

Report on

Downhole Electromagnetic (DHEM) Surveys

for

Henty Gold Mine.

in drillholes

LSUD01
LSUD05
MUD01
MUD02
MXUD01
RHD24
RHD25
RHD27
RHD29

October 2012

Report no. : 1207a
Report date : 30/Nov/2012
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Disclaimer

Although care was taken during preparation and processing of the data in this report, you are reminded that inaccuracies or omissions may occasionally occur. Any interpretations, recommendations, or conclusions contained in this report are no more than the opinions of the author(s) and are not presented here as proven facts. You accept all risks and responsibility for losses, damages, costs and other consequences resulting directly or indirectly from using the information in this report.

Map coordinates

Unless noted otherwise, coordinates in this report are
MGA55 (datum: GDA94, projection: Map Grid of Australia zone 55)

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1. Introduction

Outer-Rim Exploration Services (“ORE”) were contracted by Henty Gold Mine to undertake downhole electromagnetic (“DHEM”) surveys in several exploration drillholes between 3rd October and 24th October 2012.

Initially it was planned to survey 17 drillholes however several were blocked close to the surface and no data was collected in these. A total of 9 drillholes were logged. The status of the holes is summarised in the following table.

drillhole	area	status
LSUD01	Lakeside	LOGGED, modelled
LSUD02	Lakeside	blocked at 1m; PVC casing is bent too much for probe to pass
LSUD03	Lakeside	blocked at 1m; possibly silted
LSUD04	Lakeside	blocked at 2m; possibly silted
LSUD05	Lakeside	LOGGED, modelled
LSUD06A	Lakeside	blocked at 2m by something very solid
MUD01	Old Murchison Mine	LOGGED
MUD02	Old Murchison Mine	LOGGED
MXUD01	Muxton	LOGGED
PZ001	Platter Zone	blocked at 10m
RHD24	Red Hills	LOGGED
RHD25	Red Hills	LOGGED
RHD26	Red Hills	blocked at 10m
RHD27	Red Hills	LOGGED
RHD28	Red Hills	collar not found; probably bulldozed when RHD29 drilled?
RHD29	Red Hills	LOGGED
Z15203	near mine site	blocked at 10m

ORE commented that the type of PVC used to case the holes was thinner-walled and of a lesser strength grade than they typically see on other jobs and this may explain the unexpected prevalence of the PVC being apparently crushed or deformed in the hole. ORE recommend using Class 12 (or better) PVC for casing in the future. For the specific “Crone” brand probes used on the present survey the minimum nominal PVC diameter is 40mm.

Of the drillholes logged, only Lakeside LSUD01 and LSUD05 showed any significant anomalous responses and this report gives the details of conductor modelling carried out for these two holes. The data for the other seven holes logged had no significant anomalous responses and downhole profile plots of these are included in Appendix 3.

Digital data for all holes logged are supplied on an accompanying CD disk.

2. Survey Areas

Appendix 2 shows transmitter (“Tx”) loop locations against aerial photography. The first figure gives the regional setting of all loops, and subsequent figures show individual Tx loops in detail along with drill collar locations and vertical projections of the drillhole. (*Note that for the Lakeside*

survey the original data supplied by ORE includes a Tx loop vertex at 384601 E, 5375635 N. This vertex is in error and did not exist. It has been removed from the figure in Appendix 2).

3. DHEM Data Summary

The DHEM data for all drillholes logged are shown in summary form in Appendix 3. This appendix also includes a general technical summary of the equipment manufactured by Crone Geophysics that was used for the survey.

Two separate probes were used to collect the full 3-component data; this required two logging passes of each drillhole. One probe measured the electromagnetic component along the axis of the drillhole and the other probe measured the remaining two orthogonal components. The former is generally referred to by Outer-Rim as the “Z” probe (measuring the “A” component), and the latter as the “XY” probe (measuring the “U” and “V” components).

The convention for the 3-component directions are;

A : axial, ie. along the drill hole, +ve up the drill hole.

U : transverse to axial; in the vertical plane containing the drill hole. At 12 o'clock when looking down the hole.

V : transverse to axial; horizontal, making a right handed set of axes A, U and V. At 9 when o'clock looking down the hole.

The “Z” probe has an effective receiver coil area of 7900m² compared to the “XY” probe with 3000m². This results in the U and V component data being generally noisier in the late-time channels compared to similar times for the A component data.

4. Modelling Conductors

“Maxwell” software (from ElectroMagnetic Imaging Technology, Perth) was used to model the DHEM responses for LSUD01 and LSUD05. This software uses flat plate geometry to approximate conductors intersected or missed by a drillhole.

Two small conductive zones have been intersected by **LSUD01** at about 405m (“Plate C”) and 450m (“Plate B”). Both give narrow positive anomalies in the A component data (Figure 1). Plate C is at about the position of the Henty Fault (Figure 3) and has dimensions of about 25m x 25m, however the data is not distinctive enough to have confidence that these dimensions are very accurate. Plate B appears to be of smaller dimensions, perhaps 10m x 10m but again these dimensions may not be very accurate, and within the Farrell Slates (Figure 3).

The negative response in the A component of **LSUD01** (Figure 1) from about 460m to 510m is indicative of a reasonable conductor close to, but missed by the drillhole. This is the best anomaly detected in the whole survey. The plate has dimensions 100m x 100m and it is about 20m away to the SSW from LSUD01 at its closest approach 480m downhole. Figure 3 shows the position of the plate projected along strike to where it would intersect LSUD01. No existing drillholes have passed through the modelled position of this conductor (Figures 7, 8, 9).

Data from **LSUD05** also indicates that two small conductors were intersected by the drillhole and that in addition one larger conductor was detected off-hole (Figure 2). The two small conductors were intersected at about 165m (“Plate F”) and 230m (“Plate E”). Plate E is at about the position of

the Henty Fault (Figure 4) and has dimensions of about 15m x 15m, while Plate F is 10m x 10m and well within the Mount Black Volcanics. These two intersected conductors, like the two in LSUD01, do not have sufficiently well defined DHEM anomalies to accurately model the plate dimensions – however they are certainly not large conductors.

A negative response in the A component of **LSUD05** (Figure 2) from about 240m to 340m is indicative of an off-hole conductor missed by the drillhole. The anomaly is slightly unusual in that negative response develops to its strongest at time channel 20 (2 milliseconds) but its relative intensity quickly diminishes as time proceeds to the later channels. This specific late-time behaviour could not be adequately modelled however this inability did not have a serious adverse effect on the final Plate D model parameters.

Plate D has dimensions 60m x 60m and it is about 35m away to the NNE from LSUD05 at its closest approach 275m downhole. Figure 4 shows the position of the plate projected along strike to where it would intersect LSUD05. No existing drillholes have passed through the modelled position of this conductor (Figures 7, 8, 9).

Table 1 gives the model plate parameters for the two off-hole conductors detected by the DHEM logs from LSUD01 and LSUD05. Figure 6 shows the surface projection of these two model plates and the drill traces.

	LSUD01	LSUD05
	"plate A"	"plate D"
Reference point	Centre top of plate	Centre top of plate
E_mga	384573	384644
N_mga	5375497	5375371
Depth relative to drill collar	-430	-197
Dip	62.5	62.5
Dip_Direction	290	290
Length of top	100	60
Length of side	100	60
Conductivity-Thickness	10	10

Table 1
Properties of the two primary (off-hole) plate conductors modelled.

5. Further Comments on the Observed and Modelled Data

In Figure 1 and Figure 2 the lack of a good match between observed and modelled responses, even to the degree that the signs of the observed and modelled data are opposite over some depth ranges, appears to be related to the response from the host rock and overburden. It is difficult to accurately model the contribution that the host rock and overburden make to the observed DHEM profile data; that response appears to be too complex to be fully accounted for by adding simple thick or thin conductive plates to the overall model.

Consequently the final model (red profiles in Figures 1 and 2) utilised temporary model plates at the surface to account for the general patterns of the full DHEM profile responses seen in Figures 1 and 2. However these surface plates were too simple to represent the true host rock and overburden

conductivity distribution and so are not described quantitatively in this report. The response from these temporary surface plates can be thought of as a base-level upon which the responses from the deep conductors (Plates A, B, C, D, E, F) are superimposed.

The two conductors, Plate A and Plate D, appear to lie in the same plane within the Farrell Slates. Drillhole LSUD02 (which was not logged) overshot Plate A and goes between Plate A and Plate D (Figures 7, 8, 9). Figure 5 illustrates approximately where the plane of these two plates intersects LSUD02. It would be interesting to check the geological log of LSUD02 at about this position to see if there is any change in lithology that may correlate with the plane of the conductors.

6. Conclusions and Recommendations

Plate A which is off-hole in **LSUD01** offers the best conductor to target by drilling. It is recommended that any drillhole(s) planned to test this anomaly aim to intersect the plate at its geometric centre. Alternatively, or as a second target position, because the modelled DHEM anomaly is more sensitive to the closest side of the model plate, if there is any doubt about the best place to attempt to intersect the conductor then the intersection position should be biased more towards the edge of the plate nearest to LSUD01; perhaps half way between its geometric centre and that edge of the plate.

Plate D which is off-hole in **LSUD05** is not as well defined as Plate A in LSUD01. It is similarly recommended that any drillhole(s) planned to test Plate D aim to intersect the plate at its geometric centre, or perhaps half way between this centre and the edge of the plate nearest to LSUD05.

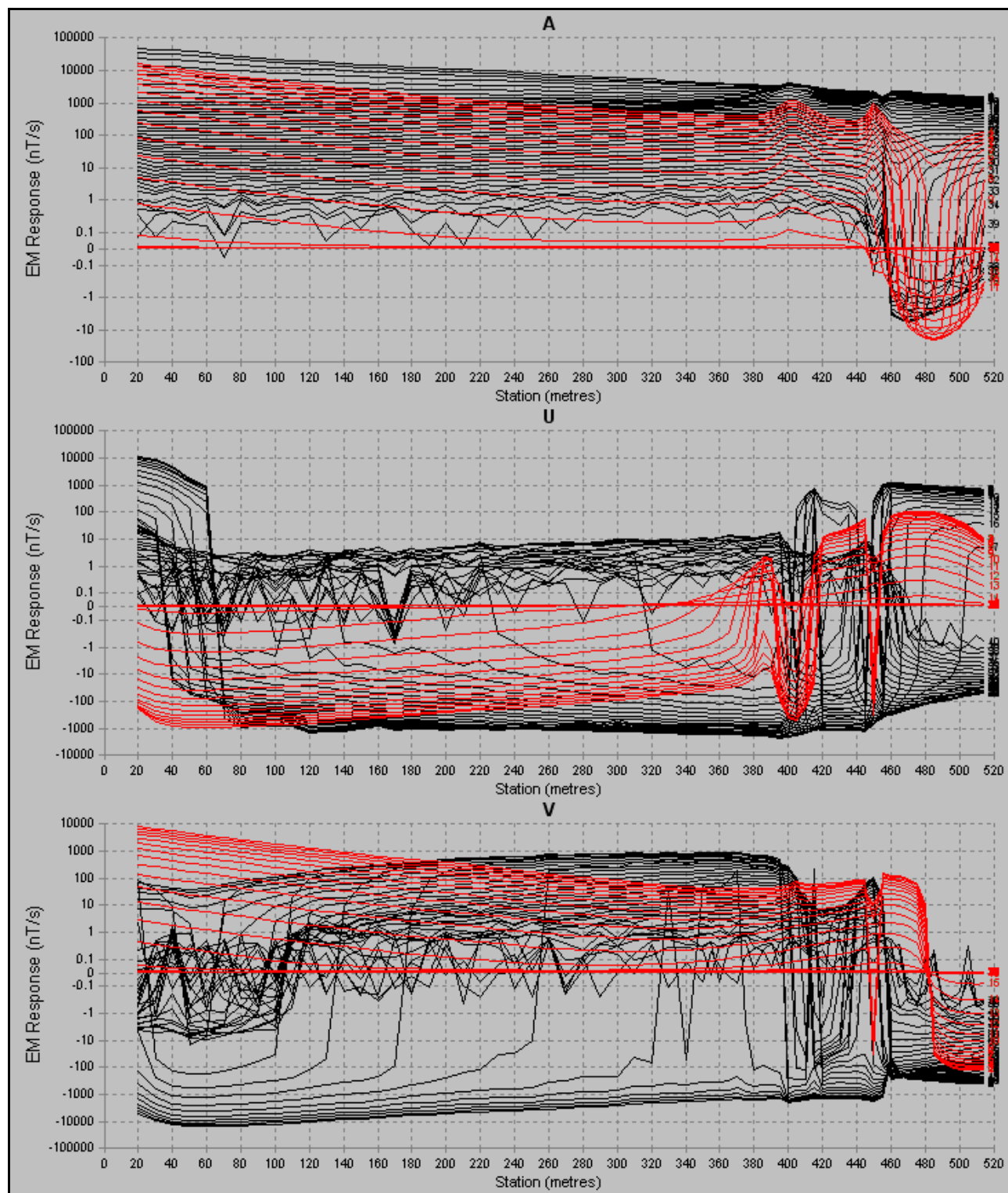


Figure 1
DHEM profile (A,U,V components) for drillhole **LSUD01**
black : observed
red : modelled

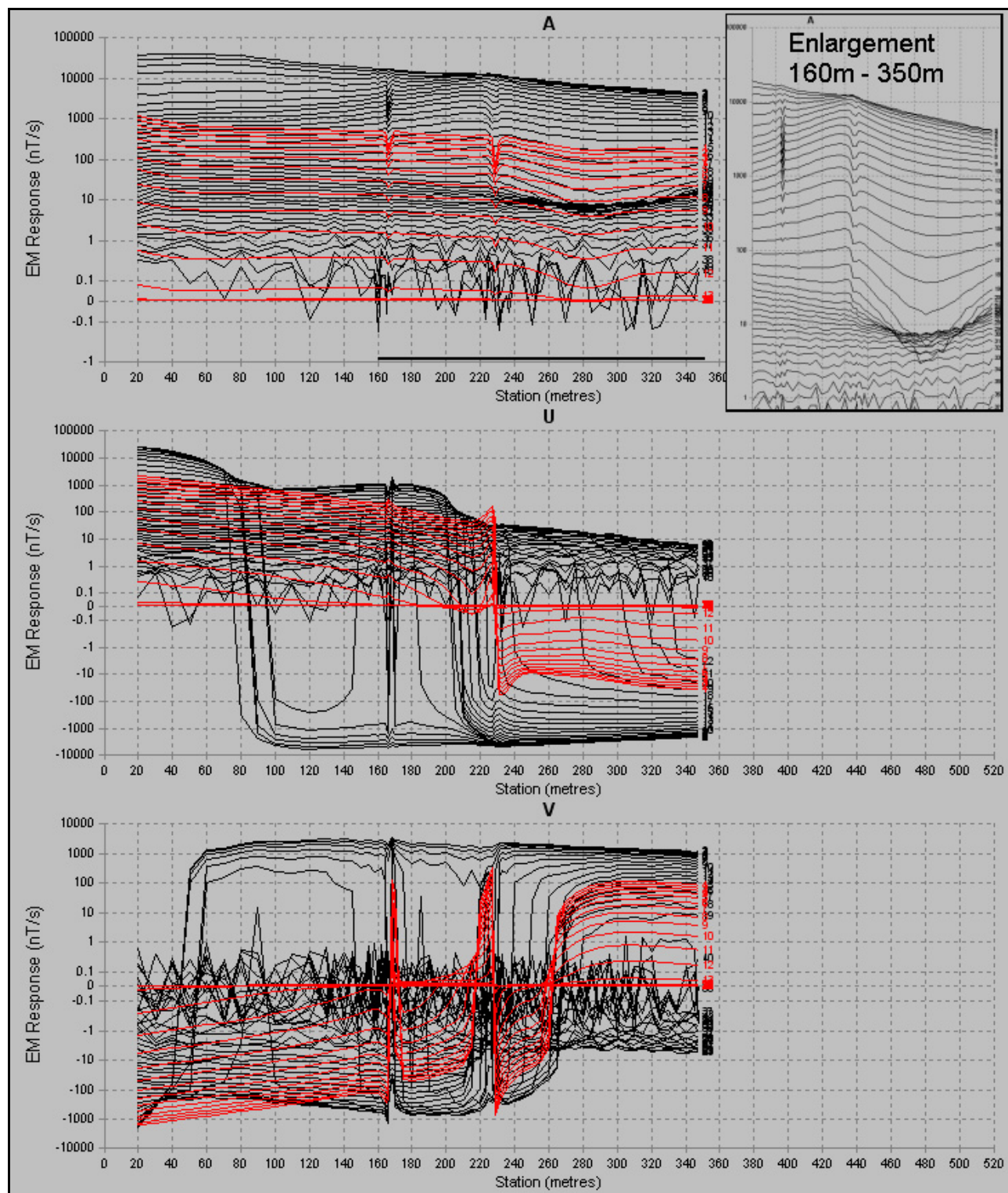


Figure 2
DHEM profile (A,U,V components) for drillhole **LSUD05**
black : observed
red : modelled

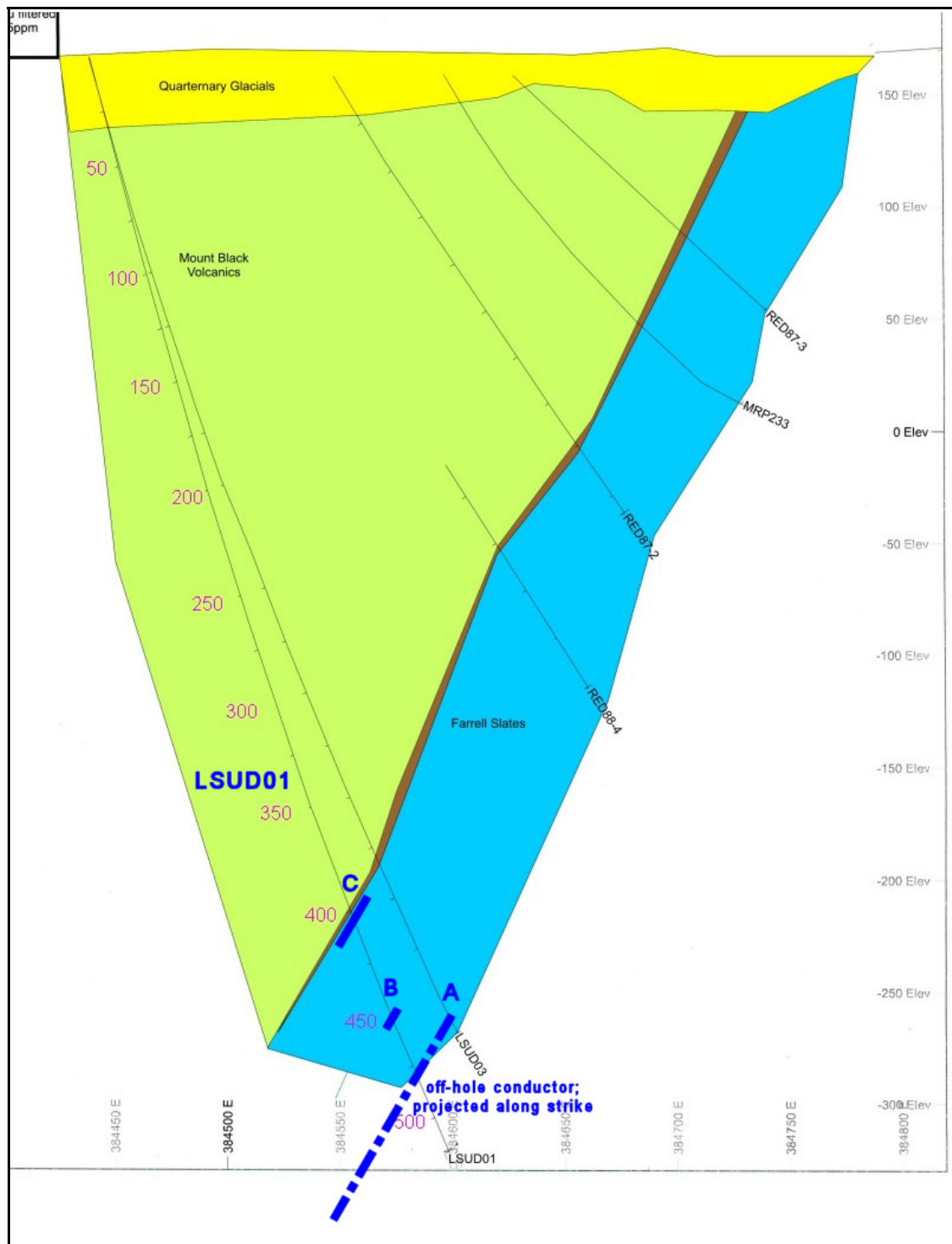


Figure 3
LSUD01 model plates : section 5,375,600 N

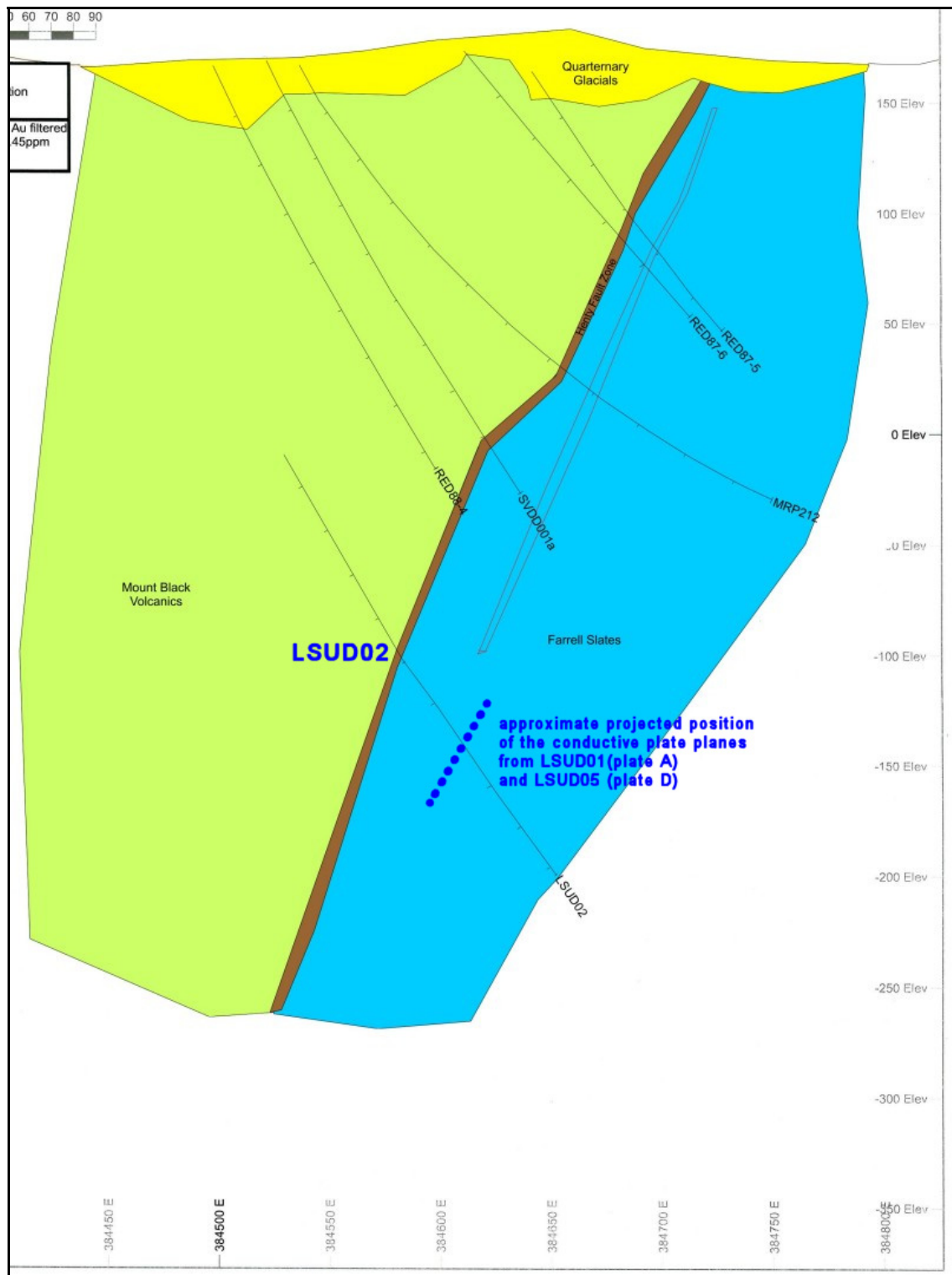


Figure 5
LSUD02 : section 5,375,500 N
 Showing where the model plates from LSUD01 and LSUD05 would project onto this section.
(Note that this is not generated from a calculated model for LSUD02).

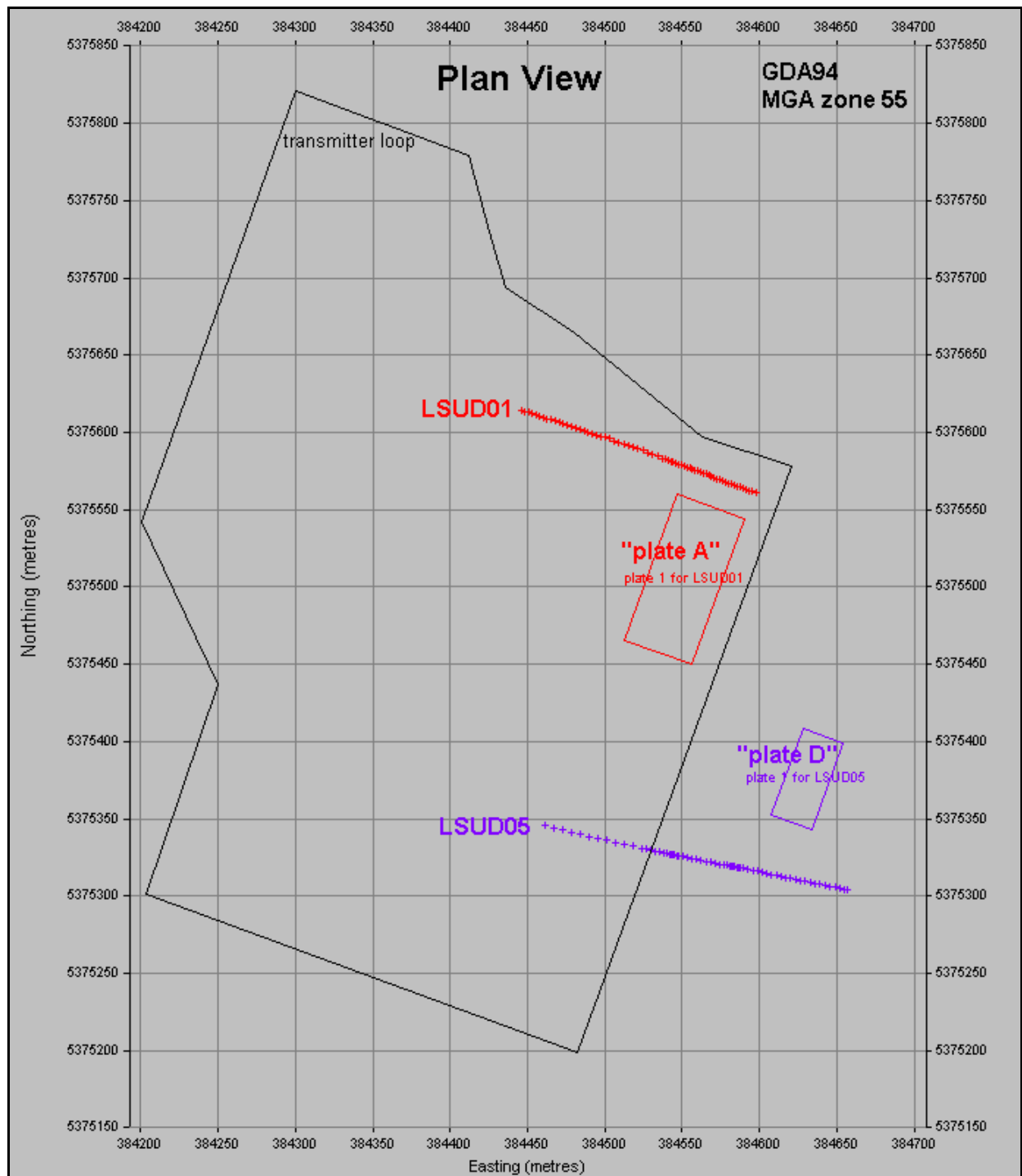


Figure 6
Plan view of vertically projected model plates and drillholes.

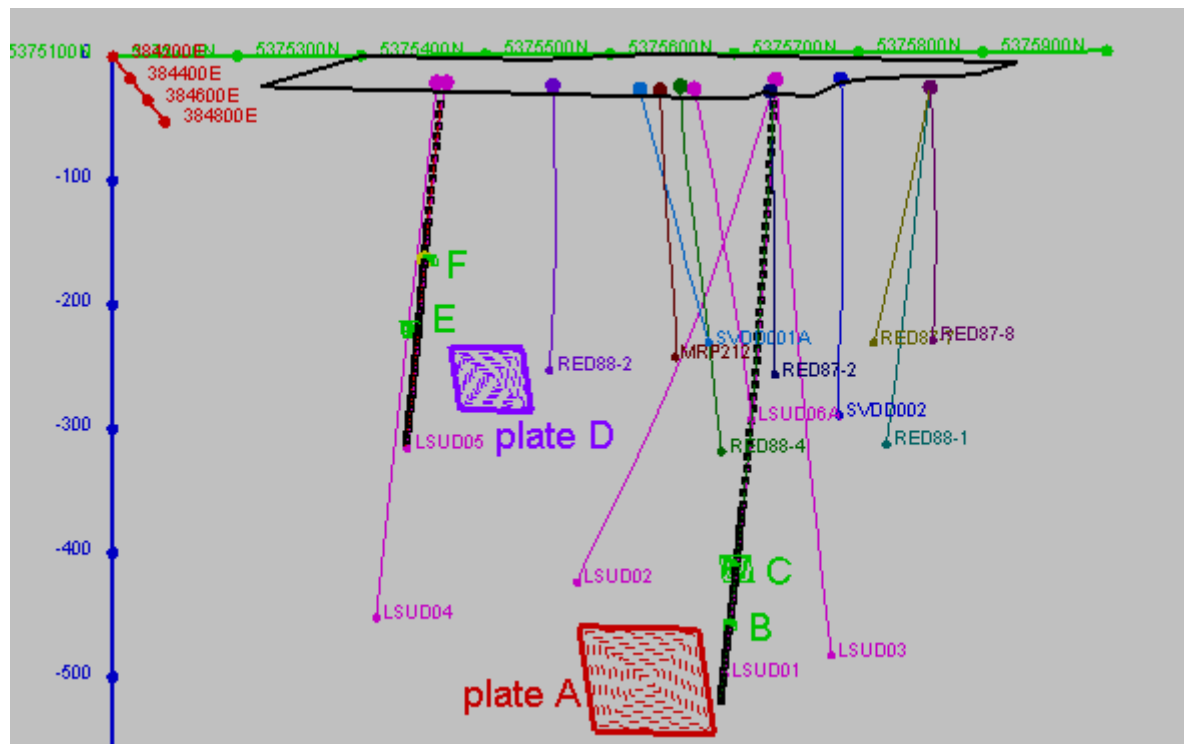


Figure 7
Perspective view of model plates showing existing drilling, looking down and towards WEST.

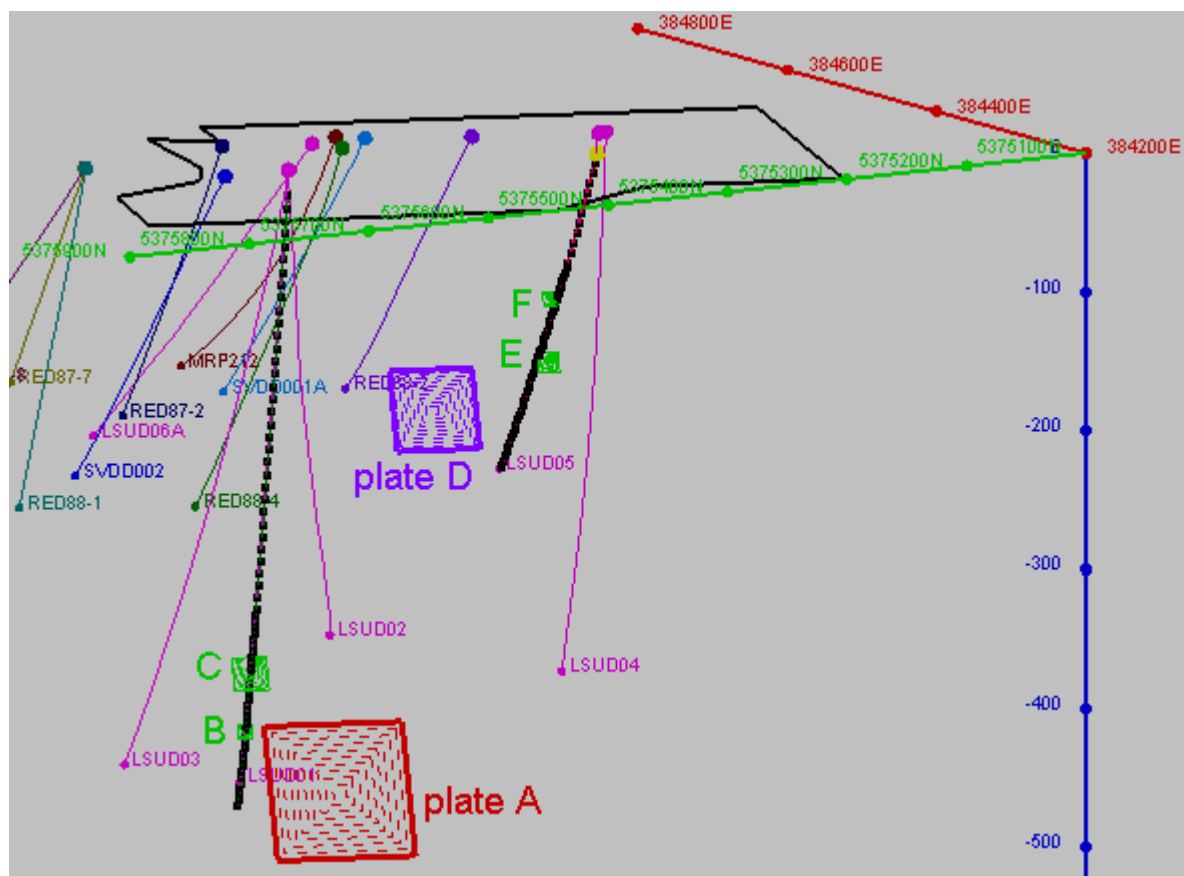


Figure 8
Perspective view of model plates showing existing drilling, looking down and towards SE.

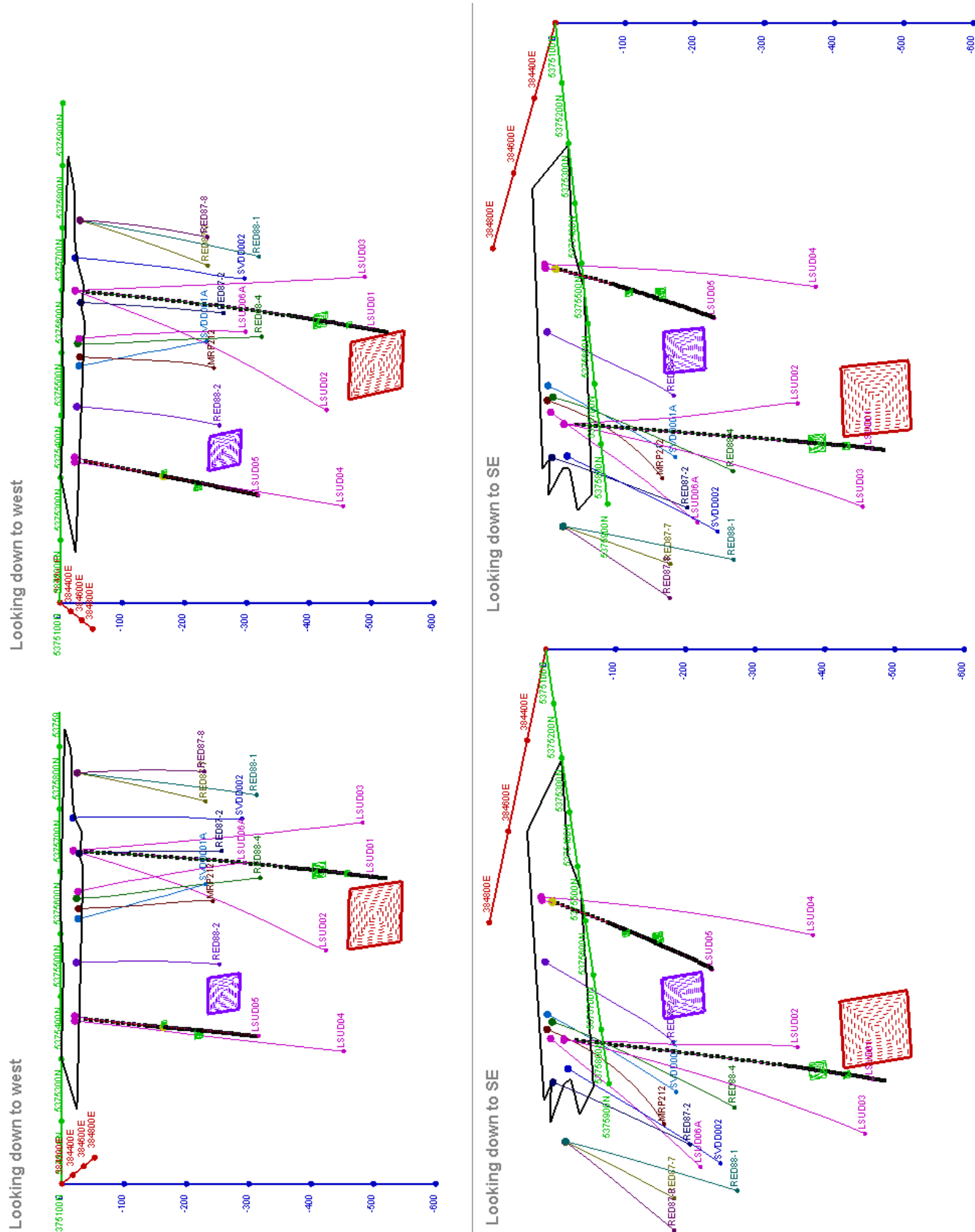


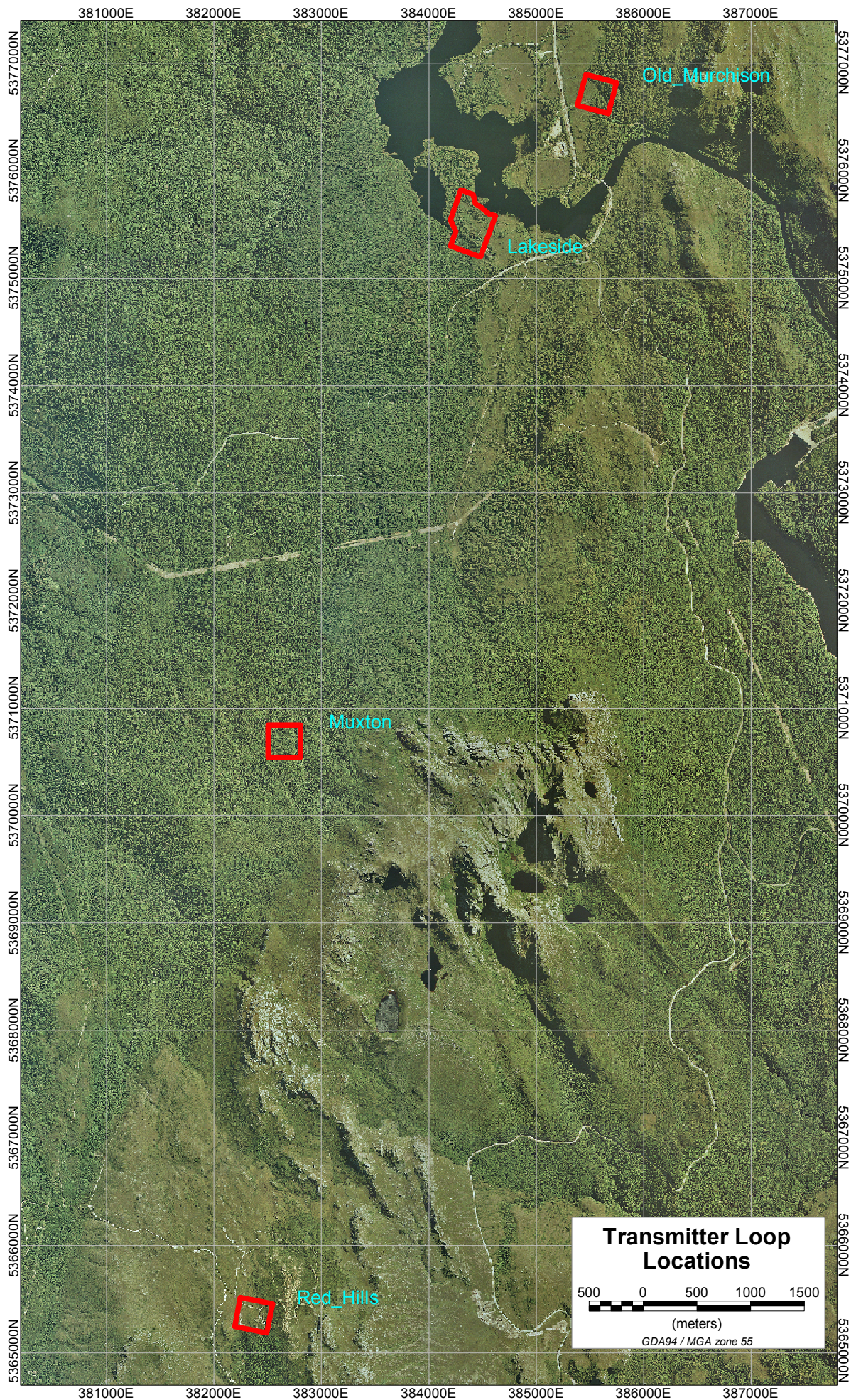
Figure 9
Stereo pairs for perspective views (same directions as Figures 7 & 8).

