LOGISTICAL REPORT

FOR

COPPER STRIKE LTD.

3D INDUCED POLARIZATION SURVEY

ON THE

LAKE MARGARET PROPERTY

Queenstown, Tasmania

Lake Margaret Grid: Approximately 42^0 00'S 145^0 30' E

SURVEY CONDUCTED BY
SJ GEOPHYSICS LTD.
FEBRUARY 2006

REPORT WRITTEN BY
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1 Introduction

A 3D Induced Polarization survey was conducted on Copper Strike Ltd.'s Lake Margaret property. The property is situated near Queenstown in western Tasmania, about 1.5 kilometers from the Lake Margaret Power Station.

Lake Margaret is located immediately north of, and on strike from the producing Mt Lyell Copper Mine. Previous geophysical and geochemical data have defined drill targets on the Great Lyell Fault. The purpose of the 3D-IP survey was to assist in defining viable drill targets, and to evaluate the mineral potential of the property.

The ground geophysical program was completed by SJ Geophysics Ltd. from February 14 to 25, 2006. Initial quality control was performed on site by the field geophysicist, while the final data processing and inversions were carried out in the offices of SJ Geophysics Ltd.

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

2 Location and Line Information

The Lake Margaret property is located about 8km north of Queenstown, in western Tasmania. The project area is indicated on the mineral deposit map in Figure 1. Access to the site is north from Queenstown along highway A10 then along a Hydro Tasmania access road to the Lake Margaret power station. The final 1km to the trailhead is along an extremely steep 4WD track to the top of the Lake Margaret Pipeline. This track is gated at the power station and a key must be obtained from Hydro Tasmania. Finally gear must be taken in on foot to the grid, approximately 1km along an overgrown and extremely slippery corduroy track. Motel accommodation for the crew was in Queenstown.

The relief of the area is extremely steep, the grid being located on a steep mountain slope, and several deep, heavily forested ravines. The vegetation varies from second-growth rain forest, to scrub, to buttongrass. Several major creeks run through the property, and water levels increased towards the end of the survey. Outcrops are few and scattered, mainly on the western part of the property, and along the creek beds. The eastern ends of all lines stop at the base of the Owen Conglomerate cliffs.

The IP survey was conducted on a single 1km x 1km grid, which consisted of five lines lines varying in length from 700 – 900m. Existing station laths were used, located every 25m. Although the station spacing was 25m, IP data was gathered using 50m current shots. On repeated current lines, shots were taken on the alternate set of stations. Potential dipoles were 50m on all lines. Line spacing was 200m, with lines labeled 8250N, 8450N, 8650N, 8850N, and 9050N.

Grid access was extremely limited with two possible access points along the northern section of the grid. A single baseline provided the only possible access to all five lines. The cut lines of the historic grid had been trimmed 5 years ago, and the extensive undergrowth, extremely steep terrain , and steady rain hampered production.

