KING ISLAND SCHEELITE
ASX : KIS

16 December 2020

DOLPHIN TUNGSTEN PROJECT

REVISED FEASIBILITY STUDY PROVIDES SIGNIFICANT INCREASE IN NPV AND MINE LIFE EXTENDED TO 14 YEARS

Highlights:

- **Revised Feasibility Study ("Study") and Updated Mineral Reserve Estimate are now complete at the Dolphin Tungsten Project, resulting in:**
  - **An increase in the Net Present Value ("NPV") of 65%, from $146 million to $241 million, (**pre-tax at a discount rate of 8%**)**[1]
  - **Increased Probable Ore Reserve as per Table 1:**[2] [3]

Table 1. Probable Ore Reserve

	Mt	WO_3%	Mmtu
Dolphin Open Cut (0.2% WO_3 cut off)	2.93	0.76	2.22
Dolphin Underground (0.7% WO_3 cut off)	1.50	1.24	1.86
Total	**4.43**	**0.92**	**4.08**

  - **Operational life extended from 8 years to 14 years**
- **The Study incorporates the following changes from the Feasibility Study published in June 2019:**[4]
  - **Conversion of Resources to Reserves for an underground mine providing an additional 83% of saleable tungsten**
  - **Metallurgical testwork simplifies process flowsheet providing gains of an additional 5% of saleable tungsten at higher grade and a lower average production cost**

Cautionary Statement

The Revised Feasibility Study referred to in this announcement is based on Probable Ore Reserves derived from Indicated Mineral Resources. No inferred Resource material has been included in the estimation of Ore Reserves. The Company advises that Probable Ore Reserves provide 100% of the total tonnage and 100% of the total tungsten metal underpinning the forecast production target and financial projections. King Island Scheelite Limited has concluded it has reasonable basis for providing the forward looking statements included in this announcement (see pages 42-43). The detailed reasons for that conclusion are outlined throughout this announcement and Material Assumptions are disclosed in Appendix 1.

[1] Refer Forward looking statements, Appendix 1 Technical Report p42
[2] Probable Reserve uses and conforms with guidelines and definitions of 2012 edition of the JORC Code
[3] Refer Competent Person Statement, Appendix 1 Technical Report p42
[4] KIS market announcement 3 June 2019 "KIS ASX Announcement – Completion of Feasibility Study"

OVERVIEW

King Island Scheelite Limited (**ASX: KIS**) ("**KIS**" or "**the Company**") is pleased to provide the results of the recently completed Revised Feasibility Study and Updated Mineral Reserve Estimate ("RFS"), for the Company's 100% owned Dolphin Tungsten Project, located on King Island, Tasmania, based on studies conducted by a number of independent consultants and KIS staff.

King Island Scheelite Chairman, Johann Jacobs, said:

"The King Island Scheelite team has continued to successfully optimise and de-risk its 100% owned Dolphin Tungsten Project, both technically and commercially. As part of this process, we commissioned independent consultants to design an underground mine beyond the proposed open cut limits, estimate associated capital and operating costs , and revise the financial model to reflect the impact of the underground operation. At the same time, we deemed it appropriate to also incorporate changes to the mineral processing flowsheet and operating parameters derived from recent metallurgical testwork.

"The significantly improved financial performance forecast bears testimony to our objective of optimising and de-risking the operation. Our key next steps are to secure an appropriate balance of debt and equity funding for the redevelopment of the Dolphin Project. In this regard we have recently mandated specialist project debt financiers to assist the Company."

Economic Analysis

The RFS has delivered the following potential economic benefits flowing to the Company on the successful redevelopment of its Dolphin Project. The sensitivity of these benefits to a range of criteria, including **grade, recovery, Opex, strip ratio, foreign exchange rate** and more, is analysed in the Technical Report, Appendix 1.

Table 2. 2020 Feasibility Study Key Financial Outcomes[5]

Result	2020 Feasibility Study
NPV - Real - pre-tax, (at 8% discount rate)	**A$241M**
IRR – pre-tax	**43%**
Capital payback - pre-tax – years	**2.25**

The increase in NPV is largely attributable to the extension of the mine life and the new flow sheet, which results in higher recoveries at a higher grade. These significant benefits have been offset by a small increase in Capex.

[5] Refer Forward Looking Statements, Appendix 1 Technical Report p42

Operating Costs

Operating costs were determined as detailed in the section titled "Financial Model Input Assumptions."

Table 3. Average life of mine costs

	Open Cut A$/mtu	Underground A$/mtu
Mining	48	71
Processing	45	32
Transport and Other	9	8
Royalties	24	23
Total	**126**	**134**

Open cut ("OC") operating costs are lower than in the 2019 Feasibility Study due to the increase in recoveries and flowsheet changes offset by some increases in costs.

Capital Costs

Capital costs were determined by independent consultants detailed in the Technical Report, resulting in the following:

Table 4. Capital Cost Estimate

Item	A$ million
Site Services	6.3
OC Mobile Mining Equipment	15.9
Processing Plant	45.4
Contingency	5.1
Start Up Capital	**72.7**
Additional OC Equipment	4.5
UG Mining	25.5
Sustaining Capital	15.7
Other Deferred Capital	10.8
Deferred Capital	**56.5**
Life of Mine Capital	**129.2**
Capital cost per mtu of WO_3 produced	**$40/mtu**

The increase in Start Up Capital costs attributable to the Opencut operation from $65 million in the June 2019 study, is due largely to additional mining equipment, modifications to the processing plant and an increase in contingencies.

Financial Model Input Assumptions

Mining Costs

Polberro Consulting Pty Ltd, an independent mining consulting company, prepared the underground mine plan and schedule. Resource and Exploration Geology estimated required personnel, equipment and quarterly operating expenditure for contract underground mining, using consultant's cost database.

KIS updated Xenith Consulting's estimated open cut mining costs *(ASX: KIS 3 June 2019)* to reflect the revised mining plan.

Processing Costs

Gekko Systems Pty Ltd (**Gekko**), an independent process engineering company, was engaged to design a processing plant based on a flowsheet developed by ALS Laboratories in Burnie. Gekko completed the design and capital cost estimate of the processing plant to a Level 3 accuracy, which means that the capital costs are within a 10% level of accuracy.

In addition, Gekko completed a detailed estimate of processing operating costs initially for the open-cut operation. These costs were adjusted for the underground operation to consider the lower throughput tonnes and higher grade of the underground ore.

Royalties and "Other" Costs

There are two private royalty agreements with corporate entities flowing from agreements with past investors in the project and the normal Tasmanian State Government royalties. Other costs, which account for a very small percentage of total costs, are in line with the 2019 feasibility study.

Offtake Agreements in Place

The Company previously signed an offtake agreement with leading European tungsten powder provider, Wolfram Bergbau und Hutten AG, for 140,000 metric tonne units ("mtu") of WO_3 over 4 years (See KIS ASX announcement: 8 April 2019). A further offtake agreement was recently concluded with Kalon Resources, a wholly owned subsidiary in the Noble Group of companies. The latter agreement is for 1,500 tonnes of concentrate for 3 years with options to extend (See KIS ASX announcement 2 September 2020).

Pricing

Pricing for APT, Ammonium Paratungstate, the benchmark used to derive concentrate pricing, is based on an average of industry experts provided from recent publicly available material. Pricing in 2023, the first year of production is US$280/mtu, thereafter prices increase in 2024 to US$295/mtu before declining in 2025 to US$265/mtu in line with forecasts. Thereafter prices are kept constant at US$300/mtu.

A$/US$ Exchange Rate

All revenues will be US$ denominated, so fluctuations in the exchange rates will have significant impacts on the ultimate returns. In this analysis, the exchange rate has been kept constant at A$1.00 being equivalent to US$0.70.

Project Funding

The Company is currently exploring possible joint venture partnerships, as well as having mandated a company to assist with securing project debt funding. Furthermore, discussions between the Company and the Critical Minerals Facilitation Office, in addition to various other Federal, State and local authorities, commenced earlier this year and have progressed over the course of 2020.[6]

Development Timeline

On the basis of the relatively advanced engineering studies and the proposed methodology based on a modular design, the engineering consultants have determined that detailed design, procurement, construction and commissioning could be achieved **within a fifteen-month period** after financial close. Most of the vital mobile equipment has a lead time of approximately six to nine months. Given the above, the Company is confident that once financial close has been reached, commissioning of the mine and processing plant can be achieved within fifteen months.

This market announcement has been approved by the Board of King Island Scheelite Limited.

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[6] The Feasibility Study assumes that KIS obtains funding to; (a) progress the project to a development decision and (b) construct the project. There is no certainty that this funding will be available to KIS in a timely manner for the project. Refer to Forward Looking and cautionary Statements p37. Technical Report p 42-43.

APPENDIX 1

KING ISLAND SCHEELITE LIMITED

DOLPHIN MINE

REVISED FEASIBILITY STUDY AND

UPDATED MINERAL RESERVE ESTIMATE

INCLUDING OPENCUT AND UNDERGROUND OPERATIONS

TECHNICAL REPORT

DECEMBER 2020

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1 EXECUTIVE SUMMARY

King Island Scheelite Limited ("KIS") holds mining and exploration tenure over the historic Dolphin and Bold Head Scheelite Mines on Mining Lease 2080P/M and the highly prospective EL19/2001 near Grassy, southeast King Island (Figure 3).

This Revised Feasibility Study ("RFS") and updated Mineral Reserve Estimation has been undertaken in compliance with the requirements of the reporting guidelines of the 2012 Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia, (the JORC Code 2012) which are aligned to the Committee for Mineral Reserves International Reporting Standards Definitions (the CRIRSCO Standard).

KIS proposes to extend the historic Dolphin Open Cut (OC) mine, eastward to a depth of -140m RL, to recover remnant ore from the historic underground operation by means of an 8 year OC mine. On completion of the proposed Dolphin OC, a further 6 years of underground (UG) mining is planned from ore resources between -140 m RL to -300 m RL extending total project life to 14 years.

At a 0.2% WO_3 cut off, the Dolphin OC contains a total of 2.93Mt of Probable Reserves at an average grade of 0.76% WO_3 with a Run of Mine strip ratio of 10.3 t/t. At a 0.7% WO_3 cut off, the Dolphin UG contains a total of 1.50Mt of Probable Reserves at an average grade of 1.24% WO_3. Both OC and UG reserves are classified according to the guidelines of the 2012 edition of the JORC Code.[1]

In addition to the proposed mining developments, the project requires the construction of a gravity process plant, supplemented by a concentrate dressing circuit, together with mine infrastructure. This RFS and Mineral Reserve Estimation updates technical studies completed since the KIS 2019 Feasibility Study (FS) and Revised Mineral Reserve *(ASX:KIS 3 June 2019).*

The Dolphin OC design has not materially changed from the 2019 reserve estimation *(ASX:KIS 3 June 2019)*. The OC production schedule and mining equipment requirements have been revised from previous estimates resulting in minor changes to estimated capital and operating costs which are updated in this study. The OC operation is planned to mine and process approximately 400ktpa of ore for eight years to produce approximately 26,800t of WO_3 concentrate.

The Dolphin UG Mine design, reserve estimation and schedule were developed by Polberro Consulting, using a combination of; post pillar cut and fill, cut and fill, up-hole bench stoping, downhole bench stoping and remnant stoping. The UG mine will be accessed from a portal established at -120 m RL and a new southern decline developed to re-access and rehabilitate historic mine infrastructure below -150 m RL including production drives and ventilation return airways.

The UG production schedule and mining equipment list have been calculated based on the mine design and production rates of approximately 300 ktpa of ore. The RFS and

[1] Refer to JORC tables, qualifications and competent persons statements in the appendices of this report.

associated UG reserve estimation outlines a further 6 years of mine life producing an additional 24,500 t of WO_3 concentrate.

The inclusion of the UG ore reserve significantly extends the project life producing approximately 51,700 t of WO_3 concentrate over the combined UG and OC production period of 14 years. This concentrate will be sold into a market with strongly growing demand and constrained supply.[2]

The Dolphin processing plant has been substantially modified since the 2019 FS and Reserve Estimation with the inclusion of Multi Gravity Separators (MGS) in the gravity plant. The addition of MGS reduces the requirement for flotation, simplifying the circuit and resulting in the production of a coarse gravity concentrate and a fine gravity concentrate. The plant modifications result in adjustments to capital and substantial reductions in operating costs, that are both included in this RFS.

Further site infrastructure engineering has been completed, resulting in minor alterations to capital and operating cost savings that are updated in this RFS.

A summary of key outcomes from the RFS and Updated Mineral Reserve Estimation are outlined in Table 1. The RFS suggests the Project is most sensitive to fluctuations in APT price, exchange rate and plant recoveries.

Figure 1. Project Location

[2] Refer to Forward Looking Statements p27

Figure 2. Mine Location

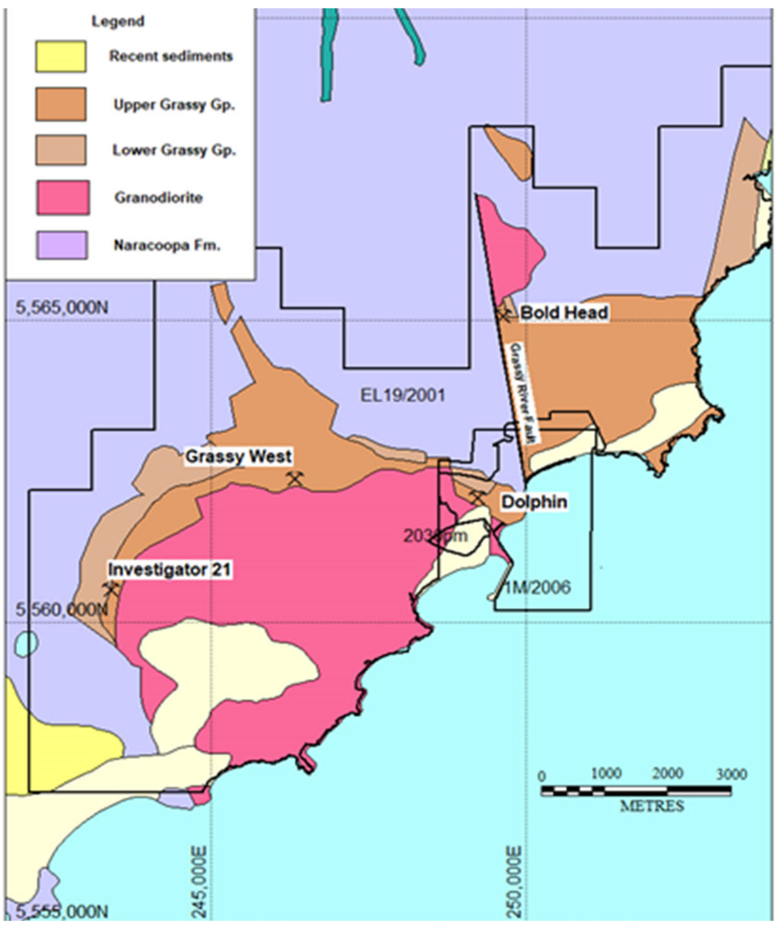


Figure 3. Project Tenure

Table 1. Summary of Key Outcomes Combined OC and UG Feasibility Study 2020

Item	Units	Revised Feasibility Study 2020
Project Life	Years	14
OC Probable reserve (0.2% WO_3 cut off)	2.93 Mt @ 0.76% WO_3, 2.22 Mmtu	
UG Probable reserve (0.7% WO_3 cut off)	1.50 Mt @ 1.24% WO_3, 1.86 Mmtu	
Total Ore (Reserve)[1]	**4.43 Mt @ 0.92% WO_3, 4.08 Mmtu**	
Tungsten Revenue		
APT Price (average)	US$	US$295
mtu Sold	M mtu	3.26
Revenue	A$ M	1,059.0
Capital Costs – Life of Mine		
Mining	A$ M	56.4
Processing Plant	A$ M	47.9
Other	A$ M	24.9
Total	**A$ M**	**129.2**
Operating Costs – Life of Mine		
OC Mining	A$ M	-83.7
UG Mining	A$ M	-106.9
Processing	A$ M	-126.9
Shipping	A$ M	-14.4
Admin	A$ M	-15.1
Royalties	A$ M	-76.4
Total	**A$ M**	**-423.3**
Financial		
EBITDA	A$ M	635.7
Pre-Tax NPV $_{8\%}$	A$ M	241
Pre Tax IRR	%	42.5
Production Cost Metrics		
Opex/mtu	$/mtu	129.8
Capex/mtu	$/mtu	39.6
Opex/t ore processed	$/t	96.0
Capex/t ore processed	$/t	31.9

1. The Ore Reserves underpinning the above production target have been prepared by Competent Persons in accordance with the requirements of the JORC (2012) Code. Refer to JORC tables, qualifications and Competent Persons Statements page 41.
2. All figures are presented in nominal Australian dollars unless otherwise specified. All cashflows are quoted pre-tax unless noted. This applies to the entire document.
3. Pre-development expenditure prior commencement of construction is excluded from pre-production capital.
4. Pre-production mining costs are calculated up to first ore processed.
5. Cash Cost includes all mining, haulage, processing, royalties, shipping and site administration costs.
6. Includes the Dolphin OC design of the May 2019 FS combined with 2020 UG Ore Reserve
7. Rounding errors may occur
8. See Forward Looking and Cautionary Statements, page 41 and 42.

