BC Geological Survey
Assessment Report
32874

C O A S T   M O U N T A I N   G E O L O G I C A L   L I M I T E D

2011 GEOPHYSICAL AND GEOCHEMICAL ASSESSMENT REPORT

ON THE

LEKCIN PROPERTY

NEW WESTMINSTER MINING DIVISION
BRITISH COLUMBIA

NTS 092H/6W

UTM: 603000 E, 5477000 N, NAD 83, Zone 10

49°27' NORTH LATITUDE, 121°35' WEST LONGITUDE

PREPARED FOR

APAC Resources Inc.
200 – 551 HOWE STREET
VANCOUVER, BC V6C 2C2

BY

COAST MOUNTAIN GEOLOGICAL LTD.
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March 19, 2012

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SUMMARY

The Lekcin Property is located approximately 12 km northwest of Hope and 120 km east of Vancouver, British Columbia along the east side of Harrison Lake. Access to the property is good using an extensive network of logging roads from American Creek forest service road which connects to Provincial Highway #1 (5 km north of Hope), or via the Garnet Creek forest service road which connects to Provincial Highway #7 (13 km west of Hope).

The property consists of 20 claims covering 7142.3 hectares. The property is owned 50% by John A. Chapman and 50% by Gerry G. Carlson, held by Carlson on behalf of KGE Management Ltd. (the "Vendors"), and is under option to APAC Resources Inc.

The Lekcin Property is within the East Harrison Lake Belt (EHLB) which is intruded by stocks and plutons of the Coast Plutonic Complex (CPC), and is approximately 3.5 km SSW of the Giant Mascot Mine. Two historical occurrences of copper-nickel+/-PGE mineralization have been described on the Lekcin property; the Swede occurrence (Minfile #092HSW082) and the more recently discovered Big Nic zone.

In 2011 a program of 3D IP Survey was conducted over the Bic Nic and Swede zones. In addition prospecting and sampling was conducted in the Big Nic area. This work generated a significant number of chargeability anomalies, especially in the Big Nic zone, and follow up work is recommended.

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INTRODUCTION

This report details the results of line cutting a grid and performing a 3D IP survey program on the Lekcin property by Coast Mountian Geological Ltd. (CMG) during the fall of 2011. Work was conducted on the property during the period of September 20th to October 16th, 2011. The survey conducted delineates potential areas of Ni-Cu PGE mineralization on the property, similar to that of the nearby Giant Mascott Mine.

LOCATION AND ACCESS

The Lekcin property is located at 49° 26' 38'' north latitude and 121° 33' 41'' west longitude, NTS map sheet 092H/6W in southwestern British Columbia, approximately 12 km northwest of Hope and 120 km east of Vancouver (Figure 1). The claims are centered between Ruby Creek and Emory Creek which connects to the Fraser River. The Fraser River is a major transportation corridor with road, rail, gas and oil pipelines and power transmission lines. The claims can be accessed via the American Creek forest service road which connects to Provincial Highway #1 5 km north of Hope, or via the Garnet Creek forest service road which connects to Provincial Highway #7 13 km west of Hope or 17 km east of Agassiz. Access for development and mining operations would most likely be developed from the American Creek forest service road and/or the Garnet Creek forest service road. The CPR railroad main line is adjacent to Highway 7 at Ruby Creek. In addition, barge access to Ruby Creek is a possibility.

The claims are in moderately rugged, glaciated, mountainous terrain, with elevations ranging from 250 m to 1300 m above sea level, with a maximum of 1425 m on Zofka Ridge. Tree line varies between 1200 m and 1650 m above sea level. Approximately 20 % of the property has been logged in recent years and active logging and construction of new logging road access continues.

CLIMATE

Climate in the region of the Lekcin property consist of cool summers and mild winters. Annual precipitation is approximately 300 cm. Snow pack can reach 400 cm and remains on south slopes until April or May and on north slopes until June. Temperatures range from an average of –1 ^{o}C in winter to 15 ^{o}C in summer.

FLORA AND FAUNA

The Lekcin project area is in an active logging region that extends from the claims along access corridors south to Ruby Creek at Highway 7 and north to Emory Creek. The only environmental element within the region is the Old Settler Peak goat herd, which resides at the headwaters of Daioff Creek, 2 km northeast of the deposit. The herd stays on the peak year round so there should be no impact on their habitat by exploration at Lekcin.

NATIVE LAND CLAIMS

Almost all of British Columbia lands are subject to treaty negotiations with the Status Indians. The Lekcin property falls within the large "Yale" treaty area; extending south to the U.S.A. border, north to Boston Bar, east to Manning Park and west to Chilliwack.

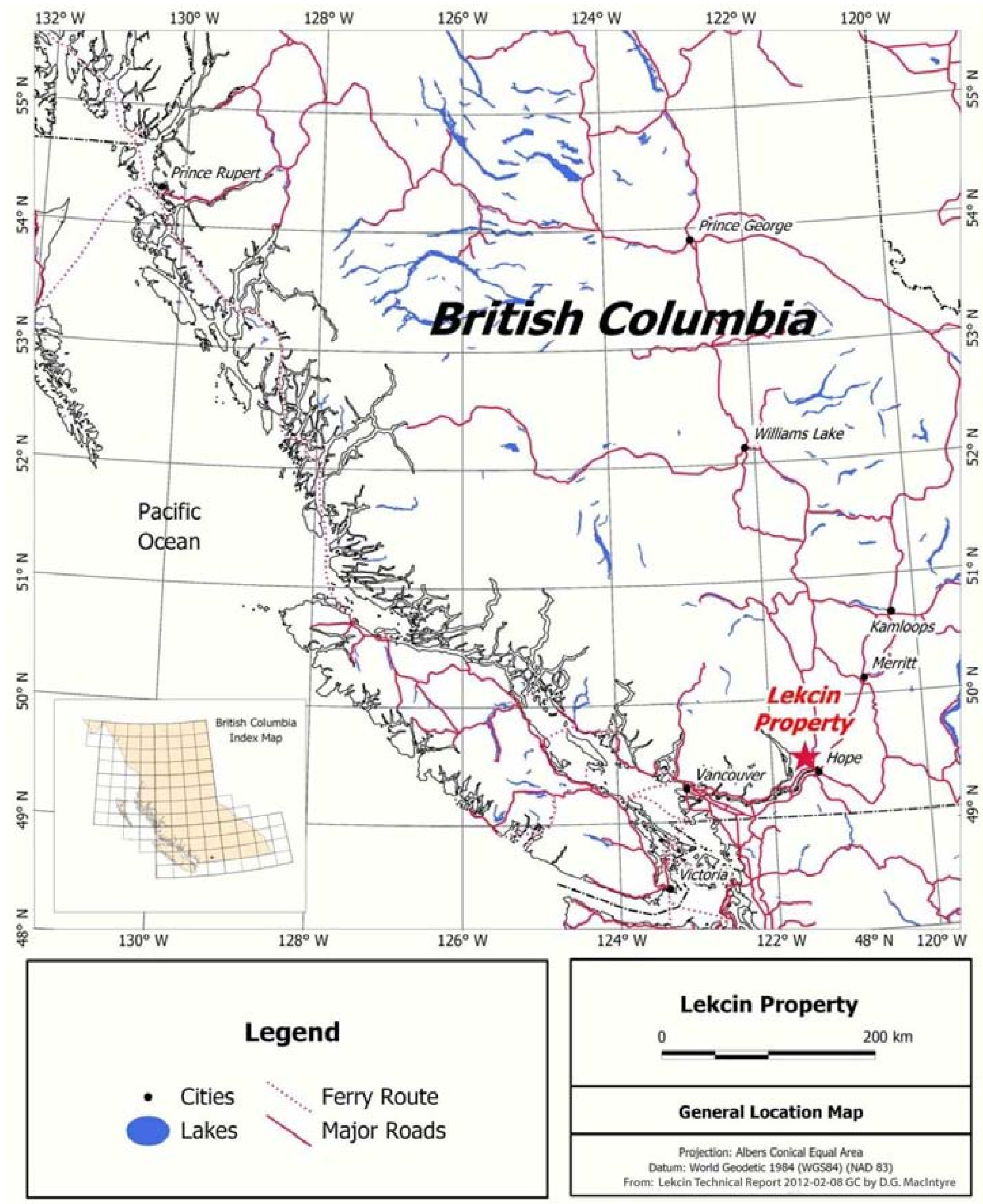


FIGURE 1: LOCATION MAP

CLAIMS AND OWNERSHIP

The Lekcin Property consists of 20 claims covering approximately 7142.3 hectares (Table 1, Figure 2). The claims are located in the New Westminster Mining Division of the NTS map sheet 92H/6W. The claims are owned 50% by John A. Chapman and 50% by Gerry G. Carlson, held by Carlson on behalf of KGE Management Ltd. (the “Vendors”). The property is under option to APAC Resources Inc. of Vancouver, BC.

Table 1: SUMMARY OF CLAIMS DATA

Claim Name	Tenure No.	Area (Ha)	Issue Date	New Expiry Date
LEKCIN ONE	851106	510.0*	Apr 08 / 2011	Oct 31 / 2021
LEKCIN TWO	851107	525.3	Apr 08 / 2011	Oct 31 / 2019
LEKCIN THREE	851108	525.2	Apr 08 / 2011	Oct 31 / 2019
LEKCIN FOUR	851109	483.1	Apr 08 / 2011	Apr 08 / 2013
LEKCIN FIVE	851110	525.3	Apr 08 / 2011	Apr 08 / 2013
LEKCIN SIX	851111	525.3	Apr 08 / 2011	Oct 31 / 2021
LEKCIN SEVEN	851133	126.0	Apr 08 / 2011	Apr 08 / 2013
LEKCIN EIGHT	851134	525.6	Apr 08 / 2011	Apr 08 / 2013
LEKCIN NINE	851135	273.3	Apr 08 / 2011	Apr 08 / 2013
LEKCIN ELEVEN	851215	45.6*	Apr 09 / 2011	Oct 31 / 2021
LEKCIN 10	851217	84.0	Apr 09 / 2011	Oct 31 / 2021
LEKCIN TWELVE	851229	441.3	Apr 09 / 2011	Apr 09 / 2013
LEKCIN 13	851759	525.0	Apr 15 / 2011	Apr 15 / 2013
LEKCIN 14	851760	525.0	Apr 15 / 2011	Apr 15 / 2013
LEKCIN 15	852465	251.9	Apr 25 / 2011	Apr 25 / 2012
LEKCIN 16	852469	272.8	Apr 25 / 2011	Apr 25 / 2012
LEKCIN 17	852470	78.1*	Apr 25 / 2011	Apr 25 / 2012
LEKCIN 18	857207	525.4	Jun 18 / 2011	Jun 18 / 2013
LEKCIN 19	889518	105.1	Aug 15 / 2011	Aug 15 / 2013
LEKCIN 20	937837	273.1	Dec 17 / 2011	Dec 17 / 2012
	TOTAL	**7146.3**		

* *Claims recalculated to account for overlap with existing claims*

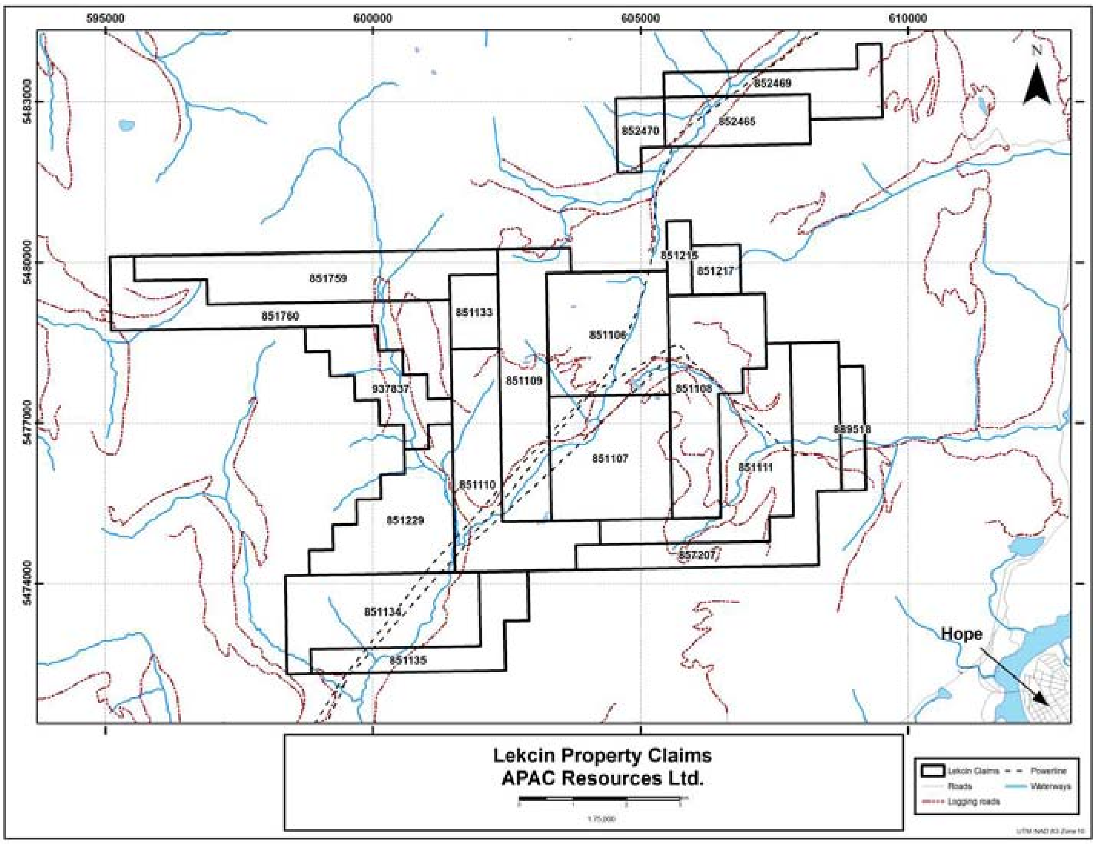


FIGURE 2: CLAIMS MAP

REGIONAL GEOLOGY

The regional geology of the East Harrison Lake Belt (EHLB) is subdivided into north to northwest-trending tectono-stratigraphic packages and intruded by mid-Cretaceous age stocks and plutons of the Coast Plutonic Complex (CPC) (Figure 3). Age relationships, lithological associations and metamorphic grade distinguish the tectono-stratigraphic packages, which are stacked from west to east along faulted, layer-parallel contacts. Jura-Cretaceous, calc-alkaline, intermediate to felsic, arc-derived volcanic and sedimentary sequences of the Harrison Lake and Fire Lake Groups form the western margin of the belt. The CPC partially obscures the eastern margin of the belt.

The most recent interpretation of the regional geology by Ash (2002) presents a two-fold subdivision of the EHLB. Ash identifies an upper ophiolitic package called the Cogburn Assemblage, which includes the ultramafic rocks that are focus of the current exploration program and lower package of Middle to late Triassic arc-derived? clastic metasedimentary rocks which sit structurally above and to the east of the Harrison Lake and Fire lake groups. Rocks of the EHLB are moderately to tightly folded along south to southeast plunging axes which reflect the influence of both regional tectonism and post-kinematic intrusion of the CPC.

The clastic metasedimentary sequence comprises variably metamorphosed, interbedded mudstone, siltstone and fine to medium grained volcanic wacke (Lowes, 1972). Metamorphism grades from greenschist to amphibolite facies (to the sillimanite zone) and appears to increase, along with intensity of ductile deformation, eastward and particularly near the margins of the mid-Cretaceous intrusions. The unit is crosscut by the Hornet Creek Gneiss which has been dated by U-Pb zircon methods at ca 226 Ma (Monger and Parrish, 1991). The eastern part of this unit was formally called the Settler Schist, which Monger (1991) correlated with the Darrington Phyllite of the Shuksan Suite in northwest Washington. The western part of the unit was previously assigned to the sedimentary component of the Slolicum Schist (Troost, 1999). Ash (2002) suggests that these rocks are typical of Late Triassic basinal sedimentary sequences that are a dominant component of Mesozoic arc terrains along the Cordillera.

The term Cogburn Group was originally used to described ophiolitic melange of chlorite-amphibole schist (mafic volcanic), grey meta-phyllite and metamorphised ribboned chert (Gabites, 1985). Ash (2002) combined the supracrustal volcanics and sediments of the Cogburn Group with mafic plutonic rocks, including the Baird Metadiorite, and the ultramfic bodies into what he described as a coherent, imbricated ophiolitic package called the Cogburn Assemblege. The ophiolitic package sits structurally above the metaclastic rocks. Metamorphism ranges from upper greenschist to amphibolite grade. Gabites (1985) correlated the Cogburn Group rocks with Mississippian to earliest Jurrassic oceanic rocks of the Bridge River-Hozameen Terrains.

The mid-Cretaceous intrusions of the EHLB appear to be part of a single evolving plutonic suite that formed between 103 Ma and 93 Ma (Ash, 2002). Three identifiable phases, ranging in composition from diorites to tonalites (Gabite, 1985; Monger, 1989, Journey and Friedman, 1993) are found in the EHLB. The plutons become progressively younger and larger, with more evolved compositions and larger and more complex metamorphic aureoles from west to east across the belt (Ash, 2002).

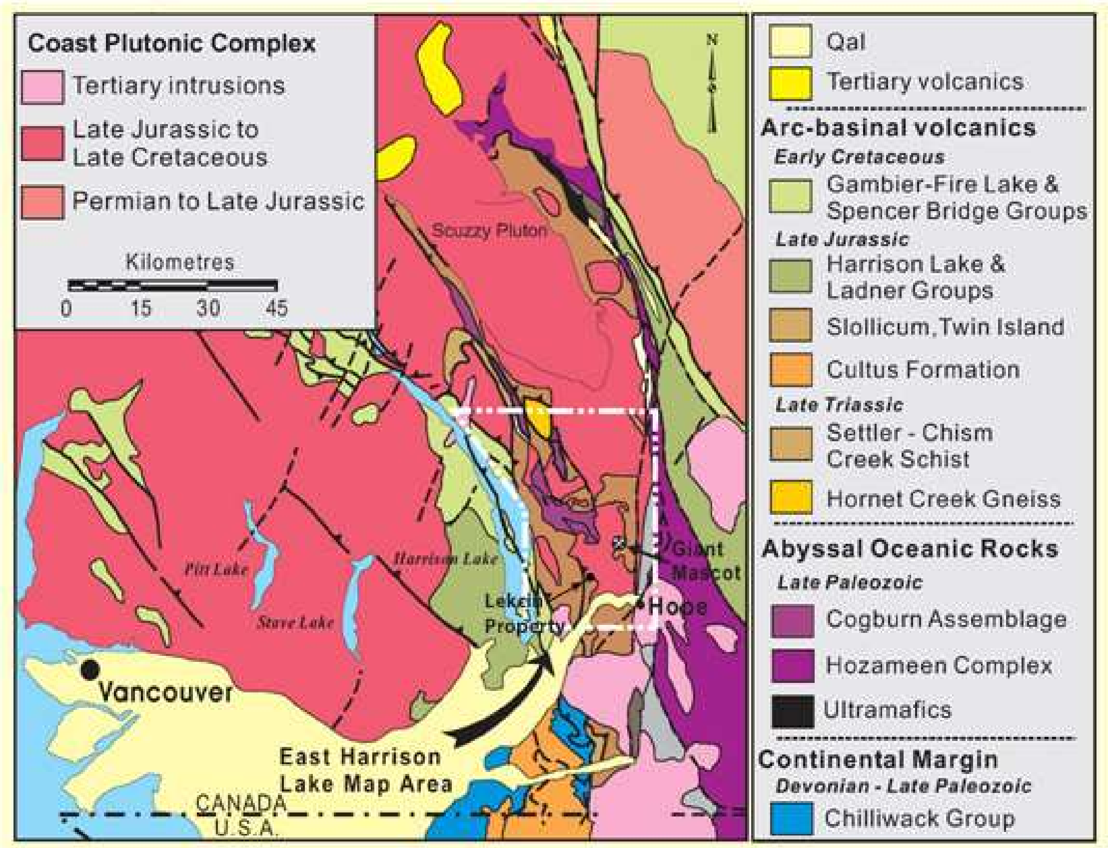


FIGURE 3: REGIONAL GEOLOGIC SETTING (REVISED AFTER JOURNEAY AND FRIEDMAN,1993)

GIANT MASCOT MINE

The Giant Mascot mine represents the only significant nickel producer in British Columbia. The initial discovery on the Giant Mascot mine property (also called: Pride of Emory mine, B.C. Nickel, Pacific Nickel, Western Nickel, and Giant Nickel mine) was made in 1923 when Carl Zofka, a trapper, located outcrops of the Pride of Emory orebody on Emory Mountain. By 1937 $1,300,000 was spent to develop 1.2 million tons of ore at 1.38 per cent nickel and 0.50 per cent copper.
From 1958 to closure, total production from 26 ore bodies was approximately 4,700,000 tons of ore, containing 59,000,000 pounds of nickel and 28,000,000 pounds of copper.

LOCAL GEOLOGY OF THE GIANT MASCOT DEPOSIT

Pyrrhotitic nickel-copper deposits are situated in an ultrabasic complex with chronologically and probably genetically related basic, dioritic, and noritic phases. The complex forms part of a 15-mile-wide, north-trending block of Late Paleozoic metamorphic rocks and Mesozoic intrusive rocks. The block is bounded on the east by the Fraser River fault zone and on the west by the Shuksan fault zone. Pipe-like mineral deposits occur within a segmented, crudely elliptical ultramafic complex about 1.5 miles in diameter. The stocklike mass contains pendants of metamorphosed Paleozoic rocks of the Chilliwack Group (?) and is in turn enclosed in younger granitic rocks considered to be part of the Spuzzum pluton.

The complex contains a complete spectrum of ultramafic rocks with pyroxenite and peridotite (generally hornblendic) the most common rock types and dunitic phases rare. Hornblendite is often found adjacent to a granitic contact, suggesting a metamorphic or metasomatic origin for these bodies.

Twenty-eight mineral deposits have been outlined within the main ultramafic mass. Of these deposits, production has been obtained from twenty-two, and five (4600, Pride of Emory, 1500, Brunswick 2, and Brunswick 5) accounted for over two-thirds of the production. Pipe-like orebodies range from a vertical continuity of 1,200 feet to 100 feet and have horizontal sections ranging from 250 by 120 feet to 20 by 40 feet. The orebodies can be divided into three types: (1) zoned, in which sulphides are disseminated through one or more rock types and show gradational change in tenor (for example, Brunswick Nos. 1, 5, 6 and 4600, 1900, and 512), (2) massive, generally confined to fault or contact zones and having sharp contacts (for example, Pride of Emory and Brunswick Nos. 2, 8, and 9), (3) vein, narrow tabular bodies that may enrich an ore zone but have limited tonnage potential.

PROPERTY GEOLOGY

The geology of the Lekcin Property (Figure 4) is modified after McClaren (2007). The north-central portion of the Property is underlain by the Spuzzum Pluton. The Spuzzum Pluton is compositionally zoned and irregularly shaped body that is approximately 10 x 30 km in plan view (Richards and McTaggert, 1976). The Spuzzum Pluton age ranges from 96.3 +/- 0.5 Ma (zircon) (Brown et al. 2000) in the north-northwest to 79 +/- Ma (biotite) (Richards and McTaggert, 1976) at the southern tonalitic portion of the pluton. Magmatic fabric is prevalent in the southern portion of the pluton but the northernmost part of the pluton is overprinted by solid-state foliation. While the ultramafic rocks have been grouped with the Spuzzum Pluton rocks, age determinations have yet to conclude unequivocally that they are of the same age (G. Nixon, pers. comm. to McClaren, 2007). The following igneous phases have been recognized within the Property.

Pyroxene Diorite: Pyroxene > hornblende + biotite (+chlorite). Minute inclusions of hematite in plagioclase feldspars commonly give it a pink colour. The average anthorite content is An_{53} and ranges from a low of $An_{43.7}$ to a high of $An_{62.1}$ (Vining, 1977).

Hornblende Diorite: Hornblende > pyroxene. Pyroxene < 10% and hornblende > 10% + biotite + plagioclase. Plagioclase has an average composition of $An_{47.5}$ and ranges from a low of $An_{41.2}$ to a high of $An_{53.8}$. (Vining, 1977)

Tonalite: Largely composed of anhedral quartz and biotite, subhedral hornblende and plagioclase (An_{50} - An_{32}). Locally foliated; locally hornblendized to resemblehornblende gabbro. The unit shows a gradational and comfortable contact with metamorphic rocks. Small to large zenoliths of gneiss and schist are included in tonalite in all parts. (Vining, 1977) Tonalite was considered to be younger than diorites of the Spuzzum Pluton (Richards, 1971) and considered to be contemporaneous with other diorites of the Spuzzum Pluton (Vining, 1977). There is no presence of pyroxene within the tonalites.

Hornblende Diorite and Tonalite: Rocks believed to have formed by the hornblendization of diorite or tonalite are characterized by the abundance of hornblende, with plagioclase and perhaps quartz and biotite, but no pyroxene. These rocks grade into normal diorite or tonalite. Ultramafic bodies are closely associated with hornblendized rocks. Pyroxenes (predominately hypersthene) may be found in transitions to diorite and occur as corroded relicts in hornblende clots (Vining, 1977). Hornblende gabbro dykes are found to cut the Spuzzum Pluton pyroxene diorite in the north central portion of the Big Nic Property. Rubble consisting of pyroxenite with associated sulphide mineralization (pyrrhotite, chalcopyrite and pentlandite) has been found at several locations within the area in which the geophysical surveys were carried out (McClaren, 2007).

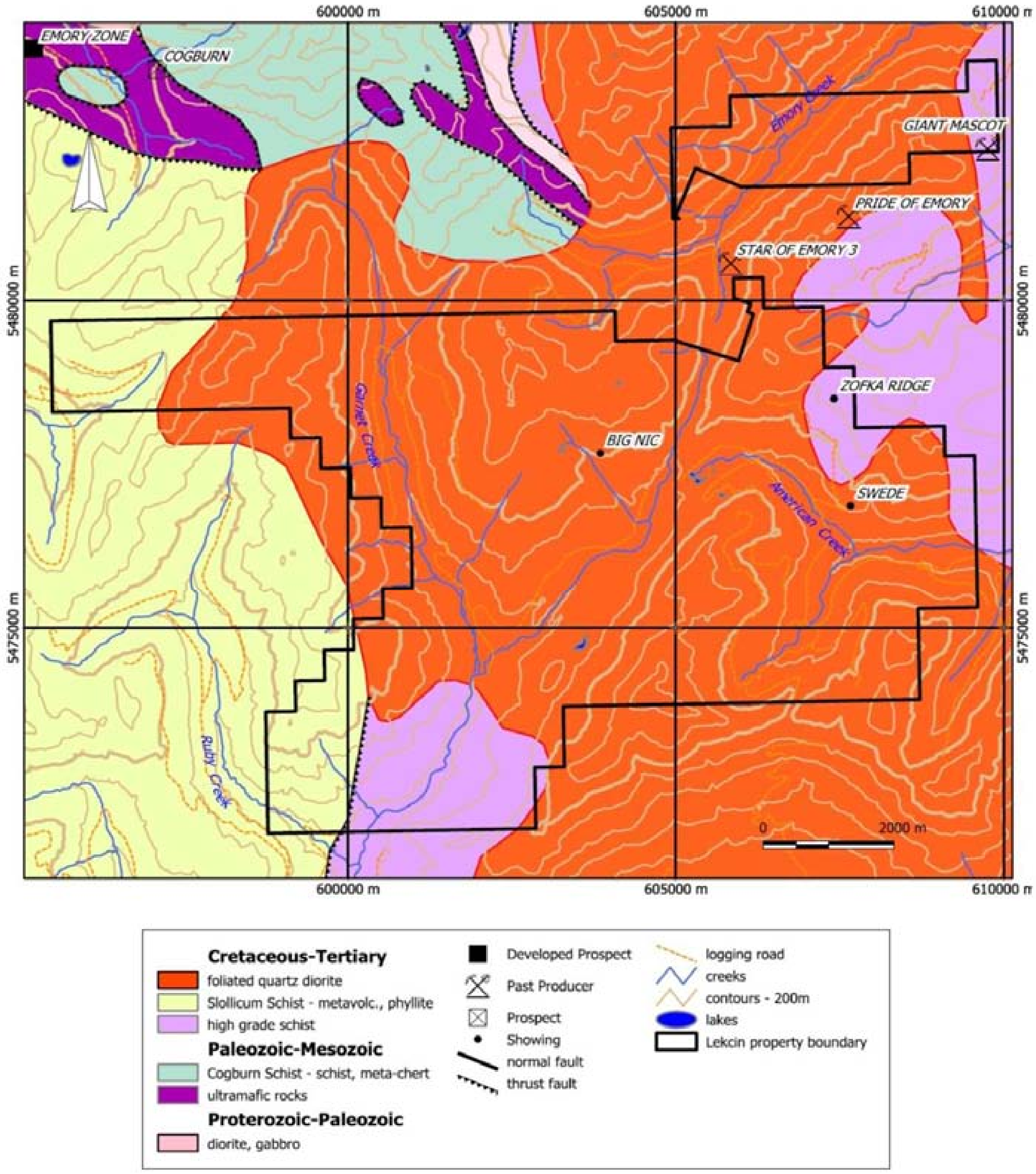


Figure 4: Geology map of the Lekcin Ni-Cu-PGE Property (Geology after Massey et al. 2003)

MINERALIZATION

Two historical occurrences of copper-nickel+/-PGE mineralization have been described on the Lekcin property; the Swede occurrence (Minfile #092HSW082) and the more recently discovered Big Nic zone.

BIG NIC

Previous exploration by Pacific Coast Nickel located several areas of massive sulphide rubble on the Big Nic mineral tenures. Follow-up prospecting during the 2006 field season located additional areas of rubble mineralization (Sp Gabbro, MS-8 and MS-10) (McClaren, 2006). Mineralization at Big Nic, located in the northern portion of the Property, is primarily found as angular rubble, believed to be close to its source area. Assays of grab samples of this mineralized rubble material have yielded up to 0.93% nickel; 7.44% copper and .09% cobalt (McClaren, 2007). Mineralization consists of pyrrhotite, chalcopyrite and pentlandite associated with pyroxenite. In the Big Nic area, pyroxenite found mingled with a melanocratic hornblende gabbro is altered to hornblende. A magnetometer grid survey was carried out over the MS area and a ground magnetic survey to the west of this area. The grid survey was able to define the probable source of rubble mineralization in the MS area and the ground magnetic survey was able to detect other areas of interest (McClaren 2007).

SWEDE

The following description of the Swede showing is taken from the Minfile database. The area of the Swede occurrence is underlain by altered, sericitized and chloritized diorite, gabbro, pyroxenite, peridotite, dunite and hornblendite. Granodiorite, diorite and gabbro phases are reported to be gradational to each other. Rusty oxidized and crumbly shear zones are common in the pyroxenite. Garnet-rich paragneiss and sericite schist occurs nearby, apparently as a roof pendant. The intrusive rocks are reported to form an arcuate-shaped complex occurring as a marginal phase of the main intrusive mass, which is thought to be Cretaceous in age. Shearing is strongest along a south trend with dips predominantly to the west. Northwest striking shears with north dips are also common. Nickeliferous pyrrhotite occurs disseminated with chalcopyrite in fractured pyroxenite and peridotite. Pyrite occurs sparingly as disseminations in the rusty oxidized and sheared zones. Results from drilling in the early 1970s ranged from between 0.09 % nickel and 0.02 % copper over 1.2 metres to 0.01 % nickel and 0.01 % copper over 9 metres (Assessment Report 3355).

LEKCIN EXPLORATION HISTORY

Nickel-copper mineralization was discovered in 1923 at the Giant Mascot deposit (Pacific Nickel or Pride of Emory, B.C.) by prospector Carl Zofta. From 1936 to 1974, Giant Mascot produced 26,573,090 kilograms of nickel and 13,212,770 kilograms of copper with silver, gold and cobalt credits by milling 4.3 million tonnes of ore from 28 individual orebodies. PGE production was not recorded, but early sampling yielded values from 2.74 to 3.98 g/t platinum plus palladium. The mine maintained an average head grade of 0.77% Ni, 0.33% Cu, 0.68 g/t Au and 0.34 g/t platinum group elements (PGE's). Maximum ore grades were quoted as 2.6% Ni, 0.9% Cu, 1 .O% Cr, 0.1% Co, 0.68 g/t Au, 2 g/t Pt and 7.2 g/t Pd (Travis, 2002). Most of this production occurred after Giant Mascot Mines Limited reorganized the property and commenced continuous production from 1958 to closure in August, 1973.

Mineralization at Giant Mascot is hosted in what was interpreted as early ultramafic phases of the predominantly dioritic Spuzzum Pluton. Since that initial discovery most exploration in the region has focused on the Ni-Cu, and more recently the PGE potential of the ultramafic rocks, including those on the Lekcin property.

The first recorded exploration in the area of the Lekcin Property started in 1967 when the Swede occurrence was discovered. Over the next several years, Kelso Explorations Ltd. completed surface exploration programs, including prospecting, mapping, geochemical sampling, magnetic and self potential surveys and bulldozer trenching. This work culminated in 341 metres (1,120 feet) of BX diamond drilling in 1970, resulting in narrow intersections of anomalous nickel in pyroxenite and peridotite (Tully, 1970).

Giant Mascot Mines completed some geochemical silt sampling in the early 1970's related to their nearby mining operations and Lacana Mining Corporation conducted extensive reconnaissance exploration throughout an area that partially includes the Property in 1987.

In 2000, Santoy Resources Ltd. acquired property in the Giant Mascot Ni belt, specifically targeting areas where ultramafic xenoliths were known to occur within the Spuzzum pluton.

In 2001, Santoy worked mainly on the Victor Nickel and DC Nickel showings, on the area west of Victor Nickel and on the Emory 6 claim, immediately west of the Giant Mascot "glory hole". The 2001 field program at the Victor showing consisted of detailed mapping and sampling (16 chip samples) and improving access. Sampling indicated enrichment in PGE's (Pt< 86 ppb, Pd ~65 ppb) and elevated Cu (< 1,137 ppm), Ni (~510 ppm) but failed to return substantial results (Travis, 2002).

The original Big Nic claims were staked by Pacific Coast Nickel Corp. ("Pacific Coast") in 2003 over an area that comprises the majority of the current Lekcin property. Reconnaissance rock sampling was completed, predominantly in the height of land separating the Garnet Creek and North Fork or American Creek watersheds. Late in the 2003 field season, Pacific Coast discovered massive sulphide rubble in an area now referred to as the Big Nic showing, approximately 7.5 km southwest of the Giant Mascot Mine. The float was angular in nature, suggesting it occurs close to source, and graded up to 0.93 % nickel, 7.44 % copper and .09 % cobalt.

In 2005 Pacific Coast completed reconnaissance rock sampling in the area worked in 2004 and also in the Mt. McNair-Mt. Parker area on the western side of the Property. They also contracted Aeroquest Limited to fly 615.0 line kilometres of an Aero TEM II magneticelectromagnetic survey (McClaren, 2005). This survey identified areas on the Big Nic Property that Pacific Coast felt warranted further assessment. These areas were examined during their 2006 field program.

In 2006 Pacific Coast completed an additional 74.4 line kilometres of airborne TEM II survey in the north-western portion of the claim group (McClaren, 2006). This survey outlined a circular magnetic feature approximately 1.5 kilometres in diameter, possibly indicative of prospective ultramafic lithologies. A number of weak to moderate conductors were also detected. They also completed a program of limited surface rock sampling and ground based magnetic surveying, in a further effort to locate the source of the massive sulphide float discovery.

In 2007, Pacific Coast carried out additional detailed geophysical surveys in the area of the Big Nic showing, including 13 line km of magnetic surveying and 66 transient EM soundings (McClaren, 2007).

In 2008, Pacific Coast drilled 3 short holes in the vicinity of the Big Nic showing (Murray McClaren, personal communication). Results of the drilling were disappointing, with low nickel and copper values encountered over narrow widths. Mr. McClaren also stated that two holes were drilled near or in the borrow pit where massive sulphide boulders occur. There is no information on the location of these drill holes or the results encountered. In 2011, the Vendors acquired the Property by staking. They subsequently acquired the data from several airborne magnetic-electromagnetic surveys that have been flown over and adjacent to portions of the property over the past several years (McClaren, 2006).

2011 WORK PROGRAM

At the request of APAC, Coast Mountain Geological Ltd. (CMG) was contracted to oversee a 2011 work program involving two small 3D Induced Polarization (3D IP) grids on the Lekcin Property. The two surveys were conducted over the Big Nic (Figure 4) and Swede (Figure 5) showings. Work was done between October 23-28 (Big Nic) and November 6-9, 2011 (Swede). In addition to the 3D IP surveys, CMG conducted prospecting and geochemical sampling on the Lekcin Property in October 2011.

The exploration program was composed of 3 phases: the preparation, surveying and line-cutting of two grids, completion of the 3D IP survey over these grids (conducted by SJ Geophysics Ltd. (Appendix I)), and prospecting and geochemical sampling carried out over the Big Nic area.

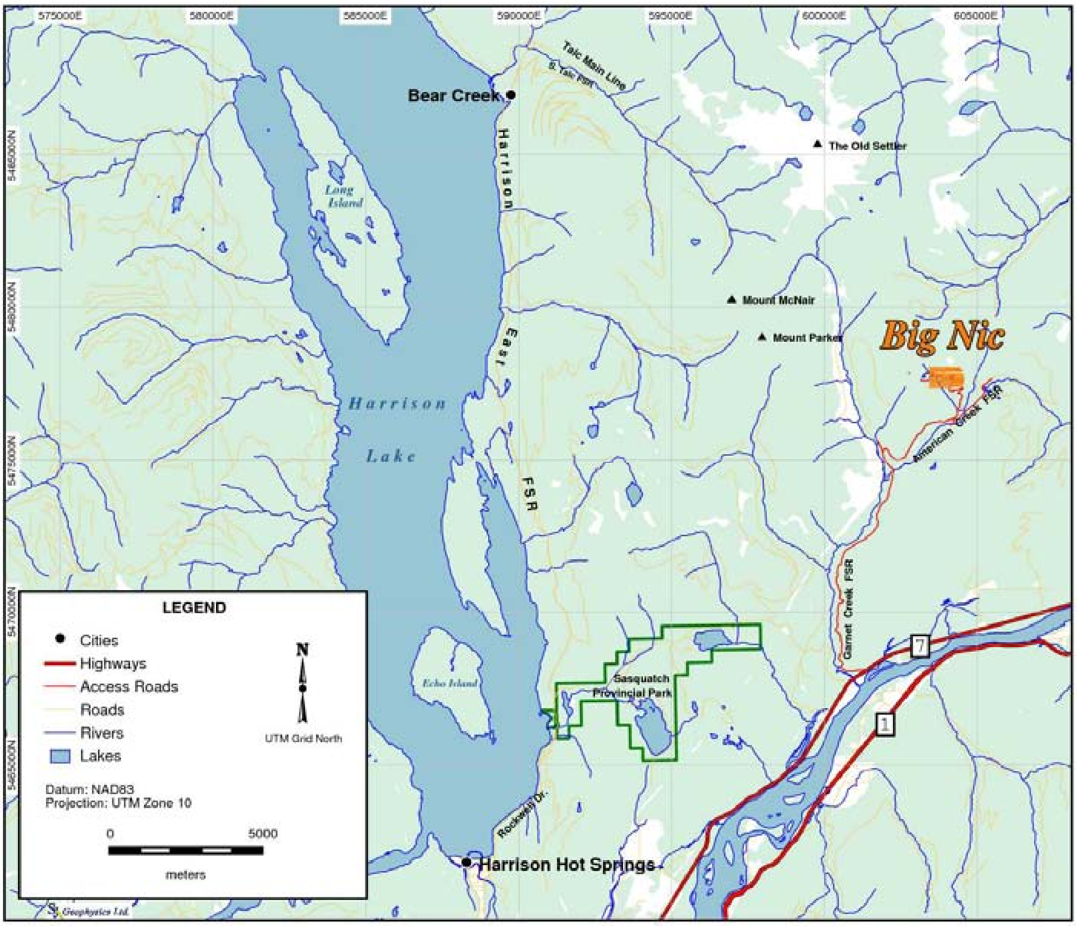


FIGURE 5: **LOCATION MAP FOR THE BIG NIC GRID**

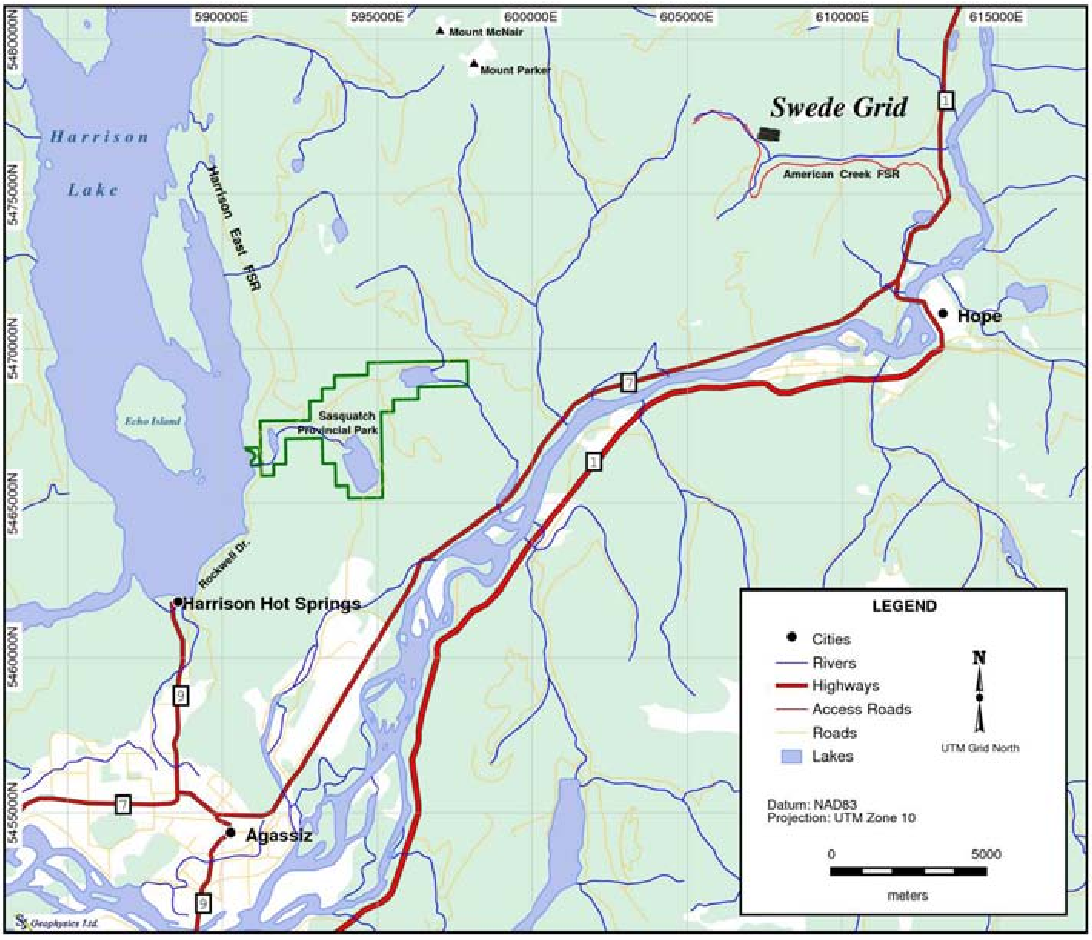


FIGURE 6: **LOCATION MAP FOR THE SWEDE GRID**

GRID PREPARATION AND LINE CUTTING

The grid survey and line-cutting teams commenced work on the project on October 10th, 2011. The proposed grid was located and an initial Safety Meeting was conducted to review the Emergency Response Plan for the project.

