Australian Mines Limited



ASX: AUZ

31 July 2015

# HIGHLIGHTS

# Doolgunna - Marymia Project Burton prospect

- Intersected thick zone of anomalous copper and zinc on edge of buried conductor
  - o Down hole EM survey commencing early August to test for off-hole conductors
  - $\circ$  High powered surface EM survey commencing over broad copper soil anomaly
  - 4 metres @ 0.23% copper from 18 metres returned from historic Burton drilling

# **Gregory prospect**

- Identified off-hole conductor within 25 metres of historic drill hole
  - Conductor located along fault structure at southern margin of Bryah Basin
  - o Drill testing of conductor commencing in September quarter

# Marriotts Nickel Project

- Commenced preparations for resource extension drilling of nickel sulphide deposit
  - Orebody currently only drilled to 160 metres below ground surface
  - o 20 metres @ 2.46% nickel from 129 metres returned from previous drilling
  - Mineralisation remains open at depth

# **Corporate**

- Raised \$0.5 million through share placement to professional investors (post Quarter end)
  - Drilling and geophysical exploration program of priority copper targets fully-funded
- Increased ground holding by 300% within emerging Doolgunna copper province
  - Doolgunna-Marymia tenement package now exceeds 1,300 square kilometres
- Secured majority ownership of strategic copper tenements at Doolgunna-Marymia



Australian Mines Limited ("Australian Mines" or "the Company") is pleased to provide shareholders its Quarterly Activities Report for the period ended 30 June 2015.

# **Doolgunna - Marymia Project**

Australian Mines' Doolgunna-Marymia Project is situated approximately 900 kilometres north of Perth and immediately adjacent to Sandfire's (ASX: SFR) Doolgunna project area – home to their world class DeGrussa Copper-Gold Mine.

Last month, Sandfire announced that a diamond core drill holed designed to test a subtle off-hole EM conductor within the Sandfire-Talisman joint venture area (located 10 kilometres east of the DeGrussa Copper-Gold Mine) successfully intersected a zone of massive sulphide mineralisation similar in appearance to the VMS mineralisation at DeGrussa<sup>1</sup>.

Sandfire subsequently reported that this drill intersection returned 16.5 metres grading 18.9% copper and 2.1g/t gold from 409.5 metres down hole<sup>2</sup>.

This new VMS discovery by Sandfire, known as the Monty Prospect, represents arguably the first significant intersection of high-grade copper-gold mineralisation in the region since the initial DeGrussa discovery six years ago and reaffirms the Doolgunna-Marymia area of Western Australia as an emerging copper province with the potential to host a number of ore bodies across this district.

Recognising the significant base metal potential of the Doolgunna-Marymia province, Australian Mines is currently earning up to an 80% interest in a 1,300 square kilometre contiguous land holding immediately neighbouring Sandfire's Doolgunna project area to the east.

Included within the Company's extensive tenement package is 45 kilometres of the Jenkin Fault (being the key controlling structure of the DeGrussa VMS ore bodies) and no less than 250 square kilometres of the interpreted Bryah Basin.

# Burton prospect

During this quarter, Australian Mines completed a first-pass RC drill program across five prospective target areas within the Australian Mines – Riedel Resources (ASX: RIE) joint venture area, including the Burton prospect where the Company has recently detected a strong late-time bedrock conductor coincident with the Jenkin Fault structure<sup>3</sup>.

Significantly, this late-time conductor at Burton also appears beneath an extensive copper-in-soil geochemical anomaly (peak assay of 353ppm copper) and corresponding surface gold anomaly<sup>4</sup>.

<sup>&</sup>lt;sup>1</sup>Sandfire Resources NL, Doolgunna Project – Exploration update, released 17 June 2015

<sup>&</sup>lt;sup>2</sup> Sandfire Resources NL, Doolgunna Project – Assay results, released 25 June 2015

<sup>&</sup>lt;sup>3</sup> Australian Mines Limited, Presentation – Mines and Money London, released 2 December 2014

<sup>&</sup>lt;sup>4</sup> Lodestar Minerals Limited, September 2013 Quarterly Activities Report, released 30 October 2013



Due to tenement boundary constraints that existed at that the time of Australian Mines' initial RC drilling program, the Company was unable to drill test the main conductive zone at Burton. Instead, Australian Mines was only able to site a single RC drill hole on the eastern edge of the interpreted buried conductor.

The Company was, therefore, highly encouraged by the results returned from this reconnaissance drill hole at Burton, which intersected a thick zone of anomalous copper that subsequently assayed **21 metres** @ **0.05% copper + 0.21% zinc from 193 metres** downhole (drill hole MMRC003)<sup>5</sup>.

This intersection is not dissimilar to the initial RC drill results returned from Sandfire-Talisman's Monty Prospect, which included 49 metres @ 0.03% copper from 87 metres and 6 metres @ 0.05% copper from 70 metres downhole<sup>6,7</sup>.

Australian Mines similarly notes that the Talisman's 2011 RC drill hole SPRC141, which was drilled within 20 metres of Sandfire's subsequent discovery hole at Monty (TLDD004A)<sup>8</sup> only returned 7 metres @ 0.21% copper from 65 metres down hole<sup>9</sup>.

The presence of low-grade copper mineralisation in close proximity to the high-grade copper at Monty, therefore, suggests that historic copper oxide intersections returned from Australian Mines' Burton prospect such as **4 metres** @ **0.23% copper from 18 metres** down hole (drill hole NKB0719)<sup>10</sup>, located 150 metres east of the Burton conductor, must be viewed as significant.

