

30 January 2024

Tivan approves progression of Speewah Fluorite Project

- Tivan Board resolves to progress the Speewah Fluorite Project, including commencement of a Pre-Feasibility Study (“PFS”), following completion of an internal assessment of the project.
- The Speewah Fluorite Project hosts a JORC compliant Indicated and Inferred Resource of 27.2 million tonnes at 9.5% CaF₂ (2% CaF₂ cut-off grade) with a high-grade component of 6.7 million tonnes at 24.6% CaF₂ (10% CaF₂ cut-off grade).
- Fluorite is used to produce commercial grade fluorspar products and fluorine; industrial applications include steel, aluminum and chemical manufacturing, and emerging sectors including next-generation lithium ion batteries, solar cells and semiconductor manufacturing.
- In December 2023, the Australian Government added fluorine to Australia’s Critical Minerals List, in recognition of its role in the energy transition and lack of production in-country.
- The global Fluorspar market is forecast to move into structural deficit from 2025, principally due to demand from the emerging ‘Battery-F’ value chain. The price of Acid Grade Fluorspar reached historical high levels through 2023.
- Building on a Scoping Study completed in 2018, the PFS will assess the technical and economic feasibility of a mining and processing operation targeting the high-grade component of the deposit to produce Acid Grade Fluorspar.
- The PFS is expected to be completed by June 2024 and is complemented by the synergistic engineering and approvals work streams that are progressing for the Speewah Vanadium Project.
- The Speewah Fluorite Project is consistent with Tivan’s strategy of producing critical minerals that support the energy transition.

The Board of Tivan Limited (ASX: TVN) (“Tivan” or the “Company”) is pleased to advise that it has resolved to progress the Speewah Fluorite Project in Western Australia, which forms part of the Company’s broader Speewah Project in the Kimberley region of north-east Western Australia.

The Speewah Fluorite Project hosts a JORC compliant Indicated and Inferred Resource of 27.2 million tonnes at 9.5% CaF₂ (at a 2% CaF₂ cut-off grade) with a high-grade component of 6.7 million tonnes at 24.6% CaF₂ (at a 10% CaF₂ cut-off grade), which was acquired as part of the Speewah Project acquisition in 2023 from King River Resources Limited (“KRR”) (see ASX announcement of 20 February 2023). The fluorite deposit is located to the southeast of the Speewah vanadium deposits.

Fluorite is an important industrial mineral used to produce commercial grade fluorspar products. Industrial and metallurgical uses include steel and iron production, refrigeration and air conditioning systems, aluminium manufacturing, fluoropolymer and fluorochemical production, and uranium fuel production; and in energy transition sectors including next-generation lithium ion batteries, solar cells and semiconductor manufacturing.

The Federal Government recently added fluorine to Australia's Critical Minerals List, providing eligibility for in-country projects for strategic and targeted Government policy, facilitation and financing support for development.

Tivan's Project Team and Technical Advisory Group recently completed an internal assessment supporting the Board's decision to advance the project by way of a pre-feasibility study ("PFS") to evaluate in detail the technical and economic feasibility of a mining and processing operation targeting the high-grade component of the deposit to produce acid grade fluorspar (+97% CaF₂).

The Speewah Fluorite Project is consistent with Tivan's mission of developing the critical mineral resources required for the energy transition.

Speewah Fluorite Project Overview

Location and tenure

The broader Speewah Project is located 100km south of the port of Wyndham, and 110km south-west of Kununurra, in the Kimberley region of north-east Western Australia. The Project covers an area of 226km² comprising seven granted tenements: E80/2863, E80/3657, M80/267, M80/268, M80/269, L80/43, and L80/47. The Speewah Fluorite deposit is hosted on M80/268 and M80/269, located to the southeast of the Central, Redhill and Buckman vanadium deposits (refer to figure 1 below).

