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Date: 15th November, 2010

Memo to: Mr Ken Rogers and Mr Nick Byrne
NT Resources Ltd

From: Frank Lindeman
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Subject: Report on the Interpretation of Recently Completed 1km x 1km station-spaced Gravity Survey over the Ooratippra Project in NT.

Introduction:

This project and its geophysical characteristics are adequately described in the **NT Resources Prospectus**. Reference is also made to a Lindeman Geophysics Pty Ltd **Memorandum** to Ken Rogers, dated April 1, 2010 and titled "*Olympic Dam Geophysical Response*". In this memorandum, the process of calculating the Bouguer gravity residual from semi-detailed gravity data over the large regional gravity response at Olympic Dam is described and the relationship between this surprising result and the ore deposit is revealed.
NB: All images described here will be provided as jpg images

Gravity Survey:

Figure 1 shows the available Government regional Bouguer gravity response and the actual gravity stations. For the most part, these stations were widely spaced and not detailed enough to make any realistic interpretation of possible source characteristics and depth and similarly not detailed enough to calculate a gravity residual. With the assistance of a NTGS grant, a program was devised to cover the ground tenements.

Atlas Geophysics of Perth was engaged to carry out a helicopter-assisted 1km x 1km survey. Atlas provided this data in standard located data format and also as ER Mapper images. Because of the uncertainty of the accuracy of the original regional data, which is a compilation of several surveys of varying ages, Atlas provided data as both "Atlas-only" and a "merged regional and Atlas". Also provided were images of First Vertical Derivative (1VD) and the Digital Terrain Model (DTM).

Figure 2 shows the regional gravity data and the NT Resources tenements, the outline of which describes the Atlas gravity coverage.

