Empire Metals Limited Announces Pitfield Project Development Update

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LONDON, January 27, 2026 - Empire Metals Ltd. (AIM:EEE)(OTCQX:EPMLF), the AIM-quoted and OTCQX-traded leading exploration and development company, is pleased to provide an update on the Pitfield titanium Project in Western Australia ('Pitfield' or the 'Project'). With a number of Empire's key development milestones now nearing completion the Company is well positioned to commence metallurgical piloting test work. The engineering, metallurgical testing, mining studies, and piloting test work will provide the necessary information to complete the Scoping Study later in 2026.

Highlights

- Flotation test work confirms selective recovery of titanium minerals into a froth flotation concentrate with the rejection of high levels of unwanted gangue minerals.
- Whole-of-ore flotation, as an alternative to gravity and flotation, has improved overall concentrate grades (over 34% TiO_2) and recoveries (circa 70%) whilst simplifying the mineral separation flowsheet.
- Positive results achieved from atmospheric sulphuric acid leaching of flotation concentrates, which requires much lower temperatures and simpler equipment than the acid bake-water leach process tested to date.
- Optimisation of the product finishing stage is underway, targeting both anatase and rutile pigment products, as well as feedstock suitable for Ti metal production.
- Non-binding Cooperation Agreement executed with the Mid West Ports Authority to enable formal discussions regarding future port access and use of port facilities.
- Environmental studies progressing well, identifying opportunities to reduce environmental and social impacts, and streamlining the Project's permitting pathway in a Tier-1 mining jurisdiction.

Progress planned for Q1 2026

The metallurgical test programmes on the in-situ weathered ores are being completed rapidly with key aspects of the metallurgical performance being captured for comparison with existing industry performance. By early February, the mineral separation process flowsheet is anticipated to reach a stage that will permit the commencement of additional large-scale metallurgical batch tests. These batch tests will generate the mineral concentrates required for optimising the hydrometallurgical performance and also to produce additional high-grade titanium products required for characterisation-supporting marketing efforts. The aim is to have a preferred process flowsheet completed by end of Q1 so that the continuous pilot scale testing work can commence.

This quarter, concurrent with the development of the base case flowsheet, the majority of alternative flowsheet configurations are expected to undergo testing, with comparative assessments undertaken to decide which concepts should progress to continuous pilot scale test work. Aspects such as capital costs, operating costs, complexity, product quality and potential for byproducts will be used to compare and select viable options to pursue.

Engineering data sighter tests and desktop studies will also be completed to allow project scoping and engineering design criteria. Completing sighter tests for bulk materials handling, waste stream geochemistry, tailings dewatering and water recycling will help inform the engineering studies and define what further test work would be required to build confidence in project development decisions.

Shaun Bunn, Managing Director, said: "The ongoing achievements of our metallurgical and environmental

teams continue to impress. We are greatly encouraged by the pace and quality of work being delivered, advancing multiple workstreams in parallel, and accelerating the Project's development pathway. We committed early in the Project development stage to bring together a strong team of metallurgical, environmental and social scientists, and they have worked closely with our geology and engineering staff during this critical phase of exploration, mineral resource development and process design.

"Metallurgical programmes are progressing rapidly toward a defined process flowsheet, with flotation performance and atmospheric low temperature leaching options having the potential to materially enhance project economics. In parallel, engineering, mining and marketing studies are now underway to support completion of a Scoping Study later this year. Collectively, these milestones strengthen Pitfield's position as a globally significant titanium development project with multiple downstream product pathways, including pigment and titanium metal feedstock."

Metallurgical Process Development

The metallurgical batch programme has progressed rapidly examining a range of aspects important to the flowsheet development, specifically ore characterisation, mineral separation, titanium extraction and TiO_2 product development.

The progress being made in each area is discussed below:

Ore characterisation

Mineralogy using Scanning Electron Microscope ('SEM') and X-Ray Diffraction ('XRD') technologies remain important for understanding the ore and its behaviour through the metallurgical testing process.

