Resouro Strategic Metals Inc. Metallurgical Testwork and PEA Update – Tiros Project

written by Raj Shah | March 2, 2026

Metallurgical Testwork and Preliminary Economic Assessment Update

March 2, 2026 (Source) – Resouro Strategic Metals Inc. (ASX:RAU) (CVE:RSM) (8TX:FRA) (RSGOF:OTCMKTS) provided an update on ongoing metallurgical testwork and advancement of the Preliminary Economic Assessment ("PEA") for its Tiros Titanium and Rare Earths Project ("Tiros" or "Tiros Project" or the "Project") located in Minas Gerais, Brazil.

Metallurgical testwork completed to date highlights that a conventional process flowsheet can produce a titanium dioxide ("TiO2") concentrate and achieve high Total Rare Earth Oxide ("TREO") extractions using Sulphuric Acid Leach (SAL).

Highlights of the results include:

Fine particle flow sheet (< 20 micron) using sulphuric acid;

- 88.8% to 95.2% stage extraction of TREO; and
- 71.2% to 94.2% of TiO2 stage recovery.

Coarse particle flow sheet (>75 micron) using conventional flowsheet;

- 76.8% TiO2 concentrate grade; and
- TiO2 stage recovery of coarse feed 39%.

Important notice: These results must be read along with Appendix I* (Details of Results) and Appendix II* (JORC Table).

Commenting on the latest results and update for Tiros, Christopher Eager, Resouro's CEO, said;

"Resouro is well advanced in testing a conventional process flowsheet for recovery of titanium dioxide to concentrate and high leach extractions of rare earth elements. The latest metallurgical testwork results provide increasing confidence that the Tiros Project has the potential to be developed into a globally significant regolith (highly weathered soft rock) type titanium and rare earths project."

Ongoing metallurgical testwork and optimization

The current phase of the metallurgical testwork, being conducted at SGS Lakefield (Canada), and at CIT Senai and SGS Geosol, (Brazil), is focused on reducing sulphuric acid consumption and further optimizing recoveries.

Preliminary sulphuric acid consumption ranged from 700kg/t to 1,320kg/t. These acid consumption figures are for raw sample minus 20 micron fraction prior to beneficiation activities and before sulphuric acid recycling. The minus 20 micron sample makes up about 56% of the raw sample weight and therefore equates to 392kg/t to 739kg/t of acid per tonne of raw sample.

Iron oxides and alumina make up approximately 54% of the minus 20 micron feed and are significant consumers of acid. Beneficiation testwork is aimed at reducing iron oxide and alumina and other worthless gangue minerals from the leach feed. Beneficiation is intended to decrease the volume of material to be leached by reducing low value acid consuming minerals, increasing the TiO2 and TREO grades of the leach feed, with the aim of improving overall project economics.

Ongoing work is evaluating:

- Magnetic separation to remove iron oxides which are significant acid consumers;
- Flotation to remove non-valuable silicate and gangue materials prior to leaching;
- Optimization of reductive calcination and acid bake conditions;
- Acid regeneration and acid recycling; and
- Potential on-site sulphuric acid production to reduce operating costs.

Initial testwork on magnetic and electrostatic separation and flotation have been encouraging, indicating potential to materially reduce acid consumption while maintaining high metal recoveries.

Resouro will also investigate acid regeneration and recycling and the feasibility of producing sulphuric acid at site to take advantage of abundant elemental sulphur and sulphur mineralizations available in Brazil.