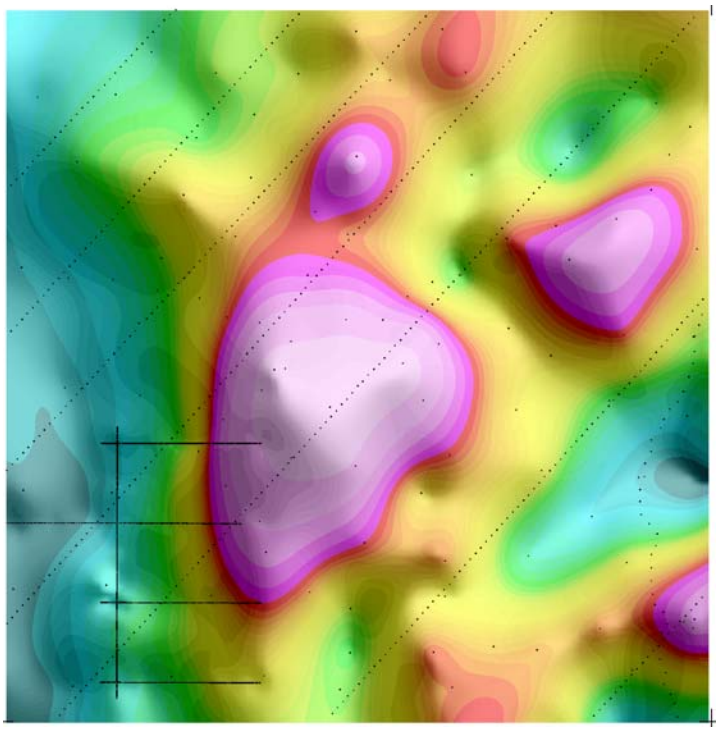

Figure 1 Ooratippra Project –Government Regional Bouguer Gravity and Stations

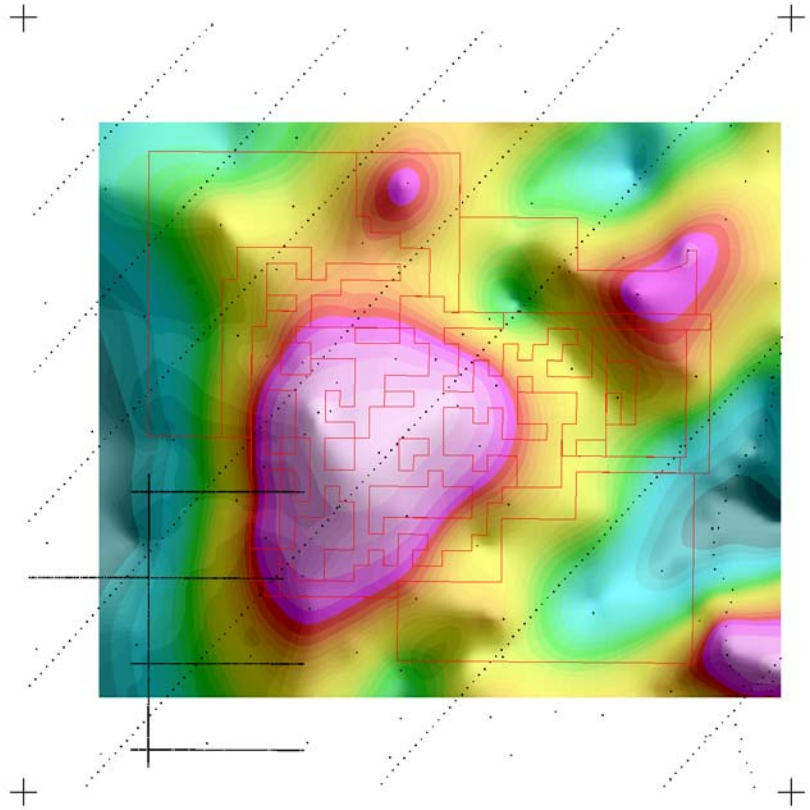

Figure 2 Ooratippra – Government Gravity, Stations and Tenements.

Atlas Gravity Results

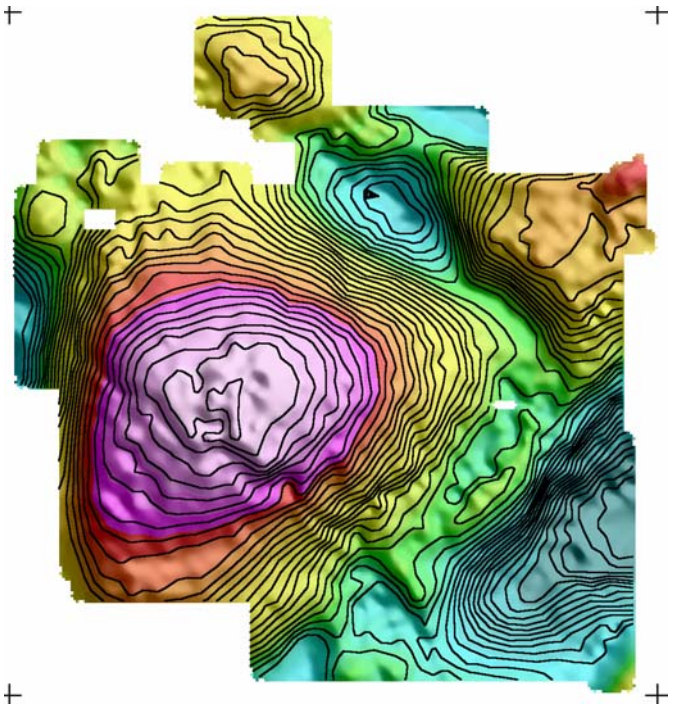

Figure 3-Ooratippra Bouguer Gravity with 1 mgal contours

Figure 3 shows the gravity data from the Atlas survey alone. Although, as described previously, we have a merged (regional + Atlas) data set but because of the uncertainty of the quality of the regional data set, only the Atlas specific data has been processed and interpreted.