Empire has analysed 216 samples with XRD. The primary purpose of this analysis was to generate data that clearly identifies the mineralogy downhole and which will lead to a better understanding of the mineralogy within the weathering profile. What can be clearly identified from the samples analysed at Pitfield is that anatase is the dominant Ti mineral in the saprolite and weathered sandstone and titanite is the dominant Ti mineral in the fresh sandstone bedrock. There is minor but significant rutile evident throughout the deposit and virtually no evidence of ilmenite (refer Table 1). This data indicates that there is little or no material difference within the highly weathered mineral resources across the deposits, suggesting a straightforward flowsheet can be applied and will be effective.

Mineral/Lithology	Saprolite	Weathered Bedrock	Fresh Bedrock
Anatase	8.3	7.0	1.9
Rutile	0.5	0.5	0.5
Titanite	0.3	0.9	11.6

Table 1: Average Weight % of Ti minerals within the different rock types confirmed by XRD

Mineral Separation & Concentration

The bulk-scale samples collected in the recent AC drilling programme have been used for larger scale metallurgical tests. The team is currently focused on assessing flotation as an earlier processing step for whole-of-ore following such positive responses on the finer ore fraction. Whole-of-ore flotation requires a short scrubbing/grinding stage, followed by conditioning and flotation. Consistent with the fines flotation, similar reagent schemes are able to achieve selective recovery of titanium minerals for the whole ore samples. Further investigation around grind size, selective liberation and cleaning stages are still under investigation which will provide for larger scale flotation tests, leading into continuous piloting.

Key results to date include:

- Fine fraction "rougher" flotation on saprolite samples have achieved 67- 77% TiO2 recovery and up to 19% TiO2 concentrate grade. Similar recovery performance was achieved on a weathered sandstone samples fines fraction with a "rougher" flotation recovery of 68%.
- Cleaner tests on rougher concentrate have achieved a 90% stage recovery at 32% TiO_2 concentrate grade. This equates to an overall float recovery of circa 70%.

Suitable reagent regimes have now been narrowed down, and optimisation of the flotation parameters is being evaluated by adjusting other variables. The reagents being advanced to the next phase have all shown selective recovery of titanium minerals into a froth flotation concentrate, with high levels of rejection of unwanted gangue minerals, in excess of 80% by mass, and cleaner concentrate grades greater than 34% TiO_2.

One aspect currently under examination is the application of fine-particle flotation cell technologies on the Pitfield weathered ores. Aspects such as froth washing to remove entrained particles, finer air bubbles and higher intensity reagent - slurry mixing will improve the selective recovery of the titanium minerals from unwanted gangue minerals.

Hydrometallurgy - Titanium Extraction

The high-grade mineral concentrate samples which are now been generated by flotation have allowed the beneficiation work to advance more quickly, with the process selection phase on schedule to allow several flowsheet options to advance to a bulk-scale batch programme ahead of a piloting phase, which is now expected to commence before mid-year.

Initially, titanium extraction was focused on a known process route for anatase leaching which is similar to the existing, industry proven, sulphate route for titanium pigment production. This involves a sulphuric acid bake followed by water leach to extract the titanium into solution and then recovering the titanium through a hydrolysis process before further refining and calcining into TiO_2. This flowsheet confirms a highly effective route for extraction of the titanium found at Pitfield, with leach recoveries of 98%.

Recently, atmospheric sulphuric acid leaching concept has shown promising results, requiring less acid, simpler equipment, and lower temperatures than previous methods. Testing at temperatures as low as 120 °C with residence times up to four hours suggests significant reductions in energy and acid use, though recoveries still need improvement. Further examinations are underway to test higher grade concentrates and to further optimise the leach conditions and recoveries. The team is particularly excited by this flowsheet option as it has the potential to simplify the extraction circuit and provide an opportunity for recycling and reuse of low-grade acid within the process flowsheet.

The metallurgical team had also identified several alternative processes that would also be effective for the titanium extraction stage, and test work is now well underway to assess these options. Empire's metallurgical team is managing the process development with the support of Strategic Metallurgy Pty Ltd (announced 16 July 2025), and the concepts are being tested at several local commercial metallurgical laboratories.

Product development

As announced previously a +99% TiO_2 anatase pigment product has been produced from the Pitfield ore, using conventional acid bake-water leach process as applied in the sulphate pigment industry (announced 9 June 2025). Further programmes have commenced to examine variables in the product finishing steps to target either an anatase pigment or a rutile pigment product. Potential to make alternative titanium products such as titanium tetrachloride ($TiCl_4$), which is the pre-curser to making Ti metal sponge via the Kroll process, or to develop an alternative Ti metal production route are being investigated.

