



ASX Announcement 23 May 2018

TRITON TO FASTRACK STUDIES OF GLOBALLY SIGNFICANT NICANDA HILL VANADIUM RESOURCE 1.44 BILLION TONNES AT 0.29% V2O51

- Triton to fast track studies for the Nicanda Hill vanadium mineralisation in Mozambique
- ✓ Globally significant vanadium deposit 1.44 billion tonnes at $0.29\% \text{ V}_2\text{O}_5^1$ Tier one resource with minimal mining costs due to processing of graphite tailings
- CSA Global study confirms potential of the shallow, upper zone of the deposit
- √ Testwork planned to identify processing options for vanadium concentrate
- ✓ Studies are complementary to both the Ancuabe and Nicanda Hill graphite projects and provide regional synergies.

Triton Minerals Limited (**Triton** or the **Company**) is pleased to announce that it will fast track studies on the vanadium mineralisation at its 100% owned Nicanda Hill Project in Mozambique, a globally significant vanadium deposit.

The decision to advance Nicanda Hill follows a successful independent review by CSA Global which confirmed the potential of the vanadium deposit and potential processing options.

Nicanda Hill has a JORC Resource of 1.44 billion tonnes of vanadium at a grade of 0.29% V₂O₅ (refer to Table 1 and Triton ASX announcement dated 30 October 2015¹). This resource is one of the world's largest defined resources of vanadium and provides an opportunity to capitalise on the forecast shortage of Vanadium in coming years evidenced by recent price increases in the price of vanadium. In addition, it is one of the few vanadium deposits with a significant proportion (28%) of resource in the higher confidence levels of Measured and Indicated.

ASX Vanadium Peer Comparison - Resource Size and Market Capitalisation (ASX Announcements)



¹ ASX Announcement, "Nicanda Hill Resource Upgrade", 30 November 2015. Triton is not aware of any new information or data that material effects the information included in the relevant market announcement, and all material assumptions and technical parameters underpinning the estimate in the relevant announcement continue to apply and have not materially changed.

1



The Mineral Resource Estimate for Nicanda Hill was based on a total of 148 drillholes (86 Reverse Circulation and 62 Diamond drill holes) for a total of 21,864 metres of drilling.

Nicanda Hill Vanadium

Given the appreciation in the vanadium pentoxide price and strong pricing outlook, Triton is investigating the opportunity to produce a vanadium concentrate or product from Nicanda Hill.

As announced to the ASX on 13 March 2018, Triton appointed CSA Global to assist in advancing the technical understanding and potential of the vanadium deposit at Nicanda Hill.

Mineral Resource Estimate

A JORC compliant updated Mineral Resource estimate of 1.44Bt at 0.29% V_2O_5 , containing 4.2Mt of V_2O_5 , was reported to the ASX on 30 October 2015².

Classification	Tonnes	Grade	Contained Graphite	Grade	Contained V₂O₅
	(Mt)	(TGC%)	(Mt)	(V ₂ O ₅ %)	(Mt)
Measured	33	12.34	4.06	0.34	0.11
Indicated	375	11.08	41.51	0.29	1.10
Inferred	1,036	11.08	114.75	0.29	3.01
Total	1,443	11.11	160.32	0.29	4.22

Table 1: Nicanda Hill October 2015 Mineral Resource Estimate Table (reported using 5%TGC cut-off grade)

Note that some table numbers may not tabulate exactly due to the effects of rounding.

A review was undertaken of the available vanadium and multi-element chemistry in the Mineral Resource to identify potential vanadium target areas (best grade zones) within the Nicanda Hill deposit. The vanadium in the upper 150m of the deposit appears to concentrate in the Mutola zone, in the North, Centre and South. The Vanadium grades in the hanging and foot walls decreased as distance from the Mutola zone increased, with the hanging wall more enriched than foot wall.

² See footnote 1



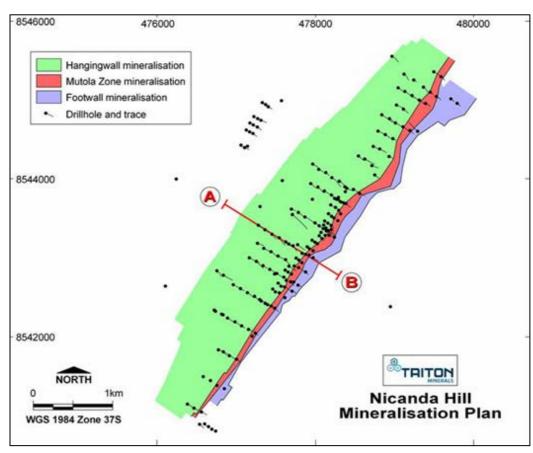


Figure 1: Nicanda Hill mineralisation zones

The figures below highlight the areas of higher vanadium concentration in the upper 150m zone of the Nicanda Hill deposit. Drillholes from these areas will be selected for further petrographic and metallurgical testwork. In addition, the lithology logging will be reviewed to enable an improved model to be created for the vanadium mineralisation, distinct from the graphite mineralisation.

