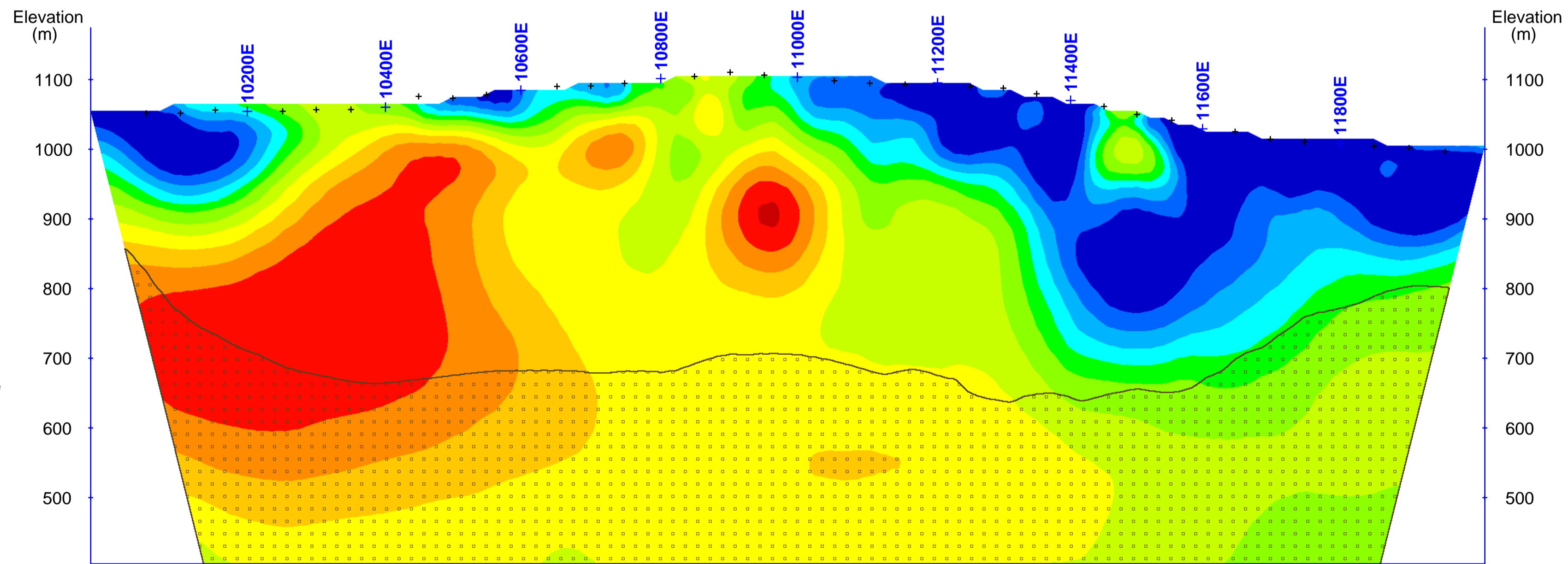
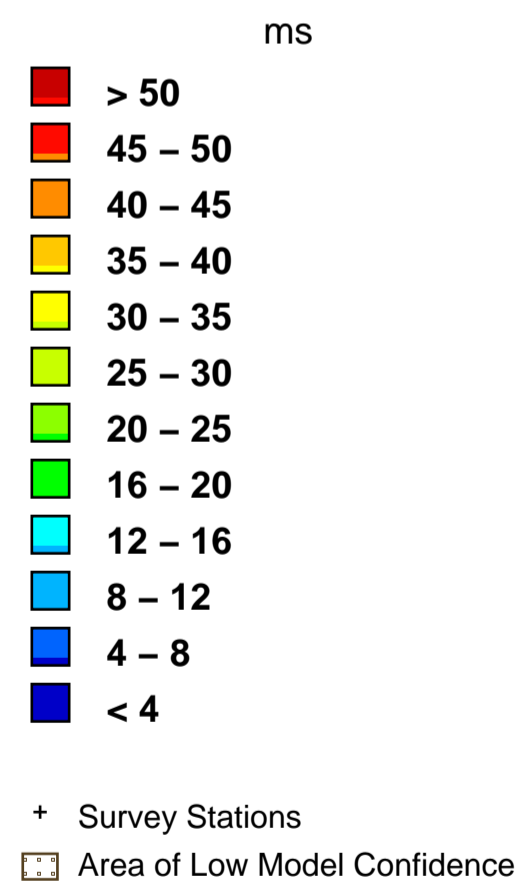
Cross Section Map

Section: 700N

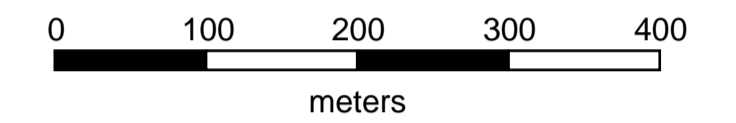
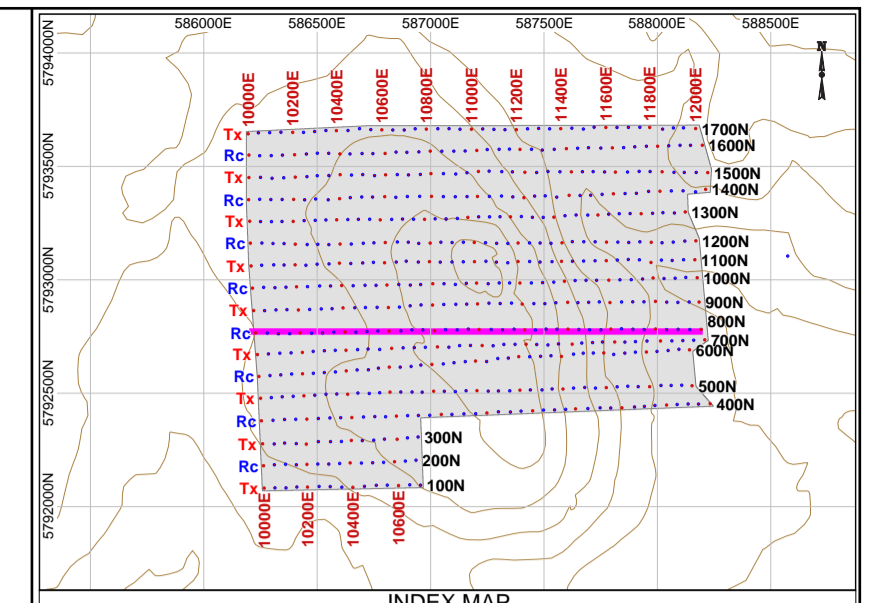




Interpreted Resistivity (ohm-m)



Interpreted Chargeability (ms)



Project Information:  
 Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Survey Date: Aug.-Sept., 2011

Instrumentation:  
 Receiver: DABStix 24-bit Single Channel Receiver  
 Transmitter: GDD TX II  
 Array Type: 3D

Mapping Information:  
 Datum: NAD83  
 Projection: UTM Zone 10  
 Mapping Date: 13-Oct-2011

**Eagle Peak Resources Inc.**

**Miocene Property**

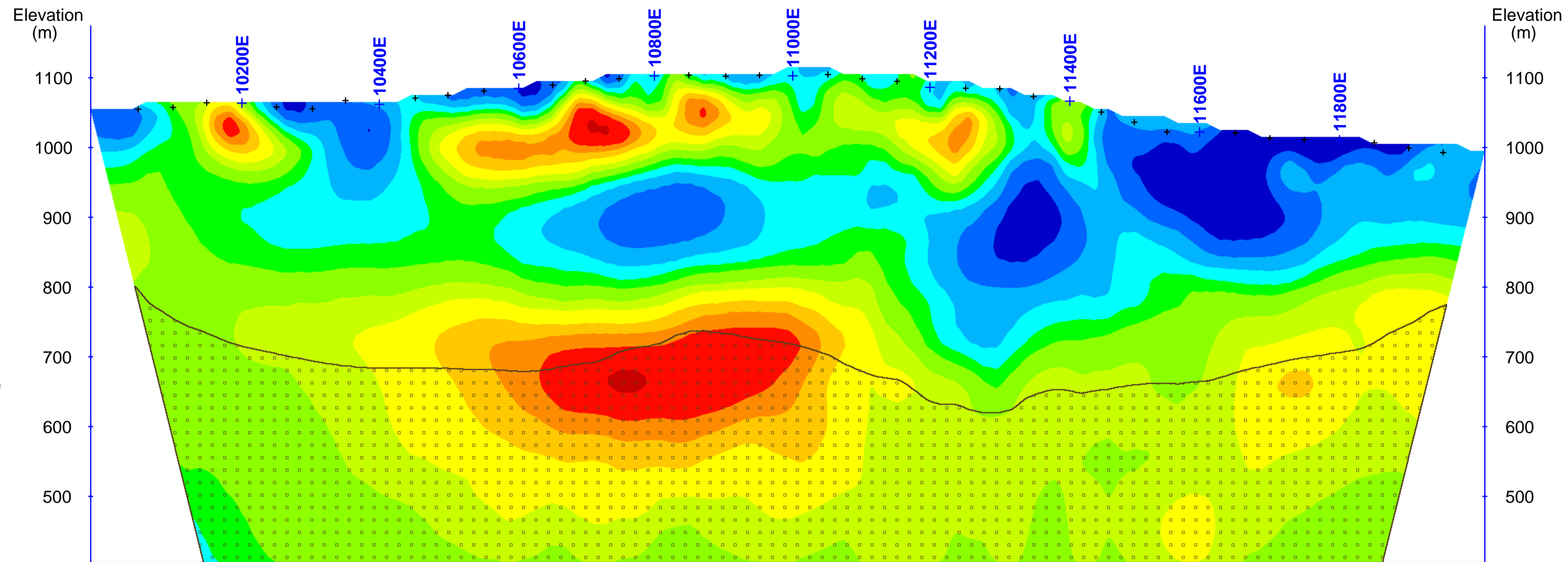
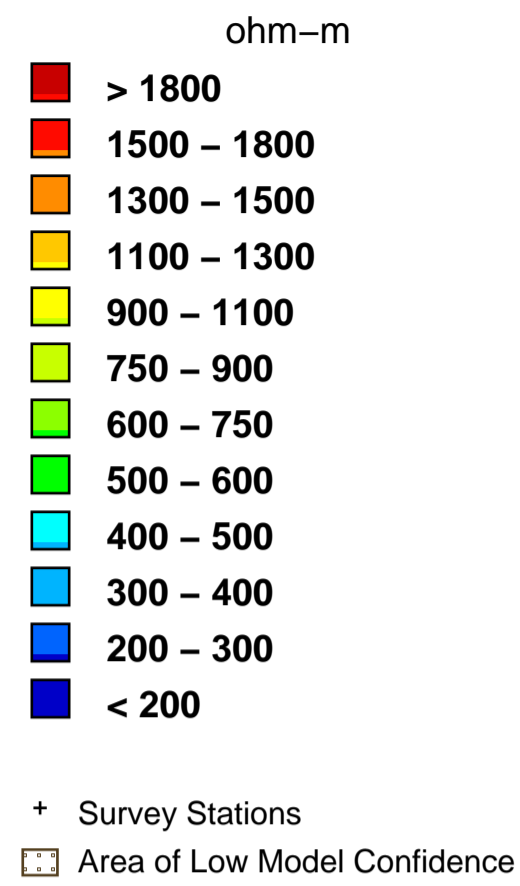
**Williams Lake, B.C.**

**3D Inversion Model**

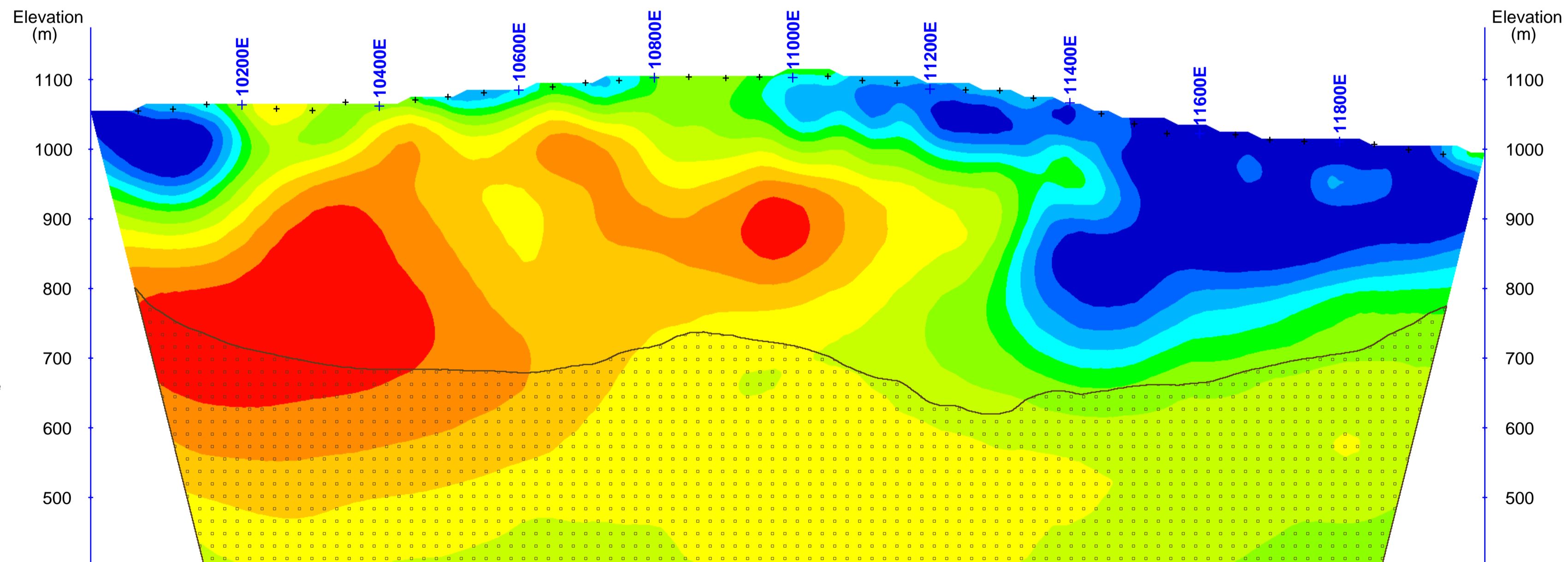
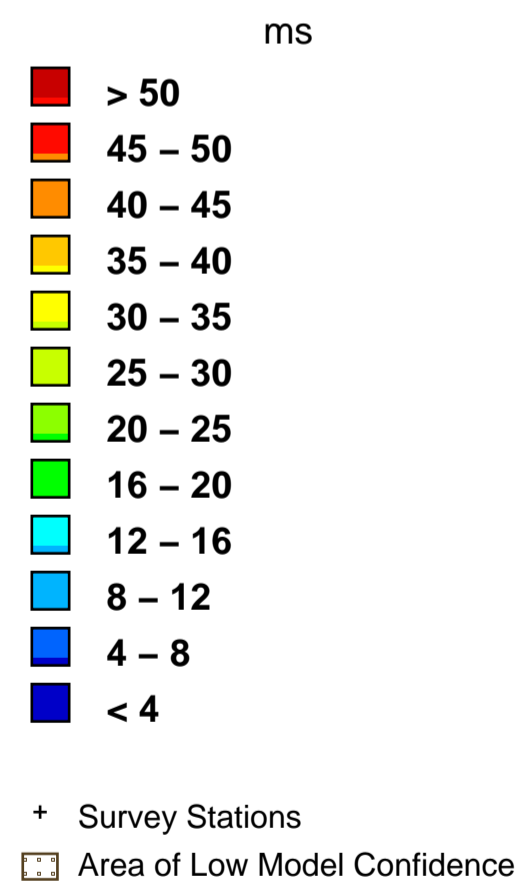
of  
**Interpreted  
 Resistivity & Chargeability**

Cross Section Map

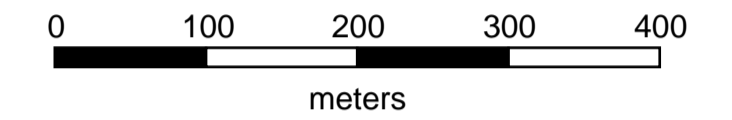
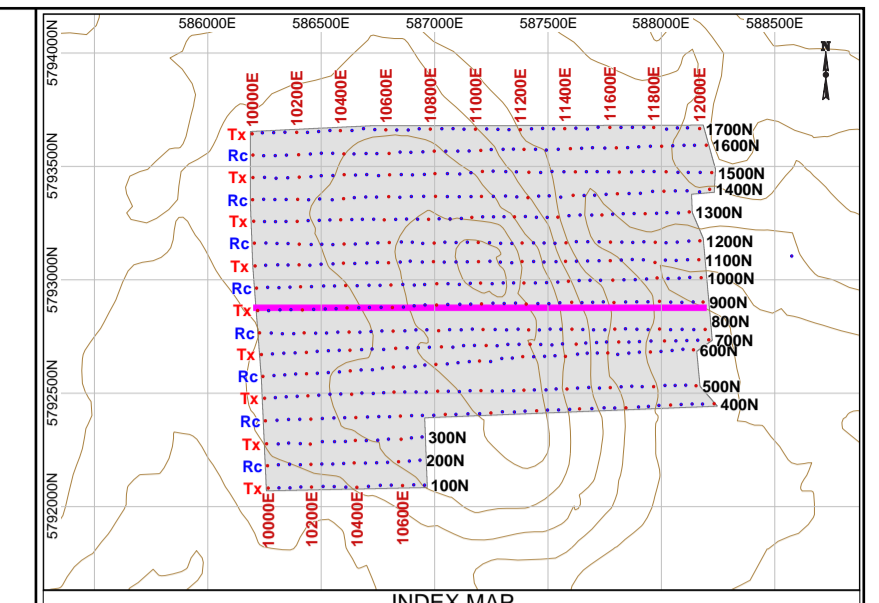
Section: 800N



Interpreted Resistivity (ohm-m)



Interpreted Chargeability (ms)



Project Information:  
 Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Survey Date: Aug.–Sept., 2011

Instrumentation:  
 Receiver: DABstix 24-bit Single Channel Receiver  
 Transmitter: GDD TX II  
 Array Type: 3D

Mapping Information:  
 Datum: NAD83  
 Projection: UTM Zone 10  
 Mapping Date: 13–Oct–2011

**Eagle Peak Resources Inc.**

**Miocene Property**

**Williams Lake, B.C.**

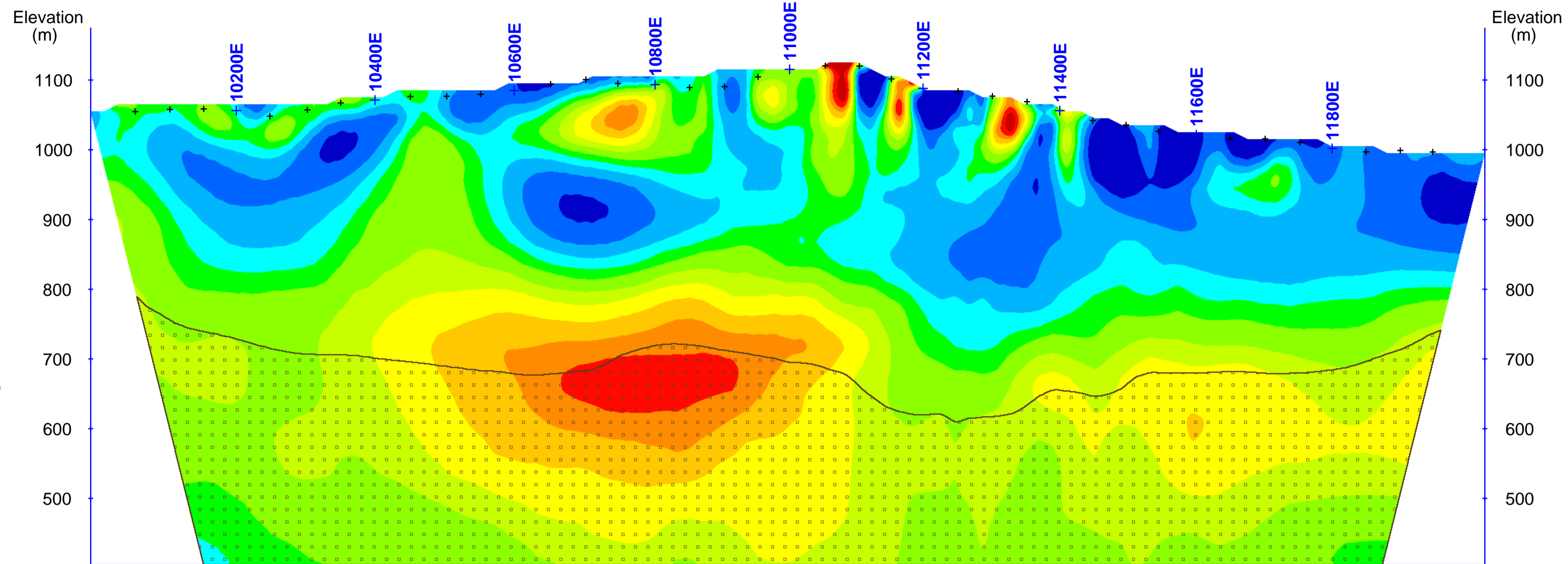
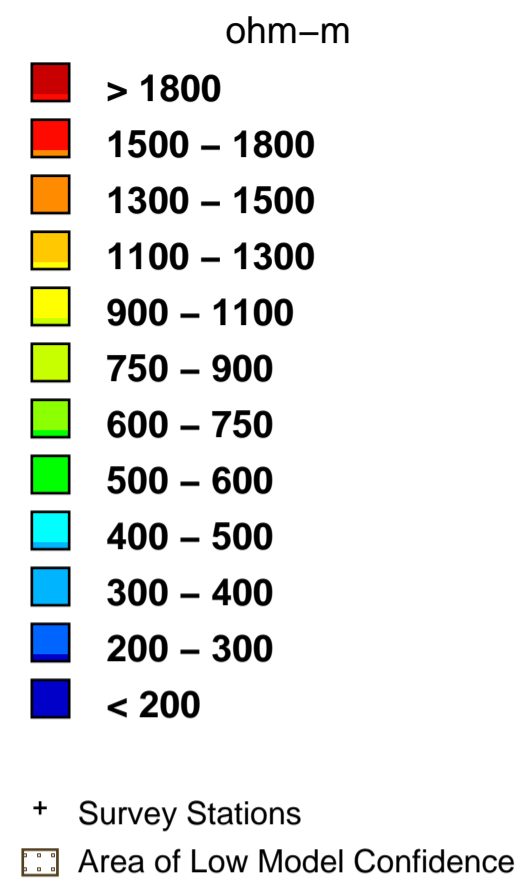
**3D Inversion Model**

of

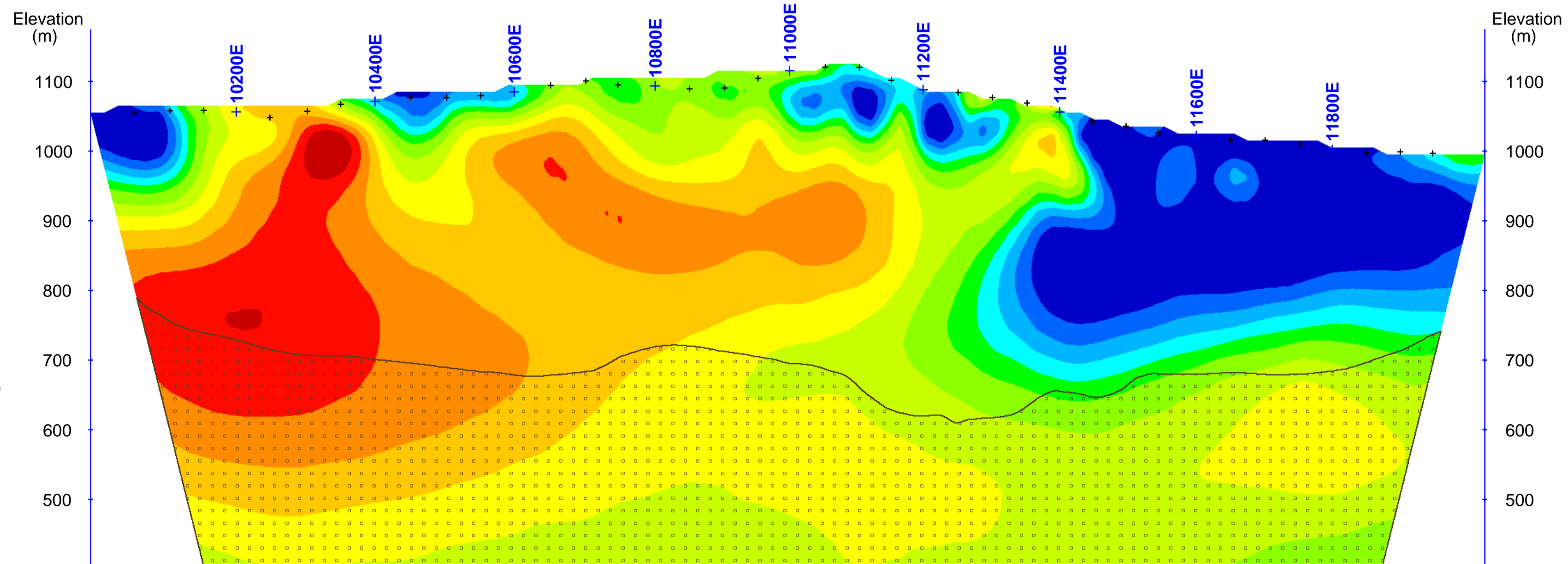
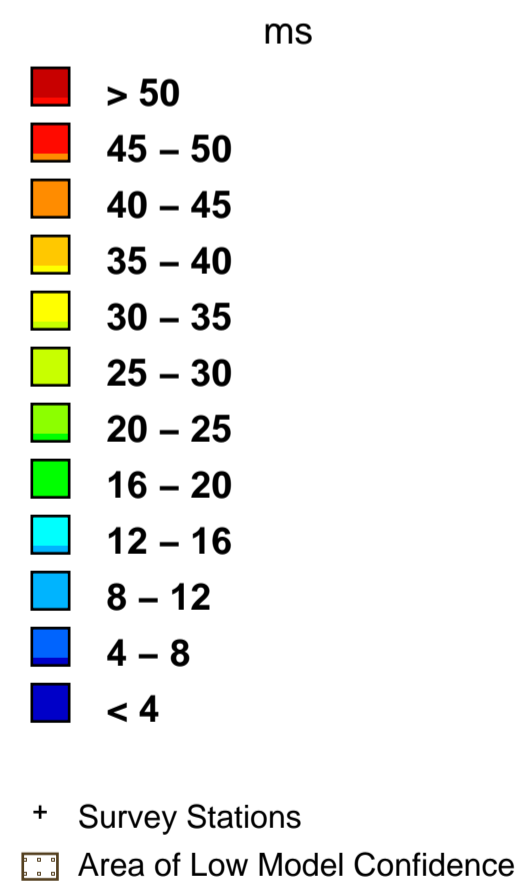
**Interpreted  
 Resistivity & Chargeability**

Cross Section Map

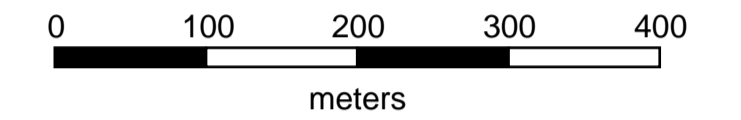
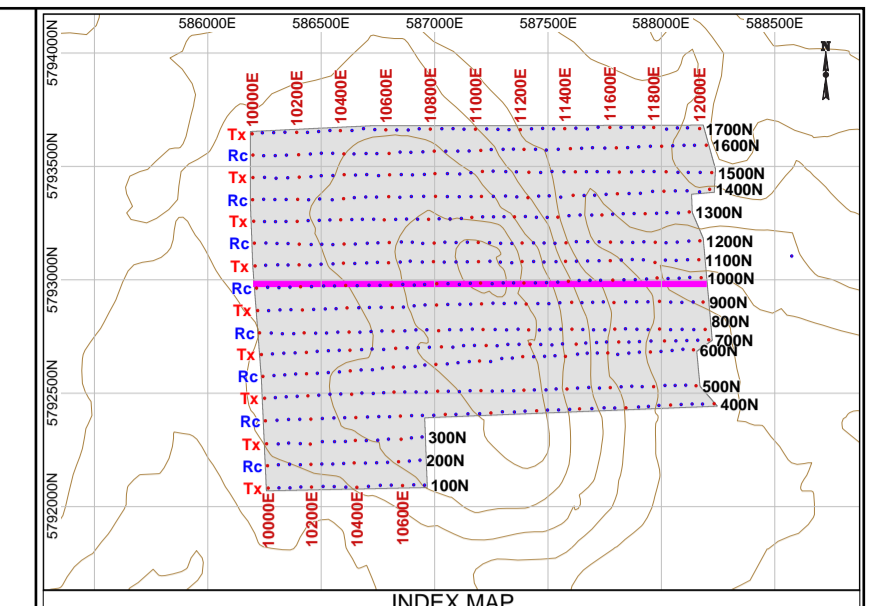
Section: 900N



