



Zenith  
Minerals  
Limited

ABN 96 119 397 938

## ASX & MEDIA RELEASE

# QUARTERLY ACTIVITY REPORT FOR THE PERIOD ENDING 30 JUNE 2014

## HIGHLIGHTS

### ASX CODE: ZNC

#### Activities

##### Exploration /Development

- Earaheedy Manganese
- Kavaklitepe Gold
- Develin Creek Copper-Zinc-Gold
- Mt Minnie Gold
- Mt Alexander Magnetite Iron

##### Details as at Jun 2014

Issued Shares	112.3 m
Unlisted options	1.1 m
Mkt. Cap. (\$0.08)	A\$ 9.0m
Cash June 14	A\$1.1m
Debt	Nil

#### Directors

Michael Clifford	Managing Director
Mike Joyce	Non Exec Chairman
Stan Macdonald	Non Exec Director
Julian Goldsworthy	Non Exec Director

#### Major Shareholders

HSBC Custody. Nom.	9.3%
Giralta (Atlas Iron)	9.1%
Miquilini	5.3%
Tilbrook/Grey Willow	5.3%
Nada Granich	4.8%
Yandal Inv. PL	3.0%

#### Contact Us

Zenith Minerals Australia Limited  
Level 2, 33 Ord Street  
WEST PERTH WA 6005

PO Box 1426  
WEST PERTH WA 6872

Telephone: (08) 9226 1110  
Facsimile: (08) 9481 0411

Email:  
[information@zenithminerals.com.au](mailto:information@zenithminerals.com.au)

Web: [www.zenithminerals.com.au](http://www.zenithminerals.com.au)

### Exploration and Development

#### Zenith announced two significant new project acquisitions:

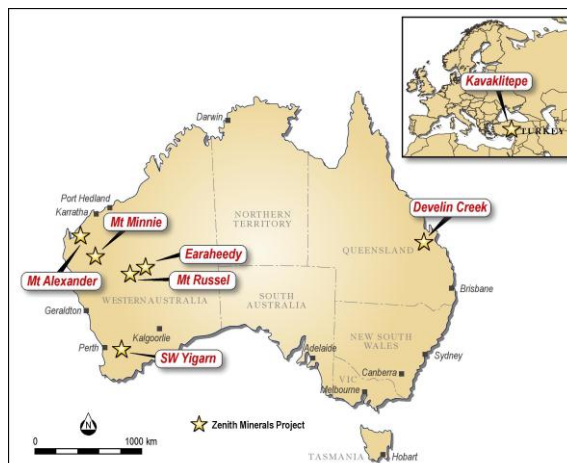
- Acquisition of **Develin Creek** Copper-Zinc-Gold-Silver Massive Sulphide Project in Queensland (51% with right to acquire 100%):
  - 1.76Mt grading 1.7% copper, 2% zinc and 0.2g/t gold total inferred resource
  - Results up to 13.5 metres @ 3.3% copper, 4.0% zinc and 0.4g/t gold in drilling outside existing Sulphide City resource
  - Recent airborne electromagnetic survey (HeliTEM) identified multiple conductors with limited ground follow-up to date along 50km of host volcanic rocks.
- Acquisition of Rio Tinto's **Earaheedy** Manganese Tenure, expands Zenith holdings to cover 130km of target manganese horizon - field work commenced.
- **Kavaklitepe Gold Project** Turkey (earning 70%) – Trenching of high order gold soil anomalies & coincident IP anomalies at Kavaklitepe planned for next quarter, subject to permitting.
- **Mt Minnie** Gold Project WA (100%) – tenure granted, field activities to proceed this quarter.

### Project Generation

- Secured new exploration licence applications (100%) over two areas prospective for gold and copper in WA, respectively:
  - **SW Yilgarn** – Bottleneck (previous drilling results up to 3m @ 18.8g/t gold & 4m @ 21.38g/t gold) and Nanicup Bridge up to 3m @ 10.9 g/t gold
  - **Mt Russel** - Near surface historic copper exploration results in shallow drilling.

### Corporate

- Cash on hand \$0.88M plus Federal Government R&D Tax Refund of \$256,000 received subsequent to the end of the quarter (total \$1.1M).





## ZENITH'S EXPLORATION PROJECTS

**Develin Creek (Zenith purchased 51% (subject to QLD Government approval) with right to acquire 100% equity**

- **3 Massive Sulphide Deposits with JORC 2012 Compliant Resources of 1.76Mt grading 1.7% copper, 2% zinc and 0.2g/t gold total inferred resource,**
- **Drilling outside the existing Sulphide City resource boundary intersected results up to 13.2 metres @ 3.3% copper, 4.0% zinc and 0.4g/t gold, extending mineralisation up to a further 200m south,**
- **Previous electrical geophysical surveys can detect both the massive sulphides and the underlying stringer zone mineralisation, confirming that these are appropriate exploration tools for further use,**
- **Numerous geophysical and geochemical targets along 50km of host volcanic rocks,**
- **Recent airborne electromagnetic survey (HeliTEM) flown over entire host volcanic sequence with limited ground follow-up to date,**
- **Planning and permitting underway for drill testing.**

### Activities in June Quarter

Subsequent to the end of the quarter the Company announced (ASX Release 7<sup>th</sup> July 2014) the acquisition of the Develin Creek base metals project, located 70km north-west of Rockhampton in Central Queensland. The project hosts several copper-zinc-gold-silver volcanic hosted massive sulphide (VHMS) deposits and covers an extensive belt of underexplored prospective volcanic rocks. Mineralisation comprises massive sulphide, stringer and breccia style copper-zinc-gold-silver deposits, hosted by basalts.

### Planned Activities

Zenith is currently prioritising the many Develin Creek exploration targets it has identified for assessment and these will be the subject of a follow-up ASX release.

Field exploration programs are planned to commence in the September quarter (on receipt of Queensland Government approvals). Zenith also plans to update the resource estimate to include the Fitzroy Resources Limited 2010-2011 drill results that have not yet been incorporated in the current resource estimate.

### Background on Develin Creek Project

The Develin Creek deposits are of a style similar to those currently being mined by Sandfire Resources NL at DeGrussa and Independence Group NL at Jaguar - both deposits are located in Western Australia. These types of deposits typically occur in clusters making them attractive exploration targets.

The current (JORC 2012) Inferred Resource estimate for the three main mineralized bodies (Sulphide City, Scorpion and Window) defined to date by drilling is: 1.76Mt grading 1.7% copper (Cu), 2% zinc (Zn) and 0.2g/t gold (refer to JORC compliant resource statement and associated tables attached to this report).

The main deposits are shown in Figure 2 below.



**Figure 2: Develin Creek Resources – Plan View of Sulphide City, Scorpion and Window Deposits Overlying Image of IP Chargeability Anomaly (Red zones are high chargeability)**

The **Sulphide City** mineralisation consists of stockwork, disseminated and massive sulphide mineralisation. The main Sulphide City lens, outlined with a 1% copper equivalent cut-off, has a horizontal projection of about 300m x 150m. The lens varies from 2.5m to 29m in thickness, generally dips 25-30° west-northwest and has been intersected at depths between 80m and 200m. Better historic drill intersections (previously reported by Fitzroy Resources Limited to the ASX, 14<sup>th</sup> Oct 2010, 11<sup>th</sup> May 2011 and 28<sup>th</sup> Oct 2011) include:

- DDH-016 14.5m @ 0.6% Cu and 4.3% Zn (includes 2.5m @ 12.0% Zn)
- DDH-044 11.3m @ 2.1% Cu, 5.9% Zn, 16g/t Ag and 1.21g/t Au
- PD-052 15.0m @ 3.1% Cu, 2.3% Zn

The **Scorpion deposit**, 500m south-west of the Sulphide City deposit occurs in a 400m x 200m zone in altered volcanic rocks, the sulphide body, 2.5m – 9.5m thick consists of brecciated massive sulphides and grades up to 6% Cu, 9% Zn, 43g/t Ag and 1g/t Au. Better historic drill results (previously reported by Fitzroy Resources Limited to the ASX, 14<sup>th</sup> Oct 2010 and 11<sup>th</sup> May 2011) include:

- DDH-001 21.6m @ 2.5% Cu, 1.5% Zn, 13g/t Ag, 0.5g/t Au, (includes 16.2m @ 3.2% Cu, 1.6% Zn)
- DDH-002 31.6m @ 1.5% Cu, 1.5% Zn, 15g/t Ag and 0.3g/t Au (includes 16.7m @ 2.1% Cu, 2.0% Zn)
- PD-007 44.0m @ 1.6% Cu, 1.0% Zn, 8g/t Ag, 0.3g/t Au, (includes 25.0m @ 2.6% Cu, 1.2% Zn, 10g/t Ag)

The highly weathered **Window** mineralisation consists of steeply dipping chalcopyrite rich massive sulphides and sulphidic breccias with a 2m thick supergene blanket of covellite-chalcocite at 50m depth within a wider zone of



stringer style mineralisation. The location and style of mineralisation indicates that the Window Deposit may be the partially eroded footwall stringer zone to the nearby Scorpion massive sulphide lenses. Better historic drilling results from Window (previously reported by Fitzroy Resources Limited to the ASX, 14<sup>th</sup> Oct 2010) include:

- **PD-012      84.0m @ 0.8% Cu   (includes 48.0m @ 1.2%)**

Inferred Resources (JORC 2004) were estimated for the Develin Creek Deposits and first reported to the ASX by Icon Resources Limited in 2007 for the 3 known mineralised bodies, totalling **1.76Mt @ 1.71% copper, 2.05% zinc, 8.5g/t silver and 0.24g/t gold**, at a 1% Cu equivalent cut-off. The previous resource has now been reviewed and updated to be compliant with the JORC Code 2012 Edition. Note that no additional drilling has been included in the resource upgrade and there are no changes to the tonnes and grades previously reported.

