



Steelpoortdrift Vanadium Project

Corporate Presentation

October 2023

ASX:VR8

WWW.VR8.GLOBAL



This presentation does not constitute investment advice. This presentation has been prepared by Vanadium Resources Limited (“the Company” or ASX:VR8) to provide summary information about the Company and its activities as at the date of this presentation (October 2023). Neither this presentation nor the information contained in it constitutes a disclosure document or an offer, invitation, solicitation or recommendation in relation to the purchase or sale of shares in any jurisdiction. The presentation does not take into account any person's particular investment objectives, financial resources or other relevant circumstances and the opinions and recommendations in this presentation are not intended to represent recommendations of particular investments to particular persons. All securities transactions involve risks, which include (among others) the risk of adverse or unanticipated market, financial or political developments. This presentation does not purport to contain all of the information that a prospective investor may require to make an evaluation of the Company or its business activities. Nothing in this document is, or is intended to be, a recommendation to invest in the Company.

The Company confirms that it is not aware of any information or data that materially affects the information included in this presentation, and that all material assumptions and technical parameters underpinning the announcements on which this presentation relies continue to apply. The information contained in this presentation is a professional opinion only and is given in good faith.

Certain information in this presentation has been derived from third parties and though Vanadium Resources has no reason to believe that it is not accurate, reliable or complete, it has not been independently audited or verified by Vanadium Resources.

Any forward-looking statements included in this presentation involve subjective judgement and analysis and are subject to uncertainties, risks and contingencies, many of which are outside the control of, and maybe unknown to, Vanadium Resources. In particular, these statements speak only to the date of this presentation, they assume the success of Vanadium Resources' strategies, and they are subject to significant regulatory, business, competitive and economic uncertainties and risks. Actual future events may vary materially from the forward-looking statements and the assumptions on which these assumptions are based. Recipients of this presentation are cautioned not to place undue reliance on such forward-looking statements.

Vanadium Resources makes no representation or warranty as to the accuracy, reliability or completeness of information in this document and does not take responsibility for updating any information or correcting any errors or omissions which may become apparent after this presentation is released.

To the extent permitted by law, Vanadium Resources and its officers, employees, related bodies corporate and agents disclaim all liability, direct, indirect or consequential (and whether or not arising out of the negligence, default or lack of care of Vanadium Resources and/or any of its agents) for any loss or damage suffered by a recipient or other persons arising out of, or in connection with, any use or reliance on this presentation or information. All amounts in A\$ unless stated otherwise.

All financial outcomes as reported in this announcement are done so on a 100% project basis. VR8 currently holds 73.95% ownership in the Steelpoortdrift project.

Competent Person Statement, Previously Reported Information & Cautionary Statement

The information in the referenced in this presentation that relates to Exploration Results, including the Mineral Resources contained within the Production Target (and forecast financial information derived from the production targets) at the Steelpoortdrift project has previously been released to the ASX. Refer to ASX announcements released on 21 May 2018 titled “Exploration on High Grade Pipes Commences At SPD Vanadium Project”, 23 September 2020 titled “Scoping Study Confirms Viability of V2O5 Production”, 4 October 2022 titled “DFS Delivers A\$1.9BN NPV Confirming World Class Steelpoortdrift Vanadium Project” and 4 October 2022 titled VR8 updates Mineral Resources and Ore Reserve. The Company confirms that it is not aware of any information or data that materially affects the information included in the market announcement, and that all material assumptions and technical parameters underpinning the announcement continue to apply. The Company confirms that the form and context in which the Competent Person’s findings are presented have not been materially modified from the original market announcements referred to above.

Mineral Resources

The Company confirms it is not aware of any new information or data that materially affects the information included in the 4 October 2022 (VR8 updated mineral resource and ore reserve for the Steelpoortdrift Vanadium Project) Vanadium Resource estimate and all material assumptions and technical parameters underpinning the estimate continue to apply and have not materially changed when referring to its resource announcement made on 04 October 2022. The Company confirms that the form and context in which the Competent Person’s findings are presented have not been materially modified from the original market announcements.

Ore Reserves

The Company confirms that it is not aware of any new information or data that materially affects the information included in the Ore Reserves Statement and that all material assumptions and technical parameters underpinning the estimates in the Ore Reserves Statement continue to apply and have not materially changed. The Information that has been presented in this report has been extracted from the announcement dated 4 October 2022 (VR8 updated mineral resource and ore reserve for the Steelpoortdrift Vanadium Project). The Company confirms that the form and context in which the Competent Person’s findings are presented have not been materially modified from the original market announcements.

Cautionary Statement LR 5.16.4

There is a low level of geological confidence associated with the inferred mineral resources and there is no certainty that further exploration work will result in the determination of indicated mineral resources or that production target itself will be realised.

Emerging Vanadium Producer



One of the world's largest and highest-grade vanadium deposits



DFS indicates strong financial outcomes with post-tax NPV_{7.5%} of US\$1.2Bn (US\$0.9Bn att. 74%)¹, 42% IRR & potential to increase ownership



Ore body easy to mine, low strip ratio & low operating cost



Using conventional / proven concentrate & Salt Roast Leach ("SRL") processes to produce an average of 10.7kt to 21.0kt V₂O₅ flake per annum



Mining license granted



Established major mining & smelting jurisdiction



Located in a major industrial region with established infrastructure – existing operating plants, power and water, proven road & rail options to port



Experienced management team & commenced recruitment process for key technical & commercial roles

¹ Announced transaction to increase interest to 86.49% (up from 73.95%), 3 May 2023

Corporate Overview



Corporate Structure (ASX: VR8) – as at 02 October 2023

538.2m

Shares on issue
(undiluted)

A\$0.058

Share Price

A\$31.2m

Market Cap
(@ \$0.058c)

A\$6.1m

Cash
(As at 30 June 2023)

20.3m

Performance Rights
(1.3m Class A & 1m Class B)

Top Shareholders

- | | | |
|---|------------------------------------|------|
| 1 | Matrix Resources (Zhejiang) Co Ltd | 9.9% |
| 2 | Danterne Pty Ltd ¹ | 8.5% |
| 3 | Raubex Pty Ltd | 8.2% |
| 4 | Romfal Sifat Pty Ltd | 3.7% |
| 5 | Davy Corp Pty Ltd ² | 3.1% |

Top 20 Shareholders

54.7%

Board of Directors



Jurie Wessels

Executive Chairman



John Ciganek

Managing Director & CEO



Michael Davy

Non-Executive Director



¹ Mr Jurie Hendrik Wessels (Executive Chairman) is a director and shareholder of Danterne Pty Ltd

² Mr Michael Davy (Non-Executive Director) is the sole director and shareholder of Davy Corp Pty Ltd



Listed as a Critical Mineral in Australia, the US, UK and European Union, Vanadium demand is expected to grow significantly from its energy storage capabilities

Vanadium Redox Flow Batteries (VRFBs)

- VRFBs forecast to represent up to 20% of total battery capacity¹
- Significant advantages available over counterparts, particularly in the storage and grid-relief capacities with further development upside



Easily scalable – additional capacity easy to build in by adding more storage tanks



Sustainable – vanadium can be fully reused or recycled at end of battery lifespan



