



Corporate Presentation

“Unlocking a globally significant Vanadium project for a new era”



March 2021



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Material Assumptions

The information in this presentation that relates to the Scoping Study is based on material assumptions, the assumptions have previously been released to the ASX on 23 September 2020. The data that materially affects the information included in the original market announcement have not materially changed.

Cautionary statement concerning the proportion of Inferred Mineral Resources

There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of additional Measured and Indicated Mineral Resources or that the Production target itself will be realised.



The information in this announcement that relates to Exploration Results and other technical information relating to drilling and sampling at the SPD Vanadium complies with the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code) and has been compiled and assessed under the supervision of Mr Nico Denner, the principal of GEMECS (Pty) Ltd, consultants to the Company. Mr NJ Denner is a Fellow of the Geological Society of South Africa (GSSA) and a member of good standing of the South African Council for Natural Scientific Professions (SACNASP), both Recognised Professional Organisations under the JORC Code. Mr NJ Denner is a geologist with 24 years' experience in the South African Mining Industry and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the JORC Code. Mr Denner consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

The information in this announcement that relates to Mineral Resources, including the Mineral Resources contained within the Production Target, complies with the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code) and that has been compiled, assessed and created by Mr Kerry Griffin BSc.(Geology), Dip Eng Geol., a Member of the Australian Institute of Geoscientists and a Principal Consultant at Mining Plus Pty Ltd, consultants to the Company. Mr Griffin has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the JORC Code. Mr Griffin is the competent person for the resource estimation and has relied on provided information and data from the Company, including but not limited to the geological model and database. Mr Griffin consents to the inclusion in this announcement of matters based on his information in the form and context in which it appears.



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Section 1: Introduction



Key Points

- ◆ **World Class** – one of the world’s largest vanadium deposits. Total JORC Resource of 662 Mt at 0.77% V₂O₅ (including 188 Mt at 1.23% V₂O₅).
- ◆ **Contained metal (V)** – the mineral resource contains 244 million tonnes of magnetite @ 2.14% V₂O₅ (in magnetite concentrate), for 5,214,000 tonnes of V₂O₅ based on an average 36.85% in situ magnetite content and using an in-situ 0.45% V₂O₅ cut-off grade.
- ◆ **Potential Flake production** - based on an average V₂O₅ recovery of 81% to produce a >98% V₂O₅ flake product, a total of 2.4 Mt tonnes of saleable Vanadium flake may be produced from the measured and indicated resource.
- ◆ **Long life and high grade** – long life open pit mining generates high grade Vanadium concentrate of 1,9-2.2% V₂O₅ post beneficiation with low silica and alumina contents required for downstream processing, which will facilitate the production of >98% V₂O₅ flake using a conventional Salt Roast Leach (“**SRL**”) process.
- ◆ **The Bushveld Complex** – within the famous Bushveld Complex, home to some of the richest vanadium deposits in the world.
- ◆ **Infrastructure** – close to existing underutilized processing plants, power and water nearby with proven road & rail options to port.
- ◆ **Scoping Study** – the Project generated a post-tax NPV_{8%} of between US\$359M and US\$401M based on a Vanadium price of US\$6.95/lb, Capex of US\$161.5M to US\$187.9M and average unit cash operating costs of US\$3.07/lb to US\$3.37/b.
- ◆ **License Granted** – one of the few vanadium resources globally with a mining right granted, which includes environmental approval.
- ◆ **PFS** – initial pit optimization work as part of the PFS has identified the potential to preferentially mine higher grades during initial operations whilst simultaneously unlocking additional medium grade ore for future processing, which has the potential to improve NPV and will form part of the focus for the PFS.



SPD Scoping Study Highlights¹

- ◆ **Production** – annual production over LOM of 8,518t to 9451t (18.7/Mlb to 20.8Mlb) of +98% V₂O₅ flake.
- ◆ **Resources** – JORC Resource of 662 Mt at 0.77% V₂O₅ (including 188 Mt at 1.23% V₂O₅).
- ◆ **Long Mine Life** – current mine life of +25 years processing high grade opencast ore only and +400 years based on a run of mine (“**LOM**”) ore Resource life of +400 years.
- ◆ **Low Costs** – initial pre-production Capex of US\$161.5M to 187.9M and average LOM cash operating cost of US\$3.07/lb to US\$3.37/lb V₂O₅.
- ◆ **Approvals** – granted Mining Right and relevant Environmental approvals.
- ◆ **Strong Economics** – Post-tax NPV_{8%} of US\$359M to US\$401M, 28.8% to 30.7% IRR and US\$71.5Mpa to US\$77.2Mpa EBITDA. EBITDA LOM (US\$, pre-tax) US\$1,75B to US\$1,9B.

1. Source: ASX Announcement titled “Scoping Study Confirms Viability of V₂O₅ Production”, 23 September 2020.



Section 2: Corporate Overview



- ◆ VR8 has the right to acquire 73.95% of the Project via the acquisition of an interest in Vanadium Resources Pty Ltd (“**VanRes**”), the holder of the Mining Right.
- ◆ The Company currently own 50%, with final 23.95% interest upon receipt of approval for a change of control of VanRes from the South African Department of Mineral Resources.
- ◆ Directors include prominent South African mining identities who were original Project vendors.
- ◆ Director's hold ~29% of issued share capital.
- ◆ Financial means available of A\$0.9M to advance the Project.¹

Market Capitalisation	A\$18.0m
Share Price (26 March 2021)	A\$0.048
52 Week Range	A\$0.015 – 0.051
Cash (31 Dec 20)	A\$0.04M
Loan & Centriq Insurance Facilities	A\$0.9M
Shares Outstanding	374M
Unlisted Options & Rights (w. avg. exercise price of A\$0.101/sh)	61.6M



1. Financial means comprises cash, Convertible Note and Centriq Insurance Policy



Focused Management

FAST TRACK



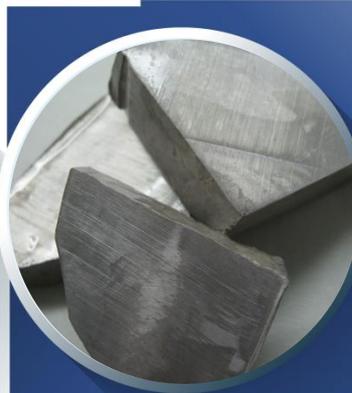
Fast track of the Resource ready for development or the utilization of nearby underutilized plant that could be modified for early production

NEXT TO MINE



Create the World's next Vanadium mine able to compete on a global scale. The granting of a mining license (mining right) is a major advantage

VALUE ADD



Pursue all possibilities for value adding from concentrate through to high purity V_2O_5

PARTNERS



Begin early development and partnerships for reciprocal partnerships in steel, alloys and battery technology



Section 3: Scoping Study



Scoping Study confirms viability of SPD

- ◆ Globally competitive opex and capex metrics.
- ◆ Confirms production of vanadium pentoxide utilising conventional SRL processing methods is technically and financially viable.
- ◆ Financial modelling shows substantial value and robust returns with attractive payback and a resilience to low price environments.
- ◆ Low operating and capital expenditures ascribable to high grade nature of vanadium mineralisation, along with access to regional infrastructure and local experience in production of vanadium products.
- ◆ Low operating costs resulting in the project retaining strong margins should prices move to the downside.

