



Memorandum

Please find below the preliminary results from 2D forward modelling of acquired magnetic data over the L13 area (Figure 1).

1 Introduction

2D Forward modelling was conducted through two magnetic anomalies in the L13 survey area, sliced in an East-West direction as shown in Figure 1. Forward modelling analysed the effect of varying spatial extent, depth to top and magnetic susceptibility of model materials in an attempt to reproduce measured magnetic intensity anomalies.

2 Results

The results of 2D modelling of a single potential causative magnetic body that could reproduce the magnetic intensity anomalies presented in Figure 1 are presented below.

- Figures 2A, 2B and 2C present the variation in depth to top, body width and magnetic susceptibility of the forward model that could appropriately reproduce magnetic high A (Figure 1).
- Figures 3A, 3B and 3C present the variation in depth to top, body width and magnetic susceptibility of the forward model that could appropriately reproduce magnetic high B (Figure 2).

3 Discussion and Recommendations

The results presented by GHD in this memorandum provide constraints for further modelling of magnetic data. Initial interpretations of causative magnetic body geometries suggest the body may consist of a sub-vertical slab-like magnetic body. Potential geometries of bodies may be approximated by interpreting magnetic susceptibility properties of suspected materials in the subsurface of L13 and obtaining results from plotted results in the memorandum.

A 40-50% magnetite body with magnetic susceptibility of 1-1.5 (SI units) could represent a plausible grade to produce the anomalies presented in Figure 1. For example this would constrain width dimensions of 30-37 m for a causative magnetite body producing anomaly 1 based on plotted modelling results (Figure 2B).

GHD recommends obtaining more ground magnetic data to enhance the resolution of current data coverage over L13 and recommends UBC inversion modelling to better constrain possible causative body geometries.

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4 Concluding Remarks

GHD looks forward to working with Lottah Mining on further defining this resource. If you have any questions please do not hesitate to contact the undersigned or Hugh Tassell.

