

26th April 2018

The Company Announcement Platform  
ASX Limited  
Exchange Centre  
20 Bridge Road  
SYDNEY NSW 2000

## DRILL-HOLE SAMPLE ASSAYS - MARY VALLEY MANGANESE PROJECT

### HIGHLIGHTS

- **Significant intersections of massive and brecciated Manganese Oxide mineralisation confirmed in several locations at Amamoor**
- **Best Intersection 3.2m @ 59.8% MnO from 8.8m in Hole ADD006**
- **Shallow high grade intersections indicate multiple lenses open in all directions at Amamoor**
- **Further drilling planned**

Eclipse Metals Ltd (ASX:EPM) is pleased to announce that sample analyses for selected core assayed from the recently completed reconnaissance diamond drilling program at the company's Mary Valley Manganese Project near Gympie in Queensland (refer Figure 3), have now been received and evaluated.

Best intersections from the Amamoor prospect include:

- **3.2m @ 59.8% MnO from 8.8m in Hole ADD006 (photograph)**
- **2.4m @ 26.3% MnO from 14.9m in Hole ADD007**

Interpretation of these results highlight the open nature of the high grade mineralisation, and that multiple lodges exist in close proximity in at least one area at Amamoor, where the mineralisation presents as steeply-dipping, lenticular-shaped fault-controlled zones.



**Photograph - Massive MnO mineralisation in ADD006 (part 8.80m to 12.00m)**  
Significant intersection of brecciated and massive manganese mineralisation (up to 62.18% MnO).

Eclipse Metals Ltd is an Australian exploration company focused on exploring the Northern Territory and Queensland for multi commodity mineralisation. The company has an impressive portfolio of assets prospective for gold, manganese, base metals and uranium mineralisation. The Company's mission is to increase Shareholder wealth through capital growth and ultimately, dividends. Eclipse plans to achieve this goal by exploring for and developing viable mineral deposits to generate mining or joint venture income.

### BOARD

Carl Popal  
Executive Chairman

Craig Hall  
Non-Executive Director

Rodney Dale  
Non-Executive Director

### COMPANY SECRETARY

Eryn Kestel

### REGISTERED OFFICE

C/-NKH Knight  
Unit 19  
Level 2, Spectrum  
100 Railway Road  
Subiaco WA 6008  
Phone: +61 8 9367 8133  
Fax: +61 8 9367 8812

### PRINCIPAL PLACE OF BUSINESS

Level 3, 1060 Hay Street  
West Perth WA 6005  
Phone: +61 8 9480 0420  
Fax: +61 8 9321 0320

### AUSTRALIAN BUSINESS NUMBER

85 142 366 541

### SHARE REGISTRY

Security Transfer Registrars  
770 Canning Highway  
Applecross WA 6153

### ASX CODE

EPM

### WEBSITE

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

Further petrophysical and petrographic studies are advancing the company's understanding of the deposit. Data from last year's gravity survey is now being re-evaluated taking into account mineralisation intersected in the drilling program.

At the conclusion of the studies further drilling will be proposed at Amamoor, targeting the high grade mineralisation down-dip and along strike from these shallow intersections.

## **Discussion of Results- Amamoor**

Eclipse Metals drilled eight diamond core holes at Amamoor for an aggregate of 152.4m (refer Table 1 and Figure 2). This drilling program was conducted strictly on a reconnaissance basis and the extent of drilling and sample analyses was limited to contain initial costs.

In this part of the Amamoor State Forest, the original forest has been invaded by exotic weeds and undergrowth, and large sections have been cleared and replaced with plantations of hoop pine. Access to drill locations was gained via existing forestry tracks and by clearing exotic weeds from previously excavated tracks and mining benches.

Hole ADD002B, drilled adjacent to ADD002 as a result of core-loss in the original hole, was sited toward the southwestern end of the prospect in an area of elevated gravity values. This hole intersected 8.6m of manganese mineralisation with an average grade of 7.0% MnO from 2m depth, dipping flatly at 15° to the east, in line with the company's geological expectation for that area. While this intersection was low grade, the company will investigate the opportunity to identify higher grade mineralisation within the unit in the vicinity.