SPD - Scoping Study Outcomes ¹	
EBITDA LoM (US\$, pre-tax)	1,756 – 1,900 M
EBITDA per annum (US\$)	71.5 – 77.2 M
NPV ^{8%} (US\$, post-tax)	359 – 401 M
IRR (US\$, pre-tax, 100% equity)	28.8 – 30.7 %
IRR (US\$, post-tax, 100% equity)	26.3 – 28.2 %
IRR (US\$, post-tax, 50:50 equity:debt)	41.4 – 44.7 %
Payback Period	2 – 3 years
Life of Mine (Study Period)	25 years
Life of Mine (Mining schedule)	30 years
Pre-production CAPEX (US\$, incl. contingency)	161.5 - 187.9 M
Sustaining CAPEX LoM (US\$)	14.9 M
Average cash operating costs (US\$/lb V ₂ O ₅)	3.07 – 3.37
Annual V ₂ O ₅ production over LoM	18.7 – 20.8 M lb / 8,518 – 9,451 tonnes

1. Source: ASX Announcement titled "Scoping Study Confirms Viability of V₂O₅ Production", 23 September 2020 (page 3).

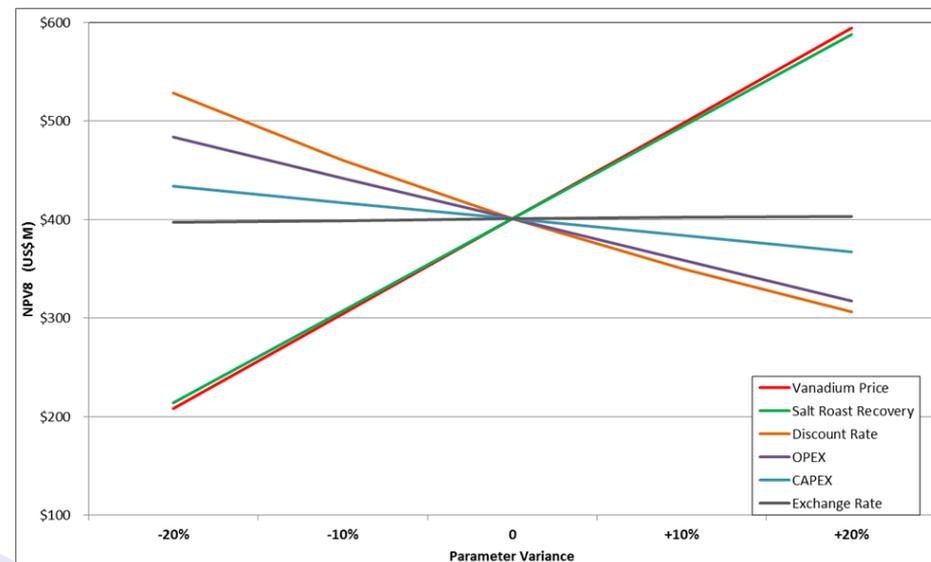


Scoping Study Parameters & Assumptions

- ◆ Compiled by VR8 with the assistance of highly experienced and reputable independent consultants.
- ◆ Completed to an overall +/-35% accuracy.
- ◆ These assumptions will be further tested during the preparation of the PFS.

Key Parameters / Assumptions ¹	
General / Economic	
Discount Rate	8%
Vanadium Price for +98% V ₂ O ₅ flake product (US\$/lb)	6.95
Exchange Rate (ZAR : USD)	16
Mining / Production	
Average LoM Strip Ratio	0.42
Processing Rate	1.6 Mtpa
LoM Production Target	48.5 Mt
Average V ₂ O ₅ grade mined (diluted)	0.75%
Recovery into concentrate (mass)	32%
Recovery into concentrate (V ₂ O ₅)	90%
Recovery from concentrate to V ₂ O ₅ flake	81.5%
Average concentrate grade (V ₂ O ₅)	2.03%
Mining / Production	
LoM average mining costs (\$/lb V ₂ O ₅ produced)	\$0.56
LoM average concentrator costs (\$/lb V ₂ O ₅ produced)	\$0.52
LoM average salt roast costs (\$/lb V ₂ O ₅ produced)	\$1.45
General and admin costs (\$/lb V ₂ O ₅ produced)	\$0.54
Royalty	2%
Tax rate	28%

Sensitivity to historical V ₂ O ₅ prices	US\$4.50	US\$5.50	US\$6.00	US\$6.95	US\$8.60	US\$10.0
NPV ^{8%} US\$M (OPEX = US\$3.07/lb)	61	199	269	401	629	825
NPV ^{8%} US\$M (OPEX+10% = US\$3.37/lb)	20	158	227	359	587	781

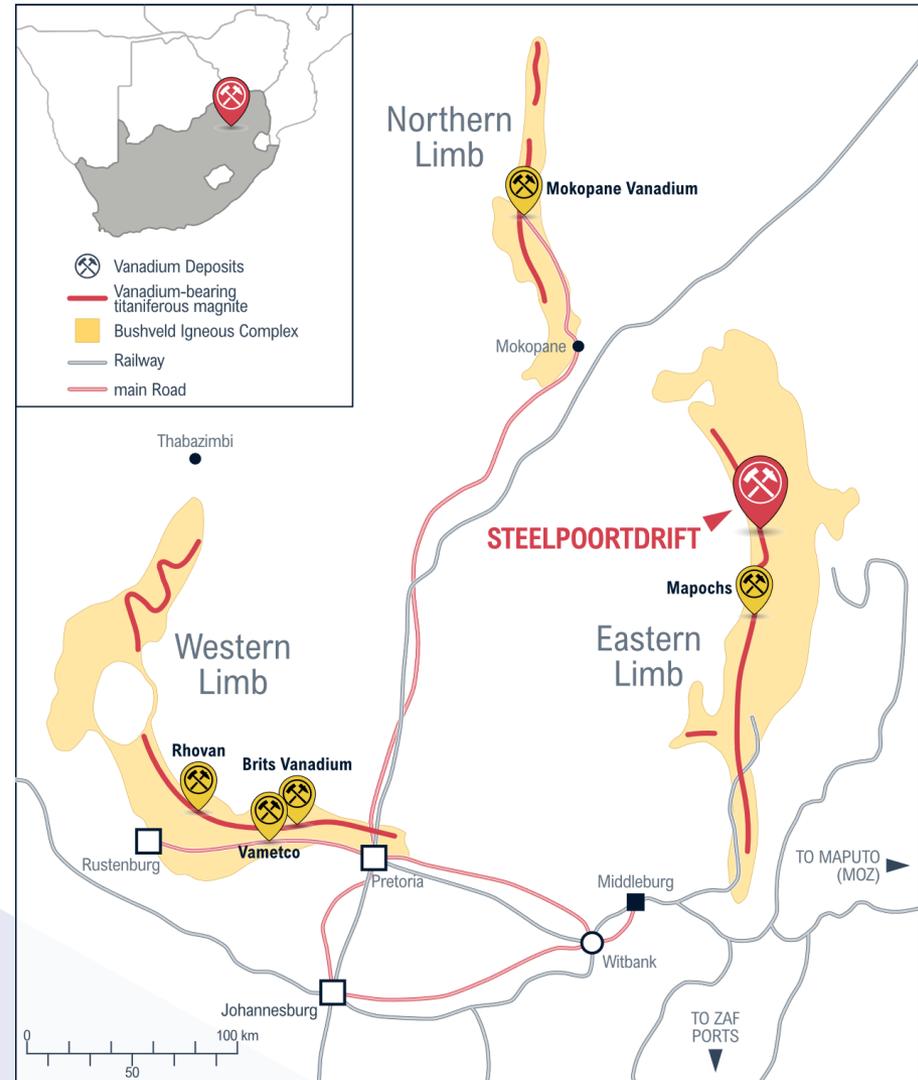


1. Source: ASX Announcement titled "Scoping Study Confirms Viability of V₂O₅ Production", 23 September 2020.



Located in the Bushveld Complex

- ◆ Steelpoortdrift Vanadium Project (“**SPD**” or “**Project**”) is part of a geologically unique igneous complex endowed with deposits of PGEs, chromium, vanadium and magnetite.
- ◆ This world-renowned mining location is host to several mining operations and multiple major mining companies are active in the area.
- ◆ Other Mines in the Bushveld Complex:
 - **Bushveld Minerals** – Vametco Vanadium Mine, Mokopane Vanadium Project.
 - **Xstrata** – Rhovan Vanadium Mine.
 - **Anglo American**
Twickenham PGE Mine, Modikwa PGE Mine, Kroondal PGE Mine, Bokoni PGE Mine, Mogalakwena PGE Mine, Polokwane Smelter, Waterval Smelter.
 - **African Rainbow** – Modikwa PGE Mine, Two Rivers PGE Mine.
 - **Sibanye Stillwater** Marikana PGE Mine.
 - **Impala Platinum** Rustenburg PGE Mine.
 - **Samancor** Tubatse Chrome Operations, Mooinooi.





