SECOND ANNUAL REPORT

Ringwood EL32244

Titleholder : Gempart (NT) Pty Ltd

EXPLORATION LICENCE EL32244

FOR THE PERIOD 20/03/2021 to 19/03/2022

APPENDIX 1

VTEM INTERPRETATION REPORT





Ringwood and No 5 Bore (EL32244) 2021 VTEM Survey Results

GEMPART (NT) PTY LTD

August 2021

Introduction

Gempart Pty Ltd commissioned GeoTech Airborne to fly a VTEM Max survey over prospective areas of the Hale Project, located about 150km east of Alice springs.

The survey was flown between the 5th and 8th April 2021 over 5 blocks.

The survey areas were flown with a nominal line spacing of 300m, with infill lines flown at 150m spacing over selected anomalies.

This memo focuses on the results of the surveys within EL32244, which include most of Ringwood (Area 3) and No 5 Bore (Area 4).



Interpreted Conductor Overview

A total of 1026.9 line-km of VTEM data was flown withing EL32244 – 968.3 km as part of the Ringwood block (Area 3) and 58.6 km for the No 5 bore block (Area 4).

A single good late-time anomaly was resolved from the No 5 Bore area (NFB01), with two lines extended to close of the anomaly for modelling.

Several interesting anomalies were resolved within the Ringwood area including circular anomaly of interest in the south west of the survey area (RW01), a complex zone of anomalism in the NE (RW02) extending over about 6km, and a cluster of local anomalies in the southwest, one of which (RW03) sits on a significant domain boundary.



Interpreted Conductor Overview



Geology

DEM

Interpreted Conductor Overview



RTP 1VD

NFB01 – Plate model



NFB01 - RDIs



The top of the RDI model is reasonable consistent with the dip and extent of the plate models, but suggests significant thickness. In this case the RDI model is much deeper than the Maxwell plate model (~100m compared to generally less than 20m for the plate models). RDIs/CDIs can over estimate depth to source, especially for moderately dipping conductors, so the true depth to this conductor is probably closer to that of the plate models.

RW01 - Overview



RW01 – Modelling and RDI



RW01 is a vert interesting circular anomaly persisting to late times. It has no corresponding magnetic anomaly, but is located in an interesting position within folded magnetic stratigraphy and bounded by possible NW-SE structures. The shape of the anomaly suggests a large pipe-like feature (i.e. breccia pipe).

An attempt was made at modelling the response with plates, but a match could only be obtained using strike limited plates (i.e. 200m across), rather than plates that represent the 2km diameter of the feature. If the measured response is indicative of localised secondary magnetic fields within a larger conductive body, then the models could be representing the top of a large depth-extent body, with the upper surface having a saucer shaped geometry. This is supported by the RDIs, which show a very shallow (less than 50m) source with undefined (unresolved) depth extent.

RW02 - Overview



RW02 looks to me made up of a zone of at least six conductors. Some may be fault-offset/repetitions of the same conductive horizon.

The overall strike length of target is more than 6km.

The structural location of the anomalies is interesting, within RW2b, RW2d, and RW2f located within the nose of a tight fold, and RW2a and RW2c aligned along the fold hinge.

Of interest is the fact that RW2d and RW2f are coincident with strong magnetic units that map the limbs of the fold, but the association between strong magnetic and EM responses only occurs over a 2.6km zone on the northern limb of the fold, whereas the same magnetic horizon elsewhere has no TEM response

The anomalies all suggest shallow-dipping sources and relatively shallow depths. No modelling has been done on these anomalies, but the RDIs support the assumption of shallow (i.e. subcropping to max 50m depth), flat-lying to shallow-dipping targets.

RW02a - RDIs

Line 5460



RW02b/c - RDIs

Line 5490



broad late-time anomaly. The RDIs do not clearly resolve the individual conductive horizons.



RW02d/e - RDIs

Line 5570



1.0

0.8

0.8

7339000

7340000

7341000

EM Response (pV/Am4)

Ch40

7342000

Northing (metres)

7343000

7344000

7345000

Clearly multiple peaks in the earlier times, but migrating to a single broad late-time anomaly. The RDIs do not clearly resolve the individual conductive horizons.

RW02f - RDIs

Line 5630



0.0 -0.2

Northing (metres)

RW03 - Overview



Therefore RW03 is located in an interesting position at the junction of two domains with quite different structural/lithological orientations.

