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MEMORANDUM

To: BC Gold Corporation
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Date: 15 October 2008

From: Dave Hildes
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Re: BCG 2008 IP Survey - Interpretation Supplement

This memorandum is a supplement to the previously delivered field report which described an induced polarization (IP) survey conducted on several BC Gold properties in the Yukon. This supplement contains an interpretation of the data and recommendations based on the IP data and 2D IP inversions performed by Aurora Geosciences Ltd. on the WS grid. Figures were provided by BC Gold showing the results of 3D IP inversions on the WS grid (performed by Mira Geosciences) and MMI Cu soil geochemistry results on all 6 grids that were surveyed by Aurora in 2008.

Three grids were surveyed with an expanding pole-dipole array geometry using 100 m dipoles and reading to the 6th dipole separation; the WS, Peanut and Copper grids.

WS grid

The WS grid is immediately south of Western Copper's Zones 12, 13 and 12E. The MMI test line that BC Gold conducted over Western Copper's L4400 showed elevated MMI Cu across nearly the line. This coincides with deep weakly elevated chargeability spanning across Zone 13 and Zone 12E imaged using 100 m dipoles. There was reasonably good correlation between the elevated chargeability and intersected sulphides through the southern half of Zone 13, Zone 12 and Zone 12E (L4400 is at approximately the juncture of Zone 12 and 13). There is not a strong resistivity signature to any of these zones.

There is broad weakly elevated chargeability throughout the central sections of lines 162 & 159. The resistivity shows a more cohesive picture with a subtle resistivity low centered at approximately station 11500 which corresponds with slightly elevated MMI Cu results. To the east (approx 800 metres) is < 50 Ohm-m ground which is also seen in the eastern reach of the Western Copper southern most lines.

The fact that this zone is on-strike with Western Copper's Zone 12 and has a similar chargeability signature (albeit weak) suggests this area as a target. IP surveying with 25 m dipole separation to gain better lateral resolution (with infill lines) may help in targeting a drill, but if this is not possible, setting up at station 11550 on line 159 and drilling to the SW would be the best IP target in this area. Although the IP anomaly is stronger on line 159, a similar signature in the IP is seen on L162 and is closer to Western Copper's Zone 12. The Western Copper Zone 12E does not appear to extend to the southern-most of the Western Copper lines and there is little indication of it on BC Gold's ground.

There is very little variation in chargeability across lines 155 and 152. A resistive feature appears to be continuing from lines 162 and 159 trending slightly grid east starting at station 12000 on L162 and passing through approximately station 11800 on L155. The most prominent feature on these lines is the elevated chargeability coupled with the reduced resistivity on the far eastern parts of the lines.

Lines 149, 147, 144 and 141 all have elevated chargeabilities around station 10600 which do not appear to be imaged in the 3D inversion results, but are recovered in the 2D inversions. This is an especially distinct feature on lines 141 and 144 and is coincident with elevated MMI Cu values. Although the IP is stronger on line 141, it is more consistent on line 144 and the MMI signature is stronger on line 144. A steeply east dipping hole is recommended at station 10650 on L144 with infill and tighter dipole IP recommended to guide further drilling. There is no significant chargeability signature associated with the MMI Cu response from station 11500 to 12000 on these lines. A resistive feature running from approximately station 11200 on L149 through to station 11000 on L141 appears to be continued from L152 and the elevated MMI occur grid west of this resistivity feature.

There is broadly elevated chargeability on L135, centered (and strongest) at station 10800, where there are elevated MMI Cu results. There are however significantly higher MMI Cu results further to the east. The data between the winter survey and summer surveys were not consistent for either the resistivity or the chargeability suggesting significantly different current paths between the two geometries of the surveys. This area should be resurveyed with 25 m dipoles prior to drilling.

Peanut grid

Figures *BCG_Peanut_Stacked_Apparent_IP.pdf* and *BCG_Peanut_Stacked_Apparent_Res.pdf* show stacked psesudosections of apparent chargeability and apparent resistivity for the Peanut grid. All the apparent chargeability pseudosections use a common linear colour scale while all the apparent resistivity pseudosections use a common log-linear colour scale.