World Class JORC Resource

- ◆ High grade Mineral Resources drilled to a high level of confidence including Measured, Indicated and Inferred categories.
- ◆ Global Mineral Resource of 662Mt at 0.77% V₂O₅ (0.45% V₂O₅ cut-off).
- ◆ High grade Mineral Resource of 188Mt at 1.23% V₂O₅ (0.9% V₂O₅ cut-off).
- ◆ Includes 68Mt at 1.37% V₂O₅ in a discrete, outcropping massive magnetite layer (LM1A).
- ◆ **The deposit offers the potential to target higher ROM ore V₂O₅ grade Resource areas, which will be targeted for the next round of pit optimisation studies as part of the PFS.**

1. Source: ASX Announcement titled "Scoping Study Confirms Viability of V₂O₅ Production", 23 September 2020 (page 15).

Mineral Resource by Category¹

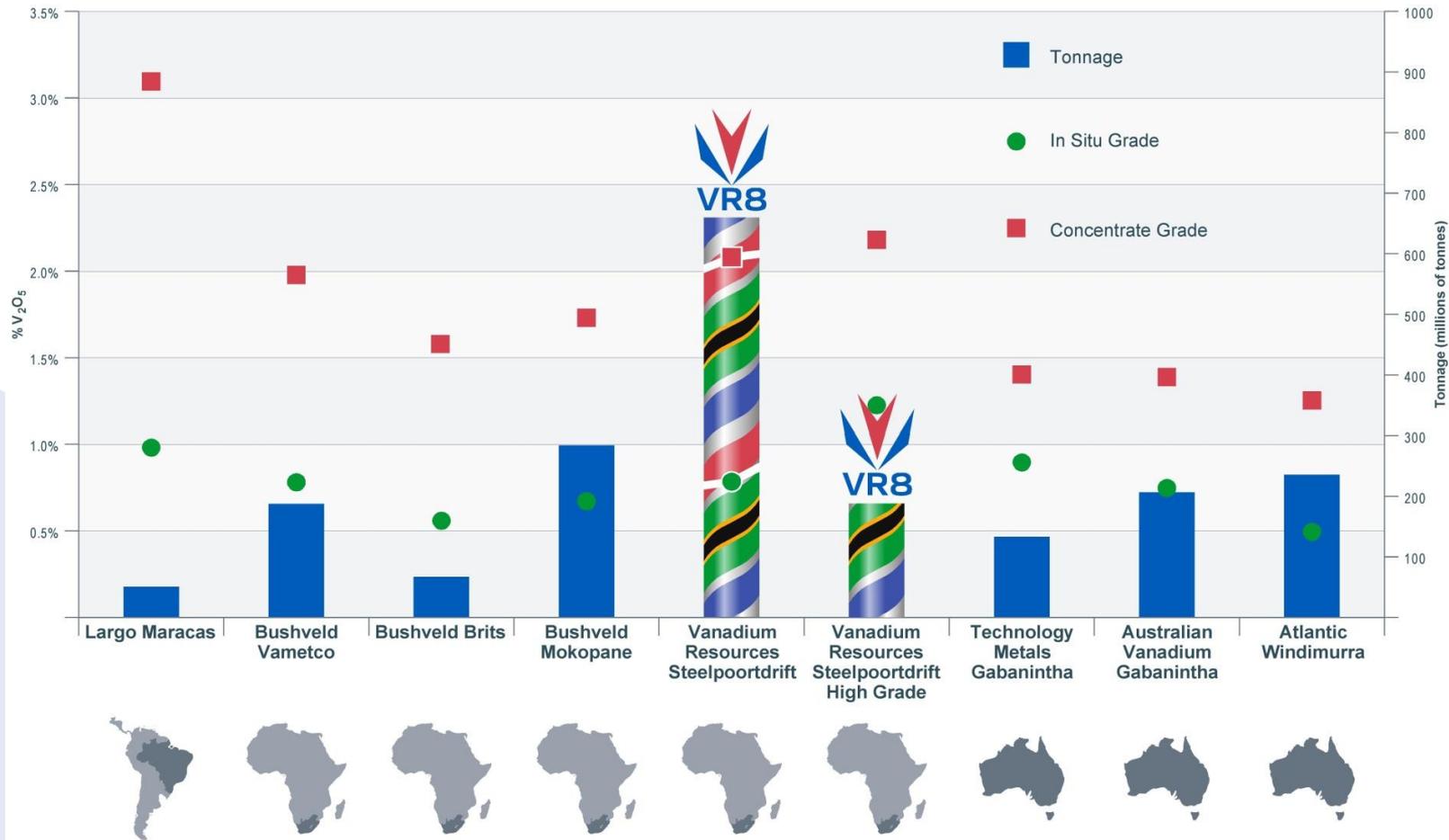
Category	Tonnes (Mt)	Whole Rock V ₂ O ₅ %
Measured	92	0.77
Indicated	284	0.78
Inferred	285	0.77
TOTAL	662	0.77

Mineral Resource by Grade¹

V ₂ O ₅ Range	Category	Tonnes (Mt)	Whole Rock V ₂ O ₅ %
> 0.90%	Measured	26	1.22
> 0.90%	Indicated	83	1.24
> 0.90%	Inferred	78	1.22
Sub Total	> 0.90%	188	1.23
0.45%–0.90%	Measured	66	0.59
0.45%–0.90%	Indicated	201	0.59
0.45%–0.90%	Inferred	207	0.60
Sub Total	0.45%–0.90%	474	0.59
TOTAL		662	0.78



A stand-out amongst all peers

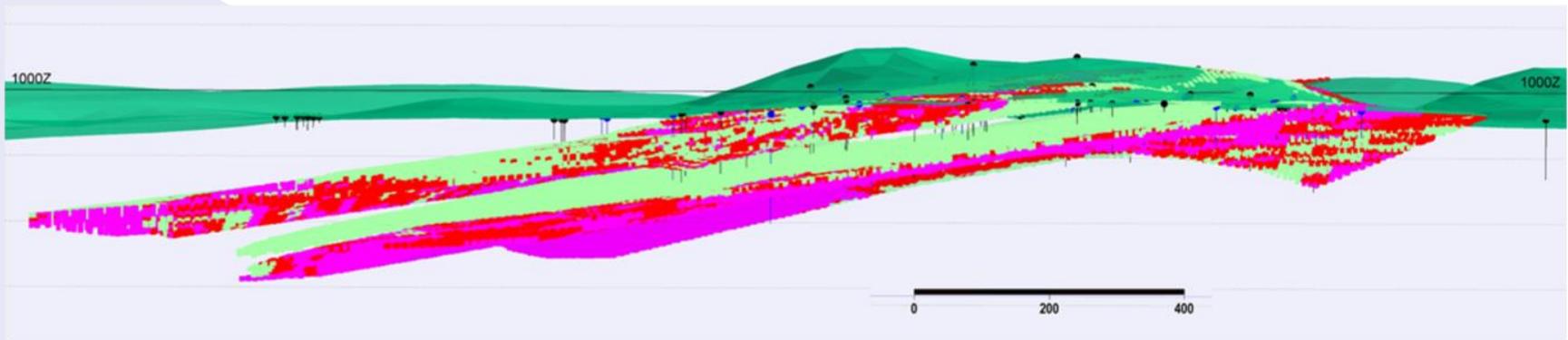


The above chart compares Resources reported under different codes and companies at different stages of development as detailed in ASX Announcement titled "Scoping Study Confirms Viability of V₂O₅ Production", 23 September 2020 (pages 13-14). Only Resources with a quoted in situ grade > 0.45% V₂O₅ are shown in figure.