Having addressed the tenement boundary constraint issue during this quarter,<sup>11</sup> Australian Mines have mobilised a down hole EM crew to the Burton prospect to survey drill hole MMRC003 (and selected historic drill holes) and test for any off-hole conductors that may represent potential massive sulphide mineralisation at depth.

The Company has also commissioned an RC drill program over the main bedrock conductor at Burton as well as extending the EM coverage over this prospective copper target.

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<sup>&</sup>lt;sup>5</sup> Australian Mines Limited, Copper & zinc mineralisation intersected along Jenkin Fault, Marymia Project, released 18 June 2015

<sup>&</sup>lt;sup>6</sup> Talisman Mining Limited, Springfield Project – Exploration update, released 7 June 2011

<sup>&</sup>lt;sup>7</sup> Talisman Mining Limited, June 2010 Quarterly Report, released 29 July 2010

<sup>&</sup>lt;sup>8</sup> Sandfire Resources NL, Doolgunna Project – Assay results, released 25 June 2015

<sup>&</sup>lt;sup>9</sup> Talisman Mining Limited, Springfield Project – Exploration update, released 7 June 2011

<sup>&</sup>lt;sup>10</sup> Galtrad Pty Ltd, Annual Report for tenements E52/592, P52/797 to 799, submitted to the Western Australian Department of Mines and Petroleum, November 1995

<sup>&</sup>lt;sup>11</sup> Australian Mines Limited, Australian Mines increases Marymia ground holding, released 11 June 2015

# Australian Mines Limited



**Figure 1:** Australian Mines' Doolgunna-Marymia Project is located 45 kilometres east, and along strike of, Sandfire's DeGrussa Copper-Gold Mine. The recently discovered massive copper sulphide mineralisation at the Monty Prospect (Sandfire –Talisman joint venture) is similarly within 35 kilometres of the Company's project area.

# Australian Mines Limited



**Figure 2:** A ground-based electromagnetic (EM) survey over a section of the Jenkin Fault covered by Australian Mines' Doolgunna-Marymia Project successfully detected a late-time bedrock conductor at the Burton prospect. Due to the target's close proximity to the Company's then tenement boundary, Australian Mines drilled a single, sub-optimal RC hole (MMRC003) designed to test the eastern edge of this conductor. This drill hole intersected anomalous copper and zinc mineralisation. Following the recently announced joint venture with Lodestar, Australian Mines has commissioned an RC drill program over the main bedrock conductor at Burton as well as extending the EM coverage into the Australian Mines / Lodestar joint venture ground.



# Gregory prospect

In addition to the conductor at Burton, Australian Mines recently identified a bedrock conductor at its Gregory prospect that warrants follow-up drill testing.

The Gregory prospect was initially identified by Barrick Gold (NYSE: ABX) in 2005 when a detailed geophysical program of this region identified a coincident gravity and magnetic circular anomaly located on the interpreted southern margin of the Bryah Basin<sup>12</sup>.

Mining company Placer Dome had previously noted that surface geochemical sampling across the Gregory prospect area confirmed the presence of gold at this target location<sup>13</sup>.

Barrick subsequently drilled a single RC hole into this target in 2007<sup>14</sup>. Australian Mines has been unable to locate the assay results from this drill hole but the Company notes that the drill chip samples from Barrick's hole were only analysed for gold and the gold pathfinder element of arsenic. No samples were submitted for copper or multi-element analysis.

It is worth noting that Barrick also acknowledged that this drill hole was terminated at a shallower than intended depth, and thus failed to test the geophysical anomaly at Gregory<sup>15</sup>.

Having acquired the Barrick ground in 2010, Lodestar Minerals immediately completed an airborne EM survey over the entire tenement area including the Gregory prospect.

The resulting data highlighted a subtle late-time bedrock semi-coincident with the existing gravity and magnetic anomaly at Gregory (referred to as the B29 conductor by Lodestar)<sup>16</sup>, which Lodestar sought to drill test with a single RC drill hole in 2011.

Lodestar's initial RC drill hole at Gregory (drill hole LNRC006), which was designed to pierce the main zone of the Gregory contact was terminated prematurely at a depth of 85 metre due to technical issues with the drill rig<sup>17</sup>.

Lodestar subsequently relocated the drill hole for this target and undertook drill hole LNRC007. Australian Mines relogged the drill chips from this hole during the quarter and confirms that hole LNRC007 did not intersect any material that would explain the conductor at Gregory.

Drill hole LNRC007 was later cased with PVC to facilitate a down hole EM survey.

Lodestar Minerals Limited, Annual General Meeting presentation, released 29 October 2010

<sup>&</sup>lt;sup>12</sup> Barrick (PD) Australia Limited, Gregory Project - Annual Report for tenements E52/1680-1684, E52/1706, E69/1879, submitted to the Western Australian Department of Mines and Petroleum, January 2007

Placer Dome Asia-Pacific, Gregory Project - Annual Report Technical Report, submitted to the Western Australian Department of Mines and Petroleum, 2005

Australian Mineral Field, Gregory Project - Annual Report for tenements E52/1680-1684, E52/1706, submitted to the Western Australian Department of Mines and Petroleum, October 2007

Barrick (PD) Australia Limited, Gregory Project - Annual Report for tenements E52/1680-1684, E52/1706, E69/1879, submitted to the Western Australian Department of Mines and Petroleum, January 2007

<sup>&</sup>lt;sup>17</sup> Lodestar Minerals Limited, Annual Report Technical Report – tenements E52/2440, E52/2444, E52/2456, E52/2468,

submitted to the Western Australian Department of Mines and Petroleum, December 2011



During this quarter, Australian Mines re-acquired the down hole EM data for Lodestar's Gregory drill hole from the geophysical contractor. The resulting EM data revealed a clear but subtle off-hole conductor at a depth of 160 metres down hole.