The apparent resistivity shows two relatively more resistive zones, one along the eastern edge of the grid from line 10000 to line 11000, the other on the western edge of the grid. Both appear to correlate well with high total magnetic field linears from the airborne magnetic survey.

There is an IP anomaly running along the west side of the gird. It is open to the west from L10200 to L11200 and then extends to L11400 and L11600 centered at approximately station 10400. Another linear elevated chargeability runs from approximately L10200, station 10800 through L11400, station 10800. The strongest IP anomalies are on lines 10800, 11000 and 11200 along the west side of the grid.

The IP signatures on the southmost three lines (10000, 10200 and 10400) have signatures indicative of thin or pod-like chargeable features in the central part of the grid.

MMI soil geochemistry samples were taken on the NW corner of the grid (from approximately station 9900 to station 10700 on lines 10900 through 12300). There are elevated MMI Cu soil geochemical values in the vicinity of the IP anomaly, but the correlation appears to be weak. Modelling of the IP data would aid in coalescing the two databases.

MMI soil geochemistry was also done on two smaller blocks on the eastern edge of the grid: 1) on lines 10000, 10100 and 10200 between stations 11000 and 11500 and 2) on lines 10800 through 11200 between stations 11000 and 11500. The highest Cu values were on the very eastern edge of the MMI survey and are effectively off the grid surveyed by the IP.

Prior to drilling, further IP at 25 metre dipole spacing is recommended over the strongest chargeability anomaly on lines 10800, 11000 and 11200 from station 10600 to 9600 (extending the lines another 400 m to the west). In addition, infill lines 10900 and 11100 should be cut and surveyed.

In addition the central portion on lines 10000 (stations 10000 to 11000), 10200 (stations 10200 to 11200) and 10400 (stations 10400 to 114000) should be resurveyed with 25 metre dipoles to further define this target. Infill lines 11000 and 11300 should be surveyed pending positive results on the three currently cut lines.

The MMI Cu anomaly on the eastern side of the grid remain predominantly untested by IP. It is recommended that Line 10000, 10200, 11000 & 11200 be extended to station 11750 and these lines be surveyed with 25 m dipoles from station 11000 to 11750. In addition infill lines 10100, 10900, 11100 & 11300 should be cut and surveyed between stations 11000 and 11750.

If a hole is to be drilled prior to any other surveying or inversions, a vertical hole (in the absence of any geological information suggesting structural dip) on L11000 at station 10300 would best test the IP data collected to date.

Copper grid

Figures *BCG_Copper_Stacked_Apparent_IP.pdf* and *BCG_Copper_Stacked_Apparent_Res.pdf* show stacked psesudosections of apparent chargeability and apparent resistivity for the Copper grid. All the apparent chargeability pseudosections use a common linear colour scale while all the apparent resistivity pseudosections use a common log-linear colour scale.

The apparent resistivity shows a resistive zone to the northeast that coincides well with the area immedeately north of the magnetic feature as imaged by the airborne total magnetic field. There is a slightly more complicated resistivity structure on L100.

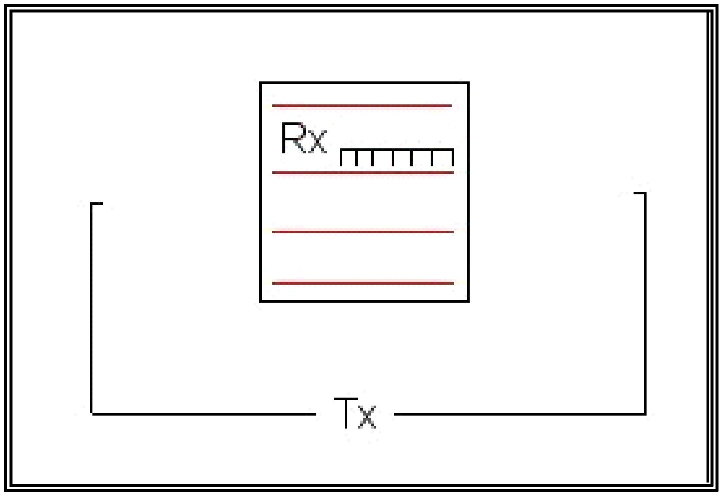
There are broad zones of anomalous apparent chargeability which correlate well with the areas of increased apparent resistivity, suggesting that the differences in chargeability are caused by broad lithological changes rather than mineralization. The MMI Cu soil geochemistry results show elevated Cu values throughout most of the grid, with no particular area distinguishing itself.

