A COMPETENT PERSONS' REPORT ON THE MINERAL ASSETS OF TIRUPATI GRAPHITE, MADAGASCAR AND MOZAMBIQUE

Report Prepared for

Tirupati Graphite PLC

Report Prepared by

srk consulting®

SRK Mining Services (India) Private Limited

March 2026

SRK Legal Entity:	SRK Mining Services (India) Private Limited
SRK Address:	DD 30, 5th Floor, Andromeda, Sector 1, Salt Lake City, Kolkata – 700064.
Date	March 2026
Client's Legal Entity:	Tirupati Graphite PLC
Client's Address:	
SRK project Number:	IN1384
SRK project Director:	Subrato Kumar Ghosh, Practice Leader and Corporate Consultant (Project Evaluation)
SRK project Manager:	Shameek Chattopadhyay, Principal Consultant (Resource Geology)

SRK Mining Services (India) Pvt Ltd
5th Floor, Andromeda Building,
DD-30, Sector 1, Salt Lake City
Kolkata, West Bengal, India, 700 064.

T: +91 33 6548 8317
E: enquiries@srk.co.in

www.in.srk.com

EXECUTIVE SUMMARY

A COMPETENT PERSONS' REPORT ON THE MINERAL ASSETS OF TIRUPATI GRAPHITE, MADAGASCAR AND MOZAMBIQUE

1 INTRODUCTION

SRK Mining Services (India) Private Limited (SRK) has prepared a Competent Persons' Report (CPR) on the graphite mineral assets (the Mineral Assets) of Tirupati Graphite PLC (Tirupati or the Company), located in Madagascar and Mozambique.

The CPR will be included in the prospectus published by the Company.

2 OVERVIEW OF MINERAL ASSETS

Tirupati holds multiple mineral licenses/permits for exploration and mining for graphite in Madagascar and Mozambique. Tirupati secured the permits in Vatomina in December 2016, Sahamamy in February 2018 (from Roistang ER) and added the Montepuez and Balama Central permits in Mozambique with the 2023 acquisition of Suni Resources S.A.. A summary of the Mineral Assets is given in Table ES 1. The location of the Mineral Asset licence areas is presented in Figure ES 1 and Figure ES 2.

Table ES 1: Tirupati 2025 Mineral Assets

Mineral Asset	Mineral Resource	Ore Reserve	Location	Status	Output Capacity (ktpa)
Vatomina	Yes	No	Madagascar	Operating	12,000
Sahamamy	Yes	No	Madagascar	Care and maintenance	18,000
Montepuez	Yes	No	Mozambique	Greenfield, FS to be updated	53,000
Balama Central	Yes	No	Mozambique	Greenfield, FS to be updated	58,000

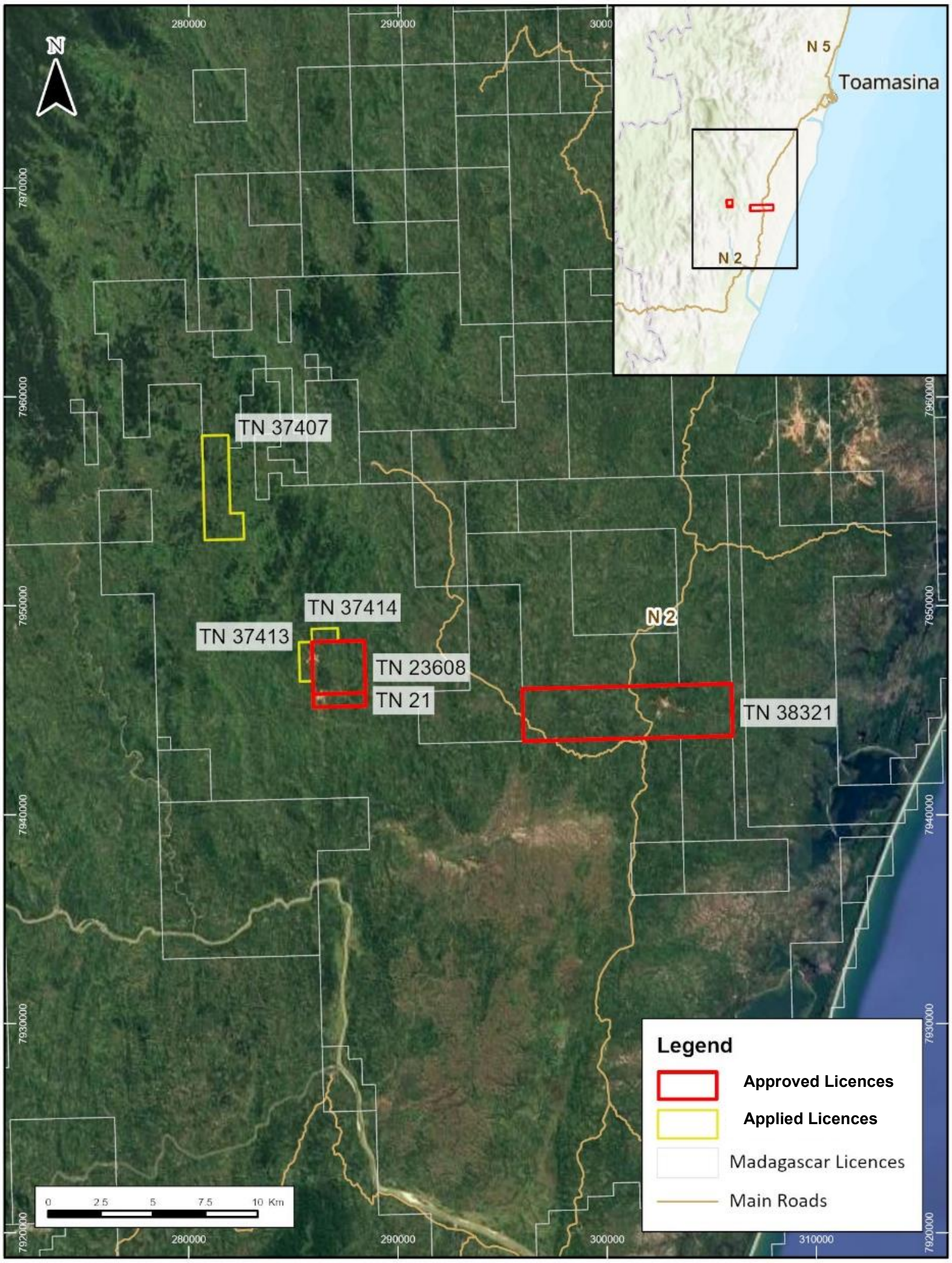

Figure ES 1: Location of Tirupati Madagascar licence areas

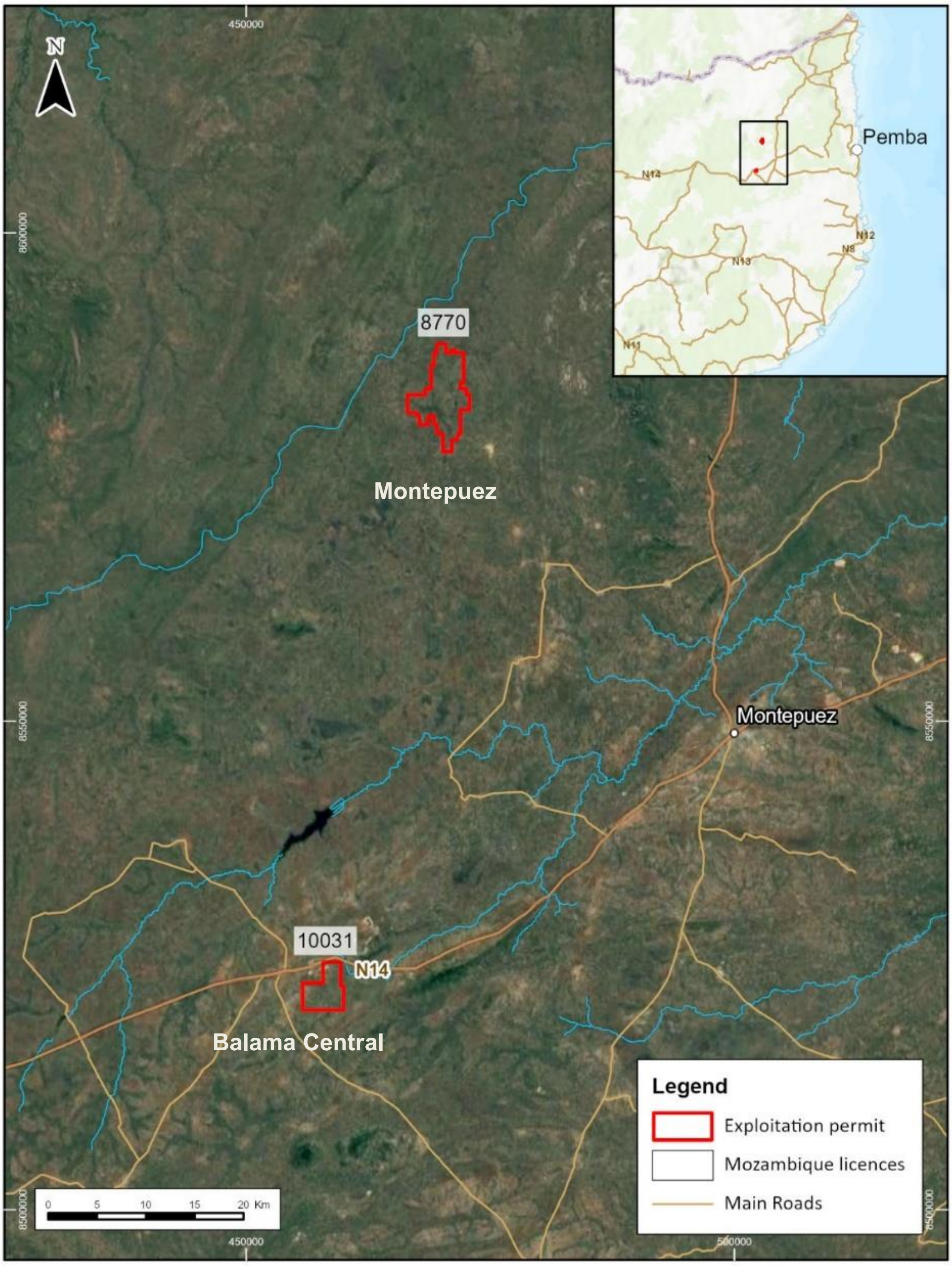

Figure ES 2: Location of Tirupati Mozambique licence areas

Mineral Resources have been declared for the four Mineral Assets using the terms and definitions given in The 2012 Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves as published by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia (the JORC Code) and are presented in Table ES 2.

Vatomina is the only asset currently in production and is ramping up production to the nameplate capacity of 6,000 tpa graphite concentrate. Tirupati is progressing field work and technical studies at Vatomina with the aim to reporting Ore Reserves at the end of 2026

Table ES 2: Mineral Resources Statement for Tirupati Mineral Assets, 30 September 2025

Deposit	Resource Classification	Tonnes (Mt)	Grade (%TGC)	Contained Graphite (kt)
Vatomina	Measured	-	-	-
	Indicated	1.6	3.8	60
	Measured and Indicated	**1.6**	**3.8**	**60**
	Inferred	4.4	3.8	170
	Total Resource	**6**	**3.8**	**230**
Sahamamy	Measured	-	-	-
	Indicated	1.2	4.0	50
	Measured and Indicated	**1.2**	**4.0**	**50**
	Inferred	5.2	4.3	220
	Total Resource	**6.4**	**4.2**	**270**
Elephant (Montepuez)	Measured	5.3	8.3	440
	Indicated	29.6	8.1	2,400
	Measured and Indicated	**34.9**	**8.1**	**2,840**
	Inferred	33.9	6.8	2,310
	Total	**68.8**	**7.5**	**5,150**
Buffalo (Montepuez)	Measured	5.5	9.0	500
	Indicated	16.5	10.3	1,700
	Measured and Indicated	**22.0**	**10.0**	**2,200**
	Inferred	19.7	8.9	1,750
	Total	**41.7**	**9.5**	**3,950**
Balama Central	Measured	-	-	-
	Indicated	50.1	7.7	3,860
	Measured and Indicated	**50.1**	**7.7**	**3,860**
	Inferred	7.8	9.0	700
	Total	**57.9**	**7.9**	**4,560**
Total	Measured	11.0	8.7	940
	Indicated	99.0	8.2	8,070
	Measured and Indicated	**109.8**	**8.2**	**9,010**
	Inferred	71.0	7.3	5,150
	Total	**180.8**	**7.8**	**14,160**

The following notes accompany the Mineral Resource Statement:

- The Competent Person who has compiled the Mineral Resources as reported by the Company is Mr Shameek Chattopadhyay, M.Sc., MAusIMM;
- The Competent Person visited the Vatomina and Sahamamy project during 9 March 2024, and all sites multiple times since 2019. The extended SRK project team authoring the CPR was unable to visit the Mineral Assets due to the ongoing political situation and unrest in relevant areas in both Madagascar and Mozambique.
- The Mineral Resources have an effective date of 30 September 2025.
- Rounding as required by reporting guidelines may result in apparent summation differences between tonnes, grade and contained metal content. Where these occur, they are not considered material.
- Tonnages are reported in metric units, grades in percent (%) and grades are rounded appropriately.
- Mineral Resources are reported with reasonable prospects for eventual economic extraction, by applying appropriate technical and economic assumptions. A cutoff grade of 2.0%TGC has been applied for Vatomina and Sahamamy, and 2.5%TGC for Montepuez and Balama Central.
- Mineral Resources are not Ore Reserves and do not have demonstrated economic viability, nor have any mining modifying factors been applied.

- A JORC Table 1 has been completed and is available from the Company. All elements of Table 1 are included in this CPR.

3 VATOMINA

The Vatomina mine is in the Atsinanana region in the Brickaville district in the eastern part of Madagascar. Tirupati was granted the mining permit by the Mines Ministry in December 2016 and declared a maiden JORC MRE in 2018. A processing facility with a capacity of 9,000 tpa graphite concentrate was scheduled for commissioning in 2021 but hampered by the pandemic. The installed plant has a stated design capacity of 6,000 tpa of finished product. Production data has been provided from April 2022 onwards.

3.1 Mineral Resource Estimate (MRE)

SRK has prepared Mineral Resource Estimates for the Vatomina deposit with Mineral Resources totalling 6.0 Mt at 3.8% TGC for 230 kt of contained graphite, including 1.6 Mt of Measured and Indicated Mineral Resources at 3.8% TGC for 60 kt of contained graphite.

The Mineral Resource is reported above a 2.0% TGC cut-off grade, within an optimised pit shell using a graphite concentrate price of USD 950/t.

3.2 Production

Processing facilities with sufficient capacity to produce up to 6,000 tpa of graphite concentrate were installed at Vatomina and commissioned in 2022. Production up to 11,400 tpa graphite concentrate is permitted.

Mining at Vatomina is relatively simple as the ore can be visually distinguished from the surrounding overburden and waste; however, the lack of grade control can result in variability in the graphite content of the material being fed to the plant, which can reduce process efficiency and production capacity.

Production is highly variable. Monthly plant feed rate since April 2022 varies from 3,300 tpm to 23,000 tpm. Concentrate production varies from 87 tpm to 55 tpm. If peak monthly production could be sustained, annual graphite concentrate production of 6,700 tpa could be achieved.

Since the mothballing of the Sahamamy Project, mobile and fixed assets have been transferred between the two projects to increase production at Vatomina where five pre-concentration units are now operating compared to the original two units.

3.3 Work Plan

Three pre-concentration units (PCU) have been transferred from Sahamamy to Vatomina with a fourth unit underway which will bring the number of operating PCU to six. The additional PCU, located in the new mining areas, will reduce the haulage distance from the pit to the plant and will help increase production.

The process of ramping up graphite production from 12,000 tpa to 18,000 tpa at Vatomina has been initiated with a targeted completion date of 2026.

A drilling program is planned for 2026 comprising about 5,000 m of diamond drilling the results of which will be used to update the MRE.

Tirupati has provided SRK with details of planned exploration activities and expenditure to explore an identified target at Vatomina which SRK estimates contains a potential for 18-20 Mt of graphite mineralisation at 4-5% TGC. Exploration will include about 18,000 m of diamond drilling and is expected to be completed within 5 years at a cost of GBP 2 million which SRK considers to be reasonable.

3.4 Risks and Opportunities

SRK perceives the following risks associated with the Vatomina mine:

- Mining is currently being undertaken with no supporting (detailed) long-term or short-term strategic planning. This is considered a high-risk strategy, and this appears to have contributed to the reduced production performance noted by the Company for 2025 (YTD); for example, the appearance of clays within certain parts of the deposit and the lower-than-expected mined grades.
- The Company’s strategy for Mineral Resource development and conversion to Ore Reserves is highly conceptual and is not supported by detailed budgets and work plans. Whilst in principle the strategy may be achievable within the time period indicated by the Company, the level of planning could result in unforeseen delays or issues which limit progress.
- Mining activity is advancing into new areas where n metallurgical testwork has been carried out. A Relatively simple testwork program, based on the available equipment in the existing plant should be carried out on samples from the new mining areas to confirm the ability to produce saleable concentrates and determine target recoveries for financial planning.
- The process plant is currently achieving less than half of the nameplate capacity. Periods of downtime for maintenance and lack of spare parts is reported. Capital investment in the processing facilities will be required if production targets are to be achieved.
- The remaining capacity of the final concentrate unit (FCU) tailings storage facility requires investigation and an operating life for the current facility needs to be determined as a priority so that planning can begin for a new facility which will have to be designed and permitted before it can be put into operation.
- There is a risk of community opposition to the project related to dissatisfaction with the Vatomina project due to claims related to compensation for land use combined with ongoing water contamination issues.
- There is a risk of regulators imposing fines or penalties on the company due to non-compliance with environmental commitments including water quality standards and non-compliance with water abstraction limits.
- A closure plan and associated financial liability has not yet been developed. These will be required before the company can declare Ore Reserve.

SRK perceives the following opportunities associated with the Vatomina mine.

- To identify additional Mineral Resources for the Vatomina asset through further exploration.
- To upgrade a portion of the Mineral Resources of the Vatomina asset to higher classifications through further drilling and sampling.
- Relocation of the remaining fixed plant from Sahamamy to increase production capacity and provision of spare parts.

4 SAHAMAMY

The Sahamamy asset is located in the Toasamina Province on the central east coast of Madagascar. The two mining concessions and three exploration permits were acquired when Tirupati acquired 95% of Establissement Rostaing SARL (Rostaing) in February 2018.

The Rostaing deposit (renamed as the Sahamamy project by Tirupati) was operated by different companies since 1967 as a small open pit mining and processing operation producing up to 240 tonnes per annum of graphite. Tirupati expanded production to 3,000 tpa in 2019 and then increased production capacity to 18,000 tpa with a larger mining fleet and new processing facility commissioned in 2023.

Production difficulties resulted in operations being placed in care and maintenance in April 2024 and no production is scheduled for 2025-26.

4.1 Mineral Resource Estimate (MRE)

SRK has prepared Mineral Resource Estimates for the Sahamamy deposit with Mineral Resources totalling 6.4 Mt at 4.2%TGC for 270 kt of contained graphite, including 1.2 Mt of Measured and Indicated Mineral Resources at 4.0% TGC for 50 kt of contained graphite.

The Mineral Resource is reported above a 2.0% TGC cut-off grade, within an optimised pit shell using a graphite concentrate price of USD 950/t.

4.2 Work Plan

A major expansion of production was implemented at Sahamamy in 2022-23 with an increase in mining fleet and primary processing capacity to 450,000 tpa of ore and a complementary secondary process plant with a production capacity of 18,000 tpa of graphite concentrate.

Operational difficulties caused Tirupati to place the operation into care and maintenance in April 2024. Subsequentially many of the assets, both fixed and mobile, have been relocated to the Vatomina operation to ramp up production there.

The production records from February 2023 to March 2024 show that the process plant was not able to sustain a concentrate grade over 94% FC and further exploration and development of the Sahamamy deposit needs to be supported by thorough metallurgical testwork to demonstrate production of a saleable concentrate.

In the period from February 2023 to March 2024 the Company reported variability in the clay content of the ore causing difficulties in the process plant, particularly in the rainy season. Variability testing of the ore should be carried out as part of any plans to re-start operations to determine if the feed to the plant should be blended to limit the clay content of the plant feed.

The reasonable prospect of eventual economic extraction (RPEEE) for Sahamamy has been derived using benchmarks from similar operations and budgeted costs from the Company but no actual production costs from the operating period. A benchmarking exercise resulted in the Sahamamy costs being increased in line with similar graphite operations elsewhere.

Tirupati has provided SRK with details of planned exploration activities and expenditure to explore an identified target with potential for 1-2 Mt of graphite mineralisation at 4-5% TGC. Exploration will include about 2,000 m of diamond drilling and is expected to be completed within two years.

4.3 Risks and Opportunities

The key project risks identified by SRK for the Montepuez project are:

- The Sahamamy process plant averaged a final concentrate grade of 91% FC. Metallurgical testwork on representative samples of the ore should be conducted as a first step in any plans to re-open the operation.
- The RPEEE should be updated with actual costs from the operating period.
- There is a legal risk relating to the construction and operation of the settlement ponds within the exploration licence area (307413) that do not appear to have been established with the necessary approvals from environmental authorities.
- There is a risk related to community dissatisfaction with the Sahamamy project due to claims related to compensation for land use combined with ongoing water contamination issues.
- A closure plan and associated financial liability has not yet been developed. These will be required before the company can declare Ore Reserve.

5 MONTEPUEZ

The Montepuez asset consists of two deposits, Elephant and Buffalo, located in Cabo Delgado province in Northern Mozambique. The assets and associated exploration permits were acquired when Tirupati took over Suni Resources S.A., a subsidiary of Battery Minerals Limited in 2023.

The Montepuez project is currently under ‘Force Majeure’ till December 2025 (implemented by Battery Minerals Limited on May 2022), beyond which Tirupati will assess the ground situation, and the Management will take a call on further proceedings. The concession is supported by a DUAT (land use right), an environmental licence, and a water licence, making the project fully permitted, with an expiry date of November 2025. SRK has been advised that the licence validity periods are paused for the duration of the *force majeure* declaration and that these can be re-activated once the project resumes. The lease area (Mining license Number 8770) covers approximately 3666.88 ha (36.67 km^2). Within the limits of the CPR, SRK has not taken responsibility for undertaking a validation of these licences or the *force majeure* status.

5.1 Mineral Resource Estimate

SRK has prepared Mineral Resource Estimates (MRE) for the Elephant and Buffalo deposits with Mineral Resources totalling 110.5 Mt at 8.3% TGC for 9.1 Mt of contained graphite, including 57.0 Mt of Measured and Indicated Mineral Resources at 8.80% TGC for 5.0 Mt of contained graphite.

The Mineral Resource is reported above a 2.5% TGC cut-off grade, constrained by geological wireframes and an optimised pit shell based on a USD 800/t concentrate price.

5.2 Work Plan

Systematic exploration has been undertaken at Montepuez from the time of Battery Minerals Limited being granted their license in 2014 including almost 20,000 m of drilling in the Elephant and Buffalo deposits.

A comprehensive feasibility study was completed in 2017 and subsequentially updated with a value engineering and project implementation plan, completed in 2019 to construct an open-cut mining and processing operation capable of producing 53 kt of flake graphite concentrate per year at a grade of 96% TGC.

A thorough metallurgical testwork program was carried out by the previous owners as part of the development of the Montepuez Graphite Implementation Plan (MGIP) comprising flowsheet development and equipment selection for a process plant with a capacity to produce 53,000 tpa of graphite concentrate with >96% TGC.

The previous owners had established certain elements of the plant infrastructure, including a site camp, water retention dam and internal access roads, but without access to site, it is not possible to comment on the current condition of these facilities, and as the site was abandoned after the declaration of force majeure, these should not be considered to be useable until confirmed otherwise.

Earlier reports suggest that additional close spaced drilling would capture the structural complexity of the deposits which may impact the overall geometry and grade of the graphite mineralisation. Re-logging of the core would help with the definition of the extent of the weathered zones and the boundary between oxidised and fresh rocks. The Versatile Time Domain Electromagnetic (VTEM) airborne surveys suggest there is additional potential graphite mineralisation in the area, only a few of which have been tested leaving potential for further discoveries. The two deposits identified remain open at depth, offering further potential.

Since the previous studies were completed, there has been considerable cost inflation globally, whilst the graphite market has remained relatively static. The previous studies should be updated to reflect current economics. The results of the previous metallurgical testwork can be considered valid for inclusion in the new studies.

SRK has not been able to obtain and review copies of the exploration permits or the reported environmental approval. The status of the relationship between the Company and local stakeholders is not known, and SRK is therefore not able to comment on the social acceptance of the Company at this time. SRK notes that no assessment of current environmental and social liabilities has been undertaken.

The concession is supported by a DUAT (land use right), an environmental licence, and a water licence, deemed for renewal in November 2025. SRK is unaware of the renewal status.

5.3 Risks and Opportunities

The key project risks identified by SRK for the Montepuez project are:

- The ongoing force majeure conditions of the project are a significant hurdle to the project's development.
- Insufficient knowledge and understanding of the structural geology, as a result of the drill pattern spacing, could generate misleading geometry and grade estimation.
- Whilst a feasibility study has historically been prepared for the project, changing macroeconomic conditions means that the results of this study are not applicable to present day. Updating of this study (and the supporting design, engineering and economic analysis) is likely to result in considerably reduced Ore Reserves for the project.
- The work required to update understanding of the project to a Feasibility level of detail is considerable, requiring significant time and financial inputs. SRK recommends that the next study undertaken on the project should be at a Scoping Study level of detail only, as the various economic inputs to the study will have changed significantly and a fundamental reassessment of the project scope will likely be required.
- The project is located upstream of a designation national park. Exploration and future mining activities will need to be carefully planned to ensure that impacts to water courses do not occur.

The key project opportunities identified for the Montepuez project by SRK are:

- Previous test work shows that V_2O_5 can be recovered as a by-product of graphite

6 BALAMA CENTRAL

The Balama Central project, located in the Cabo Delgado Province of northern Mozambique, is adjacent to Syrah Resources, the largest flake graphite producing mine in country.

Graphite occurrences in the area are enhanced by local weathering, which produces soft, friable material that is amenable to processing. The project is explored in very limited area and holds a large potential.

6.1 Mineral Resource Estimate (MRE)

SRK has prepared a Mineral Resource Estimate, totalling 57.9 Mt at 7.9% TGC for 4,560 kt of contained graphite. This includes some 51.2 Mt of Indicated Mineral Resources, at 7.7% TGC, for 3,860 kt of contained graphite

The Mineral Resource is reported above a 2.5% TGC cut-off grade, within an optimised pit shell using a graphite concentrate price of USD 800/t.

6.2 Work Plan

Battery Minerals Limited, the previous owner of the project, carried out exploration between 2015-2018 through a series of mapping, geophysics and drilling 38 diamond drill holes of over 3,000 m in total, and identified two potential prospects of high-grade graphite in the lease area, Lennox and Byron, and reported Mineral Resources as per JORC Code 2012 in 2018.

A preliminary metallurgical testwork program carried out by Battery Minerals Limited and included in the 2018 MRE demonstrated the potential for the production of a concentrate with a total graphitic carbon content of >96% at an average recovery of 90%. A mineral liberation analysis determined flake size and liberation which was integrated into a geometallurgical model used to predict flake production.

The Balama Central project is at an early stage and whilst the previous preliminary studies completed on project are a positive indicator of the project's economic potential, a substantial quantity of work is required to be able to declare an Ore Reserve.

Undrilled segments of VTEM anomalies offer scope for identifying additional mineralisation, particularly along known trends adjacent to the Lennox and Byron zones. All prospects remain open along strike to the north and at depth. Extensional drilling in these directions may contribute to increased resource tonnage. Targeted infill drilling could improve data density and support the reclassification of existing resources to higher confidence categories

6.3 Risks and Opportunities

The key project opportunities identified for the Balma Central project by SRK are:

- The ongoing force majeure conditions of the project are a significant hurdle to the project's development.
- Earlier assessment was undertaken under very different macro-economic conditions which renders the results inapplicable in the currrent market.
- Faults within the structure of the deposit are not well defined and variations in geometry and tonnages may not be fully understood.
- The Mineral Resource extends up to the edge of the tenement boundary and the regulatory buffer zones required between the pit design and the tenement limits, may render these inaccessible potentially leading to partial sterilisation of the resource.

- SRK has not been able to obtain and review copies of the exploration permits or the reported environmental approval. SRK notes that no assessment of current environmental and social liabilities has been undertaken and that the project is located upstream of a designated National Park. The status of the relationship between the Company and local stakeholders is not known. SRK is therefore not able to comment on the social acceptance of the Company at this time.
- The project requires development through a structured series of studies which is likely to require considerable time and financial investment to complete.

The key project opportunities identified for the Balma Central project by SRK are:

- Undrilled segments of VTEM anomalies offer scope for identifying additional mineralisation, particularly along known trends adjacent to the Lennox and Byron zones.
- All prospects remain open along strike to the north and at depth. Extensional drilling in these directions may contribute to increased resource tonnage.
- Targeted infill drilling could improve data density and support the reclassification of existing resources to higher confidence categories.
- Preliminary indications suggest potential for V_2O_5 recovery as a secondary product. Further investigation may reveal economic viability, adding value to the graphite operation

7 CONCLUSION

SRK has undertaken a review of exploration and Mineral Resource estimates presented by the Company, and has reported Mineral Resources for all four assets, amounting to 181 Mt at 7.8% TGC across the assets, as presented in Table ES 2.

In addition, Exploration Targets have been estimated for Vatomina and Sahamamy. At Vatomina, SRK estimates an Exploration Target of about 18-20 Mt of graphite mineralisation with an average grade ranging between 4-5% TGC. At Sahamamy, an Exploration Target of about 1-2 Mt of graphite mineralisation with an average grade ranging between 4-5% TGC is reported. Both of the Exploration Targets are supported by drilling plans and costed exploration programmes, which are considered reasonable.

In reviewing the MRE for the various assets, SRK notes that there is scope for improvements to be made. These include:

- Additional diamond drilling to improve confidence in the geological and grade continuity, and also to improve confidence in auger drilling.
- Implementation and review of appropriate field protocols for logging, sampling, sub-sampling, sample preparation, assay and QAQC for any additional drilling.
- Detailed structural mapping and interpretation to refine the existing model(s).
- Gathering additional density data to improve tonnage estimates.
- Adjustments to the grade estimates to improve the quality of the block models.

Various field work and technical studies are still required to advance the Mineral Assets to complete life of mine plans and enable Ore Reserves to be declared. SRK notes that the Company is still in the process of developing the projects.

The Company has prepared a work programme including sufficient work at Vatomina, the only Mineral Asset in operation at present, aiming to declare an Ore Reserve at the end of 2026. The plan is preliminary in nature and challenging, though may be achievable. The work programme covers a 48 week period for the year 2026. The main activities are in theory achievable within the 48-week period as indicated by the Company, though leave little space for unplanned elements. Many of the activities proposed, especially those related to transitioning ESG alignment from Local Compliance to alignment with IFC Performance Standards may require significant time and financial investment. SRK recommends that a more detailed plan and budget is prepared ahead of starting these activities, detailing who will undertake the work (staff, laboratories, consultants, contractors, etc), any prerequisite items, and detailed cost estimates

In addition to the work programme above, the Company recognises in this document that additional work is required to support the conversion of Mineral Resources to Ore Reserves. To support Ore Reserve declaration, the following items are noted:

- Development of robust resource models.
- Validation of metallurgical recoveries.
- Completion of hydrogeological and geotechnical studies.
- Pit optimisation and mine design.
- Definition of appropriate modifying factors.
- Development of a life of mine plan and financial model for approval by the Board.

No budgets, timelines or details supporting this intended work have yet been developed in detail at the date of the CPR.

A work programme outline has been prepared for Sahamamy, to be detailed and advanced, and the mine is currently on care and maintenance. The Company has provided SRK with a proposed work programme to support re-starting operations. The plan is uncosted and there is no accompanying schedule; however, the Company has stated that it has prepared an indicative cost estimate of between USD 5 million and USD 6 million for completion of the activities.

No plans have been outlined for Montepuez and Balama Central, notably considering the geopolitical situation in the region. Previously completed technical studies for Montepuez and Balama Central have declared Ore Reserves, it should not be assumed that development of an updated mine design, mining and processing schedule, and supporting economic analysis would yield the same quantum of Ore Reserves under current market conditions.