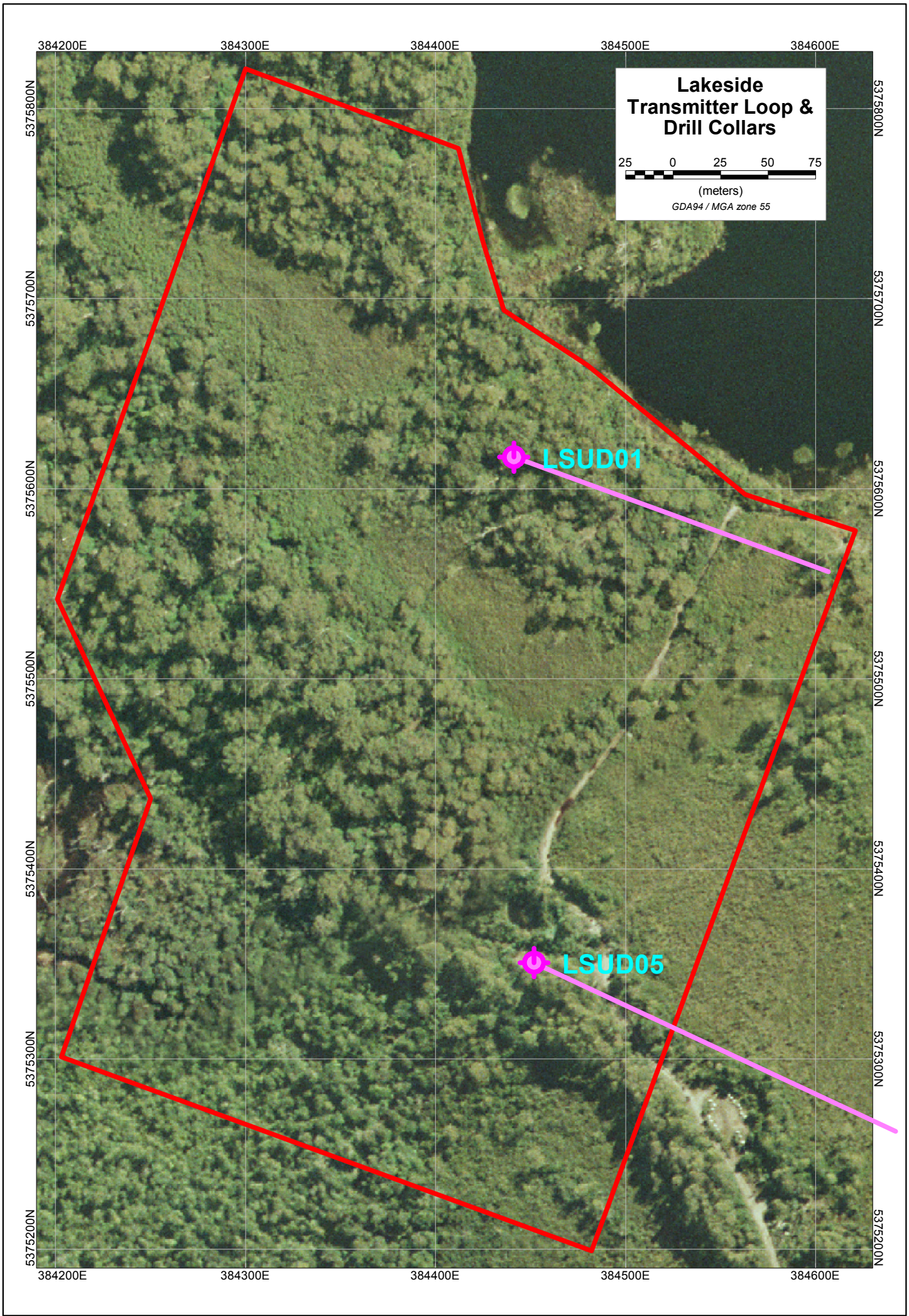
Appendix 1

**see;
Digital data on CD-ROM**

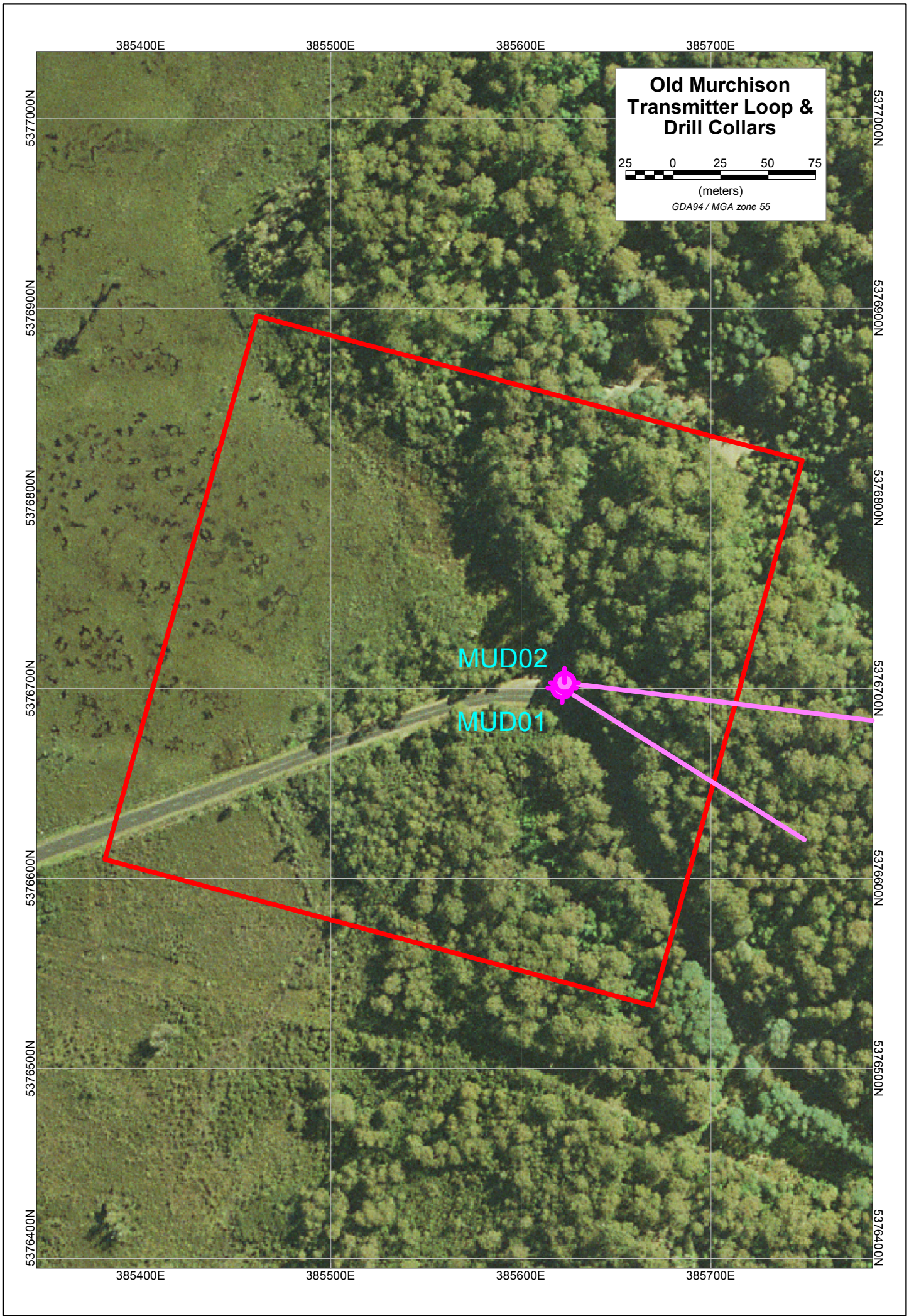
Appendix 2

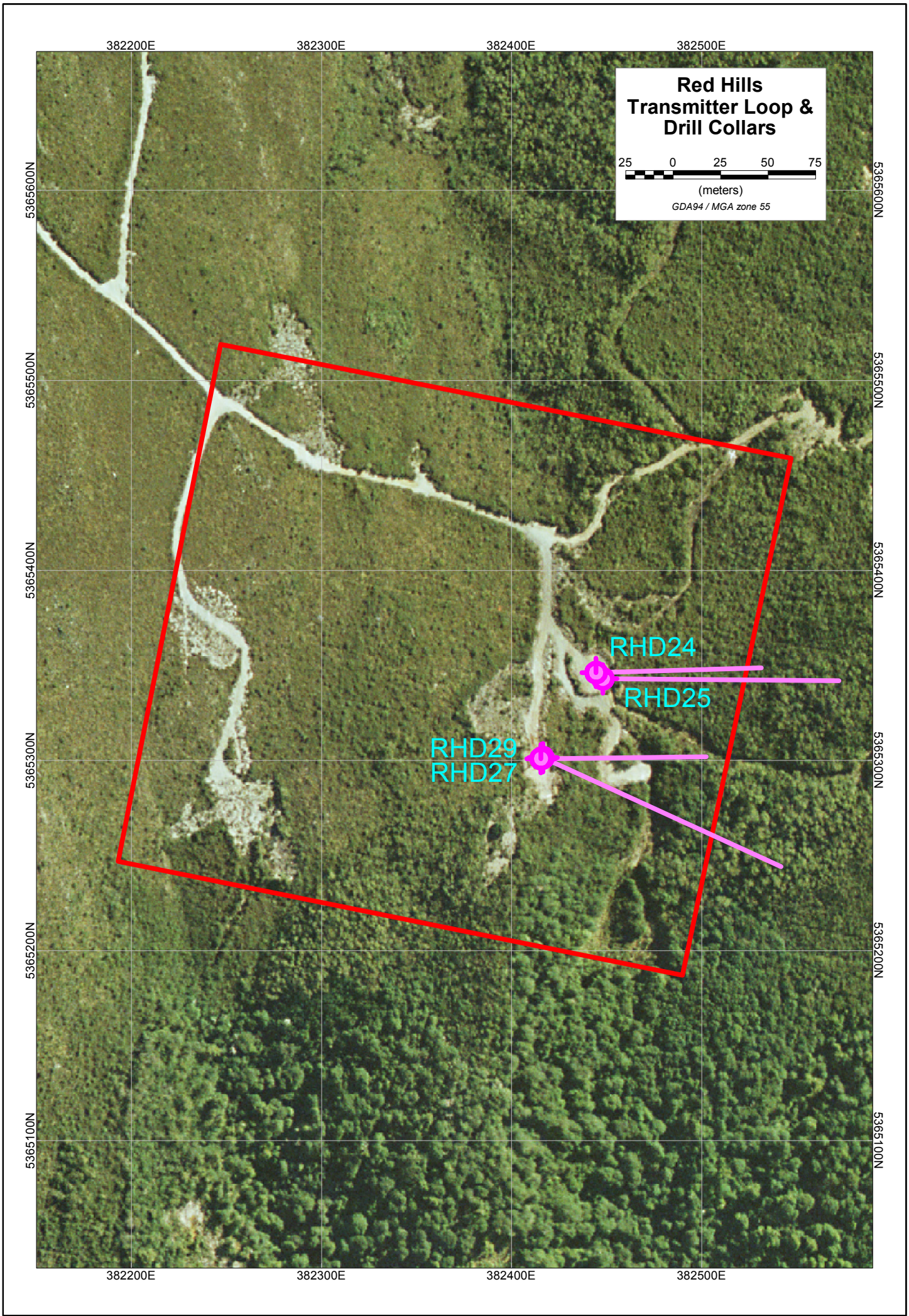
Transmitter Loops on Aerial Photography











**Red Hills
Transmitter Loop &
Drill Collars**

25 0 25 50 75
(meters)
GDA94 / MGA zone 55

RHD24

RHD25

RHD29
RHD27

Appendix 3

Outer-Rim DHEM Data Summary



OUTER-RIM EXPLORATION SERVICES

ABN 88 104 028 417

42 Christable Way,
Landsdale, WA, 6065

Geophysical Contracting Services

100% Australian Owned

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Mail: admin@outer-rim.com.au



Volume 1 of 1

Client : Unity Mining Limited
Prospect : Henty Mine
Area : Tullah, TAS
Survey : DHEM Survey
Survey Period : 3rd to the 24th October 2012
Operator : Jason Downey



CRONE GEOPHYSICS & EXPLORATION LTD.

3607 WOLFEDALE ROAD, MISSISSAUGA, ONTARIO, CANADA, L5C 1V8
Phone: (905) 270-0096 Fax: (905) 270-3472 www.cronegeophysics.com

3-D PULSE EM - SYSTEM DESCRIPTION

Name of System: Crone Pulse EM (PEM).

Method Employed: TDEM (Time-domain electromagnetics) or TEM (Transient EM).

Survey Types:

- **Surface** - DEEPEM, Large In-Loop, Moving Loop, Moving Coil - 3 components.
- **Borehole** - 3D Borehole PEM - 3 components are measured and oriented.
- **Underground** - 3D Borehole PEM - including flat or up-dipping holes.

Measured Quantity: Rate of change of magnetic field in nanoTesla/second (same as nV/m²).

Receiver: Fully digital (input is digitized before stacking) with 24 bit dynamic range.

Channels (Gates):

- Typically 20 logarithmic channels in off-time and 1 during ramp (PP).
- Operator can select from several built-in tables including:
 - 10, 20, or 30 channel system (single, double, triple density)
 - 45 channels 4.5 usec wide covering the end of ramp and start of off-time.
 - 42 channels and PP for 150 msec time base.
 - full sampling of ramp and off-time (8 on ramp and full off-time starting at 0 usec).
- Programmable channel positions in the field.

Stacking: 512 to 65536 stacks with spike rejection.

Gain Control: Automatic software control (no selection or correction required).

Rx Operation: Menu-driven software. Large 16x40 character LCD. Full alphanumeric keyboard.

Display: 256 x 128 pixel scrollable graphic LCD for decay curves and profiles in the field.

Data Handling: Solid state storage; multiple files; all files can be appended at any time. Plot, list, sort, delete data. RS232 transmission of all data or only certain files.

Synchronization: Radio, cable, or crystal clock

Current Waveform: Bipolar on-off square waveform with exponential turn-on and ramp off.

Time Base: Off-time plus ramp time.

- 8.33, 16.66, 50, 100 and 150 msec for 60 Hz noise rejection (equivalent base frequencies of 30, 15, 5, 2.5, 1.67 Hz.)
- 10.0, 20.0, 50.0, 100.0 and 150 msec for 50 Hz noise rejection (equivalent base frequencies of 25, 12.5, 5, 2.5, 1.67 Hz.)

Ramp Time: The time required for the current to turn off.

- 500, 1000, or 1500 usec selections for precisely controlled linear turn-off ramps.
- "fast ramp" option turns current off as quickly as possible for a given loop size and current (2 usec or less to a few hundred usec).

Transmit Loop:

- Single turn loop of any dimension (less than 100m x 100m to greater than 2km x 2km).
- Multi-turn 14m diameter loop for near-surface Moving Coil surveys.

Tx Output Current:

- 30 Amps maximum at 160 Volts for 4.8 kWatt system.
- 20 Amps maximum at 120 Volts for 2.4 kWatt system.

Tx Output Voltage:

- 48 to 240 Volts continuously adjustable for 4.8 kWatt system.
- 24 to 120 Volts continuously adjustable for 2.4 kWatt system.

Tx Safety features: Transmitter automatically shuts off when loop is opened. Also shuts off with high instrument temperature and overload. Fuse and circuit breaker overload protection.

Borehole Probes: 32 mm diameter.
Pressure-tested for depths of 2500m or more.

Operating Temperature: -40°C to 50°C



CRONE GEOPHYSICS & EXPLORATION LTD.

3607 WOLFEDALE ROAD, MISSISSAUGA, ONTARIO, CANADA, L5C 1V8
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3-D PULSE EM - SPECIAL FEATURES

High Power: A new 4.8 kWatt transmitter allows very large loops to be used while maintaining a high current.

Precise Current Ramps: Precisely- controlled linear ramps of fixed duration allow for proper comparisons to be made between data from different loop sizes, and also allows for the step response transformation.

Long Time Base (Low Frequency): A new long time base of 150 msec (1.67 Hz) ensures that very long time constant conductors can be seen in complicated environments.

Step Response: A new step response transformation allows even longer time-constant conductors to be seen by reproducing the response that would be seen in a direct measurement of the step response. Our controlled linear ramps and our standard Primary Pulse (PP) measurement on the ramp are necessary for this calculation.

Fast Ramp Option: A new "fast ramp" option duplicates the response seen from other pulse-type systems, but this does not allow for the step response calculation. We do not recommend fast ramps because they are not as linear as our controlled ramps, they drift in duration as the loop warms up, and there is no advantage in terms of power put into the ground since the area under the dB/dt pulse produced by the ramp is the same.

Calculation of Impulse Response: The "fast ramp" response can be calculated (as well as the true impulse response) from our standard linear ramp data.

True Digital Receiver: The Crone receiver is a true digital receiver in that the input is immediately digitized before stacking and binning. This produces the following feature (programmable gate positions) .

Programmable Gate Positions: There is complete freedom of channel (or gate) positions and widths, which can be programmed in the field. There are also numerous built-in tables.

Full Sampling: The entire ramp and off-time can be sampled with contiguous channels if desired.

Current Ramp always Sampled: A Primary Pulse (PP) measurement is always made on the current ramp, which is of great help to ensure proper polarities, and also is crucial for the step response transformation.

High Quality LCD Display: The 256 x 128 pixel LCD on the receiver allows for accurate plots of decay curves and line or borehole profiles on the receiver, and is of great assistance to the operator to monitor noise and anomaly build-up.

No Data Reduction: There is no data reduction for surface surveys and Z-component borehole surveys, so that what is seen on the receiver is what will be seen in the final plots. For 3-D borehole surveys, there is only the correction applied to the direction of the X and Y components to aid interpretation. Gain controls are automatic, so that the output is always in nanoTeslas/sec (= nV/m²).

Slim-line Probes: A 32 mm probe diameter ensures that virtually all holes can be surveyed with 3-component measurements.

Oriented X and Y Components: X-Y orientation tools accurately orient the X and Y components. This helps tremendously with giving direction to off-hole conductors and to the centre of in-hole conductors.

Reliable, Durable and Portable Equipment: The PEM system has been in use since the early 1970's under temperature extremes of -40°C to +50°C, in desert, jungle, arctic, mountainous, and underground mining conditions.



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3-D PULSE EM - APPLICATIONS

- **Base metals** ⇒ direct detection of:
 - ◇ volcanogenic massive sulphide (VMS) deposits
 - ◇ magmatic sulphide deposits
 - ◇ sedex massive sulphide deposits
 - ◇ higher grade ore within disseminated zones⇒ indirect detection of :
 - ◇ sphalerite and other non-conductors
 - ◇ galena and other poorly connected mineralsthrough detection of associated well-connected conductors.
⇒ detection of conductive marker zones related to deposits
- **Gold** ⇒ detection of associated conductors - e.g. pyrite/pyrrhotite
 ⇒ detection of the host - e.g. banded iron formations
- **Uranium** ⇒ detection of associated graphitic basement conductors
 ⇒ detection of associated conductive alteration zones
- **Diamonds** ⇒ detection and definition of clay-rich layer overlying kimberlites
 ⇒ locating kimberlites under locally thinned conductive cover

In the ore definition, delineation and production stages of a mining operation, Pulse EM can still be highly effective to:

- Define the boundaries of conductive ore
- Determine the size of intersected conductors and thereby determine whether they are connected to main ore zones.
- Reduce the number of necessary drillholes by exploring between holes.
- Survey underground drillholes - even flat or inclined holes.

Pulse EM can also be used for:

- General geological mapping of conductive structures
 - ⇒ shears, fractures, lineaments
 - ⇒ hydrothermal alteration
 - ⇒ graphite-rich rocks, including graphitic schist, shale, slate, and argillite
 - ⇒ clay alteration and zeolites
 - ⇒ differential and clay weathering
 - ⇒ conductive weathered layer at surface
- Groundwater exploration
- Mapping groundwater contamination plumes and freshwater-saltwater interface
- Geothermal exploration
- Mapping depth and thickness of horizontal strata
- Mapping permafrost thickness

SURVEY PARAMETERS

Configuration : Downhole
Station Spacing : 5-10 m

RECEIVER

Receiver : Crone
Frequency : 2.5
Component : A,U,V
Rx Coil : Crone
Rx Area : 7900m2, 3000m2 turn-m

TRANSMITTER

Transmitter : Crone
Loop : LSUD
Tx Moment : 160000 turn-m
Tx Current : 20 A
Turn Off : 1 ms

WINDOW TIMES (ms)

From the start of the Ramp

1 : 0.8500	12 : 1.362	23 : 3.920	34 : 24.36
2 : 1.052	13 : 1.438	24 : 4.528	35 : 29.21
3 : 1.064	14 : 1.530	25 : 5.262	36 : 35.08
4 : 1.078	15 : 1.640	26 : 6.148	37 : 42.16
5 : 1.094	16 : 1.774	27 : 7.220	38 : 50.73
6 : 1.114	17 : 1.936	28 : 8.514	39 : 61.07
7 : 1.138	18 : 2.132	29 : 10.08	40 : 73.56
8 : 1.168	19 : 2.368	30 : 11.97	41 : 88.66
9 : 1.204	20 : 2.654	31 : 14.20	
10 : 1.246	21 : 3.000	32 : 16.96	
11 : 1.298	22 : 3.416	33 : 20.33	



Outer-Rim Exploration
Services Pty Ltd

Unity Mining Ltd
Lakeside

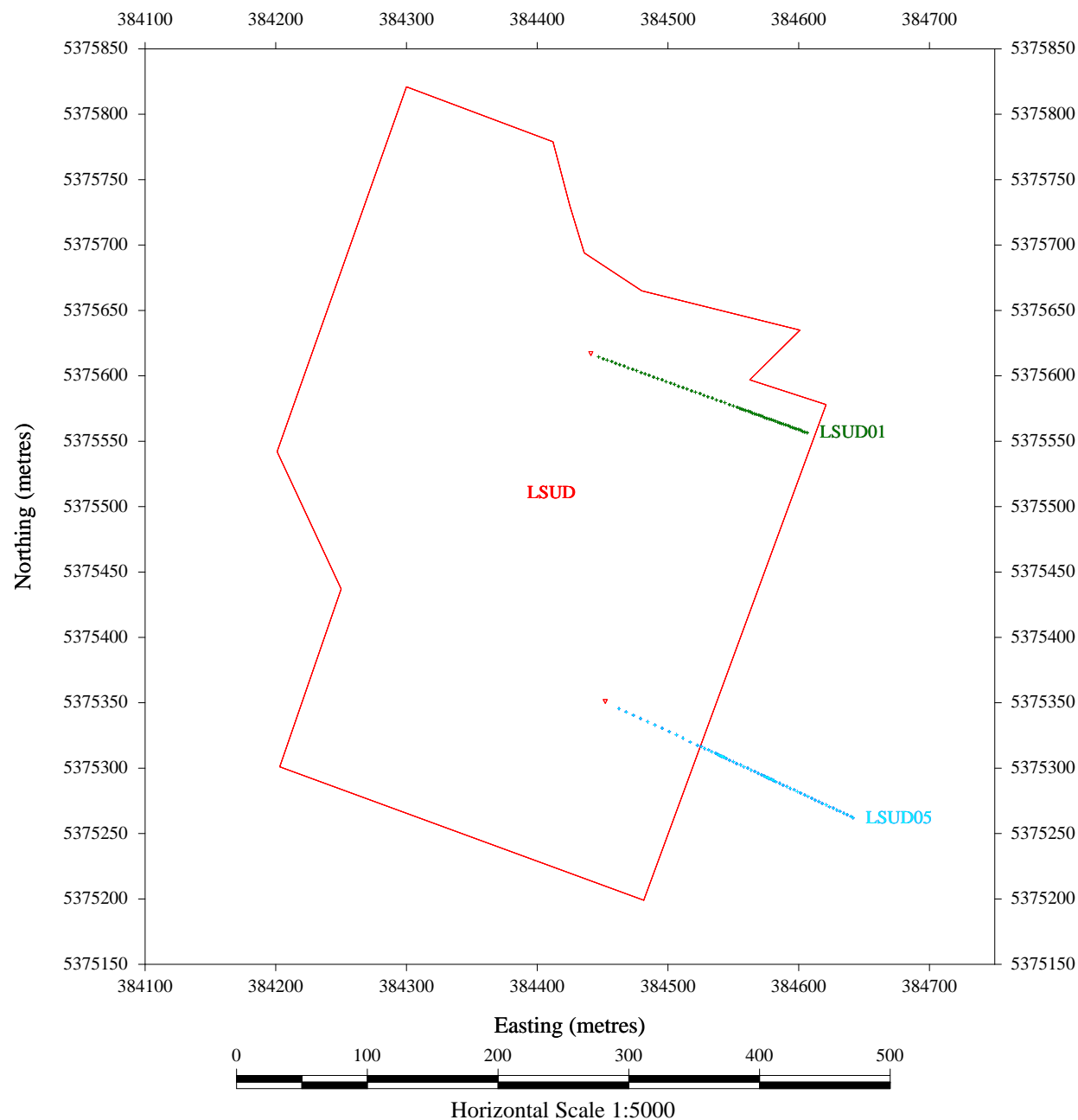
Downhole EM Survey
Survey Location Plan
Hole: LSUD01 & LSUD05

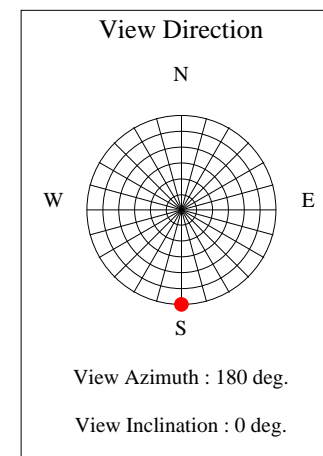
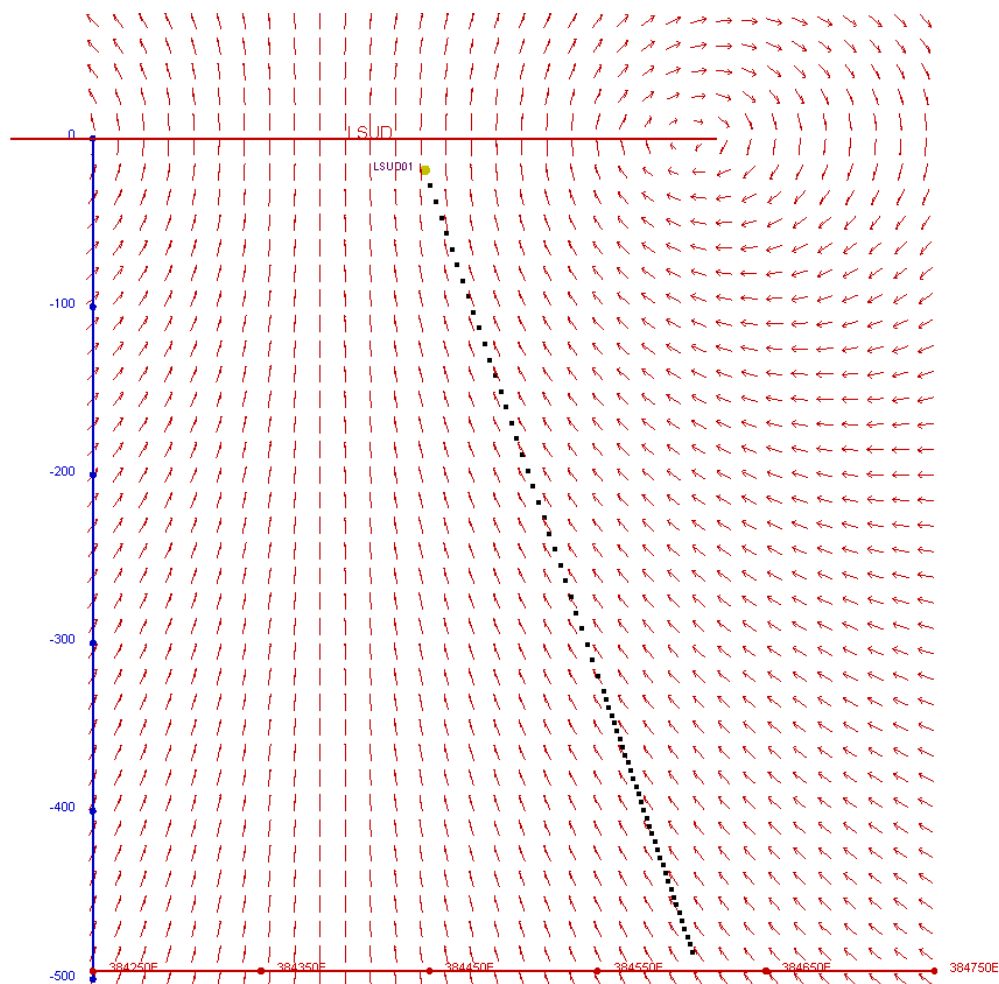
Drawn : DJL

Job No.: JN 2721

Date: 25-10-2012

Fig No.:#1





**Outer-Rim Exploration
Services Pty Ltd**

**Unity Mining Ltd
Lakeside**

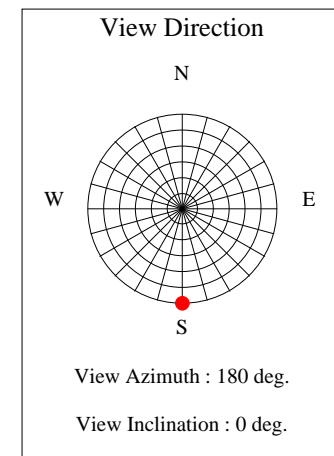
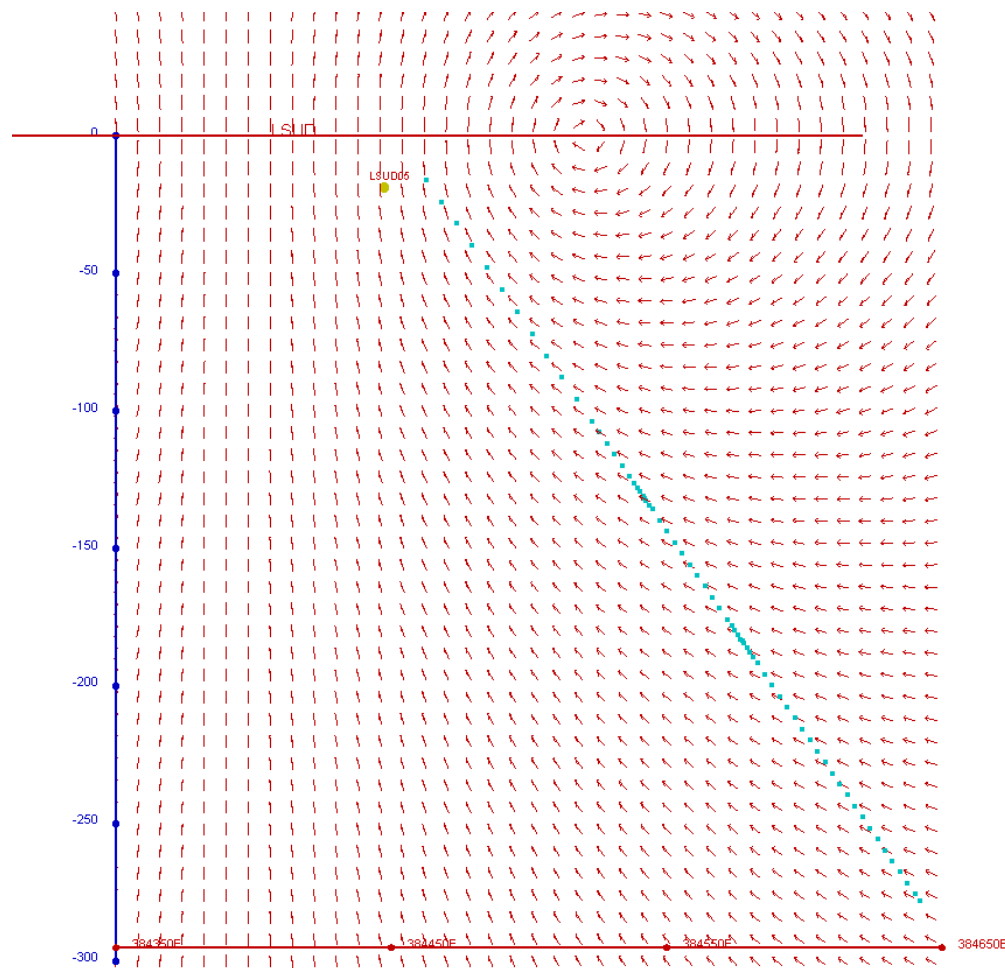
**Downhole EM Survey
Primary Field Plot
Hole: LSUD01**

Drawn : DJL

Job No.: JN 2721

Date: 29-10-2012

Fig No.:#2



Outer-Rim Exploration
Services Pty Ltd

Unity Mining Ltd
Lakeside

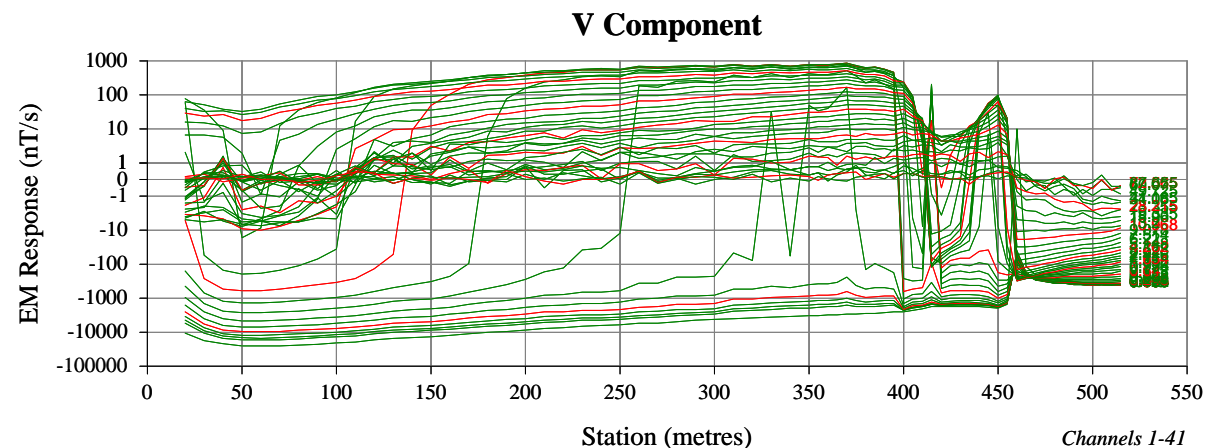
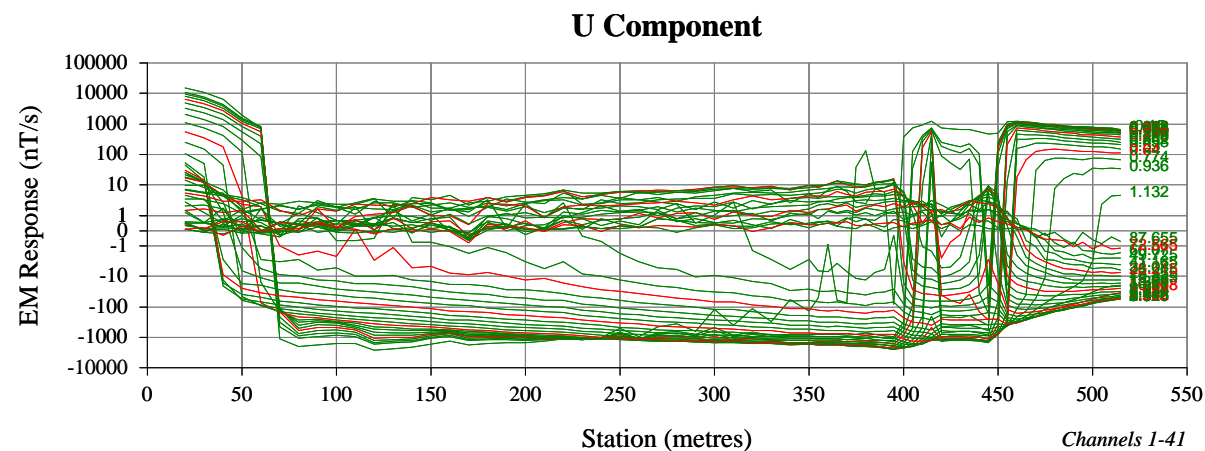
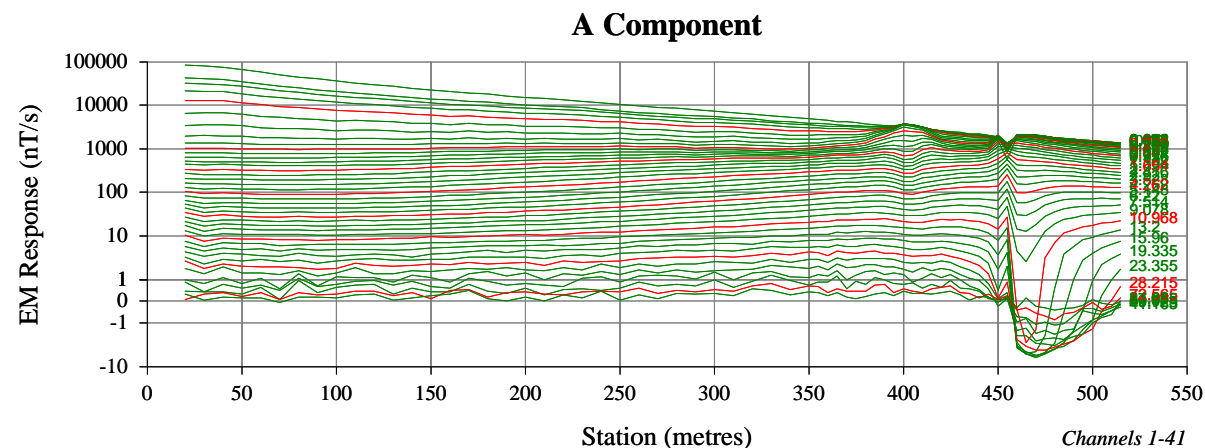
Downhole EM Survey
Primary Field Plot
Hole: LSUD05

Drawn : DJL

Job No.: JN 2721

Date: 29-10-2012

Fig No.:#3



SURVEY PARAMETERS

Configuration : Downhole
Station Spacing : 5-10 m

RECEIVER

Receiver : Crone
Frequency : 2.5
Component : A,U,V
Rx Coil : Crone
Rx Area : 7900m2, 3000m2 turn-m

TRANSMITTER

Transmitter : Crone
Loop : LSUD
Tx Moment : 160000 turn-m
Tx Current : 20 A
Turn Off : 1 ms

WINDOW TIMES (ms): Centre From the start of the Ramp

1 : 0.8500	12 : 1.362	23 : 3.920	34 : 24.36
2 : 1.052	13 : 1.438	24 : 4.528	35 : 29.21
3 : 1.064	14 : 1.530	25 : 5.262	36 : 35.08
4 : 1.078	15 : 1.640	26 : 6.148	37 : 42.16
5 : 1.094	16 : 1.774	27 : 7.220	38 : 50.73
6 : 1.114	17 : 1.936	28 : 8.514	39 : 61.07
7 : 1.138	18 : 2.132	29 : 10.08	40 : 73.56
8 : 1.168	19 : 2.368	30 : 11.97	41 : 88.66
9 : 1.204	20 : 2.654	31 : 14.20	
10 : 1.246	21 : 3.000	32 : 16.96	
11 : 1.298	22 : 3.416	33 : 20.33	



**Outer-Rim Exploration
Services Pty Ltd**

**Unity Mining Ltd
Lakeside**

**Downhole EM Survey
Log-Linear Profiles
Hole: LSUD01**

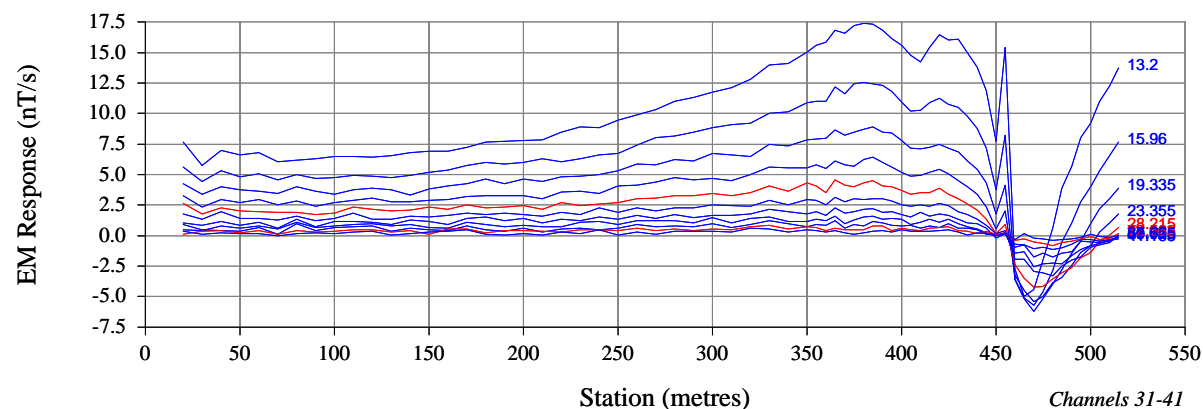
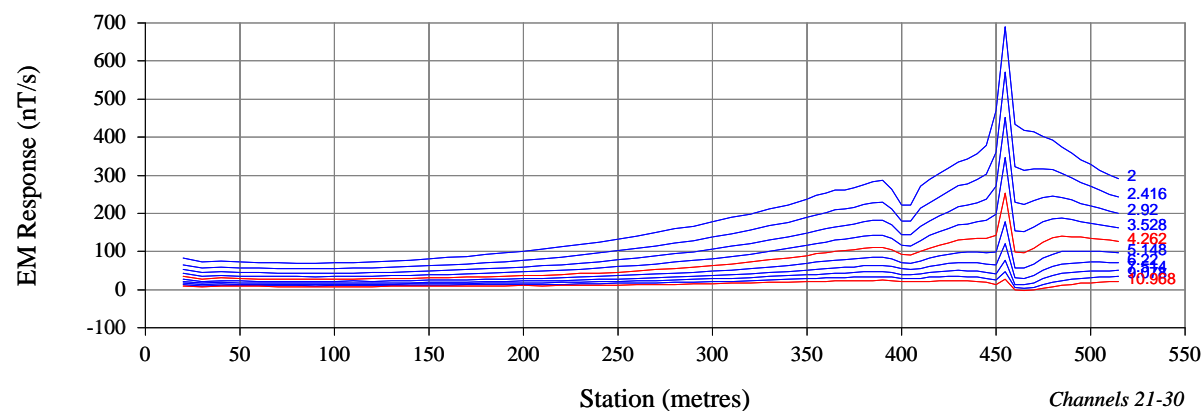
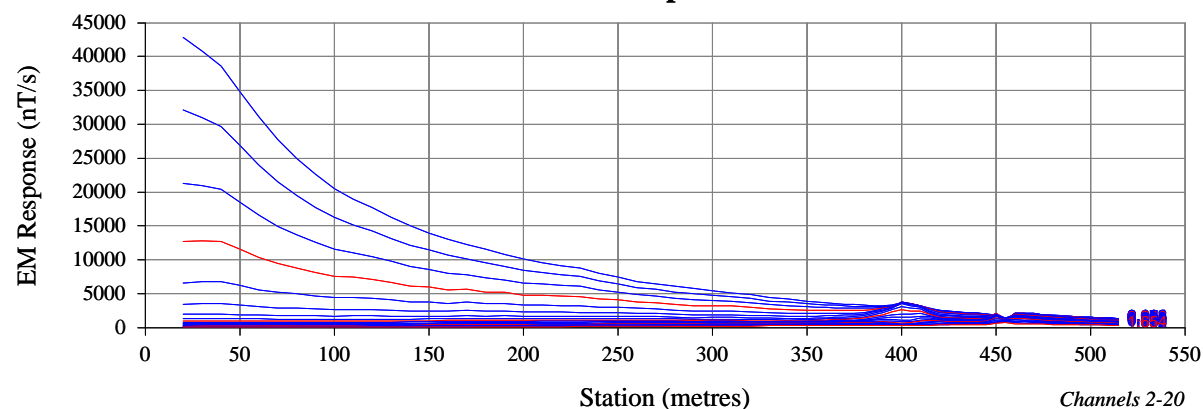
Drawn : DJL

Job No.: JN 2721

Date: 29-10-2012

Fig No.:#4

A Component



SURVEY PARAMETERS

Configuration : Downhole
Station Spacing : 5-10 m

RECEIVER

Receiver : Crone
Frequency : 2.5
Component : A
Rx Coil : Crone
Rx Area : 7900m² turn-m

TRANSMITTER

Transmitter : Crone
Loop : LSUD
Tx Moment : 160000 turn-m
Tx Current : 20 A
Turn Off : 1 ms

WINDOW TIMES (ms): Centre From the start of the Ramp

1 : 0.8500	12 : 1.362	23 : 3.920	34 : 24.36
2 : 1.052	13 : 1.438	24 : 4.528	35 : 29.21
3 : 1.064	14 : 1.530	25 : 5.262	36 : 35.08
4 : 1.078	15 : 1.640	26 : 6.148	37 : 42.16
5 : 1.094	16 : 1.774	27 : 7.220	38 : 50.73
6 : 1.114	17 : 1.936	28 : 8.514	39 : 61.07
7 : 1.138	18 : 2.132	29 : 10.08	40 : 73.56
8 : 1.168	19 : 2.368	30 : 11.97	41 : 88.66
9 : 1.204	20 : 2.654	31 : 14.20	
10 : 1.246	21 : 3.000	32 : 16.96	
11 : 1.298	22 : 3.416	33 : 20.33	



