

13 June 2019

Sconi to generate \$5 billion in free cashflow over 30-year mine life

HIGHLIGHTS:

- **Expanded Mineral Resource¹ at Sconi to support longer mine life of 30+ years**
- **Highlights from updated Ore Reserve²**
 - **69% increase in Total Ore Reserve tonnes to 57.30 million tonnes**
 - **17% increase in Proved Ore Reserve tonnes to 8.08 million tonnes**
 - **82% increase in Probable Ore Reserve tonnes to 49.22 million tonnes**
- **Highlights from revised financials³**
 - **Additional mine life increases Total Revenue by 44% to \$13.3 billion**
 - **Total free cashflow increases 93% to \$5.0 billion**
 - **NPV₈ (pre-tax) increases by 12% to \$1.47 billion**
 - **IRR (pre-tax) revised down slightly to 20%**
 - **NPV₈ (post-tax) increases by 17% to \$0.81 billion**
 - **IRR (post-tax) maintained at 15%**

¹ The Mineral Resource for the Sconi Project was released by Australian Mines via the ASX Announcements platform on 14 February 2019 and is detailed in Appendix 5 of this report. The Mineral Resource for the Sconi Project, as outlined in the 14 February 2019 report is: Measured 8.27Mt @ 0.75% Ni, 0.09% Co; Indicated 49.24Mt @ 0.60% Ni, 0.08% Co; Inferred 18.2 Mt @ 0.54% Ni, 0.05% Co. The Company is not aware of any new information or data that materially affects the information included in the market announcement released by the Company on 14 February 2019 in respect of the Sconi Project and all material assumptions and technical parameters underpinning the Mineral Resource estimates in that announcement continue to apply and have not materially changed.

² See Table 1, Appendix 4 and Appendix 7 of this report for full details of the updated Ore Reserve for the Sconi Project

³ See Table 2 and Table 3 of this report for full details of the revised financials for the Sconi Project
All figures are expressed in Australian dollars unless otherwise specified

Advanced battery materials development company, **Australian Mines Limited** (“Australian Mines” or “the Company”) (Australia ASX: AUZ; USA OTCQB: AMSLF; Frankfurt Stock Exchange: MJH) is pleased to announce an updated mine plan, Ore Reserve Estimate and financials for the Sconi Cobalt-Nickel-Scandium Project in North Queensland, Australia.

Following the positive drill results announced earlier this year⁴, which substantially expanded the Mineral Resource⁵ for the Sconi Project, the Company has been working on refinements⁶ to the Sconi mine plan originally released as part of the Sconi Bankable Feasibility Study in November 2018 (“BFS”) ⁷. Input has been provided by global engineering and construction firm Ausenco, specialist mine planning consultants Orelogy, and Stimulus Laboratories, who partnered with Australian Mines in the construction and operation of the Company’s demonstration-size processing plant in Perth.

As a result of this work, which included an update to the Ore Reserve⁸ and mine design, the Company is pleased to report that the planned Life of Mine of the Project has increased from 18 years to at least 30 years⁹.

There has likewise been a significant increase in both the projected pre-tax and post-tax NPV_{8%} of the Sconi Project to \$1.47 billion and \$0.81 billion respectively¹⁰ based on the same economic assumptions contained in the Sconi BFS¹¹.

The extended mine life will also result in an increase in the expected total revenue generated by the project, which has risen to \$13.27 billion over the 30+ year life.

In February 2019¹², the Company announced a 63% increase in the tonnage of the Greenvale Mineral Resource and a 94% increase in the Lucknow Mineral Resource, with Total Mineral Resources for Sconi now estimated at 75.71 million tonnes at 0.60% nickel and 0.08% cobalt¹³.

⁴ Australian Mines, Growth potential of the Sconi Project continues to be unlocked, released 21 January 2019

⁵ Australian Mines, Substantial increase in Mineral Resource tonnage set to boost financial outcomes for Sconi Project, released 14 February 2019

⁶ In line with standard industry practice, Australian Mines continues to assess and, where appropriate, implement refinements to the Sconi mine plan particularly in light of the updated Mineral Resource that was released post 20 November 2018, being the release date of the Bankable Feasibility Study (BFS) for the Sconi Project. It should be noted that the November 2018 is the JORC-compliant BFS for the Sconi Project and, as such, it is the final study for this project. Notwithstanding this, Australian Mines may release additional information regarding the project from time to time, in accordance with the company’s continuous disclosure obligation.

⁷ Australian Mines, BFS supports strong commercial case for developing Sconi, released 20 November 2018

⁸ See Table 1, Appendix 4 and Appendix 7 of this report for full details of the updated Ore Reserve for Sconi Project

⁹ See Table 2 and Table 3 of this report for full details

¹⁰ See Table 2 and Table 3 of this report for full details of the revised financials for the Sconi Project

¹¹ Australian Mines, BFS supports strong commercial case for developing Sconi, released 20 November 2018

¹² Australian Mines, Substantial increase in Mineral Resource tonnage set to boost financial outcomes for Sconi Project, released 14 February 2019

¹³ See Appendix 5 of this report for full details of the Sconi Mineral Resource Estimate as released by Australian Mines via the ASX Announcements platform on 14 February 2019

The Mineral Resource for the Sconi Project was released by Australian Mines via the ASX Announcements platform on 14 February 2019 and is detailed in Appendix 5 of this report. The Mineral Resource for the Sconi Project, as outlined in the 14 February 2019 report is: Measured 8.27Mt @ 0.75% Ni, 0.09% Co; Indicated 49.24Mt @ 0.60% Ni, 0.08% Co; Inferred 18.2 Mt @ 0.54% Ni, 0.05% Co. The Company is not aware of any new information or data that materially affects the information included in the market announcement released by the Company on 14 February 2019 in respect of the Sconi Project and all material assumptions and technical parameters underpinning the Mineral Resource estimates in that announcement continue to apply and have not materially changed.

The Project is now estimated to produce 1,405,000 tonnes of nickel sulphate (up 46%, 209,000 tonnes of cobalt sulphate (up 37%) and 1,441 tonnes of scandium over the project life¹⁴.

Assuming that today's typical medium size electric vehicle (EV) contains between 6 and 12 kilograms of cobalt and between 15 and 30 kilograms of nickel¹⁵, the total nickel and cobalt production from Sconi over its life will be sufficient to produce the equivalent of at least 3 million to 6 million EV battery packs.

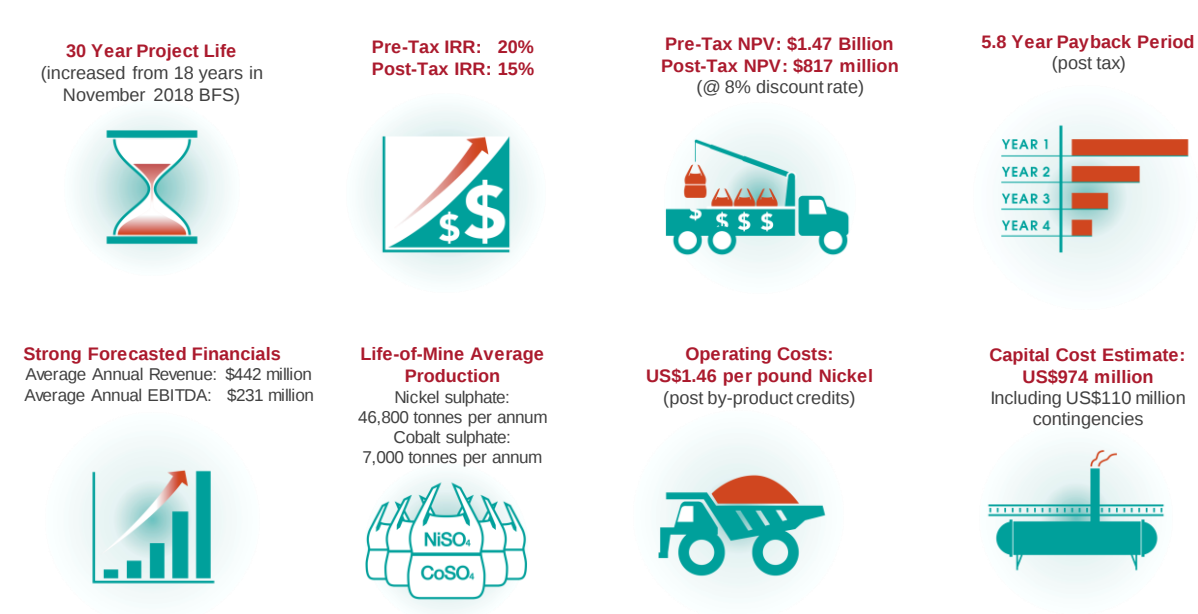


Figure 1: Updated key economic outcomes of Australian Mines' 100%-owned Sconi Project

ORE RESERVE

The updated Sconi Ore Reserve was prepared by specialist mine planning consultants, Orelogy, in accordance with the 2012 JORC code.

As per JORC guidelines, only Measured and Indicated Resource materials were considered as eligible for conversion to Ore Reserves. The scandium grades were not used in the cut-off grade analysis, open pit optimisation or ore definition for scheduling.

Proved and Probable Ore Reserves were determined from mineralisation classified as Measured or Indicated Resource respectively. Orelogy determined that this classification is reasonable because of the nature of the Sconi deposit in terms of consistency and past mining activity¹⁶.

¹⁴ See Figure 6 of this report

¹⁵ Source: McKinsey 'Lithium and cobalt – a tale of two commodities', June 2018 and 'The future of nickel: A class act', November 2017. (Actual nickel and cobalt content depends on the chemistry used).

¹⁶ See Appendix 7 of this document for further details

Orelogy also conclude that the beneficiation risk common to other laterite projects is not applicable to the Sconi Project as no beneficiation is being undertaken prior to pressure acid leach processing.

Approximately 14% of the Ore Reserves are classified as Proved and 86% are classified as Probable. When compared to the November 2018 Ore Reserves, the Proved component has increased by 16%, the Probable component has increased by 82% and the Total Ore Reserve tonnages has increased by 69%.

Classification	Ore (million tonnes)	Nickel (%)	Cobalt (%)	Scandium (ppm)
Proved	8.08	0.72	0.09	44
Probable	49.22	0.55	0.08	33
Total	57.30	0.58	0.08	35

Table 1: Sconi Project Ore Reserve summary¹⁷ based on based on variable nickel equivalent cut-off between 0.40% and 0.45%.

The breakeven cut-off grade was determined to be between 0.40% - 0.45% nickel equivalent using the formula¹⁸ $\rightarrow$ Nickel equivalent (%) = $[(\text{Ni grade} \times \text{Ni price} \times \text{Ni recovery}) + (\text{Co grade} \times \text{Co price} \times \text{Co recovery})] \div (\text{Ni price} \times \text{Ni recovery})$ ¹⁹ where: nickel price = 27,946 AUD, cobalt price = 93,153 AUD, Nickel Recovery = 94.8%, Cobalt Recovery = 95.7%.

Open pit optimisation was undertaken using US\$9/lb for nickel and US\$30/lb for cobalt and an exchange rate of 0.71 AUD/USD. No value was applied to scandium.

Optimisation inputs parameters were:

- Ore processing rate of 2 million tonne per annum throughput
- Dilution was applied through re-blocking to the 2m mining height
- Overall slope angle of 45°.
- Mining costs based on contractor rates averaging of US\$2.26/t mined
- Ore costs for grade control, rehandle, reclaim and extra over for ore mining of US\$1.88/t ore
- Mining overheads of US\$2.15/t ore
- Road train haulage of US\$2.05/t ore and US\$10.04/t ore from Lucknow and Kokomo respectively

¹⁷ See Appendix 7 of this report for full details of the Sconi Ore Reserve. The information in this report that relates to Ore Reserves is based on, and fairly reflects, information compiled by Mr Jake Fitzsimons (who is an employee of Orelogy Consulting Pty Ltd), a Competent Person, in accordance with the requirements of the JORC code. The Mineral Resource Figures in Tables 2 to 7 and Tables A5-1 to A5-7 are inclusive of the Ore Reserve figures in Table 1. It should be noted that the Proven and Probable Reserves detailed in Table 1 are inclusive of allowance for mining dilution and ore loss.

¹⁸ See Appendix 7 – *Sconi Project Ore Reserve Estimate* for further details regarding Orelogy's estimation of the Sconi Project's Ore Reserve

¹⁹ Where: nickel price = 27,946 AUD, cobalt price = 93,153 AUD, Nickel Recovery = 94.8%, Cobalt Recovery = 95.7%.

- Variable processing costs (averaging US\$30.70/t ore) based on sulphur, limestone consumption linked primarily to magnesium and aluminium and NaOH consumption linked to nickel and cobalt
- Fixed overheads of US\$33.21/t for G&A, plant labour, maintenance and sustaining capital
- Selling costs of \$32.77/t product plus royalties of 3.2% and 5.0% for Ni and Co respectively

Due to the variable processing costs the pit optimisation was based on block value calculations for free cash flow. The breakeven cut-off grade was determined to be between a 0.4% and 0.45% nickel equivalent grade.

PROCESSING

The Sconi Project uses a hydrometallurgical route for processing nickel and cobalt ore through to battery-grade nickel sulphate and cobalt sulphate with scandium recovery and production of high-purity scandium oxide.

The proposed process flow comprises the following key unit processes:

- Stage 1 – Leaching. Aqueous pressure leach in an acidic sulphate medium to dissolve the base metals while minimizing dissolution of the iron and silica gangue. The conditions used are typical for base metal dissolution from lateritic ores sources, with rapid leach kinetics resulting in autoclave residence times of ~60 minutes for near complete nickel and cobalt extraction. The leach discharge slurry proceeds to neutralization for removal of the free acid, iron and aluminium. The neutralised slurry is filtered and washed to separate the valuable metal in solution from the residue solids. The solids are conveyed for dry stacking.
- Stage 2 – Sulphide Precipitation. The filtered PLS solution is then subjected to sulphide precipitation to recover a high-grade nickel/cobalt sulphide product with minimal impurities.
- Stage 3 – Nickel and cobalt oxidative re-leach and secondary impurity removal. The nickel and cobalt rich sulphide intermediate is oxidised and re-leached under medium pressure and temperature to provide a high concentration, small volume stream. Solvent extraction is used to separate the nickel and cobalt.
- Stage 4 – Crystallisation of high-purity nickel sulphate and cobalt sulphate. Solvent extraction is used to separate the nickel and cobalt. The separate nickel and cobalt sulphate streams are concentrated to saturation point via thermal and mechanical energy input. This causes the metals to begin crystallising from solution as metal sulphate hydrates. The specific form of crystal is manipulated by controlling the temperature of crystallisation. The crystals are dried and packed for shipping.

In addition to the key stages outlined, the proposed process plant also includes:

- a sulphuric acid plant for generation of acid, steam and power
- an oxygen plant
- reagent preparation facility
- water treatment plant
- plant air and cooling system.

The process comprises four basic sequential steps, all of which are well proven and commonly used in the wider metallurgical industry and provide high recoveries of base metals.

The direct and variable test work was based on blended and master composites that were constructed to be representative of the laterite deposit.

The initial pilot program was completed on a laterite ore containing nickel, cobalt and scandium from the Lucknow deposit in. The pilot campaign included approximately 48 hours of operation for each of the beneficiation, pressure acid leach (PAL), scandium solvent extraction (ScSX), scandium oxalate precipitation and calcination unit operations. The pilot campaign was completed over the period of September to November 2017 at Stimulus Laboratories in Welshpool, Western Australia.

A demonstration plant program was subsequently completed on ore from Sconi project's Lucknow and Greenvale deposits. The primary goal of the campaign was to generate samples of scandium oxide, nickel sulphate, and cobalt sulphate for marketing purposes and to assist process design for the feasibility study. During the campaign approximately 7.5 tonnes of Lucknow ore and 4.3 tonnes of Greenvale ore were processed through beneficiation and PAL, with the resulting leach liquor then processed through ScSX, scandium precipitation and calcination, iron removal, and mixed sulphide precipitation (MSP). The resulting MSP was then used as feed to the refinery circuit, which includes pressure oxidation (POX), followed by impurity removal, cobalt & zinc solvent extraction, and crystallisation.

The demonstration plant campaign was completed over the period from March to June 2018 at Stimulus Laboratories in Welshpool, Western Australia.

