

ASX ANNOUNCEMENT

Coburn Mineral Sands Project, WA



STRANDLINE
resources limited

16 April 2019

Definitive Feasibility Study shows Coburn will generate strong financial returns over a long life

With key project approvals already in place, Strandline will now move to finalise funding and partnering for this world-scale project

HIGHLIGHTS

- DFS shows Coburn will generate strong financial returns with a Pre-Tax NPV of A\$551m (USD:AUD 0.72, 8% discount rate) and an Internal Rate of Return of 32%
- Large Ore Reserve of 523Mt @ 1.11% Total Heavy Mineral (THM) underpins an initial mine life of 22.5 years at the planned mining rate of 23.4Mtpa
- Life of Mine (LOM) revenue of A\$3.9b and LOM EBITDA of A\$1.9b, with a revenue-to-operating cost ratio of 2.2, based on TZMI's February-2019 commodity price forecast
- Key project approvals already in place (environmental, native title, heritage and mining), making Coburn construction-ready pending finalisation of project financing
- Nominal 18-month design and construct duration to achieve first ore to process facilities
- Located in the Tier-1 mining jurisdiction of Western Australia, close to key infrastructure and the dominant mineral sands market of Asia
- Engagement with global consumers confirms high demand for Coburn's products in both concentrate and final product form, providing a wide range of offtake and investment options
- DFS design shows Coburn can deliver both a high-value Heavy Mineral Concentrate product (HMC Case) or can be refined further to final products (Final Products Case)
- Development capital of A\$207m for HMC Case, with an additional A\$50m required for Final Products Case which includes MSP infrastructure
- Significant opportunities to grow project Reserves and mine life through evaluation of resources extending north and along strike of the current Reserves (Extension Case)

Strandline Resources (ASX: STA) is pleased to release the outstanding findings of the Definitive Feasibility Study (DFS) on its Coburn Mineral Sands Project in the Mid West of Western Australia.

The DFS confirms the project to be a world class next generation project in the Mineral Sands sector that will deliver strong financial returns over an initial 22.5-year mine life, has a high value product suite, can be mined using conventional methods and will be capital-efficient.

With key development approvals in place and the DFS now completed, the project is set for near term commercialisation at a favourable time in the mineral sands market when new supply is in high demand.

The DFS capitalises on value enhancements over previous project studies across areas including improved product recoveries through application of current technology, optimised mine plan, and improved product transport and power generation efficiencies.

Coburn Mineral Sands Project – Definitive Feasibility Study

Strandline Managing Director Luke Graham said: “This DFS confirms that Coburn is a world class project which will generate strong financial returns for shareholders.

“The ability to produce saleable products in both concentrate and final product form opens the door to a wide range of offtake and funding options for Coburn.

“The path to profitable production is relatively short, the payback period and rates of return are attractive and there is ample scope to grow mine life even further over time.”

Summary of DFS Financial Evaluation

The Coburn DFS represents a significant milestone in Strandline’s strategy to become a low-cost, high-margin mineral sands producer of relevance to key customers around the world.

The DFS metrics are summarised below:

Table 1 DFS Key Financial Metrics and Assumptions

Description	DFS Final Product Case ³	DFS HMC Case ³
NPV (8% WACC, Real, Pre Tax, no debt) ¹	\$551M	\$481M
IRR	32.3%	36.4%
Capital Expenditure (Pre-production)	A\$257M	A\$207M
Payback Period of Initial Capital from start of production ⁴	2.3 years	2.2 years
LOM Revenue	A\$3,906M	A\$3,417M
LOM OPEX C1 Costs inc transport	A\$1,778M	A\$1,622M
LOM All-in Sustaining Costs (AISC)	A\$1,973M	A\$1,793M
Revenue to C1 Cost Ratio	2.2	2.1
Annual Average Operating Margin	A\$364/t	A\$305/t
LOM Free Cash Flow (FCF) pre-tax	A\$1,610M	A\$1,357M
Key Assumptions		
Annual Production Rate (Steady State)	23.4Mt	23.4Mt
LOM Production (Ore Mined)	523.4Mt	523.4Mt
Mine Life	22.5 Years	22.5 Years
Annual Avg HMC Produced (from WCP)	229 kt/year	229 kt/year
Annual Avg Premium Zircon Production	32 kt/year	-
Annual Avg Zircon Concentrate Production	58 kt/year	-
Annual Avg HiTi90 Production	20 kt/year	-
Annual Avg Ilmenite Production	110 kt/year	-
Exchange Rate (A\$/US\$)	0.72	0.72
Product Price²		
LOM Avg HMC Price (FOB)	-	US\$479/t
LOM Avg Premium Zircon (FOB)	US\$1,480/t	-
LOM Avg Zircon Concentrate (FOB)	US\$871/t	-
LOM Avg HiTi90 (FOB)	US\$1,014/t	-
LOM Avg Ilmenite (FOB)	US\$267/t	-

Notes:

¹ The NPV has been calculated using project related costs only and does not consider Strandline’s corporate costs. DFS capital and operating costs have been developed in accordance with a ±10% accuracy

² Pricing assumptions for ilmenite, rutile and zircon were obtained from TZ Mineral International Pty Ltd’s (TZMI) mineral sands marketing report, titled *Titanium Feedstock Price Forecast February 2019*. TZMI pricing was then adjusted where appropriate to account for quality characteristics of the Coburn product. In the case of concentrate product (zircon concentrate), pricing was adjusted further to consider downstream handling costs

³ DFS contemplates two viable development options: (1) HMC Case producing a high-grade +95% heavy mineral concentrate (HMC) product (which can be sold to the downstream global processing market); (2) Final Products Case building an additional mineral separation plant to separate the valuable zircon and titanium minerals into final product form.

⁴ Pre-tax and ungeared

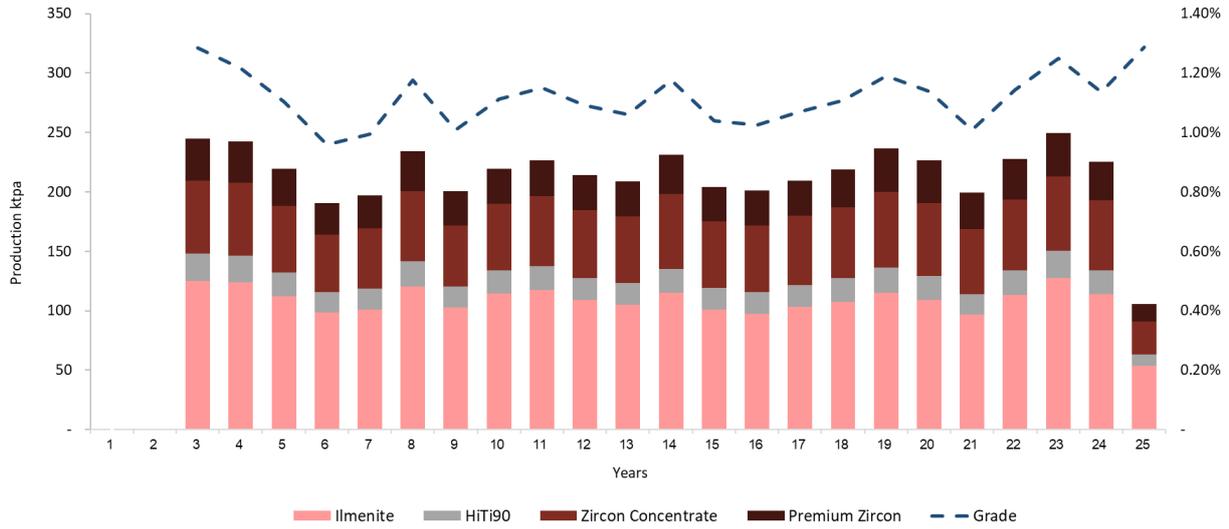


Figure 1 Yearly Project Production by Product

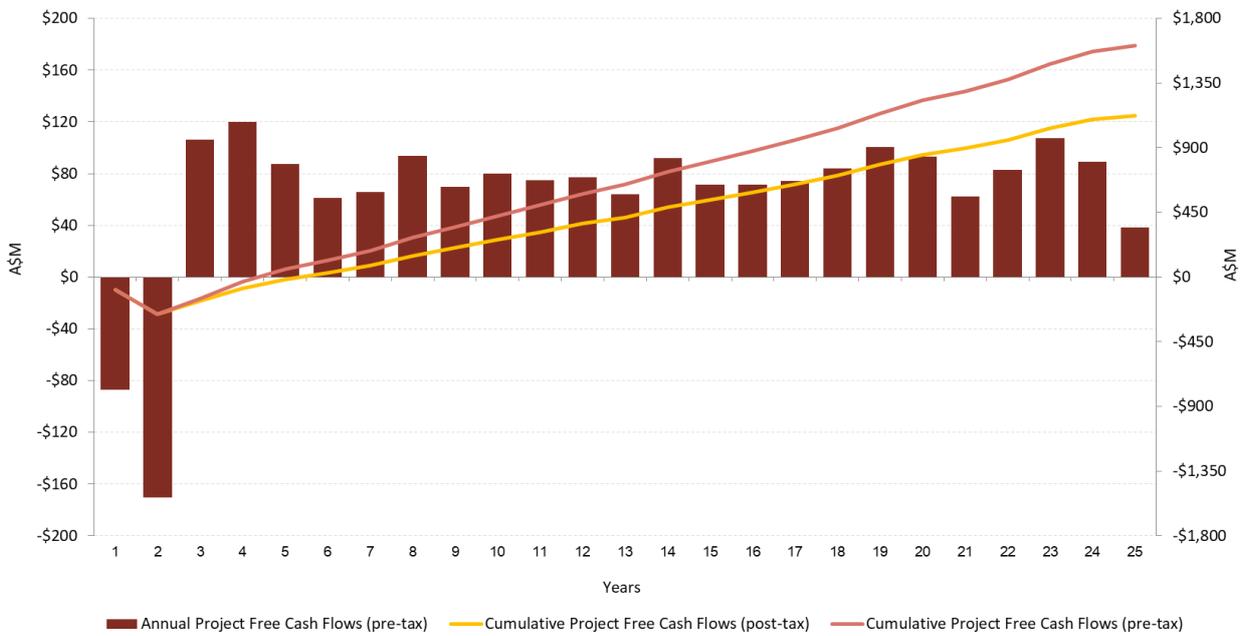


Figure 2 Yearly Project Free Cash Flows

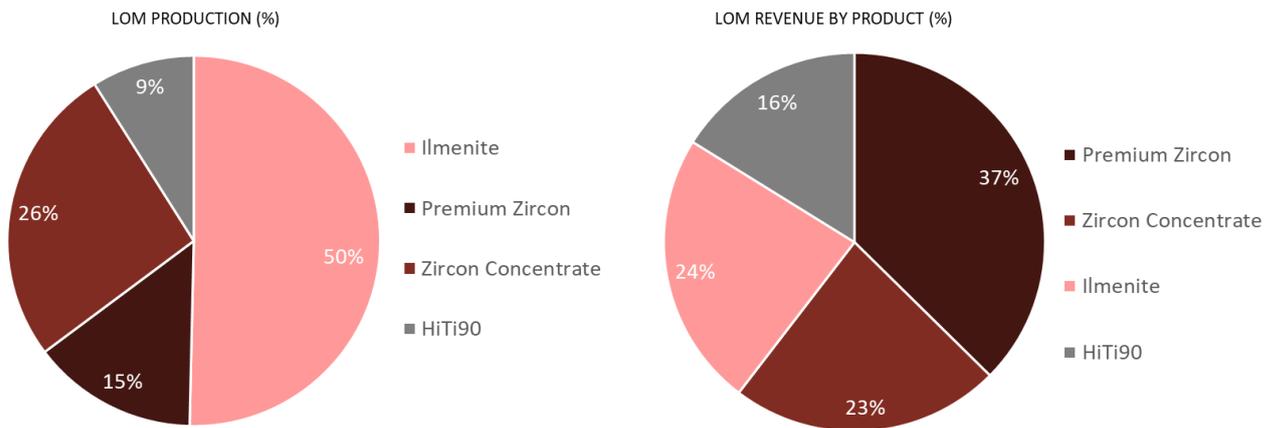


Figure 3 Life of Mine Project product and revenue

DFS Synopsis

The main conclusions of the Coburn DFS are as follows:

- The DFS has been compiled by a range of independent and experienced consultants, including GR Engineering Services, AMC Consultants, IHC Robbins, AECOM and TZMI’s Allied Mineral Laboratories
- The **DFS defines a realistic pathway to commercial production**; confirming the ability to produce highly marketable zircon-titanium mineral products with first ore to processing plant in a nominal 18 month period
- JORC compliant **Mineral Resources of 1.6Bt @ 1.2% total heavy mineral (THM)**, classified 119Mt (or 7%) Measured, 607Mt (or 38%) Indicated, and 880Mt Inferred (or 55%) provides the geological foundation for the project - ASX announcement 14 November 2018
- JORC compliant **Ore Reserve of 523Mt grading 1.11% THM for ~5.8Mt of contained heavy mineral, underpins an initial mine life of 22.5 years** at a mining rate of 23.4Mtpa - ASX announcement 16 April 2019
- **Immense potential to further increase project Reserves and mine life** through evaluation and conversion of resources extending north and along strike of the current Ore Reserves (refer “**Extension Case**”)
- **Mining study confirms a conventional open pit dry mining operation** where free-dig unconsolidated sand is mined using heavy mobile equipment reporting material to two (2) mobile Dozer Mining Units (DMU) and a mobile excavator mining unit (EMU). The DMU prepares the ore for processing and the ore is pumped in a slurry form to the processing plant. The EMU alternates between overburden removal and ore processing during periods of DMU movement
- Bulk metallurgical testwork of representative samples, using full scale or scalable processing equipment, confirms conventional processing capable of **producing high-quality products with exceptional pit-to-product recovery rates** achieved within both concentrate and final product streams
- Engineering trade-off studies were performed to optimise the processing route, product marketability and minimise project development risk
- DFS confirms an efficient and modern process design capable of producing a high-grade saleable 95% Heavy Mineral Concentrate (HMC) product from the Wet Concentrator Plant (WCP) and final products through further processing by the Mineral Separation Plant (MSP)
- Engagement with leading global mineral sands consumers during the **DFS confirms the saleability and strong market demand for Coburn’s products in both concentrate and final product form**. As such, the DFS contemplates development options for “**HMC Case**” (lower capital option) and “**Final Products Case**”

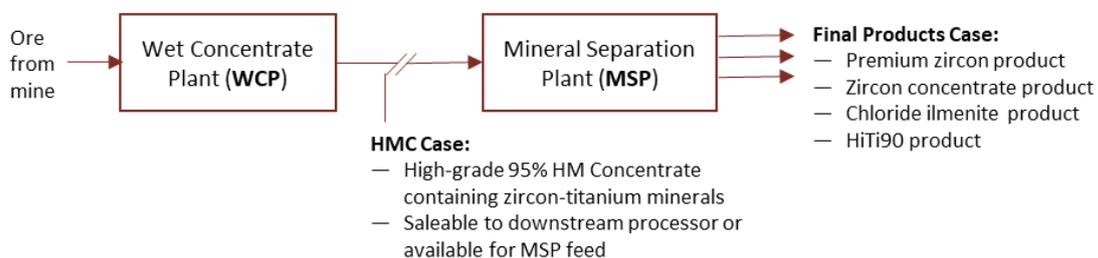


Figure 4 Block diagram of Coburn Process Units and Product Optionality

- The WCP design utilises multiple stages of high-capacity gravity separation and classification to produce a high grade HMC
- In the Final Product Case, the HMC will be processed in the MSP, using electrostatic separation, gravity and magnetic fractionation to produce a high-value product suite comprising a **premium zircon product** (66% ZrO₂), **zircon concentrate product** (28% ZrO₂ and 11% TiO₂), **HiTi90 product** (which combines the rutile and leucoxene minerals to produce a 90% TiO₂ blend) and a **chloride-grade ilmenite product** (62% TiO₂)
- Sand tails (including the coarse sands and slimes) from the WCP will be pumped to moveable tails stackers where the sand is separated from the lower density water and slime. The **sand is deposited in the pit and the water and slime are returned for thickening and subsequent co-disposal** in the pit amongst the sand

Coburn Mineral Sands Project – Definitive Feasibility Study

- The sand tails and slime material are then profiled and covered with stockpiled subsoils and topsoils to re-create the planned soil profile and final land form ready for **full rehabilitation**
- Products produced will be temporarily stored on site before being trucked on a continuous basis from the mine site to a dedicated staging facility located close to port, at Geraldton
- **Product inventory will be shipped in bulk form to the existing port of Geraldton. Geraldton port is an established mineral sands export facility**, with licences already in place to handle Coburn’s suite of minerals
- Water for operations will be supplied by a combination of sources including in-pit water if present, recycled sand tailings and slimes return water and raw water top-up from a local bore field
- Power for the operation will be supplied from a site power station operating on LNG (with diesel backup) with approximately 20% solar (renewable) penetration for the low voltage stable loads
- Project personnel will reside in a permanent village on site, catering for a drive-in-drive-out workforce. Additional temporary accommodation will be added to account for the peak construction period
- Other non-process infrastructure comprises product storage facilities, water treatment plant, waste management facilities, fuel storage and dispensary, water services, main 45km access road, site roads, laboratory, workshop, buildings, offices, mining compound and communications facilities
- The **project is a long life, multi decade operation and will generate a host of socio-economic benefits** including capital inflows to regional Australia, significant job creation, indigenous engagement, training and job diversity as well local business opportunities and community partnership programs
- **Key project development approvals are in place** (environmental, native title, heritage and mining) and the project is considered construction-ready pending finalisation of project financing
- The project overlays two pastoral leases, Coburn and Hamelin. **The Coburn Pastoral lease is 100% owned by Strandline, which covers the first 20 years of Ore Reserves.** The Hamelin Pastoral Lease, to the immediate north, is managed by others
- The project is co-located across two native title claims, the Nanda Native Title Claim and the Malgana Native Title Claim. **The Company has entered into appropriate formal agreements with the Native title holders**
- The DFS Final Products Case confirms a pre-tax (real) **NPV⁸ of A\$551 million** and an **IRR% of 32.3%**:
 - Project revenue for the initial 22.5 years is A\$3.91b based on TZMI’s February-2019 commodity price forecast, with a LOM operating cost (C1) of A\$1.78b and All-in-Sustaining-Cost (AISC) of A\$1.97b
 - An attractive revenue-to-C1 operating cost ratio of 2.2
 - Total pre-production capital expenditure is estimated to be A\$257 million with first ore delivered to process facilities nominally 78 weeks after project development commences
- The HMC Case offers the flexibility of a lower capital option compared to the Final Products Case (A\$207 million compared to \$257 million) or a potential staged development strategy
- The HMC Case shows a pre-tax (real) NPV⁸ of A\$481 million and an IRR% of 36.4%
- The Mine Life Extension Case (presented as Scoping Study findings) identifies the potential to further increase project Reserves and mine life through evaluation and conversion of resources extending north and along strike of the current Ore Reserves (refer “**Extension Case**” summary below)

Mine Life Extension Case – Scoping Study Findings

Potential exists to further increase project reserves, mine life and returns, through further economic evaluation of resources extending north and along strike of the DFS Ore Reserves. A Scoping Study assessment of Amy South Indicated and Inferred material, titled “Extension Case”, was undertaken concurrently with the DFS.

The purpose of the Scoping Study was to ascertain the financial benefits of a longer mine life by scheduling production targets from Indicated (7Mt @ 1.1% THM) and Inferred (702Mt @ 1.2% THM) Mineral Resources. The Mineral Resources lie north and directly adjacent to the current granted Mining and Retention Licences

Coburn Mineral Sands Project – Definitive Feasibility Study

and are interpreted to represent the strike continuation of the same body of mineralisation currently defined by the DFS Ore Reserves.

Mining, processing costs, metallurgical recoveries, product pricing from the DFS Final Products Case have been applied to the Mineral Resources used as the basis for this Scoping Study. This is considered appropriate with the production targets forming an extension to the DFS Ore Reserves. Refer Annexure 2 JORC Table 1, Section 1 to 4 for further details about the Extension Case Scoping Study.

The production targets are scheduled from year 23 when the current DFS Ore Reserves are depleted and additional feed is required. The **Extension Case adds 15 years of production to the mine life** (total 37.5 LOM).

The Extension Case confirms the potential to generate an **additional A\$3.08b of project revenue** (total project revenue when added to the DFS Final Products Case of A\$6.99b) and A\$1.73b EBITDA (total project EBITDA of A\$3.66b). Extension Case, when integrated with the DFS Final Products Case, shows a **pre-tax NPV⁸ of A\$710m**.

No upfront capital expenditure will be required to access the production target relating to the Extension Case, however additional sustaining capital cost has been allowed relating to 1 additional WCP move during year 29, borefields, site roads and land access. Key financial outcomes of the Extension Case Scoping Study include:

Table 2 Coburn Extension Case Scoping Study Financial Evaluation

Description	Extension Case	Extension Case integrated with DFS Final Product Case ¹
Mine Life	15 years	37.5
Mine Plan (Year)	22.5 to 37.5	1 to 37.5
Production (Ore Mined)	353.4Mt	876.8Mt
Annual Production Rate (Steady State)	23.4Mt	23.4Mt
NPV (8% WACC, Real, Pre Tax, no debt) ¹	-	A\$710m
IRR	-	32.4%
LOM Revenue	A\$3,079M	A6,985M
LOM OPEX C1 Costs inc transport	A\$1,200M	A\$2,978M
LOM All-in Sustaining Costs (AISC)	A\$1,354M	A\$3,327M
LOM EBITDA	A\$1,725M	A\$3,658M

Notes:

¹ For financial sensitivity analysis of the Extension Case (integrated with the Final Products Case) refer to Annexure 1 (DFS Presentation)

The Extension Case Scoping Study has a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realised. The stated Production Target is based on the Company's current expectation of future results or events and should not be solely relied upon by Investors when making investment decisions. Further evaluation work and appropriate studies are required to establish sufficient confidence that this target will be met.

The Extension Case Scoping Study has been undertaken to evaluate the financial impacts of extending the mine life at the Coburn Mineral Sands Project. It is a preliminary technical and economic study based on low level technical and economic assessments that are insufficient to support the estimation of ore reserves. The Production Target and forecast financial information is based on JORC (2012) Mineral Resources which are reported and classified at approximately 1% Indicated and 99% Inferred. Further exploration, evaluation work and appropriate studies are required before Strandline can estimate ore reserves or provide certainty of a development case for the Mine Life extension case. Given the uncertainties Investors should not make investment decisions solely on the results of the scoping study. No significant capital expenditure will be required to access the Production Target relating to the Extension Case, however additional sustaining capital cost has been allowed and based on calculations in the DFS. Investors should note that there is no certainty that Strandline will be able to raise funding when needed. It is also possible that funding may only be available on terms that may be dilutive to or otherwise affect the value of Strandline's shares.

Next Steps

Project financing and pre-execution activities to follow the DFS include:

- Advance project funding, offtake and strategic partner arrangements, including finalise selection of HMC or Final Product option
- Progress early works activities such as award of major work packages, stakeholder engagement and maintain project approvals in good standing in readiness for construction
- Achieve Final Investment Decision (FID) and commence execution of the project

Supporting Information

This document is to be read in conjunction with the information contained in Annexure 1 and 2 which contain a series of forward-looking statements disclosing details of the material assumptions and underlying methodologies for deriving the above-mentioned financial information and production targets, including price assumptions and operating cost assumptions. Strandline has concluded that it has a reasonable basis for providing these forward-looking statements and the forecast financial information included in this document and supporting slides. This includes a reasonable basis to expect that Strandline will be able to fund the development of the Coburn Mineral Sands Project when required in accordance with the information detailed in the supporting slides.

ABOUT STRANDLINE

Strandline Resources Limited (**ASX: STA**) is an emerging heavy mineral sands (**HMS**) developer with a growing portfolio of 100%-owned development assets located in Western Australia and within the world’s major zircon and titanium producing corridor in South East Africa. Strandline’s strategy is to develop and operate quality, high margin, expandable mining assets with market differentiation and global relevance.

Strandline’s project portfolio comprises development optionality, geographic diversity and scalability. This includes two zircon-rich, ‘development ready’ projects, the Fungoni Project in Tanzania and the large Coburn Project in Western Australia, as well as a series of titanium dominated exploration targets spread along 350km of highly prospective Tanzanian coastline, including the advanced Tanga South Project and Bagamoyo Project.

The Company’s focus is to continue its aggressive exploration and development strategy and execute its multi-tiered and staged growth plans to maximise shareholder value.

