

BCGold Corporation

2009 Geophysical Report on the WS Property

Claims

WS 1-208 ICE 1-41 SLEEP 13-18 BC 1-26 and 35-144

Grant Numbers YC53521–YC53602 (WS) YC53748-YC53821 (WS) YC53993-YC54032 (WS) YC91789-YC91800 (WS) YC46784-YC46787 (ICE) YC54407-YC54443 (ICE) YC60134-YC60139 (Sleep) YC60184-YC60209 (BC) YC60218-YC60327 (BC)

Owned by Shawn Ryan (100%)

Located 31km NNW of Carmacks, Yukon Whitehorse Mining District NTS 115I/07

> 62⁰ 18' 48"N 136⁰ 38' 30"W

For: BCGold Corporation Suite 1400, 625 Howe Street Vancouver BC V6c 2T6

Prepared by Gary Sidhu

Work performed August 15th – September 11th, 2009



Abstract

The WS property consists of 208 contiguous claims: WS 1–208. This assessment report also includes the grouped claims, ICE 1-41; BC 1-26; BC 35-144; and SLEEP 13-18. Line cutting and ground geophysical work in 2009 was conducted on WS claim blocks 1-82. The property is located approximately adjacent to the Carmacks Copper deposit in the Whitehorse Mining District of central Yukon. The claims are owned 100% by Shawn Ryan of Dawson City, YT and are under option to BCGold Corporation. Exploration in this area stretches back to the turn of the century when copper mineralization was first discovered at Williams Creek some 40 km south of the Minto copper gold deposit (Doherty 2008). The property is underlain by Early Jurassic Aishihik Suite foliated and nonfoliated granitoid rocks of the Granite Mountain Batholith (Hood et al, 2009). Field work performed between the dates of August 15th – September 11th consisted of a pole-dipole induced polarization survey. The geophysical survey outlined induced polarization high chargeability zones coincident with Mobile Metal Ion (MMITM) soil geochemistry anomalies. Geological mapping and prospecting, extended MMITM and geophysical surveys are recommended in order to define the open ended anomalies.

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fax: 604-642-2411

tel: 604-646-1589

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fax: 604-642-2411

tel: 604-646-1589

1.0 Introduction and Terms of Reference

The WS property consists of 208 contiguous claims: WS 1–208. Work was conducted on WS 173-179, 188-194 and ICE 5-10, 17-22 claims. The ICE 1-4, 11-16, 23-41; BC 1-26; BC 35-144; and SLEEP 13-18 claims have been grouped with the WS claims. All claims are owned 100% by Shawn Ryan, of Dawson City, YT subject to an option agreement with BCGold Corporation ("BCGold") whereby BCGold can earn a 100% in the properties as part of a larger set of claims located in the Carmacks copper-gold belt.

This report describes work completed between the dates of August 15th – September 11th 2009 on the WS and ICE claims to comply with reporting requirements under the Yukon Quartz Mining Act.

2.0 Reliance on Other Experts

This report is based upon the results of geophysical fieldwork supervised by Andre Lebel of Aurora Geosciences Ltd. ("Aurora") and a geophysical summary report by Frank Dziuba of Aurora for BCGold as well as publicly-available assessment reports and certain private reports prepared for and provided by BCGold. There is no reason to believe that any of this information is incorrect.

The author has relied on information provided by the Yukon Mining Recorder's website to describe the mineral tenure status of the property. This information is believed to be correct.

3.0 Property Description and Location

The WS property is located 31 kilometres NW of Carmacks and 3 kilometres ESE of the Carmacks Copper Deposit. The WS claims adjoin the W and WCC claims, which are owned by Carmacks Copper Corporation on the southern end of their land holdings. (Fig. 1, 2). The property falls within the Whitehorse Mining District on NTS map sheets 115I/07 and is centered at an Easting of 416 500 and a Northing of 6 912 000. The WS property also includes the grouped contiguous claims, ICE 1-41; BC 1-26; BC 35-144; and SLEEP13-18 (Fig. 3).

The WS claims were staked under the Yukon Quartz Mining Act in the Whitehorse Mining District. The WS Claims are all owned 100% by BCGold (Table 1).

In accordance with the Yukon Quartz Mining Act, yearly extensions to the expiry dates of quartz claims are dependent upon conducting \$100 of work per claim or paying the equivalent cash in lieu of work. Work must be filed in the year the work was completed. Excess work can be used to extend expiry dates up to maximum of four years. Assessment costs can be applied to adjoining claims through filing grouping certificates. Filing a statement of work and costs and submission of an assessment report to the Whitehorse Mining Recorder verifying completion of the work, are also required no later than six months after the anniversary date of the claim.

The claims are located within the Traditional Territory of the Little Salmon Carmacks First Nation and Selkirk First Nation, which has a land claim settlement Agreement under the Yukon Umbrella Final Agreement (Doherty, 2008)



Figure 1: Carmacks area location map

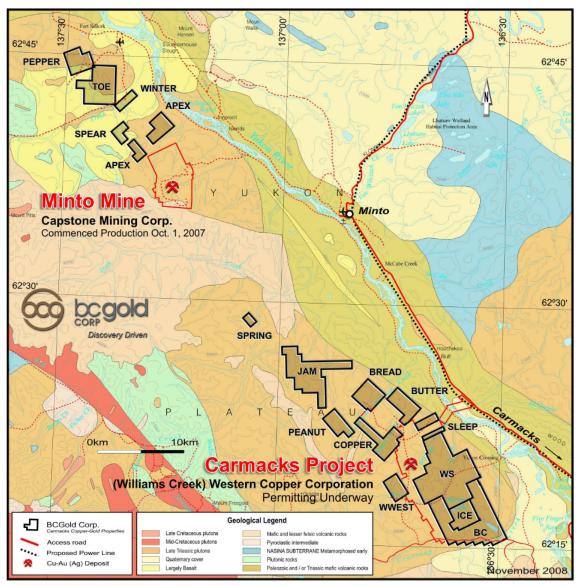


Figure 2: Carmacks regional geology and claim location map

Claim Name	Grant Number	Claim No.	Claim Owner	Claim Expiry Date	Status	NTS Map Nmber
ICE	YC46784-YC46787	1-4	BCGold Corp.	12/14/2014	Active	115107
ICE	YC54407-YC54443	5-41	BCGold Corp.	28/11/2012	Active	115107
WS	YC53521-YC53602	1-82	BCGold Corp.	11/8/2012	Active	115107
WS	YC53748-YC53821	83-156	BCGold Corp.	23/08/2012	Active	115107
WS	YC53993-YC54032	157-196	BCGold Corp.	4/10/2012	Active	115107
WS	YC91789-YC91800	197-208	BCGold Corp.	8/18/2010	Active	115107
SLEEP	YC60134-YC60139	13-18	BCGold Corp.	4/2/2014	Active	115107
BC	YC60184-YC60209	1-26	BCGold Corp.	4/2/2014	Active	115107
BC	YC60218-YC60327	27-144	BCGold Corp.	4/2/2014	Active	115107

Table 1: WS and Grouped Claim Data

Source: Yukon Mining Recorder Website.

4.0. Accessibility, Climate, Local Resources, Infrastructure and Physiography

Access to the property is by helicopter from Carmacks. Low precipitation and a wide temperature range characterize the climate. Winters are cold, and temperatures of -30° C to -40° C are common. Summers are moderately cool to hot, with daily highs of 15° C to 30° C. The Town of Carmacks is the closest centre for obtaining groceries, fuel, accommodation and some limited rental and contracted exploration services. Trans North Helicopters maintains a summer helicopter base at Carmacks.