Interpreted Resistivity (ohm-m)



Interpreted Chargeability (ms)



Project Information:  
 Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Survey Date: Aug.-Sept., 2011

Instrumentation:  
 Receiver: DABstix 24-bit Single Channel Receiver  
 Transmitter: GDD TX II  
 Array Type: 3D

Mapping Information:  
 Datum: NAD83  
 Projection: UTM Zone 10  
 Mapping Date: 13-Oct-2011

**Eagle Peak Resources Inc.**

**Miocene Property**

**Williams Lake, B.C.**

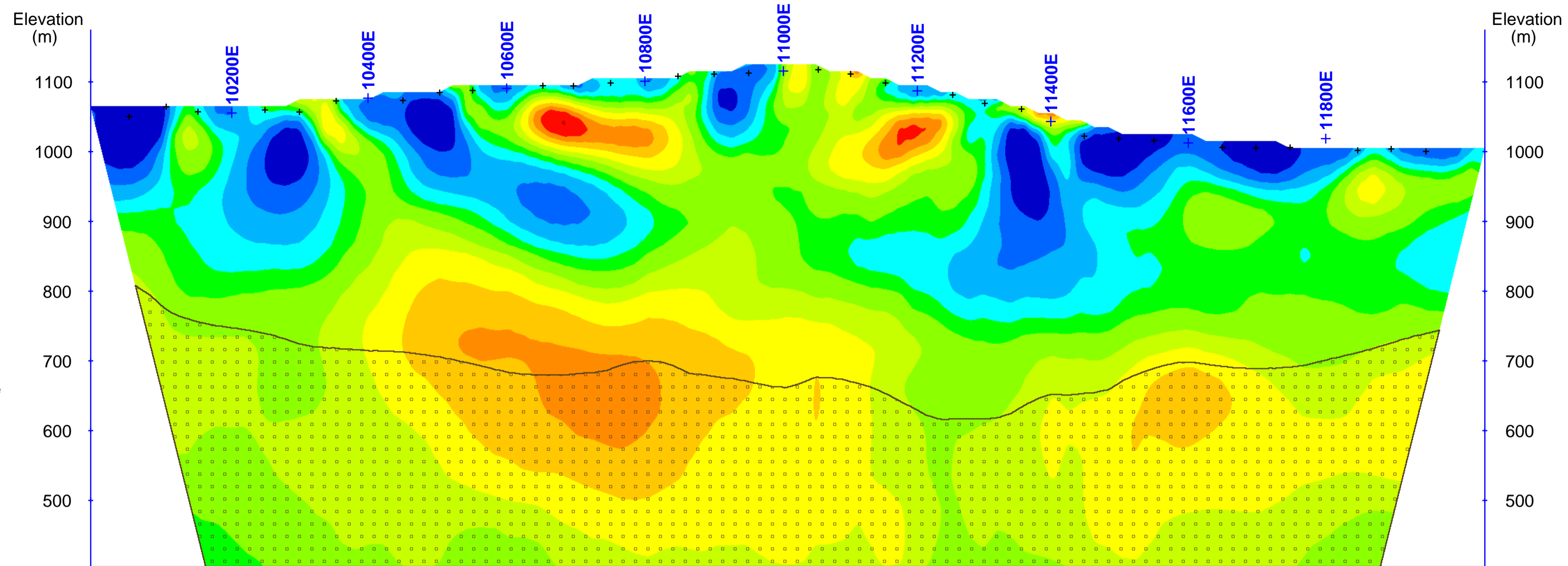
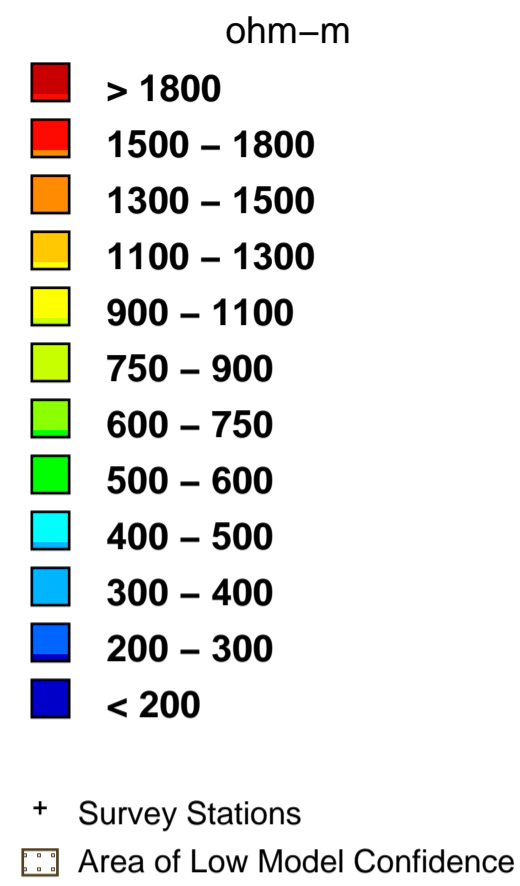
**3D Inversion Model**

of  
**Interpreted  
 Resistivity & Chargeability**

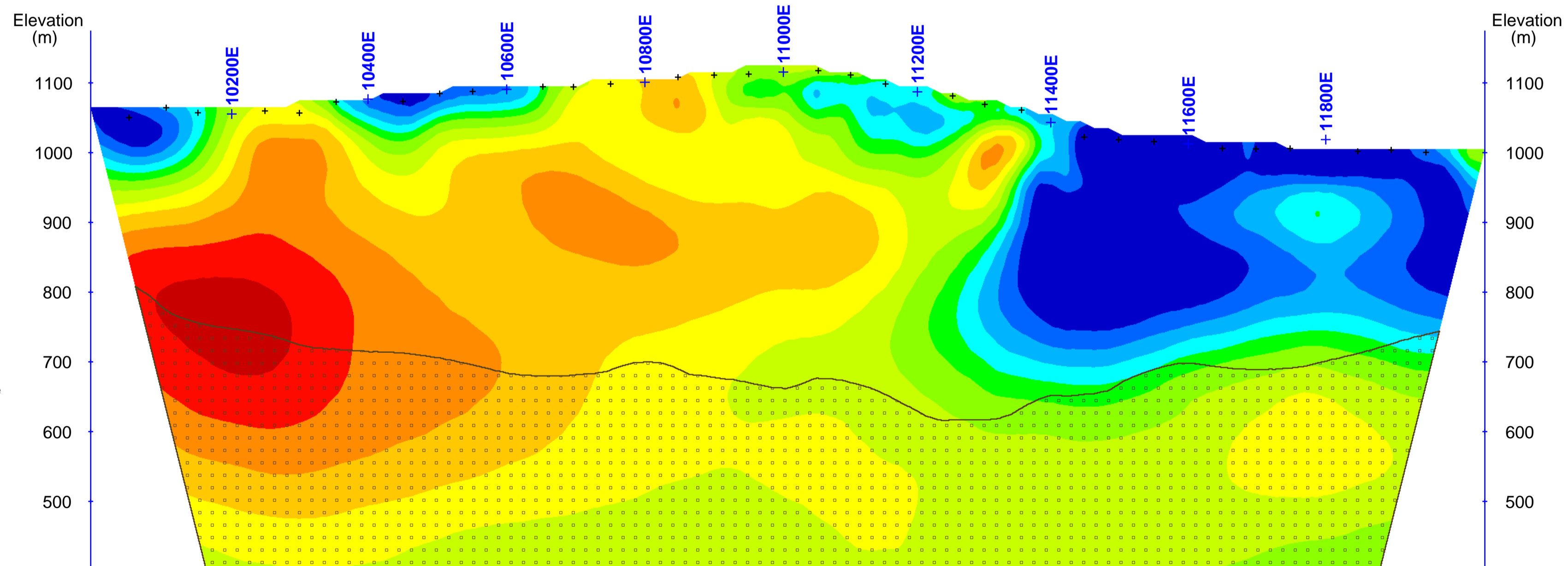
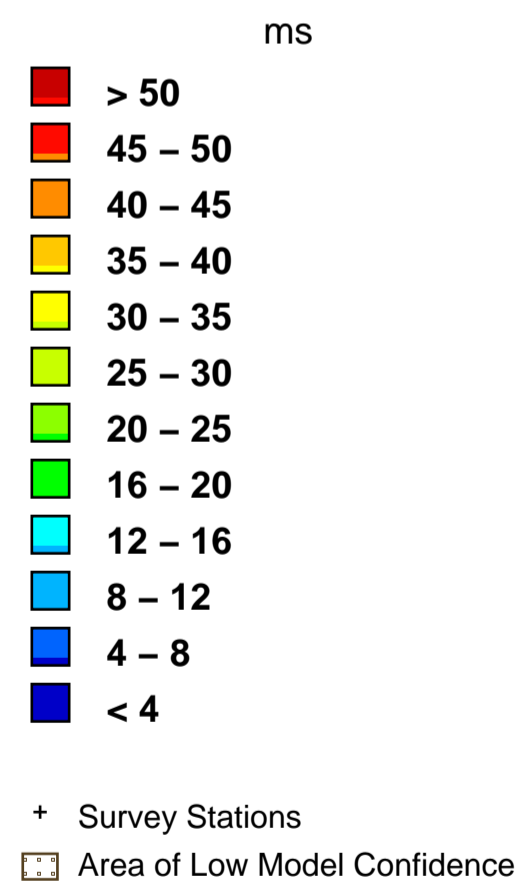
Cross Section Map

Section: 1000N

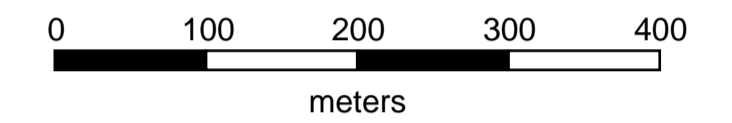
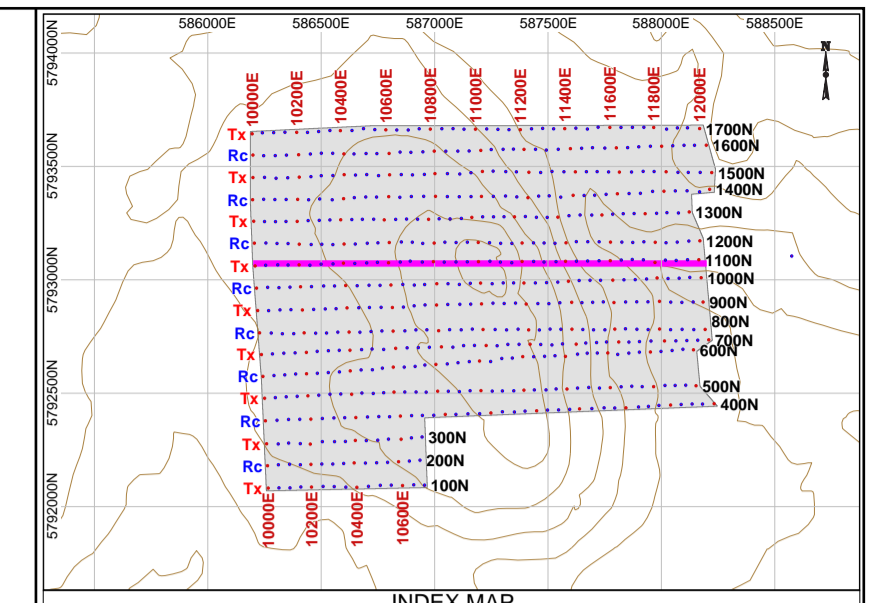




Interpreted Resistivity (ohm-m)



Interpreted Chargeability (ms)



Project Information:  
 Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Survey Date: Aug.-Sept., 2011

Instrumentation:  
 Receiver: DABstix 24-bit Single Channel Receiver  
 Transmitter: GDD TX II  
 Array Type: 3D

Mapping Information:  
 Datum: NAD83  
 Projection: UTM Zone 10  
 Mapping Date: 13-Oct-2011

**Eagle Peak Resources Inc.**

**Miocene Property**

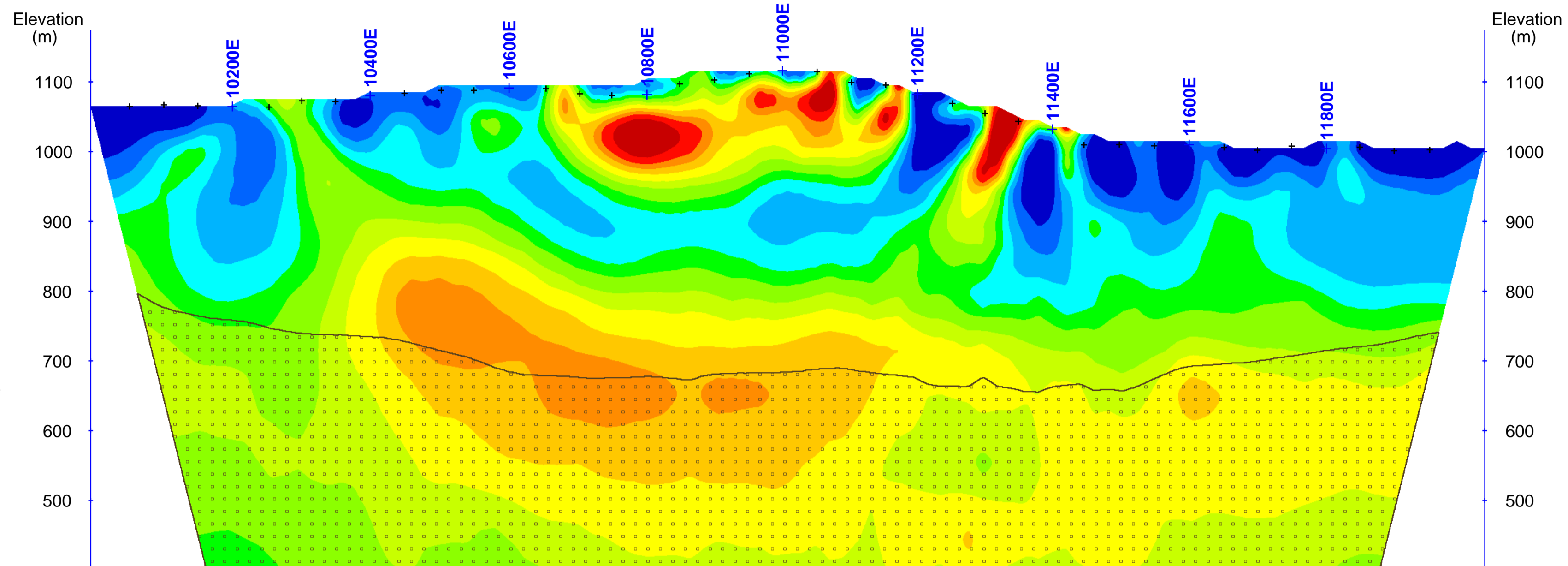
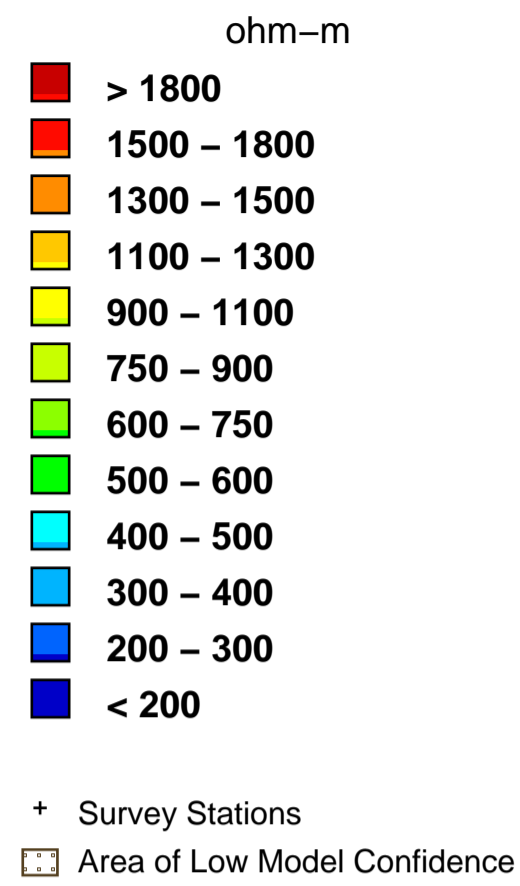
**Williams Lake, B.C.**

**3D Inversion Model**

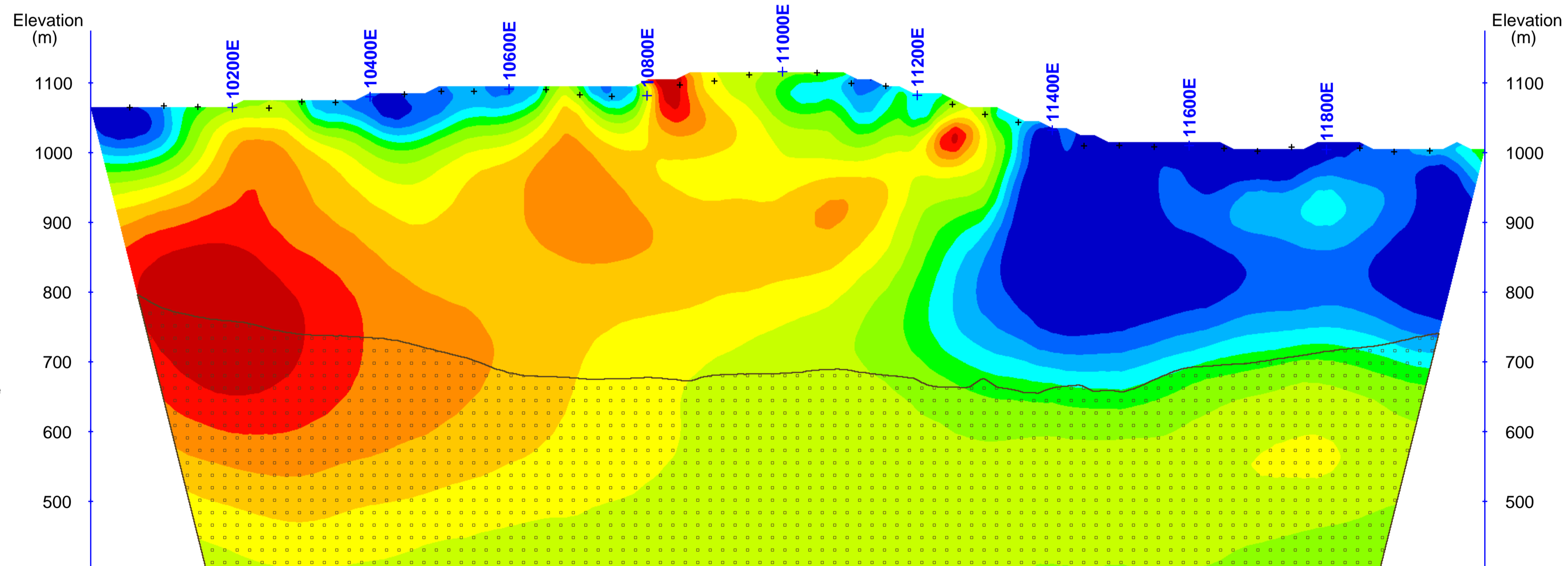
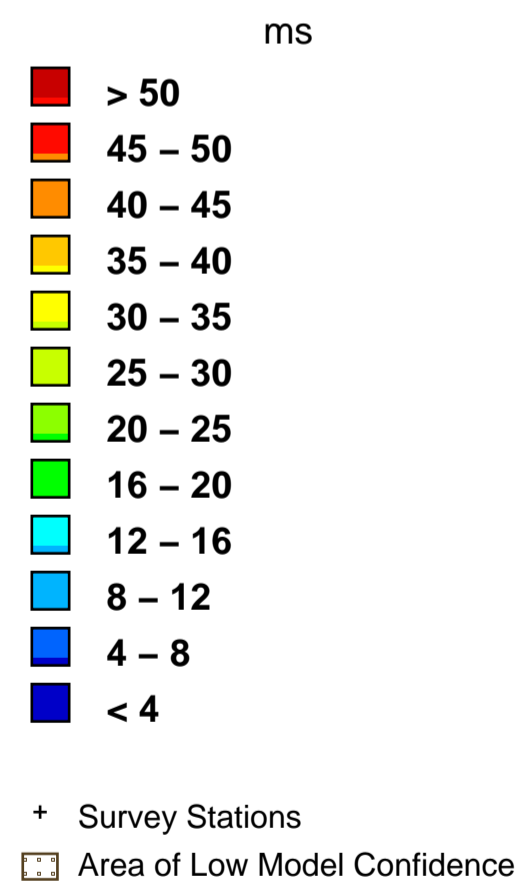
of  
**Interpreted  
 Resistivity & Chargeability**

Cross Section Map

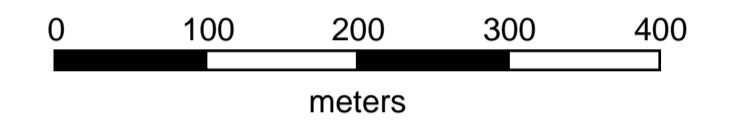
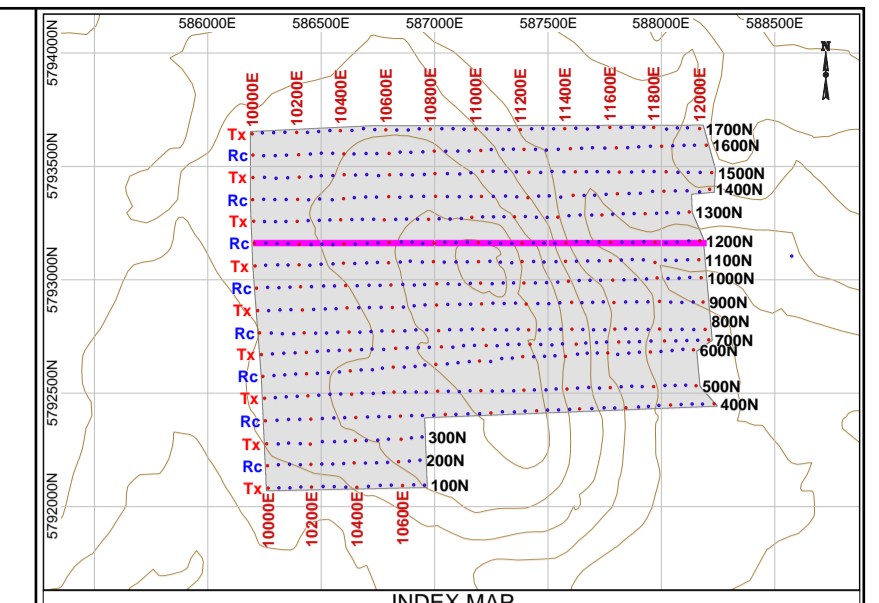
Section: 1100N



Interpreted Resistivity (ohm-m)



Interpreted Chargeability (ms)



Project Information:  
 Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Survey Date: Aug.-Sept., 2011

Instrumentation:  
 Receiver: DABstix 24-bit Single Channel Receiver  
 Transmitter: GDD TX II  
 Array Type: 3D

Mapping Information:  
 Datum: NAD83  
 Projection: UTM Zone 10  
 Mapping Date: 13-Oct-2011

**Eagle Peak Resources Inc.**

**Miocene Property**

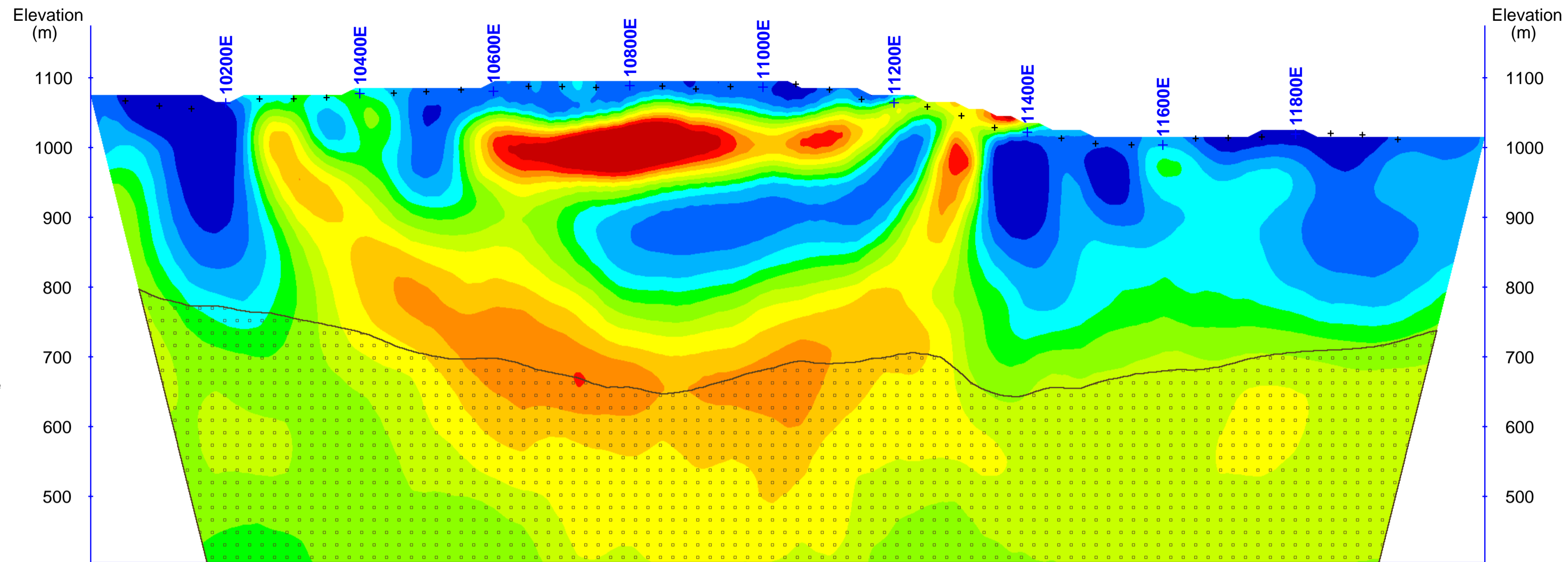
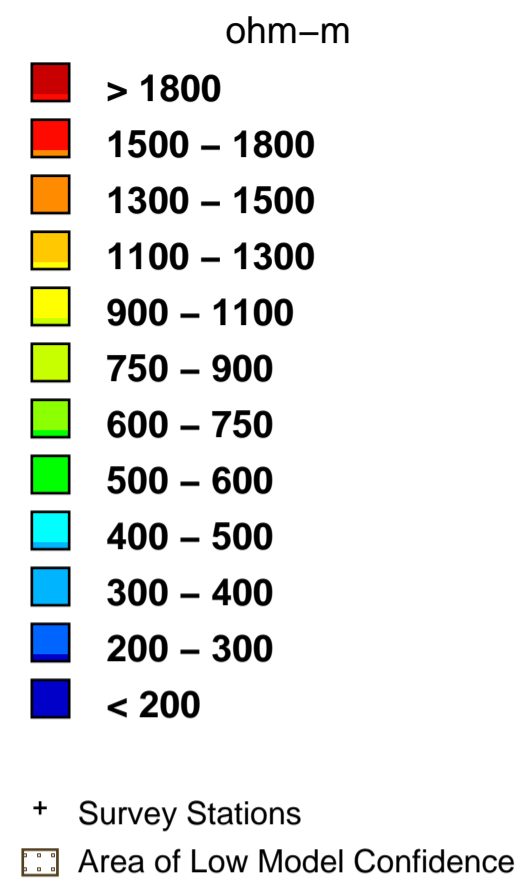
**Williams Lake, B.C.**