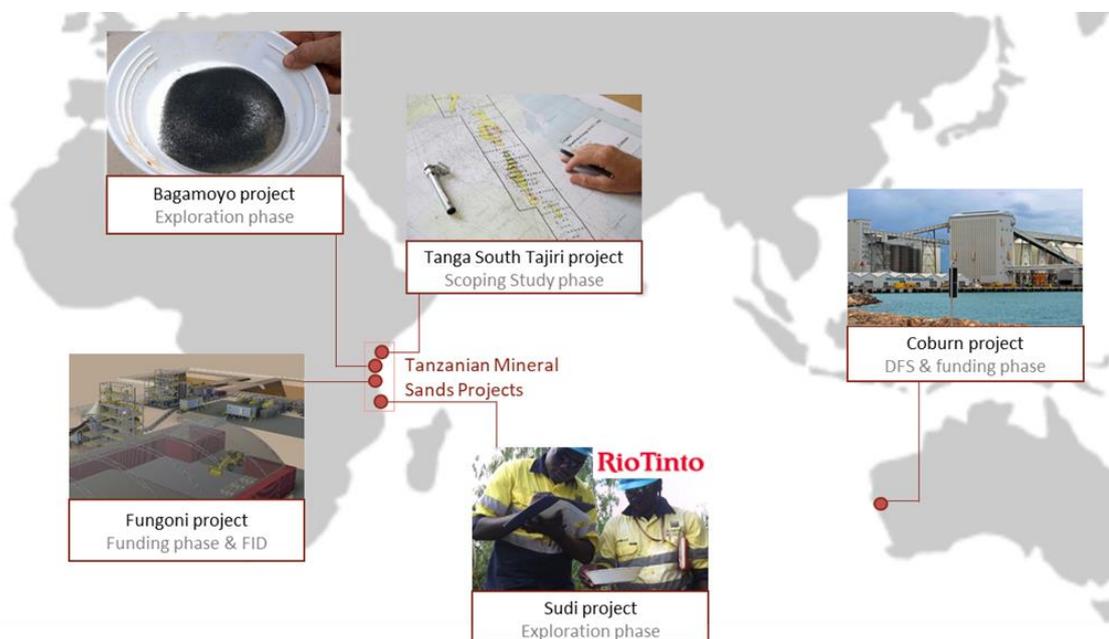


Figure 5 Strandline’s world-wide mineral sands exploration & development projects

MINERAL SANDS COMPETENT PERSON'S STATEMENTS

Exploration Results and Mineral Resource Estimation

The information in this report that relates to Exploration Results is based on, and fairly represents, information and supporting documentation prepared by Mr Brendan Cummins, Chief Geologist and employee of Strandline. Mr Cummins is a member of the Australian Institute of Geoscientists and he has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity which has been undertaken to qualify as Competent Persons as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Cummins consents to the inclusion in this release of the matters based on the information in the form and context in which they appear. Mr Cummins is a shareholder of Strandline Resources.

The information in this report that relates to Mineral Resources is based on, and fairly represents, information and supporting documentation prepared by Mr Greg Jones, (Consultant to Strandline and Geological Services Manager for IHC Robbins) and Mr Brendan Cummins (Chief Geologist and employee of Strandline). Mr Jones is a member of the Australian Institute of Mining and Metallurgy and Mr Cummins is a member of the Australian Institute of Geoscientists and both have sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration, and to the activities undertaken to qualify as Competent Persons as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Specifically, Mr Cummins is the Competent Person for the provision of the drill database, and completed the site inspection. Mr Jones is the Competent Person for the data integration and resource estimation. Mr Jones and Mr Cummins consent to the inclusion in this report of the matters based on their information in the form and context in which they appear.

Scoping Study Production Targets (No ore reserves declared)

The information in this report that relates to the Mine Extension Case Scoping Study is based on information compiled under the direction of Mr Adrian Jones. Mr Jones is a Member of the Australasian Institute of Mining and Metallurgy and is employed by AMC. Mr Jones has sufficient experience relevant to the style of mineralization and type of deposit under consideration to qualify as a Competent Person as defined in the JORC Code.

Non-mining modifying factors for the production targets are drawn from contributions provided by various sources as stated in the Coburn Ore Reserve announcement dated 16 April, 2019.

FORWARD LOOKING STATEMENTS

This report contains certain forward looking statements. Forward looking statements are only predictions and are subject to risks, uncertainties and assumptions which are outside of the control of Strandline. These risks, uncertainties and assumptions include commodity prices, currency fluctuations, economic and financial market conditions, environmental risks and legislative, fiscal or regulatory developments, political risks, project delay, approvals and cost estimates. Actual values, results or events may be materially different to those contained in this announcement. Given these uncertainties, readers are cautioned not to place reliance on forward looking statements. Any forward looking statements in this announcement reflect the views of Strandline only at the date of this announcement. Subject to any continuing obligations under applicable laws and ASX Listing Rules, Strandline does not undertake any obligation to update or revise any information or any of the forward looking statements in this announcement to reflect changes in events, conditions or circumstances on which any forward looking statements is based.

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Annexure 1 DFS Presentation

COBURN MINERAL SANDS PROJECT DEFINITIVE FEASIBILITY STUDY

STRANDLINE RESOURCES | APRIL 2019



STRANDLINE
resources limited



A World Class Asset for the Next Generation of Mineral Sands



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These statements are subject to significant risks and uncertainties that include but are not limited to those inherent in mine development and production, geological, mining, metallurgical and processing technical problems, the inability to obtain and maintain mine licenses, permits and other regulatory approvals required in connection with mining and processing operations, competition for among other things, capital, acquisitions of reserves, undeveloped lands and skilled personnel, incorrect assessments of the value of projects and acquisitions, changes in commodity prices and exchange rate, currency and interest rate fluctuations and other adverse economic conditions, the potential inability to market and sell products, various events which could disrupt operations and/or the transportation of mineral products, including labour stoppages and severe weather conditions, the demand for and availability of transportation services, environmental, native title, heritage, taxation and other legal problems, the potential inability to secure adequate financing and management's potential inability to anticipate and manage the foregoing factors and risks. There can be no assurance that forward-looking statements will prove to be correct.

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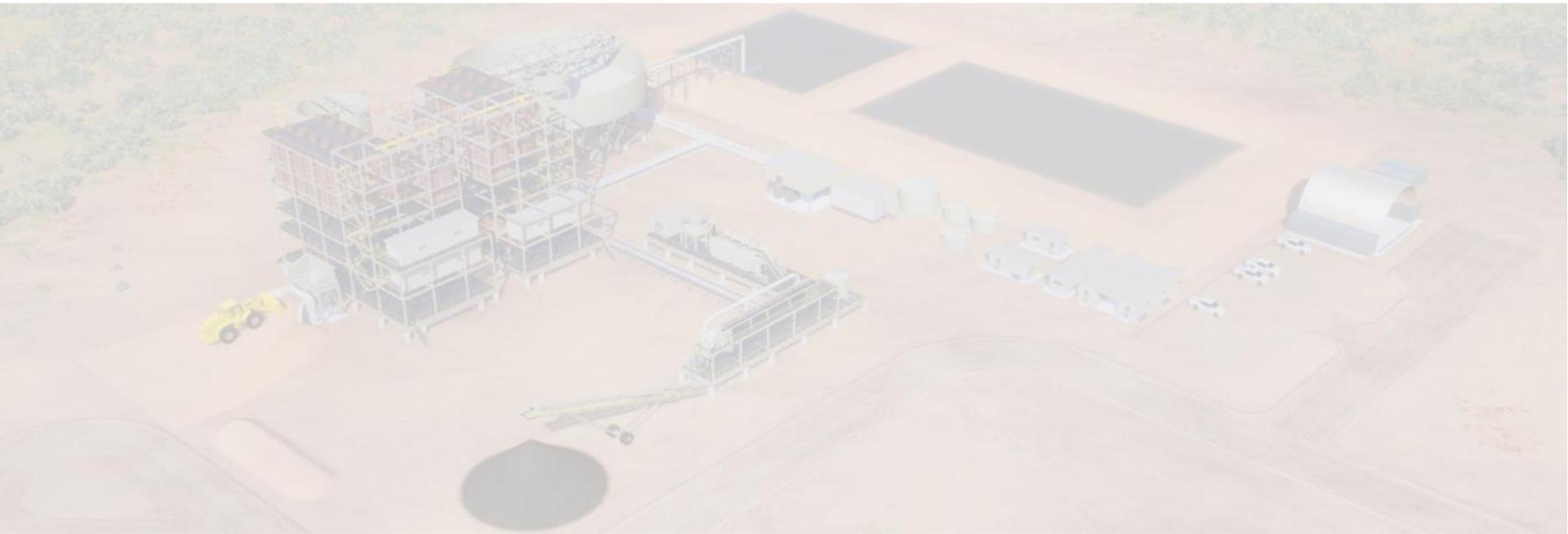


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SECTION I INTRODUCTION



ABOUT STRANDLINE



About Strandline	<ul style="list-style-type: none">▪ Strandline Resources Limited (“Strandline” or “the Company”) is an ASX listed resources company (ASX: STA), focused on the exploration and development of its portfolio of mineral sands assets in Australia and Tanzania▪ This includes two “development ready” projects - the Fungoni Mineral Sands Project in Tanzania and Coburn Minerals Sands Project (“Coburn” or “the Project”) in Western Australia▪ Strandline is pleased to announce the findings of the Definitive Feasibility Study (“DFS”) on its Coburn Project▪ Strandline initiated the Coburn DFS after receiving positive results from its internal project reviews and market engagement, which were undertaken in response to the strong upturn in the mineral sands market in recent years
Coburn DFS	<ul style="list-style-type: none">▪ The DFS confirms the project will deliver strong financial returns over an initial 22.5-year mine life, has a high value zircon-titanium product suite, can be mined using conventional methods and will be capital-efficient▪ The DFS capitalises on value enhancements over previous project studies across areas including, improved product recoveries through application of current technology, optimised mining plan, and improved product transport and power generation efficiencies▪ With key development approvals in place and the DFS now completed, the project is set for near term commercialisation at a favourable time in the mineral sands market when new supply is in high demand
Strandline’s Project Portfolio Snapshot	<ul style="list-style-type: none">▪ Strandline’s asset portfolio consists of 100% owned projects located in the two largest mineral sands producing jurisdictions of the world - Africa and Australia:<ul style="list-style-type: none">— Coburn - DFS completed (this document) by a range of independent and highly reputable consultant/contractor firms with experience in mineral sands and Australian project development— Fungoni – DFS completed and project financing due-diligence underway with Nedbank CIB mandated as Lead Arranger and Underwriter for US\$26m debt facility (total est. capex of US\$32m excl taxes, levies and financing fees)— Tanga South (Tajiri) – resource definition drilling completed to grow existing JORC resources of 147Mt @ 3.1% THM— Tanzania Generative Projects - exploration continuing at the Bagamoyo project in Central Tanzania and at the Sudi project in Southern Tanzania in JV with Rio Tinto



COBURN HIGHLIGHTS

Coburn DFS confirms the strong outlook for the Coburn mineral sands project. Coburn has an attractive high-value product suite and low cost operation with the ability to generate strong financial returns

- DFS confirms Strandline’s 100% owned Coburn project is one of largest and most advanced undeveloped mineral sands projects in the world
- DFS shows Coburn will generate strong financial returns with a Pre-Tax NPV of A\$551m (USD:AUD 0.72, 8% discount rate) and an IRR of 32%
- Large Ore Reserve of 523Mt @ 1.11% Total Heavy Mineral (THM) underpins an initial mine life of 22.5 years at the planned mining rate of 23.4Mtpa
- Life of Mine (LOM) revenue of A\$3.9b and LOM EBITDA of A\$1.9b, with a revenue-to-operating cost ratio of 2.2, based on TZMI’s Feb-2019 commodity price forecast
- Key development approvals already in place, including mining lease, environmental approval, native title and heritage agreements
- Nominal 18-month design and construct duration to achieve first ore to process facilities to coincide with industry-forecasted global supply shortage
- Located in the Tier-1 mining jurisdiction of Western Australia, close to key infrastructure and the dominant mineral sands market of Asia
- Engagement with global consumers confirms high demand for Coburn’s products in both concentrate and final product form, providing a wide range of offtake and investment options
- Coburn can deliver both a high-value Heavy Mineral Concentrate product (HMC Case) or can be refined further to final products (Final Products Case)
- Capital-efficient development of A\$206.7m for HMC Case, with an additional A\$50.7m required for Final Products Case which includes MSP infrastructure
- Significant opportunity to grow project Reserves and mine life through evaluation of resources extending north and along strike of current Reserves (Extension Case)

Key Financial Metrics

	DFS - Final Products Case	DFS – HMC Case
Mine Life	22.5yrs	22.5yrs
Ore Tonnes Mined	523Mt	523Mt
Ore Throughput	23.4Mtpa	23.4Mtpa
Capex	A\$257M	A\$207M
LOM Revenue	A\$3.91B	A\$3.42B
LOM Opex (C1)	A\$1.78B	A\$1.62B
LOM AISC	A\$1.97B	A\$1.79B
Avg. C1 Cost per Product Tonne	A\$346/t	A\$316/t
Avg. AISC per Product Tonne (“A”)	A\$397/t	A\$361/t
Avg. Basket Price (“B”)	A\$760/t	A\$665/t
Avg. Cash Margin (B-A)	A\$363/t	A\$304/t
LOM EBITDA	A\$1.93B	A\$1.62B
Avg. EBITDA	A\$86M	A\$69M
NPV ⁸ (pre-tax, real, no debt)	A\$551M	A\$481M
IRR (pre-tax, real, no debt)	32.3%	36.4%

Notes:

¹ The DFS is underpinned by the Coburn JORC-2012 compliant Ore Reserve Statement as per ASX dated 16 April 2019

² Refer Coburn DFS Announcement 16 April 2019

COBURN - DFS PARTNERS



The DFS was completed by a range of independent and highly reputable consultant/contractor firms with experience in mineral sands and Australian project development

The DFS represents a significant milestone in Strandline’s strategy to become a low-cost, high-margin mineral sands producer of relevance to key customers around the world. The DFS defines a proven project delivery plan and realistic pathway to commercial production; confirming the ability to achieve first ore to process facilities in 18 months from commencement of project execution

DFS Scope of Work

- Geological evaluation and JORC-2012 compliant Mineral Resource estimation
- Metallurgical testwork, characterisation and process flowsheet development
- Mining plan, design and JORC-2012 compliant Ore Reserve
- Hydrology, hydrogeology, and geotechnical analysis
- Process and non-process infrastructure engineering design
- Bulk earthworks, drainage and tailing management
- Product quality evaluation and pricing review
- Logistics relating to project implementation and operations
- Approvals, permitting and environmental-social impact
- Execution planning including implementation schedule
- Operations and maintenance philosophy
- Risk and opportunity assessment
- Capital and operating cost estimates ±10%
- Financial modelling and analysis



- Process and non-process infrastructure design, DFS capital-operating cost estimates and report compilation



- Geology and JORC-compliant Mineral Resource estimation



- Mine study, geotechnics, and JORC-compliant Ore Reserve development



- Tailings disposal



- Bulk metallurgical testwork and analysis (Allied Mineral Laboratories)



- Mineral sands commodity price forecast data



- Environmental impact assessment, hydrology, environmental monitoring and management plan
- Project approvals and permitting



- Corporate financial advisor

Notes:

1. AMC performed the geotechnical interpretations relating to the mining study building on the results from previous geotechnical analysis completed by Snowden



SECTION II PROJECT OVERVIEW





COBURN PROJECT LOCATION

The Coburn project is situated in the low risk, mining focused jurisdiction of Western Australia, 240km north of the established mineral sands export port of Geraldton, with favourable access to global consumers

- Coburn is located in the Gascoyne region of Western Australia (WA). WA is a Tier-1 global mining jurisdiction with a rich history of mining, including mineral sands operations
- Situated 40km west of North West Coastal Highway, linking to port of Geraldton some 240km to the south. Geraldton port is an established bulk mineral sands export facility with key materials handling and shiploader infrastructure already in place
- Coburn's Amy deposit is a large northerly trending zone of dune-hosted mineralisation with a strike length of approximately 35 km. The deposit runs adjacent and to the east of the Shark Bay World Heritage Property in the Shire of Shark Bay
- Carnarvon, a town of some 4,500 inhabitants, is the Gascoyne's regional centre and provides government, commercial and community services for the majority of the Region. However, Denham is the closest town to the Project, lying approximately 85 km to the north-west of the northern boundary of the Coburn mining tenements
- Most of the operational supplies, labour and professional services for Coburn will be accessed through Geraldton and other regional communities
- The Shark Bay district is located within a transitional climatic region that experiences an overlap of tropical and temperate zones, resulting in hot dry summers and mild winters
- Rainfall in the region is low and sporadic, with annual precipitation ranging from 200 to 400 mm. Average annual rainfall is about 212 mm at Hamelin Pool and the majority of rain falls between May and August. Consequently, the water supply for the project is to be sourced from underground via a purpose built bore field tapping into the Carnarvon Basin, which lies directly beneath the Project area
- The project area is influenced by southeast trade winds, which generate southerly winds for the majority of the year. The region can also experience tropical depressions, cyclones, summer troughs and lows and is categorised as Region C Cyclonic

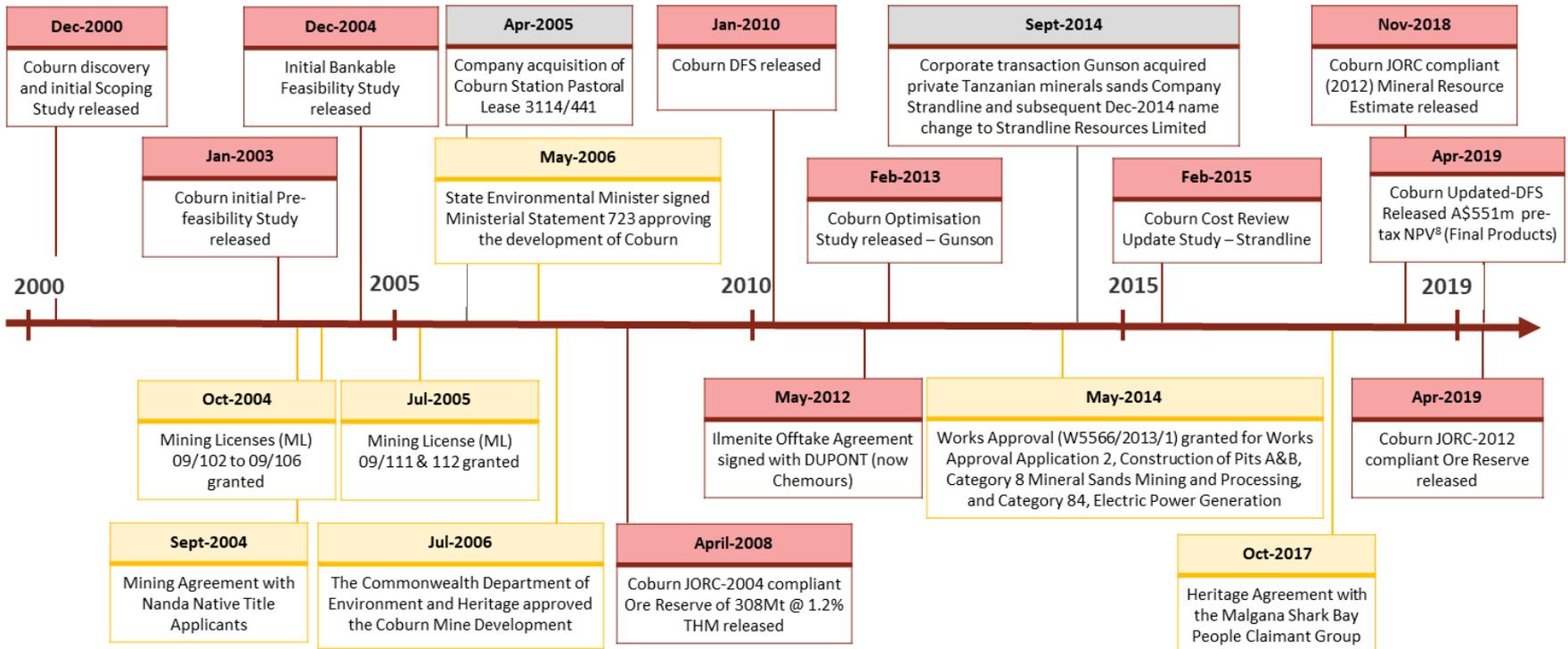


Image: Coburn Project Location Map with Mineral Resources and Tenement outline



HISTORY OF COBURN

The Coburn deposit was discovered in 2000 and has undergone multiple stages of evaluation and feasibility study assessment since. The timeline below provides a summary of the key project milestones achieved to date



- Significant Permits and Approvals
- Strandline actions (includes Gunson Resources activities)

Source: Company Announcements.



GEOLOGY AND MINERALISATION

Coburn is a world-scale mineral sands deposit, containing a rich zircon-titanium HM assemblage, with 20Mt of in-situ HM, low slimes, low oversize and strong geological continuity across and along strike

- Coburn’s Amy deposit was discovered in 2000 after prospectors identified that the ancient coastline at Coburn was an ideal trap-site for heavy mineral sands with its characteristic hook shape
- Mineralisation consists of an accumulation of mainly aeolian sands deposited over a Cretaceous basement of clays, clayey sands and limestone
- A total of 3 dune sequences containing heavy mineral are recognised across the project area
- The Amy South mineralisation has a strike length of approximately 27 km, a width up to 3 km and a maximum thickness of approximately 50 metres. Amy North adds a further 6km in strike length
- IHC Robbins issued (November-2018) JORC compliant Global Mineral Resource estimate of 1.6Bt HM at 1.2% THM (cut-off grade of 0.8%)
- Measured-Indicated resources of 726Mt at 1.3% THM contained in the Amy South deposit (doesn’t include Amy North) have been evaluated as part of the DFS and updated Ore Reserve
- Amy South deposit comprises an exceptionally rich heavy mineral assemblage of 22% zircon, 12% rutile-leucoxene and 48% ilmenite
- Indicated-Inferred resources extending north and along strike of the Ore Reserve, totals 709Mt at 1.2% THM which have been evaluated in the Mine Life “Extension Case” Scoping Study

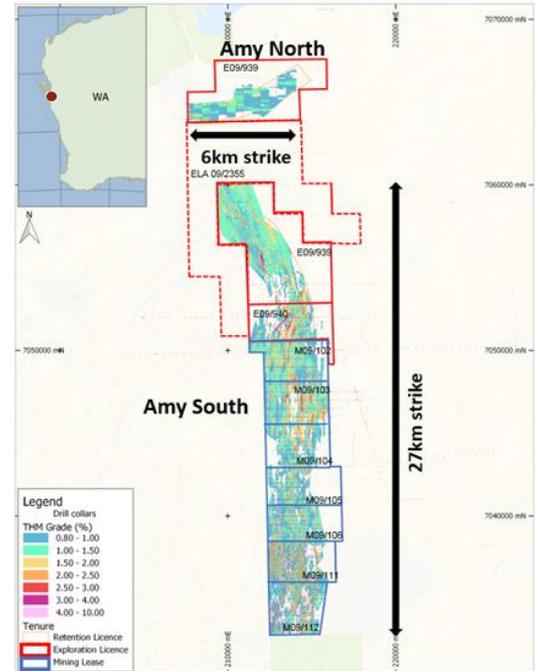


Image: Coburn Mineral Resource and Tenement Outline

- Notes:
1. Mineral Resources reported at a cut-off grade of 0.8% THM
 2. Valuable Mineral assemblage is reported as a percentage of in situ THM content
 3. Appropriate rounding applied

Source: Coburn Updated JORC compliant Mineral Resource estimate, 14 November 2018

Coburn JORC-2012 Global Mineral Resources – Amy South and Amy North^{1,2,3}

Resource Category	Ore ⁽¹⁾			Valuable HM Grade (In-Situ) ⁽²⁾					
	Material (Mt)	In situ THM (Mt)	THM (%)	Ilmenite (%)	Rutile (%)	Zircon (%)	Leucoxene (%)	Slimes (%)	Oversize (%)
Measured	119	1.5	1.3	45	5	24	6	3	6
Indicated	607	7.7	1.3	48	7	22	5	3	3
Inferred	880	10.4	1.2	49	7	21	4	3	1
Total	1606	19.6	1.2	48	7	22	5	3	2



JORC COMPLIANT ORE RESERVES UNDERPIN THE DFS

Large Ore Reserve of 523Mt @ 1.11% Total Heavy Mineral (THM) underpins an initial mine life of 22.5 years at the planned mining rate of 23.4Mtpa of ore

An April-2019 JORC compliant Ore Reserve of 523Mt @ 1.11% THM underpins the DFS:

- Pit optimization was completed on the Mineral Resource model by specialist mineral sands mining consultants AMC to define the economic limits of open pit mining
- AMC also performed the geotechnical interpretations relating to the mining study building on the results from previous geotechnical analysis completed by Snowden
- Ground condition typically comprise unconsolidated sand, with shallow and free digging discontinuous calcrete layers of various thickness. Pit slopes were subsequently designed at a batter face angle of 34° and a berm of 5m utilised for every 20m of batter height
- Major assumptions used for pit optimization were pit slopes (defined above), processing recoveries defined from metallurgical test work, product prices and operating costs derived from DFS studies
- Mining dilution of 0% was assumed, as all material within the mineralized horizon is treated as ore due to the non-selective nature of a bulk tonnage mining operations. Mining recovery of 100% was assumed, as all material within the mineralized mining zone was treated as ore and edge losses are expected to be minimal. A minimum mining width of 100m was used to accommodate the DMU and its infrastructure at the base of the pit
- Inferred Mineral Resources were not assessed as part of DFS

