

# NEW MINING LICENCE APPLICATION EXTENDS THE AUSTRALIAN VANADIUM PROJECT

*AVL extends its footprint and future of the Australian Vanadium Project at Gabanintha with a Mining Licence application covering southern Mineral Resource fault blocks*

## KEY POINTS

- **New Mining Licence Application (MLA 51/890) submitted over southern fault blocks**
- **MLA 51/890 contains Inferred Resources in fault blocks 60 and 70 with:**
  - **Total Mineral Resource of 27.5 Mt 0.76% V<sub>2</sub>O<sub>5</sub>;**
  - **Including high grade massive magnetite zone of 14.8 Mt at 0.99% V<sub>2</sub>O<sub>5</sub>; and**
  - **3D Magnetic Inversion model showing additional strike of 500m with potential for further high-quality resources pending drilling**
- **Previous drill results in southern fault blocks returned high-grade vanadium with only minor weathering, implying high magnetic recoveries and concentrate quality**
- **Application provides flexibility for future infrastructure works and further optimisation of the Australian Vanadium Project mine-life**
- **New MLA 51/890 (south) complements existing MLA 51/878 (north) securing maximum strike availability of the Gabanintha vanadium deposit to AVL**
- **MLA 51/878 remains the basis of the Company's Bankable Feasibility Studies.**

Australian Vanadium Limited (ASX: AVL, "the Company" or "AVL") is pleased to announce that it has submitted a new Mining Licence application (MLA 51/890) that includes the Inferred Resource fault block 70 (see Figure 1) located on tenement E51/843. The Mineral Resource within the lease application area totals 27.5 million tonnes at 0.76% V<sub>2</sub>O<sub>5</sub> including 14.8 Million Tonnes at 0.99% V<sub>2</sub>O<sub>5</sub> of high-grade (HG) massive magnetite zone.

The new Mining Licence Application, complements and extends AVL's position over the deposit at Gabanintha, where the total Mineral Resource stands at 208.4 Million Tonnes at 0.74% V<sub>2</sub>O<sub>5</sub> including 87.9 Million Tonnes at 1.06% V<sub>2</sub>O<sub>5</sub> of HG zone (see Appendix 2 for detailed Mineral Resource Inventory Table).