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SRK Mining Services (India) Pvt Ltd
5th Floor, Andromeda Building,
DD-30, Sector 1, Salt Lake City
Kolkata, West Bengal, India, 700 064.

T: +91 33 6548 8317
E: enquiries@srk.co.in

www.in.srk.com

A COMPETENT PERSONS' REPORT ON THE MINERAL ASSETS OF TIRUPATI GRAPHITE, MADAGASCAR AND MOZAMBIQUE

1 INTRODUCTION

1.1 Background

Tirupati Graphite PLC (Tirupati or the Company) has requested SRK Mining Services (India) Private Limited (SRK) to prepare a Competent Persons' Report (CPR) on its graphite mineral assets (the Mineral Assets), located in Madagascar and Mozambique.

The CPR will be included in the prospectus to be published by the Company in March 2026 (the Prospectus) (the Publication Date) in connection with the Company's applications to the United Kingdom's Financial Conduct Authority (FCA) for admission of the Company's ordinary shares to listing on the London Stock Exchange's main market for listed securities.

The CPR is structured by the four Mineral Assets. These comprise the Vatomina mine in operation and the Sahamamy project in Madagascar, and the Montepuez and Balama Central projects in Mozambique. In 2025, Tirupati has commenced re-development plans for the Mineral Assets, focusing on Vatomina. Sahamamy, Montepuez, and Balama Central comprise the Exploration projects.

The CPR presents information on geology, mineral resources, mining engineering, mineral processing, tailings management, infrastructure, environmental and social management, and exploration potential. Limited information is provided on forecast production, and estimated capital and operating costs, and no information is provided on revenue or cash flow. The CPR also contains sections commenting upon Mining Licences held by Tirupati, as well as the risks and opportunities associated with the Mineral Assets.

The Mineral Resource statements included in this CPR have been derived by SRK and are reported using the terms and definitions given in The 2012 Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves as published by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia (the JORC Code).

SRK notes that no Ore Reserves are declared. Tirupati is progressing field work and technical studies at Vatomina with the aim to reporting Ore Reserves at the end of 2026.

1.2 Requirement, Reporting Standard, Reliance

1.2.1 Requirement

The CPR will be included in the Prospectus to be published on the Publication Date. The CPR has been prepared in compliance with the following requirements which together comprise the Requirements:

- Prospectus Rules: Admission to Trading on a Regulated Market (PRM) and the Listing Rules published by the FCA from time to time and under Part VI of the Financial Services and Markets Act 2000 of the United Kingdom.
- Public Offers and Admissions to Trading Regulations 2024 (POAT).
- The Primary Market Technical Note (TN619.1) issued by the FCA, dated May 2022,
- .

With respect to paragraphs 132(a) to (e) of TN619.1 SRK notes the following:

- For compliance with Paragraph 132 (a) details relating to Mineral Resources reported in accordance with the JORC Code are included in sub-sections of the individual Mineral Asset Sections 3.9, 4.9, 5.9 and 6.9 with respect to Mineral Resources. SRK notes that no Ore Reserves have been reported for the Company's Mineral Assets.
- For compliance with Paragraph 132 (b) details relating to the anticipated life of mine and duration of commercial activity in extracting Ore Reserves, SRK notes that no Ore Reserves have been declared, due to the life of mine plans and required supporting information still been progressed and completed by the Company. In relation to exploration potential, Sections 3.10 and 4.10 presents the Exploration Targets for Vatomina and Sahamamy, and Sections 5.7.10 and 6.10.5 discussed the exploration potential for Montepuez and Balama Central;
- For compliance with Paragraph 132 (c) details relating to the duration and main terms of licences or concessions and legal, economic and environmental conditions, SRK has commented on these to the extent possible in the relevant sub-sections on Regulatory Framework in the individual Mineral Asset Sections 3.4, 4.4, 5.4 and 6.4.
- For compliance with Paragraph 132 (d) details relating to current and anticipated progress of mineral exploration, extraction and processing including a discussion on the accessibility of the deposits are included in sub-sections of the individual Mineral Asset Sections 3.20, 4.15, 5.13 and 6.10.
- For compliance with Paragraph 132 (e) details relating to the exceptional factors that have influenced paragraphs 132(a)-(d) of TN619.1 are deemed to include (1) the current state of study resulting from the change in the Company's management to advance the Mineral Assets to the point where Ore Reserves can be declared; and (2) the security situations in both Madagascar; Mozambique which has not made site visits by the SRK team possible.

In respect of Paragraph 133(i)(d), Appendix II, Paragraphs (i) to (ix) of the TN619.1 , specifically the recommended content for the Mining Competent Persons' Report, SRK highlights the following:

- The primary focus of the CPR is with respect to the provision of independently audited and current: Mineral Resources and exploration programmes for the Mineral Assets as reported herein.
- No Ore Reserves have been declared or life of mine plans prepared at the date of the CPR, resulting in no Valuation of the Ore Reserves.
- Insufficient information is available to assess the environmental and social liabilities associated with the Mineral Assets. SRK has made comments to the extent possible in sub-sections of the individual Mineral Asset Sections 3.16, 4.13, 5.13.5, and 6.10.4.
- Historical production and expenditure statistics are presented in Section 2.3. SRK notes that the Company does not have records of detailed statistics per Mineral Asset.
- The special factors that have limited or influenced SRK's review work and declaration of the Mineral Resources and Exploration Targets the same exceptional factors influencing paragraphs 132(a)-(d) of TN619.1.

1.2.2 Reliance

The CPR is addressed to the Directors of the Company. SRK has confirmed in writing in a letter dated on the Publication Date (the Consent Letter) that it:

- authorises and consents to the inclusion of the CPR in the Prospectus to be published on the Publication Date; and
- takes responsibility for the CPR as part of the Prospectus and declares that the information contained in the CPR is, to the best of its knowledge, in accordance with the facts and makes no omission likely to affect its import.

1.3 Effective Date, Base Information Date and Publication Date

The effective date of the CPR is 30 September 2025 (the Effective Date). The CPR summarises:

- The Mineral Resources statements dated 30 September 2025;
- SRK's review of the Company's recent history and 2026 plans for the Mineral Assets, as the Company continues to progress the field work and technical studies at Vatamoina and considers the future of the three Exploration projects;
- SRK's review of the environmental, social and permitting aspects relating to the Mineral Assets, noting that the Company is yet to assess environmental liabilities and develop a mine closure plan and cost; and
- SRK's review of the supporting details for the Company's exploration programmes including activities and expenditures.

The Publication Date of the Prospectus and the CPR included therein is March 2026. As advised by the Company, as at the Publication Date of the Prospectus no material change has occurred as of the Effective Date of the CPR inclusive of the Mineral Resources; the environmental and social liabilities as outlined in the CPR. Limited production has taken place, and this has mostly been from processing stockpiled material, thereby not impacting the Mineral Resource reported herein. The work programmes will have been impacted by additional works required to remedy some damage to infrastructure at the mine and port resulting from the cyclone in February 2026. The cyclone also damaged some 210 t of product, which is currently back at the mine to be repackaged.

1.4 Scope of Work

SRK has undertaken a technical due diligence review of the Mineral Assets, as described in the following sections of this CPR. For the Vatomina operating mine, this has included reviews of the following technical elements: geology and Mineral Resources; mining; mineral processing and metallurgy, and site water management; tailings storage; and environmental, social and permitting aspects.

For the exploration projects, the reviews have been limited to the geology and Mineral Resource estimates, as well as a brief review of any additional technical studies undertaken in parallel and a review of any current environmental and social issues that may affect ongoing work.

1.5 Data Verification and Reliance

This CPR is dependent upon technical, financial and legal input from the Company. Notably, the technical information as provided to, and taken in good faith by, SRK has not been independently verified by means of re-calculation. SRK has, however, conducted a review and assessment of all material technical issues likely to influence the future performance of the Mineral Assets including the stated Mineral Resources and the limited forecasts that have been provided.

SRK has not undertaken a site visit to the Mineral Assets as part of this commission to support its review of the information supplied by the Company.

SRK considers that with respect to all material technical-economic matters, it has undertaken all necessary investigations to ensure compliance with the JORC Code.

The Mineral Resource and information presented reflects various technical-economic conditions prevailing at the date of the CPR, including the Company's expectations regarding the commodity markets. These and underlying technical economic parameters can change significantly over relatively short periods of time.

SRK has not reviewed the rights of Tirupati to mine from a legal perspective. Consequently, SRK relies on Tirupati to the effect that it will be entitled to mine all material reported in the CPR and that all necessary statutory mining authorisations and associated environmental permits are in place or are being put in place. SRK's review has rather been restricted to confirming that the Mineral Resources as stated in the CPR are within the currently valid licence boundaries.

1.6 Limitations, Responsibility Statement, Declarations, Consent and Copyright

1.6.1 Limitations

The Company has agreed that, to the extent permitted by law, it will indemnify SRK and its employees and officers in respect of any liability suffered or incurred as a result of or in connection with the preparation of this report albeit that this indemnity will not apply in respect of any material negligence, wilful misconduct or breach of law. The Company has also agreed to indemnify SRK and its employees and officers for time incurred and any costs in relation to any inquiry or proceeding initiated by any person except to the extent SRK or its employees and officers have been materially negligent or acted with wilful misconduct or in breach of law in which case SRK shall bear such costs.

The Company has confirmed to SRK that to its knowledge the information it has provided to SRK was complete and not incorrect or misleading in any material aspect. SRK has no reason to believe that any material facts have been withheld and the Company has confirmed to SRK that it believes it has provided all material information. The achievability of the budgets and forecasts presented here are neither warranted nor guaranteed by SRK. The forecasts as presented and discussed herein have been proposed by Tirupati management and adjusted where appropriate by SRK to reflect its opinion but cannot be assured. Notably, for example, they are necessarily based on economic and market assumptions, many of which are beyond the control of the Company and SRK.

1.6.2 Responsibility Statement

For the purposes of Rule 3.1.4 of PRM and item 1.2 Appendix 2 Annex 3.1R PRM, SRK is responsible for the CPR as part of the Prospectus and declares that to the best of its knowledge the information contained in the CPR is in accordance with the facts and contains no omission likely to affect its import. This declaration is included in the Prospectus in compliance with item 1.2 of Annex 1.1 of Appendix 2 to the PRM.

1.6.3 Declarations

SRK will receive a fee for the preparation of this CPR in accordance with normal professional consulting practice. This fee is not contingent on the outcome of any transaction and SRK will receive no other benefit for the preparation of this report. SRK does not have any pecuniary or other interests that could reasonably be regarded as capable of affecting its ability to provide an unbiased opinion in relation to the Mineral Resources.

Neither SRK or the Competent Person, who are responsible for authoring this CPR, nor any Directors of SRK have at the date of the CPR, nor have had within the previous two years, any shareholding in Tirupati, its advisors, the Mineral Assets, or any other economic or beneficial interest (present or contingent) in any of the assets being reported on. SRK is not a group, holding or associated company of Tirupati. None of SRK’s partners or officers are officers or proposed officers of any group, holding or associated company of Tirupati. Further, no Competent Person involved in the preparation of the CPR is an officer, employee or proposed officer of Tirupati or any group, holding or associated company of Tirupati. Consequently, SRK, the Competent Person and the Directors of SRK consider themselves to be independent of Tirupati, its directors, senior management and advisors.

1.6.4 Consent

SRK has given and has not withdrawn its written consent to the publication of the CPR and has authorised the contents of its report and context in which they are respectively included and has authorised the contents of its report for the purposes of compliance with Rule 5.3.2R(2)(f) of the Prospectus Regulation Rules.

1.6.5 Copyright

Except where SRK has agreed otherwise, including pursuant to an agreement between SRK and the Company dated December 2025 or any subsequent agreement:

- neither the whole nor any part of the CPR nor any reference thereto may be included by any party other than the Company, any of its direct and indirect subsidiaries or a competent state authority in the United Kingdom or any other relevant jurisdiction, as may be applicable (together, the Recipients), in any other document without the prior written consent of SRK save that in the case that the CPR is not included in full in any other document, the Recipient shall present a draft of any document produced by it that may incorporate a part of this report to SRK for review so that SRK may ensure that this is presented in a manner which accurately and reasonably reflects any results or conclusions contained in this report; and
- copyright of all text and other matters in this document, including the manner of presentation, is the exclusive property of SRK. It is an offence to publish this document or any part of the document under a different cover, or to reproduce and/or use, without written consent (whether granted by virtue of an agreement with the Company or otherwise), any technical procedure and/or technique contained in this document. The intellectual property reflected in the contents resides with SRK and shall not be used for any activity that does not involve SRK, without the written consent of SRK.

Neither the whole nor any part of the CPR nor any reference thereto may be included in any other document without the prior written consent of SRK regarding the form and context in which it appears.

1.7 Indemnities Provided by the Company

The Company has provided the following indemnities to SRK:

- The Company has agreed that, to the extent permitted by law, it will indemnify SRK and its employees and officers in respect of any liability suffered or incurred as a result of or in connection with the preparation of the CPR albeit that this indemnity will not apply in respect of any material negligence, wilful misconduct or breach of law. The Company has also agreed to indemnify SRK and its employees and officers for time incurred and any costs in relation to any inquiry or proceeding initiated by any person except to the extent SRK or its employees and officers have been materially negligent or acted with wilful misconduct or in breach of law in which case SRK shall bear such costs; and

- In order to assist SRK in the preparation of the CPR the Company may be required to receive and process information or documents containing personal information in relation to SRK's project personnel. The Company has agreed to comply strictly with the provisions of the Data Protection Act 1998 of the United Kingdom (DPA 1998) and all regulations and statutory instruments arising from the DPA 1998, and the Company will indemnify and keep indemnified SRK in respect of all and any claims and costs caused by breaches of the DPA 1998.

1.8 Qualification of Consultants

SRK is an associate company of the international group holding company SRK Consulting (Global) Limited. The SRK Group comprises over 1,700 staff, offering expertise in a wide range of resource engineering disciplines with 45 offices located on six continents.

The SRK Group prides itself on its independence and objectivity in providing clients with resources and advice to assist them in making crucial judgment decisions. For SRK this is assured by the fact that it holds no equity in client companies or mineral assets.

SRK has a demonstrated track record in undertaking independent assessments of resources and reserves, project evaluations and audits, Mineral Experts' Reports, Competent Persons' Reports, Mineral Resource and Ore Reserve Compliance Audits, Independent Valuation Reports and independent feasibility evaluations to bankable standards on behalf of exploration and mining companies and financial institutions worldwide. SRK has also worked with a large number of major international mining companies and their projects, providing mining industry consultancy service inputs. SRK also has specific experience in commissions of this nature.

The SRK project team that has prepared the Competent Persons' Report includes:

- Shameek Chattopadhyay, MSc., MAusIMM, Principal Consultant (Resource Geology);
- Sukhanjan Bose, MSc., MAusIMM, Principal Consultant (Exploration Geology);
- Sulagna Banerjee, M.Sc Tech, MAusIMM, project Consultant (Resource Geology);
- Atree Bandyopadhyay, M.Sc, MAusIMM, project Consultant (Resource Geology);
- Liam MacNamara, PhD Beng MMMM ACSM, Principal Consultant (Metallurgy and Mineral Processing), SRK Consulting (UK);
- Indranil Sen, MSc., MBA (Public System Management), MIAH, project Consultant, (ESG);
- Teresa Steele-Schober, MELP, MSAIMM, Principal Consultant (ESG), SRK Consulting (UK).

The Competent Person who has compiled the Mineral Resources as reported by the Company is Mr Shameek Chattopadhyay, M.Sc., MAusIMM, who is an employee of SRK and a member of the Australasian Institute of Mining and Metallurgy (AusIMM). Mr. Chattopadhyay has over 20 years of experience in exploration geology and resource estimation, including the sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaking to qualify as a Competent Person for the reporting of Exploration Results and Mineral Resources as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'.

The person taking overall responsibility for the compilation and preparation of the CPR is Shameek Chattopadhyay.

1.9 Site Visits

The Competent Person responsible for the reporting of Mineral Resources visited the Vatomina and Sahamamy project the site between 9 March 2024 and 10 March 2024. In addition, the Competent Person has previously visited the sites multiple times since 2019. These site visits allowed the Competent Person to review exploration procedures, review the control of mineralisation, examine drilled core and auger samples, inspect the site, interview project personnel and collect relevant information.

Additionally, Sukhanjan Bose, B.Sc.M.Sc.; MAusIMM, Principal Consultant (Geology), Atree Bandyopadhyay, B.Sc. M.Sc., MAusIMM and Sulagna Benrjee, B.Sc. M.Sc Tech., MAusIMM; visited Sahamamy and Vatomina between 29 March 2022 and 4 April 2022. The purpose of such visit was set up the drilling and QAQC protocols.

The extended SRK project team authoring the CPR was unable to visit the Mineral Assets in both Madagascar and Mozambique due to the ongoing political situation and unrest in relevant areas of both countries. These are considered extenuating circumstances affecting SRK's due diligence process to the extent that the SRK team has not been able to visit operations, facilities, or hold face to face meetings with Company personnel. SRK and the Company have discussed that visits will be undertaken at an opportune time after the issuance of the Prospectus.

1.10 Review Standard

With respect to the geology, Mineral Resources and Ore Reserves, SRK has reviewed the asset within the context of, and in accordance with, the Rules the reporting standard adopted for the reporting of the Mineral Resource and Ore Reserve statements for the Mineral Assets by the terms and definitions given in in accordance with the terms and guidelines of the JORC Code.

The JORC Code is a reporting code which has been aligned with the Committee for Mineral Reserves International Reporting Standards (CRIRSCO) reporting template. Accordingly, SRK considers the JORC Code to be an internationally accepted reporting standard which is recognised and adopted world-wide for market-related reporting and financial investment.

1.10.1 Mineral Resources

A 'Mineral Resource' is a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade (or quality), and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade (or quality), continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories.

The term 'Mineral Resource' covers mineralisation, including dumps, stockpiles and tailings, which have been identified and estimated through exploration and sampling and within which Ore Reserves may be defined by the consideration and application of the Modifying Factors.

1.10.2 Ore Reserves

An 'Ore Reserve' is the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at Pre-Feasibility study (PFS) or Feasibility study (FS) level as appropriate that include application of Modifying Factors, and/or operational information if already in production but which meets a minimum PFS level of detail and accuracy. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified. The reference point at which Reserves are defined, usually the point where the ore is delivered to the processing plant, must be stated. Ore Reserves are subdivided in order of increasing confidence into Probable Ore Reserves and Proved Ore Reserves.

A PFS is a comprehensive study of a range of options for the technical and economic viability of a mineral project that has advanced to a stage where a preferred mining method, in the case of underground mining, or the pit configuration, in the case of an open pit, is established and an effective method of mineral processing is determined. It includes a financial analysis based on reasonable assumptions on the Modifying Factors and the evaluation of any other relevant factors which are sufficient for a Competent Person, acting reasonably, to determine if all or part of the Mineral Resources may be converted to an Ore Reserve at the time of reporting. A Pre-Feasibility Study is at a lower confidence level than a Feasibility Study.

A FS is a comprehensive technical and economic study of the selected development option for a mineral project that includes appropriately detailed assessments of applicable Modifying Factors together with any other relevant operational factors and detailed financial analysis that are necessary to demonstrate at the time of reporting that extraction is reasonably justified (economically mineable). The results of the study may reasonably serve as the basis for a final decision by a proponent or financial institution to proceed with, or finance, the development of the project. The confidence level of the study will be higher than that of a Pre-Feasibility Study.

1.10.3 Previous Reviews

In 2019, SRK reviewed the exploration data and authored the Mineral Resource Estimates for Sahamamy and Vatomina. In April 2025, SRK audited the Mineral Resource Estimates and reported the Mineral Resource statement as of 30 April 2025 in accordance with the JORC Code. In April 2025, SRK also reviewed the exploration data pertaining to Sahamamy and Vatomina, which were generated by Tirupati and the further exploration programme in these assets.

2 TIRUPATI AND THE MINERAL ASSETS

2.1 Overview of Assets

Tirupati holds multiple mineral licenses/permits for exploration and mining for graphite in Madagascar and Mozambique. Tirupati started graphite exploration and mining operations in Madagascar with the acquiring of permits in Sahamamy and Vatomina in 2015. In 2023, Tirupati acquired Suni Resources S.A. in Mozambique, obtaining a further two graphite mining permits. A summary of the mineral assets of Tirupati is given in Table 2-1. The locations of the assets are illustrated in Figure 2-1 and Figure 2-2. A summary of the permits held in relation to the Mineral Assets is given in Table 2-2.

Table 2-1: List of Tirupati mineral assets

Mineral Asset	Mineral Resource	Ore Reserve	Location	Status	Output Capacity (ktpa)
Vatomina	Yes	No	Madagascar	Operating	12,000
Sahamamy	Yes	No	Madagascar	Care and maintenance	18,000
Montepuez	Yes	No	Mozambique	Greenfield, FS to be updated	53,000
Balama Central	Yes	No	Mozambique	Greenfield, FS to be updated	58,000

Table 2-2: Tirupati Permits

Asset	Lease No.	Type of Lease	Area (km^2)
Vatomina	38321	Exploitation permit	25.00
Sahamamy	21	Exploitation permit	1.56
	37413	Exploration & Research permit (applied)	1.17
	37414	Exploration & Research permit (applied)	0.78
Sahasoa (part of Sahamamy asset)	23608	Exploitation permit	6.25
Vohitranivona (part of Sahamamy asset)	37407	Exploration & Research permit (applied)	7.03
Montepuez	8770C	Mining Concession	36.66
Balama Central	10031C	Mining Concession	59.00

The ‘Research Permits’ (PR) of Tirupati in Madagascar are under application for renewal and pending approval from the Bureau du Cadastre Minier de Madagascar (BCMM). Figure 2-1 presents the location of the Madagascan licence areas that have been approved and are in the process of being adjudicated.

The feasibility studies for the assets in Mozambique were completed at a time when the graphite market for Battery Electric Vehicles (BEV) was in its infancy and the economics of the projects may be positively impacted by recent increases in demand, which may result in potential for greater development than originally planned.

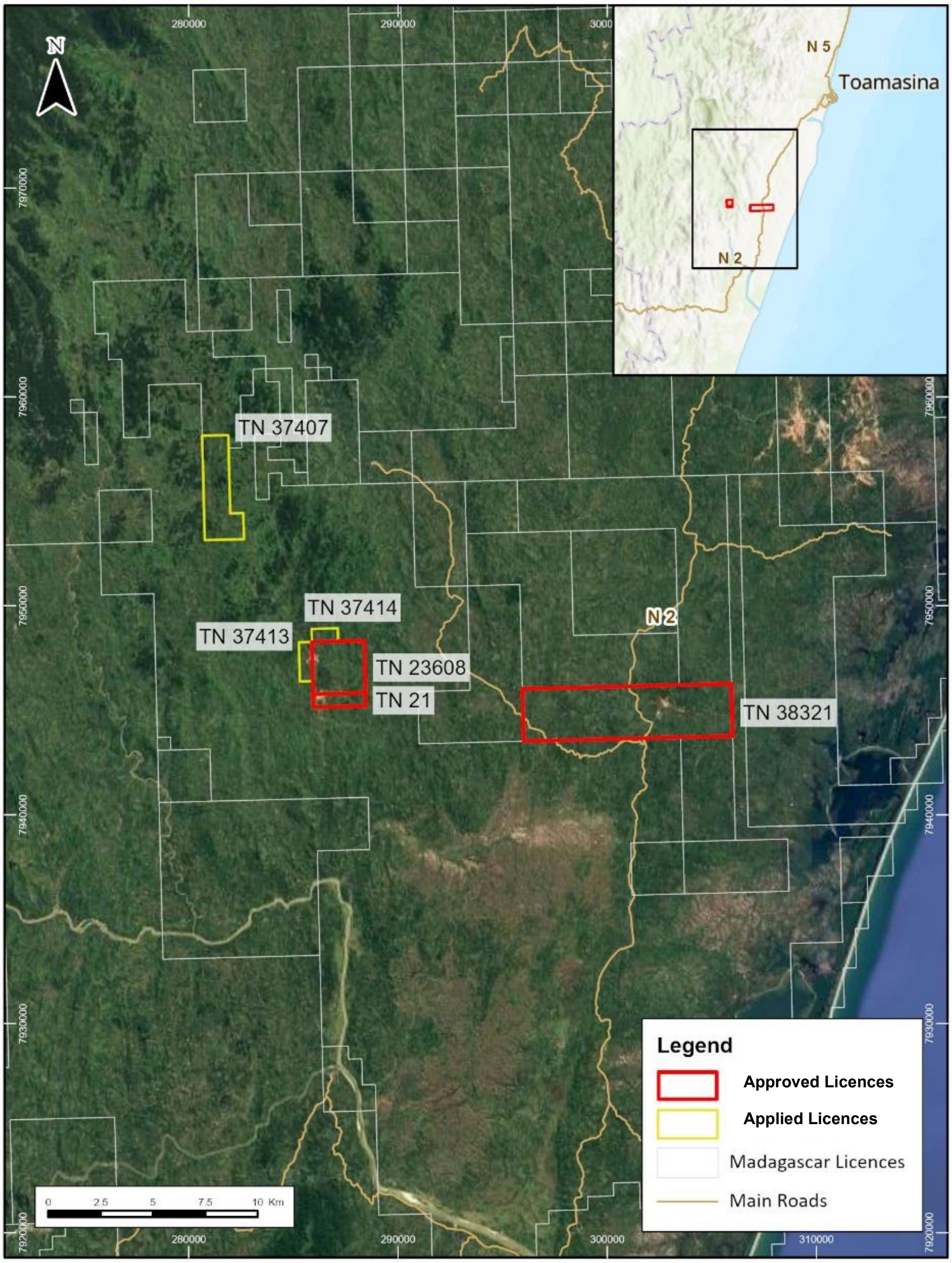


Figure 2-1: Location of Tirupati Madagascar licence areas

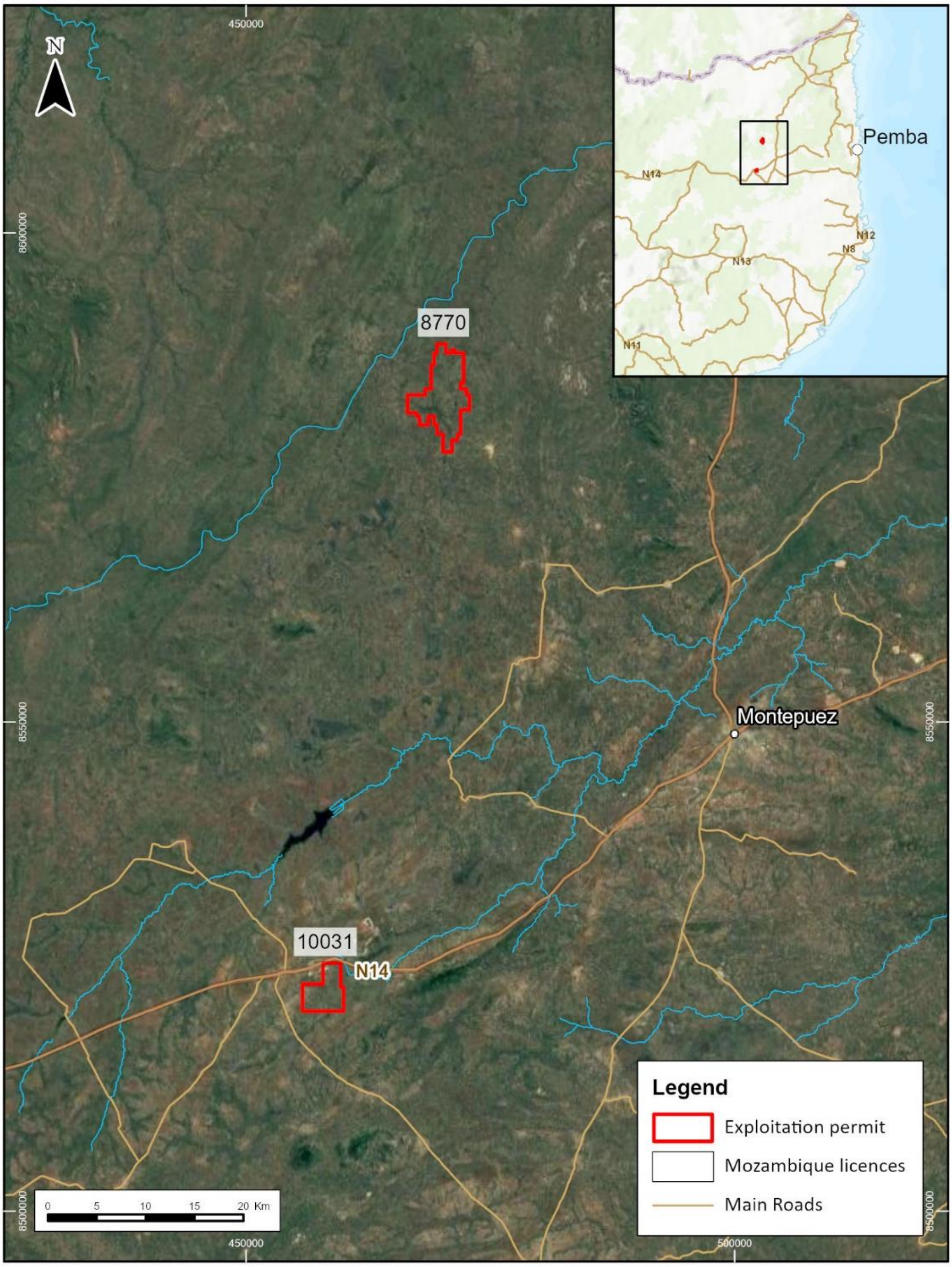


Figure 2-2: Location of Tirupati Mozambique licence areas

2.2 Overview of Exploration

Tirupati has undertaken exploration at Vatomina and Sahamamy since the takeover from the Battery Minerals Limited. The summary of exploration carried out by Tirupati at Vatomina and Sahamamy post 2020 is given in Table 2-4 and Table 2-4, respectively.

Table 2-3: Summary of Vatomina exploration (post 2020)

Type	Number	Total Meterage (m)	Year	Objective
Auger	1956	17,601.00	2021 - 25	Prospecting
Trench	29	125.59	2022	Prospecting
DDH	37	1,538.37	2022 - 25	Pre Mining
DDH	49	2,517.89	2021 - 22	Resource Definition

Table 2-4: Summary of Sahamamy exploration (post 2020)

Type	Number	Total Meterage (m)	Year	Objective
Auger	1600	11,332.0	2021 - 23	Prospecting
Trench	25	1,693.5	2022 - 23	Prospecting
DDH	3	88.5	2022	Drill test geophysical anomalies
DDH	20	615.9	2022 -23	Pre Mining
DDH	18	535.6	2023	Resource Definition

Tirupati, since acquisition of the Suni Resources S.A., is yet to initiate any ground exploration work in Mozambique.

The initial Mineral Resource estimate and accompanying Statement for Vatomina was published in November 2018. SRK was engaged by Tirupati in 2019 to audit the Mineral Resources and Ore Reserves of the Madagascar Mineral Assets (Sahamamy and Vatomina) and published a CPR in 2020. Based on the suggestions and recommendations made by SRK, Tirupati carried out exploration work in both Sahamamy and Vatomina, which includes conducting ground ER Survey at selective targets, core drilling, sample preparation and assaying. Tirupati used the hand auger and trench-pitting as part of the mapping program to delineate the graphite mineralisation in the permit areas.

2.3 Overview of Production and Expenditure

Production in Madagascar has been focused on the Vatomina operation since the Sahamamy operation was mothballed in March 2024. Since April 2024 mining and processing equipment has been relocated from Sahamamy to Vatomina to increase production from the Vatomina operation. The properties in Mozambique are in exploration and development and no production has taken place to date. Production and costs statistics for 2022 to 2025 are presented in Table 2-5.

