Zonge Engineering and Research Organization (Australia) Pty Ltd

Mount Wells
DDIP Survey

Logistics Summary

August 2008

for

Outback Metals Ltd.

Compiled by:

S.Mann

Report No: Job 820 Date : August 2008

Zonge Engineering & Research Organization (Australia) Pty Ltd

98 Frederick Street Welland S.A. 5007

Tel +61 8 83404308 Fax +61 8 83404309

CONTENTS

TABLES

FIGURES

1. SUMMARY

During August 2008 Zonge Engineering and Research Organization (Zonge) mobilised a three-person geophysical field crew to the Mount Wells prospect near Pine Creek N.T. to conduct a Dipole-Dipole Induced Polarisation (DDIP) survey for Outback Metals Ltd. The survey was to have been completed over two lines, each approximately 700 metres long and over existing workings.

The survey commenced on the 5th August 2008 and was terminated on the 11th August 2008 in consultation with the Client due to unacceptably high resistivity in the area to be surveyed. The Zonge field Geophysicist in consultation with Outback Metals, Zonge head office and the consulting Geophysicist (Mathew Cooper of Resource Potentials) determined that data acquisition was not possible in the given conditions without very time consuming preparation. Given this it was determined that the DDIP technique was unsuitable for mapping the existing mineralisation.

2. IP INSTRUMENTATION

A Zonge multipurpose GDP-32 receiver was used to take all of the IP data for this project. The raw data from each day was downloaded every evening from the receiver to laptop computer and emailed to Zonge's Adelaide office. Preliminary processing and plotting are completed in the field. DDIP transmitted fields were generated with a Zonge GGT-10 geophysical transmitter which was powered by a ZMG-7.5 generator system throughout the survey period. Signal frequency and synchronisation were controlled directly by an XMT-32 controller.

Porous ceramic pots filled with a saturated copper sulphate solution were used as non-polarisable electrodes.

3. IP SURVEY PARAMETERS

The planned survey lines were oriented as shown in Figure 2 and were to be read at 25 metre a-spacing and station spacing providing data coverage of n=1 to 8.

No data were acquired due to the unusually resistive conditions encountered over Mount Wells. The preparation time required to reduce transmitter electrode resistance to a point where transmission were possible was considered impractical.

4. PRODUCTION ISSUES

Early delays occurred due to ambiguities in the line coordinates provided to Zonge. Specifically, coordinates relevant to MGA zone 53 were provided which did not correlate to the Mount Wells area which lies in MGA zone 52. This was rectified toward the end of the first day when recalculated coordinates were provided by Resource Potentials.

Preparation and an attempt to record data were delayed extensively due to the unexpectedly difficult terrain over Mount Wells. The difficult terrain (Figure 4) required the crew to carry all water and all electrode preparation equipment along the planned line. Part way through the preparation of line 1 (Figure 2) the Crew Chief decided that the safety of the crew was at risk should preparation on this line proceed. As a consequence, an alternate line over the West Lode was planned (Figure 1). Preparation was completed on this line and the crew attempted to record data. The resistance between the transmitter pits (Figure 3) was in excess of 10,000 Ohms in all cases and too high to allow transmission. Subsequent attempts to reduce the resistance between pits was unsuccessful. Given the very resistive conditions and nature of the terrain it was considered that the time required to allow data acquisition to continue was prohibitive and the DDIP technique was impractical. After consultation with Outback Metals Ltd, Resource Potentials and Zonge management the survey was cancelled.

Tyre damage contributed to minor delays however no other significant delays to production occurred during the survey. More detailed information on daily production may be found on the accompanying disc under *"Production Reports"*.

5. PRODUCTION SUMMARY

Table 1 gives a summary of the production of Job 820. More detailed information on daily production may be found on the accompanying disc under *"Production Reports"*.

Table 1 Production Summary of Job 820

Date	Description
Tue-5/8/08	Travel from Adelaide to Darwin, collect vehicles and equipment and travel to Emerald Springs
Wed-6/8/08	Travel to survey site, make up receiver electrodes and lay transmitter wires for Time Domain IP
Thu-7/8/08	Travel to site, repair flat tyre and lay out wires on the Western lode as advised by Client
Fri-8/8/08	Continue to lay out transmitter wires and dig receiver pits on Western lode line
Sat-9/8/08	Continue to dig pits and lay out receiver wires. Encountered extremely high resistance levels in pits (12000 ohms). Informed Client - survey terminated.
Sun-10/8/08	Pack all survey equipment, load onto vehicles and drive to Darwin
Mon-11/8/08	Deliver equipment to NQX for freighting to Adelaide. Crew travel to Adelaide by air.

6. DATA PROCESSING

No data were processed during Job 820.