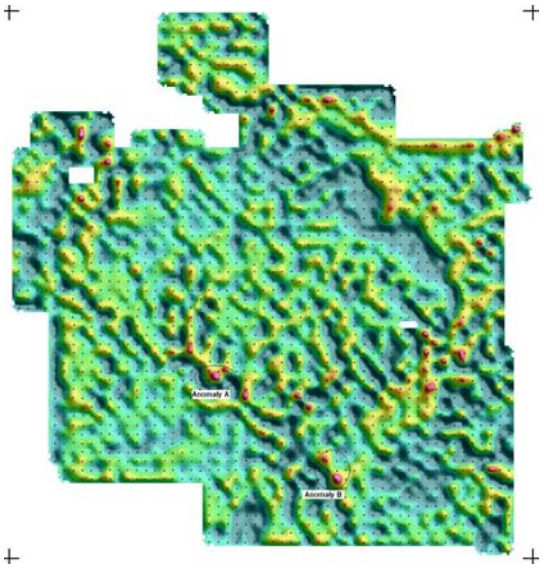

Figure 4: Ooratippra Bouguer gravity residual and stations and Anomalies A & B

Interpretation of Gravity Data

Examination of the new Bouguer gravity data (**figure 3**) shows that the original regional scale anomalies are now described in much more detail and while the shapes, extents and attitudes are somewhat different to the original pre-Atlas regional data, on this presentation, there is some suggestion of new responses due to possibly shallower gravity sources. These require some enhancement. It is important to note that the definitive Olympic Dam responses were not obvious in the images of the straight Bouguer gravity response. However once an anomaly has been defined/enhanced by further processing, it can be detected/highlighted in profile analysis.

The Bouguer gravity residual was calculated by the removal of a 9 x Hanning filtered data set from the original data. **Figure 4** shows this result.

Examination of all of the "apparent" residual responses in this figure has shown that many are due to single readings, and some are possibly noisy readings. In all the situations where these so-called anomalies have not been highlighted for possible follow-up, it has been determined that at these locations there is no potential for the further development of small responses due to shallow sources. At two locations however (**A and B in Figure 5)**, it has been decided that these responses could be further developed with more detailed work, as responses from possible shallow sources.

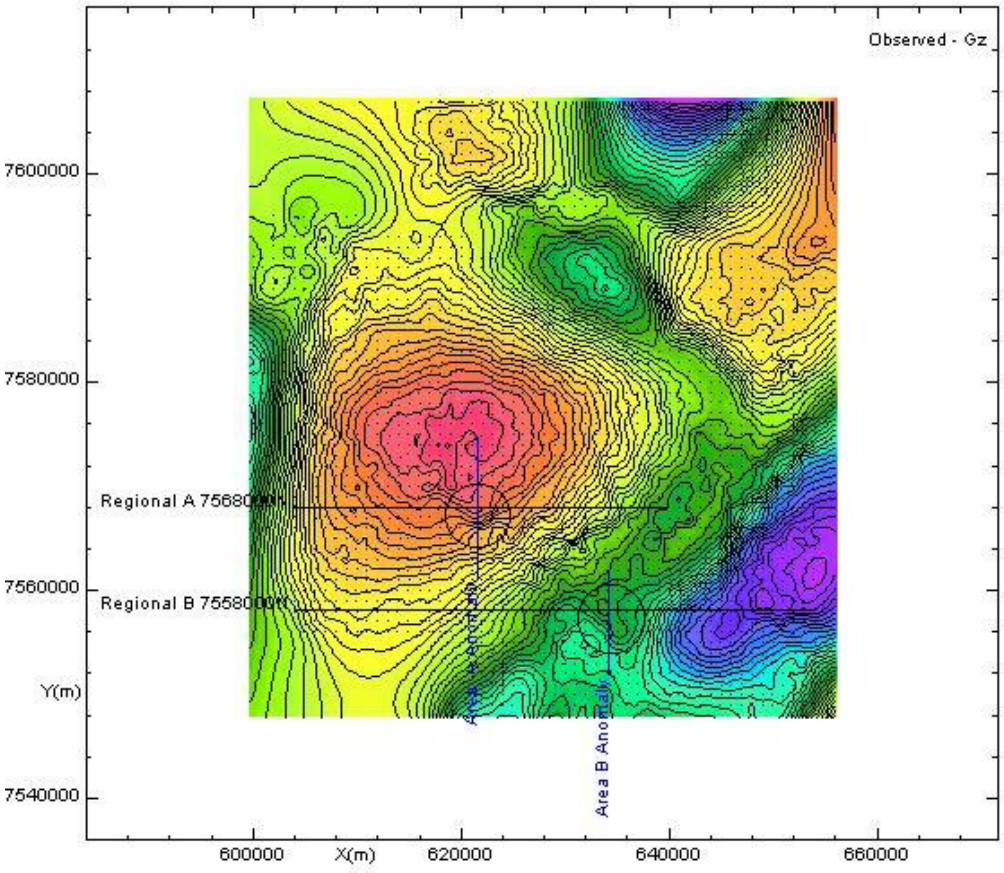

Figure 5: Atlas Gravity Contours, Stations, Anomalies A and B and Regional Profiles