Table 2-5: Tirupati Historical Production, Sales Revenue and Cost Statistics

		FY 2024-25 Actual	FY 2023-24 Actual	FY 2022-23 Actual
Ore mined	t	101,751	279,036	194,400
Ore grade	% TGC	2.61	3.04	2.96
Graphite concentrate production	t	2,169	7,096	4,770
Graphite concentrate sales	t	2,240	7,434	3,982
Revenue	000 GBP	1,575	4,905	2,890
Average selling price	USD/Mt	899	828	875
	GBP/Mt	703	660	726
Operating costs				
Mining and processing	000 GBP	609	3,027	1,513
Human resources	000 GBP	331	340	327
Logistics utilities and plant admin	000 GBP	554	1,010	368
Inventory adjustment	000 GBP	700	12	-676
Total	000 GBP	2,194	4,389	1,531
Unit cost of production	GBP/Mt	1,012	619	321

Tirupati undertook metallurgical tests from Vatomina, developed process plant design with a production capacity of 12,000 tpa graphite concentrate as well as initiating infrastructure development at site, including building access roads, bridge crossings, workshop, storage facilities and commencing preliminary civil construction and phase wise foundation works for the process plant.

In Sahamamy, Tirupati ramped up the process capacity to 600 tpa from July 2018 from the earlier capacity of 240 tpa. Alongside, Tirupati constructed and commissioned a new 3,000 tpa process plant in February 2019. A major expansion was commissioned in early 2023 with the addition a mining fleet with a capacity to mine approximately 450,000 tpa, two new pre-concentration units with a total capacity of 400,000 tpa and a new final concentrate plant capable of producing 18,000 tpa graphite concentrate. Due to operational difficulties, Sahamamy was placed into care and maintenance in March 2024. Large parts of the Sahamamy plant have subsequentially been re-deployed to the Vatomina operation.

2.4 Commodity Price

2.5 Corporate Environmental, Social and Governance

Tirupati notes that the Board of Directors maintains oversight of the sustainability performance of the company and its assets. Whilst the company has not yet published formal policies in respect of corporate governance or sustainability, its website makes commitments in respect of environmental, social, health and safety, and governance. These include[1]:

- Mitigating impacts on the environment.
- Mitigating carbon emissions associated with the company's activities via, for example, development of on-site renewable power facilities.
- Aiming to be a partner for local stakeholders through investment in local areas, job creation and support for health, well-being and education initiatives.
- Prioritising the safety of employees and stakeholders in and around the projects across all developmental and operational activities.

[1] https://tirupatigraphite.co.uk/sustainability/

- Implementing appropriate oversight, and reporting.
- implementing best practice mining and tailings management on sites.

Tirupati published a Sustainability Report for the period 2020 – 2021.The report states that it was prepared in line with the Global Reporting Initiative's Core standards. There has been no specific sustainability report published since then; however, commentary on some sustainability aspects is included in the annual reports which are available on the Company's website.

Whilst SRK has not reviewed specific documentation related to stakeholder engagement and community relations, the Tirupati Annual Report (31 March 2024) states that the Company engages with communities local to its operations with the goal of improving the quality of life and opportunities for local people. The Company also reports that an ongoing programme for community development is in place.

Engagements with government Ministries and departments in both Madagascar and Mozambique are reportedly frequently undertaken to ensure mutually beneficial relationships between the company, its partners and host nations.

The Company's 2024 annual report also recognises the potential impacts of climate change on operations and supply chains. SRK has not seen site-specific climate vulnerability assessments and is not clear on whether or not these have been completed to more accurately inform the understanding of this risk.

3 VATOMINA

3.1 Introduction

Tirupati holds a mining/exploitation permit of 2,510 ha in Vatomina, which was acquired from Jean Soanomeiny Kara in 2015. Tirupati is currently mining along with a processing plant operation for an approved annual graphite production of 11,400 t.

3.2 Location

The Vatomina mine is in the Atsinanana region in the Brickaville district in the eastern part of Madagascar (Figure 3-1). The mine is located near the Vatomina and Sahavalaina villages in the Brickaville district and falls under the Toposheet No. U46. The site is located around 70 km south of Toamasina, the primary seaport of the country on the east coast of Madagascar, and 20 km north of Brickaville. The mine is accessible directly off the N2 national highway connecting it to Brickaville and the capital city, Antananarivo to the south and Toamasina to the north.

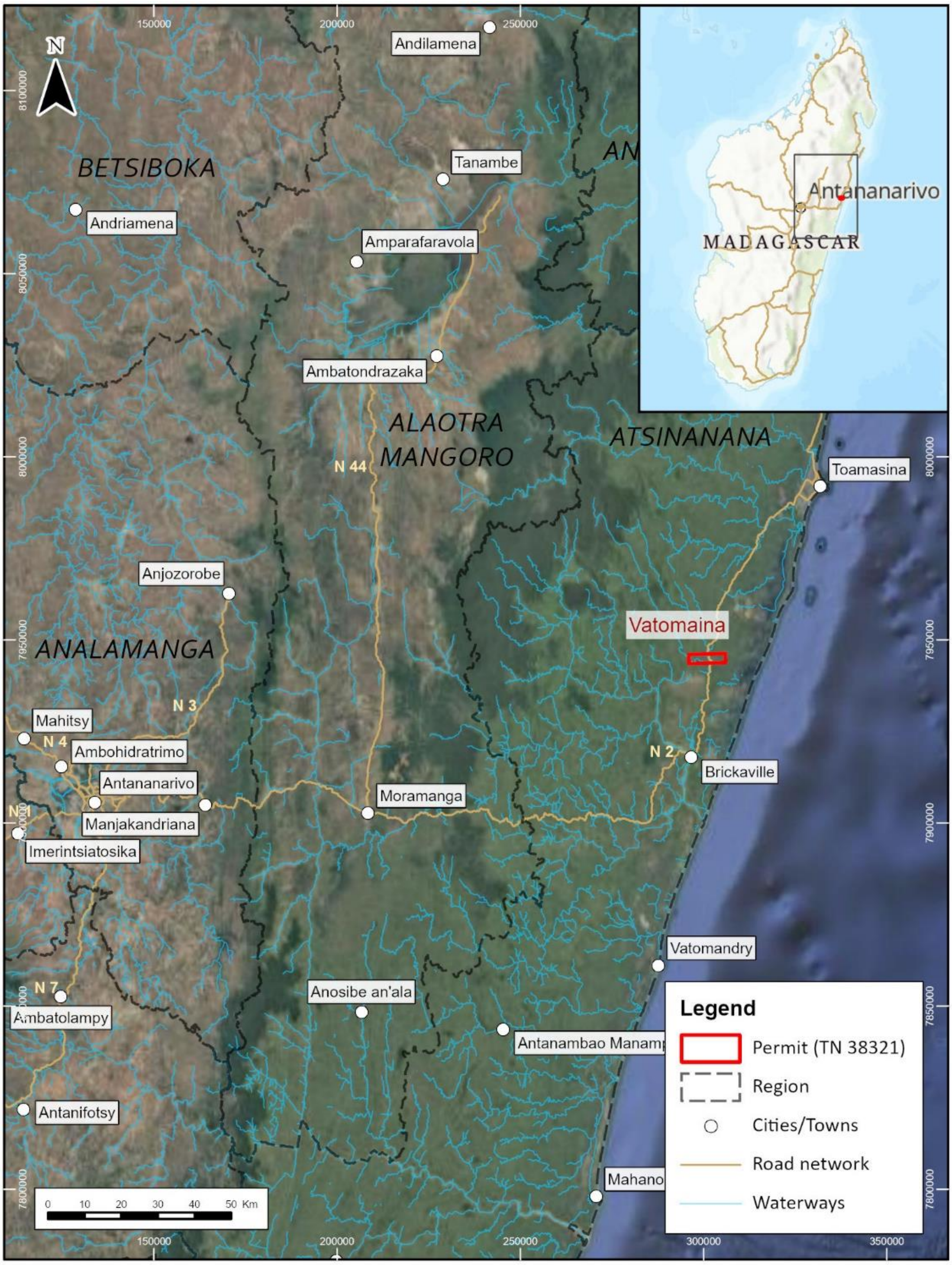


Figure 3-1: Vatomina Mine Location

3.3 History

Tirupati Madagascar Ventures SARL (TMV), a 100% subsidiary of Tirupati Resources Mauritius (TRM), purchased an artisanal mining licence (PRE- 38321) covering an area of 25.10 km^2 from its previous holder Jean Soanomeiny Kara and acquired the commercial mining permit (E 38321) on 18 December 2015, which was subsequently approved by Bureau du Cadastre Minier de Madagascar (BCMM) and Office National pour l'Environment (ONE) on 10 October 2016. The mining permit is valid for a period of 40 years to 17 December 2055.

On 11 May 2017, Tirupati Graphite PLC acquired TRM, thereby acquiring TMV, the holders of the mining license for the Vatomina project.

Following the acquisition, Tirupati initiated exploration in Vatomina, with drilling and bulk sampling. Tirupati published its maiden JORC compliant Mineral Resource estimate in November 2018. Further, Tirupati undertook metallurgical tests from Vatomina, developed process plant design as well as initiated infrastructure development at site including building access roads, bridge crossings, workshop, storage facilities and commencing preliminary civil construction and phase wise foundation works for the process plant. In the initial phase a 6000 tpa capacity process plant is planned. The Vatomina project has a permit to produce 950 tpm or 11,400 tpa of graphite concentrate.

3.4 Regulatory Framework

This section describes the main legal requirements that the project will be expected to adhere to as well as the current status of permits required for project development.

3.4.1 Mining legislation

Legal Requirements

The Mining Code of Madagascar is governed by the most recent Law No. 2023-007, which focuses on the sustainable management of resources, environmental protection, and clear obligations. The Ministry of Mines and Strategic Resources has regulatory oversight of mining activities. The BCMM is responsible for issuing and registering mining permits.

Mineral permits include prospecting authorisations for short term, initial assessments and are not renewable. Exploration permits are only available to Malagasy registered entities for advanced exploration. Exploitation Licences (PE) are issued for large-scale extraction activities.

Holders of mining permits must provide financial guarantees for environmental mitigation and restoration as part of the environmental permitting process.

The Mining Code includes provisions encouraging collaboration with local entities including local procurements and employment. Preference for recruitment of local labour and skills transfer are expected.

Current Status

Tirupati Graphite PLC holds 98% in TMV (the lessee) and 1% each to private equity of Mr Hemant Kumar Poddar and Mr Shishir Kumar Poddar.

Tirupati holds an Exploitation Permit Number 38321 in Vatomina covering an area of 25.10km^2 and acquired the commercial mining permit (PE 38321) on 18 December 2015, valid to 17 December 2055 for the extraction of graphite, chrome, copper, gold, basalt, and beryl. Overall, Vatomina’s tenure is secure, but it carries typical operational, financial, environmental, and social responsibilities that the licence holder must maintain throughout the life of the mine. The tenure is summarised in Table 3-1.

Table 3-1: Summary of Vatomina Mineral Tenure

Licence No.	Status	Area (ha)	Awarded	Expiry	Commodity
38321	Exploitation Permit	2,510	December 2015	December 2055	Graphite, Chrome, Gold, Copper, Basalt, Baryl

3.4.2 Environmental legislation

Legal Requirements

Mining projects are required to prepare and implement environmental and social impact assessments and management plans. The Environmental Charter, Law No 2015-003, dated 20 January 2015, sets out the requirements. The implementing procedures for the Environmental Charter are contained in the MECIE Degree (Making Investments Compatible with the Environment) which was initially published in 1999 and amended by Decree No 2004-167 of 3 February 2004.

Mining projects must obtain an environmental authorisation or licence prior to commencement of mining activities. An environmental impact assessment document (étude d'impact environnemental (EIE)) must be submitted to and approved by the relevant environmental authority (ie,ONE) to the relevant environmental body of the Ministry of Mines. An Environmental Commitment Programme (Program d'Engagement Environnemental (PEE)), must also be developed and approved by the relevant environmental body of the Ministry of Mines.

Financial guarantees must be paid to cover the costs of implementing the environmental management plan and restoring the mine site at closure. The form of the guarantee may include payment of funds into a dedicated bank account in Madagascar. The quantum of the guarantee is stipulated in the environmental specification that is approved alongside the EIE. Payment is typically required before mining operations commence. The validity and sufficiency of the guarantee are reviewed and maintained throughout the project.

Mining permits confer the rights of mining companies to use local water for mining operations. Permits to abstract water from local rivers as part of the mining and environmental authorisations processes. Approvals to discharge water in line with local legal limits are also approved in the EIE process.

Clearing permits may be required from the Forest Department to authorise mine and road development.

Current Status

Tirupati has received an Environment Clearance Certificate (Number 29/16-MEEF/ONE/DG/PE) for the mining operations covering an area of 2,510 ha and approving the relevant mining and allied activities for the tenure of the permit. The certificate does not expire but may be withdrawn if the holder fails to comply with the stipulated conditions.

There are no designated Forest lands within the permit area; however, the Company has to obtain a Clearing Permit approved by the Forest Department for proposed mining area and road construction. Tirupati, under the conditions of the 'Clearing Authorisation', has to participate in regional reforestation to replace all plants destroyed during the mining operation.

Water consumption at Vatomina for year up to March 2024 was 4,727.44 m^3/day, significantly in excess of the approved limit of 200 m^3/ day. Tirupati reports that it intends to formally request an increased limit when the water permit is renewed in 2026. Total water consumption for 2024-25 was 119, 233 m^3.

3.4.3 Land tenure

Legal Requirements

Historically, all land was presumed to belong to the state, meaning that most land in villages (fokontany) was legally state property even though local people farmed and occupied it. Since the 2005 land reform, long-term occupants of untitled land can be recognised as private landowners through local land certificates issued by communes. Community assemblies and elders participate in field visits and recognition committees that validate who actually owns and uses specific plots of land when certificates are issued and disputes arise.

Current Status

Tirupati negotiates access to land and compensation payments with local landowners and administrators. To date, 58 ha has been secured and negotiations are underway for an additional 100 ha (Phase 2) and 70 ha (Phase 3). The Company reports that there was some opposition to land acquisition but that these have been largely resolved except for one individual[2].

3.5 Setting

Information on the project setting has been extracted in whole or in part from the Environmental Impact Study of the graphite exploitation project located in the rural commune of Ambinaninony, District of Brickaville, East Region, Mining permit number 38321, dated January 2016 and prepare by Madagascar Development Engineering.

3.5.1 Climate

The climate of Madagascar is subtropical, with a hot and rainy season between November and April (summer), and a cooler dry season from May to October (winter). The east coast has a subequatorial climate and receives the heaviest rainfall, averaging as much as 3.5 m annually. The eastern coast is well known not only for a hot, humid climate but also for seasonal cyclones that occur during the rainy season.

The weather in the Brickaville district can be summarised as follows:

- the hottest months are January to March, the maximum temperature varies from 30 – 33°C and the minimum temperature around 26°C;
- the cooler months are July-August, the maximum temperature ranges from 24 – 26°C and the minimum temperature about 17°C; and
- January to March receives the heaviest rainfall, measuring between 350 – 500 mm; October receives the lowest rainfall, around 75 mm.

[2] Tirupati Graphite Plc Madagascar ESG report for period April 2023 to March 2024

3.5.2 Land use and land users

The licence area is characterised by a succession of low-altitude hills of 50 to 100 m elevation. The valleys between the hill are narrow with many having been transformed into rice paddies. Slash and burn agriculture is practiced on the slopes of the hills.

With the exception of the great eastern forest, the vegetation cover around the project area consists of mainly degraded formations that have been impacted by human activities including slash-and-burn agriculture. Secondary forest has established which is characterised by dense, low-lying, fast growing, sun-loving species.

The four main vegetation types present include; secondary forest, Savannah, wetland and agriculture. Wetland vegetation dominates along the Vatomina River. Agricultural use includes rice paddies, cassava, potatoes, lychees, coffee and raffia.

3.5.3 Hydrology

The site lies within the Rianila Watershed which drains an area of 7,820 km^2. This lies within the larger Rongaronga Basin. The main tributaries of the Rongaronga are the Vatomina and Ranofotsy which have their sources in the hills and gradually meander through the landscape to the south-west.

3.6 Geological Setting and Mineralisation

3.6.1 Regional Geological Setting

The Vatomina project lies within the Betsimisaraka Subdomain of the Antananarivo Domain, the largest tectonic unit in Madagascar (Figure 3-2 and Table 3-2). The domain is mainly composed of granitoid gneisses, migmatites, and schists intruded by calc-alkaline granites, gabbro, and syenite (Kröner et al., 2000). The Betsimisaraka Subdomain broadly corresponds to the Manampotsy Belt, which separates the Masora, Antongil, and Antananarivo cratons (Key et al., 2011).

The Manampotsy Belt consists of NNW–SSE trending metasedimentary sequences metamorphosed to amphibolite–granulite facies. These include quartzo-feldspathic migmatitic paragneisses with variable biotite and hornblende, along with local graphitic schist, quartzite, and calc-silicate horizons. The sequence is interlayered with granitoid gneisses and migmatites derived from 2.75–2.50 Ga protoliths, later intruded by granitic, gabbroic, and syenitic bodies in an active continental margin setting.

Regionally, the Antananarivo Domain records Neoproterozoic tectonism linked to the closure of the Palaeo-Mozambique Ocean. The Betsimisaraka Suture Zone marks this event, representing westward subduction and subsequent collision with the Antongil Block. The metasedimentary protoliths, interpreted to have been sourced from the Dharwar Craton, have depositional ages of 800–550 Ma, and were deformed and thrust eastward between ca. 630–515 Ma.

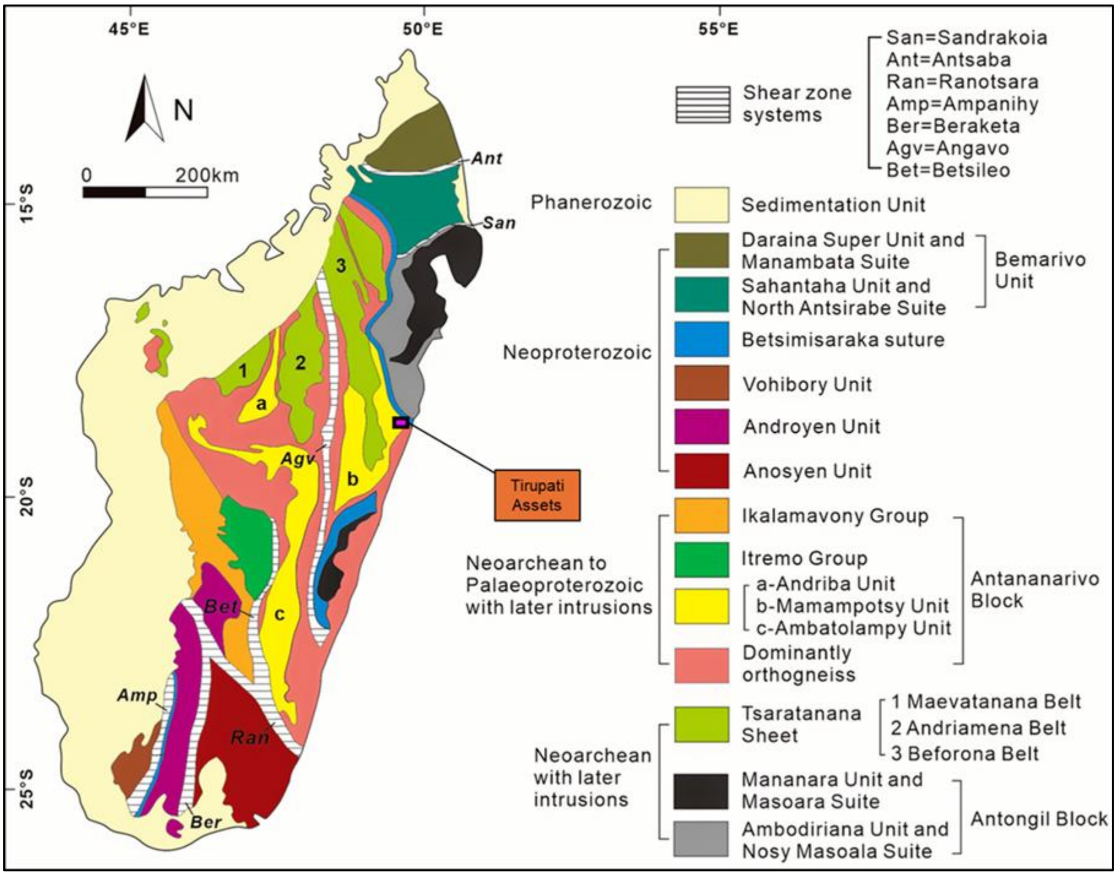


Figure 3-2: Regional Geological Setting (Source: MDPI)

Table 3-2: Generalised Regional Stratigraphy After USGS and PGRM

Age	Group	Formation	Description
Quaternary to Recent			Undifferentiated Alluvium
Cretaceous	Mananjary Group		Continental Argillaceous Clayey Sandstone
		Anala Lava Suite	Basalt
			Gabbro and Microgabbro
Neo-Proterozoic		Kiangara Suite	Alkaline granites and syenites
			Charnockite
		Imorona-Itsindro Suite	Granodioritic Orthogneisses
			Orthogneiss of Brickaville
	Manampotsy Complex	Formation of Sakanila	Biotite gneiss to amphibolite with hornblende units quartzite, graphitic rock- sillimanite with or without garnet
		Formation of Andasibe	Biotite paragneiss with or without hornblende and quartz-paragneiss with feldspathic units, quartzite lenses with or without sillimanite graphite sometimes with garnet and calcium silicate and cipolin (marble)

3.6.2 Geology

The Vatomina permit lies within the Anaborian and Manampotsy belts primarily comprising of quartzo-feldspathic migmatiic paragneisses with varying biotite and hornblende (Figure 3-3).

Based on the geological mapping and the recent exploration programme, the major lithological units observed are gneisses and migmatite gneiss with graphite bands along with N-S trending basic intrusive like dolerite. The top alluvium soil is around 3-6 m thick and comprised of mainly brown to yellowish brown coloured ferruginous minerals.

The saprolite unit underlain the topsoil and is reported up to a depth of 25-30 m from surface. The unit is the resultant of weathering of 'Graphitic Gneiss', composed of quartz, feldspar, biotite, graphite flakes, minor mica and amphiboles. The graphitic gneiss is highly weathered and at places the original structures like foliation are preserved.

Graphitic gneiss is a medium grain rock whereas the graphite flakes vary from fines to jumbo size (nearly 1cm). The graphite mineralization strikes generally NNW-SSE and dips average 35-40º towards south. Graphite lenses frequently occur in multiple bands averaging 0.5 – 2.0 m true thickness (in places it goes up to 5.0 m), with intercalated kaolinite-rich barren bands of weathered schist and gneiss.

Quartzo-feldspathic gneiss is reported within the graphitic gneiss, has mica and occasional presence of garnet (khondalite).

The core drilling program reported granitic gneiss below the saprolite unit with gabbro and marble at few borehole intersections. The true thickness of these units is not proved as the boreholes were closed within these units.

3.6.3 Style of Mineralisation

The graphite mineralisation in Madagascar occurs predominantly in quartzo-feldspathic schists and gneisses (+/- sillimanite, garnet and biotite), that have been variably weathered. The graphite, originally formed along cleavage and shear planes, remains relatively inert during the formation of the (lateritic) regolith, resulting in a free-dig graphitic material comprising of clays and other oxide minerals.

Graphite mineralization at the Tirupati Mineral Assets in Madagascar comprises disseminated crystalline graphite hosted within weathered gneissic rocks. The graphite mineralization occurs in multiple bands/lenses with varying thickness, 0.50 – 5.0 m.

The graphitic carbon content within the mineralised zones varies from 1.0% to around 23% (maximum), with an average of around 4%. The graphite flakes vary from 0.2 mm (small flakes) to 5-6 mm (jumbo flakes) within the graphitic zones.

3.6.4 Deposit Type

The graphite deposits in Vatomina project are saprolite hosted graphite deposit, epigenetic within the gneissic banded formation (Manampotsy Gneiss), which was deformed and metamorphosed at upper amphibolite to granulite facies.

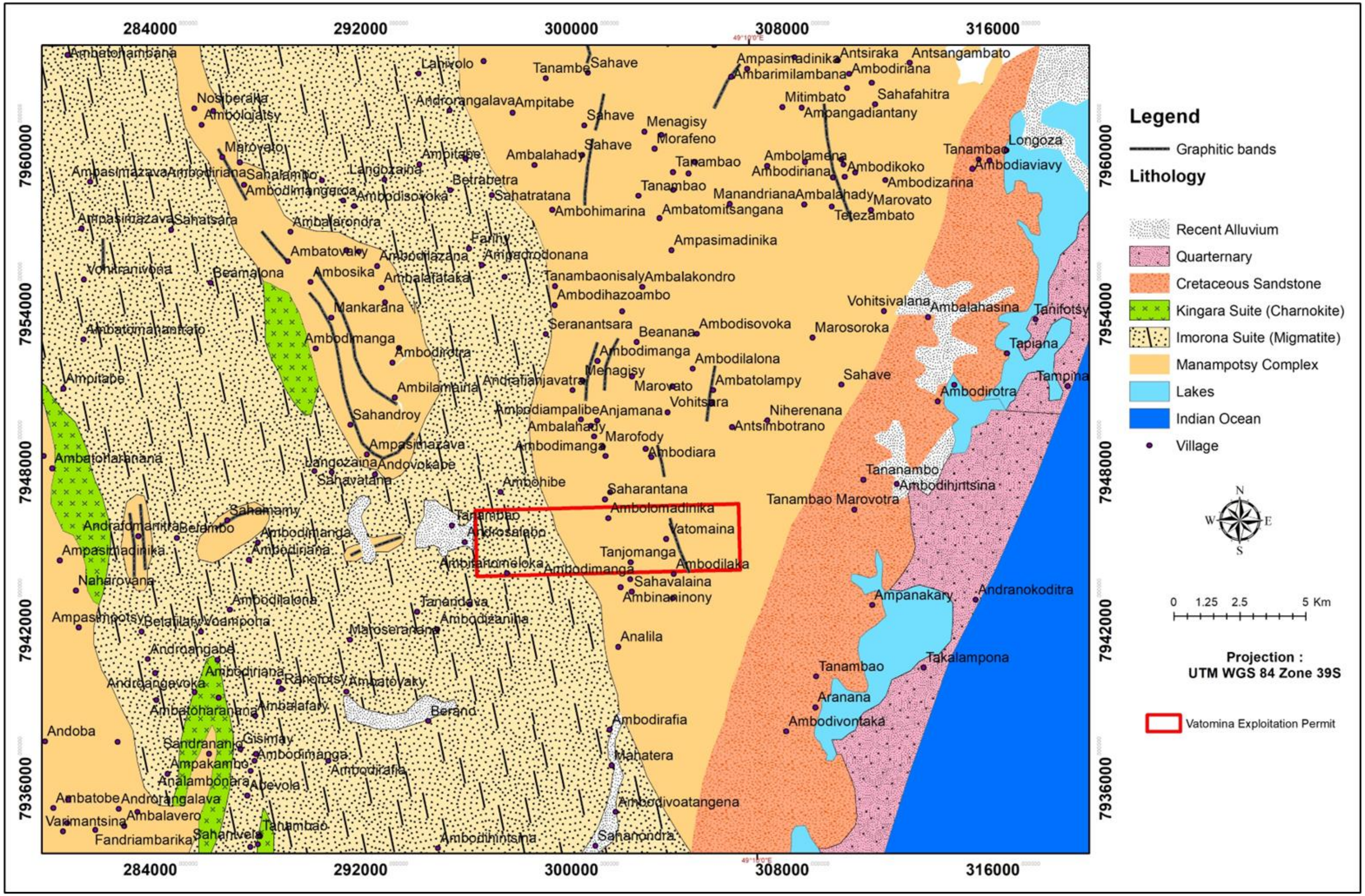


Figure 3-3: Vatomina Geology Map

3.7 Exploration

Vatomina is extensively covered with soil and outcrops of rocks are rare. In absence of any historical data from the assets, including geological maps of appropriate scale, Tirupati developed the following exploration strategies:

- obtaining appropriate understanding of the geological characteristics of the mineralised horizon, including the control and local continuity of the mineralised horizons, as reflected in the artisanal mine in Vatomina and then use such knowledge in the relatively unknown areas;
- to develop progressive Areas of Interest (AoI) in the line of its overall development plan for the assets;
- developing appropriate access to mobilise drilling rigs and other equipment that are required for undertaking the required exploration;
- dynamically review the exploration results and continuously update the geological maps and conceptual geological models to allow effective use of the exploration budget; and
- geological mapping exercise was substantiated by Hand auger, pitting and trenching data which was further planned to be verified by core drilling.

In addition to geological mapping, pitting and trenching, Tirupati carried out both auger and core drilling Vatomina projects. A summary of all drilling works carried out to date is presented in Table 3-3 and illustrated in Figure 3-4.

Table 3-3: Summary of Vatomina drilling

Asset	Hole Type	Number of Drillholes	Drilled Meterage (m)	Maximum Depth (m)	Avgerage Depth (m)
Vatomina	Auger	1956	17,601	9	7
Vatomina	DDH	152	7,184	90	47.8

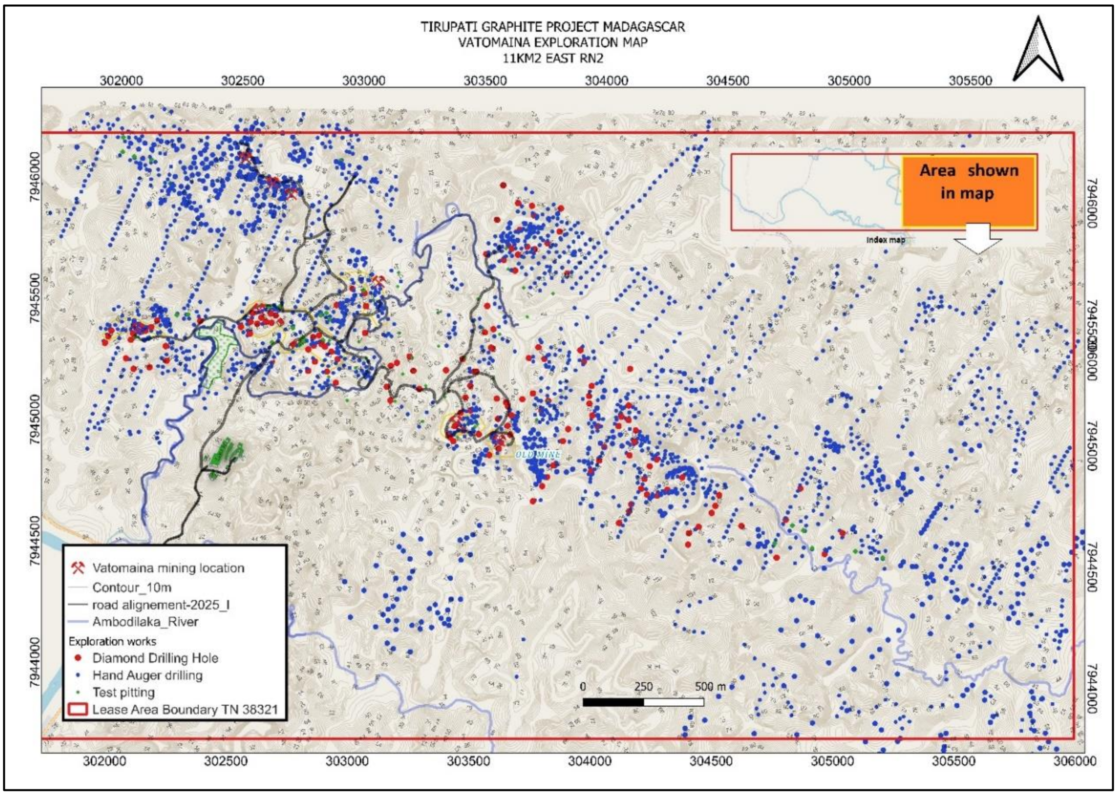


Figure 3-4: Map showing distribution of boreholes in Vatomina

3.7.1 Topographic Survey

Society Geosciences Development of Madagascar (SGDM), based in Antananarivo, was engaged during October 2014 to December 2016 to carry out the topographical survey in Vatomina, covering a total area of 11.22 km^2. SGDM used Total Station (Nikon, Leica and Topcon make) for collection of ground survey points along with recording of surface features like roads, populated areas (villages), water bodies, electrical lines, camps, etc. The density of survey points was used to prepare a topographic map in 1:5000 scale with 2 m contour interval.

The ground survey data were processed in AutoCAD for preparation of digital maps. Subsequently, the topographic map was used as a base map for geological mapping. Tirupati used their inhouse Total Station (Nikon, Leica) to update the mine surface from time to time which was super imposed on the original topography survey data. Latest updated topographic survey data is as of April 2025.