Mineralisation

- ◆ The SPD Project is located in the Bushveld Complex, **one of the most studied geological provinces in the world.**
- ◆ Vanadiferous titanomagnetite layers occur at the same stratigraphic level across the entire complex and can be traced for almost 400 km.
- ◆ Typically, vanadium mineralisation in the Bushveld Complex is typically **higher grade than global peers.**
- ◆ The global resource at SPD is one of the largest and highest grade (in-situ) Mineral Resources within the Bushveld Complex and globally at 188Mt at 1.23% V_2O_5 .
- ◆ Mineralisation outcrops at surface, meaning amenable to open pit mining.
- ◆ Mineralisation dips shallowly ($\sim 10^\circ$) – less waste to mine, **low strip ratios and cheaper mining cost.**
- ◆ Scoping Study has defined initial production target of 48.5Mt which corresponds to 25-year mine life at 1.6Mtpa ROM ore at 0.75% V_2O_5 .





Pit Optimisation Studies & Mine Design

- ◆ Optimum pit shell #RF2 generated an in-pit Mineral Resource of 53Mt at 0.75% V₂O₅ (391kt of contained V₂O₅).
- ◆ The analysis included dilution of a 0.5m skin of waste added to the Resource.
- ◆ Overall slope design assumptions based on a preliminary review of geological structure, rock mass and pit design parameters.
- ◆ While no geotechnical work has been completed to date, a detailed geotechnical study will be completed as part of the PFS which will be incorporated into the overall slope design for the pit design.
- ◆ A conceptual pit design was developed using pit shell #RF2, which generated 48.5Mt of ore mineralisation and 18.3Mt of waste material, resulting a strip ratio of 0.47 : 1 (waste : ore) over the life of mine.
- ◆ Of the 48.5Mt of potential ROM ore mill feed, 43.3Mt is contained within the Measured and Indicated Resource classifications (7% of the ROM ore mill feed is inferred).

Optimum Pit Shell¹

Shell ID	Mineralised Tonnes (Mt)	Waste Tonnes (Mt)	Strip Ratio	LoM at 1.6Mtpa (yrs)	Contained Tonnes of V ₂ O ₅ % (kt)
RF2	85	25	0.30	53	439

In-pit Mineral Resource (Shell RF2)¹

Category	Tonnes (Mt)	Diluted Grade (V ₂ O ₅ %)	Tonnes V ₂ O ₅ in magnetite (kt)
Measured	18	0.78	140
Indicated	30	0.75	225
Inferred	4	0.66	26
TOTAL	53	0.75	391

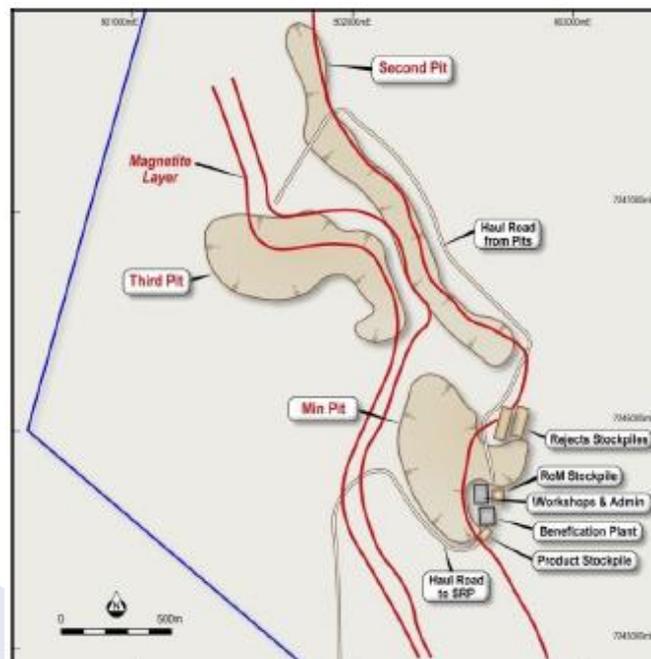
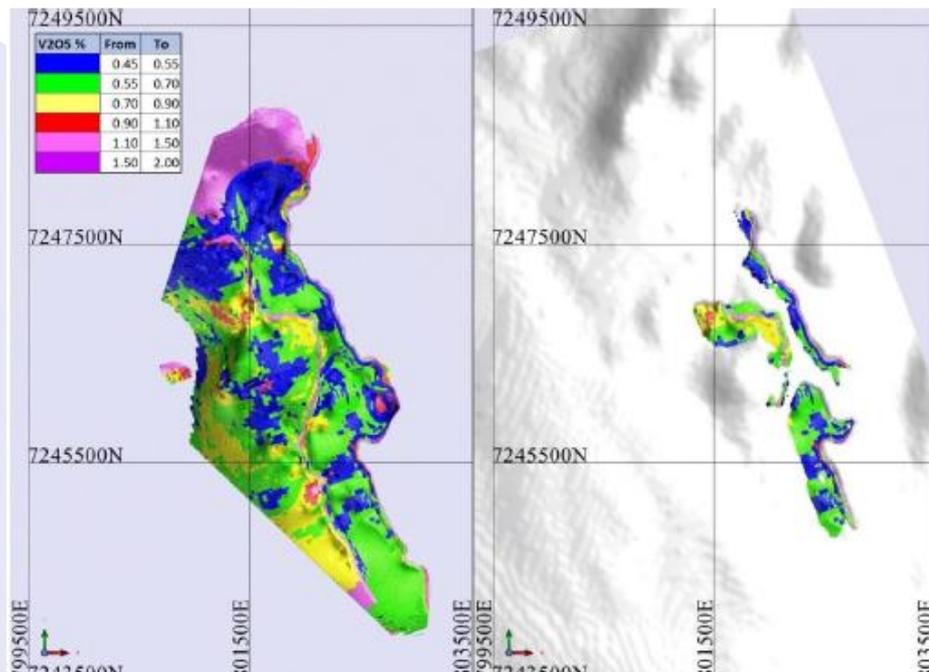
1. Source: ASX Announcement titled "Scoping Study Confirms Viability of V₂O₅ Production", 23 September 2020 (pages 17-18).



Conceptual Pit Design & Site Layout

- ◆ The optimum pit shell #RF2 and conceptual design represent only a small part of the overall total Mineral Resource (as shown below).
- ◆ This highlights the potential:
 - for the life of the operation to extend well past the 30-year life of mine; and
 - to increase the ROM ore V_2O_5 grade particularly during the early years of operations – this has the potential to reduce the tonnage of ore required to be mined to achieve the same V_2O_5 product rates (and improve NPV).

Mineral Resource (LH), Pit Shell #RF2 (Mid) & Site Layout (RH)¹



1. Source: ASX Announcement titled "Scoping Study Confirms Viability of V_2O_5 Production", 23 September 2020 (pages 19-20).



Concentrate Test Results – Beneficiation

- ◆ Testwork undertaken by SGS and Mintek confirmed that a simple beneficiation process was well suited to the SPD ore body which showed concentrate grades of 2.2% V_2O_5 .
- ◆ Various phases of concentrate testwork optimised both vanadium content and reduction of silica and alumina.
- ◆ This analysis showed consistent vanadium content throughout the mineralised intervals, with low levels of silica and alumina.

Testwork	V_2O_5 %	TiO_2 %	SiO_2 %	Al_2O_3 %	Fe %
March 2019	2.2	12.0	3.2	4.8	54.6
June 2020	2.2	12.3	1.2	3.4	58.3



Source: ASX Announcement titled “Scoping Study Confirms Viability of V_2O_5 Production”, 23 September 2020 (page 21).