Modelling of this off-hole anomaly suggests the source of this conductor is located within 25 metres of hole LNRC007.

Australian Mines is currently scheduled to drill test this newly detected conductor in the September quarter.



**Figure 3:** Down hole EM survey of the Gregory drill hole LNRC007 detected a clear off-hole conductor within 25 metres of the drill hole. Australian Mines will drill to test this subtle off-hole EM anomaly in the coming quarter.



# Dixon prospect

The Company's Dixon prospect, like Sandfire's DeGrussa prospect, was initially considered a gold play given its geological setting and encouraging gold intersections<sup>18,19</sup>.

Work completed this quarter by Australian Mines, however, indicates that the Company's Dixon prospect potentially represents a VMS copper-gold system whereby the oxide gold zone is the possible surface expression of deeper massive sulphide mineralisation.

Historic shallow drilling at Dixon has outlined sporadic intersections of gold mineralisation within weathered (saprolitic) mafic and doleritic units along a 200 metre zone that appears to coincide with the margin of the Bryah Basin.

Similar to the gold mineralisation observed at DeGrussa, the gold mineralisation at Dixon is routinely associated with sulphides (rather than hosted in quartz veins) and petrographic studies previously undertaken at Dixon confirmed the presence of chalcopyrite (copper sulphide) within the project area<sup>20</sup>.

Despite sulphide minerals regularly being logged during the historic drilling at Dixon, previous explorers did not appear to systematically analyse samples for copper or other base metal elements. Similarly, no geophysics has previously been undertaken across the Dixon prospect area.

Encouraged by the results of the preliminary exploration activities completed over the Dixon prospect to date, Australian Mines will commence a ground-based EM survey over this prospective VMS target in the coming weeks. Drill testing of any resulting anomaly will similarly be completed during the September quarter.

# Marriotts Nickel Project

Australian Mines' 100%-owned Marriotts Nickel Project hosts a shallow, undeveloped nickel sulphide deposit within the granted Mining Lease of M37/96.

Located within 20 kilometres of Talisman Mining's (ASX: TLM) recently acquired Sinclair Nickel Mine and processing plant in Western Australia<sup>21</sup>, the Company's Marriotts Nickel Project currently has a defined Mineral Resource of **0.83 million tonnes @ 1.13 % nickel for 9,400 tonnes of contained nickel**<sup>22</sup> (see Table 1).

The Company considers that there is potential to increase the current nickel resource at Marriotts through drill testing interpreted extensions of the Marriotts orebody.

<sup>20</sup> Galtrad Pty Ltd, Annual Report for tenements E52/592, P52/797 to 799, submitted to the Western Australian Department of Mines and Petroleum, November 1995

<sup>&</sup>lt;sup>18</sup> Sandfire Resources NL, Quarterly Activities Report, released 30 January 2009

<sup>&</sup>lt;sup>19</sup> Australian Mines Limited, Quarterly Activities Report for the period ended 30 September 2014, released 30 October 2014

<sup>&</sup>lt;sup>21</sup> Talisman Mining Limited, Talisman to Acquire Sinclair Nickel Project, released 20 October 2014

<sup>&</sup>lt;sup>22</sup> Australian Mines Limited, Addendum to 2014 Annual Report, released 29 December 2014



Resource drilling at Marriotts has historically focussed on the delineating near-surface (<150 metres below ground surface) nickel sulphide mineralisation. One of the deeper holes drilled into the Company's orebody, though, intersected **20 metres @ 2.46% nickel from 129 metres down hole** (drill hole AMMD023)<sup>23</sup> and this mineralisation remains open at depth.

Encouragingly, work completed by Australian Mines suggests that nickel grades at Marriotts increase with depth<sup>24</sup>.

Recognising the near-term production potential of its Marriotts Nickel Project, Australian Mines has commenced preparations for a step-out drill program of this orebody.

This proposed resource drilling program is designed to define extensions of the Marriotts nickel mineralisation in addition to upgrading the resource classification to enable the Company to undertake a future scoping or mining feasibility study.

Marriotts Mineral Resource (as at 30 June 2014) <sup>25</sup>					
Location	Category	Nickel Tonnes			
Marriotts, Western Australia					
	Measured	-	-	-	
	Indicated	460,000	1.12	5,100	
	Inferred	370,000	1.15	4,300	
	Total	830,000	1.13	9,400	

 Table 1: Mineral Resources for the Marriotts nickel sulphide deposit (using a lower cut of 0.5% nickel)<sup>26</sup>.

<sup>&</sup>lt;sup>23</sup> Australian Mines Limited, Update: Marriotts Nickel Project, released 17 August 2007

 <sup>&</sup>lt;sup>24</sup> Australian Mines Limited, Quarterly Activities report for the period ended 30 September 2007, released 31 October 2007
 <sup>25</sup> Australian Mines Limited, Addendum to 2014 Annual Report, released 29 December 2014

<sup>&</sup>lt;sup>26</sup> The Marriotts Mineral Resources is reported under JORC 2004 Guidelines, as there has been no Material Change or Reestimation of the Mineral Resource since the introduction of the JORC 2012 Code. Future estimates of the Marriotts Nickel Project resource will be completed to JORC 2012 Guidelines.





**Figure 4:** Location of Australian Mines' Marriotts Nickel Project in relation to regional geology, production centres and reported contained nickel of the Agnew-Wiluna Belt<sup>27</sup>.