2 STUDY OVERVIEW

This Mineral Reserve Estimate is based on mining and processing resources extending below and east of the historic Dolphin Pit. The 8-year project life outlined in KIS's 2019 Feasibility Study *(ASX:KIS 3 June 2019)* has been extended with the additional UG reserves to a combined total of 14 years. A summary of the main project parameters includes:

- Owner-operated mining in the Dolphin OC operation followed by contract UG mining.
- 14 year mine life producing a total of 3.26 M mtu of WO_3 in concentrate.
- Construction of an onsite 400 ktpa gravity processing plant.
- 15 month construction period with mining scheduled to start 12 months after the final investment decision.
- Laboratory test work suggest recoveries in the range of 73% to 82.8% producing concentrate grades above 63.5% WO_3.
- OC Reserves of 2.93 Mt at average grade of 0.76% WO_3 at a 0.20% cut-off grade.
- OC stripping ratio of 1 to 10.3 (t/t).
- Drill-blast-load-haul OC mining operation
- Overburden used to reclaim land in Grassy Bay adjacent to OC
- UG Reserves of 1.50 Mt at average grade of 1.24% WO_3 at a 0.70% cut off grade.
- Contract UG mining operation commences near the end of OC mining.
- UG mine decline accessed using diesel and electro-hydraulic powered load-haul-dump mining equipment.
- UG ore production from post pillar cut and fill ("PPCAF'), cut and fill ("CAF"), up-hole benching ("UHB"), down hole benching ("DHB") and remnant stoping at 300ktpa.
- Main environmental approvals in place (EPN and Development Permit).
- Previous Tailings Storage Facility (TSF) will be modified and utilised for new tailings storage.
- Power supply by Hydro Tasmanian with on-site diesel generation.

This FS and ore reserve statement has been compiled by KIS with support from the following consultants:

- Polberro Consulting – UG Mine design, schedule and reserve estimation (Ore Reserve Statement, Dolphin Orebody, October 2020 – Polberro Consulting)
- Resource and Exploration Geology – Resource estimation, mining cost analysis reserve estimation and FS compilation
- ALS – Metallurgical test work
- Asther – Metallurgical test work, plant design and cost estimation
- Gekko – Plant design and cost estimation
- e^3 planning – Environmental surveys and permit application
- GHD & PSM – Tailings storage facility design
- Xenith Consulting – OC Mine planning and cost estimation

- PSM – Geotechnical assessment, tailings storage facility, membrane wall
- BR Design – Site Infrastructure design and cost estimation
- Argus – Marketing and financial analysis

The current site consists of the dewatered historic Dolphin open cut and underground mine, tailings storage facility and an area of reclaimed land developed from the previous OC mining operations. The town of Grassy is located 1 km north of the mine and the Grassy port 1km south of the mine.

Figure 4. KIS Dolphin Project Proposed Mine Layout.

3 TENURE, ENVIRONMENT, COMMUNITY AND APPROVALS

The Project is located on Mining lease 2080P/M. KIS also holds an Exploration License EL19/2001 covering prospective ground on the periphery of the Grassy Granite, including the historic Bold Head Mine and several advanced exploration projects including Investigator 21 (ASX:KIS April 2018).

The current permitting approval DA26 05/06 to reopen of the mine, was received from King Island Council and the Tasmanian Environment Protection Authority (EPA) in the May 2009. This approval provided for the development of the Dolphin mine site with an expanded open pit, tailing storage facility, processing plant and reclamation of Grassy Bay for waste rock disposal and remains the overarching permit today.

A revised assessment report detailing the current OC mining operations was completed and submitted to the EPA for its review, in December 2016. The EPA approved the amended mining operations and issued an Environmental Protection Notice 7442/2 (EPN), in October 2017. The EPN contains all environmental conditions to be met prior, during and following mining operations.

All relevant approvals for proposed mining operations have now been obtained. Prior to commencement of construction, detailed operating plans must be submitted to various authorities.

4 GEOLOGY AND RESOURCES

Scheelite skarn mineralisation has formed within the metamorphic aureole of the Carboniferous Grassy Granite where it is in proximity to the calcareous sediments and carbonates of the Lower Grassy Group. The Dolphin and Bold Head deposits are hosted in a similar stratigraphic sequence.

Mineralisation is hosted within a 100-200m thick sequence of complex skarn mineralogy with two main horizons known as B and C Lens both of 10-30m thickness separated by a similar thickness of skarn altered volcanic sediments. Skarn formation and mineralisation have occurred where carbonates come into direct contact with the intrusion, or adjacent to brittle faults intersecting the intrusion. Mineralisation in the Dolphin deposit is best developed within C Lens which has several distinct mineralogical components including a garnet hornfels, a pyroxene-garnet hornfels and banded pyroxene-garnet hornfels. B Lens is an upper dolomite horizon which has been variably hornfelsed and metasomatised with sporadic mineralised pyroxene-garnet skarn.

The Dolphin deposit dips east to southeast at approximately 30^{o} before steepening to 50^{o} in proximity of the Decline Fault on the eastern margin of the deposit. The host stratigraphy is broadly folded by several southeast dipping open anticlines or vergence folds with wavelengths of a few tens of metres. Several major southeast and east trending normal faults associated with the folding cut the orebody into discreet fault blocks. The Northern Boundary Fault truncates the mine sequence to north juxtaposing the Lower Grassy Group against the Fraser Formation quartzite. The Mine Sequence is truncated to the south by the granite, the surface of which dips and plunges shallowly north and east.

The Dolphin mineral resource estimation has been derived from a kriged block model derived solely from diamond drill holes. Wire-framed solid models of geological and mineralisation domains were created from 20m spaced north-south cross sections utilizing drill hole data and historic geological sections.

The Dolphin Mineral Resource was estimated in 2015 and has previously been publicly released (*ASX:KIS 15 April 2015*). The total estimated remnant Mineral Resource for the Dolphin Mine at a 0.2% WO_3 cut-off, classified as Indicated Resource in accordance with the 2012 edition of the JORC Code is shown in Table 2.

Table 2. Dolphin Project Indicated Mineral Resources above 0.2% WO_3 cut off (April 2015)[3]

Mt	WO_3 %	Tonnes WO_3
9.6	0.9	86,400

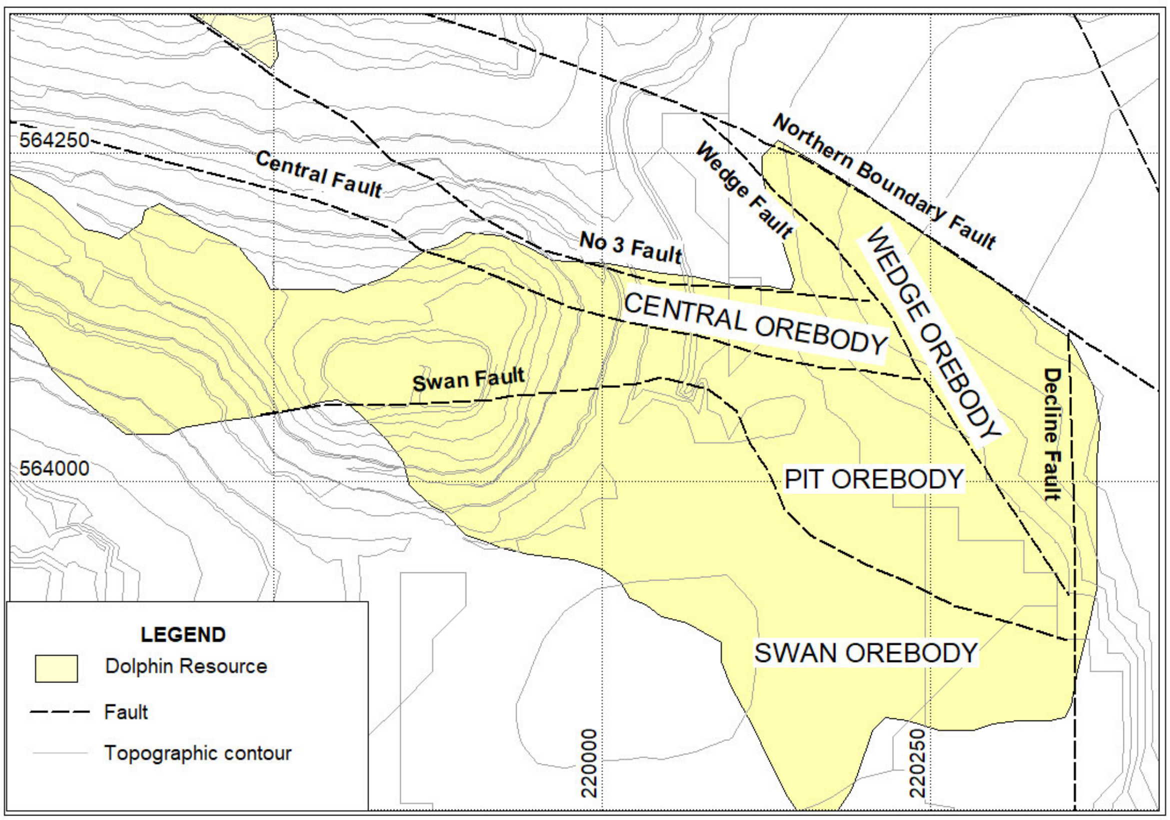


Figure 5. Schematic mineral resource plan, faults and ore block locations

[3] Refer to JORC tables, Qualifications and Competent Persons Statements in the appendices of this report.

5 MINING

5.1 Introduction

Earlier open cut mining reserve estimations of the Dolphin deposit were completed by Xenith *(ASX:KIS September 2015)* and updated by KIS in 2019 *(ASX:KIS 3 June 2019)*. This Revised Feasibility Study is based essentially on the 2019 OC reserve with modifications to scheduling and equipment followed by UG mining of resources below and east of the proposed OC to -300mRL.

The OC mine is proposed to be an own-operate, truck-shovel operation utilising mid-sized hydraulic excavators matched to a fleet of 75 tonne dump trucks The UG mine will be decline accessed and based on contract mining for development and ore production using standard rubber tyred diesel and electro-hydraulic underground mining equipment.

Both the OC and UG Reserves and Feasibility Study are based on the 2015 Dolphin Mineral Resource Estimate. The Dolphin UG ore reserve was estimated with key inputs by mining consultants Polberro Mining (Ore Reserve Statement, Dolphin Orebody, October 2020) and Resource and Exploration Geology as well as other external consultants and KIS staff.

5.2 Open Cut Mining

5.2.1 Open Cut Introduction

Updates to the 2019 Mineral Reserve Estimate have been made during the current Feasibility Study, none of which are considered to result in a material variance from the original estimate of 3.0Mt @ 0.73% WO_3. Technical studies into scheduling, equipment, drill and blast and power and fuel costs have resulted in minor revisions to cost estimation. Physical constraints, cut offs and mine design remain essentially the same with the most significant updates to the 2019 estimate being:

- Updated equipment list
- Revision of ore schedule into 2 stages
- Smoothing of the waste movement schedule to optimise mining costs
- Increased drilling capacity with smaller holes and 100% emulsion explosives to reduce blasting effects on Grassy town and improve fragmentation
- Updated OC cost estimation

5.2.2 Open Cut Geotechnical

The Dolphin OC final pit design has been constrained within parameters defined by geotechnical studies completed by consultants Kevin Rosengren, Coffey Mining and PSM and has not changed since the 2019 FS and Ore reserve *(ASX:KIS 3 June 2019).*

Scheduling of ore mining has been revised to a 2-stage OC mine requiring a shallower membrane wall de-risking the overall OC. A final membrane wall will be constructed after year 4 outside the perimeter of the final pit design. Membrane wall methodology is based on recommendations from numerous consultants, most recently Groundwater Geotechnical Engineering Consultant Ernst Friedlander and Groundwater control contractors Keller Australia.

Table 3. Dolphin Pit Design Parameters

Geotechnical Domain	Bench face angle	Height	Berm width	Inter ramp angle
1	30	variable to 20m	15 sand-rock	30
2	50	10m	5m	37
3	50	10m	5m	37
5	6070	20m	7m	47/54
6	50	20m	7m	40
7	50/70	20m	7m	40/54
8	60/70	20m	7m	47/54
9	60/70	20m	7m	47/54

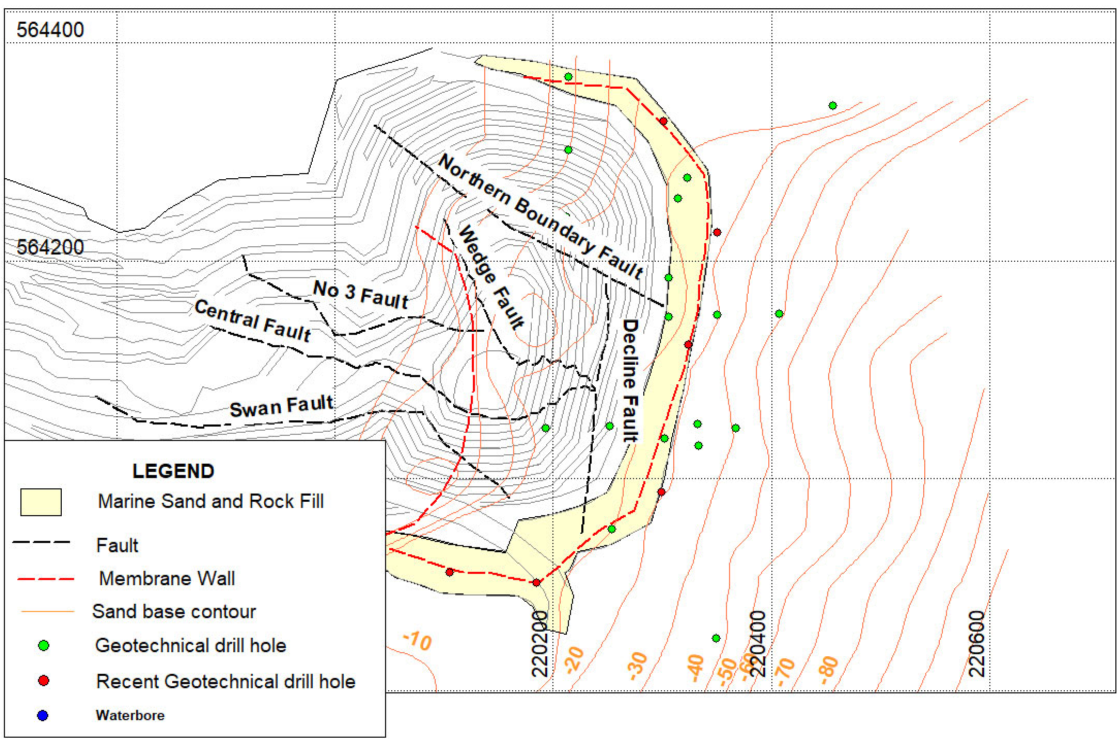


Figure 6. Proposed pit, geotechnical domains, membrane wall location.

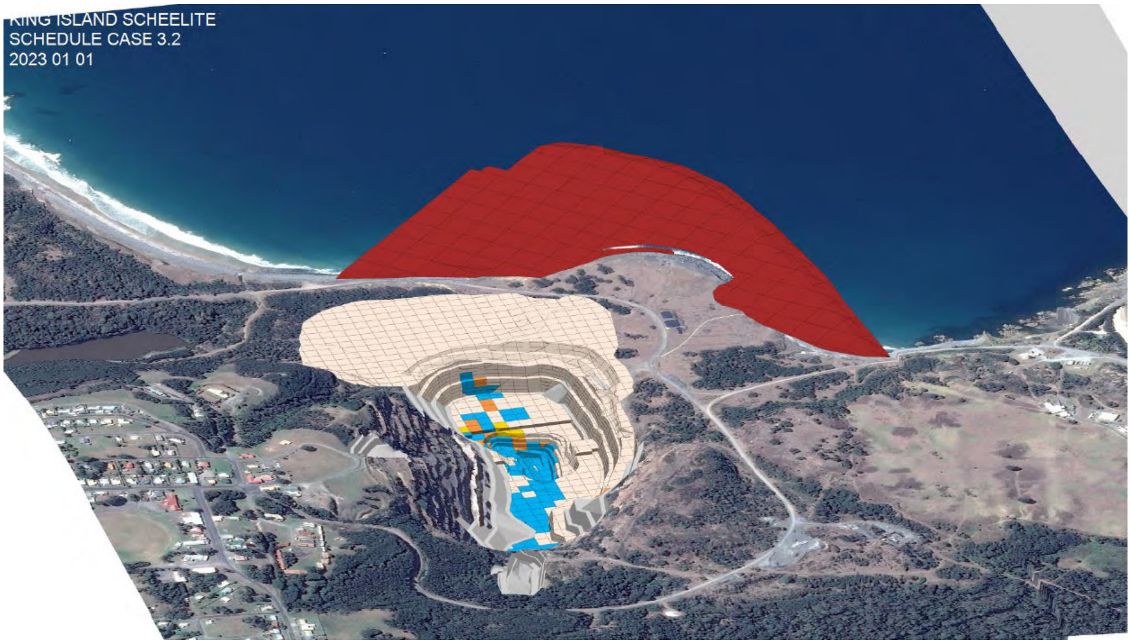


Figure 7: Dolphin open pit Stage 1 development.

5.2.3 Open Cut Design

The Dolphin Open Pit final pit design remains unchanged to that completed by REG and Xenith consultants using Surpac software for the 2019 Feasibility Study. The interim design to allow the installation of the Interim Membrane Wall has minor effects on the ore schedule in terms of grade timing but no effect on overall ore tonnes and grade.

