ASX Announcement

Outstanding metallurgical results highlight strong economic potential of Gabanintha vanadium project in WA

Highlights:

- Extensive metallurgical tests further establish Gabanintha's strong potential to be a high-grade, low-cost vanadium project
- Results show high recovery rates from all the ore types, including oxidised material, at Gabanintha
- Strong recoveries achieved using relatively coarse grind sizes, highlighting further scope to keep operating costs low
- Silica content removed easily, benefiting both capex and recovery
- Strong recoveries of titanium demonstrate potential to generate additional revenue
- Metallurgical results will be combined with the recent upgraded Resource inventory as part of the feasibility study

Australian Vanadium (ASX: AVL) is pleased to report outstanding results from extensive metallurgical tests on ore types from its Gabanintha vanadium project near Meekatharra in WA.

The tests returned high recovery rates from the fresh, transitional and oxide ore at Gabanintha, further demonstrating the project's strong potential to enjoy both low capital and operating costs.

The project's attractive cost profile was also underpinned by results showing that the silica content of the ore was removed easily and that there were strong recovery rates for the titanium, raising the prospect of an additional revenue source.

The results will be combined with the latest mineral resource estimate[1] (see ASX release dated 10 November, 2015) as part of the project feasibility studies and will also be used to advance the processing design.

Key technical findings of the testwork include:

- Magnetic separation tests indicate that both Low Grade (LG) and High Grade (HG) partly oxidised and fresh samples can be effectively upgraded to concentrates up to 1.5% V_2O_5.
- Totally oxidised samples yield a high quality iron-vanadium-titanium concentrate when using high intensity magnetic separation (mass recovery ranges between 30% and 85%, vanadium recovery 30 to 90%)

[1] ASX Announcement 10 November 2015. Updated Mineral Resource Estimate

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ASX ANNOUNCEMENT

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- Magnetic recovery of LG samples is impressive with 32 to 62% of mass recovered and 70% to 85% of the V_2O_5 reporting to concentrate at a coarse grind size.
- Magnetic recovery from HG samples is excellent at 75% to 82% of mass recovered and 82% to 95% of the V_2O_5 at a coarse grind using low intensity magnetic separation.

Australian Vanadium Chief Executive Vince Algar said the results provided further strong evidence that Gabanintha was well on track to be a high-grade, low-cost vanadium project.

“We are rapidly ticking all the boxes along the way to establishing Gabanintha as a technically and economically robust project,” Mr Algar said.

“The strong recoveries achieved from all the ore types using a relatively coarse grind size strengthen our view that Gabanintha will enjoy both low operating and capital costs.”

Details of Metallurgical Testing

Six composite RC samples were submitted for testing to Bureau Veritas metallurgical laboratories under the guidance of metallurgical consultants Battery Limits Pty Ltd. The samples comprised oxide, transition and fresh material each from low grade (disseminated) and high grade (massive) mineralisation for a total weight of 225.51 kilograms. Crushing and grinding parameters, analysis of recoveries from all ore types using gravity and magnetic separation methods were tested in order to confirm suitable process plant options. The tests performed included Grind Size Distribution, Davis Tube Recovery (DTR), Low Intensity Magnetic Separation (LIMS), Wet High Intensity Magnetic Separation (WHIMS), Heavy Liquid Separation (HLS) and Wilfley Table techniques. Figure 1 shows the distribution of Low Grade (LG) and High Grade (HG) mineralised zones in a schematic cross section of the Gabanintha Deposit.

