OUTSTANDING PRE-FEASIBILITY STUDY FOR VICTORY BORE VANADIUM PROJECT

- The Victory Bore Pre-Feasibility Study (**PFS**) has been completed on time, and on-budget by METS Engineers, Snowden-Optiro and other key specialists. A summary of the financial results are shown in the body of this announcement.
- An updated Mineral Resource of 465 Mt @ 0.30% V₂O₅, 5.1% TiO₂ and 17.7% Fe (Measured, Indicated and Inferred Resources) was reported in accordance with the JORC Code (2012).
- A maiden probable Ore Reserve of 93 Mt @ 0.35% V₂O₅, 5.2% TiO₂ and 19.8% Fe was reported in accordance with the JORC Code (2012).
- The operation will involve an optimal mining rate of 4 Mt/a of ore to produce approximately 1.25 Mt/a of high-grade magnetite concentrate to be processed into six end products.
- Mining and magnetite concentration to occur at Victory Bore in Western Australia. Magnetite
 concentrates to be bulk shipped to the Kingdom of Saudi Arabia (KSA) for downstream processing
 into final high value end products.
- Mining will be by standard open cut methods: low strip ratio, drill and blast, load and haul.
- Downstream processing will use traditional methods with modern applications and state of the art flow processing.
- Processing in KSA has significant advantages with lower Operating and Capital Costs and close
 proximity to markets. The KSA Government has proposed downstream processing to be located in
 one of the industrial hubs specifically designated for Ferro-Alloy processing.

The Company has commenced discussions with interested Saudi companies as partners in the KSA processing operation, and is arranging meetings at the forthcoming Future Minerals Forum (**FMF**) being held January 2024 in Riyahd, KSA.

The Company believes that it has a reasonable basis for providing the forward looking statements and forecast financial information included in this announcement. The reasons for that conclusion are included in this announcement. All material assumptions, including the JORC modifying factors, upon which the forecast financial information is based, are disclosed in this announcement. This announcement has been prepared in accordance with JORC Code 2012 and the ASX Listing Rules. The Project is at the PFS phase and although reasonable care has been taken to ensure that the facts are accurate and that the opinions expressed are fair and reasonable, no reliance can be placed for any purpose on the information contained in this document or on its completeness. Actual results and development of projects may differ materially from those expressed or implied by these forward looking statements depending on a variety of factors. An Indicated and Measured Ore Resource classified under JORC 2012 Guidelines was used solely for the PFS and all relevant details are set out in this announcement. A key conclusion of the PFS, which is based on forward looking statements, is that the Project is considered to have positive economic potential. The Company believes it has a reasonable basis to expect to be able to fund and further develop the Project by a combination of debt and equity. However, there is no certainty that the Company can raise funding when required. It is possible that some part of any future funding may only be available on terms that may be dilutive. The Company is considering a value realisation strategy such as a Joint Venture in Kingdom Of Saudi Arabia (KSA) which may result in a reduction of proportionate ownership of any processing plant in KSA. Given the uncertainties involved, investors should take their own investment advice and not rely solely on the results of this Pre-Feasibility Study.

ASX: SRN ABN: 48 083 274 024



Surefire Resources NL ("**Surefire**" or "the **Company**") is delighted to announce the results of the Pre-Feasibility Study (**PFS**) for the Company's flagship Victory Bore Project, located close to existing infrastructure with direct transport links to Geraldton Port in Western Australia.

The PFS was completed to an accuracy of +/- 25% to 35%, on time, and on-budget and undertaken by METS Engineers, Snowden Optiro, together with other specialist groups providing reliable cost estimates, and using conservative commodity pricing.

Table 1 Summary of project economics estimate. All values are approximate rounded to nearest significant digit.

Project Parameter	Unit	Amount
Pre-tax NPV at a 10% discount rate	USD \$M	\$1,110
Pre-tax NPV at a 10% discount rate	AUD \$M	\$1,708
Pre-tax Internal Rate of Return	%	42.22%
Capital Cost	USD \$M	\$498
Capital Cost	AUD \$M	\$767
OPEX: normalised back to concentrate produced	USD per tonne of concentrate	\$254
Life of Mine	Years	24
Pre-tax payback	Years	2.4
Exchange rate	USD:AUD	0.65

The Company's approach to this maiden and landmark study of the Victory Bore Project is to use industry standard processing for a range of products to maximise the value, allowing for a reliable and demonstrable low-risk business concept. These outstanding financial results demonstrate that offshore processing is the correct approach in a global economic backdrop of rising capital and operating costs (**Figure 1**).

The Company has a non-binding Memorandum of Understanding (**MoU**) in place with the Ministry of Investment Saudi Arabia (**MISA**) for vanadium and critical mineral processing in the Kingdom of Saudi Arabia (see ASX announcement 16 August 2023).

The Company's engagement with the Kingdom of Saudi Arabia (**KSA**) as a low power and fuel cost jurisdiction, allows the project significant advantages of reduced operating costs, and producing final products for nearby markets. The KSA has a significant steel sector with demand for vanadium products, including ferrovanadium and vanadium electrolyte for Vanadium Redox Batteries.

Management Comment: Mr Paul Burton, Surefire Resources Managing Director said "This is an outstanding result for our world class critical minerals project and shows that in the current economic environment, offshore processing is the right approach to getting this project into development and production. We look forward to taking this project forward, completing the next significant milestones and engaging with KSA companies interested in being part of our project and development".



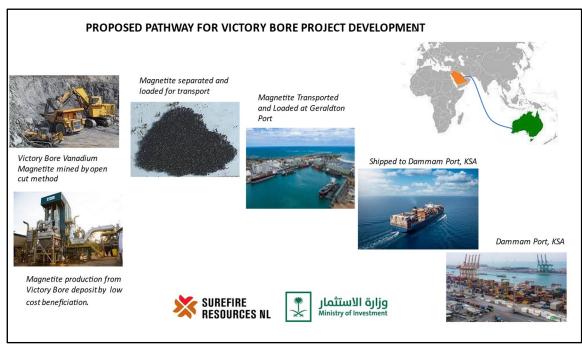




Figure 1 Development proposal for the Victory Bore Vanadium Project: mining and concentrate production in Australia, final product production in the low cost jurisdiction of the KSA.



SUMMARY OF KEY PFS RESULTS

Surefire has based the PFS on producing approximately 1.25 million tonnes per year (Mt/a) of high quality vanadium-titanium magnetite concentrate at the Victory Bore mine site in Western Australia, and to produce up to six products from that concentrate in KSA:

- 2,580 t/a High purity vanadium
- 5,760 t/a of Ferrovanadium
- 192,880 t/a of Titanium slag
- 364,480 t/a of Pig iron
- 245,480 t/a of High purity iron oxide pigment
- 245,480 t/a of High grade iron ore

Note: The final product mix may differ in a future Feasibility Study as processes may be optimised further to maximise recoveries and revenues.

Capital Cost Estimate

The Capital Costs for mining, the beneficiation plant, and ancillary infrastructure and plant at the Victory Bore and KSA sites is approximate and inclusive of earthworks, concrete, structural steelwork, mechanical installation, pipework, electrical and instrumentation, roads, freight, working capital, commissioning, workforce accommodation and meals, temp services, spares and tools, owners' costs, insurance and Engineering, Procurement and Construction Management (EPCM). A 10% contingency and escalation of processing facilities is applied. Equipment pricings are procured from vendor quotes and METS database. The breakdown of the capital requirements of the project is presented in Table 2. Costs are estimated to ±25% to ±35%.

Table 2 Summary of CAPEX

Description	US\$
Direct Costs	
Comminution and Dry Cobbing (Australia)	15,393,000
Grinding & Magnetic Separation (Australia)	40,120,500
Thickening and Filtering (Australia)	31,452,750
Low Temperature Reductive Roasting (KSA)	92,741,250
Ferric and Alkaline Leaching (KSA)	23,948,750
Ferrous Solution Treatment (KSA)	10,785,250
De-Silication and AMV Precipitation (KSA)	2,516,500
Solvent Extraction (KSA)	7,826,000
De-ammonisation and V ₂ O ₅ Flake Production (KSA)	3,062,500
Pig iron, TiO₂ Slag and FeV Production (KSA)	90,440,000
Reagents 1 and 2 (KSA)	2,800,000
Water Supply (Australia)	4,016,250
Water Supply (KSA)	2,220,750
Fuel and Air Service (Australia)	1,412,250
Natural Gas, Fuel and Air Service (KSA)	1,569,750
Camp and Sewage (Australia and KSA)	9,119,250
First fill	20,490,000
Total – Direct Costs	\$359,914,750



Description	US\$
Indirect Costs	
Working Capital	31,610,738
Insurance	5,818,710
EPCM	35,991,475
Owner's Costs	10,797,443
Contingency	35,991,475
Commissioning	7,198,295
Workforce accommodation & meals, temp services	7,198,295
Spares and tools	3,879,140
Total – Indirect Costs	\$138,485,570

TOTAL CAPEX	\$498,400,320
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Operating Cost Estimate

Operating costs (**OPEX**) are estimated to $\pm 25\%$ to $\pm 35\%$ and are broken down into Total, Australian based, and KSA based costs shown in **Table 3**. Cost components are obtained from METS database.

Table 3 Mine operating costs (Sourced from METS database).

Australia Beneficiation Plant Sub-Total Cost								
	USD/a	USD/t ROM Feed	USD/t Concentrate					
Power	\$15,374,297	\$3.84	\$12.28					
Consumables	\$6,352,448	\$1.59	\$5.08					
Reagents	\$94,149	\$0.02	\$0.08					
Logistics	\$56,942,440	\$14.24	\$45.50					
Labour	\$6,093,800	\$1.52	\$4.87					
Mining	\$34,189,587	\$8.55	\$27.32					
Maintenance	\$2,320,320	\$0.58	\$1.85					
Miscellaneous	\$4,468,802	\$1.12	\$3.57					
Total	\$125,835,843	\$31.46	\$100.55					

KSA Process Plant Sub-Total Cost							
	USD/a	USD/t ROM Feed*	USD/t Concentrate				
Power	\$32,786,074	\$8.20	\$26.20				
Consumables	\$545,368	\$0.14	\$0.44				
Reagents	\$122,843,977	\$30.71	\$98.16				
Logistics	\$17,766,944	\$4.44	\$14.20				
Labour	\$3,394,000	\$0.85	\$2.71				
Mining	\$0	\$0.00	\$0.00				
Maintenance	\$9,714,400	\$2.43	\$7.76				
Miscellaneous	\$5,095,729	\$1.27	\$4.07				
Total	\$192,146,492	\$48.04	\$153.54				

GRAND TOTAL \$317,982,334	\$79.50	\$254.08
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^{*} This cost estimate is included for comparative purposes only, there are no ROM costs in the KSA. The total concentrate cost includes mining, beneficiation and final products production costs normalised back to the concentrate volume used to produce them.



The OPEX estimate costs associated with the products being considered is shown in Table 4 below:

Table 4 Product OPEX (Sourced from METS database).

		Processing costs
High purity vanadium	USD/tonne	\$9,973.86
Ferrovanadium	USD/tonne	\$5,057.64
Titanium oxide slag	USD/tonne	\$330.98
Pig iron	USD/tonne	\$296.41
High purity iron oxide	USD/tonne	\$371.62

Exchange Rate

All values are expressed in US dollars. An exchange rate of US\$0.65 to A\$1.00 is applied where estimates are Australian dollar based.

Update Mineral Resource Estimate

The Mineral Resource Estimate (MRE) for the Victory Bore Project has been updated from the previous MRE (see ASX announcement 1 February 2023). The resource model is unchanged but there has been a change in reporting to consider a lower cut-off grade (V_2O_5) from 0.26% to 0.15% based on marginal cut-off grades determined during the PFS. In addition, TiO_2 , Fe, AI_2O_3 and SiO_2 grades have been included in the reporting.

The Mineral Resource was converted to an Ore Reserve by economic evaluation using open pit optimisation to product an economic mining shell followed by detailed pit design, and life of mine scheduling. Mine equipment requirements were estimated and costed for financial modelling.

A range of V_2O_5 cut-offs was calculated during the MRE. While a 0.3% V_2O_5 lower cut-off has been applied to reported tonnes and grade, this was done on the basis of that this cut-off was considered in line with current mineralisation type, likely favourable processing route and the Vanadium price in conjunction with associated possibly recoverable beneficial elements.