Outer-Rim Exploration
Services Pty Ltd

Unity Mining Ltd
Lakeside

Downhole EM Survey
Linear Profiles - A Component
Hole: LSUD01

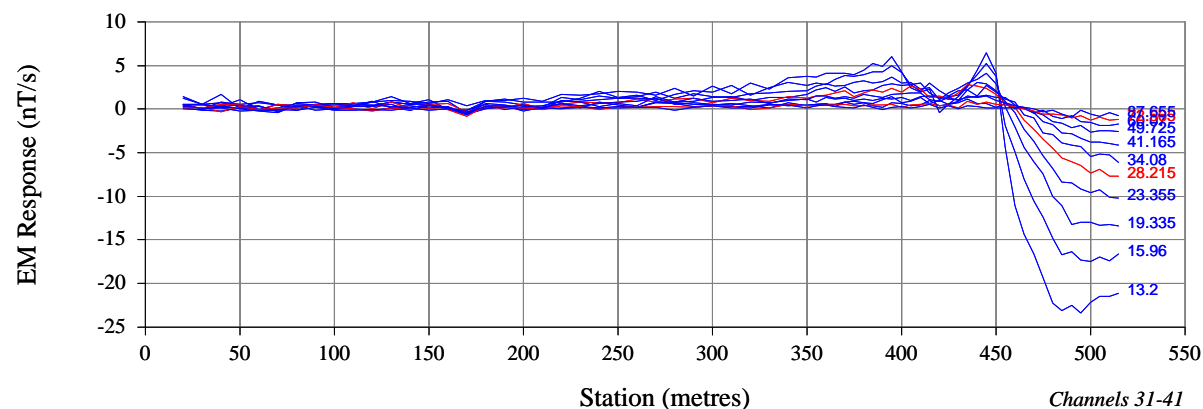
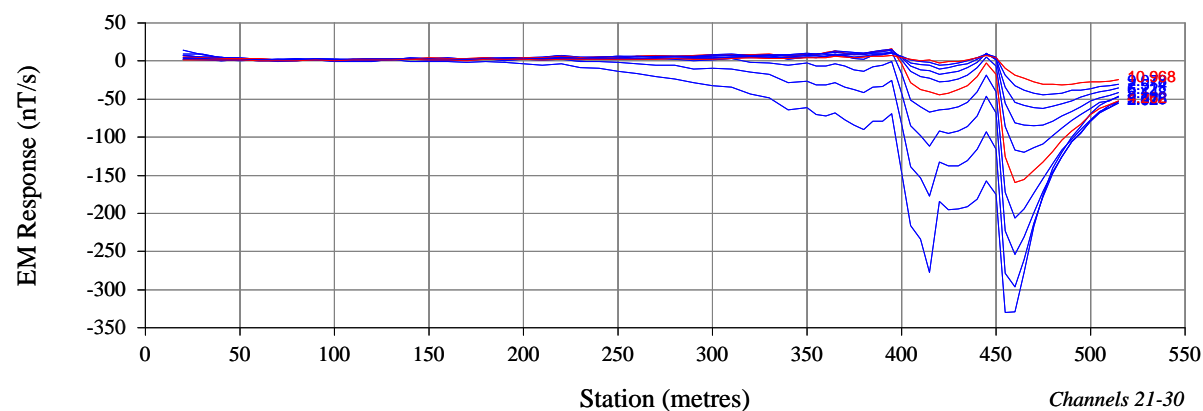
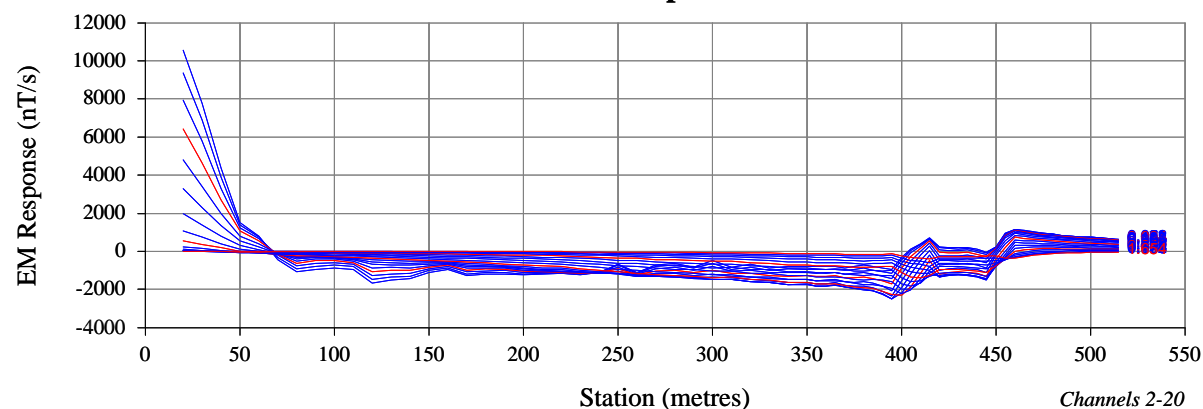
Drawn : DJL

Job No.: JN 2721

Date: 29-10-2012

Fig No.:#5

U Component



SURVEY PARAMETERS

Configuration : Downhole
Station Spacing : 5-10 m

RECEIVER

Receiver : Crone
Frequency : 2.5
Component : U
Rx Coil : Crone
Rx Area : 3000m2 turn-m

TRANSMITTER

Transmitter : Crone
Loop : LSUD
Tx Moment : 160000 turn-m
Tx Current : 20 A
Turn Off : 1 ms

WINDOW TIMES (ms): Centre From the start of the Ramp

1 : 0.8500	12 : 1.362	23 : 3.920	34 : 24.36
2 : 1.052	13 : 1.438	24 : 4.528	35 : 29.21
3 : 1.064	14 : 1.530	25 : 5.262	36 : 35.08
4 : 1.078	15 : 1.640	26 : 6.148	37 : 42.16
5 : 1.094	16 : 1.774	27 : 7.220	38 : 50.73
6 : 1.114	17 : 1.936	28 : 8.514	39 : 61.07
7 : 1.138	18 : 2.132	29 : 10.08	40 : 73.56
8 : 1.168	19 : 2.368	30 : 11.97	41 : 88.66
9 : 1.204	20 : 2.654	31 : 14.20	
10 : 1.246	21 : 3.000	32 : 16.96	
11 : 1.298	22 : 3.416	33 : 20.33	



Outer-Rim Exploration
Services Pty Ltd

Unity Mining Ltd
Lakeside

Downhole EM Survey
Linear Profiles - U Component
Hole: LSUD01

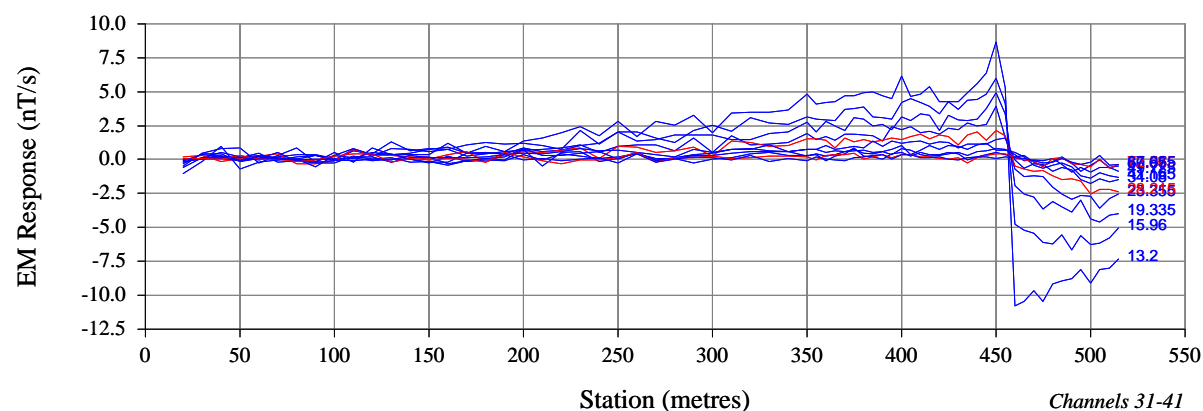
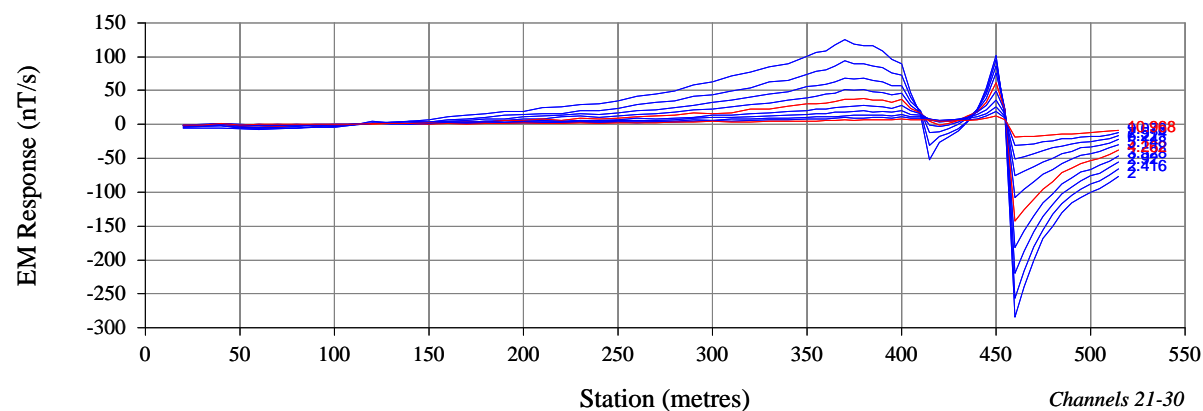
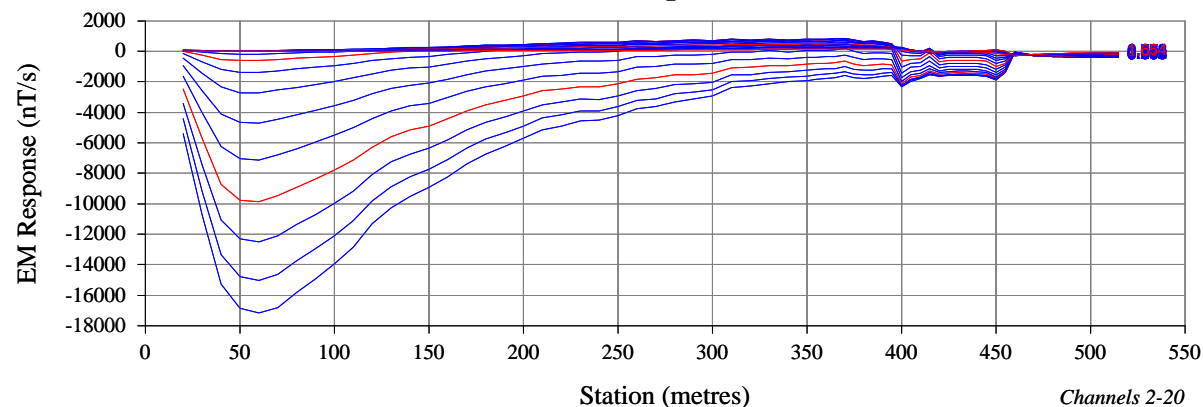
Drawn : DJL

Job No.: JN 2721

Date: 29-10-2012

Fig No.:#6

V Component



SURVEY PARAMETERS

Configuration : Downhole
Station Spacing : 5-10 m

RECEIVER

Receiver : Crone
Frequency : 2.5
Component : V
Rx Coil : Crone
Rx Area : 3000m2 turn-m

TRANSMITTER

Transmitter : Crone
Loop : LSUD
Tx Moment : 160000 turn-m
Tx Current : 20 A
Turn Off : 1 ms

WINDOW TIMES (ms): Centre From the start of the Ramp

1 : 0.8500	12 : 1.362	23 : 3.920	34 : 24.36
2 : 1.052	13 : 1.438	24 : 4.528	35 : 29.21
3 : 1.064	14 : 1.530	25 : 5.262	36 : 35.08
4 : 1.078	15 : 1.640	26 : 6.148	37 : 42.16
5 : 1.094	16 : 1.774	27 : 7.220	38 : 50.73
6 : 1.114	17 : 1.936	28 : 8.514	39 : 61.07
7 : 1.138	18 : 2.132	29 : 10.08	40 : 73.56
8 : 1.168	19 : 2.368	30 : 11.97	41 : 88.66
9 : 1.204	20 : 2.654	31 : 14.20	
10 : 1.246	21 : 3.000	32 : 16.96	
11 : 1.298	22 : 3.416	33 : 20.33	



Outer-Rim Exploration
Services Pty Ltd

Unity Mining Ltd
Lakeside

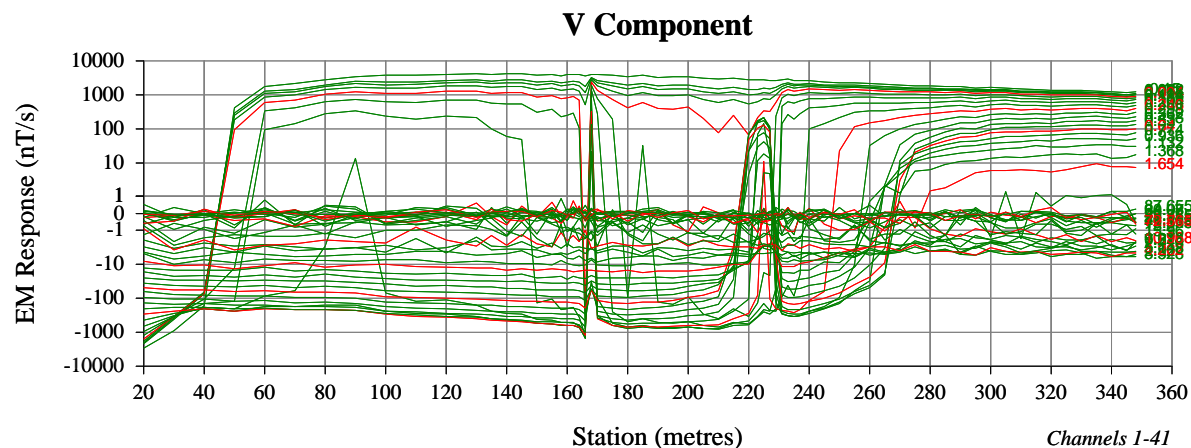
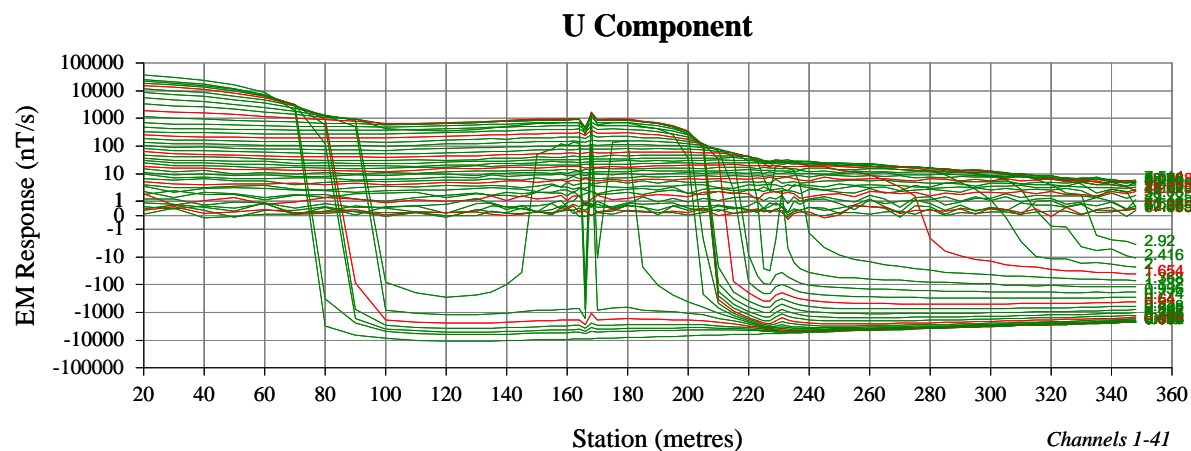
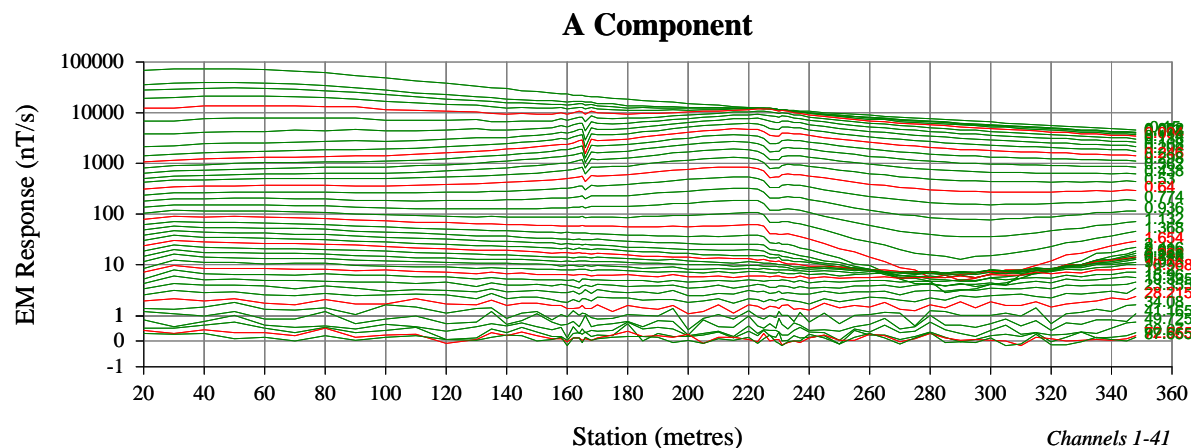
Downhole EM Survey
Linear Profiles - V Component
Hole: LSUD01

Drawn : DJL

Job No.: JN 2721

Date: 29-10-2012

Fig No.:#7



SURVEY PARAMETERS

Configuration : Downhole
Station Spacing : 2-10 m

RECEIVER

Receiver : Crone
Frequency : 2.5
Component : A,U,V
Rx Coil : Crone
Rx Area : 7900m2, 3000m2 turn-m

TRANSMITTER

Transmitter : Crone
Loop : LSUD
Tx Moment : 160000 turn-m
Tx Current : 20 A
Turn Off : 1 ms

WINDOW TIMES (ms): Centre From the start of the Ramp

1 : 0.8500	12 : 1.362	23 : 3.920	34 : 24.36
2 : 1.052	13 : 1.438	24 : 4.528	35 : 29.21
3 : 1.064	14 : 1.530	25 : 5.262	36 : 35.08
4 : 1.078	15 : 1.640	26 : 6.148	37 : 42.16
5 : 1.094	16 : 1.774	27 : 7.220	38 : 50.73
6 : 1.114	17 : 1.936	28 : 8.514	39 : 61.07
7 : 1.138	18 : 2.132	29 : 10.08	40 : 73.56
8 : 1.168	19 : 2.368	30 : 11.97	41 : 88.66
9 : 1.204	20 : 2.654	31 : 14.20	
10 : 1.246	21 : 3.000	32 : 16.96	
11 : 1.298	22 : 3.416	33 : 20.33	



Outer-Rim Exploration
Services Pty Ltd

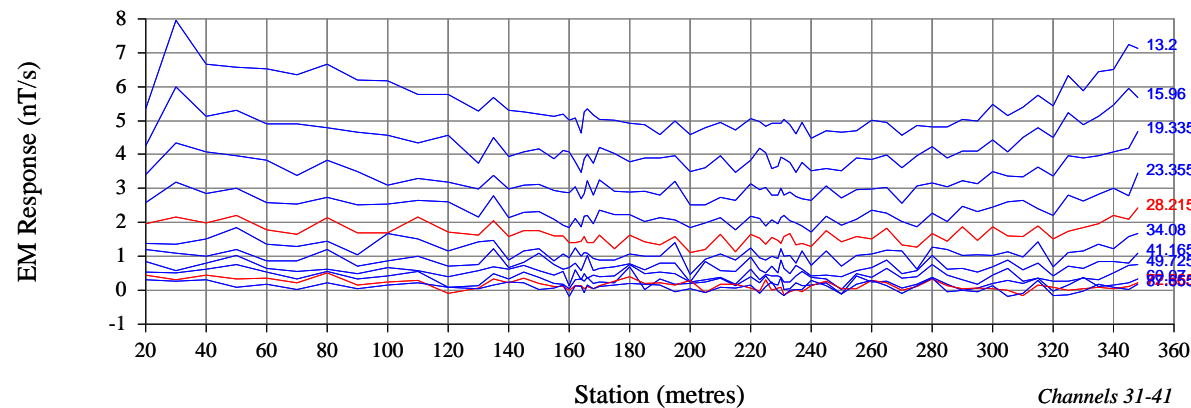
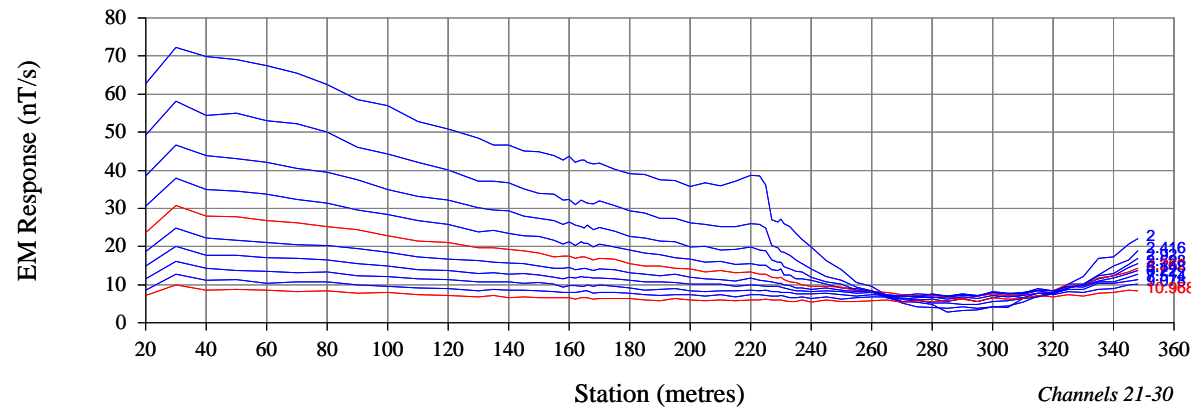
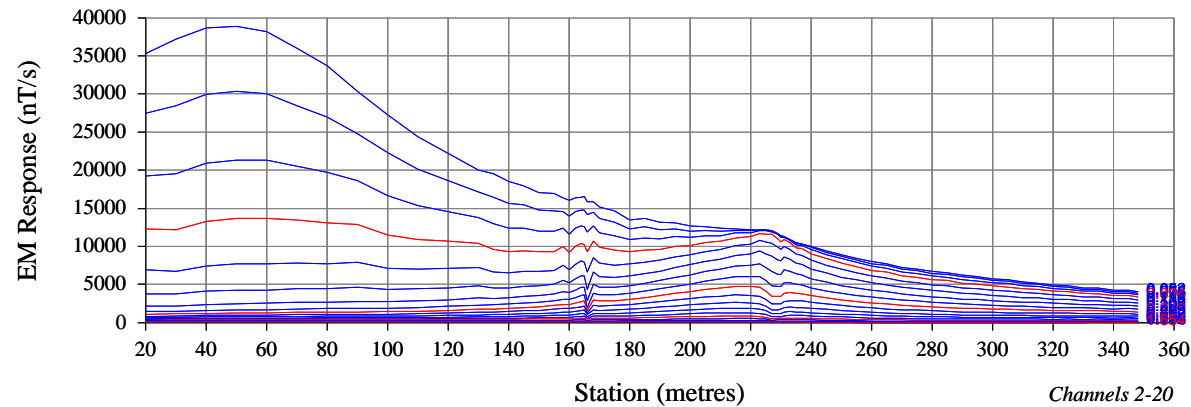
Unity Mining Ltd
Lakeside

Downhole EM Survey
Log-Linear Profiles
Hole: LSUD05

Drawn : DJL
Date: 29-10-2012

Job No.: JN 2721
Fig No.:#8

A Component



SURVEY PARAMETERS

Configuration : Downhole
Station Spacing : 2-10 m

RECEIVER

Receiver : Crone
Frequency : 2.5
Component : A
Rx Coil : Crone
Rx Area : 7900m² turn-m

TRANSMITTER

Transmitter : Crone
Loop : LSUD
Tx Moment : 160000 turn-m
Tx Current : 20 A
Turn Off : 1 ms

WINDOW TIMES (ms): Centre From the start of the Ramp

1 : 0.8500	12 : 1.362	23 : 3.920	34 : 24.36
2 : 1.052	13 : 1.438	24 : 4.528	35 : 29.21
3 : 1.064	14 : 1.530	25 : 5.262	36 : 35.08
4 : 1.078	15 : 1.640	26 : 6.148	37 : 42.16
5 : 1.094	16 : 1.774	27 : 7.220	38 : 50.73
6 : 1.114	17 : 1.936	28 : 8.514	39 : 61.07
7 : 1.138	18 : 2.132	29 : 10.08	40 : 73.56
8 : 1.168	19 : 2.368	30 : 11.97	41 : 88.66
9 : 1.204	20 : 2.654	31 : 14.20	
10 : 1.246	21 : 3.000	32 : 16.96	
11 : 1.298	22 : 3.416	33 : 20.33	



Outer-Rim Exploration
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Lakeside

Downhole EM Survey
Linear Profiles - A Component
Hole: LSUD05

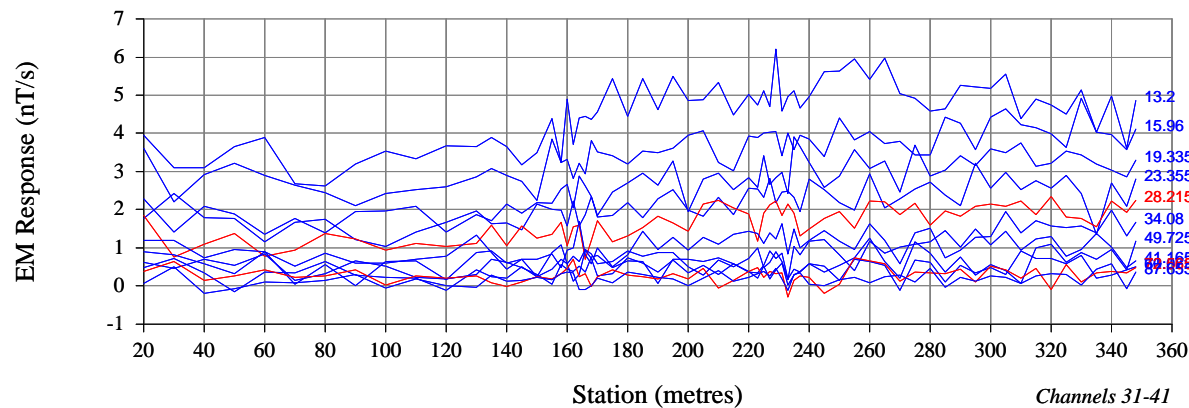
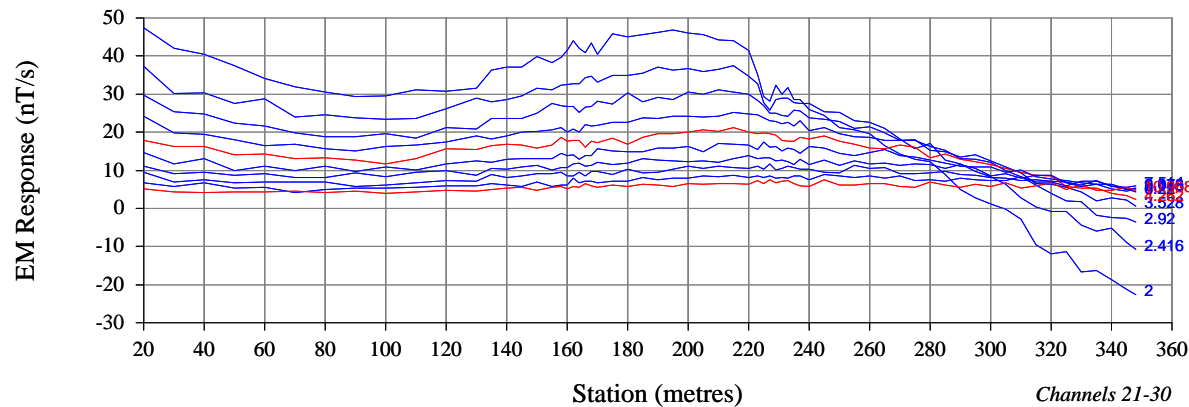
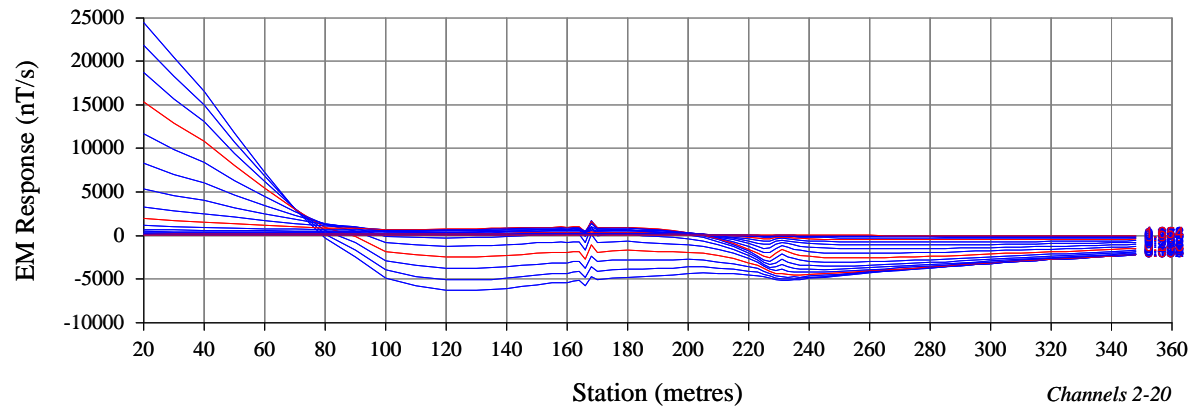
Drawn : DJL

Job No.: JN 2721

Date: 29-10-2012

Fig No.:#9

U Component



SURVEY PARAMETERS

Configuration : Downhole
Station Spacing : 2-10 m

RECEIVER

Receiver : Crone
Frequency : 2.5
Component : U
Rx Coil : Crone
Rx Area : 3000m2 turn-m

TRANSMITTER

Transmitter : Crone
Loop : LSUD
Tx Moment : 160000 turn-m
Tx Current : 20 A
Turn Off : 1 ms

WINDOW TIMES (ms): Centre From the start of the Ramp

1 : 0.8500	12 : 1.362	23 : 3.920	34 : 24.36
2 : 1.052	13 : 1.438	24 : 4.528	35 : 29.21
3 : 1.064	14 : 1.530	25 : 5.262	36 : 35.08
4 : 1.078	15 : 1.640	26 : 6.148	37 : 42.16
5 : 1.094	16 : 1.774	27 : 7.220	38 : 50.73
6 : 1.114	17 : 1.936	28 : 8.514	39 : 61.07
7 : 1.138	18 : 2.132	29 : 10.08	40 : 73.56
8 : 1.168	19 : 2.368	30 : 11.97	41 : 88.66
9 : 1.204	20 : 2.654	31 : 14.20	
10 : 1.246	21 : 3.000	32 : 16.96	
11 : 1.298	22 : 3.416	33 : 20.33	



Outer-Rim Exploration
Services Pty Ltd

Unity Mining Ltd
Lakeside

Downhole EM Survey
Linear Profiles - U Component
Hole: LSUD05

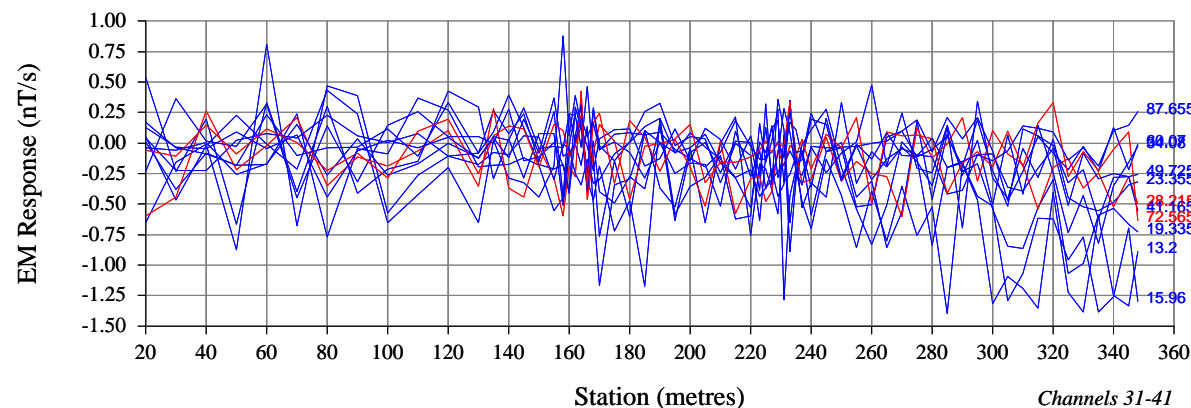
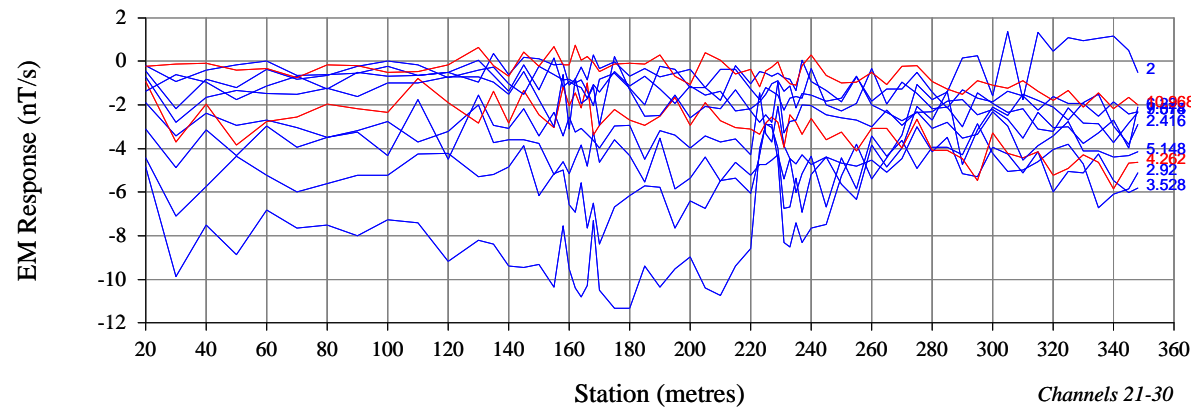
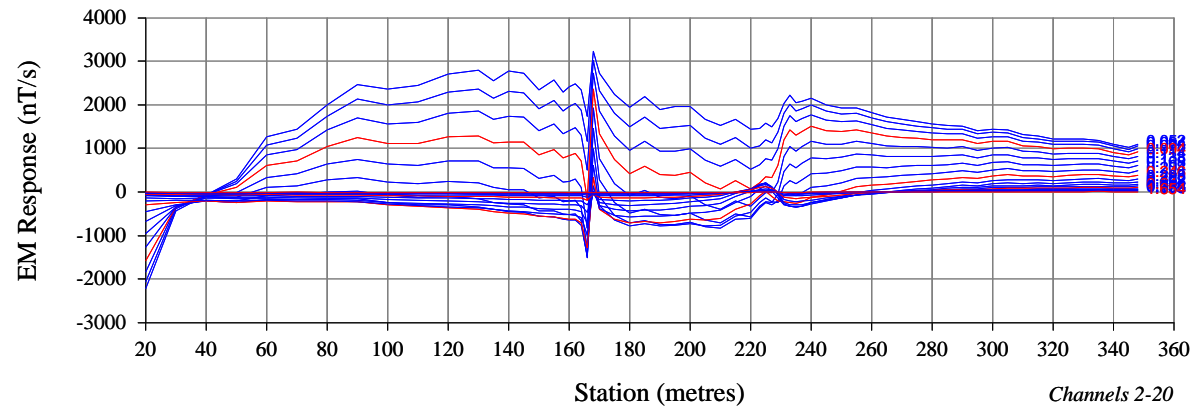
Drawn : DJL

Job No.: JN 2721

Date: 29-10-2012

Fig No.:#10

V Component



SURVEY PARAMETERS

Configuration : Downhole
Station Spacing : 2-10 m

RECEIVER

Receiver : Crone
Frequency : 2.5
Component : V
Rx Coil : Crone
Rx Area : 3000m2 turn-m

TRANSMITTER

Transmitter : Crone
Loop : LSUD
Tx Moment : 160000 turn-m
Tx Current : 20 A
Turn Off : 1 ms

WINDOW TIMES (ms): Centre From the start of the Ramp

1 : 0.8500	12 : 1.362	23 : 3.920	34 : 24.36
2 : 1.052	13 : 1.438	24 : 4.528	35 : 29.21
3 : 1.064	14 : 1.530	25 : 5.262	36 : 35.08
4 : 1.078	15 : 1.640	26 : 6.148	37 : 42.16
5 : 1.094	16 : 1.774	27 : 7.220	38 : 50.73
6 : 1.114	17 : 1.936	28 : 8.514	39 : 61.07
7 : 1.138	18 : 2.132	29 : 10.08	40 : 73.56
8 : 1.168	19 : 2.368	30 : 11.97	41 : 88.66
9 : 1.204	20 : 2.654	31 : 14.20	
10 : 1.246	21 : 3.000	32 : 16.96	
11 : 1.298	22 : 3.416	33 : 20.33	



Outer-Rim Exploration
Services Pty Ltd

Unity Mining Ltd
Lakeside

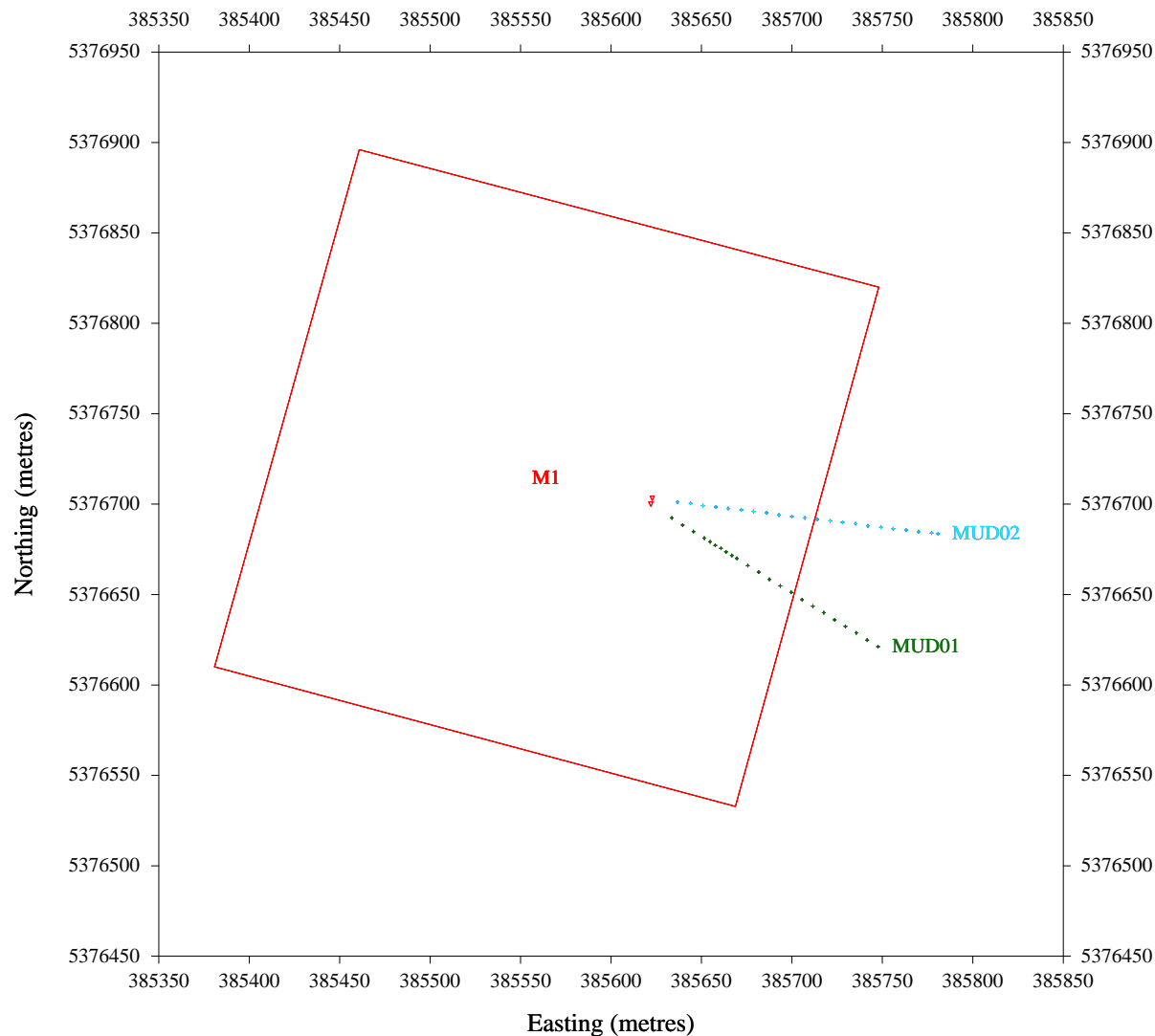
Downhole EM Survey
Linear Profiles - V Component
Hole: LSUD05

Drawn : DJL

Job No.: JN 2721

Date: 29-10-2012

Fig No.:#11



SURVEY PARAMETERS

Configuration : Downhole
Station Spacing : 5-10 m

RECEIVER

Receiver : Crone
Frequency : 2.5
Component : A,U,V
Rx Coil : Crone
Rx Area : 7900m2, 3000m2 turn-m

TRANSMITTER

Transmitter : Crone
Loop : M1
Tx Moment : 90000 turn-m
Tx Current : 20 A
Turn Off : 1 ms

WINDOW TIMES (ms)

From the start of the Ramp

1 : 0.8500	12 : 1.362	23 : 3.920	34 : 24.36
2 : 1.052	13 : 1.438	24 : 4.528	35 : 29.22
3 : 1.064	14 : 1.530	25 : 5.262	36 : 35.08
4 : 1.078	15 : 1.640	26 : 6.148	37 : 42.16
5 : 1.094	16 : 1.774	27 : 7.220	38 : 50.72
6 : 1.114	17 : 1.936	28 : 8.514	39 : 61.07
7 : 1.138	18 : 2.132	29 : 10.08	40 : 73.56
8 : 1.168	19 : 2.368	30 : 11.97	41 : 88.66
9 : 1.204	20 : 2.654	31 : 14.20	
10 : 1.246	21 : 3.000	32 : 16.96	
11 : 1.298	22 : 3.416	33 : 20.33	



