

ASX: RAU
TSXV: RSM

TSXV Release: ASX Release:
12 August 2024 13 August 2024

Resouro Strategic Metals Metallurgy Update for the Tiros Project

[Resouro Strategic Metals Inc.](#) (ASX: RAU; [TSX-V: RSM](#); [FSE: 8TX](#); [OTC: RSGOF](#)) ("**Resouro**" or the "**Company**") is pleased to announce an update on its metallurgical studies for the Tiros Titanium and Rare Earth Elements Project in Brazil ("**Tiros Project**" or "**Tiros**" or "**Project**") which marks a significant milestone in the Project's development. The results from the metallurgical test work below indicate that Resouro, together with its partner Altilium Projects (Australia) Pty Ltd ("**Altilium**"), have the potential to achieve the highest rare earth extractions known across the industry to date.

Highlights

Following the July 18, 2024 release of the Company's maiden JORC Mineral Resource Estimate ("**MRE**") for the Tiros Project, Resouro has completed the first steps of its metallurgical strategy with its partner, Altilium.

The aim of this metallurgical study was to achieve maximum extractions and recovery of Rare Earth and Titanium minerals, applying Altilium's patented technology, including acid regeneration with minimal acid loss as well as zero waste.

Altilium assessed an approximately 50kg representative sample, covering five diamond drill holes of the Tiros JORC compliant resource in laboratory conditions and produced the following extraction results:

TEST	TREY	LREE	MREE	HREE
L3	80.8%	81.6%	96.2%	74.8%

Table 1: Metallurgical Extraction using 50kg of representative sample.



President, CEO, Director and Founder, Chris Eager commented:

“Completion of our first stage of the Altilium extraction assessment for the Central Block of the Tiros Rare Earth project marks a pivotal moment for Resouro Strategic Metals and the industry as a whole.”

“These extraction results, combined with the maiden JORC mineral resource estimate, provide our shareholders with confidence that Tiros’ consistently thick, near surface and highly weathered clay-like material has strong potential to produce excellent results and meet the needs of the global demand for stable supply of rare earth critical minerals.”

“Our metallurgical studies will continue the next steps with our partner, Altilium, whilst reviewing options from the more conventional metallurgical study path. This work combined with our infill drilling for mine planning and feasibility and environmental purposes will seek to establish Resouro as a leading rare earth business.”

“Resouro is committed to sustainable practices and positive community engagement, ensuring that our growth contributes to the well-being of the regions in which we operate.”

“Resouro will continue to update the market on progress to completion of our Preliminary Economic Assessment”

About Altilium

Altilium Group Limited (“**Altilium Group**”), incorporated in England, is the parent company of Altilium Licensing Limited (“ALL”) and Altilium Projects (Australia) Pty Ltd).

Research and development for the Altilium Group is performed in Australia. Altilium Technology may be applied to ore, mining waste or process tailings. The first developed application of Altilium Technology was the Altilium Nickel Laterite Process™ which is designed to process nickel laterite ore. The Altilium Group has subsequently developed the following processes:

- Altilium Bauxite Process™ - to extract metals from bauxite ore;
- Altilium Red Mud Process™ - to re-process bauxite residue (tailings); and
- Altilium Ti/REE Process™ - to extract titanium and rare earth elements from a lateritic ore.

The Altilium Group is proactively researching and developing new applications for its technology with a focus on the extraction of critical metals.

Altilium Group has marked the successful completion of its latest metallurgical testing phase, utilising the proprietary Altilium Ti/REE Process™ on a 50 kg composite sample provided by Resouro. This rigorous testing process, carried out at Core Resources Laboratories in Brisbane, involved air-drying and milling the sample to 0.5mm to analyse its chemical and mineral content. Three leach tests were conducted to understand the metal extractions, with the goal of

generating a solution rich in rare earth elements (“**REEs**”) and a residue enriched with titanium. Notably, the third test, which incorporated a pre-treatment process, achieved the highest rare earth extractions known in the industry to date, demonstrating the effectiveness of Altilium's innovative approach.