Environmental Study Progress

Environmental baseline studies and community engagement are critical path items for project approvals in

Western Australia. Studies completed to date have identified opportunities to reduce environmental and social impacts. This has the potential to reduce permitting risk and supports the Company's objective of responsible and timely project development.

Pitfield is located within the Avon Wheatbelt Bioregion of Western Australia. Land use in the vicinity of the Project is predominantly farming for crops and/or sheep grazing (see Figure 1) and it is the patches of vegetation across the Project that are assessed in field studies.

During 2025, field studies focused on priority areas within the Project tenements and have been completed with success. The timing of this year's study is considered an achievement, successfully adhering to the guidelines issued by the State Government for a second year in a row, and ensuring that the survey data gained from these studies is of the highest quality.

The studies were completed by Botanica, a well-respected environmental consultancy based in Western Australia for over 25 years and who pride themselves on their technical expertise, and in-depth knowledge of policy and legislation (see Figure 2).

Figure 1. Extent of clearing and local land use around Three Springs

Figure 2. Photos of botanical survey team taken during the spring work programme.

Strategic Location & Infrastructure Advantage

Located within the Mid-West region of Western Australia, near the northern wheatbelt town of Three Springs, the Pitfield titanium project lies 313 km north of Perth and 156 km southeast of Geraldton, the Mid-West region's capital and major port. The Company has now signed a non-binding co-operation agreement with the Mid West Ports Authority, enabling formal discussions regarding future port access and use of port facilities.

Western Australia is a Tier 1 mining jurisdiction, with mining-friendly policies, stable government, transparency, and advanced technology expertise. Pitfield has existing connections to port (both road and rail), HV power substations, and is nearby to natural gas pipelines as well as a green energy hub, which is under planning and development (refer Figure 3).

Figure 3. Pitfield Project Location showing theMid-West Region Infrastructure and Services

Three Springs is a welcoming rural community founded on farming yet with the added benefit of a strong local mining industry, with the largest talc mine in the southern hemisphere located just a few kilometres to the east of the townsite (see Figure 4). Three Springs boasts affordable housing and excellent services for a town of its size, including a district hospital with 24-hour emergency care, a primary school, supermarket, commercial businesses, and a wide range of sporting and community facilities. The town is also strategic to Western Australia's clean-energy future, with the government's "Clean Energy Link North" transmission project highlighting Three Springs' role in unlocking the Mid-West region's renewable energy potential.

Figure 4. Local infrastructure and services, including the nearby Talc Mine

Empire is actively, and regularly, consulting with local community members, landowners and stakeholders through proactive engagement. Through its stakeholder engagement process, the Company has identified emergency and health services as a community priority. Empire has as a result sponsored fund raising events for the St John Ambulance North Midlands Sub Centre. St John plays a vital role in health and emergency services across the region. Locally available contractors and suppliers have been used for site works.

?Competent Person Statement

The scientific and technical information in this report that relates to process metallurgy is based on information reviewed by Ms Narelle Marriott, an employee of Empire Metals Australia Pty Ltd, a wholly owned subsidiary of Empire. Ms Marriott is a member of the AusIMM and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the JORC Code 2012. Ms. Marriott consents to the inclusion in this announcement of the matters based on their information in the form and context in which it appears.

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About Empire Metals Limited

Empire Metals Ltd (AIM: EEE and OTCQX: EPMLF) is an exploration and resource development company focused on the commercialisation of the Pitfield Titanium Project, located in Western Australia. The titanium discovery at Pitfield is of unprecedented scale and hosts one of the largest and highest-grade titanium resources reported globally, with a Mineral Resource Estimate (MRE) totalling 2.2 billion tonnes grading 5.1% TiO? for 113 million tonnes of contained TiO?.

Titanium mineralisation at Pitfield occurs from surface and displays exceptional grade continuity along strike and down dip. The MRE extends across just 20% of the known mineralised footprint, providing substantial potential for further resource expansion.

Conventional processing has already produced a high-purity product grading 99.25% TiO?, suitable for titanium sponge metal or pigment feedstock. With excellent logistics and established infrastructure, Pitfield is strategically positioned to supply the growing global demand for titanium and other critical minerals.

SOURCE: Empire Metals Limited

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