

**National Instrument 43-101 Technical Report
for the Tiros REE Project**

Minas Gerais
Brazil

Report Prepared for:

Resouro Strategic Metals Inc.

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Dated: 1 September 2024

CERTIFICATE OF QUALIFIED PERSON
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I, Simon James Atticus Mortimer, FAIG, do hereby certify that:

1. I am a Professional Geologist with Atticus Geoscience Consulting S.A.C. with an address at Ave. Jose Larco 724, Miraflores, Lima, Peru.
2. I graduated from the University of St. Andrews, Scotland, with a B. Sc. in Geoscience in 1995 and from the Camborne School of Mines with a MSc. in Mining Geology in 1998.
3. I am a registered Professional Geoscientist, practicing as a member of the Australasian Institute of Mining and Metallurgy (#300947) and the Australian Institute of Geoscientists (FAIG #7795).
4. I have worked as a geoscientist in the minerals industry for over 20 years and I have been directly involved in the mining, exploration, and evaluation of mineral properties mainly in Peru, Chile, Argentina, Brazil, and Colombia for precious and base metals.
5. I have read the definition of “Qualified Person” set out in National Instrument 43-101 Standards of Disclosure for Mineral Projects (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “Qualified Person” for the purposes of NI 43-101.
6. I am responsible for all the sections of the technical report titled, “National Instrument 43-101 Technical Report for the Tiros REE Project, Minas Gerais, ”, (the “Technical Report”), issued 1 September 2024 and with an Effective Date of 18 July 2024.
7. I have not visited the Tiros REE Property, the subject of the Technical Report.
8. I am independent of Resouro Strategic Metals applying all of the tests in Section 1.5 of NI 43-101 and Companion Policy 43-101CP.
9. I have had no prior involvement with the Tiros REE Property which is the subject of the Technical Report.
10. I have read NI 43-101, Form 43-101F1 and confirm the Technical Report has been prepared in compliance with that instrument and form.
11. As of the Effective Date of the Technical Report, to the best of my knowledge, information and belief, the Sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Signed at Lima, Peru this 1st day of September 2024.

/s/ Simon Mortimer

Simon Mortimer (FAIG, MSc)

CERTIFICATE OF QUALIFIED PERSON

Luis Oviedo (P.Geo)

I, Luis Oviedo Hannig, P.Geo., do hereby certify that:

1. I am an independent consultant and Principal Geoscientist with Atticus Chile SA, whose address is Avenida Santa Magdalena 1026 Providencia, Santiago, Chile.
2. I graduated from the University of Chile with a geologist title in 1977 in Santiago, Chile.
3. I am a member, in good standing, of the Colegio de Geólogos de Chile and the Instituto de Ingenieros de Chile. QP licence from the “Comision Calificadora de Competencias en Recursos y Reservas Mineras” (CCCRRM) of Chile, License Number 013.
4. I have practiced my profession continuously for more than 40 years and have been involved in mineral exploration, mine site geology, mineral resource, and reserve estimations, preliminary economic assessments, pre-feasibility studies, due diligence, valuation, and evaluation reporting, and have authored or co-authored numerous NI-43-101 and technical reports on various commodities including base metals, gold, silver, rare earth, limestone and lithium projects along the Andean Cordillera from Canada to Chile.
5. I have read the definition of “Qualified Person” set out in National Instrument 43-101 Standards of Disclosure for Mineral Projects (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “Qualified Person” for the purposes of NI 43-101.
6. I am co-responsible for the technical report titled, “National Instrument 43-101 Technical Report for the Tiros REE Project, Minas Gerais, Brazil”, (the “Technical Report”), issued 1 September 2024 and with an Effective Date of 18 July 2024.
7. I visited the Project and Resouro offices from 8 to 12 April 2024.
8. I am independent of Resouro, applying all the tests in Section 1.5 of NI 43-101.
9. I have had no prior involvement with the Project that is the subject of the Technical Report.
10. I have read NI 43-101, Form 43-101F1, and confirm the Technical Report has been prepared in compliance with that instrument and form.
11. As of the Effective Date of the Technical Report, to the best of my knowledge, information and belief, the Sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Signed at Santiago, Chile this 1st day of September 2024.

Luis Oviedo Hannig (P. Geo, QP CCCRRM #013)

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1.0 SUMMARY

1.1 Introduction

Geological consulting group Atticus Consulting SAC (“Atticus”) was engaged by Canadian public company Resouro Strategic Metals Inc. (“RSM”, “Resouro”, the “Company”, or the “Issuer”), to prepare an independent National Instrument 43-101 (“NI 43-101”) Technical Report (the “Report”) for the Tiros Project (“Tiros” or the “Project” or the “Property”), located in Minas Gerais, Brazil. The Report has been prepared in accordance with the disclosure and reporting requirements set forth in the Canadian Securities Administrators’ National Instrument 43-101, Companion Policy 43-101CP, and Form 43-101F1 (June 30, 2011) and covers the Tiros Project titanium and rare earth element exploration project.

1.1.1 Purpose of the Technical Report

The Technical Report has been prepared for RSM, a Canadian public company trading on the Toronto Stock Exchange (TSX-V: RSM) and the Australian Stock Exchange (ASX: RAU), in order to provide a summary of scientific and technical information and data concerning the Project, in support of the Standards of Disclosure for Mineral Projects according to Canadian National Instrument 43-101.

This Report verifies the data and information related to historical and current mineral exploration on the Project and presents a report on data and information available from the Company and in the public domain.

1.1.2 Previous Technical Reports

There are no previous NI 43-101 Technical Reports prepared for the Issuer regarding the Tiros Project and as such this Report is the current technical report regarding the Project.

1.1.3 Effective Date

The Effective Date of the Report is 18 July 2024 (“Effective Date”).

1.1.4 Qualifications of Consultants

The Report has been prepared by Simon Mortimer (the “Author”), Managing Director and Principal Geoscientist at Atticus. Mr. Mortimer is a professional geoscientist (FAIG #7795) with experience in geology, mineral exploration, mineral resource and reserve estimation and classification, land tenure management, metallurgical testing, mineral processing, capital and operating cost estimation, and mineral economics. Mr. Mortimer has been assisted in the preparation of the report by Luis Oviedo (the “Co-Author”), Managing Director of L&M Geosciencias SpA, member #013 of the Chilean Commission for Geology and Resources (CCCRRM) and consultant to Atticus Consulting SAC.

Mr. Simon Mortimer and Mr. Luis Oviedo, by virtue of their education, experience, and professional association, are both considered be Qualified Persons (“QP”), as that term is defined in NI 43-101 and specifically sections 1.5 and 5.1 of NI 43-101CP (Companion Policy). Mr. Simon Mortimer is responsible for preparing all sections of the Report.

1.2 Personal Inspection (Site Visit)

On the 8 April 2024, at the request of the Issuer, Luis Oviedo (QP) completed a Personal Inspection (site visit) on the Tiros Project, accompanied by geologist Rodrigo Mello (Resouro exploration geologist).

The Personal Inspection of the Project was made as a requirement of NI 43-101 for the preparation of the Report and to observe general access and Property conditions, to observe mineralization, and to verify the exploration carried out to date on the Project.

1.3 Property Description and Location

The Tiros Project is located in the State of Minas Gerais, about 250 km west northwest of the City of Belo Horizonte, which is about 350 km directly north of the City of Rio de Janeiro and the coast. The Tiros Property is centred at approximately 401723 mE, 7893379 mS UTM, zone 23 (-19.05°S Lat., -45.934°W Long.)

1.3.1 Land Tenure

The Tiros project comprises of twenty-five (25) exploration concessions for a total of 44,989 Ha. These exploration concessions are held by TIROS MINERAIS ESTRATÉGICOS MINERAÇÃO LTDA, which is 90% owned by Resouro Strategic Metals and 10% owned by third party RBM CONSULTORIA MINERAL EIRELI. The exploration concessions cover four exploration target zones: Tiros North, Tiros Central, Sao Gotardo, and Campos Altos. This mineral resource estimate is limited to a portion of the Tiros Central exploration target.

1.3.2 Surface Rights and Legal Access

The surface rights associated with the Project are privately held by landholders which to date has been approved by individual landholders successfully under individual agreement without compensation which is typical of exploration access in Brazil. It is expected as the drilling infill program advances landholder access requirements will require compensation for access to be granted

1.3.3 Community Consultation

The surface rights associated with the Projects are privately held and according to the Company, there is no need for any additional community consultation in the area of the Project.

1.3.4 Environmental Studies and Liabilities

Resouro Strategic Metals (RSM) is committed to the development of modern ESG practices and respects the link between leading ESG practices and project acceptance. RSM is authorized to conduct mineral exploration in the areas where it operates in adherence to legislation and governmental standards.

1.3.5 Royalties and Obligations

All mining permits in Brazil are subject to state and landowner royalties, pursuant to Article 20, § 1, of the Constitution and Article 11, "b", of the Mining Code. In Brazil, the Financial Compensation for the Exploration of Mineral Resources (Compensação Financeira por Exploração Mineral - CFEM) is a royalty to

be paid to the Federal Government at rates that can vary from 1% up to 3.5%, depending on the substance. It is worth noting that CFEM rates for mining rare earth elements are 2%.

The author is not aware of any other royalties, back-in rights, or other agreements and encumbrances to which the project may be subject.

1.4 Property Access and Operating Season

The Tiros Ti-REE Project area is located in the centre of State of Minas Gerais, about 350 km (by road) west-northwest of the state capital and mining City of Belo Horizonte

The relatively low elevation and favourable climate allows for most exploration work (geological mapping, surface sampling, drilling and geophysical surveys) to be completed year-round.

1.5 History

Exploration began in the region during 2010 with Águia Metais Ltda reviewing the potential for phosphate. In 2011, Águia Metais Ltda established a partnership with Vicenza to define and explore a project called Projeto Mata da Corda consisting of 142 mineral tenements. From 2013 onwards, the exploration objectives moved away from phosphates and turned to titanium.

1.5.1 Prior Ownership and Ownership Changes

In 2016, Vicenza entered into a partnership with Iluka. The Vicenza-Iluka Joint Venture operated between 2016 and 2017. In the late 2010's Vicenza underwent financial difficulties and could not continue with exploration activities. Subsequently, the exploration licenses were transferred to RBM Consultoria Mineral (RBM) in exchange for the services of their technical director, Rodrigo Mello. Following the completion of program of reanalysis from historic drill holes, RBM entered into an agreement with Resouro Strategic Metals in July 2023 and started a drilling and metallurgical testing program that is still ongoing.

1.5.2 Historical Exploration Work

Vicenza were only interested in the Titanium and phosphate potential of the deposit; the rare earth elements were analysed as they were considered as a contaminant for the extraction of TiO₂. Vicenza conducted metallurgical tests, focused on the extraction of titanium dioxide, on the Capacete target using the core from their only diamond drill hole, PMC-FD-0074, with 82.45 m, with 64 assays at SGS-Geosol, using ICP. The Vicenza-Iluka Joint Venture drilled twenty (20) vertical, 75 mm diameter Air Core drill holes, totaling 1,225m with depths ranging from 35 to 60 m, analysed with a handheld XRF. RBM completed a program of reanalysis sending 443 samples taken from historic drill holes to the SGS Geosol laboratory where they were analyzed using the ICP method (including REE).

1.6 Geological Setting and Mineralization

The Project is located in the São Francisco Craton, which has an area of 350,000 km² and covers a large part of Minas Gerais State. It is of the polycyclic intracratonic type, slightly deformed in the center and gradually deformed towards the edges. The Craton housed a set of ultrapotassic alkaline rocks. Among these groups are the Alto Paranaíba Alkaline-Carbonatitic sub-volcanic bodies of kamafugites and kimberlites. The Capacete Formation is the sedimentation of the erosion products of these rocks.

1.6.1 Property Geology

The Mata da Corda Group is represented in the area by epiclastic rocks (sandstone and conglomerate) of the Capacete Formation which is friable and magnetic, composed of quartz with fragments of volcanic rocks and heavy minerals such as magnetite and ilmenite. It is medium to coarse grain size, with flat-parallel stratification marked by granulometric and compositional variation, presenting strata richer in quartz and others richer in fragments of volcanic rock and heavy minerals. The Capacete Formation contains all the TiO₂ and REE mineralisation.

1.7 Deposit Types

The Tiros deposit consists of secondary mineral concentrations that have been formed through surface weathering and sedimentary processes from the primary minerals. These types of mineral concentrations are known as Ionic Adsorption Clay (IAC) Deposits, which in the case of Tiros are residual soils that are formed from the intense weathering of rare earth-rich rocks, such as the alkaline volcanics of the Mata da Corda formation.

1.8 Exploration

An aeromagnetic and radiometric survey conducted by the state government agency “Codemig” with flight lines NS, separated by 400 m each. It was the interpretation of this geophysical data that was used as a base for mapping work and identifying the extension of the Capacete formation.

1.9 Drilling

In 2023 to 2024 Resouro completed a drilling program at three targets: São Gotardo, Tiros-Central and Tiros-North. In total, the programs consisted of forty (40) air core drill holes, totalling 2190 metres; thirty-three (33) diamond drill holes, totalling 2319.6 metres; and twenty-five (25) auger holes totalling 263.5 metres.

1.10 Sample Preparation, Analysis and Security

Samples were prepared and assayed at SGS GEOSOL (SGS) accredited laboratory.

The TiO₂ was analyzed by fusing the sample material with lithium metaborate followed by subsequent analysis via ICPAES, if the assay returned a value greater than the upper detection limit then it would be reanalysed with final determination via XRF. Rare Earth Elements were analyzed through fusion with lithium metaborate followed by assay determination via ICPMS. Base metals and other elements were determined by the ICPMS.

A total of 3268 drill samples were submitted for analysis by Resouro Strategic Metals Inc. from the 2023-2024 drilling campaign. This included 439 samples (13.4%) which were for QA/QC purposes; this rate of QA/QC sample submission is slightly lower than the generally accepted rate for QA/QC control samples (approximately 15%); however, the rate of sample insertion is considered by the QP (Simon Mortimer) to be adequate for the purposes of the Report.

It is the opinion of QP Simon Mortimer, that the procedures, policies and protocols surrounding the capture and verification of drilling information are sufficient and appropriate and that the assay methods used are consistent with good exploration and operational practices such that the data is reliable for the purpose of mineral resource estimation. Furthermore, the QP is of the opinion that the assay data is adequate for the purpose of estimating a mineral resource and for the purpose of the Report

1.11 Data Verification

The Author (Simon Mortimer) has reviewed historical and current data and information regarding past and current exploration work on the Property. The Author has no reason to doubt the adequacy of historical sample preparation, security and analytical procedures as presented, and have confidence in the historical information and data and its use for the purposes of the Report.

Mr. Luis Oviedo, QP and Co-Author of the Report, visited the Property on the 8th of April 2024, accompanied by Rodrigo Mello (Resouro exploration geologist).

1.12 Mineral Processing and Metallurgical Testing

RSM submitted a composite sample to the Prosper metallurgical test work laboratory. This 207 Kg sample was taken from 19 historic holes from a variety of different zones across the Tiros project and was tested for rare earth element extraction via ammonium hydroxide leaching. The samples were screened and leached at 80 degrees using Ammonium Sulphate. Results showed recovery of REEs ranging from 17% to 61%, averaging 50%.

A second laboratory independently tested the same samples with ammonium sulphate leaching experiments, however, the results of these studies were found to be quite different from those completed by the Prosper laboratory which is understood to be related to a poor QA/QC process.

To get clarity of the leachability of the Tiros ore Resouro developed an additional metallurgical program focussed on industry comparison processes and typical metallurgical processing parameters including characterisation, leaching, gravimetric and electrical and an optimisation phase. Additional to this comparative process RSM was undergoing a non-conventional utilising the processing partner Altilium Group Ltd. ("Altilium"). The results of these programs at the time of writing this report are not yet known.

1.13 Mineral Resource Estimates

The Mineral Resource Estimate (MRE) for the Tiros Project considers the TiO₂, the Total Rare Earth Oxides ("TREO"), and the Magnetic Rare Earth Oxides ("MREO"); reporting to a cut-off of 1000ppm TREO the estimate contains 1 billion tonnes at 4,050 ppm TREO, 1,120 ppm MREO and 12% TiO₂ in the Measured and Indicated categories (refer to Table 14-13 below). The Inferred resource contains 660,000,000 tonnes at 12% TiO₂, 3,800ppm TREO, and 1,000ppm MREO.

The deposit contains a high-grade domain of 76,400,000 tonnes at 9,110ppm TREO, 2,420 ppm MREO, and 23% TiO₂, within the Measured and Indicated categories. The Inferred resource of the high-grade domain contains 42,000,000 tonnes at 8,600ppm TREO, 2,200ppm MREO, and 23% TiO₂.

The MRE places the Tiros Project as one of the largest undeveloped titanium and rare earth resource globally and in Brazil.

Table 1-1: NI 43-101 compliant maiden MRE, Tiros Project, Brazil (1,000 ppm TREO cut-off).

DOMAIN	CAT	TONNES (t)	TiO ₂	TREO (ppm)	MREO (ppm)
HG (High Grade)	Measured	20,800,000	24	9,320	2,530
	Indicated	55,700,000	23	9,030	2,380
	M + I	76,400,000	23	9,110	2,420
	Inferred	42,000,000	23	8,600	2,200
MG (Medium Grade)	Measured	224,000,000	11	3,570	997
	Indicated	704,000,000	11	3,650	1,020
	M + I	927,000,000	11	3,630	1,000
	Inferred	620,000,000	11	3,500	950
TOTAL (High + Medium Grade)	Measured	245,000,000	12	4,060	1,130
	Indicated	759,000,000	12	4,040	1,120
	M + I	1,000,000,000	12	4,050	1,120
	Inferred	660,000,000	12	3,800	1,000

**The resources table has been rounded to 3 significant figures for measured and indicated resources and to 2 significant figures for inferred resources.*

1.14 Other Relevant Data and Information

The Author (Simon Mortimer) is not aware of any additional information or explanations necessary to make the Report understandable and not misleading.

1.15 Interpretation and Conclusions

The objective of the Report was to prepare an independent NI 43-101 Technical Report, capturing historical and current information and data available about the Tiros REE & TiO₂ Project, providing interpretation and conclusions, and making recommendations for future work.

1.15.1 Risks and Uncertainties

Risks and uncertainties which may reasonably affect reliability or confidence in future work on the Property relate mainly to the reproducibility of exploration results (*i.e.*, exploration risk) in a future production environment. Exploration risk is inherently high in early-stage exploration project; however, these risks are mitigated by applying the latest geophysical and surface sampling techniques to develop high confidence targets for future drilling programs. Exploration work completed by Resouro has confirmed that the mineralisation in the Tiros Project is very homogenous and continuous through the host lithology, indicating that the risk associated with the successful completion of the future drill programs is low.

1.16 Recommendations

It is the opinion of the Author (Simon Mortimer) that the geological setting and character of the mineralization discovered to date on the Tiros Project is of sufficient merit to justify additional exploration

and development expenditures. A recommended work program, arising through the preparation of the Report and consultation with Resouro Strategic Metals Inc., is provided below.

Next Phase Advanced Exploration Works

- Extend the area of the topographic survey across the remaining Tiros central RSM owned project tenements.
- Perform further density tests on the lithologies of interest.
- Conduct further exploration drilling and infill drilling to extend and improve the level confidence for the current mineral resource estimate for the Project.
- Undertake mineralogical and preliminary metallurgical studies to demonstrate the potential recoveries and subsequent economic extraction of payable metals, such as in support of the production of concentrates for export or in support of secondary processing.
- Determine if the asset meets investment hurdles and financial viability through the completion of a Preliminary Economic Assessment (PEA). This will include demonstrating prospects for economic extraction, with sufficient flexibility to support the evaluation of an optimal bulk-tonnage mining scenario.

2.0 INTRODUCTION

Geological consulting group Atticus Consulting SAC (“Atticus”) was engaged by Canadian public company Resouro Strategic Metals Inc. (“RSM”, “Resouro”, the “Company”, or the “Issuer”), to prepare an independent National Instrument 43-101 (“NI 43-101”) Technical Report (the “Report”) for the Tiros Project (“Tiros” or the “Project” or the “Property”), located in Minas Gerais, Brazil.

The Report has been prepared in accordance with the disclosure and reporting requirements set forth in the Canadian Securities Administrators’ National Instrument 43-101, Companion Policy 43-101CP, and Form 43-101F1 (June 30, 2011).

The Tiros Project is an exploration project focused on titanium and rare Earth elements with 25 active exploration licenses.

2.1 Purpose of the Technical Report

The Technical Report has been prepared for RSM, a Canadian public company trading on the Toronto Stock Exchange (TSX-V: RSM) and the Australian Stock Exchange (ASX: RAU), in order to provide a summary of scientific and technical information and data concerning the Project, in support of the Standards of Disclosure for Mineral Projects according to Canadian National Instrument 43-101.

This Report verifies the data and information related to historical and current mineral exploration on the Project and presents a report on data and information available from the Company and in the public domain.

The quality of information, conclusions, and recommendations contained herein have been determined using information available at the time of Report preparation.

2.2 Previous Technical Reports

There are no previous NI 43-101 Technical Reports prepared for the Issuer regarding the Tiros Project and as such this Report is the current technical report regarding the Project.

2.3 Effective Date

The Effective Date of the Report is 18 of July 2024 (“Effective Date”).

2.4 Qualifications of Consultants

The Report has been prepared by Simon Mortimer (the “Author”), Managing Director and Principal Geoscientist at Atticus. Mr. Mortimer is a professional geoscientist (FAIG. #7795) with experience in geology, mineral exploration, mineral resource and reserve estimation and classification, land tenure management, metallurgical testing, mineral processing, capital and operating cost estimation, and mineral economics. Mr. Mortimer has been assisted in the preparation of the report by Luis Oviedo (the “Co-Author”), Managing Director of L&M Geosciencias SpA, member #013 of the Chilean Commission for Geology and Resources (CCCRRM) and consultant to Atticus Consulting SAC.

Mr. Simon Mortimer and Mr. Luis Oviedo, by virtue of their education, experience, and professional association, are both considered be Qualified Persons (“QP”), as that term is defined in NI 43-101 and specifically sections 1.5 and 5.1 of NI 43-101CP (Companion Policy). Mr. Simon Mortimer is responsible for preparing all sections of the Report.

The Author, Co-Author and consultants employed by Atticus in the preparation of the Report have no beneficial interest in RSM and are not insiders, associates, or affiliates of RSM. The results of the Report are not dependent upon any prior agreements concerning the conclusions to be reached, nor are there any undisclosed understandings concerning any future business dealings between RSM and Atticus. Atticus is being paid a fee for the work in accordance with normal professional consulting practices.

2.5 Personal Inspection (Site Visit)

On the 8 April 2024, at the request of the Issuer, Luis Oviedo (QP) completed a Personal Inspection (site visit) on the Tiros Project, accompanied by geologist Rodrigo Mello (Resouro exploration geologist).

Access to the Project area is excellent (see Section 5.1).

The Personal Inspection of the Project was made as a requirement of NI 43-101 for the preparation of the Report and to observe general access and Property conditions, to observe surface mineralization, to review the historical exploration activities, and to verify the position of a selection of existing collar locations. During the site visit, it was possible to observe five DDH collars that were located with hand GPS (see Table 2-1). Some of the auger collar locations were also verified, observing their landmarks, but not always with the identification plates with hole information. It is typical that landmarks with drilling identification can be damaged and lost over time due to the passage of vehicles, animals, or agricultural machinery. The location of holes in pastures and roads makes it difficult to place more permanent landmarks.

Table 2-1. Selected collar locations collected during the Personal Inspection of the Tiros Project.

HOLE_ID	Luis Oviedo		Database		Difference	
	EAST	NORTH	EAST	NORTH	EAST	NORTH
FDTIR-33	400465	7892325	400463.97	7892326.81	-1.03	1.81
FDTIR-30	401267	7891703	401265.91	7891706.15	-1.09	3.14
FDTIR-12	403169	7894166	403170.88	7894170.70	1.88	4.70
ACTIR-53	404864	7895656	404866.00	7895660.85	2.00	4.85
ACTIR-54	405174	7895508	405173.35	7895510.04	-0.66	2.04
ACTIR-34	404680	7894602	404677.25	7894603.42	-2.75	1.42

During the site visit the exploration and evaluation activities completed by Resouro were reviewed, examining the documented procedures around the drilling and sampling, including recording the drill collar locations, the movement of the drill cores from site to the storage facilities, measuring and logging of the drill core, the taking of analytical samples, the chain of custody of the samples, the digital recording of the geological information, and the evaluation of data prior to consideration for geological modeling and mineral resource estimation. During drilling, experienced geologists implemented industry standard measures designed to ensure the consistency and reliability of the exploration data. The aspects that could materially impact the integrity of the drillhole and sampling databases (core logging, sampling, and

database management) were reviewed. Mr. Luis Oviedo was able to interview staff to ascertain exploration procedures and protocols.

It is the Co-author’s opinion that the process observed and studied was adequate and standard for the purposes of this technical report.

A selection of photographs taken during the Personal Inspection of the Project is provided in Figure 2-1.



Figure 2-1. Selection of photos taken during the Personal Inspection of the Project (Atticus, 2024).

2.6 Sources of Information

The information, conclusions, opinions, and estimates contained herein are based on:

- information available to the Author at the time of preparation of the Report;
- assumptions, conditions, and qualifications as set forth in the Report; and
- data, reports, and other information supplied by RSM as well as third party/public sources.

For the purposes of the Report, the Author (Simon Mortimer) has relied on concession ownership information provided by RSM. Mr. Mortimer has not researched legal property title or mineral rights for the Project and expresses no legal opinion as to the ownership status of the Project.

Company personnel and associates were actively consulted before and during the Report preparation and during the Personal Inspection, including RSM personnel Logan Francis (COO) and Rodrigo Mello (Technical

Consultant). The information pertaining to the geological, mineralization, and exploration techniques used in this report are taken from reports and internal memoranda prepared or obtained by RSM’s own works, from public sources, or from previous operators reports. A reasonable amount of confirmatory testing and verification has been accomplished.

In addition, Luis Oviedo (QP) completed a personal inspection of the Projects to confirm features within the project areas, including accessibility, infrastructure, mineralization, historical and current data and information, as presented. Although the Author believes that all the information provided in this report is accurate, it is possible that some problems were not detected and may have been used in this evaluation. The Author does, however, represent that the information was evaluated and put together in good faith.

Except for the purposes legislated under Canadian provincial securities laws, any use of the Report by any third party is at that party’s sole risk.

2.7 Commonly Used Terms, Initialisms and Units of Measure

All units in the Report are based on the International System of Units ("SI Units"), except for units that are industry standards, such as troy ounces for the mass of precious metals. Table 2-2 provides a list of some of the terms and abbreviations used in the Report. Unless specified otherwise, the currency used is American Dollars (USD\$) and coordinates are given in WGS84 Zone 19S (EPSG:32719).

Table 2-2. Commonly used units of measure, abbreviations, initialisms and technical terms in the Report.

Units of Measure/Abbreviations		Initialisms/Abbreviations	
above sea level	ASL	AA	Atomic Absorption
annum (year)	a	PGO	Professional Geoscientists of Ontario
billion years ago	Ga	CRM	Certified Reference Material
centimetre	cm	DDH	Diamond Drill Hole
degree	°	EM	Electromagnetic
degrees Celsius	°C	EOH	End of Hole
dollar (Canadian)	C\$	EPSG	European Petroleum Survey Group
foot	ft	FA	Fire Assay
gram	g	ICP	Inductively Coupled Plasma
grams per tonne	g/t	Int.	Interval
greater than	>	Lat.	Latitude
hectares	ha	Long.	Longitude
hour	hr	LLD	Lower Limit of Detection
inch	in	LOI	Loss On Ignition
kilo (thousand)	K	MAG	Magnetic Survey or Magnetometer
kilogram	kg	NAD 83	North American Datum 83
kilometre	km	NI 43-101	National Instrument 43-101
less than	<	NSR	Net Smelter Return
litre	L	P.Geol.	Professional Geoscientist or Professional Geologist
megawatt	Mw	PSAD56	Provisional Sud American Datum de 1956
metre	m	QA/QC	Quality Assurance / Quality Control

Units of Measure/Abbreviations		Initialisms/Abbreviations	
Millimetre	mm	QP	Qualified Person
million	M	qtz	Quartz
million years ago	Ma	RC	Reverse Circulation
nanotesla	nT	SEM	Scanning Electron Microscope
not analyzed	na	SG	Specific Gravity
ounce	oz	SI	International System of Units
parts per million	ppm	UTM	Universal Transverse Mercator
parts per billion	ppb	WGS 84	World Geodetic System 1984
percent	%	REE's	Rare Earth Elements
pound(s)	lb.	TREO	Total Rare Earth Oxide
short ton (2,000 lb)	st	LREO	Light Rare Earth Oxide
specific gravity	SG	HREO	Heavy Rare Earth Oxide
square kilometre	km ²	MREO	Magnetic Rare Earth Oxide
square metre	m ²	TiO ₂	Titanium Dioxide
three-dimensional	3D	Minerals*	
tonne (1,000 kg)	t	Ccl	chrysocolla
Rare Earth Elements		Cv	covellite
Lanthanum	La	Cpr	cuprite
Cerium	Ce	Dg	digenite
Praseodymium	Pr	Lim	limonite
Neodymium	Nd	Mag	magnetite
Promethium	Pm	Mlc	malachite
Samarium	Sm	Kfs	potassium feldspar
Europium	Eu	Py	pyrite
Gadolinium	Gd	Qz	quartz
Terbium	Tm	Tlc	talc
Dysprosium	Dy	Common Elements	
Holmium	Ho	Ca	calcium
Erbium	Er	Co	cobalt
Thulium	Tm	Cu	copper
Ytterbium	Yb	Au	gold
Lutetium	Lu	Fe	iron
Scandium	Sc	K	potassium
Yttrium	Y	Ag	silver
		Na	sodium
		S	sulphur
		Ti	Titanium

*IMA-CNMNC approved mineral symbols

The rare earth elements are a set of seventeen metallic elements that include the fifteen lanthanides on the periodic table plus scandium and yttrium. These elements are often grouped into a sub-set of either light or heavy rare earth elements that exhibit similar physical and chemical characteristics. Within the suite of rare earth elements there also exists a subset of elements that have magnetic properties and are commercially important for the production of rare earth magnets. Table 2-3 details the groupings of the rare earth elements.

Table 2-3. Description of sub-groups of the rare earth elements.

Light Rare Earth Elements (LREEs)	Heavy Rare Earth Elements (HREEs)	Magnetic Rare Earth Elements (MREEs)
Lanthanum (La)	Europium (Eu)*	Praseodymium (Pr)
Cerium (Ce)	Gadolinium (Gd)	Neodymium (Nd)
Praseodymium (Pr)	Terbium (Tb)	Terbium (Tb)
Neodymium (Nd)	Dysprosium (Dy)	Dysprosium (Dy)
Promethium (Pm)**	Holmium (Ho)	
Samarium (Sm)	Erbium (Er)	
	Thulium (Tm)	
	Ytterbium (Yb)	
	Lutetium (Lu)	
	Yttrium (Y)	
	Scandium (Sc)***	

*In the periodic table Europium is considered a light REE, however, it is at the heavy end of the chart and behaves more like a heavy REE and is therefore grouped within the heavy rare earths for the purpose of reporting exploration results.

**Promethium (Pm) does not have any stable isotopes, and with only about 500grams naturally occurring in the Earth's crust at any one time it is not considered in the evaluation of rare earth elements

*** scandium (Sc, atomic number 21) is officially classified as a rare earth element by the International Union of Pure and Applied Chemistry (IUPAC). However, Sc is characterised by very different geochemical behaviour to the other REEs and is therefore not included in the reporting of exploration results.

The reporting of exploration results for the rare earth elements considers the sum of the elements within each of the REE groups, which is normally expressed in terms of their oxides, defining the Total Rare Earth Oxides (TREO), the Heavy Rare Earth Oxides (HREO), the Light Rare Earth Oxides (LREO), and the Magnetic Rare Earth Oxides (MREO). The definition of the TREO, HREO, LREO, and MREO are detailed in the following formulas:

$$HREO: ([Dyppm]*1.1477) + ([Erppm]*1.1435) + ([Euppm]*1.158) + ([Gdppm]*1.1526) + ([Hoppm]*1.1455) + ([Luppm]*1.1371) + ([Tbppm]*1.1761) + ([Tmppm]*1.1421) + ([Ybppm]*1.1386) + ([Yppm]*1.2699)$$

$$LREO: ([Ceppm]*1.1712) + ([Lappm]*1.1727) + ([Ndppm]*1.1664) + ([Prppm]*1.2081) + ([Smppm]*1.1596)$$

TREO: HREO + LREO

*MREO: ([Prppm]*1.2081) + ([Ndppm]*1.1664) + ([Tbppm]*1.1761) + ([Dyppm]*1.1477)*

3.0 RELIANCE ON OTHER EXPERTS

The Report has been prepared by Atticus Consulting SAC (Atticus) for the Issuer Resouro Strategic Metals Inc (RSM). The Authors (QPs) have not relied on any other report, opinion or statement of another expert who is not a qualified person, or on information provided by the Issuer concerning legal, political, environmental or tax matters relevant to the Report.

4.0 PROPERTY DESCRIPTION AND LOCATION

4.1 Property Location

The Tiros Project is located in the State of Minas Gerais, about 250 km west northwest of the City of Belo Horizonte, which is about 350 km directly north of the City of Rio de Janeiro and the coast. Figure 4-1 details the location of the project area. The Tiros Property is centred at approximately 401723 mE, 7893379 mS (-19.05°S Lat., -45.934°W Long.) (Figure 4-2); the aforementioned UTM coordinates are provided in the WGS84 Zone 23K South.

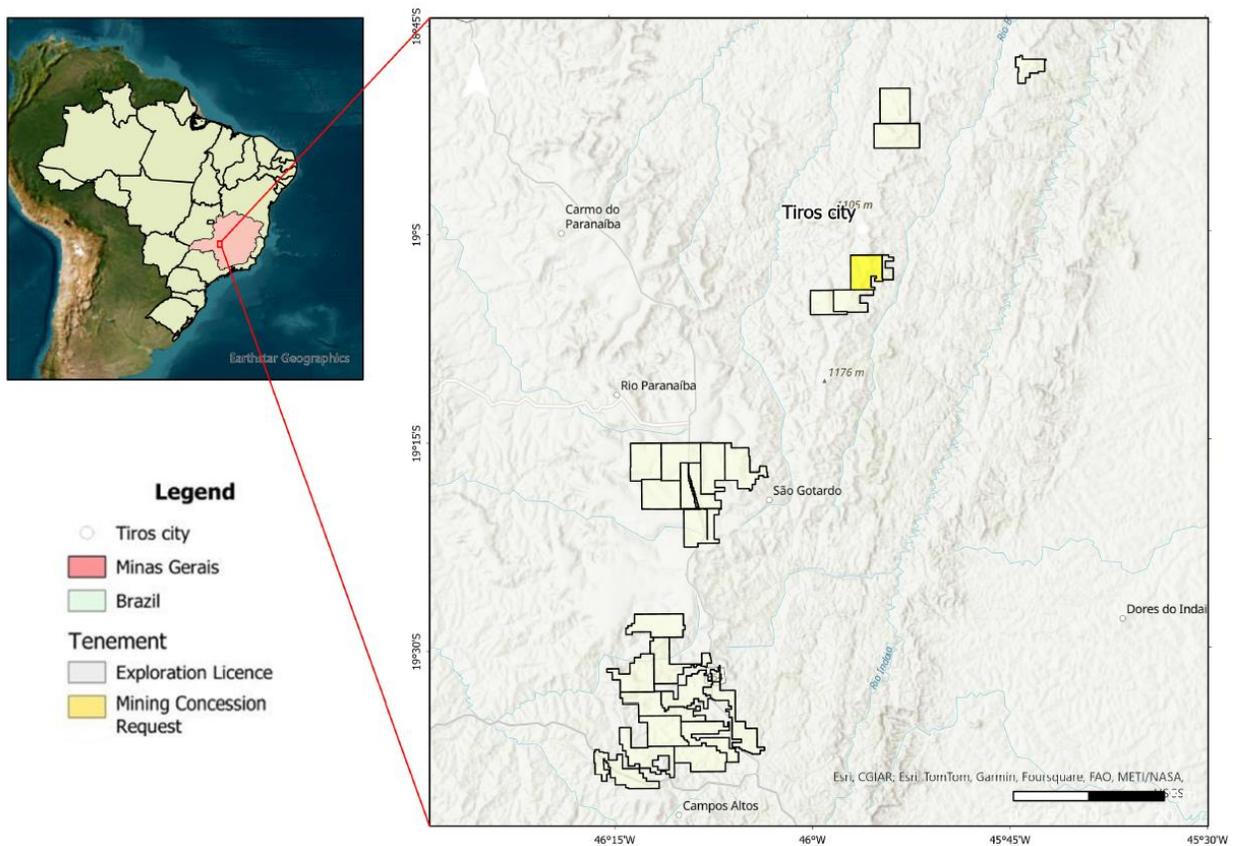


Figure 4-1. Location map of the Tiros project area with the outline of the concessions that comprise the Property.