20+ year lifespan – zero degradation over time with battery life twice that of lithium



Reliable – no performance loss in harsh conditions and 100% depth of discharge available



Safety – non-flammable, non-toxic, water based battery that is safer than alternatives



Efficient – lower emissions and lower associated energy costs than alternative technologies



Dalian Flow Battery Energy Storage Peak-shaving Power Station

A world-leading Vanadium Redox Flow Battery facility was recently switched on in China, with Stage 1 providing a capacity of 100MW / 400MWh. Stage 2 will double this capacity

Steel & Alloys

- Over 90% of the current demand for vanadium arises from its use to strengthen steel and alloys
- The performance benefit in strengthening steel has seen demand grow and imminent construction regulation changes in China to mandate higher quality Rebar is expected to drive further growth
- Development of strong, lightweight alloys has seen vanadium incorporated to a large range of products including jet engines, 3D printing and tools
 - Boeing's fleet of 787s and A350s include up to 100tons of light weight vanadium alloys²



Global Demand & Pricing Dynamics



Annual demand for VRFBs is expected to equate to between **50kt and 100kt of V_2O_5 by 2033.**

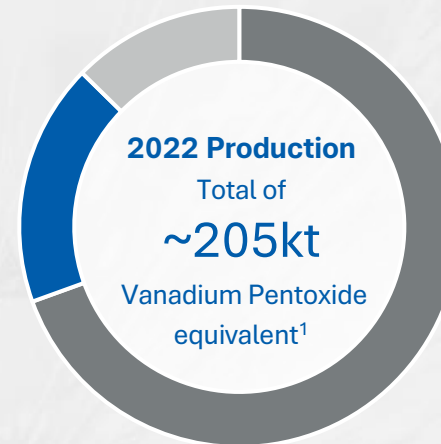
Demand for VRFB's in 2022 was ~9kt of V_2O_5 , largely for new installations in China.

Source: Project Blue 2023

Vanadium demand for Steel will grow strongly and **may double by 2050.²**

This will be driven by China and India, and an increased production of micro-alloyed steel.

Source: Vanitec & TTP Squared Inc



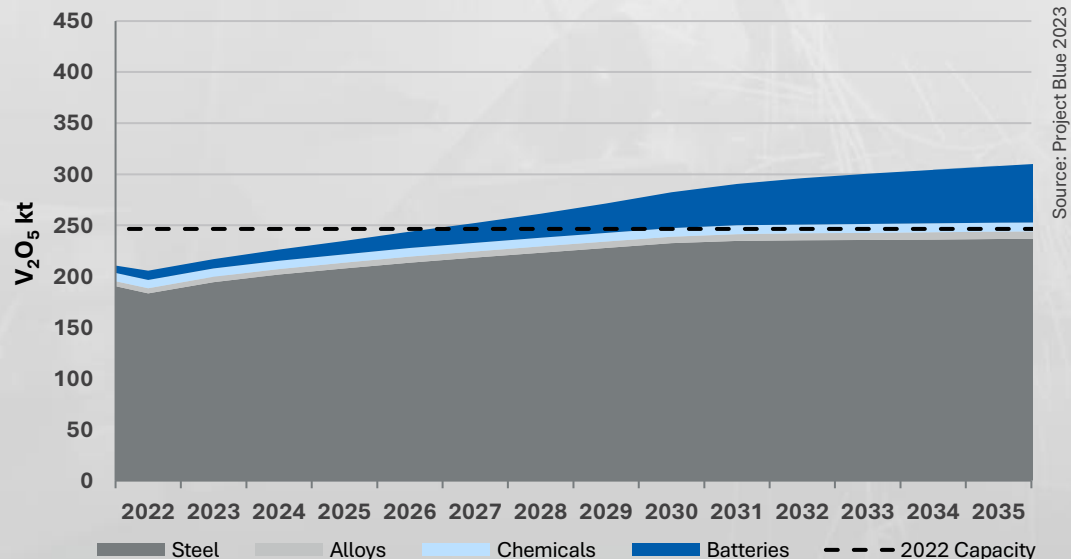
Production Type

Co-production:	144kt
Primary:	37kt
Secondary:	26kt

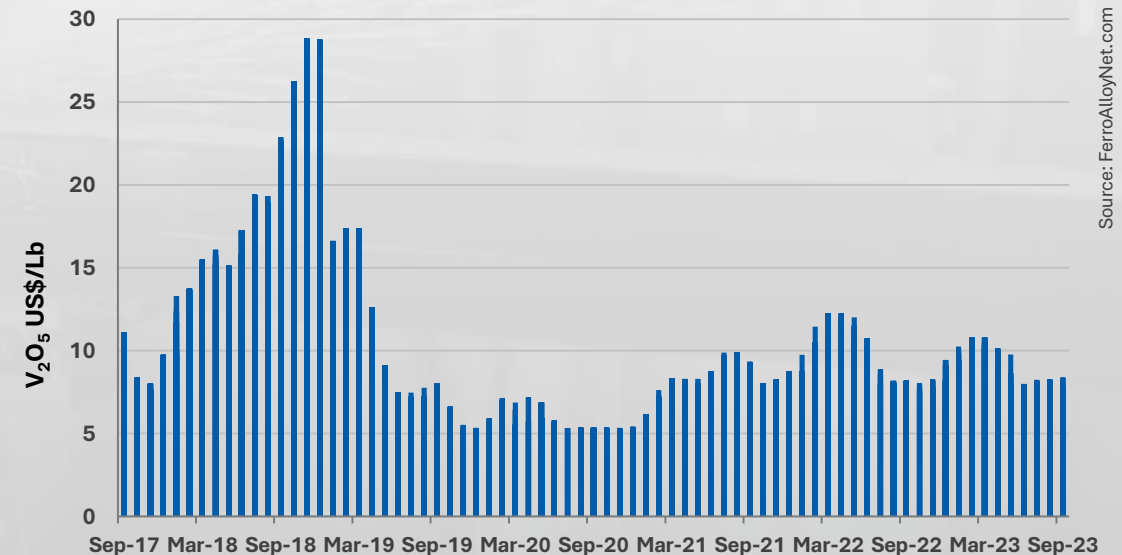
VR8 will provide critically needed V_2O_5 supply with the Project to be a significant primary producer

Source: Project Blue 2023

V_2O_5 Demand by Sector & Production Capacity



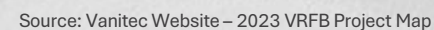
Vanadium Pentoxide 98% min Europe US\$/lb



VRFB Installations
Constructed or Announced¹

Capacity of VRFB
Installations (>2.6GW) ¹

VRFB Installations in Europe
(Excl. Residential Units)¹



DFS Delivers World Class Vanadium Project



US\$1.21bn
(A\$1.9bn)

NPV_{7.5%} (post-tax)



US\$896m
(A\$1.4bn)

Attributable 74% NPV



US\$152m
(A\$237m)

Yearly Free Cashflows



42%

IRR (post-tax)



27 months

Payback



US\$211m
(A\$329m)
Incl. Contingency

Start up Capex



US\$3.24

Cash Costs V₂O₅/lb



US\$9.50
(Deloitte forward mid-range)

Price per V₂O₅/lb

¹ Refer ASX Announcement dated 4 October 2022 "DFS Delivers A\$1.9BN NPV Confirming World Class Steelportdrift Vanadium Project"

Location – in the Bushveld Complex



This world-renowned mining location is host to several mining operations, multiple major mining companies are active in the area, and is in close proximity to existing infrastructure.