Building on these promising results, Altilium Group is now focused on the next phase of development, which involves designing and executing a laboratory-scale test programme to establish the Altilium Ti/REE Process™ flowsheet. The company aims to optimise the process parameters to improve the grades and extraction efficiency of target metals, including titanium, silica, REEs, scandium, iron, and aluminium.

Christopher Gower, CEO of Altilium Group, said, *“The recent completion of this “Sighter Test Work” marks a significant milestone for Altilium Group. By applying our proprietary Altilium Ti/REE Process™ (at Core Resources Laboratories), we have achieved unprecedented levels of rare earth extractions, reinforcing our commitment to innovation and excellence in resource processing. This accomplishment not only highlights the potential of our technology but also sets a new benchmark for the industry.”*

“Looking ahead, our focus is on refining and optimising the Altilium Ti/REE Process™ and our other process flowsheets to maximise the extraction efficiency for the target metals: titanium and rare earth elements in this case; and, alumina, iron, nickel, cobalt, scandium and more in the case of our other flowsheets. Our goal is to continually enhance the grades, yields and extractions to deliver an efficient and profitable flowsheet, positioning Altilium as a leader in sustainable mineral processing solutions.”

The Altilium Metallurgical Test Work

The scope for the first stage Altilium test work was aimed at understanding the feasibility of applying the Altilium Ti/REE Process™ technology to Resouro’s samples mainly for the extraction of rare earth elements into solution.

The work involved a composite sample of 50kg, premixed by Resouro, air dried and milled to 100% passing 0.5mm. Chemical and mineralogical analysis was conducted on the head sample. Three optimization sighter leach tests were conducted using nitric acid (HNO₃) applying the Altilium Ti/REE Process™ at Core Resources Laboratories in Brisbane to generate Pregnant Leach Solution (“**PLS**”) and residue. The samples were assayed for aluminium (Al), calcium (Ca), cobalt (Co), chromium (Cr), iron (Fe), gallium (Ga), magnesium (Mg), manganese (Mn), nickel (Ni), sulphur (S), scandium (Sc), silicon (Si), titanium (Ti), and rare earth elements (REEs).

The sighter leach test conditions were assessed as follows:

- L1 test involved leaching at the standard acid concentration used in the Altium Ti/REE Process™.
- L2 test involved leaching at high concentration of acid.
- L3 test involved a pre leach heat treatment process and leaching at the standard acid concentration used in the Altium Ti/REE Process™.

In all these tests, REE metal extractions, acid consumptions and residue compositions were measured with the summary of extraction of the REE noted below.

TEST	TREY	LREE	MREE	HREE
L1	69.3%	69.3%	72.5%	73.8%
L2	59.8%	59.8%	63.8%	62.5%
L3	80.8%	81.6%	96.2%	74.8%

Table 2: Metallurgical Extraction using 50kg of representative sample under the three test conditions.

Notably, the titanium dioxide (“**TiO₂**”) contained in the sample reported between 2.5 – 4.5% in the PLS with the remaining pleasingly not reporting to the PLS indicating a strong possibility of TiO₂ recovery by traditional metallurgical recovery methods from the residue.

The representative samples were taken from the Tiros central project area over four tenements which are the subject of the recent maiden JORC MRE announcement by Resouro dated July 18th, 2024.