Coburn Project JORC 2012 Ore Reserve Statement April-2019

ORE RESERVES SUMMARY FOR COBURN PROJECT				
Deposit	Reserve Category	Ore	Heavy Mineral	
		(Mt)	HM (Mt)	THM (%)
Coburn - Amy South	Proved	106	1.16	1.10
Coburn - Amy South	Probable	417	4.66	1.12
	Total¹	523	5.83	1.11

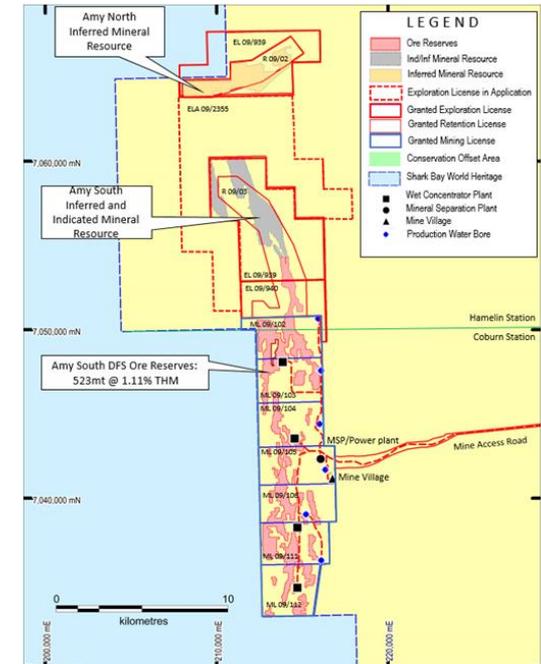


Image: Coburn Project Mine Pit and Tenement Outline

Notes:

1. Total may deviate from the arithmetic sum due to rounding.

Source: Coburn Updated JORC compliant Ore Reserve Statement, 16 April 2019



MINING METHODOLOGY

Conventional open pit dry mining in free-dig sand using D11 dozers feeding mobile Dozer Mining Units (DMUs), with in pit tailings deposition and progressive backfill and rehabilitation

- Seeds will be collected from vegetation across the orebody prior to the vegetation being removed by heavy mobile equipment. Collected seeds will be used in the mine rehabilitation process
- Topsoil and Subsoil material will be stripped by dozer or scraper and will be either placed in stockpiles in the vicinity of the pit or placed directly on top of recontoured tails areas. Both topsoil and subsoil will be managed to minimize stockpile duration
- Overburden, where present, will be removed by large capacity bulldozers and placed in the pit void immediately behind the mined-out ore. Interburden removal is carried out by an excavator and the EMU (Excavator Mining Unit). No drill and blast is required
- Ore is pushed by a fleet of D11 manned carry dozers to DMUs (dozer trap), oversized material is wet screened separated from the slurry undersize which is subsequently pumped to the ore processing facilities. The DMU's are skid mounted and moved on average every 6 days during the LOM. The EMU alternates between overburden removal and ore processing during periods of DMU movement
- Grade control of the ore has been defined through the mine optimisation and scheduling process to achieve the target feed head grade to the plant. Operation efficiency of the dozers will be aided by the application of modern GPS tracking and level control technology
- The mining and related earthmoving activities will be delivered under a contract mining arrangement. The mining contractor will be responsible for efficiently feeding material to the EMU and DMU's as per the mine plan and also performing the necessary contouring of tails and in-pit slimes, subsoil-topsoil replacement, haul road maintenance, bench management and drainage, in pit dewatering and re-contouring of the completed pit area in readiness for rehabilitation
- Strandline will be responsible for statutory duties, technical services, geology and detailed mine planning, potable water, power and communication systems

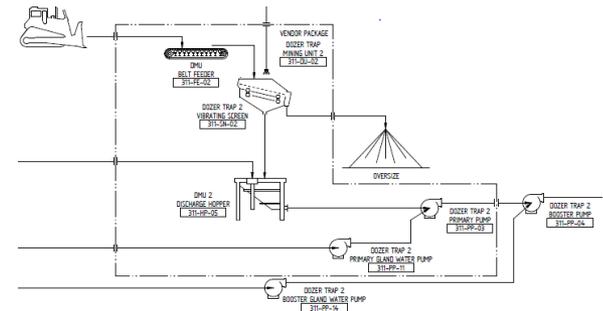


Image: DFS Dozer Mining Unit Schematic Diagram



Image: Conventional Dozer Push Mining Method



MINING SEQUENCE

Coburn provides a large homogenous orebody with mineralisation outcropping in places. The grade, HM assemblage and slimes content remain relatively consistent throughout the DFS mine plan

- Coburn project comprises mining, retention and exploration tenure which are owned 100% by Strandline, with the initial 22.5 years of mining operations based on Ore Reserves
- Mining pits were designed and collated into high level yearly panels for the purposes of scheduling. The image (right) shows the mining block sequence across the Ore Reserves
- Slope angles used in the pit design is shown in the below image
- Average waste-to-ore strip ratio is 0.7. Average pit depth is 23m and maximum depth is 62m
- Significant potential to increase the Coburn Reserves and extend the mine life through continued optimisation of the mine plan as product pricing improves, as well as undertaking economic evaluation of the existing Mineral Resources that lie north along strike of the current Reserves
- The Amy South Indicated-Inferred classified resources, that lie north of the granted Mining Licence and extending onto a granted Retention Licence, is interpreted to represent the strike continuation of the same body of mineralisation as currently defined by the Ore Reserves (refer Scoping Study “**Extension Case**”)



Image: Coburn Test Pit highlighting dry free flowing yellow sand with very low slime content, minimal loamy red sand and no calcrete

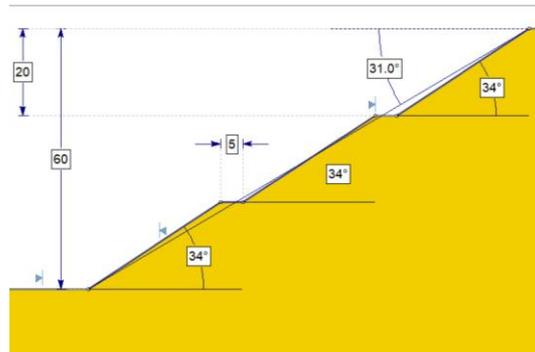


Image: DFS design basis for mine pit batter-berm slope configuration

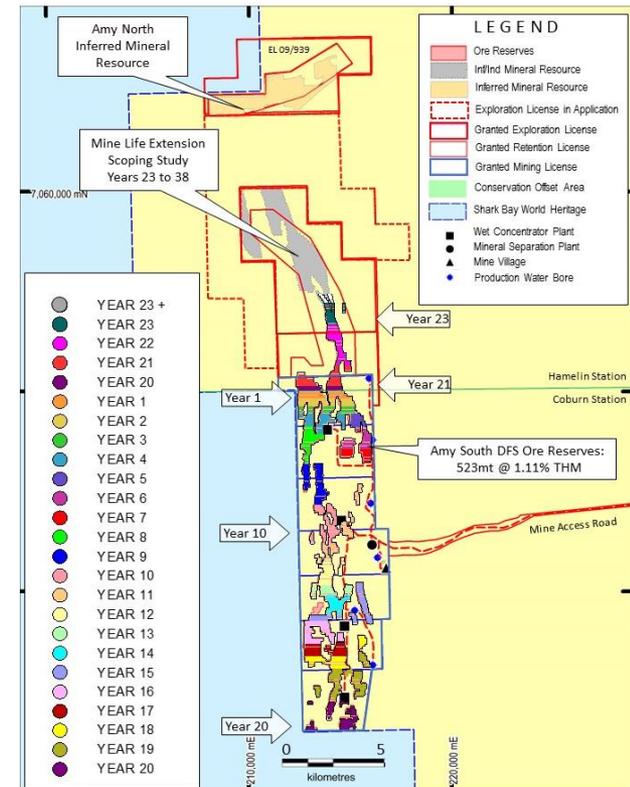


Image: Coburn DFS Mine Pit Site Layout and Sequence



MINE BACKFILL AND REHABILITATION

Coburn's proposed method of rehabilitation and mine closure is well proven in the mineral sands industry with progressive back-fill and rehabilitation to the pre-mining state

- Tails (including the coarse sand and slime) from the WCP will be pumped to moveable tails stackers comprising a cluster of cyclones, which separate the sand from the lower density water and slime. The sand is deposited in the pit and the water and slime are returned to the thickener at the WCP
- Coburn's extremely low slime content of 2.6% makes it amenable to efficient co-disposal due to the high sand-to-slime ratio and the characteristics of the slime
- The slime is flocculated in the thickener and returned via pump to the same tails stacker in the pit, resulting in disposal of slime in amongst the coarse sand (co-disposal)
- The sand tails and slimes stockpile are then profiled by dozer prior to the desired landform contour in readiness for rehabilitation
- The tails is then covered with stockpiled subsoil and topsoil to re-create the planned soil profile and final land form
- Once the desired landform is achieved, the area may be ripped. Ripping loosens the soil and encourages the spread of plant roots required for healthy vegetation and decreases wind and water erosion. Vegetation cover is re-established as a priority as soon as the soil profile is ready. Soil and vegetation is monitored against baseline studies undertaken prior to disturbance
- Groundwater levels are monitored during operations as per management plans. Rehabilitated areas are monitored for up to two years after mining has ceased.
- A mine closure management plan has been developed by the Company and approved by the relevant authority



Image: Typical Co-disposal of Sand Tails and Slimes



Image: Coburn Project Landscape



PROCESSING – TESTWORK AND PRODUCT RECOVERIES

Extensive metallurgical testwork and market testing has been carried out on the Coburn material over the last decade. The DFS performed an additional representative bulk sample testwork program to determine an optimum process configuration and product suite using modern technology

Bulk metallurgical Testwork 2018-2019

- High quality final products have been achieved from the DFS through the process flowsheet metallurgical testwork program
- The bulk testwork utilised modern, full scale or scalable beneficiation and mineral separation equipment
- A total of 23.4t of bulk sample was collected across the Coburn ore body to be representative of the Ore Reserve grade of 1.1% to 1.2% THM
- Engineering trade-off studies were performed to optimise the processing route, product marketability and minimise project development risk
- The testwork confirmed a process circuit capable of producing a high-grade saleable 95% Heavy Mineral Concentrate (HMC) product from the Wet Concentrator Plant (WCP), and final finished products through further processing by the Mineral Separation Plant (MSP)
- Engagement with leading global mineral sands consumers during the DFS confirmed the saleability and high market appeal of Coburn’s products in both concentrate and final product form. As such, the DFS presents development options for the “HMC Case” and “Final Products Case”
- A key feature is the uplift in separation efficiency using modern technology (resulting in improved WCP and MSP recoveries compared to previous testwork)

Product	WCP Recovery (%)		MSP Recovery (%) ³		MSP Yield to saleable products (%) ⁵
	Previous Test Program ²	2018/19 Test Program	Previous Test Program ²	2018/19 Test Program	2018/19 Test Program
Ilmenite	81	86.8	81	95.4	103.9
HiTi90¹	84	87.7	69	70.9	77.0
Zircon	94	98.2	73	98.7⁴	98.8

Source: DFS Metallurgical Testwork Results – refer ASX Announcement 01 April 2019

Notes:

1. HiTi product contains rutile and leucoxene mineral species.
2. Previous Test Program: results from testwork program Allied Mineral Laboratories report February 2010 titled “Testwork and flowsheet development (in consultation with Sedgman Pty Ltd and Titanatek Pty Ltd)”
3. MSP Recoveries are for actual mineral species.
4. MSP zircon recovery comprises 54.8% into premium zircon and a further 43.9% into zircon concentrate as contained zircon.
5. Actual yields into saleable products are higher due to contributions from other minerals. For example, ilmenite product contains a contribution from leucoxene that was not recovered into HiTi90 product.



PROCESSING – WET CONCENTRATION PLANT

The WCP receives ore from the mining units and associated pumping system at an average rate of 3,000tph. A high grade 95% Heavy Mineral Concentrate is produced through multiple stages of high efficiency gravity separation and classification technology

Wet Concentration Plant (WCP)

- The WCP beneficiates the heavy minerals (ilmenite, leucoxene, rutile, zircon) and rejects the non-valuable, lighter minerals through multiple stages of high-capacity gravity separation and classification
- WCP process is designed to produce Heavy Mineral Concentrate (HMC) containing nominally 95% HM
- The WCP infrastructure is relocatable and is planned to be moved as mining advances along the orebody in years 8, 10, 18 & 19
- HMC is transported to the MSP and stockpiled ready for feeding

- The HMC contains on average 25% zircon, 47% ilmenite, 5% leucoxene, 6% rutile, 12% light HM and 5% free silica



Image: Coburn Preliminary 3-D Model of WCP Infrastructure

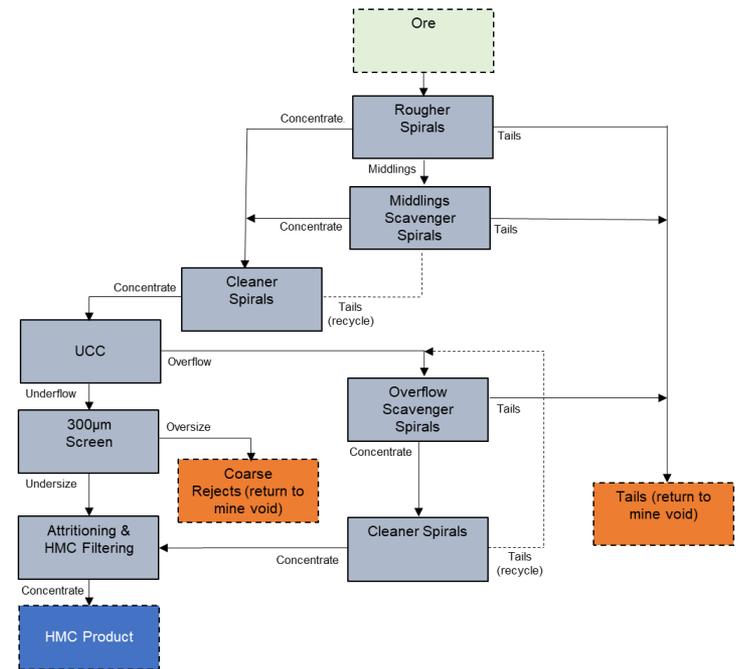


Image: Coburn WCP Process Flowsheet Diagram

Source: For more detail on DFS Metallurgical Testwork refer ASX Announcement 01 April 2019



PROCESSING – MINERAL SEPARATION PLANT

The MSP utilises modern, but conventional process equipment to enhance product recovery, quality or marketability. Premium zircon, zircon concentrate, chloride-grade ilmenite and HiTi90 products will be produced at the MSP

Mineral Separation Plant (MSP)

- HMC is dried, screened to remove any trash material and then passed through an electrostatic rolls separator circuit to separate non-conductor mineral from conductor mineral
- Conductive HM proceeds through the conductor circuit via a magnetic circuit to produce HiTi and ilmenite final products
- Non-conductive HM proceeds through the non-conductor circuit to produce premium zircon and zircon concentrate

- The introduction of a zircon concentrate stream (as a co-product to the premium zircon) contributes to the significant increase in overall zircon recovery at the MSP
- The MSP is not designed to be relocated and all major mine infrastructure is located at the MSP site, including power generation, administration, workshops, stores and accommodation village nearby



Image: Coburn Preliminary 3-D Model of MSP Infrastructure

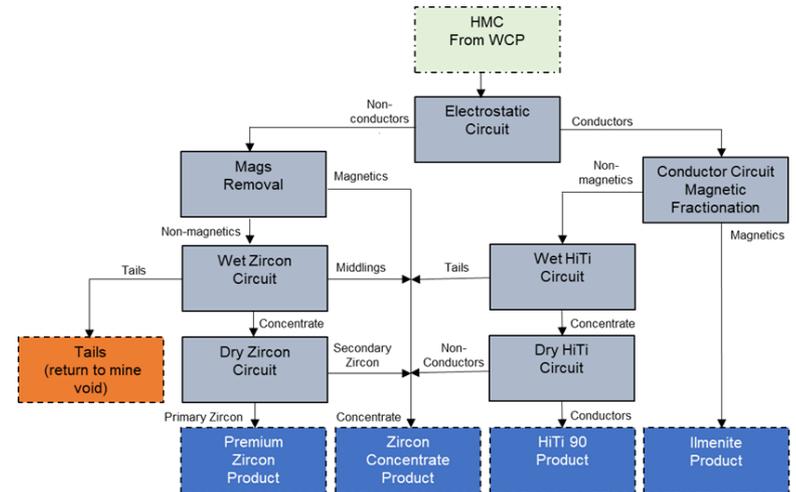


Image: Coburn MSP Process Flowsheet Diagram

Source: For more detail on DFS Metallurgical Testwork refer ASX Announcement 01 April 2019



LOGISTICS & PORT INFRASTRUCTURE

Coburn benefits from access to existing major road infrastructure linking it to the established mineral sands export port of Geraldton, some 240kms south

- Coburn products will be sold in bulk cargo form to global mineral sands customers. Product will be trucked (via triple road train payload 103t) on a continuous basis from the mine site to a dedicated staging facility located close to port, at Narngulu, Geraldton
- The Narngulu product staging facility footprint will be 6,500m² (storage capacity of 60,000t of product), with bays to segregate products to ensure non-contamination
- The staging facility will be purpose designed, installed and operated on a Build Own Operate basis by an experience trucking and logistics contractor
- Mineral concentrate will accumulate until enough product is available for delivery to the Geraldton port facilities for shipment. Pocket road train combinations will deliver the cargo on a campaign basis from the staging facility to the drive over hopper at Geraldton port that connects with Berth 4
- The existing Geraldton port handling and shiploading infrastructure (managed by Mid West Ports Authority) will be used to receive and transfer the product onto the ship. Strandline has entered into a Joint Cooperation Agreement with MWPA in order to finalise an appropriate Port Services Agreement required for the operations phase
- Geraldton port is an established bulk mineral sands export port, with export licences already in place to handle Coburn’s suite of minerals. Shipments will be arranged individually per product and will vary in accordance with the production plan and customer requirements



Image: Ariel View of Geraldton Port Infrastructure



Image: Geraldton Port Facilities (Top) and Shiploader (Bottom)



Product	Average Annual Production (t)	Size of Shipment (t)	Number of Shipments Per Year	Nominal Frequency
Zircon	32,000	6,000-12,000	4	Quarterly
Zircon Concentrate	58,000	6,000-12,000	6	Bi Monthly
HiTi90	20,000	6,000-12,000	4	Quarterly
Ilmenite	110,000	10,000-20,000	12	Monthly

Image: Coburn’s Indicative Shipping Schedule Per Product



NON PROCESS INFRASTRUCTURE

Main Access Roads

- A 43.5km sealed bitumen access road connects the processing and administration facilities with the North West Coastal Highway (NWCH) located to the east. The road will be designed to take triple road trains carrying 103t payloads and the intersection with the NWCH will be designed to Western Australian Main Roads Department standards
- Several unsealed access roads across the mining lease area will also be constructed, including a road to link to the accommodation village, WCP (designed to handle triple road train movements) and other minor roads suitable for 4wd maintenance vehicles to access the MFU and bore field locations

Site Bulk Earthworks and Drainage

- The WCP and MSP facilities will each be established on a single level pad, founded in cut material
- The MSP facility, administration area, power station and fuel storage facilities will be contained in an area approximately 250 m long and 250 m wide and located to avoid the major local water courses. The site is naturally drained to the north east
- The WCP facility and associated infrastructure area will be contained in an area approximately 150 m long and 150 m wide and initially located centrally to the first mining pits comprising years 1 to 8. The site is naturally draining into the pit area
- The design basis allows for 100 mm of top soil to be removed across the site and stored within 2 km for future reuse during mine closure. Based on the site investigation conducted by Snowden in 2006, the bearing capacity of the subgrade (insitu material) is estimated to be in the order of 150kPa, typical of loose sands and silty sands. Based on the outcomes of the site investigation, detailed excavation and engineered backfill with 500 mm of selected material will be required under the major structures
- A HDPE lined 5,000 m³ settling pond and interconnected 10,000 m³ process water pond will be constructed at the WCP and a 30,000 m³ raw water pond will be constructed at the MSP



Image: Typical Triple Road Train Configuration



Image: Typical HDPE lined Water Pond



NON PROCESS INFRASTRUCTURE

Site Accommodation

- Operations personnel will reside in a 200 person permanent village located approximately 2.5 km south of the MSP facility. The facilities will be installed progressively in multiple stages to align with the development schedule and manning level. Additional temporary accommodation units will be added to account for peak manning requirements during construction
- The permanent rooms are designed ergonomically and to minimise disturbance

Power Supply

- Electricity for the project will be supplied from a site power station operating on LNG. The power station is located near some of the main permanently located infrastructure at the MSP. The power station is suitable for a maximum demand capacity of 16 MW and average consumed power of 12 MW. The MSP makes up 1.3 MW of average consumed power demand. Cost of power is forecast to be A\$0.17/kWh
- The power solution for the DFS is trucked LNG to an on-site storage and re-vapourisation facility under a Build Own Operate Maintain (BOOM) arrangement with a gas supplier. The gas then feeds a set of gas engine generators (with diesel backup) on an N+1 basis and has approximately 20% solar (renewable) penetration for the low voltage stable loads, again on a BOOM arrangement. Details of the final solution to be determined through the detailed design phase
- Overhead power lines will be installed to distribute power to the various project loads. Generation is at 11kV with step up to 22kV for power transmission lines
- At each connection point, a transformer will be installed to convert the high voltage supply to industry standard 415Vac. Power at 415Vac is distributed throughout the site to the various transportable air-conditioned substations and distribution points
- Reticulation to the mobile pieces of equipment including the DMUs, booster pumps and tailings stackers will be via 22kv trailing cables. In conjunction with the overhead power line, an optical fibre cable will be installed to establish the communications system backbone for the Project site



Image: Typical Site Accommodation Village



Image: Typical Power Station Facility



NON PROCESS INFRASTRUCTURE

Water Supply

- Water is required by the project for the processing plant, domestic use at the village and the plant amenities and dust suppression. Under an equilibrium operation scenario, ~8.5 GL/annum of water consumption is estimated and a peak consumption of 15.2 GL/ annum at the beginning of operations when return water is negligible
- Process water is sourced from 6 telemetry controlled bores, spaced approximately evenly across the project area. Each bore pumps from a depth of ~120 m (actual bore depth 350m to 400m) at a rate of 360 m³/h
- The water system has been designed to maximise water recycling and minimise bore water demands. Bores (CPB3, 4, 6) located to the north of the MSP will feed directly into the Process water dam (located at the WCP). Bores (CPB1, 2, 5) located to the south of the MSP will feed directly to the MSP Raw water dam. The MSP raw water dam provides top up as required to the WCP process water dam

Water Treatment Plant (WTP)

- Desalinated RO (Reverse Osmosis) water is required to facilitate good mineral separation in the MSP circuit and supply potable water to various mine site facilities. A 1,000m³ per hour RO plant will be installed at the MSP and be fed from the raw water stored in a tank located at the MSP. Pumps from this tank maintain constant pressure to the RO plants. Fresh water produced will be stored in a 450 m³ capacity MSP fresh water tank, which supplies the MSP, along with two 32m³ tanks at the WCP
- A separate RO plant will produce potable water for use at the village, MSP offices, administration facilities, WCP and mining contractor's compound
- Excess water produced by the MSP, including waste brine from the RO plant, will be rejected into the process water dam, where it will be diluted with bore water and reused in the process



Image: Typical Bore Field Pump Station



Image: Typical Water Treatment Plant



NON PROCESS INFRASTRUCTURE

Waste Management

- Waste generated from the project will be managed in accordance with the Environment Impact Assessment (EIA) requirements
- Domestic waste such as paper, food, glass and plastics will be housed in a class II (or III) landfill facility. Hazardous and healthcare waste will be stored in drums or closed bins in accordance with the guidelines issued for the management of hazardous waste and EIA requirements and transported off site to a suitable handling and treatment facility
- Non-hazardous industrial waste, such as scrap building materials, bricks, metal and wood/timber, will be generated during the project lifestyle. These wastes will be disposed in the landfill facility. Scrap metal and other recyclables will be collected and sold to a licensed contractor
- Domestic waste water will be generated at the MSP/Administration and village area and will be pumped to a dedicated Waste Water Treatment Plant (WWTP) located at the village area MSP. The WCP will have its own dedicated and relocatable WWTP
- Effluent will be treated to meet the stringent discharge and reuse standards to comply with Local Government and Health Department Regulations. Waste water from the WWTPs will be pumped to a spray dispersal area located away from the facility being serviced

Site Building, Offices and Security Facilities

- Site buildings will be located at the WCP and MSP processing plant sites. Site buildings include reception, office rooms, crib rooms, control rooms, training area, first aid clinic/medical centre, certified laboratory, meeting rooms, workshop, warehouse, amenities, data rooms and storage areas
- The buildings at the WCP will be transportable and will be of a single module design. The workshop and store at the WCP will consist of dome covered 12m containers

Mining Facilities and Buildings

- The mining contract will be assigned a dedicated compound and hard stand area to house its buildings, workshop, wash down facility and associated mining equipment



