BC Geological Survey Assessment Report 31145

# TITLE PAGE

# SUMMARY GEOLOGICAL REPORT AND GEOPHYSICAL ASSESSMENT REPORT

# **GRIZZLY PROJECT**

## SHESLAY RIVER AREA

#### NORTHWESTERN BRITISH COLUMBIA

Approximate geographic centre of subject property: Latitude 58.20 degrees and Longitude 131.75 degrees

**Prepared for** 

### EQUINOX RESOURCES LTD.

#### GARIBALDI RESOURCE CORP.

Wesley Raven, P.Geo.

Carl von Einsiedel, P.Geo.

October 15, 2009

# **REVISED JULY 15, 2010**

SOW: 4292115 SOW: 4292359

# Section 2. TABLE OF CONTENTS

Section 1	: TITLE PAGE		1
Section 2	. TABLE OF CONTENTS		2
Section 3	: SUMMARY		6
Section 4	. INTRODUCTION AND TERMS OF F	REFERENCE 1	1
Section 5	S. STATEMENT OF COSTS	1	2
Section 6	6. PROPERTY DESCRIPTION AND LO	CATION 1	3
Section 7	ACCESS, CLIMATE, INFRASTRUC	TURE AND PHYSIOGRAPHY 1	5
Section 8	B. HISTORY	1	7
Section 9	. GEOLOGICAL SETTING	1	9
Section 1	0. DEPOSIT TYPES	2	21
Section 1	1. MINERALIZATION	2	22
	<ol> <li>EXPLORATION</li> <li>Exploration work carried out by Garil</li> <li>Exploration work carried out by Equination</li> </ol>	paldi Resources 2006–2008 2	27 27 28
Section 1	3. DRILLING	3	85
Section 1	4. SAMPLE METHOD AND APPROAC	ЭН 3	85
Section 1	5. SAMPLE PREPARATION, ANALYS	ES AND SECURITY 3	85
Section 1	6. DATA VERIFICATION	3	85
Section 1	7. ADJACENT PROPERTIES	3	86
Section 1	8. MINERAL PROCESSING AND MET	ALLURGICAL TESTING 4	1
Section 1	9. MINERAL RESOURCE AND RESER	RVE ESTIMATES 4	1
Section 2	0. OTHER RELEVENT INFORMATION	4	1
Section 2	1. INTERPRETATION AND CONCLUS	SIONS 4	2
Section 2	2. RECOMMENDATIONS	4	3
Section 2	3. REFERENCES	4	5
Section 2	4. CERTIFICATE (Wes Raven)	4	6
Section 2	5. CERTIFICATE (C. von Einsiedel)	4	7

# LIST OF TABLES

Table 1 List of mineral claims comprising the Grizzly Property		13
LIST OF FIG	URES	
Figure 1:	Regional location map showing mineral claims, MINFILE database, access roads, mines and advanced alkalic porphyry copper-gold prospects in NW BC	9
Figure 2:	Regional geological map showing advanced alkalic porphyry copper-gold prospects in NW BC	10
Figure 3:	Property location map showing mineral claim tenure reference numbers (1:100,000 scale)	16
Figure 4:	Property index map showing project outline historic claim boundaries, Minfile locations and inset map areas (1:100,000 scale)	18
Figure 5	Property map showing BCMEM generalized geology, structure and Minfile occurrences (1:100,000 scale)	20
Figure 6	Detail plan showing soil sampling (copper) by Corona Corp. and 1974 drill hole locations (1:20,000 scale)	23
Figure 7	Detail plan showing soil sampling (gold) by Corona Corp. and 1974 drill hole locations (1:20,000 scale)	24
Figure 8	Detail plan showing rock sampling (copper / gold) by Corona Corp. And 1974 drill hole locations (1:20,000 scale)	25
Figure 9	Detail Magnetic color contour map -sun illuminated from east. Topo base map. 3-D IP Test Survey (black circles). South study area (white rectangle). Minfile Occurrences (yellow stars)	28
Figure 10	Magnetic Inversion of south study area – 3D Perspective view from southeast -Isosurfaces of higher magnetic materials are drawn in green (0.1658 SI), yellow (0.20 SI) and red (0.25 SI). Translucent map of magnetic data draped over surface. IP survey lines drawn in pur	29 ole.
Figure 11	3D Perspective view from the southeast -Depth slice at 100m through chargeability inversion -Isosurface of high (0.016568 SI) magnetic body (brown):	30
Figure 12	Isosurface of Chargeability: 2.75 ms (green), 3.5 ms (yellow), 5.0 ms (red) – View from south.	31
Figure 13	Depth slice at 100m through resistivity inversion. Isosurface of magnetics (0.016568 SI – shown in brown) -View from the south.	32
Figure 14	Isosurface of resistivity: 10000 ohm-m (blue), conductivity 0.015 mho-m (yellow) – View from south.	33

Figure 15	Isosurface of magnetics (0.016568 SI – red): Isosurface of chargeability ( 3.5 ms – green): Isosurface of resistivity (10,000 ohm-m – blue): View from the southeast. Translucent overlay of DEM surface.	34
Figure 16	Digital elevation map showing Copper Creek and Grizzly Projects, Primary target area and historic property boundaries (1:100,000 scale)	38
Figure 17	Google Earth View showing Grizzly and Copper Creek Properties and primary target areas (schematic view – not to scale)	39
Figure 18	Aerial view of the Dick Creek target showing Upper Main Trench and 2004/5 drill holes (not to scale)	40
Figure 19	Compilation plan for the Dick Creek Target showing copper in soil, IP and magnetic anomaly response	40
Figure 20	Drill Section 9850 for the Dick Creek prospect	40

#### LIST OF APPENDICES

Appendix 1: List of technical reports and technical drawings prepared by SJ Geophysics for the Grizzly Project IP Survey

Pezzot, T., Unpublished Memorandum on the Exploration Potential of the Grizzly Property based on an Interpretation of 2006 Fugro Airborne Magnetic Survey data, dated March 23, 2009

Pezzot, T., Unpublished Memorandum on the 3D IP Test Survey Results for the Grizzly Property, dated April 3, 2009

Campagne T., SJV Geophysics Ltd. Logistical Report on the 3D Induced Polarization Survey on the Grizzly Grid., April 2009

Location Map – 1:50,000 scale (prepared by SJ Geophysics)

Location Grid Map showing underlying mineral tenures (prepared by SJ Geophsycis)

3D Sections – Grizzly Grid – Section 2N 3D Sections – Grizzly Grid – Section 3N 3D Sections – Grizzly Grid – Section 4N

Grizzly Grid – Raw 3D IP survey data (text format)

#### LIST OF APPENDICES (con't)

3D Inversion Model, Interpreted Chargeability (ms): 50 m below topography 3D Inversion Model, Interpreted Chargeability (ms): 75 m below topography 3D Inversion Model, Interpreted Chargeability (ms): 100 m below topography 3D Inversion Model, Interpreted Chargeability (ms): 150 m below topography 3D Inversion Model, Interpreted Chargeability (ms): 200 m below topography 3D Inversion Model, Interpreted Chargeability (ms): 200 m below topography 3D Inversion Model, Interpreted Chargeability (ms): 250 m below topography 3D Inversion Model, Interpreted Chargeability (ms): 300 m below topography

3D Inversion Model, Interpreted Resistivity (ohm-m): 50 m below topography 3D Inversion Model, Interpreted Resistivity (ohm-m): 75 m below topography 3D Inversion Model, Interpreted Resistivity (ohm-m): 100 m below topography 3D Inversion Model, Interpreted Resistivity (ohm-m): 150 m below topography 3D Inversion Model, Interpreted Resistivity (ohm-m): 200 m below topography 3D Inversion Model, Interpreted Resistivity (ohm-m): 250 m below topography 3D Inversion Model, Interpreted Resistivity (ohm-m): 250 m below topography 3D Inversion Model, Interpreted Resistivity (ohm-m): 300 m below topography

#### 3. SUMMARY

The Grizzly Property is an early stage porphyry copper-gold prospect located in north western British Columbia approximately 50 kilometres northwest of Telegraph Creek. This area of BC is referred to either as the Golden Triangle or the Stikine Arch and hosts several world class porphyry deposits including Novagold Resources Galore Creek Project (120 kilometers to the south) and Imperial Metals Red Chris deposit (100 kilometers to the southeast) and a large number of gold and copper-gold prospects that have been intermittently explored since the 1960's.

The Property forms a large "L" shaped block (comprising 17,503 hectares) that covers potential extensions (to the south and to the west) of a series of advanced porphyry copper-gold prospects referred to as the Copper Creek Property presently being explored by Firesteel Resources.

In early March 2009, the current owner Garibaldi Resources Ltd. (Garibaldi) entered into an option agreement with Equinox Resources (Equinox) whereby Equinox acquired the right to earn up to a 70% interest in the property by completing \$1,000,000 in exploration over four years.

During mid to late March 2009, pursuant to the terms of the joint venture agreement with Garibaldi Resources, Equinox Resources completed an exploration program consisting of geophysical modelling and a trial IP survey. The total cost of the exploration work completed by Equinox was r\$108,662.46.

There is no useable road access to the claims at present however, the road that was constructed from Telegraph Creek to the former Golden Bear Mine in the mid 1980's passes through the southern part of the Grizzly Property. Although this road is not presently in use it would certainly be feasible to rehabilitate it if a significant mineral deposit is defined in the project area. At present the best way to access the claims is by helicopter from Dease Lake or from the airstrip at Bob Quinn located 100 kilometres to the east. The current program utilized helicopter support from the Bob Quin airstrip.

Regional geological maps published by the BC Ministry of Energy and Mines (BCMEM) show that the Property is underlain by Late Triassic aged intrusive rocks and by sedimentary and volcanic rocks belonging to the Stuhini Group. According to Barr et al, 1976, these rock units comprise Late Triassic and Early Jurassic aged volcanic island arc assemblages which are the host for all of BC's alkalic porphyry copper-gold deposits.

These kinds of deposits tend to occupy brecciated and faulted zones related to extensively altered subvolcanic intrusions and their volcanic host rocks. Alteration patterns are distinctly different from those of classic calcalkaline porphyry deposits which are characterized by concentric phyllic-argillic-propylitic zones. The alkalic deposits typically have a central potassic zone which passes outward into a propylitic zone however these often overlap and are overprinted by retrograde metasomatic alteration. Magnetite breccias and disseminations are associated with the potassic alteration zone which hosts most of the copper and gold mineralization. Disseminated pyrite and minor copper mineralization tend to mantle the propylitic alteration zone.

The copper-gold porphyry prospects located within the Copper Creek Property are referred to as the Copper Creek, Dick Creek and Pyrrhotite Creek targets. Systematic

soil geochemical surveys, geophysical surveys (mag and IP), trenching and drill testing carried out by Firesteel and various previous operators have partially defined these mineralized zones. Within the copper in soil and IP anomalies that define the Dick Creek Prospect Firesteel has reported trench assays of 270 meters grading 0.38% copper and 0.23 g/t gold. DDH CC04-05 completed in 2004 reportedly intersected 242.3 meters grading 0.44% copper and 0.32 g/t gold.

BC MINFILE data and assessment reports available from BCMEM indicate that there are several known copper and gold prospects in the western part of the Grizzly Property which have been the focus of previous exploration work. The most advanced of these is referred to as the Grizzly Prospect located on the west side of the Sheslay River approximately 5 kilometers northwest of the Pyrrhotite Creek prospect. In the 1960's Kennecott completed soil geochemical surveys, IP geophysical surveys and attempted a back pack drill program however no drill results were reported. In the 1970's Brascan and Ducanex Resources completed three widely spaced holes that confirmed the presence of potassic alteration and low grade copper mineralization however, none of the drill core or rock samples from this program were assayed for gold. In 1988 Corona Corporation acquired the ground and completed prospecting, rock sampling and a much more extensive soil geochemical survey than that originally completed by Kennecott. Corona's work confirmed that significant gold values (approximately 50% of the samples returned values ranging from 0.1 to more than 1.0 g/t gold) are associated with the copper mineralization in the area of the Grizzly prospect and defined several copper and gold geochemical anomalies which are similar in amplitude to the soil geochemical anomalies reported by Firesteel but do not appear to have been adequately tested by the limited drill program completed in the 1970's.

The copper and gold values reported by Corona for the Grizzly prospect and the reported presence of additional mineralized zones located on the east side of the Sheslay River Valley between the Grizzly prospect and the present Copper Creek Property suggest that additional exploration work is warranted in the western part of the Grizzly Property.

The southern part of the Grizzly property covers an extensive area of low relief separated from the main part of the Copper Creek Property by the Hackett River. This area is heavily forested and exhibits little bedrock exposure. To determine if there is potential for alkalic porphyry type mineralization in this part of the Grizzly Property Garibaldi carried out an airborne magnetic survey in 2006. For comparative purposes this survey covered the southern part of Firesteel's Copper Creek Property (including the Pyrrhotite Creek and Copper Creek Prospects). Results of the airborne magnetic survey showed that the rock units and structures which underlie the Copper Creek prospects appear to continue into the large area of low relief within the Garibaldi claims and identified several magnetic anomalies which are similar to the magnetic anomalies that are associated with the mineralized zones which comprise the Copper Creek Property. During 2007 and 2008 Garibaldi completed orientation soil geochemical surveys which reportedly returned copper values within the anomalous range determined by Firesteel for the Copper Creek property however the surveys only covered a small fraction of the prospective area and will need to be expanded to cover the area of interest defined by the airborne magnetic survey.

The objective of the geophysical modelling and IP survey carried out by Equinox was to assess the geological similarities between the Copper Creek and Grizzly Properties and

to determine if any of the magnetic anomalies defined by the airborne survey exhibit a chargeability response. The presence of a chargeability response is considered an essential characteristic when defining drill targets in "blind" or "overburden covered" porphyry environments.

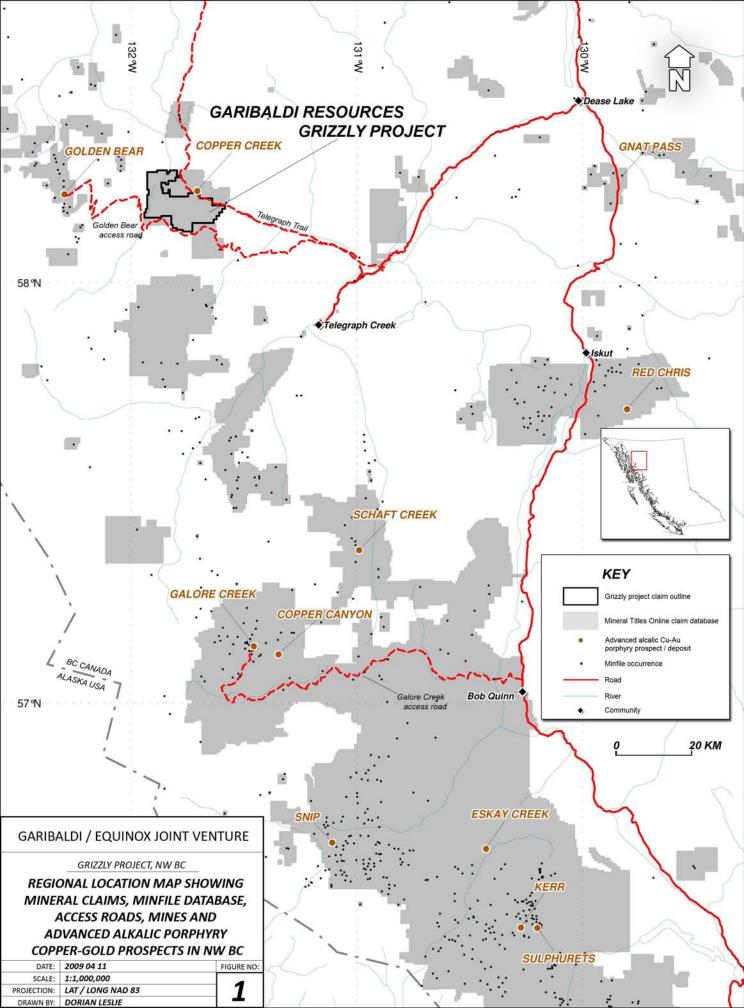
According to Trent Pezzot of SJ Geophysics the trial survey covered a NW elongated magnetic high located in the south central part of the Grizzly Property. The magnetic anomaly is approximately one kilometer long and it was postulated that it could represent either an alteration zone surrounding a vertical fault zone or a near vertical, pipe like intrusive body possibly related to a larger, deep intrusion.

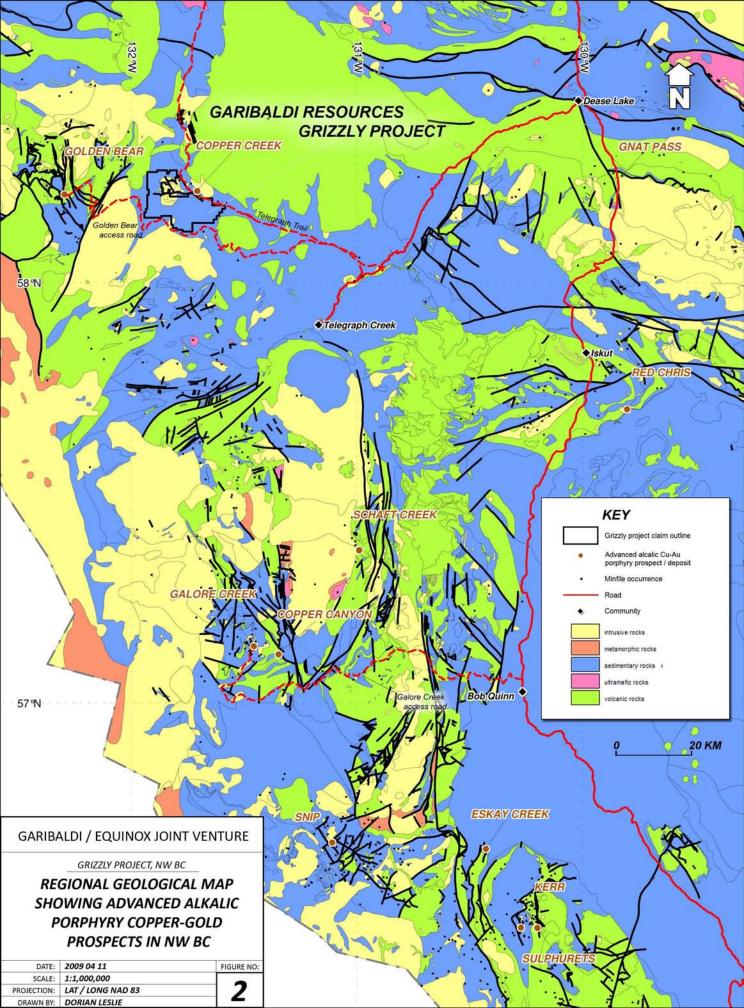
The trial IP survey comprised three survey lines approximately 1.6 kilometers in length and was designed to identify any increases in chargeability or changes in resistivity along the magnetic feature that might be indicative of porphyry style mineralization. In this analysis the chargeability component of the IP survey is usually the most critical since it can be used to directly detect the disseminated base metal sulphide minerals that comprise the porphyry mineralization.

Several chargeability anomalies were identified within the area surveyed with the largest and highest amplitude feature mapped along the northeast flank of the northwest oriented magnetic body. This anomaly is noted on two of the three IP survey lines and appears to be open to the southeast.

Based on the fact that Equinox has confirmed there are "blind" chargeability anomalies associated with some of the magnetic features identified in the southern part of the Grizzly Property it is recommended that a staged exploration program be carried out to evaluate the entire area of interest defined by the 2006 airborne survey. In addition, Equinox should assess the mineralized zones and soil geochemical anomalies identified by Kennecott, Brascan, Corona and Skyline in the western part of the Property.

The initial work program for the Grizzly Property should consist of grid based geochemical surveys over the entire area of interest defined by the airborne magnetic survey. The estimated cost of this program including contingencies is estimated at \$110,000. Based on the results of the geochemical survey a follow up program of target focussed IP surveys should be completed. It should be noted that the follow-up IP survey will require line cutting and will require application to the BC Ministry of Mines and Energy for appropriate permits.





# 4. INTRODUCTION AND TERMS OF REFERENCE

This report summarizes the exploration work completed on the Grizzly Property by Equinox Resources in early 2009 and recommends continuing the exploration work.

The author was requested by Equinox Resources Ltd. to review all available historic and current technical information for the Grizzly Property area and if warranted, to plan and recommend a program to explore the mineral potential of the claims.

The qualified person who is the author of this report worked on various exploration projects in the project area since the late 1980's for several junior mining companies. The author visited the Grizzly Property by helicopter on September 12, 2008.

The available historic technical data for the Grizzly Property consists of regional geological information compiled by the BC Ministry of Energy and Mines and assessment reports completed by Kennecott, Brascan, Corona Corporation, Firesteel Resources, Garibaldi Resources, Skyline Explorations and various other previous operators which are on file with the BC Ministry of Energy and Mines. Sources are listed in the References section of this report and are cited where appropriate in the body of this report.

The technical reports concerning and survey interpretations for the Grizzly Property geophysical survey were provided by Trent Pezzott, P.Geo., of SJ Geophysics.

The author has prepared this report based on information believed to be accurate at the time of completion but which is not guaranteed. The author has relied on the work completed by SJ Geophysics, the geophysical survey work completed by Fugro Airborne Surveys in 2006 and the various assessment reports completed on the property or portions thereof by various mining companies and on publically available federal and provincial government documents such as geological maps and reports on the project area.

The various technical and assessment reports that were used in the preparation of this report appear to have been completed by competent professionals without any misleading or promotional intent.

# 5. STATEMENT OF COSTS

Project duration: crew mobilized from Vancouver on March 6, 2009 returning on March 21, 2009

Mobilization and field equipment supplies and expenses:	\$ 12,810.90
Geophysical consulting fees: For completion of Grizzly Property Evaluation based on 2006 Fugro airborne mag survey	9,069.00
Geophysical survey charges: As per survey logistics report (appendix 1) IP survey completed March 6 - 20, 2009 includes mobilization and standby expenses as per invoice no. S	31,899.06 SJ09858-A
Helicopter charter costs: 27.9 hours @ \$1,250/hr. + logistics	36,388.50
Field support personnel : Mark Roden: March 5 to March 21 @ \$500 per day Harvey Chaudet: March 6 to March 19 @ \$400 per day CJL crew member for demobe: March March 15 to March 19	8,000.00 5,600.00 1,275.00
Geological consulting fees: Preparation of technical report etc.	3,520.00
Total expenditures	\$108,662.46

#### 6. PROPERTY DESCRIPTION AND LOCATION

The property is located approximately 50 kilometres northwest of the community of Telegraph Creek and approximately 120 kilometres north of Novagold's Galore Creek Project. The approximate geographic centre of the property is situated at Latitude 58.20 degrees North and Longitude 131.75 degrees West.

The location of the project area relative to other mining claims, access roads and other developed alkalic porphyry copper-gold prospects is illustrated in Figure 1. Regional geological information is illustrated in Figure 2.

The property consists of 51 contiguous map staked mineral titles comprising 17,503 hectares. The claims form an irregular, "L" shaped block extending for roughly 15 kilometres east west and 10 kilometres north south. Figure 3 shows the location of each of the mineral claims that comprise the Grizzly Property relative to generalized topographic features and also shows the location of the Firesteel Resources Copper Creek Property.

