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Unity Mining Limited

Gog Range Joint Venture

EL 31/2004 Firetower East
Annual Report for Period
26 November 2013 to 25 November 2014

Vol. 1 of 1

November 2014

Held by:	Greatland Gold Pty Ltd
Manager & Operator:	Unity Mining Limited
Author:	P.G. Stonestreet
Date:	November 2014
Map Sheets:	Tasmania 1:25,000 Series Gog (4440) Deloraine (4640) Tasmania 1:100,000 Series Mersey (8114) Forth (8115) Meander (8214) Tamar (8215)
Geographic Co-ord (GDA94):	Minimum East: 452,000 m Maximum East: 462,000 m Minimum North: 5,401,000 m Maximum North: 5,408,000 m
Commodities:	Base metals, gold, silver

1.0 ABSTRACT

Unity Mining Ltd (UML) commenced exploration of EL 31/2004 Firetower East from late 2011, as manager and operator of the Gog Range Joint Venture, in a farm-in agreement with tenement holder Greatland Pty Ltd.

Work completed during the 12 months report period, ended 25 November 2014, comprised data compilation and review, interpretation and rock chip sampling.

Total expenditure on the tenement during the report period was $7376.

UML proposes to conduct more intensive field exploration in 2015 on the Gog Range JV tenements, including EL 31/2004 Firetower East, with continued focus on gold and base metals prospectivity. Current tenure expires on 25 November 2014 and UML has lodged an application for a further 12 months extension of term.

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Digital Files

EL31_2004_201411_01_Report.pdf
(Report text, plus figures included in report)

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(Rock chip assay results)

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(QAQC rock chip assay results)

2.0 INTRODUCTION

This report details exploration completed by Unity Mining Limited (UML) on EL 31/2004 Firetower East in the year ended 25 November 2014.

Work was limited to data compilation and review, interpretation and rock chip sampling.

The current 12 months extension of term for EL 31/2004 Firetower East expires on 25 November 2014. UML intends to continue compilation, analysis and review of exploration data and, if warranted, conduct further field exploration activities on the EL. An application for a further 12 months extension of term has been lodged.

2.1 Location & Access

EL 31/2004 Firetower East is located in central northern Tasmania, straddling a boundary of the Kentish and Meander Valley Municipalities. The EL is centred approximately 55 km west of Launceston and 39 km south - southeast of Devonport. Nearest townships are Sheffield, 19.5 km to the northwest, and Mole Creek, 9 km to the southwest (Figure 1).

No sealed roads pass through the immediate EL area. Main access from the west is via Paradise Road – Union Bridge Road (C137), which links Sheffield and Mole Creek, then along the unsealed graded Gog Road to a network of forestry roads and four-wheel drive tracks. The central northern section of the tenement is accessible from Dynans Bridge – Weegena Road (C159) via Kellys Cage Road and unsealed forestry roads. From Deloraine the eastern portion of the EL can be accessed from Red Hills – Bengeo Road (C163) and Coxs Road. Some areas in steep rugged terrain adjacent to the Mersey River and Lobster Rivulet are only accessible on foot.

2.2 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. The company lodged an application for the tenement over vacant ground in April 2004.

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

Proposed exploration activity on the EL requires assessment by and approval from the Mineral Exploration Working Group (MWEG). Approval of exploration programs is conditional upon the proponent meeting the requirements of the Mineral Exploration Code of Practice (MECOP) and all site specific conditions.

EL 31/2004 Firetower East covers extensive areas of proclaimed State Forest, Informal Reserve (State Forest/Forestry Tasmania Managed Land) and Forest Reserve (Figure 2). Some areas of Private Land fall within the northern boundary of the tenement, mainly along the floodplain of the Mersey River. The central southern perimeter of the EL abuts the Alum Cliffs State Reserve.