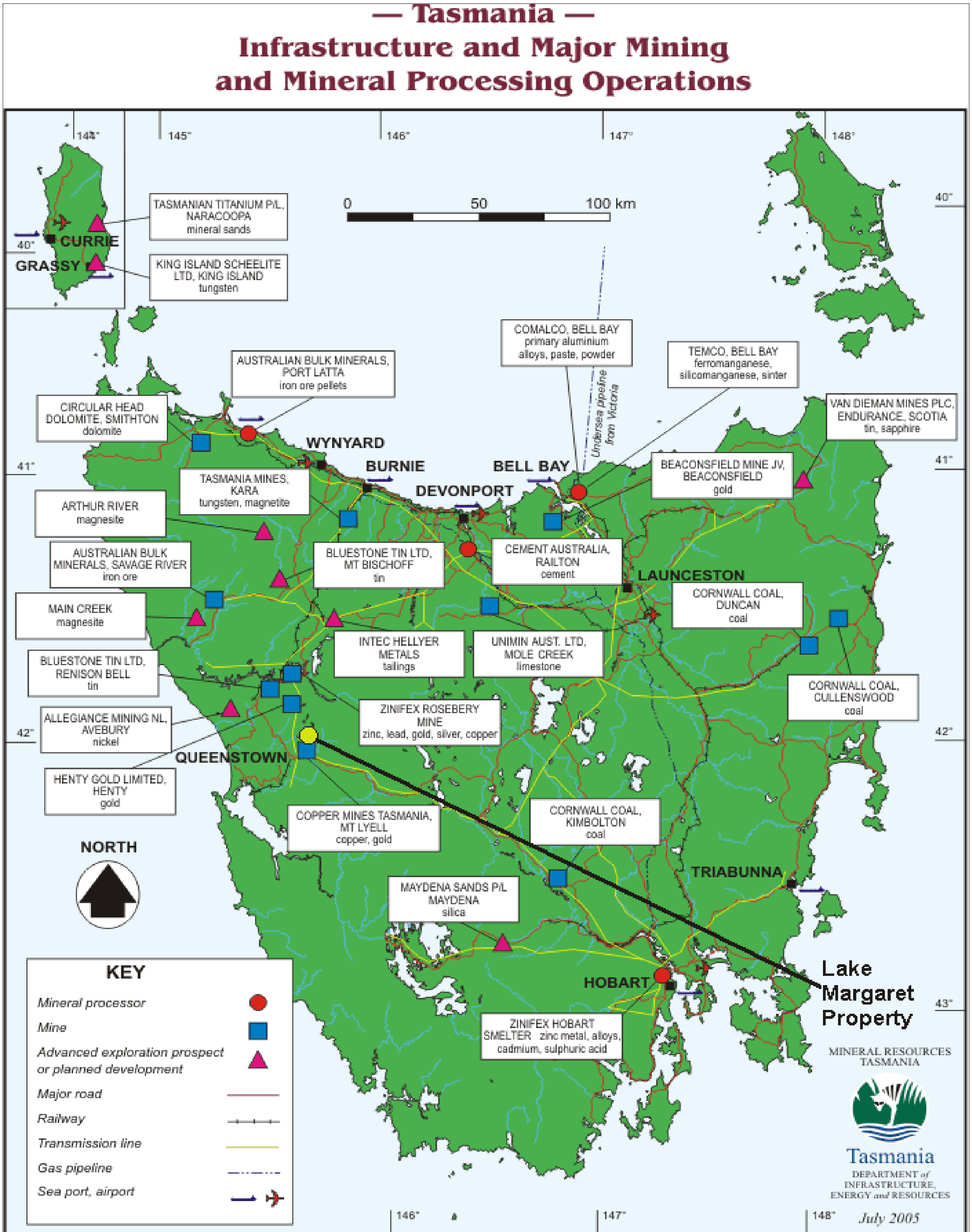

Figure 1: Location Map of Lake Margaret Project

Location data was gathered by the field crew, and consisted of clinometer readings, and GPS points where possible. A Digital Terrain Model (DTM) was used for the final inversion. The cut grid was not well-located, with marked station laths differing from actual UTM coordinates by as much as 100m in some areas.