Outer-Rim Exploration
Services Pty Ltd

Unity Mining Ltd
Murchison

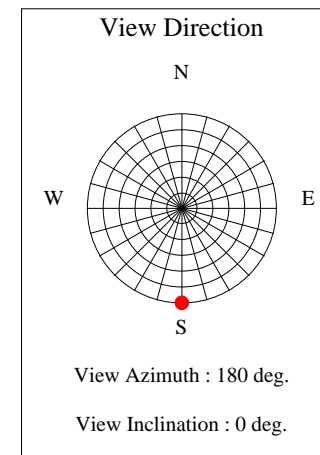
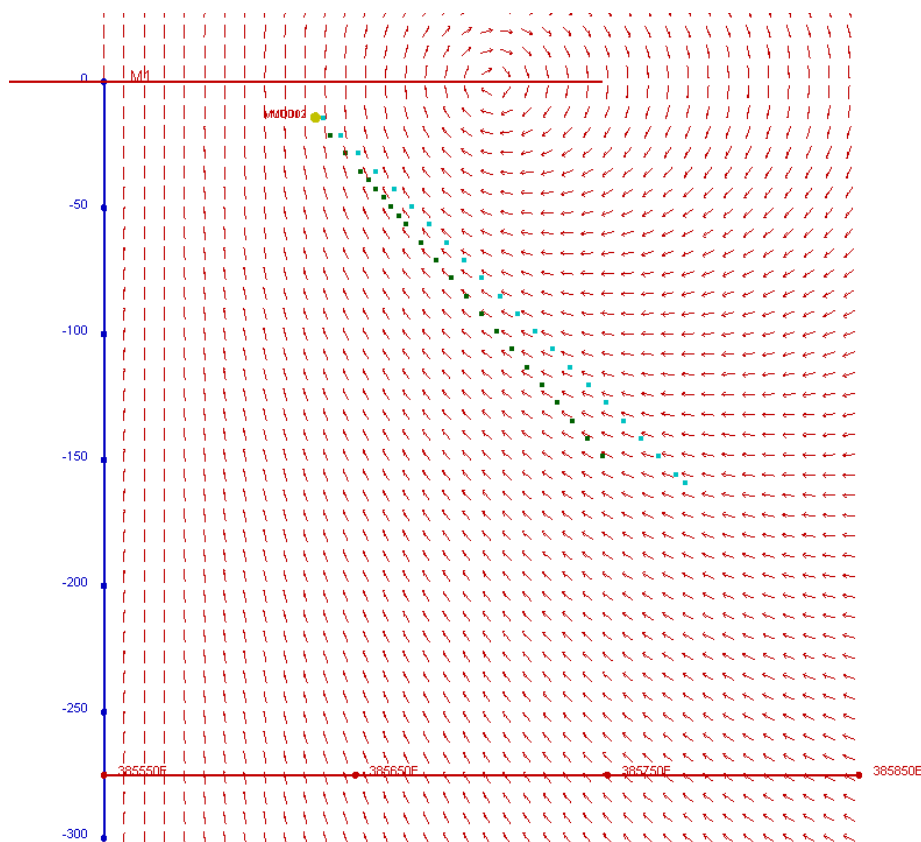
Downhole EM Survey
Survey Location Plan
Hole: MUD01 & MUD02

Drawn : DJL

Job No.: JN 2721

Date: 29-10-2012

Fig No.:#12



Outer-Rim Exploration
Services Pty Ltd

Unity Mining Ltd
Murchison

Downhole EM Survey
Primary Field Plot
Hole: MUD01 & MUD02

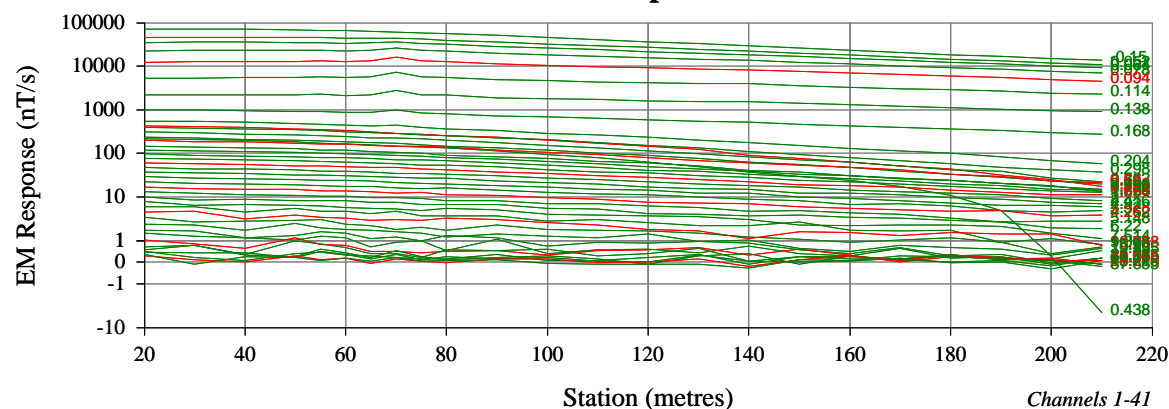
Drawn : DJL

Job No.: JN 2721

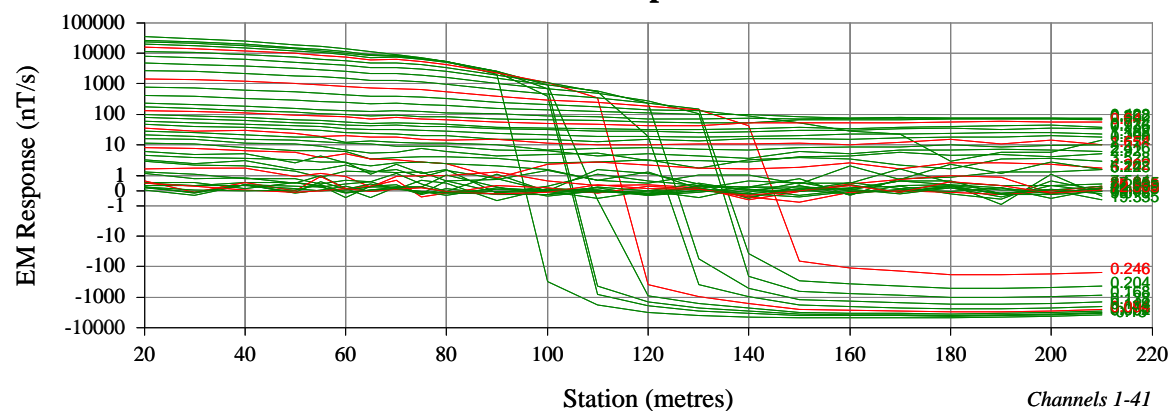
Date: 29-10-2012

Fig No.:#13

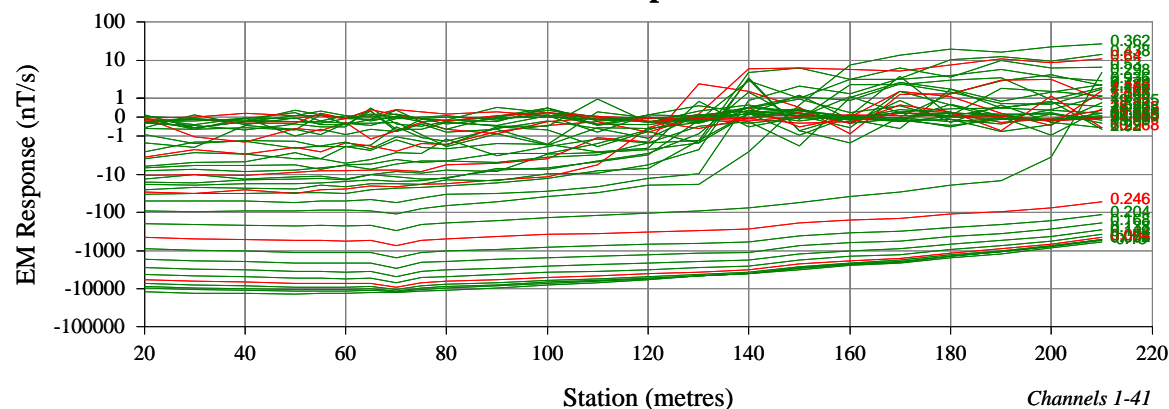
A Component



U Component



V Component



SURVEY PARAMETERS

Configuration : Downhole
Station Spacing : 5-10 m

RECEIVER

Receiver : Crone
Frequency : 2.5
Component : A,U,V
Rx Coil : Crone
Rx Area : 7900m2, 3000m2 turn-m

TRANSMITTER

Transmitter : Crone
Loop : M1
Tx Moment : 90000 turn-m
Tx Current : 20 A
Turn Off : 1 ms

WINDOW TIMES (ms): Centre From the start of the Ramp

1 : 0.8500	12 : 1.362	23 : 3.920	34 : 24.36
2 : 1.052	13 : 1.438	24 : 4.528	35 : 29.22
3 : 1.064	14 : 1.530	25 : 5.262	36 : 35.08
4 : 1.078	15 : 1.640	26 : 6.148	37 : 42.16
5 : 1.094	16 : 1.774	27 : 7.220	38 : 50.72
6 : 1.114	17 : 1.936	28 : 8.514	39 : 61.07
7 : 1.138	18 : 2.132	29 : 10.08	40 : 73.56
8 : 1.168	19 : 2.368	30 : 11.97	41 : 88.66
9 : 1.204	20 : 2.654	31 : 14.20	
10 : 1.246	21 : 3.000	32 : 16.96	
11 : 1.298	22 : 3.416	33 : 20.33	



Outer-Rim Exploration
Services Pty Ltd

Unity Mining Ltd
Murchison

Downhole EM Survey
Log-Linear Profiles
Hole: MUD01

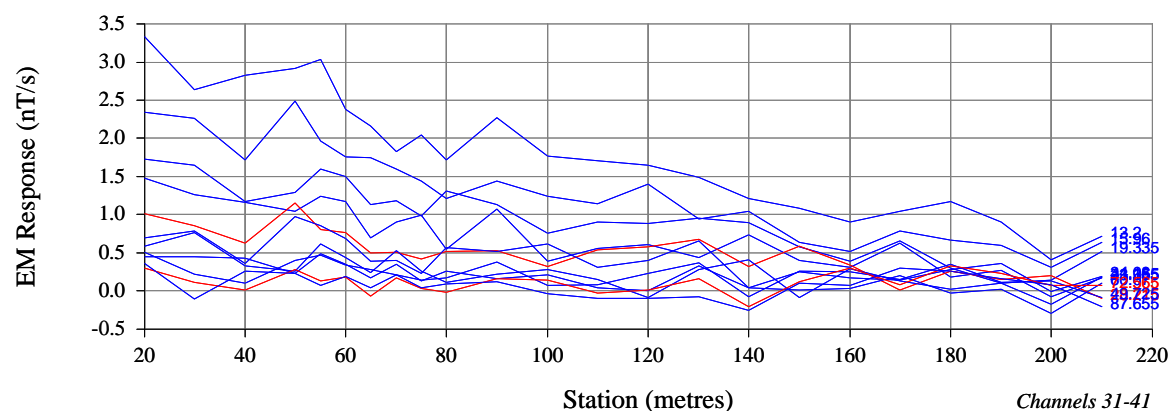
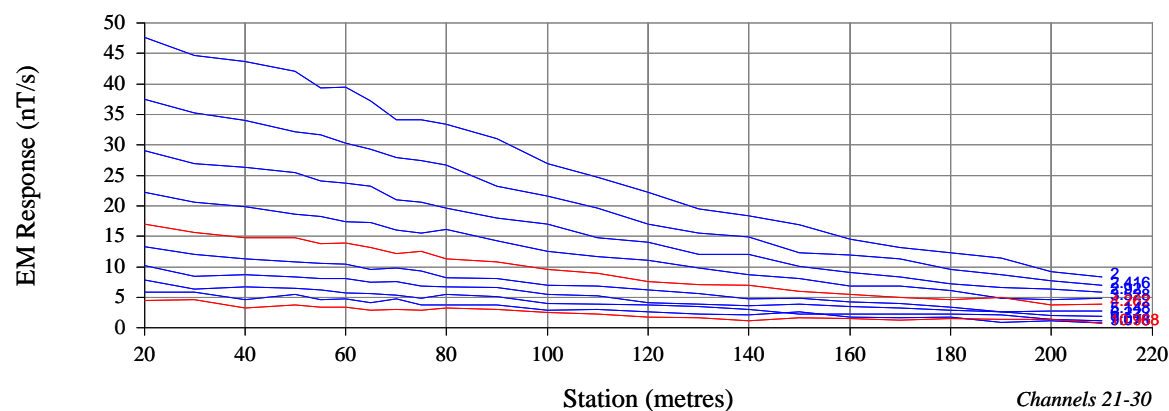
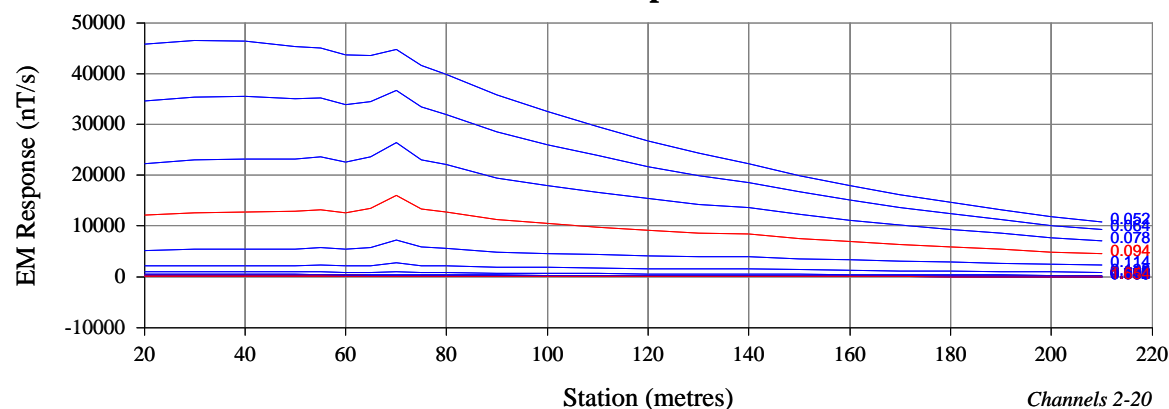
Drawn : DJL

Job No.: JN 2721

Date: 29-10-2012

Fig No.:#14

A Component



SURVEY PARAMETERS

Configuration : Downhole
Station Spacing : 5-10 m

RECEIVER

Receiver : Crone
Frequency : 2.5
Component : A
Rx Coil : Crone
Rx Area : 7900m² turn-m

TRANSMITTER

Transmitter : Crone
Loop : M1
Tx Moment : 90000 turn-m
Tx Current : 20 A
Turn Off : 1 ms

WINDOW TIMES (ms): Centre From the start of the Ramp

1 : 0.8500	12 : 1.362	23 : 3.920	34 : 24.36
2 : 1.052	13 : 1.438	24 : 4.528	35 : 29.22
3 : 1.064	14 : 1.530	25 : 5.262	36 : 35.08
4 : 1.078	15 : 1.640	26 : 6.148	37 : 42.16
5 : 1.094	16 : 1.774	27 : 7.220	38 : 50.72
6 : 1.114	17 : 1.936	28 : 8.514	39 : 61.07
7 : 1.138	18 : 2.132	29 : 10.08	40 : 73.56
8 : 1.168	19 : 2.368	30 : 11.97	41 : 88.66
9 : 1.204	20 : 2.654	31 : 14.20	
10 : 1.246	21 : 3.000	32 : 16.96	
11 : 1.298	22 : 3.416	33 : 20.33	



Outer-Rim Exploration
Services Pty Ltd

Unity Mining Ltd
Murchison

Downhole EM Survey
Linear Profiles - A Component
Hole: MUD01

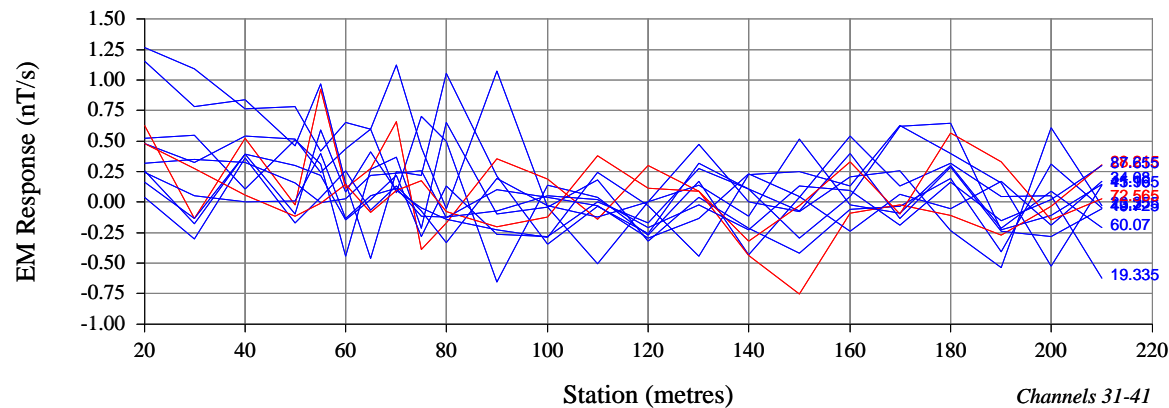
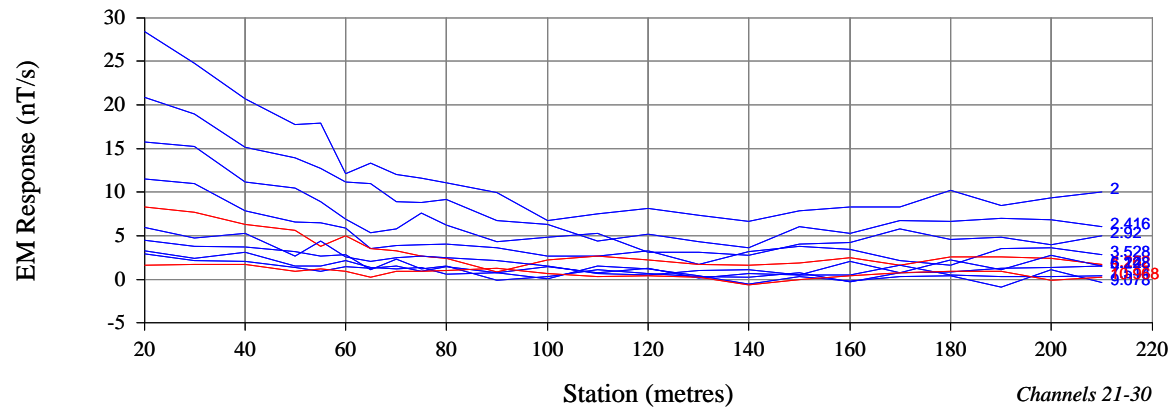
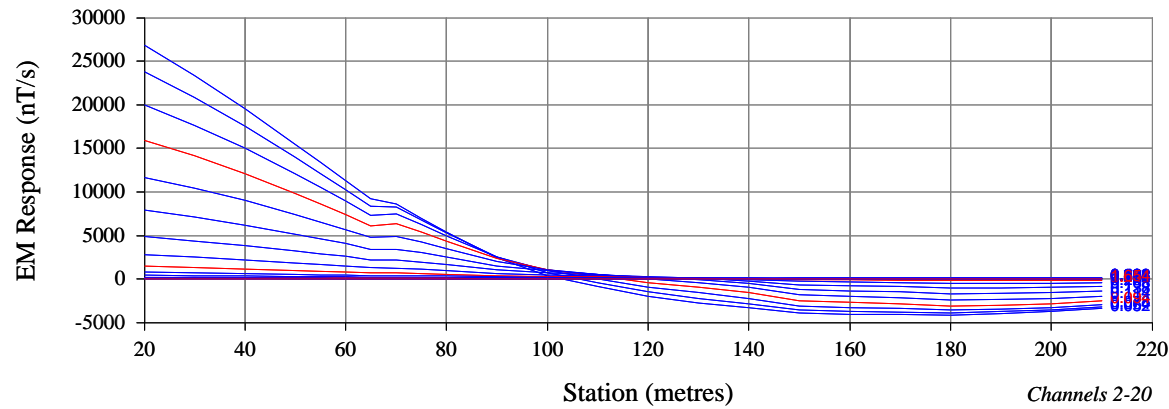
Drawn : DJL

Job No.: JN 2721

Date: 29-10-2012

Fig No.:#15

U Component



SURVEY PARAMETERS

Configuration : Downhole
Station Spacing : 5-10 m

RECEIVER

Receiver : Crone
Frequency : 2.5
Component : U
Rx Coil : Crone
Rx Area : 3000m2 turn-m

TRANSMITTER

Transmitter : Crone
Loop : M1
Tx Moment : 90000 turn-m
Tx Current : 20 A
Turn Off : 1 ms

WINDOW TIMES (ms): Centre From the start of the Ramp

1 : 0.8500	12 : 1.362	23 : 3.920	34 : 24.36
2 : 1.052	13 : 1.438	24 : 4.528	35 : 29.22
3 : 1.064	14 : 1.530	25 : 5.262	36 : 35.08
4 : 1.078	15 : 1.640	26 : 6.148	37 : 42.16
5 : 1.094	16 : 1.774	27 : 7.220	38 : 50.72
6 : 1.114	17 : 1.936	28 : 8.514	39 : 61.07
7 : 1.138	18 : 2.132	29 : 10.08	40 : 73.56
8 : 1.168	19 : 2.368	30 : 11.97	41 : 88.66
9 : 1.204	20 : 2.654	31 : 14.20	
10 : 1.246	21 : 3.000	32 : 16.96	
11 : 1.298	22 : 3.416	33 : 20.33	



Outer-Rim Exploration
Services Pty Ltd

Unity Mining Ltd
Murchison

Downhole EM Survey
Linear Profiles - U Component
Hole: MUD01

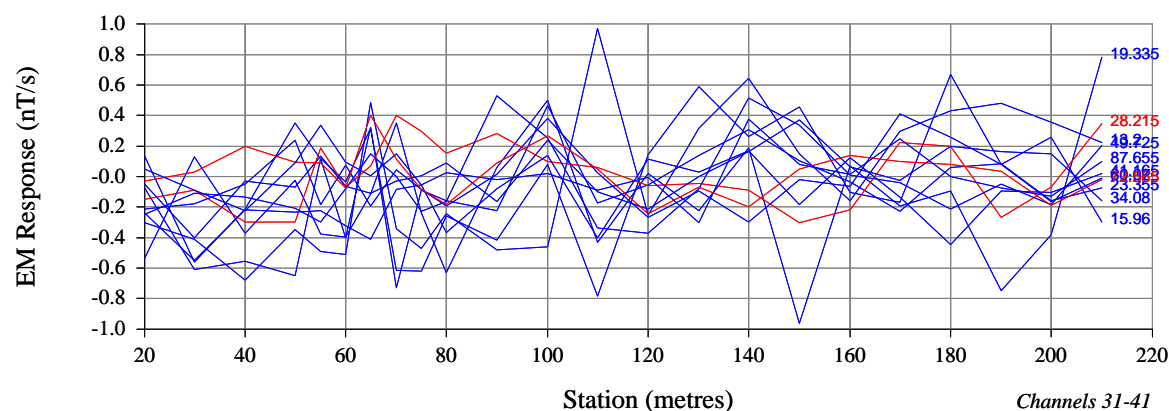
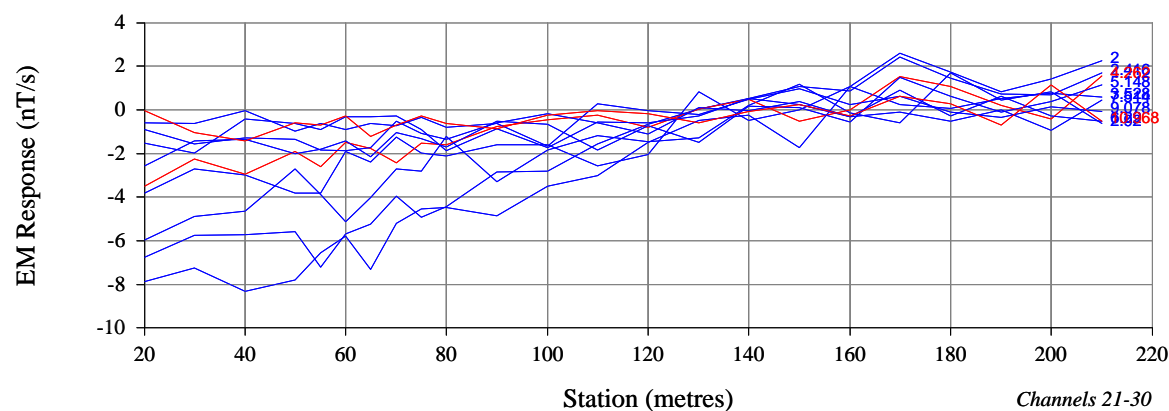
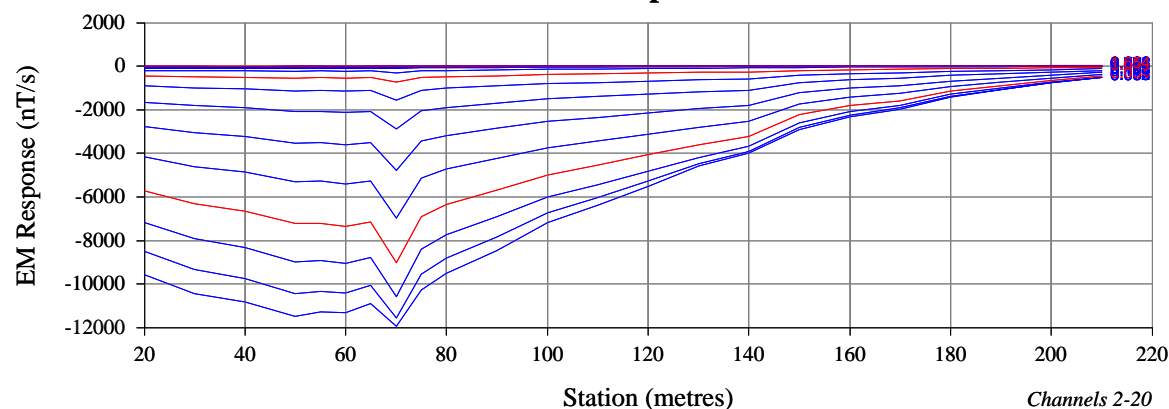
Drawn : DJL

Job No.: JN 2721

Date: 29-10-2012

Fig No.:#16

V Component



SURVEY PARAMETERS

Configuration : Downhole
Station Spacing : 5-10 m

RECEIVER

Receiver : Crone
Frequency : 2.5
Component : V
Rx Coil : Crone
Rx Area : 3000m2 turn-m

TRANSMITTER

Transmitter : Crone
Loop : M1
Tx Moment : 90000 turn-m
Tx Current : 20 A
Turn Off : 1 ms

WINDOW TIMES (ms): Centre From the start of the Ramp

1 : 0.8500	12 : 1.362	23 : 3.920	34 : 24.36
2 : 1.052	13 : 1.438	24 : 4.528	35 : 29.22
3 : 1.064	14 : 1.530	25 : 5.262	36 : 35.08
4 : 1.078	15 : 1.640	26 : 6.148	37 : 42.16
5 : 1.094	16 : 1.774	27 : 7.220	38 : 50.72
6 : 1.114	17 : 1.936	28 : 8.514	39 : 61.07
7 : 1.138	18 : 2.132	29 : 10.08	40 : 73.56
8 : 1.168	19 : 2.368	30 : 11.97	41 : 88.66
9 : 1.204	20 : 2.654	31 : 14.20	
10 : 1.246	21 : 3.000	32 : 16.96	
11 : 1.298	22 : 3.416	33 : 20.33	



Outer-Rim Exploration
Services Pty Ltd

Unity Mining Ltd
Murchison

Downhole EM Survey
Linear Profiles - V Component
Hole: MUD01

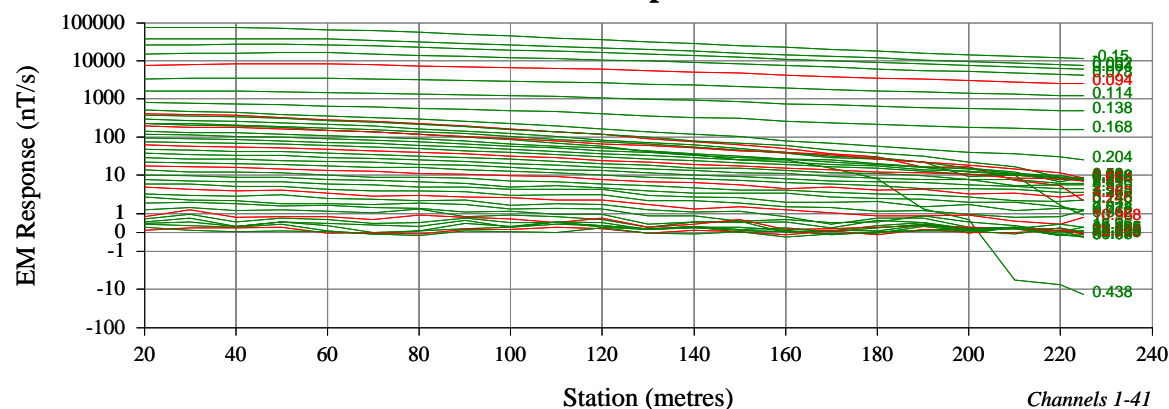
Drawn : DJL

Job No.: JN 2721

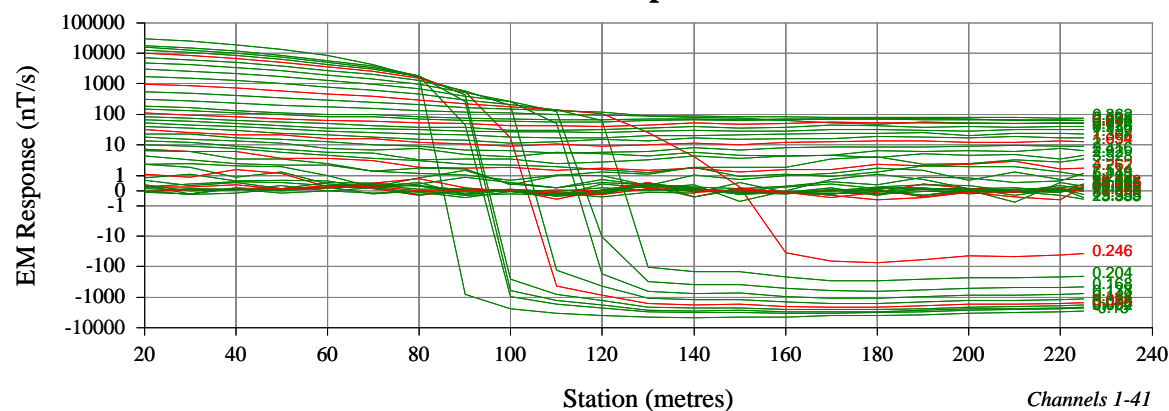
Date: 29-10-2012

Fig No.:#17

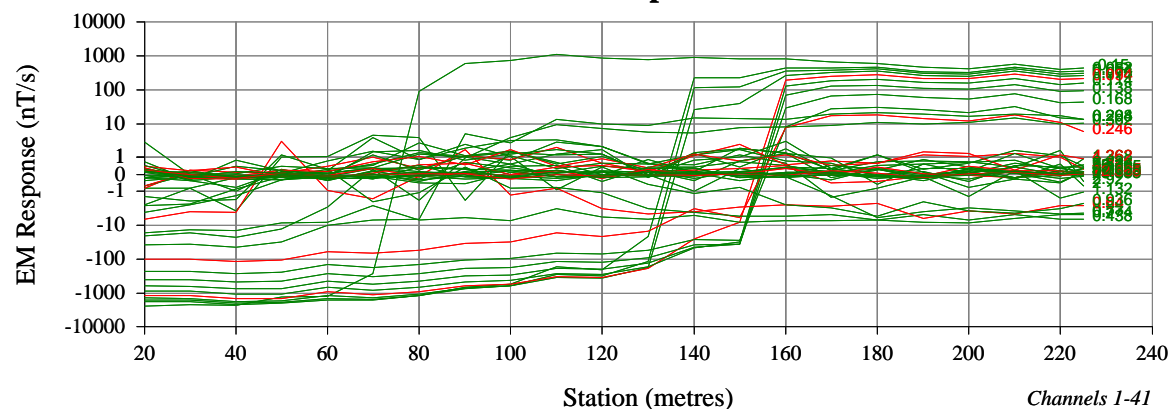
A Component



U Component



V Component



SURVEY PARAMETERS

Configuration : Downhole
Station Spacing : 5-10 m

RECEIVER

Receiver : Crone
Frequency : 2.5
Component : A,U,V
Rx Coil : Crone
Rx Area : 7900m², 3000m² turn-m

TRANSMITTER

Transmitter : Crone
Loop : M1
Tx Moment : 90000 turn-m
Tx Current : 20 A
Turn Off : 1 ms

WINDOW TIMES (ms): Centre From the start of the Ramp

1 : 0.8500	12 : 1.362	23 : 3.920	34 : 24.36
2 : 1.052	13 : 1.438	24 : 4.528	35 : 29.22
3 : 1.064	14 : 1.530	25 : 5.262	36 : 35.08
4 : 1.078	15 : 1.640	26 : 6.148	37 : 42.16
5 : 1.094	16 : 1.774	27 : 7.220	38 : 50.72
6 : 1.114	17 : 1.936	28 : 8.514	39 : 61.07
7 : 1.138	18 : 2.132	29 : 10.08	40 : 73.56
8 : 1.168	19 : 2.368	30 : 11.97	41 : 88.66
9 : 1.204	20 : 2.654	31 : 14.20	
10 : 1.246	21 : 3.000	32 : 16.96	
11 : 1.298	22 : 3.416	33 : 20.33	



Outer-Rim Exploration
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Downhole EM Survey
Log-Linear Profiles
Hole: MUD02

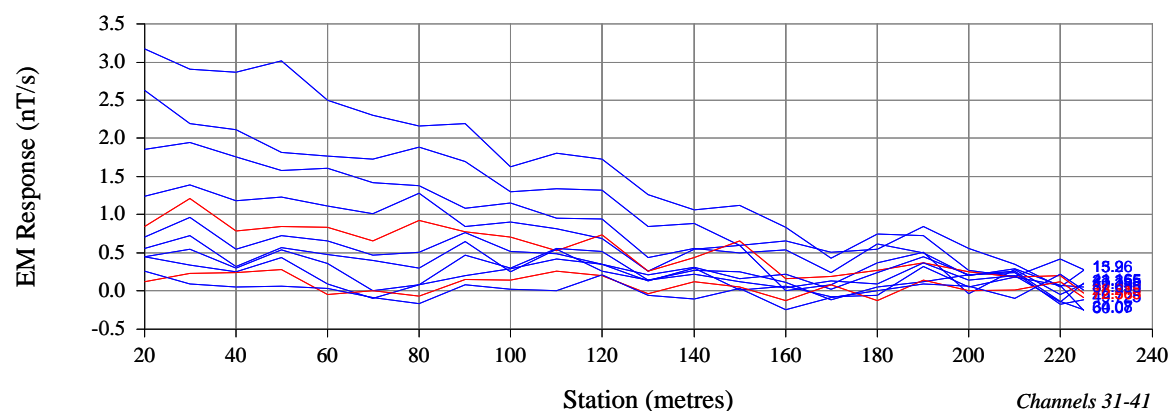
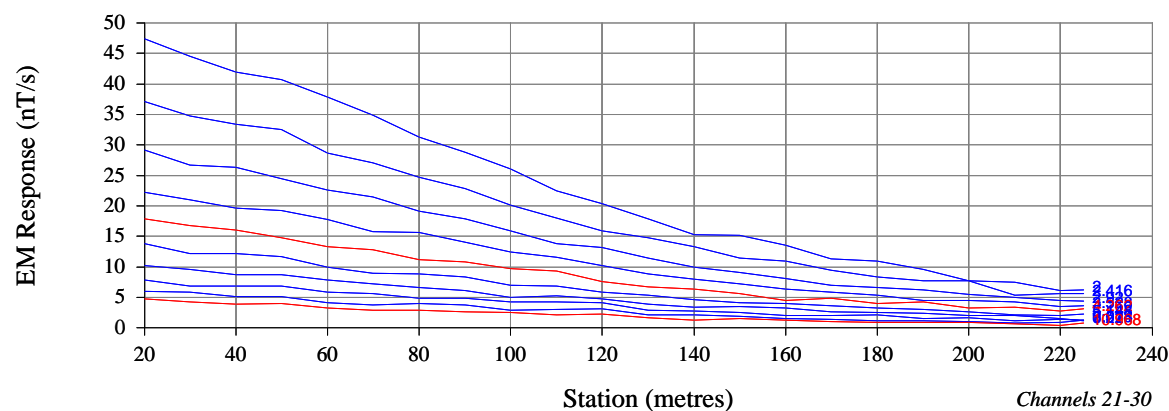
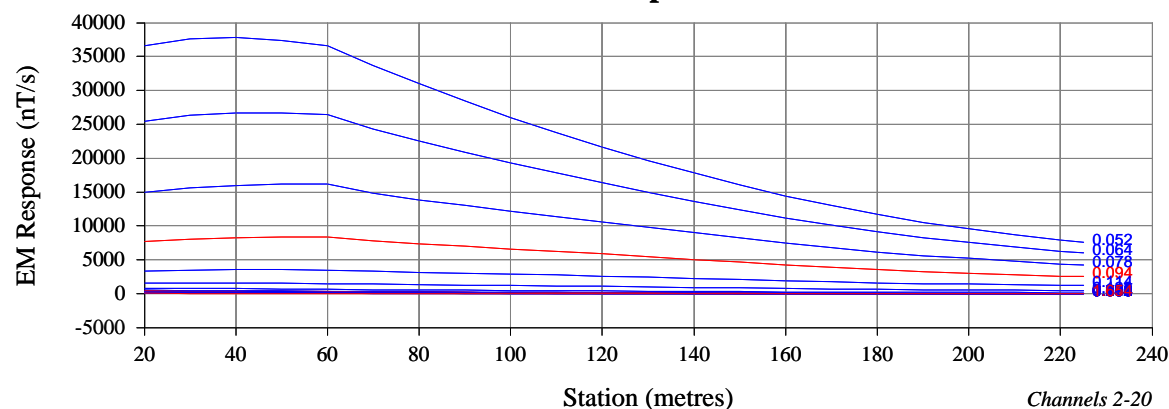
Drawn : DJL

Job No.: JN 2721

Date: 29-10-2012

Fig No.:#18

A Component



SURVEY PARAMETERS

Configuration : Downhole
Station Spacing : 5-10 m

RECEIVER

Receiver : Crone
Frequency : 2.5
Component : A
Rx Coil : Crone
Rx Area : 7900m2 turn-m

TRANSMITTER

Transmitter : Crone
Loop : M1
Tx Moment : 90000 turn-m
Tx Current : 20 A
Turn Off : 1 ms

WINDOW TIMES (ms): Centre From the start of the Ramp

1 : 0.8500	12 : 1.362	23 : 3.920	34 : 24.36
2 : 1.052	13 : 1.438	24 : 4.528	35 : 29.22
3 : 1.064	14 : 1.530	25 : 5.262	36 : 35.08
4 : 1.078	15 : 1.640	26 : 6.148	37 : 42.16
5 : 1.094	16 : 1.774	27 : 7.220	38 : 50.72
6 : 1.114	17 : 1.936	28 : 8.514	39 : 61.07
7 : 1.138	18 : 2.132	29 : 10.08	40 : 73.56
8 : 1.168	19 : 2.368	30 : 11.97	41 : 88.66
9 : 1.204	20 : 2.654	31 : 14.20	
10 : 1.246	21 : 3.000	32 : 16.96	
11 : 1.298	22 : 3.416	33 : 20.33	



Outer-Rim Exploration
Services Pty Ltd

Unity Mining Ltd
Murchison

Downhole EM Survey
Linear Profiles - A Component
Hole: MUD02

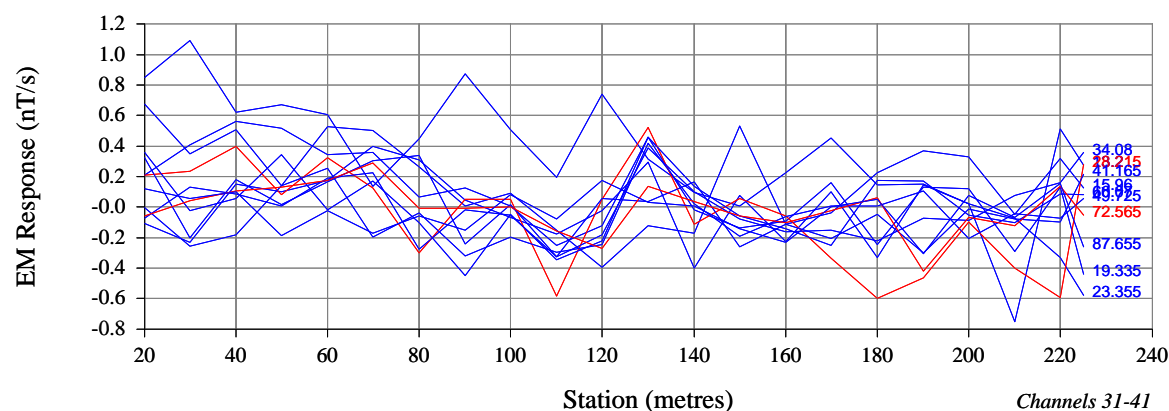
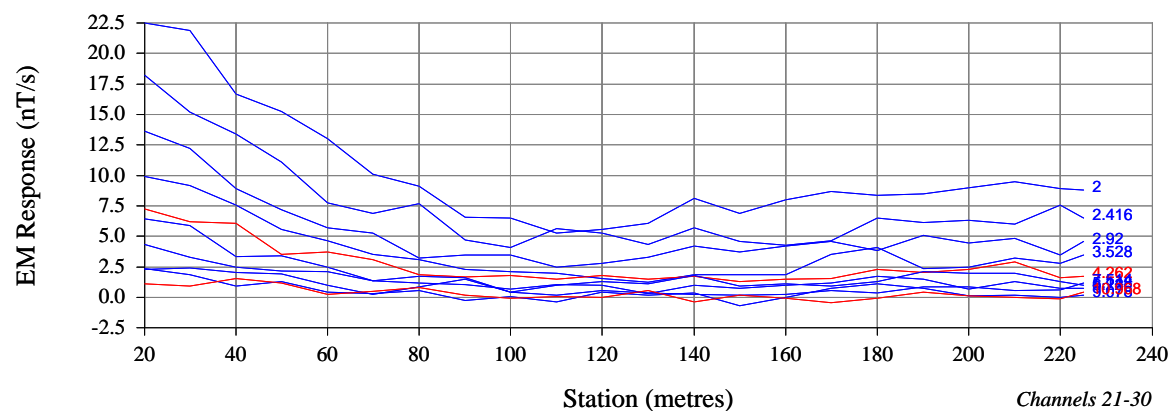
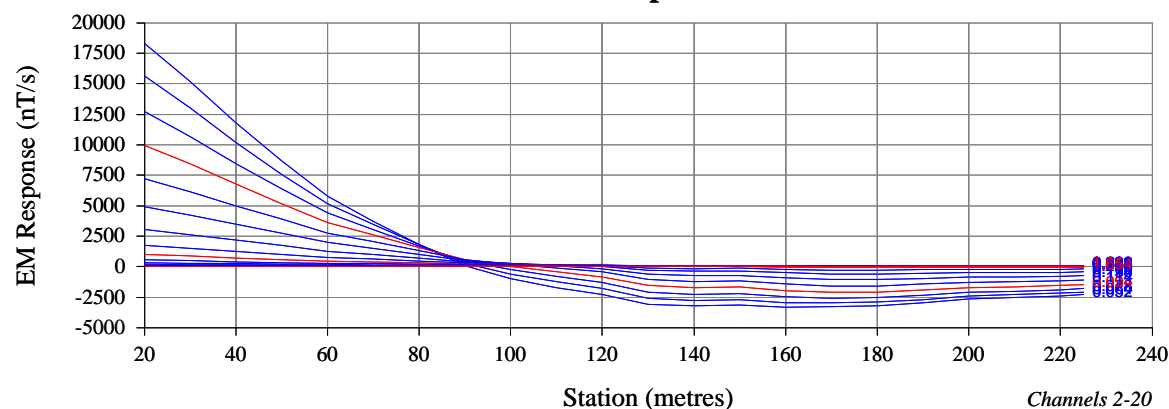
Drawn : DJL

Job No.: JN 2721

Date: 29-10-2012

Fig No.:#19

U Component



SURVEY PARAMETERS

Configuration : Downhole
Station Spacing : 5-10 m

RECEIVER

Receiver : Crone
Frequency : 2.5
Component : U
Rx Coil : Crone
Rx Area : 3000m2 turn-m