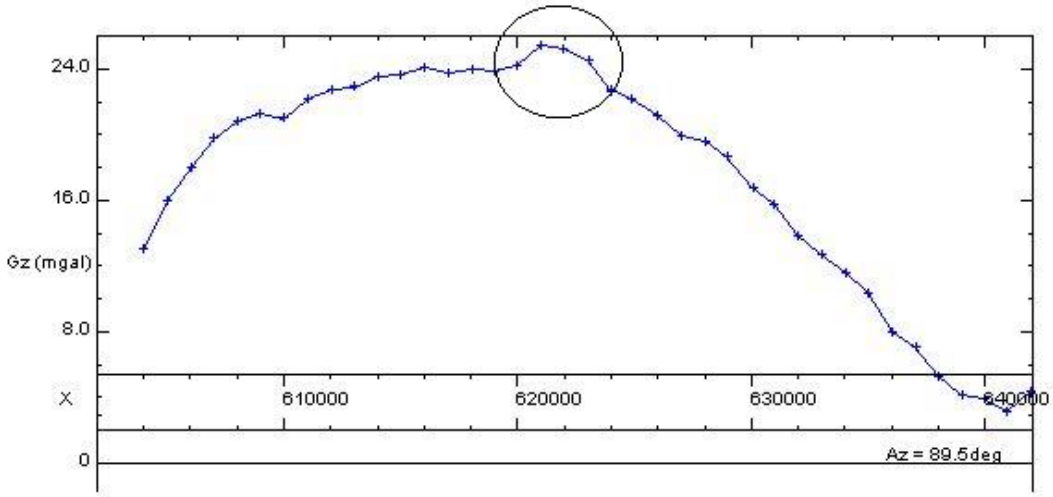

Figure 6: Gravity Profile on **7568000N** showing anomaly A on regional profile

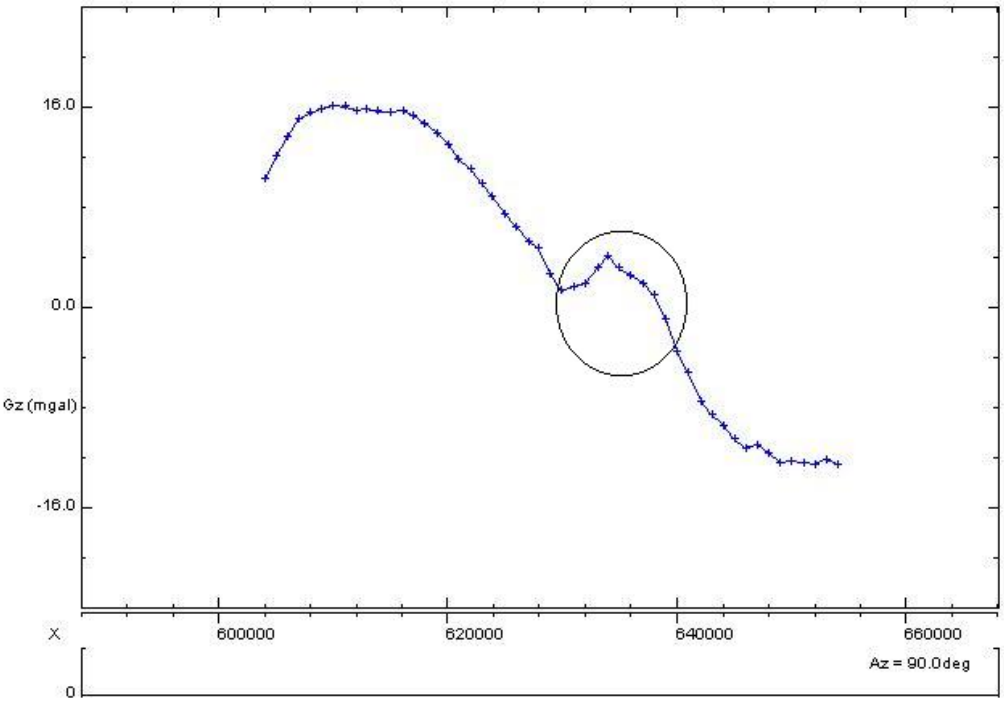

Figure 7: Gravity traverse on **7558000N** showing anomaly B on regional profile

Anomaly A

This anomaly is centred at 621637E and 7567344N although this co-ordinate is not a reading station. **Figure 8** is a detailed presentation of this area, with the center of the area of interest designated with a **+ 2**. The