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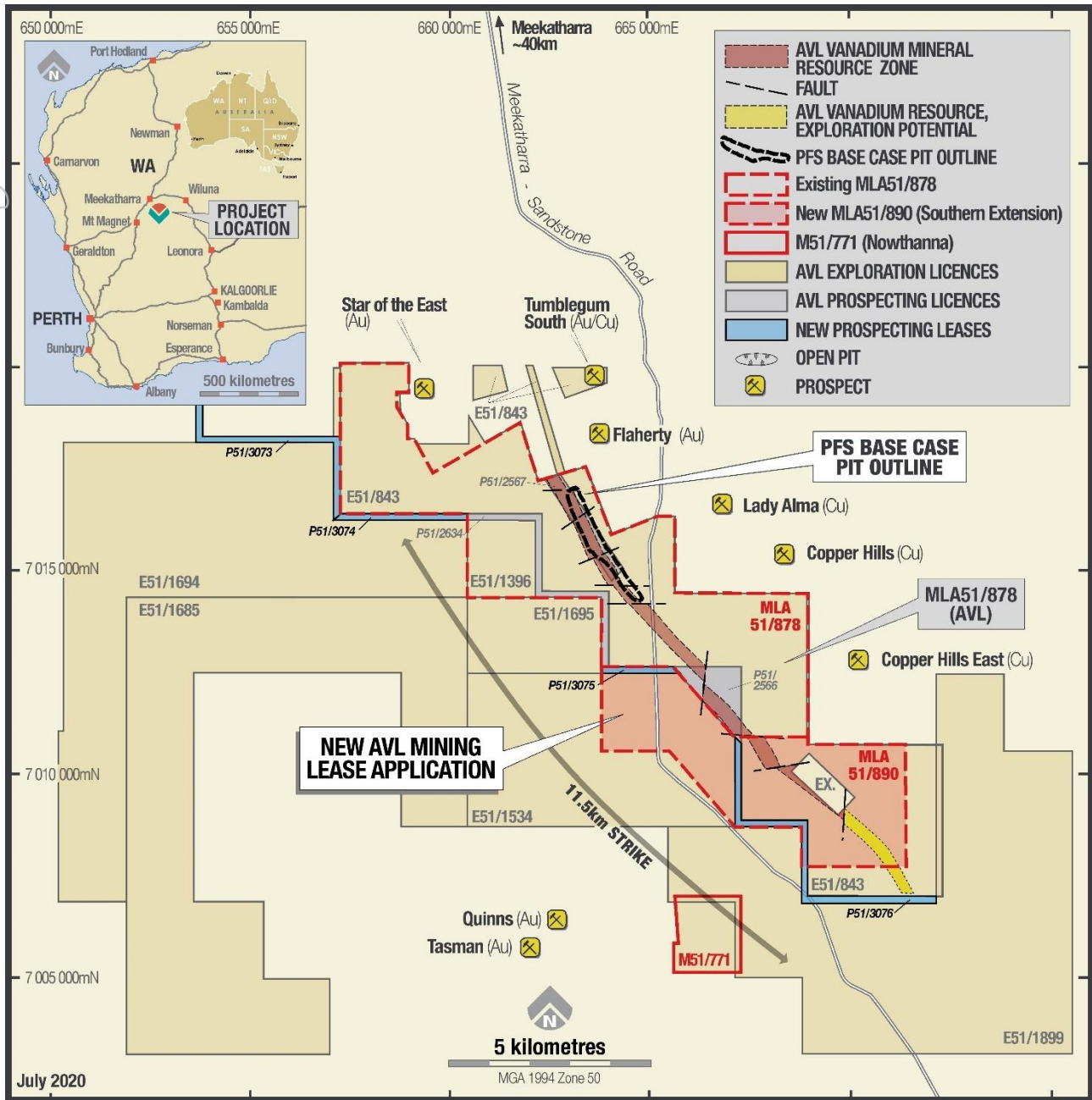


Figure 1 The Australian Vanadium Project Location and Tenure with Mining Lease Application MLA 51/890 Southern Extension

The southern areas at the Australian Vanadium Project were not initially a priority due to early focus on the northern part of the deposit. Subsequent work has revealed the importance of the magnetic response of ore during beneficiation. 3D magnetic inversion modelling during 2019 highlights the quality of the deposit in the southern fault blocks where the response is found to be stronger and shallower, indicating potential for increased recovery through the magnetic separation circuit<sup>1</sup>.

<sup>1</sup> See ASX announcement dated 4 March 2020 "Total Vanadium Resource at the Australian Vanadium Project Rises to 208 Million Tonnes"

The area under application is immediately south of and contiguous with AVL's MLA 51/878 application and covers the remaining strike of the Australian Vanadium Project at Gabanintha, held 100% by AVL. The Mineral Resources within MLA 51/878 will continue to be the primary basis for the Bankable Feasibility Studies.

Infrastructure in the new MLA, covering E51/843, E51/1534, P51/3075 and P51/3076, is planned to support two open pits as well as containing waste dumps, topsoil stockpiles, haulage roads and a mining service area. This area forms the contiguous southern extension of the Australian Vanadium Project under MLA 51/878 and will be optimised, developed, and mined as part of the overall schedule of operations by AVL.

### 2008 – 2015 DRILL RESULTS – MLA 51/890

The Mineral Resources currently defined within the MLA 51/890 area were estimated using results from a series of drilling programs conducted on the deposit in 2008, 2009, 2015 and 2019. An updated Mineral Resource was declared in March 2020<sup>1</sup> (See Appendix 2) based on additional infill drilling completed during 2019.

Fault block 70 in the new MLA area has an existing Inferred Mineral Resource based on drilling completed during 2008 and 2009. Historic drilling in fault block 70 identified continuity of the Lady Alma layered gabbro intrusion, host to the massive and disseminated vanadium-titanium-magnetite mineralisation at the Australian Vanadium Project at Gabanintha. The cross section in Figure 2 is in fault block 70 that is the southern-most Mineral Resource block (refer to Figure 3 for denotations A – A' showing the location of the cross section).