**3D Inversion Model**

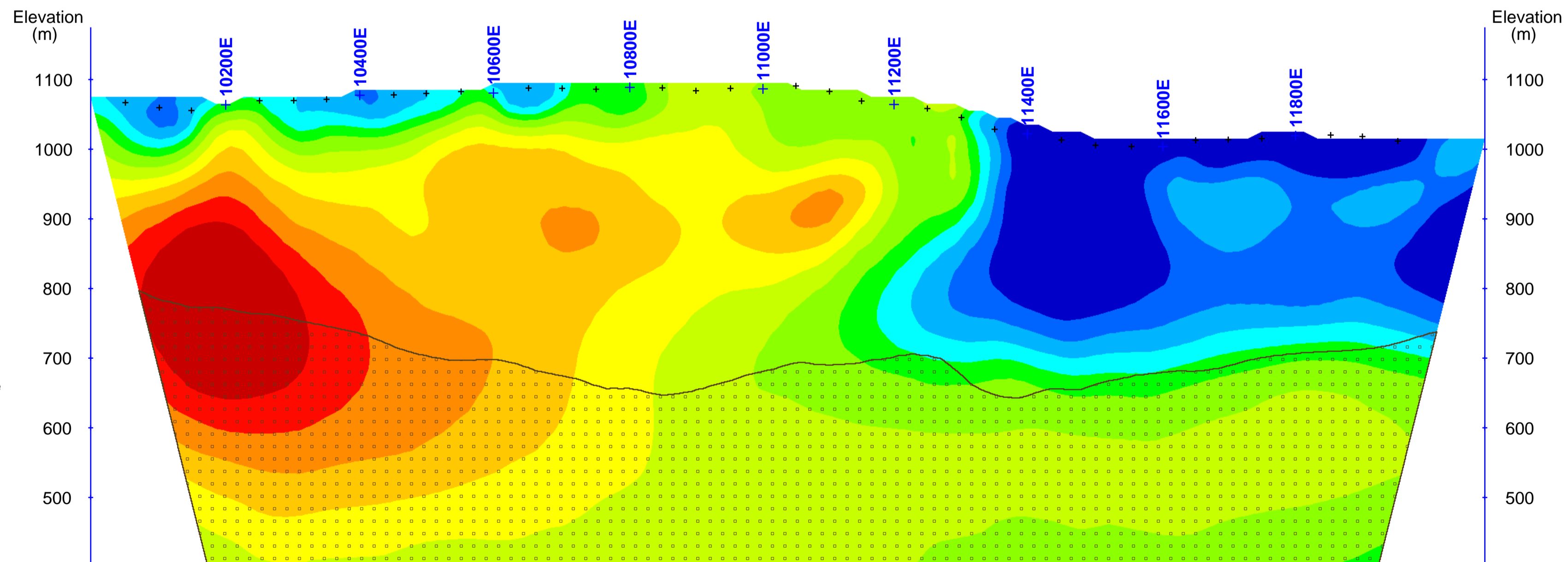
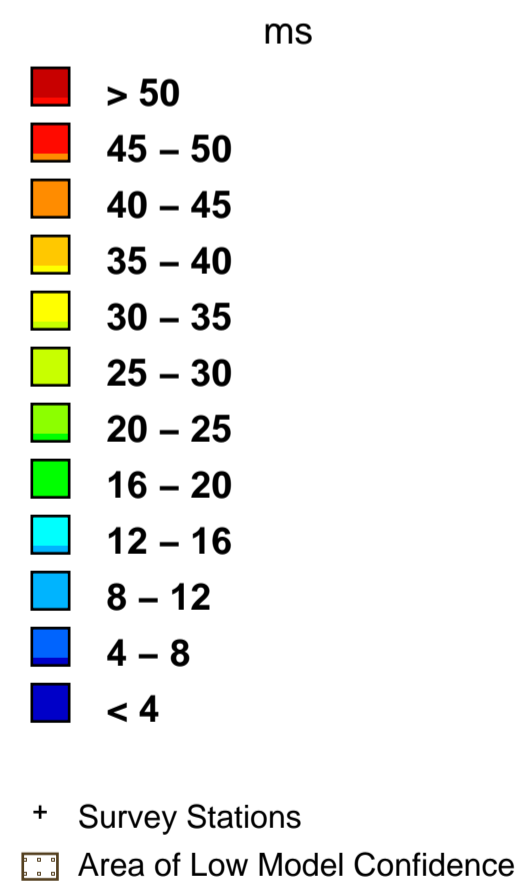
of  
**Interpreted  
 Resistivity & Chargeability**

Cross Section Map

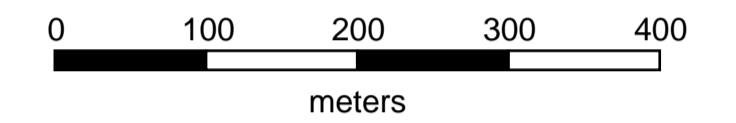
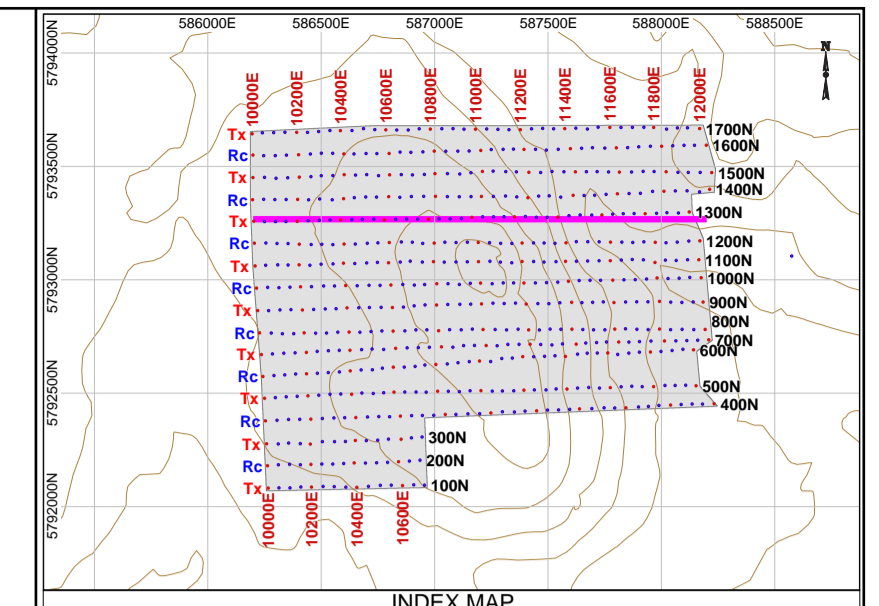
Section: 1200N



Interpreted Resistivity (ohm-m)



Interpreted Chargeability (ms)



Project Information:  
 Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Survey Date: Aug.-Sept., 2011

Instrumentation:  
 Receiver: DABstix 24-bit Single Channel Receiver  
 Transmitter: GDD TX II  
 Array Type: 3D

Mapping Information:  
 Datum: NAD83  
 Projection: UTM Zone 10  
 Mapping Date: 13-Oct-2011

**Eagle Peak Resources Inc.**

**Miocene Property**

**Williams Lake, B.C.**

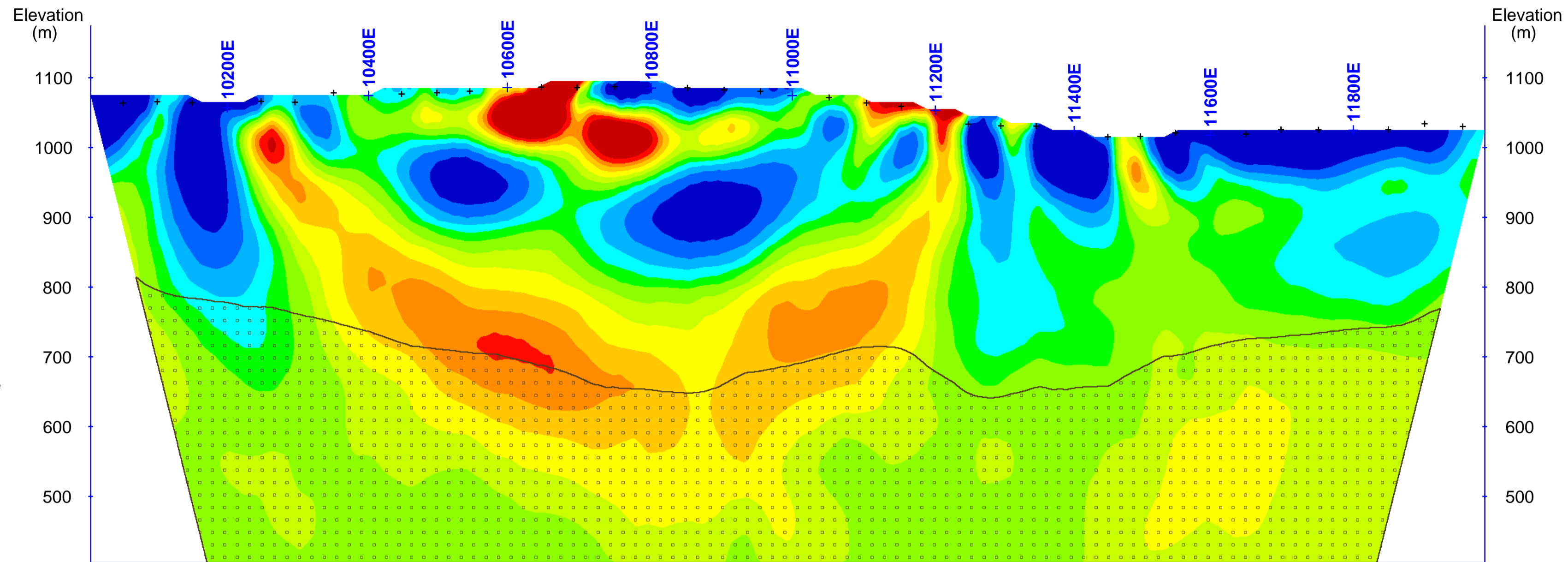
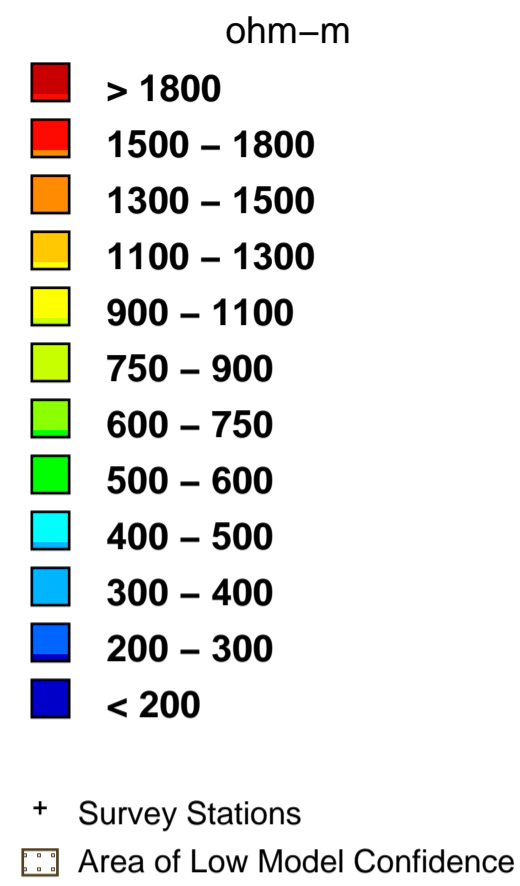
**3D Inversion Model**

of  
**Interpreted  
 Resistivity & Chargeability**

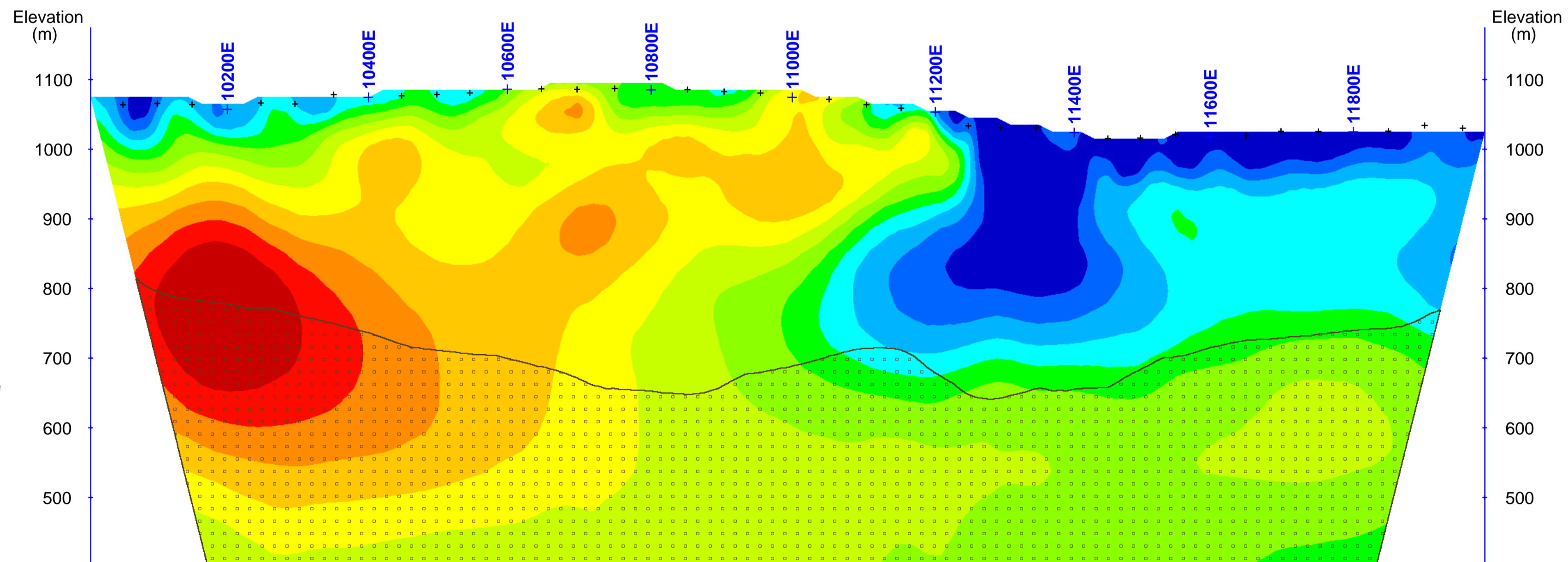
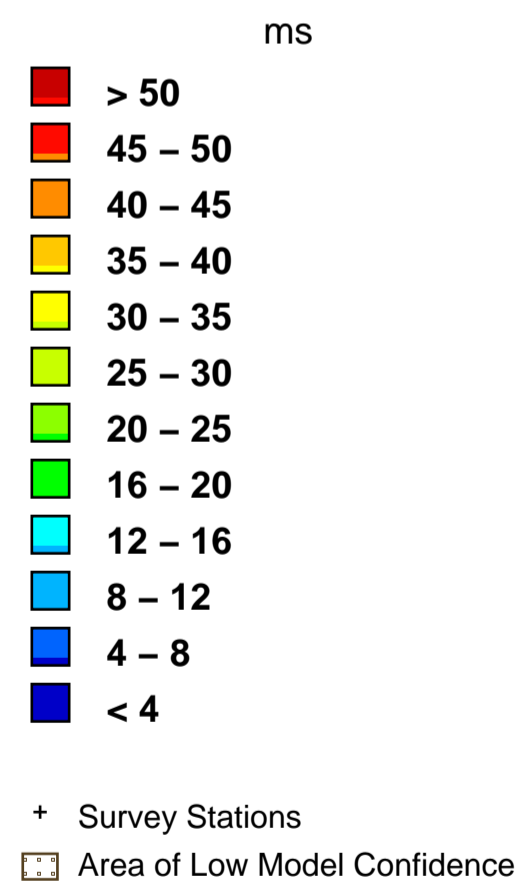
Cross Section Map

Section: 1300N

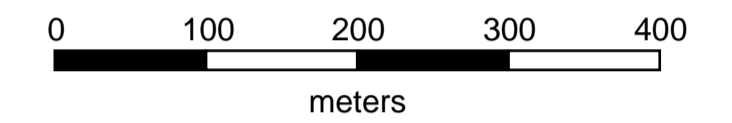
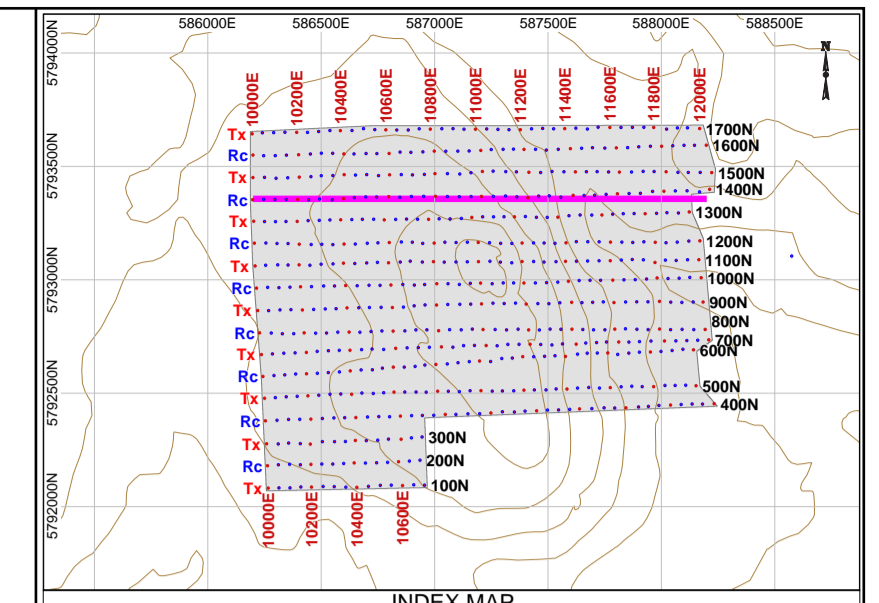




Interpreted Resistivity (ohm-m)



Interpreted Chargeability (ms)



Project Information:  
 Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Survey Date: Aug.-Sept., 2011

Instrumentation:  
 Receiver: DABstix 24-bit Single Channel Receiver  
 Transmitter: GDD TX II  
 Array Type: 3D

Mapping Information:  
 Datum: NAD83  
 Projection: UTM Zone 10  
 Mapping Date: 13-Oct-2011

**Eagle Peak Resources Inc.**

**Miocene Property**

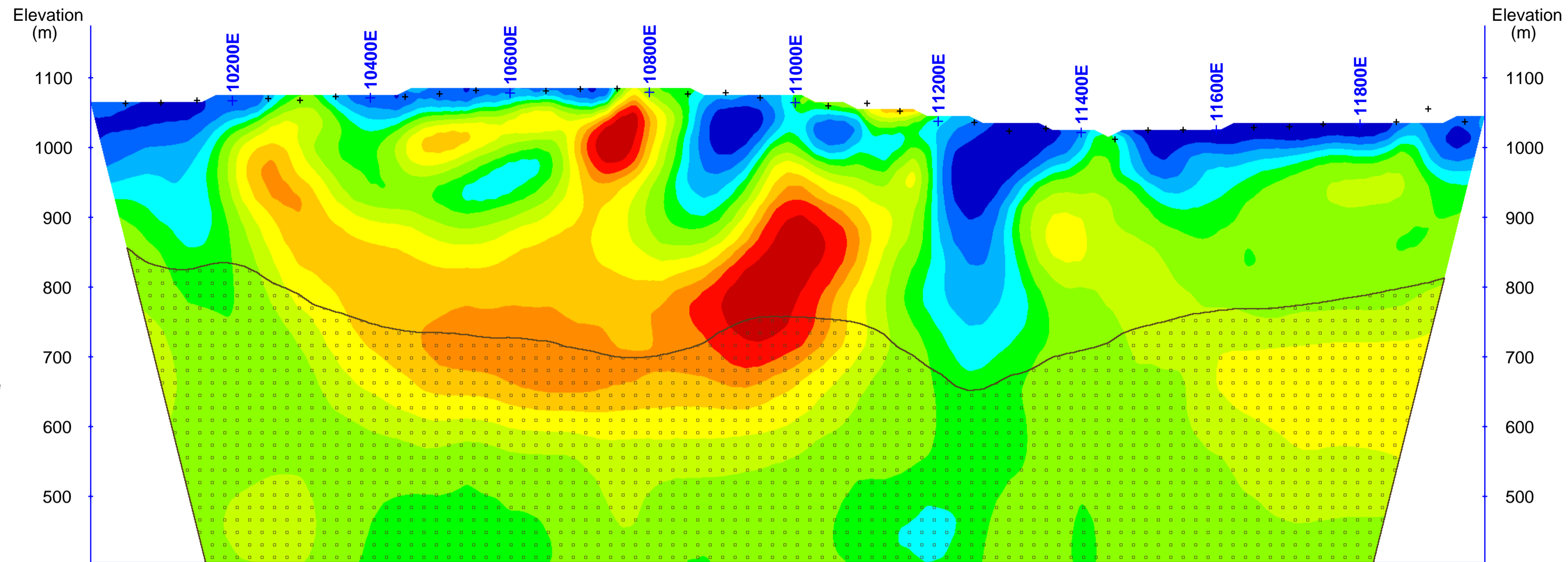
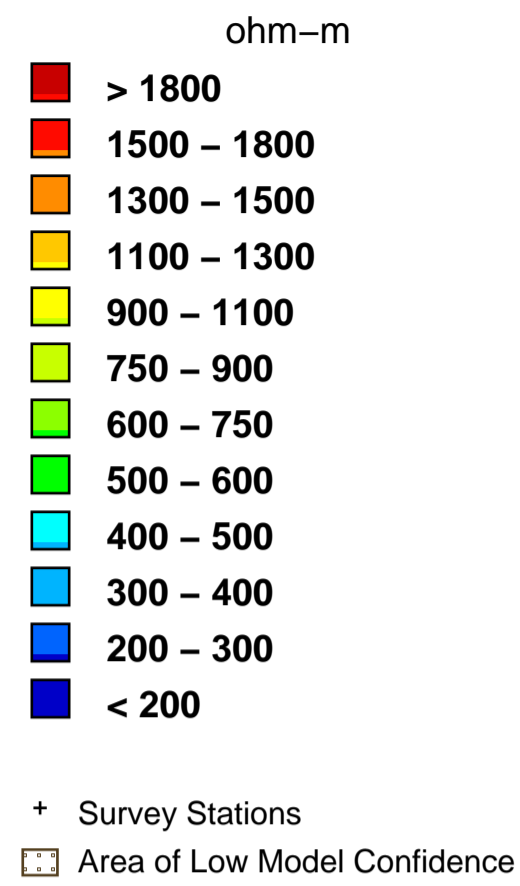
**Williams Lake, B.C.**

**3D Inversion Model**

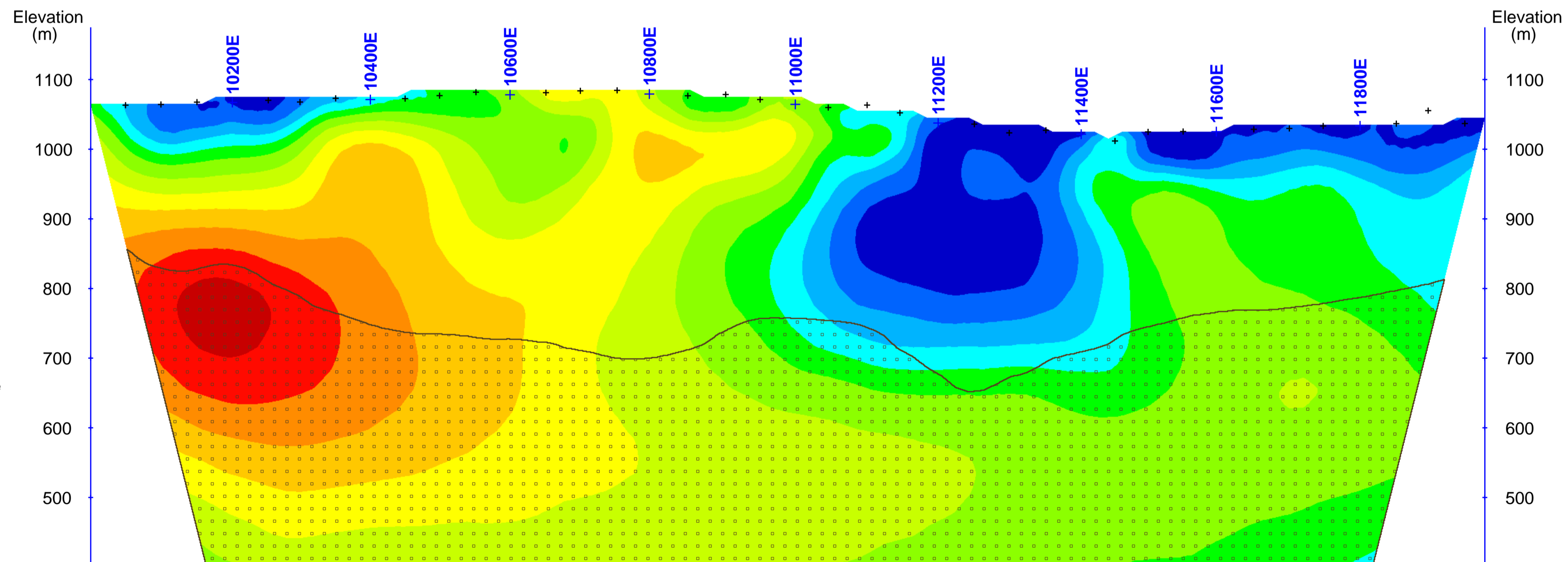
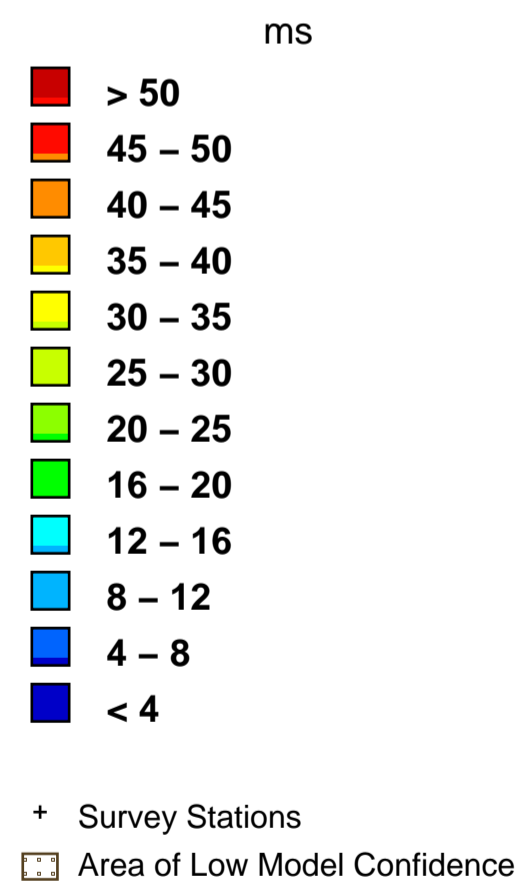
of  
**Interpreted  
 Resistivity & Chargeability**

Cross Section Map

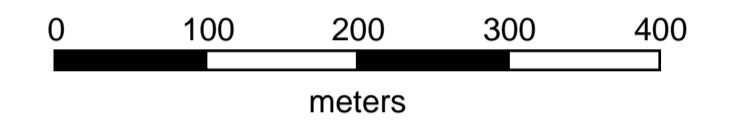
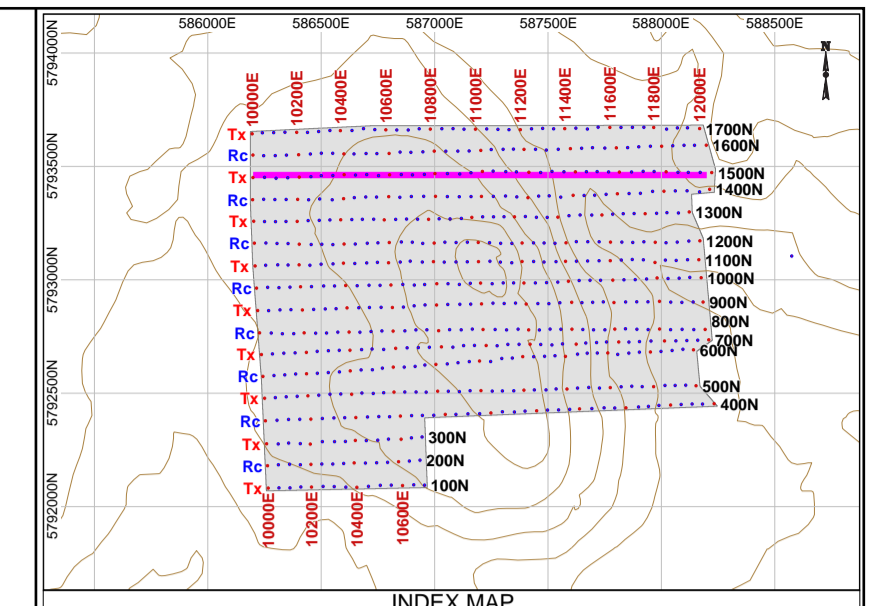
Section: 1400N



Interpreted Resistivity (ohm-m)



