RESERVE DRILLING TO COMMENCE AT STEELPOORTDRIFT VANADIUM PROJECT

HIGHLIGHTS

- **Drilling rigs mobilised to site to commence reserve drilling as part of PFS study**
- **More exceptional concentrate results with consistent high grades of more than 2% V_2O_5 in the final round of samples from 2018-2019 drilling**
- **Excellent mass recovery across mineralised intervals, increasing to +40% in higher grade zones (insitu grades +1.0% V_2O_5)**

The management of Vanadium Resources Limited (ASX:VR8) (**VR8** or **the Company)** is pleased to announce more exceptional concentrate results which support the quality of vanadium mineralisation present at the Steelpoortdrift (SPD) Vanadium Project in South Africa.

These results continue to show the high grade, high quality nature of the vanadiferous titanomagnetite present at Steelpoortdrift, which is potentially a saleable product and also provides an advantage in downstream processing due to being high in Fe (> 55%), TiO_2 (~12%) and V_2O_5 (~2.2%) and low in silica and alumina (Appendix 1).

Further results are to be received as drill rigs arrive on site to commence the reserve drilling programme at Steelpoortdrift. The short drilling campaign is focussed on the near surface mineralisation within the conceptual pit shell used as the basis of the Company's recent Scoping Study. The reserve drilling will improve the definition of mineralisation in this zone and should enable an upgrade in the confidence of the Mineral Resource in this area (provided results agree with previous drilling results).

Concentrate was generated from mineralised drill samples from VR8's drilling by using a Davis Tube, which separates magnetic material from non-magnetic material. Both the magnetic and non magnetic fraction were then analysed by XRF. Samples were taken from mineralised intervals with whole rock or in situ vanadium contents above 0.5% V_2O_5 (refer Appendix 1, ASX Announcements 12 October 2018, 25 October 2018, 28 Nov 2018, 16 January 2019, 14 February 2019 and 27 March 2019).

It is noteworthy that the V_2O_5, TiO_2 and Fe grades of the concentrate do not change with depth from surface, confirming that no changes in process design are requried for the "oxide" or weathered portion of the Steelpoortdrift deposit.

The latest results include:

- 10m at 2.26% V_2O_5 , 12% TiO_2 & 58% Fe from 17m (VRC037)
  Mass recovery 38%, whole rock 0.95% V_2O_5
- 11m at 2.22% V_2O_5 , 11% TiO_2 & 58% Fe from surface (VRC016)
  Mass recovery 33%, whole rock 0.84% V_2O_5
- 20m at 2.37% V_2O_5 , 11% TiO_2 & 55% Fe from 86m (VRC038)
  Mass recovery 44%, whole rock 1.20% V_2O_5
- 10m at 2.32% V_2O_5 , 11% TiO_2 & 58% Fe from 74m (VRC016)
  Mass recovery 46%, whole rock 1.17% V_2O_5
- 11m at 2.29% V_2O_5, 10% TiO_2 & 58% Fe from 59m (VRC042)
  Mass recovery 43%, whole rock 1.07% V_2O_5
- 8m at 2.40% V_2O_5 , 11% TiO_2 & 58% Fe from 73m (VRC021)
  Mass recovery 36%, whole rock 0.93% V_2O_5

Note: Mass recovery refers to the weight of magnetic material recovered as a percentage of the total sample weight. The higher the mass recovery, the less material is required to be processed to achieve a production target and the less waste needs to be disposed of or stored.

***Figure 1**. Drilling during 2018 at the SPD Vanadium Project.*

Concentrate produced from 2018 drill samples is being used in studies to assess which technologies and processing options are most appropriate for the vanadiferous titanomagnetite concentrate produced from Steelpoortdrift with the purpose of determining the optimum method, or combination of methods of downstream processing, that deliver the highest value for the Company. Development of a viable processing flowsheet would enable the Company to unlock significantly higher value from the commodities present within the Steelpoortdrift concentrate and transform VR8 into a producer of high value specialist products suitable for the steel, renewable energy and industrial minerals markets.

These studies, and subsequent studies, will compare conventional downstream processing methods such as the salt roasting method already used in South Africa at Bushveld's Vametco Operations and Glencore's Rhovan Operations with established pyro- and hydrometallurgical processes to the Steelpoortdrift vanadium concentrate, along with possibly other, more innovative, methods.

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Competent Persons Statement

The information in this announcement that relates to Exploration Results and other technical information relating to drilling, sampling and the geological interpretation derived from the Exploration Results 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 Vanadium 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 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 2.

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. Further details on the Mineral Resource can be found in the ASX Announcement dated 16 April 2019.