The pit design continues to be constrained by geotechnical domains, the existing open pit morphology and a -20m RL contour of the base of offshore marine sand. A block cut off grade of 0.2% WO_3 was used to define the ore boundaries within the base and western limit of the existing open pit. A Whittle optimiser utilising Lerchs-Grossmann algorithm was used to verify the economics of the pit limit and showed the pit limits determined by the physical constraints lay well within the optimum pit extents determined by the optimiser.

From the updated mine design, a production and dump schedule were produced as the basis of an economic model. Mining factors were applied to convert the in-situ tonnage and graded to a ROM tonnages and grade. The ROM Ore then formed the basis for classification as Open Cut Ore Reserves, once other modifying factors were applied.

5.2.4 Drill and Blast

The majority of the waste and ore will require drill and blasting; the exception to this being old fill and marine sand material. Blasts will be engineered to ensure minimum displacement of the ore to minimise dilution and ore loss. Drilling will be carried out by 2 top hammer rigs with blast hole diameters from 102 mm to 127 mm. The following are the key drill and blast assumptions:

- Epiroc T45-10 Long Mast production drill rig on waste
- Epiroc T45-11 Flexi Boom drill rig on ore
- Drill rates and blasting based on contractor rates
- Separate container explosives magazines for detonators and high explosives
- Pump-able bulk ANE emulsion is to be supplied by 25t Isotainers
- Powder factor for waste 0.7kg/m^3 and 0.8kg/m^3 using 102mm diameter holes
- Emulsion bulk explosive used at quoted $/t rate

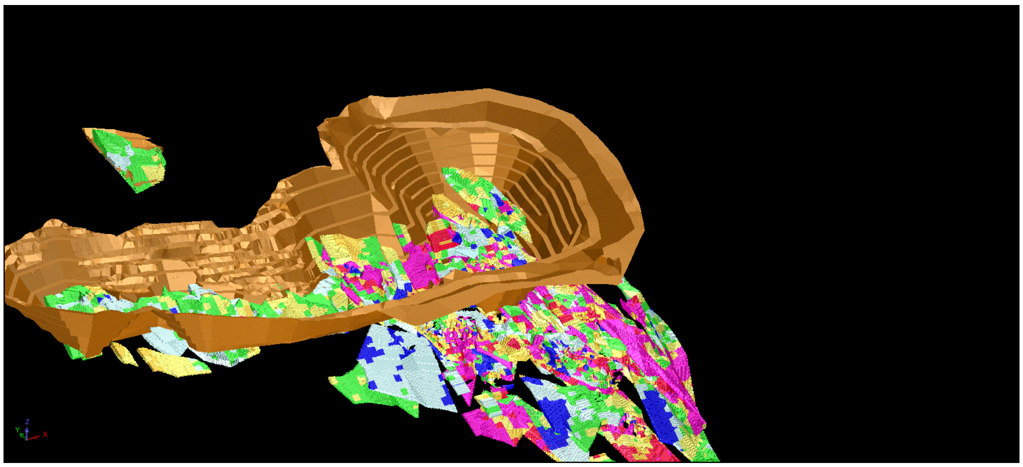


Figure 8. Dolphin Deposit and proposed OC orthogonal Image, looking NE.

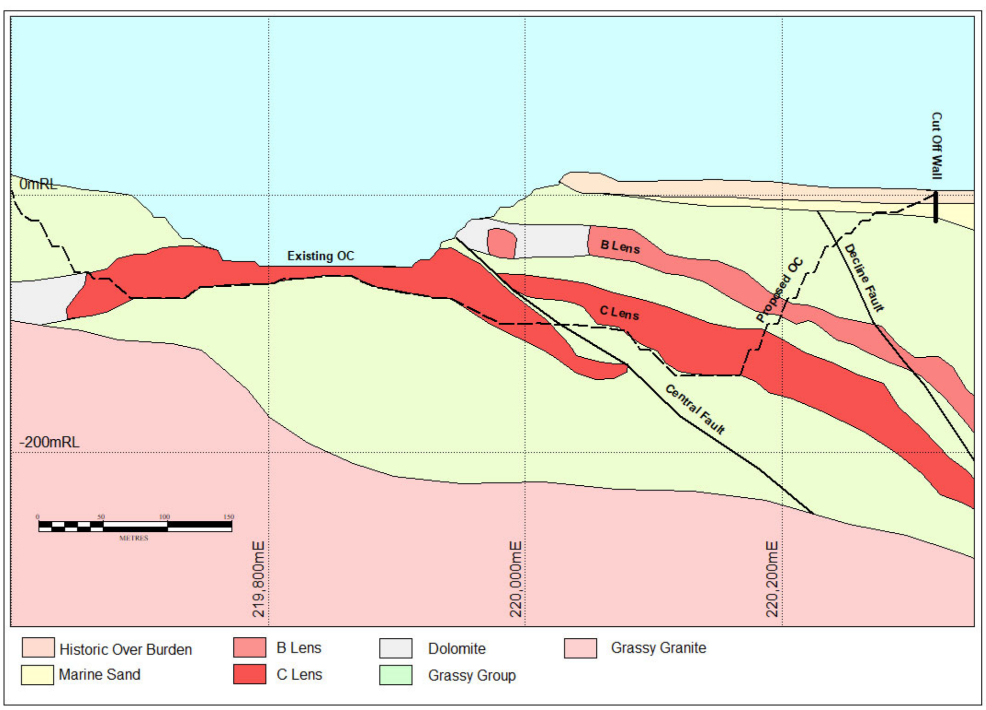


Figure 9. Section 546,100N, Dolphin OC and mineralisation.

5.2.5 Load, Haul and Ancillary Equipment

Truck and excavator mining is the most flexible mining method and is well suited to the mining operations of the Dolphin Project. Waste and ore material will be blasted and mined in 2.5 m flitches. The bulk waste material will be dug with a 150t Cat 6015B backhoe excavator loading Cat 775 rigid trucks. The ore mining is to be dug with a 75t Cat 374 excavator loading Cat 775 trucks. Ore is taken to the ROM pad to be fed to the crusher on dayshift by a Cat 972 FEL loader with the waste taken to the nearby offshore overburden stockpile.

An ancillary fleet of a Cat D10 bulldozer on the waste dump, a Cat D8 bulldozer in the pit, a grader, 10kl water truck, 5kl Service truck, pit pump and lighting plant have been chosen to match the owner operator production schedule.

5.2.6 Offshore Overburden Emplacement Area

The 2009 Development Approval provided for the development of an expanded open pit, tailing storage facility, processing plant and reclamation of Grassy Bay at the Dolphin mine site. GHD prepared an initial report on the construction of the overburden storage facility in Grassy Bay as part of the 2007 open cut feasibility study. A revised offshore overburden placement study was completed by Pitt and Sherry in 2016 and was submitted to the EPA as part of the Amended Mine Plan. The design concept was approved by the EPA in Environmental Protection Notice 7442/2 (the EPN), granted on 2 October 2017.

The 2019 plan provides for an off-shore emplacement area containing approximately 10M BCM of overburden. This reclamation area involves a two-stage construction plan. Stage 1 involves the establishment of a cut off membrane at commencement of mining operations. Mining operation is required to generate overburden required for civil construction including Stage 1 and 2 of the offshore reclamation. Stage 2 is the establishment of the final overburden area.

The construction plan has been designed to minimize erosion and potential turbidity by creating an armored seawall on the exposed southeastern wall designed to protect the emplacement area from the prevailing swell direction. The majority of the overburden will be placed in an area of a low energy ocean processes behind the seawall. With the ore being a skarn means that waste rock mine acid generation is negligible.

5.2.7 Interim and Final Membrane Wall

The Dolphin Pit Design extends seaward into the historic reclamation area. The top 25m is developed in historic overburden and marine sands, with the pit crest constrained by the -20m base of marine sand contour. In order to manage the potential seepage or water ingress in the permeable sediments, KIS engaged PSM to carry out a detailed design and costing of a seawall membrane that will exist between the pit crest and the ocean. Stage 1 involves the construction of an interim wall at maximum -5m depth followed by the final membrane wall at -20m depth in year 4 (Figure 7).

The membrane wall consists of a trench dug from the surface through the old waste rock and sand and into fresh rock. The trench is filled with a bentonite and/or cement slurry mix creating an impermeable barrier between the shoreline and the pit. Wall construction below -12m RL requires a cement-bentonite mixture to be injected into the marine sand in bore holes. Cost estimation of the final and intermediate membrane wall is divided between upfront and deferred capital in the financial model.

5.2.8 Mining Loss and Dilution

The in-situ minable resource has been modified to simulate the effects of recovery and dilution. Mining factors applied for deriving Ore Reserves were selected based on Open Cut Mining by hydraulic excavator in backhoe configuration loading trucks. Selective mining and grade control with a smaller more flexible drill rig and a smaller 75t excavator helps to maximise recovery and minimise dilution.

A mining loss of 15 cm and dilution of 15 cm was applied along any block edge within the geological model that was immediately adjacent a waste block. Loss and dilution have been applied by looking at all blocks surrounding an individual ore block (east, west, south, north, top, and bottom). If any ore block face was adjacent to a waste block, then the loss and dilution has been applied to those block faces.

5.2.9 Mining Schedule

The production schedule for the Dolphin Open Cut Mine is based on the following assumptions:

- Plant feed 400ktpa
- Head Grade (average) 0.76% WO_3
- Pre-strip commences year 1

Schedule summary is presented in Table 4.

Table 4. Mine Schedule Summary

Item	Unit	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Total
Ore Mined	kt	317	409	405	400	422	412	448	115	2,928
Waste Mined	BCM	1,586	1,506	1,400	1,560	1,835	1,889	586	78	10,440
Ore Grade	WO_3 %	0.55	0.64	1.02	0.54	0.52	0.78	1.18	0.75	0.76
Strip Ratio	t/t	14.5	10.7	10.0	11.3	12.6	13.3	3.8	2.0	10.3
In Situ Tungsten	mtu WO_3	173,459	259,984	412,724	217,171	220,735	319,945	530,350	86,093	2,220,461

The life of mine strip ratio has increased slightly to 1:10.3 t/t with new Case 3.2 Mining Schedule.

5.2.10 Revised Ore Reserve Statement

The revised Dolphin Ore Reserve estimate shown in Table 5 has been compiled by Independent Mining Consultant – Tim Callaghan[4] (Member AusIMM) in accordance with the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (JORC Code 2012 Edition). The Open Cut Ore Reserves are based on the

[4] Refer to JORC tables, Qualifications and Competent Persons Statements in the appendices of this report.

Mineral Resource Model estimated and reported by Resource and Exploration Geology in September 2015.

Table 5. Dolphin Open Cut Ore Reserve above 0.2% WO_3 Cutoff[5]

Classification	Mt	WO_3%
Probable Reserve	2.93	0.76

The breakeven cut-off grade used in the estimation of the Dolphin Ore Reserves is 0.2 % WO_3. Under the JORC Code only Measured and Indicated Mineral Resources may be considered for conversion to Ore Reserves after consideration of the "Modifying Factors" including mining, metallurgical, economic, marketing, legal, environmental, social and governmental considerations. A summary of modifying factors are listed in JORC Table 1, Section 4, Estimation and Reporting of Ore Reserves in the appendix of this report.

The grades and metal stated in the Ore Reserves Estimate include mining recovery and dilution estimates. The Ore Reserve Estimate is reported within the revised open pit designs prepared as part of this study only. The Probable Ore Reserve Estimate is based on Mineral Resource's classified as Indicated Resource after consideration of all mining, metallurgical, social, environmental and financial aspects of the operation. There is no material change from the 2019 Ore reserve estimation from minor pit and schedule modifications.

5.3 Underground Mining

5.3.1 Introduction

The Dolphin Orebody was historically mined utilising an underground decline for access as a Load-Haul-Dump operation from 1972 until its closure in 1990. The historic underground mine recorded a total production of 2.6 Mt of ore @ 1.0% WO_3. Very low tungsten prices due to limited demand led to closure of the Dolphin Mine in 1990. On closure the estimated (pre JORC) reserve was 1.15 Mt @ 1.21% WO_3 above a 0.7% WO_3 cut off.

This UG Reserve estimation is based on re-accessing minable resources located below the proposed Dolphin OC, scheduled to produce 2.93 Mt @ 0.76% WO_3 *(ASX:KIS 3 June 2019)*.

5.3.2 Geotechnical

Although the Dolphin orebody is well drilled, modern geotechnical data coverage of the underground deposit is insufficient to construct rock mass rating models commonly used for defining mining methods and ground support regimes in modern underground mines. For this study, KIS have relied on the previous mine history and particularly the experience of the previous Mining/Geotechnical Engineer and Mine Manager.

The historic operation deployed a rock mechanics program in collaboration with CSIRO to investigate the performance of post pillars, ground pillars and regional pillars during

[5] Refer to JORC tables, Qualifications and Competent Persons Statements in the appendices of this report.

ongoing mining activities (Fudge and Nag, 1995). Mining methods, ground support regimes and an extractive mining sequence were developed to minimise major ground disturbance.

The Dolphin Orebody is separated into a number of discreet ore lenses by late brittle faults (see Figure 5). Ground conditions within these orebodies varied greatly, mainly influenced by the rock unit being mined and its proximity to discrete structures.

Ground conditions within the larger C lens orebodies were generally good to very good, allowing extraction with large span room and pillar and up-hole bench stopes. KIS placed diamond drillholes in the Mid Wedge Orebody C and B lens which confirm ground conditions as being generally good to excellent (RQD >90%). Some individual structures are associated with poor recoveries and very poor RQD (e.g. Decline Fault, Northern Boundary Fault).

Ground conditions within the major C Lens orebodies are considered adequate to allow 8 m spans in room and pillar cut and fill stopes and 14 m spans in open stopes provided routine geotechnical inspections are completed with adequate ground support and timely fill placement established.

Much of the historic decline and earliest orebody accesses were developed in biotite hornfels and lower volcanics within the immediate footwall of the orebody using (now) obsolete initial ground support practices. Subsequent failures necessitated the requirement of steel arch sets for much of the old upper decline. This reserve estimation has assumed the requirement for a new Southern Decline to avoid rehabilitating failed development where possible.

Typical primary support for development headings such as split sets and mesh has been estimated on a pro-rata basis for quantity estimation only. Actual primary development support should be derived in every case either by manual design or the use of software systems such as RocScience's Unwedge and the results modified with practice. All headings will be split set and mesh supported according to design with default mesh to 1.5 m height and 7 bolts per 1.2 m. Intersections are to be cable bolted with twin strand 6 m cables according to design (generally 8 per intersection). Use of fibrecrete (40 mm) for 25% of all development has been assumed.

5.3.3 Mining Method and Mine Design

The historic Dolphin underground mine was a decline accessed Load Haul Dump operation from 1972 until its closure in 1990. Ore production was from a combination of post pillar cut and fill and up hole bench stopes. Mine sequencing, ground support and fill cycles were developed and improved as the operation progressed. The mine decline was located close to the orebody footwall and supported with steel arch sets in many instances placed after failures developed. The later mine development was supported with mesh and grouted rock bolts every 2-3 rounds providing better conditions.

Some of the old decline, level access and stope openings are up to 40 years old and the loss of some access is highly probable. The majority of re-entry development is proposed to be in the form of new development except where older development must be utilised.

The proposed mining method is similar to the old mine, with a new decline designed to bypass the upper decline and access the lower mine and Swan areas. The decline and accesses have been designed to suit modern rubber tyred underground equipment at minimum 4.5 x 4.5 m. Design parameters are summarised in Table 6.

Ore production assumes a combination of cut and fill (CAF), post pillar cut and fill (PPCAF) and up hole bench stoping (UHB), down hole bench stoping (DHB) and remnant up hole stoping methods.

It is assumed all voids will be filled with either cemented paste fill, sand fill or waste rock. The recoveries utilised in this estimate are completely reliant on the use of consolidated paste fill. The use of consolidated paste fill represents the safest and most productive means of recovering the maximum percentage of the in-situ resources.

Remnant ore is located within areas that have been previously mined or may have been compromised by known poor ground conditions since the mine closed some 30 years ago. It is assumed that remnant ore will be mined where practicable late in any mining sequence except where the voids produced can be immediately filled to prevent subsidence and/or caving.