5.0 History

The area covered by the WS, ICE, BC and SLEEP claims has seen some prior reconnaissance exploration work as part of the property work around the Williams Creek deposit primarily by Hudson Bay Exploration. There are two Minfile occurrences within the WS claim bounds; Bishi (115I 006) and Taslar (115I 007). Both were staked in the early 1970's on aeromagnetic anomalies.

In 2007 BCGold completed an airborne magnetic and radiometric survey was flown over the entire belt claims.

A total of 1618 MMI[™] soil samples and 5 rock samples were collected by BCGold during the 2007 field season on the WS Claims

In 2007 BCGold Corp. collected 614 MMI[™] soil samples and 16 rock samples on the ICE claims. Four diamond drill holes totalling 859.23m. Drilling on ICE 07-03 and ICE 07-04 intersected discreet zones of copper mineralization that returned assays of 1.2 % Cu over 1.69 m in Ice 07-02 and 0.20 m of 1.41% Cu in Ice 07-04 (Doherty, 2008).

In 2008 BCGold Corp. conducted two geophysical surveys on the WS property. A 14 km winter IP survey was conducted on the western side of the property along with a 22.1 km IP survey in the summer. A total of 465 MMI[™] samples were collected by Ryanwood crews and a 1,300 metre diamond drill program was undertaken. The MMI[™] resulted in multiple new copper and gold anomalies coincident with IP chargeability zones. Six diamond drill holes were all located in the north western part of the property and copper sulphide mineralization was intersected in 2 holes.

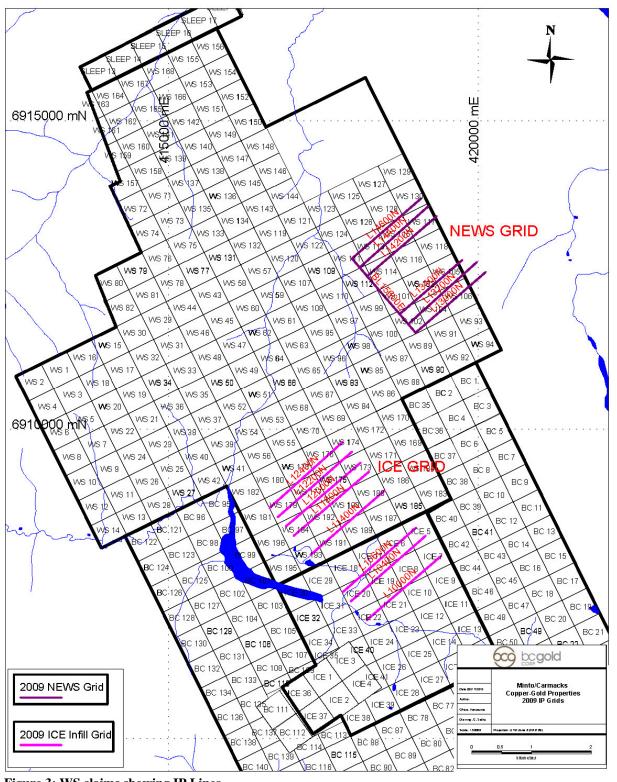


Figure 3: WS claims showing IP Lines.

6.0 Geology

6.1 Regional Geology

The WS claims are located approximately 3-7 kilometres south of the Williams Creek (Carmacks Copper Corp) copper-gold deposits. This area of the Yukon is bounded by the Stikinia Terrane rocks to the east, Yukon Tanana Terrane rocks to the north and the Coast Plutonic Complex rocks to the west. The Minto and Williams Creek copper-gold deposits are hosted within foliated biotite rich granodiorite and granitic rocks of the Early Jurassic Aishihik Suite.

6.2 Property Geology

The WS claims are located south of the Williams Creek deposit and north of the Freegold Road. Rocks underlying the property are primarily foliated to non-foliated hornblende-biotite granodiorite with aplite dykes (Fig. 4). Traces of malachite were noted in a few locations. Magnetite and 1-2% epidote were noted in a number of locations. Outcrop is scarce (< 5%) and normally confined to rounded ridge tops and stream cuts.

7.0 Exploration Programs

7.1 Line Cutting

A field crew from Coureur des Bois Ltd. of Whitehorse, YT cut 26.3 line-kilometer IP grid on the WS and ICE claim blocks from July 18 to August 24, 2009 (Fig. 5).

7.2 Pole-Dipole Induced Polarization Survey

A field crew from Aurora conducted a pole-dipole induced polarization survey at 100m dipole spacing from August 15th to September 11th. Details of the survey are included in the appendices along with the digital data from the survey on a CD-ROM included with this report.

8.0 Results and Interpretation

The 2009 geophysics surveys were concentrated in two different areas on the WS and ICE properties and are identified as the "ICE Grid" and "NEWS Grid." The Ice grid was conducted in order to infill a survey conducted in 2007, and to follow up on MMI anomalies. The basis for the NEWS grid is a strong MMI anomaly.

8.1 ICE GRID

The ICE grid consists of eight survey lines (Fig. 5) oriented in a northeast-southwest direction. Higher values in the northern part (11400N to 12400N) of the grid require the survey to be displayed on two different maps with different scales. The survey indicates a resistive high (>4000 ohm-m) at depth striking north-south from station 12500E on L11400N to station 13500N on L12400N while conductive material is seen near surface striking north-south also (Dziuba, 2009). On L12400N to L12000N centred at station 1300E at depths of 80m to 150m, an anomalous chargeable zone (ICE 1), values in the range of 10-14.7 mV/V is identified. Chargeability values of 10.0 mV/V or higher are considered anomalous (Dziuba, 2009). On line L11800N (ICE 2) centred at 12600E at approximately 130m depth another anomaly is identified with values between 10-13 mV/V. L11400N did not identify any anomalous chargeable zones.

The values on the southern part of the grid ranged only as high as ~ 5 mV/V and these values occur near surface as sub-horizontal bodies in contact with resistivity lows.

8.2 NEWS GRID

This grid consists of six survey lines oriented in a northeast-southwest direction. This survey was conducted in response to encouraging MMI geochemistry results. The lines are separated into two groups with 800 metres separating them. The northern group lines 14600N, 14400N and 14200N show a sharp contact striking north to south in the resistivity model. Similarly the chargeability model shows a contact separating lower chargeability values from higher chargeability values.

The southern group of lines consist of 13400N, 13200N and 13000N. Anomalous values greater than 8 mV/V and up to 13 mV/V form broad zones, in the order of 300m in width, centred below station 16600E on lines 13400N and 13200N(Dziuba, 2009).

9.0 Recommendations

Based on the presence of favourable copper MMI soil anomalies coincident with chargeability and magnetic geophysical signatures, further work is recommended on the WS property.

Figure 6 shows open ended IP chargeability and MMI anomalies to the south of L10 000N. To the north of L12 400N we have an open ended chargeability anomaly and an open ended MMI anomaly to the north east of L11 100N as well.