3.7.2 Geological Mapping

Geological mapping (Figure 3-5) post 2020 in Vatomina was focused on the eastern part of the concession that was mostly un-explored. The area is covered by dense vegetation and outcrops are limited. The highly weathered graphitic gneiss and gneiss, exposed as saprolite, were mapped along the road cuttings. Between 2021-2025, a traverse was taken in the eastern part of Vatomina covering 3.9 km^2 in 1:5000 scale which was further checked by auger drilling, pitting, and trenching to delineate the graphite gneiss (mineralized rock) continuity trending NNE-SSW. The regional geological map is also showing the NE continuity of graphitic gneiss within the Vatomina area.

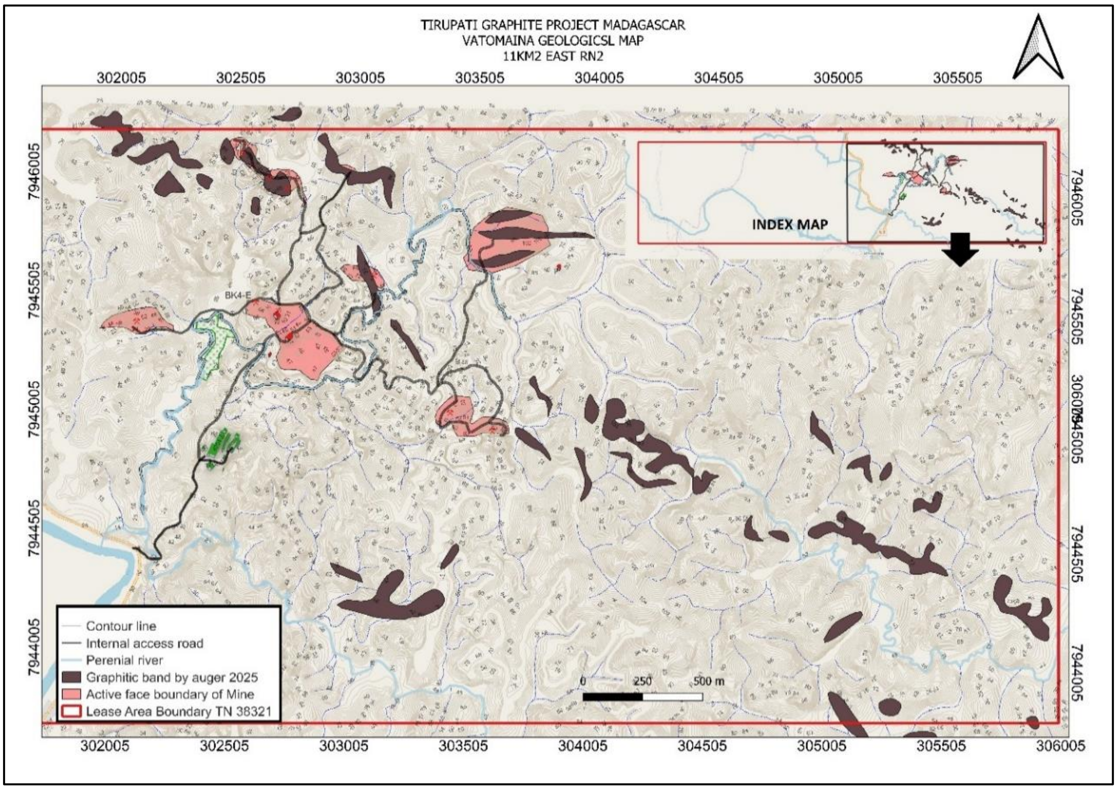


Figure 3-5: Mapping of graphitic bands within Vatomina Permit

3.7.3 Trenching

Tirupati carried out channel sampling in 29 trenches within the Vatomina permit in 2022. Samples were collected from channels of 10 cm width to 8 cm depth (cross cutting band or horizontal channel). The sample length was selected based on the thickness of graphite bands.

SRK has reviewed the field procedures followed by Tirupati and considers these to be in line with industry good practices.

Asset	Hole Type	Number of Trenches	Trench Meterage (m)	Year of Completion
Vatomina	TRN	29	125.59	2022

3.7.4 Auger Drilling

Tirupati conducted auger drilling in the eastern part of Vatomina during 2021-2025 to establish the location and the continuity of graphite mineralisation and the host graphitic gneiss in the un-explored area to enable the design of a core drilling program.

A total of 1956 boreholes were drilled with total meterage of 17,169 m. The average depth of the boreholes was 9 m. The size of the auger boreholes is equivalent to NQ size, 47.6 mm hole diameter. The drilling was completed in-house by Tirupati under the supervision of Company geologists. In addition to the hand augers, Tirupati developed 29 pits in 2022 to delineate the continuation of the mineralized body. The auger drilling completed is summarised in Table 3-4 and illustrated in Figure 3-6.

Table 3-4: Summary of the Auger drilling in Vatomina (post 2020)

Asset	Hole Type	Number of Auger Drillholes	Drilled Meterage (m)	Year of Completion
Vatomina	HAG	561	5049	2021
Vatomina	HAG	789	7101	2022
Vatomina	HAG	326	2931	2023
Vatomina	HAG	118	1062	2024
Vatomina	HAG	162	1458	2025
Total		**1956**	**17,601**	

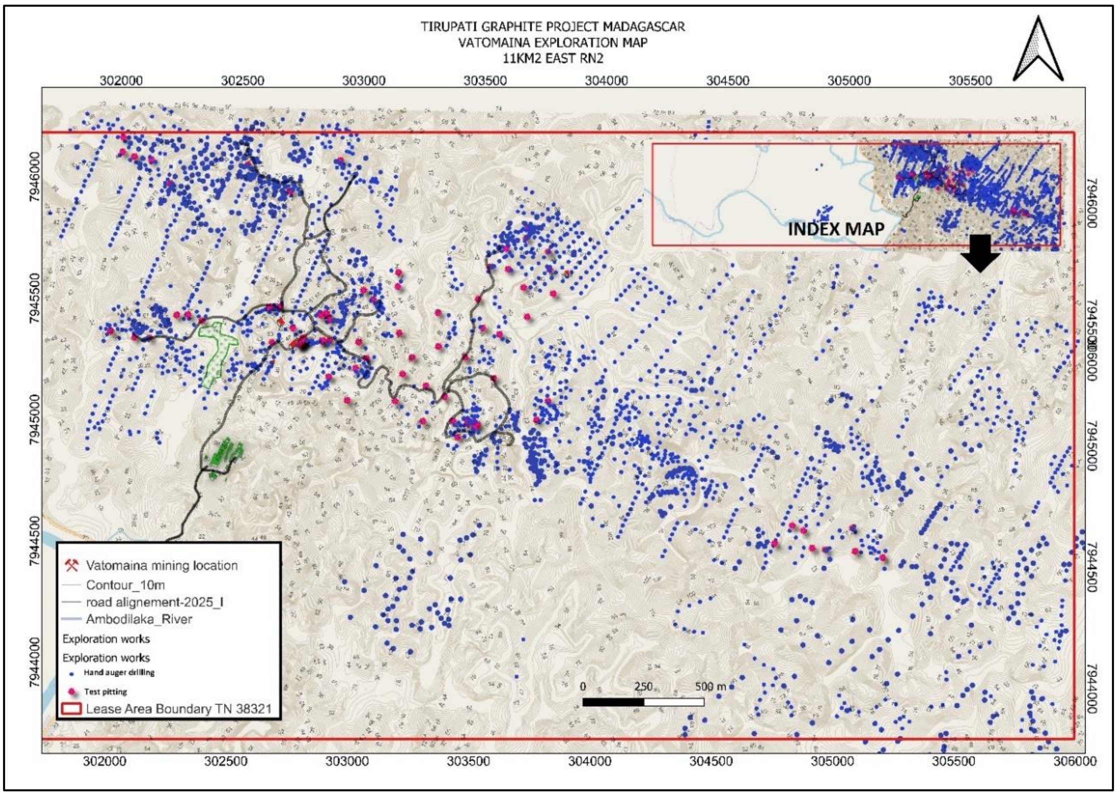


Figure 3-6: Distribution of Vatomina auger boreholes and test pits

3.7.5 Diamond Drilling

The core drilling was undertaken by the in-house drilling team under the supervision of Company geologists. The core drilling program extended from 2020 to date, with 86 boreholes completed, totalling around 4,000 m of core drilled. Tirupati used an in-house top drive hydraulic Kores rig for the core drilling campaign.

The objective of the core drilling program was to intersect mineralisation at deeper levels beyond the saprolite zone and in fresh rocks and to establish resources down to about 50 m vertical depth. The maximum depth of the core drilling program was 90.0 m, with an average depth of 47.8 m. The azimuth of the boreholes was decided based on the structural trend of the mineralisation, mostly varying between NE and SE. All boreholes were inclined (except VBH-06V and VBH-23A, which were vertical), but due to non-availability of any borehole deviation tool, no boreholes were surveyed for deviation.

Core drilling was primarily NQ series (triple tube), whereas HW and NW (casing bit diameter) was used for the top weathered and loose formations. Details of the core drilling programme are presented in Table 3-5 and illustrated in Figure 3-7.

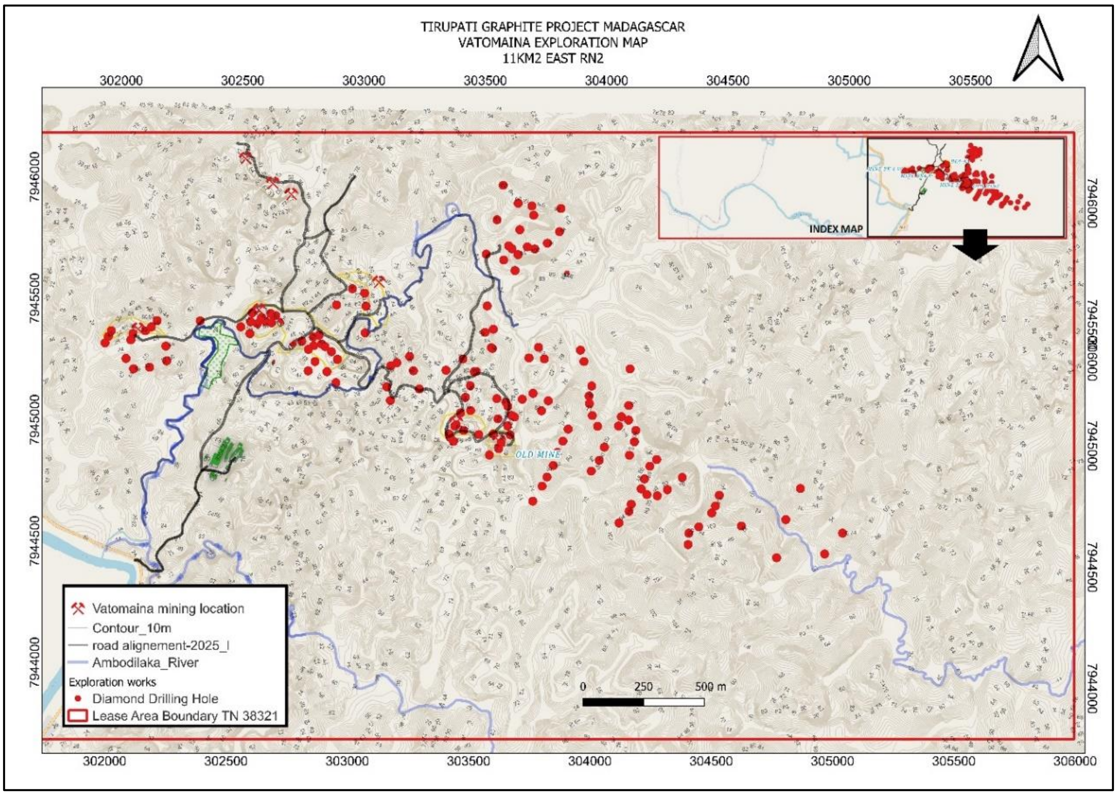


Figure 3-7: Locations of Vatomina diamond core boreholes

Table 3-5: Summary of Vatomina core drilling (post 2020)

Asset	Hole Type	Number of Drillholes	Drilled Meterage (m)	Year of Completion
Vatomina	DDH	49	2517.89	2021
Vatomina	DDH	10	370.46	2022
Vatomina	DDH	26	1119.41	2023
Vatomina	DDH	1	48.5	2025
Total		**86**	**4056.26**	

3.7.6 Geological Logging

The standard format for logging was designed by Tirupati to record the lithological units in terms of colour, weathering profile, texture, mineralisation and lithological description. Standard lithological codes were developed for the major lithological units and separate codes for weathering, mineralisation and grain size. A secondary lithological code was developed to record any alteration zone like ferruginous, saprolite, etc. In the case of core drilling, additional data on core recovery and RQD (where applicable) were recorded for each drill run in standard log formats.

3.7.7 Sampling

Sampling honoured the lithological breaks, mainly reflecting the mineralised units, such as graphitic gneiss and saprolite along with the visual identification of presence of any graphite in other lithological units like pegmatite veins, pedolith, etc.

In case of auger drilling, samples were taken continuously, with 1m sample length. For core drilling, sample interval for the mineralized zone was considered between 1.0 and 3.0 m, with a typical length of 2.0 m. The overall sampling interval for drilled cores varied from 0.40 m to 4.0 m within the mineralised units. The distribution of sample intervals for core drilling in mineralised (GC samples) and non-mineralised (non-GC samples) lithological units is illustrated in Figure 3-8.

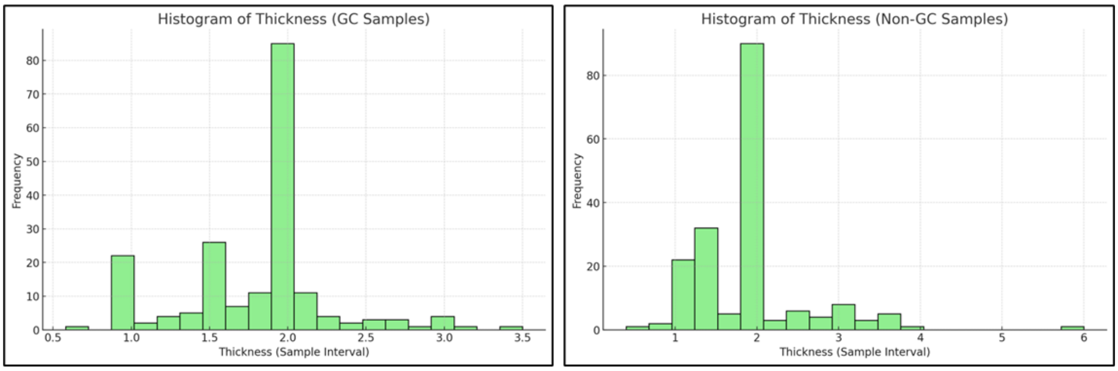


Figure 3-8: Distribution of sample interval of Vatomina core drilling in mineralised and non-mineralised units

3.7.8 Sample Preparation

Sample preparation was undertaken in-house using conventional methods (Figure 3-9). Drill cores were marked, which were later split into two halves. For samples from saprolite (soft) formation, the samplers used chisel knife and metal plates to retrieve the half portion of the core for sample preparation. For harder rocks, a core cutting machine was used.

The half core sample weighing about 800 – 900 g is first manually crushed to approximately 2 mm, followed by homogenization and coning–quartering to obtain two equal portions of around 400 – 450 g each. One half is preserved as a coarse duplicate, while the other half is used for pulp preparation by further crushing with a hand mortar to approximately 140 mesh size and sieving to ensure 95% passing, with the oversize retained as coarse rejects. The resulting pulp is then divided into three equal parts of 100 – 150 g each, with one portion sent for laboratory analysis, the second retained as a pulp duplicate, and the third stored at the exploration camp for record purposes.

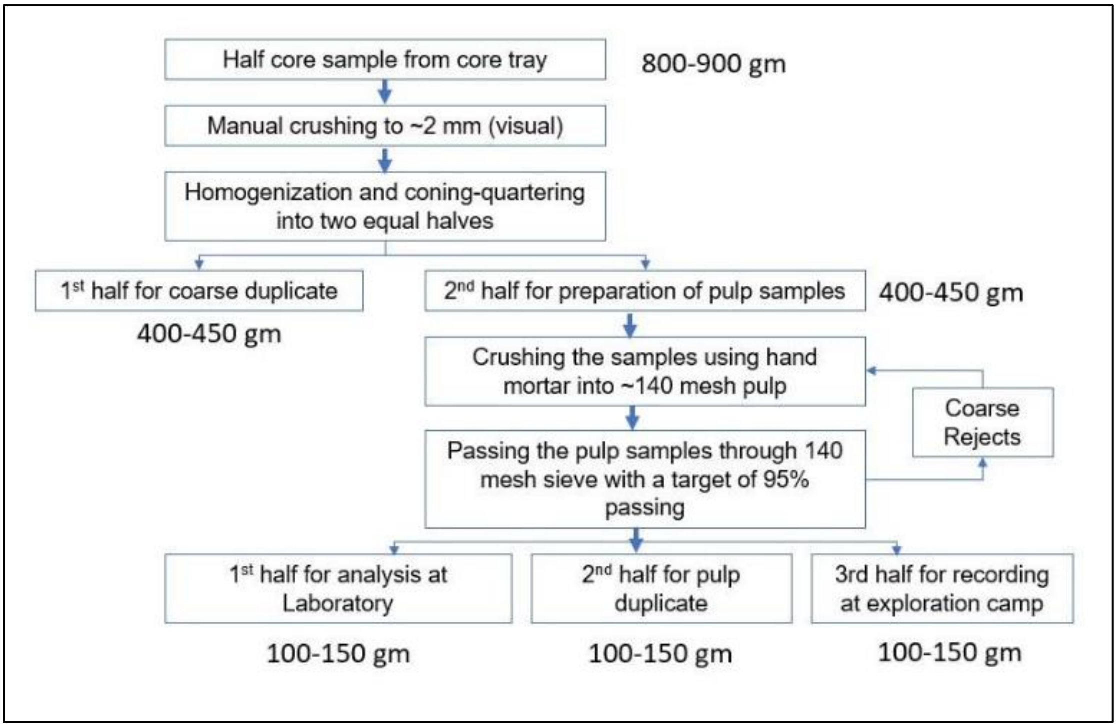


Figure 3-9: Standard sample preparation flowsheet

3.7.9 Assay

Exploration samples generated from the Vatomina project were prepared at the Tirupati in-house laboratory following standard crushing, drying, and pulverization protocols to ensure sample representativeness. The prepared pulps were then dispatched under chain-of-custody procedures to SGS India, which serves as the primary laboratory for this project.

At SGS, the samples are being analysed for Fixed Carbon (FC) content using the Muffle Furnace method. In this procedure, weighed samples are heated in a controlled furnace environment to a defined temperature profile, during which volatile matter, moisture, and non-carbonate impurities are burned off. The residual weight, expressed as a percentage of the original sample mass, is reported as FC**.** The assay results are still awaiting from SGS, India.

3.7.10 QAQC

At the Vatomina project, Tirupati implements a rigorous QAQC protocol to ensure the reliability and integrity of FC assay results from diamond drill cores. Analytical batches consist of 20 samples, with 4 QC samples (approximately 20%) incorporated in each batch. The QC suite comprises:

- Certified Reference Materials (two types): monitor analytical accuracy and detect systematic bias.
- Field Duplicates: assess variability arising from sampling and sub-sampling.
- Pulp Duplicates: evaluate laboratory precision and sample homogenisation.
- Field Blanks: inserted systematically as every 20th sample during preparation to detect potential contamination.

At the time of reporting, assay results from SGS are awaited. Once received, results will be reviewed and validated through internal QAQC protocols, including comparison with check assays and insertion of field duplicates and standards. These results will then be integrated into the project's geological database and subsequent resource modeling.

3.7.11 Database

All field-generated data were systematically transferred into a digital database using a standardized template developed in Microsoft Excel. The use of a consistent template ensured uniformity in data entry and facilitated effective validation and compilation of geological information. Detailed geological logging sheets, incorporating standardized logging codes for lithology, structure, and mineralization characteristics, were also maintained in Excel format to ensure consistency across the dataset.

The digital database is managed and regularly updated by Tirupati's geological team, who are responsible for verifying the accuracy and completeness of incoming data from the field and drilling programmes. Periodic data reviews and updates are carried out to incorporate new drilling, sampling, and assay results, ensuring that the database remains current and serves as a reliable foundation for geological interpretation and resource estimation.

3.7.12 SRK Comments

SRK is of the opinion that the drilling data for the project has been generated in a professional and systematic manner, adhering to industry-standard exploration and data management practices. The exploration work at Vatomina has been carried out in a phased manner, beginning with reconnaissance through hand auger drilling to delineate graphite-bearing zones, followed by confirmatory core drilling across the leasehold area. This systematic approach has enabled Tirupati to progressively build geological understanding and confirm the lateral and vertical continuity of graphite mineralisation.

Data from both hand auger and core drilling programmes have been carefully logged, recorded in standardized templates, and regularly updated in the project database, ensuring traceability and reliability. In addition, limited mining from selected parts of the lease has provided valuable validation of the interpreted geological model and graphite occurrence.

Once the pending assay results are received, a comprehensive reconciliation between drilling, assay, and production data can be undertaken. This will enable refinement of grade distribution and geological continuity, thereby supporting a more robust and higher-confidence Mineral Resource Estimate for Vatomina.

3.8 Metallurgical Tests

Metallurgical testwork is carried out as part of the development of the process to concentrate the value minerals from the ore. While the plant at Vatomina is already in operation, a review of the metallurgical testwork used as the basis of design will indicate whether the plant and the design of the plant is fit for the purpose intended and to what extent, if any, production can be increased without major capital expenditure.

Metallurgical testwork should be undertaken throughout the life of the mine as the material previously tested is depleted and new material is introduced to the process.

3.8.1 Summary

A metallurgical testwork program was carried out at Institute of Minerals and Materials Technology (IMMT) located in Bhubaneswar, India in 2018 and summarised in their report No. 1106/MPD/SSP-327/Nov./2018. No other metallurgical testwork information has been provided for the processing of the Vatomina Graphites.

The objective of the testwork was to establish a flowsheet maximising flake recovery where flake graphite was described as material >150 μm.

Two bulk samples were provided for initial testing, one from BK4 and one from BK6. The flowsheet developed in this campaign was then used as the basis for testing samples from BK1, BK4 (West), and BK6 (West), as well as additional samples from BK4 and BK6.

Finally, a mixed graphite sample was processed in the same way and used to develop a process design criteria and mass balance for a 60 tph processing module.

The report states that the testwork demonstrated a concept of pre-concentration using a scrubbing classifier to reject over 80% of the run of mine (RoM) with minimal loss of graphitic material. The upgraded material from the pre-concentration plant would be further processed with multiple stages of flotation and concentrate regrinding to generate a finished product.

3.8.2 Samples

Preliminary testwork was carried out on two bulk samples labelled BK4 (75 kg) and BK6 (125 kg) were shipped to the IMMT laboratory for metallurgical testing. No sample provenance is provided.

The preliminary samples were characterised as shown in Table 3-6. Fixed carbon is reported rather than the conventional TGC.

The samples for the beneficiation testwork were characterised as shown in

Table 3-7.

A final round of testwork was carried out on a mixed sample from across the deposit with a target Fixed Carbon content of 6%. No head sample analysis is provided in the Report.

Table 3-6: Preliminary Testwork Sample Proximate Analysis

Sample	Moisture (%)	VM (%)	Ash (%)	FC (%)
BK4	0.05	6.29	88.29	5.37
BK6	0.09	9.03	80.48	10.43

Table 3-7: Beneficiation Testwork Sample Proximate Analysis

Sample	Moisture (%)	VM (%)	Ash (%)	FC (%)
BK1	1.09	4.873	91.74	3.43
BK4(W)	0.49	6.09	88.87	5.04
BK4	0.69	5.83	88.52	5.65
BK6(W)	0.53	7.63	86.15	6.22
BK6	0.88	8.3	83.77	7.05

3.8.3 Mineralogy

The Preliminary Testwork Program included an optical mineralogical study on both samples. The BK4 sample is reported to be 65% liberated at 100 μm and the K6 sample fully liberated at a grind size of 75 μm.

An XRD study was conducted to determine the main mineral phases present in the two samples though no conclusions are reported from this analysis.

Mineralogy can play an important role in understanding the processing of the ore and modern mineralogical studies using tools such as QEMSCAN could deliver a lot more useful information regarding mineral liberation and association.

3.8.4 Comminution

No testwork on the determination of the comminution breakage energy for crushing or grinding of the ore has been reported. Sizing crushing and grinding equipment without this information is risky, particularly when over-grinding of the graphite should be avoided.

There is no concentrate regrind and liberation analysis reported. The plant flowsheet relies on multiple stages of concentrate re-grinding and without testwork to determine the size and power of the re-grind mill, there is a risk that over grinding will take place in the plant, reducing the higher value flake graphite to finer, lower value material.

3.8.5 Flotation

The Preliminary testwork program determined the optimum grind size and flotation reagent scheme to upgrade the BK4 and BK6 samples. The test conditions established in the preliminary phase were used as the basis for the six samples used for the beneficiation testwork and the final mixed graphite sample testwork.

The flotation testwork has only been carried out in open circuit. With a circuit configuration which relies

3.8.6 Dewatering and Drying

No dewatering or drying testwork was included in the reports reviewed by SRK.

Thermal drying of a combustible material such as graphite must be done with great care and an appropriate level of testing and design work should always be undertaken.

3.8.7 SRK Comments

There are large gaps in the information that SRK was provided to review, which does not necessarily mean the work has not been done; however, SRK highlights what is missing:

- The samples tested cannot be traced back to a location, or locations, within the mining areas.
- The mineralogical analysis is limited to two samples and was undertaken at a basic of level.

- No comminution energy determination is included in the testwork report. Nothing in the report can be used to confirm crushing and milling equipment sizing, performance and capacity.
- Flotation testing was only carried out in open circuit. Open circuit flotation tests cannot be reliably scaled up to provide predictions of full plant performance.
- Flotation results are reported as FC and it is unclear how this relates to the more conventional TGC.
- Column flotation has been included in the testwork program but no operating parameters are reported, meaning that the testwork report cannot be used to select equipment or predict the beneficial performance the addition of flotation columns to the circuit may bring.
- There is no dewatering testwork for concentrates or tailings.

SRK assumes that there are other testwork campaigns which were used to generate the information required to design the process plant at Vatomina, size the equipment and predict the plant performance. This cannot be achieved with the information that has been provided to date.

The conclusions of the report highlight that the process designed is unique which is always a concern in plant design. Proven flowsheets with established equipment are lower risk.

3.9 Mineral Resource Estimation

SRK uses Leapfrog Geo software to produce 3D geological models and Datamine RM software for block modelling and grade and tonnage estimation. The block models are classified in accordance with the terms and guidelines of the JORC Code.

3.9.1 Database

A summary of the exploration database used for Vatomina Mineral Resource estimation is presented in Table 3-8. The resource estimation is based on data updated up to 2020. The auger drillholes completed after the 2020 CPR were mainly used to trace mineralization continuity in soil-covered areas and acted as a substitute for geological mapping, not for defining resources. Similarly, the trenches dug after the 2020 CPR helped in understanding the geology and continuity of mineralization. The diamond drillholes drilled after 2020 were not included in the current estimation, as their assay results are still awaited. The current resource estimation and reporting cover only the areas supported by the verified pre-2020 database, while the new mineralized zones identified through post-2020 auger drilling, trenching, and diamond drilling are classified as Exploration Targets. The boundary is shown in Figure 3-10.

Table 3-8: Summary of Vatomina Exploration Data used to define Mineral Resources as of 30 September 2025

Drilling Type	Count	Drilled Meter
Auger Drilling	549	4879.0
Diamond Drillhole	66	3127.9
Trench	15	34.9
Total	**630**	**8041.8**

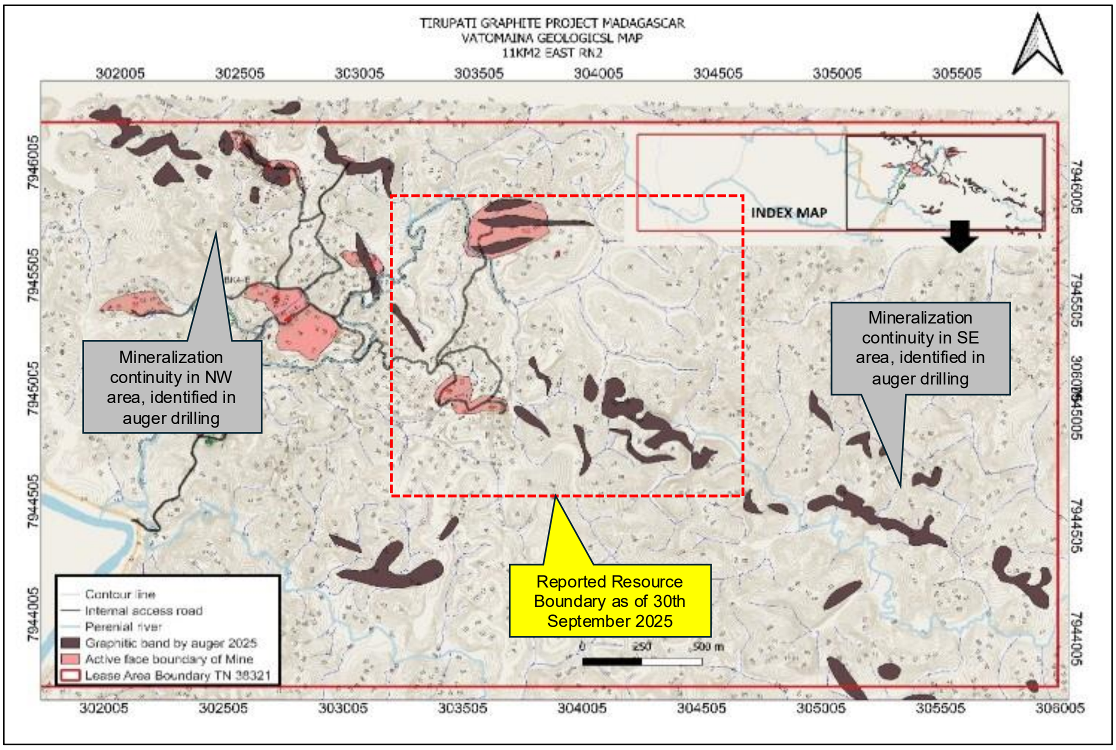


Figure 3-10: Reported Mineral Resource Estimation Boundary as of 30 September 2025

3.9.2 Data Validation

Prior to the construction of geological modelling, SRK undertook a data validation exercise to ensure the data quality is appropriate for undertaking a Mineral Resource Estimate. Those included:

- validation of the borehole coordinates;
- overlapping intervals;
- harmonisation of the geological logging codes;
- missing interval and missing assay results;
- assigning appropriate value for those samples where the GC% were reported below the detection limit; and
- reconciliation of the geological logs with the assay results.

SRK did not find any material issue in terms of the integrity of the exploration database. SRK has, however, noted that:

- The samples from 276 holes (227 auger holes and 27 diamond drillholes) are yet to be assayed. As of writing this report, SRK understand that Tirupati is in the process of preparing these samples to be analysed in the laboratory.
- For those samples, that were logged as internal waste and which were not assayed or reported a grade below the detection limit, SRK assumed a default value of 0.25% TGC.

3.9.3 Geological Modelling

Topographic Model

The 3D topographic digital elevation model was constructed using Leapfrog Geo software, based on the topographic survey data, generated by Tirupati using Total Station survey equipment. SRK imported the elevation grid model into Leapfrog Geo software and created the 3D topographic surface with a resolution of 25 x 25 m.

Lithology Model

3D lithological model was constructed based on the grouped lithological units, which include (a) Overburden, (b) Graphitic Gneiss, (c) Dolerite Dykes, and (d) non-graphitic gneiss as a country rock. The hanging wall and foot wall contact surfaces of the graphic gneisses and dolerite dykes were constructed using the Leapfrog's vein tool. Figure 3-11 presents the 3D View of the Vatomina Geological Model (Looking Northwest).