Other Mines in the Bushveld Complex



Vametco – Vanadium Mine
Mokopane – Vanadium Project



Rhovan – Vanadium Mine
Lion Smelter - Ferrochrome



TwEEfontein – Ferrochrome Mine



Twickenham – PGE Mine



Modikwa – PGE Mine



Marikana – PGE Mine

Regional Infrastructure in the Bushveld Complex



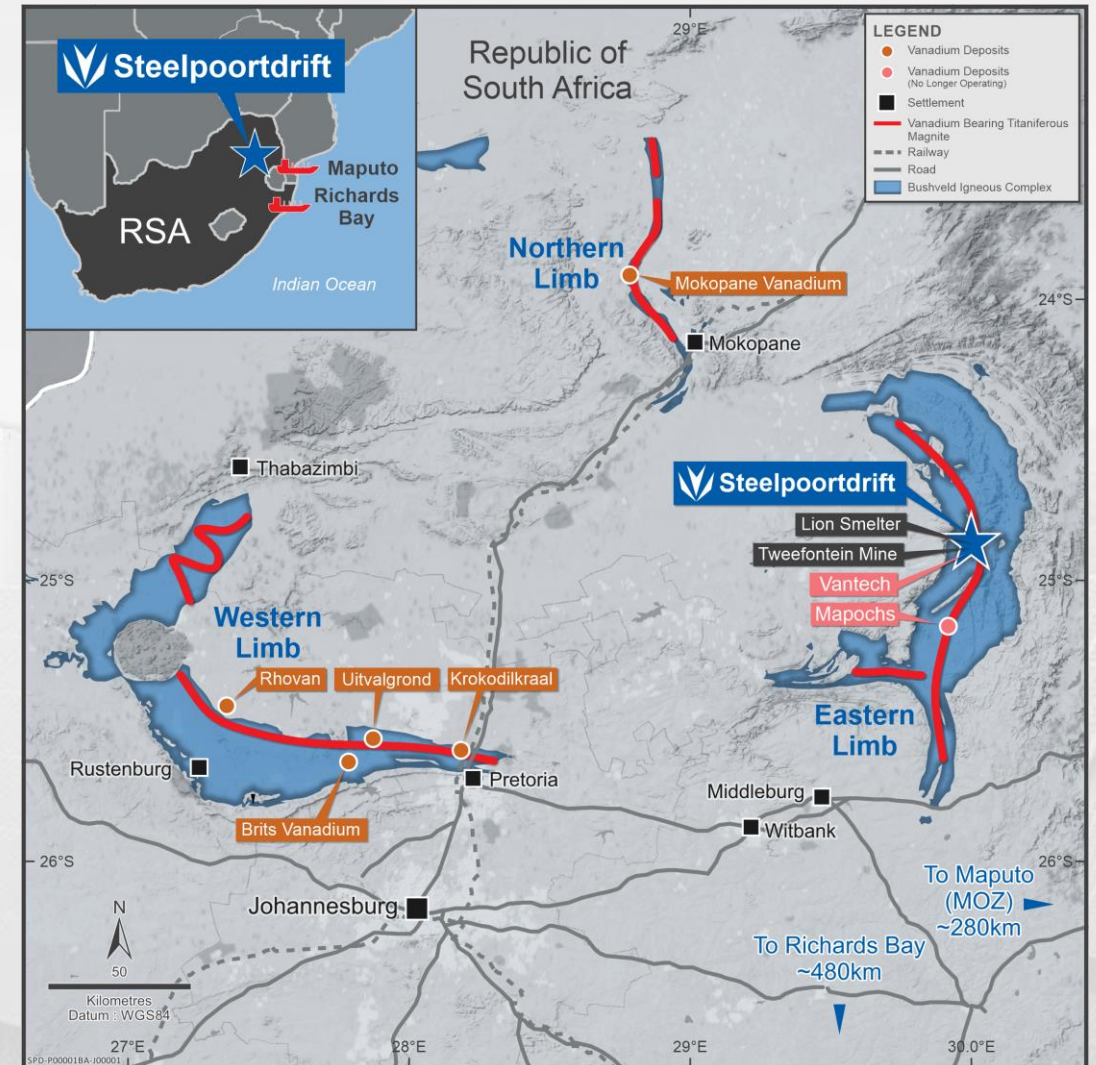
Eskom Substation
12km away



De Hoop Dam
15km away



Rail Siding
30km away



Mine, Concentrator & SRL



Mine Site – View of the North of Mining Area

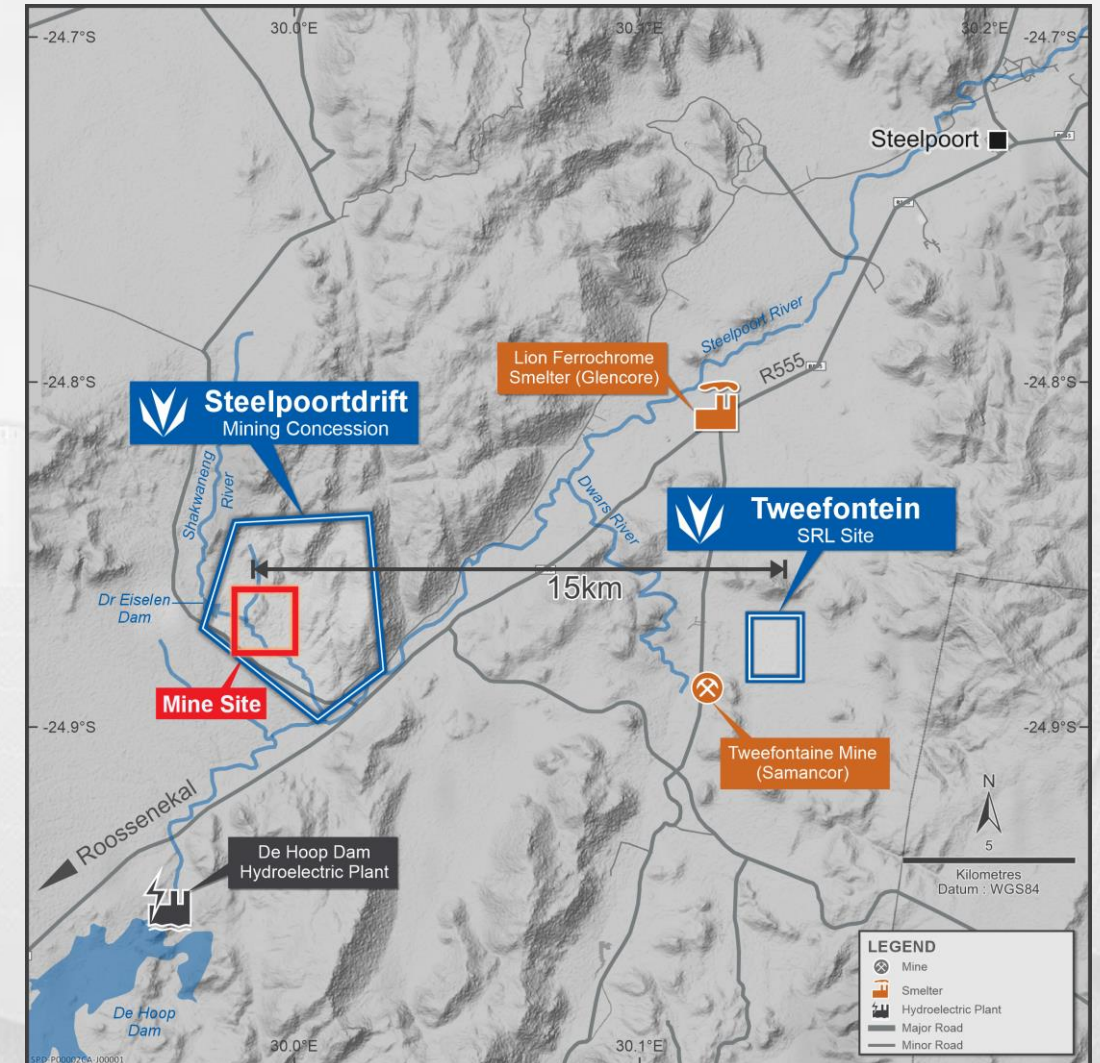


The mine site, concentrator and SRL sites are located within a substantial mining and smelting district, with well established infrastructure (including water, power, sealed roads, rail, etc)

VR8 Offices and Warehouses in Steelpoort Industrial Park



VR8 administration offices, core shed, main laboratory and SRL site is located within the Steelpoort Industrial Park