Lines were surveyed and chained at 50 metre intervals using compass, straight chain and hand-held GPS. Brush and undergrowth was cut and cleared to facilitate the following IP Survey using brush axes and chainsaws. Some areas of dense brush, steep slopes and strong magnetics caused some line deflections from the idealized proposed grid plans (Figures 6 and 7).

THREE DIMENSIONAL INDUCED POLARIZATION (3D IP) SURVEY

SJ Geophysics Ltd. was subcontracted to carry out a 3D IP survey with the purpose of providing 3D inverted models of resistivity and chargeability properties. This work commenced on October 23rd and all work on the grids was completed on the 9th of November, 2011.

A detailed presentation of the IP survey details, instrumentation and geophysical techniques is presented in the two Geophysical Logistics Reports appended to this assessment report (Appendices I and III). Sections and plan maps of interpreted resistivity and chargeability are also appended (Appendices II and IV).

BIG NIC

The Big Nic grid consisted of 7 survey lines oriented at 90°, spaced 100m apart, and ranging in length from 1025-1100m (Figure 6). Line labels were numbered 1 though to 7, starting with Line 1 in the north going south to Line 7. Station labels for the grid were based on the UTM coordinates, with the station labels being represented by the last four digits in the UTM easting.

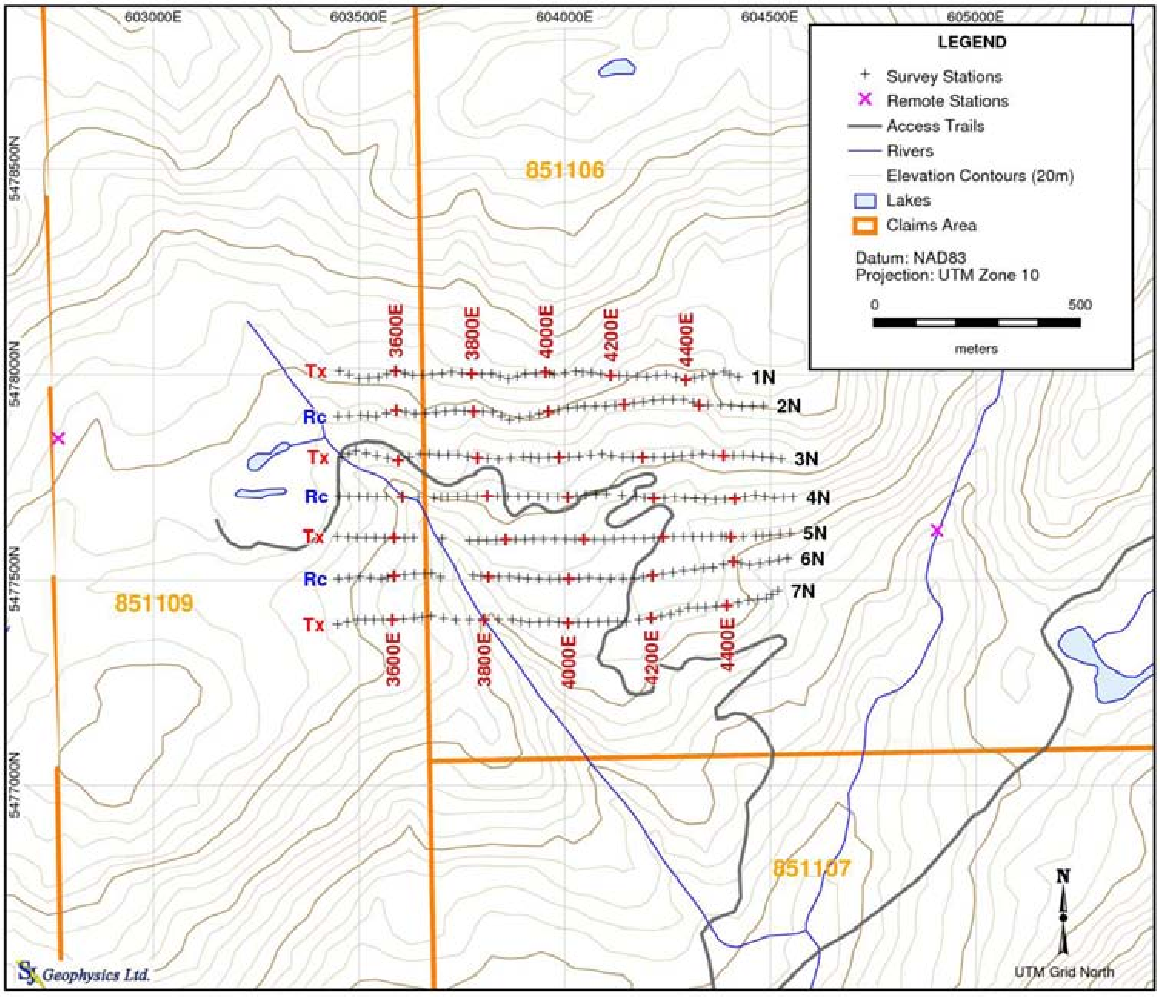


FIGURE 7: **BIG NIC IP SURVEY GRID**

SWEDE

The Swede grid consisted of 5 survey lines, spaced at 100 m, and each 700 metres long, and roughly 100 metres apart (Figure 7). Lines trend at an azimuth of 102°. Line and station labels for the grid were based on a local coordinate system with lines labelled A through E and stations using a distance based label from 1000 to 1700 east.

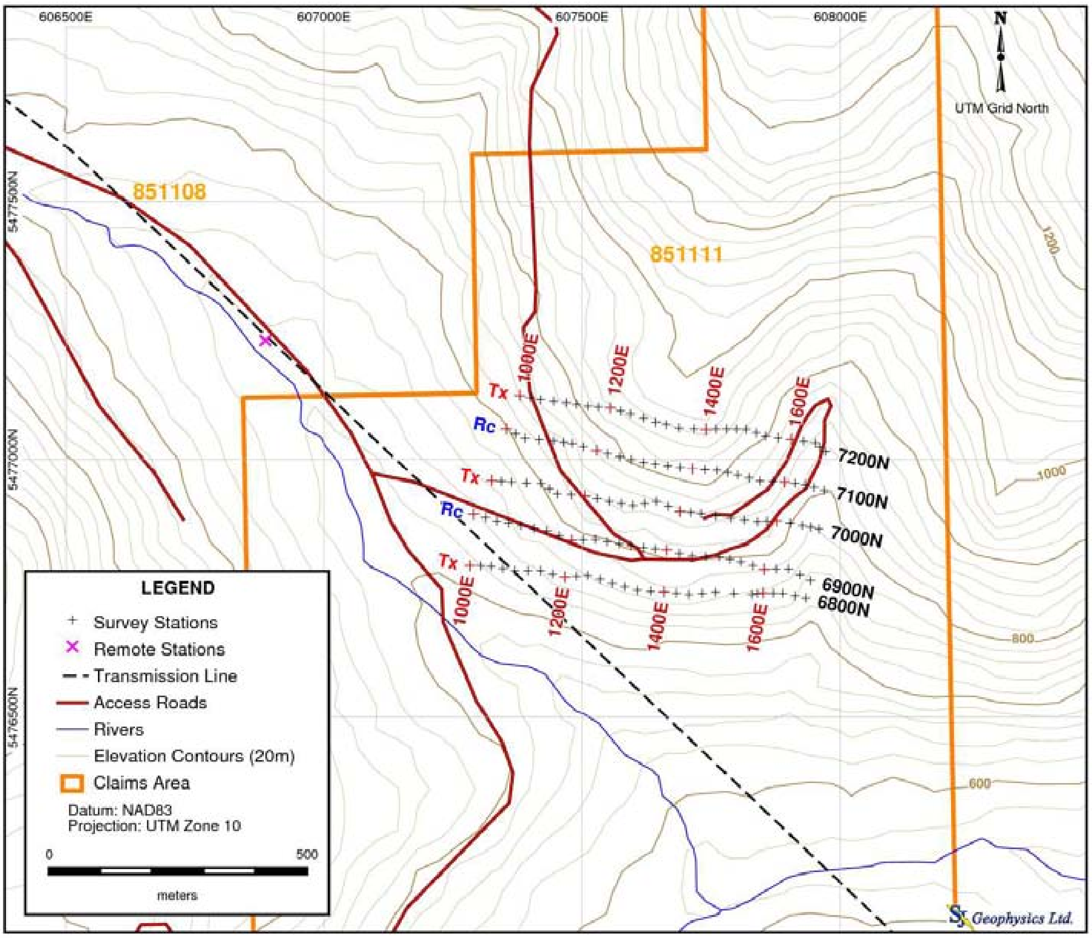


FIGURE 8: **SWEDE IP SURVEY GRID**

PROSPECTING AND ROCK SAMPLING

Prospecting was conducted in the vicinity of the Big Nic showing, and 9 rock samples were collected. Sample BN-01 was collected from outcrop along the access road approximately 980 metres southeast of the Big Nic showing. It is described as a 5cm veinlet trending to the north and dipping 80º to the west. The veinlet contained pyrite and minor chalcopyrite. The remaining 8 samples were collected from what is interpreted to be subcrop exposed in a borrow pit located 440 metres northeast of the Big Nic showing (PCN locality MS-8). Samples BN02 to BN08 are described as massive pyrite, chalcopyrite, pyrrhotite and pentlandite. As shown in Table 2, these samples contained between 0.84% to 4.38% Cu and 0.64% to 0.92% Ni with up to 1.14 grams/tonne Au, up to 0.12 g/t Pt and up to 0.17 g/t Pd. Sample BN-09, which may be at or close to the contact with massive sulphides, is described as containing approximately 10% disseminated sulphides. Sample locations are shown in Figure 8, and sample notes are tabulated in Appendix V.

***TABLE 2:* ANALYTICAL RESULTS FOR 2011 ROCK SAMPLES**

Sample	East	North	Cu %	Ni %	Co %	Au g/t	Pt g/t	Pd g/t	Mineralization
BN-01	604455	5476950	0.19	0.08	0.01	0.02	0	0.02	10% Py, minor Cpy
BN-02	604290	5477790	4.38	0.92	0.09	0.08	0.05	0.1	msv py, cpy, po, pentl.
BN-03	604290	5477790	1.21	0.69	0.07	0.09	0.1	0.15	as above
BN-04	604290	5477790	2.38	0.73	0.07	1.14	0.02	0.15	as above
BN-05	604290	5477790	1.4	0.77	0.07	0.13	0.04	0.15	as above
BN-06	604290	5477790	1	0.77	0.07	0.02	0.04	0.12	as above
BN-07	604290	5477790	0.84	0.78	0.07	0.18	0.12	0.17	as above
BN-08	604290	5477790	1.6	0.64	0.07	0.06	0.03	0.09	as above
BN-09	604290	5477790	0.12	0.04	0.01	0.01	0.01	0.01	10% sulphides

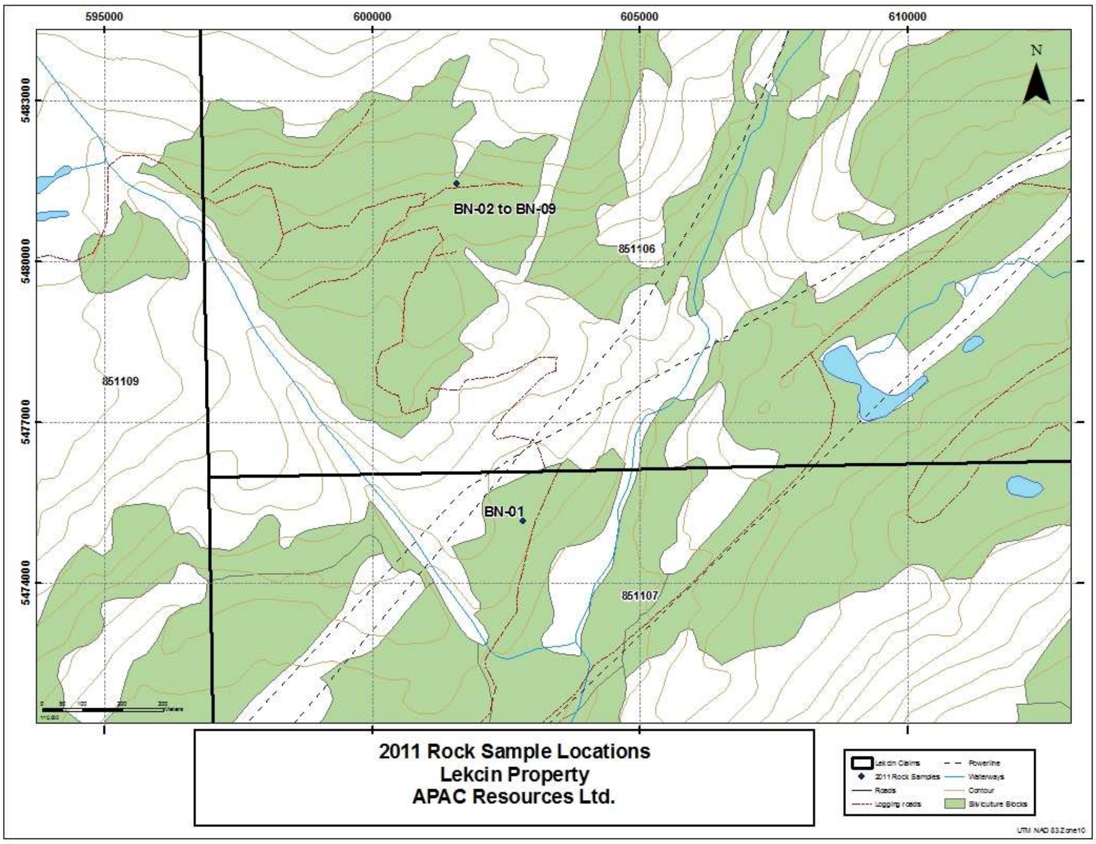


FIGURE 9: ROCK SAMPLE LOCATIONS MAP

SAMPLE SECURITY AND ANALYSIS

Rock samples were placed in labelled plastic bags, with a label also placed within the bag and shipped directly to the Acme laboratory in Vancouver. Only a Coast employee handled or had access to the samples before they arrived at the lab.

All samples were analyzed at Acme Analytical Laboratories located at 852 E. Hastings St, Vancouver BC, V6A 1R6. Acme Labs is ISO 9001:2001 certified.

Upon receipt, rock samples were catalogued and noted into the lab's system before being prepared by AMCE's preparation method R200-250. The R200-250 method involves crushing samples to pass through a 10 mesh screen, splitting off a 250g representative sample and pulverizing until 85% of the split is able to pass through a 200 mesh screen. The pulps were then geochemically analyzed utilizing ACME's 1EX method in which 0.25g of sample is split off, digested and heated in a bath of HNO_3-HClO4-HF to fuming and taken to dryness. The residue is then dissolved in HCl and analyzed by ICP-MS for element concentrations. Rock samples were also tested for lead by ACME's fire assay 3B02 method. In this method a 30g spit of the pulp is fire assayed and levels are determined by an AA (atomic absorption) finish. Analytical certificates for the rock samples are attached in Appendix VI.

RESULTS AND INTERPRETATION

IP Survey Results: Big Nic Grid

The interpreted resistivity results from the Big Nic IP survey showed moderate variation, from less than 500 ohm-m to greater than 10,000 ohm-m. A distinct resistive domain was delineated in the central region of the grid, exhibiting a N – NE trend. The moderately conductive zones delineated exhibit a NE – SW trend.

The interpreted chargeability results from the Big Nic survey delineated a series of chargeability anomalies that are primarily coincident with a moderately conductive response. A general characteristic of these anomalous chargeability features is that they appear "pipe-like" in shape and are sub-vertical / steeply dipping.

These anomalous features bear a strong resemblance to the "pipe like mineral deposits" exploited at the nearby Giant Mascot Mine. Furthermore, during the prospecting program several strongly mineralized samples (BN02-09) were collected from a hand excavated pit. While it was not possible to determine if the sample source was local, their angular nature and the lay of the land presents the possibility that they were sourced from subcrop.

These samples are coincident with a pipe-like chargeability anomaly which therefore presents a priority exploration target.

The anomalous chargeability features of note are:

- LN 3N / 4225E: Coincident with the above mentioned sampling
- LN 1N / 3450E: Steep ESE dipping anomaly
- LN 4N / 3900E: SE dipping anomaly, near surface
- LN 6N / 3875E: Deeper anomaly (~75m below surface), ESE dipping
- LN 6N / 4125E: Near surface pipe-like anomaly

Recommended follow up includes ground magnetic surveys, geochemical sampling and drilling.

IP Survey Results: Swede Grid

The interpreted resistivity results from the Swede IP survey show a very narrow response variation, from less than 1500 ohm-m to greater than 6,000 ohm-m. A large, very moderate

resistive domain was delineated in the central region of the grid with very subtle evidence of an E-W break through the center of this feature. A moderate E-W chargeability anomaly is coincident with this "break" resistivity feature.
On the western edge of the Swede survey, centered on Line 7000N, is a large chargeability anomaly, coincident with a relative conductive anomaly.
Prospecting, geochemical sampling and ground magnetic in the area of this chargeability is recommended to determine if further exploration and drilling may be warranted.

CONCLUSIONS AND RECOMMENDATIONS

The 3D IP Surveys generated a significant number of chargeability anomalies and targets, most notably on the Big Nic Survey. Further exploration work is warranted such as:

- Geological mapping, prospecting and "ground-truthing" of the chargeability anomalies that appear to be at or near surface
- Geochemical sampling across these anomalies
- Ground magnetic surveys over previously gridded area
- Potential trenching or test – pitting where warranted
- Potential drilling of anomalies prioritized by the above work

Respectfully submitted,

Chris Basil
COAST MOUNTAIN GEOLOGICAL LTD.

March 19th, 2012

ITEMIZED COST STATEMENT

EXPENDITURE SUMMARY

Period **Oct. 10, 2011 - Jan. 20, 2012** **PROJECT:** **Big Nic/Swede Grids - Harrison Lake Area, BC**

Expenses	**Mobilization**						
Mobilization	Geophysical Crew Demobilization					$1,201.04	
Hotel / Meals / Other						$0.00	
	Expenses:					**Mobilization**	**$1,201.04**
Expenses	**Supplies / Accom. / Food / Support**						
Supplies	Flagging, chains, batteries					$25.00	
Radios		18	days	@	$23.00 /day	$414.00	
Hotel (mandays)		90	days	@	$40.25 /day	$3,622.50	
Food (mandays)		90	days	@	$51.75 /day	$4,657.50	
CMG Trucks		16	days	@	$143.75 /day	$2,300.00	
Fuel						$216.00	
	Expenses					**Supplies**	**$11,235.00**
Expenses	**Geophysics/Data/Comunication**						
IP System/2 Operators		10	days	@	$3,108.00 /day	$31,080.00	
IP Laborers x 3		30	days	@	$393.75 /day	$11,812.50	
IP Field Processing		18	hours	@	$120.75 /hour	$2,173.50	
IP Trucks		20	days	@	$157.50 /day	$3,150.00	
Fuel						$2,089.50	
IP Data Processing	Fine 3DIP Inversion Processing					$2,769.44	
IP Sections and Plans						$2,467.33	
Sample Analysis	Acme Analytical Labs					$432.66	
	Expenses					**Geophysics/Data**	**$55,974.93**
Expenses	**Labour/Subcontractors**						
Linecutters (mandays)		20	days	@	$402.50 /day	$8,050.00	
Linecutters-Local		20	days	@	$402.50 /day	$8,050.00	
Trucks		22	days	@	$172.50 /day	$3,795.00	
Fuel						$863.50	
	Expenses					**Subcontractors/Labour**	**$20,758.50**
Professional Wages	**Oct. 10, 2011 - Jan. 20, 2012**						
C. Basil: Data Interp.		3.5	days	@	$650.00 /day	$2,275.00	
C. Basil: Logistics, Sampling		6	days	@	$650.00 /day	$3,900.00	
G.Sotiropoulos, Geotech: Logistics		14	days	@	$475.00 /day	$6,412.50	
B. Dewonck, P. Geo: Admin		0.5	days	@	$700.00 /day	$350.00	
	Wages					**Professional Wages**	**$12,937.50**
					TOTAL Expenditures		**$102,106.97**

STATEMENT OF QUALIFICATIONS

I, Melanie Mercier, M.Sc., do hereby certify that:

1. I graduated with a Master of Science degree in Earth Sciences from Carleton University, Ottawa, Ontario, in 2011.
2. I have been practicing my profession as an Exploration Geologist continuously since my graduation and as a mapping Geologist for the past 5 years.
3. I am an employee of Coast Mountain Geological Ltd., and participated in compiling the report titled "Geophysical and Geochemical Assessment Report on the Lekcin Property" dated March 12, 2012.
4. The information contained within this report is based on information compiled from past reports, the sources of which are quoted in the report.
5. I personally believe this report accurately depicts the information available to date.
6. I hold no interest, directly or indirectly in the Lekcin Property or any surrounding properties, and have no agreements, arrangements or understandings with the property owner.

Dated this 19th day of March, 2012

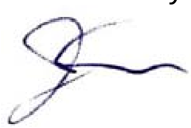
signature

STATEMENT OF QUALIFICATIONS

I, Jodi Cross, B.Sc., do hereby certify that:

1. I graduated with a B.Sc. (honours) in Geological Sciences from the University of British Columbia, Vancouver, B.C. in 2009. I also hold a Postgraduate Certificate in Geothermal Energy Technology from the University of Auckland, New Zealand (2010).
2. I have worked as an Student/Junior Exploration Geologist for 16 months, and as a Geological Lab Assistant for 9 months.
3. I am an employee of Coast Mountain Geological Ltd., and participated in compiling the report titled “Geophysical and Geochemical Assessment Report on the Lekcin Property” dated March 12, 2012.
4. The information contained within this report is based on information compiled from past reports, the sources of which are quoted in the report.
5. I personally believe this report accurately depicts the information available to date.
6. I hold no interest, directly or indirectly in the Lekcin Property or any surrounding properties, and have no agreements, arrangements or understandings with the property owner.

Dated this 19th day of March, 2012



Jodi Cross

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APPENDIX I

3D IP GEOPHYSICAL SURVEY REPORT ON BIG NIC AREA:

SJ GEOPHYSICS LTD.

LOGISTICS REPORT PREPARED

FOR

COAST MOUNTAIN GEOLOGICAL LTD.

THREE-DIMENSIONAL INDUCED POLARIZATION SURVEY

ON THE

BIG NIC PROJECT

HARRISON HOT SPRING, BRITISH COLUMBIA, CANADA
LATITUDE: N49° 31' LONGITUDE: W121° 44'
NAD83 UTM ZONE 10
MINING DIVISION: NEW WESTMINSTER
NTS SHEET: 092H05

SURVEY CONDUCTED BY SJ GEOPHYSICS LTD.
OCTOBER 2011

REPORT PREPARED BY
SHANE SMITH
NOVEMBER 2011

TABLE OF CONTENTS

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INDEX OF TABLES

1. SURVEY DETAILS

SJ Geophysics Ltd. was contracted by Coast Mountain Geological Ltd. to acquire geophysical data on their Big Nic project. The following table provides a brief summary of the project. This logistical report summarizes the operational aspects and methodologies of the geophysical survey. This report does not discuss or interpret the survey results.

Client	Coast Mounatin Geological Ltd. (CMG)
Project Name	Big Nic Project
Location	Grid Location: N49° 31' W121° 44'
	UTM NAD 83 Zone 10N: 591100E 5486000N
Survey Type	3D Induced Polarization (3DIP)
Number of Survey Lines	7
Total Line Kilometres	7.45 km
Dates	October 23 – October 28, 2011
Objective	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

2. LOCATION AND ACCESS

The Big Nic project is located in the province of British Columbia, Canada (see Figure 1). The closest town to the survey area is Harrison Hot Springs, which is approximately 30 km southwest of the Big Nic project.

Figure 1: Overview map of the Big Nic Project located in British Columbia, Canada

The project area can be accessed from Harrison Hot Springs by the following directions:

- From Harrison Hot Springs go west on Lillooet Avenue until a four way stop, turn right onto Highway 9 and head south.
- Continue on Highway 9 for about 6.5km and then turn left onto Highway 7, going east.
- Take Highway 7 for about 20km, the last marked road is Ruby Creek Road, after that proceed about 500m on Highway 7 until an unmarked dirt road and turn left.
- This dirt road is Garnet Creek Road, proceed for about 10km until a fork is reached and take a right onto American Creek Road.
- Proceed on American Creek Road for about 8km until you reach the grid (Figure 2).

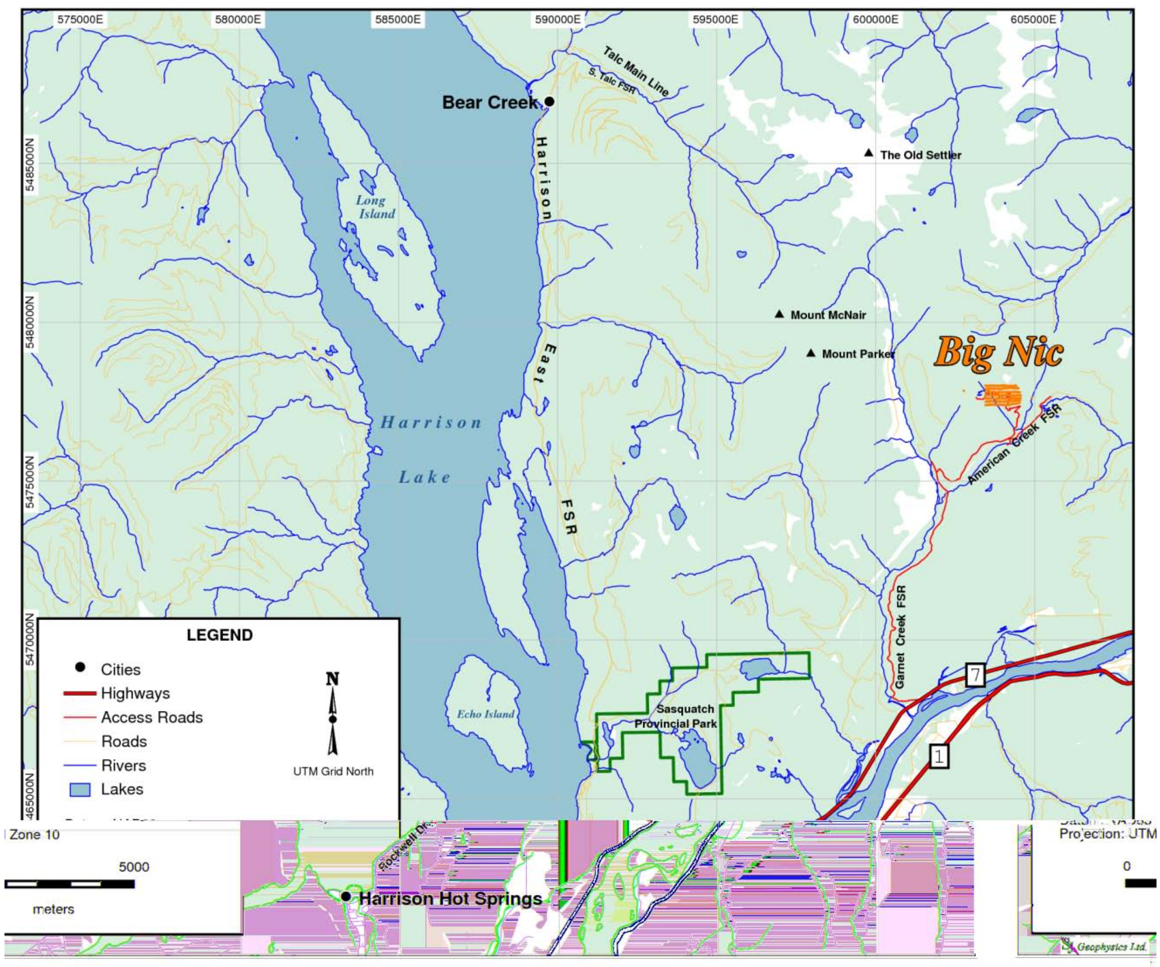


Figure 2: Location map for the Big Nic Project showing towns and road access.

The Big Nic Project is located within British Columbia's mainland coastal forest. These forests are temperate coniferous forests dominated by Western Hemlocks, Western Red Cedars and Fir trees. The area surveyed was dominated by old growth, second growth and recently logged forests. The alpine environments near the grid contained various sedges while the more recently logged slopes were dominated by a very thick shrub layer. Fauna within the area include Black Bears, moose, deer and various other animals.

3. GRID INFORMATION

Grid	Big Nic
Number Of Lines	7 (3DIP)
Survey Line Azimuth	90º
Line Spacing	100 m
Station Spacing	3DIP: 50 m
Elevation range	800 – 1200 m

Table 2: Grid parameters

The Big Nic grid consisted of 7 survey lines, spaced at 100 m with stations flagged and marked every 50 m (Figure 3). Line labels were numbered 1 though to 7, starting with Line 1 in the north going south to Line 7. Station labels for the grid were based on the UTM coordinates, with the station labels being represented by the last four digits in the UTM easting. Grid parameters can be found in Appendix A.

All of the locational information was recorded by the SJ Geophysics crew, including GPS control points and slope/clinometric data. Control points were recorded with a Garmin GPSMap 60CSx and 62S handheld GPS in the UTM projection and NAD83 datum. Slope data was recorded with a Suunto handheld clinometer.

The terrain was steep in sections with large cliffs and outcrops present. For lines 4 to 7, there was an impassible large ravine cross cutting the lines. Consequently, each side of the ravine was surveyed separately. However, these lines had good road access and good contact making the survey quick. Lines 1 to 3 were in a very steep hillside with numerous cliffs and gullies present. There was no road access to these lines so the production was slower than lines 4 to 7. The ground was slippery, with dead fall, muddy sections, and lots of loose soil. The use of caulk boots was necessary. Rain and snow over the course of the survey time creating very slippery

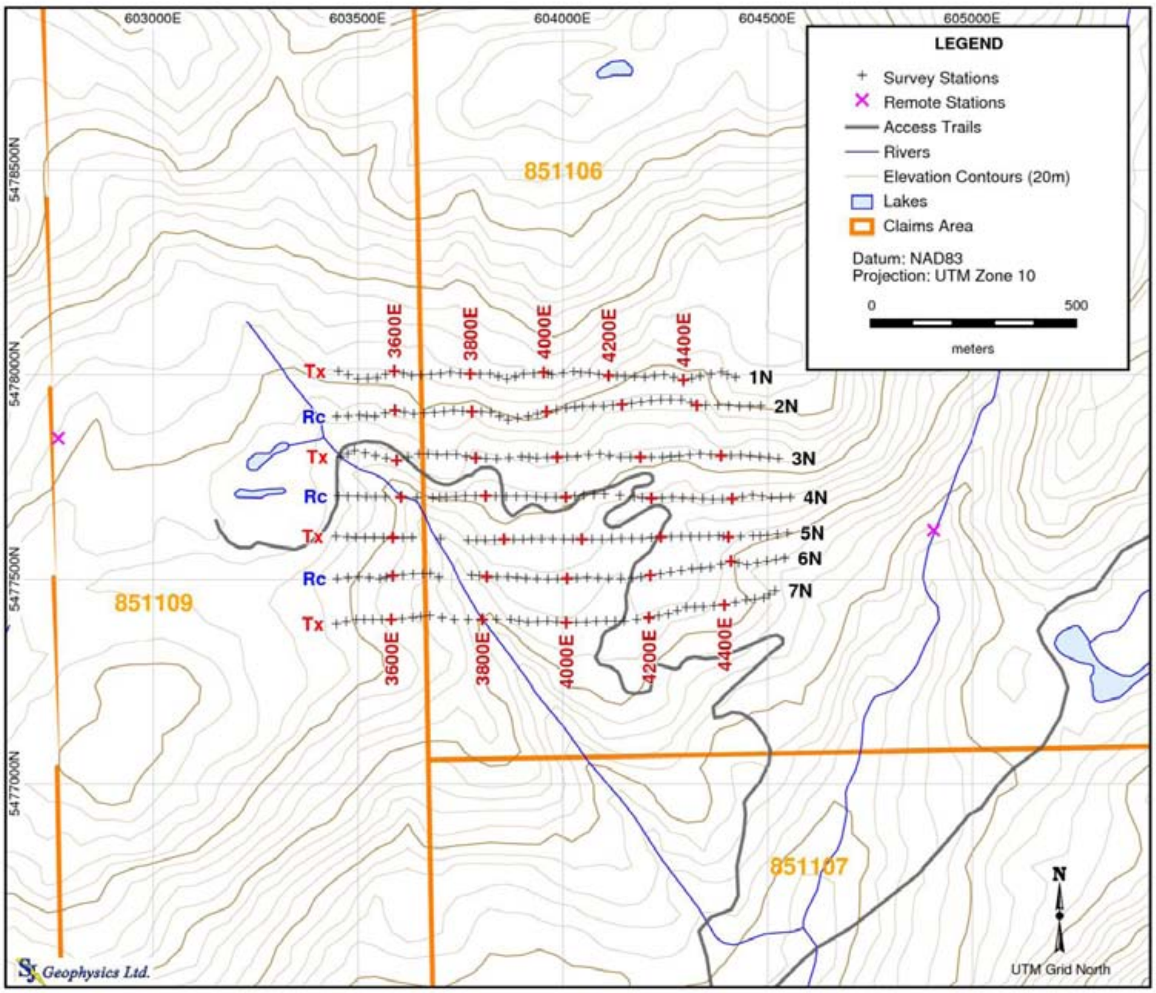


Figure 3: Grid Map showing the survey area for the Big Nic grid.

conditions, especially from the snow. Temperature at the Big Nic project ranged from -5 ºC at night up to 10 ºC during the day. Precipitation was heavy at times, which is typical for this time of year so the conditions were very wet.

4. *FIELD WORK AND INSTRUMENTATION*

4.1. *Field Logistics*

The SJ Geophysics field crew consisted between five and six employees while on the Big Nic project. A summary of the geophysical personnel and the dates they were working on the project site. While on the grid, the field geophysicists and technicians would oversee all operational aspects including field logistics, data acquisition and initial field data quality control while the helpers would be available to assist with day-to-day field operations.

Crew Member Name	***Role***	***Dates on Site***	***Demobilization Date***
Jordan Perk	Field Geophysicist	Oct 23 - Oct 26	Oct 26
Mat Kootchin	Field Geophysicist	Oct 26 - Oct 28	Oct 28
Shane Smith	Field Geophysicist	Oct 23 - Oct 28	Oct 28
Kieran Kootchin	Field Technician	Oct 23 - Oct 28	Oct 28
Morgan Bezeminder	Field Technician	Oct 23 - Oct 28	Oct 28
Julian Samson	Helper	Oct 23 -Oct 28	Oct 28

Table 3: Details of the SJ Geophysics crew mobilization and demobilization date

The SJ crew arrived on the grid on the October 23 and the survey commenced.

Technical problems occurred during the survey. A medium sized Black Bear and her two cubs where encountered several times on the grid. The crew took extreme caution with the bears and halted the survey when they were spotted. No incidents occurred, thanks in part to extreme caution and bear training around these bears. The crew also had a bad digitizer interface box resulting in the loss of 4 dipoles. This was fixed with minor delays.

Production was completed on October 28th and the crew was able to pick up all of the wire and remotes. The crew did not demobilize as other surveys where to be done in the area.

The SJ Geophysics crew was accommodated by the client at the Bungalow Motel in Harrison Hot Springs, BC. The accommodations consisted of small, one or two bedroom cabins with washrooms and internet. One cabin contained a central kitchen area and fireplace that were used by all crew members for preparing meals and drying clothing and footwear. Cell phone coverage was reliable in town using the Bell or Telus networks, but was spotty using the Rogers Network. There was no cellular reception on the grid.

4.2. Survey Parameters and Instrumentation

The geophysical instrumentation used to acquire the 3DIP data consisted of a SJ-24 full waveform receiver and a GDD Tx II transmitter. The specifications of these instruments are listed in Appendix B and the equipment parameters are summarized in Table 4.

The IP array was connected using special 8-conductor cables with 50 m takeouts for the receiver electrodes. For the potential 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 long (75 cm) stainless steel electrodes hammered into the ground. The remote current locations (Table 5) consisted of four 1 m stainless steel rods, 15 mm in diameter.

Array Type	3DIP – Offset Pole-Dipole
Number of Dipoles	16 to 22
Dipole Length	50 m, 100 m
Array Length	800 m – 1100 m
Current Interval	50 m
IP Transmitter	GDD TxII (Serial #247)

Array Type	3DIP – Offset Pole-Dipole
Duty Cycle	50%
Waveform	Square
Cycle and Period	2 sec on / 2 sec off; 8 second
IP Receiver	SJ-24 Full Waveform Digital Receiver
Reading Length	Minimum 60 seconds
Vp Delay, Vp Integration	1200 ms, 600 ms
Mx Delay, # of Windows	200 ms, 20
Width (Mx Intergration)	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
GPS	Garmin GPSmap 60CSx/62S
Average Accuracy	5 -10 m
Datum / Projection	NAD83 UTM Zone 10

Table 4: Instrument parameters

Type	Label	Location
East Remote 1	5N 4850E	604905E 5477620N
West Remote 1	5N 2950E	602768E 5477845N

Table 5: Location of 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 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 typically separated by half the line spacing, which is same as the current injection spacing. These spacing 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 and data density 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. Given the dense forest canopy covering the survey area, it was challenging to record a reliable GPS signal. Consequently, many GPS control points were replaced in favour of interpolated distances calculated from distance, slope and azimuth information. All GPS elevations typically have lower accuracy in the vertical direction and were replaced by elevations extracted from a DEM.

