28 November 2018

Strong final assays pave way for JORC Resource at SPD Vanadium Project

Next phases of drilling already well advanced to upgrade the Resource and test nearby high-grade vanadium pipes for DSO potential

Key Points

- **Final assays in from drilling program to calculate maiden JORC Resource**
- **The outstanding results include:**
  - **18m at 0.80% V_2O_5 from surface (VRC017)**
    incl. 4m at 1.16% V_2O_5 from 0m
    incl. 4m at 0.94% V_2O_5 from 14m
  - **11m at 0.84% V_2O_5 from surface (VRC016)**
    incl. 4m at 1.00% V_2O_5 from 6m
  - **9m at 1.06% V_2O_5 from 22m (VRC015)**
    incl. 3m at 1.45% V_2O_5 from 28m
  - **11m at 0.98% V_2O_5 from 24m (VRC019)**
    incl. 8m at 1.15% V_2O_5 from 27m
    incl. 2m at 1.65% V_2O_5 from 33m
  - **14.2m at 0.82% V_2O_5 from 2.9m (VDD006)**
  - **12m at 1.00% V_2O_5 from 46m (VRC014)**
    incl. 9m at 1.13% V_2O_5 from 49m
    incl. 2m at 1.74% V_2O_5 from 56m
- **Next phases of drilling now well advanced with four rigs operating**
- **Drilling underway to test nearby shallow vanadium pipes, which have the potential to complement a low-cost DSO operation at SPD**

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Tando Resources (ASX: TNO, **Tando** or **the Company**) is pleased to announce continued outstanding assay results which will help underpin the impending maiden JORC Resource at its SPD Vanadium Project.

These latest assays include the final results from the recently-completed Phase One drilling program. They will now be incorporated into the maiden JORC Resource estimate, which is on track for publication before Christmas.

All holes reported in this statement are shown on Figure 1 with significant intersections tabulated in Appendix 2 as whole-rock, or pre-concentrate, grades including:

- 18m at 0.80% V_2O_5 from surface (VRC017)
    - incl. 4m at 1.16% V_2O_5 from 0m
    - incl. 4m at 0.94% V_2O_5 from 14m
- 11m at 0.84% V_2O_5 from surface (VRC016)
    - incl. 4m at 1.00% V_2O_5 from 6m
- 12m at 1.00% V_2O_5 from 46m (VRC014, Lower Layer)
    - incl. 9m at 1.13% V_2O_5 from 49m
    - incl. 2m at 1.74% V_2O_5 from 56m
- 9m at 1.06% V_2O_5 from 22m (VRC015, Lower Layer)
    - incl. 3m at 1.45% V_2O_5 from 28m
- 14.2m at 0.82% V_2O_5 from 2.9m (VDD006, Upper Layer)
- 11m at 0.98% V_2O_5 from 24m (VRC019, Lower Layer)
    - incl. 8m at 1.15% V_2O_5 from 27m
    - incl. 2m at 1.65% V_2O_5 from 33m
- 7m at 1.06% V_2O_5 from 61m (VRC009, Upper Layer)
    - within an interval of 54m at 0.70% V_2O_5 from 47m
- 7m at 1.15% V_2O_5 from 44m
  & 4m at 0.95% V_2O_5 from 59m (VRC010, Upper Layer)
    - within an interval of 32m at 0.77% V2O5 from 32m
- 11m at 0.89% V_2O_5 from 36m (VRC018, Lower Layer)
    - including 7m at 1.09% V_2O_5 from 39m
- 15m at 0.99% V_2O_5 from 94m (VRC022, Lower Layer)
    - including 8m at 1.11% V_2O_5 from 95m
- 12m at 0.98% V_2O_5 from 76m (VRC017, Lower Layer)
    - including 9m at 1.12% V_2O_5 from 79m