Concentrate Test Results – Salt Roast Leach

- ◆ Testwork undertaken by Mintec demonstrated that the SRL method was well suited to the extraction of vanadium from concentrate.
- ◆ The SLR process was able to successfully produce +98% V_2O_5 flake from a 2.2% V_2O_5 concentrate, with an average recovery of 81.5%.
- ◆ Scoping Study testwork led by Mr Les Ford, one of the world's foremost experts in the production of vanadium.
- ◆ The SRL process uses proven technology and used in other vanadium operations in the Bushveld Complex and globally.

Source: ASX Announcement titled "Scoping Study Confirms Viability of V_2O_5 Production", 23 September 2020 (page 21-22).



Process Design

- ◆ The processing facility will consist of:
 - a mineral concentrator and associated services and utilities; and
 - a separate SRL processing plant to produce +98% V₂O₅ flakes.
- ◆ **Concentrator**
 - METS South Africa (Pty) Ltd (“**METS**”) designed the concentrator facility using its experience in design and construction of similar facilities in South Africa – resulting in the Capex being able to be costed at a robust level.
 - The design included three stage crushing following by dry magnetic separation to reject coarse waste material, then ball milling of the upgrade material with wet magnetic separation to produce a refined concentrate of 2.2% V₂O₅.
 - Construction period of 9 to 12 months.
- ◆ **SRL Plant**
 - The capex estimates for the SRL plant was based on quotes of key items of equipment sourced directly from the equipment suppliers and manufacturers.
 - ENC Minerals built up costs for civils, structural steel, piping and pipework derived from a database of costs derived from similar facilities in South Africa in consultation with METS and Les Ford.
 - Costs sourced from direct quotes made up ~55% of the total construction and installation cost estimate.
 - Construction period of 24 months.



Infrastructure

◆ Freight

- The Project is located near the town of Steelpoortdrift in the Limpopo Province of South Africa and well served with national highways.
- Established unsealed roads provide access into and across the Project area and will be upgraded – this will enable haulage of product to the plant site or to customer, railhead or port.
- Rail infrastructure is located near the Project with sidings at Steelpoortdrift, Burgersfort (Apiesdoring) and Roosenekal.

◆ Power

- The Scoping Study has assumed the use of grid power with the state electricity supplier Eskom.
- Alternative power solutions will be considered if the application process with Eskom is expected to be delayed.

◆ Water

- The De Hoop dam is located 15km from the Project and raw water pipelines run adjacent to the Project.
- The Company has also applied for a Water Usage license from boreholes as an alternative water source.

◆ Tailings & Waste Management

- The beneficiation process will contain solely waste rock and no reagents or harmful materials.
- The SRL plant has incorporated a dewatering facility to remove water from residues for re-use as process water. The residues will be stockpiled away from drainage systems.

◆ Environmental, Community & Permitting

- Tenure comprises a single, granted Mining Right which expires September 2048.
- The Company will need to prepare its application for a Water Usage License to enable use of water in processing and mining as well as the creation of stockpiles on the Project – an application will be submitted once detailed site layout plans are completed.



Regional Infrastructure Advantage



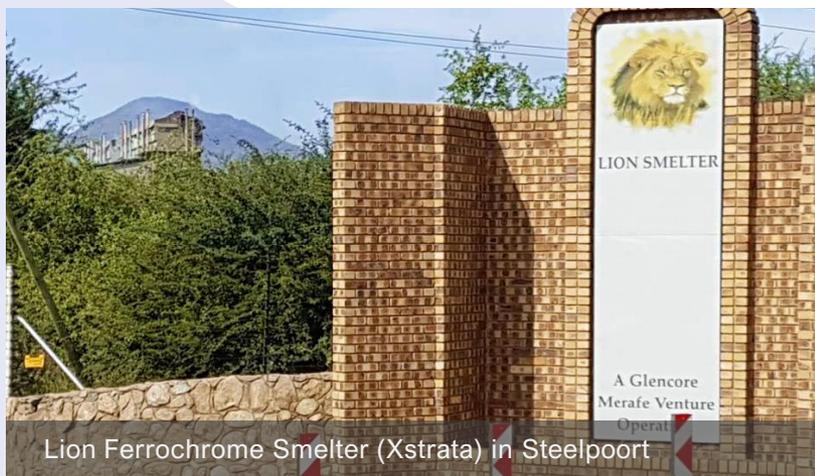
ESKOM sub station, 12km from project



Platinum refinery in Bushveld Complex N of Steelport



De Hoop Dam 15km from project



Lion Ferrochrome Smelter (Xstrata) in Steelport



Steelport Rail Siding 30km from project



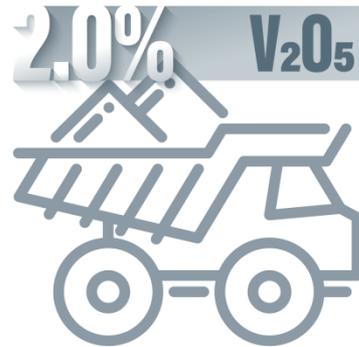
Existing Port Access



- ◆ Existing and proven transport from the Steelpoortdrift resource.
- ◆ Road or rail options.



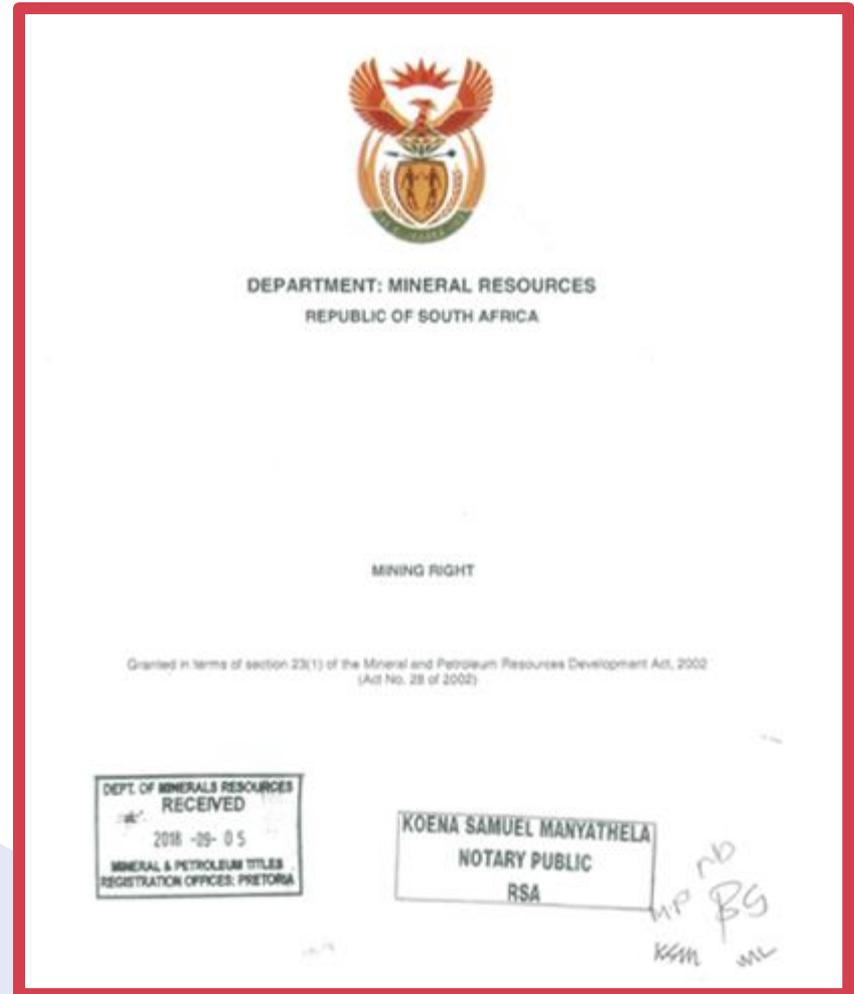
Port to... China
20 DAYS





Permitting

- ◆ The Project is covered by a granted Mining Right.
- ◆ The Mining Right remains in force until September 2048.
- ◆ The Mining Right includes approval of the Environmental Management Plan and Social & Labour Plan for the Project.
- ◆ Approvals in-place:
 - Mining Right
 - Environmental Management Plan
 - Social and Labour Plan





Community Relations Matter



- ◆ Vanadium Resources has maintained a positive relationship with local communities since project inception.
- ◆ A dedicated local community relations officer has been involved in the project since March 2018.
- ◆ Recent community meetings reaffirmed the communities' support for the project.
- ◆ Social and Labour Plan has been Approved as part of the granting of the mining lease.
- ◆ VR8 is committed to facilitating and supporting a Social Investment Plan (“**SIP**”) for the local communities.