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APPENDIX 1: Significant Drillhole Intercepts from Drilling at the Steelpoortdrift 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 %	Mass recovery	V_2O_5 %	TiO_2 %	Fe* %	Al_2O_3 %	SiO_2 %
VRC016	RC	801990	7245688	90		**0**	**11**	**0.84**	**5.80**	**33%**	**2.22**	**11.1**	**58.1**	**2.91**	**1.32**
					incl.	**6**	**4**	**1.00**	**7.12**	**44%**	**2.17**	**11.7**	**57.7**	**3.36**	**1.20**
					UML	44	20	0.57	4.03						
					LML	**74**	**10**	**1.17**	**7.83**	**46%**	**2.32**	**11.4**	**58.3**	**3.01**	**1.01**
					incl	**81**	**3**	**1.71**	**11.0**	**73%**	**2.28**	**12.4**	**58.0**	**3.11**	**0.39**
VRC021	RC	802185	7246300	86	UML	47	19	0.53	3.86						
					LML	**73**	**8**	**0.93**	**5.82**	**36%**	**2.40**	**10.6**	**57.7**	**3.03**	**1.95**
					incl	**79**	**1**	**1.73**	**11.1**	**71%**	**2.35**	**11.7**	**57.8**	**2.78**	**0.74**
VRC037	RC	802366	7245723	36	IML	1	10	0.60	4.38	**25%**	**2.17**	**12.4**	**56.5**	**3.02**	**1.68**
					LML	**17**	**10**	**0.95**	**6.38**	**38%**	**2.26**	**11.9**	**57.7**	**3.22**	**1.72**
					incl	**25**	**2**	**1.59**	**10.1**	**67%**	**2.25**	**12.2**	**56.5**	**3.49**	**2.66**
VRC038	RC	802347	7246469	110	UML	20	26	0.55	3.91	**20%**	**2.08**	**12.4**	**57.8**	**3.23**	**2.04**
					IML	64	20	0.73	4.93						
					incl	**79**	**5**	**1.16**	**7.71**						
					LML	**86**	**20**	**1.20**	**6.93**	**44%**	**2.37**	**11.3**	**55.1**	**4.12**	**3.86**
					incl	**91**	**7**	**1.48**	**9.14**	**57%**	**2.27**	**11.9**	**55.2**	**3.96**	**3.70**
VRC039	RC	802086	7246095	81	UML	0	15	0.72	5.18	**29%**	**2.07**	**11.8**	**57.6**	**3.52**	**1.72**
					IML	50	16	0.56	4.05						
					LML	73	8	0.89	6.14	**35%**	**2.22**	**11.9**	**57.0**	**3.45**	**2.84**
VRC042	RC	801885	7246967	76	IML	35	16	0.64	3.61	**24%**	**2.42**	**10.2**	**60.1**	**2.83**	**0.97**
					LML	**59**	**11**	**1.07**	**6.13**	**43%**	**2.29**	**10.4**	**57.5**	**3.70**	**2.63**
					incl	**67**	**3**	**1.55**	**9.66**	**63%**	**2.22**	**11.8**	**56.1**	**3.95**	**2.89**
VRC044	RC	802078	7246785	90	UML	0	12	0.74	5.05						
					incl	8	3	1.01	6.92						
					IML	50	15	0.58	4.16						
					LML	**76**	**10**	**0.99**	**6.62**	**44%**	**2.19**	**12.1**	**57.5**	**3.69**	**1.88**
					incl	**83**	**2**	**1.55**	**10.2**	**67%**	**2.25**	**12.3**	**57.6**	**3.53**	**1.52**
VRC046	RC	801751	7246552	136	UML	20	40	0.77	6.43	**35%**	**1.94**	**12.0**	**58.5**	**3.64**	**1.26**
					incl	**35**	**9**	**1.17**	**9.26**	**55%**	**1.98**	**12.5**	**58.7**	**3.73**	**0.60**
					IML	95	16	0.57	4.18						

