

31 March 2017

Technical Reports

Australian Mines Limited ("Australian Mines" or "the Company)" advises that the results of the Flemington Cobalt-Scandium Project's Scoping Study announced on 16 March 2017 have been expanded, with the full details accompanying this announcement.

This opens the way for Australian Mines to finalise its Mining Lease Application over the Flemington ore body, which the Company expects to submit to the New South Wales' Department of Industry (Division of Resources and Energy) within the next 7 days.

Australian Mines also advises that prior to the Company commencing construction of its demonstration-size and fully operational high pressure acid leach (HPAL) processing plant for the Sconi Cobalt-Nickel-Scandium Project next month, it wishes to remind shareholders on the full results of the Pre-Feasibility Study on the Sconi Project completed by its joint venture partner Metallica Minerals Limited and announced on 28 March 2013, including reiterating the Project's upgraded Mineral Resource (JORC Code 2012) and the published cobalt, nickel and scandium production targets.

Full details of the 100% Australian Mines-owned processing plant, which will take approximately six months to build, will be announced in the coming weeks.

At this stage the Company can confirm that the demonstration-sized processing plant, which is significantly larger in both size and processing capacity than a pilot plant, (having an expected footprint of around 500 square metres), will be producing commercial grade cobalt sulphate, nickel sulphate and scandium oxide saleable products for the battery and advanced alloy markets.

The processing plant is expected to start treating cobalt, nickel and scandium ore from the Sconi Project as early as September this year. This short-timeframe is only possible because Australian Mines already has all the necessary approvals in place to commence mining and processing ore from this deposit.

The Company similarly envisages processing ore from the Flemington Project through this processing plant to commence towards the end of this year.



For further information, regarding the following technical reports that pertain to the Flemington Scoping Study and the Sconi Pre-Feasibility Study, please contact Australian Mines via the contacts below.

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Flemington Scoping Study

As announced on 16 March 2017, Australian Mines commissioned a Scoping Study from SRK Consulting to evaluate the technical and economic feasibility of the Flemington Cobalt-Scandium Project in New South Wales. The results of the Scoping Study reinforce Australian Mines' plans for the Flemington Project and recommends the Company considers advancing the Flemington Project to a Pre-Feasibility Study (PFS).

As announced on 10 October 2016, Australian Mines has an option agreement to acquire 100% of the Flemington Project from Jervois Mining Limited¹.

The Company's Flemington deposit is the continuation of Clean TeQ Holdings' Syerston nickel-cobalt-scandium, being separate solely by a tenement boundary.

Australian Mines' priority is to commence a significant drill program at Flemington from late April, which is designed to better define the cobalt and nickel resource for this project, as well as to begin working through the follow-up recommendations made in the Scoping Study

Scoping Study Parameters - Cautionary Statements

The Scoping Study referred to in this announcement, and completed by internationally renowned mining consulting firm, SRK Consulting (Australasia) Pty Ltd, has been undertaken to evaluate the technical feasibility of the Flemington Project. SRK Consulting has provided its consent to the data and the interpretations contained in this announcement.

It is a preliminary technical and economic study of the potential viability of the Flemington Project. It is based on low level technical and economic assessments that are not sufficient to support the estimation of ore reserves. It includes an economic evaluation including capital cost estimates to within ±35% and an operating cost estimate to within ±25%. It also includes technical consideration of the project infrastructure, mining, metallurgy, hydrogeology, tailings, environmental and social aspects, and project economics. Further evaluation work and appropriate studies are required before Australian Mines will be in a position to estimate any ore reserves or to provide any assurance of an economic development case.

Approximately 90% of the total Life of Mine production target is based on the Measured Resource category with the remaining 10% in the Indicated Resources category. The Scoping Study is based on the material assumptions outlined in this announcement, including at Appendix 4. These include assumptions about the availability of funding. While Australian Mines considers all of the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the Scoping Study will be achieved.

To achieve the range of outcomes indicated in the Scoping Study, funding of in the order of A\$75 million will likely be required. Investors should note that there is no certainty that Australian Mines will be able to raise that amount of funding when needed. Whilst it is possible that such funding may only be available on terms that may be dilutive to or otherwise affect the value of Australian Mines' existing shares, Australian Mines is likely to be in a strong financial position from the revenue generated from its Sconi cobalt-nickel-scandium operation, that it may be in a position to completely fund the construction of the Flemington Project as anticipated by the Scoping Study solely out of Australian Mines cash flow generated from its Sconi Project.

The Company has concluded that it has a reasonable basis for providing forward-looking statements included in this announcement and believes that it has a "reasonable basis" to expect it will be able to fund the development of the project. Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the Scoping Study.

¹ Australian Mines Limited, Strategic acquisitions position Australian Mines to fast-track into a leading global scandium company, released 10 October 2016



Summary of SRK's Scoping Study results

SRK found the economic results of the Scoping Study to be promising and recommended Australian Mines proceed to a Pre-Feasibility Study.

The economic analysis completed in this study demonstrated a Net Present Value (NPV) for Flemington of A\$162 million at an indicative 12% discount rate, rising to an impressive A\$409 million if a 4% discount rate is applied.

SRK points out that this is a preliminary assessment of the project was undertaken in accordance with Provision of Services contract with Australian Mines, dated October 2017, which states that SRK would deliver a scoping study report that would include an economic evaluation including capital cost estimates to within +/- 35% and an operating cost estimate to within +/- 25%. This is the same level of confidence quoted by Clean TeQ in their Syerston nickel and cobalt Pre-Feasibility Study of October 2016².

The Scoping Study recommends that ongoing project development should include reestimation of the resource model using 3D tools to support a future Pre-Feasibility Study or Feasibility Study, as SRK commented that their 3D model reports greater tonnages than the Mineral Resource previously announced by the Company and Jervois Mining Limited.

A summary of the current Mineral Resource for the Flemington Project is summarised in this announcement.

The Flemington Project was modelled as producing 99.9% pure scandium oxide (Sc_2O_3) – being the saleable product preferred by Airbus and the multiple potential automotive customers – with an estimated value of US\$1.5 million per tonne. This estimated value represents a significant discount to current market prices with scandium oxide currently demanding up to US\$2.6 million per tonne³.

The Scoping Study considered a range of production rate options from very small scale (3 tonnes per annum) to operations that are considered large for scandium, being a plant capable of producing 50 tonnes of scandium oxide per annum.

SRK noted that a future operation at Flemington will have relatively low mining rates and a very low strip ratio. As such, Australian Mines proposes to engage the services of mining contractors on site in short campaigns on an annual basis to produce up to 100,000 tonnes of Run of Mine (ROM) ore per annum to feed the proposed processing plant.

The Flemington deposit is very shallow and contiguous in shape. As the ore body outcrops, the final mine pits are expected to be shallow, with a maximum final depth of just 50 metres.

² Clean TeQ Holdings, Syerston nickel and cobalt Pre-Feasibility Study, released 5 October 2016

³ Contract price offered by Chinese-based Prichem Technology Limited to supply Australian Mines on 15 December 2016



Both ore and waste material materials are predicted to be free dig, hence drilling and blasting were not required and greatly reduced the mining costs.

Based on its experience and project benchmarking, SRK estimated mining costs at only A\$3.50 per tonne of ore taking into consideration: free dig material; campaign contractor mining; small scale equipment; shallow pits and short hauls.

A hydrometallurgical plant with a conventional processing flowsheet has been selected for the Flemington Project.

SRK noted the hydrometallurgical flowsheet was well suited to the Flemington lateritic ores, with a processing rate up to 100,000 tonnes per annum of ore to produce the target 50 tonnes of the saleable scandium oxide (Sc_2O_3) in each of the 18 years of mine life considered in this optimised model.

Metallurgical test work undertaken by CSIRO on Flemington ore has demonstrated high metal extractions at relatively low acid consumptions, both of which are critical drivers of Project economics. Based on the samples tested, no processing issues have been identified.

SRK recommended further market studies be undertaken by Australian Mines on the impact of 50 tonnes per annum production from the project on global scandium supply and demand.



Figure 1: Proposed design of the open pit mine at Flemington. Indicative location of the processing plant shown to the west of the proposed mine. The area shaded in green to the immediate north of the proposed pit represents the area to be drilled at part of the Australian Mines' upcoming resource extension drill program targeting high grade cobalt and scandium mineralisation.





Figure 2: Schematic image showing the proposed footprint of the infrastructure at the Flemington mining operation.

Further details of the results of the Flemington Scoping Study is set out below and the material assumptions underpinning the production targets and associated financial information is set out in Appendix 4 of this announcement.

KEY COMPONENTS OF THE SCOPING STUDY

1. Resource Estimates

As previously announced by the Company on 10 October 2016 and Jervois Mining Limited on 31 July 2015, the Flemington Project currently contains the following Mineral Resource estimates:

Table 1: Mineral Resource Estimation for the Flemington Project.

Measured Resource:	2.67 million tonnes	435 ppm Scandium
Indicated Resource:	0.47 million tonnes	426 ppm Scandium
Total Resource:	3.14 million tonnes	434 ppm Scandium
Total Scandium Oxide (Sc ₂ 0 ₃)*:	2,085 tonnes	(using a 200ppm Sc lower cut-off)

^{*} Total contained scandium metal tonnage multiplied by 1.53 to convert to total Sc₂O₃, being the saleable scandium product

For further details relating to the above Mineral Resource, please refer to Appendix 3 of this announcement.



2. Metallurgical Testwork

Testwork for the Flemington Project had previously been undertaken by CSIRO for Jervois Mining. Results from the testwork were used in the Scoping Study where applicable to assist in the process design.

The work undertaken by CSIRO included a series of small-scale batch atmosphere leach (AL) and high-pressure acid leach (HPAL) tests under a range of operation conditions.

SRK does not consider that HPAL testing completed to date to be fully optimised. The scandium extraction is lower than anticipated at 86% when compared to the nickel and cobalt extractions and when benchmarked against other scandium projects. Accordingly, SRK considers the scandium extraction to be conservative and with further optimization testwork, expects scandium extractions to increase to over 90%.

Although SRK confirms that the testwork to date supports the Scoping Study, further work is recommended in subsequent stages of the development of the project to increase the confidence in the metallurgical behavior and process design. Particularly, this work should focus on HPAL testwork of the Flemington ores and solvent extraction of the HPAL discharge liquors.

3. Mining Study

The proposed mining operation at Flemington will deliver a planned production rate of 100,000 tonnes per annum of ore to the processing plant. SRK has investigated maximising the Project's net present value (NPV) by applying an elevated cut-off grade to the run of mine (ROM) ore and lifting the average grade of the ROM ore to 450 grams per tonnes of scandium for the first for 18 years of project life.

After the first 18 years, the remaining 1.5 million tonnes of current known resource is available to be mined at the lower grade of 347 grams per tonne scandium.

The project therefore has a long projected operating life, estimated at over 30 years of production

As the study focuses specially on the first 18 years of mine life and the cut-off used is elevated, the stockpiled lower-grade ore needs to be consider as waste for the purposes of this study. Thus, the average stated stripping ratio of 0.9 t waste: 1 t of ore is artificially elevated as the bulk of this 'waste' is ore, which will be subsequently processed by the processing plant.

Any non-mineralised pre-stripping waste is proposed to be used in the construction of site facilities, including the tailings dam, ROM pad and site roads.



The deposit is planned to be mined using conventional small-scale, open pit truck and excavator mining equipment. The scale of the operation does not warrant having a dedicated mining fleet on site. As a result, the Project is proposed to be campaign mined by a mining contractor who will mobilise equipment to site for campaign mining annually. The mining equipment proposed for the campaign mining operation is conventional, of low capital cost, small scale and carries low risk.

4. Process description

A block flow diagram that summarises the Flemington Project process flowsheet is shown in Figure 3 below:

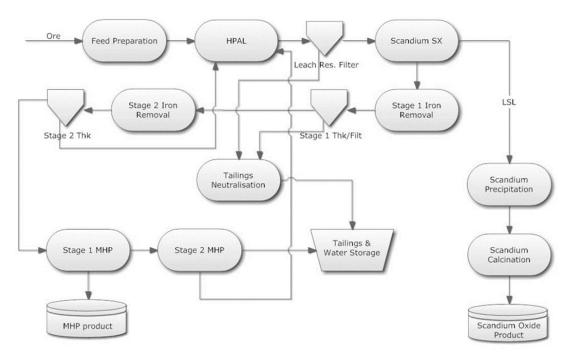


Figure 3: The proposed Flemington processing plant is a small-scale hydrometallurgical facility that uses sulphuric acid under high temperature and pressure to leach scandium, nickel and cobalt from the feed. Whilst a MHP is the stated nickel and cobalt by-product in this study, SRK confirmed in the scoping study that this Project can equally produce a nickel sulphate and cobalt sulphate end-product should that be the intention of Australian Mines.