TRANSMITTER

Transmitter : Crone
Loop : M1
Tx Moment : 90000 turn-m
Tx Current : 20 A
Turn Off : 1 ms

WINDOW TIMES (ms): Centre From the start of the Ramp

1 : 0.8500	12 : 1.362	23 : 3.920	34 : 24.36
2 : 1.052	13 : 1.438	24 : 4.528	35 : 29.22
3 : 1.064	14 : 1.530	25 : 5.262	36 : 35.08
4 : 1.078	15 : 1.640	26 : 6.148	37 : 42.16
5 : 1.094	16 : 1.774	27 : 7.220	38 : 50.72
6 : 1.114	17 : 1.936	28 : 8.514	39 : 61.07
7 : 1.138	18 : 2.132	29 : 10.08	40 : 73.56
8 : 1.168	19 : 2.368	30 : 11.97	41 : 88.66
9 : 1.204	20 : 2.654	31 : 14.20	
10 : 1.246	21 : 3.000	32 : 16.96	
11 : 1.298	22 : 3.416	33 : 20.33	



Outer-Rim Exploration
Services Pty Ltd

Unity Mining Ltd
Murchison

Downhole EM Survey
Linear Profiles - U Component
Hole: MUD02

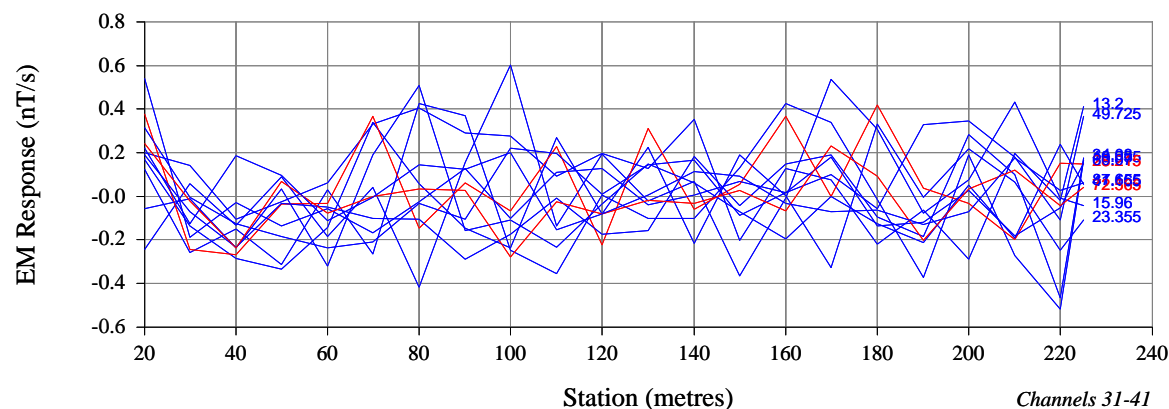
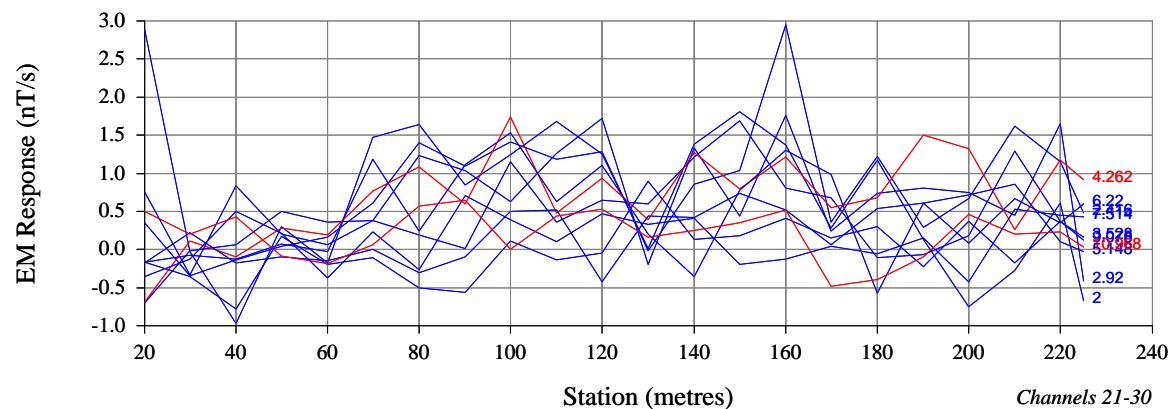
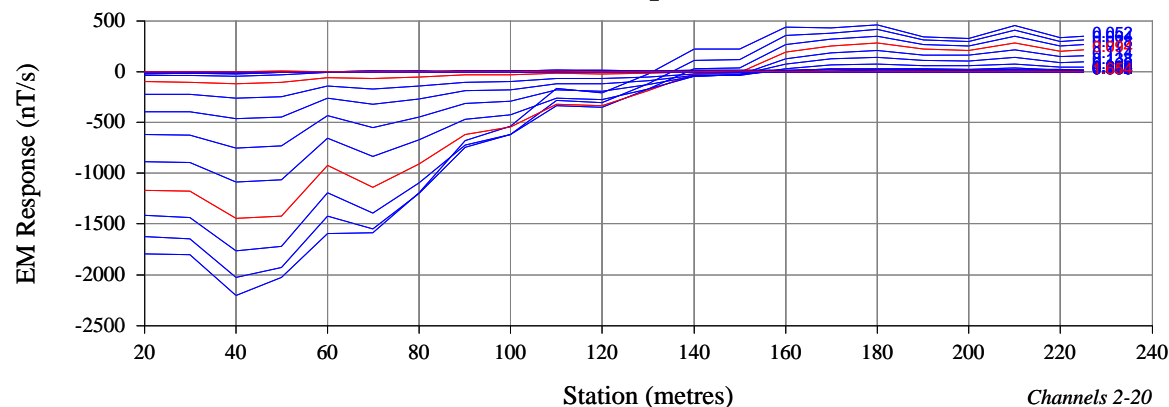
Drawn : DJL

Job No.: JN 2721

Date: 29-10-2012

Fig No.:#20

V Component



SURVEY PARAMETERS

Configuration : Downhole
Station Spacing : 5-10 m

RECEIVER

Receiver : Crone
Frequency : 2.5
Component : V
Rx Coil : Crone
Rx Area : 3000m2 turn-m

TRANSMITTER

Transmitter : Crone
Loop : M1
Tx Moment : 90000 turn-m
Tx Current : 20 A
Turn Off : 1 ms

WINDOW TIMES (ms): Centre From the start of the Ramp

1 : 0.8500	12 : 1.362	23 : 3.920	34 : 24.36
2 : 1.052	13 : 1.438	24 : 4.528	35 : 29.22
3 : 1.064	14 : 1.530	25 : 5.262	36 : 35.08
4 : 1.078	15 : 1.640	26 : 6.148	37 : 42.16
5 : 1.094	16 : 1.774	27 : 7.220	38 : 50.72
6 : 1.114	17 : 1.936	28 : 8.514	39 : 61.07
7 : 1.138	18 : 2.132	29 : 10.08	40 : 73.56
8 : 1.168	19 : 2.368	30 : 11.97	41 : 88.66
9 : 1.204	20 : 2.654	31 : 14.20	
10 : 1.246	21 : 3.000	32 : 16.96	
11 : 1.298	22 : 3.416	33 : 20.33	



Outer-Rim Exploration
Services Pty Ltd

Unity Mining Ltd
Murchison

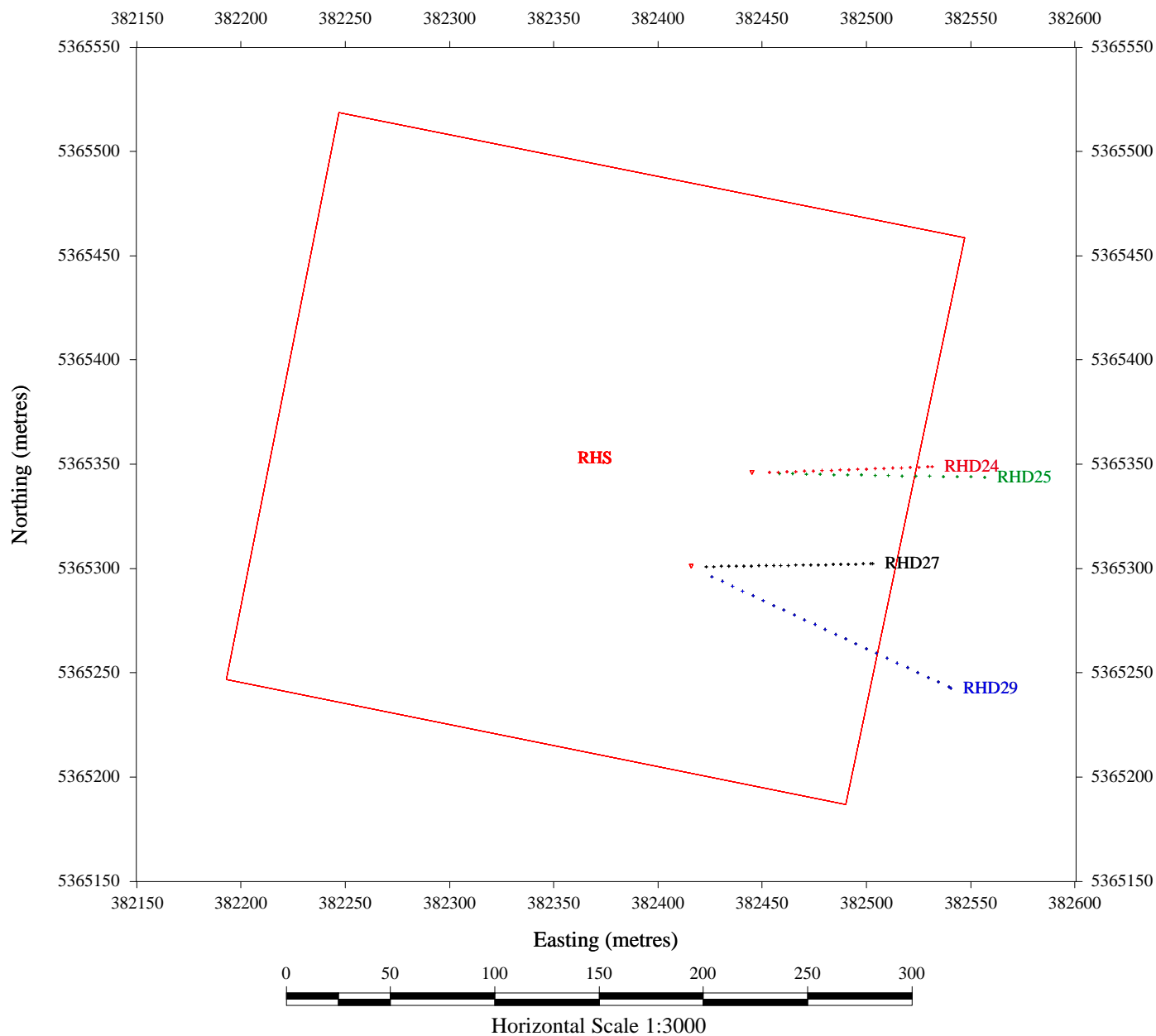
Downhole EM Survey
Linear Profiles - V Component
Hole: MUD02

Drawn : DJL

Job No.: JN 2721

Date: 29-10-2012

Fig No.:#21



SURVEY PARAMETERS

Configuration : Downhole
Station Spacing : 2-10 m

RECEIVER

Receiver : Crone
Frequency : 2.5
Component : A,U,V
Rx Coil : Crone
Rx Area : 7900m2, 3000m2 turn-m

TRANSMITTER

Transmitter : Crone
Loop : RHS
Tx Moment : 90000 turn-m
Tx Current : 20 A
Turn Off : 1 ms

WINDOW TIMES (ms) From the start of the Ramp

1 : 0.8500	12 : 1.362	23 : 3.920	34 : 24.36
2 : 1.052	13 : 1.438	24 : 4.528	35 : 29.22
3 : 1.064	14 : 1.530	25 : 5.262	36 : 35.08
4 : 1.078	15 : 1.640	26 : 6.148	37 : 42.16
5 : 1.094	16 : 1.774	27 : 7.220	38 : 50.72
6 : 1.114	17 : 1.936	28 : 8.514	39 : 61.07
7 : 1.138	18 : 2.132	29 : 10.08	40 : 73.56
8 : 1.168	19 : 2.368	30 : 11.97	41 : 88.66
9 : 1.204	20 : 2.654	31 : 14.20	
10 : 1.246	21 : 3.000	32 : 16.96	
11 : 1.298	22 : 3.416	33 : 20.33	



Outer-Rim Exploration
Services Pty Ltd

Unity Mining Ltd
Red Hills

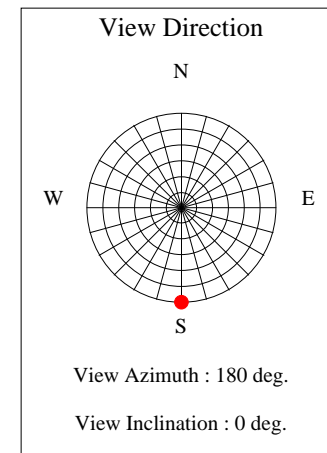
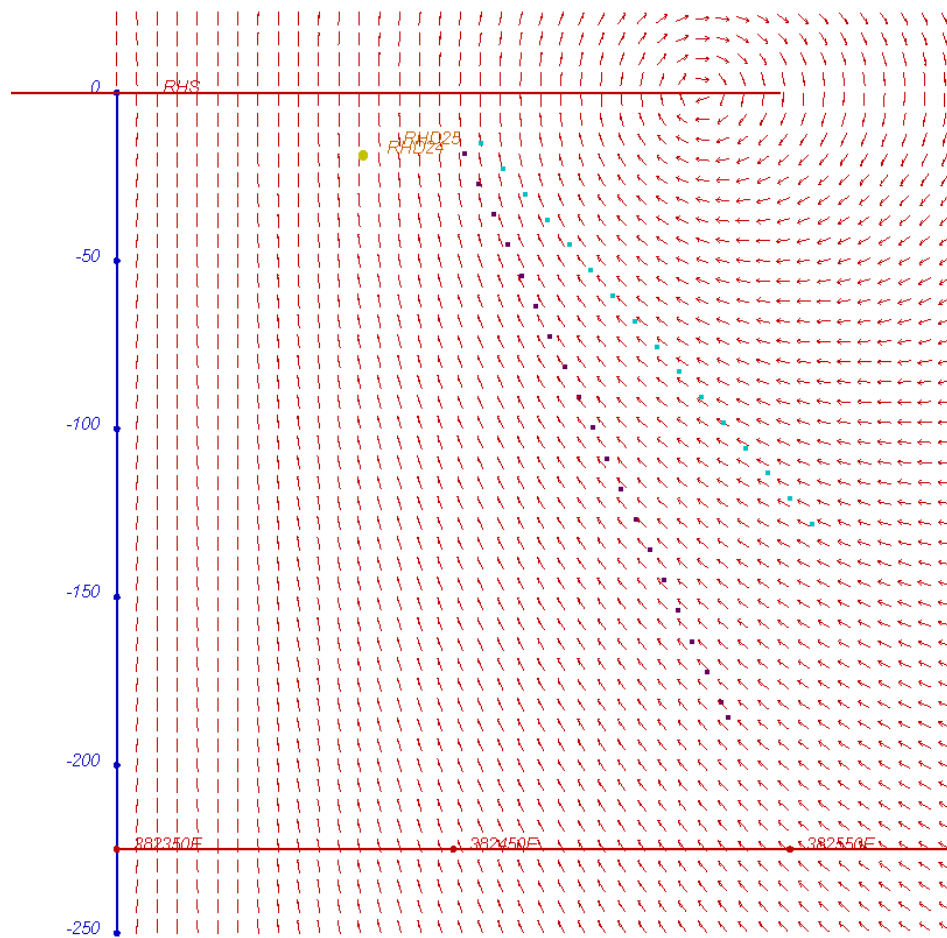
Downhole EM Survey
Survey Location Plan
Hole: RHD24,25,27 & 29

Drawn : DJL

Job No.: JN 2721

Date: 31-10-2012

Fig No.:#22



Outer-Rim Exploration
Services Pty Ltd

Unity Mining Ltd
Red Hills

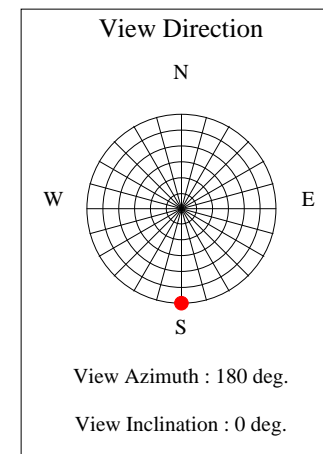
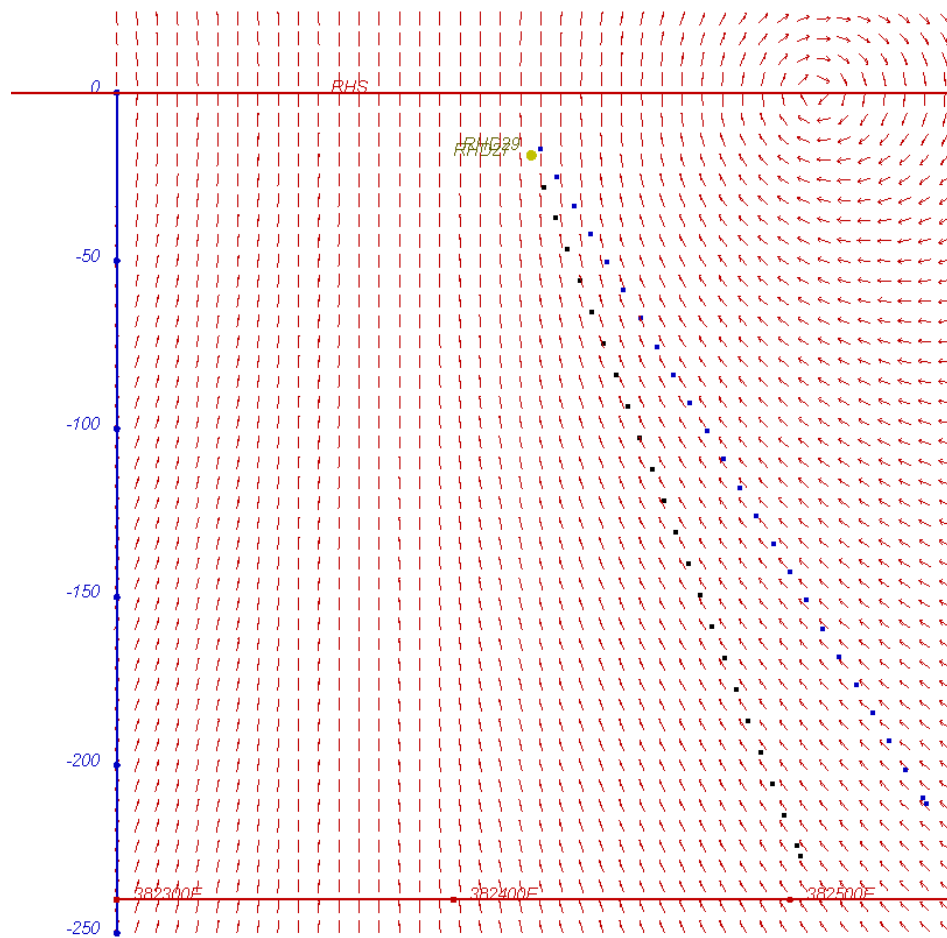
Downhole EM Survey
Primary Field Plot
Hole: RHD24 & RHD25

Drawn : DJL

Job No.: JN 2721

Date: 31-10-2012

Fig No.:#23



Outer-Rim Exploration
Services Pty Ltd

Unity Mining Ltd
Red Hills

Downhole EM Survey
Primary Field Plot
Hole: RHD27 & RHD29

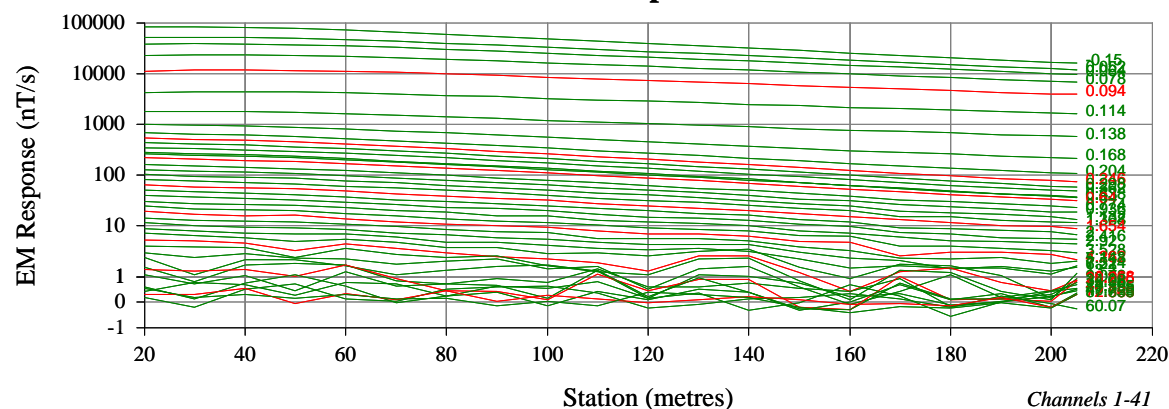
Drawn : DJL

Job No.: JN 2721

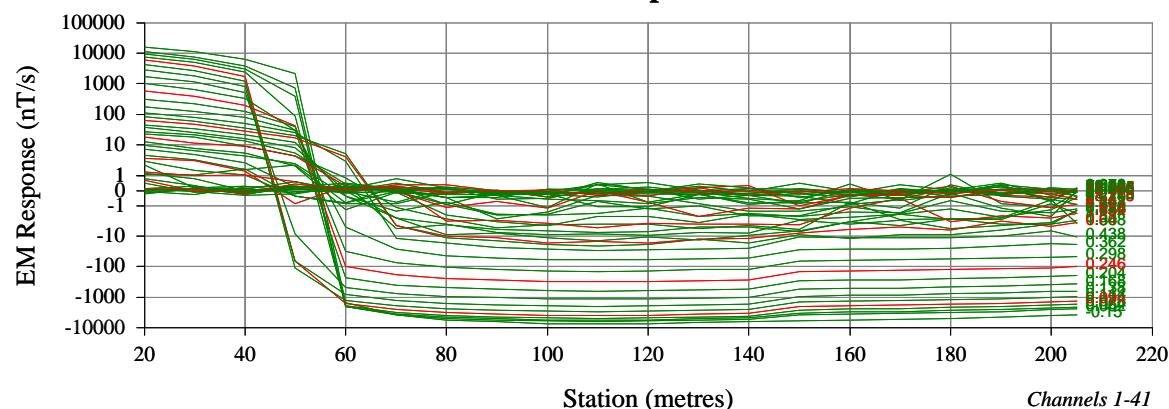
Date: 31-10-2012

Fig No.:#24

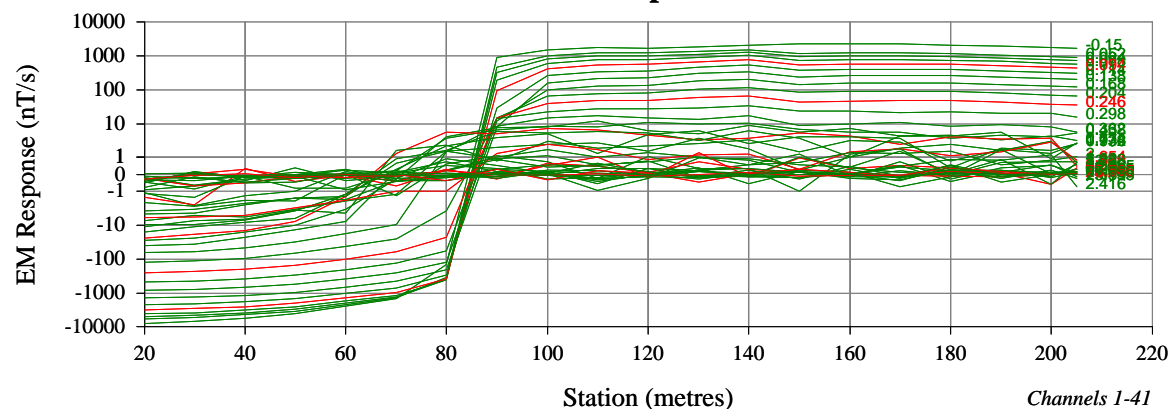
A Component



U Component



V Component



SURVEY PARAMETERS

Configuration : Downhole
Station Spacing : 5-10 m

RECEIVER

Receiver : Crone
Frequency : 2.5
Component : A,U,V
Rx Coil : Crone
Rx Area : 7900m2, 3000m2 turn-m

TRANSMITTER

Transmitter : Crone
Loop : RHS
Tx Moment : 90000 turn-m
Tx Current : 20 A
Turn Off : 1 ms

WINDOW TIMES (ms): Centre From the start of the Ramp

1 : 0.8500	12 : 1.362	23 : 3.920	34 : 24.36
2 : 1.052	13 : 1.438	24 : 4.528	35 : 29.22
3 : 1.064	14 : 1.530	25 : 5.262	36 : 35.08
4 : 1.078	15 : 1.640	26 : 6.148	37 : 42.16
5 : 1.094	16 : 1.774	27 : 7.220	38 : 50.72
6 : 1.114	17 : 1.936	28 : 8.514	39 : 61.07
7 : 1.138	18 : 2.132	29 : 10.08	40 : 73.56
8 : 1.168	19 : 2.368	30 : 11.97	41 : 88.66
9 : 1.204	20 : 2.654	31 : 14.20	
10 : 1.246	21 : 3.000	32 : 16.96	
11 : 1.298	22 : 3.416	33 : 20.33	



Outer-Rim Exploration
Services Pty Ltd

Unity Mining Ltd
Red Hills

Downhole EM Survey
Log-Linear Profiles
Hole: RHD24

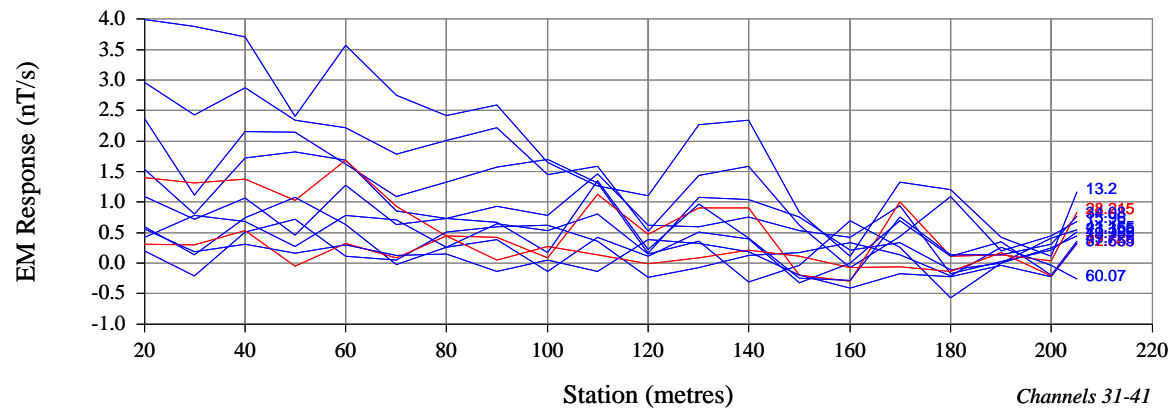
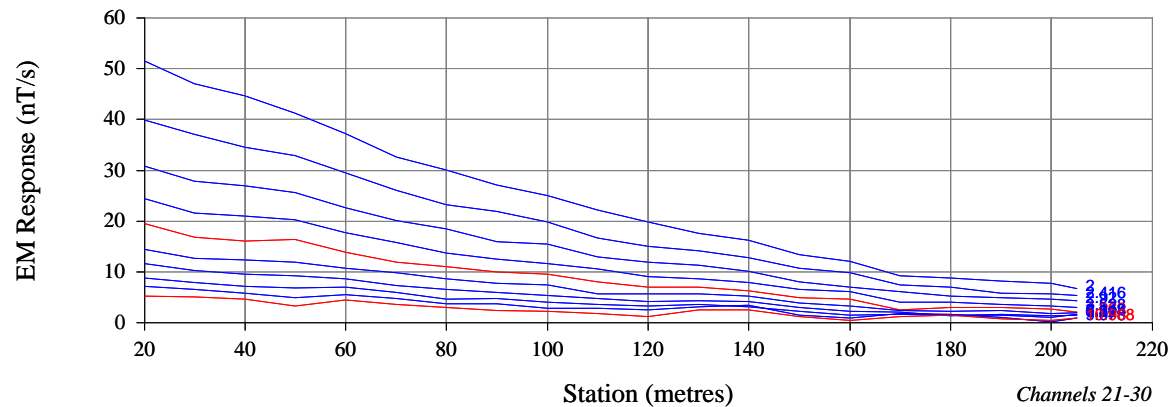
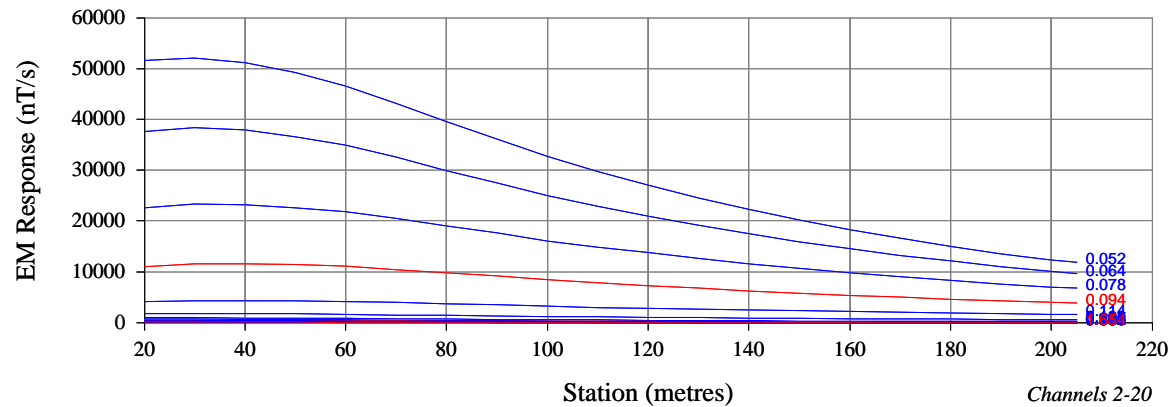
Drawn : DJL

Job No.: JN 2721

Date: 31-10-2012

Fig No.:#25

A Component



SURVEY PARAMETERS

Configuration : Downhole
Station Spacing : 5-10 m

RECEIVER

Receiver : Crone
Frequency : 2.5
Component : A
Rx Coil : Crone
Rx Area : 7900m² turn-m

TRANSMITTER

Transmitter : Crone
Loop : RHS
Tx Moment : 90000 turn-m
Tx Current : 20 A
Turn Off : 1 ms

WINDOW TIMES (ms): Centre From the start of the Ramp

1 : 0.8500	12 : 1.362	23 : 3.920	34 : 24.36
2 : 1.052	13 : 1.438	24 : 4.528	35 : 29.22
3 : 1.064	14 : 1.530	25 : 5.262	36 : 35.08
4 : 1.078	15 : 1.640	26 : 6.148	37 : 42.16
5 : 1.094	16 : 1.774	27 : 7.220	38 : 50.72
6 : 1.114	17 : 1.936	28 : 8.514	39 : 61.07
7 : 1.138	18 : 2.132	29 : 10.08	40 : 73.56
8 : 1.168	19 : 2.368	30 : 11.97	41 : 88.66
9 : 1.204	20 : 2.654	31 : 14.20	
10 : 1.246	21 : 3.000	32 : 16.96	
11 : 1.298	22 : 3.416	33 : 20.33	



Outer-Rim Exploration
Services Pty Ltd

Unity Mining Ltd
Red Hills

Downhole EM Survey
Linear Profiles - A Component
Hole: RHD24

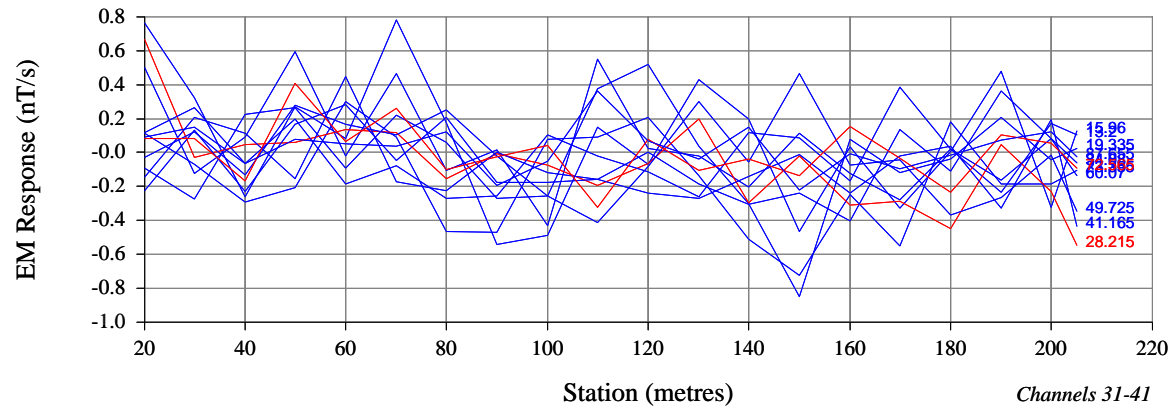
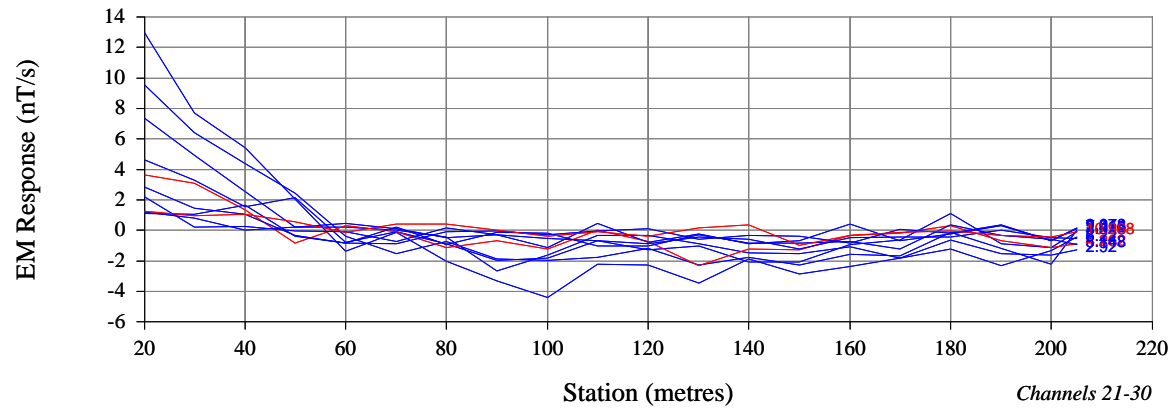
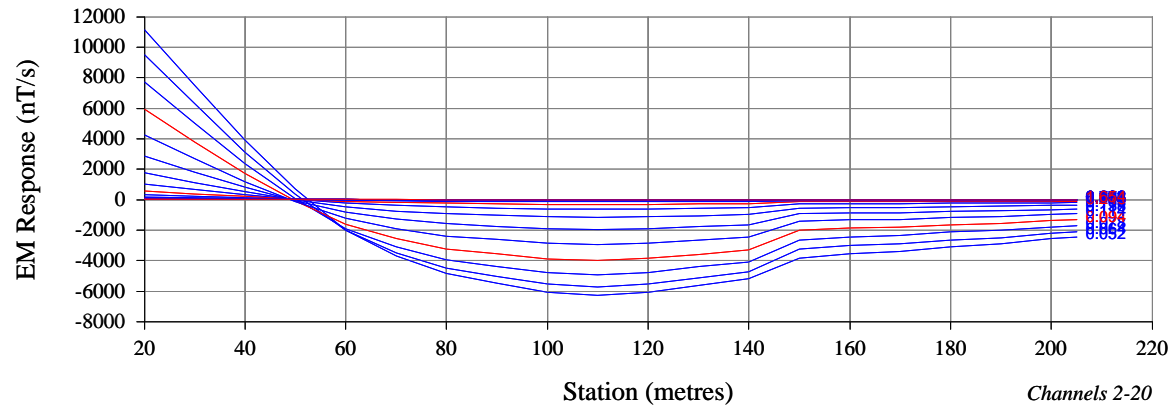
Drawn : DJL

Job No.: JN 2721

Date: 31-10-2012

Fig No.:#26

U Component



SURVEY PARAMETERS

Configuration : Downhole
Station Spacing : 5-10 m

RECEIVED

Receiver	: Crone
Frequency	: 2.5
Component	: U
Rx Coil	: Crone
Rx Area	: 3000m2 turn-m

TRANSMITTER

Transmitter	: Crone
Loop	: RHS
Tx Moment	: 90000 turn-m
Tx Current	: 20 A
Turn Off	: 1 ms

WINDOW TIMES (ms): Centre
From the start of the Ramp

1	: 0.8500	12	: 1.362	23	: 3.920	34	: 24.36
2	: 1.052	13	: 1.438	24	: 4.528	35	: 29.22
3	: 1.064	14	: 1.530	25	: 5.262	36	: 35.08
4	: 1.078	15	: 1.640	26	: 6.148	37	: 42.16
5	: 1.094	16	: 1.774	27	: 7.220	38	: 50.72
6	: 1.114	17	: 1.936	28	: 8.514	39	: 61.07
7	: 1.138	18	: 2.132	29	: 10.08	40	: 73.56
8	: 1.168	19	: 2.368	30	: 11.97	41	: 88.66
9	: 1.204	20	: 2.654	31	: 14.20		
10	: 1.246	21	: 3.000	32	: 16.96		
11	: 1.298	22	: 3.416	33	: 20.33		



Outer-Rim Exploration
Services Pty Ltd

Unity Mining Ltd
Red Hills

Downhole EM Survey
Linear Profiles - U Component
Hole: RHD24

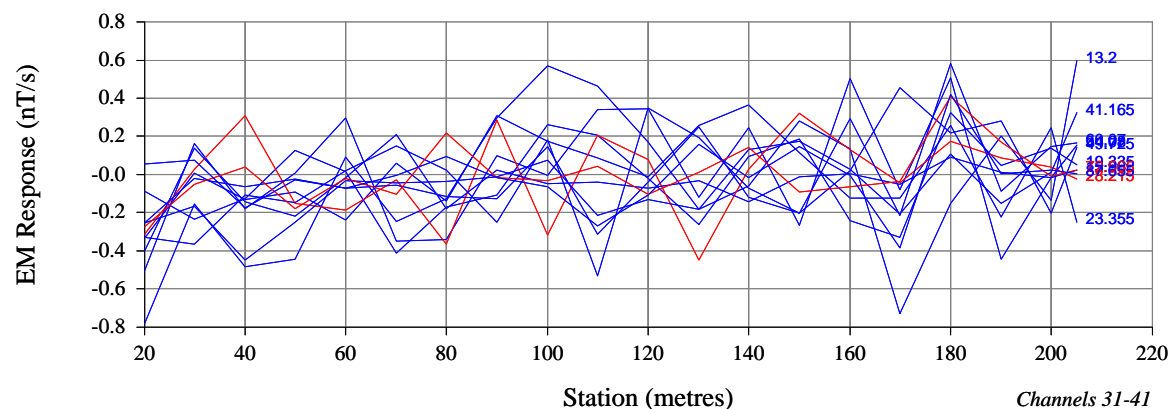
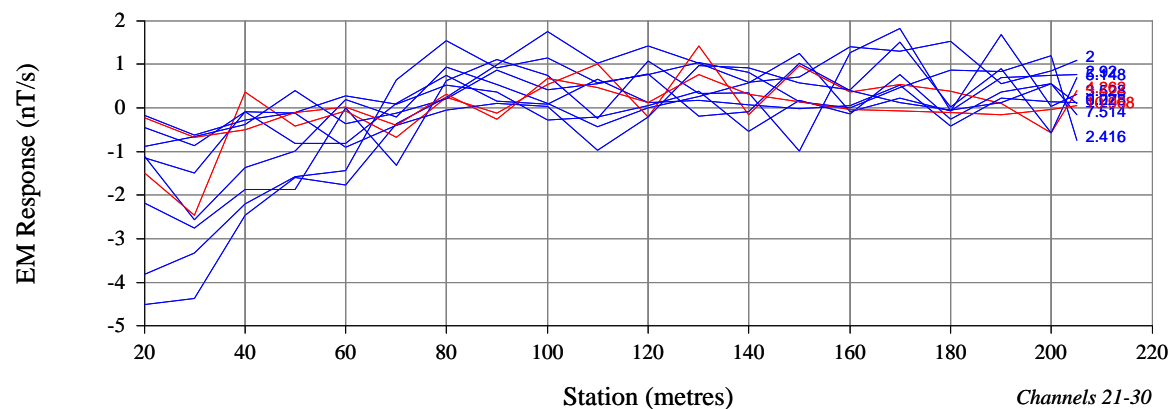
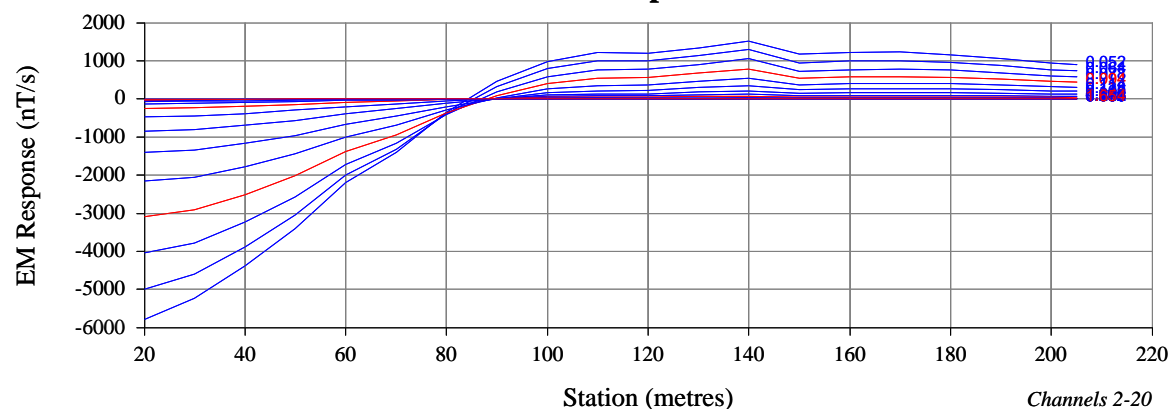
Drawn : DJL

Job No.: JN 2721

Date: 31-10-2012

Fig No.:#27

V Component



SURVEY PARAMETERS

Configuration : Downhole
Station Spacing : 5-10 m

RECEIVER

Receiver : Crone
Frequency : 2.5
Component : V
Rx Coil : Crone
Rx Area : 3000m2 turn-m

TRANSMITTER

Transmitter : Crone
Loop : RHS
Tx Moment : 90000 turn-m
Tx Current : 20 A
Turn Off : 1 ms

WINDOW TIMES (ms): Centre From the start of the Ramp

1 : 0.8500	12 : 1.362	23 : 3.920	34 : 24.36
2 : 1.052	13 : 1.438	24 : 4.528	35 : 29.22
3 : 1.064	14 : 1.530	25 : 5.262	36 : 35.08
4 : 1.078	15 : 1.640	26 : 6.148	37 : 42.16
5 : 1.094	16 : 1.774	27 : 7.220	38 : 50.72
6 : 1.114	17 : 1.936	28 : 8.514	39 : 61.07
7 : 1.138	18 : 2.132	29 : 10.08	40 : 73.56
8 : 1.168	19 : 2.368	30 : 11.97	41 : 88.66
9 : 1.204	20 : 2.654	31 : 14.20	
10 : 1.246	21 : 3.000	32 : 16.96	
11 : 1.298	22 : 3.416	33 : 20.33	