6.2. IP Data

The IP geophysical data go through a series of quality assurance processes. Prior to acquisition, it is SJ Geophysics' best practice to acquire a noise reading to determine the background noise levels and to detect possible bad channels (i.e. poor ground contacts). This allows the operator to troubleshoot problem areas in the array prior to acquisition, then once the operator is satisfied surveying can begin. Immediately after each full waveform reading is completed the data are analyzed in the field to provide the operator a set of Vp's, Sp's and a chart of the decay curves for each dipole in the array. This gives the operator valuable information to verify the quality of data in real time. Also available to the operator are visualization tools for full waveform signals and a spectral analysis program to assist in troubleshooting possible bad stations and unwanted noise.

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 Big Nic project was of mostly good quality. The contact was good with the exception of a couple cliff sections. The voltage potentials (Vp), for the most part, were strong and the signals and resulting decay curves were mostly clean. On the Big Nic project most of the data flagged for removal was due to non-coupling. This phenomenon 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. For the most part the data collected from the Big Nic project was very clean as in Figure 4. Decay curves where occasionally noisy due to a weaker signal from low currents as illustrated in Figure 5.

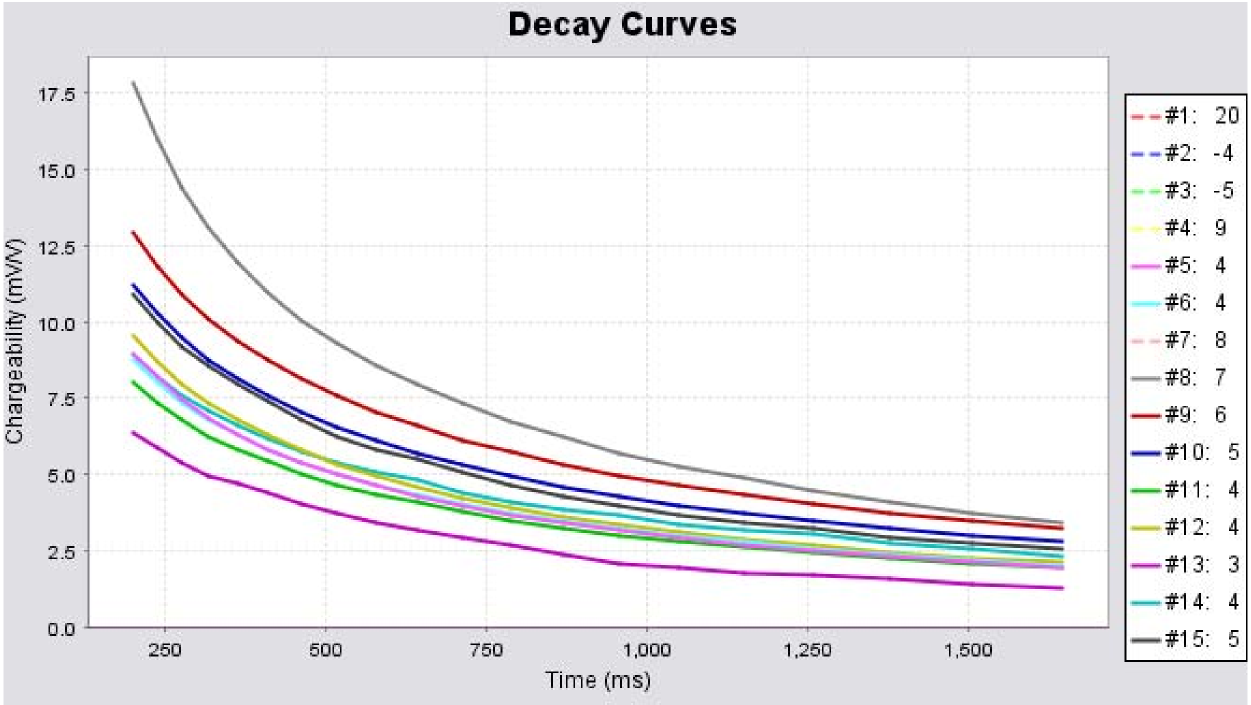


Figure 4: Decay curves from L1 injection station 4250E.

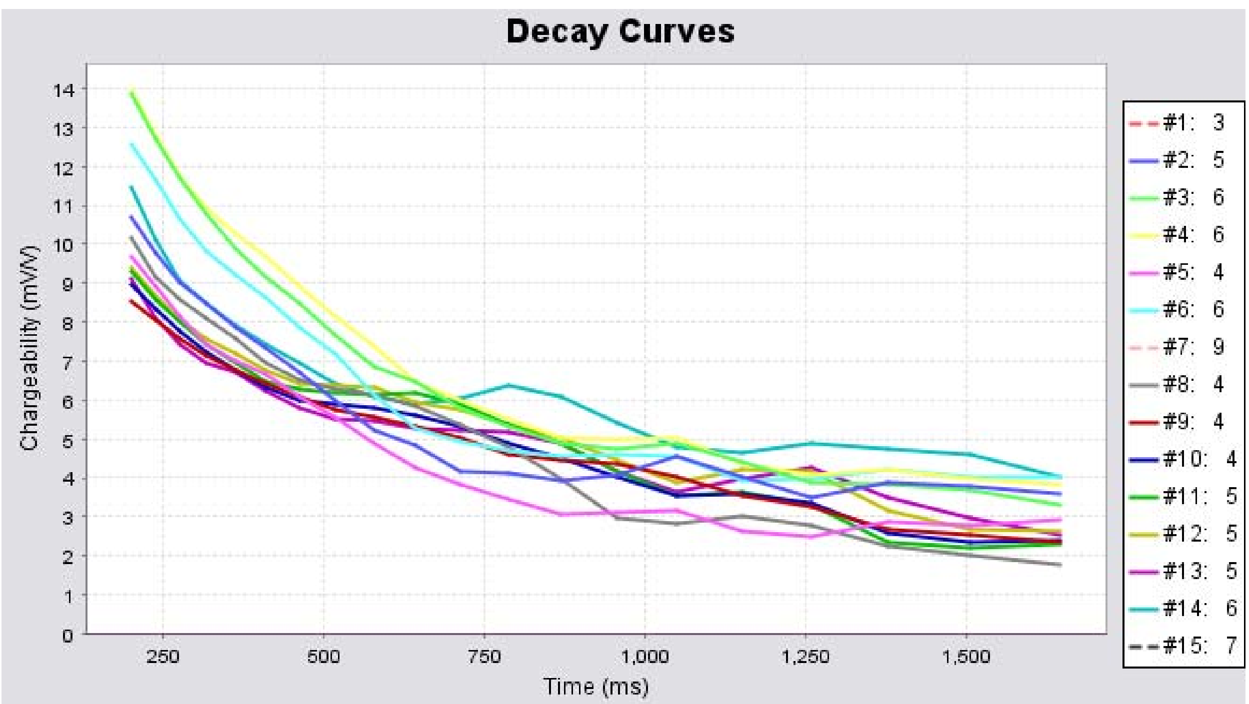


Figure 5: Decay curves from L5 injection station 4200E.

7. GEOPHYSICAL INVERSION

The purpose of geophysical inversion is to estimate the distribution of rock physical properties in the subsurface based on the geophysical data collected at the surface. Examples of rock 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 can then be overlain to aid in interpretation and facilitate discussion of potential drilling targets.

Respectfully submitted,

by Shane Smith
SJ Geophysics Ltd.

APPENDIX A: SURVEY SUMMARY TABLE

Big Nic Grid

Line	***Series***	***Type***	***Start Station***	***Ravine Section Skipped***	***End Station***	***Survey Length (m)***
1	N	Tx	3450	-	4550	1100
2	N	Rc	3450	-	4550	1100
3	N	Tx	3450	-	4550	1100
4	N	Rc	3450	3575-3650	4550	1025
5	N	Tx	3450	3650-3700	4550	1050
6	N	Rc	3450	3725-3750	4550	1075
7	N	Tx	3450	3750-3850	4550	1000

Total Linear Metres = 7450m

APPENDIX B: INSTRUMENT SPECIFICATIONS

SJ-24 Full Waveform Digital IP Receiver

Technical:

Input impedance:	10Ω
Input overvoltage protection:	up to 1000V
External memory:	Unlimited readings
Number of dipoles:	4 to 16 +, expandable
Synchronization:	Software signal post-processing user selectable
Common mode rejection:	More than 100 dB (for Rs=0)
Self potential (Sp):	Range: -5V to +5V Resolution: 0.1mV Proprietary intelligent stacking process rejecting strong non-linear SP drifts
Primary voltage:	Range: 1μV – 10V (24bit) Resolution: 1μV Accuracy: typ. <1.0%
Chargeability:	Resolution: 1μV/V Accuracy: typ. <1.0%

General (4 dipole unit):

Dimensions:	18 x 16 x 9 cm
Weight:	1.1kg
Battery:	12V external
Operating temperature range:	-20 °C to 40 °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 °C to +65 °C
Display:	Digital LCD read to 0.001 A
Dimensions:	34 x 21 x 39 cm
Weight:	20 kg

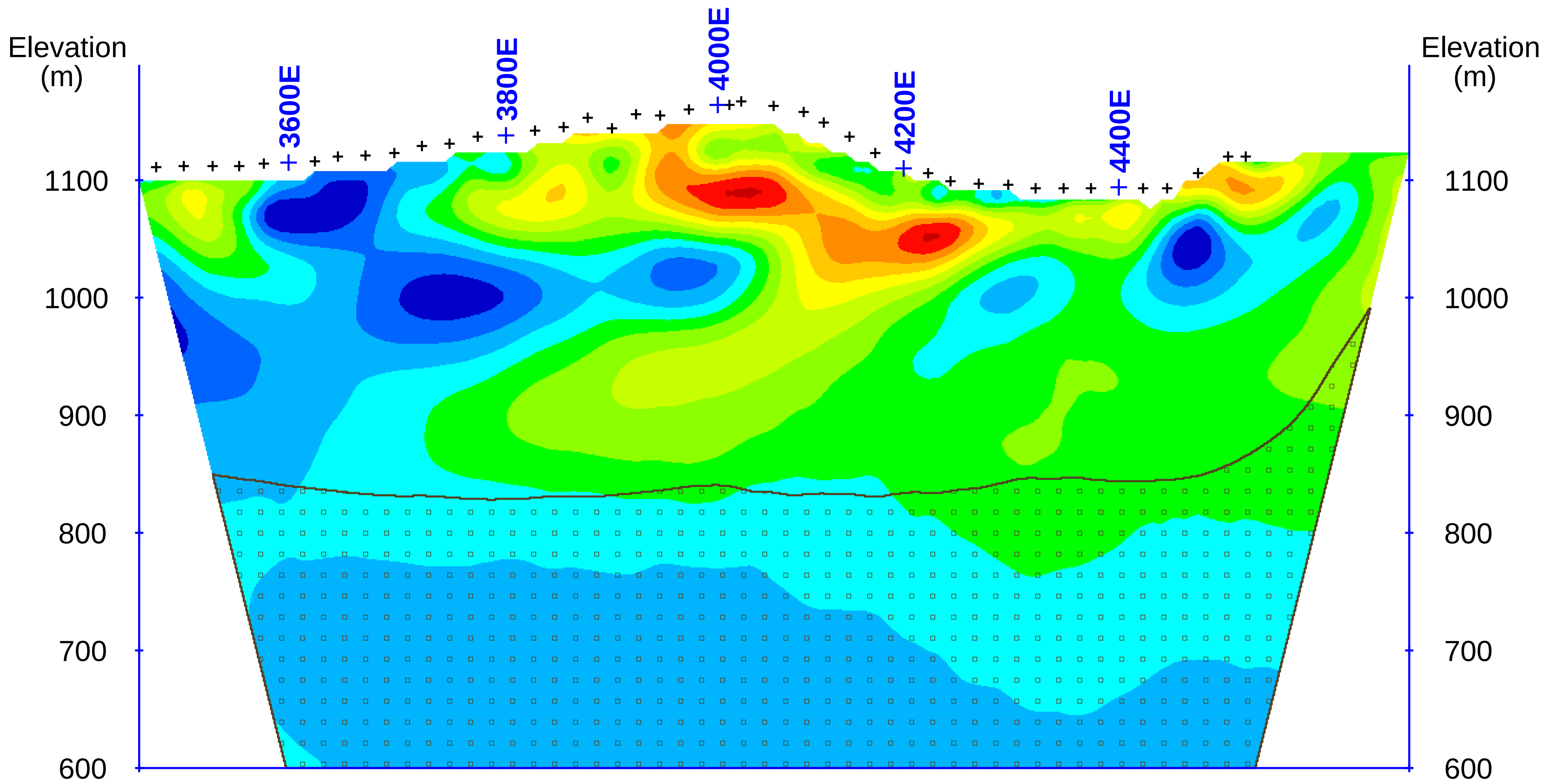
APPENDIX II

BIG NIC CROSS-SECTIONS, CHARGEABILITY AND RESISTIVITY PLAN MAPS

ohm−m

- > 10000
- 7470 − 10000
- 5540 − 7470
- 4100 − 5540
- 3040 − 4100
- 2250 − 3040
- 1670 − 2250
- 1240 − 1670
- 920 − 1240
- 680 − 920
- 500 − 680
- < 500

+ Survey Stations
Area of Low Model Confidence

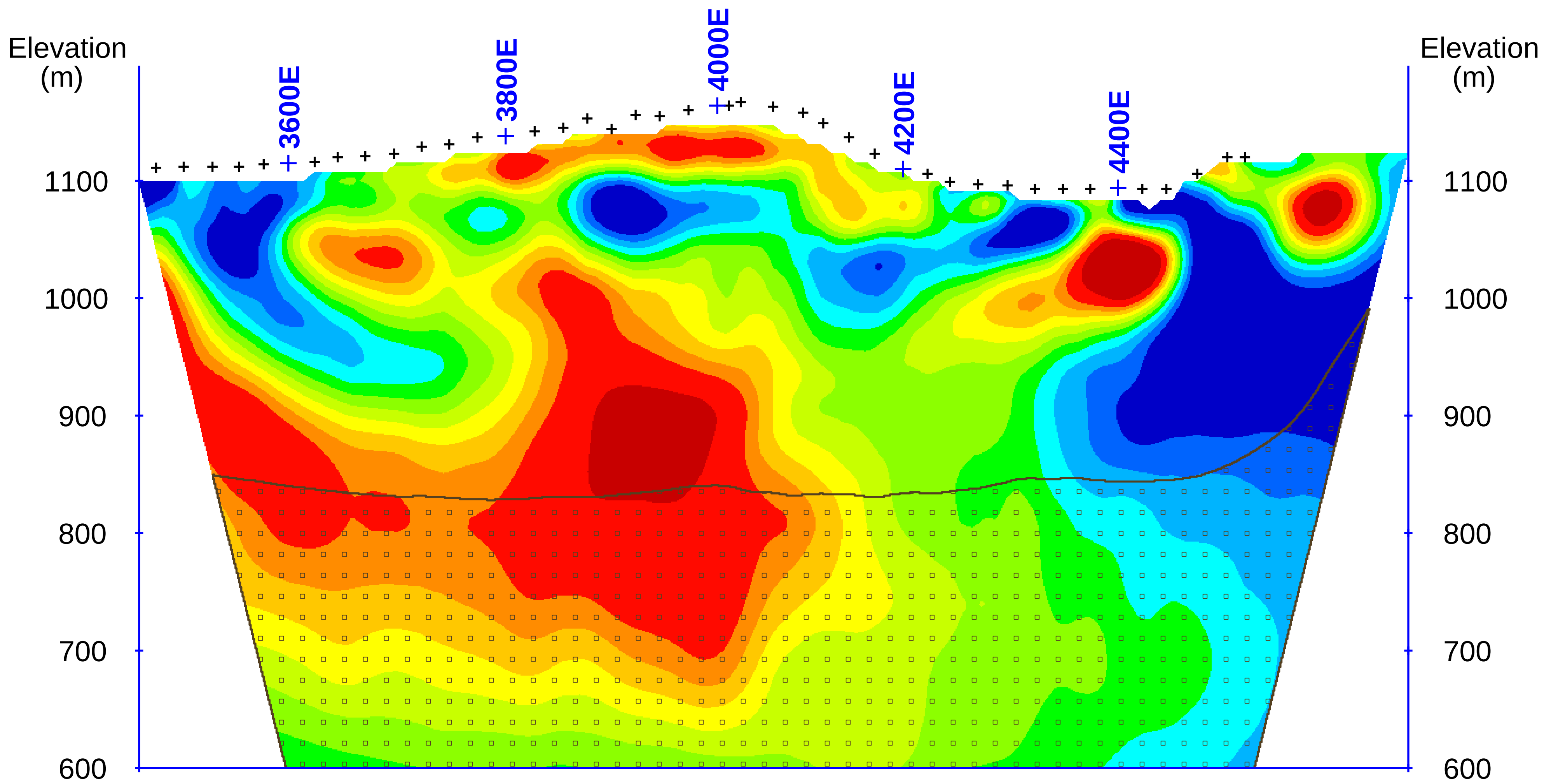


Interpreted Resistivity (ohm−m)

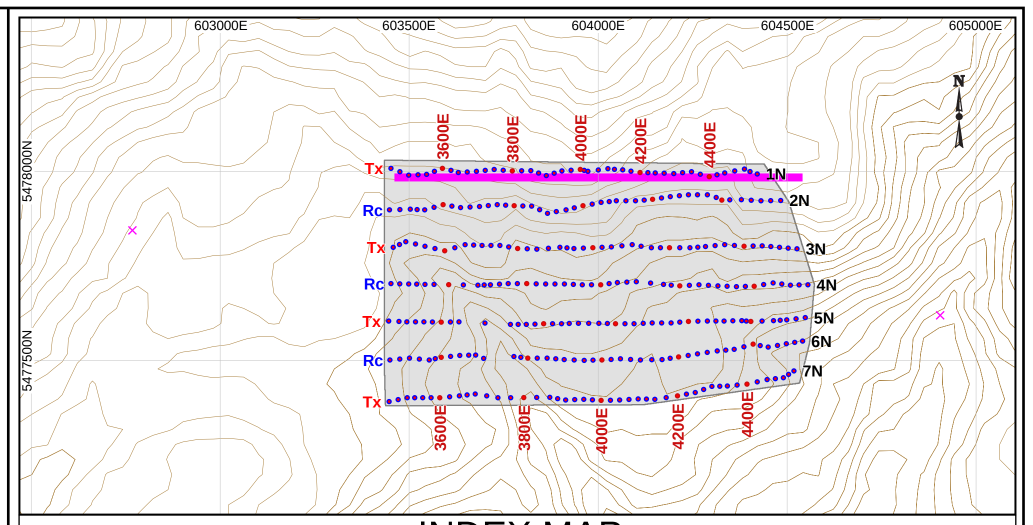
ms

- > 13
- 11 − 13
- 10 − 11
- 9 − 10
- 8 − 9
- 7 − 8
- 6 − 7
- 5 − 6
- 4 − 5
- 3 − 4
- 2 − 3
- < 2

+ Survey Stations
Area of Low Model Confidence



Interpreted Chargeability (ms)

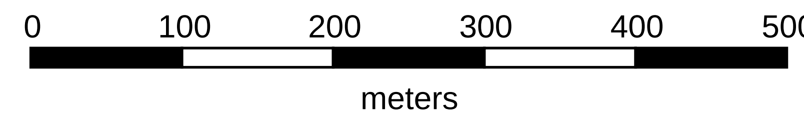


INDEX MAP

Project Information:
Survey by: SJ Geophysics Ltd.
3D Inversion by: S.J.V. Consultants Ltd.
Survey Date: October 2011

Instrumentation:
Receiver: SJ−24 Full−Waveform Digital IP Receiver
Transmitter: GDD TX II
Array Type: 3D

Mapping Information:
Datum: NAD83
Projection: UTM Zone 10
Mapping Date: 13−Dec−2011



Coast Mountain Geological Ltd.

Big Nic Project

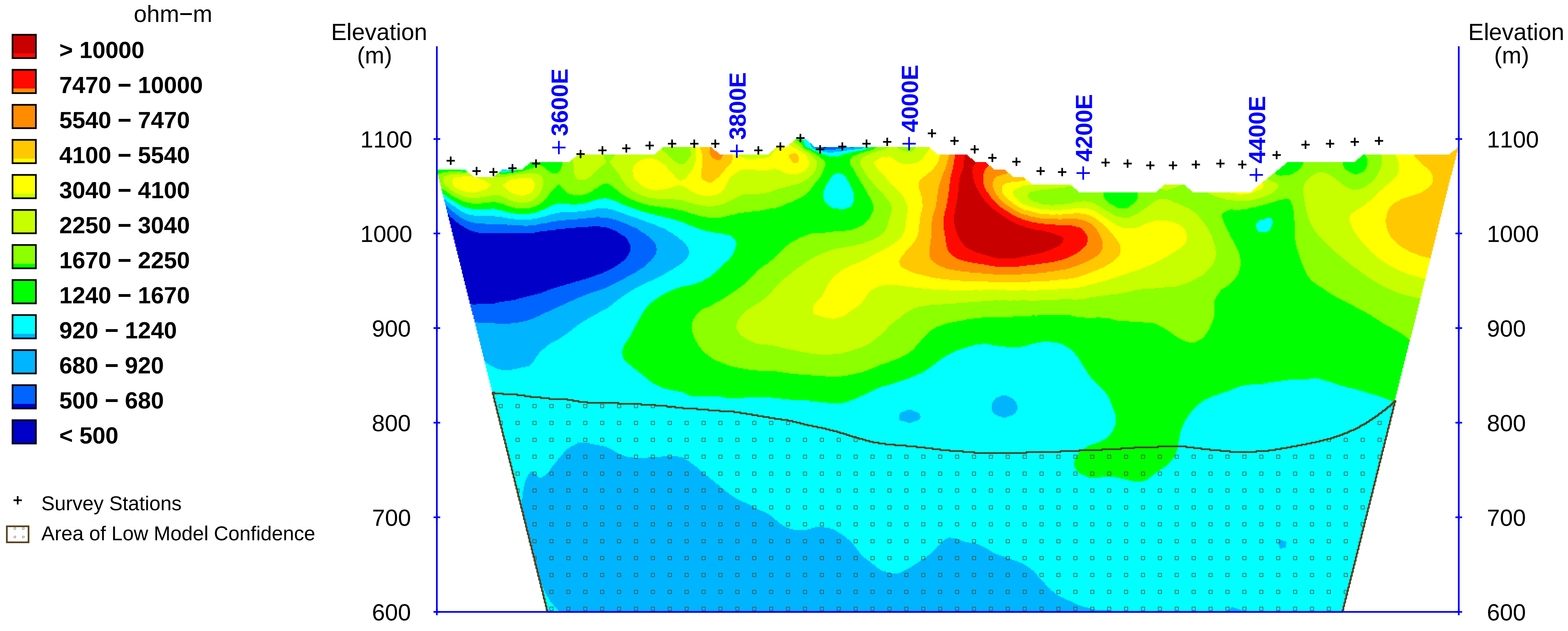
Harrison Hot Springs, B.C.

3D Inversion Model
of
Interpreted
Resistivity & Chargeability

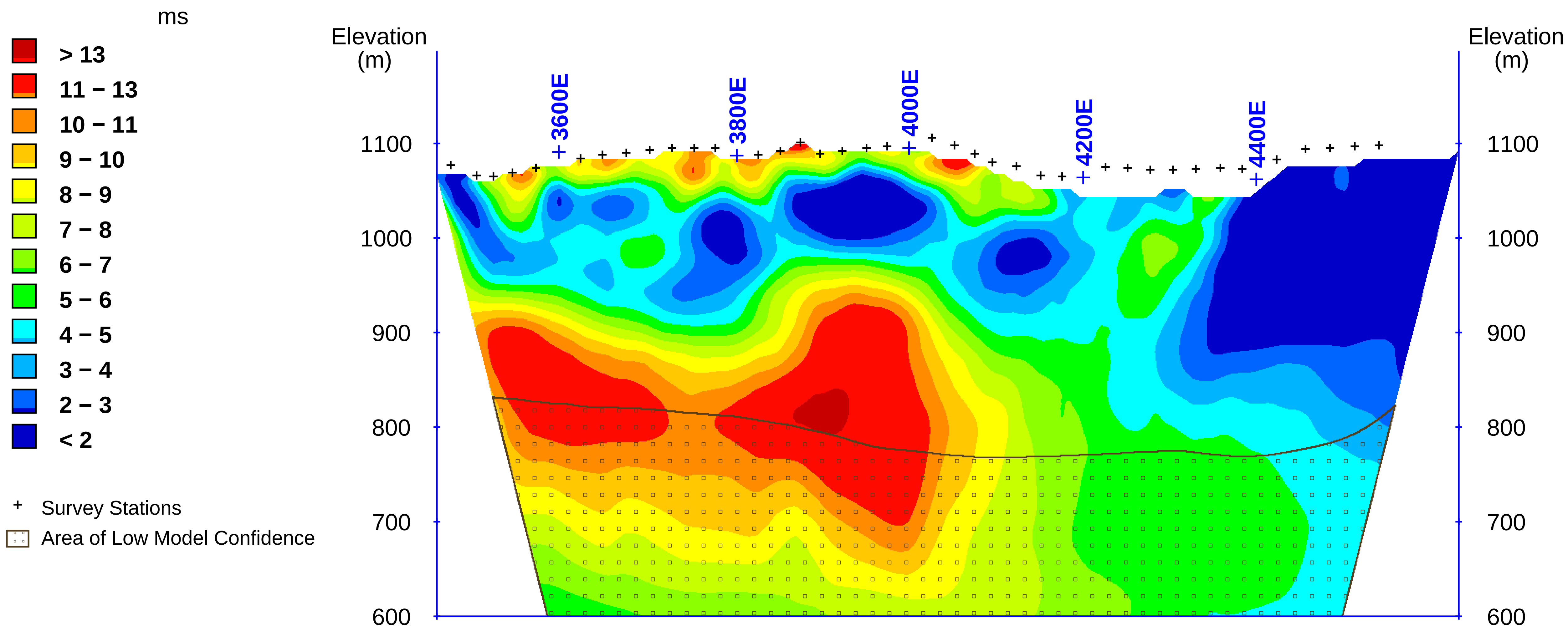
Cross Section Map

Section: 1N

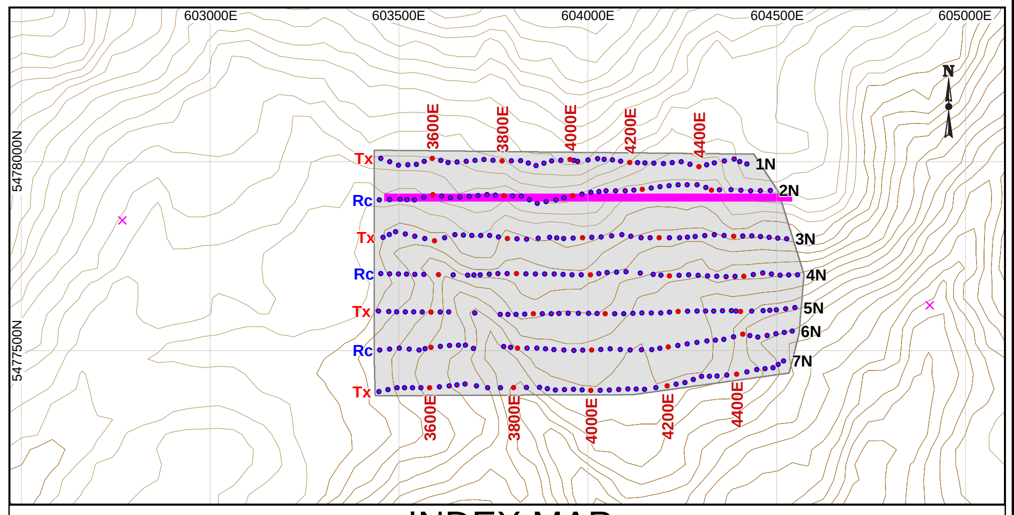
SJ Geophysics Ltd.



Interpreted Resistivity (ohm−m)



Interpreted Chargeability (ms)

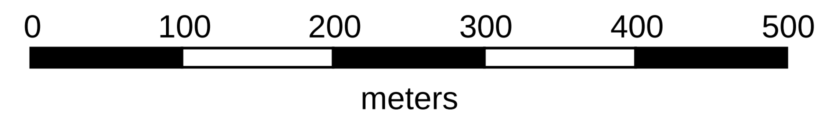


INDEX MAP

Project Information:
Survey by: SJ Geophysics Ltd.
3D Inversion by: S.J.V. Consultants Ltd.
Survey Date: October 2011

Instrumentation:
Receiver: SJ−24 Full−Waveform Digital IP Receiver
Transmitter: GDD TX II
Array Type: 3D

Mapping Information:
Datum: NAD83
Projection: UTM Zone 10
Mapping Date: 13−Dec−2011



Coast Mountain Geological Ltd.

Big Nic Project

Harrison Hot Springs, B.C.

3D Inversion Model of Interpreted Resistivity & Chargeability

Cross Section Map

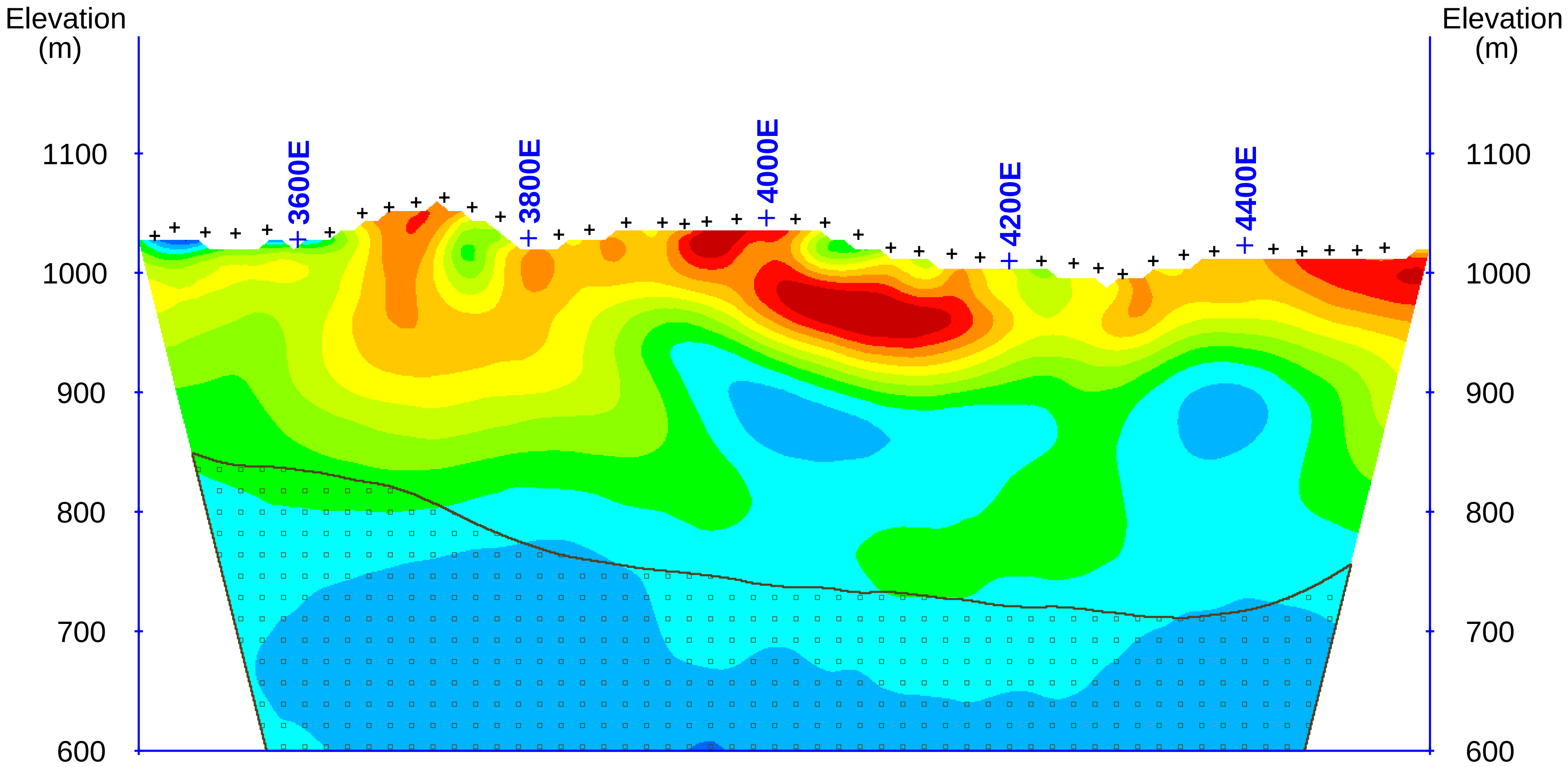
Section: 2N

SJ Geophysics Ltd.

ohm−m

- > 10000
- 7470 − 10000
- 5540 − 7470
- 4100 − 5540
- 3040 − 4100
- 2250 − 3040
- 1670 − 2250
- 1240 − 1670
- 920 − 1240
- 680 − 920
- 500 − 680
- < 500

+ Survey Stations
Area of Low Model Confidence

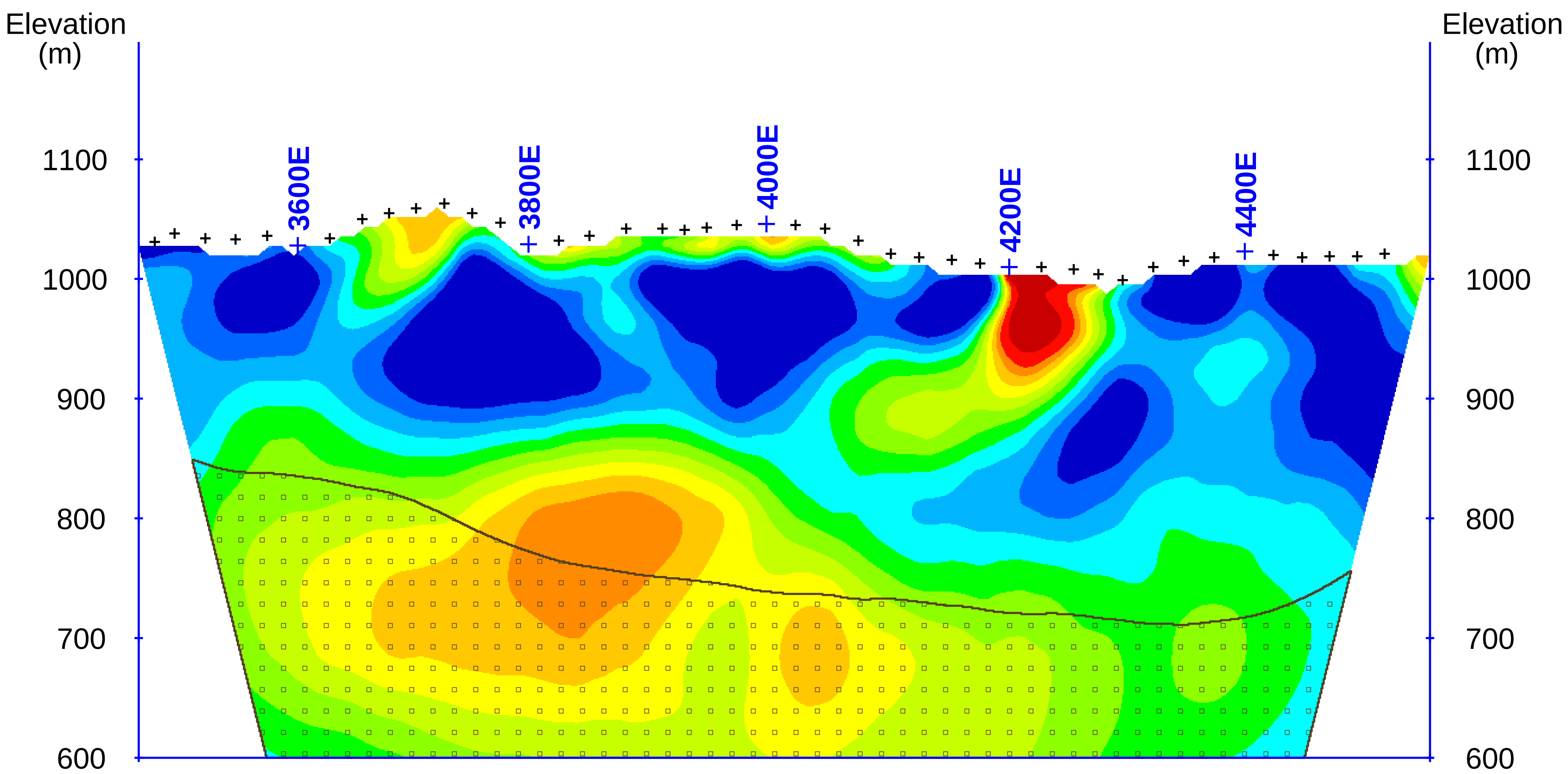


Interpreted Resistivity (ohm−m)

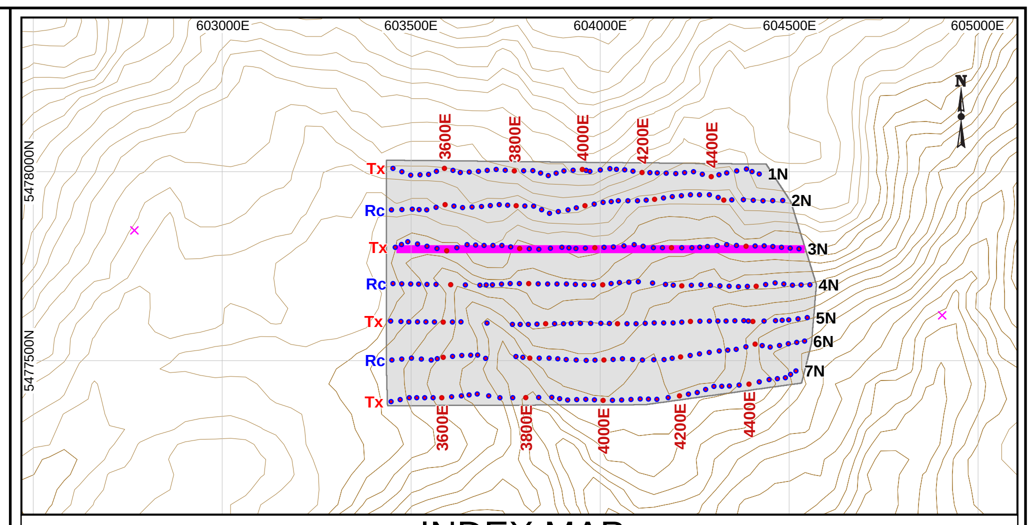
ms

- > 13
- 11 − 13
- 10 − 11
- 9 − 10
- 8 − 9
- 7 − 8
- 6 − 7
- 5 − 6
- 4 − 5
- 3 − 4
- 2 − 3
- < 2

+ Survey Stations
Area of Low Model Confidence



Interpreted Chargeability (ms)



INDEX MAP

Project Information:
Survey by: SJ Geophysics Ltd.
3D Inversion by: S.J.V. Consultants Ltd.
Survey Date: October 2011

Instrumentation:
Receiver: SJ−24 Full−Waveform Digital IP Receiver
Transmitter: GDD TX II
Array Type: 3D

Mapping Information:
Datum: NAD83
Projection: UTM Zone 10
Mapping Date: 13−Dec−2011

0 100 200 300 400 500
meters

Coast Mountain Geological Ltd.

Big Nic Project

Harrison Hot Springs, B.C.