It is orthogonal to the main NW-SE lithologicial trend in this area (as defined by RW04, RW05, RW06 along larger strike length conductive horizons), and is coincident with a magnetic feature that is consistent with the dominantly NE magnetic trend seen in the No 5 Bore area to the SW (as seen in the regional magnetic imagery)



RW03 - RDIs

Line 5030



An attempt was made to model the RW03 response with plate models, but a good model fit could not be obtained. The anomaly shape and character suggest a shallow-dipping to flay-lying source at shallow depth (less than 50m), which is supported by the RDIs.



RW04 and RW05 - RDIs

Line 5110



These are 3rd order anomalies that may warrant further investigation.

RW04 is on the southern edge of the survey and looks to be a locally shallower part of a conductive trend that possibly marks the domain boundary between the Ringwood and No 5 bore "domains".

RW5 is an interesting local feature that is offset to the south of the main conductive horizon in this area.



RW06 - RDIs

Line 5080



This 3rd order anomaly is a locally anomalous zone along a larger strikelength conductive horizon.

It is located close to a fold nose so may be representing local thickening of a weakly conductive formational horizon.



RW07 - RDIs



Ch20 7345500 7344000 7344500 7345000 7346000 Northing (metres) Ch30 Ohm-m 7343500 7344000 7344500 7345000 7345500 7346000 Northing (metres) Ch40 0.008 **RW07** 0.006 0.004 0.00 -0.002 7343500 7344000 734450 7345000 7345500 7346000

Northing (metres)

EM Respor

e (p\//Am4)

spo

EM Re:

RW07 is an interesting local late-time anomaly. The lack of early time response suggests this is a deeper bedrock source, but the anomaly is not defined well enough to mode with any accuracy. The RDIs suggest a depth of around 200m, but this is likely over exaggerated. A ground TEM survey is needed to better resolve the anomaly. Infill lines flown either side of this feature did not resolve any anomalies, suggesting is it strike limited (less than 100m).

It is located within a zone of complex magnetics

Conclusions

The Ringwood block (Area 3) and no 45 Bore block (Area 4) of the 2021 Hale VTEM survey have resolved some interesting anomalies. Most of the anomalous responses appear to be sourced from shallow sources with very shallow dips, and are not able to be well represented by plate models.

One local anomaly in the NE of the Ringwood area (RW07) represents the only clear confined bedrock conductor, but the ground TEM surveying is required to better define this anomaly for generating an accurate model for targeting.

Reasonable models were generated for the anomalies seen in the No 5 Bore area in the SW (NFB01). These models suggest the source could be a locally shallower part of a larger strike-length formational conductor, which appears to be deepening along strike to the SE. The up-dip extent of these models are consistent with a local topographic ridge, so there may be evidence of the source lithology at surface.

The most interesting anomaly within the Ringwood area is a circular late time anomaly, RW01. Modelling and RDI imagery suggest a shallow, saucer-shaped geometry for the source, which may be representing the top of a large depth-extent body such as a breccia pipe.

A group of anomalous late-time conductors in the NE of Ringwood (RW02) extend over a strike length of 6km and have potential for as a stratiform base-metals target. The location of the anomalies is interesting – either lying within the nose or along the axis of a significant fold.

At the very SW part of the Ringwood area is a local anomaly that is of interest on two notes – it is coincident with a SW-NE magnetic anomaly that is truncated by a domain boundary that divides the No 5 Bore and Ringwood areas.

| Name | Priority | Description |
|-------|----------|--|
| RW01 | 1 | Interesting circular late-time feature bound by folded magnetic stragigraphy and possible NW-SE faults |
| RW2a | 2 | Good early- to late-time anomaly along hinge line of tight fold |
| RW2b | 2 | Early-to late time anomaly within fold nose |
| RW2c | 2 | Good early- to late-time anomaly along hinge line of tight fold |
| RW2d | 2 | Goo early- to late time anomaly on northern limb of fold nose - coincident with magnetic horizon |
| RW2e | 3 | Weaker secondary peak to RW2d |
| RW2f | 2 | Local extension of RW2d - also coincident with local magnetic anomaly |
| RW03 | 1 | Good shielded late-time coincident with SW-NE mag unit. On contact between SW-NE and NW-SE domains |
| RW04 | 3 | Strong early- to late-time trend on edge of survey and along conductive trend that marks domain boundary |
| RW05 | 3 | Locally stronger mid-to late-time anomaly along offset to SW of conductive trend |
| RW06 | 3 | Locally stronger mid-to late-time anomaly along conductive trend, close to fold nose |
| RW07 | 2 | Local low-amplitude late-time. Within are of complex magnetics |
| NFB01 | 2 | Broad mid- to late time anomaly. Locally anomalous part of larger strike -length conductive trend. |