contour interval is 0.5 mgal. **Figure 9** is a profile over this response on line 7568000N, which shows the apparent anomaly as defined with the 1km-spaced readings.

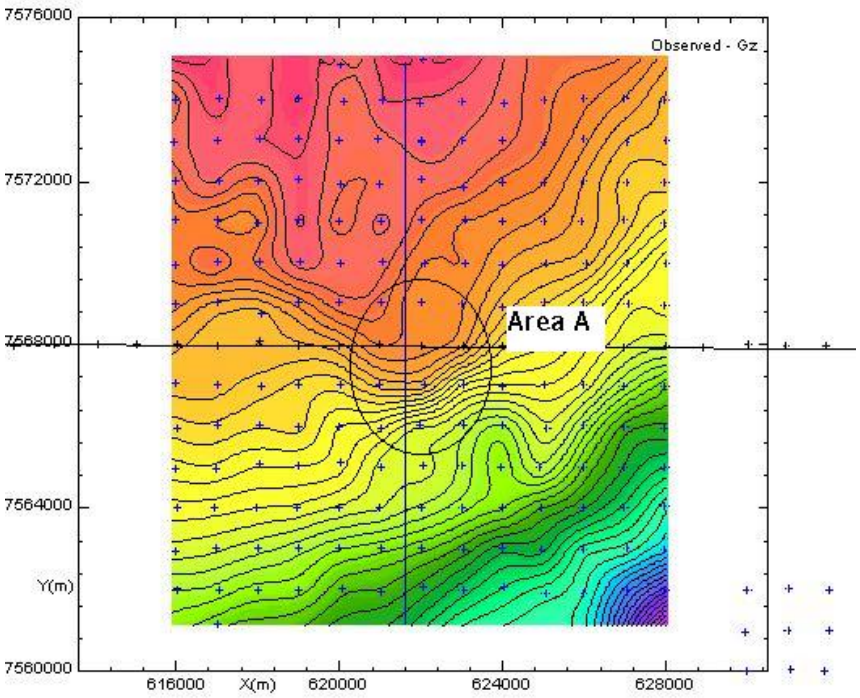

Figure 8- Area A Bouguer Gravity Contours (0.5mgals)

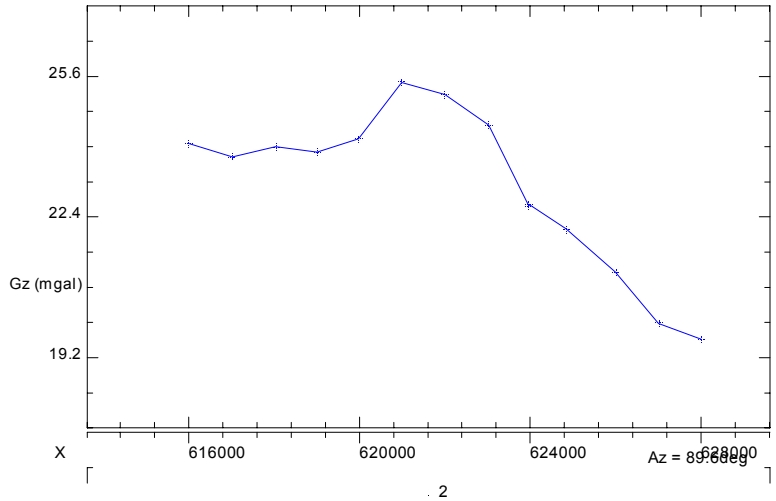

Figure 9 – Line 7568000N Gravity Profile over Area A showing anomalous response

Anomaly B

This anomaly is a linear NNW trending response centred at 634940E and 7556000N (figure 5).

