



## Quarterly Activities Report

Period Ended 31 March 2019



# Highlights

## Sconi Cobalt-Nickel-Scandium Project

- Queensland Government declares Sconi Project a Prescribed Project, in recognition of the project's potential to boost the North Queensland regional economy
- Independent study by CRU International places Sconi in 1<sup>st</sup> quartile of cost curve for global cobalt and nickel production
- Additional high-grade cobalt and nickel intersections reported in January from the Sconi Mineral Resource extension drilling program, including shallow intersections grading as high as 3.4% cobalt in a single metre section;
- Updated Mineral Resource announced in February boosting the contained cobalt and nickel metal quantities for the Sconi Project;
  - Greenvale Mineral Resource tonnes increased by 63.2%
  - Lucknow Mineral Resource tonnes increased by 94.6%

## Corporate

- \$5 million raised through an equity placement to sophisticated and institutional investors
- \$1.9 million Research and Development tax rebate received for activities completed at the Company's demonstration-size processing plant in Western Australia



**Australian Mines Managing Director, Benjamin Bell, commented:** *“We continued to add value to and progress the Sconi Project during the March quarter. As we move to finalise the long-form off-take agreement with SK Innovations and progress financing negotiations for Sconi, we have improved the Project’s potential by extending the Life of Mine for the Project through the significant upgrading of the Mineral Resources at the Greenvale and Lucknow deposits.”*

*“With Sconi now defined as a Prescribed Project by the Queensland Government, we are buoyed by the support of the Government in progressing the Project and delivering jobs and opportunities to the local community on the ground at Greenvale and throughout the Charters Towers local government district and the North Queensland region more broadly.”*

*“On a macro level, it is clear that electric vehicles and renewables will be a major focus of the upcoming Federal election campaign. With Labor declaring a target of 50% electric vehicle sales in Australia by 2030 and the Coalition also indicating it has a target of 25-50% over the same period, this has brought the potential of electric vehicles into sharp focus in Australia.”*

*“Significantly, a number of major automotive manufacturers have been quick to declare that these targets are in line with their existing internal modelling and that many of the leading carmakers are planning to have electric variants of all their vehicles, including SUVs and 4WDs, between now and 2025.”*

*“As we are planning on producing battery grade nickel sulphate and cobalt sulphate from Sconi, we are extremely well placed to capitalise on the expected increase in demand over the coming decade. We have a busy quarter ahead as we progress the Sconi Project.”*

**Australian Mines Limited** (“Australian Mines” or “the Company”) (Australia ASX: AUZ; USA OTCQB: AMSLF; Frankfurt Stock Exchange: MJH) is pleased to provide its Quarterly Activities Report for the period ending 31 March 2019.

## Sconi Cobalt-Nickel-Scandium Project

In January, the Queensland Government declared the Sconi Project a Prescribed Project<sup>1</sup>, in recognition of the project’s potential to boost the North Queensland regional economy. The Prescribed Project status will greatly assist in streamlining Sconi’s progress through the final stages of regulatory approvals.

During this period, an independent market study, prepared by CRU International, forecasted that the Sconi Project will be one of the most competitive cobalt-producing nickel operations in the world<sup>2</sup>.

Based on the outcomes of financial modelling in the Company’s robust Bankable Feasibility Study (BFS), released in November last year<sup>3</sup>, the market study forecasted that the 2025 value-adjusted business costs<sup>4</sup> of the Sconi Project would place it in the 1<sup>st</sup> (or lowest cost) quartile compared with other existing and proposed analogous operations globally (see Figures 1 and 2).

