

**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> INDUCED POLARIZATION AND MAGNETIC		<b>TOTAL COST</b> \$175,087
<b>AUTHOR(S)</b> J GREG DAWSON	<b>SIGNATURE(S)</b> 	
<b>NOTICE OF WORK PERMIT NUMBER(S)/DATE(S)</b> MX-1-753		<b>YEAR OF WORK</b>
<b>STATEMENT OF WORK - CASH PAYMENT EVENT NUMBER(S)/DATE(S)</b> 4187071		
<b>PROPERTY NAME</b> BABINE PROJECT		
<b>CLAIM NAME(S) (on which work was done)</b> 548419, 548420, 552226, 552228, 552233, 552235, 55240, 552244, 552248, 552252, 552254, 552256, 558524, 558526, 558528, 560184, 564259, 564260, 524261, 564262		
<b>COMMODITIES SOUGHT</b> COPPER, GOLD, MOLYBDENUM		
<b>MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN</b> 093M09, 093M10		
<b>MINING DIVISION</b> OMINECA		<b>NTS</b> 093M01
<b>LATITUDE</b> 55 ° 17 ' . " . "		<b>LONGITUDE</b> 126 ° 14 ' . " (at centre of work)
<b>OWNER(S)</b>		
1) COPPER RIDGE EXPLORATIONS		2) _____
<b>MAILING ADDRESS</b>		
500-625 HOWE ST		V6C 2T6
VANCOUVER, BC.		_____
<b>OPERATOR(S) [who paid for the work]</b>		
1) SAME		2) _____
<b>MAILING ADDRESS</b>		
_____		
<b>PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude):</b>		
HORNBLANDE BIOTITE FELDSPAR PORPHYRY, QUARTZ DIORITE, ANDGSIITE, CONGLOMERATE, JURASSIC, HAZELTON GROUP, PHYLLIC, ARGILLIC, Cu, Mo, Au PORPHYRY.		
<b>REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS</b> 1198, 3311, 23358, 23848, 24273		

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
<b>GEOLOGICAL (scale, area)</b>			
Ground, mapping _____			
Photo interpretation _____			
<b>GEOPHYSICAL (line-kilometres)</b>			
Ground		552235 552254 552228, 552226 558524, 552233	
Magnetic _____	13.7		
Electromagnetic _____			
Induced Polarization _____	14.0	SAME	77,043.5
Radiometric _____			
Seismic _____			
Other _____			
Airborne _____			
<b>GEOCHEMICAL</b>			
(number of samples analysed for ...)			
Soil _____			
Silt _____			
Rock _____			
Other _____			
<b>DRILLING</b>			
(total metres; number of holes, size)			
Core _____			
Non-core _____			
<b>RELATED TECHNICAL</b>			
Sampling/assaying _____			
Petrographic _____			
Mineralographic _____			
Metallurgic _____			
<b>PROSPECTING (scale, area)</b> _____			
<b>PREPARATORY/PHYSICAL</b>			
Line/grid (kilometres) _____	90	ALL	98,044.5
Topographic/Photogrammetric (scale, area) _____			
Legal surveys (scale, area) _____			
Road, local access (kilometres)/trail _____			
Trench (metres) _____			
Underground dev. (metres) _____			
Other _____			
<b>TOTAL COST</b>			175,088.00

Assessment Report

Induced Polarization and Magnetic Surveys  
on the  
Babine Property

Babine Lake Area  
North-Central British Columbia

55° 17' North 126° 14' West  
NTS Map Sheets 93M/8E and 93M/8W

Prepared for  
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March, 2008

## TABLE OF CONTENTS

SUMMARY .....	1
INTRODUCTION .....	2
LOCATION ACCESS AND PHYSIOGRAPHY .....	2
CLAIM STATUS.....	3
HISTORY .....	5
REGIONAL GEOLOGY .....	7
LOCAL GEOLOGY .....	9
Structure .....	9
MINERALIZATION AND ALTERATION .....	10
Mineralization .....	10
Alteration .....	11
GEOPHYSICS .....	12
CONCLUSIONS.....	14
RECOMMENDATIONS.....	14
ITEMIZED COST STATEMENT.....	15
STATEMENT OF QUALIFICATIONS .....	16
REFERENCES.....	17

## LIST OF TABLES

TABLE 1. Babine Tenure Data.....	3
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## LIST OF FIGURES

Figure 1. Babine Project Location Map.....	2
Figure 2. Babine Project Claim Map. ....	4
Figure 3. Grid Location Map.....	13
Figure 4. Preliminary results from completed 2007 IP survey .....	14

## APPENDICES

APPENDIX I.	Logistical Report, Induced Polarization and Magnetometer Surveys, Babine Project, Babine Lake Area, B.C.
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## SUMMARY

This report documents Induced Polarization and Magnetic Surveys conducted on Copper Ridge's Babine Property in north central British Columbia. Severe snow conditions made the geophysical surveying difficult, so only 14 km of IP and 13.7 km of magnetometer surveying of a planned total of 90 km were completed. The total cost of the program to be applied for assessment credits is \$175,087.

The Nak property is located approximately 80 km northeast of the town of Smithers in central British Columbia and approximately 2 kilometres east of Nakinilerak Lake.

The NAK deposit occurs in the well-mineralized Babine copper-gold porphyry belt that includes the Bell and Granisle mines, the Morrison deposit and numerous undeveloped prospects. The Bell and Granisle mines together produced 130 million tonnes of ore grading 0.4% copper (Cu), 0.15 g/t gold (Au) and 0.75 g/t silver. The NAK property was explored by Noranda in the 1960's and 1970's and more recently by a number of junior exploration companies through the mid 1990's. Copper-gold mineralization at the NAK property is associated with disseminated chalcopyrite, pyrite and local bornite, in and adjacent to quartz-sulphide veinlets within multiple phase porphyry intrusions and local breccia zones.

Historical drilling has included 107 core holes for a total of 15,629 m. Highlights from the most recent drilling include 70.7 m grading 0.248% Cu and 1.166 g/t Au in hole 96-55, 12.5 m grading 2.614% Cu and 0.143 g/t Au in hole 96-58, 18.0 m grading 1.318% Cu and 0.203 g/t Au in hole 96-65 and 21.3 m grading 0.295% Cu and 1.059 g/t Au in hole 96-70.

Due to severe winter conditions, only about 1/6 of the planned IP and magnetic survey proposed at the Babine Project was completed. This work, however, served to confirm the IP and magnetic results from earlier surveys and to demonstrate the pattern of a chargeability low flanked by a chargeability high, which hosts the known copper-gold mineralization, continues to the southeast.

It is recommended that the 90 kilometre IP and magnetic survey be completed as planned. The results of the completed surveys, when compared to the results of the previous surveys and the signature of known copper-gold mineralization, can be used to guide a subsequent drilling program.

## INTRODUCTION

This report documents Induced Polarization and Magnetic Surveys conducted on Copper Ridge's Babine Property in north central British Columbia. A 90 kilometre grid to control the survey was completed between August 28 and October 9, 2007 by Sabrex Contracting of Quesnel, British Columbia. The IP and magnetic surveys were carried out between November 19 and December 13, 2007 by Scott Geophysics of Vancouver, British Columbia. Camp support services were supplied by Korax Mining Services of Smithers. Severe snow conditions made the geophysical surveying difficult, so only 14 km of IP and 13.7 km of magnetometer surveying were completed. The total cost of the program to be applied for assessment credits is \$ 175,087

## LOCATION ACCESS AND PHYSIOGRAPHY

The Nak property is located approximately 80 km northeast of the town of Smithers in central British Columbia and approximately 2 kilometres east of Nakinilerak Lake (Figure 1). It is within the Omineca Mining Division centred at latitude 55°17' N, longitude 126°14'W on NTS map sheets 93M/8E and 93M/8W.

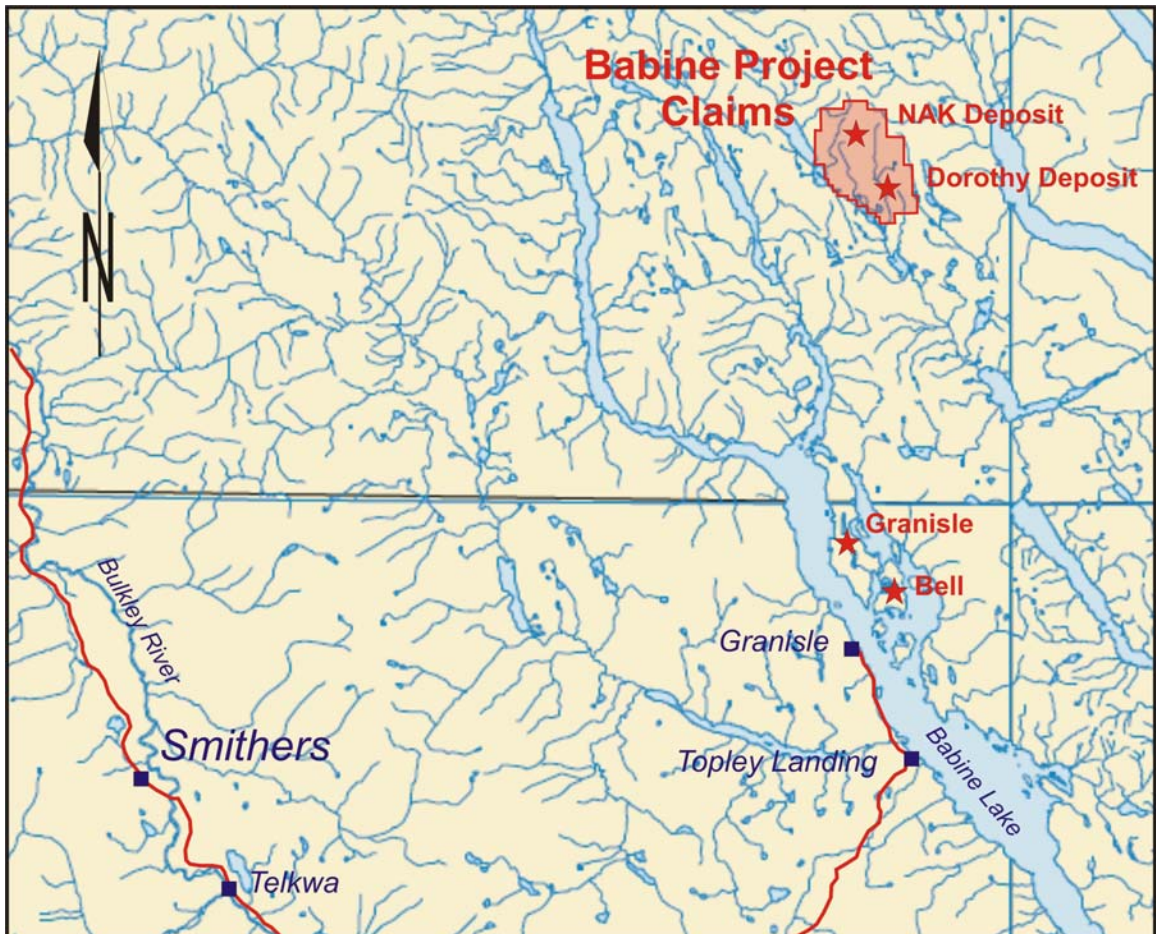


Figure 1. Babine Project Location Map.