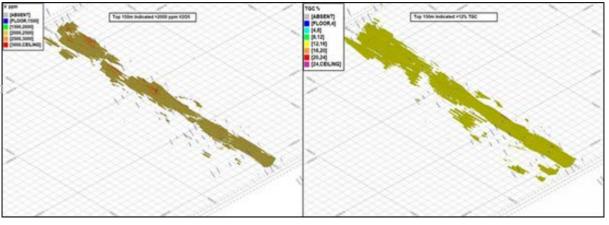


Figure 2: V > 2000 ppm on the left, TGC > 12% on the right in the top 150m of the resource



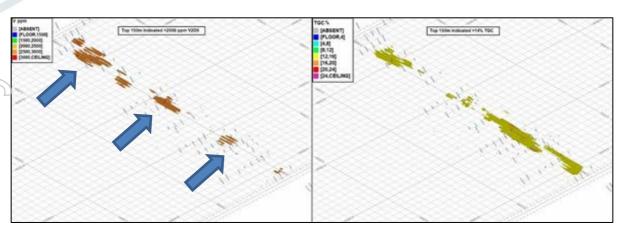


Figure 3: V > 2500 ppm on the left, TGC > 14% on the right in the top 150m of the resource

Processing

Triton is currently progressing a mineralogical study into the vanadium mineralisation at Nicanda Hill, which will feed into a planned metallurgical testwork programme using samples from diamond core holes already drilled and being held in storage.

Initial characterisation of the vanadium mineralisation shows the presence of Vanadium in mica (muscovite and roscoelite), epidote (mukhinite), phlogopite, jarosite, goethite/clay, chlorite, amphibole and garnet (goldmanite).

Further investigation is planned to confirm the proportions of these vanadium minerals in the areas with greatest vanadium content within the Nicanda Hill deposit.

This information will be used to further develop the vanadium recovery processes to a concentrate from the Nicanda Hill resource.

Established methodologies such as magnetic separation, dense media separation will be trialled on samples from Nicanda Hill along with flotation trials. Following the proposed mineralogical investigations, Triton Minerals is planning to commence metallurgical investigations with mineralised core samples from Nicanda Hill.

The advantage of the Vanadium resource is that it is complementary to the huge graphite deposit already defined at Nicanda Hill and any processing of Vanadium is likely to be a secondary processing of the graphite tailings, meaning that there will be no additional mining costs for the vanadium feedstock.



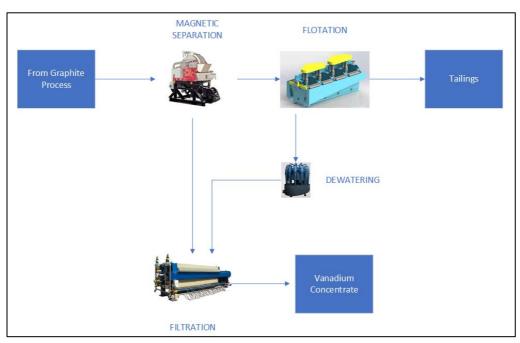


Figure 4: Nicanda Hill vanadium process flowsheet concept

Summary and Next Steps

The recent work completed on the vanadium potential of Nicanda Hill has enabled Triton to undertake further targeted testwork and metallurgical studies to target the most prospective areas in this substantial deposit.

Samples for the most prospective zones within Nicanda Hill have been identified and testwork in Australia will commence shortly. It is anticipated that testwork results will be available in Q3 2018.

Commenting of the results, Triton Managing Director Peter Canterbury said:

"Whilst we were aware of the size of the vanadium deposit, these studies have highlighted significant zones of vanadium within the Nicanda Hill orebody and demonstrate that valuable synergies may be achieved by producing both graphite and vanadium.

These recent developments will assist the commercialisation discussions underway on Nicanda Hill and the Company's efforts to introduce a JV partner into what is a world scale vanadium and graphite deposit.

It further emphasises the upside potential of Triton through its portfolio of quality projects.

I look forward to updating Shareholders in the near term on both the metallurgical testwork but also on farm-in discussions on Nicanda Hill.

We believe this will be complementary to our development of the Ancuabe Graphite Project in Mozambique and will provide significant regional synergies for the Company."



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Competent Person's Statement

The information in this report that relates to the Mineral Resource estimate at Nicanda Hill is based on, and fairly represents, information which has been compiled by Mr James Ridley. Mr Ridley is a Principal Geologist at Ridley Mineral Resource Consulting Pty Ltd, who is an independent consultant and a Member of the Australasian Institute of Mining and Metallurgy. Mr Ridley has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that is being undertaken to qualify as Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Ridley consents to the inclusion in this report of the matters based on his information in the form and context in which they appear.