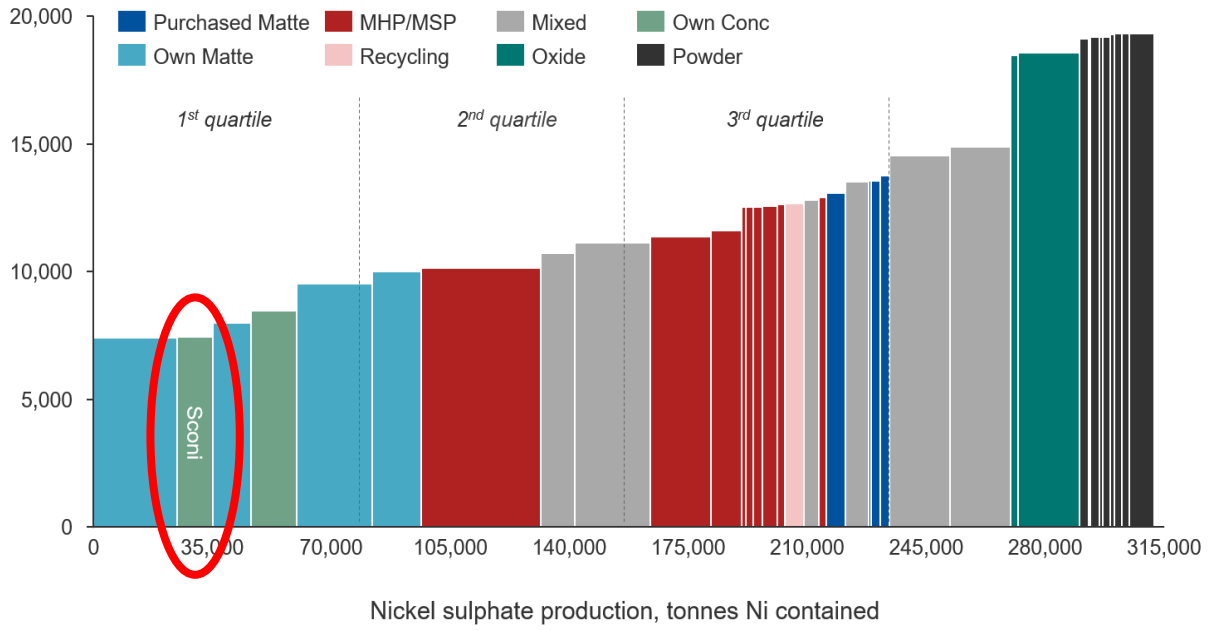
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<sup>1</sup> Australian Mines Limited, Queensland Government provides Sconi Prescribed Project Status, 25 January 2019

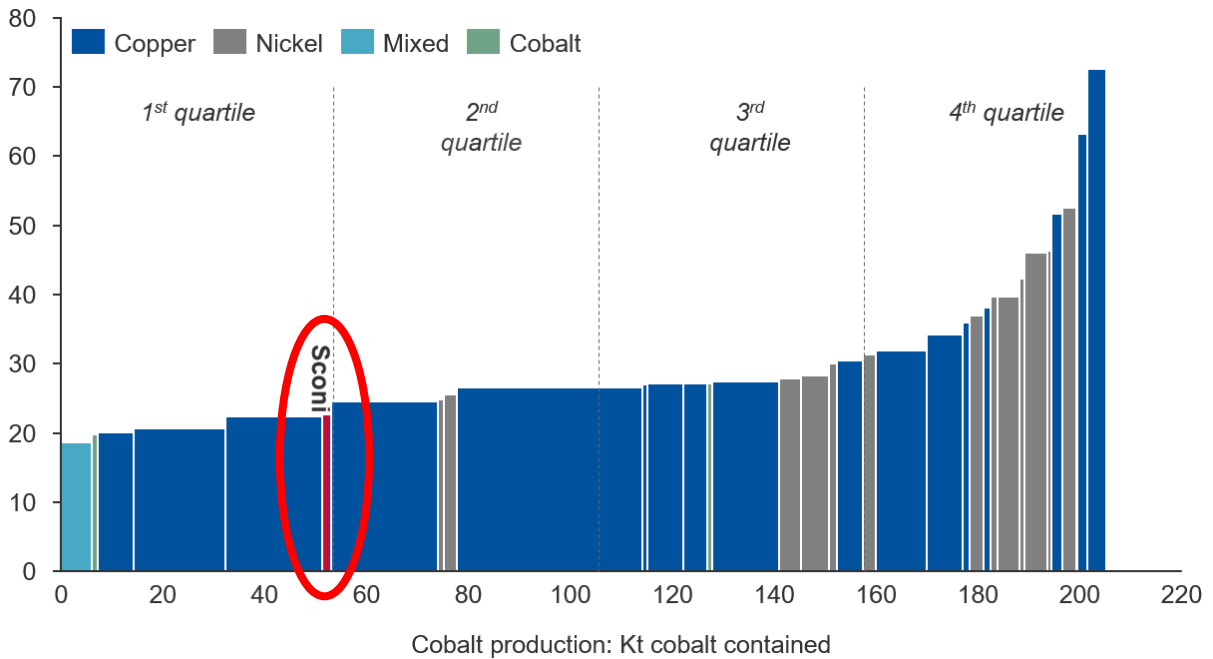
<sup>2</sup> Australian Mines Limited, Study places Sconi as low-cost cobalt and nickel producer, 12 February 2019

