

## ASX ANNOUNCEMENT

4 July 2014

Australian Securities Exchange  
Companies Announcements Office  
ASX Limited  
Level 40, Central Park  
152-158 St Georges Terrace  
PERTH WA 6000

### **FIELD EXPLORATION CONFIRMS POTENTIAL OF THE MARY VALLEY AND MOONFORD PROJECTS**

#### **Highlights**

- Second phase of field exploration over Mary Valley Manganese and Moonford Iron projects has now been completed.
- Exploration consisted of geological mapping and rock-chip sampling with samples submitted to a laboratory in Brisbane
- Numerous outcrops at the Mary Valley project were found in the heavily vegetated ground.

The Directors of Eclipse Metals Limited (“**Eclipse Metals**” or the “**Company**”) (**ASX: EPM**) are pleased to announce completion of the second phase of geological field work over the Mary Valley and Moonford Projects in south-east Queensland.

The April/May preliminary reconnaissance exploration program resulted in identifying substantial areas of manganese mineralisation in the Mary Valley tenements, as announced on 29<sup>th</sup> April 2014. In addition, for the Moonford iron project, occurrence of outcropping limonite/hematite mineralisation was announced on 6<sup>th</sup> May 2014.

Compilation of field data from sampling and detailed geological mapping of the area is in progress to assist in delineating the extent of mineralised areas in both Mary Valley and Moonford projects.

#### **MARY VALLEY MANGANESE PROJECT**

A recently conducted geological reconnaissance exercise, including mapping of several historic manganese mine sites and their surroundings, **has indicated potential extensions to known mineralisation** and suggested suitability of various techniques for future exploration.

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Geological mapping included rock-chip sampling of remnant Mn-ore exposed in old workings and related outcrops of probable un-mined extensions. Numerous rock-chip samples were collected and submitted for analysis with results expected in two to three weeks.

Mapping and sampling focussed on five areas of historic manganese ore mining including Amamoor/Skyring Creek mines, the Kandanga / Cameron workings, the Eel Creek, Zachariah Creek and Donaldson workings. Apart from the Eel Creek and Donaldson workings, the manganiferous rocks are largely obscured by soil and dense vegetation cover and outcrops are rare.

At each of the sites inspected, remnants of high-grade manganese ore were observed exposed within the old workings. In addition, outcrops of manganiferous rock were discovered near the Amamoor/Skyring Creek mines, **indicating the possibility that significant unmined mineralisation is present nearby.**



*Photo 1: Massive Manganese outcrops near the Amamoor Workings*

Commenting on exploration recently completed over the Mary Valley and Moonford Projects, Pedro Kastellorizos, Executive Director of Eclipse Metals, said: *“We are very encouraged by results from recent geological field work at Mary Valley where remnant manganese ore was sampled and extensions of mineralisation were recognised and sampled. We look forward to receiving sample analytical results and to evaluating potential for development of mineable ore bodies”.*

## **MOONFORD IRON PROJECT**

More detailed geological mapping has been carried out to identify the extent and thickness of the oolitic iron rich formation. This recent work has also identified a new area of ironstone outcrop.

Samples collected to represent the various types of ironstones have been submitted for comprehensive analysis.

A report with maps and sample details will be released when sample analyses have been received and interpreted within the next two to three weeks.



*Photo 2: Small quarry excavated on the bed of oolitic ironstone*



Pedro Kastellorizos  
Executive Director

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*The information in this report that relates to Exploration Results together with any related assessments and interpretations is based on information compiled by Mr Peter Spitalny on behalf of Mr Pedro Kastellorizos and Mr Giles Rodney (Rod) Dale, both Directors of Eclipse Metals Limited. Mr Spitalny is a Member of the Australasian Institute of Mining and Metallurgy and has sufficient experience relevant to the styles of mineralisation under consideration and to the activity which he has undertaken to qualify as a Competent Person*

*Mr Dale is a Fellow of the Australasian Institute of Mining and Metallurgy and has sufficient experience relevant to the styles of mineralisation under consideration and to the activity being reported 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 Kastellorizos is a geologist with over 17 years of experience relevant to the styles of mineralisation under consideration and to the activity which he is undertaking as Executive Director.*

*Mr Peter Spitalny consents to the inclusion in the report of the matters based on his information in the form and context in which it appears. The Company is not aware of any new information or data that materially affects the information in this report and such information is based on the information compiled on behalf of company Geologists, Executive director Mr Pedro Kastellorizos and Non-Executive Director Mr Giles Rodney (Rod) Dale.*