Table 6. Summary of UG Mining Method

Method	Span	Height	Other	Gradient	Recovery	Dilution
Decline	4.5m	4.5-4.7m		1:7 max		
Corner	4.5m	4.5-4.7m	Radius 15 to 20m	1:10 max		
Level drive	4.5m	4.5m		1:50 min		
PPCAF (width defined by ground conditions)	Up to 8.0m	4.5m–5.0m	6m x 6m pillar rock, sand fill or low strength paste fill	level	82.5%	10%
CAF (width defined by ground conditions)	6.0m	4.5m	Rock, sand or low strength paste fill	level	70-90%	10%
UHB	14m	15m-20m	4 - 5m fault, shoulder and crown pillars. Primary stope high strength paste fill Secondary stope low strength paste fill	1:50	80%	10%
DHB	14m	15m-20m	4 - 5m fault and shoulder Primary stope high strength paste fill Secondary stope low strength paste fill	1:50	86%	10%
Remnant stoping up hole	14m	15m-10m	Fault pillars Low strength paste fill	1:50	50-80%	10%

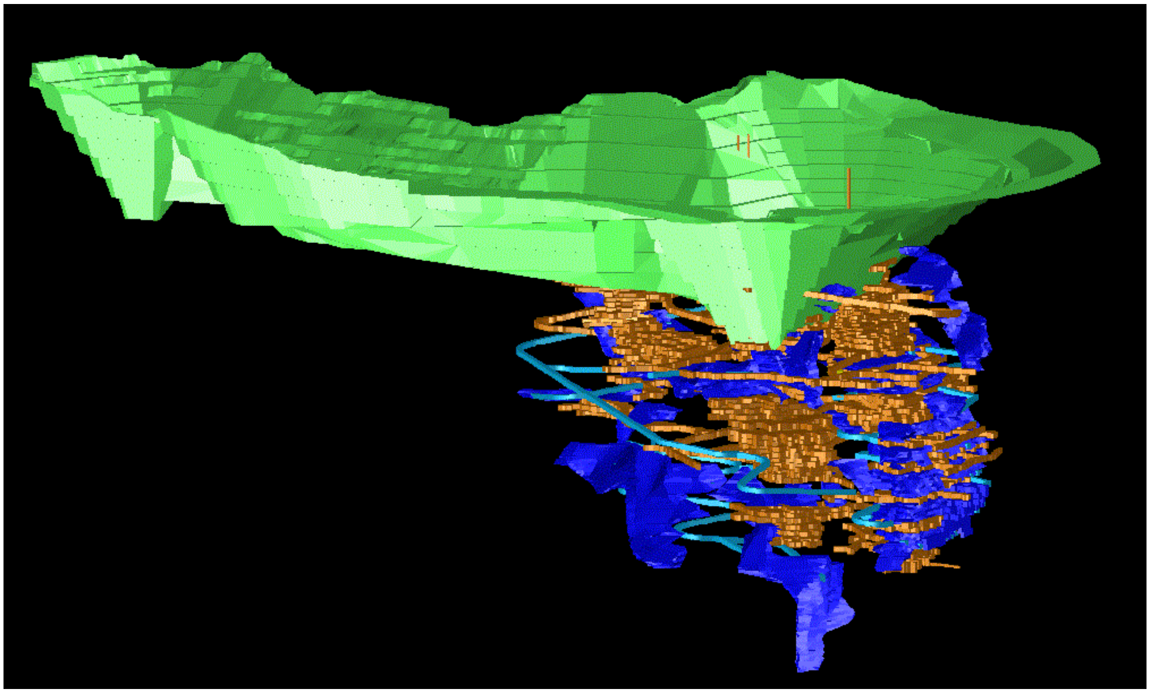


Figure 10. Dolphin mine looking NE, with proposed open cut, historic underground mine (bronze), new decline (light blue) and production stopes (dark blue).

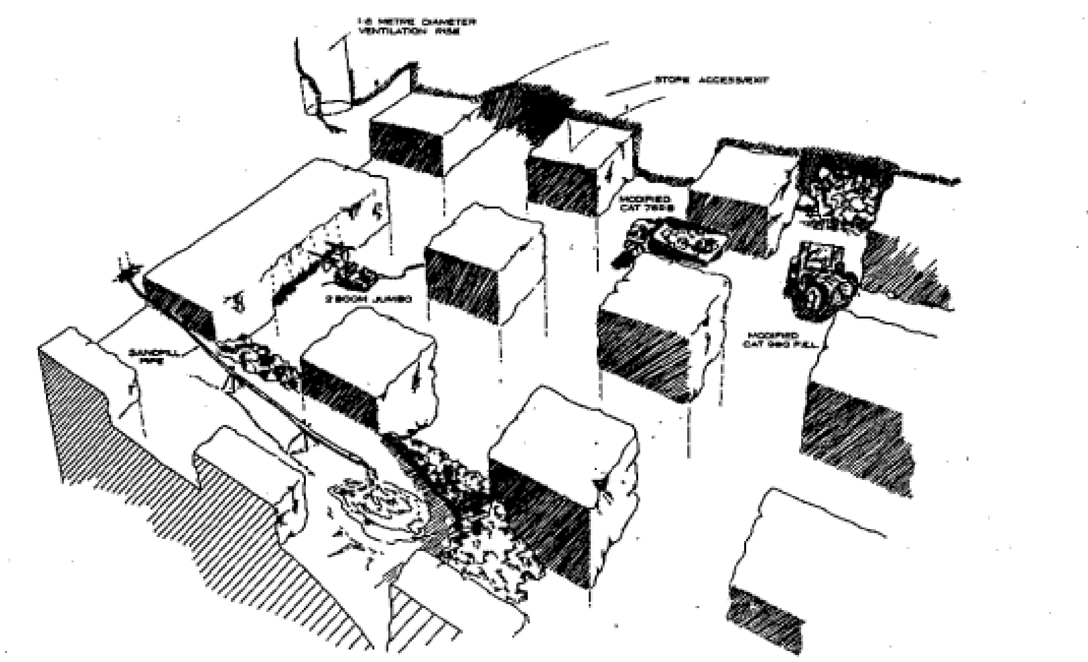


Figure 11. Post Pillar Mining Dolphin Mine.

5.3.4 Ventilation

On mine closure the ventilation circuit was working adequately, with the air ingress of 120 m^3 at the portal with unforced ventilation to the various stoping areas. All return air was collected at the -150 m level return airway and directed to twin ventilation rises on the 75 m level driven by two Richardson 1615CY centrifugal fans.

It is assumed that the ventilation circuit below -140 m RL will remain intact, although is assumed to require some rehabilitation. Under the new planned underground operating conditions, the ventilation air ingress will be at the -120 m RL portal. The ventilation circuit will need to be connected from some convenient point underground to the new exhaust fan position in the completed open cut, as the original return air rises to surface (where the exhaust fans were located) will be mined out, as part of the new planned open cut to the -140 m RL. A dedicated return air rise will be required from the -150 m level to the surface either via the old -100 m level into the open cut or via a dedicated rise to surface. Currently a 135 m raise bored rise and fan (210 kW) has been included in the capital however other alternative systems require design and costing.

Internal forced ventilation has been included in the operating costs and includes a 90 kW decline fan and several 55 kW face fans for development headings.

5.3.5 Mine Dewatering and Pumping

Historically the underground mine pumped approximately 23 l/s of fresh water, 14l/s of which was estimated to be mine make up water. There, is no reason to assume these rates will change significantly once the mine has been dewatered, however, mine dewatering will involve larger pumping rates in years 1-3 estimated to be in the range of 40-50 l/s.

The historic mine pumping system involved a series of staged “dirty water” pumps capable of pumping 75 l/s utilising 100 mm water lines through rises, boreholes and the decline to and out of the historic open cut. A separate high capacity open cut clear water pump system with a peak capacity of 260 l/s was formerly utilised to remove water from the open cut.

The proposed mine dewatering and pumping system, yet to be finalized will follow a similar strategy. A pump station comprising two 75 kw mono-pumps has been allowed for in UG capital infrastructure. In addition, a travelling mono-pump will be used to dewater the lower mine. A 20 kw decline Flygt pump and up to 3 face Flygt pumps in various locations have been allowed for during the first 2 years of mining.

Mine development and rehabilitation is to be conducted in close sequence with the dewatering process to permit physical examination. Drilling of dewatering holes and probe holes are required to check and drain potential perched water in isolated stopes.

5.3.6 UG Mining Equipment

The Dolphin Mine and mining methods have been designed using typical diesel powered and electro-hydraulic underground mining equipment commonly used in the Australian mining industry. A list of underground equipment that could support the proposed production schedule has been proposed within the feasibility study in Table 7. Equipment in this instance is assumed to be supplied by a mining contractor.

Table 7. List of Underground Equipment

Item	Year 1	Year 2	Years 3-6
Atlas Copco 2 Boom Jumbo	2	3	1
Loader Cat R2900	3	3	2
Truck Cat AD45	1	3	2
Ejector Truck CAT740 CAT730	1	1	1
Long hole Rig	1	1	1
Charge up	1	1	1
Integrated Tool Carrier	1	1	1
Shotcreter	1	1	1
Agitator Truck (KIS Owned)	1	1	1
Grader (KIS owned)	1	1	1
Service truck	1	1	1
Light Vehicles contractor	6	6	6
Light Vehicles KIS	6	6	6

5.3.7 UG Cut Off Grade Estimation

An appropriate cut-off grade for Reserve Estimation was derived from approximate financial parameters, modelled process recoveries and estimated mining and processing costs derived from KIS technical studies. Cut-off grade estimation is summarised in Table 8.

Table 8. UG Cut Off Grade Estimation

Assumtions	Unit	Source
Metal Price WO_3	$25,000	$US/t KIS
Exchange Rate	0.7	Jul-20
Realization rate	77%	Approximate industry average
Mining Recovery	90%	Approximate industry average
Mill Recovery	74%	KIS Test work
Milling cost	$33	KIS PFS Op cost
Mining Cost	$90	Authors estimate
Operating cost	$123	$ A KIS PFS Op Costs
Calculations		
Mine Gate Price	$20,350	(Metalprice*realization*mill recovery)/ exchange
Operating cost/tonne of ore insitu	$137	Operating Cost / mining recovery
WO_3 % break even cut off/t	0.67%	

5.3.8 Ore Reserve Estimation Methodology

Ore reserve estimation utilised horizontal flitches on 1.0 to 2.5m intervals with ore perimeters outlining realistic mining shapes using a 0.7% WO_3 cut off. Close spaced horizontal perimeters better defined the boundary between planned mining shapes and existing voids.

The methodology was utilised to remove mineralisation that could not reasonably be expected to be mined because of its relative position with respect to stope and development voids, post pillars and areas of extremely poor or failed ground.

Perimeters were modelled into realistic digital stope shapes. The grade and tonnes (including planned dilution) within each digital stope model were loaded into an excel spreadsheet with appropriate recovery and dilution factors applied depending on mining method. The in-situ ore was modified in order to simulate the effects mining has upon ore recovery and dilution. Dilution and loss ratios used for the estimation are summarised in Table 3. All dilution from overbreak and fill was conservatively assumed to have zero grade. A 0.7% WO_3 stope cut off was then applied to remove stopes that do not add value to the project.

5.3.9 Ore Reserve Statement

The Dolphin Underground Ore Reserve estimate shown in Table 9 has been compiled by Independent Mining Consultant – Alan Fudge[6] (Member AusIMM) in accordance with the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (JORC Code 2012 Edition). The Ore Reserves are based on the Mineral Resource Model estimated and reported by Resource and Exploration Geology in September 2015.

Table 9. Dolphin Underground Probable Ore Reserve above 0.7% WO_3 Cutoff

	kt	WO_3 %
Total Dolphin UG	**1,503**	**1.24**

The breakeven cut-off grade used in the estimation of the Dolphin Ore Reserves is 0.7 % WO_3. Under the JORC Code only Measured and Indicated Mineral Resources may be considered for conversion to Ore Reserves after consideration of the "Modifying Factors" including mining, metallurgical, economic, marketing, legal, environmental, social and governmental considerations. A summary of modifying factors are listed in JORC Table 1, Section 4, Estimation and Reporting of Ore Reserves in the appendices of this report.

The grades and metal stated in the Ore Reserves Estimate include mining recovery and dilution estimates. The Ore Reserve Estimate is reported within the underground mine design prepared as a component of this study only (Ore Reserve Statement, Dolphin Orebody, October 2020 – Polberro Consulting). The Probable Ore Reserve Estimate is based on Mineral Resource's classified as Indicated Resource after consideration of all mining, metallurgical, social, environmental and financial aspects of the operation.

[6] Refer to JORC tables, Qualifications and Competent Persons Statements in the appendices of this report.

5.3.10 Mining Schedule

A development and production schedule has been produced by Polberro Consulting to support the reserve estimate as required under the guidelines of the 2012 edition of the JORC Code. In this instance it has been assumed all surface open cut mining has been completed to a depth of -140 m RL before underground mining commences. The development and production schedule for the Dolphin Underground Mine below -140mRL is based on the following assumptions:

- Plant feed 300 ktpa
- New decline access to -150 m RL
- Rehabilitation of old workings below -150 m RL
- Development of ventilation system based on old -150 m return airway
- Development of lower decline to access lower reserves
- Allowance in development rates for dewatering and probe holes
- Conservative ground support to allow for unknown ground conditions
- Waste Development advance rate 6 m per drill per day
- Ore Development advance rate 10 m per drill per day
- Rehab with stripping advance rate 6 m per day
- Rehab with no stripping advance rate 14 m per day
- Loader mucking capacity 1000 tonnes per day per loader
- Production drill rig 250 m per day per rig
- Cable Support Drilling 200 m per day per rig
- Paste fill plant capacity 800 cubic metres per day
- Production drill metres assigned to UHB at 12 tonnes per metre and DHB at 10 tonnes per metre
- Mesh sheets applied to development at 1.5 sheets per metre of development or rehabilitation (8-9 m^2 per metre advance)
- Split sets (2.4 m) applied to development at 7.5 split-sets per metre including rehabilitation.
- Fibrecrete applied to 25% of development and rehabilitation at a rate of 40 mm coverage i.e. pre-rata 0.18 cubic metres per metre. (Rate doubled for the -280 Lower Wedge)
- Cable metres have been assigned per metre developed at 1m per metre, an intersection allowance of 70m per intersection, a bench stoping allowance of 18 m per metre for draw point crosscuts and a Cut and Fill & Post Pillar allowance based on the back area exposed and the area of influence of each cable.

An annualized summary of the underground development and production schedule is located in Table 10.

Table 10. Summarized Underground Mine Schedule

Mining	Unit	Total	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14
Ore Mined	kt	1,483	129	306	301	309	301	137
Waste Mined	kt	179	117	62				
Ore Grade	WO_3%	1.24%	1.13%	1.15%	1.16%	1.26%	1.38%	1.30%
In-situ tungsten	mtu	1,832,139	145,970	352,339	350,440	389,949	416,017	177,423
Waste development m	m	3,453	2,280	1,173				
Ore development m	m	7,014	1,054	1,998	1,126	1,089	1,013	734
High stength fill	m^3	107,650	0	34,700	22,890	24,190	22,960	2,910
Low strength fill	m^3	373,230	50,450	66,470	63,760	54,520	79,170	58,860
Development cable bolts	m	20,080	6,450	13,630				
Stope cable bolts	m	41,640	4,560	9,120	7,990	7,720	8,380	3,870
Development Split Sets	No	52,370	30,470	21,900				
Stope Split sets	No	31,580	4,550	9,810	6,060	2,170	3,430	5,560
Fibrecrete	m3	1,290	740	550				
Cable drilling	m	61,710	11,000	22,750	7,990	7,720	8,380	3,870
Lonhole drilling	m	67,150	1,260	10,520	17,110	17,270	17,650	3,340
Longhole rigs	No		1	1	1	1	1	1
Loaders 2900	No		2	3	2	2	2	2
Trucks AD45	No		2	4	3	3	3	2
Development Rigs	No		3	2	1	1	1	1

6 METALLURGY AND PROCESS PLANT

6.1 Ore Characteristics

B and C lens of the Dolphin orebody comprise four main ore types including:

- B Lens – pyroxene garnet skarn with sparse coarse scheelite veins and crystals comprising 22% of the minable resource in the OC.
- C Lens - banded garnet-pyroxene-biotite-calcite footwall beds comprising 54% of the resource, pyroxene-garnet skarn 15% and garnet skarn 9%.

The four categories possess different physical characteristics and exhibit slightly varied metallurgical performances. Both variability and blended composites have been provided for metallurgical test work.

6.2 Metallurgy

6.2.1 History

Numerous reports have been published relating to the metrics of the historic operations, including plant flowsheets, product grades and recoveries. Prior to shutdown of the Dolphin mine in 1990 the processing plant operations included comminution, coarse and fine gravity separation, concentrate dressing, flotation and leaching to produce three products. Historical data suggests that the percentage recovery of tungsten was approximately 72%.

Table 11. Dolphin Ore Physical Characteristics

Measurement	Units	B Lens		C Lens	
		HG Comp	Avg Comp	HG Comp	Avg Comp
-UCS	Mpa	83.5, 76.5	41.3, 60.1	80.0, 59.1	132.0, 68.4
Abrasion Index		-	0.0687	-	0.1858
Crushing Work Index (76+51mm)	Range kWh/t	-	9.5 – 23.3	-	8.2 – 25.2
	Avg. kWh/t	-	15.9	-	13.5
	80^{th} pct kWh/t	-	20.2	-	16.5
Rod Work Index	kWh/t	-	17.9	-	17.6
Bond Work Index	212um kWh/t	-	10.6	-	12.5
	P80 kWh/t	-	143	-	154
SG		2.82	2.75	3.00	2.74

6.2.2 KIS Testwork

KIS have conducted extensive laboratory test work over the last 15 years in an effort to improve recovery and reduce processing capital and operating costs. Coarse gravity separation has proved most efficient with flotation and recently fine gravity separation being investigated for cost effectively increasing overall recovery. Recent studies into fine gravity separation of the coarse gravity tail using multi-gravity separators (MGS) at ALS Burnie laboratories have achieved excellent results. Flotation dressing of the fine gravity product produced a concentrate >60% WO_3. Total recovery of coarse and fine gravity circuits is estimated to be approximately 79%, with recoveries adjusted for head grade ranging between 73% and 82%.

KIS intend to blend the coarse and fine concentrates to produce a final salable concentrate >63% WO_3 to meet offtake specifications. Further optimization work at pilot or plant scale is planned.

6.3 Process Plant Design

Process plant design was completed by Gekko and Asther (Figure 14). Significant modifications to the process flowsheet and plant design since the 2019 FS *(ASX:KIS 3 June 2019)* have been made, mainly to the gravity circuit resulting in a reduced flotation requirement. Civil construction associated with processing outside of the Gekko scope was designed and costed by BR Design.

