



- 1 – Honda 5 kW motor generator
- 24 – 100 m 10-pin receiver cables
- 34 – Electrodes (stainless steel)
- 2 – Large winders
- 3 – Speedy winders
- Current wire (8 km)

Other:

- 4 – Garmin hand-held non differential GPS receivers
- 1 – Laptop computer with Geosoft and software
- 1 – Satellite Phone
- 4 – Handheld radios
- 1 – Base radio with 120v inverter/antenna and 12v battery
- 6 – Bear deterrents (bear spray and bear banger set)
- 3 – Cross-peen hammers
- 1 – Chainsaw
- 1 – Pop tent for IP transmitter
- 1 – IP tool box
- 1 – Geophysical tool box

## 2 Survey Location

The RC Gold Property is located at the headwaters of Clear Creek in Yukon and is accessed via truck by the Clear Creek placer mine access gravel road connected to the Klondike Highway between Stewart Crossing and Dawson City. Via helicopter, the property is approximately 110 km from Dawson City and 65 km from Mayo. The IP survey grid and area is shown in Figure 1.

All coordinates described in this memo refer to UTM zone 8N, 1983 North America Datum (NAD83).

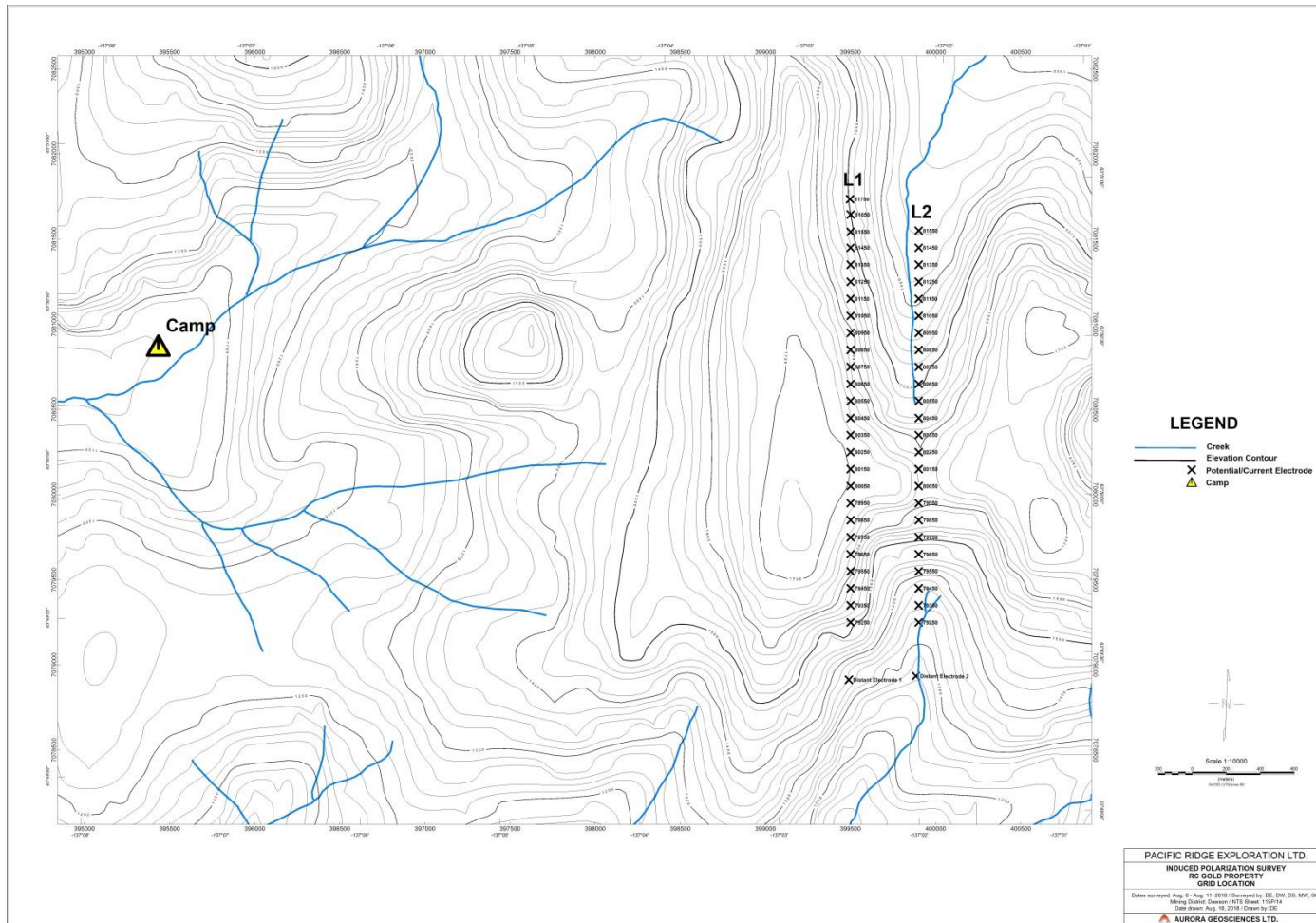


Figure 1 : IP survey grid location map.

### 3 Grid Specifications

The IP survey grids are established digitally utilizing UTM Projection NAD 83, Zone 8N. Text files are formatted and coordinates uploaded to GPS receivers for on the ground navigation.

The following 2 lines spaced 400 metres apart comprise the grid:

Line	South/North end station locations	Line length	Line azimuth	Distant electrode location (ID)
1	399500E, 7079250N/ 399497E, 7081735N	2.4 km	0°	399490E, 7078913N(1)
2	399900E, 7079250N/ 399900E, 7081550N	1.9 km	0°	399884E, 7078935N(2)

### 4 Survey Specifications

The IP survey was completed according to the following specifications:

GPS gridding:	Grids were laid out in NAD83 Zone 8N and uploaded to the GPS receivers.
Array :	2D Modified Pole-Dipole
Distant electrode:	Minimum 300 metres standoff
Dipole length :	100 metres
Dipole range:	N=1-10
Station spacing :	100 metres
Transmitter signal :	Time domain / 0.125 Hz / 50% duty cycle / reversing polarity (2s positive , 2s off, 2s negative, 2s off)
Receiver sampling:	20 time windows with semi-logarithmic time windows (6X40 ms, 7X80 ms and 7X160 ms)
Noise:	Error in chargeability kept to 5% or less wherever possible. When not possible, readings were repeated to determine their repeatability.