<sup>&</sup>lt;sup>27</sup> Modified from – Talisman Mining Limited, Talisman to acquire Sinclair Nickel Project, released 20 October 2014





**Figure 5:** Schematic cross section of the Marriotts Nickel Project. Work previously completed by Australian Mines indicated that the nickel grade at Marriotts may increase with depth and that the nickel mineralisation remains open at depth.



# Corporate

# Share placement raises \$525,000

As reported by the Company on 10 July 2015, Australian Mines recently completed a placement of 105 million shares to professional and sophisticated investors raising \$525,000 before costs.

These funds ensure Australian Mines' 2015 field campaign, which includes RC drilling and down hole surveying of its priority copper targets across its Doolgunna-Marymia Project, remains fully funded.

The Company had cash reserves of \$397,000 (before the equity raising) and no debt as at 30 June 2015.

# Farm-in agreement with Lodestar Minerals

During this quarter, Australian Mines entered into a farm-in and joint venture agreement with Lodestar Minerals (ASX: LSR) covering the six key exploration tenements immediately surrounding the Company's existing Doolgunna-Marymia project area.

This joint venture has enabled Australian Mines to significantly increase its footprint in the prospective Doolgunna-Marymia region of Western Australia, including an additional 15 kilometres strike continuity of the priority Jenkin Fault structure, being the key controlling structure of the mineralisation at Sandfire's DeGrussa Copper-Gold Mine.

The Company has also acquired a number of advanced copper targets through this joint venture including the western extension of the Company's Burton base metal prospect and the promising Gregory prospect.

Under this agreement, Australian Mines can earn up to an 80% interest in the Lodestar's Ned's Creek and Marymia tenements by making a \$250,000 payment to Lodestar in December 2015 and spending a minimum of \$3 million over four years, with a minimum exploration commitment of \$150,000 within six months<sup>28</sup>.

# Riedel Resources joint venture tenements

On 30 May 2015, Australian Mines reported that the Company had earned a 51% interest in the prospective Doolgunna-Marymia tenements of E52/2394 and E52/239 having met the terms of agreement with Riedel Resources (ASX: RIE) that Australian Mines spend \$1 million in exploration before April 2016.

During this quarter, the Company similarly notified Riedel Resources of Australian Mines' intention to raise its majority stake in this project to 80% by spending a further \$2 million on exploration over the coming three years.

# \*\*\*ENDS\*\*\*

<sup>&</sup>lt;sup>28</sup> Australian Mines Limited, Australian Mines increases Marymia ground holding, released 11 June 2015



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#### **Competent Person's Statement**

Information in this report that relates to Doolgunna-Marymia Project Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Benjamin Bell who is a member of the Australian Institute of Geoscientists. Mr Bell is a full-time employee and Managing Director of Australian Mines Limited. Mr Bell has sufficient experience that is relevant to the styles of mineralisation and types 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 Bell 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 the Marriotts Nickel Project Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Mick Elias, who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Elias is a director of Australian Mines Limited. Mr Elias has sufficient experience relevant to this 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 Elias consents to the inclusion in this report of the matters based on his information in the form and context in which is appears.

The information regarding Australian Mines' Marriotts Mineral Resource has been extracted from various Company announcements, which are available on the Australian Mines website (www.australianmines.com.au) or through the ASX website at www.asx.com.au (using ticker code "AUZ"). Australian Mines confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the estimates in that market announcement continue to apply and have not materially changed. Australian Mines confirms that the form and context in which the Competent Person's findings are presented have not materially modified from the original market announcement.

This document contains Mineral Resources that are reported under JORC 2004 Guidelines, as there has been no Material Change or Re-estimation of the Mineral Resource since the introduction of the JORC 2012 Code. Future estimates of the Marriotts Nickel Project resource will be completed to JORC 2012 Guidelines.



#### **About Australian Mines**

Australian Mines Limited (ASX: AUZ) is an Australian-listed resource company targeting copper, nickel and gold deposits. The Company is actively exploring the Doolgunna-Marymia region of Western Australia, which has demonstrated the potential to host significant base metal and gold mineralisation including Sandfire's DeGrussa Copper-Gold Mine and Northern Star's Plutonic Gold Mine. The Company is also advancing its Marriotts Nickel Project near Leinster, Western Australia.

#### Doolgunna – Marymia Project

#### Agreement to earn up to 80% interest in E52/2440, E52/2444, E52/2456, E52/2492, E52/2493 & E52/2468

Australian Mines entered into a Farm-in and Joint Venture Agreement with Lodestar Minerals (ASX: LSR) in June 2015 in respect of All Minerals Excluding Gold within the tenements of E52/2440, E52/2444, E52/2456, E52/2492, E52/2493 and E52/2468.

Under the terms of the agreement announced on 11 June 2015, Australian Mines may acquire a 51% interest in these tenements by spending \$1 million on exploration within an initial two-year period and making a \$250,000 payment to Lodestar in December 2015.

Following the acquisition of the initial 51%, Australian Mines may elect to acquire an additional 29% interest (taking the total to 80%) in these tenements by spending a further \$2 million on exploration within a further 24-month period.

#### Agreement to earn up to 80% interest in E52/2394 & E52/2395

Australian Mines signed a Heads of Agreement with Riedel Resources (ASX: RIE) in April 2014 covering the tenements E52/2394 and E52/2395.

As announced on 29 May 2015, Australian Mines currently holds a 51% interest in these tenements and the Company has elected to acquire an additional 29% interest in the project (taking the total to 80%) by spending a further \$2 million on exploration by May 2018.