5. Production Target and Financial Forecast Estimates

The results from the Scoping Study developed an 18-year mine plan schedule that contains a production target of 100,000 tonnes of ore per annum. The mine production schedule and grades of the ore delivered to the ROM pad as estimated in the Scoping Study are shown below.



Based on the production targets arising from the Scoping Study, SRK indicated that the Flemington Project has the potential to generate an after-tax cash flow of A\$677 million for first 18 years of production from 2020 to 2037. A sensitivity analysis of this projected cash flow is projected in the following section of this announcement.

The financial evaluation has been completed on a 100% project basis. The table below sets out the key economic inputs underpinning the production targets and financial forecasts.

Table 2: Economic inputs underpinning the Flemington Scoping Study

Description	Rate
Cobalt price	US\$13.50/lb
Nickel price	US\$10.00/lb
Scandium price	US\$1,500kg
Exchange rate	A\$0.74/US\$1
Average cobalt recovery	80%
Average nickel recovery	83%
Average scandium recovery	76%
Processing plant throughput	100,000 tpa
Average cobalt feed grade (over 20 years)	0.06%
Average nickel feed grade (over 20 years)	Determined in PFS
Average scandium feed grade (over 20 years)	450 g/t



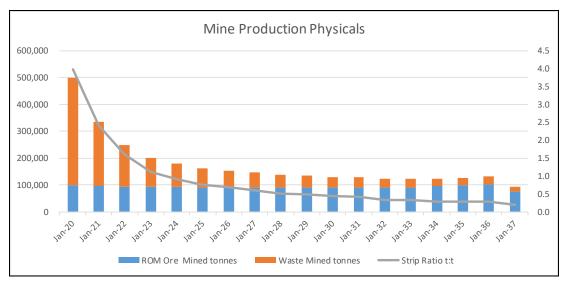


Figure 4: As the study focuses specifically on the first 18 years of mine life and the cut-off used is elevated, the stockpiled lower-grade ore needs to be consider as waste for the purposes of this study. Thus, the average stated stripping ratio of 0.9 t waste: 1 t of ore is artificially elevated as the bulk of this 'waste' is ore, which will be subsequently processed by the processing plant.

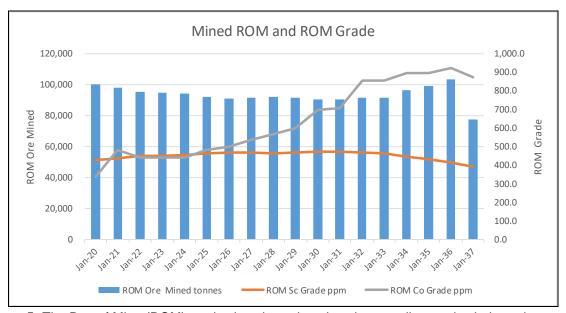


Figure 5: The Run of Mine (ROM) production charted against the scandium and cobalt grades across the Project life. The constant increase of the cobalt head grade over the initial 18-year mine life contemplate by the SRK study appears to suggest that the cobalt grades at Flemington increases as the mining operation expands to the north and west. With the mineralisation remaining open in both the north and west at Flemington, Australian Mines is seeking to complete a resource extension drilling over this ore body in the coming quartier.



6. Sensitivity

The following table demonstrates the sensitivity of the pre-tax NPV to Scandium price and operating costs. Australian Mines' Board considers that a range of sensitivities of ±30% in scandium pricing and operating costs is a reasonable basis for a scoping level study.

Variance (%)	Opex (A\$)	Sc ₂ O ₃ Price (A\$)	Exchange rate
25	197.2	385.9	151.2
20	208.9	359.9	168.6
15	220.5	333.8	187.5
10	232.2	307.7	208.1
5	243.9	281.6	230.7
0	255.5	255.5	255.5
-5	267.2	229.4	283.0
-10	278.8	203.4	313.5
-15	290.5	177.3	347.6
-20	302.2	151.2	385.9
-25	313.8	125.1	429.4

PERMITTING AND APPROVALS

In light of the very strong business case to develop a mining operation at Flemington based on the preliminary results of the Flemington Scoping Study, Australian Mines is presently preparing a Mining Lease Application over the Flemington ore body, which it intends to submit to the New South Wales Government in April 2017.

As part of this process, the Company is also presently securing a water application and associated water licences for the Flemington Project from the relevant New South Wales Government Authority.



FUNDING

To achieve the range of outcomes indicated in the Scoping Study, funding of in the order of A\$75 million will likely be required. The Company currently has sufficient cash to fund the proposed resource extension drill program and to obtain the required mining lease and water licence for the Flemington Project.

It is anticipated that the remaining funding required to develop the Flemington Project will be sourced from the revenue stream modeled from the Sconi Project.

Whilst the Company does not currently expect the funding to require an equity component, to the extent that equity funding is required this would have a dilutive impact on shareholders.

The Company currently believes that there are reasonable grounds to assume that funding for the ongoing development of the Flemington Project will be available as envisaged by this announcement, on the following basis:

- Australian Mines believes that the market demand for scandium is increasing and that the Company is in a position to take advantage of that increase demand by securing offtake partners. The Company is currently in early stage discussions with potential offtake partners for the Sconi Project, which would see Australian Mines fast-track the construction of that project. The Company intends to use the revenues stream modelled for the Sconi operation to fund the construction of the processing plant at Flemington without requiring external funding or debt finance. The details of these discussions cannot be disclosed at this time for commercial reasons. No material or binding agreements for funding or off-take have been signed at this time.
- Australian Mines is confident that there is a strong possibility that it will continue to increase mineral resources at the Flemington Project to what is currently assumed in the Scoping Study. Resource extension drilling is planned to specifically target the high-grade cobalt zone to the north of the present resource.
- Australian Mines' board has relevant experience in financing projects of similar scope in Australia. Mr Neil Warburton, Non-executive Director of Australian Mines, for example, was previously a director of Sirius Resources Limited, where he played a significant role in leading that company's substantial project financing and its substantial growth until its recent merger with Independence Group Limited.
- Australian Mines considers that SRK has been conservative in is commodity pricing for cobalt, nickel and scandium throughout the Scoping Study. The current cobalt price of US\$24 per pound is almost twice as high as SRK base price assumption of only US\$13.50 per pound. Thus, if current commodity prices were applied to the



Flemington project, the economic case for developing a mining operation at this site would be even stronger that SRK's quoted base case.

SCANDIUM MARKETING

Since entering agreements to acquire the Flemington and Sconi projects some five months ago, Australian Mines has met with a range of companies in the scandium alloy supply chain, from master alloy companies to aerospace and automotive manufactures. These discussions are advancing with Australian Mines' Managing Director currently meeting with potential offtake partners for its scandium and cobalt products.

The Company believes that there is a rapidly growing demand across the aerospace and automotive sectors for aluminum-scandium alloys as a result of a market demand for increased fuel efficiency in conventional vehicles and greater range in electric vehicles.

Airbus states that together with Boeing, it expects to receive orders from commercial airline companies for approximately 33,000 to 38,000 additional new aircraft over the coming 20 years. To meet this demand, Airbus will be required to further streamline their manufacturing process as current production methods will result in the French aircraft manufacturer only being able to complete 75% of their expected orders⁴.

By using an aluminum scandium alloy rather than the current aluminum-copper-magnesium alloy, aircraft companies like Airbus are able to reduce the number of steps required to manufacturer a commercial plane from 22 individual steps (stations) to only 9 steps⁵. This will significantly reduce the required construction time.

With 47 tonnes of aluminum alloy used to build a typical commercial airliner, even assuming only a 50% take up of aluminum scandium alloy across the sector, the potential future demand for scandium oxide from the aviation sector alone is 150 tonnes per year⁶.

⁴ Airbus Group Innovations, Advanced aluminium lightweight materials for future aerospace products, Aluminium 2016 conference paper, 29 November 2016

⁵ Airbus Group Innovations, Advanced aluminium lightweight materials for future aerospace products, Aluminium 2016 conference paper, 29 November 2016

⁶ Clean TeQ Holding, Investor Presentation, released 11 February 2015



Sconi Cobalt-Nickel-Scandium Mineral Resource

As announced to the market on 10 October 2016, the Company has entered into a joint venture agreement with Metallica Minerals Limited (ASX: MLM) ("Metallica Minerals") under which Australian Mines can acquire up to a 75% interest in the Sconi Project.

On 4 July 2012, Metallica Minerals announced the results of the Scoping Study for the Sconi Cobalt-Nickel-Scandium. On 28 March 2013, Metallica Minerals announced the results of the Pre-Feasibility Study for the Sconi Cobalt-Nickel-Scandium Project, including the full disclosure on the upgraded Mineral Resource (JORC Code 2012) and the published cobalt, nickel and scandium production targets.

The Company would also like to take this opportunity to remind shareholders on the full results of the Sconi Pre-Feasibility Study

MINERAL RESOURCE ESTIMATES

As previously announced, the results of the Sconi Pre-Feasibility Study indicated that the Sconi Project contains the following Mineral Resources⁷:

 Table 3: Cobalt and Nickel Mineral Resource Estimation for the Sconi Project.

Measured Resource:	17 million tonnes	0.80% Nickel	0.07% Cobalt
Indicated Resource:	48 million tonnes	0.58% Nickel	0.07% Cobalt
Inferred Resource:	24 million tonnes	0.41% Nickel	0.04% Cobalt
Total Resource:	89 million tonnes	0.58% Nickel	0.06% Cobalt
Total Contained Metal:	514,000 tonnes	of Nickel metal	
	54,500 tonnes	of Cobalt metal	Using a COG of 0.7% NiEq

⁷ The Mineral Resource Estimate for the Sconi Cobalt-Nickel-Scandium Project is reported under JORC 2012 Guidelines and was first reported by Australian Mines' joint venture partner, Metallica Minerals Limited on 21 October 2013. There has been no Material Change or Re-estimation of the Mineral Resource since this 21 October 2013 announcement by Metallica Minerals Limited. The NiEq is similarly described in their 21 October 2013 announcement.

^{*} Total contained scandium metal tonnage multiplied by 1.53 to convert to total Sc₂O₃, being the saleable scandium product



 Table 4: Scandium Mineral Resource Estimation for the Sconi Project.

Measured Resource:	0.7 million tonnes	208 g/t Scandium
Indicated Resource:	6.5 million tonnes	174 g/t Scandium
Total Resource:	7.2 million tonnes	177 g/t Scandium
Total Scandium Oxide (Sc ₂ 0 ₃)*:	1,950 tonnes	(using a 100g/t Sc lower cut-off)

For further details relating to the above Mineral Resource⁸, please refer to Appendix 6 of this announcement.

FINANCIAL EVALUATION

The financial evaluation was completed on a 100% project basis. The table below sets out the key economic inputs:

Description	Rate
Cobalt price	US\$15.00/lb
Nickel price	US\$10.00/lb
Scandium price	US\$2,000kg
Exchange rate	A\$0.90/US\$1
Average cobalt recovery	90%
Average nickel recovery	90%
Average scandium recovery	85%
Processing plant throughput	750,000 tpa
Average cobalt feed grade (over 20 years)	0.11%
Average nickel feed grade (over 20 years)	0.81%
Average scandium feed grade (over 20 years)	109g/t Sc2O3

Further details of the material assumptions underpinning these production targets are set out in Appendix 7 of this announcement.

⁸ The scandium resource outlined in Table 4 above relates to the 'Lucknow' lens at Sconi. The total scandium resource at Sconi comprises additional lens, which combined 20 million tonnes @ 162 g/t scandium for a total of 2,989 tonnes of contained scandium oxide, reported in Table 5 of Metallica Minerals' JORC 2012 Mineral Resource announcement to the ASX dated 21 October 2013.



PERMITTING AND APPROVALS

Ahead of the outcome of a Definitive Feasibility Study, which is currently in progress, Australian Mines has obtained the necessary State Environment Licence required to carry out a mining operation at the Sconi Project as well as the corresponding licence covering the operation of a processing plant at the Sconi Project.

As a result, the Company now has in place all the necessary approvals and licences for the future development of a mining and processing operation at the Sconi Project.



Appendix 1: Competent Person's Statement

Flemington Cobalt-Scandium project

Information in this document that relates to Exploration Results and Mineral Resources for the Flemington Project is based on information compiled by Max Rangott, who is a Fellow of The Australasian Institute of Mining and Metallurgy (AusIMM) and a Director of Rangott Mineral Exploration Pty Ltd. Mr Rangott has sufficient experience that is relevant to the styles of mineralisation and types of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Rangott consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Sconi Cobalt-Nickel-Scandium Project

Information in this document that relates to Exploration Results and Mineral Resources for the Sconi Cobalt-Nickel-Scandium Project is based on information compiled by Michael Tyndall, who is a member of The Australasian Institute of Mining and Metallurgy (AuslMM) and Director of Geomyn Consulting Pty Ltd. Mr Tyndall has sufficient experience that is relevant to the styles of mineralisation and types of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Tyndall consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.