Previous drilling<sup>2</sup> in fault block 70 has best results of:

- GDH907 – 16 m at 1.12 % V<sub>2</sub>O<sub>5</sub> from 36 m, including 11 m at 1.25 % V<sub>2</sub>O<sub>5</sub> from 40 m
- GRC0045 - 33 m at 1.08 % V<sub>2</sub>O<sub>5</sub> from 46 m, including 9 m at 1.22 % V<sub>2</sub>O<sub>5</sub> from 61 m
- GRC0047 - 15 m at 1.06 % V<sub>2</sub>O<sub>5</sub> from 62 m, including 6 m at 1.24 % V<sub>2</sub>O<sub>5</sub> from 65 m
- GRC0043 - 14 m at 1.02 % V<sub>2</sub>O<sub>5</sub> from 15 m, including 6 m at 1.24 % V<sub>2</sub>O<sub>5</sub> from 22 m
- GDH909 - 18 m at 0.99 % V<sub>2</sub>O<sub>5</sub> from 193 m, including 8 m at 1.29 % V<sub>2</sub>O<sub>5</sub> from 202 m
- GRC0044 - 9 m at 1.20 % V<sub>2</sub>O<sub>5</sub> from 46 m, including 6 m at 1.25 % V<sub>2</sub>O<sub>5</sub> from 48 m

Full details of drill collars and intersections are detailed in Appendix 1. All drill collars at the Australian Vanadium Project are shown in Figure 3.

<sup>2</sup> See ASX announcement dated 25 May 2015 "High-Grade Vanadium Confirmed at Gabanintha"

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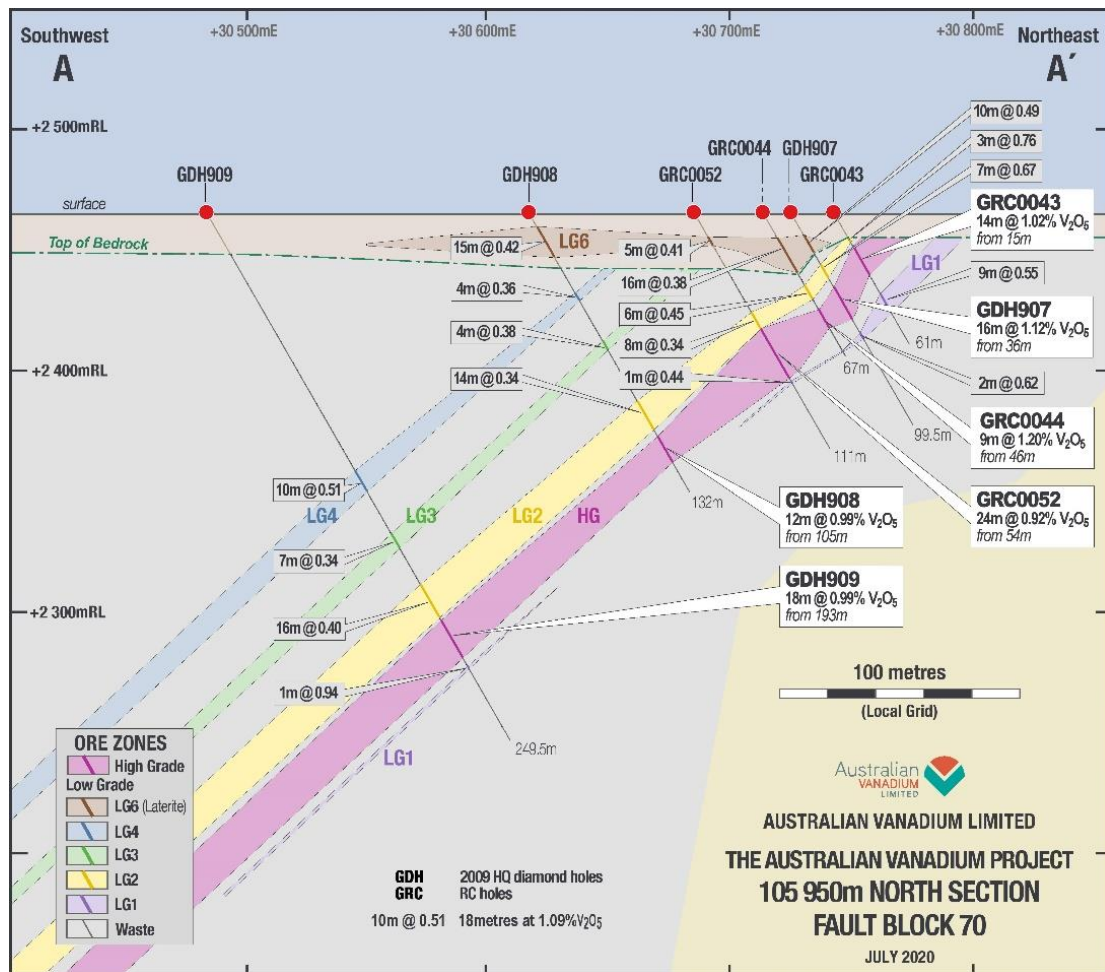


