30 May 2024

Update:
Tivan & CSIRO successfully complete TIVAN+ Testwork Program

The Board of Tivan Limited (ASX: TVN) ("Tivan" or the "Company") provides enclosed an update of the announcement released on ASX on 24 May 2024 titled "Tivan & CSIRO successfully complete TIVAN+ Testwork Program".

The updated announcement includes the addition of a Competent Person's Statement and supporting additional JORC Code (2012) information tables.

This announcement has been approved by the Board of the Company.

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24 May 2024

Tivan & CSIRO successfully complete TIVAN+ Testwork Program

- **Tivan and CSIRO, Australia's national science agency, have successfully completed a significant development testwork program for the TIVAN+ critical minerals processing technology.**
- **Testwork outcomes have exceeded expectations, delivering excellent results that confirm the technical viability of processing Speewah concentrate with the TIVAN+ technology.**
- **TIVAN+ is designed to recover vanadium, titanium and iron from vanadium titanomagnetite, providing an opportunity to reshape global supply chains and downstream industrial pathways in the critical minerals of vanadium and titanium.**
- **High-grade magnetite returned using TIVAN+ has highlighted the potential of the product as a high-quality feedstock for a direct reduced iron (DRI) process for the production of "green steel".**
- **Tivan has an exclusive 20 year worldwide licence (except India) from CSIRO for the TIVAN+ technology, initially focused on Tivan's 100% owned Speewah Vanadium Project.**
- **Tivan is advancing discussions with two asset owners of vanadium titanomagnetite resources that have expressed interest in the utilisation of TIVAN+ technology.**
- **Tivan will review its strategy for the Speewah Vanadium Project, inclusive of the TIVAN+ pathway, following completion of the Pre-Feasibility Study for the Speewah Fluorite Project in July.**

The Board of Tivan Limited (ASX: TVN) ("Tivan" or the "Company") is pleased to advise that a significant development testwork program has been completed for the TIVAN+ critical minerals processing technology, confirming the technical viability of processing vanadium titanomagnetite ("VTM") concentrate from the Speewah Vanadium Project in Western Australia with the TIVAN+ technology.

The testwork program focused on assessing the TIVAN+ technology flowsheet developed between CSIRO and Tivan utilising Speewah concentrate, with the objective of validating the technology and supporting future process engineering and pilot plant design. Testwork outcomes have exceeded expectations, delivering excellent results in the flowsheet areas of leaching and product recovery.

The testwork program was delivered under a Research Services Agreement between Tivan and CSIRO. CSIRO is Australia's national science agency and is one of the largest and most multidisciplinary mission-driven research organisations in the world, operating at 49 sites across Australia and sites overseas.

Tivan announced in November 2023 that it has secured a long-term commercial and strategic partnership with CSIRO to facilitate collaborative development and commercialisation of the TIVAN+ critical minerals processing technology for the recovery of vanadium. The partnership was established through the execution of two agreements:

- Technology Licence Agreement ("TLA"): providing Tivan with an exclusive, non-transferable 20 year licence (excluding India) to use CSIRO's specified VTM intellectual property, patents, know-how and any further improvements thereto for the recovery of vanadium in the form of the TIVAN+ technology.

- Research Services Agreement ("RSA"): establishing the agreed pathway for technology development and optimisation including the testwork program to validate the TIVAN+ technology flowsheet utilising Speewah concentrate.

For further details of the strategic partnership with CSIRO, refer to the ASX announcement of 14 November 2023.

Development Program - Testwork Results

The TIVAN+ technology has been developed to optimise extraction of value from the vanadium, iron and titanium contained in VTM feedstocks. The technology is based on leaching and selective product recovery (precipitation) processes to recover vanadium pentoxide, magnetite and a titanium pigment feedstock.

Development of the TIVAN+ technology under the RSA has progressed as planned and testing addressing the aspects of leaching and product recovery has finished on schedule. The testwork program undertaken has delivered excellent outcomes, generating positive results that demonstrate the technical viability of processing Speewah concentrate with the TIVAN+ technology.

The purpose of the testwork program was to:

- Investigate risks and opportunities identified for the TIVAN+ technology, developed through integration of aspects of Tivan's own VTM intellectual property with CSIRO's VTM processing technology.
- Review the TIVAN+ flowsheet to identify technology gaps in support of testwork definition.
- Validate the TIVAN+ technology flowsheet utilising VTM concentrate from Tivan's Speewah and Mount Peake Projects.
- Support future process engineering activities.
- Address key technical areas required to support a future TIVAN+ Pilot Plant.