Deposit	Tonnes	Cu% Grade	Zn% Grade	Ag g/t Grade	Au g/t Grade
<b>SULPHIDE CITY</b>	1,114,784	1.64	2.41	7.2	0.20
<b>SCORPION</b>	485,100	1.98	1.87	13.9	0.39
<b>WINDOW</b>	156,960	1.45	-	1.0	0.02
<b>TOTAL</b>	1,756,844	1.71	2.05	8.5	0.24

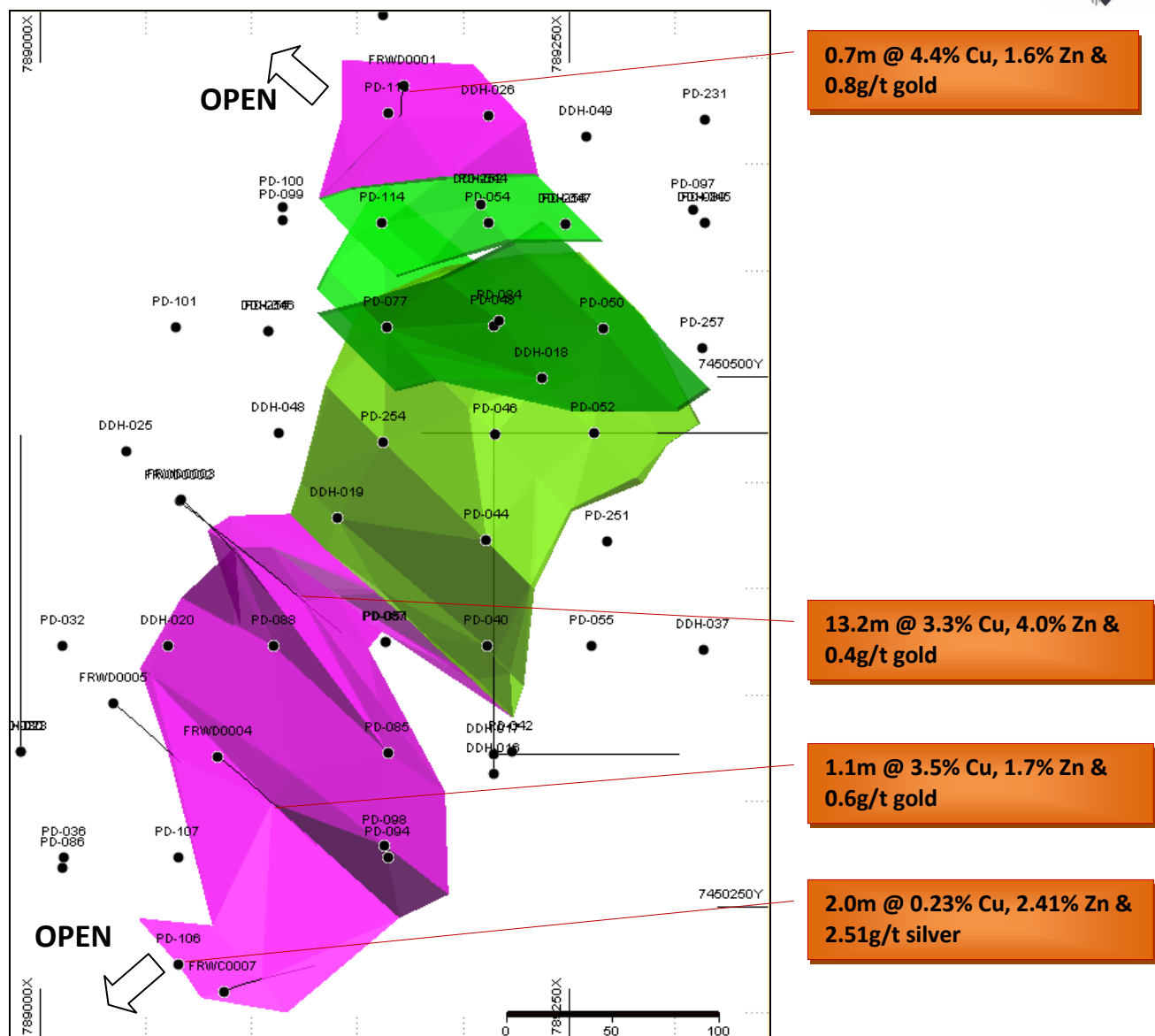
*Refer to attached Table 1 and Competent Person Sign-off at the end of this Quarterly Report.*

Note that drilling in late 2011 by Fitzroy extended mineralisation at the Sulphide City deposit by 200m to the south, this mineralisation has not yet been included in the resource estimate reported above. Better intersections from that drilling (previously reported by Fitzroy -ASX Releases 28<sup>th</sup> July 2011, 28<sup>th</sup> Oct 2011 and 30<sup>th</sup> Jan 2012) which extends high-grade copper-zinc mineralisation to the north and south (refer to Figure 3) that are not included in the resource estimate include:

- **FRWD0002   13.2m @ 3.3% Cu, 4.0% Zn & 0.4g/t gold (40m south of existing resource)**
- **FRWD0004   1.1m @ 3.5% Cu, 1.7% Zn & 0.6g/t gold (140m south of existing resource)**
- **FRWD0001   0.7m @ 4.4% Cu, 1.6% Zn & 0.8g/t gold (50m north of existing resource)**
- **FRWC007     2.0m @ 0.23% Cu, 2.41% Zn & 2.51g/t silver (200m south of existing resource)**

Significant potential exists to extend the currently defined copper-zinc-gold-silver deposits of Sulphide City, Scorpion and Window and to discover new mineralisation lenses in higher or lower stratigraphic positions.

Elsewhere within the project area, there is good potential to discover previously undetected VHMS mineralisation, in the extensive landholdings totalling 300km<sup>2</sup>. Zenith now controls over 50km of strike length of prospective volcanic host rock sequence. The application of modern geophysical exploration technology offers an improved ability to see through areas of surficial cover to define new drilling targets. Testwork by Fitzroy and previous explorers clearly demonstrates that both IP and electromagnetic (EM) geophysical surveys are able to detect the disseminated and massive sulphide bodies respectively. Although IP geophysical coverage is limited to the area surrounding the known deposits the project wide HeliTEM survey has identified over 66 EM targets of which only a few have had cursory follow-up ground work.



**Figure 3: Sulphide City Deposit (Green) Showing Drill Extensions defined by Fitzroy Resources (Purple)**  
(Note these intersections are not included in the Resource Estimate)

### **Kavaklitepe Gold Project Turkey (Zenith Earning up to 70%)**

- Two coherent plus 800 metre long, high order gold in soil anomalies, with peak soil sample values over 1 g/t gold
- Continuous rock chip traverse of 54.0 metres grading 3.33 g/t gold, including 21.5 metres grading 7.2 g/t gold within the NW soil anomaly (Kuzey Zone)
- Continuous rock chip traverse of 21 metres grading 2.67 g/t gold within the NE anomaly
- Strong chargeable IP geophysical anomaly identified directly beneath high-grade surface rock chip samples (7.68, 22.7 g/t gold) and gold in soil (up to 6.05 g/t gold) at the Kuzey Zone.
- Kavaklitepe has yet to be drilled (only discovered in early 2013)





### Activities in June Quarter

During the quarter Zenith reported (ASX release 7<sup>th</sup> April 2014) successful results from IP geophysical survey trials conducted over two of the major gold in soil anomalies (Guney and Kuzey) at the Kavaklitepe JV project.

Strong chargeability anomalies were detected beneath high-grade gold in soil anomalies.

Two survey configurations were tested (gradient array – grid area and pole-dipole - single lines) both returning strong to moderate chargeable responses (>20Mv/v). Beneath the Kuzey zone a strong chargeable IP geophysical anomaly was identified directly beneath high-grade surface rock chip samples (7.68, 22.7 g/t gold) and gold in soil (up to 6.05 g/t gold), whilst a second strong chargeable IP geophysical anomaly was identified beneath the Guney Zone, potentially associated with cross faulting (Figure 4). At Kuzey the chargeability anomaly lies directly beneath the 900m long (50ppb Au) high-grade gold in soil anomaly (maximum 6050ppb Au, 6.05 g/t Au) and can be detected in the survey data to a depth of at least 100m (Figure 5).

### Planned Activities

The next step in evaluating the Kavaklitepe prospects will include trenching to expose the rock beneath the surface soil cover, followed by drilling. The company is waiting on forestry permits to allow this work to proceed.

### Background on Kavaklitepe Project

Zenith's wholly owned subsidiary S2M2 Coal Pty Ltd has an exclusive option to earn up to a 70% interest in Canadian TSX-V listed Columbus Copper's Kavaklitepe Gold Project located in western Turkey. Columbus Copper reported the discovery of gold mineralization at Kavaklitepe in a TSX-V release dated January 17, 2013. The original discovery was made by following up a stream sediment anomaly with 5.2 grams per tonne ("g/t") gold returned from a rock chip composite in a stream bed outcrop. A small trench in an adjacent road cut was opened up perpendicular to the observed mineralization strike and returned a weighted average grade of 2.67 g/t gold over 21 metres of exposure. About 1.4 kilometres northwest from the discovery outcrop follow up on a soil sample anomaly, peaking at 6.05 g/t gold, led to identification of a brecciated zone striking north east. Four rock samples collected there returned 28.2 g/t, 21.7 g/t, 6.7 g/t and 3.66 g/t gold respectively (see Columbus TSX-V release of March 1, 2013). Further rock sampling along a road bank in this zone confirmed the presence of high-grade gold mineralization returning 54.0 metres of continuous rock chips with an average grade of 3.33 g/t gold, including 21.5 metres grading 7.2 g/t gold (refer to attached table outlining details of sampling).

Columbus Copper also collected a total of 2,127 soil samples on the project in 50 metre x 50 metre and 100 metre x 100 metre grids covering an area of approximately 11 square kilometres, of which 176 samples returned gold grades higher than 50 ppb, 112 - higher than 100 ppb and 40 - higher than 250 ppb with 9 of these samples containing more than 1000 ppb (1 g/t) gold. The soil sampling outlined a potentially mineralized zone measuring 850 metres by 250 metres and continuing for another 800 metres to the southwest and possibly displaced by a northwest southeast trending fault at its southern margin. There are strong, coincident arsenic and antimony anomalies.

Under the Turkish Agreement, S2M2 Coal may earn an initial 51% interest in the Property over three years by, among other things, making US\$400,000 in cash payments of which US\$250,000 was paid on October 9, 2013 and completing US\$2,500,000 in cumulative exploration expenditures on the Property. If S2M2 earns the initial 51% interest in the Property, it may elect to earn a further 19%, for 70% in total, by paying Columbus Copper an additional US\$500,000 and by completing a bankable feasibility study within a four year period. The Turkish Agreement contains other terms and conditions that are customary for an option/joint venture contract.