The process flowsheet design includes two stage crushing, using jaw and cone crushers, fine ore stockpile, fine vertical shaft impact crushing, coarse and fine gravity concentration using spirals and tables, dressing of gravity concentrates by flotation and magnetic separation and finally drying, blending and bagging of concentrate. (Figures 12 and 13). Plant throughput is expected to average 60 tonnes per hour.

Updated infrastructure requirements and capital and operating costs associated with the process plant are included in this feasibility study.

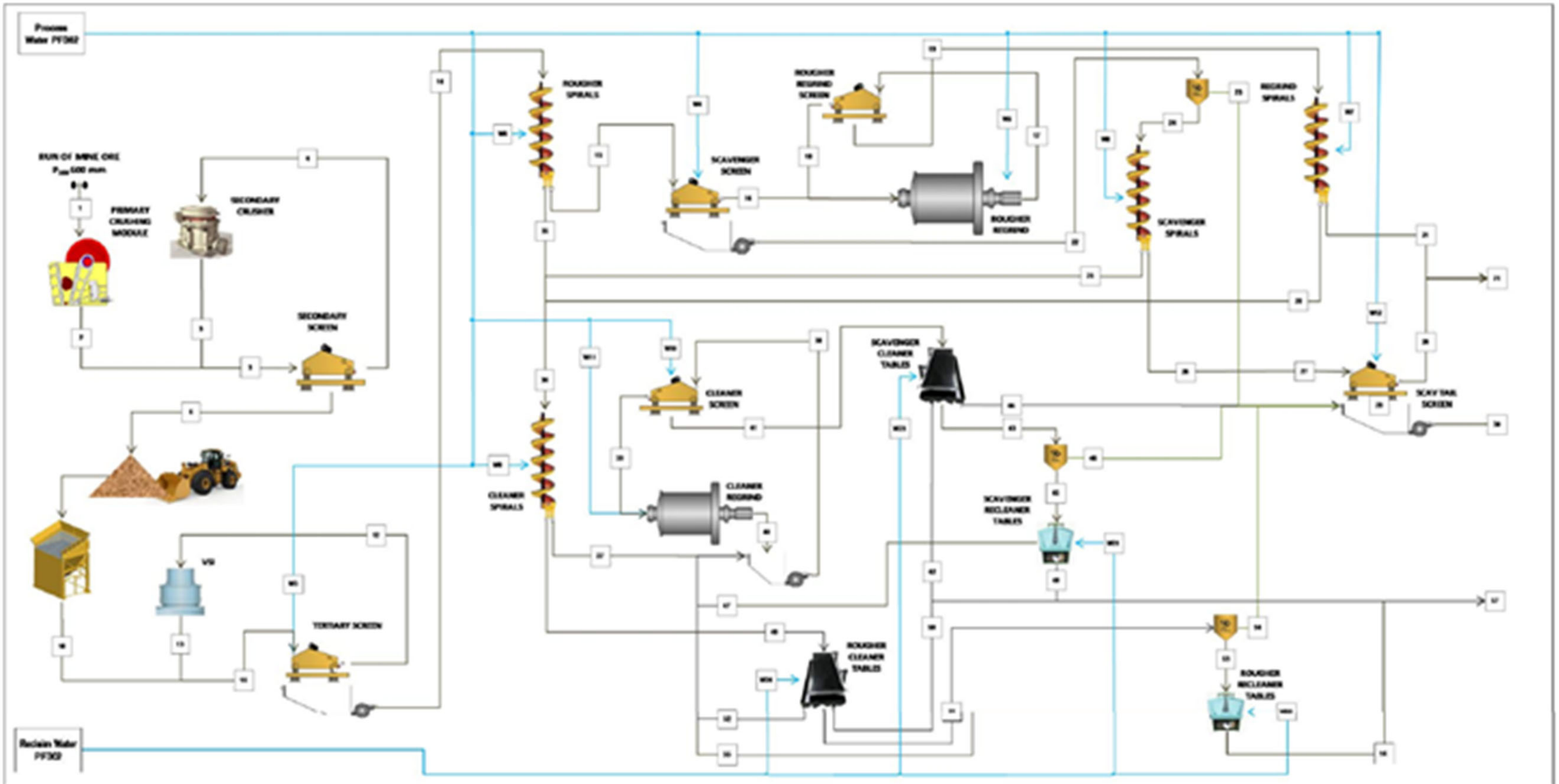


Figure 12. Process flow sheet comminution and coarse gravity circuit

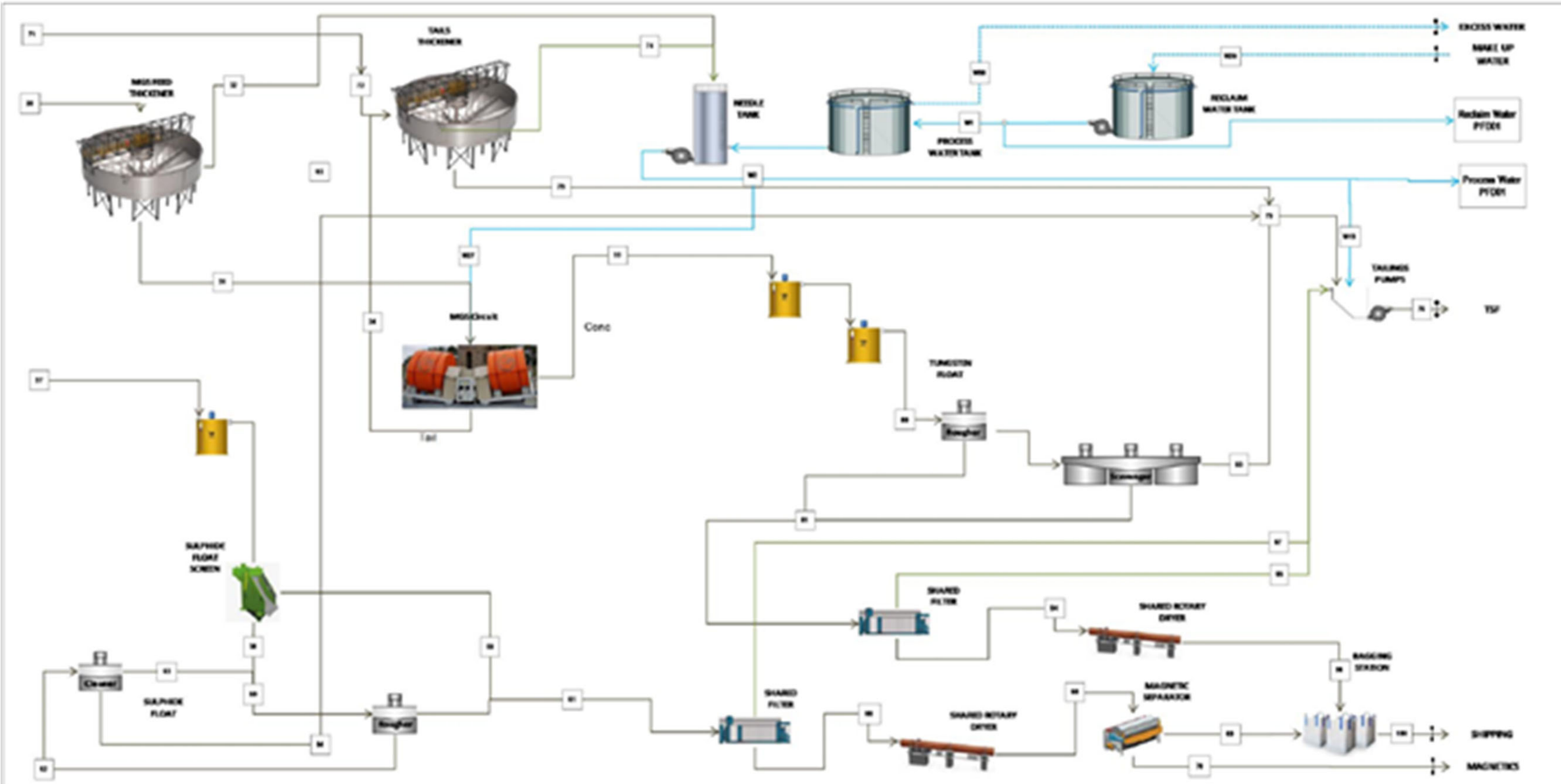


Figure 13. Process flow fine gravity, dressing and blending circuit

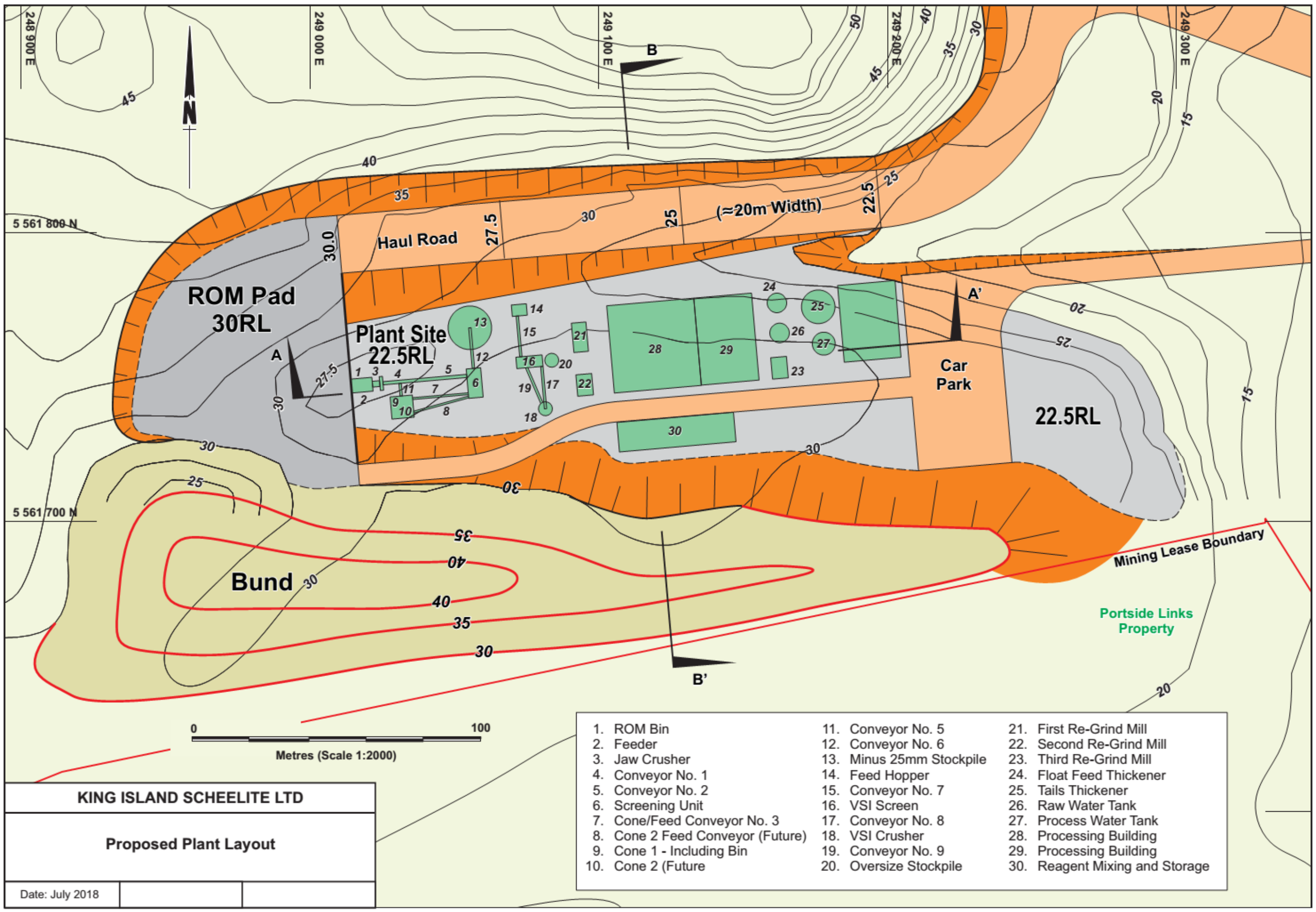
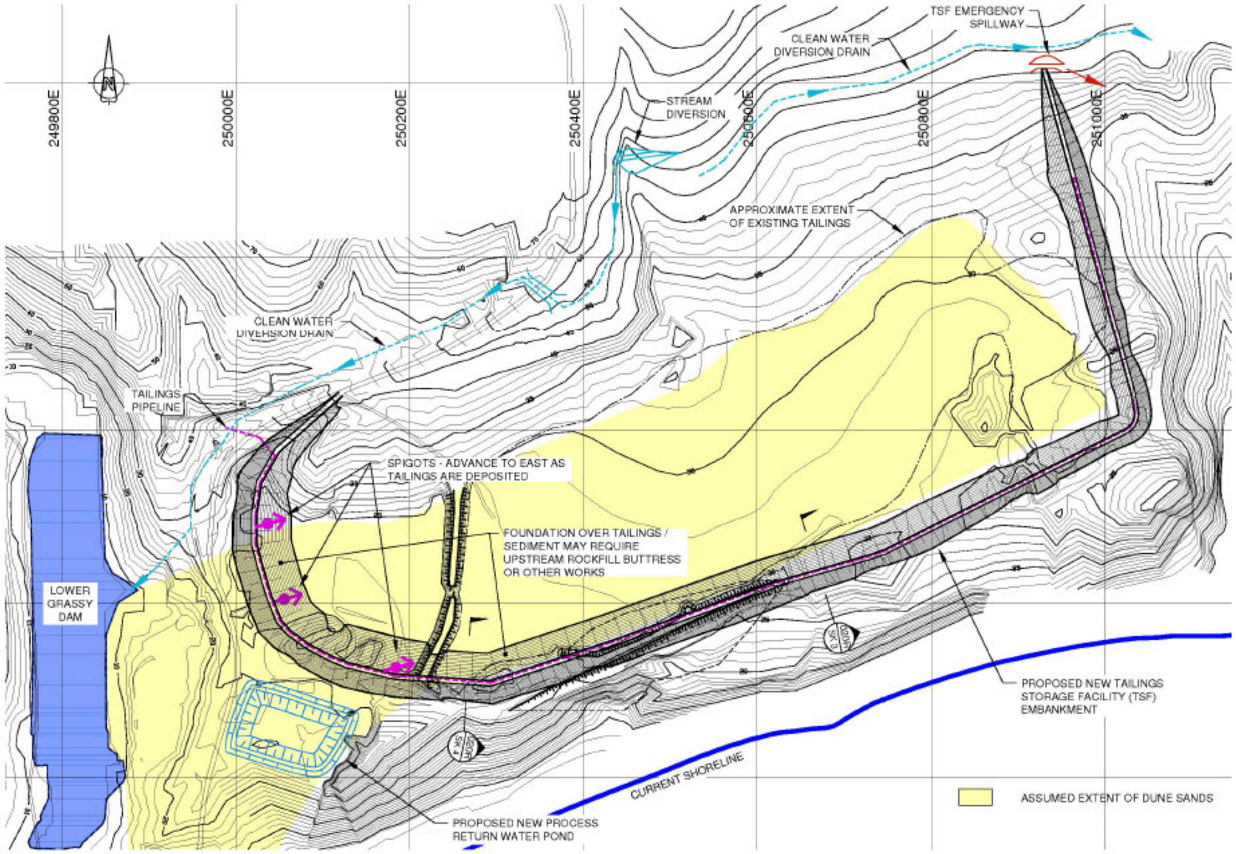


Figure 14. Process Plant Layout

King Island Scheelite Ltd



Sketch 2: New TSF embankment and associated mine water management (refer MWSI, Oct 2015)

PSM

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PSM2398-020R
12 October 2015

Figure 15. Planned Tailings Storage Facility

7 INFRASTRUCTURE AND SERVICES

Development of the site additional to mining and processing requirements will require the construction of:

- Mining haul road to ROM & Tailings Storage Facility (TSF) and upgrade to existing access road from Grassy Town and Port
- Administration, mining, processing & laboratory offices, stores warehouse, change rooms and associated ablutions & waste water disposal system
- Raw water pumping stations and pipelines
- Site storm water and water recycling storage & reticulation
- Heavy & mobile vehicle and fixed plant workshops
- Fuel storage
- Potable water supply
- Explosives storage and handling
- Electrical infrastructure
- Diesel power plant and infrastructure
- Accommodation facilities
- Communications and IT

Site Layout, detailed design and cost estimations for additional site infrastructure have been included in this FS.

7.1 Power

The process plant power demand in the first 8 years (400ktpa) is estimated to be 1.7 MW/h with an annual usage of 13 GWhpa. OC mine dewatering and ancillary site infrastructure requires an additional 1 GWhpa for an estimated total of 14 GWhpa.

UG mine operation in years 9 – 14 requires an average 600 kW/h and an annual total of 4GWhpa with a peak of 8 GWhpa in year 2. Process plant consumption is estimated to reduce to 1.3 M/h and 9 GWhpa processing higher grade UG ore at 300 ktpa. With mine dewatering and ancillary equipment total usage in years 9 – 14 is estimated to be approximately 14 GWhpa with a peak of 17 GWhpa.

A Memorandum of Understanding has been signed with Hydro Tasmania to supply electricity at the King Island domestic rate after a power line upgrade. A competitive stand alone diesel generation proposal has been received as a viable alternative. With the grid power option, diesel generation is required to run the crushers with their spiky loads and act as an emergency genset for critical equipment in the event of a power failure.