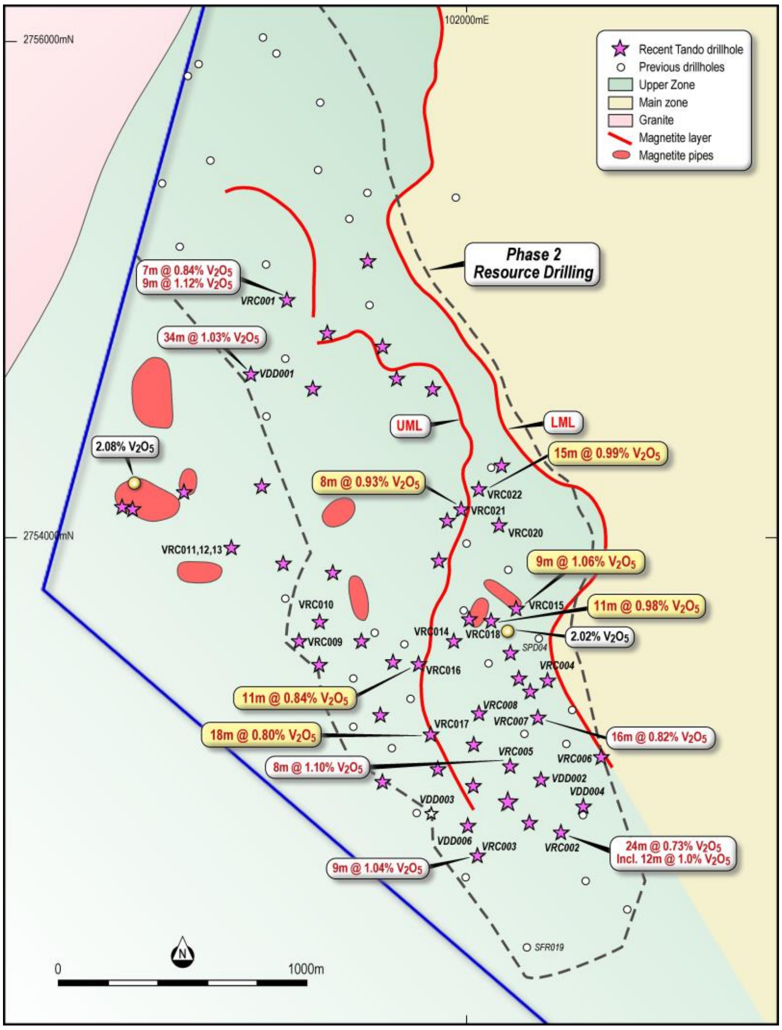

***Figure 1**. Plan showing location of drilling at SPD as well as historical and planned drilling.*

The Phase 1 drilling program targeted the established SPD deposit, where there is currently a resource of 513 million tonnes at a grade of 0.78% V_2O_5 defined under the SAMREC code. This resource is a "foreign resource" (as defined in the ASX Listing Rules) and is detailed in Appendix 1 below. Drilling aimed to provide sufficient data to allow a maiden JORC-compliant Mineral Resource to be calculated and receipt of these assays enables the Mineral Resource Estimate to be finalised.

The Phase Two drilling program is now well advanced with the aim of upgrading the initial JORC Resource to an Indicated category. This program comprises 58 holes for 5,550m. Three rigs are operating and 38 holes for 3,148m have been completed to date. The program is anticipated to be completed in December.

Drilling is also underway to test the potential of the surrounding high-grade vanadium pipes at SPD (refer ASX Announcement 23 November 2018). This drilling is aimed at establishing either a Direct Shipping Ore (DSO) or similar near-term production operation.

Historical drilling at SPD returned magnetic concentrate grades above 2.2% V_2O_5 (refer ASX release 17 September 2018). Tando is awaiting concentrate analyses from drill samples submitted for magnetic separation by Davis Tube. Simple beneficiation processes like magnetic separation are being investigated to generate a concentrate which could be able to be blended with DSO material for sale.

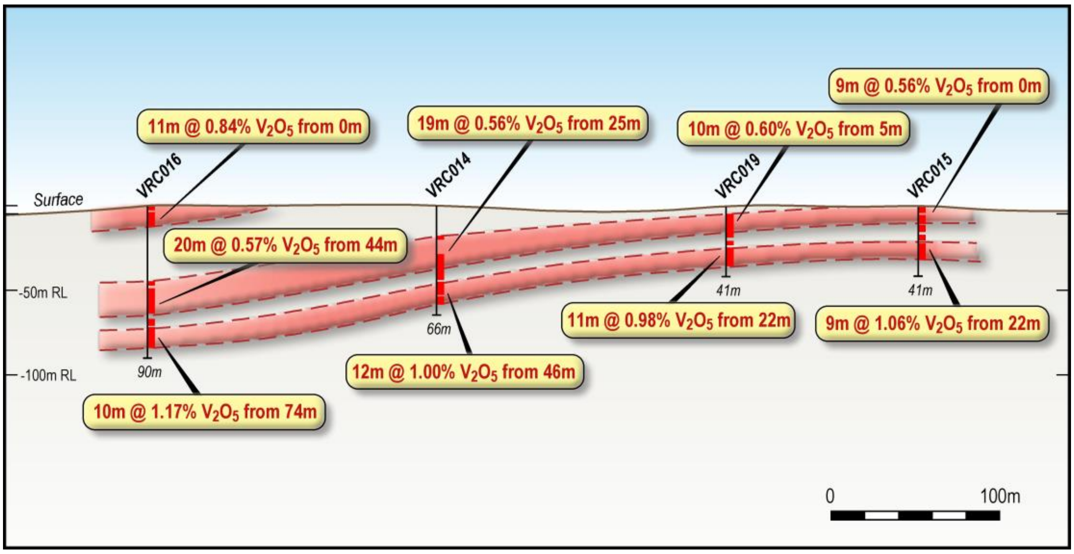

***Figure 2**. Cross Section showing results from VRC014 - 019.*

Tando Managing Director Bill Oliver said the Company's strategy to establish SPD as a substantial, robust vanadium project was proceeding to plan.