					LML	**121**	**10**	**1.01**	**6.88**	**43%**	**2.20**	**11.7**	**58.9**	**3.55**	**0.95**
					incl	**129**	**2**	**1.72**	**11.2**	**73%**	**2.24**	**12.4**	**58.3**	**3.61**	**0.78**
VRC001	RC	801520	7247155	90	UML	3	**7**	**0.84**	**5.60**	**36%**	**2.17**	**11.7**	**57.0**	**3.94**	**1.86**
					LML	47	35	0.66	4.59	**28%**	**2.11**	**11.7**	**58.5**	**3.32**	**1.84**
					incl.	73	**9**	**1.12**	**7.49**	**47%**	**2.19**	**12.0**	**57.8**	**3.79**	**2.01**
					incl.	80	**2**	**1.62**	**10.2**	**68%**	**2.24**	**12.3**	**57.2**	**3.68**	**1.98**
VRC002	RC	802548	7245002	39		0	**24**	**0.73**	**5.02**	**29%**	**2.16**	**11.3**	**57.1**	**3.53**	**2.63**
					incl.	12	**12**	**1.00**	**6.77**	**41%**	**2.15**	**12.1**	**56.3**	**3.80**	**2.48**
					incl.	22	**2**	**1.72**	**11.2**	**74%**	**2.20**	**12.5**	**57.7**	**3.37**	**1.43**
VRC003	RC	802414	7245050	69		23	35	0.65	4.53	**28%**	**2.15**	**11.5**	**57.5**	**3.37**	**2.53**
					incl.	49	**9**	**1.04**	**6.95**	**45%**	**2.20**	**12.1**	**56.3**	**3.62**	**2.54**
VRC008	RC	802230	7245480	76	UML	23	25	0.68	4.70	**23%**	**2.42**	**8.33**	**58.1**	**3.05**	**3.96**
					incl.	40	**8**	**1.03**	**6.94**	**41%**	**2.32**	**10.6**	**59.4**	**2.91**	**1.65**
VRC010	RC	801600	7245869	134	UML	32	32	0.77	9.86	**37%**	**1.91**	**12.5**	**57.9**	**3.16**	**1.67**
					incl.	44	**7**	**1.15**	**9.15**	**55%**	**1.96**	**12.8**	**58.1**	**3.26**	**1.21**
					&	59	**4**	**0.95**	**6.30**	**40%**	**2.15**	**11.8**	**57.2**	**3.38**	**2.13**
					LML	93	38	0.64	4.45	**27%**	**2.13**	**11.5**	**58.4**	**2.94**	**2.06**
					incl.	123	**8**	**1.11**	**7.50**	**47%**	**2.19**	**12.1**	**58.4**	**3.21**	**1.45**
					incl.	129	**2**	**1.61**	**10.5**	**68%**	**2.20**	**12.6**	**58.5**	**3.08**	**0.98**
VRC004	RC	802503	7245603	46		18	**3**	**0.62**	**3.22**	*Not analysed*					
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	*Not analysed*					
VRC007	RC	802495	7245445	38		0	**1**	**1.31**	**11.1**						
						10	**16**	**0.82**	**5.06**	*Sampled for Metallurgy*					
					incl.	24	**2**	**1.54**	**9.86**						
VRC009	RC	801520	7245793	156	UML	47	54	0.70	5.62	*Sampled for Metallurgy*					
					incl.	61	**7**	**1.06**	**8.36**						
					LML	134	**11**	**0.98**	**6.63**	*Sampled for Metallurgy*					
					incl.	143	**2**	**1.70**	**11.0**						
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	*Sampled for Metallurgy*					
					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	*Sampled for Environmental Study*				
						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**					
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**					
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	UML	5	8	0.75	5.50					
					IML	47	13	0.57	4.20					
					LML	**69**	**9**	**1.09**	**7.40**					
					incl	**76**	**2**	**1.57**	**10.0**					
VRC035	RC	801646	7247189	76	IML	33	16	0.57	4.06					
					LML	**57**	**12**	**0.97**	**6.46**					
					incl	**66**	**2**	**1.61**	**10.7**					