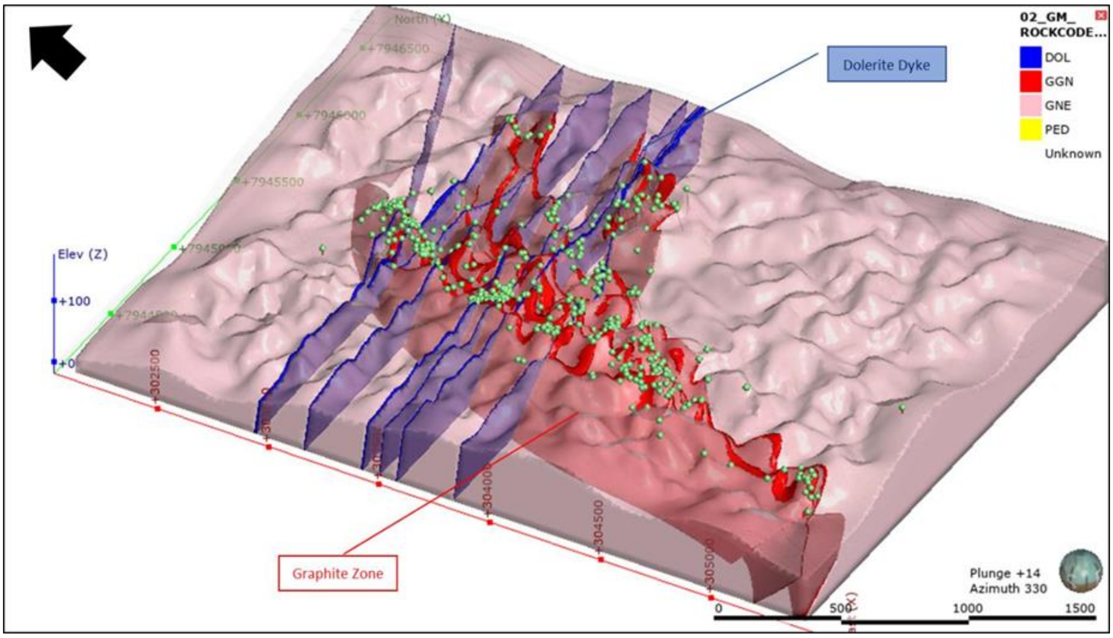


Figure 3-11: 3D View of Vatomina Geological Model (looking NW)

Regolith Model

In addition to the construction of the geological model, a 3D model of the regolith horizons was also constructed using the Leapfrog's stratigraphic modelling tool based on the geological logs. In this, SRK considered three horizons, including Pedoloith, Saprolite/Sap Rock and Bed Rock. The regolith model was intersected with the lithological model to derive the graphitic gneiss in the saprolitic horizon and in the fresh rocks. Figure 3-12 presents the 3D view of the modelled Graphitic Gneiss distributed in Saprolite and Fresh Rock.

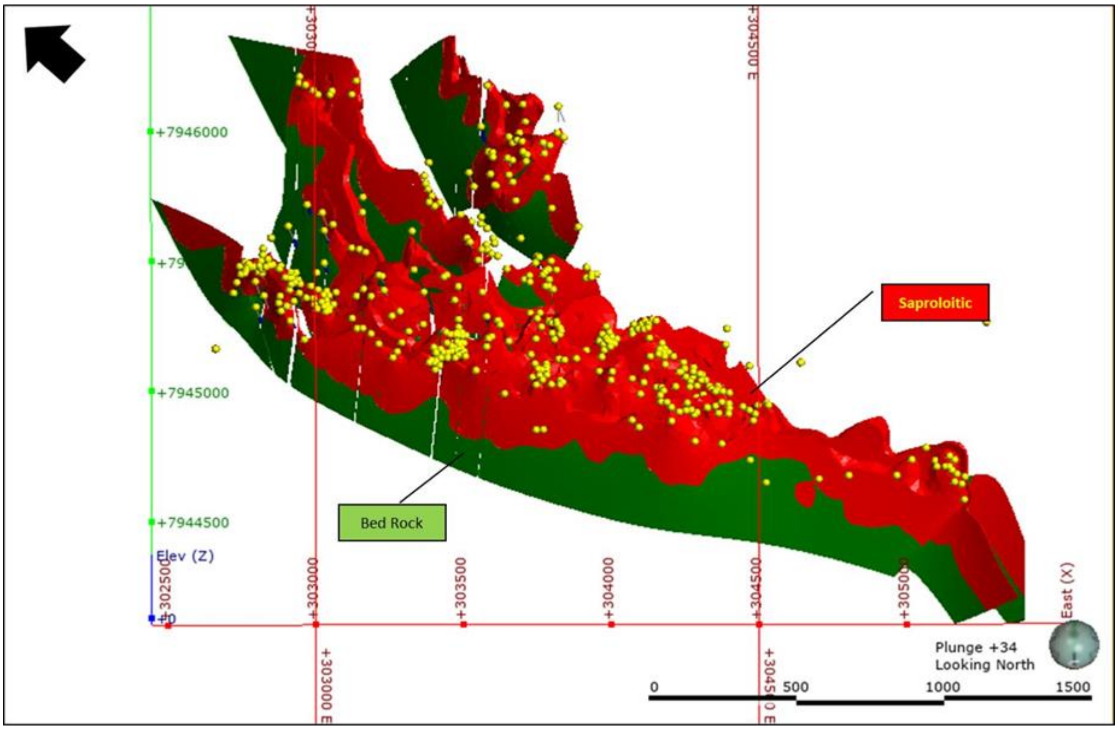


Figure 3-12: 3D View of Modelled Graphitic Gneiss distributed in Saprolite and Bed Rock (looking north)

3.9.4 Domaining Definition

In order to define such broad geological units, 2 m minimum intersection thickness was considered. Further, each graphitic band was separately coded within each drillhole. This was undertaken using a combination of the lithological observations and assay results. The contacts between the graphitic and non-graphitic gneiss were then defined based on a 2% TGC cut-off grade. Eight graphite bands were modelled for resource estimation. Figure 3-13 presents an overview of different zones identified during interpretation. In order to delineate the geometry of the graphitic bands, SRK used the structural data generated by Tirupati.

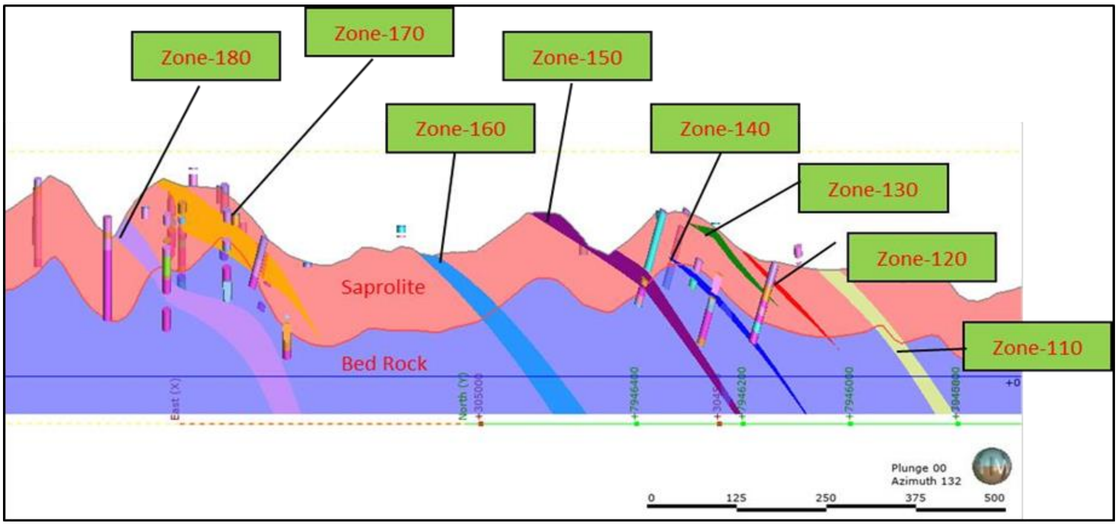


Figure 3-13: Example Cross Section Reflecting Different Vatomina Estimation Domains

3.9.5 Sample Statistics

The sample statistics of Vatomina are presented in Table 3-9. The summary statistics show low coefficient of variation (CoV) which indicate a low degree of GC% variability within the modelled mineralised zones.

Table 3-9: Summary of Vatomina Sample Statistics

Zone	Field	Count	Minimum	Maximum	Mean	Variance	StdDev	CoV
110	GC	152	2.10	10.40	4.79	3.54	1.88	0.39
111	GC	8	5.31	11.47	8.72	4.04	2.01	0.23
112	GC	5	3.02	3.94	3.57	0.09	0.30	0.08
120	GC	110	2.02	14.90	4.72	7.51	2.74	0.58
130	GC	138	2.01	7.82	4.08	1.93	1.39	0.34
140	GC	151	2.01	13.53	4.11	4.12	2.03	0.49
150	GC	80	2.00	13.20	4.20	5.79	2.41	0.57
160	GC	36	2.04	8.75	4.48	3.46	1.86	0.42
161	GC	3	3.14	6.65	5.48	2.73	1.65	0.30
170	GC	42	2.12	11.36	4.29	4.27	2.07	0.48
180	GC	19	2.22	7.20	4.37	2.07	1.44	0.33

3.9.6 Compositing

Prior to generating the MRE, the samples were composited to equal lengths such that a constant volume was achieved, therefore honouring the sample support theory. As sampling was predominantly based on lithological intervals, the actual sample lengths range between 0.1 m to 3.75 m with a mean sample length of 1.4 m, a composite length of 2 m was used. SRK undertook a statistical analysis to ensure that the composites did not result in a reduction in the mean GC grade. A summary of the composite statistics for Vatomina presented in Table 3-10.

Table 3-10: Summary of Vatomina Composite Statistics

Zone	Field	Count	Minimum	Maximum	Mean	Variance	StdDev	CoV
110	GC	96	2.10	9.67	4.72	2.90	1.70	0.36
111	GC	4	7.12	11.47	8.72	3.20	1.79	0.21
112	GC	3	3.31	3.94	3.57	0.06	0.24	0.07
120	GC	81	2.02	14.90	4.72	6.86	2.62	0.55
130	GC	87	2.06	7.17	4.08	1.53	1.24	0.30
140	GC	100	2.01	11.49	4.11	3.63	1.90	0.46
150	GC	62	2.00	13.20	4.20	5.51	2.35	0.56
160	GC	23	2.14	7.54	4.48	3.32	1.82	0.41
161	GC	2	3.14	6.65	5.48	2.73	1.65	0.30
170	GC	35	2.12	11.36	4.29	3.92	1.98	0.46
180	GC	17	2.22	7.20	4.38	1.98	1.41	0.32

3.9.7 Grade Capping

SRK conducted a comprehensive capping analysis for each variable within each estimation domain. SRK analysed capping sensitivity plots and three-dimensional visual inspections of grade distributions to assess the presence and influence of higher values. The results indicated that there are no significant higher values as outliers present and have no material impact on the statistical distributions. Consequently, no capping was necessary for any of the domains.

3.9.8 Delustering

Since the drillholes are uniformly distributed in a regular grid pattern and do not exhibit clustering, declustering was not necessary prior to resource estimation. The equal spacing of drillholes ensures that each sample contributes evenly to the estimation process, minimizing the risk of spatial bias or over-representation of certain areas within the dataset.

3.9.9 Geostatistical Analysis

A geostatistical study was undertaken to investigate the grade continuity and to derive parameters for grade interpolation. The 3D variogram analysis was undertaken in Snowden Supervisor software. Semi-variograms were constructed for each domain to determine the grade continuity and spatial variability of GC% and to determine the search neighbourhood approach and setting up the kriging parameters.

Initially, the Nugget Effect was determined from the downhole experimental semi-variograms. SRK attempted to construct directional variograms, but due to the absence of closed spaced drilling at this stage of the project, SRK relied on the omni-directional variograms. Graphical representation of the constructed omni-directional semi-variograms for Vatomina are presented in Figure 3-14. Table 3-11 presents the summary of the variogram parameters.

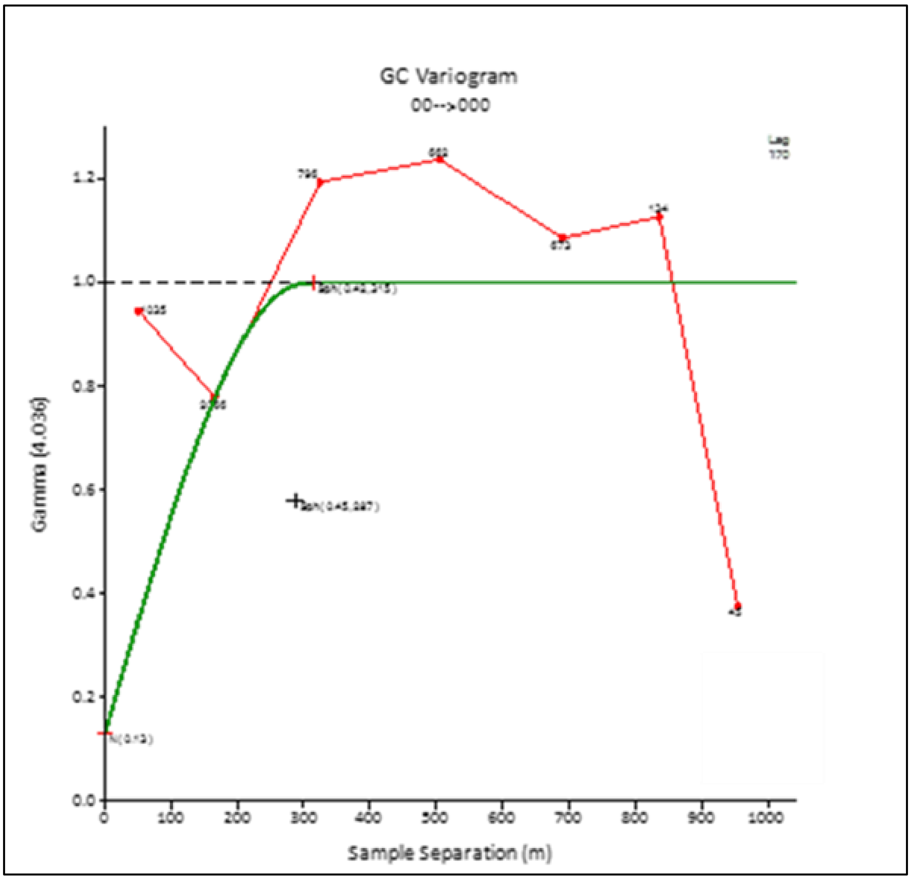


Figure 3-14: Vatomina omni-directional modelled variogram

Table 3-11: Summary of Vatomina Variogram Parameters

Parameter	Vatomina
Element	TGC%
Variogram reference number	1
Rotation angle around Z axis	0
Rotation angle around X axis	0
Rotation angle around Z axis	0
Nugget variance	0.1
Variogram model type (Structure 1)	Spherical
First Range of Structure 1	7
Second Range of Structure 1	7
Third Range of Structure 1	7
Sill parameter of Structure 1	0.22
Variogram model type (Structure 2)	Spherical
First Range of Structure 2	24
Second Range of Structure 2	24
Third Range of Structure 2	24
Sill parameter of Structure 2	0.68

3.9.10 Block Model

Following the construction of the wireframes and the geostatistical analysis, a 3D block model was created in the Datamine Studio 3 software. For the selection of the block model framework SRK considered the average borehole spacing and possible open pit bench height. In order to increase the accuracy of the domain boundary definition, SRK used sub-blocks along each direction for all the modelled geological wireframes. Table 3-12 presents the summary of the block model parameters selected by SRK for Vatomina.

Table 3-12: Summary of Vatomina Block Model Framework

	X (m)	Y (m)	Z (m)
Minimum	302000	7944000	-100
Maximum	306000	7946300	100
Range	4000	2300	200
Parent block size	20	20	5
Number of blocks	200	115	40
Rotation	0	0	0

3.9.11 Grade Estimation

For Vatomina, SRK used Ordinary Kriging (OK) for the grade interpolation into the block model, honouring the geological contacts defined by the geological modelling process and using the variogram parameters set out above. Before undertaking the grade estimation, SRK carried out a search neighbourhood analysis for the appropriateness of the search and estimation parameters through the optimisation of the following parameters:

- Search Ellipsoid Dimension.
- Number of minimum and maximum samples to be used for estimation.
- Optimisation of Search Octants.
- Number of discretisation points.

Based on the results of the above study, SRK selected the final search parameters for Vatomina, which are reflected in Table 3-13. In order to compare the mean grades derived from the Ordinary Kriging, SRK also estimated the empty block model using Inverse Distance Weighted Method. The estimation parameters were set up by visually checking the data to ensure suitable minimum and maximum samples have been used, and that the factored searches were sufficiently large to fill the entire block model.

Table 3-13: Summary of Vatomina Search Parameters

Domain	110	111	112	120	130	140	150	160	161	170	180
Element	GC	GC	GC	GC	GC	GC	GC	GC	GC	GC	GC
Search Method	110	111	112	120	130	140	150	160	161	170	180
Rotation angle about Z Axis	2	2	2	2	2	2	2	2	2	2	2
Rotation angle about X Axis	150	70	80	100	100	100	100	100	100	100	250
Rotation angle about Z Axis	150	70	80	100	100	100	100	100	100	100	250
First Pass Search distance along strike	150	70	80	100	100	100	100	100	100	100	250
First Pass Search distance across strike	0	0	0	0	0	0	0	0	0	0	0
First Pass Search distance along dip	0	0	0	0	0	0	0	0	0	0	0
Minimum Number of Sample First Pass	0	0	0	0	0	0	0	0	0	0	0
Maximum Number of Sample First Pass	3	3	3	3	3	3	3	3	3	3	3
Second Pass Search distance along strike	1	1	1	1	1	1	1	1	1	1	1
Second Pass Search distance across strike	3	3	3	3	3	3	3	3	3	3	3
Second Pass Search distance along dip	5	3	3	3	3	3	5	5	3	5	3
Minimum Number of Sample for the Second Pass	15	4	4	8	8	8	15	15	4	8	8
Maximum Number of Sample for the Second Pass	2	2	2	2	2	2	2	2	2	2	2
Third Pass Search distance along strike	5	3	3	3	3	3	5	5	3	3	3
Third Pass Search distance across strike	15	4	4	8	8	8	15	15	4	4	4
Third Pass Search distance along dip	10	10	10	10	10	10	10	10	10	10	10
Minimum Number of Sample for the Third Pass	3	2	2	3	3	3	3	3	2	2	2
Maximum Number of Sample for the Third Pass	8	4	4	8	8	8	8	10	4	4	4
Use Octant Search	No	No	No	No	No	No	No	No	No	No	No
Number of octants containing samples	-	-	-	-	-	-	-	-	-	-	-
Minimum number of samples per octant	-	-	-	-	-	-	-	-	-	-	-
Maximum number of samples per octant	-	-	-	-	-	-	-	-	-	-	-
Maximum Number per borehole	2	-	-	2	2	2	2	2	-	2	2

3.9.12 Model Validation

SRK has undertaken a number of validation exercises on the resulting estimated model, to confirm that the modelled estimates represent the input sample data on both local and global scales, and to check that the estimate is not biased. Methods of validation used include:

- visual inspection of block grades in comparison with drillhole data; and
- comparison of block model and sample mean grades.

Visual Validation

Visual validation provides a comparison of the interpolated block model on a local scale and in this case, this showed a reasonable correlation, with local block estimates displaying similar grades to nearby drillholes. Figure 3-15 shows an example of the visual validation checks for the model, which highlight the overall block grades corresponding with the composite samples grades.

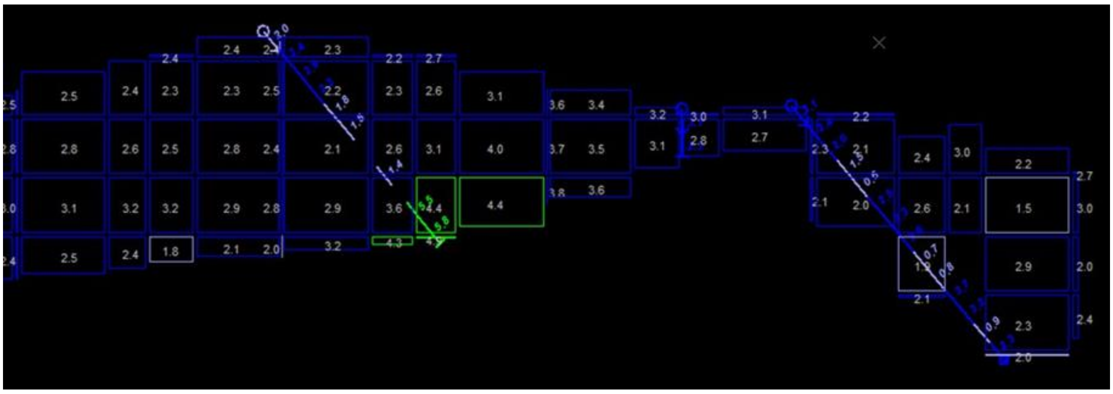


Figure 3-15: Visual validation of Vatomina block model against drillhole data

Statistical Validation

A statistical validation of the interpolated block model has been undertaken, and the results are presented in Table 3-14. A comparison was made between the declustered capped composite samples and the OK grade estimate. In general, the declustered capped composite samples compare well with the OK block model estimates, with no sign of any bias therefore validating the global estimated grades. Based on the visual and statistical validation results, SRK accepted the grades in the block model.

Table 3-14: Statistical validation of composite sample statistics versus estimated block model statistics

Domain	Composite Mean	Estimated Mean	Absolute Difference	% Difference
110	4.72	4.62	0.10	2%
111	8.72	8.38	0.34	4%
112	3.57	3.55	0.02	0%
120	4.72	4.24	0.48	10%
130	4.08	4.08	0.00	0%
140	4.11	4.28	-0.17	-4%
150	4.20	4.65	-0.45	-11%
160	4.48	4.03	0.45	10%
161	5.48	5.07	0.41	8%
170	4.29	4.26	0.03	1%
180	4.38	3.93	0.45	10%

3.9.13 Density Model

In absence of detailed study on the dry in situ bulk density measurement, SRK assumed a default density of 1.92 t/m^3 for all mineralised zones. SRK understands that Tirupati will be undertaking a next phase of exploration to generate further exploration data to enhance the density model.

3.9.14 Mineral Resource Classification

The Mineral Resource statement presented herein has been classified following the definitions and guidelines of the JORC Code (2012) from which the following definitions have been taken.

Inferred Mineral Resources

An 'Inferred Mineral Resource' is that part of a Mineral Resource for which tonnage, grade and mineral content can be estimated with a low level of confidence. It is inferred from geological evidence and assumed but not verified geological and/or grade continuity. It is based on information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes which may be limited or of uncertain quality and reliability. An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource.

The Inferred category is intended to cover situations where a mineral concentration or occurrence has been identified and limited measurements and sampling completed, but where the data are insufficient to allow the geological and/or grade continuity to be confidently interpreted. Commonly, it would be reasonable to expect that the majority of Inferred Mineral Resources would upgrade to Indicated Mineral Resources with continued exploration. Due to the uncertainty of Inferred Mineral Resources, it should not be assumed that such upgrading will always occur.

Indicated Mineral Resources

An 'Indicated Mineral Resource' is that part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a reasonable level of confidence. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drillholes. An Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource but has a higher level of confidence than that applying to an Inferred Mineral Resource. Mineralisation may be classified as an Indicated Mineral Resource when the nature, quality, amount and distribution of data are such as to allow confident interpretation of the geological framework and to assume continuity of mineralisation. Confidence in the estimate is sufficient to allow the application of technical and economic parameters, and to enable an evaluation of economic viability.

Measured Mineral Resources

A 'Measured Mineral Resource' is that part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a high level of confidence. It is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are spaced closely enough to confirm geological and grade continuity.

Mineralisation may be classified as a Measured Mineral Resource when the nature, quality, amount and distribution of data are such as to leave no reasonable doubt, in the opinion of the Competent Person determining the Mineral Resource, that the tonnage and grade of the mineralisation can be estimated to within close limits, and that any variation from the estimate would be unlikely to significantly affect potential economic viability.

This category requires a high level of confidence in, and understanding of, the geology and controls of the mineral deposit.

Confidence in the estimate is sufficient to allow the application of technical and economic parameters and to enable an evaluation of economic viability that has a greater degree of certainty than an evaluation based on an Indicated Mineral Resource.

Key Considerations of Vatomina Mineral Resource Classification

Based on the data available as of the Effective Date of reporting, SRK classified the Vatomina Mineral Resource into the Indicated and Inferred categories, as the terms defined in the JORC Code. In determining this, the following factors were considered:

- the quality, distribution and quantity of data used in the estimation;
- the geological knowledge and understanding, focusing on geological and grade continuity; and
- the quality of the geostatistics and quality of the estimation.

Table 3-15: Key Consideration for Vatomina Mineral Resource Classification

Criteria	SRK Consideration
Data Quality	The methodologies adopted by the Company for the drilling programme is in the line of the standard industry practice. The results from the QAQC programme show no evidence of material bias within the laboratory.
Data Distribution	The exploration was not done on regular grid.
Geological Knowledge and continuity	The geology of the graphite mineralised zone is complex. There are variations in thickness and grade between adjacent drillholes. In addition to that, the area has been intruded by a number of dolerite dykes.
Quality of Geostatistics and Grade Interpolation	The quality of the semi-variograms are comparatively poor. The resultant block model validates well when compared to the input sample data.

Considering the above, SRK classified the Mineral Resources using the following criteria, which is reflected in Figure 3-16:

- Indicated Resource: part of the mineralised horizon that occurs within the saprolitic horizon, where the continuity of the mineralised body has been established through diamond drilling which are broadly distributed at 100 m interval along the strike of the mineralised body and downdip continuity is established along the section; and the quality of the estimate is reasonably well.
- Inferred Mineral Resource: part of the mineralised horizon that occurs within the saprolitic horizon, where the continuity of the mineralised body has been assumed based on the diamond drilling which are broadly distributed 200 m interval along the strike of the mineralised body; and the quality of the estimate is reasonably well.

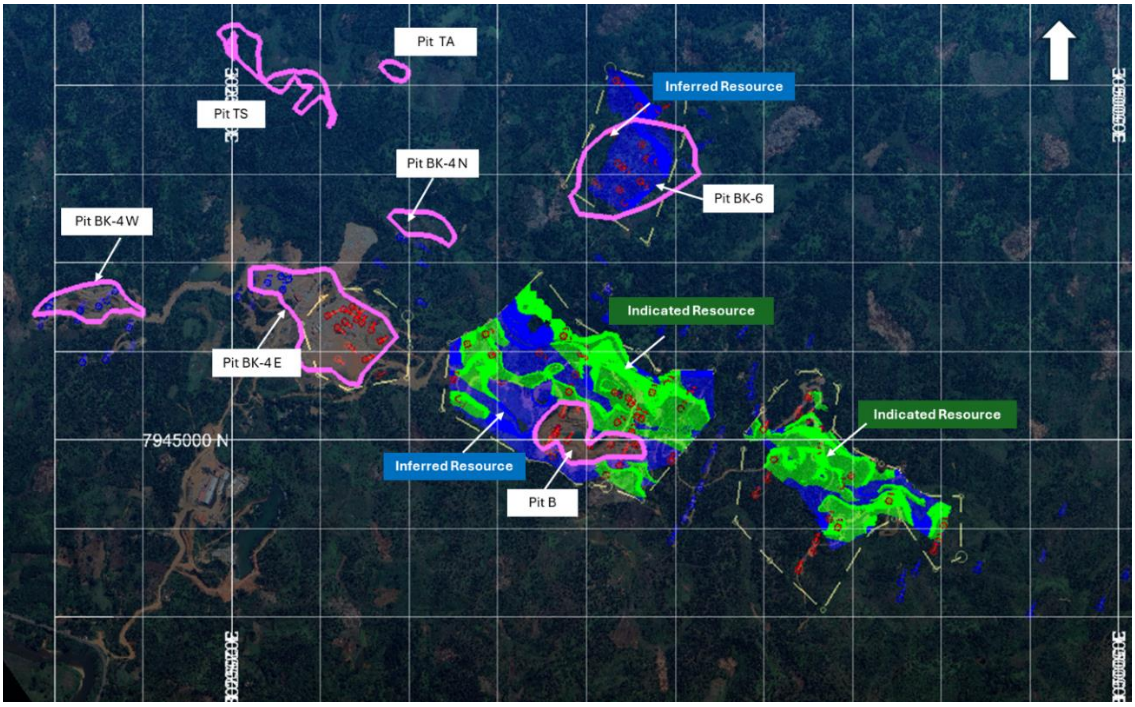


Figure 3-16: Vatomina Mineral Resource Classification Scheme

3.9.15 RPEEE

To support assessment of the Reasonable Prospects of Eventual Economic Extraction (RPEEE), SRK has developed optimised pit shells for the project based on various technical and economic factors, summarised in Table 3-16. These parameters are based on benchmark numbers from similar operations, as well as budgeted costs provided by the Company. Given the lack of available actual cost data, SRK has benchmarked these costs against other graphite operations and elected to increase certain costs areas including mining, processing and selling costs.

Graphite price forecasts were sourced from S&P Global's Mining Intelligence platform The graphite market is somewhat complex, with sales prices typically structured around flake size and concentrate grade. Differential pricing may also be realised depending on the destination of the graphite, with European markets often paying a premium over Asian markets. In the absence of any detail on the flake size distribution of the concentrate or the sales destination, SRK has elected to use the long-term FOB price forecast provided by S&P for a mixed flake concentrate with a grade of 94-95% TGC. A 30% premium to this price was included, consistent with standard industry approaches to reporting Mineral Resources.

Table 3-16: Parameters used to generate Conceptual Pit Shell to define Mineral Resource

Parameters		Units	Value
Production			
	Production Rate - Ore	(tpa)	270,000
Geotechnical			
	Footwall	(Deg)	30
	Hanging wall	(Deg)	30
Mining Factors			
	Dilution	(%)	5.0
	Recovery	(%)	95.0
Processing			
	Average Mass Yield	(%)	5.0
Operating Costs			
	Mining Cost	(USD/t_{rock})	1.5
	Incremental Mining Cost	(USD/bench)	0.01
	Reference Level	(Z Elevation)	
	Processing	(USD/t_{ore})	6.9
	G&A	(USD/t_{ore})	7.6
	Transport and Other	(USD/t_{ore})	7.0
	Selling Cost	(USD/t_{conc})	107
Price			
	Graphite	(USD/t_{conc})	950
		(USD/t_{dmtu})	1,030
Product Grade		(%)	92
Other			
	Discount Rate	(%)	10
Cut-Off Grade			
	Marginal	(USD/t_{ore})	14.5
		(%)	1.81

3.9.16 Mineral Resource Statement

The Mineral Resource Statement for Vatomina dated 30 September 2025 considering 2% TGC cut-off grade and reported within an optimised shell is presented in Table 3-17.

Table 3-17: Vatomina Mineral Resources, 30 September 2025

Classification	Tonnage (Mt)	TGC %
Measured	0	0
Indicated	1.6	3.8
Inferred	4.4	3.8
Total Resource	6.0	3.8

The following notes accompany the Mineral Resource Statement:

- The Mineral Resources have an effective date of 30 September 2025;
- Rounding as required by reporting guidelines may result in apparent summation differences between tonnes, grade and contained metal content. Where these occur, they are not considered material.
- Tonnages are reported in metric units, grades in percent (%) and grades are rounded appropriately.
- The Competent Person for the declaration of Mineral Resources is Mr Shameek Chattopadhyay, an employee of SRK.
- Mineral Resources are reported with reasonable prospects for eventual economic extraction, by applying appropriate technical and economic assumptions. A cut-off grade of 2%TGC has been applied and the reported Mineral Resources are limited by an optimised pit shell.
- Mineral Resources are not Ore Reserves and do not have demonstrated economic viability, nor have any mining modifying factors been applied.
- A JORC Table 1 has been completed and is available from the Company. All elements of Table 1 are included in this CPR.

3.9.17 Sensitivity

SRK has produced a grade-tonnage curve for TGC% for the Indicated and Inferred Mineral Resources, which is shown in Figure 3-17.