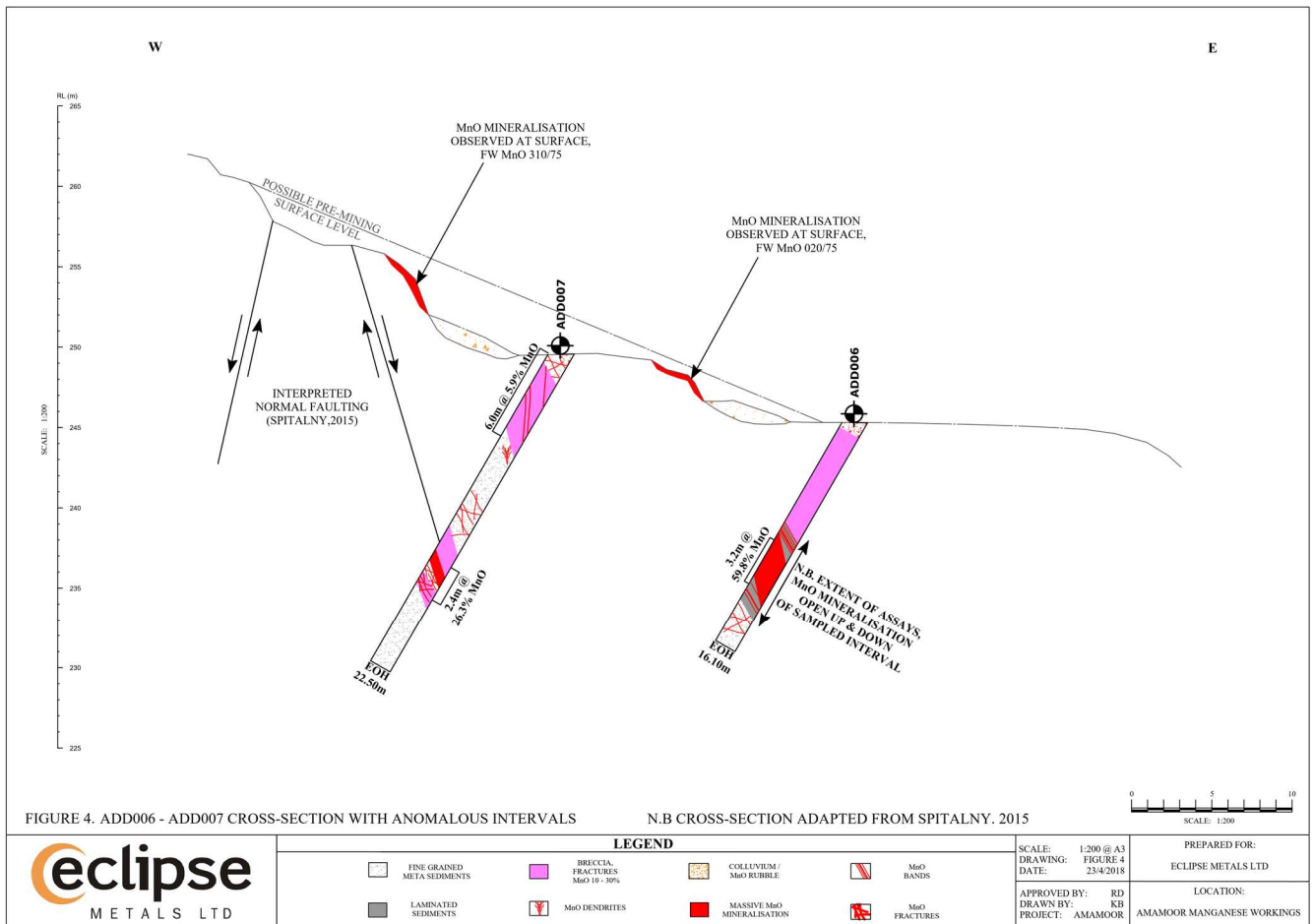
The company believes that this intersection, together with the occurrence of float and sub-outcropping manganese mineralisation over a wide area to the west and south-west, strongly supports the potential for substantial extensions of mineralisation in the southern area at Amamoor.

Holes ADD006 and ADD007 were drilled to target depth extensions of an historically mined area, and intersected layered-to-massive manganese mineralisation over much of their lengths.