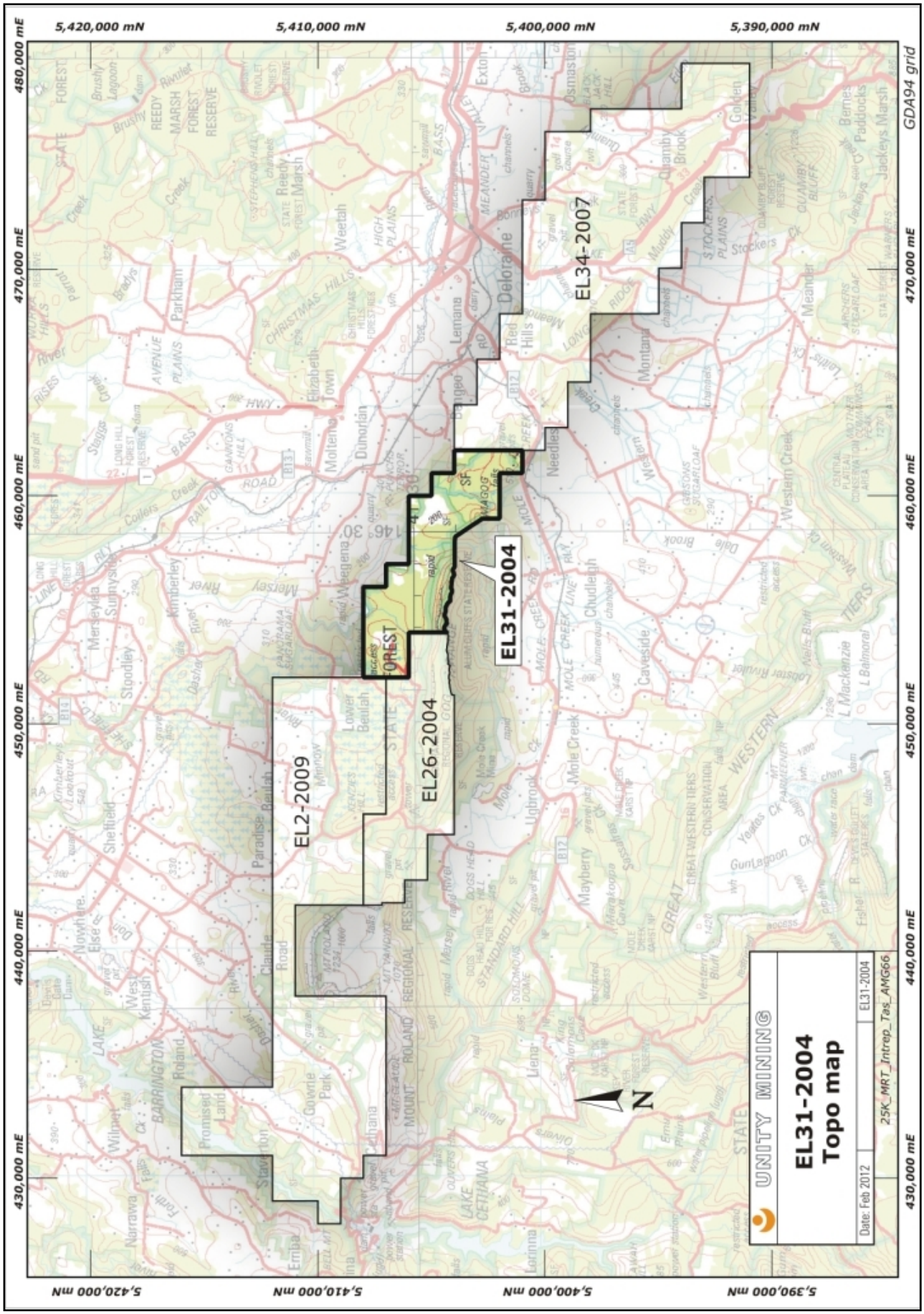

Figure 1: EL 31/2004 Firetower East location map. Other tenements in Unity's Gog Range Joint Venture are also shown. Projection is UTM MGA94 Zone 55 co-ordinate system. Base image by TASMAP (www.tasmap.tas.gov.au), © State of Tasmania.

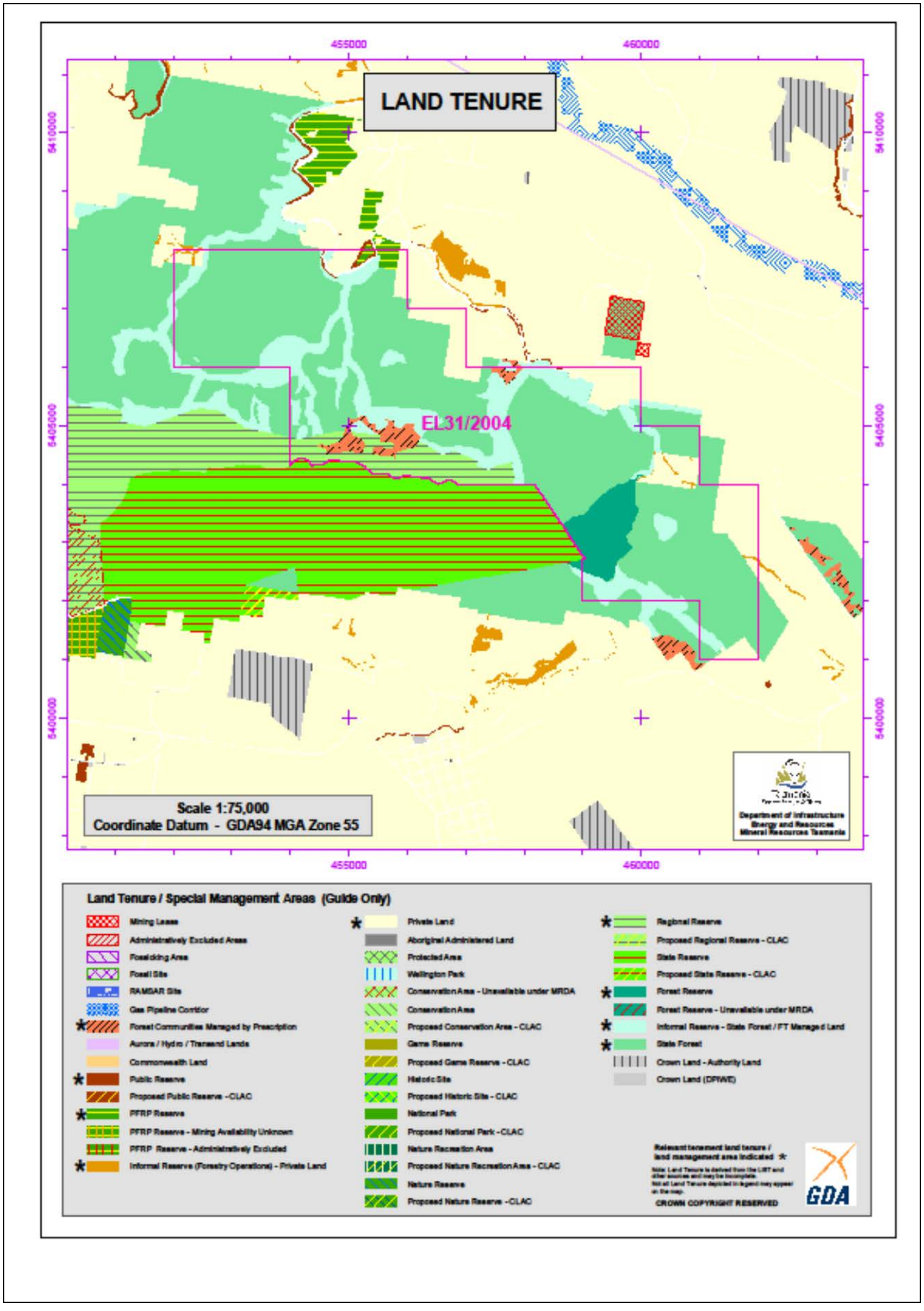

Figure 2: **EL 31/2004 Firetower East land tenure map. Projection is UTM MGA94 Zone 55 co-ordinate system. Base images by the LIST, Information and Land Services, DPIPWE (www.thelist.tas.gov.au) and Mineral Resources Tasmania, DIER (www.mrt.tas.gov.au), © State of Tasmania.**

2.3 Topography Climate and Vegetation

EL 31/2004 Firetower East covers steep rugged terrain in the eastern section of the Gog Range through to Gardners Ridge. Maximum spot elevations along the Gog Range ridge are 689 m AHD at the abandoned fire spotting tower site and 698 m AHD near Granta Pools. Mount Roland, further to the west and part of the Fossey Mountains range, rises to an elevation of 1,233 m AHD.

The Mersey River and Lobster Rivulet cut through very rugged terrain in the central and eastern sections of the EL. Numerous creeks and streams flow into the Mersey River from headwaters along the Gog Range.

Average rainfall calculated from observations at nearby Mole Creek weather station (elevation 237 m AHD), over the period from 1915 – 2012, is 1,124 mm per year. Highest rainfall period is from June – August. Occasional snowfalls occur at higher elevations and overnight frosts are frequent throughout the district during winter months.