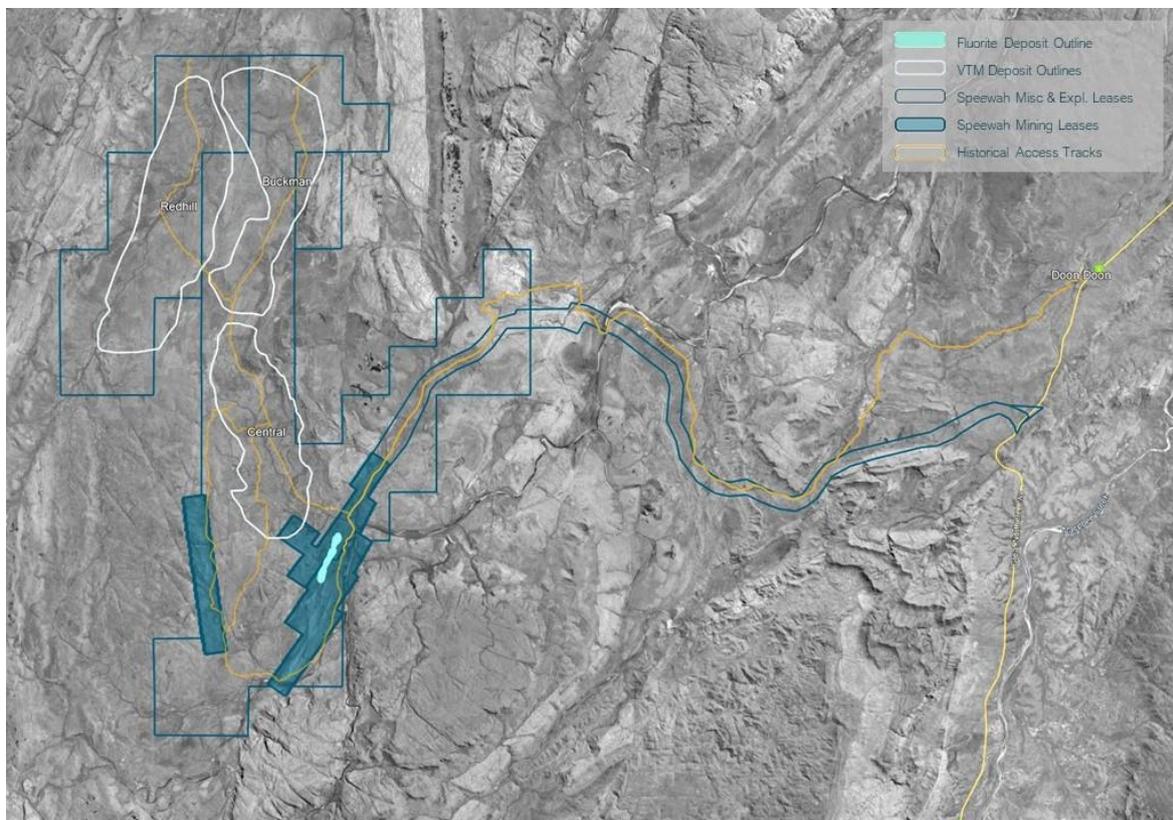


Figure 1: Speewah map showing location of tenements, access tracks, and vanadium and fluorite deposits

Geology & Mineral Resource Estimate

The Speewah fluorite deposit sits approximately 2km to the southeast of the Speewah vanadium deposit, and is located on the western edge of the Halls Creek Mobile Zone and on the southeast side of the Speewah Dome. Fluorite mineralisation is predominantly hosted by north-northeast and northeast trending faults within the King River Fault, with minor occurrences along north-trending normal faults within the Speewah Dome.

Fluorite veins have been mapped in three main areas which comprise most of the deposit and form the basis of the Mineral Resource estimate for the deposit (see below). The predominantly white-fluorite mineralisation occurs mainly within tabular steeply dipping veins showing very good strike continuity. The veins range in thickness from 1 to 10m, often flanked by lower grade stockwork and stringer veins, forming an envelope up to 5m wide.



Figure 2: Fluorite mineralisation from the Speewah fluorite deposit

In 2018, KRR engaged mining industry consultants CSA Global Pty Ltd (“CSA”) to prepare an updated Mineral Resource estimate for the Speewah fluorite deposit in accordance with the JORC Code 2012 (a previous Mineral Resource estimate was prepared in 2009 in accordance with the JORC Code 2004) (see KRR ASX announcement of 23 February 2018).