The PFS considered a pit optimisation based on product mix, product pricing and mining costs. That optimisation concluded a cutoff grade of $0.2\% \ V_2O_5$ is sustainable. The cut-off was calculated on a block-by-block basis using the pit optimisation inputs resulting in a variable cut-off grade.

Table 5 Victory Bore Mineral Resource Estimate as at December 2023. Resources at a 0.15% V₂O₅ cutoff. Tonnages are rounded.

	Cut-off (%	Volume	Tonnes					
Classification:	V ₂ O ₅)	(Mbcm)	(Mt)	V ₂ O ₅ (%)	TiO ₂ (%)	Fe (%)	Al ₂ O ₃ (%)	SiO ₂ (%)
Measured	0.15	7.6	25.3	0.35	4.96	19.20	17.0	34.9
Indicated	0.15	33.9	113.2	0.32	4.70	18.19	17.4	35.9
Inferred	0.15	99.3	326.1	0.28	5.28	17.41	16.0	36.4
Total	0.15	140.7	464.6	0.30	5.12	17.70	16.4	36.2

The estimated ore reserves and/or mineral resources underpinning the production target have been prepared by a competent person in accordance with the requirements in the JORC Code.

Only Measured and Indicated Resources are used in this PFS. The Inferred Resources do not form part of this PFS and are not used to underpin the proposed production schedule.



The Company confirms that all material assumptions and technical parameters underpinning the Mineral Resource Estimates continue to apply and have not materially changed.

In-pit Measured and Indicated Mineral Resources were used as the basis of Probable Ore Reserve, estimated using the guidelines of the JORC Code (2012). The result of the classification reflects the Competent Person's view of the deposit. No Inferred Resources are included in the Ore Reserve estimate.

Geology

The Victory Bore Project is in Western Australia within the Murchison Domain of the Youanmi Terrane, part of the Yilgarn Craton. The primary geological feature is the Atley Igneous Complex, part of the Meeline Suite, with V-Ti fractionated mineralisation. The region is dominated by the Youanmi Fault, indicating a 15 km left lateral strike-slip movement. Gneisses, layered gabbroic intrusions, and greenstone units are present between large granitoids to the west and east.

The layered gabbroic intrusives host the vanadium-titanomagnetite that constitutes the resource. The magnetite rich layers strike at 020° and dip steeply to the west. The gabbroic layers range from leucogabbro which contain plagioclase phenocrysts, to metagabbro or gabbronorites. Magnetite crystals are course, and concentrated towards the base of each layer where they are typically massive to semi-massive. Overlying this is a layer of disseminated magnetite with 0.2% to 1% pyrite and pyrrhotite.

Metallurgy

Multiple stages of metallurgical testing have been completed by METS and Diamantina Laboratories. Test work showed that:

- The ore is composed of magnetite, titanomagnetite, ulvospinel, chlorite, and ilmenite as the main vanadiumbearing minerals;
- Vanadium content of the ore increases with depth: Shallow (low grade), Mid (medium grade) and Deep (high grade);
- Vanadium correlates highly with magnetite and is antipathetic with silica and alumina;
- Bond Crushing Work Index (CWi) results showed the ore to be soft (within the range of 7-9 kWh/t) compared
 to other titanomagnetite deposits;
- Abrasion Index (Ai) classified low and mid-grade ores as "moderate-abrasive" (0.1045 to 0.1873) and high grade ores as "non-abrasive" (0.0790);
- Unconfined Compressive Strength (**UCS**) results demonstrated that most of the ore body is strong at 77.1±35.7;
- Overall downstream V₂O₅ recovery of 88%;
- Acceptable liberation of magnetite is achievable at 106μm (Table 7).



Table 6 LIMS results summary. The test were conducted at 1,200 gauss using a grind of P_{80} 106 μ m. Results confirm earlier DTR test work. G: grade, D: distribution.

		Mass Product Yield		· · · · · · · · · · · · · · · · · · ·		TiO₂ (%)		V ₂ O ₅ (%)		SiO ₂ (%)		Al₂O₃ (%)	
	Product	(%)	G	D	G	D	G	D	G	D	G	D	
Comp 1	Mags	20.7	60.79	58.9	10.15	33.4	1.40	74.7	2.12	1.3	1.77	2.0	
Comp 1	N-Mags	79.3	11.02	41.1	5.26	66.6	0.12	25.3	40.51	98.7	22.29	98.0	
Comp 2	Mags	27.9	59.89	63.6	11.00	44.4	1.40	80.5	2.25	2.3	1.55	2.6	
Comp 2	N-Mags	72.1	13.27	36.4	5.33	55.6	0.13	19.5	37.12	97.7	22.10	97.4	
Comp 2	Mags	38.6	60.56	68.2	11.60	48.9	1.34	80.4	1.65	3.2	1.40	4.9	
Comp 3	N-Mags	61.4	17.78	31.8	7.62	51.1	0.21	19.6	31.90	96.8	17.08	95.1	

Overall recoveries, from ore to final products and from concentrate to final products, are summarised in Figure 7.

Table 7 Summary of recoveries for the three metals underpinning the products that will be produced.

Element	Recovery from ore to concentrate	Recovery from concentrate
V	61.40%	88.0%
Fe*	62.47%	100.0%
Ti	46.75%	97.9%

^{*:} Ferric Chloride is added to the process and subsequently becomes an additional source of iron.

Mining

Mining will be undertaken using standard open cut methods and will be done by contract miners. Basic mining parameters shown in Table 8.

Table 8 Mining parameters used in the PFS.

Bench height / flitches	10m / 2.5m
Drill and blast pattern	Generally 6 x 6m with 1.5m subdrill and 4.1m stemming height
Grade control	Blast hole sampling and grade block mark out; reconciliation
Haulage	90t capacity trucks
Low grade	To strategic long-term stockpiles
ROM pad	No blending is required

The resource model was sampled to mining blocks of 5 mE by 10 mN by 5 mRL to minimise dilution and ore loss. An open pit design was optimised on these blocks that delivers the highest indicative present value based on mining costs.

Initial pit optimisations were completed based on the following parameters:

- Measured and Indicated classification considered without lower bounding cut-off
- process feed rate of 4.6 Mt/a (dry)
- beneficiation equations based on regressions of raw test data
- downstream V₂O₅ recovery of 88%
- Mining costs of A\$7.37/bcm plus:



- o A\$0.02/bcm/m depth
- A\$1/bcm/km (reference to 6,871,500 mN)
- drill and blast costs of A\$1.04/bcm, A\$1.28/bcm or A\$3.25/bcm for upper, transition and lower material respectively.
- Ore and processing costs of:
 - Beneficiation cost of A\$10/t ore
 - o G&A cost of A\$5.43/t ore
 - o Concentrate transport cost of A\$120/t concentrate
 - Downstream processing cost of A\$15/t concentrate.
- royalty of 2.5% of price
- price of US\$33/kg FeV80
- exchange rate of 0.68 (A\$:US\$)
- an annual discount rate of 8%

SME Geotechnical completed a geotechnical analysis to recommended pit slope design parameters for Victory Bore as summarised as:

Material	Batter angle (°)	Berm width at base of batter (m)	Batter height (m)	Inter-ramp slope angle, crest to crest (°)	Optimised angle (°)
Upper (oxide)	50	6.5	10	34	30
Transition	65	6.5	10	42	40
Lower (fresh)	85	9.5	20	61	50

Optimised angles included allowance for ramps.

Dilution and ore loss was applied through re-blocking the model to 5 mE by 10 mN by 5 mRL. This was deemed to be an appropriate selective mining unit (SMU) when considering the orebody width. Dilution and ore loss changes over the entire model area considering Measured and Indicated Resources at a cut-off of $0.15\% V_2O_5$ are summarised as:

Model	Mineral Resource	Mining	Mining / Mineral Resource
Dry mass (Mt)	138	139	+0.8%
V ₂ O ₅ (%)	0.33	0.32	-1.0%
TiO ₂ (%)	4.75	4.71	-0.8%
Fe (%)	18.39	18.24	-0.8%
Al ₂ O ₃ (%)	17.34	17.37	+0.2%
SiO ₂ (%)	35.72	35.87	+0.4%

The cut-off grade is based on a block-based calculation and considers V_2O_5 and Fe grades as well as block location. The typical resultant cut-off is 0.15-0.2% V_2O_5 .

Subsequent to the initial mine plan development, the input cost and revenue assumptions were materially updated. The validation optimisation considered the following parameters. The resulting pit shell was spatially similar to the initial optimisation shell and thus the initial mine plan was retained.



Parameter	Units	Value
Slope angle	o	35 upper
		40 transition
		45 west wall lower
		50 east wall lower
Resources	classification	Measured and Indicated
(no lower limiting cut-off applied)		
Plant feed	Mt/a	4.0
V ₂ O ₅ concentrate to product recovery	%	71.09
Fe concentrate to product recovery	%	97.92
Ti concentrate to product recovery	%	100.02
Exchange rate	A\$:US\$	0.65
Base mining cost	A\$/t rock	7.83189-0.0096*(bench RL)
Incremental ore mining cost	A\$/t ore	5.55
Beneficiation plant	A\$/t ore	13.65
Sustaining capital	A\$/t ore	7.57
Administration	A\$/t ore	1.23
Concentrate transport	US\$/t conc	45.50
KSA plant	US\$/t conc	153.54
Royalty	% of cost	5 (on mining+bene+admin)
Product transport	US\$/t product	9.00
Vanadium product split	%	24 high purity flake 76 ferrovanadium
Iron product split	%	51 pig iron 24 iron ore 24 hematite pigment 0 ferrovanadium
High purity vanadium flake	US\$/t	20,944
Ferrovanadium	US\$/t	26,750
Titanium oxide slag	US\$/t	657.64
Pig iron	US\$/t	412
Iron ore	US\$/t	128
Hematite pigment	US\$/t	450

The pit design was completed on the basis of the pit optimisation results. The design parameters used are summarised in Table 10.



Table 10 Pit design parameters.

Parameter	Unit	Upper	Transition	Lower	Lower
Bench range	mRL	≥450	≥430<450	<430	<430
Batter angle	•	50	65	85	85
Batter height	m	10	10	10	10
Berm interval	m	10	10	10	20
Berm width	m	6.5	6.5	6.5	9.5
Inter-ramp slope angle (no ramps)	o	33.9	41.9	53.6	60.6
Overall angle (toe to toe, two ramps)	0	N/A	N/A	43.3	49.1

The minimum mining width considered was 20 m.

The resulting final pit is 1,900m long, 375m wide, and 200m deep. The overall layout of the mine site is shown in Figure 2.

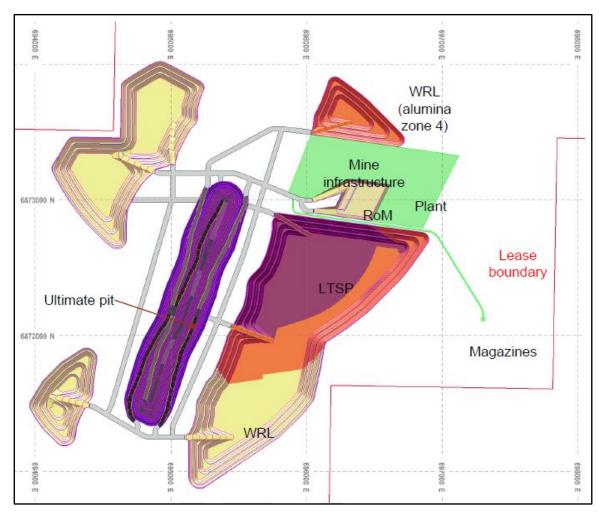


Figure 2 Overall mine layout with final pit design. WRL: Waste Rock Landform, LTSP: Long Term Strategic Stockpile.



Pit Inventory

The pit design inventory is included as Table 11.

Table 11 Pit inventory.

Туре	Mass (Mt)	V ₂ O ₅ (%)	TiO₂ %)	Fe (%)	Al ₂ O ₃ (%)	SiO₂ (%)	Concentrate (Mt)	Mass pull (%)	FeV80 (kt)
Measured Resource	24.0	0.35	5.08	19.62	16.85	34.52	6.2	25.9	24.0
Indicated Resource	69.2	0.35	5.19	19.85	16.76	34.28	18.1	26.1	69.2
Sub-total ore	93.2	0.35	5.16	19.79	16.78	34.34	24.3	26.1	93.2
Inferred (treated as waste)	2.9	0.29	4.43	17.02	16.27	37.45	0.7	22.8	2.9
Waste (alumina zone)	32.3	0.09	1.63	7.12	20.89	46.82	-	-	-
Waste (other zones)	42.2	-	-	-	-	-	-	-	-
Sub-total waste	77.4	-	-	-	-	-	-	-	-
Total	170.5	-	-	-	-	-	-	-	-

The ultimate pit is developed in 12 stages for scheduling and expediting access to higher ore grades (Figure 4).