The Gog Range is located within the Northern Slopes bioregion. Extensive areas of production forest, dominantly eucalypt plantations with some stands of pine (Pinus radiata), have been established in silviculture operations 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. Areas of cleared agricultural land are restricted to the Mersey River floodplain along the northern boundary of the EL.

3.0 GEOLOGY

Mapping of the Sheffield 1 Mile Sheet by the Tasmanian Geological Survey (Jennings, 1979) included coverage of a major section of the current EL 31/2004 Firetower East area. More recent regional mapping by Mineral Resources Tasmania (Vicary, 2004; McClenaghan et al, 2008), with revisions by Vicary (2008) supported by petrological studies, has advanced understanding of the Cambrian volcanic sequence stratigraphy of the Fossey Mountain Trough.

Description of the geology of EL 31/2004 Firetower East and the surrounding district, including known metallic mineral occurrences, is contained in open file company reports (Komyshan, cited in Weste, 1978; Poltock, cited in Vivian, 1984; Baxter and Askins, 2005).

3.1 Regional Geology

The four ELs comprising Greatland/UML's Gog Range Joint Venture cover in excess of 40 km strike length of Cambrian stratigraphy, including sequences correlated with the prospective Mount Read Volcanics (MRV). In western Tasmania the MRV within the Dundas Trough are highly mineralised and host major polymetallic VHMS deposits at Hellyer-Fossey, Que River, Rosebery and Hercules, copper-gold-silver deposits in the Mt Lyell mining field and gold at the Henty mine.

The MRV correlates in the Gog Range area were deposited in the Fossey Mountain Trough and occur in a semi-continuous east-southeast aligned belt which extends from Cethana and Gowrie Park, in the west, to the Kentish Hills - Quamby Brook area in the southeast (Ref. Figure 3). Correlation of the Middle to Late Cambrian stratigraphy in the Fossey Mountain Trough with the MRV in the Dundas Trough remains equivocal.

Based on regional mapping the Cambrian volcanic and volcaniclastic sequences are assigned to three main stratigraphic units. From oldest to youngest these units are as follows:

- Gog Range Greywacke (a regionally extensive unit of quartz+feldspar-phyric pumiceous volcaniclastics, siliceous conglomerate, interbedded greywacke, siltstone and shale, with minor felsic lavas)

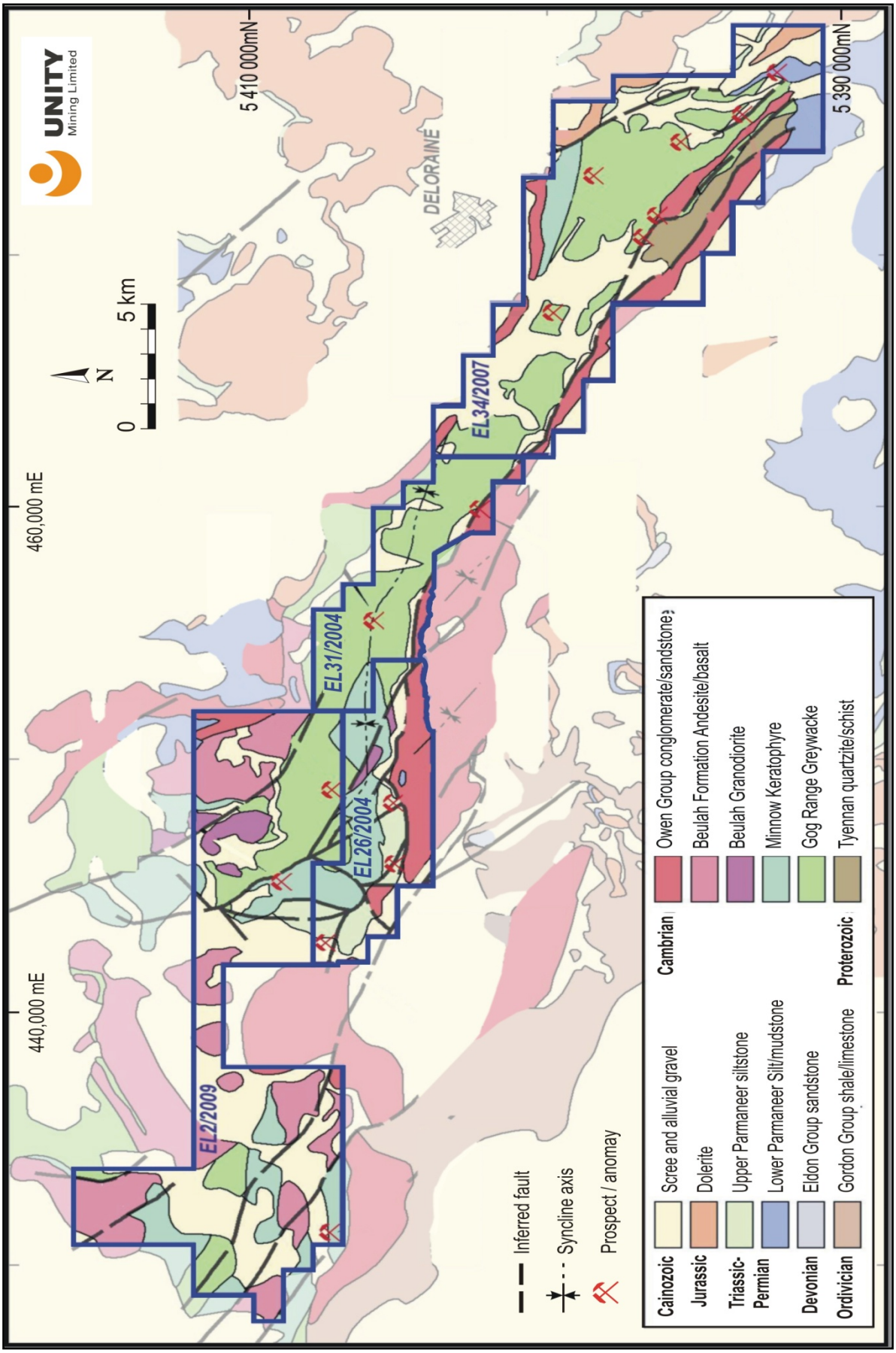

Figure 3: **Gog Range JV Project regional geology. Projection is UTM MGA94 Zone 55 co-ordinate system. Base image by Mineral Resources Tasmania, DIER (www.mrt.tas.gov.au), © State of Tasmania.**

- Beulah/Dasher Andesite (including a lower feldspar+pyroxene-phyric andesitic volcaniclastic unit)
- Minnow Keratophyre (intruding both of the older units).

Vicary (2008) proposed correlation of the Gog Range Greywacke with the Western Volcano-sedimentary Sequence of the MRV and the Beulah/Dasher Andesite with the Lynchford Member of the Tyndall Group.