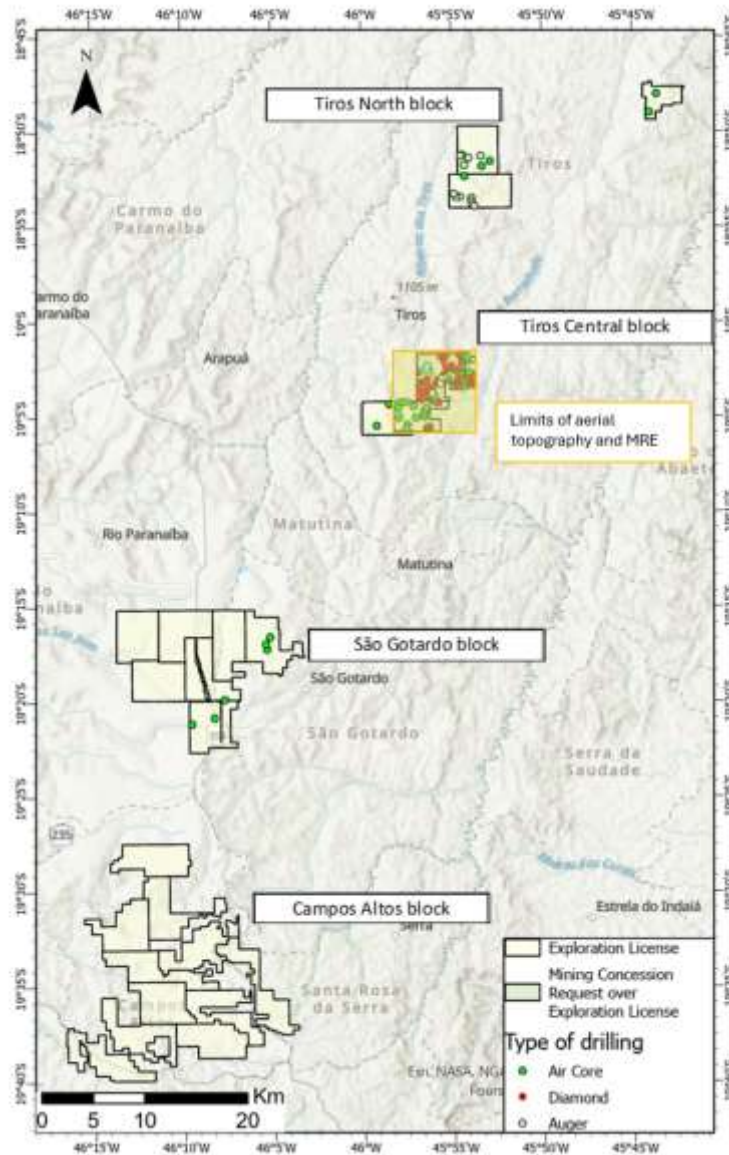


Figure 1: Plan view of the Tiros project tenements including the central blocks highlighted and covered in the Maiden JORC MRE announcement and the subject of this metallurgical results announcement.

Proposed Future Works

Following this announcement, Resouro will commence the second phase of the Altilium test work. This work includes testing the representative Resouro sample with the Altilium Ti/REE Process™ technology flowsheet. This work will also include separating the TiO₂, and zircon, niobium and phosphate potential from the leach/residue by various beneficiation processes. In addition, the following tasks will be undertaken:

- In-fill drilling to work towards delineating a potential JORC compliant reserve;

- Further metallurgical test work programs with preferred laboratory partners to optimise REE extraction and TiO₂ recovery under typical conditions;
- Undertake a Scoping Study with Engineering Procurement and Construction Management (“EPCM”) partner and other subject matter experts;
- Complete a Preliminary Mining and Environmental Baseline survey and studies to submit bulk mining approvals and work towards a pilot project; and
- Downstream studies and product testing to align the metallurgical flow sheet with potential future offtake partners.

Competent Person Statement

The information in this announcement that relates to the Metallurgical Results is based on, and fairly represents, information compiled by Mr Sravan Maddipati a Competent Person and registered professional Metallurgist (MAUSIMM #323008) with experience in metallurgy, metallurgical studies and operations and experience in rare earth element extraction. Mr Maddipati is an employee of Altilium and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify him as a Competent Persons as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.

Mr Simon Mortimer, a Competent and Qualified Person and registered professional geologist (FAIG #7795) with experience in geology, mineral exploration, geological modelling, mineral resource estimation and classification, and database management. Mr Mortimer is a consultant for Atticus Geoscience and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify them as Competent Persons as defined in the 2012 Edition of the ‘Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves’ and as Qualified Person under the National Instrument 43-101 Standards of Disclosure for Mineral Projects. Mr Maddipati and Mr Mortimer consent to the inclusion of this information in this announcement of the matters based on his information in the form and context in which it appears.

