

17 July 2017

Quarterly Report June 2017

Ilgarari Copper Project

The Ilgarari project contains an Inferred Mineral Resource (JORC 2004) estimated to be 1,100,000 tonnes averaging 1.9% Cu (refer ASX announcement 20 November 2012). The resource is located over the historic Ilgarari copper mine workings. Please 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.

Zeta has agreed to participate in an innovative metallurgical test program being undertaken at the Minerals Research Institute Western Australia (MRIWA). Approximately 200 kg of remnant copper carbonates from shaft dumps and tailings at Ilgarari will be included in a test program which is designed to investigate the potential of Glycine Heap Leaching as an economically attractive option to treat copper ores.

Glycine Heap Leaching is an emerging green metallurgical technology that utilises a benign chemical (Glycine) that avoids the various risks associated with sulphuric acid processes. There are no atmospheric emissions and no special storage requirements for the tailings. The risks to wildlife, vegetation and groundwater are minimal. In the heap leach context, energy requirements are greatly reduced as there is no grinding required.

The research program, which is co funded by MRIWA and a number of interested resource companies is expected to be completed by June 2019.

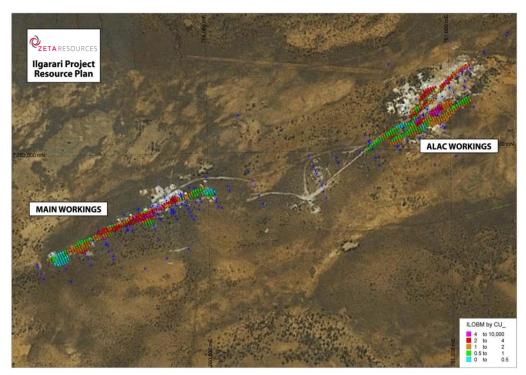


Figure 1: Ilgarari project – Resource Ore Block Model showing Main Zone and Alac Zone. The project contains a JORC 2004 copper oxide resource estimated to be 1,100,000 tonnes averaging 1.9% Cu

Murrin Gold Project

The Murrin Murrin Gold Project hosts the Malcolm Challenger gold deposits which contain a JORC 2012 indicated resource estimate to be 547,000 tonnes at 3.12 grams per tonne for 54,875 ounces. (refer ASX announcement dated 22 January 2014). The project has been subject to a joint venture arrangement with Golden Cliffs NL a 100%-owned subsidiary of GME Resources Ltd (refer ASX announcement dated 14 July 2016).

In June, Zeta received notification that Golden Cliffs NL (GCNL) was withdrawing from the Murrin Murrin Joint Venture. All exploration results/data generated by the joint venture have been returned to Zeta and the site has been rehabilitated as per DMP guidelines.

Zeta will now undertake a review of the work completed by GCNL over the past 12 months before embarking on further exploration at the project.

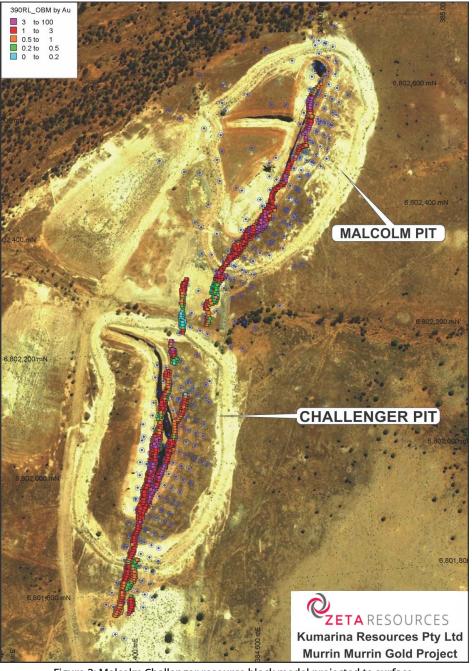
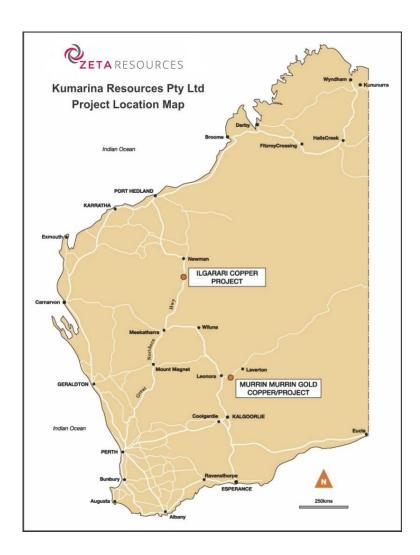