7.2 Freight Transport

The majority of the islands freight is delivered to Grassy Port. The port is managed by Tasports, a state-owned entity and is capable of hosting 5,000t ships. King Island is currently serviced by two roll-on, roll-off shipping services. Average shipping costs for container and roll on roll off freight has been used for cost estimation in this Feasibility Study. Access between the mine and nearby Grassy port is approximately 1km.

7.3 Water

KIS have license to extract 500Mlpa of water from Lower Grassy Dam. Raw water for the project will be drawn from the Lower Grassy Dam supplemented with recycled process water (30%), storm water and mine water. Potable water will be drawn from the local scheme by dedicated pipeline. Waste water will be treated on site and discharged according to local water authority regulations.

7.4 Fuel

Diesel fuel for mining equipment and power generation is to be shipped in 26kl Isotainers and transferred to 2 double skinned diesel distribution tanks.

7.5 Accommodation

King Island Scheelite aims as much as possible to source its workforce locally. Initially there will need to be a higher proportion of fly in fly out, but KIS is targeting moving to 75% local hire by year 3 of the operation.

The old Grassy School has been purchased by KIS and could be renovated to include ensuite rooms and messing for long term single persons. Additional transportable ensuite units could also be installed as required.

7.6 Tailings Storage Facility (TSF)

A TSF designed to ANCOLD standards on the historic TSF footprint has been completed by consultants PSM. Dam curent design capacity is 3.7Mt, built in 2 lifts. A sediment pond and decant pond followed by wetland system capture and return clean TSF water back to the Processing Plant.

8 PROJECT IMPLEMENTATION

To commence operation of the Project the following development activities will be undertaken:

- All relevant approvals for the operation of an open cut mine have been obtained. Prior to commencement of operations detailed operating plans must be submitted to council and a closure and rehabilitation plan to the EPA
- Development and implementation of a site wide occupational health and safety management system to govern the operations
- Development of HR policies and an organisational structure to support the operation
- Processing facility construction – a scope has been prepared in the FS and a preferred contractor has been selected to conduct the work
- Provision of office, accommodation facilities and associated infrastructure
- Re-establishment of power supply and diesel generated power station
- Execution of key reagent and consumables supply contracts to support the ore processing needs and provision of first fills

Key personnel will be recruited at appropriate times and will provide project management supervision and support through development up to operational status. Pre-production capital and operational expenditure for the start-up of the project has been allowed for in the economic model.

9 COST ESTIMATION

Capital and operating costs are key inputs to the financial model supporting this FS and ore reserve update. Capital and operating costs have been provided by KIS and external consultants including but not limited to Gekko, Asther, Xenith, PSM, Polberro, Resource and Exploration Geology and BR Design.

OC Mining fleet capital cost estimates were developed as an owner operator from 1st principles by KIS, CAT dealerships and Xenith. Mine operating cost have been derived from Xenith's cost model and database.

UG Mining capital and operating costs have been estimated from 1st principles using the UG mine schedule and KIS and external consultants' cost database. Mining capital and operating cost estimates were developed assuming the 6-year mine life will be based solely on a contract mine operator. Increased mine operating costs occur in Year 9 and 10 where extra contract mining equipment will be required for mine development and ground support.

Process plant capital cost estimation has been provided by Gekko with additions by Asther and BR Design for capital works outside of Gekko's scope. Tailings storage facility design and capital cost has been estimated by PSM with previous iterations by GHD and SEMF. Additional site infrastructure capital costs have been estimated by BR Design. Plant operating cost have been estimated by Gekko and Asther. Capital infrastructure for the paste plant are included in UG mine capital estimates.

Capital and operating costs are considered to be appropriate for this style and of deposit and in line with similar sized OC and UG operations in Australia.

A summary of capital and operating costs are listed in Tables 12 and 13.

Table 12. Key Capital Costs Life of Mine

Item	Value $M
Processing Plant	$42.1M
Tailings Storge Facility	$6.2M
OC Capital	$30.9M
UG Capital	$25.5
Other	$24.5
Total	**$129.2M**

Table 13. Key Operating Costs – Life of Mine

Item	Value $/mtu shipped	$/t ore processed
OC mining cost	$48 mtu	$29/t
UG mining cost	$71 mtu	$72/t
Total mining cost	**$58 mtu**	**$43/t**
Processing cost	$39 mtu	$29/t
Shipping cost	$4 mtu	$3/t
Royalties	$24mtu	$17/t
Other	$5 mtu	$3/t
Total	**$130 mtu**	**$95/t**

Note: Minor rounding errors may occur

10 FINANCIAL ANALYSIS

Based on the capital and operating cost estimates outlined, a financial model has been developed for the purpose of evaluating the economics of the Dolphin Project. A summary of the yearly production, modelled cash flow and project metrics is listed in Table 14.

Pricing for APT, Ammonium Paratungstate, the benchmark used to derive concentrate pricing, is based on an average of industry experts provided from recent publicly available material Pricing in 2023, the first year of production is US$280/mtu, thereafter prices increase in 2024 to US$295/mtu before declining in 2025 to US$265/mtu in line with forecasts. Thereafter prices are kept constant at US$300/mtu.

The exchange rate has been kept constant at A$1.00 to US$0.70.

Economic modelling for the revised 14-year KIS Dolphin Project provided the following key outcomes:

- Development capital of $73.0 million
- Deferred Capital of $56.2 million
- Production of 3.26 Mmtu of scheelite in concentrate over 14 years
- Total processing of 4.4 Mt at 0.92% WO_3 with plant recoveries ranging between 73% to 83% depending on head grade
- LOM Cash Cost of A$130/mtu produced,
- Project royalties total A$76.4 M, comprising payments to the Tasmanian State Government and third-party interests
- EBITDA of A$638.5 M
- Pre-Tax NPV applying an 8% discount rate (NPV8%) is $241 M with a Pre-tax Internal Rate of Return (IRR) of 42.5%

The LOM cost of production for the ore processed is $96/t comprising:

- Mining Cost - $43/t
- Processing Cost - $29/t
- Shipping Cost – $3/t
- Site Administration Cost - $4/t
- Royalty Cost - $ 17/t

All cashflows are quoted pre-tax. The Project is most sensitive to fluctuations in the APT price and metallurgical recovery and moderately sensitive to fluctuations in Opex, Capex, Reserve and head grade (Figure 16).

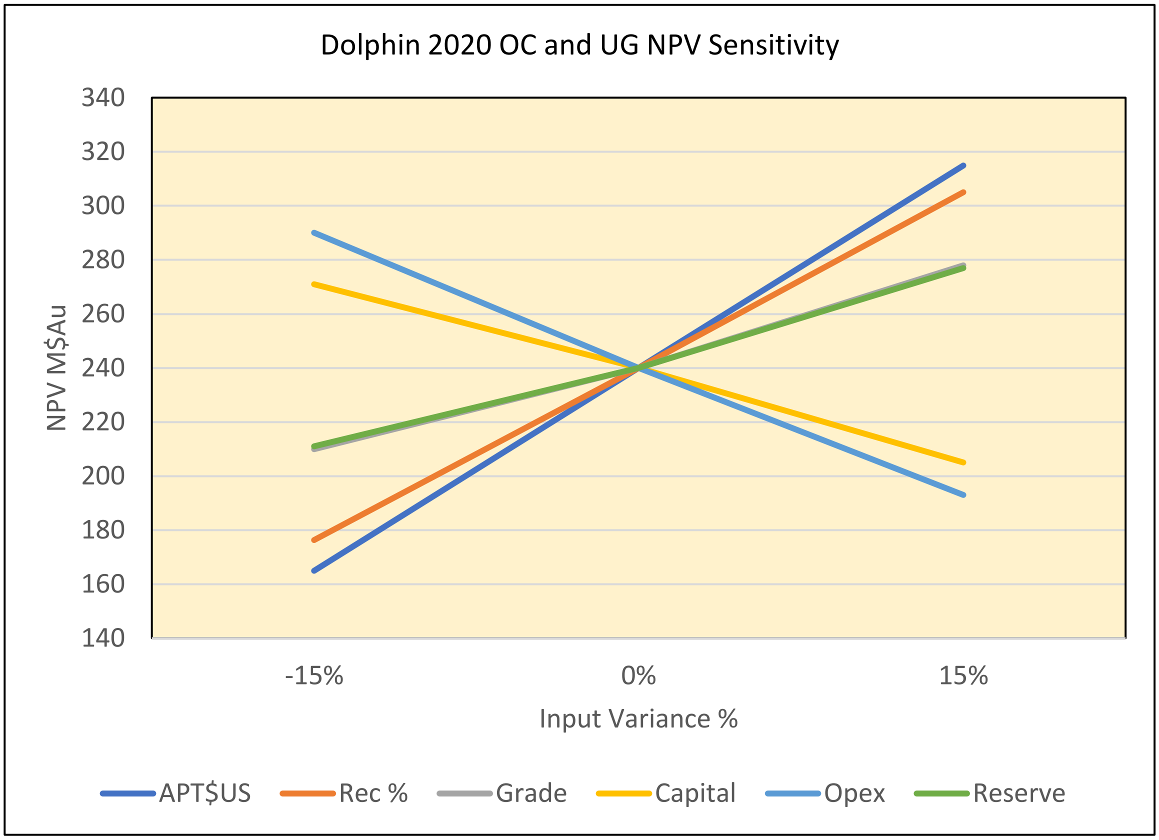

Figure 16. Sensitivity analysis chart.

Table 14. Yearly Production, Cash Flow and Project Metrics

PRODUCTION	Units	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Total
O/C Ore Mined	kt		317.8	409.8	405.8	400.2	422.5	412.7	448.6	115.7							**2,933.2**
U/G Ore Mined	kt									68.1	301.3	291.4	299.5	306.1	199.1	17.8	**1,483.3**
Plant Feed	kt		260.0	460.0	413.1	398.7	424.4	363.6	432.7	248.9	301.3	291.4	299.5	306.1	199.1	17.8	**4,416.5**
Feed WO_3 Grade	%		0.55%	0.62%	1.01%	0.54%	0.52%	0.74%	1.16%	0.93%	1.15%	1.21%	1.24%	1.32%	1.32%	1.49%	**0.92%**
Plant Feed WO_3	kmtu		144	283	419	217	222	271	503	232	347	352	371	403	263	26	**4,052**
Metal Recovery	%		74.6%	76.8%	81.0%	75.6%	75.1%	78.7%	82.3%	80.6%	82.1%	82.5%	82.5%	82.7%	82.6%	82.8%	**80.5%**
Production/Sales	kmtu		107.1	217.4	339.1	163.7	166.4	213.0	414.1	187.4	285.0	290.8	305.7	333.6	216.9	21.9	**3262.0**
OPEX	**Units**	**Year 0**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Year 9**	**Year 10**	**Year 11**	**Year 12**	**Year 13**	**Year 14**	**Total**
O/C Mining	$M	$2.3	$10.3	$11.1	$12.9	$13.3	$11.4	$11.9	$8.2	$2.4							**$83.7**
U/G Mining	$M									$11.6	$23.1	$19.1	$18.4	$17.8	$14.2	$2.5	**$106.9**
Processing	$M		$8.1	$11.6	$10.8	$10.5	$11.0	$9.9	$11.1	$8.3	$9.3	$9.1	$9.3	$9.4	$7.3	$1.2	**$126.9**
Admin	$M	$0.6	$1.0	$1.1	$1.1	$1.1	$1.1	$1.1	$1.1	$1.1	$1.2	$1.1	$1.1	$1.1	$1.1	$0.3	**$15.1**
Royalties	$M		$1.2	$2.5	$8.3	$5.0	$5.1	$6.2	$10.7	$4.6	$6.4	$6.6	$6.9	$7.5	$4.9	$0.5	**$76.4**
Shipping	$M		$0.5	$1.0	$1.5	$0.7	$0.7	$0.9	$1.8	$0.8	$1.3	$1.3	$1.4	$1.5	$1.0	$0.1	**$14.4**
Total Opex	$M	**$2.8**	**$21.0**	**$27.3**	**$34.6**	**$30.7**	**$29.3**	**$30.0**	**$32.9**	**$28.8**	**$41.3**	**$37.2**	**$37.0**	**$37.3**	**$28.5**	**$4.5**	**$423.3**
REVENUE	**Units**	**Year 0**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Year 9**	**Year 10**	**Year 11**	**Year 12**	**Year 13**	**Year 14**	**Total**
APT Price	US$/t		$280	$295	$265	$295	$300	$300	$300	$300	$300	$300	$300	$300	$300	$300	**$295.0**
Exchange Rate	Au$/t		0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	**0.7**
Realisation	%		77%	77%	77%	77%	77%	77%	77%	77%	77%	77%	77%	77%	77%	77%	**77%**
Sales Revenue	$M		$33.0	$70.5	$98.8	$53.1	$54.9	$70.3	$136.6	$61.8	$94.1	$96.0	$100.9	$110.1	$71.6	$7.2	**$1,059.0**
EBITDA	$M	-$2.8	$12.0	$43.2	$64.2	$22.5	$25.6	$40.3	$103.7	$33.0	$52.7	$58.7	$63.9	$72.8	$43.1	$2.7	**$638.5**
Capex	$M	-$73.0	-$1.5	-$1.2	-$5.2	-$10.7	-$1.2	-$1.2	-$1.2	-$20.2	-$5.3	-$1.5	-$2.0	-$2.0	-$2.0	-$0.5	**-$128.7**
Cash Flow	$M	-$75.8	$10.5	$42.0	$59.0	$11.8	$24.4	$39.1	$102.5	$12.8	$47.4	$57.2	$61.9	$70.8	$41.1	$2.2	**$506.9**
NPV @ 8%	**$M**	**$241**															
IRR	**%**	**42.5%**															

11 OPPORTUNITY AND RISK

11.1 Opportunity

The project outlined in this Ore Reserve Estimate is projected to deliver a positive return on investment. Further potential upside opportunities are outlined below:

- Optimisation and smoothing of concentrate production during the transition from OC to UG mining to best suit available resources and logistical access constraints
- Operational upside in UG geotechnical conditions potentially allowing ore recovery above planned performance.
- Reopening the satellite Bold Head mine has the possibility to provide an alternative ore source, increasing throughput reliability and further extending the project life.
- Exploration drilling has identified several scheelite drill targets in EL 19/2001, with reasonable expectation that further drilling and technical studies may result in identification of additional economic Resources leading to an increased mine life and profitability.
- Preliminary metallurgical test work on alkali leaching of ultra-fine scheelite tails suggests there is potential to increase metal recovery.
- Ore sorting technology has the potential to reduce mining cut-off grades which could reduce operating costs and increases available resources.
- Integrating renewable energy sources has the potential to reduce electrical energy costs.

11.2 Risk

Material risks contemplated along with mitigating circumstances are considered as follows:

- APT price risk – There is a risk of negative movement in the APT price compared to the study assumptions. To mitigate this risk the Company has included some price protection mechanisms in its contracts.
- Geological risk – There is a risk that the modelled ore tonnes and grade will not be realized during mining. Mitigating this risk, the geology and WO_3 distribution of the Dolphin deposits is well understood from close spaced drilling and historic underground mapping and sampling. 100% of WO_3 at Dolphin is in the Probable Reserve category. Scheelite ores fluoresce under UV light assisting in pit and stockpile grade control. Predicted WO_3 grades are consistent with historic production.
- OC Geotechnical risk – There is a risk that the membrane wall and open cut design will require additional engineering and ground support beyond the expected outcomes of this study. Mitigating these risks, the pit has been modified to a more conservative design from the 2015 Reserve Estimation with no material change to the reserve.
- Pit wall stability Risk – There exist a risk that final pit wall stability may be compromised by historic stope voids. Optimising the best combination of open cut-underground mine design will mitigate this risk with further iterations of the combined mine design. Some additional stabilization ground support may be required.

- UG Geotechnical risk – The ground condition assessment for the UG mine is based upon perceived conditions at the time of the mine closure in 1991 with minor geotechnical drill validation post 2006. It is anticipated that ground conditions may have deteriorated significantly in old stoping areas, most particularly in the Mid-Wedge which was open on numerous horizons. This risk has been mitigated by excluding some resources from the reserve estimate in this area. Significant risk minimization is the proposed use of cemented paste fill which allows increased recovery and stability on completion. Drilling of historic stope areas is recommended to assess geotechnical risk.
- UG development/rehabilitation risk - There exists a risk that significant deterioration of mine workings has taken place both in normally supported development and most particularly where steel arch set development was utilized. Measures taken to mitigate this risk include: mine design which has included new decline and access development where possible, high pro-rata allowance for support materials, 25% allowance for 40mm fibrecrete in development, scheduled slow waste development rates, pre-development water cover and geotechnical drilling, planned high level support for rehabilitated development and avoiding rehabilitation of historic steel arch supported development.
- Water ingress – There is some risk of water ingress from the proposed OC though the exposure of numerous stopes and level development. To mitigate this risk, KIS propose to use a mixture of fibrecrete with an impervious lining to seal in pit stormwater sumps prior to pumping. Future OC/UG optimisation will take wall stability and sump positioning into consideration in mine planning.
- UG Dewatering risk - The risk associated with dewatering includes risk associated with perched/entrapped water in declines, old stopes and behind ground failures as well as the risk of mud rush from hydraulic sandfill if not properly dewatered. To mitigate this risk, extensive probe and water cover drilling to drain perched water in known development water traps and to monitor old post pillar stope drainage is required. Formerly stope fill barricades were either simple timber barricades or breeze block walls unlikely to sustain significant head of water. Monitoring water in old stopes is critical to reducing the risk of any water/fill inrush.
- UG Loss of Access - The development of a new escape way system or the refurbishment of the old system is essential for secondary egress in the event of temporary loss of access due to ground failure.
- UG Ventilation - In this report a new 135 m raise from the old -150 m level to surface is planned. Assessment of ground conditions and detailed engineering has not yet been completed resulting in possible development and cost risk. Mitigating this risk are alternative low-cost ventilation systems utilising historic workings which also require planning and cost estimation.
- Metallurgical risk – There is a risk that modelled WO_3 recovery will be lower than anticipated. Extensive metallurgical test work and modelling together with historical performance has informed the assumptions used to generate costs and estimate throughput rates. Processing performance and WO_3 recoveries are well understood with the most recent test work results comparative to historical results.
- Operating Cost risk – There is a risk that operating costs will be higher than anticipated reducing free cash flow for debt servicing. The FS estimates were developed from reputable contractor tender rates, supplier and minor contractor

quotes and cross referenced with similar projects by experienced independent consultants.

