

## Memorandum

**To:** Michael Vicary  
**cc:**  
**From:** Chris Dauth  
**Date:** August 2002  
**Subject:** Red Hills DHEM

---

### INTRODUCTION

Down-hole electromagnetic (DHEM) data were acquired on diamond drillhole RH22 at the Red Hills Project within EL29/1994. The data were acquired by Outer Rim Exploration Services during January 2002 using the CRONE three component DHEM system. The aim of the survey was to delineate conductive off-hole EM response for the purpose of gold exploration. This MEMO documents the survey specifications and results.

### SURVEY SPECIFICATIONS

Survey Contractor: Outer Rim Exploration Services  
Survey Date: January 9<sup>th</sup> and 18<sup>th</sup> 2002  
System: CRONE PEM  
Time Base: 10 msec  
Ramp Time: 0.3 msec  
# Channels: 26  
Components: X, Y, and Z 0-780m  
Loop Size: 500m x 400m  
Current: 15 Amps  
Receiver: Digital #105  
Sample Interval: 10-20m

Drillhole RH22 is collared at 382014mE, 5364406mN (AGD84, AMG55). Down-hole survey details are tabulated as follows:

Distance	Azimuth	Dip	Depth
0	80	80	0
12	80	80	12
12	80	79.5	24
6	84	79	30
9	84	78.5	39
15	86	78.3	54
9	86	77	63

9	86	77	72
12	84	77	84
11	84	76	95
10	83	76	105
9	83	75.5	114
12	81	75	126
11	83	74	137
10	83	74	147
11	83	74	158
10	82	73.5	168
11	82	73.3	179
10	82	72	189
11	82	72	200
10	82	71	210
11	83	71	221
10	81	71	231
12	82	70.5	243
9	81	71	252
12	81	70	264
9	81	70	273
15	81	70	288
12	81	69	300
12	80	68	312
18	80	67	330
30	80	67	360
29	80	67	389
33	80	66	422
28	82	65	450
30	82	64	480
30	82	64	510
30	82	64	540
30	83	63	570
30	82	62	600
30	83	58	630
30	80	54	660
30	81	51	690
30	81	49	720
25	82	48	745
43	82	47	788

The transmitter loop was situated as a rectangle with corners defined at:

1. 382000mE, 5364400mN
2. 382000mE, 5364900mN
3. 381600mE, 5364900mN
4. 381600mE, 5364400mN

Data were acquired over 2 separate days for logistical reasons. The data are of good quality considering the local electromagnetic noise environment.

## **RESULTS**

Profiles of the DHEM data are presented in the survey logistical report by Outer Rim Exploration Services. Data do exhibit a broad conductor response centred at approximately 400m down-hole. This is interpreted to be associated with current channelling along a weakly conductive black shale. This response is formational and not likely to be associated with economic mineralisation. No further work is recommended.