The 12 stages of pit development are shown in Figure 3 and Table 12:

- Stages 1 to 4 access high grade ore at the top of zone 1 (main).
- Stages 5 and 6 cut back on the hanging wall (west side) to access zone 1 ore below the initial stages and collect zone 2 (central) ore from the higher benches.
- Stages 7 and 8 cut back on the footwall (east side) also to access zone 1 ore.
- Stages 9 and 10 cut back on the hanging wall (west side) accessing zone 2 ore.
- Stages 11 and 12 cut back on the hanging wall (west side) also accessing zone 2 ore

Table 12 Pit design inventory

Stage	Total mass (Mt)	Waste mass (Mt)	Strip ratio (wst:ore)	Ore mass (Mt)	V₂O₅ (%)	TiO₂ (%)	Fe (%)	Al₂O₃ (%)	SiO ₂ (%)	Co (%)	Cr2O₃ (%)	P (%)	Cu (%)	Ni (%)	LOI (%)
1	4.2	1.5	0.54	2.7	0.40	6.0	22.6	15.7	31.7	0.02	0.01	0.02	0.03	0.04	0.40
2	3.4	1.3	0.61	2.1	0.41	6.2	23.1	15.4	31.1	0.02	0.01	0.02	0.04	0.04	0.76
3	2.8	1.2	0.70	1.7	0.47	6.7	25.3	14.3	28.8	0.02	0.02	0.02	0.04	0.04	1.18
4	3.3	1.1	0.47	2.2	0.39	5.7	21.8	16.1	32.5	0.02	0.01	0.02	0.03	0.04	0.69
5	12.7	5.9	0.87	6.8	0.36	5.2	20.0	16.5	34.6	0.01	0.04	0.02	0.03	0.03	0.72
6	11.4	5.6	0.95	5.8	0.36	5.2	20.0	16.4	34.0	0.01	0.04	0.02	0.03	0.04	1.09
7	16.5	9.6	1.38	6.9	0.38	5.8	21.4	16.7	32.4	0.02	0.01	0.02	0.03	0.03	0.50
8	14.3	7.3	1.05	7.0	0.39	5.8	21.9	16.1	32.1	0.01	0.01	0.02	0.03	0.03	0.66
9	33.9	13.1	0.63	20.7	0.34	4.9	18.9	17.3	35.3	0.01	0.04	0.02	0.03	0.03	0.63
10	20.9	9.7	0.87	11.1	0.34	4.9	18.8	17.0	35.2	0.01	0.04	0.02	0.03	0.03	0.98
11	26.0	11.5	0.80	14.4	0.32	4.7	18.4	17.4	35.8	0.01	0.04	0.02	0.03	0.03	0.60
12	21.2	9.6	0.83	11.6	0.35	5.0	19.3	16.7	34.8	0.01	0.04	0.02	0.03	0.04	0.86
Total	170.5	77.4	0.83	93.2	0.35	5.2	19.8	16.8	34.3	0.01	0.03	0.02	0.03	0.03	0.73



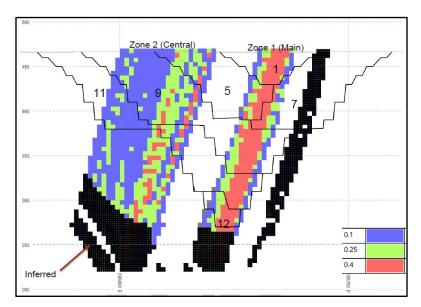


Figure 3 Staged pit development outlines (6,872,195mN). Colour represents the vanadium grade. The stages refer to those outlined in Table 12.

Black areas represent Inferred Resources and are not in the mining schedule.

Maiden Ore Reserve

The Mineral Resource was converted to an Ore Reserve by economic evaluation using open pit optimisation to produce an economic mining shell followed by detailed pit design, and life of mine scheduling. Mine equipment requirements were estimated and costed for financial modelling. A pit optimisation validation was run using financial model inputs to confirm the shell.

A maiden probable Ore Reserve of 93 Mt @ $0.35\% \ V_2O_5$, $5.2\% \ TiO_2$ and 19.8% Fe was reported in accordance with the JORC Code (2012). All Measured and Indicated Resources above cut-off within the pit design were classified as Probable Ore Reserves after considering the confidence in the material modifying factors. No in-pit Inferred Mineral Resources were included in the Probable Ore Reserve **Table 13 Victory Bore Ore Reserve as at November 2023**

	□X□ <u></u>	□ & □▲	□ • □₽			□●□₽
Probable	93.1	0.35	5.2	19.8	16.8	34.3

Notes:

- Tonnes and grades are as at the ROM and are dry
- Cut-off grade is based on the block by block revenue to cost calculation and roughly relates to a 0.2% V₂O₅ cut-off.



Mine schedule Estimate

The mining schedule provides the beneficiation plant with 4 Mt/a ore (average). Lower grade ore is stockpiled for processing at the end of mining.

The overall mining rate, including waste, will ramp up to 12 Mt/a within nine months of mine start-up (Figure 4).

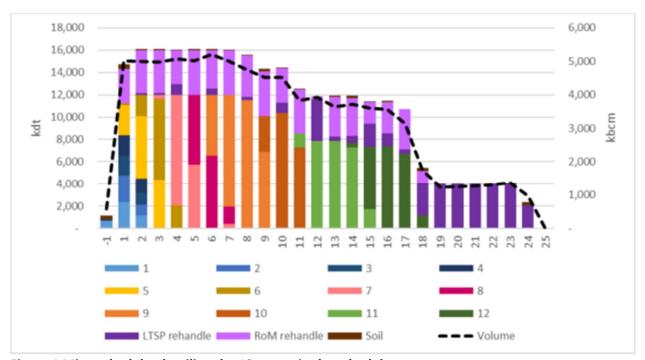


Figure 4 Mine schedule, detailing the 12 stages in the schedule.

The ore processing schedule by resource classification is shown in **Figure 5**.

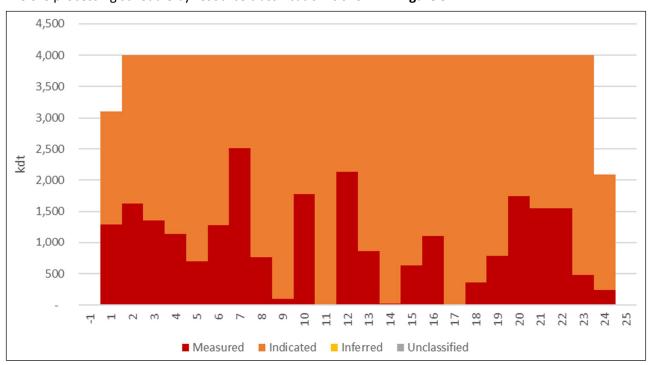


Figure 5 Process schedule by resource classification



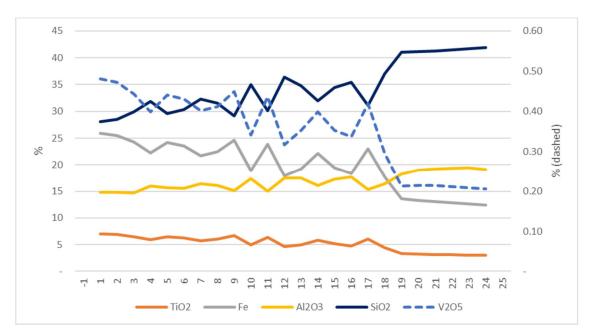


Figure 6 Primary ore feed grades through Life of Mine.

The capital costs associated with the mining operation is expensed as operating costs except for the pre-production period.

Ministry of Investment Saudi Arabia (MISA)

In August 2023 the Company executed a non-binding Memorandum of Understanding (MOU) with MISA for assistance with developing a downstream processing facility in KSA, (refer ASX announcement 16 August 2023).

MISA offers supportive and advisory services to organizations to deliver solutions to their business needs and implement local solutions by drawing on a wealth of global knowledge and experience.

The mining and metals sector represents one of the most exciting blue-sky opportunities for investors in Saudi Arabia (source MISA) with an under-supplied local market, and an unprecedented effort to boost industrial production, and proximity to export markets in the region.

The MOU provides the Company with a clear pathway for maximising value from the Victory Bore project following a development strategy conducted by Surefire for a mining and beneficiation operation at the Victory Bore mine location, and then transport of high-grade concentrate to a jurisdiction where power costs are low, infrastructure for downstream processing is present, and a large market exists for products.

The MOU terms confirm the party's agreement to progress the following:

- The processing of Victory Bore concentrate and other vanadium bearing feedstock in KSA will create investment, processing capability, employment, and production of high value commodities.
- MISA will provide assistance to SRN for importing and processing of its mineral concentrate;
- MISA will provide investment opportunities and incentives and assist Surefire to secure binding agreements for funding and development;
- MISA will introduce partners for production facilities;
- Surefire will introduce its preferred engineering partners to design and construct the facilities;
- Surefire will also consider the establishment of a High Purity Alumina (HPA) production facility in KSA;



 Surefire will have access to other vanadium opportunities in KSA including fly-ash and hard rock vanadium resources.

KSA based operation

It is the Companies current plan to operate the downstream processing plant in KSA with an experienced Saudi company. This would be on a joint venture basis where the downstream processing, marketing and product sales of the operation are managed by the joint venture company. Discussions with potential partners have commenced and Confidentiality Agreements in place. These discussions are at an early stage there is no guarantee that an agreement will be reached. If an agreement is not reached the Company will proceed on a stand-alone basis. The results of this PFS are not based on any assumed contribution from a KSA partner.

Processing Design

It is proposed that two plants will be constructed in different locations: a beneficiation plant in Victory Bore, Western Australia, and a processing plant in Ras Al Khair Region, KSA. The overall process design is shown in **Figure 7**.

The beneficiation plant at the Victory Bore mine site involves comminution and dry cobbing, grinding, magnetic separation, thickening, water supply, fuel and air services, and camp water service areas. Approximately 4M t/a of ore feed will be mined to feed the beneficiation plant for an average annual output of 1.25 Mt/a vanadium titanomagnetite concentrate. The concentrate will have a 45µm final grind size.

Tailing and Waste Disposal

The beneficiation plant will produce approximately 1.7 million m³/year tailings stream from the tail's thickener at 35% moisture content. Tailings will be pumped into the tailings dam which is designed to hold 23 million m³ of tailings with dimensions of 1250m x 1000m, 20m deep. Water is recycled regularly and returned to the process plant circuit. To ensure that the tailings dam is operating in a safe manner, a risk- based approach will be applied with the use of TSF management plan, emergency action plan, and regular monitoring with the use of sensors such as piezometers.

Non-magnetic wastes out of coarse cobbing will ultimately be backfilled into the open pit mine.

The Victory Bore Vanadium deposit contains minor sulphide content, occurring as separate minerals. These will report to the tailings dam and/or waste pile. Metallurgical test work will be done to mitigate acid run-off generation. No other potentially harmful metals or compounds are identified.

The wastewater produced from the beneficiation plant will be highly saline. The plant will generate 0.5GL of wastewater annually. Most of this water will be either be transferred into the tailings dam where necessary or be used as spray water. To store this wastewater, an evaporation pond will be built to hold a total volume of 10 million m³ over the life of the mine.



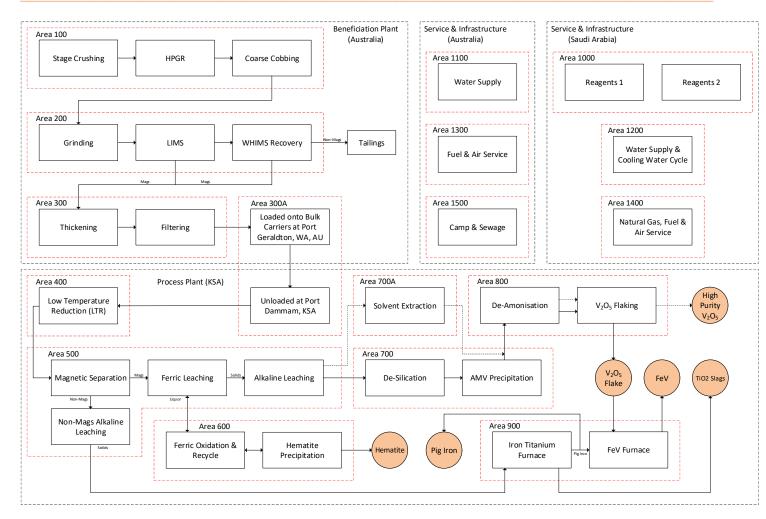


Figure 7 Overall process design divided into Australian and KSA operations.