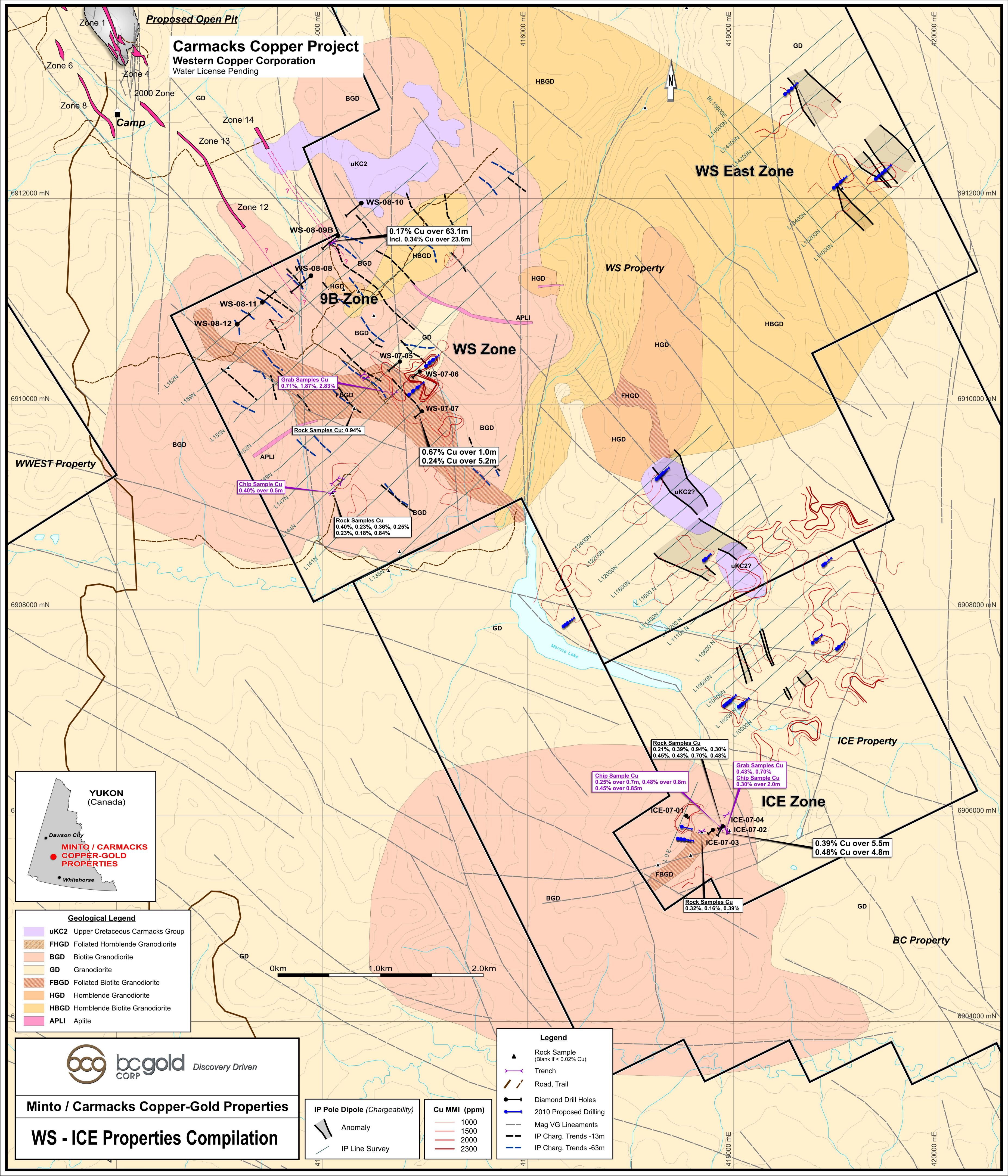
A phase 1 program should consist of additional MMI sampling is recommended to outline the extent of the present anomalies that are open ended as shown on figure 6. A pole-dipole induced polarization survey is recommended to delineate the extent of the open ended chargeability anomalies mentioned above, also

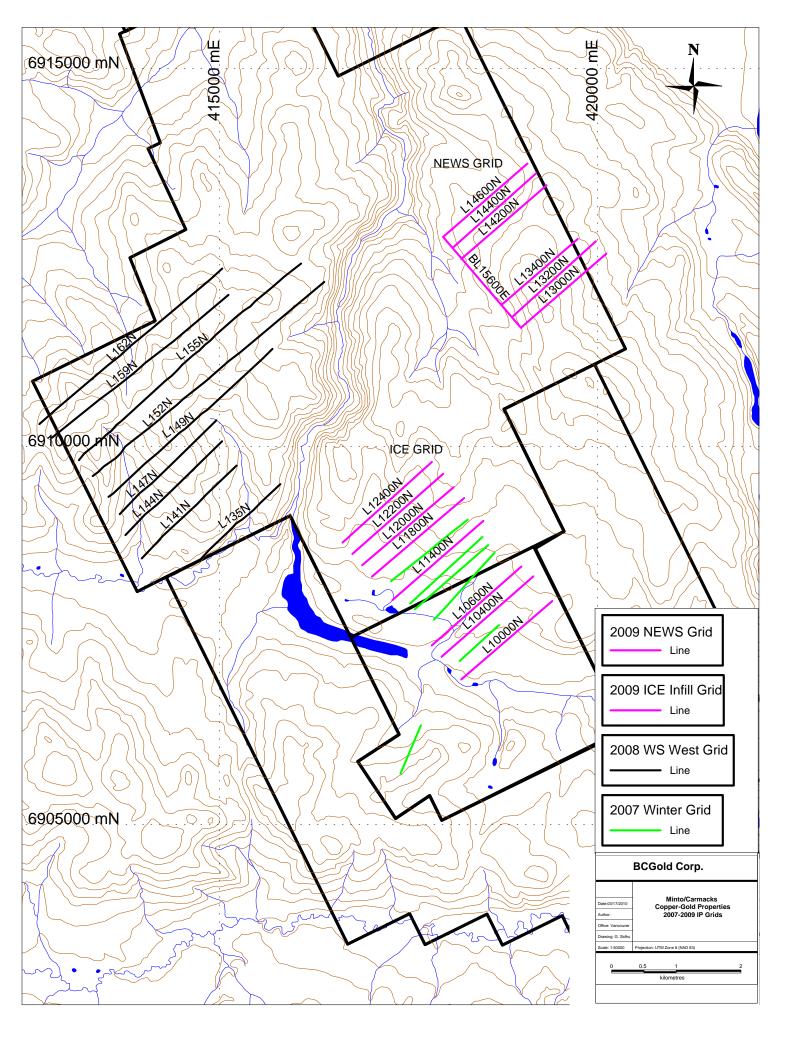
A phase 2 program would be comprised of a drill program with targets based on integrated data from the phase 1 program.