In ADD006 an intersection of high grade mineralisation averaged 59.8% MnO over 3.2m within a manganese-mineralised zone of some 15m width. In ADD007 an interval of manganese-mineralised breccia averaged 5.9% MnO over 6m from surface, and 26.3% MnO over 2.4m from 14.9m (refer Table 2 and cross section in Figure 1.)

These intersections, along with surface evidence of interpreted mineralisation, indicate the potential for mineable widths of both low-grade mineralisation which may be beneficiated, along with high-grade DSO manganese mineralisation previously identified in the project area.

Significantly, at the time of drilling, the company noted from the oriented core that the high-grade mineralisation is steeply-dipping (ca. 75°) as opposed to earlier interpretations of a shallow dip, and curtailed the programme as it became apparent that collar locations would need to be reviewed to ensure that planned drilling was an efficient test of mineralisation in this area.



**Figure 1. Cross section of ADD006 and ADD007, Amamoor**

Review of the recent drilling and further geological and geophysical assessment are ongoing. Planning of the next phase of exploration will include further drilling at Amamoor, targeting high grade mineralisation down-dip and along strike from these shallow zones.

**Table 1. AMAMMOOR DRILL-HOLE DETAILS**

HOLE ID	UTM GDA94 m East	UTM GDA94 m North	AZIMUTH / INCLINATION	FINAL DEPTH m
ADD001	462255	7085724	Vertical	16
ADD002	462158	7085708	120 / 85	20.1
ADD002B	462155	7085711	125 / 88	10.6
ADD003	462104	7085764	146 / 85	16
ADD004	462060	7085818	125 / 85	30.2
ADD005	462013	7085992	268 / 72	20.9
ADD006	461954	7085992	270 / 60	16.1
ADD007	461944	7085983	235 / 60	22.5