Interpreted Chargeability (ms)



Project Information:  
 Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Survey Date: Aug.-Sept., 2011

Instrumentation:  
 Receiver: DABstix 24-bit Single Channel Receiver  
 Transmitter: GDD TX II  
 Array Type: 3D

Mapping Information:  
 Datum: NAD83  
 Projection: UTM Zone 10  
 Mapping Date: 13-Oct-2011

**Eagle Peak Resources Inc.**

**Miocene Property**

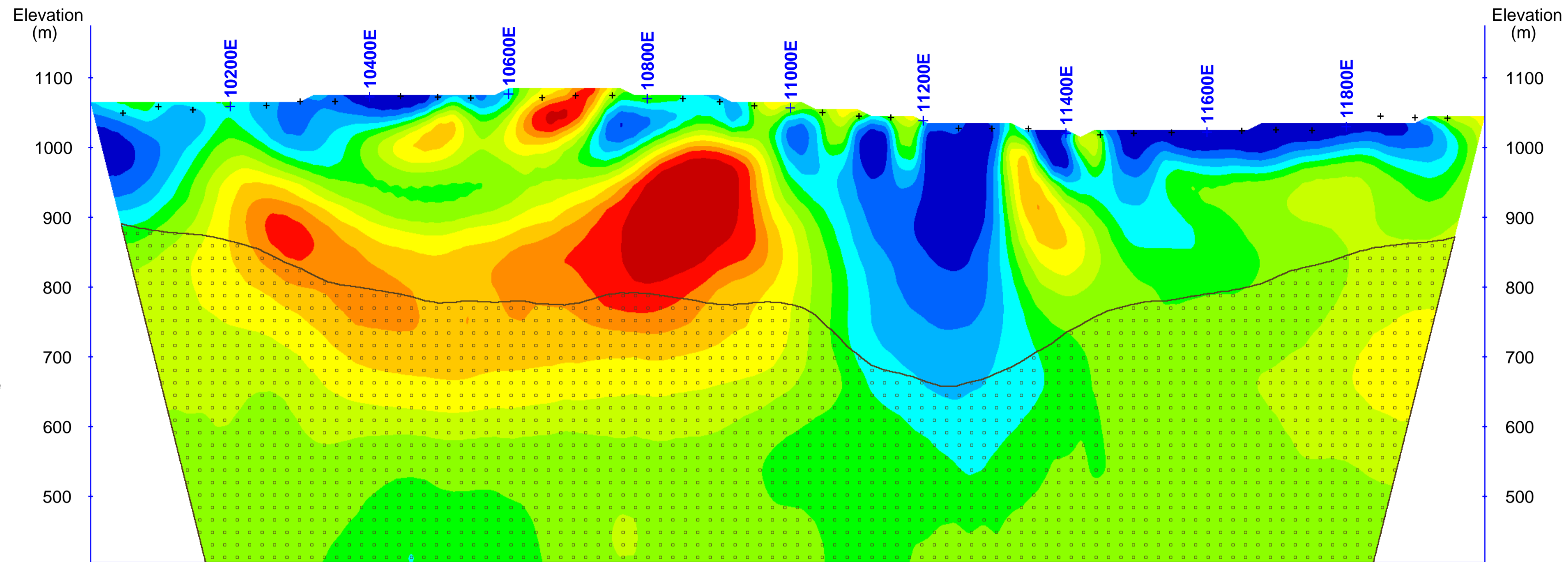
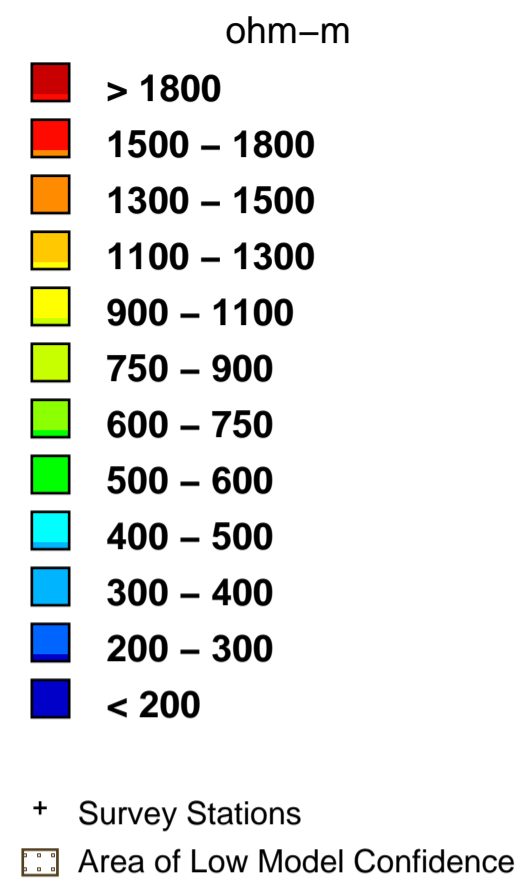
**Williams Lake, B.C.**

**3D Inversion Model**

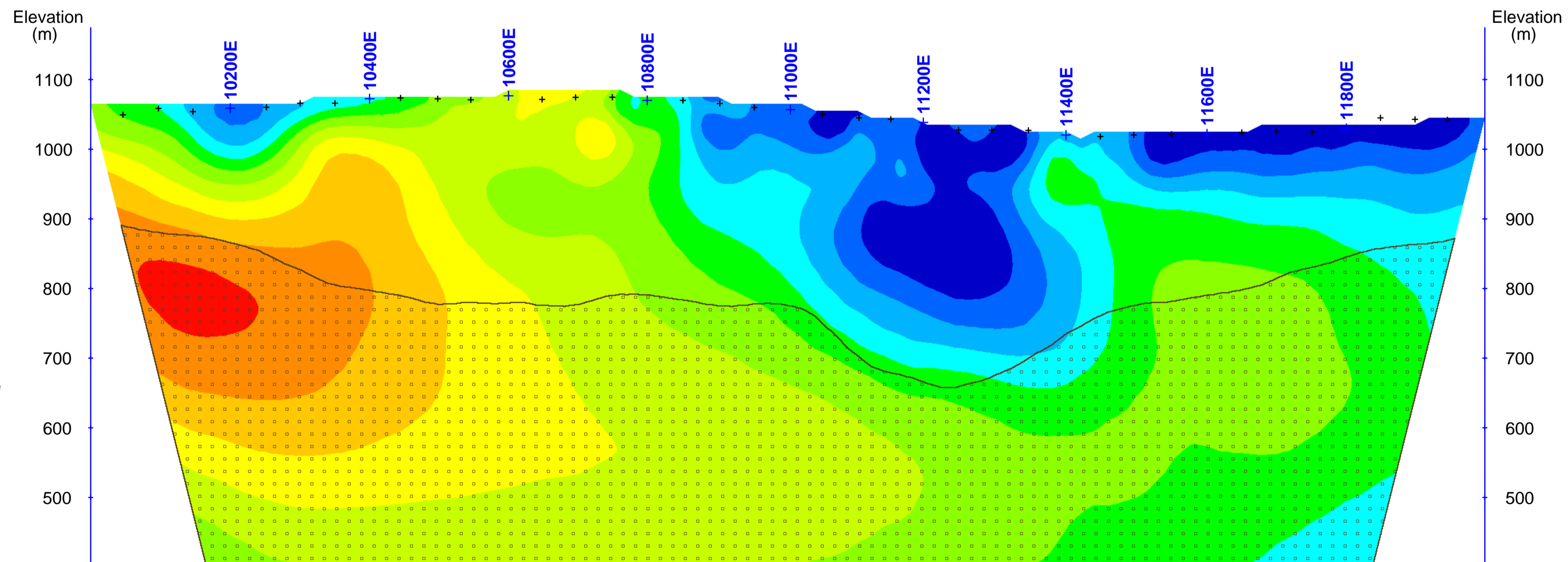
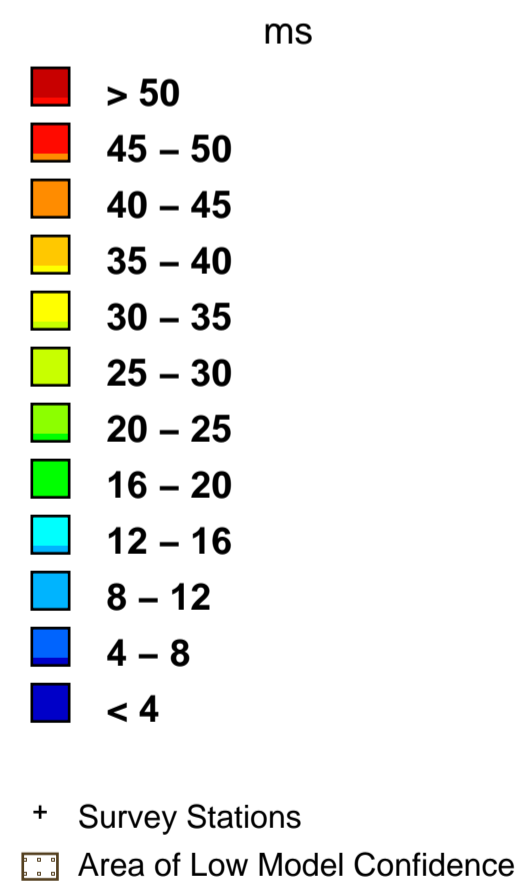
of  
**Interpreted  
 Resistivity & Chargeability**

Cross Section Map

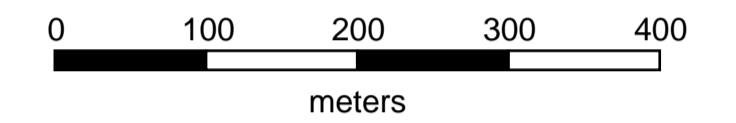
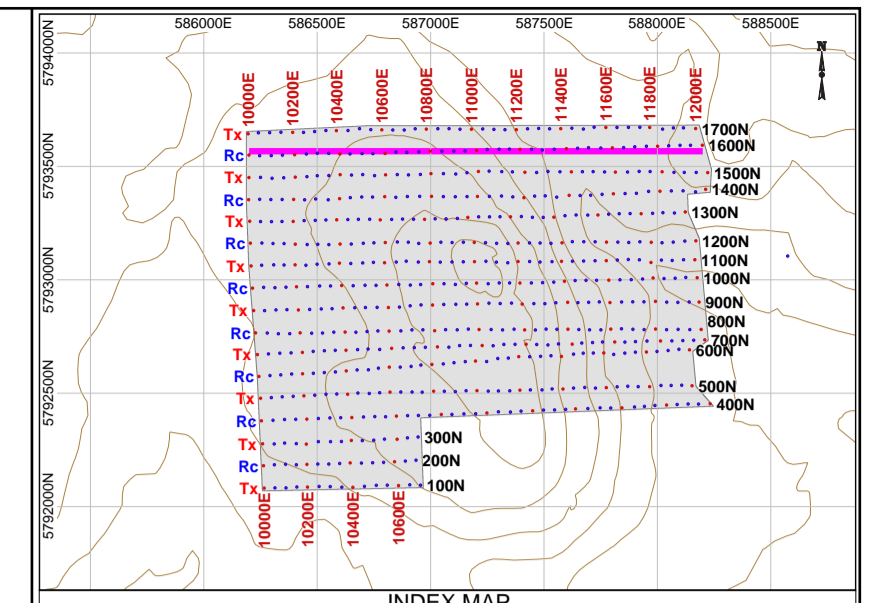
Section: 1500N



Interpreted Resistivity (ohm-m)



Interpreted Chargeability (ms)



Project Information:  
 Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Survey Date: Aug.-Sept., 2011

Instrumentation:  
 Receiver: DABStix 24-bit Single Channel Receiver  
 Transmitter: GDD TX II  
 Array Type: 3D

Mapping Information:  
 Datum: NAD83  
 Projection: UTM Zone 10  
 Mapping Date: 13-Oct-2011

**Eagle Peak Resources Inc.**

**Miocene Property**

**Williams Lake, B.C.**

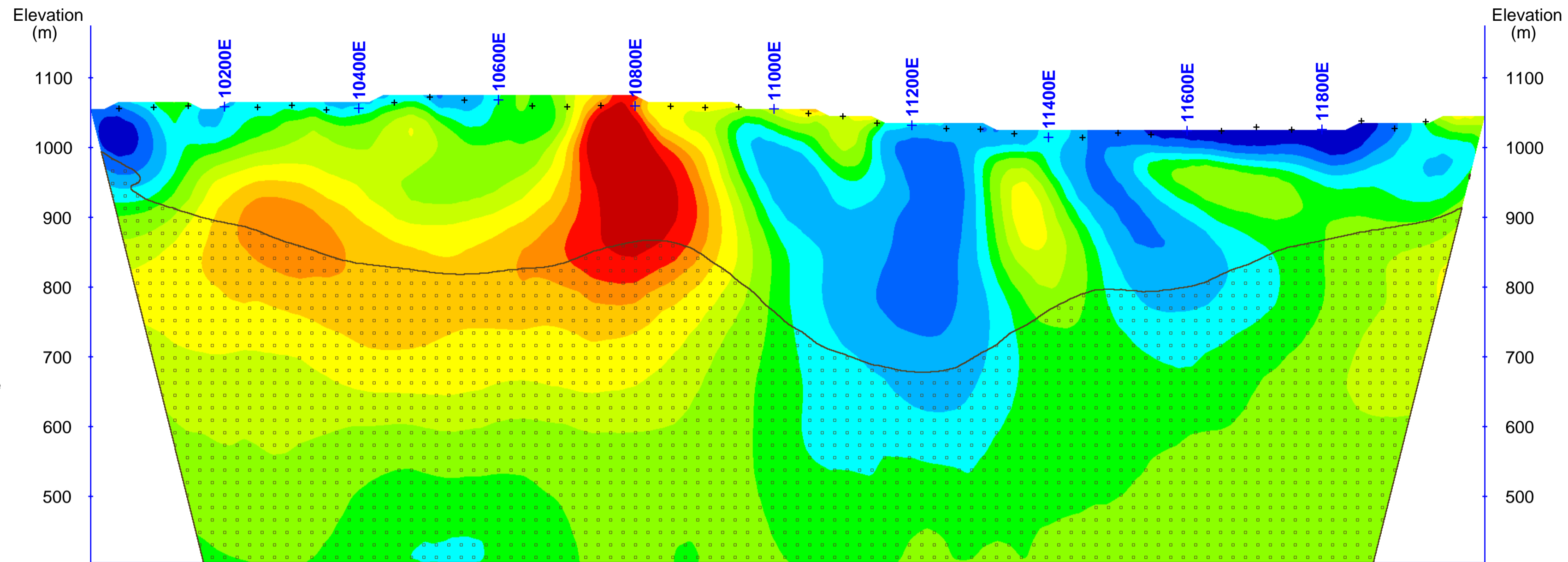
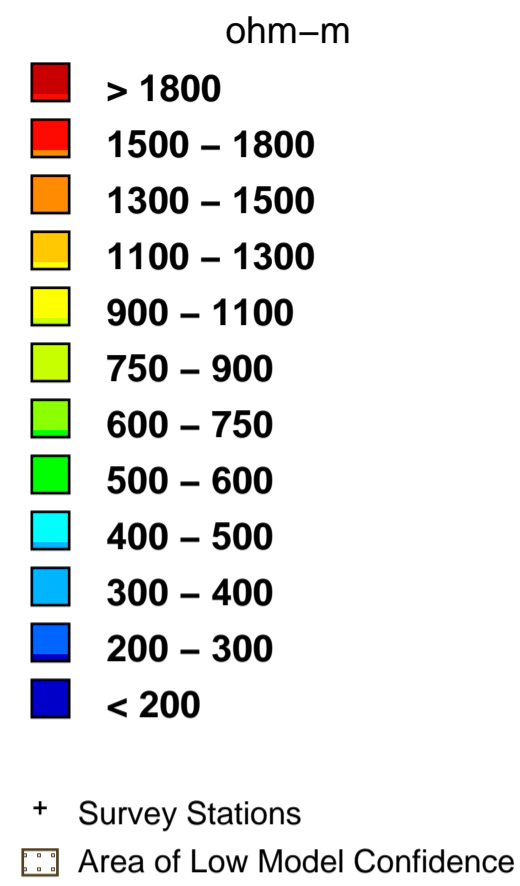
**3D Inversion Model**

of  
**Interpreted  
 Resistivity & Chargeability**

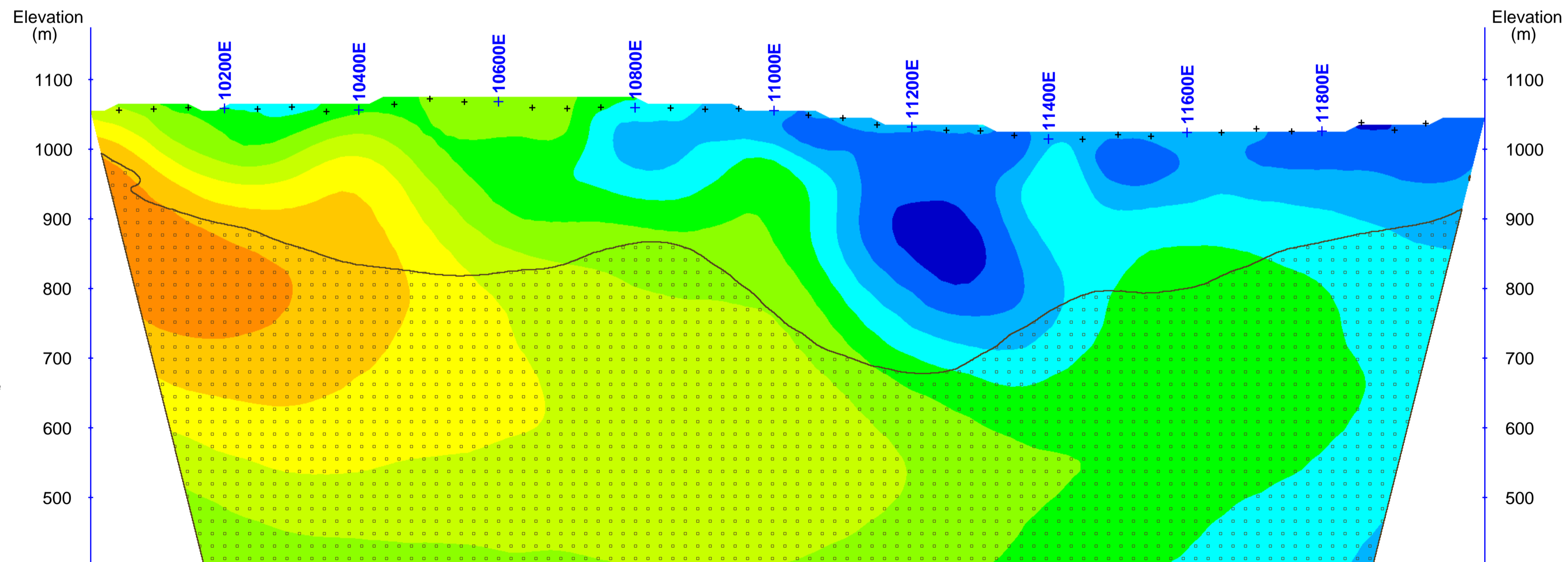
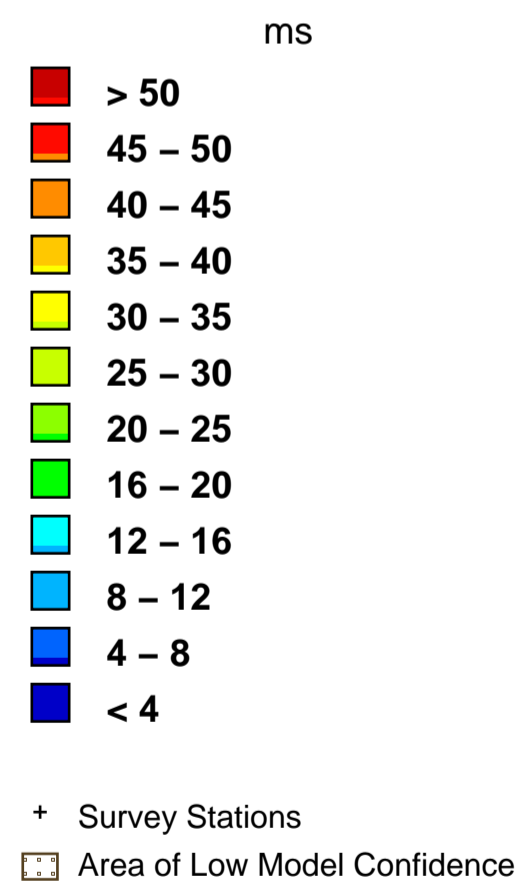
Cross Section Map

Section: 1600N

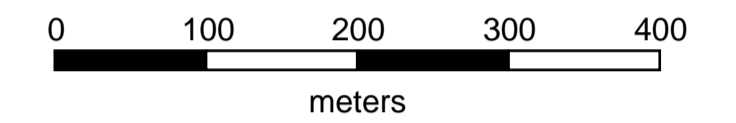
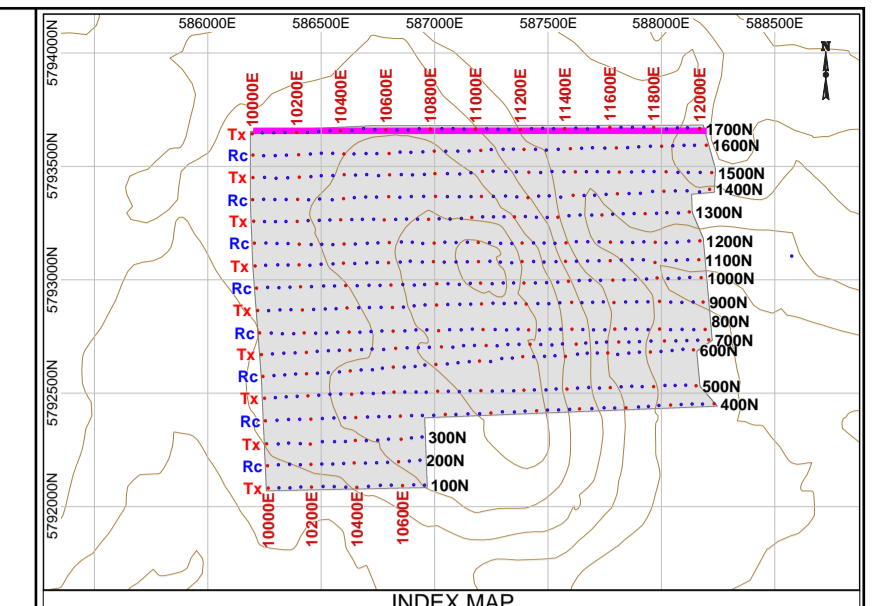




Interpreted Resistivity (ohm-m)



Interpreted Chargeability (ms)



Project Information:  
 Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Survey Date: Aug.-Sept., 2011

Instrumentation:  
 Receiver: DABStix 24-bit Single Channel Receiver  
 Transmitter: GDD TX II  
 Array Type: 3D

Mapping Information:  
 Datum: NAD83  
 Projection: UTM Zone 10  
 Mapping Date: 13-Oct-2011

**Eagle Peak Resources Inc.**

**Miocene Property**

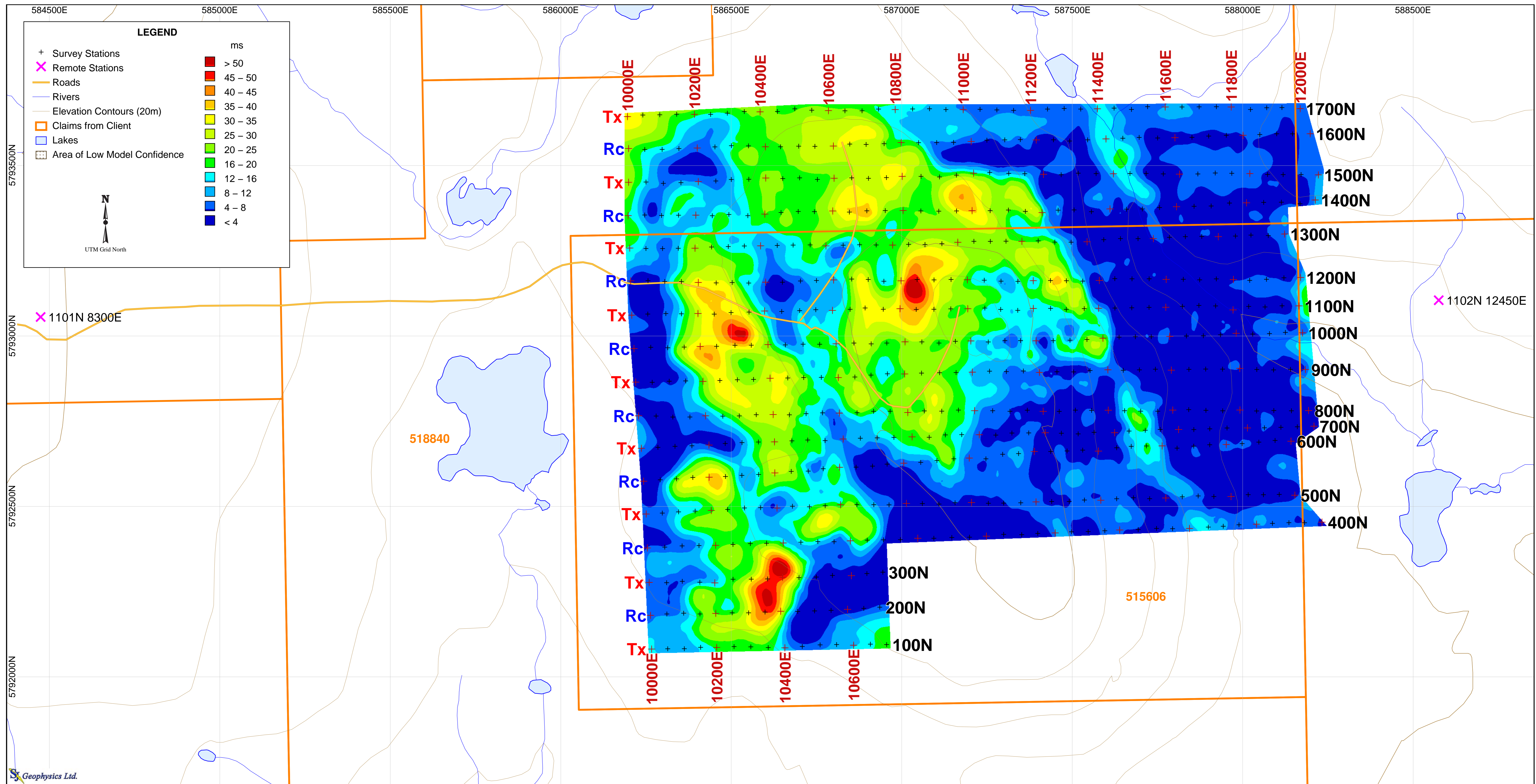
**Williams Lake, B.C.**

**3D Inversion Model**

of  
**Interpreted  
 Resistivity & Chargeability**

Cross Section Map

Section: 1700N



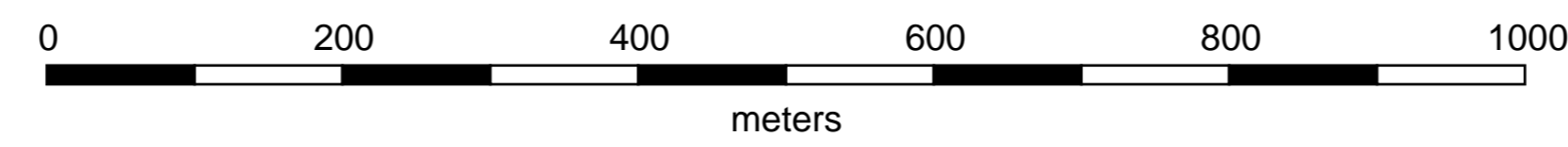
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 Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Survey Date: Aug.-Sept., 2011

Instrumentation:  
 Receiver: DABStix 24-bit Single Channel Receiver  
 Transmitter: GDD TX II  
 Array Type: 3D

Mapping Information:  
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 Projection: UTM Zone 10  
 Mapping Date: 13-Oct-2011

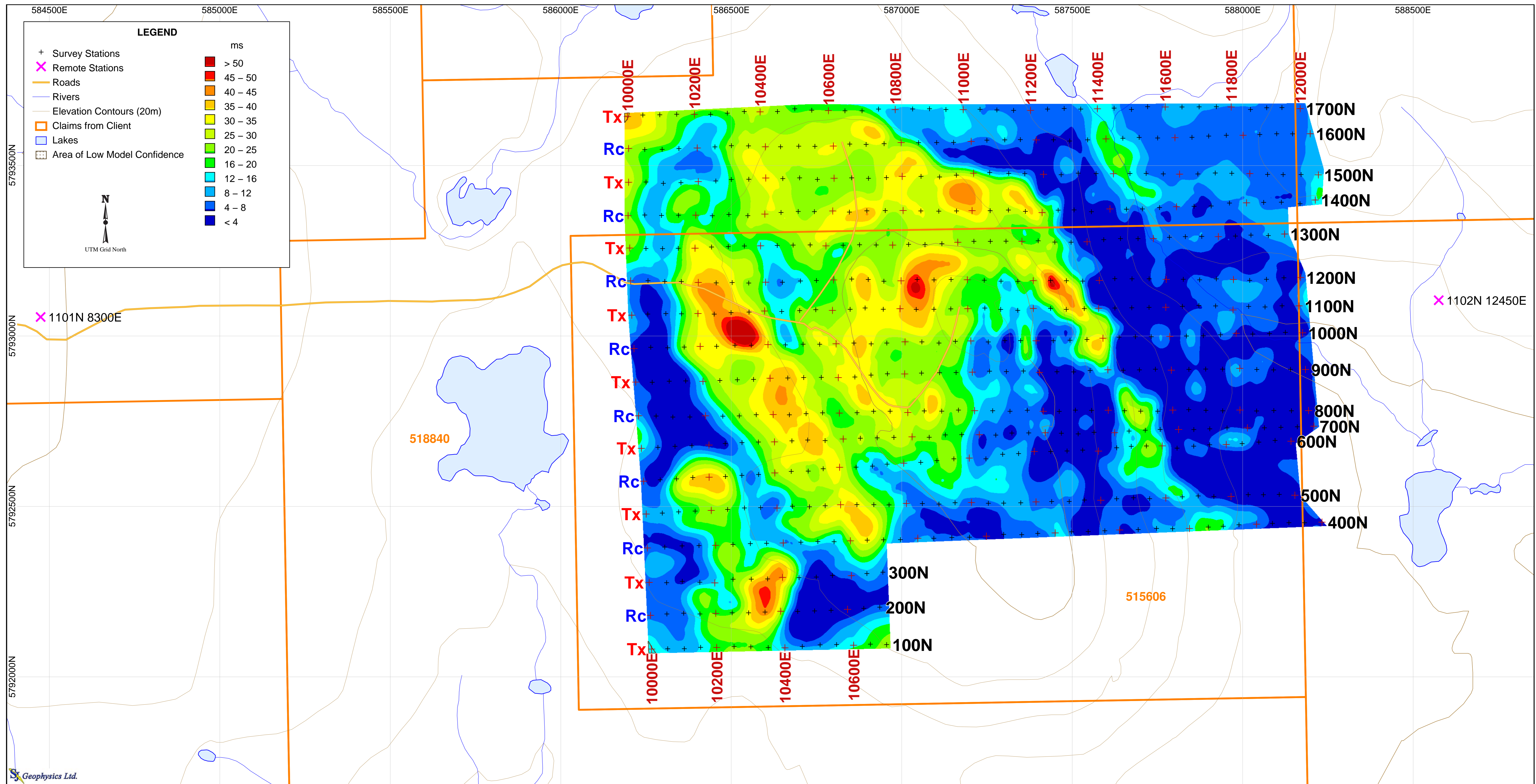
Planmap  
 3D Inversion Model

Depth: 25m Below Topography



**Eagle Peak Resources Inc.**  
**Interpreted Chargeability (ms)**  
 Miocene Property  
 Williams Lake, B.C.





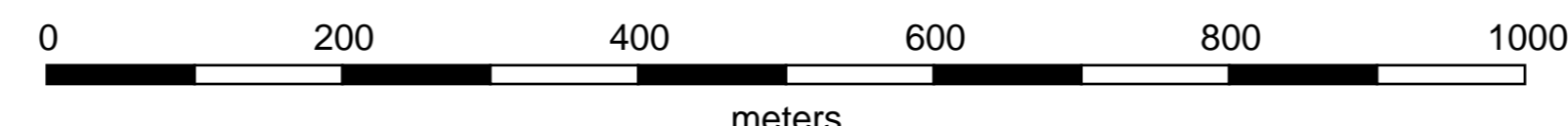
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 Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Survey Date: Aug.-Sept., 2011

Instrumentation:  
 Receiver: DABStix 24-bit Single Channel Receiver  
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 Array Type: 3D

Mapping Information:  
 Datum: NAD83  
 Projection: UTM Zone 10  
 Mapping Date: 13-Oct-2011

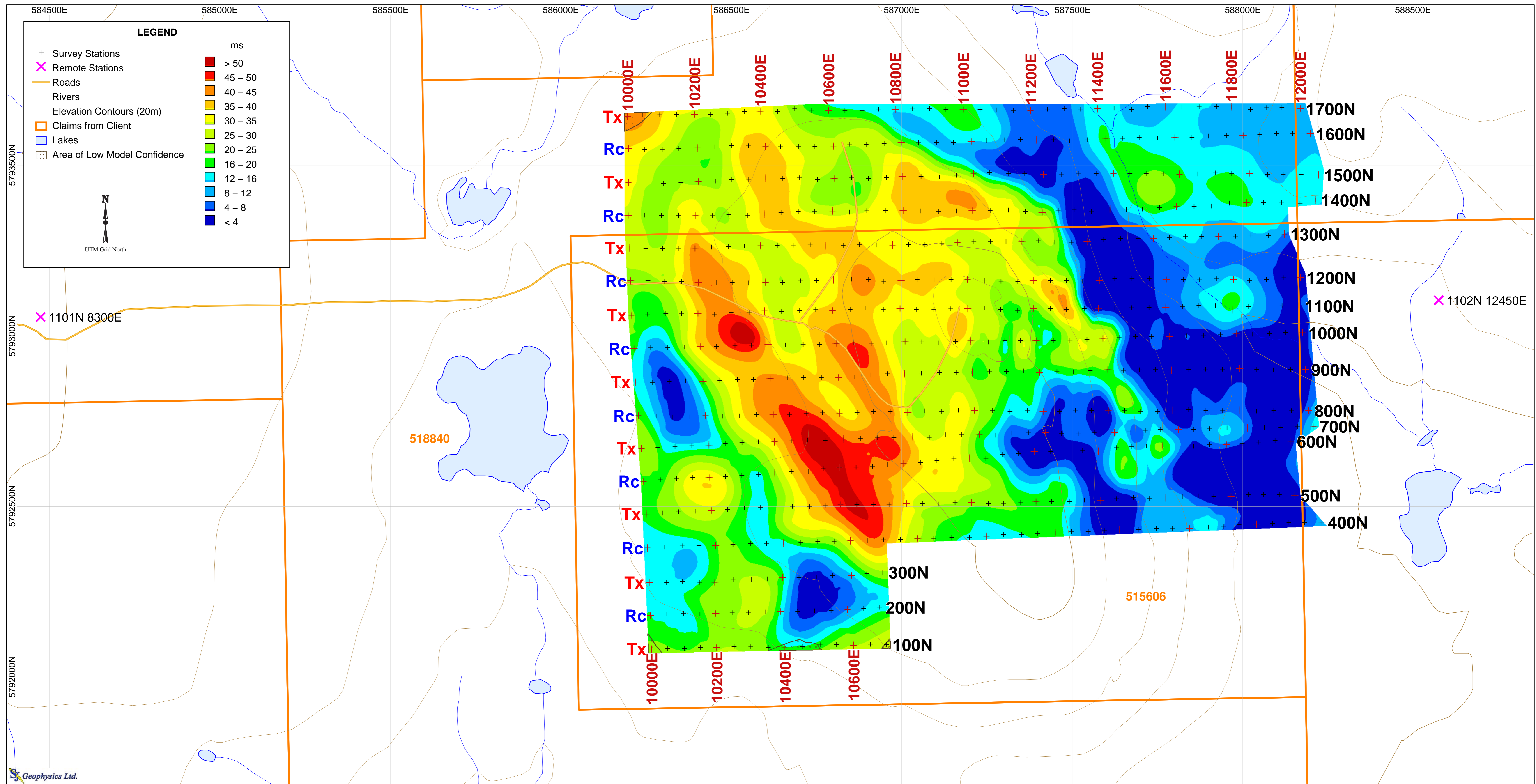
Planmap  
 3D Inversion Model

Depth: 50m Below Topography



**Eagle Peak Resources Inc.**  
**Interpreted Chargeability (ms)**  
 Miocene Property  
 Williams Lake, B.C.





Project Information:  
 Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Survey Date: Aug.-Sept., 2011

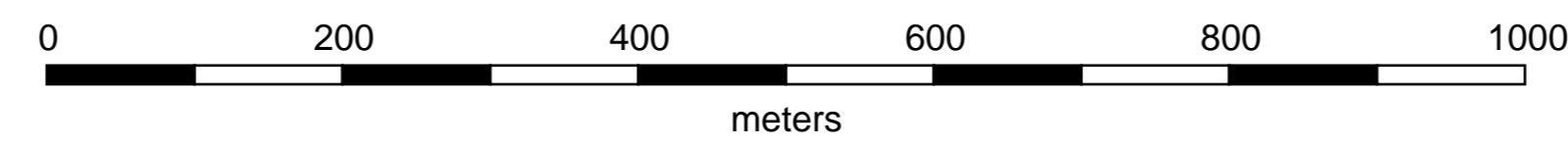
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 Transmitter: GDD TX II  
 Array Type: 3D

Mapping Information:  
 Datum: NAD83  
 Projection: UTM Zone 10  
 Mapping Date: 13-Oct-2011

Planmap

3D Inversion Model

Depth: 100m Below Topography



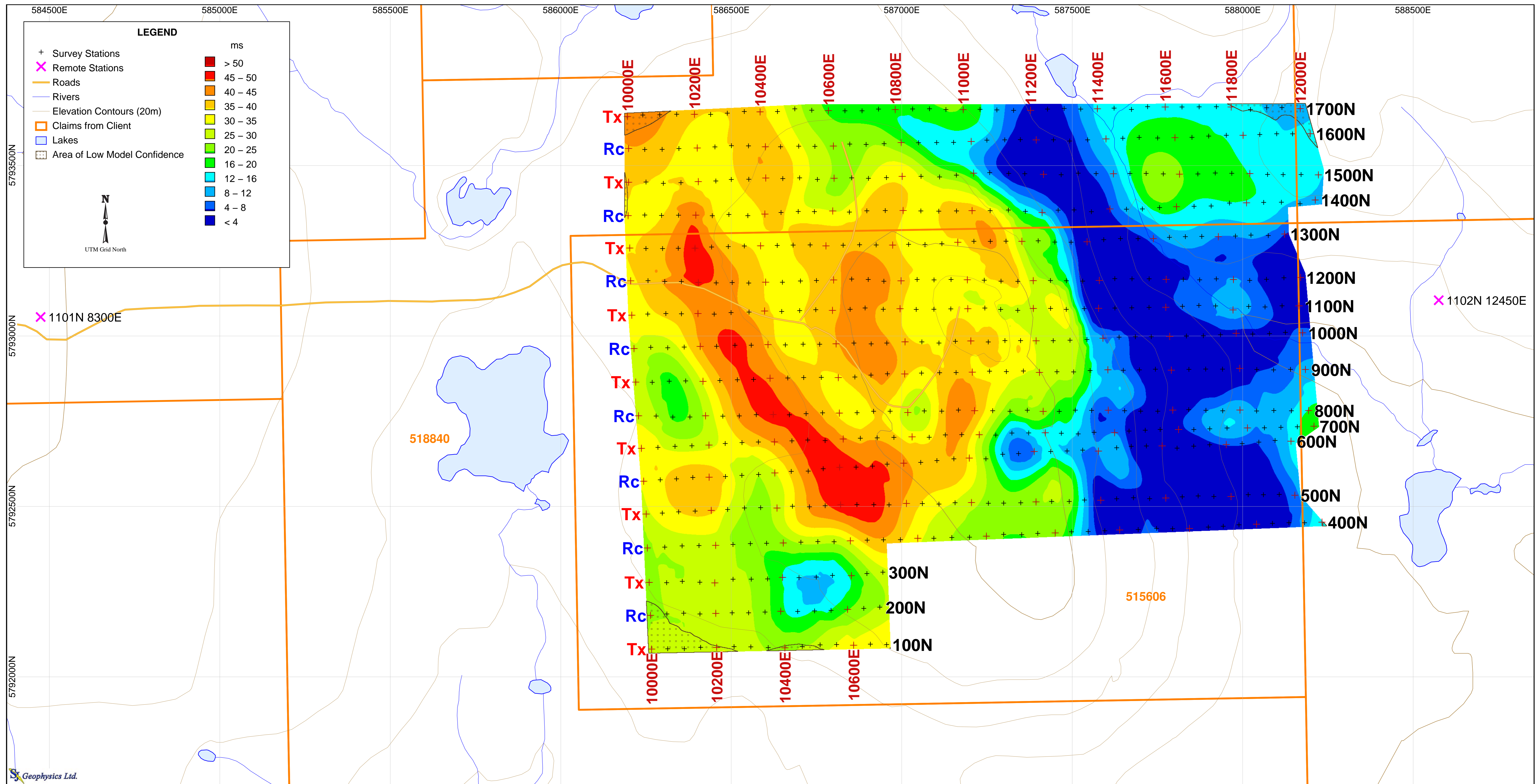
Eagle Peak Resources Inc.

Interpreted Chargeability (ms)

Miocene Property

Williams Lake, B.C.





Project Information:  
 Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Survey Date: Aug.-Sept., 2011

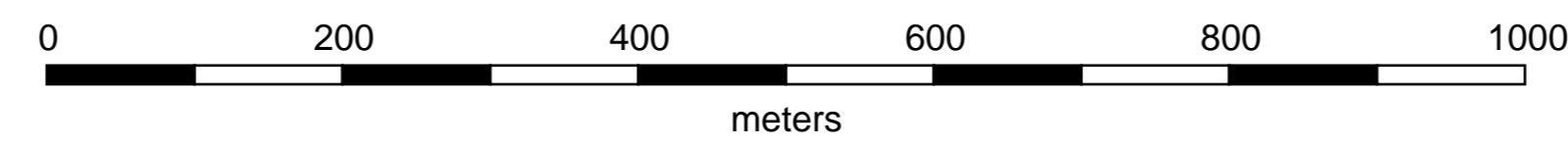
Instrumentation:  
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 Transmitter: GDD TX II  
 Array Type: 3D

Mapping Information:  
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 Projection: UTM Zone 10  
 Mapping Date: 13-Oct-2011

Planmap

3D Inversion Model

Depth: 150m Below Topography



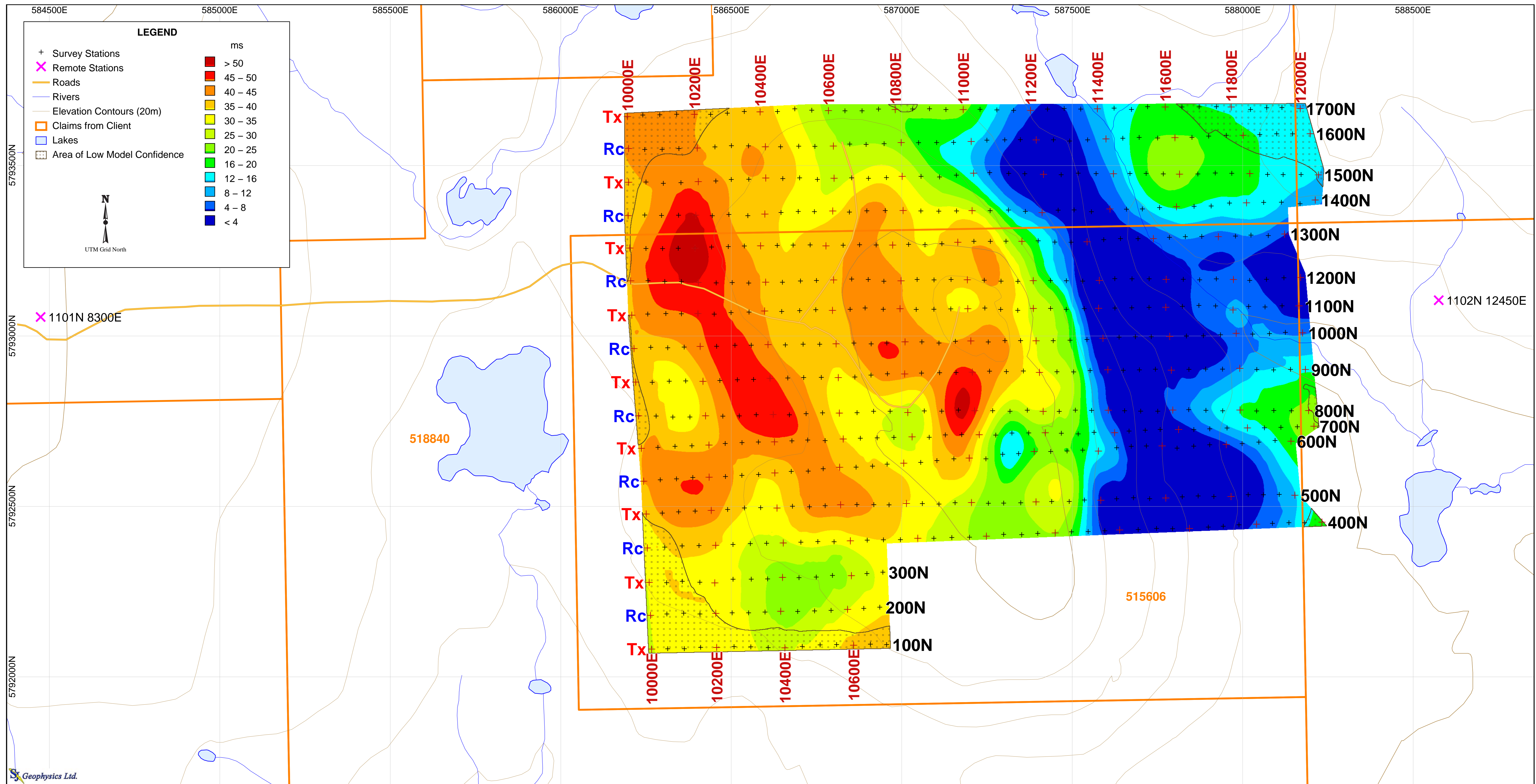
Eagle Peak Resources Inc.

Interpreted Chargeability (ms)

Miocene Property

Williams Lake, B.C.

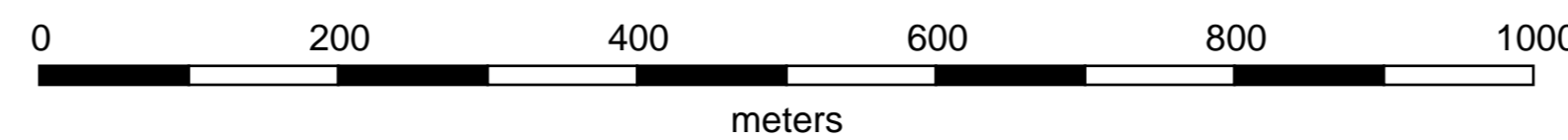




Planmap

3D Inversion Model

Depth: 200m Below Topography



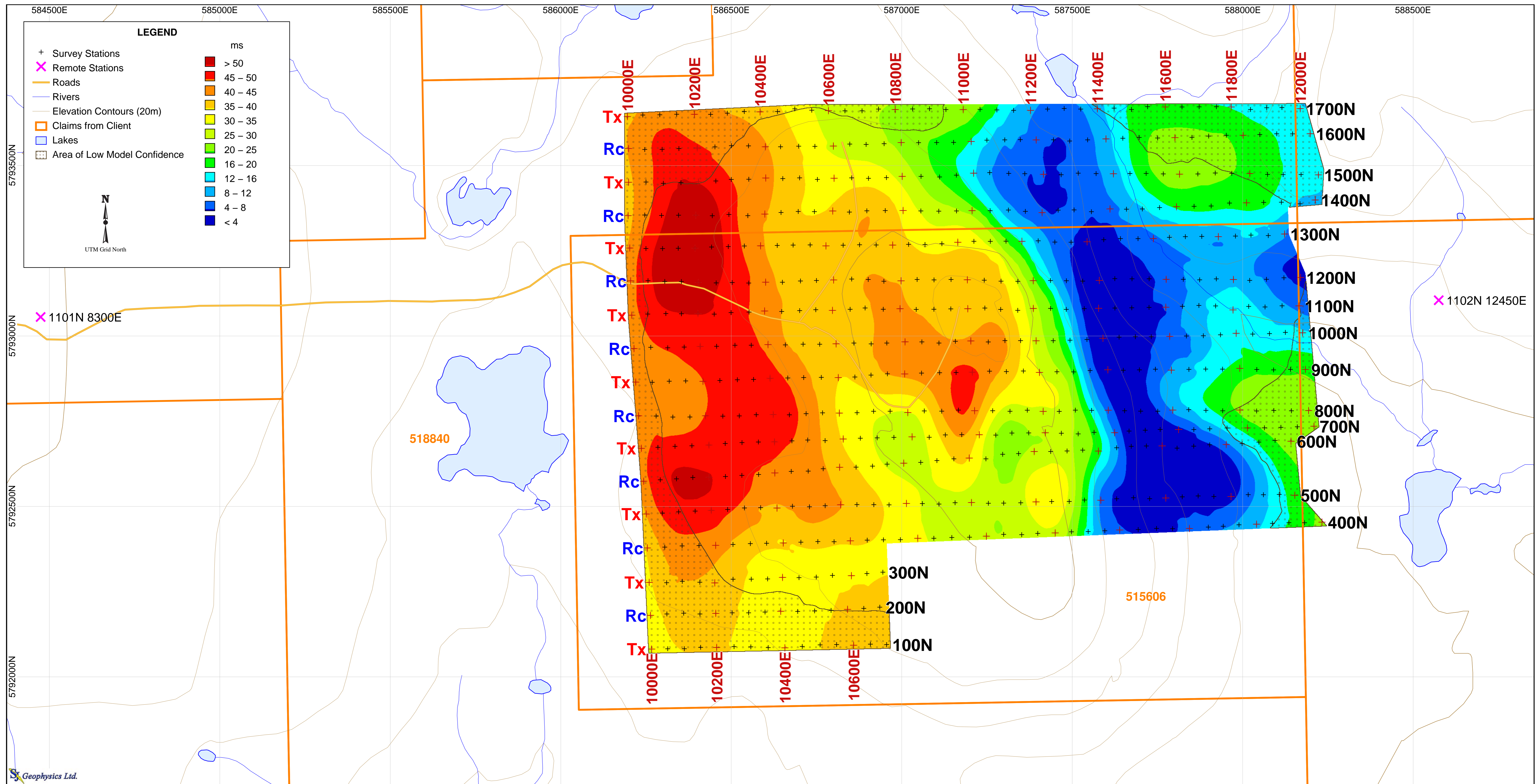
Eagle Peak Resources Inc.

Interpreted Chargeability (ms)

Miocene Property

Williams Lake, B.C.





Project Information:  
 Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Survey Date: Aug.-Sept., 2011

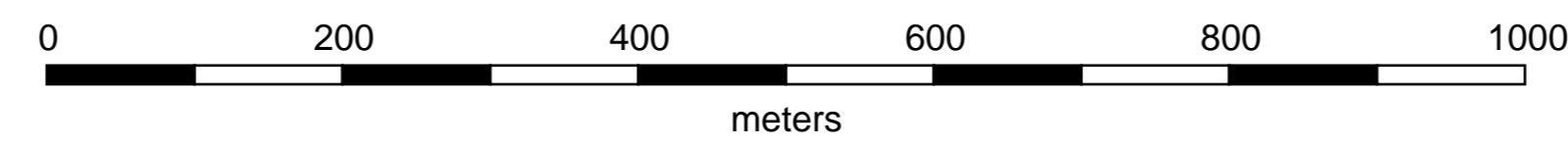
Instrumentation:  
 Receiver: DABStix 24-bit Single Channel Receiver  
 Transmitter: GDD TX II  
 Array Type: 3D

Mapping Information:  
 Datum: NAD83  
 Projection: UTM Zone 10  
 Mapping Date: 13-Oct-2011

Planmap

3D Inversion Model

Depth: 250m Below Topography



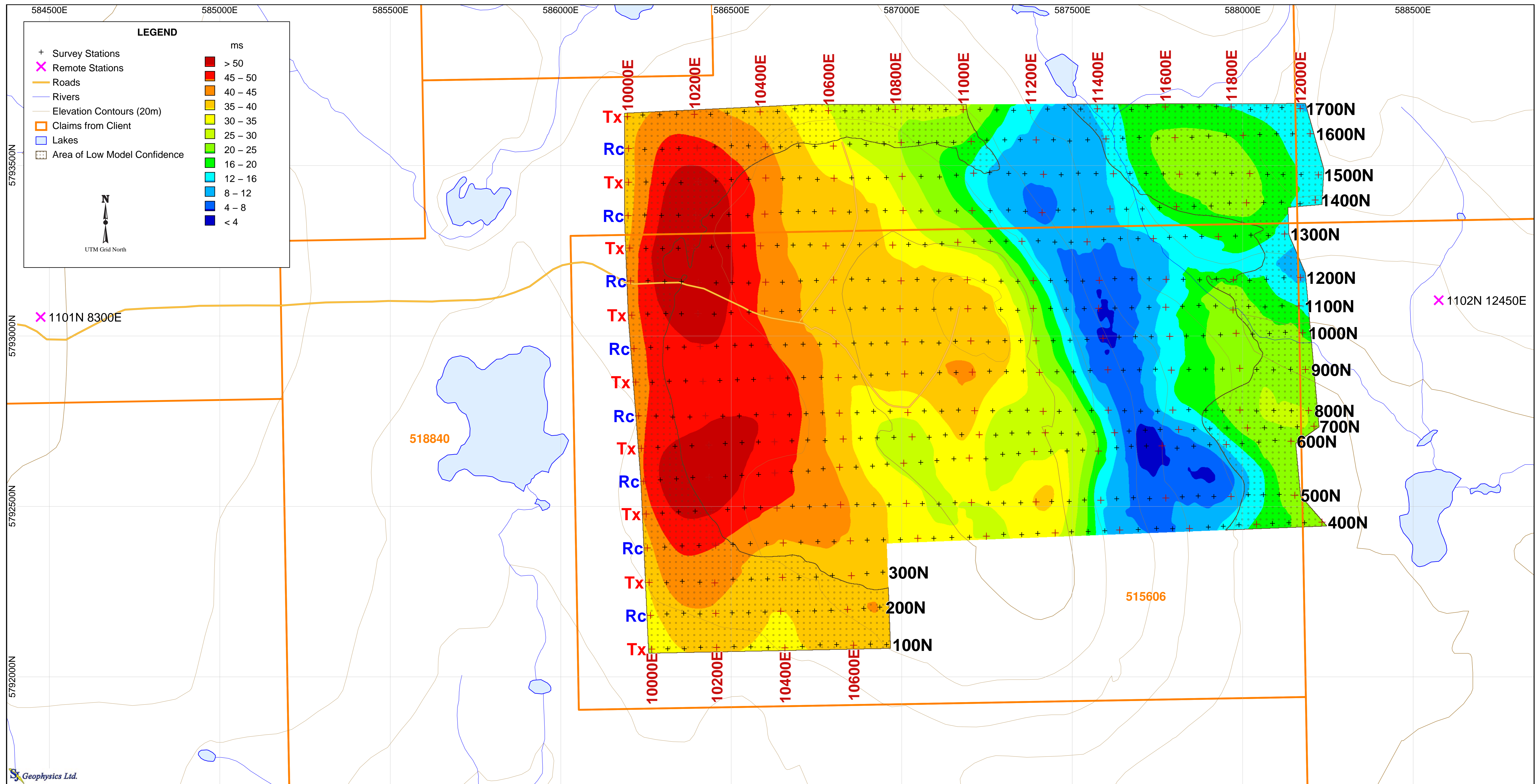
Eagle Peak Resources Inc.

Interpreted Chargeability (ms)

Miocene Property

Williams Lake, B.C.





