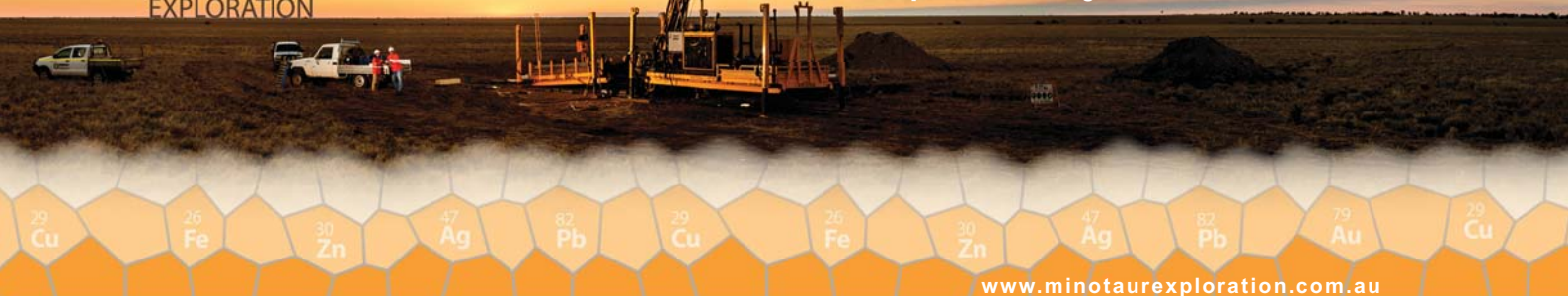


# Quarterly Report

for the period ending 30 June 2014



[www.minotaurexploration.com.au](http://www.minotaurexploration.com.au)

## HIGHLIGHTS

### CORPORATE

- Unveiled extensive nickel discovery opportunities within the group's Western Australian tenements.
- Cash at end of Quarter was \$4.8 million

### EXPLORATION

- Drilling around the old Mingary Mine on EL4745 returned significant gold assays. Drill hole **14RCBH07** returned an average of **16m @ 1.07 g/t Au** from 80m and drill hole **14RCBH09** returned an intersection of **16m @ 0.66 g/t Au, 0.38% Cu** from 104m.
- Drilling commenced on priority EM targets on the **Eloise Copper Joint Venture** and continues into the current Quarter.
- Geochemical sampling and mapping commenced on a second round of gold targets at the Leinster Gold Joint Venture in Western Australia.
- Planning for initial nickel exploration at the Scotia Project is complete. A ground EM survey over the Saints mineralised area will follow receipt of heritage clearances.
- Assays of RC sections beneath the historic 5B gold mine near Kambalda, WA returned strong gold and nickel sulphide grades from less than 150m below surface.



Figure 1: Diamond drilling, Cloncurry.

## CORPORATE REVIEW

At 30 June 2014 the Company's market value was \$14.5 million. Cash and term deposits totalled \$4.8 million. Investments in ASX listed companies (refer Table 5 for details) were valued at market at \$1.1 million.

Net expenditure outflow during the Quarter was \$0.99 million (net after joint venture recoveries). Expenditure through the September 2014 Quarter is forecast to be \$0.97 million.