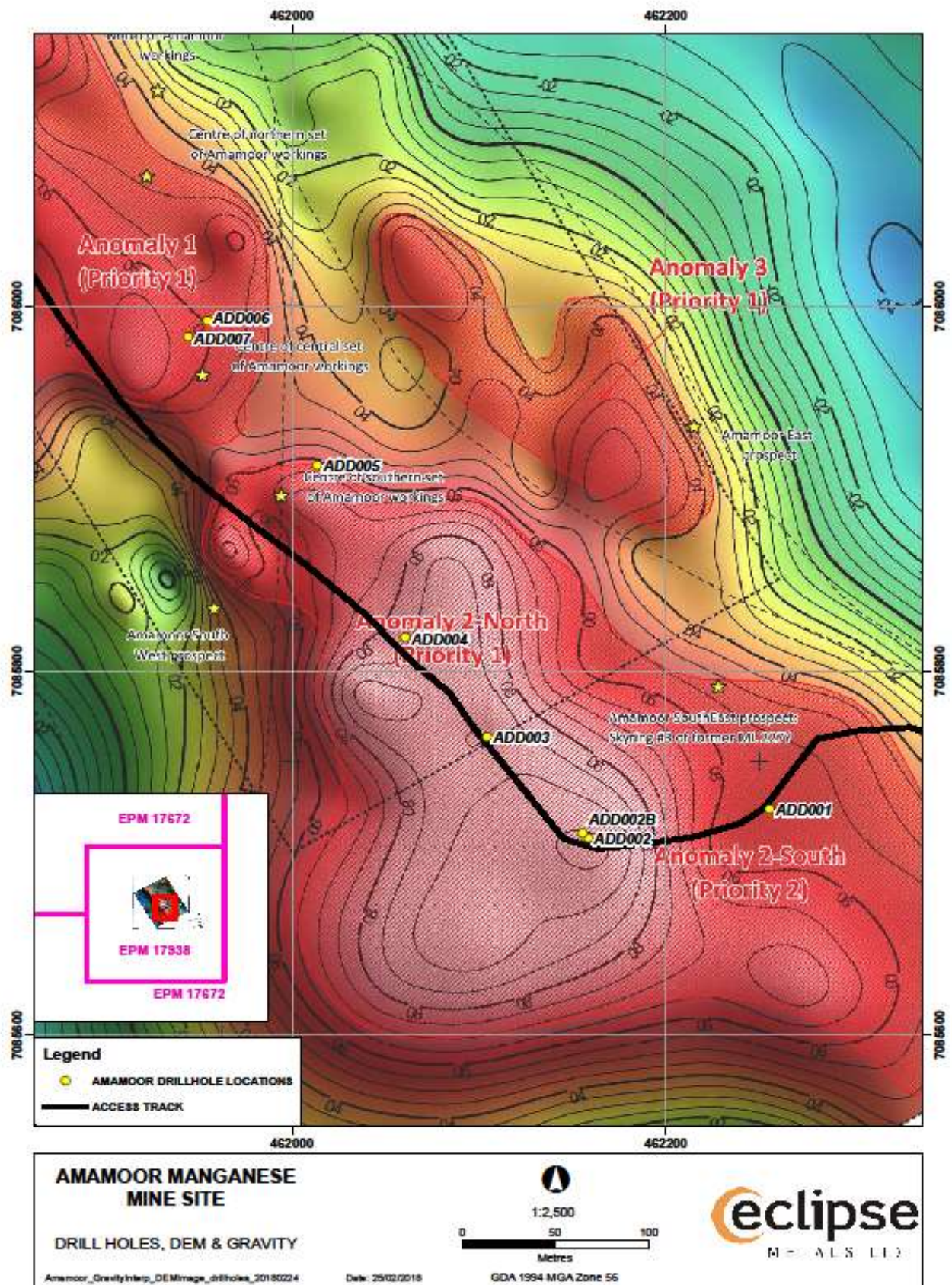
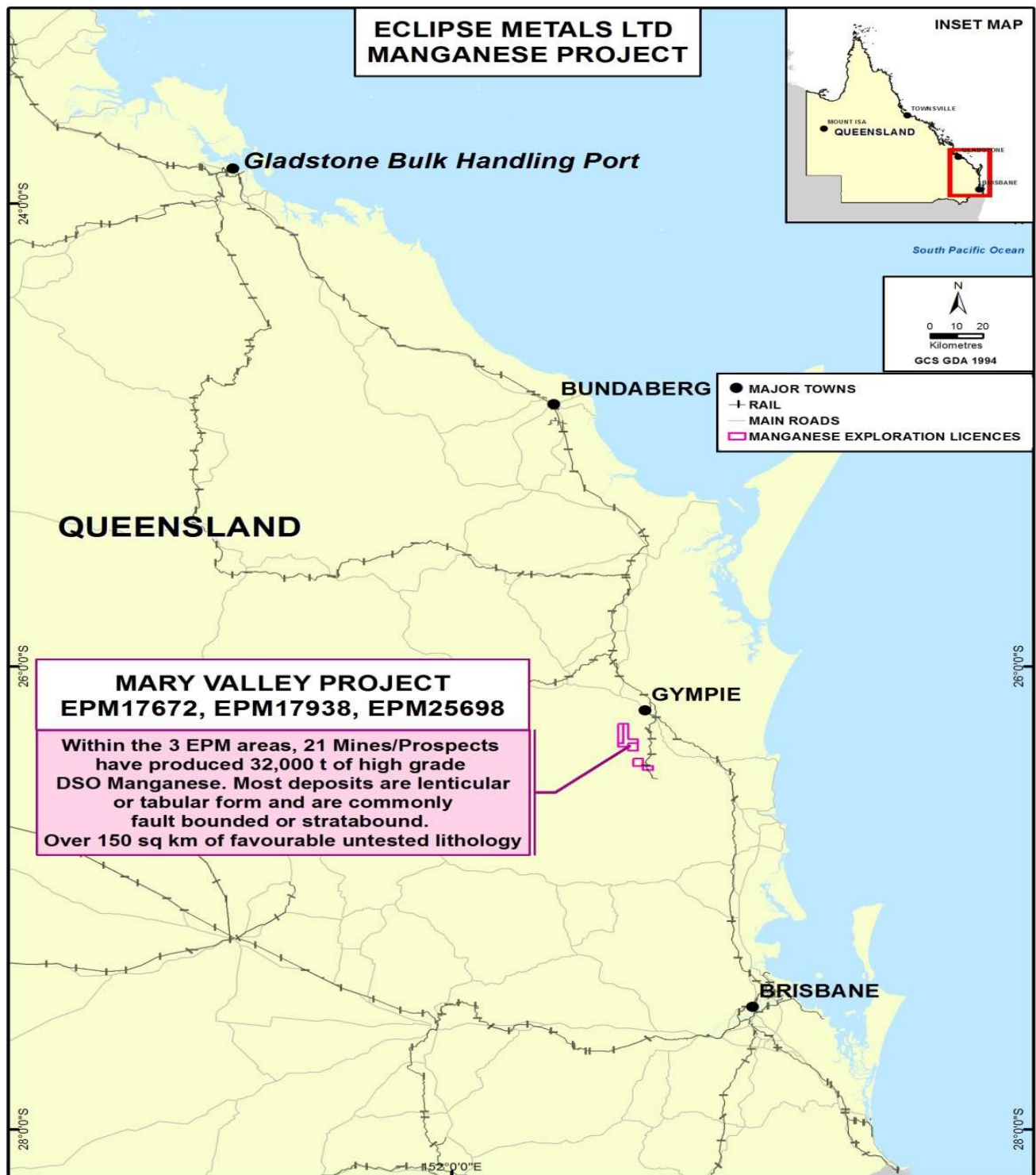