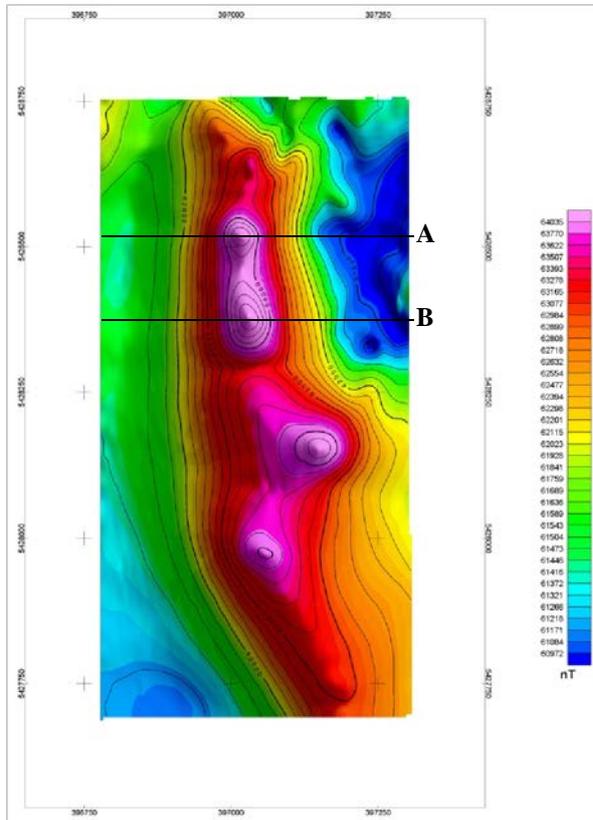


Figure 1 L13 Acquired magnetic data and 2D forward modelling slice locations

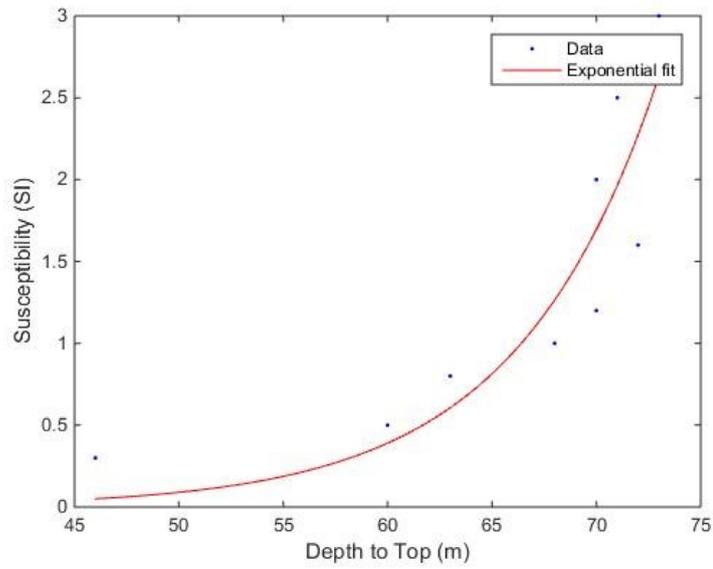


Figure 2A Plot of anomaly A forward modelling results, depth to top against susceptibility

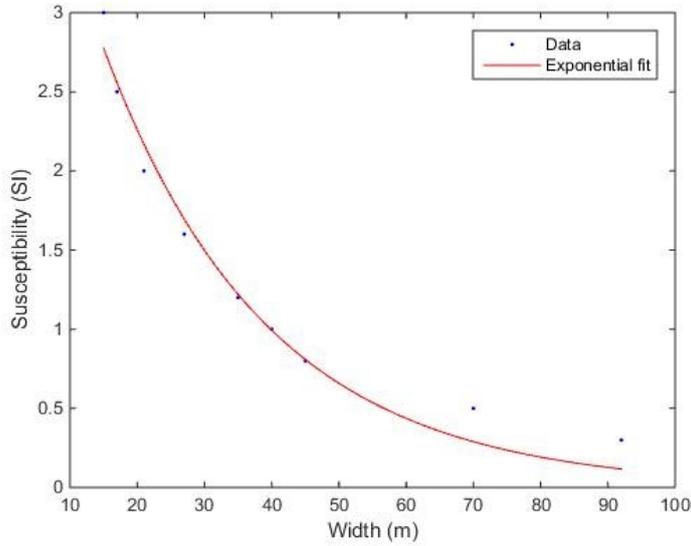


Figure 2B Plot of anomaly A forward modelling results, body width against susceptibility