To the south, in a belt extending from Mount Roland through the Gog Range to Gardners Ridge - Needles Ridge and Long Ridge - Native Hop Hill south of Deloraine, the stratigraphy is dominated by the Roland Conglomerate. Assigned to the Late Cambrian - Early Ordovician Owen Group, the Roland Conglomerate consists of an overlap sequence of coarse-grained siliciclastic sediments, including large volumes of very coarse siliciclastic conglomerate, which unconformably overlie the MRV sequences. Clasts within the conglomerate are dominantly metaquartzite, derived from the Neoproterozoic Tyennan basement.

South of the Gog Range, in the Mole Creek area, the Roland Conglomerate is unconformably overlain by the Moina Sandstone, which in turn is conformably overlain by the Ordovician Gordon Limestone. The Mole Creek karst system, of high scientific and conservation significance, is developed on the Gordon Limestone.

Further to the southeast, in the Quamby Brook – Golden Valley area, glaciomarine rocks of the Permian Lower Parmeener Supergroup unconformably overlie the older Palaeozoic strata. Jurassic dolerite occurs as flat lying sills which have intruded the Permian sediments. The northern and eastern parts of the district are largely covered by Tertiary basalt.

Stratigraphy of the pre-Tertiary rocks in the Gog Range region is presented in Figure 4.

A highly complex structural architecture is evident along the boundary between the Cambrian volcanic stratigraphy and the younger overlap sequences (Owen Group Roland Conglomerate and Gordon Group Moina Sandstone). Successive thrust faulting events in the Early and Middle Palaeozoic have been proposed from observed stratigraphic and structural relationships throughout the region (Woodward et al, 1993).

Older rocks in the region have been subjected to major polyphase deformation. The Cambrian volcanic sequences along the southern margin of the Fossey Mountain Trough are tightly folded, with more open folding preserved in the Roland Conglomerate (Berry and Bull, 2012). East - west trending folds, initiated in the late Cambrian and preserved in the Gog Range Greywacke (Keele, 1993), were reactivated and tightened during Devonian deformation (the Tabberabberan Orogeny).

3.2 Local Geology

EL 31/2004 Firetower East covers approximately 11 km strike length of the Middle Cambrian volcanic, volcaniclastic and siliciclastic sequence stratigraphy. These rocks are located in the keel of a synclinal structure and have been mapped in intermittent outcrop over a total width of 2 – 4 km within the EL area (Ref. Figure 5).

Basaltic lava, lava breccia and volcaniclastic sequence extends along the southeastern perimeter of the EL between the Mersey River and Lobster Rivulet. These mafic rocks are possibly correlates of the Motton Spilite. The overlying Gog Range Greywacke comprises volcaniclastic and siliciclastic sediments, pumiceous rhyolitic volcaniclastics and localised andesitic lavas and volcaniclastics. The Firetower stockwork vein gold deposit occurs further along strike to the west within rhyolitic volcaniclastics and associated intrusives of the Gog Range Greywacke.

Sandstone and siliceous conglomerate of the Late Cambrian-Early Ordovician Owen Group (Roland Conglomerate) form the steep ridge lines of the eastern part of the Gog Range through to Gardners Ridge and the Magog. Further to the north and east, these siliciclastic rocks outcrop prominently at Conglomerate Hill and Punches Terror. Debris flow lobes derived from the Roland Conglomerate frequently obscure the older Palaeozoic rocks.

Tertiary basalt locally caps the Cambrian strata in the central northern section of the EL. Thin deposits of cobble to boulder conglomerate are preserved in dissected river terraces along the edges of the Mersey River floodplain.

3.2.1 Alteration and Mineralisation

The only recorded mineral occurrences within EL 31/2004 Firetower East are prospecting pits in the Lobster Rivulet area and several anomalous stream sediment sites. Main interest in this tenement is the potential for along strike extensions of the prospective Cambrian volcanic and volcaniclastic stratigraphy which hosts gold mineralisation at the Firetower deposit further to the west.

The Firetower gold deposit occurs in an upper felsic volcaniclastic unit of the Gog Range Greywacke. These felsic host rocks are in close contact with andesitic sequences which have been correlated with the Lynchford Member of the Tyndall Group in the MRV (Vicary, 2008).

Alteration in the Firetower deposit area is localised in a 250-500 m wide zone lying sub-parallel to the contact between the Cambrian volcanic sequences and the overlying Roland Conglomerate. Dominant alteration is a pervasive silica+sericite+carbonate+pyrite assemblage. Gold mineralisation is associated with fine quartz and carbonate vein stockworks, with 2-5% sulphides (mainly pyrite, with trace-minor chalcopyrite, sphalerite, galena and arsenopyrite/glaucodot). Tungsten mineralisation, occurring as scheelite, is also associated with the carbonate veining.

Pre-Tertiary Stratigraphy of the Gog Range Region

	Stratigraphy				Lithology	MRT Map Symbols
Jurassic					Tholeiitic dolerite	Jb
Late Carboniferous - Permian	Lower Parmeener Supergroup				Glaciomarine sediments; pebbly quartz sandstone, conglomerate	Pi
Late Cambrian - Ordovician		Gordon Group	Gordon Limestone		Limestone, siltstone (shallow marine deposits)	Ol
	Wurawina Supergroup		Moina Sandstone correlate		Siliceous conglomerate, sandstone (marine deposits)	€Osm
		Owen Group	Roland Conglomerate		Siliceous conglomerate, sandstone	€Ocl
Middle Cambrian	Mount Read Volcanics correlates	? Tyndall Group correlates		Minnow Keratophyre	Quartz+feldspar+/-pyroxene phyric porphyry	€qfpz
				Beulah/ Dasher Andesite	Feldspar+pyroxene phyric andesitic lavas, lava breccias, volcaniclastics	€dta
					Lower feldspar+pyroxene phyric volcaniclastic	€dtav
Middle Cambrian		? Western Volcano-Sedimentary Sequence correlates		Gog Range Greywacke	Quartz+feldspar phyric pumiceous volcaniclastics, siliceous conglomerate, interbedded greywacke, siltstone and shale, minor felsic lavas **Firetower deposit host sequence**	€dsv/€dsvgv + €dtp
Early - Middle Cambrian			? Motton Spilite		Pillowed to massive tholeiitic basalt	€cwb
			? Barrington Chert		Laminated to brecciated chert	
Precambrian (Meso Proterozoic)	Tyennan Metamorphic Region				Quartzite, schistose micaceous quartzite, phyllite, pelitic schist (poly-deformed continental basement)	

Figure 4: Stratigraphy of the Gog Range region. Compiled from Digital Geological Atlas 1:25,000 Scale Series, Mineral Resources Tasmania, DIER (www.mrt.tas.gov.au), © State of Tasmania, 2004 and 2008.