Preliminary economic assessment update

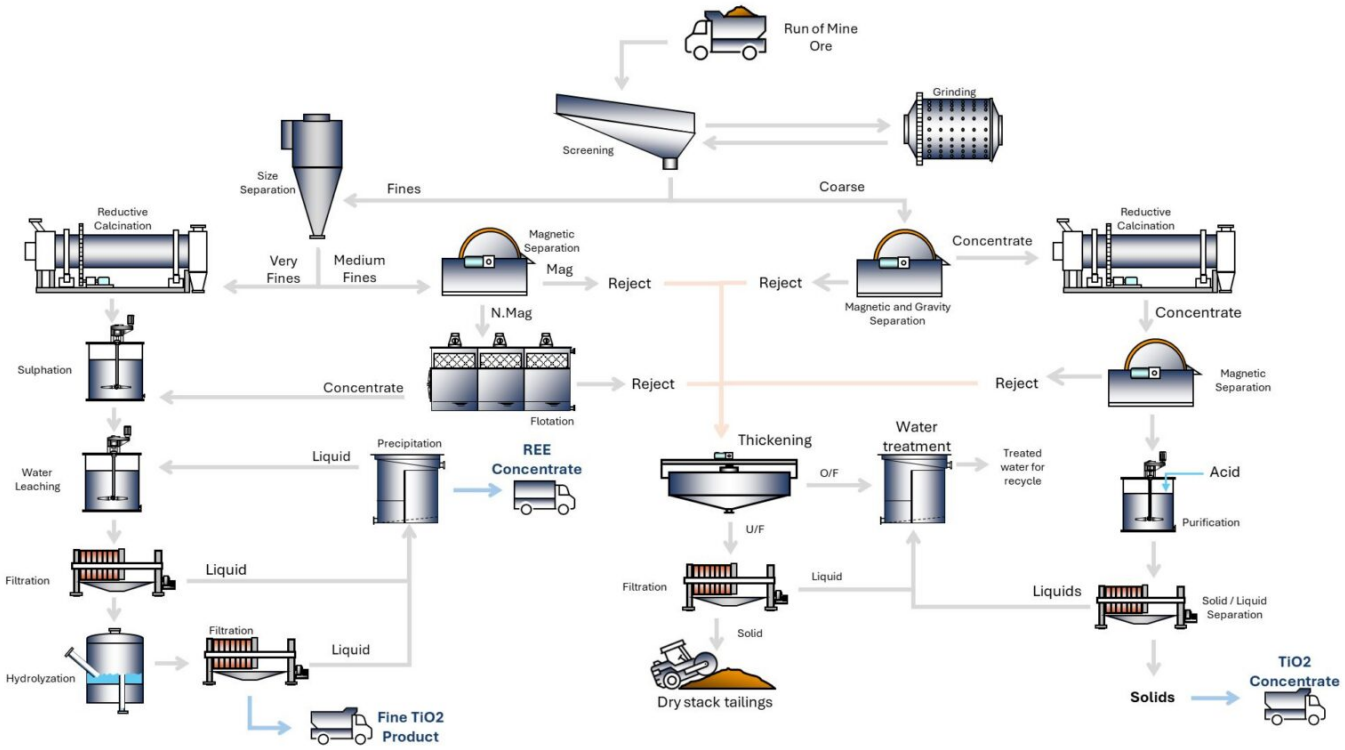
The PEA continues to advance, however, to be more economical and respectful of budgets, consideration is being given to placing the PEA on hold pending completion of ongoing metallurgical testwork optimization. The key milestones achieved or in progress include:

- Initial mine planning substantially completed pending final processing cost inputs;
- Environmental Impact Assessment and Project permit process advancing;
- Infrastructure, processing plant capital and operating costs to be finalized following completion of beneficiation, the current stage of metallurgical testwork; and
- Initial independent TiO_2 and rare earth oxides market study received; update to follow completion of beneficiation.

Finalization of processing cost inputs remains the key workstream prior to completion of the PEA.

About Resouro Strategic Metals Inc.