4.2 Mineral Disposition

A detail view of the Tiros Project concessions is shown in Figure 4-2 and summarized in Table 4-1. The Tiros project comprises of twenty-five (25) exploration concessions, a total of 44,989 Ha. These exploration concessions are held by TIROS MINERAIS ESTRATÉGICOS MINERAÇÃO LTDA, which is 90% owned by Resouro Strategic Metals and 10% owned by third party RBM CONSULTORIA MINERAL EIRELI. The exploration concessions cover four exploration target zones: Tiros North, Tiros Central, Sao Gotardo, and Campos Altos. This mineral resource estimate is limited to a portion of the Tiros Central exploration target.

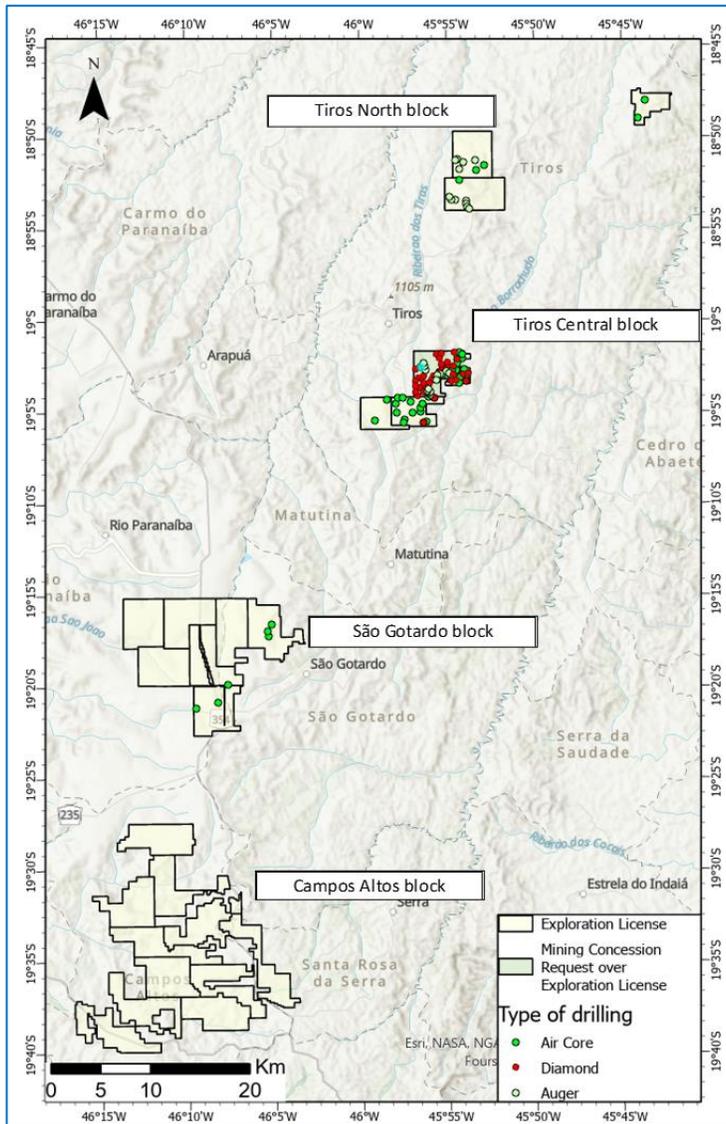


Figure 4-2. Map of the Tiros Projects concessions, detailing the four exploration target areas and the location of the drill holes.

4.3 Claim Status

The 25 concessions (44,989 Ha) that comprise the Tiros REE Project are all exploration licenses. The exploration concessions cover four exploration target zones: Tiros North, Tiros Central, Sao Gotardo, and Campos Altos. This mineral resource estimate is limited to a portion of the Tiros Central exploration target.

Table 4-1. Summary of the Tiros Project Mining Concessions.

Tenement	Area (ha)	Status	Holder	Status
831.045/2010	1735.69	Exploration Permit	TIROS MINERAIS ESTRATÉGICOS MINERAÇÃO LTDA	Final Report approved.

833.082/2014	1251,24	Exploration Permit	TIROS MINERAIS ESTRATÉGICOS MINERAÇÃO LTDA	Final Report approved.
833.083/2014	365.86	Exploration Permit	TIROS MINERAIS ESTRATÉGICOS MINERAÇÃO LTDA	Final Report approved.
830.450/2017	871.55	Exploration Permit	TIROS MINERAIS ESTRATÉGICOS MINERAÇÃO LTDA	Active
830.915/2018	1055.16	Exploration Permit	TIROS MINERAIS ESTRATÉGICOS MINERAÇÃO LTDA	Pending Renewal
831.390/2020	1995.44	Exploration Permit	TIROS MINERAIS ESTRATÉGICOS MINERAÇÃO LTDA	Pending Renewal
831.720/2020	1981.41	Exploration Permit	TIROS MINERAIS ESTRATÉGICOS MINERAÇÃO LTDA	Pending Renewal
830.026/2021	1998.88	Exploration Permit	TIROS MINERAIS ESTRATÉGICOS MINERAÇÃO LTDA	Active
830.027/2021	1986.59	Exploration Permit	TIROS MINERAIS ESTRATÉGICOS MINERAÇÃO LTDA	Active
831.237/2021	1885.16	Exploration Permit	TIROS MINERAIS ESTRATÉGICOS MINERAÇÃO LTDA	Active
831.314/2021	1972.27	Exploration Permit	TIROS MINERAIS ESTRATÉGICOS MINERAÇÃO LTDA	Active
832.023/2023	1999.78	Exploration Permit	TIROS MINERAIS ESTRATÉGICOS MINERAÇÃO LTDA	Active
832.025/2023	1998.62	Exploration Permit	TIROS MINERAIS ESTRATÉGICOS MINERAÇÃO LTDA	Active
832.026/2023	1984.17	Exploration Permit	TIROS MINERAIS ESTRATÉGICOS MINERAÇÃO LTDA	Active
832.027/2023	1999.96	Exploration Permit	TIROS MINERAIS ESTRATÉGICOS MINERAÇÃO LTDA	Active
832.029/2023	1978.98	Exploration Permit	TIROS MINERAIS ESTRATÉGICOS MINERAÇÃO LTDA	Active
832.223/2023	1988.13	Exploration Permit	TIROS MINERAIS ESTRATÉGICOS MINERAÇÃO LTDA	Active
832.226/2023	1999.86	Exploration Permit	TIROS MINERAIS ESTRATÉGICOS MINERAÇÃO LTDA	Active
832.601/2023	1995.56	Exploration Permit	TIROS MINERAIS ESTRATÉGICOS MINERAÇÃO LTDA	Active
832.604/2023	1999.79	Exploration Permit	TIROS MINERAIS ESTRATÉGICOS MINERAÇÃO LTDA	Active
832.620/2023	1990.14	Exploration Permit	TIROS MINERAIS ESTRATÉGICOS MINERAÇÃO LTDA	Active
832.621/2023	1998.28	Exploration Permit	TIROS MINERAIS ESTRATÉGICOS MINERAÇÃO LTDA	Active
832.624/2023	1998.75	Exploration Permit	TIROS MINERAIS ESTRATÉGICOS MINERAÇÃO LTDA	Active
832.625/2023	1998.43	Exploration Permit	TIROS MINERAIS ESTRATÉGICOS MINERAÇÃO LTDA	Active
832.627/2023	1989,29	Exploration Permit	TIROS MINERAIS ESTRATÉGICOS MINERAÇÃO LTDA	Active

4.4 Transaction Terms and Agreement

A definitive agreement was signed between Resouro Inc. and RBM Consultoria Mineral Ltd. (RBM) on July 31, 2023. The summary of the terms of this agreement is given below.

- The earn-in terms would require three stages of payments for the acquisition of 90% of the property in exchange for a total of 1,642,000 shares of Resouro. The stages are related to the conclusion of the scope study, pre-feasibility studies and definitive feasibility studies.
- The remaining 10% is a free carried Interest in the name of RBM;

An addendum to this agreement was signed on October 9th, 2023, whereas RBM waives the requirements for the transfer of 90% of the title holder equity (Brazil Copper Mineração, renamed Tiros Minerai s Estratégicos Ltda) to Resouro, in exchange for the 1,642,000 shares of Resouro, subject to the escrow periods established by the TSX and eventually, ASX. As compensation for such acceleration, RBM will be entitled to receive 750,000 performance rights in Resouro, which will be converted into shares upon completion of a DFS on the project.

4.5 Environmental Studies, Permitting and Social or Community Impact

RSM recognizes the importance of sustainable, ethical, and safe practices in the communities it works within and among its employees and stakeholders. RSM is committed to the development of modern ESG practices and respects the link between leading ESG practices and project acceptance. RSM is authorized to conduct mineral exploration in the areas where it operates in adherence to legislation and governmental standards.

- RSM is committed to achieving its part in the United Nations sustainable development goals (SDG) and will undertake an assessment of the project in compliance with practically achieving its part in these goals in the communities in which we work. This will include:
- Establishment of environmental monitoring programs
- Detailed environmental and community studies through the various project lifecycles
- Frequent and transparent community, landholder, and stakeholder engagement
- Development program to achieve the relevant goals of the SDG
- Training of team members in sustainability in operations and zero harm practices for safety and health
- Promote a company culture that promotes diversity, and inclusion for successful outcomes
- Respect and acknowledge the cultures, customs, and values of people in the communities where RSM operates.
- Promote mutually beneficial, sustainable, and symbiotic relationships between agriculture, mining, and communities.

4.6 Royalties and Obligations

All mining permits in Brazil are subject to state and landowner royalties, pursuant to Article 20, § 1, of the Constitution and Article 11, "b", of the Mining Code. In Brazil, the Financial Compensation for the Exploration of Mineral Resources (Compensação Financeira por Exploração Mineral - CFEM) is a royalty to be paid to the Federal Government at rates that can vary from 1% up to 3.5%, depending on the substance. It is worth noting that CFEM rates for mining rare earth elements are 2%. CFEM shall be paid (i) on the first sale of the mineral product; (ii) when there is mineralogical mischaracterization or in the industrialization of the substance, which is considered "consume" of the product by the holder of the mining tenement; or (iii) when the products are exported, whichever occurs first. The basis for calculating the CFEM will vary depending on the event that causes the payment of the royalty. The landowners' royalties could be subject to a transaction, however, if there's no agreement to access the land or the contract does not specify the royalties, Article 11, §1, of the Mining Code sets forth that the royalties will correspond to half of the amounts paid as CFEM.

Except for the royalties to be paid to the government (CFEM) or to the landowner, in case the company does not decide to purchase the land where mining is set to occur, no other royalty is due to any previous owner.

The author is not aware of any other royalties, back-in rights, or other agreements and encumbrances to which the project may be subject. The author is also not aware of any environmental liabilities or other risks that may prevent Resouro from carrying out future work, nor of any other significant factors and risks that may affect access, title, or the right or ability to perform work on the project

4.7 Other Significant Factors and Risks

As of the Effective Date of the Report, the Author is not aware of any significant factors that may affect access, title, or the right or ability to perform the proposed work program on the concessions that comprise the Tiros Project.

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 Access to Property

The Tiros REE Project area is located in the centre of State of Minas Gerais, about 350 km (by road) west-northwest of the state capital and mining City of Belo Horizonte (Figure 5-1).

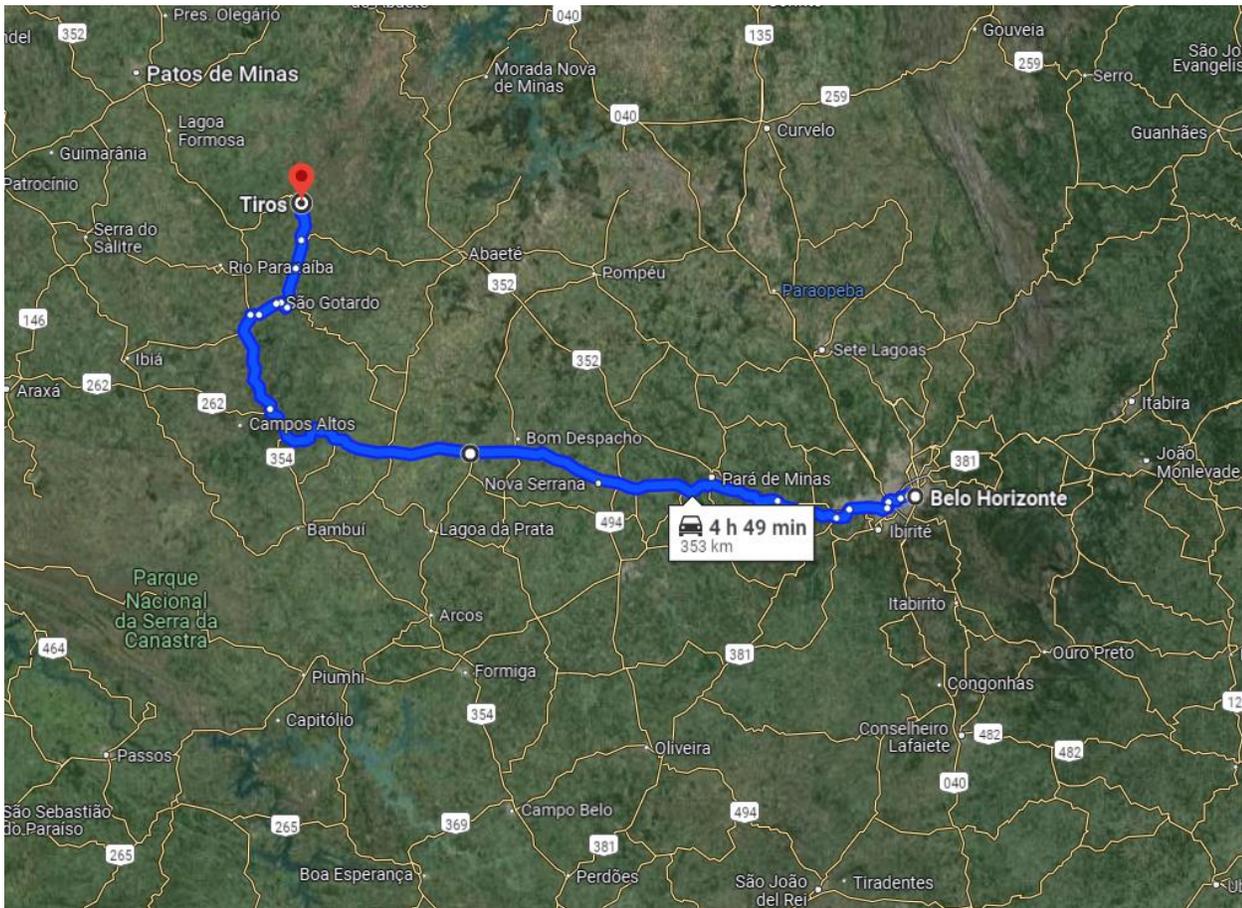


Figure 5-1. Location, access and infrastructure for the Tiros Project, Brazil.

The Project area can be accessed by the Brazilian interstate roads 262 and 354, heading east out from the state capital of Belo Horizonte towards Campos Altos and then north on towards the town of Tiros. The tenements are accessible via sealed roads, apart from landholder entry ways to access their lands, which are also used for access to the exploration sites.

5.1.1 Surface Rights and Access

According to the Company, the surface rights associated with the Project are privately held by landholders which to date has been approved by individual landholders successfully under individual agreement without compensation which is typical of exploration access in Brazil. It is expected as the drilling infill program advances landholder access requirements will require compensation for access to be granted.

5.2 Climate and Operating Season

The climatic conditions of the Tiros region are characterized by a tropical climate tempered by altitude, with a rainy season from November to March and a dry season from May to September, while April and October are transition months. During the winter season, there is a significant decrease in precipitation levels as compared to the summer months. Köppen and Geiger classify this climate as Aw. The average annual temperature in Tiros is 23 °C, and precipitation here is about 1681 mm per year. See figure 5-2.

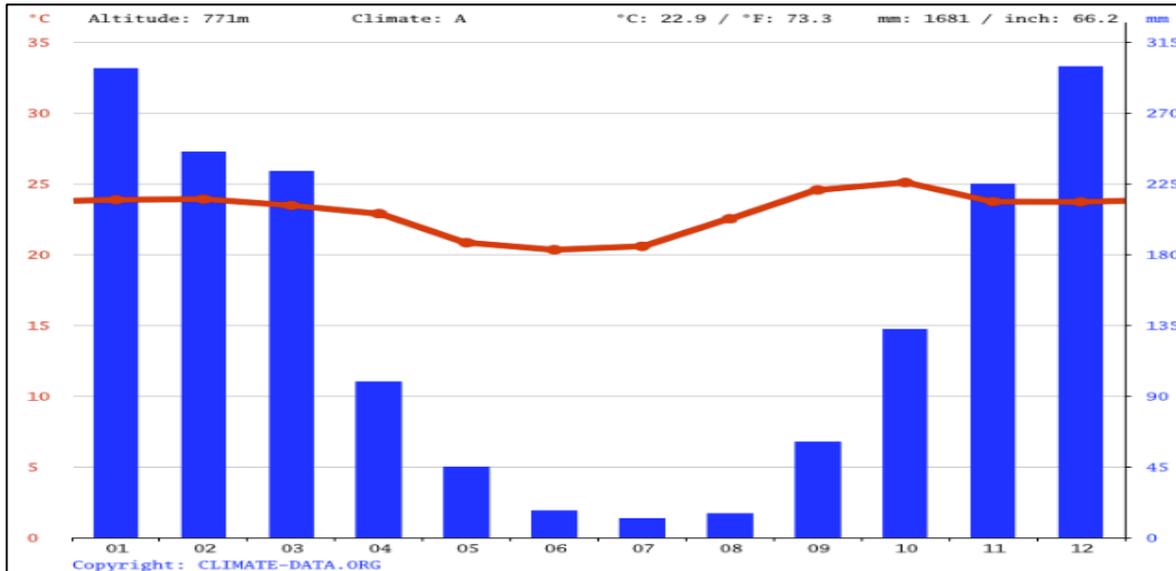


Figure 5-2. Typical climate data of the Project area.

The relatively low elevation and favourable climate allows for most exploration work (geological mapping, surface sampling, drilling and geophysical surveys) to be completed year-round.

5.3 Local Resources and Infrastructure

The Tiros project area is located approximately 350 km west-northwest of Belo Horizonte, the sixth (6) largest city in Brazil and the capital of Minas Gerais state. The town of Belo Horizonte has an international airport and is well connected to all major cities in Brazil and is a central to an array of mining and exploration projects in the State. The closest town to the project area is Tiros, with a population of approximately 8,000 people and reasonable accommodations and resources for tools and workers.

The Project is within proximity of major federal highways and high-voltage power lines, and with major rail infrastructure running through the Minas Gerais state.

5.4 Physiography

The region that covers the area is in the geomorphological region known as the São Francisco Plateau, which is characterized by sedimentary plateaus limited by well-marked erosional edges, distinguishing land with a preserved surface from land with recessed surfaces. The project's typical height above sea level is between 1200 m in higher plateau areas and ~900m in lower eroded valleys.

The figure below (5-2) drapes a satellite photo over the topographic surface, looking to the NE over the Tiros Central exploration target, with the polygons of the four mineral rights shown in blue. The plateau that preserves the Capacete formation is well defined in this view, whereas the eroded valleys separating the remaining plateau should contain a minor proportion of the mineralized bed. The isometric view shows typical cleared cropping farm conditions with semi-uncleared, moderately dense native and non-native flora in valleys.

5.4.1 Water Availability

Water for exploration activities is available throughout the region from various local catchments, municipality sources and where approved from the landowners' water rights on private property.

5.4.2 Flora and Fauna

Vegetation has been mainly cleared for agriculture purposes with paddock boundaries and valleys near intermittent (seasonal) drainage where machinery have not been able to clear, consisting of native and non-native shrubs and trees of low to moderate height

Typically, there is very little animal life visible in the region and when present it is generally restricted to small lizards, small mammals (*i.e.*, rodents), birds (*e.g.*, vultures) and insects (*i.e.*, spiders, ants, butterflies) whose concentrations increase in areas with a year-round water source.

6.0 HISTORY

6.1 Historical Exploration Work

Exploration began in the region during 2010 with Águia Metais Ltda reviewing the potential for phosphate. In 2011, Águia Metais Ltda established a partnership with Vicenza to define and explore a project called Projeto Mata da Corda consisting of 142 mineral tenements. From 2013 onwards, the exploration objectives moved away from phosphates and turned to titanium. Vicenza completed one vertical diamond drill hole, reaching 82.45 m depth. The drillhole collar was surveyed by handheld GPS and was sampled down to 75m analysing for whole rock major element oxides, including TiO₂ and the suite of Rare Earth elements. The diamond drilling achieved good recovery cutting through the clay like sedimentary units.

The protocols put in place by Vicenza for the extraction of exploration data from their drill campaign are seen to be of a good standard and through review of the data appears to have been well executed. Figures 6-1, 6-2 & 6-3 illustrate the processes involved in the generation and management of exploration data.



Figure 6-1 photo of the diamond drill rig operated by Vicenza during their exploration campaign



Figure 6-2. Example of core photos taken from the Vicenza diamond drill campaign.

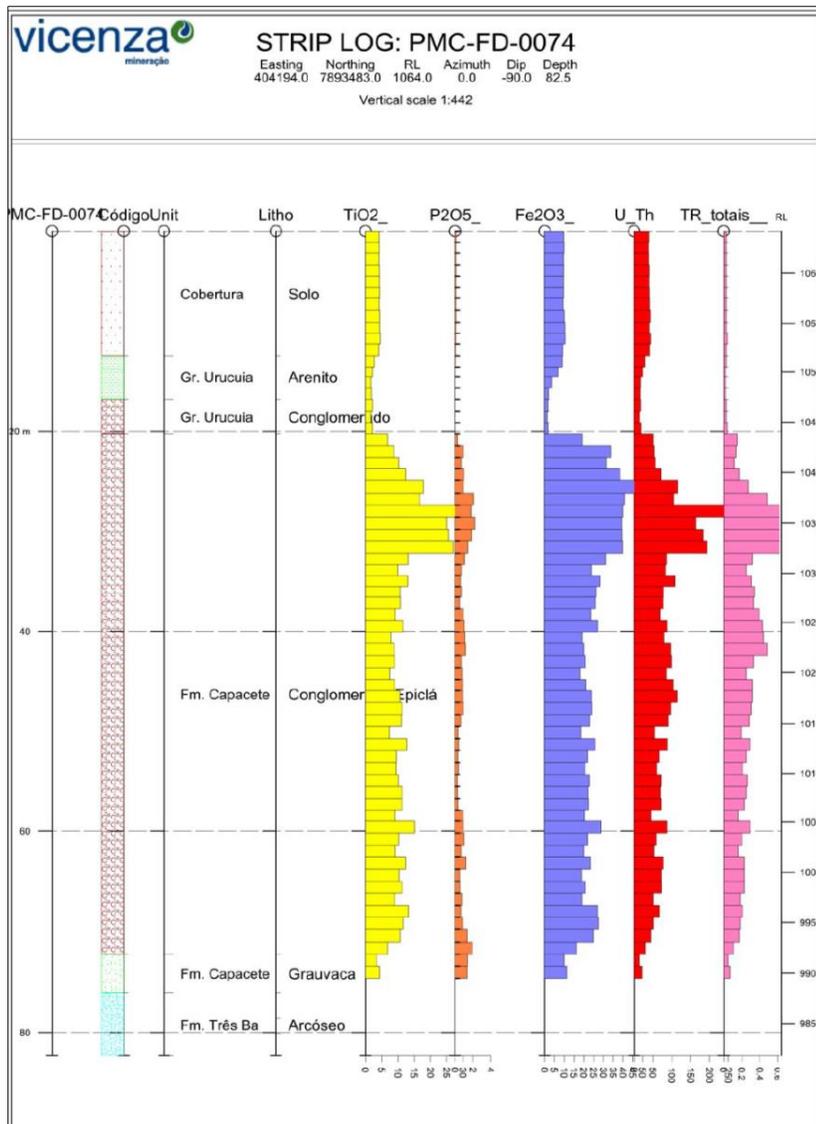


Figure 6-3. Geological log of the Vicenza PMC-FD-0074 diamond drill hole.

Sixty-four samples were taken from this drill hole which were sent for chemical analysis to the SGS Geosol Laboratory, using the ICP-MS, ICP-OES and X-ray fluorescence methods. The results produced an average of 12.4% TiO₂, 0.33% REE, and 0.68% P₂O₅, as summarized in the next table (see Table 6-1):

Table 6 1. Chemical Analysis Results for Historical Drill Hole PMC-FD-0074.

Drill Hole	From (m)	To (m)	Thickness (m)	TiO ₂ (%)	HREE (%)	LREE (%)	REE Total (%)	P ₂ O ₅ (%)
PMC-FD-0074	22.60	71.00	48.40	12.40	0.02	0.31	0.33	0.68

Drill Hole	From (m)	To (m)	Thickness (m)	TiO ₂ (%)	HREE (%)	LREE (%)	REE Total (%)	P ₂ O ₅ (%)
including	24.90	32.10	7.20	23.30	0.03	0.69	0.71	0.88

Vicenza were only interested in the Titanium and phosphate potential of the deposit; the rare earth elements were analysed as they were considered as a contaminant for the extraction of TiO₂. Vicenza conducted metallurgical tests on the Capacete target using the core from hole PMC-FD-0074, the detail of which can be seen in section 6.2.

Following encouraging results in 2016, Vicenza entered into a partnership with Iluka. The Vicenza-Iluka Joint Venture operated between 2016 and 2017 when they drilled twenty (20) vertical, 75 mm diameter Air Core (shown in Figure 6-4) drill holes, totaling 1,225m with depths ranging from 35 to 60 m, and located using a handheld GPS.

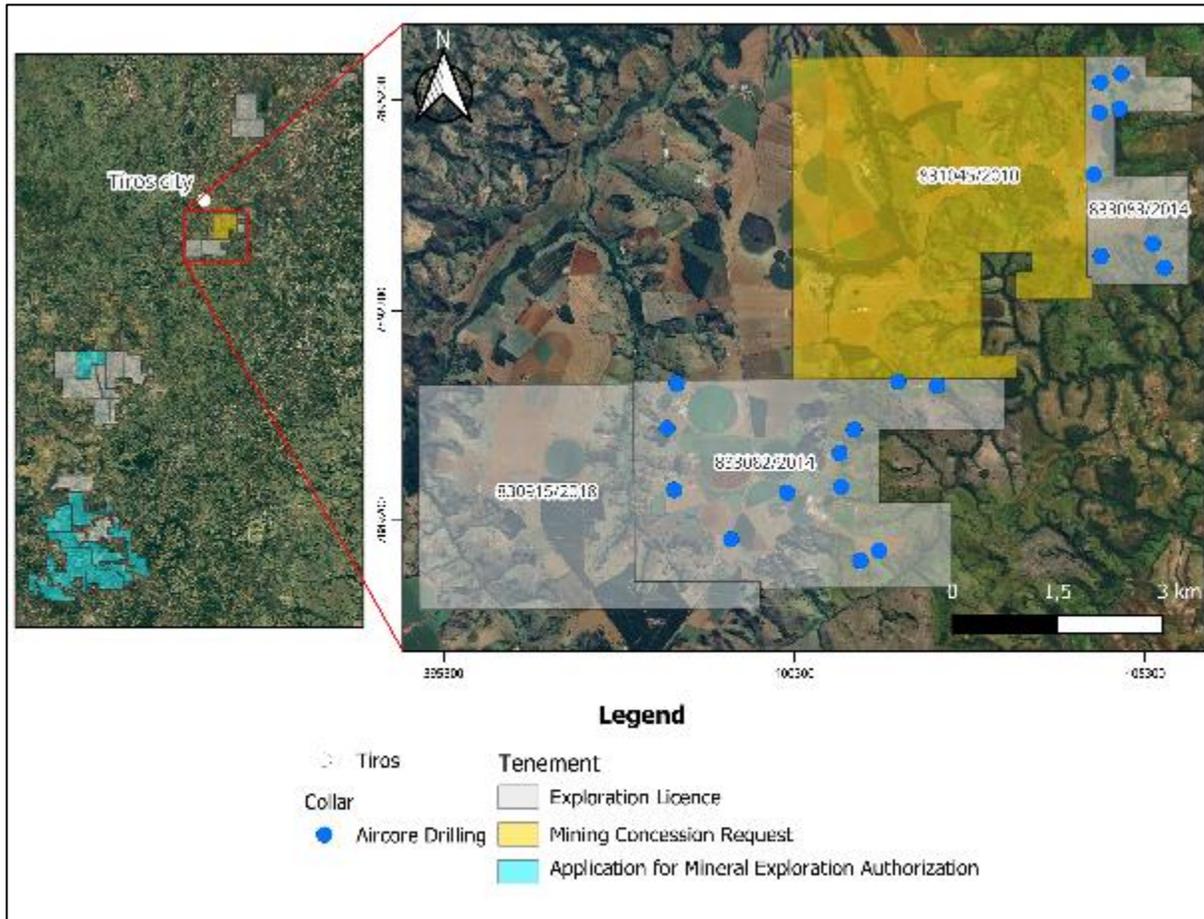


Figure 6-4, showing a map of the Tiros Central exploration target with the location of the air core drill holes completed during the Vicenza-Iluka joint venture

The air core drill holes were sampled on one-metre intervals throughout the entire length of the drill hole. The samples were initially analyzed by Iluka-Vicenza using only a portable XRF.

In 2016 Vicenza-Iluka commissioned Ground Radar Inc. to complete a ground penetrating radar (GPR) survey over a portion of the Tiros Central exploration target. The GPR study surveyed 8.4 line-kilometres and defined the depth of overburden and depth to the top of the Capacete formation. When combined with the drilling the results of this study allowed for an interpretation of the thickness of the Capacete formation across a wider area and is considered an effective auxiliary tool to be used to better calculate the volume of the mineralised material and of the sterile overburden. The Results were not presented in a viable format to be integrated directly in the geological modelling process; however, the depth profiles were reviewed and integrated manually into the wireframe generation.

Figure 6-5 shows the results of one of these lines with its corresponding interpretation.

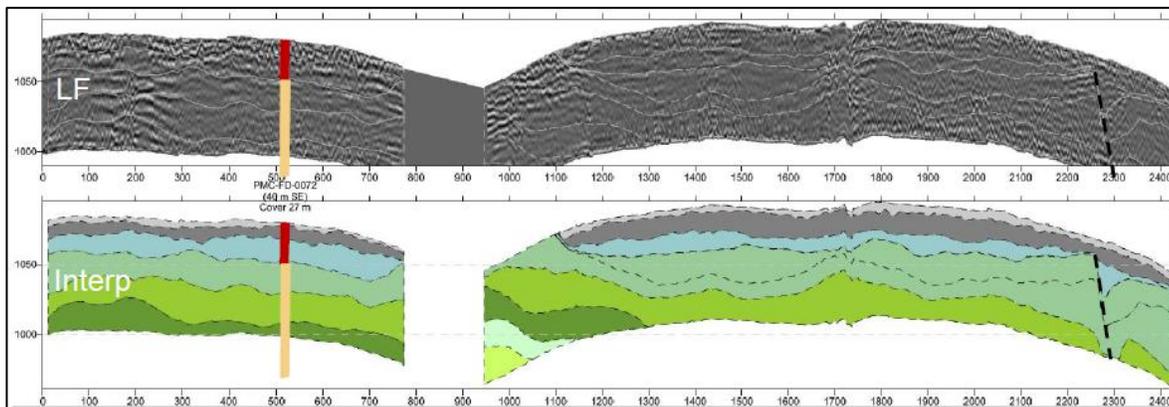


Figure 6-5. GPR profile with the interpretation

In the late 2010's, Vicenza underwent financial difficulties and could not continue with exploration activities. Subsequently, three of their exploration licenses were transferred to RBM Consultoria Mineral (RBM) in exchange for the services of their technical director, Rodrigo Mello. RBM kept the areas in good order, expanding the property, acquiring new licenses, undertaking desktop studies, and initiating a major chemical re-analysis of samples from the Vicenza-Iluka drilling.

In 2021 to 2023, RBM completed a program of reanalysis sending 443 samples taken from historic drill holes to the SGS Geosol laboratory where they were analyzed using the ICP method (including REE). The sampling program included industry standard QAQC, with insertion of blanks, standards, and duplicates into the sample stream. After receiving the results from the re-assay program, it was realized that the handheld XRF did not produce verifiable, repeatable, unbiased sample results, and that moving forward only certified laboratory analyses would be reported. The drill chip samples were sent to SGS Geosol for analysis of the REEs, TiO_2 and whole rock major element oxide analysis using the ICP-MS and ICP-OES. The SGS Geosol laboratory analyses gave results that indicated high grades of titanium and rare earth elements consistent with the Vicenza diamond drill hole. See (Table 6-2). The notable intervals have been calculated by RSM using a combined cut-off of 6% TiO_2 and 1000 ppm TREO to define the nominal mineralisation and

then a cut-off of 16% TiO₂ and 6000 ppm TREO for the high-grade intercepts. Internal dilution was set at one metre, but very rarely there were more than one interval per drill hole.

Table 6-2. Detailing the notable intercepts for the Vicenza and Illuka-Vicenza air core drill holes, sampled by RBM.

HoleID	X	Y	Z	AZIMUTH	DIP	Interval FROM	Interval TO	Average TREO ppm	Average TiO ₂ %
AC-TIR-002	400968.7	7889678	1071.211	0	90	36	42	1986	10.23
AC-TIR-003	399395.8	7888934	1096.954	0	90	44	48	3082	13.01
AC-TIR-004	398587.7	7889640	1076.711	0	90	37	51	4125	11.83
including						45	49	8328	19.33
AC-TIR-005	398485.3	7890519	1070.696	0	90	36	47	2530	11.71
AC-TIR-006	401506.61	7888770.62	1034.01	0	90	21	24	2328	9.59
AC-TIR-007	98623.66	7891159.92	1055.09	0	90	26	58	2967	7.14
AC-TIR-008	401777.8	7891183	1079.7	0	90	44	55	3382	15.77
including						53	57	4461	22.12
AC-TIR-009	402337.5	7891131	1048.104	0	90	13	28	4873	17
including						20	25	9349	24.4
AC-TIR-010	400946.7	7890168	1066.318	0	90	26	39	4599	16.73
including						31	36	7268	22.57
AC-TIR-011	401150.6	7890502	1048.662	0	90	11	53	4116	16.47
including						16	22	7576	22.6
AC-TIR-012	404669.6	7892974	1074.331	0	90	51	60	5521	17.12
including						53	60	6587	19.22
AC-TIR-013	405408.4	7893153	1033.307	0	90	29	36	2865	8.78
AC-TIR-014	404568.9	7894139	1049.344	0	90	31	35	2629	10.06
AC-TIR-015	404930.23	7895077.48	1042.69	0	90	16	53	3787	13.09
including						25	30	6772	23.72
AC-TIR-016	404644.8	7895023	1052.623	0	90	30	51	3334	11.23
AC-TIR-017	405574.43	7892812.13	1018.47	0	90	0	45	4579	13.61
including						3	8	7169	26.57
AC-TIR-018	404954.4	7895577	1047.773	0	90	22	33	4933	14.25
AC-TIR-019	404665.26	7895454.43	1052.22	0	90	23	48	4452	10
AC-TIR-020	401239.3	7888629	1044.091	0	90	13	27	5495	15.19
including						20	25	9876	21.49

In all cases it was found that the XRF analytical results were lower than the certified assay results, the ICP TiO₂ ICP results were 16% higher than the XRF. No XRF analyses were used in the resource estimation, nor in the reporting of drill intercepts.

Following the completion of this work, RBM entered into an agreement with Resouro Strategic Metals in July 2023 and started a drilling and metallurgical testing program that is still ongoing.

6.2 Historical Mineral Processing and Metallurgical Testing

The metallurgical test work carried out by Vicenza focused on the extraction of titanium dioxide through the creation of an anatase (TiO₂) concentrate. The joint venture performed characterization studies such as QEMSCAN, MLA, SEM, BSE, XRD, assay by size fraction, and MLA and XRD analysis.

A 29.6 kg sample of the conglomerate from the Capacete Fm. at 24.9% TiO₂ was used for a process that included: desliming, magnetic low and high intensities, gravimetric concentration, and leaching. The resulting concentrate assayed at the SGS Laboratories showed 86% TiO₂.

Figure 6-6 shows how the grade in TiO₂ varies as the anatase increases throughout the concentration process.

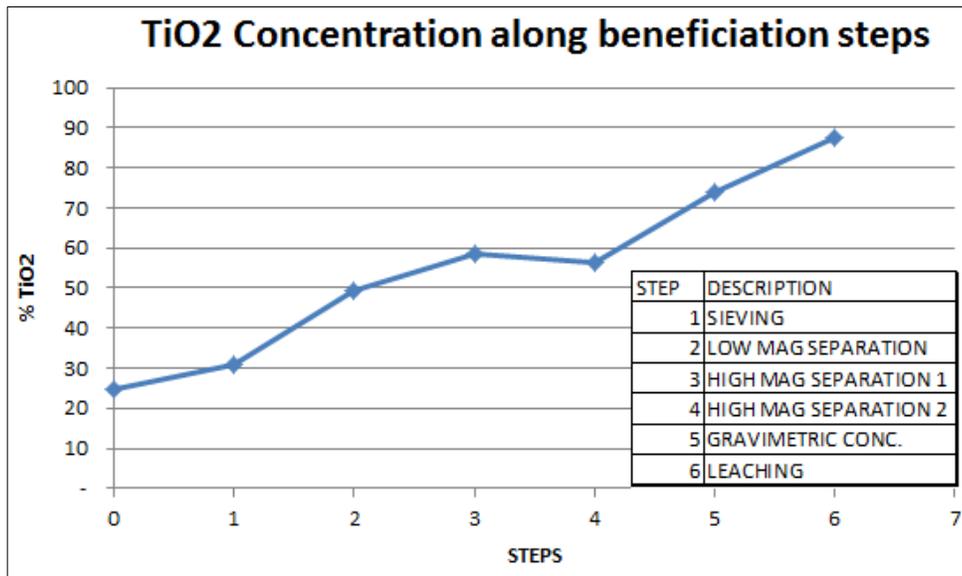


Figure 6-6. Increase in the TiO₂ grade according to the different beneficiation steps.