<sup>3</sup> Australian Mines Limited, BFS supports strong commercial case for developing Sconi, released 20 November 2018

<sup>4</sup> Value-adjusted business costs take into account all non-capital costs associated with producing and delivering a product to its natural market, as well as adjusting for by-product credits and value-in-use premia/discounts.



**Figure 1:** Nickel sulphate cost curve 2025, nominal USD per tonne of nickel contained



**Figure 2:** Pro rata cost curve of cobalt producers 2025, Nominal USD per lb cobalt

Being a projected low-cost future producer of the key battery metals, cobalt and nickel, Australian Mines is attracting attention from companies operating in the electric vehicle and related sectors.

Within this favourable business environment, Australian Mines continues to make positive progress towards finalising a long-form off-take contract with Korean-based SK Innovation for the sale and purchase of battery-grade cobalt sulphate and nickel sulphate from the Sconi Project, in line with the term sheet signed by both parties in early 2018<sup>5</sup>.

Details of any executed long-form off-take contract between Australian Mines and SK Innovation will be released by the Company to the market via the ASX platform at the appropriate time and in accordance with the Company's continuous disclosure obligations.

Australian Mines continued to investigate a range of project funding options during the March 2019 quarter, including a combination of off-take pre-payments, senior debt funding, royalty and/or streaming options, funding support via the Commonwealth Government's Northern Australia Infrastructure Facility (NAIF)<sup>6</sup> and mezzanine financing. These project financing discussions are being progressed with the assistance of UK-based Medea Capital Partners as the Company's principal financial advisor<sup>7</sup>.

Again, the Company will update the market on the outcomes of its project finance negotiations via the ASX platform at the appropriate times and in accordance with the Company's continuous disclosure obligations.

The Company was pleased to release further outstanding near-surface results from its Mineral Resource extension drilling program at Sconi during this quarter<sup>8</sup>. This drill program significantly expanded the mineralised footprint of the Sconi Project and resulted in a substantial increase in the Mineral Resource tonnage at the Sconi Project being announced by the Company in February<sup>9</sup> (see Table 1 and Appendix 1 of this report).

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<sup>5</sup> Australian Mines Limited, AUZ partners with SK Innovation to develop Sconi Project, 19 February 2018

<sup>6</sup> Australian Mines Limited, Sconi Project in Due Diligence Phase for NAIF funding, 15 October 2018

<sup>7</sup> Australian Mines Limited, Specialist off-take adviser appointed as Australian Mines advances towards development of its Sconi Project, 31 January 2018

<sup>8</sup> Australian Mines Limited, Growth potential of the Sconi Project continues to be unlocked, 21 January 2019

<sup>9</sup> Australian Mines Limited, Substantial increase in Sconi Mineral Resource tonnage, 14 February 2019