From July 2018 to March 2019 further optimisation and refinement batch testwork was conducted, with particular focus on the use of slurry neutralisation instead of liquor neutralisation, use of high magnesium material from site in place of limestone for neutralisation, filtration technology options, production of higher purity mixed sulphide intermediate and relocation/optimisation of the scandium recovery.

In April - May 2019 investigations were undertaken to investigate pre-concentration of ore from Lucknow and Kokomo and in May 2019 a 2-tonne pilot campaign was completed using Greenvale ore to demonstrate the suitability of slurry neutralisation with high magnesium material, gather further filtration data and demonstrate higher pressure mixed sulphide precipitation.

Other key modifying factors include:

- Australian Mines' application to be declared as a Prescribed Project under the State Development and Public Works Organisation Act 1971 was approved on 25th January 2019. This enables the remaining approvals (State and Local Government) to be coordinated through the Department of State Development, Manufacturing, Infrastructure and Planning and will accelerate the acquisition of the various approvals necessary to undertake the works, including access to water resources.
- Australian Mines holds an ILUA and Cultural Heritage Management Plan (CHMP) with the Gugu Badhan Traditional Land Owners (who have subsequently been determined as the Native Title holders) for mining Greenvale and Kokomo (north of the Gregory Development Road).

MINERAL RESOURCE

The Sconi Mineral Resource Estimate^{20,21} is set out in the tables below.

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

Table 2: Greenvale Mineral Resource (includes in-situ and stockpile material). Lower cut-off grade: Nickel equivalent 0.40% (See Appendix 3 of this report for "nickel equivalent" calculations).

²⁰ The Mineral Resource for the Sconi Project was released by Australian Mines via the ASX Announcements platform on 14 February 2019 and is detailed in Tables 2 to 7 of this report. The Mineral Resource for the Sconi Project, as outlined in the 14 February 2019 report is: Measured 8.27Mt @ 0.75% Ni, 0.09% Co; Indicated 49.24Mt @ 0.60% Ni, 0.08% Co; Inferred 18.2 Mt @ 0.54% Ni, 0.05% Co. The Company is not aware of any new information or data that materially affects the information included in the market announcement released by the Company on 14 February 2019 in respect of the Sconi Project and all material assumptions and technical parameters underpinning the Mineral Resource estimates in that announcement continue to apply and have not materially changed.

²¹ The information in this report that relates to Mineral Resources is based on, and fairly reflects, information compiled by Mr David Williams, a Competent Person (who is an employee of CSA Global Pty Ltd), in accordance with the requirements of the JORC code.

Classification	Tonnes (million tonnes)	Nickel equivalent (%)	Nickel (%)	Cobalt (%)
Measured	5.05	1.06	0.83	0.07
Indicated	16.67	0.9	0.73	0.05
Inferred	2.70	0.87	0.74	0.04
TOTAL	24.40	0.93	0.75	0.05

Table 3: Greenvale Mineral Resource (in situ material only). Lower cut-off grade: Nickel equivalent 0.40% (See Appendix 3 of this report for “nickel equivalent” calculations).

Classification	Tonnes (million tonnes)	Nickel equivalent (%)	Nickel (%)	Cobalt (%)
Measured	-	-	-	-
Indicated	0.57	0.86	0.75	0.05
Inferred	7.64	0.55	0.47	0.04
TOTAL	8.21	0.57	0.49	0.04

Table 4: Greenvale Mineral Resource stockpile material. Lower cut-off grade: Nickel equivalent 0.40% (See Appendix 3 of this report for “nickel equivalent” calculations).

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

Table 5: Lucknow Mineral Resource. Lower cut-off grade: Nickel equivalent 0.55%. (See Appendix 3 of this report for “nickel equivalent” calculations).

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

Table 6: Kokomo Mineral Resource. Lower cut-off grade: Nickel equivalent 0.45%. (See Appendix 3 of this report for “nickel equivalent” calculations.)

The project's combined tonnage and contained metal are listed in Table 7 below.

Deposit	Resource category	Tonnes* (million tonnes)	NiEq (%)	Nickel (%)	Cobalt (%)	Eq metal (Tonnes)	Ni Metal (Tonnes)	Co metal (Tonnes)
Greenvale	Measured	5.05	1.06	0.83	0.07	53,530	41,915	3,535
	Indicated	17.24	0.90	0.73	0.05	154,932	125,966	8,620
	Inferred	10.34	0.63	0.54	0.04	65,510	55,888	4,136
	Total	32.63	0.84	0.69	0.05	273,972	223,769	16,291
Lucknow	Measured	1.60	0.91	0.53	0.11	14,560	8,480	1,760
	Indicated	12.63	0.83	0.47	0.11	104,829	59,361	13,893
	Inferred	0.38	0.66	0.55	0.03	2,508	2,090	114
	Total	14.62	0.83	0.48	0.11	121,346	70,176	16,082
Kokomo	Measured	1.62	1.17	0.73	0.15	18,954	11,826	2,430
	Indicated	19.37	0.83	0.57	0.09	160,771	110,409	17,433
	Inferred	7.48	0.7	0.53	0.07	52,360	39,644	5,236
	Total	28.47	0.81	0.57	0.09	230,607	162,279	25,623
Total	Measured	8.27	1.05	0.75	0.09	87,044	62,221	7,725
	Indicated	49.24	0.85	0.60	0.08	420,532	295,736	39,946
	Inferred	18.2	0.66	0.54	0.05	120,378	97,622	9,486
	Total	75.71	0.83	0.60	0.08	627,954	455,579	57,157

Table 7: Combined Sconi Mineral Resource and contained metal calculations. (See Tables 2 to 6 for cut-off grades and Appendix 3 of this report for “nickel equivalent” calculations.)

MINE DESIGN

Approximately 14% of the Ore Reserves (outlined in Table 1 and Appendix 4 of this report) are classified as Proved and 86% are classified as Probable.

In light of the updated Ore Reserve (outlined in Table 1 and Appendix 4 of this report), new pit designs have been developed for the Greenvale and Lucknow ore.

The optimised Greenvale pit design now captures 97.4% of the ore with only a slight 2.5% increase in waste (Figure 2).

The optimised Lucknow pit design captures an impressive 99% of the ore with only a 6% increase in additional waste (Figure 3).

The unchanged Kokomo pit design captured 90% of the ore with approximately 20% waste (Figure 4).

The Greenvale mining area comprises two large main pits with multiple internal stages and (Pit 1 & Pit 2), eight smaller pits and a stockpile from historical mining operations designated as Pit 10. In total, the pits contain 17.8 million tonnes of ore at 0.76% nickel and 0.06% cobalt with 28.9 million tonnes of waste for a very favourable overall strip ratio of 1.6 : 1.

The Lucknow mining area comprises a large main pit with 13 internal stages, and a single smaller pit to the south (Stage 12). In total, the pits contain 20.8 million tonnes of ore at 0.42% nickel and 0.08% cobalt with 20.8 million tonnes of waste with an enviable overall strip ratio of only 0.5 : 1.

The Kokomo mining area is made up of a large centrally located main pit with ten internal stages, and eight smaller satellite pits. In total the pits contain 19.0 million tonnes of ore at 0.58% nickel and 0.10% cobalt with 9.9 million tonnes of waste with an overall strip ratio of 0.5 : 1.



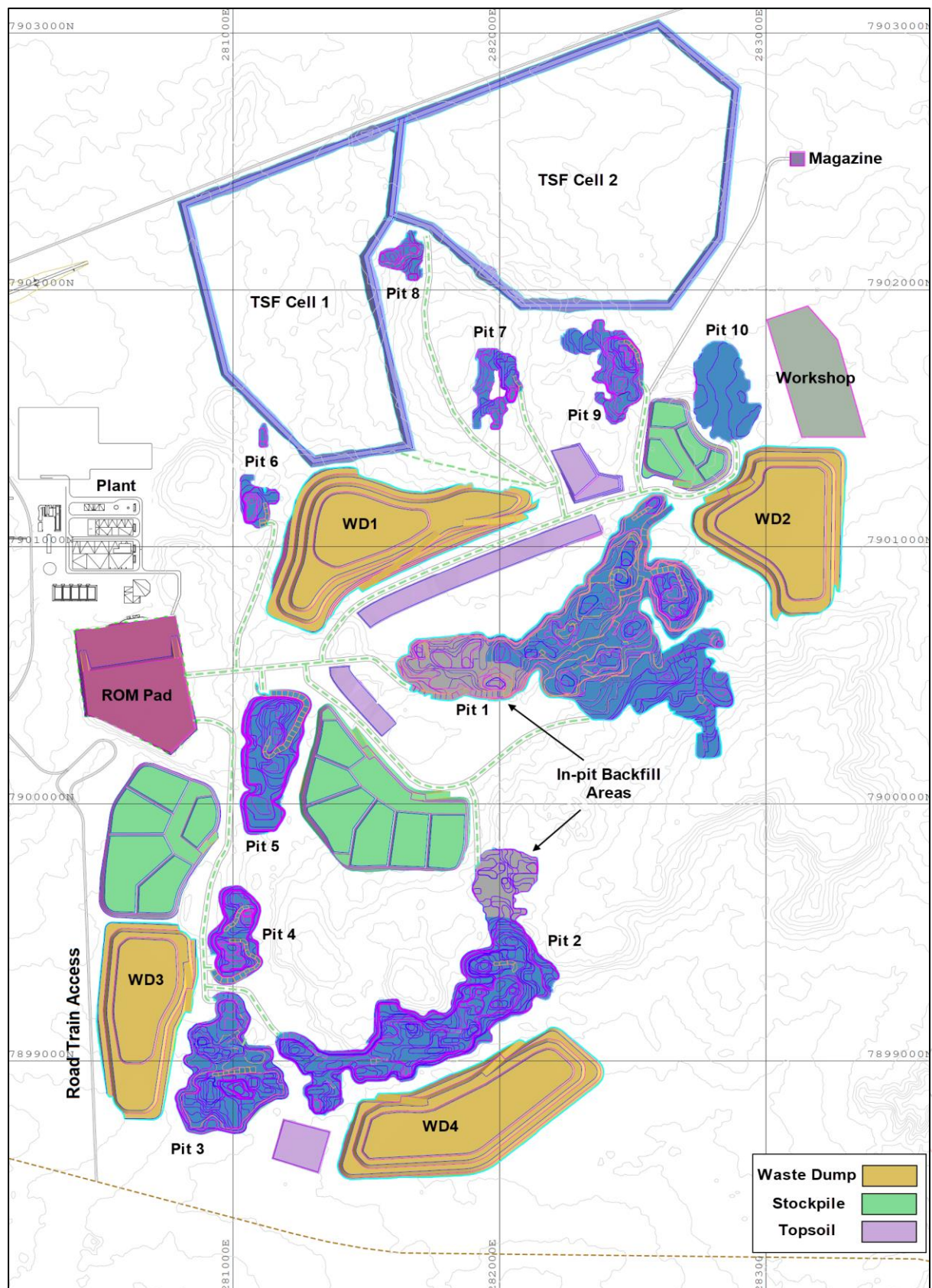


Figure 2: Proposed site layout of the Greenvale mining operation and Sconi processing plant