Figure 2 Cross section through Block 70

### 3D MAGNETIC INVERSION MODEL

The proposed process to extract vanadium uses a magnetic separation circuit. AVL has identified that the magnetic susceptibility can be used to target areas that show higher magnetism and less weathering nearer the surface. A 3D magnetic inversion model was completed using 50 metre aeromagnetic flight lines from a 2006 survey over the entire length of the magnetite, with both original survey and inversion model completed by Southern Geoscience Consultants. Figure 3 shows the total magnetic intensity image from this survey, with the fault blocks, AVL drilling and high-grade Mineral Resource by fault block. The result helped target the successful drilling of fault blocks 50 and 60 completed in December 2019<sup>3</sup>. The drilling results in fault blocks 50 and 60, with respect to weathering and magnetic response, correlate with the 3D inversion model indications. The positive results from the drilling in fault blocks 50 and 60 add flexibility to the mine schedule in the BFS, allowing strongly magnetic material to be processed early in the mine life, increasing vanadium recovery.

<sup>3</sup> See announcement dated 4 February 2020, "Shallow High-Grade Vanadium Intersections from Southern Infill Drilling"

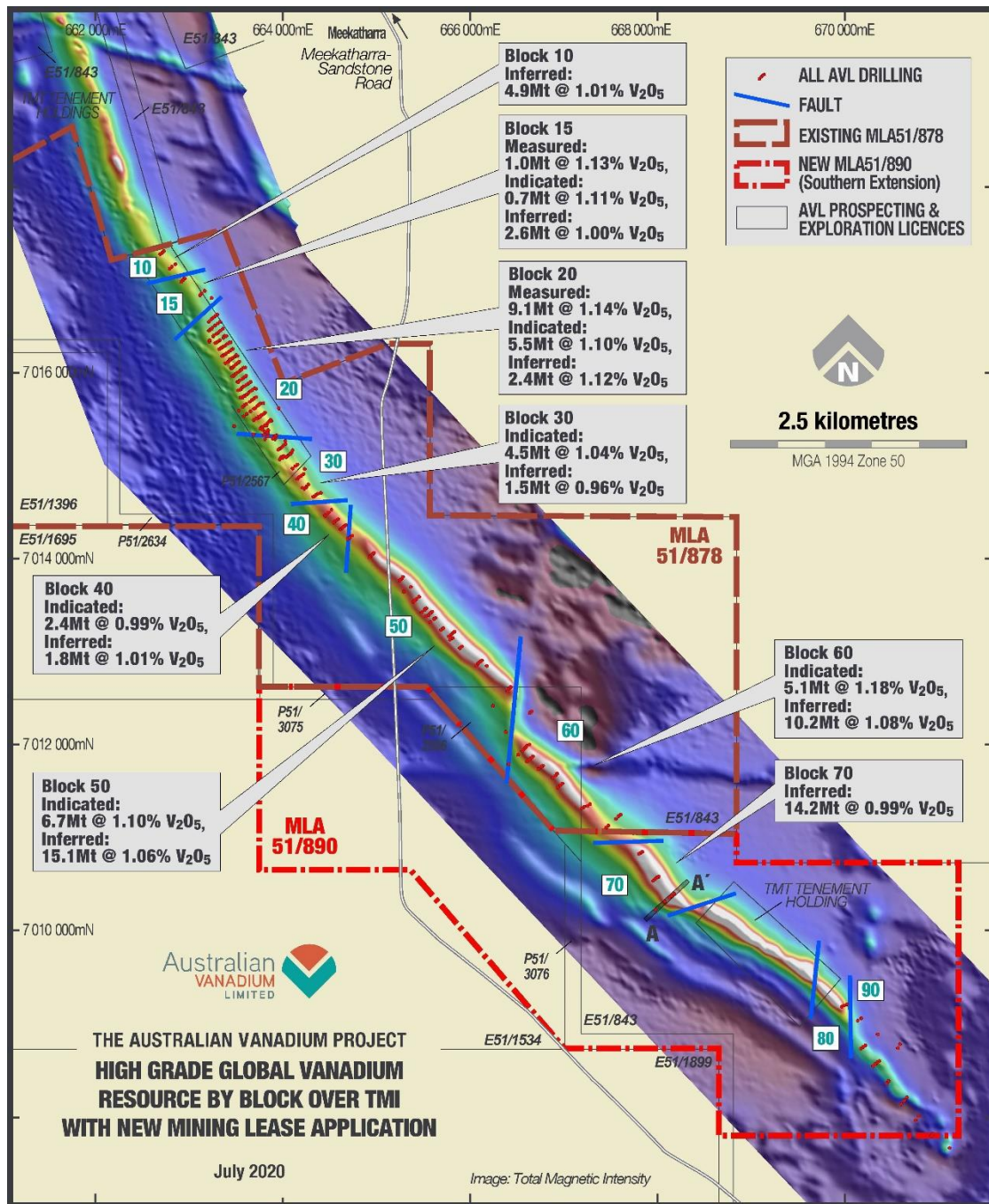


Figure 3 The Australian Vanadium Project deposit over Total Magnetic Intensity imagery with High-Grade Mineral Resource by Fault Block

The total magnetics imagery (TMI) and 3D inversion model show the magnetic signature is still strong near surface in the MLA 51/890 southern extension area. Limited and poorly directed drilling was completed more than a decade ago in the south (AVL) portion of fault block 80 and in fault block 90. The strong magnetic response in the southern portion of fault block 80 highlights the excellent potential that exists there. Addition of the southern fault blocks to a mining lease application significantly increases the opportunity for extension of the mine life at the project.