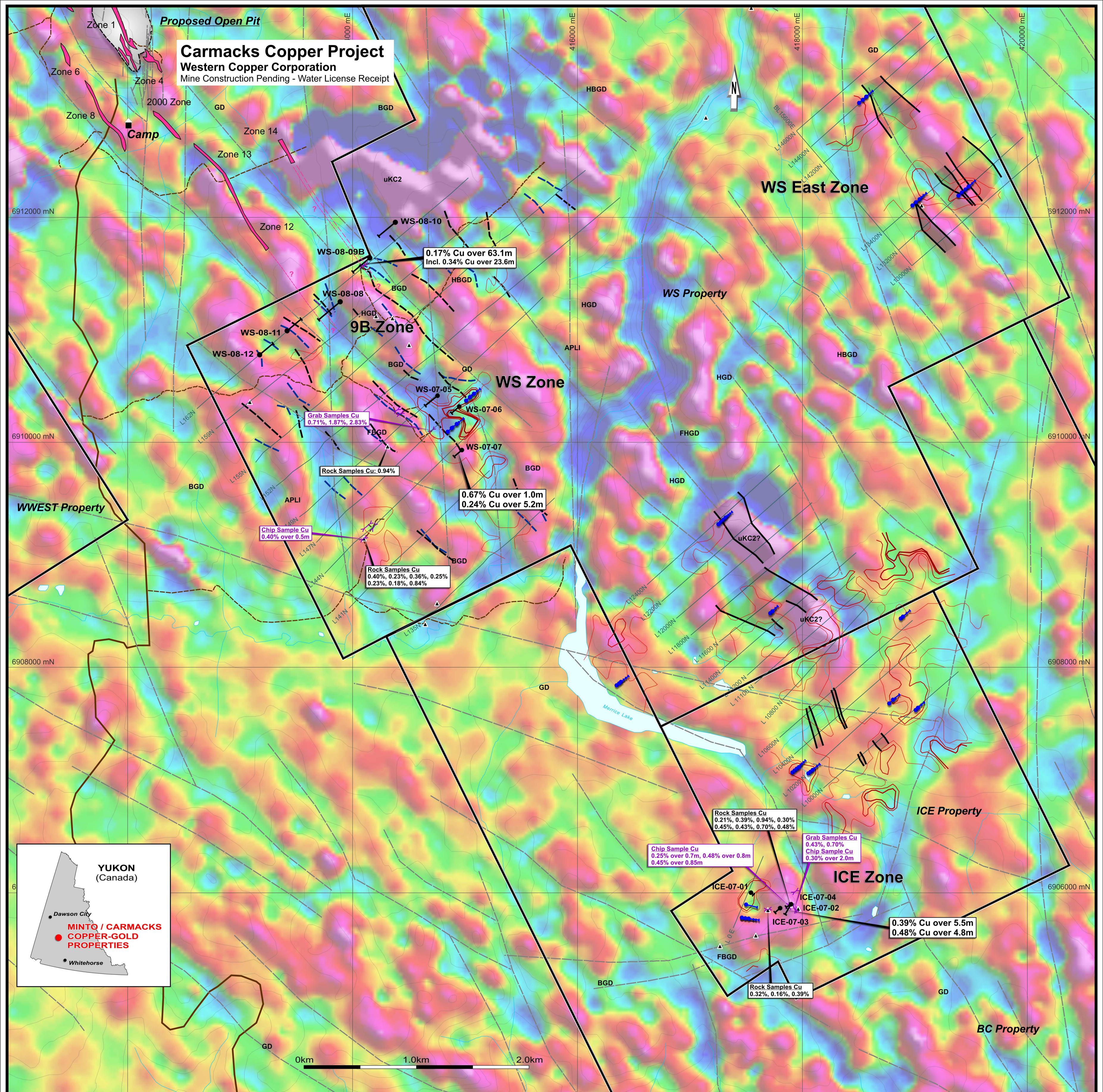
10.0 Statement of Costs

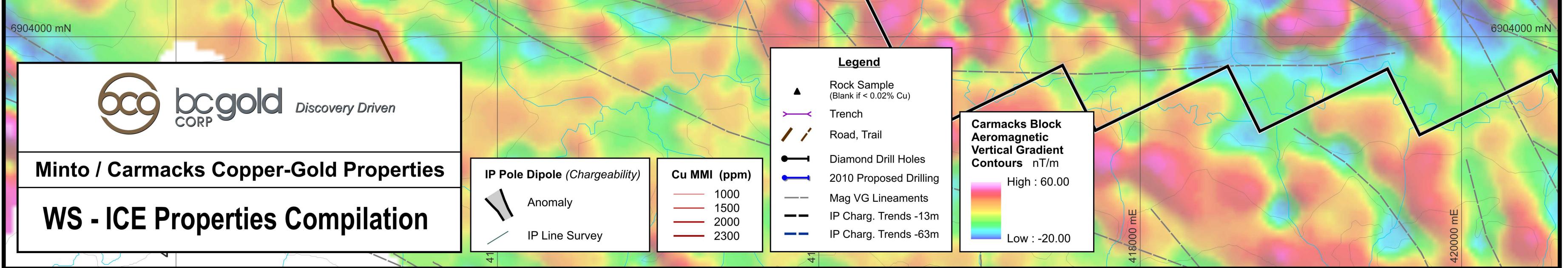
Table 2: Detailed Statement of Work

Item	Cost
Aurora Geosciences Ltd.	\$38,108.17
Total invoices from Aurora Geosciences Ltd. were \$60,132.65 for 41.5 km of IP surveys. The	
average cost per km was \$1,448.98.	
Aurora Surveyed 26.3 km of line on the WS claims, for an estimated cost of \$38,108.17	
Trans North Helicopters May 31-June 9, 2008	\$9,158.12
Total Spent on WS Claim Group	\$47,266.29









11.0 Certificate of Qualifications

11.1 Fieldwork Supervisor

I, Geoff Newton, hereby certify that:

- 1. I am a Project Geologist with BCGold Corp, #1400, 625 Howe Street, Vancouver, BC, V6C 2T6
- 2. I am a graduate of Laurentian University, with a degree in Geology (B.Sc. Honours, 2005).
- 3. I have been involved in mineral exploration in the Yukon continuously since 2005.
- 4. I am a member in good standing of the Association of Professional Engineers and Geoscientists of British Columbia and have been registered as a Geoscientist in training since 2008.
- 5. I am the supervisor of the fieldwork conducted, on BCG's Carmacks claims including the **WS**,
- ICE, SLEEP and BC Properties in the Whitehorse Mining District during the 2009 field season.
 The report is based on fieldwork conducted in August 15th September 11th, 2009 and company files.

Geoff Newton, G.I.T. Project Geologist **BCGold Corp** June 1st, 2010

11.2 Author

I, Gary Sidhu, of 15404 90Ave, Surrey in the Province of British Columbia hereby certify that:

- 1) I am a Project Geologist with BCGold Corp, #1400, 625 Howe St, Vancouver, BC, V6C 2T6
- 2) I have been employed in my profession as a Geologist continuously with BCGold Corp, and worked periodically in geology while attending University.
- 3) This report is based upon data collected by BCGold Corp staff on their Carmacks claims including the **WS**, **ICE**, **SLEEP and BC Properties** in the Whitehorse Mining District during the 2009 field season under the supervision of Geoff Newton (GIT).
- 4) I hold no interest in the Carmacks Project Claims.

Dated this 1st of June at Vancouver BC Canada.

Gary Sidhu

12.0 References

Doherty, R.A. 2008. Assessment Report on the WS Total Claims. Target Evaluation Program Carmacks Area. (Dated January 31, 2008 from BCGold Corp files)

Doherty, R.A. 2008. Assessment Report on the ICE Claims Carmacks Area, Yukon (Dated May 28, 2008)

Dzuiba, Frank 2009. Aurora Geosciences Ltd. Memorandum, December 15th, 2009; *Carmacks 2009 IP Surveys– Interpretation Supplement.*

Hood, S., Hickey, K., Colpron, M. and Mercer, B. 2009. High-grade hydrothermal copper-gold mineralization in foliated granitoids at the Minto mine, central Yukon. Yukon Exploration and Geology 2008: 137-146.

Mortensen, J.K. and Tafti, R. 2003. Nature and origin of copper-gold mineralization at the Minto and Williams Creek deposits, west-central Yukon: Preliminary investigations. Yukon Exploration and Geology 2002: 175-182.