Image: Typical Waste Water Treatment Plant



Image: Typical Mine Workshop Facilities

NON PROCESS INFRASTRUCTURE



Fuel Storage and Dispensary

- The project includes two types of fuel storage facility; a liquid natural gas (LNG) for the power station and MSP dryers and diesel storage and dispensing for light vehicles, plant equipment and mining vehicles
- The LNG storage and dispensing facility will be supplied, installed, operated and maintained under a BOOM commercial model. LNG will be delivered to the LNG facility by cryogenic road tankers where it will be held on consignment and vaporised, odorised and pressure regulated prior to delivery to the power station
- LNG storage will consist of 3 x 350kL horizontal storage tanks, providing 385 tonnes of storage. The LNG facility will include ambient air vaporisers, with gas supplied at a minimum of 15 degrees C below ambient temperature
- The plant diesel fuel facility will be located at the MSP plant and dispensing for vehicles will be controlled used a magnetic card system. The fuel storage facility will consist of a single 55,000 litre, fuel double contained horizontal tank. Diesel fuel will be delivered to site by road using road tankers. There will be a single point loading facility with reticulated pipework to transfer diesel fuel to the tank. The offloading and dispensing areas will be bunded to contain any spillage
- Plant consumption is estimated at 423,140 litres per annum excluding the mining contractor use. The mining contractor will be responsible for its own fuel system. Fuel out-loading includes a high flow fuelling point as well as a single service point, that will service light vehicles



Image: Example Fuel Storage and Dispensary Layout

Communications

- A specialist communications consultant developed the preliminary design for the full communications requirement for the project
- The communications system is based on configuration of the following, wide area network (WAN), local area network (LAN), intra site microwave communications, IP telephony and unified communications, village entertainment, WI-FI network and two-way radio system

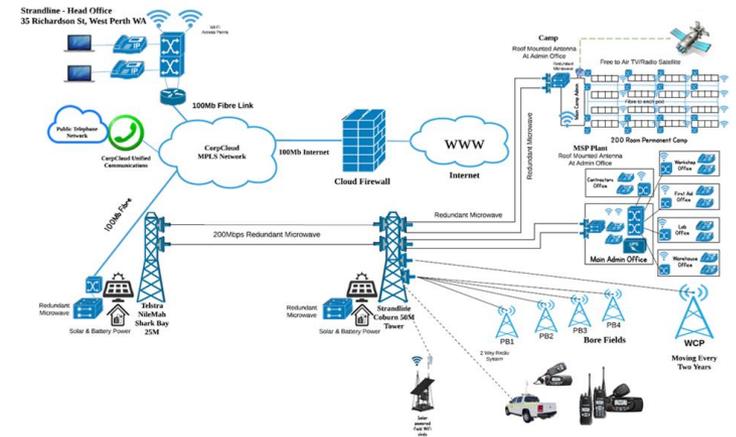


Image: Coburn Communication Infrastructure Preliminary Design



SECTION III MARKETING



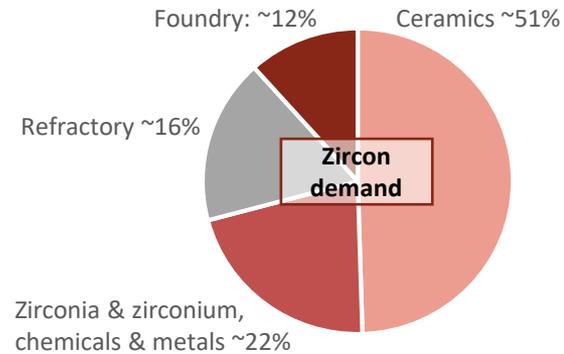


MINERAL SANDS MARKET - TWO MAIN PRODUCT STREAMS

Coburn’s product revenue spans across the two main mineral sands product streams, zircon and titanium, producing products used in everyday life

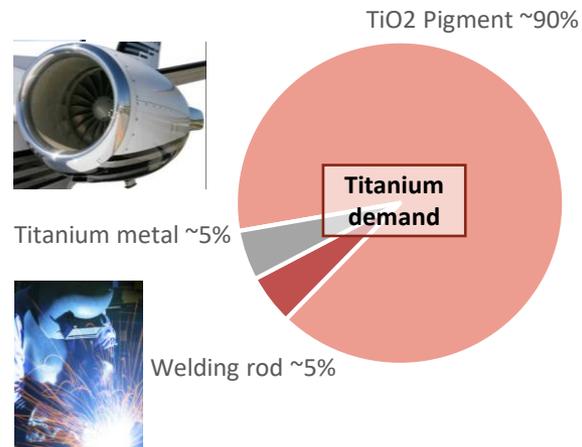
Zircon Applications

- Zircon is resistant to water, chemicals, heat and abrasion
- ~1.15 million tpa global market; Significant new supply is required to meet forecast zircon demand
- China dominates global zircon consumption with 47% and Iluka Resources is the most influential in setting benchmark prices
- Ceramics market represents 51% of the zircon market and is forecast to dominate growth
- Coburn to produce ~5% (57,000 tpa) of global zircon.
- Coburn DFS projected LOM revenue from zircon is ~55%



Titanium Applications

- TiO2 pigment imparts whiteness, is UV resistant and inert
- ~7.0 million tpa global market (TiO2 units), including ~0.75 million tpa of chloride grade ilmenite
- Longer term deficits for chloride pigmant feedstocks are forecast, underpinning a strong outlook for Coburn’s HiTi and chloride ilmenite products
- China chloride pigment consumption increasing, driven by higher environmental standards and technology advancement
- Coburn to produce ~9% (70,000 tpa TiO2 units) of global chloride ilmenite





STRONG LONG TERM MARKET FUNDAMENTALS

Coburn’s product suite and construction readiness means it is extremely well placed to capitalise on the forecast supply deficit, providing strong market fundamentals for development

Key Features of the Global Mineral Sands Market

- Increasing mineral sands demand driven by urbanisation, global growth and extensive array of applications
- Supply being restricted by mine closures, declining grades and depleting stockpiles
- Market from 2019 expected to remain tight
- New projects required to meet future demand
- Strong long-term market fundamentals - demand growth outpacing supply
- With DFS completed and key development approvals in place, Coburn is well place for commercialisation

- The image below shows the forecast underlying demand for zircon increasing year-on-year at 2.5-3.0% per annum and existing production decreasing at an average of 5% per annum, resulting in a potential large structural supply deficit

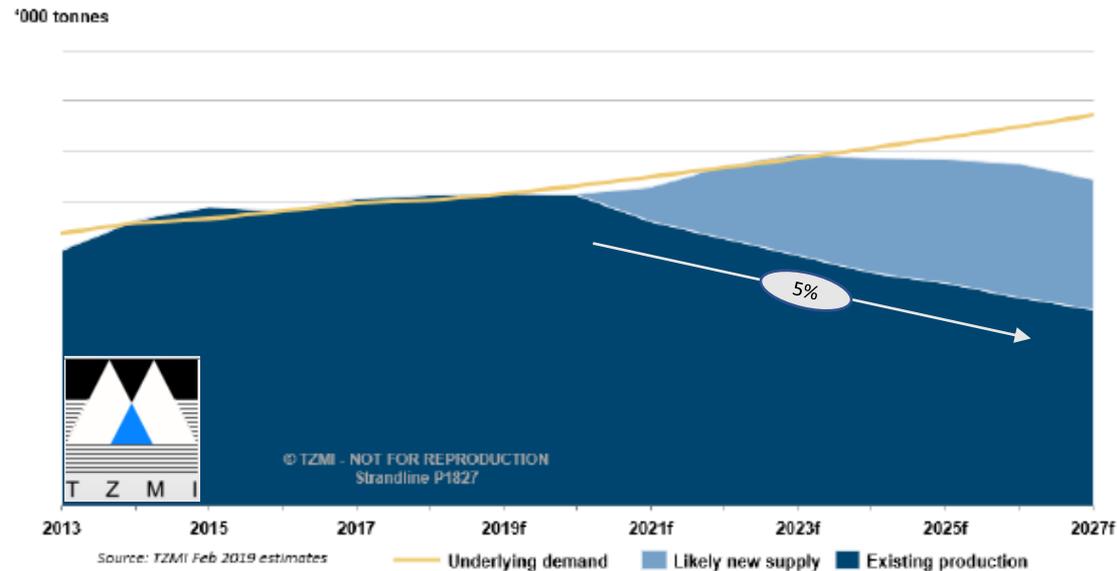


Image: TZ Minerals International . February-2019 - Global Zircon Supply/Demand Balance to 2027

Source: TZMI Report (STA), February 2019

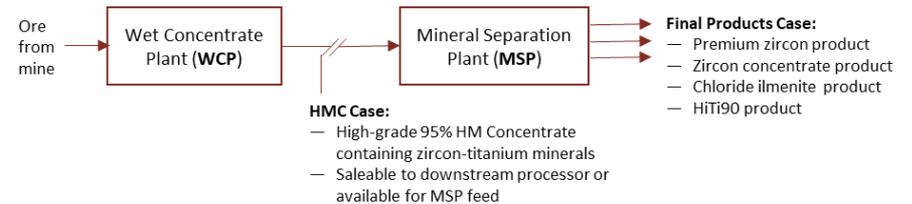


PRODUCT QUALITY

Outstanding metallurgical results confirm Coburn can produce both high-value HMC and final products, opening the door to a wide range of offtake and funding options

Key Features of Coburn Final products

- DFS design reveals development optionality with the ability to market a high-value 95% HMC product or refining further to final products
- Premium zircon product contains high 66% ZrO₂ and low contaminant trace elements making it suitable for a range of industry applications (including ceramics, foundry and chemical application)
- Chloride ilmenite product contains an attractive 62% TiO₂ and is low in most key impurities, attractive for direct chloride pigment application or upgrading via Synthetic Rutile (SR) or slag routes into high grade chloride route pigment feedstock
- HiTi90 product contains 90% TiO₂ and attractive for direct chloride pigment application or blending up of lower grade feedstocks for similar applications. Competes strongly with lower grade Leucoxene 88% TiO₂
- Zircon Concentrate contains 28% ZrO₂ and 11% TiO₂, with contained zircon suitable for blending with other ceramics grade zircon or as a stand-alone product for chemical and foundry applications. Contained TiO₂ comprises a majority of higher value HiTi minerals
- Engagement with global consumers confirms high demand for Coburn’s products in both concentrate or final product form, providing a wide range of offtake and investment options



Analyses	Units	Ilmenite	HiTi	Primary Zircon	Zircon Concentrate
TiO ₂	%	62.3	90.1	0.17	10.8
Fe ₂ O ₃ (XRF)	%	29.4	1.5	0.14	4.4
Al ₂ O ₃	%	1.41	0.93	0.41	20.2
SiO ₂	%	3.4	2.7	32.8	33.7
Cr ₂ O ₃	%	0.14	0.2	0.0	0.05
ZrO ₂ + HfO ₂	%	0.12	2.4	65.8	27.9
CaO	%	0.1	0.1	0.01	0.09
MgO	%	0.2	0.05	0.03	0.67
MnO	%	0.8	0.01	0.0	0.07
CeO ₂	%	0.02	0.01	0.03	0.16
Th	ppm	130	56	117	390
U	ppm	14	50	220	151
D50	(µm)	148	121	125	NA

Table: Coburn Project Final Product Specification

Source: For more detail on DFS Product Specification refer ASX Announcement 01 April 2019



PRODUCT PRICING BASIS

Coburn DFS has used TZMI’s February-2019 commodity price forecast dataset as the basis for determining the projected project revenue

DFS Price Basis for Final Products Case

- TZMI’s Feb-2019 long term price forecast¹ (real 2018 dollars) is:
 - Zircon: US\$1,469/t FOB
 - Chloride Ilmenite: US\$269/t FOB
 - Rutile: US\$1,118/t FOB
- Appropriate quality adjustments (as determined by Strandline) were applied to the zircon concentrate and leucoxene mineral

DFS Price Basis for HMC Case

- For the HMC Case, the same TZMI pricing has also been applied, however formula based assumptions (as determined by Strandline) take into account mineral quality adjustments and downstream handling and administration costs of the processor

Product	Unit	Basis	2021	2022	2023	2024+
Zircon	US\$/t	FOB Real	1,551	1,548	1,507	1,469
Rutile	US\$/t	FOB Real	1,214	1,150	1,120	1,118
Chloride Ilmenite	US\$/t	FOB Real	252	260	259	269

Table: Summary of TZMI’s Feb-2019 annual price forecast per product used in the Coburn DFS (US\$/t FOB Real).

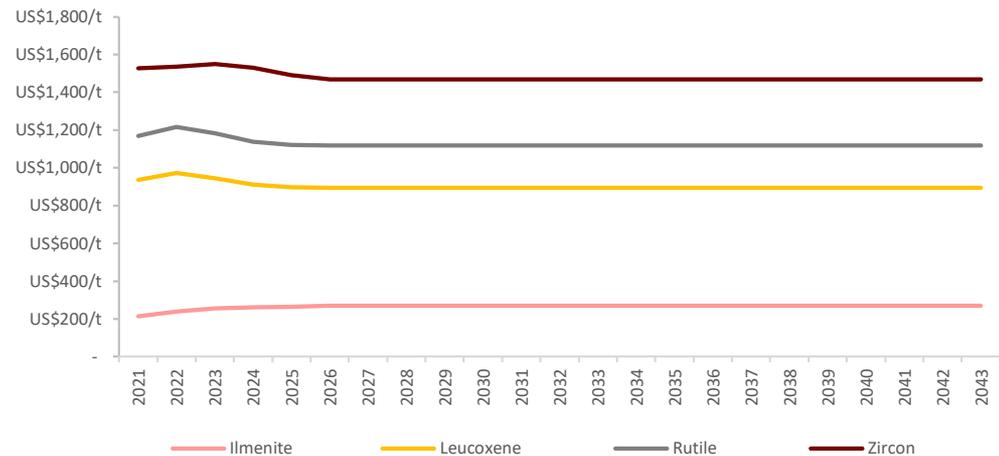


Figure DFS Pricing Assumption Per Mineral (FOB, Real, first 22.5 Years)

Note:

¹ TZ Minerals International (TZMI) is a global, independent consulting and publishing company which specialises in technical, strategic and commercial analyses of the opaque mineral, chemical and metal sectors including data, analysis and information across the mineral sands industries.

² TZMI’s Feb-2019 forecast US\$/t Nominal pricing has been converted to US\$/t Real pricing by applying a 2.2% pa inflation factor

Source: TZMI Report (STA), February 2019



SECTION IV PROJECT EXECUTION STRATEGY





EXECUTION STRATEGY

The Coburn project benefits from being situated in the key mining state of WA in proximity to engineering, construction and operational expertise. A detailed project execution plan based on proven project delivery strategies has been developed for the various phases of project development

Main Project Risks

- As an integral part of the DFS key project risks were assessed to better understand the material risks and opportunities associated with the development strategy and implementation activities. This process is critical to inform the on-going risk management activity and support decision making
- Risk assessment indicates that while the project has sound fundamental characteristics across all aspects, there remain several material risks that relate specifically to mining and processing complexity, and controlling operating costs and efficiencies. The assessment also confirms the rigour of management activities undertaken on the project
- The key project risks include:
 - Delays in securing project capital funding or final project approvals
 - An increase in working capital or pre-production expenditure resulting in top-up funding being required
 - Negative movements in commodity prices
 - Failure to secure offtake/sales agreements across the product suite
 - Performance of implementation partners across key performance indicators of quality, schedule, cost and safety
 - Bulk material mining productivity and performance
 - Process performance relating to plant throughput, recovery, grade and specification
- Treatment strategies and controls were identified and considered reasonable and effective to reduce the residual risks to an acceptable level suitable for project development. These strategies and controls will be incorporated into the final implementation plans

Procurement Contract Strategy

- Mining Services: Contract Mining
- Process Infrastructure: fixed price EPC/M
- Non-process Infrastructure: D&C & EPC/M
- Power Supply: Build Own Operate Maintain Contract
- Transport and Logistics: Contract Logistics
- Village Services: Contract
- Environment & Social: Owner implementation
- Operations: Owner implementation



PROJECT OPPORTUNITIES

The Coburn DFS has defined a robust and financially strong development plan, with opportunities still available to add incremental value to project financial and non-financial outcomes. Strandline is committed to continuous improvement and driving a high-performance operational culture

Main Project Opportunities

The Coburn project is exposed to a range of potential opportunities to further enhance its fundamental and these will be subject to review as the project develops:

- Further optimising the existing mine pits as product pricing and technology improves, thus expanding Ore Reserves that can be mined profitably
- Upgrade Amy South and Amy North Inferred resources (728Mt and 151Mt respectively) to Measured-Indicated resources and convert to economic Ore Reserves, adding to project mine life and financial returns
- Improve regional conservation and research activity in the Gascoyne region through effective conservation programs, partnering, training and sustainable practices, enhancing the projects contribution to regional benefit and Company reputation
- Positive movement in commodity prices above forecast
- Reduced initial project capital cost with the commercialisation of the HMC option (rather than Final Products), which is estimated to reduce upfront capital by \$50m (and increase in pre-tax IRR 36% from 32%). Potential to defer the MSP capital to later in the mine life (if at all)
- Empowering the aboriginal and local communities to prosper from the project through career development, business improvement and partnership programs through the life of the project
- Implement semi-autonomous dozing technology and critical modelling of the cell extraction sequence to improve on DFS assumed mining productivity, fleet management and operating cost, by further optimising every dozer push and maximizing field operation time per day
- Transferring some major capital items into operating cost items, under a build-own-operate-maintain commercial model, for the DMU-EMU equipment or permanent village or main site access road
- Improved process performance including recoveries, throughput and product specification
- Use of existing storage infrastructure at Narngulu or the port (also eliminating staging) resulting in a reduction in Mine-to-ship logistics cost
- Competitive procurement process across the major work packages associated with the project infrastructure (such as process plant EPC, permanent village, bulk earthworks, mining) driving enhanced value and execution certainty. This can be carried out during the project financing phase
- Alternative lower cost equipment suppliers and/or refurbished second-hand plant (including village facilities)



PROJECT EXECUTION SCHEDULE

First production of HMC from the WCP is expected to be achieved within 78 weeks from commencement of the project. A detailed project execution schedule has been prepared taking into account lead times and foreseeable site and seasonal conditions

Coburn Implementation Schedule Summary

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
Early Works																									
Early Works Mobilisation and Site Establishment	■	■																							
Main Access Road and Intersection			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Pioneer Camp			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
EPC/M Detailed Engineering Design																									
DMU-EMU	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
WCP & MSP	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Infrastructure	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Procurement																									
Mechanical Equipment	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Steel, Platework, tanks and vessels				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Electrical Equipment & Materials & OHL					■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Piping Material and Fittings						■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Power Station (PS) & LNG Facility							■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Construction																									
Bulk earthworks incl. site road & drainage			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Accommodation Village				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Concrete Works					■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Borefield							■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Power Station & LNG Facility								■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Steel, Mechanical and Platework Works									■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Piping - Site and Process Plant										■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Electrical & instrumentation incl. PS, Comms & OHL											■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
DMU-EMU													■	■	■	■	■	■	■	■	■	■	■	■	■
Pre-Production Mining																									
Mining Contract Mobilisation																									
Starter Pit Development & Ore Available for DMU																									
Commissioning																									
DMU-EMU																									
WCP incl. Borefield																									
First Ore to WCP																									
MSP																									
First HMC to MSP																									
Ramp Up																									
Plant optimisation & performance testing																									

Note:

¹ First Ore to WCP is scheduled in Week 78 and First HMC feed to MSP is scheduled in week 84

Basis of Schedule Summary

- Project execution is expected to start immediately following FID
- Project schedule captures the life cycle of the project from award of the EPCM contract, through detailed design, procurement, construction, to the completion of commissioning and production ramp up
- Major early works packages include establishment of the pioneer camp, permanent village and access road construction
- Multi discipline detailed design of process and non-process infrastructure scope commences immediately
- The critical path of the project runs through procurement and installation activities associated with the process facilities, including steel fabrication supply, structural, mechanical and pipework (SMP) construction, and electrical and instrumentation (E&I), construction, and no-load and load commissioning, and hence the overall project duration
- The construction portion of the schedule has been optimised to account for parallel work fronts where feasible and early access for construction vendors (e.g. concrete, SMP, E&I)



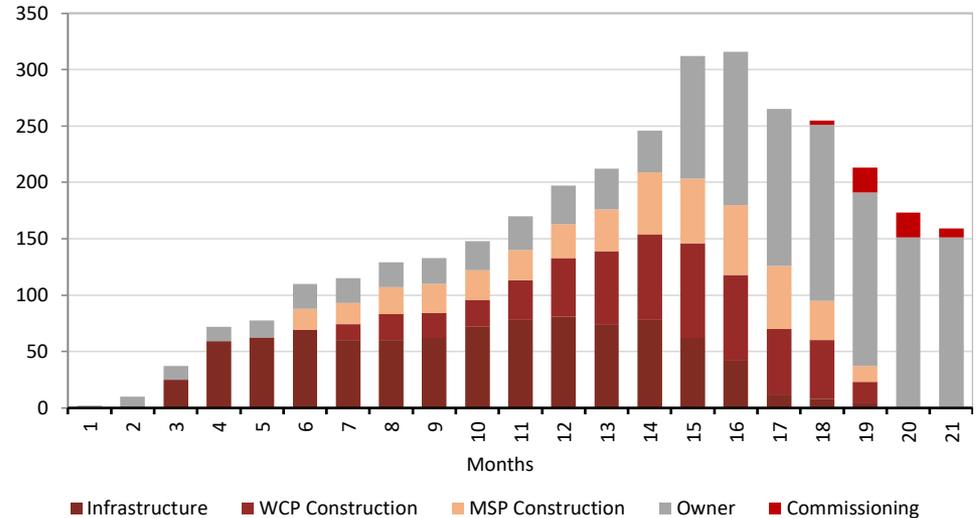
WORKFORCE PLANNING

The Coburn project will generate significant employment and career opportunities through the construction and operational phases. Workers will be predominately sourced from the regional area facilitating a drive-in-drive-out arrangement

Construction

- The construction effort will be spread over a number of key work fronts including:
 - Infrastructure: roads, power, village, bulk earthworks, borefield & administration areas
 - WCP
 - MSP
 - Mine pit development
- Peak workforce during construction including the owners project and operational team is estimated to be 316 people
- The permanent village is designed for 200 person and additional temporary accommodation units will be installed to cater for the peak period

ACCOMMODATION REQUIREMENTS



Note:

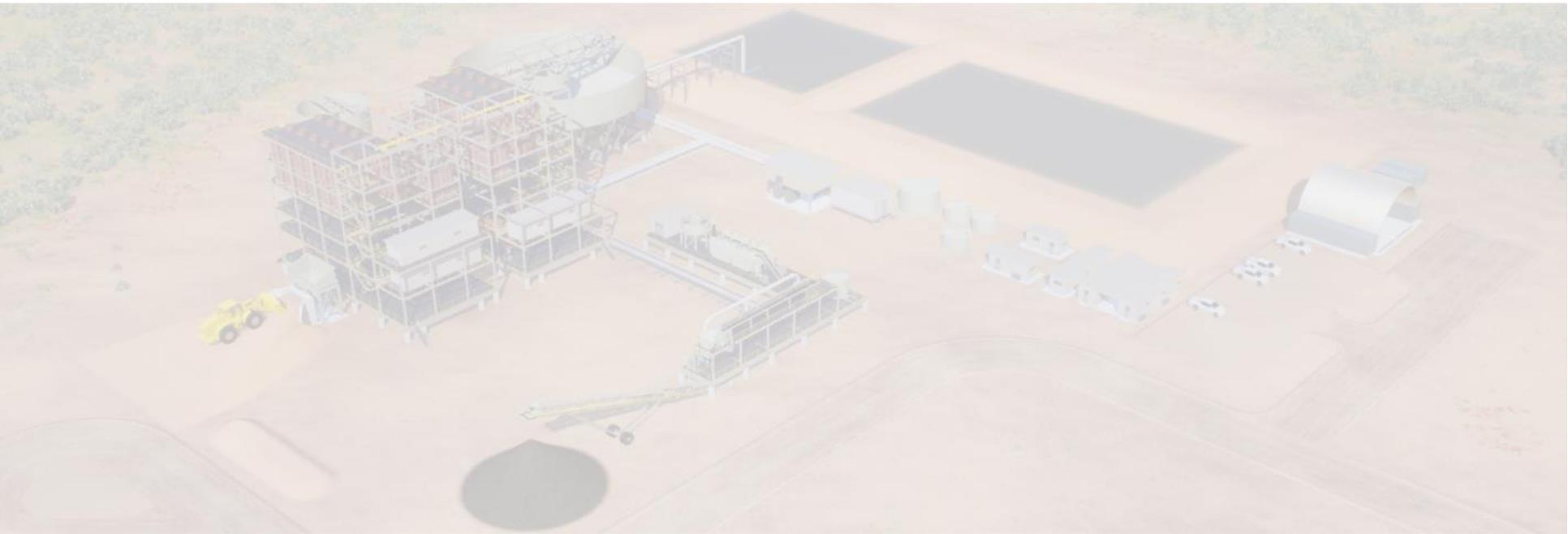
¹Strandline’s Owners team includes project and operations personnel

