LOGISTICAL REPORT

FOR

TASGOLD LTD.

3D INDUCED POLARIZATION SURVEY

ON THE

WART HILL PROPERTY

SMRV Project

Elliot Bay, Tasmania

SURVEY CONDUCTED BY
SJ GEOPHYSICS LTD.
NOVEMBER – DECEMBER 2005

REPORT WRITTEN BY
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1 Introduction

A 3D Induced Polarization survey was conducted on Tasgold's Wart Hill property. The property is located 4km inland from the southwestern coast of Tasmania, near Elliot Bay. Previous geophysical, geochemical and drilling programs have defined a volcanic hosted massive sulphide (VHMS) base and precious metal horizon on the V19 grid, which is folded and displaced by a major fault. The 3D-IP survey will be used to define this horizon on the other side of the fault, and to provide primary drill targets. Major ore deposits have been found in geologically similar environments 125km to the north. The IP survey will also be used to help find the source of zinc soil anomalies on V34, the second grid adjacent to V19.

The geophysical survey was completed by SJ Geophysics Ltd. from November 24 to December 22, 2005. Data processing and quality control were completed on-site by the field geophysicists. During the survey, IP data for the V19 grid was sent to the SJ Geophysics office in Delta, Canada for inversion modeling. Some preliminary results were thus available on-site, and were used to guide the direction of the survey. Final inversion modeling was completed after the IP crew demobed, with geophysical interpretation to be completed by Aimex Geophysics of Perth, WA.

2 Location and Line Information

The Wart Hill Property is located about 8km north of Elliot Bay on the southwest coast of Tasmania, in the Southern Mount Reed Volcanics (SMRV) Project Area as indicated in the figure below. Access to the site is by helicopter from Strahan. Two grids were surveyed: V19 (encompassing Wart Hill), and V34. The camp was located about 4km south of the V19 prospect.

Figure 1: Figure 1.Current Tasgold Ltd. Projects in Tasmania, including Wart Hill (SMRV).

The relief of the area is fairly low, with Wart Hill (approximately 100m) being the highest topographic feature on the survey grid. The vegetation is a mixture of buttongrass plain, scrub, and dense rainforest. Bedrock was close to surface in the buttongrass plains, and outcrops were small but numerous. Several creeks ran through the property, with varying water levels throughout the survey period.

The IP survey was conducted on two overlapping grids. The V19 grid consisted of seventeen 1150m lines spaced 100m apart. Stations were labelled "-20, -19, ..., +25, +26" in 25m intervals on an azimuth of 90 degrees. Although the station spacing was twenty-five meters, the IP data was gathered using 50m current shots on lines 11900N to 12400N and 13000N to 13500N. On repeated current lines, shots were taken on the alternate set of stations (odd station numbers versus even). In order to achieve higher resolution over diamond drill-holes, a tighter 25m current shot spacing was used on lines 12500N to 12900N. Potential dipoles were 50m on all lines, which was necessary to obtain adequate signal strength.

The V34 Grid consisted of fifteen 1000m lines, spaced 100m apart, on the same azimuth (90 degrees) as the V19 grid. Lines 13000N to 13400N were extended 700m to the V19 grid. Current was injected every 50m along these lines, then on the V19 lines for approximately 250m so that the models would overlap. Lines 13500N to 14400N were surveyed with 50m potential dipoles and alternate 50m current shots.

Two sets of location data were taken for both grids. A combination of handheld GPS and clinometer readings were taken to use in the preliminary models. A Differential GPS system was brought in on December 10th and an accurate location for each survey point was collected by Tasgold employees.