Project Information:  
 Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Survey Date: Aug.-Sept., 2011

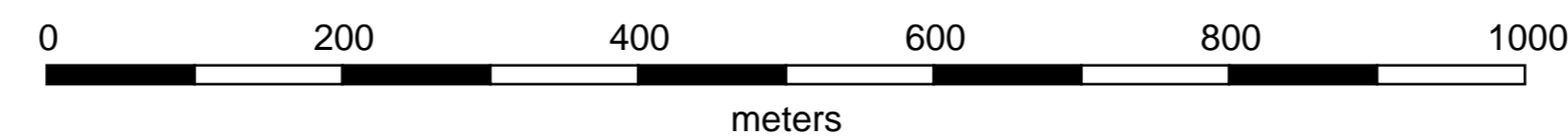
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 Receiver: DABStix 24-bit Single Channel Receiver  
 Transmitter: GDD TX II  
 Array Type: 3D

Mapping Information:  
 Datum: NAD83  
 Projection: UTM Zone 10  
 Mapping Date: 13-Oct-2011

Planmap

3D Inversion Model

Depth: 300m Below Topography



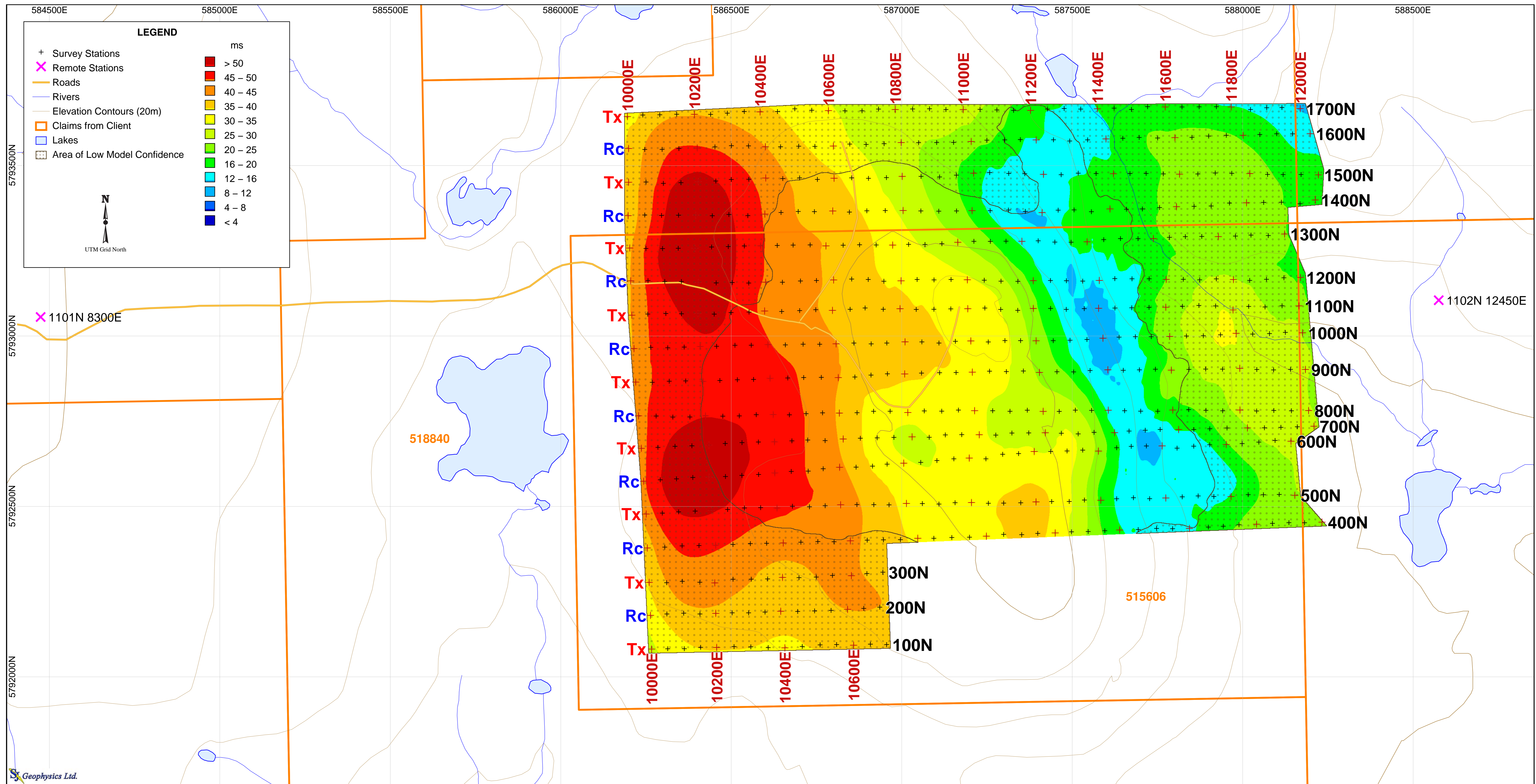
Eagle Peak Resources Inc.

Interpreted Chargeability (ms)

Miocene Property

Williams Lake, B.C.





Project Information:  
 Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Survey Date: Aug.-Sept., 2011

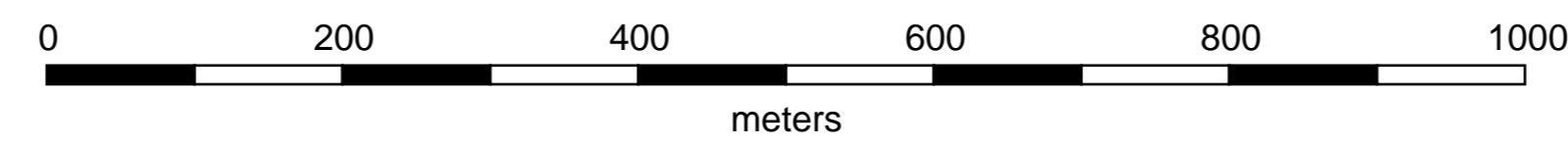
Instrumentation:  
 Receiver: DABStix 24-bit Single Channel Receiver  
 Transmitter: GDD TX II  
 Array Type: 3D

Mapping Information:  
 Datum: NAD83  
 Projection: UTM Zone 10  
 Mapping Date: 13-Oct-2011

Planmap

3D Inversion Model

Depth: 350m Below Topography



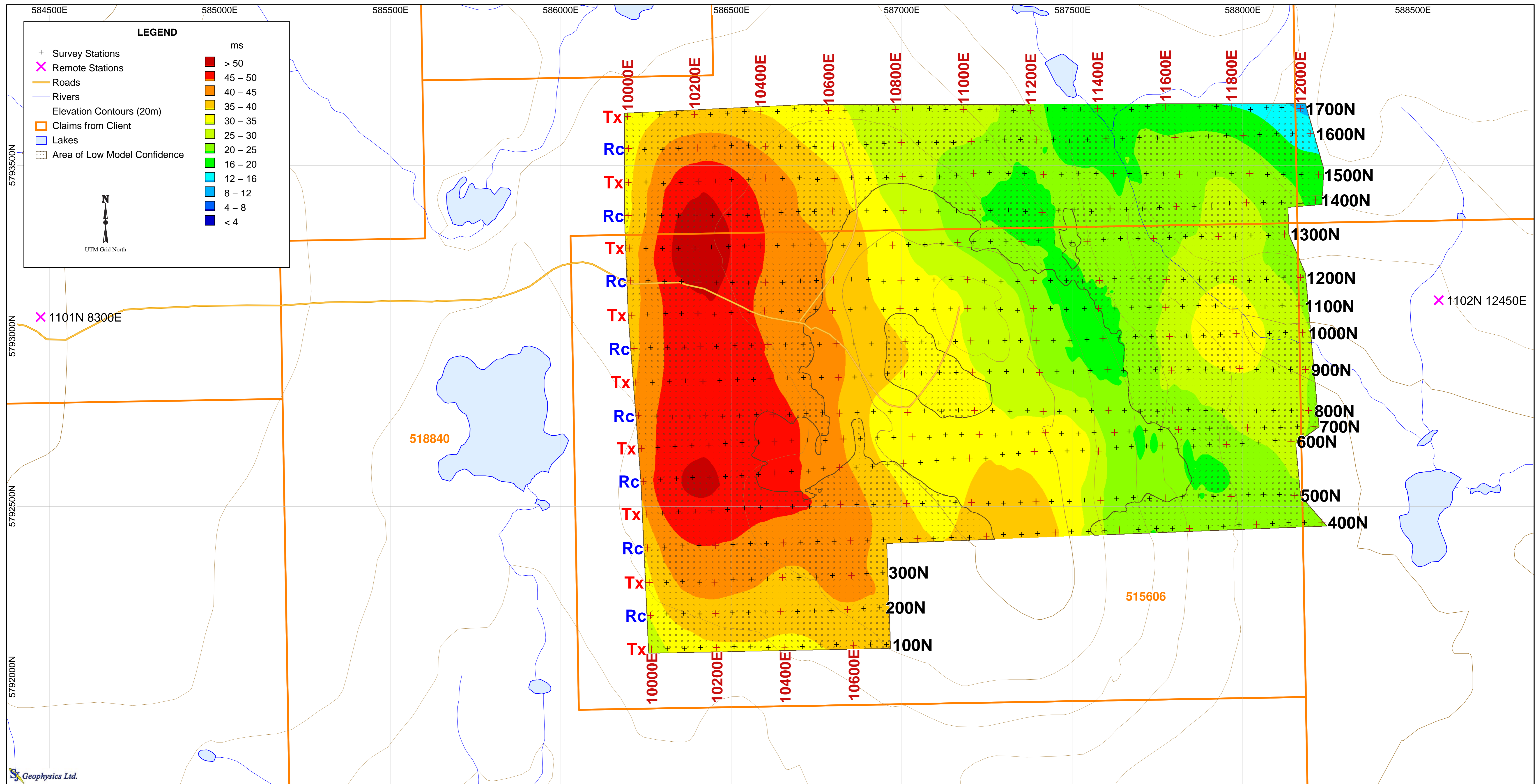
Eagle Peak Resources Inc.

Interpreted Chargeability (ms)

Miocene Property

Williams Lake, B.C.





Project Information:  
 Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Survey Date: Aug.-Sept., 2011

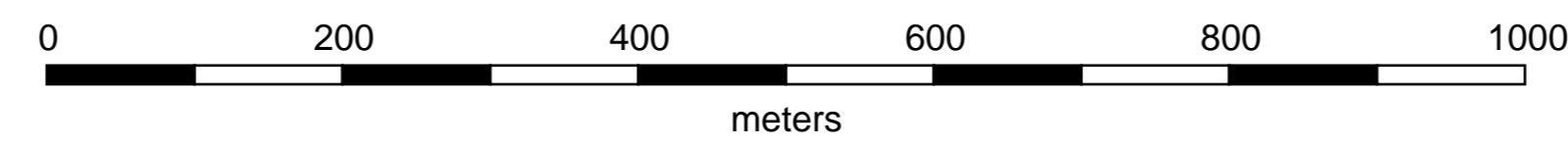
Instrumentation:  
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 Transmitter: GDD TX II  
 Array Type: 3D

Mapping Information:  
 Datum: NAD83  
 Projection: UTM Zone 10  
 Mapping Date: 13-Oct-2011

Planmap

3D Inversion Model

Depth: 400m Below Topography



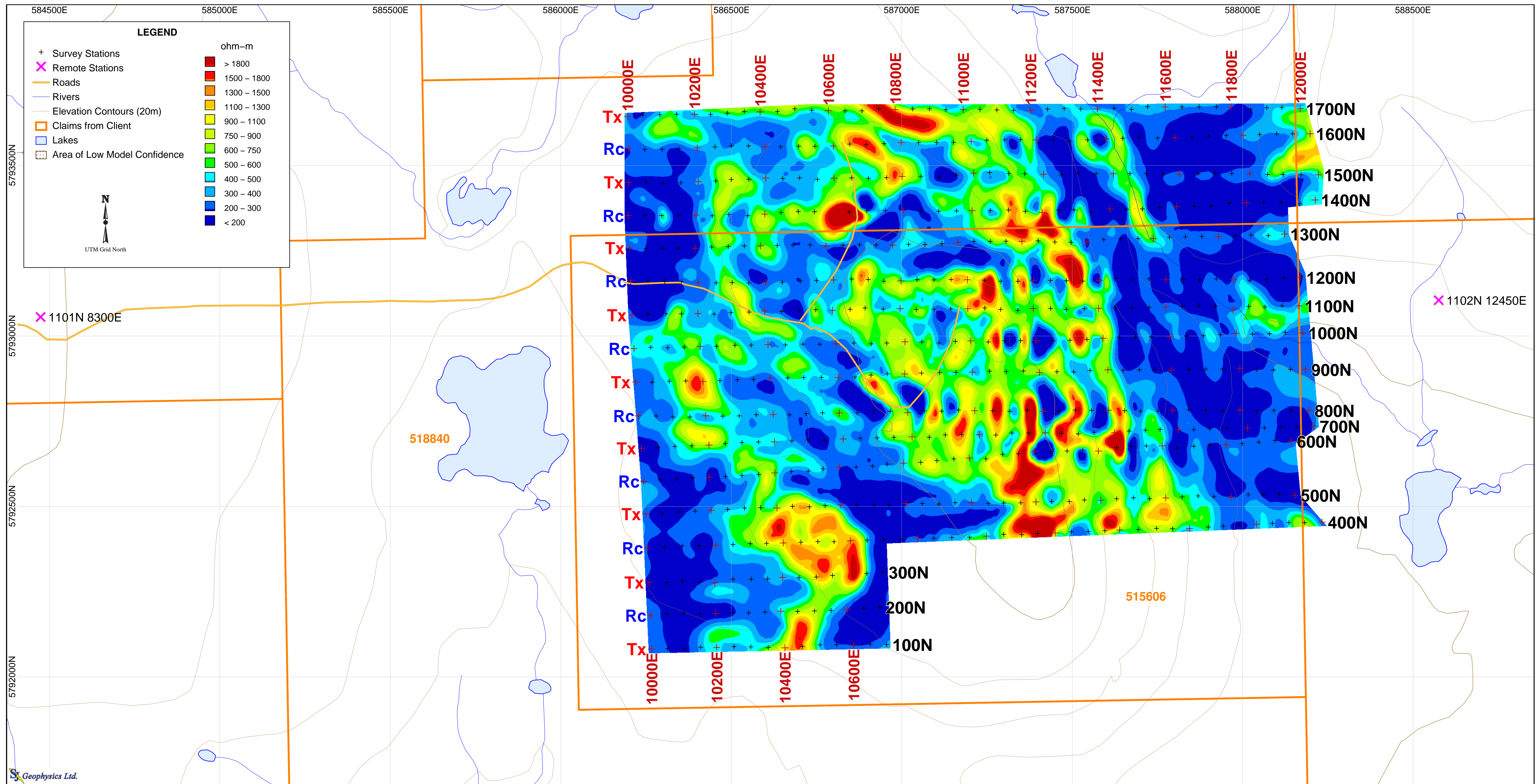
Eagle Peak Resources Inc.

Interpreted Chargeability (ms)

Miocene Property

Williams Lake, B.C.





Project Information:  
 Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Survey Date: Aug.-Sept., 2011

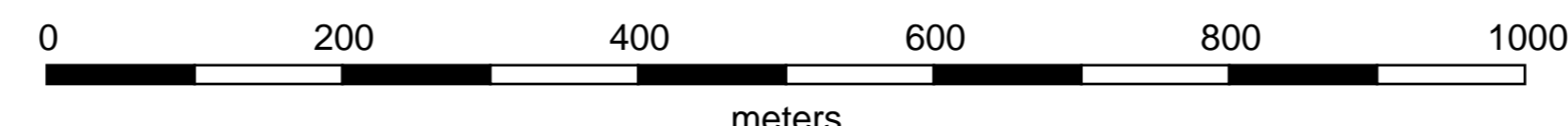
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 Receiver: DABStix 24-bit Single Channel Receiver  
 Transmitter: GDD TX II  
 Array Type: 3D

Mapping Information:  
 Datum: NAD83  
 Projection: UTM Zone 10  
 Mapping Date: 13-Oct-2011

Planmap

3D Inversion Model

Depth: 25m Below Topography



Eagle Peak Resources Inc.

Interpreted Resistivity (ohm-m)

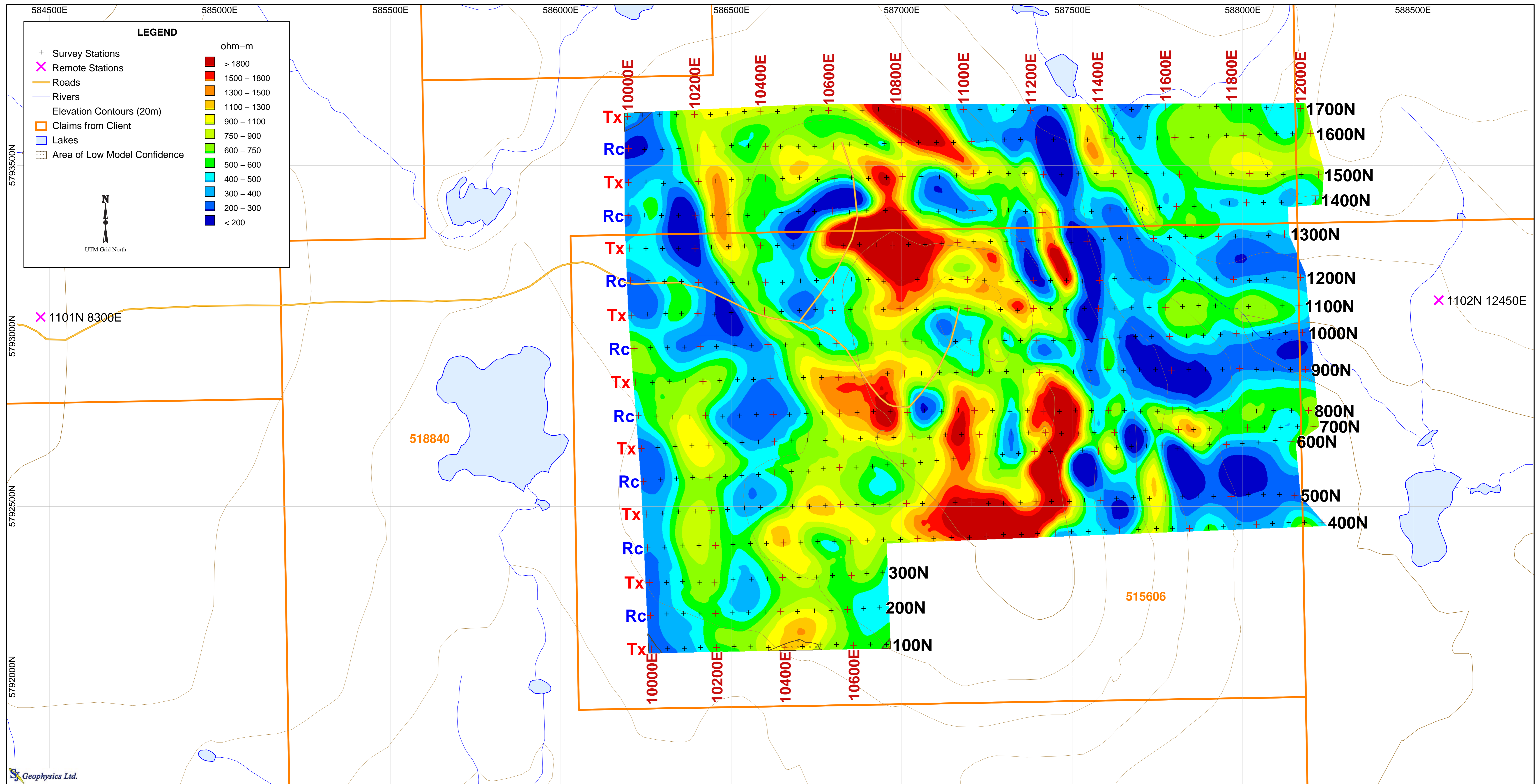
Miocene Property

Williams Lake, B.C.









Project Information:  
 Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Survey Date: Aug.-Sept., 2011

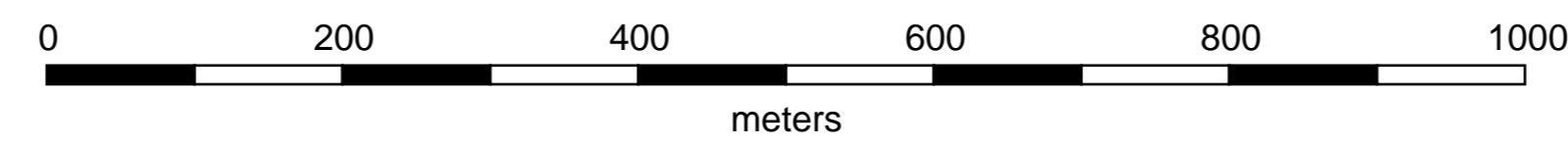
Instrumentation:  
 Receiver: DABStix 24-bit Single Channel Receiver  
 Transmitter: GDD TX II  
 Array Type: 3D

Mapping Information:  
 Datum: NAD83  
 Projection: UTM Zone 10  
 Mapping Date: 13-Oct-2011

Planmap

3D Inversion Model

Depth: 100m Below Topography



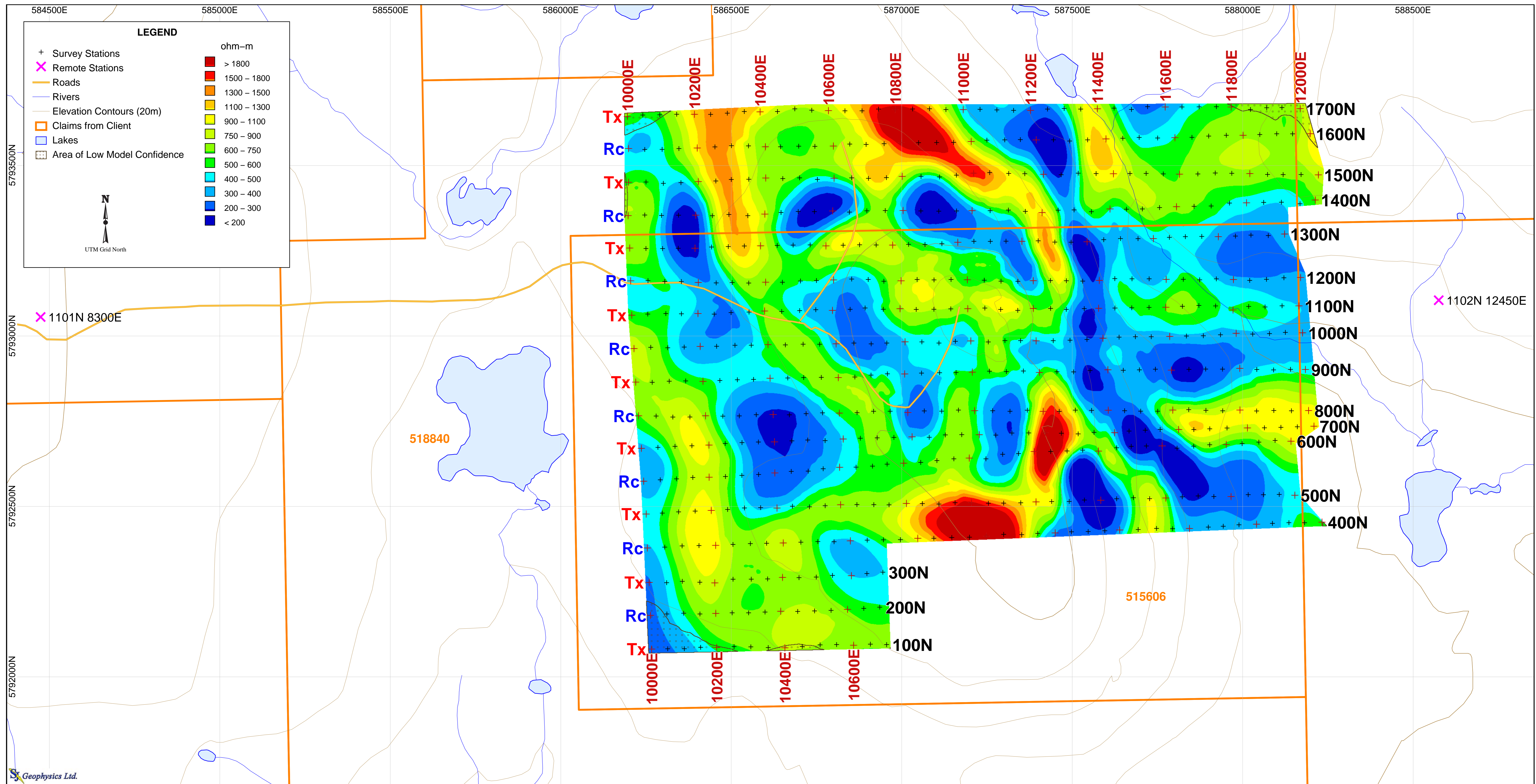
Eagle Peak Resources Inc.

Interpreted Resistivity (ohm-m)

Miocene Property

Williams Lake, B.C.