Deposit	Resource category	Tonnes (million tonnes)	NiEq <sup>10</sup> %	Nickel %	Cobalt %	Ni Metal (tonnes)	Co metal (tonnes)
Greenvale	Measured	5.05	1.06	0.83	0.07	41,915	3,535
	Indicated	17.24	0.90	0.73	0.05	125,966	8,620
	Inferred	10.34	0.63	0.54	0.04	55,888	4,136
	<b>Total</b>	<b>32.63</b>	<b>0.84</b>	<b>0.69</b>	<b>0.05</b>	<b>223,769</b>	<b>16,291</b>
Lucknow	Measured	1.60	0.91	0.53	0.11	8,480	1,760
	Indicated	12.63	0.83	0.47	0.11	59,361	13,893
	Inferred	0.38	0.66	0.55	0.03	2,090	114
	<b>Total</b>	<b>14.62</b>	<b>0.83</b>	<b>0.48</b>	<b>0.11</b>	<b>70,176</b>	<b>16,082</b>
Kokomo	Measured	1.62	1.17	0.73	0.15	11,826	2,430
	Indicated	19.37	0.83	0.57	0.09	110,409	17,433
	Inferred	7.48	0.7	0.53	0.07	39,644	5,236
	<b>Total</b>	<b>28.47</b>	<b>0.81</b>	<b>0.57</b>	<b>0.09</b>	<b>162,279</b>	<b>25,623</b>
Total	Measured	8.27	1.05	0.75	0.09	62,221	7,725
	Indicated	49.24	0.85	0.60	0.08	295,736	39,946
	Inferred	18.2	0.66	0.54	0.05	97,622	9,486
	<b>Total</b>	<b>75.71</b>	<b>0.83</b>	<b>0.60</b>	<b>0.08</b>	<b>455,579</b>	<b>57,157</b>

**Table 1:** Combined Sconi Mineral Resource and contained metal calculations. (See Tables 2 to 4 in Appendix 1 of this report for cut-off grades)<sup>11</sup>

<sup>10</sup> Nieq calculation is described in detail in Appendix 1 of this report.

<sup>11</sup> The Company is not aware of any new information or data that materially affects the information included in the market announcement released by the Company on 14 February 2019 in respect of the Sconi Project and all material assumptions and technical parameters underpinning the Mineral Resource estimates in that announcement continue to apply and have not materially changed.