Access to the property area is gained by taking Canadian Forest Products barge from Topley Landing to Nose Bay on Babine Lake and travelling north on the Jinx, Hautet and Nakinilerak forestry roads. Recently constructed logging roads provide good access to the central part of the property. During summer months adequate sources of water for a drill program and for a camp are available from small local creeks in the area, and several locations have year round water supplies.

The northern Babine Lake area is located within the Nechacko Plateau, a physiographic subdivision of the Interior Plateau. The Nak property covers an area of moderate relief containing a central wide valley with average elevations of 1,000 metres asl. The central valley is flanked to the east and west by ridges with maximum elevations of 1,200 and 1,400 metres (asl) respectively.

The region is covered with extensive glacial deposits of gravel, sand and clay, with outcrop limited to higher ridges and some creek valleys (Carter, 1994).

## CLAIM STATUS

The Property consists of 20 Mineral Titles Online (MTO) claims (tenures), located in the Omenica Mining Division, centred at 55° 17' North latitude, 126° 14' West longitude, NTS Map Sheets 93M/8E and 93M/8W, as shown in Figure 2 and summarized in Table 1:

Table 1 – Babine Tenures (Subject to acceptance of this report).

Tenure Number	Tenure Name	Good Until	Area (ha)
548719	DOROTHY	April 30, 2013	903.708
548720	LYNN	April 30, 2013	368.312
552226	NAK	April 30, 2013	221.105
552228	NAK 1	April 30, 2013	294.773
552233	NAK 2	April 30, 2013	147.39
552235	NAK 4	April 30, 2013	73.721
552240	NAK 5	April 30, 2013	36.841
552244	NAK 6	April 30, 2013	73.722
552248	NAK 7	April 30, 2013	36.838
552252	NAK 8	April 30, 2013	73.717
552254	NAK 9	April 30, 2013	331.737
552256	NAK 10	April 30, 2013	221.004
558524	NAK A	April 30, 2013	423.896
558526	NAK B	April 30, 2013	460.751
558528	NAK C	April 30, 2013	331.562
560184	DEE 2	April 30, 2013	461.019
564259	NADO 1	April 30, 2013	460.952
564260	NADO 2	April 30, 2013	461.073
564261		April 30, 2013	332.09
564262	NADO 4	April 30, 2013	368.607
<b>Total</b>			<b>6082.818</b>

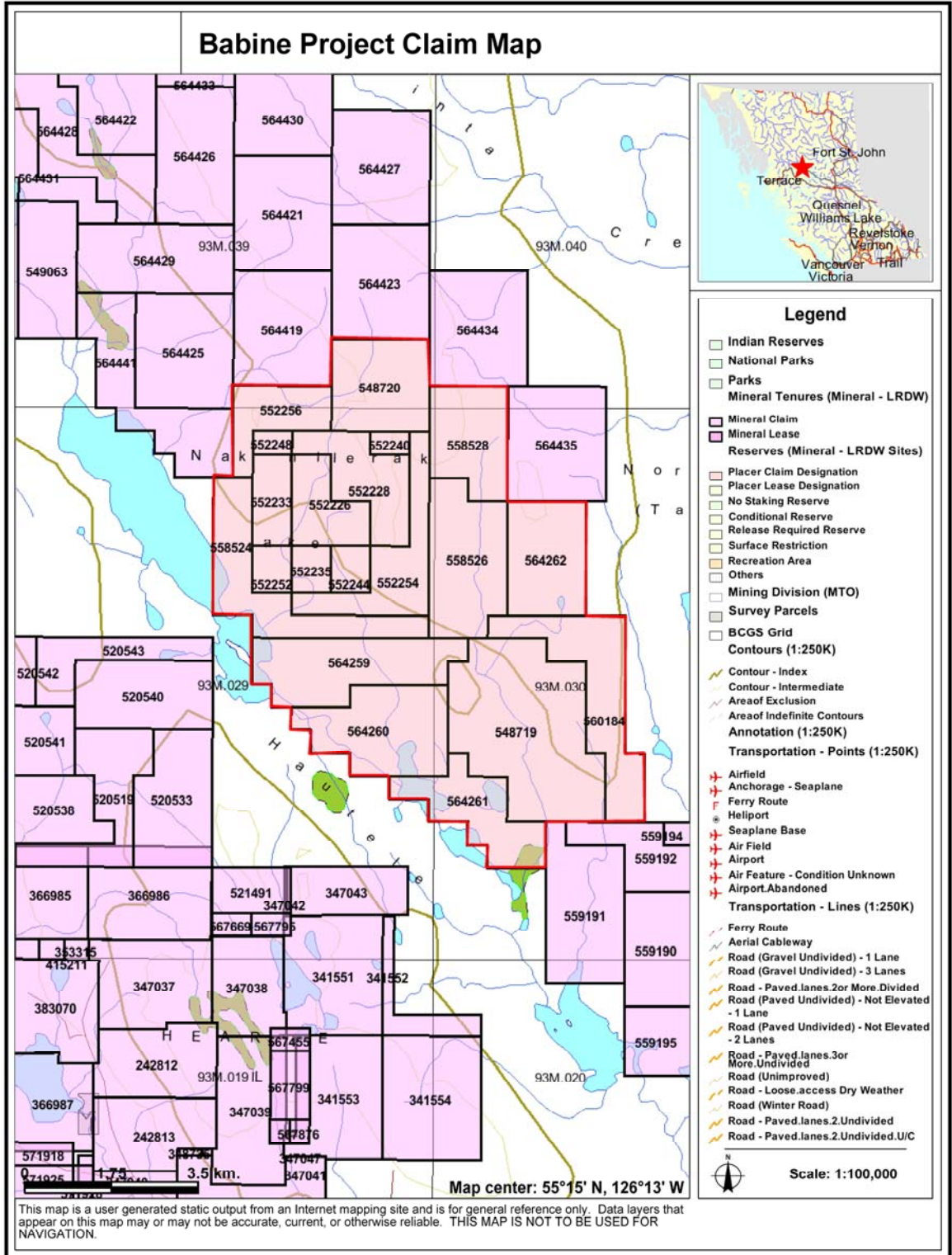


Figure 2. Babine Project Claim Map.

Seven of the 20 claims are owned 100% outright by Copper Ridge Explorations Inc., while the remaining 13 are subject to underlying option agreements. NAK, NAK 1, NAK 2 and NAK 4 through 10 are subject to an agreement with an underlying owner whereby Copper Ridge can earn a 100% interest in the claims by making payments totalling \$250,000 over 6.5 years and paying \$125,000



upon certain exploration expenditures being met. The vendor retains a 3% NSR royalty, two-thirds of which can be purchased by Copper Ridge for \$1 million.

The Dorothy, Lynn and Dee 2 claims are subject to an agreement whereby Copper Ridge can earn a 100% interest in the Dorothy property by making payments totalling \$200,000, issuing 400,000 shares over 4 years and making additional payments upon certain exploration expenditures being met.

## HISTORY

1964-1971: Following the discovery of anomalous copper values in stream sediments northeast of Nakinilerak Lake, Noranda Exploration Company Ltd. performed mineral exploration work on the ground covered by the Nak Property between 1964 and 1970. This included soil geochemical, surface geophysical and geological mapping surveys. As well, limited trenching and the diamond drilling of 28 holes totalling 1,837 metres in length was performed.

In 1971 geological, geochemical and geophysical surveys were also conducted by Noranda on the Sno claim group southeast of the main Nak property. This area became the south-western part of the Nak claims.

Early 1970's: Ducanex Resources performed geophysical and geochemical surveys on the Lynn property, which was subsequently included into the northern part of the Nak claims. Ducanex also performed 480 metres of diamond drilling in 8 holes. (Note: This area is well north of the 1995 and 1996 drill programs of Hera Resources Inc.).

1992: The Nak 1, 2, 3 and 4 claims were located by Lorne B. Warren.

1992-1993: Tri-Alpha Investments began a new grid on the ground but subsequently cancelled their exploration program and returned the property to owner Lorne B. Warren.

1993: An airborne geophysical survey (16 line km helicopter-borne magnetometer, electromagnetic and VLM-EM) was carried-out on behalf of Noranda Exploration Company Ltd. over the central portion of the Nak claims. Also, Teck Exploration Ltd. requested Jim Oliver, P.Geo. to carry-out petrographic and litho-geochemical studies on surface rock and drill-core samples collected from the Nak property. Results of these programs were summarized by Carter (1994).

1994: The property was re-staked and the claims optioned by Hera Resources Inc. In late 1994 a camp was established and an induced polarization (IP) and magnetic survey was conducted on the Nak 1 to 5 claims over a newly constructed grid. A total of 45.2

kilometres of grid line was cut. The IP survey outlined several anomalous zones worthy of further mineral exploration including a central zone of lower chargeability surrounded by higher chargeability indicating a potential pyrite halo to a mineralized porphyry system (Howell, 1995).

1995: The 1994 grid was extended by Hera Resources Inc. and later covered by additional IP and magnetometer surveys. These surveys outlined a large, low chargeability response coincident with rare outcrops of a quartz diorite and other intrusive rocks containing up to 5% chalcopyrite (Bridge, 1996). The low chargeability response was rimmed by a strong but variable chargeability response which at the time was noted to coincide with known pyrite mineralization. Most of the anomalous areas were covered by glacial till.

Hera Resources Inc. carried-out a drill program on the Nak 95-1 and Nak 95-2 claims that consisted of 43 BQ diamond drill holes totalling 8,007.30 metres in length. This work resulted in the discovery of copper mineralization related to rhyodacite dykes along the western margin of a quartz diorite intrusion. Drilling to the south outlined copper-gold mineralization related to the quartz diorite and rhyodacite.

The eastern edge of the low chargeability area was also drilled and all but one drill hole encountered only trace amounts of copper and/or gold mineralization.

1996: Hera Resources Inc. drilled the north-trending highs in the center of the IP anomaly. In all 28 BQ diamond drill holes were drilled totalling 5,304.10 metres in length; 1,600 core samples were assayed. The 1996 drilling program resulted in the identification of a zone of significant copper-gold mineralization in the south of the known mineralized area called the 'Southern Zone'. A study of copper-gold ratios in drill-core also suggested possible mineralized extensions of the Southern Zone elsewhere on the property. As well, the Southern Zone was found to host localized high-grade copper veins (1.318% Cu and 0.203g/t Au over 18.28 metres) and associated disseminated mineralization in adjacent sedimentary units.

Geological mapping (geology and alteration), and sampling (6 grab samples assayed) was performed on a 1:5,000 scale around the area of drilling—on 34.3 kilometres of grid line.

Core from the 1995 drill program was re-examined and correlated with the 1996 drilling with the aim of developing consistency in the

nomenclature of lithologic units, alteration and mineralization. Based on these results a review of geological modeling at the Nak deposit was undertaken.