Tenure Number	Good To Date	Area
521137	2010/sep/30	358.02
532128	2010/sep/30	426.76
532129	2010/sep/30	426.25
532130	2010/sep/30	409.47
532131	2010/sep/30	426.60
532132	2010/sep/30	409.77
532133	2010/sep/30	426.42
532134	2010/sep/30	409.52
532135	2010/sep/30	392.32
532136	2010/sep/30	409.32
532137	2010/sep/30	409.86
532138	2010/sep/30	426.40
532139	2010/sep/30	426.51
532140	2010/sep/30	409.58
532141	2010/sep/30	375.38
532142	2010/sep/30	426.68
532143	2010/sep/30	409.64
532144	2010/sep/30	409.70
532145	2010/sep/30	426.85
532146	2010/sep/30	426.86
532147	2010/sep/30	426.94
532148	2010/sep/30	427.06
532149	2010/sep/30	391.56
532150	2010/sep/30	425.77
532151	2010/sep/30	306.63
532152	2010/sep/30	427.15

Table 1: List of mineral claims comprising the Grizzly Property

2010/sep/30	102.46
2010/sep/30	409.07
2010/sep/30	426.25
2010/sep/30	425.67
2010/sep/30	289.89
2010/sep/30	426.37
2010/sep/30	375.21
2010/sep/30	409.44
2010/sep/30	409.54
2010/sep/30	426.72
2010/sep/30	392.69
2010/sep/30	409.51
2010/sep/30	392.68
2010/sep/30	68.15
2010/sep/30	17.04
2010/sep/30	34.07
2010/sep/30	34.08
2010/sep/30	17.04
2010/sep/30	340.84
2010/sep/30	204.86
2010/sep/30	425.75
2010/sep/30	68.14
2010/sep/30	68.29
2010/sep/30	426.11
2010/sep/30	256.16
	2010/sep/30         2010/sep/30

#### 6.1 Provincial Mining Regulations

All of the claims which comprise the Grizzly Property were staked pursuant to the BC Ministry of Energy and Mines MTO system (Mineral Titles Online System). Title to the claims is maintained through the performance of annual assessment filings and payment of required fees.

To the best of the author's knowledge, government permits will be required to carry out the proposed Stage II exploration program and for any follow up diamond drilling program recommended after completion of this program. These programs will require application to the Ministry of Energy and Mines for permits and the Issuer may be required to post security equivalent to the estimated costs of any reclamation work which will be required after completion of the proposed exploration work. The reader is cautioned that there is no guarantee that the Issuer will be able to obtain the permits required to carry out the proposed work program. However, the author is not aware of any problems encountered by other junior mining companies in obtaining the permits required to carry out similar programs in nearby areas. To the best of the author's knowledge approval from local First Nations communities may also be required to carry out the proposed exploration program.

#### 7. ACCESSIBILITY, CLIMATE, INFRASTRUCTURE AND PHYSIOGRAPHY

There is no useable road access to the claims at present however there is an airstrip located at the Sheslay River ten kilometres to the north of the property and the road to the former Golden Bear Mine passes through the southern part of the property. There are a series of skid roads that extend from the airstrip to the main prospects located within the Copper Creek Property. Figure 3. shows the location of the Golden Bear mine road relative to claim locations. At present the best way to access the property is by helicopter from the airstrip at Bob Quinn on Highway 37 or from the community of Dease Lake approximately 100 kilometres east.

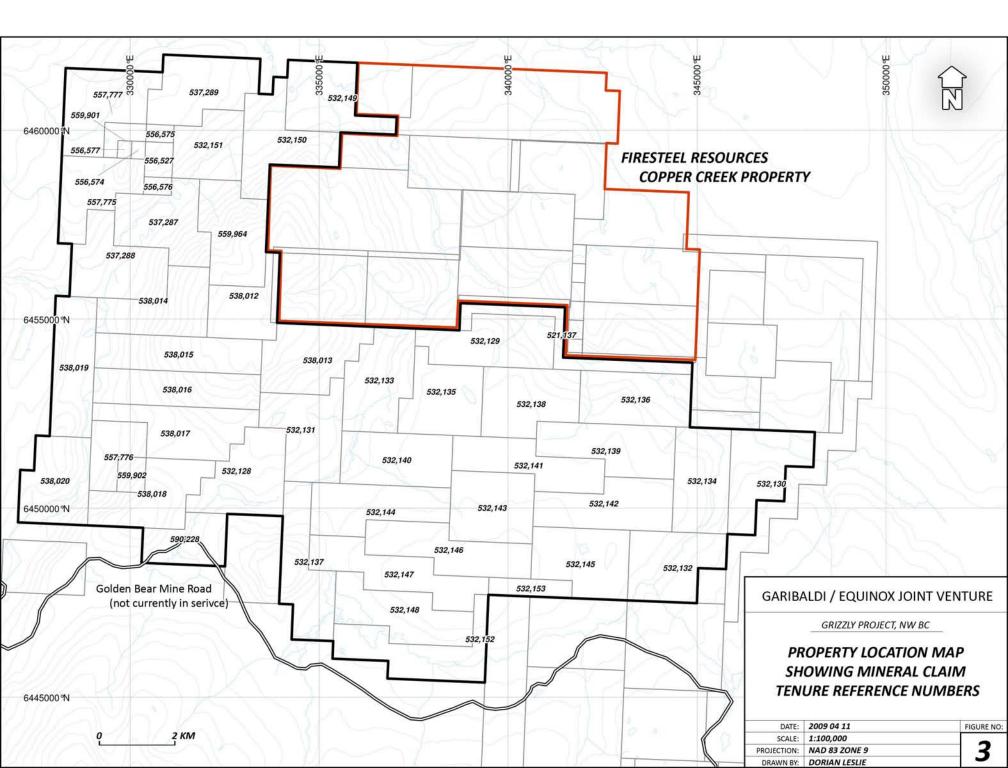
The project area is in the rain shadow of the Coast Range Mountains and annual precipitation is 425 mm including average snowfall of 218 cm. The Grizzly Property is generally free of snow for approximately six months of the year. In general, exploration work in this area is carried out from June until October however snow cover is relatively light compared to the Galore Creek project area and most exploration work could be carried out from April through to November.

There is no existing camp or other significant infrastructure within the Grizzly Property.

The Grizzly property is subdivided into two geographically distinct areas referred to as the Western Block and the Southern Block. The Western Block covers the main part of a prominent topographic feature formed by the Kaketsa Pluton (Kaketsa Mtn. elevation – 1900 m) and straddles the Sheslay River Valley (from 600 meter elevation to 1100 meter elevation) along the western side of the Copper Creek Property. The Southern Block covers an area of subdued topography ranging from (900 to 1100 meters in elevation) separated from the main part of the Copper Creek Property by the Hackett River. Figure 16 is a digital elevation map that shows the generalized topography of the project area and Figure 17 is a Google Earth view that shows the main areas of interest.

There are several known alkalic porphyry copper occurrences that have undergone intermittent exploration within the Garibaldi claims to the west of the Copper Creek Property however the topography of the ground to the south of the Copper Creek Property is very subdued and there is believed to have been little previous exploration of this ground

Satellite imagery shows that approximately 95% of the area within the Grizzly Property is either forest covered or overburden covered. The Google Earth image shown in Figure 4 illustrates the relative positions of the prospects located within the Firesteel Resources property, the prospects located in the western part of the Grizzly Property and lack of bedrock exposure in the main part of the Grizzly Property. Forested areas comprise stunted spruce, alder, fir and cedar typical of northern forest conditions. Due to limited access current land use is limited to hunting.



### 8.0 HISTORY OF EXPLORATION

According to published technical data copper mineralization in the Sheslay River / Hackett River area was first identified in the 1950's and was explored by Kennecott and Newmont Exploration in the early 1960's. Kennecott completed soil geochemical surveys and IP surveys in the area of the Kid and Grizzly Prospects and reportedly attempted a "back pack drilling program" but were unable to penetrate overburden.

During the late 1960's and early 1970's Skyline Explorations Ltd. explored the area covered by the present Copper Creek Area and began evaluating the Pyrrhotite Creek and Copper Creek prospects. Preliminary drilling was completed at both prospects and reportedly intersected 113 meters grading 0.35% copper at Pyrrhotite Creek and 44 meters averaging 0.43% copper at Copper Creek.

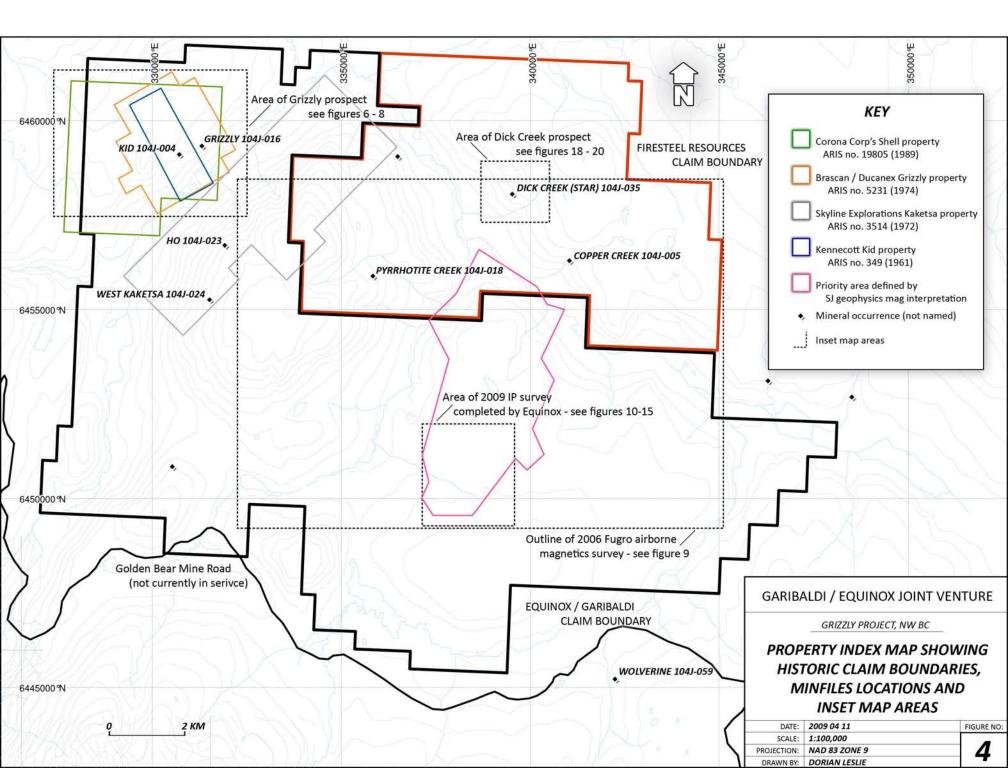
During this time Skyline also completed reconnaissance work to the west of the Pyrrhotite Creek Prospect (the area between the present Copper Creek Property boundary and the Sheslay River) and reportedly discovered at least two mineralized areas (referred to as the "West Kaketsa" and "Ho" Prospects). At West Kakesta mineralization reportedly consists of highly altered and sheared volcanic and intrusive rocks containing disseminated and fracture controlled chalcopyrite over exposed widths of at least 24 meters. According the Darney, R. and Gutrah, G., 1971 the mineralized area referred to as West Kaketsa was considered a high priority target because the observed mineralization closely resembles that seen at the Pyrrhotite Creek Prospect.

In 1974 Brascan Resources and Ducanex Resources optioned the area referred to as the Grizzly Prospect and completed three widely spaced holes that confirmed the presence of potassic alteration and low grade copper mineralization. However, none of the drill core or rock samples from this program were assayed for gold.

Between 1976 and 1989 United Cambridge Mines and various joint venture partners carried out several exploration programs to evaluate the Copper Creek and Pyrrhotite Creek Prospects and identified the Dick Creek Prospect. Details concerning the mineralization that has been identified on the Copper Creek Property is included in the section titled "Adjacent Properties".

In 1988 Corona Corporation acquired the ground around the Grizzly Prospect and completed prospecting, rock sampling and a much more extensive soil geochemical survey than that originally completed by Kennecott. Corona's work confirmed that significant gold values (approximately 50% of the samples returned values ranging from 0.1 to more than 1.0 g/t gold) are associated with the copper mineralization in the area of the Grizzly prospect and defined several copper and gold geochemical anomalies which are similar in amplitude to the soil geochemical anomalies reported by Firesteel but do not appear to have been adequately tested by the limited drill program completed in the 1970's.

In March 2002 the present Copper Creek Property was optioned to Firesteel Resources Ltd. In 2004 Firesteel Resources carried out a program of geological mapping, trenching, soil geochemistry and 1,555 meters of diamond drilling focusing on the DK (Dick Creek) Zone. The best hole of the program, CUCR 04-05 was angled to the north and cut 0.44 per cent copper and 0.32 g/t gold averaged over its full length of 242 meters.



#### 9. GEOLOGICAL SETTING

The project area is located in the north western part of of the Stikine Arch near its contact with the Coast Plutonic Complex. Upper Triassic aged Stuhini Group island arc volcanic and sedimentary rocks unconformably overlie a sequence of Paleozoic to Middle Triassic marine sediments. These rock units have been intruded by Upper Triassic to Lower Jurassic aged syentitic stocks and by Jurassic to Lower Cretaceous aged diorite and granodiorite plutons of the Coast Plutonic Complex. The geological map available online from the BCMEM is reproduced in Figure 5.

The oldest rocks comprise Devonian to Permian aged limestones, cherts, volcanic and epiclastics which host the Golden Bear Mine located approximately 50 kilometers to the west the of the Grizzly Property. Unconformably overlying these rocks are augite andesite breccias, conglomerates and volcaniclastic rocks belonging to the Stuhini Group. Small oval shaped syenite, pyroxenite and orthoclase porphyry stocks dated as Late Triassic to Early Jurassic (190-210 ma., Souther, 1971) intrude the Stuhini group volcanic rocks. According to Barr et al, 1976 these Late Triassic and Early Jurassic aged volcanic island arc assemblages are the host for all of BC's alkalic type porphyry copper-gold deposits and form a class distinct from the calcalkaline porphyry deposits. Upper Triassic aged volcanic intruded by syenitic stocks host the Galore Creek, Red Chris and Copper Canyon alkalic copper-gold porphyry deposits.

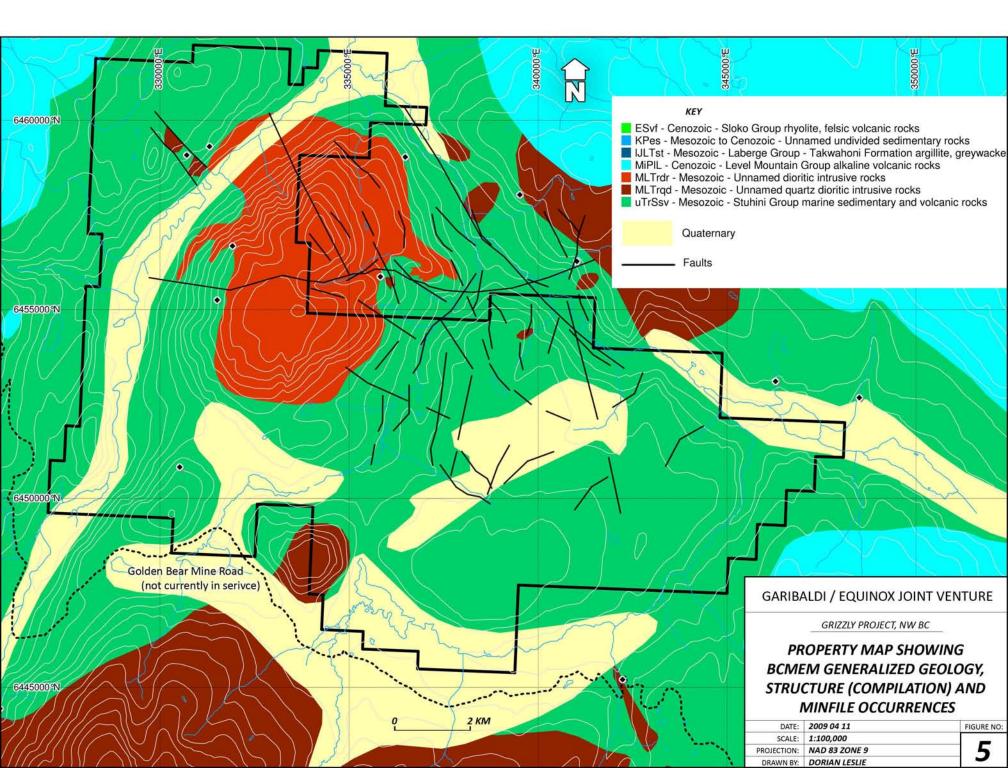
The Grizzly / Copper Creek area is underlain by a broad belt of Upper Triassic intermediate volcanic andesites, tuffaceous andesite and tuffs with interbedded clastic sediments. The best known intrusive rock unit is the Kaketsa Pluton which is an elliptical, north trending intrusion approximately 4 by 5.6 kilometers in size dated at 218.8 million years. A number of potentially economic copper prospects occur near the contacts of the Kaketsa Pluton and its related smaller stocks and these prospects are described in the text of this report.

A thick sequence of basalts belonging to the Tertiary Aged Level Mountain Group covered the area during Tertiary time however, subsequent glaciations and erosion has removed these basalts from the Hackett River valley and much of the surrounding area which has exposed the older volcanics and intrusives.

No past production is recorded for the map area although large copper, gold and silver reserves have recently been defined at Galore Creek (proven and probable reserves effective October 5, 2006 as per Novagold News Release: 540.7 million tons containing 6.6 billion pounds of copper, 5.3 million ounces of gold and 92.6 million ounces of silver.

Although alkalic porphyry copper-gold deposits may have been sub-economic in the late 1970's sustained increases in copper and gold prices since 2002 and the potential for large sized deposits have resulted in increasing industry interest in these types of occurrences. The generalized geology of the project area is shown in Figure 2 which includes the main alkalic copper-gold prospects and known deposits in the project area.

This work identified three main areas of mineralization referred to as Copper Creek (Minfile 104J – 005), Star, Dick Creek (Minfile 104J- 035) and Pyrrhotite Creek (Minfile 104J-018). Figure 4 shows the location and reference numbers of all of the MINFILE occurrences within the project area.



### 10. DEPOSIT TYPES

For the subject property alkalic porphyry copper-gold deposits are believed to be the most important potential target.

Alkalic porphyry copper-gold deposits tend to occupy brecciated and faulted zones related to extensively altered subvolcanic intrusions and their volcanic host rocks. Alteration patterns are distinctly different from those of classic calcalkaline porphyry deposits which are characterized by concentric phyllic-argillic-propylitic zones. The alkalic deposits typically have a central potassic zone which passes outward into a propylitic zone however these often overlap and are overprinted by retrograde metasomatic alteration. Magnetite breccias and disseminations are associated with the potassic alteration zone which hosts most of the copper and gold mineralization. Disseminated pyrite and minor copper mineralization tend to mantle the propylitic alteration zone.

Mineralization occurs in alkaline magmatic centers that are characterized by alkaline intrusions and comagmatic subalkaline to alkaline and shoshonitic volcanic rocks (de Rosen- Spence, 1985,). Crowded feldspar porphyritic textures are characteristic of both the intrusives and the volcanics; pyroxene-phyric basalts are typical. The alkaline intrusions evolved from crystal-fractionated, volatile and metal-enriched magmas (Fox, 1989; Mutschler *et al.*,1990) that were emplaced rapidly and often intrude their volcanic edifice. Multiple intrusions of crystal-rich magma produce porphyritic textured intrusives, intrusive breccias and hydrothermal breccias. These intrusive pulses predate, coincide with and postdate alteration and mineralization related to the magmatic centers.

In addition to the potential for porphyry copper occurrences there is also potential for structurally controlled gold deposits similar to the Snip Deposit.

A significant zone of gold mineralization was identified immediately southeast of the Grizzly Property during construction of the Golden Bear Mine access road in the late 1980's.

# 11. MINERALIZATION

The BC Ministry of Energy and Mines (BCMEM) Minfile database identifies five known mineral prospects within the Grizzly property including four alkalic porphyry copper type occurrences including the Kid Prospect (Minfile 104J-004), Grizzly 4,13 Prospect (Minfile 104J-016), Ho Prospect (Minfile 104J-023), and the West Kaketsa Prospect (Minfile 104J-024). The AI 9 Prospect (Minfile 104J-060) is classed as a vein, breccia, stock work type occurrence. The reference numbers and locations of these Minfile occurrences are shown in Figure 4.

# 11.1 Kid Prospect (Minfile 104J-004), Grizzly 4,13 Prospect (Minfile 104J-016)

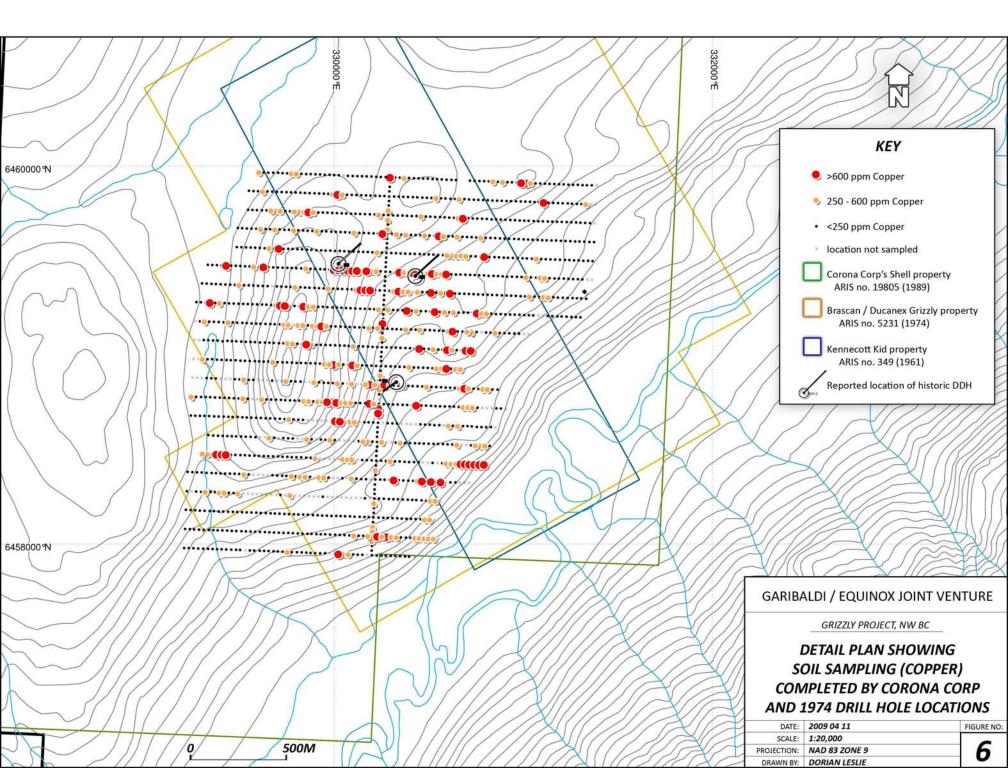
According to published technical reports these prospects comprise at least two areas of porphyry style mineralization located on the west side of the Sheslay River at elevations of between 800 and 1,000 meters.