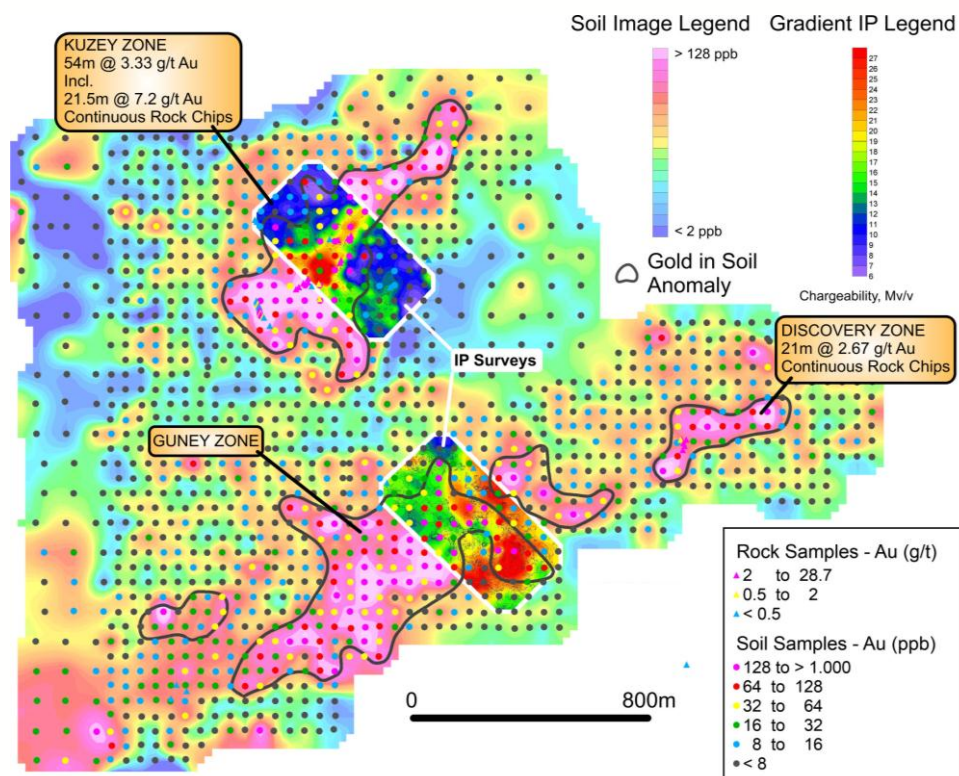


Figure 4: Plan Showing Kavaklitepe Project IP Geophysical Surveys (Images of chargeability at 25m below surface) overlying Gold in Soil Geochemical Anomaly with Rock Chip Sample Locations

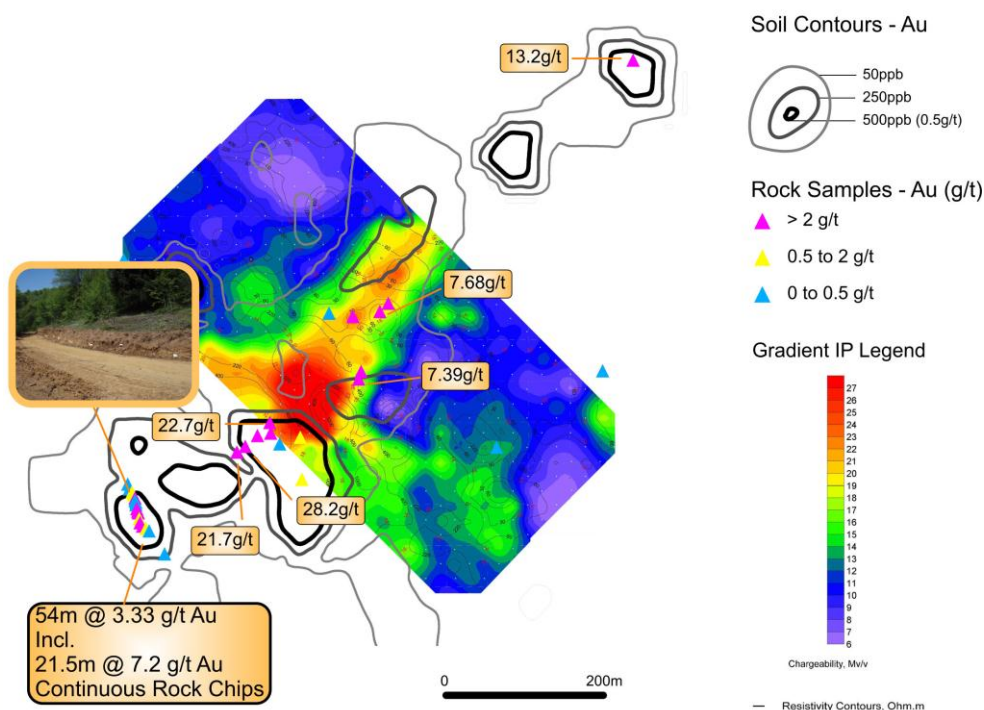


Figure 5: Plan Showing Kuzey Zone Gold in Soil Geochemical Anomaly Contours and Rock Chip Sample Locations overlying IP Geophysical Survey Image of Chargeability (25m depth slice)



### **Earaheedy Manganese Project (Zenith Minerals 100%)**

- Zenith first mover and dominant landholder, recognised potential new manganese (Mn) province in Earaheedy Basin in 2010.
- Strong tenement position - 130 strike kilometres of target manganese horizon.
- New acquisition of Rio Tinto tenure includes airborne EM survey data, covering 30km of strike.
- Manganese appears both structurally controlled and stratiform.
- Zenith's priority target is high-grade near surface oxide grading >40% Mn
- Red Lake 2012 – 1st direct shipping ore (DSO) grade Mn intersected by drilling in Earaheedy Basin;
  - 3m @ 41.0% Mn within 5m @ 34.8% Mn from 22m
  - 1m @ 40.2% Mn within 3m @ 30.7% Mn from 3m

### **Activities in June Quarter**

The acquisition of Rio Tinto's Earaheedy tenements subsequent to the end of the quarter extended Zenith's manganese prospective target horizon in the Earaheedy basin from ~75 kilometres of strike to ~130 kilometres. Previous Zenith drilling immediately south east of the Rio Tinto tenement boundary at the Lockeridge Prospect in 2013 returned: 3 metres @ 25.1% Mn from 8 metres and 3 metres @ 20.2% Mn from 27 metres depth in a gently east dipping horizon as well as mapping and sampling to the immediate south east of the Rio Tinto tenement boundary indicates a possible extension of the manganese horizon into the Rio Tinto leases. Field work has commenced to assess this target area.

In addition to the Rio Tinto tenure a new exploration licence has been successfully applied for by Zenith to cover the Blue Cliff Manganese prospect where previous drilling by a JV managed by Cazaly Resources Limited intersected: 2 metres @ 33.0% Mn from 2 metres and 3 metres @ 26.1% Mn from 22 metres depth (as announced by Cazaly to the ASX - 27 July 2012). Zenith considers there to be potential for the development of additional Mn along strike of the Blue Cliffs occurrence as well as within the area adjacent to the new tenure acquired from Rio Tinto.

### **Background on Earaheedy Project**

The Proterozoic aged Earaheedy Basin north of Wiluna in Western Australia is a potential new manganese province with similarities to the giant Kalahari manganese field in South Africa. As first mover Zenith established a strong land position with tenements now covering ~130 strike kilometres of prospective stratigraphy (Figure 6). Zenith's priority target is high grade (>40% Mn) manganese oxide formed by weathering or supergene upgrade of primary mineralisation.

Zenith completed the first ever drilling for manganese in the western Earaheedy in late 2010 at the Lockeridge prospect, intersecting a shallow dipping bed of primary manganese carbonate mineralisation. Better results from Lockeridge include: 12m @ 11.1% Mn from 28m depth, and 3m @ 18.0% Mn from 37m depth (Figure 7).

Subsequent drilling at the Black and Blue prospect returned thick zones of manganese oxide; 31m @ 7.9% Mn from surface, including: 2m @ 17.1 % Mn, 1m @ 22% Mn and 3m @ 14.3 % Mn.