Capex

- ◆ The pre-production capex is 185.7M including a 15% contingency (as shown below).
- ◆ Capex estimate for the process plant was based on assumptions and parameters outlined in the Scoping Study.

Area	US\$M	%
Mine Site, Pre-Strip & Stockpile	14.0	9%
Processing Plant	80.6	50%
Tailings Dam	30.0	19%
Site Infrastructure, Utilities & Services	14.7	9%
Construction / Support / Equipment / Consumables	18.2	11%
Financing Costs	4.0	3%
Sub Total	161.5	
Contingency (15%)	24.2	
Total	185.7M	
Sustaining Capex	14.9	

Operating Costs

- ◆ The Project has an estimated C1 cash cost (at mine gate) of US\$3.07/lb V₂O₅ (as shown below).
- ◆ Operating costs have been presented as a range to provide an appropriate level of accuracy for the study.

Area	US\$/t ROM	US\$/lb V ₂ O ₅
Mining	5.2-5.7	0.42-0.46
Benefication	6.4-7.0	0.52-0.57
Salt Roasting Plant	17.8-19.6	1.45-1.60
G&A, Environmental & Social	6.6-7.2	0.54-0.59
Sub Total	35.9-39.5	2.93-3.22
Royalties	0.3	0.14
Total	36.2-39.8	3.07-3.37

Source: ASX Announcement titled "Scoping Study Confirms Viability of V₂O₅ Production", 23 September 2020 (page 26-28).

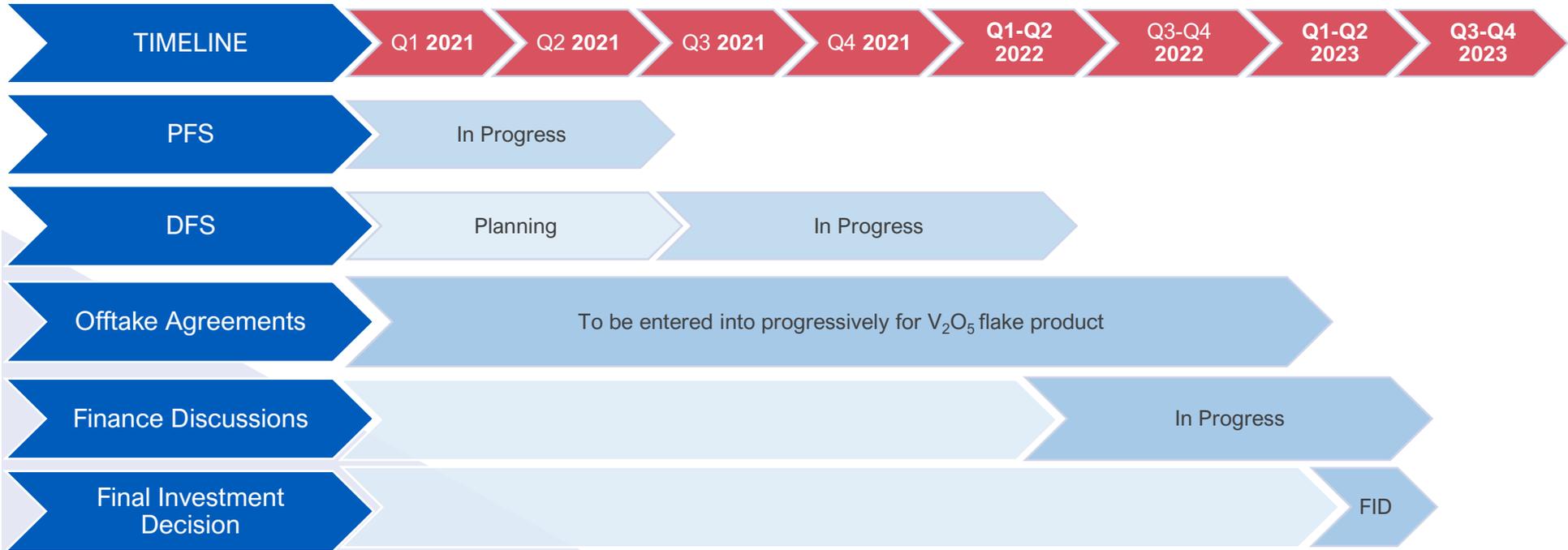


Section 4: Next Steps



Next Steps

- ◆ PFS to be completed Q2 2021.
- ◆ PFS focus will be on optimizing pit shell design and mining schedule in order to front end high grade ore feed and also confirm Capex and Opex values.
- ◆ Preliminary discussions with potential offtakers and financiers to commence post completion of PFS.
- ◆ Approval for change of control of VanRes and increase in relevant interest in SPD to 73.95% from the South African Department of Mineral Resources.
- ◆ DFS to be completed Q2 2022





Appendices

Appendix A: Board & Management

Appendix B: Markets

Appendix C: Geology

Appendix D: Peer Analysis



Appendix A: Board & Management



Experienced Management



Eugene Nel — Chief Executive Officer

Mr Nel has 25 years' experience as a metallurgical and process engineer in the operations, management, design and optimisation of mineral beneficiation in Africa, South America, Europe and the Middle East. He has been involved in a number of successful mining and processing operations and has assisted client teams throughout project lifecycles and disciplines. As a registered Pr. Tech. Eng. with the Engineering Council of South Africa, as well as member of the Southern African Institute of Mining and Metallurgy and Mine Metallurgical Managers Association of South Africa, he qualifies as a competent person under JORC.



Jurie Wessels — Chairman

24 years' entrepreneurial experience in the exploration industry exploring for various minerals in Africa, South America and Europe. Practiced as a minerals lawyer. Co-founded Vanadium Resources Ltd and several exploration and mining companies including Bauba Resources Ltd (BAU.J), Arcadia Minerals Ltd, Consortium Minerals Ltd, Tungstène du Narbonnais SAS and GoldStone Resources Ltd (GRL.L).



Nico van der Hoven — Director

Businessman and entrepreneur with over 29 years' experience in exploration and mining, having co-founded and operated 5 mines over this period. Nico co-founded Herculite Chrome, Bauba Resources Ltd (BAU.J), Vanadium Resources (Pty) Ltd and GoldStone Resources Ltd (GRL.L). He currently acts as Chairman of Bauba Resources Ltd, an active chrome mining company and platinum explorer.



Michael Davy — Director

Accountant with over 15 years' experience across a range of industries. Previously held a senior management role in Australia for Songa Offshore (listed Norwegian Oil and Gas drilling company), after working in Australia and London for other large organisations overseeing various finance functions. Mr Davy has held directorships in several ASX listed companies and is currently director and owner of a number of successful private businesses as well as being the Non-Executive Chairman of Raiden Resources Limited (ASX: RDN) and a Non-Executive Director of Riversgold Ltd (ASX: RGL),.



