**UNDER** the Fast Track Approvals Act 2024

IN THE MATTER of a substantive application for marine

consents that would otherwise be applied for under the Exclusive Economic Zone and Continental Shelf

(Environmental Effects) Act 2012

**BY** Trans-Tasman Resources Limited

# EVIDENCE OF SHAWN THOMPSON (TECHNICAL AND OPERATIONAL) ON BEHALF OF TRANS-TASMAN RESOURCES LIMITED IN RESPONSE TO COMMENTS RECEIVED

**13 OCTOBER 2025** 

HOLM | MAJUREY

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#### INTRODUCTION

#### Qualifications and experience

- My name is Shawn Thompson, and I am the Managing Director of Siecap NZ Ltd, a project management and engineering advisory firm specialising in heavy industrial, infrastructure, and resource sector projects across New Zealand, Australia, and the wider Pacific.
- 2. My career spans more than three decades and is built on strong vocational and academic foundations, bridging the practical realities of the workshop floor with the strategic demands of project leadership. I began with hands-on mechanical and design training before progressing through engineering, operational, and management roles across a range of industries and geographies.
- 3. This background is supported by international professional recognition through several chartered institutions, reflecting a longstanding commitment to engineering excellence, sound judgement, and the practical application of technical expertise to deliver reliable, commercially grounded project outcomes.
- 4. **Technical and Industry Qualifications:** In addition to my applied engineering qualifications and professional registrations, I hold a range of technical certifications gained through formal trade and industry training. Trained and qualified as an Aircraft Engineer, Mechanical Designer and Pressure Vessel Inspector, with extensive hands-on experience in mechanical systems and industrial plant operations. I am also a Certified Carbon Auditor and hold a Professional Certificate from the Australasian Institute of Mining and Metallurgy in Environmental, Social, Governance and Social Responsibility.

- 5. **Professional Engineering Registration:** Registered Professional Engineer with the UK Engineering Council and Chartered Member of Engineering New Zealand.
- 6. Academic Credentials: I hold a Higher National Diploma from the Department of Higher Education and Training (DHET) South Africa and a Graduateship in Mechanical Engineering from the City and Guilds Institute (London), providing a strong technical foundation that has underpinned my professional career in design, operations, and project delivery. I also have a Master of Construction Management awarded by Auckland University of Technology in 2010, further strengthening my expertise in project governance, risk management, and the strategic delivery of complex industrial and infrastructure projects.
- 7. My academic background has supported my attainment of chartered and professional status, including registration as a Chartered Member of Engineering New Zealand, Fellow of the Institution of Mechanical Engineers (UK), and Professional Engineer with the UK Engineering Council, reflecting both technical competence and leadership within the engineering profession.
- 8. **Professional Recognition:** Fellow of the Institution of Mechanical Engineers (UK); Member of the Institute of Engineering Designers (UK); Member of the Australasian Institute of Mining and Metallurgy; Institute of Engineers Australia (Risk Engineering) and Member of the American Society of Mechanical Engineers.
- 9. I have over 35 years of international engineering and project leadership experience across New Zealand, Australia, Saudi Arabia, South Africa and Papua New Guinea. My career has encompassed senior roles in the design, construction, and operation of major industrial plants, infrastructure, and marine

- facilities, often in technically challenging and high-risk settings.
- 10. As a Professional Engineer, Chartered Technologist, and Project Director, I bring expertise in mechanical engineering, offshore and onshore project delivery, and large-scale operations management. My background includes extensive involvement in offshore engineering and marine logistics, resource and process industries, and the development of heavy industrial and infrastructure assets under international codes, safety regimes, and environmental standards.

#### **Code of Conduct**

11. I have been provided with a copy of the Code of Conduct for Expert Witnesses contained in the Environment Court's Practice Note dated 1 January 2023. I have read and agree to comply with that Code. This evidence is within my area of expertise, except where I state that I am relying upon the specified evidence of another person. I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express.

#### Involvement in project

12. Siecap NZ's involvement in the project stems from our longstandina professional relationship with Trans-Tasman Resources Limited (TTR), established through our prior senior roles within the organisation. Drawing on this history and detailed understanding of the project's technical, operational, and regulatory background, we have continued to support TTR in a professional capacity. Our ongoing engagement is delivered through Siecap NZ as an independent advisory and engineering services firm, providing specialist input consistent with our obligations, qualifications and certifications as registered and chartered professionals within the minina, engineering, and environmental sectors.