Four prospecting licences (P51/3073, P51/3074, P51/3075 and P51/3076 – see Figure 1) were acquired by the issue of shares (ASX announcement 9<sup>th</sup> June 2020) and transferred from a third party to secure all required tenure underlying MLA 51/890.

Managing Director Vincent Algar commented “Australian Vanadium has now consolidated its entire strike of mineralisation into Mining Licence Applications, ensuring a strong future for the Project. The Mineral Resources in MLA 51/890 will not form part of the BFS study, but will offer opportunities for optimisation, scaling of production and mine-life extensions in the future.”

For further information, please contact:

**Vincent Algar, Managing Director** +61 8 9321 5594

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*This announcement has been approved in accordance with the Company's published continuous disclosure policy and has been approved by the Board.*

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#### **ABOUT AUSTRALIAN VANADIUM LTD**

AVL is a resource company focused on vanadium, seeking to offer investors a unique exposure to all aspects of the vanadium value chain – from resource through to steel and energy storage opportunities. AVL is advancing the development of its world-class Australian Vanadium Project.

The Australian Vanadium Project is currently one of the highest-grade vanadium projects being advanced globally, with 208.2Mt at 0.74% vanadium pentoxide ( $V_2O_5$ ) and containing a high-grade zone of 87.9Mt at 1.06%  $V_2O_5$  reported in compliance with the JORC Code 2012 (see ASX announcement dated 4<sup>th</sup> March 2020 ‘Total Vanadium Resource at The Australian Vanadium Project Rises to 208 Million Tonnes’).

The company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources or Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The company confirms that the form and context in which the Competent Person’s findings are presented have not been materially modified from the original market announcement.