## REGIONAL GEOLOGY

The Nak Property is located within a belt of Tertiary (and Cretaceous?) aged porphyry copper deposits located in north-central British Columbia (MacIntyre et al., 1997). The most important of these deposits are the Granisle and Bell Mines which together produced a combined total of 130 million tonnes of ore at 0.4% Cu, 0.15 g/t Au and 0.75 g/t Ag.

The Babine porphyry deposits occur in the Intermontane Tectonic Belt of British Columbia and are hosted by Mesozoic volcanic and sedimentary rocks of the Stikine Terrane and within Tertiary intrusive bodies. The Stikine Terrane was part of an ocean island arc that was accreted to western margin of North America in the Late-Jurassic to Early-Cretaceous time.

The Babine Lake area is underlain primarily by an island arc assemblage of Late-Triassic (Takla Group) and Early-Jurassic (Hazelton Group) marine volcanic, volcanoclastic and sedimentary rocks. These units have been intruded by granitic rocks of various ages—Early-Jurassic Topley intrusions (in part co-magmatic with the Hazelton Group), Early-Cretaceous Omineca intrusions, Late-Cretaceous rhyolite and granodiorite porphyries of the Bulkley sequence, and the Early-Tertiary (Eocene) Babine igneous suite.

Marine and non-marine sedimentary rocks of the Mid- to Late-Jurassic Bowser Lake and Mid-Cretaceous Skeena groups overlie the older volcanic and sedimentary units, and are preserved in down-dropped basins bounded by north-northwest trending faults developed during extensional and transtensional tectonic activity in Late-Cretaceous and Early-Tertiary time (Carter et al, 1995).

It is thought that the deep-seated faulting and related dilatant zones provided conduits for calc-alkaline magmatic activity that led to both the Late-Cretaceous Bulkley intrusions and the Eocene Babine igneous suite (with which regional copper-gold porphyry mineralization is associated). Radiometric ages for mineralized and unmineralized biotite-feldspar porphyries of the Babine suite have yielded an average age of 50 Ma (Carter et al, 1995), suggesting that these intrusive bodies were emplaced over a short period in Mid-Eocene time.

The Babine igneous suite of rocks appears to be confined to a 40 kilometre wide belt extending more than 100 kilometres north-westerly from the northern region of Babine Lake. The Nak property is situated on the north-eastern margin of this zone.

Regionally the Nak property is underlain by an irregularly dipping sequence of Mesozoic andesite flows, breccias and lapilli tuff in fault contact with volcanoclastic sandstone, siltstone, mudstone, volcanic-granitic cobble conglomerate, minor

shale and argillaceous coal beds (Richards, 1973). These units were uplifted into a north-easterly trending arc (the Skeena Arc) during the development of the Bowser and Nechako basins to the north and south. The Nak Property is located just north of the axis of the Skeena Arc.

The northern basin filled with sedimentary rock of the Mid- to Late-Jurassic Bowser Lake Group and the Mid-Cretaceous Skeena Group. These rocks were subsequently preserved in down-dropped basins bounded by north-northwest trending faults systems developed during a period of regional extension and transtension faulting in the Late-Cretaceous to Early-Tertiary.

Several periods of intrusive activity have occurred along the Skeena Arc from Late-Cretaceous to Tertiary time. The most important porphyry copper mineralization in the area is associated with the Babine Intrusive Suite. These rocks are Eocene (and possibly Cretaceous) intrusions composed of an early quartz-diorite and quartz-monzonite suite and were followed by distinctive biotite-feldspar porphyry intrusions. The Babine Intrusive Suite intruded along north to north-westerly trending faults developed during the Late Cretaceous and Early Tertiary. Field evidence indicates that these faults were active during the period of mineralization at the Morrison-Heame Hill deposits and possibly at the Nak property (Bridge, 1997).

Porphyry-style mineralization in the Babine Lake region is associated with three ages of intrusive activity - but the main host rock for copper-gold mineralization is the Eocene age Babine igneous suite which has been characterized (from oldest to youngest) as equigranular, fine- to medium-grained quartz diorite and quartz monzonite, sub-porphyrific rhyolites and dacites and distinctive 'crowded' (hornblende)-biotite-feldspar porphyries (Carter et al, 1995). These rocks occur as irregular dykes, dyke swarms and plugs generally not exceeding 1 kilometre in surface area. Multiple intrusive events are a common feature of the oldest quartz-diorite and quartz-monzonite intrusive phase at some deposits. It has also been reported that some of the better mineralized properties in the region contain pre-, inter- and post-mineral (hornblende) biotite-feldspar porphyries and intrusive breccias.

Alteration zones associated with mineralized porphyries of the Babine igneous suite include a central potassic zone (hydrothermal biotite  $\pm$  K-spar), grading outward into a phyllic zone (quartz-sericite-pyrite), and finally an outer zone of propylitic alteration (chlorite-carbonate  $\pm$  epidote).

Regionally, copper mineralization primarily occurs within northeast and northwest striking, steeply-dipping quartz-chalcopyrite  $\pm$  bornite veinlets less than 5 mm wide (Carter, 1994). Enhanced grades are locally developed at, or adjacent to contacts between intrusive phases and volcanic and sedimentary rocks of the Hazelton Group. Mineralized haloes containing 5-10% pyrite have been reported at some deposits and extend up to 300 metres outward from a central zone of copper mineralization.

The Babine sequence of intrusions host the former Granisle and Bell mines and numerous other smaller unexploited mineral deposits in the region. The Morrison deposit located southwest of the Nak property has been reported as containing a resource of between 45-90 million tonnes grading 0.42 % Cu and 0.01 oz/t Au (Carter, 1994).

They are known to occur within a narrow belt approximately 40 kilometres wide and extending from the northern part of Babine Lake. The Nak deposit is situated on the on the eastern edge of this belt.

## LOCAL GEOLOGY

The Nak property contains limited outcrop, therefore much of the geology of the area is based on diamond drill-logs and geophysical data (Spencer, 1996).

The Nak property is underlain by a northwest-trending, east-dipping sequence of andesite flows and volcanoclastics, and argillaceous and cherty sedimentary rocks of the Jurassic Hazelton Group. Sandstone and conglomerate bordering Nakinilerak Lake may belong to a younger sequence (Carter, 1994). Hazelton Group rocks at the Nak property are intruded by diorite to monzonite bodies of probable Early-Cretaceous age, and by stocks, sills and dykes of the Eocene age Babine igneous suite.

The centre of the Nak property contains an approximately 1.8 km<sup>2</sup> polyphase intrusive stock consisting of fine-grained quartz-diorite and quartz monzonite, and numerous varieties of (hornblende) biotite-feldspar porphyry (Carter, 1994). Similar intrusive bodies outcrop on ridges near the western claim boundaries. Due to poor outcrop in the area, intrusive contacts and spatial relationships are not well-defined. Several dykes and sills cut layered rocks hundreds of metres to the south and west of this main stock, as well as in the northern portion of the property.

The central polyphase intrusive stock is thought to be situated at the intersection of northeast and northwest faults. This is structurally similar to other porphyry systems in the region (Carter, 1994).

The Nak Property is underlain by a fault bounded sequence of volcanic and sedimentary rocks which have been intruded by a semi-circular quartz diorite intrusion. The geology in the central low relief area was determined from numerous drill-hole intersections. Northerly (?) trending rhyodacite dykes related to the porphyry copper mineralization cut all of the rock units along the western margin of the intrusion. These dykes also extend to the north and south of the main body of quartz diorite.

### Structure

The quartz diorite intrusion is centered on a regional north-westerly trending fault which is intersected by a northerly trending fault in the northern part of the property. This northerly trending fault was intersected by drill holes in the ravine

along the western part of the deposit. Numerous faults parallel to this northerly trend have been intersected by drilling west of the quartz diorite intrusion and across it. These faults host mineralization which indicates that movement either occurred during or before mineralization and they had to be active after the quartz diorite stock cooled. The most likely explanation is that they were active during the period of extensional tectonics from Late-Cretaceous to Early-Tertiary which also spans the period of mineralization. This long period of active tectonics is also supported by the presence of extensional veins in the sedimentary rocks.

## **MINERALIZATION AND ALTERATION**

### **Mineralization**

In 1996 a study of the copper-gold ratios in assays from drill-core was carried out with the following results reported (Bridge, 1997)

Based on these analyses Bridge (1997) has outlined four types of copper-gold mineralization forming distinct zones at the Nak porphyry deposit:

- (1) Elevated copper:gold mineralization with a ratio of less than 2.0 is restricted to a zone along the southern and south-eastern portion of the quartz-diorite stock. (Lower grade to background copper and gold values with the same ratio are also found in the weakly mineralized halo to the deposit). This high grade mineralization is characterized by elevated copper and gold values in mafic potassic altered siltstone and quartz-diorite. Most of the copper and gold is related to the mafic potassic veinlets which contain chalcopyrite, trace bornite and molybdenite.

A minor portion of the copper tenor is related to quartz-carbonate-chalcopyrite-pyrite-bornite-molybdenite veins of the late phyllic alteration event. It has been reported that westerly dipping drill holes intersected numerous quartz veins at high angles to core axis whereas easterly dipping drill holes rarely encountered these veins. Based on these observations Bridge (1997) has postulated that these particular mineralized veins may strike in a northern direction and dip steeply to the east, and if so the copper tenor reported for intersections in units from easterly dipping holes may not completely reflect the metal content of these zones.

- (2) Copper:gold mineralization with a ratio greater than 2.0 relates to different alteration types which contain similar economic minerals but are located in different parts of the property. Firstly, the northern zone covers a large region along the western margin of the quartz-diorite and across the body to the north-eastern contact zone. This zone is characterized by early potassic alteration with no known copper mineralization, and is followed by the development of a stockwork of quartz-carbonate-chalcopyrite-bornite-pyrite-molybdenite veins which contain increasing amounts of gypsum at depth. These veins have sericite-clay envelopes and they are

concentrated around the margins of rhyodacite dykes. The rhyodacite dykes have intense feldspar alteration with minor disseminated chalcopyrite and bornite locally, which strongly elevates the copper tenor of the rock.

High grade copper veins have a copper to gold ratio greater than 2.0. These veins are known to be located to the north and south of the western margin of the quartz-diorite intrusion. The veins are 0.5 to 200 cm thick and are composed of tourmaline-quartz pyrite-chalcopyrite with minor magnetite. The veins appear singly or in a stockwork of parallel veins dipping either vertically or steeply to the east.

Arsenopyrite veins occur in the southern portion of the drilled area of the Nak deposit. Quartz-arsenopyrite veins have elevated gold values where they occur in black graphitic shale in drill hole N 96-62.

Tourmaline-carbonate-arsenopyrite-pyrite veins up to 5 cm thick were intersected in drill holes N 96-60 and N 96-61, but do not have elevated gold values.