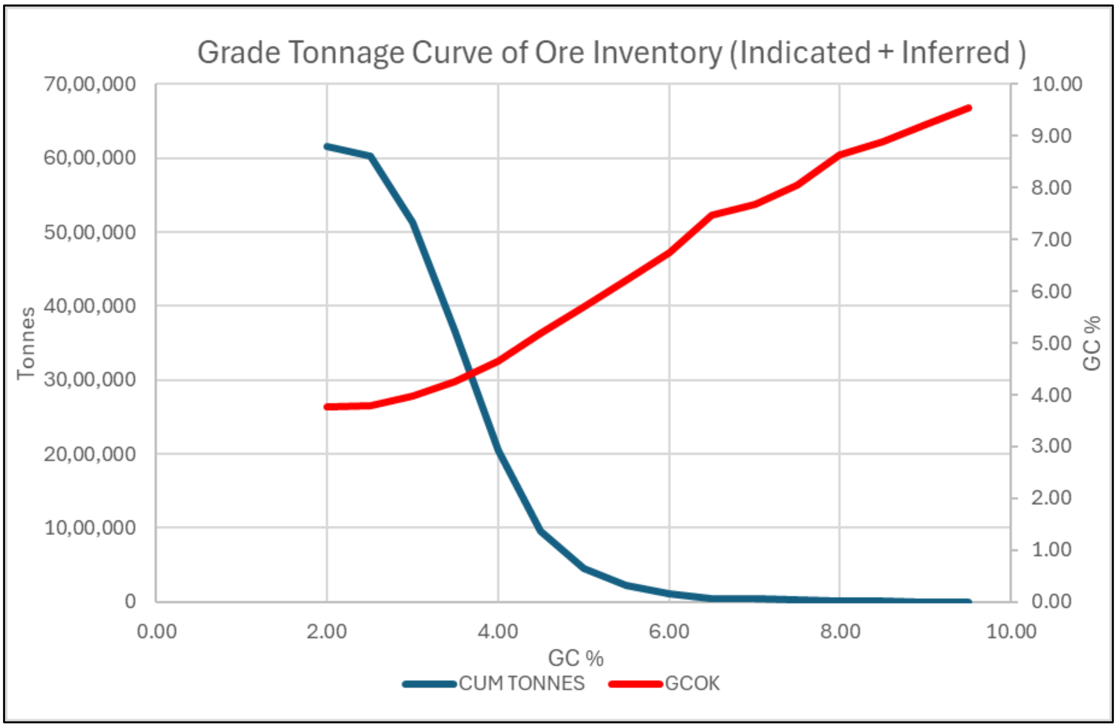


Figure 3-17: Grade-Tonnage Curve for Vatomina Mineral Resource

3.10 Exploration Target

An Exploration Target, as the term defined in the JORC Code, is a statement or estimate of the exploration potential of a mineral deposit in a defined geological setting where the statement or estimate is quoted as a range of tonnes and a range of grade or quality, and relates to mineralisation for which there has been insufficient exploration to estimate Mineral Resources.

At Vatomina, SRK estimates an Exploration Target of about 18-20 Mt of graphite mineralisation with an average grade ranging between 4-5% TGC. The following note is applicable to the Exploration Target:

- estimated range of tonnages and grades is effective at 30 September 2025;
- estimated range of tonnages and grades is in addition to the already reported Mineral Resources; and
- estimated range of tonnages and grades are conceptual in nature, as there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

Tirupati has provided SRK with details of their planned exploration activities and expenditure to explore such Exploration Target, which include a drilling campaign of about 18,000 m which is expected to be completed in 5 years. To undertake such campaign Tirupati envisage a budget of about GBP 2,000,000. SRK has reviewed the drilling plan and exploration budget and finds it to be reasonable.

The 2026 programme is planned to comprise about 5,000 m of diamond drilling starting in Quarter 1 of the Year 2026, aiming at the updated Mineral Resource estimate, if and as justified. The budgeted cost assumes that drilling will generate approximately 2,500 samples for analysis during 2026.

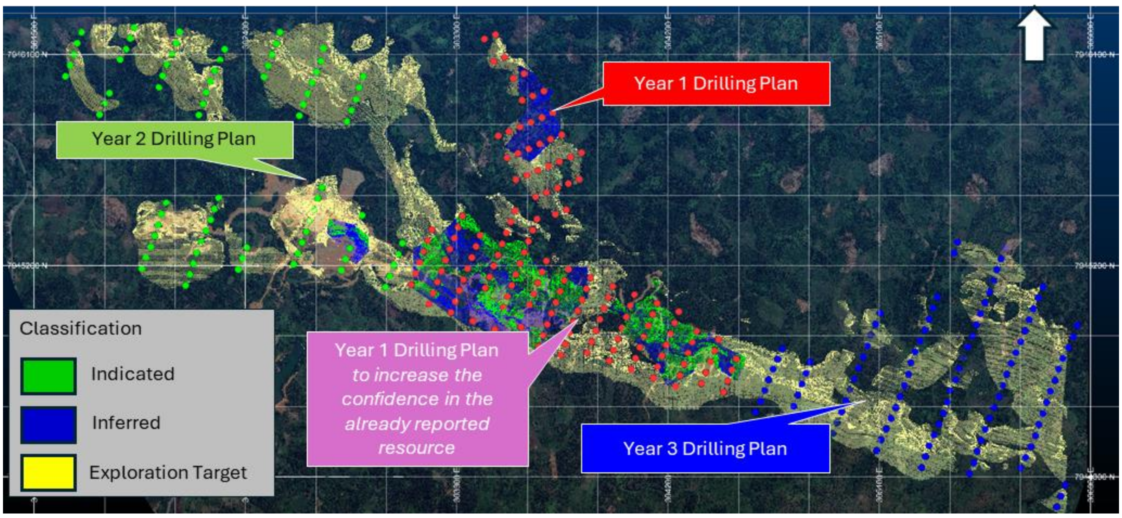


Figure 3-18: Vatomina Exploration Target area and Tirupati Drilling Plan

3.11 Mining

The Company started mining production at Vatomina in April 2018. Operations were suspended in December 2024 due to financial difficulties but resumed in February 2025, and are currently ongoing.

SRK has not been provided with any mine designs or production schedules to support understanding of operations and understands that the mine has no formal Ore Reserves. Instead, mining is guided by Resource models and day-to-day onsite management. This is considered a high-risk strategy; however, this is somewhat mitigated by the simplistic mining and processing approach and low production rates. SRK notes that one of the contributing factors to the Company placing the Sahamamy mine on care and maintenance was the lack of a proper mine development strategy, highlighting the risks associated with this approach.

Production during 2025 has reportedly come from three mining areas, Tanandava (Mine TA), Old Mine, and BK6. Figure 3-19 shows the Mineral Resource extents versus the Company's mining areas and indicates that Mineral Resources are only estimated for the BK6 and Old Mine Sites, and that Indicated Mineral Resources are only present at Old Mine.

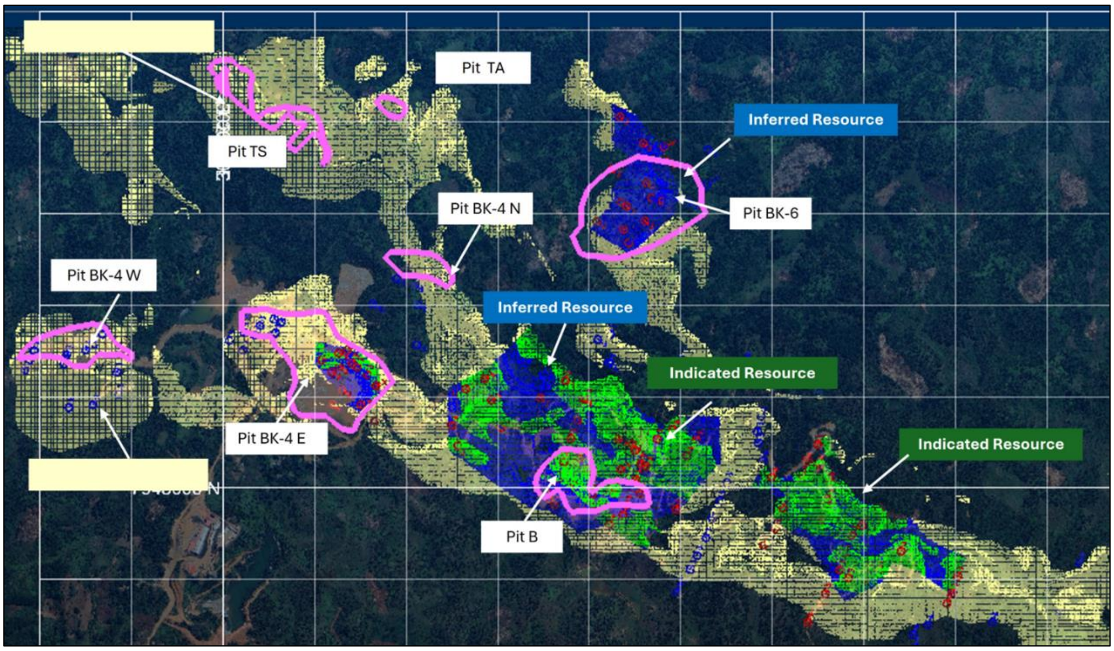


Figure 3-19: Vatomina Mineral Resource extents versus mining areas

Mining production between February 2025 and August 2025 is reported to be approximately 104.4 kt at an average grade of 2.64% TGC, for a total production of 2,755 t contained graphite. The available production statistics from the various mining sites is shown in Figure 3-19, and the location of these sites is shown in Figure 3-20. Based on the provided statistics for 2025 (February to August), 26% of the mined ore came from Tanandava, 1.7% from Old Mine, and 72.1% from BK6. SRK understands that current mining activities will continue to be focused on these areas.

Total monthly mining production (ore and waste) is highly variable, ranging from 1,000 t to over 100,000 t. Stripping ratios are also highly variable, ranging from 0.15 to 2.96 during 2022-23. SRK notes that in the production statistics provided, since April 2023 (but excluding April 2025) the reported stripping ratio for each month is exactly 1.25 m^3 per tonne of ore mined. As such, only very limited reliance is placed on the waste stripping and total mining production totals.

No mined grades are provided in the production statistics. The grade of processed material is provided, but it is unclear how this is analysed or calculated. Data indicate that grades are back-calculated from production (grade reported to multiple decimal places); however, it is unclear how this would account for variable metallurgical recoveries and concentrate grades. Overburden from the mining process is tipped in waste dumps local to each mining area as shown in Figure 3-20.

Table 3-18: Production by Fiscal Year

Production Year	Ore Mined (t)	Waste Mined (t)*	Stripping Ratio (t:t)	Ore Processed (t)	Processed Grade (%TGC)	Contained Graphite (t)
2022-23	182,215	277,726	1.52	168,424	3.08	5,191
2023-24	129,444	310,648	2.40	141,216	3.04	4,294
2024-25	103,091	247,419	2.40	101,751	2.61	2,658
2025 (Apr to Oct)	145,171	264,492	1.82	106,798	2.80	2,986

*Waste volumes have been multiplied by the Resource density (1.92 g/cm^2) to estimate waste tonnes

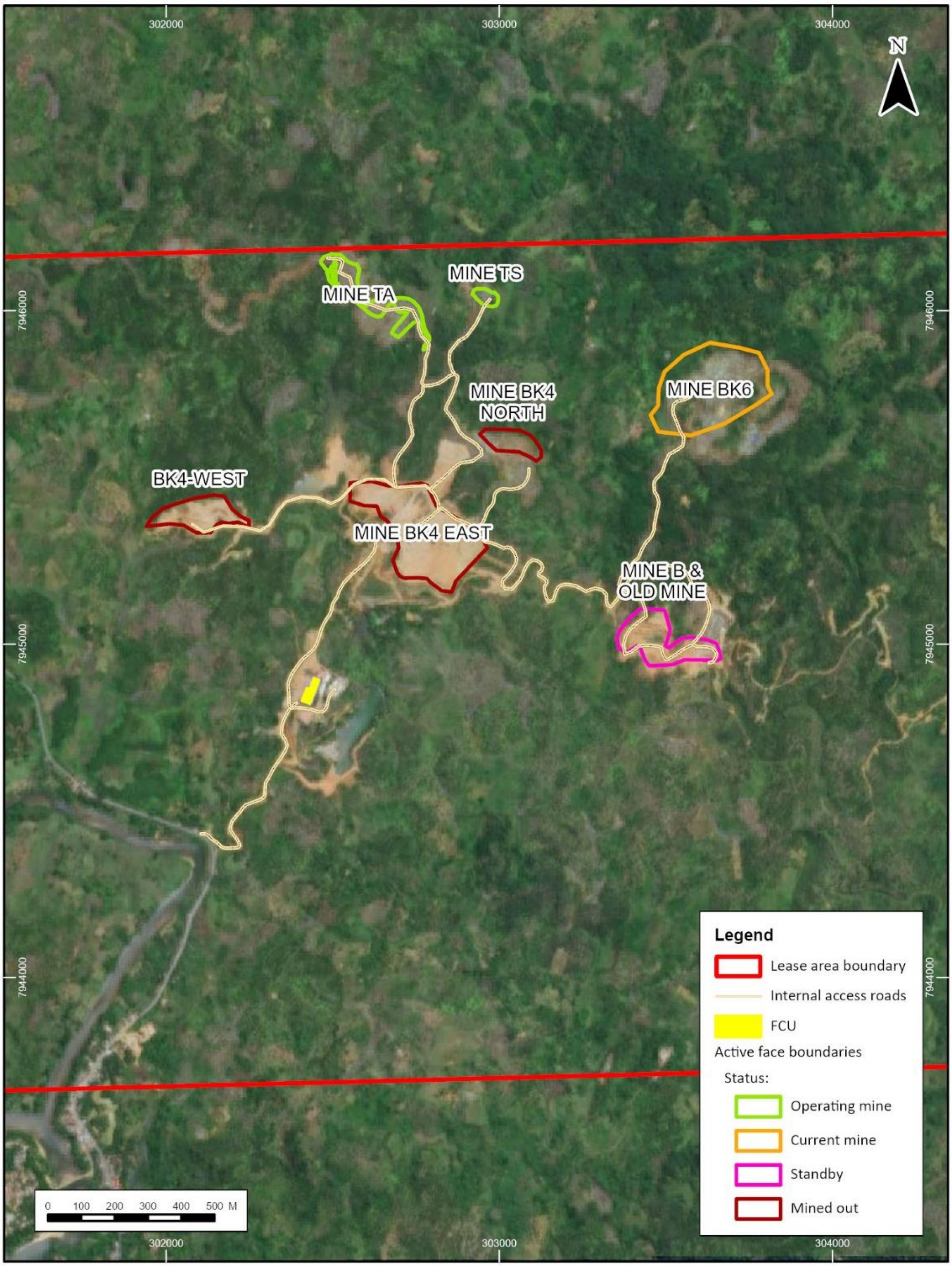


Figure 3-20: Vatomina Mining Areas

3.11.1 Mining Methods and Ore Control

All mining is understood to be undertaken using excavators and trucks only. Drill and blast is not used, and only material which can be freely excavated is extracted. Bulldozers may be used for ripping of some ore prior to excavation.

SRK understands that the Company does not currently undertake grade control drilling, sampling and short-term planning to guide mining operations. Instead, as the ore is largely visually distinguishable by its darker colour, and the base of mining is controlled by the limits of free-digging, the mining sequence follows the floor and mines delineated areas sequentially. This process does not allow for any selectivity to the mining (for example, prioritisation of higher-grade ore, stockpiling of low grades), and particularly at the margins of the deposits is likely to result in some sub-economic material being mined and processed.

SRK understands that the Company intends to transition to a more controlled mining process. Details of the intended work-programme to support this transition are provided in Section 3.19.

3.11.2 Mobile Fleet

The current mining fleet is a combination of Owner and rental equipment and is summarised in Table 3-19. Owner equipment was purchased in 2021 and 2022, whilst rental equipment was brought in during 2025 to improve production rates.

Table 3-19: Mining Equipment

Type	Manufacturer	Owner/Rental	Count	Comment
Articulated Dump Truck	Komatsu	Owner	4	1x currently listed as out of use
	Unknown	Rental	6	
Excavator	Hitachi	Owner	6	5x EX210, 1x EX140
	Hitachi	Rental	2	
Loader	Hitachi	Owner	4	4x TL340H
Backhoe	Hitachi	Owner	2	1x BX-80, 1x TH-86
Bulldozer	Various	Owner	3	1x BEML BD65, 2x Fuso (1x out of use)
Grader	BEML	Owner	1	
Tractor	Farmtrac	Owner	2	1x 60/60, 1x XP41

3.11.3 Operating and Capital Costs

The Company has not provided a detailed breakdown of operating and capital costs for the project. Some limited cost information has been provided in the annual reports, however this cannot be distinguished between the Vatomina and Sahamamy operations (in periods where both were operating). These are summarised in Table 2-5.

3.11.4 Operational Challenges

The Company has stated that since restarting operations in 2025 there have been significant challenges in sustaining efficient mining and production rates at close to rated capacities. Mining operations have been disrupted by heavy rainfall, resulting in loss of 48 operating days between May and August 2025), by insufficient excavator capacity due to mechanical failures, and due to low mined grades. The low mined grades are attributed by the Company to poor mining governance legacy. The Company has developed a remediation plan to address these issues, some of which have been implemented during the course of 2025. This includes:

- Development of the BK6 mining area, including construction of a 2.5 km road and over-burden stripping.
- Development of a 1-month RoM stockpile.

- Flattening of certain steep sections along three haul roads.
- Rental of additional loading and hauling equipment to increase stripping and ore haulage rates.
- Repair of Owner mining equipment and drilling equipment.
- Implementation of a soil auger campaign to improve identification of clay-rich zones.

The effectiveness of this strategy is unclear, although it is noted that year-to-date production (2,755 t graphite) is only marginally less than production over the same period in 2023 (2,915 t graphite), and considerably higher than production over the same period in 2024 (1,380 t graphite).

3.11.5 SRK Comments

The mining strategy employed at Vatomina is simplistic and does not follow the typical processes and design employed by many other mining companies. Current mining operations do not appear to be supported by the reported Mineral Resource, and there are no mine designs or mining schedules (long term or short term) available. The material being mined, however, lends itself to this process, with ore material visually distinguishable from the surrounding waste and overburden, and the competency contrast between weathered and fresh rocks defining the mining floor.

Regardless of the ease of mining, this strategy does have some inherent and significant risks. In particular, the lack of grade control and inability to mine selectively mean that there is a high probability of material below economic cut-off grades being mined and treated as ore. The lack of detailed mining control is noted by the Company as having impacted recent production rates and is also listed as a contributing factor to placing the Sahamamy project on care and maintenance. As costs margins decrease with higher costs and a stable graphite price, the ability to distinguish between ore and waste material is critical to the long-term stability of operations.

The mobile equipment available to the mine appears adequate, and the ability to rent additional equipment locally allows for the Company to rapidly scale production without significant capital expenditure, though at a higher operating cost than with a full owner mining fleet. Maintenance and the availability of spare parts does appear to be impacting production currently, but the Company has provided a high level plan to address this for the future.

No information has been provided to SRK on the mine capital and operating costs. This may be a direct result of the Company’s recent difficulties in accessing the Company accounts; however, it also makes commenting on the economic sustainability of the mine impossible. SRK strongly recommends that the Company make these data available as part of its ongoing public disclosures.

3.12 Processing

The ore at Vatomina is processed in two stages. Initially, ore is fed to one of five Pre-Concentration units (PCU), two of which are located at the BK4 East mining area, two are located at the BK6 mining area, and a further unit treating material from the Old Mine area. The PCU produce an intermediate concentrate which is pumped to PCU-1 from where it is pumped to the Final Concentration Unit (FCU) for further upgrading to the finished product. Concentrate is then dried and bagged for shipment to the port at Toamasina, approximately 70 km from site.

Figure 3-21 and Figure 3-22 show the general flowsheets for the PCU and FCU, respectively. Historically the Vatomina mine operated with only two PCU; however, after placing the Sahamamy mine on care and maintenance at the end of the 2024 Financial Year, the Company moved three additional PCU to the Vatomina site, as well as a flotation cell, ball mill, centrifuge and dryer to support increased production at the FCU.

The location of the PCU are shown in Figure 3-24. The Company is reportedly in the process of re-locating a sixth PCU from Sahamamy to Vatomina for installation alongside PCU5.

The Company reports that upgrading at the PCU rejects approximately 90-95% of impurities, and that the intermediate concentrate produced has a grade of between 55% TGC and 70% TGC. Estimation of tailings production assuming these feed grades, however, appears to result in a considerable under-estimation of tailings production, indicating that upgrading at the PCUs may be less effective than reported (see Section 3.13).

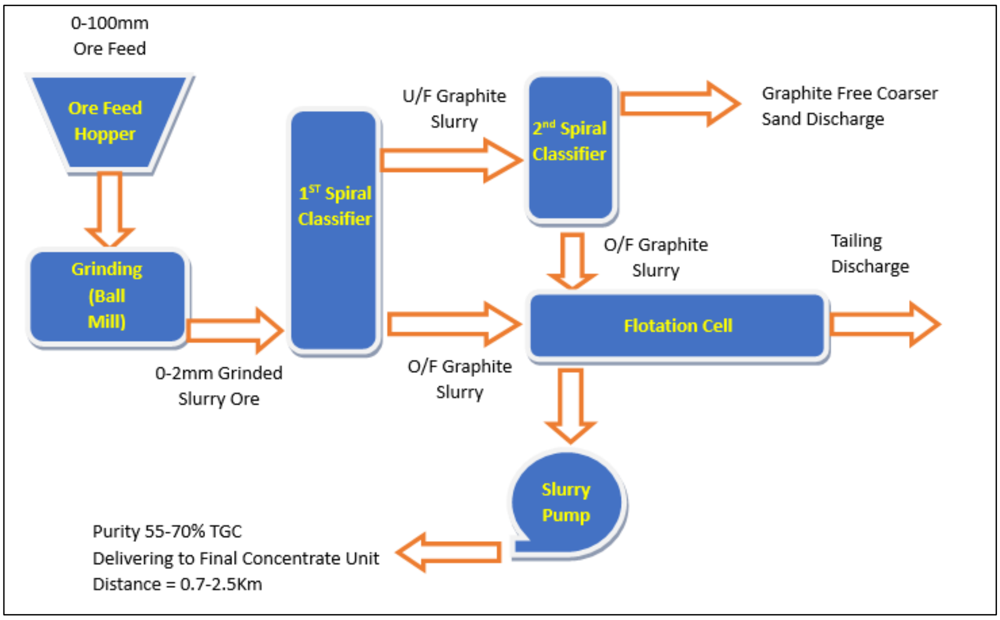


Figure 3-21: Pre-Concentration Unit Schematic

Coarse sand from the Classifier is reported to represent 20-30% of the ore feed tonnage to the PCU depending on the aera being mined. The sand is utilised in construction work both within the mining operations and the local community. The maintenance of the mine roads is dependent on availability of the sand, especially in the rainy season.

Fine tailings from the PCU flows by gravity to nearby settling ponds there the water is channelled back to a return water pump station and recycled back to the PCU as process water as shown in Figure 3-28.

The intermediate concentrate from all PCU is pumped to PCU-1 from where the combined intermediate concentrate is pumped to the FCU for upgrading to a saleable concentrate which is then dried and packed for export.

A schematic of the FCU flowsheet is shown in Figure 3-22.

The flowsheet employs multiple stages of flotation and stage-wise concentrate re-grinding to achieve a high grade concentrate targeting > 96% TGC. Final concentrate is dewatered in centrifuges, dried, screened into saleable size fractions and packed into big bags for export. The equipment used is standard mineral processing technology, and from the photographs provided by site, appears to be of a quite basic nature with minimal automation and monitoring. Plant operation relies on the operators experience.

A layout of the FCU is shown in Figure 3-23.

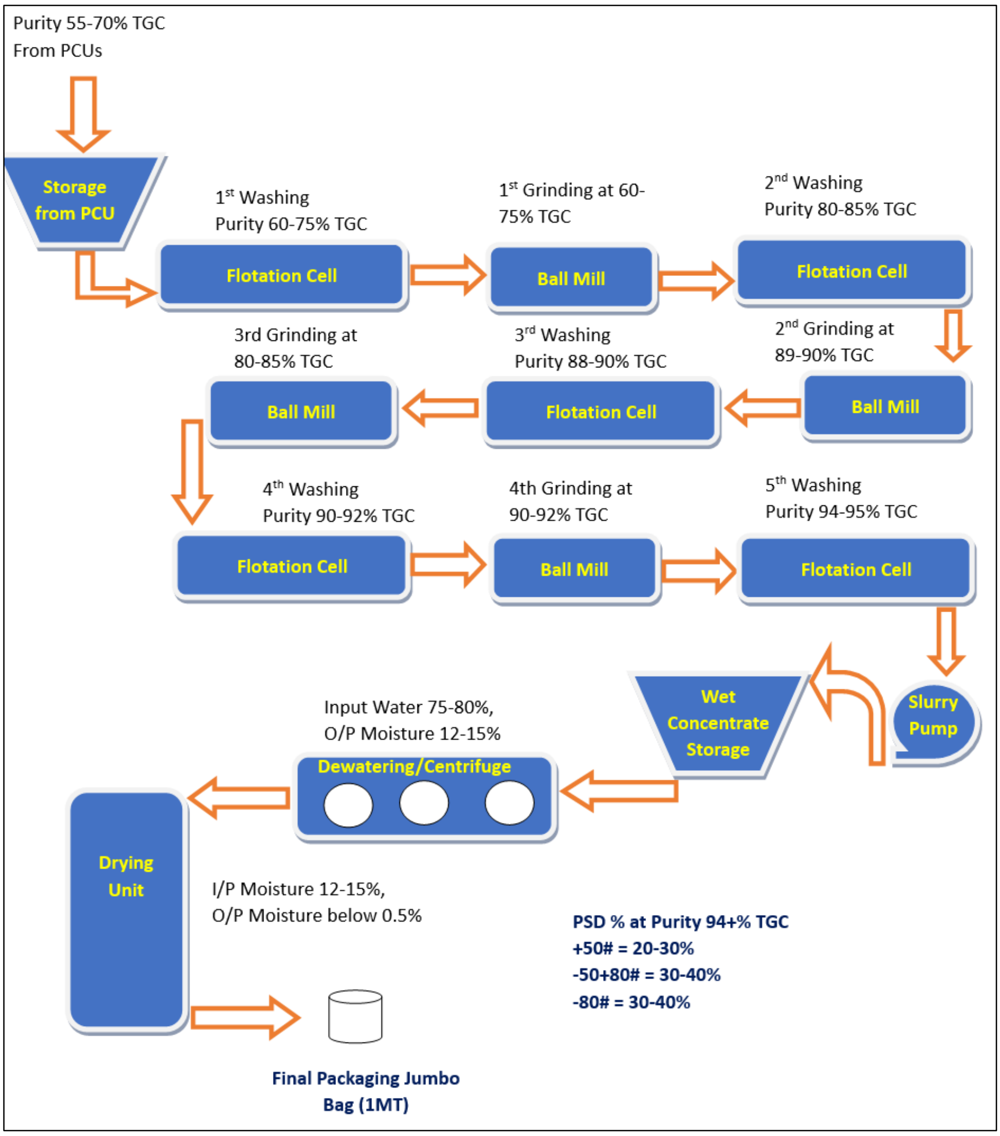


Figure 3-22: Final Concentrate Unit (FCU) Schematic

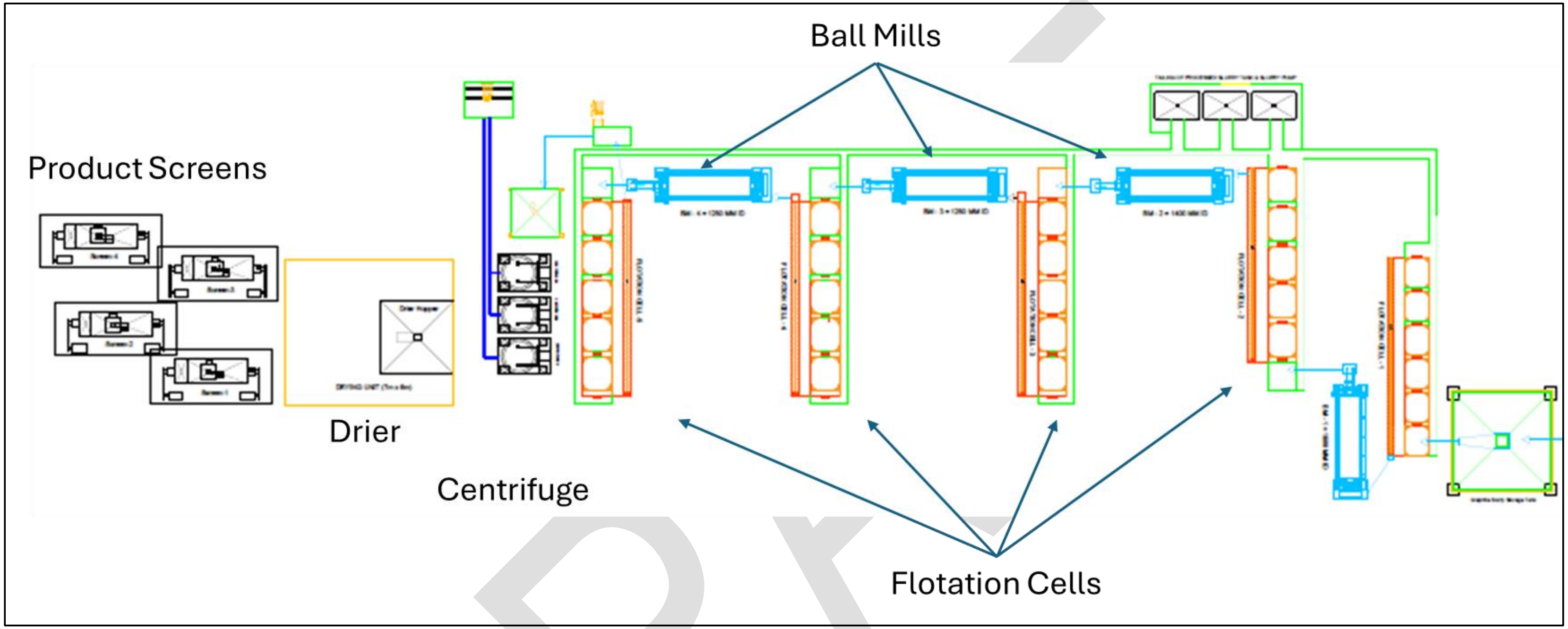


Figure 3-23: Vatomina FCU Plant Layout

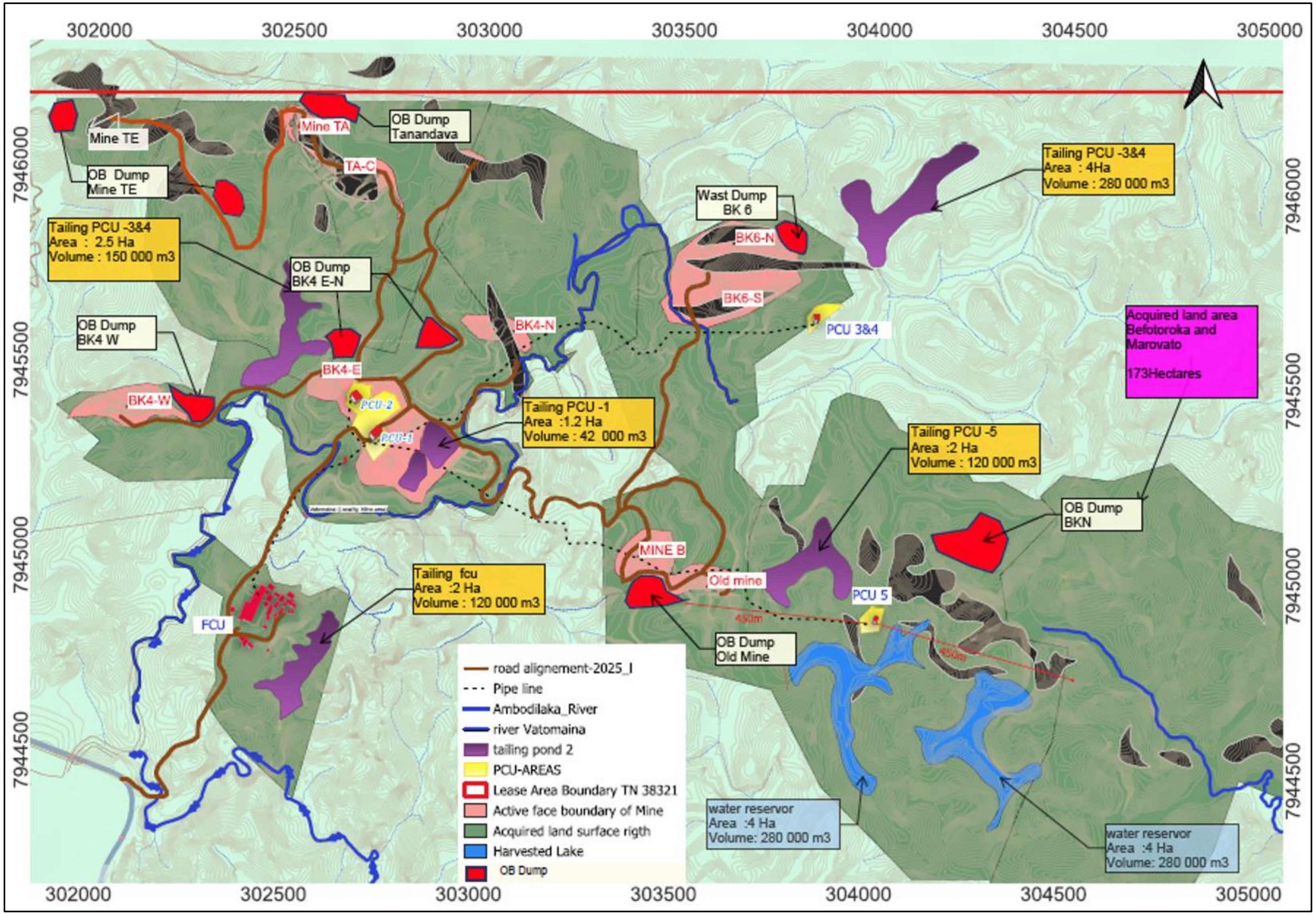


Figure 3-24: Tailings and Water Storage Infrastructure Layout

3.12.1 Recoveries

Only very limited information has been provided on achieved processing recoveries, and there is some uncertainty on how these have been derived. Many of the factors appear to have been back-calculated, but it is unclear how this has accounted for variable mass pull, metallurgical recoveries and concentrate grades.