KSA based Magnetite concentrate processing operations

The site for the final products processing plant for the Victory Bore Vanadium Project has been proposed to be situated in the Kingdom of Saudi Arabia (**KSA**). The plant shall be located in the Ras Al-Khair region of KSA after discussions with the Ministry of Investment Saudi Arabia and the Royal Commission of Saudi Arabia. Ras Al-Khair is an operational industrial hub and port and is part of the KSA's drive to diversify its economy.

The processing Plant in KSA will take the Australian site produced vanadium titanomagnetite concentrate and process it to produce the final product stream by:

- Low Temperature Reductive Roasting
- Ferric and Alkaline Leaching
- Ferric Oxidation, Precipitation and Haematite (Fe2O3) Production
- De-Silication and AMV Precipitation (high purity route Additional Solvent Extraction)
- De-ammonisation and High Purity Vanadium Pentoxide (V₂O₅) Production
- Pig Iron (Fe), Titanium Dioxide (TiO₂) Slag and Ferrovanadium (FeV) Production

Both high purity vanadium flake and electrolyte grade V_2O_5 are considered for this project to ensure the project can adapt to market fluctuation. Ferrovanadium will also be produced.



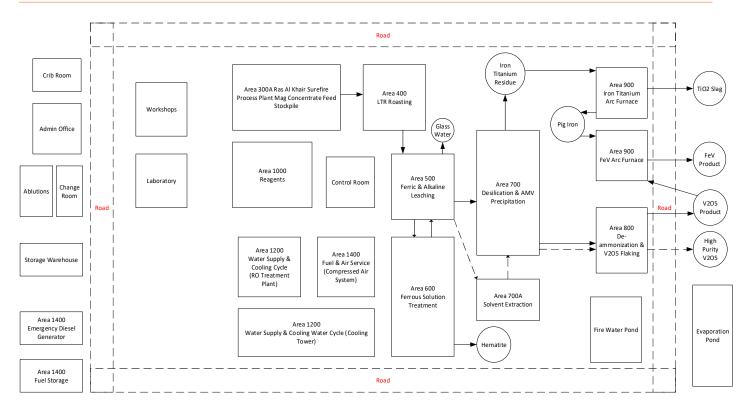


Figure 8 KSA general processing arrangement.

The vanadium production process results in a very high purity haematite by-product. This can be used in pig iron production or sold as a standalone product into the lucrative haematite pigment market. Additional products from the plant includes pig iron and titanium dioxide slag.

The range of products considered by the PFS enhance the product variability for the project and considerably de-risk the project's revenue stream.

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The range of products considered by the PFS enhance the product variability for the project and considerably de-risk the project's revenue stream.

Concentrate Transport and Shipping

Details of road haulage were provided by Qube Logistics and shipping provided by Gunvor (Singapore).

Transport

The concentrate will be road hauled from the Victory Bore mine site by road to Geraldton by a haulage contractor in the following scheme:

- Provision of Front-End Loaders at site and operator.
- Haulage of product in Ultra Quads (145-148t) from Site to Narngulu Storage Facility (14km from the port as there is no storage at the port).
- Drivers will be based in both Geraldton and at the site for changing over halfway allowing them to return to their starting locations.
- Stockpile management and storage of product.
- Storage Facility with a capacity of 100,000t.



- Load out into super triple combinations (98-100t) and haul to Berth 4 truck unloader
- Unload into berth 4 truck unloader the current berth 4 truck unloader can only take double combinations however the MWPA are upgrading this to take larger combinations which should be operational when the project commences.

Shipping:

Shipping of the concentrate to Dammam Port in KSA will be done monthly from the Geraldton Port, with a proposal to use Post-Panamax bulk carriers. Arrangement with shipping agents and contract types (FOB or CIF/CFR) will be determined by Surefire.

From Port Dammam the concentrate will be off loaded on to existing conveyor belt systems and transported to the processing facilities.

Infrastructure Estimate

Victory Bore:

A 170-room accommodation village will service the Victory Bore Project. The village will be roughly 2 km South-East of the mine site. Temporary accommodation will be provided during the construction phase and is expected to require 70 beds.

Fully equipped offices, training facilities, and administrative buildings are included in the cost estimates.

Training and medical facilities and equipment allowances will be made available for a mine rescue team. The site will provide fully equipped first-aid boxes and minor condition treatment facilities. Patients effected by serious medical conditions will be airlifted to the nearest medical facility at the Geraldton Regional hospital.

The site access roads connect the various facilities within the site. The main access point is from the Paynes Find-Sandstone Road. In addition, road development will include a heavy vehicle haul road, main access road, accommodation village access, and internal roads within the processing area.

A main workshop will be created for heavy and light vehicles and other servicing requirements for the process plant site.

In addition separate storage facilities will be provided for spares, oil and lubricants, chemicals, and gas cylinders. On site geochemical laboratory facilities for product testing and QA/QC will be outsourced to a commercial provider.

Ras Al-Faid KSA:

For the operation in Saudi Arabia, a 160-room accommodation camp onsite. Fully equipped offices, training facilities and administrative buildings will also be provided and included in the cost estimates.

Training and meeting facilities and equipment allowances will be made available for a plant rescue team. The process plant will be supplied with fully equipped first-aid boxes and minor condition treatment facilities. The site will include a dispensary service for basic medical needs and a central medical station for severe medical cases along with an occupational site nurse. During an emergency, evacuation may be via ambulance to the nearest suitable medical facility which would be the Ma'aden Fluor Medical Center. Air evacuations will be from the plant via helicopter to the nearest emergency hospital in the city of Al Jubail.

The site access roads will connect the various facilities within the site. The main access point is from Road 7 and highway no. 7950 on the Saudi Arabian Highway Maps. Road development will include heavy vehicle haul road, main access road, accommodation village access, and internal roads within the processing area.

A main workshop will be created for heavy and light vehicles and other servicing requirements for the process on the plant site.



Power and Water Estimate

Victory Bore:

The modelled installed power demand for the project is 17.95MW. Gas supply to site is made possible through the Northern Goldfields Interconnect that runs within one kilometre of the proposed mine site. This provides an option to generate power onsite through a gas-fired plant or generators. Both diesel and solar plant power production are considered. Surefire is pursuing a contracting strategy to use a "Build-Own-Operate" model.

The water supply for the project is expected to be provided using bore water. An initial hydrogeological study has been completed. The assessment of the hydrogeological conditions and water supply potential suggests that the project is unlikely to face significant water-related challenges or environmental impacts related to dewatering operations.

Ras Al-Faid KSA:

In KSA, approvals for processing are expected to be in place following final discussions with the KSA government departments, as the area is designated for Ferro Alloy processing.

It is estimated that the installed power demand for the KSA operation is 73.14 MW. Power can be supplied from direct connection to the electricity grid of the Ras Al Khair industrial zone and backed up by emergency diesel generators. Integration of renewable energy is also recommended due to high potential for solar generation in Ras Al Khair region.

From discussion with SA agencies it is estimated that water supply will be sourced from local desalination plant. Sewage and water treatment services will be provided from local providers.

Legal Tenure, Approvals and Native Title

Victory Bore:

The Victory Bore Vanadium Project is held under E57/1036. A Mining Licence covering the whole of this exploration licence is under application with the DMIRS. Surefire is the 100% owner of the project.

Engagement is ongoing with government authorities, including the Department of Mines Industry Regulation and Safety (**DMIRS**) and Main Roads of Western Australia, as well as stakeholders like the Shire of Sandstone and Atley Station. Primary approvals include mining leases, licenses, and compliance with various acts and regulations. Secondary approvals, including those related to environmental, power generation, dewatering, and water supply, will be obtained during detailed design and construction phases. No current Native Titles exist over the project area, but compliance with the Aboriginal Cultural Heritage Act (2021) is required.

Ras Al-Faid:

In KSA land tenure approvals are assisted by the Ministry of Investment and the Royal Commission in KSA. Agreements for processing are expected to be in place following final discussions with the KSA government departments.

The area selected is designated for Ferro Alloy processing. A total land area of 210,000 m² is expected to build the processing plant. The location of the plant within the Ras Al Khair industrial area will be determined.



Environmental

Victory Bore:

Detailed fauna and flora surveys were undertaken by Onshore Environmental Consultants Pty Ltd in two phases covering winter and spring conditions.

None of the plant taxa currently identified from the study area were gazetted as Threatened Flora under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) or the Western Australian Biodiversity Conservation Act 2016 (BC Act). Two Priority flora taxa, as listed by the Department of Biodiversity, Conservation and Attractions (DBCA), were recorded from the study area; Jacksonia lanicarpa (Priority 1) and Calotis sp. Perrinvale Station (R.J. Cranfield 7096) (Priority 3).

The fauna identified in the project's general area included 18 conservation significant fauna species, of which two species were assessed as likely to occur within the study area based on the known distribution and habitat preferences of the species: Malleefowl (Leipoa ocellata) - listed as Vulnerable under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) and the BC Act; and Brush-tailed Mulgara (Dasycercus blythi) - listed as Priority 4 by DBCA.

KSA:

Ras Al- Faid is an operational industrial hub with areas designated for mineral processing under Ferro-Alloys. In KSA, it is expected that environmental approvals for vanadium processing will be required, and will be subject to final discussions with the KSA government agencies. The area is a designated heavy industry hub and the interest from KSA is in downstream vanadium processing. Following the completion of this PFS, and under assistance and direction from MISA the Company will engage an environmental consultant / agency in KSA to assist with any approvals.

Workforce Estimate

Victory Bore:

The Victory Bore Project will operate on a 24/7 basis. Mining personnel requirements for the mine will peak at 120 full time employees (FTE) and 37 FTE for the processing plant. Human Resource policies, recruitment, inductions, training and development, employee relations, grievance resolution procedures, and remuneration strategy have been addressed in the PFS.

KSA:

The processing plant in KSA will employ 155 FTE.

Vanadium: Markets and Product Pricing Assumptions

KSA is a significant steel product producer with 41 steel factories but does not currently produce vanadium for its industrial sector. In 2022 it announced the additional construction of three Iron and Steel plants worth \$9.3Bn (source The National Business, 13 Sep 2022).

Vanadium demand in KSA is estimated at 10-12kt/a, growing at 4-5% Year on Year. The steel industry accounts for 90% of the total vanadium demand where it is used in alloying. Under the KSA Green Initiative the potential use of Vanadium Redox Flow Batteries in KSA is included which will mean a significant increased vanadium electrolyte demand.



Vanadium pricing is relatively transparent1. The average price for 98% V_2O_5 (powder) during the last three years (August 2019 to August 2022) was \$7.5/lb and the AMV discount is \$0.5/lb while the premium for high purity 99.5% vanadium pentoxide is \$1.8/lb based on the analysis. The premium for higher purity 99.8% V_2O_5 is expected to be higher than the premium for 99.5% and thus a conservative \$2/lb is assumed for the highly purified (99.8%) V_2O_5 product (Figure 9).

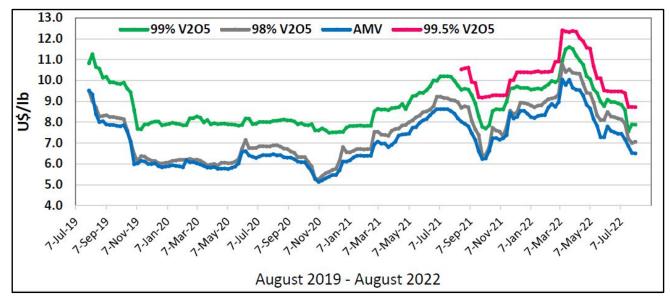


Figure 9 Recent Three-Years Historic Price Chart for AMV, V₂O₅ (98%), V₂O₅ (99%) and V₂O₅ (99.5%) in China.

Titanium: Markets and Product Pricing Assumptions

Approximately 95% of titanium extracted is refined into titanium oxide, which is widely used in paints and coatings applications as pigment. Asia Pacific dominates the titanium dioxide market due to rising demand for construction activities, overseeing a steady growth in price. In the medium-term future, the demand for titanium is projected to outweigh the supply, which further drives the price (Figure 10).