#### Marriotts Nickel Project

#### 100% interest in Mining Lease 37/96

Australian Mines holds a 100% interest in the Marriotts Nickel Project in Western Australia, which hosts a current Mineral Resource of: Indicated 460,000t @ 1.12% Ni plus Inferred 370,000t @ 1.13% Ni (reported at 0.5%Ni lower cut-off grade)<sup>29</sup>.

<sup>29</sup> Australian Mines Limited, Addendum to 2014 Annual Report, released 29 December 2014



# **Appendix 1: Tenement Information**

### Mining tenements held at end of the quarter

Location	Project	Tenement	Status	Interest
AUSTRALIA				
Western Australia	Marriotts	M37/096	Granted	100%

# Mining tenements acquired and disposed of during the quarter

Location	Project	Tenement	Status	Interest
-	-	-	-	-

### Beneficial percentage interests held in farm-in or farm-out agreements at end of the quarter

Location	Project	Agreement	Parties	Interest	Comments
AUSTRALIA					
Western Australia	Doolgunna- Marymia	Farm-in and Joint Venture Agreement	AUZ and LSR	0%	Announced 11 June 2015
Western Australia	Doolgunna- Marymia	Heads of Agreement	AUZ and RIE	51%	Announced 30 April 2014



Beneficial percentage interests in farm-in or farm-out agreements acquired or disposed of during the quarter

Location	Project	Agreement	Parties	Interest	Comments
AUSTRALIA					
Western Australia	Doolgunna- Marymia	Farm-in and Joint Venture Agreement	AUZ and LSR	0%	Announced 11 June 2015
Western Australia	Doolgunna- Marymia	Heads of Agreement	AUZ and RIE	51%	Announced 29 May 2015

#### Heads of Agreement - Australian Mines (ASX: AUZ) and Riedel Resources (ASX: RIE)

On 29 May 2015, Australian Mines announced that the Company has earned a 51% interest in the exploration tenements E52/2394 and E52/2395, having met the terms under the Heads of Agreement with Riedel Resources to spend \$1 million in exploration before April 2016.

The key terms of the AUZ - RIE agreement are summarised in the Company's announcement of 30 April 2014.

#### Farm-in and Joint Venture Agreement - Australian Mines (ASX: AUZ) and Lodestar Minerals (ASX: LSR)

During the quarter, Australian Mines entered into a Farm-In and Joint Venture Agreement with Lodestar Minerals covering the exploration tenements E52/2440, E52/2444, E52/2456, E52/2468, E52/2492 and E52/2493.

The key commercial terms of this agreement were announced on 11 June 2015 and include:

- Australian Mines may acquire a 51% interest in All Minerals Excluding Gold within these tenements by spending \$1 million on exploration within an initial two-year period from the signing of the agreement. (Under this agreement, *All Minerals Excluding Gold* means any mineralisation where gold is either absent or, if present, is not the dominant mineral within a maiden Mineral Resource).
- Australian Mines has the right to withdraw from the joint venture subject to the Company spending a minimum of \$150,000 in exploration on these tenements within six months from the signing of the agreement.
- If Australian Mines exercises its option to continue with the joint venture after this initial six month period, the Company must make a cash payment to Lodestar of \$250,000 by 10 December 2015.
- Following the acquisition of the initial 51%, Australian Mines may elect to acquire an additional 29% interest (taking the total to 80%) in the tenements by spending a further \$2 million on exploration within a further 24-month period.
- Once Australian Mines has satisfied its earn-in obligations, with a resulting joint venture interest of either 51% of 80%, Lodestar may elect to contribute on a pro-rata basis or dilute their interest according to the standard industry formula.



# Appendix 2: JORC Code, 2012 Edition

# Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation		Commentary
Sampling techniques	<text><text><text><text></text></text></text></text>	•	<ul> <li>Doolgunna-Marymia Project</li> <li>Samples from Australian Mines' reverse circulation (RC) drill programs are collected at one-metre intervals using a cone splitter to produce an approximate three kilogram sample, which is representative of the full drill metre.</li> <li>Sampling is guided by Australian Mines' protocols and QA/QC procedures, which were designed in consultation with SRK Consulting, Perth.</li> <li>All samples are submitted to the Intertek Genalysis laboratory in Perth for Fire Assay and Four Acid ICP-OES analysis.</li> <li>Australian Mines typically analyse for the following elements: Au, Ag, Al, As, Ba, Bi, Ca, Cd, Ce, Co, Cr, Cu, Fe, K, La, Li, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Sn, Sr, Te, Ti, TI, V, W, Zn.</li> <li>Martotts Nickel Project</li> <li>Sampling is guided by Australian Mines' historic Marriotts drilling programs relate to NQ diameter diamond core which were halved by core saw and sampled on a one metre basis.</li> <li>Sampling is guided by Australian Mines' strict protocols and QA/QC procedures, which were designed in consultation with SRK Consulting.</li> <li>All samples are submitted to the Intertek Genalysis laboratory for Fire Assay and Four Acid ICP-OES analysis.</li> <li>Australian Mines typically analyse for the following ending in consultation with SRK Consulting.</li> <li>All samples are submitted to the Intertek Genalysis laboratory for Fire Assay and Four Acid ICP-OES analysis.</li> <li>Australian Mines typically analyse for the following elements: Au, Ag, Al, As, Ba, Bi, Ca, Cd, Ce, Co, Cr, Cu, Fe, K, La, Li, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Sn, Sr, Te, Ti, TI, V, W, Zn.</li> </ul>