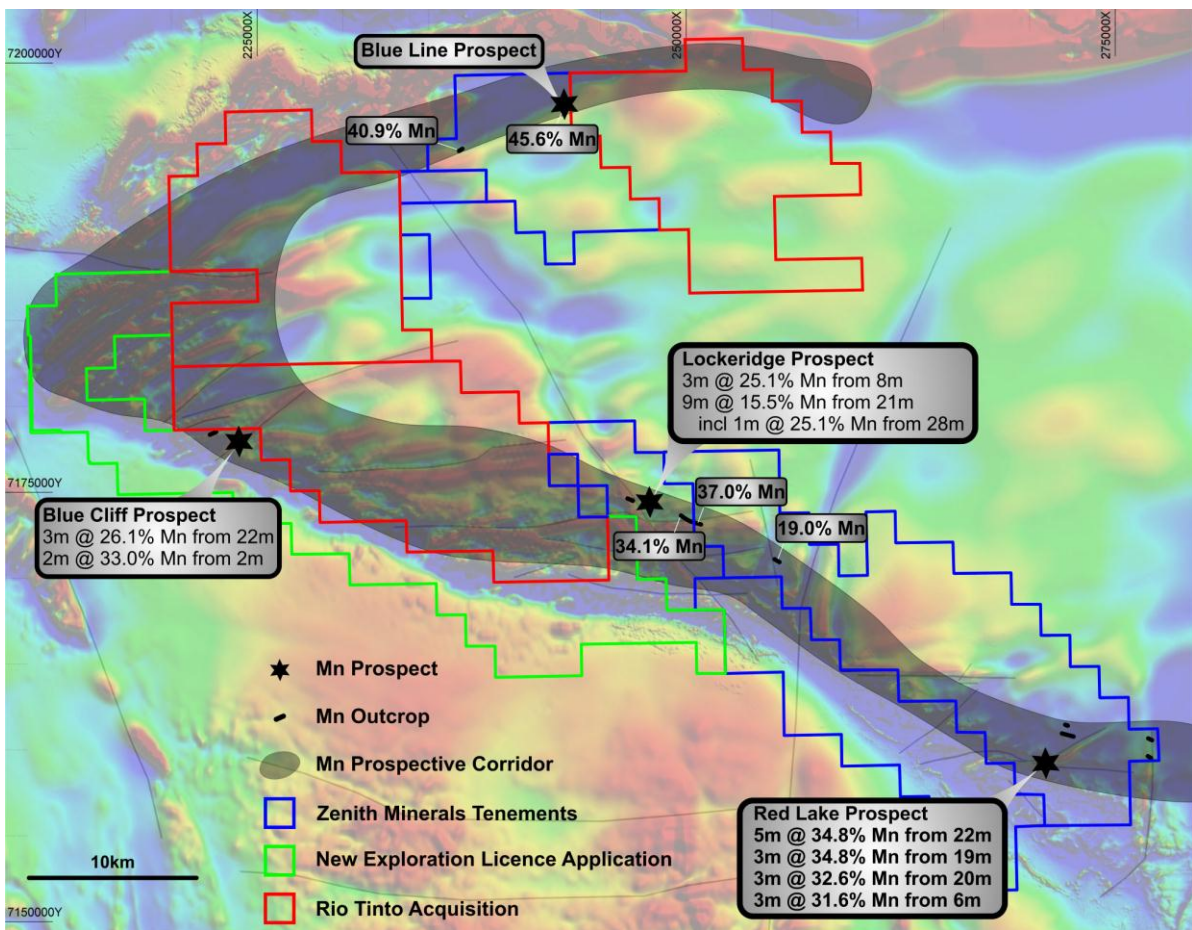


Figure 6. Zenith Tenements and manganese prospects, Western Earraheedy Basin,

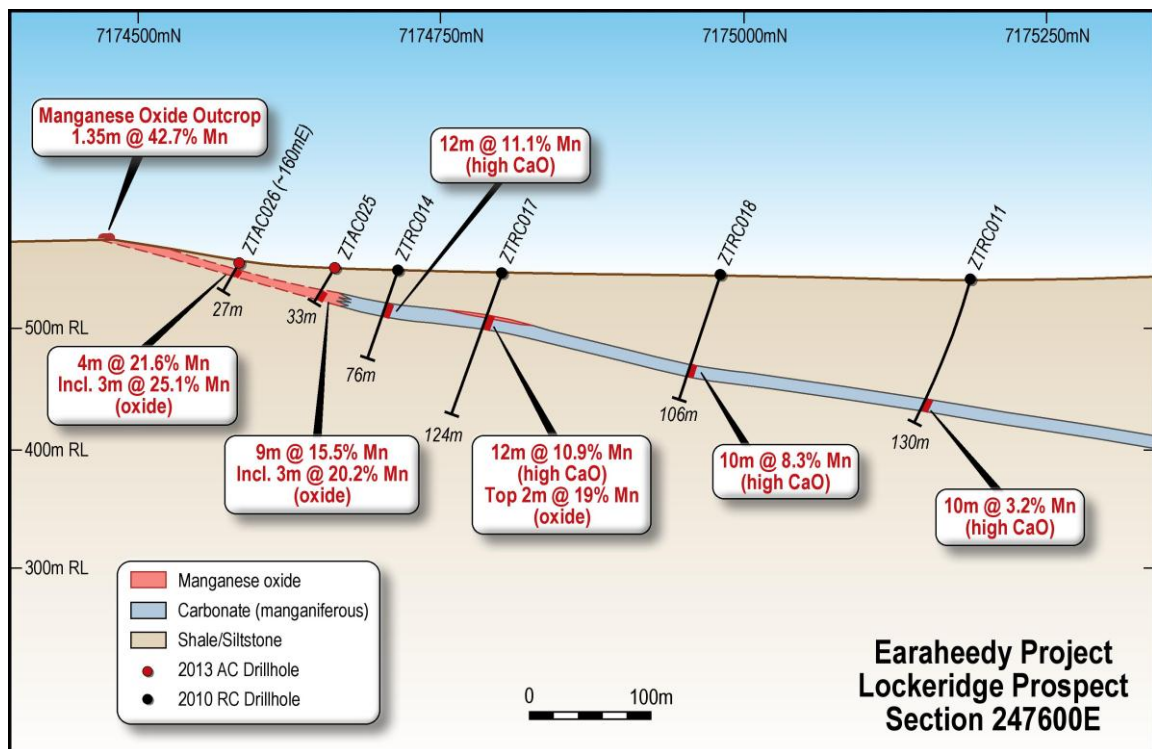


Figure 7. Lockeridge Prospect cross section showing recent up-dip Mn intersections in aircore drill holes (red)



The first DSO grade Mn drill intersections recorded in the Earraheedy Basin were reported by Zenith in 2012 at the Red Lake prospect. Drilling results include; 3m @ 41% Mn (within 5m @ 34.8% Mn from 22m depth), and 3 metres @ 34.8% Mn from 19 metres, including 1m @ 42.3% Mn.

In late 2013 two additional holes drilled at the Lockeridge prospect were very positive, confirming that manganese oxide could persist up to 200m down dip from the high-grade manganese surface outcrops. The primary manganiferous carbonate at Lockeridge is supergene enriched near surface. Previous Zenith drilling completed in 2010 was stepped out more than 250 metres down dip from the outcrop, and intersected primary manganiferous carbonate with Mn grades in the range 3 to 10% Mn for up to 1.2 km down dip. The 2013 program established potential for supergene manganese oxide with both holes intersecting mineralisation. Hole ZTAC026 (3m @ 25.1% Mn incl. 1m @ 29.6%) intersected the target around 100 metres down dip from the high grade outcrop, and hole ZTAC025 (3m @ 20.2% Mn) hit partially oxidised mineralisation around 150m down dip from surface outcrop.

Outcrops of manganese oxide at the Christmas Bore Prospect on the northern side of the Earraheedy Basin were also drill tested in late 2013 for the first time, with 13 holes completed to confirm the presence of manganese mineralisation. The drilling intersected manganese oxide zones interpreted to be associated with a relatively steeply dipping fault (best ZBAC004; 5m @ 16.1% Mn, incl 1 m @ 20.3% Mn and 1m @ 22.7% Mn).

A maiden resource estimate was reported to ASX on 9 April 2013 for the Red Lake prospect. The tonnage/grade estimates are tabulated below at both a 5% and a 10% Mn cut-off grade.

Red Lake Mn Mineral Resource estimate								
Classification	Reporting Cut-off Grade	Tonnes (Mt)	Mn %	Fe %	Si %	Al <sub>2</sub> O <sub>3</sub> %	P %	S %
Inferred	5 % Mn	1.6	15.7	21	23.1	9.8	0.25	0.11
Inferred	10% Mn	1.2	19.0	19.1	20.8	9.4	0.26	0.13

*Note: This information was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.*

#### **Earraheedy Base Metals Project (Zenith Minerals 100%)**

- Irish/MVT Style carbonate hosted zinc and lead (Zn-Pb) mineralisation along western edge of Earraheedy Basin
- Wide spaced (1-10km) historic drilling demonstrates Zn-Pb anomalism over 300km<sup>2</sup>
- Previous drilling intersected:
  - Navajoh Prospect: 7.3m @ 6.1% Zn, 0.77% Pb (incl. 3.3m @ 11.2%Zn & 0.93%Pb)
  - Magazine Prospect: 5m @ 5.6% Zn+Pb (incl. 2m @ 8.2%Zn & 2.8%Pb)
  - Chinook Prospect: 6m @ 3.63% Zn+Pb
- Potential for large scale deposit remains untested.

#### **Activities in June Quarter**

Company geologists re-logged historical diamond drill core from the Earraheedy base metals project held at the GSWA core library in Perth and completed a detailed review of previous work, with a view to assessing controls on higher-grade zinc-lead zones. The work demonstrated clear high-grade zinc-lead trends that require drill follow-up. The company is seeking expressions of interest from third parties who may be interested in advancing the Earraheedy base metals project.



### Mt Alexander Iron (Zenith Minerals 100%)

- **Advantages over other WA magnetite deposits;**
  - Location close to coast and infrastructure (Well located close to sealed roads, gas pipelines and only 120km from coast near Onslow (Mitsui, Chevron ports)
  - Coarser grained = better beneficiation
  - Low waste:ore ratio ~ 1:1, Good compact mining shape
- Base case in 2011 Scoping study - slurry pipeline, tranship by barge to vessel offshore
- 80km to API JV (Aquila-AMCI) West Pilbara proposed railway to Anketell Port – third party access indicated by developers (Note Aquila is subject to a current takeover by Baosteel)
- Prominent range +4 km long, Up to 200 metres thick
- JORC Inferred Resource of 535Mt @ 30 % Fe is only ~ 50% of target iron formation (“BIF”) area. Clear potential to grow resource within significant additional Exploration Target.

### Activities in June Quarter

During the quarter the Company continued assessment of potential process water sources for the Mt Alexander project as well as continuing discussions with various potential partners interested in advancing the Mt Alexander Iron Project.

### Background on Mt Alexander Project

The Mount Alexander Project is 120 km from the port of Onslow, and 260 km south west of Karratha in the West Pilbara region of Western Australia, close to the Pilbara coast, the sealed North West Coastal Highway and the Dampier Bunbury gas pipeline. Planned rail from the nearby West Pilbara Iron Project (Aquila/AMCI JV) to a new port development at Anketell Point provides a possible alternative infrastructure solution.

Zenith has discovered magnetite iron mineralisation occurs in a banded iron formation (BIF) associated with a sequence of amphibolite, dolomite, schist and quartzite of Proterozoic age in the northern Gascoyne Province. These rocks have been metamorphosed to upper greenschist and amphibolite grade.

In May 2013 the Company announced a significant upgrade to the magnetite resource at Mount Alexander. The new Inferred Resource now stands at **535 million tonnes @ 30.0% Fe**.

Mount Alexander BIF Mineral Resource estimate as at May 2013							
		Head Grade					
Classification	Tonnes (Mt)	Fe %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	LOI %	P %	S %
Inferred	535.1	30.0	48.0	2.2	-0.4	0.1	0.46
	DTR	DTR Concentrate Grade					
	Mass Recovery %	Fe %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	LOI %	P %	S %
	24.6	69.9	2.4	0.1	-2.7	0.01	1.1

Substantial additional potential exists for increased tonnage with only ~50% of target BIF drill tested to date. The Company has released (24 May 2013) an **additional Exploration Target of 570 to 680 million tonnes @ 25 to 35% Fe** (excluding the Inferred Resource), in accordance with Section 17 and Section 38 of the JORC Guidelines 2012. *The potential quantity and grade of this Exploration Target is conceptual in nature. There has been insufficient*





exploration to define a Mineral Resource and it is uncertain if further exploration will result in the determination of a Mineral Resource. The Exploration Target has been estimated on the basis of outcrop mapping (by Zenith and by Jigsaw Geoscience, assays from outcrop rock chip samples taken by Zenith, drilling by Zenith (12 RC holes within the Exploration Target) at nominal 300m centres, magnetic susceptibility measurements and total iron and DTR analyses from drill samples, 2.5D profile and 3D inversion modelling of detailed ground (~100-200m line spacing) and airborne magnetic (~50m line spacing) survey data by Core Geophysics. A volume for the magnetite mineralisation was calculated to -100mRL and a bulk density range of 3.1g/cc to 3.7g/cc (consistent with a grade of 25-35wt% iron as magnetite) was applied to the volume derived from the modelling. The updated resource model wireframe was utilised for the Mt Alexander prospect area where appropriate. Further drilling to test the validity of the Exploration Target is planned within the next 2 years subject to receipt of the necessary permits and approvals, and the availability of funding.

A Scoping Study by consultants ProMet was reported to ASX on 10 May 2011. The Study assessed the basic mining, processing and infrastructure requirements, and estimated Capital Costs and Operating Costs. Based on detailed test work on diamond drill core the Study applied a weight recovery of 30.2% at p80 minus 40 micron grind and a DTR concentrate grade of 69.9% Fe and 3.0% SiO<sub>2</sub>. The Base Case selected included processing by crushing, grinding, wet magnetic separation. The Base Case transport option for the concentrate was by slurry pipeline 120 km to the coast near Onslow, and transport by barge to an offshore mooring for transfer into ships for export (transshipment).

*\* The Scoping Study referred to in this report is based on low-level technical and economic assessments, and is insufficient to support estimation of Ore Reserves or to provide assurance of an economic development case at this stage, or to provide certainty that the conclusions of the Scoping Study will be realised.*

Pre-feasibility study elements undertaken aimed at de-risking the project include; finalised Level 1 and Level 2 flora & flora surveys (which did not identify any major environmental triggers), work on securing access to a project water supply, and investigation of export infrastructure options and bulk material transshipment technology.