Outer-Rim Exploration
Services Pty Ltd

Unity Mining Ltd
Red Hills

Downhole EM Survey
Linear Profiles - V Component
Hole: RHD24

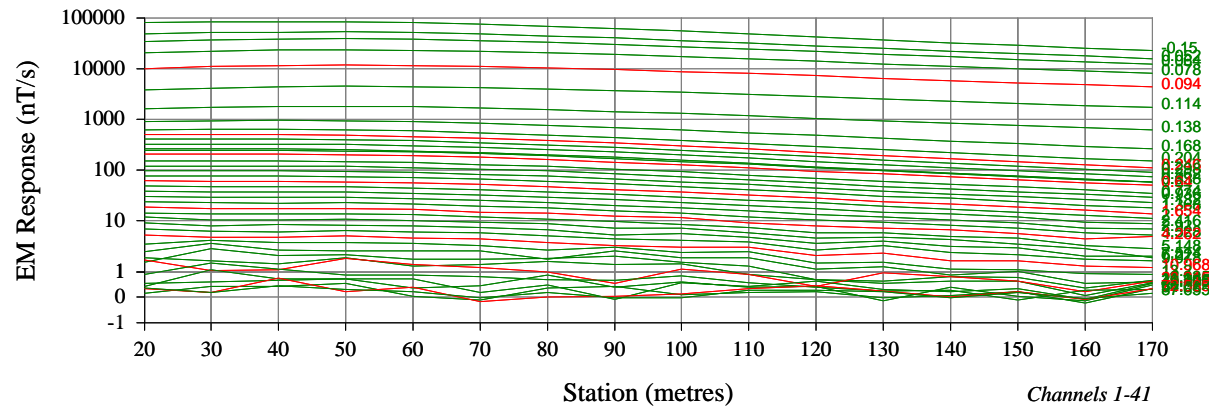
Drawn : DJL

Job No.: JN 2721

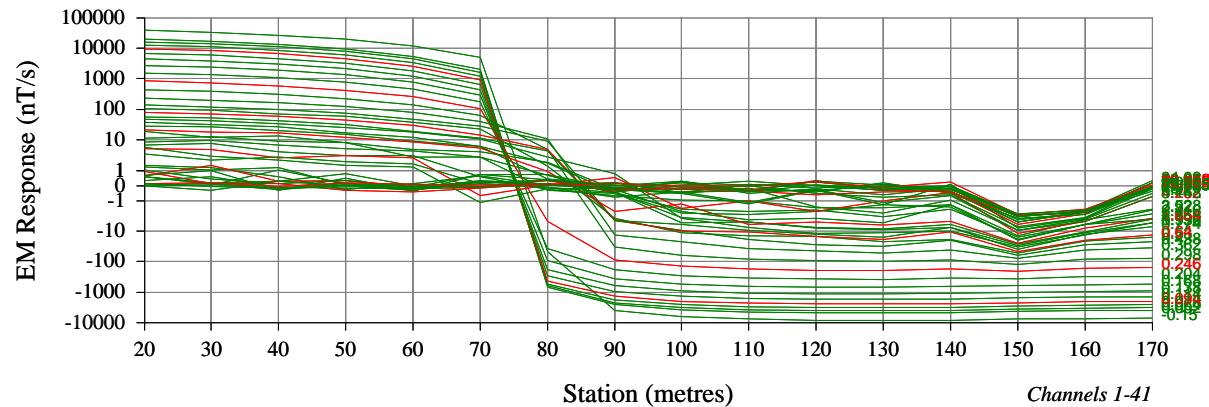
Date: 31-10-2012

Fig No.:#28

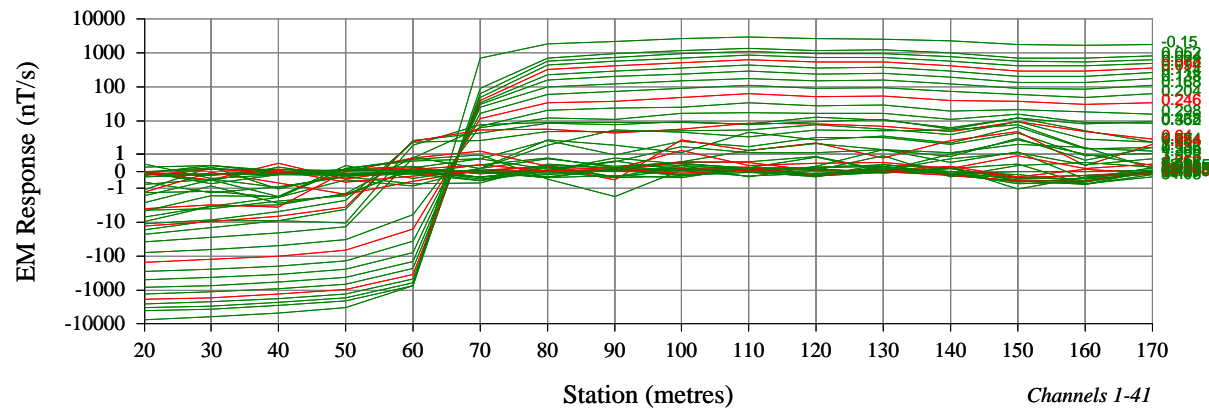
A Component



U Component



V Component



SURVEY PARAMETERS

Configuration : Downhole
Station Spacing : 10 m

RECEIVER

Receiver : Crone
Frequency : 2.5
Component : A,U,V
Rx Coil : Crone
Rx Area : 7900m2, 3000m2 turn-m

TRANSMITTER

Transmitter : Crone
Loop : RHS
Tx Moment : 90000 turn-m
Tx Current : 20 A
Turn Off : 1 ms

WINDOW TIMES (ms): Centre From the start of the Ramp

1 : 0.8500	12 : 1.362	23 : 3.920	34 : 24.36
2 : 1.052	13 : 1.438	24 : 4.528	35 : 29.22
3 : 1.064	14 : 1.530	25 : 5.262	36 : 35.08
4 : 1.078	15 : 1.640	26 : 6.148	37 : 42.16
5 : 1.094	16 : 1.774	27 : 7.220	38 : 50.72
6 : 1.114	17 : 1.936	28 : 8.514	39 : 61.07
7 : 1.138	18 : 2.132	29 : 10.08	40 : 73.56
8 : 1.168	19 : 2.368	30 : 11.97	41 : 88.66
9 : 1.204	20 : 2.654	31 : 14.20	
10 : 1.246	21 : 3.000	32 : 16.96	
11 : 1.298	22 : 3.416	33 : 20.33	



Outer-Rim Exploration
Services Pty Ltd

Unity Mining Ltd
Red Hills

Downhole EM Survey
Log-Linear Profiles
Hole: RHD25

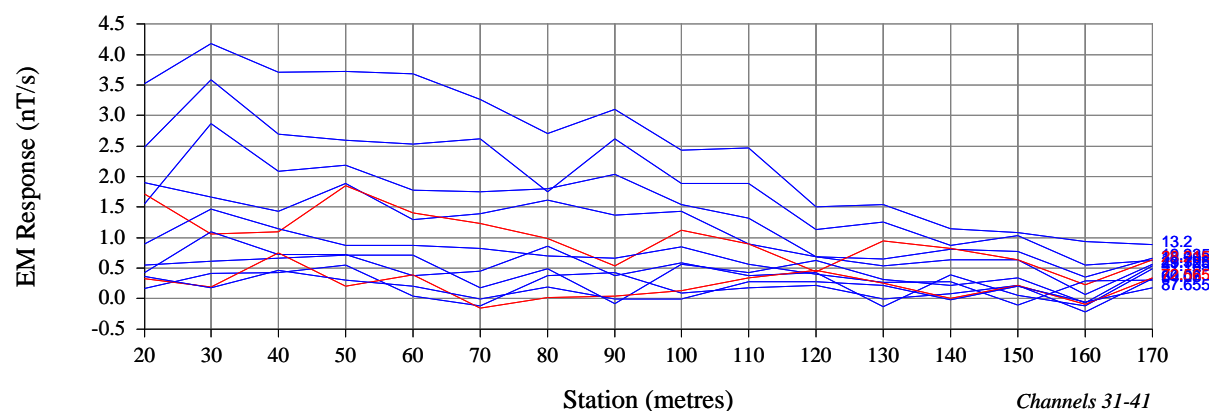
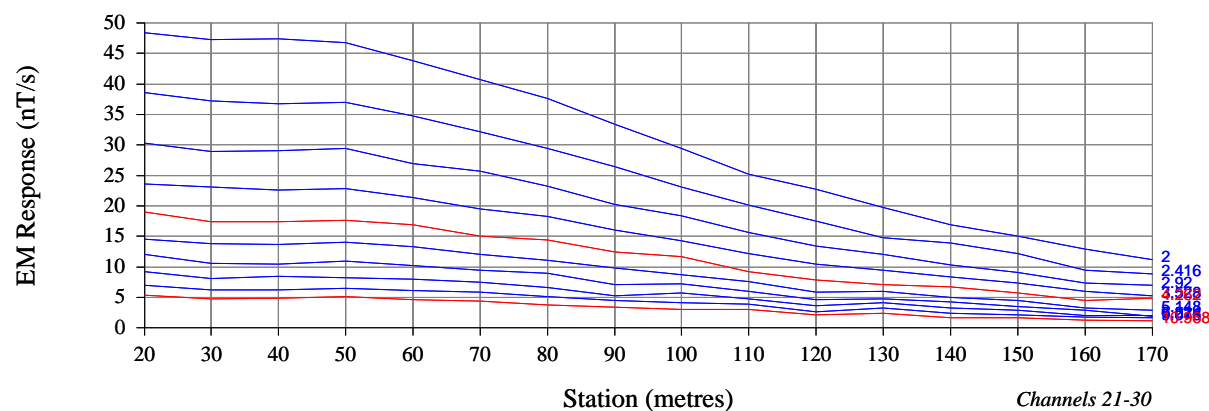
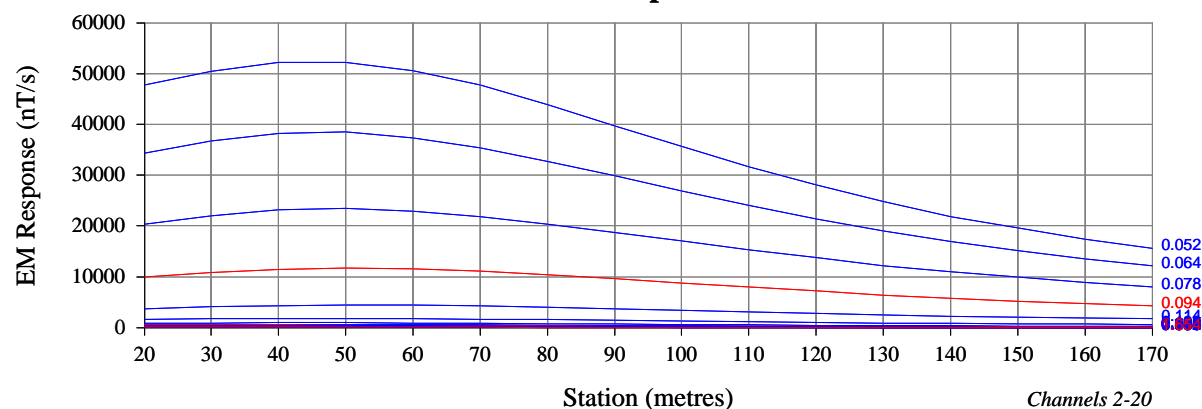
Drawn : DJL

Job No.: JN 2721

Date: 31-10-2012

Fig No.:#29

A Component



SURVEY PARAMETERS

Configuration : Downhole
Station Spacing : 10 m

RECEIVER

Receiver : Crone
Frequency : 2.5
Component : A
Rx Coil : Crone
Rx Area : 7900m² turn-m

TRANSMITTER

Transmitter : Crone
Loop : RHS
Tx Moment : 90000 turn-m
Tx Current : 20 A
Turn Off : 1 ms

WINDOW TIMES (ms): Centre From the start of the Ramp

1 : 0.8500	12 : 1.362	23 : 3.920	34 : 24.36
2 : 1.052	13 : 1.438	24 : 4.528	35 : 29.22
3 : 1.064	14 : 1.530	25 : 5.262	36 : 35.08
4 : 1.078	15 : 1.640	26 : 6.148	37 : 42.16
5 : 1.094	16 : 1.774	27 : 7.220	38 : 50.72
6 : 1.114	17 : 1.936	28 : 8.514	39 : 61.07
7 : 1.138	18 : 2.132	29 : 10.08	40 : 73.56
8 : 1.168	19 : 2.368	30 : 11.97	41 : 88.66
9 : 1.204	20 : 2.654	31 : 14.20	
10 : 1.246	21 : 3.000	32 : 16.96	
11 : 1.298	22 : 3.416	33 : 20.33	



Outer-Rim Exploration
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Unity Mining Ltd
Red Hills

Downhole EM Survey
Linear Profiles - A Component
Hole: RHD25

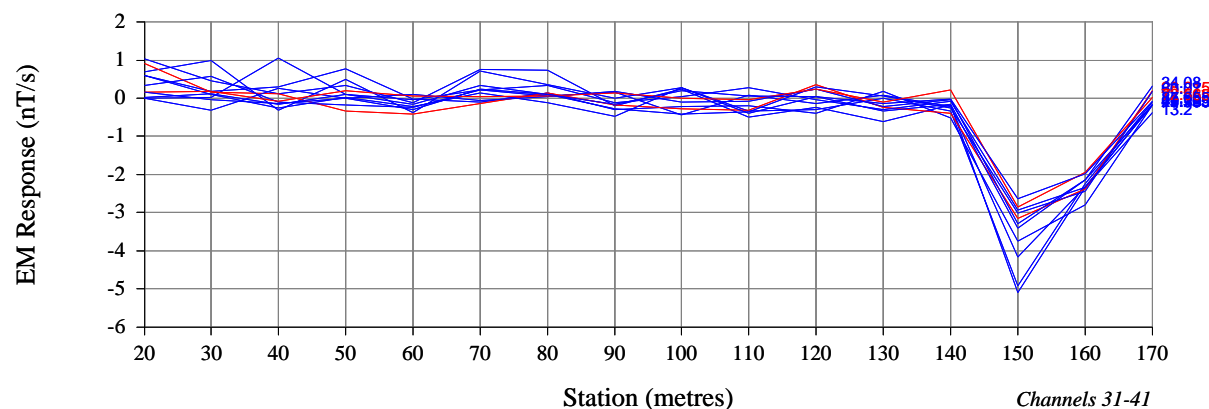
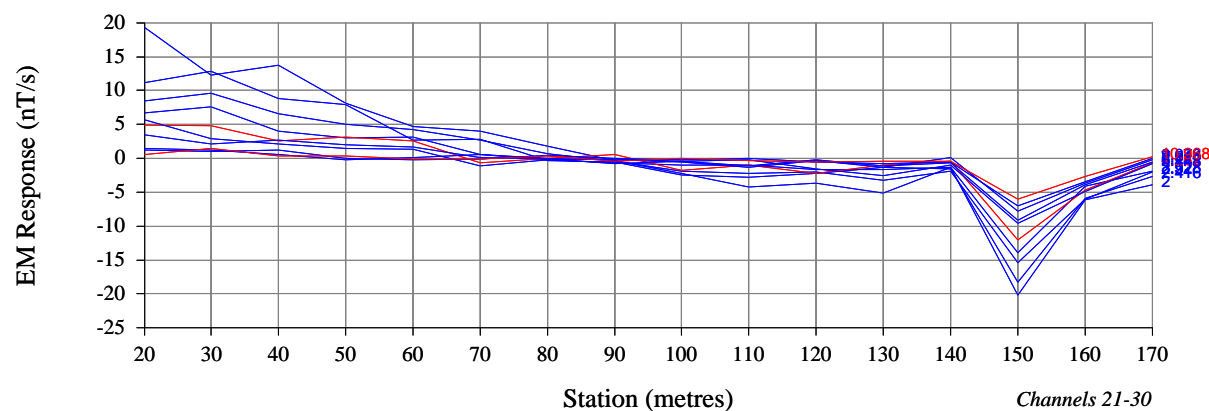
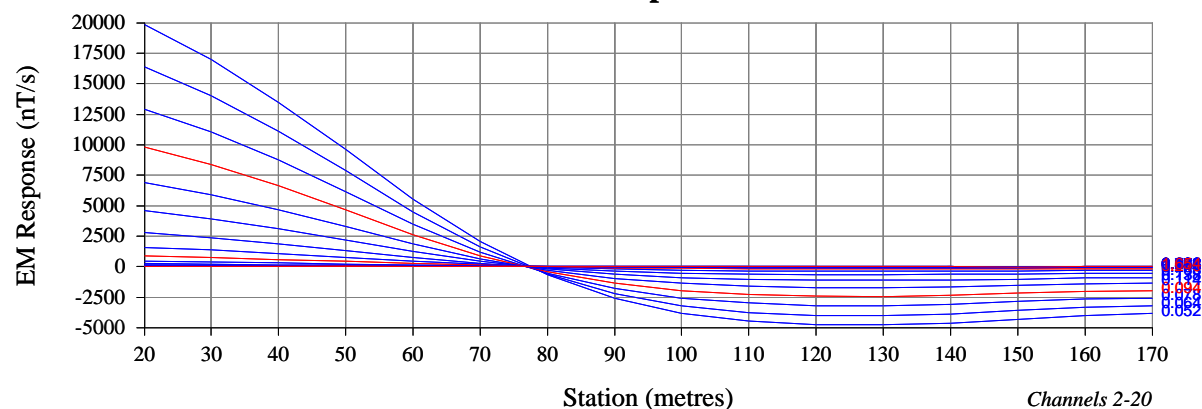
Drawn : DJL

Job No.: JN 2721

Date: 31-10-2012

Fig No.:#30

U Component



SURVEY PARAMETERS

Configuration : Downhole
Station Spacing : 10 m

RECEIVER

Receiver : Crone
Frequency : 2.5
Component : U
Rx Coil : Crone
Rx Area : 3000m2 turn-m

TRANSMITTER

Transmitter : Crone
Loop : RHS
Tx Moment : 90000 turn-m
Tx Current : 20 A
Turn Off : 1 ms

WINDOW TIMES (ms): Centre From the start of the Ramp

1 : 0.8500	12 : 1.362	23 : 3.920	34 : 24.36
2 : 1.052	13 : 1.438	24 : 4.528	35 : 29.22
3 : 1.064	14 : 1.530	25 : 5.262	36 : 35.08
4 : 1.078	15 : 1.640	26 : 6.148	37 : 42.16
5 : 1.094	16 : 1.774	27 : 7.220	38 : 50.72
6 : 1.114	17 : 1.936	28 : 8.514	39 : 61.07
7 : 1.138	18 : 2.132	29 : 10.08	40 : 73.56
8 : 1.168	19 : 2.368	30 : 11.97	41 : 88.66
9 : 1.204	20 : 2.654	31 : 14.20	
10 : 1.246	21 : 3.000	32 : 16.96	
11 : 1.298	22 : 3.416	33 : 20.33	



Outer-Rim Exploration
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Red Hills

Downhole EM Survey
Linear Profiles - U Component
Hole: RHD25

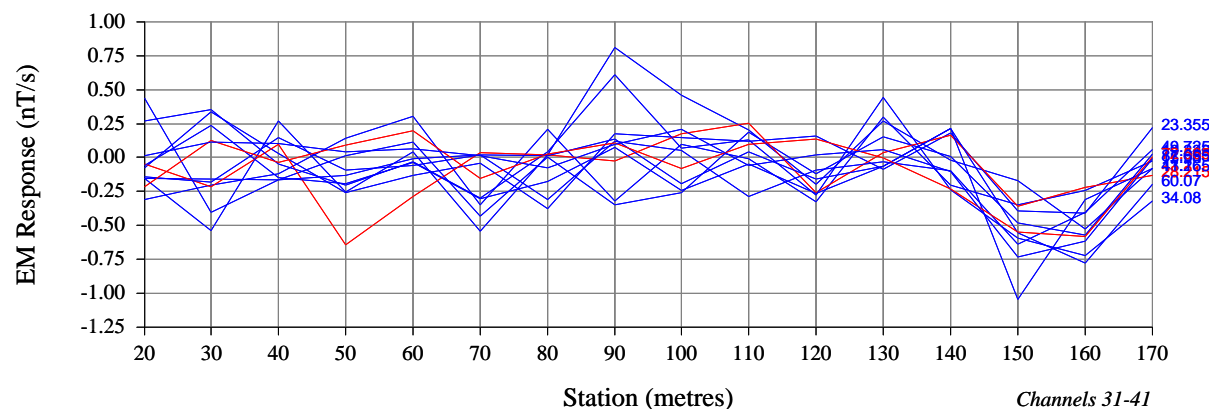
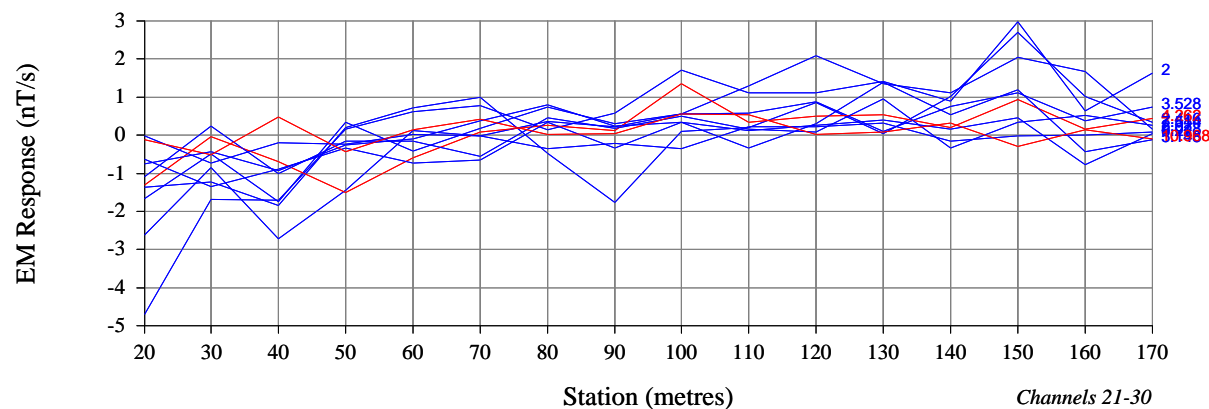
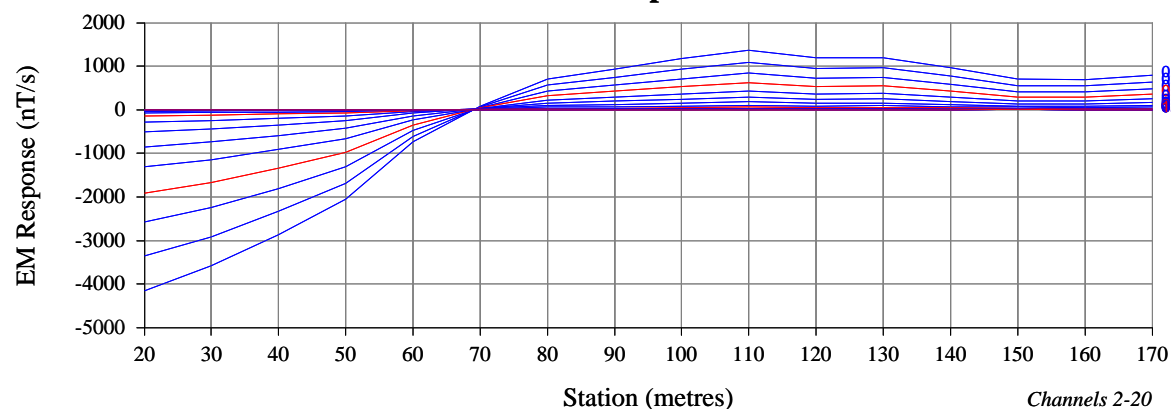
Drawn : DJL

Job No.: JN 2721

Date: 31-10-2012

Fig No.:#31

V Component



SURVEY PARAMETERS

Configuration : Downhole
Station Spacing : 10 m

RECEIVER

Receiver : Crone
Frequency : 2.5
Component : V
Rx Coil : Crone
Rx Area : 3000m2 turn-m

TRANSMITTER

Transmitter : Crone
Loop : RHS
Tx Moment : 90000 turn-m
Tx Current : 20 A
Turn Off : 1 ms

WINDOW TIMES (ms): Centre From the start of the Ramp

1 : 0.8500	12 : 1.362	23 : 3.920	34 : 24.36
2 : 1.052	13 : 1.438	24 : 4.528	35 : 29.22
3 : 1.064	14 : 1.530	25 : 5.262	36 : 35.08
4 : 1.078	15 : 1.640	26 : 6.148	37 : 42.16
5 : 1.094	16 : 1.774	27 : 7.220	38 : 50.72
6 : 1.114	17 : 1.936	28 : 8.514	39 : 61.07
7 : 1.138	18 : 2.132	29 : 10.08	40 : 73.56
8 : 1.168	19 : 2.368	30 : 11.97	41 : 88.66
9 : 1.204	20 : 2.654	31 : 14.20	
10 : 1.246	21 : 3.000	32 : 16.96	
11 : 1.298	22 : 3.416	33 : 20.33	



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Downhole EM Survey
Linear Profiles - V Component
Hole: RHD25

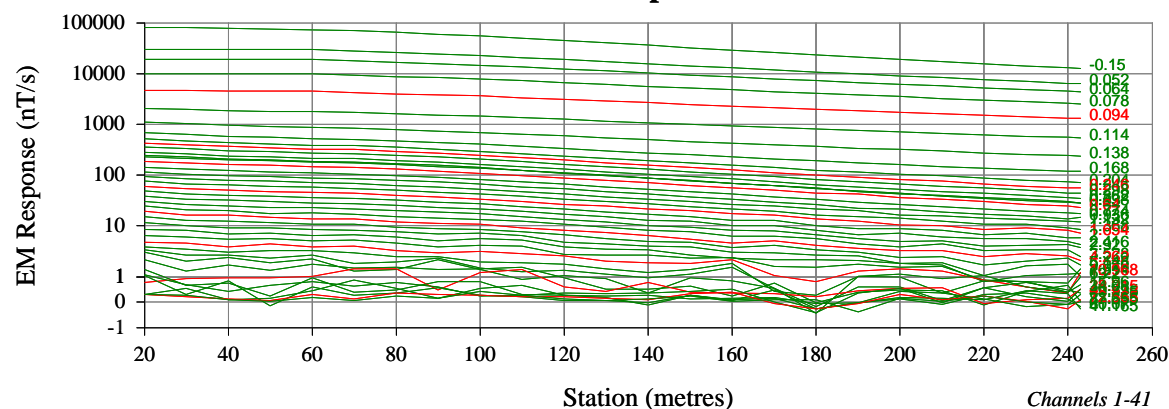
Drawn : DJL

Job No.: JN 2721

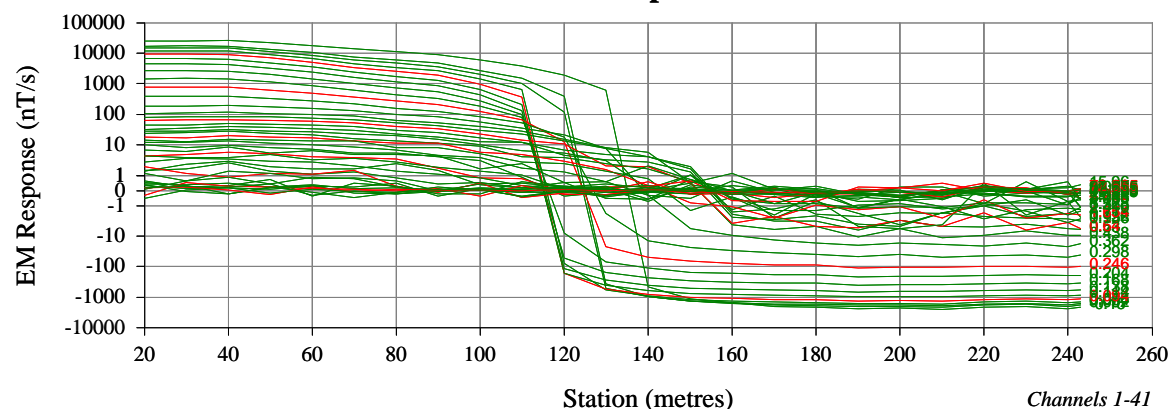
Date: 31-10-2012

Fig No.:#32

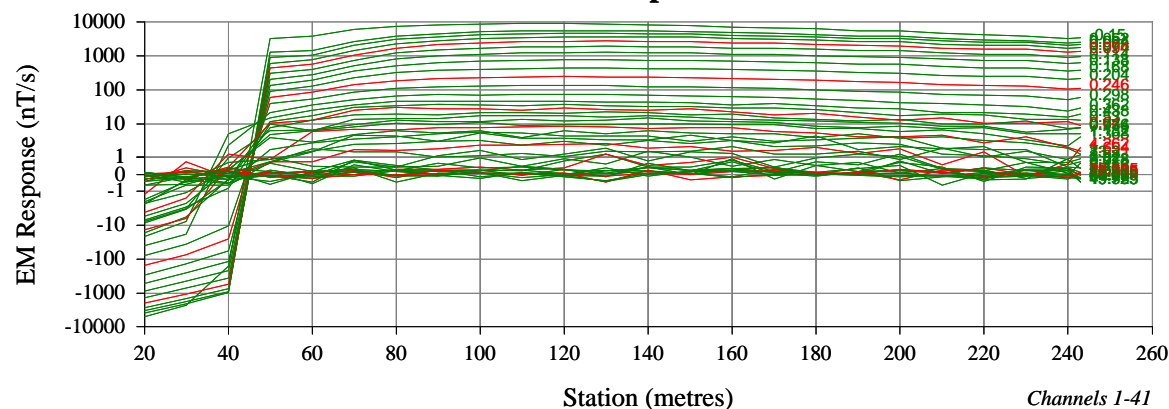
A Component



U Component



V Component



SURVEY PARAMETERS

Configuration : Downhole
Station Spacing : 3-10 m

RECEIVER

Receiver : Crone
Frequency : 2.5
Component : A,U,V
Rx Coil : Crone
Rx Area : 7900m2, 3000m2 turn-m

TRANSMITTER

Transmitter : Crone
Loop : RHS
Tx Moment : 90000 turn-m
Tx Current : 20 A
Turn Off : 1 ms

WINDOW TIMES (ms): Centre From the start of the Ramp

1 : 0.8500	12 : 1.362	23 : 3.920	34 : 24.36
2 : 1.052	13 : 1.438	24 : 4.528	35 : 29.22
3 : 1.064	14 : 1.530	25 : 5.262	36 : 35.08
4 : 1.078	15 : 1.640	26 : 6.148	37 : 42.16
5 : 1.094	16 : 1.774	27 : 7.220	38 : 50.72
6 : 1.114	17 : 1.936	28 : 8.514	39 : 61.07
7 : 1.138	18 : 2.132	29 : 10.08	40 : 73.56
8 : 1.168	19 : 2.368	30 : 11.97	41 : 88.66
9 : 1.204	20 : 2.654	31 : 14.20	
10 : 1.246	21 : 3.000	32 : 16.96	
11 : 1.298	22 : 3.416	33 : 20.33	



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Downhole EM Survey
Log-Linear Profiles
Hole: RHD27

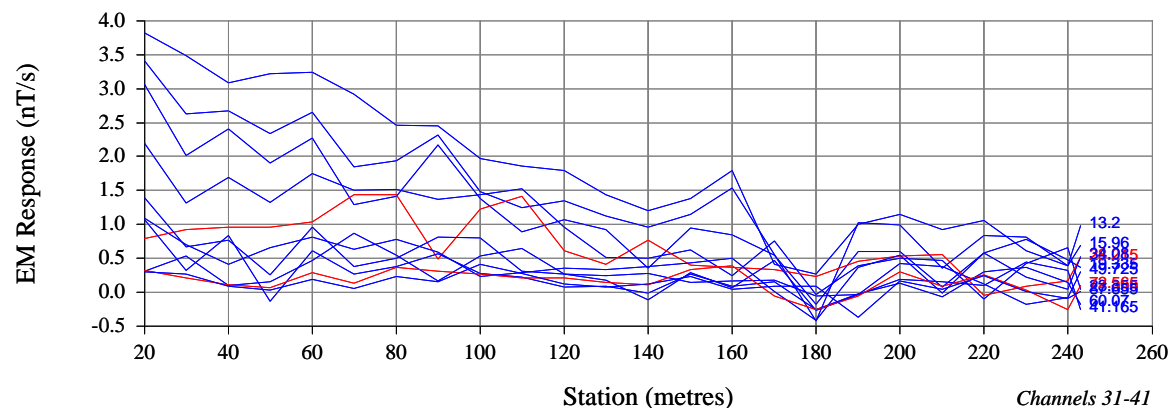
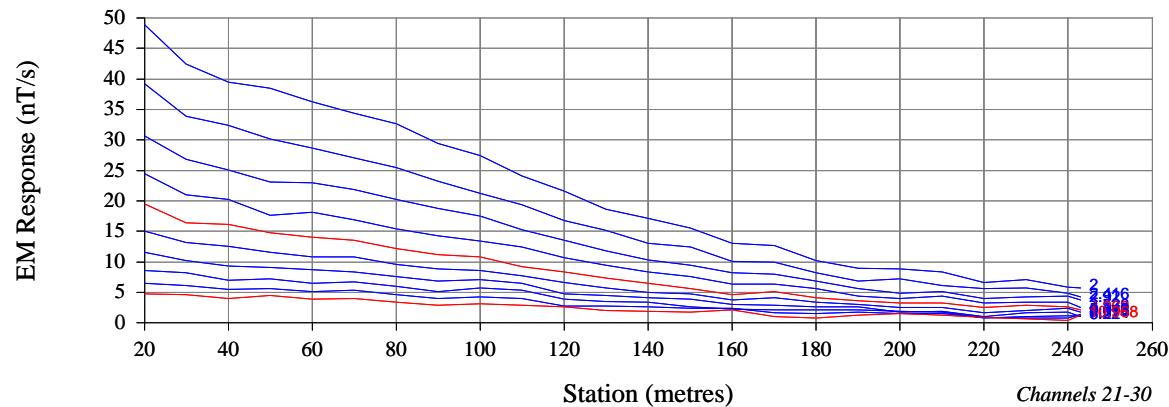
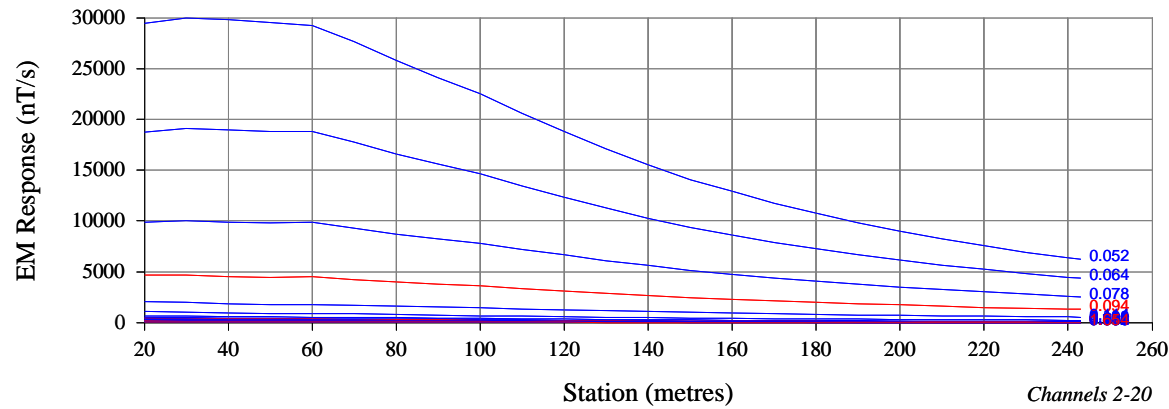
Drawn : DJL

Job No.: JN 2721

Date: 31-10-2012

Fig No.:#33

A Component



SURVEY PARAMETERS

Configuration : Downhole
Station Spacing : 3-10 m

RECEIVER

Receiver : Crone
Frequency : 2.5
Component : A
Rx Coil : Crone
Rx Area : 7900m² turn-m

TRANSMITTER

Transmitter : Crone
Loop : RHS
Tx Moment : 90000 turn-m
Tx Current : 20 A
Turn Off : 1 ms

WINDOW TIMES (ms): Centre From the start of the Ramp

1 : 0.8500	12 : 1.362	23 : 3.920	34 : 24.36
2 : 1.052	13 : 1.438	24 : 4.528	35 : 29.22
3 : 1.064	14 : 1.530	25 : 5.262	36 : 35.08
4 : 1.078	15 : 1.640	26 : 6.148	37 : 42.16
5 : 1.094	16 : 1.774	27 : 7.220	38 : 50.72
6 : 1.114	17 : 1.936	28 : 8.514	39 : 61.07
7 : 1.138	18 : 2.132	29 : 10.08	40 : 73.56
8 : 1.168	19 : 2.368	30 : 11.97	41 : 88.66
9 : 1.204	20 : 2.654	31 : 14.20	
10 : 1.246	21 : 3.000	32 : 16.96	
11 : 1.298	22 : 3.416	33 : 20.33	



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Red Hills

Downhole EM Survey
Linear Profiles - A Component
Hole: RHD27

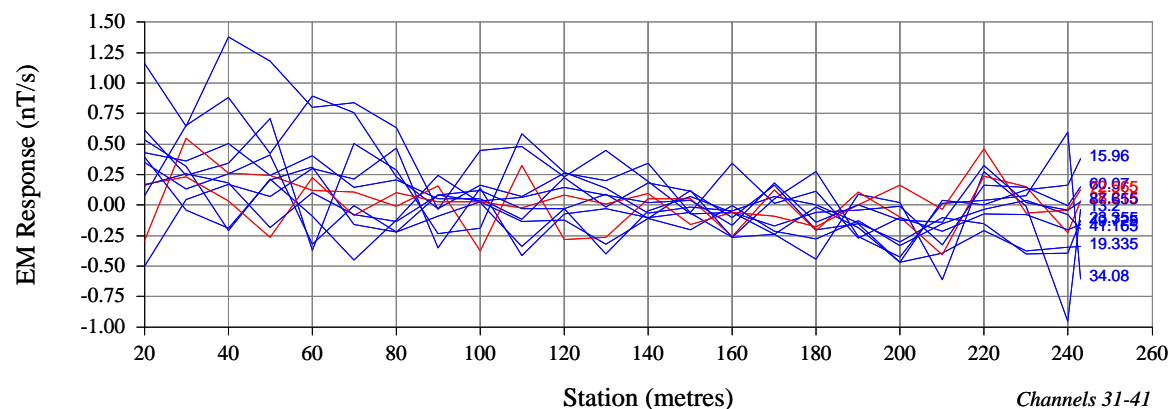
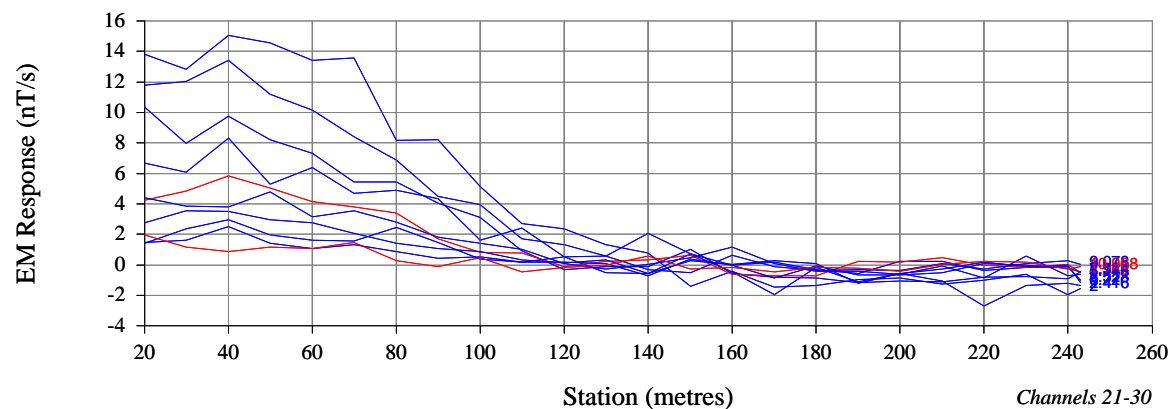
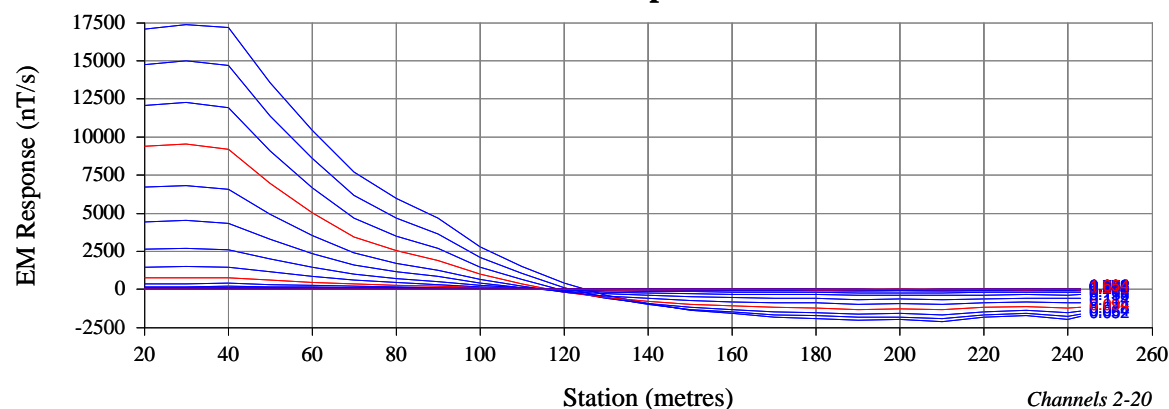
Drawn : DJL

Job No.: JN 2721

Date: 31-10-2012

Fig No.:#34

U Component



SURVEY PARAMETERS

Configuration : Downhole
Station Spacing : 3-10 m

RECEIVER

Receiver : Crone
Frequency : 2.5
Component : U
Rx Coil : Crone
Rx Area : 3000m² turn-m

TRANSMITTER

Transmitter : Crone
Loop : RHS
Tx Moment : 90000 turn-m
Tx Current : 20 A
Turn Off : 1 ms

WINDOW TIMES (ms): Centre From the start of the Ramp

1 : 0.8500	12 : 1.362	23 : 3.920	34 : 24.36
2 : 1.052	13 : 1.438	24 : 4.528	35 : 29.22
3 : 1.064	14 : 1.530	25 : 5.262	36 : 35.08
4 : 1.078	15 : 1.640	26 : 6.148	37 : 42.16
5 : 1.094	16 : 1.774	27 : 7.220	38 : 50.72
6 : 1.114	17 : 1.936	28 : 8.514	39 : 61.07
7 : 1.138	18 : 2.132	29 : 10.08	40 : 73.56
8 : 1.168	19 : 2.368	30 : 11.97	41 : 88.66
9 : 1.204	20 : 2.654	31 : 14.20	
10 : 1.246	21 : 3.000	32 : 16.96	
11 : 1.298	22 : 3.416	33 : 20.33	



