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TIROS PROJECT WORK PROGRAM UPDATE

[Resouro Strategic Metals Inc.](#) ([ASX: RAU](#); [TSX-V: RSM](#); [FSE: 8TX](#); [OTCQB: RSGOF](#)) ("**Resouro**" or the "**Company**") is pleased to announce an update to work programs for the development of Resouro's Tiros Titanium and Rare Earth Elements ("**REE**") Project ("**Tiros Project**" or "**Project**") in Minas Gerais, Brazil.

Highlights

Activities are ongoing at Resouro's world scale 1.7 billion tonnes¹ Tiros Titanium - REE Project in Brazil which contains an estimated 198 million tonnes of Titanium Dioxide ("**TiO₂**") and 6.6 million tonnes of Total Rare Earth Oxide ("**TREO**").

A comprehensive work program is underway with the aim of delivering staged outcomes throughout 2025. An overview of the key work programmes underway includes:

- Drill Hole Assays: Results expected imminently;
- Update to the Mineral Resource Estimate: Advanced planning stages underway;
- Initial Mine Designs: Preparations in progress;
- Metallurgical Test Work: Programs advancing rapidly;
- Northern Block Trial Mining: Application currently in progress;
- Scoping Study for Northern Block Demonstration Plant: Planning initiated; and
- Scoping Study for full scale plant at Central Block: Expected by year end.

¹ Refer section "About the Company" at the end of this announcement for full details of the Company's maiden Mineral Resource Estimate for the Tiros Project.

With the appointment of Progesys as technical study managers, and Sete Meio Ambiente for environmental studies (*refer ASX announcement of 16 January, 2025, TSXV/OTCQB 15 January, 2025*), the Company is pleased to provide the following update on its technical work programs planned for 2025.

The Tiros Project Mineral Resource Estimate

The Tiros project comprises 28 mineral concessions totalling 497 km² located in the state of Minas Gerais, 350 km from Belo Horizonte, the state capital. Minas Gerais is a tier one mining jurisdiction of the world and one of the most infrastructurally developed states in Brazil.

Resouro released a maiden Mineral Resource Estimate (“MRE”) for the Tiros Project of 1.7 Billion Tonnes of Inferred, Indicated and Measured Resource (*refer ASX release 18th July 2024, TSXV 17th July 2024*), the details of which are contained at the end of this announcement.

CURRENT WORK ACTIVITIES

Anticipated Work Program Outcomes

The Company is working diligently towards achieving the following work program milestones with the expected timeline below:

	Q1 2025	Q2 2025	Q3 2025	Q4 2025
Drill Assays				
Trial Mining Application – Northern Block				
MRE Update				
Beneficiation test works				
Sulphuric Acid test works				
Nitric Acid test works				
Scoping Study Demonstration Plant Northern Block				
Scoping Study Full Scale Operation – Central Block				

Drilling Results

The Company is set to publish assay results from 49 new diamond drill holes encompassing 2,500 samples drilled in 2024 in the near term. Samples are being processed at SGS Geosol laboratories in Belo Horizonte. Initial assay results are expected imminently, with the remaining samples scheduled for completion within the next six weeks.

Mineral Resource Update

Atticus Geoscience Consulting (“Atticus”), independent Mineral Resource Estimation Consultants, are actively compiling the necessary data for an updated MRE. The updated MRE is expected to be completed approximately four weeks after receiving the remaining assay results from the 2024 drill program. It is anticipated that the updated MRE will be published late in late Q1 or early Q2 CY25.

Demonstration Plant Scoping Study at Tiros Northern Block.

The Company has commenced an application process for trial mining licences (Guia de Utilização or “GU”) to complement a demonstration plant scoping study in the Tiros Northern Block.

The demonstration plant scoping study will build on current metallurgical test work and the development of an optimised metallurgical flowsheet, leading to prefeasibility and definitive feasibility studies.

The Tiros Northern Block has been selected as the location for the Scoping Study and trial mining exercise due to the following advantages:

1. High-Grade Resources: The site has high-grade rare earths and titanium dioxide from surface.
2. Free-Dig Mining Potential: The highly-weathered mineralization enables cost-effective “free-dig”² mining operations.
3. Access to Affordable Power: Proximity to power lines with low-cost electricity.
4. Road Infrastructure: Paved roads are located near the proposed mining area.
5. Water Availability: An existing water dam is situated in the local area.
6. Minimal Environmental Impact: The area has a low environmental footprint from previous artisanal mining operations.
7. No Agricultural Conflicts: The area is free from agricultural activities, ensuring minimal land-use competition.