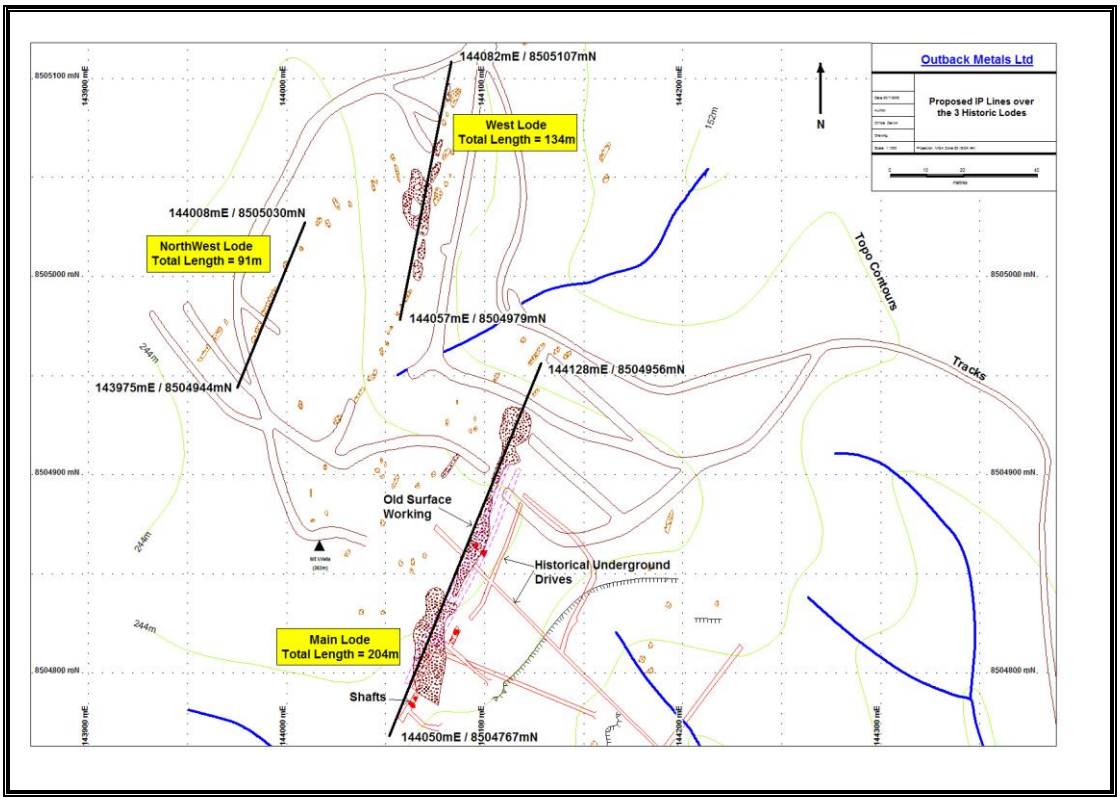

Figure 1 Mt Wells Proposed DDIP Survey Layout

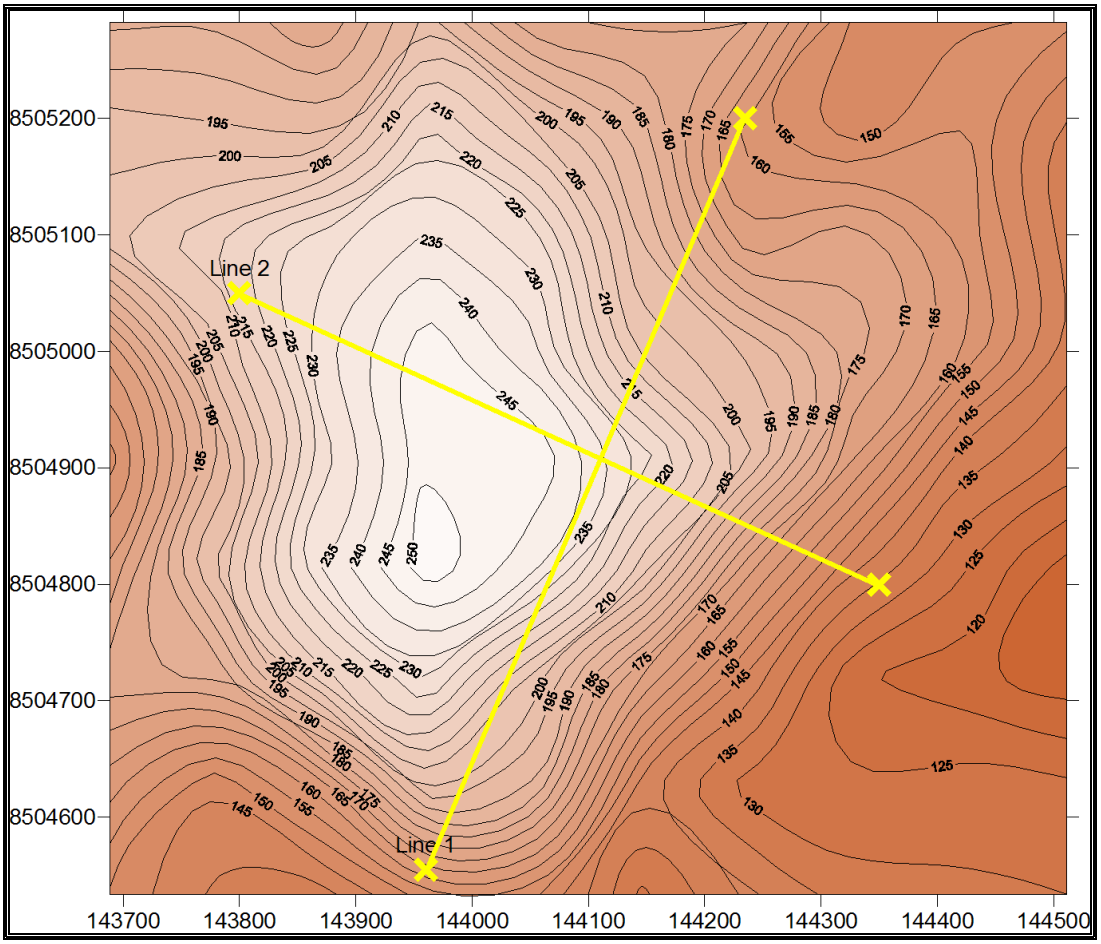

Figure 2 Planned DDIP lines over Mt Wells

Figure 3 Transmitter Pit

Figure 4 Terrain over Mount Wells