MINOTAUR  
EXPLORATION

Quarterly Report for the period ending 30 June 2014

## REVIEW OF ACTIVITIES

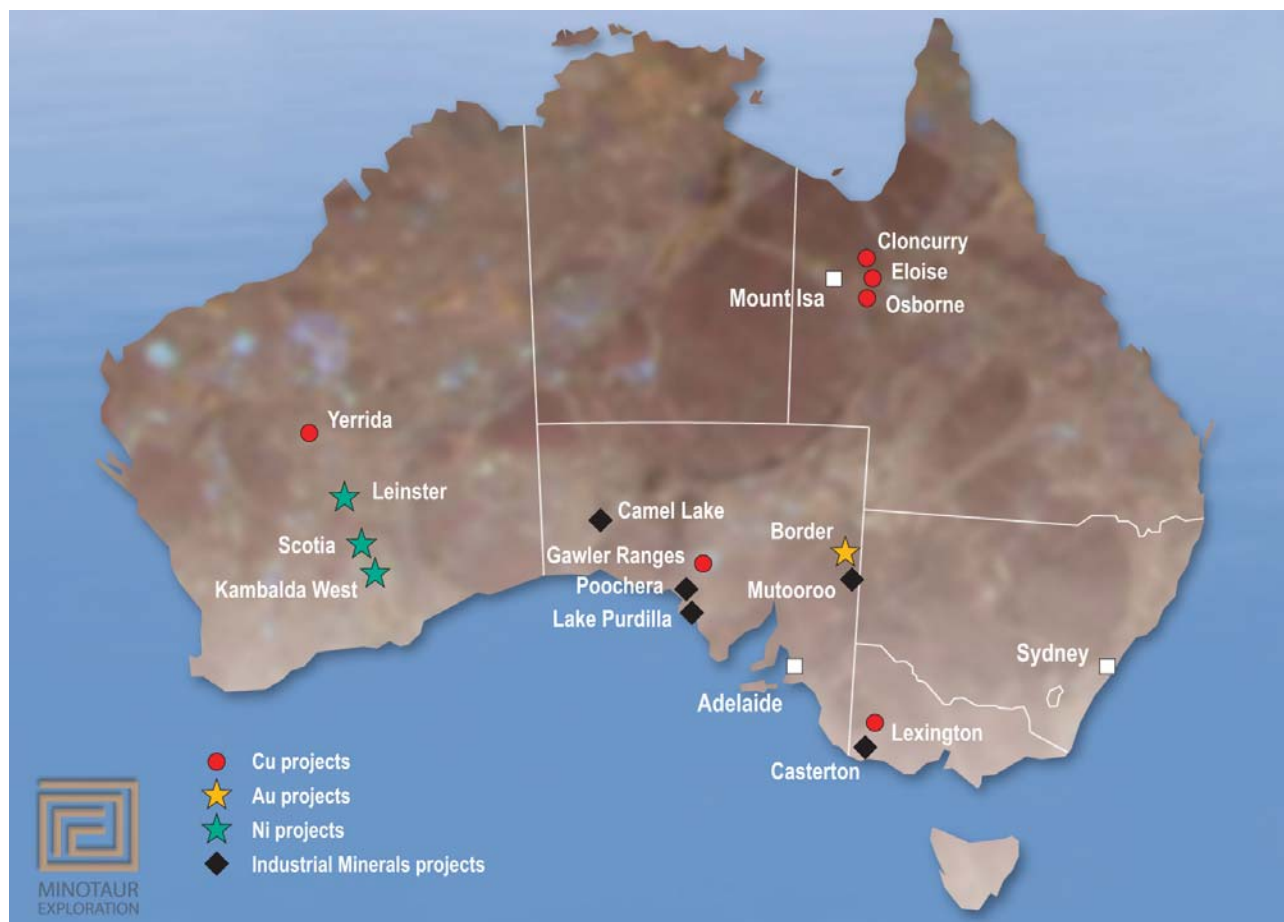


Figure 2: Minotaur Exploration's project locations.

PROJECT LOCATION	TENEMENT AREA KM <sup>2</sup>
NSW <sup>§</sup>	624
South Australia <sup>§</sup>	8,812
Queensland <sup>§</sup>	3,988
Victoria	1,409
Western Australia <sup>§¶</sup>	1,073
<b>Total Area</b>	<b>15,906</b>

Table 1: Minotaur Exploration Limited's tenement areas, under application and/or held 100% or in joint venture<sup>§</sup> or within Minotaur Gold Solutions<sup>¶</sup> (MinAuSol; Minotaur Exploration as to 50%).

### NEW SOUTH WALES

#### Arthurville Base Metals Project

EL 7588, Minotaur 100%

Petrological analysis of drill chips from the recent drilling program by external consultants confirmed that the andesitic rocks at target IP1 have been pervasively sericite altered. Lesser silica with minor carbonate and fine grained pyrite confirms the source of the IP anomaly was intersected in drill hole AR14RC002. The consultant's report concluded that the alteration may represent a marginal phase of alteration to porphyry copper mineralisation with a relatively low pH compared to that indicated by potassic alteration. The lack of alteration in the adjacent hole suggests that any potential copper porphyry would be at significant depth and is therefore not a viable drill target.

After assessment of the results Minotaur, Mitsubishi Materials Corporation (MMC) and Mitsubishi Corporation (MC) mutually elected to terminate the joint venture.



## NEW SOUTH WALES

### Dubbo Project

EL 8137, EL 8138, EL 8139, Minotaur 100%

No activity on the tenements during the Quarter.

## SOUTH AUSTRALIA

### Bonython Hill Project

EL 4745, Minotaur 100%

An inaugural drilling program was conducted at the Mingary Mine prospect during the Quarter<sup>1</sup>. The historic Mingary Mine is located in the northern part of Minotaur Exploration's 100% owned Bonython Hill EL 4745 (Figure 3), approximately 75km southwest of Broken Hill. Historic workings are located on secondary copper mineralisation associated with a distinctive ferruginous quartz horizon thought to represent a tectonised, recrystallised quartzite/sandstone unit.

A three-hole RC drilling program (for 491m) was completed in April 2014. Drill holes 14RCBH07 and 14RCBH08, drilled on the southern of two EM lines (Line B, Figure 4), were designed to test the lode horizon exposed in the old workings and two separate

EM conductors modelled on this line. Drill hole 14RCBH07 intersected the tectonised, sulphide-bearing quartzite lode zone between 82 and 98m (downhole depths) within a sequence of Palaeoproterozoic gneisses. The sulphide-rich lode contained abundant pyrite, pyrrhotite and chalcopyrite, dips steeply to the west and is the likely source of the EM conductor.

Drill hole 14RCBH08 targeted a much weaker EM conductor to the east of the lode horizon and intersected a 1m sulphide-rich zone within the host gneiss package.

Drill hole 14RCBH09 was drilled on the northern EM line (Line A, Figure 4), approximately 600m to the north along strike from the old mine workings. It intersected similar lithologies to those in hole 14RCBH07, including the lode horizon between 92 and 129m downhole.

Hole	East	North	RL	Dip	Azimuth	Depth (m)
14RCBH07	480000	6422059	223	-60	105	120
14RCBH08	480125	6422053	216	-60	105	180
14RCBH09	480122	6422672	227	-60	105	191

Table 2: Mingary Mine prospect drill collar locations. Northing and Easting coordinates are relative to Datum GDA94, Zone 54.

