



Unity Mining Limited
Henty Gold Mine
ABN 61 005 674 073
Postal Address: PO Box 231 Queenstown TAS 7467
Site Office: Howards Road Queenstown TAS 7467
Phone: (03) 6473 2444
Facsimile: (03) 6473 1857

Unity Mining Limited
Gog Range Joint Venture
EL 31/2004 Firetower East
Annual Report for Period
26 November 2011 to 25 November 2012
Vol. 1 of 1
December 2012

Held by:	Greatland Pty Ltd
Manager & Operator	Unity Mining Limited
Author:	A.N. Lorrigan and D.A. Evans
Date:	December 2012
Map Sheets:	Tasmania 1:25,000 Series Cethana (4240) Wilmot (4241) Gog (4440) Sheffield (4441) Tasmania 1:100,000 Series Forth (8115)
Geographic Co-ord (GDA94):	Min East: 452,000m Max East: 462,000m Min North: 5,401,000m Max North: 5,408,000m
Commodities:	Gold, silver, copper

ABSTRACT

Unity Mining Ltd (UML) commenced exploration of EL 31/2004 Firetower East in the latter part of 2011-2012, as manager and operator of the Gog Range Joint Venture (known as the Firetower Project) with tenement holder Greatland Pty Ltd. Work undertaken during the 12 month report period, ended 25 November 2012, comprised a litho-structural interpretation of the Firetower Project tenements and surrounding region. The work outlined several targets within the Firetower East licence.

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Appendices

- Appendix 1 Gog Range Project, Tasmania Target Generation Summary Report (Dr Drazen Vukovic)

Digital Files

EL312004_201212_01_Report.pdf
(Report text, plus figures included in report)

EL312004_2012012_02_Appendix.pdf

1.0 INTRODUCTION

This report details exploration completed by Unity Mining Limited (UML) on EL 31/2004 Firetower East over the twelve months to 25 November 2012.

A litho-structural interpretation was completed covering the four exploration licences of the Firetower Project. Several targets were outlined within the EL 31/2004 Firetower East area. The value of magnetics as an exploration tool is evident as a result of this work and from subsequent drilling on EL 26/2004, further to the west. Two types of "prospective" magnetic signatures are apparent. The first is magnetic depletion, related to alteration and associated with gold mineralisation at the Firetower deposit. The second comprises elevated magnetic responses, attributed to magnetite alteration within the host volcanic sequences. The flanks of these magnetic highs, where magnetite alteration is transitional to a haematite-rich assemblage, are regarded as prospective for copper+gold vein mineralisation (as intersected in drilling on one of these anomalies at Firetower West on EL 26/2004).

1.1 Location and Access

EL 31/2004 Firetower East is located 55 km west of Launceston in central northern Tasmania (Figure 1). It lies 15 km west northwest of the town of Deloraine and forms the central part of the Company's Firetower Project. The bulk of land within the tenement is State Forest with smaller portions of private farming land on the northern and western extremities.

The tenement straddles the Tasmania NW (SK55-20) and Tasmania NE (SK55-21) 1:250,000 map sheets. It falls within the four 1:100,000 map sheets of Mersey (8114), Forth (8115), Meander (8214) and Tamar (8215).

From Launceston, access to the project area is by sealed road to Deloraine then west or west northwest via sealed roads. Unsealed local roads and logging tracks provide adequate access throughout the tenement.

1.2 Tenure

EL 31/2004 Firetower East, covering 29 sq km, was granted to Greatland Pty Ltd on 26 November 2004 for a period of five years.

UML announced on 12 October 2011 a farm-in agreement with Greatland Pty Ltd to explore on four ELs in the Gog Range area, including EL 31/2004 Firetower East. Under the terms of the agreement UML may earn a 51% interest by spending \$2 million within the first two and a half years.

Any exploration activity proposed on EL 31/2004 requires assessment by and approval from the Mineral Exploration Working Group (MEWG) prior to commencement. Approval of exploration programs is conditional upon UML, as manager and operator, meeting the requirements of the Mineral Exploration Code of Practice (MECOP) and all site specific conditions.