Appendices

		PROJECT :	BCG-9545-YT	Geophysics	Comments
		IP			
	Current Job	37.00	0.0	0.0	
	Jul 2009 Totals	0.00	0.0	0.0	
	Aug 2009 Totals	17.90			
	Sep 2009 Totals	19.10	0.0	0.0	
*	Sat 15-Aug-2009				
*	Sun 16-Aug-2009	1.60			Line 10000N from 12000E to 13600E
*	Mon 17-Aug-2009	0.40			Line 10400N from 12000E to 12400E
*	Tue 18-Aug-2009	1.20			Line 10400N from 12400E to 13600E
*	Wed 19-Aug-2009	0.30			Line 10600N from 12000E to 12300E
*	Thu 20-Aug-2009 Fri 21-Aug-2009	1.30			Line 10600N from 12300E to 13600E
*	Sat 22-Aug-2009	1.60			Line 11400N from 12000E to 13600E Weather Day
*	Sun 23-Aug-2009	0.15			Line 11800N from 12000E to 12150E
*	Mon 24-Aug-2009	1.45			Line 11800N from 12150E to 13600E
*	Tue 25-Aug-2009	1.45			Line 12000N from 12000E to 13600E
*	Wed 26-Aug-2009	2.10			Line 12200N from 12000E to 13600E & line 12400N from 12000E to 12500E
*	Thu 27-Aug-2009	1.10			Line 12400N from 12500E to 13600E
*	Fri 28-Aug-2009				Camp move
*	Sat 29-Aug-2009	1.50			Line 13000N from 15600E to 17100E
*	Sun 30-Aug-2009	1.50			Line 14600N from 15600E to 17100E used 6pin snake because of rain
*	Mon 31-Aug-2009	2.10			Line 14400N From 15600E to 17100E & line 14200N from 15600 E to 16250E
	Tue 1-Sep-2009	2.40			Line 14200N from 16250E to 17100E & line 13400N From 15600E to 17100E
	Wed 2-Sep-2009	1.50			line 13200N from 15600E to 17100E
	Thu 3-Sep-2009				Camp move
	Fri 4-Sep-2009	2.10			Line 10000 from 10000E to 7900E
	Sat 5-Sep-2009	1.80			Line 10000 from 7900E to 6800E & line 10200N from 10000E to 9300E
	Sun 6-Sep-2009	2.50			Line 10200N from 9250E to 6800E
	Mon 7-Sep-2009	3.20			Line 10400N from 10000E to 6800E
	Tue 8-Sep-2009	1.40			Picked up wire from L10400N and stretched it out along the base line to L11800N. There were a couple open loops. Line 11800N from 10000E to 8600E
	Wed 9-Sep-2009	2.80			Line 11400N from 10000E to 8600E & line 11600N from 10000E to 8600E
	Thu 10-Sep-2009	1.40			Line 11200N from 10000E to 8600E
	Fri 11-Sep-2009				

PROJECT : BCG-9545-YT IP Survey August 2009 PERSONNEL : 113 Man-Days BAD WEATHER : 4 Man-Weather Days DAYS ON THE JOB : 28 days								
	Men-Weather Days	Tim Stewart	Andre Lebel	David Robinson	Dan Mawhinney	Alicia Cannata		
Current Job	4	10	19	28	28	28		
Aug 2009 Totals	4	10	8	17	17	17		
Sep 2009 Totals	0	0	11	11	11	11	Remarks	
Sat 15-Aug-2009	*	Mobe in		Mobe in	Mobe in	Mobe in	Set up camp and ran wire out to the first line	
Sun 16-Aug-2009	*	RX		Current	Cables	TX	Completed first line	
Mon 17-Aug-2009	*	RX		cables	тх	Current	Rain and wet cables brought the survey day to an end. Used afternoon to dry cables and camp duties	
Tue 18-Aug-2009	*	RX		TX	Current	Cables	Thunder and lighting ended the day early	
Wed 19-Aug-2009	*	RX		Current	Cables	ТХ	had many problems with the current path as well as "strange' readings on the RX. Many repeats had to be taken and cables checked for data quality. Thunder and lighting later in the day	
Thu 20-Aug-2009	*	RX		cables	TX	Current	readings went well. Moved current to other side of the grid.	
Fri 21-Aug-2009	*	RX		TX	Current	Cables	overcast with rain most of the afternoon.	
Sat 22-Aug-2009	4	RX		Current	Cables	TX	rainy wet conditions. Wet cables.	
Sun 23-Aug-2009	*	RX		cables	тх	Current	strange readings. Troubles with current path and animals chewin on cables.	
Mon 24-Aug-2009	*	Demobe out	Mobe in/RX	TX	Current	Cables	overcast. Andre switched out Tim at 12:00 pm	
Tue 25-Aug-2009	*		RX	Current	Cables	ТХ	overcast. Readings went well. Dan Saw bear on grid. It hung arou for about an hour.	
Wed 26-Aug-2009	*		RX	cables	TX	Current	Sunny, Rain about 1pm for an hour. 8am - 6pm	
Thu 27-Aug-2009	*		RX	TX	Current	Cables	overcast, Finished grid and picked up wire.	
Fri 28-Aug-2009	*		Camp move	Camp move	Camp move	Camp move	Camp move. Helicopter arrived at 2pm. 3 internals, 3 slings	
Sat 29-Aug-2009	*		RX	Current	Cables	TX	Overcast most of the day.	
Sun 30-Aug-2009	*		RX	Cables	TX	Current	Rain and wet cables, so we switched to 6 pin snake. 8am - 7pm	
Mon 31-Aug-2009	*		RX	tx	Current	Cables	overcast, 9am - 6pm	
Tue 1-Sep-2009	*		Rx	Current	Cables	Тх	Sunny, 8:30am to 6pm	
Wed 2-Sep-2009	*		RX	cables	Тх	Current	Sunny, Started at 8:30am finished Line at 1pm, pack up wire and gear by 3pm.	
Thu 3-Sep-2009	*		Camp move	Camp move	Camp move	Camp move	Moved camp to Apex grid 5 slings to road and 6 slings from Minto landing to the Apex camp location	
Fri 4-Sep-2009	*		RX	TX	Current	Cables	Overcast, started at 9am until 5:30pm	
Sat 5-Sep-2009	*		RX	Current	Cables	ТХ	Sunny, Started at 8:30am finished line at 1pm, a couple open loo And started the next line at 4:30pm finished around 6pr	
Sun 6-Sep-2009	*		RX	cables	TX	Current	sunny, Started at 9am finished at 5:30pm	
Mon 7-Sep-2009	*		RX	TX	Current	Cables	Sunny, Started at 9am finished at 6;30pm	
Tue 8-Sep-2009	*		RX	Current	Cables	ТΧ	Sunny, started at 10am finished at 7pm	
Wed 9-Sep-2009	*		RX	cables	TX	Current	Cloudy and light drizzle, started at 9am finished at 7pm	
Thu 10-Sep-2009	*		RX	TX	Current	Cables	Cloudy, started at 9am finished at 5pm.	
Fri 11-Sep-2009	*		Demobe	Demobe	Demobe	Demobe	Sunny, 3 sling loads and 2 internal loads with the long ranger Helicopter arrived at 10am and was finished at 1:30pm. Arrived back in Whitehorse by 4pm.	



Yellowknife Office

3506 McDonald Drive Yellowknife, NT X1A 3J2 Phone (867) 920-2729 Fax: (867) 873-3816 www.aurorageosciences.com

MEMORANDUM

Date:

To: Brian Fowler, BC Gold Corp.