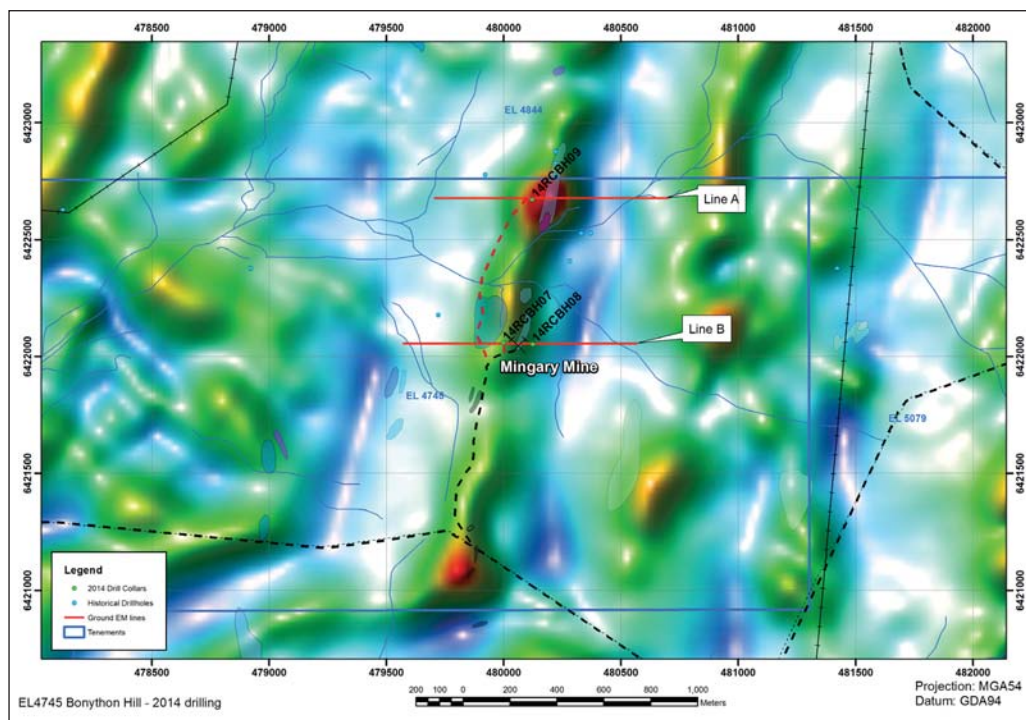


Figure 3: Mingary Mine prospect drill hole locations over CNORM magnetic image.

<sup>1</sup> Significant Gold Intersections from Inaugural Mingary (SA) Drilling, MEP\_ASX announcement 22 May 2014.



MINOTAUR  
EXPLORATION

## Bonython Hill Project continued

Significant assays from the drilling programme are listed in Table 3. The lode zone intersected in hole **14RCBH07** returned an average of **16m @ 1.07 g/t Au** from 80m, including **4m @ 1.58 g/t Au and 0.31% Cu** from 80m and **4m @ 1.31 g/t Au and 0.27% Cu** from 92m. The zone 84 to 92m also contained anomalous Zn of 0.25%. The drill section for this line is shown in Figure 4.

The narrow sulphide intersection in hole **14RCBH08** is considered sufficient to explain the EM anomaly. No significant assays were associated with this zone.

Drill hole **14RCBH09** returned an intersection of **16m @ 0.66 g/t Au, 0.38% Cu** from 104m, including **4m @ 1.10 g/t Au, 0.50% Cu** from 116m and **4m @ 1.99 g/t Au and 0.59% Cu** from 132m. A drill section for this hole is shown as Figure 5.

Hole	From	To	Interval (m)	True Width (m)	Au g/t	Ag g/t	Cu ppm	Zn ppm
14RCBH07	80	84	4	3	1.585	3.64	3110	404
	84	88	4	3	0.469	2.67	1990	2930
	88	92	4	3	0.905	4.69	2610	2020
	92	96	4	3	1.31	9.88	2680	809
	96	100	4	3	0.229	2.66	0.06	253
14RCBH08					No significant intersection			
14RCBH09	68	72	4	3	0.176	0.56	305	92
	76	76	4	3	0.155	1.20	760	90
	84	88	4	3	0.143	0.23	198	100
	92	96	4	3	0.052	1.19	3390	68
	96	100	4	3	0.109	1.78	5410	103
	104	108	4	3	0.441	0.85	2790	162
	108	112	4	3	0.266	1.17	3320	132
	112	116	4	3	0.831	1.56	4310	104
	116	120	4	3	1.105	1.59	4970	56
	120	124	4	3	0.07	0.62	2680	63
14RCBH09	132	136	4	3	1.988	1.65	5860	81

Table 3: Drilling assays for anomalous elements Mingary Mine prospect. Samples are 4m composites made from individual 1m drill samples.

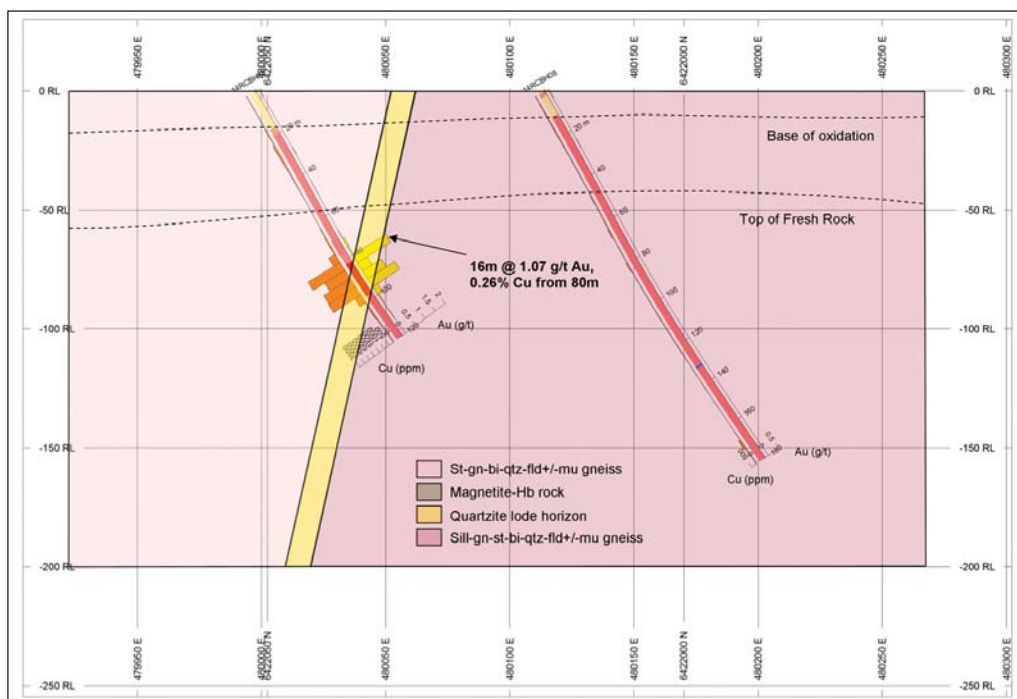


Figure 4: Cross-section view Drill Line B, with image based on artificial surface Datum of Zero RL, showing the geological section for holes 14RCBH07 and 14RCBH08 with Au and Cu values in ppm. Downhole intersection highlighted; true width is estimated to be 75% of the downhole width.