The information in this announcement that relates to Exploration Targets, Exploration Results and Mineral Resources is based on, and fairly represents, information compiled by Mr Luis Oviedo. Mr Oviedo is a consultant for Atticus Geoscience and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify him as Competent Person as defined in the 2012 Edition of the ‘Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves’. Certain information in this announcement is extracted from the ASX announcement titled "Resouro Strategic Metals Maiden JORC Resource for the Tiros Project" dated 18 July 2024 that relates to Exploration Targets, Exploration Results and Mineral Resources and is

based upon information compiled by Mr Luis Oviedo. The Company confirms that it is not aware of any new information or data that materially affects the information included in the ASX announcement and, in the case of Exploration Targets, Exploration Results and Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which Mr Oviedo's findings are presented have not materially been modified from the original market announcement. Mr Luis Oviedo consents to the inclusion of this information in this announcement of the matters based on his information in the form and context in which it appears.

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

Contact Information:

Chris Eager, CEO

chris.eager@resouro.com

+44 7388 0579809

Justin Clyne, Director

justin.clyne@resouro.com

+61 407 123 143

Melissa Hamilton, Media & Capital Partners, Director

melissa.hamilton@mcpartners.com.au

+61 417 750 274

About the Company

Resouro 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 project in Minas Gerais and the Novo Mundo Gold Project in Mato Grosso. The Tiros project represents 25 mineral concessions totalling 450 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 as announced to the ASX on 18 July 2024 (TSXV 17 July 2024) and is based on the JORC Compliant Technical Report prepared by Mr Simon Mortimer and Mr Luis Oviedo of Atticus Geoscience, as follows:

DOMAIN	CAT	TONNES (t)	TiO ₂ (%)	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.

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, 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.

APPENDIX 1: JORC Table 1

JORC Code, 2012 Edition – Table 1 Report

TIROS REE+Ti PROJECT – METALLURGY UPDATE

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> Nature and quality of sampling (e.g. cut channels, random chips, or specific specialized industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representativity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralization that are Material to the Public Report. In cases where 'industry standard' work has been done, this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverized to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. 	<ul style="list-style-type: none"> Samples were taken from the diamond drill hole. The sampling intervals were chosen based on geological description during drill core logging. One quarter of selected stored core samples was taken, completing a bulk sample of `50kg, representative of the full mineralization. The samples were taken according to industry standard procedures. Measures to ensure the metallurgical sample representativity included selection of diamond drill core to represent the mineralization, given the higher recovery of this type of drilling, the selection using a random method, to avoid bias and the comparison of the grade for TiO2% and TREO ppm between the mineral resource published and the calculated grade of the metallurgical sample. Geology was also taken into account, though the usage of the main lithologic units present in the mineralization, which are the strongly oxidized material (SOX) , with 54% of the sample, and moderately oxidized material (MOX), with 46% of the sample. Discussed in the Mineral Resources declaration, published at ASX in July 18th, 2024. The geology and grades reported in this declaration were reproduced in the metallurgical sample, in order to reproduce the mineral deposit.