Resources & Ore Reserves



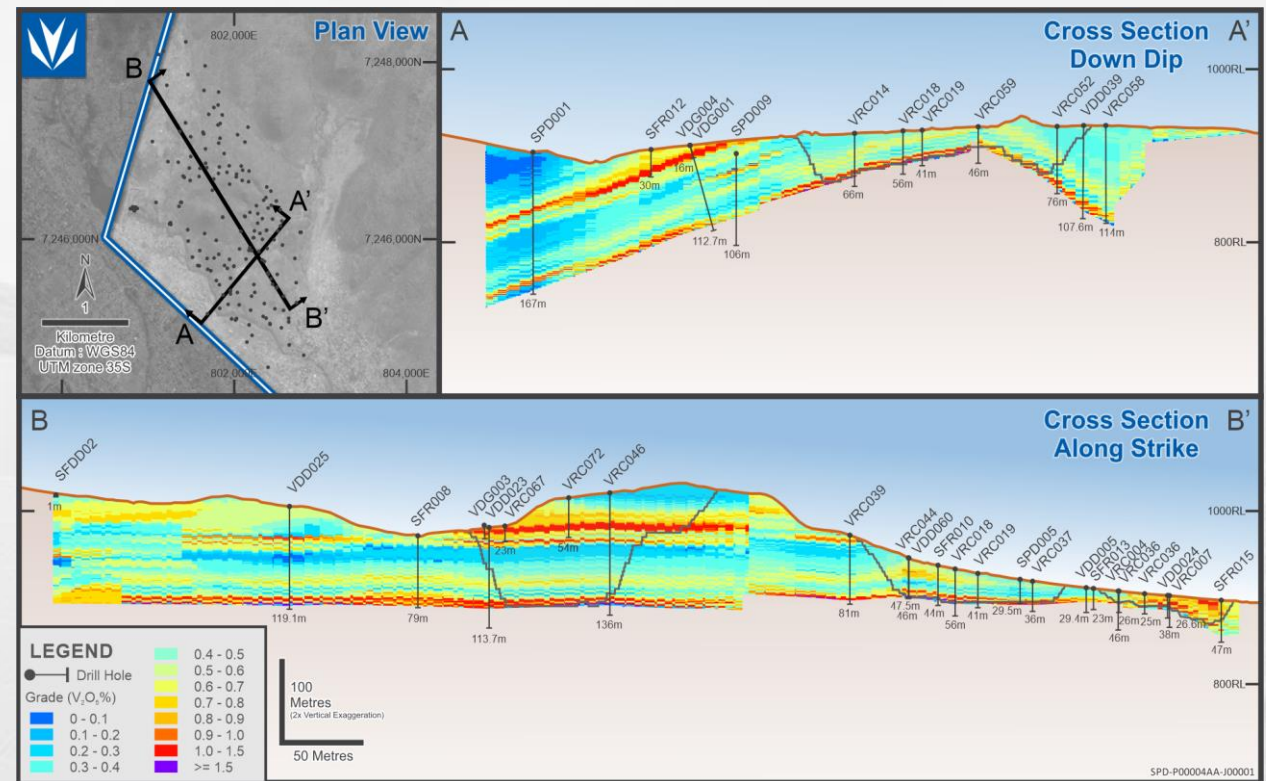
- Global Mineral Resource of 680Mt at 0.70% V_2O_5
- Total Ore Reserve of 77Mt at 0.72% V_2O_5
- Mineralisation outcrops at surface and dips shallowly ($\sim 10^\circ$) – less waste to mine, low strip ratios (0.88x waste : ore) and cheaper mining cost
- Orebody able to achieve a high-grade concentrate of greater than 2% V_2O_5

Mineral Resource^{1&2}

Mineral Resource Category	Tonnage (Mt)	V_2O_5 (%)	Fe_2O (%)	Contained V_2O_5 (Mt)
Measured	145.5	0.72	22.47	1.05
Indicated	327.3	0.70	22.80	2.29
Inferred	207.4	0.68	22.90	1.40
Total / Average	680.1	0.70	22.76	4.74

Ore Reserve¹

Ore Reserve Category	Tonnage (Mt)	V_2O_5 (%)	Contained V_2O_5 (Mt)	Tonnage by Category (%)
Proved	30.2	0.70	0.21	39.3%
Probable	46.6	0.72	0.34	60.7%
Total / Average	76.8	0.72	0.55	100.0%