The majority of the EL covers State Forest, in the northern area there are some private mineral reserves and in the south the tenement abuts the Gog Range Regional Reserve and the Alum Cliffs Special Reserve.

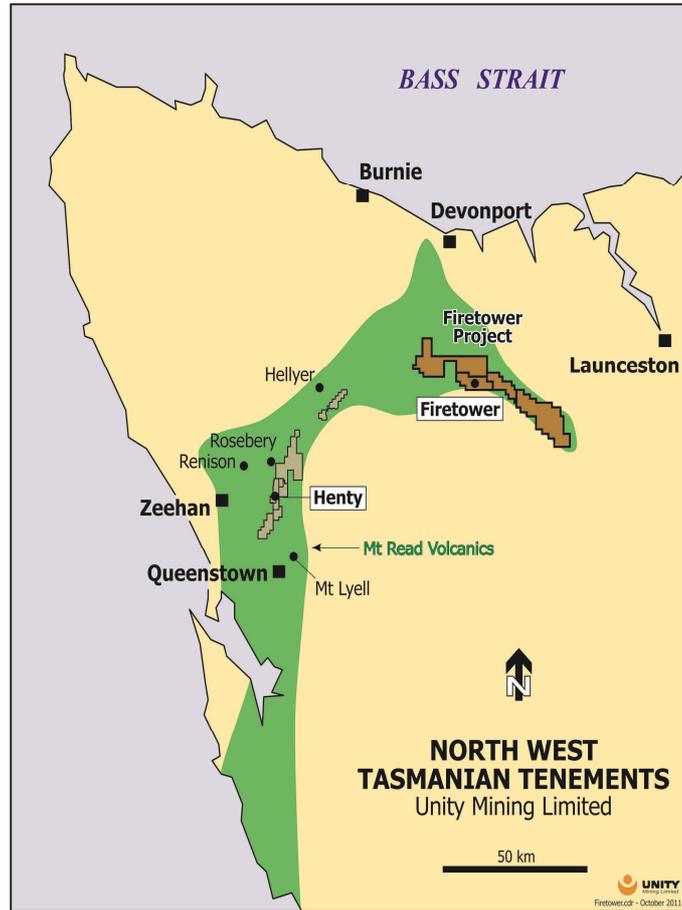


Figure 1 Location Map – Firetower Project Tenements

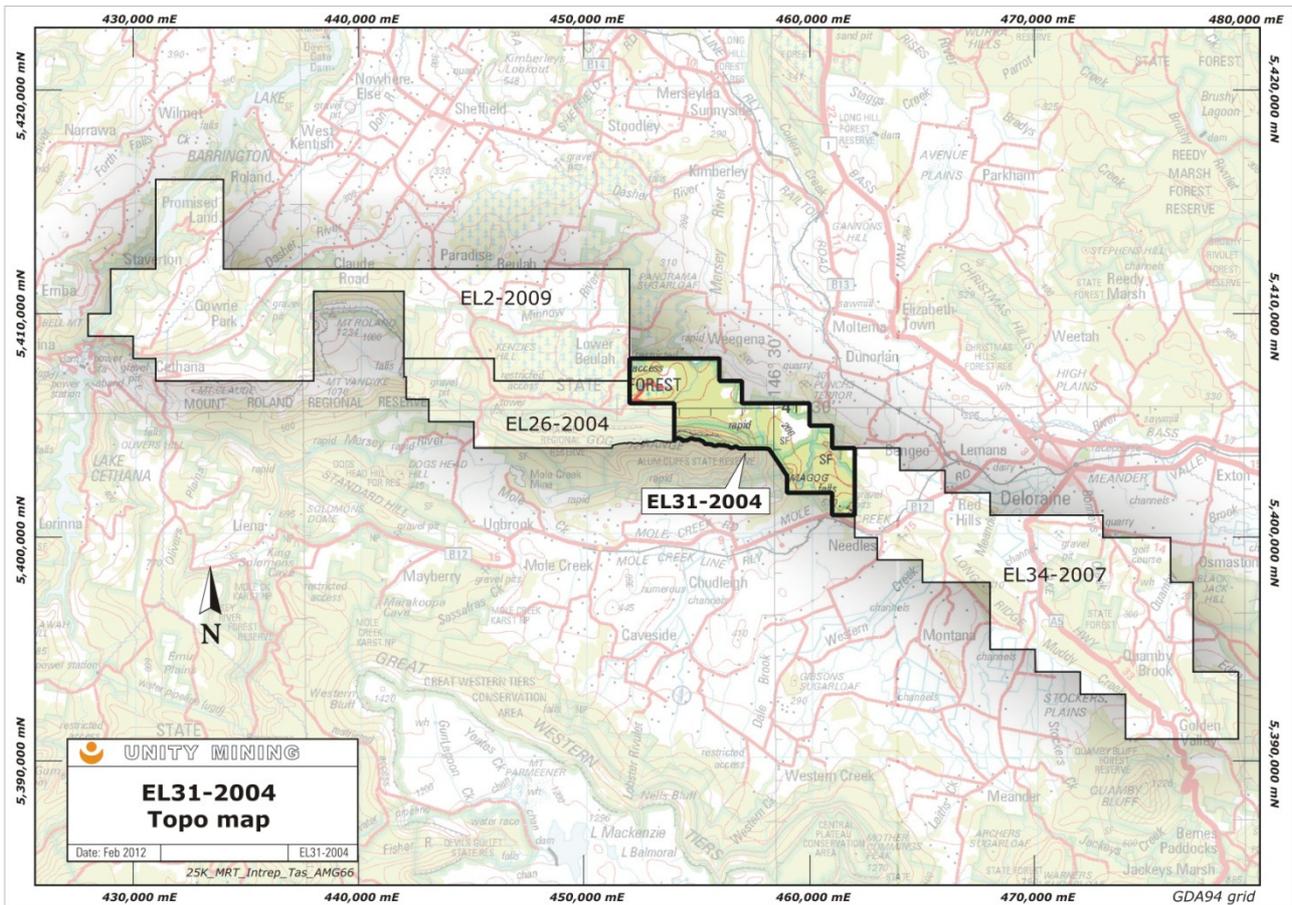


Figure 2: EL 31/2004 Topographic Map. Other Joint Venture tenements in the Gog Range area and adjacent to EL 31/2004 are also shown. Projection is UTM MGA94 Zone 55 Co-ordinate system.

1.3 Topography Climate and Vegetation

EL 31/2004 Firetower East covers very steep dissected terrain in the eastern portion of the Gog Range through to Gardners Ridge and extends north over parts of the Mersey River valley. Maximum spot elevations along the Gog Range are 689 m AHD at the abandoned fire spotting tower site and 696 m AHD near Granta Pools. Mount Roland, part of the Fossey Mountains range, is located further to the west and rises to an elevation of 1,233 m AHD. The Mersey River and Lobster Rivulet cut through the central and eastern sections of the EL. Tributary creek drainages of the Mersey River originate in and drain off the Gog Range.

Average rainfall calculated from observations at nearby Mole Creek, over the period from 1915 – 2012, is 1,124 mm per year. Highest rainfall period is from June – August. Snowfalls occur occasionally at higher elevations during winter months.

The Gog Range is located within the Northern Slopes bioregion. Extensive areas of plantation forest, dominantly eucalypt with some pine (*Pinus radiata*), have been established throughout the northern section of the EL area. Remnant native forest, mainly dry sclerophyll, is preserved on the northern slopes of the Gog Range and along river and creek valleys.

2.0 GEOLOGY

2.1 Regional Geology

Neo-Proterozoic Tyennan Group metasediments are unconformably overlain by the Mt Read Volcanics. The Cambrian Mt Read Volcanics belt is highly mineralised and hosts major

polymetallic VHMS deposits, particularly in the west of Tasmania. The Cambrian volcanics and sediments are unconformably overlain by the late Cambrian to early Ordovician Gordon Group consisting of siliciclastics of the Roland Conglomerate and Moina Sandstone overlain in turn by the Gordon Limestone. The regional and economic geological setting has been detailed in a previous report (Baxter and Askins, 2005).

2.2 Local Geology

Figure 3 shows the interpreted geology of the Firetower Project tenements.