Figure 2. Amamoor Drill-hole Locations with Gravity and DEM



**Figure 3. Location Map, Mary Valley Tenements**



**Table 2. SAMPLED INTERSECTIONS - AMAMoor DIAMOND DRILLING**

HOLE ID	m FROM	m TO	GEOLOGY	MnO %	Fe <sub>2</sub> O <sub>3</sub> %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	LOI %
<b>ADD 002B</b>	2	3	Mn oxide breccia	7.31	14.14	45.33	13.4	6.01
	3	4	"	7.95	15.3	45.07	13.35	6.63
	4	5	"	6.64	13.98	45.61	14.14	6.01
	5	6	"	7.7	12.19	44.2	14.8	5.63
	6	7	"	7.7	12.72	44.06	14.75	5.29
	7	8	"	7.56	11.68	43.62	16.24	4.24
	8	9	"	3.06	12.57	49.86	16.3	3.43
	9	10	"	7.05	11.73	45.37	15.0	3.96
	10	10.6	"	8.71	9.75	43.95	14.74	4.07
<b>ADD 006</b>	6.8	7.5	Mn oxide	6.66	11.5	44.97	13.74	3.91
	7.8	8.8	Footwall volcanics	3.15	14.12	49.09	9.94	3.19
	<b>8.8</b>	<b>9.8</b>	Mn oxide	<b>54.69</b>	3.63	18.6	3.45	3.66
	<b>9.8</b>	<b>10.8</b>	"	<b>62.01</b>	0.48	18.14	0.34	1.14
	<b>10.8</b>	<b>12</b>	"	<b>62.18</b>	0.68	18.46	0.72	2.09
	12	13	Footwall volcanics	2.42	12.36	44.69	15.7	4.61
<b>ADD 007</b>	0.3	1.3	Mn oxide breccia	15.38	9.54	34.11	13.52	5.51
	1.3	2	"	5.02	11.8	41.12	15.8	4.7
	2	3	"	2.38	9.43	48.03	17.94	2.95
	3	4	Hematitic bands	6.13	8.68	43.27	16.64	3.53
	4	5	"	4.18	10.65	45.47	17.1	4.03
	5	6.3	Shear zone	2.94	11.14	48.43	17.04	3.56
	8	9	"	0.31	10.72	52.9	16.28	3.96
	14	14.9	Hanging Wall	3.06	9.53	41.17	14.8	6.76
	<b>14.9</b>	<b>15.7</b>	Mn oxide breccia	<b>39.91</b>	4.55	24.37	5.87	5.04
	<b>16.3</b>	<b>17.3</b>	"	<b>31.23</b>	5.66	28.6	7.9	3.58
	21.5	22.5	Metasediment + Qtz	0.26	8.79	47.22	16.24	6.23

For and of behalf of the board.