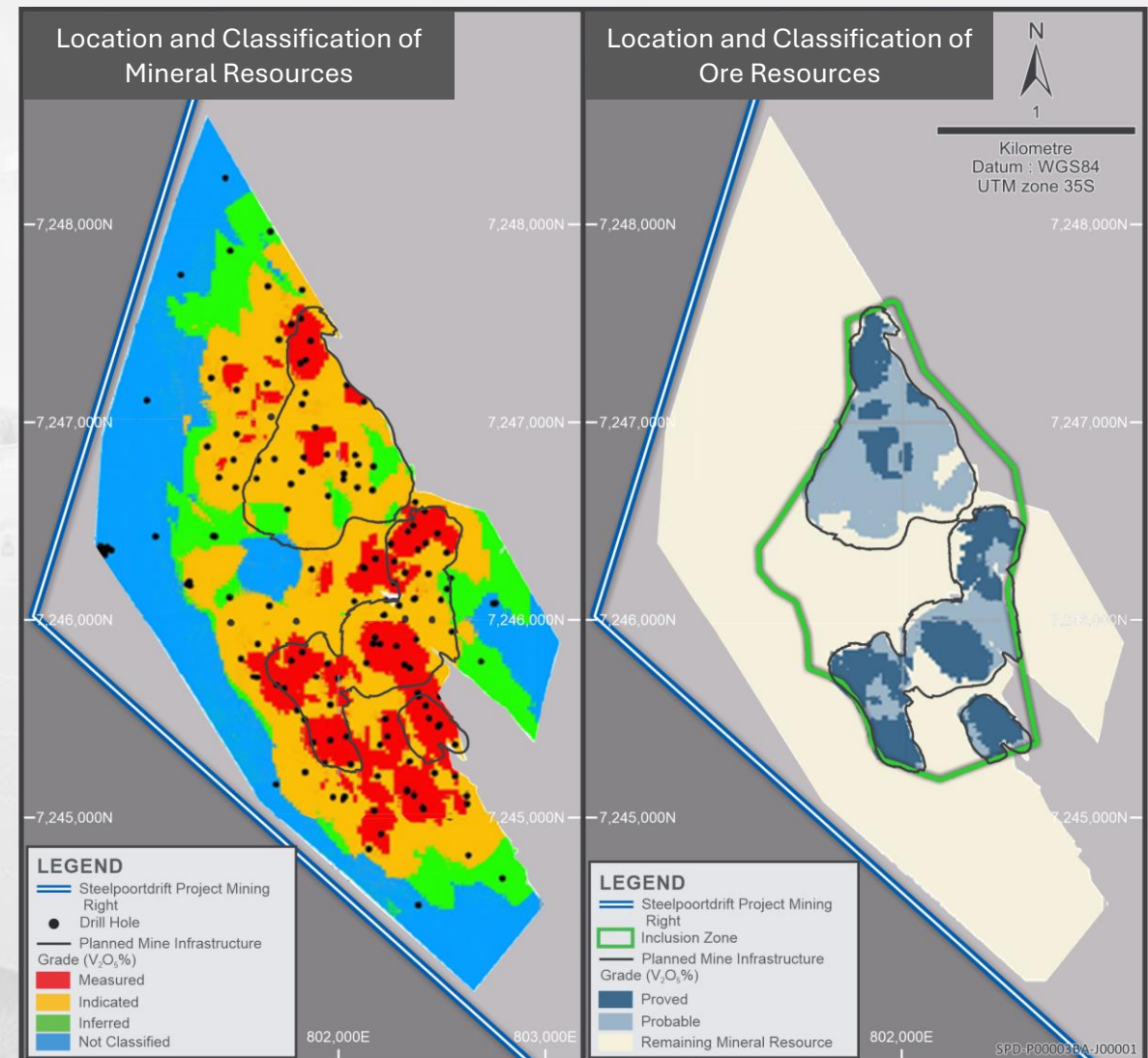
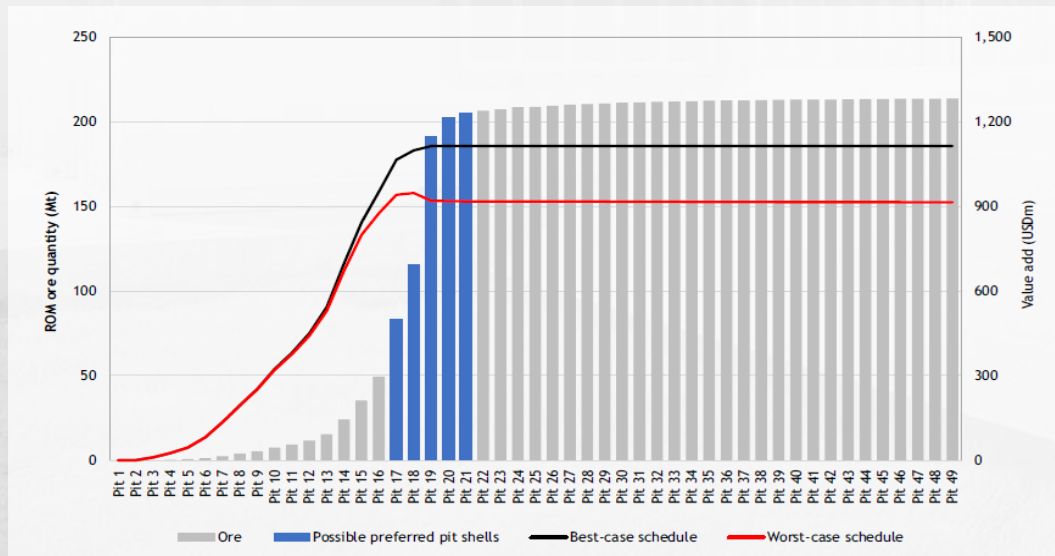


1. Refer ASX Announcement dated 4 October 2022 "DFS Delivers A\$1.9BN NPV Confirming World Class Steelpoortdrift Vanadium Project"
2. Source: Sound Mining CPR (2022). Notes: V_2O_5 cut off $\geq 0.45\%$, tonnage rounded down to nearest 100,000t and metal content to nearest 10,000t

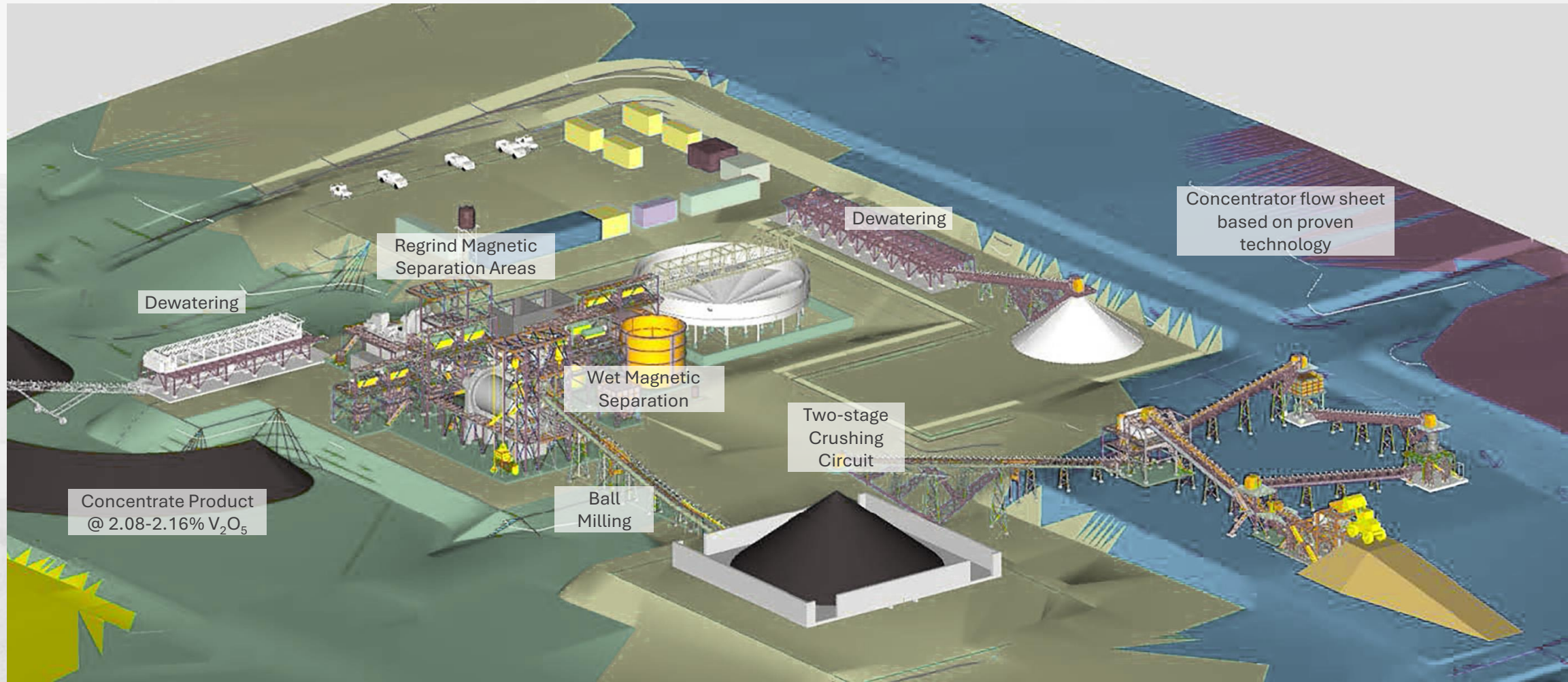
Location of Mineral Resources & Ore Reserves