To facilitate the program, CSIRO assembled a team of research scientists and subject matter experts to oversee progression of relevant areas of the TIVAN+ testwork and flowsheet development. The testwork program was conducted at CSIRO's Mineral Resources facility at Waterford in Perth.

Testwork was performed on high-grade (2.44% V_2O_5) Speewah concentrate prepared before Tivan's acquisition of the Speewah Project. The concentrate was produced in 2011 when approximately six tonnes of RC drilling samples were processed with magnetic separation.

Leaching Results

Leaching testwork on the Speewah concentrate was undertaken to assess vanadium extraction and titanium residue properties. Testwork included a larger bench scale trial with 2.2 kg of Speewah concentrate. The vanadium extraction results for all 25 trials completed for Speewah concentrate are summarised in *Table 1* in *Appendix 1*. The trials delivered excellent results, demonstrating the repeatability of high vanadium extraction within the range of experimental testing parameters. A vanadium extraction of 98.5% was validated with a larger bench scale trial (Tiva45), which is an

excellent result significantly higher than standard industry vanadium salt roast yields from VTM ores. The leaching outcomes also support the CSIRO/Tivan position that the technology will be applicable to alternative VTM deposits.

The leach produces a vanadium bearing solution and a titanium enriched leach residue. The residue from the leach was ~57 to 60% Ti (as TiO_2) in optimised leaching trials. Three selected titanium rich residues from the vanadium leaching trials were submitted for a sulphate digest to test their amenability to the sulphate pigment process. The titanium extraction results are summarised in *Table 2* in *Appendix 1*. Titanium extractions in the range of 87.7% to 94.2% were returned, an outcome which demonstrates that the titanium residue from the TIVAN+ technology has amenability to the sulphate pigment process. As part of the commercial strategy for TIVAN+, Tivan is assessing product specifications for titanium dioxide and exploring opportunities to directly sell or further process the residue for titanium dioxide pigment manufacture.

Product Recovery Results

Earlier testwork on the recovery of a vanadium pentoxide (V_2O_5) product from the leach liquor was performed on synthetic solutions to establish preferred processing routes and vanadium pentoxide specifications. The final executed tests utilised leach liquor prepared from Speewah concentrate. The targeted high purity (>99.5%) vanadium pentoxide specification was met when utilising Speewah leach liquor, validating the results from previous synthetic solution testing (see ASX announcement 14 November 2023 for synthetic results). Results are summarised in *Table 3* in *Appendix 1.*

The high purity V_2O_5 sample was prepared without specialised industry purification steps such as solvent extraction, leaving significant scope for further reduction of the impurities in the TIVAN+ V_2O_5. The outcome is important as it supports the Company's vision for use of the vanadium pentoxide product in the preparation of vanadium electrolyte products.

Iron recovery work was performed solely on representative synthetic solutions. The results from the iron recovery tests were very positive, demonstrating the production of target high-grade (>64.5% Fe) iron products with high recovery of iron from solution. Single stage and two stage recovery flowsheets were trialed with both configurations demonstrating near-quantitative (100%) iron recovery from solution. Notably an iron grade of 69.4%, which corresponds to near pure magnetite, was obtained at a lower recovery of approximately 92%. The results highlight the potential for the magnetite to be a feedstock for a direct reduced iron ("DRI") process. DRI feedstocks are typically higher quality than blast furnace iron ore feedstocks, requiring an iron composition of greater than 67%.

The results show there is flexibility for the project to tailor the high-grade magnetite product to the specifications required for downstream vendors. Future work with commercial limestones relevant to the region is required to confirm the high-grade iron oxide product outcomes.

Image 1: Samples - titanium dioxide (leach trials), magnetite (iron recovery trials), "AMV" (ammonium metavanadate is a pre-cursor to V_2O_5 preparation) and vanadium pentoxide (vanadium recovery trials) (source: CSIRO)

Commercial Update

Under the terms of the TLA with CSIRO for TIVAN+, Tivan is to actively seek to sublicence the TIVAN+ technology to third parties (see ASX announcement of 14 November 2023).

Tivan has received approaches from two independent third parties interested in assessing the suitability of the TIVAN+ technology for their vanadium titanomagnetite deposits. Tivan is working through preliminary assessment phases with these third parties to determine desktop technical applicability, and if warranted define proposed preliminary testwork requirements on third party deposit samples to be undertaken in conjunction with CSIRO.

Tivan notes that while there is third party interest in the TIVAN+ technology, there is no guarantee or certainty that a sublicensing agreement will eventuate.