## **Alteration**

The following description of the alteration mineralogy of the Nak porphyry system is taken from Bridge (1996):

*“Three distinct phases of hydrothermal alteration are present on the Nak Property. The first is a prograde potassic-advanced argillic system which is subsequently overprinted by a retrograde phyllic and argillic alteration followed by carbonate and sulphate veins. The retrograde phase of alteration covers a roughly circular area of 2.5 km in diameter.*

*The earlier potassic system is a smaller circular region of 1.2 km in diameter with advanced argillic alteration around the potassic alteration and in elongate zones along northerly trending faults in the western part of the deposit. The different alteration types were distinguished by the presence of certain vein types and associated alteration envelopes. There is a broad region of dark brown hornfels affecting the sedimentary rocks around the outside of the quartz diorite intrusion. Locally, there is the development of agmatite in the southwest corner contact zone. The hornfels is overprinted by hydrothermal alteration related to mineralization.*

*Potassic alteration can be separated into two sub-types; mafic potassic and potassic. Mafic potassic alteration is recognized in the hornfels sedimentary rocks along the south-western contact of the quartz-diorite intrusion and also in drill hole N95-35 on the eastern side. The alteration is characterized by veins of biotite-K-feldspar-amphibole-magnetite-quartz-chalcopyrite-pyrite-bornite-molybdenite. The rock becomes weak to strongly magnetic due to the presence of magnetite. The property magnetometer survey records the abundance of magnetite as a pronounced magnetic high along the south-eastern edge of the intrusion.*

*Potassic alteration is recognized in the quartz-diorite and sedimentary rocks north of the zone of mafic potassic alteration. This alteration consists of veins of K-feldspar, quartz and carbonate.*

*Advanced argillic alteration is located along the margin of the potassic alteration and to the north and south a distance of 600 metres along northerly trending faults. The alteration consists of clay-quartz-tourmaline flooding or bluish quartz-tourmaline  $\pm$  chalcopyrite  $\pm$  pyrite  $\pm$  magnetite  $\pm$  sericite veins. Zones of massive porcellanite in volcanic rock cut by tourmaline veins were intersected by drill holes north of the quartz-diorite. Trace amounts of blue and purple dumortirite has been identified in the sedimentary rocks to the west of the quartz-diorite intrusion.*

*Phyllic alteration consists of sericite-quartz and carbonate-pyrite-chalcopyrite-bornite veins overprinting hornfels volcanic and sedimentary rocks. The carbonate veins have sericite envelopes. These veins also occur in fault zones which cut across the quartz-diorite.*

*Argillic alteration is a widespread pervasive alteration occurring in the extensively faulted sedimentary rocks west of the quartz-diorite intrusion. This alteration consists of clay-carbonate alteration with rare arsenopyrite-pyrite-calcite  $\pm$  quartz veins.*

*Propylitic alteration occurs in volcanic rocks in the northern and eastern portions of the deposit. This alteration consists of chlorite-calcite-epidote-pyrite mineralization.”*

## **GEOPHYSICS**

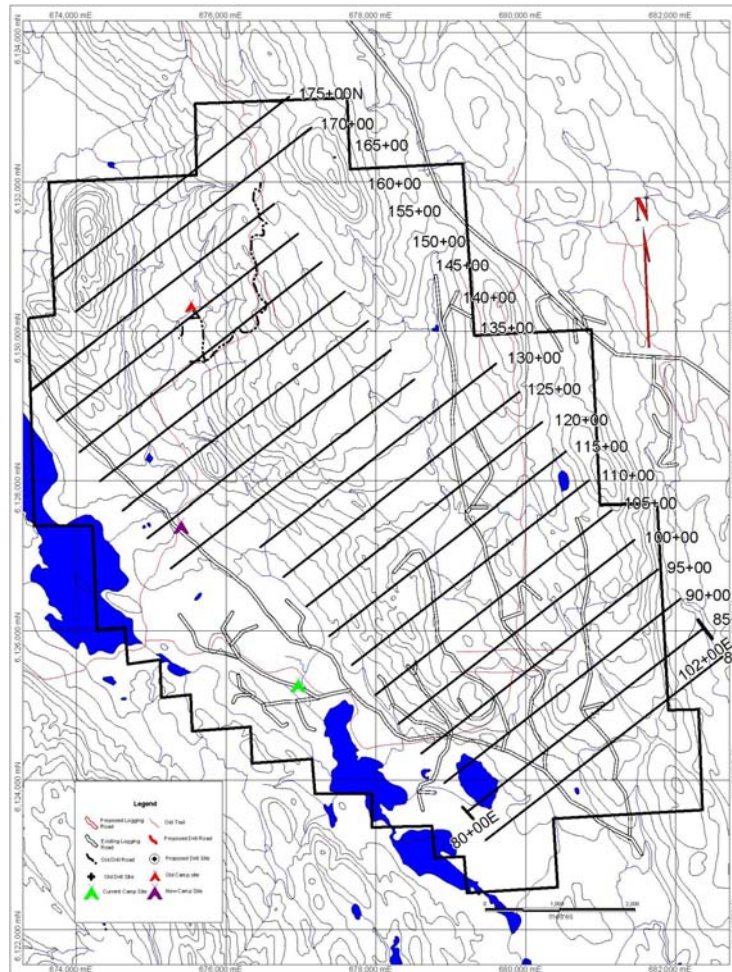
An induced Polarization (IP) survey completed on the Nak property in 1994 identified a circular zone of low chargeability approximately 1,600 metres in diameter that is flanked by a rim of high chargeability (Spencer, 1996). This was interpreted as part of a pyrite halo to a central mineralized zone, and was, in part, confirmed through historical diamond drilling by Noranda Exploration Company Ltd. and Hera Resources Inc. (Spencer, 1996). The majority of the copper - gold mineralization identified during the 1994 and 1995 drilling programs was associated with the large area of low chargeability.

A magnetometer survey outlined an area of high susceptibility along the southern margin of the intrusive stock. Spencer (1996) reports that this may define a potassic alteration zone where amphibole and primary biotite have altered to secondary biotite and magnetite.

The main focus of the 2007 program at Babine was to extend the IP and magnetic coverage from the NAK deposit in the northwest to include the Dorothy deposit in the southeast. A 90 kilometre grid with a 9.5 kilometre northwest - southeast trending baseline was established by Sabrex Contracting to control the



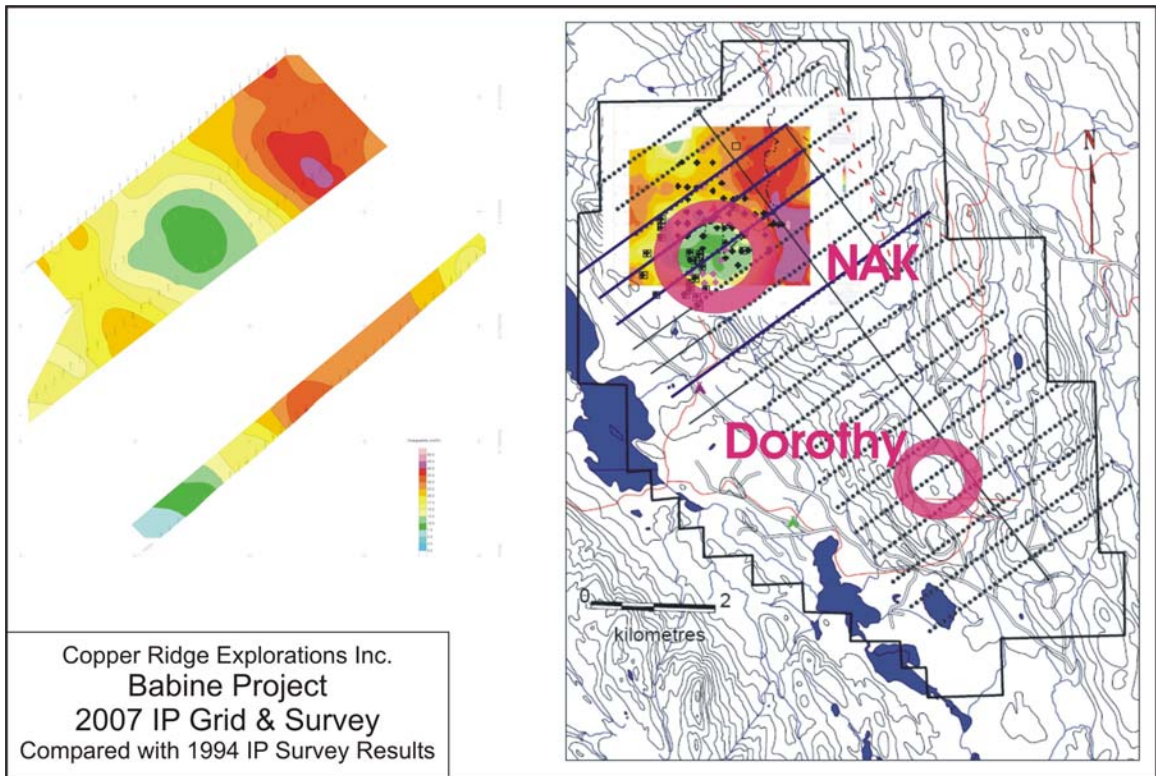
survey (Figure 3). IP and magnetometer surveying was commenced on November 19 by Scott Geophysics, but was terminated before completion on December 13 do to severe winter conditions. A total of 14 km of IP surveying and 13.7 km of magnetometer surveying was completed. A logistics report with a full set of black and white maps is included as Appendix A.



**Figure 3. Grid Location Map.**

The results from lines 15500, 16000 and 16500 show an area of strong chargeability to the northeast flanked by an area of low to moderate chargeability on the southwest. As shown in Figure 4, these results confirm an expand upon the results of the 1994 survey. The results from line 14000 indicate that the signature of a chargeability high flanked by a low continues to the southeast, but may in fact be offset to the southwest somewhat by a fault. Details of the survey and sections showing chargeability and resistivity results are included in Appendix I to this report.

The magnetometer survey indicates that an area of higher magnetic response is associated with the area of known copper - gold mineralization in the centre of the old Nak grid. This could be caused by weak magnetite mineralization that is noted to be part of the potassic alteration assemblage associated with the copper - gold mineralization.



**Figure 4. Preliminary results from completed 2007 IP survey, showing chargeability, compared with 1994 survey results.**

## CONCLUSIONS

Due to severe winter conditions, only about 1/6 of the planned IP and magnetic survey proposed at the Babine Project was completed. This work, however, served to confirm the IP and magnetic results from earlier surveys and to demonstrate that the pattern of a chargeability low flanked by a chargeability high, continues to the southeast.

The results of the magnetometer survey also confirmed that an area of higher magnetic susceptibility is associated with the known mineralization.

## RECOMMENDATIONS

It is recommended that the remainder of the 90 kilometre IP and magnetic survey be completed as planned. The results of the completed surveys, when compared to the results of the previous surveys and the signature of known copper-gold mineralization, can be used to guide a subsequent drilling program.