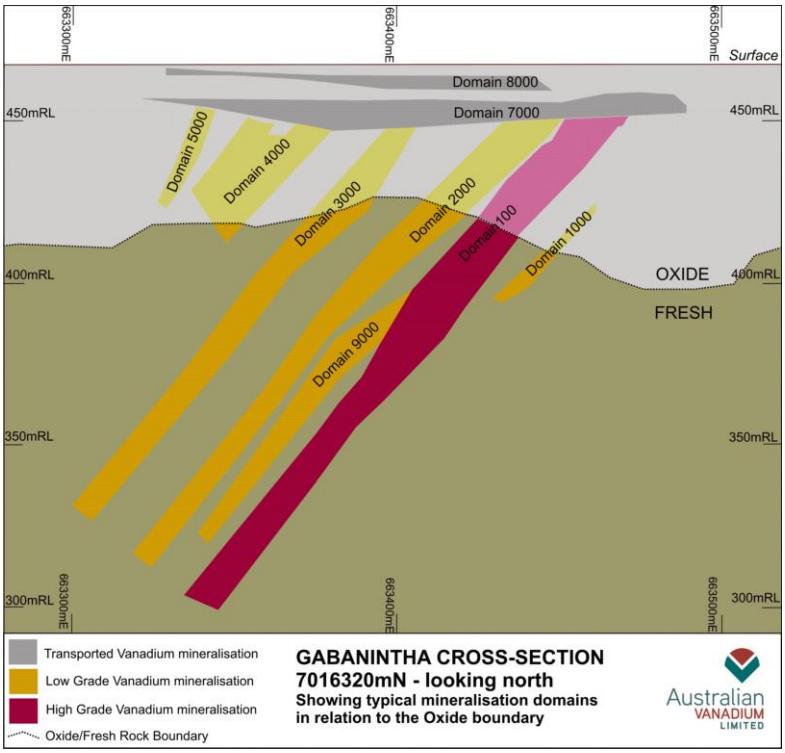

Figure 1: Schematic cross section of Gabanintha Deposit showing HG and LG domains as well as oxide boundary. Transitional material is found above and below the indicated oxide and fresh boundary

The test work provides vital information for ongoing more detailed test work and plant design which will take place as part of the feasibility study.

The following are the main findings:

Grind Size

The samples are relatively grind-insensitive and good liberation of V-Ti-Fe can be achieved at a coarse 500 micron size. This could remove the necessity to fine grind for all separation techniques and thus save significantly on milling and processing capital and operating costs. Tests at 80% passing -75, -212 and -500 microns were conducted and there was little difference in the recovery results.

The silica content of all samples was seen to be effectively reduced by screening. Due to the non-magnetic nature of the silica it is likewise effectively reduced during magnetic separation and reports to the non-magnetic fraction. Further work on silica reduction and de-sliming is required but the results from the current tests are very encouraging and point to the generation of low silica magnetic concentrates. LG concentrates achieved silica contents between 2.2% and 8% while HG concentrates achieved silica contents between 1.57% and 4.4%.