The strongest IP target would be on L104 at station 12700; there are elevated MMI Cu values proximal to this station (to the east), which could be consistent with the IP if there were a westward dipping structure (so that the MMI results would be up-dip)

Prior to drilling, further IP at 25 metre dipole spacing is recommended over the strongest chargeability anomaly on line 104 with infill lines 103 and 102 also being surveyed. The current data (and further surveyed data) should be inverted to best coalesce the soil geochemistry and IP data prior to deciding on a drill targets.

Gradient IP Method.

An IP / resistivity survey using a gradient array (also known as a modified Schlumberger array) has a source field generated by a grounded current dipole with a very large spacing compared to the potential dipoles. The potentials are surveyed within a smaller area centred at the mid-point between the two transmitting electrodes. The survey geometry is sketched below:



The receiver array (typically 10 dipoles) moves along the survey lines in 10-dipole steps (for example 500 m each move for a survey using 50 m dipoles). The survey lines are confined the area of a survey "box" centred on the mid-point between the transmitting electrodes so that the electric field (and therefore the current) is approximately uniform and horizontal throughout the survey area. As the transmitting electrodes are both stationary, the survey typically proceeds faster than moving source IP surveys.

The dimensions of the survey areas for the Spear, Toe and Pepper grids were as follows:

Grid	**Box**	**Potential Box size**	**Current electrode locations**	**Current separation**
Spear	Box 1	800m X 1800m	379499E 6949355N and 377074E 6952267N	3800m

Toe	Box 1	800m X 900m	375928E 6953605N and 376015E 6957928N	4325m
Toe	Box 2	800m X 900m	375928E 6953605N and 376052E 6958490N	4900m
Toe	Box 3	800m X 600m	376001E 6955086N and 376044E 6959085N	4000m
Toe	Box 4	800m X 950m	376045E 6954886N and 376046E 6959757N	4875m
Pepper	Box 1	600m X 900m	374370E 6956989N and 372491E 6960814N	4250m
Pepper	Box 2	600m X 900m	374370E 6956989N and 372151E 6961537N	5050m
Pepper	Box 3	600m X 900m	373628E 6958189N and 371948E 6962275N	4415m

The uniform source field of a gradient array differs fundamentally from a dipole-dipole or pole-dipole IP survey where the proximity of the potential electrodes to the current source results in a varying source field which can be exploited to extract depth information about the target. The data are typically plotted in pseudosections with distal potentials plotted below proximal potentials to indicate their greater depth sampling. In a gradient survey, all potential stations are equivalent as the source field is uniform within the survey area and pseudosections cannot be made. This is a disadvantage of the gradient method: very little target depth information can be derived.

Because the source field is horizontal, gradient array surveys are relatively insensitive to thin vertical conductors striking aligned normal to the direction of the primary electric field and are most sensitive to horizontal or flat-lying conductors. Conversely, the gradient array is more sensitive to steeply dipping resistive features than horizontal resistive features (Furness, 1993). Similarly, the gradient array is more sensitive to vertical chargeable bodies than horizontal ones. Despite the gradient array insensitivity to vertical conductors, the array is more sensitive to dip than dipole-dipole and pole-dipole surveys and has better horizontal resolution (Coggon, 1973).

Although depth resolution is poor for a gradient array, the depth of investigation, defined as the depth at which a thin horizontal conductor contributes the maximum amount to the total measured signal at the ground surface, is relatively deep. For these three grids it ranges from 240 m for a maximum response at the edge of the Spear potential array to 640 m for a maximum response at the centre of Box 2 of the Pepper grid in an isotropic half-space (Bhattacharya and Dutta, 1982). The depth of investigation for vertical bodies is typically on the order of ½ that of horizontal bodies.