Operations

- An average operational direct skilled workforce of 144 has been estimated, which includes mining and other contractor and consultant personnel
- The Company plans to engage with contractors, consultants and other suppliers to encourage employment from the Mid-West region, including a focus on Aboriginal employment and local business participation during all stages of the project
- Based on 24 hours, 365 operational days per year and includes but not limited to roles relating to management, supervision, trades, engineers, environmentalist, technicians, operators, apprentices, medical professionals, consultants, security, and semi skilled labourer personnel



SECTION V DFS FINANCIAL EVALUATION





FINANCIAL MODEL METRICS

DFS shows Coburn will generate strong financial returns with a Pre-Tax NPV⁸ of A\$551m and an IRR of 32% for the Final Products Case. Project economics are based on known Ore Reserves for an initial 22.5 year LOM using a discounted cash flow analysis using project related costs

- A discounted cash flow (DCF) analysis has been undertaken incorporating the estimated capital and operating expenditures and revenue assumptions based on TZMI’s Feb-2019 commodity price forecast
- The NPV valuation is measured from FID, currently assumed to be November 2019
- The NPV has been calculated using project related costs only and does not consider Strandline’s corporate costs
- DFS shows LOM project revenue of A\$3.9b and LOM EBITDA of A\$1.9b, with revenue-to-operating cost ratio of 2.2
- Development capital is progressively deployed over the design and construction phase. A 6 month ramp-up period has been assumed to reach steady state nameplate production performance
- The assets relating to the Coburn project are held in Strandline’s parent Company Strandline Resources Limited (ASX: STA)
- The project is subject to the laws of Australia and the following royalty and tax assumptions have been made:
 - Corporate tax rate of 30% on taxable profit
 - Capital expenditure is depreciable (written off) for tax purposes over the life of mine
 - Royalty paid to the Government of 5% of the Project revenue (for industrial minerals)
 - NPV includes accumulated tax losses carried forward from prior years which was used to offset against profit generated from the project

Key Financial Metrics

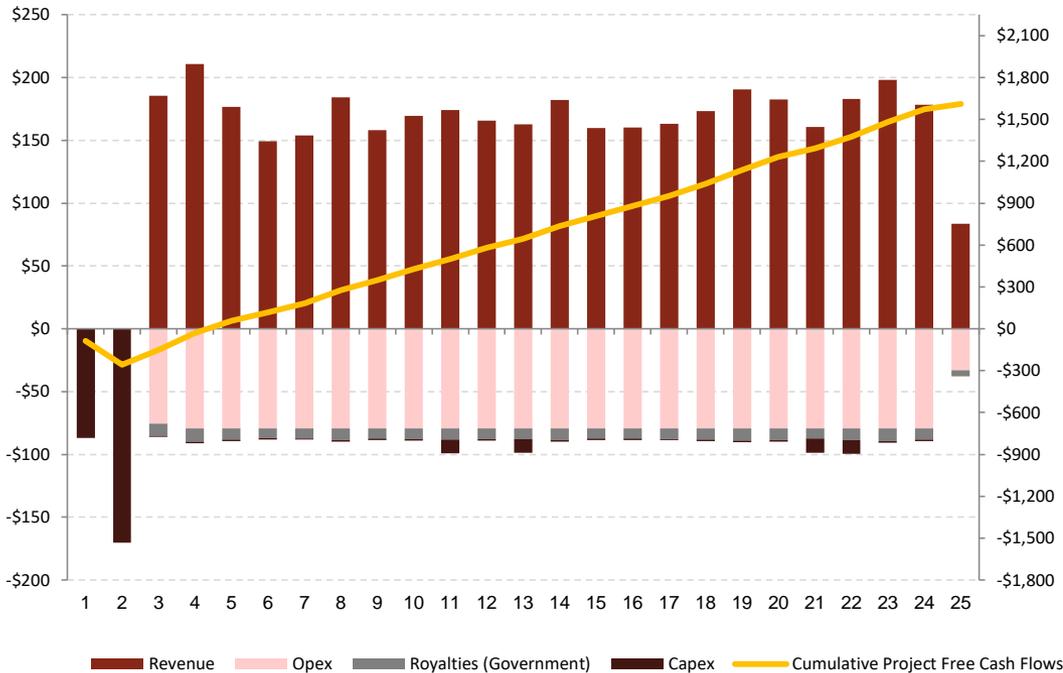
	DFS - Final Products Case	DFS – HMC Case
Mine Life	22.5yrs	22.5yrs
Ore Tonnes Mined	523Mt	523Mt
Ore Throughput	23.4Mtpa	23.4Mtpa
Capex	A\$257M	A\$207M
LOM Revenue	A\$3.91B	A\$3.42B
LOM Opex (C1)	A\$1.78B	A\$1.62B
LOM AISC	A\$1.97B	A\$1.79B
Avg. C1 Cost per Product Tonne	A\$346/t	A\$316/t
Avg. AISC per Product Tonne (“A”)	A\$397/t	A\$361/t
Avg. Basket Price (“B”)	A\$760/t	A\$665/t
Avg. Cash Margin (B-A)	A\$363/t	A\$304/t
LOM EBITDA	A\$1.93B	A\$1.62B
Avg. EBITDA	A\$86M	A\$69M
NPV ⁸ (pre-tax, real, no debt)	A\$551M	A\$481M
IRR (pre-tax, real, no debt)	32.3%	36.4%
NPV ⁸ (post-tax, real, no debt)	A\$352M	A\$312M
IRR (post-tax, real, no debt)	24.5%	27.4%



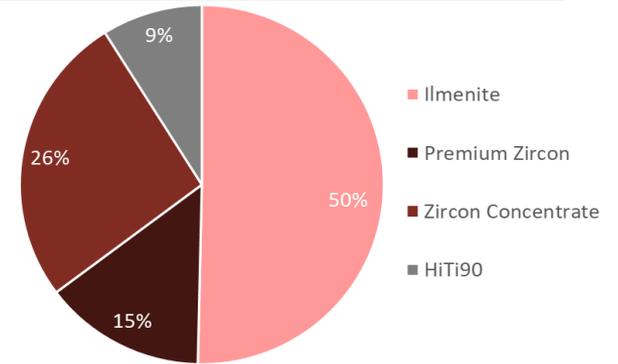
DFS FINANCIAL OUTPUTS PRE-TAX

Coburn delivers high margin operating cash flows with zircon representing 60% of revenue, HiTi90 16% and chloride ilmenite contributing 24%

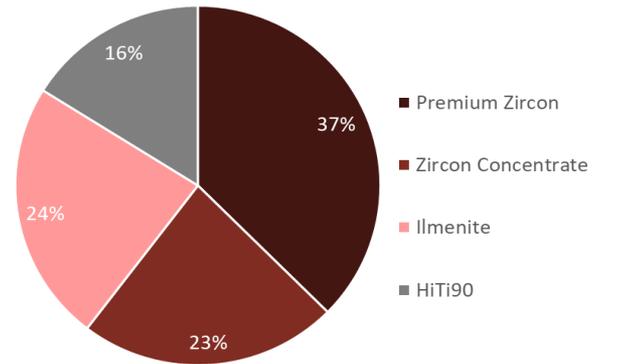
Project Free Cash Flows (A\$m) ^{1,2}



Production by Product (tonnes)



Revenue by Product (US\$m)



Notes:
 1. Net cash flows are on a pre-tax, real, pre-finance basis.
 2. Capex includes upfront and sustaining capex.



CAPITAL AND OPERATING COSTS

Capital and operating cost estimates used in the DFS are supported by first principle estimates and quotations from suppliers and contractors, providing a high degree of confidence in the financial projections, with an overall accuracy level of $\pm 10\%$ as appropriate for a DFS of this nature

- Development capital and operating cost estimates are presented in Australian dollars (A\$), with an estimate base data of Apr-2019
- Estimated costs have been sourced using standard industry methods, including first principles, supplier quotations, vendor information, benching marking and contractor commitments
- Contingency is based on a deterministic assessment approach which reviews the level of confidence in each input and applies the relevant contingency factor
- Other capital items include sustaining and deferred capital of A\$65m incurred progressively over the life of mine
- The operating philosophy is based on industry proven operations and maintenance strategies
- The Project benefits from a cost-effective bulk material mining method suitable for an experienced mining contractor, a conventional processing solution and an efficient mine-to-ship logistics route

Capital Cost Item	Final Products Case (A\$m) ¹	HMC Case (A\$m) ¹
Bulk Earthworks	20.34	19.60
Civil	8.08	5.51
Mechanical Equipment	67.22	49.24
Platework & Structural Steel	17.95	11.64
Piping	17.02	15.05
Electrical & Instrumentation	24.05	20.10
Site Buildings	12.39	11.97
Construction Equipment & Facilities	10.94	8.35
EPC-M ²	30.75	23.10
Owners Costs – Directs ³	12.52	12.27
Owners Costs – Indirects ⁴	14.14	12.92
Project Contingency	22.00	17.79
Total	257.40	207.54

Note:

¹ DFS capital costs summary includes all design, supply, installation and delivery components of the works, excludes working capital

² EPC-M capital cost include engineering, drafting, procurement, construction and commissioning activities and associated supervision and management

³ Owners Costs (Direct) include borefield, pre-production mine development, fuel, Owner’s maintenance equipment and vehicles

⁴ Owner Costs (Indirect) include village accommodation, first fills, spares, Owner’s team and consultants.

Other key cost assumption: Exchange rate sensitivity is 95% AUD and 5% USD

Operating Cost Item ¹	Final Products Case (A\$/Saleable t) ¹	HMC Case (A\$/Saleable t) ¹
Mining	135.18	135.46
Processing	144.53	118.55
Administration & General	29.97	27.62
Transportation to Ship	36.41	34.10
C1 Cash Costs	346.09	315.73
Government Royalty	38.02	33.27
Sustaining Capital	12.70	11.73
All in Sustaining Cost (ASIC)	396.81	360.73
Product Basket Price	760.34	665.32
Operating C1 Cost Margin	414.25	349.59
ASIC Margin	363.53	304.59

Note:

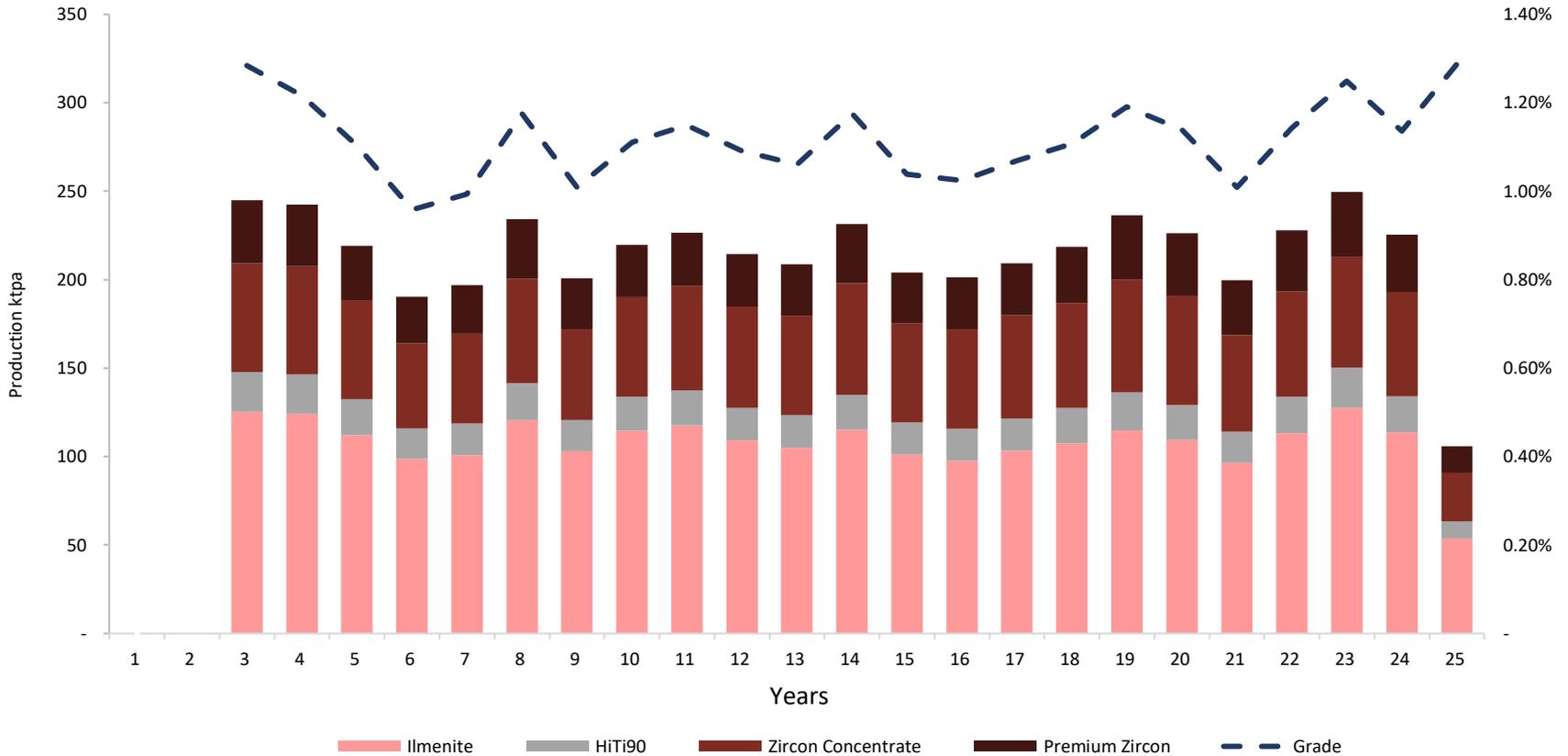
¹ Mining includes tailings and slimes handling, mine backfill, DMU-EMU and rehabilitation activities.

Other key cost assumptions: Foreign exchange of AUD:USD 0.72; Cost of fuel per litre A\$0.90/ltr (net of rebate); cost of electrical power A\$17 cents/kWh; WCP relocations to occur in years 8, 10, 18 and 19; WCP relocations to each incur 14 days of production downtime. The downtime has been averaged over the life of mine and included in the overall downtime schedule



MINING AND PRODUCTION PROFILE

Initial 22.5 years of mining operations based on 523Mt of Ore Reserves, the grade, HM assemblage and slimes content remain relatively consistent throughout the DFS mine plan

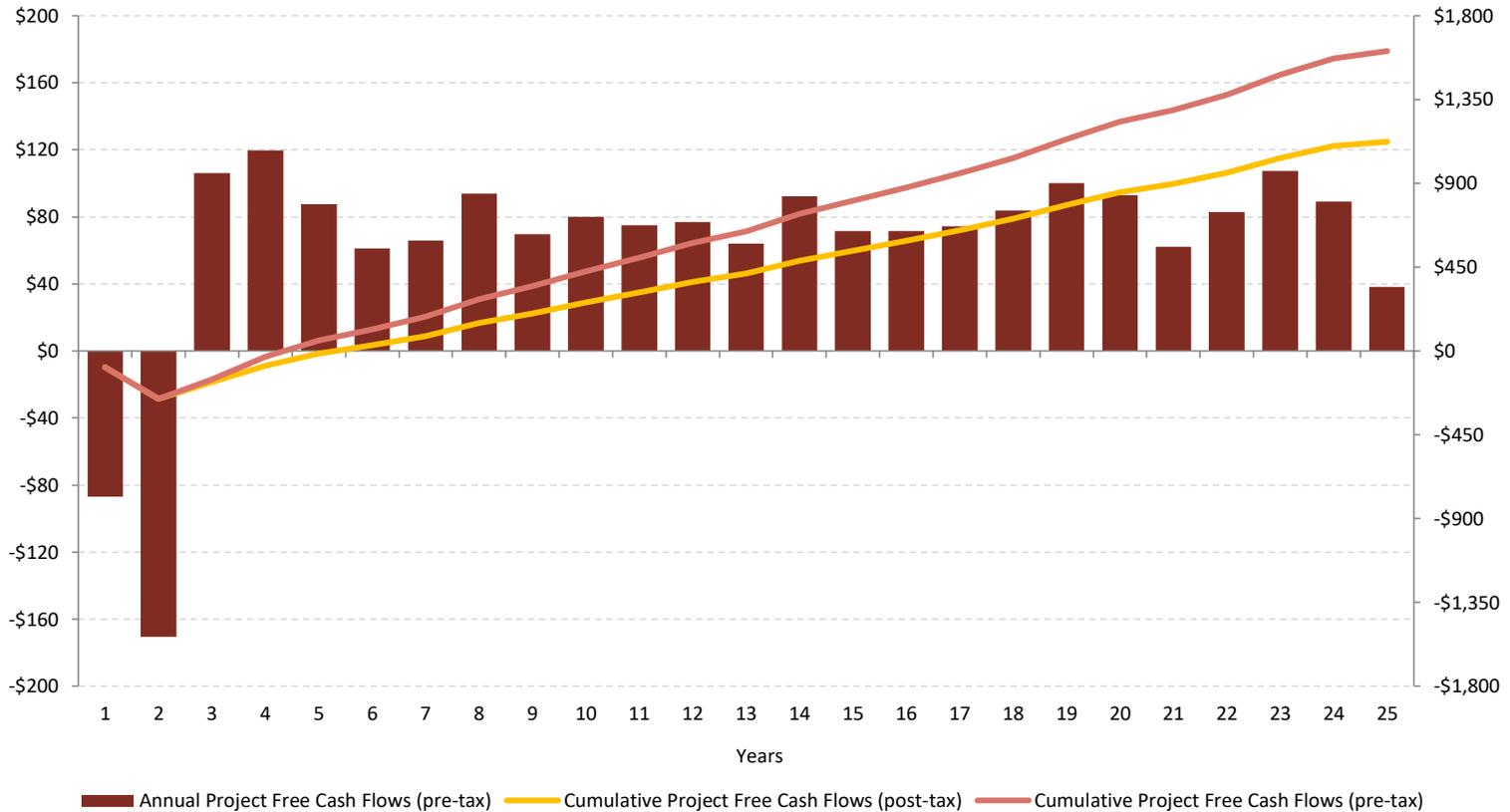




PROJECT CASH FLOWS

Strong forecast project free cash flows result in capital payback occurring 2.3 years after operation (pre-tax)

Project Free Cash Flows (A\$m) ¹

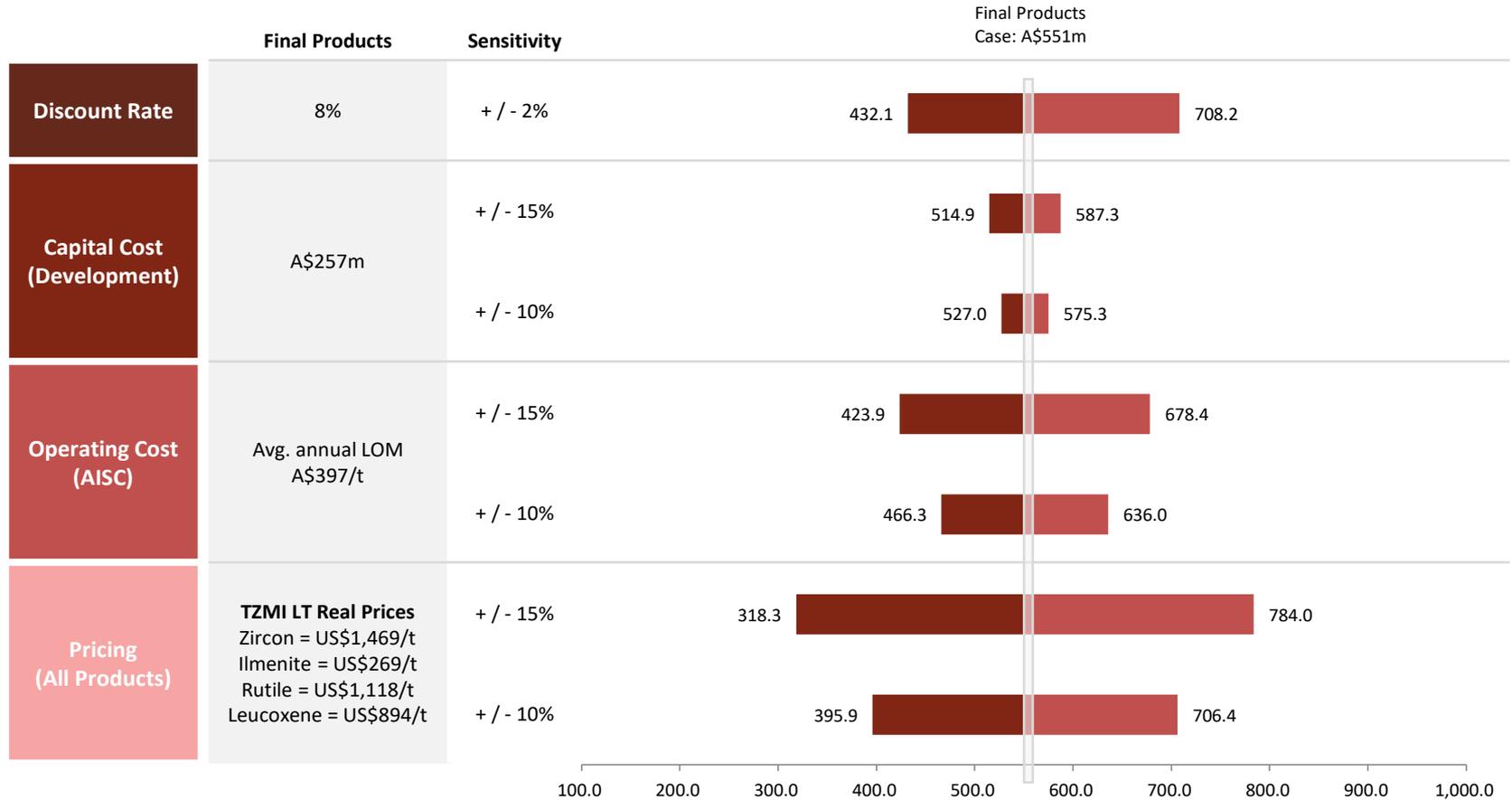


1. Project Free Cash Flows are calculated as all project cash flows including all revenues, operating and non-operating costs, capex, pre-tax and pre-finance (real). Cumulative Project Free Cash Flows include pre-tax and post tax comparatives



SENSITIVITY ANALYSIS

Under the DFS assumptions, using TZMI February-2019 pricing, the Coburn Project pre-tax, pre-finance NPV⁸ is A\$551m. The Project is most sensitive to movements in commodity prices, particularly zircon, as 60% of revenue is expected to be generated from contained zircon.