Next Steps

Tivan is currently focused on progressing the Speewah Fluorite Project and scheduled to deliver the Pre-Feasibility Study ("**PFS**") in July.

Following the completion of the PFS, Tivan will undertake a comprehensive review of its strategy and planning for the Speewah Vanadium Project. The principal aim of the review will be to evaluate a preferred development pathway as between traditional salt roast processing and the TIVAN+ technology pathway. The review will encompass the extensive body of work that Tivan completed in advancing the salt roast pathway between September 2023 and February 2024, in conjunction with Hatch Engineering (see ASX announcement of 22 September 2023).

In respect of TIVAN+, the review will encompass the extensive body of work completed with CSIRO over the past year and the testwork results reported today. It will evaluate the pathway to the planning and construction of a large-scale TIVAN+ Pilot Plant, including potential funding through commercial arrangements and various Australian government programs. The Board notes that the recent 2024-25 Federal Budget includes significant funding for innovative projects that build sovereign capabilities and that accelerate the energy transition.

Tivan will report the findings of this comprehensive review in Q3. Meanwhile, Tivan will continue to rapidly advance the Company's strategic priorities in 2024, being the Speewah Fluorite Project and the Sandover Project.

Tivan Executive Chairman Mr Grant Wilson commented:

"A year on from our decision to break from the TIVAN® flowsheet, we are delighted to report the first testwork results of our strategic partnership with CSIRO. The results confirm the technical viability of TIVAN+ and the amenability of the technology pathway to the Speewah resource. These are critical foundational steps and the result of extensive collaboration between Tivan and CSIRO.

The success of the testwork program means that Tivan can now evaluate the traditional salt roast pathway against the TIVAN+ technology pathway. This important exercise will occur in Q3. If we decide in favour of TIVAN+, we will move directly toward the planning and construction of a large-scale TIVAN+ Pilot Plant. From a scheduling perspective, there is scope to construct a TIVAN+ Pilot Plant whilst we are delivering the Speewah Fluorite Project.

The Board of Tivan extends its congratulations to the team at CSIRO. The testwork results are fantastic and offer scope to build important sovereign capabilities that advance the energy transition. A TIVAN+ Pilot Plant would be a breakthrough achievement in critical minerals processing and would be 'Made in Australia'."

This announcement has been approved by the Board of the Company.

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Ends

Competent Person's Statement

Tivan's exploration activities, including for the Speewah Project, are being overseen by Mr Stephen Walsh (BSc). The information that relates to exploration results in this announcement is based on and fairly represents information and supporting documentation prepared and compiled by Mr Walsh, a Competent Person, who is the Chief Geologist and an employee of Tivan, and a member of the Australasian Institute of Mining and Metallurgy (AusIMM). Mr Walsh has sufficient experience of relevance to the styles of mineralisation and the types of deposits under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results. Mr Walsh consents to the inclusion in this announcement of the matters based on information compiled by him in the form and context which it appears.

Forward looking statement

This announcement contains certain "forward-looking statements" and comments about future matters. Forward-looking statements can generally be identified by the use of forward-looking words such as, "expect", "anticipate", "likely", "intend", "should", "estimate", "target", "outlook", and other similar expressions and include, but are not limited to, the timing, outcome and effects of the future studies, project development and other work. Indications of, and guidance or outlook on, future earnings, financial position, performance of the Company or global markets for relevant commodities are also forward-looking statements. You are cautioned not to place undue reliance on forward-looking statements. Any such statements, opinions and estimates in this announcement speak only as of the date hereof, are preliminary views and are based on assumptions and contingencies subject to change without notice. Forward-looking statements are provided as a general guide only. There can be no assurance that actual outcomes will not differ materially from these forward-looking statements. Any such forward looking statement also inherently involves known and unknown risks, uncertainties and other factors and may involve significant elements of subjective judgement and assumptions that may cause actual results, performance and achievements to differ. Except as required by law the Company undertakes no obligation to finalise, check, supplement, revise or update forward-looking statements in the future, regardless of whether new information, future events or results or other factors affect the information contained in this announcement.