- I was employed by TTR from 2013 to 2017 in the capacity of Project Director.
- 14. I previously gave evidence for TTR before a Decision-making Committee (**DMC**) in 2014 and 2017.
- 15. My evidence before the 2014 DMC comprised:
  - Statement of Evidence in Chief of Shawn Thompson on behalf of Trans-Tasman Resources Ltd 16 February 2014 – Addressed the development of the technical solution and feasibility study.
- 16. My evidence before the 2017 DMC comprised:
  - Corporate evidence of Shawn Thompson on behalf of Trans-Tasman Resources Limited 16 December 2016 -Provided a description of the development of the project and details of critical environmentally related components as presented in the Environmental Impact Assessment.
  - Corporate evidence of Shawn Thompson on behalf of Trans-Tasman Resources Limited 16 December 2016 -Provided an overview of operational aspects of the project.
- 17. I also co-authored the Siecap Taranaki VTM Project Prefeasibility Study Offshore Iron Sands Project<sup>1</sup> (Prefeasibility Study) which forms part of the current TTR application under the Fast-Track Approval Act 2024.
- 18. In the interests of transparency, I disclose that I maintain a small, non-material shareholding in Manuka Resources Limited, held purely as a passive investment. The holding is minor in scale and does not influence, nor is it influenced by, any professional or commercial activities I am involved in.

Attachment 3a - Siecap Taranaki VTM Project Pre-Feasibility Study Offshore Iron Sands Project 25 March 2025\_Part1 FINAL

#### Scope of evidence

- 19. This evidence is provided to assist the decision-maker by addressing technical and operational matters raised in submissions.
- 20. My evidence responds point-by-point to submitter comments and queries on technical and operational issues. In particular, it covers process design and performance, product quality, discharge characteristics and mixing behaviour, equipment selection and reliability, materials handling and logistics, health, safety and environmental controls, monitoring and compliance, and risk management and mitigation.
- 21. I have also contributed to the response tables relevant to my areas of knowledge and experience that are being submitted together with this statement of evidence as part of TTR's responses to comments; and those contributions form part of my evidence.

#### **RESPONSE TO SUBMITTER COMMENTS**

## Environmental Protection Authority – Response to request for section 51 report for Taranaki VTM Project – FTAA-2504-1048

Responses to a detailed comment by, Dr Ursula Rojas Nazar, Senior advisor of the EEZ Act team with respect to unaddressed recommendations from technical reports (ref: point 3/pg.4) and the specific reference to further testing of dewatering magnets.

- 22. Dewatering magnetic separators are commercially mature, having been tested and proven internationally under full plant conditions. Several well-known technology providers supply magnetic dewatering or dewatering-capable magnetic drum solutions.
- 23. These units combine magnetic separation and moisture removal in a single stage, delivering high recovery of strongly magnetic minerals, with iron recovery often exceeding 99.5%.

  Beyond recovery, the core value proposition is in lowering the moisture content of the concentrate, thereby simplifying

downstream material handling, reducing drying costs, and improving throughput.

Response to a detailed comment by, Dr Ursula Rojas Nazar, Senior advisor of the EEZ Act team with respect to unaddressed recommendations from technical reports (ref: point 3/pg.4) and the specific reference to the mineral content of desalinated water and its impact on final product specification.

24. With regards Reverse Osmosis (**RO**) permeate from seawater, it typically contains <10 mg/L sodium, <1 mg/L chloride, and negligible potassium, with total dissolved salts well below 50 mg/L (**ppm**). Independent published test work has shown that even a minimal wash with RO desalinated water will drop residual chloride in a magnetite concentrate to ~0.005% (50 mg/L), far below typical steelmaking/pellet feed specification limits which sit at between 100-500 mg/L. Reference: Guimera, J. (2019). Technological gaps inhibiting the exploitation of CRMs primary resources. SCRREEN – EU Horizon 2020.