7.0 GEOLOGICAL SETTING AND MINERALIZATION

7.1 Regional Geology

The São Francisco Craton is a complex arrangement of high-grade metamorphic terrains (gneisses, granitoids, and granulites) of the Archean age. Includes granite-greenstone associations and belts of Paleoproterozoic supracrustal rocks, as well as plutonic rocks with great compositional variety. The Craton is largely covered by Proterozoic and Phanerozoic sedimentary rocks attributed to the São Francisco Basin. In its surroundings, two folded belts were developed, causing ductile-brittle deformations as well as its coverings, represented in the domain of the São Francisco Basin (Figure 7 1).

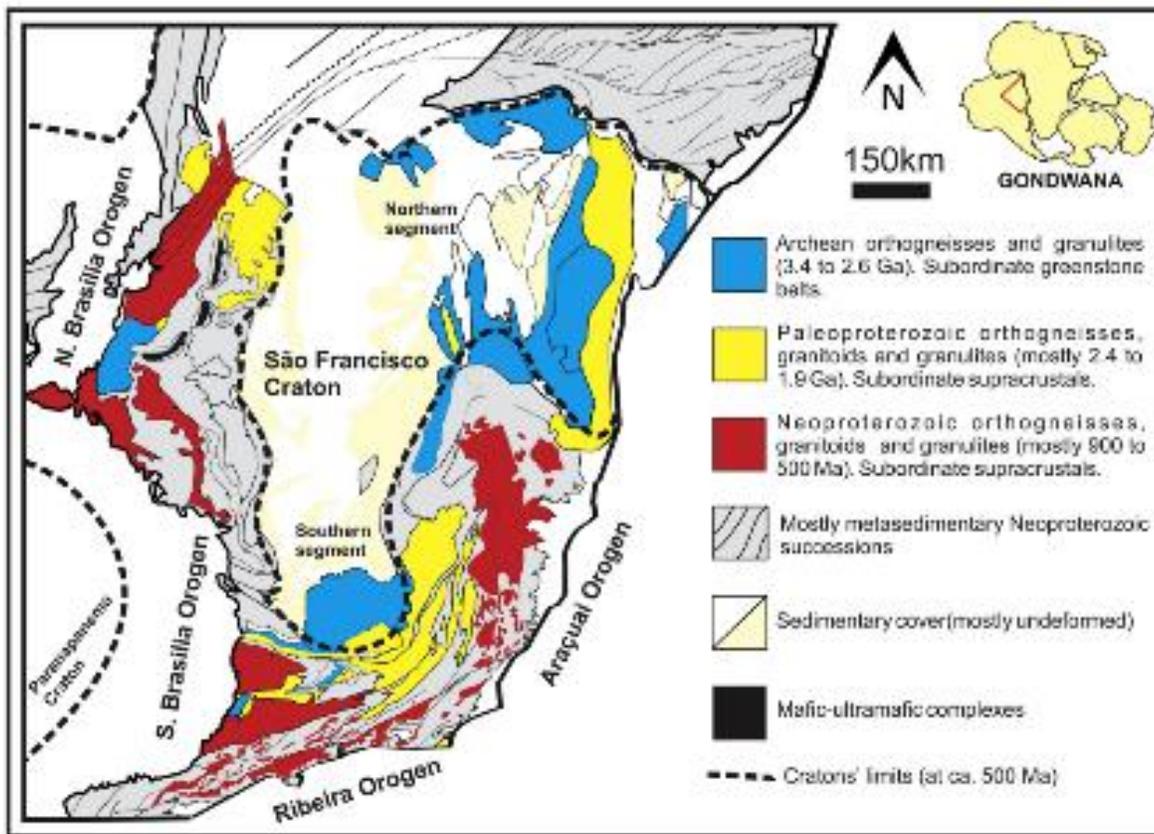


Figure 7-1. Subdivision of the Brazilian shield, showing the position of the São Francisco Craton amid the orogenic belts and the Neoproterozoic metasedimentary successions.

The São Francisco Basin has an area of 350,000 km² and covers a large part of Minas Gerais State. It is of the polycyclic intracratonic type, slightly deformed in the center and gradually deformed towards the edges. The filling of the basin, occurred through successive sequences, namely: Rift; Intracratonic Supersequence; and Intracratonic/Antepaís Supersequence (neoproterozoic). The permocarboniferous units are the São Franciscan supersequence are described in accordance with Zalán & Romeiro Silva (2007).

The Brasília Fold Belt of Neoproterozoic age is more than 1,100 km long and represents a complex belt of folds and thrust faults with tectonic and metamorphic vergences towards the Craton (Fuck et al., 1994),

and presents two distinct trends: a northern one, with a NE orientation and a southern one with a NW orientation. The meeting of the two branches marks a large regional structure defined by WNW-SSE lineaments, located at the same latitude as the Federal District. See Figure 7-1.

During the Late Cretaceous, the Craton housed a set of ultrapotassic alkaline rocks. Among these groups are the Alto Paranaíba Alkaline-Carbonatitic sub-volcanic bodies of kamafugites and kimberlites. The Capacete Formation is the sedimentation of the erosion products of these rocks. Creating a sedimentary package that contains grauwas, sandstones, lithic epiclastic conglomerates, and detrital apatite with fragments of phosphorites.

7.2 Local Geology

In the project area, as shown in figure 7-2 the following distrital units were mapped, and the stratigraphy from base to top is Bambuí Group, Areado Group, Mata da Corda Group, Laterite cover, and Alluvial Deposit. There is an NNE-directed band that encompasses Capacete formation, which generally has a lateritic cover and is exposed only on the slopes of the plateaus.

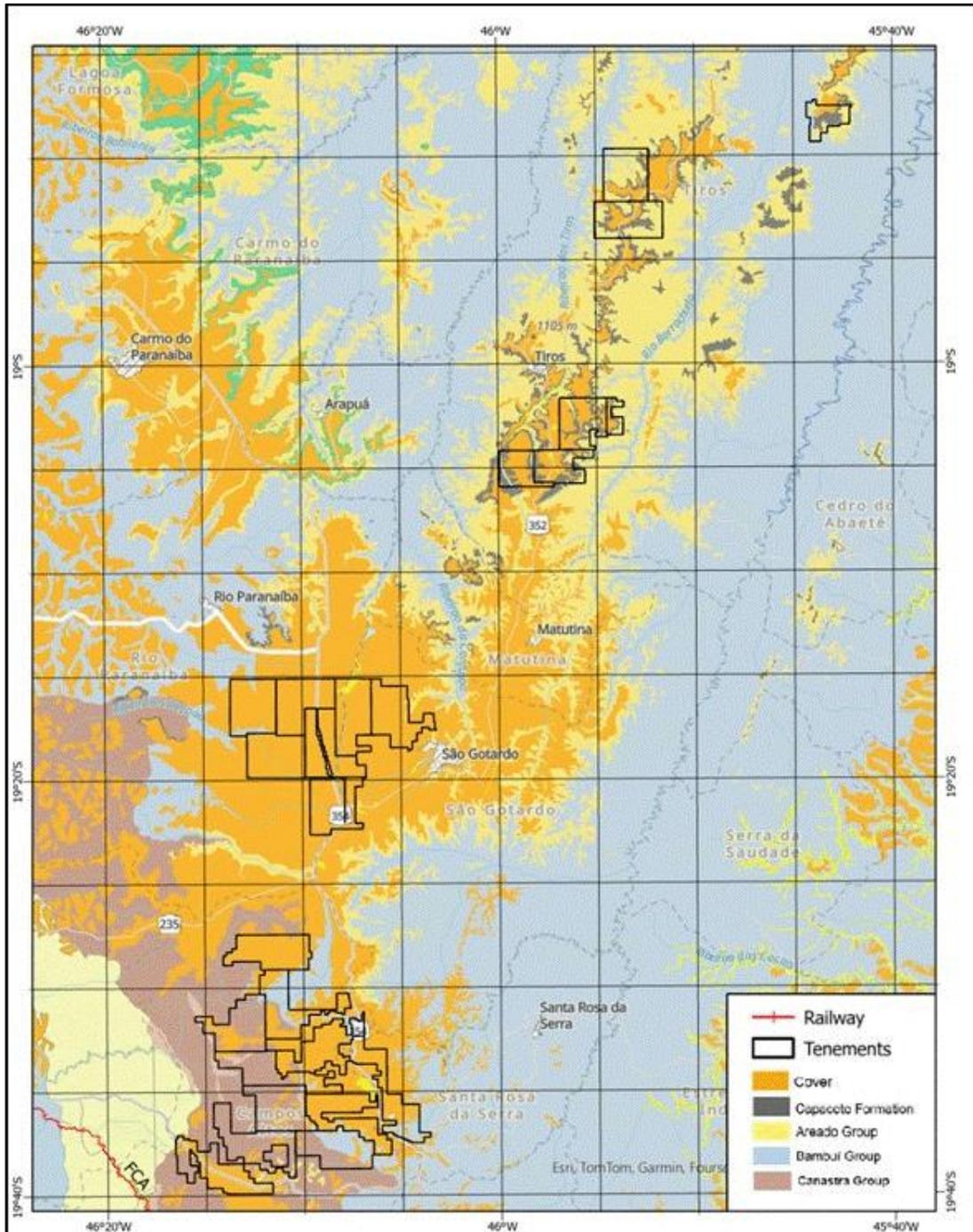


Figure 7-2. Local geology within and around the Tiros REE Project, Minas Gerais, Brazil.

The Bambuí Group (Paraopebas Subgroup) is represented by a pink claystone and siltstone with disseminated white mica of detrital origin and plane-parallel lamination marked by the variation from clay and silty to silty-sandy planes.

The Areado Group is characterized by sandstones composed of quartz with fine to medium grain sizes. There is stratification marked by particle size variation, both for levels of coarse sand and for levels of fine sand grain size. In some outcrops, cross-stratifications up to 3 m thick were observed.

The Mata da Corda Group is represented in the area by epiclastic rocks (sandstone and conglomerate) of the Capacete Formation (Figure 7-3) which is friable and magnetic, composed of quartz with fragments of volcanic rocks and heavy minerals such as magnetite and ilmenite. It is medium to coarse grain size, with flat-parallel stratification marked by granulometric and compositional variation, presenting strata richer in quartz and others richer in fragments of volcanic rock and heavy minerals. The Capacete Formation contains all the TiO_2 and REE mineralisation.



Figure 7-3: showing the epiclastic rocks of an outcrop of the Capacete formation within a roadside ravine.



Figure 7 4: Conglomerate hand sample from the Capacete Formation.

The regolith changes in the epiclastic formations of the Capacete Formation result in a saprolite (Figure 7-5) with a reddish to purplish colour and magnetic, clayey, and disseminated kaolinite, possibly from the alteration of the volcanic fragments. Saprolite samples show low levels of P₂O₅, but high concentrations of TiO₂ and REE.



Figure 7-5: Saprolite outcrop from the epiclastic rocks of the Capacete Formation.

The saprolite is the lateritic cover which occurs at the top of the plateaus and has developed through the evolution of weathering of the rocks of the Mata da Corda Group. Outcrops are observed on the edges of the ravines and breaks in the topography. The laterite is reddish, weakly magnetic, beige, with a clayey matrix, quartz fragments, and goethite nodules.

7.3 Regolith

A study on the geochemical results of the AC and core drilling, combined with the results of the mineralogical study, led to the separation of the weathered profile into four distinct zones based on visual and geochemical characteristics. The main oxide used for the definition is CaO. Other oxides, such as K₂O, SiO₂, Al₂O₃, MgO, Fe₂O₃, are used to define the boundaries. Along all the weathering profiles and extensions, Ti shows a positive correlation with Fe₂O₃, BaO, V, MnO, Nb, La, Nd, Hf, Ta, Th, and U, and an inverse correlation with SiO₂. Following is the definition of the different layers defined in the local geology:

SOX (Strongly Oxidized Saprolite): It is the topmost layer. Thickness varies from a few meters up to almost 40 meters. Typically, weathering has completely removed CaO and K₂O, resulting in high kaolinite, exceptionally low mica content, and anatase enrichment. Later, this layer was also named “Red” for sampling purposes. It is red and displays no structures.

MOX (Moderately Oxidized Saprolite): The MOX zone is characterized by a slight increase in CaO, K₂O, and SiO₂ and slight decreases in Al₂O₃ levels. Kaolinite is almost absent, and micas account for up to 45% of mineral abundance. CaO is the best indicator of the weathering stage, but the other oxides are more important for identifying transition zones. It displays a range of green tones with reddish mottling and well-preserved rock structures.

WOX (Weakly Oxidized Saprolite or Sap Rock): The WOX zone is a transition between fresh and weathered sediment, and its definition is imprecise. The mineralogical study showed samples with approximately 50% mica, small amounts of K-feldspar, and no kaolinite. Grey is the dominant color, and structures are well preserved.

FRS (Fresh Rock): was arbitrarily defined as having CaO > 8%, which is when calcite is present and reacts with weak HCl. The average TiO₂ is 6%, Fe₂O₃ is 14%, CaO is 12% (ranging from 7 to 22%), and P₂O₅ is 1%.

The following definitions are the layers based on geochemistry to assist in differentiating samples collected during drilling:

SOX: CaO < 0.15% and K₂O < 2%

MOX: 0.15 < CaO < 0.5% and 2% < K₂O < 5%

WOX: 0.5% < CaO < 8%

FRS: CaO > 8% and LOI >10%

8.0 DEPOSIT TYPES

The Tiros project can be defined as a regolith-lateritic deposit, in which a rock enriched with concentrations of certain elements is subject to leaching by meteoric waters in different layers. These types of mineral concentrations are known as Ionic Adsorption Clay (IAC) Deposits, which in the case of Tiros are residual soils that are formed from the intense weathering of rare earth-rich rocks, such as the alkaline volcanics of the Mata da Corda formation

In relation to the anatase, the main paradigm is the Tapira deposit, situated 127 km to the SW of Tiros. The geology there is plutonic, but the geochemical signature is similar, with TiO₂ grades in the order of 12-14 % and anomalous REE.

The enriched REE deposits close to the surface are more common in Brazil, there is the Serra Verde deposit and the recently discovered deposit on the dome of Poços de Caldas. The former is a product of granite enrichment and the latter, of carbonatite enrichment

9.0 EXPLORATION

9.1 Mapping & Geophysics

The main source of geophysical data used was the aeromagnetic and radiometric survey conducted by the state government agency “Codemig” with flight lines NS, separated by 400 m each. It was the interpretation of this geophysical data that was used as a base for mapping work and identifying the extension of the Capacete formation.

The combination of a magnetic signal response together with the presence of thorium indicates a concentration of rare earth elements. This technique has been used to define the potential limits of the Capacete Formation across the region from using remote sensing data, which could then be followed up on the ground with surface mapping and drilling. The analytical signal technique showed zones of maximum magnetic and thorium intensity which correspond to the known outcropping Capacete Formation, while towards the south of the project, this pattern changes, with the presence of thorium without high magnetism. This region has not been mapped previously; however, this does indicate that it could be the Capacete formation, which will need to be confirmed on the ground.

Figure 9-1 shows the overall project region, where the map on the left is the thorium radiometric image and the magnetic analytical signal image on the right. The images are very similar, showing correlation of the two data responses, except for the southern zone of the project where they begin to differ.

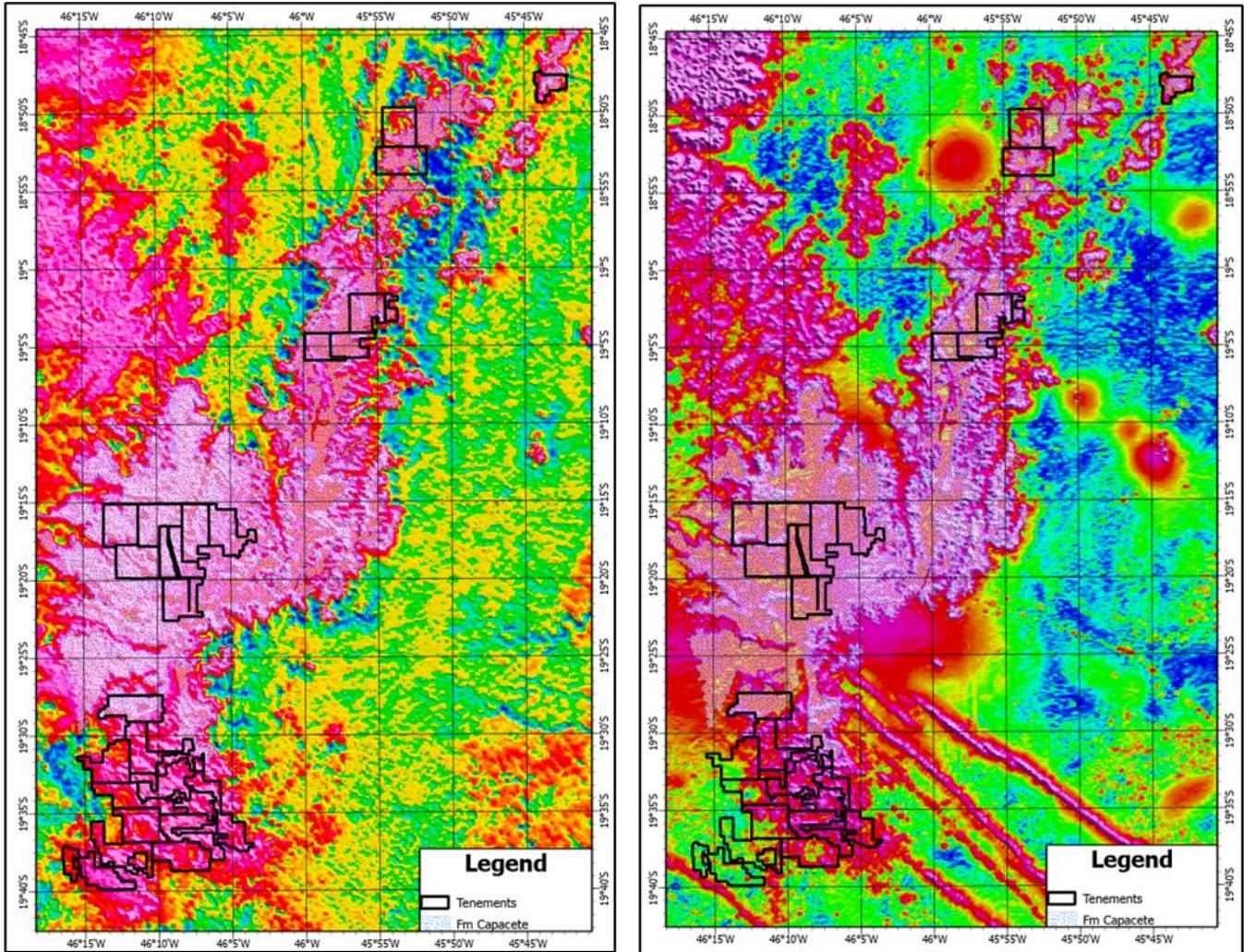


Figure 9-1. Remote sensing mage maps, Thorium on the left and magnetic analytical signal on the right.

9.2 Surface Exploration

Due to the extensive cover of the area, surface exploration and sampling are only possible in a few road cuts or in some steep gullies. Trenching could be used as an option to expose the Capacete formation in regions with less overburden; however, there has been no trenching work completed to date.

10.0 DRILLING

In 2023 and 2024, Resouro completed a drilling program at the three deposit areas: São Gotardo, Tiros-Central and Tiros-North. In total, the programs consisted of forty (40) air core drill holes, totalling 2190 metres; thirty-three (33) diamond drill holes, totalling 2319.6 metres; and twenty-five (25) auger holes totalling 263.5 metres. Table 10-1 details the drill holes completed by Resouro; the drill holes AC-TIR-XX are from the air core campaign, the FDTIR-XX holes are the diamond drill holes and the FT-XX are the Auger holes.

Table 10-1. Summary of the samples collected from the 2023-2024 drilling programs.

Drill Hole	UTMX (mE)	UTMY (mN)	UTMZ (m AMSL)	Az (collar)	Dip (collar)	Length (m)	Core Assays	Control Assays	All Samples
AC-TIR-21	404224.23	7893655.55	1049.77	0	90	43	42	6	48
AC-TIR-22	404272.72	7893423.87	1053.16	0	90	58	55	8	63
AC-TIR-23	404862.56	7893709.94	1050.78	0	90	57	55	8	63
AC-TIR-24	404687.96	7893660.20	1052.42	0	90	80	79	11	90
AC-TIR-25	404596.06	7893609.32	1053.80	0	90	59	58	7	65
AC-TIR-26	404440.48	7893489.84	1053.67	0	90	83	83	12	95
AC-TIR-27	404280.33	7893362.86	1057.48	0	90	46	26	5	31
AC-TIR-28	404372.34	7893399.44	1056.21	0	90	80	59	6	65
AC-TIR-29	404526.89	7893552.81	1054.83	0	90	74	48	7	55
AC-TIR-30	404533.49	7893924.42	1026.13	0	90	48	48	6	54
AC-TIR-31	404049.98	7893281.42	1057.09	0	90	59	29	5	34
AC-TIR-32	404900.23	7893225.59	1073.52	0	90	63	20	3	23
AC-TIR-33	404871.87	7892650.69	1039.55	0	90	51	46	6	52
AC-TIR-34	404677.25	7894603.42	1072.10	0	90	67	19	3	22
AC-TIR-35	405309.46	7893967.16	964.15	0	90	41	0	0	0
AC-TIR-36	405142.69	7895114.37	1019.15	0	90	46	40	5	45
AC-TIR-37	396319.48	7888843.20	1076.13	0	90	49	29	4	33
AC-TIR-38	397552.43	7890888.41	1055.60	0	90	57	56	9	65
AC-TIR-39	405672.43	7910404.40	1004.34	0	90	30	30	3	33
AC-TIR-40	406569.46	7914079.10	1045.11	0	90	51	16	3	19
AC-TIR-41	422776.54	7919372.41	925.70	0	90	42	14	2	16
AC-TIR-42	423468.98	7921117.42	977.75	0	90	45	32	3	35
AC-TIR-43	407348.67	7914549.39	1043.60	0	90	53	15	3	18
AC-TIR-44	404871.44	7913032.94	991.23	0	90	47	27	5	43
AC-TIR-45	385650.35	7867098.12	1161.99	0	90	55	18	3	23
AC-TIR-46	386029.19	7868244.01	1157.95	0	90	56	19	2	21
AC-TIR-47	385619.28	7867582.60	1161.96	0	90	41	0	0	0
AC-TIR-48	380629.97	7860391.82	1153.51	0	90	41	21	2	23
AC-TIR-49	378409.55	7859778.69	1108.11	0	90	47	47	7	54
AC-TIR-50	381583.05	7862200.99	1135.72	0	90	33	24	1	25
AC-TIR-51	400978.99	7894228.67	1041.12	0	90	62	54	8	62
AC-TIR-52	401404.57	7893869.35	1016.98	0	90	37	37	4	41

Drill Hole	UTMX (mE)	UTMY (mN)	UTMZ (m AMSL)	Az (collar)	Dip (collar)	Length (m)	Core Assays	Control Assays	All Samples
AC-TIR-53	404866.00	7895660.85	1036.60	0	90	55	55	8	63
AC-TIR-54	405173.35	7895510.04	1025.72	0	90	53	53	7	60
AC-TIR-55	404108.47	7893973.10	1061.22	0	90	82	55	8	63
AC-TIR-56	403165.59	7893421.16	1025.73	0	90	55	55	7	62
AC-TIR-57	399910.79	7890739.78	1088.08	0	90	40	0	0	0
AC-TIR-58	399159.49	7891148.40	1079.97	0	90	37	0	0	0
AC-TIR-59	399230.80	7888587.13	1096.07	0	90	86	62	9	71
AC-TIR-60	402842.09	7893714.00	1053.71	0	90	81	66	9	75
FDTIR-01	402324.80	7891122.29	1048.28	0	90	52.7	46	7	53
FDTIR-02	404641.99	7895024.68	1052.67	0	90	61.55	37	3	40
FDTIR-03	405584.79	7892798.24	1018.75	0	90	31.9	32	6	38
FDTIR-04	401235.42	7888631.32	1051.72	0	90	37.7	30	4	34
FDTIR-05	404499.47	7892925.16	1051.32	0	90	31.9	17	2	19
FDTIR-06	405286.18	7893524.04	1067.30	0	90	49.4	26	3	29
FDTIR-07	404023.47	7892769.44	1032.04	0	90	18.45	12	2	14
FDTIR-08	404381.36	7895649.30	1044.43	0	90	79.8	66	9	75
FDTIR-09	404239.98	7894354.35	1068.95	0	90	92.85	56	8	64
FDTIR-10	405722.37	7893594.41	1003.59	0	90	33.95	6	1	7
FDTIR-11	403610.44	7894295.72	1060.44	0	90	54.4	19	2	21
FDTIR-12	403170.88	7894170.70	1075.18	0	90	63.8	23	3	26
FDTIR-13	402839.56	7893705.73	1053.86	0	90	81.15	64	9	73
FDTIR-14	402214.40	7893315.69	1055.10	0	90	50.15	30	4	34
FDTIR-15	401701.39	7891530.10	1083.66	0	90	101.3	62	9	71
FDTIR-16	400647.28	7891313.11	1083.36	0	90	96	57	8	65
FDTIR-17	402999.79	7894554.73	1072.99	0	90	91.75	56	7	63
FDTIR-18	402097.34	7892863.30	1036.27	0	90	71.8	66	9	75
FDTIR-19	403642.25	7894682.46	1034.73	0	90	79	70	10	80
FDTIR-20	401861.47	7892554.50	1049.93	0	90	67.25	52	7	59
FDTIR-21	401529.65	7892108.61	1081.16	0	90	56.35	29	4	33
FDTIR-22	400875.11	7892132.04	1060.12	0	90	76.6	63	9	72
FDTIR-23	400417.69	7894027.27	1078.24	0	90	91.05	51	6	57
FDTIR-24	402529.81	7895491.93	1073.77	0	90	67.35	24	4	28
FDTIR-25	402866.36	7895082.49	1074.26	0	90	68.15	25	4	29
FDTIR-26	403019.27	7895563.99	1043.47	0	90	68.55	51	6	57
FDTIR-27	400783.91	7893114.39	1071.79	0	90	92.2	66	9	75
FDTIR-28	401289.04	7892571.24	1045.26	0	90	70.15	62	9	71
FDTIR-29	401271.09	7893312.07	1061.49	0	90	85.8	62	8	70
FDTIR-30	401265.91	7891706.15	1086.32	0	90	108.3	70	10	80
FDTIR-31	400408.37	7892783.50	1067.24	0	90	95.2	64	8	72
FDTIR-32	400499.67	7891744.91	1084.46	0	90	98.05	66	10	76
FDTIR-33	400463.97	7892326.81	1077.84	0	90	95.05	61	8	69

Drill Hole	UTMX (mE)	UTMY (mN)	UTMZ (m AMSL)	Az (collar)	Dip (collar)	Length (m)	Core Assays	Control Assays	All Samples
FT-01	401470.11	7893948.80	1002.72	0	90	6	6	0	6
FT-02	401368.27	7894337.35	997.10	0	90	11	11	0	11
FT-03	401286.01	7894607.04	997.06	0	90	7	7	0	7
FT-04	402990.97	7893548.06	1027.23	0	90	15	15	0	15
FT-05	402639.18	7893408.65	1018.94	0	90	9	9	0	9
FT-06	402553.93	7892931.25	1038.44	0	90	15	15	2	17
FT-07	403540.64	7893844.63	944.05	0	90	7	3	0	3
FT-08	403810.42	7893648.95	988.20	0	90	7	3	0	3
FT-09	401958.88	7891441.34	1039.08	0	90	11	11	1	12
FT-10	401827.65	7891642.82	1001.10	0	90	10	10	1	11
FT-11	401967.66	7891729.99	1033.30	0	90	10.5	11	1	12
FT-12	401675.77	7891809.22	1050.78	0	90	11	11	1	12
FT-13	401749.77	7892020.54	1020.91	0	90	8	8	1	9
FT-14	404435.89	7911032.01	1040.91	0	90	15	15	2	17
FT-15	404013.26	7911080.74	1034.50	0	90	16	15	2	17
FT-16	403803.71	7911334.18	988.34	0	90	13	13	2	15
FT-17	405530.20	7910965.00	1046.47	0	90	12	12	2	14
FT-18	405538.26	7910683.96	1022.84	0	90	9	9	2	11
FT-19	405670.27	7910407.43	1021.41	0	90	11	11	2	13
FT-20	405796.15	7910195.71	1037.29	0	90	7	7	1	8
FT-21	404814.63	7914113.18	892.66	0	90	7	7	1	8
FT-22	405226.07	7914808.89	909.52	0	90	7	7	1	8
FT-23	404683.34	7915150.83	912.15	0	90	12	12	2	14
FT-24	404434.85	7915039.79	916.73	0	90	15	15	2	17
FT-25	406423.38	7915086.93	1012.85	0	90	12	12	0	12
TOTAL						4773.1	3268	439	3720

Of the 98 drill holes (total of 4773.10m) executed by Resouro, the majority (75 holes with 4111.10m) were located in Tiros Central, a total of seventeen (17) holes with 389m located in the Tiros North exploration target area, and six (6) holes in the São Gotardo target. The mineral resource estimation is limited to the Tiros Central target area. Figure 10-1 focuses on the drilling completed to date and proposed drilling within the Tiros Central exploration target area.

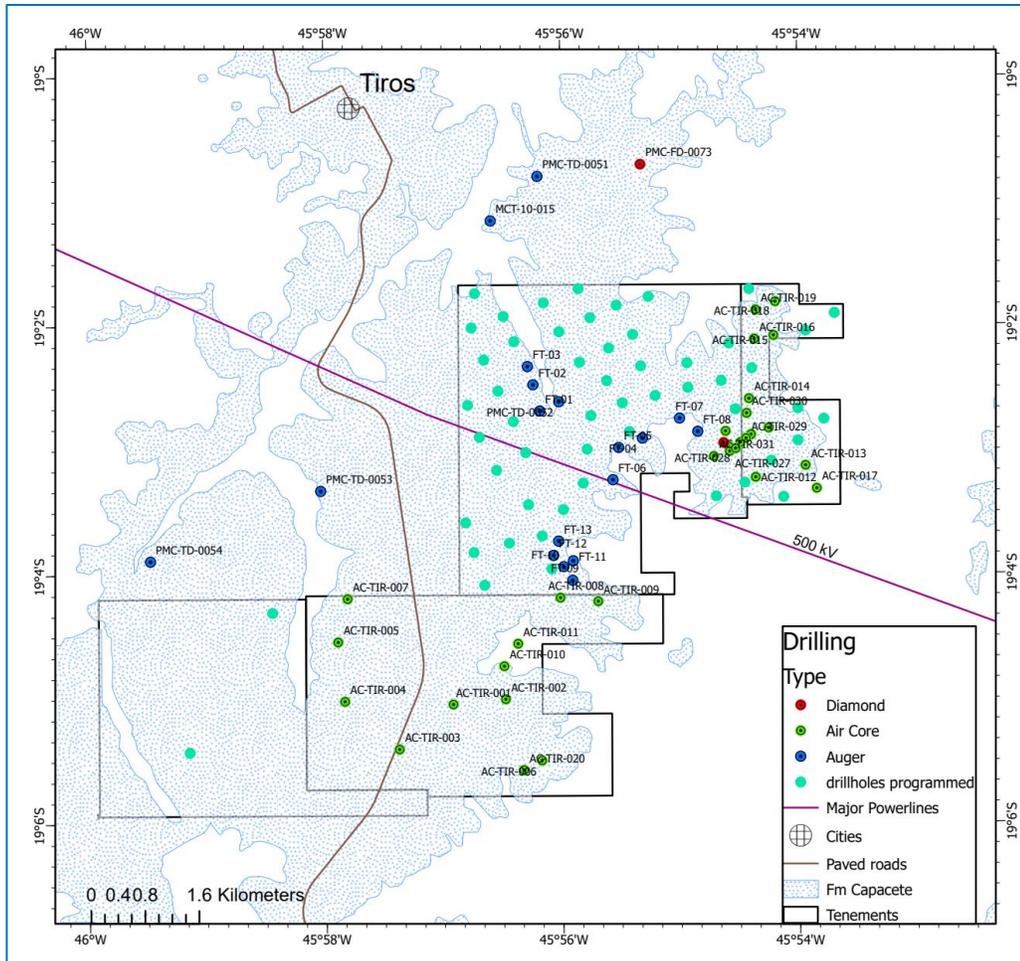


Figure 10-1, showing Auger, Diamond and air core drill hole locations in the Tiros Central exploration target area

10.1 Auger Drilling

Totalling to date 263.50m in 25 auger drill holes of 4 inches in diameter, with the depth of the holes varied from 6 to 15 m. Drilling followed a standard operating procedure for the auger equipment and was drilled to maximum physical depth of the rig. The auger drill holes from FT-01 to FT-14 are located in the Tiros Central exploration target area and the auger drill holes from FT-15 to FT-25 are located in the Tiros North exploration target area.

The auger results received are summarized in Table 10-2 showing the resource contains high levels of titanium dioxide and high levels of rare earth elements consistent with the historical drilling. The Auger drilling was limited in depth and in all cases did not penetrate to the base of the Capacete formation and the holes were stopped in mineralised material. The notable intervals have been calculated using a combined cut-off of 6% TiO₂ and 1000 ppm TREO to define the nominal mineralisation and then a cut-off of 16% TiO₂ and 6000 ppm TREO for the high-grade intercepts. Internal dilution was set at one metre, but very rarely there were more than one interval per drill hole. The same calculation was applied to the air core and diamond holes.

Table 10-2 Results of the Resouro Auger drill campaign.

HoleID	X	Y	Z	AZIMUTH	DIP	Interval FROM	Interval TO	Average TREO ppm	Average TiO ₂ %
FT-01	401470.1	7893949	1002.723	0	90	0	6	4,189	20.56
FT-02	401368.3	7894337	997.0978	0	90	0	11	5,253	15.26
FT-03	401286	7894607	997.0582	0	90	0	6	4,058	15.03
FT-04	402991	7893548	1027.228	0	90	3	15	6,699	20.41
including						6	14	8,287	24.08
FT-05	402639.2	7893409	1018.939	0	90	2	9	3,455	10.92
FT-07	403540.6	7893845	944.0546	0	90	0	2	3,610	10.82
FT-09	401958.9	7891441	1039.084	0	90	3	11	5,768	16.03
including						5	9	7,952	22.22
FT-10	401827.6	7891643	1001.096	0	90	7	10	3,143	8.76
FT-11	401967.7	7891730	1033.299	0	90	0	10.5	7,181	10.47
including						6	10.5	8,619	9.43
FT-14	404435.9	7911032	1040.91	0	90	12	15	662	9.37
FT-15	404013.3	7911081	1034.5	0	90	3	16	1,846	9.92
FT-16	403803.7	7911334	988.3385	0	90	0	13	1,546	7.2
FT-18	405538.3	7910684	1022.839	0	90	2	9	2,508	7.66
FT-19	405670.3	7910407	1021.412	0	90	0	11	4,131	8.78
FT-20	405796.2	7910196	1037.287	0	90	6	7	223	6.14
FT-21	404814.6	7914113	892.66	0	90	0	2	1,882	4.65
FT-23	404683.3	7915151	912.154	0	90	0	11	5,155	14.03
including						7	11	9,087	21.47
FT-24	404434.8	7915040	916.733	0	90	0	15	3,885	13.01
FT-25	406423.4	7915087	1012.846	0	90	0	12	8,150	21.26
including						2	12	8,710	22.89

10.2 Air Core Drilling

The air core drilling campaign consisted of forty (40) drill holes, totalling 2,190 metres. The air core drill holes were of 100 mm in diameter and were drilled with depths varying from 40 m to 85 m. The drill holes AC-TIR-21 to AC-TIR-38, and AC-TIR-51 to AC-TIR-60 were located in the Tiros Central exploration target, the drill holes AC-TIR-39 to AC-TIR-44 were located in Tiros Norte and the holes AC-TIR-45 to AC-TIR-50 were located in the São Gotardo exploration targets. The air core holes could be drilled deeper than the auger holes and hence were programmed to reach the hard conglomerate basement, which was easily identified by the drilling team as well as the field geologists.

Results from the air core holes, which are summarized in Table 10-3 show that the Capacete formation continues to contain high levels of titanium consistent with historical drilling and the results returned from the auger holes drilled by RBM. Results also indicated the occurrence of a high-grade zone in the upper horizons of the Capacete formation which is consistent with that known from historical exploration. The results of the air core program indicated the geological interpretation, and the method of exploration applied are appropriate.