The approval process for a trial mining license is typically shorter than that of a full mining concession, enabling an accelerated timeline for development and operations. This fast-track process allows companies to de-risk projects by conducting smaller scale demonstration operations before transitioning to full-scale production. As a result, companies benefit from reduced initial capital expenditures (capex) while achieving early cash flow generation.

The combination of high-grade resources, beneficiation, and high metallurgical recoveries ensures that a relatively small-scale operation should deliver substantial production volumes of TREO, TiO₂, and valuable by-products.

² “free-dig” is a mining term used to describe rock types that are soft enough for mining equipment to excavate without the use of drilling and blasting techniques and therefore has a lower mining cost by the elimination of drill and blast.

It is anticipated that the Demonstration Plant Scoping Study should commence in Q2 CY2025.

Full Scale Operations Scoping Study at Tiros Central Block.

Following the scoping study for the Tiros Northern Block, it is planned that the Company will undertake a scoping study for a full-scale operation based on the Tiros Central Block. This will take into consideration the ongoing test work optimisation studies and leverage the outcomes of the Demonstration Plant scoping study. It is anticipated that this could be achieved by the end of 2025.

Metallurgical Test-work, Process Flow Sheet Development

Metallurgical test work for these flowsheets is advancing rapidly on different flowsheets for the leaching of REE and the concentration and purification of TiO₂. These will integrate with the chosen flowsheets into the Scoping Study for the Demonstration Plant at the Tiros Northern Block and a full-scale production facility at various throughputs at Tiros Central Block.

Mineral Beneficiation

Physical beneficiation test-work using various sizing, gravimetric, electrostatic and magnetic separation technologies is underway at laboratories in Brazil and Australia. The objective of these studies is to evaluate the feasibility of separating key components from the Tiros material such as TiO₂ minerals, iron minerals and silica and leaching for REE. Beneficiation offers the significant advantage of reducing the volume of material requiring leaching, while simultaneously increasing the head grade supplied to the rare earths leaching circuit. Beneficiation work is being performed at Laboratories in Perth, CIT Senai Laboratories in Belo Horizonte and at the University of São Paulo (USP) in Brazil.

Nitric Acid Test Work: Altilium Process™

A 45 kg representative composite sample from the Tiros Central Block (*refer ASX release dated 27 September 2024, TSXV 26 September, 2024*) has been processed using Altilium technology. The sighter test-work demonstrated that the Altilium Ti/REE Process™ achieved extractions of over 96% of the Magnet Rare Earth Oxides (“**MREO**”) from representative samples selected from a cross section of the Tiros mineralisation. This corresponds to the world’s highest REE extractions on non-selective mineralisation intervals. With rare earths extracted, the TiO₂ enriched residue is currently being analyzed by laboratories in Perth, Western Australia, to determine the next steps for separating TiO₂, and other materials.

An additional 200-kilogram sample from the Tiros Central Block will be used to repeat the initial sighter test-work and leach work from the 45kg sample. This 200 kg sample will be used to develop the nitric acid regeneration stages, as well as the aluminium and iron hydrolysis processes, with the goal of optimizing acid consumption, residence times, and temperatures. The data from this work will allow Altilium to provide scoping study-level capital and

operating cost estimates for various scales of production. This information will be integrated into the Scoping Study for the proposed Demonstration Plant for the Tiros Northern Block and for the large-scale operation planned at Tiros Central Block.

Mineral Concentrate Samples

Upon completion of the mineral beneficiation test work, Resouro will be able to provide titanium mineral concentrate samples for analysis, assessment and marketing purposes. The Company is actively engaging with potential off-takers across Europe, North America and South East Asia regarding these products and plans to provide them product samples.

Rare Earths Samples

A portion of the mixed rare earth nitrate liquor from nitric acid leaching will be sent to a potential off-taker in the United States. The remaining liquor will be converted into a Mixed Rare Earth Oxide for analysis and distribution to various potential off-takers in the United States and Europe.

Sulphuric Acid Treatment

A high-temperature sulphuric acid treatment process has been undertaken to separate and recover precipitated products. This process has the potential to produce high purity, salable products including TiO₂, iron oxide as well as silica and alumina products. The resulting residue from this process, enriched in rare earth, can be further processed through downstream leaching and precipitation.