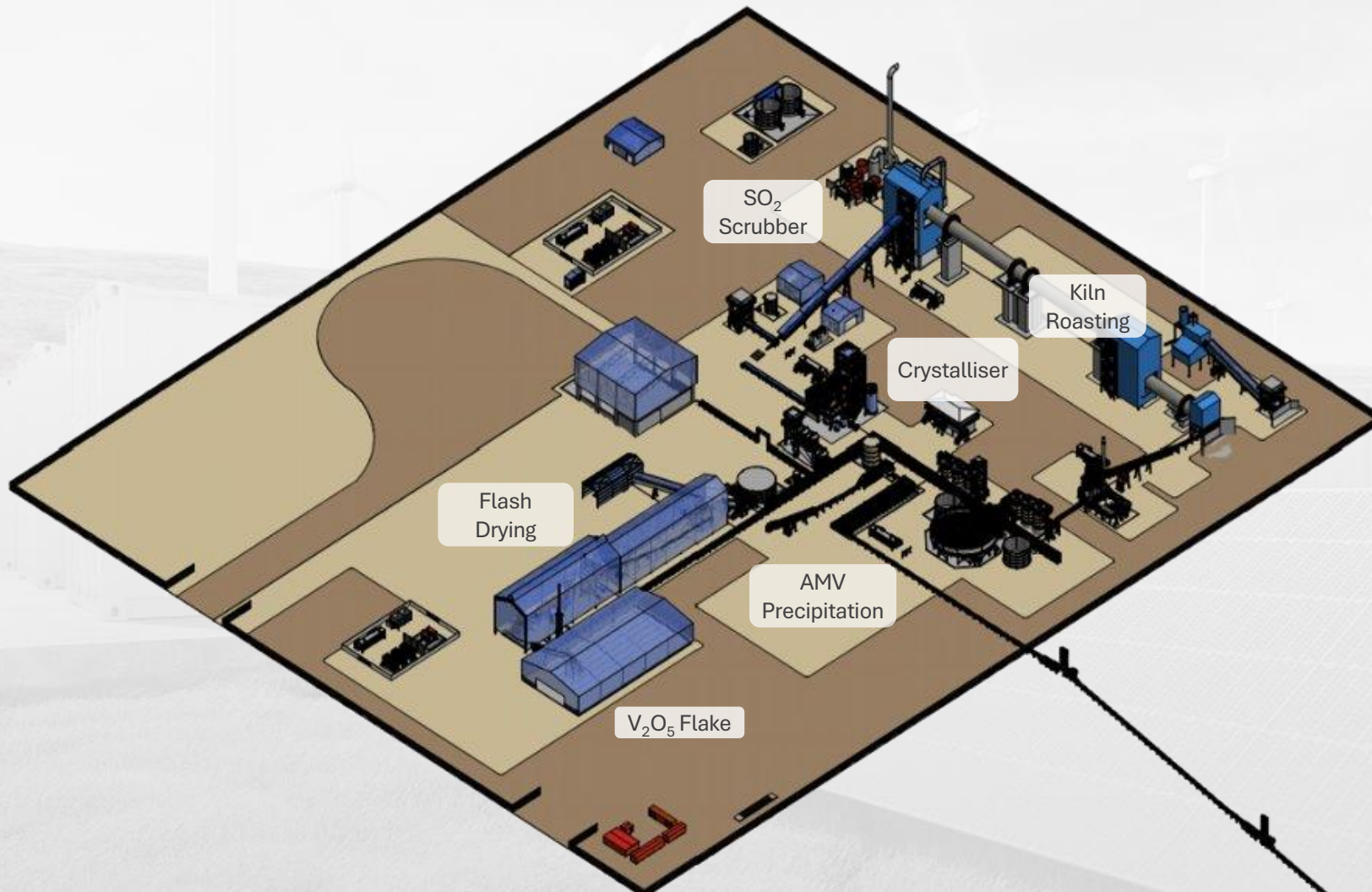


- The final pit design and Ore Reserves based on LOM of 25 years (designed to match Mining Right term)
- Final pit design was based on Pit 17, which highlights potential for a larger ultimate pit design
- Ore Reserves represents 12% of Mineral Resources and highlights the substantial scale of the project
- Based on a ROM ore production rate of 3.5Mtpa, the project would have a mine of over 180 years
- Potential opportunity to increase Resources and Reserves with infill drilling within “Not Classified” zones



Steelpoortdrift Concentrator Plant





SRL flow sheet based on proven technology

SRL Plant comprises kiln roasting, desilification, ammonium metavanadate (“AMV”) precipitation, flash drying and V₂O₅ flake production

Concentrate feed rate of 790ktpa with a grade of >2.00% V₂O₅ to produce ~13.2ktpa of vanadium flake of >98% V₂O₅

Evaporation and crystallisation to recover Na₂SO₄ crystals for recirculation to the kiln has also been included

Offtake, Strategic Investment and Project Financing



Strong progress toward securing binding offtake, strategic investment and project financing

Offtake Agreements & Strategic Investment

- **Secured A\$5.9M strategic equity at 40% premium with Matrix Resources and entered an MOU for 20% offtake and 20% sales agency, 3 May 2023**
- Both VR8 and Matrix have reaffirmed their commitment to enter into agency and offtake agreements to achieve the outcomes envisioned in the MOU, with terms that will support project financing
- Strong interest received for the remaining product from North American and European groups, the Company has entered into negotiations with a view to securing an agency and/or offtake agreement and strategic equity investment
- The rationale for the process is to optimise value to VR8 by securing offtake and strategic investment terms that will support project financing for the Steelpoortdrift and Tweefontein operations

Project Financing

- Several potential funding pathways available to finance the Project having received a number of non-binding indicative term sheets from debt financiers
- The Project has the potential to support ~65% debt gearing of the total funding requirement
- Discussions with potential debt financiers have continued as the Company aims to obtain credit approved term sheets and ensure that the Project is ready for a due diligence process