Table 10-3 Results of the Resouro air core drill campaign.

HoleID	X	Y	Z	AZIMUTH	DIP	Interval FROM	Interval TO	Average TREO ppm	Average TiO ₂ %
ACTIR-21	404224	7893656	1050	0	90	31	43	4,976	12.95
ACTIR-22	404273	7893424	1053	0	90	24	58	4,356	10.91
ACTIR-23	404863	7893710	1051	0	90	29	57	4,585	12.99
including						35	39	9,366	24.17
ACTIR-24	404686	7893661	1064	0	90	40	78	6,443	19.33
including						43	53	10,703	31.07
including						71	78	5,930	20.4
ACTIR-25	404596	7893609	1054	0	90	28	59	4,815	13.41
including						31	39	7,577	21.41
ACTIR-26	404440	7893490	1054	0	90	30	83	4,616	14.05
including						32	40	8,530	25.08
ACTIR-27	404280	7893363	1057	0	90	30	46	4,456	15.85
including						39	43	8,676	23.49
ACTIR-28	404372	7893400	1035	0	90	23	80	3,739	13.44
including						26	36	6,290	24.38
ACTIR-29	404527	7893553	1055	0	90	30	74	5,036	14.11
including						35	43	9,862	23.24

HoleID	X	Y	Z	AZIMUTH	DIP	Interval FROM	Interval TO	Average TREO ppm	Average TiO ₂ %
ACTIR-30	404534	7893922	1047	0	90	6	48	5,337	12.41
including						11	14	15,053	25.0
ACTIR-31	404050	7893281	1057	0	90	33	59	6,410	15.62
including						35	45	7,980	23.02
ACTIR-32	404899	7893225	1038	0	90	47	63	6,088	14.57
including						48	54	10,391	21.39
ACTIR-33	404876	7892647	1058	0	90	9	51	4,265	11.65
including						14	20	9,094	24.27
ACTIR-34	404677	7894603	1072	0	90	50	67	4,604	13.25
including						58	61	8,176	19.65
ACTIR-36	405143	7895114	1019	0	90	6	46	4,576	15.24
including						9	15	7,899	21.22
ACTIR-37	396320	7888840	1024	0	90	22	49	3,198	10.47
ACTIR-38	397552	7890890	1022	0	90	8	57	3,461	12.82
including						17	20	6,886	22.07
ACTIR-39	405672	7910407	992	0	90	0	29	3,890	9.31
ACTIR-40	406571	7914075	1039	0	90	42	51	4,345	11.75
ACTIR-41	422780	7919369	910	0	90	3	13	5,185	14.94
including						7	11	9,254	19.84
ACTIR-42	423471	7921116	959	0	90	13	37	5,010	16.65
ACTIR-43	407349	7914551	1054	0	90	43	53	7,484	17.69
including						47	53	9,713	22.28
ACTIR-44	404871.44	7913032.94	991.23	0	90	26	45	5,070	16.77
including						30	36	7,332	22.83
ACTIR-45	385650	7867098	1161	0	90	45	55	4,883	14.54
including						52	55	7,403	20.5
ACTIR-46	386029	7868243	1109	0	90	41	56	4,223	13.19
ACTIR-48	380630	7860388	1125	0	90	24	41	4,746	11.6
ACTIR-49	378409	7859778	1108	0	90	0	45	5,194	17.66
ACTIR-50	381569	7862210	1122	0	90	13	33	3,469	11.42
ACTIR-51	400978.99	7894228.67	1041.12	0	90	10	58	3,916	11.72
including						16	22	6,300	22.12
ACTIR-52	401404.57	7893869.34	1016.98	0	90	13	35	4,779	15.41
including						15	17	3,617	23.84

HoleID	X	Y	Z	AZIMUTH	DIP	Interval FROM	Interval TO	Average TREO ppm	Average TiO ₂ %
ACTIR-53	404866.00	7895660.85	1036.60	0	90	9	55	3,868	11.06
including						16	20	10,708	23.26
ACTIR-54	405173.34	7895510.04	1025.72	0	90	2	52	3,806	11.54
including						7	13	7,336	19.86
ACTIR-55	404108.47	7893973.10	1061.22	0	90	37	82	4,404	12.44
including						43	50	7,985	20.7
ACTIR-56	403165.59	7893421.16	1025.73	0	90	2	47	3,679	10.23
including						3	6	5,579	20.84
ACTIR-59	399230.80	7888587.13	1096.07	0	90	39	86	4,196	10.0
including						50	56	9,146	18.33
ACTIR-60	402842.09	7893714.00	1053.71	0	90	19	76	4,143	11.36
including						26	33	8,062	16.59

10.3 Diamond Drilling

The diamond drilling campaign comprises 33 holes, a total of 2319.6 metres, all 63.5 mm diameter core, and all of which were located on the Tiros Central exploration target. Drilling was undertaken following industry standard operating procedures for diamond drilling and was operated by an experienced drilling contractor.

Results from the diamond holes, which are summarized in Table 10-4 show that the Capacete formation continues to contain high levels of titanium oxide and REE mineralisation with a high-grade zone in the upper horizons. The results of the diamond drill program indicated that the geological interpretation and the method of exploration applied are appropriate.

Table 10-4 Results of the Resouro diamond drilling campaign.

HoleID	X	Y	Z	AZIMUTH	DIP	Interval FROM	Interval TO	Average TREO ppm	Average TiO ₂ %
FDTIR-01	402326	7891121	1032	0	90	10	52.7	4,566	12.99
including						15.4	21.4	10,028	25.93
FDTIR-02	404643	7895024	1033	0	90	29	61.55	4,097	10.89
including						34	39	7,146	20.83
FDTIR-03	405585	7892798	1019	0	90	0	31.9	5,737	13.35
including						3	11	9,412	26.21
FDTIR-04	401235	7888631	1052	0	90	13	33	4,979	13.99
including						21	26	9,093	21.72
FDTIR-05	404499	7892925	1051	0	90	19	31.9	5,512	16.73
including						26	31.9	9,660	20.55
FDTIR-06	405286	7893524	1067	0	90	35	49	4,926	13.69
including						36	41	7,260	22.16
FDTIR-07	404023	7892769	1032	0	90	12	18.45	5,442	10.47
FDTIR-08	404389	7895655	1013	0	90	15	71	4,305	11.21
including						21	28	9,055	21.15
FDTIR-09	404241	7894354	1055	0	90	39	91	4,793	14.11
including						50	58	7,868	26.25
FDTIR-10	405722	7893594	1004	0	90	0	6	1,709.93	5.76
FDTIR-11	403611	7894297	1016	0	90	36	54.4	4,957	13.09
including						42	46	10,264	25.43
FDTIR-12	403171	7894171	1075	0	90	44	63.8	6,789	16.11
including						52	58	12,937	27.23
FDTIR-13	402835	7893707	1083	0	90	19	79	4,046	12
including						24	35	7,744	19.26
FDTIR-14	402214	7893320	1011	0	90	22	50.15	5,519	16.14
including						31	39	10,721	25.42

FDTIR-15	401701	7891530	1084	0	90	44	99	3,881	12.15
including						49	62	6,504	21.11
FDTIR-16	400647	7891313	1083	0	90	38	90	4,630	11.29
including						45	51	8,268	21.86
FDTIR-17	403000	7894552	1016	0	90	43	91.75	4,850	12.6
including						50	63	8,008	18.79
FDTIR-18	402097	7892865	995	0	90	13	64	5,110	14.85
including						18	33	8,158	17.66
FDTIR-19	403646	7894678	1019	0	90	12	77	4,034	11.36
including						18	24	8,199	25.1
FDTIR-20	401854.3	7892576	1022.353	0	90	17	67.25	4,062	12.23
including						26	31	9,417	24.96
FDTIR-21	401529.6	7892109	1081.161	0	90	30	56.35	4,537	12.34
including						38	43	8,239	19.84
FDTIR-22	400875.1	7892132	1060.115	0	90	19	76.6	4,719	11.55
including						30	38	10,338	23
FDTIR-23	400417.7	7894027	1078.243	0	90	43	89	4,392	11.66
including						49	52	10,890	23.1
FDTIR-24	402529.7	7895492	1027.86	0	90	45	67.35	5,021	9.79
including						49	53	7,623	17.1
FDTIR-25	402866.4	7895082	1074.264	0	90	46	68.15	5,597	12.65
including						53	58	9,746	19.77
FDTIR-26	403018.5	7895562	1049.157	0	90	18	67	5,150	15.98
including						26	31	8,819	22.25
including						40	43	5,245	18.8
including						48	56	5,712	20.26
FDTIR-27	400783.9	7893114	1071.786	0	90	28	88	3,319	10.65

including						38	42	9,064	21.76
FDTIR-28	401289.6	7892566	1013.581	0	90	11	69	4,130	12.2
including						20	26	7,479	21.44
FDTIR-29	401268.3	7893302	1035.779	0	90	27	83	4,933	14.04
including						29	34	3,892	24.64
including						38	49	7,926	21.4
FDTIR-30	401265.9	7891706	1086.316	0	90	41	107	3,632	10.19
including						54	60	8,096	21.24
FDTIR-31	400407.4	7892785	1023.207	0	90	36	94	3,886	11.24
including						44	50	8,426	21.8
FDTIR-32	400499.7	7891745	1084.46	0	90	34	98.05	4,054	12.38
including						44	48	8,854	22.9
FDTIR-33	400464	7892327	1077.839	0	90	38	94	3,654	10.79
including						48	53	9,422	23.35

Table 10-4 Results of the Resouro diamond drill campaign.

11.0 SAMPLE PREPARATION, ANALYSIS AND SECURITY

This section reviews all known sample preparation, analysis and security as it relates to current exploration work completed on the Project by Resouro Strategic Metals Inc. (2023-2024 drilling program). The review of sample preparation, analysis and security with respect to historical exploration work completed by previous operators/owners is reviewed in Section 6.0 History.

The material extracted from the Auger holes were logged and sampled, collating information such as lithology, oxidation, color, and presence of fragments, and recorded them every 1 m. The material being captured every metre down the hole was bagged and labeled for sample preparation in the Resouro workshop. All of the material extracted was prepared for sample analysis, no material was left remaining. The samples in the Resouro workshop were weighed, dried, manually crushed, re-weighed, and sent for analysis at the SGS Geosol laboratory in Belo Horizonte, which is the closest accredited laboratory. The chemical analyses of the samples sent to the laboratory followed industry standard procedures, which included, weighing, drying, screening, sorting, splitting, attrition, and analysis via ICP.

The chips recovered from the aircore holes were logged and sampled on a 1 metre basis. The geological parameters, such as lithology, oxidation, color and presence of fragments were all recorded, and the material prepared for samples in the Resouro workshop. Samples were then sent for chemical analysis to the SGS Geosol laboratory in Belo Horizonte.

The diamond drill cores recovered from the diamond drill campaign, were boxed and measured on site and then brought to the Resouro workshop for logging and sampling. The drill cores had excellent recoveries of close to 100%, and were logged and sampled on one metre intervals, adjusting to prominent geological contacts when present. The drill cores were split, using a knife and the geological parameters such as lithology, oxidation, color and presence of fragments were recorded. One quarter of the core was prepared for sampling and while three quarters remained in the core box for reference. The samples, in the Resouro warehouse were weighed, dried, manually crushed, split into 2kg samples and re-weighed before being sent to the SGS Geosol laboratory for analytical analysis.

SGS completed sample preparation for laboratory analysis and includes weighing on receipt, drying, two crushing stages, splitting and pulverization to reach a final aliquot of 250g at -150# granulometry. Chemical analysis is then completed using the ICP OES/MS analytical method, which consists of the determination of 48 elements by fusion with lithium metaborate.

It is the opinion of QP Simon Mortimer, that the procedures, policies and protocols surrounding the capture and verification of drilling information are sufficient and appropriate and that the assay methods used are consistent with good exploration and operational practices such that the data is reliable for the purpose of mineral resource estimation. Furthermore, the QP is of the opinion that the assay data is adequate for the purpose of estimating a mineral resource (see Section 14), and for the purpose of the Report (see Section 2.1).

11.1 Analytical Sampling

Samples were prepared and assayed at SGS GEOSOL (SGS) accredited laboratory.

The TiO₂ was analyzed by fusing the sample material with lithium metaborate followed by subsequent analysis via ICPAES, if the assay returned a value greater than the upper detection limit then it would be reanalysed with final determination via XRF. Rare Earth Elements were analyzed through fusion with lithium metaborate followed by assay determination via ICPMS. Base metals and other elements were determined by the ICPMS.

Detection limits and reporting styles for all elements at SGS are summarized in Table 11-2.

For statistical purposes within the Report, any analytical result that was reported to be less than the lower limit of detection (“LLD”) was set to one half of that detection limit (e.g., a result reported as <0.5 was set to a numeric value of 0.25). Result reported to be greater than maximum value reportable, and where no corresponding over limit analysis was performed, were set to that maximum value (e.g., a result reported as >25.0 was set to a numeric value of 26).

Table 11-2. Lower Limit of Detection for elements measured and as reported by SGS.

Element	Lab Method	LLD	Unit	Element	Lab Method	LLD	Unit	Element	Lab Method	LLD	Unit
Al ₂ O ₃	ICP95A	0.01	%	Cu	IMS95A	5	ppm	W	IMS95A	0.1	ppm
Ba	ICP95A	10	ppm	Dy	IMS95A	0.05	ppm	Yb	IMS95A	0.1	ppm
CaO	ICP95A	0.01	%	Er	IMS95A	0.05	ppm	Ta	IMS95A	0.5	ppm
Cr ₂ O ₃	ICP95A	0.01	%	Eu	IMS95A	0.05	ppm	Y	IMS95A	0.5	ppm
Fe ₂ O ₃	ICP95A	0.01	%	Ga	IMS95A	0.1	ppm	Y	IMS95A	0.05	ppm
K ₂ O	ICP95A	0.01	%	Gd	IMS95A	0.05	ppm	Yb ₂	IMS95A	0.1	ppm
LOI	ICP95A	-45	%	Hf	IMS95A	0.05	ppm	LOI	PHY01E	-45	%
MgO	ICP95A	0.01	%	Ho	IMS95A	0.05	ppm	Al ₂ O ₃	XRF79C	0.01	%
MnO	ICP95A	0.01	%	La	IMS95A	0.01	ppm	CaO	XRF79C	0.01	%
Na ₂ O	ICP95A	0.01	%	Lu	IMS95A	0.05	ppm	Fe ₂ O ₃	XRF79C	0.01	%
Nb	ICP95A	10	ppm	Mo	IMS95A	2	ppm	K ₂ O	XRF79C	0.01	%
P ₂ O ₅	ICP95A	0.01	%	Nb	IMS95A	0.05	ppm	MgO	XRF79C	0.01	%
SiO ₂	ICP95A	0.01	%	Nd	IMS95A	0.01	ppm	MnO	XRF79C	0.01	%
Sr	ICP95A	10	ppm	Ni	IMS95A	5	ppm	Na ₂ O	XRF79C	0.01	%
Sum	ICP95A	0.01	%	Pr	IMS95A	0.05	ppm	P ₂ O ₅	XRF79C	0.01	%
TiO ₂	ICP95A	0.01	%	Rb	IMS95A	0.2	ppm	SiO ₂	XRF79C	0.1	%
V	ICP95A	3	ppm	Sm	IMS95A	0.1	ppm	TiO ₂	XRF79C	0.01	%
Y	ICP95A	10	ppm	Sn	IMS95A	0.3	ppm				
Zn	ICP95A	5	ppm	Ta	IMS95A	0.05	ppm				
Zr	ICP95A	10	ppm	Tb	IMS95A	0.05	ppm				
V	ICP95A	5	ppm	Th	IMS95A	0.1	ppm				
Ce	IMS95A	0.1	ppm	Tl	IMS95A	0.5	ppm				
Co	IMS95A	0.5	ppm	Tm	IMS95A	0.05	ppm				
Cs	IMS95A	0.05	ppm	U	IMS95A	0.05	ppm				

11.2 QA/QC Control Samples

A total of 3268 core samples were submitted for analysis by Resouro Strategic Metals Inc. from the 2023-2024 drilling campaign. This included 439 samples (13.4%) which were for QA/QC purposes; this rate of

QA/QC sample submission is slightly lower than the generally accepted rate for QA/QC control samples (approximately 15%); however, the rate of sample insertion is considered by the QP (Simon Mortimer) to be adequate for the purposes of the Report (see Section 2.1).

The QAQC program consists of an insertion of two blanks, two field duplicates, and three standards per fifty (50) samples, totaling 14% of the samples. Five (5) different CRMs were inserted into the sample stream, standards GRE-01, GRE-04, ITAK 705, PMC-BK-004, PMC-BK-005 (see Section 11.2.1), which are commercial standards prepared by Geostats PTY LTD, ITAK, and Intertek Brazil, respectively. They come in individual, sealed pouches, and their weights vary from 10 to 60 grams depending on the control samples chosen. The blanks were manufactured by Instituto de tecnologia August Kekule and made from a quartz, granite and limestone matrix.

High-grade and low-grade standards or certified reference material (CRM) were manufactured by Intertek from kamafugites of the Patos Formation, which is very similar to the conglomerate of the Capacete Formation.

In total Resouro Strategic Metals Inc. introduced 150 samples of blank material and 214 samples of standards into the sample stream.

11.2.1 Certified Reference Material (CRM)

Certified reference materials were used by Resouro to monitor the accuracy of the analyses performed by SGS. A number of different reference materials for different combinations of elements were used during the course of the analytical work being reported on herein (Tables 11-3 to 11-7; Figures 11-1 to 11-24).

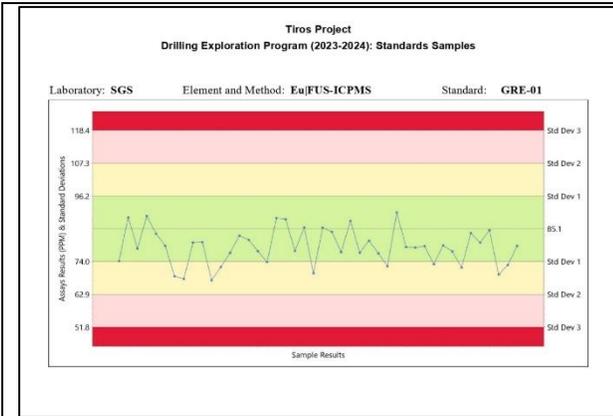
11.2.1.1 Certified Reference Material – GRE-01

The reference material GRE-01 is a Rare Earth Element QA/QC standard with the predicted assay values as described in table 11-3. This sample has been prepared by Geostats Pty Ltd from Australia, manufactured from a carbonatite in Tanzania. This certified reference material was tested in a dedicated certification program, where ten (10) samples were sent to five (5) laboratories for analyses. Assay distributions were checked and processed statistically, producing monitoring statistics for this standard.

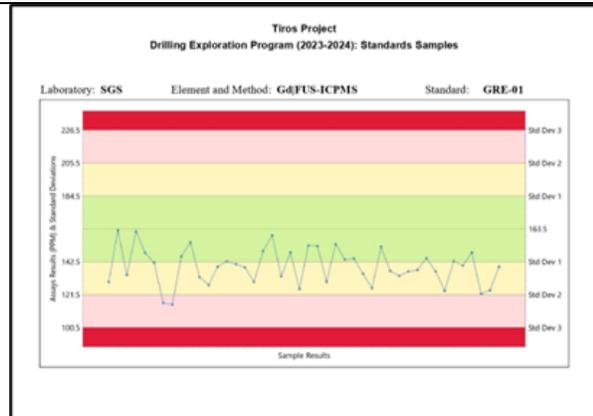
Table 11-3. CRM GRE-01 Values.

GRE-01		
Element	Certified Mean	1 Std Dev (between lab)
Ce	12960	322
Dy	20.86	1.72
Er	5.16	2.72
Eu	85.1	11.1
Gd	163.5	21
Ho	2.13	0.19
La	8246	179
Lu	0.36	0.11
Nb	1669.8	58.8
Nd	4278	118
Pr	1273.2	84
Sm	422.2	23.2
Ta	14.1	0.91
Tb	9.98	2.3
Tm	0.397	0.059
Y	49.81	5.36
Yb	2.42	0.47

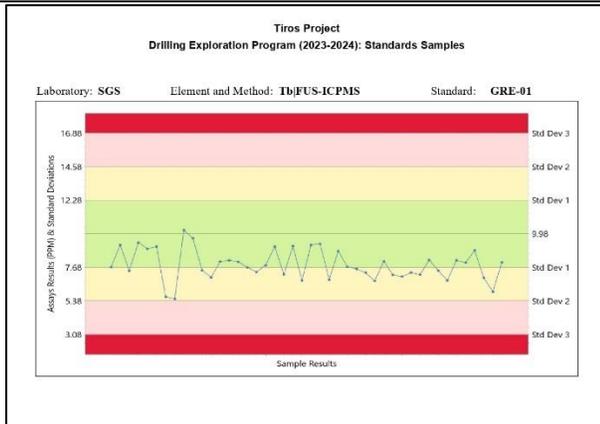
The analytical results returned by SGS Geosol for the heavy rare earth elements of Europium (Eu), Gadolinium (Gd), Terbium (Tb), dysprosium (Dy), Holmium (Ho), Erbium (Er), Thulium (Tm), Ytterbium (Yb), Lutetium (Lu), and Yttrium (Y) are detailed in figure 11-1.



Europium (Eu) assay results, considering a mean and standard deviation as detailed in table 11-3



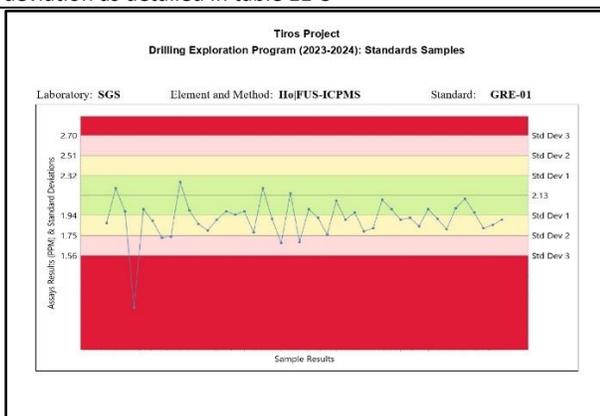
Gadolinium (Gd) assay results considering a mean and standard deviation as detailed in table 11-3



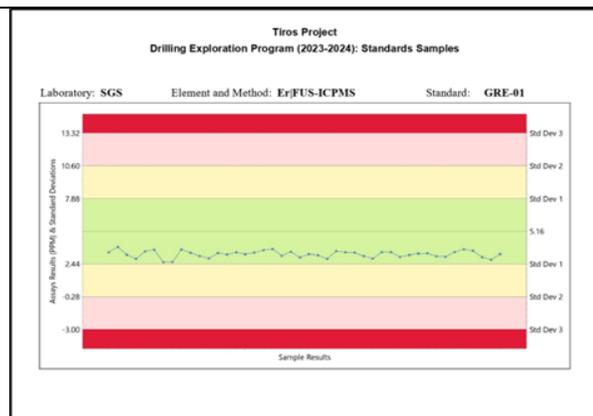
Terbium (Tb) assay results, considering a mean and standard deviation as detailed in table 11-3



Dysprosium (Dy) assay results, considering a mean and standard deviation as detailed in table 11-3



Holmium (Ho) assay results, considering a mean and standard deviation as detailed in table 11-3



Erbium (Er) assay results, considering a mean and standard deviation as detailed in table 11-3

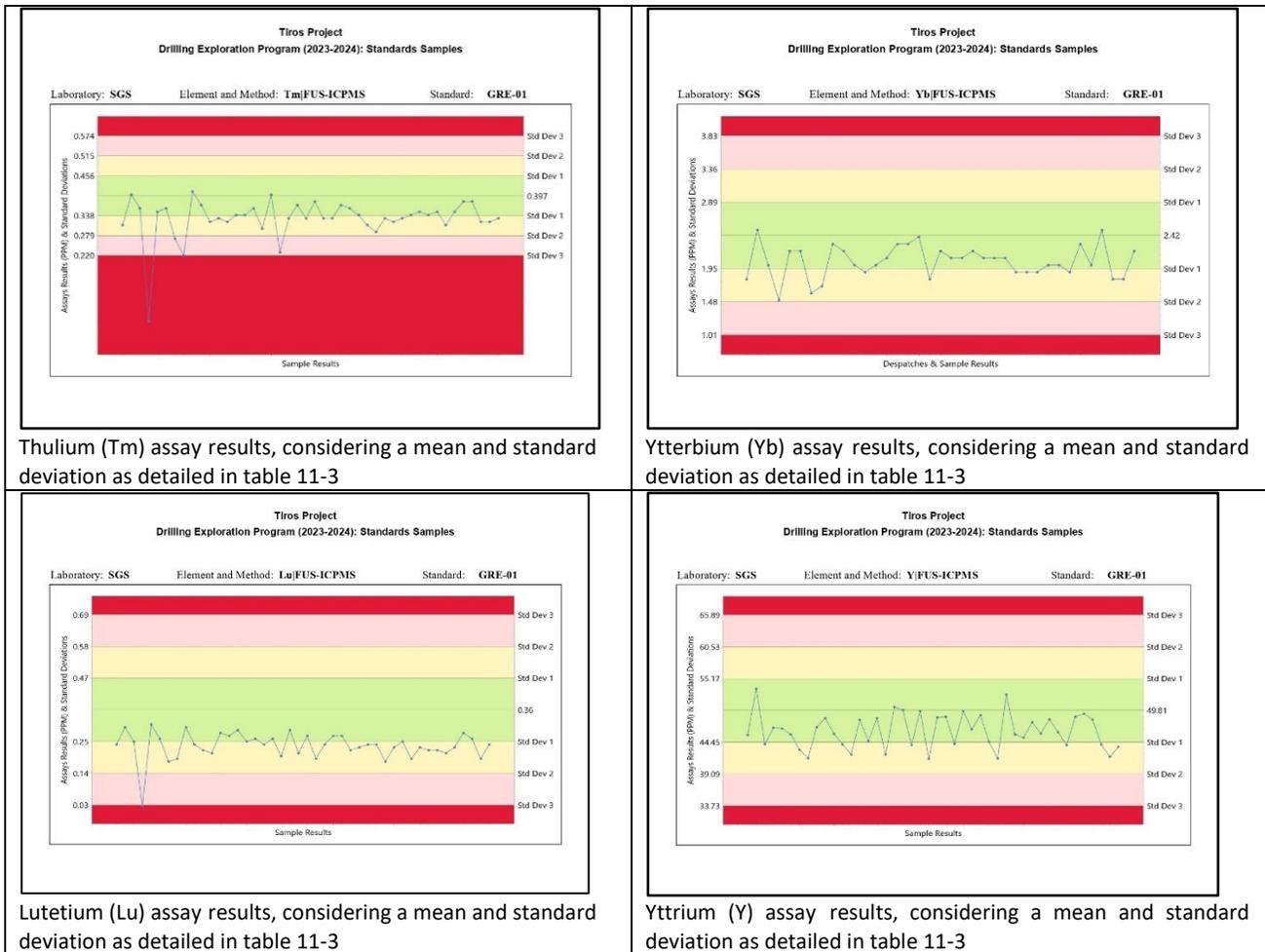


Figure 11-1. Showing the assays results returned by SGS Geosol for the GRE-01 certified reference material standard, detailing the heavy rare earth elements of Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu and Y, reporting the assay values against their respective mean and standard deviation as reported by the CRM manufacturer.

It is observed that, in general, the analyses for the CRM’s of the heavy REE’s averaged within three standard deviations of the certified concentrations over the span of the laboratory work, which is acceptable. However, a bias can be observed throughout the dataset and across most of the HREE’s, except for Dysprosium (Dy) and Yttrium (Y), with the mean of the returned assay values for the GRE-01 reference material being approximately 0.8 standard deviations below the expected value. More work is required to determine if this observation is correct and consistent in the assay determination to understand if any adjustment factors should be applied to the resource calculation. However, if this bias is accepted as being valid and the CRM from which the assays were returned are considered to be of good standing, then the effect of these HREE’s being under-evaluated would only potentially increase the TREO grade by 0.3%; (1000ppm would become 1003ppm, which is a difference that is way below the margin of error considered in reporting the resource figures).

One sample appears to have returned an anomalously low value for both Lutetium and Thulium, but this appears to be isolated and will not affect the overall statistics.

The analytical results returned by SGS Geosol for the light rare earth elements of Lanthanum (La), Cerium (Ce), praseodymium (Pr), Neodymium (Nd), and Samarium (Sm) are detailed in figure 11-2.

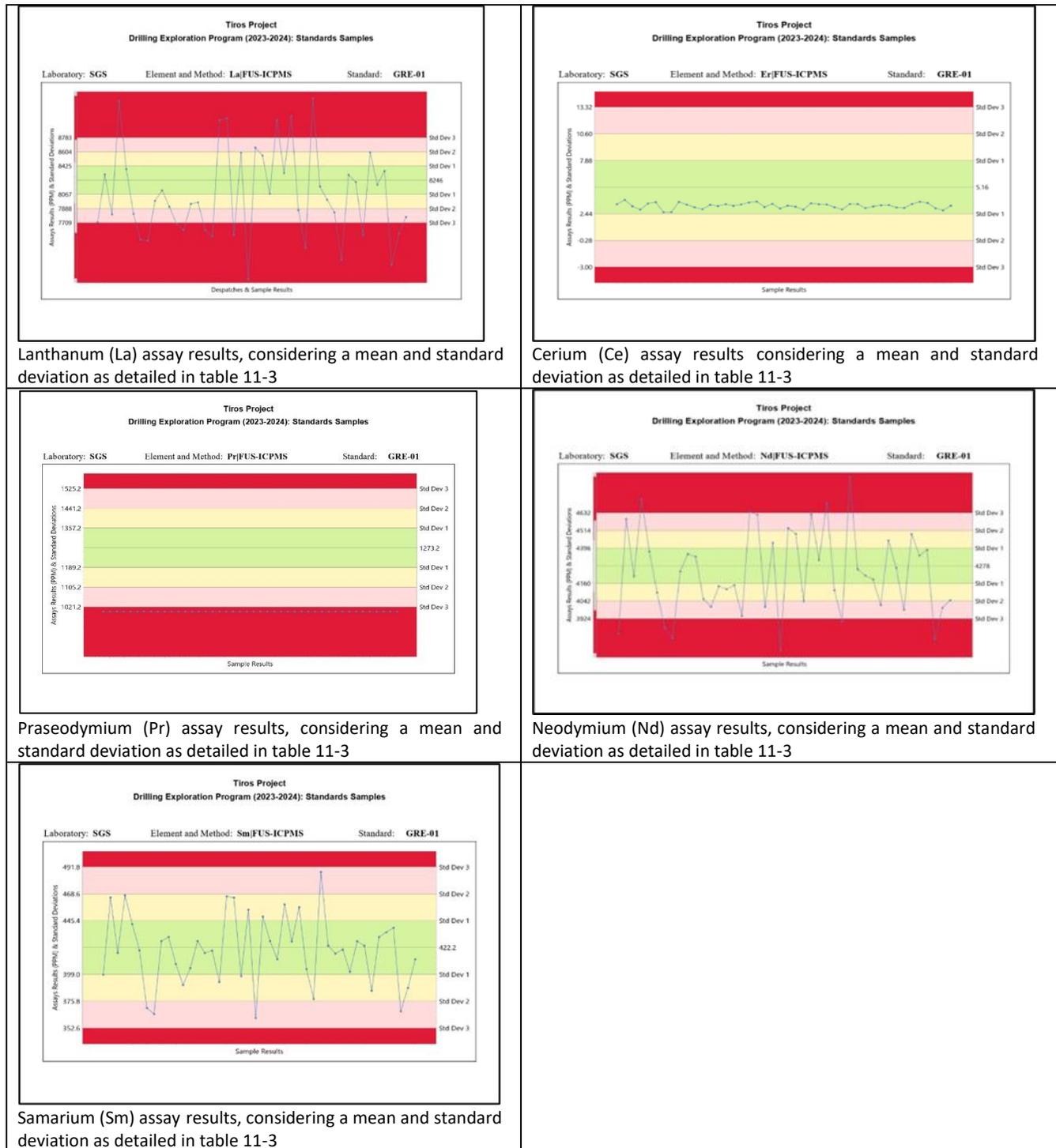


Figure 11-2 showing the assays results returned by SGS Geosol for the GRE-01 certified reference material standard, detailing the light rare earth elements of La, Ce, Pr, Nd, and Sm, reporting the assay values against their respective mean and standard deviation as reported by the CRM manufacturer.

It is observed that, in general, the analyses for the CRM's of the light REE's averaged within three standard deviations of the certified concentrations over the span of the laboratory work, however both Lanthanum and Neodymium observe quite erratic variations against the known values of the reference material. The values for Praseodymium (Pr) and Cerium (Ce) have returned constant assay value as the predicted CRM values for these elements were over the detection limit for the analytical method used at SGS. These elements will be better evaluated using the GRE-04 certified reference material.

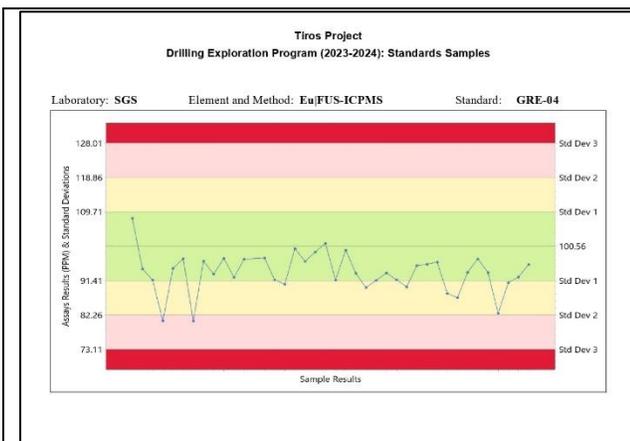
11.2.1.2 Certified Reference Material – GRE-04

The reference material GRE-04 is a Rare Earth Element QA/QC standard with the predicted assay values as described in table 11-4. This sample has been manufactured by Intertek from kamafugites of the Patos Formation, which is very similar to the conglomerate of the Capacete Formation.

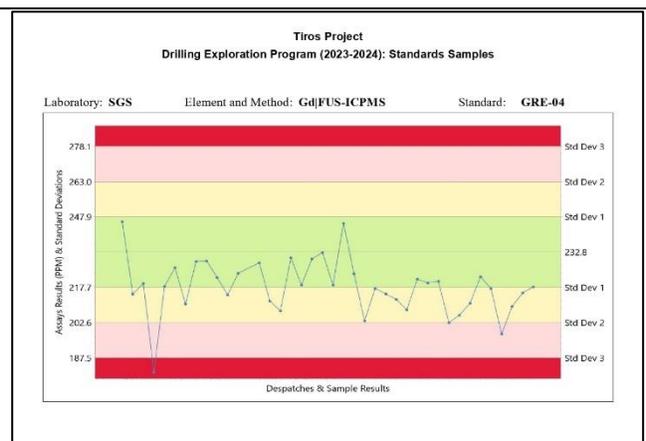
Table 11-4. CRM GRE-04 Values.

GRE-04		
Element	Certified Mean	1 Std Dev (between lab)
Ce	6127	146
Dy	96.52	6.77
Er	28.56	1.81
Eu	100.56	9.15
Gd	232.8	15.1
Ho	13.52	1.03
La	2735.5	53.2
Lu	1.76	0.2
Nb	3553	308
Nd	2702	133
Pr	721.1	46
Sm	390.4	18.7
Ta	122.1	14
Tb	24.45	1.61
Tm	3.01	0.21
Y	319.4	14.8
Yb	15.02	0.74

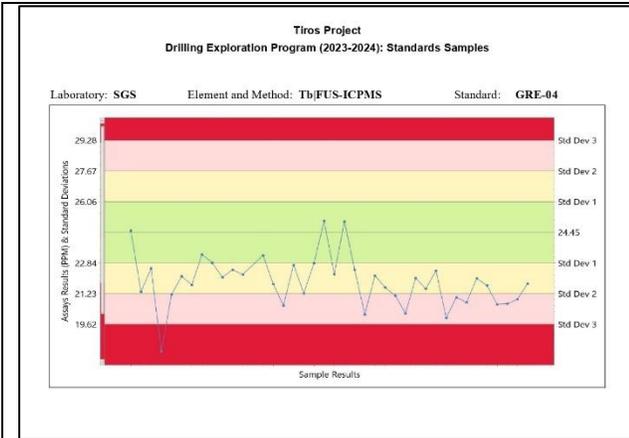
The analytical results returned by SGS Geosol for the heavy rare earth elements of Europium (Eu), Gadolinium (Gd), Terbium (Tb), dysprosium (Dy), Holmium (Ho), Erbium (Er), Thulium (Tm), Ytterbium (Yb), Lutetium (Lu), and Yttrium (Y) are detailed in figure 11-3.