Response to a technical comment by, Dr Ursula Rojas Nazar, Senior advisor of the EEZ Act team with respect to Desalinated water and iron ore washing (ref: point I-II/pg.6-7)

- 25. RO obtained desalinated water (permeate) will wash the magnetite concentrate during the slurry transport from the Integrated Mining Vessel (IMV) to Floating storage and Offloading vessel (FSO). During this transport the permeate will remove residual surface salts. The permeate will retain chloride at levels comparable to diluted seawater, far lower than raw seawater but higher than the initial RO permeate.
- 26. The now "used" RO permeate will be extracted from the transported slurry, onboard the FSO, by hyperbaric disc filter units and then discharged in compliance with any regulatory requirements. The "Used" permeate's chloride concentrations are expected to be in the hundreds of mg/L range, orders of magnitude lower than seawater which is typically around

- ~19,000 mg/L. It will be fresher (lighter) than seawater and have a positive buoyancy.
- 27. The permeate discharge would typically behave like a buoyant jet with its momentum and lower density driving rapid entrainment in the surrounding seawater, any wind shear and turbulence at the surface will aid mixing.
- 28. In typical coastal conditions, the volume of the "used" permeate will be negligible compared with prevailing surface flow, so any localised freshening of the water column will be minor. I expect the dissipation pattern to be broadly comparable to the way fresh rainwater spreads and mixes into the sea surface after a storm.
- 29. There are two sources of RO related discharge:
  - "Used" permeate, extracted from the transported slurry on the FSO in the hyperbaric filter unit addressed above, and
  - Brine or concentrate product from the RO units on the IMV.
- 30. The Brine or RO concentrate will be mixed into the de-ored sediment discharge slurry, immediately cutting brine strength down to ~1.1–1.3× that of seawater before it is even released into the ocean. The momentum and buoyancy differential of the discharge will drive the rapid near-field entrainment needed to return the discharge to near-ambient salinity very quickly.

Response to a technical comment by, Dr Ursula Rojas Nazar, Senior advisor of the EEZ Act team with respect to Vanadium extraction and her considered uncertainties (ref: point III/pg.7)

31. The extraction of vanadium does not form part of the proposed offshore mining operation and is not a core process of the application. Instead, the vanadiferous titanomagnetite (VTM) concentrates will be exported and vanadium recovery

would be undertaken in another client-based country where appropriate understanding, refining and metallurgical infrastructure already exists and management of all processing chemicals and reagents, including waste, are fully approved and permitted.

- 32. The primary scope of the project remains the extraction, concentration and transportation of titanomagnetite. The complexities, risks, and environmental considerations associated with sodium salt roasting, leaching, and subsequent waste streams identified in the Siecap Metallurgical Review will be addressed in the context of any downstream processing facility, separate from the offshore operations under application.
- 33. By treating vanadium recovery as a downstream, independent process, the uncertainties associated with large-scale sodium salt roasting and its environmental implications are excluded from the present proposal. Any future development of vanadium extraction facilities would be subject to its own rigorous testing, pilot work, and environmental approvals in the jurisdiction where it was proposed to be undertaken.

Response to a technical comment by, Dr Ursula Rojas Nazar, Senior advisor of the EEZ Act team with respect to the use and management of chemicals related to the reverse osmosis desalination process (ref: point IV-V/pg.8-9)

- 34. In NZ waters, discharges of harmful substances are tightly controlled under the EEZ (Discharge & Dumping) Regulations 2015; all operators need a marine discharge consent unless the discharge is expressly "permitted." TTR's zero discharge of RO chemicals avoids that consent burden and associated risk.
- 35. In the Prefeasibility Study in Section 8.2, reference is made to a secondary system that will used for periodical cleaning of membranes installed in the reverse osmosis plant. This system

will typically be made up of a closed-loop CIP (cleaning in place) skid for acids/caustics/biocides with hard-piped return to a Waste Chemical Tank (**WCT**). There will be no overboard drains from the RO/CIP area.

- 36. All pre-treatment and cleaning discharges from the RO system will be fully contained within the closed-loop system and will not enter the marine environment. Spent solutions rinse waters, filter media, and any contaminated absorbents will be captured onboard, routed to a dedicated waste chemical tank, packaged and consigned to approved onshore reception facilities. No intentional or operational overboard discharge will occur. Piping and transfer systems will meet ABS class/engineering standards.
- 37. Marine Protection Rules Part 100 requires all NZ ports to provide reception facilities for harmful substances (including chemicals). Maritime NZ also publishes details to help ships arrange shore reception. New Zealand already operates on a capture, neutralise, and land model for shipboard treatment wastes and for RO plant cleaning wastes (on shore).
- 38. In Section 9.2 of the Prefeasibility Study, addressing Offshore Operations, an extensive list of rules, regulations and legislation that will govern the TTR operations is clearly laid out.
  - The Flag State for the IMV will be New Zealand and as such all operations will comply with all the applicable marine rules and regulations.
- 39. TTR will need to incorporate all RO chemicals into the vessel's Safety Management System (ISM Code) procedures: receipt, storage, transfer, use, PPE, and emergency response aligned to Health and Safety at Work (Hazardous Substances) Regulations 2017 and The International Maritime Dangerous Goods (IMDG) Code. TTR will be required to keep current MSDS onboard and referenced in job safety analyses/permits.