15 December, 2009

From: Franz Dziuba

Re: Carmacks 2009 IP Surveys

This memorandum contains an interpretation of induced polarization and resistivity (IP) data collected during 2009 on three Carmacks copper-gold properties for BC Gold Corp.

The IP surveys were designed to aid planning of exploration drilling by mapping out zones of sulphide mineralization, specifically focussing on areas of favourable copper and gold soil M.M.I[™] anomalies discovered on the Carmacks Block NEWS and Ice properties and the Minto Block Apex East property. The aim of the BC Gold Corp's exploration program is to locate "Carmacks Style" copper oxide zones and "Minto-type" copper-gold mineralization.

Lebel (Sept. 22, 2009) describes the 2009 ground geophysical survey program at BC Gold Corp's Carmacks Copper-Gold properties. This field report includes geo-referenced grid location maps and pseudosections of the apparent resistivity and chargeability data. These data were subsequently inversion modelled using the UBC software DCIP2D to optimize the geological interpretation of the geophysical data. The recovered 2D models are the primary data considered in this interpretation report.

The inversion model results are shown as stacked chargeability and apparent resistivity sections with the spacing between sections held constant so that the full sections are visible. All coordinates in this memo will refer to grid station coordinates .

The Carmacks Properties are underlain by intermediate to felsic intrusive and metaintrusive rocks of the Early Jurassic Granite Mountain Batholith and the Minto Pluton which also hosts Capstone Mining's Minto deposits situated immediately to the south of the APEX East property. Geological observations at the Minto deposit are summarized by Hood et al - Minto Deposit (2008) and used in this memo as a geological model. The exploration target would be a high-grade copper-gold deposit comprising hypogene chalcopyrite-bornite-magnetite mineralization with only minor amounts of pyrite hosted by foliated granodiorite, diorite and gneissic rocks, with gneissic rocks containing the highest economic grades.

Capstone Mining has reported success using IP and magnetometer geophysical surveys and follow up diamond drilling as tools for locating economic deposits on their Minto property. In terms of IP response sufficient quantities of chalcopyrite-bornite sulphide mineralization would produce only a modest chargeability high reflecting the absence of more highly chargeable pyrite sulphide mineralization (Telford et al). Copper oxide mineralization, the result of supergene alteration would not be expected to give a significant IP response. The apparent resistivity data should generally map lithologies and some alteration. Though no physical properties data is available for comparison one would expect the altered and deformed foliated granodiorite / gneissic rocks which host the economic mineralization at Minto to have differing resistivity than the surrounding massive granodiorite. Finally the airborne magnetometer survey data (Aeroquest 2007) could be used to directly indicate the presence of magnetite mineralization as magnetic highs.

Minto Block Apex East Property

The Apex East grid consists of seven lines separated into two groups spaced 800m apart. Individual group lines are oriented in a northeast southwest direction and spaced 200m apart.

Lines 10000N, 10200N, 10400N -

BCG Apex East Charge Model.pdf BCG Apex East Res Model.pdf

These three southernmost lines 10000N to 10400N show a broad zone of very high apparent resistivity greater than 10,000 ohm-m striking northwest along their western portions. Model results indicate the resistive material plunging from near surface, at about station 7200E, to 200m below the surface by station 7900E. Immediately to the east on lines 10000N and 10400N a discrete resistivity high averaging 8000 ohm-m can be seen centered at station 8300E. The depth to this body is approximately 90m below the surface Both resistive features are coincident with elevated chargeabilities of up to 8.8 mV/V. Further to the east apparent resistivities are generally lower, ranging between 700 - 1500 ohm-m along with chargeability values of between 1 - 3.5 mV/V. The lowest apparent resistivities are seen near surface. Narrow near surface low resistivity features are noticed at stations 7500 to 7700E while broader areas of low apparent resistivity are seen spanning stations 8200E to 9200E. These zones are limited to the upper 50 - 80m of the sections and may indicate either weathered bedrock and /or areas of quaternary cover.

Lines 11200N, 11400N, 11600N, 11800N - BCG Apex East Charge Model.pdf BCG Apex East Res Model.pdf

The DC inversion results show moderately high resistivity features of approximately 2500 ohm-m striking NW over the western portions of these lines. A contact with material of lesser resistivity (~750 ohm-m) can be seen near stations 9150E. Moderate to low chargeability values (average of 4.5 mV/V) straddle this contact. A narrow low resistivity feature running from station 9350E on L11800N to 9600E on L11200N

occupies a topographic low.

Notable chargeability anomalies are annotated on the stacked section maps and summarized in the following table

Anomaly description	IP Model values (mV/V)	Resistivity Model values (ohm-m)	Depth below surface (metres)	Notes
APEX 1	6 - 9	6000 - >10000	150	proximal to elevated copper MMI values & magnetic lineament
APEX 2	5 - 7	6000- >10000	90	proximal to elevated copper MMI on L10000N
APEX 3	4-5	2000 - 3000	0 - 50	proximal to magnetic lineament

Carmacks Block Ice Property

Eight survey lines oriented in a northeast-southwest direction were run over the ICE property in 2009. The lines were positioned to fill in between lines covered by previous IP surveys and are situated as groups of lines spaced 200m to 400m apart. Higher chargeability values were measured over the northern group of lines which required the chargeability model results to be displayed on two separate maps for illustrative purposes.

Lines 11400N, 11800N, 12000N, 12200N, 12400N BCG ICE Res Model.pdf BCG ICE_north Charge Model.pdf

The modelled resistivity values on the ICE grid can be generally divided into three groups with the following ranges ; low resistivity values of less than 200 ohm-m, intermediate resistivity values greater than 200 ohm-m but less than 4000 ohm-m, and high values greater than 4000 ohm-m. The groups are outlined on the accompanying figure - *BCG ICE Res Model.pdf*

Highly resistive material is seen at depth striking north-south from station 12500E on L11400N to station 13500N on L12400N while conductive material is seen near surface striking north- south as well.

An examination of the recovered chargeability models show values ranging from 0 to 14 mV/V with a background value of 3.5 mV/V. Chargeability values of 10.0 mV/V or higher are considered anomalous and annotated on the accompanying figure - *BCG ICE_north Charge Model.pdf*. A chargeable zone can be traced southeast from L12400N to L12000N centered at station 1300E at depths of between 80m and 150m below the surface.

Another broad and deep zone of chargeable material is mapped on L11800N between stations 12300E to 12850E at a depth below surface of approximately 130m. The IP survey of L11400N did not return any chargeability values of greater then 6 mV/V.

Lines 10000N, 10400N, 10600N BCG ICE Res Model.pdf BCG ICE_south Charge Model.pdf

The recovered resistivity model sections are dominated by a sub horizontal low resistivity layer, averaging approximately 100m thick. This feature comes to surface at the higher topographic relief northeastern ends of the survey lines and is overlain by a more highly resistive layer of material, up to 50m thick, down slope to the southwest.

The chargeability model sections show recovered values from these lines that range only as high as 5 mV/V, with higher values occupying the sub horizontal resistivity contact.

Notable chargeability anomalies are annotated on the stacked section maps and summarized in the following table

Anomaly description	IP Model values (mV/V)	Resistivity Model values (ohm-m)	Depth below surface (metres)	Notes
ICE 1	10 - 14	2000 - 3000	80 -150	coincident with a total magnetic field high and elevated copper MMI on L12400N
ICE 2	10 - 13	5000 - 6000	130	proximal to elevated copper MMI

Carmacks Block NEWS property

IP data were collected over six survey lines on the NEWS grid during 2009. The lines are separated into two groups spaced 800m apart. Individual group lines are oriented in a northeast southwest direction and spaced 200m apart.