John Ciganek — Director

30 years experience working in mining operations, project finance, M&A and the equity capital markets. John is a mining engineer and holds an MBA. He was an executive director for BurnVair Corporate Finance, where he headed the Perth business of BurnVair, which included providing financing and structuring advice, as well as arranging debt and equity financings for capital intensive projects. John has experience in a range of roles covering business development, research and analyses, and mining engineering.



Real Mining Experience

South African based directors Nico van der Hoven and Jurie Wessels were responsible for the establishment and development of Bauba Resources Ltd, an active chrome mining company in the Bushveld Complex.

- ◆ Both have hands-on, local, experience in exploration, mining, beneficiation and shipping to export markets that will be invaluable in progressing the project.
- ◆ Nico brings skills with exposure to marketing and selling of chrome products, including negotiating offtake agreements.
- ◆ Nico has co-founded and operated 5 chrome mines in South Africa in the last 25 years.





Access to Specialist Skills

Les Ford — Lead Consultant



Les has over 40 years of experience constructing, developing and producing vanadium projects and is regarded as one of the world's foremost experts in vanadium. Les began his career at Highveld Steel and Vanadium's Vanchem plant that used material from the same geological setting to that of Steelpoortdrift at its operations in Witbank in South Africa to produce steel and a suite of vanadium products. Later in his career Les was responsible, respectively as technical director and as managing director, for the development and construction of producing vanadium mines for Largo Resources in Brazil and for Vantech (formerly Xstrata, now Glencore). He was also intimately involved with the redesign of the Windimurra Vanadium plant in Australia and of Glencore's Vantech operations in South Africa.

METS South Africa (Pty) Ltd (SA)
Process design and costing



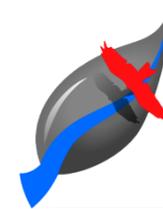
ENC Minerals (Pty) Ltd (SA)
Design and management of metallurgical test-work



Sound Mining (Pty) Ltd (SA)
Engineering, mine planning and design



Red Kite Consulting (Pty) Ltd (SA)
Environmental management and consulting



Geoactiv (Pty) Ltd (SA)
Geology, exploration and drilling



GEMECS (Pty) Ltd (SA)
Database management, resource modelling



Mining Plus Pty Ltd (AU)
Resource modelling, mine planning and design

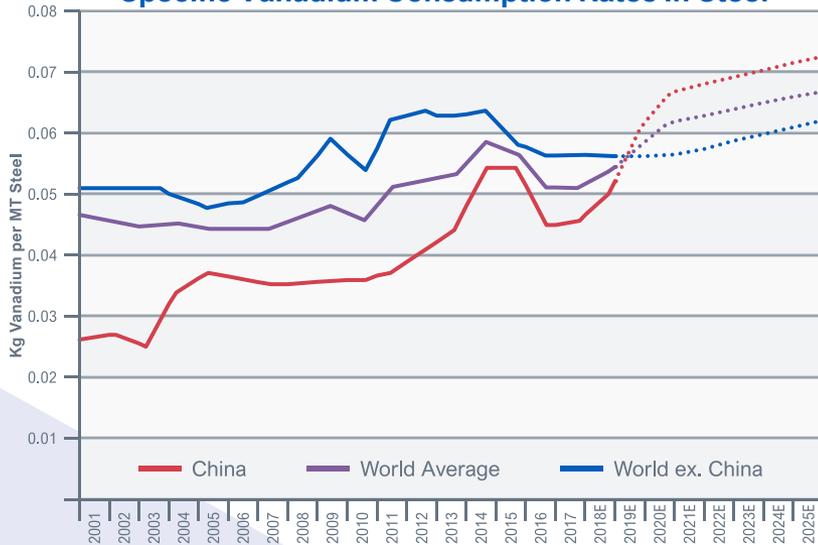




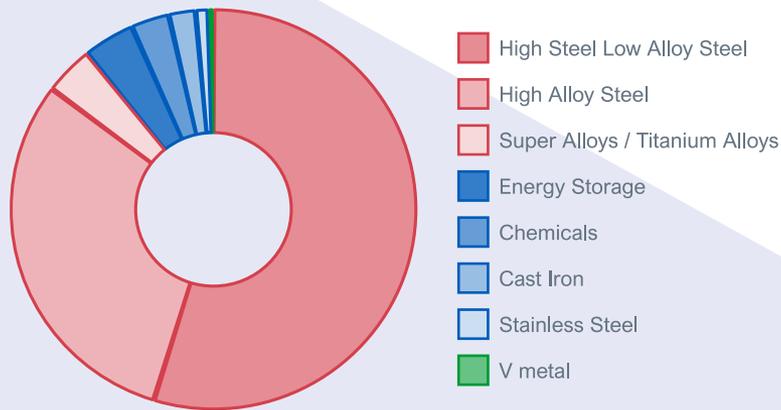
Appendix B: Markets



Specific Vanadium Consumption Rates In Steel



- ◆ Inventories low, additional demand will impact pricing as witnessed during 2018.
- ◆ Falls from the 2018 high suggest that low pricing will be maintained at higher levels than historical lows and remain commercially strong.



Vanadium (V₂O₅) Price Chart



Source: TTP Squared, Metal Bulletin

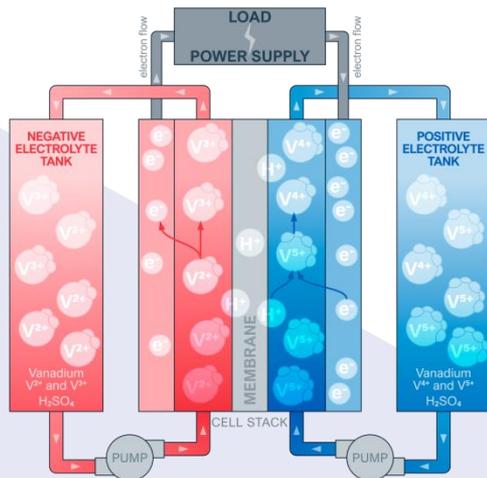


- ◆ Over 90% of the current demand for vanadium arises from its use to strengthen steel and alloys.
- ◆ Demand increasing due to more stringent regulations in China for rebar and other steel products used in construction. While implementation has been slower than expected, inspections are set to continue during 2019.
- ◆ China recently has perfected the manufacture of high-performance alloys resulting in strong growth in the sector.
- ◆ Supply of new lightweight alloys increasing in the aerospace industry. All new Boeing Dreamliner 787 and Airbus A350 now incorporate vanadium in light weight alloys up to 100 tons per aircraft.





- ◆ Forecasters expect over 1,200GW of battery capacity to be added between today and 2050, with approx. 600GW before 2025. ¹
- ◆ VRFBs forecast to represent between 15 and 25 % of battery capacity.
- ◆ Could add up to 10,000mtV of demand into an already undersupplied market. ²



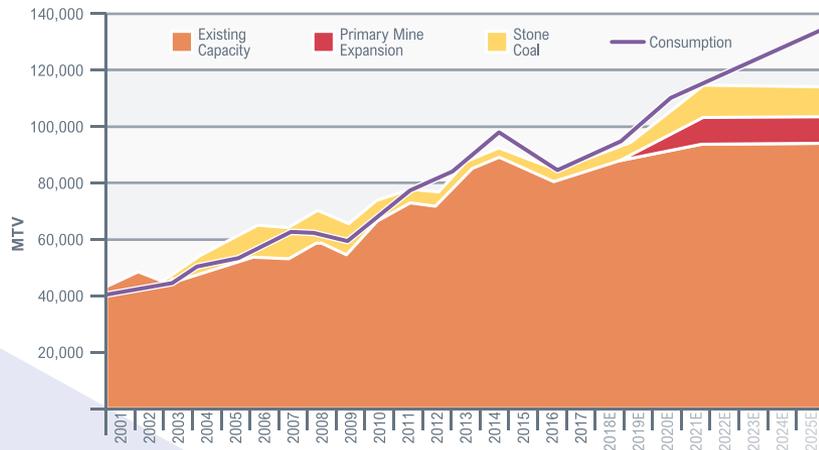
Dalian City, China has signed a syndicated loan agreement to fund the first stage of a 200/800MWh vanadium battery. The first stage of the project is planned to be 100/400MWh and estimated to be complete by mid 2020.