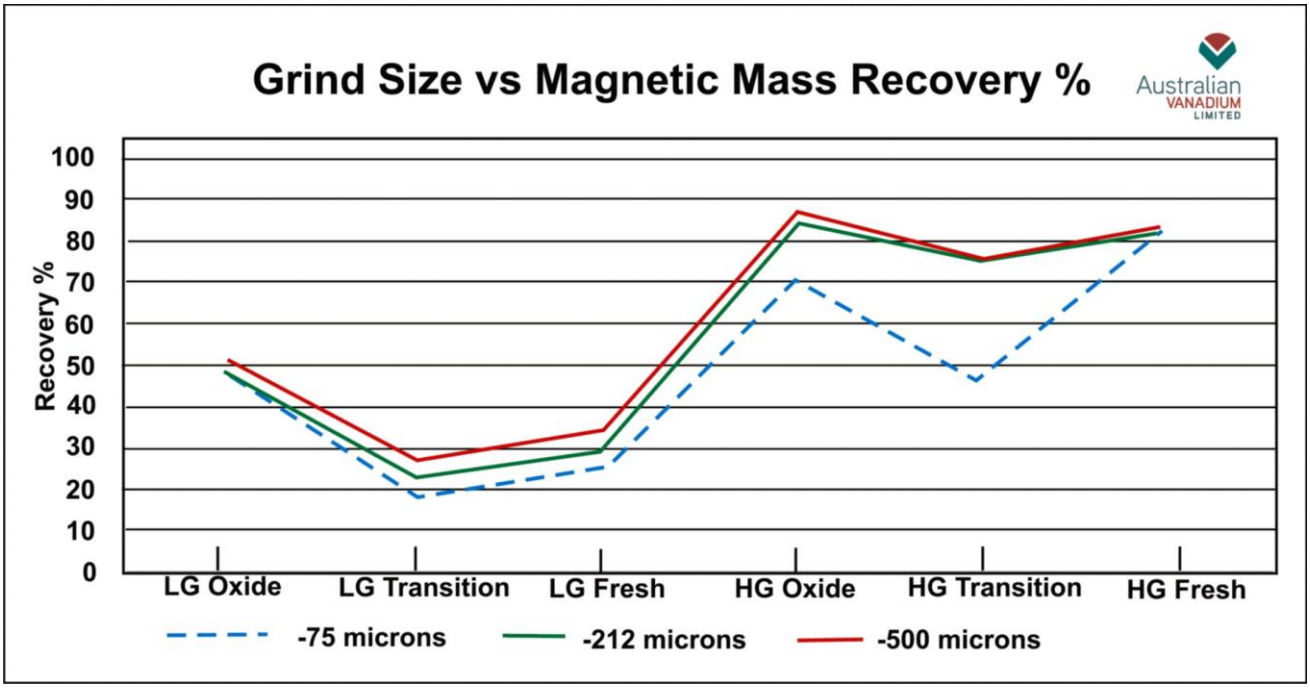

Figure 2: Effect of grind size on magnetic mass recovery of the ore sub-types. All sample recoveries are DTR at 3000G except LG Oxide and HG Oxide Samples which are WHIMS at 7000G

Recovery

Davis Tube Recovery (DTR) tests, a low intensity magnetic recovery method, confirm that magnetic separation techniques will be applicable for both High Grade (HG) and Low Grade (LG), transition and fresh materials using a coarse grind size.

Magnetic separation tests were completed at 750, 1500, 3000 Gauss using DTR methods for all grind sizes. In the massive HG transition and fresh ore types, results indicated that a grind size of 500 microns was optimum for separation of the magnetic fraction. The lower Gauss values (750 to 3000) allowed 70%-80% mass recoveries and 85%-92% V_2O_5 recovery in the magnetic concentrates of the HG Ore. Vanadium concentrate grades varied from 1.1 to 1.5 % V_2O_5.

LG disseminated mineralisation samples yielded lower mass recoveries from DTR methods with concentrate mass yields from 24% to 32%. Despite this lower overall mass of concentrate, an impressive 65-70% of the vanadium is recovered, yielding a significant grade increase from the 0.5% V_2O_5 feed to between 1.1% and 1.4% V_2O_5. These tests confirm a key result from earlier mineralogy work[2]; that the low grade ores can yield significant additional high quality vanadium units.

Use of Wet High Intensity Magnetic Separation (WHIMS) techniques showed good potential to upgrade and recover oxide and transitional samples. It is often the case that strongly oxidised portions of vanadium deposits cannot produce a concentrate using any magnetic methods. This result is an excellent outcome for Gabanintha, allowing a flowsheet to be

[2] ASX on 21st October 2015 Gabanintha Confirms Positive Vanadium Mineralogy

developed that incorporates and recovers significant oxidised vanadium tonnes. These tests were conducted on all sample types using high intensity magnets at intensities of 4500, 7000 and 9000 Gauss.

As the magnetic intensity was increased from 4,500 to 7,000 Gauss, a significant leap occurs in the recovered mass and vanadium. This occurs particularly strongly in completely oxidised LG and HG material. In the LG oxide, mass yields jump from 30% to 50% with vanadium recovery jumping from 40% to 70%. In the HG oxide, mass yields jump from 32% to 75% with vanadium recovery jumping from 32% to 82%. This result is supported by earlier mineralogy work which indicated the presence of unweathered magnetite cores in partially weathered martite mineral grains in surface, and apparently completely oxidised, material (see Figure 3).

Grades obtained from the test work indicate that a concentrate product assaying between 1.3% and 1.5% V_2O_5 is feasible from a blend of all ore sub-types, including oxides. Mass yields of concentrate and vanadium similarly point to the excellent potential of blending oxide, transition and fresh material from both LG and HG ore types in the mining and processing scenarios.