## COMPETENT PERSON STATEMENT – MINERAL RESOURCES

The information in this announcement that relates to Mineral Resources is based on and fairly represents information compiled by Mr Lauritz Barnes, (consultant with Trepanier Pty Ltd) and Mr Brian Davis (consultant with Geologica Pty Ltd). Mr Barnes and Mr Davis are both members of the Australasian Institute of Mining and Metallurgy (AusIMM) and the Australian Institute of Geoscientists (AIG). Both have sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration, and to the activities undertaken to qualify as Competent Persons as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Specifically, Mr Barnes is the Competent Person for the estimation and Mr Davis is the Competent Person for the database, geological model and site visits. Mr Barnes and Mr Davis consent to the inclusion in this announcement of the matters based on their information in the form and context in which they appear.

For details of JORC 2012 Exploration Results and Mineral Resource Reporting Table 1 parameters please see ASX announcement dated 4 March 2020 “Total Vanadium Resource at the Australian Vanadium Project Rises to 208 Million Tonnes”; announcement dated 4 February 2020, “Shallow High-Grade Vanadium Intersections from Southern Infill Drilling”; and announcement dated 25 May 2015, “High-Grade Vanadium Confirmed at Gabanintha”.

## APPENDIX 1

### DRILL HOLE DATABASE & INTERCEPTS WITHIN MLA 51/890

#### High Grade Intercepts Within MLA 51/890

(GDH = Diamond Drill Holes, GRC = Reverse Circulation Holes)

Table 1 HIGH GRADE DOMAIN INTERCEPTS WITHIN MLA

Hole ID	MGA94 East	MGA94 North	RL	Hole Depth (m)	Dip	Azi	From (m)	To (m)	Interval (m)	V <sub>2</sub> O <sub>5</sub> %	Fe %	TiO <sub>2</sub> %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	LOI %
GDH907	668,132	7,010,371	464	99.5	-60	50	36	52	16	1.12	47.6	12.6	7.7	6.0	2.5
GDH908	668,049	7,010,302	464	132	-60	50	105	117	12	0.99	43.4	11.3	12.1	6.4	2.8
GDH909	667,946	7,010,219	463	249.5	-60	50	193	211	18	0.99	43.2	11.2	11.9	6.4	2.8
GRC0043	668,146	7,010,382	464	61	-60	50	15	29	14	1.02	43.7	11.7	12.1	7.0	-
GRC0044	668,119	7,010,369	464	67	-60	50	46	55	9	1.20	50.2	13.0	3.8	4.4	-
GRC0045	667,986	7,010,571	464	79	-60	50	46	79	33	1.08	46.9	12.0	7.1	5.3	-
GRC0046	667,962	7,010,558	464	78	-60	50	68	78	10	0.76	35.7	9.1	17.8	8.7	-
GRC0047	667,810	7,010,838	464	79	-60	50	62	77	15	1.06	46.9	11.7	7.4	6.8	-
GRC0052	668,102	7,010,345	463	111	-60	50	54	78	24	0.92	43.7	10.9	10.5	6.1	3.7
GRC0053	667,941	7,010,540	464	120	-60	50	94	116	22	0.82	39.9	9.6	11.8	8.5	5.3
GRC0054c	667,775	7,010,816	464	112	-60	50	91	105	14	0.98	46.6	11.6	7.1	5.8	3.4
GRC0155	667,920	7,010,523	464	138	-60	50	113	135	22	0.95	45.5	10.7	8.5	6.6	4.2

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## Low Grade Domain Intercepts Within MLA 51/890

(GDH = Diamond Drill Holes, GRC = Reverse Circulation Holes)