Figure 2: Malcolm Challenger resource block model projected to surface The Malcolm Challenger deposit contains a JORC 2012 compliant resource of 547,000 tonnes averaging 3.12 grams per tonne

Competent Persons Statement

The information in this report as it relates to exploration results and geology has been compiled by Mr Tony Standish and Dr Bryan Smith. Dr Bryan Smith is a Member of the Australasian Institute of Mining and Metallurgy and is a self-employed consultant. Mr Tony Standish is a member of The Australasian Institute of Geoscientists and an employee with Eureka Geological Services. Mr Tony Standish and Dr Smith have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they have undertaken to qualify as Competent Persons as defined in the 2012 Edition of the Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). Mr Tony Standish and Dr Smith consent to the inclusion in the report of the matters based on information provided in the form and context in which it appears.

The resource estimates in this document have been made by Mr Simon Coxhell (Member of the Australasian Institute of Mining and Metallurgy) who is a consultant employed by Cox Rocks Pty Ltd. Mr Coxhell has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he has undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). Mr Coxhell consents to the inclusion in the report of the matters based on information provided in the form and context in which it appears.



Kumarina Tenement Schedule

Project	Number	Ownership
Ilgarari	E52/2274	100%
Eulaminna	M39/0371	Gold & Base Rights
Eulaminna	M39/0372	Gold & Base Rights
Murrin Murrin	M39/0397	100%
Murrin Murrin	M39/0398	100%
Murrin Murrin	M39/0399	100%
Murrin Murrin	M39/0400	100%
Murrin Murrin	M39/1068	100%
Murrin Murrin	P39/5230	100%
Murrin Murrin	P39/5231	100%
Murrin Murrin	P39/5232	100%
Murrin Murrin	P39/5233	100%
Murrin Murrin	P39/5234	100%
Murrin Murrin	P39/5235	100%
Murrin Murrin	P39/5236	100%
Murrin Murrin	P39/5237	100%
Murrin Murrin	P39/5238	100%

APPENDIX

JORC Table 1 – Section 1 Sampling Techniques and Data – Zeta

Criteria	Explanation	
Sampling Techniques	The mineralisation is sampled by reverse circulation (RC). A total of 28 AC/RC holes have been drilled to a maximum depth of 60m. Holes were drilled angled at 60° towards grid north (335° magnetic), which is the optimal drilling orientation for the SSE dipping Ilgarari shear.	
Drilling Techniques	Drilling was by 4 1/4 inch (108mm) diameter, face sampling reverse circulation by NDRC Drilling Pty Ltd.	
Drill sample recovery	RC recoveries are logged visually as weak, medium or good, with the majority being 'good'. Overall recoveries are >90% and there are no significant sample recovery problems.	
Logging	Logging of RC chips records lithology, mineralogy, veining, weathering, colour and other features of the samples. All drill hole samples were logged.	
	RC chips from each metre were placed in a plastic chip tray for later reference.	
Sub-sampling techniques and sample preparation	Samples were collected from 1 metre intervals from the drill rigs cyclone and discharged into a cone splitter adjusted to split off 1/8th of the whole sample, sample size was typically 2 to 3kg which is considered industry standard sample size for base metal mineralisation. These samples have been stored on site for potential further assay. Remaining sample was collected in buckets and laid out in rows of 10 on the ground.	
	Composite samples were collected using a scoop over 4m, again to a sample size of 2-3kg. All the drilling was assayed with composite samples as no visible mineralisation was observed. A field duplicate sample was taken at random at a rate of 1 duplicate sample per 50 samples using the same composite scoop sampling method. The lack of significant mineralisation and small sample population makes it difficult to interpret the results.	
	The majority of the samples were dry.	
	The samples were submitted to the Bureau Veritas Laboratory in Perth.	
	The samples were dried, pulverised to a grind size of 90% passing 75 micron and a 40gm sub-sample was split for analysis.	
	A blank sample of clean washed white quartz sand was also inserted at a rate of 1 per 50 samples. The analytical grade of the blanks was below detection level, indicating there was no cross contamination of sample in the laboratory sample preparation process.	
Quality of assay data and laboratory	The analytical technique used a 40 gram Aqua Regia digest, ICP-MS for gold and copper.	
tests	No geophysical tools were used to determine any element concentrations used in the grade determinations.	
	Certified reference materials have been used, inserted at a random rate of 1 duplicate sample per 20 samples. Reference materials are used to assess the bias present in the analytical technique. An analytical bias of 5-10% below the CRM was detected, however with the lack of mineralisation this is not considered relevant.	
	Laboratory QAQC involves the use of internal lab standards using certified reference material, blanks, splits and replicates as part of the in house procedures.	
Verification of sampling and assaying	No external laboratory checks undertaken.	
	Logging data was collected using paper template log sheets and transferred to a set of standard Excel templates.	
	The information was sent to Perth office for validation and uploaded into the Datashed database.	
Location of data points	Hole collars were located by a handheld Garmin GPS in MGA94, Zone 51 datum. Expected accuracy is + or – 5 m for easting, northing coordinates. No Downhole surveys were conducted.	
	The Bottom of Surveys were conducted.	