JORC Code, 2012 Edition – Table 1 reportSection 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>• Nature and quality of sampling (eg 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.</li> <li>• Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>• Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>• In cases where 'industry standard' work has been done this would be relatively simple (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>• Rock chip samples were collected as part of the field reconnaissance program. Samples were collected when visible mineralisation was identified in the field.</li> <li>• Each rock chip sample was approximately 5kg in weight with the sample numbered from SP001 to SP060 within the exploration licence area.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>• Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).</li> </ul>	<ul style="list-style-type: none"> <li>• No applicable as no drilling was undertaken</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>• Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>• Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• No applicable as no drilling was undertaken</li> </ul>
Logging	<ul style="list-style-type: none"> <li>• Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate</li> </ul>	<ul style="list-style-type: none"> <li>• No applicable as no drilling was undertaken</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>Mineral Resource estimation, mining studies and metallurgical studies.</i></p> <ul style="list-style-type: none"> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	
<p><i>Sub-sampling techniques and sample preparation</i></p>	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <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></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No applicable as no drilling was undertaken.</li> </ul>
<p><i>Quality of assay data and laboratory tests</i></p>	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <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></li> <li>• <i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Rock Chip samples were sent to ALS in Brisbane for Iron Ore and Manganese ore XRF Fusion</li> <li>• XRF Fusion to determine content of Fe, Mn, SiO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub>, TiO<sub>2</sub>, Ba, Cl, K<sub>2</sub>O, MgO, Ni, Pb, Sn, Sr CaO, V<sub>2</sub>O<sub>5</sub>, V, Zn, Zr, As, S, BaO, CaO and P and LOI</li> </ul>
<p><i>Verification of sampling and assaying</i></p>	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No applicable as no drilling was undertaken.</li> </ul>

Criteria	JORC Code explanation	Commentary
Location of data points	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Specification of the grid system used.</li> <li>• Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>• All coordinate information was collected using a hand held GPS using GDA94 Zone 56</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>• Data spacing for reporting of Exploration Results.</li> <li>• 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.</li> <li>• Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>• The locations of samples will be issued once assay results have come back from the Lab</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• No applicable as no drilling was undertaken</li> </ul>
Sample security	<ul style="list-style-type: none"> <li>• The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>• Samples were labelled/bagged and trucked straight to the analytical laboratory</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>• The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>• Not applicable as not audits were conducted</li> </ul>

### Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• EPM18596, EPM17672 and EPM17938 are held beneficially for Eclipse Metals Limited in its subsidiary Walla Mines Pty Ltd. Eclipse holds 56% of the current securities within Walla Mines Pty Ltd.</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li>• <i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>• In 1961, Queensland Geological Survey completed a regional iron ore research program resulting in publications outlining numerous regional iron occurrences. In 1984, Commercial Minerals Ltd delineated limonite mineralisation through an 18 hole percussion drilling program.</li> <li>• Manganese ore has been mined intermittently from deposit in the Mary Valley since 1920's, with the bulk of the output occurring from 1957-1960.</li> </ul>
<i>Geology</i>	<ul style="list-style-type: none"> <li>• <i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Within the Moonford Iron Project, oxidised oolitic ironstone is hosting the iron mineralisation which is part of the Evergreen Formation. Investigations provided further confirmation of a primary bedded iron ore deposit within the formation of siltstone, sandstone and ironstone.</li> <li>• The Mary Valley Manganese Project, geochemical separation of manganese from iron in a submarine exhalative system. Deposition of the manganese oxide has apparently been controlled by faulting and fracturing of the incompetent cherty and jasperoidal bed, with the fractures providing the fluid channel way and replacement of the host rock by manganese oxides occurring progressively away from those fractures.</li> </ul>
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <li>• <i>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:</i> <ul style="list-style-type: none"> <li>○ <i>easting and northing of the drill hole collar</i></li> <li>○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li>○ <i>dip and azimuth of the hole</i></li> <li>○ <i>down hole length and interception depth</i></li> <li>○ <i>hole length.</i></li> </ul> </li> <li>• <i>If the exclusion of this information is justified on the basis that the</i></li> </ul>	<ul style="list-style-type: none"> <li>• No applicable as no drilling was undertaken</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>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.</i>	
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <li><i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</i></li> <li><i>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.</i></li> <li><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>Not applicable as no data averaging has been used</li> </ul>
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <li><i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li><i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</i></li> </ul>	<ul style="list-style-type: none"> <li>The rock chip analysis has not yet been completed by the laboratory. Samples collected are only from the surface and any potential depths of mineralisation can only be observed on the surface and hence are speculative in nature</li> </ul>
<i>Diagrams</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Map to be release once the assay results have been finalised from the laboratory.</li> </ul>
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li><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></li> </ul>	<ul style="list-style-type: none"> <li>Several samples were collected from the lower and higher grade mineralisation observed – pending assay results before any conclusions can be determined.</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li><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></li> </ul>	<ul style="list-style-type: none"> <li>Not applicable</li> </ul>
<i>Further work</i>	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (eg tests for lateral</i></li> </ul>	<ul style="list-style-type: none"> <li>Next phase of exploration will depend on the assay results – not yet</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>extensions or depth extensions or large-scale step-out drilling).</i></p> <ul style="list-style-type: none"><li><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></li></ul>	<p>determined at this stage.</p>