Appendix 2: Forward Looking Statements & Disclaimers

This news release contains "forward-looking information" within the meaning of applicable Australian securities legislation, including information relating to Australian Mines' future financial or operating performance may be deemed "forward looking". All statements in this news release, other than statements of historical fact, that address events or developments that Australian Mines expects to occur, are "forward-looking statements". Forward-looking statements are statements that are not historical facts and are generally, but not always, identified by the words "expects", "does not expect", "plans", "anticipates", "does not anticipate", "believes", "intends", "estimates", "projects", "potential", "scheduled", "forecast", "budget" and similar expressions, or that events or conditions "will", "would", "may", "could", "should" or "might" occur. All such forward-looking statements are based on the opinions and estimates of the relevant management as of the date such statements are made and are subject to important risk factors and uncertainties, many of which are beyond Australian Mines' ability to control or predict. Forward-looking statements are necessarily based on estimates and assumptions that are inherently subject to known and unknown risks, uncertainties and other factors that may cause actual results, level of activity, performance or achievements to be materially different from those expressed or implied by such forward-looking statements.

In the case of Australian Mines, these facts include their anticipated operations in future periods, planned exploration and development of its properties, and plans related to its business and other matters that may occur in the future. This information relates to analyses and other information that is based on expectations of future performance and planned work programs. Statements concerning mineral resource estimates may also be deemed to constitute forward-looking information to the extent that they involve estimates of the mineralisation that will be encountered if a mineral property is developed.

Forward-looking information is subject to a variety of known and unknown risks, uncertainties and other factors which could cause actual events or results to differ from those expressed or implied by the forward-looking information, including, without limitation: exploration hazards and risks; risks related to exploration and development of natural resource properties; uncertainty in Australian Mines' ability to obtain funding; commodity price fluctuations; recent market events and conditions; risks related to the uncertainty of mineral resource calculations and the inclusion of inferred mineral resources in economic estimation; risks related to governmental regulations; risks related to obtaining necessary licenses and permits; risks related to their business being subject to environmental laws and regulations; risks related to their mineral properties being subject to prior unregistered agreements, transfers, or claims and other defects in title; risks relating to competition from larger companies with greater financial and technical resources; risks relating to the inability to meet financial obligations under agreements to which they are a party; ability to recruit and retain qualified personnel; and risks related to their directors and officers becoming associated with other natural resource companies which may give rise to conflicts of interests. This list is not exhaustive of the factors that may affect Australian Mines' forward-looking information. Should one or more of these risks and uncertainties materialise, or should underlying assumptions prove incorrect, actual results may vary materially from those described in the forward-looking information.

Australian Mines' forward-looking information is based on the reasonable beliefs, expectations and opinions of their respective management on the date the statements are made and Australian Mines does not assume any obligation to update forward looking information if circumstances or



management's beliefs, expectations or opinions change, except as required by law. For the reasons set forth above, investors should not place undue reliance on forward-looking information.

Production Targets Estimates for the Flemington Ore Body

The production targets presented for the Flemington Project in this announcement is based on the Scoping Study completed by SRK Consulting in March 2017. Approximately 90% of the production target referred to in this announcement is based on Measured Resources with the remaining 10% based on Indicated Resources.

The Company has concluded that it has a reasonable basis for providing the production targets included in this announcement. The detailed reasons for that conclusion are outlined throughout this announcement and all material assumptions, including the JORC modifying factors, upon which the production targets are based are disclosed in this announcement and in Appendix 5 JORC Table 1 attached to this announcement. This announcement has been prepared in accordance with the JORC Code (2012) and the ASX Listing Rules.



Appendix 3: Flemington Project - Mineral Resource Information

Geology and geological interpretation

Logging revealed five major lithotypes. These were based on qualitative and visual logging of chip samples. The two diamond PQ holes drilled in 2014 led to further definition and detailed logging of the boundaries between the main lithotypes. The boundaries were shown to be mostly gradational.

The main lithotypes identified are:

- (a) Transported laterite;
- (b) Haematitic laterite;
- (c) Limonitic laterite;
- (d) Transitional laterite; and
- (e) Saprolite (bedrock of dunite and olivine pyroxenite compositions).

Sampling and sub-sampling techniques

Sampling techniques

The sampling method used by Jervois involves the following methodology:

Samples from air core drilling were collected on 1 metre intervals. The sample coming from the drill face through the cyclone is collected in 0.6 metre by 0.4 metre plastic bags with the bag held under the cyclone so the entire sample falls into the bag. The cyclone effectively homogenizes the sample coming up through the drill string prior to it being deposited into the plastic bags. The cyclone/splitter reject material was collected and held onsite until assaying was completed and there was no further immediate use for the reject material.

A sample for the laboratory was then collected from the plastic bags. ¹/₈ sample split was collected using a free-standing three-tier sample splitter. A sample of between 1.5 and 3 kilograms was collected and put in a calico bag which are labelled with the hole number and hole depth. These numbers represent the "sample number". No separate individual sample numbers are allocated to each interval other than for check sampling.

Surface samples and drill hole hand held field XRF analyses were undertaken by RME geologists to confirm and direct the exploration program. These results were not considered for the resource evaluation.

Drilling techniques

All resource drilling by Jervois was air core using modern methods and high air pressures. All drilling used in the resource estimation was managed by Jervois.

Diamond drilling was undertaken by Jervois to provide samples for density determinations and metallurgical purposes and did not contribute to the resource estimate other than providing bulk density samples.



Sample analysis method

The split samples from the 2013 program were analysed by the four-acid digestion ICP-technique ME-IC61 and sample pulps were retrieved and split in small riffle splitter and one half was analysed by SC-ICP06 (fusion technique). Samples from 2014 and 2015 were analysed by both fusion and ME-IC61 (four acid digestion) techniques. The ME-IC61 assays were not used in the resource calculations.

Drill and data spacing and distribution

The resource calculations were based on data from a group of 65 vertical aircore holes, part of a larger group of exploration holes drilled during 2013, 2014 and 2015. Chip samples were collected over 1 metre intervals. The sample returns were logged by the RME site geologist and the logging later refined at the offices of Rangott Mineral Exploration Pty Ltd ("RME").

Estimation methodology

Given the nature of the host rock (laterite), its known areal distribution and sheet-like layered geometry, a sectional method of estimation was considered the most appropriate, and facilitated correlation of the lithotypes between holes, and interpretation of internal structure. The estimation was carried out manually.

Extrapolation distances on the east-west oriented sections varied from 10 to 95 metres between drill holes and from 10 to 20 metres beyond the last significantly mineralised holes on each section. Extrapolation distances between the sections varied from 17 to 36 metres, and beyond the southernmost and northernmost sections, 20 metres.

High scandium values (>800ppm) are supported by nearby values so it was not considered necessary to cut them.

No check estimates, previous estimates and or mine production records are available.

No by-products were considered.

No other elements were considered at this stage. There are locally elevated concentrations of nickel and cobalt.

The possible economic significance of nickel and cobalt will be considered in later studies.

Block model interpolation is not applicable.

Assumptions relating to modelling of selective mining units are not applicable.

Correlation assumptions were not considered.

The geological logging data was used to determine the interpreted lithotype boundaries.

There is a broad spread of scandium values from 200 ppm to 1,010ppm, the bulk of the higher-grade values occurring in the limonitic laterite.



Cut-off grade(s)

A lower cut-off grade of 200ppm scandium was used for the resource calculations based on limited economic modeling data, which suggested that a breakeven grade would be less than 50ppm scandium. Due to the broad spread of scandium values between 200 and 1000ppm in the resource area, no upper cut was applied.

A sectional calculation method was used for calculating volume, tonnages and grades of the five laterite lithotypes.

A number of sections were divided into sub-sections, reflecting changes in drill hole spacing and the resource classification, to allow a rigorous calculation of volumes.

Mining and metallurgical methods and parameters

Mining factors or assumptions

No mining factors were applied to the Mineral Resource estimate. Some aggregation of the resource blocks is required for any mining selectivity scenario in addition to the application of mining losses and dilution factors.

Metallurgical factors or assumptions

Jervois have completed test work that indicates metallurgical recovery is in the order of 85 to 90% for scandium and cobalt.



Criteria

Appendix 4: Flemington Project - Material Assumptions

Commentary

Material assumptions used in the estimations of the production target and associated financial information are set out in the following table:

	The Mineral Resource estimate declared on 19 August 2015 by Jervois Mining				
resources	Limited and reviewed by SRK underpins the production target. This estimate was				was
estimate	prepared by a Competent Person in accordance with the JORC Code 2012.				
underpinning the production	App	Approximately 90% of the total production target is based on Measured Resources			
target		the remaining 10% based on Inc	_	on modelarda recoo	
Site Visits		Competent Person has visited the	he prospect on several of	occasions, but not d	uring
	tne	drilling program.			
Study Status	The	production target and financial in	nformation in this annou	ncement are based	on a
	Sco	oing Study.			
	The	Coording Charles in board on low	lovel technical and con-		ا ممما
		Scoping Study is based on low- sufficient to support estimations			
		nomic development case at		•	
	cond	clusions of the Scoping Study wil	ll be realised.		
Costs	CDK	has undertaken a proliminary	actimate of the project	oconomics to a sec	pping
Cosis	SRK has undertaken a preliminary estimate of the project economics to a scoping study level of accuracy in accordance with Provision of Services contract with				
i .	Stuu	y level of accuracy in accord	ance with Provision of	Services contract	with
	Aust	ralian Mines, dated October 2	2017, which states tha	t SRK would deliv	er a
	Aust		2017, which states tha ide an economic evaluat	t SRK would delivion including capital	∕er a
	Aust	ralian Mines, dated October 2 bing study report that would inclunates to within +/- 35% and an o	2017, which states that de an economic evaluate perating cost estimate to	t SRK would delivion including capital within +/- 25%	∕er a
	Aust	ralian Mines, dated October 2 bing study report that would inclu	2017, which states that de an economic evaluate to perating cost estimate to Unit	t SRK would delivion including capital	∕er a
	Aust	ralian Mines, dated October 2 bing study report that would inclunates to within +/- 35% and an o	2017, which states that de an economic evaluate perating cost estimate to	t SRK would delivion including capital within +/- 25%	∕er a
	Aust	tralian Mines, dated October 2 bing study report that would inclunates to within +/- 35% and an o	2017, which states that de an economic evaluate to perating cost estimate to Unit	t SRK would delivion including capital within +/- 25%	∕er a
	Aust	ralian Mines, dated October 2 bing study report that would inclunates to within +/- 35% and an o Unit Operating Costs Mining Cost	2017, which states that de an economic evaluate perating cost estimate to Unit A\$/t TMM	t SRK would delivion including capital within +/- 25% LOM Totals 3.50	∕er a
	Aust	ralian Mines, dated October 2 bing study report that would inclunates to within +/- 35% and an occurred Costs Mining Cost Processing Cost	2017, which states that de an economic evaluate perating cost estimate to Unit A\$/t TMM A\$/t ROM	t SRK would delivion including capital within +/- 25% LOM Totals 3.50 192.75	∕er a
	Aust	ralian Mines, dated October 2 bing study report that would include nates to within +/- 35% and an occurred Costs Mining Cost Processing Cost G&A Cost	2017, which states that de an economic evaluate perating cost estimate to Unit A\$/t TMM A\$/t ROM	t SRK would delivion including capital within +/- 25% LOM Totals 3.50 192.75	∕er a
	Aust	ralian Mines, dated October 2 bing study report that would inclunates to within +/- 35% and an occurred Costs Mining Cost Processing Cost G&A Cost Operating Costs	2017, which states that de an economic evaluate perating cost estimate to Unit A\$/t TMM A\$/t ROM A\$M	t SRK would delivion including capital within +/- 25% LOM Totals 3.50 192.75 5.00	er a
	Aust	ralian Mines, dated October 2 bing study report that would include nates to within +/- 35% and an occupant of the control of t	2017, which states that de an economic evaluate perating cost estimate to the control of the cost of t	t SRK would delivion including capital within +/- 25% LOM Totals 3.50 192.75 5.00	er a
	Aust	ralian Mines, dated October 2 bing study report that would include the nates to within +/- 35% and an occupant of the nates to within +/- 35% and an occupant of the nates to within +/- 35% and an occupant of the nates to within +/- 35% and an occupant occ	2017, which states that ide an economic evaluate perating cost estimate to the control of the co	t SRK would delivion including capital within +/- 25% LOM Totals 3.50 192.75 5.00 11	er a
	Aust	Unit Operating Costs Mining Cost Processing Cost G&A Cost Operating Costs Mining Cost Mining Cost Cost Operating Costs Mining Cost Mining Cost Description Mining Cost Operating Costs Mining Cost Mining Cost Mobilisation & Tech Services Environment Opex	2017, which states that de an economic evaluate perating cost estimate to Unit A\$/t TMM A\$/t ROM A\$M A\$M A\$M	t SRK would delivion including capital within +/- 25% LOM Totals 3.50 192.75 5.00 11 3 2	er a
	Aust	ralian Mines, dated October 2 bing study report that would include nates to within +/- 35% and an occurrence of the control of	2017, which states that de an economic evaluate perating cost estimate to Unit A\$/t TMM A\$/t ROM A\$M A\$M A\$M A\$M A\$M	t SRK would delivion including capital within +/- 25% LOM Totals 3.50 192.75 5.00 11 3 2 4	er a