- Funding risk – The Company will be required to raise additional equity or debt capital to fund the redevelopment of the Project. For this purpose, the Company has embarked on numerous funding initiatives resulting in ongoing discussions with a number of parties, including investors, suppliers, and financial institutions, in relation to providing debt financing, and various forms of equity finance. In addition, the Company is also exploring the formation of joint venture partnerships. There are, however, no guarantees that these funding negotiations will result in securing appropriate funding, or funding on terms acceptable to the Company. If the Company is not able to obtain what the Company deems an appropriate level of financing, it may be required to reduce the scope of its operations and scale back its programs. This may adversely impact revenues and profitability.

ADDITIONAL NOTES

Forward Looking Statements

Some statements in this report regarding estimates or future events are forward looking statements. They include indications of, and guidance on, future earnings, cash flow, costs and financial performance. Forward looking statements include, but are not limited to, statements preceded by words such as "planned", "expected", "projected", "estimated", "may", "scheduled", "intends", "anticipates", "believes", "potential", "could", "nominal", "conceptual" and similar expressions. Forward looking statements, opinions and estimates included in this announcement are based on assumptions and contingencies which are subject to change without notice, as are statements about market and industry trends, which are based on interpretations of current market conditions. Forward looking statements are provided as a general guide only and should not be relied on as a guarantee of future performance. Forward looking statements may be affected by a range of variables that could cause actual results to differ from estimated results, and may cause the Company's actual performance and financial results in future periods to materially differ from any projections of future performance or results expressed or implied by such forward looking statements. These risks and uncertainties include but are not limited to liabilities inherent in mine development and production, geological, mining and processing technical problems, competition for capital, acquisition of skilled personnel, incorrect assessments of the value of acquisitions, changes in commodity prices and exchange rate, currency and interest fluctuations, 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, the ability to secure adequate financing and management's ability to anticipate and manage the foregoing factors and risks. There can be no assurance that forward looking statements will prove to be correct.

Statements regarding plans with respect to the Company's mineral properties may contain forward looking statements in relation to future matters that can only be made where the Company has a reasonable basis for making those statements.

This announcement has been prepared in compliance with the JORC Code (2012) and the current ASX Listing Rules. The Company believes that it has a reasonable basis for making the forward looking statements in the announcement, including with respect to any production targets and financial estimates, based on the information contained in this and previous ASX announcements

Competent Persons' Declarations

The information in this announcement that relates to ore resources, open cut ore reserves and feasibility studies is based on, and fairly represents, information and supporting documentation compiled by Mr. Tim Callaghan, an independent mining consultant working for Resource and Exploration Geology. Mr. Callaghan is a Member of the Australian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code). Mr. Callaghan has reviewed the contents of this news release and consents to the inclusion in this announcement of all technical statements based on their information in the form and context in which they appear.

The information in this announcement that relates to underground ore reserves is based on, and fairly represents, information and supporting documentation compiled by Mr. Alan Fudge, an independent mining consultant working for Polberro Consulting. Mr. Fudge is a Member of the Australian Institute of Mining and Metallurgy and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code). Mr. Fudge has reviewed the contents of this news release and consents to the inclusion in this announcement of all technical statements derived from his report Ore Reserve Statement, Dolphin Orebody October 2020, based on the information in the form and context in which they appear.

The information in this announcement that relates to metallurgy and processing, and fairly represents, information and supporting documentation compiled by Mr. Alvin Johns, an independent mining consultant working for Asther Pty Ltd. Mr. Johns is a Member of the Australian Institute of Mining and Metallurgy and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code). Mr. Johns has reviewed the contents of this news release and consents to the inclusion in this announcement of all technical statements associated with metallurgical testwork and process design, based on the information in the form and context in which they appear.

Statement of Independence

Tim Callaghan and Alan Fudge have no material interest or entitlement in the securities or assets of King Island Scheelite Pty Ltd or any associated companies.

Cautionary Statement

The Ore Reserve estimate referred to in this announcement is based on a Probable Ore Reserve derived from Indicated Resources. No Inferred Resource material has been included in the estimation of Reserves. The Company advises that Probable Ore Reserves provides 100% of the total tonnage. There is no dependence on non-Ore Reserve material. No Inferred Mineral Resource material is included in the life of mine plan. King Island Scheelite has concluded it has reasonable basis for providing the forward-looking statements included in this announcement. The detailed reasons for that conclusion are outlined throughout this announcement and Material Assumptions are disclosed.

References in this announcement to the September 2015 Mineral Resource statement is a reference to the Company's ASX Announcement dated 24 April 2015. References in this announcement to the June 2019 Feasibility Study and Revised Ore Reserve Estimate is a reference to the Company's ASX Announcement dated 3 June 2019. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and, in the case of reporting of Mineral Resources and Reserves that all material assumptions and technical parameters underpinning the estimate in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which any Competent Person's findings are presented have not been materially modified from the original market announcement.

Previously Reported Information

This announcement includes information that relates to Mineral Resources, Mineral Reserves and Exploration Results which were prepared under JORC Code (2012). This information was included in the Company's previous announcements as follows:

ASX announcement dated 24 April 2015, Updated Resource Statement April 2015. King Island Scheelite Pty Ltd is not aware of any new information or data that materially affects the information included in the previous announcement, and all material assumptions and technical parameters underpinning mineral resource estimates in the previous announcement continue to apply and have not materially changed.

ASX announcement dated 21 September 2015, Updated Reserve Estimation, September 2015. King Island Scheelite Pty Ltd is not aware of any new information or data that materially affects the information included in the previous announcement, and all material assumptions and technical parameters underpinning mineral resource estimates in the previous announcement continue to apply and have not materially changed.

ASX announcement dated 23 April 2018, Dolphin Project Drilling Results, April 2018

ASX announcement dated 3 June 2019, Feasibility Study and Revised re Reserve Estimate, June 2019. King Island Scheelite Pty Ltd is not aware of any new information or data that materially affects the information included in the previous announcement, and all material assumptions and technical parameters underpinning mineral reserve estimates and feasibility studies in the previous announcement continue to apply and have not materially changed.

References

Callaghan, T J, 2015 Dolphin Mine Mineral Resource Estimate, April 2015

Fudge, A, 2020 Ore Reserve Statement, Dolphin Orebody, October 2020

JORC (2012) Table 1 report

Section 1. Sampling Techniques and Data		
Criteria	**JORC Code Explanation**	**Commentary**
Sampling Techniques	• Nature and Quality of sampling (e.g. cut channels, random chips or specific specialized industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or hand held XRF instruments etc.). • Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. • Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1m samples from which 3kg was pulverized to produce 30g 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 sampling types (e.g. submarine nodules) may warrant disclosure of detailed information.	• The Dolphin Scheelite Skarn has been sampled through numerous historic underground and surface diamond drilling campaigns between 1947 and 1989 by the previous mine operators. • Recent diamond drilling campaigns were completed by KIS in 2005, 2006, 2011, 2013 and 2014. • 636 historic diamond drill holes for 56,667.8m • 113 recent drillholes for 9,975.8m. • Approximately 3 ft or 1m samples of 1-3kg were taken from diamond saw cut drill core whilst respecting geological boundaries.
Drilling Techniques	• Drill type (e.g. core, reverse circulation, open hole hammer, rotary air blast, auger, bangka, sonic etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face sampling bit or other type, where core is oriented and if so by what method	• Generally, NQ diamond core for surface drillholes and BQ or BQ equivalent for underground drill holes. • Core not oriented.

Criteria	JORC Code Explanation	Commentary
Sample recovery	• Method of recording and assessing core and chip sample recoveries and results assessed. • Measures taken to maximize sample recovery and ensure representative nature of the samples. • Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred.	• Core reconstituted, marked up and measured for recovery in all drilling campaigns • Generally excellent (95-100%) • No relationship between recovery and grade was observed
Logging	• Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. • Whether logging is qualitative of quantitative in nature. Core (or costean, channel etc.) photography.	• Historic core geologically logged onto typed paper logs. • Recent core geologically logged onto excel spreadsheets by experienced geologists. • Standard lithology codes used for interpretation. • RQD and recoveries logged • Historic and recent logs loaded into excel spreadsheets and uploaded into access database.
Sub-Sample techniques and sample preparation	• If core, whether cut or sawn and whether quarter of half taken. • If non core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry • For all sample types, the nature, quality and appropriateness of the sample preparation technique. • Quality control procedures adopted for all sub sampling stages to maximize representivity of samples. • Measures taken to ensure that the sampling is representative of the insitu material collected, including for instance results of field duplicate/second half sampling. • Whether sample sizes are appropriate to the grain size of the material being sampled	• No record of historic sample preparation • Half core split by diamond saw on 0.5 – 1.0m samples while respecting geological contacts. • Bagged core delivered to commercial Laboratories in Burnie (BRL, AMMTECH, ALS) • Half core crushed to 80% passing 2mm • Crushed sample quartered to 500g and pulverized to pass 75 micron.

Criteria	JORC Code Explanation	Commentary
Quality of assay data and laboratory tests	• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. • For geophysics tools, spectrometers, hand held XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibration factors applied and their derivation etc. • Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	• No record of QAQC procedures were available for historic sampling. • Recent samples assayed for WO_3 and Mo by XRF at Burnie Research Laboratories (AMMTECH, ALS). • Historic samples assayed for WO_3 and Mo by XRF in on site mine laboratories with check samples assayed by Amdel. • No formal QAQC analysis cited for recent validation drilling campaign.
Verification of sampling and assaying	• The verification of significant intersections by either independent or alternative company personnel • The use of twinned holes • Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols • Discuss any adjustment to assay data	• No independent laboratory analyses completed. • Minor verification of historic data with recent drilling campaigns. • Twinned Metallurgical holes show excellent correlation with primary hole. • Primary assay data was received electronically and stored by consultant geologist. • All electronic data uploaded to access database • Historic data loaded into Access database. • Data validation with Surpac software, basic statistical analysis and comparison with historic plans and sections. • Negative results for below detection limit assay data has been entered as 0.01% WO_3
Location of data points	• Accuracy and quality of surveys used to locate drill holes (collar and downhole surveys) trenches, mine workings and other locations used in mineral resource estimation • Specification of grid system used • Quality and accuracy of topographic control	• All hole collar surveys by licensed surveyor. • All coordinates in historic mine grid ISG and GDA94 • RL's as MSL • Down hole surveys by downhole camera • Topographic dtm created from mine surveys

Criteria	JORC Code Explanation	Commentary
Data Spacing and distribution	• Data spacing for exploration results • Whether data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for Mineral Resource and Ore Reserve estimation procedures and classifications applied. • Whether sample compositing has been applied	• Sample spacing approximately 20 x 20m or better for much of the resource. • Drill spacing is considered to be appropriate for the estimation of Measured and Indicated Mineral resources. • Samples have been composited on 1m intercepts for the resource estimation.
Orientation of data in relation to geological structure	• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. • If the relationship between drilling orientation and the orientation of key mineralised structures is considered to have introduced sampling bias, this should be assessed and reported if material.	• The majority of DDH have been drilled north-south or vertical sub-perpendicular the gently dipping mineralisation. • Drill hole orientation is not considered to have introduced any material sampling bias.
Sample Security	• The measures taken to ensure sample security	• Post 2005 samples ticketed and bagged on site. • Delivered by courier to laboratories in Burnie. • All historic data digitally captured and stored in customised access database • Data integrity validated with Surpac Software for EOH depth and sample overlaps. • Manual check by reviewing cross sections with the historic drafted sections and plans. • Basic statistical analysis supports data validation
Audits or Reviews	• The results of any audits or reviews of sampling techniques and data	• No audits or reviews of sampling data and techniques completed.

Section 2 Reporting of Exploration Results

Section 2. Reporting of Exploration Results		
Criteria	JORC Code Explanation	Commentary
Mineral tenement and land tenure status	• Type reference, name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. • The security of tenure held at the time of reporting along with known impediments to obtaining a license to operate the area	• Mine Lease 2080P/M Grassy, and EL19/2001 King Island. • The ML and EL's are 100% owned by Australian Tungsten Pty Ltd, a subsidiary of KIS • The area is a historic scheelite mining district and there are no known or experienced impediments to operating a license in this area • EL19/2001 requires annual renewal. • State Royalties 5.35%, Osisko Royalty 1.5%, HNC Royalty 2% capped at $3.9 M
Exploration done by other parties	• Acknowledgement and appraisal of exploration by other parties	• The Dolphin Mine operated intermittently as an open cut and underground operation until its closure in 1990 by King Island Scheelite, Geopeko and North Ltd. • Exploration and resource drilling completed by these previous companies. • KIS commenced feasibility studies into reopening the operation from 2005 until the present.
Geology	• Deposit type, geological setting and style of mineralisation	• The Dolphin Scheelite deposit is a metasomatic skarn hosted in hornfelsed Cambrian calcareous sedimentary rocks on the northern margin of the Grassy Granite, southeast King Island. The deposit forms a roof pendant located on the surface of the granite. The skarn consists of layered and banded garnet skarn and pyroxene-garnet skarn replacing two principal carbonate horizons, B and C Lens. Scheelite occurs as coarse and fine disseminations in the skarn mineralogy.

Criteria	JORC Code Explanation	Commentary
Drill Hole Information	• A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes • Easting and Northing of the drill hole collar • Elevation or RL of the drill hole collar • Dip and azimuth of the hole • Downhole length and interception depth • Hole length • If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case	• Not applicable. This announcement refers to the Reserve Estimation and Feasibility study of the Dolphin Project and is not a report on Exploration Results. • Drill hole information previously reported in Mineral Resource Estimation Report (ASX:KIS April 2015).
Data aggregation methods	• In reporting of Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cutoff grades are usually material and should be stated. • Where aggregate intercepts include short lengths of high grade results and longer lengths of low grade results, the procedure used for aggregation should be stated and some examples of such aggregations should be shown in detail • The assumptions used for any reporting of metal equivalent values should be clearly stated.	• Not applicable. This announcement refers to the Reserve Estimation and Feasibility study of the Dolphin Project and is not a report on Exploration Results. • A summary of resource validation drill intercepts has been previously reported in Mineral Resource Estimation Report (ASX:KIS April 2015). • Mineralised zones were reported as length weighted intercepts.

Criteria	JORC Code Explanation	Commentary
Relationship between mineralisation widths and intercept lengths	• These relationships are particularly important in the reporting of Exploration Results with respect to the drill hole angle is known, its nature should be reported. • If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (e.g. down hole length, true width not known)	• Most drill holes have been drilled to intercept the deposit at high angles to best represent true widths of the mineralisation. • Systematic resource drilling on 20m sections.
Diagrams	• Appropriate maps and sections (with scales) and tabulated intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill collar locations and appropriate sectional views.	• See the body of this report for plan and section of the Dolphin Deposit. • Detailed plans and sections previously reported in Mineral Resource Estimation Report (ASX:KIS April 2015).
Balanced reporting	• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/ or widths should be practiced to avoid misleading reporting of Exploration Results	• Not applicable. This report is a Mineral Reserve Estimation and does not contain any exploration Results. • Exploration Results previously reported in Mineral Resource Estimation Report (ASX:KIS April 2015).
Other substantive exploration data	• Other exploration data, if meaningful and material, should be reported including (but not limited to); geological observations, geophysical survey results, geochemical survey results, bulk samples – size and method of treatment, metallurgical results, bulk density, groundwater, geochemical and rock characteristics, potential deleterious or contaminating substances.	• Bulk samples and diamond drill core have been selected for metallurgical test work. • Summary details of test work are located in JORC Table 1, Section 4 of this report.

Criteria	JORC Code Explanation	Commentary
Further work	• The nature and scale of planned further work (e.g. test for lateral extensions or depth extensions or large scale step out drilling) • Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	• Further resource extension drilling west and south east of Indicated Resource. • Resource plans and sections previously reported in Mineral Resource Estimation Report (ASX:KIS April 2015).