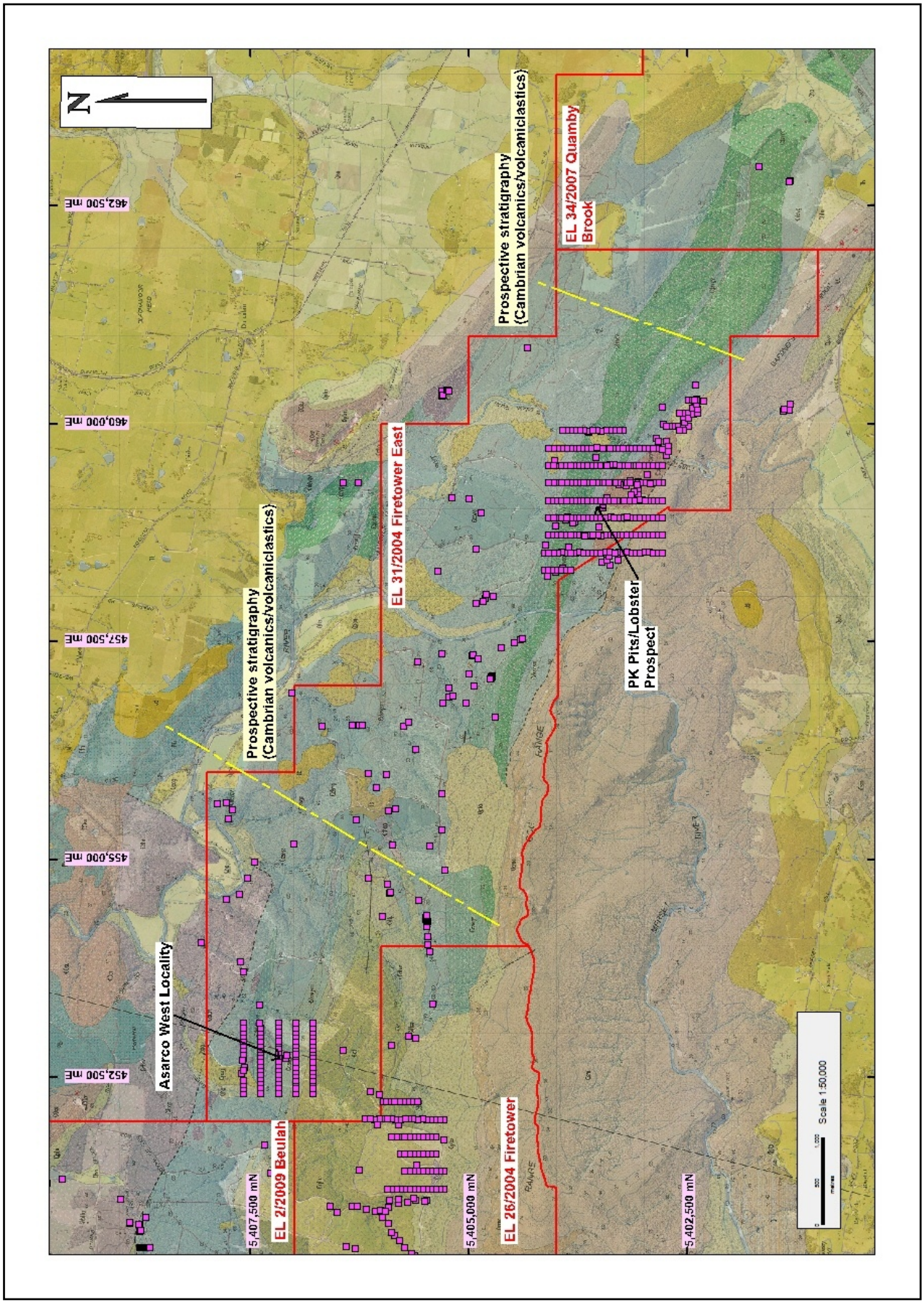

Figure 5: EL 31/2004 Firetower East interpreted geology with mineral prospects and geochemical sample locations. Projection is UTM MGA94 Zone 55 co-ordinate system. Background image is half-resolution aerial photographic mosaic. Base image by TASMAP (www.tasmap.tas.gov.au), © State of Tasmania, 2012. Additional translucent base images by Mineral Resources Tasmania, DIER (www.mrt.tas.gov.au), © State of Tasmania, 2004 and 2008.

4.0 PREVIOUS EXPLORATION

Past prospecting and exploration activities within the area now covered by EL 31/2004 Firetower East are recorded in company reports available on open file at Mineral Resources Tasmania. Comprehensive research of previous exploration has been undertaken by Greatland, as summarised in Baxter and Askins (2005).

First recorded prospecting activity in the Gog Range district took place in the 1880s, when gold was recovered from alluvial deposits along the Minnow River. Hard rock mining for gold commenced in the late 19th Century at the Star of the West mine. Several shafts and adits were sunk on the northern slopes of the Star of the West Hill, approximately 4 km to the north of the Firetower deposit near the Minnow River. These shallow workings were excavated to prospect for and extract gold contained in lenticular quartz veins within quartz+feldspar-phyric rhyolitic host rocks.

Systematic exploration of the Cambrian volcanic sequences within the Fossey Mountain Trough was commenced in 1973 by Asarco Australia Pty Ltd. Initial work comprised a regional stream sediment sampling program. Asarco's exploration focus was on VHMS base metals prospectivity, with few samples assayed for gold.

Exploration continued in a joint venture, with CRA Exploration as operator, from 1976. CRAE expanded the tenement holding through the Cethana to Gog Range district and undertook diamond drilling and limited percussion drilling programs to test for VHMS base metals mineralisation at the Cethana, Lake Barrington and Staverton prospects.

CRAE also conducted reconnaissance stream sediment sampling in the Gog Range area during the early 1980s. Significant gold assays were recorded, including 320 ppm gold from a panned concentrate sample collected in creek drainage near the Union Bridge Road. The drainage sampling results were not followed up prior to CRAE terminating exploration in Tasmania in 1988.

Subsequent exploration by Noranda Pty Ltd in 1989 led to the discovery of stockwork vein gold mineralisation at Firetower. This mineralisation was drill tested by Noranda and also by Plutonic Operations from 1992 – 1998. Exploration activities at the Firetower deposit are summarised in Evans (2012).