Resouro Strategic Metals Inc. (ASX:RAU) (CVE:RSM) (OTCMKTS:RSGOF) (FRA:8TX) is a Canadian incorporated mineral exploration and development company, listed on the ASX, TSXV, OTC and FSE, focused on the discovery and advancement of economic mineral projects in Brazil, including the Tiros Titanium-Rare Earths Project and the Novo Mundo Gold Project. The Tiros project has 28 mineral concessions totalling 497 km2 located in the state of Minas Gerais, one of the best infrastructurally developed states of Brazil, 350 km from the state capital of Belo Horizonte. Resouro's Mineral Resource Estimate for the Tiros Project contains 165 million tonne of titanium dioxide and 5.5 million tonne of total rare earths oxides within a Measured and Indicated Resource of 1.4 billion tonne at 12% titanium dioxide and 4,000 ppm of total rare earth oxides.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TiO2 Concentrate
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Fine TiO2 Product
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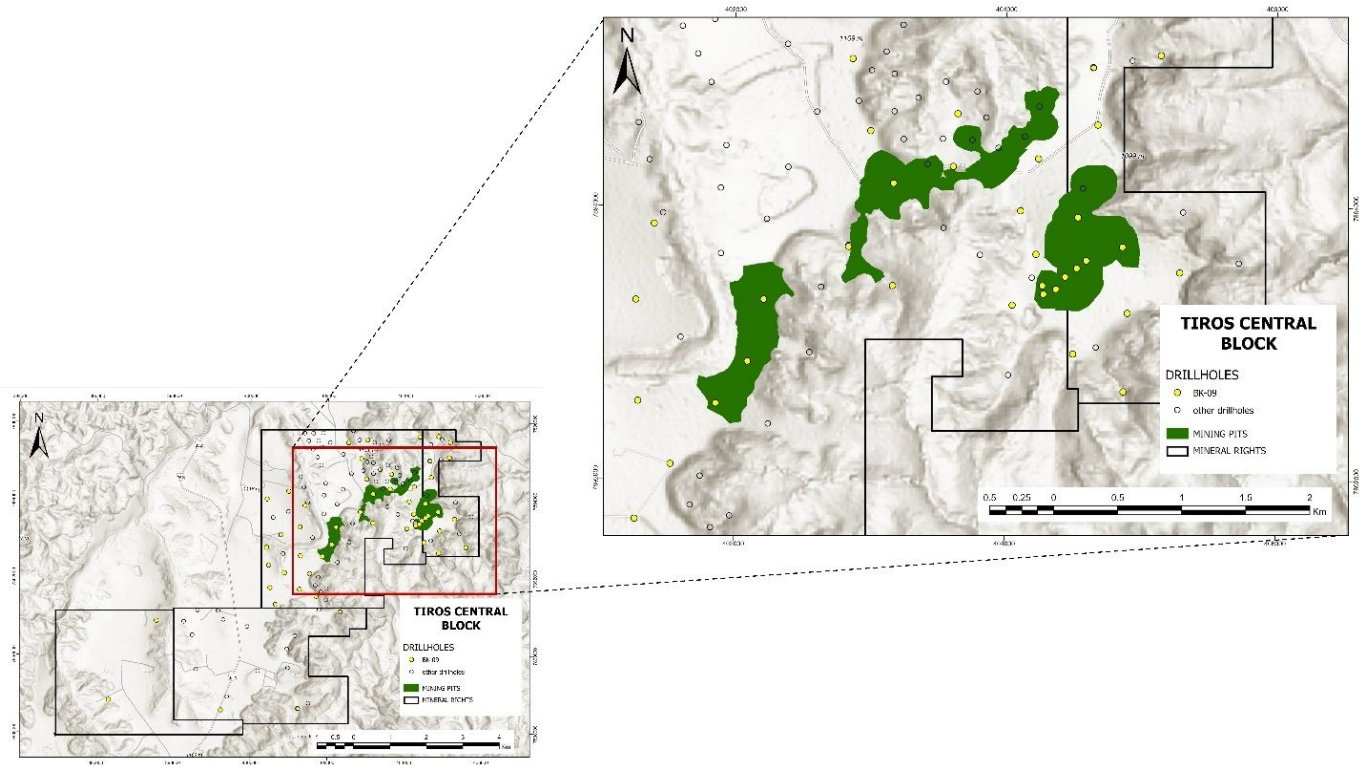
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