CSA reported a JORC (2012) compliant Indicated and Inferred Resource of 27.2 million tonnes at 9.5% CaF₂ (at a 2% CaF₂ cut-off grade) for four targeted fluorite veins at the deposit, which included a high-grade Indicated and Inferred Resource of 6.7 million tonnes at 24.6% CaF₂ (at a 10% CaF₂ cut-off grade).

The Mineral Resource estimate is based on analysis of data collected from several reverse circulation (“RC”) and diamond drilling campaigns, and geological mapping carried out from 1989 to 2007. A total of 134 RC holes for 13,595m, and 30 diamond holes for 1,941m, are included in the data set used for the Mineral Resource estimate. A total of 5,268m of RC and 848m of diamond intervals lie within the modelled mineralisation envelopes.



The CSA 2018 Mineral Resource estimate is shown in the table below:

Zone	JORC Classification	Tonnage (Mt)	CaF ₂ (%)
High Grade	Indicated	4.1	25.3
	Inferred	2.6	23.6
Total High Grade		6.7	24.6
Low Grade	Indicated	8.9	5.0
	Inferred	11.6	4.3
Total Low Grade		20.4	4.6
Combined Zones	Indicated	13.0	11.4
	Inferred	14.2	7.8
Grand Total		27.2	9.5

Due to the effects of rounding, the total may not represent the sum of all components; CaF₂ calculated as F x 2.0547 Mineral Resource estimate prepared at a 2% CaF₂ cut-off grade; high-grade estimate prepared at a 10% CaF₂ cut-off grade