"*These latest results continue to demonstrate the high quality of the SPD vanadium deposit and will further strengthen the impending maiden JORC Resource," Mr Oliver said.*

"The strategy to establish a DSO operation or similar high-grade, near-term production opportunity utilising material from the nearby vanadium pipes is also on track, with the drilling program making strong progress.

"The combination of these parallel activities will underpin strong newsflow for many months."

As part of drilling activities, the drilling contractor has recruited employees from the local communities, assisted by Tando, which is expected to be the first of many opportunities for the project to provide benefits such as employment and training for these communities.

The Company is fully funded for the drilling programme and resource work as well as the metallurgical and mining studies which will follow completion of the drilling programme.

Background on the SPD Vanadium Project

Global vanadium projects are summarised in Figure 3. Currently approximately 85% of the world's vanadium is produced in China, Russia and South Africa. The SPD Vanadium Project is located in one of these producing regions and has the potential to be globally significant based on its tonnage and grade in concentrate (Figure 3).

The SPD Vanadium Project is located in a similar geological setting to the mining operations of Rhovan (Glencore), Vametco (Bushveld Minerals) and Mapochs in the Gauteng and Limpopo provinces of South Africa (Figure 4). Both the Rhovan and Vametco processing plants include refining to generate products used in the global steel making industry and aim to develop downstream processing to produce materials used in the battery market.

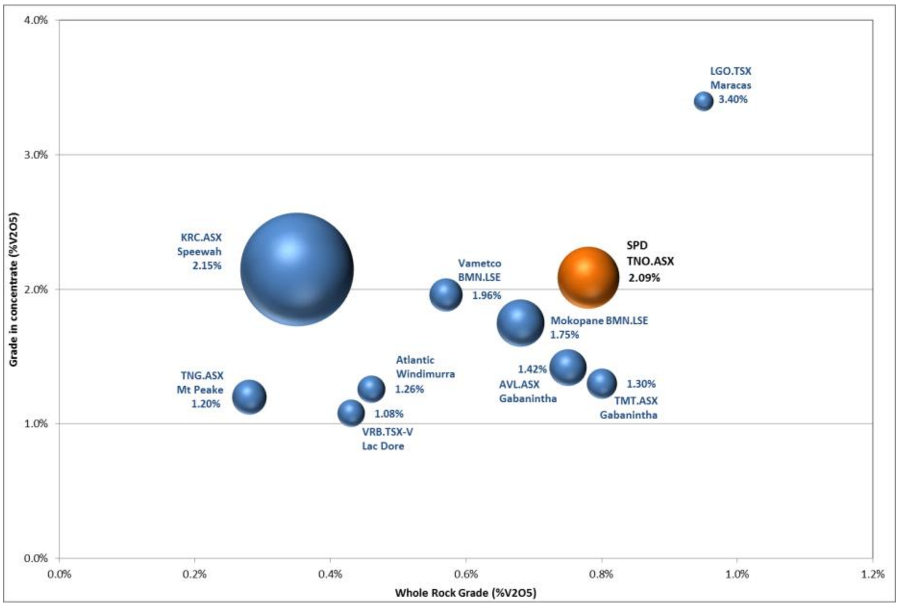

***Figure 3**. Global vanadium projects categorised by resource grade and grade in concentrate.*
Label states concentrate grade based on reported testwork. Bubble size denotes tonnage.
Tonnes and grade based on reported total resources, due to different host exchanges these are reported under differing reporting regimes (JORC, 43-101 or SAMREC).
Source: Company websites, ASX / TSX / LSE announcements.

The region around the SPD Vanadium Project contains critical infrastructure such as:

- High voltage power lines and sub stations operated by the state provider ESKOM,
- Water resources including the De Hoop Dam 15km south of the project,
- Rail links,
- Sealed roads around the project area,
- Mining service companies and support business in the immediate area,
- Available skilled workforce within the local community and the region.