¹ BloombergNEF, New Energy Outlook 2018; International Energy Agency, World Energy Outlook 2018

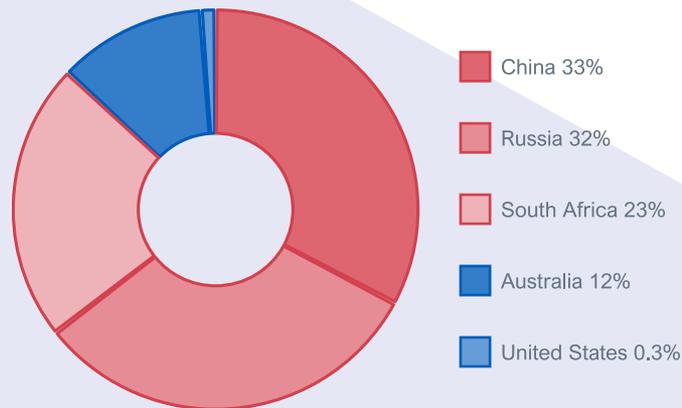
² Noack et. al, 2016. Techno-economic modelling of RFB Systems (Energies 2016, 9, 627) Vanadium Flow Batteries: An In Depth Analysis. EPRI, Palo Alto, CA: 2007.1014836



Vanadium Production by Raw Material



- ◆ Over 85% of the world's vanadium is produced from China, Russia and South Africa.
- ◆ Chinese domestic production is largely from polluting sources (stone coal) or low-grade resources.
- ◆ Stringent implementation of Chinese environmental standards place serious doubts on the future of many Chinese stone coal resources.
- ◆ South Africa has become a major recipient of mining investment by major Chinese mineral and metal suppliers. A combination of higher grade and lower opex bodes well for quality undeveloped resources.



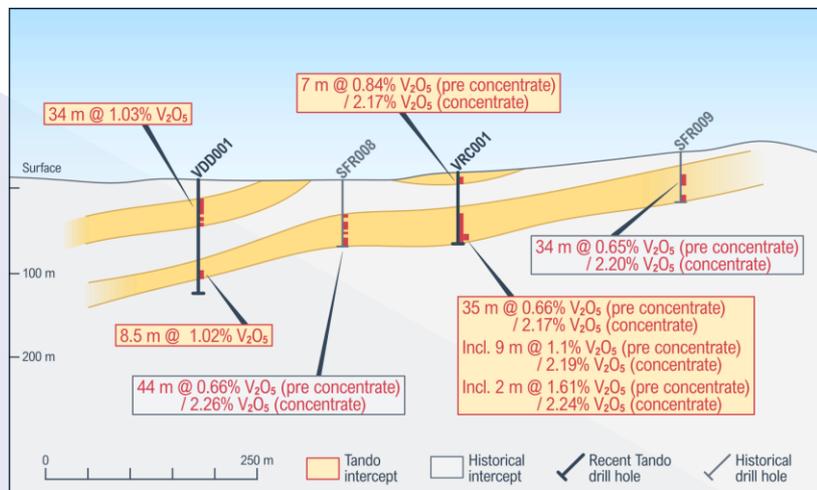


Appendix C: Geology



High Grade Drill Results

- ◆ Mineral Resource includes 188Mt at 1.23% V₂O₅ from surface.
- ◆ High-grade drill results from surface.
- ◆ Thick zones of mineralisation, make the deposit amenable to large scale open pit mining.



- ◆ 18m at 0.80% V₂O₅ from 0m (VRC017) incl. 4m at 1.16% V₂O₅
- ◆ 14m at 0.98% V₂O₅ from 0m / surface (VRC043)
- ◆ 34m at 1.03% V₂O₅ from 22m (VDD001)
- ◆ 12m at 1.00% V₂O₅ from 12m (VRC002) incl. 2m at 1.72% V₂O₅
- ◆ 10m at 1.17% V₂O₅ from 35m (VRC045)
- ◆ 9m at 1.06% V₂O₅ from 22m (VRC015) incl. 3m at 1.45% V₂O₅
- ◆ 11m at 0.99% V₂O₅ from 17m (VRC040) incl. 2m at 1.67% V₂O₅
- ◆ 11m at 0.98% V₂O₅ from 24m (VRC019) incl. 8m at 1.15% V₂O₅ from 27m incl. 2m at 1.65% V₂O₅ from 33m
- ◆ 10m at 0.99% V₂O₅ from 9m (VRC036)
- ◆ 10m at 0.95% V₂O₅ from 17m (VRC037) incl. 2m at 1.59% V₂O₅ from 6m

* Refer ASX Announcements 12 Oct 2018, 25 Oct 2018, 28 Nov 2018 & 16 Jan 2019



Excellent Oxide Zone Results

- ◆ Mineralisation outcrops or subcrops across project, with weathering < 10m.
- ◆ Amenable to open pit mining with an initial 25-year mine life defined.
- ◆ Unlike many deposits, weathered mineralisation behaves no differently to fresh mineralisation in processing tests to date.
- ◆ Concentrate results from both mineralisation sources contain identical V_2O_5 contents. ⁽¹⁾



¹ Refer ASX Announcement 5 August 2019.



Appendix D: Peer Analysis

PEER COMPARISON INFORMATION



Company	Code	Project	Stage	Resource Category	Resource Tonnes	Resource Grade	Concentrate Grade	Information Source
Largo	LGO.TSX	Maracas	Production	Measured, Indicated & Inferred (43-101)	49.25	0.99	3.10	43-101 Technical Report dated 26/10/2017 largoresources.com/operations/maracas-menchen-mine
Bushveld	BMN.LSE	Vametco	Production	Indicated & Inferred	187	0.78	1.98	Competent Persons' Report on the Vametco Vanadium Mine Jan 2020 https://www.bushveldminerals.com/technical-reports/
		Mokopane	Development	Indicated & Inferred	298	0.68	1.75	Mokopane PFS Study Report Jan 2016 bushveldminerals.com/technical-reports/
		Britts	Exploration	Indicated & Inferred	67	0.56	1.58	Competent Persons' Report on the Brits Vanadium Project Jan 2020 https://www.bushveldminerals.com/technical-reports/
Vanadium Resources	VR8.ASX	Steelpoortdrift	Development	Measured, Indicated & Inferred	662	0.77	2.18	ASX Announcement 16 April 2019
TNG	TNG.ASX	Mt Peake	Development	Measured, Indicated & Inferred	160	0.28	1.20	ASX Announcement 26/03/2013
King River	KRR.ASX	Speewah	Development	Measured, Indicated & Inferred	4,712	0.30	2.11	ASX Announcement 02/11/2018 21/03/2018
Pursuit	PUR.ASX	Koitelainen Vosa	Development	Inferred	116.4	0.28	2.25	ASX Announcement 06/02/2019
		Airijoki	Development	Inferred	44.3	0.40	1.70	ASX Announcement 08/03/2019
Aust Vanadium	AVL.ASX	Gabanintha	Development	Measured, Indicated & Inferred	208.2	0.74	1.39	ASX Announcement 04/03/2020, 17/03/2020
Technology Metals	TMT.ASX	Gabanintha	Development	Indicated & Inferred	131	0.90	1.36	ASX Announcement 29/03/2019
Atlantic	Private	Windimurra	Development	Measured, Indicated & Inferred	235	0.49	1.26	https://atlanticptyltd.com.au/projects/windimurra/geology-reserves-resources

Source: ASX Announcement titled "Scoping Study Confirms Viability of V₂O₅ Production", 23 September 2020 (page 213-14).



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