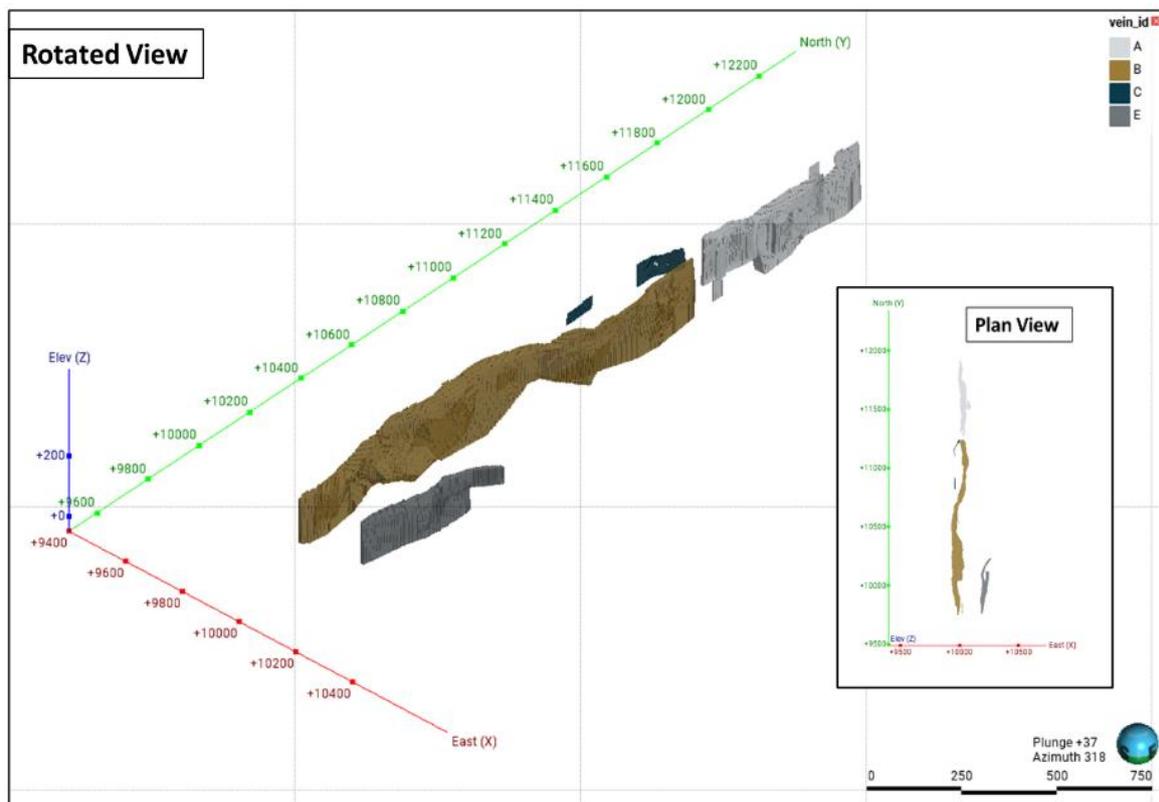


Figure 3: Mineral Resource estimate block model for Speewah fluorite deposit

A review of the extensive drillhole database by Tivan has indicated potential for inclusion of additional mineralisation in an updated resource model, including potential for additional high-grade mineralisation. Drilling also indicates that the resource may be open at depth, with the true extents of mineralisation yet to be determined. This indicates the possibility of a substantial resource enhancement should the current resource trend persist at greater depths.

Previous Work Undertaken

Extensive exploration activity has been undertaken at the Speewah Fluorite Project over a number of decades, from initial discovery and drill-out of the vein systems identified. A significant body of work for the deposit followed the discovery phase, including various mining, infrastructure, hydrology, metallurgy, processing, environmental and social, and scoping and implementation work programs and studies, and Mineral Resource estimates.

As noted, in 2018 an updated Mineral Resource estimate was prepared by CSA. That same year CSA also conducted a review of historic works and studies, and an independent mine and infrastructure planning review, culminating in the delivery of a Scoping Study. KRR subsequently published a summary of findings of the Scoping Study (see ASX announcement of 4 October 2018).

Internal Project Assessment

Tivan's Project Team and Technical Advisory Group have undertaken a review of the Speewah Fluorite Project database, including prior work programs and studies in the areas of exploration and resource definition, mining, metallurgy and processing, scoping and planning. The review supported an internal technical and commercial assessment of the project, with the Tivan Board subsequently resolving to progress the Project and complete a Pre-Feasibility Study to evaluate in detail technical and economic feasibility (refer below for further details).

At a summary level, the review highlighted that the Project has low capital intensity, low non-process infrastructure requirements and strong synergies with the Speewah Vanadium Project.

Fluorite Market Overview

Fluorite is the mineral form of calcium fluoride (CaF_2) and is predominantly extracted from hydrothermal vein deposits. Fluorite is mined and processed to produce commercial grade fluorspar, which can be further processed to produce fluorine. Fluorspar is produced at a number of commercial specifications dependent on the end use, with acid grade fluorspar being of the highest purity (+97% CaF_2).

China, Mexico, South Africa and Mongolia are the largest producers of fluorspar, with global production totalling 8.3 million tonnes in 2022¹. There is currently no domestic fluorspar or fluorine production in Australia.

Industrial and metallurgical uses include steel and iron production, refrigeration and air conditioning systems, aluminium manufacturing, fluoropolymer and fluorochemical production, and uranium fuel production; and in energy transition sectors including for next-generation lithium ion batteries, solar cells and semiconductor manufacturing.

¹ Source: <https://www.statista.com/statistics/1051717/global-fluorspar-production-by-country/>



The price of fluorspar has increased significantly in recent years, to historical highs.