Criteria	Cor	nmentary			
	The follo		lining and Processing physica	als applicable t	o the Project are as
		Category	Description	Units	LOM Totals
		Mining	ROM Ore Mined	t	1,682,397
		physicals	Waste	t	1,512,413
			Strip	ratio	0.90
			Total Material Movement	t	
			ROM Sc Grade	ppm	450.4
			ROM Co Grade	ppm	639.3
			SC Metal - ROM	t	758
			Co Metal - ROM	t	1,076
		Processing	ROM Ore Processed	t	1,682,397
		physicals	Sc Grade Processed	ppm	450.4
			Co Grade Processed	ppm	639.3
			Sc Metallurgical Recovery	%	76%
			Co Metallurgical Recovery	%	80%
			Sc Metal Recovered	t	577
			Co Metal Recovered	t	867
			Scandium to Sc ₂ O ₃	Factor	1.533
			Sc ₂ O ₃ Produced	t	885
Mining factors or assumptions	The final scope of the project requires further definition and additional study ensure the value of the project is optimised and that a prefeasibility study estim can be stated. The production target has been developed assuming conventional open pit mir methods of small-scale, open pit truck and excavator mining equipment. The so of the operation does not warrant having a dedicated mining fleet on site. A result, the Project is proposed to be campaign mined by a mining contractor who				easibility study estimate ntional open pit mining equipment. The scale ng fleet on site. As a
Metallurgical factors or assumptions	mobilise equipment to site for campaign mining annually. The mining equipment proposed for the campaign mining operation is conventional, of low capital cost, small scale and carries low risk Test work for the Project had previously been undertaken by CSIRO for Jervois. Results from the test work were used where applicable to assist in the process design. No additional metallurgical test work was undertaken as part of this scoping				
	study. The work undertaken by CSIRO included a series of small-scale bate atmospheric leach and high-pressure acid leach tests under a range of operating conditions.				



Cuitonia	Commentent
Criteria	Commentary
	Bulk pregnant leach solution (PLS) was produced from a single larger batch AL test. A solvent extraction (SX) and scandium purification test work program was completed using the bulk PLS as feed liquor. The metallurgical test work has shown the HPAL process to leach the scandium, nickel and cobalt from their ores, and not to be highly acid consuming. In addition, viscosity was not excessive as is the case with some high clay content lateritic ores.
	SRK does not consider the HPAL testing completed to date to be fully optimised. The scandium extraction is lower than anticipated, at 86.0%, when compared to the nickel and cobalt extractions and when benchmarked against other scandium projects.
	SRK considers the scandium extraction to be conservative and with further optimisation test work, expects scandium extractions to increase to over 90%.
Environmental	A number of statutory approvals have been identified as relevant for the Project, including:
	Environmental Planning and Assessment Act 1979
	All new mining projects (including expansions or modifications of existing projects) require development consent under the <i>Environmental Planning and Assessment Act 1979 (EP&A</i> Act). Projects with a capital investment exceeding A\$30 million are classified as "State Significant Development" and must be formally approved by the Minister for Planning & Infrastructure.
	An additional process (the "Gateway" process) is required for State significant mining developments on land classified as "strategic agricultural land". The Gateway assessment occurs prior to lodgement of a development application. The Project appears unlikely to have an impact on strategic agricultural land, however. Once it has been confirmed that none of the project land is likely to affect strategic agricultural land, the project proponent can lodge a development application.
	Mining Act 1992
	Environmental aspects of mineral exploration and mining (including mine
	rehabilitation and closure) in New South Wales are generally administered under the
	Mining Act 1992. Once a development consent has been issued under the EP&A
	Act, the project proponent would be required a Mine Operations Plan (including a mine rehabilitation plan) to the Department of Industry Resources & Energy.
	Documentation required by Resources and Energy has a strong focus on mine rehabilitation. Proponents are required provide an estimate of mine rehabilitation costs and to lodge a security deposit covering the full estimated cost of rehabilitation. Annual reporting on environmental performance (including rehabilitation progress) will be required as part of authorisations issued under the <i>Mining Act</i> .



Criteria	Commentary
	Protection of the Environment Operations Act 1997
	The <i>Protection of the Environment Operations Act</i> (<i>POEO</i> Act) is the instrument through which certain specified activities are regulated by the Environment Protection Authority (EPA). Activities listed in Schedule 1 of the <i>POEO</i> Act are administered by means of environmental protection licences issued to owners or operators of the premises on which the activities occur. The Flemington Project would require a licence authorising mining and mineral processing, as well as some other regulated activities (potentially including road
	construction, waste disposal, sewage treatment, quarrying of borrow material, hazardous chemical storage and the like).
Infrastructure	Due to the relatively small electrical demand, it is proposed that the Project will be powered by diesel-fired generators.
	Water supply is supplemented by recovery from the TSF. The design includes an evaporation pond to reduce excess water requirements due to the positive water balance and the need to bleed liquor to maintain several elements below their solubility limit. Other infrastructure required to maintain operations, such as administration buildings, workshops, warehouse, roads, information technology (IT) and communications, would be located on site.
	There is no site accommodation village proposed by Australian Mines. Employees and contractors would be sourced locally wherever possible, resulting in most being accommodated in the local towns.
	The mining workforce is likely to be sourced mainly from the local towns of Condobolin, Fifield and Parkes. Other key technical staff will be brought in from regional centres, as required.
	Regional public airstrips at Dubbo and Parkes connect with multiple flights daily from Sydney, Brisbane, Melbourne and a number of other regional centres.
	The supporting infrastructure and facilities are representative of a modern hydrometallurgical and open pit mining operation, and comprise the following:
	Access road and internal roads
	Haul roads
	Power station
	High pressure steam boiler
	Site buildings - office and administration complex Levelove facilities.
	Laydown facilitiesOre stockpiles and waste stockpile area
	Processing plant and associated facilities
	Raw water storage to manage rainfall runoff
	Process plant
	Tailings storage facilities



Criteria	Commentary
	Evaporation ponds
	Borefield and associated infrastructure
	Reverse osmosis plant
	IT and communications systems
	Core farm and core processing facility
	Analytical and metallurgical laboratory
	Mine and plant workshops
	Diesel fuel storage and refuelling facility
	Washdown bay
	Standpipe for water carts.
Revenue factors	The S ₂ O ₃ product price of US\$1.5 million used in the study is consistent with the pricing used by Clean TeQ Holding Limited in their study of the adjoining Syerston project. This was considered appropriate given that Flemington ore body appears to be the continuation of the Syerston mineralisation. SRK understands that Australian Mines is presently in discussions with a number of potential off-take partners, and the outcome of the discussions may influence the price used in any subsequent PFS.
Market assessment	Since acquiring the Flemington and Sconi projects some five months ago, Australian Mines has met with a range of companies in the scandium alloy supply chain, from master alloy companies to aerospace and automotive manufactures. These discussions are advancing with Australian Mines' Managing Director currently meeting with potential offtake partners for its scandium and cobalt products. The Company believes that there is a rapidly growing demand across the aerospace and automotive sectors for aluminium alloys as a result of a market demand for increased fuel efficiency in conventional vehicles and greater range in electric vehicles. Airbus states that together with Boeing, it expects to receive orders from commercial airline companies for approximately 33,000 to 38,000 additional new aircraft over the coming 20 years. To meet this demand, Airbus will be required to further streamline their manufacturing process as current production methods will result in the French aircraft manufacturer only being about to complete 75% of their expected orders. By using an aluminium scandium alloy rather than the current aluminium-coppermagnesium alloy, aircraft companies like Airbus are able to reduce the number of steps required to manufacturer a commercial plane from 22 individual steps (stations) to only 9 steps. This will significantly reduce the required construction time.



Criteria	Commentary			
	With 47 tonnes of aluminium alloy used to build a typical co	ommercial airline, even		
	assuming only a 50% take up of aluminium scandium alloy across the sector, the			
	potential future demand for scandium oxide from the aviation sector alone is 150			
	tonnes per year.			
	tornes per year.			
Economic	The key economic assumptions underpinning the production targets:			
	Description	Rate		
	Cobalt price	US\$13.50/lb		
	Nickel price	US\$10.00/lb		
	Scandium price	US\$1,500kg		
	Exchange rate	A\$0.74/US\$1		
	Average cobalt recovery	80%		
	Average nickel recovery	83%		
	Average scandium recovery	76%		
	Processing plant throughput	100,000 tpa		
	Average cobalt feed grade (over 20 years)	0.06%		
	Average nickel feed grade (over 20 years)	Determined in PFS		
	Average scandium feed grade (over 20 years) 450g/t			
Social	SRK's review did not identify any social considerations compromise project permitting and implementation.	likely to significantly		
Classification	Resources were classified in accordance with the Austr	ralasian Code for the		
	Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012 Edition).			
	The classification of Mineral Resources was completed based on the geological complexity, estimation performance, number of drill samples, drill hole spacings and sample distribution. The Competent Person is satisfied that the result appropriately reflects his view of the deposit.			
	Further details of the criteria used to define the resource class 3 to this announcement.	s is set out in Appendix		



Drill sample

Appendix 5: Flemington Project - JORC Table 1

Section 1 Sampling Techniques and Data

Criteria **JORC Code explanation** Commentary Sampling Nature and quality of sampling (eg cut Vertical air core holes were drilled, and techniques channels, random chips, or specific sampled over successive 1 metre intervals specialised industry via an on-board cyclone. The bulk samples standard measurement tools appropriate to the from both drilling programs were passed minerals under investigation, such as through a 3-tier riffle splitter, giving (1/8) down hole gamma sondes, or handheld 0.75-1.5kg samples for analysis, and (7/8) XRF instruments, etc). These examples bulk samples for storage. The sample splits should not be taken as limiting the broad from the 2013 program were initially analysed by technique ME-ICP-61 and the meaning of sampling. sample pulp were subsequently retrieved Include reference to measures taken to and split in a small riffle splitter, and one ensure sample representivity and the half of each analysed by a fusion technique appropriate calibration any (Sc-ICP06). The split samples from the measurement tools or systems used. 2014 and 2015 program were analysed by both the fusion technique and by technique Aspects of the determination ME-ICP-41. mineralisation that are Material to the Public Report. 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. **Drilling** Drill type (eg core, reverse circulation, The holes relevant to this statement were techniques open-hole hammer, rotary air blast, drilled by the air core technique, using a auger, Bangka, sonic, etc) and details Hydco air core rig fitted with a 200psi / (eg core diameter, triple or standard 400cfm compressor (2013 and 2014 tube, depth of diamond tails, faceprogram), and a Hydrapower Scout fitted sampling bit or other type, whether core with a 200psi/600cfm compressor (2015 is oriented and if so, by what method, program). The nominal bit diameter used on the rig in 2013 and 2014 program was 89mm, but subsequent measurement of the bit showed that wear had reduced it to 80mm diameter, and this figure was used in recover calculations. The nominal bit diameter used in the 2015 program was 102mm (measured).

The bulk and assay samples were weighed,

and using bulk density values for different

Method of recording and assessing core

and chip sample recoveries and results



Criteria	JORC Code explanation	Commentary
recovery	 Measures taken to maximise sample recovery and ensure representative nature of the samples. 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. 	lithotypes, theoretical sample weights were calculated and compared with the actual weights to give recoveries for a limited number of drill holes. Sample recoveries varied from 50% to 97%, with an average of 85% for the key limonitic laterite in 2013 and 2014, and from 6% (in surface rubble) to 83% in the 2015 program, with the limonitic material recoveries lying higher in the range. Cuttings were flushed from the hole at the end of each 1 metre interval drilled.
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. 	 The chip samples were logged during drilling by the site geologist and the project geologists further assessed them during the data compilation phase of the project. Logging of air core chips was initially largely done on a colour basis. Logging was qualitative and visual, but other factors were taken into account. In 2014 two PQ core holes were drilled close to two air core holes; detailed logging of the core showed that the boundaries between the main lithotypes are commonly gradational. 100% of the samples/holes were logged by the geologists.
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 sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in-situ 	 Samples sent for analysis were approximately 1/8 of the total sample weight. The samples were riffle-split in the raw (damp) state, using a 3-tier splitter. The samples for analysis were prepared by an independent commercial laboratory (Australian Laboratory Services Pty Ltd (ALS) in Orange) to accepted industry standards. The laboratory dried and pulverised the entire sample, from which 0.25g was extracted for ME-ICP-61 analyses, and 0.1g for borate fusion analyses.

results for field duplicate/second-half •

Whether sample sizes are appropriate to

the grain size of the material being

sampling.

sampled.