Appendix 1 - RSA testwork program results

Trial	Vanadium Extraction
Tiva19	97.1%
Tiva22	97.5%
Tiva23	97.1%
Tiva24	97.2%
Tiva25	97.7%
Tiva26	**98.5%**
Tiva27	97.4%
Tiva28	98.0%
Tiva29	96.9%
Tiva30	92.7%
Tiva31	96.6%
Tiva32	91.5%
Tiva33	95.0%
Tiva34	97.9%
Tiva35	95.5%
Tiva36	96.1%
Tiva37	96.5%
Tiva38	96.2%
Tiva39	98.2%
Tiva40	97.0%
Tiva41	97.3%
Tiva42	96.9%
Tiva45 (bulk)	**98.9%**
Tiva47	98.6%
Tiva48	**98.8%**

Table 1: Vanadium extraction data for vanadium leach trials (source: CSIRO); variety of different conditions were trialled, with key outcomes demonstrated in trials Tiva26, Tiva45 and Tiva48

Sample	Test ID	Titanium Extraction
Tiva45	18079	91.5%
Tiva45	18080	94.2%
Tiva47	18081	87.7%
Tiva48	18082	87.9%

Table 2: Titanium extraction data from sulphate digest trials (source: CSIRO, from work performed at ALS); all trials conducted under the same operating conditions

Composition	Units	Assay
V	%	56.03
Al_2O_3	%	0.019
Fe_2O_3	%	0.014
TiO_2	ppm	5.01
Cr_2O_3	ppm	56.3
MgO	%	0.017
CaO	%	0.014
SiO_2	%	0.021
P	%	0.001
S	%	0.001
K	%	0.001
Na	%	0.010
Cl	%	0.001
As_2O_3	ppm	0.26
CdO	ppm	0.11
Co_2O_3	ppm	0.14
CuO	ppm	5.01
MnO	ppm	1.29
MoO_3	ppm	677
NiO	ppm	3.82
PbO	ppm	1.08
Sb_2O_3	ppm	29.9
ZnO	ppm	6.22
Sum of impurities*	%	0.18
Calculated purity (V_2O_5)	%	99.82

Table 3: Chemical composition data for Speewah vanadium pentoxide (V_2O_5) sample (source: CSIRO, from analyses performed at Bureau Veritas)

JORC Code, 2012 Edition - Table 1 Report

SECTION 1 SAMPLING TECHNIQUES AND DATA		
Criteria	**JORC Code explanation**	**Commentary**
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• The metallurgical testwork program was completed on a titanomagnetite concentrate sample received in the Speewah Project acquisition from King River Resources Limited ("KRR"). • The sample used is a p80 -45 micron high grade concentrate that assayed 2.44% V_2O_5 produced from a RC chips sample by magnetic separation methods in 2011.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• No new drilling was completed in preparation for the testwork reported in this announcement. • The testwork described in this announcement was completed on titanomagnetite concentrate derived from RC drilling with a face-sampling bit.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• RC chip samples from every 1 metre drilled interval were sampled and composited. The host gabbro is fresh from near surface and sample recovery into RC bags was high. • No relationship between grade and recovery has been identified.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• RC drill 1 metre intervals logged 100% from surface to end-of-hole.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximize representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.*	• RC bags were re-sampled to collect a 6 tonne composite sample for testwork. • The average grade of the 6 tonne sample compares with the drill assayed intervals for the HG zone. • Subsampling was performed during the preparation stage according to the metallurgical laboratories' internal protocol. • RC chips from every 1 metre interval were sampled and composited. The final composited grade compares

	• *Whether sample sizes are appropriate to the grain size of the material being sampled.*	favourably with the average V, Ti and Fe grades from the drill assays for the HG zones of the vanadium deposit. • Sample sizes were considered appropriate to the grain size of the material being sampled.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	For the testwork program reported in this announcement: • Solid sample analyses in the program were conducted by X-Ray Fluorescence ("XRF") at ALS Global, Bureau Veritas and CSIRO Selected solid samples were split for XRF analysis and sent to multiple commercial laboratories (see above) as further data validation. Select solid samples were analysed by combinations of XRF, acid digest and ICP, colorimetry after fusion with Na_2CO_3 for Cl and total combustion analysis for S. • All liquor sample analyses in the program were conducted at CSIRO Waterford via Inductively Coupled Plasma (ICP) analysis Select liquor samples were re-assayed at ALS Global by ICP as further data validation. • Standards, blanks and duplicates were utilised by Bureau Veritas, ALS Global and CSIRO as per their standard QAQC procedures. • The vanadium pentoxide assay results presented in Appendix 1, Table 3, are a combination of Laser Ablation ICP Mass Spectrometry (LA-ICP-MS) and XRF results from Bureau Veritas. LA-ICP-MS assays included the following elements: Ti, Cr, As, Cd, Co, Cu, Mn, Mo, Ni, Pb, Sb and Zn. The remaining presented elements were analysed by XRF.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Significant drill intersections have been verified by alternative company personnel. • Data is incorporated into a digital database, assays from laboratories received in a digital format. • No adjustments or calibrations made to primary assay data collected for the purpose of reporting assay grades and mineralized intervals.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Almost 90% of the collars used in the resource estimate were surveyed using a differential global positioning system instrument, with the remaining surveyed using a hand-held GPS. Downhole deviations were measured by downhole