## Bonython Hill Project continued

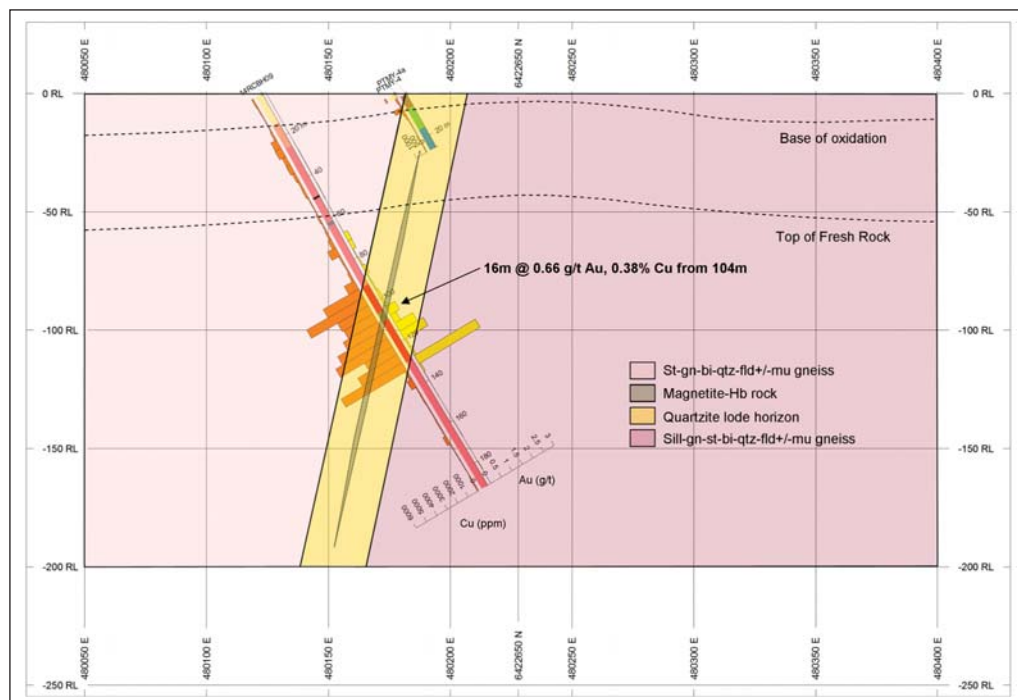


Figure 5: Cross-section view Drill Line A, with image based on artificial surface Datum of Zero RL, showing the geological section for holes 14RCBH09 with Au and Cu values in ppm. Downhole intersection highlighted; true width is estimated to be 75% of the downhole width.

Results for the original 1m drill samples confirm those reported for the 4m composites (Table 3). Drill hole 14RCBH07 returned an intersection of 19m @ 0.70 g/t Au from 80m, including 8m @ 1.08 g/t from 88m. The one metre samples for drill hole 14RCBH09 confirmed the wide zone of copper mineralisation containing narrower higher-grade gold zones. The interval 92 to 130m average 0.41% Cu and 0.4 g/t Au. These results demonstrate continuity of gold mineralisation over a strike length of 600m and warrant further drilling to test for lode extensions towards the highly anomalous rock chip samples 1km to the north (see discussion below in relation to EL4844 and Figure 6).

## Border Base Metals Project

EL 4352, 4844, 5079, 5437 Sumitomo 56.75%,  
Minotaur 43.25%

Final assay results received this Quarter confirmed the previously reported results for drill hole 14DDCT001 at the Catch Dam prospect (EL4352)<sup>2</sup>. Weakly anomalous Zn up to 0.31% confirms the initial Niton hand-held XRF analyses. Gold values were all low. No further work is planned on this target.

Rock chip sampling on EL4844 (Mingary) returned highly anomalous gold values along strike from the Mingary Mine (see above). Samples collected up to 1km to the north of the old mine returned up to 2.42 g/t Au (Figure 6). The samples were collected over the same lode rocks intersected in the drilling on the Bonython Hill tenement and are associated with a linear magnetic anomaly. The sampling suggests an anomalous zone of Au mineralisation up to 3km in strike length may be present. Further evaluation will continue next Quarter.

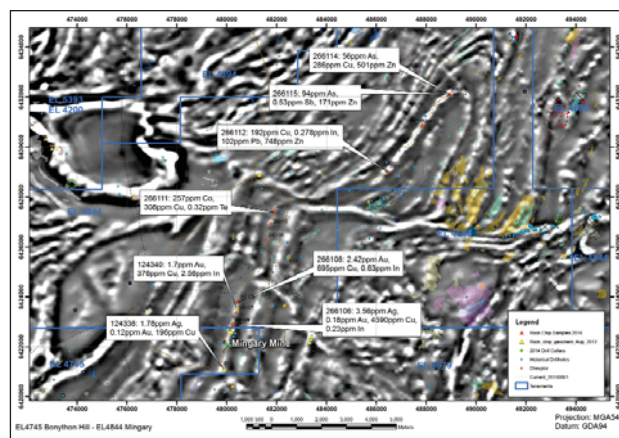


Figure 6: Rock chip sample results for Mingary Mine area overlain on greyscale magnetic image.

<sup>2</sup> Catch Dam Copper + Gold IP Anomaly Tested, MEP\_ASX announcement 7 April 2014.



## SOUTH AUSTRALIA

### Mutooroo Magnetite Project

EL 5079, Sumitomo 56.6%, Minotaur 43.4%

The joint venture has no plans to resume work on the magnetite deposits, preferring instead to divest these assets.

### Poochera Kaolin Project

EL 4575, 5016, 5095, 5308, 5365 5395, Minotaur 100%

Testing of samples for ceramic and silica proppants continued in parallel with potential investment and offtake discussions with various parties.

### Sceales Gypsum Project

EL 4697, 5398, Minotaur 100%

Discussions continued with potential partners in parallel with preparation for further field investigations.

### Coober Pedy Project

EL 4980, 4981, Minotaur 100%

No activity this Quarter.

### Gawler Ranges Project

EL 4776, 5096, 5097, EL 5232, Minotaur 100%

Preparations are in progress for granting of approvals to conduct a ground EM survey over selected targets prospective for base metals and silver mineralisation similar to that at the Meninnie Dam and Paris deposits.