Criteria	JORC Code explanation	Commentary																											
	Unusual commodities or mineralization types (e.g. submarine nodules) may warrant disclosure of detailed information.																												
Drilling techniques	<ul style="list-style-type: none"> Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.). 	<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th colspan="4">MRE - Diamond drilling</th> </tr> <tr> <th></th> <th>2011</th> <th>2023-2024</th> <th rowspan="2">Total</th> </tr> <tr> <th></th> <th>Vicenza</th> <th>Resouro Strategic Metals</th> </tr> </thead> <tbody> <tr> <td>TOTAL HOLES</td> <td>1</td> <td>32</td> <td>33</td> </tr> <tr> <td>TOTAL DEPTH (m)</td> <td>82.45</td> <td>2285.65</td> <td>2368.1</td> </tr> <tr> <td>TOTAL SAMPLES</td> <td>64</td> <td>1515</td> <td>1579</td> </tr> <tr> <td>TOTAL SAMPLES (m)</td> <td>74.6</td> <td>1515.5</td> <td>1590.1</td> </tr> </tbody> </table> <ul style="list-style-type: none"> All holes were vertical and with depths below 100m, no trajectory measures were taken in the holes. All diamond drilling was performed using HQ (63.5 mm diameter). 	MRE - Diamond drilling					2011	2023-2024	Total		Vicenza	Resouro Strategic Metals	TOTAL HOLES	1	32	33	TOTAL DEPTH (m)	82.45	2285.65	2368.1	TOTAL SAMPLES	64	1515	1579	TOTAL SAMPLES (m)	74.6	1515.5	1590.1
MRE - Diamond drilling																													
	2011	2023-2024	Total																										
	Vicenza	Resouro Strategic Metals																											
TOTAL HOLES	1	32	33																										
TOTAL DEPTH (m)	82.45	2285.65	2368.1																										
TOTAL SAMPLES	64	1515	1579																										
TOTAL SAMPLES (m)	74.6	1515.5	1590.1																										
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximize sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	<ul style="list-style-type: none"> The diamond drilling recovery consisted of verifying runs and recoveries recorded in the core boxes with verification by measuring the core present in the boxes with tape measure. The recovery control of the drilled material is carried out for auger and aircore holes by comparing its weight with the theoretical weight calculated from bibliographic density values. Due to the soft nature of the material being drilled, no geotechnical logging was carried out, however it was noted that the core drilling gave good recovery. Not applied because the core recovery data is not registered in the drill hole database. 																											
Logging	<ul style="list-style-type: none"> Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. 	<ul style="list-style-type: none"> Not applicable Geotechnical descriptions were not carried out. Geological description consisted of defining weathering levels, mineralogy, and lithology The author observed the photographs of the drill core with random representatives shown below. 																											

Tuesday, 13 August 2024

Criteria	JORC Code explanation	Commentary
		

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> All diamond drill holes were fully logged.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field. duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	<ul style="list-style-type: none"> The diamond drilling and collected core samples were cut in half and then in half again to allow one quarter of the material to be sent for chemical analysis and the remaining three quarters stored in the core shed. The sampling was planned by the geologists and care was taken to avoid any contamination between neighbouring samples. The physical preparation of the drilling samples was performed at the SGS Laboratory of Vespasiano – MG. For diamond samples, physical preparation involves crushing ~75% of the material to 3mm followed by pulverizing 95% of the material to <150#, generating a pulp weighing 250g. In the Resouro exploration program per details in recent Maiden JORC MRE announcement (dated 18th July 2024) (includes aircore, auger and diamond), 10 field duplicates, and 10 blanks were inserted into a batch with 224 original samples to control the quality of the physical preparation. For the remaining batches, for every group of 44 samples, 6 control samples were added: three standards, one field duplicate and two blanks, totaling 12% of quality control samples for every group of 50 results. Sample sizes are considered appropriate for the mineralization and testwork type.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external 	<ul style="list-style-type: none"> The applied assay method is considered to be the standard for the determination of TiO₂ and REE. Chemical analyses were conducted in the laboratory of SGS Geosol, Vespasiano-MG. Sample pulps were assayed by ICP-MS, ICP-OES, and X-ray Fluorescence methods, the latter being used only in diamond drilling samples. The assay technique is considered to be a total rock geochemical analysis method and a standard technique within the industry. Handheld XRF instrument model Niton Goldd XIt3 was used in the aircore samples by Iluka-Vicenza JV. Quality control tools (standard samples, blanks, and duplicates) were applied in the drilling

Tuesday, 13 August 2024

Criteria	JORC Code explanation	Commentary
	laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	programs in the chemical analysis performed on SGS Geosol.
Verification of sampling and assaying	<ul style="list-style-type: none"> The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> A site visit was undertaken by Mr. Luis Oviedo, competent person and employee of Atticus geoscience who works closely with Mr. Mortimer. Mr. Oviedo did not take any independent samples to verify the intersection data used in this metallurgy test. Five (5) twin holes are included in the drilling database and an interpretation of these indicated a strong correlation. Primary data sources were reviewed against digital information extracted from the RSM Access database. Verification procedures were applied by the Atticus Geoscience data team when migrating the Access database into a more robust SQL data management system. There are no adjustments on assays relating to this announcement.
Location of data points	<ul style="list-style-type: none"> Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> All drill hole collars were topographically surveyed using the RTK system, which is a stationary GPS system of high precision. Some drill hole landmarks are visible and were identified in the field, however som48e landmarks are not visible due to the agricultural nature of the land use in the areas drilled. WGS 84 Datum for coordinate system. In the field it was observed that drill hole landmarks are fragile and can be destroyed and lost due to vehicles, animals, and agricultural machinery. There's a risk of loss of information related to the topographic survey of the hole collars not being accurate.
Data spacing and distribution	<ul style="list-style-type: none"> Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve 	<ul style="list-style-type: none"> The drilling grid is not regular and prioritizes locations without the presence of cover, where the Capacete Formation outcrops. The majority of the diamond drill hole samples that were taken have a length of 1m. The drilling is in the exploratory phase and the grid is irregular in general terms.