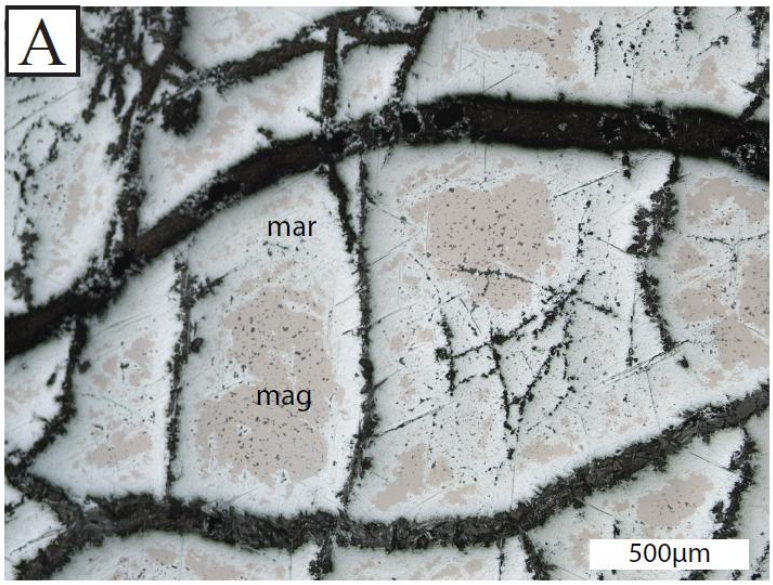

Fig 3: Sample GDH916 Oxidised sample showing weathered iron mineral martite grain and preserved magnetite core.

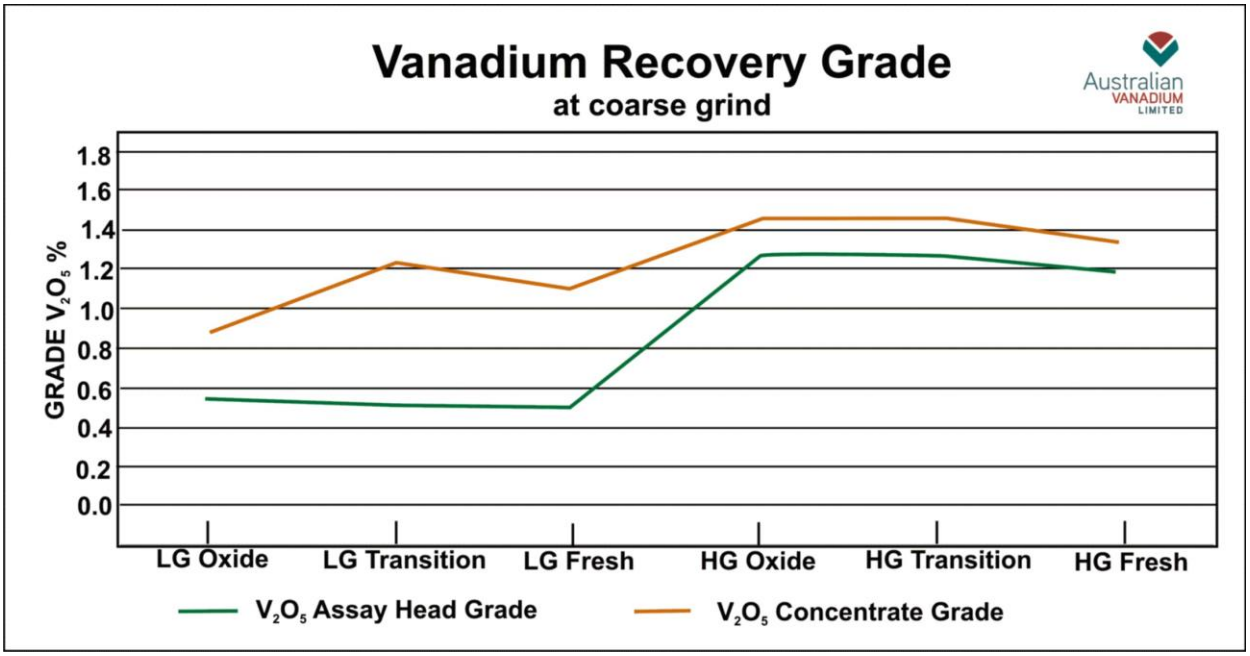

Figure 4: Expected Vanadium Grade of the ore sub-types. All sample recoveries are DTR at 3000G except LG Oxide and HG Oxide Samples which are WHIMS at 7000G

Titanium Recovery in Concentrate

The test work indicated that in general, transitional and fresh samples achieved good recovery of Titanium dioxide (TiO_2) in terms of recovery percentage and grade. Sample head grades varied from 6.5% to 9% TiO_2 in the LG samples and 13-15% TiO_2 in the HG samples.