VRC036	RC	802436	7245563	26	IML	0	2	0.91	7.23						
					LML	**9**	**10**	**0.99**	**6.60**						
					incl	**16**	**3**	**1.37**	**8.89**						
VRC040	RC	801838	7247307	31	LML	**17**	**11**	**0.99**	**6.59**						
					incl	**25**	**2**	**1.67**	**10.8**						
VRC041	RC	801666	7247021	71	IML	35	14	0.57	4.11						
					LML	**57**	**11**	**0.94**	**6.25**						
					incl	**65**	**2**	**1.64**	**10.5**						
VRC043	RC	801942	7246831	96	UML	0	24	0.86	6.35						
					incl	**0**	**14**	**0.98**	**7.51**						
					IML	66	13	0.55	4.18						
					LML	**79**	**12**	**1.08**	**7.25**						
					incl	**86**	**5**	**1.29**	**8.41**						
					incl	**87**	**2**	**1.62**	**10.9**						
VRC045	RC	801948	7246620	141	UML	19	41	0.78	6.52						
					incl	**35**	**10**	**1.17**	**9.17**						
					IML	94	19	0.56	4.03						
					LML	**121**	**12**	**0.96**	**6.42**						
					incl	**130**	**3**	**1.43**	**9.14**						
VRC047	RC	801863	7247402	16	LML	0	**12**	**0.99**	**6.74**						
					incl.	3	**9**	**1.13**	**7.67**						
					incl.	10	**2**	**1.70**	**10.8**						
VRC048	RC	802040	7247179	9	LML	0	**4**	**1.35**	**8.80**						
VRC049	RC	802126	7247096	11	LML	0	**8**	**1.35**	**6.99**						
VRC050	RC	801707	7247413	56	LML	43	**10**	**1.01**	**6.81**						
					incl.	50	**3**	**1.34**	**8.51**						
VRC051	RC	801829	7247675	66	IML	30	15	0.62	2.88						
VDD001	DD	801358	7246865	135	UML	21	**34**	**1.03**	**5.92**	**41%**	**2.32**	**10.0**	**57.6**	**3.74**	**2.61**
					LML	108.6	**8.5**	**1.02**	**6.64**	**42%**	**2.00**	**10.2**	**51.0**	**3.85**	**3.31**
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	IML	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**					
VDD007	DD	801760	7245770	134.6	UML	16.00	37.0	0.74	6.26					
					LML	111.5	12.0	0.97	6.51					
					incl.	121.3	2.3	1.72	11.0					
VDD008	DD	801590	7245680	140.7	UML	39.4	32.4	0.78	6.53					
					incl.	55	**5.6**	**1.28**	**9.84**					
					LML	119.5	**9.1**	**0.93**	**6.24**					
					incl.	122.5	**6.0**	**1.34**	**7.43**					
					incl.	127.6	**2.5**	**1.58**	**10.1**					
VDD009	DD	801890	7245698	119.6	UML	1.5	**14.9**	**0.99**	**7.67**					
					incl.	1.5	**7.0**	**1.21**	**9.81**					
					LML	89.8	**9.9**	**1.06**	**7.19**					
					incl.	93.1	**6.6**	**1.16**	**7.72**					
					incl.	97	**2.7**	**1.60**	**10.3**					
VDD010	DD	801831	7245486	119.7	UML	0	29.9	0.78	6.94					
					incl.	18.9	**6.0**	**1.27**	**9.97**					
					LML	98.4	**11.7**	**0.96**	**6.56**					
					incl.	103.7	**6.4**	**1.49**	**10.1**					
					incl.	107.4	**2.7**	**1.57**	**10.2**					
VDD013	DD	802059	7245262	91.8	UML	3.4	**5.4**	**1.19**	**9.18**					
					LML	78.0	**9.8**	**1.00**	**6.75**					
					incl.	80.0	**7.8**	**1.11**	**7.51**					
					incl.	85.5	**2.3**	**1.58**	**10.2**					
VDD014	DD	802204	7245358	66.3	LML	55.8	**6.0**	**1.14**	**6.76**					
					incl.	59.5	**2.3**	**1.49**	**9.38**					
VDD015	DD	802333	7245126	62.6	LML	50.4	**11.2**	**0.97**	**4.19**					
					incl.	53.4	**8.2**	**1.12**	**7.57**					
					incl.	59	**2.6**	**1.55**	**9.98**					
VDD016	DD	801835	7245220	128.8	UML	17.3	**26.7**	**0.82**	**7.27**					
					incl.	32.3	**7.1**	**1.16**	**9.30**					
					IML	48.1	**4.0**	**0.93**	**6.46**					
					LML	116	**8.5**	**0.96**	**6.56**					
					incl.	122.2	**2.3**	**1.65**	**10.5**					