One 1 metre duplicate sample was split

from each hole during drilling, and the

analytical values for the duplicates gave a

high level of replication. One blank sample

was also included for most holes, and they



Criteria	JORC Code explanation	Commentary
Quality of	• The nature quality and appropriateness	gave very low scandium values. The laterite materials for the most part presented as damp, gritty clay, so 1kg samples are considered to be quite appropriate. The technique Sc-ICP06 developed by ALS
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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	 is considered to be a total extraction technique. All scandium values used in the 2014 and 2015 resource calculations were determined by this method. Second point is not applicable. See above regarding performance of duplicates and blanks. One low-grade (93ppm) scandium standard sample was included in the 2014 sample batch (commercial high-grade scandium standards are not available). The analysis gave 92ppm. Four low grade commercial
Verification of sampling and assaying	 The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. 	wo PQ core holes were drilled in 2014, each located 5m away from air core holes, primarily to measure the densities of the laterite types. Quarter-core samples were

- Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.
- Discuss any adjustment to assay data.
- wo PQ core holes were drilled in 2014, each located 5m away from air core holes, primarily to measure the densities of the laterite types. Quarter-core samples were taken from the core and analysed for scandium. The scandium values gave reasonable correlations with those from parts of the 'twin' air core holes, but major discrepancies were evident between the values from some sections of both twinned holes. The discrepancies may be due to one or a combination of sample recoveries, samples sizes, or varying bedrock lithotypes.
- Primary data was entered in Excel files by the site geologist at RME's premises, and



Criteria	JORC Code explanation	Commentary
		stored on a secure server, and later checked by the project geologist, who made minor adjustments.
		 No adjustments were made to the analytical data.
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. 	 Drill hole collars and relevant cadastral boundaries were picked up using a Trimble GEOEXPLORER 6000 differential GPS meter. Data was recorded in zone 55 MGA94. Accuracy was ±10 centimetres in most cases; a few readings were ±1 metre.
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. 	 Drill hole spacing varied from 10 to 95 metres along traverses spaced 35 to 72 metres apart. The data spacing and distribution is considered to be adequate for classifying the Mineral Resource as either Measured or Indicated, for this type of deposit. The drill samples were not composited prior to assaying.
Orientation of data in relation to geological structure	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. 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. 	 The orientation of syn- or post-mineralisation faulting is not known with any certainty but is believed to be generally north-south, and the drill hole distribution is optimal for such an orientation. Second point not applicable.
Sample security	The measures taken to ensure sample security.	 Assay samples were left overnight in a locked metal locked on the tray of a vehicle during the drilling and then taken to RME's premises in Orange, stored briefly in a secure shed, and then submitted to the ALS laboratory in Orange.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits or reviews have been carried out.



Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	 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. 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. 	 The scandium prospect is held under Exploration Licence no 7805 which has an expiry date of August 2017. The licence is in good standing with the NSW Department of Industry, Trade and Investment. The licence is held 100% by AUZ. The licence area includes freehold land, public road reserves and a small area of Crown Land. In October 2016, Australian Mines entered an options agreement with Jervois Mining for Australian Mines to acquire 100% of the tenement. Australian Mines anticipates submitting a Mining Lease Application over EL7805 in March 2017
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	exploration reports were obtained and assessed, particularly geochemical and drilling information. • Under the relationship with Jervois, Australian Mines has had access to
		exploration work conducted by Jervois over EL7805 in regards to scandium prospects
Geology	Deposit type, geological setting and style of mineralisation.	 Scandium, nickel, cobalt and chromium occur in a thick laterite sequence developed over part of the Ordovician Tout ultramafic intrusive complex. The laterite sequence includes (from top to bottom) transported (alluvial and colluvial), haematitic, limonitic, transitional and saprolitic lithotypes. The higher scandium grades dominantly occur in the limonitic laterite, and appear to have been derived from the long-term weathering of underlying Ordovician dunite and pyroxenite.
Drill hole Information	 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: o easting and northing of the drill hole 	 This report does not contain any new drilling data or assays. The historic drilling referenced in this report were release by Jervois drilling via the ASX platform between 2013 and 2016.
	collar o elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar	



Criteria	JORC Code explanation	Commentary
	 dip and azimuth of the hole down hole length and interception depth 	
	 hole length. 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. 	
Data aggregation methods	 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. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the 	 It was considered that cutting of high grades was not necessary (see section 3 below). Aggregation of scandium values to give overall intercept grades was by calculation of arithmetic means. No metal equivalent values have been calculated.
	 procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	
Relationship between mineralisatio n widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. 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'). 	All holes were drilled vertically, and as the laterite sequence is close to flat-lying, the intersected widths of scandium mineralisation approximate true widths.
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 drill hole collar locations and appropriate sectional views. 	 This report does not contain any new drilling data or assays. The historic drilling referenced in this report were release by Jervois drilling via the ASX platform between 2013 and 2016.
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 	The reported results reflect a full range of intersected widths and scandium grades.



Criteria	JORC Code explanation	Commentary
	practiced to avoid misleading reporting of Exploration Results.	
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; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	 Other exploration data collected by the company is not considered as 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 (eg 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. 	Further work may include a resource extension drill program across the interpreted northern continuation of the cobalt and scandium mineralised zones. The specifications of any future drill program, including the location and targeted depth of these holes, will be announced by the Company prior to the commencement of drilling.



Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	 easures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. ata validation procedures used. 	 Data was entered by the project geologist and checked at various stages during plotting of the drill sections.
Site visits	 omment on any site visits undertaken by the Competent Person and the outcome of those visits. f no site visits have been undertaken indicate why this is the case. 	he Competent Person has visited the prospect on several occasions
Geological interpretatio n	 onfidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. ature of the data used and of any assumptions made. he effect, if any, of alternative interpretations on Mineral Resource estimation. he use of geology in guiding and controlling Mineral Resource estimation. he factors affecting continuity both of grade and geology. 	 No alternative interpretations can be considered with the present drill traverse spacing. It is considered that drilling of additional holes on intermediate traverses would be unlikely to materially alter the interpreted three-dimensional structure. Five different Mineral Resources were calculated for the five interpreted lithotypes and then combined.
Dimensions	he extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	length of 360m and a width varying from 220 to 475 m and covers an area of 12.9

constraints to the south. Scandium grade



Criteria	JORC Code explanation	Commentary
		varies considerably both vertically and laterally within the five lithotypes, however the weighted mean grade of each lithotype is usually quite consistent from section to section, given the style of mineralisation.
Estimation and modelling techniques	he nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. he availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. he assumptions made regarding recovery of by-products. stimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).	 Given the nature of the host rock (laterite), its known areal distribution and sheet-like layered geometry, a sectional method of estimation was considered the most appropriate, and facilitated correlation of the lithotypes between holes, and interpretation of internal structure. The estimation was carried out manually. Extrapolation distances on the east-west oriented sections varied from 10 to 95 metres between drill holes and from 10 to 20 metres beyond the last significantly mineralised holes on each section. Extrapolation distances between the sections varied from 34 to 72 metres, and beyond the southernmost and northernmost sections, 20 metres. High scandium values (>800ppm) are supported by nearby values so it was not considered necessary to cut them. No check estimates, previous estimates and or mine production records are available. No by-products were considered. No other elements were considered at this stage.
	n the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	The possible economic significance of nickel and cobalt will be considered in later studies.
	•	Block model interpolation is not applicable.Assumptions relating to modelling of
	ny assumptions behind modelling of selective mining units.	selective mining units are not applicable.
	ny assumptions about correlation	 Correlation assumptions were not considered.
	escription of how the geological interpretation was used to control the resource estimates.	 The geological logging data was used to determine the interpreted lithotype boundaries.
		• There is a broad spread of scandium values from 200 ppm to 1,010ppm.
	 iscussion of basis for using or not using grade cutting or capping. 	The process of validation has not been carried out at this stage



Criteria	JORC Code explanation	Commentary
	he process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	
Moisture	hether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	he tonnages were estimated on a dry weight basis, in line with the analytical data. To determine bulk densities, short lengths of whole PQ core were weighed shortly after drilling, then dried in a gas-fired drying cabinet at approximately 70°C for a minimum of 48 hours, then weighed again. From this data, moisture contents were calculated on a wet weight basis (weight loss / wet weight x 100).
Cut-off parameters	 he basis of the adopted cut-off grade(s) or quality parameters applied. 	s very little is known about the economics of mining and extracting scandium from laterites, a 200pm cut off was chose to give a robust resource.
Mining factors or assumptions	ssumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	he resource could be cheaply mined by a small open cut with low flitches, on a contract campaign basis. It is unlikely that drilling and blasting would be necessary.
Metallurgical factors or assumptions	he basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the	imited bench testing of small samples for acid leaching potential has been undertaken, and has shown some promise, with good scandium, nickel and cobalt recoveries achieved over a 24 hour leach period.



Criteria	JORC Code explanation	Commentary
	metallurgical assumptions made.	
Environmen- tal factors or assumptions	ssumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	the deposit, there is likely to be onl minimal waste material produced by mining operation, and any waste materia would be similar to currently sub croppin laterite.
Bulk density	 hether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. he bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit. 	the collars of air core holes SY-37 and SY 35 respectively, down to several metres i to saprolite bedrock. A piece of coherer core from each 1 metre interval wa weighed then dried and weighed again then coated and immersed in water an immediately weighed. The three data set obtained were used to calculate in-situ an dry-weight densities, with the dry weigh densities applied in the resource tonnag calculations. The densities ranged fror 1.37g/cc to 2.56 g/cc, with mean densitie of 2.04g/cc from the haematitic laterite
	iscuss assumptions for bulk density estimates used in the evaluation process of the different materials.	

Classificatio

- The basis for the classification of the Mineral Resources into varying confidence categories.
- The Competent Person has a high level of confidence in the sample integrity, and assay data, and in the resource calculation technique. However, he considers that

tonnages.

laterite, and 1.63g/cc for the transitional laterite) to give more conservative



Criteria	JORC Code explanation	Commentary
	Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).	there is some risk, albeit minor, to the apparent degree of geological and grade continuity between holes.
	 Whether the result appropriately reflects the Competent Person's view of the deposit. 	
Audits or reviews	 The results of any audits or reviews of Mineral Resource estimates. 	 No audits or reviews have been carried out.
Discussion of relative accuracy/ confidence	 Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. 	 No statistical work has been carried out. However it is considered that the tonnage estimates are accurate to within ±10%, for each lithotype, and the grade estimates to within ±10%. The estimates were local and detailed, calculated for each lithotype present, for each section and for individual panels within each section. Not applicable.



Appendix 6: Sconi Project - Mineral Resource Information

Geology and geological interpretation

The Sconi cobalt-nickel-scandium laterite deposits have formed on ultramafic rocks that include serpentinites, gabbros and pyroxenites.

The laterites, commonly occurring as plateaus of high ground, were formed by a period of prolonged weathering that postdates the Cretaceous era. The nature of the laterites depends on the underlying lithology and always overly strongly weathered rocks.

The ultramafic rocks have a high background level of nickel and cobalt (i.e. between 500 to 2 000 ppm nickel and 60 to 100 ppm cobalt) and the process of lateritisation has concentrated the nickel and cobalt to grades which can be exploited economically.

Sampling and sub-sampling techniques

Sampling techniques

The sampling method used by Metallica Minerals since 1997 involves the following methodology:

Samples from Reverse Circulation (RC) drilling were collected on 1 metre intervals. The sample coming from the drill face through the cyclone is collected in 0.6 metre by 0.4 metre plastic bags with the bag held under the cyclone so the entire sample falls into the bag. The cyclone effectively homogenizes the sample coming up through the drill string prior to it being deposited into the plastic bags. The cyclone/splitter reject material was collected and held onsite until assaying was completed and there was no further immediate use for the reject material.

A sample for the laboratory is then collected from the plastic bags. A "spear" method is used for this, with a spear inserted into the bag and a "core" of the material in the plastic bag collected. A sample of between 1.5 to 3 kilogram is collected and put in calico bags which are labelled with the hole number and hole depth. These numbers represent the "sample number". No separate individual sample numbers are allocated to each interval other than for check sampling.

During the Metallica Minerals 2010 and 2012 drilling program a field portable XRF unit was on site and most samples were tested. Zones of low grade nickel mineralisation (<0.20% Ni) identified by the unit were generally composited.

Surface samples and drill hole hand held field XRF analyses were undertaken by Metallica Minerals' geologists to confirm and direct the exploration program. These results are not considered for the resource evaluation.

Drilling used for resource estimation that predate Metallica Minerals' drilling campaigns include:

- (a) Straits RC drilling at Greenvale completed in 2007 using standard cyclone and riffle splitting methods.
- (b) Anderson drilling.



<u>Sub-sampling techniques and sample preparation</u>

RC drill hole samples were split at the drill rig and subsampled as described above. This produced a field sample of 2 to 3 kilograms which was sent to an accredited laboratory for analysis. The principal laboratory was changed during the exploration program from ALS to SGS with similar procedures and standard methods. Both laboratories conform to Australian Standards ISO 9001 and ISO 17025.

For RC sample preparation and assaying the process at each laboratory is as follows:

- SGS assaying techniques involve drying the samples and then milling the material in a LM5 Mill to a nominal 85% passing 75 µm. An analytical pulp of approximately 220 grams is subsampled and the milled residue is retained for future reference. Then digested with 4 acids: nitric, hydrochloric, hydrofluoric and perchloric acid to effect as near to total solubility of the metals in the sample as possible. The resultant solution is then presented to an ICP for element quantification.
- ALS uses a similar method to SGS. The RC samples are dried then the entire sample is pulverised to a nominal 85% passing 75 µm. A "pulp" sample is split off and the residue is retained for future reference. The "pulp" is then split down to 50 grams which is digested in a mixture of nitric, perchloric and hydrofluoric acids. The residue is then leached in hydrochloric acid and the resultant solution is made to 100 ml in a volumetric flask. Elemental concentrations are determined simultaneously by Inductively Coupled Plasma Atomic Emission Spectrometry (ICPAES). Accuracy and precision is improved through the use of an internal standard.

Drilling techniques

All resource drilling by Metallica Minerals and Straits was mostly by RC methods and to a lesser extent air core, using modern methods and high air pressures. All drilling used in the resource estimation was managed by Metallica Minerals. Older drilling using uncertain methods and quality control were excluded for the purpose of this resource estimation. The following table provides a summary of the data used in the estimation and the data that was excluded (in grey).

PQ size diamond drilling by Metallica Minerals at other deposits was undertaken for metallurgical purposes and does not contribute to the resource estimate other than providing bulk density samples.



Deposit	Company	Year	Holes	Meters Drilled	Method	Comment
	QNI	1980s	(~140)	2 788	RC	Not used
	Annoconda	1998	(12)	242	RC	Not used
Lucknow	Straits	2005	19	834	RC	
Lucknow	Metallica	2010	298	7 030	RC	
	Metallica	2010	3	128	DDH	Metallurgy - No Assays
	Resource subtotal		317	7 864	RC	
	Metal Ex	1970	(266)	6 878	RC	Not used
	Anaconda	1998	(23)	733	RC	Not used
Greenvale	Straits	2007-08	141	5 935	RC	
	Metallica	2010-12	805	20 652	RC	
	Metallica	2010	3	73.7	DDH	Metallurgy - No Assays
	Resource subtotal		946	26 587	RC	
Kokomo	Metallica	2000-09	1 056	28 787	RC	
Kokomo	Metallica	2007-09	10	5,212	DDH	Metallurgy - No Assays
Minna-	Metallica	2003-07	345	6 604	RC	
moolka	Austin Anderson	1971	(78)		Percussion	Locations lost
	Austin Anderson	1971-72	26 (215)	800	Percussion	Full data for only 26 of 215 holes
Bell Creek	Ashton Mining	1989-90	122 (255)	1 800	RC	Full data for only 122 of 255 holes
	Metallica	1998-07	919	16 525	RC	
	Metallica	2005-07	43	981	DDH	
	Resource subtotal		1 110	19 587	RC and some DDH	

Drill and data spacing and distribution

Resource classification is based on data spacing and should adequately reflect the continuity and the risk of all areas. Extrapolation at the laterite margins is generally limited to half the drill spacing or less where not closed out by subgrade drilling results.

Compositing to 1 metre lengths was undertaken to ensure consistent sample support and search selection. In most cases this has little effect as the majority of samples were 1 metre in length.

Classification

Generally, classification has been applied on a drill density spacing as follows:

- Measured Mineral Resource for a reasonably regular pattern of 20 metres (Sconi South) or 30 metres (Sconi North)
- Indicated Mineral Resource for a reasonably regular pattern of 40 metres (Sconi South) or 60 metres (Sconi North).
- Inferred Mineral Resource for a reasonably regular pattern of >60 metres (Sconi North) or 80 metres (Sconi south)



Sample analysis method

Both SGS and ALS laboratories used were experienced in processing and assaying nickel-cobalt laterite samples and used appropriate analytical methods. Both laboratories demonstrated the use of internal quality control processes.

In addition, Metallica Minerals regularly took RC duplicate field samples and submitted these for assay within the same batch at a rate of approximately 1 in 45. Field XRF analyses were used to exclude drilling from duplicate sampling if the entire hole returned insignificant results. The results were reviewed for each deposit and these indicated that the combined sampling and assaying variance is less than 10% for all significant elements

In 2008, Metallica Minerals obtained five independent certified reference standards from Geostats Pty Ltd in Perth. These were first used in all subsequent drilling programs. The standards are only certified for nickel, copper and zinc, with cobalt, iron, chrome and scandium values available from single neutron activation analysis. The results were reviewed by Associates Pty Ltd (Golder) in 2009 and again in 2010. The results were considered acceptable and confirmed the relative accuracy of the assay laboratories.

Check samples where the original or second split pulps were re-assayed at a second laboratory were undertaken intermittently by Golder after all major drilling programs. Review of the paired assays by Golder indicated acceptable variations.

Estimation methodology

All significant elements assayed were incorporated into the resource estimate that included the potentially economically significant elements nickel, cobalt and scandium, as well as other elements significant for processing or whole rock chemistry including magnesium, iron, manganese, aluminum, calcium, chrome and copper.

All elements were estimated using ordinary kriging with variogram model parameters derived from the drill hole samples by laterite domain.

All estimations were undertaken separately for the principal laterite geology types that include laterite, saprolite and weathered rock. Other domains varied by deposit but generally included:

- Nickel and cobalt were estimated within a mineralisation domain interpreted using a nominal 0.3% nickel cut-off, varied to account for continuity and laterite profile. Nickel and cobalt are correlated and this relationship is maintained by using the same estimation processes and parameters.
- Higher grade scandium was estimated within a 70 g/t scandium interpretation. Scandium
 displays a separate control to that for nickel and cobalt and can cross-cut the geology at
 times.
- Some iron boundaries were applied within the laterite to subdivide material for processing option analysis.

All estimates used unfolding methods to ensure variations in the laterite surface are reflected in the estimates and sample selection.

Geology and grade domains were interpreted as polygons or surface lines on drill sections and wireframed for block modelling.



High grade cuts were applied to nickel, cobalt and scandium to reduce the influence of extreme grades or outliers. The top-cuts applied varied by deposit but do not significantly affect the global metal content estimated.

Cut-off grade(s)

The Sconi Resources are multi-element and combine nickel, cobalt and scandium grades using a nickel equivalent cut-off grade where:

NiEq = Ni + 1.5 * Co + 0.01 * Sc

This formula has been derived using the following commodity prices and recoveries:

- Nickel US\$10/lb and 90% recovery
- Cobalt US\$15/lb and 90% recovery
- Scandium US\$1500/kg scandium oxide and 90% recovery (scandium oxide is the product typically traded and contains 65.2% scandium metal)

Note scandium units are in g/t which is equivalent to ppm. Nickel and cobalt units are in %.

The marginal cost of operating an acid leach process is understood to be around 0.7% NiEq for a large-scale facility. This understanding is the basis for the current resource statement at a 0.7% NiEq cut-off for reporting the Mineral Resource base case that could form part of the combined SCONI project development. To provide a return on capital investment a higher-grade target would be required initially (a higher cut-off is also provided).

Mining and metallurgical methods and parameters

Mining factors or assumptions

No mining factors are applied to the Mineral Resource estimate which is estimated for 10 m by 10 m by 1 m size blocks. Some aggregation of the resource blocks is required for any mining selectivity scenario in addition to the application of mining losses and dilution factors.

Metallurgical factors or assumptions

Metallica Minerals have completed test work that indicates metallurgical recovery is in the order of 90% for each of nickel, cobalt and scandium.



Appendix 7: Sconi Project - Material assumptions

Material assumptions used in the estimations are set out in the following table:

Criteria	Commentary			
Site Visits	The Competent Person has visited the prospect on several occasions, previously as Geology Manager and full-time employee of Metallica Minerals during the latest drilling programs.			
Study Status	The information in this announcement regarding the Sconi project is based on 20 Sconi Project's Phase 1 PFS and the 2012 study, the former being completed Golder and Associated and the latter by IMC Mining Group.			
	The PFS was based on a high-pressure acid leach (HPAL) processing plant treating 200,000 tonnes per annum of high-grade scandium laterite resource. The Sconi Phase 1 was designed to be a commercial stand-alone project, with the intention that it may lead to a much larger (750,000 tpa) Phase 2, cobalt-nickel-scandium brownfields expansion in the future. Both the 2012 and 2013 studies were based on accuracy level of ~35% for technical and economic assessments. In 2017, the study status is insufficient to support estimations of Ore Reserves or to provide assurance of an economic development case.			
Costs	Metallica Minerals and its third-party engineering consulting representatives collectively estimated the project economics to an accuracy level of 35%, based or 2012 - 2013 pricing and mass balance quantities. Estimated operating expenditure for a 'tri-metal' cobalt-nickel-scandium mining operations are:			
	Unit Operating Costs	Unit	Per Annum Totals	
	Mining Cost	A\$/dt ROM	16	
	Reagents	A\$/dt ROM	48	
	Sulphur	A\$/dt ROM	41	
	Maintenance	A\$/dt ROM	24	
	G & A costs	A\$/dt ROM	20	
Total Opex Estimate A\$/dt ROM 184				



Criteria Commentary

The Life of Mine Mining and Processing physicals applicable to the Project based on the July 2012 study are as follows

Category	Description	Units	LOM Totals
Mining	ROM Ore Mined	Mt	15
physicals	Waste	Mt	9
	Strip	ratio	1:1.6
	ROM Ni Grade	%	0.81
	ROM Co Grade	%	0.1
	ROM Sc Grade	ppm	73
	Ni Metal - ROM	t	116,650
	Co Metal - ROM	t	15,550
	Sc Metal – ROM	t	1,600
Processing	ROM Ore Processed	Mt	15
physicals	Sc Grade Processed	%	0.81
	Co Grade Processed	%	0.11
	Sc Grade Processed	ppm	73
	Ni Metallurgical Recovery	%	90%
	Co Metallurgical Recovery	%	90%
	Sc Metallurgical Recovery	%	85%
	Scandium to Sc ₂ O ₃	Factor	1.533
	Sc ₂ O ₃ Produced	t	2,080

Estimated operating expenditure for a scandium-only mining operation based on the March 2013 study are as follows are:

Unit Operating Costs	Unit	Per Annum Totals	
Mining and Processing Cost	A\$/dt ROM	160.00	
Operating Costs			
Mining Cost	A\$M	5.5	
Labour	A\$M	12.8	
Maintenance	A\$M	7.4	
Other General Costs	A\$M	5.8	



Criteria	Co	mmentary					
Criteria		mmentary				o Acid Plant	With Acid Plant
	Consumables a		and	A\$M		29.5	16.6
		Power		A\$M		2.4	1.8
		Contingency o	f 5%	A\$M		3.2	2.7
		Total Opex E		A\$M		66.6	52.7
		PFS of March	2013 are a				
		Category		escription	Units	LC	OM Totals
		Mining physicals	ROI	M Ore Mined	Mt		5.9
		priyolodio		Waste	Mt		1.2
				Strip	ratio		1:1.9
			Total Material Movement		Mt		8.75
		-		ROM Sc Grade			178
				Metal - ROM	t		1,025
		Processing	ROM	Ore Processed	Mt		3.92
		physicals	Sc Gr	ade Processed	ppm		209
			Sc Metal	llurgical Recovery	%		81.5%
			Scandiu	m metal to Sc ₂ O ₃	Factor		1.533
Mining factors or assumptions	outp to th Min sma	outs to lift the preferred straining at the projection.	oroject out udy option ect is expe	et requires further do of 2013 and ensure , ready for a DFS. ected to involve con and excavator m	e the value oventional of ining equip	open pit n	nining methods of the scale of the
Matallussiaal	Pro equ the carr	ject is propose ipment to site campaign min ries low risk	ed to be ca for campai ing operat	having a dedicated ampaign mined by gn mining annually tion is conventional	a mining o . The mini , of low ca	contractor ing equipr apital cost	who will mobilise ment proposed for t, small scale and
Metallurgical factors or assumptions	The most recent testwork for the Project was undertaken in 2012 by SGS Lakefield Oretest (Perth, Western Australia) for Metallica Minerals. Results from the testwork were used where applicable to assist in the process design.						



Criteria	Commentary
	This testwork was undertaken on a large 4,400-kilogram sample of representative high grade scandium resource and was processed through a HPAL pilot plant for a continuous 10-day period. This feed blend was selected to maximise scandium production for the purpose of market evaluation. A scandium testwork extraction of 85% was achieved, contained in approximately 15,000 litres of pregnant leach solution (PLS).
	The PLS produced at SGS was transported to Brisbane where a purpose-built pilot plant for scandium extraction had been constructed by Metallica Minerals. This plant was designed to recover scandium from the PLS into a more concentrated solution (Scandium Rich Solution) using solvent extraction techniques which form part of Metallica's proprietary technology. Scandium recovery from the PLS into the Scandium Rich Solution averaged 98%. The product produced was high grade scandium oxide which exceeded the target purity level of 99.9%, with most of the product achieving 99.99% purity ("Four Nines").
	The Sconi Phase 1 PFS assumed a conservative overall recovery of 81.5% as opposed to the implied recovery from testwork which was above 83%. Some later testwork has revealed the opportunity for further improvements.
Environmental	In 2013 and thereafter, Metallica Minerals has been seeking environmental approvals for a 1 million tonne per annum processing capacity to ensure that both phases of the Sconi project could proceed. The Sconi Phase 2 development, is a potential future brownfields expansion.
	Project components like the residue storage facility and the water and power supply would need to suite the final scale of the processing plant. The Company does not expect there to be significant delays or issues in relation to developing a mine and processing facility om site due to strong community and Government support
Infrastructure	The Sconi project is in an excellent location, centred on the large historic Greenvale mine site where high grade nickel ores were mined from 1974 to 1992. The Project is approximately 250 kilomtres by road from Townsville (population ~190,000).
	Townsville is a major regional centre that supports large scale refineries such as the QNI's Yabulu nickel refinery, Xstrata's copper refinery and Sun Metals zinc refinery.
	Local service industries for these existing industrial plants include electrical, mechanical and civil engineering contractors, plant hire, metal fabrication, machine shops and other service providers.
	There is a skilled workforce in Townsville to support any major industrial activity in the region.
	The advantages of the proposed site location include:
	readily available water adjacent to the proposed Sconi plant,
	less than a three hours' drive on sealed roads from Townsville, a major regional centre,



Criteria	Commentary
	access to existing port facilities in Townsville,
	access to existing industrial services in Townsville,
	strong community support,
	access to power within 3 kilometres of the proposed plant site, and
	close to the purpose-built township of Greenvale, including airstrip which
	previously supported the historical mining activities.
Revenue factors	The product price used in the studies is consistent with the pricing used similar companies in their corresponding economic studies.
lactors	companies in their corresponding economic studies.
	These pricing values are considered conservative. The long terms cobalt price of US\$15 per pound using in the July 2012 study for example, is significantly lower than the current market price of US\$24 per pound.
	Similarly, there has been as significant movement in the AUD:USD exchange rate which further factors the economics of the project.
	The Sconi studies assumed a AUD:USD of 0.90 (or one Australian dollar buys 90 American cents). Currently, the AUD:USD exchange rate stands at 0.76 (or one Australian dollar buys only 76 American cents).
	As all commodity prices are quoted in USD, which has increased by approximately 15% (with respect AUD) since the studies were completed, but the mining and processing costs are quoted in AUD, this means that the expected cost of the mining operation at Sconi remains the same, whereas the anticipated revenue of the mine is at least 15% higher than the studies suggest solely due to a favourable movement in the exchange rate.
	Thus, due to rising commodity prices and the decreasing strength of the Australian dollar against the US dollar, the economics of the Sconi project is materially better than the already impressive anticipated revenue outlined in these studies.
Market assessment	Since acquiring the Flemington and Sconi projects some five months ago, Australian Mines has met with a range of companies in the scandium alloy supply chain, from master alloy companies to aerospace and automotive manufactures. These discussions are advancing with Australian Mines' Managing Director currently meeting with potential offtake partners for its scandium and cobalt products.
	The Company believes that there is a rapidly growing demand across the aerospace and automotive sectors for aluminum alloys as a result of a market demand for increased fuel efficiency in conventional vehicles and greater range in electric vehicles.



Criteria	Commentary				
	Airbus states that together with Boeing, it expects to receive orders from commercial airline companies for approximately 33,000 to 38,000 additional new aircraft over the coming 20 years.				
	To meet this demand, Airbus will be required to further streamline their manufacturing process as current production methods will result in the French aircraft manufacturer only being about to complete 75% of their expected orders. By using an aluminum scandium alloy rather than the current aluminum-copper-magnesium alloy, aircraft companies like Airbus are able to reduce the number of steps required to manufacturer a commercial plane from 22 individual steps (stations) to only 9 steps. This will significantly reduce the required construction time. With 47 tonnes of aluminum alloy used to build a typical commercial airline, even assuming only a 50% take up of aluminum scandium alloy across the sector, the potential future demand for scandium oxide from the aviation sector alone is 150 tonnes per year.				
	The use of scandium has been limited by its scarcity and lack of reliable supply. The current total world supply of scandium is estimated to be around ten tonnes of scandium oxide per annum, all of which is sourced as a by-product from other metals and industrial processes. High purity scandium oxide currently sells at prices well in excess of US\$2,000/kg depending on product quantity and purity.				
Economic	The key economic inputs:				
	Description Rate				
	Cobalt price	US\$15.00/lb			
	Nickel price	US\$10.00/lb			
	Scandium price	US\$2,000kg			
	Exchange rate	A\$0.90/US\$1			
	Average cobalt recovery	90%			
	Average nickel recovery	90%			
	Average scandium recovery	81%			
	Processing plant throughput	750,000 dtpa			
	Average cobalt feed grade (over 20 years)	0.11%			
	Average nickel feed grade (over 20 years)	0.81%			
	Average scandium feed grade (over 20 years)	73g/t Sc			
Social	No social considerations were identified that would likely to significantly compromise project permitting and implementation.				
Classification	Resources were classified in accordance with the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012 Edition).				
	The classification of Mineral Resources was completed based on the geological complexity, estimation performance, number of drill samples, drill hole spacing and				



Criteria	Commentary
	sample distribution. No detailed studies have been completed using simulation or probabilistic methods that could quantify relative accuracy of the resource estimates.
	Laterites can have significant short range variation in material types and grade due to local variations in weathering process. However, on a broader scale they demonstrate consistency in lateral extent. As a result, drilling demonstrates a regional grade and volume rather than local certainty. Hence drill spacing, as used for the resource classification, is the prime indicator of estimation risk.
	The Competent Person is satisfied that the result appropriately reflects his view of the deposit.
	Further details of the criteria used to define the resource class is set out in Appendix 9 to this announcement.



Appendix 8: Sconi Project - JORC Table 1

Section 1 Sampling Techniques and Data

JORC Code explanation Criteria Commentary Sampling Nature and quality of sampling (eg cut Samples from Reverse Circulation (RC) techniques drilling were collected on 1 metre intervals. channels, random chips, or specific specialised industry standard The sample coming from the drill face measurement tools appropriate to the through the cyclone is collected in 600 mm minerals under investigation, such as by 400 mm plastic bags with the bag held down hole gamma sondes, or handheld under the cyclone so the entire sample falls XRF instruments, etc). These examples into the bag. The cyclone effectively should not be taken as limiting the broad homogenizes the sample coming up meaning of sampling. through the drill string prior to it being deposited into the plastic bags. The Include reference to measures taken to cyclone/splitter reject material was collected ensure sample representivity and the and held onsite until assaying was of appropriate calibration any completed and there was no further measurement tools or systems used. immediate use for the reject material. Aspects of the determination A sample for the laboratory is then collected mineralisation that are Material to the from the plastic bags. A 'spear' method is Public Report. used for this, with a spear inserted into the bag and a 'core' of the material in the In cases where 'industry standard' work plastic bag collected. A sample of between has been done this would be relatively 1.5 to 3kg is collected and put in calico simple (eg 'reverse circulation drilling was used to obtain 1 m samples from bags which are labelled with the hole number and hole depth, representing the which 3 kg was pulverised to produce a 'sample number'. No separate individual 30 g charge for fire assay'). In other sample numbers are allocated to each cases more explanation may interval other than for check sampling. required, such as where there is coarse gold that has inherent sampling During the 2010 and 2012 drilling programs Unusual commodities or conducted by Metallica Minerals, a field problems. portable XRF unit was on site and most mineralisation types (eg submarine samples were tested. Zones of low-grade nodules) may warrant disclosure of detailed information. nickel mineralisation (<0.20% Ni) identified by the unit were generally composited. Surface samples and drill hole hand held field XRF analyses were undertaken by Metallica Minerals' geologists to confirm and direct the exploration program. These results are not considered for the resource evaluation. Drilling Drill type (eg core, reverse circulation, Drill All resource drilling by Metallica techniques open-hole hammer, rotary air blast, Minerals and Straits was mostly by RC auger, Bangka, sonic, etc) and details methods and to a lesser extent air core, (eg core diameter, triple or standard using modern methods and high air tube, depth of diamond tails, facepressures. All drilling used in the resource sampling bit or other type, whether core estimation was managed by Metallica is oriented and if so, by what method, Minerals. Older drilling using uncertain etc). methods and quality control were excluded

for the purpose of this resource estimation. PQ size diamond drilling by Metallica



Criteria	JORC Code explanation	Commentary
		Minerals at other deposits was undertaken for metallurgical purposes and does not contribute to the resource estimate other than providing bulk density samples
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative 	 Metallica Minerals RC drilling generally used high air pressure to keep the laterite samples dry and maintain reasonable recovery and sample splitting. Metallica Minerals geologists indicated that
	 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. 	the recovery for RC drilling by Metallica in the mineralised zone was good to excellent. This was confirmed through observations by Golder during site visits. The RC samples were not weighed to support this observation and the comments are based on expected volume from 1 metre sample intervals and the bit size used on the day.
		 The degree of recovery is not recorded for the Straits drill holes. However, their reports indicated redrilling of several holes that did have unacceptable recovery.
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 guestical in pattern Core (or contain) 	 The logging of core for metallurgical sampling and chip samples for lithology types were essential to understanding the laterite profile and are used in the application of density and interpretation of the laterite domains and sample assay results for the Mineral Resource estimation.
	 quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	 The drill logs were standardised with set geological codes to limit the number of rock types and therefore assist in geological interpretation.
		 The logging of drill chips was more qualitative in nature with the use of geological codes. Sub-set sample material was capture in chip trays and photographs of each marked chip tray were taken.
		 Almost always, logs for each metre were recorded on template logs sheets by hand and later transferred to Excel spreadsheet.
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 	 With core, sections identified for analysis were halved where one half was submitted for analysis and the remaining half preserved as a record.
J 5 - 21. W. C. 1	 sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample 	 Non-core samples for each metre of drilling were homogenised in a cyclone on the drill rig and bagged. Representative sub- samples were speared. In 2007, Metallica



Criteria	JORC Code explanation	Commentary
	 Quality control procedures adopted for all sub-sampling 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. Whether sample sizes are appropriate to the grain size of the material being sampled. 	Minerals checked the spear sampling method against duplicates derived from rifle splitting and sufficient correlation was demonstrated. Samples were mainly dry, but wet when recovered below the water table. The nature and type of sample is appropriate for laterite deposits. Various sampling and assay verification tests have been carried out during many of Metallica Minerals' drilling programs in the past, where consistent sampling methods and technics were followed.
		 Independently certified reference standards from Geostats Pty Ltd and duplicate samples were introduced to each suite of drill hole samples. Metallica Minerals had a competent
		geologist supervising the drilling and sampling at all times.Sample sizes were appropriate for the assay technique followed.
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 (eg standards, blanks, duplicates, external laboratory checks) 	 Both SGS and ALS laboratories used were experienced in processing and assaying nickel laterite samples and used appropriate analytical methods. Both laboratories demonstrated the use or internal quality control processes. Metallica Minerals regularly took RC duplicate field samples and submitted these for assay within the same batch at a rate or approximately 1 in 45. Field XRF analyses were used to exclude drilling from duplicate sampling if the entire hole returned insignificant results.
	and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	 Independently certified reference standards and duplicate samples were introduced. to each suite of drill hole samples.
		 The standards are only certified for nickel copper and zinc, with Co, Fe, cobalt, iron chrome and scandium values available from single neutron activation analysis.
		 Check samples where the original of second split pulps were re-assayed at a second laboratory were undertaken intermittently by Golder after all major drilling programmes