The situation of a constant source field is analogous to that of a magnetic body in the Earth's magnetic field and therefore basic potential theory can be applied. *Quick* (1974) has shown through laboratory experiments that standard potential field depth estimates based on anomaly half-width can be used for gradient array chargeability anomalies.

Three grids (Spear, Pepper and Toe) were surveyed with 50 metre dipoles using a gradient array geometry.

Spear grid

The chargeability plan map shows several chargeable features running nearly perpendicular to the wing lines. The furthest north, at approximately station 11175, is broadest with a half-height width of 335 m on the NE profile (labelled **A**) shown in the accompanying figure *BCG_Spear_Gradient_IP_with_Profiles.pdf,* suggesting a depth to the top of the feature of 167.5 metres for a thin prism. If the body is not thin relative to the depth of burial, the depth to the top would be less than 167.5 metres at L10500E (the approximate location of the NE profile)**.** The asymmetry of the profile suggests a dip to the NW. The feature to the south consists of two sub-parallel chargeability highs, labelled **B** and **C,** which coalesce at line 10400. These linear features are truncated to the east between lines 10400 and 10600. The north-western splay, **B**, (at station 10675 on L11000E, the approximate location of the SW profile) has a half-height width of 160 m while the south-eastern splay (at station 10350 on L11000E) has a half-height width of 150 m and is of lower amplitude suggesting a depth to top of feature of 80 m and 75 m respectively. As above, if the body is not thin relative to depth, the depth would be less than 75-80 m. The one-dimensionality of these features suggests that they are not caused by Minto-style flat-lying bodies.

The apparent resistivity (accompanying figure *BCG_Spear_Gradient_Res.pdf)* shows slightly more conductive ground to the north-east aside from the extreme NE corner which is the most resistive area of the grid. The correlation between the IP and resistivity is very low. This area could be the result of a deep horizontal conductor (to which the gradient survey is particularly sensitive to) - the geometry is most sensitive to horizontal conductive targets at a depth of 240 metres but the response could equally be produced by a horizontal layer with three times the contrast at 70 m (Bhattacharya and Dutta, 1982). From the half-width of the conductive anomaly it is unlikely caused by anything deeper. The conductive feature is moderately correlated with a magnetic low.

The MMI Cu geochemistry shows relatively high values in the area between features **A** and **B** and would be on the up-dip side of feature **A** based on interpreted dip from the apparent chargeability. There does not appear to be an MMI Cu anomaly associated with chargeability features **B** and **C**. Only a small portion of the Spear Grid was covered by the MMI soil sampling program.

The best IP drill target would be collared on L10400E at station 11200N, drilled with a grid south azimuth and a dip of 55 degrees to intersect feature **A**, however the small chargeability anomaly on L10800E between station 11025N and 10875N is more proximal to the elevated MMI results. Several lines of 50 m dipole separation inline IP surveying over targets of interest prior to drilling is recommended.

Pepper grid

Three areas of elevated chargeabiltiy are outlined in the accompanying maps *BCG_Pepper_Gradient_IP_with_Profiles.pdf* and *BCG_Pepper_Gradient_Res.pdf*; all have smaller scale structure within the area of elevated chargeability. The highest apparent chargeabilities occur in the northern most part of the grid, labelled **A** . A weak chargeability linear feature from L10600E, station 11625N, through L10400E, station 11825N to L10000E, station 12025N is roughly coincident with a resistive feature.

Area **B** is generally coincident with a resistive area. The chargeability high running from L10200E, station 11075N to L10600E, station 11275N and the chargeability high on

L10600E, station 10925 are well correlated with resistivity highs. However, the strongest chargeabilities in this area run across lines 10200E, 10500E and 10600E at station 10675 and are north of the well defined linear resistive feature across all four lines at station 10575. The half-height width of this apparent resistivity feature on L10200E is 150 m. The signature of this area is consistent with vertical structures of resistive, chargeable material, to which gradient surveys are sensitive; it could however be also caused by a flat-lying chargeable body with varying levels of sulphides within it.