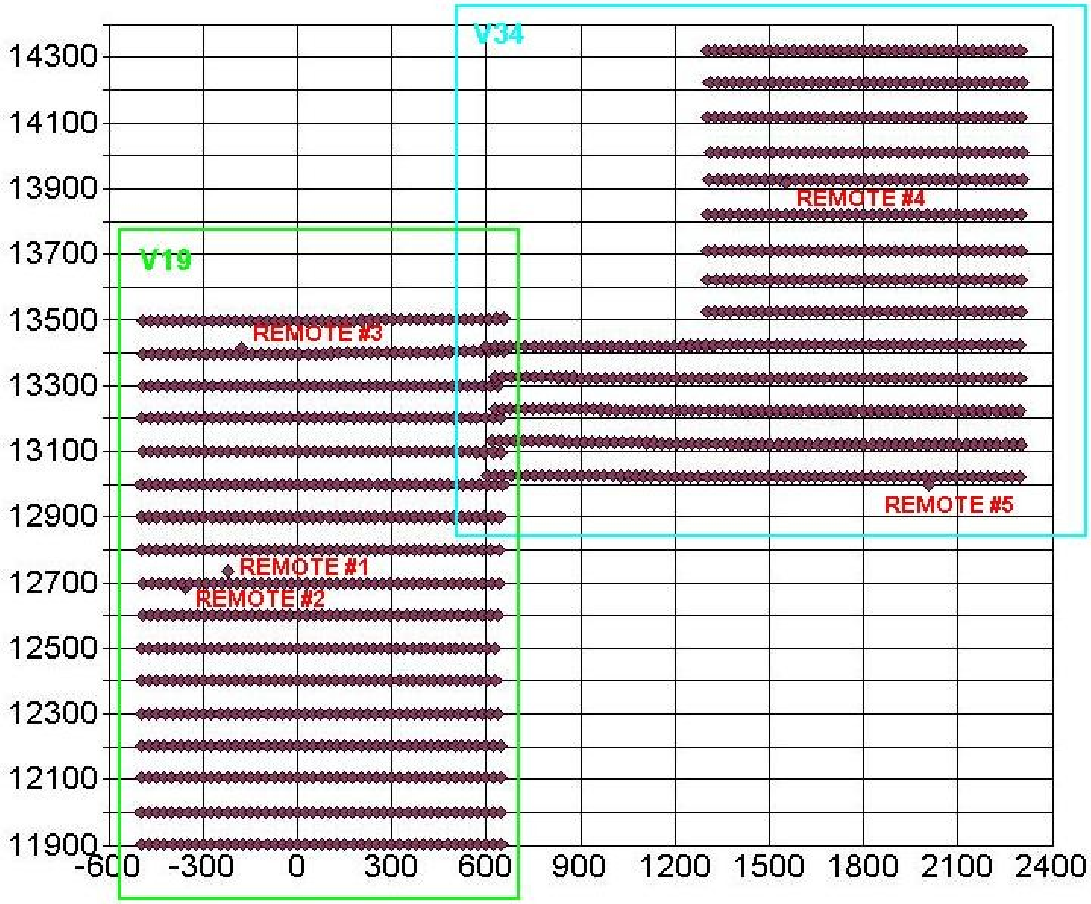

Figure 2: Wart Hill 3D-IP survey stations, including remote current locations.

3 Field Work and Instrumentation

3.1 Field Logistics

The SJ Geophysics crew consisted of Rhys Goldstein (Engineering Physicist), Aaron Snider (Graduate Geophysicist), and Sean Suttie (Graduate Technician). Aaron Snider traveled from Vancouver on November 19 and arrived in Hobart, Tasmania on November 21st. He spent the first several days gathering supplies and helping to arrange the shipment of equipment from Canada. Sean and Rhys arrived on November 22nd and 23rd respectively. The crew and equipment then travelled from Hobart to Strahan on a charter flight. Two helicopter flights were required to get the equipment and crew into camp.

The first full day in camp was spent building IP receiver cables and testing the equipment. The IP survey began on the following day on Nov 27th, which involved mobilizing the gear to the site, training the crew, and taking several test shots.

With a few exceptions, production then proceeded at a rate of one potential line per day (effectively two lines per day, as potential lines alternate with current lines). In an effort to obtain higher resolution over a well studied area (diamond drill holes), 25m current shots were taken for receiver lines 12800N and 12600N.

After the completion of V19 on Dec 8th, a day was spend moving to the V34 grid. Much of the morning was spent getting the gear to the site, due to numerous road problems (sinkholes, broken bridge, steep terrain). Since the IP production had at this point caught up to the line cutting, the crew spent the afternoon chaining lines and acquiring locations on the first lines of the new grid.

Full production on V34 began the following day. Receiver lines 13100N to 13300N were 1600m long, with associated current lines of 2000m that extended into the V19 grid. Due to their length, these lines took two days each to complete. Receiver lines 13500N to 14300N were

1000m long and were each completed in one day. The survey was completed and the gear removed from the grid on Dec 17th. Dec 18th was spent data processing and packing. The remaining days were spent demobilizing or in stand-by waiting for the helicopter. Rhys demobilized from the camp on Dec 19th, while Aaron and Sean left on Dec 20th.

IP and location data processing, quality checking, and preliminary pseudosections were completed on-site in the camp office.

3.2 Survey Parameters and Instrumentation

A modified pole-dipole 3D-IP configuration array was used with 12 dipoles of 50m, 100m, and 150m separations. The IP data was collected using SJ Geophysics' Full Waveform receiver. The current was injected with a 2 seconds on, 2 seconds off duty cycle into the ground via a transmitter. A 3.6 kW GDD transmitter was used during the duration of the program. For the production phase, the 3D configuration consisted of two current lines being recorded into the receiver line. The two current injection locations were on the two adjacent survey lines 100m away from the receiver line.

The potential array was implemented using specialized 8 conductor IP cables configured with 50m takeouts for the potential rods. At each current station, electrodes used consisted of three 0.5m stainless steel rods, 15mm in diameter. For the potential line, the electrodes consisted of 12mm stainless steel "pins" of 0.5m in length.

Three IP remotes were used on V19, and two on V34. Each consisted of three 1m stainless steel rods, 15mm in diameter. They were placed in at distances of 500 - 1000m from the receiver lines in use. The exact location of each remote current was acquired by GPS for use in the geophysical calculations.

4 Geophysical Techniques

4.1 IP Method

The time domain IP technique energizes the ground surface with an alternating square wave pulse via a pair of current electrodes. On most surveys, such as this one, the IP/Resistivity measurements are made on a regular grid of stations along survey lines.