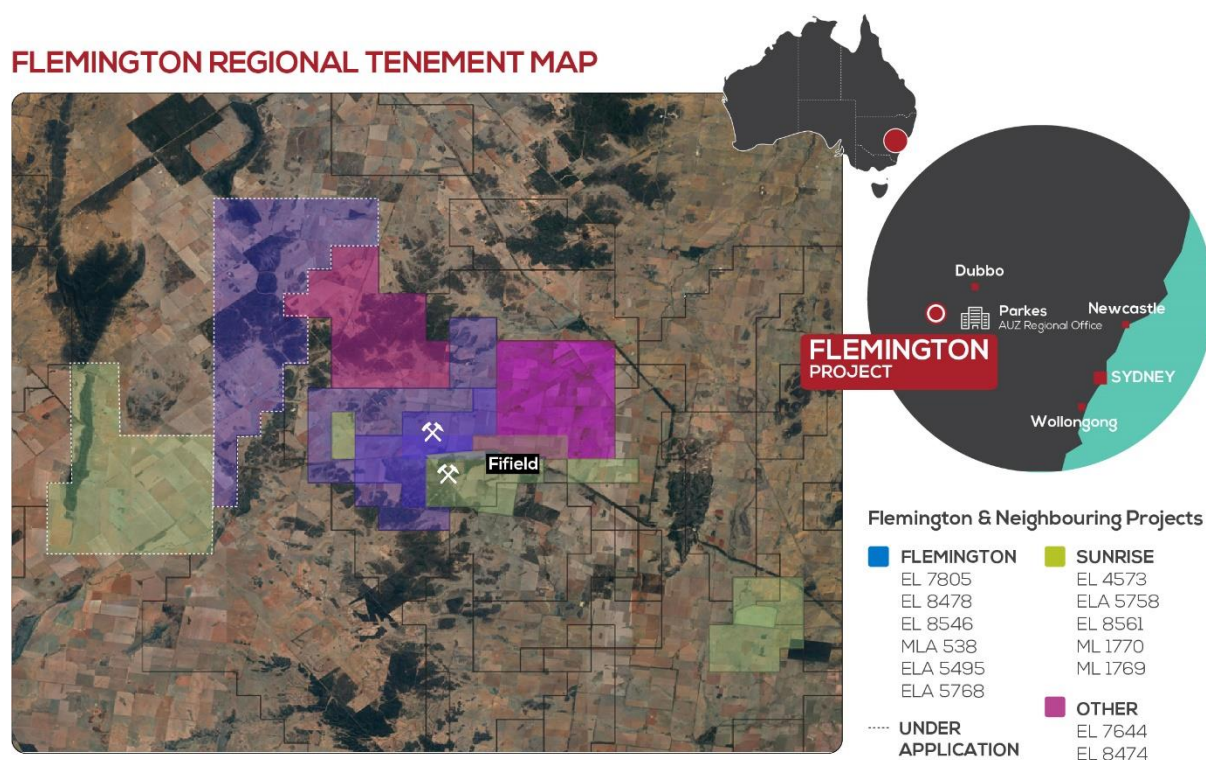


## Flemington Cobalt-Scandium-Nickel Project

Australian Mines' 100%-owned Flemington Cobalt-Nickel-Scandium Project, located 370 kilometres west of Sydney (New South Wales), contains an initial Mineral Resource of 2.5 million tonnes at 0.103% cobalt and 403ppm scandium in the Measured category; and 0.2 million tonnes at 0.076% cobalt and 408ppm scandium in the Indicated category<sup>12</sup>.

Australian Mines believes significant potential remains to materially expand the current Mineral Resource, given that only 1% of the prospective geology at Flemington has been comprehensively tested to date<sup>13</sup>.

Australian Mines is preparing to commence a Mineral Resource expansion drilling program at the Company's Flemington Project in New South Wales. Further details regarding the drilling program will be released via the ASX platform once the results from this program are available.



**Figure 3:** Map showing Australian Mines' dominant landholding within this highly prospective district in New South Wales, Australia.

Purple / Blue = Australian Mines' Flemington Project

Green = Clean TeQ Holding's Sunrise Project

Magenta = Platina's Owendale and Jervois Mining's unnamed Project

<sup>12</sup> The Company is not aware of any new information or data that materially affects the information included in the market announcement released by the Company on 31 October 2017 in respect of the Flemington Project and all material assumptions and technical parameters underpinning the Mineral Resource estimates in that announcement continue to apply and have not materially changed.

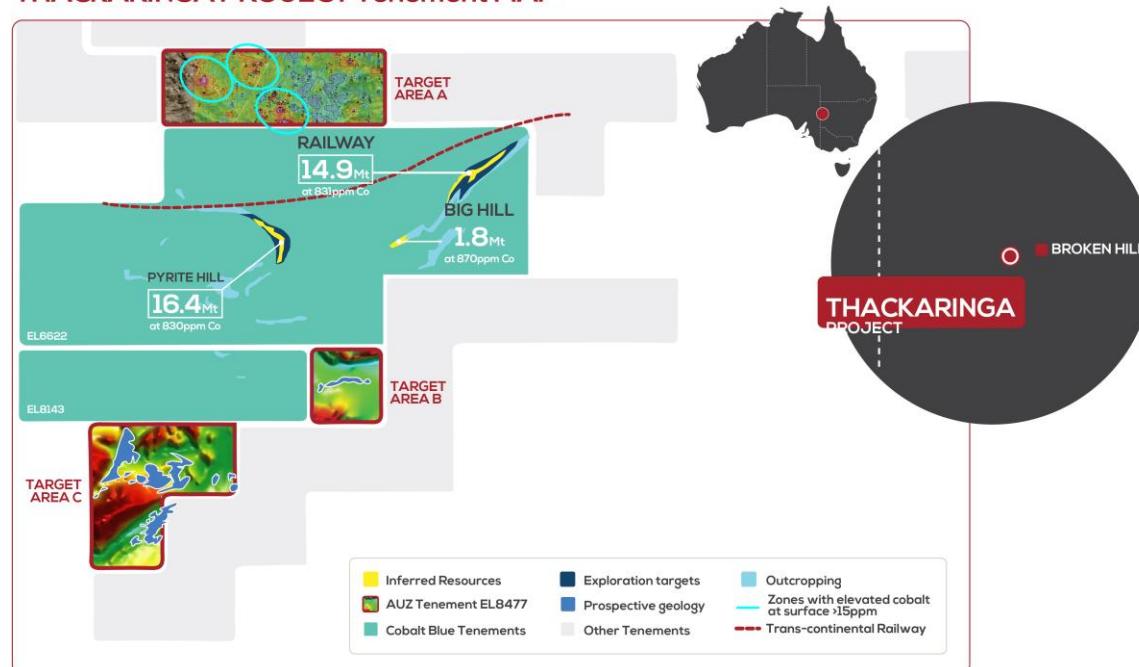
<sup>13</sup> Australian Mines Limited, Maiden Mineral Resource confirms Flemington Project's cobalt credentials, 31 October 2017