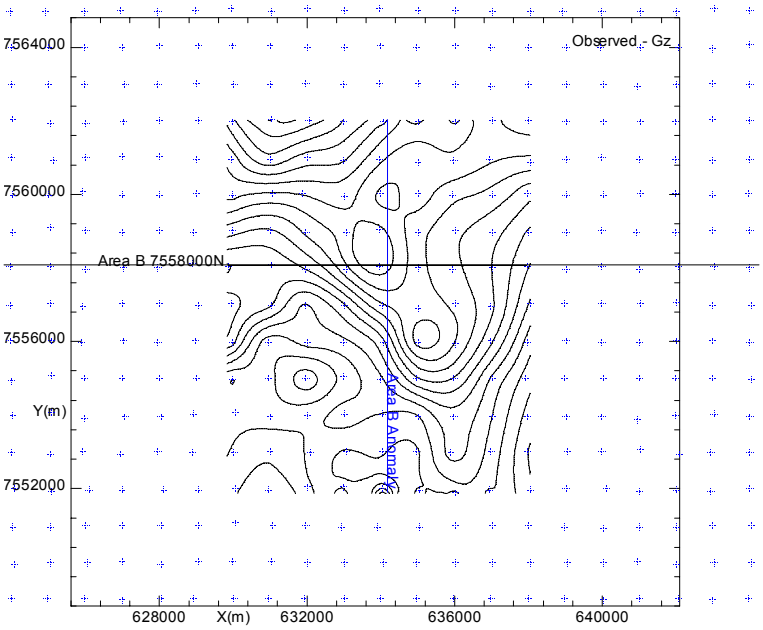

Figure 10 Area B Bouguer Gravity Contours (0.5 mgal)

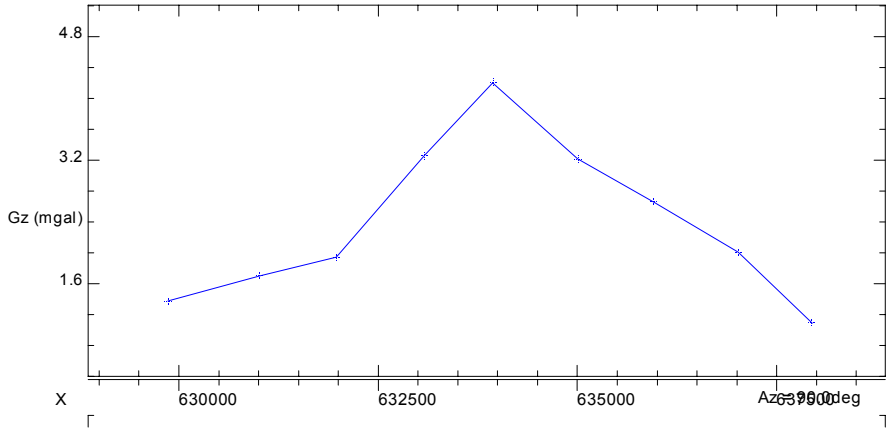

Figure 11: Area B - Gravity Profile Line 7558000N

Discussion and Recommendations

With the use of the *Gravity Residual* and then detailed profile analysis, small and discrete gravity responses, which could develop into signatures from shallow sources have been interpreted to exist at two locations within the Altlas gravity data ie ***Areas A and B.***

Although the Atlas ground surveying utilized 1km station spacings, which were a great improvement on the existing station spacing of the regional data coverage, the two interpreted responses will need further more detailed follow-up before any detailed interpretation can be conducted.

It is recommended that NTR engages ***Atlas Geophysics*** to carry out a series of detailed traverses over the two areas of interest discussed above, and then carry out further interpretation of the resulting data. A station spacing of 100m to 200m along each line is suggested. A program for this work is not included in this report.

It should be noted that Atlas has agreed to "free mobilization" to the Ooratippra Project.

Frank Lindeman
Lindeman Geophysics Pty Ltd