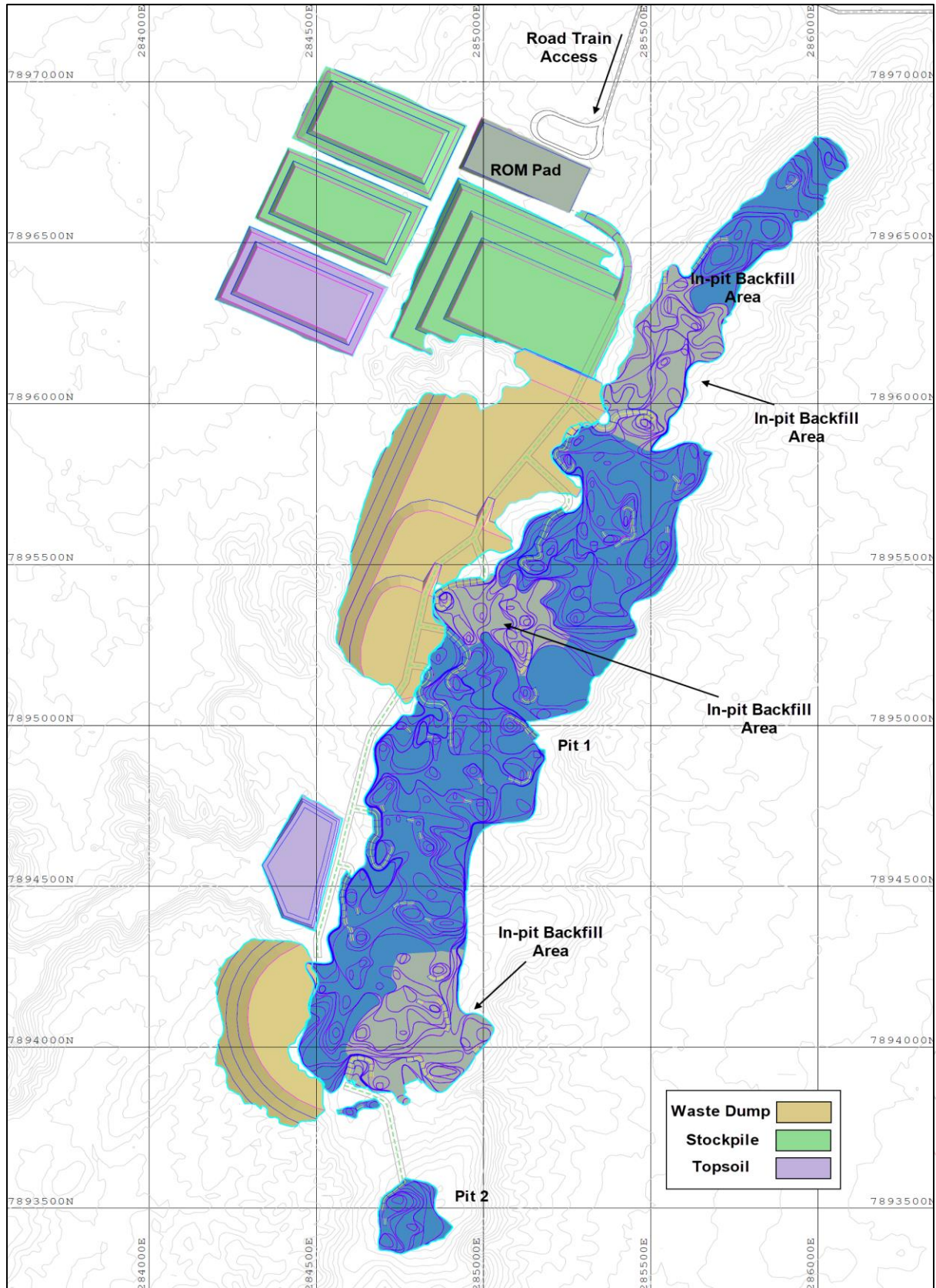


Figure 3: Proposed site layout of the Lucknow mining operation

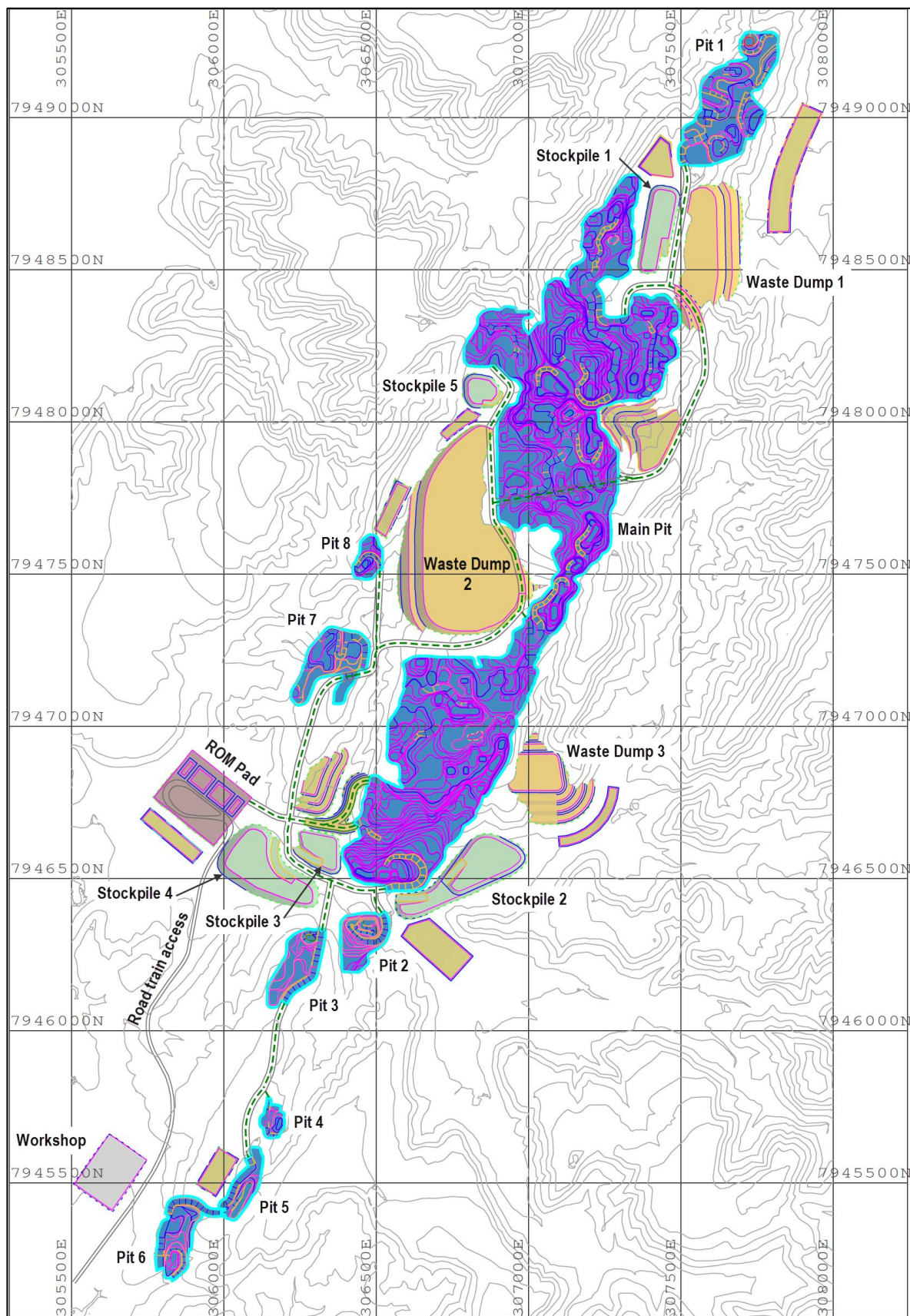


Figure 4: Proposed site layout of the Kokomo mining operation

FINANCIAL ANALYSIS AND SENSITIVITIES

An updated valuation for the Sconi Project used a cashflow model based on the same economic assumptions contained in the project's BFS, whilst incorporating the revised mine plan based on the updated Ore Reserve outlined in this report.

A summary of updated key financial outcomes is laid out in Table 8 below.

Parameter	Units	Value
NPV at 8% discount rate (pre-tax)	\$ million	1,471
NPV at 8% discount rate (post-tax)	\$ million	817
IRR (pre-tax)	%	20
IRR (post-tax)	%	15
Simple pay back (pre-tax)	years	4.4
Simple pay back (post-tax)	years	5.8
Total Revenue	\$ million	13,270
Total Net Cashflow	\$ million	4,984

Table 8: Updated Sconi economic outcomes

Parameter	Units	Value
Autoclave Throughput	mtpa	2.0
Life of Mine	years	30
Average Strip Ratio	waste:ore	0.87
Average Production (years 2-10)		
- Nickel Sulphate (NiSO4.6H2O)	ktpa	61.0
- Cobalt Sulphate (CoSO4.7H2O)	ktpa	10.1
Average Production (LOM)		
- Nickel Sulphate (NiSO4.6H2O)	ktpa	46.8
- Cobalt Sulphate (CoSO4.7H2O)	ktpa	7.0
Nickel recovery	%	94.8
Cobalt recovery	%	95.7
Nickel price	US\$/lb	7.00
Nickel sulphate premium	US\$/lb	2.00
Cobalt price	US\$/lb	30.00
Cobalt sulphate premium	US\$/lb	0.00
Scandium oxide price	US\$/kg	1,000
Forex	AUD/USD	0.71
Discount Rate	%	8.0
Tax Rate	%	30.0
QLD State Royalties	%	2.5
Costs (years 3-30)		
Total C1 cash costs net of Cobalt & Scandium	US\$/lb Ni	1.46
Total Free On Board (FOB) cash costs (inc royalties)	US\$/lb Ni	1.96
Pre-production capex	US\$m	974
Sustaining Capex	% of capex	1.25

Table 9: Key inputs for the updated Sconi Project model

REVENUE AND PROFITABILITY

The Sconi BFS estimates total gross project revenue of \$13.27 billion, and an exceptional average EBITDA margin of c.50% over the 30-year Life of Mine.

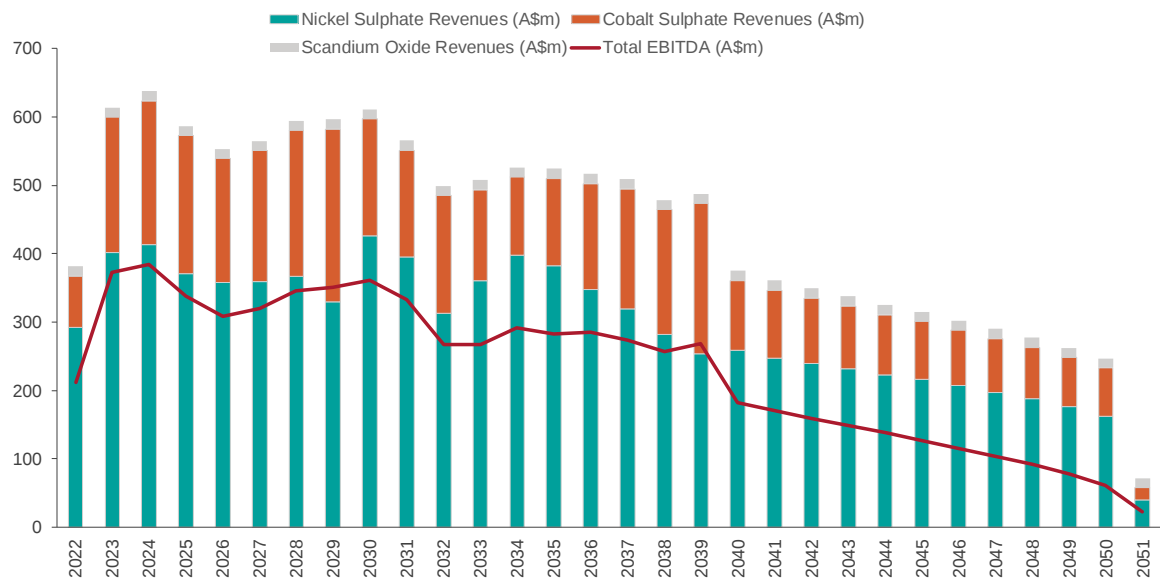


Figure 5: Total projected revenue and EBITDA of the Sconi Cobalt-Nickel-Scandium Project

PRODUCTION

Projected post-ramp-up production is estimated at 61,001 tonnes per annum of nickel sulphate and 10,091 tonnes per annum of cobalt sulphate (years 2-10 average).

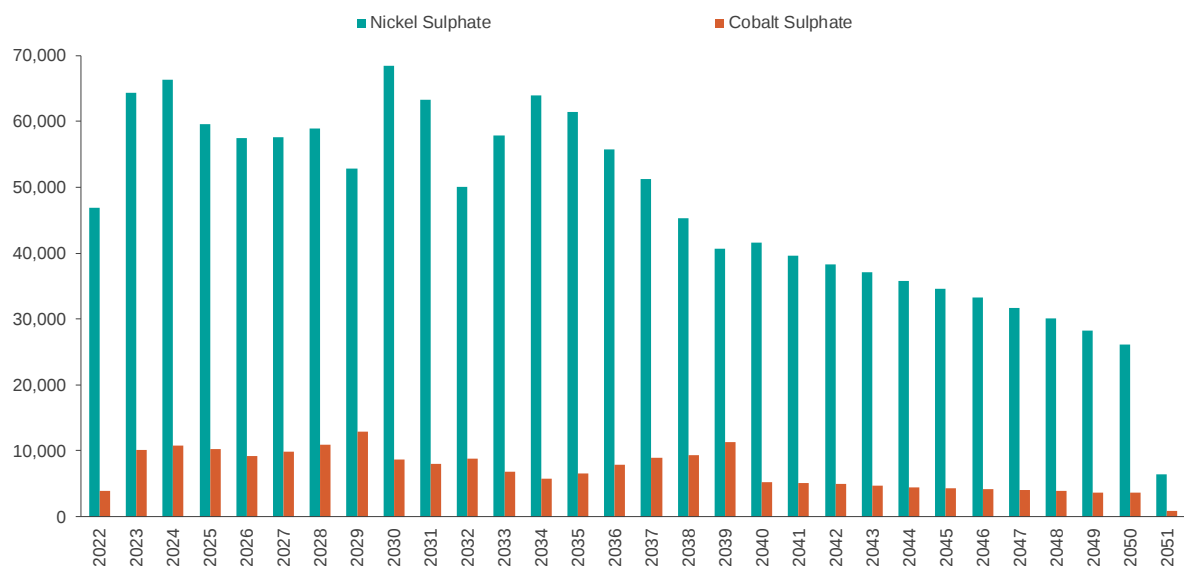


Figure 6: Total projected production for cobalt sulphate and nickel sulphate from the Sconi Project

OPERATING COSTS

The updated Ore Reserve Estimate²² for the Sconi project and resulting redesign of the Sconi pits has led to a slightly lower head grade and production profile, thereby delivering a slight increase in the mining, processing and administration costs for the project, whilst the ore handling cost has been reduced. This has resulted in the operating costs before by-product credits increasing by US\$0.37/lb nickel.

Both capital cost and operating cost estimates have been refined through on-going operations at Australian Mines' demonstration-sized processing plant in Perth.

The breakdown of cash operating costs is in Table 10 below.

Cost	US\$ per pound of Nickel produced
Mining	0.69
Ore handling	0.39
Processing	4.60
G&A	0.35
Freight	0.08
Subtotal	6.10
Less Co credit	(4.21)
Less Sc credit	(0.43)
Total C1 cash costs	1.46

Table 10: Breakdown of revised C1 cash costs of the Sconi Project in North Queensland, Australia

²² See Table 1, Appendix 4 and Appendix 7 of this report for full details of the updated Ore Reserve for Sconi Project

CASHFLOW PROJECTIONS

Sconi is estimated to produce a total free cashflow after tax of \$5.0 billion over the initial 30-year project life, for a simple payback of capital of 4.4 years on a pre-tax basis and 5.8 years on a post-tax basis.

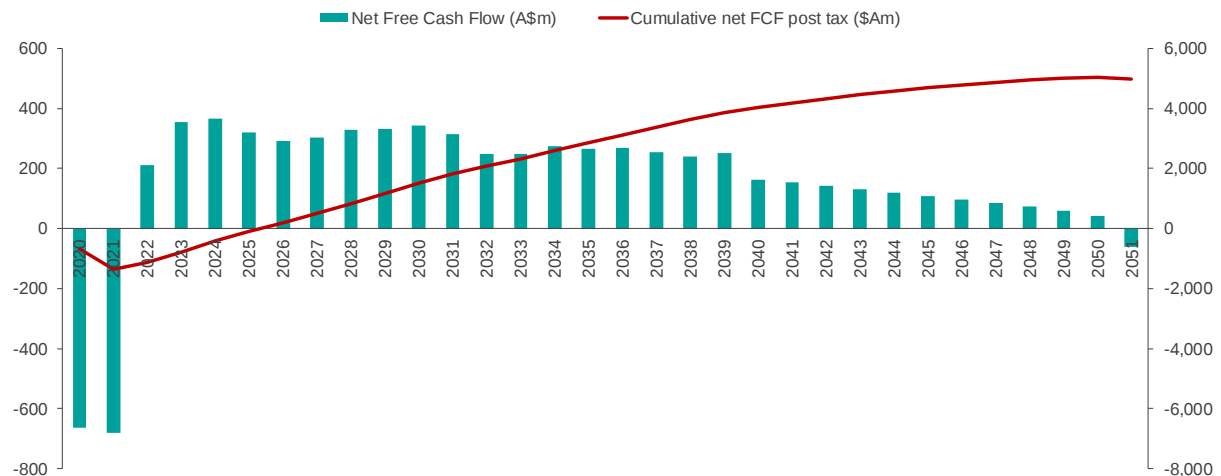


Figure 7: Post-tax Free Cashflow (FCF) and cumulative post-tax Free Cashflow expected to be produced from the Sconi Project

COMMUNITY IMPACT

The Sconi Project was declared a Prescribed Project by the Queensland Government earlier this year²³, in a move that will assist in streamlining Sconi's progress through the final stages of regulatory approvals and fast-track its future development.

Australian Mines aims to invest over \$1 billion to build a battery metals production plant near the historic mining town of Greenvale in North Queensland and has made a commitment to local operational expenditure with significant upgrades to infrastructure in the region.

Further to the Company's recent announcement on the purchase of a 13-acre parcel of freehold land within Greenvale²⁴, Australian Mines has since been in discussions with a town planner with regards to the potential of this land from a housing perspective.

The 30+ year life of mine will provide long-term career opportunities for the local community, with the Company proposing to operate a residential workforce based predominantly out of Greenvale.

²³ Australian Mines Limited, Queensland Government provides Sconi Prescribed Project Status, released 25 January 2019

²⁴ Australian Mines Limited, Greenvale land acquisition reinforces Australian Mines' commitment to developing the Sconi Project, North Queensland, released 22 January 2019

A construction workforce of 500 people will be required and, once in production, the Sconi Project will employ over 300 people on a full-time basis.

Australian Mines will continue to actively engage with the local community and local government during the project's development and ongoing operation.

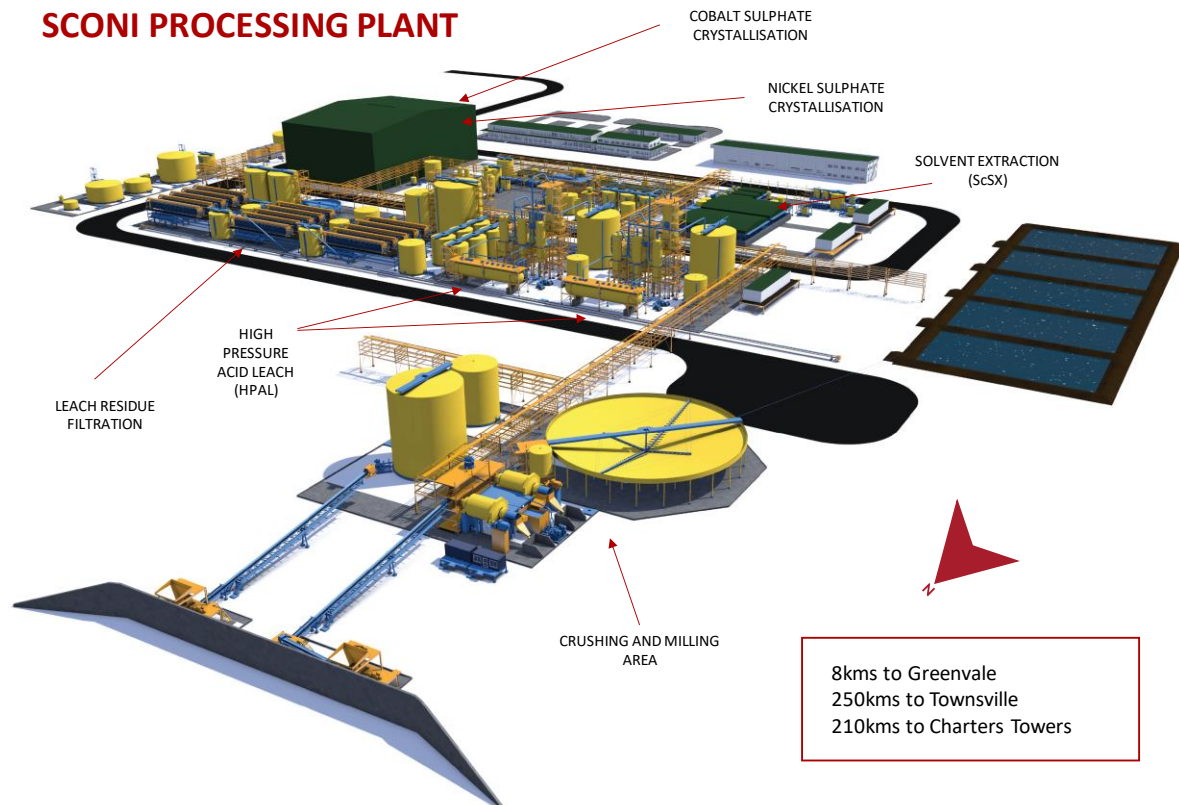


Figure 8: Indicative design for the Sconi Project's processing plant located close to the historic mining town of Greenvale

Australian Mines' Managing Director, Benjamin Bell, commented: *"As we stated in February, the revised Mineral Resource Estimate was likely to have a positive impact on the overall economics of the proposed mining and processing operation at Sconi, which the BFS had already shown to be commercially viable.*

"The additional tonnage forms the basis of a revised mine plan and ongoing refinements to the Company's BFS that we continue to work on, with the aim of maximising value to our shareholders. I am delighted to report that the results so far have shown significantly longer mine life and corresponding improvements to the Sconi Project's financial outcomes.

"The Sconi Project will result in a significant upgrade of existing public and common-use infrastructure located within the local region including roads, airport and telecommunications.

"The use of local businesses is a key feature and requirement of the construction contract and we have committed to develop an Australian Industry Participation Plan and an Indigenous Employment Plan for the Sconi Project.

"In the construction phase, local businesses with experience in fabrication, engineering, labour, plant and equipment hire, metalwork, welding, and drilling will all be encouraged to tender for work.

"This is in line on our promise of employing local, living local, buying local."

*****ENDS*****

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Appendix 1: Forward Looking Statements

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

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

Any forward looking statement is included as a general guide only and speak only as of the date of this document. No reliance can be placed for any purpose whatsoever on the information contained in this document or its completeness. No representation or warranty, express or implied, is made as to the accuracy, likelihood or achievement or reasonableness of any forecasts, prospects, returns or statements in relation to future matters contained in this document. To the maximum extent permitted by law, Australian Mines Limited and its Associates disclaim all responsibility and liability for the forward looking statements, including, without limitation, any liability arising from negligence. Recipients of this document must make their own investigations and inquiries regarding all assumptions, risks, uncertainties and contingencies which may affect the future operations of Australian Mines Limited or Australian Mines Limited's securities.



Appendix 2: Competent Persons' Statements

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

The information in this report that relates to Ore Reserves is based on, and fairly reflects, information compiled by Mr Jake Fitzsimons, a Competent Person, who is an employee of Orelogy Consulting Pty Ltd and a Member of the Australian Institute of Mining and Metallurgy (MAusIMM #110318). Mr Fitzsimons has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as Competent Person as defined in the 2012 Edition of the Australasian Code for the Reporting of Exploration Results, Mineral Resources, and Ore Reserves (JORC Code). Mr Fitzsimons consents to the disclosure of information in this report in the form and context in which it appears.



Appendix 3: Nickel equivalent calculation – Sconi Project

NiEq grades reference in this report were calculated according to the following formula:

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

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

Forex US\$:A\$ = 0.71,

Nickel – A\$27,946/t and 94.8% recovery,

Cobalt – A\$93,153/t and 95.7% recovery.

Prices and recoveries effective as at 10th February 2019.

Metal recovery data was determined by variability test work of nickel and cobalt solvent extraction during the inhouse pilot plant test work program. Results typically achieved between 90% and 99% from samples with nickel and cobalt grades aligned with expected mine grades as reported from the Mineral Resource model. Lower recoveries of between 85% and 90% were achieved from some lower-grade samples to determine economic cut off grades.

It is the opinion of Australian Mines that all the elements included in the metal equivalents calculation have a reasonable potential to be recovered and sold. Detail supporting the formula are provided further on in this document.

The Competent Person and Australian Mines believe there are reasonable prospects for eventual economic extraction of the Mineral Resources. Consideration was given to the relatively shallow depth of the mineralisation, existing infrastructure near to the project including sealed road access, power, labour and water, and positive results from the 2018 Feasibility Study.



Appendix 4: Sconi Project Ore Reserve Estimate

Table A4-1: Ore Reserve Summary

Classification	Pit	Ore (Million tonnes)	Nickel (%)	Cobalt (%)	Scandium (ppm)
Proved	Greenvale	4.49	0.83	0.07	36
	Kokomo	1.52	0.72	0.15	58
	Lucknow	2.07	0.47	0.09	51
	Sub-total	8.08	0.72	0.09	44
Probable	Greenvale	13.08	0.73	0.05	29
	Kokomo	17.43	0.57	0.09	31
	Lucknow	18.71	0.42	0.08	38
	Sub-total	49.22	0.55	0.08	33
Total	Greenvale	17.57	0.76	0.06	31
	Kokomo	18.96	0.58	0.10	33
	Lucknow	20.77	0.42	0.08	39
	TOTAL	57.30	0.58	0.08	35

Appendix 5: Sconi Project Mineral Resource Estimate

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

Table A5-1: Greenvale Mineral Resource (includes in-situ and stockpile material). Lower cut-off grade: Nickel equivalent 0.40% (See Appendix 3 of this report for “nickel equivalent” calculations).

Classification	Tonnes (million tonnes)	Nickel equivalent (%)	Nickel (%)	Cobalt (%)
Measured	5.05	1.06	0.83	0.07
Indicated	16.67	0.9	0.73	0.05
Inferred	2.70	0.87	0.74	0.04
TOTAL	24.40	0.93	0.75	0.05

Table A5-2: Greenvale Mineral Resource (in situ material only). Lower cut-off grade: Nickel equivalent 0.40% (See Appendix 3 of this report for “nickel equivalent” calculations).

Classification	Tonnes (million tonnes)	Nickel equivalent (%)	Nickel (%)	Cobalt (%)
Measured	-	-	-	-
Indicated	0.57	0.86	0.75	0.05
Inferred	7.64	0.55	0.47	0.04
TOTAL	8.21	0.57	0.49	0.04

Table A5-3: Greenvale Mineral Resource stockpile material. Lower cut-off grade: Nickel equivalent 0.40% (See Appendix 3 of this report for “nickel equivalent” calculations).

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

Table A5-4: Lucknow Mineral Resource. Lower cut-off grade: Nickel equivalent 0.55%. (See Appendix 3 of this report for “nickel equivalent” calculations).

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

Table A5-5: Kokomo Mineral Resource. Lower cut-off grade: Nickel equivalent 0.45%. (See Appendix 3 of this report for “nickel equivalent” calculations.)

The Sconi project’s combined tonnage and contained metal are listed in Table A5-6 below.

Deposit	Resource category	Tonnes* (million tonnes)	NiEq (%)	Nickel (%)	Cobalt (%)	Eq metal (Tonnes)	Ni Metal (Tonnes)	Co metal (Tonnes)
Greenvale	Measured	5.05	1.06	0.83	0.07	53,530	41,915	3,535
	Indicated	17.24	0.90	0.73	0.05	154,932	125,966	8,620
	Inferred	10.34	0.63	0.54	0.04	65,510	55,888	4,136
	Total	32.63	0.84	0.69	0.05	273,972	223,769	16,291
Lucknow	Measured	1.60	0.91	0.53	0.11	14,560	8,480	1,760
	Indicated	12.63	0.83	0.47	0.11	104,829	59,361	13,893
	Inferred	0.38	0.66	0.55	0.03	2,508	2,090	114
	Total	14.62	0.83	0.48	0.11	121,346	70,176	16,082
Kokomo	Measured	1.62	1.17	0.73	0.15	18,954	11,826	2,430
	Indicated	19.37	0.83	0.57	0.09	160,771	110,409	17,433
	Inferred	7.48	0.7	0.53	0.07	52,360	39,644	5,236
	Total	28.47	0.81	0.57	0.09	230,607	162,279	25,623
Total	Measured	8.27	1.05	0.75	0.09	87,044	62,221	7,725
	Indicated	49.24	0.85	0.60	0.08	420,532	295,736	39,946
	Inferred	18.2	0.66	0.54	0.05	120,378	97,622	9,486
	Total	75.71	0.83	0.60	0.08	627,954	455,579	57,157

Table A5-6: Combined Sconi Mineral Resource and contained metal calculations. (See Tables A5-1 to A5-5 for cut-off grades and Appendix 3 of this report for “nickel equivalent” calculations.)

*Tonnages rounded to the nearest 10kt. Differences may occur in totals due to rounding.

Appendix 6: Sconi Project Mineral Resource Estimate

JORC Code, 2012 Edition



Greenvale and Lucknow

Section 1: Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)



Criteria	JORC Code explanation	Commentary
Sampling techniques	- Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. - Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. - Aspects of the determination of 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.	- RC samples of 1 m drill length were passed through a rig mounted cyclone and collected in calico bags at the rig mounted riffle splitter and represents a sub sample of the entire meter. - Holes drilled in 2010 and 2011 were sampled by laying the sample bag on its side and using a long trowel ("spear"). - Between 1.5 kg and 3 kg of sample was collected. - Diamond core was not submitted for analysis. - Quality assurance of the sampling was carried out on the samples with a duplicate sample collected at the rig using a riffle splitter. The test work compared one in 50 holes and the samples were analyzed after the assays for both samples were returned and show good correlation. The Competent Person is satisfied that the sampling system is up to industry standard.
Drilling techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	- Drilling supporting the Mineral Resource estimate was reverse circulation (RC) and some air core (AC), completed from 2010 through 2011 and in 2018. Holes predating 2010 were not included in the Mineral Resource estimate due to quality assurance issues. - Historical drilling (pre-Metallica Minerals, dating to early 1970's) was a mix of rotary air-blast (RAB), AC and RC, however these were not used in any manner to support the Mineral Resource estimate.

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 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.	• RC and AC drilling generally used high air pressure to keep the lateritic samples dry and to maintain good sample recovery. Recovery in the mineralised intervals was deemed to be good to excellent. • Relationships between sample recovery and grade could not be determined without original sample weight data, however the CP does not believe a material relationship exists.
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.	• An Australian Mines consulting geologist was present at all times during drilling and sampling. • Australian Mines geological logging protocols at the time were followed to ensure consistency in drill logs between the geological staff. • RC chips were logged for weathering, lithologies (primary and proto), mineralogy, color and grain size. RC chip trays (with chips) were photographed. • The interpreted weathering and fresh zone domains were also logged; ferruginous pisolite, limonite, saprolite, weathered ultramafic and fresh ultramafic. These logs were correlated with assays. • The full sample lengths were logged.
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 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.	• RC and AC samples were dispatched to the analytical laboratory in Townsville. • The CP considers the riffle splitter sampling method to be an appropriate sampling method, based upon test work from the Greenvale and Lucknow deposit. • Samples were dry. • Field duplicates from RC samples were taken at a rate of 1:50, approximately 1 sample per drill hole. Field duplicates were taken by passing the bulk sample through another riffle splitter at the rig. • No records were kept regarding the sample sizes for either the original or duplicate samples. A total of 300 field duplicate samples were taken at Greenvale and Lucknow. • Sample sizes are considered to be appropriate to the grain size of the material being sampled.

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) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	- Drill samples were sent to SGS in Townsville. This laboratory conforms to Australian Standards ISO9001 and ISO 17025. - SEG samples were dried then pulverized in LM5 Mill to achieve a nominal 85% passing 75um. The pulp sample is digested in 4-acid to effect as near to total solubility of the metals as possible, with the solution presented to an ICP for element quantification. Internal standards were used to monitor Quality Control. - The processes are considered total. - Australian Mines used three Certified Reference Materials (CRMs) to monitor the accuracy of the metal analyses. The CRMs were certified for Ni, Cu and Zn, but not for Fe, Mg, Sc or Co. Ni displayed reasonable precision and accuracy with the exception of one CRM, which showed a low bias. - Field duplicates (n=300) are discussed in Sub-sampling section. - The QA procedures and results show acceptable levels of accuracy and precision were established.
Verification of sampling and assaying	- The verification of significant intersections by either independent or alternative company personnel. - The use of twinned holes. - Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. - Discuss any adjustment to assay data.	- Australian Mines geological personnel independently reviewed selected RC drill intersections and verified their suitability to be included in the drilling results. - The mineralisation is not visual and any significant intersections are apparent from the sample analyses. - Twinned RC holes were used at both Greenvale and Lucknow. - Selected RC drill hole collars were surveyed in the field with a hand-held GPS unit, and the surveyed coordinates (easting and northing) were within 10 m of the coordinates surveyed by DGPS. - The GPS locations are considered to be an approximate location of the actual collar coordinates. - Assay data recorded as negative values in the database were 'less than detection' and adjusted to zero values for the announcement.
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.	- All drill holes drilled by Australian Mines have been surveyed at the end of the program by independent surveying companies, using DGPS to provide accurate surveyed coordinates. Down hole surveys were not required due to the shallow depths of most holes. - All grid coordinates are in Map Grid of Australia (MGA) coordinates, with the grid being MGA Zone 55 South. - The topographic Digital Terrain Model (DTM) was prepared using data sourced from WorldView-2 satellite imagery dated December 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) and classifications applied. - Whether sample compositing has been applied.	- Drill spacing was set to 40 m x 40 m grid where topography allowed. Some areas were drilled at 20 m x 40 m to allow a greater level of confidence to be formed. Other no core areas on the edge of the deposit were drilled at a nominal 80 m x 80 m spacing. - Samples were not composited at the sampling stage.
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.	- Drill holes were drilled vertically which is considered to minimize any potential sampling bias with the saprolitic host lithology. Some late stage faulting may be present, but any offset of saprolite and / or mineralisation cannot be predicted at the Mineral Resource drill-out level. - Any sampling bias resultant from the orientation of drilling and possible structural offsets of mineralisation is considered to be minimal.
Sample security	The measures taken to ensure sample security.	Drill samples were under the care and supervision of Australian Mines staff at all times until transportation by local couriers to the analytical laboratories in Townsville.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	The drilling procedures, sampling methodologies, sample analyses and the drill hole database were audited by Expedio data management.

Section 2: Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	- 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 Sconi Mineral Resource is covered by Mining Lease Application MLA10368. Once the lease is granted it will be 100% owned by Greenvale Operations Pty Ltd, covering an area of 1088 Ha. The MLA was lodged on 20th April 2012. Exploration Permits EPM 25834 and 25865 cover and extend beyond the boundaries of the MLA. EPM 25834 was granted 6/1/2016 and expires 5/1/2021, and is held by NORNICO Pty Ltd. EPM25865 was granted on 15/12/2015 and expires 24/12/2020, and is held by Greenvale Operations Pty Ltd. - Australian Mines negotiated an ILUA with the Native Title claimants of the area (Gugu Badhun) signed on 24th Feb 2005 and is valid for 20 years. Australian Mines finalized a Mining ILUA with the Gugu Badhun people for ML10368, lodged in July 2012. This ILUA includes a cultural heritage component that covers Australian Mines duty of care for this

		tenement.
<i>Exploration done by other parties</i>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	- The Greenvale deposit is centered on the Greenvale Mine, which operated between 1974 and 1992. The orebody was a nickel laterite grading 1.56% Ni and 0.12% Co. - The Greenvale deposit has been subjected to several drilling programs since the deposit was mined. Anaconda drilled 23 RC holes (733 m) in 1998. Few holes intersected Ni mineralization. Straits Resources drilled 141 RC holes (5,935 m) in 2007/08. These holes are not included in the database which supports the Mineral Resource estimate due to quality assurance concerns.
<i>Geology</i>	<i>Deposit type, geological setting and style of mineralisation.</i>	- The Sconi Mineral Resource is contained within a saprolite, developed by weathering process over fragments of ultramafic basement rocks. Ni and Co have been enriched from the ultramafic rocks by both residual and supergene processes. Sc is less enriched at Greenvale than the other deposits, however higher Sc levels are recorded from drill samples obtained from the waste dumps, allowing these dumps to be assessed for inclusion in the Mineral Resource. - Serpentinities are interpreted as being formed in shear zones at the top edges of a meta-gabbro. Through the central regions of the deposit the serpentinite and resultant saprolite are generally flat lying at shallow depth and become steeper with several structures dipping up to 70° on the edges of the deposit. Weathering is preferentially superimposed on the softer serpentinite, resulting in the formation of limonite hosted nickel mineralisation and the formation of cobalt mineralisation, via the scavenging of cobalt by the accumulation of MnO near the base of the weathering profile.
<i>Drill hole Information</i>	<i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i> <i>easting and northing of the drill hole collar</i> <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> <i>dip and azimuth of the hole</i> <i>down hole length and interception depth</i> <i>hole length.</i> <i>If the exclusion of this information is justified on the basis that the information is not Material and this</i>	Exploration Results are not being reported.