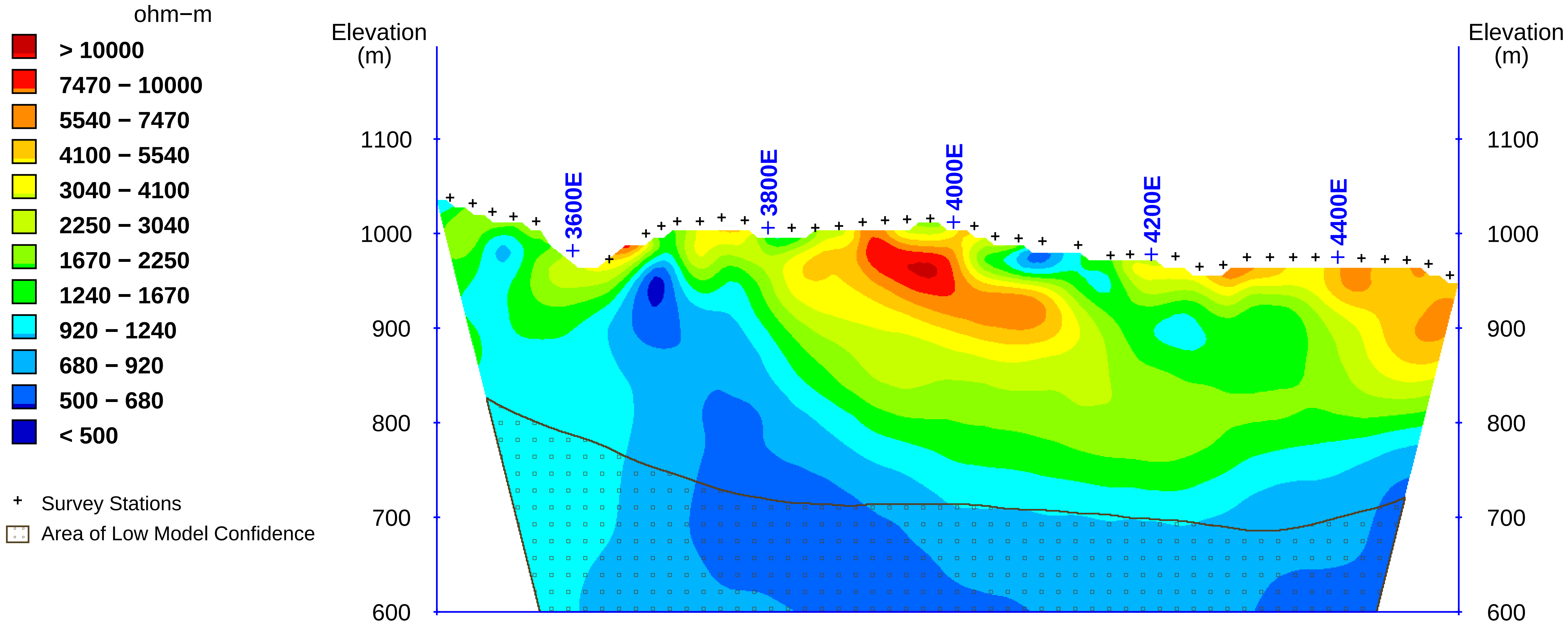
3D Inversion Model
of
Interpreted
Resistivity & Chargeability

Cross Section Map

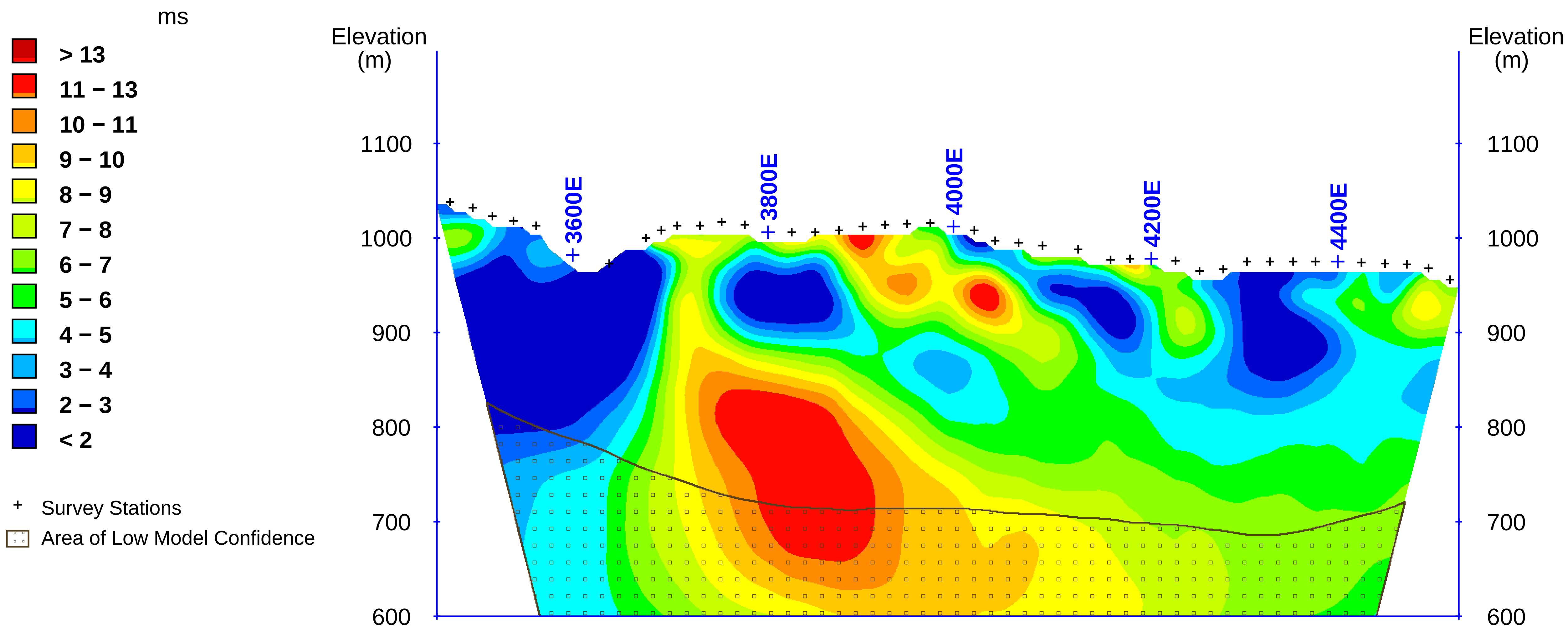
Section: 3N

SJ Geophysics Ltd.

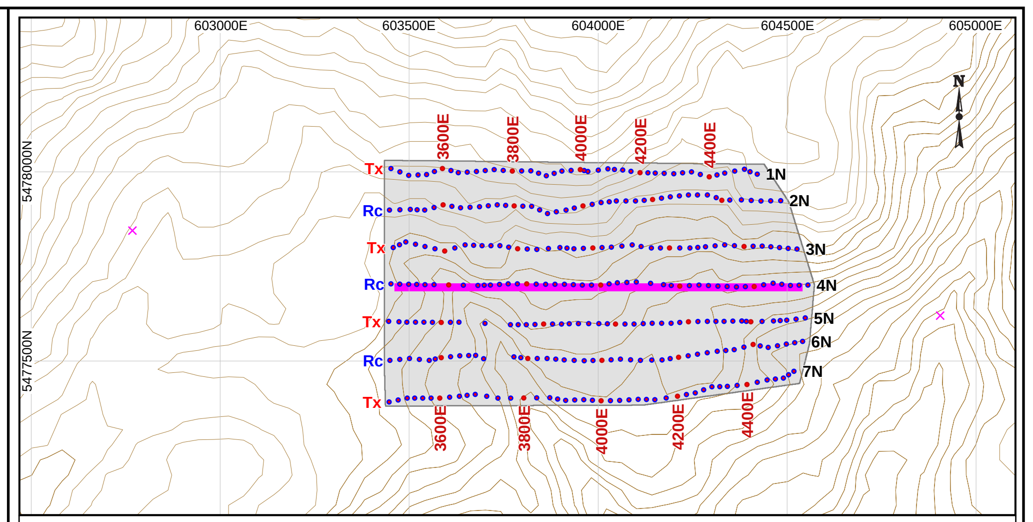
Mapping By : S.J.V. Consultants Ltd. 11966−95A Avenue, Delta, British Columbia, Canada V4C 3W2 (604) 582−1100 www.sjgeophysics.com



Interpreted Resistivity (ohm−m)



Interpreted Chargeability (ms)

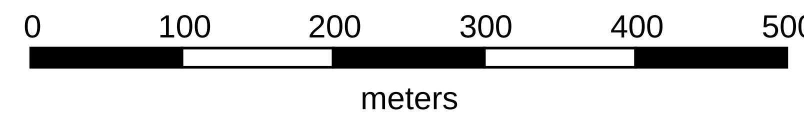


INDEX MAP

Project Information:
Survey by: SJ Geophysics Ltd.
3D Inversion by: S.J.V. Consultants Ltd.
Survey Date: October 2011

Instrumentation:
Receiver: SJ−24 Full−Waveform Digital IP Receiver
Transmitter: GDD TX II
Array Type: 3D

Mapping Information:
Datum: NAD83
Projection: UTM Zone 10
Mapping Date: 13−Dec−2011



Coast Mountain Geological Ltd.

Big Nic Project

Harrison Hot Springs, B.C.

3D Inversion Model

of

Interpreted

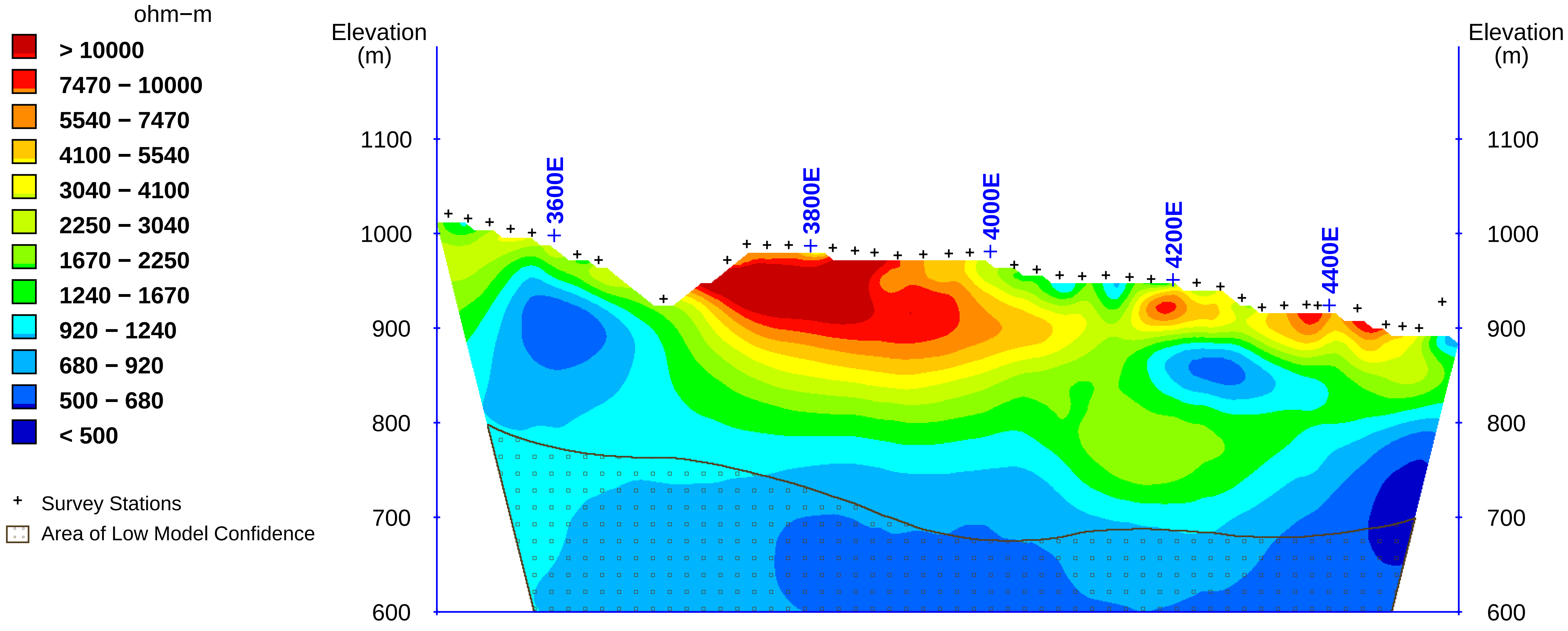
Resistivity & Chargeability

Cross Section Map

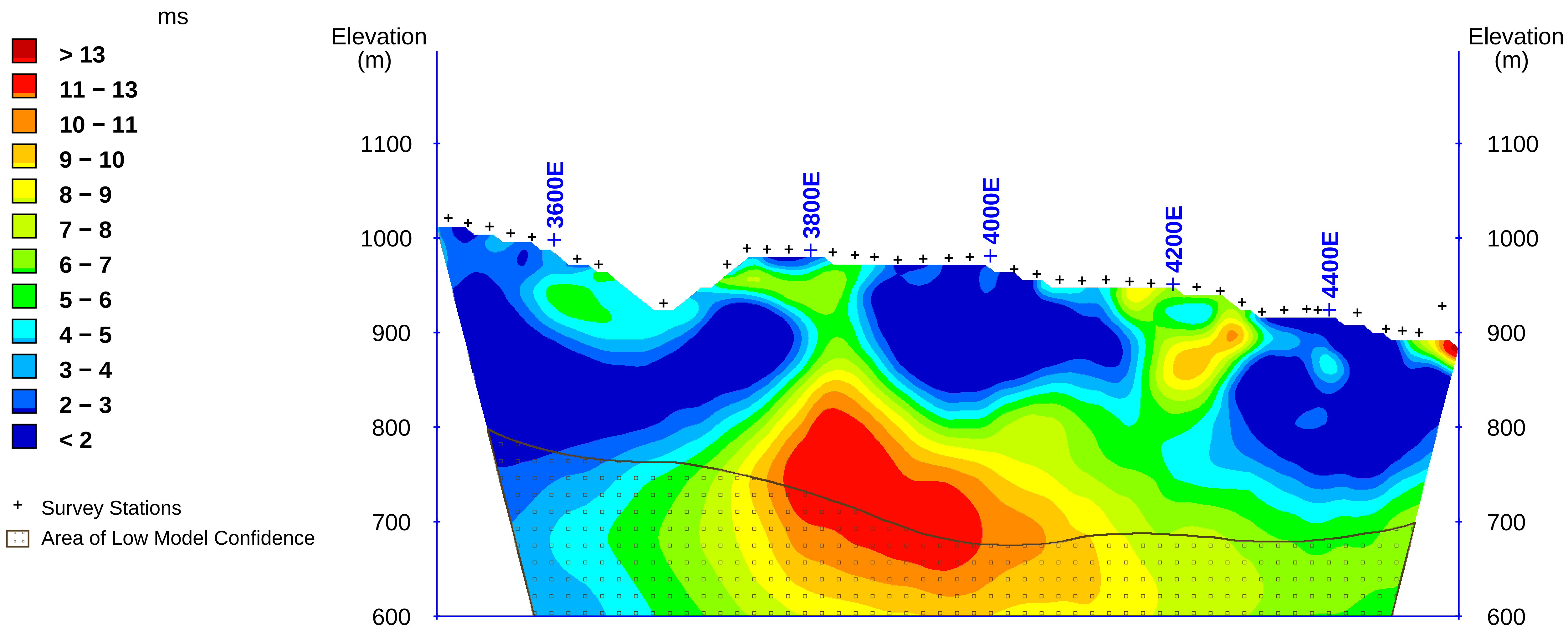
Section: 4N

SJ Geophysics Ltd.

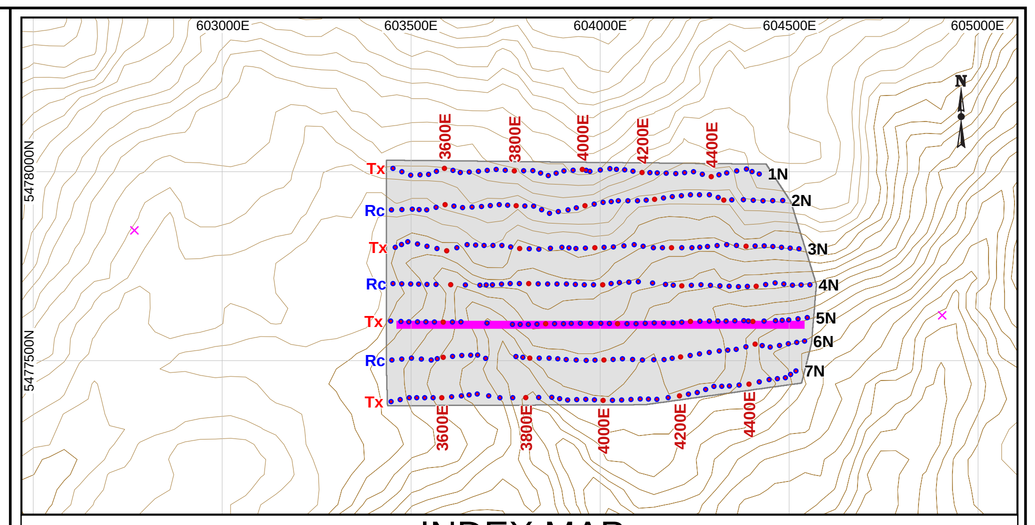
Mapping By : S.J.V. Consultants Ltd. 11966−95A Avenue, Delta, British Columbia, Canada V4C 3W2 (604) 582−1100 www.sjgeophysics.com



Interpreted Resistivity (ohm−m)



Interpreted Chargeability (ms)



INDEX MAP

Project Information:
Survey by: SJ Geophysics Ltd.
3D Inversion by: S.J.V. Consultants Ltd.
Survey Date: October 2011

Instrumentation:
Receiver: SJ−24 Full−Waveform Digital IP Receiver
Transmitter: GDD TX II
Array Type: 3D

Mapping Information:
Datum: NAD83
Projection: UTM Zone 10
Mapping Date: 13−Dec−2011

0 100 200 300 400 500
meters

Coast Mountain Geological Ltd.

Big Nic Project

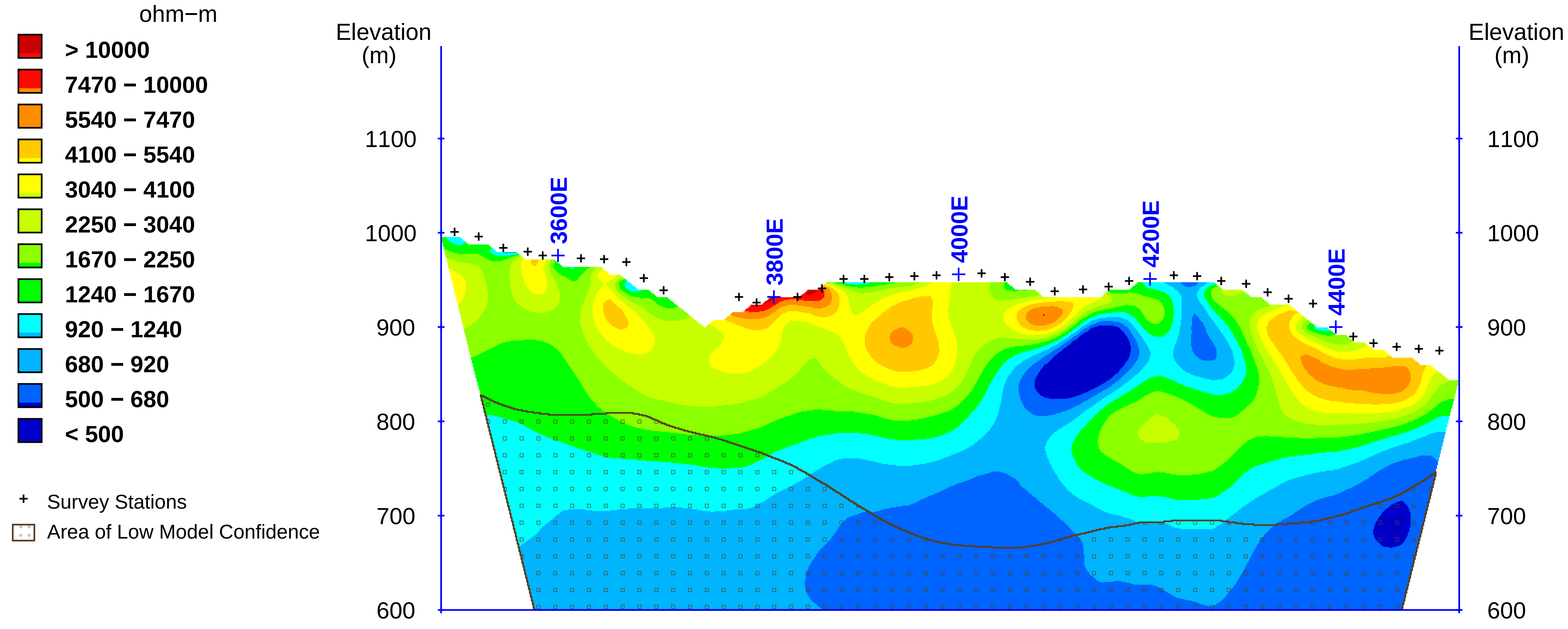
Harrison Hot Springs, B.C.

3D Inversion Model
of
Interpreted
Resistivity & Chargeability

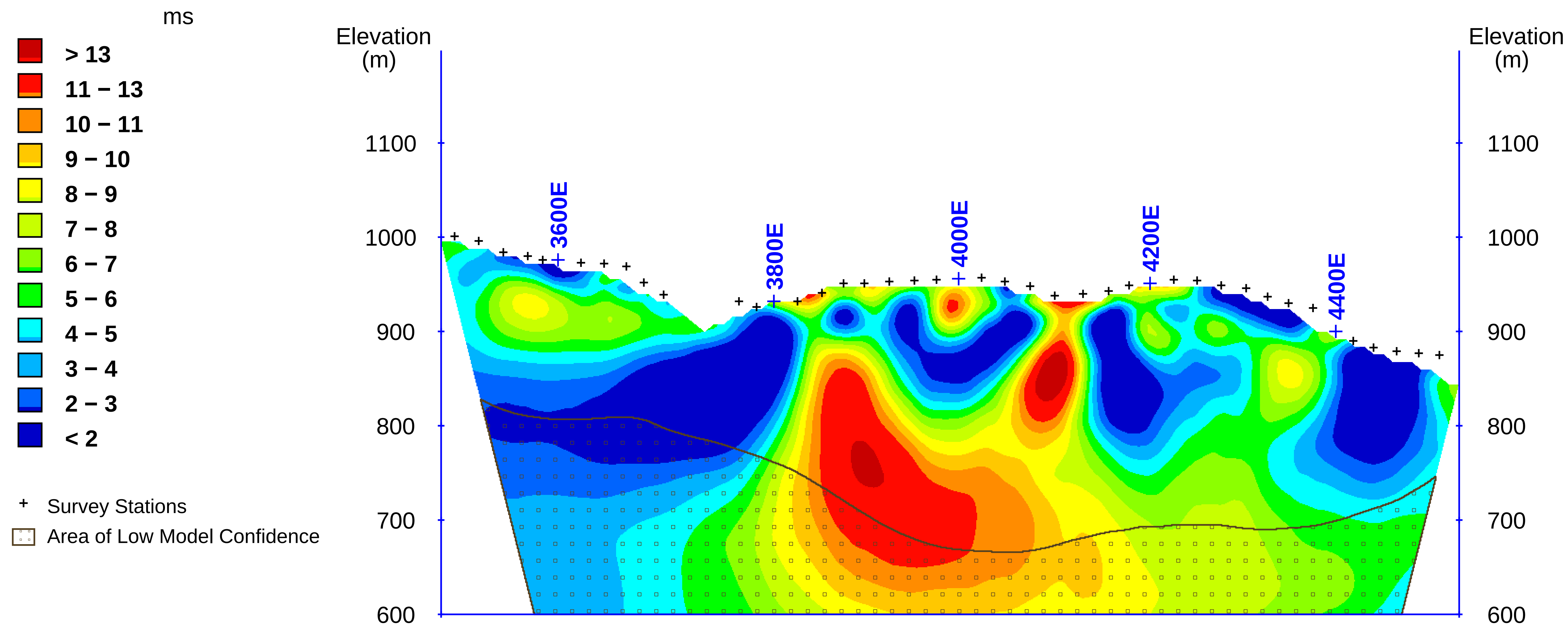
Cross Section Map

Section: 5N

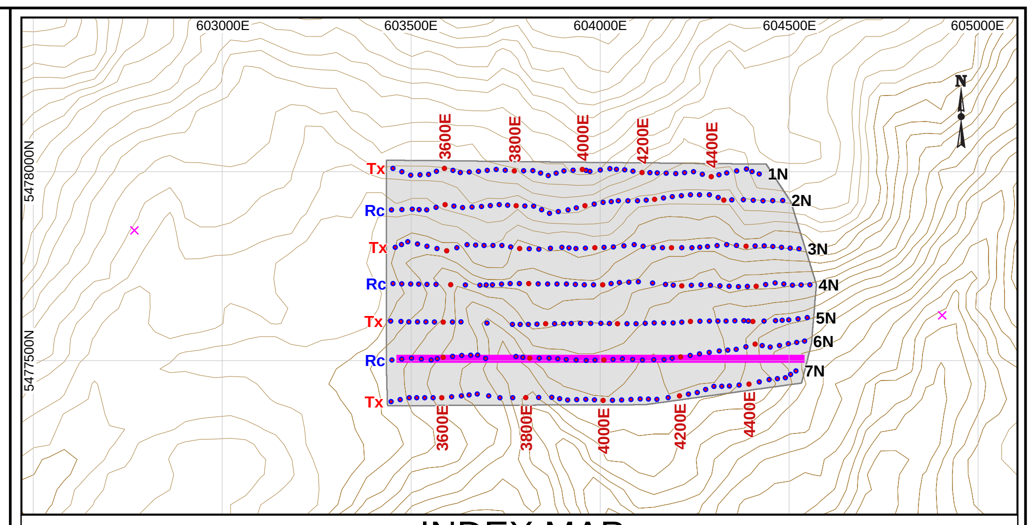
SJ Geophysics Ltd.



Interpreted Resistivity (ohm−m)



Interpreted Chargeability (ms)

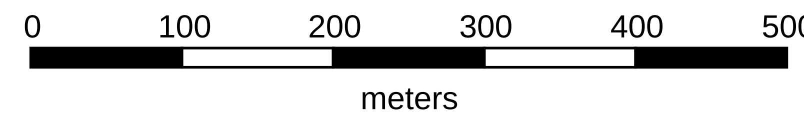


INDEX MAP

Project Information:
Survey by: SJ Geophysics Ltd.
3D Inversion by: S.J.V. Consultants Ltd.
Survey Date: October 2011

Instrumentation:
Receiver: SJ−24 Full−Waveform Digital IP Receiver
Transmitter: GDD TX II
Array Type: 3D

Mapping Information:
Datum: NAD83
Projection: UTM Zone 10
Mapping Date: 13−Dec−2011



Coast Mountain Geological Ltd.

Big Nic Project

Harrison Hot Springs, B.C.

3D Inversion Model
of
Interpreted
Resistivity & Chargeability

Cross Section Map

Section: 6N

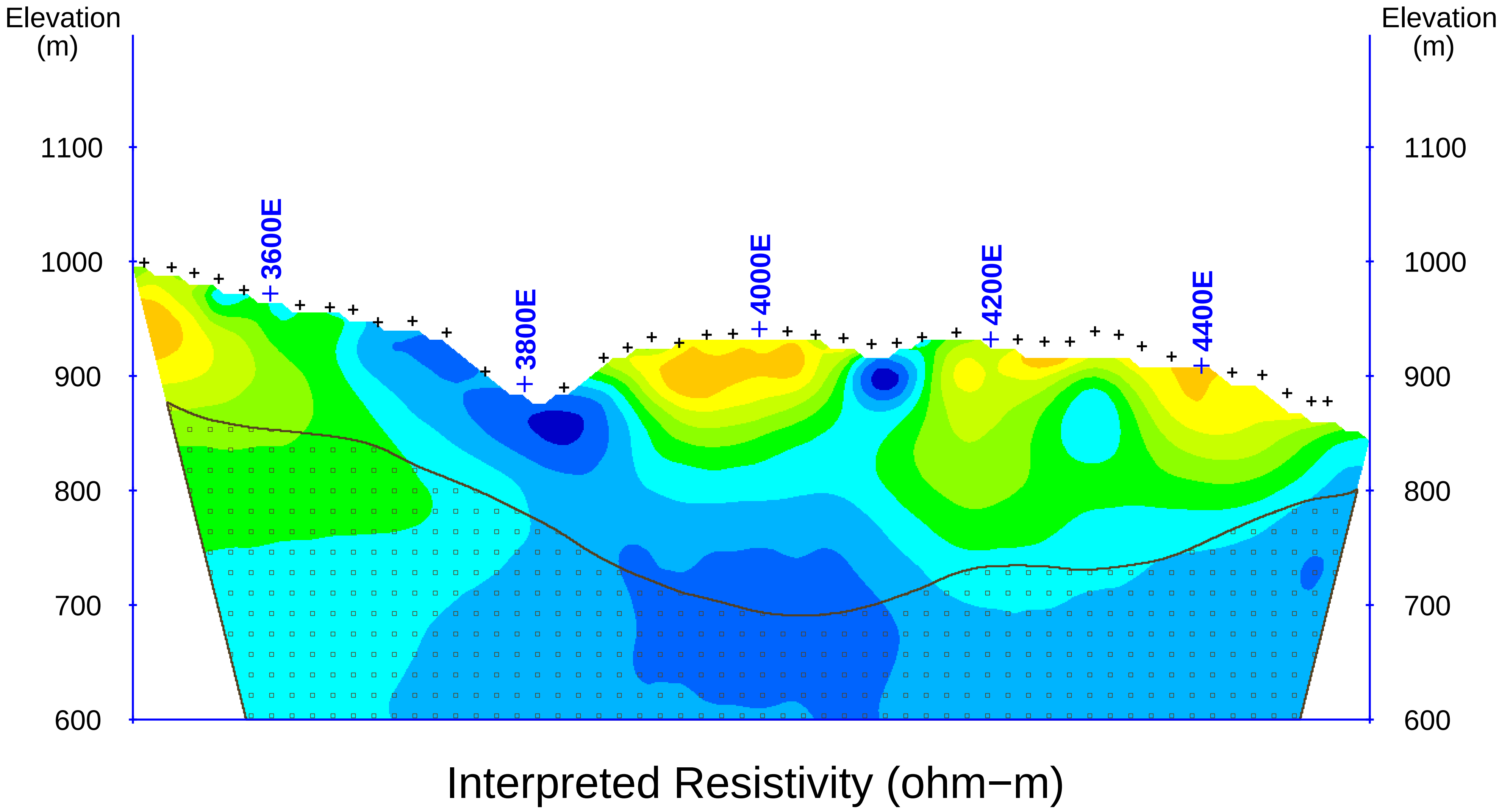
SJ Geophysics Ltd.

ohm−m

- > 10000
- 7470 − 10000
- 5540 − 7470
- 4100 − 5540
- 3040 − 4100
- 2250 − 3040
- 1670 − 2250
- 1240 − 1670
- 920 − 1240
- 680 − 920
- 500 − 680
- < 500

+ Survey Stations

Area of Low Model Confidence



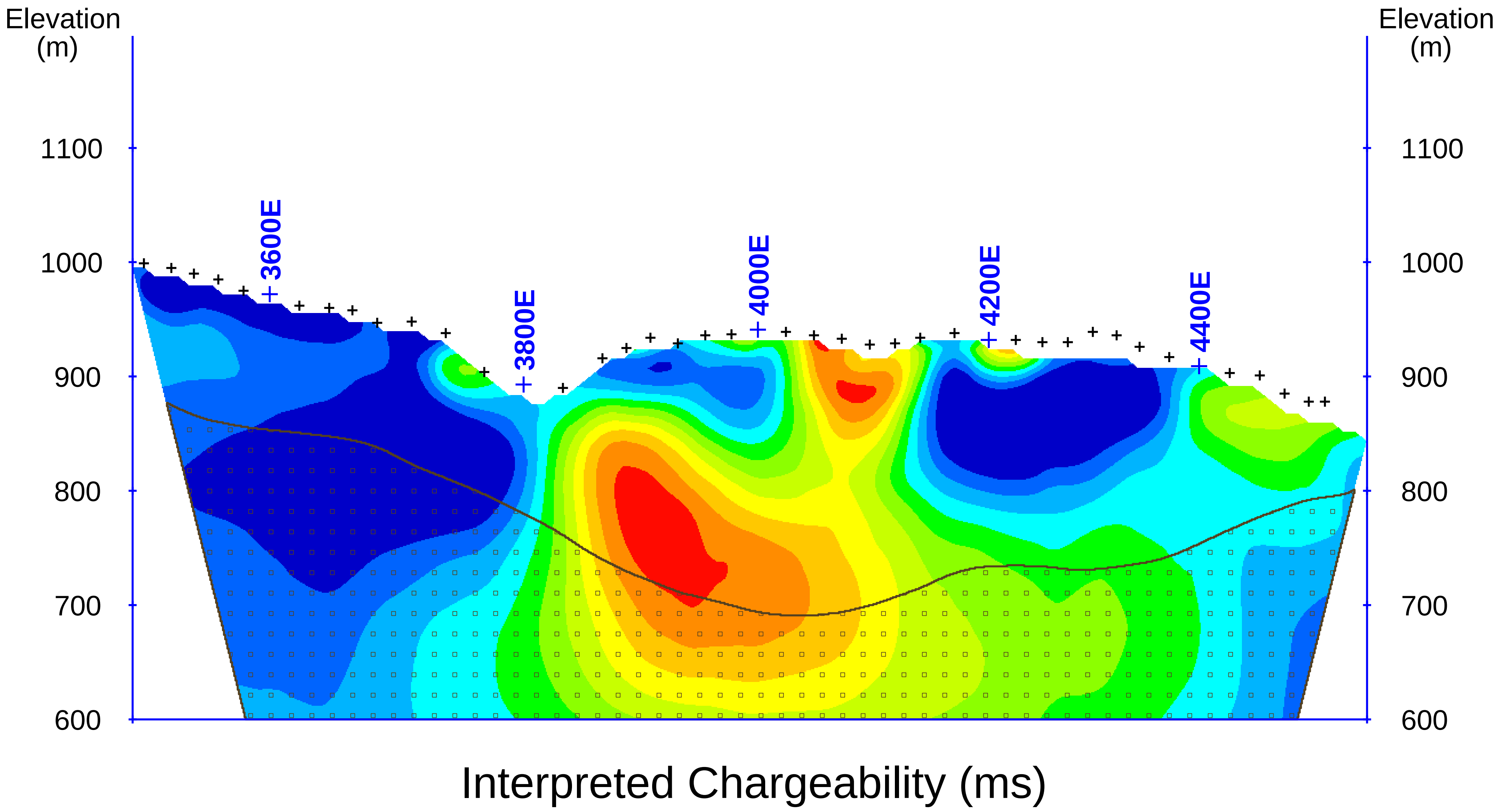
Interpreted Resistivity (ohm−m)

ms

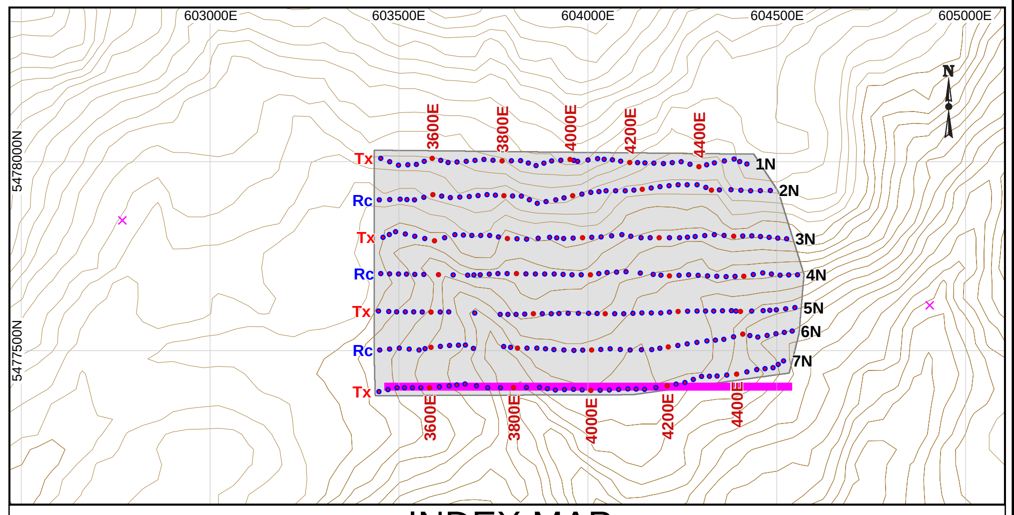
- > 13
- 11 − 13
- 10 − 11
- 9 − 10
- 8 − 9
- 7 − 8
- 6 − 7
- 5 − 6
- 4 − 5
- 3 − 4
- 2 − 3
- < 2

+ Survey Stations

Area of Low Model Confidence



Interpreted Chargeability (ms)



INDEX MAP

Project Information:
Survey by: SJ Geophysics Ltd.
3D Inversion by: S.J.V. Consultants Ltd.
Survey Date: October 2011

Instrumentation:
Receiver: SJ−24 Full−Waveform Digital IP Receiver
Transmitter: GDD TX II
Array Type: 3D

Mapping Information:
Datum: NAD83
Projection: UTM Zone 10
Mapping Date: 13−Dec−2011

0 100 200 300 400 500
meters

Coast Mountain Geological Ltd.

Big Nic Project

Harrison Hot Springs, B.C.

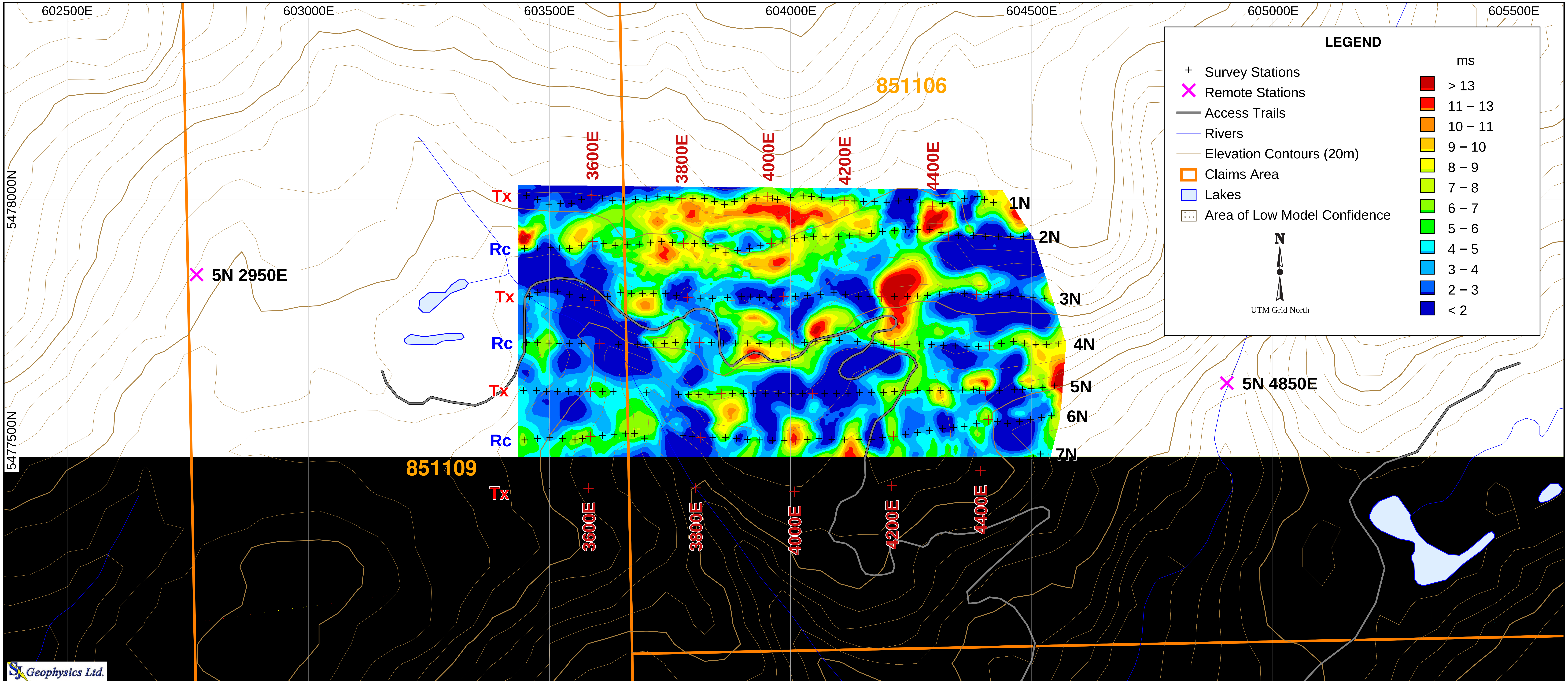
3D Inversion Model
of
Interpreted
Resistivity & Chargeability

Cross Section Map

Section: 7N

SJ Geophysics Ltd.