## Thackaringa Cobalt Project

Australian Mines' 100%-owned Thackaringa Project is a pure cobalt exploration play that immediately adjoins Cobalt Blue Holdings' Pyrite Hill / Railway / Big Hill Project located near Broken Hill in New South Wales.

With the Company's exploration team focused on the updated Mineral Resource Estimate for Sconi and planning resource expansion drilling at Flemington, limited field work was consequently undertaken over the Thackaringa Project during the March quarter.

### THACKARINGA PROJECT Tenement MAP



**Figure 4:** Australian Mines' Thackaringa project in central New South Wales, Australia showing the location of priority target areas within *Target Area A* where a close-spaced geochemical sampling program by the Company identified zones of highly elevated cobalt levels.

## Corporate Activity

Australian Mines raised \$5 million before costs in February through an equity placement to sophisticated and institutional investors<sup>14</sup>. The placement of 172,413,793 fully paid Ordinary shares at 2.9 cents per share was completed in accordance with Section 708 of the Corporations Act, using the Company's existing placement capacity pursuant to Listing Rule 7.1.

In January 2019, the Company received a \$1.9 million rebate from the Australian Tax Office in relation to the Company's research and development expenditure during the 2017-18 financial year<sup>15</sup>. The rebate relates to continued development work completed at Australian Mines' demonstration-size High-Pressure Acid Leach and Solvent Extraction plant located in Perth, Western Australia, in conjunction with Simulus Group's laboratories.

<sup>14</sup> Australian Mines Limited, Australian Mines secures funds to accelerate cobalt and nickel projects, 27 February

<sup>15</sup> Australian Mines Limited, \$1.9 million received from Commonwealth Government, 15 January 2019



**\*\*\*ENDS\*\*\***

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## Appendix 1: Mineral Resource Estimates

Sconi Cobalt-Nickel-Scandium Project – Mineral Resource (Effective 14 February 2019)<sup>16</sup>

Classification	Tonnes (million tonnes)	Nickel equivalent (%)	Nickel (%)	Cobalt (%)
Measured	5.05	1.06	0.83	0.07
Indicated	17.24	0.90	0.73	0.05
Inferred	10.34	0.63	0.54	0.04
<b>TOTAL</b>	<b>32.63</b>	<b>0.84</b>	<b>0.69</b>	<b>0.05</b>

**Table 2:** Greenvale Mineral Resource

Lower cut-off grade: Nickel equivalent 0.40%

Classification	Tonnes (million tonnes)	Nickel equivalent (%)	Nickel (%)	Cobalt (%)
Measured	1.60	0.91	0.53	0.11
Indicated	12.63	0.83	0.47	0.11
Inferred	0.38	0.66	0.55	0.03
<b>TOTAL</b>	<b>14.62</b>	<b>0.83</b>	<b>0.48</b>	<b>0.11</b>