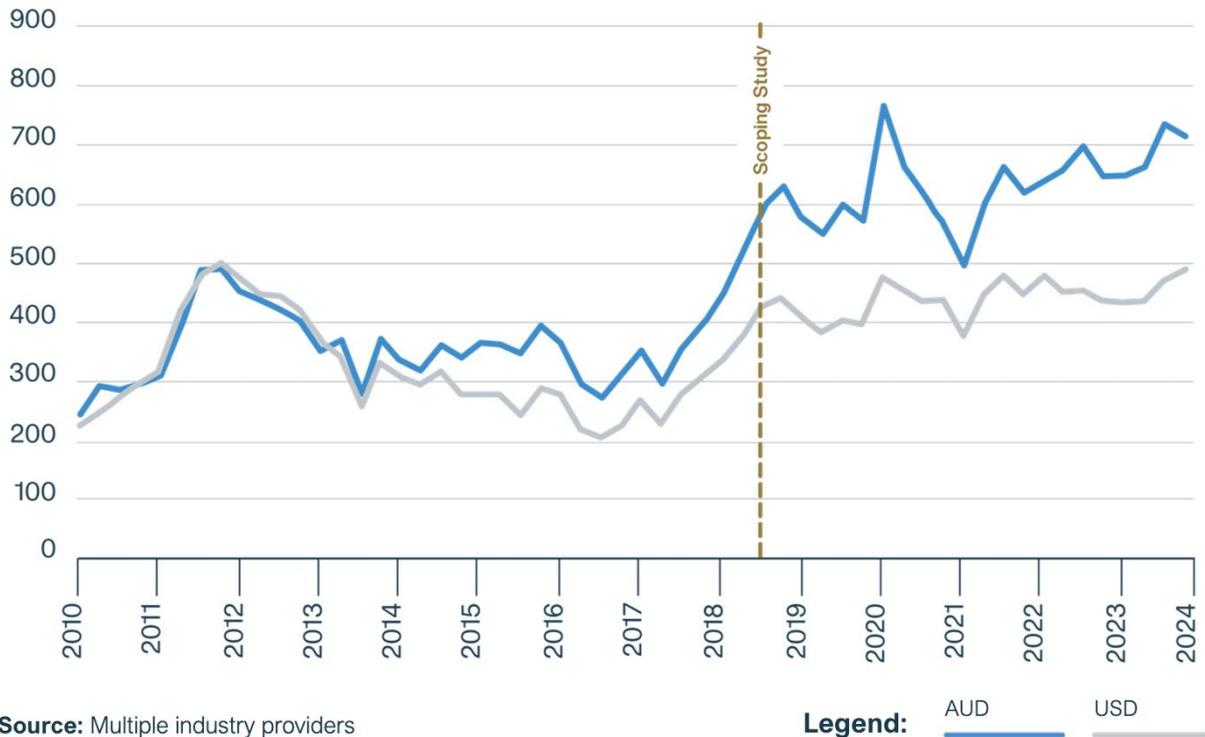


Figure 4: Acid grade fluorspar per tonne, USD, AUD, FOB China (CAF>97%)

Fluorite Market Study

Tivan completed an internal study of the global fluorspar market in September 2023. The findings have been corroborated and enlarged upon through recent engagement with leading market research providers, including Benchmark Mineral Intelligence.

On a forward-looking basis Tivan holds a constructive view of the global demand-supply balance for fluorspar, particularly the acid grade segment. The global fluorspar market is forecast to move into structural deficit from 2025, principally due to demand from next-generation EV batteries and supply constraints faced by China.

This backdrop is supportive for medium term prices of fluorspar.