Area **C** has generally poorly correlated apparent chargeability and apparent resistivity.

The MMI survey covered the central part of the grid, predominantly on lines 10200E through 10600E. There is fairly high positive correlation between elevated Cu values and elevated chargeability in area **B**, however there is also a substantial group of similarly elevated Cu values in the chargeability low between areas **A** and **B**.

The best drill target to test the elevated resistivity, chargeability & Cu in Area **B** would be a vertical hole (in the absence of other geological information to indicate a dip) at L10400E, station 11125N. There are several other targets with similar signatures in areas **A** & **B**. Alternatively, a vertical hole at L10600E, station 10700N would test a higher chargeability anomaly, still withing an MMI Cu high but the offset between the resistive and chargeable anomaly is approximately 100 m here. All the targets in Area **B** appear to be fairly shallow (< 75 m). Several lines of 25 m dipole separation inline IP surveying over targets of interest prior to drilling is recommended.

Toe grid

The Toe grid apparent resistivity plan map (*BCG_Toe_Gradient_Res.pdf)* shows the grid divided into a < 1000 Ohm-m conductive area in the middle from station 9675N to 10675 (approximately) with more resistive (> 1500 Ohm-m) ground to both the north and the south. Within the 1500 Ohm-m resistive area are two slightly more resistive areas on lines 10500 and 10700 at station 10975 and 10925 respectively and another on L10700E, station 9575N which have coincident chargeability highs, labelled **A** and **B** on the accompanying figures *BCG_Toe_Gradient_Res.pdf* and *BCG_Toe_Gradient_IP.pdf*. There are two other chargeable areas labelled **C** and **D** which are poorly correlated with the resistivity. All have signatures that would be consistent with Minto-style flat lying bodies.

The MMI survey covered the southern part of the Toe grid, predominantly on lines 10200E through 10600E. There is positive correlation between elevated Cu values and elevated chargeability in area **D**, however there is also a substantial group of similarly elevated Cu values in the low to middle chargeability area to the north of area **D**. There is negative correlation in area **B** and no MMI coverage in areas **A** and **C**.

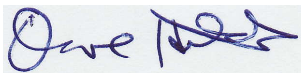
The best IP drill targets would be vertical holes (in the absence of other geological information to indicate a dip) to test the coincident elevated resistivity and chargeability in Area **A** at L10500E, station 10975N and the uncorrelated chargeability high at L10500E, station 10375N. If the southern half of the grid is preferred (as this was the originally planned survey), an alternate target for the coincident chargeability and resisitivity is Area **B** with a vertical hole on L10700E, station 9600N and an uncorrelated target in area **D** on L10500E, station 9025N, which is also in an area of elevated MMI Cu concentrations. Targets **A** and **B** are suggestive of fairly shallow (<75 m) vertical targets, while areas **C** and **D** are more consistent with flat lying targets. The depth of maximum response is quite deep (>600 m) for a flat lying conductive body, but a shallower, greater contrast could produce the same result. Several lines of 25 m dipole inline IP surveying over targets of interest prior to drilling is recommended.

Products

The following files are attached to this report.

Figures	BCG_Copper_Stacked_Apparent_IP.pdf BCG_Copper_Stacked_Apparent_Res.pdf BCG_Peanut_Stacked_Apparent_IP.pdf BCG_Peanut_Stacked_Apparent_Res.pdf BCG_Pepper_Gradient_IP_with_Profiles.pdf BCG_Pepper_Gradient_Res.pdf BCG_Spear_Gradient_IP_with_Profiles.pdf BCG_Spear_Gradient_Res.pdf BCG_Toe_Gradient_IP.pdf BCG_Toe_Gradient_Res.pdf
Inversions	A folder for each line on the WS grid containing the mesh file used, recovered chargeability model, recovered resistivity model, images of the recovered chargeability and resisitivity with a depth of investigation estimate, images of predicted and observed data.
BC Gold 2008 IP Interpretation Supplement.pdf	A pdf of this report.

Yours Sincerely,
AURORA GEOSCIENCES LTD.


Dave Hildes
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Dave Hildes, P.Geo, Ph.D.

References

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