**Table 3:** Lucknow Mineral Resource

Lower cut-off grade: Nickel equivalent 0.55%

Classification	Tonnes (million tonnes)	Nickel equivalent (%)	Nickel (%)	Cobalt (%)
Measured	1.62	1.17	0.73	0.15
Indicated	19.37	0.83	0.57	0.09
Inferred	7.48	0.70	0.53	0.07
<b>TOTAL</b>	<b>28.47</b>	<b>0.81</b>	<b>0.57</b>	<b>0.09</b>

**Table 4:** Kokomo Mineral Resource

Lower cut-off grade: Nickel equivalent 0.45%<sup>17</sup>

<sup>16</sup> The Company is not aware of any new information or data that materially affects the information included in the market announcement released by the Company on 14 February 2019 in respect of the Sconi Project and all material assumptions and technical parameters underpinning the Mineral Resource estimates in that announcement continue to apply and have not materially changed.

<sup>17</sup> NiEq grades reference in this report were calculated according to the following formula:

$$NiEq = [(nickel\ grade \times nickel\ price \times nickel\ recovery) + (cobalt\ grade \times cobalt\ price \times cobalt\ recovery) / (nickel\ price \times nickel\ recovery)]$$

The formula was derived using the following commodity prices and recoveries:

Forex US\$:A\$ = 0.71, Nickel – A\$27,946/t and 94.8% recovery, Cobalt – A\$93,153/t and 95.7% recovery.

## Appendix 2: Competent Persons' Statements

### **Sconi Cobalt-Nickel-Scandium Project**

The Mineral Resource for the Sconi Cobalt-Nickel-Scandium Project contained within this document is reported under JORC 2012 Guidelines. This Mineral Resource was first reported by Australian Mines Limited on 14 February 2019. There has been no Material Change or Re-estimation of the Mineral Resource since this 14 February 2019 announcement by Australian Mines Limited.

The information in this report that relates to Mineral Resources is based on, and fairly reflects, information compiled by Mr David Williams, a Competent Person, who is an employee of CSA Global Pty Ltd and a Member of the Australian Institute of Geoscientists (#4176). Mr Williams has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as Competent Person as defined in the 2012 Edition of the Australasian Code for the Reporting of Exploration Results, Mineral Resources, and Ore Reserves (JORC Code). Mr Williams consents to the disclosure of information in this report in the form and context in which it appears.

Information in this report that relates to Sconi Cobalt-Nickel-Scandium Project's Exploration Results 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 it appears.

### **Flemington Cobalt-Nickel-Scandium Project**

The Mineral Resource for the Flemington Cobalt-Nickel-Scandium Project contained within this document is reported under JORC 2012 Guidelines. This Mineral Resource was first reported by Australian Mines Limited on 31 October 2017. There has been no Material Change or Re-estimation of the Mineral Resource since this 31 October 2017 announcement by Australian Mines Limited.

Information in this report that relates to Flemington Cobalt-Nickel-Scandium Project's Exploration Results 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 it appears.

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(<sup>17</sup> continued) Prices and recoveries effective as at 10th February 2019. Metal recovery data was determined by variability test work of nickel and cobalt solvent extraction during the inhouse pilot plant test work program. Results typically achieved between 90% and 99% from samples with nickel and cobalt grades aligned with expected mine grades as reported from the Mineral Resource model. Lower recoveries of between 85% and 90% were achieved from some lower-grade samples to determine economic cut off grades. It is the opinion of Australian Mines that all the elements included in the metal equivalents calculation have a reasonable potential to be recovered and sold. Detail supporting the formula are provided further on in this document. The Competent Person and Australian Mines believe there are reasonable prospects for eventual economic extraction of the Mineral Resources. Consideration was given to the relatively shallow depth of the mineralisation, existing infrastructure near to the project including sealed road access, power, labour and water, and positive results from the 2018 Feasibility Study.

## **Thackaringa Cobalt Project**

The information in this report that relates to the Thackaringa Cobalt Project's 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.



## Appendix 3: Forward Looking Statements

This announcement contains forward looking statements. Forward looking statements can generally be identified by the use of forward looking words such as, 'expect', 'anticipate', 'likely', 'intend', 'should', 'could', 'may', 'predict', 'plan', 'propose', 'will', 'believe', 'forecast', 'estimate', 'target', 'outlook', 'guidance', 'potential' and other similar expressions within the meaning of securities laws of applicable jurisdictions.