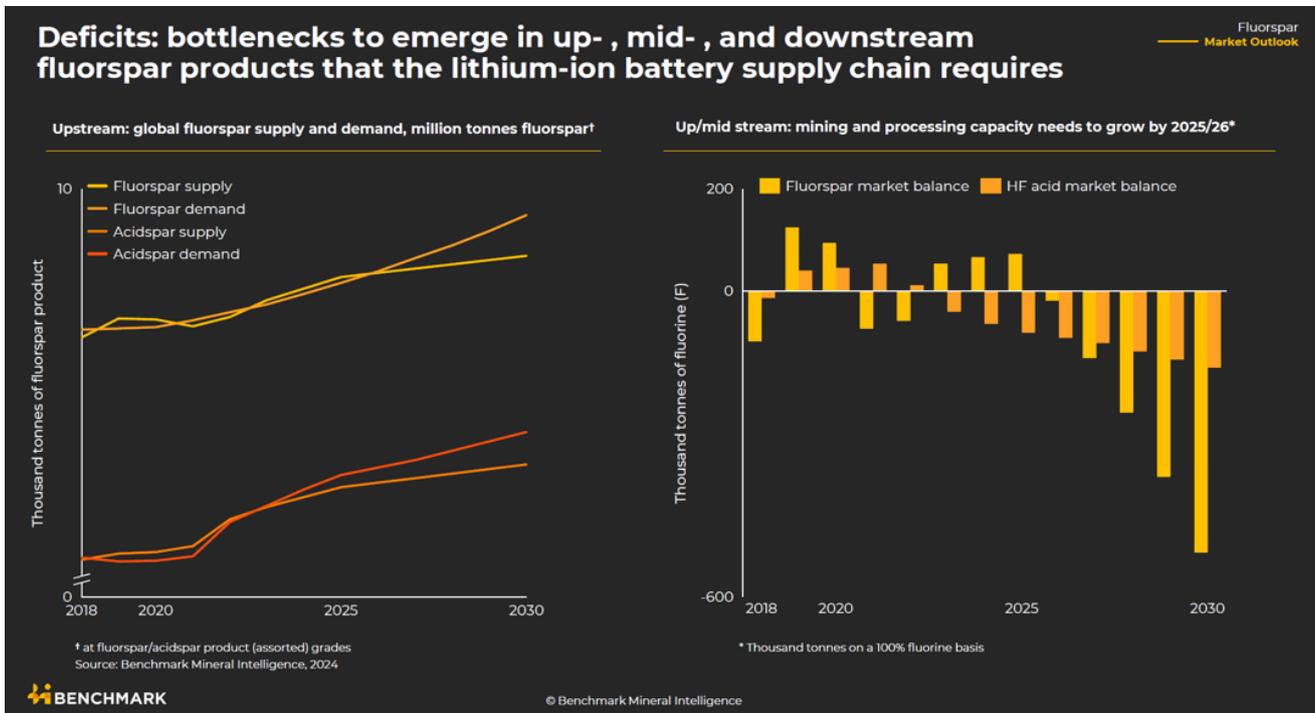


Figure 5: Fluorspar is forecast to move into structural scarcity (source: Benchmark Mineral Intelligence)

Addition of Fluorine to Australia's Critical Mineral List

In December 2023, the Australian Government added fluorine to Australia's Critical Minerals List. A critical mineral has two characteristics as defined by Geoscience Australia:

1. It is essential for the functioning of our modern technologies, economies or national security; and
2. There is a risk that its supply chains could be disrupted.

The Critical Minerals List provides eligibility for strategic and targeted Government policy, facilitation and financing support to accelerate project development in Australia. The Australian Government's Critical Minerals Strategy is adapted towards advancing the global energy transition and leveraging Australia's endowment of those resources identified on the Critical Minerals List. Tivan's submission to the Critical Minerals Strategy, published in February 2023, is available on Tivan's website.

The inclusion of fluorine on the Critical Minerals List was an important consideration for Tivan's Board. Tivan's engagement with governmental facilitation agencies is ongoing at the Federal, State/Territory and Local levels.

Planned Work Program

The planned PFS for the Speewah Fluorite Project will consider a proposed mining and processing operation targeting the high-grade component of the deposit to produce acid grade fluorspar. The PFS will include mining, hydrology, tailings, engineering and economic studies, supported by a testwork program for further development of the process



flowsheet and confirmation of project fluorspar product specifications. The PFS will be complemented by the synergistic engineering and approvals work streams also being undertaken for the Speewah Vanadium Project.

The PFS is planned to commence in February and is expected to complete by June 2024. The PFS for the Speewah Fluorite Project will progress in parallel to the PFS to be undertaken by Hatch for the Company’s Speewah Vanadium Project (see below). The timetable for the latter was presented at Tivan’s Annual General Meeting and is unchanged.