Titanium oxide recovery using DTR methods (3000 Gauss and 500 micron grind size) yielded the following encouraging results;

- Transition LG : 64.3 % TiO_2 recovered at a grade of 15.8 % TiO_2
- Fresh LG : 71.2% TiO_2 recovered at a grade of 14.0% TiO_2
- Transition HG : 79.3 % TiO_2 recovered at a grade of 15.2% TiO_2
- Fresh HG: 86.4% of TiO_2 recovered at a grade of 14.0% TiO_2

When using higher intensity magnetic separation, oxide recoveries increase significantly at 7000 Gauss and this includes the recovery of TiO_2.

The consultant has recommended the company undertake a detailed review of TiO_2 by-product recovery options as part of its planned feasibility work in 2015 in the light of these positive test results.

The addition of a Titanium product recovery stream could add significantly to the project economics, if it is possible to implement such a recovery at modest to low capital costs.

Recommendations for Future test Work

The consultant has recommended that a number of additional tests be carried out as part of a detailed feasibility study to determine the ultimate processing route and ideal blending strategy to follow during operations:

- Additional tests are required using core samples (already drilled) to assess variability of ore types, gravity upgrade techniques, de-sliming characteristics and roast leach work
- Detailed evaluation of Fe: V ratios across the resource to identify the maximum upgradability potential of the ore types.
- Conduct future test work on the available drill core to determine optimal grind recovery and fines minimisation, as well as maximisation of silica removal during beneficiation.
- Optimise magnetic recovery circuits
- Commence roast/leach test work on selected samples and composites.
- Consider TiO_2 recovery processing options given the good TiO_2 recovery and grade achieved during the current round of tests.

Vanadium Market Developments

Australian Vanadium Limited (AVL) continues to advance its opportunities in the Vanadium Redox Battery market by forming relationships with key players. The Company has formed a battery focused subsidiary, VSUN Pty Ltd, which will sell vanadium batteries on behalf of a world leader in commercial battery development, focusing on the Australian market, particularly businesses and off-grid opportunities. The scalability of VRBs also opens up many other applications including domestic, farm-production and electric vehicle charging stations.

The rapid acceleration in the development of renewable energy projects on a global scale is being accompanied by rapidly growing interest and need for grid storage technologies. The uptake of VRB technology along with other grid storage technologies could have a significant effect on the vanadium (V_2O_5) market as the use of V_2O_5 electrolyte is a large component (50% of current cost) of the battery units.

The unique characteristics of VRBs, specifically their scalability, long lifespan cycles and the use of one battery element, make them a strong candidate to earn up to 30% of the growing energy storage market, which is expected to grow from a current 0.4GW to 40GW in just the next seven years.

AVL, as a potential vanadium producer, recognises the importance of the steel markets, but is also actively seeking to link the use of its products to the rise of vanadium battery technology.

During 2015, the vanadium markets continued to be affected by the slowing world iron ore and steel markets. The Business Rescue status of Evraz Highveld Steel in South Africa and associated operations such as the Mapochs Mine are leading to a dramatic reduction in available vanadium products. The closure or suspension of Chinese vanadium capacity is ongoing while the demand for steel and its source materials has slowed in 2015.

The price of vanadium (as ferrovanadium and oxide) has remained at historic lows throughout the year. Australian Vanadium believes this situation is unsustainable. With the strong and ever-increasing interest in vanadium for use in energy storage, demand and prices are expected to recover as steel demand grows.

Australian Vanadium is positioning itself to offer shareholders long-term opportunities and value across the entire vanadium supply chain.

For further information, please contact:

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Competent Person References

Competent Person Statement – Metallurgical Results
The information in this statement that relates to Metallurgical Results is based on information compiled by independent consulting metallurgist David Pass B.Sc (Hons), Mr Pass is a Member of The Australian Institute of Mining and Metallurgy. David Pass is employed by Battery Limits Pty Ltd Mr Pass 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 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'.

Mr. Pass 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 www.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 persons findings are presented has not been materially modified from the original market announcement.

http://www.australianvanadium.com.au/wp-content/uploads/2015/02/Gabanintha-Resource-Update-2015-10-Nov-Final.pdf