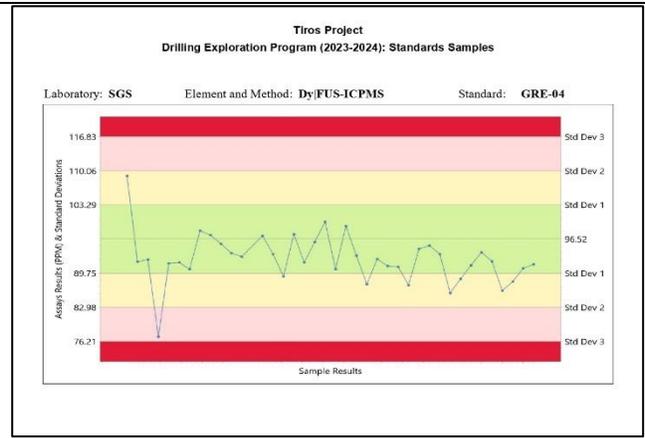
Europium (Eu) assay results, considering a mean and standard deviation as detailed in table 11-4



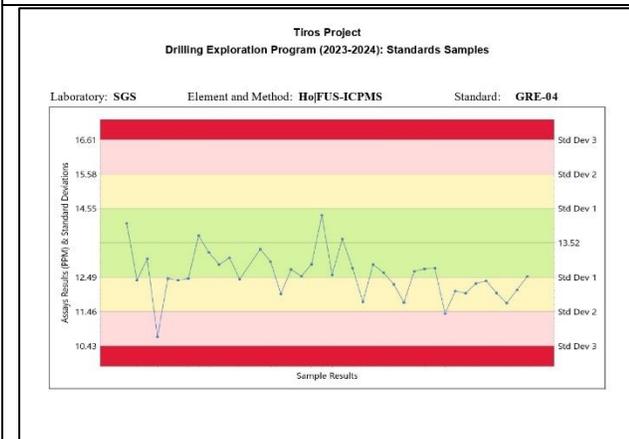
Gadolinium (Gd) assay results considering a mean and standard deviation as detailed in table 11-4



Terbium (Tb) assay results, considering a mean and standard deviation as detailed in table 11-4



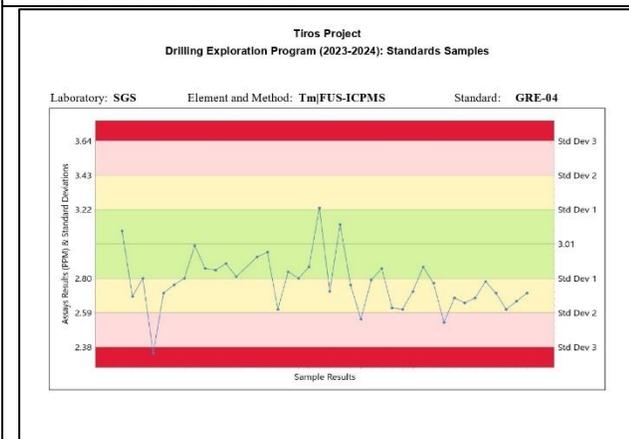
Dysprosium (Dy) assay results, considering a mean and standard deviation as detailed in table 11-4



Holmium (Ho) assay results, considering a mean and standard deviation as detailed in table 11-4



Erbium (Er) assay results, considering a mean and standard deviation as detailed in table 11-4



Thulium (Tm) assay results, considering a mean and standard deviation as detailed in table 11-4



Ytterbium (Yb) assay results, considering a mean and standard deviation as detailed in table 11-4

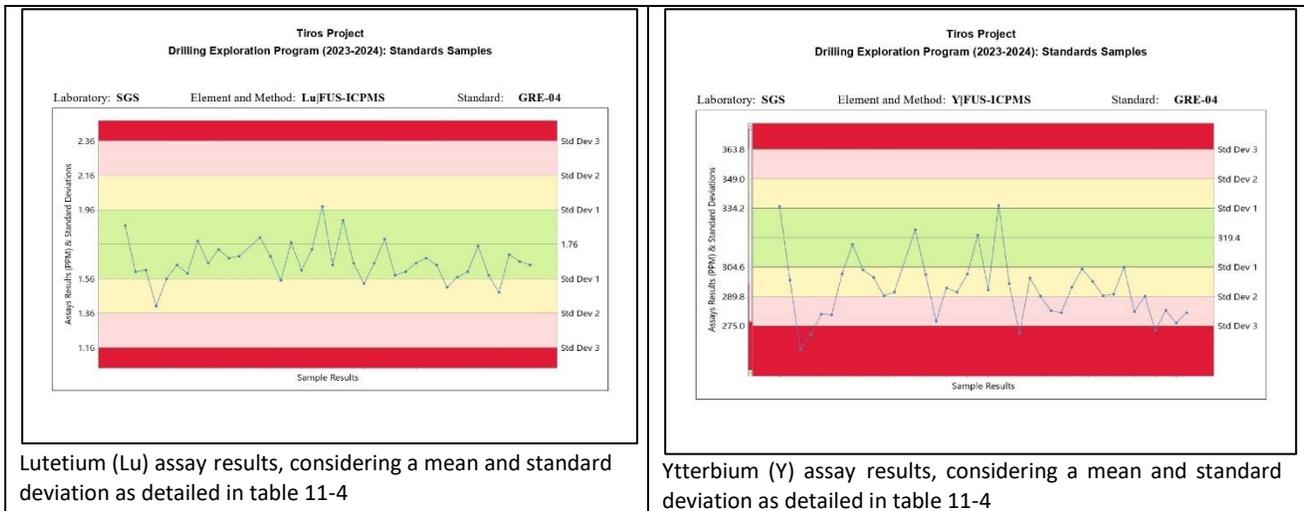
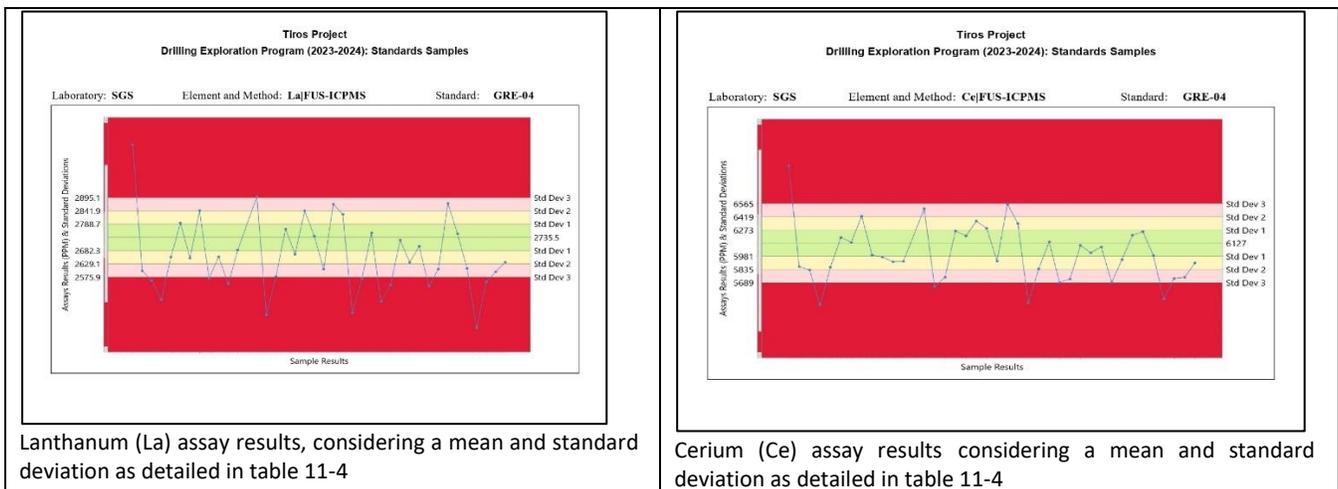


Figure 11-3. Showing the assays results returned by SGS Geosol for the GRE-04 certified reference material standard, detailing the heavy rare earth elements of Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu and Y, reporting the assay values against their respective mean and standard deviation as reported by the CRM manufacturer.

It is observed that, in general, the analyses for the CRM’s of the heavy REE’s averaged within three standard deviations of the certified concentrations over the span of the laboratory work, which is acceptable. However, the results are very similar to those of the GRE-01 certified reference material in that a minor bias can be observed, although this will not affect the estimated results. Similar to the GRE-01 CRM, more study is required on the analyses of these reference materials.

The analytical results returned by SGS Geosol for the light rare earth elements of Lanthanum (La), Cerium (Ce), praseodymium (Pr), Neodymium (Nd), and Samarium (Sm) are detailed in Figure 11-4.



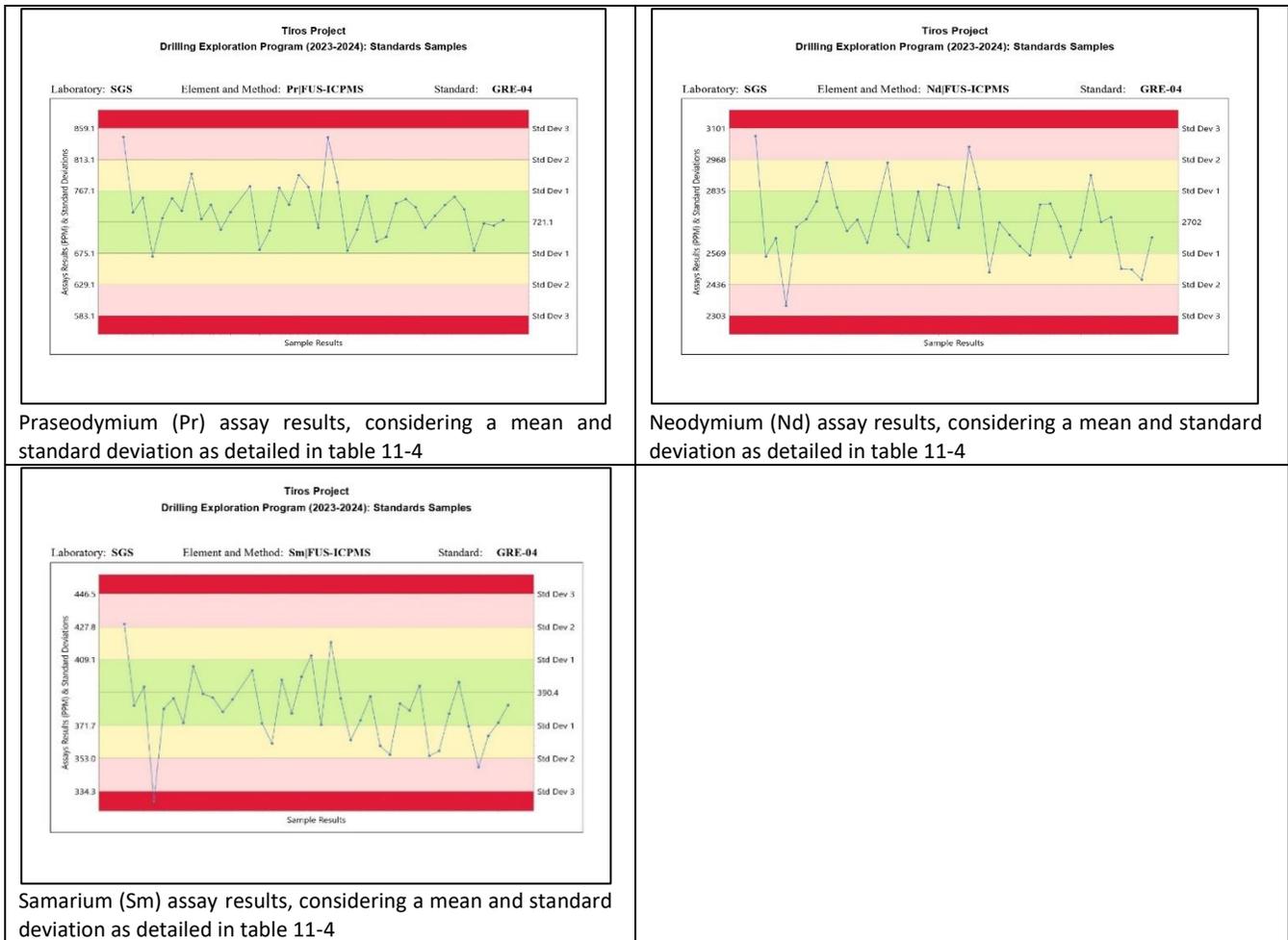


Figure 11-4 showing the assays results returned by SGS Geosol for the GRE-01 certified reference material standard, detailing the light rare earth elements of La, Ce, Tb, Pr, Nd, and Sm, reporting the assay values against their respective mean and standard deviation as reported by the CRM manufacturer.

It is observed that, in general, the analyses for the CRM’s of the light REE’s averaged within two standard deviations of the certified concentrations over the span of the laboratory work, however both Lanthanum and Neodymium observe quite erratic variations against the known values of the reference material.

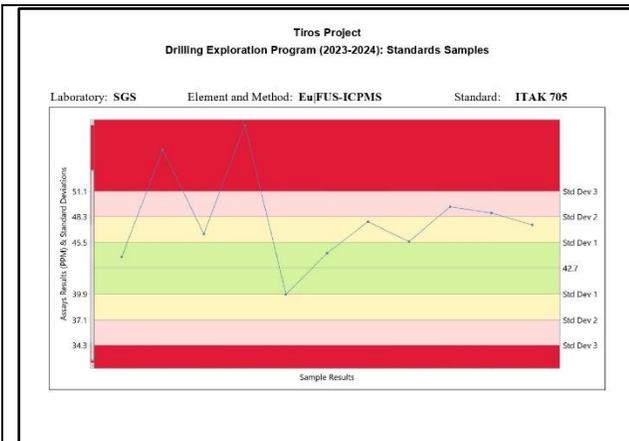
11.2.1.3 Certified Reference Material – ITAK 705

The reference material ITAK 705 is a Rare Earth Element QA/QC standard with the predicted assay values as described in table 11-4. This sample has been manufactured by ITAK, prepared from a sample of rare earth mineral donated by a rare earth mineral mining company from southeastern Brazil in 2017. The certified reference material is presented as a fine power. ITAK-705 was analyzed by six specialized laboratories. The statistical evaluation was carried out according to ISO GUIDE 35 and ISO 5725-2, using identification and treatment of outliers, stragglers and technically invalid data, certified value calculation, standard deviation calculation, and extended standard uncertainty calculation. The method used on the certification of ITAK-705 was acid digestion followed by determination by ICP-OES and ICP-MS.

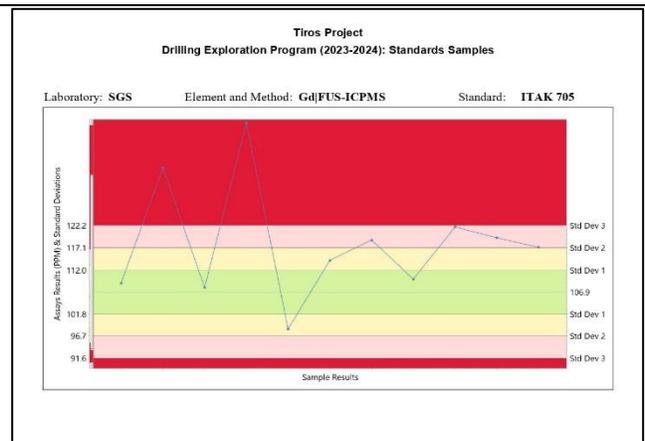
Table 11-5. CRM ITAK 705 Values.

ITAK 705		
Element	Certified Mean	1 Std Dev (between lab)
Ce	2013	172
Dy	51.3	4.8
Er	17.45	1.2
Eu	42.7	2.8
Gd	106.9	5.1
Ho	7.54	0.32
La	1245.1	40
Lu	1.29	0.23
Nd	1344	92
Pr	334	20
Sm	186	20
Th	88.8	4.9
Tm	1.9	0.17
U	11.79	0.47
Y	204.7	11
Yb	10.04	1.1

The analytical results returned by SGS Geosol for the heavy rare earth elements of Europium (Eu), Gadolinium (Gd), Terbium (Tb), dysprosium (Dy), Holmium (Ho), Erbium (Er), Thulium (Tm), Ytterbium (Yb), Lutetium (Lu), and Yttrium (Y) are detailed in figure 11-5.



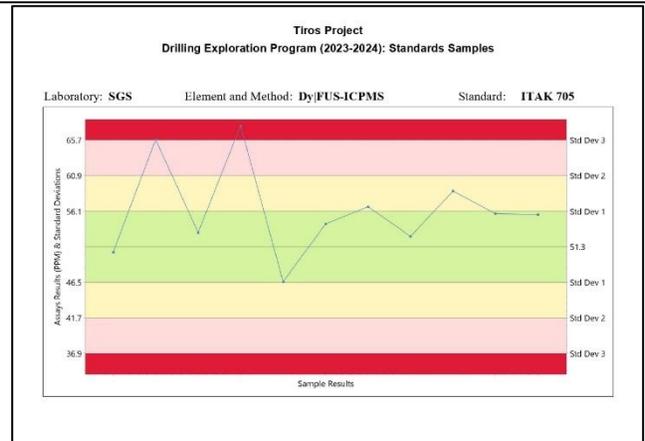
Europium (Eu) assay results, considering a mean and standard deviation as detailed in table 11-5



Gadolinium (Gd) assay results considering a mean and standard deviation as detailed in table 11-5



Holmium (Ho) assay results, considering a mean and standard deviation as detailed in table 11-5



Dysprosium (Dy) assay results, considering a mean and standard deviation as detailed in table 11-5

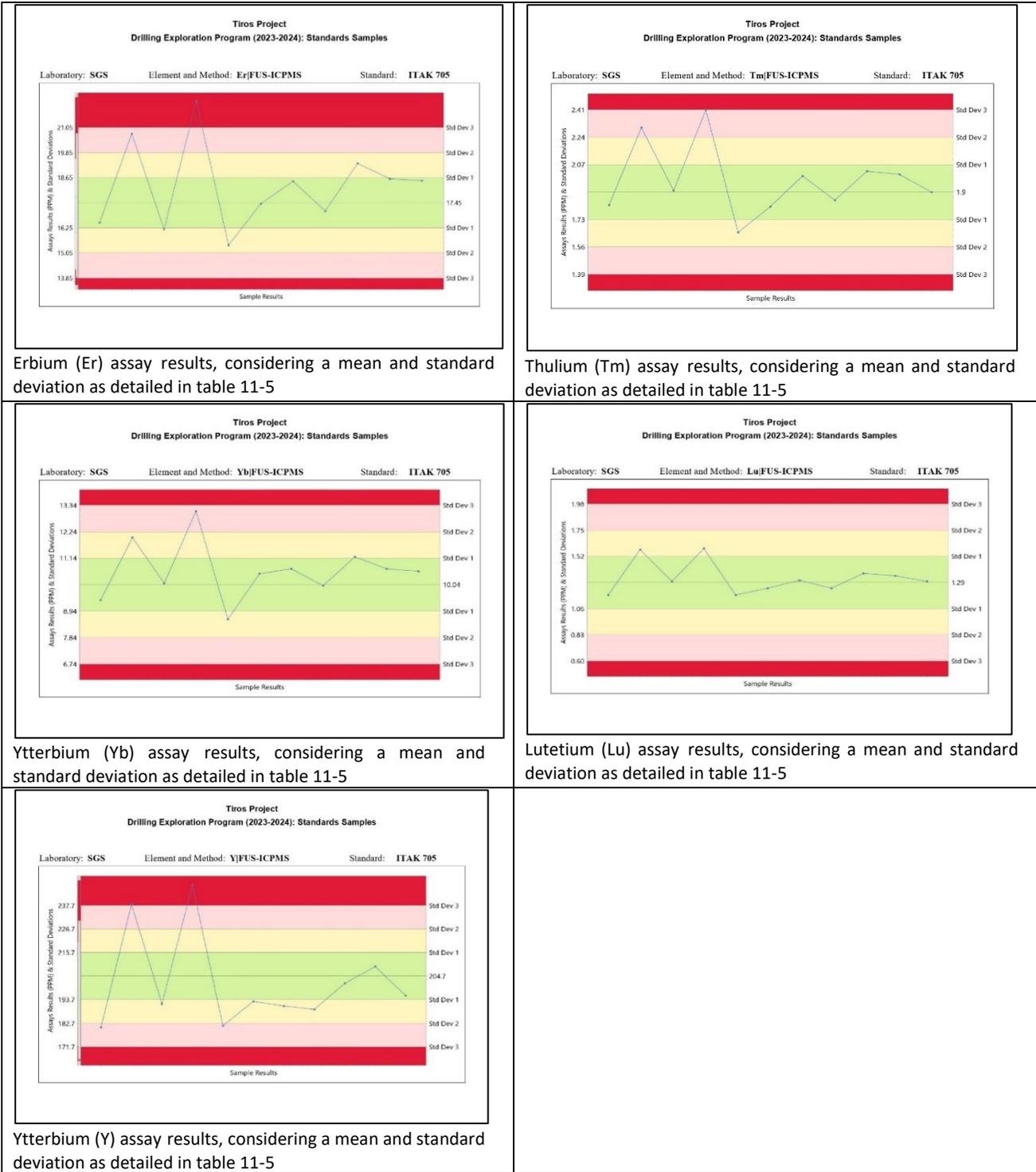
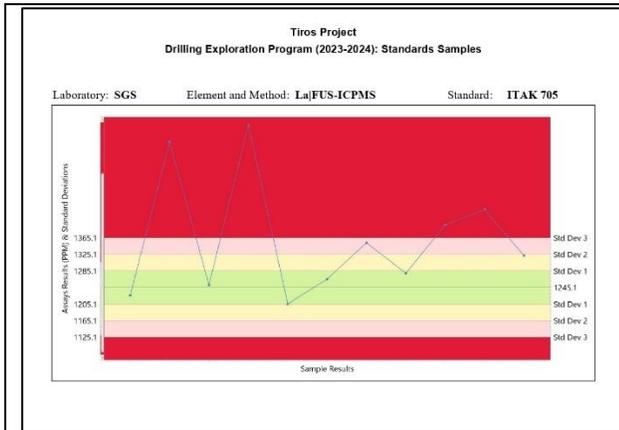


Figure 11-5 showing the assays results returned by SGS Geosol for the ITAK-705 certified reference material standard, detailing the heavy rare earth elements of Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu and Y, reporting the assay values against their respective mean and standard deviation as reported by the CRM manufacturer.

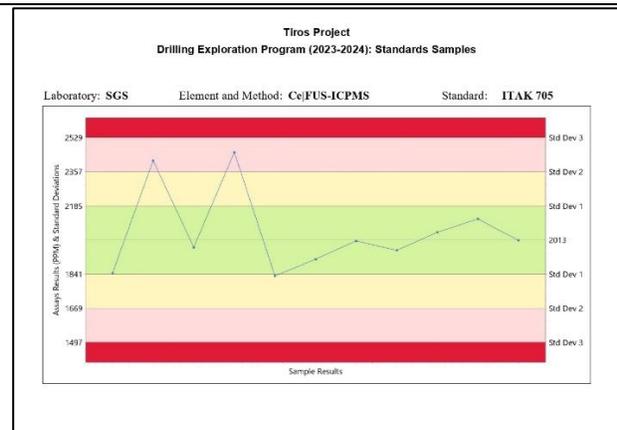
It is observed that, in general, the analyses for the CRM's of the heavy REE's averaged within two standard deviations of the certified concentrations over the span of the laboratory work, which is acceptable.

However, two samples appear to be anomalous, reporting values that are just over 3 standard deviations. At present there are only eleven (11) samples of the ITAK-705 CRM, more samples are required to give a more robust evaluation of the QAQC for this standard.

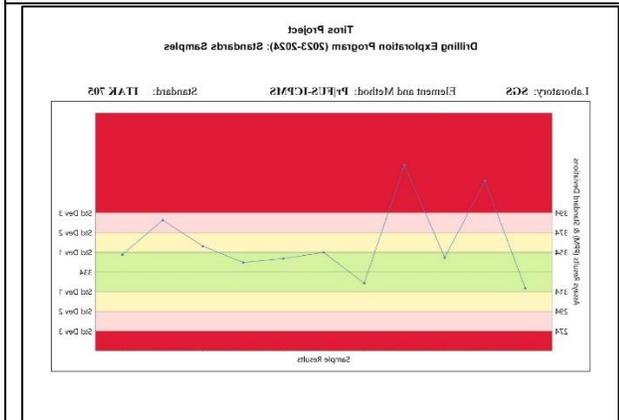
The analytical results returned by SGS Geosol for the light rare earth elements of Lanthanum (La), Cerium (Ce), praseodymium (Pr), Neodymium (Nd), and Samarium (Sm) are detailed in figure 11-6.



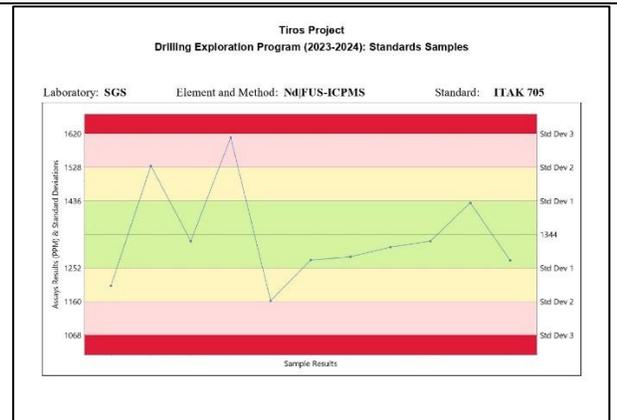
Lanthanum (La) assay results, considering a mean and standard deviation as detailed in table 11-5



Cerium (Ce) assay results considering a mean and standard deviation as detailed in table 11-5



Praseodymium (Pr) assay results, considering a mean and standard deviation as detailed in table 11-5



Neodymium (Nd) assay results, considering a mean and standard deviation as detailed in table 11-5

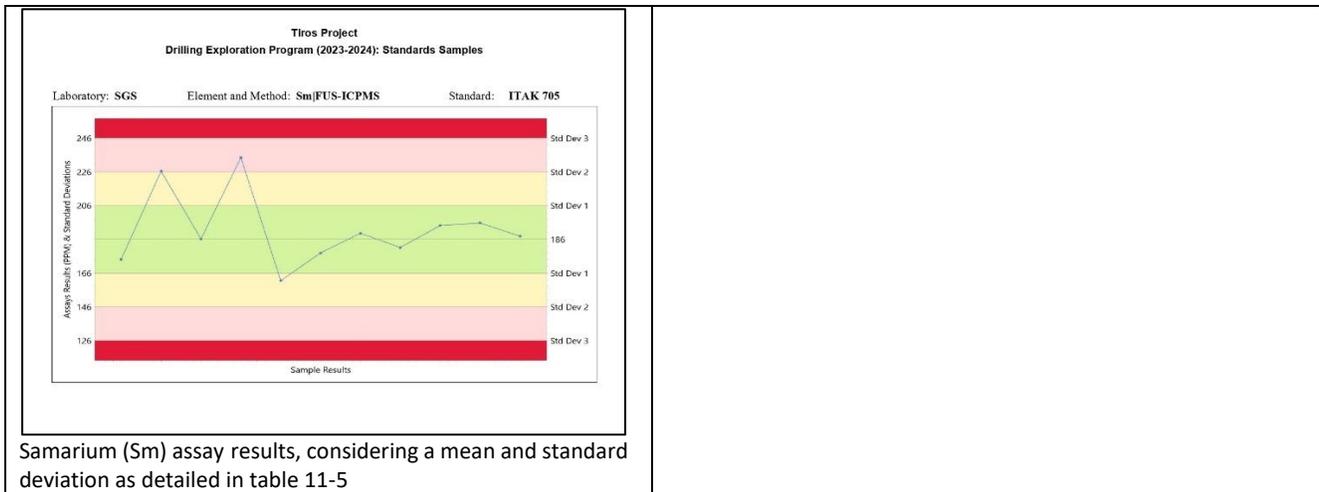


Figure 11-6. Showing the assays results returned by SGS Geosol for the ITAK-705 certified reference material standard, detailing the light rare earth elements of La, Ce, Pr, Nd, and Sm, reporting the assay values against their respective mean and standard deviation as reported by the CRM manufacturer.

It is observed that, in general, the analyses for the CRM’s of the light REE’s averaged within two standard deviations of the certified concentrations over the span of the laboratory work, however there are a couple of samples that are returning values up to 3 standard deviations above the expected assay value.

11.2.1.4 Certified Reference Material – PMC-BK-004 and PMC-BK-005

The reference material PMC-BK-004 and PMC-BK-005 are both major element oxide QA/QC standards with the predicted assay values as described in tables 11-6, and 11-7 respectively. These reference materials are being used to assess the analyses of TiO₂, with PMC-BK-004 as a lower-grade reference and the PMC-BK-005 as a higher-grade reference. These reference samples have been manufactured by Intertek, Brazil, prepared from a sample of kamafugite from the nearby Patos Formation, as commissioned by Vicenza, former owner of the Project. The certified reference material is presented as a fine power. PMC-BK-004 and PMC-BK-005 were analyzed by five specialized laboratories in Brazil, Peru and Australia. The method used on the certification of PMC-BK-004 and PMC-BK-005 was heat fusion followed by determination via XRF.

Table 11-6. CRM PMC-BK-004 Values.

PMC-BK-004		
Element	Certified Mean	1 Std Dev (between lab)
Al2O3	7.69	0.04
CaO	5.56	0.1
Fe2O3	21.08	0.2
K2O	2.69	0.02
MgO	7.66	0.11
MnO	0.28	0.03
Na2O	0.11	0.02
P2O5	2.64	0.03
SiO2	37.11	0.31
TiO2	7.82	0.1

Table 11-7. CRM PMC-BK-005 Values.

PMC-BK-005		
Element	Certified Mean	1 Std Dev (between lab)
Al2O3	11.05	0.18
CaO	3.72	0.04
Fe2O3	31.62	0.5
K2O	1.35	0.02
MgO	2.83	0.04
MnO	0.5	0.01
P2O5	4.97	0.07
SiO2	22.11	0.26
TiO2	11.95	0.16

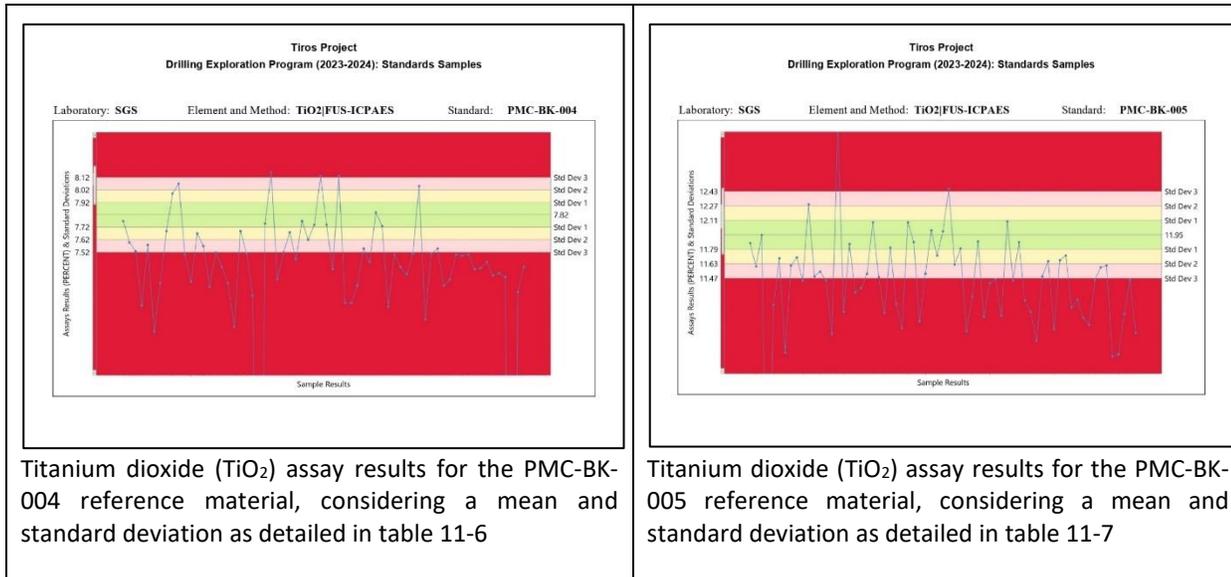


Figure 11-7. Showing the assays results returned by SGS Geosol for the PMC-BK-004 and PMC-BK-005 certified reference material standards, detailing the TiO₂ assay values against their respective mean and standard deviation as reported by the CRM manufacturer.

It is observed that, in general, the analyses for the CRM's of the titanium dioxide did not average within three standard deviations of the certified concentrations over the span of the laboratory work. The majority of the assays returned were more than three standard deviations below the values that they should have been according to the reference material.

Through conversations with Resouro the Author noted that the reference material inserted into the sample stream was over 11 years old. It is known that certain reference material can over time decrease slightly the concentration of certain metals and metal oxides, hence the results which were obtained from analysis of the PMC-BK-004 and PMC-BK-005 certified reference material by SGS Geosol could potentially be inaccurate.

The PMC-BK-004 and PMC-BK-005 certified reference material was defined to test assay analysis of P₂O₅, SiO₂, Fe₂O₃, MnO, CaO, MgO, K₂O, Na₂O, TiO₂, and Al₂O₃ with fusion preparation and determination via XRF. However, the assay method applied for analysis of TiO₂ is fusion preparation and determination via ICP, although analysis via ICP will give values similar to XRF, they will exhibit differences with respect to determining accuracy through the analysis of reference material.

Taking these two points into account the Author recognises that the PMC-BK-004 and PMC-BK-005 certified reference material should not be used to assure the accuracy of the titanium dioxide assay as completed by SGS Geosol. To better understand and qualify the accuracy of the TiO₂ analysis the QA/QC standards tested by SGS will need to be reviewed. The SGS Geosol laboratory, with the aim to improving their internal quality assurance insert standards, duplicates and blanks into the sample stream. This is a common practice in laboratories as it allows the lab to continually check their results against an

independent standard and adjust their analytical procedures if required. Figure 11-8 shows the Titanium dioxide (TiO₂) assay results returned by SGS Geosol for the OREAS461 reference material, which has a calculated mean of 3.07 and standard deviation of 0.094. It can be seen that the assay results for the assay of this certified reference material are within the expected range of 3 standard deviations with no bias.

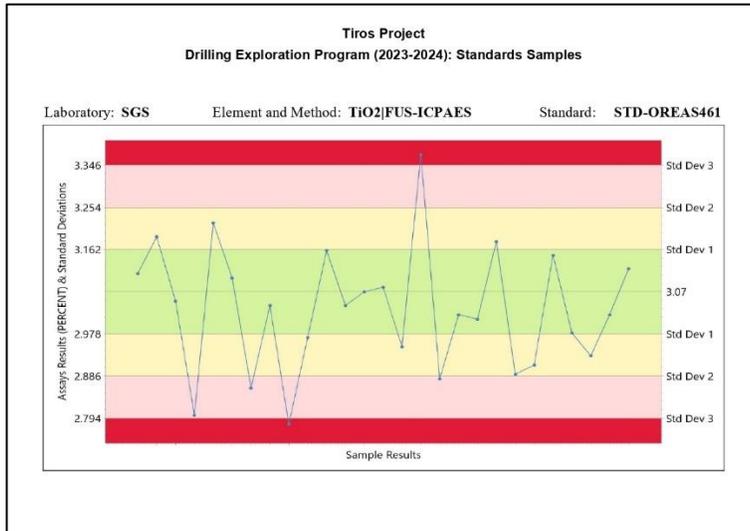
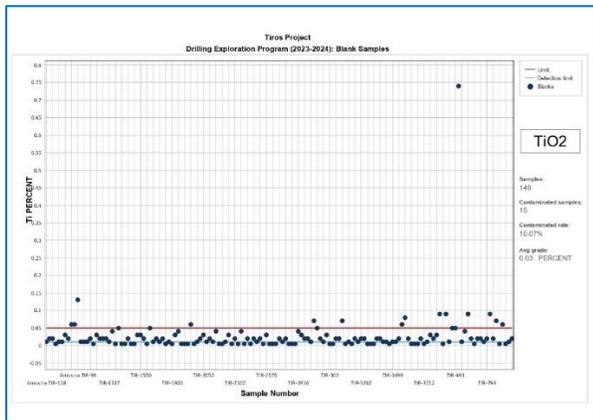


Figure 11-8, Titanium dioxide (TiO₂) assay results returned by SGS Geosol for the OREAS461 reference material

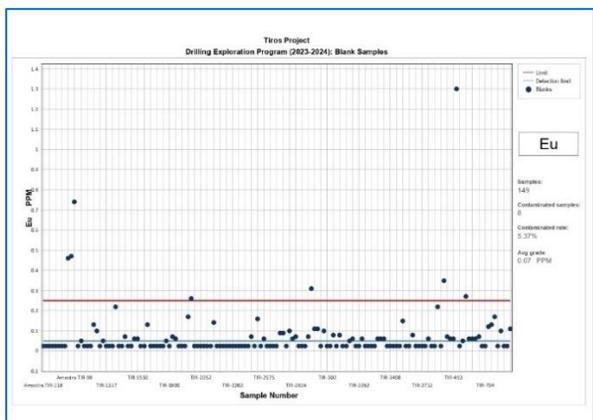
11.2.2 Blanks

For the 2023-2024 drilling campaign on the Tiros Project, blanks used were inserted into the sample stream to test for contamination across samples within the process of geochemical analysis at the SGS Geosol laboratory. The blanks are made from ground silica, prepared by Instituto de Tecnologia August Kekule and made from a quartz, granite and limestone matrix.

