

# Gabanintha Environmental Studies

## Flagship Vanadium project timeline update

### Highlights:

- **Desktop subterranean fauna study completed**
- **Vertebrate and SRE invertebrate fauna field study underway**
- **Flora and vegetation field study underway**
- **Updated timeline indicates project preparation is progressing as anticipated**

Australian Vanadium Limited (ASX:AVL, “the Company” or AVL”) provides this update on activities underway to progress the development of its flagship vanadium project at Gabanintha in Western Australia.

The Environmental Protection Authority requires a number of baseline studies to be undertaken by the Company to establish any potential environmental impact of the project.

The Company recently finalised a desktop subterranean fauna study completed by Biologic Environmental Consultants. A vertebrate and short-range endemic (SRE) invertebrate fauna study as well as a two season level-2 flora and vegetation field study are now underway at Gabanintha. The results of these studies will provide important baseline data and determine the need for further studies.

The Company is progressing towards the granting of a mining licence under MLA 51/878 at Gabanintha.

### Gabanintha Vanadium Deposit

The Gabanintha Project is located 40km south of Meekatharra in Western Australia. The vanadium resource is hosted in a gabbroic layered igneous complex containing bands of massive and disseminated titanomagnetite in a sequence over 200m in thickness. The style of mineralisation is similar to a number of deposit types around the world with the most similarity to vanadium deposits of the Bushveld Complex of South Africa.

The Gabanintha Vanadium Project is currently one of the highest-grade vanadium projects being advanced globally with existing Measured Resources of 7.0Mt at 1.09% grade  $V_2O_5$ , Indicated Resources of 17.8Mt at 0.68% grade  $V_2O_5$  and Inferred Resources of 66.7Mt at 0.83%

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### ASX ANNOUNCEMENT

#### Australian Vanadium Limited

ASX: AVL  
FRA: JT7.F

ABN: 90 116 221 740

T: +61 8 9321 5594  
F: +61 8 6268 2699  
E: [info@australianvanadium.com.au](mailto:info@australianvanadium.com.au)  
W: [australianvanadium.com.au](http://australianvanadium.com.au)

#### Street Address:

Level 1, 85 Havelock Street  
West Perth WA 6005

#### Postal Address:

Level 1, 85 Havelock Street  
West Perth WA 6005

#### Projects:

Gabanintha - Vanadium  
Blesberg, South Africa - Lithium/Tantalum  
Northanna Hill – Uranium/Vanadium



grade  $V_2O_5$ , a total of 91.4Mt, grading 0.82%  $V_2O_5$  and containing a discrete high-grade zone of 56.8Mt, grading 1.0%  $V_2O_5$  reported in compliance with the JORC Code 2012 (see YRR ASX Announcement 10 November 2015).

The updated Mineral Resource estimate incorporated 97% of the historical drilling data including data from the Company's 2009 and 2015 RC and diamond drilling programs. This included 233 RC and 17 Diamond Core holes for 20,086 metres over a 12 kilometre strike length. Of these holes 19,431metres were used in the grade estimate (see Figure1).

### Updated timeline

Table 1 shows an updated timeline of key activities underway and planned for the advancement of the project towards development.

PROJECT DESCRIPTION	MONTH									
	Apr 17	May 17	Jun 17	July 17	Aug 17	Sep 17	Oct 17	Nov 17	Dec 17	
Resource Update (including Cobalt)	Active	Active	Completed	Completed	Completed	Completed	Completed	Completed	Completed	
Mine Design and preliminary schedule	Completed	Active	Active	Active	Completed	Completed	Completed	Completed	Completed	
Metallurgical Test Program	Completed	Active	Active	Active	Active	Completed	Completed	Completed	Completed	
Water Supply & Hydrology Studies	Completed	Completed	Completed	Completed	Active	Active	Active	Completed	Completed	
Environmental Studies	Active	Active	Active	Active	Active	Active	Active	Active	Completed	
Environmental & Permitting Review	Completed	Completed	Completed	Completed	Completed	Active	Active	Active	Completed	
Marketing and Offtake negotiations	Active	Active	Active	Active	Active	Active	Active	Active	Active	

Table 1. Updated Milestone Table for Gabinintha Vanadium project.