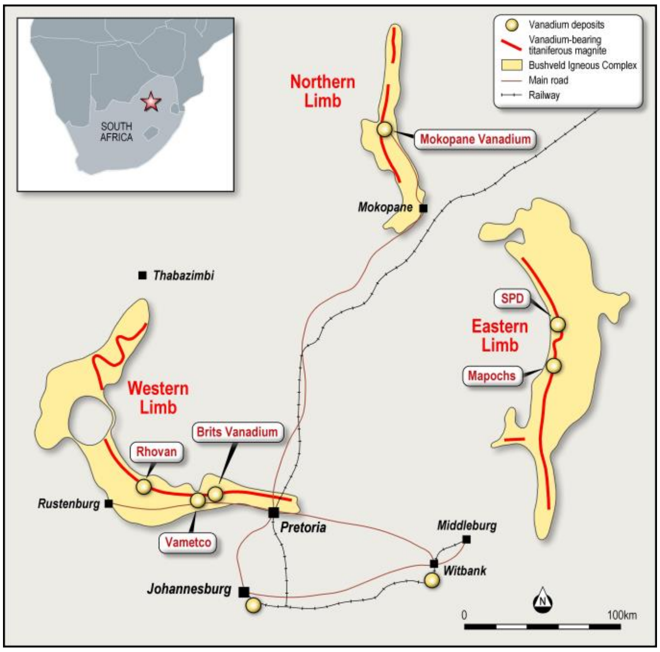

***Figure 4**. Location of the SPD Vanadium Project and other vanadium deposits in the Bushveld Igneous Complex.*

Background on Vanadium

The Company has targeted vanadium as a commodity of interest due to its usage in energy storage, specifically vanadium redox flow batteries (**VRFB**). It is anticipated that forecast increase in battery usage for large scale energy storage will lead to a significant increase in the demand for vanadium. VRFB technology was developed in Australia and has the following advantages:

- a substantially longer lifespan than most current batteries (up to 20 years),
- being able to hold charge for a substantial time (up to 12 months),
- the ability to discharge 100% of its charge without damage,
- scalability to enable larger scale storage facilities to be constructed, and
- greater chemical stability as only a single element is present in the electrolyte.

These features make VRFBs attractive for household or small town sized energy storage requirements. According to research conducted by Lazard (NYSE.LAZ) VRFB's already have a levelised cost of storage that exceeds Li-ion battery storage by 26% to 32% on a comparative basis (full report available at https://www.lazard.com/perspective/). Current VRFB facilities in usage or in development are located in China and Japan with development of further facilities constrained by an absence of supply of "battery grade" V_2O_5.

The price for >98% Vanadium Pentoxide (V_2O_5), a more commonly traded intermediate product, has increased from US$3.50/lb at the start of 2017 and approximately US$10/lb at the start of 2018 to current prices at and above US$30/lb (fob China, source: Metal Bulletin).

Current day demand for vanadium arises from its use in steel making. Vanadium is principally used to add strength via various alloys as well as other speciality uses. This usage accounts for over 90% of current vanadium demand in today's market (with the balance supplying chemical usages). Demand from steel makers is forecast to increase with the recent implementation of stricter standards on the strength of steel to be used in construction (specifically rebar).

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Competent Persons Statement

The information in this announcement that relates to Exploration Results and other technical information 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 Bill Oliver, the Managing Director of Tando Resources Ltd. Mr Oliver is a Member of the Australasian Institute of Mining and Metallurgy and the Australasian Institute of Geoscientists. He 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 Oliver consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears. The Exploration Results are based on standard industry practises for drilling, logging, sampling, assay methods including quality assurance and quality control measures as detailed in Appendix 3.

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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 Tando 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 Tando's control.

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APPENDIX 1.

The resource for the SPD Vanadium Project as shown in Table 1 was estimated by GEMECS Pty Ltd based on all available drilling data in accordance with the SAMREC Code (2007) and is therefore a "qualifying foreign resource estimate" as defined in the ASX Listing Rules (further detail below and in the ASX Announcement of 22 March 2018). The resource was classed as inferred under the SAMREC Code. Bill Oliver, Managing Director of Tando, is acting as the Competent Person and has reviewed reports and data compiled and used in the resource estimation. The authors of the report on the 2010 exploration activities and resource estimate have confirmed that there are no material changes to the resource or underlying data since the date of the report (June 2010), and that the information presented here is consistent with the data it reported.