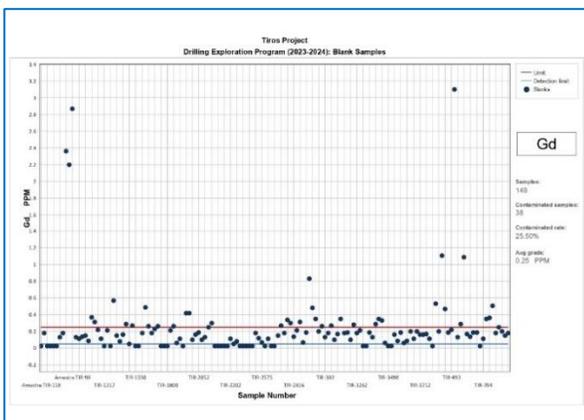
Data extracted from the analyses of the blanks is detailed in the graphs within figure 11-9. All the results are expected to be very close to the lower limit of detection. If the assay value returned was indicated as being less than the lower limit of detection the value was assigned as one-half the detection limit. An upper tolerance limit of five times the detection limit was set. The lower detection limits for all elements assayed by SGS Geosol can be seen in table 11-2. There were 150 data points (blanks) examined and the results detailed in Figure 11-9, displaying the assay values returned for TiO₂, the heavy rare earth elements (Europium (Eu), Gadolinium (Gd), Terbium (Tb), dysprosium (Dy), Holmium (Ho), Erbium (Er), Thulium (Tm), Ytterbium (Yb), Lutetium (Lu), and Yttrium (Y)) and the light rare earth elements (Lanthanum (La), Cerium (Ce), praseodymium (Pr), Neodymium (Nd), and Samarium (Sm))



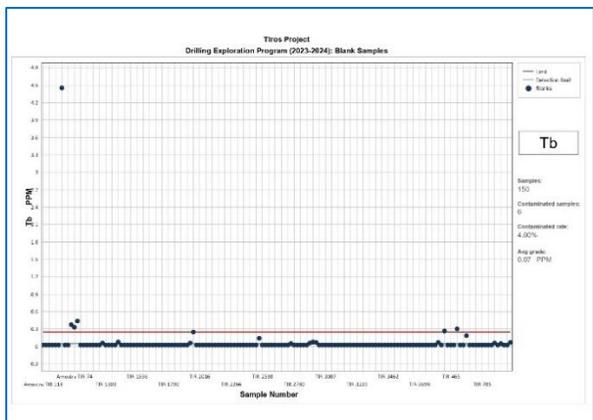
TiO2 results returned from the assays of the blanks



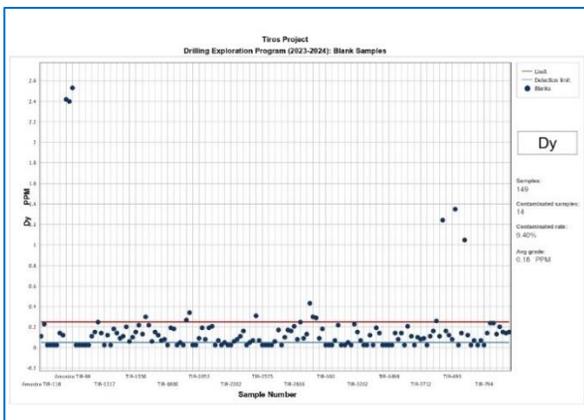
Eu results returned from the assays of the blanks



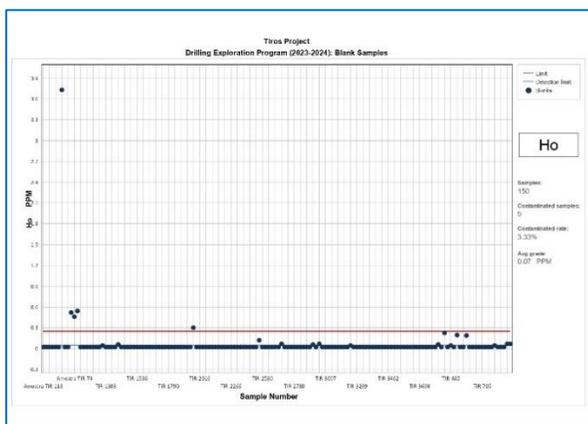
Gd results returned from the assays of the blanks



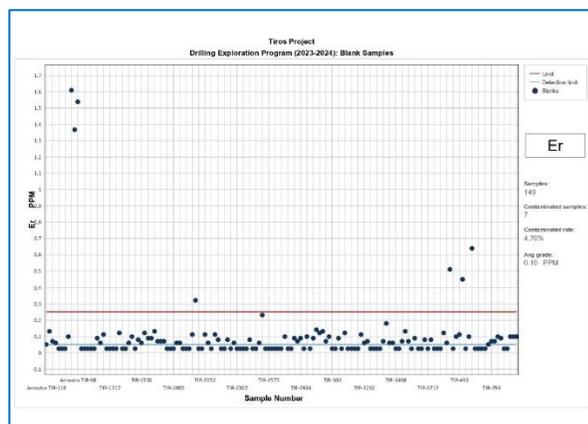
Tb results returned from the assays of the blanks



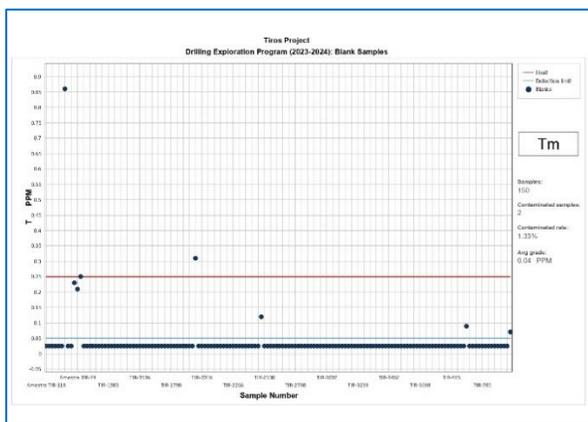
Dy results returned from the assays of the blanks



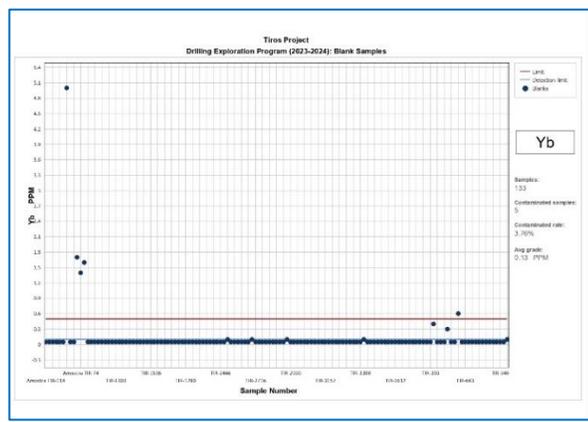
Ho results returned from the assays of the blanks



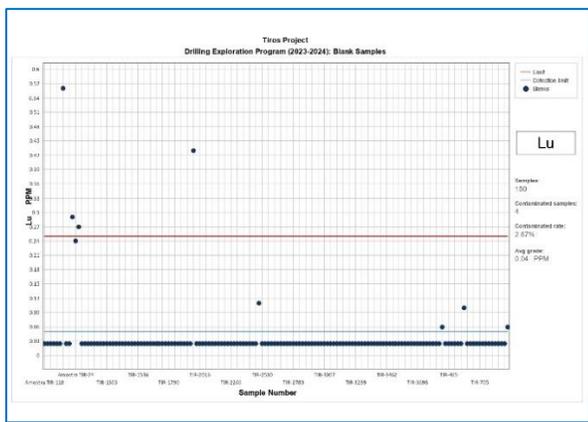
Er results returned from the assays of the blanks



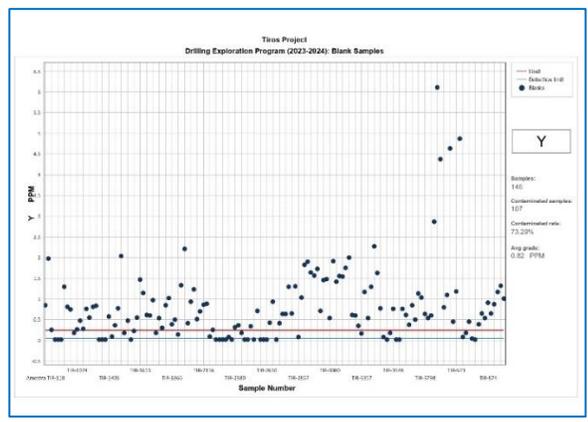
Tm results returned from the assays of the blanks



Yb results returned from the assays of the blanks



Lu results returned from the assays of the blanks



Y results returned from the assays of the blanks

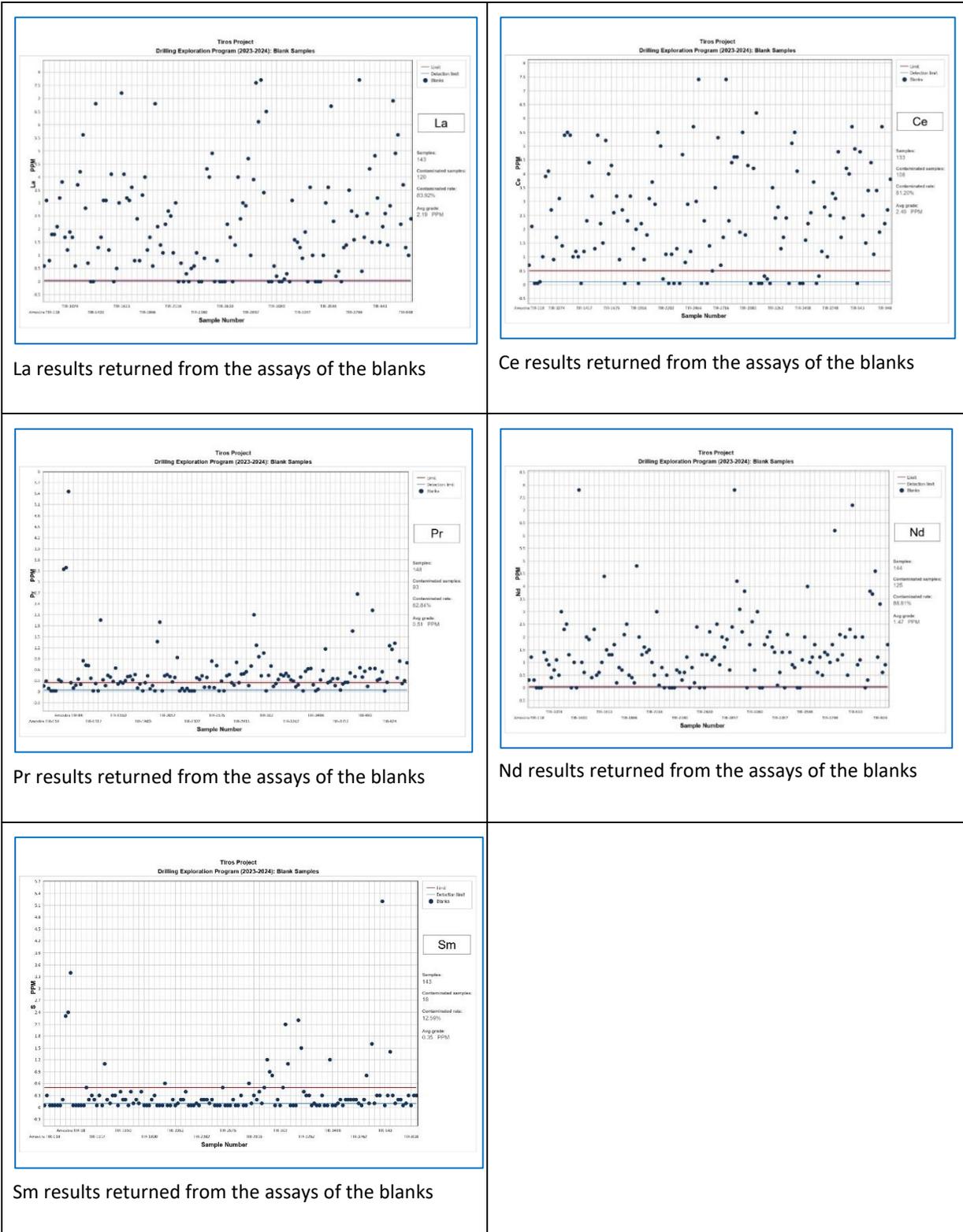


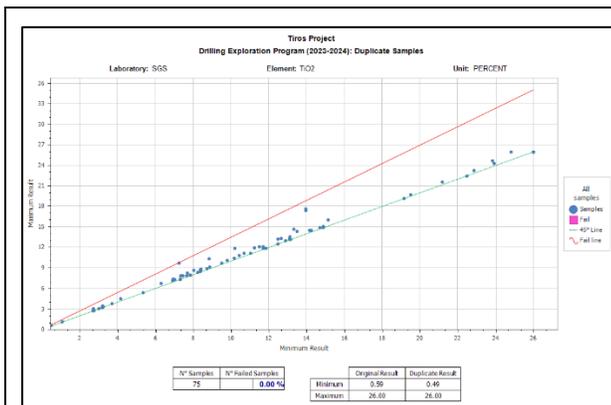
Figure 11-9 showing the assays results returned by SGS Geosol for the blanks, detailing the TiO2 assays, the heavy rare earth elements (Europium (Eu), Gadolinium (Gd), Terbium (Tb), dysprosium (Dy), Holmium (Ho), Erbium (Er),

Thulium (Tm), Ytterbium (Yb), Lutetium (Lu), and Yttrium (Y)) and the light rare earth elements (Lanthanum (La), Cerium (Ce), praseodymium (Pr), Neodymium (Nd), and Samarium (Sm))

The blanks analysed for TiO₂, and the heavy rare earth elements all returned values very close to the lower limit of detection, demonstrating that there has been no contamination between subsequent samples. The results returned for the majority of the light rare earth elements, (La, Ce, N, and to include Y) show values that are greater than a multiple of five (x5) times the lower detection limit. Although the analysis of blanks for these elements appears to show contamination, because this is isolated to these elements this feature is more a reflection in the confidence of determining the lower limit of detection.

11.2.3 Duplicates

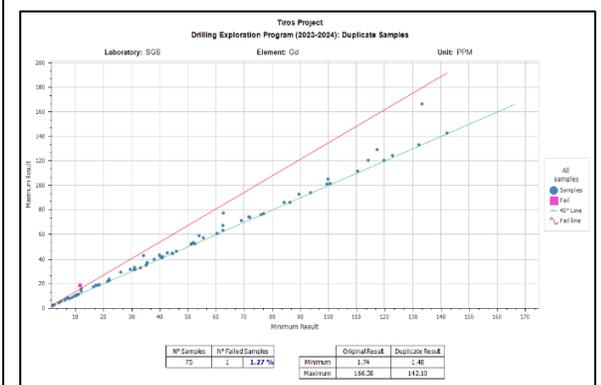
Precision is the ability to consistently reproduce measurements under conditions similar to the conditions under which the original measurements were made. An effective way to test this is to submit a series of duplicates into the sampling stream. A total of 75 field duplicates were analyzed, and the respective Max-Min graphs were prepared for the pairs of the analysis of TiO₂, the heavy rare earth elements (Europium (Eu), Gadolinium (Gd), Terbium (Tb), dysprosium (Dy), Holmium (Ho), Erbium (Er), Thulium (Tm), Ytterbium (Yb), Lutetium (Lu), and Yttrium (Y)) and the light rare earth elements (Lanthanum (La), Cerium (Ce), praseodymium (Pr), Neodymium (Nd), and Samarium (Sm)).



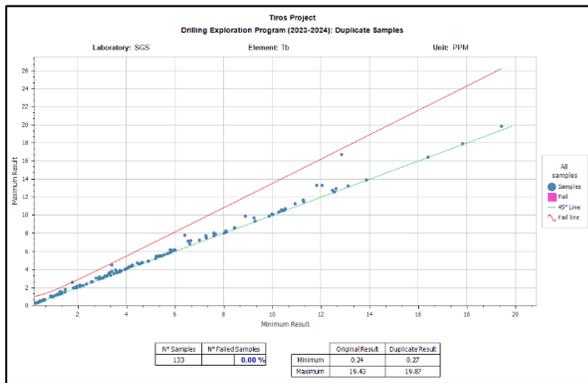
TiO₂ assay results for the duplicate pairs.



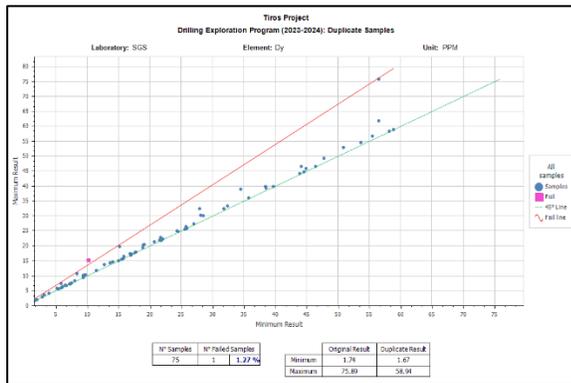
Eu assay results returned for the duplicate pairs



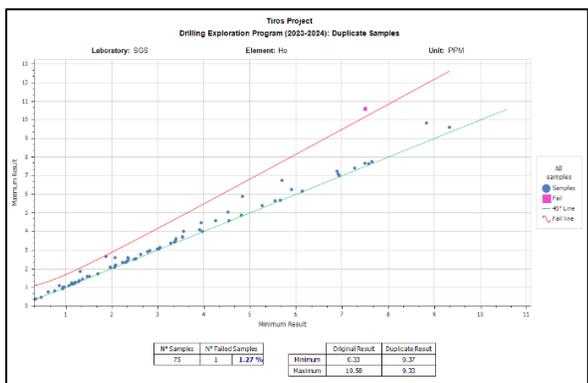
Gd assay results returned for the duplicate pairs



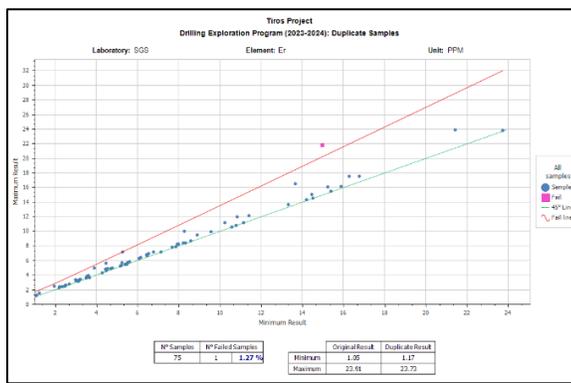
Tl assay results returned for the duplicate pairs



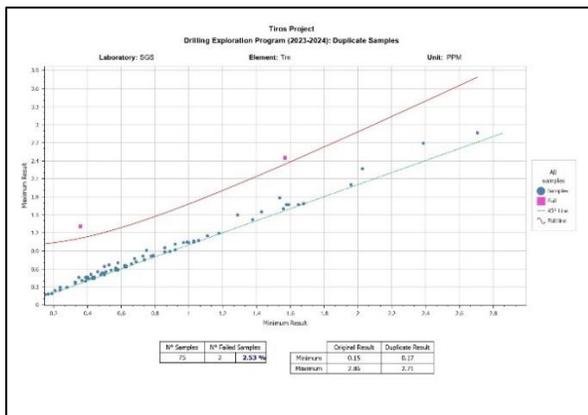
Dy assay results returned for the duplicate pairs



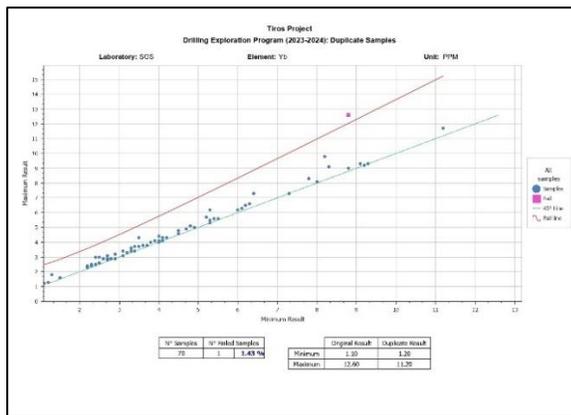
Ho assay results returned for the duplicate pairs



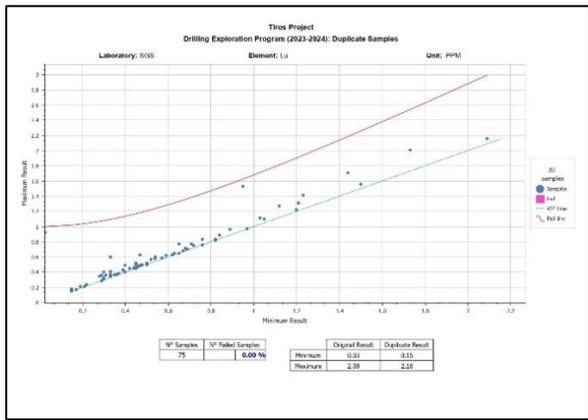
Er assay results returned for the duplicate pairs



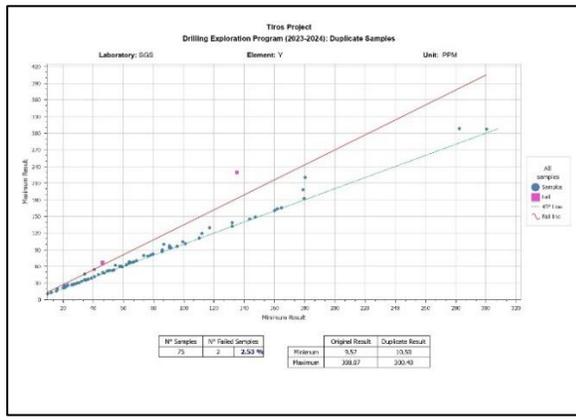
Tm assay results returned for the duplicate pairs



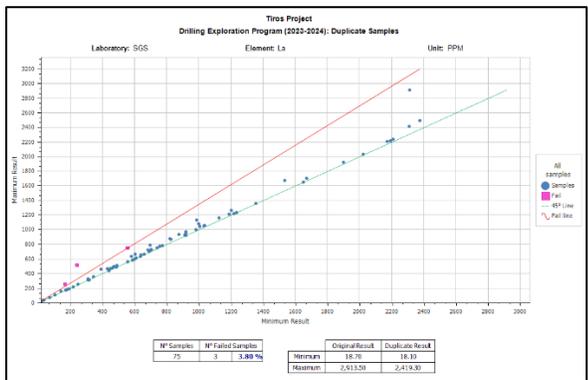
Yb assay results returned for the duplicate pairs



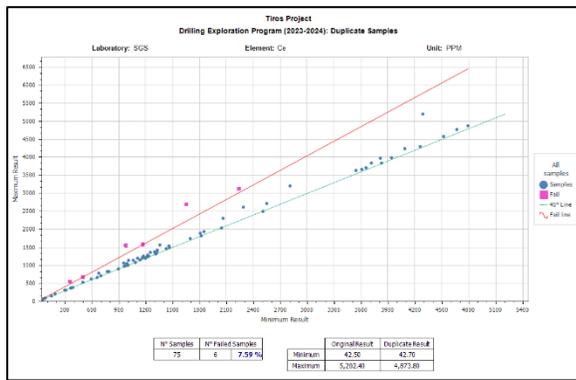
Lu assay results returned for the duplicate pairs



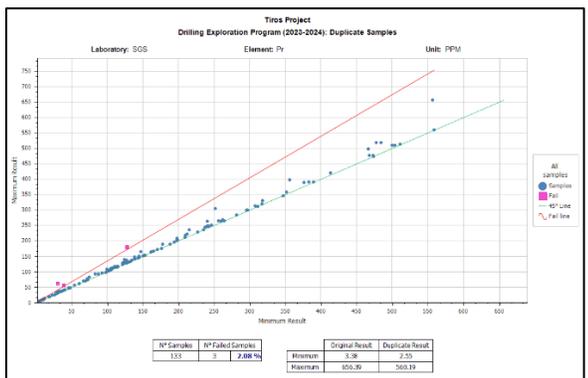
Y assay results returned for the duplicate pairs



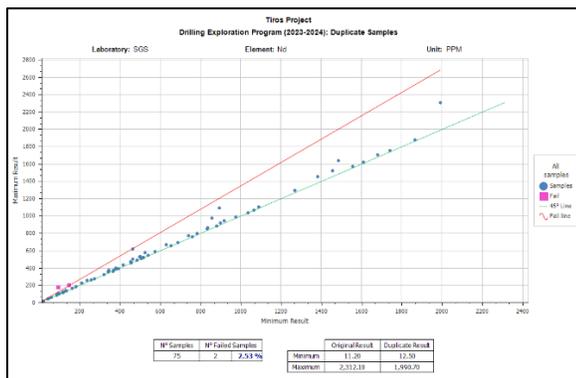
La assay results returned for the duplicate pairs



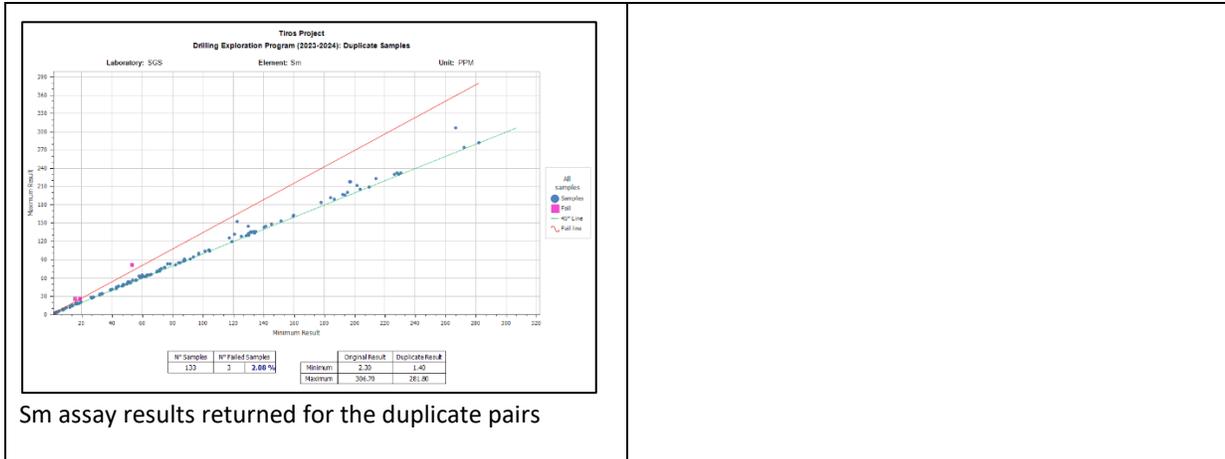
Ce results returned from the assays of the blanks



Pr assay results returned for the duplicate pairs



Nd assay results returned for the duplicate pairs



Sm assay results returned for the duplicate pairs

Figure 11-10 showing the assays results returned by SGS Geosol for the duplicate pairs, detailing the TiO₂ assays, the heavy rare earth elements (Europium (Eu), Gadolinium (Gd), Terbium (Tb), dysprosium (Dy), Holmium (Ho), Erbium (Er), Thulium (Tm), Ytterbium (Yb), Lutetium (Lu), and Yttrium (Y)) and the light rare earth elements (Lanthanum (La), Cerium (Ce), praseodymium (Pr), Neodymium (Nd), and Samarium (Sm))

In total, 0 analysis (0%) were identified as failing the duplicate criteria for TiO₂; the light REEs displayed between zero (0) and four (4) samples out of the seventy-five (75) duplicates, a maximum of 5% failing the duplicate criteria; and the heavy REEs returning between zero and two are Earth Elements. An acceptable limit for the duplication of analyses is around 10%. Therefore, it is concluded that the sampling precision with respect to TiO₂ and Rare Earth Elements are acceptable.

11.3 QA/QC Conclusions

Sample preparation, security and analytical procedures used by Resouro are adequate for the purposes of this Report (see Section 2.1) and for the current updated Mineral Resource Estimate. The QAQC program implemented by Resouro has been to industry standards, however issues have arisen in the analyses of the certified reference material. It is recommended that in the future a more representative CRM be used for the review of TiO₂ and that the reporting of the QAQC program should occur continually throughout the drill campaign and the results reviewed as and when the results of each sample batch are returned from the lab.

The Author an QP (Simon Mortimer) has not seen any factors from the drill core database that would materially impact the reliability or accuracy of the calculation of a mineral resource estimate.

12.0 DATA VERIFICATION

12.1 Internal-External Data Verification

The Author (Simon Mortimer) has reviewed historical and current data and information regarding past and current exploration work on the Property. The Author has no reason to doubt the adequacy of historical sample preparation, security and analytical procedures as presented, and have confidence in the historical information and data and its use for the purposes of the Report as described in Section 2.1.

12.2 Verification Performed by the QPs

Mr. Luis Oviedo, QP and Co-Author of the Report, visited the Property on the 8th of April 2024, accompanied by Rodrigo Mello (Technical Consultant).

The Personal Inspection of the Project was made as a requirement of NI 43-101 for the preparation of the Report and to observe general access and conditions, to observe surface mineralization, and evidence of the historical exploration work (*see* Section 2.5).

Mr. Oviedo confirmed the presence of REE and TiO₂ mineralization and the general geology as described by Resouro.

12.3 Comments on Data Verification

It is the Author's opinion that where known, the procedures, policies and protocols for geological mapping, rock sampling and soil sampling are sufficient and appropriate and that the assay procedures and assay results from rock and soil sampling completed to date are consistent with good exploration and operational practices, such that the data and information is reliable for the purposes of the Report (*see* Section 2.1).

13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

RSM submitted a composite sample to the Prosper metallurgical test work laboratory. This 207 Kg sample was taken from 19 historic holes from a variety of different zones across the Tiros project and was tested for rare earth element extraction via ammonium hydroxide leaching. The samples were screened from material passing 600 mesh, leached at 80 degrees Celsius using a 40ml of 0.5 mole Ammonium Sulphate (NH₄)₂SO₄ with pH starting at 3.5 and finishing at 4.5, with an average pH of 4. Results showed recovery of REEs ranging from 17% to 61%, averaging 50%.

Table 13-1: Preliminary REE Concentrate Metallurgy Work

(NH ₄) ₂ SO ₄ 0.5M 40ml	Ce	DY	Er	Eu	Gd	Ho	La	Lu	Nd	Pr	Sm	Tb	Tm	Y	Yb
Head Grade ppm	1685.5	22.8	7.6	19.3	48.0	3.3	703.2	0.5	548.1	164.9	80.0	5.3	0.9	73.5	4.7
Leached Grade ppm	289.3	13.8	5.3	9.0	23.8	2.1	156.2	0.3	226.7	53.0	32.2	3.3	0.4	51.3	2.9
Leached Recovery	17%	60%	69%	46%	50%	62%	22%	63%	41%	32%	40%	62%	43%	70%	61%

A second laboratory independently tested the same samples with ammonium sulphate leaching experiments, however, the results of these studies were found to be quite different from those completed by the Prosper laboratory which is understood to be related to a poor QA/QC process.

The work done by RSM on the rare earth element extraction as of the effective date has been inconclusive; therefore, to get clarity of the leachability of the Tiros mineralisation Resouro developed an additional metallurgical program focussed on industry comparison processes and typical metallurgical processing parameters including characterisation, leaching, gravimetric and electrical and an optimisation phase. Additional to this comparative process RSM has been testing non-conventional rare earth element extraction with their processing partner Altilium Group Ltd. (“Altilium”). The results of these programs at the time of writing this report are not yet known.

14.0 MINERAL RESOURCE ESTIMATES

This Report supports a maiden Mineral Resource Estimate (“MRE”) for the Tiros Deposit as completed by Atticus Consulting SAC., signed off by QPs Simon Mortimer and Luis Oviedo. The Effective Date for this maiden MRE for the Tiros Deposit is the 18th of July 2024.

14.1 Introduction

Resouro Strategic Metals Inc. engaged Atticus Geoscience Consulting Ltd. to prepare a mineral resource estimate for the Tiros deposit (the “MRE” or “Mineral Resource Estimate”). The effective date of the MRE is the 18 of July 2024.

The MRE was prepared under the direction of Simon Mortimer (Author) and Luis Oviedo (Co-Author) with assistance from Luis Huapaya (geologist) and Daniel Basilio (geologist). Mr. Mortimer and Mr. Basilio developed the geological interpretation, the construction of the lithology model and the mineralized domain models. Mr. Oviedo provided the Rare Earth element domain experience, adding guidance to the estimation protocols and assisting in the preparation of the technical report. Mr. Huapaya completed work on the statistics, geo-statistics, grade interpolation, and density modelling.

The MRE contained in this Report was completed in accordance with the National Instrument 43-101 and following the CIM Definition Standards for Mineral Resources & Mineral Reserves (CIM, 2014) and CIM Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines (CIM, 2019).

Surface Control

The topographic surface used for constructing and delineating the geological models was supplied by the Resouro geological team. This surface was derived from a drone-based (Lidar) topographic survey carried out in 2024 on Resouro's mining property by Avant Geophysics. The provided DTM file was triangulated with a resolution of 2.5 metres, based on topographic data points of 1m resolution. The LIDAR survey was flown over only a portion of the Tiros Central exploration target, hence limiting the resource calculation to this area, 3247Ha, covering approximately 73% of the Tiros Central property, which corresponds to approximately 7% of the entire Tiros property boundary. Figure 14-1 shows the area surveyed and the extent of the DTM.

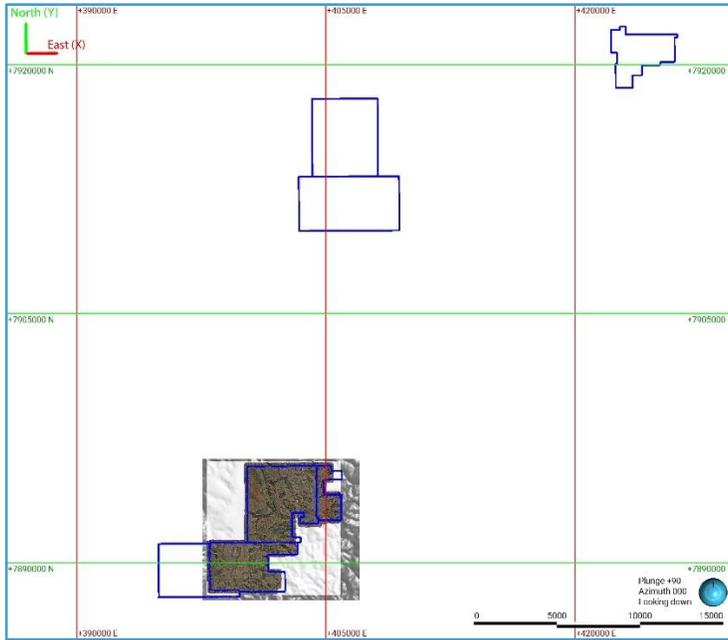


Figure 14-1, showing the location and extent of the LIDAR survey and topographic surface wireframe with the property boundaries of the Tiros Central and Tiros North exploration targets in blue.

14.2 Drilling Database

The information used for the MRE is derived from the historical drilling campaigns of Vicenza (2011) and Iluka Resources (2016), and from the drill campaigns of Resouro Strategic Metals (2023-2024). The majority, 85% of the sampling was completed in the recent RSM drill campaigns, while the other 15% was completed during the historical drill campaigns of Iluka and Vicenza.

A total of 33 diamond drill holes were used in the calculation of the MRE. Vicenza (2011) completed 1 diamond drill hole within the resource boundary, drilling a total of 82.45 m and taking 64 samples. Resouro Strategic Metals (2023-2024) completed 32 diamond drill holes within the resource boundary, drilling a total of 2,285.65 m and taking 1,515 samples.

A total of 42 air core drill holes were used in the calculation of the MRE. Iluka Resource (2016) completed 19 air core drilling within the resource boundary, drilling a total of 914 m and taking 412 samples. Resouro Strategic Metals (2023-2024) completed 23 air core drilling within the resource boundary, drilling a total of 1,425.5 m and taking 1,144 samples.

A total of 9 auger drill holes were used in the calculation of the MRE. Resouro Strategic Metals (2023-2024) completed 9 diamond drill holes within the resource boundary, drilling a total of 86.5 m and taking 83 samples.

Table 14-1, 14-2, and 14-3 detail the amount and type of drilling that have been used to define this mineral resource estimation. Only the drill holes within the limit of the topographic survey have been included in this resource calculation.

Table 14-1 summary of samples taken from air core drill holes used in the MRE

	2016	2023-2024	Total
	Iluka Resource	Resouro Strategic Metals	
TOTAL HOLES	19	23	42
TOTAL DEPTH (m)	914	1425.5	2339.5
TOTAL SAMPLES	412	1144	1556
TOTAL SAMPLES (m)	412	1144	1556

Table 14-2, summary of samples taken from diamond drill holes used in the MRE

	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

Table 14-3 summary of samples taken from auger drill holes used in the MRE

	2023-2024	Total
	Resouro Strategic Metals	
TOTAL HOLES	9	9
TOTAL DEPTH (m)	86.5	86.5
TOTAL SAMPLES	83	83
TOTAL SAMPLES (m)	82.5	82.5

The resource estimation utilised samples taken from diamond, air core, and auger drilling; with 1590.1 metres of samples taken from 2368.1m of diamond drill core, 1556 metres of samples taken from 2339.5m of air core drilling, and a total of 82.5m of samples taken from auger drilling.

All drilling and sampling data has been verified, validated and imported into a SQL Server cloud-based data management system, including data and meta-data on the collar, survey, lithology, alteration, density and assay samples. Information from all the drill holes in the resource area were used in the in the geological modelling and resource calculation. The drilling database also contains 2321 density measurements collected by Resouro Strategic Metals Inc. Figure 14-2 shows the location of the drill holes overlain on the LIDAR topographic surface and trimmed to the property boundary.