Hand specimen of vanadiferous titanomagnetite from the Project¹



¹ Refer ASX Announcement dated 21 May 2018 "Exploration On High Grade Pipes Commences At SPD Vanadium Project"

Growth Catalysts to Increase Shareholder Value



Key Catalysts to FID

- Secure long-term offtake(s)
- Secure project funding from combination of:
 - i. Debt ~65% PF debt
 - ii. Equity ~35% from offtakers, strategic equity & ECMs

Build Phase 1

- Flake Production of avg 10.7ktpa V_2O_5
- ROM Ore avg. of 1.6Mtpa at 0.83% V_2O_5
- Concentrate avg. of 724ktpa at >2.0% V_2O_5
- Capex US\$211M (pre-production)

Build Phase 2 (4 years after Phase 1)

- Flake Production of avg 21.0ktpa V_2O_5
- ROM Ore avg. of 3.5Mtpa at 0.70% V_2O_5
- Concentrate avg. of 1,247 ktpa at >2.0% V_2O_5
- Capex US\$188M

Valuation Upside Options

Optimise Resource & Production

- Ropeway conveyor from Mine to SRL plant
- Delineation drilling and re-optimisation based on unconstrained Mineral Resource
- Increase production rate >3.5Mtpa ROM (given 180yr mine life)

Additional Revenue Streams

- Residual vanadium recovery plant and potential additional products (V_2O_3 , FerroVanadium, TiO_2 , Ilmenite)
- Titanium (TiO_2) in SRL tailings recovery

Explore VRFB Potential

- Investigate larger VFRB size (currently 1MW) to meet 100% of power requirements for site operations
- Vertical integration opportunities including vanadium electrolyte, battery manufacture and energy generation

Key Project Workstreams



Environmental Authorisation & Water Use Licence Applications

Environmental authorisations and water use licence applications for each site are progressing well with approval expected H1 CY2024

Social And Labour Plan & Community Engagement

Social and Labour Plan amendments submitted to regulators for review after receiving clear community encouragement and support

Front-End Engineering Design Underway

Commenced work on the Front-End Engineering Design (FEED) with a focus on locking down detailed designs, schedule optimisation and development of Project Execution and Operational Readiness plans

Engineering – Tendering & Awarding Contracts

As designs are completed, tenders will be drawn up for each specific piece of plant/equipment and will be issued to pre-identified suppliers, with an aim to award tenders and finalise contracts in early H2 CY2024

Contractor Delivery and Project Management

Project delivery model expected to lean on multiple Engineering, Procurement and Construction (EPC) contracts over core elements of the operation, with oversight by experienced project managers to mitigate interface risks

Expanding Project Management Team

VR8's engineering and support team to be expanded to include a Concentrate Manager, Salt Roast Leach (SRL) Manager, Infrastructure (Power & Water) Manager, Contracts Manager, Mine Manager and HR

Power Solutions, Rope Conveyor and Site Access

The Company continues to progress work with Kadoma to provide solutions for the provision of power to both operations, has initiated studies on a Rope Conveyor between the operations and is building alternate site access roads

Updated Project Implementation Plan

Updated project implementation plan includes a revised target for FID of H2 CY2024 with first production in H1 CY2026 – management are confident the delay will allow for a more robust and efficient project which maximises the deposit's value

¹ Refer ASX Announcement dated 03 Oct 2023 "Steelpoortdrift and Tweefontein Projects Update"

Investment Highlights



- ✓ Strong financials with attributable NPV of A\$1.4bn, IRR of 42% and payback period of 27 months
- ✓ Competitive Capex (US\$211m) and lowest quartile Opex (Cash Cost US\$3.24/lb)
- ✓ Long life project with excellent production profile – 25 years at an average of 19.4ktpa
- ✓ Established mining jurisdiction with significant infrastructure and expertise nearby
- ✓ Debt advisors appointed, positive engagement and discussions advancing with banks and other financial institutions
- ✓ Securing offtake and strategic equity – secured strategic equity & Offtake MOU from Matrix Resources
- ➔ Building a strong project development and execution team
- ➔ Significant upside potential with a range of opportunities and initiatives identified to increase value
- ➔ Securing debt financing
- ➔ Targeting first concentrate and flake production in H2 CY2026

Shaping a sustainable tomorrow by unlocking vanadium's potential across energy storage, infrastructure and beyond





Appendix

October 2023

ASX:VR8

WWW.VR8.GLOBAL

Board & Management



JURIE WESSELS
Executive Chairman

Jurie Wessels has 26 years' experience in the exploration industry and co-founded a number of exploration and mining companies, including Bauba Resources Ltd (BAU.J), which owns three operating chrome mines, GoldStone Resources Ltd (GRL.L), which company is mining the Homase-Akrokkeri Gold Mine in Ghana acquired and developed by GoldStone when Jurie was CEO, Arcadia Minerals Ltd (AM7.ASX), which company owns an advanced Tantalum project, the Bitterwasser Lithium Clay and Brine Projects and tier 1 exploration assets, and Vanadium Resources Ltd. Jurie has significant experience in the sourcing and assessment of exploration and exploitation projects and in the governance, funding and management of resource companies. He explored for various minerals in Africa, South America, the Indian sub-continent and Europe, and explored and developed several mining projects to successful conclusion.



JOHN CIGANEK
Managing Director &
Chief Executive Officer

John Ciganek is a qualified Mining Engineer, holds a Master of Business Administration and has more than 30 years of mining and finance experience. His experience spans working in mining operations, project development, project finance, offtake agreements, M&A and the equity capital markets. Through his career to date, John has been involved with successfully raising debt and equity funding in excess of ~A\$5 Bn for various clients. Mr Ciganek's previous roles are Principal / Director of Euclase Capital, Executive Director of BurnVoor Corporate Finance, General Manager Corporate Development at PMI Gold, Senior Banks Engineer and Risk Executive at Commonwealth Bank, and Senior Mining Engineering positions with Hargraves Resources, Reynolds Yilgarn Gold and Comalco / Rio Tinto (CRA). John is a Non-Executive Director of Calidus Resources Limited (CAI.ASX) and Ookami Limited (OOK.ASX).



MICHAEL DAVY
Non-Executive Director

Michael Davy is an Australian executive and Accountant with over 18 years' experience across a range of industries. Michael previously held a senior management role in Australia for Songa Offshore (listed Norwegian Oil and Gas drilling company), where he assisted with the start-up of the Australian operations and managed the finance team for a two rig operation with multi-hundred million dollar revenues. Prior to that he worked in Australia and London for other large organisations overseeing various finance functions. Michael is currently a director and owner of a number of successful private businesses all under his personal management. During the past five years Michael has held directorships in several ASX listed companies and is currently the Non-Executive Chairman of Raiden Resources Limited (ASX: RDN) and Haranga Resources Ltd (ASX:HAR) and is a non-executive director of Arcadia Minerals Ltd (ASX:AM7).