Earlier exploration by Comalco Limited in 1976 – 1978 included coverage of the Gardners Ridge – Needles Ridge area and west to the Mersey River, with focus on copper sulphide mineralisation and magnetite+fluorite+tin skarn targets. Boulders of magnetite located during initial field reconnaissance in the Lobster Rivulet area returned anomalous assays for tin, tungsten and molybdenum. The magnetite is hosted by mafic volcanics and volcaniclastics which outcrop intermittently along the northeastern slopes of Gardners Ridge and the Magog. Further sampling and ground magnetic surveying and costeaning were undertaken but failed to define significant mineralisation (Weste, 1978).

Austamax also explored the East Gog area in 1983 - 1984, over an area centred on Eel Hole Creek. Regional drainage sampling was undertaken to re-locate and check geochemical anomalies previously identified by Asarco. An airborne EM survey was flown, followed up with geological mapping, rock chip sampling and petrographic studies. An intrusive – extrusive complex was mapped in the Gregory's Road area. Several isolated quartz diorite intrusions were located, with samples from outcropping tourmaline and silica alteration zones returning anomalous gold, silver and lead assays. One rock chip sample assayed 0.24 g/t gold. Austamax concluded that none of the airborne EM anomalies in the area were related to surficial or near surface VHMS mineralisation (Vivian, 1984).

EL 31/2004 Firetower East was granted to Greatland Pty Ltd on 26 November 2004 from an application lodged over vacant ground in April 2004. The EL is continuous with the three other ELs in the Gog Range project area, which extend the company's tenement holding over a continuous strike length of more than 40 km of prospective Cambrian stratigraphy.

Initial work by Greatland consisted of acquisition and compilation of data from previous exploration activities. Field work was commenced in early 2007. Geological reconnaissance

and rock chip and some soil sampling were undertaken to further evaluate the Asarco and Austamax East Gog geochemical anomalies and the Lobster Rivulet and PK Pit prospects. Old workings, consisting of a hand excavated trench connected with a shallow shaft in massive magnetite, were located at the Lobster Rivulet prospect. The trench was mapped and channel sampled. Anomalous assays of up to 2170 ppm copper were reported.

Greatland completed additional soil sampling at the Lobster Rivulet and Asarco West prospects in 2008 – 2009. Further soil and rock chip sampling was undertaken on the Lobster Rivulet prospect in 2009 – 2011, augmented by geological mapping. All geochemical sampling results were subdued.

In 2012, UML as manager and operator in joint venture with Greatland Pty Ltd, acquired high resolution QuickBird satellite imagery covering the four ELs of the Gog Range JV project area. Film based colour aerial photography, at 1:30,000 scale, was flown over the tenements in March - April 2012 by Information and Land Services, DPIPWE. A regional litho-structural interpretation was also completed with the aim of generating targets for further exploration. The study utilised available geospatial, geophysical, geochemical and drillhole datasets. Paucity of high resolution airborne geophysical data over the southeastern sector of the joint venture project area was evident from this work.

Through 2013, all available geospatial, geophysical, geochemical and drillhole datasets were compiled as a GIS project and evaluated at regional and prospect scales. Open file company reports on previous exploration completed in the EL 31/2004 Firetower East area were also reviewed.

5.0 WORK COMPLETED (2013/2014)

Work completed in the year ended 25 November 2014 is presented below.

5.1 Geophysical and Geochemical Dataset Evaluation

Evaluation of the gold and base metals prospectivity of EL 31/2004 Firetower East was continued by UML in 2013-2014 using geophysical, geochemical and mapping datasets.

5.2 Rock Chip Sampling

A total of ten rock chip samples were collected over a subtle magnetic anomaly in the west of the tenement that had not been previously sampled. These samples were submitted for multi-element analysis at ALS Burnie. Outcrop was poor in the region of previously logged forest and was restricted to topographical highs.

6.0 RESULTS

The ten rock chip samples that were assayed showed no gold or base metal anomalism. All but one had barium tenors higher than 1500ppm which is probably indicative of rhyolitic intrusive. In outcrop the rocks were typically haematised, with a pinkish hue. Assay results are given in Appendix 1.