### North Flinders Project

ELs 4388, 4478, 5117, ML 4386, Minotaur 10%, Perilya 90%

Field work by Perilya during the quarter consisted of a limited program of XRF soil surveying and rock chip sampling in and around the Linda sulphide prospect in the southern portion of EL4788. Minor anomalism is restricted to a small zone of lead enrichment in the immediate vicinity of the outcropping mineralisation which was previously tested by BHP in 1984.

Eight rock chip samples were also collected from this area however no significant anomalism in any pathfinder elements was identified. Additional, wider spaced reconnaissance XRF lines are planned for the area in the second half of the year.

## QUEENSLAND

Minotaur's main area of exploration activity is in the Cloncurry copper belt of North Queensland where an extensive (3,988 km<sup>2</sup>) package of tenements highly prospective for iron oxide copper-gold mineralisation has been assembled over the past several years (Figure 7).

Most tenements are veneered by cover sediments and a large number of potential targets are being systematically surveyed using advanced geophysical techniques and prioritised for drill testing.

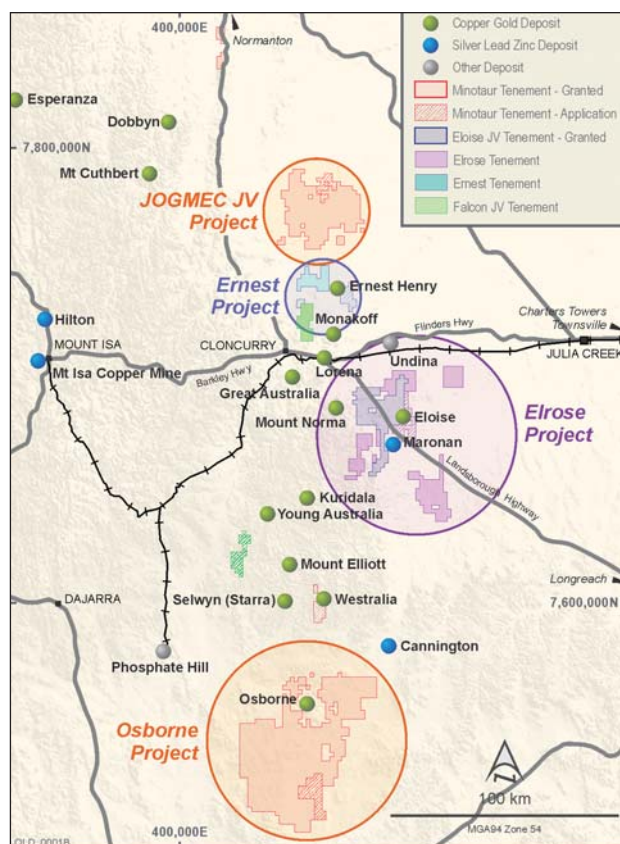


Figure 7: Location of Minotaur tenements in the Cloncurry region of North Queensland. Elose Copper JV tenements adjacent to the Elose mine are shown as gray colour within the Elose Project area.

### Elose Copper Joint Venture

EPM17838, EPM 18442, MDL431, MDL432, Minotaur 100%, GFR earning 50%, (except on MDL 432 and parts of MDL431 and parts of EPM17838 where Sandfire Resources NL is earning 80%)

High-priority geophysical targets generated from airborne VTEM data acquired in the December Quarter were subjected to detailed ground geophysical and geological assessment, that work being concluded early in April. Drilling is now in progress on priority EM targets<sup>3</sup>.

<sup>3</sup> Drilling Multiple New Copper-Gold Targets at Elose Project, Cloncurry, MEP\_ASX announcement, 10 June 2014.





## QUEENSLAND

### Osborne Project

EPMs 18571, 18572, 18573, 18574, 18575, 18576, 18720, 19050, 19061, 19066; EPMA 25197, Minotaur 100%

Subsequent to a number of innovative geophysical trials, the Company submitted a proposal for airborne electrical geophysics for consideration by the Geological Survey of Queensland under their industry partnership plan.

### Ernest Project

EPM 19205, 19775, Minotaur 100%

No activity during the Quarter.

### Eloise Project

EPM 18624, 19096, 19500, 19505, 25237, 25238  
Minotaur 100%

The Eloise project area encompasses tenements in the vicinity of the operating Eloise copper mine (Figure 5). Those tenements subject to the Eloise Copper JV are included in this area. EPMs 25237 and 25238 were granted in March. No field activity outside of the Eloise JV area occurred during the Quarter.

### Falcon Joint Venture

EPM 18289, 18313 Falcon Minerals Ltd 100%,  
Minotaur earning 51%

Notice of Entry for preliminary activities (geological reconnaissance, rock chip sampling) have been sent to two landowners on EPM 18313 (Mt Agate). Field work is planned for next Quarter.

## VICTORIA

### Victorian Copper Project

ELs 5402, 5403, 5450, 5475 Minotaur 100%

No activity during the Quarter.

## WESTERN AUSTRALIA

### Yerrida Project

E51/1580, E51/1581, E51/1585, E51/1591, E51/1593,  
Minotaur 100%

A Native Title agreement was finalised with the **Yugunga-Nya Claimant Group** during the Quarter. The five licences were granted.

Data was received for the airborne EM survey (AEM) flown by the Department of Mines and Petroleum and Geoscience Australia (Capricorn Survey). The survey was flown at a 5km line spacing and provides important information on the conductivity of regional stratigraphic units and any cover sediments.

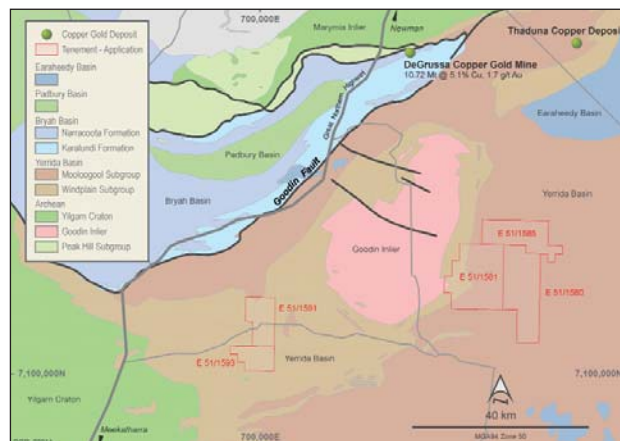


Figure 11: Location and regional geological setting for Minotaur's tenements within the Yerrida Basin, Western Australia.