## 5 Data Processing and 2D Modelling

All IP data are downloaded, archived and imported into Geosoft's Oasis Montaj IP package for daily processing. Electrode locations and data plot points are georeferenced through linear interpolation according to the observed handheld GPS data collected simultaneously with the IP survey.

A subset channel of average IP values, windowed from 60 ms through 1880 ms, is created for each of the lines surveyed and an apparent resistivity calculation using georeferenced electrode positions is applied to the edited data.

The IP and resistivity data are inspected using the Oasis Montaj IP and resistivity quality control tool. Data exhibiting irregular decay curves and readings measured with poor primary voltages (Vp's) less than 1 mV are flagged for rejection. These readings remain in the database for further inspection. Data quality was primarily impacted by two factors: 1) poor electrical contact with ground due to lack of soil and 2) electrical noise due to telluric currents.

Stacked Sections of the calculated apparent resistivity and apparent chargeability incorporating all lines are generated with Geosoft and included with this report.

2D resistivity and chargeability models were calculated using DCIP2D software developed at the University of British Columbia (UBC) - Geophysical Inversion Facility, Department of Earth and Ocean Sciences. Inspected and spatially referenced IP and resistivity data were exported out of Oasis Montaj into DCIP2D compatible data. Default inversion parameters were applied to produce smooth chargeability and resistivity 2 dimensional models.

The inversion results were imported into Oasis Montaj and section maps of the chargeability and resistivity models for each line were generated and are included with this report. Inversion logs in ASCII format for each model that contain inversion parameter information are also included.

Geosoft IP database 'PEX-20180816-RCGold\_IP\_Merged.gdb' channel names and descriptions are as follows:

Channel	Units	Description
Mem		Raw data sequence number
Date	yyyy/mm/dd	Date of data acquisition
Hour	hh:mm:ss	Time of data acquisition
Array	P-DP	Array type (2D Pole-Dipole)
LineTx	metres	Grid easting coordinate of current electrode
LineRx	metres	Grid easting coordinate of reference potential electrode
Dir	N-S	Survey direction