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Red Hills

Downhole EM Survey
Linear Profiles - U Component
Hole: RHD27

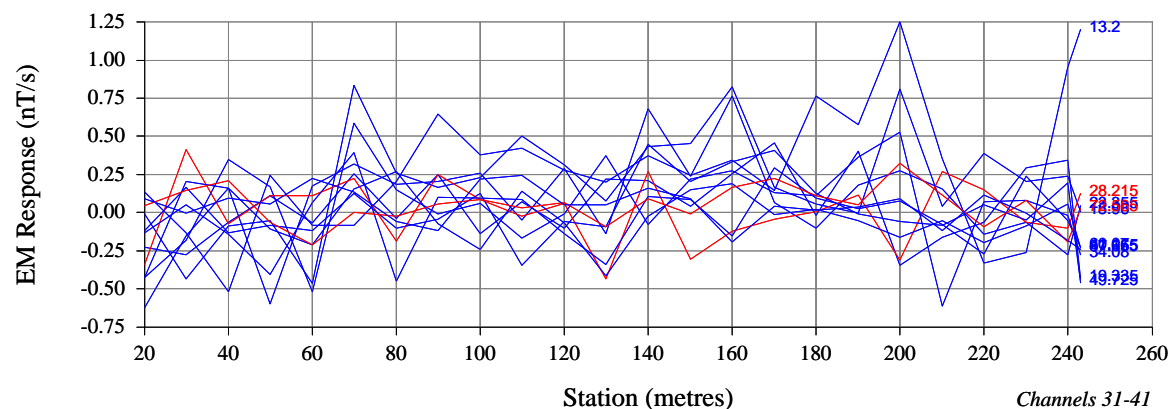
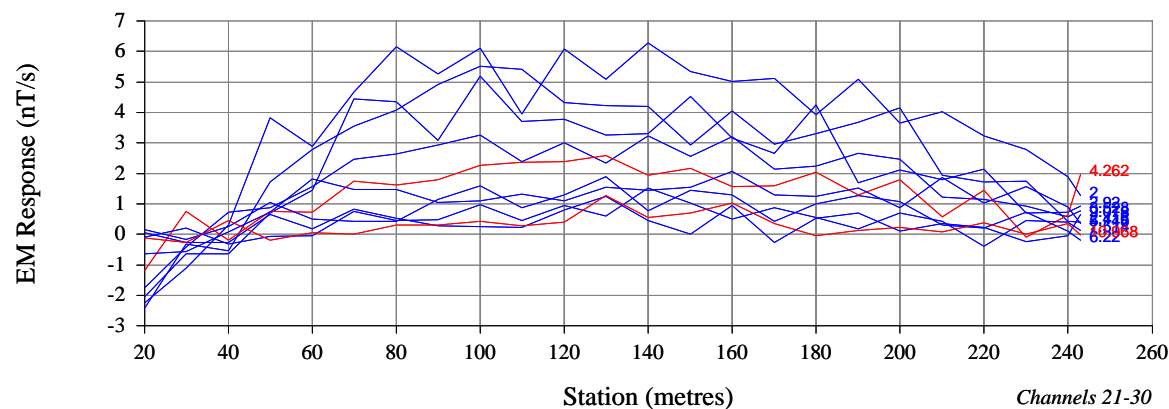
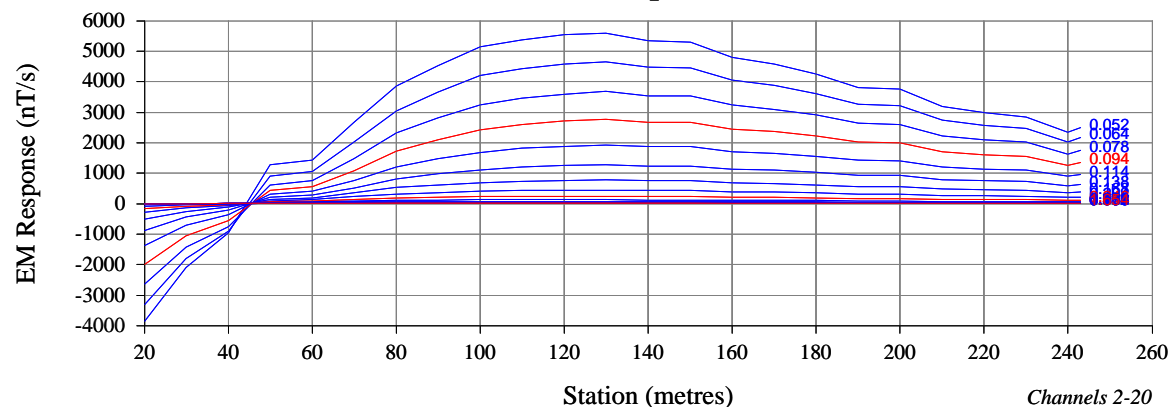
Drawn : DJL

Job No.: JN 2721

Date: 31-10-2012

Fig No.:#35

V Component



SURVEY PARAMETERS

Configuration : Downhole
Station Spacing : 3-10 m

RECEIVER

Receiver : Crone
Frequency : 2.5
Component : V
Rx Coil : Crone
Rx Area : 3000m2 turn-m

TRANSMITTER

Transmitter : Crone
Loop : RHS
Tx Moment : 90000 turn-m
Tx Current : 20 A
Turn Off : 1 ms

WINDOW TIMES (ms): Centre From the start of the Ramp

1 : 0.8500	12 : 1.362	23 : 3.920	34 : 24.36
2 : 1.052	13 : 1.438	24 : 4.528	35 : 29.22
3 : 1.064	14 : 1.530	25 : 5.262	36 : 35.08
4 : 1.078	15 : 1.640	26 : 6.148	37 : 42.16
5 : 1.094	16 : 1.774	27 : 7.220	38 : 50.72
6 : 1.114	17 : 1.936	28 : 8.514	39 : 61.07
7 : 1.138	18 : 2.132	29 : 10.08	40 : 73.56
8 : 1.168	19 : 2.368	30 : 11.97	41 : 88.66
9 : 1.204	20 : 2.654	31 : 14.20	
10 : 1.246	21 : 3.000	32 : 16.96	
11 : 1.298	22 : 3.416	33 : 20.33	



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Downhole EM Survey
Linear Profiles - V Component
Hole: RHD27

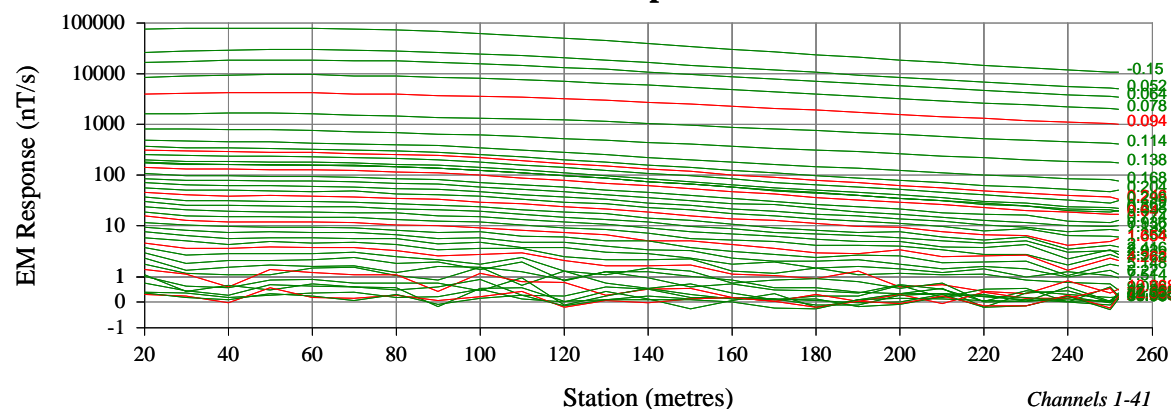
Drawn : DJL

Job No.: JN 2721

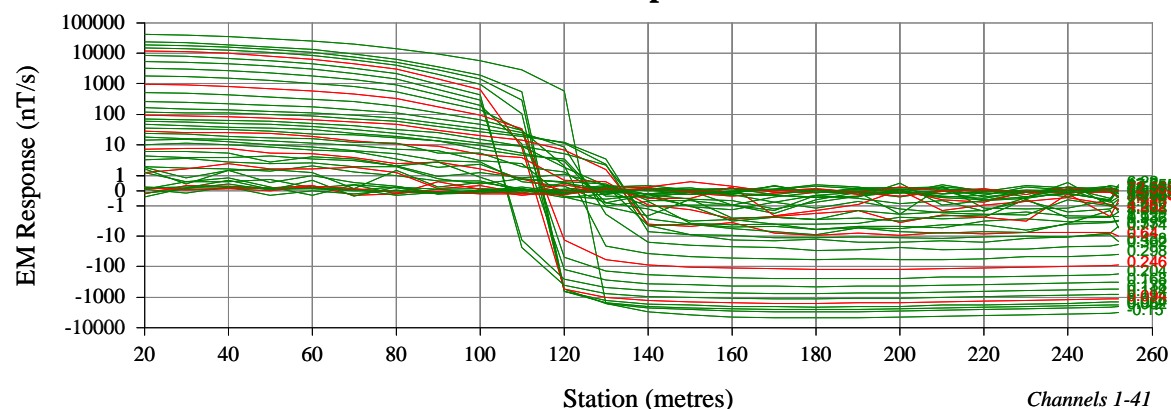
Date: 31-10-2012

Fig No.:#36

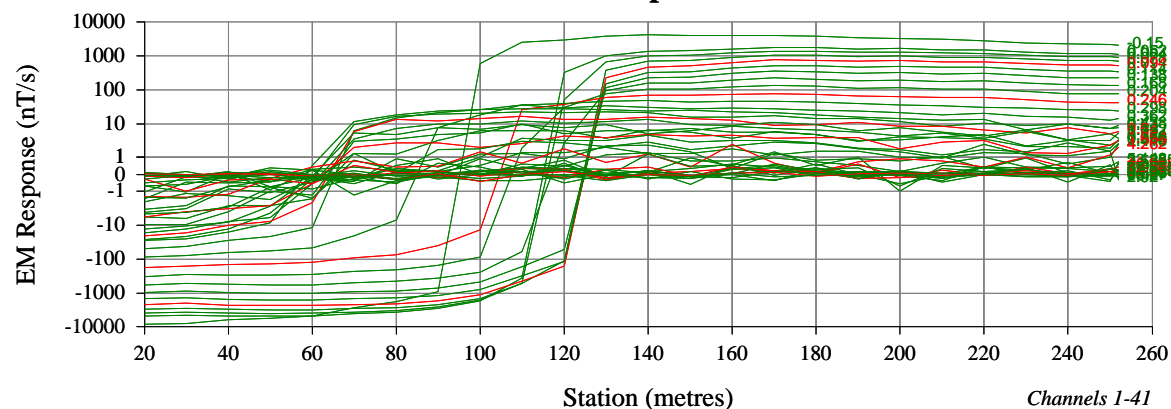
A Component



U Component



V Component



SURVEY PARAMETERS

Configuration : Downhole
Station Spacing : 2-10 m

RECEIVER

Receiver : Crone
Frequency : 2.5
Component : A,U,V
Rx Coil : Crone
Rx Area : 7900m2, 3000m2 turn-m

TRANSMITTER

Transmitter : Crone
Loop : RHS
Tx Moment : 90000 turn-m
Tx Current : 20 A
Turn Off : 1 ms

WINDOW TIMES (ms): Centre From the start of the Ramp

1 : 0.8500	12 : 1.362	23 : 3.920	34 : 24.36
2 : 1.052	13 : 1.438	24 : 4.528	35 : 29.22
3 : 1.064	14 : 1.530	25 : 5.262	36 : 35.08
4 : 1.078	15 : 1.640	26 : 6.148	37 : 42.16
5 : 1.094	16 : 1.774	27 : 7.220	38 : 50.72
6 : 1.114	17 : 1.936	28 : 8.514	39 : 61.07
7 : 1.138	18 : 2.132	29 : 10.08	40 : 73.56
8 : 1.168	19 : 2.368	30 : 11.97	41 : 88.66
9 : 1.204	20 : 2.654	31 : 14.20	
10 : 1.246	21 : 3.000	32 : 16.96	
11 : 1.298	22 : 3.416	33 : 20.33	



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Downhole EM Survey
Log-Linear Profiles
Hole: RHD29

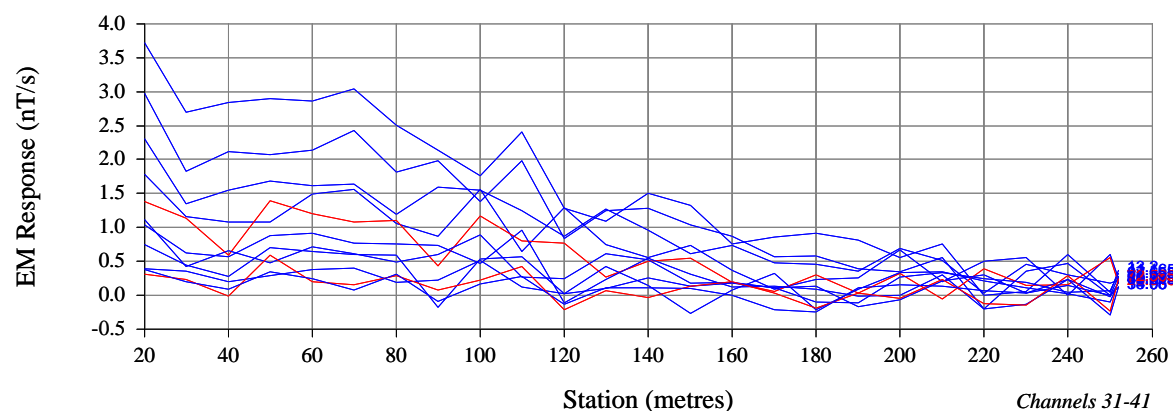
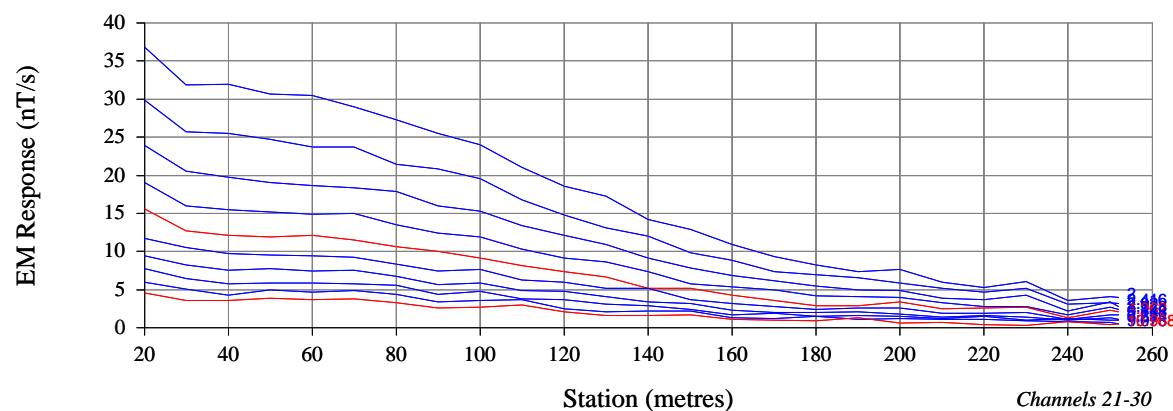
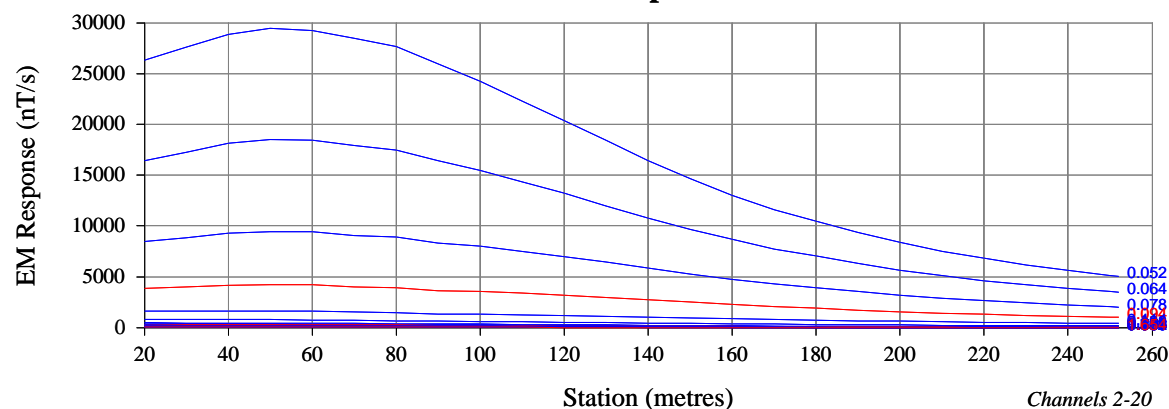
Drawn : DJL

Job No.: JN 2721

Date: 31-10-2012

Fig No.:#37

A Component



SURVEY PARAMETERS

Configuration : Downhole
Station Spacing : 2-10 m

RECEIVER

Receiver : Crone
Frequency : 2.5
Component : A
Rx Coil : Crone
Rx Area : 7900m² turn-m

TRANSMITTER

Transmitter : Crone
Loop : RHS
Tx Moment : 90000 turn-m
Tx Current : 20 A
Turn Off : 1 ms

WINDOW TIMES (ms): Centre From the start of the Ramp

1 : 0.8500	12 : 1.362	23 : 3.920	34 : 24.36
2 : 1.052	13 : 1.438	24 : 4.528	35 : 29.22
3 : 1.064	14 : 1.530	25 : 5.262	36 : 35.08
4 : 1.078	15 : 1.640	26 : 6.148	37 : 42.16
5 : 1.094	16 : 1.774	27 : 7.220	38 : 50.72
6 : 1.114	17 : 1.936	28 : 8.514	39 : 61.07
7 : 1.138	18 : 2.132	29 : 10.08	40 : 73.56
8 : 1.168	19 : 2.368	30 : 11.97	41 : 88.66
9 : 1.204	20 : 2.654	31 : 14.20	
10 : 1.246	21 : 3.000	32 : 16.96	
11 : 1.298	22 : 3.416	33 : 20.33	



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Downhole EM Survey
Linear Profiles - A Component
Hole: RHD29

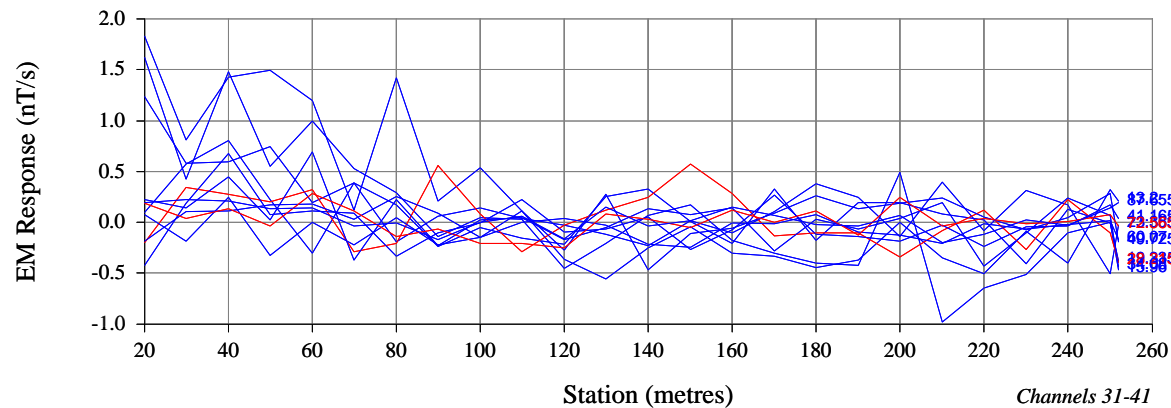
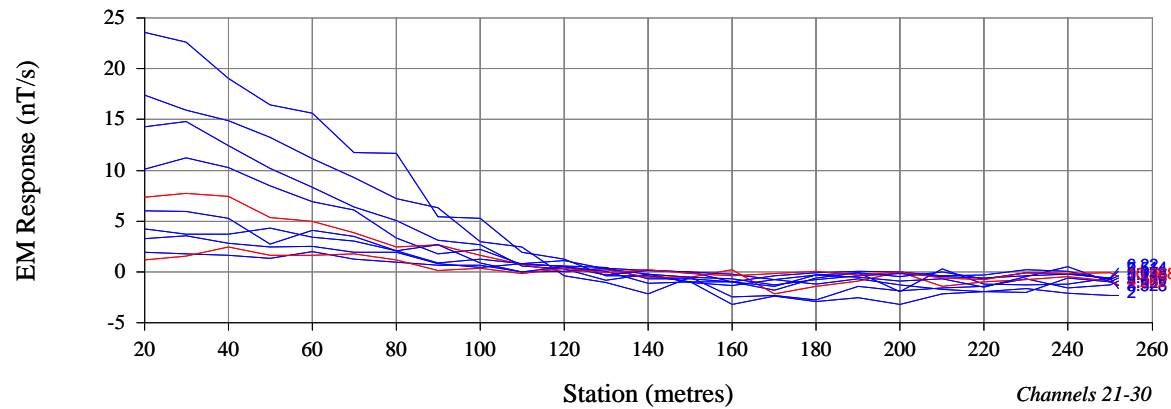
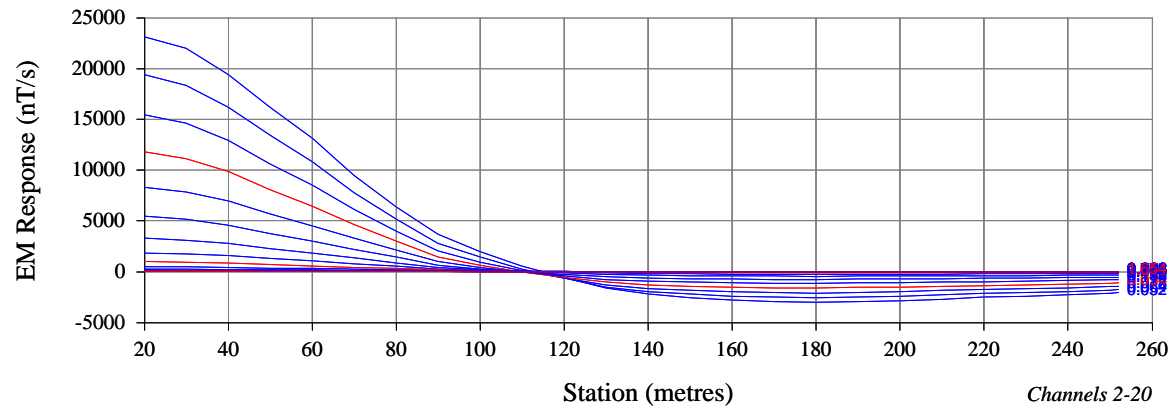
Drawn : DJL

Job No.: JN 2721

Date: 31-10-2012

Fig No.:#38

U Component



SURVEY PARAMETERS

Configuration : Downhole
Station Spacing : 2-10 m

RECEIVER

Receiver : Crone
Frequency : 2.5
Component : U
Rx Coil : Crone
Rx Area : 3000m² turn-m

TRANSMITTER

Transmitter : Crone
Loop : RHS
Tx Moment : 90000 turn-m
Tx Current : 20 A
Turn Off : 1 ms

WINDOW TIMES (ms): Centre From the start of the Ramp

1 : 0.8500	12 : 1.362	23 : 3.920	34 : 24.36
2 : 1.052	13 : 1.438	24 : 4.528	35 : 29.22
3 : 1.064	14 : 1.530	25 : 5.262	36 : 35.08
4 : 1.078	15 : 1.640	26 : 6.148	37 : 42.16
5 : 1.094	16 : 1.774	27 : 7.220	38 : 50.72
6 : 1.114	17 : 1.936	28 : 8.514	39 : 61.07
7 : 1.138	18 : 2.132	29 : 10.08	40 : 73.56
8 : 1.168	19 : 2.368	30 : 11.97	41 : 88.66
9 : 1.204	20 : 2.654	31 : 14.20	
10 : 1.246	21 : 3.000	32 : 16.96	
11 : 1.298	22 : 3.416	33 : 20.33	



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Downhole EM Survey
Linear Profiles - U Component
Hole: RHD29

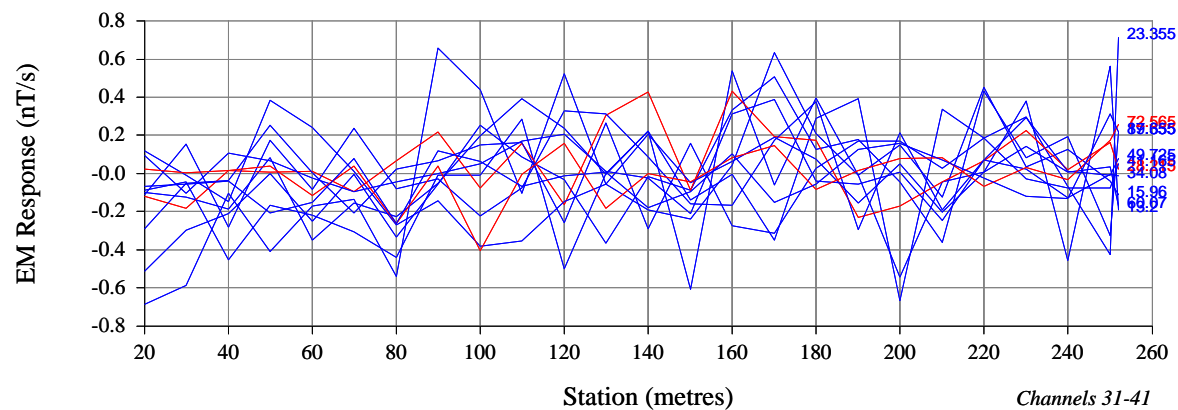
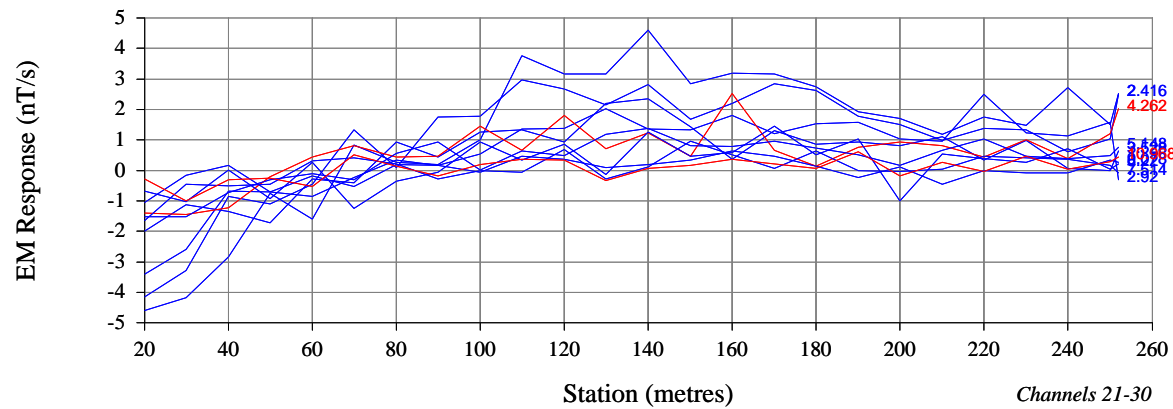
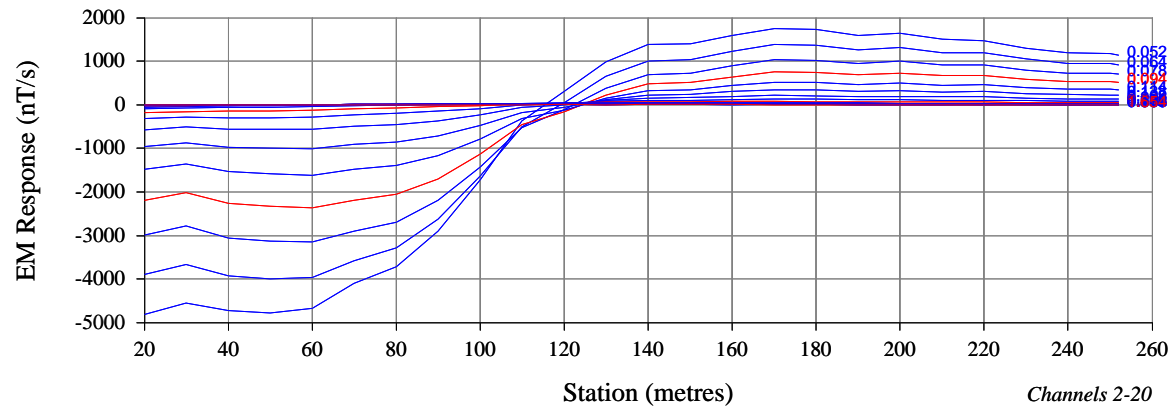
Drawn : DJL

Job No.: JN 2721

Date: 31-10-2012

Fig No.:#39

V Component



SURVEY PARAMETERS

Configuration : Downhole
Station Spacing : 2-10 m

RECEIVER

Receiver : Crone
Frequency : 2.5
Component : V
Rx Coil : Crone
Rx Area : 3000m2 turn-m

TRANSMITTER

Transmitter : Crone
Loop : RHS
Tx Moment : 90000 turn-m
Tx Current : 20 A
Turn Off : 1 ms

WINDOW TIMES (ms): Centre From the start of the Ramp

1 : 0.8500	12 : 1.362	23 : 3.920	34 : 24.36
2 : 1.052	13 : 1.438	24 : 4.528	35 : 29.22
3 : 1.064	14 : 1.530	25 : 5.262	36 : 35.08
4 : 1.078	15 : 1.640	26 : 6.148	37 : 42.16
5 : 1.094	16 : 1.774	27 : 7.220	38 : 50.72
6 : 1.114	17 : 1.936	28 : 8.514	39 : 61.07
7 : 1.138	18 : 2.132	29 : 10.08	40 : 73.56
8 : 1.168	19 : 2.368	30 : 11.97	41 : 88.66
9 : 1.204	20 : 2.654	31 : 14.20	
10 : 1.246	21 : 3.000	32 : 16.96	
11 : 1.298	22 : 3.416	33 : 20.33	



Outer-Rim Exploration
Services Pty Ltd

Unity Mining Ltd
Red Hills

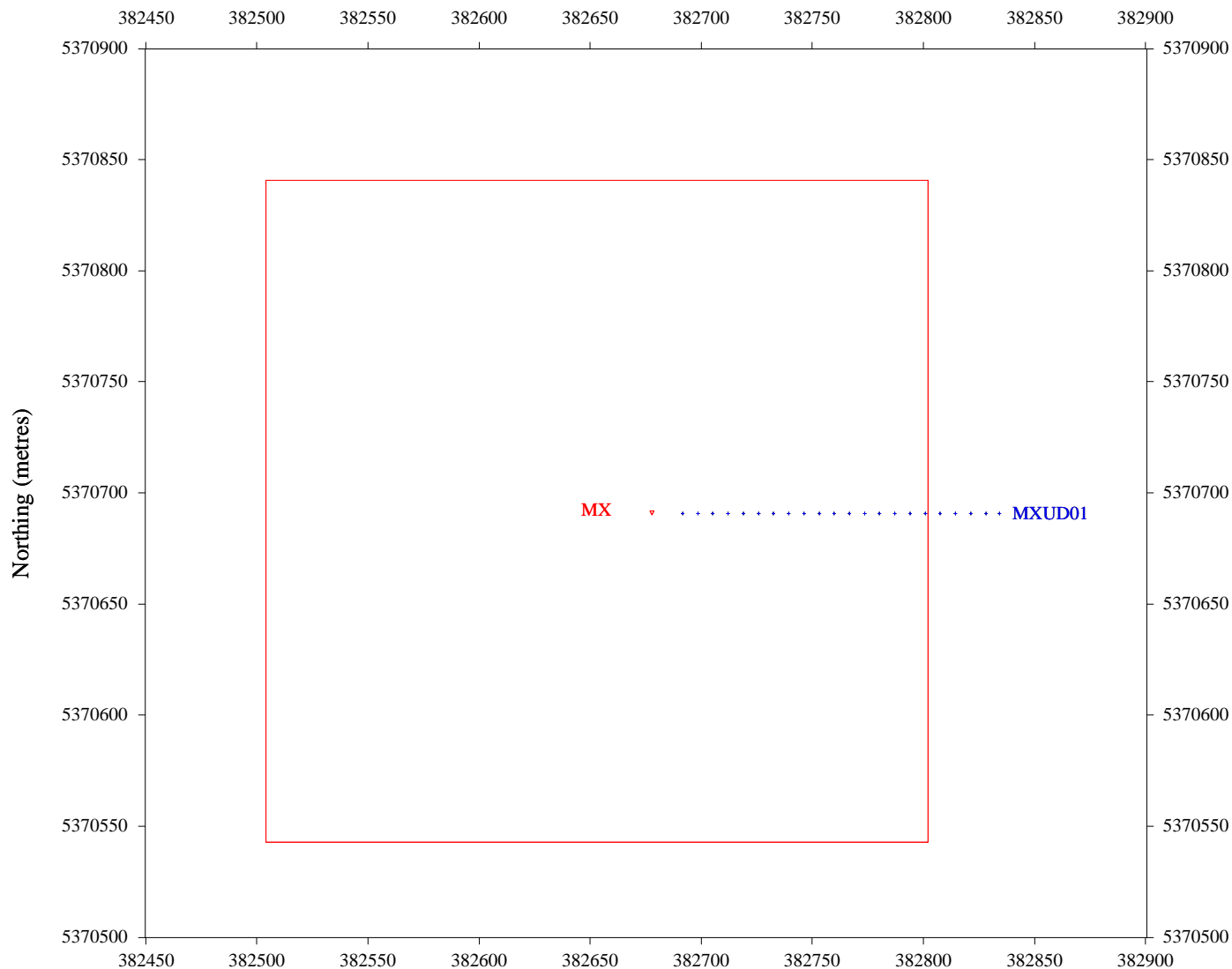
Downhole EM Survey
Linear Profiles - V Component
Hole: RHD29

Drawn : DJL

Job No.: JN 2721

Date: 31-10-2012

Fig No.:#40



SURVEY PARAMETERS

Configuration : Downhole
Station Spacing : 9-10 m

RECEIVER

Receiver : Crone
Frequency : 2.5
Component : A,U,V
Rx Coil : Crone
Rx Area : 7900m2, 3000m2 turn-m

TRANSMITTER

Transmitter : Crone
Loop : MX
Tx Moment : 90000 turn-m
Tx Current : 20 A
Turn Off : 1 ms

WINDOW TIMES (ms)

From the start of the Ramp

1 : 0.8500	12 : 1.362	23 : 3.920	34 : 24.36
2 : 1.052	13 : 1.438	24 : 4.528	35 : 29.21
3 : 1.064	14 : 1.530	25 : 5.262	36 : 35.08
4 : 1.078	15 : 1.640	26 : 6.148	37 : 42.16
5 : 1.094	16 : 1.774	27 : 7.220	38 : 50.73
6 : 1.114	17 : 1.936	28 : 8.514	39 : 61.07
7 : 1.138	18 : 2.132	29 : 10.08	40 : 73.56
8 : 1.168	19 : 2.368	30 : 11.97	41 : 88.66
9 : 1.204	20 : 2.654	31 : 14.20	
10 : 1.246	21 : 3.000	32 : 16.96	
11 : 1.298	22 : 3.416	33 : 20.33	



**Outer-Rim Exploration
Services Pty Ltd**

**Unity Mining Ltd
Upper Stirling Valley**

**Downhole EM Survey
Survey Location Plan
Hole: MXUD01**

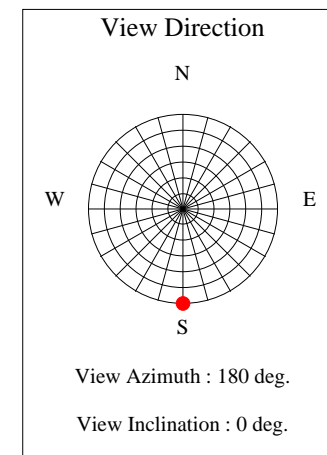
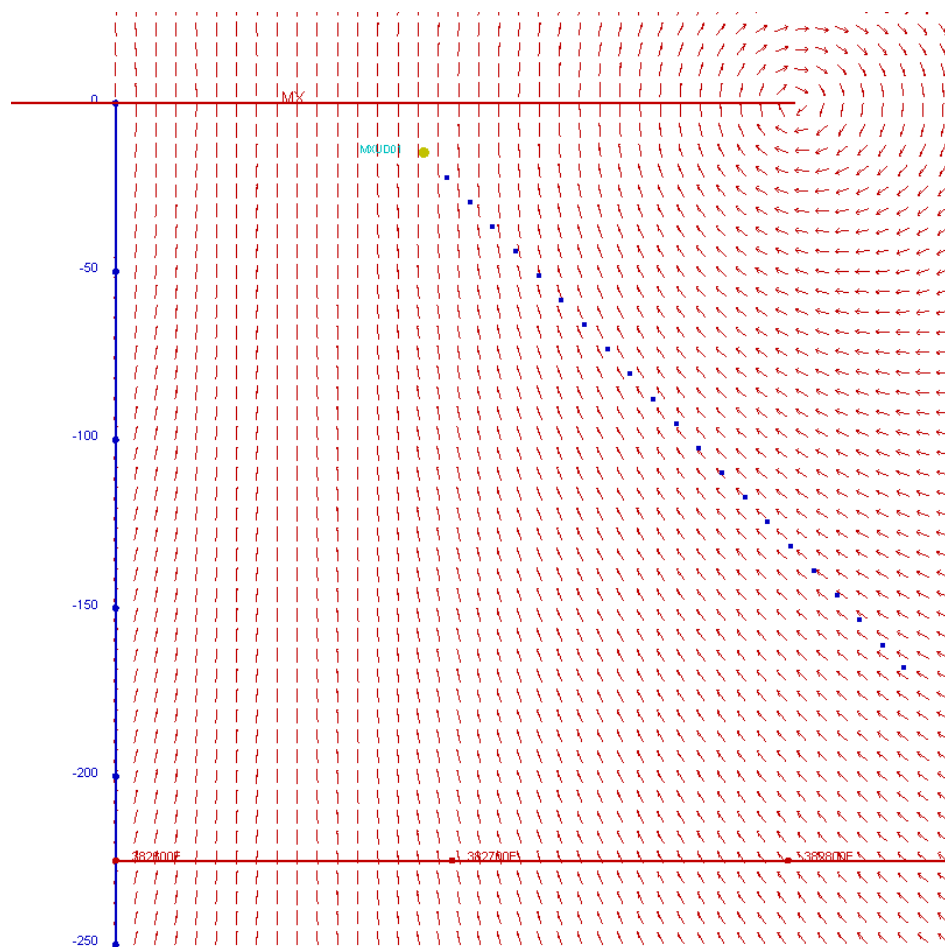
Drawn : DJL

Job No.: JN 2721

Date: 31-10-2012

Fig No.:#41

Horizontal Scale 1:3000



Outer-Rim Exploration
Services Pty Ltd

Unity Mining Ltd
Upper Stirling Valley

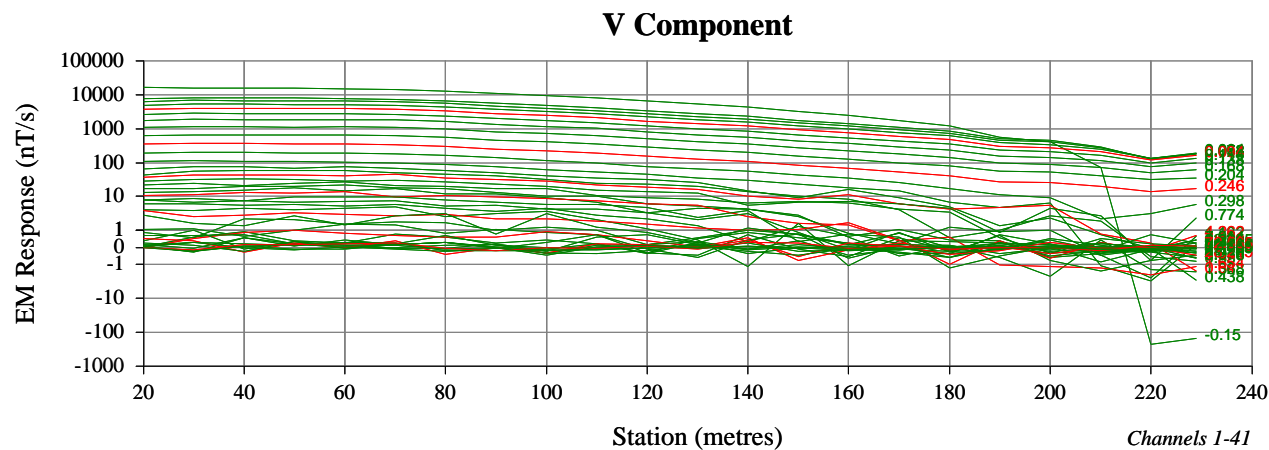
Downhole EM Survey
Primary Field Plot
Hole: MXUD01

Drawn : DJL

Job No.: JN 2721

Date: 31-10-2012

Fig No.:#42



1	: 0.8500	12	: 1.362	23	: 3.920	34	: 24.36
2	: 1.052	13	: 1.438	24	: 4.528	35	: 29.21
3	: 1.064	14	: 1.530	25	: 5.262	36	: 35.08
4	: 1.078	15	: 1.640	26	: 6.148	37	: 42.16
5	: 1.094	16	: 1.774	27	: 7.220	38	: 50.73
6	: 1.114	17	: 1.936	28	: 8.514	39	: 61.07
7	: 1.138	18	: 2.132	29	: 10.08	40	: 73.56
8	: 1.168	19	: 2.368	30	: 11.97	41	: 88.66
9	: 1.204	20	: 2.654	31	: 14.20		
10	: 1.246	21	: 3.000	32	: 16.96		
11	: 1.298	22	: 3.416	33	: 20.33		