	<i>exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i>	
Data aggregation methods	• <i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</i> • <i>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i> • <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	• Exploration Results are not being reported.
Relationship between mineralisation widths and intercept lengths	• <i>These relationships are particularly important in the reporting of Exploration Results.</i> • <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> • <i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</i>	• The Ni mineralisation is hosted in limonitic and saprolitic profiles which are relatively thin and laterally extensive. They present a vertical grade profile as a result of the weathering processes that reduce with depth. Vertical RC drilling completed to date provides the best drilling orientation.
Diagrams	• <i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i>	• Maps and figures depicting drill collar locations and limits of lateritic mineralisation were presented in ASX announcements in late 2018.
Balanced reporting	• <i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i>	• Exploration Results are not being reported.
Other substantive exploration data	• <i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical</i>	• A total of five wide diameter (900mm) drill holes were drilled into both the Powerline and The Edge deposits to sample representative material for successful pilot plant metallurgical test work conducted in 2018. Results from this work are not included in the Mineral Resource estimate.

	<i>test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i>	
<i>Further work</i>	<i>• The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> <i>• Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	- Australian Mines have not planned further exploration test work apart from the current exploration program. - The current exploration program equates to 50% of all holes drilled at the Greenvale mine since 1962.



Section 3: Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

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.	- The 2010 and 2011 drill database was audited prior to the 2013 Mineral Resource (as reported in 2018) and any issues were resolved prior to preparation of the Mineral Resource. Validation of digital versus hard copy data were carried out by the previous Competent Person. No material issues were reported at the time. - The 2018 drill database was validated by CSA Global prior to use in the Mineral Resource estimate, and the database was found to be clean with no validation issues. - CSA Global checked the drillhole files for errors prior to Mineral Resource estimation, including for absent collar data, multiple collar entries, absent survey data, overlapping intervals, negative sample lengths, and sample intervals which extended beyond the hole depth defined in the collar table. No errors of any material significance were detected. - The following elemental data were imported into Datamine from the database: Ni, Co, Sc, Fe, Mg, Mn, Cr, Ca and Al. Stoichiometric calculations were used to convert Fe to FeO, Mg to MgO, Mn to MnO, Ca to CaO, Al to Al₂O₃, and Cr to Cr₂O₃, with the oxides used in grade interpolation.
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.	- The Competent Person carried out a site visit from 9 through 11 October 2017. - The outcome of the site

Criteria	JORC Code explanation	Commentary
		visit was that data has been collected in a manner that supports reporting an MRE in accordance with the guidelines of the JORC Code, and controls on the mineralisation are relatively well-understood. The project location, infrastructure and local environment were appraised as part of JORC's "reasonable prospects" test. • The water filled pits at Greenvale were noted and discussions later held with Mining Engineers involved in the Feasibility Study, so that appropriate density assignments and other adjustments could be made to the Mineral Resource block model.
Geological interpretation	• <i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i> • <i>Nature of the data used and of any assumptions made.</i> • <i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i> • <i>The use of geology in guiding and controlling Mineral Resource estimation.</i> • <i>The factors affecting continuity both of grade and geology.</i>	• The nickel laterite geology is well understood and the data at the deposit conforms to the expected laterite sequence. The laterite profile is developed from weathering processes with significant lateral continuity in the profile. This can have local variation in thickness and grade as a result of weathering processes. This is expected for laterite deposits where mining is expected to adapt to the local changes. The Mineral Resource classification is based on drill spacing and it is anticipated that future infill drill programs will reduce volume uncertainty. • The Competent Person's confidence in the geological interpretations is reflected by the classification of the Mineral Resource. • Geological logs of drill samples and sample assays were used to interpret the geological

Criteria	JORC Code explanation	Commentary
		models. - Alternative models for the saprolitic and lateritic profiles might be proposed with future work programs; however, it is not anticipated that these will impart any material differences to the tonnage or interpolated grade distribution of resultant models. - The geological interpretation of the weathering profiles controls the interpretation of the mineralisation envelopes for nickel. - The geological models were interpreted and modelled by the Competent Person. Three geological domains were interpreted based upon the geological logs of drill samples. Weathered ultramafic basement (LITHZONE=1) is defined as the lower zone of consistent logging of basement lithologies (predominantly weathered peridotite and pyroxenite). Saprolite (LITHZONE=2) is interpreted as the material between the basement and high iron zones. Limonite (LITHZONE=3) consists of the majority of higher-grade iron samples and low grade Mg samples. - An interpretation of the nickel distribution resulted in the delineation of domains constraining >0.6% nickel (Greenvale) and >0.3% (Lucknow). - An interpretation of the cobalt distribution resulted in the delineation of domains constraining >0.03% for both deposits. - Scandium domains were modelled at Lucknow using a lower cut-off of 60 ppm Sc. Scandium was not

Criteria	JORC Code explanation	Commentary
		modelled at Greenvale.
Dimensions	<i>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.</i>	- The Greenvale Mineral Resource is approximately 2,700 m in strike length, between 150 m and 1,300 m in plan width, and extends to a depth of approximately 50 m below surface. - The Lucknow Mineral Resource is approximately 3,900 m in strike length, between 150 m and 350 m in plan width, and extends to a depth of approximately 50 m below surface.
Estimation and modelling techniques	<i>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.</i> <i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i> <i>The assumptions made regarding recovery of by-products.</i> <i>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</i> <i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i> <i>Any assumptions behind modelling of selective mining units.</i> <i>Any assumptions about correlation between variables.</i> <i>Description of how the geological interpretation was used to control the resource estimates.</i> <i>Discussion of basis for using or not using grade cutting or capping.</i> <i>The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.</i>	- Datamine Studio RM was used for the geological modelling, block model construction, and grade interpolation and validation. - A block model with block sizes 10 m (X) x 10 m (Y) x 5 m (Z) was constructed. Sub-celling was not used. The block sizes are approximately half the tightest drill spacing, which generally supports a Measured classification. Blocks were flagged according to the geological and mineralisation envelopes. - Drill sample data were flagged by the mineralisation and weathering domain envelopes, with variables LITHZONE, NIZONE and COZONE used. Drillholes were sampled at 1 m intervals and the drill samples were accordingly composited to 1 m lengths. Composited sample data were statistically reviewed to determine appropriate top-cuts, with top-cuts applied for nickel and cobalt. Log probability plots were used to determine the top-cuts, and the very high-grade samples were reviewed in Datamine by the Competent Person to

Criteria	JORC Code explanation	Commentary
		determine if they were clustered with other high-grade samples. • The composited drill samples were input into variogram modelling. Normal scores variograms were selected for modelling because they presented the best structured variograms for the Greenvale assays. Downhole and directional variograms were modelled for nickel, cobalt, scandium, iron, magnesium, manganese, aluminium, chromium and calcium. Low relative nugget effects were modelled for these (nickel 20%, cobalt 30%, scandium <10%), with short ranges generally 10–25 m associated with sills between 55% and 75% of the population variance. Longest ranges were modelled in the saprolite unit, in excess of 100 m. Variograms used all data in the weathering domains and were not constrained within the nickel or scandium envelopes. Major variogram directions were 0°, which approximates the strike of the host geological units. • Grades were interpolated for all the grade variables by ordinary kriging, with local dip variations honoured by using Datamine's Dynamic Anisotropy functionality. Blocks in the Greenvale model were estimated using a search ellipse of 60 m (major) x 30 m (semi-major) x 5 m (minor) dimensions, with a minimum of 8 and maximum of 16 samples from a minimum of four drillholes per cell interpolation. Blocks in the

Criteria	JORC Code explanation	Commentary
		Lucknow model were estimated using a search ellipse of 40 m (major) x 20 m (semi-major) x 5 m (minor) dimensions, with a minimum of 8 and maximum of 16 samples from a minimum of four drillholes per cell interpolation. Grade interpolation in the Kokomo model used between eight and 12 samples per block estimate. Larger search radii were used to interpolated grades in the Kokomo model. Search radii were increased, and the minimum number of samples reduced in subsequent sample searches if cells were not interpolated in the first pass. Cell discretization of 3 x 3 x 1 (X, Y, Z) was employed. The nickel and cobalt mineralisation domains were used as a hard boundary during grade interpolation. • Grade interpolation for the in-situ Mineral Resources was by ordinary kriging; for the dumps and stockpiles at Greenvale, inverse distance squared was used. • The Mineral Resource model was an update of the 2018 Mineral Resource, with minor modifications made to the geological interpretations after taking into account significant increase in number of drill samples from the 2018 drilling. A new metal equivalents formula has been applied for the reporting of this MRE. • No by-products are anticipated to be recovered. Scandium has not been included in the mineral processing stream

Criteria	JORC Code explanation	Commentary
		for the Feasibility Study - The interpolated grades were validated by way of review of cross sections (block model and drill samples presented with same colour legend); swath plots, and comparison of mean grades from de-clustered drillhole data. - Some correlation is observed between nickel and cobalt. Scandium does not appear to be statistically correlated to the other elements.
Moisture	<i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i>	Tonnages are estimated on a dry basis. Moisture content measurements were derived from the difference between the dry and wet weights of the RC drill samples, as determined by SGS Laboratory in Townsville, Queensland.



Cut-off parameters	• <i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i>	• A marginal cut-off grade was determined using costs and recovery data as provided to CSA Global as part of the Feasibility Study. • The Greenvale MRE is reported above a marginal cut-off grade of 0.4% NiEq and the Lucknow MRE is reported above a cut-off grade of 0.55% NiEq. Metal Equivalent formulae and supporting data are discussed in the report and are determined from the knowledge that the Mineral Resources are multi-element and combine nickel and cobalt grades using a nickel equivalent cut-off grade where: • $\text{NiEq} = \frac{(\text{nickel grade} \times \text{nickel price} \times \text{nickel recovery}) + (\text{cobalt grade} \times \text{cobalt price} \times \text{cobalt recovery})}{(\text{nickel price} \times \text{nickel recovery})}$ • The following formulae was derived using the following commodity prices and recoveries: • Forex US\$:A\$ = 0.71 • nickel - A\$27,946/t and 94.8% recovery • cobalt - A\$93,153/t and 95.7% recovery. • Prices and recoveries effective as at 10 February 2019. • Metal recovery data was determined by variability test work of nickel and cobalt solvent extraction during the inhouse pilot plant test work program. Results typically achieved
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Criteria	JORC Code explanation	Commentary
		between 90% and 99% from samples with nickel and cobalt grades aligned with expected mine grades as reported from the Mineral Resource model. Lower recoveries of between 85% and 90% were achieved from some lower-grade samples to determine economic cut off grades. The Kokomo MRE has not been updated and the NiEq grade has not been updated from the 2018 MRE, with no additional testwork having been completed since that time.
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 have been applied to the resource block model prior to handover for mining studies. Any mining will be by open pit mining methodologies.
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.	Metal recovery data as determined by variability testwork of nickel and cobalt leach extraction. Results typically achieved between 90% and 99% from samples with nickel and cobalt grades aligned with expected mine grades. Lower recoveries of between 85% and 90% were achieved from some lower-grade samples.

Criteria	JORC Code explanation	Commentary
Environmental 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 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.	- Mining of the lateritic and saprolitic ore is proposed to be from relatively shallow open pits. The lithologies are highly weathered with most sulphides species already oxidised. - Disposal of mine tailings and mining waste can possibly be into pre-existing mine voids. - It is anticipated that any future environmental impacts and waste disposal from mining and processing will again be correctly managed as required under the regulatory permitting conditions.
Bulk density	- 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.	- Determined through the Caliper Method for dry bulk density by a combination of direct measurement of the volume of whole PQ diamond drill core and reverse circulation metallurgical drill holes. Measurements were taken from multiple down hole intersections (137 at Greenvale and 70 at Lucknow) from a total of six separate drill holes across all main lithological domains. Both a wet and dry specific gravity data was determined through measured moisture content. - Dry bulk density data was obtained to reach the required confidence for the main geological material types of iron laterite, haematitic (red) laterite, mottled laterite, saprolite, silica boxwork and weather ultramafic. Broader-based lithological domains were then identified and earmarked for potential economic extraction which in turn incorporated the different characteristics of

Criteria	JORC Code explanation	Commentary
		these material types in terms of mineralogy, void spaces, alteration zones and moisture content. - Both deposits (Greenvale and Lucknow) were assessed separately based on general lithological domains and geological setting. Therefore, using the individual sample measurements, an average density value estimate for both wet and dry material was determined for each domain at each deposit. With this assumption, a combined or blended density estimate of, for example, laterite and saprolite as one mined bulk commodity was considered. - Dry bulk density values assigned are as follows: - Greenvale – weathered ultramafic (1.9 t/m³), saprolite (1.52 t/m³), Limonite (1.52 t/m³), dumps (waste 1.2 t/m³, crusher oversize stockpile 1.75 t/m³). - Lucknow – saprolite (1.68 t/m³), limonite (1.7 t/m³).
Classification	<i>The basis for the classification of the Mineral Resources into varying confidence categories.</i> <i>Whether appropriate account has been taken of all relevant factors (i.e. 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).</i> <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i>	- The Mineral Resource has been classified following due consideration of all criteria contained in Section 1, Section 2 and Section 3 of JORC 2012 Table 1. - Data quality and confidence in the geological interpretation support the classification. Wireframe solids for Measured and Indicated volumes were used to assign classification values (RESCAT; 1 = Measured, 2 = Indicated, 3 = Inferred, 4 = unclassified). - The Measured Mineral Resource is supported by regular drill pattern spacing

Criteria	JORC Code explanation	Commentary
		of 20 m (EW) x 20 m (NS). Measured Resources in the central part of the deposit are supported by 20 m (EW) x 40 m (NS). • The Indicated Mineral Resource is supported by regular drill pattern spacing of 40 m (EW) x 40 m (NS). • The Inferred Mineral Resource is supported by regular drill pattern spacing of 80 m (EW) x 80 m (NS). • The waste dumps are classified as Inferred. The oversize stockpile is classified as Indicated. • Blocks not interpolated are not classified. • The final classification strategy and results appropriately reflect the Competent Person's view of the deposit.
Audits or reviews	• <i>The results of any audits or reviews of Mineral Resource estimates.</i>	• The Mineral Resource models were internally peer reviewed by CSA Global prior to release of results to Australian Mines. CSA Global reviewed the data collection, QAQC, geological modelling, statistical analyses, grade interpolation, bulk density measurements and resource classification strategies.
Discussion of relative accuracy/ confidence	• <i>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.</i> • <i>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.</i> • <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i>	• 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 processes. 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.

Criteria	JORC Code explanation	Commentary
		Hence drill spacing, as used for the Mineral Resource classification, is the prime indicator of estimation risk, therefore used to delineate Mineral Resource classification volumes.



Kokomo

Section 1: Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)



Criteria	JORC Code explanation	Commentary
Sampling techniques	• <i>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i> • <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> • <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i> • <i>In cases where ‘industry standard’ work has been done this would be relatively simple (e.g. ‘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 (e.g. submarine nodules) may warrant disclosure of detailed information.</i>	• Drillhole data supporting the Mineral Resource were drilled by Metallica in 2000–2009 (1,056 RC holes for 28,787 m, and 10 DD holes for 521.5 m). The DD holes were drilled for metallurgical testwork samples which were assayed but not used for grade interpolation in the MRE. The assays were used to compare the sampling and chemical analyses from adjacent DD and RC drillholes. • RC samples of 1 m drill length were passed through a rig-mounted cyclone and collected in large plastic bags positioned beneath the cyclone. The action of the cyclone adequately homogenises the sample collected in the bag. Representative 1.5 kg to 3 kg samples were collected in calico bags for dispatch to the analytical laboratory by laying the plastic bag on its side and using a long trowel (“spear”). • Diamond core was not sampled by Metallica personnel, instead it was delivered whole for metallurgical testwork. • QA of the spear sampling was carried out at a later date using a riffle splitter, with a 3:1 mass reduction. The testwork used 19 holes from the 2008 drill program (221 samples) and assay results were compared with the spear sample assays (originals) which show good correlation.
Drilling techniques	• <i>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i>	• Drilling supporting the Mineral Resource was predominantly by RC with minor diamond core drilling. Historical drilling

Criteria	JORC Code explanation	Commentary
		(pre-Metallica, dating to early 1970s) was a mix of RAB and RC; however, these were not used in any manner to support the MRE. • Diamond core was NQ diameter and was not oriented.
Drill sample recovery	• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> • <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i> • <i>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.</i>	• Metallica RC drilling generally used high air pressure to keep the lateritic samples dry and to maintain good sample recovery. Recovery in the mineralised intervals was deemed to be good to excellent. RC samples were not weighed and advice to the Competent Person was provided by former Metallica geological staff who were involved with the drilling. • Relationships between sample recovery and grade could not be determined without original sample weight data; however, the Competent Person does not believe a material relationship exists.

Criteria	JORC Code explanation	Commentary
Logging	• <i>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.</i> • <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i> • <i>The total length and percentage of the relevant intersections logged.</i>	• A Metallica geologist was present at all times during drilling and sampling. Metallica's geological logging protocols at the time were followed to ensure consistency in drill logs between the geological staff. • RC chips were logged for weathering, lithologies (primary and proto), mineralogy, colour and grain size. RC chip trays (with chips) were photographed. • Diamond core were also logged for structure (alpha and betas, when observed). Diamond core was photographed. • The interpreted weathering and fresh zone domains were also logged; hematitic iron-rich soil, ferruginous laterite +/- silica boxwork, saprolite, weathered ultramafic and fresh ultramafic. These logs were correlated with assays. • The full sample lengths were logged.
Subsampling techniques and sample preparation	• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> • <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> • <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> • <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> • <i>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</i> • <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	• RC speared samples were dispatched to the analytical laboratory. • The Competent Person considers the spear sampling method to be an appropriate sampling method, based upon later testwork to compare it with riffle split samples. • Samples were dry. • Field duplicates from RC samples were taken at a rate of 1:60, approximately one sample per drillhole. No field duplicate sample was taken if field XRF readings showed barren samples. Field duplicates were taken by spear method by the same sampler who took the

Criteria	JORC Code explanation	Commentary
		original spear sample. No records were kept regarding the sample weights for either the original or duplicate samples. A total of 698 field duplicate samples were taken at Kokomo. • QA of the spear sampling was carried out at a later date using a riffle splitter, with a 3:1 mass reduction. The testwork used 19 holes from the 2008 drill program (221 samples) and assay results were compared with the spear sample assays (originals) which show good correlation. • Diamond drillholes are considered to be twinned drillholes to adjacent RC holes. Sample geological logs correlate well. • Sample sizes are considered to be appropriate to the grain size of the material being sampled.
Quality of assay data and laboratory tests	• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> • <i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i> • <i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i>	• Drill samples were originally sent to ALS and then to SGS. Both labs conform to Australian Standards ISO9001 and ISO 17025. • ALS samples were dried then pulverised in LM5 Mill to achieve a nominal 85% passing 75µm. A pulp sample was then taken and split down to achieve a 0.5 g sample which was digested in a mixture of three acids (nitric, perchloric and hydrofluoric). The residue is then leached in hydrochloric acid and the solution's elemental concentrations determined by ICP-AES. Internal standards were used to monitor QC. • SGS samples followed a

Criteria	JORC Code explanation	Commentary
		similar subsampling process. The pulp sample is digested in four-acid to effect as near to total solubility of the metals as possible, with the solution presented to an ICP for element quantification. • The analytical procedures are considered total analysis techniques. • Metallica used five CRMs to monitor the accuracy of the metal analyses. The CRMs were certified for nickel, copper and zinc, but not for scandium or cobalt. Results are generally good, with failures due to mis-match of CRMs or analytical issues; no action was taken at the time because the CRM errors were deemed to be of insufficient magnitude to require re-analysis of pulps. • Selected pulps from the 2008 program were sent to ALS Townsville for umpire analyses. Comparative results for nickel, cobalt and scandium are considered by the Competent Person to be good. • The QAQC procedures and results show acceptable levels of accuracy and precision were achieved.
Verification of sampling and assaying	• <i>The verification of significant intersections by either independent or alternative company personnel.</i> • <i>The use of twinned holes.</i> • <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> • <i>Discuss any adjustment to assay data.</i>	• Australian Mines geological personnel independently reviewed selected RC drill intersections and verified their suitability to be included in the estimation of Mineral Resources. The mineralisation is not visual, and any significant intersections are apparent from the sample analyses. • Two diamond holes were drilled at Kokomo on northing section 7,947,535 mN and were twinned with

Criteria	JORC Code explanation	Commentary
		RC hole KK-049. The diamond holes were drilled to obtain samples for metallurgical testwork. Assays for nickel for holes KK-049 and KKDH-003 are generally similar although some variance is noted, and whether this is due to the mineralogical nugget effect or sampling error is yet to be ascertained. These two holes also were drilled into a deeper zone of saprolitic mineralisation, whilst KKDH-004 (offset by 12 m) penetrated barren saprolite at a shallower depth. • The original assay certificates, collar surveys and geological logs are archived with the Mineral Resource files. • Selected RC drillhole collars were surveyed in the field by the Competent Person (Mineral Resources) during the 2017 site inspection with a handheld GPS unit, and the surveyed coordinates (easting and northing) were within 10 m of the coordinates surveyed by differential GPS. The precise location of the drill collars is not known due to the holes having been rehabilitated since the drill programs were completed. The GPS locations are considered to be an approximate location of the actual collar coordinates. • Assay data are recorded as negative values in the database where "less than detection" and have been adjusted to equate to half the analytical detection limit for the elements in question. The exception is scandium, where database values of <-6 ppm were assigned as "absent"

Criteria	JORC Code explanation	Commentary
		assay.
Location of data points	• <i>Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i> • <i>Specification of the grid system used.</i> • <i>Quality and adequacy of topographic control.</i>	• All drillholes were surveyed by independent surveying companies, using differential GPS to provide accurate surveyed coordinates. Downhole surveys were not required due to the shallow depths of most holes. • All grid coordinates are in MGA coordinates, with the grid being MGA Zone 55 South. • The topographic DTM was prepared using data sourced from an airborne survey flown in September 2008. An AutoCAD contour file with surveyed spot heights, including the surveyed drillhole collar coordinates and elevations, were used to model a DTM, and was considered adequate to estimate Mineral Resources for Kokomo.
Data spacing and distribution	• <i>Data spacing for reporting of Exploration Results.</i> • <i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i> • <i>Whether sample compositing has been applied.</i>	• Several sets of drill spacing are noted at Kokomo, often overlapping. The broadest scale of drilling is 40 m (EW) x 100 m (NS), with closer spaced drill grids of 40 m (EW) x 50 m (NS), and 20 m (EW) x 25 m (NS). The local drill grids played a key role in the classification of the Mineral Resources, and therefore the Competent Person considers the data spacing to be sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource classification categories adopted for Kokomo. • Samples were not composited at the sampling stage.
Orientation of data in relation to	• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	• Most drillholes were drilled vertically which is considered to minimise any

Criteria	JORC Code explanation	Commentary
geological structure	<i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i>	potential sampling bias with the saprolitic host lithology. Some late stage faulting may be present, but any offset of saprolite and/or mineralisation cannot be predicted at the Mineral Resource drill-out level. Any sampling bias resultant from the orientation of drilling and possible structural offsets of mineralisation is considered to be minimal and fall within the tolerances built into the Mineral Resource categorisations.
Sample security	<i>The measures taken to ensure sample security.</i>	Drill samples were under the care and supervision of Metallica staff at all times until transportation by local couriers to the analytical laboratories in Townsville.
Audits or reviews	<i>The results of any audits or reviews of sampling techniques and data.</i>	- The drilling procedures, sampling methodologies, sample analyses and the drillhole database were audited by Golder in 2009. Some minor issues were noted and resolved by Metallica at the time, and prior to estimation of Mineral Resources by Golder. Golder considered all data processed to be acceptable. - CSA Global carried out a high-level review prior to reporting of Mineral Resources (this report) and did not note any material deficiencies in the quality of work undertaken during Metallica's work programs. CSA Global focused on the spear sampling methodology employed by Metallica and consider the spear sampling was carried out to a high level, ensuring a representative sample was obtained from each 1 m drill interval.

Section 2: Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	- 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 Kokomo Mineral Resource is covered by mining lease ML10342. This lease is 100% owned by Sconi Mining Operations Pty Ltd and has an area of 4.19 km². The mining lease was granted on 14 April 2013 and expires on 30 April 2034. EPM25833 surrounds the mining lease and was granted on 20 August 2015 for a period of five years.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	- The Kokomo deposit has been subjected to several drilling programs since the deposit was first identified in the early 1970s, up until Metallica purchased the property from Dominion Metals Ltd in 1995. The drill information from pre-Metallica work programs was not available for the MRE. - The deposit was first drilled by Laloma Corporation NL (Laloma) in the early 1970s, exploring for base metals, including nickel and cobalt. Laloma drilled 50 shallow and widely spaced RAB holes on the laterite capping the ultramafic rocks. This drill information was not available for the MRE. - Queensland nickel Managements Pty Ltd (QNM) drilled the deposit in 1992, totalling 56 holes for 928 m, which intersected some thick intersections of high grade cobalt-nickel mineralisation. This drill information was not available for the MRE. - Dominion Metals Ltd completed 29 RAB and 53 RC holes between 1993 and 1995. The Dominion holes were not included in the MRE due to QC issues with the collar surveys and the assays. Metallica's drill programs cover the ground drilled by Dominion therefore the suppression of the Dominion holes is not expected to affect the quality of the MRE.
Geology	Deposit type, geological setting and style of mineralisation.	- The Kokomo Mineral Resource is contained within a laterite, developed by weathering process over fragments of ultramafic basement rocks. nickel, cobalt and scandium have been enriched from the ultramafic rocks by both residual and supergene processes. - The ultramafic complex and overlying nickel laterite form an elongated north-northeast trending body bounded by predominantly siltstones on the eastern and western margins. These margins display a marked

Criteria	JORC Code explanation	Commentary
		increase in nickel, scandium and cobalt content.
Drillhole information	• A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes: ◦ easting and northing of the drillhole collar ◦ elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar ◦ dip and azimuth of the hole ◦ downhole 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.	• Drillhole information from Metallica drill programs were used to support the MRE. The locations of drill samples, and the geological logs of these samples were used to build the geological model, and with the sample analyses, support the MRE.
Data aggregation methods	• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. 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 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.	• Exploration results are not reported here, with all Metallica drillholes used to support the MRE.
Relationship between mineralisation 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 drillhole 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 (e.g. 'down hole length, true width not known').	• The nickel mineralisation is hosted in saprolitic profiles which are relatively thin and laterally extensive. They present a vertical grade profile as a result of the weathering processes that reduce with depth. Vertical RC drilling completed to date provides the best drilling orientation.
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	• Maps and figures depicting drill collar locations and limits of lateritic mineralisation are presented in the body of this report.

Criteria	JORC Code explanation	Commentary
	<i>of drillhole collar locations and appropriate sectional views.</i>	
Balance d 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.	Exploration results are not reported here, with all Metallica drillholes used to support the MRE.
Other substant ive explorati on 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.	- Three bulk density sampling methods were employed in 2008 to determine the most appropriate method, results from which would support the MRE. 36 shallow test pits were excavated, with the pit volume accurately calculated and the mass of material excavated determined. Wet bulk densities were calculated from these. A moisture content was determined from adjacent drill samples (pre-existing drillholes) which was used to derive the DBD for the pits. - The calliper method was used to determine density, with diamond drill core used. Competent sticks of core were squared off at the ends and the volume calculated and the core then weighed. - Volume of friable core was calculated by using a sand box to measure the volume of core accommodated within a known volume of sand. The core samples were weighed to derive the wet density, with known moisture content of samples from adjacent holes used to determine the DBD. - The core calliper data were ultimately chosen to support the MRE and are supported by data from the Bell Creek deposit (Metallica) which are similar in values for dry density, per lithological type. - Other relevant exploration work includes ore and waste characterisation testwork for environmental studies, with a view to assessing the potential impact of long term on-site stockpiles. No bulk samples have been taken from Kokomo for metallurgical testwork. No geotechnical work has been carried out to date. Some groundwater monitoring bores are in place but are not currently being monitored. Fauna and flora studies as part of the EIS were completed in 2013.
Further work	- The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). - Diagrams clearly highlighting the areas of	Australian Mines has not planned further exploration testwork to improve or increase the quality of the Mineral Resource at Kokomo due to the recent depressed market for nickel and have no plans at this time for further geological exploration, with all

Criteria	JORC Code explanation	Commentary
	<i>possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	geological work focusing on the Feasibility Study.

Section 3: Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

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 and resolved any issues prior to preparation of the Mineral Resource in 2009. Validation of digital versus hard copy data were carried out by the previous Competent Person. No material issues were reported by Golder at the time. - CSA Global checked the drillhole files for errors prior to Mineral Resource estimation, including absent collar data, multiple collar entries, absent survey data, overlapping intervals, negative sample lengths, and sample intervals which extended beyond the hole depth defined in the collar table. No errors of any material significance were detected.
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.	- The Competent Person carried out a site visit from 9 to 11 October 2017. - The outcome of the site visit was that data has been collected in a manner that supports reporting an MRE in accordance with the guidelines of the JORC Code, and controls to the mineralisation are relatively well-understood. The project location, infrastructure and local environment were appraised as part of JORC's "reasonable prospects" test.
Geological interpretation	- Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. - 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 controlling Mineral Resource estimation. - The factors affecting continuity both of grade and geology.	- nickel laterite geology is well understood and the data at the deposit conforms to the expected laterite sequence. The laterite profile is developed from weathering processes with significant lateral continuity in the profile. This can have local variation in thickness and grade as a result of weathering processes. This is expected for laterite deposits where mining is expected to adapt to the local changes. The Mineral Resource classification is based on drill spacing and it is anticipated that future infill drill programs will reduce volume uncertainty. - The Competent Person's confidence in the geological interpretations is reflected by the classification of the Mineral Resource. - Geological logs of drill samples and sample analytical results were used to interpret the geological models. - Alternative models for the saprolitic and lateritic profiles might be proposed with future work programs; however, it is not anticipated that these

Criteria	JORC Code explanation	Commentary
		will impart any material differences to the tonnage or interpolated grade distribution of resultant models. - The geological interpretation of the weathering profiles controls the interpretation of the mineralisation envelopes for nickel and scandium. - The geological models were interpreted and prepared by Metallica and reviewed by the previous Competent Person. Four geological domains were interpreted based upon the geological logs of drill samples. Weathered ultramafic basement (ZONE_LAT=1) is defined as the lower zone of consistent logging of basement lithologies (predominantly weathered peridotite and pyroxenite). Saprolite (ZONE_LAT = 2) is interpreted as the material between the basement and high iron zones. This domain is dominated by material logged as siliceous saprolite. High-iron laterite (ZONE_LAT = 3) consists of the majority of higher grade iron samples and is defined at a geochemical cut-off of 30% iron. Alluvium (ZONE_LAT = 4) irregularly covers the laterite and is defined by lithological logs of alluvium and supported by geological mapping and geomorphology. - An interpretation of the nickel distribution resulted in the delineation of an envelope constraining >0.3% nickel. This envelope also captures most of the cobalt mineralisation, however where cobalt mineralisation is located outside of the nickel envelope, the nickel interpretation was expanded to capture the cobalt mineralisation. This has resulted in local dilution of the nickel mineralisation within the nickel envelope. - Scandium mineralisation is more variable than nickel and cobalt and studies to date show no direct relationship between scandium, and nickel and cobalt. Scandium can occur spatially above, within or below nickel mineralisation and at times extends into the basement, alluvium or laterally into surrounding sedimentary units. An envelope constraining >60 ppm scandium was interpreted by Golder and Metallica in 2008 and was reviewed by the current Competent Person and deemed appropriate for use in the current MRE.
Dimensions	<i>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.</i>	The Kokomo Mineral Resource is approximately 4,800 m in strike length, between 330 m and 770 m in plan width, and extends to a depth of approximately 40 m below surface.
Estimation and modelling	<i>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum</i>	Vulcan Envisage was used for block model construction, and grade interpolation and validation. Datamine Studio RM was also used to validate the resource model for the current reporting of the Mineral Resource.

Criteria	JORC Code explanation	Commentary
techniques	<i>distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</i> <i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i> <i>The assumptions made regarding recovery of by-products.</i> <i>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</i> <i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i> <i>Any assumptions behind modelling of selective mining units.</i> <i>Any assumptions about correlation between variables.</i> <i>Description of how the geological interpretation was used to control the resource estimates.</i> <i>Discussion of basis for using or not using grade cutting or capping.</i> <i>The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.</i>	- A block model with block sizes 10 m (X) x 10 m (Y) x 1 m (Z) was constructed. Sub-celling was not used. The block sizes are approximately half the tightest drill spacing, which generally support Measured classification. Blocks were flagged according to the geological and mineralisation envelopes. - Drill sample data were flagged by the mineralisation and weathering domain envelopes, with variables ZONE_LAT, ZONE_NI and ZONE_SC used. Most drillholes were sampled at 1 m intervals and the drill samples were composited to 1 m lengths. Composited sample data were statistically reviewed to determine appropriate top-cuts, with the following top-cuts applied: nickel (3% and 1%, mineralisation and non-mineralisation domains), cobalt (2% and 0.4%), and scandium (650 ppm and 100 ppm). Log probability plots were used to determine the top-cuts, and the very high-grade samples were reviewed in Datamine to determine if they were clustered with other high-grade samples. - The block model and drill sample locations were translated into an unfolded space due to the undulations of the geological surfaces interpreted at Kokomo. The unfolded sample locations were input into variogram modelling. Correlograms were selected for analyses because they presented the best structured variograms for the Kokomo assays. Downhole and directional experimental correlograms were modelled for nickel, cobalt, scandium, iron, magnesium, manganese, aluminium, chromium, calcium and copper. Low relative nugget effects were modelled for each of these (10% to 20%), with short ranges generally 10–25 m associated with sills between 55% and 75% of the population variance. Longest ranges were modelled in the saprolite unit, up to 400 m. Correlograms used all data in the weathering domains and were not constrained within the nickel or scandium envelopes. Major correlogram directions were 025° which approximates the strike of the host geological units. - The block model was unfolded into translated space prior to grade interpolation. Grades were interpolated for all the grade variables by ordinary kriging. A three-pass estimation strategy was used; pass 1 used a search ellipse of 60 m (major) x 30 m (semi-major) x 2.5 m (minor) dimensions. A minimum of eight and maximum of 12 samples from a minimum of four drillholes were used to interpolate a cell. If a cell could not be interpolated in pass 1, then pass 2 parameters of a search ellipse of 120 m (major) x 60 m (semi-major) x 4 m (minor) dimensions. A minimum of six and maximum of 12 samples from a minimum of three drillholes were used to interpolate a cell. If a cell

Criteria	JORC Code explanation	Commentary
		could not be interpolated in pass 2, then pass 3 parameters of a search ellipse of 180 m (major) x 90 m (semi-major) x 20 m (minor) dimensions. A minimum of one and maximum of 12 samples from no minimum of drillholes were used to interpolate a cell. For all block estimates, a maximum of three composited samples per hole was used. Cell discretization of 3 x 3 x 1 (X, Y, Z) was employed. The nickel and scandium mineralisation envelopes were used as a hard boundary during grade interpolation. Blocks that could not be interpolated due to insufficient data were assigned very low grades (e.g. 0.01% nickel); these blocks were located at the peripheries of the domains and predominantly in the basement domain. • The Mineral Resource model was an update of the 2008 model, with similar geological interpretations and grade interpolation techniques used. The current model (prepared in 2009) was based upon an additional 349 drillholes which increased the model volumes. • No by-products are anticipated to be recovered. • The interpolated grades were validated by way of review of cross sections (block model and drill samples presented with same colour legend); swath plots, and comparison of mean grades from de-clustered drillhole data. • Some correlation is observed between nickel and cobalt. Scandium does not appear to be statistically correlated to the other elements.
Moisture	• <i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i>	• Tonnages are estimated on a dry basis. Moisture content measurements were derived from the difference between the dry and wet weights of the RC drill samples, as determined by SGS Laboratory in Townsville, Queensland.



Criteria	JORC Code explanation	Commentary
Cut-off parameters	<i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i>	- A marginal cut-off grade was determined using costs and recovery data as provided to CSA Global as part of the Feasibility Study. - The Mineral Resource is reported above cut-off grades of 0.45% NiEq. Metal Equivalent formulae and supporting data are discussed in the report and are determined from the knowledge that the Mineral Resources are multi-element and combine nickel and cobalt grades using a NiEq cut-off grade where: $\text{NiEq} = [(\text{nickel grade} \times \text{nickel price} \times \text{nickel recov} / 100) + (\text{cobalt grade} \times \text{cobalt price} \times \text{cobalt recov} / 100) / (\text{nickel price} / 100)]$ - The following formulae was derived using the following commodity prices and recoveries: - Forex US\$:A\$ = 0.75 - nickel – A\$23,516/t and 90% recovery - cobalt – A\$88,185/t and 90% recovery. - Prices and recoveries effective as at 2 July 2018. - Metal recovery data as determined by variability testwork of nickel and cobalt leach extraction. Results typically achieved between 90% and 99% from samples with nickel and cobalt grades aligned with expected mine grades. Lower recoveries of between 85% and 90% were achieved from some lower-grade samples.
Mining factors or assumptions	<i>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.</i>	No mining factors have been applied to the resource block model prior to handover for mining studies. Any mining will be by open pit mining methodologies.
Metallurgical factors or assumptions	<i>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</i>	Metal recovery data as determined by variability testwork of nickel and cobalt leach extraction. Results typically achieved between 90% and 99% from samples with nickel and cobalt grades aligned with expected mine grades. Lower recoveries of between 85% and 90% were achieved from some lower-grade samples.

Criteria	JORC Code explanation	Commentary
	<i>basis of the metallurgical assumptions made.</i>	
Environmental 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 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.	- Mining of the lateritic and saprolitic ore will be from relatively shallow open pits. The lithologies are highly weathered with most sulphides species already oxidised. - Disposal of mine tailings and mining waste can possibly be into pre-existing mine voids. - Dry and wet season environmental surveys were previously carried out for fauna and flora surveys, archaeological surveys, surface water sampling and dust monitoring, as part of the project's EIS and pre-feasibility studies. - It is anticipated that any future environmental impacts and waste disposal from mining and processing will again be correctly managed as required under the regulatory permitting conditions.
Bulk density	- 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.	- DBD was measured using several methods, using several types of test material, to provide a basis for deriving the density data used in the Mineral Resource. The methods included calliper (direct measurement of volume of whole PQ diameter diamond core); sand box core (indirect measurement of volume by placing incompetent core samples in a sand box of known volume, then removing the core and replacing with the required volume of sand); and surface pits (shallow pits with volumes calculated by volume of sand required to fill the pit; the excavated material is weighed). - The average density for the significant geological codes (sample lithological logs) were derived from calliper, sand pits and surface pits, as discussed in Section 2 of this Table. The DBD was assigned to each drill sample per lithological logged code and interpolated into the block model using the NN technique. - The following NN interpolations were carried out (DBD in t/m³): LITH = 1 (LFe, DBD = 1.5), LITH = 2 (LSi, 1.9), LITH = 4, 5 (LSap, Mg, 2.1), LITH = 7 (WUm, 1.7), LITH = 8 (Ser, 2.0), LITH = 9 (Cly, 1.5), LITH = 10, 11 (Grn, Apl, 2.1), LITH >=12, 13, 14, 15 (SndSt, Msh, All, Soil, 2.0) - The average dry density per ZONE_LAT interpolated for Kokomo are 1.79 t/m³ (ZONE_LAT = 1), 1.89 t/m³ (ZONE_LAT = 2), 1.68 t/m³ (ZONE_LAT = 3). ZONE_LAT = 4 was assigned a DBD of 2.0 t/m³, and this zone is not classified as a Mineral Resource. Blocks not coded with ZONE_LAT (default = 0) were assigned a DBD of 1.7 t/m³.

Criteria	JORC Code explanation	Commentary
Classification	<i>The basis for the classification of the Mineral Resources into varying confidence categories.</i> <i>Whether appropriate account has been taken of all relevant factors (i.e. 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).</i> <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i>	- The Mineral Resource has been classified following due consideration of all criteria contained in Section 1, Section 2 and Section 3 of JORC 2012 Table 1. - Data quality and confidence in the geological interpretation support the classification. Wireframe solids for measured and indicated volumes were used to assign classification values (RESCAT; 1 = Measured, 2 = Indicated, 3 = Inferred, 4 = unclassified). - The Measured Mineral Resource is supported by regular drill pattern spacing of 20 m (EW) x 25 m (NS). - The Indicated Mineral Resource is supported by regular drill pattern spacing of 40 m (EW) x 50 m (NS). - The Inferred Mineral Resource is supported by regular drill pattern spacing of 40 m (EW) x 100 m (NS). - Block classifications are downgraded if number of holes used per block estimate do not meet a set threshold. - Blocks not interpolated are not classified. - The resultant classified block model, when viewed in section, generally shows consistent classification schema, however there irregularly appears a mild case of "spotted dog", resultant from the use of grade interpolation outputs to over-ride classification assignments in some instances. The Competent Person is of the opinion the volumes with an irregular distribution of classification will not affect mine planning studies untowardly. - The final classification strategy and results appropriately reflect the Competent Person's view of the deposit.
Audits or reviews	<i>The results of any audits or reviews of Mineral Resource estimates.</i>	The Mineral Resource block model was prepared in 2009 by Golder and reported according to the JORC Code (2004). The model was internally peer reviewed by Golder prior to release to Metallica. The same model was reviewed by CSA Global (this report) in preparation for use in the current FS and is to be reported according to the JORC Code (2012). CSA Global reviewed the data collection, QC, geological modelling, statistical analyses, grade interpolation, bulk density measurements and resource classification strategies. No material flaws were noted by CSA Global and the 2009 model is considered fit for purpose to be used in mine planning studies.

Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/ confidence	• <i>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.</i> • <i>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.</i> • <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i>	• 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 Mineral Resource classification, is the prime indicator of estimation risk, therefore used to delineate Mineral Resource classification volumes.



Appendix 7: Sconi Project Ore Reserve Estimate

JORC Code, 2012 Edition

Section 4: Estimation and reporting of Ore Reserves

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserve	<i>Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.</i> <i>Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.</i>	The Mineral Resource Estimate used as a basis for the conversion to the Ore Reserve was provided on 13th February 2019 with Mr David Williams, employee of CSA Global, as the Competent Person. The total Mineral Resource of 75.7Mt at 0.60% Ni and 0.08% Co includes 8.3Mt of Measured materials at 0.75% Ni and 0.09% Co, 49.2Mt of Indicated material at 0.60% Ni and 0.08% Co and 18.2Mt of Inferred material at 0.54% Ni and 0.05% Co. The Mineral Resources are reported inclusive of the Ore Reserves.
Site Visits	<i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits</i>	The Competent Person (Mr Jake Fitzsimons) visited the proposed project site in June 2018. The following observations were incorporated: - The Greenvale mining area is located near the township of Greenvale in northeast Queensland approximately 220km west of Townsville with access via dual-lane sealed road for all except a 10km section approximately 20km from Greenvale. - The project is made up of three sites centred at Greenvale with Lucknow approximately 9km to the southeast accessible via an existing sealed road. Kokomo is located approximately 60km to the northeast accessible via unsealed road and a ford crossing of the Burdekin River. The Kokomo site was not visited due time considerations. - The Greenvale site has been mined historically although little infrastructure remains except for the access road, power line terminal and a serviceable shed. The rail line servicing the site during previous operations has been abandoned and only the embankment remains. The other sites have not been mined previously and do not have existing infrastructure. - The topography in and around the sites can be considered generally rugged. Greenvale is the least rugged, with a relatively flat terrain across the central area around the old workings. Lucknow lies across the top of flat-topped ridge with steeper sides.

Criteria	JORC Code explanation	Commentary
Study status	<i>The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.</i> <i>The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.</i>	A mining feasibility study update was conducted to produce a revised mine plan for updated Mineral Resource Estimate using the 2018 BFS inputs as the foundation. The 2018 BFS report was compiled by Ausenco on behalf of Australian Mines Limited, with input from various specialist consultants: - CSA Global (CSA) (geology) - Orelogy Consulting Pty Ltd (mine planning) - The Simulus Group (metallurgical test work and process design) - AARC Environmental Solutions Pty Ltd (health, safety, environment and social responsibility) - Ausenco (non-process infrastructure) and Medea Capital Partners (market and financial evaluation). The updated Ore Reserve was underpinned by a mine plan producing nickel and cobalt ore for processing on site. The planned high-pressure acid leach processing technology produces nickel and cobalt sulphates for shipping to off-take partners via the Townsville port. The pressure acid leach process requires large amounts of sulphuric acid to digest the ore in the autoclave. The mining schedule was therefore optimised to provide the highest value ore to the process facility based on reagent consumption costs as well as revenue from nickel and cobalt production. The mine planning activities included open pit optimisation, final and interim stage pit designs, mine scheduling including backfilling, and mining cost estimations. Modifying factors considered during the mine planning process included mining dilution and ore loss, slope design criteria and practical mining considerations. The activities and findings of all other disciplines were summarised in the 2018 BFS document, including detail of the derivation of other modifying factors such as processing recoveries, costs, revenue factors, environmental and social considerations etc. Overall the results of the updated mine plan demonstrate that the Sconi project is technically achievable and economically viable at the forecast nickel and cobalt prices.

Criteria	JORC Code explanation	Commentary
Cut-off parameters	<i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i>	Only Measured and Indicated resource materials were considered as eligible for conversion to ore material. On direction from Australian Mines, the scandium grades were not used in the cut-off grade analysis, open pit optimisation or ore definition for scheduling. The scandium grades were retained for reporting purposes. The processing cost was dependent on acid consumption linked to the content of %Al, %Mg, %Ni and %Co in the ore feed. Therefore, a variable cut-off grade was applied at the block level for both the open pit optimisation work and subsequent ore definition for scheduling. The breakeven cut-off grade was determined to lie between 0.40% to 0.45% nickel equivalent dependent of the variable processing cost using the formula: $\text{BECOG (\%Nieq)} = (\text{Total cost of processing}) / (\text{Nieq grade} \times \text{net Ni Price} \times \text{Ni recovery})$ Nickel equivalent was assigned using the formula: $\text{Nieq (\%)} = [(\text{Ni grade} \times \text{Ni price} \times \text{Ni recovery}) + (\text{Co grade} \times \text{Co price} \times \text{Co recovery})] \div (\text{Ni price} \times \text{Ni recovery})$ Where: - Ni price = 27,946 AUD - Co price = 93,153 AUD - Ni Recovery = 94.8% - Co Recovery = 95.7% No other quality parameters were applied during the Ore Reserve estimation.
Mining factors or assumptions	<i>The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).</i>	As part of the update to the BFS, a detailed mine design and annual schedule was produced. This study indicated that: - The Ore Reserve derived from the Mineral Resource can easily meet the processing feed requirements for the production targets of the project. - The ore presents near surface and is easily accessible by conventional open pit mining methods. - The pit optimisation, design and schedule process indicate a project life of approximately 30-years at an ore processing rate of 2,000,000t per annum with mining for 18 years and rehandle of lower-grade material for the final 12 years. - The cost of the Sconi mining operation accounts for 10-12% of the total sulphate production cost.

Criteria	JORC Code explanation	Commentary
	<i>The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.</i>	A conventional open pit mine method was used as the basis of the BFS due to the near surface presentation of the mineralisation and the shallow depth of the pits. Mining and backfilling of pit voids is scheduled once pits voids are completed. The ore production schedule assumes Greenvale/Lucknow is operated as one mining area and Kokomo as a separate area. The schedule indicates that mining will be split between both areas and mined in campaigns with stockpiling and rehandle of material to meet blend objectives. At Greenvale ore will be delivered from the pits to a ROM pad adjacent to the primary crushing. Ore from both Lucknow and Kokomo will be delivered to a local ROM pad from where it will be loaded into road trains and transported to the Greenvale site. Due to the relatively low mining rate, blending requirements and potential for flooding of the Burdekin River, ore from Kokomo will be stockpiled at Greenvale on the ROM which has sufficient capacity for 2 to 3 months of feed. Mining at Kokomo was limited to 9 months of the year to avoid any potential wet season. Mine design criteria include allowances for minimum mining width, ramp width and gradient, pit exit location and slope design parameters.
	<i>The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc.), grade control and pre-production drilling.</i>	No additional geotechnical site investigation was completed for the study. A site visit was undertaken in June 2018 to identify any significant risks. During the site visit it was observed that long term exposed walls at the existing Greenvale pit were still remarkably stable with very little evidence of failure. Existing wall angles were observed in the range from 75° to 85°. Due to the large lateral extent of the pits and the shallow depth of the deposit, large scale wall failure due to structural controls is unlikely and small-scale failure is expected to occur on 5 to 10% of the walls. Slope monitoring and management will be part of the operation at the mines. Grade control drilling is planned to extend from surface to the final pit depth and be completed in advance of mining using RC drilling methods. The grade control program will aim to: • Define the economic boundary of the deposit; • Block out the higher value direct feed zone and stockpiles zones; and • Provide further data to develop a blend plan to manage acid consumption.