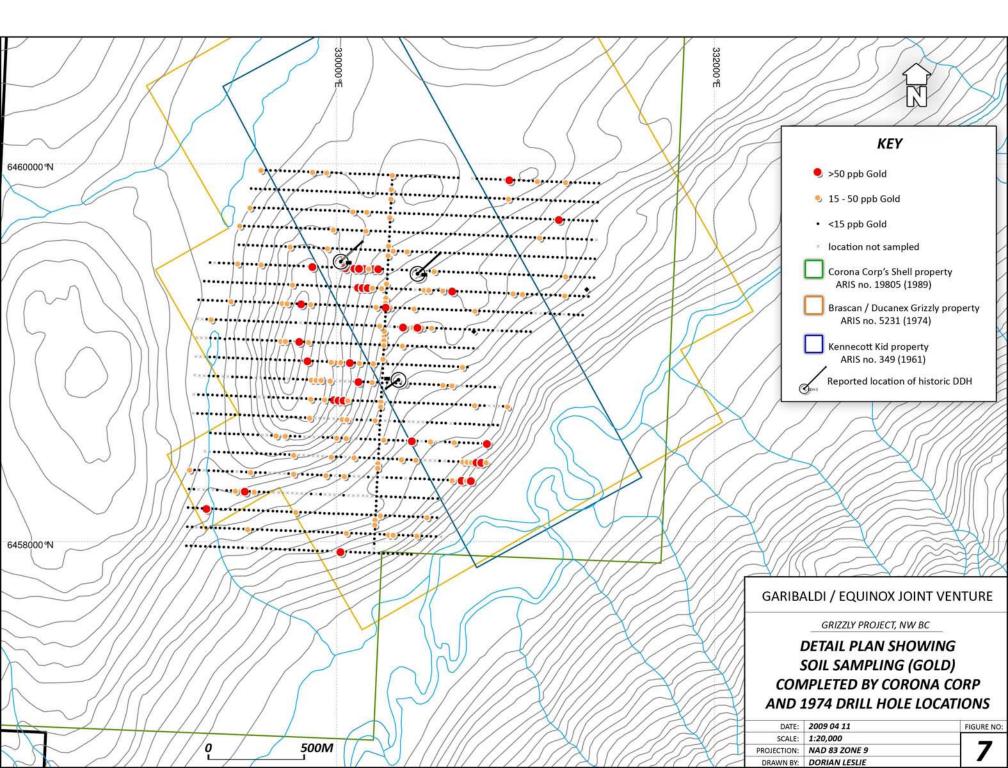
During the early 1960's Kennecott completed soil geochemical surveys and IP surveys in the area of the Kid and Grizzly Prospects and in 1974 Brascan Resources and Ducanex Resources completed three widely spaced holes. The drilling reportedly confirmed the presence of potassic alteration and low grade copper mineralization but no gold values were reported.

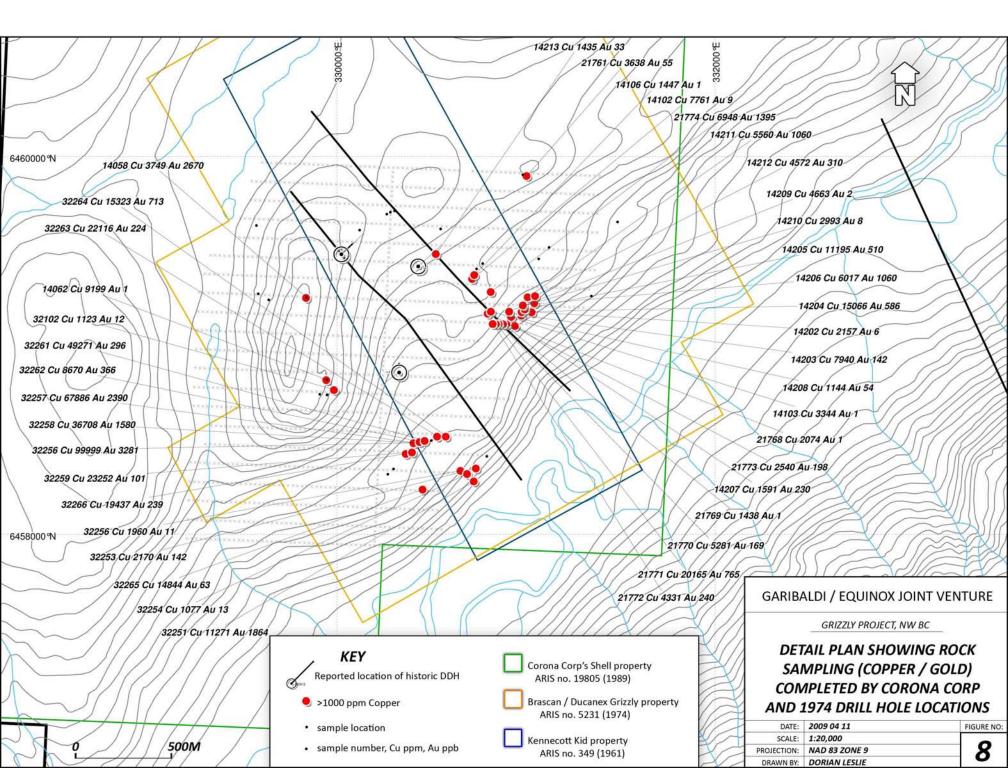
In 1988 Corona Corporation acquired the ground around the Kid and Grizzly Prospects and completed prospecting, rock sampling and a much more extensive soil geochemical survey (1,307 soil sample sites) than that originally completed by Kennecott. In addition Corona reported 84 rock sample assays. Corona's exploration work confirmed that significant gold values are associated with the observed mineralization (approximately 50% of the rock samples returned values ranging from 0.1% to more than 1.0% copper and from 0.1 to more than 1.0 g/t gold). The geochemical survey completed by Corona in 1989 defined several copper and gold geochemical anomalies which are similar in amplitude to the soil geochemical anomalies reported by Firesteel but do not appear to have been adequately tested by the limited drill program completed in the 1970's.

Alteration in the area of the occurrences is reportedly consists of linear zones of strong K-feldspar flooding with associated magnetitie, epidote and carbonate. Chalcopyrite – pyrite mineralization is closely associated with the K-feldspar flooding and is finely disseminated in the intrusive rocks and also occurs as veinlets and fracture fillings in shear zones along the intrusive contacts.

Rock sample descriptions include references to highly altered and mineralized samples and assay results include several samples in excess of 1% copper and several samples which returned more than 1 g/t gold. Figure no.s 6, 7 and 8 show the copper and gold soil geochemical anomalies and anomalous rock samples. Copper and gold values for the anomalous rock samples are shown on the rock sample location plan.







#### 11.2 Ho Prospect (Minfile 104J-023), West Kaketsa Prospect (Minfile 104J-024)

During the late 1960's and early 1970's Skyline Explorations Ltd. explored the area covered by the present Copper Creek Area and began evaluating the Pyrrhotite Creek and Copper Creek prospects. During this time Skyline also completed reconnaissance work to the west of the Pyrrhotite Creek Prospect (the area between the present Copper Creek Property boundary and the Sheslay River) and reportedly discovered at least two mineralized areas (referred to as the "West Kaketsa" and "Ho" Prospects).

At West Kakesta mineralization reportedly consists of highly altered and sheared volcanic and intrusive rocks containing disseminated and fracture controlled chalcopyrite over exposed widths of at least 24 meters. According to Darney and Gutrah, 1971 the mineralized area referred to as West Kaketsa was considered a high priority target because the observed mineralization closely resembles that seen at the Pyrrhotite Creek Prospect. No sample assays were reported and there are no reports of any other exploration work completed on the West Kaketsa Prospect.

In the same technical assessment report Darney and Gutrah, 1971 also note that there is a series of narrow quartz carbonate veins on the west side of Kaketsa Mountain. Mineralization reportedly consists of pyrite and chalcopyrite with minor galena and sphalerite. No sample assays were reported and there are no reports of any other exploration work completed on the Ho Prospect.

# 12. EXPLORATION

### 12.1 Exploration work carried out by Garibaldi Resources (2006 – 2008)

The southern part of the Grizzly property covers an extensive area of low relief separated from the main part of the Copper Creek Property by the Hackett River. This area is heavily forested and exhibits little bedrock exposure. To determine if there is potential for alkalic porphyry type mineralization in this part of the Grizzly Property Garibaldi carried out an airborne magnetic survey in 2006. For comparative purposes this survey covered the southern part of Firesteel's Copper Creek Property (including the Pyrrhotite Creek and Copper Creek Prospects).

Results of the airborne magnetic survey showed that the rock units and structures which underlie the Copper Creek prospects appear to continue into the large area of low relief within the Garibaldi claims and identified several magnetic anomalies which are similar to the magnetic anomalies that are associated with the mineralized zones which comprise the Copper Creek Property.

During 2007 and 2008 Garibaldi completed orientation soil geochemical surveys which reportedly returned copper values within the anomalous range determined by Firesteel for the Copper Creek property however the surveys only covered a small fraction of the prospective area and need to be expanded to cover the area of interest defined by the airborne magnetic survey.

Prior to completing the geochemical surveys Garibaldi funded acquisition of all available digital topographic and aerial photography and also funded preparation of detailed topographic mapping (5 meter contour) for the area covered by the airborne magnetic survey.

During late 2008 Garibaldi completed a comprehensive literature review for the Copper Creek and Grizzly Properties and compiled all available technical data. This work involved geo-referencing all of the historic technical maps published in all of the assessment reports listed in the References section of this report. Once the technical mapping was geo-referenced all geochemical and rock sampling data was digitized to determine UTM co-ordinates for each sample and the reported assay values were all entered into a spreadsheet to make it possible to generate anomaly maps using the same anomaly thresholds that were determined by Firesteel Resources for the Copper Creek Property.

Figure 4, 9 and 16 show the area that was covered by the airborne magnetic survey and the main areas of interest on the Grizzly and Copper Creek Properties.

# 12.2 Exploration work carried out by Equinox Resources in 2009

In March, 2009, Equinox commissioned S.J.V. Consultants Ltd. to evaluate the results of airborne magnetic survey completed by Fugro Airborne Surveys in 2006 and to assess exploration potential of the Grizzly Property. The results of this study concluded that the Grizzly property has a high potential for alkalic porphyry copper-gold mineralization similar to the Copper Creek prospect located immediately north of the study area and identified several magnetic targets where exploration efforts should be concentrated (memo dated March 23, 2009). A priority area of interest was defined as shown in Figure 10.

SJ Geophysics has considerable experience with porphyry targets in the Galore Creek area and was asked to recommend and supervise a program of geophysical test surveys for this area. A small 3D-IP survey was recommended to test one of the target areas. The southernmost magnetic anomaly in the south-central section of the study area was selected because of the flat terrain and readily available helicopter access.

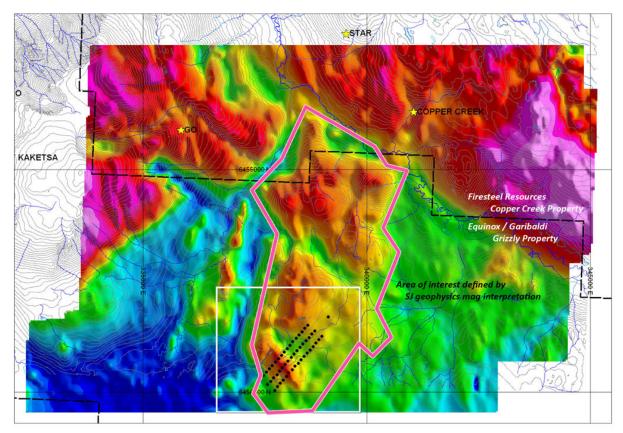


Figure 9: Detail Magnetic color contour map -sun illuminated from east. Topo base map. 3-D IP Test Survey (black circles). South study area (white rectangle). Minfile Occurrences (yellow stars)

The target area covered a northwest elongated magnetic high approximately 1 kilometer long. It appears to be terminated at both ends against north-northeast trending faults. This feature can be interpreted in several ways. It could represent an alteration zone surrounding a near vertical fault zone. A 3D inversion (shown below as Figure 10) suggests it could also be interpreted as a near vertical, pipe like body,

possibly originating from a large, deep intrusion. Higher susceptibilities noted in the near surface could be indicative of facies or lithological changes, possibly a result of alteration processes.

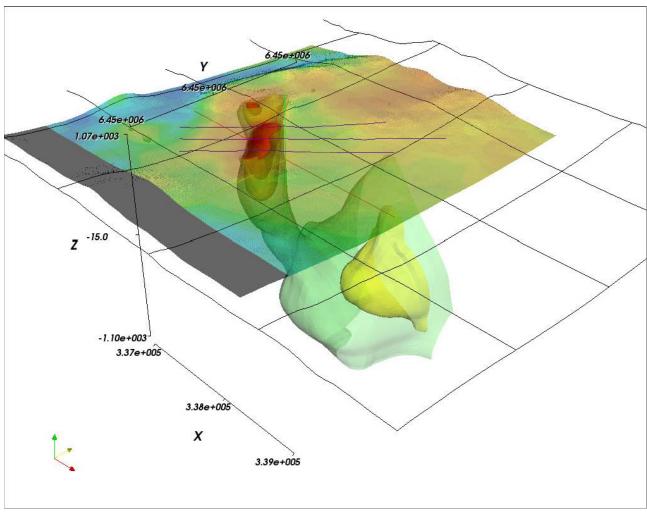


Figure 10: Magnetic Inversion of south study area – 3D Perspective view from southeast -Isosurfaces of higher magnetic materials are drawn in green (0.1658 SI), yellow (0.20 SI) and red (0.25 SI). Translucent map of magnetic data draped over surface. IP survey lines drawn in purple.

The intention of the IP survey was to identify any increases in chargeability or changes in resistivity along the magnetic feature that might be indicative of porphyry style mineralization. In this analysis, the chargeability component of the IP survey is usually the most critical, since it can be used to directly detect the disseminated base metal compounds. The resistivity (conductivity) parameter is more commonly used to map lithological (facies) units and geological structures that make up and control the porphyry system.

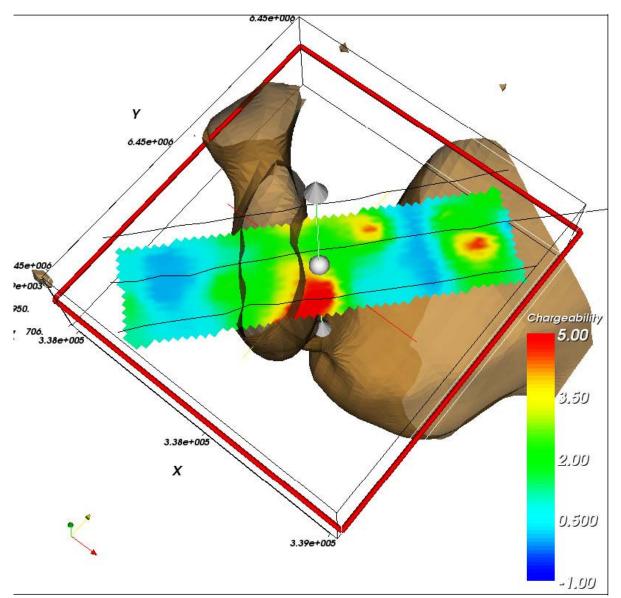


Figure 11: 3D Perspective view from the southeast -Depth slice at 100m through chargeability inversion -Isosurface of high (0.016568 SI) magnetic body (brown):

A horizontal slice through the chargeability inversion model (Figure 11) reveals northwesterly oriented background trends that generally parallel the magnetic features and likely follow the local, near surface geology. There are several localized high chargeability anomalies superimposed over this background, with the largest and highest amplitude feature mapped along the northeast flank of the magnetic body. This anomaly is noted on two of the three lines and is considered to be open to the southeast. A cutoff view of the inversion model (Figure 12), which strips away the low chargeability values, suggests this anomaly originates from a horizontally oriented cylinder, approximately 150 metres in diameter, starting at about 50 metres depth. The absolute amplitude of the anomaly is relatively weak (up to 7 ms) but significantly higher than the local background (<1.0 ms). It directly coincides with a low resistivity zone.

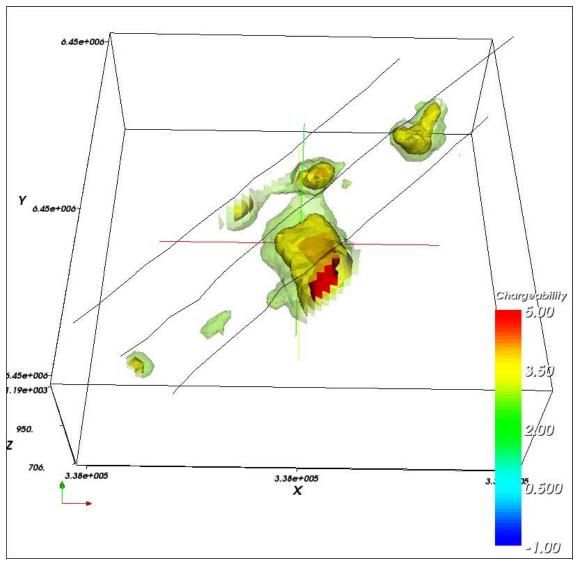


Figure 12: Isosurface of Chargeability: 2.75 ms (green), 3.5 ms (yellow), 5.0 ms (red) - View from south.

Two other discrete chargeability anomalies warrant mention. One forms a northeast elongated feature at the north end of the centre survey line. It appears to be sandwiched between two similarly oriented resistivity highs. The other is a very small feature located between two survey lines, due north of the largest anomaly. A horizontal slice through the resistivity inversion model at 100m depth is shown below as Figure 13.

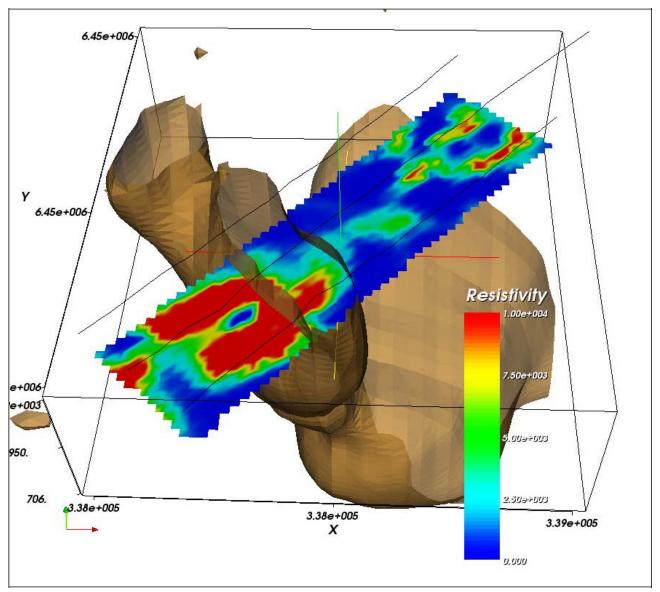


Figure 13: Depth slice at 100m through resistivity inversion. Isosurface of magnetics (0.016568 SI – shown in brown)

The resistivity inversion reveals three distinct environments:

1 A high resistivity (> 10,000 ohm-m) halfspace is mapped to the southwest of the magnetic body. This large feature appears to surround a narrow, pipe-like core of conductive material that plunges at a shallow angle to the southwest (Figure 14).

2 A low resistivity band, approximately 400 m across is mapped immediately northeast of the magnetic body.

3 The northeast portion of the survey is characterized by northeasterly elongated pods of moderate resistivity. These appear to form a circular pattern surrounding the chargeability high in the area. There are several different orientations of trends evident in the resistivity and conductivity data. Conductive trends appear to align predominantly in a northeasterly direction although this bias is likely due to the nature of the survey grid. A larger survey will be required to confirm these trends and determine which are most significant.

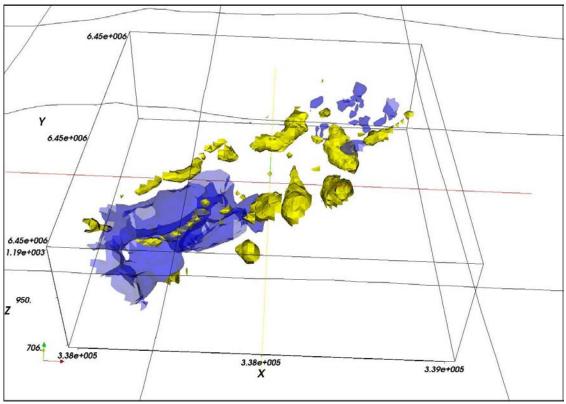


Figure 14: Isosurface of resistivity: 10000 ohm-m (blue), conductivity 0.015 mho-m (yellow) – View from south.

The 3D models for all three geophysical parameters (magnetics, chargeability and resistivity) can be rendered in a common 3D visualization. This allows a clear comparison of the spatial relationships between the interpreted features. Figure 15 below clearly illustrates that the northwesterly trending, vertical magnetic dyke separates two different resistivity regimes: the high resistivity halfspace to the southwest and the lower resistivity halfspace to the northeast. It also illustrates how the large chargeability anomaly forms a localized target parallel to and flanking the magnetic body.

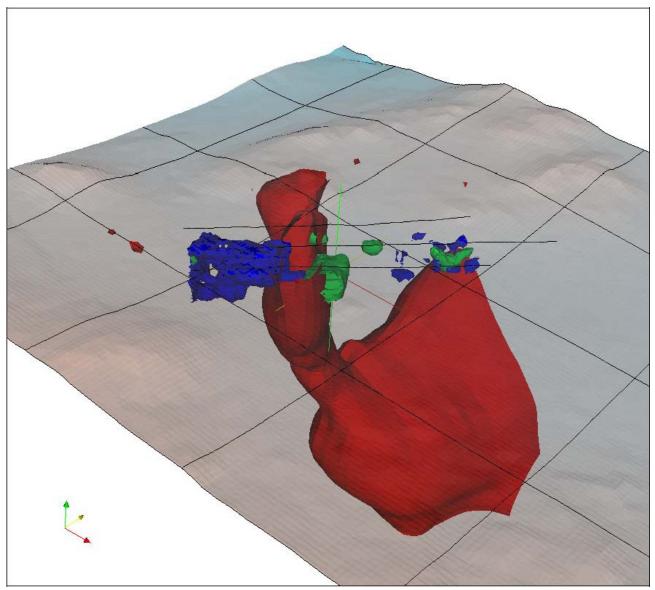


Figure 15: Isosurface of magnetics (0.016568 SI – red): Isosurface of chargeability (3.5 ms – green): Isosurface of resistivity (10,000 ohm-m – blue): View from the southeast. Translucent overlay of DEM surface.

The results from this test IP survey are very encouraging. The presence of elevated chargeabilities and the discrete resistivity contact coincident with the magnetic high can be easily interpreted as the response to a porphyry system. The magnetic dyke could be reflecting an intrusive body that acted as a heat source and possibly the source of the metallic minerals themselves. The localized chargeability high could be reflecting metallic mineralization accumulated along the flank of the intrusion. The resistivity contrast across the magnetic body could be reflecting a lithological contact or alteration effects. The anomaly warrants further exploration to determine the precise size and shape of the chargeable mass.