***Table 1**. SPD Vanadium Project resource (classed as inferred under the SAMREC Code).*

Reef	Avge Thickness (m)	Tonnes (Mt)	Whole Rock V_2O_5%	Mt%	Magnetite Tonnes	V_2O_5% in Magnetite
Upper Layer	24	184.2	0.73	42.4	78.1	1.99
Lower Layer	22	329.1	0.81	41.6	136.0	2.20
Averages & Totals	**23**	**513.3**	**0.78**	**41.9**	**215.0**	**2.09**

Table 1 Notes: While this foreign resource is not reported in compliance with the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (**JORC Code**), it is the Company's opinion (and the opinion of the Competent Person for this document), that the data quality and validation criteria, as well as the resource methodology and check procedures, are reliable and consistent with criteria as defined by the JORC Code. All tabulated data has been rounded to one decimal place for tonnage and two decimal places for grades. %V_2O_5 is derived from XRF analysis by multiplying %V by 1.785.

The resource for the SPD Vanadium Project is based on two phases of drilling detailed in the ASX Announcement of 22 March 2018 (also refer Figure 1). Initial exploration by Vantech in 1997 comprised 16 diamond core drill holes for 1051.6m as well as detailed geological mapping. Exploration by VanRes comprised 23 RC drillholes for 1,073m and 2 diamond core drillholes for 278m drilled in 2010. Best whole-rock drilling results from the SPD Vanadium Project include:

- 9m at 1.34% V_2O_5 + 10.5% TiO_2 from 9m (SFR019)
- 13m at 1.13% V_2O_5 + 7.43% TiO_2 from 10m (SFR017)
- 14m at 1.08% V_2O_5 + 7.07% TiO_2 from 9m (SFR013)
- 20m at 0.96% V_2O_5 + 8.35% TiO_2 from 11m (SFR011)
- 15m at 0.92% V_2O_5 + 6.44% TiO_2 from 8m (SFR018)
- 12.2m at 0.90% V_2O_5 from 127.2m & 26.9m at 0.80% V_2O_5 from 43.1m (SFDD001)

Drill samples were passed through a Davis Tube to obtain a magnetic concentrate. Vanadium and titanium content analyses in the concentrate are very consistent, **averaging 2% V_2O_5 and 13% TiO_2** (ASX Announcement 22 March 2018).

The Competent Person has not yet completed sufficient review on the qualifying foreign resource estimate to classify it in accordance with the JORC Code at this time and consequently it is uncertain that, following evaluation and/or further exploration work that the qualifying foreign resource estimate will be able to be reported as a Mineral Resource in accordance with the JORC Code. As detailed in this announcement the Company plans to implement a drilling programme to establish a Mineral Resource and, provided results are consistent with previous drilling, carry out further drilling aimed at increasing the confidence in the Mineral Resource.

APPENDIX 2: Significant Drillhole Intercepts from Drilling at the SPD Vanadium Project

HOLE ID	Drill Type	EAST	NORTH	EOH (m)	UNIT	INTERSECTION (whole rock)				(magnetic concentrate)				
						From (m)	Width (m)	V_2O_5 %	TiO_2 %	V_2O_5 %	TiO_2 %	Fe* %	Al_2O_3 %	SiO_2 %
VDD001	DD	801358	7246865	135	UML	21	**34**	**1.03**	**5.92**					
					LML	108.6	**8.5**	**1.02**	**6.64**					
VDD002	DD	802477	7245218	56.8	LML	3.8	**19.6**	**0.60**	**4.22**					
VDD003	DD	802040	7245103	131.7	UML	*UML sampled for Metallurgy*								
VDD003	DD	802040	7245103	131.7	LML	78	13.2	0.62	3.63					
					LML	94	**10.1**	**0.89**	**6.10**					
					incl	97	**7.1**	**1.04**	**7.07**					
VDD004	DD	802634	7245063	25		*Sampled for Metallurgy*								
VDD005	DD	802400	7245603	29		*Sampled for Metallurgy*								
VDD006	DD	802185	7245045	101.8	UML	2.9	**14.2**	**0.82**	**5.84**					
					LML	51	33.7	0.67	6.64					
					incl.	77.3	**7.6**	**1.17**	**7.90**					
					incl.	82.6	**2.4**	**1.63**	**10.5**					
VRC001	RC	801520	7247155	90	UML	3	**7**	**0.84**	**5.60**					
					LML	47	35	0.66	4.59					
					incl.	73	**9**	**1.12**	**7.49**					
					incl.	80	**2**	**1.62**	**10.2**					
VRC002	RC	802548	7245002	39		0	**24**	**0.73**	**5.02**					
					incl.	12	**12**	**1.00**	**6.77**					
					incl.	22	**2**	**1.72**	**11.2**					
VRC003	RC	802414	7245050	69		23	35	0.65	4.53					
					incl.	49	**9**	**1.04**	**6.95**					
VRC004	RC	802503	7245603	46		18	**3**	**0.62**	**3.22**					
VRC005	RC	802351	7245271	62		13	37	0.65	4.52					
					incl.	42	**8**	**1.10**	**7.43**					
					incl.	48	**2**	**1.56**	**10.2**					
VRC006	RC	802723	7245283	36		16	2	0.53	3.06					
VRC007	RC	802495	7245445	38		0	**1**	**1.31**	**11.1**					
						10	**16**	**0.82**	**5.06**					
					incl.	24	**2**	**1.54**	**9.86**					
VRC008	RC	802230	7245480	76	UML	23	25	0.68	4.70					
					incl.	40	**8**	**1.03**	**6.94**					
VRC009	RC	801520	7245793	156	UML	47	54	0.70	5.62					
					incl.	61	**7**	**1.06**	**8.36**					
					LML	134	**11**	**0.98**	**6.63**					
					incl.	143	**2**	**1.70**	**11.0**					
VRC010	RC	801600	7245869	134	UML	32	32	0.77	9.86					
					incl.	44	**7**	**1.15**	**9.15**					
					&	59	**4**	**0.95**	**6.30**					
					LML	93	38	0.64	4.45					