## ITEMIZED COST STATEMENT

Line cutting	90 km@	930.93	83,784
Geophysics	14 km@	4484.5	62,783
Groceries and Camp Supplies			3,275
Field Supplies			9,415
Communications			1,588
Camp Support and Construction			5,500
Barge Use (Canadian Forest Products)			2,000
Road Use (Canadian Forest Products)			1,920
Vehicle	30 days@	160.77	4,823
Total			175,087

## STATEMENT OF QUALIFICATIONS

I, John Gregory Dawson, do hereby declare that;

1. I am currently employed as Vice President Exploration for Copper Ridge Explorations Inc. of 500 - 625 Howe Street Vancouver, British Columbia V6C 2T6.
2. I graduated with a Bachelor Science degree from the University of British Columbia in 1987 and a Masters of Science degree from Queens' University in 1991.
3. I am a member of the Association of Professional Engineers and Geoscientists of British Columbia, Registration Number 19882.
4. I have worked as a geologist for a total of 20 years since graduation from University, and prior to graduation, as a student and or geotechnician for a period of 11 additional years.
5. I have read the definition of "Qualified Person" set out in National Instrument 43-101("NI 43-101") and certify that by reason of my education, affiliation with a professional association and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of NI 43-101.
6. I am not aware of any material fact or material change with respect to the subject matter of this report, the omission to disclose which makes this report misleading.
7. I am not independent of the issuer applying all tests in Section 1.5 of NI 43-101 in that I am an employee and Director of Copper Ridge Explorations Inc and hold shares and options in the Company.

Dated this 31<sup>st</sup> day of March, 2008

J. Greg Dawson, P.Geo

## REFERENCES

- Bridge, D., 1997: Geological and Drilling Report on the Nak 95-1-Nak-3, Nak 4-11, Snak and Snak 1 Mineral Claims, Omineca Mining Division, North-Central British Columbia. Geological Survey Branch Assessment Report No. 24,928.
- Carter, N.C., 1994: Geological, Geochemical and Geophysical Report on the Nakinilerak Lake Property Nak 1-5 Mineral Claims. Geological Survey Branch Assessment Report # 23,358.
- Howell, W.A., 1995: Linecutting and Geophysical Report on the Nak 1 to 5 Claims. Geological Survey Branch Assessment Report No. 23,848.
- Klit, D.A. and John Lloyd, 1995 : A Geophysical Report on an Induced Polarization Survey on the Nakinilerak Lake Property. In Geological Survey Branch Assessment Report No. 23,848.
- Spencer, B.E., 1996: Report on the 1995 Drill Program-Nak 95-1/95-2 M.C.'s. Geological Survey Branch Assessment Report No. 24,273.
- Woolham, R.W., 1993: Report on a Combined Helicopter-Borne Magnetic, Electromagnetic and VLF-EM Survey, Nak Block, Province of British Columbia, NTS 93 M/1,8 for Noranda Exploration Company Ltd. (Internal Report).

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# **APPENDIX I.**

## **Logistical Report Induced Polarization and Magnetometer Surveys Babine Project, Babine Lake Area, B.C.**

**By**

**Alan Scott, Geophysicist  
Scott Geophysics  
Vancouver, B.C.**

LOGISTICAL REPORT  
INDUCED POLARIZATION AND MAGNETOMETER SURVEYS  
BABINE PROJECT, BABINE LAKE AREA, B.C.

on behalf of

COPPER RIDGE EXPLORATIONS INC.  
Suite 600 – 625 Howe Street  
Vancouver, B.C. V6C 2V6

Surveys performed: November 19 to December 13, 2007

by

Alan Scott, Geophysicist  
SCOTT GEOPHYSICS LTD.  
4013 West 14<sup>th</sup> Avenue  
Vancouver, B.C. V6R 2X3

January 10, 2008

## TABLE OF CONTENTS

	page
1 Introduction	1
2 Survey coverage and procedures	1
3. Personnel	1
4. Instrumentation	1
Appendix	
Statement of Qualifications	rear of report
Listing of GPS derived UTM coordinates	rear of report
Accompanying Maps (1:10000 scale)	
	map pocket
Chargeability/Resistivity Pseudosections with Magnetometer Profiles Lines 14000N, 15500N, 16000N, and 16500N	1
Chargeability contour plan	2
Resistivity contour plan	2
Magnetometer profiles	3
Accompanying Data Files	
One (1) compact disk with all survey data and maps	4



## 1. INTRODUCTION

Induced polarization (IP) and magnetometer surveys were performed at the Babine Project, Babine Lake Area, B.C., within the period November 19 to December 13, 2007.

The surveys were performed by Scott Geophysics Ltd. on behalf of Copper Ridge Explorations Inc. This report describes the instrumentation and procedures, and presents the results of the surveys.

## 2. SURVEY COVERAGE AND PROCEDURES

A total of 14 km of IP and 13.7 km of magnetometer survey were performed at the Babine Project. Progress was slow, primarily due to heavy snowfalls restricting road access to the grid. The pole dipole array was used for the IP survey with an "a" spacing of 100 metres and "n" separations of 1 to 6. The on line current electrode was located to the west of the potential electrodes on all survey lines.

The chargeability and resistivity results are presented on the accompanying pseudosections and contour plan maps. The magnetometer survey results are presented as profiles on the pseudosections and as a profile plan.

## 3. PERSONNEL

Gordon Stewart was the crew chief on the survey on behalf of Scott Geophysics Ltd. Greg Dawson was the representative on behalf of Copper Ridge Explorations Inc.

## 4. INSTRUMENTATION

A Scintrex IPR12 receiver and two GDD TxII transmitters were used for the IP survey. Readings were taken in the time domain using a 2 second on/2 second off alternating square wave. The chargeability values plotted on the accompanying pseudosections and plan maps are for the interval 690 to 1050 msec after shutoff.

A Scintrex ENVI magnetometer was used for the magnetometer survey. All data was corrected for diurnal drift with reference to a Scintrex ENVI base station magnetometer cycling at 10 second intervals.

Respectfully Submitted,

Alan Scott, Geophysicist

Statement of Qualifications

for

Alan Scott, Geophysicist

of

4013 West 14<sup>th</sup> Avenue  
Vancouver, B.C. V6R 2X3

I hereby certify the following statements regarding my qualifications and involvement in the program of work conducted on behalf of Copper Ridge Explorations Inc. at the Babine Project, Babine Lake Area, B.C., and as presented in this report of January 10, 2008.

The work was performed by individuals trained and qualified for its performance.

I have no material interest in the property under consideration in this report.