Initial test-work has been completed, resulting in several products, along with a mixed rare earth sulphide liquor. These products and re-liquor are currently at the SGS Geosol Laboratory in Belo Horizonte for recovery and product quality analysis.

Mine Plan and Design for the Tiros Central Block

In the third quarter of 2024, Global Mining Consultants developed a first-pass preliminary mine plan for the Tiros Central Block. This work will be updated with drill data from infill drilling, initial metallurgical recoveries, as well as capital and operating cost figures from the process flowsheets being developed. These works will be undertaken at the completion of a selection process for optimum process flowsheet, as well as operating and capital costs estimates.

Tiros Project Location and Infrastructure Map

The Tiros Project is ideally located near road, rail and power infrastructure.



Figure 1: Map of Tiros Project mineral rights in Minas Gerais, Brazil relative to infrastructure of power lines and road networks.

Tiros Tenement Map

Below are the mineral tenement holdings at Tiros.

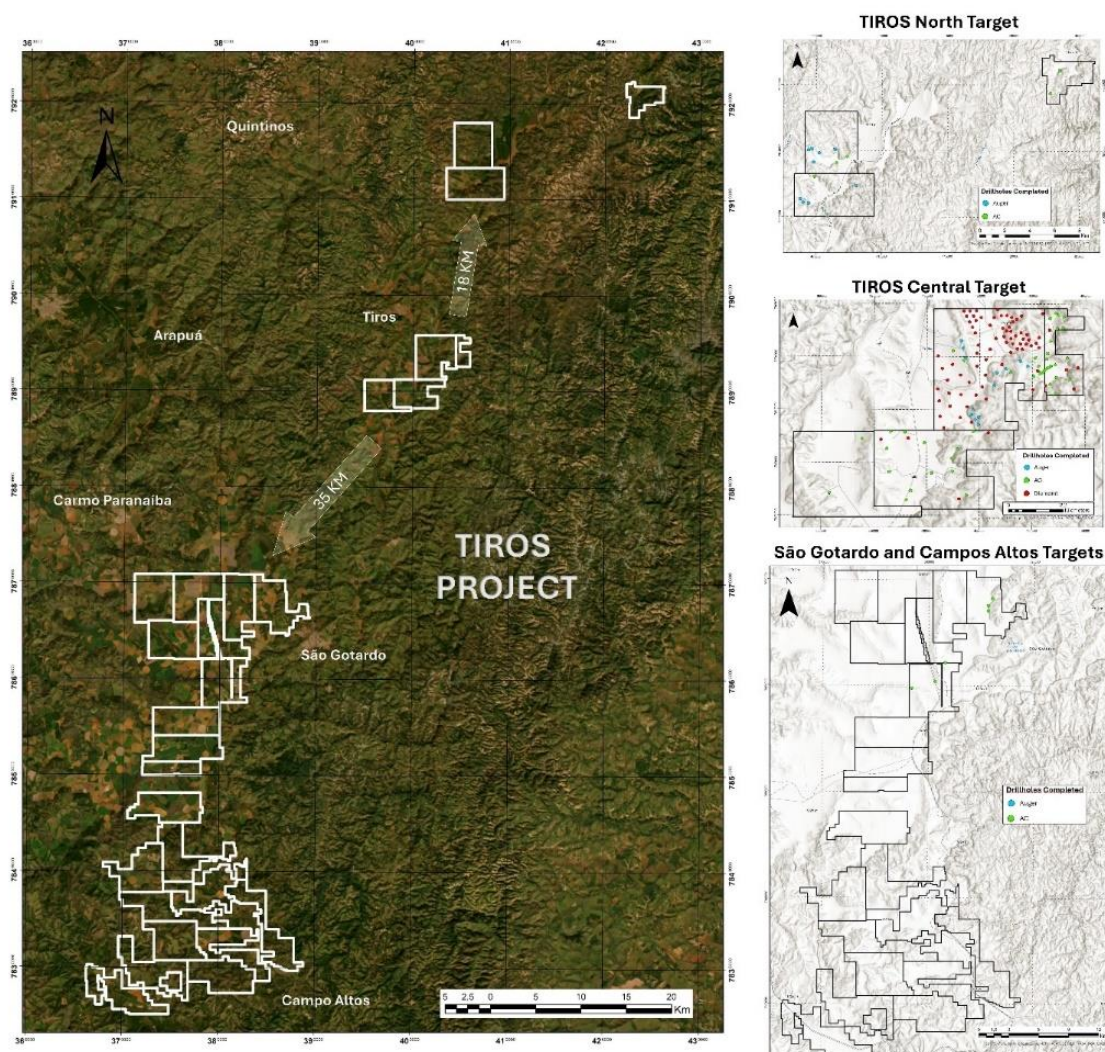


Figure 2. Resouro's mineral right holding at Tiros North, Tiros Central, Sao Gotardo and Campos Altos.