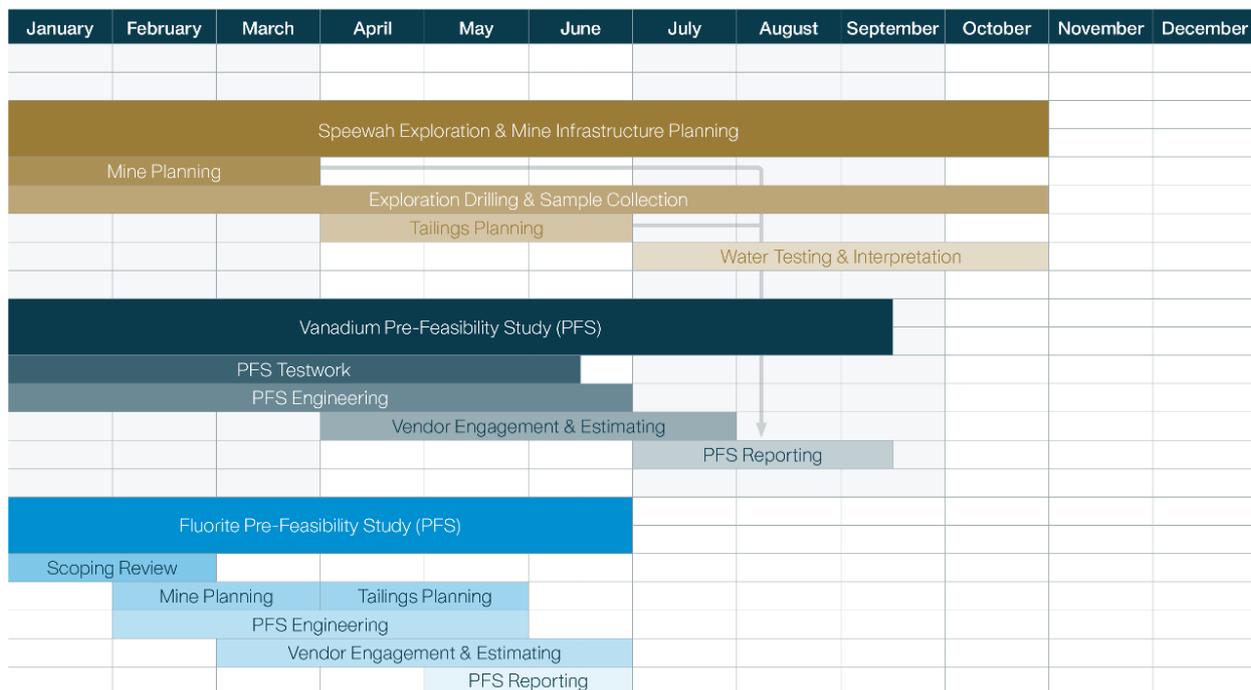


Figure 6: Tivan’s 2024 timelines for the Speewah Project

Speewah Vanadium Project Update

The Board of Tivan is also pleased to provide an update on the Speewah Vanadium Project, which is focused on development of a conventional salt roast processing operation at Speewah to produce vanadium oxides. The Project is planned to comprise mining, beneficiation and processing operations integrated at the Speewah site, and a separate planned vanadium electrolyte production facility intended to be located at the Middle Arm Sustainable Development Precinct in Darwin.

As previously announced, the Company appointed global engineering group Hatch to complete an engineering review for the PFS of the salt roast processing pathway for the Speewah Vanadium Project (see ASX announcement of 22 September 2023).

The engineering review has now been completed, including scoping for the vanadium pre-feasibility level testwork required for beneficiation and salt roast processing. Tivan and Hatch are at an advanced stage of review of the proposed scope and program for the vanadium PFS.



In addition, planning is being finalised for the next phase of on-site environmental survey work for the Speewah Project in consultation with Perth-based environmental consultancy Animal Plant Mineral (“APM”), including for approvals with the Kimberley Land Council (see ASX announcement of 19 December 2023). This environmental work will support approvals processes for both the vanadium and fluorite projects.

Briefing Session

Executive Chairman, Mr Grant Wilson, will host an online session for shareholders next week to further introduce the Speewah Fluorite Project. Details will be provided ahead of time.

Comment from Tivan Executive Chairman

Mr Grant Wilson commented:

“In our first major announcement this year, I am delighted to introduce the Speewah Fluorite Project to Tivan’s shareholders. Fluorite was discovered at Speewah in 1905. With the emergence of structural demand from next-gen EV batteries, its time may well have arrived.

In making the decision to progress to a Pre-Feasibility Study the Board recognised the strong synergies that exist with the Speewah Vanadium Project. This includes our extensive progress on long-lead environmental items, our networking with global offtake partners, and our early and inclusive engagement with Traditional Owners.

The inclusion of fluorine on the Critical Minerals List provides Tivan with strong tailwinds to advance the Speewah Fluorite Project, building upon the large body of work previously conducted. The relative simplicity of the Project enables us to target the end of Q2 for PFS delivery, providing Tivan with two major catalysts in the year ahead.

Onward.”

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

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Competent Person's Statement

The information in this announcement related to the Speewah Fluorite Mineral Resource estimate is extracted from an ASX announcement of King River Resources Limited (ASX: KRR) entitled "27.2 million tonne JORC Fluorite Resource" and dated 23 February 2018, and is available to view on www.kingriverresources.com.au and www.asx.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 announcement, and, in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the relevant 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 have not been materially modified from the original market announcement.

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.