T1Y	metres	Grid northing coordinate of current electrode (Station #)
R1Y	metres	Grid northing coordinate of potential electrode (Station #)
R2Y	metres	Grid northing coordinate of potential electrode (Station #)
Tx1	metres	Mock grid coordinate of infinite electrode (distant electrode) off line (arbitrarily chosen to be large (infinite))
Contact	kOhm	Contact resistance of potential electrodes
n		'n' level
Rho	Ohm*m	Calculated (GDD receiver) apparent resistivity
Sp	mV	Average spontaneous potential
SpMin	mV	Minimum spontaneous potential
SpMax	mV	Maximum spontaneous potential
Vp	mV	Primary voltage measured 240 ms in on time window
ErrVp	mV	Standard deviation in primary voltage calculated by GDD receiver
M	mV/V	Average chargeability calculated by the GDD receiver
ErrM	mV/V	Standard deviation in average chargeability calculated by the GDD receiver
I	Amperes	Injected current
Ima	Milli-Amperes	Injected current
Time	ms	Length of reading window
DC	Percentage	Duty cycle of transmitted signal
Stack		Number of transmitter cycles measured during the course of the reading
Mxx		GDD receiver calculated chargeability across time window xx. Twenty windows total – M01-M20.
IP_Decay		Chargeability decay curve (array channel) across all twenty time windows.
MF		Metal factor – avg. apparent chargeability / apparent resistivity * 1000

		(IP_Avg/Calcappres * 1000)
QC_(Type)		Quality control flags for resistivity (QC_Res) and chargeability (QC_IP).
IP_Avg	mV/V	Average chargeability reading from 60 ms through to 1880 ms.
Calcappres	Ohm*m	Calculated apparent resistivity values using georeferenced electrode positions
Z	metres	Grid referenced plot point - Depth
Elevation	metres	Georeferenced elevation of apparent resistivity/apparent chargeability plot in metres above sea level (Elevation = Topo + Z)
Topo	metres	Georeferenced surface location of Stn/X coordinate – LiDAR derived elevation in metres above sea level
T1_Z	metres	Georeferenced elevation of current electrode (T1X) – metres above sea level
T1_UTME	metres	Georeferenced coordinate of current electrode (T1X)-Easting
T1_UTMN	metres	Georeferenced coordinate of current electrode (T1X)-Northing
R1_Z	metres	Georeferenced elevation of potential electrode 1 (R1X) – metres above sea level
R1_UTME	metres	Georeferenced coordinate of potential electrode 1 (R1X)-Easting
R1_UTMN	metres	Georeferenced coordinate of potential electrode 1 (R1X)-Northing
R2_Z	metres	Georeferenced elevation of potential electrode 2 (R2X) – metres above sea level
R2_UTME	metres	Georeferenced coordinate of potential electrode 2 (R2X)-Easting
R2_UTMN	metres	Georeferenced coordinate of potential electrode 2 (R2X)-Northing
T2_Z	metres	Georeferenced elevation of distant/infinite electrode –metres above sea level
T2_UTME	metres	Georeferenced coordinate of distant/infinite electrode -Easting
T2_UTMN	metres	Georeferenced coordinate of distant/infinite electrode -Northing
Stn	metres	Apparent resistivity/apparent chargeability plot position defined as the midpoint between R1X and T1X

Xnad83z8	metres	Georeferenced coordinate of apparent resistivity/apparent chargeability plot point (Stn/X) - Easting
Ynad83z8	metres	Georeferenced coordinate of apparent resistivity/apparent chargeability plot point (Stn/X) - Northing

## 6 Products

The following files are included in the digital version of this report:

Folder name	Description of contents
\Raw Data\Survey Type\Date	Unedited instrument data dump files sorted by date. Garmin GPS data in .gpx format. IP data in ASCII format.
Processed Data\Survey Type\ (Data Type)	Processed IP data in Geosoft database (GDB) and ASCII format (XYZ). Processed Garmin GPS electrode location database organized by line in ASCII format (XYZ).
\Final Products\Maps\Map Type	Stacked section maps of apparent chargeability and resistivity pseudosections and section maps of chargeability and resistivity 2D models, all in packed Geosoft map format and PDF exports.
\Inversion Results\Data Type\Line #	Model results converted into ASCII format (XYZ) databases that contain grid referenced and georeferenced coordinates as well as corresponding Geosoft database (GDB) versions.
\Crew Log\	Production summary and daily log in PDF Format

Respectfully submitted,

**Aurora Geosciences Ltd.**

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