Lines 14600N,14400N, 14200N BCG NEWS Res Model.pdf BCG NEWS Charge Model.pdf

The resistivity model results show a sharp contact striking north to south from approximately 16000E on L14200N to station 16250E on L14600N. The contact separates material with resistivities of less than 1000 ohm-m to the southeast from materials with resistivities greater than 1000 ohm-m to the northwest. The chargeability model sections show the same contact separating a lower background chargeability to the southeast from higher values to the northwest. Examination of the higher values to the northwest indicate a background of 6.5 mV/V. Values greater than 8 mV/V are considered anomalous and

outlined on the accompanying figure. The anomalous areas lie between 80 and 120m below the surface. One is centered on L14600N at station 16750E, the other two are seen below station 16350E on lines 14400N and 14200N.

Lines 13400N, 13200N, 13000N BCG NEWS Res Model.pdf BCG NEWS Charge Model.pdf

The resistivity model indicates a slight resistivity low centered below station 16300E on L13400N striking south to station 16050E on L 13000N.

Chargeability values greater than 8 mV/V and up to 13.5 mV/V form broad zones, in the order of 300m in width, centered below station 16600E on lines 13400N and 13200N. The depth to the top of these areas is approximately 100m. The anomaly is not seen on L13000N though another chargeable zone, containing more subdued values, is seen below station 15900E on Lines 13200N and 13000N.

Notable chargeability anomalies are annotated on the stacked section maps and summarized in the following table

Anomaly description	IP Model values (mV/V)	Resistivity Model values (ohm-m)	Depth below surface (metres)	Notes
NEWS 1	8 - 9.5	1500 - 2000	80 - 120	proximal total magnetic field high and elevated copper MMI on L14200N
NEWS 2	8 - 14	2500 - 3000	50 - 80	proximal elevated copper MMI and magnetic lineament
NEWS 3	8 - 8.5	2000 - 2500	100 - 140	Coincident with a total magnetic field high

Recommendations

IP surveys have proven successful in outlining areas of disseminated sulphide mineralization. It should be noted however, that resistive and chargeable features can result from a number of causes and that there may be sources within surrounding / overlying formations which can generate resistivity and chargeability anomalies which may appear to be of economic interest. The results of the 2009 IP survey described in this memo support the following recommendations ;

a. A top priority target for drill testing would be the coincident copper MMI, magnetic and chargeability target ICE 1. A recommended vertical drill hole collar would be on the ICE Grid, Line 12400N at station 12900E, to test for economic mineralization to a minimum of 150 metres below surface.

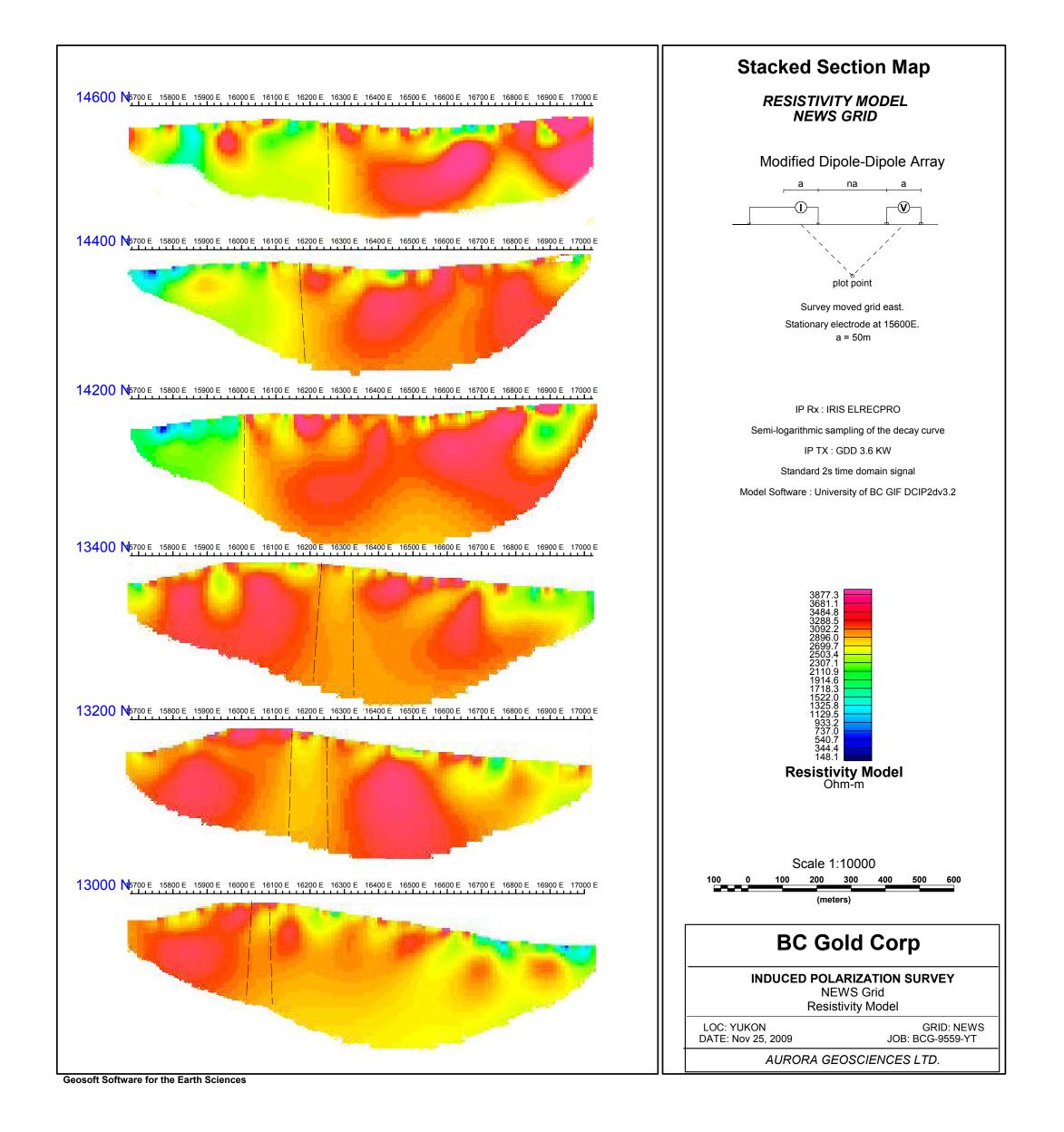
b. The NEWS 2 target should be drill tested for economic mineralization to a minimum of 100m below the surface on the NEWS grid, Line 14200N at station 16400E.