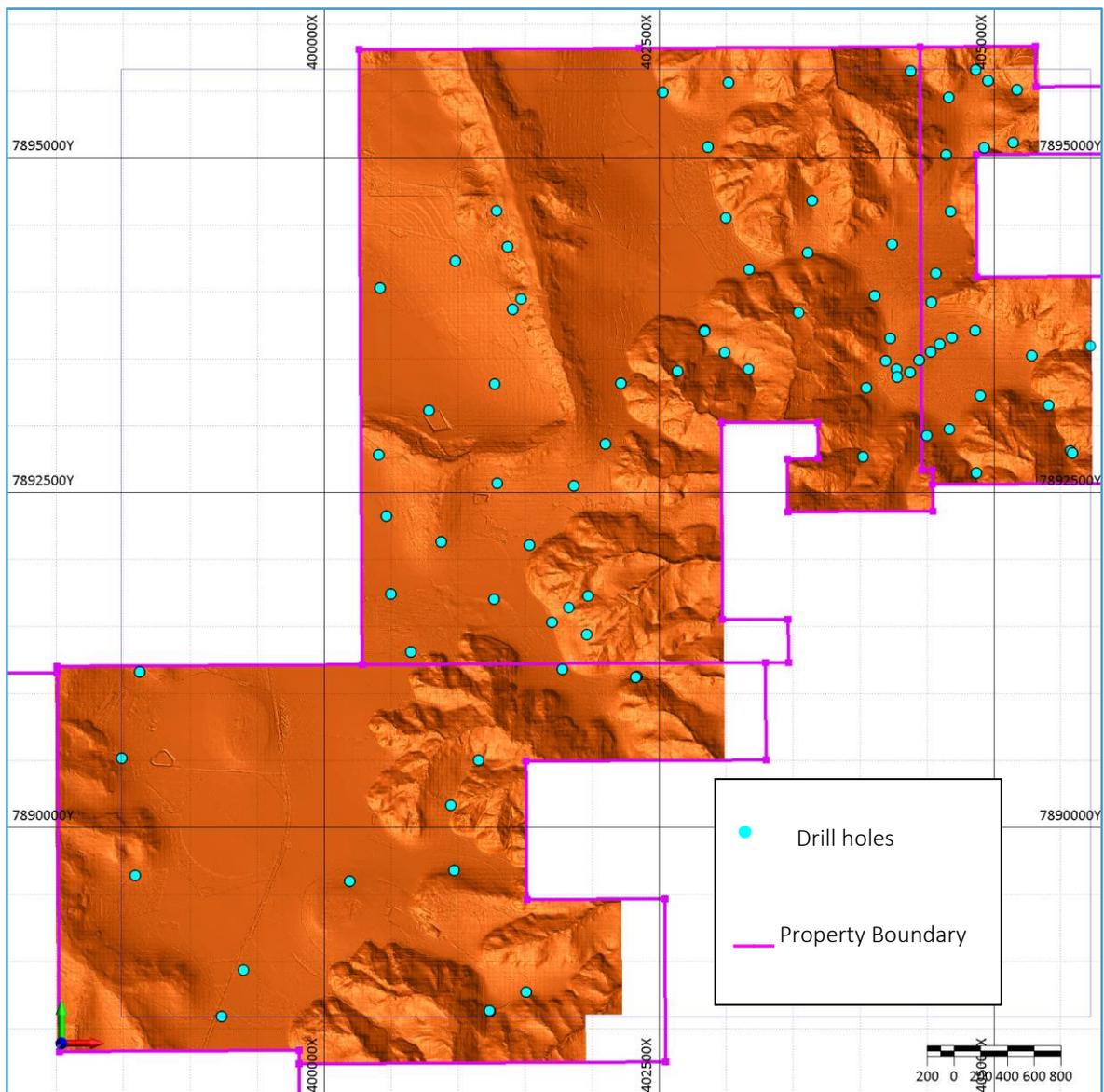


Figure 14-2, location of the drill holes used in the mineral resource estimation, focused on the north and eastern end of the Tiros Central exploration target

14.2.1 Collar Location and Down-hole Deviation

The collar locations of the Vicenza (2011), Iluka Resources (2016), and Resouro drill holes were all located using handheld RTK GPS. The Resouro collar locations RTK used is known to have an accuracy of +/- 3m in the easting and northing and +/- 5m in height, however, is calibrated with surveyed landmarks to improve accuracy. For modelling purposes, the heights of the collar locations have been adjusted to the topographic surface.

All the drill holes through the Vicenza, Iluka and Resouro campaigns are all vertical and are relatively short, less than 80m, and have drilled through clay material. It is not expected that these holes will exhibit any natural deviation away from the vertical, hence no downhole deviation surveys have been completed.

No spatial location errors or issues have been observed with the data in any of these holes.

14.2.2 Assay Sample Summary

The sample interval lengths are based on mineralization contacts and vary between 0.1m and 1.4 metres. Over 96.5 % of the samples have a length of 1 m. In total, 2786 samples were taken from 2730 m of variably mineralized drill core. Figure 14-3 details the number of sample interval lengths that were taken throughout the different drilling campaigns.

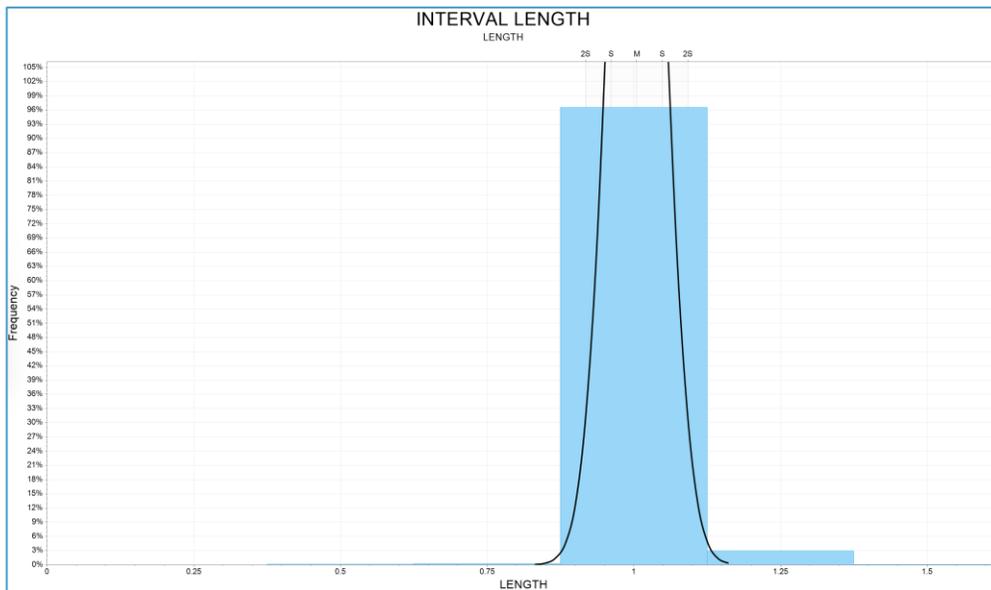


Figure 14-3. Summary of the sample interval lengths for the drill holes used in the MRE.

14.3 Estimation Methodology

The estimation of the mineral resource is broken down into the following stages:

- Validation of the information utilized in the resource and database compilation.
- Interpretation and 3D modeling of the lithology and mineralization.
- Development of the estimation domains.
- Compositing of grade within the domains.
- Exploratory data analysis.
- Block model definition.
- Interpolation of grade within the defined domains.
- Review and model the variability in the rock density.
- Evaluation of confidence in the estimation.
- Model validation.
- Definition of reasonable economic extraction.

Validation of the data and database compilation was completed using Geobank™ data management software. The interpretation and 3D geological modeling was completed using Leapfrog Geo™ software, statistical studies were performed using Micromine™ tools, and the block model, subsequent estimation and validation was carried out using the Micromine™ 2020 software.

14.4 Geological Interpretation and Modelling

Geological modelling was completed using Leapfrog Geo™ software, building integrated models for lithology, TiO₂-REE mineralization and a sub-model that defined a high-grade mineralized zone (Figure 14-4). All models were built following event modelling methodology, constructing each surface and subsequent solid in sequence with respect to the genesis and evolution of the mineral deposit.

Interpretation of the geology utilized information from the assay and lithology data tables from the historical and recent drilling campaign.

14.4.1 Lithology Model

Drill core logging has identified three key geological formations essential for constructing the 3D model of the deposit. The main unit, referred to as the Capacete Formation, comprises a friable conglomerate package with clay layers, containing all the known TiO₂-REE mineralization within the project area. Overlying this is the Detritus-Lateritic overburden unit, a more recent geological formation, which marks the upper boundary of the mineralized Capacete formation. The oldest stratigraphic unit, the Tres Barras Formation of the Areado Group, acts as the basement and thus defines the lower boundary of the mineralized Capacete formation. The drilling to date indicates that the Capacete formation in its entirety is mineralized.

The stratigraphy within the area modelled shows flat, sub-horizontal layers with minimal dip variation across the entire project area. Furthermore, no faults have been identified, and there is no evidence of vertical or horizontal displacement of the lithological units. Figure 14-4 is an isometric view of the 3d lithology model of the north and eastern limit of the Tiros Central exploration target, it shows the location of the drill holes, with the collars coloured referent to the year that they were drilled, and the main lithological formations (Overburden, Capacete, and Tres Barras). The image of the 3d model has been rendered with a vertical exaggeration of 500% (x5).

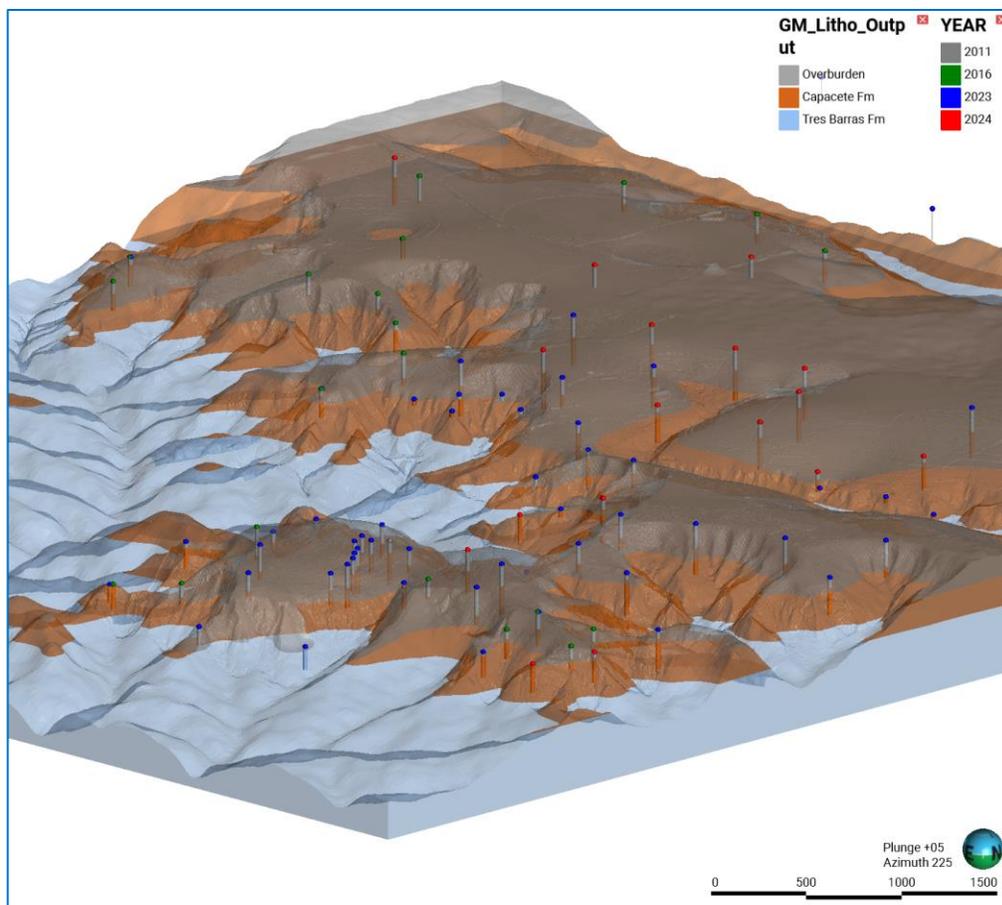


Figure 14-4. A 3D isometric view looking towards the south-west showing the lithology as a 3D solid within the Tiros project area (The 3d model has been rendered with a vertical exaggeration of 500% (x5))

14.4.2 Mineralization Model

The mineralization envelope was identified as being the Capacete Formation, the lateral extents of which are currently only arbitrarily limited by the property boundary or the extent of the LIDAR survey. Consequently, the solid representation of this unit from the lithological model was utilized to define the extent of the entire mineralized zone. Criteria for defining mineralized intervals were based on TiO_2 and TREO grades, the mineralised material was considered as being greater than 6% TiO_2 and 3500 ppm TREO, however there is a strong correlation between the TiO_2 and TREO mineralisation that 6% TiO_2 corresponds to 3500ppm TREO, and no regions exist with only TiO_2 or REE mineralisation. Figure 14-5 shows a cross section cutting through the Capacete formation, displaying TiO_2 and REE (TREO) mineralisation. It is evident that the entire formation is mineralised, and a high-grade layer exists towards the top of the unit.

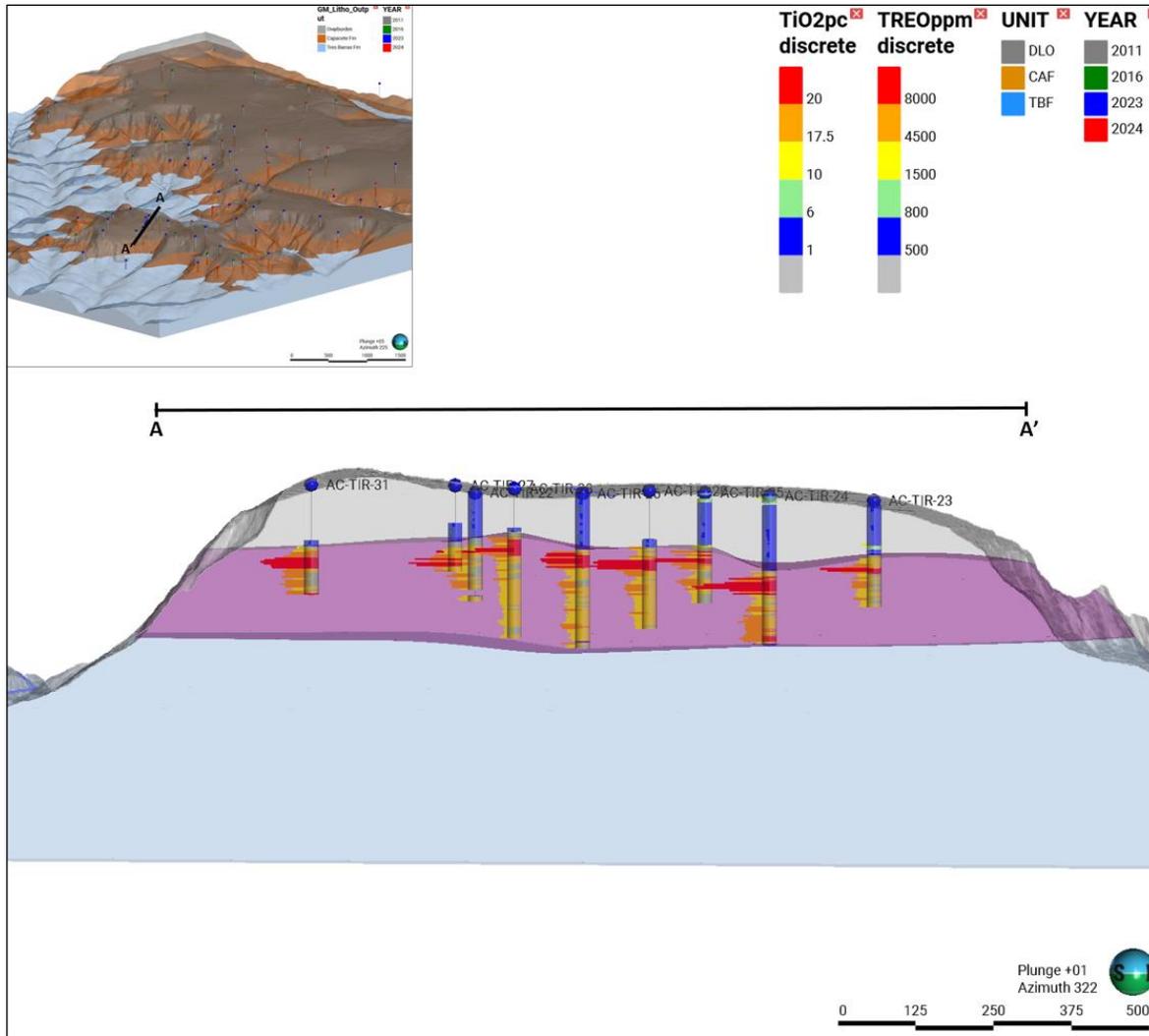


Figure 14-5. Cross-section view looking towards the north-west showing the outermost halo of TiO₂-TREO mineralization domain (purple wireframe) within the Tiros project area. The cylindrical trace displays the TiO₂ grade (%) and the bar graph shows the TREO grade (ppm).

14.5 Data Analysis and Estimation Domains

14.5.1 Exploratory Data Analysis (EDA)

The Exploratory Data Analysis (EDA) was continuously reviewed during the geological modeling process to provide an understanding of the behaviour of rare earth elements (REE) and titanium oxides (TiO₂) during the genesis of the deposit, and to define the estimation domains. The Capacete Formation in its entirety is the mineralised domain, which has been sub-divided into a High grade and Medium-Low grade domains. The high-grade domain is defined using a threshold of 20% TiO₂ and 8000 ppm TREO, and the remainder of the mineralised domain is considered as low-medium grade. Figure 14-5 shows the distribution of TREO mineralisation across all samples, displaying data sub-populations with thresholds around 8000ppm and 1000ppm.

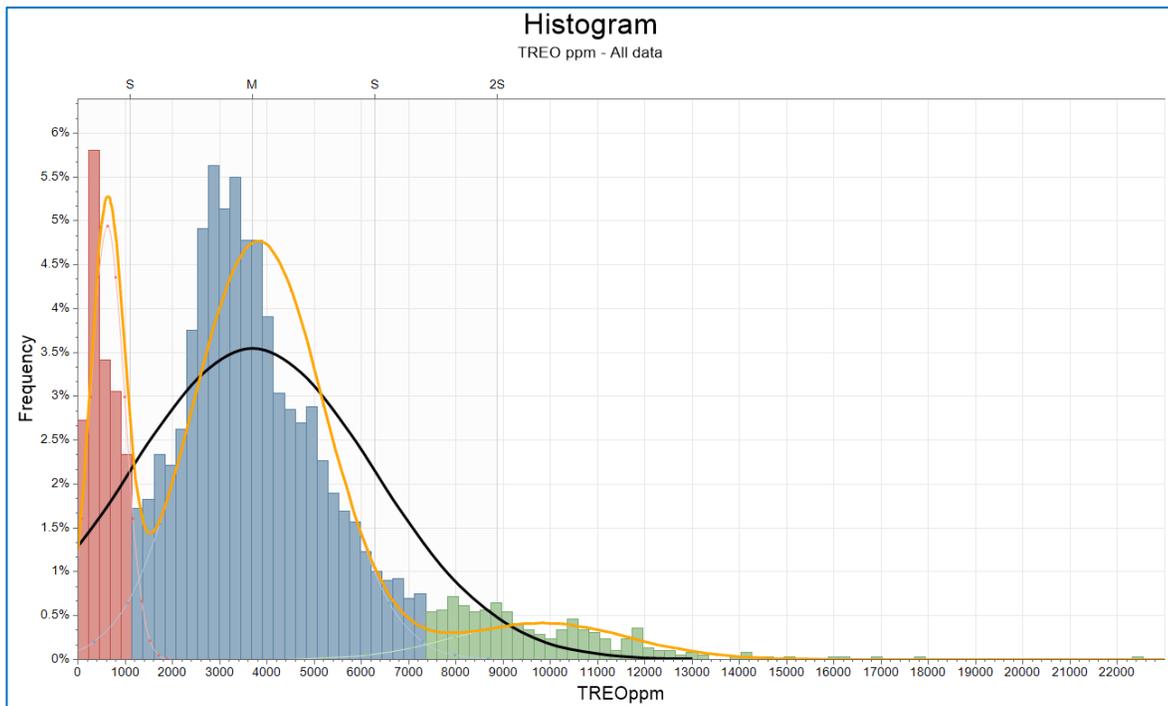


Figure 14-6. Histogram showing the distribution of TREO.

An analysis of the statistics of the TREO and TiO₂ assay data points that fall within the high and low–medium grade domains are summarised in Table 14-1 and detailed in the histograms in figure 14-6

Table 14-4. Summary of the basic statistics for the assay data points filtered by the low-medium and high-grade domains.

Domain	Element	Input Data	Min	Max	No of Points	Mean	Variance	Std Dev	COV	Median	25 Prctile	50 Prctile	75 Prctile
High Grade	TiO ₂ %	Assay	10.49	39	370	23.39	24.05	4.90	0.21	22.85	20.20	22.85	26.68
	TREO ppm	Assay	2233	22420	367	8881	6425563	2535	0.29	8852	7357	8852	10463
Low Medium Grade	TiO ₂ %	Assay	1.01	34.8	2439	11.00	12.53	3.54	0.32	10.33	8.50	10.33	12.96
	TREO ppm	Assay	432	10284	2419	3693	2008776	1417	0.38	3498	2740	3498	4553

It is evident from the summary statistics and the histograms of the TiO₂ an TREO data points restricted within these domains, that the thresholds used in the definition of the Low-Medium-Grade domain and the High-Grade domain separate distinct data populations, both of which can be suitably estimated via kriging. Figure 14-7 shows the histograms that correspond to the summary of basic statistics in table 14-1

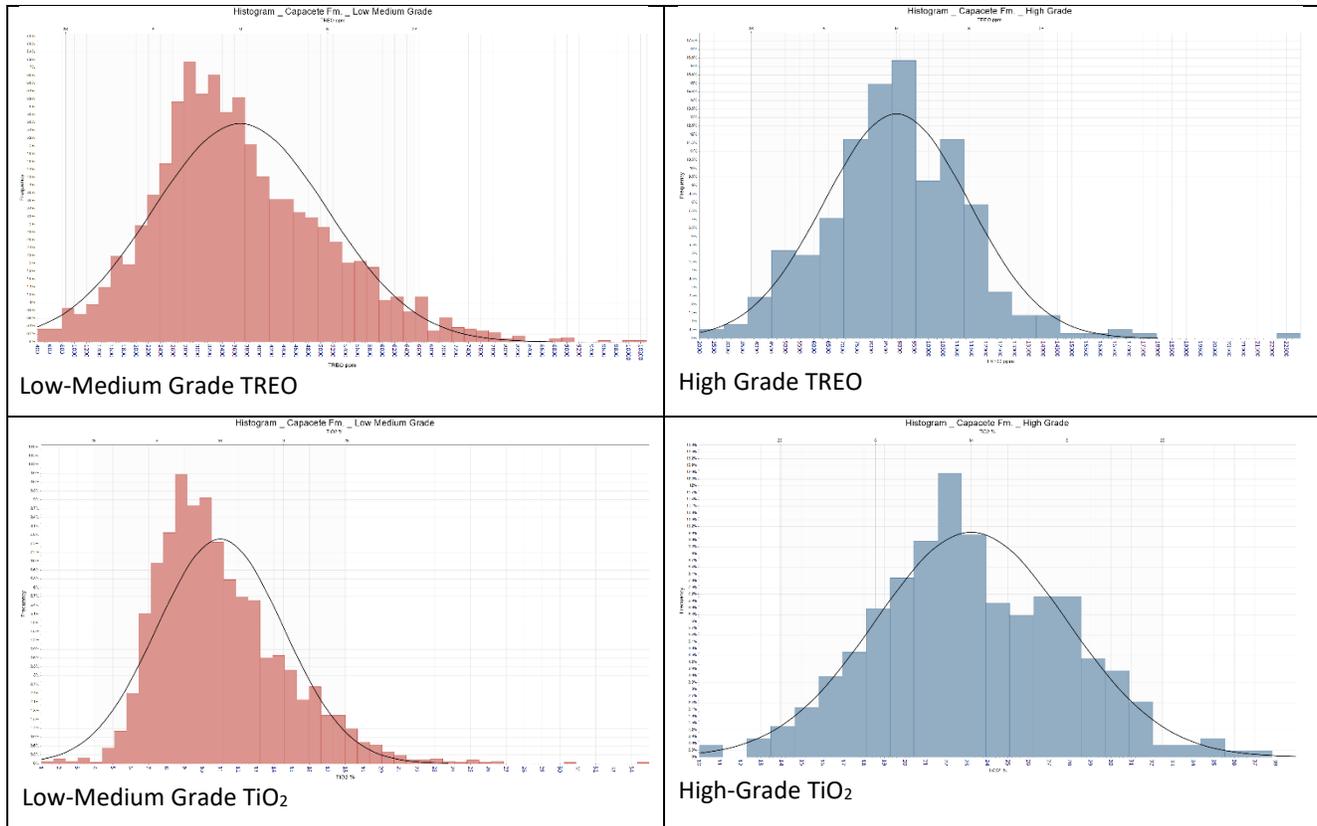


Figure 14-7, the histograms of the TREO and TiO₂ data points within the low-medium and high -grade domains

It is understood that the rare earth elements can be grouped into either a heavy or light faction based on their position in the periodic table and that the REEs within their group exhibit similar physical and chemical characteristics. See Table 2-2 for the break down and classification of the heavy and light factions.

A statistical analysis of the correlation between the REE is provide in Table 14-5; a correlation of between 0.1 to 0.3 is extremely low, 0.3 to 0.4 is low, 0.4 to 0.5 is moderate, 0.5 to 0.7 is moderately high, 0.7 to 0.8 is high, and 0.8 to 1.0 is extremely high.

Table 14-5. Correlation matrix for the REE within the Capacete Fm. (Low-Medium + High Grade) Domain.

		HREO										LREO				
Correlation		Dyppm	Euppm	Erppm	Gdppm	Hoppm	Luppm	Tbppm	Tmppm	Yppm	Ybppm	Ceppm	Lappm	Ndppm	Prppm	Smppm
HREO	Dyppm	1.0														
	Euppm	0.9	1.0													
	Erppm	0.9	0.7	1.0												
	Gdppm	1.0	1.0	0.8	1.0											
	Hoppm	1.0	0.8	1.0	0.9	1.0										
	Luppm	0.8	0.6	1.0	0.7	0.9	1.0									
	Tbppm	1.0	1.0	0.9	1.0	0.9	0.8	1.0								
	Tmppm	0.9	0.7	1.0	0.8	1.0	1.0	0.8	1.0							
	Yppm	0.9	0.6	1.0	0.8	1.0	1.0	0.8	1.0	1.0						
	Ybppm	0.9	0.6	1.0	0.8	1.0	1.0	0.8	1.0	1.0	1.0					
LREO	Ceppm	0.5	0.7	0.3	0.6	0.4	0.2	0.6	0.3	0.2	0.2	1.0				
	Lappm	0.7	0.8	0.5	0.8	0.6	0.3	0.7	0.4	0.4	0.4	0.8	1.0			
	Ndppm	0.8	1.0	0.6	0.9	0.7	0.5	0.9	0.6	0.5	0.5	0.8	0.9	1.0		
	Prppm	0.8	1.0	0.6	0.9	0.7	0.4	0.9	0.5	0.5	0.5	0.8	0.9	1.0	1.0	
	Smppm	0.9	1.0	0.7	1.0	0.8	0.5	0.9	0.6	0.6	0.6	0.7	0.9	1.0	1.0	1.0

The extremely high correlation between all the heavy rare earth elements, and the extremely high correlation between all of the light rare earth elements indicates that the variographic analysis and estimation parameters for one of the elements in a group will be the same as the other elements in that group, therefore the REEs should be grouped in to Heavy and Light for the purpose of estimation.

14.5.2 Estimation Domain Model

The Estimation Domain Model (EDM) was created by integrating the lithology and mineralization models and examining the distribution of TiO₂ and TREO grades. The EDM defines two solid estimation domains: a low to medium-grade domain, encompassing material falling within the 6% TiO₂ and 3500 ppm TREO grade range; and a high-grade domain, using a threshold of 20% TiO₂ and 8000 ppm TREO (Figure 14-7).

Validation of the EDM was conducted against the lithology model, confirming that all high-grade material is located within the Capacete Formation.

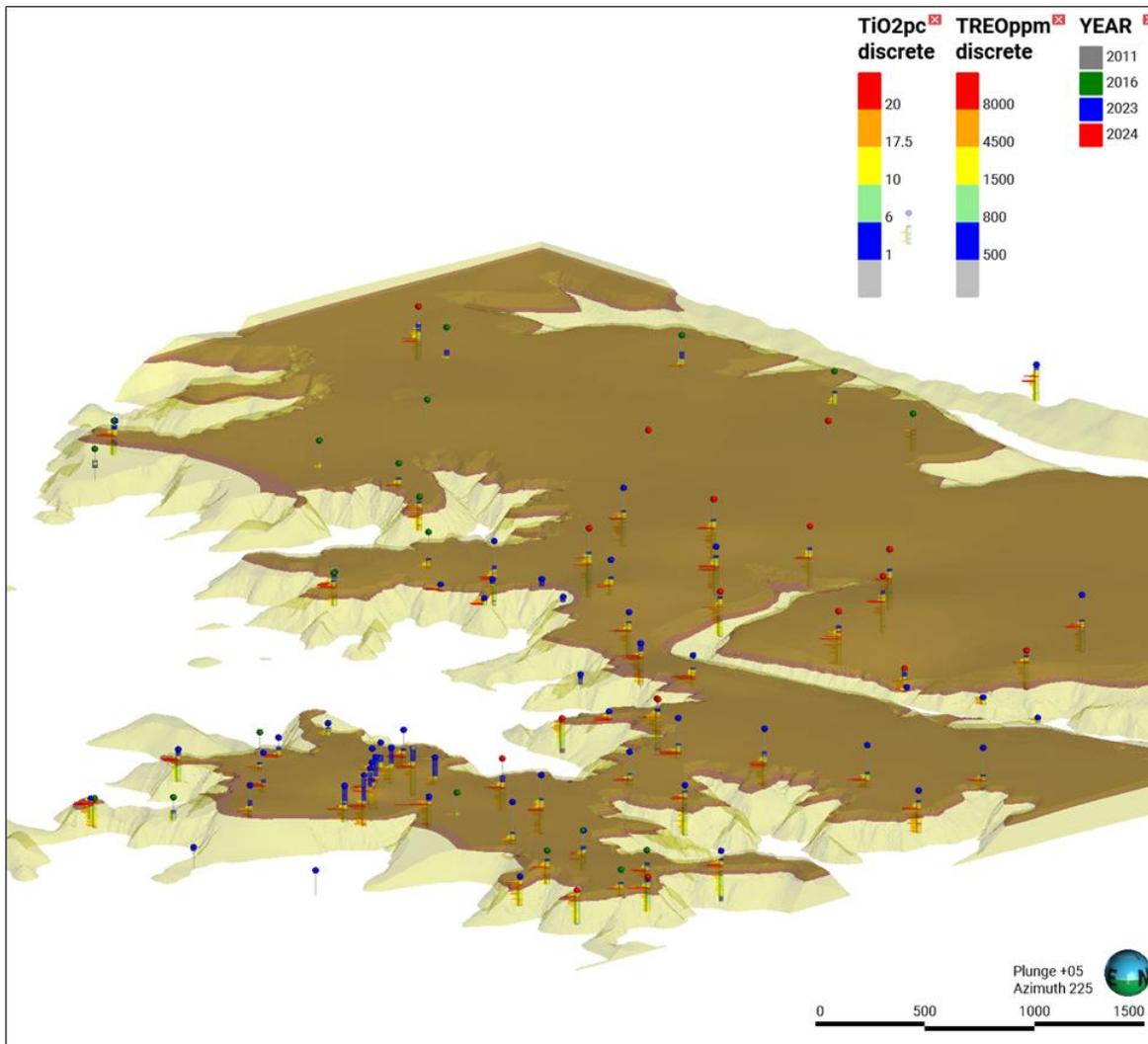


Figure 14-8. A 3D isometric view of the estimation domains looking towards the south-west, the yellow wireframe is the low to medium-grade TiO₂-TREO domain and the dark red wireframe is the high-grade TiO₂-TREO domain. The cylindrical trace displays the TiO₂ grade (%) and the bar graph shows the TREO grade (ppm).

14.5.3 Contact Analysis, Compositing and Capping

An analysis of the contact between the low medium-grade domain and the high-grade domain for TiO₂ grade can be seen in Figure 14-9, and an analysis of the contact between the low medium-grade domain and high-grade domain for TREO grade can be seen in Figure 14-10.

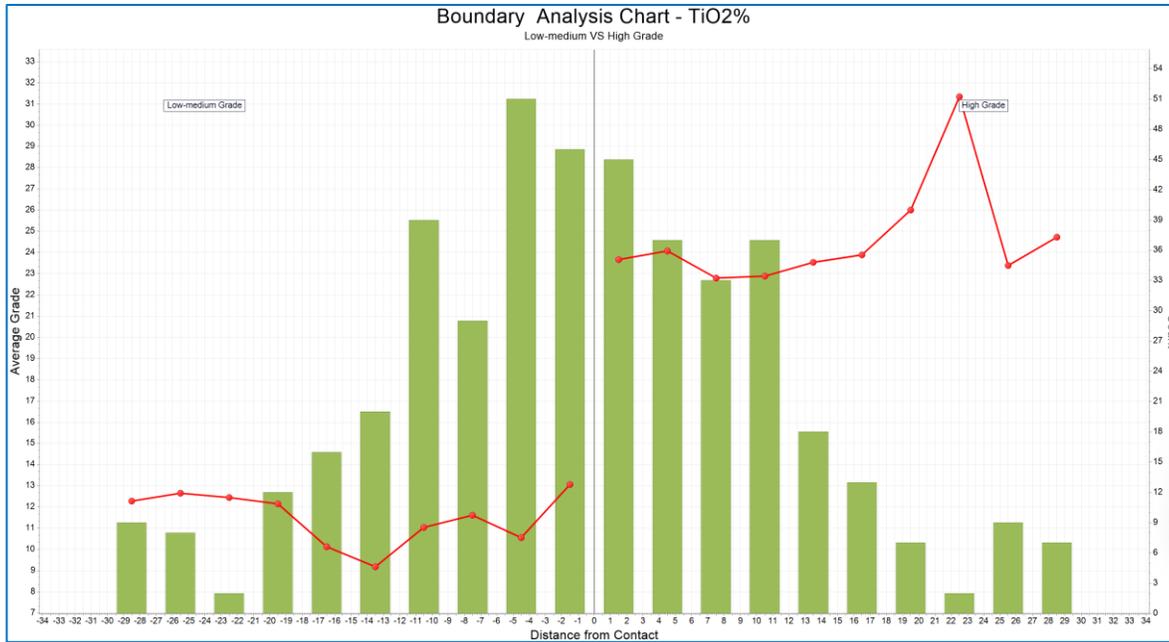


Figure 14-9. Contact analysis plot showing the variation in TiO₂ grade between the low medium-grade domain and the high-grade domain in the Capacete Fm.

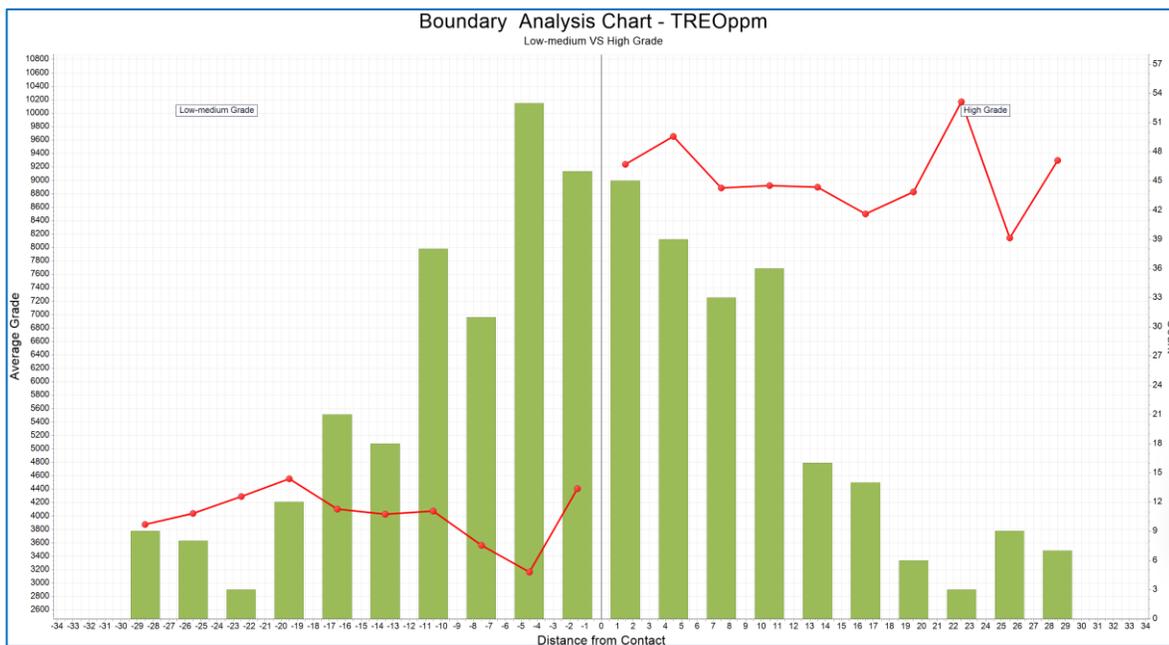


Figure 14-10. Contact analysis plot showing the variation in TREO grade between the low medium-grade domain and the high-grade domain in the Capacete Fm.