Criteria	JORC Code explanation	Commentary
	<p>estimation procedure(s) and classifications applied.</p> <ul style="list-style-type: none"> • Whether sample compositing has been applied. 	<ul style="list-style-type: none"> • Not Applied
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> • Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. • If the relationship between the drilling orientation and the orientation of key mineralized structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	<ul style="list-style-type: none"> • The geological layers are approximately horizontal, and the holes are vertical. Sampling was performed almost perpendicular to the layers, which is the best condition. • No bias was introduced when using vertical drill holes.
Sample security	<ul style="list-style-type: none"> • The measures taken to ensure sample security. 	<ul style="list-style-type: none"> • Samples from the drilling program received in the field are identified on the core box containing the hole number and depth. Later in the core storage facility, each sample receives a sample number identification, both on the outside of the box and internally with a label. The aliquots sent to the laboratory are also properly identified, internally and externally, with the sample number. • The samples were transported by Resouro's personnel from the drill site to the core storage facility in Tiros.
Audits or reviews	<ul style="list-style-type: none"> • The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> • There has been no specific audit or reviews on sampling techniques, however, Resouro did appoint some senior consulting geologists to review the sampling and drilling techniques.

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary																														
Mineral tenement and land tenure status	<ul style="list-style-type: none"> Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. 	<table border="1"> <thead> <tr> <th>Tenement</th> <th>Area (ha)</th> <th>Status</th> <th>Target</th> <th>Holder</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td>831045/2010</td> <td>1736</td> <td>Exploration Permit</td> <td>Tiros Central</td> <td>BRAZIL COPPER MINERAÇÃO LTDA</td> <td>Active</td> </tr> <tr> <td>833082/2014</td> <td>1251</td> <td>Exploration Permit</td> <td>Tiros Central</td> <td>BRAZIL COPPER MINERAÇÃO LTDA</td> <td>Active</td> </tr> <tr> <td>833083/2014</td> <td>366</td> <td>Exploration Permit</td> <td>Tiros Central</td> <td>BRAZIL COPPER MINERAÇÃO LTDA</td> <td>Active</td> </tr> <tr> <td>830915/2018</td> <td>1055</td> <td>Exploration Permit</td> <td>Tiros Central</td> <td>BRAZIL COPPER MINERAÇÃO LTDA</td> <td>Active</td> </tr> </tbody> </table>	Tenement	Area (ha)	Status	Target	Holder	Status	831045/2010	1736	Exploration Permit	Tiros Central	BRAZIL COPPER MINERAÇÃO LTDA	Active	833082/2014	1251	Exploration Permit	Tiros Central	BRAZIL COPPER MINERAÇÃO LTDA	Active	833083/2014	366	Exploration Permit	Tiros Central	BRAZIL COPPER MINERAÇÃO LTDA	Active	830915/2018	1055	Exploration Permit	Tiros Central	BRAZIL COPPER MINERAÇÃO LTDA	Active
		Tenement	Area (ha)	Status	Target	Holder	Status																									
		831045/2010	1736	Exploration Permit	Tiros Central	BRAZIL COPPER MINERAÇÃO LTDA	Active																									
		833082/2014	1251	Exploration Permit	Tiros Central	BRAZIL COPPER MINERAÇÃO LTDA	Active																									
		833083/2014	366	Exploration Permit	Tiros Central	BRAZIL COPPER MINERAÇÃO LTDA	Active																									
830915/2018	1055	Exploration Permit	Tiros Central	BRAZIL COPPER MINERAÇÃO LTDA	Active																											
<ul style="list-style-type: none"> The Tiros central target comprises of four (4) exploration concessions totalling 4,400 Ha. These exploration concessions are held by BRAZIL COPPER MINERAÇÃO LTDA, (the former name of Tiros Minerais Estratégicos Mineração Ltda) which is 90% owned by Tiros Stratmet Pte Ltd (100% owned by Resouro Strategic Metals) and 10% owned by third party RBM CONSULTORIA MINERAL EIRELI. The Tiros project, in total, has 25 permits, with 45,000 ha. It is divided in four exploration target zones: Tiros North, Tiros Central, Sao Gotardo, and Campos Altos. This metallurgy update is limited to a portion of the Tiros Central exploration target per figure 1 in this announcement. 																																
<ul style="list-style-type: none"> The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area. 	<ul style="list-style-type: none"> ANM' GIS system (http://sigmine.dnpm.gov.br/webmap/SIGMINE (anm.gov.br) was checked to verify the status of tenement areas at the time of the report and the information shows the areas as regular for exploration works by RSM. No issue related to tenement rights in this check was detected. 																															
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Historical exploration work was carried out by Vicenza and Iluka-Vicenza JV. The principal source of information was the Final Exploration Report (FER) to DNPM/ANM (Brazilian National Department of Mineral Production/ Mining National Agency) with a description and evaluation of results obtained in the exploration work carried out by Vicenza, and an internal report titled '6 Monthly Report activities in Capacete Project, MG – Brazil' carried out by Iluka-Vicenza JV. 																														
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralization. 	<ul style="list-style-type: none"> Rare earth and titanium mineralization are hosted in sandstones and conglomerates of the Capacete Formation, belonging to the Mata da Corda Group. Titanium is associated with the mineral anatase, originating from the alteration of perovskite. As for rare earths, they are suspected to be associated with ionic clays. Both rare earth and Titanium are spatially related. The Capacete Formation is the result of the sedimentation of the erosion product of the rocks of the Patos Formation, also belonging to the Mata da Corda Group. The Patos Formation represents a voluminous set of Upper Cretaceous kamafugite pyroclastic flows and deposits, hosted in the Brasília Belt, southwest of the São Francisco Craton. 																														