# 13. DRILLING

No recent drill testing has been completed on the Grizzly Property.

# 14. SAMPLE METHOD AND APPROACH

No sampling was carried out as part of the current exploration program.

# 15. SAMPLE PREPARATION, ANALYSES AND SECURITY

No sampling was carried out during the current exploration program.

# 16. DATA VERIFICATION

The author has not verified any of the soil geochemical or rock sample analyses reported by Corona Corp. for the Grizzly Prospect nor has the author verified any of the exploration data provided by Firesteel Resources for the Copper Creek Project.

# 17. ADJACENT PROPERTIES

Firesteel Resources' Copper Creek Property adjoins the Grizzly Property on its western and southern boundaries. Reported Minfile Occurrences and areas of interest on both properties are shown in Figure 16 and Figure 17. Figure 16 is a digital elevation map that shows the generalized topography of the area and Figure 17 is a Google Earth view looking to the north which shows the subdued topography to the south of the Copper Creek Property.

According to Firesteel Resources the Copper Creek Property covers a series of alkalic, porphyry copper-gold targets analogous to that which hosts the Galore Creek (measured and indicated resources are 785.7 million tonnes grading 0.52% copper ("Cu"), 0.29 grams per tonne ("g/t") gold ("Au") and 4.9 g/t silver ("Ag") plus 357.7 million tonnes of inferred resources at 0.36% Cu, 0.18 g/t Au and 3.7 g/t Ag) and Red Chris (measured and indicated resources are 446.1 million tonnes at 0.36% Cu and 0.29 g/t Au, plus inferred resources at 268.7 million tonnes grading 0.30% Cu and 0.27 g/t Au). Firesteel has invested approximately \$4 million to date in direct expenditures acquiring, exploring and evaluating this Property. Firesteel believes that this Property is one of the most highly prospective copper-gold alkalic porphyry targets in BC and warrants a significant exploration program to test its potential.

Exploration work on the Copper Creek Property has identified several significant targets all of which are accessible by existing trails from the Sheslay River airstrip located immediately north of the Copper Creek Property.

The Copper Creek target comprises a 530 by 940 meter Cu-in-soil anomaly (>350 ppm) with coincident gold values up to 230 ppb. An open-ended IP chargeability anomaly and magnetic anomaly is coincident with this Cu-in-soil anomaly. Six holes were drilled in this area prior to 1970. The best intersection graded 0.49% copper over 43.6 meters including a 1.37 meter intersection of 2.6% copper and 4 g/t gold. The geochemical and geophysical anomalies are open to the north, east and south.

The Dick Creek Target (DK) exhibits a 540 by 320 meter Cu-in-soil anomaly (>350 ppm) with coincident gold-in-soil values up to 200 ppb. This geochemical anomaly is coincident with an IP chargeability anomaly and a magnetic anomaly. Trench sampling of the "Upper Main Trench" produced 270 meters averaging 0.38% copper and 0.23 g/t gold.

The Dick Creek North Target exhibits a 700m by 500 m IP Chargeability anomaly that may be an extension of the Sevensma target and is open to the north. The eastern flank of this IP anomaly displays a very strong copper-in-soil anomaly with several values greater than 1.0% copper. A high-order magnetic anomaly also coincides with the copper geochemical anomaly.

The Sevensma (Dick Creek East) target is 960 meters long, open ended with Cu-in-soil values greater than 300 ppm and scattered gold-in-soil values up to 490 ppb. It is located on a magnetic and IP chargeability anomaly. No trenching or drilling has been done to test this target.

The Pyrrhotite Creek target lies within the eastern part of the property. Previous workers have outlined an altered and mineralized zone, which is 1800 meters long and 750 meters wide.

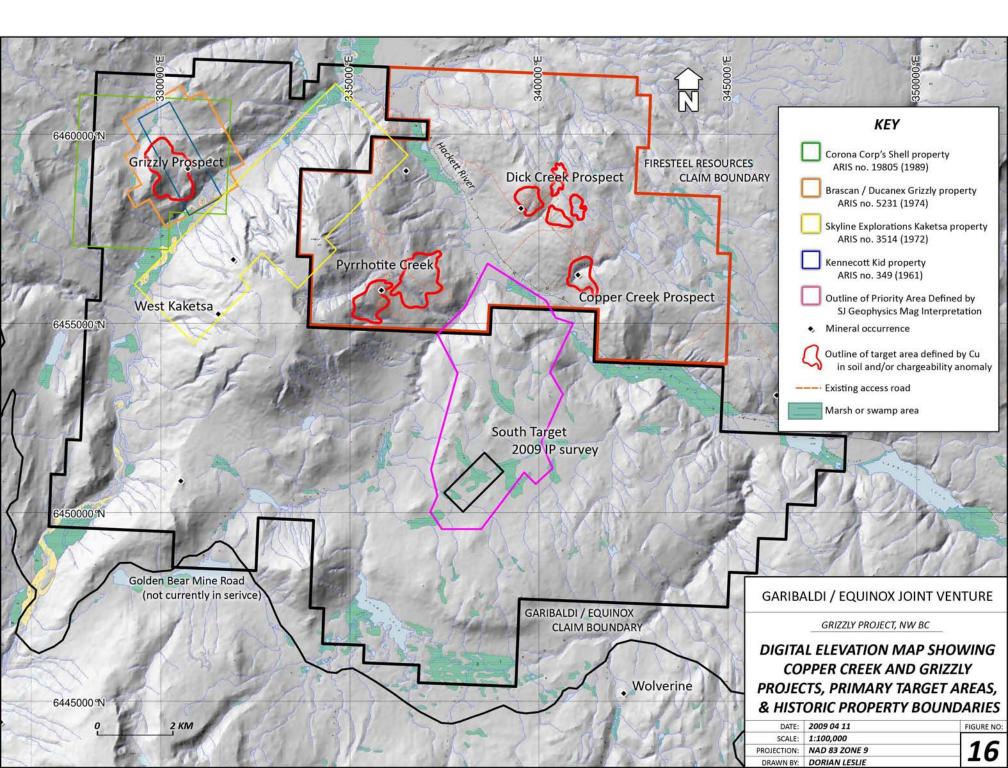
Several extensive copper-in-soil geochemical anomalies occur on the flanks of a broad (1500 by 300 meter and open-ended) IP chargeability anomaly.

The road to Pyrrhotite Creek provides access to the numerous mineralized zones as well as large IP, magnetic and soil geochemical anomalies defined in this area. The largest of the mineralized zones is 1700 meters long and 800 meters wide. A composite chip sample from trenches in the main zone is reported by previous workers to have returned 0,48% copper over 157 meters. In 1972, a previous operator drilled 7 holes in this area – the most significant result of which was an intercept of 113 meters grading 0.35% copper.

Figure 16 and Figure 17 show the generalized outlines of the main target areas on the Copper Creek and Grizzly Properties as defined by soil geochemical and ground geophysical survey data.

During the spring of 2005, twelve drill holes totaling 1524 meters were drilled on the Dick Creek Zone (also referred to as the DK Zone). Eleven of the holes intersected significant (>0.3% Copper Equivalent) mineralization from the surface to the bottom of each hole. Nine of these holes intersected copper-gold mineralization throughout which assayed greater than 0.4% Cu equivalent. Eighteen trenches have exposed the mineralized zone over a 400 meter by 400 meter area.

Figure's 18 to 20 show the general terrain around the Dick Creek Zone, the locations of the 2004/5 drill holes and the location of the "Upper Main Trench". Figure 19 shows the coincident geochemical and geophysical anomalies that define the Dick Creek Zone relative to the 2004/5 drill program.



Sheslay River

**Grizzly Prospec** 

West Kaketsa

Cu / Au stream anomaly South Target 2009 IP survey

**Dick Creek** 

yrrhotite Cree

RESTEEL RESOURCE

CLAIM BOUNDA

**Hackett River** 

Y .....

**Tahltan River** 

**Golden Bear Mine Road** (not currently in serivce)

GARIBALDI / EQUINOX

**CLAIM BOUNDARY** 

Wolverine

#### GARIBALDI / EQUINOX JOINT VENTURE

GRIZZLY PROJECT, NW BC

**GOOGLE EARTH VIEW SHOWING COPPER CREEK AND GRIZZLY PROPERTIES, PRIMARY** TARGET AREAS

DATE:	2009 04 11	FIGURE NO:
SCALE:		
PROJECTION:	*	17
DRAWN BY:	DORIAN LESLIE	1/

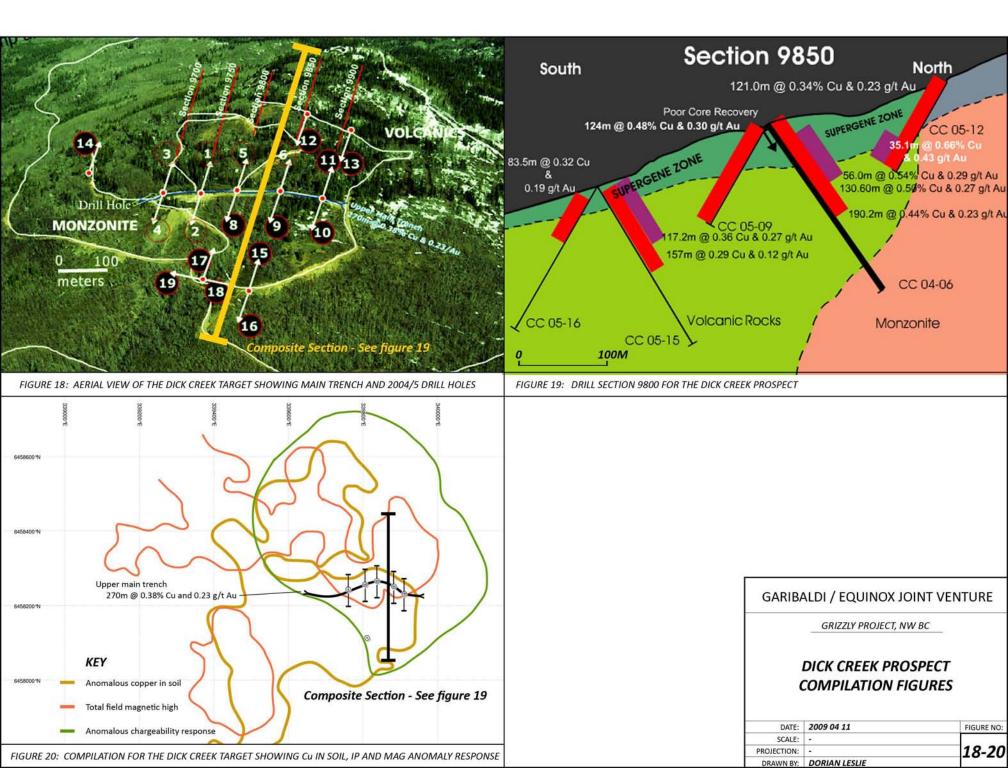
Outline of target area defined by Cu in soil and/or chargeability anomaly

Outline of Priority Area Defined by SJ Geophysics Mag Interpretation

Other minfiles

Minfiles Garibaldi's claims

KEY



#### 18. MINERAL PROCESSING AND METALLURGICAL TESTING

No mineral processing or metallurgical testing has been carried out on the Grizzly Property.

#### **19. MINERAL RESOURCE AND RESERVE ESTIMATES**

No mineral resource or reserve estimates have been completed for the Grizzly Property.

#### 20. OTHER RELEVENT INFORMATION

There is no other relevant technical information concerning the Grizzly Property.

#### 21. INTERPRETATION AND CONCLUSIONS

Available technical data indicates potential for the discovery of alkalic, porphyry coppergold mineralization in both the western part of the Grizzly Property and the southern part of the Grizzly Property.

The exploration work completed by Kennecott, Brascan / Ducanex Resources, and, Corona Corp. identified a large area in the western part of Grizzly Property that exhibits mineralization and soil geochemical responses similar to those that define the mineralized zones identified within the adjoining Copper Creek Property. The work completed by Skyline Exploration identified additional targets in this part of the Grizzly property.

A program of detailed geological mapping and sampling is warranted to verify the historic rock sampling and soil geochemical results.

The airborne magnetic survey completed by Garibaldi in 2006 confirmed that the rock units and structures associated with mineralization continue to the southeast onto the Grizzly Property. Results of an independent assessment of the airborne magnetic data identified multiple magnetic targets.

In March 2009 Equinox Resources completed a trial IP survey covering one of the magnetic targets identified by the airborne magnetic survey completed by Garibaldi in 2006. Several chargeability anomalies were identified and based on the fact that Equinox has confirmed there are "blind" chargeability anomalies associated with the magnetic features identified in the southern part of the Grizzly Property the entire area of interest defined by the 2006 airborne survey should be evaluated. 3D IP surveying should be extended to cover this and the other magnetic targets in the area. Soil geochemical sampling is also warranted to help prioritize the magnetic targets for follow up IP surveys. These surveys should be planned as a summer exploration program.

#### 22. **RECOMMENDATIONS**

The initial work program for the Grizzly Property should consist of grid based geochemical surveys over the entire area of interest defined by the airborne magnetic survey. The estimated cost of this program including contingencies is estimated at \$110,000.

Based on the results of the geochemical survey a Stage 2 follow up program of target focussed IP surveys should be completed. At this stage allowance can be made for a minimum of two additional target areas to be surveyed at a cost of \$110,000 (including contingencies).

With regards to follow-up work on the Grizzly target area (the areas explored by Corona and Skyline Exploration to the west of the Pyrrhotite Creek Prospect) it is recommended that initial work in this area should be designed to verify the results reported by Corona and to make an assessment of the targets identified on the west side of the Sheslay River immediately west of Pyrrhotite Creek. The estimated cost of this work would be a minimum of \$50,000. Although it is important to confirm the historic results at the Grizzly prospect and assess the other targets in this area this work could be completed concurrently with the IP survey work after completion of Stage 1.

The total cost of the work recommended for the Grizzly Property is estimated at \$270,000. Stage 1 should consist of grid based geochemical surveys in the southern part of the Grizzly Property. Stage 2 should consist of target focussed IP surveys to follow up targets identified by the geochemical surveys and geological mapping and verification sampling in the western part of the Grizzly Property to assess the areas explored by Corona and Skyline exploration. The estimated cost of this program is \$270,000.

Stage 1

Grid based geochemical surveys in the southern part of the Grizzly Property

Allowance for 30 day sampling program (all inclusive)	75,000
Assays and technical reporting;	25,000
Contingency	10,000
Sub - total	\$110,000

Stage 2: Target focussed IP surveys in the southern part of the Grizzly Property and geological mapping and verification sampling in the western part of the Grizzly Property:

Allowance for IP surveys (all inclusive)	\$ 100,000
Contingency	10,000
Sub - total	\$ 110,000

Allowance for geological mapping and verification sampling in the western part of the Grizzly Property:

Crew and mobilization	\$ 10,000
Allowance for ten day sampling program	25,000
Assays and technical reporting;	15,000
Sub-total	\$ 50,000

The estimated cost of Stage 1 and Stage 2 Exploration Program is \$270,000.

On completion of these programs a decision can be made whether or not to proceed with drill testing of any of the targets which are identified.

#### 23. **REFERENCES**

#### Publications

Barr D.A. and Lawrence, E.A., ARIS Assessment report No. 349. Report on Geological and geochemical Surveys for the Kid 1-12 claims for Kennco Explorations Limited dated May 9, 1961

Gutrath, G.C. and Darney, R.J., ARIS Assessment report No. 3514. Report on the Geology and Geochemistry of the Kaketsa Mountain Area for Skyline Explorations Inc., January, 1972

Gutrath, G.C. and Darney, R.J., ARIS Assessment report No. 3515. Report on the Geology and Geochemistry of the Pyrrhotite Creek Project for Skyline Explorations Inc., November, 1971

Johnson, D., ARIS Assessment report No. 5231, Report on Diamond Drilling, Grizzly Claims, for Brascan Resources and Ducanex Resources Ltd., October 14, 1974

Johnson, D., ARIS Assessment report No. 19805, Geochemical Report on the Shell 1-4 Claim Group for Corona Corp, March 9, 1990

Jones, P., ARIS Assessment report No. 18421, Prospecting Report on the Shell 1-4 Claim Group for Corona Corp, January, 1989

Pezzot, T., Unpublished Memorandum on the Exploration Potential of the Grizzly Property based on an Interpretation of 2006 Fugro Airborne Magnetic Survey data, dated March 23, 2009

Pezzot, T., Unpublished Memorandum on the 3D IP Test Survey Results for the Grizzly Property, dated April 3, 2009

Travis, A., Keewatin Consultants, ARIS Assessment Report No. 27,435: Geochemical and Geohysical Report on the Copper Creek Property for Firesteel Resources Ltd., dated March 31, 2004

Unpublished Memorandum Concerning Technical Summary of the Copper Creek Property provided by Firesteel resources in March 2009.

Internet Sites

Note: all data from BC Ministry of Mines downloaded from: http://www.em.gov.bc.ca/Mining/Geolsurv/MapPlace/geoData.htm

#### 24. CERTIFICATE OF AUTHOR

I, WESLEY RAVEN, P.Geo., of 108-1720 West 12th Avenue, Vancouver, British Columbia hereby certify:

- 1. I am the author of the report entitled "Summary Report and Proposed Exploration program on the Grizzly Property" dated April 20, 2009.
- 2. I was retained as an independent geological consultant to Equinox Resources Ltd.
- 3. I am a graduate of the University of British Columbia (1983) and hold a B.Sc. degree in geology. I have been employed in my profession by various companies since 1983. I am a member of the Association of Professional Engineers and Geoscientists of British Columbia, and have been registered since 1992. I am a Fellow of the Geological Association of Canada and have been a member since 1989. I am a qualified person for this report on the basis of my education, affiliation with a professional association and past relevant work experience.
- 4. I made a one-day site visit to the Grizzly Property on September 12, 2008.
- 5. I am responsible for items 1 to 26 of this technical report on the Grizzly Property, from information obtained by myself during the property examination and from the sources listed in the References section of this report.
- 6. I am independent of, and have no direct involvement with, Equinox Resources Ltd. nor with Garibaldi Resource Corp. as defined in NI 43-101, Section 1.4 and in Section 3.5 of the Companion Policy to NI 43-101.
- 7. I have no prior involvement on the Grizzly Property except for my time spent on reviewing the historical database, reviewing available government maps and reports, and preparation of this technical report and an assessment report.
- 8. I have read both NI 43-101 and NI 43-101 F1 and the technical report has been prepared in compliance with that instrument and form.
- 9. As of the date of this report I am not aware of any material fact or material change with respect to the subject matter of the report that is not reflected in the report, the omission to disclose which makes the report on the subject properly misleading.
- 10. I consent to the public filing of this technical report and to extracts from, or a summary of, the technical report for Equinox Resources Ltd. or Garibaldi Resouces Corp. for any corporate use normal to their business.

Wesley Raven, P. Geo.

DATED at Vancouver, British Columbia, this 20th day of April, 2009

#### 25. CERTIFICATE OF AUTHOR

I, Carl von Einsiedel, P.Geo., of 8888 Shook Road, Mission, B.C. hereby certify that:

1. I am a currently a self employed consulting geologist with offices at 8888 Shook Road., Mission, B.C.

2. I graduated with a degree in Bachelor of Science Degree with a major in Geology from the Carleton University in Ottawa in 1987.

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

4. I have worked as a geologist continuously for a total of 20 years since my graduation from university.

5. I am responsible for the amendments of all sections of the technical report titled "Geophysical Assessment Report on the Grizzly Property" dated October 15, 2009I

6. I am the registered owner of the subject property and I am therefore not independent of the issuer applying all of the tests in section 1.5 of National Instrument 43-101.

Dated this 15th of October 2009.

C. von Einsiedel, P.Geo

Pezzot, T., Unpublished Memorandum on the Exploration Potential of the Grizzly Property based on an Interpretation of 2006 Fugro Airborne Magnetic Survey data, dated March 23, 2009



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



11966 – 95A Avenue, Delta BC V4C 3W2 CANADA 
 Bus: (604) 582-1100
 Fax: (604) 589-7466

 E-mail: trent@sjgeophysics.com
 www.sjgeophysics.com

## Memorandum

To: Ram Explorations Ltd.

From: E. Trent Pezzot

Date: March 23, 2009

**Re:** Grizzly Project

Ram Explorations Ltd. commissioned S.J.V. Consultants Ltd. to evaluate the exploration potential of the Grizzly property, located some 50 kilometres northwest of Telegraph Creek, in NTS 104J04 and the Atlin Mining District. The Grizzly property is owned (optioned) by Garibaldi Resources Ltd. and consists of 51 contiguous claims, covering an area of 17,040 hectares. A list of the tenure numbers is presented below as Table 1.

The evaluation was based on a research of public domain and historical data for the area and a review of the results from an airborne magnetometer survey completed in December, 2006.

The primary exploration target is an alkalic porphyry gold copper, similar to the nearby Copper Creek prospect.

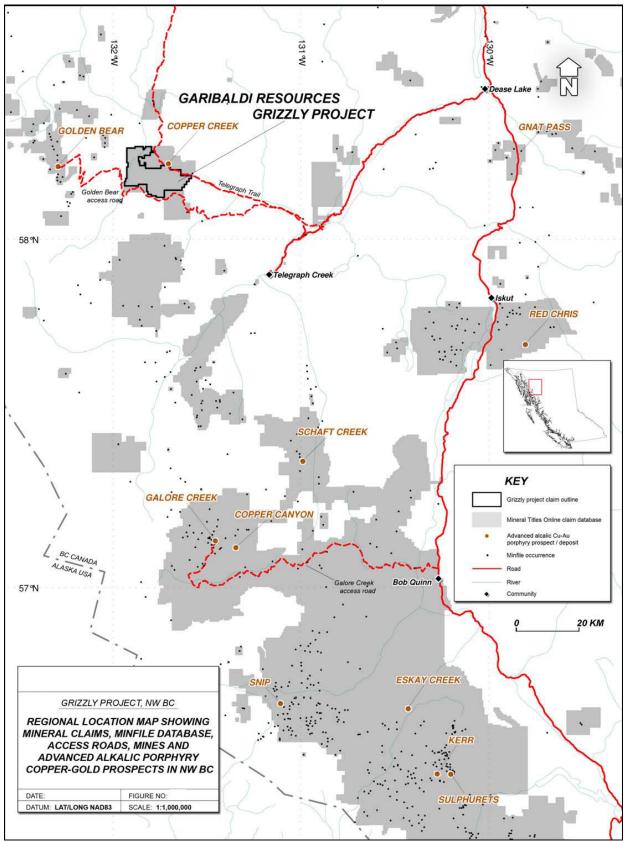


Figure 1: Grizzly Project Location Map

Tenure Number	Area in Ha	Expiry Date	<u>Owner</u>	<u>Beneficial Owner / Operator</u>
537419		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
532128		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
532129		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
532130		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
532131		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
532132		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
532133		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
532134		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
532135		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
532136		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
532137		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
532138		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
532139		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
532140		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
532141		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
532142		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
532143		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
532144		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
532145		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
532146		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
532147		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
532148		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
532149		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
532150		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
532151		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
532152		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
532153		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
521137		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
538012		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
538013		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
538014		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
538015		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
538016		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
538017		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
538018		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
538019		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
538020		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.