¹ Metals Bulletin publications



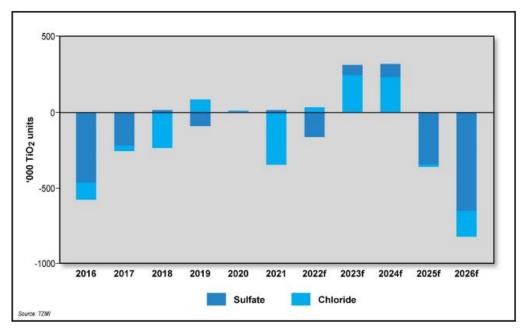


Figure 10 Annual Feedstock Surplus/Deficit by Pigment Process Route (after Metals Bulletin).

Pig Iron: Markets and Product Pricing Assumptions

The pig iron market is experiencing a global shortage as the war in Ukraine has drastically reduced the pig iron production in both Russia and Ukraine, which are major producers. The pig iron market is facing major restraints due to its environmental impacts; however, the introduction of new technologies and ongoing infrastructure projects will offer new opportunities for the market. Pig iron pricing is volatile. Pricing used in the PFS is equivalent to the lowest levels seen in the recent past (Figure 11).

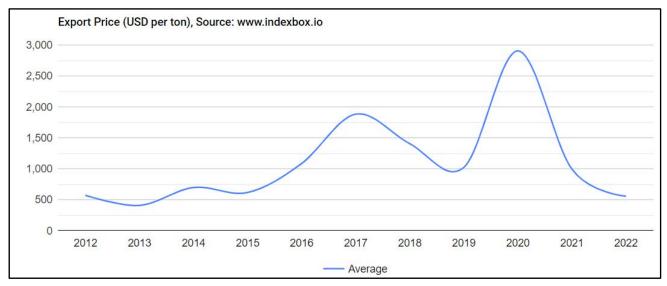


Figure 11 Pig iron price (www.indexbox.io).

Pigment Iron Oxide: Markets and Product Pricing Assumptions

The iron oxide pigment (IOP) market is valued at USD2 2.67 billion in 2023 and projected to grow to US\$4.9 billion by 2030, mainly driven by the rising demand for pigment in various applications. The iron oxide pigment price varies greatly depending on the grade and colour, fluctuating between US\$600 up to US\$1,600 (Figure 12). The IOP market is a niche one. Surefire is undertaking further investigations into the volumes it may feed into this growing segment.



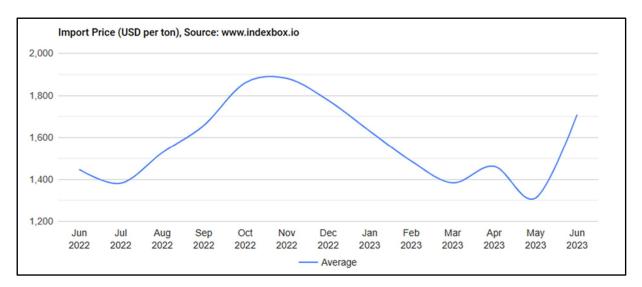


Figure 12 US iron oxide pigment import price (after www.indexbox.io).

The assumed product pricing used as input into the financial analysis of the project is presented in Table 14.

Table 14 Pricing assumptions used in the financial model.

Product	Sale Price (US\$/t)
Vanadium Pentoxide (V₂O₅) Flake [Electrolyte Grade]	20,944
Ferrovanadium (FeV)	26,750
Titanium Dioxide (TiO₂) Slag	658
Pig Iron (Fe)	412
Iron Oxide Pigment (Fe ₂ O ₃)	450
High Grade Iron Oxide	128

Modifying Factors

The modifying factors including pit design, product pricing assumptions, metallurgical parameters, environmental considerations, and final processing to saleable products are included in this announcement under the appropriate headings.

Royalties and Tax

In Western Australia, mineral royalty rates are prescribed under the Mining Regulations 1981 Act. Magnetite concentrate production at the Victory Bore mine site will be subject to an *ad valorem* royalty of 5% based on the "royalty value". The royalty value is the commercial value of the magnetite concentrate with any adjustments for transport costs to the final customer. In the PFS, A royalty rate of 5% has been applied.

Operating in Australia and the KSA has significant tax implications including, but not limited to tax holidays, withholding tax, and corporate profits tax. In recognition of this, and in the absence of a corporate structure that is financially optimised, all values in the PFS are stated as pre-tax.



Risks

The Australian and New Zealand ISO 31000 standard was used to undertake a risk assessment of the project. The risk consequence is quantified in respect to financial impact, reputation, image, injuries and death, with an additional field provided for other factors. The risk likelihood is described and defined in terms of frequency per year. The ISO 31000 (2009) framework is shown in Figure 13.

The project risk assessment undertaken for the concept study identified a total of 240 risks. The break-down of these risks to their ranking level is shown in Table 15. Key risks were assessed for the mining, geology, beneficiation plant, water, camp, infrastructure, safety, environmental, transport, processing plant, marketing, financial and test work. The risks were reassessed after the implementation of the risk treatment mitigation strategies that were identified. The residual risk assessment reduced the ranking of the risks considerably (Table 15), with only 2 'Extreme' risks remaining:

- Limited geotechnical data that may lead to sudden or unpredictable pit wall failure.
- 2. Significant escalation in OPEX and or CAPEX

The residual risks classified as "High" are identified below.

Mining Risks:

- 1. Undetected wall movement leading to a sudden or unpredictable pit wall failure.
- 2. Rock falls due to blast damage and/or over digging.
- 3. Ore waste ratio underestimation.

Beneficiation Plant Risks:

- 4. Damage and high-maintenance blockages in crushing area.
- 5. Undersized power consumption and the potential wear and failure of rubber rollers in screening area.
- 6. Low cyclone efficiency due to viscosity screening issues affecting fluid entering the cyclone.
- 7. Viscosity-related issues, resulting in a substantial reduction in capacity.
- 8. Risk of the concentrate not being able to be dewatered and filtered.
- 9. Potential for CAPEX increases beyond the PFS estimate, with significant financial implications.
- 10. Potential for cost overruns, particularly in the context of ramp-up delays and the commissioning schedule.

Camp and Infrastructure Risks:

- 11. Medical emergencies, particularly those of an extreme nature.
- 12. Dust and noise.
- 13. CAPEX increase during camp construction and operations.
- 14. The risk of dust storm in the area and in haul road.
- 15. Increasing traffic load due to the maintenance of bush tracks leading to increased traffic.
- 16. The reliability and maintenance, efficiency and management of solar power, complex power management, and potential CAPEX increases.
- 17. Construction materials management and timeliness of adequate supply.
- 18. Exchange rate risk.
- 19. The availability and capability of regional services and the skills base.

O & HS Risks:

- 20. Dusty environments pose a significant risk to personnel.
- 21. The potential for safety item omissions.



Transport Risks:

- 22. Traffic congestion and the presence of increased road trains on the route to Geraldton.
- 23. Road maintenance issues resulting from increased traffic.
- 24. The suitability of the road to Sandstone is a concern
- 25. Stockpile management in Saudi Arabia.

Process Plant Risks:

- 26. Inefficient magnetic separation, high ferric chloride makeup rates, low vanadium recovery and low-grade titanium slag.
- 27. Bad ramp-up process leading to delays in the operation.

Marketing Risks:

28. Haematite marketing revolves around the offtake contract due to uncertainty of haematite grade.

Financial Risks:

- 29. Potential for escalating of fuel prices.
- 30. Difficulty in securing the necessary financial support for the project's execution and success.

Test work Risks:

31. Metallurgical risks consist of uncertainties due to the lack of test work in various critical process stages.

The identified risks will be the subject of additional work as the project progresses to a Feasibility Study.

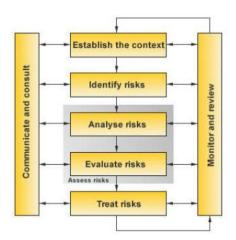


Figure 13 ISO 31000 risk assessment flow sheet.



Table 15 Risks identified and risks remaining after mitigation.

		Risk	s after Mitiga	tion					
Risk Ranking	Extreme	High	Moderate	Low	Extreme	High	Moderate	Low	Total
Area									
Mining	9	10	0	0	1	5	8	5	19
Geology	1	6	2	1	0	0	6	4	10
Beneficiation Plant	12	27	2	0	0	10	25	6	41
Water	13	7	1	0	0	0	10	11	21
Camp	2	5	6	6	0	3	4	12	19
Infrastructure	19	14	1	13	0	15	17	15	47
OH&S	2	0	4	7	0	2	4	8	14
Environment	3	10	7	2	0	0	9	13	22
Transport	4	3	0	0	0	4	2	1	7
Process Plant	6	2	5	2	0	5	3	6	15
Marketing	1	5	0	0	0	1	5	0	6
Financial	4	3	4	0	1	3	3	4	11
Test work	5	3	0	0	0	7	1	0	8
Total									240

Sensitivity Analysis

A Sensitivity Analysis with variations up to ±20% of the Net Present Value (NPV) and Internal Rate of Return (IRR) has also been performed, indicating the first and foremost dominating factor is hematite (Fe2O3) sale price, followed by OPEX, CAPEX and vanadium flake sale price respectively.

A sensitivity analysis of Net Present Value (NPV) and Internal Rate of Return (IRR) was undertaken, which aims to evaluate the impact of the following key variables to the overall project economics. Variations up to ±20% have been modelled (**Table 16**, **Figure 14**):

- CAPEX
- OPEX
- Ferrovanadium price
- Pig iron price

Table 16 Pre-tax NPV for the Project from the Sensitivity Analysis

US\$ M										
Sensitivity, %	-20%	-10%	0%	10%	20%					
CAPEX	1,246	1,178	1,110	1,042	975					
OPEX	1,573	1,341	1,110	879	647					
Ferrovanadium price	863	987	1,110	1,233	1,357					
Pig iron price	897	1,004	1,110	1,216	1,323					



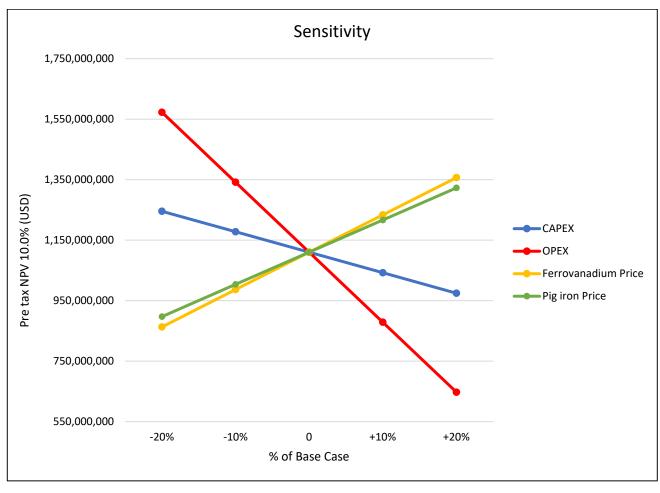


Figure 14 NPV sensitivity analysis.

Opportunities

The key opportunities for the project include:

- Upgrade of Inferred Resources to Measured or Indicated.
- Change in bench/flitch to reduce mining costs.
- Change the primary loading equipment size/type.
- Potential for waste from the pit to be used for tailing wall construction.
- A portion of the ore may be able to be tipped directly into the crusher.
- Blast hole sampling may be sufficient for grade control estimation.
- Waste mining costs may be able to be reduced if ground conditions are determined to be more favourable (e.g. lower powder factors without negatively impacting digging rates) than ore zones.
- Reducing offset of WRLs from pit. Whilst this would slightly reduce the waste haul costs it may negatively impact slopes and/or potential pit expansions (from pit optimisation input improvements).
- Include all potential revenue products in the pit optimisation and schedule (e.g. titanium).
- Investigate the development of an alumina recovery process for the high-alumina lithologies/tailings.
- Processing advances and state of the art operations including use of automation and AI.
- Renewable Electrification along all aspects of the operation.