VDD017	DD	802208	7244911	110.6	UML	7.7	**11.8**	**1.06**	**8.55**					
					incl.	10.9	**5.7**	**1.37**	**11.0**					
					IML	30.3	**4.0**	**0.92**	**7.00**					
					LML	94.4	**7.7**	**1.03**	**6.79**					
					incl.	100.1	**2.0**	**1.23**	**7.54**					
VDD018	DD	802197	7245189	74.6	UML	1.3	**6.7**	**0.78**	**5.29**					
					LML	62.0	**11.0**	**1.00**	**6.59**					
					incl.	67.0	**6.0**	**1.15**	**7.62**					
					incl.	70.3	**2.7**	**1.58**	**10.1**					
VDD019	DD	801265	7246164	132.6	UML	35.8	**24.6**	**0.84**	**7.92**					
					incl.	50.3	**10.1**	**1.15**	**8.85**					
					LML	120.3	7.8	1.12	7.60					
					incl.	125.5	**2.6**	**1.53**	**9.96**					
VDD020	DD	801460	7246107	147.2	UML	48.3	**14.6**	**0.94**	**7.45**					
					incl.	50.3	**7.1**	**1.25**	**9.90**					
					LML	131.9	12.1	0.95	6.44					
					incl.	136.5	**7.6**	**1.14**	**7.68**					
					incl.	141.7	**2.3**	**1.68**	**10.8**					
VDD021	DD	801387	7246415	128.8	UML	11.5	**39.1**	**0.77**	**6.52**					
					incl.	27.3	**9.1**	**1.17**	**9.40**					
					LML	84.6	10.7	1.05	7.10					
					incl.	95.4	**2.2**	**1.66**	**10.7**					
VDD022	DD	801660	7246064	158.6	UML	44.3	37.8	0.76	6.56					
					incl.	61.7	**7.1**	**1.24**	**9.70**					
					LML	137.1	11.7	0.96	6.51					
					incl.	140.6	**8.2**	**1.13**	**7.65**					
					incl.	146.7	**2.1**	**1.69**	**10.9**					
VDD023	DD	801603	7246802	113.7	UML	0	**20.0**	**0.92**	**8.93**					
					incl.	4.8	**10.4**	**1.07**	**9.96**					
					LML	85.6	**10.7**	**1.05**	**7.10**					
					incl.	95.4	**2.2**	**1.66**	**10.7**					
VDD024	DD	802500	7245459	26.6		*Sampled for Metallurgy*								
VDD025	DD	801460	7246107	147.2	UML	36.6	**16.8**	**0.76**	**5.71**					
					incl.	36.6	**3.4**	**1.23**	**9.40**					
					LML	102.8	12.9	0.93	6.16					
					incl.	106.9	**8.8**	**1.11**	**7.46**					

					incl.	113.4	**2.3**	**1.64**	**10.6**					
VDD026	DD	801998	7245697	86.7		*Sampled for Metallurgy*								
VDD028	DD	800835	7246354	10.3		*Sampled for Metallurgy*								
VDD029	DD	800835	7246357	8.6		*Sampled for Metallurgy*								
VDD030	DD	801816	7247515	38.7	LML	26.6	**7.9**	**1.22**	**8.22**					
					incl.	32.0	**3.1**	**1.52**	**10.0**					
VDD031	DD	801829	7246816	98.3	LML	77.3	**11.9**	**0.98**	**6.54**					
					incl.	81.0	**8.2**	**1.15**	**7.66**					
					incl.	86.5	**2.7**	**1.62**	**10.3**					
VDD032	DD	802767	7246077	90.8		51.8	19.1	0.60	4.20					
VDD033	DD	801866	7246248	150.0	UML	36.1	**41.5**	**0.76**	**6.48**					
					incl.	53.9	**8.3**	**1.23**	**9.73**					
					LML	135.1	11.9	0.96	6.52					
					incl.	138.9	**8.1**	**1.14**	**7.70**					
					incl.	144.6	**2.4**	**1.65**	**10.6**					

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 2.

APPENDIX 4.

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

Criteria	JORC Code explanation	Commentary
		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 and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	Diamond drill core and RC drill chips are being 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	The sampling techniques for both diamond drilling

Criteria	JORC Code explanation	Commentary
	appropriateness of the sample preparation technique.	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 whole rock 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. Davis Tube analysis was carried out by SGS Laboratories Johannesburg, an ISO accredited commercial laboratory. Davis Tube analysis carried out at magnetic field of 1000G with magnetic and non-magnetic fractions analysed by XRF fusion for Fe, TiO2, V2O5, P2O5, SiO2, Al2O3, CaO, Cr2O3, MgO, MnO, Na2O, K2O and 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.

Criteria	JORC Code explanation	Commentary
		QA/QC samples are checked following receipt of each 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 UAV and heliborne surveys.
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, refer ASX Announcement 16 April 2019.
	Whether sample compositing has been applied.	No sample compositing has been applied.
Orientation of data in relation to geological	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit*	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

Criteria	JORC Code explanation	Commentary
structure	*type.*	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*	Refer Appendix 1.

Criteria	JORC Code explanation	Commentary
	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.*	
	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. Davis Tube results are reported for the same intervals as the whole rock analyses.
	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 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.*	Appropriate diagrams are shown in the text.
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*	All results > 0.5% V_2O_5 included.

Criteria	JORC Code explanation	Commentary
	Results.	
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 – infill drilling has commenced and will inform a Mineral Resource update. This will then be used as the basis of a PFS.