

## AVL TESTS CONFIRM POTENTIAL FOR SIGNIFICANT IRON BY-PRODUCT

*Target by-product quality achieved through initial benchscale testwork.*

### KEY POINTS

- The Australian Vanadium Project testwork proves potential for generation of an iron and titanium rich calcine by-product.
- Benchscale testing by Australian Vanadium Limited has successfully upgraded the calcine iron content from 54% Fe to an average of 66% Fe.
- Calcine grading >62% Fe could be sold into the global iron ore market.
- Calcine sales could add significant additional revenue over the life of the project.
- Testing is underway to separate titanium from the high-grade iron calcine to further improve product quality.

Australian Vanadium Limited (ASX: AVL, "the Company" or "AVL") is pleased to announce an update to benchscale testwork on iron and titanium rich calcine, which was considered a tailings stream within The Australian Vanadium Project roast-leach process, as outlined in the Pre-Feasibility Study ("PFS")<sup>1</sup>.

The testwork is being undertaken to establish whether the Company can upgrade the calcine from a lower grade (<55% Fe) iron concentrate, with marginal commercial value, to a higher grade (>62% Fe) iron product which could be sold into the global iron ore market and potentially generate significant additional revenue over the life of the Project.

Samples of calcine material generated from pilot and benchscale tests have been used for the testwork. The testwork has been very successful, improving iron grades from 54% up to an average of 66%. Table 1 shows the assay results of upgraded calcine from three effective sighter tests.

	Fe		Ti		Si		Al	
	Grade %	Recovery %	Grade %	Recovery %	Grade %	Recovery %	Grade %	Recovery %
Test 1	<b>67.30</b>	97.86	9.18	91.53	0.70	60.24	1.44	77.44
Test 2	<b>64.60</b>	97.86	9.32	98.53	1.70	62.29	2.16	76.64
Test 3	<b>66.20</b>	99.49	9.10	97.38	1.00	76.30	1.52	88.63

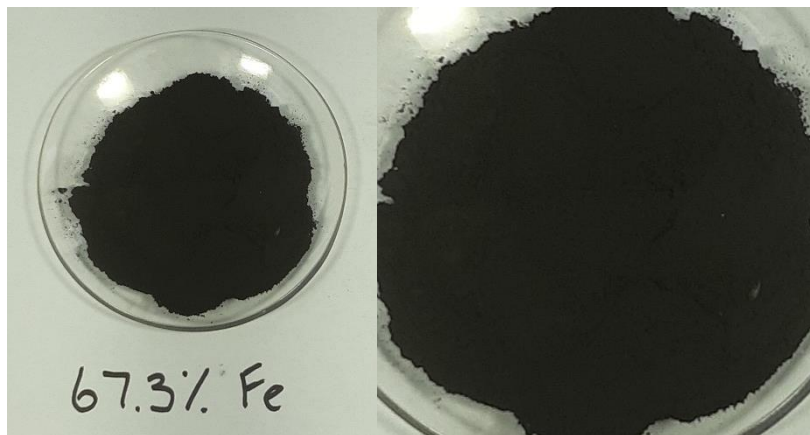
**Table 1 Results of Calcine Upgrade Benchscale Testing**

<sup>1</sup> see ASX announcement dated 19 December 2018 'Gabanintha Pre-Feasibility Study and Maiden Ore Reserve'

As a result of this successful testing, work is now underway to physically separate a portion of the titanium, which will further upgrade the calcine material and improve its value.

Todd Richardson, AVL's Chief Operating Officer comments, "With the amount of iron and titanium rich calcine that's forecast to be generated by The Australian Vanadium Project process, there is a big opportunity to unlock the value of this material. These indicative tests support a technical path to upgrade the material to be a valuable by-product."

AVL is actively negotiating potential offtake agreements for both the calcine product and vanadium produced from The Australian Vanadium Project. By-product sales could have a positive impact on overall operating costs and therefore enhance the Company's goal to be one of the lowest cost producers of vanadium in the world.



*Figure 1 Calcine Test Program Work 67.3% Iron Product*

For further information, please contact:

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#### **COMPETENT PERSON STATEMENT – METALLURGICAL RESULTS**

The information in this announcement that relates to Metallurgical Results is based on information compiled by independent consulting metallurgist Brian McNab (CP. B.Sc Extractive Metallurgy), Mr McNab is a Member of AusIMM. Brian McNab is employed by Wood Mining and Metals. Mr McNab has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which is undertaken, to qualify as a Competent Person as defined in the JORC 2012 Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr McNab consents to the inclusion in the announcement of the matters based on the information made available to him, in the form and context in which it appears.