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.)	<ul> <li>Doolgunna-Marymia Project</li> <li>The drill holes referred to in this report for the Doolgunna-Marymia Project are reverse circulation (RC).</li> <li>Marriotts Nickel Project</li> <li>The drill holes referred to regarding the Company's Marriotts Nickel project are RC precollars to a nominal depth of 50 metres with an NQ diameter diamond core tail to end of hole. Metallurgical testing holes were drilled using HQ diameter diamond drilling.</li> </ul>
Drill sample recovery	<ul> <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> <li>Doolgunna-Marymia Project</li> <li>Sample recoveries from the Company's RC programs were high with more than 90% of the sample returned for most metres.</li> <li>All samples were visually checked for recovery, moisture and contamination with the appropriate notes being recorded in the sampling logs.</li> <li>There is no observable relationship between recovery and grade, and therefore no sample bias is assumed. Australian Mines protocols, designed in consultation with SRK Consulting (Perth) are followed to preclude any issues of sample bias</li> </ul>

#### Marriotts Nickel Project

 Diamond core recoveries are recorded during drilling and reconciled during the core processing and geological logging. No significant sample recovery problems appear to have occurred.

The massive sulphide style of mineralisation and the consistency of mineralised intervals are considered to preclude any issue of sample bias due to material loss or gain.



#### 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.
- Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.
- The total length and percentage of the relevant intersections logged.

#### Doolgunna-Marymia Project

 Geological logging of drill chips have been recorded for the Company's drill holes, including lithology, mineralogy, grainsize, texture, weathering, oxidation, colour and other features of the samples.

Drill chips were not logged to any geotechnical standard and the data from the Doolgunna-Marymia drilling is insufficient to support Mineral Resource estimation at this stage.

Logging of RC drill chips is considered to be semiquantitative given the nature of rock chip fragments and the inability to obtain detailed geological information. The drill hole was logged in full to the end of the hole.

#### **Marriotts Nickel Project**

 Geological logging of drill core have been recorded for this drill hole, including lithology, mineralogy, texture, weathering, oxidation, colour and other features of the samples.

The drill holes was logged in full to the end of the hole but were not logged to geotechnical standard.

#### Sub-sampling techniques and sample preparation

- If core, whether cut or sawn and whether quarter, half or all core taken.
- If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.
- For all sample types, the nature, quality and appropriateness of the sample preparation technique.
- Quality control procedures adopted for all subsampling stages to maximise representivity of samples.
- 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.

#### Doolgunna-Marymia Project

All one metre splits were passed through a cone splitter to produce a 12% split for assaying. The 78% off-split was collected in green bags for future testing as required.

Samples are dried and pulverised using industry standard methods by Intertek Genalysis at their Perth assay laboratory.

All samples are pulverised to produce a 50-gram charge, which is analysed by Fire Assay and Four Acid ICP-OES.

The sample sizes are considered to be appropriate to correctly represent the sought after mineralisation style.



 Whether sample sizes are appropriate to the grain size of the material being sampled.

#### **Marriotts Nickel Project**

 All one metre splits from the RC pre-collar samples were passed through a cone splitter to produce a 12% split for assaying. The 78% offsplit was collected in green bags for future testing as required.

The diamond core resulting from the Company's Marriotts drill program was cut using a diamond saw by Australian Mines personnel. Half core was sampled on one metre intervals.

Samples are dried and pulverised using industry standard methods by Intertek Genalysis at their Perth assay laboratory.

All samples are pulverised to produce a 50-gram charge, which is analysed by Fire Assay and Four Acid ICP-OES.

Standards are inserted approximately every 20 samples or at least one every hole for both diamond and RC drilling. Blanks are inserted selectively in RC and diamond programs, at least once per hole.

All QAQC samples were returned within acceptable statistical ranges.

The sample sizes are considered to be appropriate to correctly represent the sought after mineralisation style.

Quality of assay data and laboratory tests

- The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.
- 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.
- 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.

#### Doolgunna-Marymia Project

 Samples submitted to Intertek Genalysis in Perth are assayed using a Fire Assay and mixed four acid digest.

The samples are digested and refluxed with a mixture of acids including Hydrofluoric, Nitric, Hydrochloric and Perchloric acids and analysis conducted for multi-elements including Au, Ag, Al, As, Ba, Bi, Ca, Cd, Ce, Co, Cr, Cu, Fe, K, La, Li, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Sn, Sr, Te, Ti, TI, V, W, Zn.

This method approaches a total digest for many elements although some refractory minerals may not be completely attacked.



 The quality of the analytical results is monitored through the use of internal laboratory procedures to ensure the results are representative and within acceptable ranges of accuracy and precision.

#### Marriotts Nickel Project

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All QAQC samples were returned within acceptable statistical ranges.

Verification of sampling and assaying The verification of significant intersections by either independent or alternative company personnel.

- The use of twinned holes.
- Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.
- Discuss any adjustment to assay data.

Any materially significant intersections are initially verified by Australian Mines' Managing Director, and are then independently verified by the external consulting company, rOREdata.

Primary data is collected using a set of standard Excel templates using lookup tables. The information was sent to the Company's external database consultant, rOREdata, for validation and compilation into Australian Mines' database.



No twinned hole drilling is proposed by Australian Mines for the Doolgunna-Marymia Project at this stage.

No adjustments or calibrations were made to any assay values.

# Location of data points

 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.

- Specification of the grid system used.
- Quality and adequacy of topographic control.

#### Doolgunna–Marymia Project

Drill hole collar locations are recorded using handheld Garmin GPS.

The expected accuracy is +/- 5 metres for easting and northings. The grid system used is Map Grid of Australia (MGA) GDA94 Zone 51.

#### **Marriotts Nickel Project**

 Drill hole collar locations have been accurately surveyed in Map Grid of Australia (MGA) GDA94
 Zone 51 using differential GPS (DGPS) and all diamond holes were surveyed by down hole gyro.