Six of the AEM lines flew over MEP tenements and highlighted 11 conductive responses within tenements E5101593, E5101591, E5101581 and E5101585 that require ground follow-up (Figure 12). At a line spacing of 5000 metres, the (AEM) survey specifications were not optimal for blanket exploration for massive sulphide mineralisation throughout the tenements. Field inspection is planned for next Quarter to assess the sources of the conductive responses and begin mapping and sampling of outcrops.

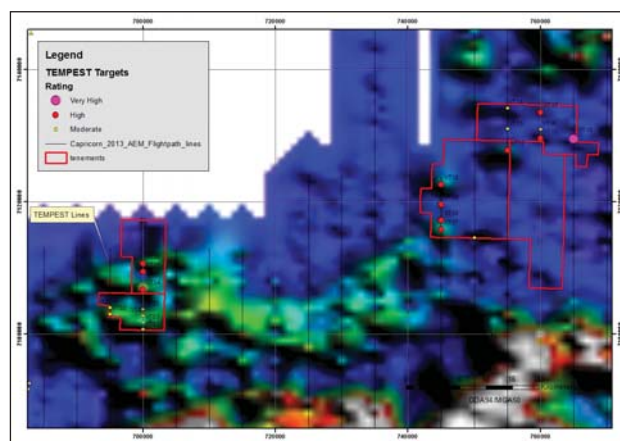


Figure 12: Plan showing Yerrida tenements and selected targets plotted over the late time X Component TEMPEST image.



## WESTERN AUSTRALIA

### Scotia Project

E29/661, E29/719, P29/2105, P29/2117, P29/2118, P29/2119, P29/2120, P29/2121, M29/245, M29/246, M24/279, M24/336, Aphrodite Gold Ltd earning up to 80% of gold rights. E29/886, Minotaur Gold Solutions Ltd 100% of which Minotaur 50%, GFR 50%

The Scotia Project comprises a group of tenements located about 65km north of Kalgoorlie (Figure 13) in Western Australia. The tenements are held by Minotaur Gold Solutions Ltd (MinAuSol), the shares in which are owned 50% by Minotaur.

The tenements (excepting E29/886) are subject to a joint venture with Aphrodite Gold Limited (ASX: AQQ) (Aphrodite) under which Aphrodite has earned a 51% beneficial interest in gold rights through joint venture expenditure and the right to increase that interest up to 80%. The joint venture requires Aphrodite to meet annual tenement expenditure obligations which currently total \$451,600. The Scotia package comprises a notable nickel region situated along the Bardoc Shear Zone.

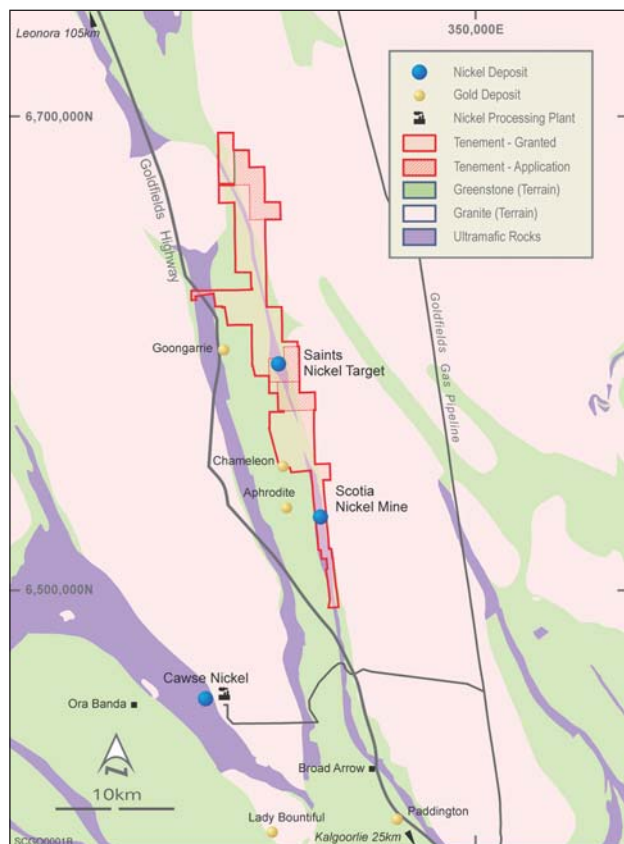


Figure 13: Location and regional geological setting for MinAuSol's Scotia tenements.

Review of previous exploration and prospectivity over the Scotia Project highlighted the potential for extensions to the known nickel mineralisation in the Saints area and the potential for additional deposits along strike at the same stratigraphic horizon. An extensive ground EM program is planned over the area in the next Quarter.

### Leinster Gold Project

E36/235, E37/909, M36/475, M36/502, M36/511, M36/524, M36/526, M36/548, M37/806, M37/877, M37/878, P37/170, P37/7370, P37/7371, P37/7372, P37/7373, Minotaur 100%, GFR earning 50%

The Leinster Gold project comprises 17 tenements, over an area of 285km<sup>2</sup> held 100%, located ~300km north of Kalgoorlie (Figures 14 and 15) in Achaean granite/greenstone terrain.