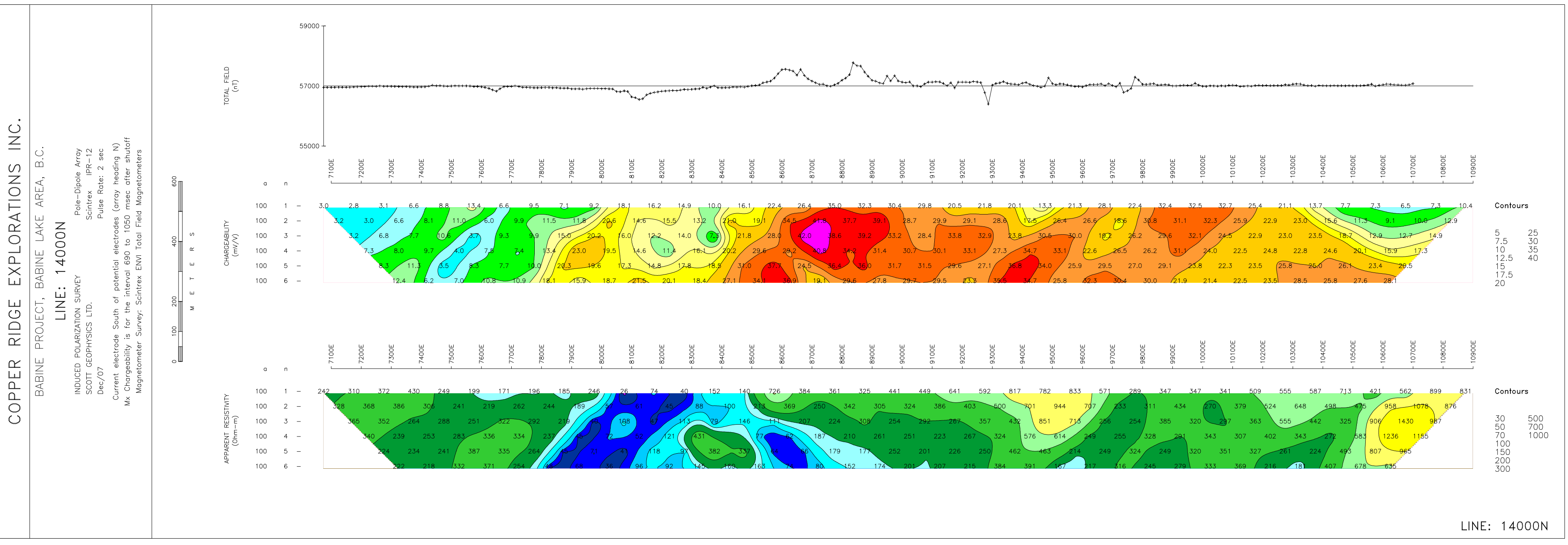
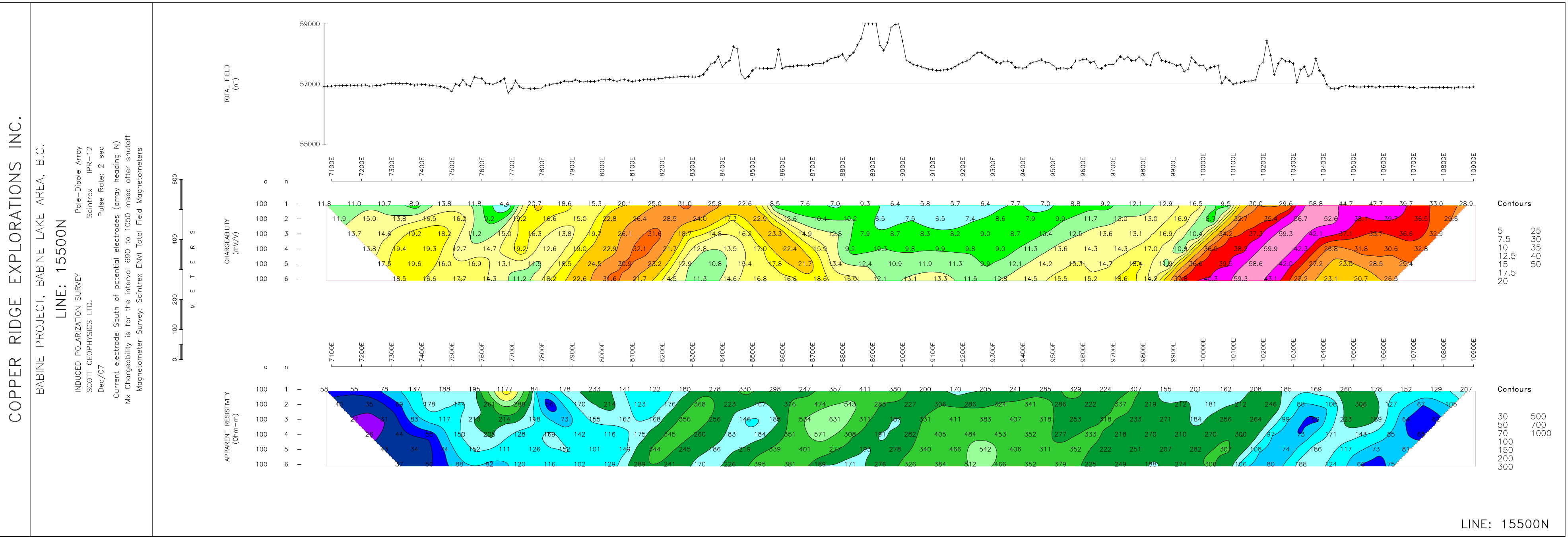
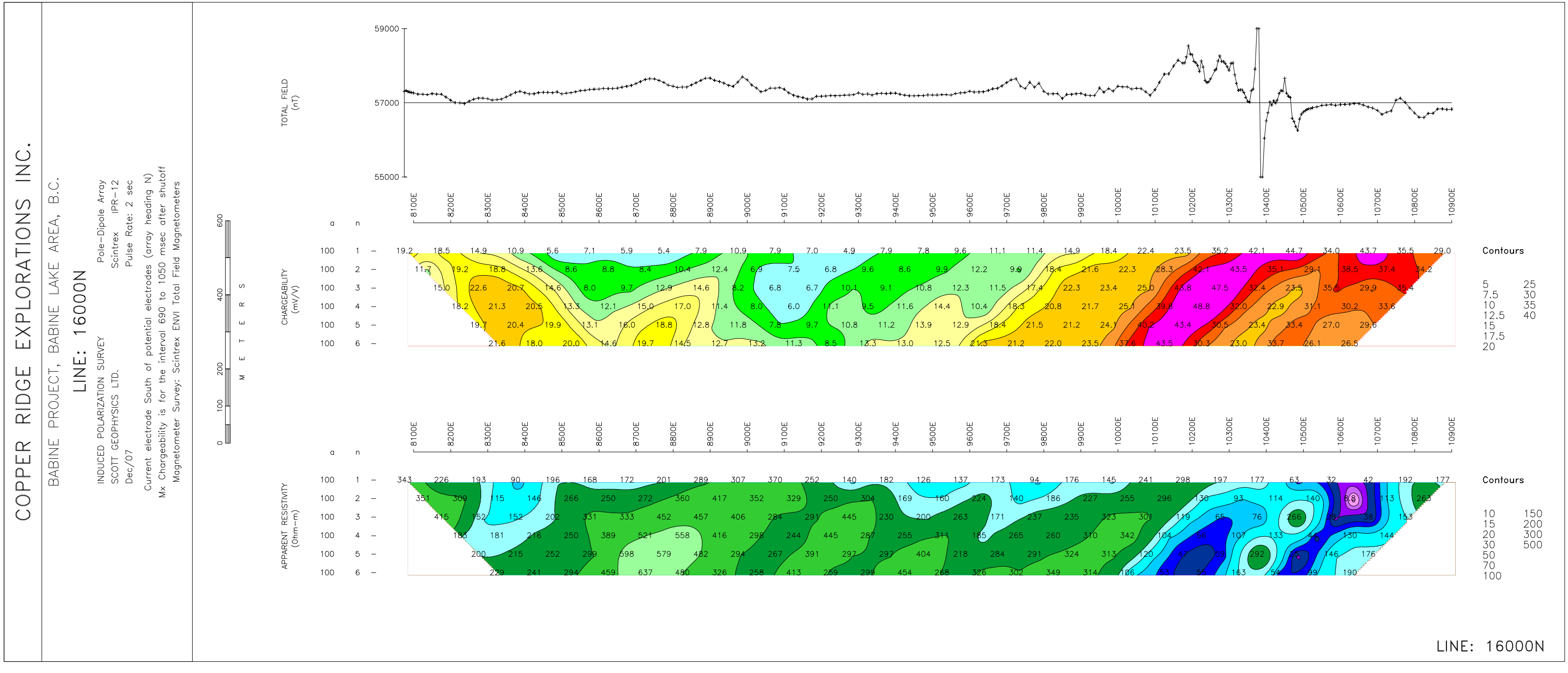
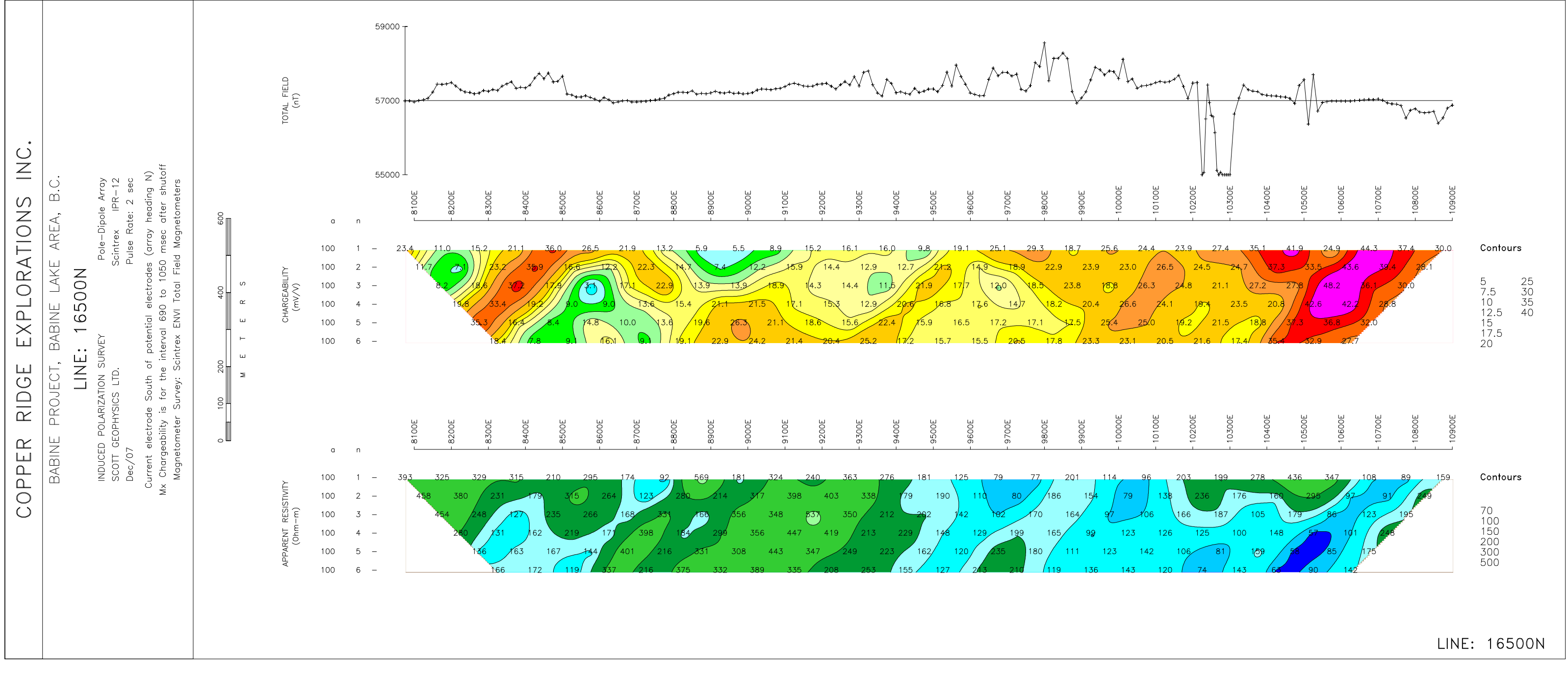
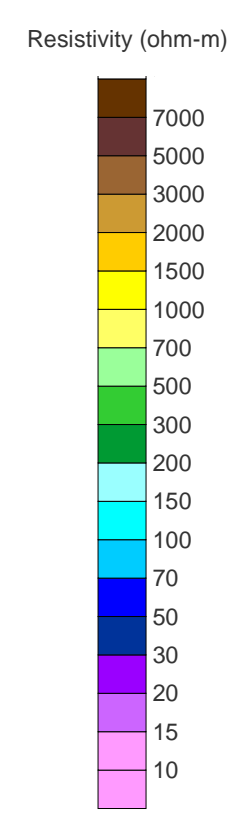
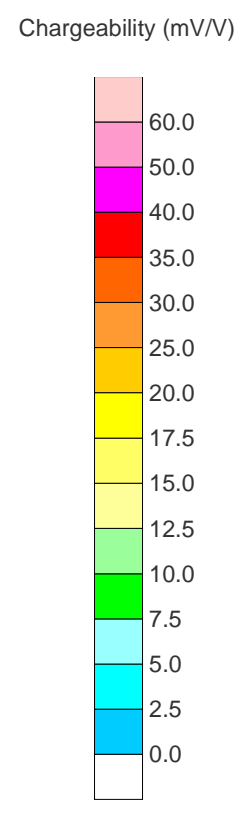
I graduated from the University of British Columbia with a Bachelor of Science degree (Geophysics) in 1970 and with a Master of Business Administration in 1982.

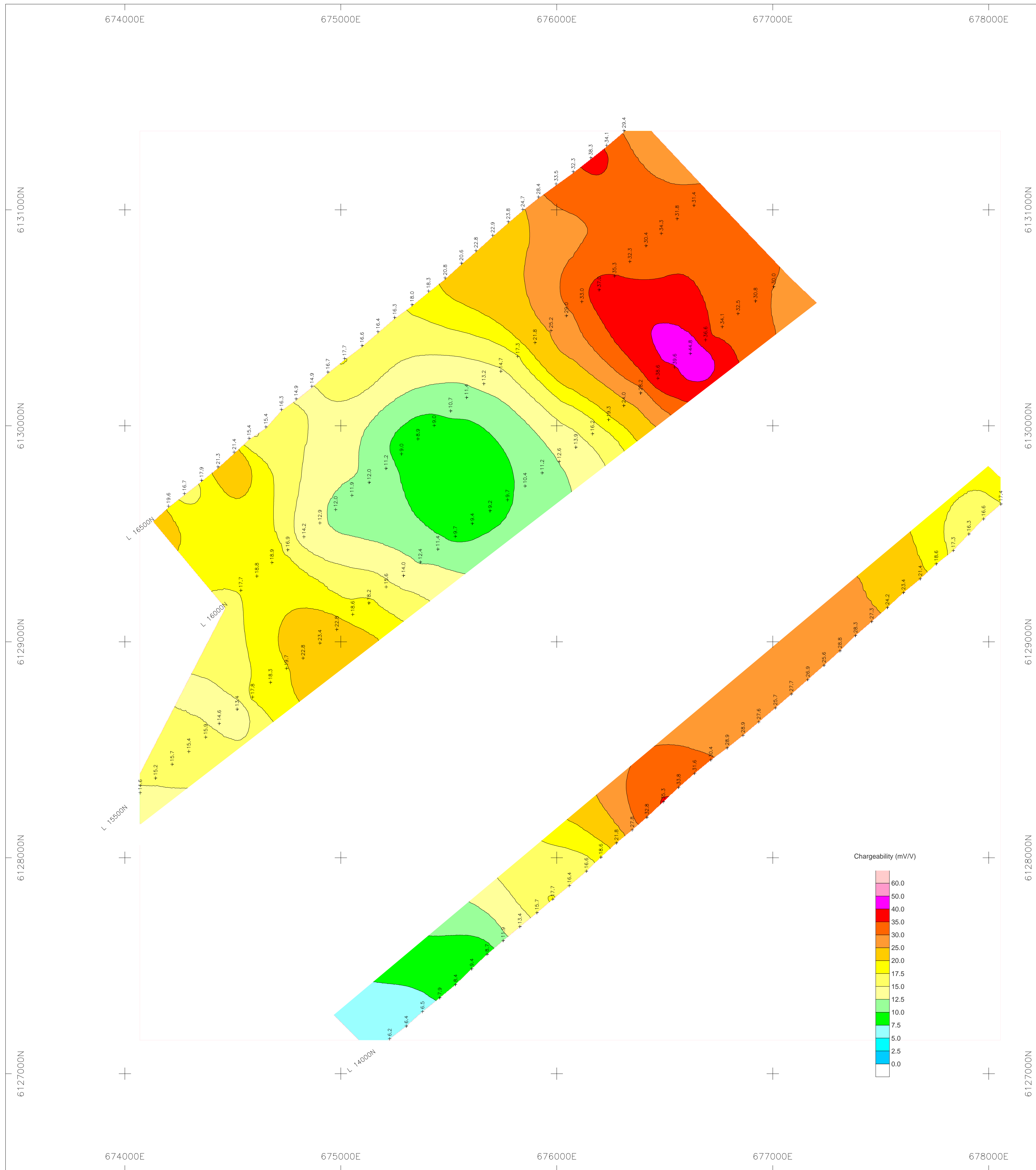
I am a member of the Association of Professional Engineers and Geoscientists of the Province of British Columbia.