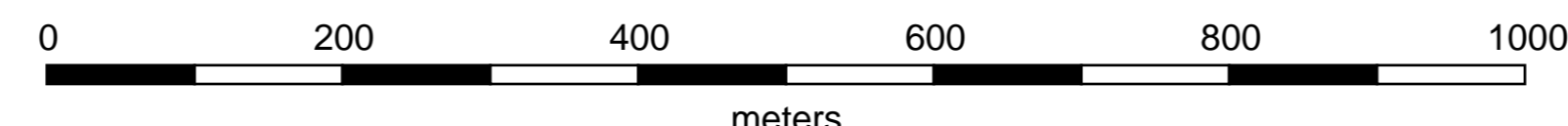




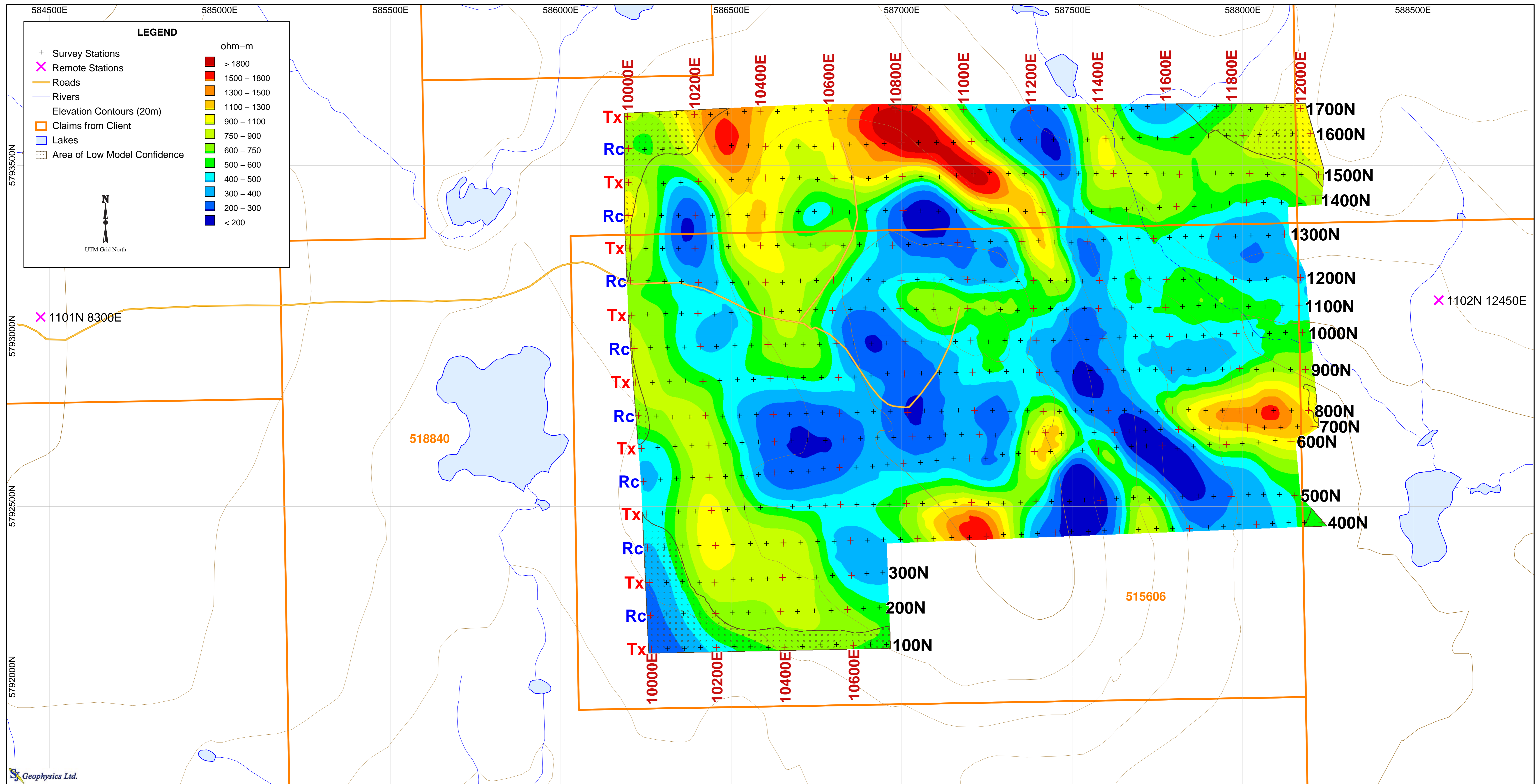
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 Survey Date: Aug.-Sept., 2011  
 Instrumentation:  
 Receiver: DABStix 24-bit Single Channel Receiver  
 Transmitter: GDD TX II  
 Array Type: 3D  
 Mapping Information:  
 Datum: NAD83  
 Projection: UTM Zone 10  
 Mapping Date: 13-Oct-2011

Planmap  
 3D Inversion Model  
 Depth: 150m Below Topography

**Eagle Peak Resources Inc.**  
**Interpreted Resistivity (ohm-m)**  
**Miocene Property**  
**Williams Lake, B.C.**







Project Information:  
 Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Survey Date: Aug.-Sept., 2011

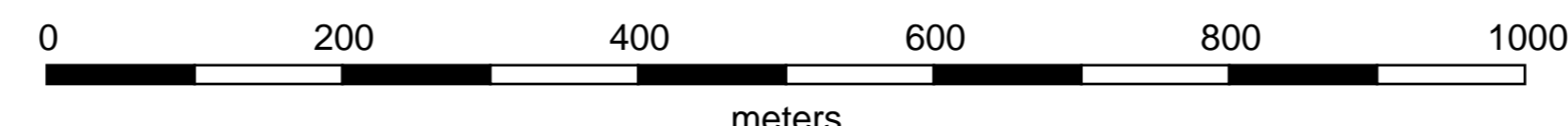
Instrumentation:  
 Receiver: DABStix 24-bit Single Channel Receiver  
 Transmitter: GDD TX II  
 Array Type: 3D

Mapping Information:  
 Datum: NAD83  
 Projection: UTM Zone 10  
 Mapping Date: 13-Oct-2011

Planmap

3D Inversion Model

Depth: 200m Below Topography



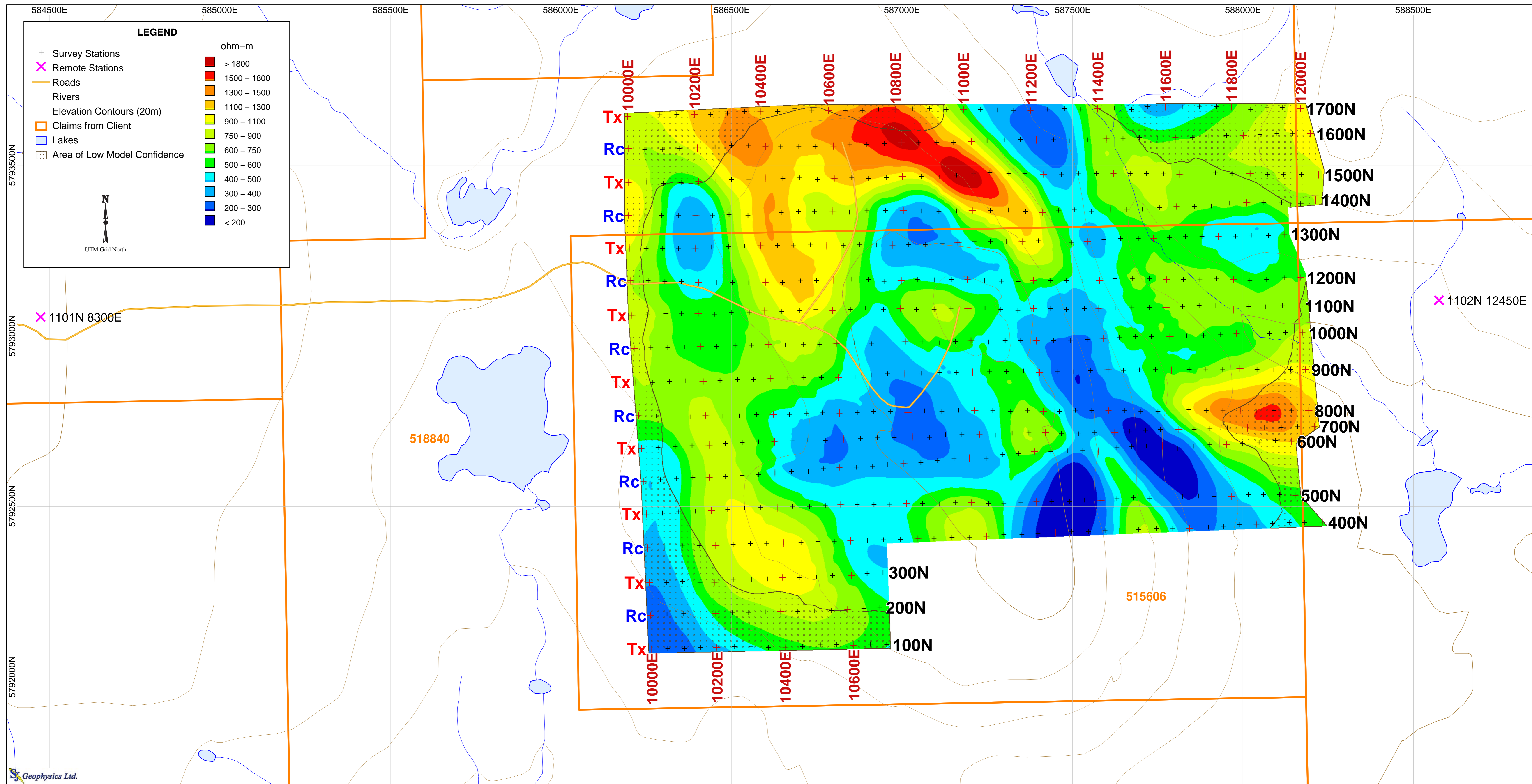
Eagle Peak Resources Inc.

Interpreted Resistivity (ohm-m)

Miocene Property

Williams Lake, B.C.

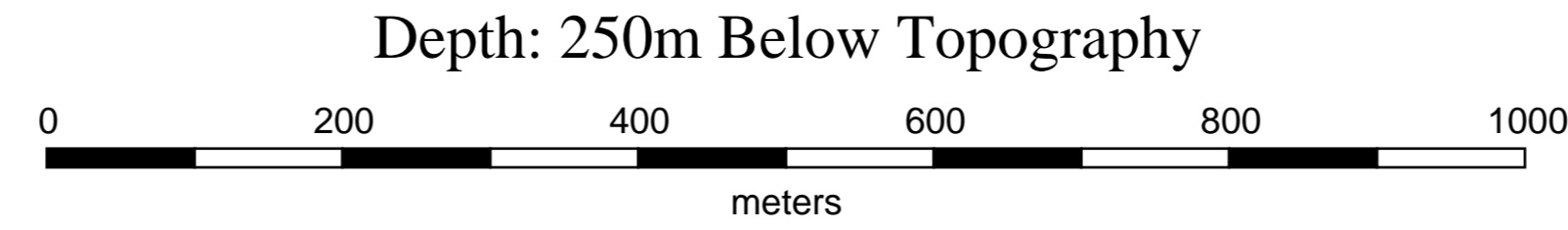




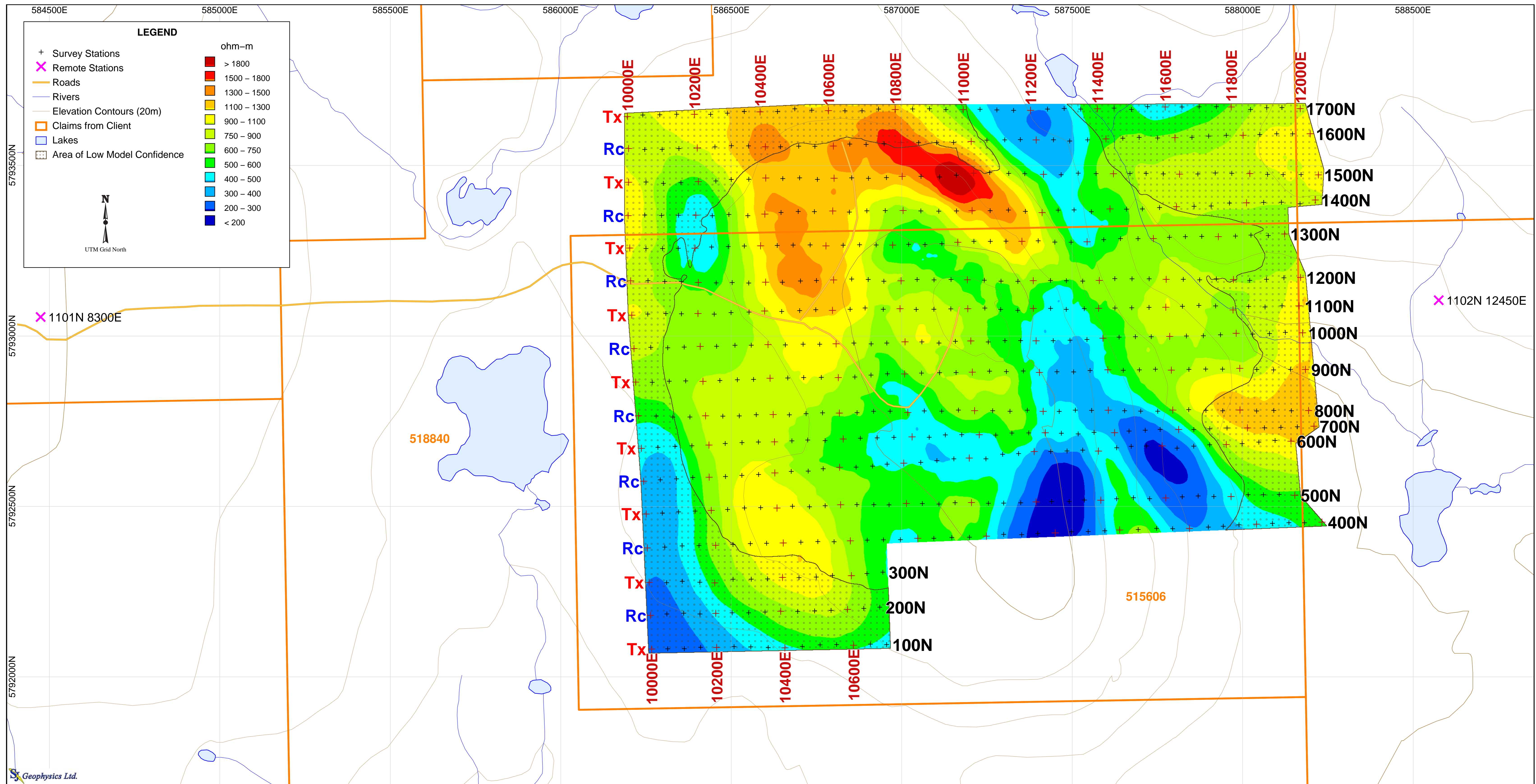
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 3D Inversion by: S.J.V. Consultants Ltd.  
 Survey Date: Aug.-Sept., 2011  
  
**Instrumentation:**  
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 Transmitter: GDD TX II  
 Array Type: 3D  
  
**Mapping Information:**  
 Datum: NAD83  
 Projection: UTM Zone 10  
 Mapping Date: 13-Oct-2011

Planmap  
 3D Inversion Model

**Eagle Peak Resources Inc.**  
**Interpreted Resistivity (ohm-m)**  
**Miocene Property**  
**Williams Lake, B.C.**







Project Information:  
 Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Survey Date: Aug.-Sept., 2011

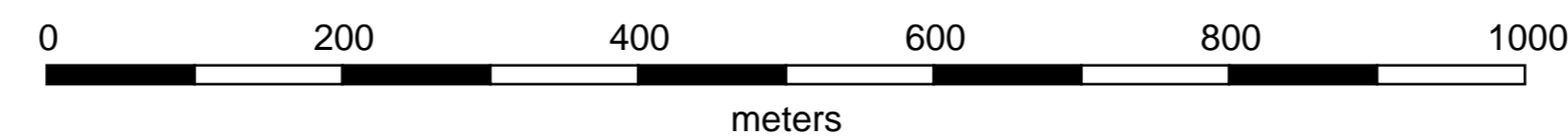
Instrumentation:  
 Receiver: DABStix 24-bit Single Channel Receiver  
 Transmitter: GDD TX II  
 Array Type: 3D

Mapping Information:  
 Datum: NAD83  
 Projection: UTM Zone 10  
 Mapping Date: 13-Oct-2011

Planmap

3D Inversion Model

Depth: 300m Below Topography



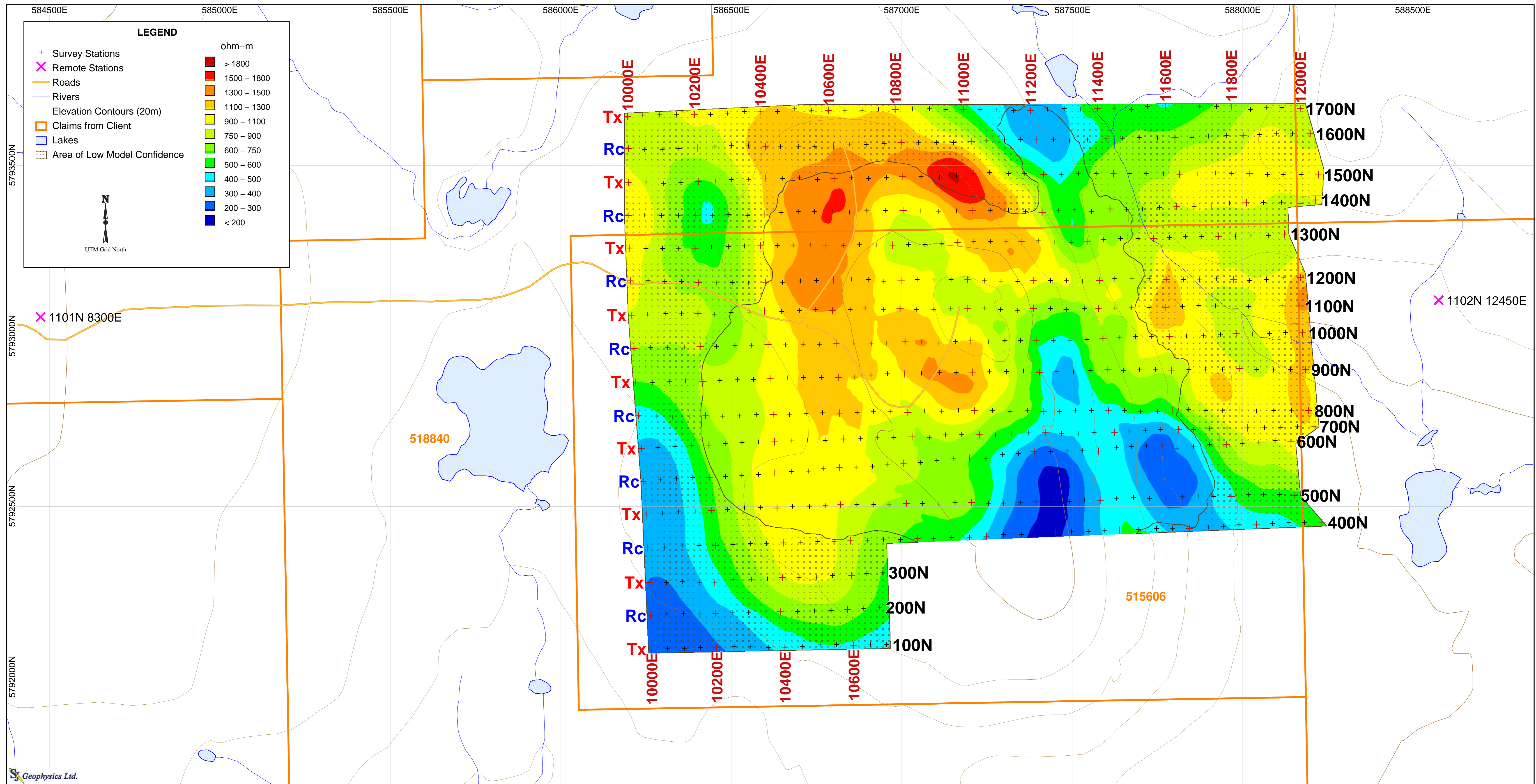
Eagle Peak Resources Inc.

Interpreted Resistivity (ohm-m)

Miocene Property

Williams Lake, B.C.





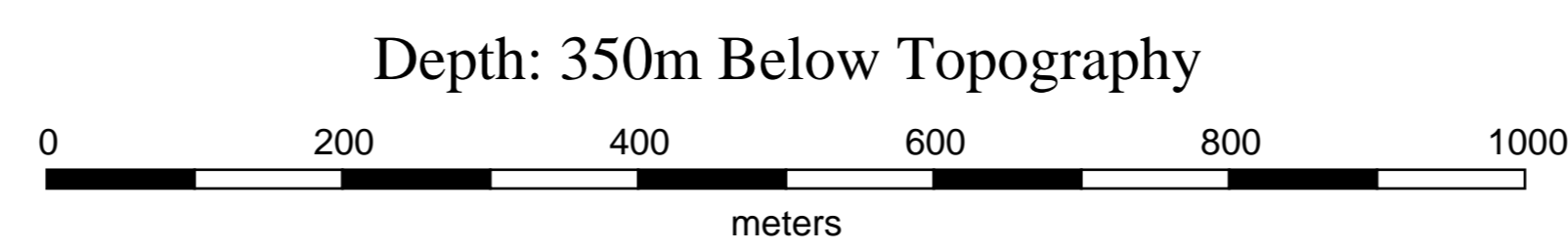
Project Information:  
 Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Survey Date: Aug.-Sept., 2011

Instrumentation:  
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 Transmitter: GDD TX II  
 Array Type: 3D

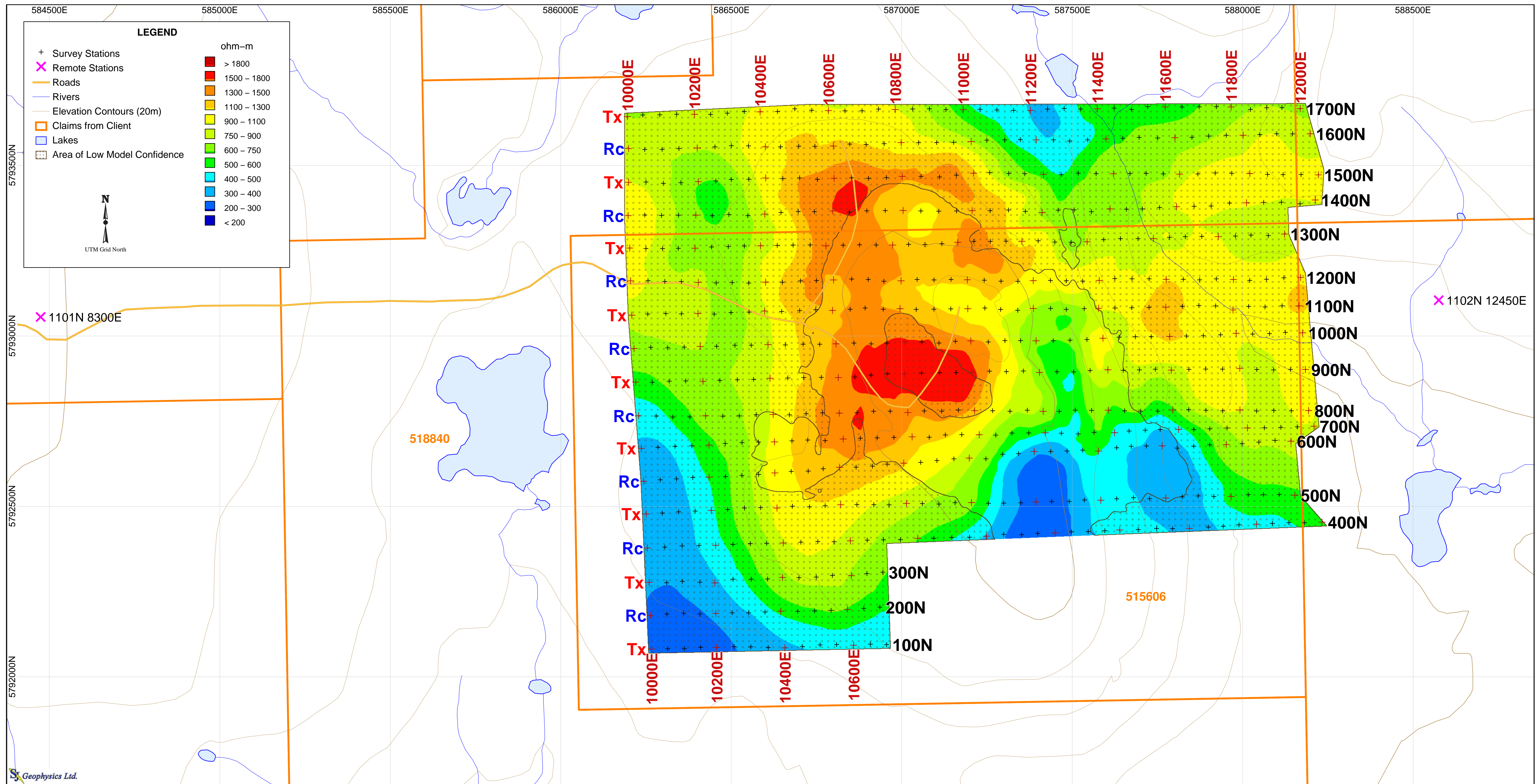
Mapping Information:  
 Datum: NAD83  
 Projection: UTM Zone 10  
 Mapping Date: 13-Oct-2011

Planmap  
 3D Inversion Model

**Eagle Peak Resources Inc.**  
**Interpreted Resistivity (ohm-m)**  
 Miocene Property  
 Williams Lake, B.C.







Project Information:  
 Survey by: SJ Geophysics Ltd.  
 3D Inversion by: S.J.V. Consultants Ltd.  
 Survey Date: Aug.-Sept., 2011

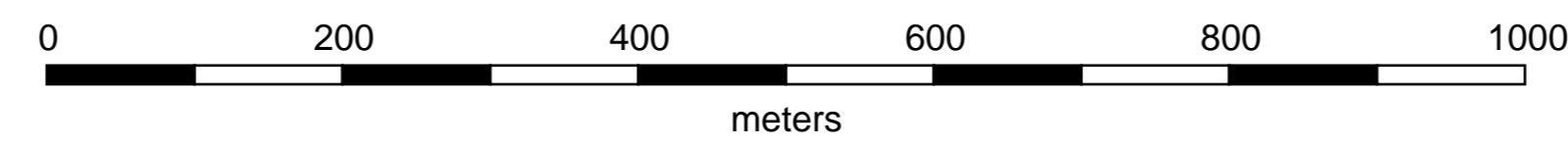
Instrumentation:  
 Receiver: DABStix 24-bit Single Channel Receiver  
 Transmitter: GDD TX II  
 Array Type: 3D

Mapping Information:  
 Datum: NAD83  
 Projection: UTM Zone 10  
 Mapping Date: 13-Oct-2011

Planmap

3D Inversion Model

Depth: 400m Below Topography



Eagle Peak Resources Inc.

Interpreted Resistivity (ohm-m)

Miocene Property

Williams Lake, B.C.

**APPENDIX III**

**INTERPRETATION MEMO ON THE INDUCED POLARIZATION  
SURVEY AND PLANS AND SECTIONS**

**By**

**J. Witter**



***SJ Geophysics Ltd.***  
***S.J.V. Consultants Ltd.***



11966 - 95A Avenue,  
Delta, BC V4C 3W2 CANADA

Bus: (604) 582-1100  
www.sjgeophysics.com

**MEMORANDUM**

Date: December 2, 2011  
From: Jeff Witter  
To: Eagle Peak Resources Inc.

**SUBJECT: Interpretation Memorandum on the 3DIP Survey for the Miocene Project,  
Peaks Prospect Grid**

The purpose of this memo is to present the results and preliminary interpretation of a three-dimensional induced polarization (3DIP) geophysical survey conducted on Eagle Peak Resources Inc.'s Peaks Prospect grid. This area is part of the company's Miocene project in the Cariboo Mining Division of central British Columbia. In summary, the 3DIP survey succeeded at resolving interesting resistivity and chargeability anomalies in the subsurface that appear consistent with mapped geological trends. Interestingly, identified near-surface geophysical anomalies do not appear to correlate with recognized surface showings. The most significant geophysical feature in the surveyed area appears to be a northwest-trending chargeability high, associated with a resistivity low and possibly a magnetic low, located on the western side of the grid, at a depth of approximately 100 – 200 m. This anomalous zone runs parallel to and coincides with a body of latite porphyry surrounded by pyritic sediments and argillite. These geophysical results appear consistent with the mapped geology as we would expect high chargeability to be associated with pyrite, and clay-rich rocks (i.e. argillite) often have low resistivity. Therefore, the northwest-trending zone of geophysical anomalies likely represents a region anomalously rich in pyrite and clay compared to other parts of the survey area.

The Peaks Prospect 3DIP survey consisted of 17 lines covering an irregular-shaped area approximately 2 km x 1.6 km in size (Figure 1). The grid is more or less centred on the summit of a modest-sized hill. Previous exploration by others has identified two “showings” named



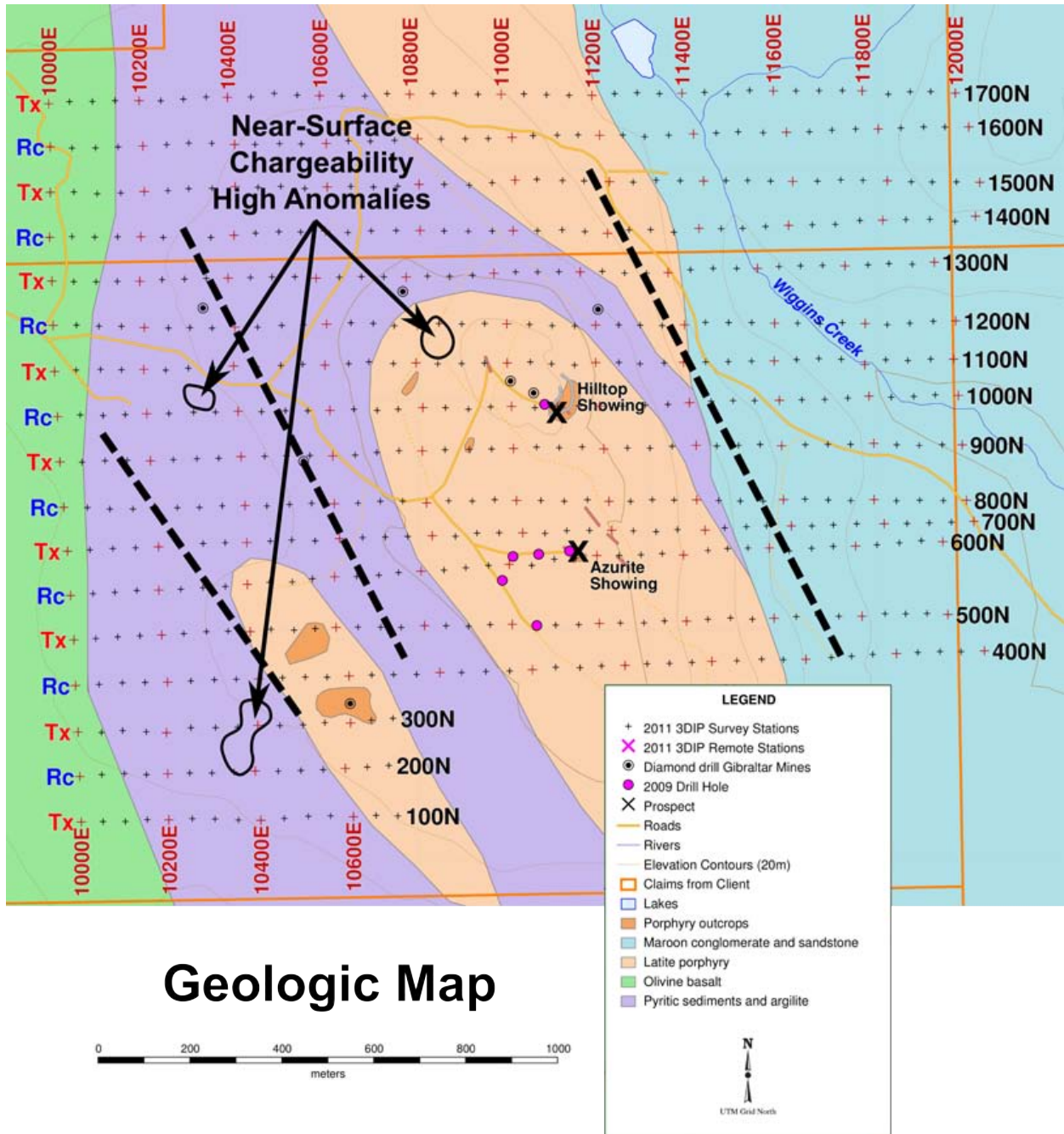
Hilltop and Azurite which consisted of mineralized zones of interest. We are not aware of the specific characteristics of these showings. Geological mapping by the client has delineated four main rock types with a dominant northwest-trending distribution.