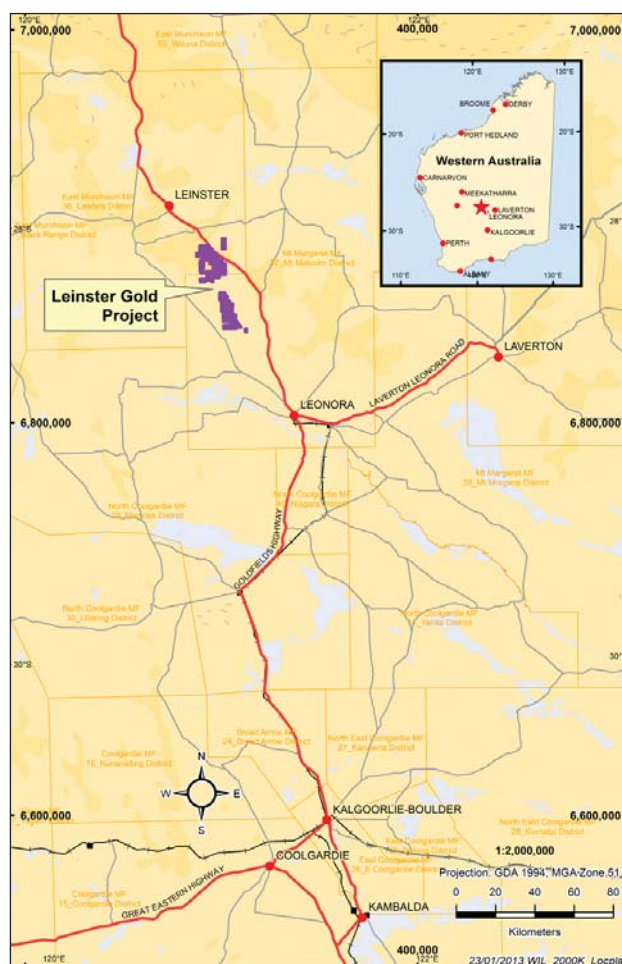


Figure 14: Location of the Leinster Gold Project.

## Leinster Gold Project continued

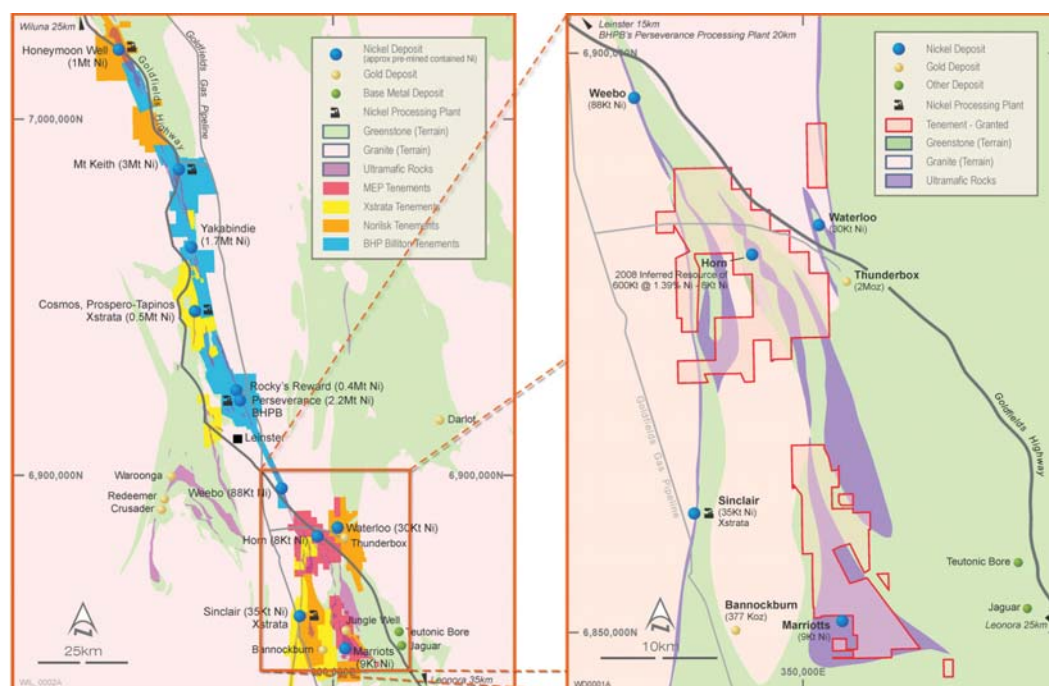


Figure 15: Leinster Gold Project tenements and regional setting.

First-pass aircore and RC drilling of 141 holes for 8,457 metres was completed at seven gold targets. Refer ASX release dated 11 March 2014 for a full technical discussion of results from the 'Salute' and 'Mt Newman' prospects.

Final assay results from the above programme for the remainder of the drill holes on the Pond Well SZ, Aztec, Esperanza, Jungle Well North prospects were evaluated<sup>4</sup>. Assays of 1m drill samples from the zones of gold mineralisation intersected at the Salute Prospect confirmed results obtained from the original 4m composites. Anomalous gold intersections were also returned from the Pond Well SZ prospect in several drill holes (Table 4).

Field work commenced to assess other gold prospects defined by structural interpretations and review of previous geochemical sample assays. Field mapping, lag, and soil sampling was carried out on the Javelin prospect, immediately south along the same structural trend as the Jungle Well gold deposit (Figure 16).

Lag, soil and rock chip sampling was also carried out over the Centura and Firefly prospects on the northern Wildara group of tenements (Figure 16). Results are expected early next Quarter.

Prospect	Drill Hole	Depth from (m)	Depth to (m)	Au ppb	Au* ppm (gt/t)
Salute	14SAAC041 Including:	28	36		1.52
		28	32		2.36
		48	56		1.03
	14SAAC043	16	20	426	
Pond Well SZ	14PWAC035	68	76	329	
	14PWAC028	44	52	450	
	14PWAC003	32	40	233	
	14PWAC004	72	76	269	
Aztec	14AZAC004	32	36	272	
Shane's	14SHAC004	40	44	101	
Jungle Well North	14JWAC009	32	40	200	
	14JWAC010	60	68	313	

Table 4: Significant drilling intersections from initial drilling program. The remaining results from Salute and from Mt Newman were reported previously<sup>1</sup>. \* denotes gold analysed by fire assay, all other assays were analysed using an aqua regia digest and ICP-MS finish (reported as parts per billion – ppb). Note that all intersections quoted are down-hole thicknesses and it is not possible at this early stage of exploration to estimate what the true thickness of any mineralised intersection may be.

