

Magnetic Depth Modeling of EL 28413

and EL 28435

Tennant Creek, Northern Territory

For

Austgold Ludi Mining Pty Ltd and Minerals

Invesco Pty Ltd

INTRODUCTION

ELs 28413 and EL 28435 are located approximately 850 km south of Darwin and about 40 km north of Tennant Creek in central Australia. A high resolution airborne magnetic survey of the project area was undertaken by UTS Geophysics during July 2012. This survey consisted of flying 100 metres spaced lines in an East - West direction at a terrain clearance of 50 metres over the Exploration Licenses. Processing and interpretation of geophysical data revealed a number of magnetic ridges in the project area, which were concealed below Quaternary regolith cover or lying deeper within lithological units exposed in the project area. The main purpose of this exercise was to estimate the depth of these magnetic anomalies/ ridges which should provide assistance in exploring the project area.

MAGNETIC MODELING

To understand depth of magnetic anomalies, some selected areas were further studied to estimate the depth of which magnetic anomalies were identified during the geophysical survey. 2 D modeling was conducted on the anomalous magnetic field by using program ModelVision. Figure 1 shows TMI image of the project with model parameters and the results. Grids profiles were constructed in directions orthogonal to strike in order to obtain meaningful depth estimated.

Table 1 shows anomaly positions (MGA94) and depth to top. It may be noted that depth to top values range from 40 m to 810 m with an average of 274 m. Magnetic susceptibilities values are also given in Table 1 which vary from 0.04 to 0.55 with an average of 0.17 (SI). Length of anomalies is also noted , varying from 200 m to 1000 m with an average of 485 m.

Figure 1

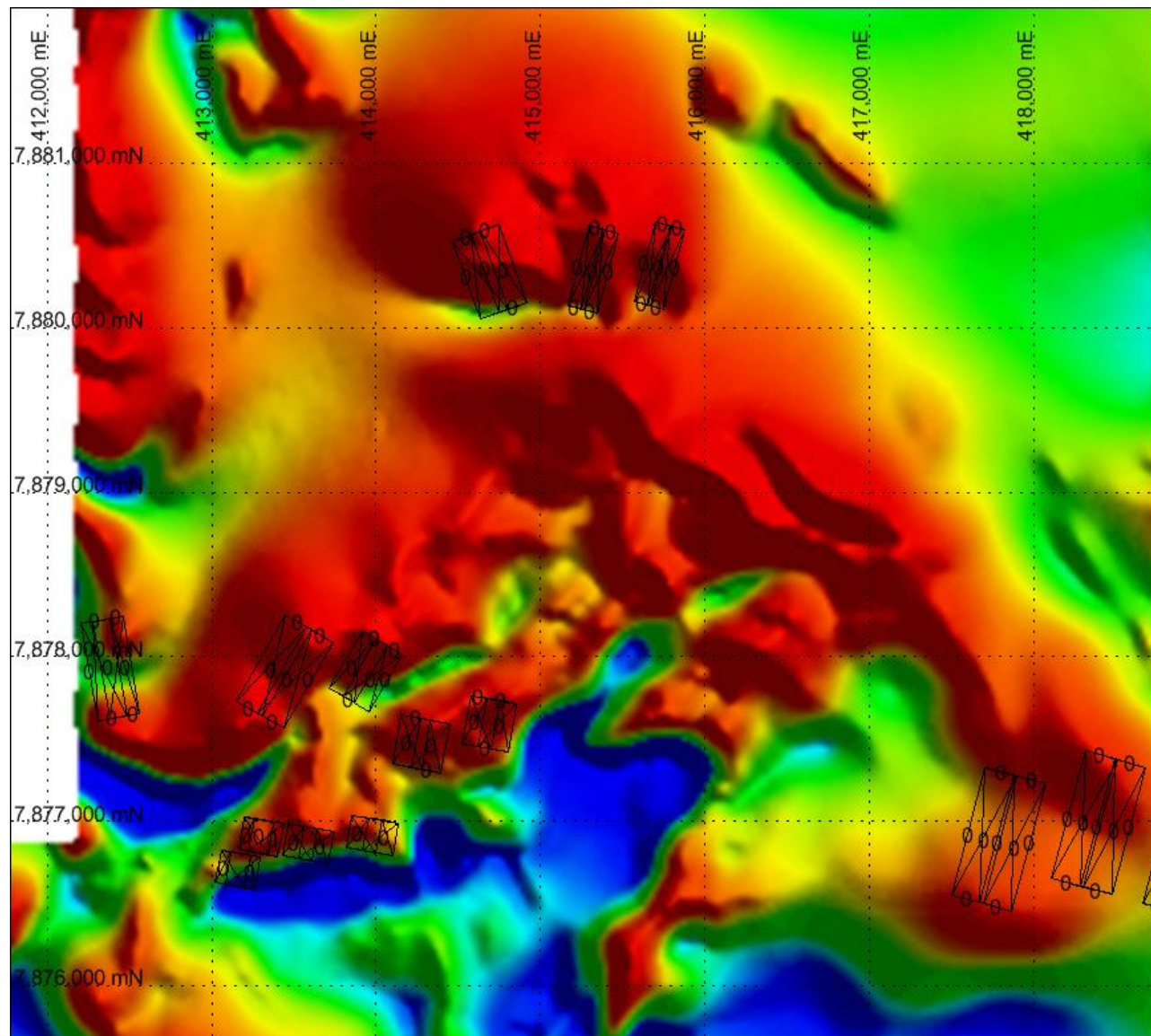


Table 1

Body	Easting	Northing	Depth to top (m)	Susceptibility (SI)	Thickness(m)	Dip (°)	Strike Azimuth (°)	Length (m)	Depth Extent (m)
1	410440	7893817	188	0.55	50	60	5	583.6	500
2	410947	7893823	169	0.10	50	60	5	583.6	500
3	411395	7893812	162	0.10	50	60	5	600	500
4	415245	7891951	99	0.15	50	60	75	400	500
5	414063	7872717	741	0.05	1000	60	345	1000	1000
6	421006	7870161	170	0.10	50	80	315	600	400
7	418346	7869833	249	0.10	80	50	45	600	400
8	418693	7870202	74	0.04	30	50	45	200	400
9	417903	7869854	286	0.10	80	50	45	600	400
10	422190	7873004	810	0.04	200	60	270	200	800
11	414729	7891806	40	0.12	75	60	85	400	300
12	414244	7891786	50	0.08	75	60	100	400	300
13	415720	7892073	147	0.10	40	60	30	300	500
14	415364	7880343	210	0.28	100	80	15	500	500
15	415770	7880363	236	0.15	100	80	15	500	500
16	414777	7880369	299	0.40	120	70	340	500	500
17	418486	7876966	539	0.20	200	70	15	800	500
18	417876	7876866	637	0.20	200	70	15	800	500
19	419042	7876814	600	0.10	200	70	15	800	500
20	414067	7876899	159	0.20	100	70	10	200	500
21	413678	7876848	168	0.20	100	70	10	200	500
22	413391	7876891	103	0.10	60	70	10	200	500
23	413248	7876688	65	0.10	60	70	10	200	500
24	414778	7877576	167	0.10	100	70	10	300	500
25	414363	7877454	200	0.10	120	70	10	300	500
26	413522	7877864	314	0.30	150	70	30	600	500
27	414014	7877865	253	0.20	100	70	30	400	500
28	412472	7877944	225	0.10	80	70	350	600	500