The PFS further identified a number of opportunities that may improve the economics and reduce the risks of the Project. In addition, further work is required before embarking on a Feasibility Study, the Company. They include:

- 1. A slurry pipeline to transport the magnetite concentrate from the mine site to Geraldton Port was considered. Discussions are being held with a possible third party commercial slurrying operation
- 2. Hydrogeological survey to better define and quantify groundwater resources
- 3. Metallurgical test work to refine the parameters used in the vanadium pentoxide flowsheet, particularly in relation to alkaline leaching, desilication, and AMV precipitation
- 4. Additional comminution test work to verify earlier work in relation to grinding and WHIMS magnetite recovery
- 5. Iron oxide low temperature reductive roasting of ores to better quantify reductant reagent requirements
- 6. Test work is required to determine the production of pig iron, TiO2 slag and FeV production.
- 7. Refinement and optimisation of the mine schedule.
- 8. Studies into further mitigation of risks identified in the PFS

Funding

The Company's Board believes that there are reasonable grounds to assume that funding for this project going forward will be in place through a debt and equity funding strategy in place and started:

- A capital raising was successfully completed recently and raised \$2M² via a share placement to sophisticated investors. The placement include the issuing of 181,818,186 options at a strike price of \$0.019 expiring on 30 November 2026. If exercised, these options represent \$3.45M in possible capital.
- A pro-rata non-renounceable entitlement offer of one fully paid ordinary share for every eight shares held by eligible shareholders at an issue price of A\$0.011 each to raise up to A\$2,621,785, together with one free-attaching option (exercisable at A\$0.019 and expiring on 30 November 2026.
- If exercised, the options from both the placement and the non-renounceable offer have the potential to raise an additional represent \$7.98M (before costs).
- The Company executed a non-binding MOU with the KSA and Ministry of Investment, Kingdom of Saudi Arabia (MISA)³ under which MISA will:
 - provide assistance to SRN for importing and processing of its mineral concentrate
 - provide investment opportunities and incentives and assist Surefire to secure binding agreements for funding and development
 - introduce partners for the production facilities
 - access other vanadium opportunities in KSA including fly-ash and hard rock vanadium resources.

Project Finance

The KSA has significant debt funding incentives of up to 75% of Capital Costs at attractive interest rates, to attract investment in KSA, particularly for critical mineral resource processing. The availability of this type of funding has been discussed and referred to by the Ministry of Investment Saudi Arabia (MISA) and is included in their documentation. At this stage, and until further discussions are concluded, there is no assurance that

² ASX:SRN "Placement Completed", 9 November 2023.

³ ASX:SRN: "Surefire Executes MOU with the Ministry Of Investment, Kingdom Of Saudi Arabia for Vanadium and HPA Critical Mineral Processing", 16 August 2023.



SRN will eventually have access to this funding. If access to this debt funding is unsuccessful then Surefire will rely on alternative debt and equity funding.

Joint Venture Partner for KSA based operation

Surefire is in preliminary discussions with a Saudi Arabia based partner which may include financing of the KSA-based plant. It is intended that any arrangement with a Saudi based group would be on a joint-venture structure with on terms yet to be finalised. These are in the early stages of discussion there is no guarantee that any agreement will eventuate. In an agreement is not reached MISA have indicated that the Company can proceed on a stand-alone basis.

Following the outcome of availability of funding in KSA and with any joint venture partner discussions, the Company will also mandate a leading Corporate Finance team to structure an appropriate debt and equity finance structure that may comprise of all or some of the following:

Debt and Equity Finance

Debt

It is expected that a suitable debt/equity structure will be agreed. The Company will discuss traditional resource project finance with leading banks and institutions in Australia and overseas for debt finance. The Company has had preliminary discussions with an overseas major export credit bank for potential intertest in financing the project. The institution has experience in operating and funding projects in KSA and the Company plans to progress these discussions on conclusion of this PFS. This is at an early stage and there is no guarantee debt funding from banks or other institutions will eventuate.

Equity

Any equity component will be dependent on the amount of debt raised. The Company would not pursue an equity alone funding solution. The Company will approach interested Australian, Middle Eastern, and European based institutions for equity. The Company would aim to make the equity component of any project finance structure as minimal as possible to reduce dilution however there is a risk that any equity funding may be dilutive to shareholders and therefore could impact the value of the Companies securities.

Offtake Agreements

The Company has not entered into any offtake agreements but has been approached by interested parties. It is expected that any offtake agreement will include either project or pre-production debt and or equity finance.

The Board is of the opinion that:

- The PFS has delivered a very robust and exceptionally economic case to develop the Victory Bore Vanadium deposit. NPV and IRR metrics show the project is unparalleled in the Australia bulk mining industry in its projection of profitability. The Board confident that these metrics will enable it to fund pre-production capital through conventional debt and equity financing and engaging with possible partners on both a project and/or corporate level.
- The multiple products to be produced by the project significantly lower revenue volatility and therefore investment risk.
- The Victory Bore Vanadium Project is one of the largest vanadium resources in Australia. Vanadium is an Australian, US, and Europe-declared Critical Mineral4. A buoyant vanadium price, through the improvement of market conditions, particularly with respect to power storage demands and high quality steel demand, underpins the Project's economics.
- The strategy of developing a mine and initial concentration facility in Australia and a final products plant in the KSA is vindicated by the PFS:

⁴ "Critical Minerals Strategy 2023-2030", Australian Government, 7 July 2023, accessible by website: https://www.industry.gov.au/publications/critical-minerals-strategy-2023-2030



The Victory Bore Vanadium Project is located in one of the consistently voted best jurisdictions in the world for mining5. Its location is well placed with respect to infrastructure and services. Importantly, it is well placed to tap capital markets that are well versed in Australian mining investment opportunities.

The KSA is actively pursuing minerals projects. The proposed site of the products processing plant has ready access to port and transport infrastructure, cheap power, and a ready and low cost workforce.

• The depth and experience of the Board of Directors is reflected in the Company's track record in raising capital to advance its portfolio of projects. Surefire Resources Limited has been listed on the ASX since 1999. Mr Vladimir Nikolaenko has been at the forefront of bringing projects to the market since 2011. Mr Paul Burton has recently managed both Feasibility Studies (**DFS**) and Front End Engineering and Design (**FEED**) on a vanadium project and has project experience in a range of commodities. He has also raised over \$80M in finance, secured offtake agreements and has significant global experience. He has also overseen a USD \$600 mandate for debt finance and finance from Export Finance Australia (EFA) and Export Credit Banks. The remaining Board members have significant mining operation experience and commercial experience.

The Board is actively pursuing funding initiatives for the Project that include:

- Discussions with KSA-based partners with access to KSA sovereign funds
- Engagement with global institutional investors
- Engaging with possible partners to seek MOUs for product off-take
- · Initial discussions for long term debt and equity funding
- The initiation of business relationships in support of the Project's development.

Estimated Project Time lines

The Board of Surefire plans for a Definitive Feasibility Study (**DFS**) will be started by Q2, 2024 and will be scheduled to take twelve months.

At the same time the Company will progress negotiations for process plant location in the KSA which is expected to conclude by Q2, 2024.

An agreement with a KSA based joint venture partner for processing is expected by Q2, 2024.

Currently, SRN has a Mining Lease in application and is planning to progress the relevant approvals required: These approvals include but are not limited to Environmental Impact Assessment, vegetation clearing permit, mining proposal and mine closure plan, water extraction licence, safety and other approvals from Shire and Main Roads WA.

Consequential to the grant of a Mining Lease and other approvals, the Company will seek mine site approval to operate.

Authorised for ASX release by the SRN Board of Directors:

Inquiries: Paul Burton Managing Director +61 8 6331 6330

⁵ "Fraser Institute Annual Survey of Mining Companies 2022", Fraser Institute, 2023. Accessible by web: https://www.australianmining.com.au/australia-ranks-high-in-global-mining-survey/#:~:text=The%20annual%20survey%20assesses%20the,Australia%20ranked%20as%20number%20two.



Forward Looking Statements:

This announcement contains 'forward-looking information' that is based on the Company's expectations, estimates and projections as of the date on which the statements were made. This forward-looking information includes, among other things, statements with respect to the Company's business strategy, plans, development, objectives, performance, outlook, growth, cash flow, projections, targets and expectations, mineral reserves and resources, results of exploration and related expenses. Generally, this forward-looking information can be identified by the use of forward-looking terminology such as 'outlook', 'anticipate', 'project', 'target', 'potential', 'likely', 'believe', 'estimate', 'expect', 'intend', 'may', 'would', 'could', 'should', 'scheduled', 'will', 'plan', 'forecast', 'evolve' and similar expressions. Persons reading this announcement are cautioned that such statements are only predictions, and that the Company's actual future results or performance may be materially different. Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the Company's actual results, level of activity, performance or achievements to be materially different from those expressed or implied by such forward-looking information.

Competent Person Statements:

The information in this report that relates to exploration results has been reviewed, compiled and fairly represented by Mr Horst Prumm, a Member of the Australian Institute of Mining and Metallurgy ('AusIMM') and the Australian Institute of Geoscience ('AIG') and a fulltime employee of Prumm Corporation Pty Ltd. Mr Prumm has sufficient experience relevant to the style of mineralisation and type of deposits under consideration to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee ('JORC') Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves. Mr Prumm consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.

The information in this report that relates to the Victory Bore Vanadium mineral resource estimation is based on work completed by Mr. Stephen Hyland, a Competent Person and Fellow of the AusIMM. Mr. Hyland is Principal Consultant Geologist with Hyland Geological and Mining Consultants (**HGMC**), who is a Fellow of the Australian Institute of Mining and Metallurgy and holds relevant qualifications and experience as a qualified person for public reporting according to the JORC Code in Australia. Mr Hyland consents to the inclusion in this report of the information in the form and context in which it appears.

JORC Code, 2012 Edition:

Section 1: Sampling Techniques and Data

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

Criteria	Commentary
Sampling Techniques	Reverse Circulation ("RC") drilling was carried out with an RCD250 drilling rig with a Deck mounted Sullair 1150/350 compressor coupled to a Sullair 1350/500 Auxiliary compressor and 2400cfm/950psi Air Research booster. Rig mounted sampling system with twin sample collection chambers and a Sandvik cone splitter. 4 ½ inch drill pipe with 5 inch face sampling hammer. The holes were drilled to 140mm diameter. Standard rig mounted sampling system was employed. Samples were taken from the collar (0m). Sampling was continuous to the end of hole depth. Each metre was geologically logged and assayed by hand-held XRF, assayed for mag susceptibility and recorded. Each metre was stored in a chip tray. Drill collar positions were captured using a DGPS to 10mm accuracy.
	Each metre of samples was split with a three-tier rifle splitter mounted beneath the cyclone on the drill rig. Metre samples were collected in green mining bags and calico bags. Each metre was also sieved and collected in a chip tray for geological logging. Samples were composited to 2m manually using a 50% riffle splitter. The 2m composite samples were delivered to Nagrom Laboratories in Kelmscott by Surefire staff for assay of vanadium and multi-element assay.
Drilling	62 x 140mm RC holes were drilled for a total of 5,189 metres. The Reverse circulation rig used a downhole hammer and face sampling button bit.
techniques	Sample piles were recorded for each 6m rod. Rods were counted when pulled at the end of each hole. Given the relatively short hole length, no down hole surveying instruments were used.
Drill sample recovery	Geologist supervising the drilling program recorded each metre as it was drilled. Geological logs, samples logs, daily drill logs, and sample piles all recorded hole depths. No aberrations were found.
	All logs of sampling and drilling lengths matched.
	Each metre was recovered. No redrilling was necessary. No biases were recorded.
Logging	Drill cuttings were geologically logged to the level of detail deemed appropriate for mineral exploration, with details entered into a geological database.
	Drilling logs record weathering, oxidation, mineralogy, colour, texture, structure accessory minerals sulphides and mineralisation. All logging is quantitative.
	The drill holes reported were logged in full.