This announcement has been authorized for release by the Board of Directors.

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About the Company

Resouro is a Canadian incorporated mineral exploration and development company, listed on the ASX, TSXV, OTCQB and FSE, focused on the discovery and advancement of economic mineral projects in Brazil, including the Tiros Titanium and Rare Earths and project in Minas Gerais and the Novo Mundo Gold Project in Mato Grosso. The Tiros project represents 28 mineral concessions totalling 497 km² located in the state of Minas Gerais, one of the most infrastructurally developed states of Brazil, 350 km from Belo Horizonte, the state capital. Resouro has released a Mineral Resource Estimate for the Tiros Project of 1.7 bn tonnes of Inferred, Indicated and Measured Resource (*reference: ASX release ASX: RAU dated 18th July 2024, TSXV 17th July 2024*).

DOMAIN	CAT	TONNES (t)	TiO2 (%)	TREO (ppm)	MREO (ppm)
HG (High Grade)	Inferred	42,000,000	23	8,700	2,200
	Indicated	55,700,000	23	9,030	2,380
	Measured	20,800,000	24	9,320	2,530
	Sum	120,000,000	23	9,000	2,400
MG (Medium Grade)	Inferred	620,000,000	11	3,500	950
	Indicated	704,000,000	11	3,650	1,020
	Measured	224,000,000	11	3,570	997
	Sum	1,500,000,000	11	3,500	930
	Totals	1,700,000,000	12	3,900	1,100

Note: Further details of the Company's Maiden JORC MRE are contained within the Company's announcement of 18 July, 2024. Resouro is not aware of any new information or data that materially affects the information included in the Company's announcement of 18 July 2024 and that all material assumptions and technical parameters underpinning the estimates referred to therein continue to apply and have not materially changed

Resouro Strategic Metals Inc., capital structure:

TSXV Chess Depositary Interests	43,313,635
ASX Common Stock	49,276,414
Total on Issue	92,590,049
Shares in Escrow	1,642,000
Options (various strike prices)	14,939,259
Performance Rights	750,000
Fully Diluted Securities	109,921,308

Forward-Looking Information

This announcement contains certain "forward-looking information" within the meaning of applicable securities law. Forward-looking information is frequently characterized by words such as "plan", "expect", "project", "intend", "believe", "anticipate", "estimate" and other similar words, or statements that certain events or conditions "may" or "will" occur. Although we believe that the expectations reflected in the forward-looking information are reasonable, there can be no assurance that such expectations will prove to be correct. We cannot guarantee future results, performance or achievements. Consequently, there is no representation that the actual results achieved will be the same, in whole or in part, as those set out in the forward-looking information.

Forward-looking information is based on the opinions and estimates of management at the date the statements are made and are subject to a variety of risks and uncertainties and other factors that could cause actual events or results to differ materially from those anticipated in the forward-looking information. Some of the risks and other factors that could cause the results to differ materially from those expressed in the forward-looking information include, but are not limited to: general economic conditions in Canada and globally; industry conditions, including governmental regulation and environmental regulation; failure to obtain industry partner and other third party consents and approvals, if and when required; the need to obtain required approvals from regulatory authorities; stock market volatility; liabilities inherent in the mining industry; competition for, among other things, skilled personnel and supplies; incorrect assessments of the value of acquisitions; geological, technical, processing and transportation problems; changes in tax laws and incentive programs; failure to realize the anticipated benefits of acquisitions and dispositions; and the other factors. Readers are cautioned that this list of risk factors should not be construed as exhaustive.

The forward-looking information contained in this announcement is expressly qualified by this cautionary statement. We undertake no duty to update any of the forward-looking information to conform such information to actual results or to changes in our expectations except as otherwise required by applicable securities legislation. Readers are cautioned not to place undue reliance on forward-looking information.

Neither the ASX, OTC, TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.

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