Table 2 LOW GRADE DOMAIN INTERCEPTS WITHIN MLA

Hole ID	MGA94 East	MGA94 North	RL	Hole Depth (m)	Dip	Azi	From (m)	To (m)	Interval (m)	V <sub>2</sub> O <sub>5</sub> %	Fe %	TiO <sub>2</sub> %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	LOI %	Domain
GDH907	668,132	7,010,371	464	99.5	-60	50	24	31	7	0.67	30.6	8.2	23.2	14.8	6.5	LG2
GDH908	668,049	7,010,302	464	132	-60	50	88	102	14	0.34	17.7	4.6	36.5	16.1	3.9	LG2
GDH909	667,946	7,010,219	463	249.5	-60	50	176	192	16	0.40	19.0	5.1	32.8	17.8	3.3	LG2
GRC0043	668,146	7,010,382	464	61	-60	50	10	13	3	0.76	30.7	9.6	25.2	13.0	-	LG2
GRC0044	668,119	7,010,369	464	67	-60	50	37	43	6	0.45	23.1	5.3	31.5	13.8	-	LG2
GRC0045	667,986	7,010,571	464	79	-60	50	20	39	19	0.56	23.5	7.0	27.8	21.9	-	LG2
GRC0046	667,962	7,010,558	464	78	-60	50	47	62	15	0.46	22.4	6.0	30.3	17.8	-	LG2
GRC0047	667,810	7,010,838	464	79	-60	50	35	59	24	0.44	22.4	5.5	31.7	17.8	-	LG2
GRC0048	667,788	7,010,825	464	62	-60	50	52	62	10	0.35	17.8	4.6	35.1	20.2	-	LG2
GRC0052	668,102	7,010,345	463	111	-60	50	46	54	8	0.34	17.9	4.8	35.1	19.4	3.8	LG2
GRC0053	667,941	7,010,540	464	120	-60	50	66	76	10	0.50	24.4	6.8	27.1	15.8	3.1	LG2
GRC0054c	667,775	7,010,816	464	112	-60	50	66	78	12	0.44	23.5	6.4	28.4	17.0	7.3	LG2
GRC0155	667,920	7,010,523	464	138	-60	50	82	92	10	0.50	23.4	5.9	29.3	16.0	2.0	LG2
GDH908	668,049	7,010,302	464	132	-60	50	60	64	4	0.38	20.9	4.9	36.1	8.5	1.5	LG3
GDH909	667,946	7,010,219	463	249.5	-60	50	152	159	7	0.34	19.1	4.5	37.1	9.8	1.9	LG3
GRC0046	667,962	7,010,558	464	78	-60	50	17	33	16	0.37	19.2	4.6	41.4	17.9	-	LG3
GRC0053	667,941	7,010,540	464	120	-60	50	40	43	3	0.31	22.1	4.8	37.8	12.1	6.6	LG3
GRC0054c	667,775	7,010,816	464	112	-60	50	38	47	9	0.38	22.6	4.6	35.2	15.0	8.3	LG3
GRC0155	667,920	7,010,523	464	138	-60	50	60	64	4	0.36	20.7	4.7	36.5	8.7	5.1	LG3
GDH908	668,049	7,010,302	464	132	-60	50	37	41	4	0.36	20.3	4.9	36.2	9.9	1.6	LG4
GDH909	667,946	7,010,219	463	249.5	-60	50	122	132	10	0.51	24.7	6.9	29.1	14.6	2.4	LG4
GRC0155	667,920	7,010,523	464	138	-60	50	34	37	3	0.34	20.8	5.1	34.8	8.5	9.7	LG4
GDH907	668,132	7,010,371	464	99.5	-60	50	8	18	10	0.49	24.2	6.2	32.4	16.8	7.9	LG6
GDH908	668,049	7,010,302	464	132	-60	50	4	19	15	0.42	22.2	5.8	32.8	13.0	7.6	LG6
GRC0044	668,119	7,010,369	464	67	-60	50	12	28	16	0.38	20.4	4.9	35.4	18.5	-	LG6
GRC0046	667,962	7,010,558	464	78	-60	50	8	17	9	0.43	23.9	5.7	36.9	15.0	-	LG6
GRC0047	667,810	7,010,838	464	79	-60	50	24	35	11	0.87	39.9	7.4	15.8	11.6	-	LG6
GRC0048	667,788	7,010,825	464	62	-60	50	23	40	17	0.93	42.7	9.1	13.3	9.5	-	LG6
GRC0052	668,102	7,010,345	463	111	-60	50	9	14	5	0.41	26.5	6.0	31.8	10.0	5.9	LG6
GRC0053	667,941	7,010,540	464	120	-60	50	7	12	5	0.35	23.8	5.3	39.8	10.6	6.7	LG6
GRC0054c	667,775	7,010,816	464	112	-60	50	22	38	16	0.86	44.1	9.4	11.7	9.1	3.8	LG6