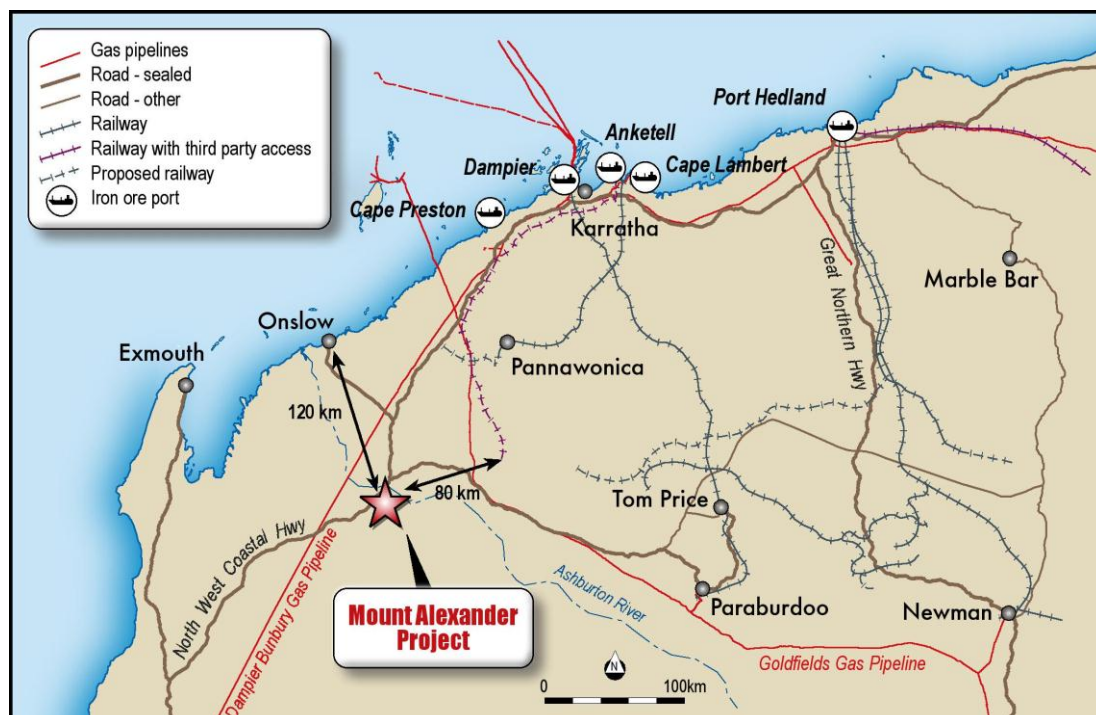


Figure 6: Mount Alexander Project location and proximity to coast and regional infrastructure





#### **Mt Minnie Gold Project (Zenith Minerals 100%)**

- New geological model – project prospective for reduced intrusion related gold deposits (trace element metal association including: bismuth, molybdenum and tungsten).
- 7 existing gold prospects over 50km of strike
- High-grade rock samples include: 64.2 g/t gold, 21.5 g/t gold
- Only cursory reconnaissance exploration activity to date by previous explorer focused on nearby Minnie Springs molybdenum deposit

#### **Activities in June Quarter**

The exploration licenses were granted during the quarter. Regional government airborne electromagnetic survey data (GSWA-Geoscience Australia - Capricorn Tempest Survey) was processed and interpreted. The 5km line spaced regional data is a useful tool in determining the depth of shallow cover sequences that overly portions of the project area. Initial field reconnaissance is planned to commence in the coming quarterly period.

#### **Background on Mt Minnie Project**

The Mt Minnie project consisting of two exploration licences is situated approximately 240 km northeast of Carnarvon in Western Australia. The Mt Minnie North – Ram West tenements cover a portion of terrain composed predominantly of mid-Proterozoic granite assigned to the Minnie Creek batholith prospective for reduced intrusion related gold deposits. The project has 7 existing gold prospects requiring follow-up that to date have only been the subject of cursory reconnaissance exploration activity.

Mt Minnie North (E09/2063) – Previous rock chip sampling at the Woods Prospect has identified a zone of very positive gold results including: 21.5 g/t Au, 0.49 g/t Au, 0.3 g/t Au, 0.15 g/t Au and 1.09 g/t Au. In addition rock chip sampling has returned up to 6.64g/t Au from the Osborne Well/Neptune Prospect area, located approximately 12 km to the south east of Woods Prospect. Mineralisation at all prospects is associated with quartz veining and sheared-altered granite.

Ram West (E09/2064) – Previous prospecting has defined 5 gold prospects over an area 10km x 5km that have not been followed up after their initial discovery: Ram West – gold to 0.85 g/t Au with associated bismuth (0.14%), tungsten and molybdenum, Fenceline – gold up to 64.2 g/t Au, Roadside - gold up to 0.3 g/t Au with associated tungsten and molybdenum, Michelle's Copper – gold up to 0.6 g/t Au with associated bismuth (0.2%), molybdenum (278 ppm), tungsten (0.12%) and copper (3.6%), Clay pan – gold up to 0.28 g/t Au.

#### **SW Yilgarn – New Exploration License Applications (100%)**

- Bottleneck - previous high-grade gold drill intersections up to 3m @ 12.2g/t gold & 6m @ 10.0g/t gold
- Nanicup Ridge (previous drill intersections up to 3m @ 10.9g/t and 3m @ 3.92g/t Au)



## Activities in June Quarter

Two new exploration license applications were submitted during the quarter to cover the historic Bottleneck and Nanicup Bridge prospects and along strike targets.

Following a review of the previous exploration activities, Zenith has outlined a well-defined high-grade gold target that is ready for walk-up drill testing.

## Background on SW Yilgarn Project

Exploration licence E70/4587 (Bottleneck) was applied for to cover the former Quadrio Resources (Dominion Mining) high-grade gold prospect Bottleneck which to date has had limited follow-up drill testing post initial discovery.

Previous near-surface high-grade gold drill intersections (ASX release 11/02/2013 by Caravel Minerals Limited ASX:CVV a company that was spun-out from Dominion in 2013) at Bottleneck include:

- 3m @ 12.2g/t gold (within 21m @ 3.5 g/t gold),
- 6m @ 10.0g/t gold,
- 1m @ 75.0g/t gold (within 12m @ 7.5g/t gold) &
- 1m @ 22.0g/t gold (within 7m @ 6.3 g/t gold).

In addition to the Bottleneck prospect, E70/4588 (Nanicup Ridge) was applied for to cover the former Dominion Mining/Caravel Minerals Limited prospect Nanicup Bridge, where exploration from 2001 to 2009 led to the definition of an extensive system of gold anomalism (4.2 strike km). Previous drill hole gold intersections at Nanicup Ridge (reported to the Department of Mines and Petroleum – WAMEX Number a075240) include:

- 3m @ 10.99g/t gold and
- 3m @ 3.92g/t gold.

The Nanicup Ridge Prospect has many similarities to the giant Tropicana gold system (>7Moz Au), including host rock, alteration, thickness of mineralised shear and geochemical signature.

The information regarding Exploration Results from the SW Yilgarn Project was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.

### **Mt Russel Copper – New Exploration License Application (100%)**

- **Near surface copper exploration results in historic shallow drilling**
- **Yerrida basin setting, same host sequence as Thaduna Green Dragon copper deposits under assessment 100km to the north**

## Activities in June Quarter

A new exploration license application was applied for during the quarter to cover an area of the historic copper exploration results in the southern Yerrida Basin.

## Background on Mt Russel Project

Exploration licence E53/1809 (Mt Russel) encompasses historic copper exploration results reported by ACM in 1983 (GSWA – WAMEX Report a12928) including: 10m @ 0.28% Cu from 10m down-hole, in the oxidized portion of the hole of a regional stratigraphic drill hole.

The project area covers the southern margins of the Yerrida Basin (Maraloou formation) – part of the Capricorn Orogenic belt. A number of explorers are active in the northern portion of the Yerrida Basin including: Sipa



Resources Limited (ASX:SRI) who have reported promising results from their Thaduna copper project and Sandfire Resources NL (ASX:SFR) and Joint Venture partner Ventnor Resources Limited (ASX:VRX) who are assessing the Green Dragon copper project.

The Mt Russel area is considered a viable near surface flat lying oxide copper target amenable to potential cheap mining and processing via solvent extraction electrowinning, similar to the near surface copper oxide deposits of the mid-western USA, that overly the large porphyry copper deposits

#### **Sungai Roi Coal Project - Indonesia (Right to earn 90%)**

- Coal concession in East Barito, Kalimantan, Indonesia
- Multiple, flat lying high-grade thermal coal seams crop out over 3km of strike.
- Close to existing infrastructure including haul roads and barge loading facilities
- Conditional offer received, US\$500,000 in staged payments and royalty of US\$1.00/tonne coal mined for S2M2 Coal's rights

#### **Activities in June Quarter**

No field activities were conducted during the quarter.

#### **Background on Sungai Roi Project**

The Sungai Roi coal concession in East Barito, Kalimantan, Indonesia contains an Exploration Target estimated in accordance with Section 17 and Section 38 of the JORC Guidelines 2012 of approximately 1 to 1.2 million tonnes of high-grade (6800 - 6900 kcal/kg GAR) thermal coal. \*The potential quantity and grade of this Exploration Target is conceptual in nature. There has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the determination of a Mineral Resource.

The Exploration Target was estimated by S2M2 Coal based on detailed mapping and sampling of 14 shallow dipping coal seams exposures over a strike length of 3km within a width of 800m and a 40m vertical range based on topographic contours. Cumulative coal seam thickness is up to 1.87m. Drilling to test the validity of the Exploration Target is recommended subject to receipt of necessary permits and approvals.

S2M2 Coal has the exclusive right to conduct due diligence on the Sungai Roi coal concession and the option, at its election, to acquire a 90% interest in the company owning the Sungai Roi coal concession. The multiple, flat lying coal seams on the concession crop out over 3km of strike within an area of gently undulating topography. The project is also close to existing infrastructure including haul roads and barge loading facilities that have the potential to reduce the upfront capital costs and time frame for development of the project.

In October 2013, S2M2 Coal received a conditional offer from an Indonesian entity to purchase S2M2 Coal's rights in respect of the Sungai Roi Coal Project for consideration of US\$500,000 in staged payments and a US\$1.00 royalty per tonne of coal mined. The company is awaiting confirmation of clean and clear title to the coal license.



## **NEW OPPORTUNITIES**

The Company is continuing to assess a number of resource opportunities that have both synergies with existing Zenith projects or that will enhance the Company's existing project portfolio.

## **CORPORATE**

During the quarter the Company received \$256,000 as a Federal Government R&D Tax Refund. The funds will be applied towards the ongoing assessment of the company's project portfolio.