I have been practicing my profession as a Geophysicist in the field of Mineral Exploration since 1970.

Respectfully submitted,

Alan Scott, P.Geo.





**SURVEY SPECIFICATIONS**

survey performed Nov-Dec/07  
 receiver Scintrex IPR12  
 transmitter 2 \* (GDD Tx11)  
 pulse time 2 seconds  
 Mx receive window 690-1050 msec

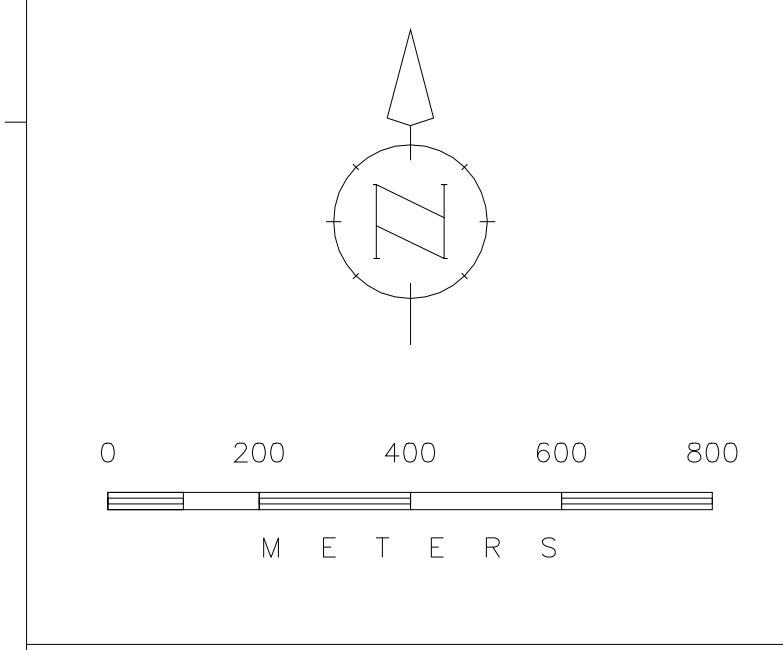
array pole dipole  
 a spacing 100 metres  
 n separations 1,2,3,4,5,6  
 current electrode W of potentials

Contoured value Filtered Chargeability  
 Filtered values n = 1 to 6

Contour intervals:  
 0, 2.5, 5, 7.5, 10, 12.5, 15, 17.5,  
 20, 25, 30, 35, 40, 50, 60 (mV/Volt)

Note: The filter applied to this data  
 is the standard Fraser triangular filter  
 whereby one value is selected at n=1, two  
 values at n=2, three values at n=3, etc.  
 The plotted value is the average of the  
 average values of the n separations and  
 is plotted at the n=1 data point.

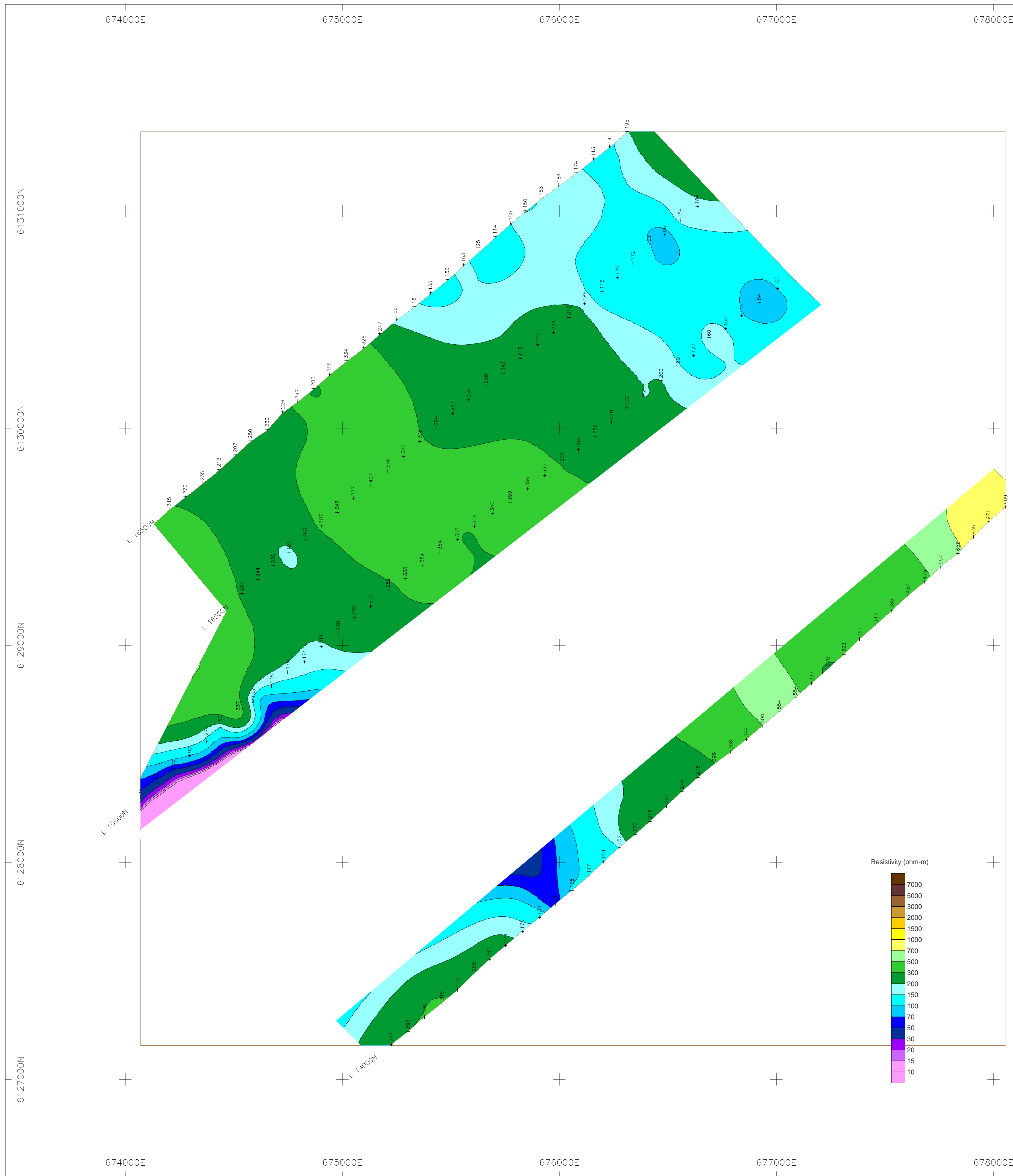
GPS derived UTM coordinates - WGS84



COPPER RIDGE EXPLORATIONS INC.

**BABINE PROJECT**  
 BABINE LAKE AREA, B.C.  
 Chargeability Contour Plan  
 Triangular Filtered Values  
 First to Sixth Separations

DRAWN BY: ars      DATE: Dec/07  
 SCOTT GEOPHYSICS LTD.



**SURVEY SPECIFICATIONS**

survey performed Nov-Dec/07  
 receiver Scintrex IPR12  
 transmitter 2 \* (GDD Tx11)  
 pulse time 2 seconds  
 Mx receive window 690-1050 msec

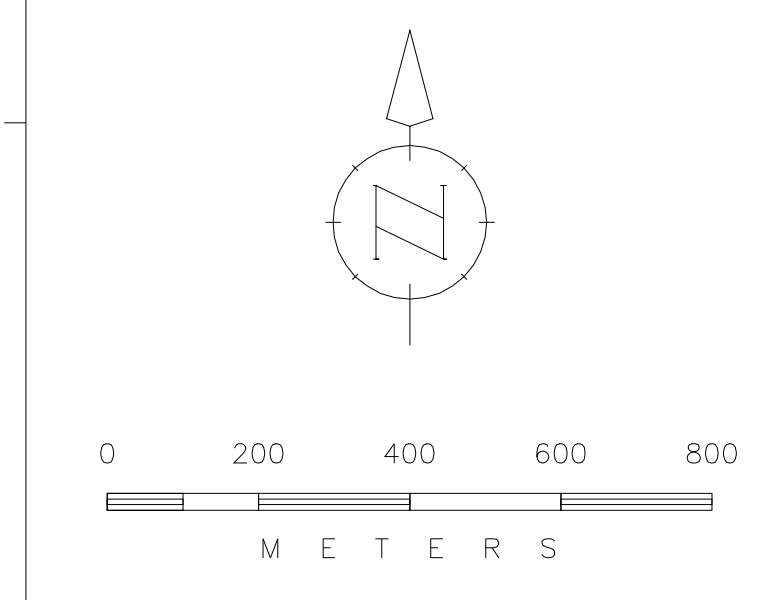
array pole dipole  
 a spacing 100 metres  
 n separations 1,2,3,4,5,6  
 current electrode W of potentials

Contoured value Filtered Resistivity  
 Filtered values n = 1 to 6

Log contour intervals:  
 10, 15, 20, 30, 50, 70, 100, 150, 200,  
 300, 500, 700, . . . . . 7000 (ohm-metres)

Note: The filter applied to this data  
 is the standard Fraser triangular filter  
 whereby one value is selected at n=1, two  
 values at n=2, three values at n=3, etc.  
 The plotted value is the average of the  
 average values of the n separations and  
 is plotted at the n=1 data point.