No data are available on the recoveries of the PCU and FCU separately, and only a total recovery is available.

The available performance statistics are summarised in Figure 3-25, and indicate that there is a positive correlation between plant feed grades and both total recovery and mass pull. Concentrate grades are largely static versus feed grades.

Monthly plant throughput rates are shown in Figure 3-26. Throughputs are highly variable, but between September 2022 and November 2023 showed relative stability with an average monthly throughput of 16,500 tpm. Since re-starting production in early 2025, throughput levels have again averaged 16,500 tpm; however, individual months have been as low as 4,722 t or as high as 22,913 t. During this period the PCU from the Sahamamy project were also operating at Vatomina

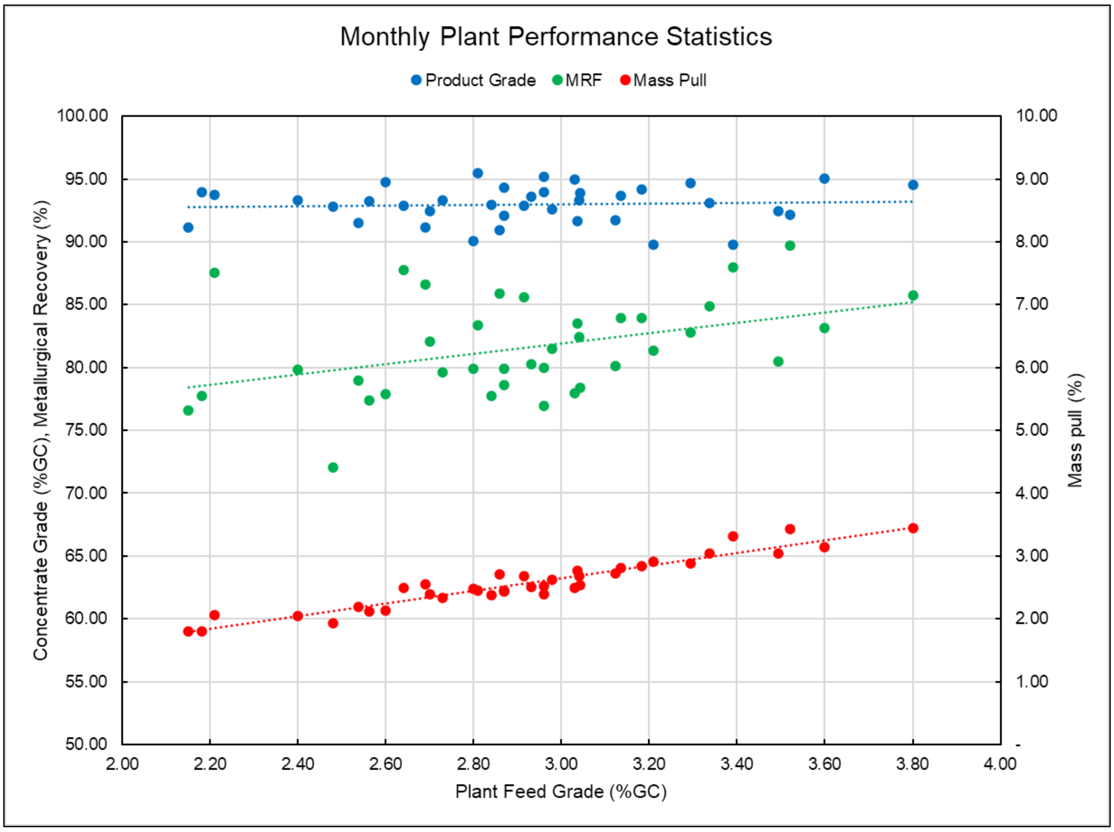


Figure 3-25: Summary of monthly plant performance since April 2022

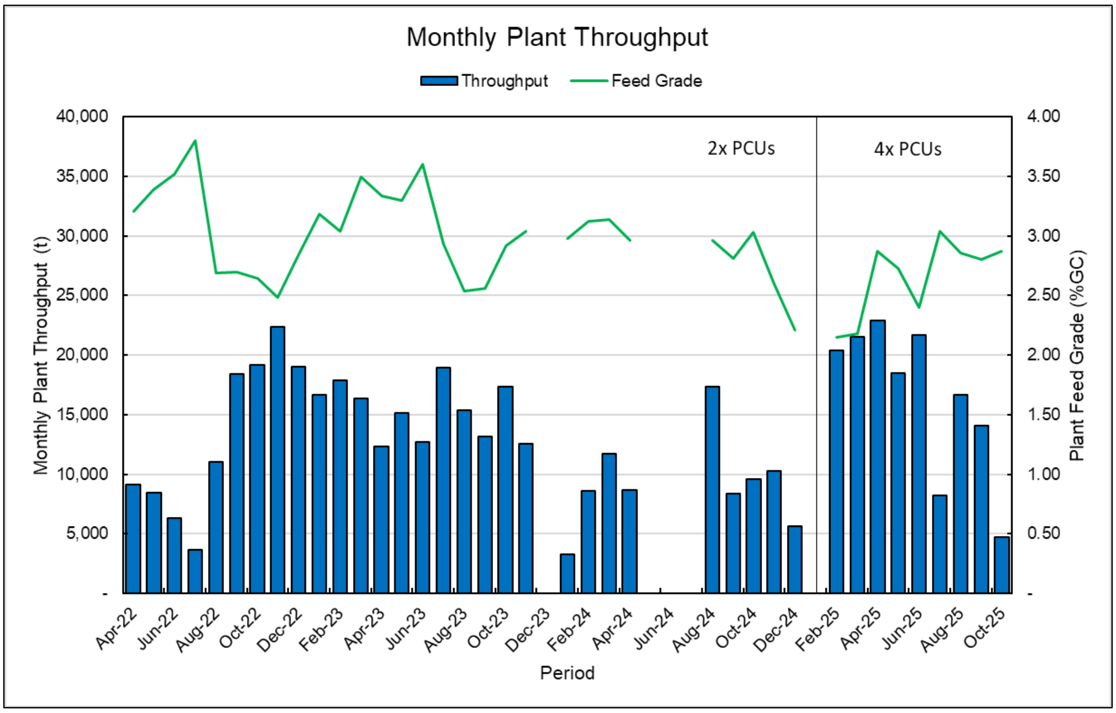


Figure 3-26: Monthly plant throughputs since April 2022

3.12.2 Operational Challenges

Since restarting operations in February 2024, the Company has struggled to maintain production rates at levels close to the nameplate capacity. This is noted by the Company as being due to a combination of mining and processing challenges, and has developed a remedial action programme to address these issues.

Processing challenges encountered are identified as:

- Inconsistency in the ore feed characteristics, specifically the presence of clay in part of the BK6 mining area, resulting in process difficulties and reduced graphite quality (understood to refer to concentrate quality).
- Sub-optimal performance of ball mills and unplanned downtime due to non-availability of spare parts.
- Poor classifier performance due to under-powered gearboxes.
- Water pumps damaged by mud moved by high rainfall.
- Insufficient drying capacity due to not achieving consistency of final product grade which has been addressed by the relocation of a drier from the moth-balled Sahamamy operation.

The improvement plans, for which SRK has not been provided with a timeline for the completion, or accompanying cost-estimates, include:

- Implementing a regular ordering cycle for holding bars and grinding media to ensure supplies are available for the ball mill.
- Replacement of classifier shafts for all PCU.
- Installation of higher powered gearboxes to improve classifier performance in all PCU.

- Procurement and installation of double-deck vibratory screens at each PCU to increase throughput.
- Replacement of slurry and water pumps at each PCU.

3.13 Tailings and Waste Rock

There are three sources of tailings at the Vatomina operation:

- waste rock from the mining operation;
- flotation tailings from the semi-mobile PCU located in the mining area; and
- tailings from the FCU or main plant.

3.13.1 Waste Rock Production

The Company has identified the areas adjacent to the mining activity where the overburden is dumped. No specific waste rock dumps have been designed or delineated in the data provided to SRK. The waste rock dumping areas are shown in Figure 3-24.

SRK does not have a reliable estimate of the volume of overburden mined at Vatomina, noting that in the majority of the production data provided the stripping ratio is set at 1.25 m^3 of waste mined for each tonne of ore mined.

Notwithstanding the above, the mined waste rock volumes reported by the Company total 573,065 m^3 since April 2022. Applying the Resource density of 1.92 g/cm^3 to this volume, approximately 1.1 Mt of waste rock has been mined.

3.13.2 Tailings Production

The location and size of the various tailings ponds at the Vatomina site are shown in Figure 3-24, the capacities of which are summarised in Table 3-20.

Fine tailings from the PCU are deposited in sedimentation basins, such as that shown in Figure 3-27, typically located adjacent to the PCU. Solids are allowed to settle, and periodically the sedimentation basins are excavated to maintain drainage flow through the impoundment to the return water system. Water from the settlement ponds is channelled back to a return water pump station and recycled back to the PCU as process water, as shown in Figure 3-28.

Table 3-20: Reported tailings facilities and capacities

Tailings Dam	Area (ha)	Capacity (m^3)
FCU	2.0	120,000
PCU-1	1.2	42,000
PCU-3&4	2.5	150,000
PCU-3&4 (2)	4.0	280,000
PCU-5	2.0	120,000

Figure 3-27: Typical PCU Tailings Sedimentation Pond

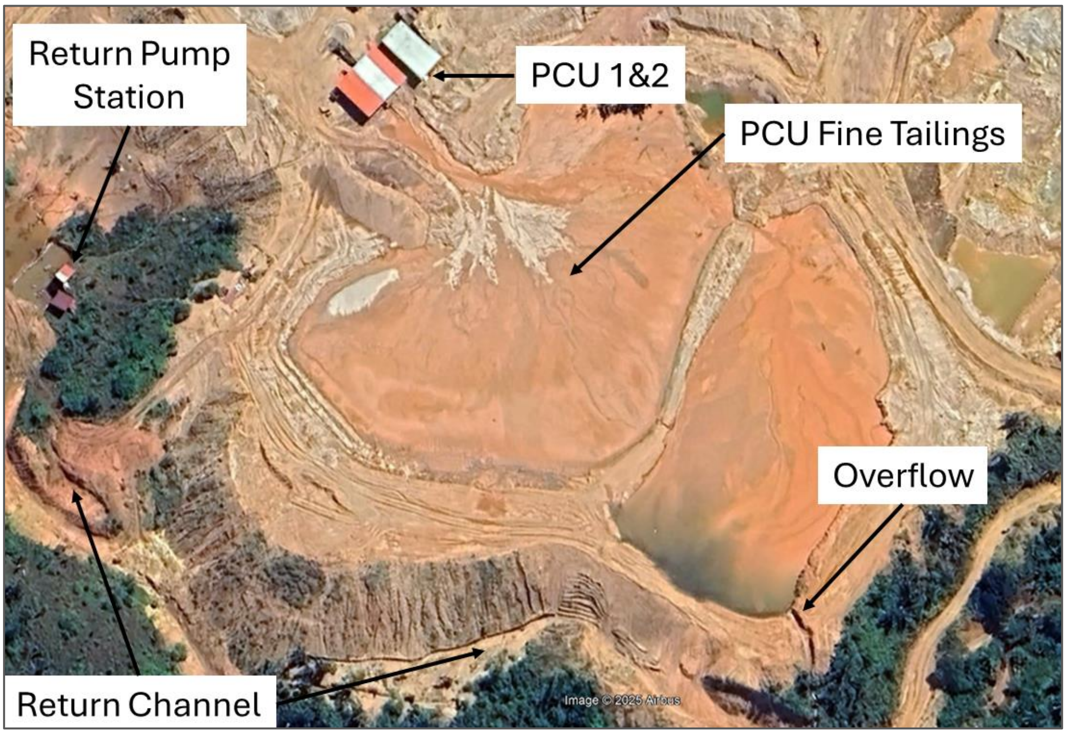


Figure 3-28: PCU 1 and 2 Return Water Pump Station location

Tailings from the FCU are deposited in a tailings storage facility adjacent to the plant, as shown in Figure 3-30. This facility has a reported capacity of 120,000 m^3.

No tailings production information has been provided by the Company; however, SRK has attempted to back-calculate the tailings produced at the PCU and at the FCU from production data. In this calculation, the intermediate feed from the PCU to the FCU has an assumed grade of 60% TGC, and recoveries at the FCU are fixed at 92% TGC, whilst PCU recoveries are variable to ensure that the reported recoveries are honoured. This results in PCU recoveries between 78.3% and 97.5% TGC, averaging 88.2% TGC.

The results of this calculation (Table 3-21) indicates that only about.8,800 t of tailings has been produced over the life of mine (LoM), or about 11,500 m^3, assuming a tailings density of 1.3 g/cm^3. This would indicate that there is considerable capacity remaining at the site.

Based on observations from site photographs and satellite imagery (Figure 3-24, Figure 3-29, and Figure 3-30) and anecdotal conversations with the Company, SRK understands that considerably more tails have been generated by the project, indicating that the grade of the intermediate feed is considerably lower than is reported. Water from the FCU tailings storage facility is returned back to the process plant through a return water pump station located at the northern end of the facility. Water is pumped to a 250 m^3 nominal capacity (12 x 6 x 4 m deep) reservoir located at above the FCU, as shown in Figure 3-29.

Table 3-21: Calculated tailings production and remaining storage capacity

Tailings Dam	Capacity	Tailings produced (t)	Tailings volume (m^3)	Remaining Capacity (m^3)
FCU	120,000.0	8,837	11,487	108,512

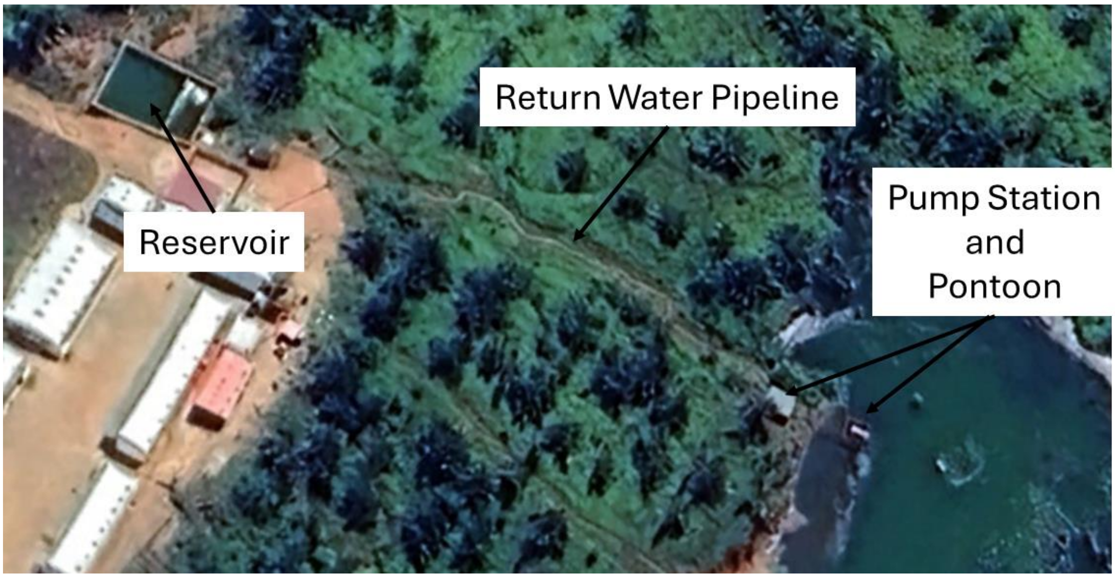


Figure 3-29: FCU Return Water System

Figure 3-30: Vatomina Concentrator and Tailings Facility

3.13.3 Tailings Dam Maintenance

In reviewing satellite imagery for the project, SRK has identified multiple areas where the tailings dams appear to have incurred settlement and movement. Examples are shown in Figure 3-31.

SRK notes that the clearest freely available aerial imagery available for the project was captured in 2023, and so this may not reflect the current status of tailings storage. SRK understand from discussions with the Company that remedial work has subsequentially taken place. This has not been confirmed by SRK.

Images provided by the Company of the current embankment show large amounts of vegetation on the surface of the embankment which is not recommended and should be removed.

Maps provided by the Company of the local water courses (Figure 3-32) indicate that there is an active water course close to the foot of the embankment.

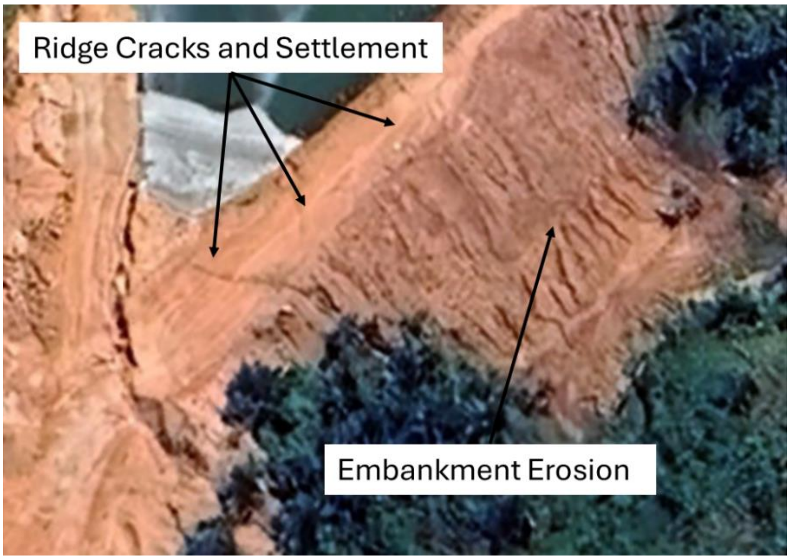


Figure 3-31: Possible embankment surface erosion and settlement

3.13.4 SRK Comments

Limited information is available on the tailings storage facilities. Production data available indicates that the majority of tailing are generated by the PCU, and that this material is reclaimed and used in construction. Relatively little tails are generated at the FCU, but the remaining capacity of the FCU tailings dam is unclear. It is possible this may become a limiting factor to ongoing production at the mine, and alterative storage will be required.

No tailings specific testwork has been provided for the mines to confirm the geochemical characteristics of the placed material, the settling densities, or other parameters. Given the nature of the material being mined, it is reasonable to assume that there is a low risk of acid-rock drainage or metalloid leaching (ARDML), but SRK recommends that this is confirmed through testwork.

As no detailed production information has been provided, the remaining capacity of the FCU tailings pond is unknown, and the rate of fill is also unknown. If capacity limits are reached, this could result in a suspension of processing activities until new storage can be developed. This could be through draining and excavation of the existing pond (as is carried out at the PCU tailings ponds), or through identification and construction of a second dam. Either process will take time and capital investment, although development of a new dam can be done without pausing processing operations.

No engineering designs for the tailings dams have been provided, including any studies on credible failure modes or failure consequences. Whilst there do not appear to be any settlements or infrastructure immediately downstream of the tailings storage dams, there is a risk of flooding and (further) sediment contamination of local water supplies. Failure of the FCU tailings storage dam could result in serious operational impacts, with nowhere to store new tails until the previous dam is cleared and a new dam constructed. This is likely to be a costly, time consuming and potentially dangerous process. Further engineering study and design is recommended to ensure that the tailings dams are constructed and managed safely.

3.14 Water

The project is located within the Rianila watershed which is part of the Rongaronga Basin. The main tributaries of interest are the Vatomina and Ranofotsy Rivers (Figure 3-32).

The main water sources for the project are two wells and surface water, namely the Ranofotsy River. The well water is intended to supply the two camps, while the river is intended to supply treatment processes such as the PCU and FCU. Additional water is obtained from recycling of water from the tailings dams / settlement ponds. The project reduced its annual water consumption from 2023/24 to 2024/25 largely due to a temporary three-month suspension of operations.

SRK notes that two water storage dams are shown on maps provided by the Company (see Figure 3-32). These dams have a reported capacity of 280,000 m^3 each. It is unclear what this water is used for on the site.

Liquid effluent from the processing units is discharged into the tailings dams / settlement ponds where the objective is for solid materials to settle prior to excess water overflowing. This overflow is decanted to the Ranofotsy River.

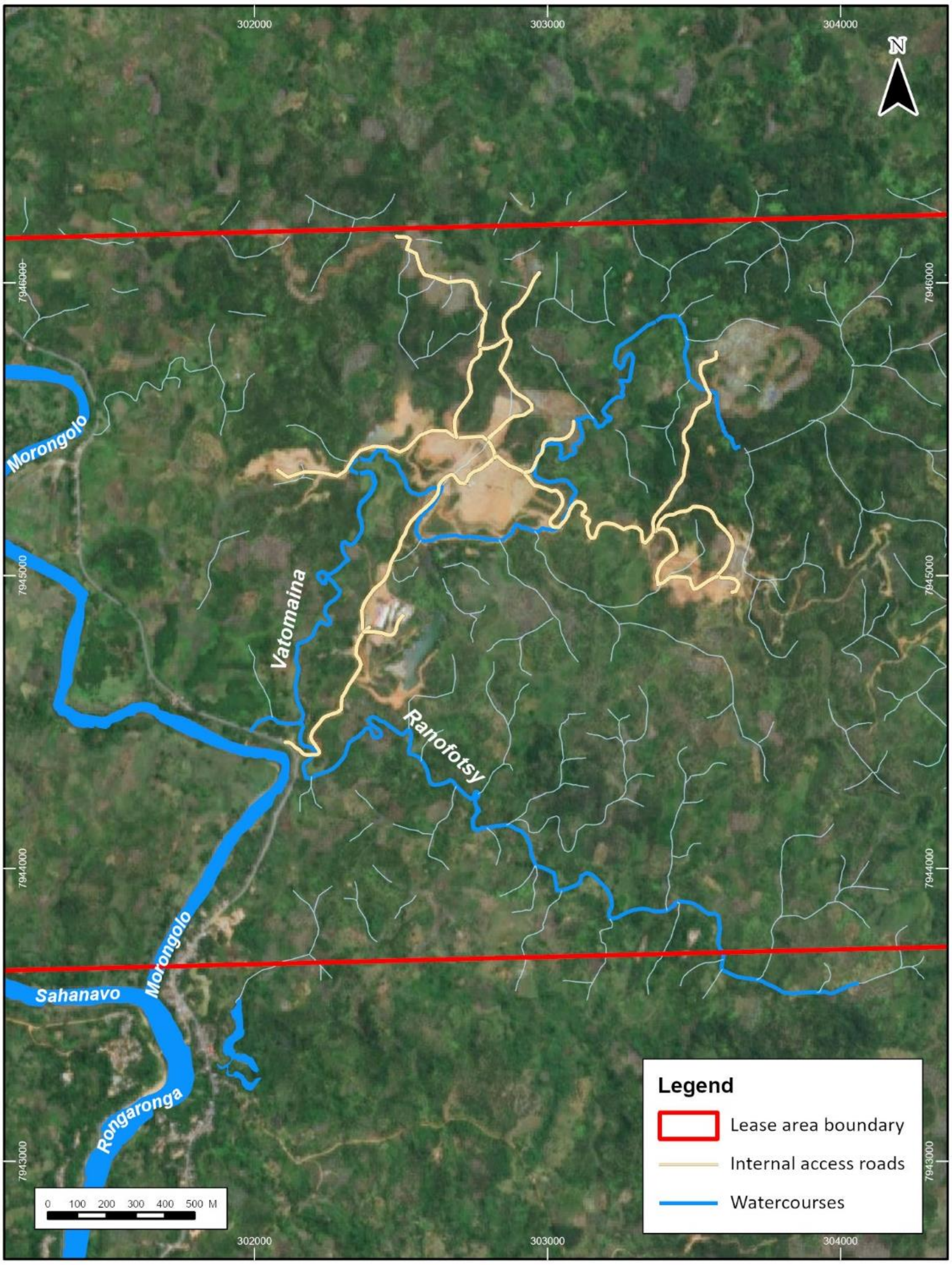


Figure 3-32: Vatomina Drainage

3.14.1 SRK Comments

With the exception of drainage channels along roads, no surface water management infrastructure is referenced in the documents and data provided by the Company for review. SRK understands, therefore, that surface water is discharged to the environment across the site without treatment or sedimentation. Tailings dam water is also understood to be regularly discharged, again without treatment or sediment cleaning.

Whilst the risks of ARDML are considered low due to the nature of the mined material, the water discharged from the site is likely to be of poor quality, and risks the supply of clean, safe water to downstream communities. SRK recommends that the Company invests in water management infrastructure as a priority, focusing on the construction of sediment control dams and drainage channels to direct pit water, surface water and tailings dam discharges into these dams.

3.15 Infrastructure and Logistics

3.15.1 Logistics

The project is located in close proximity to the NH-2 national highway, which splits the mineral licence in half and connects Madagascar's capital Antananarivo to the Tamatave Port. Tamatabve port is approximately 70 km north of the project, and is understood to be the port through which operating supplies are imported for the project, and concentrate is exported.

No transport or logistics costs have been provided to SRK for the project.

3.15.2 Site Infrastructure

Existing facilities within the project area now comprise the accommodation and recreation centre, stores, diesel generators, laboratory, tailings management infrastructure, engineering centre and plant building. The layout of the main site buildings, focused on the site of the FCU, is shown in Figure 3-33.

Figure 3-33: Main site infrastructure layout

In addition to the plant site infrastructure, the Company reports that the following other infrastructure has been developed:

- Concrete, all weather, 11 x 4 m bridge at the site entrance, allowing vehicles with loads up to 35 t to cross over a river.

- Internal roads (unsurfaced) totalling 25 km in length. Roads have reportedly been widened to 6 m to allow for drains and water run-off, and strengthened to allow for all weather use.

Power generation for the plant and for administration is understood to use diesel generators, located at the northern end of the FCU area. The installed capacity of these generators is unknown.

Tirupati reports that it is investigating the feasibility of constructing a solar power plant to provide power to the Vatomina operations. This would contribute to reducing the mine's carbon footprint if it is able to reduce reliance on diesel.

3.15.3 SRK Comments

The logistical and infrastructure setup of the project is poorly understood by SRK, with limited data available for review. The current setup appears to be largely suitable for the project's current operations, although opportunities to scale the project and support expanded production may be limited. Of critical importance is the power generation capacity and accommodation facilities.

SRK notes that certain procurement and supply issues are mentioned as contributing to reduced production through 2025, specifically the availability of grinding media and the availability of spare parts for mobile and plant equipment. This must be addressed to support stable long-term operations.

3.16 Environmental, Social and Governance Factors

SRK has undertaken a high-level, desktop-based review of environmental, social and governance information provided by Tirupati. The review included brief discussions with representatives of the company to clarify understanding of some issues.

Following the review, SRK notes the following risks which could impact the reasonable prospects assessment for this project:

- Water abstraction at Vatomina exceeds the approved limit. There is a risk that the regulator may take action against the company until such time as the planned amendment is approved.
- Tirupati reports that it is currently supplying downstream communities with drinking water due to contamination of local rivers (suspended particulates) by overflow from the Vatomina tailings dams / settlement ponds particularly during times of high rainfall. The Company is working with the Regional Water Directorate to rehabilitate and restore existing but defunct local water supply pipelines to facilitate formal supply of potable water to impacted communities. There is a risk of liability against the company until a stable, secure supply of potable water has been provided to these impacted communities.
- SRK has not verified whether all reports to government regulators are up to date. Previous reports (for the 2023-24 year and a draft for the 2024-25 year) were provided for review and include a comprehensive overview of activities undertaken on site during that period and the environmental and social monitoring programmes in place.

- Soil management programmes are in place with the objective of managing erosion. These include use of vegetation establishment on exposed slopes and drainage control structures.
- A nursery has been established to propagate species that can be replanted on impacted areas as part of the mine's restoration programme.
- SRK has not reviewed information related to routine engagements between the mine and local communities. The ESG reports to the regulator that were reviewed describe the existence of a complaint management system. An inspection report prepared by the ONE notes the need for relationships with the local community to be improved and for the land compensation committee to be reinstated.
- To SRK's knowledge, a mine closure plan has not been developed further than the conceptual objectives described in the approved EIE. A mine closure liability was also not available for review. The EIE commits Tirupati to the removal of infrastructure on the premises and rehabilitation of the area on closure. Mining benches will be revegetated and stabilised.

3.17 Human Resources

3.17.1 Local Resources

Local villages are source of un-skilled and semi-skilled manpower for the project, with the skilled personnel and other resources like fuel, machineries, plant supplies, etc. mainly are from the larger towns like Antananarivo and Toamasina.

3.18 Forecast Production

The Company is still progressing field work and studies to prepare a production plan to mine the Mineral Resources (see Section 3.19 Programme of Works).

At present, a budget for 2026 has been prepared, where mining is continuing in the current operating pits (2026 Budget).

The forecast plant feed and mining rate averages 50 kt ore per month, totalling 600 kt for 2026. Monthly fluctuations between 48,400 kt and 52,800 kt have been projected to allow for wet weather conditioning. The stripping ratio has varied between approximately 1.5 and 2.0 t waste:t ore. Whereas the stripping ratio is expected to increase over time, no estimate is available for 2026. The targeted production rate of 50 ktpm ore significantly exceeds levels achieved during the last three years. The Company has plans in place to address and alleviate the identified mining and processing challenges (described in section 3.11) to support the increased production rate. This includes capital expenditure of USD 500,000 projected in the first half of 2026, for larger plant and equipment including vibratory screens, a water pump, a generator, tailings embankment works and an additional PCU.

The projected ore grade if 3.0% TGC, which aligns with recent achieved and Mineral Resource grades. The corresponding production of 13,810 t of graphite concentrate at 94% C therefore remains an area of risk for the Company.

Concentrate is currently sold via short term contracts.

3.19 Programme of Works

The Company has provided SRK with an outline programme of works for the mine, intended to support the conversion of Inferred Mineral Resources to Indicated. The Company has also indicated that this work programme (or aspects of it) will be repeated to support conversion of *some 30 Mt of Inferred to Indicated Mineral Resource over 5 years*. No work programme or commentary is provided covering the exploration for the Inferred Mineral Resources which this would be applied to. The work programme is summarised in Table 3-22.

The work programme covers a 48-week period for the year 2026. It is conceptual, where detailed planning, resourcing and budgets is yet to be developed. The main activities are in theory achievable within the 48-week period as indicated by the Company, although leave little space for unplanned elements.

Many of the activities proposed, especially those related to transitioning ESG alignment from Local Compliance to alignment with IFC Performance Standards, may require significant time and financial investment. SRK recommends that a more detailed plan and budget is prepared ahead of starting these activities, detailing who will undertake the work (staff, laboratories, consultants, contractors, etc), any pre-requisite items, and detailed cost estimates.