		survey instruments on 3 holes only using a Globaltech Pathfinder digital downhole camera. All but four holes are vertical. All metallurgical holes are vertical. The vertical and shallow nature of the drilling means that the absence of downhole surveys is not considered a material risk. • The adopted grid system is GDA 94 Zone 52.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• RC drill spacing is mostly 250 m by 250 m in the deposit, closing down to 100 m by 100 m in the Western Area. • The Competent Person believes the mineralised domains have sufficient geological and grade continuity to support the classification applied to the Mineral Resources given the current drill pattern. • The RC composite represents the HG zone within the magnetite gabbro within the resource envelope. This was considered appropriate given the metallurgical testwork was designed to test the HG zones of mineralisation and it provided for a bulk sample suitable for testwork.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• All RC holes are vertical. This allowed the holes to intersect the mineralisation at a high angle as the magnetite gabbro has a very shallow dip to the East. • The relationship between the drilling orientation and the orientation of key mineralised structures is not considered to have introduced sampling bias.
Sample security	• *The measures taken to ensure sample security.*	• The titanomagnetite concentrate was stored at Nagrom under job number T687; the concentrate was transported by a transport contractor to CSIRO for testwork.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No external audits have been completed.
SECTION 2 REPORTING OF EXPLORATION RESULTS		
Criteria	**JORC Code explanation**	**Commentary**
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The Speewah Project comprises two Exploration Licences (E80/2863, E80/3657), three Mining Leases (M80/267, M80/268, M80/269) and two Miscellaneous Licences (L80/43, L80/47). The tenements are 100% owned by Speewah Mining Pty Ltd (a wholly owned subsidiary of Tivan Limited), and are located over the Speewah Dome, 100 km SW of Kununurra in the East Kimberley. The testwork described in this announcement was on samples collected entirely within E80/2863. The

		tenements are in good standing and no known impediments exist.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	Historical exploration: • All exploration and testwork relevant to the preparation of the titanomagnetite concentrate utilised for the testwork described in this announcement was managed by KRR.
Geology	• *Deposit type, geological setting, and style of mineralisation.*	• The deposits represent part of a large layered intrusion (the Hart Dolerite), which was intruded c1790 Ma into the Palaeo-Proterozoic sediments and minor volcanics of the 1814 Ma Speewah Group in the East Kimberley Region of Western Australia. The deposits occur within the Speewah Dome, which is an elongated antiform trending N-S. The dome is about 30 km long and attains a maximum width of about 15 km. The Hart Dolerite sill forms the core of the dome. Two distinct types of felsic granophyres (K felsic granophyre and Mafic granophyre) and three mafic gabbros (pegmatoidal gabbro, magnetite gabbro and felsic gabbro) have been identified in the Hart Dolerite. The vanadium-titanium mineralisation is hosted within a magnetite bearing gabbro unit which is up to 80 m thick. Given the mode of formation, mineralisation displays excellent geological and grade continuity. Exposure is limited and fresh rock either outcrops or is at a shallow depth of a few metres. Ti-V-Fe mineralisation occurs as disseminations of vanadiferous titanomagnetite and ilmenite. The Speewah Project comprises three deposits (Central, Buckman and Red Hill). The reported Mineral Resource lies entirely within fresh magnetite gabbro of the Hart Dolerite sill within the Speewah Dome. The magnetite gabbro unit can be subdivided into an upper low grade zone and a basal high grade zone, based on increasing vanadium tenor (grade) in the magnetite grains towards the base of the unit.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* o *easting and northing of the drill hole collar* o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* o *dip and azimuth of the hole* o *down hole length and interception depth*	• No new drilling is reported in this release. • The hole data is not presented in this announcement. This information is not considered material as the novel TIVAN+ technology on which the testwork is based is intended for use on

	○ *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	any vanadiferous titanomagnetite ore, regardless of location geologically or geographically.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• RC chip samples from every 1 metre drilled interval were sampled and composited. The final composited grade compares favourably with the average V, Ti and Fe grades from the drill assays average grades for the HG zones of the vanadium deposit. • Metal equivalent values have not been used for reporting.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• Due to the very shallow dip of the mineralisation, the vertical holes represent almost the true width of the mineralisation.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• No new drilling is reported in this release.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• All relevant results have been reported
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• All relevant data is included in the body of the announcement.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• See body of announcement.