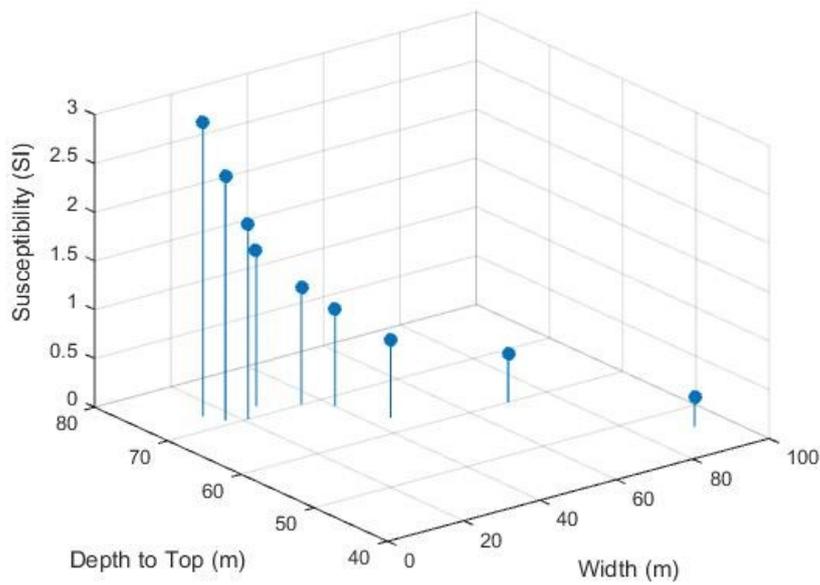


Figure 2C Plot of combined anomaly A modelling results from Figures 2A &2B

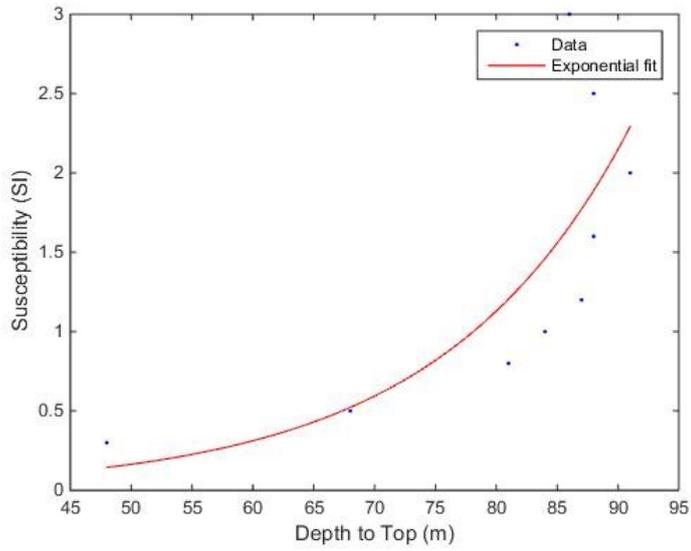


Figure 3A Plot of anomaly B forward modelling results, depth to top against susceptibility

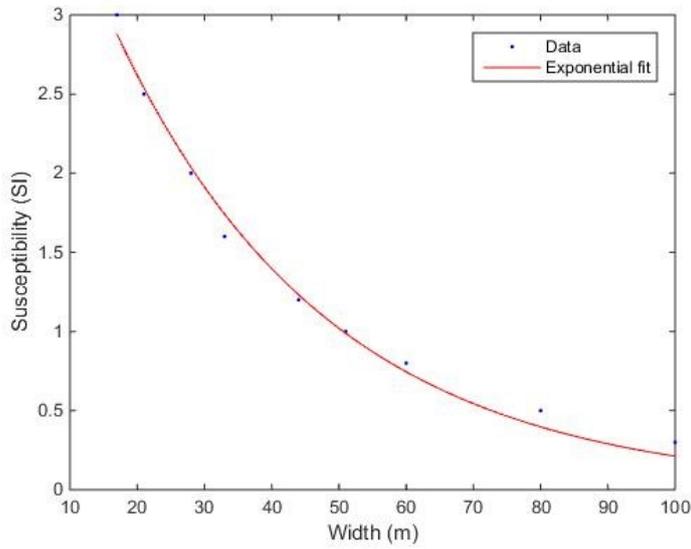


Figure 3B Plot of anomaly B forward modelling results, body width against susceptibility

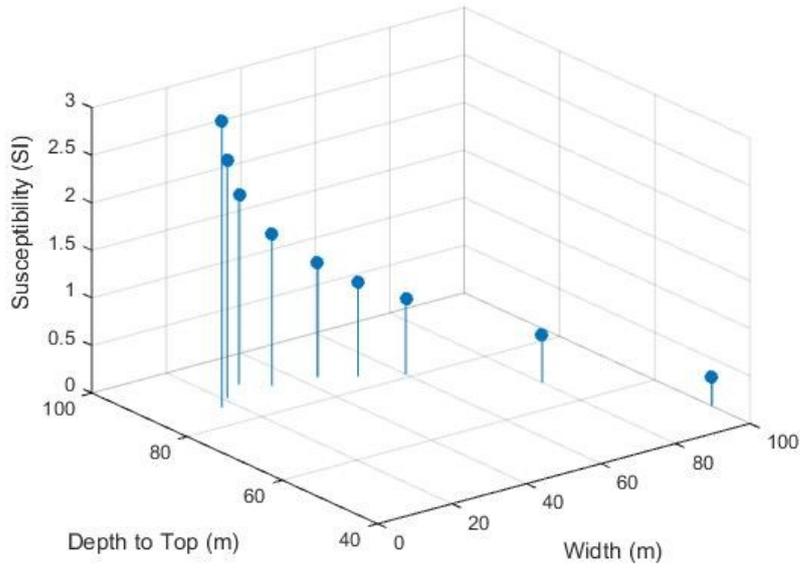


Figure 3C Plot of combined anomaly A modelling results from Figures 3A & 3B