					incl.	123	**8**	**1.11**	**7.50**					
					incl.	129	**2**	**1.61**	**10.5**					
VRC011	RC	801250		31		*Hole abandoned before target*								
VRC012	RC	801258	7246180	54		42	4	0.59	7.9					
						Redrill of VRC011, also abandoned								
VRC014	RC	802138	7245775	66		25	19	0.56	4.05					
					LML	46	**12**	**1.00**	**6.71**					
					incl.	49	**9**	**1.13**	**7.47**					
					incl.	56	**2**	**1.74**	**10.6**					
VRC015	RC	802394	7245898	41		0	9	0.56	4.41					
						11	3	0.54	3.89					
						17	2	0.60	4.20					
						22	**9**	**1.06**	**7.09**					
					incl.	**28**	**3**	**1.45**	**9.40**					
VRC016	RC	801990	7245688	90		**0**	**11**	**0.84**	**5.80**					
					incl.	**6**	**4**	**1.00**	**7.12**					
					UML	44	20	0.57	4.03					
					LML	**74**	**10**	**1.17**	**7.83**					
					incl	**81**	**3**	**1.71**	**11**					
VRC017	RC	802033	7245403	93		**0**	**18**	**0.80**	**5.72**					
					incl	**0**	**4**	**1.16**	**8.75**					
					incl	**14**	**4**	**0.94**	**6.78**					
					UML	49	19	0.56	4.3					
					LML	**76**	**12**	**0.98**						
					incl	**79**	**9**	**1.12**	**7.55**					
					incl	**85**	**3**	**1.46**	**9.42**					
VRC018	RC	802203	7245863	56	UML	15	14	0.60	4.31					
					LML	**36**	**11**	**0.89**	**5.98**					
					incl	**39**	**7**	**1.09**	**7.25**					
VRC019	RC	802289	7245855	41	UML	5	10	0.60	4.38					
					LML	**24**	**11**	**0.98**	**6.45**					
					incl	**27**	**8**	**1.15**	**7.66**					
					incl	**33**	**2**	**1.65**	**10.5**					
VRC020	RC	802333	7246231	56	UML	15	18	0.55	3.64					
					LML	**37**	**5**	**1.14**	**6.82**					
					incl	**40**	**2**	**1.42**	**8.70**					
VRC021	RC	802185	7246300	86	UML	47	19	0.53	3.86					
					LML	**73**	**8**	**0.93**	**5.82**					
					incl	**79**	**1**	**1.73**	**11.1**					
VRC022	RC	802242	7246395	116	UML	56	25	0.56	3.89					
						88	4	0.53	3.15					
					LML	**94**	**15**	**0.99**	**6.25**					
					incl	**95**	**8**	**1.11**	**7.24**					
					incl	**107**	**2**	**1.44**	**8.85**					