As a result, Australian Mines' Marriotts drill collar locations are therefore quoted with sub-metre accuracy.

#### Data spacing and distribution

- Data spacing for reporting of Exploration Results.
- 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.
- Whether sample compositing has been applied.

#### **Doolgunna-Marymia Project**

Australian Mines' drill program at Doolgunna-Marymia involved RC drilling discrete and separate geophysical anomalies interpreted from the Company's recently completed moving loop electromagnetic (EM) survey. No fixed spacing, therefore, relates to the location of these drill holes.

This drill data is not being used for estimating a Mineral Resource or modelling of grade at this stage in exploration.

No sample composting was applied to the exploration results.

#### Marriotts Nickel Project

The drilling at Marriotts was vertical and drilled on a 20 metre spaced pattern at the eastern end of the orebody, and a 20 metre by 40 metre spaced pattern over the remainder of the orebody.



This data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource estimation procedures and classifications applied.

#### **Doolgunna-Marymia Project** Orientation of Australian Mines is targeting DeGrussa-style Whether the orientation of sampling achieves data in copper-gold, komatiite-hosted nickel sulphide, and relation to unbiased sampling of possible structures and the Plutonic-style gold mineralisation at the geological extent to which this is known, considering the structure Doolgunna-Marymia Project. deposit type. The orientations of the Company's drilling are If the relationship between the drilling orientation designed to intersect modelled electromagnetic and the orientation of key mineralised structures (EM) conductors at right angles in an attempt to is considered to have introduced a sampling minimise the risk of biased sampling. bias, this should be assessed and reported if material. The orientation of the drilling is deemed sufficient at this stage of exploration. **Marriotts Nickel Project** Australian Mines Marriotts Nickel project hosts a komatiite-hosted nickel sulphide orebody. The majority of the drill holes were orientated to achieve intersection angles as close to perpendicular as possible. No orientation base sampling has been observed in the data and intersections are reported as downhole lengths. The measures taken to ensure sample security. The chain of custody is managed by Australian Sample Mines. security Samples are stored on site and are delivered in tamper-proof/evident bags via Toll IPEC directly to the assay laboratory. Australian Mines' sampling techniques and data The results of any audits or reviews of sampling Audits or collection processes are of industry standard and techniques and data. reviews have been subjected to internal reviews. Any data received from the assay laboratories are independently verified by rOREdata in Perth, Australia.



# Section 2: Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
		Doolgunna-Marymia Project
Mineral tenement and	• Type, reference name/number, location and	The Doolgunna-Marymia Project is located within
land tenure	ownership including agreements or material	the Western Australian exploration licences of
status	issues with third parties such as joint ventures,	E52/2440, E52/2444, E52/2456, E52/2468,
	partnerships, overriding royalties, native title	E52/2492, E52/2493, E52/2394 and E52/2395.
	nterests, historical sites, wilderness or hational	On 30 April 2014, Australian Mines appounced it
	park and on informational obtaingo.	had signed a Heads of Agreement with Riedel
	• The security of the tenure held at the time of	Resources (ASX code: RIE) in relation to
	reporting along with any known impediments to	licences E52/2394 and E52/2395.
	obtaining a licence to operate in the area.	On 20 May 2015 Australian Minas reported that
		the Company had earned a 51% interest in
		tenements E52/2394 and E52/2395, and the
		Company has elected to acquire an additional
		29% interest in the project (taking the total to
		80%) by spending a further \$2 million on
		exploration by May 2010
		On 11 June 2015, Australian Mines announced it
		had entered into a Farm-in and Joint Venture
		Agreement with Lodestar Minerals (ASX code:
		$E_{52/2444}$ $E_{52/2456}$ $E_{52/2468}$ $E_{52/2492}$ and
		E52/2493.
		The Company's Doolgunna-Marymia exploration
		Pastoral Leases and contained within the Native
		Title Claim boundaries of the <i>Gingiran</i> a
		(WAD6002/03) and Yugunga-Nya (WAD6132/98)
		Traditional Owners.
		All exploration licences are currently in good
		standing with no impediments to exploration
		known to exist at the time of writing.
		Marriotts Nickel Project
		The Company's Marriotts Nickel Project is
		located within the granted Western Australian
		Mining Lease of M37/69 and is held 100% by
		Australian Mines.
		The Marriotts mining lease remains in good
		standing with no impediments to exploration
		known to exist at the time of writing.



Exploration done by other parties

Acknowledgment and appraisal of exploration by other parties.

#### **Doolgunna-Marymia Project**

Limited exploration has previously been undertaken across the priority target areas of the Company's Doolgunna-Marymia Project by other companies.

A summary of the historic anomalies and drill intersections for tenements E52/2394 and E52/2395 are outlined in the Prospectus released by Riedel Resources on 23 November 2010.

A summary of the historic anomalies and drill intersections for tenements E52/2440, E52/2444, E52/2456, E52/2492, E52/2493 and 52/2468 are outlined in Lodestar's 2010 Annual Report released 29 September 2010 and Lodestar's 2013 Annual Report released on 25 September 2013.

Galtrad Pty Ltd's technical report submitted to the Western Australian Department of Mines and Petroleum for tenement E52/592 (which now forms part of Australian Mines' tenement E52/2394) is referenced in the accompanying report.

Barrick (PD) Australia Limited's technical report submitted to the Western Australian Department of Mines and Petroleum for tenement E52/12680-1684, E52/1706, E69/1879 (which now forms part of Australian Mines' tenement E52/2400) is also referenced in the accompanying report.