**Zenith Minerals Limited**

**30<sup>th</sup> July 2014**

**For further information contact;**

**Directors Michael Clifford or Mike Joyce**

**Phone 08 9226 1110**





*The information in this report that relates to Zenith Exploration Results and Exploration Targets is based on information compiled by Mr Michael Clifford, who is a Member of the Australian Institute of Geoscientists and an employee of Zenith. Mr Clifford has sufficient experience which is 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'. Mr Clifford consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*

*The information in this Report that relates to in-situ Mineral Resources at the Develin Creek project is based on information compiled by Ms Fleur Muller an employee of Geostat Services Pty Ltd. Ms Muller takes overall responsibility for the Report. She is a Member of the AusIMM and has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity she is undertaking, to qualify as a Competent Person in terms of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2012 Edition). Ms Muller consents to the inclusion in the report of the matters based on her information in the form and context in which it appears.*

*The information in this report that relates to Zenith Exploration Targets at Mt Alexander is based on information compiled by R M Joyce, who is a director of the Company and a Member of the AusIMM. Mr Joyce has sufficient experience which is 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'. Mr Joyce consents to the inclusion in the report of the matters based on his information in the form and context in which it appears. This information was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.*

*This information in this Report that relates to in-situ Mineral Resources at Zenith's Mount Alexander project is extracted from the 24 May 2013 ASX release entitled 'Mount Alexander Resource Upgrade' which is available to view on the Company's website ([www.zenithminerals.com.au](http://www.zenithminerals.com.au)). The Company confirms that it is not aware of any new information or data that materially affects the information included in the 24 May 2013 market announcement, and that all material assumptions and technical parameters underpinning the Mineral Resource estimate in the 24 May 2013 market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.*

*The information in this Report that relates to in-situ Mineral Resources at Zenith's Red Lake project is based on information compiled by Grant Louw an employee of CSA Global. Grant Louw takes overall responsibility for the Report. He is a Member of the Australian Institute of Geoscientists and has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity he is undertaking, to qualify as a Competent Person in terms of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2004 Edition). This information was prepared and first disclosed to ASX on 9 April 2012 under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.*



**Table 1**  
**Section 1 Sampling Techniques and**  
**Data – Develin Creek Project**

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<i>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</i>	A total of 49 diamond holes and 256 PD holes (+ 7 water bores) were drilled for a total of 58,160m (15,053.60m diamond; 42,577m PD; 529m WB) over a period of 3 ½ years (Dec 1992 to July 1996). Diamond drillholes were generally sampled at 1 to 2m intervals and half core splits (some ¼ core) sent to the laboratory. Percussion drill holes (including pre-collars) were generally sampled by compositing samples from the rig into 3m samples (mineralised intervals sampled @ 1 to 2m).
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	Diamond and percussion sample representivity was ensured by a combination of company procedures regarding quality controls (QC) and quality assurance (QA). Standard procedures and templates used for logging, sampling, sample submission and data entry. Mineralised intervals (generally massive sulphides) were geologically distinct from volcanic host rocks and sampled accordingly (generally 1-2 m ½ or ¼ core or 1-2m percussion). Higher grade samples re-assayed and sample pulps retained. Limited field duplicates submitted (either ¼ core or percussion duplicates). Blanks and standards included by laboratory but not submitted with sample dispatches. Assays of key intervals checked by subsequent re-sampling / multi-element analysis.
	<i>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</i>	Industry standard practices for sampling techniques for the style of mineralisation were employed at the Develin Creek deposit. Diamond core within mineralisation zones (some HQ generally NQ) was sampled at 1 -2 m intervals, and half core splits (some ¼ core) sent to the laboratory. PD samples were obtained by compositing samples from the rig into 3m samples unless sulphide mineralisation was noted then shorter 1 or 2m intervals were sampled). Samples from each percussion interval were collected in a cyclone and split using a 3 level riffle splitter. Wet samples were grab sampled for assay and the residual sample left to dry for later resampling if necessary. Samples were assayed for base metals using AAS and gold using fire assay. All grade intervals (> 1% base metals) were re-assayed by higher precision techniques and selected intercepts subsequently submitted for multi-element analysis by ICP



Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	Diamond drilling comprises HQ or more generally NQ sized core. This drilling generally involved percussion pre-collar through tertiary cover; then HQ or NQ to end of hole. Drill hole depths range from 90.7m to 507.5m. Core was generally un-oriented (vertical holes) although spear orientations were recorded in some angled holes) Open hole PD drilling comprised a nominal 5 ½ inch diameter hammer with all holes cased with PVC to solid basement. Hole depths range from 21m to 310m. About 25% of the PD holes were abandoned prior to achieving their intended depth due to unfavourable drilling conditions and extreme difficulty in penetrating the tertiary cover.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	Diamond core recovery was logged with minimal core loss recorded in mineralised intervals. PD recovery was visually assessed and considered to be acceptable within the mineralized zones.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Diamond core was reconstructed into continuous runs, depths being checked against the depth marked on the core blocks. PD samples were visually checked for recovery, moisture and contamination. A cyclone and splitter were used to provide a uniform sample and these were routinely cleaned.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	Sample recovery was generally very high within the mineralisation zones. No bias is expected to have occurred during sampling
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	Diamond core and PD drill chips underwent detailed logging through the entire hole, with records kept of lithology, degree of oxidation, etc. Diamond core was geotechnically logged for recovery. Diamond core was stored on site with key holes systematically re-logged and re-sampled
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	Diamond core and PD chip logging included records of lithology, mineralisation, and alteration. Core was photographed and magnetic susceptibility logged with selected samples submitted for petrography.
	The total length and percentage of the relevant intersections logged.	All drill holes were logged in full apart from some pre-collars through the cover sequence.
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	Diamond core was sawn in half, with half core (some ¼ core) samples were also submitted for assay analysis
	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	PD samples were collected on the rig using standard cyclone and riffle splitters. Samples were recorded if dry or wet.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	For core the 1 – 2 m sawn samples are considered appropriate and sample recovery and contamination were monitored for the percussion holes.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Standardised procedures were used for sample collection, recording and submission.



Sub-sampling techniques and sample preparation - continued	<i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i>	Limited field duplicates of PD and ¼ core were submitted during initial sampling. Both pulps and coarse rejects (and remaining core) were retained and subsequently resampled. No twinning of holes was conducted.
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	Sample sizes are considered to be appropriate to accurately represent the base metal mineralisation at Develin Creek based on the thickness and consistency of the intersections, the sampling methodology and the percent value assay ranges for the primary elements.
Quality of assay data and laboratory tests	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	The analytical techniques used were AAS for base metals and fire assay for gold with re-analysis of all elevated (>1%) base metal samples supplemented by multi-element ICP analysis of selected mineralised intervals as considered appropriate.
	<i>For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i>	No geophysical or hand-held tools were utilised for the drilling programmes (magnetic susceptibility was locally collected)
	<i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i>	Limited duplicates were submitted and standards and blanks were included by the laboratory. Subsequent re-sampling and check analyses (and re-assay of mineralised samples) is acceptable
Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	Significant intersections have been verified by personnel of subsequent companies working on the project including a systematic program of re-sampling pulps and core by Outokumpu during the mid-1990's. Samples were visually inspected to confirm sulphide content and ¼ samples were re-submitted for re-analysis of selected portions of the mineralised intervals.
	<i>The use of twinned holes.</i>	No twinning of holes was conducted on the Develin Creek deposit.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	Field data was all recorded on paper hardcopies (geological logging, sampling intervals, sample submission forms, density determinations etc on standardised templates). These data have been transferred to a digital database.
	<i>Discuss any adjustment to assay data.</i>	No adjustments were made, other than for values below the assay detection limit which were entered into the assay database as the negative of the detection limit.
Location of data points	<i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i>	Drill hole collar positions were surveyed by licenced surveyors with some crosschecking using conventional and differential GPS.  Down hole survey for some diamond holes at end of hole using an Eastman survey camera show minimal deviation. No survey was completed for PD holes.





	<i>Specification of the grid system used.</i>	A local grid was established in 1993 by a licenced surveyor and oriented AMG grid north, points on the baseline were subsequently picked up with differential GPS in 1995 to facilitate accurate grid conversions.
<i>Location of data points - continued</i>	<i>Quality and adequacy of topographic control.</i>	The topography and drill collar locations and elevations were accurately surveyed by a licenced surveyor over the period 1993-94 and a topography surface generated from these data.
<i>Data spacing and distribution</i>	<i>Data spacing for reporting of Exploration Results.</i>	Drill holes were generally spaced 50m along strike, and 50m across-strike.
	<i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i>	The data spacing and distribution is sufficient to demonstrate spatial and grade continuity of the mineralised horizon to support the definition of Inferred Mineral Resources under the 2012 JORC code.
	<i>Whether sample compositing has been applied.</i>	Percussion samples were composited to 3m intervals and submitted for assay analysis however most mineralised intercepts incorporated in the resource model were sampled over 1-2m intervals.
<i>Orientation of data in relation to geological structure</i>	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	In Sulphide City, drilling sections are orientated North West to South East with respect to grid north. This orientation is perpendicular to the strike of the sulphide lenses. The majority of the drilling at Sulphide City is vertical, adequately testing the gently dipping sulphide lenses.  In Scorpion, drill sections are orientated North to South with respect to grid North. The majority of the drilling is drilled towards the South, with -60° dipping holes adequately testing the steeper lenses.
	<i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i>	The drill hole orientations detailed above were planned to intersect the mineralised lenses as close to a perpendicular angle as possible, and thus it is not believed any sampling bias was introduced regarding the orientation of main structures.
<i>Sample security</i>	<i>The measures taken to ensure sample security.</i>	Drill core was logged and sampled at the Marlborough exploration compound with bagged samples dispatched by road freight to the laboratory in Townsville. PD samples were sub-sampled and sealed in polyweave bags at the drill site for dispatch to the laboratory.
<i>Audits or reviews</i>	<i>The results of any audits or reviews of sampling techniques and data.</i>	Sampling techniques are consistent with industry standards. Consistency of data was validated upon import into the database (eg overlapping/missing intervals, intervals exceeding maximum depth, missing assays etc). Any data which failed the database constraints was assessed for validation and fixed. Global consistency was also checked subsequently by plotting sections and reconciling assays against geology and drill orientations



## Section 2 Reporting of Exploration

### Results – Develin Creek Project

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i>	The deposit is located within EPM 17,604 the 100% Fitzroy Copper Pty Ltd owned exploration licence. Zenith has entered an agreement with Fitzroy Resources, owner of Fitzroy Copper. The prospect is located within the Forrest Home Pastoral Lease.
	<i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i>	The tenement is in good standing with no known impediment to future grant of a mining lease
<i>Exploration done by other parties</i>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	<p>Mineralisation was first identified in late 1992 by Queensland Metals Corporation (QMC) over what is now the Scorpion deposit. Between 1993 and mid-1995, QMC undertook an extensive geological and geophysical exploration program focused on the Develin Creek area and other prospects to the South.</p> <p>In July 1995, QMC entered into a joint venture agreement with Outokumpu Mining Australia Pty Ltd (OMA) to continue exploration. OMA completed the first resource estimate for the Develin Creek deposits, then withdrew from the joint venture in 1996 and QMC (later changed names to Australian Magnesium Corporation) maintained the tenements until relinquishment in 2002.</p> <p>Icon Limited (Icon) acquired the tenement and in 2007 completed this resource estimate for Sulphide City, Scorpion and Window from historical drilling data.</p> <p>Fitzroy Resources acquired the project from Icon and listed via prospectus dated October 2010 and subsequently completed a HeliTEM survey, minor DHEM, some geochemical sampling and drilling of 12 holes). Of those 12 holes, 6 diamond holes were drilled to the south and east of the Develin Creek resource. Drill hole FRWD0002 collared near the southern edge of the resource intersected 13.2m grading 4.0%Cu, 4.0%Zn, 0.5g/t Au and 30g/t Ag in massive sulphide from 182m. The mineralisation was intersected in a position that extends the known limits of the resource by around 40m to the south where it remains open to further upside. In addition Fitzroy completed 3 RC holes at the Lygon Prospect and a further 2 south of the Develin Creek resource area.</p> <p>This resource estimate encompasses the drilling completed by QMC during that period of time. Fitzroy's drilling is not part of this estimate.</p>
<i>Geology</i>	<i>Deposit type, geological setting and style of mineralisation.</i>	The Develin Creek base metal project hosts several copper-zinc-gold-silver volcanic hosted massive sulphide (VHMS) deposits and covers an extensive belt of underexplored prospective volcanic rocks. Mineralisation comprises massive sulphide, stringer and breccia style copper-zinc-gold-silver deposits, hosted by basalts.



Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:	Refer to table at the end of this ASX release
	o easting and northing of the drill hole collar	
	o elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar	
	o dip and azimuth of the hole	
	o down hole length and interception depth	
	o hole length.	
	If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	Simple down hole arithmetic weighted average grades reported, Minimum cut-off grade of 1% copper over 1m width, high grade cutting not required unless otherwise stated in the Table in the body of this ASX release
	Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	Maximum internal dilution of 2m, unless otherwise stated in the Table in the body of this ASX release
Data aggregation methods - continued	The assumptions used for any reporting of metal equivalent values should be clearly stated.	Metal equivalents not used
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results.	Drill holes are generally vertical within the main Sulphide City deposit and the Sulphide City lenses are flat to gently dipping, therefore reported intersections are close to true width. At Scorpion – true widths are 80% - 90% of intervals reported.
	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	Reported above
	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	Refer to above
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Refer to figures in Zenith ASX Release 14-07-14



Balanced reporting	<i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i>	Refer to table at the end of this ASX release
Other substantive exploration data	<i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i>	Surface sampling and mapping were completed over different field campaigns by QMC and subsequent companies. Several geophysical surveys were completed by different companies (aeromagnetism, induced polarisation, electromagnetics). No significant metallurgy testwork was completed.
Further work	<i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i>	More drilling is planned to test for extensions of the mineralised bodies and eventually upgrade the resource estimate.
	<i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	Refer to figures in Zenith ASX Release 14-07-14



## Section 3 Estimation and Reporting of Mineral Resources – Develin Creek Project

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	<i>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</i>	An Access database and comma delimited files were provided to Geostat Services Pty Ltd (Geostat) by Icon. The resource drillhole database comprises 256 percussion holes, 49 diamond drillholes and 7 water bore holes, for a total of 58,160m. Drillhole depths vary from 21m to 508m, with an average depth of 186m.
	<i>Data validation procedures used.</i>	Data validation steps included, but were not limited to the following: <ul style="list-style-type: none"> <li>• Validation through database constraints eg overlapping/missing intervals, intervals exceeding maximum depth, missing assays.</li> <li>• Validation through 3D visualisation in 3D software to check for any obvious collar, downhole survey, or assay import errors.</li> </ul>
Site visits	<i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i>	No site visit was undertaken by the Competent Person.
	<i>If no site visits have been undertaken indicate why this is the case.</i>	A site visit was not undertaken as there is limited geology to observe given cover sequence over the top of the sulphide deposit. There are currently no ongoing resource related field activities and the resource is not exposed at surface except for a small gossan zone at Window. Drill core photos were made available for review.
Geological interpretation	<i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i>	There is a reasonable level of confidence in the geological interpretation of massive sulphide horizons traceable over numerous drill holes and drill sections. Additional work (infill drilling) is required to better define exact geometry of the interpreted mineralised horizons. Further work is also needed to better define the structural geological framework.
	<i>Nature of the data used and of any assumptions made.</i>	Surface mapping of outcrop, drill hole intercept logging and assay results as well as limited structural interpretations have formed the basis for the current geological interpretation. Very little surface expression of the massive sulphide exists.
	<i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i>	The precise extents and geometry cannot be defined due to the limitations of the current drill coverage. Further work is required to better define the geometry and extents of the mineralised sulphide horizons but no significant downside changes to the interpreted mineralised volume are anticipated.





Geological interpretation - continued	<i>The use of geology in guiding and controlling Mineral Resource estimation.</i>	<p>All wireframes have varying orientations and dips, following the upper contact of pepperites (ancient sea-floor horizons). A combination of assays and lithology were used to define these wireframe envelopes, with a cut-off of approximately 1%Cu and 1%Zn to separate mineralisation from waste.</p> <p>Base of weathering intercepts were also supplied, and a base of oxidation weathering surface was constructed from these points.</p>
	<i>The factors affecting continuity both of grade and geology.</i>	The mineralised unit is clearly affected by faulting with further work required to define the structural geological framework of the deposit and thus refine the lithological interpretation.
Dimensions	<i>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</i>	The three mineralisation zones cover a total extent of 555m north-south and 705m east-west, with a maximum vertical extent of 250m.
Estimation and modelling techniques	<i>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</i>	<ul style="list-style-type: none"> <li>• A total of 6 wireframe envelopes (domains) were utilised for interpolation, comprising the two main mineralisation zones present.</li> <li>• No top-cuts were necessary for Cu, Pb, Ag and Au, as their spread of data was considered to comprise low variance, and all displayed a low coefficient of variation. Top-cuts were applied to Zn for selected wireframes where the coefficient of variation was high, and/or there was a large variance present.</li> <li>• Variography analysis was not possible, due to insufficient data levels. As the wireframes exhibit different orientations in both strike and dip, the wireframe composites could not be grouped together for variography analysis, as would be the normal case in the situation of low data levels.</li> <li>• A 3D block model was generated using Gemcom software. Parent blocks of 10m x 10m x 2m size (Y*X*Z) were generated, with the wireframes used to limit the blocks available for grade interpolation, and block centroid locations used to define the blocks for interpolation.</li> <li>• Inverse distance squared interpolation was used to estimate all element grades for the Develin Creek deposit. Each wireframe was treated as a separate hard boundary, restricting the grade interpolation to drillhole data located within each lode.</li> </ul>



		<ul style="list-style-type: none"> <li>A minimum of 2 samples and a maximum of 20 samples were used to interpolate grades into each block. Two interpolation passes were conducted for all wireframes.</li> </ul>
Estimation and modelling techniques - continued	<p><i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></p>	<p>The Develin Creek deposit was previously interpreted and modelled by Outokumpu in 1995, using a manual sectional resource method (non-JORC compliant). Three Cu-Zn mineralised bodies were interpreted, these being Sulphide City, Scorpion and Window. The easternmost bodies, the Sulphide City and the Sulphide Heights are lenses of massive sulphides with 0.6 Mt @ 2.28% Cu and 4.01% Zn, while the Scorpion body 500m southwest is a reworked breccia mineralisation with 0.3 Mt @ 2.52% Cu and 1.79% Zn.</p> <p>The Outokumpu geological interpretations based on detailed drill core logging were used as a guide to creating the resource wireframes of the current estimate.</p> <p>No mining has taken place in this deposit.</p>
	<p><i>The assumptions made regarding recovery of by-products.</i></p>	<p>No assumptions have been made with respect to the recovery of by- products or individual metals.</p>
	<p><i>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</i></p>	<p>No acid mine drainage or deleterious element studies have yet been commissioned.</p>
	<p><i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></p>	<p>Parent blocks of 10m x 10m x 2m size (Y x X x Z) were utilised for interpolation. . This compares to the average drillhole sample spacing of 50m along-strike and across-strike. A larger block of 20m x 20m x 5m was initially attempted in order to minimise conditional bias, however, the differing orientations of wireframes and variation in size prevented optimal filling of wireframes by blocks, hence a smaller block size was implemented. Search ellipses for initial interpolation of grades were tailored to individual wireframes, averaging approximately 50m x 35m x 10m.</p>
	<p><i>Any assumptions behind modelling of selective mining units.</i></p>	<p>No selective mining units were assumed in this estimate.</p>
	<p><i>Any assumptions about correlation between variables.</i></p>	<p>No assumptions were made regarding correlation between individual elements.</p>
	<p><i>Description of how the geological interpretation was used to control the resource estimates.</i></p>	<p>A combination of assays and lithology were used to defined the wireframe envelopes, with a cut-off of approximately 1%Cu and 1%Zn to separate</p>



		mineralisation from waste in addition to known lithological boundaries.
Estimation and modelling techniques - continued	<i>Discussion of basis for using or not using grade cutting or capping.</i>	No top-cuts were necessary for Cu, Pb, Ag and Au, as their spread of data was considered to comprise low variance, and all displayed a low coefficient of variation. Top-cuts of 10% or 12% were applied to Zn for two selected wireframes where the coefficient of variation was high, and/or there was a large variance present, in addition to the above criteria.
	<i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i>	The Develin Creek block model was validated by several methods, including visual validations on-screen, and global statistical comparisons of input and block grades. The model was validated visually by viewing vertical sections and plans of the block model, with spatial comparison of interpolated block grades against input composite grades to ensure grade trends were represented correctly. A reasonable overall reconciliation exists between average input composite grades and mean block grades, with most model mean grades reporting within $\pm 15\%$ of composite averages.
Moisture	<i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i>	The tonnages are estimated on a dry basis.
Cut-off parameters	<i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i>	The classified Mineral Resource is reported beneath the topography surface using a 1%CuEq cut-off. This cut-off corresponds with the visual mineralisation as determined by the pepperite horizons. This cut-off was also chosen to reflect reasonable prospect for economic extraction at the appropriate grade population.
Mining factors or assumptions	<i>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</i>	The 2m vertical block size was selected to represent the thickness of a potential underground or open pit selective mining block unit. Exploitation of the Develin Creek deposits would likely be by a combination of open pit (for near surface resources) and underground selective mining methods such as room and pillar for the flat lying sulphide zones. No assumptions have been included in this estimate for external mining dilution.
Metallurgical factors or assumptions	<i>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation</i>	No metallurgical testwork was completed over the mineralisation at Develin Creek. However, sulphides appear coarse grained and consistent with other massive sulphide deposits of a similar nature that are currently in production. Testwork will be completed at a future date.



	<i>of the basis of the metallurgical assumptions made.</i>	
<i>Environmental factors or assumptions - continued</i>	<i>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</i>	This project is only at an early stage of its life and no detailed assumption regarding possible waste and process residue disposal options have been made yet. No unusual flora or fauna was observed on the project however environmental surveys still remain to be done.
<i>Bulk density</i>	<i>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</i>	A total of 89 density values from diamond drill core were supplied by Icon. Samples were selected within mineralisation zones in diamond drill core and submitted for SG determinations. The standard methodology of drying core samples, and then calculating the SG by subtracting the weight in water from the weight in air was used.
	<i>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.</i>	It is not known whether the samples were dried and coated in wax prior to water immersion to account for void spaces and moisture content. It is planned to take more density determinations with future drilling using industry-recognised methodology.
	<i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i>	Wireframes 100 and 600 sit entirely within the oxide weathering zone, and hence exhibit a lower density than those in fresh material. No SG values were available for the oxide zone within the 100 wireframe, and a nominal SG of 3.00 was allocated to this wireframe. A high SG of 4.07 is present for fresh ore within the Sulphide City zone, which is due to the presence of massive sulphides within mineralised zones.
<i>Classification</i>	<i>The basis for the classification of the Mineral Resources into varying confidence categories.</i>	<p>The Mineral Resource for the Develin Creek deposit has been classified in accordance with the guidelines outlined in the "Australian Code for Reporting of Identified Mineral Resources and Ore Reserves" (JORC, 2012 edition). Assessment criteria include drill hole spacing, sample locations, sampling density, lode geometry, reliability of data, geological confidence and grade continuity.</p> <p>The Develin Creek resource has been classified as wholly Inferred taking into account the above parameters</p>



	<p><i>Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</i></p>	The Inferred classification has taken into account all available geological and sampling information, and the classification level is considered appropriate for the current stage of this project.
	<p><i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></p>	The Mineral Resource estimate appropriately reflects the view of the Competent Person.
Audits or reviews	<p><i>The results of any audits or reviews of Mineral Resource estimates.</i></p>	No audits of the Mineral Resource estimate have been undertaken at this time.
Discussion of relative accuracy/ confidence	<p><i>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</i></p>	The relative accuracy of the Mineral Resource estimate is reflected in the classification of the Mineral Resource as Inferred as per the guidelines of the 2012 JORC Code
	<p><i>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</i></p>	The Mineral Resource statement reflects the assumed accuracy and confidence as a global estimate.
	<p><i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></p>	No production data is available.