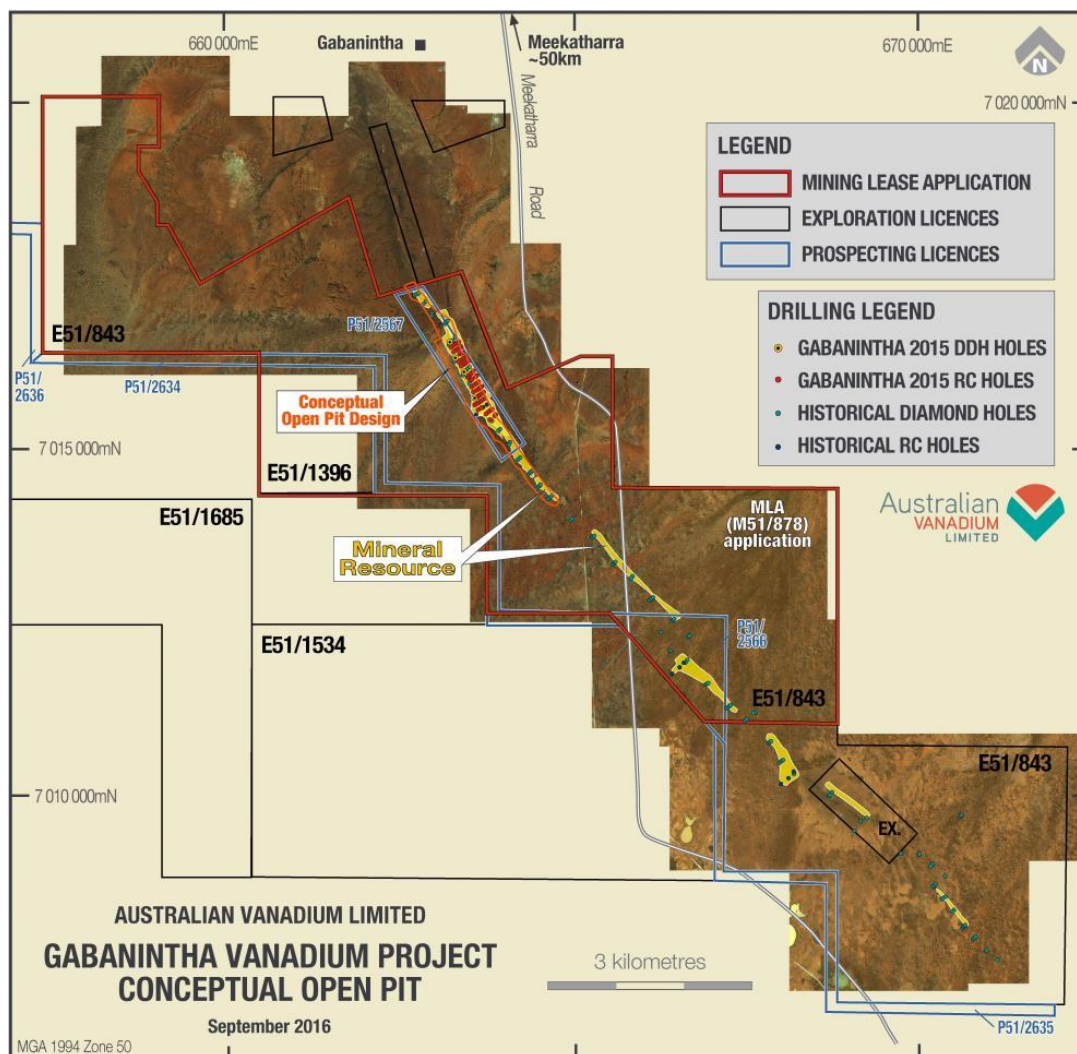


Figure 1 - Resource location and Pit Optimisation Model Pit Shell Outline

For further information, please contact:

Vincent Algar, Managing Director

+61 8 9321 5594

## **Competent Person Statement – Mineral Resource Estimation**

*The information relating to the Gabanintha Project 2015 Mineral Resource estimate reported in this announcement is based on information compiled by Mr John Tyrrell. Mr Tyrrell is a Member of The Australian Institute of Mining and Metallurgy (AusIMM) and a full-time employee of AMC (AMC Consultants Pty Ltd). Mr Tyrrell has more than 25 years' experience in the field of Mineral Resource Estimation. He has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and in resource model development to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'.*

*Mr. Tyrrell consents to the inclusion in the report of the matters based on the information made available to him, in the form and context in which it appears.*

*The information is extracted from the report entitled "Substantial high-grade vanadium resource highlights Gabanintha's world-class potential" released to ASX on 10 November 2015 and is available on the company website at [australianvanadium.com.au](http://australianvanadium.com.au).*

*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 Resource 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 has not been materially modified from the original market announcement*

**Appendix 1 - Gabanintha Project – Mineral Resource estimate using a 0.3% V<sub>2</sub>O<sub>5</sub> cutoff for low grade and 0.7% V<sub>2</sub>O<sub>5</sub> cutoff for high grade**

(total numbers may not add up due to rounding)

Material	JORC Resource Class	Million Tonnes	In situ bulk density	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%
High grade	Measured	7.0	3.73	1.09	43	12	10	8	3.4
	Indicated	4.3	3.29	1.07	41	12	12	9	4.6
	Inferred	45.5	3.67	0.97	42	11	12	8	2.8
<b>Subtotal</b>		<b>56.8</b>	<b>3.65</b>	<b>1.00</b>	<b>42</b>	<b>11</b>	<b>12</b>	<b>8</b>	<b>3.0</b>
Low grade	Indicated	13.4	2.39	0.55	24	7	27	19	8.7
	Inferred	21.1	2.48	0.53	25	7	27	17	7.0
<b>Subtotal</b>		<b>34.6</b>	<b>2.45</b>	<b>0.53</b>	<b>25</b>	<b>7</b>	<b>27</b>	<b>18</b>	<b>7.6</b>
<b>Subtotal</b>	<b>Measured</b>	7.0	3.73	1.09	43	12	10	8	3.4
<b>Subtotal</b>	<b>Indicated</b>	17.8	2.61	0.68	28	8	23	16	7.7
<b>Subtotal</b>	<b>Inferred</b>	66.7	3.29	0.83	37	10	17	11	4.1
	<b>TOTAL</b>	<b>91.4</b>	<b>3.19</b>	<b>0.82</b>	<b>35</b>	<b>10</b>	<b>18</b>	<b>11</b>	<b>4.8</b>