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## APPENDIX 2 RESOURCE TABLES

Table 3 RESOURCE TONNAGES INSIDE MLA 51/890 BY CLASSIFICATION

Domains	Category	Mt	V <sub>2</sub> O <sub>5</sub> %	Fe %	TiO <sub>2</sub> %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	LOI %
<b>HG 10</b>	Measured	-	-	-	-	-	-	-
	Indicated	-	-	-	-	-	-	-
	Inferred	14.8	0.99	44.9	11.3	9.3	6.3	3.8
	<b>Subtotal</b>	<b>14.8</b>	<b>0.99</b>	<b>44.9</b>	<b>11.3</b>	<b>9.3</b>	<b>6.3</b>	<b>3.8</b>
<b>LG 2-4</b>	Measured	-	-	-	-	-	-	-
	Indicated	-	-	-	-	-	-	-
	Inferred	10.3	0.41	21.3	5.4	33.3	15.0	3.8
	<b>Subtotal</b>	<b>10.3</b>	<b>0.41</b>	<b>21.3</b>	<b>5.4</b>	<b>33.3</b>	<b>15.0</b>	<b>3.8</b>
<b>Trans 6-8</b>	Measured	-	-	-	-	-	-	-
	Indicated	-	-	-	-	-	-	-
	Inferred	2.4	0.75	37.3	7.9	19.4	11.0	5.8
	<b>Subtotal</b>	<b>2.4</b>	<b>0.75</b>	<b>28.4</b>	<b>7.9</b>	<b>19.4</b>	<b>11.0</b>	<b>5.8</b>
<b>Total</b>	Measured	-	-	-	-	-	-	-
	Indicated	-	-	-	-	-	-	-
	Inferred	27.5	0.76	35.4	8.8	19.2	10.0	4.0
	<b>Subtotal</b>	<b>27.5</b>	<b>0.76</b>	<b>35.4</b>	<b>8.8</b>	<b>19.2</b>	<b>10.0</b>	<b>4.0</b>

Table 4 GLOBAL RESOURCE TONNAGES FOR THE ENTIRE AUSTRALIAN VANADIUM PROJECT

2020 Feb	Category	Mt	V <sub>2</sub> O <sub>5</sub> %	Fe %	TiO <sub>2</sub> %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	LOI %
HG	Measured	10.1	1.14	43.9	13.0	9.2	7.5	3.7
	Indicated	25.1	1.10	45.4	12.5	8.5	6.5	2.9
	Inferred	52.7	1.04	44.6	11.9	9.4	6.9	3.3
	<b>Subtotal</b>	<b>87.9</b>	<b>1.06</b>	<b>44.7</b>	<b>12.2</b>	<b>9.2</b>	<b>6.8</b>	<b>3.2</b>
LG 2-5	Indicated	44.5	0.51	25.0	6.8	27.4	17.0	7.9
	Inferred	60.3	0.48	25.2	6.5	28.5	15.3	6.7
	<b>Subtotal</b>	<b>104.8</b>	<b>0.49</b>	<b>25.1</b>	<b>6.6</b>	<b>28.0</b>	<b>16.1</b>	<b>7.2</b>
Trans 6-8	Inferred	15.6	0.65	28.4	7.7	24.9	15.4	7.9
	<b>Subtotal</b>	<b>15.6</b>	<b>0.65</b>	<b>28.4</b>	<b>7.7</b>	<b>24.9</b>	<b>15.4</b>	<b>7.9</b>
Total	Measured	10.1	1.14	43.9	13.0	9.2	7.5	3.7
	Indicated	69.6	0.72	32.4	8.9	20.6	13.2	6.1
	Inferred	128.5	0.73	33.5	8.8	20.2	11.9	5.4
	<b>Subtotal</b>	<b>208.2</b>	<b>0.74</b>	<b>33.6</b>	<b>9.0</b>	<b>19.8</b>	<b>12.1</b>	<b>5.6</b>

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