Table 1: List of Grizzly Property Tenures

537287		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
537288		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
537289		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
556527		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
556574		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
556575		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
556576		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
556577		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
557775		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
557776		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
557777		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
559901		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
559902		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
559964		2009 07 04	Carl von Einsiedel	Garibaldi Resources Corp.
	Total Area			
	in Ha:			
	17040			

The B.C Geology mapping shows the Grizzly property as being mostly underlain by marine sedimentary and volcanic rocks of the Upper Triassic Stuhini Group and flanked by Mesozoic dioritic and quartz-dioritic intrusive rocks and alkaline volcanic rocks of the Cenozoic Level Mountain Group. The area is part of the Stikine Arch area which is analogous to that which hosts the Galore Creek and Copper Canyon alkalic, porphyry copper gold deposits. There are 13 minfile occurrences of alkalic porphyry Cu-Au recorded in the immediate area, most located along the edges of intrusions. These include the Copper Creek, Star (Dick Creek) and Go (Pyrrhotite Creek) prospects immediately adjacent to the Grizzly property and currently being explored by Firesteel Resources Inc. Two other minfile occurrences, the AL9 (copper and gold vein, breccia, stockwork) and the Eagle (Fe skarn) are also located in the area.

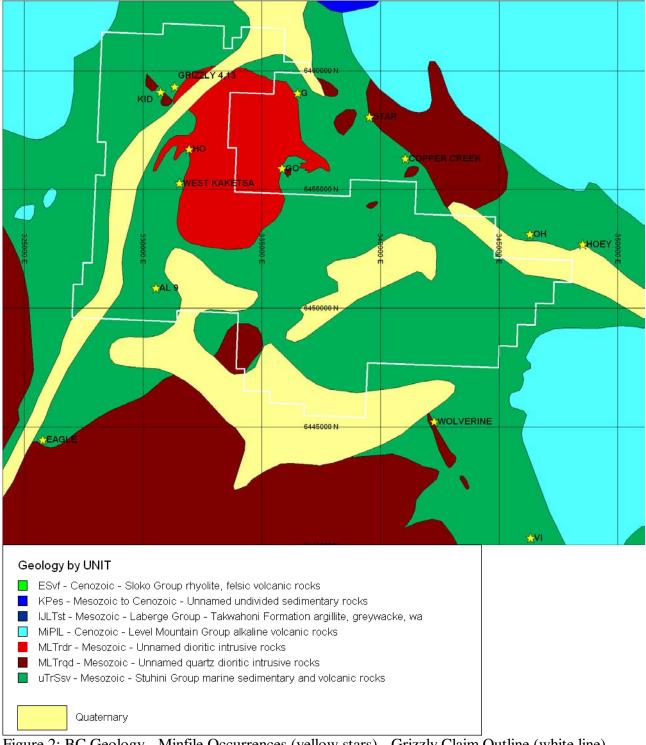


Figure 2: BC Geology - Minfile Occurrences (yellow stars) - Grizzly Claim Outline (white line) – UTM Grid at 5000m intervals (NAD83, Zone 9N).

Firesteel reports they have identified four significant porphyry copper gold targets on their Copper Creek Property. Three on the east side of the property (Copper Creek, Dick Creek and Dick Creek North) are all associated with copper and gold in soil geochemistry, magnetic and IP chargeability anomalies. The target to the west (Pyrrhotite Creek) is associated with copper in soil and IP anomalies. No gold analysis has been reported in this area.

The NRCAN geoscience data repository contains a high altitude regional magnetic data over this area, based on surveys completed in 1978. These surveys were regional in nature, generated from lines flown at 1609 metre intervals. They show excellent correlation with the mapped geology. High magnetic amplitudes responses follow the quartz diorite and diorite intrusions. The Stuhini Group rocks, which underlie most of the Grizzly property, exhibit low magnetic amplitudes that decrease to the south, likely indicating this unit thickens to the south.

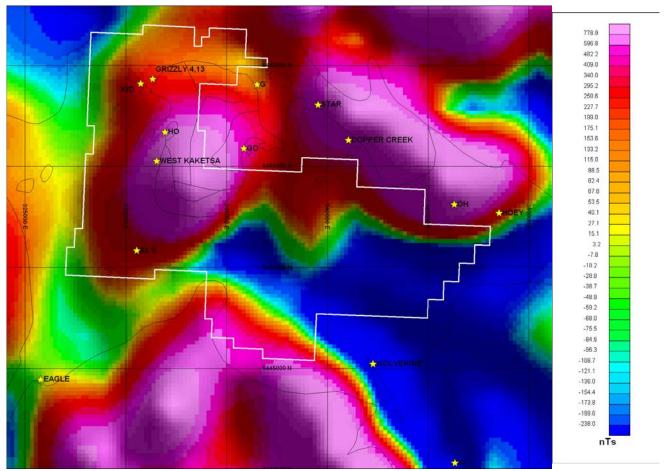


Figure 3: NRCAN high altitude regional magnetic color contour map. Regional Geology outlines (black lines). Minfile occurrences (yellow stars). Grizzly claims (white line). UTM Grid at 5000m intervals.

In December, 2006, Garibaldi Resources Ltd. hired Fugro Airborne Surveys to conduct low altitude, detailed magnetic surveys over three properties in the area, including a portion of the

Grizzly project claims. The survey extended north of the Grizzly claims and covered both the Copper Creek and Pyrrhotite Creek prospects.

The detailed airborne survey exhibits the same general trends as the regional magnetic mapping but contains significantly more detail that defines the edges of the large intrusive bodies. It also outlines several small, localized anomalies that may be mapping offshoots from the large intrusions, separate buried intrusions or discrete porphyry targets. There are a number of linear trends evident that appear to be mapping complex fault patterns, both along the edges of the intrusions and within the Stuhini Group.

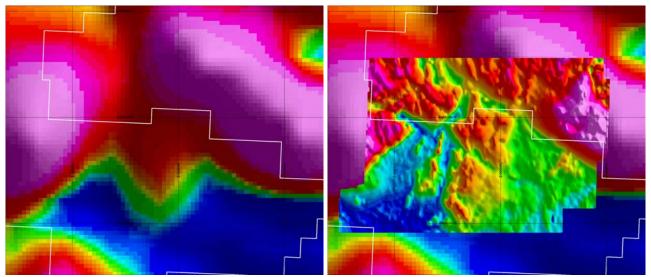


Figure 4: Comparison of NRCAN regional and Fugro detail magnetic color contour maps

The detail magnetic data (Figure 5) shows good correlation between the regional magnetics, topography and geology. It outlines four distinct environments across the survey area.

- 1. Strong magnetic highs across the northeast and northwest corners of the survey coincide with the geological outlines of the MITrqd (quartz diorite intrusion) and MITrdr (diorite intrusion) units respectively. The magnetic data delineates a more complex and realistic footprint to these intrusions than is shown on the geology maps, including a number of northeasterly and northwesterly lineations that likely reflect complex fault patterns crossing the intrusions.
- 2. A relative magnetic low covers the south western portion of the survey. This response ties to the northern edge of a regional magnetic low that likely reflects the Stuhini Group

sediments and volcanics. This unit likely thickens to the southeast. The magnetic low contains several narrow lineations that probably reflect faulting. These linears follow two dominant directions: NNE (varying from  $005^0$  to  $025^0$ ) and NW ( $300^0$ ).

- 3. The south central section contains a belt of moderate magnetic highs that narrows to the SSW. Northwesterly trending faulting (which is also reflected in the drainage patterns) divides the belt into three separate zones. These magnetic features could be reflecting buried intrusions, possibly a continuation of the large intrusions outcropping to the northwest and northeast, covered by a thin layer of Stuhini Group rocks. The eastern edge of this belt appears to be controlled by a NNE trending fault that extends through the Copper Creek prospect.
- 4. The southeastern section is an area with a quiet magnetic background, punctuated with a couple of small, weak magnetic highs.

There is a narrow magnetic high linear that parallels the base of the hill forming the eastern boundary for Pyrrhotite Creek and the boundary between magnetic areas 2 and 3. This zone is narrow at the north end and widens to the south, suggesting depth to the source increases to the south. This lineation is "broken" in several places, likely associated with northwesterly trending faulting.

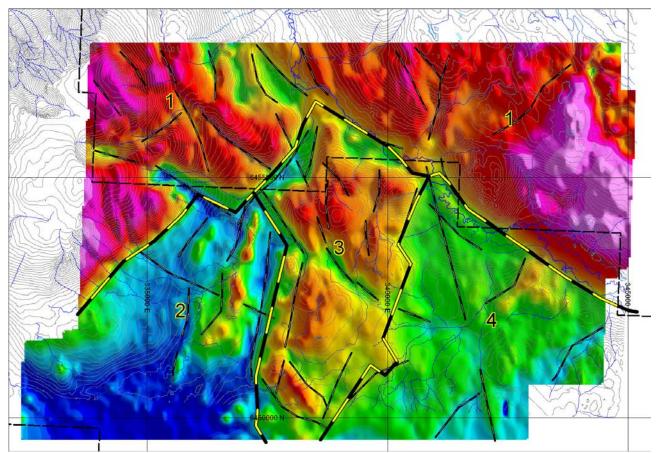


Figure 5: Detail Magnetic color contour map - sun illuminated from east. Topo base map. General response areas (Yellow-Black lines). Magnetic linears (faulting) (black-white lines).

The magnetic data across the south central block (3) was extracted from the database and used as input to a 3D magnetic inversion. A three dimensional block model, comprised of thousands of discrete cells is constructed to represent the earth. The inversion algorithm calculates and assigns magnetic susceptibility values to each of these cells to produce the magnetic readings observed.

A 3-D representation of the magnetic inversion results is shown below. This model has had the low susceptibility material removed, revealing one possible interpretation outlining the shapes and locations of the higher susceptibility bodies that could produce the three magnetic highs within the southcentral block (3). The models are viewed with a translucent overlay of the input magnetic data draped over the topographic surface. Portions of the model associated with the large intrusions to the north have been removed.

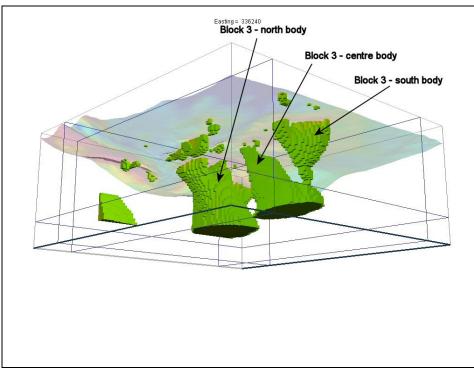


Figure 6: Mag3D inversion - 3D Perspective Drawing - view from SouthWest - looking up from below - cutoff 0.017

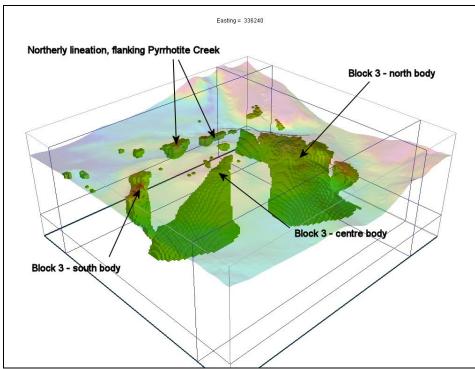


Figure 7 Mag3D inversion - 3D Perspective Drawing - view from SouthEast - looking down from above- cutoff 0.017

The northern high could be generated by a steep, NE dipping dyke (possibly originating from the intrusion adjacent to the Copper Creek prospect) that mushrooms out near surface forming a cap

of small pods of high susceptibility materials. The pod to the to the east-northeast of main cluster, along NE facing slope, appears separated from group although it could be rooted in same intrusion.

The central mag high produces a similar model as above but appears to be plunging steeply to the south and expanding at depth. The mushroom cap is not as developed.

The small mag high at the south end appears more as an isolated, near surface feature although it might have a narrowing root that extends to depth

The weak magnetic linear along east side of the Pyrrhotite Creek valley models as series of small aligned pods. Profile analysis suggests these could be interpreted as the updip edge of layer that dips to southwest.

In conclusion, the Grizzly property should be considered as having a high potential for alkalic porphyry copper gold mineralization. The geological and geophysical data suggests the presence of buried intrusive material and intersecting fault patterns that would provide a suitable geological environment for this type of deposit. Continued exploration of these properties is strongly recommended.

Exploration should follow the same general approach described by Firesteel Resources Inc. and consist of geological mapping, soil geochemistry and induced polarization surveys. These techniques are expected to outline drilling and/or trenching targets. Initial efforts should be concentrated along the magnetic features (described as Area 3 in this report) that form the trend heading SSW from the Copper Creek prospect.

A specific request was made for exploration recommendations for immediate work (March 2009). At the current time a thick (5 foot) blanket of snow covers the area, making soil geochemistry and geological mapping impractical. While these conditions generate logistical problems, IP surveying can be conducted at this time.

A recommendation was made to conduct a test of the 3-D IP survey technique across the southernmost magnetic anomaly in the south-central section of the study area. This area was selected because of the flat terrain and available helicopter access. Results from this test are currently being processed and analyzed.

Pezzot, T., Unpublished Memorandum on the 3D IP Test Survey Results for the Grizzly Property, dated April 3, 2009



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



11966 – 95A Avenue, Delta BC V4C 3W2 CANADA 
 Bus: (604) 582-1100
 Fax: (604) 589-7466

 E-mail: trent@sjgeophysics.com
 www.sjgeophysics.com

### Memorandum

#### To: Ram Explorations Ltd.

From: E. Trent Pezzot

Date: April 3, 2009

#### Re: 3D IP test survey results - Grizzly Project

In March, 2009, Ram Explorations Ltd. commissioned S.J.V. Consultants Ltd. to evaluate the exploration potential of the Grizzly property, located some 50 kilometres northwest of Telegraph Creek, in NTS 104J04 and the Atlin Mining District. The Grizzly property is owned (optioned) by Garibaldi Resources Ltd. and consists of 51 contiguous claims, covering an area of 17,040 hectares.

The evaluation was based on a research of public domain and historical data for the area and a review of data from an airborne magnetometer survey completed in December, 2006. The results of this study concluded that the Grizzly property has a high potential for alkalic porphyry copper gold mineralization similar to the Copper Creek prospect located immediately north of the study area and identified several magnetic targets where exploration efforts should be concentrated (memo to Ram Explorations Ltd., dated March 23, 2009).

Because I have had considerable experience with these exploration targets, including two years working as a geophysical consultant for Galore Resources on the Galore Creek properties, I was asked to recommend and supervise a program of geophysical test surveys for this area.

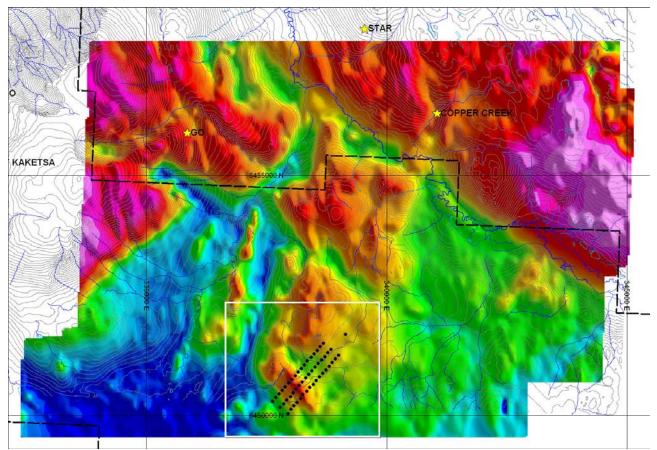


Figure 1: Detail Magnetic color contour map - sun illuminated from east. Topo base map. 3-D IP Test Survey (black circles). South study area (white rectangle). Minfile Occurrences (yellow stars)

A small 3D-IP survey was recommended to test one of the target areas. The southernmost magnetic anomaly in the south-central section of the study area was selected because of the flat terrain and readily available helicopter access. Other magnetic targets are more interesting but the logistical concerns of surveying during the winter were a major factor in this target selection.

The target area covered a NW elongated magnetic high approximately 1 kilometer long. It appears to be terminated at both ends against NNE trending faults. This feature can be interpreted in several ways. It could represent an alteration zone surrounding a near vertical fault zone. A 3D inversion (shown below as Figure 2) suggests it could also be interpreted as a near vertical, pipe like body, possibly originating from a large, deep intrusion. Higher susceptibilities noted in the near surface could be indicative of facies or lithological changes, possibly a result of alteration processes.

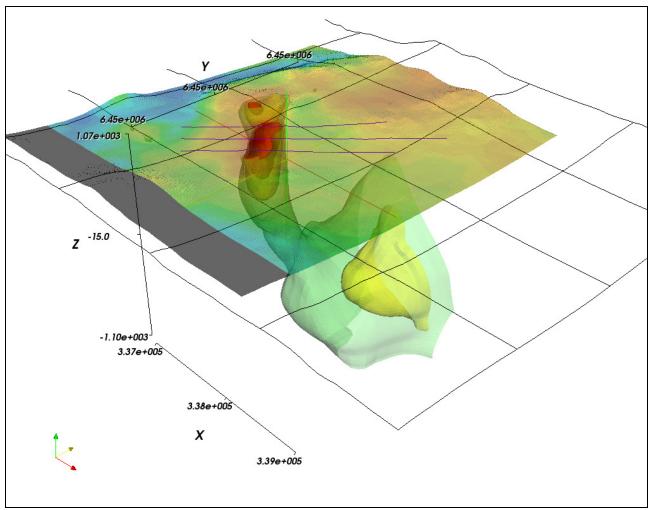


Figure 2: Magnetic Inversion of south study area – 3D Perspective view from southeast -Isosurfaces of higher magnetic materials are drawn in green (0.1658 SI), yellow (0.20 SI) and red (0.25 SI). Translucent map of magnetic data draped over surface. IP survey lines drawn in purple.

The IP survey, consisting of 3 NE trending lines, 1600m in length and spaced 200m apart was completed in March, 2009. Survey details are documented in a separate logistics report authored by Thomas Campagne of S.J.V. Consultants Ltd.

The 3D IP test survey was configured in a modified pole-dipole array, with potential dipoles established on the centre line and current electrodes placed on the two flanking lines. This configuration is designed to take advantage of the interpretational functionality offered by 3D inversion techniques. The pseudo-section technique used to display and interpret conventional, inline 2D IP data is not applicable. Inversion algorithms are used to construct 3 dimensional block models describing a subsurface distribution of the appropriate parameter (chargeability, conductivity) that can produce the observations measured at the surface. Results are displayed and interpreted using a viewing program that allows the user manipulate and view the model in 3 dimensions from multiple angles and view points.

The intention of the IP survey was to identify any increases in chargeability or changes in resistivity along the magnetic feature that might be indicative of porphyry style mineralization. In this analysis, the chargeability component of the IP survey is usually the most critical, since it can be used to directly detect the disseminated base metal compounds. The resistivity (conductivity) parameter is more commonly used to map lithological (facies) units and geological structures that make up and control the porphyry system.

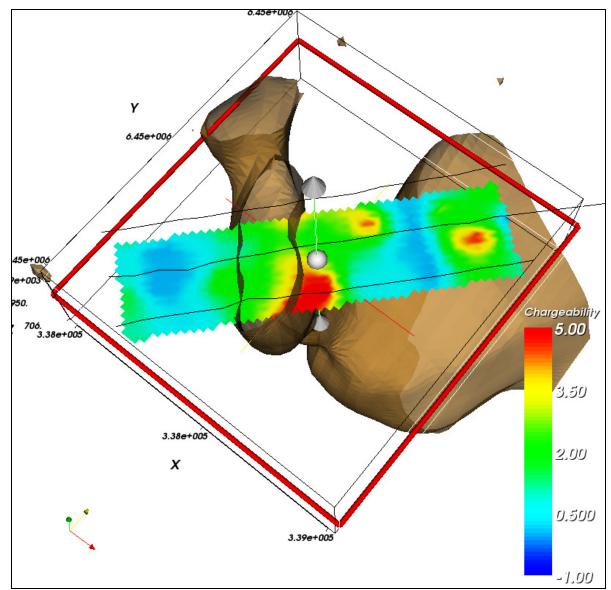


Figure 3: 3D Perspective view from the southeast - Depth slice at 100m through chargeability inversion - Isosurface of high (0.016568 SI) magnetic body (brown):

A horizontal slice through the chargeability inversion model (Figure 3) reveals northwesterly oriented background trends that generally parallel the magnetic features and likely follow the local, near surface geology. There are several localized high chargeability anomalies superimposed over this background, with the largest and highest amplitude feature mapped along the northeast flank of the magnetic body. This anomaly is noted on two of the three lines and is considered to be open to the southeast. A cutoff view of the inversion model (figure 4), which strips away the low chargeability values, suggests this anomaly originates from a horizontally oriented cylinder, approximately 150 metres in diameter, starting at about 50 metres depth. The absolute amplitude of the anomaly is relatively weak (up to 7 ms) but significantly higher than the local background (<1.0 ms). It directly coincides with a low resistivity zone.

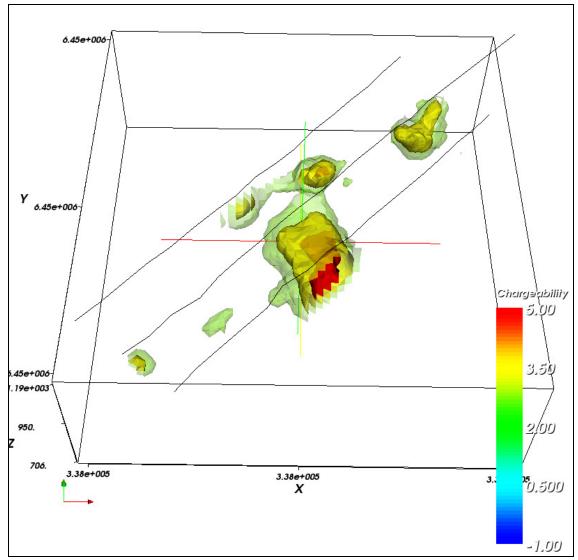


Figure 4: Isosurface of Chargeability: 2.75 ms (green), 3.5 ms (yellow), 5.0 ms (red) – View from south.

Two other discrete chargeability anomalies warrant mention. One forms a northeast elongated feature at the north end of the centre survey line. It appears to be sandwiched between two similarly oriented resistivity highs. The other is a very small feature located between two survey lines, due north of the largest anomaly.

A horizontal slice through the resistivity inversion model at 100m depth is shown below as Figure 5.