- 40. In addition to the above, ABS, TTR's Class society, requires an Inventory of Hazardous Materials (**IHM**) and expects robust onboard controls over hazardous chemicals; retaining wastes for onshore disposal is consistent with class expectations and survey ability.
- 41. With regards to handling, containment, and spill response protocols. Under NZ's maritime rules and legislation TTR will need to:
  - Maintain spill kits sized for worst-case package.
- 42. Implement immediate actions: stop source, isolate drains, contain on deck/within bunds, recover to labelled waste containers, ventilate, decontaminate as per SDS, no overboard wash-down. (This matches MARPOL/Marine Protection Rules to prevent harmful-substance discharges).
  - Record and report if any overboard release is suspected, follow the ship's pollution emergency procedures and notify as required by Marine Protection Rules / MARPOL.

Response to a technical comment by, Dr Ursula Rojas Nazar, Senior advisor of the EEZ Act team with respect to Maintenance and Waste Management (ref: point IV-V/pg.8-9)

- 43. Regarding onboard substances that will be used during maintenance activities. Any maintenance will have to be conducted in strict accordance with the IMO requirements, ABS Class rules, NZ's maritime rules and Health and Safety Requirements.
- 44. It is a prerequisite that machinery under class be continuously inspected by the relevant Class society. The ABS document "Surveys Based on Machinery Reliability and Maintenance Techniques January 2023 "
  - Routine or non-routine maintenance (including the handling of lubricants, and solvents) will occur in situ.

- The storage, handling, and containment measures for maintenance substances onboard will be controlled by the following:
  - i. NZ law (workplace): Hazardous substances onboard are controlled under HSWA (Hazardous Substances) Regulations 2017. TTR will keep an inventory, SDSs, labelling, training, emergency plan, and compliant storage/segregation. Maritime NZ explicitly points vessels to these duties;
  - ii. IMO / IMDG (dangerous goods): Class 3 flammable liquids must be packed, labelled, segregated, and stowed per the IMDG Code (Part 7 segregation rules;
  - iii. SOLAS II-2 (fire safety): Paint/flammable-liquid lockers will have proper boundaries/ventilation and fixed fireextinguishing;
  - iv. ABS requires paint/flammable-liquid lockers to be fitted with approved fixed fire systems and configured for safe storage/ventilation; and
  - v. MARPOL Annex I (oils).
- 45. With regards to Hull Cleaning and Antifouling Measures and the type of antifouling substances that would most probably be used (and their active ingredients). The most popular AFS compliant (no organotin; no cybutryne/Irgarol) coating i.e. a copper-based self-polishing copolymer (SPC) antifoulings.
- 46. With regards to specifics of the in-water hull inspection and cleaning process (e.g., frequency, methods, and containment of debris or residues):

- As required by ABS guidance notes, a comprehensive vessel inspection must be conducted by qualified personnel at least once every 12 months. These comprehensive annual inspections must cover all areas of the vessel that can be inspected without forcing a vessel into drydock. Areas that inspectors must examine include, but are not limited to:
  - i. Vessel's hull, including the niche areas, for fouling organisms or flaking anti-fouling paint;
  - ii. Ballast water tanks, as applicable;
  - iii. Bilges, pumps, and oily water separator (**OWS**)sensors, as applicable;
  - iv. Oil discharge monitoring systems and electronic valve switching function, as applicable;
  - v. Protective seals for lubrication and any hydraulic oil leaks;
  - vi. Oil and chemical storage areas, cargo areas, and waste storage areas; and
  - vii. All visible pollution control measures to verify that they are functioning properly.
- The inspections must verify whether all monitoring, training, and inspections are logged and documented according to permit requirements.
- All results from the comprehensive annual inspection must be recorded in the vessel's record-keeping documentation or logbook.
- Whenever possible, rigorous hull-cleaning activities should take place in drydock, or at other land-based

facilities where the removal of fouling organisms or spent antifouling coatings paint can be contained.