Mapping By : S.J.V. Consultants Ltd. 11966−95A Avenue, Delta, British Columbia, Canada V4C 3W2 (604) 582−1100 www.sjgeophysics.com



Project Information:
Survey by: SJ Geophysics Ltd.
3D Inversion by: S.J.V. Consultants Ltd.
Survey Date: October 2011

Instrumentation:
Receiver: SJ−24 Full−Waveform Digital IP Receiver
Transmitter: GDD TX II
Array Type: 3D

Mapping Information:
Datum: NAD83
Projection: UTM Zone 10
Mapping Date: 13−Dec−2011

Planmap

3D Inversion Model

Depth: 25m Below Topography

0 100 200 300 400 500

meters

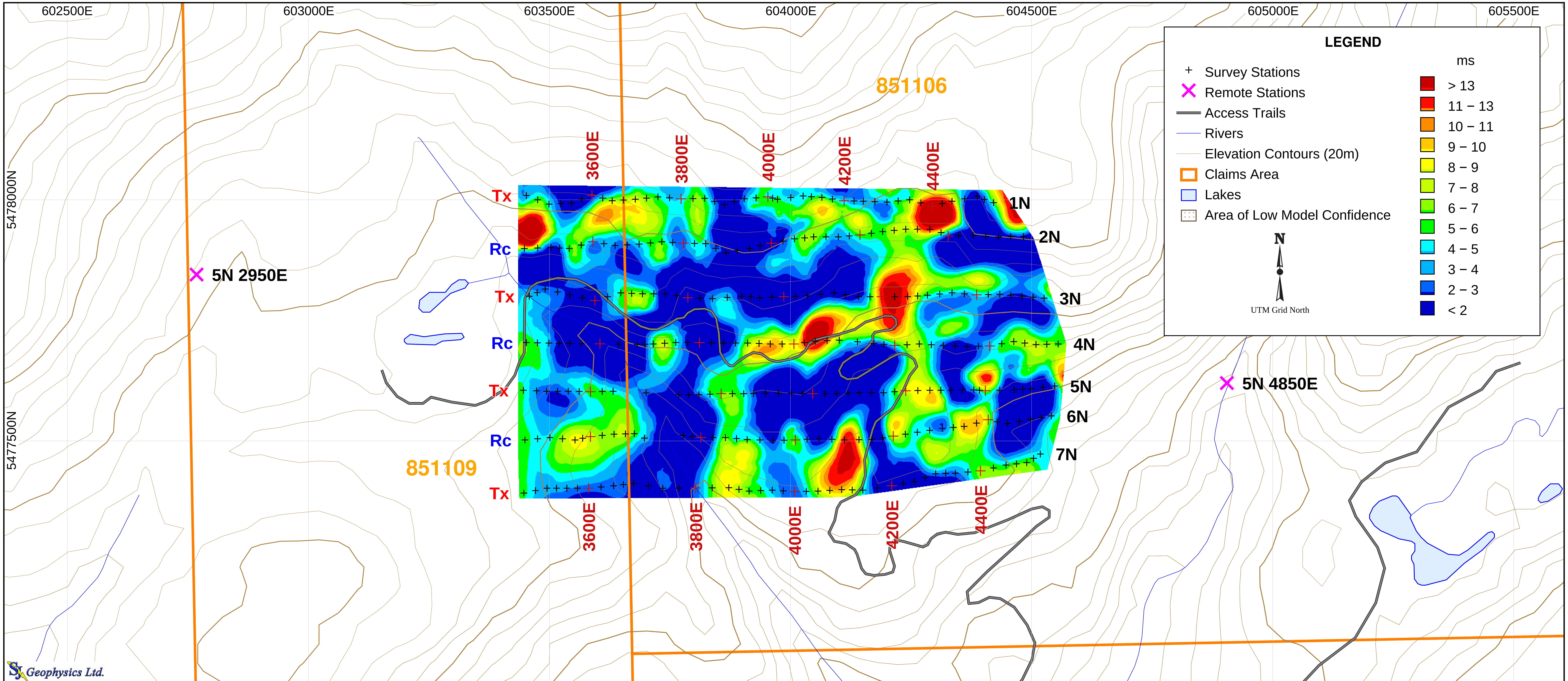
Coast Mountain Geological Ltd.

Interpreted Chargeability (ms)

Big Nic Project

Harrison Hot Springs, B.C.

Plate C−1



Project Information:
Survey by: SJ Geophysics Ltd.
3D Inversion by: S.J.V. Consultants Ltd.
Survey Date: October 2011

Instrumentation:
Receiver: SJ−24 Full−Waveform Digital IP Receiver
Transmitter: GDD TX II
Array Type: 3D

Mapping Information:
Datum: NAD83
Projection: UTM Zone 10
Mapping Date: 13−Dec−2011

Planmap

3D Inversion Model

Depth: 50m Below Topography

0 100 200 300 400 500

meters

Coast Mountain Geological Ltd.

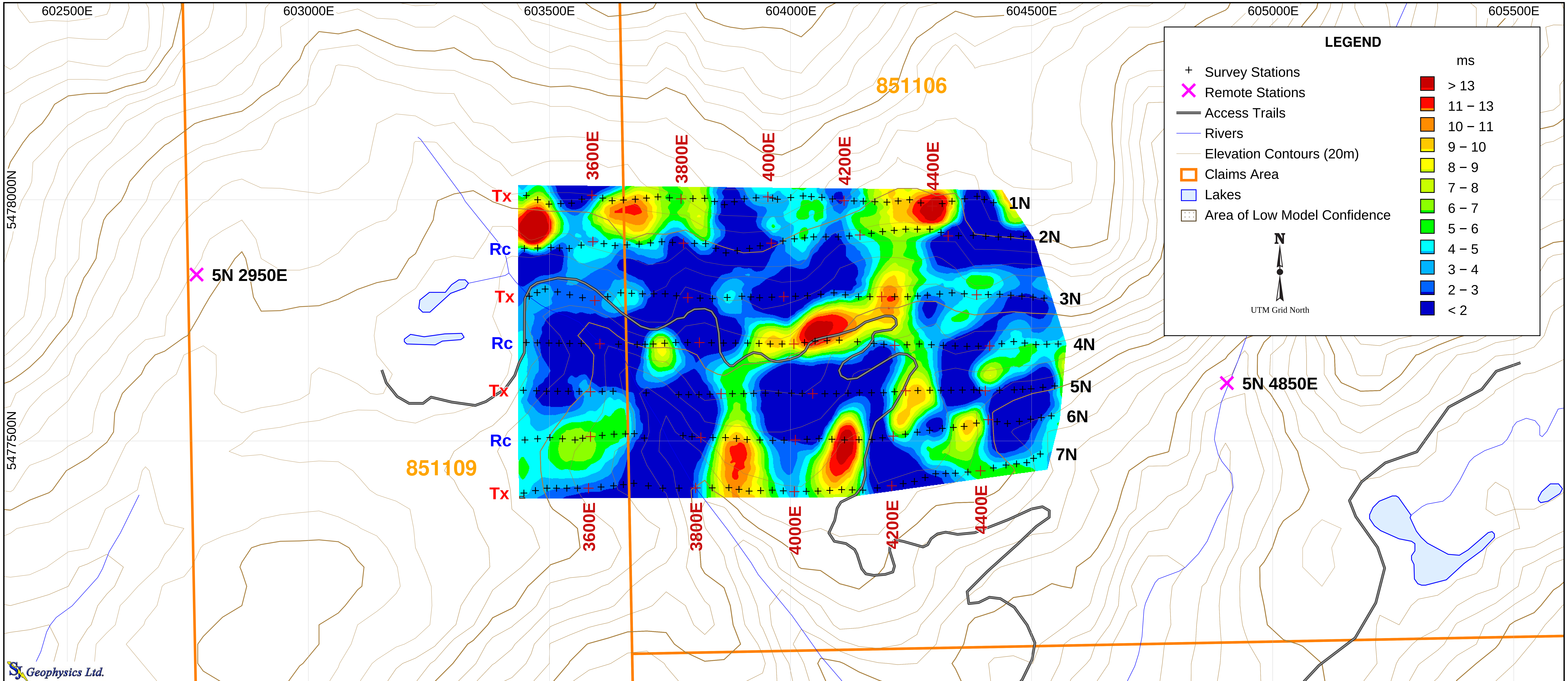
Interpreted Chargeability (ms)

Big Nic Project

Harrison Hot Springs, B.C.

Plate C−2

Mapping By : S.J.V. Consultants Ltd. 11966−95A Avenue, Delta, British Columbia, Canada V4C 3W2 (604) 582−1100 www.sjgeophysics.com



Project Information:
Survey by: SJ Geophysics Ltd.
3D Inversion by: S.J.V. Consultants Ltd.
Survey Date: October 2011

Instrumentation:
Receiver: SJ−24 Full−Waveform Digital IP Receiver
Transmitter: GDD TX II
Array Type: 3D

Mapping Information:
Datum: NAD83
Projection: UTM Zone 10
Mapping Date: 13−Dec−2011

Planmap

3D Inversion Model

Depth: 75m Below Topography

0 100 200 300 400 500

meters

Coast Mountain Geological Ltd.

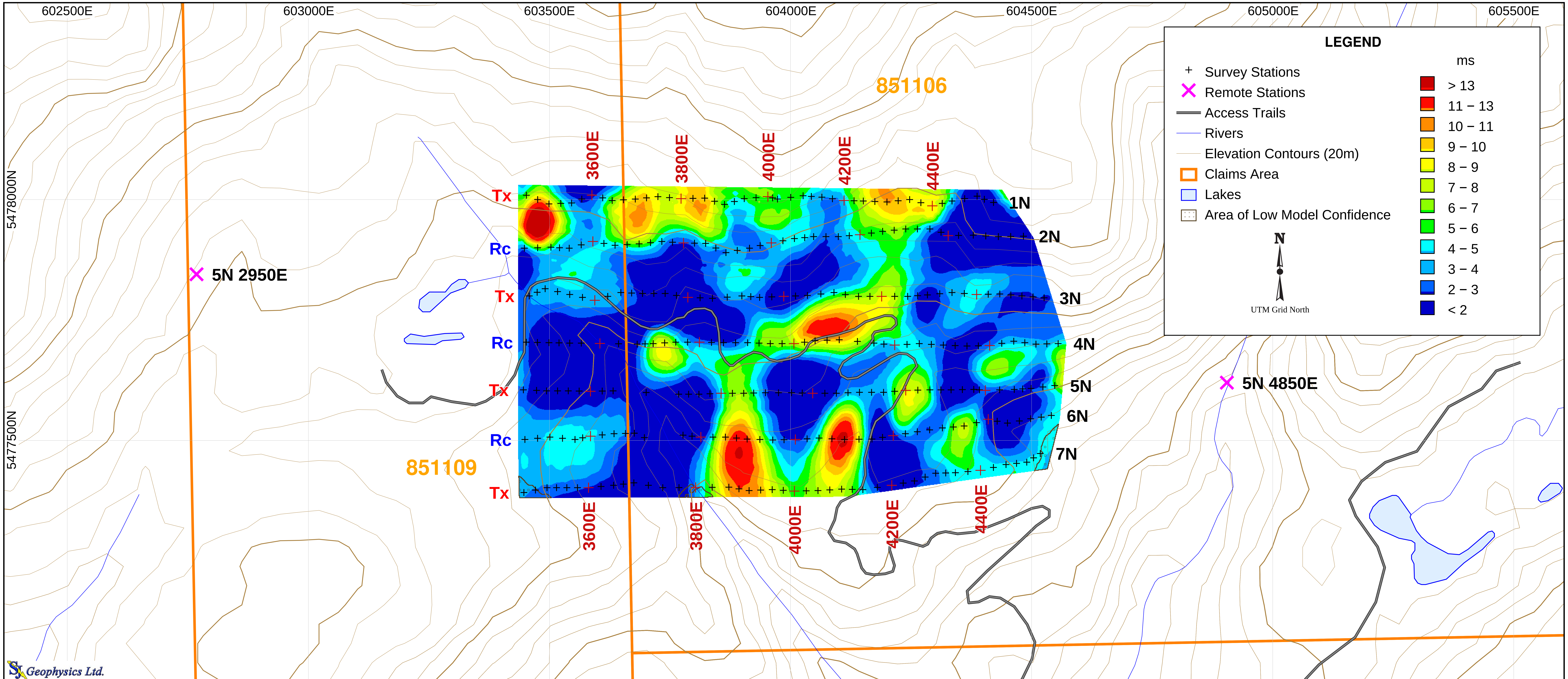
Interpreted Chargeability (ms)

Big Nic Project

Harrison Hot Springs, B.C.

Plate C−3

Mapping By : S.J.V. Consultants Ltd. 11966−95A Avenue, Delta, British Columbia, Canada V4C 3W2 (604) 582−1100 www.sjgeophysics.com



Project Information:
Survey by: SJ Geophysics Ltd.
3D Inversion by: S.J.V. Consultants Ltd.
Survey Date: October 2011

Instrumentation:
Receiver: SJ−24 Full−Waveform Digital IP Receiver
Transmitter: GDD TX II
Array Type: 3D

Mapping Information:
Datum: NAD83
Projection: UTM Zone 10
Mapping Date: 13−Dec−2011

Planmap

3D Inversion Model

Depth: 100m Below Topography

0 100 200 300 400 500
meters

Coast Mountain Geological Ltd.

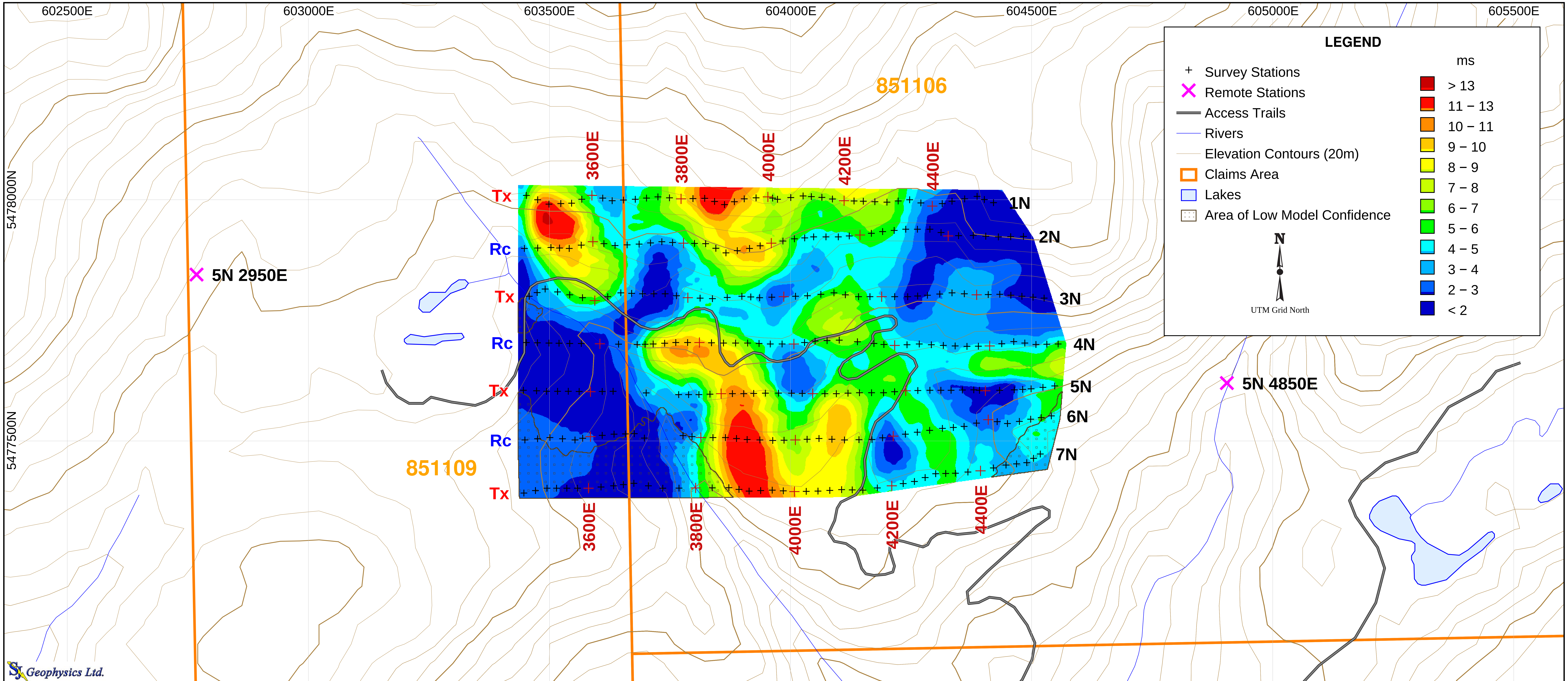
Interpreted Chargeability (ms)

Big Nic Project

Harrison Hot Springs, B.C.

Plate C−4

Mapping By : S.J.V. Consultants Ltd. 11966−95A Avenue, Delta, British Columbia, Canada V4C 3W2 (604) 582−1100 www.sjgeophysics.com



Project Information:
Survey by: SJ Geophysics Ltd.
3D Inversion by: S.J.V. Consultants Ltd.
Survey Date: October 2011

Instrumentation:
Receiver: SJ−24 Full−Waveform Digital IP Receiver
Transmitter: GDD TX II
Array Type: 3D

Mapping Information:
Datum: NAD83
Projection: UTM Zone 10
Mapping Date: 13−Dec−2011

Planmap

3D Inversion Model

Depth: 150m Below Topography

0 100 200 300 400 500
meters

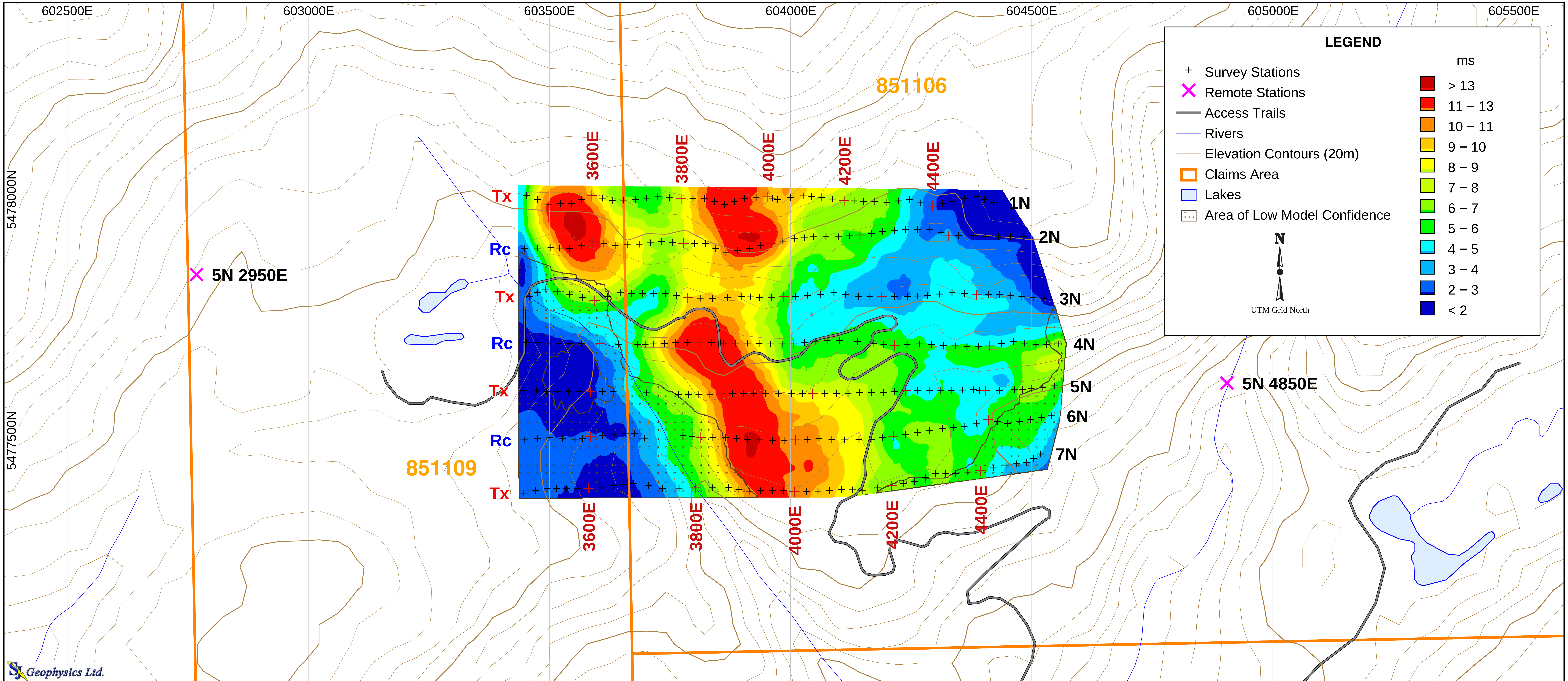
Coast Mountain Geological Ltd.

Interpreted Chargeability (ms)

Big Nic Project

Harrison Hot Springs, B.C.

Plate C−5



Project Information:
Survey by: SJ Geophysics Ltd.
3D Inversion by: S.J.V. Consultants Ltd.
Survey Date: October 2011

Instrumentation:
Receiver: SJ−24 Full−Waveform Digital IP Receiver
Transmitter: GDD TX II
Array Type: 3D

Mapping Information:
Datum: NAD83
Projection: UTM Zone 10
Mapping Date: 13−Dec−2011

Planmap

3D Inversion Model

Depth: 200m Below Topography

0 100 200 300 400 500
meters

Coast Mountain Geological Ltd.

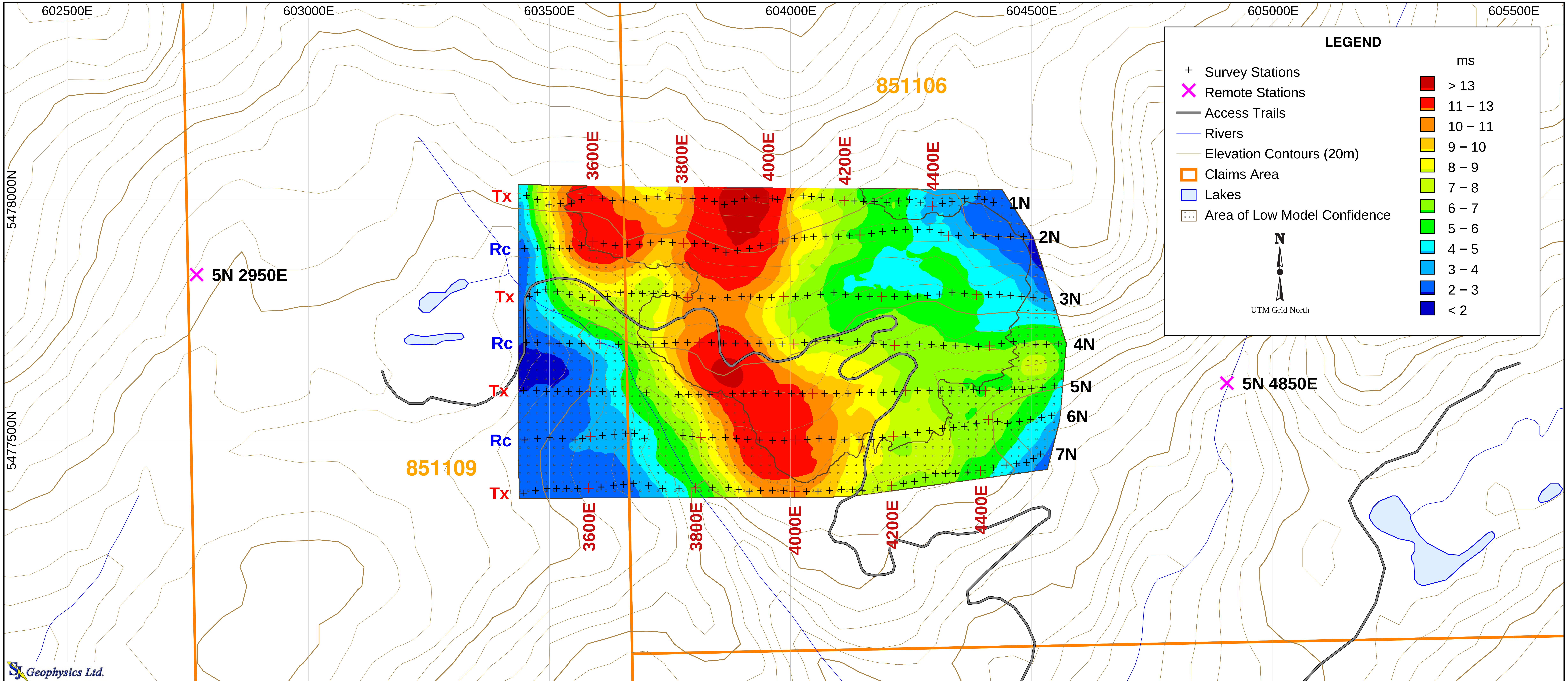
Interpreted Chargeability (ms)

Big Nic Project

Harrison Hot Springs, B.C.

Plate C−6

Mapping By : S.J.V. Consultants Ltd. 11966−95A Avenue, Delta, British Columbia, Canada V4C 3W2 (604) 582−1100 www.sjgeophysics.com



Project Information:
Survey by: SJ Geophysics Ltd.
3D Inversion by: S.J.V. Consultants Ltd.
Survey Date: October 2011

Instrumentation:
Receiver: SJ−24 Full−Waveform Digital IP Receiver
Transmitter: GDD TX II
Array Type: 3D

Mapping Information:
Datum: NAD83
Projection: UTM Zone 10
Mapping Date: 13−Dec−2011

Planmap

3D Inversion Model

Depth: 250m Below Topography

0 100 200 300 400 500
meters

Coast Mountain Geological Ltd.

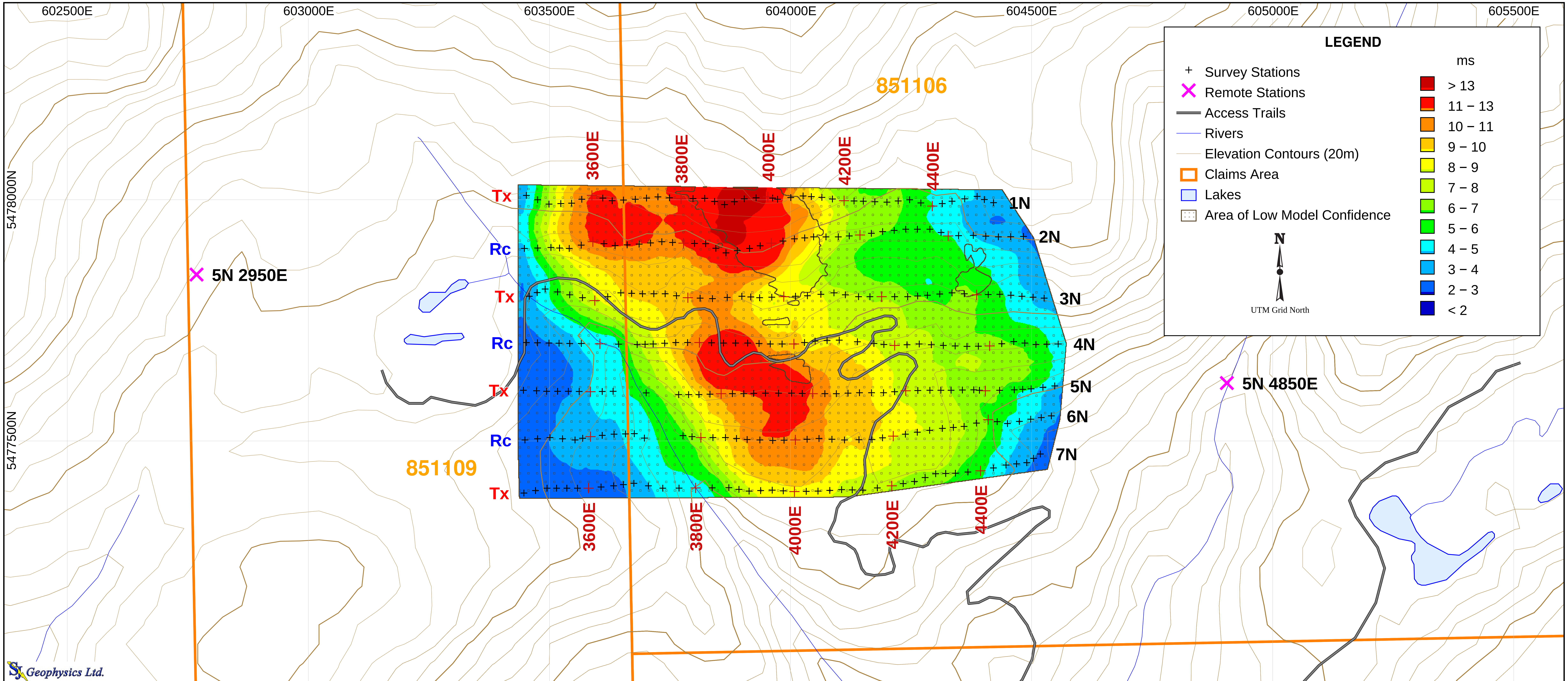
Interpreted Chargeability (ms)

Big Nic Project

Harrison Hot Springs, B.C.

Plate C−7

Mapping By : S.J.V. Consultants Ltd. 11966−95A Avenue, Delta, British Columbia, Canada V4C 3W2 (604) 582−1100 www.sjgeophysics.com



Project Information:
Survey by: SJ Geophysics Ltd.
3D Inversion by: S.J.V. Consultants Ltd.
Survey Date: October 2011

Instrumentation:
Receiver: SJ−24 Full−Waveform Digital IP Receiver
Transmitter: GDD TX II
Array Type: 3D

Mapping Information:
Datum: NAD83
Projection: UTM Zone 10
Mapping Date: 13−Dec−2011

Planmap

3D Inversion Model

Depth: 300m Below Topography

0 100 200 300 400 500
meters

Coast Mountain Geological Ltd.

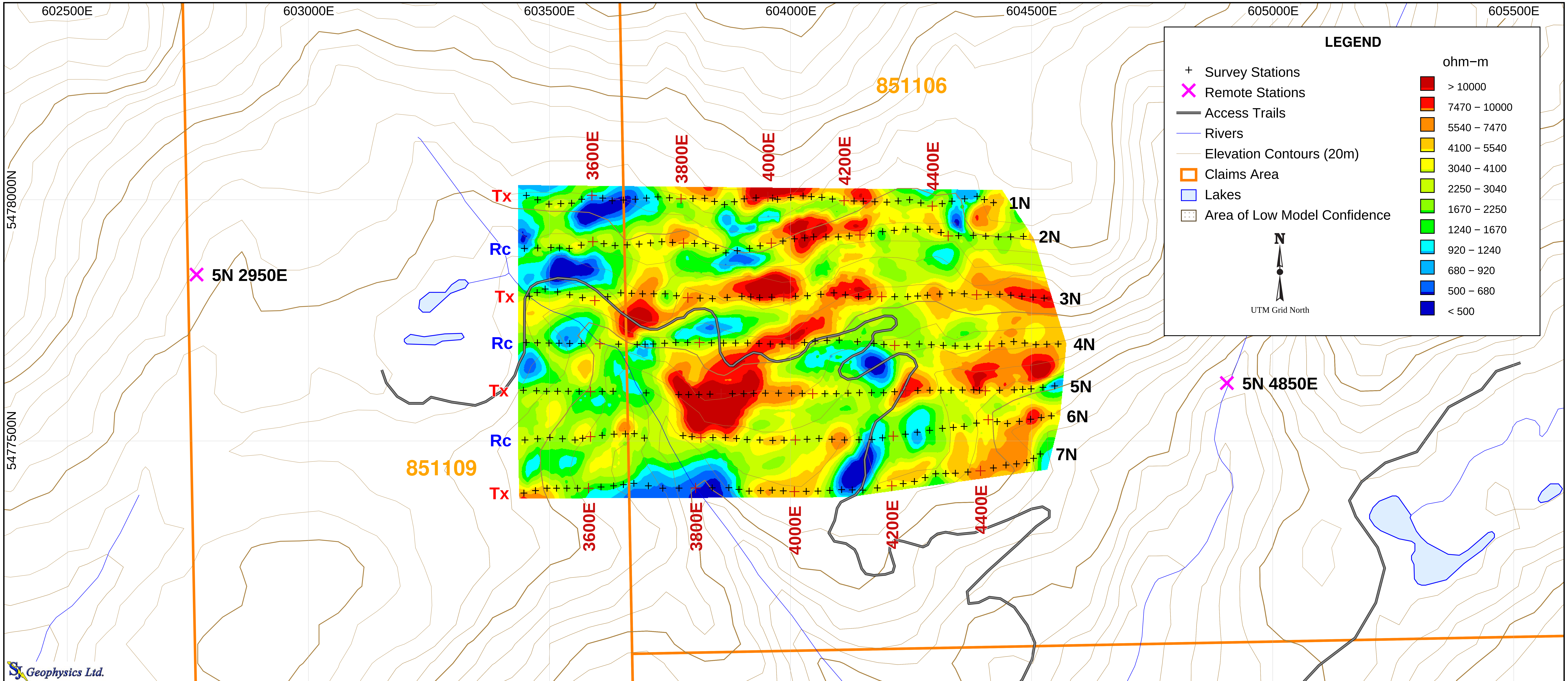
Interpreted Chargeability (ms)

Big Nic Project

Harrison Hot Springs, B.C.

Plate C−8

Mapping By : S.J.V. Consultants Ltd. 11966−95A Avenue, Delta, British Columbia, Canada V4C 3W2 (604) 582−1100 www.sjgeophysics.com



Project Information:
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3D Inversion by: S.J.V. Consultants Ltd.
Survey Date: October 2011

Instrumentation:
Receiver: SJ−24 Full−Waveform Digital IP Receiver
Transmitter: GDD TX II
Array Type: 3D

Mapping Information:
Datum: NAD83
Projection: UTM Zone 10
Mapping Date: 13−Dec−2011

Planmap

3D Inversion Model

Depth: 25m Below Topography

0 100 200 300 400 500

meters

Coast Mountain Geological Ltd.

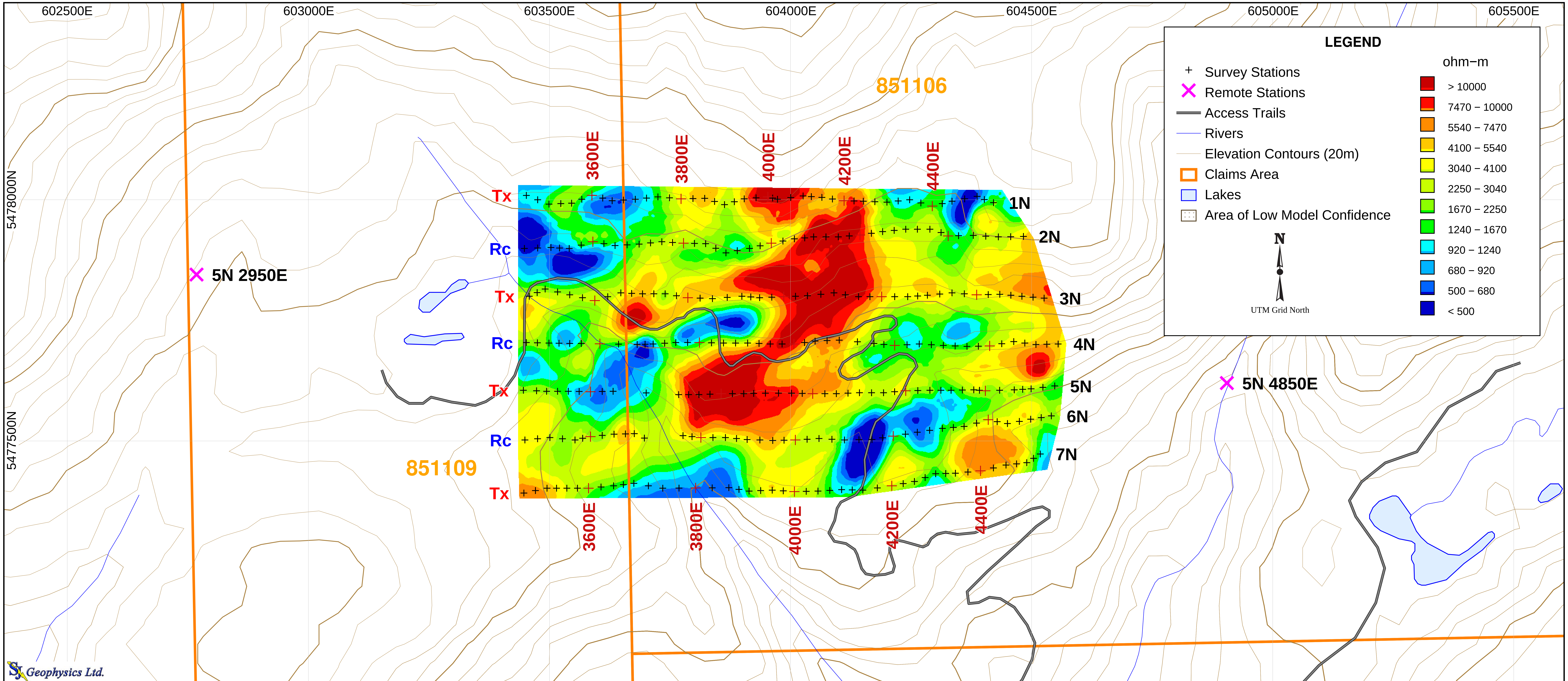
Interpreted Resistivity (ohm−m)

Big Nic Project

Harrison Hot Springs, B.C.

Plate R−1

Mapping By : S.J.V. Consultants Ltd. 11966−95A Avenue, Delta, British Columbia, Canada V4C 3W2 (604) 582−1100 www.sjgeophysics.com



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3D Inversion by: S.J.V. Consultants Ltd.
Survey Date: October 2011

Instrumentation:
Receiver: SJ−24 Full−Waveform Digital IP Receiver
Transmitter: GDD TX II
Array Type: 3D

Mapping Information:
Datum: NAD83
Projection: UTM Zone 10
Mapping Date: 13−Dec−2011

Planmap

3D Inversion Model

Depth: 50m Below Topography

0 100 200 300 400 500

meters

Coast Mountain Geological Ltd.

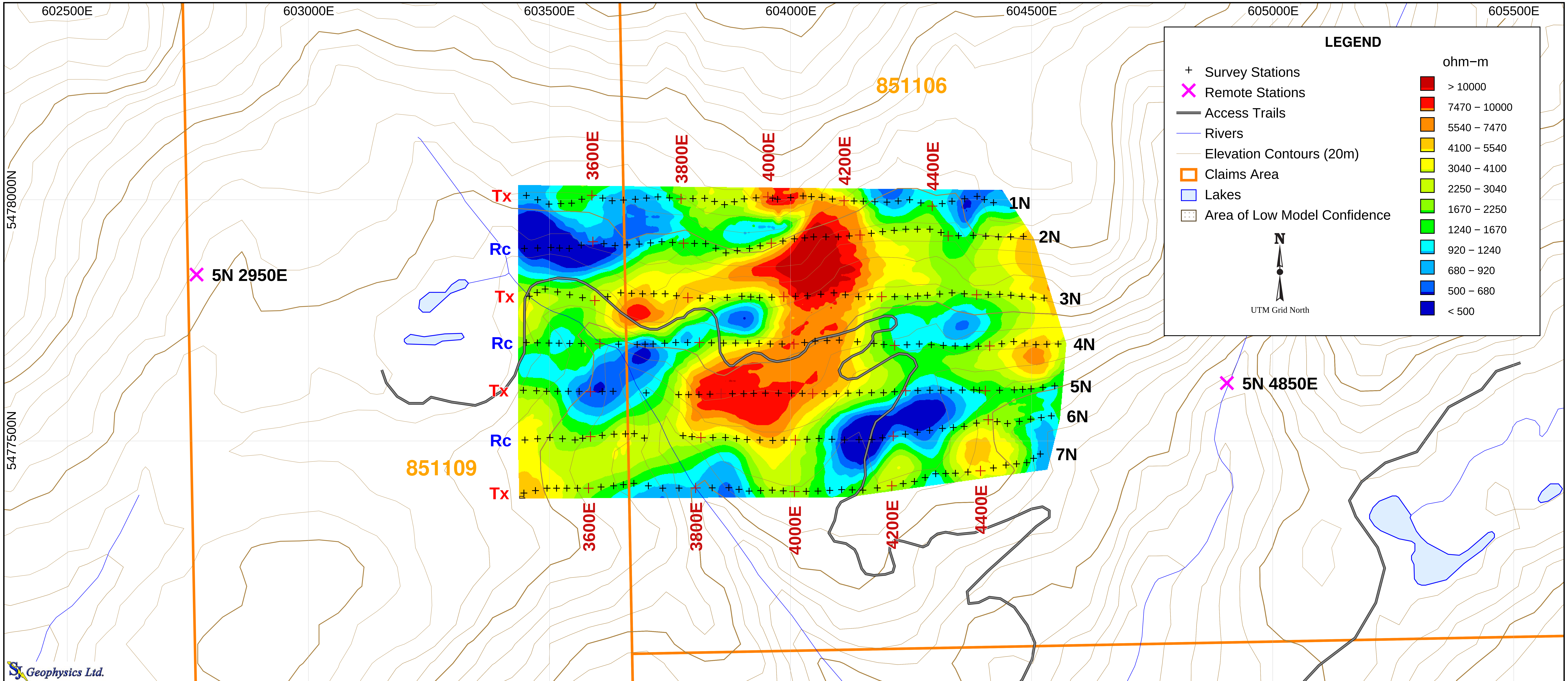
Interpreted Resistivity (ohm−m)

Big Nic Project

Harrison Hot Springs, B.C.