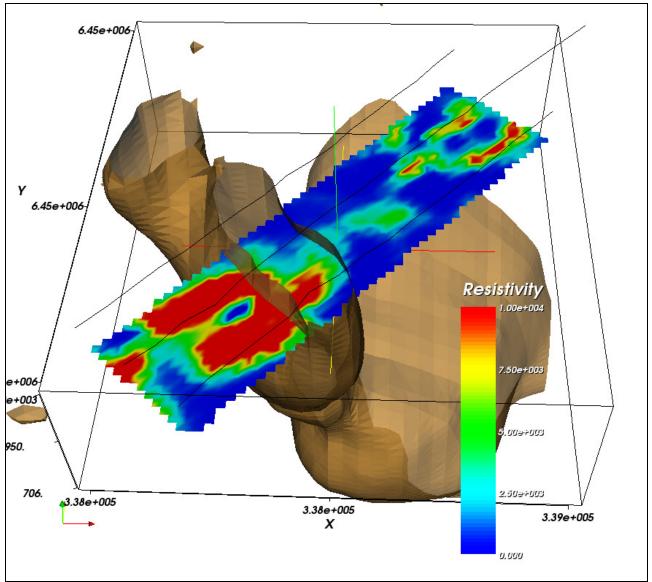


Figure 5: Depth slice at 100m through resistivity inversion. Isosurface of magnetics (0.016568 SI - shown in brown) - View from the south.

The resistivity inversion reveals three distinct environments:

- 1. A high resistivity (> 10,000 ohm-m) halfspace is mapped to the southwest of the magnetic body. This large feature appears to surround a narrow, pipe-like core of conductive material that plunges at a shallow angle to the southwest (Figure 6).
- 2. A low resistivity band, approximately 400 m across is mapped immediately northeast of the magnetic body.
- 3. The northeast portion of the survey is characterized by northeasterly elongated pods of moderate resistivity. These appear to form a circular pattern surrounding the chargeability high in the area.

There are several different orientations of trends evident in the resistivity and conductivity data. Conductive trends appear to align predominantly in a northeasterly direction although this bias is likely due to the nature of the survey grid. A larger survey will be required to confirm these trends and determine which are most significant.

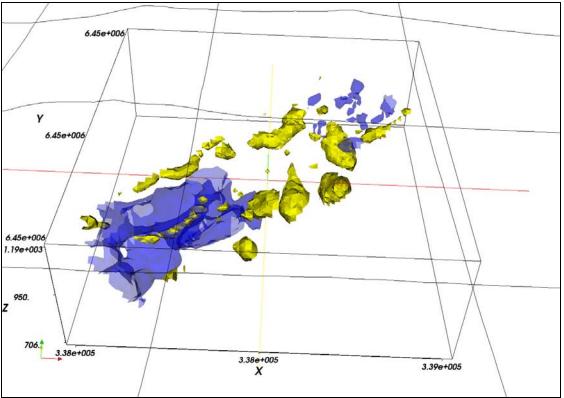


Figure 6: Isosurface of resistivity: 10000 ohm-m (blue), conductivity 0.015 mho-m (yellow) – View from south.

The 3D models for all three geophysical parameters (magnetics, chargeability and resistivity) can be rendered in a common 3D visualization. This allows a clear comparison of the spatial relationships between the interpreted features. Figure 7 below clearly illustrates that the northwesterly trending, vertical magnetic dyke separates two different resistivity regimes: the high resistivity halfspace to the southwest and the lower resistivity halfspace to the northeast. It also illustrates how the large chargeability anomaly forms a localized target parallel to and flanking the magnetic body.

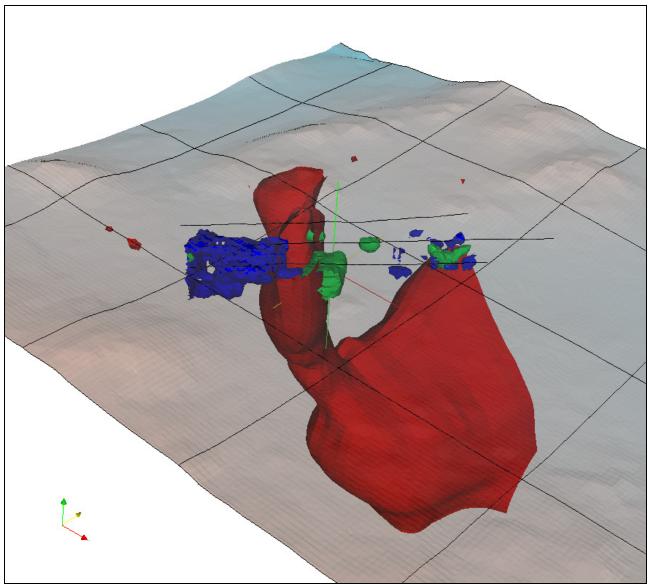


Figure 7: Isosurface of magnetics (0.016568 SI - red): Isosurface of chargeability (3.5 ms - green): Isosurface of resistivity (10,000 ohm-m - blue): View from the southeast. Translucent overlay of DEM surface.

The results from this test IP survey are very encouraging. The presence of elevated chargeabilities and the discrete resistivity contact coincident with the magnetic high can be easily interpreted as the response to a porphyry system. The magnetic dyke could be reflecting an intrusive body that acted as a heat source and possibly the source of the metallic minerals themselves. The localized chargeability high could be reflecting metallic mineralization accumulated along the flank of the intrusion. The resistivity contrast across the magnetic body could be reflecting a lithological contact or alteration effects. The anomaly warrants further exploration to determine the precise size and shape of the chargeable mass.

3D IP surveying should be extended to cover this and the other magnetic targets in the area. Soil geochemical sampling is also warranted to help prioritize the magnetic and IP targets. These surveys should be planned as a summer exploration program.

Respectfully submitted Per S.J.V. Consultants Ltd.

**E. Trent Pezzot**, BSc., PGeo. Geophysics, Geology

Campagne T., SJV Geophysics Ltd. Logistical Report on the 3D Induced Polarization Survey on the Grizzly Grid., April 2009

## **Logistical Report**

## **3D Induced Polarization Survey**

### On The

## **Grizzly Grid**

Lon 131°44'54.00" Lat 58°10'7.00" – NAD83 NTS - 104J04 & 05 BCGS – 104J011, 012, 021 & 022 Mining zone: Altin Location: British Columbia, Canada

## **Prepared For**

### **Ram Exploration Ltd.**

8888 Shook Rd Mission, BC, V2V 7N1,Canada Tel - 604 649-5793

Survey Conducted by

SJ Geophysics Ltd.

**March 2009** 

**Report Written By** 

**Thomas Campagne** 

S.J.V. Consultants Ltd.

**April 2009** 

## TABLE OF CONTENTS

## **Table of Contents**

1. Introduction	1
2. Location and grid information	1
<ul><li>3. Field work and instrumentation.</li><li>3.1. Field logistics.</li><li>3.2. Survey parameters and instrumentation.</li></ul>	4
<ul><li>4. Geophysical techniques.</li><li>4.1. IP method.</li><li>4.2. 3DIP method.</li></ul>	7
Appendix A: Statement of qualifications	9
Appendix B: Instrument specifications SJ-24 Full waveform digital IP receiver GDD Tx II IP transmitter	10
Appendix C: Grid summary information	11

# Figure Index

Figure 1: Regional map with NTS mapsheets and claim boundaries	2
Figure 2: Overview picture of the grid area taken from south east	2
Figure 3: Grid map with claim boundaries	3
Figure 4: Pictures of camp construction (left) and final camp (right)	4
Figure 5: Crew checking snow cover on the Grizzly grid	5

### 1. Introduction

A three-dimensional induced polarization (3D IP) survey was conducted on the Grizzly property for Ram Exploration Ltd. The grid was located 50 km north west of Telegraph Creek, BC, Canada. The ground geophysical program, consisting of three lines totaling 4.8 line-kilometers, was surveyed by SJ Geophysics Ltd. between March 6<sup>th</sup> and 21<sup>st</sup>, 2009. Initial data processing and quality control were performed on site by the field geophysicist, while the final data processing and inversion were carried out by S.J.V. Consultants Ltd.

Ram Exploration Ltd. manages the exploration of the Grizzly property on behalf of Garibaldi Resources Inc. looking for alkalic porphyry copper gold mineralization similar to the Copper Creek prospect located immediately north of the study area. A previous airborne magnetic survey flew above the Grizzly grid in December 2006 highlighted an anomaly on which the present 3DIP survey was conducted.

This logistical report summarizes the operational aspects of the survey and the survey methodologies used, it does not discuss any interpretation of the results of the geophysical survey.

### 2. Location and grid information

The Grizzly grid located 50 km northwest of Telegraph Creek, BC, Canada, on a plateau at approximatively 1050 m of elevation was only accessible by helicopter (see Figure 1). Scattered to dense forests as well as a swamp were surrounding a forested island (see Figure 2) on which the grid was centered. Due to the winter conditions the whole area was under a 1.5 m average snow cover which consisted of a 20 cm frozen crust overlaying a thick layer of unconsolidated powdery snow.

The grid consisted of three 1600 m long lines with an azimuth of 41° from the geographical north, 200 m line spacing, 100 m station spacing (see Figure 3). Stations were labeled with local coordinates so numbers increased from north to south for the lines (2S, 3S and 4S) and from west to east for the stations(from 0E to 1600E). None of the lines were previously cut, tracks/trails were nonexistent and stations pickets were missing. Therefore trails were made along the lines by packing the snow and holes were dug to mark each stations. Lines were also linked together by a baseline running along stations 900E.

Grizzly Grid - Logistics report (April 2009)

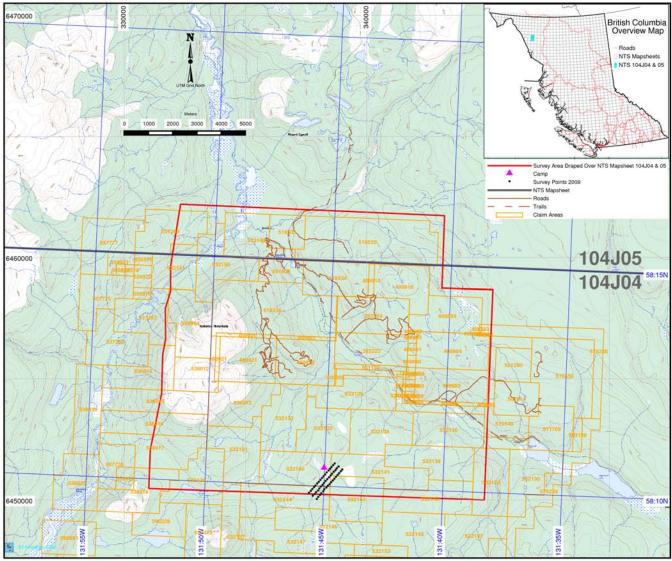


Figure 1: Regional map with NTS mapsheets and claim boundaries.



Figure 2: Overview picture of the grid area taken from south east.

SJ Geophysics Ltd. / S.J.V. Consultants Ltd.
 11966 - 95<sup>th</sup>A Avenue, Delta, BC, Canada, V4C 3W2
 2/11

 Tel: (604) 582-1100
 Fax: (604) 589-7466
 www.sjgeophysics.com
 2/11

Survey lines and stations were located to match an idealized grid previously created at the S.J.V. office in UTM NAD83 zone 9. Station holes were dug as close as possible to the ideal location then the real location was recorded with the highest accuracy available, up to 2 m and minimum 5 m, on our handheld Garmin GPS 60 CSx.

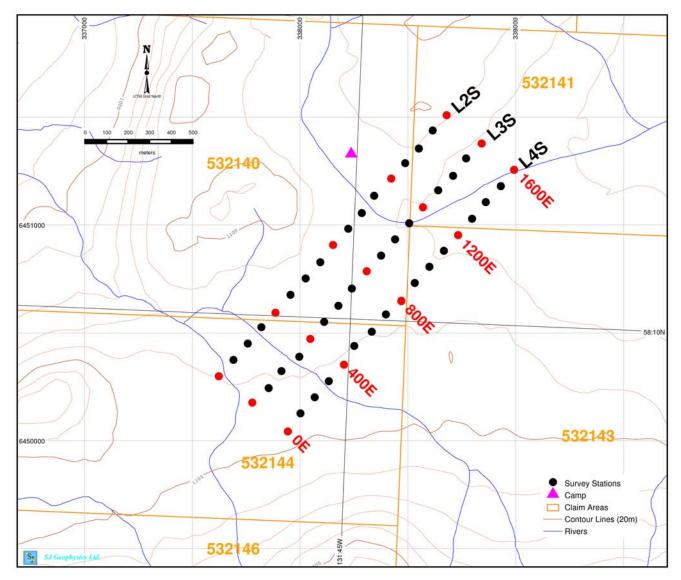


Figure 3: Grid map with claim boundaries.

### 3. Field work and instrumentation

#### 3.1. Field logistics

Over the course of the survey, the SJ Geophysics Ltd. crew consisted of 2 SJ workers helped by 2 others from Ram Exploration Ltd. The crew consisted of Thomas Campagne (geophysicist), Rene Poulin (logistics), Mark Roden (client representative) and Hervee Chaudet (client helper). SJ Geophysics and Ram Exploration workers met on the mobilization at Cache Creek on their drive to Bob Quinn on the morning of March 7<sup>th</sup>.

Three days were used for the crew mobilization to drive from Vancouver to Bob Quinn and nights were spent in motels at Cache Creek, Smithers, and a trailer at Bob Quinn. The following day (March 9<sup>th</sup>), crew, equipment and camp supplies were flown on site from Bob Quinn's airstrip by a Bell 206 helicopter operated by Lakelse Air Ltd.(1 hour 40 min one way). Two days were necessary to fly all the camp equipment, food and supplies, managed by Ram Exploration Ltd., as well as the geophysical equipment managed by SJ Geophysics. When the first load arrived on site Mark R. and Hervee C. started to build a camp 300 m far from the northeast grid edge where the crew stayed for the duration of the survey. From then it took the crew 2 days to put the kitchen tent up and one more day to put the sleeper tent up (see Figure 4). As none of the tents were finished at the end of the first day on site the crew flew back to Bob Quinn and spent another night in the trailer. When building the camp the crew



Figure 4: Pictures of camp construction (left) and final camp (right).

shoveled the snow to make a hole big enough for two tents. Then trees were cut and laid on the ground to support and level the wood floor supporting the tent frames. Camp consisted of two tents, kitchen and sleeper (insulated), each heated with a fuel stove. When the insulated tent was put together, the crew noticed that the door was missing so one was built using plywood panels leftover.

On March 12<sup>th</sup>, when the camp construction was being finished, Rene P. and Thomas C. stored all the geophysical equipment in the kitchen to keep it dry and warm, then they went to have a look on the grid. They carried snow shovels and avalanche probes to check how deep the snow was on the grid (see Figure 5). But moves were difficult because they often went through an overlaying crust then sink in a



Figure 5: Crew checking snow cover on the Grizzly grid.

powdery snow up to their waist even while using snowshoes without carrying any load. After digging a 1.65 m deep station hole they checked how frozen the ground was and it appears it was possible to pitch electrodes. Along their way they noticed an average 1.5 m snow cover by using their avalanche probes. Any moves on the grid area were therefore difficult despite of a mostly flat terrain. So they decided to pack the snow along a baseline linking stations 900E expecting it to freeze overnight and to be able to support worker carrying equipment with snowshoes on the following day.

The geophysical survey started on the next day, March 13<sup>th</sup>, when everybody went on the grid to dig station holes and setup the grid. The crew realized the baseline was consolidated by the cold temperatures at night and able to support their weight. So they decided to keep packing the snow along the lines. Then the crew easily made its way along the lines when crossing the pond area but encountered more difficulties to go through the dense parts of the forest as the lines were not previously cut. Nonetheless 32 station holes were dug and packed snow trails were traced along lines 3S and 4S by the end of the day.

On the following day, the crew finished to setup the survey by laying out the current line from the transmitter site (in the kitchen tent) to the station 0E on line 4S, receiver array (cables and electrodes), remote electrodes on line 3S station 2000E, 400 m after the array end and by digging 8 more station holes on line 2S. All electrodes were hammered in the frozen ground and the crew noticed it was possible to go through the surface of the frozen pond with the electrodes where a wet layer made of moss and mud was reached.

On March 15<sup>th</sup> the receiver station was setup at station 800E on line 3S and measurements started. On the test readings noisy dipoles were noticed in swamp areas. Then to lower the noisiest dipole the array was reduced from 16 to 15 dipoles with a 200 m long dipole over the related area. By the end of the day lines 3S and 4S were surveyed. The measurements were also interrupted when the helicopter brought extra fuel for the stoves from Bob Quinn because Ram Exploration Ltd. initially flew only 5 days of fuel.

On the following day poor stations were reinforced by adding two electrodes to improve the ground contact as well as reduce the noise while the current line was laid out and 8 more station holes were dug along line 2S. Then line 2S and 3S were surveyed with a longer dipole which was set in order to minimize the effects associated with the swamp. Current lines and remote were picked up by the end of the day. Cables and electrodes were picked up on the next day.

The crew spent 5 days to dig 49 holes from 1 m to 1.75 m of depth, to setup grid and survey, to take measurements and to pick up the geophysical equipment.

On March 17<sup>th</sup> the crew started to pack up equipment and broke down camp. On March 18<sup>th</sup> geophysical equipment and camp (tents, stoves, kitchen,...) were slung to a nearby road going to Telegraph Creek (30 min flight) where everything was loaded in 2 trucks (Ram Exploration Ltd. &

C.J.L. Enterprises Ltd.). Then trucks were driven back to Bob Quinn by Carl Von Einsiedel and a C.J.L. employee by a road going through Dease Lake. Thomas C. went back to Bob Quinn with the trucks while the other crew members flew back to the same destination.

Snow ground conditions were difficult, however weather was good while surveying which contributed a lot to speed measurements. Two snow falls happened at the beginning and the end of the survey adding 25 cm of snow in total. Otherwise weather alternated between cloudy and sunny days with temperatures between -20°c and -5°c daytime, below -20°c night time.

#### 3.2. Survey parameters and instrumentation

An offset modified pole-dipole configuration was used with 15 to 16 potential dipoles at 100 m to 200 m separations. The potential array was connected using special 8-conductor cables with 50 m takeouts spliced every 100 m to a 75 cm stainless steel electrode hammered into the ground. When not connected to an electrode cable takeouts were spliced together. Data were collected using a SJ-24 full waveform receiver. A GDD transmitter was used to inject current on a 2 seconds on, 2 seconds off duty cycle. Current was injected at 100 m intervals using 3 long (75 cm) electrodes. One remote station, consisting of 3 long electrodes, was employed for the IP survey. The remote was located on line 3N at station 2000E (LOCAL), 339140E 6451690N (UTM NAD83 Zone9), and was used for receiver line 3N.

### 4. Geophysical techniques

#### 4.1. IP method

The time domain IP technique energizes the ground with an alternating square wave pulse 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.

#### 4.2. 3DIP method

Three dimensional IP surveys were designed to take advantage of the interpretative functionality offered by 3D inversion techniques. Unlike conventional 2DIP, the electrode arrays are no longer restricted to an in-line geometry. In the standard 3DIP configuration, a receiver array is established along a survey line while current electrodes are located on two adjacent lines. Current electrodes are advanced along the adjacent lines at fixed increments (25, 50, 100 or 200 m). A typical receiver array consists of 12 to 16 dipoles separated by the same interval as the current lines or by some multiple of that interval. These spacings are sometimes modified to compensate for local conditions, such as inaccessible sites and streams, or the overall conductivity of ground. Receiver arrays are typically established on every second line. By injecting multiple current locations to a single receiver electrode array, data acquisition rates are significantly improved over conventional surveys.

Respectfully submitted,

As per S.J.V. Consultants Ltd.

Thomas Campagne, M.Sc. (Geophysics)

## **Appendix A:** Statement of qualifications

I, Thomas Campagne, of the city of Vancouver, British Columbia, hereby certify that:

- 1. I graduated from the Ecole et Observatoire des Sciences de la Terre de Strasbourg I, France in 2008 with a Masters of Science in Geophysics.
- 2. I have been working in the mineral exploration industry since 2008.
- 3. I have no interest in Ram Exploration Ltd. or in any property within the scope of this report, nor do I expect to receive any.

Signed by: \_\_\_\_\_\_ on \_\_\_\_\_.