Zones of anomalously high chargeability (~50 ms) in the shallow subsurface (25 m) do not appear to correlate with the Hilltop and Azurite showings (Figure 2). However, near-surface chargeability does clearly show northwest trends which are consistent with the mapped geology. Near-surface resistivity is variable (200 – 1800 ohm-m) but it does show a general northwest trend in agreement with the mapped geology (Figure 3). Neither the two surface showings nor the near-surface chargeability highs appear to correlate consistently with any resistivity anomalies. The easternmost portion of the survey area though, is dominated by low chargeability (<4 ms) and low resistivity (<200 ohm-m) in the near surface, which correlates well with the distribution of conglomerate and sandstone mapped at the surface.

At greater depths, very interesting chargeability and resistivity anomalies have been identified. A northwest-trending chargeability high (~45 ms) has been identified at a depth of 150 m in the west-central portion of the grid (Figure 4). This chargeability anomaly runs parallel to and partially coincides with a body of latite porphyry identified on the geologic map. A northwest-trending trending zone of low resistivity (<200 – 500 ohm-m), also lying at 150 m depth (Figure 5), is coincident with the aforementioned chargeability high. Interestingly, a total magnetic intensity (TMI) map suggests that a magnetic low may occupy this same area (Figure 6). Further analysis of the magnetic data would be needed to confirm this. Note that only one of the near-surface chargeability high anomalies appears to correlate with (and connect to; Figure 7) the deeper chargeability high. Also note that neither of the mapped surface showings (i.e. Hilltop or Azurite) appear to consistently correlate with any deep chargeability or resistivity anomalies.

In summary, the most significant finding from this 3DIP geophysical survey is the identification of a northwest-trending zone of overlapping anomalies in the western portion of the survey area. These anomalies consist of a chargeability high, resistivity low, and possibly a magnetic low all superimposed on each other. One interpretation of this combination of anomalies is as follows: high chargeability correlates with abundant disseminated sulfides, low resistivity reflects an abundance of conductive clay minerals, and a low magnetic signature corresponds to a low magnetite content. This interpretation appears consistent with the existing geology. For example, the mapped Triassic sedimentary rocks located in the zone of the

geophysical anomalies contain both pyrite (a sulfide mineral) and argillite (a clay-rich rock). Furthermore, intrusion of latite porphyry (which also outcrops nearby) may have provided heat and fluids necessary to create a hydrothermal system that would, in turn, promote alteration leading to formation of clays and destruction of magnetite. If this interpretation is correct, then the northwest-trending zone of overlapping anomalies is likely the portion of the survey area with the highest concentration of disseminated sulfides and also the zone of most intense hydrothermal alteration. Hydrothermally altered zones containing abundant sulfides are often associated with precious metal mineralization; as such, the northwest-trending zone of overlapping anomalies may be a worthy target for drilling.



## Geologic Map

Figure 1: Geologic map of the Peaks property with the 3DIP survey lines overlain and labeled. Thick dashed lines are interpretation lines derived from the shallow chargeability plan map (Figure 2). Notice the NW trend of the interpretation lines is in agreement with geologic trends. Solid black sub-circular outlines mark the locations of the near-surface chargeability high anomalies (red bodies in Figure 2). Notice that these near-surface chargeability highs do not correspond with either the Hilltop or Azurite showings.



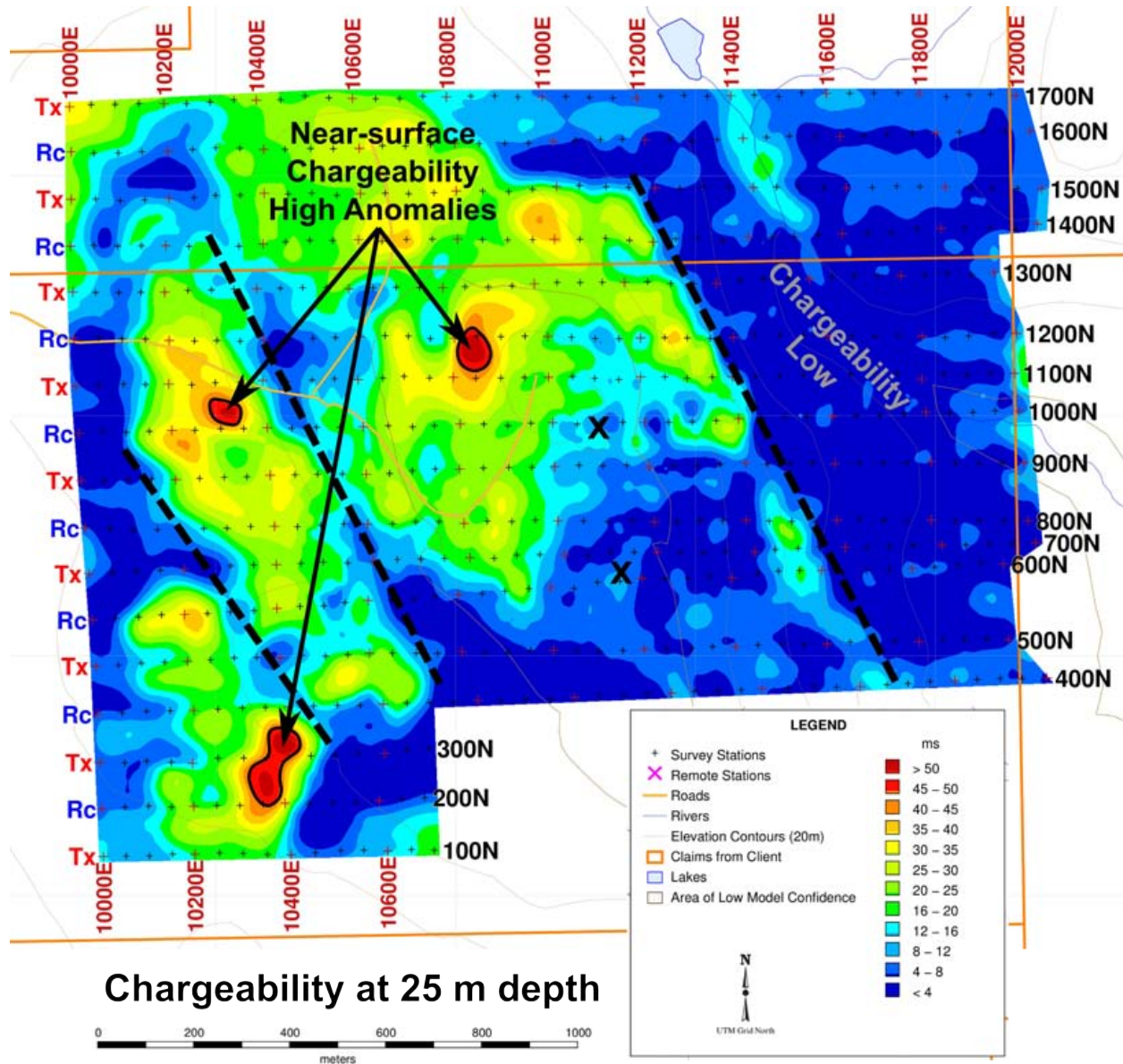


Figure 2: Plan map showing the distribution of chargeability at a depth of 25 m beneath the surface. Notice the three chargeability high anomalies located in the central, western, and southwestern parts of the survey area. Thick dashed interpretation lines have been added to the figure to accentuate northwest-trending features in the chargeability map. Black X's mark the spots of the Hilltop and Azurite showings. The eastern part of the survey area is characterized by a chargeability low.

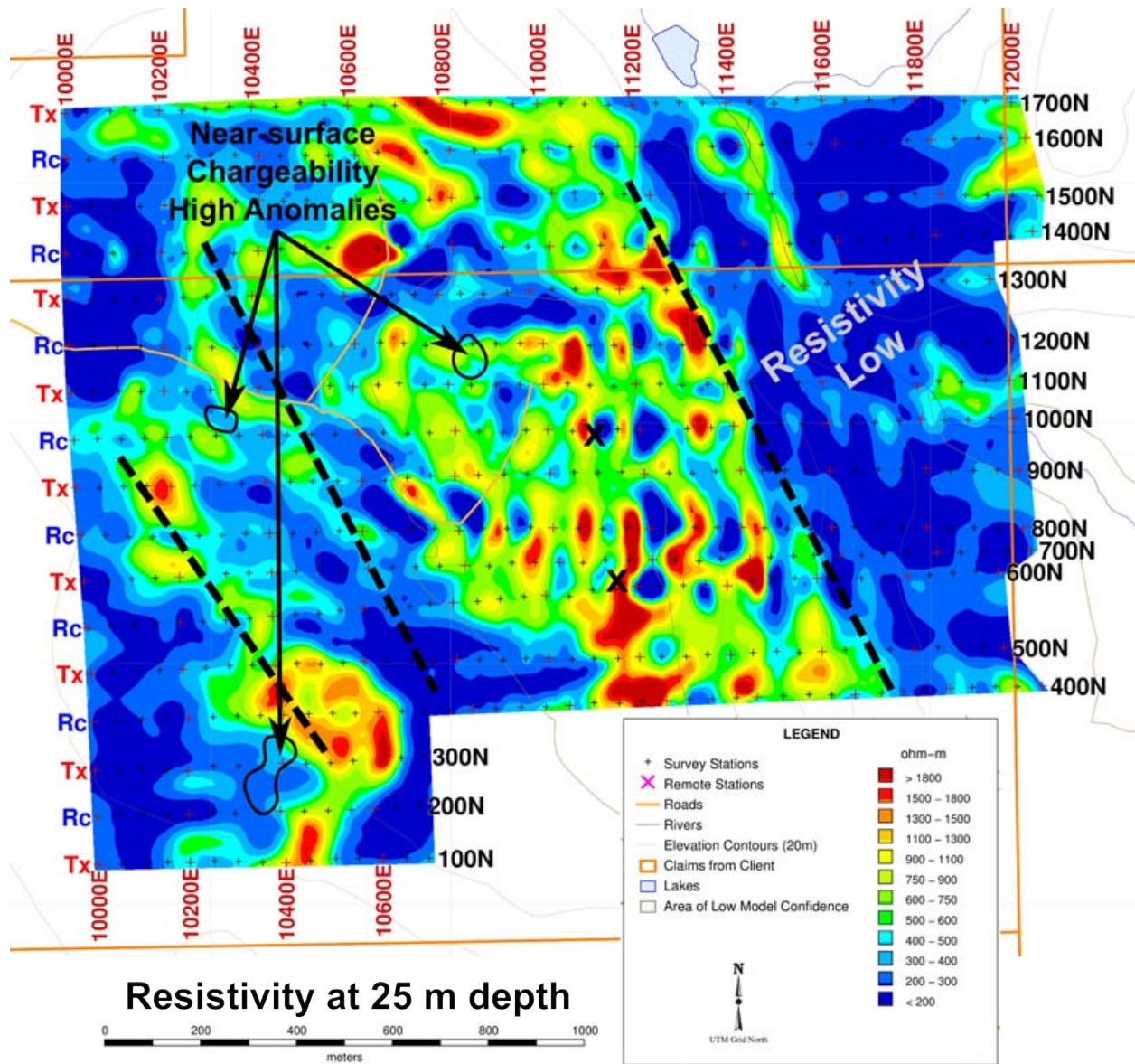


Figure 3: Plan map showing the distribution of resistivity at a depth of 25 m beneath the surface. Notice the three overlain chargeability high anomalies do not appear to consistently correlate with any specific resistivity anomaly. Thick dashed interpretation lines from Figure 2 appear to correlate somewhat with a general northwest trend in the resistivity data. Black X's mark the spots of the Hilltop and Azurite showings. The high frequency variation of resistivity highs and lows in the central part of the survey area may be due to local surface effects such as differing degrees of weathering and/or oxidation. The eastern part of the survey area is characterized by a region of dominantly low resistivity.



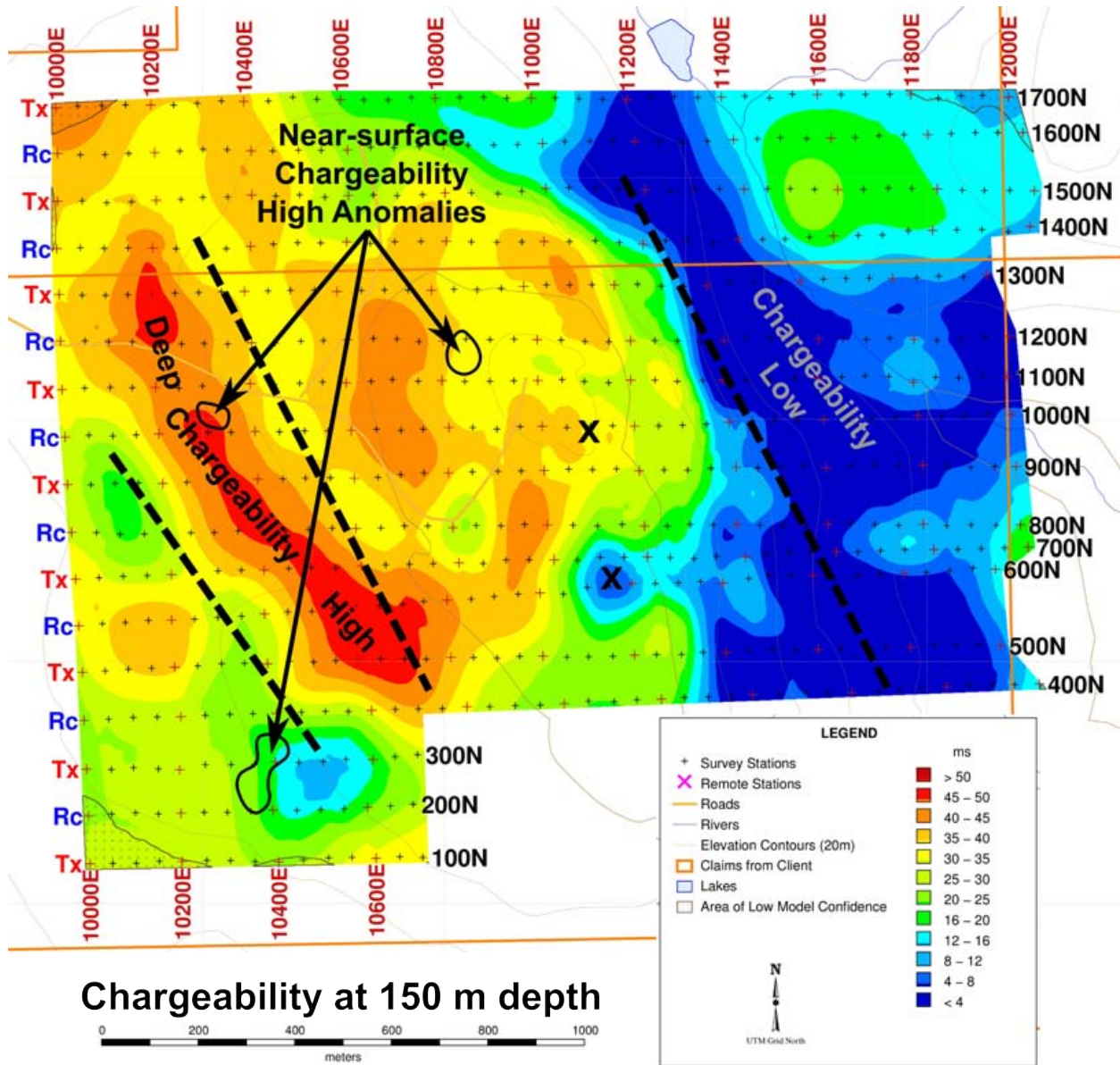


Figure 4: Plan map showing the distribution of chargeability at a depth of 150 m beneath the surface. Notice the identified, northwest-trending chargeability high anomaly on the western side of the survey area. Thick dashed interpretation lines from Figure 2 bracket this chargeability high. This deep chargeability high is connected to only one of the near-surface chargeability highs shown in Figure 2. Black X's marking the locations of the Hilltop and Azurite showings do not correlate with the deep chargeability high anomaly. The eastern part of the survey area is characterized by a chargeability low.



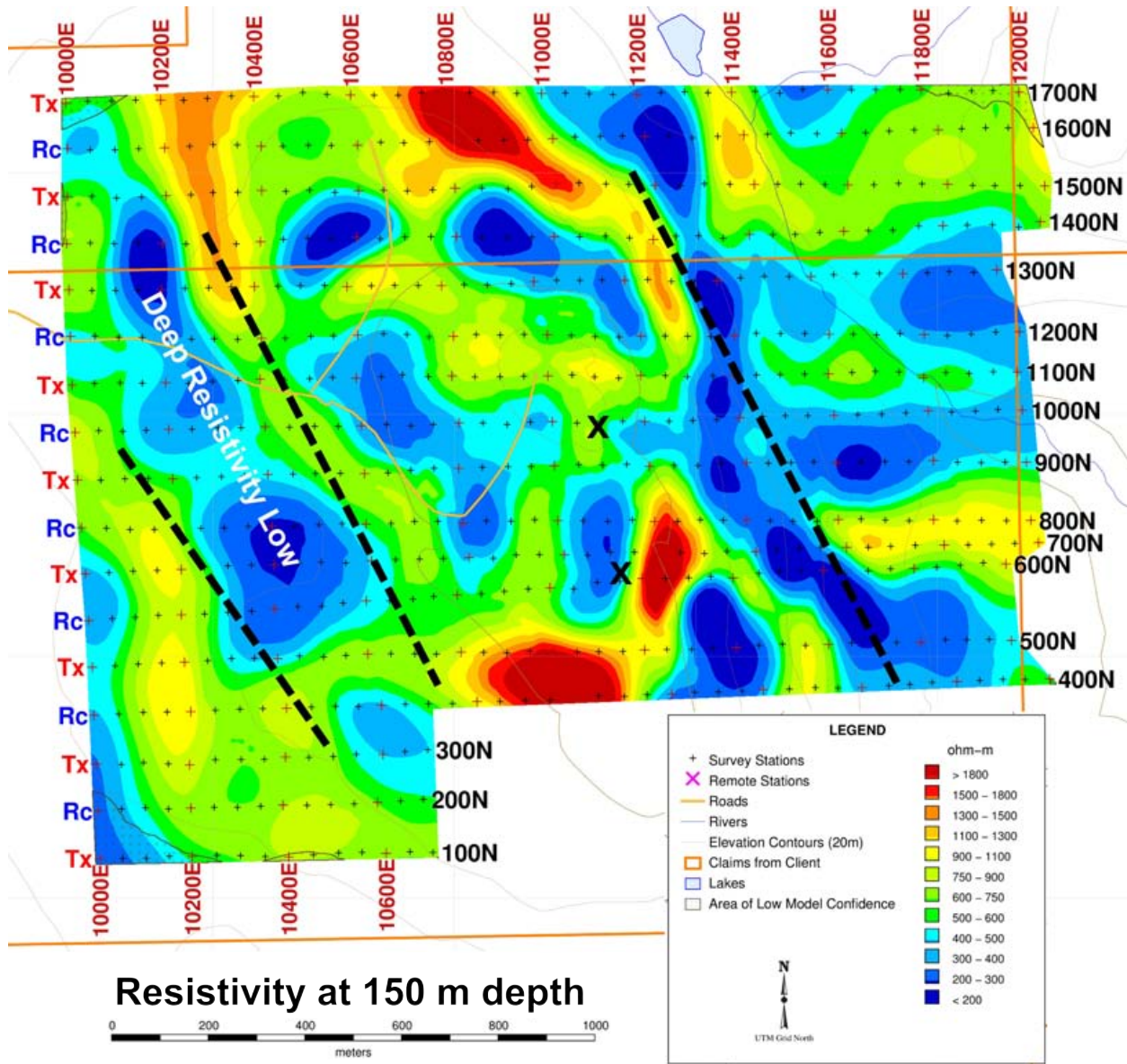


Figure 5: Plan map showing the distribution of resistivity at a depth of 150 m beneath the surface. Notice the northwest-trending resistivity low which is bracketed by the thick dashed interpretation lines from Figure 2. Black X's marking the spots of the Hilltop and Azurite showings do not consistently correlate with specific resistivity anomalies at depth.

## Total Magnetic Intensity

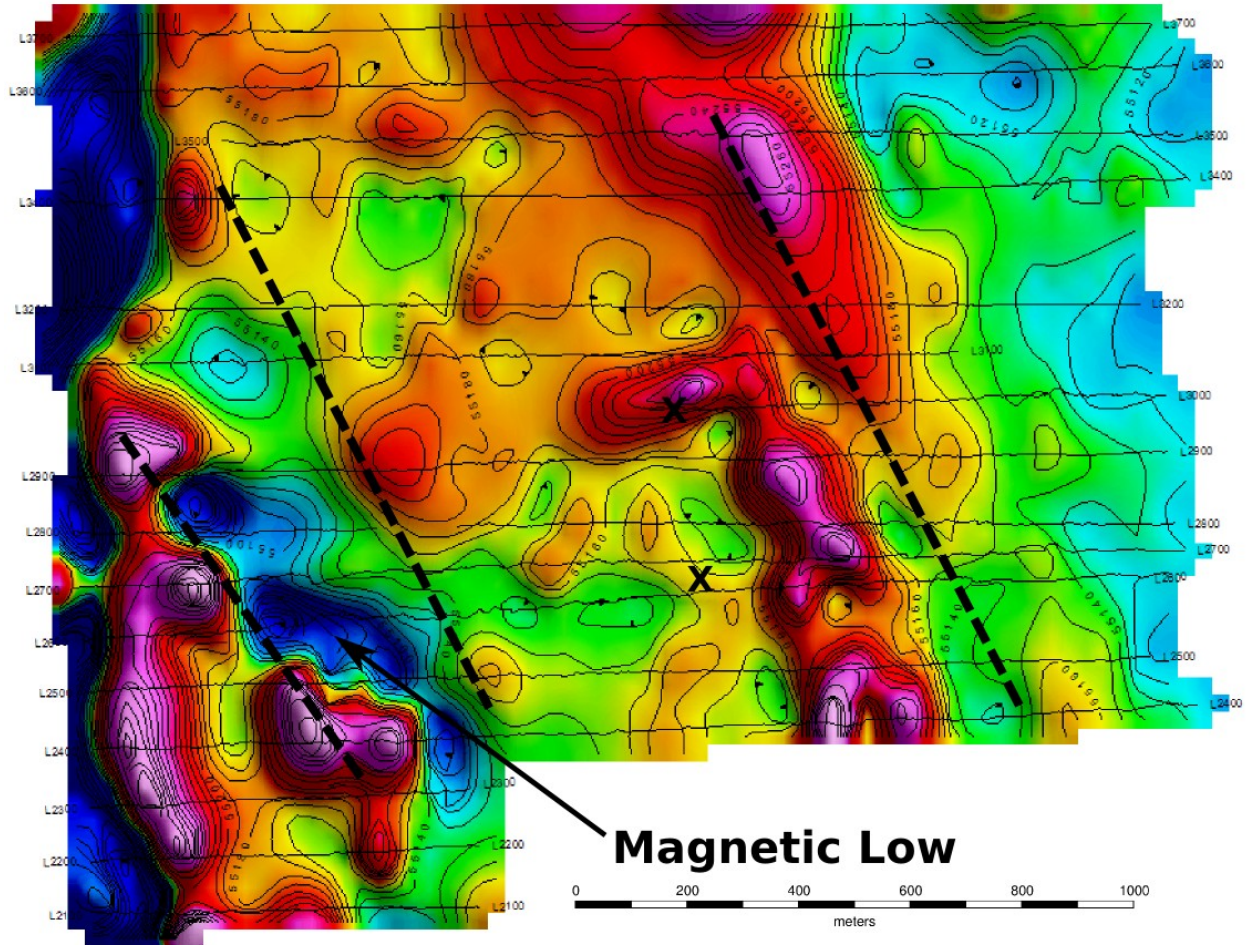


Figure 6: Plan map showing the total magnetic intensity across the survey area. There appears to be a northwest-trending, discontinuous zone of low magnetic intensity that is bracketed by the thick dashed interpretation lines from Figure 2. However, before further interpretation of these magnetic data are attempted, additional analysis is recommended.



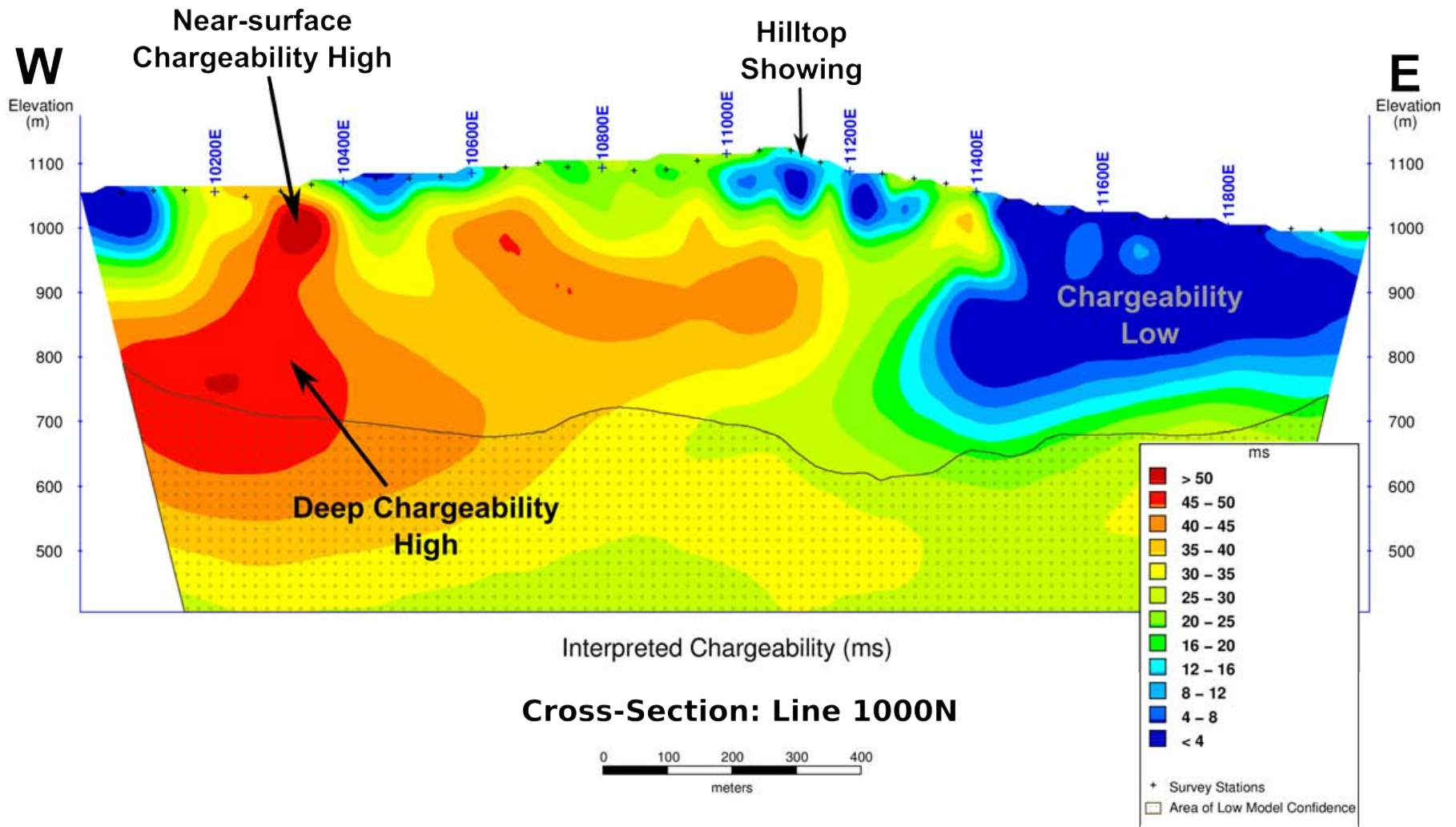


Figure 7: Cross-section showing the distribution of chargeability along Line 1000N (the middle of the survey area). The Hilltop showing lies along this line and its location is indicated. A chargeability low is associated with the Hilltop showing. The near-surface chargeability high identified in Figure 2 is indicated. This anomaly is connected to a larger and deeper chargeability high.