After the transmitter (Tx) pulse has been transmitted into the ground via the current electrodes, the IP effect is measured as a time diminishing voltage at the receiver electrodes. The IP effect is a measure of the amount of IP polarizable materials in the subsurface rock. Under ideal circumstances, IP changeability responses are a measure of the amount of disseminated metallic sulfides in the subsurface rocks.

Unfortunately, there are other rock materials that give rise to IP effects, including some graphitic rocks, clays and some metamorphic rocks (serpentinite for example). So from a geological point of view, IP responses are almost never uniquely interpretable. Because of the non-uniqueness of geophysical measurements it is always prudent to incorporate other data sets to assist in interpretation.

Also, from the IP measurements the apparent (bulk) resistivity of the ground is calculated from the input current and the measured primary voltage. IP/resistivity measurements are generally considered to be repeatable to within about five percent. However, they will exceed that if field conditions change due to variable water content or variable electrode contact.

IP/resistivity measurements are influenced, to a large degree, by the rock materials nearest the surface (or, more precisely, nearest the measuring electrodes), and the interpretation of the traditional pseudosection presentation of IP data in the past has often been uncertain. This is because stronger responses that are located near surface could mask a weaker one that is located at depth.

4.2 3D-IP Method

Three dimensional IP surveys are designed to take advantage of the interpretational functionality offered by 3-D inversion techniques. Unlike conventional IP, the electrode arrays are no longer restricted to in-line geometry. Typically, current electrodes and receiver electrodes are located on adjacent lines. Under these conditions, multiple current locations can be applied to a single receiver electrode array and data acquisition rates can be significantly improved over conventional surveys.

In a common 3D-IP configuration, a receiver array is established, end-to-end along a survey line while current electrodes are located on two adjacent lines. The survey typically starts at one end of the line and proceeds to the other end. A typical 12 dipole array normally consists of a one 100m dipole, followed by eight 50m dipoles and then three more 100m dipoles at the end of the array. In some areas these spacings are modified to compensate for local conditions such as inaccessible sites, streams, and overall conductivity of ground. Current electrodes are advanced along the adjacent lines, starting at approximately 200m from the centre of the array and advancing approximately 200m through the array at 50m increments. At this point, the receiver array is advanced 200m and the process is repeated down the line. Receiver arrays are typically established on every second line (200m apart) thereby providing subsurface coverage at 100m increments.

4.3 Inversion Programs

"Inversion" programs have recently become available that allow a more definitive interpretation, although the process remains subjective. The purpose of the inversion process is to convert surface IP/Resistivity measurements into a realistic "Interpreted Depth Section." However, note that the term is left in quotation marks. The use of the inversion routine is a subjective one because the input into the inversion routine calls for a number of user selectable variables whose adjustment can greatly influence the output. The output from the inversion routines do assist in providing a more reliable interpretation of IP/Resistivity data, however, they are relatively new to the exploration industry and are, to some degree, still in the experimental stage.

The inversion programs are generally applied iteratively to evaluate the output with regard to what is geologically known, to estimate the depth of detection, and to determine the viability of specific measurements.

The Inversion Program (DCINV3D) used by the SJ Geophysical Group was developed by a consortium of major mining companies under the auspices of the UBC-Geophysical Inversion Facility. It solves two inverse problems. The DC potentials are first inverted to recover the spatial distribution of electrical resistivity, and, secondly, the chargeability data (IP) are inverted to recover the spatial distribution of IP polarizable particles in the rocks.

The interpreted depth section maps represent the cross sectional distribution of polarizable materials, in the case of IP effect, and the cross sectional distribution of the resistivity, in the case of the resistivity parameter.

Appendix 1: Instrument Specifications

SJ Full Waveform Digital IP Receiver

Technical:

Input impedance:	10 Mohm
Input over voltage protection up to 30V	
External memory:	Unlimited readings
Number of dipoles:	4 to 16 +, expandable.
Synchronization process on primary voltages signals is done by post processing software	
Proprietary intelligent stacking process rejecting strong non-linear SP drifts	
Common mode rejection:	More than 100 dB (for Rs =0)
Self potential (Sp)	: range:-5V to + 5V
	: resolution: 0.1 mV
Ground resistance measurement range:	0.1-100 kohms
Primary voltage	: range: 1mV - 15V
	: resolution: 1µV

General:

Dimensions:	50x50x25 cm (includes carry case and all components)
Weight (with the internal battery):	15 kg
Operating temperature range:	-20°C to 40°C
Case in fiber-glass to resist field shocks and vibrations	

GDD Tx II IP Transmitter

Input voltage:	120V / 60 Hz or 240V / 50Hz (optional)
Output power:	1.4 kW maximum.
Output voltage:	150 to 2000 Volts
Output current:	5 ma to 10Amperes
Time domain:	Transmission cycle is 2 seconds ON, 2 seconds OFF
Operating temp. range:	-40^0 to $+65^0$ C
Display:	Digital LCD read to 0.001A
Dimensions (h w d):	34 x 21 x 39 cm
Weight:	20kg.