<sup>4</sup> Assays confirm gold values at the Salute prospect, Leinster Gold JV, MEP\_ASX Announcement 12 May 2014.



## Leinster Gold Project continued

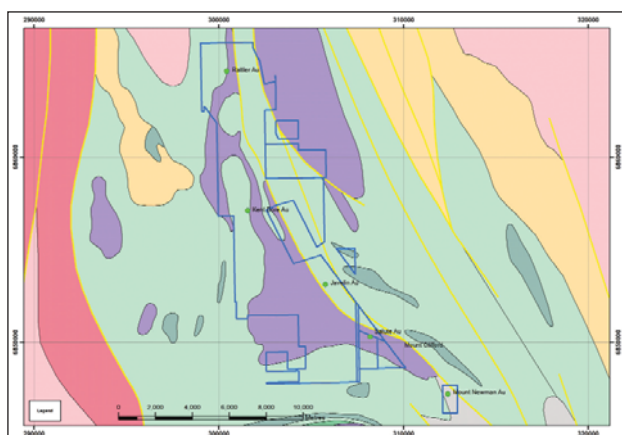


Figure 16: Additional Au prospects evaluated during the Quarter on Mount Clifford tenement group.

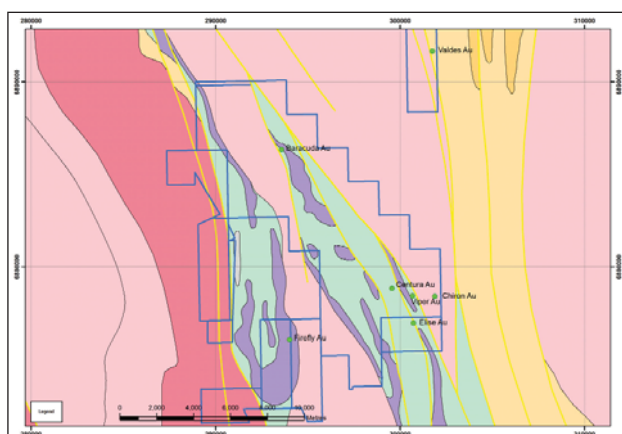


Figure 17: Additional Au prospects evaluated during the Quarter on Wildara tenement group.

## West Kambalda

*M15/395, TYK 100%, MEP with nickel rights and royalty on other minerals*

Minotaur holds certain nickel mining rights and other mineral royalty rights across a number of tenements in the Widgiemooltha-West Kambalda region of Western Australia (*Figure 2*). Tychean Resources (ASX: TYK) (**Tychean**) recently completed a 6-hole RC drill programme<sup>5</sup> on one such tenement (M15/395) as part of a regional gold exploration campaign. Tychean's objective was to confirm gold mineralisation beneath the historic, shallow 5B gold pit. Minotaur assayed Tychean's RC chips for nickel, gold and PGE elements<sup>6</sup>.

Results included 24m @ 1.53% Ni (drillhole SPRC005) and 5m @ 9.67 g/t Au (drillhole SPRC004) and successfully confirmed below pit continuity of gold, nickel and PGE mineralisation. Furthermore, results demonstrate the intimate spatial co-relationship between gold, platinum, palladium and nickel. Several other historic mines in the vicinity, namely 1A, 5A, 5D (Andrews Mine), are thought to present similar geological circumstances, suggesting that this corridor of ultramafic rocks with Kambalda style nickel mineralisation represents a compelling exploration and resource definition opportunity.

**NOVA SCOTIA, CANADA**

In 2013, Canadian private exploration company Cogonov Inc. flew a number of airborne VTEM surveys across its various tenement packages along the Cobequid IOCG belt, including the Copper Lake region and EL 6914. Cogonov intends to list on the TSX and continue to explore the region.

Under an advisory services agreement between Minotaur and Cogonov, the Company processed geophysical data to assist Cogonov with targeting and prioritising proposed drilling.

<sup>5</sup> Significant Composite Gold Results from RC Drilling at Spargoville (WA), Tychean Resources Limited ASX Announcement 20 June 2014.

<sup>6</sup> *Significant New Nickel and Gold Results from Drilling Under Historic Mine, West Kambalda*, MEP ASX Announcement 23 July 2014



MINOTAUR  
EXPLORATION

## Notes Specific – June 2014 Quarter ASX Announcements

Further details (including JORC 2012 Code Reporting Tables, where applicable) for exploration results outlined above can be found in the following announcements lodged with the ASX.

- Copper-gold drill programme completed at Arthurville JV (3 April 2014)
- Catch Dam copper+gold IP anomaly tested (7 April 2014)
- Assays confirm gold values at the Salute Prospect, Leinster (12 May 2014)
- Significant gold intersections from inaugural Mingary drilling (22 May 2014)
- Drilling multiple new copper-gold targets at Eloise Project, Cloncurry (11 June 2014)
- Significant new nickel and gold results from drilling, West Kambalda (23 July 2014)

### COMPETENT PERSON'S STATEMENT

Information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Ian Garsed, who is the Company's General Manager, Exploration and a Member of the Australian Institute of Geoscientists. Mr Garsed has experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (JORC Code 2012). Mr Garsed consents to inclusion in this report of the matters based on his information in the form and context in which it appears.

## INVESTMENTS

Minotaur has exposure to a range of exploration opportunities through its holdings in junior listed companies.

Company	ASX Code	Holding at 30 June 2014	Minotaur %	Closing Price @ 30 June 2014	Closing Value
Mithril	MTH	21,416,667	6.8%	\$0.006	\$128,500
Mungana	MUX	3,076,923	1.9%	\$0.105	\$323,077
Petratherm	PTR	30,000,000	12.4%	\$0.008	\$240,000
Variscan	VAR	7,266,238	4.1%	\$0.038	\$276,117
Thomson	TMZ	10,000,000	13.7%	\$0.016	\$160,000
<b>TOTAL</b>					<b>\$1,127,694</b>

Table 5: Summary of Investments in ASX Listed companies.