The licence area covers some 10 strike km of rocks assigned to the Cambrian Mt Read Volcanics (Figure 3). These Cambrian rocks are highly mineralised and host major polymetallic VHMS deposits, particularly in the west of Tasmania. The Cambrian volcanics and sediments are unconformably overlain by late Cambrian to early Ordovician Gordon Group consisting of siliciclastics of the Roland Conglomerate and Moina Sandstone overlain by the Gordon Limestone.

2.2.1 Mineralisation

The only reported mineral occurrences in this EL are prospecting pits in the Lobster Rivulet area and anomalous stream sediment sites. The main interest in this tenement is the potential for locating along strike extensions of the gold mineralisation at Firetower deposit (in EL 26/2004 Firetower).

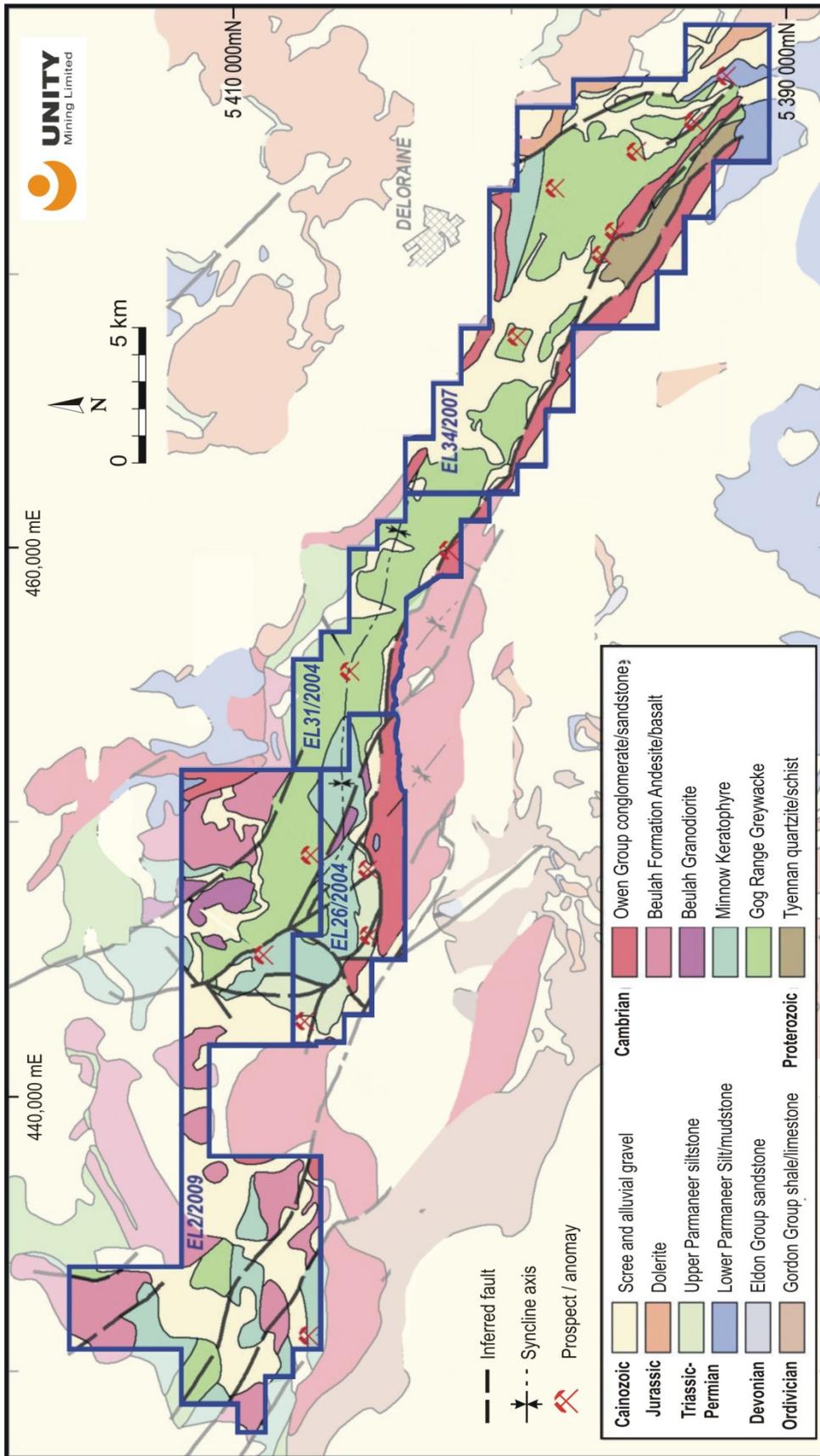


Figure 3: EL 31/2004 Interpreted Geology. Projection is UTM MGA94 Zone 55 Co-ordinate system. Image includes data which are ©Copyright State of Tasmania (Mineral Resources Tasmania, DIER).

3.0 PREVIOUS EXPLORATION

Details of previous exploration on EL 31/2004 Firetower East have been covered in Baxter and Askins (2005), McLean and Baxter (2006), McLean (2007), Baxter (2008 and 2009) and Lorrigan and Baxter (2011). Readers are referred to these reports.

4.0 WORK COMPLETED (26 NOVEMBER 2011 TO 25 NOVEMBER 2012)