Criteria	JORC Code explanation	Commentary
Verification of sampling and	The verification of significant intersections by either independent or alternative company personnel.	 In certain cases, twin holes between Metallica Minerals and previous drilling provided comparable results.
assaying	 The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) 	Hand held XRF results were continually consistent with the assayed mineralisation to acceptable levels.
	 protocols. Discuss any adjustment to assay data. 	 No adjustments of the resource assay data were performed other than applying high grade top-cuts and lower limits to reflect the assaying detection limit. Top-cuts were applied for all deposits for nickel, cobalt and scandium to limit the impact of extreme grades. The top-cut values vary by laterite domain but do not affect the metal content significantly.
		Data audits were presented occasionally that included a review of a portion of the databases supplied by Metallica Minerals against original assay certificates. In each case the databases were found to be well constructed with a few minor issues identified which were resolved before proceeding with grade estimation. Subsequent resource updates for some deposits relied on comparison of the updated results to ensure consistency with previous work and geological interpretations.
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. 	 All drill holes were located by independent surveying companies, generally using DGPS equipment to provide sub-metre accuracy for regional Map Grid of Australia (MGA) coordinates.
	 Specification of the grid system used. Quality and adequacy of topographic control. 	 Topography data was supplied separately and was both detailed and accurate. Greenvale and Lucknow used WorldView-2 satellite imagery dated Dec 2010
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) 	The resource classification was based on data spacing and should adequately reflect the continuity and the risk of all areas. Extrapolation at the laterite margins is generally limited to half the drill spacing or less where not closed out by subgrade drilling results.
	and classifications applied.Whether sample compositing has been applied.	 Compositing to 1 m lengths was undertaken to ensure consistent sample support and search selection. In most cases this has little effect as most samples were 1 m in



Criteria	JORC Code explanation	Commentary
		length
Orientation of data in relation to geological structure	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. 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. 	All drill holes were drilled vertically. This is generally the best angle to intersect the laterite profile that is relatively thin and laterally extensive with horizontal continuity and a vertical grade profile.
Sample security	The measures taken to ensure sample security.	 No specific security measures were undertaken for sampling and delivery. However, in most cases the samples were under the duty of care of the Metallica Minerals or contract geologist until delivery to the laboratory.
		 Sampling and logging completed at the drill rig and overseen by the Metallica Minerals or contract geologist, Metallica Minerals sampler and independent drilling company crew.
Audits or reviews	 The results of any audits or reviews of sampling techniques and data. 	 Golder audited the assay database for each deposit during the initial Mineral Resource estimate and resolved all issues prior to proceeding.
		 Golder inspected exploration practises and activities in the field on three different occasions. This included independently surveying selected drill collars with a hand- held GPS. All data processes that were reviewed were considered acceptable.
		 Metallica Minerals undertook several exploration programs recommended by Golder to supplement QAQC or density measurements.

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	 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. 	 All the tenements within the Sconi Project are 100% held by Metallica Minerals via wholly owned subsidiary companies. In October 2016, Australian Mines announced that it had entered into a joint venture with Metallica Minerals, which enables Australian Mines to earn up to a



Criteria	JORC Code explanation	Commentary
	The security of the tenure held at the	75% interest in the Sconi tenements.
	time of reporting along with any known impediments to obtaining a licence to operate in the area.	 All the tenements are in good standing with no known impediments.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	 Metallica Minerals commenced exploration in 1997 in areas known to have nickel laterites. For most of its deposits, the previous exploration was limited and has not been used for resource evaluation purposes.
		 At Lucknow and Greenvale early exploration drilling is available and Greenvale has subsequently been mined. This early exploration data was first used by Straits Resources to undertake an exploration programme for scandium. On acquiring the tenements from Straits, Metallica Minerals targeted their exploration for nickel, cobalt and scandium based on previous drilling. From the previous companies that explored the Lucknow and Greenvale deposits, only the Straits drilling is supported with QAQC data and is considered adequate to be included in the Mineral Resource estimate.
Geology	Deposit type, geological setting and style of mineralisation.	 The deposits are nickel laterites developed by weathering processes over fragments of ultramafic basement rocks. Nickel, cobalt and scandium have been enriched from the basement rocks by both residual and supergene processes.
Drill hole Information	 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: 	Not relevant as exploration results are not included.
	 easting and northing of the drill hole collar 	
	 elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar 	
	o dip and azimuth of the hole	
	 down hole length and interception depth 	
	o hole length.	
	 If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does 	



Criteria	JORC Code explanation	Commentary
	not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	
Data aggregation methods	 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. 	Not relevant as exploration results are not included.
	 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. 	
	 The assumptions used for any reporting of metal equivalent values should be clearly stated. 	
Relationship between mineralisatio n widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. 	 Nickel laterite deposits are laterally extensive. They have a vertical grade profile because of the weathering processes that reduce with depth. Vertical RC drilling completed to date provides the best drilling orientation.
	• 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').	
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	 Plans of the resource areas are provided in Section 3.3 and Figure 8 to Figure 11 of the ASX Release published by Metallica Minerals (21 October 2013).
	of drill hole collar locations and appropriate sectional views.	 Example cross sections are provided in Section 3.4 and Figure 12 to Figure 17 of the ASX Release published by Metallica Minerals (21 October 2013).
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.	Not relevant as exploration results are not included.
Other substantive exploration data	 Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; 	 Metallica Minerals was not aware of nor has Golder been provided with exploration data outside of that drilling used for the Mineral Resource estimate and which could



Criteria	JORC Code explanation	Commentary
	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.	Metallica Minerals indicated that metallurgical work has suggested that favourable pickel cobalt and scandium.
Further work	 The nature and scale of planned further work (eg 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. 	sufficient drilling to define the extent of most

Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	 Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. Data validation procedures used. 	 Golder audited the assay database the initial Mineral Resource estimate and resolved all issues prior to proceeding. This included both manual verification of selected drilling holes against hard copy assay certificates and full 100% comparison of digital data (i.e. original laboratory assay files). For subsequent resource updates, only the additional drilling was added to the audited database.
Site visits	 Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. 	 Mr. John Horton of Golder (former Competent Person for the Sconi Mineral Resource estimate) has visited all the sites during the main stages of exploration at the various deposits. This allowed exploration processes to be reviewed and evidence of site work inspected. These independent site visits included July 2007, August 2008 and March 2010 Mr Michael Tyndall (current Competent Person) was employed as the Geology Manager for Metallica Minerals (2011 to 2014) which included the supervision of
		field RC drilling and has continued being associated as consultant to Metallica Minerals in the same capacity.



Criteria	JORC Code explanation	Commentary
Geological interpretatio n	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	3 37
	 Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and 	weathering processes with significar lateral continuity in the profile. This ca have local variation in thickness and grad as a result of weathering processes. This i expected for laterite deposits where minin
	 controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology. 	 The Mineral Resource classification is based on drill spacing that will reduct volume uncertainty when drilling is close spaced.
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	laterally extensive. Thicknesses can var from 2 to 30 m with example sections i
		 The classified resource areas estimate include: Greenvale 1.6 km², Lucknow 0. km², Kokomo 2.7 km²;
Estimation and modelling techniques	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	incorporated into the resource estimate that included the potentially economicall significant elements nickel, cobalt an scandium, as well as other element significant for processing or whole rock chemistry including magnesium, iron manganese, aluminium, calcium, chrom
	 The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. 	derived from the drill hole samples be laterite domain.

regarding

for the principal laterite geology types that include laterite, saprolite and weathered

rock. Other domains varied by deposit but

Nickel and cobalt - estimated within a

mineralisation domain interpreted using a nominal 0.3% Ni cut-off,

generally included:

Estimation of deleterious elements or other non-grade variables of economic

significance (eg sulphur for acid mine

made

assumptions

recovery of by-products.

The



Criteria	JORC Code explanation	Commentary
	 drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. 	varied to account for continuity and laterite profile. Nickel and cobalt are correlated and this relationship is maintained by using the same estimation processes and parameters;
	 Any assumptions behind modelling of selective mining units. Any assumptions about correlation between variables. 	 Higher grade scandium was estimated within a 70 g/t Sc interpretation. Scandium displays a separate control to that for nickel and cobalt and can cross-cut the geology at times; and
	 Description of how the geological interpretation was used to control the resource estimates. 	 Some iron boundaries were applied within the laterite to subdivide material for processing option analysis.
	 Discussion of basis for using or not using grade cutting or capping. The process of validation, the checking 	 All estimates used unfolding methods to ensure variations in the laterite surface are reflected in the estimates and sample selection.
	process used, the comparison of model data to drill hole data, and use of reconciliation data if available. Ge dril	Ocales and control to the state of the state
		 High grade cuts were applied to nickel, cobalt and scandium to reduce the influence of extreme grades or outliers. The top-cuts applied varied by deposit but do not significantly affect the global metal content estimated.
	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the	All resource tonnages were calculated on a dry basis and are consistent with the assays that are prepared on a dry basis.
	moisture content.	 Moisture content (MC) was calculated for a range of samples at all deposits during bulk density determinations. Values are relatively low and are generally from 0.5% to 17% MC with an average of ~10%.
Cut-off parameters	 The basis of the adopted cut-off grade(s) or quality parameters applied. 	 The Sconi resources are multi-element and combine nickel, cobalt and scandium grades using a nickel equivalent cut-off grade where:
		$NiEq = Ni + 1.5 \times Co + 0.01 \times Sc.$
		 This formula has been derived using the following commodity prices and recoveries:
		 Nickel – US\$10/lb and 90% recovery
		 Cobalt – US\$15/lb and 90% recovery
		o Scandium – US\$1500/kg scandium



Criteria	JORC Code explanation	Co	ommentary
		•	oxide and 90% recovery (scandium oxide is the product typically traded and contains 65.2% scandium metal). Scandium units are in g/t which is equivalent to ppm. Nickel and cobalt units
		•	are in %. The marginal cost of operating an acid leach process is understood to be around 0.7% NiEq for a large-scale facility. This understanding is the basis for the current resource statement at a 0.7% NiEq cut-off for reporting the Mineral Resource base case that could form part of the combined SCONI project development. To provide a return on capital investment a higher-grade target would be required initially (a higher cut-off is also provided).
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	•	No mining factors are applied to the Mineral Resource estimate which is estimated for 10m by 10m by 1m size blocks. Some aggregation of the resource blocks is required for any mining selectivity scenario in addition to the application of mining losses and dilution factors.
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	•	Metallica Minerals previously completed test work that indicates metallurgical recovery is in the order of 90% for nickel and cobalt and 81.5% for scandium.
Environmen- tal factors or assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable	•	Processing options and analysis have been considered and tested by Metallica Minerals. In general:



data).

deposit.

Whether the result appropriately reflects

the Competent Person's view of the

Criteria	JORC Code explanation	Commentary
Bulk density	prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made. • Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. • The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit. • Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	 Mining of the laterite is in shallow pits that will not expose significant fresh rock. Mine waste materials are highly oxidised and are relatively easy to landform and rehabilitation, as demonstrated by the successful rehabilitation of the Greenvale mine site which won some environmental awards. Disposal of mine tailings can either be in external residue facilities or into inpit voids. Dry bulk density (DBD) was measured for each deposit using a range of methods and samples to provide a basis for deriving the resource estimate assumptions. Determination methods for in-situ material include: Caliper – Direct measurement of volume of whole PQ drill core from the metallurgical drill holes; Sand Core – Indirect measurement of volume by measuring displaced sand in a bucket; and Surface Pits – Pit volume measured measuring sand filling a small 30 by 30 by 30 cm pit. Average DBD for the major geological material types were applied to the resource model after a small downward adjustment was applied to correct for expected small selection biases.
Classificatio n	 The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data) 	Generally, classification has been applied on a drill density spacing as follows: Measured Mineral Resource: a reasonably regular pattern of 20 m (Sconi South) or 30 m (Sconi North) m. Indicated Mineral Resource: a reasonably regular pattern of 40 m (Sconi South) or 60 m (Sconi North).

reasonably regular pattern of >60 m

(Sconi North) or 80 m (Sconi south

Resource:

а

Mineral

Inferred



Criteria	JORC Code explanation	Commentary
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	 Golder has previously audited the databases used for the Mineral Resource estimation of each deposit.
		 Greenvale and Lucknow were previously explored, drilled and resources were estimated by Straits (2007).
		 Lucknow data was reviewed by Phil Jones and Partners (2009).
Discussion of relative accuracy/ confidence	 Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. The statement should specify whether is related to global or local estimates, and if local, state the relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. 	using simulation or probabilistic methods that could quantify relative accuracy of the resource estimates. Laterites can have significant short range variation in material types and grade due to local variations in weathering process. However, on a broader scale they demonstrate consistency in lateral extent. As a result, drilling demonstrates a regional grade and volume rather than local certainty. Hence drill spacing, as used for the resource classification, is the prime indicator of estimation risk.