#### Marriotts Nickel Project

Australian Mines acquired the Marriotts Nickel Project from BHP Billiton in 2006. A summary of the exploration completed by BHP Billiton (and by WMC) is provided in Australian Mines 2006 Annual Report released 31 October 2006.

#### Doolgunna-Marymia Project

Australian Mines are targeting three types of mineral deposits at Doolgunna-Marymia;

- (i) DeGrussa-style volcanogenic massive sulphide copper-gold
- (ii) Kambalda-style komatiite-hosted nickel sulphide, and
- (iii) Plutonic-style Archaean gold.

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#### Geology

• Deposit type, geological setting and style of mineralisation.



The Doolgunna-Marymia project overlies the eastern continuation of the Bryah Basin, considered the host of Sandfire's DeGrussa and Monty copper-gold mineralisation.

The Baumgarten Greenstone Belt located in the eastern half of the Company's Doolgunna-Marymia Project is the interpreted as northern extension of the Eastern Goldfields Province of the Yilgarn Craton.

#### Marriotts Nickel Project

Australian Mines Marriotts Nickel Project hosts a nickel sulphide Mineral Resource as reported by the Company on 29 December 2014.

The Marriotts Nickel Project is located on the Mt Clifford portion of the Agnew-Wiluna Greenstone Belt of the Eastern Goldfields.

MMRC003 is based on a minimum threshold of

250ppm (0.025%).

#### **Doolgunna-Marymia Project** Drill hole A summary of all information material to the Summary of historic exploration results, including Information understanding of the exploration results including a tabulation of the Material drill holes for the a tabulation of the following information for all project outlined in the Company's are Material drill holes: announcement of 18 June 2015 and Riedel easting and northing of the drill hole collar Resources' Prospectus released on 23 elevation or RL (Reduced Level - elevation November 2010. 0 above sea level in metres) of the drill hole collar dip and azimuth of the hole Marriotts Nickel Project 0 down hole length and interception depth 0 Summary of the historic exploration results hole length. referred to in this report, including a tabulation of $\cap$ the Material drill holes for the project are outlined If the exclusion of this information is justified on in the Company's announcement of 20 June the basis that the information is not Material and 2007. this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. **Doolgunna-Marymia Project** Any reported intersections of Australian Mines' In reporting Exploration Results, weighting aggregation drilling results are based on a regular sample averaging techniques, maximum and/or minimum methods interval of one metre. grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be Where quoted, gold intersections are based on a stated. minimum gold threshold of 0.2 g/t gold. Nickel and zinc metal intersections are based on a Where aggregate intercepts incorporate short minimum threshold grade of 0.1% (1,000ppm). lengths of high grade results and longer lengths The copper intersection reported for drill hole of low grade results, the procedure used for such

Data

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aggregation should be stated and some typical

examples of such aggregations should be shown



have been used in this report.

No upper cuts are applied and a maximum

internal dilution of three metres is used for any

intersection calculations. No metal equivalents

			•	<b>Marriotts Nickel Project</b> Any reported intersections of Australian Mines' drilling results are based on a regular sample interval of one metre.
				Where quoted nickel intersections are based on a minimum threshold grade of 0.1% (1,000ppm).
				No upper cuts are applied and a maximum internal dilution of two metres is used for any intersection calculations. No metal equivalents have been used in this report.
Relationship between mineralisation widths and	•	These relationships are particularly important in the reporting of Exploration Results.	•	<b>Doolgunna-Marymia Project</b> There is insufficient understanding of the bedrock geology at present to determine the true thickness of any reported drill intersections.
intercept lengths	•	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.		Any intersections included in this report are down hole lengths. The true widths of these intersections are not known.
	•	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').	•	<b>Marriotts Nickel Project</b> There is sufficient understanding of the bedrock geology at Marriotts to determine the true thickness of any reported drill intersections. However, whilst the majority of the Company's drill holes were orientated to achieve intersection angles as close to perpendicular as possible, intersections included in this report are downhole lengths.
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	•	Appropriate maps and sections are included in the body of this report.

The assumptions used for any reporting of metal

equivalent values should be clearly stated.

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drill hole collar locations and appropriate

sectional views.



# Balanced reporting

 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.

#### **Doolgunna-Marymia Project**

The accompanying document is considered to represent a balanced report.

Comprehensive report of the historic Exploration Results relied on by Australian Mines in this report are provided in Riedel Resources' Prospectus released via the ASX on 23 November 2010.

#### Marriotts Nickel Project

• The accompanying document is considered to represent a balanced report.

Comprehensive report of the historic Exploration Results relied on by Australian Mines in this report are provided in the Company's announcement of 20 June 2007.

#### Doolgunna-Marymia Project

Other exploration data collected by the Company is not considered material to this report at this stage. Further data collection will be reviewed and reported when considered material.

Historic exploration has been undertaken at this location by previous explorers with the results summarised in Riedel Resources' Prospectus released on 23 November 2010.

#### Marriotts Nickel Project

Other exploration data collected by the Company is not considered material to this report at this stage. Further data collection will be reviewed and reported when considered material.

#### Further work

- The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).
- Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.

#### **Doolgunna-Marymia Project**

The Company is proposing to undertake further ground-based EM surveys (and down hole EM surveys) and RC drilling as part of its follow-up exploration at Doolgunna-Marymia.

#### **Marriotts Nickel Project**

Australian Mines is currently undertaking a thorough review of the historic drilling data together with all other exploration results received from the Marriotts Nickel Project to date.

#### Other substantive exploration data

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; bulk metallurgical test results; density, groundwater, geotechnical and rock characteristics; deleterious potential or contaminating substances.



The Company is proposing to commence a resource drilling program at Marriotts to confirm the depth continuity of the nickel sulphide mineralisation.