There are forward looking statements in this announcement relating to the outcomes of the Bankable Feasibility Study for the Sconi Project announced to the market in November 2018. Actual results and developments of projects and the market development may differ materially from those expressed or implied by these forward-looking statements. These, and all other forward-looking statements contained in this announcement are subject to uncertainties, risks and contingencies and other factors, including risk factors associated with exploration, mining and production businesses. It is believed that the expectations represented in the forward looking statements are reasonable but they may be affected by a variety of variables and changes in underlying assumptions which could cause actual results or trends to differ materially, including but not limited to price fluctuations, actual demand, currency fluctuations, drilling and productions results, resource estimations, loss of market, industry competition, environmental risks, physical risks, legislative, fiscal and regulatory changes, economic and financial market conditions in various countries and regions, political risks, project delay or advancement, approvals and cost estimates.

Any forward-looking statement is included as a general guide only and speak only as of the date of this document. No reliance can be placed for any purpose whatsoever on the information contained in this document or its completeness. No representation or warranty, express or implied, is made as to the accuracy, likelihood or achievement or reasonableness of any forecasts, prospects, returns or statements in relation to future matters contained in this document. Australian Mines does not undertake to update or revised forward-looking statements, or to publish prospective financial information in the future, regardless of whether new information, future events or any other factors affect the information contained in this announcement, except where required by applicable law and stock exchange listing requirements. To the maximum extent permitted by law, Australian Mines Limited and its Associates disclaim all responsibility and liability for the forward-looking statements, including, without limitation, any liability arising from negligence. Recipients of this document must make their own investigations and inquiries regarding all assumptions, risks, uncertainties and contingencies which may affect the future operations of Australian Mines Limited or Australian Mines Limited's securities.



## Appendix 4: Tenement Information

### Mining tenements held at end of the quarter

Location	Project	Tenement	Status	Interest
<b>AUSTRALIA</b>				
Queensland	Sconi	ML 10366	Granted	100%
Queensland	Sconi	ML10342	Granted	100%
Queensland	Sconi	ML10324	Granted	100%
Queensland	Sconi	ML 10332	Granted	100%
Queensland	Sconi	ML 20549	Granted	100%
Queensland	Sconi	ML 10368	Granted	100%
Queensland	Sconi	MDL 515	Granted	100%
Queensland	Sconi	MDL 387	Granted	100%
Queensland	Sconi	EPM 25834	Granted	100%
Queensland	Sconi	EPM 25865	Granted	100%
Queensland	Sconi	EPM 25833	Granted	100%
Queensland	Sconi	EPM 26575	Granted	100%

Queensland	Sconi	EPM 26577	Granted	100%
Queensland	Sconi	EPM 26578	Granted	100%
Queensland	Sconi	EPM 26579	Granted	100%
Queensland	Sconi	EPM 26559	Granted	100%
New South Wales	Flemington	EL 7805	Granted	100%
New South Wales	Flemington	EL 8546	Granted	100%
New South Wales	Flemington	EL 8478	Granted	100%
New South Wales	Flemington	MLA 538	Pending	-
New South Wales	Flemington	ELA 5495	Pending	-
New South Wales	Flemington	ELA 5768	Pending	-
New South Wales	Thackaringa	ELA 5772	Pending	-
New South Wales	Thackaringa	EL 8477	Granted	100%

### Mining tenements acquired and disposed of during the quarter

Location	Project	Tenement	Status	Interest	Comments
-	-	-	-	-	-



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

<b>Location</b>	<b>Project</b>	<b>Agreement</b>	<b>Parties</b>	<b>Interest</b>	<b>Comments</b>
-	-	-	-	-	-

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

<b>Location</b>	<b>Project</b>	<b>Agreement</b>	<b>Parties</b>	<b>Interest</b>	<b>Comments</b>
-	-	-	-	-	-