Work completed during the report period consisted of a litho-structural interpretation of the area covered by the four ELs of the Firetower Project with the aim of generating exploration targets. A report on this study is included as Appendix I. Figure 4 shows the structural interpretation of the region and targets generated from this work. Digital datasets used in the interpretation included regional airborne magnetic imagery and 1:25,000 scale geological data. These datasets were accessed and downloaded from the Mineral Resources Tasmania website. High resolution QuickBird satellite imagery, purchased by UML from Private Forests Tasmania in March 2012, was also used in the study.

The litho-structural study outlined several targets within the EL 31/2004 Firetower East area. The most promising of these is located in the far western section of the tenement (near the western boundary) along strike from the known gold mineralisation at Firetower deposit and on the flanks of a magnetic high.

Film based colour aerial photography, at 1:30,000 scale, was flown over the Gog Range JV tenements in March-April 2012 by Information and Land Services, DPIPW. GIS ready imagery was supplied as full and half resolution mosaics, geo-referenced and in ECW format, at 0.45 m and 0.9 m pixel size respectively and accuracy in the order of +/-5 m. Complete imagery for the tenement areas, with additional regional coverage, was acquired.

At the time of reporting, a Datamine 3D model of the Firetower deposit is being constructed. This model may be useful in further assessing the possibility of the Firetower gold mineralisation extending along strike into the Firetower East tenement area.