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		Delineation of the ore boundary during mining operations will utilise survey control. Blend ratios for three or more ROM fingers / pit sources will be determined in advance from grade control modelling. The ROM fingers at all sites will be built using a layered stacking approach via end tipping and then reclaimed from the side to assist in the management of short interval grade variations and ensure grade distribution within each finger is smoothed as much as practicable for acid consumption management.
	<i>The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</i> <i>The mining dilution factors used.</i>	The July 2018 Datamine Mineral Resource Models (<i>grv0219eq_md</i>, <i>lck0219eq_md</i> & <i>kok09v_md</i>) were used as a basis for the conversion to the Ore Reserve. The overall wall slope angle of 45° was applied including allowance for ramps and variation between optimisation shell and design. Only Measured and Indicated material were categorised as ore for the optimisation process. Inferred mineralisation was treated as waste. The dilution method most suitable for disseminated laterite deposits is to re-block the model to a block size that matches the typical mining block unit. This method averages the quality parameters of the blocks that make up the new regularised block in the new block model and can better represent the way the material might be mined. It also takes into account all the quality parameters and no assumptions have to be made about the grade of the diluent. Due to the horizontal aspect of the laterite orebodies dilution is most likely to occur in the vertical direction. The sub-celled resource models were re-blocked to the selected 2m flitch height resulting in average global ore loss and dilution of: • 3.3% and 3.2% for Greenvale • 0.8% and 1.9% for Kokomo • 4.1% and 2.2% for Lucknow
	<i>The mining recovery factors used.</i> <i>Any minimum mining widths used.</i>	No further mining recovery factors were applied. Pit designs and interim cutbacks have been designed to suit a 100t excavator and 90t payload dump trucks. The parameters used were: • A minimum mining width of 20m. • Dual-lane ramp width of 22m and single-lane ramp width of 13m. • Ramp gradient 10%.

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	<i>The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.</i> <i>The infrastructure requirements of the selected mining methods.</i>	No inferred Mineral Resources have been included in the Ore Reserves or the associated production schedule. The proposed open cut mine plan and schedule considers and includes allowances for waste and overburden removal and placement, ROM pads based at the three mining areas, haul roads to the process plant, haulage loading facilities, water management, workshops, administration buildings, traffic management and other associated mine and facility infrastructure. It is planned to conduct mining on a contract basis for the life of mine.
Metallurgical factors or assumptions	- The metallurgical process proposed and the appropriateness of that process to the style of mineralisation. - Whether the metallurgical process is well-tested technology or novel in nature. - The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied. - Any assumptions or allowances made for deleterious elements. - The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole. - For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet specifications?	Simulus Engineers have developed a process for producing battery grade nickel sulphate and cobalt sulphate from a range of possible sources including lateritic nickel and cobalt ores. The proposed process flow comprises the following key unit processes: - Stage 1 – Leaching. Aqueous pressure leach in an acidic sulphate medium to dissolve the base metals while minimizing dissolution of the iron and silica gangue. The conditions used are typical for base metal dissolution from lateritic ores sources, with rapid leach kinetics resulting in autoclave residence times of ~60 minutes for near complete nickel and cobalt extraction. The leach discharge slurry proceeds to neutralization for removal of the free acid, iron and aluminium. The neutralised slurry is filtered and washed to separate the valuable metal in solution from the residue solids. The solids are conveyed for dry stacking. - Stage 2 – Sulphide Precipitation. The filtered PLS solution is then subjected to sulphide precipitation to recover a high-grade nickel/cobalt sulphide product with minimal impurities. - Stage 3 – Nickel and cobalt oxidative re-leach and secondary impurity removal. The nickel and cobalt rich sulphide intermediate is oxidised and re-leached under medium pressure and temperature to provide a high concentration, small volume stream. Solvent extraction is used to separate the nickel and cobalt. - Stage 4 – Crystallisation of high-purity nickel sulphate and cobalt sulphate. Solvent extraction is used to separate the nickel and cobalt. The separate nickel and cobalt sulphate streams are concentrated to saturation point via thermal and mechanical energy input. This causes the metals to begin crystallising from solution as metal sulphate hydrates. The specific form of

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		crystal is manipulated by controlling the temperature of crystallisation. The crystals are dried and packed for shipping. In addition to the key stages outlined, the proposed process plant also includes: • a sulphuric acid plant for generation of acid, steam and power • an oxygen plant • reagent preparation facility • water treatment plant • plant air and cooling system. The process comprises four basic sequential steps, all of which are well proven and commonly used in the wider metallurgical industry and provide high recoveries of base metals. The direct and variable test work was based on blended and master composites that were constructed to be representative of the laterite deposit. The initial pilot program was completed on a laterite ore containing nickel, cobalt and scandium from the Lucknow deposit in. The pilot campaign included approximately 48 hr of operation for each of the beneficiation, pressure acid leach (PAL), scandium solvent extraction (ScSX), scandium oxalate precipitation and calcination unit operations. The pilot campaign was completed over the period of September to November 2017 at Simulus Laboratories in Welshpool, Western Australia. A demonstration plant program was subsequently completed on ore from Sconi project's Lucknow and Greenvale deposits. The primary goal of the campaign was to generate samples of scandium oxide, nickel sulphate, and cobalt sulphate for marketing purposes and to assist process design for the feasibility study. During the campaign approximately 7.5 t of Lucknow ore and 4.3 t of Greenvale ore were processed through beneficiation and PAL, with the resulting leach liquor then processed through ScSX, scandium precipitation and calcination, iron removal, and mixed sulphide precipitation (MSP). The resulting MSP was then used as feed to the refinery circuit, which includes pressure oxidation (POX), followed by impurity removal, cobalt & zinc solvent extraction, and crystallisation. The demonstration plant campaign was completed over the period from March to June 2018 at Simulus Laboratories in Welshpool, Western Australia.

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		From July 2018 to March 2019 further optimisation and refinement batch testwork was conducted, with particular focus on the use of slurry neutralisation instead of liquor neutralisation, use of high magnesium material from site in place of limestone for neutralisation, filtration technology options, production of higher purity mixed sulphide intermediate and relocation/optimisation of the scandium recovery. In April-May 2019 investigations were undertaken to investigate pre-concentration of ore from Lucknow and Kokomo and in May 2019 a 2t pilot campaign was completed using Greenvale ore to demonstrate the suitability of slurry neutralisation with high magnesium material, gather further filtration data and demonstrate higher pressure mixed sulphide precipitation.
Environmental factors or assumptions	<i>The status of studies of potential environmental impacts of the mining and processing operation.</i> <i>Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.</i>	The project will entail a number of environmental approvals in order to proceed. The approvals will be mainly required from the Queensland Department of Environment and Science (DES). It is proposed to draw water from the Burdekin River during flood periods and store this water at the site for use during the operational phase. Additional approvals will be required by the project including: - Access to sufficient water to undertake the mining and processing - Corridors for pipelines between the Burdekin River and water storage/mining lease - Power lines for pumps and other related infrastructure. Australian Mines' application to be declared as a Prescribed Project under the State Development and Public Works Organisation Act 1971 was approved on 25th January 2019. This enables the remaining approvals (State and Local Government) to be coordinated through the Department of State Development, Manufacturing, Infrastructure and Planning and will accelerate the acquisition of the various approvals necessary to undertake the works, including access to water resources. AARC Williams Consulting Pty Ltd has undertaken the environmental approvals process. Please see body of FS for further details.
Infrastructure	<i>The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with</i>	Sconi is located 220km north west of Townville with the project area having access to major arterial roads, telephone line and a 66KVA power line – all within 1km of the project.

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	<i>which the infrastructure can be provided, or accessed.</i>	Labour, utilities, services, accommodation and transport is very accessible as the town of Greenvale is located within 8km of the proposed plant site.
Costs	<i>The derivation of, or assumptions made, regarding projected capital costs in the study.</i> <i>The methodology used to estimate operating costs.</i> <i>Allowances made for the content of deleterious elements.</i> <i>The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co-products.</i> <i>Derivation of transportation charges.</i> <i>The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.</i> <i>The allowances made for royalties payable, both Government and private.</i>	Project costs (capital, operating, consumables, labour, freight etc) were identified, assessed and calculated by the various consultants and compiled by Ausenco for the 2018 BFS report. The study contributors included: Oreology Consulting Pty Ltd (mine development and mining operations), The Simulus Group (process plant and processing operations), Ausenco (non-process infrastructure) and AARC Environmental Solutions Pty Ltd (closure). These groups utilised detailed studies, indexed prices, public reference prices etc. to calculate the various costs used as inputs into the BFS. Please see the 2018 BFS report for further information. Detailed studies by respective study managers have identified and accounted for acid consuming minerals (Al, Mg) within the deposit as well as in the process and refining of nickel and cobalt sulphate and scandium oxide. The acid consuming mineral content has also been accounted for in the updated financial modelling. All mining recovery, metallurgical recovery and other technical concerns regarding the commodity price for the Ni, Co and Sc concentrates have been considered by appropriately qualified individuals and groups in respect to the study requirements. Under the operations and financial modelling, full allowances are made for state royalties, duties, taxes, compensation etc. The project financial model details the particular financial cost, the percentage and the amount. State royalties of 3.2% and 5% respectively have been allowed for nickel and cobalt.
Revenue factors	<i>The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.</i> <i>The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</i>	The mine plan was based on economic shells through open pit optimisation using base prices for nickel and cobalt only with no value applied to scandium. The base prices used were supplied by AUZ as follows: - Nickel - US\$7.00/lb plus US\$2.00/lb premium - Cobalt – US\$30.00/lb - US\$32.77/t allowance for product transport - Exchange rate of 0.71 USD/AUD The sulphate products usually trade at a premium to the LME metal process. A premium was applied for the nickel sulphate only.

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		The assumptions have been modelled on variations and sensitivities to a range of +/- 20% on major input factors such as grade, process operating cost, mining costs, recoveries, and commodity prices.
Market assessment	<i>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</i> <i>A customer and competitor analysis along with the identification of likely market windows for the product.</i> <i>Price and volume forecasts and the basis for these forecasts.</i>	The Sconi Project will produce cobalt and nickel hydrated sulphate products ($\text{CoSO}_4 \cdot 7\text{H}_2\text{O}$ and $\text{NiSO}_4 \cdot 6\text{H}_2\text{O}$) as well as scandium oxide (Sc_2O_3). Both cobalt sulphate and nickel sulphate are essential precursor raw materials for lithium-ion batteries which is the technology used in electric vehicles batteries and other associated energy storage technologies. Australian Mines signed an off-take agreement term sheet with SK Innovation (a subsidiary of SK Holdings, one of South Korea's largest companies) for 100% of the expected cobalt sulphate and nickel sulphate production from the Sconi project for an initial period of 7 years, with an option exercisable by SK Innovation to extend this commodity supply agreement for a further 6 years. The market assessment for price has been supported by: - Australian Mines' own market research and direct meetings with market participants (producers, manufacturers and traders) in China, Japan and South Korea - Web-based commodity trading platform references. Scandium oxide is a relatively scarce, high melting point rare earth oxide increasingly used in the manufacture of aluminium alloys to increase tensile strength for a range of applications, with scandium-reinforced alloys suitable for the manufacture of weldable aluminium products such as car chassis, car panels and aircraft fuselages and other light transport applications. Australian Mines is currently undertaking market research with regards to scandium and has entered into a partnership with United Kingdom-based technology company Metalysis, to support their research and development on a solid-state process to produce a low-cost, superior aluminium-scandium alloy for potential use by the automotive and aerospace industries.
Economic	<i>The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including</i>	Australian Mines engaged Medea Capital Partners to conduct the updated financial modelling inclusive of taxation and other accounting treatments.

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	<i>estimated inflation, discount rate, etc.</i> <i>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</i>	The Mineral Resource estimation, completed by CSA Global, and mining schedule, completed by Oreology Consulting Pty Ltd, are of sufficient technical standard and level of accuracy taking into account all mining and associated activities and contingencies. The financial summary and base case NPV demonstrates a positive result. Sensitivities and discounting ranges have been applied to understand the economic tolerance to various key inputs to the base case. The sensitivities are generally $\pm 20\%$ and despite this, the financial result still demonstrates a positive economic case and profit margin to support the development of Sconi.
Social	The status of agreements with key stakeholders and matters leading to social licence to operate.	Australian Mines holds an ILUA and Cultural Heritage Management Plan (CHMP) with the Gugu Badhan Traditional Land Owners (who have subsequently been determined as the Native Title holders) for mining Greenvale and Kokomo (north of the Gregory Development Road). There is no Native Title Claim over the Lucknow resource area, and a Right to Negotiate submission in the second half of 2012 confirmed that there was no interest to that effect as no claimants came forward. The socio-economic benefits of the Project at local, regional and state level are significant with substantial economic opportunities from both direct and indirect flow-on effects. The potential benefits will include: - Construction of processing plant and facilities - Creation of approximately 500+ jobs at height of construction - Construction duration is estimated to be 18 months - An operating workforce of over 300 full time people - Increased trade to local service, hospitality and other industries - Additional indirect jobs-upstream and downstream (3x multiplier) approximately 990
Other	<i>Any identified material naturally occurring risks.</i> <i>The status of material legal agreements and marketing arrangements.</i> <i>The status of government agreements and approvals critical</i>	There are no obvious or likely naturally occurring risks that have been identified or which may negatively impact the Project or Project area. No major or material legal Agreements exist in respect to the Company at this stage. All statutory government agreements, permits and approvals commensurate to the current status of the project are all current and in good order.

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	<i>to the viability of the project, such as mineral tenement status and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third part on which extraction of the reserve is contingent.</i>	Timeframes for Agreements appropriate to the 2018 BFS were handled appropriately and have not put the project at risk. Agreement timeframes in respect to the project will be handled with similar accord so as not to put the future studies and project development at risk also.
Classification	<i>The basis for the classification of the Ore Reserves into varying confidence categories. Whether the result appropriately reflects the Competent Person's view of the deposit. The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</i>	Proven and Probable Ore Reserves were determined from mineralisation classified as Measured or Indicated Resource respectively. This classification is reasonable because of the nature of the deposit in terms of consistency and past mining activity. The beneficiation risk common to other laterite projects is not applicable to the Sconi project as no beneficiation is being undertaken prior to PAL process. The risks associated with the orebody variability appear much lower than other project risks (such as price, exchange rate and recovery) that effect revenue directly. Approximately 14% of the Ore Reserves are classified as Proven and 86% are classified as Probable.
Audits or reviews	<i>The results of any audits or reviews of Ore Reserve estimates.</i>	The Ore Reserve estimate has been reviewed internally by Orelogy Consulting Pty Ltd. An external audit was undertaken by Mining Plus with no significant new risks identified.
Discussion of relative accuracy/confidence	<i>Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person.</i> <i>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</i>	The Mineral Resource, and hence the associated Ore Reserve, relate to global estimates. The Ore Reserve estimate is an outcome of the 2019 Mining Study based on the 2018 Feasibility Study with geological, mining, metallurgical, processing, engineering, marketing and financial considerations to allow for the cost of finance and tax. Engineering and cost estimations have been done to a $\pm 15\%$ level of accuracy, consistent with a study of this nature. Medea's financial model estimated a post-tax NPV of approx. \$817M AUD at a discount rate of 8% which demonstrates that the project is economic.

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	<i>procedures used.</i> <i>Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.</i> <i>It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i>	Sensitivity analysis undertaken during the pit optimisations shows that the project is most sensitive to a movement in the commodity prices and exchange rate and less so to processing cost. The NPV is not as sensitive to changes in process recovery and capital and is least sensitive to mine operating costs. The moderate sensitivity to cost variations provide reasonable confidence in the Ore Reserve estimate. However, there is no guarantee that the price assumption, while reasonable, will be achieved.