Plate R−2

Mapping By : S.J.V. Consultants Ltd. 11966−95A Avenue, Delta, British Columbia, Canada V4C 3W2 (604) 582−1100 www.sjgeophysics.com



Project Information:
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3D Inversion by: S.J.V. Consultants Ltd.
Survey Date: October 2011

Instrumentation:
Receiver: SJ−24 Full−Waveform Digital IP Receiver
Transmitter: GDD TX II
Array Type: 3D

Mapping Information:
Datum: NAD83
Projection: UTM Zone 10
Mapping Date: 13−Dec−2011

Planmap

3D Inversion Model

Depth: 75m Below Topography

0 100 200 300 400 500
meters

Coast Mountain Geological Ltd.

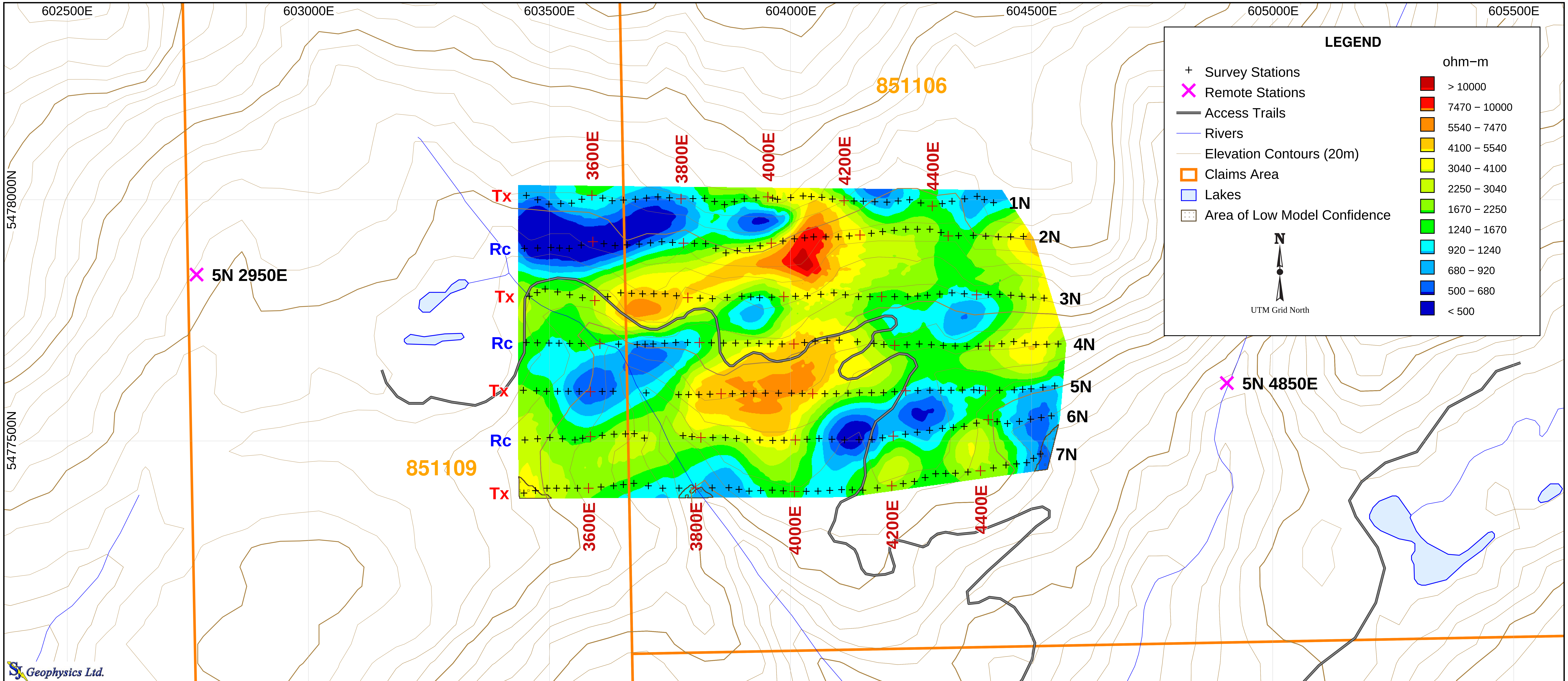
Interpreted Resistivity (ohm−m)

Big Nic Project

Harrison Hot Springs, B.C.

Plate R−3

Mapping By : S.J.V. Consultants Ltd. 11966−95A Avenue, Delta, British Columbia, Canada V4C 3W2 (604) 582−1100 www.sjgeophysics.com



Project Information:
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3D Inversion by: S.J.V. Consultants Ltd.
Survey Date: October 2011

Instrumentation:
Receiver: SJ−24 Full−Waveform Digital IP Receiver
Transmitter: GDD TX II
Array Type: 3D

Mapping Information:
Datum: NAD83
Projection: UTM Zone 10
Mapping Date: 13−Dec−2011

Planmap

3D Inversion Model

Depth: 100m Below Topography

0 100 200 300 400 500

meters

Coast Mountain Geological Ltd.

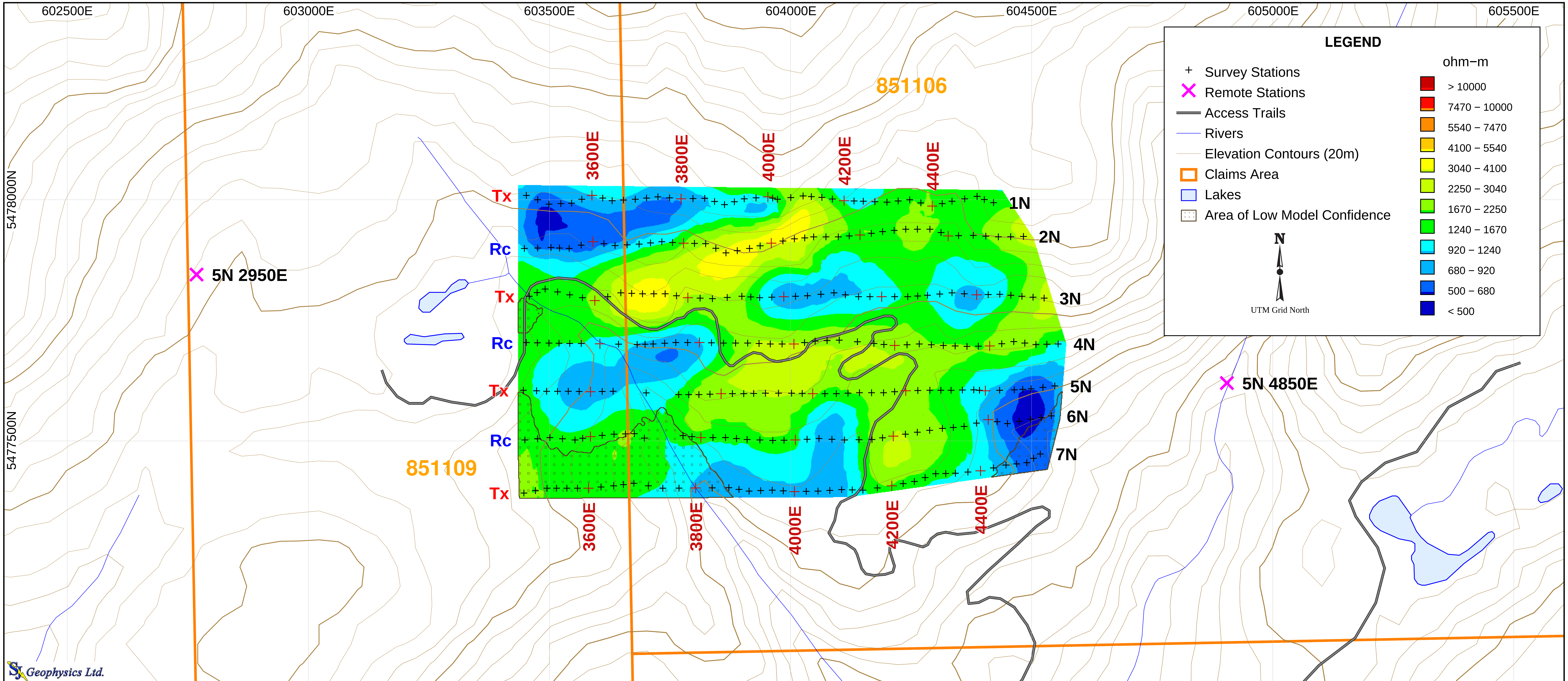
Interpreted Resistivity (ohm−m)

Big Nic Project

Harrison Hot Springs, B.C.

Plate R−4

Mapping By : S.J.V. Consultants Ltd. 11966−95A Avenue, Delta, British Columbia, Canada V4C 3W2 (604) 582−1100 www.sjgeophysics.com



Project Information:
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3D Inversion by: S.J.V. Consultants Ltd.
Survey Date: October 2011

Instrumentation:
Receiver: SJ−24 Full−Waveform Digital IP Receiver
Transmitter: GDD TX II
Array Type: 3D

Mapping Information:
Datum: NAD83
Projection: UTM Zone 10
Mapping Date: 13−Dec−2011

Planmap

3D Inversion Model

Depth: 150m Below Topography

0 100 200 300 400 500

meters

Coast Mountain Geological Ltd.

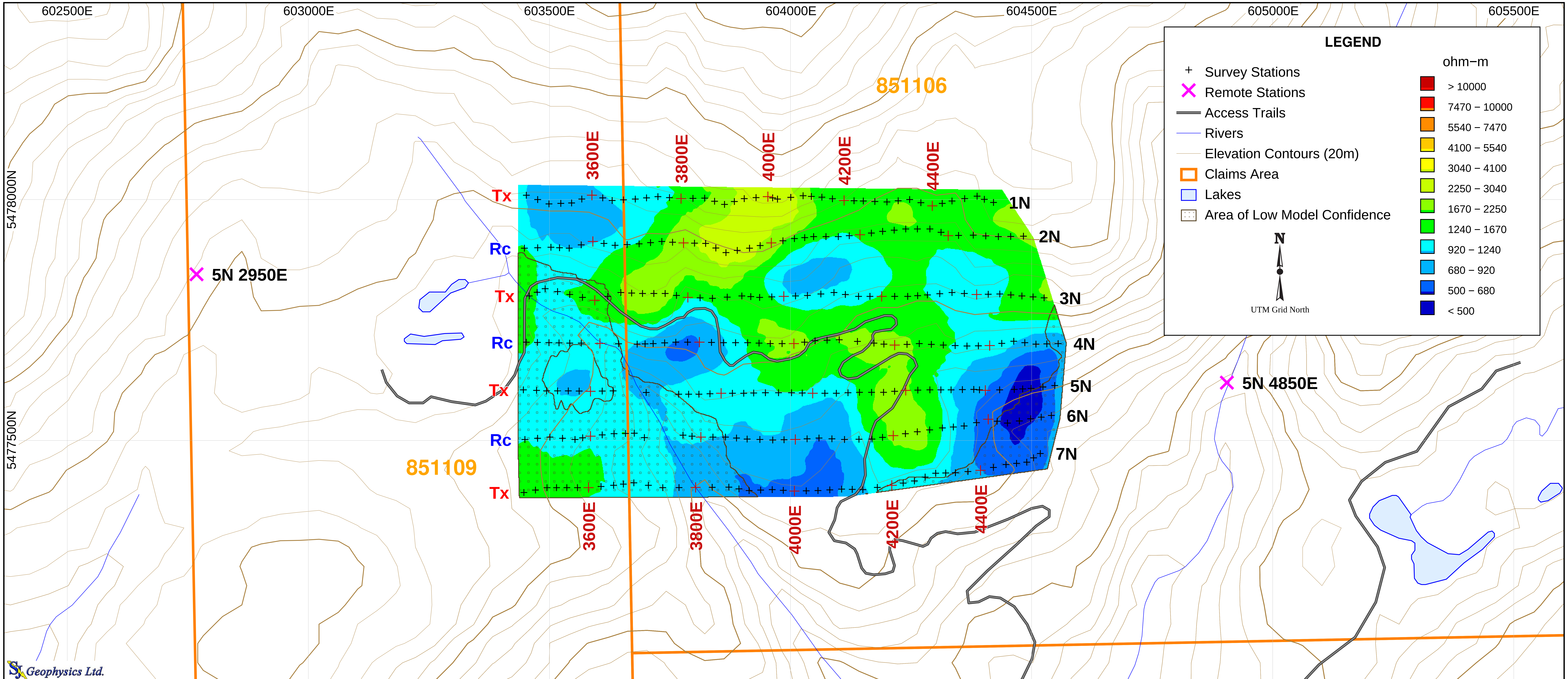
Interpreted Resistivity (ohm−m)

Big Nic Project

Harrison Hot Springs, B.C.

Plate R−5

Mapping By : S.J.V. Consultants Ltd. 11966−95A Avenue, Delta, British Columbia, Canada V4C 3W2 (604) 582−1100 www.sjgeophysics.com



Project Information:
Survey by: SJ Geophysics Ltd.
3D Inversion by: S.J.V. Consultants Ltd.
Survey Date: October 2011

Instrumentation:
Receiver: SJ−24 Full−Waveform Digital IP Receiver
Transmitter: GDD TX II
Array Type: 3D

Mapping Information:
Datum: NAD83
Projection: UTM Zone 10
Mapping Date: 13−Dec−2011

Planmap

3D Inversion Model

Depth: 200m Below Topography

0 100 200 300 400 500

meters

Coast Mountain Geological Ltd.

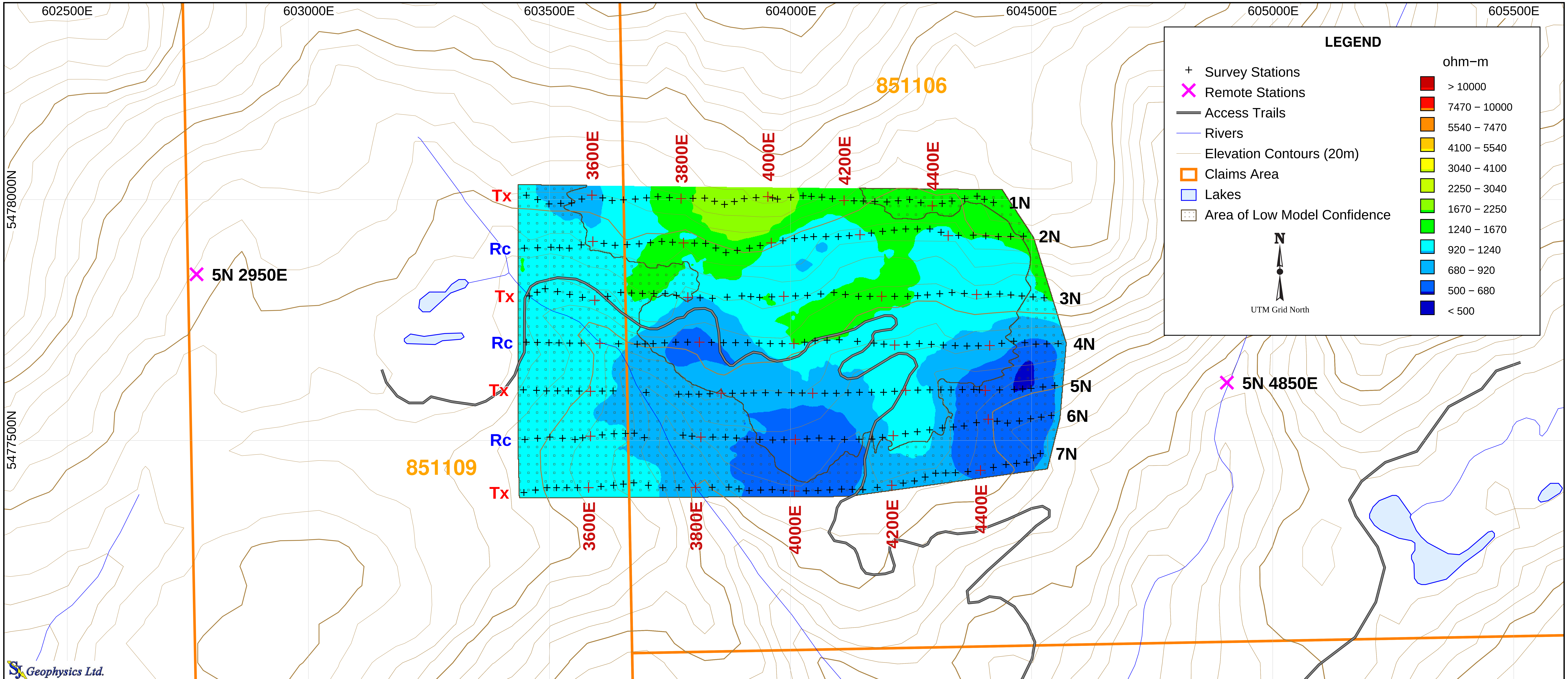
Interpreted Resistivity (ohm−m)

Big Nic Project

Harrison Hot Springs, B.C.

Plate R−6

Mapping By : S.J.V. Consultants Ltd. 11966−95A Avenue, Delta, British Columbia, Canada V4C 3W2 (604) 582−1100 www.sjgeophysics.com



Project Information:
Survey by: SJ Geophysics Ltd.
3D Inversion by: S.J.V. Consultants Ltd.
Survey Date: October 2011

Instrumentation:
Receiver: SJ−24 Full−Waveform Digital IP Receiver
Transmitter: GDD TX II
Array Type: 3D

Mapping Information:
Datum: NAD83
Projection: UTM Zone 10
Mapping Date: 13−Dec−2011

Planmap

3D Inversion Model

Depth: 250m Below Topography

0 100 200 300 400 500

meters

Coast Mountain Geological Ltd.

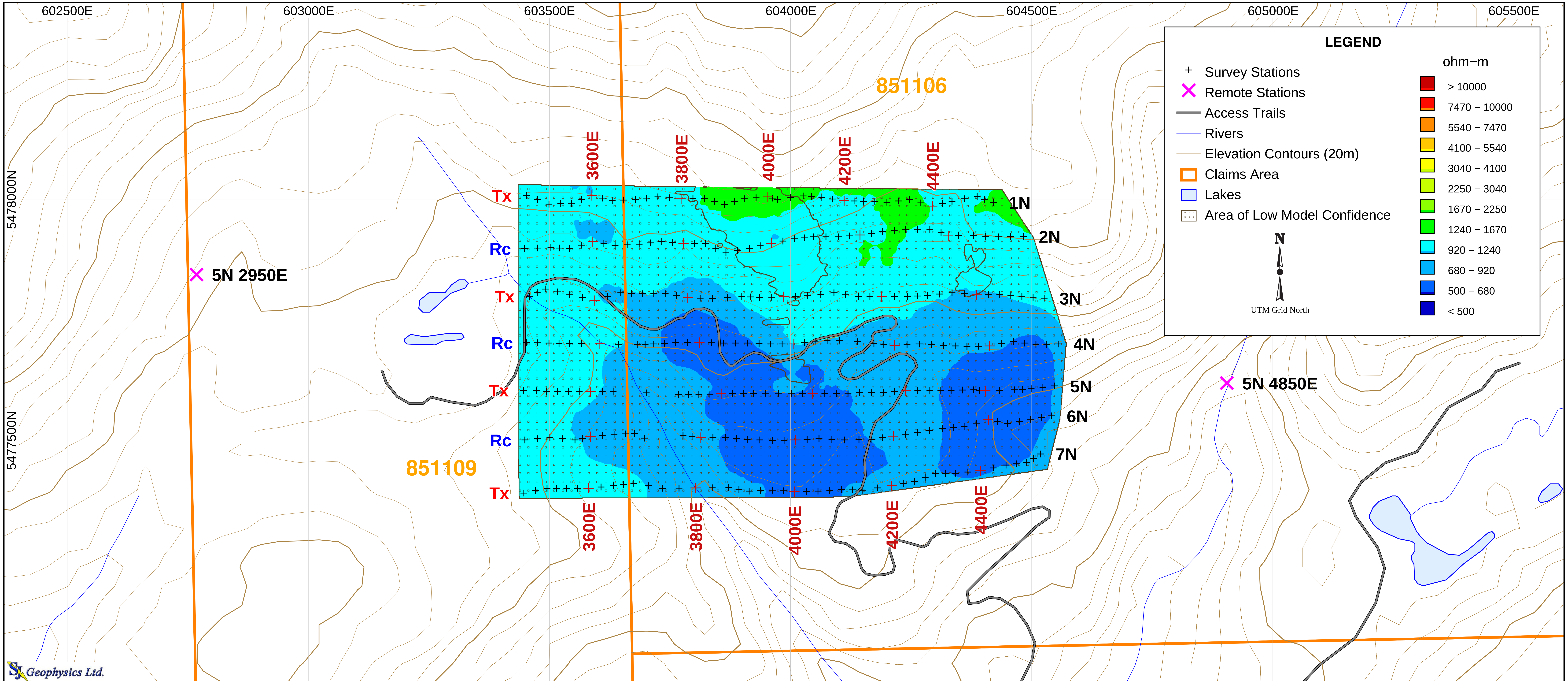
Interpreted Resistivity (ohm−m)

Big Nic Project

Harrison Hot Springs, B.C.

Plate R−7

Mapping By : S.J.V. Consultants Ltd. 11966−95A Avenue, Delta, British Columbia, Canada V4C 3W2 (604) 582−1100 www.sjgeophysics.com



Project Information:
Survey by: SJ Geophysics Ltd.
3D Inversion by: S.J.V. Consultants Ltd.
Survey Date: October 2011

Instrumentation:
Receiver: SJ−24 Full−Waveform Digital IP Receiver
Transmitter: GDD TX II
Array Type: 3D

Mapping Information:
Datum: NAD83
Projection: UTM Zone 10
Mapping Date: 13−Dec−2011

Planmap

3D Inversion Model

Depth: 300m Below Topography

0 100 200 300 400 500

meters

Coast Mountain Geological Ltd.

Interpreted Resistivity (ohm−m)

Big Nic Project

Harrison Hot Springs, B.C.

Plate R−8

Mapping By : S.J.V. Consultants Ltd. 11966−95A Avenue, Delta, British Columbia, Canada V4C 3W2 (604) 582−1100 www.sjgeophysics.com

APPENDIX III

3D IP GEOPHYSICAL SURVEY REPORT ON SWEDE AREA:

SJ GEOPHYSICS LTD.

LOGISTICS REPORT PREPARED

FOR

COAST MOUNTAIN GEOLOGICAL LTD.

THREE DIMENSIONAL INDUCED POLARIZATION SURVEY

ON THE

SWEDE PROJECT

HARRISON HOT SPRING, BRITISH COLUMBIA, CANADA
LATITUDE: N49° 31' LONGITUDE: W121° 44'
MINING DIVISION: NEW WESTMINSTER
NTS SHEET: 092H05

SURVEY CONDUCTED BY SJ GEOPHYSICS LTD.
NOVEMBER, 2011

REPORT PREPARED BY
KIERAN KOOTCHIN
NOVEMBER, 2011

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1. SURVEY SUMMARY

SJ Geophysics Ltd. was contracted by Coast Mountain Geological Ltd. to acquire geophysical data on their Swede project. The following table provides a brief summary of the project.

Client	Coast Mountain Geological Ltd. (CMG)
Project Name	Swede Project
Location (approx. centre of grid)	Grid Location: N49° 26' W121° 31' NAD83 UTM Zone 10N: 0607600E 5476800N
Survey Type	3D Induced Polarization (3DIP)
Total Line Kilometres	3DIP: 3.5km
Production Dates	November 6th to November 9th, 2011
Objective	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 Summary

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 Swede project is located in the province of British Columbia, Canada (see Figure 1). The closest major town to the survey area is Harrison Hot Springs, which is situated approximately 25 km SW of the Swede grid. The Swede project area can be accessed from Harrison Hot Springs by the following directions:

- From Harrison Hot Springs, proceed south on Agassiz-Rosedale Highway/BC-9 S.
- Follow BC-9 for 5.9 km then make a left hand turn Lougheed Highway/BC-7 E/BC-9 S.
- Proceed for 1.6 km then follow BC-7 E for 30.1 km.
- Keep right at fork, follow signs for Trans Canada Highway/BC-1 E/Cache Creek and merge onto Trans Canada Highway/BC-1 E.
- Continue for 3.2 km then turn left on American Creek FSR, Follow for 9.9 km.

Figure 1: Overview map of the Swede project located in British Columbia, Canada.

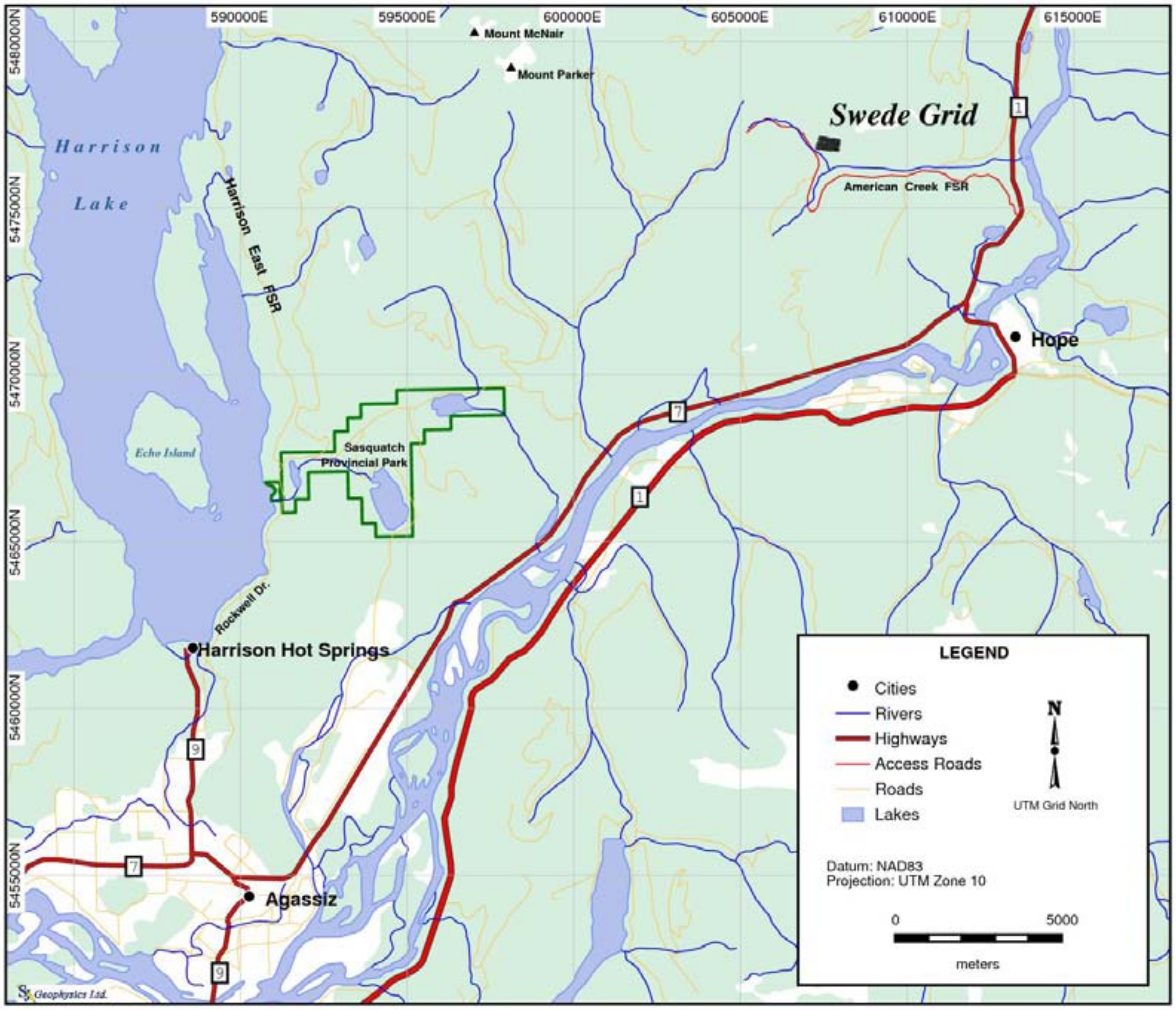


Figure 2: Location map for the Swede project showing towns and road access.

3. *GRID INFORMATION*

Grid	Swede Grid
Number Of Lines	5 (3DIP)
Survey Line Azimuth	102º
Line Spacing	100 m
Station Spacing	3DIP: 50 m
Elevation range	730 – 990 m

Table 2: Grid parameters

The Swede grid consisted of 5 survey lines, spaced at 100 m with stations flagged and marked every 50 m (Figure 3). Line and station labels for the grid were based on a local coordinate system with lines labelled A through E and stations using a distance based label from 1000 to 1700 east. The line labels were also assigned numeric labels of 7200 (A) through 6800 (E) for use within our IP and location software.

All of the location information was recorded by the SJ Geophysics crew, including GPS control points and slope/clinometric data. Control points were recorded with Garmin GPSMap 60CSx and 62S handheld GPS units using the UTM projection and NAD83 datum. Slope data were recorded with Sunnto handheld clinometers.

Old logging roads provided access to the west end of the grid, though these roads were marred by deep deactivation ditches, some washout due to swollen streams, and muddy conditions nearing the grid. The terrain on the grid itself was steep, with sometimes treacherous footing due to loose soil and wet snow.

Ground contact was good in almost all areas of the grid, with the exception of some steep, rocky terrain in the central area along L 7200N.

Temperatures while on the Swede Creek grid ranged from around -2 ºC to 8 ºC during the day. Precipitation was heavy at times, alternating between rain and snow as is typical for this time of year, so the conditions were wet.

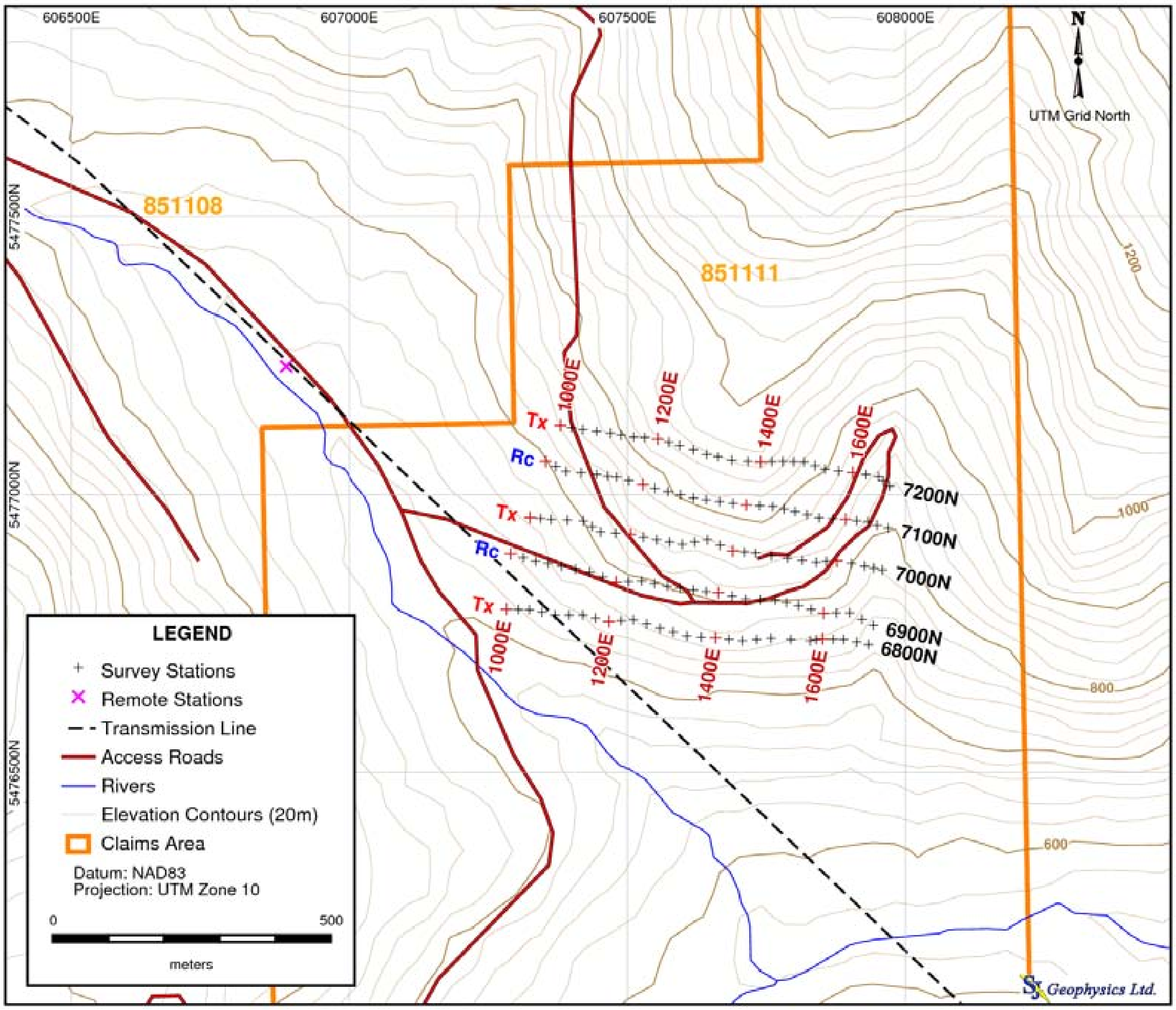


Figure 3: Grid Map showing the survey area for the Swede grid.

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 five 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.

The SJ Geophysics crew's first day on site at the Swede Grid was November 6th and they remained on site till November 9th .

Crew Member Name	*Role*	*Dates on Site*
Mat Kootchin	Field Geophysicist	November 6th - November 9th
Nathan Anstey	Field Geophysicist	November 6th - November 9th
Kieran Kootchin	Field Technician	November 6th - November 9th
Morgan Bezembinder	Field Technician	November 6th - November 9th
Julian Samson	Helper	November 6th - November 9th

Table 3: Details of the SJ Geophysics crew on site

Most of the SJ Geophysics crew arrived at the Swede project on November 6th where they spent the day preparing the grid for the survey. Decent road access allowed for good production considering the terrain. Also, high transmission power lines were a source of noise in the data, but filtration of the resonant frequencies mitigated their influence.

In some sections of the grid, poor satellite visibility due to the old growth forests made it difficult to obtain reliable location information. Some GPS control points were replaced in favour of interpolated distances calculated from distance, slope and azimuth information.

Production completed on November 8th and all remaining wire and cables were picked up from the grid on November 9th. The crew demobilized November 9th back to the office in Delta.

The SJ Geophysics crew was accommodated by the client at the Bungalow Motel in Harrison Hot Springs, BC. The accommodations consisted of one or two bedroom cabins with washrooms. One cabin contained a central kitchen area and fireplace that were used by all crew members for preparing meals and drying clothing and footwear. Wireless internet provided by the motel was inconsistent and spotty. Cell phone coverage was reliable in town using the Bell or Telus networks, but was spotty using the Rogers Network. There was no cellular reception on the grid.

4.2. Survey Parameters and Instrumentation

The geophysical instrumentation used to acquire the 3DIP data consisted of a SJ-24 full waveform receiver and a GDD Tx II transmitter. The specifications of these instruments are listed in Appendix B and the equipment parameters are summarized in Table 4.

Array Type	3DIP – Offset Pole-Dipole
Number of Dipoles	14
Dipole Length	50 m
Array Length	700 m
Current Interval	50 m
IP Transmitter	GDD TxII (Serial #247)
Duty Cycle	50%

Array Type	3DIP – Offset Pole-Dipole
Waveform	Square
Cycle and Period	2 sec on / 2 sec off; 8 second
IP Receiver	SJ-24 Full Waveform Digital Receiver
Reading Length	Minimum 63 seconds
Vp Delay, Vp Integration	1200 ms, 600 ms
Mx Delay, # of Windows	200 ms, 20
Width (Mx Intergration)	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
GPS	Garmin GPSmap 60CSx / 62S
Average Accuracy	5-15 m
Projection / Datum	NAD83 UTM Zone 10

Table 4: Instrument parameters

The IP array was connected using special 8-conductor cables with 50 m takeouts for the receiver electrodes. For the potential 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 long (75 cm) stainless steel electrodes hammered into the ground. The remote current locations (Table 5) consisted of four 1m stainless steel rods, 15mm in diameter.

Name	Label	UTM Northing / Datum	UTM Easting / Datum
West Remote	7201N 600E	5477230N / Nad83	606887E / Nad83

Table 5: Locations of 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") particles 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, such as 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 measurement 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. We attempt to overcome this uncertainty by employing geophysical inversion to better interpret the data.

5.2 3DIP Method

Three dimensional IP surveys have been 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 one survey line while current lines are located on two adjacent lines lying on either side of the receiver line. Current injections are performed sequentially at fixed increments (25, 50, 100 or 200 m) along the current lines. Meanwhile, geophysical data are collected along a receiver array which consists of 12 to 16 dipoles laid out along the receiver line. Spacing between current and receiver lines is often the same; however, line spacing is sometimes modified to compensate for local conditions, such as inaccessible sites and water bodies, or the overall conductivity of the ground. Whenever possible, two receivers are used to speed up production and increase depth penetration. In most cases, one receiver records a full 16 dipole array while the second receiver records additional dipoles. By injecting current at multiple locations along current lines adjacent to receiver arrays, 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 good. Although the grid was heavily vegetated, the trees were not thick or tall, so good satellite coverage was available in most spots. However, in steep ravines and near cliff faces, GPS multipath effects degraded the satellite signal. As a result, the positional accuracy of some of the GPS points is questionable. In these areas, the GPS points were removed and the clinometer measurements combined with an idealized ground distance and azimuth were used to interpolate locations.

6.2. IP Data

The IP geophysical data go through a series of quality assurance processes. Prior to acquisition, it is SJ Geophysics' best practice to acquire a noise reading to determine the background noise levels and to detect possible bad channels (i.e. poor ground contacts). This allows the operator to troubleshoot problem areas in the array prior to acquisition, then once the operator is satisfied surveying can begin. Immediately after each full waveform reading is completed the data are analyzed in the field to provide the operator a set of electric potential and chargeability values (Vp, Sp, Mx) as well as a chart of the chargeability decay curves for each dipole in the array. This gives the operator valuable information to verify the quality of data in real time. Also available to the operator are visualization tools for full waveform signals and a spectral analysis program to assist in troubleshooting possible bad stations and unwanted noise.

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 more stringent second review. In this second review, the data are scrutinized to ensure erroneous data points are not passed along to the final stage of processing: the inversion.

The data collected on the Swede project was of good quality. The voltage potentials (Vp) were strong in most cases and the signals and resulting decay curves were mostly clean. On the Swede project most of the data flagged for removal was due to non-coupling. This phenomenon 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. In addition a few poor quality data points were flagged for removal due to low quality signals. Data was good throughout the Swede Grid but line 7200 was noisier on the western side do to rocky ground (poor contact). Approximately 5% of the data was deleted to control quality. Figure 4 shows data from the central portion of the grid where data was generally very clean, and Figure 5 shows data from the northwest side of the grid that was slightly noisier.