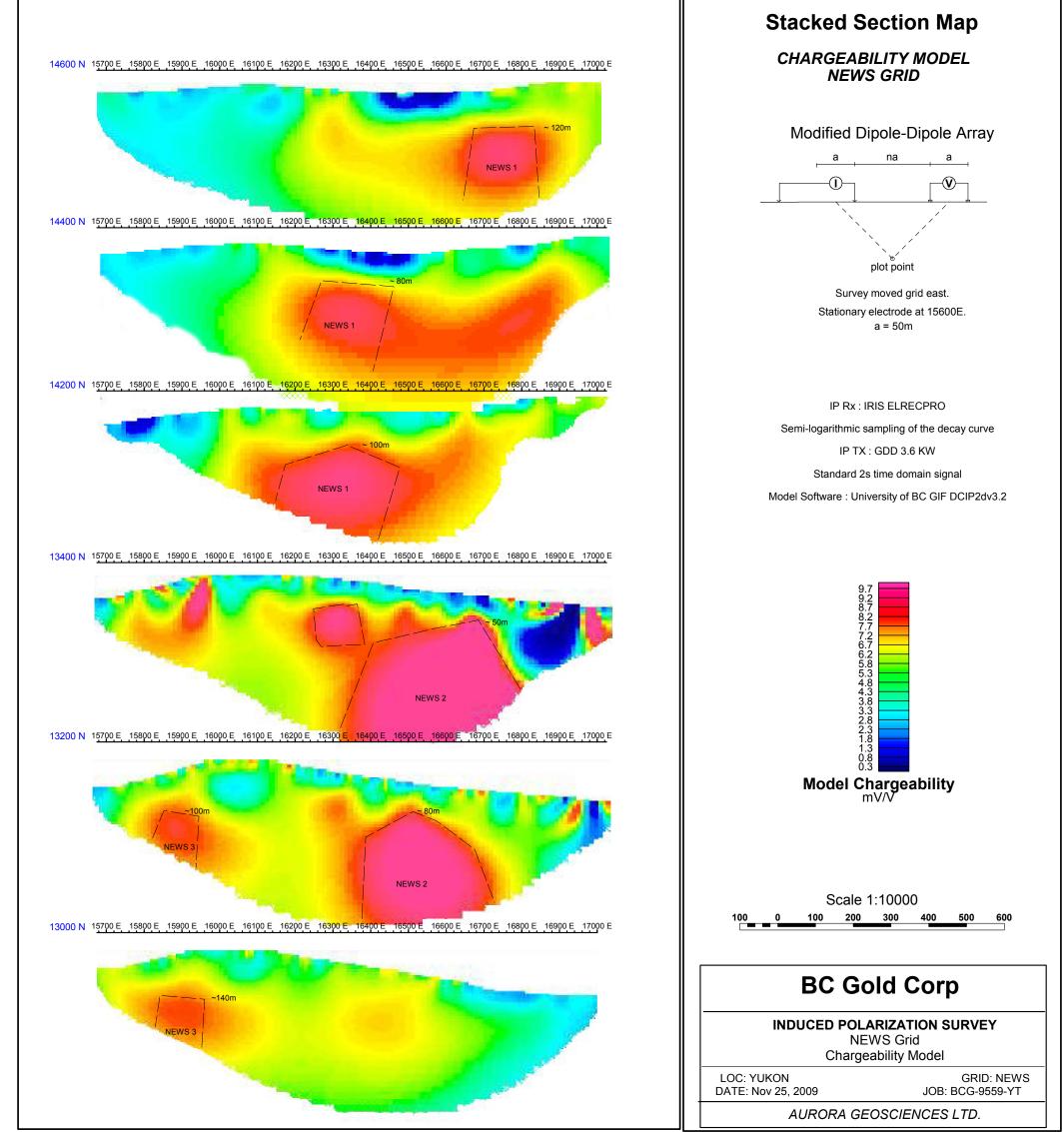
c.A compilation of all existing geological information should be undertaken to help determine the source of the APEX East grid IP anomalies before drill testing.

d.Apparent resistivity results for the entire area should be incorporated into a geological model to determine geological structure.

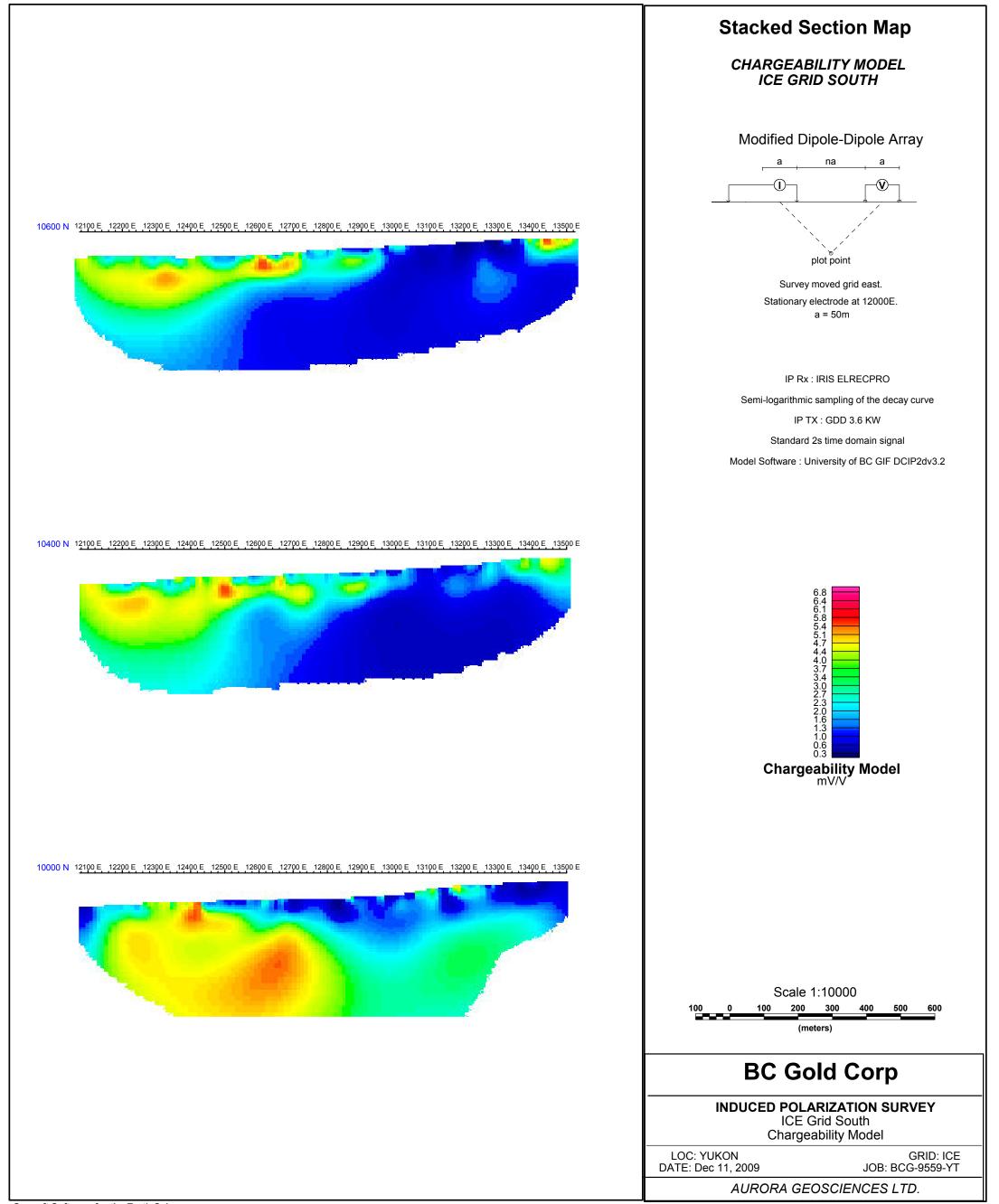
Respectfully submitted, **AURORA GEOSCIENCES LTD.**

Franz Dziuba, P.Geoph Aurora Geosciences Ltd.





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