 Vessel owner/operators who remove fouling organisms from hulls while the vessel is waterborne must employ methods that minimise the discharge of fouling organisms and antifouling hull coatings.

Response to a technical comment by, Dr Ursula Rojas Nazar, Senior advisor of the EEZ Act team with respect to Potential effects of the activity and marine discharges on human health and specifically to the understanding of the clients assertion that no chemicals will be used (ref: point IV-V/pq.8-9)

- 47. The "no chemicals" statement applies to the processing and handling of the raw ore material itself. The ore stream is mined, screened, magnetically separated, and dewatered using physical methods, no reagents are added to the concentrate or the iron sand sediments being returned to the seafloor.
- 48. TTR's mineral process flow is unusual. Across mining and minerals processing, chemicals are the norm: collectors and frothers in flotation, cyanide in gold, acids/alkalis in leach/CIP, flocculants/coagulants in tailings thickeners, depressants/modifiers in separation circuits, and a laundry list of solvents/conditioners. Against that backdrop, the TTR flowsheet is an outlier, it relies on mechanical separation, not chemistry.

Response to a technical comment by, Dr Ursula Rojas Nazar, Senior advisor of the EEZ Act team with respect to the evaluation of alternative to the disposal of De-Ored Sediment (ref: pg.14)

- 49. During the project development phases, TTR undertook a structured evaluation of alternative methods for managing the de-ored sediment generated by the seabed extraction process.
- 50. The logical range of options fell into two categories: in-place deposition (returning the material to the seabed) or complete

removal (permanent relocation or disposal elsewhere). The latter would require the annual extraction and removal of approximately 50 million spills of sediment from the mining area, a scale comparable to some of the world's largest dredging or reclamation projects. Such an approach would not only be operationally impractical and environmentally intrusive but would also significantly alter the local seabed morphology and sediment balance. By contrast, returning approximately 90% of the de-ored sediment to its point of origin maintains the natural mass balance of the marine environment, with only a small fraction of the material (the 10% VTM mineral concentrate) permanently removed.

51. Within this preferred approach, TTR further evaluated two submethods: deposition through the water column versus near-seabed release. The selected method, releasing the material as close as operationally possible to the seabed, was chosen specifically to minimise plume dispersion and environmental effects.

# Sanofex Report in collaboration with Whanganui District Council "Financial model assessment of the TTR Taranaki VTM Ironsand Project"

Response to a comment by, Dr Neil Loftus, with respect to questioning the independence and validity of the Siecap (NZ) Limited's PFS report (ref: pg. 9)

Siecap NZ's involvement in the project stems from a long-standing professional relationship with TTR, established through our prior senior roles within the organisation. This background provides us with an in-depth understanding of the project's technical, operational, and regulatory framework, knowledge that now strengthens, rather than compromises, our independent advisory capability. Our continued engagement is delivered solely through Siecap NZ, an independent engineering and project advisory firm that operates under strict professional and ethical standards.

- 53. All services are provided in accordance with our professional obligations as registered professionals and chartered engineers and technologists, governed by the ethical codes of Engineering New Zealand, the UK Engineering Council, Australasian Institute of Mining and Metallurgy and the Institution of Mechanical Engineers. These frameworks impose clear requirements around objectivity, conflict management, and integrity, ensuring that any advice or analysis we deliver is impartial, evidence-based, and free from external influence.
- 54. Any suggestion by Dr. Loftus that prior employment diminishes professional independence, misunderstands the ethical and statutory obligations that govern chartered professionals, and overlooks the value of continuity, technical insight, and accountability that such experience brings to complex, long-term projects.
- 55. In undertaking an assessment and due diligence review of Sanofex's claims, capabilities, and purported expertise, as invited by the disclaimer on page 2 of their report, we attempted to access the website cited in the document www.Sanofex.com however the site could not be reached.
- 56. It is also noted that while Dr. Loftus claims to have authored sixteen mineral reports within the New Zealand offshore mineral exploration sector, he does not acknowledge that such reports are compliance progress statutory obligations imposed upon offshore permit holders under the Crown Minerals Regulations. Dr. Loftus controlled companies have previously held three (3) offshore mining permits which required reports to be filed (16).
- 57. The omission to disclose this material context, reflects a lack of professional transparency and an incomplete understanding of regulatory reporting frameworks, which are fundamental

competencies for any practitioner purporting to provide any authoritative commentary in this field.