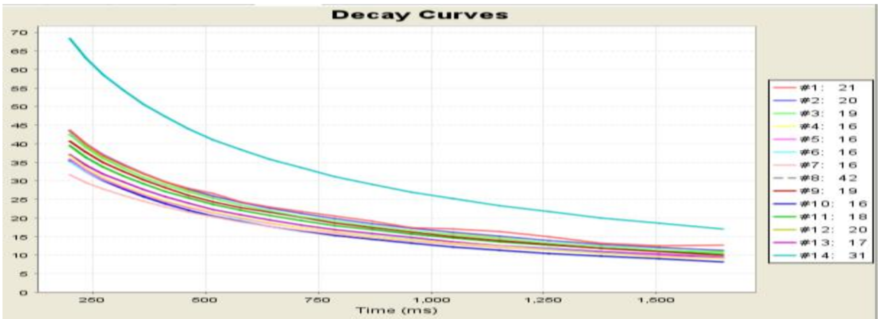


Figure 4: Decay curves from 7200N injection station 1250E.

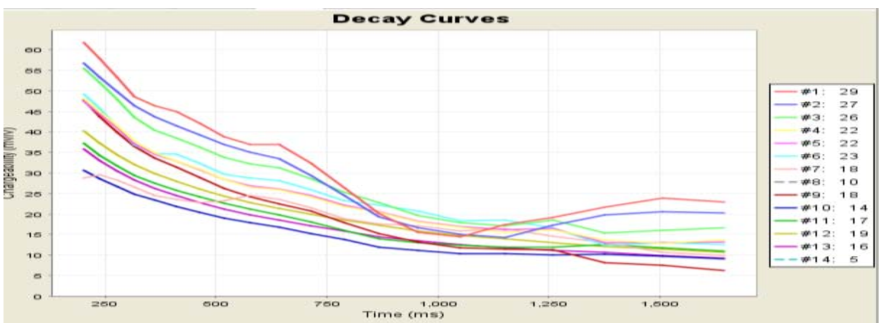


Figure 5: Decay curves from 7200N injection station 1000E.

7. GEOPHYSICAL INVERSION

The purpose of geophysical inversion is to estimate the distribution of rock physical properties in the subsurface based on the geophysical data collected at the surface. Examples of rock 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 can then be overlain to aid in interpretation and facilitate discussion of potential drilling targets.

Respectfully submitted,

by Kieran Kootchin

SJ Geophysics Ltd.

APPENDIX A: SURVEY DETAILS

Swede Grid

Line (SJ Label)	*Series*	*Type*	*Start Station*	*End Station*	*Survey Length (m)*
E (6800)	N	Tx	1000E	1700E	700
D (6900)	N	Rc	1000E	1700E	700
C (7000)	N	Tx	1000E	1700E	700
B (7100)	N	Rc	1000E	1700E	700
A (7200)	N	Tx	1000E	1700E	700

Total Linear Metres =3500M

Rc = Receiver Line, Tx = Transmitter Line,

APPENDIX B: INSTRUMENT SPECIFICATIONS

SJ-24 Full Waveform Digital IP Receiver

Technical:

Input impedance:	10Ω
Input overvoltage protection:	up to 1000V
External memory:	Unlimited readings
Number of dipoles:	4 to 16 +, expandable
Synchronization:	Software signal post-processing user selectable
Common mode rejection:	More than 100 dB (for Rs=0)
Self potential (Sp):	Range: -5V to +5V Resolution: 0.1mV Proprietary intelligent stacking process rejecting strong non-linear SP drifts
Primary voltage:	Range: 1μV – 10V (24bit) Resolution: 1μV Accuracy: typ. <1.0%
Chargeability:	Resolution: 1μV/V Accuracy: typ. <1.0%

General (4 dipole unit):

Dimensions:	18 x 16 x 9 cm
Weight:	1.1kg
Battery:	12V external
Operating temperature range:	-20 ^{o}C to 40 ^{o}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 °C to +65 °C
Display:	Digital LCD read to 0.001 A
Dimensions:	34 x 21 x 39 cm
Weight:	20 kg

APPENDIX IV

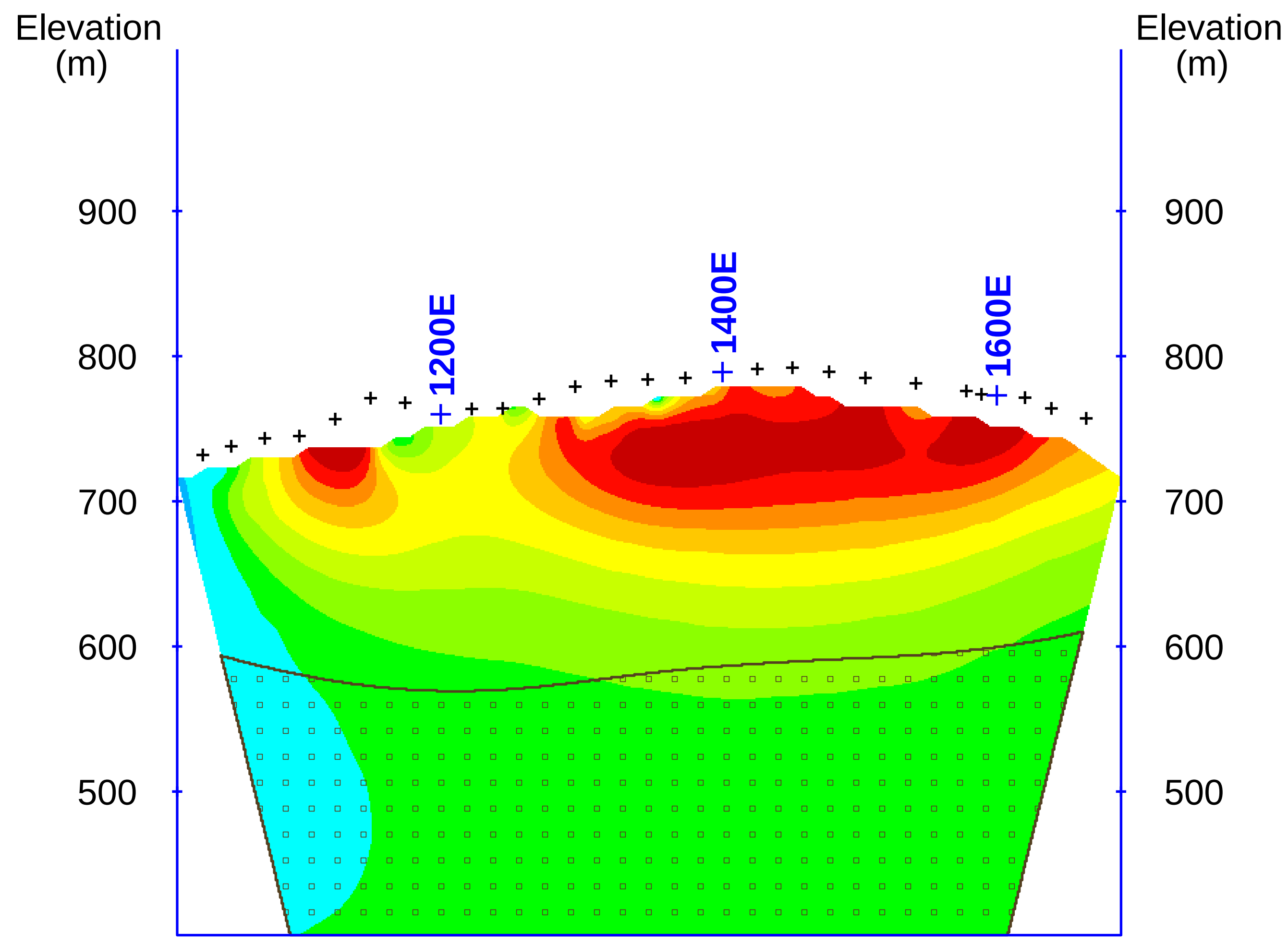
SWEDE CROSS-SECTIONS, CHARGEABILITY AND RESISTIVITY PLAN MAPS

ohm−m

- > 6100
- 5250 − 6100
- 4600 − 5250
- 4000 − 4600
- 3450 − 4000
- 3000 − 3450
- 2600 − 3000
- 2300 − 2600
- 1900 − 2300
- 1700 − 1900
- 1500 − 1700
- < 1500

\+ Survey Stations

Area of Low Model Confidence



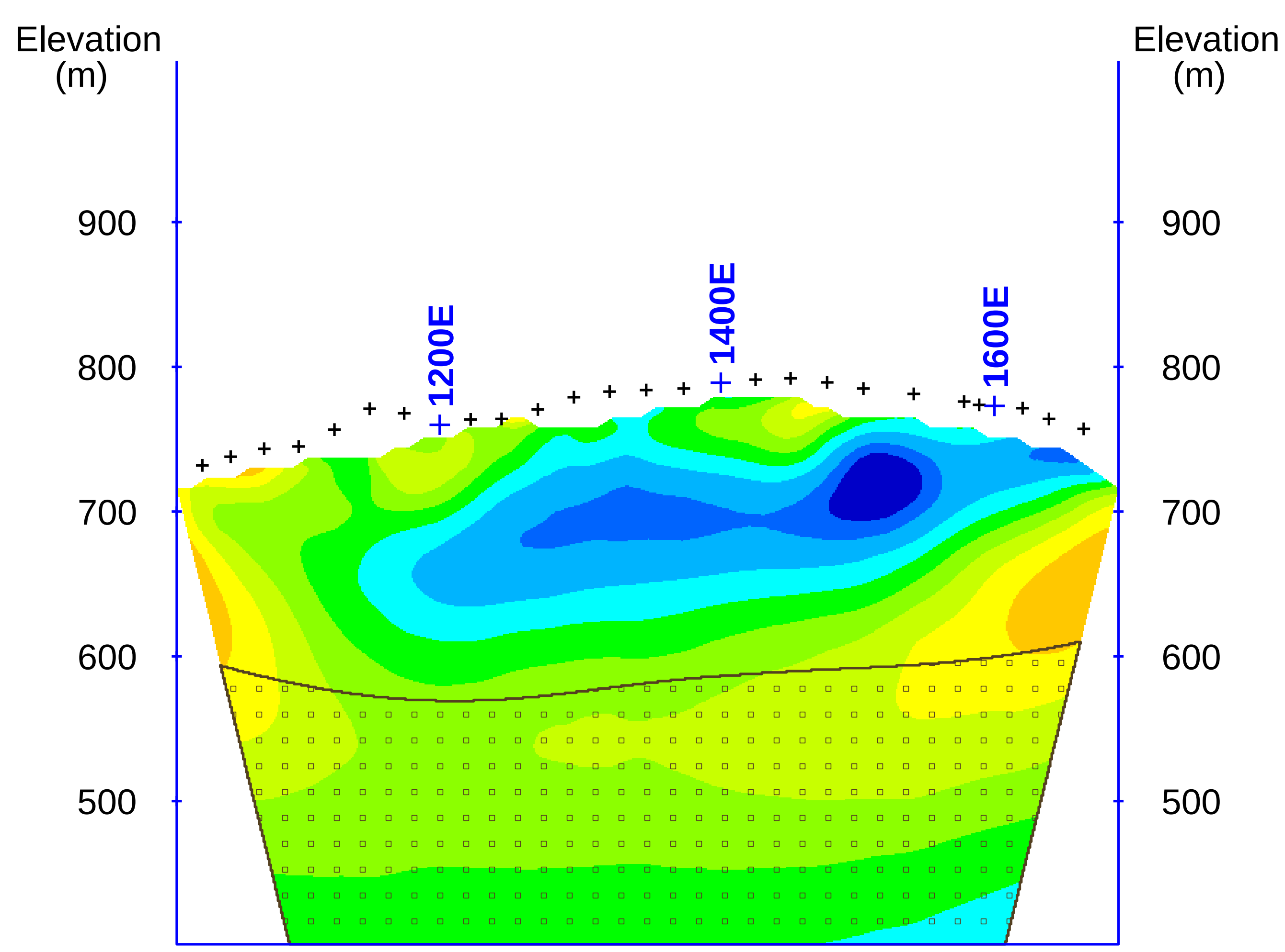
Interpreted Resistivity (ohm−m)

ms

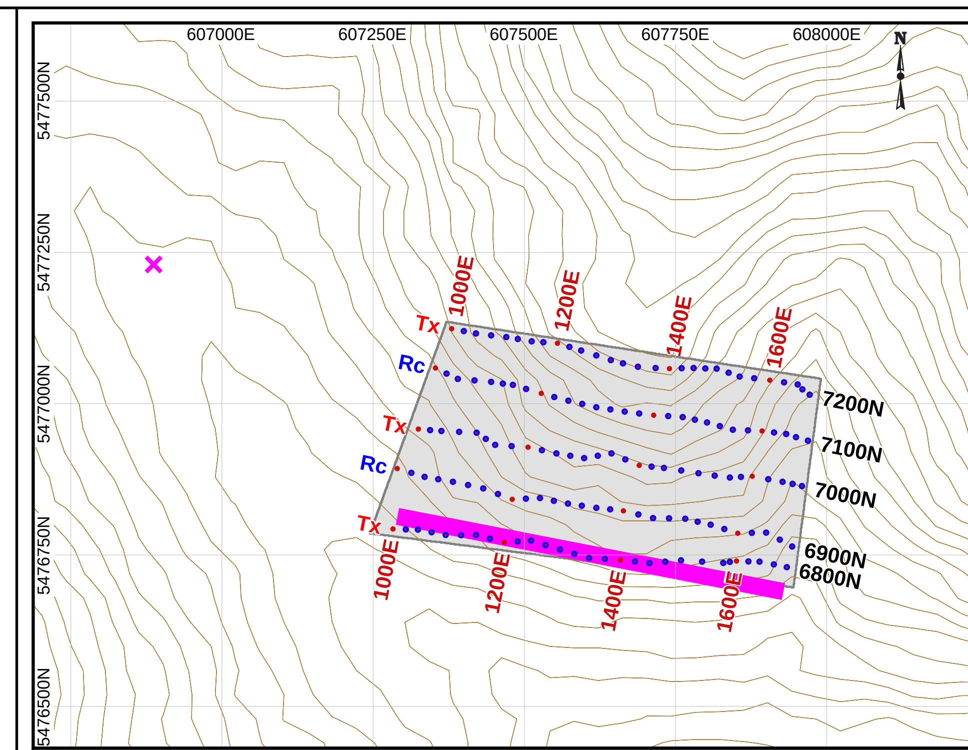
- > 50
- 45 − 50
- 40 − 45
- 35 − 40
- 30 − 35
- 25 − 30
- 20 − 25
- 15 − 20
- 10 − 15
- 5 − 10
- 2 − 5
- < 2

\+ Survey Stations

Area of Low Model Confidence



Interpreted Chargeability (ms)



INDEX MAP

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

Instrumentation:
Receiver: SJ−24 Full−Waveform Digital IP Receiver
Transmitter: GDD TX II
Array Type: 3D

Mapping Information:
Datum: NAD83
Projection: UTM Zone 10
Mapping Date: 13−Dec−2011

0 100 200 300 400
meters

Coast Mountain Geological Ltd.

Swede Project

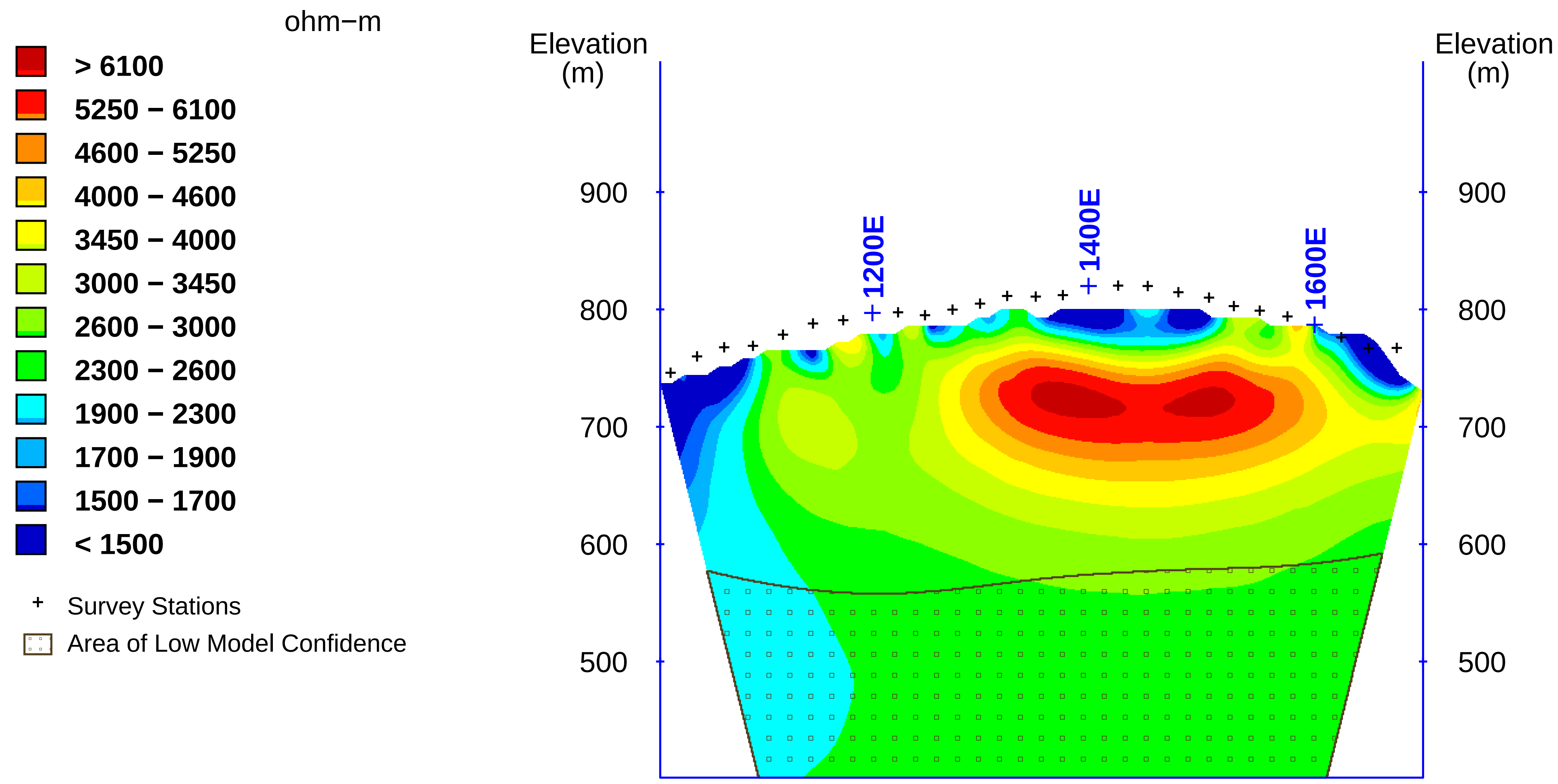
Harrison Hot Springs, B.C.

3D Inversion Model
of
Interpreted
Resistivity & Chargeability

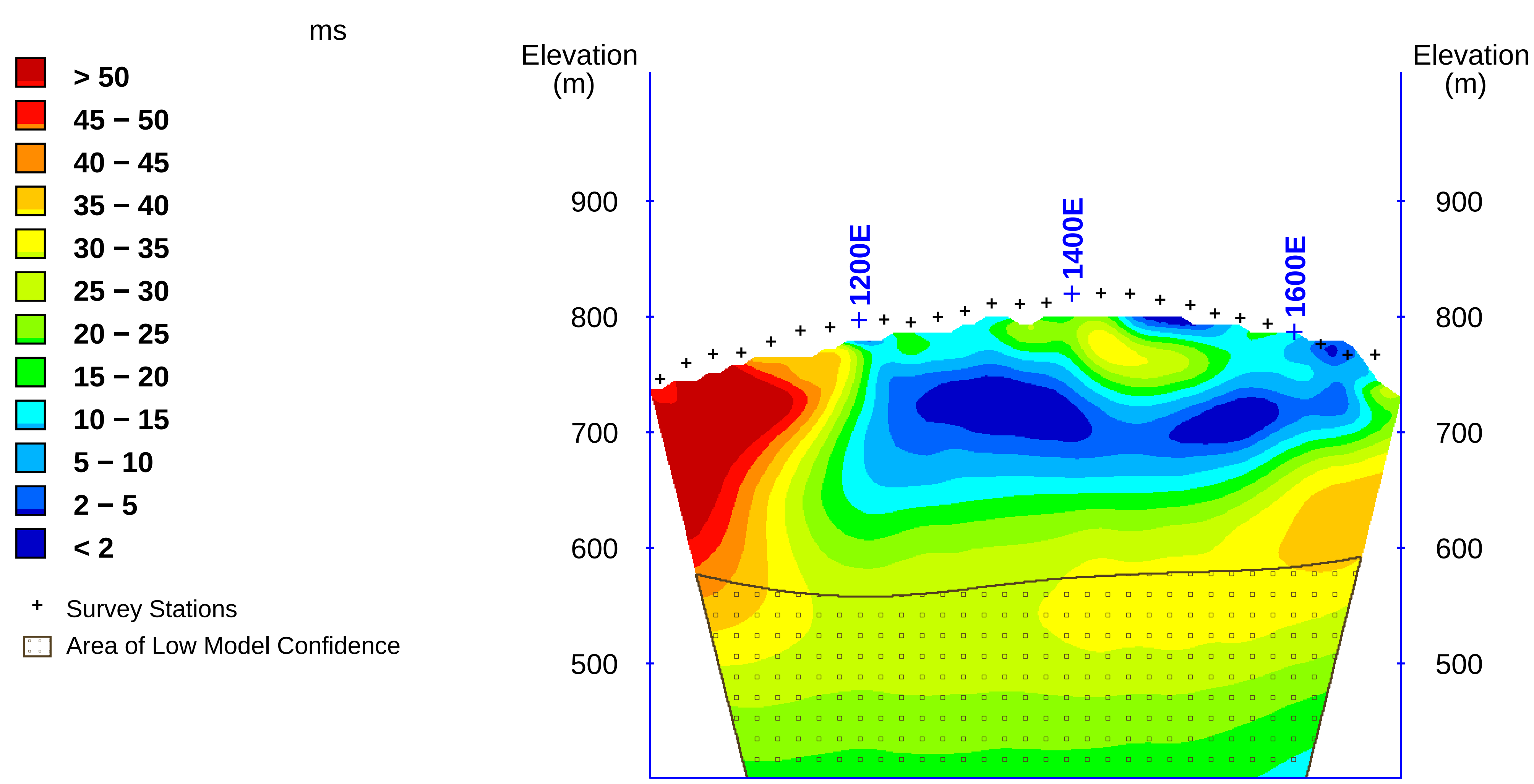
Cross Section Map

Section: 6800N

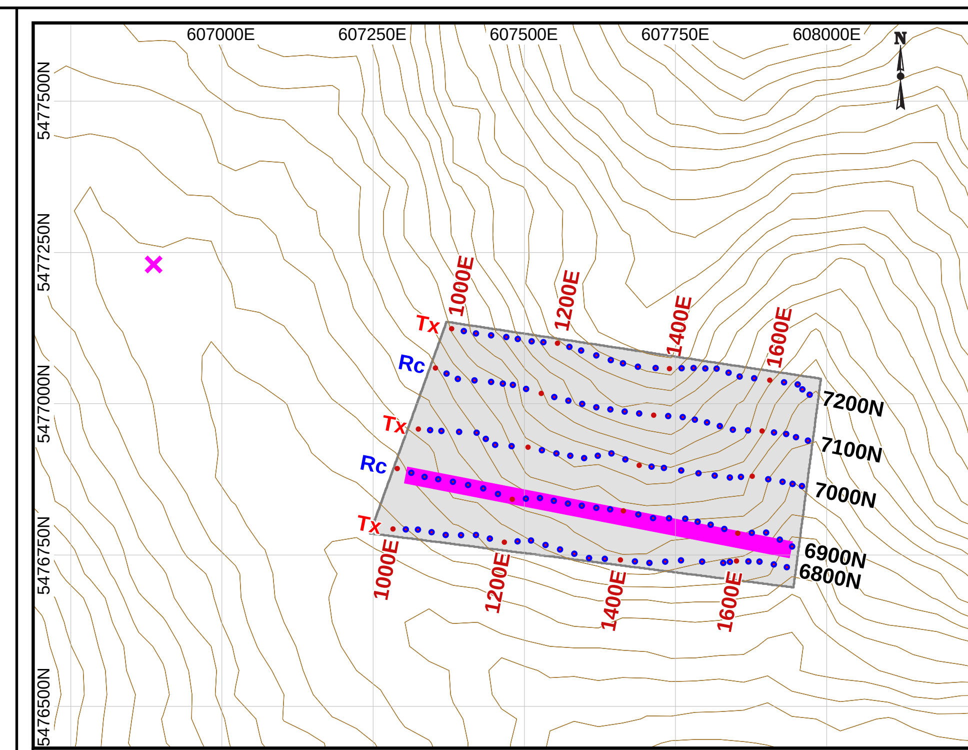
SJ Geophysics Ltd.



Interpreted Resistivity (ohm−m)



Interpreted Chargeability (ms)

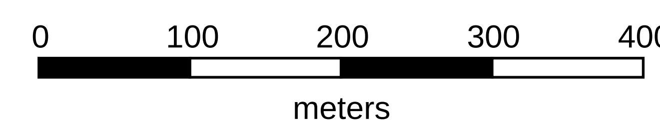


INDEX MAP

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

Instrumentation:
Receiver: SJ−24 Full−Waveform Digital IP Receiver
Transmitter: GDD TX II
Array Type: 3D

Mapping Information:
Datum: NAD83
Projection: UTM Zone 10
Mapping Date: 13−Dec−2011



Coast Mountain Geological Ltd.

Swede Project

Harrison Hot Springs, B.C.

3D Inversion Model

of

Interpreted

Resistivity & Chargeability

Cross Section Map

Section: 6900N

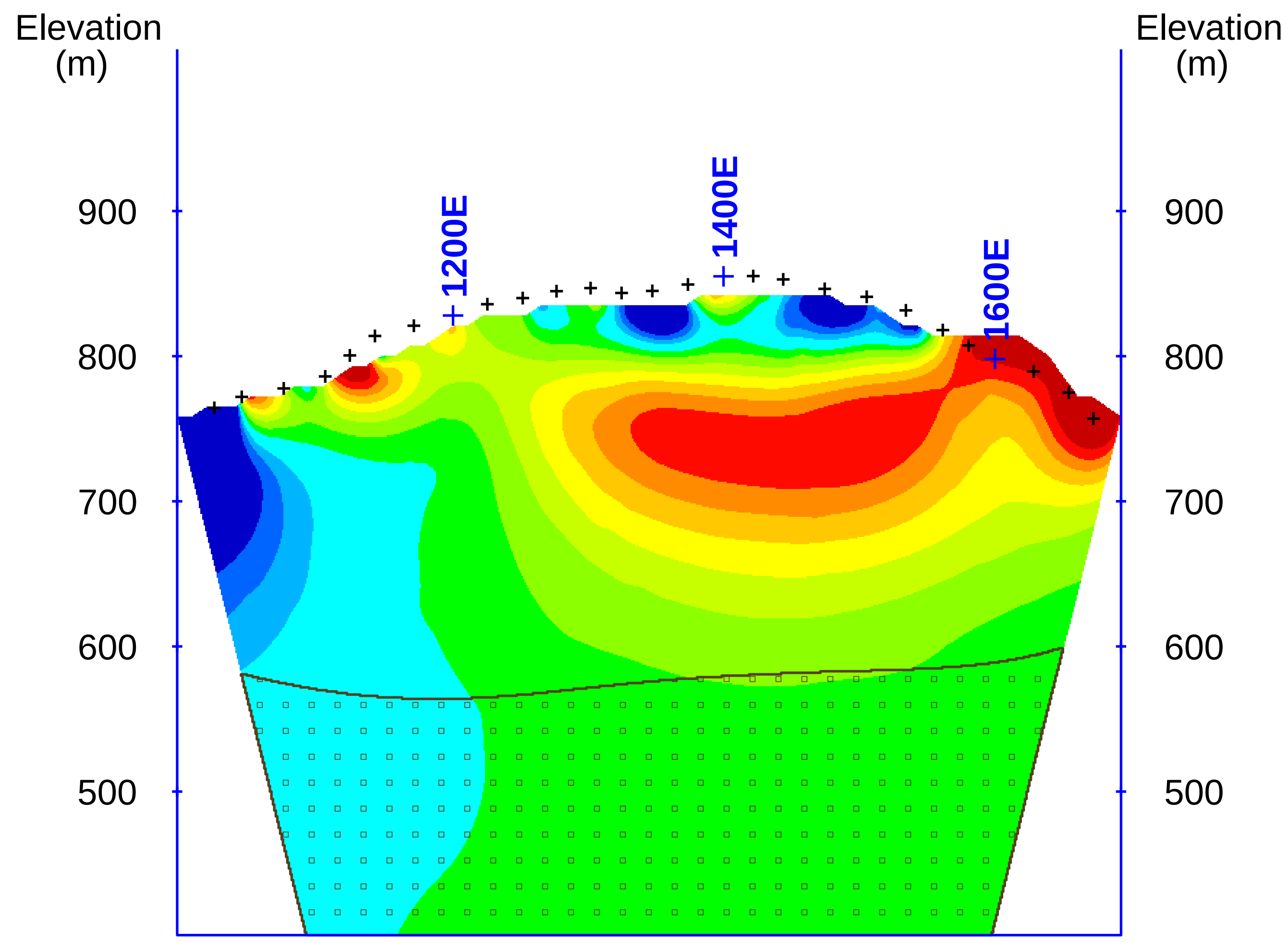
SJ Geophysics Ltd.

ohm−m

- > 6100
- 5250 − 6100
- 4600 − 5250
- 4000 − 4600
- 3450 − 4000
- 3000 − 3450
- 2600 − 3000
- 2300 − 2600
- 1900 − 2300
- 1700 − 1900
- 1500 − 1700
- < 1500

+ Survey Stations

Area of Low Model Confidence



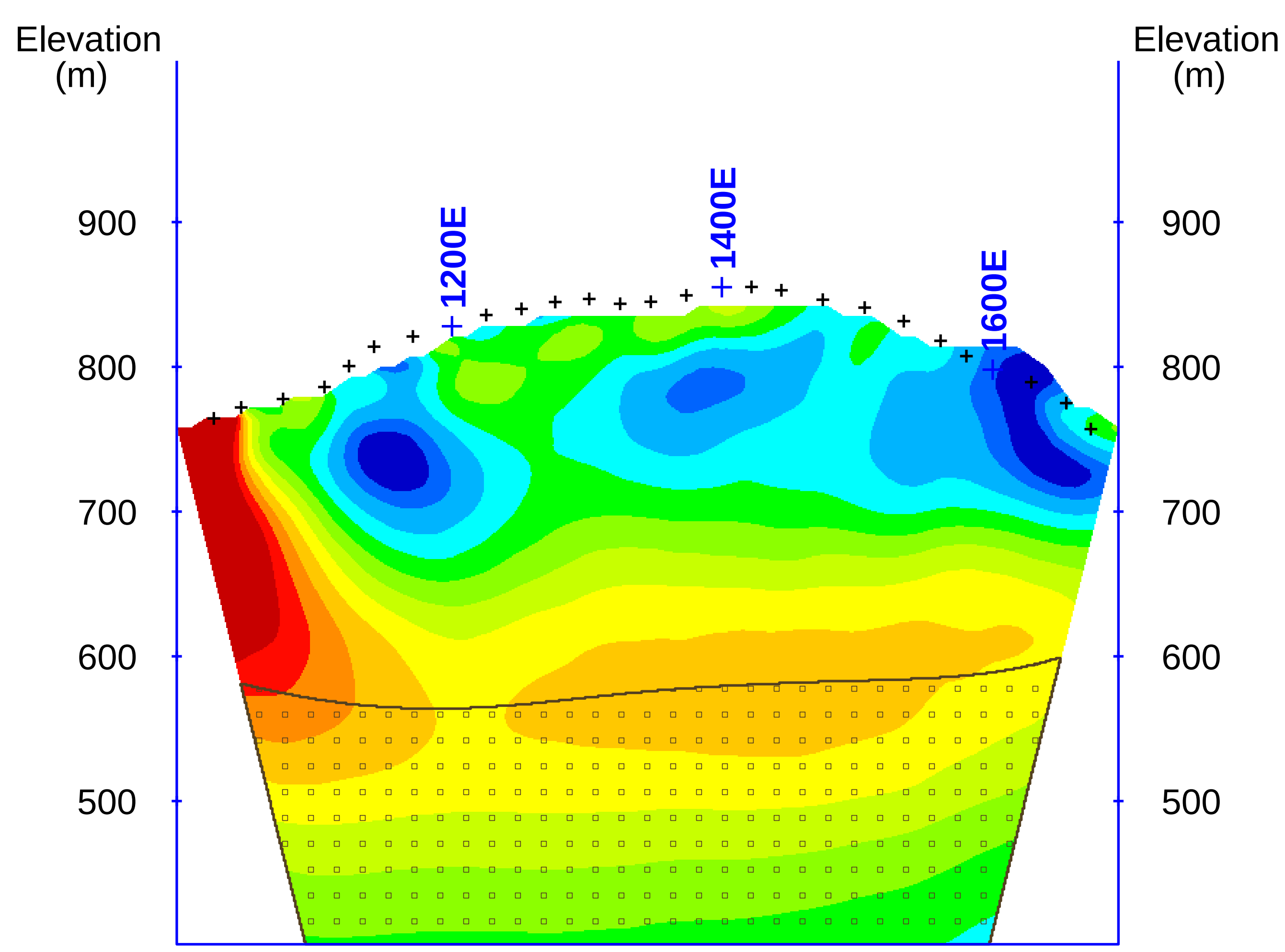
Interpreted Resistivity (ohm−m)

ms

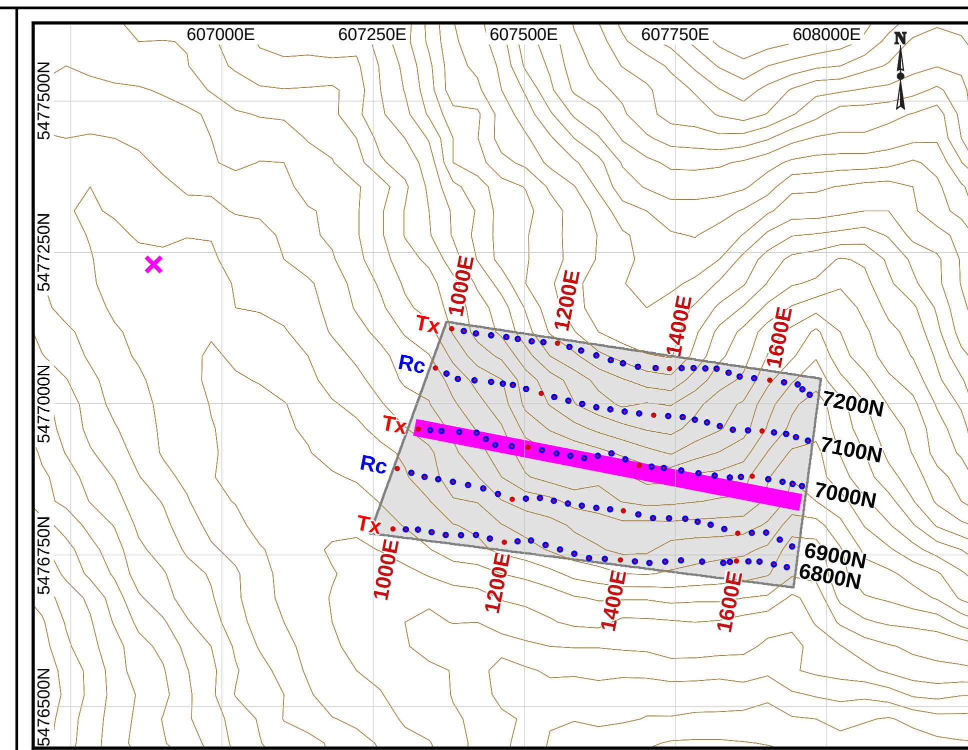
- > 50
- 45 − 50
- 40 − 45
- 35 − 40
- 30 − 35
- 25 − 30
- 20 − 25
- 15 − 20
- 10 − 15
- 5 − 10
- 2 − 5
- < 2

+ Survey Stations

Area of Low Model Confidence



Interpreted Chargeability (ms)



INDEX MAP

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

Instrumentation:
Receiver: SJ−24 Full−Waveform Digital IP Receiver
Transmitter: GDD TX II
Array Type: 3D

Mapping Information:
Datum: NAD83
Projection: UTM Zone 10
Mapping Date: 13−Dec−2011

0 100 200 300 400
meters

Coast Mountain Geological Ltd.

Swede Project

Harrison Hot Springs, B.C.