Thomas Campagne, M.Sc. (Geophysics)

## **Appendix B:** Instrument specifications

Input impedance:	10 MΩ			
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: 0.1 mV			
	Proprietary intelligent stacking process rejects			
	strong non-linear SP drifts			
Primary voltage:	Range: $1\mu V - 10V$ (24 bit)			
	Resolution: 1µV			
	Accuracy: typically <1.0%			
Chargeability:	Resolution: $1\mu V/V$			
	Accuracy: typically <1.0%			
Four-dipole digitizer:				
Dimensions (HWD):	18 x 16 x 9 cm			
Weight:	1.1 kg			
Battery:	12V external			
Operating range:	-20 to 40°C			

## SJ-24 Full waveform digital IP receiver

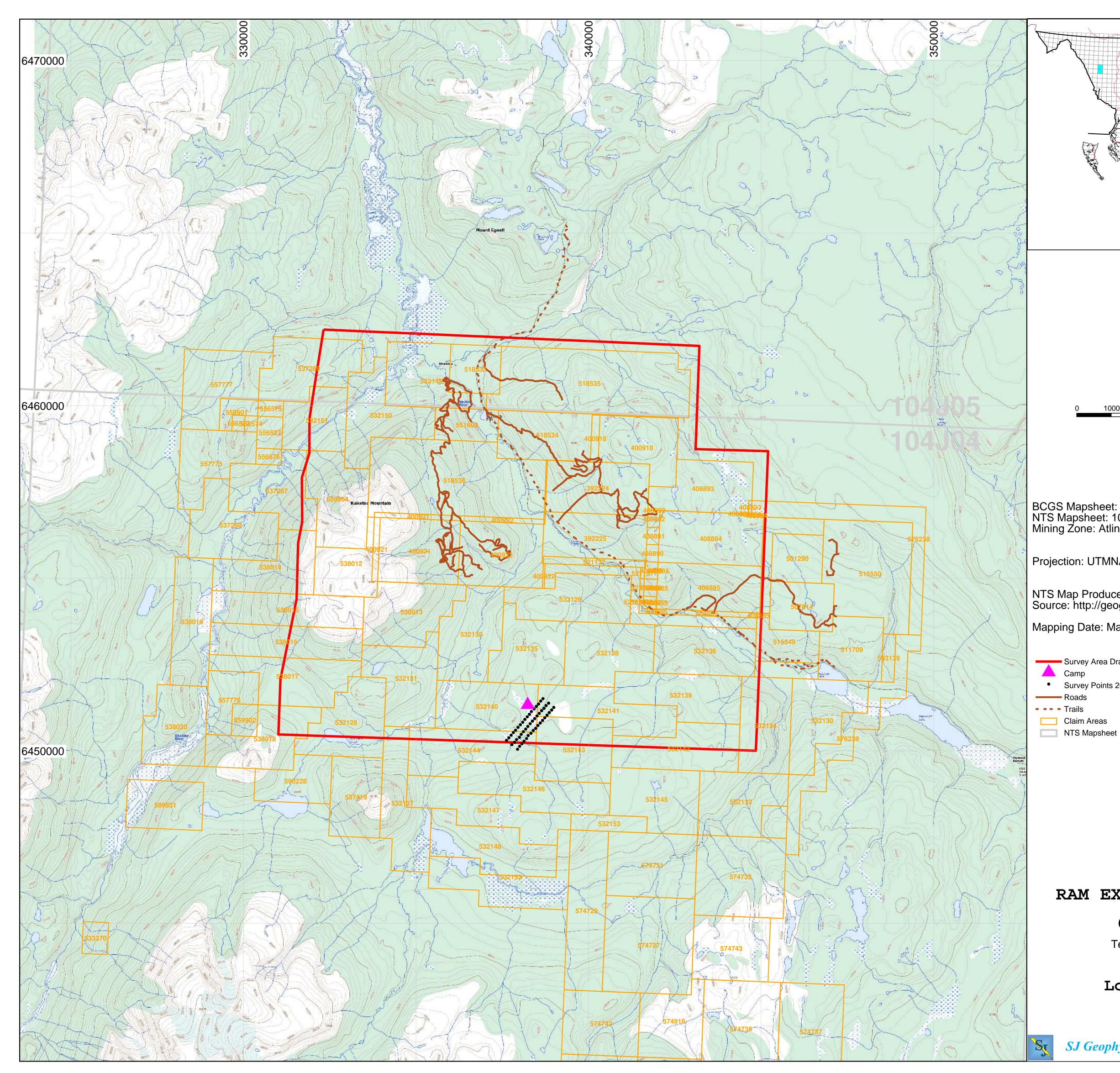
Input voltage:	120V / 60 Hz or 240V / 50Hz (optional)
Output power:	3.6 kW maximum
Output voltage:	150 to 2200 V
Output current:	5 mA to 10 A
Time domain:	1, 2, 4, 8 second on/off cycle
Operating temp. range:	-40° to +65° C
Display:	Digital LCD read to 0.001 A
Dimensions (h w d):	34 x 21 x 39 cm
Weight: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

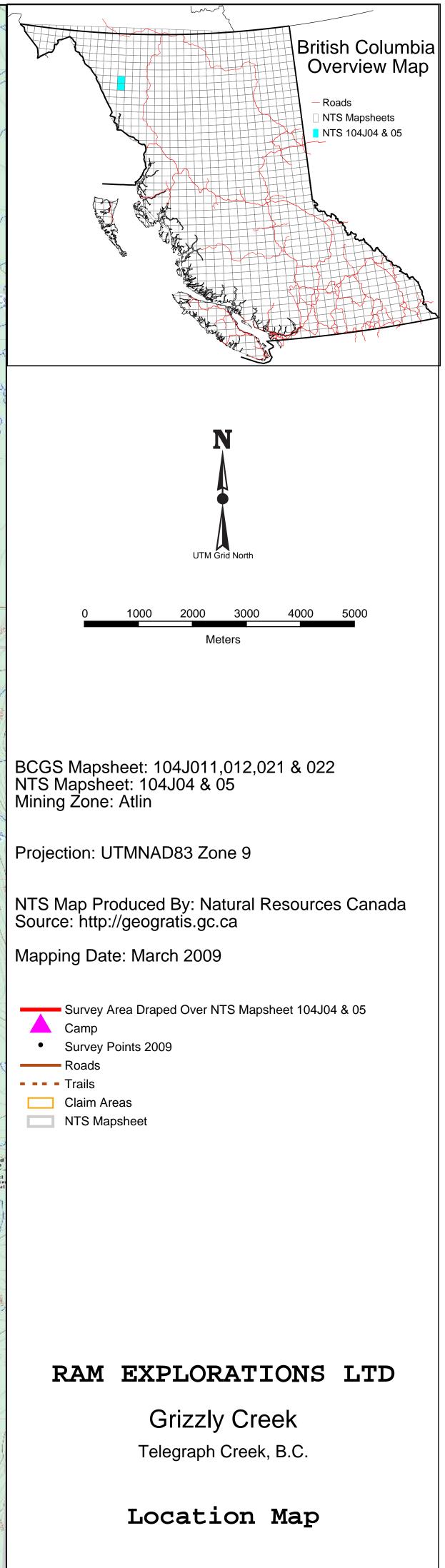
# **Appendix C: Grid summary information**

Line	Туре	Start station	End station	Survey length	Rx survey dates	# dipoles
2	Tx	0	1600	1600	March 15 <sup>th</sup>	0
3	Rx	0	1600	1600		16
4	Tx	0	1600	1600	March 16 <sup>th</sup>	0
					<b>T</b> 11.	(0.0)

*Total linear meters* = 4800 m

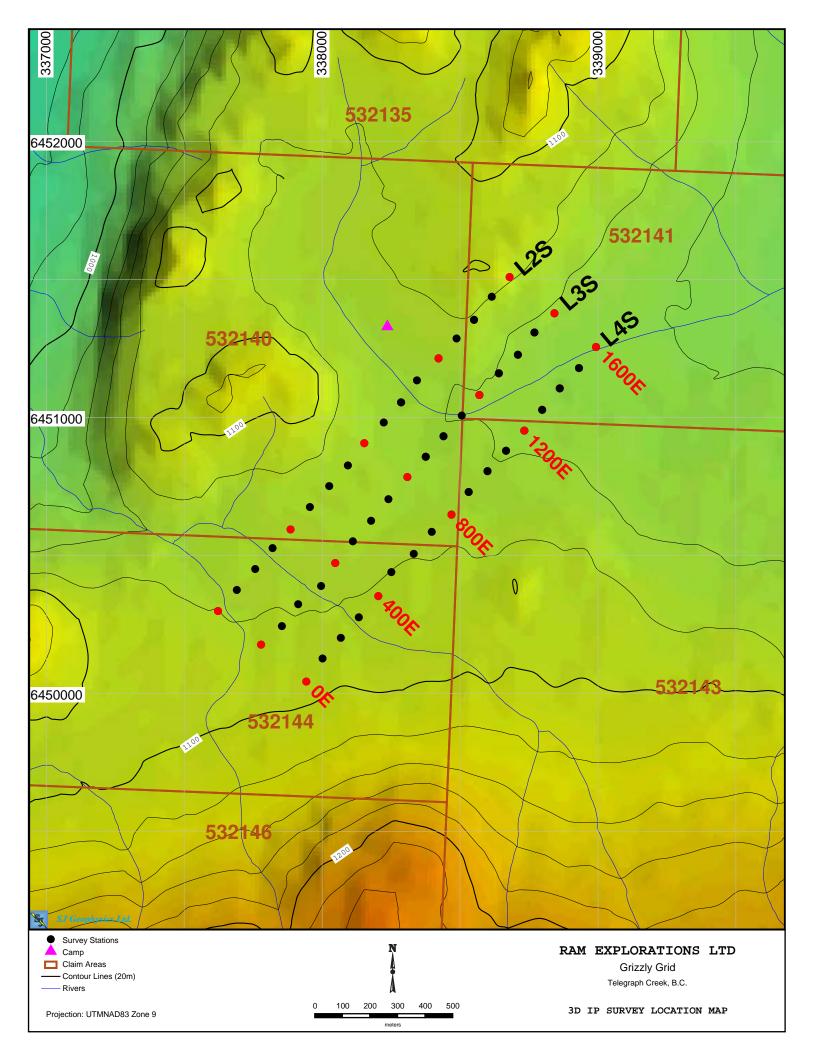
Location Map – 1:50,000 scale (prepared by SJ Geophysics)



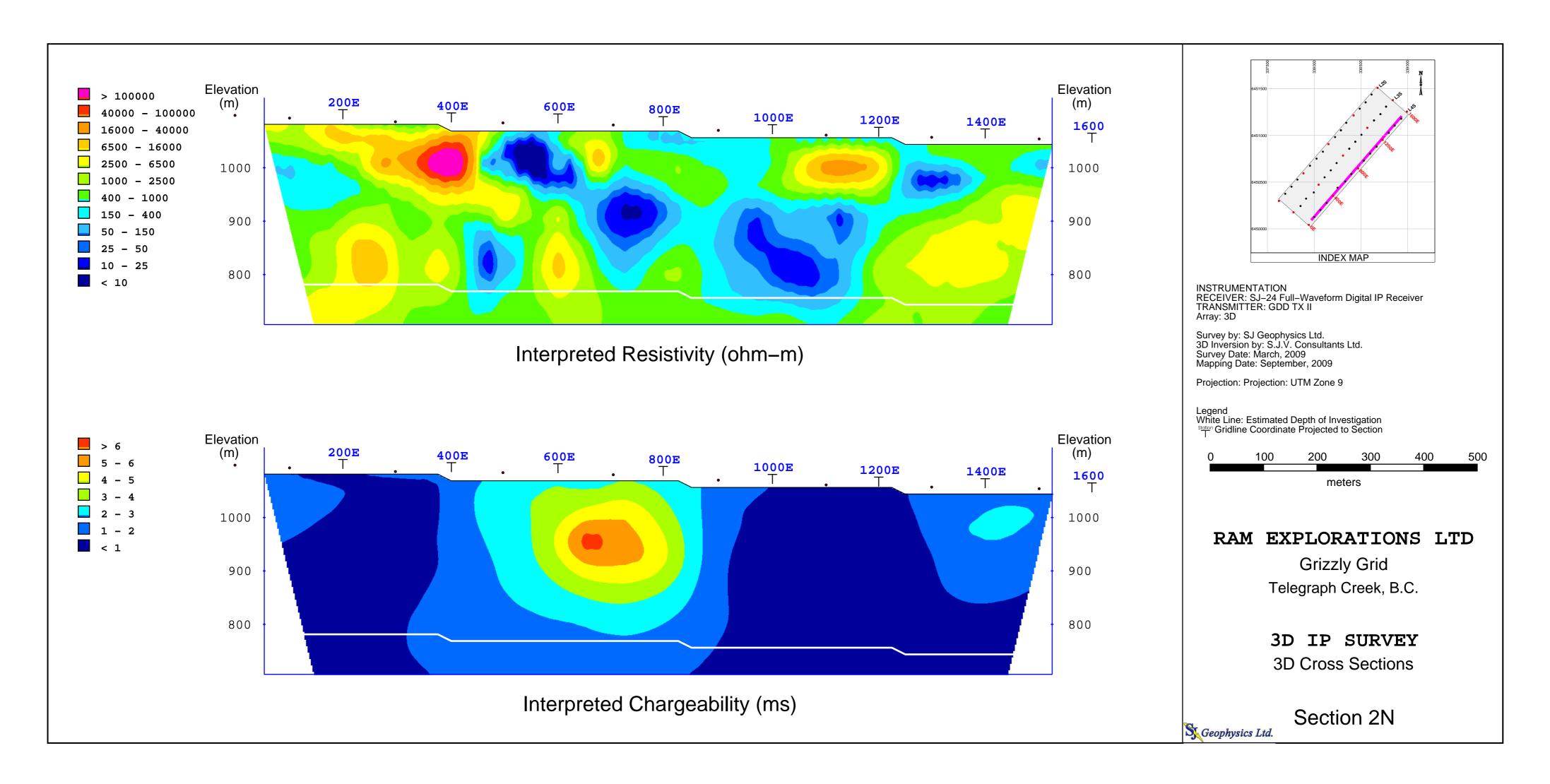


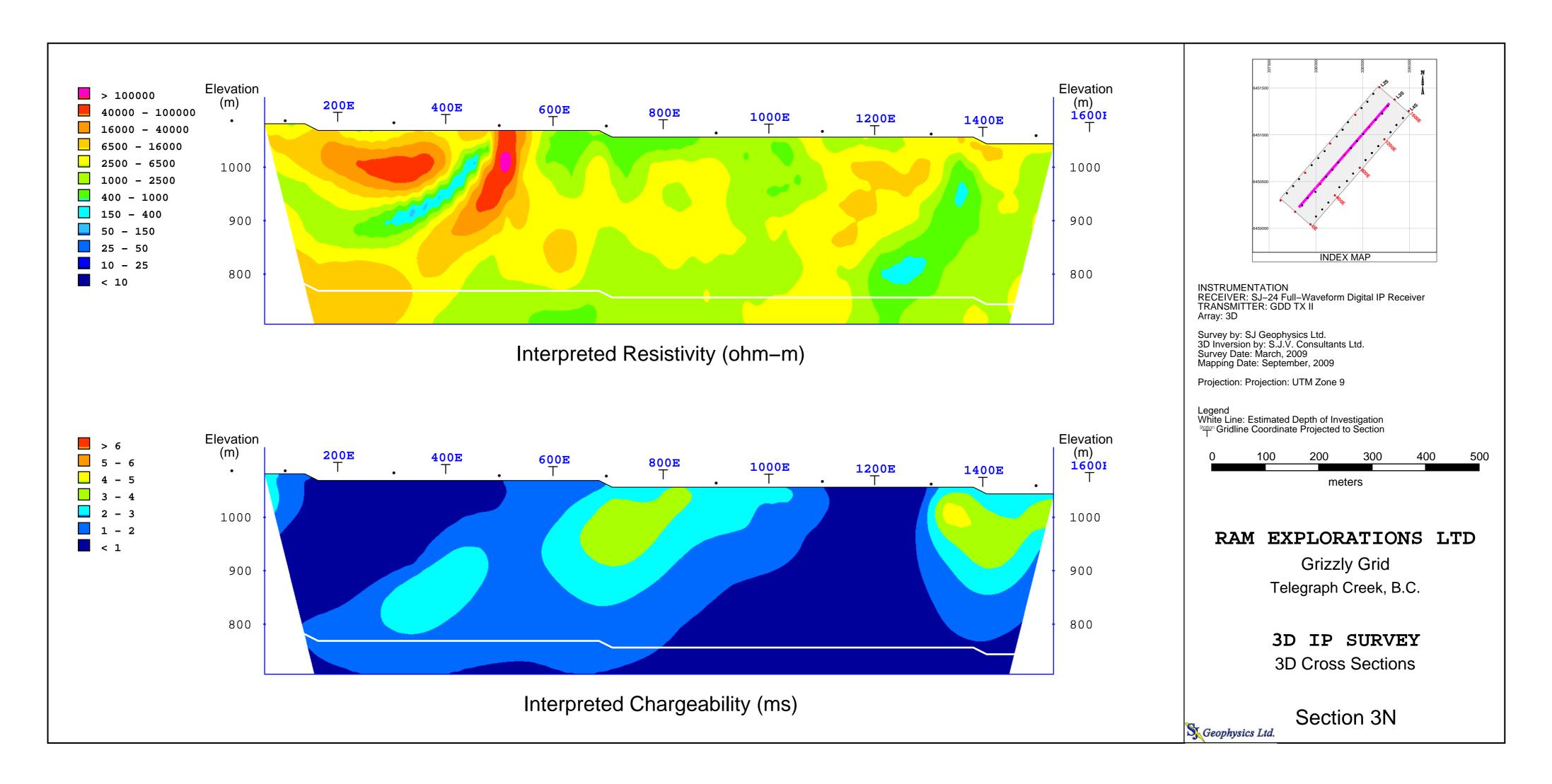
SJ Geophysics Ltd.

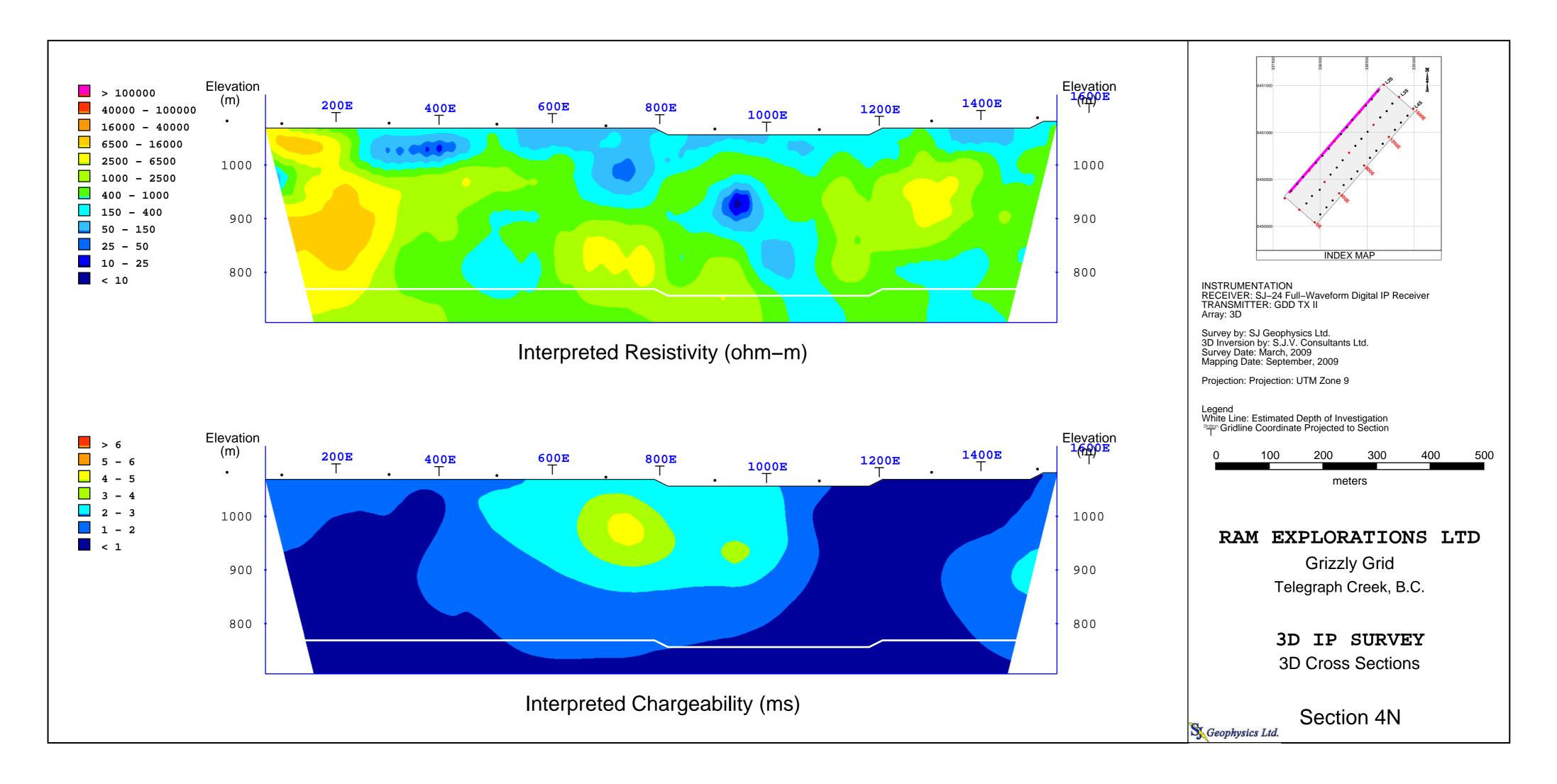
Location Grid Map showing underlying mineral tenures (prepared by SJ Geophsycis)



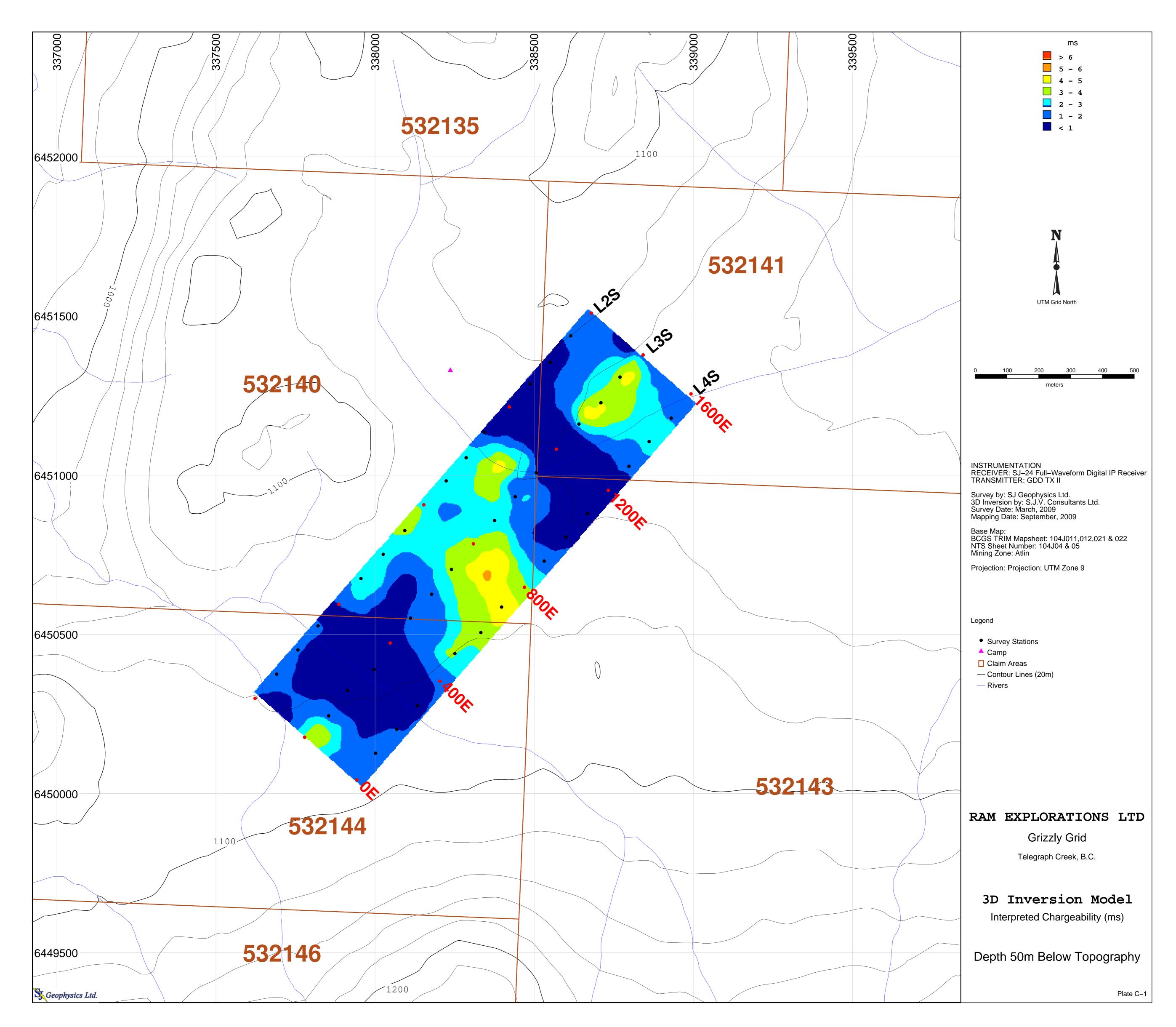
3D Sections – Grizzly Grid – Section 2N 3D Sections – Grizzly Grid – Section 3N 3D Sections – Grizzly Grid – Section 4N