Notes:

1. NPV sensitivities against Final Products Case, pre-tax, pre-debt, (real), 8% discount rate AUD



NEXT STEPS

With the DFS completed and key development approvals in place, Strandline seeks to broaden its customer base and awareness of the project while undertaking project financing and pre-execution activities

Funding Scenario for DFS Final Product Case

- Strandline does not have the financial capacity to internally fund the Coburn project development. The Company is exploring a number of external funding options including in the form of debt, offtake, joint venture and/or equity
- The financial model confirms the project's ability to comfortably support a proposed 60-65% gearing level
- The ultimate funding arrangement will be determined prior to FID based on a number of factors including general market conditions, debt-equity market dynamics, and any arrangements with strategic offtake and delivery partners
- Engagement with global consumers during the DFS confirms high demand for Coburn's products in both concentrate or final product form, providing a wide range of offtake and investment options. These options will be advanced following the release of the DFS
- The project's key attributes, include the ability to produce high-quality mineral sands products, generate strong free cash over a multi-decade mine life, situated in the low risk Tier-One mining jurisdiction of WA, and with all key development approvals in place
- At a time in the mineral sands market where new capital projects are required to meet demand, the Coburn project provides for a range of strategic delivery and funding partnerships to support commercialisation
- Azure Capital has been appointed as project financing advisor to the Company

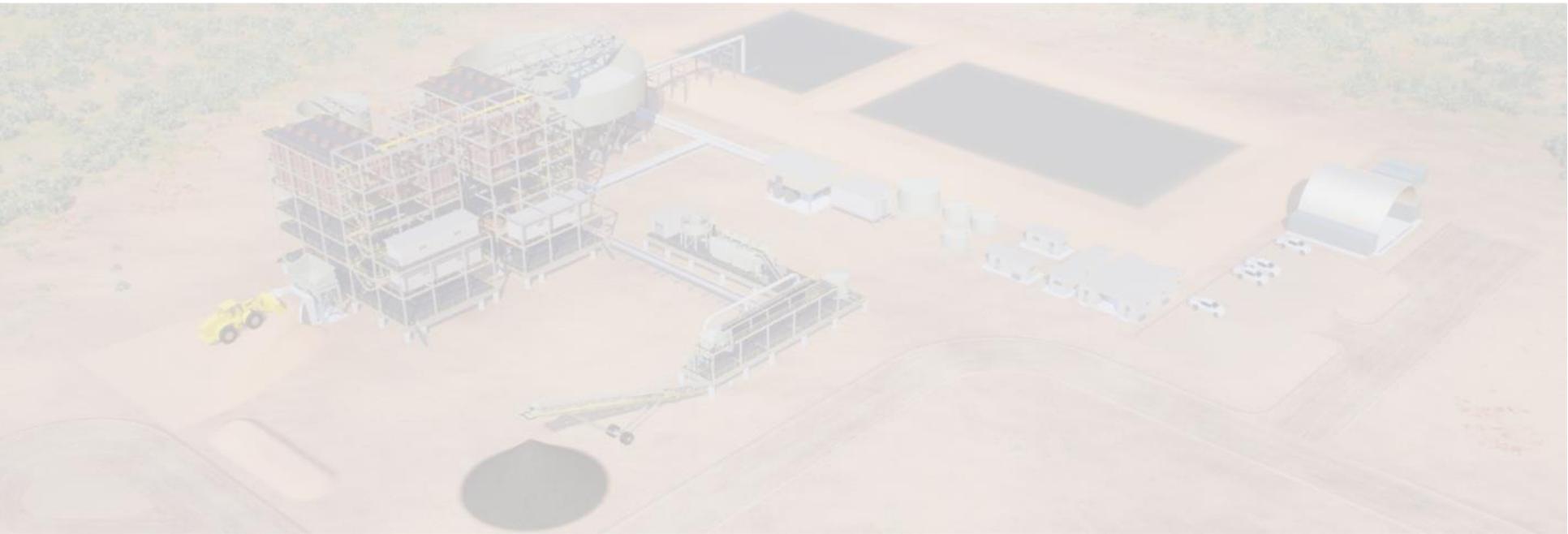
Project Development Next Steps

Project financing and pre-execution activities to follow the DFS include:

- Advance project funding, offtake and strategic partner arrangements, including finalise selection of HMC or Final Product option
- Progress early works activities such as award of major work packages, stakeholder engagement and maintain project approvals in good standing in readiness for construction
- Achieve Final Investment Decision (FID) and commence execution of the project



SECTION VI MINE LIFE EXTENSION CASE - SCOPING STUDY





MINE LIFE EXTENSION CASE - SCOPING STUDY

Potential exists to further increase project Reserves, mine life and returns, through further evaluation and conversion of resources extending north and along strike of the DFS Ore Reserves. A Scoping Study assessment of Amy South Indicated and Inferred material, titled “Extension Case”, was undertaken concurrently with the DFS

- Purpose of the Scoping Study was to ascertain the financial benefits of a longer mine life by scheduling Production Targets from Indicated and Inferred Mineral Resource
- The Mineral Resources lie north of the DFS Ore Reserves and are interpreted to represent the strike continuation of the same body of mineralisation
- Mining, processing costs, metallurgical recoveries, product pricing from the DFS Final Products Case have been applied to the Mineral Resources used as the basis for this Scoping Study. This is considered appropriate with the production targets forming an extension to the DFS Ore Reserves. Refer Annexure 2 JORC Table 1, Section 1 to 4 for further details about the Extension Case Scoping Study
- The production targets are scheduled from year 22.5 when the DFS Ore Reserves are depleted and additional feed is required. The Mine Life Extension adds 15 years production to the LOM
- No significant capital expenditure will be required to access the Production Target relating to the Extension Case, however additional sustaining capital cost has been allowed relating to 1 additional WCP move during year 29, borefields, site roads and land access
- *There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the Production Target itself will be realised. The stated Production Target is based on the Company’s current expectation of future results or events and should not be solely relied upon by Investors when making investment decisions. Further evaluation work and appropriate studies are required to establish sufficient confidence that this target will be met*

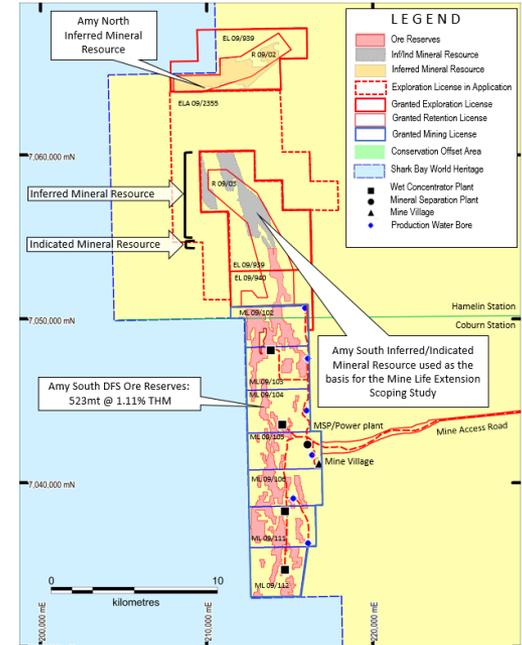


Image: Coburn Indicated and Inferred Mineral Resources used in the Extension Case Scoping Study

Amy South Resource Category	Mineral Resource ⁽¹⁾			Valuable HM Mineral Assemblage ⁽²⁾					
	Tons (Mt)	In situ THM (Mt)	THM (%)	Ilmenite (%)	Rutile (%)	Zircon (%)	Leucoxene (%)	Slimes (%)	Oversize (%)
Indicated (1%)	7	0.1	1.1	48	8	23	4	3	3
Inferred (99%)	702	8.5	1.2	49	8	23	4	2	1
Total	709	8.6	1.2	49	8	23	4	2	1

Table: Corn Amy South Mineral Resources used as the basis for this Extension Case Scoping Study

Notes:

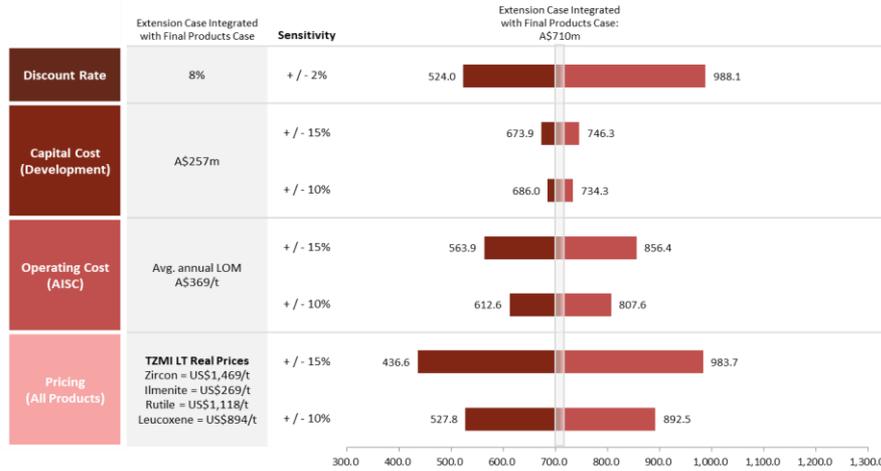
1. Mineral Resources reported at a cut-off grade of 0.8% THM
2. Valuable mineral assemblage is reported as a percentage of in situ THM content
3. Appropriate rounding applied
4. These Mineral Resources are a subset of the JORC 2012 compliant Global Coburn MRE announced on the 14 November 2018



MINE LIFE EXTENSION CASE - SCOPING STUDY

Scoping Study results show potential significant increase to mine life and project returns in the order of an additional 15 years and totalling a projected 37.5 year project mine life and A\$3.7B overall EBITDA

- The Scoping Study confirms the potential to extend the mine life by 15 years to total 37.5 years
- The Extension Case financials, when integrated with the DFS Final Products Case results in a NPV⁸ of A\$710m
- The Extension Case sensitivities shows the project is most sensitive to product pricing as shown below



Notes:
1. NPV sensitivities are post tax, pre-debt, (real), 8% discount rate A\$

¹ The DFS is underpinned by the Coburn JORC-2012 compliant Ore Reserve Statement as per ASX dated 16 April 2019

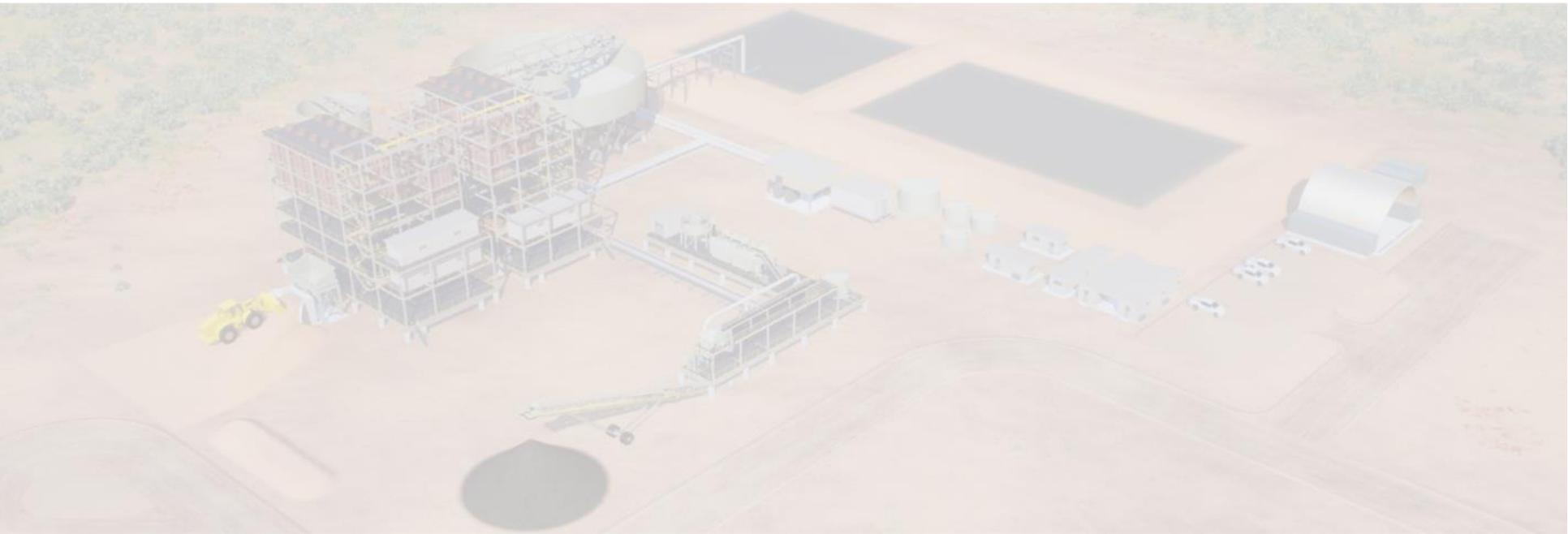
² The Extension Case Scoping Study referred to in this announcement has been undertaken to evaluate the financial impacts of extending the mine life at the Coburn Mineral Sands Project. It is a preliminary technical and economic study based on low level technical and economic assessments that are insufficient to support the estimation of ore reserves. The Production Target and forecast financial information is based on JORC (2012) Mineral Resources which are reported and classified at approximately 1% Indicated and 99% Inferred. Further exploration, evaluation work and appropriate studies are required before Strandline can estimate ore reserves or provide certainty of a development case for the Mine Life extension case. Given the uncertainties Investors should not make investment decisions solely on the results of the scoping study. No significant capital expenditure will be required to access the Production Target relating to the Extension Case, however additional sustaining capital cost has been allowed and based on calculations in the DFS. Investors should note that there is no certainty that Strandline will be able to raise funding when needed. It is also possible that funding may only be available on terms that may be dilutive to or otherwise affect the value of Strandline's shares.

Financial Evaluation

	DFS – Final Products Case	Extension Case only	Extension Case Integrated
Mine Life	22.5yrs	15yrs	37.5yrs
Mine plan	1-22.5yrs	22.5-37.5yrs	1-37.5yrs
Tonnes Mined	523Mt	354Mt	877Mt
Throughput	23.4Mtpa	23.4Mtpa	23.4Mtpa
Capex	A\$257M	Nil	A\$257M
Revenue	A\$3.91B	A\$3.1B	A\$6.98B
Total Opex (C1)	A\$1.78B	A\$1.20B	A\$2.98B
Total AISC	A\$1.97B	A\$1.36B	A\$3.33B
Avg. annual C1 Cost	A\$346/t	A\$291/t	A\$321/t
Avg. annual AISC ("A")	A\$397/t	A\$330/t	A\$369/t
Avg. annual Basket Price ("B")	A\$760/t	A\$751/t	A\$754/t
Avg. Cash Margin (B-A)	A\$363/t	A\$421/t	A\$385/t
EBITDA	A\$1.93B	A\$1.74B	A\$3.67B
Avg. annual EBITDA	A\$86M	A\$109M	A\$98M



SECTION VII DEVELOPMENT APPROVALS, PERMITS AND OBLIGATIONS





APPLICABLE LEGAL REGIME

Western Australia ranks as one of the most attractive jurisdictions in the world for mining investment. Federal and State environmental policies, permitting, economic and social requirements are well-documented, providing clarity and stability necessary for project investment

- Three tiers of government oversee legal matters within their jurisdiction within Australia. Laws are enforced in federal and state courts under the following hierarchy:
 - Federal - responsible for issues of national significance including income tax, goods and services tax, employment/workforce issues, import and export, Native Title, nationally significant environmental issues and aviation
 - State - issues of state significance, including mineral rights, water rights, lands and the environment
 - Local - issues of local significance, including planning and building.
- The Coburn project is subject to the following legislations:
 - Environmental Protection Act 1986 (WA)
 - Environmental Protection and Biodiversity Conservation Act 1999 (Commonwealth)
 - Mines Safety and Inspection Act 1994 (WA)
 - Mining Act 1978 (WA)
 - Native Title Act 1993 (Commonwealth) Aboriginal Heritage Act 1972 (WA)
 - A New Tax System (Goods and Services Tax) 1999
 - Rights in Water and Irrigation Act 1914 (WA)
 - Dangerous Goods Safety Act 2004 (WA)
 - Radiation Safety Management Act 1975 (WA)
 - Local Government (Miscellaneous Provisions) Act 1960 (WA)
 - Land Administration Act 1997 (WA).
- Employment of personnel by the Company and its contractors is governed by various employment and safety laws includes:
 - Fair Work Act 2009 (Commonwealth)
 - Mines Safety and Inspection Act 1994 (WA)
 - Occupational Safety and Health Act 1984 (WA)
 - Workers Compensation and Injury Management Act 1981 (WA)
 - Building and Construction General On-site Award 2010 (Commonwealth)
 - Independent Contractors Act 2006 (Commonwealth)
 - Pay-roll Tax Assessment Act 2002 (WA)
 - Fringe Benefits Tax Assessment Act 1986 (Commonwealth)
 - Racial Discrimination Act 1975 (Commonwealth)
 - Sex Discrimination Act 1984 (Commonwealth)
 - Equal Opportunity Act 1984 (Commonwealth)
 - Privacy Act 1988(Commonwealth)
 - Disability Discrimination Act 1992 (Commonwealth).



DEVELOPMENT APPROVALS AND PERMITS

The Coburn project is advanced in terms of development readiness with key project development approvals and management plans already in place, including environmental, mining licence / works permit, native title and heritage agreements

- ✓ PER assessment and Environmental Management Plans approved and implemented as required
- ✓ Works Approval 1. W4857/2011/1 – Initial phase of Construction - Access Road and Support Infrastructure (commenced)
- ✓ Works Approval 2. W5566/2013/1 – Pit development, construction of DMU, WCP, MSP, haul roads and Power Generation
- ✓ Works Approval 3. W5962/2016/1 – Waste Water Treatment Plant and Landfill
- ✓ Mine Proposal Number 2. Registration ID: 43813 (approved May 2014)
- ✓ Granted Mining and Retention Licences across the Ore Reserve area and Miscellaneous license L09/21
- ✓ Mining Agreement with the Nanda Native Title Claimants in place for the Construction and Mining stages of the Project
- ✓ Water License (5C) approved for 0.6 GL pa for initial road construction and camp establishment

Furthermore, a number of other non-substantive permits, licences and renewals are required prior to construction and/or mine operations:

- Department Mines, Industry Regulation and Safety (DMIRS)
 - Renew Mine Proposal 2
 - Key appointments such as the registered Manager, Quarry Manager,
 - Multiple statutory licenses and site documents such as log books and management plans
- Department of Environment and Water (DWERS)
 - Renew Works Approval 2 and 3, relating to licence to drill water bores and licence for water abstraction of up to 18GL pa
- Local Government
 - Planning and Building approvals, waste water treatments, compliance with the Food and Health Act
- Main Roads
 - Permit for heavy haulage and intersection access design/construction to the Northwest Coastal highway
- Others
 - Department of Health Aboriginal Heritage Act, Department of Gaming and Liquor



TENURE, NATIVE TITLE AND LAND ACCESS

Following the approval of the Coburn PER under Ministerial Consent 723 in 2006 a number of material conditions and procedures were imposed on the project. These conditions included developing an approved suite of Environmental Management Plans (EMP)

- The Coburn Project comprises 205km² of tenure which are owned 100% by Strandline Resources Limited
- The initial 20 years of mining and processing operations will be conducted on existing Mining Licences M09/102, M09/103, M09/104, M09/105, M09/106, M09/111 and M09/112. The final 2.5 years of reserves are currently located within a granted Retention Licence that will require conversion to a Mining Licence
- Access to the project from the North West Coastal Highway is via granted miscellaneous license L09/21
- The northern extension of the Amy South and Amy North resources are covered by granted Exploration Licences E09/939, E09/940 and Retention Licence R09/02 and R09/03
- The project overlays two pastoral leases, the Coburn Pastoral Lease and the Hamelin Pastoral Lease:
 - The Coburn Pastoral lease is 100% owned by Strandline, which covers the first 20 years of Ore Reserves
 - The Hamelin Pastoral Lease, to the immediate north, is owned and managed by Others and years 20 to 22.5 of Ore Reserves lie within this property
- The project is co-located across two native title claims, the Nanda Native Title Claim and the Malgana Native Title Claim. Native Title is the recognition of rights and interests held by Aboriginal people in relation to land, in accordance with the Native Title Act 1993 (Commonwealth)
- The Company has entered into a formal agreement with the Nanda Native title holders covering exploration, mining and processing mineral sands operations and associated activities across the Exploration and Mining licences in the project area. The Company has a Heritage Agreement in place with the Malgana Native Title Claimants as is applicable across its exploration and retention licences



Image: Coburn Mining Licence and Tenure outline including Native Title and Pastoral Lease Boundaries



ENVIRONMENTAL

Coburn is situated immediately outside the eastern boundary of the Shark Bay World Heritage Property. The project has secured environmental approval under the Federal Environment Protection and Biodiversity Conservation Act 1999 and the State Environmental Protection Act 1986

- In accordance with the environmental approvals, the Company developed an extensive suite of environmental and social management plans (16 in total), covering management of flora, fauna, vegetation, dust, waste, radiation, Aboriginal heritage, rehabilitation, hydrocarbon, and groundwater mounding etc
- Implementation of the relevant EMP's has already commenced, including site surveys related to updating baseline data in readiness for commencement of construction. During operations all EMP's are required to be implemented with regular reporting to the relevant authorities (on a quarterly, half yearly or yearly basis). The sixteen (16) EMP's are identified below:
 1. Aboriginal Heritage (approved Feb, 2007)
 2. Flora and Vegetation (approved, Feb 2007)
 3. Priority Fauna (approved Feb, 2007) and Hamelin Skink (approved Jan, 2014)
 4. Fauna (approved Feb, 2007)
 5. Progressive Rehabilitation (approved Feb, 2007)
 6. Soils and Liquid waste (approved Feb, 2007)
 7. Weed Management (approved Feb, 2007)
 8. Declared Rare Flora (approved Mar, 2007)
 9. Revegetation (approved Feb, 2007)
 10. Ground Water Mounding (approved July 2012)
 11. Preliminary Mine Closure (approved Feb, 2007 and updated Jul, 2017)
 12. Radiation (approved Feb, 2007)
 13. Soil (approved Feb, 2007)
 14. Bushfire (approved Feb, 2007)
 15. Dust (approved Feb, 2007)
 16. Hydrocarbon (approved Feb, 2007)
- Shark Bay World Heritage property: a 100m buffer shall be delineated and maintained between the project area and the boundary of the Shark Bay World Heritage property and improve the stock proof fencing between it and the Coburn Pastoral Lease
- After 7 years of mining, the Western Australian Government will decide whether to allow the mine to continue, on the basis of Strandline's performance in meeting strict rehabilitation criteria. Strandline must also publish annual reports on its rehabilitation program
- Conservation Offset Area: Relinquish mining and pastoral rights to a 42 km² area immediately south east of the proposed mine license areas
- Coburn Pastoral Station: (owned by Strandline Resources) to be de-stocked for a period of no less than 5 years
- Stakeholder Funding: Contribute funds/support for research on the ecology of Shark Bay World Heritage Property, the Shark Bay Interpretive Centre in Denham and Carnarvon Basin Rehabilitation Project



STAKEHOLDER ENGAGEMENT

The Company has undertaken a series of environmental and social impact assessments across the Coburn Project area since 2000, assessments in accordance with regulatory requirements. This involved extensive community consultation, technical evaluations, baseline surveys and land access planning

- Prior to the submission of the Public Environmental Review (PER) in July 2005 stakeholders were identified and consulted through a series of presentations and information sessions
- After the PER submission, an eight-week public review period followed, with Strandline then submitting the Proponent's Response to Submissions in October 2005, which documents stakeholder concerns and the Proponent's responses. The PER was approved under Ministerial Statement 723 with conditions on May 22, 2006
- Key project stakeholders include, but are not limited to, the following:
 - Federal and State Government agencies: DEC/DoW (now DWER – Dept. Water and Environmental Regulation), EPA, DMIRS (formerly DMP), DIA and DEE (formerly SEWPC)
 - Yamatji Land and Sea Council, Nanda Aboriginal Working Group, Malgana Aboriginal Working Group and other Aboriginal people with an interest in the area.
 - Shire of Shark Bay
 - Department of Agriculture and Food
 - Shark Bay World Heritage Property Scientific Advisory Committee (SBWHP SAC) and Shark Bay World Heritage Property Community Consultative Committee (SBWHP CCC).
 - Gascoyne Development Commission (GDC) and Mid-West Development Commission
 - The Wildflower Society of Western Australia and The Conservation Council of WA
 - Dept. Fire and Emergency Services (formerly FESA)
 - City of Geraldton
 - Local Pastoral Lease and Property Holders
- Strandline intends to continue the consultation process throughout the pre-construction, construction, operation and decommissioning phases of the project



Image: Strandline Conducting Community Consultation On Site



SHIRE OF
Shark Bay

Coburn is a major long-life project and is earmarked to form a key part of the growth and diversification aspirations of the Shire of Shark Bay



COMMITTED TO THE COMMUNITY

Coburn is a large multi-decade project proposition that is predicated on providing important socio-economics benefits, including high local content, capital inflow to regional Australia, aboriginal engagement, career development and local business opportunities

- Strandline sets out to build enduring relationships with the communities in which we operate that are characterised by respect, trust and enriching lives through the Company's participation
- Through active collaboration Strandline strives to implement long-term sustainable benefits for the local communities, regional and national stakeholders
- Coburn will generate a host of key social-economic benefits including significant job creation, training and job diversity, aboriginal engagement initiatives as well as local business improvement programs
- Coburn will provide capital flows into mid-west WA and will provide an additional element in the country's growing level of foreign investment
- Significant job creation based on a drive-in-drive-out basis (as apposed to fly-in-fly-out):
 - DFS estimated 144 direct skilled jobs through the operational phase
 - Indirect employment opportunities expected to be 3-4 times the number of direct jobs
- Community initiatives involving improvements to local infrastructure, conservation and research, education, health and medical services
- Coburn is based on 'low impact' mining philosophy, with no toxic elements or residual waste from the mine, and progressive rehabilitation of disturbed areas
- Strongly supported by project stakeholders and with an initial mine life of 22.5years (and potential additional 15 years), Strandline's vision is to create a legacy of operational excellence and sharing of benefits



Image: Local Coburn Property

KEY CONTACTS



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resources limited



STRANDLINE
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Image: Coburn Preliminary Process Plant 3D-Design - WCP (left images) and MSP (right images)



Annexure 2 JORC Table 1, Section 1 to 4 for further details about the Mine Life Extension Case Scoping Study

Appendix 1

JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> • <i>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.</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 (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.</i> 	<ul style="list-style-type: none"> • The majority of the drilling at Coburn was completed 2003 and 2007 with minor programs in 2011 and 2018 • Aircore drilling was used to obtain samples at 1.0m intervals between 2003 and 2005 with 2m intervals used in 2005. • Between 2003 and 2007 sample material was collected by a cyclone and passed through a rotary splitter that consisted of a rotating, inclined plate set directly below the cyclone discharge. The rotation speed was approximately 60rpm. The plates were set to discharge between 1 and 2kg from a 1m interval leaving 6 to 8kg of bulk bagged reject that was stacked near the collar. • A similar method was used in 2011 • In 2018 the sample was taken from the cyclone and split until a 1kg sample remained. • A sample of sand was scooped from the sample bag for visual THM% estimation and logging. Prior to 2003 only samples with an estimated 0.5% THM were submitted for analysis. The samples lower than 0.5% THM were not assayed • After 2003 all samples drilled were submitted for analysis • A sample ledger was kept at the drill rig for recording sample intervals and water resistant sample books were used with pre-printed sequential sample numbers assigned top each unique sample. • At all times significant effort was made to ensure sample representivity of the mineralization using Industry standard drilling and sample techniques for mineral sands
Drilling techniques	<ul style="list-style-type: none"> • <i>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).</i> 	<ul style="list-style-type: none"> • Aircore drilling with inner tubes for sample return was used • Aircore is considered a standard industry technique for HMS mineralization. Aircore drilling is a form of reverse circulation drilling where the sample is collected at the face and returned inside the inner tube • From 2003 onwards a Wallis Drilling Pty Ltd Mantis rig was used for the AC drilling • Aircore drill rods used were 3m long • 82mm drill bits were used • A small drill program was completed by Strike Drilling using a T450 mounted on a Mercedes Benz 6x6 Actross truck. The