Outer-Rim Exploration
Services Pty Ltd

Unity Mining Ltd
Upper Stirling Valley

Downhole EM Survey

Log-Linear Profiles

Hole: MXUD01

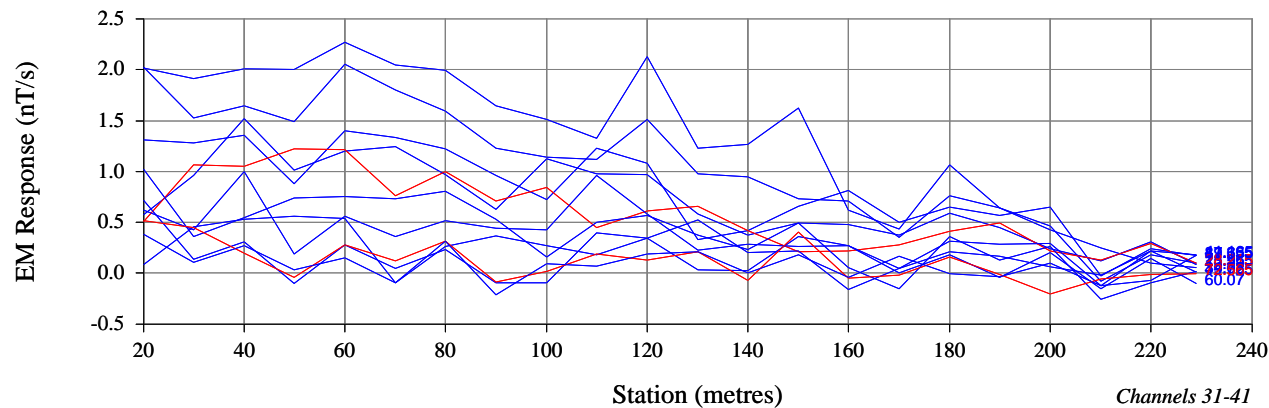
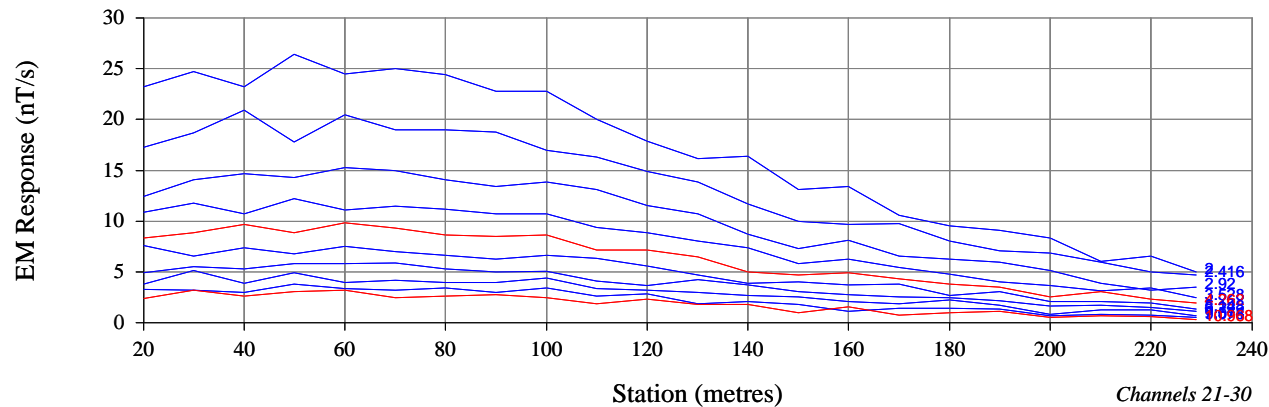
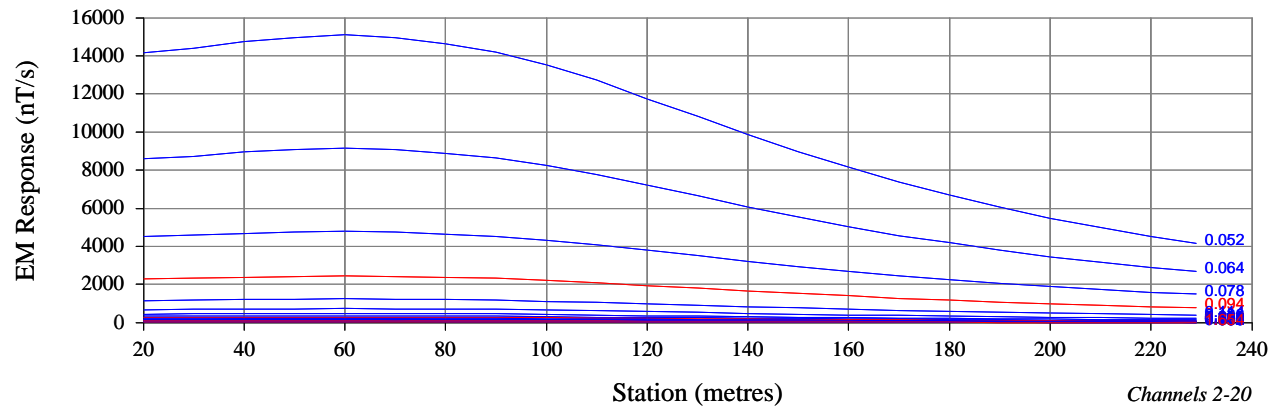
Drawn : DJL

Job No.: JN 2721

Date: 31-10-2012

Fig No.:#43

A Component



SURVEY PARAMETERS

Configuration : Downhole
Station Spacing : 9-10 m

RECEIVER

Receiver : Crone
Frequency : 2.5
Component : A
Rx Coil : Crone
Rx Area : 7900m² turn-m

TRANSMITTER

Transmitter : Crone
Loop : MX
Tx Moment : 90000 turn-m
Tx Current : 20 A
Turn Off : 1 ms

WINDOW TIMES (ms): Centre From the start of the Ramp

1 : 0.8500	12 : 1.362	23 : 3.920	34 : 24.36
2 : 1.052	13 : 1.438	24 : 4.528	35 : 29.21
3 : 1.064	14 : 1.530	25 : 5.262	36 : 35.08
4 : 1.078	15 : 1.640	26 : 6.148	37 : 42.16
5 : 1.094	16 : 1.774	27 : 7.220	38 : 50.73
6 : 1.114	17 : 1.936	28 : 8.514	39 : 61.07
7 : 1.138	18 : 2.132	29 : 10.08	40 : 73.56
8 : 1.168	19 : 2.368	30 : 11.97	41 : 88.66
9 : 1.204	20 : 2.654	31 : 14.20	
10 : 1.246	21 : 3.000	32 : 16.96	
11 : 1.298	22 : 3.416	33 : 20.33	



Outer-Rim Exploration
Services Pty Ltd

Unity Mining Ltd
Upper Stirling Valley

Downhole EM Survey
Linear Profiles - A Component
Hole: MXUD01

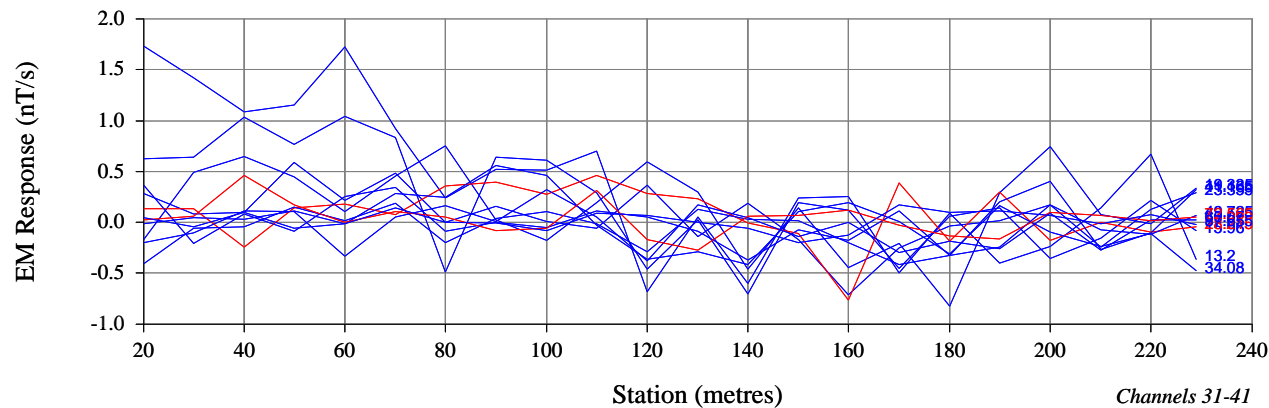
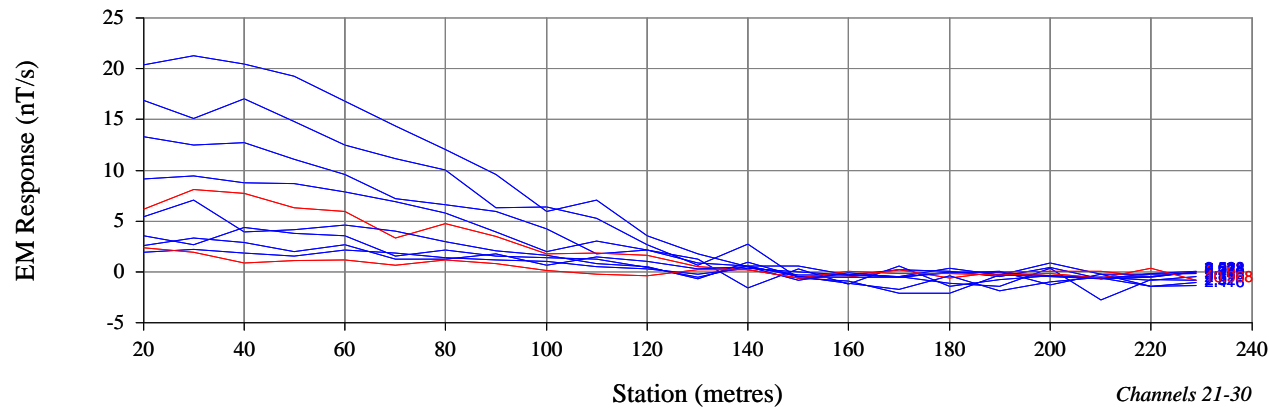
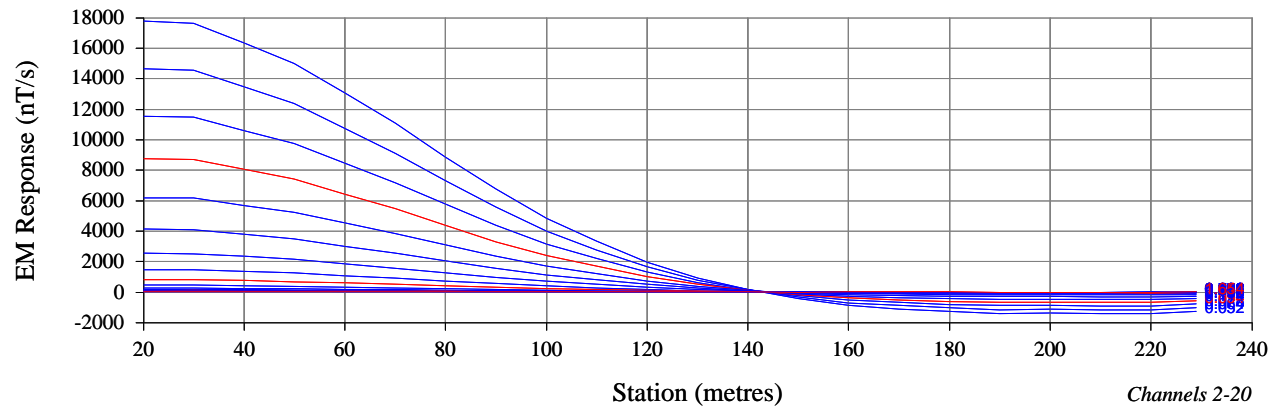
Drawn : DJL

Job No.: JN 2721

Date: 31-10-2012

Fig No.:#44

U Component



SURVEY PARAMETERS

Configuration : Downhole
Station Spacing : 9-10 m

RECEIVER

Receiver : Crone
Frequency : 2.5
Component : U
Rx Coil : Crone
Rx Area : 3000m2 turn-m

TRANSMITTER

Transmitter : Crone
Loop : MX
Tx Moment : 90000 turn-m
Tx Current : 20 A
Turn Off : 1 ms

WINDOW TIMES (ms): Centre From the start of the Ramp

1 : 0.8500	12 : 1.362	23 : 3.920	34 : 24.36
2 : 1.052	13 : 1.438	24 : 4.528	35 : 29.21
3 : 1.064	14 : 1.530	25 : 5.262	36 : 35.08
4 : 1.078	15 : 1.640	26 : 6.148	37 : 42.16
5 : 1.094	16 : 1.774	27 : 7.220	38 : 50.73
6 : 1.114	17 : 1.936	28 : 8.514	39 : 61.07
7 : 1.138	18 : 2.132	29 : 10.08	40 : 73.56
8 : 1.168	19 : 2.368	30 : 11.97	41 : 88.66
9 : 1.204	20 : 2.654	31 : 14.20	
10 : 1.246	21 : 3.000	32 : 16.96	
11 : 1.298	22 : 3.416	33 : 20.33	



Outer-Rim Exploration
Services Pty Ltd

Unity Mining Ltd
Upper Stirling Valley

Downhole EM Survey
Linear Profiles - U Component
Hole: MXUD01

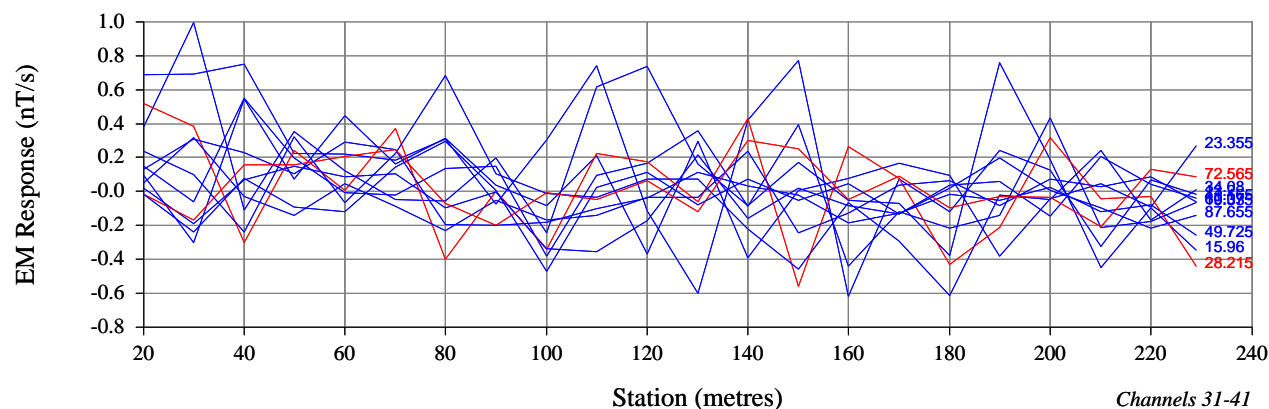
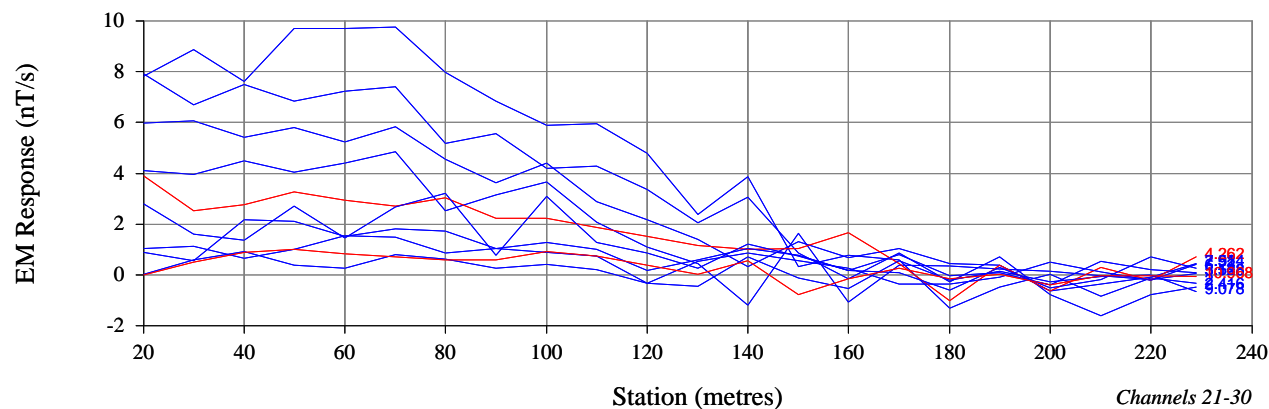
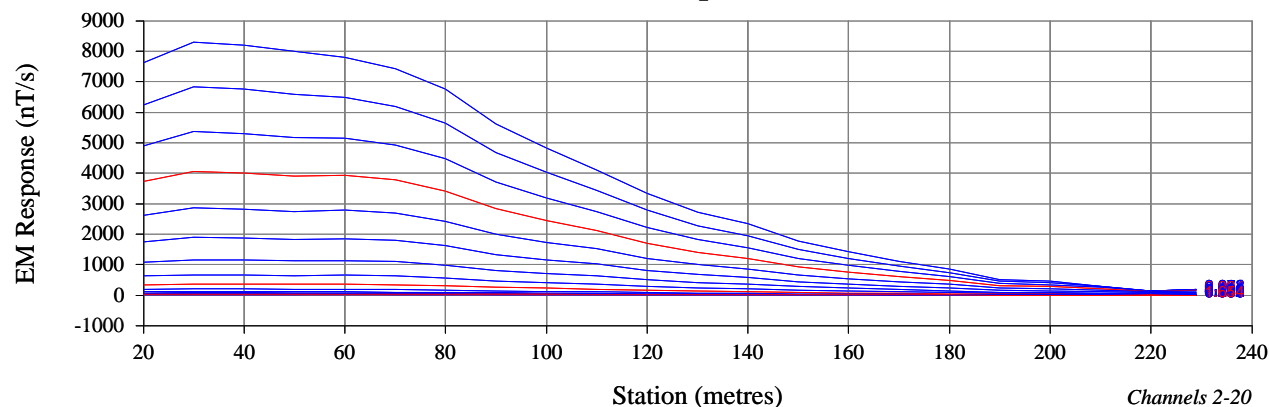
Drawn : DJL

Job No.: JN 2721

Date: 31-10-2012

Fig No.:#45

V Component



SURVEY PARAMETERS

Configuration : Downhole
Station Spacing : 9-10 m

RECEIVER

Receiver : Crone
Frequency : 2.5
Component : V
Rx Coil : Crone
Rx Area : 3000m2 turn-m

TRANSMITTER

Transmitter : Crone
Loop : MX
Tx Moment : 90000 turn-m
Tx Current : 20 A
Turn Off : 1 ms

WINDOW TIMES (ms): Centre From the start of the Ramp

1 : 0.8500	12 : 1.362	23 : 3.920	34 : 24.36
2 : 1.052	13 : 1.438	24 : 4.528	35 : 29.21
3 : 1.064	14 : 1.530	25 : 5.262	36 : 35.08
4 : 1.078	15 : 1.640	26 : 6.148	37 : 42.16
5 : 1.094	16 : 1.774	27 : 7.220	38 : 50.73
6 : 1.114	17 : 1.936	28 : 8.514	39 : 61.07
7 : 1.138	18 : 2.132	29 : 10.08	40 : 73.56
8 : 1.168	19 : 2.368	30 : 11.97	41 : 88.66
9 : 1.204	20 : 2.654	31 : 14.20	
10 : 1.246	21 : 3.000	32 : 16.96	
11 : 1.298	22 : 3.416	33 : 20.33	



Outer-Rim Exploration
Services Pty Ltd

Unity Mining Ltd
Upper Stirling Valley

Downhole EM Survey
Linear Profiles - V Component
Hole: MXUD01

Drawn : DJL

Job No.: JN 2721

Date: 31-10-2012

Fig No.:#46

Appendix 4

Outer-Rim Daily Reports



OUTER RIM EXPLORATION SERVICES – DAILY REPORT

Date: 03/10/2012
Location: Unity Mining Limited
Project Number 2721

DHEM SURVEY DETAILS

Hole ID:
Survey Type:
Live **Cased** **Open** **Under Ground**
Collar: mE mN RL
Azimuth: **Dip (+ve up):** **Depth/Length:**

From	To	Total	Component(s)	Stacks	Sensor

TRANSMITTER LOOP DETAILS

Loop #	Loop Size	No. Turns	Resistance	TX voltage	Current	Time Base	Easting	Northing

OPERATOR / CREW DETAILS

Name	Start Time	Finish Time	Total Hours	Standby	Daily Activity			Breakdown
					Survey	Mob		
Jason Downey	6:00:00 AM	6:00:00 PM	12			1		
Lee Boyd	6:00:00 AM	6:00:00 PM	12			1		

OPERATOR COMMENTS (include delays, training, travel, standby, etc)

Meet Lee at Melbourne airport drove to the ferry and got all loaded on.

Approved By:



OUTER RIM EXPLORATION SERVICES – DAILY REPORT

Date: 04/10/2012
Location: Unity Mining Limited
Project Number 2721

DHEM SURVEY DETAILS

Hole ID:		Survey Type:		Live	Cased	Open	Under Ground
Collar:		mE		mN		RL	
Azimuth:		Dip (+ve up):		Depth/Length:			

From	To	Total	Component(s)	Stacks	Sensor

TRANSMITTER LOOP DETAILS

Loop #	Loop Size	No. Turns	Resistance	TX voltage	Current	Time Base	Easting	Northing

OPERATOR / CREW DETAILS

Name	Start Time	Finish Time	Total Hours	Standby	Daily Activity		
					Survey	Mob	Breakdown
Jason Downey	6:00:00 AM	6:00:00 PM	12			1	
Lee Boyd	6:00:00 AM	6:00:00 PM	12			1	
Nicholas Leong	6:00:00 AM	6:00:00 PM	12			1	

OPERATOR COMMENTS (include delays, training, travel, standby, etc)

Jason And Lee got of the boat and got the truck fixed, Nick arrived at 9:30 we picked him up from the airport, we then pickup the trailer and uniforms and left for Tullah arriving at 5:45pm. EOD

Approved By:



OUTER RIM EXPLORATION SERVICES – DAILY REPORT

Date: 05/10/2012
Location: Unity Mining Limited
Project Number 2721

DHEM SURVEY DETAILS

Hole ID:		Survey Type:		Live	Cased	Open	Under Ground
Collar:	mE	mN		RL			
Azimuth:		Dip (+ve up):		Depth/Length:			

From	To	Total	Component(s)	Stacks	Sensor

TRANSMITTER LOOP DETAILS

Loop #	Loop Size	No. Turns	Resistance	TX voltage	Current	Time Base	Easting	Northing

OPERATOR / CREW DETAILS

Name	Start Time	Finish Time	Total Hours	Standby	Daily Activity		
					Survey	Mob	Breakdown
Jason Downey	6:00:00 AM	6:00:00 PM	11		1		
Lee Boyd	6:00:00 AM	6:00:00 PM	11		1		
Nick Leong	7:00:00 AM	6:00:00 PM	11		1		

OPERATOR COMMENTS (include delays, training, travel, standby, etc)

Arrived at Unity Mining Limited completed induction and drug and alcohol test, then went to see the Geo's and went through the JSEA. Once completed drove out to holes MUD01 and MAD02 setup on the loop M1. We dummied MUD01 and MUD02 both open to 230m. We then went back to camp. EOD

Approved By:



OUTER RIM EXPLORATION SERVICES – DAILY REPORT

Date: 06/10/2012 Location: Unity Mining Limited Project Number 2721

DHEM SURVEY DETAILS

Hole ID:		Survey Type:		Live	Cased	Open	Under Ground
Collar:	mE		mN	RL			
Azimuth:		Dip (+ve up):		Depth/Length:			

From	To	Total	Component(s)	Stacks	Sensor

TRANSMITTER LOOP DETAILS

Loop #	Loop Size	No. Turns	Resistance	TX voltage	Current	Time Base	Easting	Northing

OPERATOR / CREW DETAILS

Name	Start Time	Finish Time	Total Hours	Standby	Daily Activity		
					Survey	Mob	ORE
Jason Downey	7:00:00 AM	6:00:00 PM	11		0.25		0.75
Lee Boyd	7:00:00 AM	6:00:00 PM	11		0.25		0.75
Nick Leong	7:00:00 AM	6:00:00 PM	11		0.25		0.75

OPERATOR COMMENTS (include delays, training, travel, standby, etc)

Left camp at 7:00am went out to the LSUD holes and dummied the 6 holes, only LSUD01 and 05 where open while the rest are blocked at less than 10m. We then went back to camp. EOD

Approved By:



Approved By:



OUTER RIM EXPLORATION SERVICES – DAILY REPORT

Date: 09/10/2012 Location: Unity Mining Limited Project Number 2721

DHEM SURVEY DETAILS

Hole ID: Survey Type: Live Cased Open Under Ground
 Collar: mE mN RL
 Azimuth: Dip (+ve up): Depth/Length:

From	To	Total	Component(s)	Stacks	Sensor

TRANSMITTER LOOP DETAILS

Loop #	Loop Size	No. Turns	Resistance	TX voltage	Current	Time Base	Easting	Northing

OPERATOR / CREW DETAILS

Name	Start Time	Finish Time	Total Hours	Standby	Daily Activity		
					Survey	Mob	Breakdown
Jason Downey	7:00:00 AM	6:00:00 PM	11		0.5		0.5
Lee Boyd	7:00:00 AM	6:00:00 PM	11		0.5		0.5
Nick Leong	7:00:00 AM	6:00:00 PM	11		0.5		0.5

OPERATOR COMMENTS (include delays, training, travel, standby, etc)

Left camp went out to site and dummied the RDH holes all where open bar RHD28 which we couldn't find and 26 blocked at 10 then moved to MXU001 which was blocked at 1m just below the polly casing. Returned to camp. EOD

Approved By:



OUTER RIM EXPLORATION SERVICES – DAILY REPORT

Date: 10/10/2012 Location: Unity Mining Limited Project Number 2721

DHEM SURVEY DETAILS

Hole ID: Survey Type: Live ☐ Cased ☐ Open ☐ Under Ground ☐
 Collar: mE mN RL
 Azimuth: Dip (+ve up): Depth/Length:

From	To	Total	Component(s)	Stacks	Sensor

TRANSMITTER LOOP DETAILS

Loop #	Loop Size	No. Turns	Resistance	TX voltage	Current	Time Base	Easting	Northing

OPERATOR / CREW DETAILS

Name	Start Time	Finish Time	Total Hours	Daily Activity				ORE
				Standby	Survey	Mob		
Jason Downey	7:00:00 AM	6:00:00 PM	11					1
Lee Boyd	7:00:00 AM	6:00:00 PM	11					1
Nick Leong	7:00:00 AM	6:00:00 PM	11					1

OPERATOR COMMENTS (include delays, training, travel, standby, etc)

ORE day

Approved By:

OUTER RIM EXPLORATION SERVICES – DAILY REPORT



OUTER RIM EXPLORATION SERVICES – DAILY REPORT

Date: 12/10/2012
Location: Unity Mining Limited
Project Number 2721

DHEM SURVEY DETAILS

Hole ID:	MUD01			Survey Type:	Cased	Live	Cased	Open	Under Ground
Collar:	385622	mE	5376700	mN		RL			
Azimuth:	122	Dip (+ve up):	45	Depth/Length:	210m				

From	To	Total	Component(s)	Stacks	Sensor
20	210	190	Z	256	98
20	210	190	XY	512	70

TRANSMITTER LOOP DETAILS

Loop #	Loop Size	No. Turns	Resistance	TX voltage	Current	Time Base	Easting	Northing
M1	300x300	1	4.1	100v	20A	1m/s	385381	5376610
							385669	5376533
							385748	5376820
							385461	536896

OPERATOR / CREW DETAILS

Name	Start Time	Finish Time	Total Hours	Standby	Daily Activity			Breakdown
					Survey	Mob		
Jason Downey	7:00:00 AM	6:00:00 PM	11		1			
Lee Boyd	7:00:00 AM	6:00:00 PM	11		1			
Nick Leong	7:00:00 AM	6:00:00 PM	11		1			

OPERATOR COMMENTS (include delays, training, travel, standby, etc)

Picked up equipment and left for site setup and found we had a open loop. After having a look Jason found that the loop had been cut in 8 spots, we repaired it and started surveying hole MUD01 completing the Z and XY components. Returned to camp. EOD

Approved By:



OUTER RIM EXPLORATION SERVICES – DAILY REPORT

Date: 13/10/2012
Location: Unity Mining Limited
Project Number 2721

DHEM SURVEY DETAILS

Hole ID:	MUD02			Survey Type:	Cased	Live			
Collar:	385623	mE	5376703	mN		RL			
Azimuth:	97	Dip (+ve up):	45	Depth/Length:	225m				

From	To	Total	Component(s)	Stacks	Sensor
20	225	205	Z	256	98
20	210	205	XY	1024	70

TRANSMITTER LOOP DETAILS

Loop #	Loop Size	No. Turns	Resistance	TX voltage	Current	Time Base	Easting	Northing
M1	300x300	1	4.1	100v	20A	1m/s	385381	5376610
							385669	5376533
							385748	5376820
							385461	536896

OPERATOR / CREW DETAILS

				Daily Activity			
Name	Start Time	Finish Time	Total Hours	Standby	Survey	Mob	Breakdown
Jason Downey	7:00:00 AM	6:00:00 PM	11		1		
Lee Boyd	7:00:00 AM	6:00:00 PM	11		1		
Nick Leong	7:00:00 AM	6:00:00 PM	11		1		

OPERATOR COMMENTS (include delays, training, travel, standby, etc)

We left for site and started surveying MUD02 completing Z and XY components. The data was quite noisy so extra stacks where needed on the XY. Returned to camp. EOD

Approved By:



OUTER RIM EXPLORATION SERVICES – DAILY REPORT

Date: 14/10/2012
Location: Unity Mining Limited
Project Number 2723

DHEM SURVEY DETAILS

Hole ID:	LSUD01			Survey Type:	Cased	Live			
Collar:	384441	mE	5375617	mN		RL			
Azimuth:	110	Dip (+ve up):	70	Depth/Length:	510				

From	To	Total	Component(s)	Stacks	Sensor
20	510	490	Z	256	98
20	300	280	XY	512	70

TRANSMITTER LOOP DETAILS

Loop #	Loop Size	No. Turns	Resistance	TX voltage	Current	Time Base	Easting	Northing
L1	400x400	1	10.5	150	20A	1m/s	384482	5375199
							384480	5375665
							384201	5375542
							384203	5375301

OPERATOR / CREW DETAILS

Name	Start Time	Finish Time	Total Hours	Standby	Daily Activity			Breakdown
					Survey	Mob		
Jason Downey	7:00:00 AM	6:00:00 PM	11		1			
Lee Boyd	7:00:00 AM	6:00:00 PM	11		1			
Nick Leong	7:00:00 AM	6:00:00 PM	11		1			

OPERATOR COMMENTS (include delays, training, travel, standby, etc)

We left for site and started surveying LSUD01 completing Z and XY components. Returned to camp. EOD

Approved By:



OUTER RIM EXPLORATION SERVICES – DAILY REPORT

Date: 16/10/2012 Location: Unity Mining Limited Project Number 2721

DHEM SURVEY DETAILS

Hole ID:	LSUD01			Survey Type:	cased	Live	Cased	Open	Under Ground
Collar:	384441	mE	5375617	mN		RL			
Azimuth:	110	Dip (+ve up):	70	Depth/Length:	515m				

From	To	Total	Component(s)	Stacks	Sensor
310	515	205	XY	512	70

TRANSMITTER LOOP DETAILS

Loop #	Loop Size	No. Turns	Resistance	TX voltage	Current	Time Base	Easting	Northing
L1	400x400	1	10.5	150	20A	1m/s	384482	5375199
							384480	5375665
							384201	5375542
							384203	5375301

DHEM SURVEY DETAILS

Hole ID:	LSUD05			Survey Type:	cased	Live	Cased	Open	Under Ground
Collar:	384452	mE	5375351	mN		RL			
Azimuth:	115	Dip (+ve up):	53	Depth/Length:	345				

From	To	Total	Component(s)	Stacks	Sensor
20m	345m	325	XY	512	70

TRANSMITTER LOOP DETAILS

Loop #	Loop Size	No. Turns	Resistance	TX voltage	Current	Time Base	Easting	Northing
L1	400x400	1	10.5	150	20A	1m/s	384482	5375199
							384480	5375665
							384201	5375542
							384203	5375301

OPERATOR / CREW DETAILS

Name	Start Time	Finish Time	Total Hours	Standby	Daily Activity			Breakdown
					Survey	Mob		
Jason Downey	06:30:00	17:00:00	11.5		1			
Lee Boyd	06:30:00	17:00:00	11.5		1			
Nick Leong	06:30:00	17:00:00	11.5		1			

OPERATOR COMMENTS (include delays, training, travel, standby, etc)

Left camp at 6:30am, went to Lakeside and completed the XY on LSUD05, then packed up and went to Unity Minerals, we where going to go up to Red Hills but it was very wet and getting late so we went and got fuel and went back to camp. EOD

Approved By:



OUTER RIM EXPLORATION SERVICES – DAILY REPORT

Date: 17/10/2012 Location: Unity Mining Limited Project Number 2721

DHEM SURVEY DETAILS

Hole ID: Survey Type: Live ☐ Cased ☐ Open ☐ Under Ground ☐
 Collar: mE mN RL
 Azimuth: Dip (+ve up): Depth/Length:

From	To	Total	Component(s)	Stacks	Sensor

TRANSMITTER LOOP DETAILS

Loop #	Loop Size	No. Turns	Resistance	TX voltage	Current	Time Base	Easting	Northing

OPERATOR / CREW DETAILS

Name	Start Time	Finish Time	Total Hours	Daily Activity			
				Standby	Survey	Mob	Breakdown
Jason Downey	6:00:00 AM	6:00:00 PM	11	0.75	0.25		
Lee Boyd	6:00:00 AM	6:00:00 PM	11	0.75	0.25		
Nick Leong	7:00:00 AM	6:00:00 PM	11	0.75	0.25		

OPERATOR COMMENTS (include delays, training, travel, standby, etc)

Drove to Red Hills and started setting up. There was heavy rain and snow with high wind and we where having trouble keeping the transmitter site dry, we waited for an hour but the weather got no better so we packed up and went back to camp. EOD

Approved By:



OUTER RIM EXPLORATION SERVICES – DAILY REPORT

Date: 18/10/2012 Location: Unity Mining Limited Project Number 2721

DHEM SURVEY DETAILS

Hole ID:	RHD29			Survey Type:	cased	Live	Cased	Open	Under Ground
Collar:	382416	mE	5365301	mN		RL			
Azimuth:	115	Dip (+ve up):	57	Depth/Length:	252				

From	To	Total	Component(s)	Stacks	Sensor
20m	252	232m	Z	256	98
20m	252m	232m	XY	512	70

TRANSMITTER LOOP DETAILS

Loop #	Loop Size	No. Turns	Resistance	TX voltage	Current	Time Base	Easting	Northing
RHD	300X300	1	3.5	100	20A	1m/s	382193	5365247
							382490	5365187
							382547	5365459
							382247	5365519

DHEM SURVEY DETAILS

Hole ID:	RHD27			Survey Type:	cased	Live	Cased	Open	Under Ground
Collar:	382415	mE	5365301	mN		RL			
Azimuth:	89	Dip (+ve up):	69	Depth/Length:	243				

From	To	Total	Component(s)	Stacks	Sensor
20m	243	223	Z	256	98

TRANSMITTER LOOP DETAILS

Loop #	Loop Size	No. Turns	Resistance	TX voltage	Current	Time Base	Easting	Northing
RHD	300X300	1	3.5	100	20A	1m/s	382193	5365247
							382490	5365187
							382547	5365459
							382247	5365519

OPERATOR / CREW DETAILS

Name	Start Time	Finish Time	Total Hours	Standby	Daily Activity			Breakdown
					Survey	Mob		
Jason Downey	06:30:00	17:00:00	11.5		1			
Lee Boyd	06:30:00	17:00:00	11.5		1			
Nick Leong	06:30:00	17:00:00	11.5		1			

OPERATOR COMMENTS (include delays, training, travel, standby, etc)

Left camp went to Red Hills, started surveying RHD29 then moved to RHD27, we completed the Z and returned to camp.
EOD

Approved By:



OUTER RIM EXPLORATION SERVICES – DAILY REPORT

Date: 19/10/2012 Location: Unity Mining Limited Project Number 2721

DHEM SURVEY DETAILS

Hole ID: RHD27 Survey Type: Live Cased Open Under Ground
Collar: 382415 mE 5365301 mN
Azimuth: 89 Dip (+ve up): 69 Depth/Length: 243 m

From	To	Total	Component(s)	Stacks	Sensor
20	243	223	XY	512	70

TRANSMITTER LOOP DETAILS

Loop #	Loop Size	No. Turns	Resistance	TX voltage	Current	Time Base	Easting	Northing
RHD	300X300	1	3.5	100	20A	1m/s	382193	5365247
							382490	5365187
							382547	5365459
							382247	5365519

DHEM SURVEY DETAILS

Hole ID: RHD25 Survey Type: Cased Live Cased Open Under Ground
Collar: 382444 mE 5365346 mN
Azimuth: 91 Dip (+ve up): 49 Depth/Length: 170 m

From	To	Total	Component(s)	Stacks	Sensor
20	170	150	Z	256	98

TRANSMITTER LOOP DETAILS

Loop #	Loop Size	No. Turns	Resistance	TX voltage	Current	Time Base	Easting	Northing
RHD	300X300	1	3.5	100	20A	1m/s	382193	5365247
							382490	5365187
							382547	5365459
							382247	5365519

DHEM SURVEY DETAILS

Hole ID: RHD24 Survey Type: Cased Live Cased Open Under Ground
Collar: 382445 mE 5365346 mN
Azimuth: 88 Dip (+ve up): 65 Depth/Length: 200 m

From	To	Total	Component(s)	Stacks	Sensor
20	200	180	Z	256	98
20	150	130	XY	256	70

TRANSMITTER LOOP DETAILS

Loop #	Loop Size	No. Turns	Resistance	TX voltage	Current	Time Base	Easting	Northing
RHD	300X300	1	3.5	100	20A	1m/s	382193	5365247
							382490	5365187
							382547	5365459
							382247	5365519

OPERATOR / CREW DETAILS

Name	Start Time	Finish Time	Total Hours	Standby	Daily Activity		
					Survey	Mob	Breakdown
Jason Downey	06:00:00	17:00:00	11		1		
Lee Boyd	06:00:00	17:00:00	11		1		
Nick Leong	06:00:00	17:00:00	11		1		

OPERATOR COMMENTS (include delays, training, travel, standby, etc)

Left camp and went to Red Hills and completed the XY on RHD27, then moved to RHD25 and RHD24 and completed the Z's, then started the XY on RHD24. Returned to camp. EOD

Approved By:



OUTER RIM EXPLORATION SERVICES – DAILY REPORT

Date: 20/10/2012 Location: Unity Mining Limited Project Number 2721

DHEM SURVEY DETAILS

Hole ID: RHD25 Survey Type: Cased Live Cased Open Under Ground
 Collar: 382444 mE 5365346 mN RL
 Azimuth: 91 49 Depth/Length: 170 m

From	To	Total	Component(s)	Stacks	Sensor
20	170	150	XY	512	70

TRANSMITTER LOOP DETAILS

Loop #	Loop Size	No. Turns	Resistance	TX voltage	Current	Time Base	Easting	Northing
RHD	300X300	1	3.5	100	20A	1m/s	382193	5365247
							382490	5365187
							382547	5365459
							382247	5365519

DHEM SURVEY DETAILS

Hole ID: RHD24 Survey Type: Cased Live Cased Open Under Ground
 Collar: 382445 mE 5365346 mN RL
 Azimuth: 88 Dip (+ve up): 65 Depth/Length: 200 m

From	To	Total	Component(s)	Stacks	Sensor
160	200	40	XY	512	70

TRANSMITTER LOOP DETAILS

Loop #	Loop Size	No. Turns	Resistance	TX voltage	Current	Time Base	Easting	Northing
RHD	300X300	1	3.5	100	20A	1m/s	382193	5365247
							382490	5365187
							382547	5365459
							382247	5365519

OPERATOR / CREW DETAILS

Daily Activity							
Name	Start Time	Finish Time	Total Hours	Standby	Survey	Mob	Breakdown
Jason Downey	06:00:00	17:00:00	11	0.25	0.75		
Lee Boyd	06:00:00	17:00:00	11	0.25	0.75		
Nick Leong	06:00:00	17:00:00	11	0.25	0.75		

OPERATOR COMMENTS (include delays, training, travel, standby, etc)

left camp went to Red Hills and completed the XY on RHD24, then moved to RHD25 and completed the XY, then pack up all the gear and moved to PZ001, we went to dropped the transmitter site at the loop but with the heavy rain the water was right across the track and the area around the hole was under water. We found some high ground to leave the trailer at and went back to camp. EOD

Approved By:



OUTER RIM EXPLORATION SERVICES – DAILY REPORT

Date: 21/10/2012 Location: Unity Mining Limited Project Number 2721

DHEM SURVEY DETAILS

Hole ID: Survey Type: Live ☐ Cased ☐ Open ☐ Under Ground ☐
 Collar: mE mN RL
 Azimuth: Dip (+ve up): Depth/Length:

From	To	Total	Component(s)	Stacks	Sensor

TRANSMITTER LOOP DETAILS

Loop #	Loop Size	No. Turns	Resistance	TX voltage	Current	Time Base	Easting	Northing

OPERATOR / CREW DETAILS

Name	Start Time	Finish Time	Total Hours	Daily Activity			
				Standby	Survey	Mob	Breakdown
Jason Downey	7:00:00 AM	6:00:00 PM	11	0.75	0.25		
Lee Boyd	7:00:00 AM	6:00:00 PM	11	0.75	0.25		
Nick Leong	7:00:00 AM	6:00:00 PM	11	0.75	0.25		

OPERATOR COMMENTS (include delays, training, travel, standby, etc)

Left camp at 7:00am went out to the Unity mining then to PZ001 setup the transmitter site and did the PP, the got stuck at 5.2m. We pulled out of the hole and Jason tried to clear out the hole with no luck. We packed up and went back to camp and got ready for the helicopter job, the weather stopped us from flying the gear to site today. EOD

Approved By:



OUTER RIM EXPLORATION SERVICES – DAILY REPORT

Date: 22/10/2012 Location: Unity Mining Limited Project Number 2721

DHEM SURVEY DETAILS

Hole ID:	MXUD01			Survey Type:	Cased	Live	Cased	Open	Under Ground
Collar:	382678	mE	5370691	mN		RL			
Azimuth:	90	Dip (+ve up):	47	Depth/Length:	229				

From	To	Total	Component(s)	Stacks	Sensor
20	229	209	Z	256	98

TRANSMITTER LOOP DETAILS

Loop #	Loop Size	No. Turns	Resistance	TX voltage	Current	Time Base	Easting	Northing
MX	300x300	1	6.3	130	20	100	382504	5370841
							382802	5370841
							382802	5370543
							382504	5370543

OPERATOR / CREW DETAILS

Name	Start Time	Finish Time	Total Hours	Standby	Daily Activity			Breakdown
					Survey	Mob		
Jason Downey	6:00:00 AM	6:00:00 PM	12		1			
Lee Boyd	6:00:00 AM	6:00:00 PM	12		1			
Nick Leong	6:00:00 AM	6:00:00 PM	12		1			

OPERATOR COMMENTS (include delays, training, travel, standby, etc)

Left camp at 6:00am went out to the Tulla field ready to fly the gear to site, but the helicopter had fuel problem so we had to wait till the problem was fixed. At 10:30am the gear got to site, we arrived at 12:00pm dummied the hole{open to 229m} layed the loop and surveyed the Z. We packed all the gear and went back to the camp. EOD

Approved By:



OUTER RIM EXPLORATION SERVICES – DAILY REPORT

Date: 23/10/2012
Location: Unity Mining Limited
Project Number 2721

DHEM SURVEY DETAILS

Hole ID:	MXUD01			Survey Type:	Cased	Live	Cased	Open	Under Ground
Collar:	382678	mE	5370691	mN		RL			
Azimuth:	90	Dip (+ve up):	47	Depth/Length:	229				

From	To	Total	Component(s)	Stacks	Sensor
20	229	209	XY	512	70

TRANSMITTER LOOP DETAILS

Loop #	Loop Size	No. Turns	Resistance	TX voltage	Current	Time Base	Easting	Northing
MX	300x300	1	6.3	130	20	100	382504	5370841
							382802	5370841
							382802	5370543
							382504	5370543

OPERATOR / CREW DETAILS

Daily Activity							
Name	Start Time	Finish Time	Total Hours	Standby	Survey	Mob	Breakdown
Jason Downey	6:00:00 AM	6:00:00 PM	12		1		
Lee Boyd	6:00:00 AM	6:00:00 PM	12		1		
Nick Leong	6:00:00 AM	6:00:00 PM	12		1		

OPERATOR COMMENTS (include delays, training, travel, standby, etc)

Left camp at 6:00am went out to site we arrived at 7:30pm and surveyed the Z, pulled in the loop and got the gear choppered out packed all the gear and went back to the camp. EOD

Approved By:



OUTER RIM EXPLORATION SERVICES – DAILY REPORT

Date: Location: Project Number

DHEM SURVEY DETAILS

Hole ID: Survey Type: Live ☐ Cased ☐ Open ☐ Under Ground ☐
 Collar: mE mN RL
 Azimuth: Dip (+ve up): Depth/Length:

From	To	Total	Component(s)	Stacks	Sensor

TRANSMITTER LOOP DETAILS

Loop #	Loop Size	No. Turns	Resistance	TX voltage	Current	Time Base	Easting	Northing
MX	300x300	1	6.3	130	20	100	382504	5370841
							382802	5370841
							382802	5370543
							382504	5370543

OPERATOR / CREW DETAILS

Name	Start Time	Finish Time	Total Hours	Standby	Daily Activity			Breakdown
					Survey	Mob		
Jason Downey	6:00:00 AM	6:00:00 PM	12			1		
Lee Boyd	6:00:00 AM	6:00:00 PM	12			1		
Nick Leong	6:00:00 AM	6:00:00 PM	12			1		

OPERATOR COMMENTS (include delays, training, travel, standby, etc)

De Mobbed from site. EOJ

Approved By: