

20 July 2021



VR8 DECLARES MAIDEN ORE RESERVE FOR SPD PROJECT

HIGHLIGHTS

- ◆ **Vanadium Resources (ASX:VR8) has completed the maiden Ore Reserve for the Steelpoortdrift project with key elements being:**
 - **Total project Ore Reserve of 73.85Mt at an average grade of 0.75% V₂O₅ giving total contained V₂O₅ of 560kt,**
 - **Of the total Ore Reserve 31.17Mt is in the Proven category with balance in the Probable category,**
 - **The High-Grade portion of the Ore Reserve totals 40.25Mt at an average grade of 0.96% V₂O₅**
- ◆ **DFS study to commence H2 2021 will aim to improve on maiden Ore Reserve statement with an updated statement to be released on completion of DFS.**

Eugene Nel, Chief Executive Officer of VR8 said: "A Mineral Ore Reserve is probably the most important asset for any mining company and this is no different for Vanadium Resources. The Ore Reserve elevates the project status to that of an economically extractable deposit which carries significant value for the company. Another pleasing aspect is that the total production over the 25-year Life of Mine has been included in the Ore Reserve, which means that the DFS can be based on the present Proven and Probable Ore Reserves without the need to upscale any resources into a reserve.

With total contained V₂O₅ in the Ore Reserve of more than 1.2 billion pounds (560kt), of which 55% is in the High-grade portion, the Steelpoortdrift project is well poised to be progressed into production."

Vanadium Resources Limited (ASX:VR8)

ABN: 47 618 307 887
7/63 Shepperton Road, Victoria Park, WA 6100 Australia
+61 8 6158 9990 • contact@VR8.global • www.VR8.global

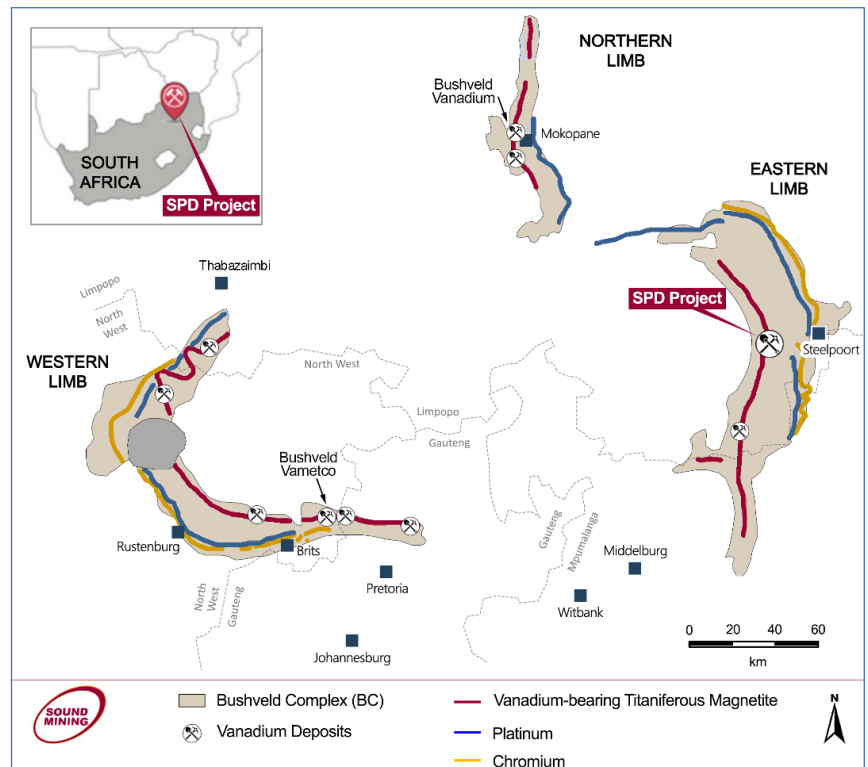
PROJECT BACKGROUND

Based on the completed Pre-Feasibility Study (Refer ASX announcement of 22 June 2021), Vanadium Resources (**ASX:VR8**) commissioned Sound Mining to complete an Ore Reserve statement for the Steelpoortdrift project. The Ore Reserve was prepared in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code), 2012 Edition guidelines.

The SPD Project is being developed as a fully integrated mineral beneficiation project in which Run-of-Mine (RoM) production from designated surface mining areas will supply a site located Concentrator Plant producing a vanadium pentoxide (V_2O_5) concentrate. This concentrate will be road hauled to an off-site Salt Roast Leach (SRL) Plant to produce a final dry flake product at $>98\% V_2O_5$.

Source: Sound Mining, 2021

Figure 1: Project location



The SPD Project is located on the farm Steelpoort 365KT which is approximately 30km south-west of the town of Steelpoort, Limpopo Province (Figure 1). The SPD Project area is situated within the Sekhukhune District Municipality in the Greater Tubatse Local Municipality, which is one of the five local municipalities falling under the Sekhukhune District Municipality (SDM).

MINERAL RESOURCES

A Mineral Resource was reported by Mining Plus (Proprietary) Limited (**Mining Plus**) during 2020 (refer to ASX announcement of 28 April 2020: *Mineral Resource update confirms Steelpoortdrifts global vanadium standing*). This Mineral Resource estimate, as at 31 July 2020, is at a cut-off grade of 0.45% V₂O₅ (Table 1). This cut-off grade has been used as the basis for the PFS, which underpins the Ore Reserve estimate. No additional optimisation of the cut-off grade has been done for the purpose of the maiden Ore Reserve reporting, with the aim to review and update cut-off grade during the DFS following which an updated Resource and Reserve statement based on new cut off grades would be reported.

The resource classification approach applied weights to key parts of the estimate including confidence in drillhole/wireframe location, number of contributing samples, the estimate pass, the number of contributing drillholes, Kriging Variance, Kriging Efficiency (KE), and the regression slope of the estimate.

Good results in each received a weighting of 1, poor results received a 3, with average results receiving a 2. These weights were then used to assign a weighted resource categorisation score. The numbers adopted are seen in Table 2.

Table 1: Mineral Resource Estimate (as at 31 July 2020)

Category	V ₂ O ₅ Range (%)	Volume (M m ³)	Quantity (Mt)	V ₂ O ₅ (%)	Fe ₂ O ₃ (%)
Measured	0.45* to 0.90	20.3	66.0	0.59	19.98
	>0.90	7.2	26.3	1.22	34.20
	Sub-total	27.5	92.3	0.77	24.03
Indicated	0.45* to 0.90	61.8	201.2	0.59	20.21
	>0.90	22.7	83.2	1.24	35.06
	Sub-total	84.5	284.4	0.78	24.55
Inferred	0.45* to 0.90	63.2	206.9	0.60	20.96
	>0.90	21.3	78.4	1.22	35.18
	Sub-total	84.5	285.3	0.77	24.87
Total (0.45 to 0.90)		145.3	474.1	0.59	20.51
Total (>0.90)		51.2	187.9	1.23	34.99
Total		196.5	662.0	0.77	24.62

Source: Mining Plus, Steelpoortdrift Vanadium Project Mineral Resource Estimate Report, July 2020

Note: *0.45% V₂O₅ being the Mineral Resource cut-off grade as declared by the Mining Plus Competent Person

Table 2: Mineral Resource Categorisation Parameters

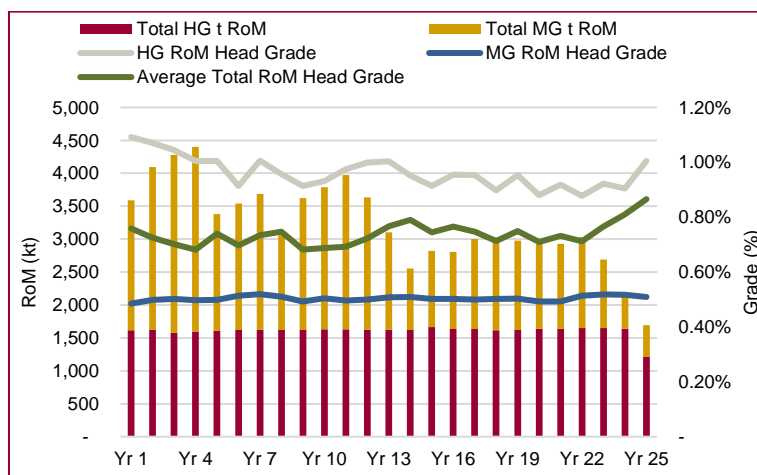
Item	1	2	3
Boreholes	Vanadium Resources	Historical (with Survey)	Historical (with GPS)
Pass	1/3 variance range	2/3 variance range	3/3 variance range
Number of Sample	24 to 32	16 to 23	1 to 15
Contributing Boreholes	7	4	1
Kriging Variance	<0.2	0.2 to 0.4	>0.4
KE	>=0.7	0.3 to 0.5	<=0.3
Regression Slope	>=0.7	0.2 to 0.6	<=0.2
Weighted Resource Category Score	1 to 1.2	1.2 to 2.0	2.0 to 3.0
Resource Category	Measured	Indicated	Inferred

Source: Mining Plus, Steelpoortdrift Vanadium Project Mineral Resource Estimate Report, July 2020

ORE RESERVE

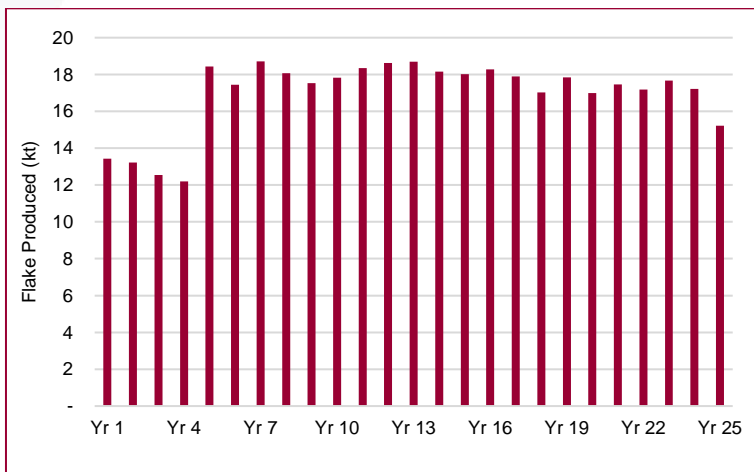
Graph 1 shows the forecast LoM production schedules for the Project. Graph 2 shows the forecast flake production from processing both HG RoM and MG RoM after processing capacity expansion in year 6 of operations.

Graph 1: LoM Production Schedule



Source: Sound Mining, 2021

Graph 2: Forecast Flake Production



Source: Sound Mining, 2021

The economic assessment completed as part of the Ore Reserve statement confirm viability of the Ore Reserves as depleted by the mine planning and reveals operating margins of 29% (at a flake sales price of US\$6.00/lb) at steady state operations. Also refer to Appendix 1 (JORC Table 1 report) for modifying factors applied. The CP is aware that there are areas of uncertainty associated with the cashflow forecasts but considers the impact of these to be immaterial with regard to the overall economics. The DCF is based on a production forecast of 25 years and the Mineral Resource is not fully depleted.

Table 3 summarises the portion of the total Mineral Resource depleted by mine planning, which forms the basis of the economic assessment and project Ore Reserve statement as at 30 June 2021 (Table 4). The Ore Reserve amounts to 73.85Mt with a grade of 0.73% V₂O₅.

Table 3: Depleted Portion of the Mineral Resource by Mine Planning

Material Type	Depleted Measured Category			Depleted Indicated Category			Total Depleted Material		
	Quantity (Mt)	Grade (%)	Vanadium Content (Mt)	Quantity (Mt)	Grade (%)	Vanadium Content (Mt)	Quantity (Mt)	Grade (%)	Vanadium Content (Mt)
HG RoM Material	15.57	1.01%	0.16	24.68	0.93%	0.23	40.25	0.96%	0.39
MG RoM Material	15.60	0.51%	0.08	24.91	0.50%	0.12	40.51	0.50%	0.20
Total Mineral Depleted	31.17	0.76%	0.24	49.59	0.71%	0.35	80.76	0.73%	0.59

Source: Sound Mining, 2021

Table 4: SPD Project Ore Reserve as at 30 June 2021

Ore Reserves as at 30 June 2021									
Material Type	Proved			Probable			Total		
	Quantity (Mt)	Grade (%)	Vanadium Content (Mt)	Quantity (Mt)	Grade (%)	Vanadium Content (Mt)	Quantity (Mt)	Grade (%)	Vanadium Content (Mt)
HG RoM Material	15.57	1.01%	0.16	24.68	0.93%	0.23	40.25	0.96%	0.39
MG RoM Material	15.60	0.51%	0.08	18.00	0.50%	0.09	33.60	0.50%	0.17
Total Mineral Reserve	31.17	0.76%	0.24	42.68	0.75%	0.32	73.85	0.73%	0.56

Source: Sound Mining, 2021

Notes: Ore Reserve Statement is stated at a price of USD6.00/lb as at 30 June 2021.

Quantity and grade measurements are reported at the delivery to plant in metric units (Mt) and head grade, both of which are rounded to two decimal places.

Approximately 6.91Mt of MG RoM at an average grade of 0.50% V₂O₅ remains untreated within the stockpile over the LoM. The CP has excluded this material from the Ore Reserve Statement.

Apparent computational errors are due to rounding and are not considered significant.

Losses that could occur as a result of transportation of content or flake are considered to be negligible for the purpose of the maiden Ore Reserve Statement.

Vanadium Resources currently has an ownership of 50% of the Project (will be increased to 73.95% ownership pending final S11 governmental approval, with no further consideration payable by VR8 for the additional 23.95%).

This announcement has been authorised for release by the directors of Vanadium Resources Limited.

FOR FURTHER INFORMATION PLEASE CONTACT:

EUGENE NEL

Chief Executive Officer

VANADIUM RESOURCES LIMITED

contact@VR8.global

DISCLAIMER

Some of the statements appearing in this announcement may be in the nature of forward looking statements. You should be aware that such statements are only predictions and are subject to inherent risks and uncertainties. Those risks and uncertainties include factors and risks specific to the industries in which the Company operates and proposes to operate as well as general economic conditions, prevailing exchange rates and interest rates and conditions in the financial markets, among other things. Actual events or results may differ materially from the events or results expressed or implied in any forward looking statement. No forward looking statement is a guarantee or representation as to future performance or any other future matters, which will be influenced by a number of factors and subject to various uncertainties and contingencies, many of which will be outside the Company's control.

The Company does not undertake any obligation to update publicly or release any revisions to these forward looking statements to reflect events or circumstances after today's date or to reflect the occurrence of unanticipated events. No representation or warranty, express or implied, is made as to the fairness, accuracy, completeness or correctness of the information, opinions or conclusions contained in this announcement. To the maximum extent permitted by law, none of the Company, its Directors, employees, advisors or agents, nor any other person, accepts any liability for any loss arising from the use of the information contained in this announcement. You are cautioned not to place undue reliance on any forward looking statement. The forward looking statements in this announcement reflect views held only as at the date of this announcement.

This announcement is not an offer, invitation or recommendation to subscribe for, or purchase securities by the Company. Nor does this announcement constitute investment or financial product advice (nor tax, accounting or legal advice) and is not intended to be used for the basis of making an investment decision. Investors should obtain their own advice before making any investment decision.

COMPETENT PERSONS STATEMENT

The information in this statement that relates to Ore Reserves is based on information that has been reviewed by Mr Vaughn Duke, of Sound Mining International SA (Proprietary) Limited (Sound Mining). Mr Duke takes overall responsibility for the Report as the Competent Person. He is a registered Professional Engineer with the Engineering Council of South Africa and a Fellow of The Southern African Institute of Mining and Metallurgy and has sufficient experience, which is relevant to the activity he is undertaking, to qualify as a Competent Person in terms of the JORC Code. Mr Duke has reviewed this Ore Reserve

Statement and given his permission for the publication of this information in the form and context within which it appears. Mr Duke has reviewed the Mineral Resource Statement reported by Mining Plus Limited (Mining Plus) (31 July 2020) from which the Ore Reserve has been derived, along with the modifying factors used for the conversion of the Mineral Resources to Ore Reserves.

Further details on the Mineral Resource can be found detailed in the ASX Announcement of 29 April 2020. The Company confirms that all material assumptions and parameters underpinning the Mineral Resource Estimate reported in the market announcement dated 29 April 2020 continue to apply and have not materially changed and that it is not aware of any new information or data that materially affects the information that has been included in this announcement.

The information in this announcement that relates to metallurgy has been compiled and assessed under the supervision of Mr Eugene Nel, a Professional Engineer of the Engineering Council of South Africa and a Member of the South African Institute of Mining and Metallurgy (both Recognised Professional Organisations as defined in the JORC Code). Mr Nel is the Chief Executive Officer (CEO) of VR8 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 Nel consents to the inclusion in this announcement of matters based on his information in the form and context in which it appears.

APPENDIX 1 - JORC CODE, 2012 EDITION – TABLE 1 REPORT

SECTION 4 ESTIMATION AND REPORTING OF ORE RESERVES

Sound Mining International SA (Proprietary) Limited estimated the Ore Reserve in accordance with the JORC Code (2012 Edition).

Criteria	Commentary
Mineral Resource Estimate for Conversion to Ore Reserves	<ul style="list-style-type: none"> The Mineral Resource for the Steelpoortdrift (SPD) Project of 662Mt at 0.77% V₂O₅, classified in the Measured, Indicated and Inferred categories was reported in the ASX Announcement of 29 April 2020. The Competent Person for the Mineral Resources is Mr Kerry Griffin of Mining Plus (Proprietary) Limited. The Ore Reserve reported in this Ore Reserve estimate is a maiden Ore Reserve Statement of the Vanadium Resource's SPD Vanadium Project. The Ore Reserve estimate was reported in 30 June 2021 and signed off by Vaughn Duke of Sound Mining International (Proprietary) Limited. Vaughn Duke is a Fellow of the Southern African Institute of Mining and Metallurgy (SAIMM) and has sufficient and relevant experience to qualify as a Competent Person. This maiden Ore Reserve is wholly inclusive of the Mineral Resource of the SPD Project as reported in April 2020 by the Mineral Resource Competent Person.
Site Visits	<p>The following persons have contributed to the Preliminary Feasibility (PFS) Study on which the maiden Ore Reserve has been based:</p> <ul style="list-style-type: none"> Vaughn Duke (Sound Mining International) is the Competent Person for the maiden ore reserve and was responsible for the overall review of the PFS document. He has not visited site and has based his opinion on information provided by the PFS's specialist consulting team and vanadium Resources. Keith Raine (Sound Mining) is an environmental specialist who understands the ESG related aspects of the SPD Project. He has visited site. Nicole Upton (Red Kite Environmental Solutions) is an environmental specialist and environmental assessment practitioner who is familiar with all the ESG related aspects of the SPD Project. She has visited site. Mark Turnbull (Sound Mining) is a financial modelling specialist who is responsible for the financial model demonstrating the economic viability of the SPD Project used in the estimation of the Ore Reserve. He has visited site. James Wilson is the financial modelling lead for the PFS. He has not visited site and has completed his work based on information provided by Vanadium Resources and other consultants. Eugene Nel (Vanadium Resources) is the project sponsor and Metallurgical Consultant who has supervised the metallurgical study test work and process flow design as part of the PFS. He has visited site and understands details associated with the site setting and location. Mehdi Nasiri (Sound Mining) is a geotechnical engineer who has undertaken geotechnical test work and slope design work for the SPD pits. He has visited site and understands the geotechnical and pit design aspects of the SPD Project. Zohreh Fakhraei (Sound Mining) is a principal mining engineer responsible for the pit design and schedule. She has not visited site. Francois Spies (UMS Group) is a lead process specialist responsible for the Concentrator design. He has not visited site. Rupert Swanepoel (Consulmet Metals) is a lead Process specialist responsible for the Salt Roast Leach (SRL) Plant. He has not visited site. Kerry Griffin (Mining Plus) is a lead Mineral Resource specialist. He has visited site and understands details associated with the site setting and location. Michael Einkamerer (Nurizon Consulting Engineers) is a lead TSF Specialist responsible for the TSF designs at the site Concentrator Plant and off site SRL Plant. He has not visited site. Graham Stripp (Sound Mining) is a principal mining engineer who has compiled the PFS document. He has visited site and understands details associated with the site setting and location.
Study Status	<ul style="list-style-type: none"> The Ore Reserve estimate is based on the outcomes of a Preliminary Feasibility Study which was completed during June 2021 and represents a maiden Ore Reserve estimate.

Criteria	Commentary																												
	<ul style="list-style-type: none"> The Mineral Resources have been converted to Ore Reserves by means of an open pit optimisation. The pit design has been informed from the outcomes of a geotechnical investigation. The modifying factors used in the Ore Reserve estimate are presented below: <table border="1" style="margin-left: 20px;"> <thead> <tr> <th style="background-color: #0056b3; color: white;">Modifying Factors and Recoveries</th> <th style="background-color: #0056b3; color: white;">Quantity</th> </tr> </thead> <tbody> <tr> <td>Dilution</td> <td>10.00%</td> </tr> <tr> <td>Geological Losses</td> <td>5.00%</td> </tr> <tr> <td>Mining Loss</td> <td>5.00%</td> </tr> <tr> <td>Concentrator Plant Recovery</td> <td>92.00%</td> </tr> <tr> <td>SRL Plant Recovery</td> <td>82.70%</td> </tr> <tr> <td>Vanadium Flake Price (USD/lb)</td> <td>6.00</td> </tr> <tr> <td>ZAR/USD Exchange Rate</td> <td>15.50</td> </tr> </tbody> </table> The Ore Reserves declared in this maiden Ore Reserve estimate for Vanadium Resources' SPD Vanadium Project have been based on a mine plan and mine designs that are deemed to be technically achievable and have been tested for economic viability using input costs, metallurgical recoveries and an expected long term Vanadium price, after due allowances for royalties. The Preliminary Feasibility Study has been prepared to an accuracy of +/- 20% using Measured and Indicated Mineral Resources. Inferred Mineral Resource material has not been included in the Ore Reserve Estimate. 	Modifying Factors and Recoveries	Quantity	Dilution	10.00%	Geological Losses	5.00%	Mining Loss	5.00%	Concentrator Plant Recovery	92.00%	SRL Plant Recovery	82.70%	Vanadium Flake Price (USD/lb)	6.00	ZAR/USD Exchange Rate	15.50												
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Cut-off Parameters	<ul style="list-style-type: none"> The breakeven cut-off grade was used. This was calculated internally by NPV Scheduler for each individual block model cell. Material is classified as ore if revenue exceeds processing costs. Processing costs in NPV Scheduler are inclusive of all additional ore mining costs. 																												
Mining Factors or Assumptions	<ul style="list-style-type: none"> The SPD Vanadium Project outcrops at surface therefore open pit mining was chosen as the mining method. Datamine mining software and NPV Pit Scheduler was used to generate a series of potentially viable open pit shells based on the Mineral Resource, preliminary cost inputs for mining and processing, mining and metallurgical recoveries and the sales price of a vanadium flake product (>98% V₂O₅). Geotechnical investigations informed the pit slope design which was set at 40° in weathered rock and 55° to 58° in fresh rock. A mining dilution of 10% was applied with an assumption of 0% V₂O₅. Mining losses of 5% and geological losses of 5% were modelled, resulting in an overall mining recovery of 90.25%. The minimum mining width matched the resource block size at 5m. Resource material classified as Inferred makes up 43% of the total Mineral Resource. Inferred material was treated as waste and excluded from the Ore Reserve estimate. All LG material (below Mineral Resource cut-off grade of 0.45% V₂O₅) was considered waste. The mining method has assumed the use of an open pit mining contractor. The contractor will require workshops and administration buildings to be constructed on site along with haul roads. It is anticipated that these buildings will be temporary installations rather than permanent structures. The recommended geometries for a stable open pit slope are presented in Table 5. <table border="1" style="margin-left: 20px;"> <thead> <tr> <th style="background-color: #0056b3; color: white;">Description</th> <th style="background-color: #0056b3; color: white;">Unit</th> <th style="background-color: #0056b3; color: white;">Fresh Rock</th> <th style="background-color: #0056b3; color: white;">Weathered Rock</th> </tr> </thead> <tbody> <tr> <td>Face Angle</td> <td>°</td> <td>85</td> <td>60</td> </tr> <tr> <td>Bench Height</td> <td>m</td> <td>5</td> <td>5</td> </tr> <tr> <td>Spill Berm Width</td> <td>m</td> <td>2</td> <td>4</td> </tr> <tr> <td>Number of Benches in Stack</td> <td>No.</td> <td>3</td> <td>4</td> </tr> <tr> <td>Catch Berm Width</td> <td>m</td> <td>6</td> <td>8</td> </tr> <tr> <td>Overall Slope Angle</td> <td>°</td> <td>54 to 58</td> <td>-40</td> </tr> </tbody> </table> 	Description	Unit	Fresh Rock	Weathered Rock	Face Angle	°	85	60	Bench Height	m	5	5	Spill Berm Width	m	2	4	Number of Benches in Stack	No.	3	4	Catch Berm Width	m	6	8	Overall Slope Angle	°	54 to 58	-40
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Overall Slope Angle	°	54 to 58	-40																										

Criteria	Commentary
Metallurgical Factors or Assumptions	<ul style="list-style-type: none"> The metallurgical process has been reported in detail in the PFS study. RoM will be treated using conventional crushing, grinding and magnetic separation techniques to produce a vanadium concentrate. This concentrate will then be roasted in the presence of salt to form water-soluble sodium metavanadate, from which vanadium pentoxide can be extracted. These methods are appropriate for the mineralisation at the Steelpoortdrift Vanadium Project. The processing techniques are all well tested techniques currently in use in similar operations in South Africa and globally. Metallurgical test work results were reported in ASX Announcements dated 24 June 2020 and 24 July 2020. These represented bulk sample/plant simulation trials utilising full core samples from wide diameter core drilling.
Environmental	<ul style="list-style-type: none"> The Mining Right which forms the Steelpoortdrift Vanadium Project has an approved Environmental Management Plan. However due to the proposed changes in layout and activities put forward in the PFS Study in comparison with the layout and activities described in the approved EMP, Vanadium Resources will be applying for an Integrated Environmental Authorisation (IEA), in terms of the National Environmental Management Act (NEMA) and the National Environmental Management: Waste Act (NEM:WA), for the new proposed mining operation. The Company is in the process of complying with all the environmental requirements including the applying for an Integrated Water Use License (IWUL).
Infrastructure	<ul style="list-style-type: none"> There is a substantial amount of regional infrastructure which can be accessed to assist the commencement of operations at the Steelpoortdrift Vanadium Project, including close proximity to national roads , rail heads, dams and ESKOM national grid. Vanadium concentrate from the Concentrator Plant will be road hauled to the SRL Plant for final processing through to a vanadium Flake concentrate. The Company is designing its operations to have minimal impact on the surrounding communities and its activities. A minimum number of buildings will need to be moved or disturbed as a result of the Company's activities. Rezoning of certain areas is in progress. The Company has entered into a Land Use Agreement with the relevant community authorities and will pay appropriate compensation for land usage.
Costs	<ul style="list-style-type: none"> All costs were determined on a US dollar (USD) basis. <p>Capital Expenditure:</p> <ul style="list-style-type: none"> The capital expenditure for the Concentrator Plant was costed based on a detailed Mechanical Equipment List. The capital expenditure for the SRL Plant was based on quotations received from original equipment manufacturers (OEMs) for supply of key equipment, with costs for installation, electrical, piping, pipework, structural steel and other plant construction items based on costs at similar operations in South Africa. Mining capital expenditure was based on establishment quotes received from open pit mining contractors. Targeted accuracy of +/- 20% inclusive of appropriate contingency. Environmental liability and ongoing rehabilitation costs were based on the PFS which were received from Red Kite Environmental Solutions (Proprietary) Limited Life-of-Mine of 25 years. <p>Operating Cost:</p> <ul style="list-style-type: none"> Operating costs were estimated using a combination of costs built up from first principles, quotations received from contractors and benchmarking against similar activities in mining projects in South Africa. The fixed operating costs were increased by a factor of 50% when the second SRL and Concentrator Plants become operational. Base currency is South African Rand (ZAR) with an exchange rate of ZAR15.50:USD1.00. Commodity price assumptions are discussed in "Revenue Factors" below. Royalties are based on the formula as defined in the South African Royalties Act (2010) linked to the Minerals and Petroleum Resources Development Act (MPRDA 2002). The royalties over the LoM were calculated at an average of 4.8%.

Criteria	Commentary
Revenue Factors	<ul style="list-style-type: none"> • RoM grade has been estimated on an annual basis from the Life-of-Mine plan. • A vanadium flake ($V_2O_5 > 98\%$) price of USD6.00/lb has been used for evaluation purposes. • The Company has not established any contracts or committed any of its production pursuant to off-take agreements at this time. • Prices are in USD.
Market Assessment	<ul style="list-style-type: none"> • Publicly available commodity reports continue to forecast a supply deficit for vanadium for the short to medium term future. • No formal customer or competitor analysis have been completed at this stage. • The Company and its consultants are in contact with a number of potential customers. • The specification planned to be produced and sold (vanadium flake, $V_2O_5 > 98\%$) is a standard industry specification.
Economic	<ul style="list-style-type: none"> • The inputs to the discounted cashflow model are tabulated in the body of the PFS. • The economic viability of the SPD Project has been determined using the Discounted Cash Flow method of valuation. For the PFS Study a discount rate of 8% was applied. • The financial model is in real terms. • The model was based on yearly increments. • No escalation was applied. • The SPD Project was valued as a single tax entity, being the South African company owning the Mining Right. • Royalties were set at the formula applicable for refined minerals. • A South African corporate tax rate of 27% was applied.
Social	<ul style="list-style-type: none"> • The Company has a social license to operate based on the Social and Labour Plan which was approved as part of the grant of the Mining Right to Vanadium Resources (Proprietary) Limited. The Company has a commitment to adhere to this Plan and also continuously review and improve it to ensure best practises are adhered to and stakeholders are receiving benefits both directly and indirectly from the Project.
Other	<ul style="list-style-type: none"> • The PFS risk analysis has not identified any fatal project flaws. • All material legal agreements are current and active, under which Vanadium Resources has a right to own 73.95% of the Project. • Vanadium Resources is awaiting consent under section 11 of the MPRDA to move from 50% to 73.95%. • No marketing agreements are in place at this stage. • The Mining Right is current and valid. Applications for water usage license and re-zoning are in progress and not expected to affect the time-lines outlined in the release.
Classification	<ul style="list-style-type: none"> • The Ore Reserve categories appropriately reflect the Competent Person's view of the deposit. • Probable and Proved Ore Reserves are declared for the SPD Project. Measured and Indicated Resources within the final pit design that have been scheduled for processing have been converted to Ore Reserves after application of the Modifying Factors.
Audits or Reviews	<ul style="list-style-type: none"> • No audits or reviews of Ore Reserve estimates have been conducted.

Criteria	Commentary
Discussion of Relative Accuracy/Confidence	<ul style="list-style-type: none"> • The Ore Reserve was estimated from the Mineral Resource after consideration of the level of confidence in the Mineral Resource and taking account of material and relevant modifying factors including mining, processing, infrastructure, environmental, legal, social and commercial factors. • The Probable Ore Reserve estimate has been based on the amount of Ore Reserve material within the pit design which is associated with the Indicated and Measured Mineral Resource. • No Inferred Mineral Resource was included in the Ore Reserve. The Ore Reserve represents the economically mineable part of the Measured and Indicated Mineral Resources. • The proposed mine and mineral beneficiation planning through to a final vanadium pentoxide flake product is considered by the Competent Person to be technically achievable. • The key factors that are likely to affect the accuracy and confidence in the Ore Reserves are: <ul style="list-style-type: none"> • Changes in vanadium pentoxide flake prices. • Changes in forecast metallurgical recoveries.