Criteria	JORC Code explanation	Commentary
		<p>purpose of the drill program was to primarily gather a 30 t metallurgical sample but 6 AC holes were also twinned against the older AC drilling completed by Wallis for comparative purposes. The strike drill rods were 6m long with a diameter of 89mm.</p> <ul style="list-style-type: none"> • All drill holes were vertical
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> • <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> 	<ul style="list-style-type: none"> • From 2003 to 2011 drill sample recovery was estimated during the logging and provided as a percentage estimate • The recovery estimation method was subjective but no issues were identified in subsequent analysis of the other quality assurances tests of the data sets such as field and laboratory duplicates and a large number of twin drill holes. • Recoveries in the shallow (<6m) depth was enhanced with the injection of some water to help keep the sand bound and enable it to be blown up the inner tube. • At the end of each drill rod, the drill string is cleaned by blowing down with air to remove any clay and silt potentially built up in the sample pipes • The twin-tube aircore drilling technique is known to provide high quality samples from the face of the drill hole • The cyclone was struck with a rubber mallet during the drilling phase to keep the inside of it free of clay and silt
<i>Logging</i>	<ul style="list-style-type: none"> • <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> 	<ul style="list-style-type: none"> • The 1m aircore samples were each qualitatively logged onto paper field sheets prior to digital entry into Microsoft Excel spreadsheet and then importation into Datashed for validation • The aircore samples were logged for lithology, colour, grainsize, hardness, cementing, wetness and estimated sample recovery. The THM, Slimes and oversize were also visually estimated. Degree of rounding and sorting y relevant comments • Every drill hole was logged in full • Logging is undertaken with reference to a Drilling Guideline with codes prescribed and guidance on description to ensure consistent and systematic data collection
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> • <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</i> 	<ul style="list-style-type: none"> • The 1m drill sample collected at the source was split using a rotary splitter from the cyclone. This was around 10 to 20% of the sand drilled yielding a sample between 1 and 2kg • Prior to 2003 the samples were split in the field to between 60 and 100g using a small laboratory riffle splitter but this method was discarded in later years • Post 2003 as a check for field bias field duplicates of the rotary split samples were completed at a frequency of 1 per 100 primary samples with the results showing

Criteria	JORC Code explanation	Commentary
	<p><i>material collected, including for instance results for field duplicate/second-half sampling.</i></p> <ul style="list-style-type: none"> • <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<p>no significant bias from the HM and Oversize but some a small bias in the slimes but the error was considered not material with no impact on data quality</p> <ul style="list-style-type: none"> • Almost all of the samples were predominantly dry and comprised sand, silty sand, sandy silt and this sample preparation method is considered appropriate • The sample sizes were deemed suitable to reliably capture THM, slime, and oversize characteristics, based on industry experience of the geologists involved and consultation with laboratory staff
<p><i>Quality of assay data and laboratory tests</i></p>	<ul style="list-style-type: none"> • <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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i> 	<ul style="list-style-type: none"> • The wet panning at the drill site provides an estimate of the THM% which is sufficient for the purpose of determining approximate concentrations of THM in the first instance <p>2003:</p> <ul style="list-style-type: none"> • There was limited QC work during the pre 2003 drill programs that were seen as mostly reconnaissance style programs • A small amount of field duplicates were analysed and no significant biases in slimes or THM observed but the data set was deemed as too small to be conclusive • Primary (Dunelabs) Vs Secondary Laboratory (Iluka) field checks were also completed but the number of samples were deemed to be too small to be statistically meaningful • As a further test over 100 samples originally assayed at Dunelabs were submitted to Western Geolabs (WGL) that showed a good correlation of THM between the laboratories but a small bias with WGL results showing higher slimes values (13% relative difference) which was attributed to more vigorous desliming used by WGL <p>Post 2003</p> <ul style="list-style-type: none"> • More systematic quality controls were adopted post 2003 involving field duplicates, check assaying between WGL and Dunelabs and another independent laboratory Cable Sands Limited (CSL) • In summary the Duplicates collected at a rate of 1/100 by riffing the total rotary splitter reject and these were submitted in the same batch as the primary sample • No significant bias was detected in the HM results from the duplicates with the mean relative difference being only 1% confirming the field duplicates were free from bias. The overall precision was reasonable averaging +/- 13% at the 90% confidence limits • The slimes and oversize results showed a small bias. The mean relative differences were low with the slimes content being low

Criteria	JORC Code explanation	Commentary
		<p>to begin with the overall magnitude of the bias would have little to no impact. Both the slimes and oversize both had poor precision which is largely consistent with observations from other similar datasets and was accepted</p> <ul style="list-style-type: none"> • In summary Check assays were collected in the field at a rate of 1/50 by bagging the reject half from the final riffing step and were submitted to CSL for analysis and compared to the results from Dunelabs and WGL from the post 2003 to 2007 programs. • The HM checks compared well to both primary laboratories with a mean relative difference of 1% and the HM assay is regarded as being accurate. It was noted in later years of 2005 and 2007 the WGL assay did not show any bias but slightly inferior precision • The slimes and oversize results showed a large bias with significant variation for both slimes and oversize between the labs. The differences were attributed to methods used to scrub the slime with WGL typically reporting higher slimes due to more rigorous desliming methods. The mean relative differences were high with WGL most likely generating too much slime. However with the overall low content of slimes and oversize relative to the sand in absolute terms the differences were considered minor • the slimes content being low to begin with the overall magnitude of the bias would have little to no impact. Both the slimes and oversize both had poor precision which is largely consistent with observations from other similar datasets and was accepted • Overall there was nothing identified to indicate a significant risk to the accuracy and precision of the data used in the resource estimate <p>Summary Analysis Method</p> <ul style="list-style-type: none"> • The individual aircore samples (1 to 2kg) were assayed predominately by Western Geolabs and Dunelabs when WGL was at capacity. Both Laboratories were based in Perth, Western Australia and they are both considered primary laboratories. • The aircore samples were first screened for removal and determination of Slimes (-45µm) and Oversize (710µm), then the sample was analysed for total heavy mineral (-1mm to +45µm) content by heavy liquid separation • WGL used TBE as the heavy liquid medium – with density range between 2.92 and 2.96 g/ml • Dunelabs used bromoform on the pre 2003

Criteria	JORC Code explanation	Commentary
		<p>holes but swapped to TBE as the heavy liquid medium – with density range between 2.92 and 2.96 g/ml</p> <ul style="list-style-type: none"> • Check laboratory CSL used LST as the heavy liquid medium – with density range between 2.85 and 2.87 g/ml • This is an industry standard technique for the analysis of HM, slimes and oversize
<p><i>Verification of sampling and assaying</i></p>	<ul style="list-style-type: none"> • <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> 	<ul style="list-style-type: none"> • Data was originally verified in the geological team between 2003 to 2011. In 2008 with the significant resource estimation completed by well-regarded independent industry specialist Deidrick Speijers an extensive review of the data was completed – no issues were identified • 6 Twin holes across the Amy South resources were drilled in 2018 as part of the metallurgical program. The overall results showed a positive correlation to the older drill data. As expected on a paired basis the HM results do not correlate strongly but overall the mean of the results support the HM grade • The field and laboratory data were updated into spreadsheet and some initial checks completed. The spreadsheets were uploaded into a Datashed database where automatic validation enabled the data to be imported. • The 2008 database was considered of high integrity with no material errors or omissions identified by Speijers • All recent drilling from 2011 and 2018 have been incorporated into the drill database established by IHC-Robbins for the 2018 MRE update • No adjustments are made to the primary assay data
<p><i>Location of data points</i></p>	<ul style="list-style-type: none"> • <i>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.</i> • <i>Specification of the grid system used.</i> • <i>Quality and adequacy of topographic control.</i> 	<ul style="list-style-type: none"> • Down hole surveys for shallow vertical aircore holes are not required • 98% of the drill collars have been surveyed using a DGPS. • The DGPS has an accuracy of +/- 10mm • The original survey work used AMG coordinates (AGD84) zone 50S. These have been converted to GDA94 datum • A local grid was established by deducting 7,000,000 from the northings and 200,000 from the eastings • In 2008 Speijers re-worked all of the previous topographic information using accurately surveyed drill collars for control. The resultant digital terrain model was then used to estimate drill collar elevation adjustments for un-surveyed or inaccurately surveyed collars. • In 2018 IHC Robbins incorporated a number of models and generated a new DTM with significantly more detail and

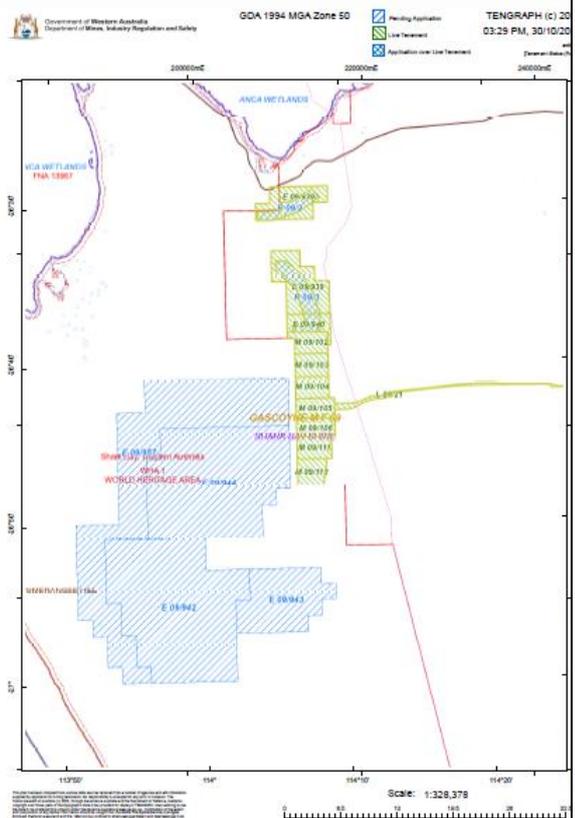
Criteria	JORC Code explanation	Commentary
		<p>accuracy then previously generated.</p> <ul style="list-style-type: none"> The DTM is considered of high quality and accurate and can be used for MRE and mine planning. The accuracy of the locations and topographic control is appropriate for this stage of mineral resource development
<p><i>Data spacing and distribution</i></p>	<ul style="list-style-type: none"> <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> 	<ul style="list-style-type: none"> Exploration results are not being reported Various grid line spacing have been used to drill the Amy South and North resource areas. The drill lines range from 125, 250 m 500 and 1000m apart across the resource areas. Drilling along the lines range from 50 to 100 to 200m The deposit is considered a large bulk tonnage style of HM mineralization with reasonable to good geological continuity that provides a high degree of confidence in the geological models and grade continuity within the holes Closer spaced drilling (125m and 50m spaced holes) provide a high degree of confidence in geological models and grade continuity between the holes and have been generally been classified as Measured. 1000 x 200m spaced drill holes have a lower degree of confidence in the geological models and grade continuity and resources estimated from these wide spaced holes have been classified as Inferred. Each aircore drill sample is a single 1m or 2m sample of sand intersected down the hole No compositing has been applied to models for values of THM, slime and oversize Compositing of samples was been undertaken on HM concentrates for mineral assemblage determination.
<p><i>Orientation of data in relation to geological structure</i></p>	<ul style="list-style-type: none"> <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> <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> 	<ul style="list-style-type: none"> The aircore drilling was oriented perpendicular to the strike of mineralization defined by reconnaissance data interpretation and also alignment of the sand dunes The northerly strike of the Amy South mineralized zones are sub-parallel and are known to be relatively well controlled by the density of drilling Amy North strikes to the ENE and the drill lines were established in a north south orientation Drill holes were vertical and the nature of the mineralisation is relatively horizontal The orientation of the drilling is considered appropriate for testing the lateral and vertical extent of mineralization without any bias

Criteria	JORC Code explanation	Commentary
<i>Sample security</i>	<ul style="list-style-type: none"> <i>The measures taken to ensure sample security.</i> 	<ul style="list-style-type: none"> There is no documentation regarding the sample security and chain of custody of the samples drilled at Coburn then transported and analysed in Perth. The drilling and sampling was completed over several years and there is no evidence from the field checks and data verification that the samples have been subjected to tampering over such a period.
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <i>The results of any audits or reviews of sampling techniques and data.</i> 	<ul style="list-style-type: none"> External data reviews have been undertaken in 2004, 2008 and 2018 prior to resource estimations

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<p><i>Mineral tenement and land tenure status</i></p>	<ul style="list-style-type: none"> • <i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i> • <i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.</i> 	<ul style="list-style-type: none"> • The exploration work was completed on tenements that are 100% owned by Strandline in Australia • The drill samples have been taken from mostly granted mining license (M09/102, 103, 104, 105, 106, 111 & 112) and granted exploration licenses (E09/939 & 940). More recently two retention licenses were also granted (R09/02 & 03) • The licenses are of varying age and are in good standing with compliance in technical and environmental reporting and payments of rents and rates. License details • Native Title agreements have been signed with the Nanda and Malgana claimant groups • The western boundary of the licenses is bound by the Shark Bay World Heritage Park where no development is permitted • On the 22nd May 2006 under Ministerial Statement 723 approval for the project was granted subject to the implementation of a number of Management Plans. • The mineral resources are located on pastoral lease stations of Coburn that is owned 100% by Strandline Resources and Hamelin Station that is owned by Bush Heritage Australia.



Criteria	JORC Code explanation	Commentary
<p><i>Exploration done by other parties</i></p>	<ul style="list-style-type: none"> • <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<ul style="list-style-type: none"> • There has been limited historic exploration work completed over the project area with the majority of the work and drilling completed by Strandline Resources (formerly Gunson Resources). In 1999 Stuart Petroleum completed the first reconnaissance drilling and was then acquired by Gunson as part of the IPO. • The exploration history is dominated by campaign drilling with the initial reconnaissance drilling in 1999 followed up by more drilling in 2002, 2003, 2004, 2005, 2006, 2007, 2011 and 2018. The majority of the drilling was completed in the early 2000s. • Resources estimations were completed in 2004 and 2008 under JORC 2004. • A scoping study was completed in 2000 and a Pre-Feasibility study in 2002 that was advanced to a Bankable Feasibility study in 2003 that was concluded and release to the market in 2004. • An updated BFS was released in 2008 and optimized in 2010 and refreshed in 2015.
<p><i>Geology</i></p>	<ul style="list-style-type: none"> • <i>Deposit type, geological setting and style of mineralisation.</i> 	<p>The Amy Zone body of mineralisation consists of an accumulation of mainly aeolian sands deposited over a Cretaceous basement of clays, clayey sands and limestone. In the southern part of the Amy Zone, the basement units are often capped by a silcrete layer, which is thought to represent a palaeo weathering surface or duricrust.</p> <p>Three phases of sand dune formation have been identified. The earliest phase occurred as a sheet like deposit over the basement and may have been associated with marine sedimentation from a transgression to the west. Within the southern end of the Amy Zone there is evidence of a buried palaeosurface marked by elevated slimes levels, which is interpreted as the top of a second phase of dunal deposition formed over the sheet dunes. The palaeosurface is best developed between 7,038,500 m N and 7,042,000 m N and has been completely eroded north of section 7,043,500 m N. Within this second phase dune system there is a prominent north-north east striking ridge, which is occasionally reflected in the sheet dunes and has been built upon by subsequent deposits. The third dune phase continues this ridge to the north where it has eroded the second phase dunes. However the ridge bifurcates south of 7,041,000 m N into a south westerly trending fore dune built over the ridge of the second phase dunes and a south easterly trending back dune. The surface of the third phase of dune formation consists of hummocky parabolic dunes. The relationship of</p>

Criteria	JORC Code explanation	Commentary
		<p>these episodes of deposition and their HM grade distribution are shown in cross-section on</p> <p>Mineralisation is associated with all of the dune formations, the lower dunes containing higher grade sheet like concentrations that are moderately continuous between sections and strike north-north-easterly. Above these, the second dune formation is more sporadically mineralised and generally lower grade and may merge with the third dune mineralisation. The third dune contains a continuous body of mineralisation associated with the back slope of the ridge in the north and migrating to its fore slope in the south. Where the dune bifurcates, it spreads across the entire section and is better developed in the front slope, although still present on the back slope. Sporadic pockets of mineralisation are also associated with the parabolic dunes of this formation, but these are less well defined due to their limited areal extents.</p> <p>The typical stratigraphy intersected in drilling consists of an upper layer of red brown sands between 1 and 6 m thick, passing downward into orange and then yellow sands, with the occasional zone of white, well sorted, possibly marine sands lying on top of a basement silcrete layer. The base of the red brown sands is often defined by a discontinuous calcrete horizon, which varies from 1 to 6 m thick and varies from gravelly nodules formed within the red brown sands through to solid layers. Evidence from drill cores and the test pit shows that the calcrete is formed in situ, cementing the red sand and is likely to be the result of redox conditions associated with variations in ground water levels</p>
<p><i>Drill hole Information</i></p>	<ul style="list-style-type: none"> • <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> <ul style="list-style-type: none"> ○ <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 exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i> 	<ul style="list-style-type: none"> • The drill hole data for this Mineral Resources Estimate comprises 4,204 holes for 109,404m of drilling and is too large to report in full. • The data has been verified and by two Independent Consulting firms prior to significant resource updates in 2008 and 2018 and has been found to be reliable and suitable for this Mineral Resource Estimate.

Criteria	JORC Code explanation	Commentary
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <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> 	<ul style="list-style-type: none"> No exploration results are being reported. The Mineral Resource estimation has been reported at a 0.8% lower cutoff grade and no upper cuts have been applied.
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <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> 	<ul style="list-style-type: none"> The nature of the mineralisation is broadly horizontal, thus vertical aircore holes are thought to represent close to true thicknesses of the mineralisation. No exploration results are being reported.
<i>Diagrams</i>	<ul style="list-style-type: none"> <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> 	<ul style="list-style-type: none"> Figures and plans are displayed in the main text of the Release.
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <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> 	<ul style="list-style-type: none"> No exploration results are being reported as part of this Mineral Resource estimation update.
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <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 test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i> 	<ul style="list-style-type: none"> A bulk sample of 30 tonnes was taken by drilling multiple AC holes at approximately 30 sites across locations within the previously defined 2010 Reserves in July 2018. This sample has been submitted to AML for additional metallurgical test work for LOM confirmatory design and variability studies. The results have been included in the updated DFS in this release.
<i>Further work</i>	<ul style="list-style-type: none"> <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> 	<ul style="list-style-type: none"> No additional exploration work is planned at this stage for Coburn.

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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Original laboratory files used to populate exploration database assay tables via an automatic software assay importer where available. Checks of data by visually inspecting on screen (to identify translation of samples), duplicate and twin drilling was visually examined to check the reproducibility of assays. Database assay values have been subjected to random reconciliation with laboratory certified value is to ensure agreement. Visual and statistical comparison was undertaken to check the validity of results Some rounding errors related to 8 out of 159 mineral assemblage composites exceeding 100% by a up to 0.28% were identified but not considered material. 3 mineral assemblage composites where incorrectly labelled and had to be re-imported into the updated MRE supplied to AMC consultants in March 2019. The error only affected 4000 records of the 1.8million database and was not considered material
Site visits	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> A site trip was undertaken by John McDonald of McDonald-Speijers in May 2003 to observe general drilling operations and sample procedures. No other site visits by staff from McDonald-Speijers are reported leading up the last MRE in 2008. Brendan Cummins has made repeated site trips to Coburn in 2016 – 2018 but none whilst drilling activities were taking place. The AC drill program in July 2018 were supervised by staff geologist from Strandline Resources. The 6 twin holes were completed under Strandlines supervision as was the sample splitting and sample dispatch to Western Geolabs facility in Perth. IHC Robbins has not undertaken a site visit but this would be recommended if Resource drilling activities re-commenced.
Geological interpretation	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> The geological interpretation for Amy North was undertaken by IHC Robbins in collaboration with the company's Exploration Manager and then validated using all logging and sampling data and observations. Current data spacing and quality is sufficient to indicate grade continuity. Interpretation of modelling domains was restricted to the main mineralised envelopes utilising THM sinks, oversize

Criteria	JORC Code explanation	Commentary
	<p><i>grade and geology.</i></p>	<p>material, slimes, and geology logging.</p> <ul style="list-style-type: none"> • A further interpretation of an upper THM domain (Zone 3) was added to the Amy South deposit to constrain high grade influence during the interpolation process, primarily in the inferred area where drill spacing is greater. • The Mineral Resource estimate was controlled to an extent by the geological envelope and basement surfaces.
<p><i>Dimensions</i></p>	<ul style="list-style-type: none"> • <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> 	<ul style="list-style-type: none"> • The Mineral Resource for Amy South is approximately 27 km long in a N-S direction and 3.5 km wide on average. The deposit ranges in thickness from approximately 2 to 60 m due to the undulating dunal morphology of the area. • The Mineral Resource for Amy North is approximately 6.5km long in a E-W direction and 1.5 km wide with thickness ranging from 2.5 to 40m.
<p><i>Estimation and modelling techniques</i></p>	<ul style="list-style-type: none"> • <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 (eg 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 drill hole data, and use of reconciliation data if available.</i> 	<ul style="list-style-type: none"> • The mineral resource estimate was conducted using CAE mining software (also known as Datamine Studio). Inverse distance weighting techniques were used to interpolate assay grades from drill hole samples into the block model and nearest neighbour techniques were used to interpolate index values and non-numeric sample identification into the block model. The mostly regular dimensions of the drill grid and the anisotropy of the drilling and sampling grid allowed for the use of inverse distance methodologies as no de-clustering of samples was required. Appropriate and industry standard search ellipses were used to search for data for the interpolation and suitable limitations on the number of samples and the impact of those samples was maintained. An inverse distance weighting of three was used so as not to over smooth the grade interpolations. Hard domain boundaries were used and these were defined by the geological wireframes that were interpreted. • This is the maiden Mineral Resource estimate for the Amy North deposit. The Amy South deposit was previously reported by McDonald-Speijers for the 2008 Mineral Resource estimate. • No assumptions were made during the resource estimation as to the recovery of byproducts. • Slimes and oversize contents are estimated at the same time as estimating the THM grade. Further detailed geochemistry is required to ascertain deleterious elements that may affect the marketability of the heavy mineral products. • The average parent cell size used for the

Criteria	JORC Code explanation	Commentary
		<p>interpolation was approximately half the standard drill hole width and a half the standard drill hole section line spacing.</p> <ul style="list-style-type: none"> • Given that the average drill hole spacing for Amy South was 100 m east-west and 250 m north south and with 1 m samples the parent cell size was 50 x 125 x 1 m (where the Z or vertical direction of the cell was nominated as the same distance as the sample length). • The average drill hole spacing for Amy North was 1000 m east-west and 100 m north south and with 1 m samples and so the parent cell size was 500 x 50 x 1 m (where the Z or vertical direction of the cell was nominated as the same distance as the sample length). • No assumptions were made regarding the modelling of selective mining units however it is assumed that a form of dry mining will be undertaken and the cell size and the sub cell splitting will allow for an appropriate dry mining preliminary reserve to be prepared. Any other mining methodology will be more than adequately catered for with the parent cell size that was selected for the modelling exercise. • No assumptions were made about correlation between variables. • The Mineral Resource estimates were controlled to an extent by the geological / mineralisation and basement surfaces. • Grade cutting or capping was not used during the interpolation because of the regular nature of sample spacing. • Samples there are widely spaced for the inferred northern area of the Amy South deposit where elevated samples could have an impact on the resource estimation were constrained using enclosed wireframes to minimize their influence during grade interpolation. In particular Zone 3. • Sample distributions were reviewed and no extreme outliers were identified either high or low that necessitated any grade cutting or capping. • The sample length of 1 m does result in a degree of grade smoothing also negating the requirement for grade cutting or capping. • Validation of grade interpolations were done visually In CAE Studio (Datamine) software by loading model and drill hole files and annotating and colouring and using filtering to check for the appropriateness of interpolations. • Statistical distributions were prepared for model zones from drill hole and model files to compare the effectiveness of the interpolation. Along strike distributions of

Criteria	JORC Code explanation	Commentary
		section line averages (swath plots) for drill holes and models were also prepared for comparison purposes
Moisture	<ul style="list-style-type: none"> Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content. 	<ul style="list-style-type: none"> Tonnages were estimated on an assumed dry basis. A bulk density algorithm was selected that is the same as previously used for reporting (a fixed bulk density of 1.65 gcm⁻³). Based on the experience of the Competent Person it is believed that the bulk density conversion factor is appropriate and fit for purpose for this style of dunal style mineralisation.
Cut-off parameters or	<ul style="list-style-type: none"> The basis of the adopted cut-off grade(s) or quality parameters applied. 	<ul style="list-style-type: none"> Cut-off grades for HM were used to prepare the reported resource estimates. These cut-off grades were defined by IHC Robbins as being based on experience, the percentage of VHM and the grade tonnage curves taken in consideration with the grade distribution along the length of the deposits. Previous reporting of Mineral Resource estimates has been undertaken at a 0.8% THM cut-off grade.
Mining factors or assumptions	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Traditional sand mining methods are such as dry mining scrapers and excavators into trucks or dozer trap style methods. No minimum thickness was assumed for the reporting of the mineral resource and it is most likely that any mining method will not allow for selectivity of specific units, but rather a broad scale approach to maximise economy of scale.
Metallurgical factors or assumptions	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Metallurgical test work has been positive from previous study undertaken on bulk samples from Coburn Metallurgical assumptions were used based on mineral assemblage composites which at this stage only allow for preliminary commentary The mineral products have been provided to customers who have undertaken their own test work to ascertain the suitability of the product for a range of purposes.
Environmental factors or assumptions	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> The Coburn project has been through the PER process and gained ministerial consent (723) for its development. It has also received a number of other approvals or has them in hand. No assumptions have been made regarding possible waste and process residue however disposal of byproducts such as SLIMES, sand and oversize are normally

Criteria	JORC Code explanation	Commentary
	<p><i>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.</i></p>	<p>part of capture and disposal back into the mining void for eventual rehabilitation. This also applies to mineral products recovered and waste products recovered from metallurgical processing of heavy mineral.</p>
Bulk density	<ul style="list-style-type: none"> • <i>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.</i> • <i>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.</i> • <i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i> 	<ul style="list-style-type: none"> • Tonnages were estimated an assumed dry basis. A bulk density algorithm was selected that is the same as previously used for reporting (a fixed bulk density of 1.65 gcm⁻³). Based on the experience of the Competent Person it is believed that the bulk density conversion factor is appropriate and fit for purpose for this style of dunal style mineralisation. • The bulk density is calculated as an in situ dry bulk density and once material has been dug up invariably this bulk density cannot be used. The bulk density is however used on wet poured HMC (heavy mineral concentrate) from mining and concentrating and is successful at estimating density and therefore tonnages for stockpiles.
Classification	<ul style="list-style-type: none"> • <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 (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</i> • <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i> 	<ul style="list-style-type: none"> • The resource classification for the Amy South and Amy North deposits was based on the following criteria: drill hole spacing and the distribution of bulk samples. • The classification of the Measured, Indicated, and Inferred Resources was supported by all of the criteria as noted above. • As a Competent Person, IHC Robbins Geological Services Manager Greg Jones considers that the result appropriately reflects a reasonable view of the deposit categorisation.
Audits or reviews	<ul style="list-style-type: none"> • <i>The results of any audits or reviews of Mineral Resource estimates.</i> 	<ul style="list-style-type: none"> • No audits or reviews of the mineral resource estimate has been undertaken at this point in time.
Discussion of relative accuracy/ confidence	<ul style="list-style-type: none"> • <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</i> 	<ul style="list-style-type: none"> • There was no geostatistical process undertaken (such as kriging or conditional simulation) during the resource estimation of the Amy South and Amy North deposits. However variography was undertaken on the THM to determine optimal drill hole and sample spacing to assist in the JORC classification process. • Qualitative assessment of the mineral resource estimate along with comparison with previous resource estimates (within a tolerance of +/- 5 per cent) points to the robustness of this particular resource estimation exercise. • Validation of the model vs drill hole grades by observation, swathe plot and population distribution analysis was favourable.