VRC023	RC	802066	7246301	86		*Assay results pending*
VRC024	RC	800846	7246321	86		*Assay results pending*
VRC025	RC	800847	7246331	86		*Assay results pending*
VRC026	RC	800850	7246348	86		*Assay results pending*
VRC027	RC	800857	7246362	86		*Assay results pending*
VRC028	RC	800829	7246339	86		*Assay results pending*
VRC029	RC	800835	7246354	86		*Assay results pending*
VRC030	RC	800824	7246353	86		*Assay results pending*
VRC031	RC	800809	7246346	86		*Assay results pending*
VRC032	RC	800796	7246343	86		*Assay results pending*
VRC033	RC	800822	7246366	86		*Assay results pending*
VRC034	RC	800876	7246347	86		*Assay results pending*
VRC035	RC	801646	7247189	86		*Assay results pending*
VRC036	RC	802436	7245563	86		*Assay results pending*
VRC037	RC	802366	7245723	86		*Assay results pending*
VRC038	RC	802347	7246469	86		*Assay results pending*
VRC039	RC	802086	7246095	86		*Assay results pending*
VRC040	RC	801838	7247307	86		*Assay results pending*
VRC041	RC	801666	7247021	86		*Assay results pending*
VRC042	RC	801885	7246967	86		*Assay results pending*
VRC043	RC	801942	7246831	86		*Assay results pending*
VRC044	RC	802078	7246785	86		*Assay results pending*
VDD007	DD	801760	7245770	134.6		*Assay results pending*
VDD008	DD	801590	7245680	140.7		*Assay results pending*
VDD009	DD	801890	7245698	119.6		*Assay results pending*
VDD010	DD	801831	7245486	119.7		*Assay results pending*
VDD011	DD	800842	7246335	77.6		*Assay results pending*
VDD012	DD	801075	7246405	65.3		*Assay results pending*
VDD013	DD	802059	7245262	91.8		*Assay results pending*
VDD014	DD	802204	7245358	66.3		*Assay results pending*
VDD015	DD	802333	7245126	62.6		*Assay results pending*
VDD016	DD	801835	7245220	128.8		*Assay results pending*
VDD017	DD	802208	7244911	110.6		*Assay results pending*
VDD018	DD	802197	7245189	74.6		*Assay results pending*
VDD019	DD	801265	7246164	132.6		*Assay results pending*
VDD020	DD	801460	7246107	147.2		*Assay results pending*
VDD021	DD	801387	7246415	128.8		*Assay results pending*
VDD022	DD	801660	7246064	158.6		*Assay results pending*
VDD023	DD	801603	7246802	113.7		*Assay results pending*

Notes:

- All coordinates are in UTM Zone 35S (WGS 84).
- All holes are vertical (-90 dip).
- Shaded results are new results reported in this announcement
- Results should be read in conjunction with the data provided in Appendix 3.

APPENDIX 3.

The following Tables are provided to ensure compliance with the JORC Code (2012 Edition) requirements for the reporting of Exploration Results at the SPD Vanadium Project.

Section 1: Sampling Techniques and Data

(Criteria in this section applies to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling techniques	*Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*	Diamond core drilling using NQ sized core. RC drilling using 5 ¼" face sampling hammer.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	RC drilling and the core sampled at 1m intervals except where these are adjusted for geological features (core only). Core will be cut in half, with all core being photographed for reference. RC drilling will be split on site using a riffle splitter.
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	All aspects of the determination of mineralisation are described in this table. Diamond core drilling and RC drilling using these methods are considered appropriate for sampling the vanadiferous titanomagnetite unit which hosts the mineralisation. All of the drill samples have been sent to a commercial laboratory for crushing, pulverising and chemical analysis by industry standard practises.
Drilling techniques	*Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic etc) and details (e.g. core diameter, triple of standard tube, depth of diamond tails, face-sampling bit or other type, whether core is orientated and if so, by what method, etc).*	Diamond drilling uses HQ and NQ2 core sizes. Coring was from surface using HQ. Core was changed to NQ2 when ground conditions were competent. All diamond core is stored in industry standard core trays labelled with the drill hole ID and core interval. RC drilling uses face sampling hammer and 5 ¼" bit sizes.
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.*	Diamond drill core recovery is being recorded as a percentage of measured recovered cores versus drilled distance. Recoveries have been high to date. RC drill samples are weighed to give a quantitative basis to estimation of recovery.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Diamond drilling - coring only changed to NQ2 when ground conditions were competent. RC – consistent drilling technique, cleaning of cyclone.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	No relationship observed between recovery and grade. There is no known or reported relationship in historical drilling between sample recovery and grade.
Logging	*Whether core and chip samples have been geologically*	Diamond drill core and RC drill chips are being