3D Inversion Model
of
Interpreted
Resistivity & Chargeability

Cross Section Map

Section: 7000N

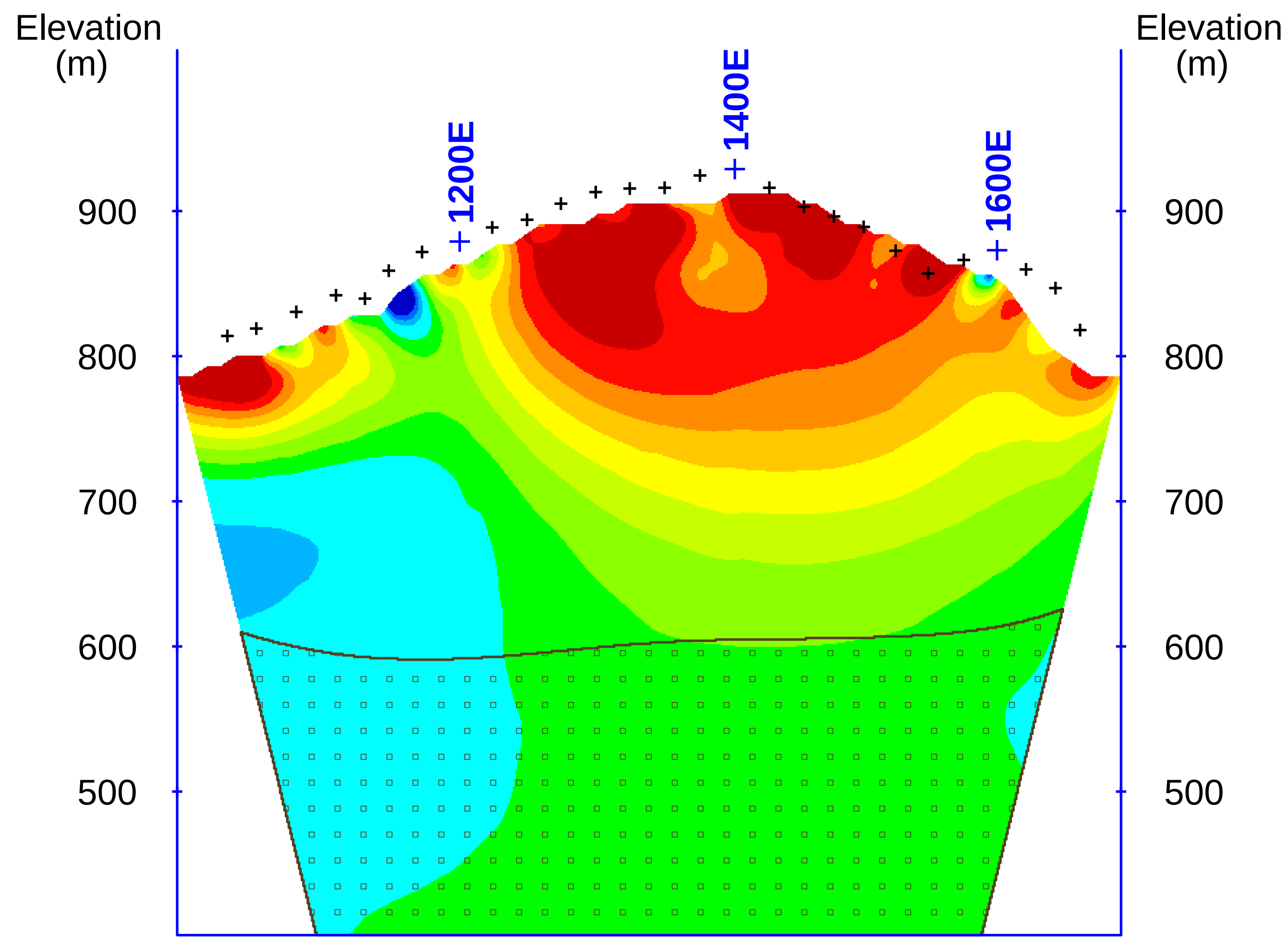
SJ Geophysics Ltd.

ohm−m

- > 6100
- 5250 − 6100
- 4600 − 5250
- 4000 − 4600
- 3450 − 4000
- 3000 − 3450
- 2600 − 3000
- 2300 − 2600
- 1900 − 2300
- 1700 − 1900
- 1500 − 1700
- < 1500

+ Survey Stations

Area of Low Model Confidence



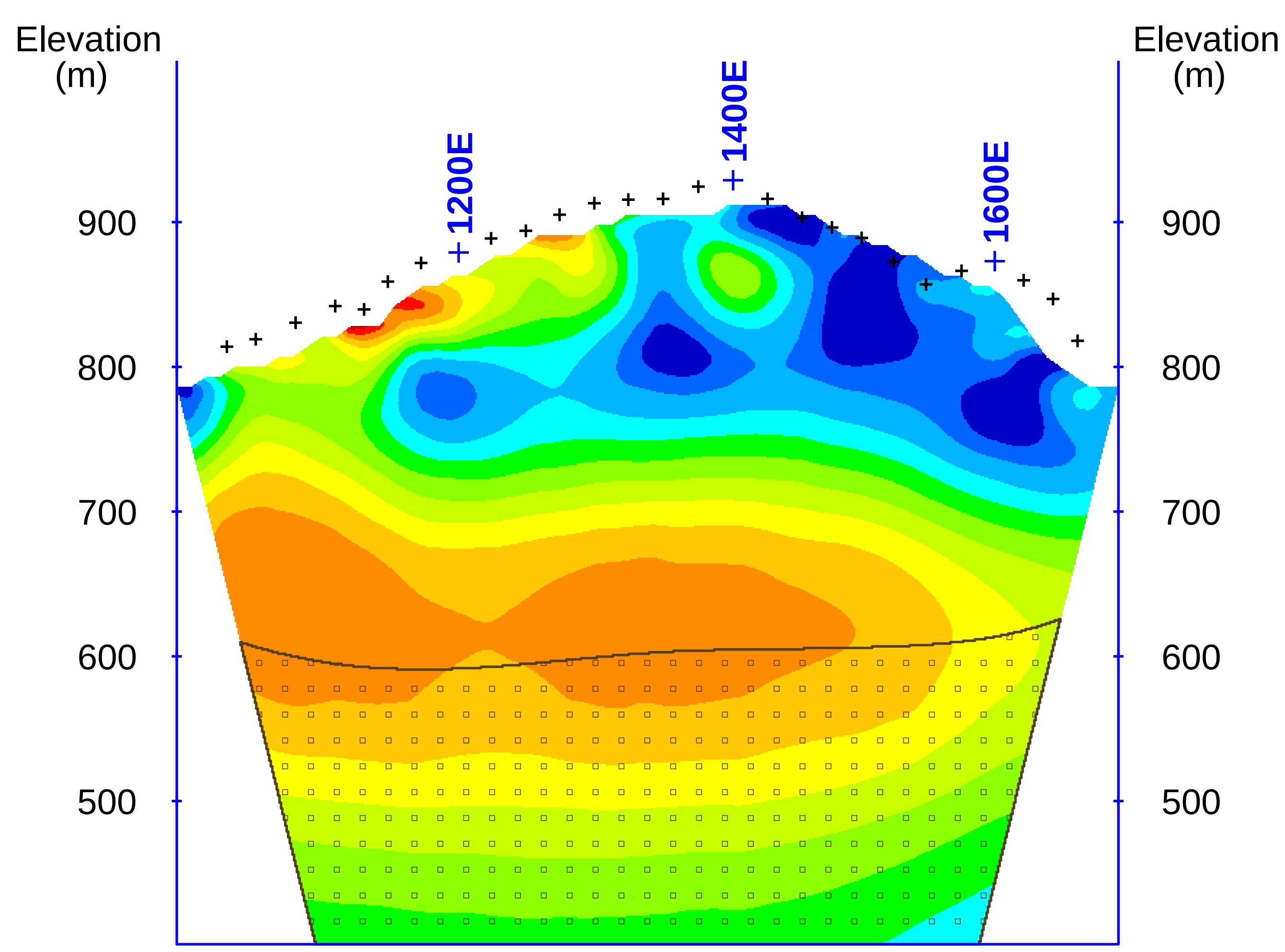
Interpreted Resistivity (ohm−m)

ms

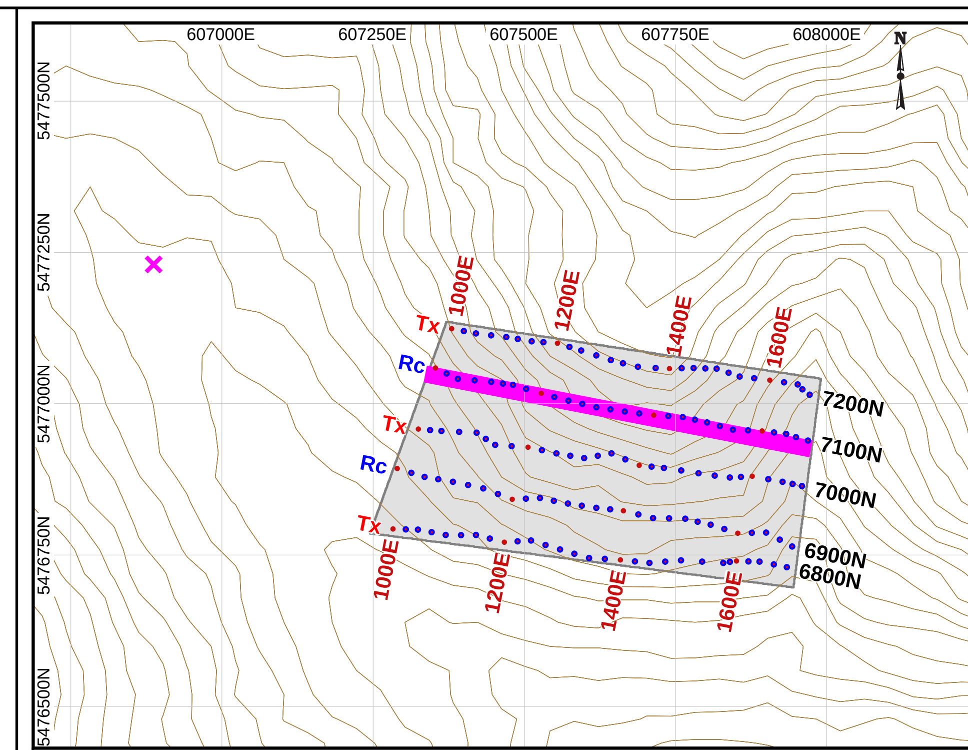
- > 50
- 45 − 50
- 40 − 45
- 35 − 40
- 30 − 35
- 25 − 30
- 20 − 25
- 15 − 20
- 10 − 15
- 5 − 10
- 2 − 5
- < 2

+ Survey Stations

Area of Low Model Confidence



Interpreted Chargeability (ms)



INDEX MAP

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

Instrumentation:
Receiver: SJ−24 Full−Waveform Digital IP Receiver
Transmitter: GDD TX II
Array Type: 3D

Mapping Information:
Datum: NAD83
Projection: UTM Zone 10
Mapping Date: 13−Dec−2011

0 100 200 300 400
meters

Coast Mountain Geological Ltd.

Swede Project

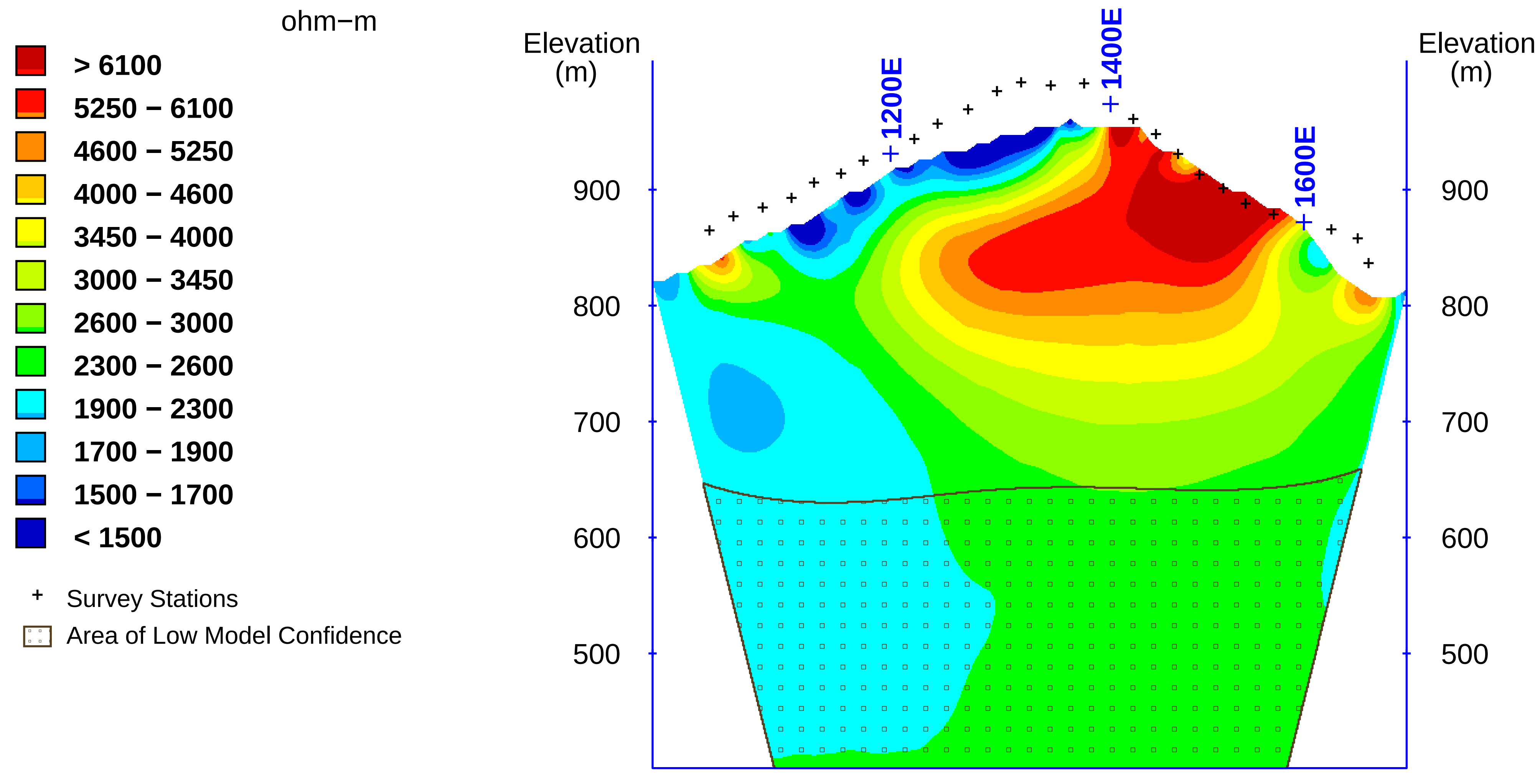
Harrison Hot Springs, B.C.

3D Inversion Model
of
Interpreted
Resistivity & Chargeability

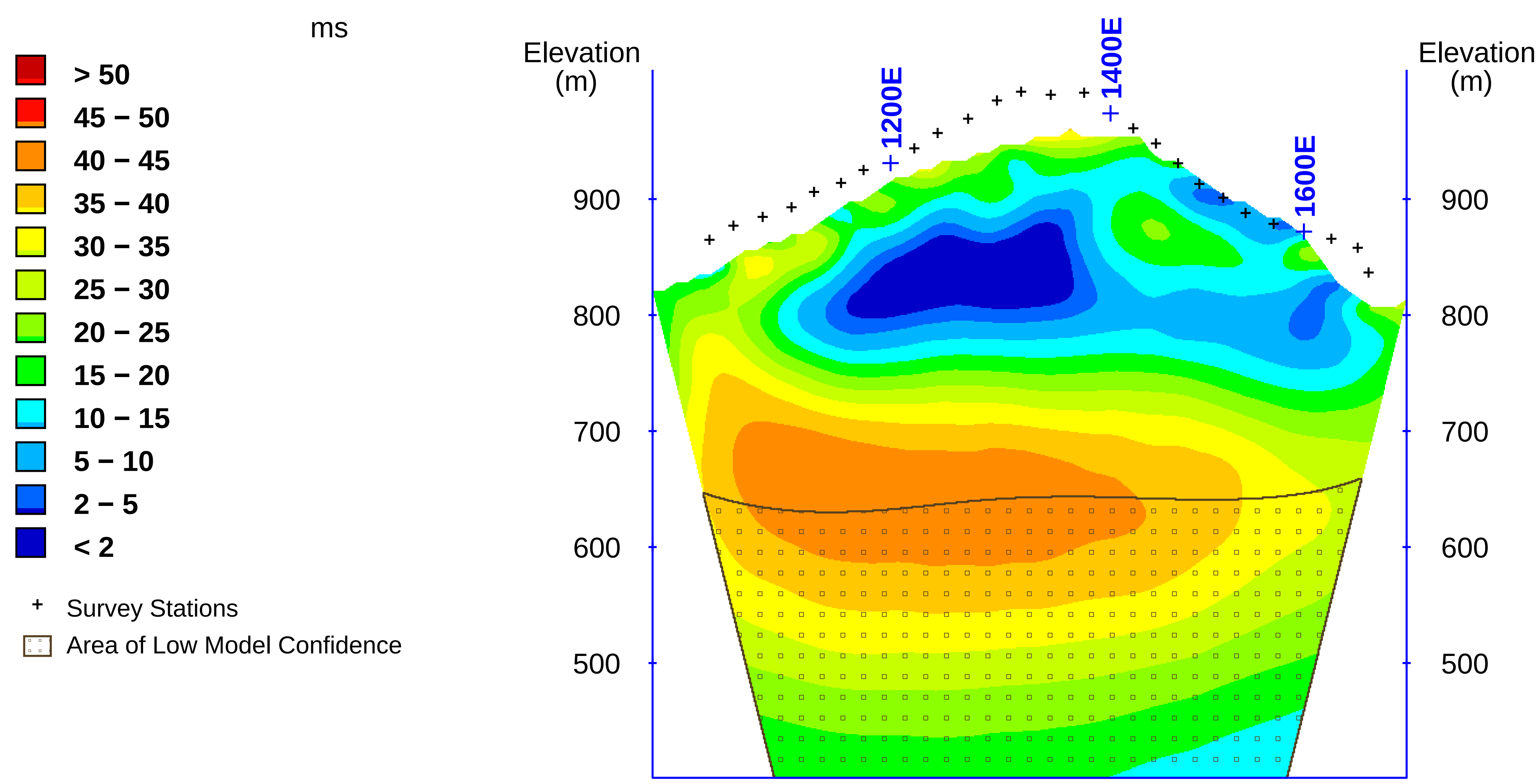
Cross Section Map

Section: 7100N

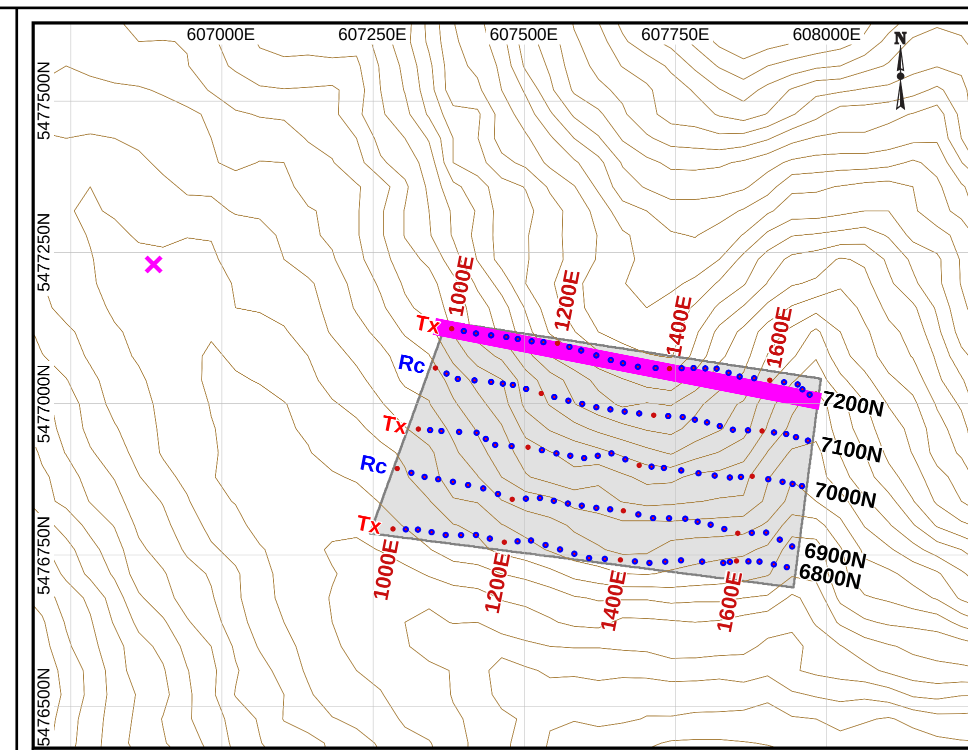
SJ Geophysics Ltd.



Interpreted Resistivity (ohm−m)



Interpreted Chargeability (ms)

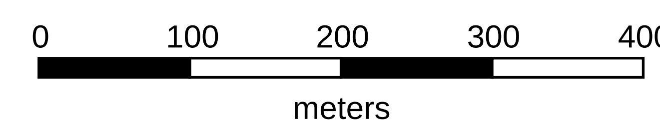


INDEX MAP

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

Instrumentation:
Receiver: SJ−24 Full−Waveform Digital IP Receiver
Transmitter: GDD TX II
Array Type: 3D

Mapping Information:
Datum: NAD83
Projection: UTM Zone 10
Mapping Date: 13−Dec−2011



Coast Mountain Geological Ltd.

Swede Project

Harrison Hot Springs, B.C.

3D Inversion Model

of

Interpreted

Resistivity & Chargeability

Cross Section Map

Section: 7200N

SJ Geophysics Ltd.

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

Instrumentation:
Receiver: SJ−24 Full−Waveform Digital IP Receiver
Transmitter: GDD TX II
Array Type: 3D

Mapping Information:
Datum: NAD83
Projection: UTM Zone 10
Mapping Date: 13−Dec−2011

Planmap

3D Inversion Model

Depth: 25m Below Topography

0 100 200 300 400 500

meters

Mapping By : S.J.V. Consultants Ltd. 11966−95A Avenue, Delta, British Columbia, Canada V4C 3W2 (604) 582−1100 www.sjgeophysics.com

Coast Mountain Geological Ltd.

Interpreted Chargeability (ms)

Swede Project

Harrison Hot Springs, B.C.

Plate C−1

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

Instrumentation:
Receiver: SJ−24 Full−Waveform Digital IP Receiver
Transmitter: GDD TX II
Array Type: 3D

Mapping Information:
Datum: NAD83
Projection: UTM Zone 10
Mapping Date: 13−Dec−2011

Planmap

3D Inversion Model

Depth: 50m Below Topography

0 100 200 300 400 500

meters

Mapping By : S.J.V. Consultants Ltd. 11966−95A Avenue, Delta, British Columbia, Canada V4C 3W2 (604) 582−1100 www.sjgeophysics.com

Coast Mountain Geological Ltd.

Interpreted Chargeability (ms)

Swede Project

Harrison Hot Springs, B.C.

Plate C−2

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

Instrumentation:
Receiver: SJ−24 Full−Waveform Digital IP Receiver
Transmitter: GDD TX II
Array Type: 3D

Mapping Information:
Datum: NAD83
Projection: UTM Zone 10
Mapping Date: 13−Dec−2011

Planmap

3D Inversion Model

Depth: 75m Below Topography

0 100 200 300 400 500

meters

Coast Mountain Geological Ltd.

Interpreted Chargeability (ms)

Swede Project

Harrison Hot Springs, B.C.

Plate C−3

Mapping By : S.J.V. Consultants Ltd. 11966−95A Avenue, Delta, British Columbia, Canada V4C 3W2 (604) 582−1100 www.sjgeophysics.com

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

Instrumentation:
Receiver: SJ−24 Full−Waveform Digital IP Receiver
Transmitter: GDD TX II
Array Type: 3D

Mapping Information:
Datum: NAD83
Projection: UTM Zone 10
Mapping Date: 13−Dec−2011

Planmap

3D Inversion Model

Depth: 100m Below Topography

0 100 200 300 400 500

meters

Mapping By : S.J.V. Consultants Ltd. 11966−95A Avenue, Delta, British Columbia, Canada V4C 3W2 (604) 582−1100 www.sjgeophysics.com

Coast Mountain Geological Ltd.

Interpreted Chargeability (ms)

Swede Project

Harrison Hot Springs, B.C.

Plate C−4

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

Instrumentation:
Receiver: SJ−24 Full−Waveform Digital IP Receiver
Transmitter: GDD TX II
Array Type: 3D

Mapping Information:
Datum: NAD83
Projection: UTM Zone 10
Mapping Date: 13−Dec−2011

Planmap

3D Inversion Model

Depth: 150m Below Topography

0 100 200 300 400 500

meters

Mapping By : S.J.V. Consultants Ltd. 11966−95A Avenue, Delta, British Columbia, Canada V4C 3W2 (604) 582−1100 www.sjgeophysics.com

Coast Mountain Geological Ltd.

Interpreted Chargeability (ms)

Swede Project

Harrison Hot Springs, B.C.

Plate C−5

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

Instrumentation:
Receiver: SJ−24 Full−Waveform Digital IP Receiver
Transmitter: GDD TX II
Array Type: 3D

Mapping Information:
Datum: NAD83
Projection: UTM Zone 10
Mapping Date: 13−Dec−2011

Planmap

3D Inversion Model

Depth: 200m Below Topography

0 100 200 300 400 500

meters

Mapping By : S.J.V. Consultants Ltd. 11966−95A Avenue, Delta, British Columbia, Canada V4C 3W2 (604) 582−1100 www.sjgeophysics.com

Coast Mountain Geological Ltd.

Interpreted Chargeability (ms)

Swede Project

Harrison Hot Springs, B.C.

Plate C−6

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

Instrumentation:
Receiver: SJ−24 Full−Waveform Digital IP Receiver
Transmitter: GDD TX II
Array Type: 3D

Mapping Information:
Datum: NAD83
Projection: UTM Zone 10
Mapping Date: 13−Dec−2011

Planmap

3D Inversion Model

Depth: 250m Below Topography

0 100 200 300 400 500

meters

Mapping By : S.J.V. Consultants Ltd. 11966−95A Avenue, Delta, British Columbia, Canada V4C 3W2 (604) 582−1100 www.sjgeophysics.com

Coast Mountain Geological Ltd.

Interpreted Chargeability (ms)

Swede Project

Harrison Hot Springs, B.C.

Plate C−7

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

Instrumentation:
Receiver: SJ−24 Full−Waveform Digital IP Receiver
Transmitter: GDD TX II
Array Type: 3D

Mapping Information:
Datum: NAD83
Projection: UTM Zone 10
Mapping Date: 13−Dec−2011

Planmap

3D Inversion Model

Depth: 25m Below Topography

0 100 200 300 400 500

meters

Coast Mountain Geological Ltd.

Interpreted Resistivity (ohm−m)

Swede Project

Harrison Hot Springs, B.C.

Plate R−1

Mapping By : S.J.V. Consultants Ltd. 11966−95A Avenue, Delta, British Columbia, Canada V4C 3W2 (604) 582−1100 www.sjgeophysics.com

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

Instrumentation:
Receiver: SJ−24 Full−Waveform Digital IP Receiver
Transmitter: GDD TX II
Array Type: 3D

Mapping Information:
Datum: NAD83
Projection: UTM Zone 10
Mapping Date: 13−Dec−2011

Planmap

3D Inversion Model

Depth: 50m Below Topography

0 100 200 300 400 500
meters

Mapping By : S.J.V. Consultants Ltd. 11966−95A Avenue, Delta, British Columbia, Canada V4C 3W2 (604) 582−1100 www.sjgeophysics.com

Coast Mountain Geological Ltd.

Interpreted Resistivity (ohm−m)

Swede Project

Harrison Hot Springs, B.C.

Plate R−2

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

Instrumentation:
Receiver: SJ−24 Full−Waveform Digital IP Receiver
Transmitter: GDD TX II
Array Type: 3D

Mapping Information:
Datum: NAD83
Projection: UTM Zone 10
Mapping Date: 13−Dec−2011

Planmap

3D Inversion Model

Depth: 75m Below Topography

0 100 200 300 400 500

meters

Coast Mountain Geological Ltd.

Interpreted Resistivity (ohm−m)

Swede Project

Harrison Hot Springs, B.C.

Plate R−3

Mapping By : S.J.V. Consultants Ltd. 11966−95A Avenue, Delta, British Columbia, Canada V4C 3W2 (604) 582−1100 www.sjgeophysics.com

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

Instrumentation:
Receiver: SJ−24 Full−Waveform Digital IP Receiver
Transmitter: GDD TX II
Array Type: 3D

Mapping Information:
Datum: NAD83
Projection: UTM Zone 10
Mapping Date: 13−Dec−2011

Planmap

3D Inversion Model

Depth: 100m Below Topography

0 100 200 300 400 500

meters

Mapping By : S.J.V. Consultants Ltd. 11966−95A Avenue, Delta, British Columbia, Canada V4C 3W2 (604) 582−1100 www.sjgeophysics.com

Coast Mountain Geological Ltd.

Interpreted Resistivity (ohm−m)

Swede Project

Harrison Hot Springs, B.C.

Plate R−4

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

Instrumentation:
Receiver: SJ−24 Full−Waveform Digital IP Receiver
Transmitter: GDD TX II
Array Type: 3D

Mapping Information:
Datum: NAD83
Projection: UTM Zone 10
Mapping Date: 13−Dec−2011

Planmap

3D Inversion Model

Depth: 150m Below Topography

0 100 200 300 400 500
meters

Coast Mountain Geological Ltd.

Interpreted Resistivity (ohm−m)

Swede Project

Harrison Hot Springs, B.C.

Plate R−5

Mapping By : S.J.V. Consultants Ltd. 11966−95A Avenue, Delta, British Columbia, Canada V4C 3W2 (604) 582−1100 www.sjgeophysics.com

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

Instrumentation:
Receiver: SJ−24 Full−Waveform Digital IP Receiver
Transmitter: GDD TX II
Array Type: 3D

Mapping Information:
Datum: NAD83
Projection: UTM Zone 10
Mapping Date: 13−Dec−2011

Planmap

3D Inversion Model

Depth: 200m Below Topography

0 100 200 300 400 500

meters

Coast Mountain Geological Ltd.

Interpreted Resistivity (ohm−m)

Swede Project

Harrison Hot Springs, B.C.

Plate R−6

Mapping By : S.J.V. Consultants Ltd. 11966−95A Avenue, Delta, British Columbia, Canada V4C 3W2 (604) 582−1100 www.sjgeophysics.com

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

Instrumentation:
Receiver: SJ−24 Full−Waveform Digital IP Receiver
Transmitter: GDD TX II
Array Type: 3D

Mapping Information:
Datum: NAD83
Projection: UTM Zone 10
Mapping Date: 13−Dec−2011

Planmap

3D Inversion Model

Depth: 250m Below Topography

0 100 200 300 400 500
meters

Coast Mountain Geological Ltd.

Interpreted Resistivity (ohm−m)

Swede Project

Harrison Hot Springs, B.C.

Plate R−7

Mapping By : S.J.V. Consultants Ltd. 11966−95A Avenue, Delta, British Columbia, Canada V4C 3W2 (604) 582−1100 www.sjgeophysics.com

APPENDIX V

ROCK SAMPLE NOTES

Sample	NAD 83 East	NAD 83 North	Cu %	Ni %	Co %	Au g/t	Pt g/t	Pd g/t	Mineralization	Comments
BN-01	604455	5476950	0.19	0.08	0.01	0.02	0.00	0.02	10% Py, minor cpy	5cm veinlet N/80W by access road
BN-02	604290	5477790	**4.38**	**0.92**	0.09	0.08	0.05	0.10	msv py, cpy, po, pentl.	Big Nic Borrow Pit Showing (subcrop appearance)
BN-03	604290	5477790	1.21	0.69	0.07	0.09	0.10	0.15	as above	as above - coarse grained
BN-04	604290	5477790	**2.38**	0.73	0.07	**1.14**	0.02	0.15	as above	as above
BN-05	604290	5477790	1.40	**0.77**	0.07	0.13	0.04	0.15	as above	as above - med grained
BN-06	604290	5477790	1.00	**0.77**	0.07	0.02	0.04	0.12	as above	as above
BN-07	604290	5477790	0.84	**0.78**	0.07	0.18	0.12	0.17	as above	as above - fine grained
BN-08	604290	5477790	1.60	0.64	0.07	0.06	0.03	0.09	as above	as above
BN-09	604290	5477790	0.12	0.04	0.01	0.01	0.01	0.01	10% sulphides	Big Nic Borrow Pit Showing - contact with msv?

APPENDIX VI

ROCK SAMPLE ASSAY CERTIFICATES

AcmeLabs Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada

www.acmelab.com

Client: **Coast Mountain Geological**
620 - 650 W. Georgia St.
PO Box 11604
Vancouver BC V6B 4N9 Canada

Submitted By: Chris Basil
Receiving Lab: Canada-Vancouver
Received: November 24, 2011
Report Date: January 18, 2012

CERTIFICATE OF ANALYSIS VAN11006506.3

CLIENT JOB INFORMATION

Project: None Given
Shipment ID:
P.O. Number
Number of Samples: 9

SAMPLE DISPOSAL

RTRN-PLP Return
DISP-RJT Dispose of Reject After 90 days

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
R200-250	9	Crush, split and pulverize 250 g rock to 200 mesh			VAN
3B02	9	Fire assay fusion Au Pt Pd by ICP-ES	30	Completed	VAN
1DX2	9	1:1:1 Aqua Regia digestion ICP-MS analysis	15	Completed	VAN
7AR	5	1:1:1 Aqua Regia digestion ICP-ES analysis	0.4	Completed	VAN

ADDITIONAL COMMENTS

Version 3; 1DX2, 7AR analysis included

Invoice To: Coast Mountain Geological
620 - 650 W. Georgia St.
PO Box 11604
Vancouver BC V6B 4N9
Canada

CC:

BRITISH COLUMBIA CERTIFIED ASSAYER
CLARENCE LEONG
GENERAL MANAGER

This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only.
All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only. Results apply to samples as submitted.
"*" asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.

AcmeLabs Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Coast Mountain Geological**
620 - 650 W. Georgia St.
PO Box 11604
Vancouver BC V6B 4N9 Canada

Project: None Given
Report Date: January 18, 2012

CERTIFICATE OF ANALYSIS VAN11006506.3

	Method	WGHT	3B	3B	3B	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	Wgt	Au	Pt	Pd	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi
	Unit	kg	ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm
	MDL	0.01	2	3	2	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1
BN-01	Rock	2.90	16	<3	17	26.1	1912	1.2	15	0.3	800.1	92.4	61	4.79	1.1	23.1	0.2	141	<0.1	<0.1	<0.1
BN-02	Rock	3.01	79	49	97	28.8	>10000	1.1	35	4.5	9174	887.4	42	>40	1.0	50.1	0.1	<1	1.1	<0.1	0.2
BN-03	Rock	4.75	93	103	154	34.6	>10000	0.7	25	1.4	6930	676.5	91	33.10	<0.5	17.4	<0.1	2	0.3	<0.1	0.2
BN-04	Rock	2.85	1137	23	146	28.4	>10000	0.8	28	3.3	7341	748.8	64	34.07	<0.5	732.9	0.1	4	0.7	0.1	0.2
BN-05	Rock	4.95	133	39	150	29.2	>10000	0.7	21	1.9	7692	716.7	53	35.05	<0.5	185.1	0.2	2	0.5	<0.1	0.2
BN-06	Rock	1.68	18	40	119	27.2	9974	1.0	20	1.5	7711	726.3	66	35.98	<0.5	89.0	0.1	3	0.3	<0.1	0.2
BN-07	Rock	1.44	177	117	170	27.0	8399	0.7	19	1.1	7839	732.2	68	35.98	<0.5	173.4	0.2	2	0.2	<0.1	0.2
BN-08	Rock	2.86	64	33	87	20.1	>10000	0.7	26	1.9	6389	663.0	86	31.49	<0.5	93.1	0.3	14	0.5	<0.1	0.1
BN-09	Rock	0.94	14	5	5	1.6	1153	0.6	34	0.2	392.7	66.4	161	3.06	<0.5	13.3	0.2	5	<0.1	<0.1	<0.1

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Client: **Coast Mountain Geological**
620 - 650 W. Georgia St.
PO Box 11604
Vancouver BC V6B 4N9 Canada

Project: None Given
Report Date: January 18, 2012

CERTIFICATE OF ANALYSIS VAN11006506.3

	Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te
	Unit	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
	MDL	2	0.01	0.001	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2
BN-01	Rock	73	0.96	0.012	1	59	0.40	27	0.042	3	2.23	0.399	0.10	<0.1	<0.01	2.6	<0.1	3.34	5	7.6	0.8
BN-02	Rock	25	0.02	0.004	<1	53	0.13	17	0.010	<1	0.14	0.009	0.05	<0.1	0.03	0.4	0.2	5.85	<1	40.1	2.3
BN-03	Rock	37	0.05	0.005	<1	55	0.39	19	0.020	2	0.12	0.005	0.05	<0.1	0.03	1.8	0.2	>10	<1	33.3	2.2
BN-04	Rock	41	0.04	0.005	<1	43	0.31	24	0.017	1	0.18	0.015	0.05	<0.1	0.03	1.1	0.2	6.36	<1	30.5	1.6
BN-05	Rock	48	0.03	0.005	<1	52	0.30	31	0.025	1	0.16	0.008	0.08	<0.1	0.02	1.1	0.1	8.59	<1	30.7	2.0
BN-06	Rock	31	0.04	0.005	<1	49	0.39	24	0.024	1	0.18	0.011	0.07	<0.1	0.02	1.3	0.1	7.68	<1	35.3	2.1
BN-07	Rock	34	0.04	0.007	<1	52	0.38	24	0.026	1	0.18	0.009	0.08	<0.1	0.02	1.1	0.1	8.24	<1	36.9	2.1
BN-08	Rock	35	0.16	0.004	<1	59	0.48	25	0.025	<1	0.34	0.062	0.09	<0.1	0.02	1.9	0.2	8.44	1	31.8	1.6
BN-09	Rock	51	0.15	0.001	<1	98	0.90	44	0.058	2	0.20	0.009	0.09	<0.1	<0.01	4.1	<0.1	1.41	1	2.4	<0.2

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Project: None Given
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CERTIFICATE OF ANALYSIS VAN11006506.3

	Method	7AR
	Analyte	Cu
	Unit	%
	MDL	0.001
BN-01	Rock	N.A.
BN-02	Rock	4.384
BN-03	Rock	1.206
BN-04	Rock	2.378
BN-05	Rock	1.403
BN-06	Rock	N.A.
BN-07	Rock	N.A.
BN-08	Rock	1.601
BN-09	Rock	N.A.

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Project: None Given
Report Date: January 18, 2012

QUALITY CONTROL REPORT VAN11006506.3

	Method	WGHT	3B	3B	3B	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	Wgt	Au	Pt	Pd	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi
	Unit	kg	ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm
	MDL	0.01	2	3	2	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1
Pulp Duplicates																					
BN-05	Rock	4.95	133	39	150	29.2	>10000	0.7	21	1.9	7692	716.7	53	35.05	<0.5	185.1	0.2	2	0.5	<0.1	0.2
REP BN-05	QC					29.8	>10000	0.7	19	1.9	7272	695.9	49	33.28	<0.5	123.1	0.2	2	0.4	<0.1	0.2
BN-09	Rock	0.94	14	5	5	1.6	1153	0.6	34	0.2	392.7	66.4	161	3.06	<0.5	13.3	0.2	5	<0.1	<0.1	<0.1
REP BN-09	QC					1.5	1123	0.6	34	0.1	393.1	64.5	157	3.10	0.6	12.6	0.2	5	<0.1	<0.1	<0.1
Reference Materials																					
STD CDN-PGMS-19	Standard		222	107	464																
STD DS8	Standard					14.8	111.4	131.0	306	1.9	40.5	7.9	638	2.39	24.7	146.6	7.6	74	2.5	4.7	6.4
STD DS8	Standard					12.6	121.5	141.8	317	1.9	36.3	7.1	617	2.54	27.0	149.8	7.3	72	2.6	6.3	7.6
STD GC-7	Standard																				
STD GC-7	Standard																				
STD PD1	Standard		509	438	551																
STD PD1 Expected			542	456	563																
STD CDN-PGMS-19			230	108	476																
STD GC-7 Expected																					
STD DS8 Expected						13.44	110	123	312	1.69	38.1	7.5	615	2.46	26	107	6.89	67.7	2.38	5.7	6.67
BLK	Blank		<2	<3	<2																
BLK	Blank		<2	<3	<2																
BLK	Blank																				
BLK	Blank					<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.5	<0.1	<1	<0.1	<0.1	<0.1
Prep Wash																					
G1	Prep Blank	<0.01	<2	<3	<2	0.2	3.2	3.3	50	<0.1	2.7	4.1	635	2.08	0.7	2.4	6.2	79	<0.1	<0.1	0.1

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QUALITY CONTROL REPORT VAN11006506.3

	Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te
	Unit	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
	MDL	2	0.01	0.001	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2
Pulp Duplicates																					
BN-05	Rock	48	0.03	0.005	<1	52	0.30	31	0.025	1	0.16	0.008	0.08	<0.1	0.02	1.1	0.1	8.59	<1	30.7	2.0
REP BN-05	QC	47	0.03	0.004	<1	51	0.30	30	0.025	<1	0.15	0.008	0.08	<0.1	0.02	1.2	0.2	8.29	<1	30.4	1.8
BN-09	Rock	51	0.15	0.001	<1	98	0.90	44	0.058	2	0.20	0.009	0.09	<0.1	<0.01	4.1	<0.1	1.41	1	2.4	<0.2
REP BN-09	QC	51	0.15	0.001	<1	100	0.87	42	0.058	2	0.19	0.009	0.09	<0.1	<0.01	4.0	<0.1	1.37	1	2.1	<0.2
Reference Materials																					
STD CDN-PGMS-19	Standard																				
STD DS8	Standard	44	0.78	0.081	19	120	0.66	282	0.139	3	1.03	0.107	0.43	2.8	0.22	3.0	5.6	0.15	5	4.9	5.1
STD DS8	Standard	44	0.71	0.084	14	119	0.65	302	0.113	2	0.93	0.086	0.44	2.9	0.21	2.4	6.0	0.17	4	5.1	5.1
STD GC-7	Standard																				
STD GC-7	Standard																				
STD PD1	Standard																				
STD PD1 Expected																					
STD CDN-PGMS-19																					
STD GC-7 Expected																					
STD DS8 Expected		41.1	0.7	0.08	14.6	115	0.6045	279	0.113	2.6	0.93	0.0883	0.41	3	0.192	2.3	5.4	0.1679	4.7	5.23	5
BLK	Blank																				
BLK	Blank																				
BLK	Blank																				
BLK	Blank	<2	<0.01	<0.001	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2
Prep Wash																					
G1	Prep Blank	41	0.59	0.075	17	6	0.57	178	0.145	1	1.11	0.125	0.53	<0.1	<0.01	2.8	0.3	<0.05	6	<0.5	<0.2

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QUALITY CONTROL REPORT VAN11006506.3

	Method	7AR
	Analyte	Cu
	Unit	%
	MDL	0.001
Pulp Duplicates		
BN-05	Rock	1.403
REP BN-05	QC	1.372
BN-09	Rock	N.A.
REP BN-09	QC	
Reference Materials		
STD CDN-PGMS-19	Standard	
STD DS8	Standard	
STD DS8	Standard	
STD GC-7	Standard	0.568
STD GC-7	Standard	0.556
STD PD1	Standard	
STD PD1 Expected		
STD CDN-PGMS-19		
STD GC-7 Expected		0.555
STD DS8 Expected		
BLK	Blank	
BLK	Blank	
BLK	Blank	<0.001
BLK	Blank	
Prep Wash		
G1	Prep Blank	N.A.

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