Section 3, Reporting of Mineral Resource Estimations		
Criteria	**JORC Code Explanation**	**Commentary**
Database Integrity	• Measures to ensure the data has not been corrupted by, for example transcription or keying errors, between its initial collection and its use for Mineral Resource estimation. • Data Validation and procedures used.	• All data captured and stored in customised Access database. • Recent digital data uploaded from laboratory reports to Access database. • Data integrity validated with Surpac Software for EOH depth and sample overlaps and transcription errors. • Historic data digitized by database consultants and uploaded to access database. • Data validated against historic plans and sections • Minor errors in data location, fixed in data base. • Negatives in database converted to 0.01% WO_3 and Mo.
Site Visits	• Comment on any site visits by the competent person and the outcome of any of those visits. • If no site visits have been undertaken indicate why this is the case.	• Numerous site visits during various drilling campaigns since 2010.
Geological Interpretation	• Confidence in (or conversely the uncertainty of) the geological interpretation of the mineral deposit. • Nature of the data used and any assumptions made. • The effect if any of alternative interpretations on Mineral Resource estimation • The use of geology in guiding and controlling the Mineral Resource estimation • The factors effecting continuity of both grade and geology.	• High confidence in the geological model. High quality sectional interpretation from underground mapping and drill hole data by Geopeko Ltd. • Diamond drillholes and sections used for geological domaining. • No alternative geological interpretations were attempted. • Geology model used for mineralised domain modeling. • Brittle faulting and skarn mineralogy effect grade domaining.
Dimensions	• The extent and variability of the mineral resource expressed as length (along strike or otherwise) plan width and depth below surface to the upper and lower limits of the Resource.	• Semi-continuous SE shallow plunging and dipping stratabound mineralisation extends 1150m in strike, by 750m width and dips from 80m above sea level in the west to 380m below sea level in the east.

Criteria	JORC Code Explanation	Commentary
Estimation and Modelling techniques	• The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. • The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. • The assumptions made regarding recovery of by products • Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterization). • In the case of block model interpolation the block size in relation to the average sample spacing and search employed. • Any assumptions behind modeling of selected mining units • Any assumptions about correlation between variables • Description of how the geological interpretation was used to control the resource estimates. • Discussion of the basis for using or not using grade cutting or capping • The process of validation, the checking process used, the comparison of model data to drill hole data, and the use of reconciliation data if available.	• Block modeled estimation completed with Surpac™ software licensed to Tim Callaghan. • Wire-framed solid models created from diamond drillholes and 20m sectional interpretation. • Solid models snapped to drill holes • Minimum mining width of 3m @ 0.2% WO_3 • Internal dilution restricted to 3m with allowances for geological continuity • Data composited on 1m downhole lengths including WO_3 and Mo • Top cutting based on CV and grade histograms for B Lens and PGH domains only. • Excellent correlation between WO_3 and Mo grades for C lens, poor correlation for B Lens • Model extent of 563600N to 564500N, 219250E to 220600E, -400mRL to 100mRL. Block dimensions of 10mN x 10mE x 10mRL block size with sub-celling to 1.25m. • Variogram models well constructed with moderate to high nugget effect (50%) and moderate range of 15 to 30m to sill for most geological domains. • Search ellipse set at 100m spherical range to ensure all blocks populated with minor anisotropy of 1:2 • Ordinary kriged block model constrained by geology solid model • Block grades validated visually against input data • Good correlation with previous estimations • Very good correlation of depleted model with historic underground production

Criteria	JORC Code Explanation	Commentary
Moisture	• Whether the tonnages were estimated on a dry basis or with natural moisture, and the method of determination of moisture content.	• The estimate based on a dry tonnage basis
Cut-off Parameters	• The basis of the adopted cutoff grades or cutoff parameters.	• Cut off grades have been based on estimated mine grade break even costs. Operating costs and financial parameters were provided by external consultants and KIS. A break even cutoff grade of 0.3% WO_3 is calculated for open pit resources. • 0.2% WO_3 cut off used for modelling and reporting.
Mining Assumptions	• Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or if applicable external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters made when estimating Mineral Resources may not always be rigorous. When this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	• Conventional blast load haul open pit operation in the first 4 years of mine life. Ore production rate of 400 ktpa and waste movement of approximately 1 Mtpa is expected from scoping studies. • Underground mining will involve conventional decline accessed room and pillar extraction with waste and sand backfill. Production rates are expected to be 300-400 ktpa.
Metallurgical assumptions	• The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions made regarding metallurgical treatment processes and parameters made when estimating Mineral Resources may not always be rigorous. When this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	• Refer to Table 1, Section 4 of this report.

Criteria	JORC Code Explanation	Commentary
Environmental assumptions	• Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status for 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.	• Refer to Table 1 Section 4
Bulk Density	• Whether assumed or determined. If assumed the basis for the assumptions. If determined the methods used, whether wet or dry, the frequency of measurements, the nature size and representativeness of the samples. • The bulk density for bulk materials must have been measured by methods that adequately account for void spaces (vughs, porosity etc.), moisture and difference between rock and alteration zones within the deposit. • Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	• Bulk density derived from historic operations (Balind 1989). • Validation of density measurements made with Post 2014 drill core using the Archimedes Method. • Bulk density used as below: B Lens = 3.1 C Lens = 3.4 Waste = 2.9

Criteria	JORC Code Explanation	Commentary
Classification	• The basis for the classification of the Mineral Resource into varying confidence categories. • Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in continuity of Geology and metal values, quality, quantity and distribution of the data). • Whether the result appropriately reflects the Competent Persons view of the deposit.	• Confidence in the geological model, data quality and interpolation is considered to be sufficient for Mineral Resource located within 30m of sample data to be classified as Indicated Resource. • Excellent correlation of grade with historic production provides confidence in the estimation. • The resource classification appropriately reflects the views of the Competent Person • None of the resource has been classified as Measured Resource due to a reliance on historic data and mine void models that cannot be adequately validated.
Audits or Reviews	• The results of any Audits or Reviews of the Mineral Resource estimates.	• No audits or reviews have been completed for this estimation
Discussion of relative accuracy/confidence	• Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource Estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy of the estimate. • These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	• The geological model and data quality within 30 m of level development is well understood and modeled. • The effects of localised brittle faulting is well understood from underground mapping and drilling. • There is excellent confidence in the global tonnage estimation. • Grade and tonnage estimation of the void model has excellent reconciliation with historic underground production. • There is some local uncertainty in the accuracy of the digital mine model. This is unlikely to have a material effect on the resource estimation for feasibility studies.

Section 4 Estimation and Reporting of Reserves		
Criteria	**JORC Code Explanation**	**Commentary**
Mineral Resource estimate for conversion to Ore Reserve	• Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve. • Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves	• The resources utilised in this estimation were derived from a digital resource block model bm415_20.mdl as described in the Dolphin Mineral Resource Estimate April 2015 provided by Resource and Exploration Geology. • Indicated Mineral Resource estimated at 9.6 Mt at 0.90% WO_3. This Reserve Estimate has been estimated using the same geological model as used in the April 2015 Resource Statement. • The Mineral Resources Statement was signed by Mr. Tim Callaghan, an Independent Consultant. Mr. Callaghan is an AUSIMM member and has sufficient relevant experience to qualify as a Competent Person. • The Mineral Resource reported is inclusive of the Ore Reserves.
Site visits	• Comment on any site visits undertaken by the Competent Person and the outcome of those visits. • If no site visits have been undertaken indicate why this is the case.	• Mr. Alan Fudge of Polberro Consulting previously worked as Geotechnical Engineer, Mining Engineer and Underground Superintendent at the mine over a period of 9 years while the mine was operating in the 1980's. • Tim Callaghan of Resource and Exploration Geology has had numerous site visits since 2010 to the present.

Criteria	JORC Code Explanation	Commentary
Study status	• The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves • The Code requires that a study to at least Prefeasibility 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.	• This study is a feasibility study into processing and open cut mining followed by underground mining of the Dolphin Orebody. • Numerous technical studies including mining, geological, metallurgical, geotechnical, site infrastructure and marketing have been conducted by KIS over the past decade. • 2019 Feasibility Study and Reserve Estimation of the Dolphin Open Cut mine producing 3.0 Mt @ 0.73% WO_3 forms the basis of this updated feasibility study. • The underground reserve estimate outlined in this study is based on remnant resources external to and below the 2019 open cut reserve. As such the UG reserve estimate should not be viewed in isolation.
Cut-off parameters	• The basis of the cut-off grade(s) or quality parameters applied.	• Cut off grades for the 2019 OC and 2020 UG mine were calculated from financial parameters provided by KIS and estimated recoveries and operating costs from technical studies. • The mine planning and ultimate open cut design was prepared based on the marginal cut-off grade of 0.2% WO_3. • Underground minable resources were defined by a 0.7% WO_3 cut off with a 0.7% WO_3 stope cut off used to estimate the Mineral Reserve.

Criteria	JORC Code Explanation	Commentary
Mining factors or assumptions	• 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). • 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. • The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc.), grade control and pre- production drilling. • The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate). • The mining dilution factors used. The mining recovery factors used. • Any minimum mining widths used. • The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion. • The infrastructure requirements of the selected mining methods.	• OC mining methods are described in KIS 2019 Feasibility Study (*ASX:KIS 3 June 2019*). • The mining method used to determine the OC Ore Reserve was conventional open pit mining using backhoe style hydraulic excavators loading off highway dump trucks for both waste and ore mining • OC Geotechnical parameters defined by PSM 30º slope in marine sand 15 m berm on sand-rock interface 50º – 70º face angle depending on domain 10-20 m face height depending on domain 5-7 m berms depending on domain • The in-situ OC ore was modified in order to simulate the mining process and the effects this has upon ore recovery, losses and dilution15 cm loss and 15 cm dilution was applied to all mineralization in the block model, along any block edge that was immediately adjacent a waste block. • In summary the basis for the OC pit limits were: -20 m contour of the base of the marine sand Pit slopes constrained by geotechnical domains Morphology of existing pit 0.2% WO_3 block cutoff. • Whittle Optimiser used to verify OC pit limits – physically constrained pit limits well within economic limits. • 20 m single truck ramp 10% grade • Underground Mining methods are summarised below: • PPCAF recovery is based on 82% traditional recovery for 14 m centre 6x6 post pillar pattern (C Lens).

Criteria	JORC Code Explanation	Commentary
		• PPCAF dilution based on historic rate of 15% (C Lens). • UHB Recovery based on theoretical 70-86% with 10% dilution – reduction in recovery to allow for shoulder and crown pillar loss where the upper level contains old fill or anticipated ground control issues (C Lens). • DHB Recovery based on theoretical 86% with 10% dilution – allows for shoulder pillar loss (C Lens). • CAF recovery is dependent upon orebody width, ground condition and stope shape and varies from 70-90% with 10% dilution (C Lens). • Remnant mining recovery ranges from 50-80% with 10-20% dilution (C Lens). • Dilution levels generally low as stope perimeters tend to be on both grade and design boundaries rather than a strict contact cut off – dilution is a combination of fill, low grade and waste rock. • B-Lens mining based on physical designs of CAF and PPCAF stopes within the >0.7% WO_3 mineralised zone or the zone as a whole. Typical B-Lens CAF recoveries of 70-90% with 10% dilution and post pillar recoveries of 75-90% with 5-10% dilution. • Scheduled Primary/Secondary transverse stoping with consolidated fill for Lower Wedge bench stoping program.

Criteria	JORC Code Explanation	Commentary
Metallurgical factors or assumptions	• The metallurgical process proposed and the appropriateness of that process to the style of mineralisation. • Whether the metallurgical process is well-tested technology or novel in nature. • The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied. • Any assumptions or allowances made for deleterious elements. • The existence of any bulk sample or pilot scale testwork and the degree to which such samples are considered representative of the orebody as a whole. • For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?	• The proposed process plant is similar to the historic operation which closed in 1992 with some modernization of equipment and processes. • Numerous laboratory test programs have been completed since 2006 involving gravity, flotation, leaching and magnetic separation. These are the same unit processes used in the historical operations at Dolphin. • The aim of the recent work was to apply modern equipment and methods to the process design. Test results achieved suggest improvement in performance when using contemporary equipment. Overall results indicate that recoveries in the range of 73% to 83% are achievable from gravity separation using spirals, tables and multi gravity separators. Coarse and fine gravity concentrate will require flotation dressing to achieve saleable grade of 63.5% WO_3. • Samples used for most of the lab test work has been sourced from infill diamond drilling campaigns between 2008 and 2018 or bulk samples from the historic OC. Samples are representative of scheduled ore production. Variability testing was completed demonstrating the range of plant performance expected. • The major deleterious elements include; Mo, SiO_2, P, S and F. KIS has negotiated limits according to offtake requirements. • Recent testing, that included the Multi Gravity Separator (MGS) was conducted at pilot scale. The preparation of feed to the MGS was conducted at plant scale. • Historic plant recovery was positively influenced by supplying uniform high grade feed.

Criteria	JORC Code Explanation	Commentary
Environmental	• 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.	• KIS has previously applied for, and received approval from King Island Council in 2006, for the development of a large open pit and processing plant at the Dolphin mine site. • Environmental Protection Notice 7442/2 issued by the EPA on 2 October 2017 • Council development applications approved.
Infrastructure	• 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.	• Development of the site will necessitate the reinstatement or design and construction of access roads, process plant site, tailings storage facility, site office, heavy vehicle workshop, fuel storage, process water storage and pump line, potable water, explosives storage, power plant, site accommodation. • Water supply from Lower Grassy Dam • Located 2 km form township of Grassy
Costs	• The derivation of, or assumptions made, regarding projected capital costs in the study. • The methodology used to estimate operating costs. • Allowances made for the content of deleterious elements. • Allowances made for the content of deleterious elements. • The source of exchange rates used in the study. • Derivation of transportation charges. • The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc. • The allowances made for royalties payable, both Government and private.	• OC mining fleet capex developed from 1st principals, Owner Operator by Xenith, plant capex provided by Gekko, Tailings Storage Facility capex cost provided by PSM, additional site infrastructure capex cost estimation by BR Design. • OC mine opex derived from Xenith cost model and database, process plant opex provided by Gekko and Asther. Metal price and exchange rate assumptions provided by independent analysts Argus. • Process Plant and site infrastructure assumed to have been depreciated prior to development of underground mine. • UG mine capital estimated from schedule and cost database.

Criteria	JORC Code Explanation	Commentary
		• UG Mine operating cost derived from 1st principals using schedule and cost database. • Metal price and exchange rate assumptions provided by independent analysts Argus. • The APT price is discounted by the purchaser by 20%. The APT price discounted by 3% for high Mo content. • Transportation charges derived from local and state shipping contractors • State Royalties 5.35%, Osisko Royalty 1.5%, HNC Royalty 2% capped at $3.9 M
Revenue factors	• 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. • The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.	• Metal price and exchange rate assumptions provided by independent analysts Argus. • The APT price discounted by the purchaser by 20%. The APT price is discounted by 3% for high Mo content. • The head grades as reported in this reserve estimate were not factored.
Market assessment	• The demand, supply and stock situation for the particular commodity, consumption trend and factors likely to affect supply and demand into the future. • A customer and competitor analysis along with the identification of likely market windows for the product. • Price and volume forecasts and the basis for these forecasts. For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.	• Market forecasts were based on a report prepared by Argus, an independent research firm with expertise and specialisation in the minerals industry and strategic research on the minerals industry and various mineral and metal commodities. • The study indicated that Tungsten is used in many diverse commercial, industrial, construction, mining and military applications.

Criteria	JORC Code Explanation	Commentary
Economic	• 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. • NPV ranges and sensitivity to variations in the significant assumptions and inputs.	• Inputs to the economic analysis were: Mine production schedule, including tungsten production schedule, produced as part of the Feasibility Study. Mine operating costs, process operating costs and general and administrative costs as stated above. APT price as stated above. Applicable royalties and taxes and duties per the mining code of Tasmania. Discount rate of 8% • The Project's sensitivity to various inputs were also investigated. The Project is most sensitive to APT price, exchange rate and recovery. However, the project value remained positive up to a 20% reduction in APT price.
Social	• The status of agreements with key stakeholders and matters leading to social license to operate.	• KIS has regularly engaged with the Tasmanian EPA and King Island Council to explain the likely changes in project impacts to the local community and the environment. KIS has also held community consultations. King Island Council approved the amended mining operations without triggering any requirement for a further development application to be lodged or a permit issued. Local employment survey well received.

Criteria	JORC Code Explanation	Commentary
Other	• To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves: • 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.	• No material naturally occurring risks have been identified to the Project. • A royalty of 5.3% is payable to the Tasmanian state government and a 3.5% is payable to third parties. • All relevant mining leases have been granted with 2080P/M granted until 2029. EL19/2001 expires in December 2020 and will require an expenditure commitment of 200K for a two year term of extension. All land required for the Project is owned by KIS. All relevant EPA environmental permitting and local government planning approvals have been granted.
Classification	• The basis for the classification of the Ore Reserves into varying confidence categories. 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).	• Ore Reserves which have been reported as Probable Reserves have been derived directly from the Mineral Resource classified as Indicated Resource. None of the resource was classified as Measured Mineral Resource. • The Competent Person's are satisfied that the stated Ore Reserve classification reflects the outcome of the technical and economic studies
Audits or reviews	• The results of any audits or reviews of Ore Reserve estimates.	• No audits or reviews of the Ore Reserve estimates have been undertaken to date.

Criteria	JORC Code Explanation	Commentary
Discussion of relative accuracy/confidence	• 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. • 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. • 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. 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.	• In the estimating of these Ore Reserves, the confidence levels as expressed in the Mineral Resource estimates have been accepted in the respective resource classification categories. • The Ore Reserves estimates relate to global estimates in the conversion of Mineral Resources to Ore Reserves. Spacing of the drill data and underground mine mapping on which the estimates are based, relative to the intended local selectivity of the mining operations are sufficient to have a high level of confidence in the estimate. • Accuracy and confidence of modifying factors are generally consistent with the current level of this study. The modifying factors applied in the estimation of the Ore Reserves are considered to be of a sufficiently high level of confidence not to have a material impact on the viability of the estimated Ore Reserves. The Ore Reserve WO_3 grades are consistent with historic production figures.

END