Criteria	JORC Code explanation	Commentary																																																								
Drill hole Information	<ul style="list-style-type: none"> A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth. hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	<p>The sample used for this metallurgical test was made by 40 representative samples selected randomly from the mineralized interval intercepted in the drill holes listed below. TiO₂ % and TREO ppm grades calculated from the weighted average grades of the individual samples is given in the table below:</p> <table border="1" data-bbox="1032 411 1543 494"> <thead> <tr> <th>SAMPLE</th> <th>TiO2%</th> <th>TREOppm</th> <th>Weight</th> </tr> </thead> <tbody> <tr> <td>BK-8</td> <td>13.27</td> <td>4,912</td> <td>48.75</td> </tr> </tbody> </table> <table border="1" data-bbox="938 526 2128 778"> <thead> <tr> <th>HoleID</th> <th>Type</th> <th>X</th> <th>Y</th> <th>Z</th> <th>Length</th> <th>Azimuth</th> <th>Dip</th> </tr> </thead> <tbody> <tr> <td>FDTIR-08</td> <td>Diamond</td> <td>404,381.4</td> <td>7,895,649.3</td> <td>1,044.4</td> <td>79.80</td> <td>0</td> <td>90</td> </tr> <tr> <td>FDTIR-09</td> <td>Diamond</td> <td>404,240.0</td> <td>7,894,354.3</td> <td>1,068.9</td> <td>92.85</td> <td>0</td> <td>90</td> </tr> <tr> <td>FDTIR-18</td> <td>Diamond</td> <td>402,097.3</td> <td>7,892,863.3</td> <td>1,036.3</td> <td>71.80</td> <td>0</td> <td>90</td> </tr> <tr> <td>FDTIR-19</td> <td>Diamond</td> <td>403,642.3</td> <td>7,894,682.5</td> <td>1,034.7</td> <td>79.00</td> <td>0</td> <td>90</td> </tr> <tr> <td>FDTIR-25</td> <td>Diamond</td> <td>402,866.4</td> <td>7,895,082.5</td> <td>1,074.3</td> <td>68.15</td> <td>0</td> <td>90</td> </tr> </tbody> </table>	SAMPLE	TiO2%	TREOppm	Weight	BK-8	13.27	4,912	48.75	HoleID	Type	X	Y	Z	Length	Azimuth	Dip	FDTIR-08	Diamond	404,381.4	7,895,649.3	1,044.4	79.80	0	90	FDTIR-09	Diamond	404,240.0	7,894,354.3	1,068.9	92.85	0	90	FDTIR-18	Diamond	402,097.3	7,892,863.3	1,036.3	71.80	0	90	FDTIR-19	Diamond	403,642.3	7,894,682.5	1,034.7	79.00	0	90	FDTIR-25	Diamond	402,866.4	7,895,082.5	1,074.3	68.15	0	90
SAMPLE	TiO2%	TREOppm	Weight																																																							
BK-8	13.27	4,912	48.75																																																							
HoleID	Type	X	Y	Z	Length	Azimuth	Dip																																																			
FDTIR-08	Diamond	404,381.4	7,895,649.3	1,044.4	79.80	0	90																																																			
FDTIR-09	Diamond	404,240.0	7,894,354.3	1,068.9	92.85	0	90																																																			
FDTIR-18	Diamond	402,097.3	7,892,863.3	1,036.3	71.80	0	90																																																			
FDTIR-19	Diamond	403,642.3	7,894,682.5	1,034.7	79.00	0	90																																																			
FDTIR-25	Diamond	402,866.4	7,895,082.5	1,074.3	68.15	0	90																																																			
Data aggregation methods	<ul style="list-style-type: none"> In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical 	<ul style="list-style-type: none"> not applicable. No compositing has been used in the calculation of notable intervals, short intervals are considered when greater than two metres, and gaps between intervals are aggregated when less than two metres 																																																								