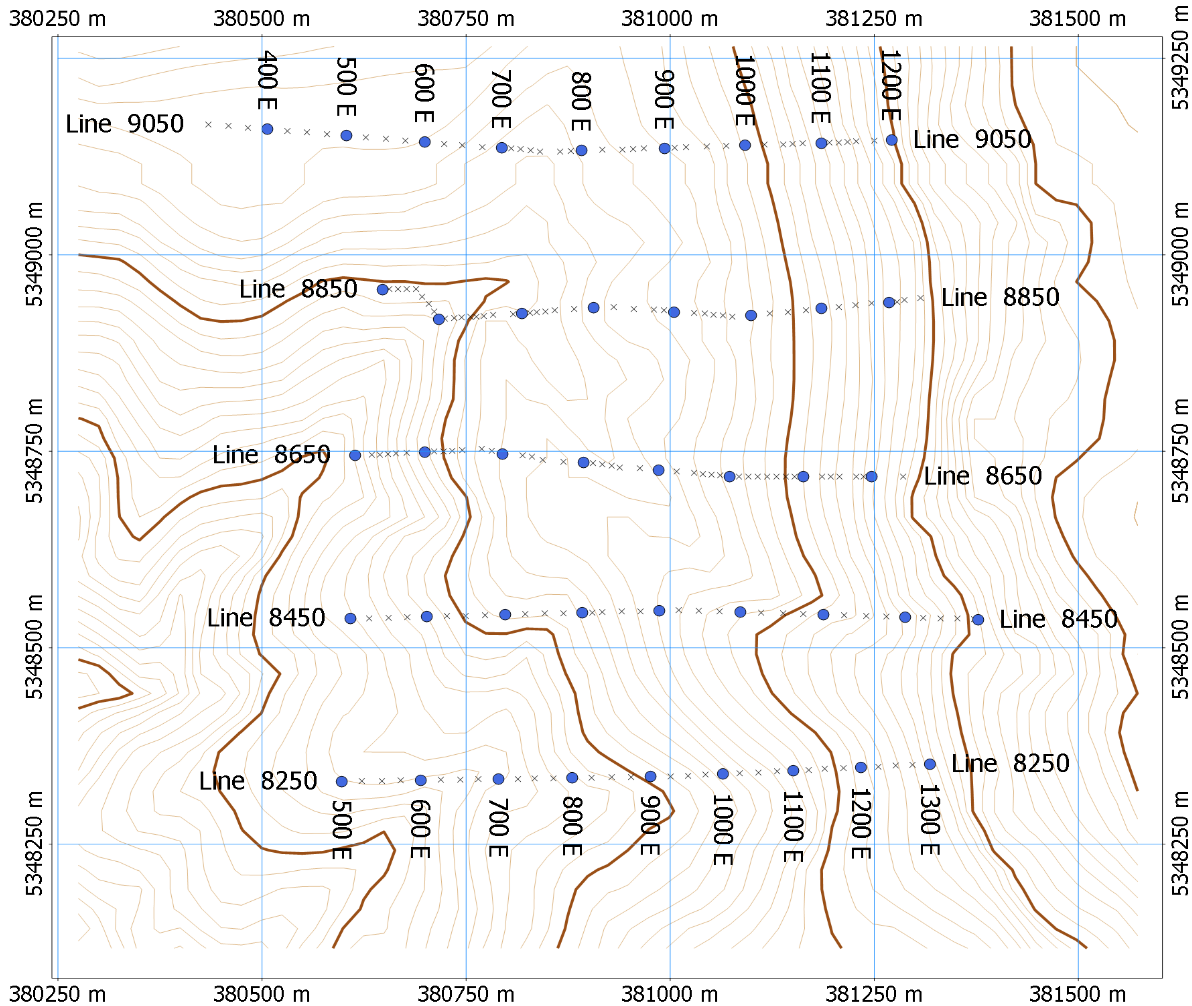

Figure 2: Lake Margaret 3D-IP grid and topography

3 Field Work and Instrumentation

3.1 Field Logistics

The SJ Geophysics Ltd. crew consisted of three SJ Geophysics employees: Aaron Snider (Geophysicist), Sean Suttie (Geophysical technician), and Cameron Scarlett (field assistant). Two other crew members were brought in from Hobart to assist with the survey: Rizal Frival, and Patrick Davies.

Aaron, Cameron and Sean mobilized by vehicle on February 12, 2006 from Warwick, Queensland with the geophysical instrumentation and made their way to Launceston, Tasmania. The crew arrived in Launceston on February 14 and spent the day purchasing and organizing survey gear (hire truck, generator, radios,etc). The next day the hired gear was picked up and Aaron mobilized to Queenstown to arrange crew accommodations and make contact with Hydro Tasmania about site access. Cameron and Sean spent the night in Launceston due to a medical complication and mobilized to Queenstown the next day. February 16 was spent meeting with Hydro, and scouting the site. Location data was also gathered on 1.5 lines, and equipment was assembled. All 5 crew members met in the evening of February 16. The next day was spent carrying the equipment into the site, and setting up cable and wire on the first three lines. Also, a safety meeting was held, and a test survey was conducted. On February 18, full production began, on lines 9050 (current 1), 8850 (potential), and 8650 (current 2), and continued at a rate of one potential line a day, until February 21. At this point, one of the field assistant's had to leave the survey to return to university. The crew spent February 21 setting up the next lines, and gathering GPS and clinometer readings, while Aaron finished processing the first few days data and sent these to Vancouver for further examination. On February 22, only one current line was surveyed due to multiple radio failures. The corresponding current line was surveyed the following day, and the wires were set up for the final day's production. On February 24, the final three lines were surveyed and all equipment and wire removed from the site. The crew then demobilized to Launceston and Hobart on February 25.

IP and location data processing and quality checking took place on-site by the SJ Geophysics crew and the preliminary and final data inversions took place at the SJ Geophysics office in Vancouver, Canada.

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 consists of two current lines being recorded into the receiver line. The current lines are usually located on either side of the receiver line, and subsequent lines are surveyed with a single current line overlap. However, a line spacing of 200m and a potential station spacing of 50m led to many null-coupled dipoles. Putting in extra current lines 100m from the potential lines was not a feasible option due to the thick vegetation and environmental requirements. Therefore, to improve near-surface resolution a 'second-pass' of the grid was taken, with the potential array located on the previous current lines. The new current lines were then either located on previous potential lines, or, on the edges of the grid, along the active potential line. This setup is summarized in Table 1. Thus, data was recorded along all five receiver lines, producing a higher resolution 3D-IP dataset.

Production Date	Potential Line	Current Line 1	Current Line 2
Feb 18	8850N	9050N	8650N
Feb 19	8450N	8650N	8250N
Feb 20	8250N	8650N	8250N
Feb 22-23	8650N	8450N	8850N
Feb 24	9050N	8850N	9050N

Table 1: Surveyed 3D-IP lines.

The potential array was implemented using specialized 8 conductor IP cables configured with 50m takeouts for the potential rods. At each current station, electrodes consisted of two 1.0m stainless steel rods, 15mm in diameter. For the potential line, the electrodes consisted of 12mm stainless steel “pins” of 0.5m in length.

A single IP remote was used, located, approximately 500m from the northwest corner of the grid, near the wooden pipeline and 4WD access track. The remote current consisted of three 1m stainless steel rods, 15mm in diameter. The exact location of the 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-24 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:	-20ºC to 40ºC
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.