**Details of Significant Develin Creek Intersections Reported in this Release:**

Hole ID	Easting (MGA94_55)	Northing (MGA94_55)	RL (m)	Dip (°)	Azimuth (°)	From (m)	To (m)	Interval (m)	Cu (%)	Zn (%)	Au (g/t)	Ag (g/t)
DDH-016	789214.3	7450313	104.31	-60	360	109.5	124	14.5	0.6	6.4	0.1	6.7
					Including	109.5	112	2.50	0.2	24.5	0.1	10.0
DDH-044	789208	7450581	108.65	-90	0	259.7	271	11.3	2.0	6.0	1.2	16.3
PD-052	789261.7	7450473	101.67	-90	0	108	123	15.0	3.1	2.3	0.1	4.8
DDH-001	788691.5	7450230	111.02	-65	177	56.9	78.5	21.6	2.5	1.5	0.5	13.8
					Including	56.9	73.1	16.2	3.2	1.6	0.6	20.5
DDH-002	788733.5	7450244	114.8	-65	182	68.9	100.5	31.6	1.5	1.5	0.3	15.5
					Including	76.5	93.2	16.7	2.2	2.0	0.5	24.4
PD-007	788664.7	7450206	107.38	-60	121	28	72	44.0	1.6	1.0	0.3	7.4
					Including	36	61	25.0	2.6	1.2	0.4	11.1
PD-012	788680	7450072	102.45	-70	92	39	123	84.0	0.8			
					Including	39	87	48.0	1.3			
FRWD0002	789065.8	7450441	120	-67	127.5	182.2	195.3	13.2	4.4	1.6	0.4	30.0
FRWD0004	789084	7450321	115	-75	127.5	122.2	123.3	1.1	3.5	1.7	0.6	21.3
FRWD0001	789171.8	7450637	110	-87	189.5	307.3	308.0	0.7	4.4	1.6	0.8	22.9
FRWC007	789087	7450210	120	-75	63.5	74	76	2.0	0.2	2.4	0.1	2.2

**APPENDIX 5B**  
**CONSOLIDATED STATEMENT OF CASH FLOWS**  
**For Quarter Ended 30 June 2014**

	Current Quarter \$A'000	Year to Date (12 months) \$A'000
<b>CASH FLOWS RELATED TO OPERATING ACTIVITIES</b>		
1.1 Receipts from product sales and related debtors	-	-
1.2 Payments for: (i) exploration and evaluation	(193)	(584)
(ii) development	-	-
(iii) production	-	-
(iv) administration	(176)	(622)
1.3 Dividends received	-	-
1.4 Interest and other items of a similar nature received	6	29
1.5 Interest and other costs of finance paid	-	-
1.6 GST and Taxation (paid)/received	11	9
1.7 Other (provide details if material)		
<i>Research and Development Grant</i>	-	-
<b>NET OPERATING CASH FLOWS</b>	<b><u>(352)</u></b>	<b><u>(1,168)</u></b>
<b>CASH FLOWS RELATED TO INVESTING ACTIVITIES</b>		
1.8 Payment for purchases of: (i) prospect	-	-
(ii) equity investments	-	-
(iii) other fixed assets	-	-
1.9 Proceeds from sale of: (i) prospects	-	-
(ii) equity investments	-	-
(iii) other fixed assets	-	-
1.10 Loans to other entities	-	-
1.11 Loans repaid by other entities		
1.12 Other - Acquisition of S2M2 Coal P/L	-	596
Other - Proceed from sale of Data & Technical Info	<u>22</u>	<u>22</u>
<b>NET INVESTING CASH FLOWS</b>	<b><u>22</u></b>	<b><u>618</u></b>
1.13 Total Operating & Investing Cash Flows	(330)	(550)
<b>CASH FLOWS RELATED TO FINANCING ACTIVITIES</b>		
1.14 Proceeds from issues of shares, options, etc.	-	-
1.15 Proceeds from sale of forfeited shares	-	-
1.16 Proceeds from borrowings	-	-
1.17 Repayment of borrowings	-	-
1.18 Dividends paid	-	-
1.19 Other – Expenses of issue	-	-
<b>NET FINANCING CASH FLOWS</b>	<b><u>-</u></b>	<b><u>-</u></b>
<b>NET INCREASE (DECREASE) IN CASH HELD</b>	<b>(330)</b>	<b>(550)</b>
1.20 Cash at beginning of quarter/year to date	1,210	1,430
1.21 Exchange rate adjustments to Item 1.20 above	-	-
<b>1.22 CASH AT END OF QUARTER</b>	<b><u>880</u></b>	<b><u>880</u></b>

## PAYMENTS TO DIRECTORS OF THE ENTITY AND ASSOCIATES OF THE DIRECTORS

## PAYMENTS TO RELATED ENTITIES OF THE ENTITY AND ASSOCIATES OF THE RELATED ENTITIES

	Current Quarter \$A'000
1.23 Aggregate amount of payments to the parties included in item 1.2	47
1.24 Aggregate amount of loans to the parties included in item 1.10	-
1.25 Explanation necessary for an understanding of the transactions: Reimbursement of administration and exploration expenses incurred on behalf of the Company and for the payment of director services.	-

## NON-CASH FINANCING AND INVESTING ACTIVITIES

- 2.1 Details of financing and investing transactions which have had a material effect on consolidated assets and liabilities but did not involve cash flows: -
- 2.2 Details of outlays made by other entities to establish or increase their shares in projects in which the reporting entity has an interest: -

## FINANCING FACILITIES AVAILABLE

Provide details of used and unused loan facilities and credit standby arrangements, adding such notes as are necessary for an understanding of the position	Amount Available \$A'000	Amount Used \$A'000
3.1 Loan facilities	-	-
3.2 Credit standby arrangements	-	-

## ESTIMATED CASH OUTFLOW FOR NEXT QUARTER

	\$A'000
4.1 Exploration and evaluation	200
4.2 Development	-
4.3 Production	-
4.4 Administration	150
<b>TOTAL</b>	350

## RECONCILIATION OF CASH

Reconciliation of cash at the end of the quarter (as shown in the statement of cash flows) to the related items in the accounts as follows:	Current Quarter \$A'000	Previous Quarter \$A'000
5.1 Cash on hand and at bank	76	98
5.2 Deposits at call	804	1,112
5.3 Bank overdraft	-	-
5.4 Other – Bank Bills (various)	-	-
<b>TOTAL :CASH AT END OF QUARTER</b> (Item 1.22)	880	1,210

## CHANGES IN INTERESTS IN MINING TENEMENTS

	Tenement Reference and location		Nature of interest	Interest at beginning of quarter	Interest at end of quarter
6 Interests in mining tenements held	E08/1410	Mt Alexander		100%	100%
	E08/1972	Mt Alexander		100%	100%
	E08/1987	Mt Alexander		100%	100%
	E08/2046	Mt Alexander		100%	100%
	E38/2895	Earaheedy East	Application	-	100%
	E38/2896	Earaheedy East	Application	-	100%
	E38/2897	Earaheedy East	Application	-	100%
	E45/3449	Cardinals		100%	100%
	E69/1771	Earaheedy		100%	100%
	E69/1907	Earaheedy		100%	100%
	E69/2657	Earaheedy		100%	100%
	E69/2733	Earaheedy		100%	100%
	E69/2734	Earaheedy		100%	100%
	E69/2735	Earaheedy		100%	100%
	E69/2736	Earaheedy		100%	100%
	E69/2737	Earaheedy		100%	100%
	L08/119	Mt Alexander		100%	100%
	E09/2063	Mt Minnie		100%	100%
	E09/2064	Mt Minnie		100%	100%
	IUP08/HAR/III/2 008	Sungai Roi (Indonesia)	Option	Option over 90%	Option over 90%
	EL2007/9861	Kavaklitepe: (Turkey)	Earn-In	Earning to 70%	Earning to 70%
	E08/2593	Mt Alexander	Application	100%	100%
	E70/4587	Sth WestYilgarn	Application	100%	100%
	E70/4588	Sth WestYilgarn	Application	100%	100%
	E47/3071	Pilbara	Application	100%	100%
6.1 Interests in mining tenements relinquished, reduced or lapsed	E45/3449	Cardinals	-	100%	nil
6.2 Interests in mining tenements acquired or increased	E69/3272	Earaheedy	Application	-	100%
	E53/1809	Mt Russel	Application	-	100%

## ISSUED AND QUOTED SECURITIES AT END OF CURRENT QUARTER

Category of Securities	Number Issued	Number Quoted	Issue Price Per Security (cents)	Amount Paid-Up Per Security (cents)
<b>7.1 Preference securities</b>	-	-	-	-
<b>7.2 Changes during the quarter</b>	-	-	-	-
<b>7.3 Ordinary Securities:</b>	110,607,460	110,607,460	-	-
Restricted Securities (21/3/2015)	1,693,814			
<b>7.4 Changes during quarter</b>				
(a) Increases through issues-				
Ordinary Securities	-	-	-	-
(b) Restricted Securities	-	-	-	-
<b>7.5 Convertible debt securities</b>	-	-	-	-
<b>7.6 Changes during the quarter</b>				
(a) Increases through issues	-	-	-	-
(b) Decrease through return of capital, buy-backs	-	-	-	-
<i>Exercise Price    Expiry Date</i>				
<b>7.7 Options</b>	200,000	-	\$0.29	20 Aug 2016
	1,000,000	-	\$0.13	21 Dec 2017
<b>7.8 Issued during quarter</b>	-	-	-	-
<b>7.9 Exercised during quarter</b>	-	-	-	-
<b>7.10 Expired during quarter</b>	-	-	-	-
<b>7.11 Debentures</b>	-	-		
<b>7.12 Unsecured notes</b>	-	-		

## COMPLIANCE STATEMENT

1. This statement has been prepared under accounting policies which comply with accounting standards as defined in the Corporations Law or other standards acceptable to ASX.
2. This statement does give a true and fair view of the matters disclosed.

Sign here:



Director/~~Company Secretary~~

Date: 30<sup>th</sup> July 2014

Print name: Michael Clifford