Criteria	Explanation
Data spacing and distribution	The nominal drill hole spacing is 400 metres easting by 20 metres northing (local grid).
	This drilling would be insufficient to support the definition of Mineral Resource, and the classifications applied under the 2012 JORC Code.
	Composite sampling over 4 metres has been used for non-mineralised intervals.
Orientation of data in relation to geological structure	The deposit is drilling towards grid north at angles from -60° to provide vertical overlap. No orientation based sampling bias has been identified.
Sample security	Chain of custody is managed by Zeta. Samples were delivered to the Perth assay lab at the end of the drilling programmeme by the geologist in charge of the programmeme.
Audits or reviews	An internal database review will be undertaken prior to the next resource estimate.

JORC Table 1 – Section 2 Reporting of Exploration Results

Criteria	Explanation	
Mineral tenement and land tenure status	The Ilgarari Project is located wholly within Exploration Licence E52/2274. The tenement is held by Kumarina Resources Ltd, a wholly owned subsidiary of Zeta Resources Ltd. The tenement is in good standing and no known impediments exist.	
Exploration done by other parties	Surface copper mineralisation in outcropping ironstones were first discovered in the 1920's. A number of workings were developed on approximately two kilometres of the North East striking shear.	
	The Main Workings and Alac Workings were mined via a series of shafts and small open pits between 1968 and 1973. During this phase, underground workings were developed to a depth of 61 metres. A heavy media separation plant was installed to beneficiate the copper oxide ore to a DSO grade of +12% Cu. The operation closed in 1973 due to the combination of the operator's inability to raise capital to maintain equipment - mine development and low copper prices.	
	Exploration activity recommenced in 1989 – 1990 with a series of drilling campaigns completed over the workings. This work resulted in numerous copper intersections ranging from 1%- 20%, with an average grade around 3%, but was considered uneconomic at the time. Sporadic exploration was completed for diamonds, uranium and other minerals during the 1990's but no ground exploration work on the copper potential was undertaken until 2011.	
	Kumarina Resources Ltd acquired the Ilgarari Copper Project upon listing in 2011.	
Geology	The Ilgarari copper mine is located in the centre of E52/2274, on a north-east shear zone identified by outcropping copperiferous ironstone formations.	
	The project area incorporates a significant portion of the sub-Collier Group of the Proterozoic Bangemall Basin and is underlain by the Ilgarari Sub Group that consists of shallow dipping siltstone, grey and black shales. Outcrop within these tenements is limited with the majority of the tenement overlain with transported colluvium and alluvial sands. Outcropping manganese bedding is located to the north and northeast of the copper workings.	
Drill hole Information	Refer to the body of text in this report and appendix 1 for all the information material to the understanding of the exploration results.	
Data aggregation methods	No significant assays returned requiring data aggregation.	
Relationship between mineralisation widths and intercept lengths	No significant mineralisation intercepted.	
Diagrams	Refer to Figures 1, 2 and 3 and Annexure 1 in body of text.	
Balanced reporting	No significant results are returned.	
Other substantive exploration data	NA .	
Further work	No further work is currently planned for the north-eastern trend away from known mineralisation.	