ALEX OEHMEN
General Manager
Operations

Alex Oehmen has over 40 years' industry experience across the resources, mineral processing and engineering sectors, with a demonstrated track record in the management of vanadium and steel making operations within the Bushveld region of South Africa. Alex holds a Bachelor of Engineering (Metallurgical) and Master of Business Leadership. Most recently, Alex was Operations Manager at Bushveld Minerals Ltd for their Vanchem operations and General Manager Operations at Vanchem Vanadium Products (Pty) Ltd prior to its acquisition by Bushveld, whose operations are within the same geological and mineralogical terrain as the Steelpoortdrift Project. Alex was responsible for operations and production of various vanadium products including vanadium pentoxide flake, ferrovanadium and various vanadium chemicals. He also held roles in the marketing of vanadium products to domestic and international markets.



TIM FEATHER
Chief Financial Officer

Tim Feather has over 25 years of experience in corporate finance. Following a law degree at the University of Nottingham, he qualified as a chartered accountant with Deloitte in the UK. In 1995 he moved into corporate finance in the City of London by joining Brown Shipley before leaving to co-found Westhouse Securities, where he was head of corporate finance and specialised in advising and fundraising for mining and oil and gas companies. He joined WH Ireland in 2012 and continued to focus on the resource sector. In 2019, he joined the Sumner Group, a privately held group with interests in mining, healthcare and defence, where he was Business Development Director. He is a non-executive director of Orcadian Energy plc, a North Sea oil development company.

Preliminary Project Timeline



Year	CY23	CY24		CY25		CY26	
Quarter	H2	H1	H2	H1	H2	H1	H2
Environmental & Water Permits							
Build Project Development Team							
FEED							
Offtake & Strategic Investment							
Debt Financing							
Equity Financing							
FID							
Engineering & Procurement							
Construction							
Production (incl. Ramp up)							

Peer Comparison



	Largo Maracas ^{1,2&3} In Production (Results as at 30 Dec 2021)	Steelpoortdrift (VR8) ^{4&5} DFS Stage	Bushveld Mokopane ⁶ PFS Stage	TMT Project ^{7,8} DFS Stage [#]	AVL Project ⁹ BFS stage [#]	Richmond Vanadium ¹⁰ PFS Stage
V ₂ O ₅ Price	US\$7.80/lb	US\$9.50/lb	US\$7.50/lb	US\$10.50/lb	US\$10.50/lb	US\$9.60/lb
Market Cap (undiluted) (As at 2 Oct 2023)	A\$275M (C\$239M)	A\$31M (Undiluted)	n.a. (Vametco in production)	A\$66M (Undiluted)	A\$122M (Undiluted)	A\$84M (Undiluted)
NPV (Pre Tax)	NPV₇ A\$3.9B[†]	NPV_{7.5} A\$2.6B (Att. A\$1.9B)	NPV₉ A\$595M	NPV₈ A\$942M	NPV_{7.5} A\$833M	NPV₁₀ A\$613M
IRR (Pre Tax)	48%	47%	25%	23%	21%	38%
NPV (Post Tax)	NPV₇ A\$2.9B[†]	NPV_{7.5} A\$1.9B (Att. A\$1.4B)	NPV₉ A\$369M	-	NPV_{7.5} A\$507M	-
IRR (Post Tax)	-	42%	20%	-	-	-
LOM	20 years	25 years	30 years	25 years	25 years	25 years
Plant Feed	1.5 - 5.0mtpa	1.6 - 3.5mtpa	1.0mtpa	1.7-2.3mtpa*	1.6mtpa	4.1mtpa
Production (V ₂ O ₅)	11,000-12,000tpa	10,700-21,000tpa	9,525tpa	12, 500tpa	11,200tpa	12,700tpa
Capex	US\$241M (at startup 2014/5) [†]	US\$211M (11ktpa) US\$188M (Stage 2 from free cashflows)	US\$298M	US\$423M	US\$435M	US\$177M
Cash Costs (US\$/lbV ₂ O ₅)	\$4.85 - \$5.25	\$3.24	\$3.28	\$4.04*	\$4.43	\$6.32

[†] The NPV's relate to the 2021 NI43-101 which includes production of ilmenite and titanium which requires additional capital expenditure. The Capex reported in this table is for the pre-production expenditure of the vanadium plant only³

* Metrics presented from 2019 DFS⁸, all other metrics for ASX:TMT are from the August 2022 Integration Study⁷

[#] Note AVL and TMT have announced a merger via a scheme of arrangement, with AVL to continue as the listed entity holding the combined assets (see ASX announcement from AVL on 25 September 2023)

¹ Largo Inc NI43-101 16 December 2021

² Largo Inc MD&A Q3 2022 & 2023 Guidance per Website

³ Largo Inc Announcement 9th July 2014

⁴ Vanadium Resources – Steelpoortdrift DFS – 4th October 2022

⁵ Vanadium Resources – Steelpoortdrift DFS Financial Model

⁶ Bushveld Minerals – Mokopane PFS 4th February 2016

⁷ Technology Metals – MTMP Integration Study 5th August 2022

⁸ Technology Metals – Gabanintha DFS 21st August 2019

⁹ Australian Vanadium – BFS 6th April 2022

¹⁰ Richmond Vanadium – Prospectus 9th December 2022

Peer Comparison Table



Company	Code	Project	Stage	Resource Category	Resource Tonnes	Resource Grade	Concentrate Grade	Information Source
Largo	LGO.TSX	Maracas	Production	Measured, Indicated & Inferred (NI43-101)	79	0.79	2.46	Largo Maracas NI43-101 Technical Report - 16th December 2021
Glencore	GLEN:LSE	Rhovan	Production	Measured, Indicated & Inferred	176	0.49		Glencore 2021 Reserves & Resources report as at 31st December 2021
Bushveld	BMN.LSE	Vametco	Production	Indicated & Inferred	183	0.78	1.98	Vametco Inferred & Indicated Mineral Resource and Ore Reserve Update for Annual Reporting purposes, as at 30 March 2022. Released 4th April 2022
		Mokopane	Development	Indicated & Inferred	285	0.68	1.75	Mokopane PFS Study Report 4th February 2016
		Britts	Exploration	Indicated & Inferred	67	0.56	1.58	Competent Persons' Report on the Brits Vanadium Project Jan 2020
Vanadium Resources	VR8.ASX	Steelpoortdrift	Development	Measured, Indicated & Inferred	680	0.70	2.10	ASX Announcement 4th October 2022 - Steelpoortdrift DFS
Australian Vanadium*	AVL.ASX	Australian Vanadium Project	Development	Measured, Indicated & Inferred	239	0.73	1.39	AVL BFS 6th April 2022
Technology Metals*	TMT.ASX	Murchison Technology Metals	Development	Indicated & Inferred	154	0.85	1.40	MTMP Mineral Resource Upgrade - 7th November 2022 & RIU Resurgence Conference Presentation 23 November 2022
Richmond Vanadium	RVT.ASX	Richmond-Julia Creek	Development	Measured, Indicated & Inferred	1838	0.36	1.83	RVT Prospectus - 9th December 2022

* AVL and TMT have announced a merger via a scheme of arrangement, with AVL to continue as the listed entity holding the combined assets (see ASX announcement from AVL on 25 September 2023)



contact@VR8.global

www.VR8.global

AUS: +61 8 6158 9990

RSA: +27 83 212 6669