**Carl Popal**  
Executive Chairman

For further information please contact:

Carl Popal  
Executive Chairman  
T: +61 8 9480 0420

Rodney Dale  
Non-Executive Director  
T: +61 8 9480 0420

## Competent Persons Statements

**Geology** The information in this report that relates to Exploration Results together with any related assessments and interpretations is based on information compiled by Mr Kim Boundy of No Bounds Exploration & Geological Consultants for Mr Rodney Dale, a Non-Executive Director of Eclipse Metals Limited. 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 Dale has verified the data disclosed in this release and consents to the inclusion in this release of the matters based on the information in the form and context in which it appears.

### JORC Code, 2012 Edition – Table 1 report

#### **Section 1 Sampling Techniques and Data**

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<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>Generally 1m Core samples taken from diamond drilling; sampling intervals decided by geological contacts</li> </ul>
<b>Drilling techniques</b>	<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>Oriented PQ and HQ triple tube diamond core</li> </ul>
<b>Drill sample recovery</b>	<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>Field and core shed paper logs.</li> <li>Triple tube and water control to obtain best recoveries.</li> </ul>
<b>Logging</b>	<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 Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>Geological logging for recon program only. No resource drilling.</li> <li>All core photographed.</li> <li>All core logged for aggregate 319.7m</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>• If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>• If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>• For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>• Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>• 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.</li> <li>• Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>• Quarter core saw cutting of mineralised sections</li> <li>• Appropriate sample prep applied by laboratory</li> <li>• QAQC procedures adopted with field duplicates.</li> <li>• Sample sized best available.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>• 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.</li> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• All assays being carried out by ALS Laboratory Brisbane to professional standards.</li> <li>• Selected samples submitted for petophysical and petrological studies.</li> <li>• Daily duplicate checks undertaken on completed work; acceptable levels of accuracy and precision established</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>• The verification of significant intersections by either independent or alternative company personnel.</li> <li>• The use of twinned holes.</li> <li>• Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> </ul> <p>• Discuss any adjustment to assay data.</p>	<ul style="list-style-type: none"> <li>• Significant intersections verified in field by Company officer.</li> <li>• Not applicable</li> <li>• Electronic data capture, storage and transfer as .csv. Routine QC checks performed by contractor and independent geological consultant. Data were found to be of high quality and in accordance with contract specifications</li> </ul>
<b>Location of data points</b>	<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> </ul> <p>• Specification of the grid system used.</p> <p>• Quality and adequacy of topographic control.</p>	<ul style="list-style-type: none"> <li>• Coordinate information was collected with hand-held GPS using MGA Zone 56 (GDA 94).</li> <li>• Not applicable</li> <li>• DEM derived from differential GPS survey as part of gravity survey</li> </ul>



Criteria	JORC Code explanation	Commentary
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li><i>Data spacing for reporting of Exploration Results.</i></li> <li><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></li> <li><i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>Samples collected from outcrop and exposure as available.</li> <li>All drilling was for reconnaissance only on varying spacing.</li> <li>N/A.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li><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></li> <li><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></li> </ul>	<ul style="list-style-type: none"> <li>Hole collars measured and downhole surveys carried out.</li> <li>No sampling bias as whole core logged before cutting</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li><i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>All data transmitted in digital format</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>Standard laboratory QA / QC</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li><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></li> <li><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></li> </ul>	<ul style="list-style-type: none"> <li>EPM17672 &amp; EPM17938 are held beneficially for Eclipse Metals Limited in its subsidiary Walla Mines Pty Ltd. Eclipse holds 87% of the current securities within Walla Mines Pty Ltd.</li> <li>EPM 25698 held 100% by Eclipse Metals Ltd</li> </ul>
<b>Exploration done by other parties</b>	<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>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>
<b>Geology</b>	<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>In the Mary Valley Manganese Project, deposits were formed by 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>

Criteria	JORC Code explanation	Commentary
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>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: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Table of data in report without elevation data pending cadastral survey in due course.</li> <li>Full core logs in preparation for reporting with assays in due course.</li> <li>152.4m in five diamond core holes drilled in Amamoor prospect.</li> <li>Down hole sample lengths for limited sampling of mineralised sections only.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>Weighted averaging applied where appropriate.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	<ul style="list-style-type: none"> <li>Down-hole lengths of mineralisation only reported.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Refer within release</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Not applicable</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Geological and metallurgical background provided in previous reports.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>Further diamond drilling programme being planned pending interpretation of results from this reconnaissance program</li> </ul>