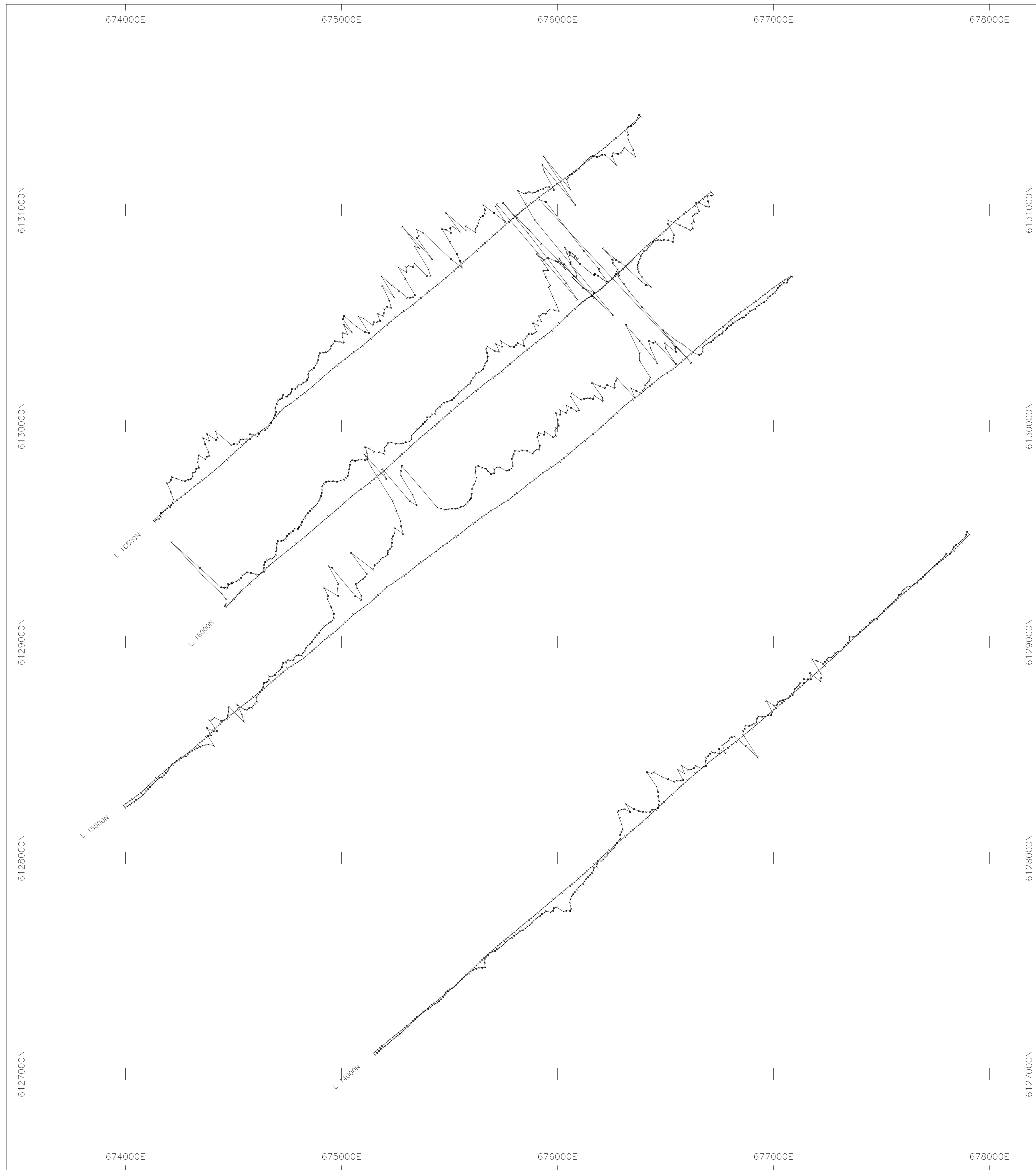
GPS derived UTM coordinates - WGS84



COPPER RIDGE EXPLORATIONS INC.

**BABINE PROJECT**  
 BABINE LAKE AREA, B.C.  
 Resistivity Contour Plan  
 Triangular Filtered Values  
 First to Sixth Separations

DRAWN BY: ars      DATE: Dec/07  
 SCOTT GEOPHYSICS LTD.

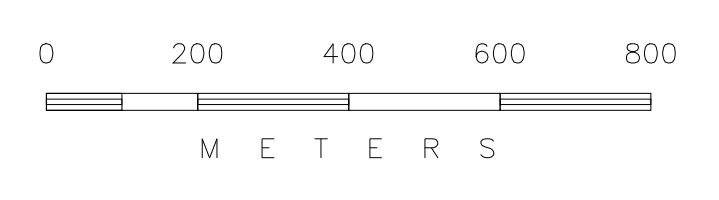
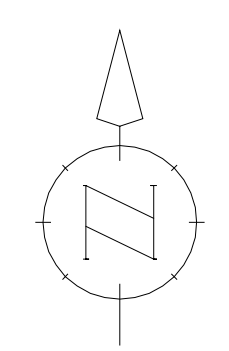


**SURVEY SPECIFICATIONS**

survey performed Nov-Dec/07  
 survey magnetometer Scintrex ENVI  
 base magnetometer Scintrex ENVI  
 type magnetometer proton  
 measurement total field  
 units nanoTeslas  
 diurnal corrections base station  
 data interval 12.5 metres

profile base 57000 nT  
 profile scale 500 nT/cm  
 (at 1:10000 scale)

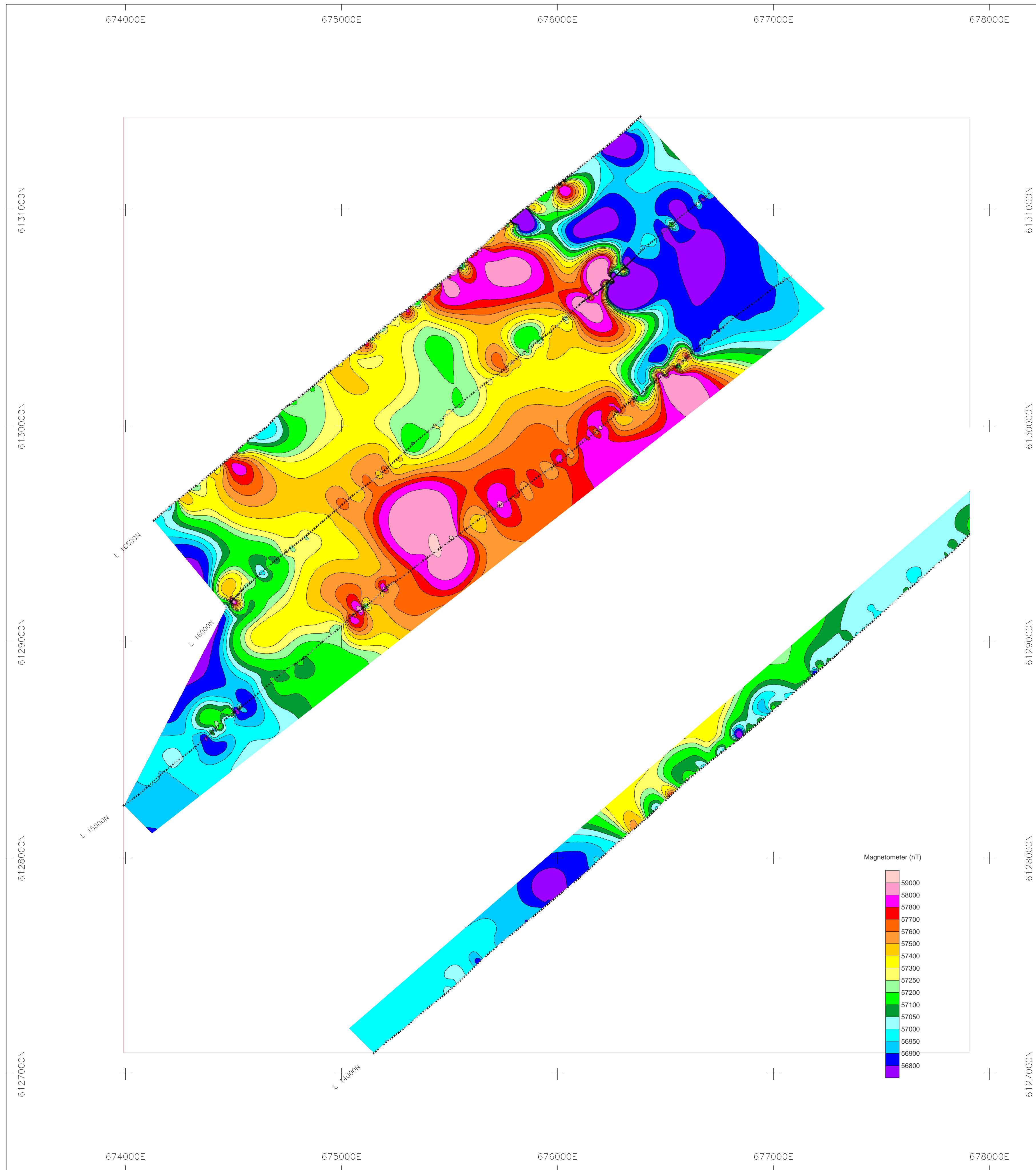
GPS derived UTM coordinates - WGS84



COPPER RIDGE EXPLORATIONS INC.

**BABINE PROJECT**  
 BABINE LAKE AREA, B.C.  
 Magnetometer Survey  
 Profiles

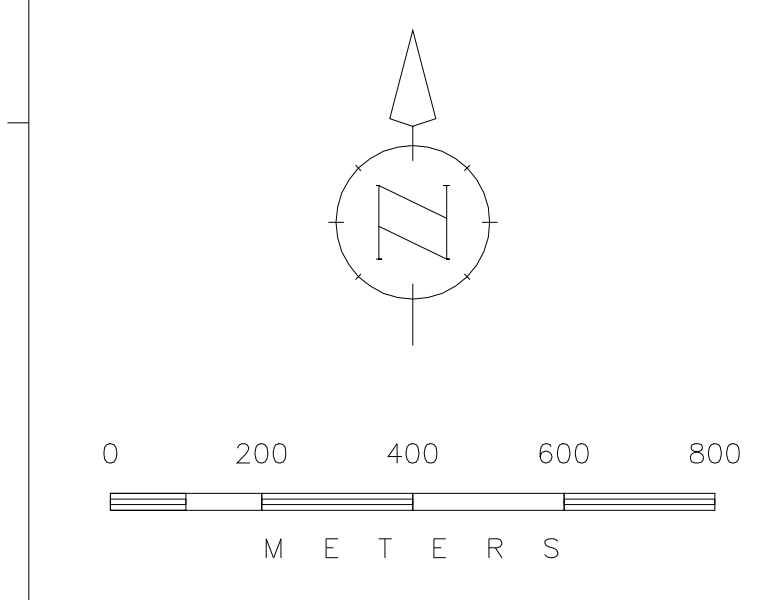
DRAWN BY: ars      DATE: Dec/07  
 SCOTT GEOPHYSICS LTD.



SURVEY SPECIFICATIONS

survey performed	Nov-Dec/07
survey magnetometer	Scintrex ENVI
base magnetometer	Scintrex ENVI
type	proton
measurement	total field
units	nanoTeslas
diurnal corrections	base station
data interval	12.5 metres

GPS derived UTM coordinates - WGS84



COPPER RIDGE EXPLORATIONS INC.

BABINE PROJECT  
 BABINE LAKE AREA, B.C.  
 Magnetometer Survey  
 Contour Plan

DRAWN BY: ars	DATE: Dec/07
SCOTT GEOPHYSICS LTD.	