Criteria	JORC Code explanation	Commentary
	and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	geologically logged for the total length of the hole. Logging is recording lithology, mineralogy, alteration, veining, structure, mineralisation and weathering. Logs are coded using the company geological coding legend and entered into Excel worksheets prior to being loaded into the company database. All core is being photographed with images to be stored on the company server. Logging is appropriate and sufficiently detailed to support Mineral Resource estimates.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Logging of chips and diamond core is both qualitative (eg. colour) and quantitative (eg. minerals percentages).
	The total length and percentage of the relevant intersections logged.	100% of all drilling to date by the Company has been logged.
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.*	Sampling for all diamond core samples will be undertaken on split core, halved via a core saw.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	RC drilling will be sampled dry and split through a riffle splitter.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	The sampling techniques for both diamond drilling and RC drilling are of consistent quality and appropriate.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	To ensure representivity core was taken from the same side of the hole each time, with field duplicates taken and inserted. Certified Reference Materials (CRMs) were selected to be similar in chemistry to the mineralisation being targeted.
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.	One field duplicate is collected per 20 samples in addition to laboratory duplicates which were also reported.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	The material and sample sizes are considered appropriate given the magnetite unit being sampled.
Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	The samples were sent to ALS Johannesburg, an ISO accredited commercial laboratory, for preparation and analysis. All samples were analysed by XRF fusion for Al2O3, As, Ba, CaO, Cl, Co, Cr2O3, Cu, Fe, K2O, MgO, Mn, Na2O, Ni, P, Pb, S, SiO2, Sn, Sr, TiO2, V, Zn and Zr as well as loss on ignition.
	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	Hand held assay devices have not been reported.
	Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	For RC drilling QA/QC samples are inserted every 10 samples. These alternate between a CRM & blank, and a field duplicate. For diamond core drilling QA/QC samples, being a CRM and a blank, are inserted every 20 samples. CRM are sourced from an accredited source and are of similar material to the mineralisation being sampled. QA/QC samples are checked following receipt of each

Criteria	JORC Code explanation	Commentary
		assay batch to confirm acceptable accuracy and precision.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	Assay results and intersections have been reviewed by independent geological consultants.
	The use of twinned holes.	Twinned holes are being drilled as part of the drilling programme.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Primary data is collected in the field and entered into Excel worksheets prior to being loaded into a database managed by an independent consultant. All core is being photographed with images to be stored on the company server.
	Discuss any adjustment to assay data.	Analytical result for V converted to V_2O_5 by multiplying by 1.785.
Location of data points	*Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	Location data has been recorded by handheld GPS (±5m accuracy on easting and northing) and will be regularly checked by survey by a licensed surveyor. Drillhole deviation for drilling is being measured via in-rod surveys during drilling.
	Specification of the grid system used.	The grid system for the SPD Vanadium Project is UTM Zone 35 S (WGS 84 Datum).
	Quality and adequacy of topographic control.	Good, based on recent survey.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	Drilling to date over the SPD Vanadium Prospect is on approximately 150m - 300m centres east-west and 300m -450m centres north-south over the mineralised body.
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	Data spacing is deemed sufficient to establish geological and grade continuity to establish a mineral resource estimate, this was estimated under the SAMREC Code which is not JORC compliant but is a "foreign resource" as defined in the ASX Listing Rules..
	Whether sample compositing has been applied.	No sample compositing has been applied.
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	The majority of the drilling at the SPD Vanadium Project is inclined to the north-east which is considered appropriate given the regional and local geological stratigraphy.
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	To date, orientation of the mineralised domain has been favourable for perpendicular drilling and sample widths are not considered to have added a significant sampling bias.
Sample security	*The measures taken to ensure sample security.*	Samples are stored at a secure yard. Samples are then delivered to the assay laboratory in Johannesburg by representatives of the Company.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	No independent audits have been undertaken.

Section 2: Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	*Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*	The SPD Project comprises a Mining Right covering the farm Steelpoortdrift 365 KT.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The tenure is in good standing.
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	The Project has previously been explored for magnetite-hosted Fe-V-Ti deposits.
Geology	*Deposit type, geological setting and style of mineralisation.*	Vanadium mineralisation at the SPD Project is located close to the contact between the Upper Zone and Main Zone of the Bushveld Igneous Complex and adjacent to the Steelpoort Fault. Mineralisation is hosted in two layers, the Upper Magnetite Layer (UML) and Lower Magnetite Layer (LML), which dip shallowly (10-12deg) to the west.
Drill hole Information	*A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* • *easting and northing of the drill hole collar* • *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* • *dip and azimuth of the hole* • *down hole length and interception depth* • *hole length.*	Refer Appendix 2.
	If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	Not applicable, information has been included.
Data aggregation methods	*In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.*	All results > 0.5% V_2O_5 have been averaged weighted by downhole length, and inclusive of a maximum of 2m internal waste.
	Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	High grade intervals > 1% V_2O_5 and 1.5% V_2O_5 have also been reported. No internal waste used for these.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalent values are being used for reporting exploration results.
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	Downhole lengths reported, true widths not known at this time.
Diagrams	*Appropriate maps and sections (with scales) and*	Appropriate diagrams are shown in the text.

Criteria	JORC Code explanation	Commentary
	tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	
Balanced reporting	*Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	All results > 0.5% V_2O_5 included.
Other substantive exploration data	*Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	Exploration data is contained in previous ASX Announcements.
Further work	*The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	As detailed in the text drilling is ongoing to verify and infill historical drilling and provide a sub surface test of the extent of the pipes.