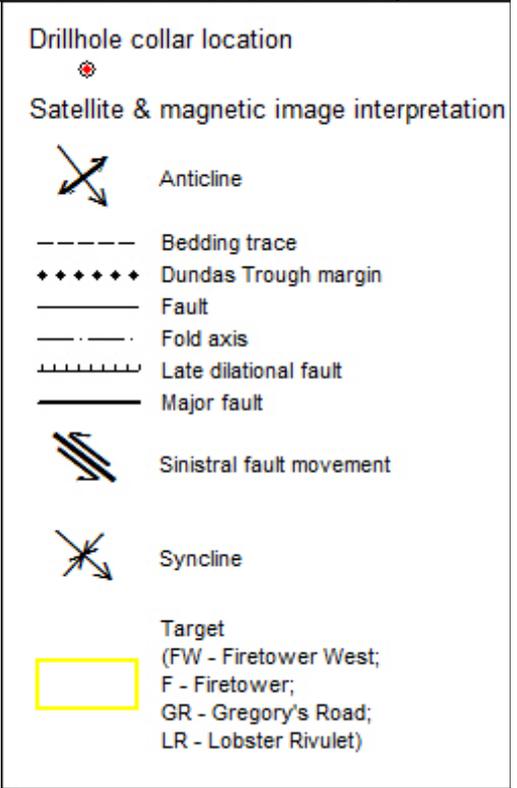
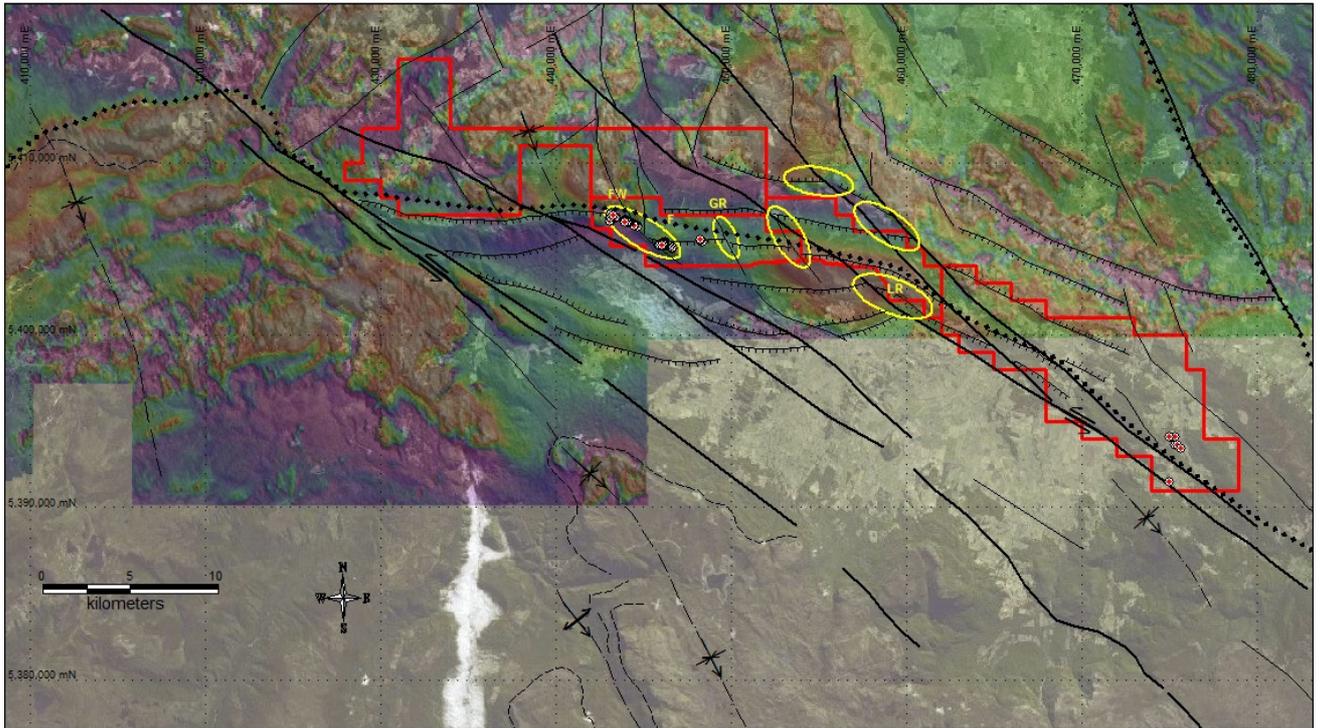


Figure 4

Structural Interpretation and Regional Targets (Ref. Vukovic 2012 Appendix 1). Projection is UTM MGA94 Zone 55 Co-ordinate system. Image includes data which are ©Copyright Commonwealth of Australia (Geoscience Australia), 1999 and ©Copyright State of Tasmania (Mineral Resources Tasmania, DIER), 2001.

5.0 EXPENDITURE

Expenditure by UML on EL 31/2004 Firetower East for the year ended 25 November 2012 was \$28,120, as follows:

Expenditure Item	\$
Geology	26, 138
Remote Sensing	1,606
Land Access	
Administration	376
TOTAL	28, 120

6.0 PLANNED WORK AND EXPENDITURE FOR 2012/13

Work planned on EL 31/2004 Firetower East for the twelve months to 25 November 2013 will include:

- Re-interpretation of existing airborne magnetic data and possible acquisition of new higher resolution data to define and evaluate prospective magnetic anomalies along strike from the Firetower gold mineralisation
- Gridding and IP surveying over prospective magnetic anomalies if warranted
- Completion of a Datamine 3D model for the area.

Expected expenditure on the tenement is \$40,000.

7.0 REFERENCES

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