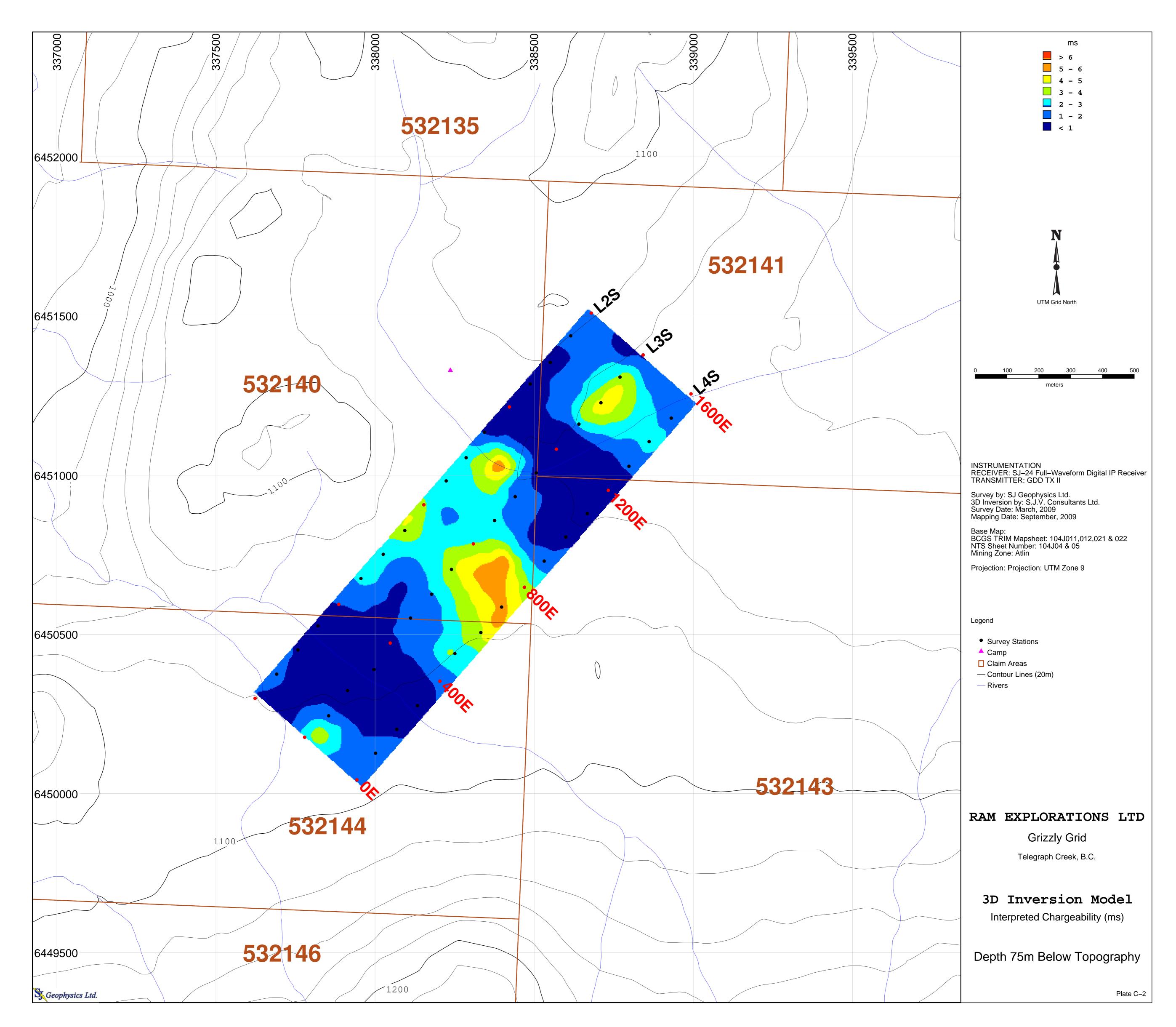


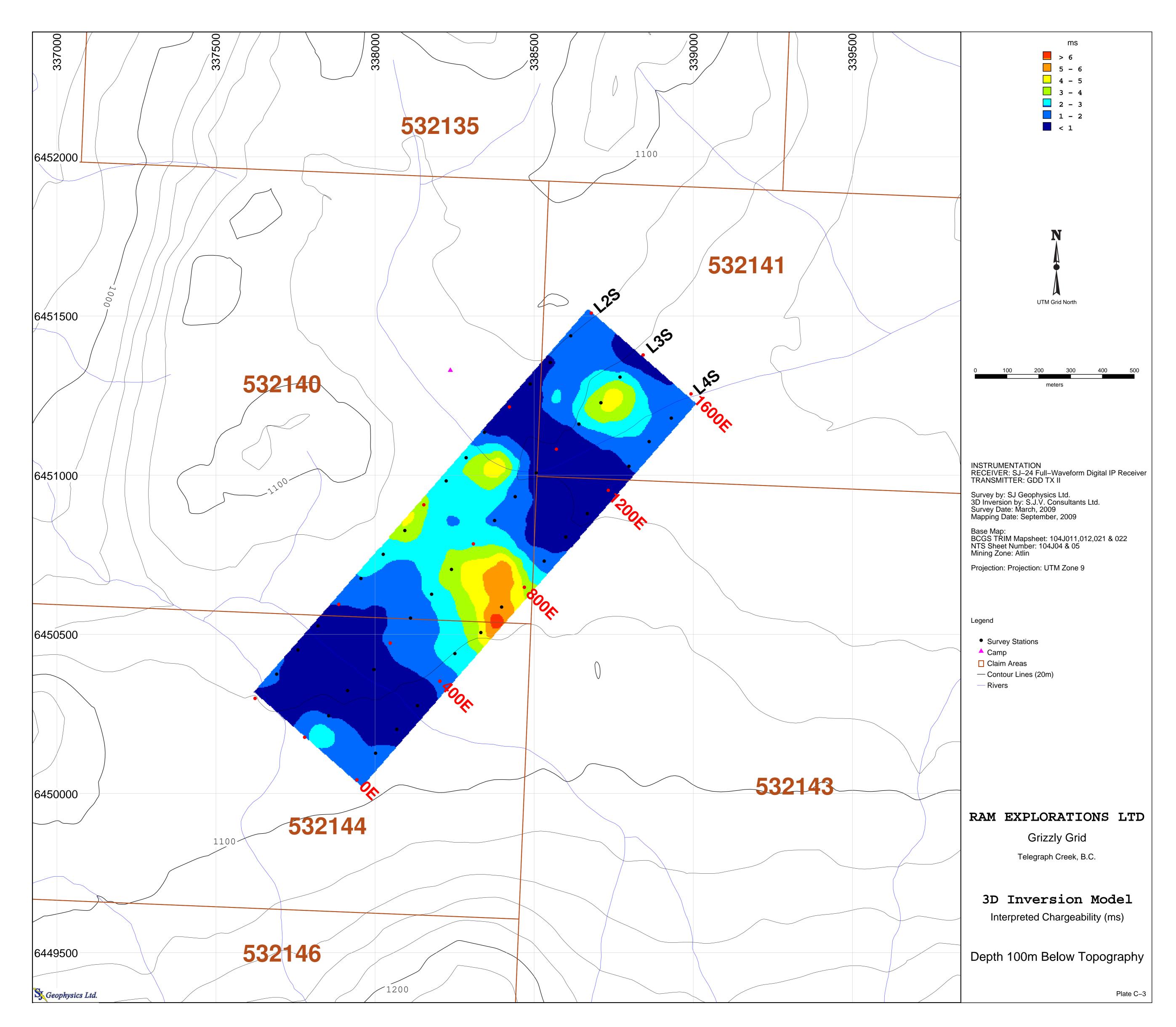


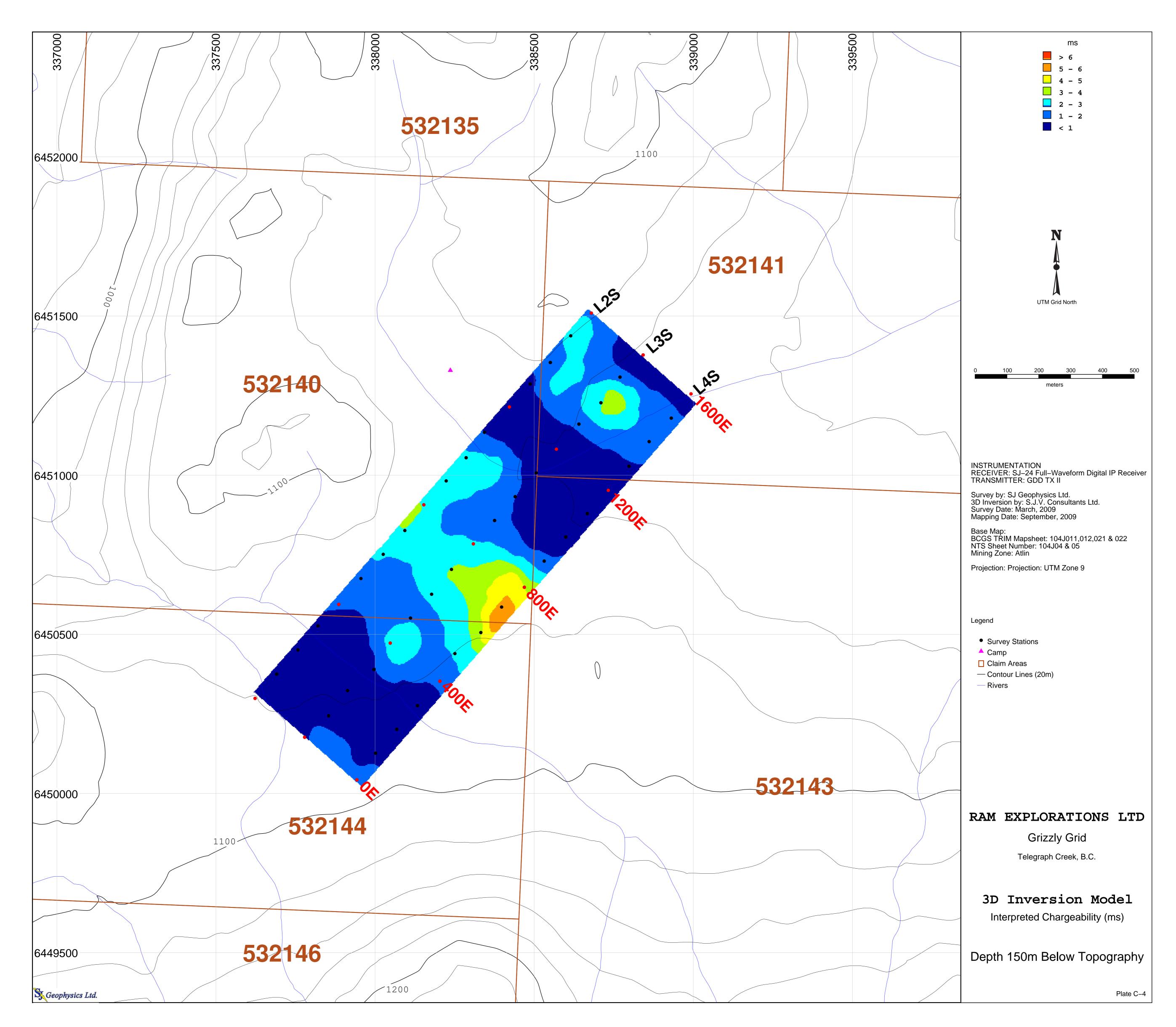


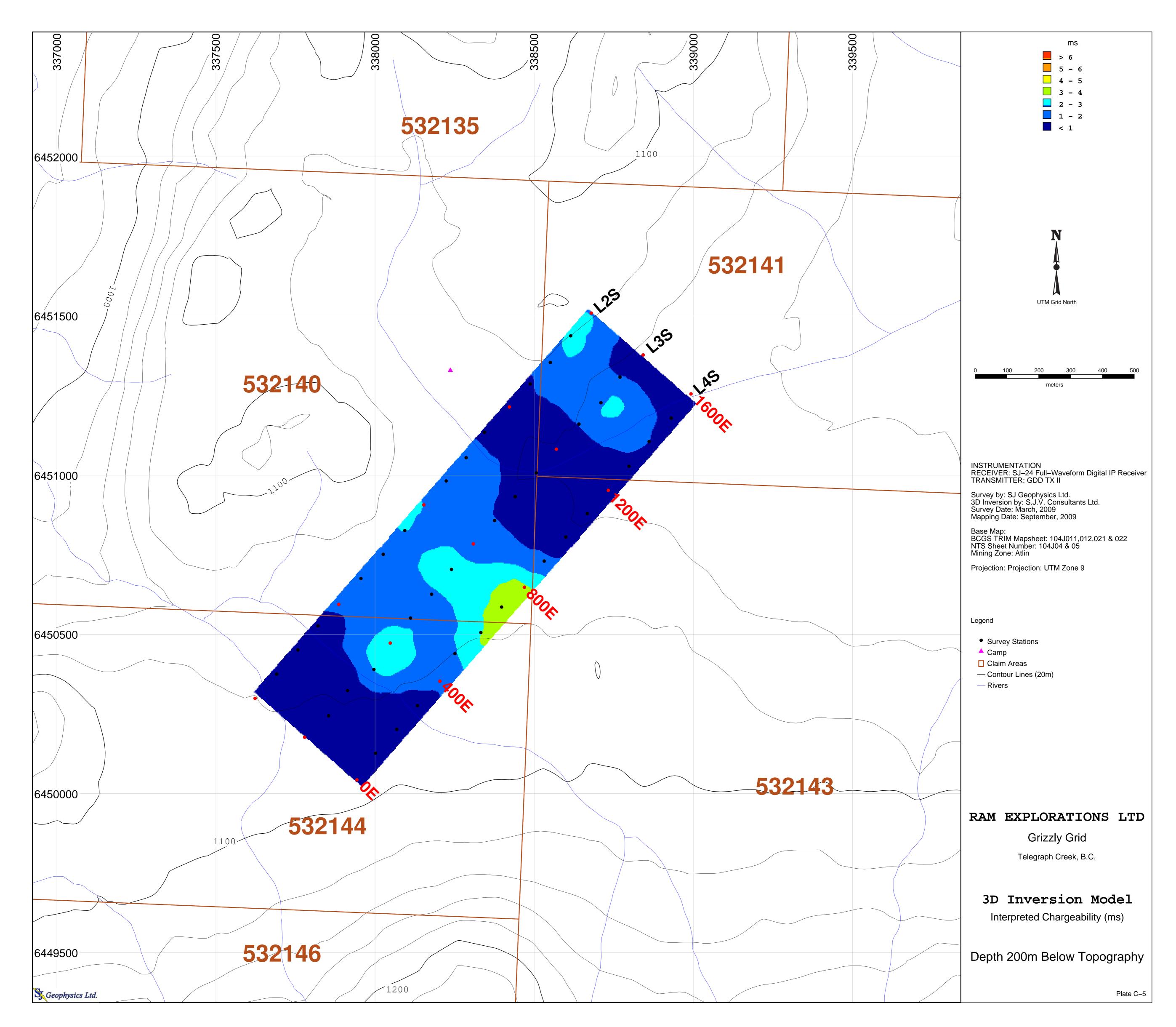
3D Inversion Model, Interpreted Chargeability (ms): 50 m below topography 3D Inversion Model, Interpreted Chargeability (ms): 75 m below topography 3D Inversion Model, Interpreted Chargeability (ms): 100 m below topography 3D Inversion Model, Interpreted Chargeability (ms): 150 m below topography 3D Inversion Model, Interpreted Chargeability (ms): 200 m below topography 3D Inversion Model, Interpreted Chargeability (ms): 250 m below topography 3D Inversion Model, Interpreted Chargeability (ms): 250 m below topography 3D Inversion Model, Interpreted Chargeability (ms): 300 m below topography

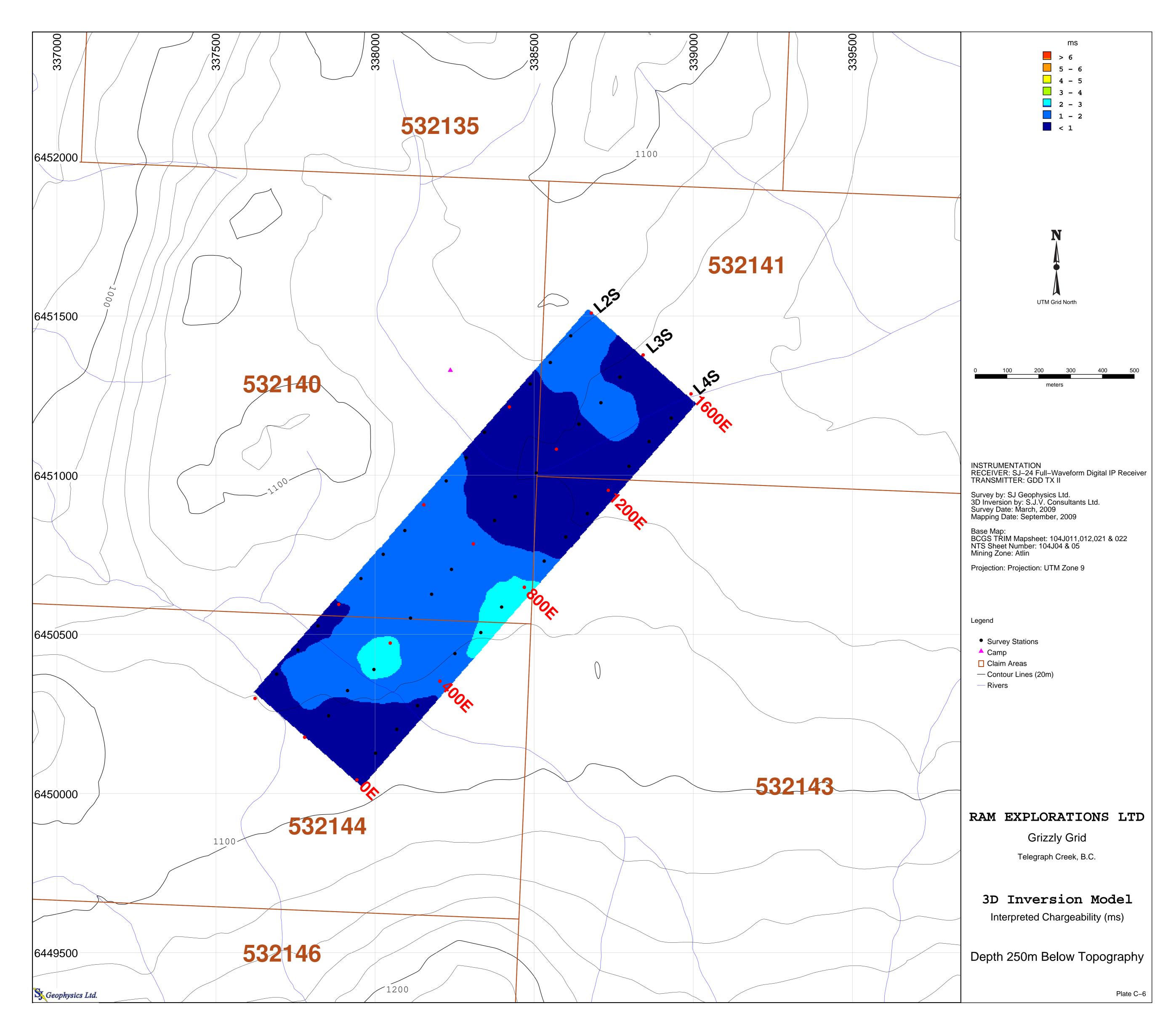


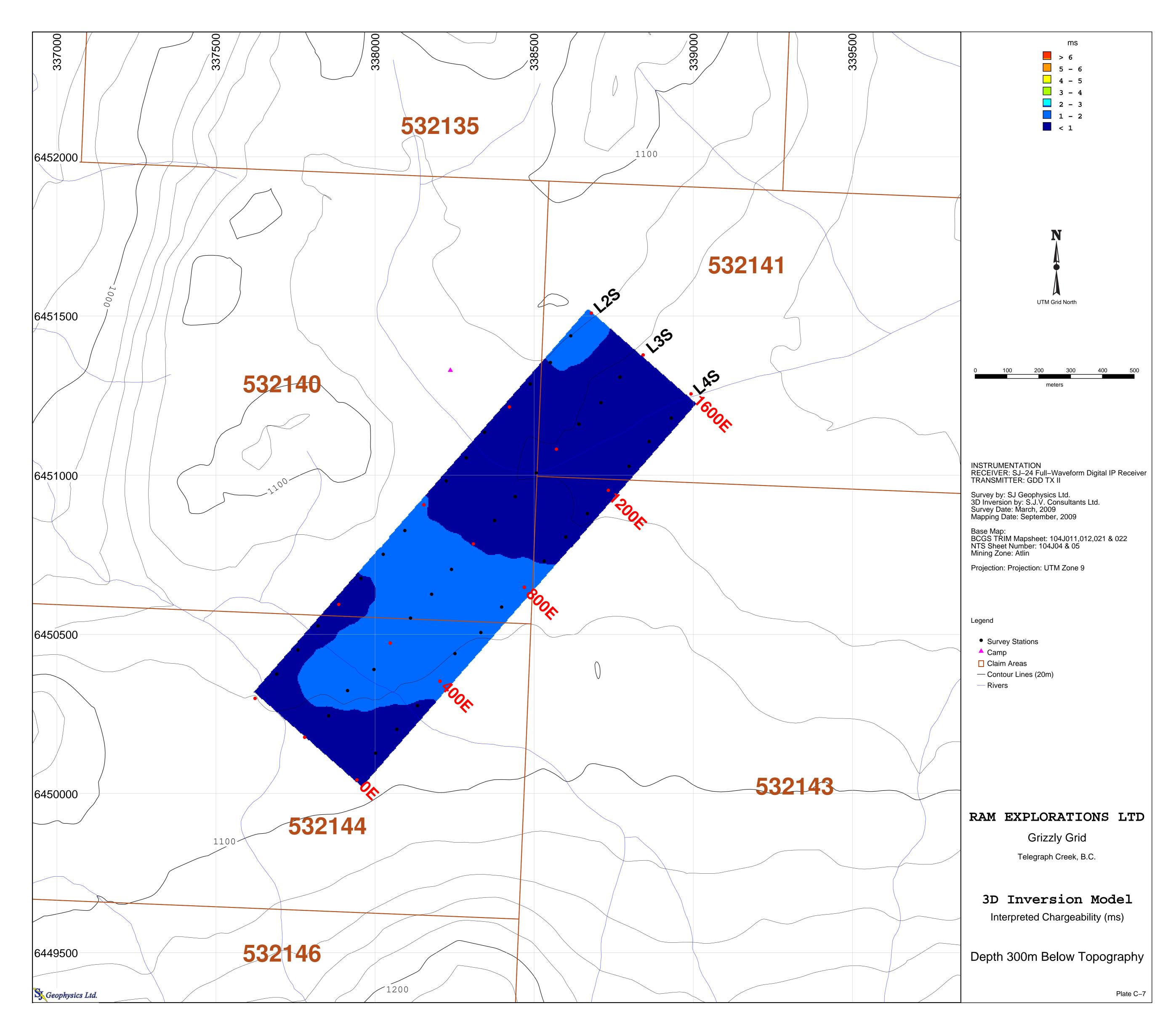












3D Inversion Model, Interpreted Resistivity (ohm-m): 50 m below topography 3D Inversion Model, Interpreted Resistivity (ohm-m): 75 m below topography 3D Inversion Model, Interpreted Resistivity (ohm-m): 100 m below topography 3D Inversion Model, Interpreted Resistivity (ohm-m): 150 m below topography 3D Inversion Model, Interpreted Resistivity (ohm-m): 200 m below topography 3D Inversion Model, Interpreted Resistivity (ohm-m): 200 m below topography 3D Inversion Model, Interpreted Resistivity (ohm-m): 250 m below topography 3D Inversion Model, Interpreted Resistivity (ohm-m): 300 m below topography