Three tier riffle splitters were used to take one metre samples. Samples were combined to form 2m composites using a 50% riffle splitter. All samples were transported to the Nagrom sample preparation/assay laboratory Kelmscott. The sample preparation followed industry best practise. All samples is significant to the exploration results. Sample size was approximately 2kg – 3kg in weight. Field duplicates, standards and blanks were inserted at a random rate of approximately 1 per 20 samples. Give resource, the sample sizes are deemed appropriate. Quality of assay data and laboratory tests The analytical technique utilised the Nagrom KM-2209-064256 method for Al, Al2O3 Co CoO Cr Cr2O3 Cu CuO Fe Fe2O3 Ni NiO P P2O5 S SO3 Si using Method XRf percentages. LOI used the TGA 002 method to percent units. The Laboratory has provided standards and QA/QC additional to that of Surefire. The external laboratory used maintains their own process of QA/QC using standards are certain laboratory quality QA/QC reports has shown no sample preparation issues with acceptable leprecision and no bias in the analytical datasets. Verification of sampling and assaying The sampling techniques were reviewed in the field by an external consultant. No twinned holes were drilled.	
All samples were transported to the Nagrom sample preparation/assay laboratory Kelmscott. The sample preparation followed industry best practise. All samples 85%. The external laboratory's QA/QC procedures involved the use of appropriate standards, duplicates and blanks which are inserted into sample batches at a frequer for the exploration results. Sample size was approximately 2kg — 3kg in weight. Field duplicates, standards and blanks were inserted at a random rate of approximately 1 per 20 samples. Gir resource, the sample sizes are deemed appropriate. Quality of assay data and laboratory tests The analytical technique utilised the Nagrom KM-2209-064256 method for Al, Al2O3 Co CoO Cr Cr2O3 Cu CuO Fe Fe2O3 Ni NiO P P2O5 S SO3 Si using Method XRF percentages. LOI used the TGA 002 method to percent units. The Laboratory has provided standards and QA/QC additional to that of Surefire. The external laboratory used maintains their own process of QA/QC using standards the external laboratory quality QA/QC reports has shown no sample preparation issues with acceptable legication of sampling and The sampling techniques were reviewed in the field by an external consultant.	
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sampling and	
All data is recorded in specifically designed templates. Assay data was received in spreadsheets and downloaded into geological database.	
The analysis of Vanadium was provided by the laboratory as V and V2O5. No other adjustments were made to the data on receipt from the assay laboratory.	
Location of Data Initial drill hole collars were located with a Garman GPS. Final collar locations were located using a digital GPS, accuracy +/- 10mm.	
Points Drill hole location is reported using the GDA94_MGAz50 grid system.	
Drill hole collar was located by GPS. Elevation value is in AHD.	
Data spacing and RC holes were drilled at approximately 25m across strike and 100m line spacing.	
distribution The data spacing is considered sufficient to assume geological and grade continuity. It is expected that this drilling will allow the estimation of Inferred and Measu	ured Mineral Resources.
Samples were composited from 2m according to supervising geologist.	
Orientation of The drill hole was angled perpendicular to the strike of the target horizon to achieve unbiased sampling of the target horizon.	
data in relation to geological structure Drill intersections are not true widths.	
Sample security Chain of custody of samples was managed by the company and the laboratory. Logging and sampling were carried out in the field at the time of drilling.	
Audits or reviews Sample preparation followed industry best practice at the commercial laboratory facility. QA/QC of assay analyses shows there are no issues with sampling, analyses shows the commercial laboratory facility.	

Section 2: Reporting of Exploration Results

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

Criteria	Commentary					
Mineral tenement and	The exploration results in this report relate to Exploration Licence E57/1036. This EL is 100% owned by Surefire Resources NL and is currently a M in application - M57/656.					
land tenure status	Tenure in the form of Exploration Licences with standard 5-year expiry dates which may be renewed. There are no known impediments to obtaining a licence to operate in this area.					
Exploration done by other parties	revious regional exploration on the project was undertaken by the company and included, geophysical surveys, geochemical surveys, rock sampling and RC drilling. Historical eophysical surveys included an airborne (helicopter) magnetic survey. Geochemical surveys included soil sampling. A detailed assessment of the historic data is in progress. No gnificant issues with the data have been detected to-date.					
Geology	The Project occurs within the Atley Igneous Complex in the East					
	Murchison Mineral field of Western Australia. The Atley					
	Intrusion is an Anorthosite body that is elongate in an NNE/SSW orientation and runs along the axis of the regional scale Youanmi Fault, a regionally dominant geological feature. Further drilling and assaying is required to fully assess the geology and style of mineralisation.					
	Mineralogy and petrology studies completed suggest that host rocks at Unaly Hill are historical magnetite layers within intrusive Anorthosite, gabbro and ultra mafics. The targeted deposit type and style of mineralisation is a Fe-Ti-V magnetite system.					
Drill hole Information	Refer to Table 1 of this report where drill hole collar and downhole orientation and depth information is tabulated No information has been excluded.					
Data aggregation	Where assays were composited for summary purposes, all assays were weighted by drill interval. No high-grade cuts have been applied to the sample data reported.					
methods	Where assays were composited for summary purposes, all assays were weighted by drill interval.					
	No metal equivalent values are used					
Relationship between	The orientation of mineralization relative to the drill hole is depicted in figures. Drill intersections are not true widths.					
mineralisation widths and intercept lengths	All drill hole results reported are downhole length, true widths are approximately 82.6% of the down hole widths.					
	All drill hole results reported are downhole length, true widths are shown on figure 3 and in the text.					
Diagrams	Appropriate diagrams are included in the main body of this report.					
Balanced Reporting	Reporting of the drill results is considered balanced.					
Other substantive exploration data	No additional meaningful and material exploration data has been excluded from this report.					
Further work	Resource estimation and a prefeasibility work is planned for the Project which may require additional RC percussion and/or diamond drilling to be undertaken.					

Section 3: Estimation and Reporting of Mineral Resources

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

Criteria	Commentary
Database integrity	The drill hole database is maintained by Surefire Resources NL
	The Competent Person has verified the internal referential integrity of the database. In total 136 drill-holes were available to assist with resource model development.
	Some historic drill holes required verification of location and elevation and adjusted to known and relatively flat topographic surface.
	No other significant errors or concerns were encountered.
Site visits	A site visit has not yet been undertaken to the specific Victory Bore location by the Competent Person responsible for the resource estimation. The competent person has visited the very near vicinity of Victory Bore in the past and is very familiar with the general terrane. The Competent Person has also relied upon reports from different personnel including Surefire representatives that have visited and worked at the Victory Bore deposit location. The site is at a very early stage of development with limited features currently observable.
Geological interpretation	Mapping, geomagnetic surveys and subsequent geologic interpretation has been carried out to capture both the geological and structural information used to guide resource modelling at Victory Bore. A precursor interpreted structural mapping study carried out by Surefire Resources NL shows a clear relationship between observable strong linear magnetic anomalies and Vanadium mineralization. Mineralization modelling has been guided by the combined geological and structural information as is currently available.
	Mineralisation envelopes were interpreted in E-W and plan (bench) section slices using all available drill hole data. A nominal 0.1 - $0.0.15\%$ V_2O_5 edge lower cut-off was initially used to delineate anomalous Vanadiferous mineralization. The mineralization developed was also locally partially adjusted to capture and delineate the extents of mineralisation in suboptimally drilled areas.
	The mineralisation envelopes are contained within a reasonably scaled, interpreted geological and structurally mapped package that is confirmed to correlate with the majority of samples / observed V_2O_5 mineralization.
Dimensions	The majority of the geologically interpreted Victory Bore mineralised occurrence has an approximate 7200m strike length. The mineralisation interpreted width ranges from approximately 30 m to 150 m depending on the zone observed. Mineralization in the majority of the deposit area extends and has been modelled to a depth of approximately 250 m below topographic surface. Mineralisation has been modelled commencing immediately below current topographic surface.
Estimation and modelling techniques	All available RC drilling data was used to build the mineralisation model and for guiding Mineral Resource estimation. Recent verification RC drilling carried out by Surefire has also enabled some of the estimated resources to be assigned a higher level of resource estimation confidence and therefore higher level of resource reporting classification.
	Surefire has acquired new assay information from recent drilling programs. An updated drilling, geological logging and assay database was used to define and model the mineralised domains for Vanadium ($V_2O_5\%$).
	The majority of drill collar positions have been surveyed. Newly drilled holes were accurately DGPS surveyed by Surefire. Some of the historic collar positions were adjusted according to Topographic DTM surface data. Some historical un-surveyed drill hole collar elevations were draped onto a 'pre-mining' topographic DTM surface and were checked in order to match the known surveyed drilling. The survey control for collar positions is considered adequate for the estimation of resources as stated.
	The mineralised domains were interpreted from the drilling data and Geomagnetic data provided by Surefire. Sets of cross-sectional 3D strings were generated throughout the deposit area in the E-W orientation. These were then used to interpret and connect to generate 3D wire-frames. The resulting V_2O_5 mineralization wire-frame domain was then used for statistical analysis and grade estimation. The development of mineralization wire-frame was tightly controlled and not extended (extrapolated) beyond 1 average section spacing from the last drill-hole 'point of observation' but some extension was permitted where clear geomagnetic mapping data showed clear extensions of V_2O_5 mineralization.

A set of wire-frame weathering surfaces and broad material type wire-frames were also modelled to highlight the near surface highly weathered thin material as well as the underlying transitional material types. These material types were used to assign basic bulk density characteristics for the deposit.

Spatial statistical analysis was carried out on the main V2O5 assay data item. Sample data was composited to two (2) metre down-hole intervals initially based on the assayed V2O5 item intervals. This also included equivalent compositing for the ancillary Fe, Al2O3, TiO2, SiO2 and other minor items. The composite probability distributions were interrogated for each element to review localized average grades, composite 'outlier' values and related coefficient of variation levels.

The main V_2O_5 composite item was used to generate both down-hole and where possible longer range between hole semi-variograms models to establish interpolation ranges and relative nugget and sill ratios used in Ordinary Kriging interpolation for block model grade assignment.

One (1) block model was constructed for the total deposit area combining the basic lithology and mineralization modelling for the main V_2O_5 item. The Block model was constructed using a 3D array of blocks with dimensions of using 5.0 m x 20.0 m x 5.0 m (E-W, N-S, Bench) block cells coded with the mineralisation wire-frames.

The Block Model coordinate boundaries (GDA94 MGA Zone 50) are;

693100m E to 696400m E - (660 x 5 m blocks)

6867400m N to 6874700m N - (365 x 20 m blocks)

150 m RL to 480 m RL - (66 x 5.0 m benches)

The Ordinary Kriging (OK) interpolation method was used for the estimation of the main V_2O_5 item using variogram parameters defined separately from the geostatistical analysis of each mineralization zone.

The kriging interpolated grades for mineralization zone used different interpolation parameters as determined from an independent domain variography analysis. No extrapolation of grades outside the mineralization wire-frame was permitted. Min of 1 composite selected – Max of 24 composites within search ellipsoid. Max of 2 composites per hole allowed. Search ellipsoids based on Semi-Variograms Showing search ellipsoid ranges of approximately 300m (long), 150m (Down-Dip) and 20m (across) ranges. A minor outlier 'distance of restriction' approach was applied during the interpolation process for all items in selected domains in order to reduce the unwanted spatial influence of very high-grade outlier composite samples. The distance of restriction was set at 40m and with the grade threshold value set within an approximate the 99th to 99.5th percentile level.

Dry Bulk Density was initially assigned by mineralisation domain with the designation of values assigned representing the average bulk density for each material type. This broad assignment was then overprinted by down-hole probe Bulk Density measurement data (consolidated to ~5100 measurements) composited and interpolated to block model using 'Nearest Neighbour' interpolation.

Moisture

All tonnages are reported on a dry basis.

Cut-off parameters

A range of V_2O_5 cut-offs was calculated during the MRE. While a 0.3% V_2O_5 lower cut-off has been applied to reported tonnes and grade, this was done on the basis of that this cut-off was considered in line with current mineralisation type, likely favourable processing route and the Vanadium price in conjunction with associated possibly recoverable beneficial elements.

The PFS considered a pit optimisation based on product mix, product pricing and mining costs. That optimisation concluded a cutoff grade of 0.2% V₂O₅ is sustainable.