### Statement of Evidence of Jill Cooper filed on behalf of Kiwis against Seabed Mining Incorporated, Greenpeace Aotearoa Incorporated

Response to a comment by, Jill Cooper with respect to vanadium price (ref: points 7 & 8, pg.2)

- Siecap references CRU Group (**CRU**), a globally recognised authority providing independent intelligence across the metals, mining, and fertiliser sectors, offering comprehensive market insights, commodity data, and strategic analysis. CRU notes<sup>2</sup> that although the vanadium market experienced a temporary oversupply in 2024, driven largely by China's real estate slowdown, the fundamentals remain robust. Importantly, the introduction of new rebar standards in China has permanently increased vanadium intensity in steel production, creating a structural shift in baseline demand rather than a transient premium.
- 59. While it is true that commodity premiums can fluctuate in the short term, the broader market trend for vanadium reflects an underlying transformation. Beyond its traditional steel applications, the emerging energy storage market, particularly through vanadium redox flow battery (VRFB) systems, is expected to drive a second wave of demand growth post-2026. This convergence of regulatory change and technological adoption supports CRU's forecast for a sustained and fundamentally grounded bullish trajectory for vanadium, not a passing market anomaly.<sup>3</sup>

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<sup>&</sup>lt;sup>2</sup> https://www.crugroup.com/en/communities/thought-leadership/2025/vanadium-supply-gap-looms-as-chinese-rebar-standards-tighten-amid-battery-boom/

<sup>3</sup> https://www.crugroup.com/en/about-us/

Response to a comment by, Jill Cooper with respect to credits for green steel (ref: points 10, pg.2)

60. Despite the rollback of U.S. clean energy credits under the "Big Beautiful Bill" Act, the long-term outlook for green steel and low-carbon iron ore remains promising. New Zealand is well positioned to supply the global push for greener steel, particularly given rising demand in Europe and Asia for ore with demonstrable emissions credentials.

Response to a comment by, Jill Cooper with respect to vanadium and titanium content (ref: points 15-19, pg.3/4)

- 61. Ms Cooper makes comments regarding the vanadium and titanium content of the iron ore and the processes required for their extraction. These comments are not relevant to the current application as, as referenced earlier in this brief, vanadium and the titanium processing and recovery fall entirely outside its scope.
- 62. With regards to the water content of the concentrate, TTR will be dewatering the concentrate using a hyperbaric disc filter onboard the FSO, that will dewater the concentrate to a level below that of the transportable moisture limit. These units perform the same function as the filter belt technology used by NZ Steel at their Glenbrook plant.

Response to a comment by, Jill Cooper with respect feasibility of desalination plants (ref: points 20 -23, pg.2)

- 63. Regarding the effectiveness of fresh water from the desalination plants removing salt from the concentrate, I refer Ms Cooper and the FTA Team to the Taharoa operation that uses fresh water from Lake Taharoa to transport the salt laden concentrate to the cargo vessel and in the process washes the concentrate to levels below that of the specified limits.
- 64. I refer further comments regarding desalination to paragraphs 24 to 30 above.

Response to a comment by, Jill Cooper with respect to operational and feasibility risk (ref: points 24 -25, pg.5)

- 65. In response, I believe that the matters raised in points 24 and 25 of Ms Coopers evidence have been addressed in paragraphs 25 33 and 60 61 of my evidence. None of the issues identified give rise to any unresolved or material operational or commercial risk.
- 66. The proposed desalination and salt removal processes are well-established, technically robust, and proven at comparable industrial scales.
- 67. The extraction of titanium and vanadium lie entirely outside the scope of the current proposal and therefore has no bearing on the operational performance of the project. Nevertheless, it is important to note that the commercial feasibility of recovering these elements from titanomagnetite concentrate has been both demonstrated and validated by industry and through TTR's independent testing.
- 68. Ore moisture management is a standard and well-understood aspect of mineral processing, already incorporated into TTR's plant design, materials handling, and logistics systems.

#### **Shawn Thompson**

13 October 2025