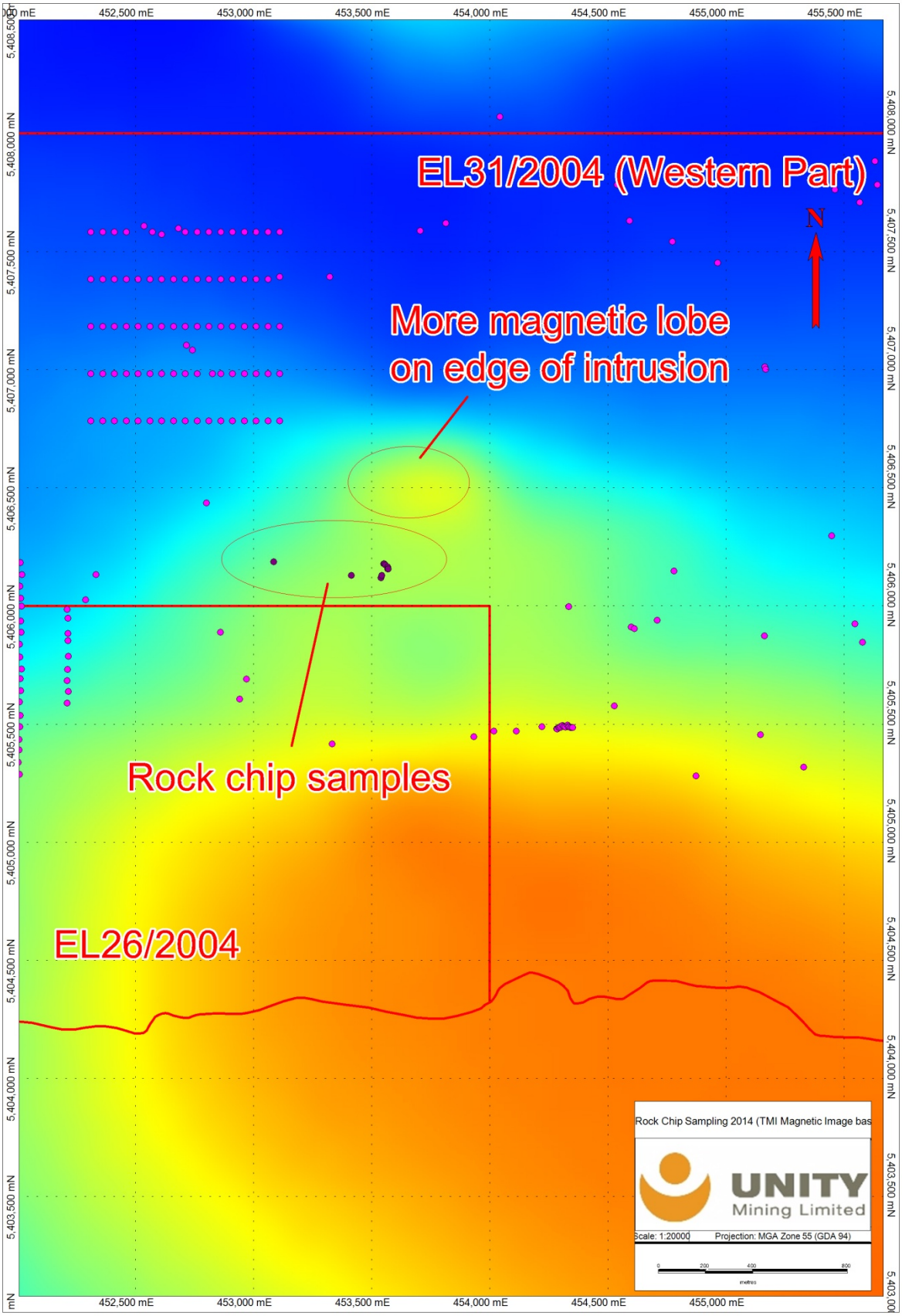

Figure 6: 2014 Rock chip samples targeting a more magnetic lobe on the edge of the rhyolitic porphyry intrusive in the western part of EL31/2004. The recently logged area over the magnetic lobe had no outcrop. Projection is UTM MGA94 Zone 55 co-ordinate system. Base map is the Devonport 1985 aeromagnetic survey (mrt.tas.gov.au).

7.0 CONCLUSIONS

Overall, prospectivity of the Cambrian volcanic and volcaniclastic stratigraphy in the EL 31/2004 Firetower East area appears to be low, particularly so for gold mineralisation. Previous exploration programs at the PK Pits/Lobster Rivulet prospect, in the southeastern section of the tenement, have failed to define significant base metals or gold mineralisation. No further work is warranted on this prospect.

The main target considered for follow up exploration is the Asarco West locality in the northwestern corner of the EL. Further exploration of this area by geological mapping and rock chip sampling is proposed.

Recent drilling at the Firetower West prospect on neighbouring tenement EL26/2009 has shown the best gold grades to be associated with the margins of magnetic anomalies. Evaluation of the magnetic coverage may help to further define the most prospective areas for mineralisation.

8.0 EXPENDITURE FOR 2013/2014

Expenditure by UML on EL 31/2004 Firetower East for the year ended 25 November 2014 was $7376, as follows:

Expenditure Item	$
Personnel	3429
Administration	1200
Access	888
Geochemistry	1859
Total	**7376**

9.0 PLANNED WORK AND EXPENDITURE FOR 2014/2015

Detailed planning and scheduling of field exploration activities on UML's Tasmanian tenements for 2015 is being finalised at the time of reporting. UML intends to undertake more intensive field work on the EL 31/2004 Firetower East, as follows:

- Evaluation of the magnetic images to further define the most prospective areas for gold and base metal mineralisation, targeting the margins of magnetic anomalies.
- Mapping and rock chip sampling of the Cambrian volcanic stratigraphy in the northwestern sector of the EL (Asarco West locality).
- Evaluation and, if applicable, implementation of shallow RAB or RC-DTHH drilling on traverses across strike of the Cambrian volcanic stratigraphy. This will allow for deeper testing of currently known geochemical anomalies.

Estimated expenditure on EL 31/2004 Firetower East in the 12 months report period, ending 25 November 2015, is $40,000. UML has lodged an application for a 12 months extension of term for the tenement.