	V ₂ O ₅ %	VOLUME							
Category	CUTOFF	cu m	TONNES	V ₂ O ₅ %	TiO ₂ %	$Al_2O_3\%$	Fe%	SiO ₂ %	LOI%
	0.05	7,731,110	25,768,471	0.342	4.909	17.030	19.043	35.125	0.83
Measured	0.10	7,728,868	25,761,242	0.342	4.910	17.030	19.046	35.121	0.83
asn	0.15	7,591,534	25,345,849	0.345	4.956	16.993	19.204	34.947	0.82
Me	0.20	6,627,908	22,389,334	0.367	5.260	16.679	20.229	33.874	0.78
	0.25	5,044,656	17,457,957	0.408	5.825	16.052	22.129	31.907	0.73

0.26
0.30 3,911,129 13,774,808 0.444 6.318 15.474 23.813 30.174 0.68 0.35 3,074,053 10,992,131 0.475 6.730 15.031 25.217 28.709 0.63 0.40 2,341,409 8,485,248 0.504 7.145 14.572 26.623 27.257 0.58 0.45 1,687,823 6,194,529 0.534 7.576 14.104 28.046 25.786 0.53 0.50 1,137,764 4,228,082 0.562 7.988 13.640 29.390 24.404 0.49 0.05 35,976,999 119,591,138 0.311 4.558 17.510 17.715 36.401 0.80 0.10 35,748,126 118,912,944 0.312 4.575 17.511 17.768 36.340 0.80 0.15 33,867,577 113,173,778 0.321 4.700 17.426 18.186 35.913 0.77 0.20 27,900,441 94,792,560 0.349 5.094 17.049 19.500 34.548 0.70 0.25 20,993,046 72,777,669 0.387 5.632 16.438 21.309 32.674 0.61 0.26 19,799,041 68,924,786 0.395 5.737 16.314 21.664 32.308 0.60 0.28 17,625,121 61,827,374 0.409 5.939 16.072 22.352 31.599 0.56 0.30 15,665,509 55,332,525 0.423 6.137 15.827 23.028 30.906 0.53
0.35 3,074,053 10,992,131 0.475 6.730 15.031 25.217 28.709 0.63 0.40 2,341,409 8,485,248 0.504 7.145 14.572 26.623 27.257 0.58 0.45 1,687,823 6,194,529 0.534 7.576 14.104 28.046 25.786 0.53 0.50 1,137,764 4,228,082 0.562 7.988 13.640 29.390 24.404 0.49 0.05 35,976,999 119,591,138 0.311 4.558 17.510 17.715 36.401 0.80 0.10 35,748,126 118,912,944 0.312 4.575 17.511 17.768 36.340 0.80 0.15 33,867,577 113,173,778 0.321 4.700 17.426 18.186 35.913 0.77 0.20 27,900,441 94,792,560 0.349 5.094 17.049 19.500 34.548 0.70 0.25 20,993,046 72,777,669 0.387 5.632 16.438 21.309 32.674 0.61 0.26 19,799,041 68,924,786 0.395 5.737 16.314 21.664 32.308 0.60 0.28 17,625,121 61,827,374 0.409 5.939 16.072 22.352 31.599 0.56 0.30 15,665,509 55,332,525 0.423 6.137 15.827 23.028 30.906 0.53
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		0.35	35,703,262	122,679,215	0.466	6.852	14.811	25.174	28.476	0.54	
		0.40	25,588,758	88,406,706	0.503	7.302	14.339	26.805	26.829	0.48	
		0.45	17,542,676	61,018,750	0.538	7.780	13.713	28.489	25.113	0.42	
		0.50	11,160,766	39,010,890	0.575	8.304	13.065	30.268	23.298	0.36	
Mining factors or	The majority of the depo	osit will be mined usi	ng open pit mir	ning methods as	the depos	it outcrop	s at surfac	e.			
assumptions	Detailed grade control v										
Metallurgical factors or								as Davis 7	Tube Recov	ery Tests s	showing good Vanadium concentrate
assumptions	recoveries. Bulk test wo	ork has not been und	ertaken.			-				-	
Environmental factors or assumptions	The resource is located	in an area of historic	mining. It is ass	sumed no signifi	cant enviro	nmental	factors wo	uld prevei	nt activatio	n of minin	g and related mineral processing activities.
Bulk density	Dry Bulk Density has bee	en determined from	a very large nui	mber of down-h	ole densito	meter me	easuremer	its taken a	s part of th	e recent S	urefire drilling program.
					stribution c	f the min	eralisation	zones and	d are deem	ed represe	entative for the rock material and
		mineralization types described for the Victory Bore deposit.									
	The density measurements have been averaged in deposit areas according to the geologically logged material type characterisation where densitometer readings are not available.										
	Locally where measuren			•	•						
									57 -2.74 t/	m3 and Fro	esh / Sulphide Zone = 2.98 -3.42 t/m3. Locally
	the nearest neighbour a										
Classification				•	-			•			tiveness of all available assay data.
			•		•		-				('(DIST1), 'number of composite available
	•		n block interpol	ation and the lo	cal kriging	variance	(KERRI) fo	r each bio	ck. The DIS	11, COMP	1 and KERR1 item values are 'condensed into a
	'quality of estimate' (QL	,	Danas Cata			مناح الممسد			the DCAT	Daaaa F	
						•					Reporting Item in the block model.
		-	•	•				•			propriate for the Resource estimation. sely drilled zones being classified as Inferred.
						-	•				where local estimated variance is lowest. Also
		•			•			-	•		atory scale and in Davis Tube Recovery <u>testing</u> .
Audits or reviews											estimation findings or classification issues have
ridates of reviews	been identified.	iodei and estimation	nas been inten	ially reviewed b	y sureme.	NO IIIajoi	CONCERNS	relating to	tile assuit	iptions or t	estimation infames of classification issues have
Discussion of relative	The Competent Person	considers the minera	I resource to be	e a robust and re	eliable glob	al estima	te of the co	ontained \	/₂O₅ and re	lated mine	eralisation. The estimation has been
accuracy/ confidence	constrained within defir				-						
	The Resource classificat	ion applied to the Re	source reflects	the Competent	Person's c	onfidence	in the esti	mate.			

Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	Explanation					
Mineral Resource estimate for conversion to Ore Reserves	 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. 	Hyland Geological and Mining Consultants prepared the updated Victory Bore Mineral Resource estimate (MRE) in January 2023. No planned dilution was applied to these estimates. Mineral Resources are inclusive of Ore Reserves. Victory Bore Mineral Resource was reported for a range of V2O5 cut-offs (0.15% to 0.3%).				
Site visits	Comment on any site visits undertaken by the Competent Person	Site visits were completed by the	following Competent Persons:			
	and the outcome of those visits.	Competent Persons	Responsibility	Date/s of site visit		
	If no site visits have been undertaken indicate why this is the case.		Mineral Resource Mining aspects of Ore Reserve Metallurgy aspects of Ore Reserve			
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 Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered. 	The Victory Bore Vanadium Project is currently at Prefeasibility Study (PFS) level with the completion of th Study.				
Cut-off parameters	The basis of the cut-off grade(s) or quality parameters applied.	The cut-off was calculated on a block-by-block basis using the pit optimisation inputs resulting in a variab cut-off grade. For some blocks this was as low as 0.15% V2O5. Only FeV80 was considered as a source of revenue.				
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 	to product an economic mining sl equipment requirements were es	rted to an Ore Reserve by economic evaluanell followed by detailed pit design, and life stimated and costed for financial modelling based on the following parameters:	e of mine scheduling. Mine		
	method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.	 beneficiation equations based on regressions of raw test data downstream V₂O₅ recovery of 88% Mining costs of \$7.37/bcm plus: \$0.02/bcm/m depth 				

Criteria	Explanation					
	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 method					

- \$1/bcm/km (reference to 6,871,500 mN)
- drill and blast costs of \$1.04/bcm, \$1.28/bcm or \$3.25/bcm for upper, transition and lower material respectively.
- Ore and processing costs of:
 - Beneficiation cost of \$10/t ore
 - G&A cost of \$5.43/t ore
 - o Concentrate transport cost of \$120/t concentrate
 - Downstream processing cost of \$15/t concentrate.
- royalty of 5%
- price of US\$33/kg FeV80
- exchange rate of 0.65 (A\$:US\$)
- an annual discount rate of 8%

SME Geotechnical completed a geotechnical analysis to recommended pit slope design parameters for Victory Bore as summarised as:

Material	Batter angle (°)	Berm width at base of batter (m)	Batter height (m)	Inter-ramp slope angle, crest to crest (°)	Optimised angle (°)
Upper (oxide)	50	6.5	10	34	30
Transition	65	6.5	10	42	40
Lower (fresh)	85	9.5	20	61	50

Optimised angles included allowance for ramps.

Grade control was assumed to be with reverse circulation (RC) drilling on a 10 m by 10 m pattern.

The majority of the orebody comprises two steeply dipping lodes which are 40+m wide. To allow selective mining of high grade areas within the orebody it was assumed to be mined selectively on 2.5 m flitches which will also assist with minimising dilution. Mining will follow a conventional drill, blast, load and haul cycle using hydraulic excavators and rigid body haul trucks.

The resource model used is named "vicboremodela1.csv", generated by Hyland Geological and Mining Consultants, and is the subject of the January 2023 MRE.

Dilution and ore loss was applied through re-blocking the model to 5 mE by 10 mN by 5 mRL. This was deemed to be an appropriate selective mining unit (SMU) when considering the orebody width. Prior to re-blocking un-estimated waste blocks surrounding the orebody were given default values of:

Field	Value	Field	Value
V ₂ O ₅ (%)	0.107	P (%)	0.064

Criteria	Explanation				
		TiO ₂ (%)	2.088	Cu (%)	0.006
		Fe (%)	8.442	Ni (%)	0.008
		Al ₂ O ₃ (%)	18.955	LOI (%)	2.156
		Co (%)	0.005	Density Upper (oxide) (t/m³)	2.22
		Cr ₂ O ₃ (%)	0.013	Density Transition (t/m³)	2.57
		SiO ₂ (%)	46.413	Density Lower (fresh) (t/m³)	2.98
		Dilution and ore loss chang cut-off of 0.15% V ₂ O ₅ are su	Indicated Resources at a		
		Model	Mineral Resource	Mining	Mining / Mineral Resource
		Dry mass (Mt)	138	139	+0.8%
		V ₂ O ₅ (%)	0.33	0.32	-1.0%
		TiO ₂ (%)	4.75	4.71	-0.8%
		Fe (%)	18.39	18.24	-0.8%
		Al ₂ O ₃ (%)	17.34	17.37	+0.2%
		SiO ₂ (%)	35.72	35.87	+0.4%
		The minimum mining width	considered was 20 m.		
		No in-pit Inferred Mineral F	Resources were used to qu	antify Ore Reserves.	
Metallurgical factors or assumptions	The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.	Refer to the body of the an	nouncement.		
	Whether the metallurgical process is well-tested technology or novel in nature.				
	The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.				
	 Any assumptions or allowances made for deleterious elements. The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole. 				

Criteria	Explanation	
	For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?	
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.	Refer to the body of the announcement.
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.	Refer to the body of the announcement.
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. The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co- products. 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. 	Refer to the body of the announcement.
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.	Refer to the body of the announcement.

Criteria	Explanation	
	The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.	
Market assessment	 The demand, supply and stock situation for the particular commodity, consumption trends 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.	
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.	Refer to the body of the announcement.
	NPV ranges and sensitivity to variations in the significant assumptions and inputs.	
Social	The status of agreements with key stakeholders and matters leading to social licence to operate.	Key stakeholders are the grazing property on which the Victory Bore deposit occurs and a gas pipeline operated by APA Ltd. Discussions are ongoing with both parties with execution of agreements imminent.
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. 	There does not exist any marketing arrangements at this time. Discussions are on-going with KSA potential development partners and/or offtake companies.
	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.	

Criteria	Explanation	
Classification Audits or reviews	The basis for the classification of the Ore Reserves into varying confidence categories.	In-pit Measured and Indicated Mineral Resources were used as the basis of Probable Ore Reserve, estimate using the guidelines of the JORC Code (2012).
	 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). 	The result of the classification reflects the Competent Person's view of the deposit. No Inferred Resources is included in the Ore Reserve estimate. 26% of the Probable Ore Reserve is from Measured Mineral Resources.
Audits or reviews	The results of any audits or reviews of Ore Reserve estimates.	MRE and mine scheduling are done by separate, independent parties. The Mine scheduling process, undertaken by Snowden, includes a review and assessment of the MRE produced by Hyland Geological and Mining Consultants.
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.	Figures show the impact on outputs of 20% changes to pit optimisation inputs for revenue factor 1 pit shell The Ore Reserve would be most sensitive to changes in price/metallurgical recoveries, process costs, dilution and mining recovery/ore loss. Upside is generally smaller than downside as the pit shells are constrained by the available Mineral Resource.
		Undiscounted cash flow Price/Recovery (±20%) Total mass Price/Recovery (±20%)
	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.	Processing Cost (±20%) Processing Cost (±20%)
	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.	Slope (±20% [-6*]) Mining Cost (±20%) 0 500 1,000 1,500 2,000 2,500 3,000 3,500 4,000 4,500 5,000 0 50 100 150 200 250 300 350
	 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. 	Margin (\$M) Decrease variable Decrease variable Mass (Mt) Decrease variable Increase variable Variable