Criteria	JORC Code explanation	Commentary
	<p>examples of such aggregations should be shown in detail.</p> <ul style="list-style-type: none"> The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<p>TREY: HREE + LREE</p> <p>HREE: ([Dyppm]) + ([Erppm]) + ([Eu]ppm) + ([Gdppm]) + ([Ho]ppm) + ([Lu]ppm) + ([Tb]ppm) + ([Tm]ppm)) + ([Yb]ppm) + ([Y]ppm)</p> <p>LREE: ([Ce]ppm) + ([La]ppm) + ([Nd]ppm) + ([Pr]ppm) + ([Sm]ppm)</p> <p>MREE: ([Pr]ppm) + ([Nd]ppm) + ([Tb]ppm) + ([Dy]ppm)</p>
<p>Relationship between mineralization widths and intercept lengths</p>	<ul style="list-style-type: none"> These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralization with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known'). 	<ul style="list-style-type: none"> All holes were drilled vertically, and the mineralization exists in horizontal layers. The interval lengths reported are a reflection of the true width of the mineralized body. Information from the drilling indicates that the thickness of the mineralized unit, the Capacete Formation, is on average 50m thick and may in places exceed 60m.
<p>Diagrams</p>	<ul style="list-style-type: none"> Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. 	<ul style="list-style-type: none"> Refer to attached announcement.
<p>Balanced reporting</p>	<ul style="list-style-type: none"> Where comprehensive reporting of all Exploration Results is not 	<ul style="list-style-type: none"> Not applicable.

Criteria	JORC Code explanation	Commentary
	<p>practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</p>	
<p>Other substantive exploration data</p>	<ul style="list-style-type: none"> Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. 	<ul style="list-style-type: none"> Limited work apart from those details noted in this announcement have been carried out for metallurgical tests with the exception of two samples generated from a composite of Aircore drilling samples. These two samples were sent independently to two different labs, the Prosper laboratory and the CDTN laboratory, both in Brazil, where they and were tested for leaching. The results of the studies were inconclusive and much more work is required with more samples needing to be tested under controlled conditions.
<p>Further work</p>	<ul style="list-style-type: none"> The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	<ul style="list-style-type: none"> Included in the body of this announcement