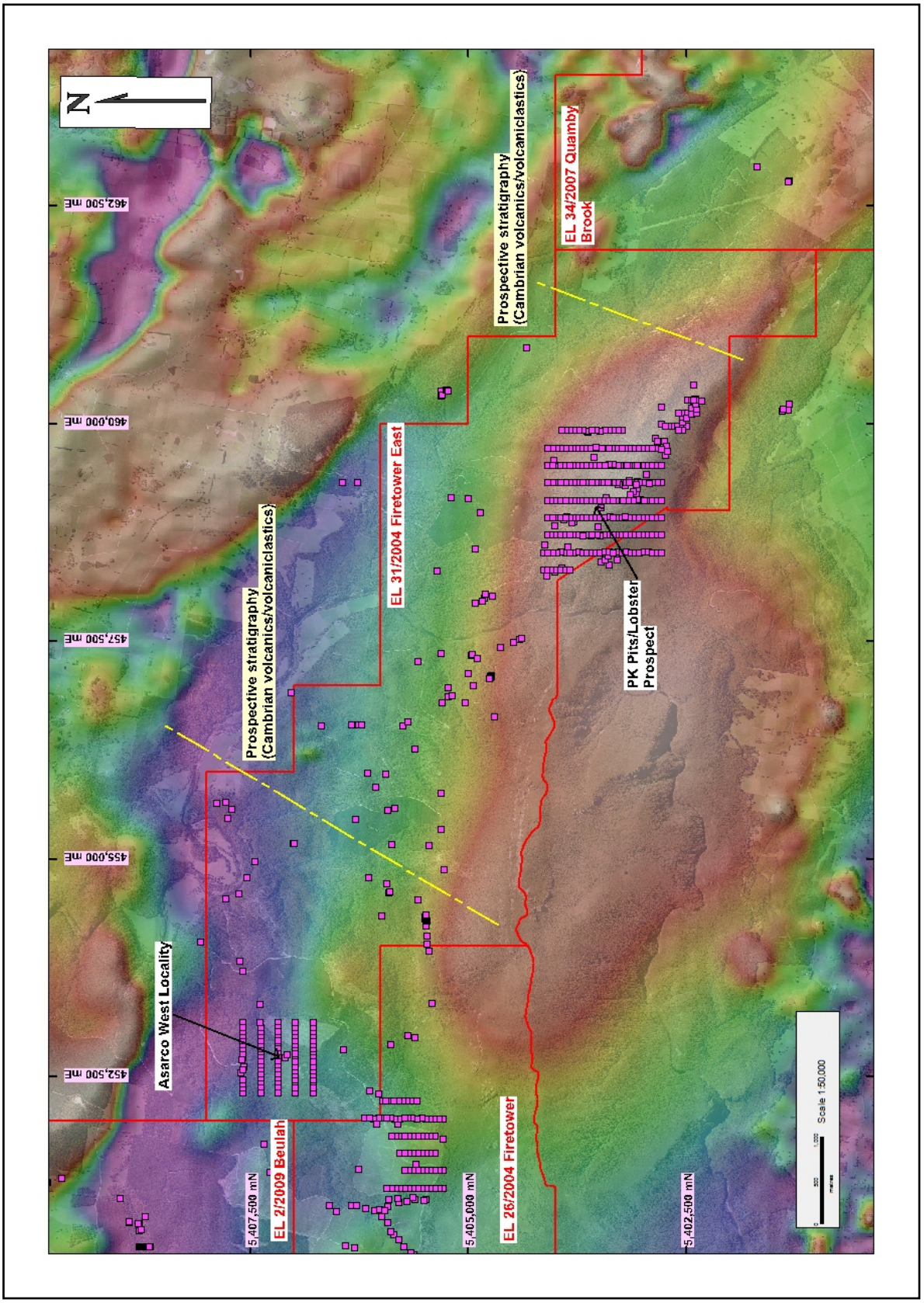

Figure 7: EL 31/2004 Firetower East total magnetic intensity with mineral prospects and geochemical sample locations. Projection is UTM MGA94 Zone 55 co-ordinate system. Background image is half-resolution aerial photographic mosaic. Base image by TASMAP (www.tasmap.tas.gov.au), © State of Tasmania, 2012. Additional base images by Mineral Resources Tasmania, DIER (www.mrt.tas.gov.au), © State of Tasmania, 2004, 2008 and 2013.

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APPENDIX 1 – ROCK CHIP ASSAY RESULTS

Sample No.	AA1901	AA1902	AA1903	AA1904	AA1905	AA1906	AA1907	AA1908	AA1909	AA1910
Easting (GDA94)	453551	453553	453559	453569	453568	453570	453539	453543	453414	453085
Northing (GDA94)	5406178	5406178	5406174	5406165	5406157	5406157	5406120	5406129	5406129	5406187
AHD (m)	367	367	364	368	366	363	367	365	351	322
Au	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Ag	0.02	0.02	0.01	<0.01	0.03	0.02	0.02	0.02	0.03	0.05
Al	8.17	7.79	7.82	7.71	7.29	7.2	7.12	7.48	7.48	7.18
As	1.1	1	0.8	1.1	1.4	0.9	1	0.6	0.9	0.6
Ba	1530	1720	1890	1510	1610	1840	1530	1690	1620	760
Be	1.32	1.54	1.77	1.6	1.4	1.63	1.48	1.3	2.6	1.23
Bi	0.15	0.13	0.11	0.1	0.12	0.15	0.15	0.22	0.06	0.15
Ca	0.1	0.07	0.06	0.09	0.07	0.07	0.06	0.04	0.04	0.02
Cd	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Ce	41.9	67.1	44.4	56.2	58.1	80.6	85.6	68	101	190
Co	2.2	2.8	2.3	2.4	2.8	2.7	2.8	1.6	3.2	5
Cr	3	3	4	6	6	5	4	4	2	5
Cs	2.38	4.81	4	1.86	2.22	2.29	1.62	1.64	6.1	1.54
Cu	2	4.6	5	4.2	4.3	4.2	2.9	3.1	1.7	1.7
Fe	2	2.97	2.66	3	3.53	2.43	3.48	2.14	3.78	5.66
Ga	17.25	18.7	17.95	17.8	17.6	17.25	18.1	17.25	19.4	18.8
Ge	0.1	0.14	0.11	0.13	0.14	0.17	0.19	0.15	0.39	0.21
Hf	6.4	5.7	6.7	6.4	6.6	6.1	6.4	6.3	6.6	6.6
In	0.148	0.147	0.157	0.131	0.092	0.079	0.122	0.123	0.157	0.063
K	3.7	4.02	4.09	3.36	3.69	3.97	3.35	3.86	4.09	3.28
La	16.4	31.7	18.4	24.4	27.6	40.3	50	31.8	148.5	41.7
Li	6.7	9.1	9.4	8.7	9.4	10.7	11.5	5.6	15.8	38
Mg	0.18	0.22	0.24	0.24	0.27	0.29	0.27	0.16	0.4	0.89
Mn	528	384	554	630	918	526	830	481	426	414
Mo	0.25	0.35	0.34	0.47	0.64	0.72	0.27	0.27	0.44	0.28
Na	1.99	1.94	1.63	2.66	1.32	2	2.3	2.3	0.88	0.05
Nb	22.4	18.9	20.7	18.9	20.5	18.7	19	20.7	20.3	19.3
Ni	2.2	1.3	1.6	2.4	2.3	1.2	1.4	1.2	0.8	2.5
P	50	150	160	150	170	90	90	120	130	80
Pb	3.2	3	2.9	2.9	3.8	2.8	4.2	4	3.4	2.4
Rb	154.5	170.5	210	157	165.5	181.5	156.5	169.5	202	141.5
Re	<0.002	<0.002	<0.002	<0.002	<0.002	0.002	0.002	<0.002	0.002	<0.002
S	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	0.01
Sb	0.68	0.73	0.8	0.81	0.67	0.66	0.51	0.51	0.71	0.73
Sc	12.1	12.3	11.8	12.2	11.7	11.5	12.3	11.9	12.2	12.9
Se	1	1	1	1	1	1	1	1	2	1
Sn	2.7	1.5	1.3	2.6	1.2	1.3	1.4	1	1.7	2.1
Sr	75.5	83.4	68.8	83.8	47.9	70.3	50.6	47.8	38.4	11
Ta	1.32	1.29	1.31	1.26	1.32	1.21	1.18	1.27	1.26	1.27
Te	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Th	20.4	18.6	18.5	18.9	20.3	19.3	18.1	18.1	19.4	19.5
Ti	0.237	0.236	0.235	0.236	0.223	0.214	0.223	0.233	0.202	0.217
Tl	0.65	0.66	0.82	0.69	0.76	0.85	0.76	0.93	0.97	0.5
U	2	1.9	2.1	2	1.9	2	2	1.7	5.6	2.7
V	22	23	22	22	23	22	23	21	15	23
W	0.7	0.8	0.7	0.9	1	1	0.5	0.5	0.8	1.2
Y	26.9	25.9	29.5	31.5	29.7	38.7	33.2	27.6	77	37.8
Zn	54	71	82	79	73	81	130	48	104	62
Zr	213	180	212	208	219	206	218	211	219	224