Criteria	JORC Code explanation	Commentary
	<p><i>economic evaluation. Documentation should include assumptions made and the procedures used.</i></p> <ul style="list-style-type: none"> • <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i> 	<ul style="list-style-type: none"> • The statement refers to global estimates for the entire known extent of the Amy South and Amy North deposits. • No production data is available for comparison with the Amy South and Amy North deposits.

Section 4 Estimation and Reporting of Ore Reserves modified for a Scoping Study which includes an approximate production Target and/or Forecast Financial Information (as advised in the ASX Scoping study Interim Guidelines). No declaration of ORE RESERVES

Criteria	JORC Code explanation	Commentary
<p><i>Mineral Resource estimate for conversion to Ore Reserves</i></p>	<ul style="list-style-type: none"> • <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> 	<ul style="list-style-type: none"> • No Ore Reserve Estimate is declared in relation to this Scoping Study • The production target is based on the following Indicated (1%) and Inferred (99%) Classified Mineral Resources 709Mt @ 1.2% THM as a subset of the Amy South Mineral Resource for Coburn estimated and reported by Greg Jones of IHC Robbins (IHCR) in November 2018 and reported by Strandline Resources Limited (Strandline) to the Australian Stock Exchange on the 14/02/2019) • The Scoping study has been undertaken to evaluate the potential to extend the Life of Mine beyond the current 22.5 years as part of the DFS • The Indicated Mineral Resources will be processed in the first 3 months and then the remainder will comprise Inferred Mineral Resources. • The Company is satisfied that the Mineral Resources used as the basis for the Scoping Study does not determine the overall viability of the Coburn Project with respect to the DFS findings. The Scoping Study has been undertaken to extend the mine life and enhance project economics. The Scoping Study provides guidance that will allow the Company to continue exploration work and studies to further improve the confidence on extending mine life on a technical and financial basis • The production target for the Mine Life extension case is additional to the declared DFS Ores Reserves • The Mineral Resources are reported inclusive of the production targets of the scoping study • The Competent people for the Mineral Resources as estimated for the Coburn Project are Mr Brendan Cummins and Mr Greg Jones • The Competent Person for the Production

Criteria	JORC Code explanation	Commentary
		Targets generated from the Indicated and Inferred Mineral Resources as part of the Scoping Study is Mr Adrian Jones
Site visits	<ul style="list-style-type: none"> • <i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i> • <i>If no site visits have been undertaken indicate why this is the case.</i> 	<ul style="list-style-type: none"> • The Competent Person is Mr Adrian Jones, Principal Mining Engineer from AMC Consultants Pty Ltd (AMC), who visited Coburn on 20 November 2018 for familiarization with the deposit, site topography, environmental conditions, local infrastructure and for discussions with project personnel. • Competent Person Mr Brendan Cummins, Chief Geologist employed by Strandline Resources has visited Coburn multiple times in 2018 and 2019 • Competent Person Mr Greg Jones, Geological Services Manager from IHC Robbins has not been to Coburn because his engagement has been to undertake the Mineral Resource Estimate using data and site knowledge verified by Mr Brendan Cummins
Study status	<ul style="list-style-type: none"> • <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> 	<ul style="list-style-type: none"> • No Ore Reserves are being declared as part of this Scoping Study • The same DFS parameters as part of this release have been used as the basis of the Scoping Study to generate the production target • Generally, a Scoping Study is technical report is completed to a lower level of confidence when compare to a DFS. However, the Company has used DFS level parameters applied to low confidence Mineral Resources as the basis of this scoping study. • In addition, there has been no Metallurgical test work from sample from the Mineral Resources used as the basis for the Scoping study • Strandline believes the that the Production Targets generated from the mineral resources that underpins this Scoping Study are a reasonable basis for reporting the Production Targets based on the interpretation that the mineralisation is a strike continuation of the northern end of the DFS Ore Reserves. There is reasonably good geological, grade and mineralogical continuity of the mineralisation as it extends to the northwest • Confidence limits of $\pm 30\%$ are appropriate for the majority of the Inferred Mineral Resources used for undertaking the Scoping Study. This is based on the continuity of the mineralisation, style and nature of dunal style deposits, geostatistical analysis of the drill data undertaken by the Competent Person(s).

Criteria	JORC Code explanation	Commentary
<i>Cut-off parameters</i>	<ul style="list-style-type: none"> <i>The basis of the cut-off grade(s) or quality parameters applied.</i> 	<ul style="list-style-type: none"> The initial optimization studies were unconstrained applying relevant and appropriate industry standard pricing for mining/processing and forecast mineral pricing to derive operating costs and expected revenues. These were applied to the block model to create a number of potential pit shells. The optimal pit shell was selected, and subsequently modified on a section by section review to consider the non-selective bulk mining method that also includes zones of low-grade ore. The resulting mine design and schedules have been used for this Production Targets of this Scoping Study. A nominal indicative economic cut-off grade of 1.0%THM.
<i>Mining factors or assumptions</i>	<ul style="list-style-type: none"> <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> <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> <i>The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.</i> <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> <i>The mining recovery factors used.</i> <i>Any minimum mining widths used.</i> <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> 	<ul style="list-style-type: none"> No Ore Reserves have been declared as part of this Scoping Study The Mining Factors and assumptions used as the basis for this Scoping Study are the same as those used for the DFS. Pit optimization was completed on the mineral resource model to define the economic limits of open pit mining. A revenue factor 1 pit shell was used as the basis for pit design. A series of sectional interpretations were then developed to isolate marginal economic grade material at the periphery of the optimized pit shell. Ore is proposed to be excavated from open pits with an average depth of 23 m and a maximum depth of 62 m using a mining contractor to operate a dozer trap, push-to-feeder mining method. Overburden horizons present in varying depths and will be spot campaigned, by dozer pushing waste into adjoining areas, in order to ensure availability of sufficient ore floor stock to maintain continuity of ore supply to the processing plant. No drill and blast is required. Ore is transport to ore processing facilities via mobile feed units (MFUs) pump stations, which slurry the ore via moveable pipeline to the plant. Geotechnical assessment was completed by AMC Consultants, with the calculation of batter face angle for varying depths of excavation being incorporated into the pit design to align with appropriate provision for factors of safety. Grade control is not possible by visual identification of ore and waste. Grade control will be reliant upon grab sampling and survey control only. Major assumptions used for pit optimization were pit slopes defined by geotechnical analysis, processing recoveries defined from metallurgical test work, product prices

Criteria	JORC Code explanation	Commentary
		<p>supplied by Strandline using TZMI industry accepted reference prices.</p> <ul style="list-style-type: none"> • Mining dilution of 0% was assumed, as all material within the mineralized horizon is treated as ore. Non selective bulk mining techniques are being applied so horizons designated ore will be a combination of mineralization including low grade or no grade dilution. • Mining recovery of 100% was assumed, as all material within the mineralized mining was treated as ore and edge losses are expected to be minimal. • Mineral processing infrastructure required for the project will include MFUs to take feed from the pit and transfer sized feed to the wet concentration plant (WCP), before final separation into component product streams in the mineral separation plant (MSP). • Mining infrastructure will include office accommodation, mobile plant workshops and warehouse. This infrastructure will be supplied by the mining contractor. • Support services infrastructure will include office accommodation, fixed plant workshop, warehouse, mine industrial area, power generation and distribution infrastructure, and water bores, dams and related water supply infrastructure. This infrastructure is owned by Strandline
<p><i>Metallurgical factors or assumptions</i></p>	<ul style="list-style-type: none"> • <i>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</i> • <i>Whether the metallurgical process is well-tested technology or novel in nature.</i> • <i>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</i> • <i>Any assumptions or allowances made for deleterious elements.</i> • <i>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.</i> • <i>For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?</i> 	<ul style="list-style-type: none"> • No metallurgical testwork has been undertaken specifically across the Mineral Resources considered as part of this Scoping Study • However, the mineralization is interpreted as the strike continuation of the resources converted to reserves as part of the DFS. Therefore, the same metallurgical factors and assumptions have been applied to the Mineral Resources considered for the Scoping Study. <p>DFS metallurgical assumptions for the DFS are described in detail below:</p> <ul style="list-style-type: none"> • The metallurgical processes were developed by GR Engineering Services (GRES) following metallurgical test work and analysis. The plant was designed to be able to process at the rate of 23.4 Mt/yr run-of-mine ore. • A bulk sample was obtained by a controlled drilling program executed across the Coburn Mining License project area. A total of 23.4 t of bulk sample was collated to ensure that a near expected reserve grade of 1.1% to 1.2% was obtained. The actual result returned for the bulk sample was 1.19% HM grade, confirming its suitability as a representative sample for the test work. • The source of product recoveries was obtained directly from the metallurgical test

Criteria	JORC Code explanation	Commentary
		<p>work program. WCP recoveries were assumed at 83.5% for heavy minerals, 86.8% for ilmenite, 87.7% for leucoxene, 87.7% for rutile (the test program combined leucoxene and rutile to make the saleable product HiTi90), 98.2% for zircon and 55% for light heavies. MSP recoveries into saleable product including contributions from all mineral streams into those saleable products were assumed at 103.9% for ilmenite, 55% for premium zircon, a further 43.1% of the contained zircon into concentrate, 77.6% of the leucoxene to HiTi90 product and 76.6% of the rutile to HiTi90 product.</p> <ul style="list-style-type: none"> • The technology proposed is industry standard and comprises two Dozer Mining Units (DMUs) that are fed by dozers pushing within a 100 m x 100 m mining block. A third unit is track mounted and fed by excavator (Excavator Mining Unit or EMU). It also doubles as an overburden mining unit when it is not being utilized for mining. Two of the three units are operating in the mining mode at any time in order to maintain the design throughput. The units are fitted with a screen to remove coarse oversize. • Slimes content at Coburn was deemed to be sufficiently low to allow it to travel with the feed through the concentrator. Its characteristics has it reporting to the tails and is separated at the tails stackers and returned to the thickener for coagulating with flocculent prior to co-disposal with the tails. • The concentrator comprises of conventional multi-stage spirals, screens and other conventional wet gravity separators. • The MSP also comprises of conventional electrostatic, magnetic and gravity separators. • The final products produced were targeted products based on market requirements (previous contracts, recent discussion with potential customers). They are main stream in potential application and align in specifications with the mineralogy evaluation of the resource. The combination of the leucoxene with the rutile into HiTi90 is a relatively common combination aligning itself to a market segment requiring this grade.
<p><i>Environmental</i></p>	<ul style="list-style-type: none"> • <i>The status of studies of potential environmental impacts of the mining and processing operation. 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> 	<ul style="list-style-type: none"> • Limited studies have been completed over the Mineral Resources considered for this Scoping Study • Some baseline vegetation mapping and a regional hydrological study. has been undertaken across the region. Monitoring bores have been drilled and are inspected and measured on a ¼ basis • No detailed studies have been undertaken that would identify the potential impact of the Mining and processing operation

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> • Prior to the development of Mine over the Mineral Resources considered for the Scoping a significant body of work would be required to be undertaken to understand and mitigate the impact on the environment. • There are no Environmental Approvals or other approvals that cannot be reasonably sought within the proposed mine schedule timeframe beyond 22.5 years of the DFS Ore Reserves • The Scoping Study area is located in an environmentally sensitive area lying to the east of the Shark Bay World Heritage Property. In order for mining to commence the Scoping Study Area it would have to achieve environmental approval under the Federal Environment Protection and Biodiversity Conservation Act 1999 and the State Environmental Protection Act 1986. It is likely a number of management plans will need to be submitted, approved, implemented, monitored and reported before, during and after the commencement of any mining operation. • The process and requirements to achieve the Environmental approvals at a State and Federal level are understood and can be achieved with the correct consultation, acquisition of relevant environmental data and following due process with the relevant regulators • The approvals for developing resources as part of the Scoping Study Area are also contingent on the environmental performance of the mining and development of the Reserves underpinning the DFS. As a condition of the approval to mine the Coburn Reserves the WA government can assess the Coburn project after 7 years and has the authority to shut the mine if environmental conditions have not been satisfactorily undertaken.
Infrastructure	<ul style="list-style-type: none"> • <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 which the infrastructure can be provided, or accessed.</i> 	<ul style="list-style-type: none"> • The Mineral Resources used as a basis for the Scoping Study will commence mining after the 22.5 years of Ore Reserves from this DFS have been depleted. The associated mine infrastructure will be present including the roads, power, water bores and port facilities in Geraldton. • After this length of time it is likely some of the infrastructure will need to be renewed but it will be available for use
Costs	<ul style="list-style-type: none"> • <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> 	<ul style="list-style-type: none"> • Projected capital costs and assumptions applied to the Mineral Resources used as the basis for this Scoping Study are based upon those used to define Ore Reserves as part of this DFS.

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> • <i>The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co- products.</i> • <i>The source of exchange rates used in the study.</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> 	<p>The detailed DFS costs are explained below and in the text of the main release:</p> <ul style="list-style-type: none"> • The Capital Costs utilized in the study are supplied from the DFS study being prepared by the Company's engineering contractor, GR Engineering Services, and have been sourced from a combination of first principles, databases and supplier quotes to an accuracy of $\pm 10\%$. • Mining, tailings and slimes management cost assumptions were determined from first principles for the mining plan (supported by contractor quotations) based on contract mining using a dry mining methodology appropriate for the deposit. • Processing cost assumptions were determined by considering the physical flows and unit consumptions determined from the mining study, metallurgical testwork and engineering design. • Support services costs were developed from first principles and quotations from suppliers as applied to the engineering design. • Transport and logistics cost assumptions were obtained from contractor quotations as applied to the transporting of the products and material in the planned form. • Port handling and ship loading cost assumptions were obtained from the standard charter of rates obtained from the Mid-West Ports Authority, as applied to the transporting of the products and material in the planned bulk form through the Geraldton Port facilities. • General and administration cost assumptions were developed from first principles for manning schedules, labour work rosters, materials, equipment and other administration related costs such as communications, IT, consultants and recruitment. • Environmental management, costs were developed from first principles based on a build-up of labour work, materials, equipment and other administration related costs. • Government royalties are currently set at 5% of product revenue in line with current WA legislation. • An AUD/USD exchange rate of \$A0.72 was assumed for the LOM, based on consensus forecasts and the last six month average price data. • The Mineral Resources used as the basis for this Scoping Study are located on the Pastoral Lease of Hamelin Station which is owned and managed by Bush Heritage Australia. It is anticipated an agreement will be concluded between Strandline and Hamelin within the development timeframe. This has not been determined in detail for

Criteria	JORC Code explanation	Commentary
Revenue factors	<ul style="list-style-type: none"> <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>he derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</i> 	<p>this Scoping Study.</p> <ul style="list-style-type: none"> The Revenue Factors and assumptions applied to the Mineral Resources used as the basis for this Scoping Study are based upon those used to define Ore Reserves as part of this DFS. <p>The DFS Revenue Factors are presented below:</p> <ul style="list-style-type: none"> Ilmenite, leucoxene, and rutile will be sold as final products, with the remainder of the concentrated minerals sold as a high-grade zircon concentrate. Product prices were assumed from reputable mineral sands market consultant TZMI pricing forecasts for comparable minerals and in-house market intelligence obtained from discussions with prospective customers. Product prices were assumed to be: Ilmenite price US\$269/t in product average over LOM. Leucoxene price US\$894/t* in product average over LOM. Rutile price US\$1118/t* in product average over LOM. Zircon price US\$1469/t in product average over LOM. Zircon price US\$[1043]/t contained zircon in zircon concentrate product, average over LOM. Leucoxene and rutile are planned to be combined into a finished HiTi90 product.
Market assessment	<ul style="list-style-type: none"> <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> <i>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</i> 	<ul style="list-style-type: none"> The Market Assessment applied to the Mineral Resources used as the basis for this Scoping Study are based upon those used to define Ore Reserves as part of this DFS. <p>The DFS Market Assessment is presented below:</p> <ul style="list-style-type: none"> The supply demand analysis was obtained from the latest TZMI February 2019 quarterly report that discusses the current trend. TZMI report that the market is coming into a shortfall in supply for mineral sands products in general. Consumption of the key products is expected to generally grow in accordance with world GDP over time. Many existing competitors' operations are in a very mature phase with some approaching mine completion. This supports the forecasting of a deficit for the Coburn products. Pricing for the titanium (ilmenite and HiTi90) and zircon products has been sourced from TZMI's pricing forecast in the same report. The mineral products generated from several generations of metallurgical testwork from the Coburn deposit have been provided and subjected to Customer review and analysis for suitability across a number of relevant

Criteria	JORC Code explanation	Commentary
		<p>applications. The products will conform to Customer specification with offtake agreements previously agreed (now expired) with potential customers.</p> <ul style="list-style-type: none"> • A number of Offtake discussions for Coburn product are progressing and will be advised to the market in due course.
<i>Economic</i>	<ul style="list-style-type: none"> • <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 estimated inflation, discount rate, etc.</i> • <i>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</i> 	<ul style="list-style-type: none"> • The Economic Assessment applied to the Mineral Resources used as the basis for this Scoping Study are based upon those used to define Ore Reserves as part of this DFS. • A range of NPV values and sensitivities of the economic analysis in relation to the Scoping Study are provided in the main body of this release. <p>The DFS Economic analysis is presented below:</p> <ul style="list-style-type: none"> • Discounted cash flow modelling and sensitivity analysis has been completed to evaluate the economic performance of the Ore Reserve. • Discount rate of 8% applied, on real, ungeared forecast cashflows. • The Ore Reserve estimate is based on work completed to at least a DFS level of accuracy with inputs for mining, processing, general and administration, sustaining capital and contingencies scheduled and costed to generate the initial Ore Reserve cost model.
<i>Social</i>	<ul style="list-style-type: none"> • <i>The status of agreements with key stakeholders and matters leading to social licence to operate.</i> 	<ul style="list-style-type: none"> • There has been extensive engagement with the stakeholders with regards to the general project area with specific regard to the areas where Ore Reserves have been declared. • Over the areas of Mineral Resources considered for this Scoping Study there will be a requirement to engage with the same stakeholder groups already involved in gaining a social license to operate. This will include: <ul style="list-style-type: none"> • WA State Government • Federal Government • Local Government of Shark Bay • Aboriginal Organisations and representatives • Pastoral lease holders • Special interest groups • Fortunately, the project has already been introduced to the affected stakeholders so it is anticipated the engagement will revolve around extending previous understandings to the northern licenses. • It is reasonable to assume that matters relating to social licence will be resolved within the development timeframe
<i>Other</i>	<ul style="list-style-type: none"> • <i>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore</i> 	<ul style="list-style-type: none"> • No Ore Reserves have been declared as part of this Scoping Study • A comprehensive Risk Assessment has been

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	<p><i>Reserves:</i></p> <ul style="list-style-type: none"> • Any identified material naturally occurring risks. • The status of material legal agreements and marketing arrangements. • The status of governmental agreements and approvals critical 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 party on which extraction of the reserve is contingent. 	<p>carried out. No material naturally occurring risks have been identified that would affect the long-term quantum of the Mineral Resources considered as the basis of the Scoping study. Short term natural risks including rain events are not expected to impact the Scoping Study production targets.</p> <ul style="list-style-type: none"> • No marketing arrangements of legal agreements have been considered for this Scoping Level study. It is assumed that the product will be sold to the same customers that will be buying the product from the DFS Ore Reserves • A number of key licenses and agreements are currently not in place to allow the eventual development of the production targets developed as part of this Scoping Study. The exploration and retention licenses will need to be upgraded to mining licenses • The integrated mine schedule of DFS Ore Reserves followed by the mining of Scoping Study Production Targets will afford the Company sufficient time to commence, and by following due process receive the necessary licenses and approvals from various regulators for timely development of the additional Mineral Resources considered as part of this Scoping Study. • Notwithstanding the fact the Scoping Level Study is based upon a portion of Inferred Mineral Resources that will need to be will be upgraded with further infill drilling.
<i>Classification</i>	<ul style="list-style-type: none"> • 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). 	<ul style="list-style-type: none"> • Ore Reserves have not been declared as part of this Scoping Study • Section 4 of the JORC Table format has been completed to comply with ASX and JORC requirements to disclose the results of production target estimates and associated forecast financial information at Scoping Study Level
<i>Audits or reviews</i>	<ul style="list-style-type: none"> • The results of any audits or reviews of Ore Reserve estimates. 	<ul style="list-style-type: none"> • Ore Reserves have not been declared as part of this Scoping Study • No audits or reviews have been completed apart from internal cross checks for content and clarity
<i>Discussion of relative accuracy/ confidence</i>	<ul style="list-style-type: none"> • 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. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate. 	<ul style="list-style-type: none"> • Ore Reserves have not been declared as part of this Scoping Study • The Level of accuracy of the Scoping Study is +/-30% • A combination of Indicated (1%) and Inferred (99%) Mineral Resources has been used as the basis for the Scoping Study production targets • The Competent persons Mr Brendan Cummins and Mr Greg Jones based on the confidence and relative accuracy of the Inferred Mineral resources believe they are suitable and appropriate for use in a Scoping

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> • <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>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> 	<p>Study</p> <ul style="list-style-type: none"> • The various modifying factors have been disclosed in preceding sub-sections of this Section 4 tabulation and the Competent Person Mr Adrian Jones considers them appropriate and suitable for Scoping Level Study. • Several licensing, agreement and approvals are required to be achieved in order for any future estimated production targets mentioned as part of the Scoping Study can be realised. This is consistent with the expectation, purpose and level of accuracy associated with studies at scoping level stage.