It is evident from the contact analysis graphs that the boundary between the high-grade and the low-medium-grade domains is very abrupt, and that the estimation should be carried separately in each of the domains.

The predominant sample length taken within this drilling campaign is 1 m; therefore, the input drill data has been composited within the estimation domains using a composite length of 1 metre.

Statistical evaluation of all the samples within the Capacete domain (Low-Medium Grade + High-Grade) identified a selection of atypically high values that would adversely affect the results of the estimation. These outliers have been reduced to a fixed or capped value based upon the distribution percentiles. Table 14-6 details the capping values applied and percentiles for each of the elements being estimated.

Table 14-6. REEs Outlier Restriction.

Element	Capping Value	N° assay capped	Capping Percentile
Dyppm	103	10	99.8
Euppm	90	4	99.95
Erppm	57	2	99.9
Gdppm	214	8	99.72
Hoppm	22	3	99.85
Luppm	5	4	99.8
Tbppm	24	8	99.72
Tmppm	6	8	99.65
Yppm	670	4	99.89
Ybppm	37	3	99.89
Ceppm	7400	2	99.99
Lappm	2570	10	99.67
Ndppm	2460	6	99.8
Prppm	670	6	99.8
Smppm	336	8	99.75
TiO2%	39	4	99.8

14.6 Specific Gravity

A total of 2321 samples were measured for specific gravity by Resouro in the Tiros project. These were collected from drill cores measured by the Resouro team following company procedures, using the Archimedes principle of mass displacement with paraffin. The results of the density measurements were plotted on a scattergram against the height of the sample location, as it was observed that there is a relation between depth and density. Figure 14-11 is a scattergram that shows how the density increases in direct relation to greater depth.

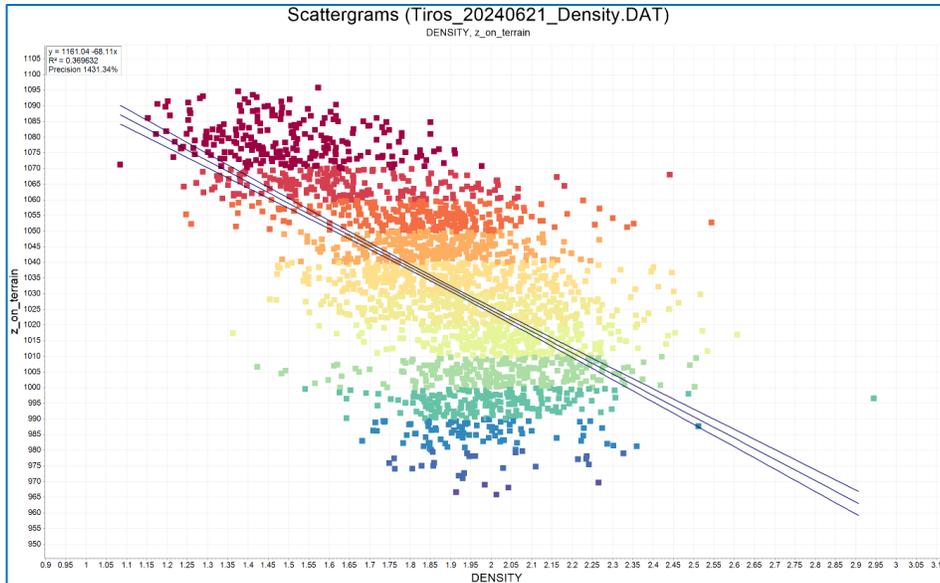


Figure 14-11. Scattergram displaying density against the altitude of the sample location.

As the density varies depending on the rock type and depth, the density of each block was assigned based upon these two criteria. The density values were assigned from the mean of the densities for each 10m interval within each rock type – Overburden, Capacete Formation, and the Tres Barras Formation. Table 14-7 details the density values assigned to the blocks within each rock type and relative elevation.

Table 14-7. Specific gravity (SG) by rock type and elevation range assigned to the block model.

Domain	Elevation Range	SG
Overburden	Z >= 1090	1.38
	1090 > Z >= 1080	1.48
	1080 > Z >= 1070	1.53
	1070 > Z >= 1060	1.65
	1060 > Z >= 1050	1.82
	1050 > Z >= 1040	1.87
	1040 > Z >= 1030	1.83
	1030 > Z >= 1010	1.92
	1010 > Z >= 1000	1.74
	1000 > Z >= 990	1.80
990 > Z >= 980	2.10	
Capacete and Tres Barras	Z >= 1050	1.88
	1050 > Z >= 1040	1.85
	1040 > Z >= 1030	1.90
	1030 > Z >= 1020	1.96
	1020 > Z >= 1010	2.04
	1010 > Z >= 1000	2.05
	1000 > Z >= 990	2.01
	990 > Z >= 980	1.96
980 > Z >= 970	2.07	
970 > Z	2.10	

14.7 Block Modelling

To attain a model most representative of the geology and then to apply economic factors to the model, a block model was created using sub-blocks optimized for the geometry of the domains and considering the size of the deposit and extraction of material in an open pit.

The block model was built in Micromine software, the dimensions of the parent block model are 100 m x 100 m x 10 m with a sub-blocking ratio of 2, 2 and 10, respectively, generating minimum sub-blocks dimensions of 50 m x 50 m x 1 m. Details of the block model definitions are provided in Table 14-8.

Table 14-8. Parameters of the definition of the block models.

	Block Model - not rotated			
	Origin Min Centre	Block Size	Factor Sub-Block	Min Block Size
X Coordinate	397985	100m	2	50m
Y Coordinate	7888087	100m	2	50m
Z Coordinate	851	10m	10	1m
N° of blocks	160419			

14.8 Variography

The estimation domains defined in the exploratory data analysis supported performing the variography by groups according to the light and heavy fractions, separately in the Low-Medium- and High- grade domains. The axes of the variographic models were the result of the analysis of variographic maps. The ellipsoid ranges for each axis were defined according to the domains and variographic models for REE and titanium oxide (Table 14-9).

Table 14-9. showing the ranges and directions of the sample search ellipsoids to REO y titanium oxide.

Variogram Parameter for HREO Low - Medium Grade

		Structure							
	Passes	Factor	Axis 1	Axis 2	Axis 3	Azimuth	Plunge	Dip	
HREO LMG	Pass 1	0.7	231	980	7	55.3	0.03	0.87	
	Pass 2	1	330	1400	10	55.3	0.03	0.87	
	Pass 3	2	660	2800	20	55.3	0.03	0.87	
	Pass 4	-				55.3	0.03	0.87	

Variogram Parameter for HREO High Grade

		Structure							
	Passes	Factor	Axis 1	Axis 2	Axis 3	Bearing	Plunge	Dip	
HREO HG	Pass 1	0.7	322	518	5.6	55.3	0.03	0.87	
	Pass 2	1	460	740	8	55.3	0.03	0.87	
	Pass 3	2	1380	2220	24	55.3	0.03	0.87	
	Pass 4	-				55.3	0.03	0.87	

Variogram Parameter for LREO Low - Medium Grade

		Structure							
	Passes	Factor	Axis 1	Axis 2	Axis 3	Bearing	Plunge	Dip	
LREO LMG	Pass 1	0.7	644	441	7	55.3	0.03	0.87	
	Pass 2	1	920	630	10	55.3	0.03	0.87	
	Pass 3	2	1840	1260	20	55.3	0.03	0.87	
	Pass 4	-				55.3	0.03	0.87	

Variogram Parameter for LREO High Grade

		Structure							
	Passes	Factor	Axis 1	Axis 2	Axis 3	Azimuth	Plunge	Dip	
LREO HG	Pass 1	0.7	504	378	4.2	55.3	0.03	0.87	
	Pass 2	1	720	540	6	55.3	0.03	0.87	
	Pass 3	2	2160	1620	18	55.3	0.03	0.87	
	Pass 4	-				55.3	0.03	0.87	

Variogram Parameter for TiO2 Low - Medium Grade

		Structure							
	Passes	Factor	Axis 1	Axis 2	Axis 3	Bearing	Plunge	Dip	
TiO2 LMG	Pass 1	0.7	462	287	7	55.3	0.03	0.87	
	Pass 2	1	660	410	10	55.3	0.03	0.87	
	Pass 3	2	1320	820	20	55.3	0.03	0.87	
	Pass 4	-				55.3	0.03	0.87	

Variogram Parameter for TiO2 High Grade

		Structure							
	Passes	Factor	Axis 1	Axis 2	Axis 3	Bearing	Plunge	Dip	
TiO2 HG	Pass 1	0.7	462	532	2.8	55.3	0.03	0.87	
	Pass 2	1	660	760	4	55.3	0.03	0.87	
	Pass 3	2	1980	2280	12	55.3	0.03	0.87	
	Pass 4	-				55.3	0.03	0.87	

14.9 Estimation Strategy

14.9.1 Estimation Methodology

The estimation of all the economic elements were carried out using Ordinary Kriging (OK), with the estimation being completed over four passes. The first estimation was set at 70% of the search ellipse ranges, the second set at 100%, the third at 200%, and the fourth an extensive distance to estimate all the

remaining blocks. This sequence enabled the estimation of all the blocks with the estimation domains and assisted in the definition of the resource categories.

14.9.2 Estimation Parameters

The search ellipsoids and estimation parameters are summarized in Table 14-10.

Table 14-10. Ordinary Kriging estimation parameters applied to the estimation of the HREEs, LREEs and Titanium Oxide.

	Estimation Pass	Domain	Min # of Composites	Max # of Composites	Min # of DDH	Range			Estimation Technique
						Major	intermediate	Minor	
HREO	Pass1	LMG	6	16	3	231	980	7	OK
	Pass2	LMG	4	16	2	330	1400	10	OK
	Pass3	LMG	2	16	2	660	2800	20	OK
	Pass4	LMG	2	16	1				OK
	Pass1	HG	3	16	3	322	518	5	OK
	Pass2	HG	2	16	2	460	740	8	OK
	Pass3	HG	2	16	2	920	1480	16	OK
	Pass4	HG	2	16	1				OK
LREO	Pass1	LMG	6	16	3	644	441	7	OK
	Pass2	LMG	4	16	2	920	630	10	OK
	Pass3	LMG	2	16	2	1840	1260	20	OK
	Pass4	LMG	2	16	1				OK
	Pass1	HG	3	16	3	504	378	4	OK
	Pass2	HG	2	16	2	720	540	6	OK
	Pass3	HG	2	16	2	1440	1080	12	OK
	Pass4	HG	2	16	1				OK
TiO2	Pass1	LMG	6	16	3	462	287	7	OK
	Pass2	LMG	4	16	2	660	410	10	OK
	Pass3	LMG	2	16	2	1320	820	20	OK
	Pass4	LMG	2	16	1				OK
	Pass1	HG	3	16	3	462	532	3	OK
	Pass2	HG	2	16	2	660	760	4	OK
	Pass3	HG	2	16	2	1980	2280	12	OK
	Pass4	HG	2	16	1				OK

14.9.3 Estimation Reporting

The fifteen rare earth elements were estimated separately, then for purposes of reporting they have been grouped into the heavy and light factions, calculating the sum of their respective oxides. The calculation that defines the Heavy Rare Earth Oxides (HREO), the Light Rare Earth Oxides (LREO), the Total Rare Earth Oxides (TREO), and the Magnetic Rare Earth Oxides (MREO) are detailed in section 2.7.

14.10 Block Model Validation

The block model estimation has been validated using the following techniques:

- Visual inspection of the estimated block grades relative to the assay composites;
- A comparison of the sample composite means against the estimated means from each of the block model domains; and,

- A swath plot evaluation of the block model grade profiles in an east-west axis against a nearest neighbour estimation and the assay composites.

14.10.1 Visual Validation

The visual validation of the estimated blocks for Total Rare Earth Oxides (TREO) shows a good correlation between the estimated values and the input composited assay data, respecting the domain boundaries and the geological trends seen within the model (Figure 14-12).

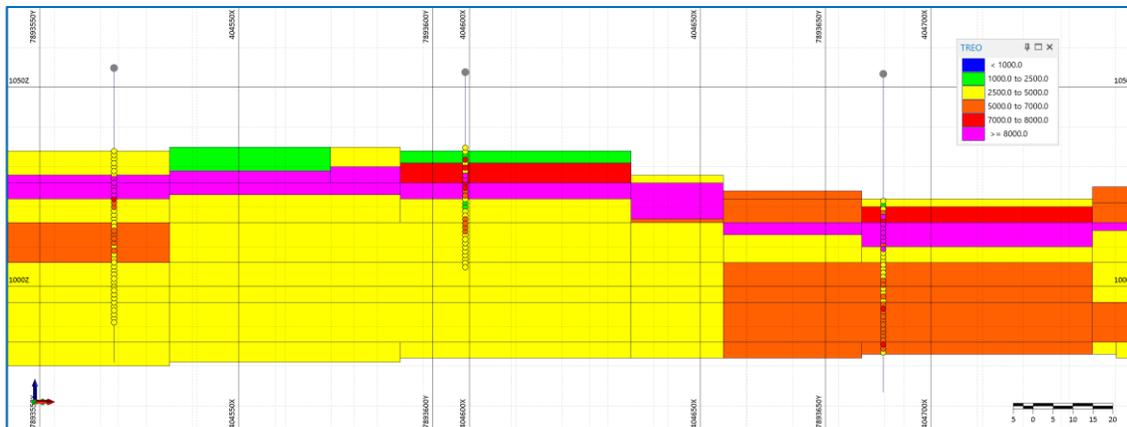


Figure 14-12. Cross-section visual validation of blocks against input composite data points, in high-grade and low-medium-grade domains for TREO ppm.

14.10.2 Comparison of Means

A comparison of the means and basic statistics for the TiO₂ and TREO input data against the estimated data and near neighbour estimation shows that there is no bias in the estimation and that the resultant values all fall within the predicted range (Table 14-11).

Table 14-11. Comparison of the statistics between the estimated results and input data in different domain.

Domain	Element	Input Data	Min	Max	No of Points	Mean	Variance	Std Dev	COV	Median	25 Prctile	50 Prctile	75 Prctile
High Grade	TiO ₂ %	Assay	10.49	39	370	23.39	24.05	4.90	0.21	22.85	20.20	22.85	26.68
	TiO ₂ %	OK	13.45	38.07	8959	22.80	6.00	2.45	0.11	22.67	21.15	22.67	24.35
	TiO ₂ %	NN	10.49	39	8959	22.19	21.80	4.67	0.21	22.09	19.70	22.09	24.84
	TREO ppm	Assay	2233	22420	367	8881	6425563	2535	0.29	8852	7357	8852	10463
	TREO ppm	OK	3087	15704	8959	8971	1187861	1090	0.12	8868	8322	8868	9575
Low Medium Grade	TiO ₂ %	Assay	1.01	34.8	2439	11.00	12.53	3.54	0.32	10.33	8.50	10.33	12.96
	TiO ₂ %	OK	2.11	28.345	39631	11.22	4.34	2.08	0.19	11.09	9.90	11.09	12.40
	TiO ₂ %	NN	0.09	34.8	39631	10.94	14.32	3.78	0.35	10.26	8.34	10.26	13.10
	TREO ppm	Assay	432	10284	2419	3693	2008776	1417	0.38	3498	2740	3498	4553
	TREO ppm	OK	873	7429	39487	3428	798741	894	0.26	3376	2856	3376	4028

14.10.3 Statistical Validation of OK Estimation Compared to Nearest Neighbour

The block model was populated with a simple nearest neighbour (NN) estimation and a set of swath plots generated to show how the Ordinary Kriging (OK) estimation varies with respect to the NN.

Block grades are validated against the raw data from the drillhole used in the estimation and with the ungrouped grades from a Nearest Neighbor (NN) analysis. No overall biases were observed.

Figures 14-13 and 14-14 show the swath plots for Dy in the high and low medium grade domains. They graphs demonstrate a good correlation between the OK and NN estimates, and a good representation of the input data, showing no bias and maintaining a local average.

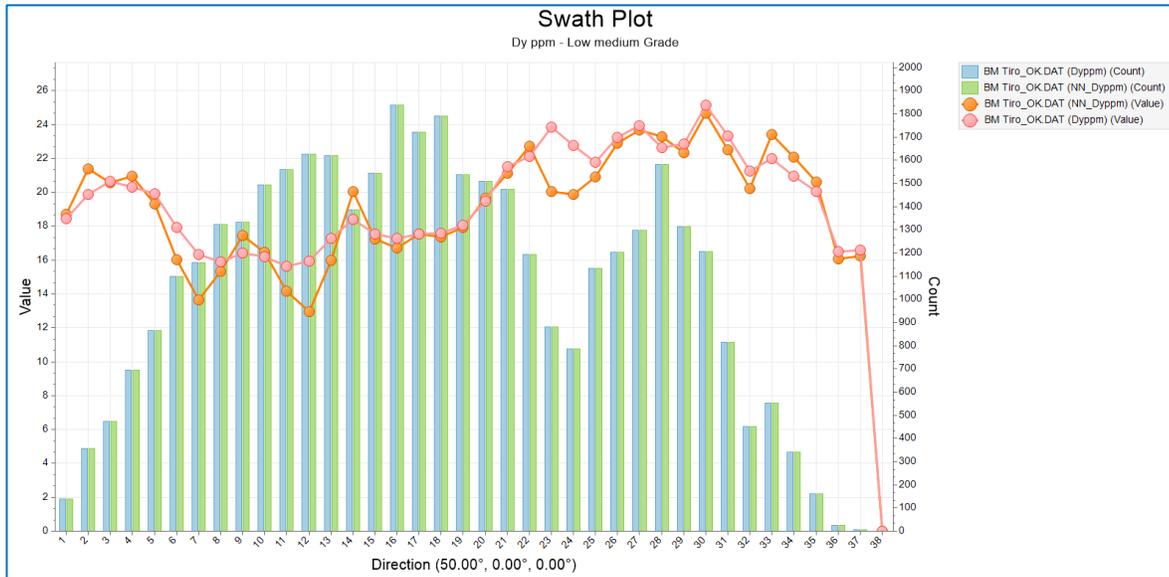


Figure 14-13. Swath Plot Validations for the Dy grade estimation within the low medium grade domain.

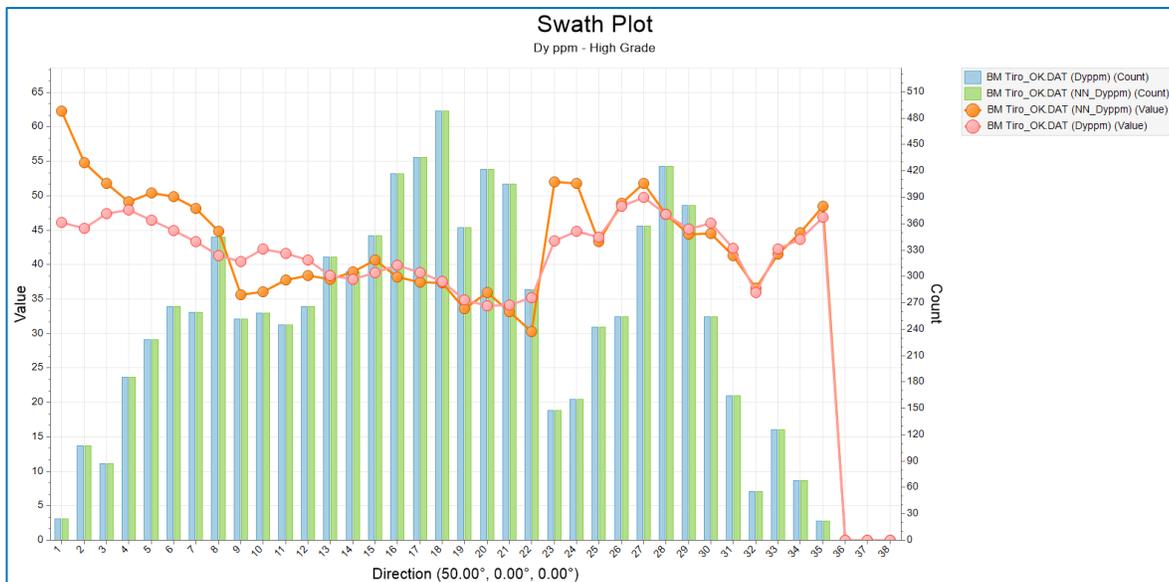


Figure 14-14. Swath Plot Validations for the Dy grade estimation within the high-grade domain.

Overall, the validation results indicate that the Ordinary Kriging (OK) model for the estimation of the rare earth elements and titanium oxide is a reasonable reflection of the input data.

14.11 Mineral Resource Classification and Estimate

Classification of the mineral resources is based on the ranges observed in the search ellipsoids and the number of drill hole composites that went into estimating the blocks. Table 14-12 shows the parameters used to define the different resource classifications. After the blocks were assigned, their classification based on the parameters (Table 14-12), they were reviewed, and the edges of the classification boundaries were smoothed to produce the final classification model.

Table 14-12. Resource classification parameters applied to the estimation.

	Distance		
	X - Y(along structure)	Min N° Drillholes	Min N° Samples
Measured	150	3	6
Indicated	250	2	4
Inferred	400	2	2

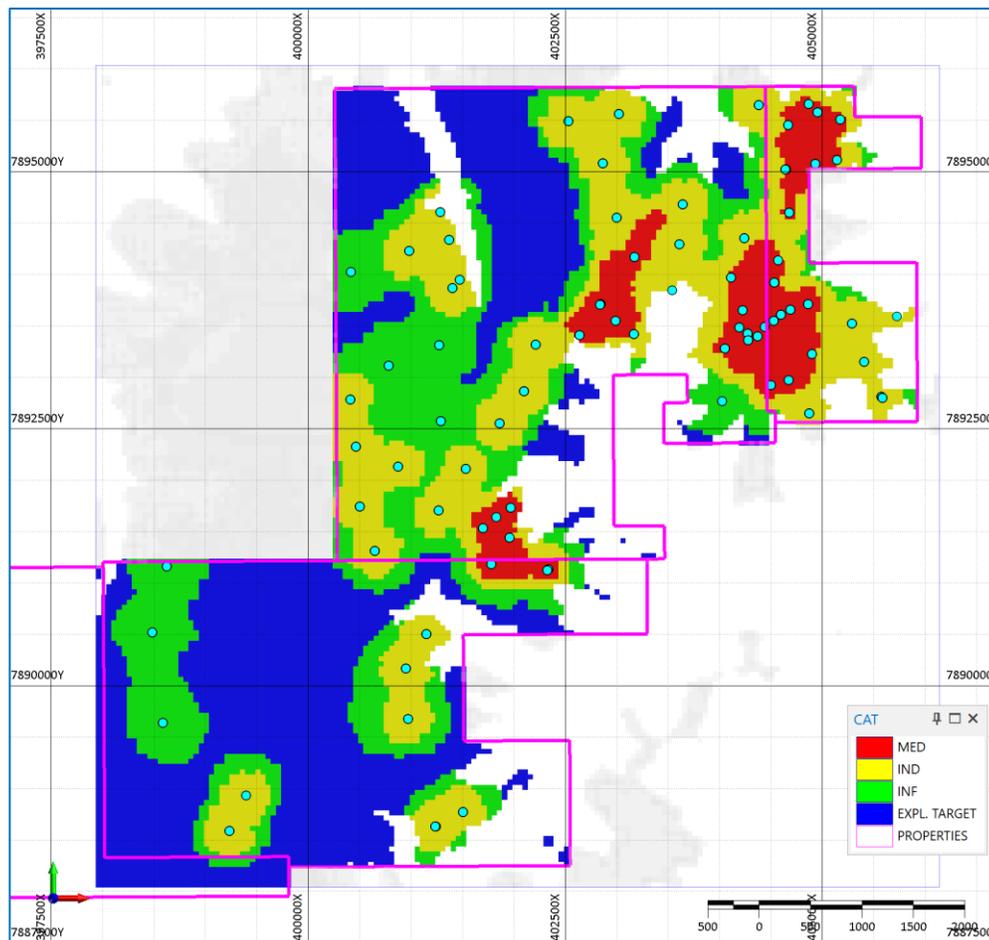


Figure 14-15. Plan view of Tiros deposit with the classification of the mineral resources coloured by classification; category 1 (red) is Measured, category 2 (yellow) is Indicated, and category 3 (green) is Inferred, and category 4 (blue) denotes an exploration target.

14.12 Reasonable Prospects for Eventual Economic Extraction and Cut-off Grade

For a mineral deposit to be considered a mineral resource, it must show that there are “Reasonable Prospects for Eventual Economic Extraction” (RPEEE). This implies that mineral resources are reported at an appropriate cut-off grade that takes into account the potential costs of extraction scenarios and processing recoveries. The geometry and stratigraphic location of the mineralised unit makes this project suitable for extraction via open pit mining methods. However, as results for adequate metallurgical test work are not yet available and there is little information on the potential recoveries, it has not been possible to define a break-even cut-off and an optimised pit. To define the portion of the resource that shows reasonable prospects for eventual economic extraction a cut-off grade of 1000ppm TREO was selected based on studies for similar deposits plus statistical analysis of this deposit has identified that approx. 1000ppm identifies a marked drop or limit of mineralisation.

14.13 Mineral Resource Statement

The Mineral Resource Estimate (MRE) for the Tiros Project considers the TiO₂, the Total Rare Earth Oxides (“TREO”), and the Magnetic Rare Earth Oxides (“MREO”); reporting to a cut-off of 1000ppm TREO the estimate contains 1 billion tonnes at 4,050 ppm TREO, 1,120 ppm MREO and 12% TiO₂ in the Measured and Indicated categories (refer to Table 14-13 below). The Inferred resource contains 660,000,000 tonnes at 12% TiO₂, 3,800ppm TREO, and 1,000ppm MREO.

The deposit contains a high-grade domain of 76,400,000 tonnes at 9,110ppm TREO, 2,420 ppm MREO, and 23% TiO₂, within the Measured and Indicated categories. The Inferred resource of the high-grade domain contains 42,000,000 tonnes at 8,600ppm TREO, 2,200ppm MREO, and 23% TiO₂.

The MRE places the Tiros Project as one of the largest undeveloped titanium and rare earth resource globally and in Brazil.

Table 14-13: NI 43-101 compliant maiden MRE, Tiros Project, Brazil (1,000 ppm TREO cut-off).

DOMAIN	CAT	TONNES (t)	TiO ₂	TREO (ppm)	MREO (ppm)
HG (High Grade)	Measured	20,800,000	24	9,320	2,530
	Indicated	55,700,000	23	9,030	2,380
	M + I	76,400,000	23	9,110	2,420
	Inferred	42,000,000	23	8,600	2,200
MG (Medium Grade)	Measured	224,000,000	11	3,570	997
	Indicated	704,000,000	11	3,650	1,020
	M + I	927,000,000	11	3,630	1,000
	Inferred	620,000,000	11	3,500	950
TOTAL (High + Medium Grade)	Measured	245,000,000	12	4,060	1,130
	Indicated	759,000,000	12	4,040	1,120
	M + I	1,000,000,000	12	4,050	1,120
	Inferred	660,000,000	12	3,800	1,000

**The resources table has been rounded to 3 significant figures for measured and indicated resources and to 2 significant figures for inferred resources.*

Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The tonnage and grade figures in the resource statement are rounded off to reflect the relative uncertainty of the estimate, for this reason the summations may not add up.

- The MRE incorporates 4,766 metres of drilling across 102 drill holes including 20 historical drill holes.
- The maiden MRE is derived from the Central tenements of the Tiros Project, being ~7% of the tenements that comprise the total Tiros Project area.
- The majority of the resource is open laterally and found to be homogeneous in nature.
- The Resource exists within Brazil's most advanced mining state (Minas Gerais) with developed infrastructure, existing access to road, rail and port, in a supportive community, and a favourable environmental region which will support the development of the Tiros Project.

15.0 MINERAL RESERVES

This section is not applicable to the Project at its current stage.

16.0 MINING METHODS

This section is not applicable to the Project at its current stage.

17.0 RECOVERY METHODS

This section is not applicable to the Project at its current stage.

18.0 PROJECT INFRASTRUCTURE

This section is not applicable to the Project at its current stage.

19.0 MARKET STUDIES AND CONTRACTS

This section is not applicable to the Project at its current stage.

20.0 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

This section is not applicable to the Project at its current stage.

21.0 CAPITAL AND OPERATING COSTS

This section is not applicable to the Project at its current stage.

22.0 ECONOMIC ANALYSIS

This section is not applicable to the Project at its current stage.

23.0 ADJACENT PROPERTIES

In total, the Capacete formation has some 1,735 km². It is reasonable to expect similar grades and thickness in some properties adjacent to the areas reported here since this formation occurs as a horizontal bed. The only property with public results reported belongs to the Brazilian company Bemisa, situated at the south and southwest extensions of the Resouro Tiros Central block. Figure 23-1 indicates the position of this project with respect to the Tiros Project concessions.

Bemisa reported over one billion tons of resources at 0.45 % TREO. It also reported positive leaching tests. This information was obtained from the mining news magazine Brazil Mineral, as referred to in the references.

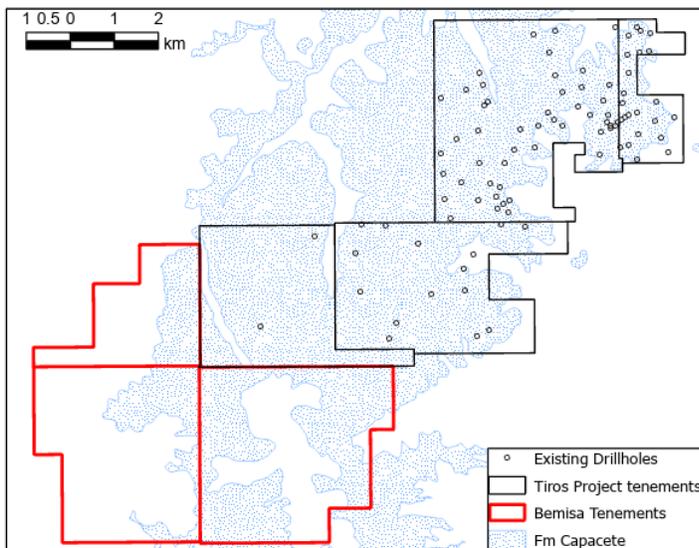


Figure 23-1, Tenement map, showing the Tiros Central concessions and the adjacent property of Bemisa

24.0 OTHER RELEVANT DATA AND INFORMATION

The Author (Simon Mortimer) is not aware of any additional information or explanations necessary to make the Report understandable and not misleading.

25.0 INTERPRETATION AND CONCLUSIONS

The objective of the Report was to prepare an independent NI 43-101 Technical Report, capturing historical and current information and data available about the Tiros REE + TiO₂ Project, providing interpretation and conclusions, and making recommendations for future work.

25.1 Property Description

The Tiros Project is located near a town called Tiros with a population of approximately 8,000 people in northern Minas Gerais, which is situated approximately 350 km west-north-west of Belo Horizonte, the state capital. The Tiros Project is an early-stage exploration project focused on rare earth elements and titanium and covers an area of approximately 450 km². The town Tiros has established infrastructure and amenities to support mineral exploration and is within close proximity of major federal highways, high voltage power lines and major rail infrastructure. The Tiros Project is accessible from sealed roads with the exception of landholder entry ways that are used to access their agricultural lands and the exploration sites.

17 exploration permits and one exploration permit application are registered in the name of BCML, a subsidiary of the Company (refer to Section **Error! Reference source not found.**), and the remaining six exploration permits and one exploration permit application have been validly assigned to BCML and are awaiting final approval from the ANM.

25.2 Geology and Mineralization

Mineralisation at the Tiros Project is due to a lateritic process enriching epiclastic rocks, and the erosion products of volcanic rocks enriched in titanium and rare earth elements. Rare earth elements and titanium mineralisation are hosted in highly weathered sandstones and conglomerates of the Capacete Formation, belonging to the Mata da Corda Group. Titanium is mainly associated with the mineral anatase, originated from the alteration of perovskite. This mineral, with formula CaTiO₃, was affected by weathering close to surface. The calcium ion was put into solution by meteoric waters, leaving the anatase crystals with many voids. This allowed the migration of the rare earth elements to nearby ionic clays.

Within the Tiros Project area, the following lithostratigraphic units were differentiated and mapped, from base to top: Bambuí Group, Areado Group, Mata da Corda Group, Laterite Cover and Alluvial Deposit. There is a North-North-East-directed band that encompasses the rocks of the Mata da Corda Group, represented by the Capacete formation, which generally have a lateritic cover and are exposed only on the slopes of the plateaus.

The upper part of the mineralized zone is known as being of higher grade for both titanium and rare earths which should be the effect of the leaching of gangue elements due to weathering.

25.3 Target Deposit Type

Rare earth elements appear in both primary and secondary mineral ores in nature. The Tiros deposit consists of secondary mineral concentrations that have been formed through surface weathering and sedimentary processes from the primary minerals. These types of mineral concentrations are known as

Ionic Adsorption Clay (IAC) Deposits, which in the case of Tiros are residual soils that are formed from the intense weathering of rare earth-rich rocks, such as the alkaline volcanics of the Mata da Corda formation.

25.4 Historical Exploration Work

The exploration history of the areas that make up the Tiros Project began in 2010, with Águia Metais Ltda initially focusing on phosphate and, from 2013, focussing on titanium. From 2010 to 2017, there was extensive geological mapping covering the Capacete formation. This mapping was based on the geophysical interpretation and field work. The main source of geophysical data used was the aeromagnetic and radiometric survey conducted by the state government agency “Codemig”, using an aircraft flying at 100m altitude, with flight lines North-South, separated by 400 m each.

Between 2016 to 2017, 20 air core drill holes were drilled by Iluka within the 833.082/2014 and 833.083/2014 exploration permits, totalling 1,225m with depth of the holes varying from 35 to 60m.

Between 2017 to 2023, RBM kept the Tiros Project areas in good order, expanded the property and acquired new exploration permits based on the available data, undertaking various desktop studies and a major chemical re-analysis of samples program was developed using the Iluka drill samples.

25.5 Risks and Uncertainties

Risks and uncertainties which may reasonably affect reliability or confidence in future work on the Property relate mainly to the reproducibility of exploration results (*i.e.*, exploration risk) in a future production environment. Exploration risk is inherently high in early-stage exploration; however, these risks are mitigated by applying the latest geophysical and surface mapping and sampling techniques to develop high confidence targets for future drilling programs. Exploration work completed by Resouro has confirmed that the mineralisation in the Tiros Project is very homogenous and continuous through the host lithology, indicating that the risk associated with the successful completion of the future drill programs is low.

The Principal Author is not aware of any other significant risks or uncertainties that would impact the Issuer’s ability to perform the recommended work program (*see* Section 26) or other future exploration work programs on the Property.

25.6 Conclusions

Based on the Property’s favourable location within the mining state of Minas Gerais, Brazil, and the extensive and continuous nature of the REE & TiO₂ mineralization within the Property, the Project presents an excellent opportunity for the discovery of a very large and relatively high-grade rare earth and titanium oxide deposit with excellent exploitation potential.

26.0 RECOMMENDATIONS

It is the opinion of the Author (Simon Mortimer) that the geological setting and character of the mineralization discovered to date on the Tiros Project is of sufficient merit to justify additional exploration and development expenditures. A recommended work program, arising through the preparation of the Report and consultation with Resouro Strategic Metals Inc., is provided below.

Next Phase Advanced Exploration Works:

- Extend the area of the topographic survey across the remaining Tiros central RSM owned project tenements.
- Perform further density tests on the lithologies of interest.
- Conduct further exploration drilling and infill drilling to extend and improve the level confidence for the current mineral resource estimate for the Project.
- Undertake mineralogical and preliminary metallurgical studies to demonstrate the potential recoveries and subsequent economic extraction of payable metals, such as in support of the production of concentrates for export or in support of secondary processing.
- Determine if the asset meets investment hurdles and financial viability through the completion of a Preliminary Economic Assessment (PEA). This will include demonstrating prospects for economic extraction, with sufficient flexibility to support the evaluation of an optimal bulk-tonnage mining scenario.

Table 26-1 provides a basic breakdown of the forecast associated exploration expenditure for each activity. All costs included are in Canadian dollars (CAD\$).

Table 26-1 A breakdown of the forecast expenditure for the next phase of exploration work program

Activity	Allocation of Funds
Surveying Studies	32,457
Metallurgical Testwork	997,472
Further Drilling and Desktop Studies	2,494,766
Operations Personnel	923,502
Capital Items	100,750
Permitting and Landholder Compensation	196,149
Total Project Related Expenditure 2024	5,002,793
Corporate Expenditure 2024 (Board, Executives, Listing and Maintenance, Overheads)	2,885,324
TOTAL	7,888,117

27.0 REFERENCES

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