Table 3-22: Summary of proposed work programme

Activity	Description	Timeline
Target Generation	Identify exploration targets within the Vatomina concessions. Undertake scout drilling and collect samples to determine grade and flake quality	4 - 6 Weeks
Exploration Drilling	Design drilling programme, Secure environmental approvals as required	1 - 2 Weeks
Site Preparation	Prepare drilling pads and develop access tracks	1 - 2 Weeks
Drilling	Complete 5,000m of diamond core drilling	10 - 14 Weeks
Logging and Sampling	Log core geologically. Prepare samples for dispatch	10-14 Weeks, running parallel with drilling
Assaying	Samples to be analysed at a laboratory for graphite content, plus multi-element analysis if necessary	8 -12 Weeks
Geological Modelling and Interpretation	Develop 3D models of mineralisation	3 - 4 Weeks
Resource Estimation	Estimate and Classify Mineral Resources	2 - 3 Weeks
Reporting	Reporting of Mineral Resource and exploration activities.	1 - 2 Weeks
Tailings Characterisation	Geochemical analysis to test for acid rock potential and metalloid leaching. Establish particle size distributions, density and settling characteristics of the potential tailings. Establish mineralogical characteristics of graphite vs gangue mineralogy. Undertake a Pre-Feasibility Level assessment to confirm viability of co-disposal of coarse and fine tailings. Review process design for potential inclusion of a tailings thickener.	Concurrent with activities listed above
Environmental and Social Governance	Transition from Local Compliance to IFC Performance Standards. Includes move towards risk-based ESG management, development of living Environmental and Social Management	Ongoing over the next 2 years

Activity	Description	Timeline
	Systems, and more proactive stakeholder engagement to align with international good practice baselines.	

In addition to the work programme above, the Company recognises in this document that additional work is required to support the conversion of Mineral Resources to Ore Reserves. To support Ore Reserve declaration, the following items are noted:

- development of robust resource models;
- validation of metallurgical recoveries;
- completion of hydrogeological and geotechnical studies;
- pit optimisation and mine design;
- definition of appropriate modifying factors; and
- development of a LoM plan and financial model for approval by the Board.

No budgets, timelines or details supporting this intended work have yet been developed in detail at the date of the CPR.

3.20 SRK Conclusions

3.20.1 Geology and Mineral Resources

Following review of the Company's geological data and interpretations, SRK considered the data sufficient for the preparation of a Mineral Resource estimate and declaration of Mineral Resources for the project totalling 6.0 Mt at 3.8% TGC, including 1.6 Mt of Indicated Mineral Resource at 3.8% TGC.

In reviewing this Mineral Resource, SRK has identified areas where improvements can be made, primarily relating to the collection of additional data. These items are summarised below:

- The current Mineral Resource estimate is based on limited drilling coverage. Most holes in this property are auger holes, which are used to confirm the continuity of mineralisation. Limited diamond drilling has been undertaken, to convert potential mineralisation into defined Mineral Resources.
- Implementation and periodic monitoring of appropriate field protocols for logging, sampling, sub-sampling, sample preparation, assay and QAQC is highly recommended in this deposit.
- Since the deposit is structurally controlled, detailed structural mapping and collection of sufficient structural data from drill cores are recommended to refine the existing model and support exploration.
- Limited parts of the 25 km² mineral permit has been explored, leaving potential for delineating additional Mineral Resources through further exploration.

3.20.2 Mining

No Ore Reserves are declared for the Vatomina Mine. Mining appears to be either of material included in the Mineral Resource Estimate, or of material identified through mapping and sampling but with no formal Resources.

The mining methods and project controls employed at Vatomina are basic, and expose the Company to risk in the mining and processing of sub-economic material through poor orebody delineation and a lack of detailed understanding. These factors have directly contributed to operational challenges at Vatomina, and the halt in operations at Sahamamy. Whilst the nature of the mined material does lend itself to these simplistic mining techniques, significant improvements can be made to improve the Company's ability to selectively mine ore and waste, helping to improve operational stability.

Considerable investment and additional study is required to support declaration of Ore Reserves for the project, as is stated to be the Company's intentions.

3.20.3 Metallurgy and Processing

The flowsheet for the Vatomina process plant was developed from several rounds of testwork on bulk samples collected from various parts of the mine. The flowsheet was developed in the preliminary phase of testing and performance confirmed on individual samples from the various zones in later stages of testwork.

The testwork was carried out at a laboratory- cale in open circuit, which does not take into account the nature of the flowsheet and the recirculation of the flotation cell tailings back through the system. As such, direct comparison of the laboratory results with the actual plant performance is not possible.

The process plant has a nameplate capacity of 12,000 tpa concentrate. Annual production since 2022-23 provided by Company is shown in Table 3-23:

Table 3-23: Vatomina Processing Production (2022-2025)

Year	Capacity (t)	Production (t)	Shortfall (t)
2022-23	12,000	4,395	7,605
2023-24	12,000	3,769	8,231
2024-25	12,000	2,169	9,831

The shortfall in production is due to a number of reasons: process and mechanical with changes in the ore type and higher clay presence slowing throughput, as well as mechanical equipment failures and a lack of spare parts preventing operation.

Strategies to improve mechanical availability are in place.

Advance metallurgical testing should be implemented if the new mining areas contain different mineralisation to those previously processed. Circuit modifications may be required if there are substantial changes in the future feed to the plant.

3.20.4 Tailings

There is very limited data available on the mines tailings storage dams. SRK considers the primary risks associated with these dams are:

- The lack of engineering design for the dams, resulting in potentially unsafe structures where failure would result in significant operational challenges, safety risks and environmental disruption.
- The lack of understanding of tailings capacity and production rates, particularly at the FCU, and the risk that running out of tailings capacity could result in an extended halt in production whilst new capacity is developed.
- Apparent historical formation of cracks and gullies in the dam walls, indicating a lack of monitoring and regular maintenance to the facilities, and potentially increasing the chances of failure. SRK notes that repairs have reportedly been made since the last available satellite imagery.

3.20.5 Water

No information is available on the water management strategy for the mine, in particular related to surface water management and water discharges from the tailings dams. Whilst the risks of ARDML are considered low due to the nature of the mined material, the water discharged from the site is likely to be of poor quality, and risks the supply of clean, safe water to downstream communities. SRK recommends that the Company invests in water management infrastructure as a priority, focusing on the construction of sediment control dams and drainage channels to direct pit water, surface water and tailings dams discharges into these dams.

3.20.6 ESG

The key Vatomina ESG issues relate to water contamination and community relations. Tirupati is aware of these and has developed plans to address them. The status of their implementation cannot be assessed or confirmed by SRK ahead of a site visit. SRK has not found any permitting issues, other than water abstraction exceeding authorised limits, for which Tirupati intends to apply for an increase. SRK notes that no assessment of current environmental and social liabilities has been undertaken.

3.20.7 Forecast Production

The Company has projected 600 kt of ore mine and processed in 2026. This significantly exceeds the historically achieved production rate; however, it is supported by various plans to address the identified mining and processing related challenges, and capital expenditure of USD 0.5 million in H1 2026. The projected production of 13,810 t of graphite concentrate at 94% C therefore remains an area of risk for the Company.

3.20.8 Work Programme

The Company’s proposed work programme provides a concept-level assessment of the work required to support conversion of the Vatomina Mineral Resources to Ore Reserves. The programme covers the key study areas within this process, and presents a timeline which is achievable at face value.

SRK highlights the current low level of study data currently available related to most technical disciplines. SRK is of the opinion that additional efforts may be required.

3.20.9 Key Risks and Opportunities

SRK perceives the following risk associated with the Vatomina mine.

- Mining is currently being undertaken with no supporting (detailed) long-term or short-term strategic planning. This is considered a high-risk strategy, and this appears to have contributed to the reduced production performance noted by the Company for 2025 (YTD), for example, the appearance of clays within certain parts of the deposit and the lower-than-expected mined grades.
- The Company's strategy for Mineral Resource development and conversion to Ore Reserves is highly conceptual and is not supported by detailed budgets and work plans. Whilst in principle the strategy may be achievable within the time period indicated by the Company, the level of planning could result in unforeseen delays or issues which limit progress.
- Mining activity is advancing into new areas where n metallurgical testwork has been carried out. A Relatively simple testwork program, based on the available equipment in the existing plant should be carried out on samples from the new mining areas to confirm the ability to produce saleable concentrates and determine target recoveries for financial planning.
- The process plant is currently achieving less than half of the nameplate capacity. Periods of downtime for maintenance and lack of spare parts is reported. Capital investment in the processing facilities will be required if production targets are to be achieved.
- The remaining capacity of the FCU tailings storage facility requires investigation and an operating life for the current facility needs to be determined as a priority so that planning can begin for a new facility which will have to be designed and permitted before it can be put into operation.
- There is a risk of community opposition to the project related to dissatisfaction with the Vatomina project due to claims related to compensation for land use combined with ongoing water contamination issues.
- There is a risk of regulators imposing fines or penalties on the company due to non-compliance with environmental commitments including water quality standards and non-compliance with water abstraction limits.
- A closure plan and associated financial liability has not yet been developed. These will be required before the company can declare Ore Reserve.
- SRK perceives the following opportunities associated with the Vatomina mine.
- To identify additional Mineral Resources for the Vatomina asset through further exploration.
- To upgrade a portion of the Mineral Resources of the Vatomina asset to higher classifications through further drilling and sampling.

4 SAHAMAMY

4.1 Introduction

The Sahamamy project comprises of two mining concessions/permits (Sahamamy and Sahasoa) and three exploration permits (applied for renewal in 2010) in a cluster in the Toasamina Province in Madagascar. These permits are awarded to Establissement Rostaing SARL (Rostaing) by Bureau du Cadastre Minier de Madagascar (BCMM), which was acquired by Tirupati in January 2018.

Tirupati holds 95% of the equity in Rostaing and the remaining 5% is held by private equity of Mr. Shishir Kumar Poddar.

4.2 Project Location

The Sahamamy project is located near Anivorano village in the Vohibinany and Brickaville districts, under the Toposheet No. U46 (Figure 4-1) . The project is located around 30 km from Brickaville. Brickaville is located along Route National 2 (N2), 105 km south of Toamasina and 220 km east of Antananarivo (the capital). Brickaville (narrow gauge line) is the nearest railway connectivity in the area. The project area covers 16 mining squares, each measuring 625 x 625 m.

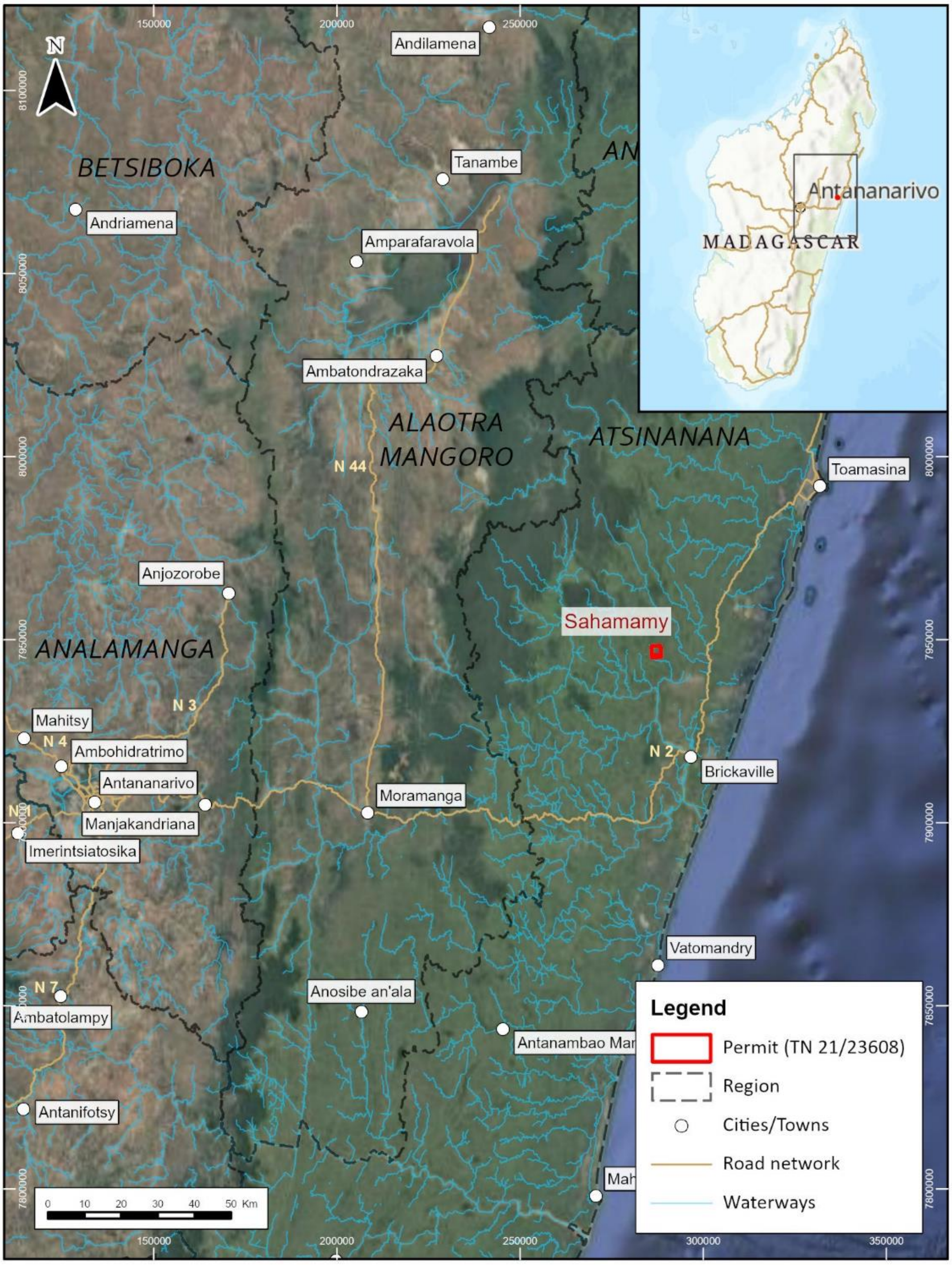


Figure 4-1: Sahamamy project location

4.3 History

The Rostaing deposit (renamed as the Sahamamy project by Tirupati) is an open pit mining and processing operation that was operated by different companies since 1967 until the property was acquired by Tirupati Graphite PLC. The mining permit area comprised of two contiguous exploitation blocks, the Sahasoa block in the northern area, and the Sahamamy block in the southern part. At acquisition, open pit mining was active mainly in the Sahamamy block and in parts of Sahasoa block.

Prior to Tirupati's acquisition, mining activity was being conducted in the Sahamamy block and graphite concentrate was being produced at a 240 tpa process plant at the site. Following acquisition, Tirupati ramped up the process capacity to 600 tpa from July 2018 and constructed and commissioned a new 3,000 tpa process plant in February 2019. The 3,000 tpa was expanded to 18,000 tpa nameplate capacity operation in February 2023, with first sales being shipped from the new plant in March 2023; however, operational difficulties meant that the Sahamamy project only operated intermittently with extended downtime periods after September 2023 and ultimately being placed on care and maintenance before March 2024 year-end.

From late 2023 onwards, while the plant was not operating, parts from the Sahamamy facility were taken for use in the Vatomina operation. This has continued since the March 2024 year-end with Sahamamy PCU being relocated to add capacity at the Vatomina project. The Sahamamy production history is summarised in Table 4-1 and Table 4-2.

Table 4-1: Sahamamy Actual Production Fiscal Year 2022-2023

Month	Ore Feed (t)	Ore Grade (FC%)	Concentrate (t)	Concentrate Grade (FC%)
February 2023	4,976	3.55	146	93.45
March 2023	21,000	3.54	682	93.49
Total	**25,976**	**3.55**	**828.0**	**94.37**

Table 4-2: Sahamamy Actual Production Fiscal Year 2023-2024

Month	Ore Feed (t)	Ore Grade (FC%)	Concentrate (t)	Concentrate Grade (FC%)
April 2023	12,000	3.93	450	93.64
May 2023	11,500	4.35	442	93.81
June 2023	9,088	3.79	316	93.66
July 2023	11,742	3.85	409	93.85
August 2023	13,390	4.26	462	93.57
September 2023	12,000	4.25	412	93.37
October 2023	19,500	3.45	545	93.18
November 2023	17,000	3.49	484	92.43
December 2023	-	-	-	98.5
January 2024	6,500	3.11	193	91.21
February 2024	16,500	2.84	415	92.14
March 2024	8,600	3.17	305	70.5
Total	**137,820**	**3.68**	**4,433**	**91.66**

4.4 Regulatory Framework

As the Sahamamy project is also located in Madagascar, the Regulatory Framework presented in Section 3.4 also applies. The current status of the Sahamamy project is described below.

4.4.1 Mineral permits

Tirupati holds 2 Exploitation (mining) permits in Sahamamy area, collectively called as the Sahamamy project, (Table 4-3 and Figure 4-2). Tirupati has an active mining permit for Sahamamy to July 2039 and April 2056 for Sahasoa.

In addition, Tirupati has applied for renewal of 03 Exploration Permits (PE) for graphite around the existing mining permits, 37413, 37414 and 37407 in 2010, which are pending for approval (Table 4-4).

Table 4-3: Sahamamy Mineral Tenure Summary

Licence No.	Name	Status	Area (ha)	Awarded	Expiry	Commodity
21	Sahamamy	Exploitation Permit	156.90	July, 1999	July, 2039	Graphite
23608	Sahasoa	Exploitation Permit	627.50	April, 2016	April, 2056	Graphite, Quartz

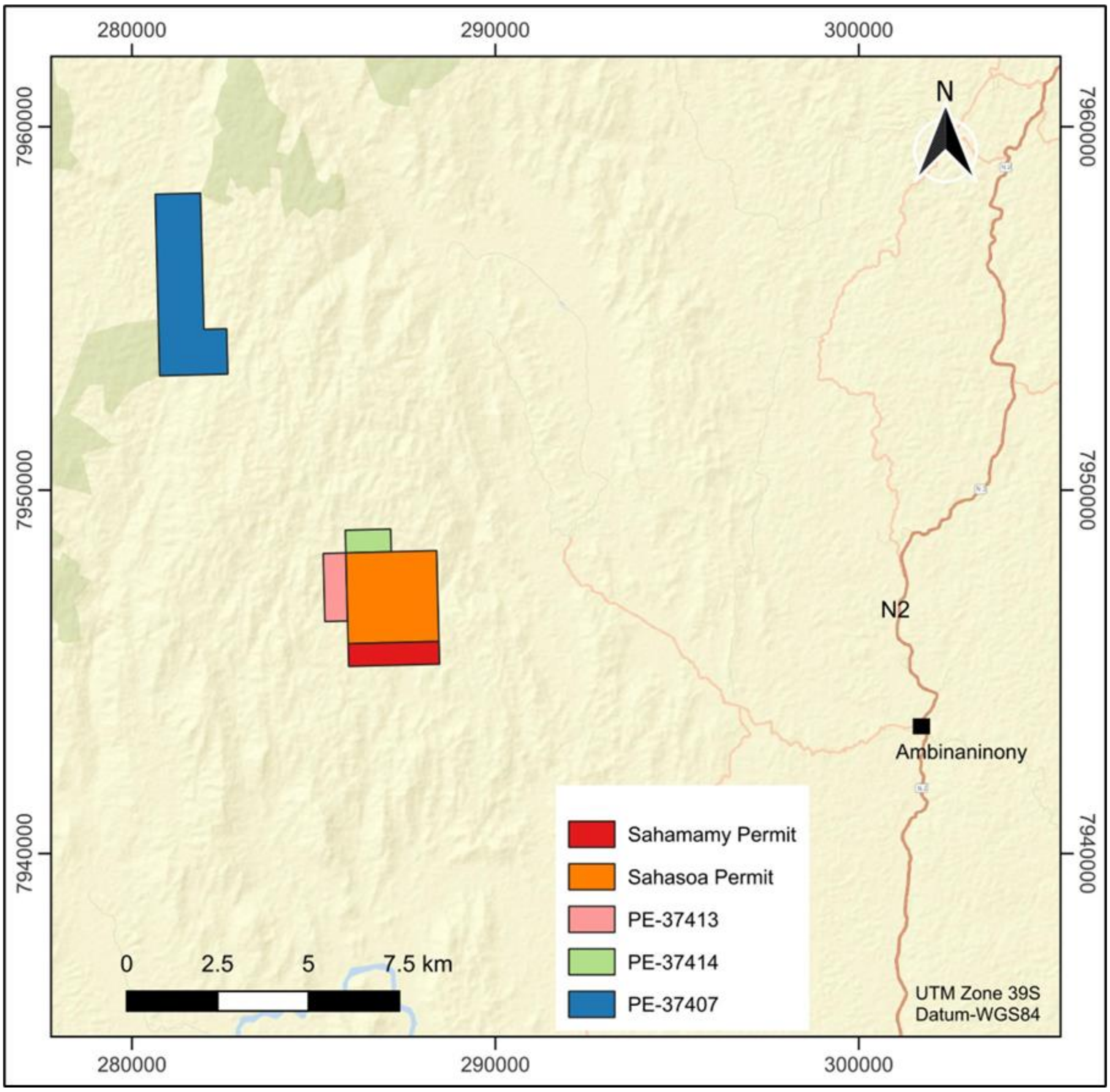


Figure 4-2: Sahamamy permits

Table 4-4: Tirupati exploration permit summary

Permit No.	Name	Status	Status	Area (ha)	Commodity
37413	Sahamamy	Exploration Permit	Applied for renewal	117	Graphite
37414	Sahamamy	Exploration Permit	Applied for renewal	78	Graphite
37407	Vohitranivona	Exploration Permit	Applied for renewal	703	Graphite

4.4.2 Environmental permissions

Environmental permissions have been received authorising mining activities on both mining licence areas. The environmental permit for PE 23608 was issued on 6 April 2020 (No 12/20-MEDD/ONE/DG/PE). A Certificate of Conformity was issue for PE 21 on 9 July 2013.

Tirupati, under the conditions of the ‘Clearing Authorisation’, has to participate in regional reforestation to replace all plants destroyed during the mining operation.

The scope of the EIE for PE 23608 includes activities taking place within the boundaries of the exploitation licence area but not the tailings storage facility that has been established on the adjacent 307413 exploration licence area. The ESG performance report submitted to the regulator as well as the EIE for the 307413 licence do not specifically describe the settlement pond that has been established on the exploration property. SRK notes, however, that figures included in the ESG report for the PE 23608 licence area do include the settlement pond and overflow system but do not, however, describe these or any associated management measures. It is therefore not clear if the settlement ponds on the PE 23608 licence area have been lawfully constructed in terms of environmental legislation.

Environmental impact assessments in support of the applications for the exploration permits have been prepared and submitted.

4.4.3 Land Tenure

Tirupati reports that the land at the Sahamamy and Sahasoa projects is owned by the company. SRK has not independently verified land title deeds for this project.

4.5 Setting

4.5.1 Accessibility

The Sahamamy project is currently accessible from Brickaville town by a graded road to Sahamamy. The project site can also be reached by taking a motorable road from Brickaville to Vohipamelona (around 6 km), followed by approximately 21 km of water transport to Gisimay.

4.5.2 Climate

The climate of Madagascar is subtropical, with a hot and rainy season between November and April (summer), and a cooler dry season from May to October (winter). The east coast has a subequatorial climate and receives the heaviest rainfall, averaging as much as 3.5 m annually. The eastern coast is well known not only for a hot, humid climate but also for seasonal cyclones that occur during the rainy season.

The weather in the Brickaville district can be summarised as:

- the hottest months are January to March, the maximum temperature varies from 30 – 33°C and the minimum temperature around 26°C;
- the cooler months are July-August, the maximum temperature ranges from 24 – 26°C and the minimum temperature about 17°C; and
- January – March receives the heaviest rainfall, measuring between 350 – 500 mm; October receives the lowest rainfall, around 75 mm. Tropical cyclones affect the east coast of Madagascar.

4.5.3 Local Resources

Local and nearby villages provide the un-skilled and semi-skilled manpower for the project, and the skilled resources and supplies such as fuel, machineries and plant supplies, etc, are mainly from the larger towns of Antananarivo and Toasamina.

Water for the previous activities was obtained from one of three sources: the Ambovinany River and two artificial reservoirs located upstream of the Sahamamy mining area.

4.5.4 Infrastructure

Infrastructure in the area is underdeveloped. Tirupati has been investing in the upgradation and maintenance of the roads connecting to N2 and building several culverts (small bridges over water passes). Tirupati commissioned the 100\ kW hydropower plant in June 2023.

4.5.5 Physiography

Tirupati's project areas are located within a moderately undulating area, forming the centre of the Madagascar metamorphic sub-province of the eastern region of the Madagascar plateau.

The properties are generally covered by dense subtropical vegetation. The intermittent areas covered by lateritic soil has grassland cover. Rock outcrops are rare due to high degree of weathering, with more than 5.0 m cover of decomposed bedrock or alluvial.

In low relief areas, the alluvial cover is generally thicker and are covered by dense semi-rainforest vegetation. Most of the concession area have elevations between 20 m and 50 m above mean sea level (AMSL). At the project areas, the general elevations for most of the concession range from 290 m to 400 m AMSL.

The Atsinanana Region, where the project is located, was formerly covered with primary forests which have been transformed due to climatic pressures (cyclones) and anthropogenic activities including slash-and-burn agricultural practices and logging. Habitat loss as a result of deforestation presents a risk to various floral and faunal species. The nearest classified forest is the Anjiro Classified Forest and is located approximately 5 km north of the project site. Local wetlands have been utilised for cultivation of rice. Endemic species of lizards, tenrecs and hedgehogs were noted to be present in the project area.

The major river flowing through the Sahamamy concession area is the Ambovinany River, which flows NS and further on flows west to east beyond the concession (Figure 4-3).

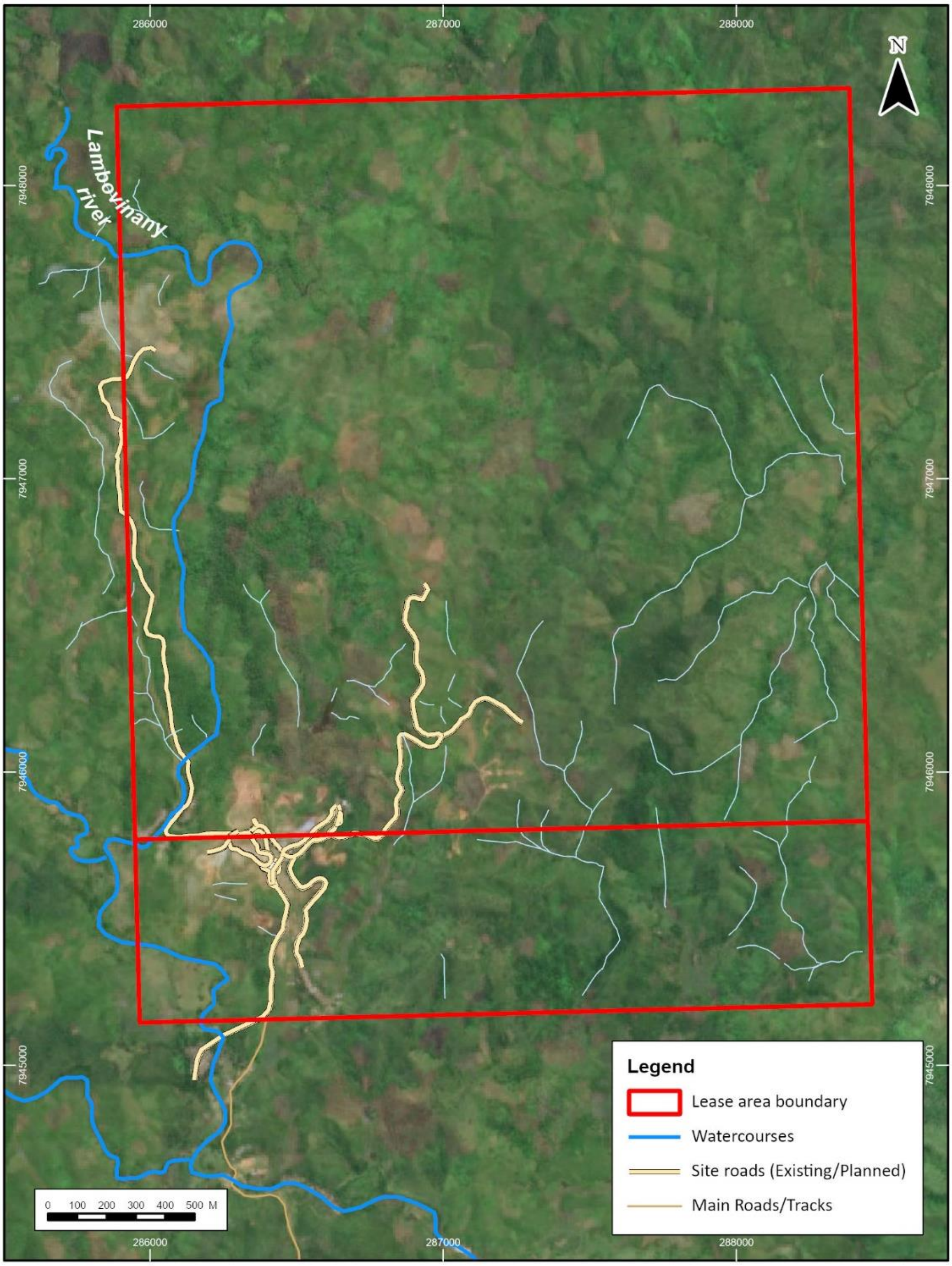


Figure 4-3: Sahamamy licence areas drainage and catchment

4.5.6 Social environment

The project area is part of the Fokontany of Sahaamamy in the rural commune of Fetraomby. There are six villages in the Fokontany which are relatively far apart from each other and include Ambolomadinika, Ampiranambo, Ambodiriana, Ambodilalona, and Poste.

The population of the area is predominantly Betsimisaraka, supplemented by migrants from Antananarivo, Fianarantsoa, and Vakinankaratra. The residents respect the customs and traditions of the region and each village has a Tangalamena (tribal authority). It is customary to seek advice of this traditional chief before undertaking activities in the area.

Education and health facilities are basic and under resourced. Common diseases in the region include malaria and stomach issues, likely due to poor water quality.

Rice cultivation is an important source of income in the area, followed by cassava, sweet potato, and cash crops. Cattle farming and poultry farming also occur but on an informal basis.

4.6 Geological Setting and Mineralisation

4.6.1 Regional Geological Setting

The Sahamamy lies within the Betsimisaraka Subdomain of the Antananarivo Domain, the largest tectonic unit in Madagascar (Figure 4-4). The domain is mainly composed of granitoid gneisses, migmatites, and schists intruded by calc-alkaline granites, gabbro, and syenite (Kröner et al., 2000). The Betsimisaraka Subdomain broadly corresponds to the Manampotsy Belt, which separates the Masora, Antongil, and Antananarivo cratons (Key et al., 2011).

The Manampotsy Belt consists of NNW–SSE trending metasedimentary sequences metamorphosed to amphibolite–granulite facies. These include quartzo-feldspathic migmatitic paragneisses with variable biotite and hornblende, along with local graphitic schist, quartzite, and calc-silicate horizons. The sequence is interlayered with granitoid gneisses and migmatites derived from 2.75–2.50 Ga protoliths, later intruded by granitic, gabbroic, and syenitic bodies in an active continental margin setting (Table 4-5).

Regionally, the Antananarivo Domain records Neoproterozoic tectonism linked to the closure of the Palaeo-Mozambique Ocean. The Betsimisaraka Suture Zone marks this event, representing westward subduction and subsequent collision with the Antongil Block. The metasedimentary protoliths, interpreted to have been sourced from the Dharwar Craton, have depositional ages of 800–550 Ma, and were deformed and thrust eastward between ca. 630–515 Ma.

Table 4-5: Generalised Regional Stratigraphy after USGS and PGRM

Age	Group	Formation	Description
Quaternary to Recent			Undifferentiated Alluvium
Cretaceous	Mananjary Group		Continental Argillaceous Clayey Sandstone
		Anala Lava Suite	Basalt
			Gabbro and Microgabbro
Neo-Proterozoic		Kiangara Suite	Alkaline granites and syenites
			Charnockite
		Imorona-Itsindro Suite	Granodioritic Orthogneisses
			Orthogneiss of Brickaville
	Manampotsy Complex	Formation of Sakanila	Biotite gneiss to amphibolite with hornblende units quartzite, graphitic rock- sillimanite with or without garnet
		Formation of Andasibe	Biotite paragneiss with or without hornblende and quartz-paragneiss

			with feldspathic units, quartzite lenses with or without sillimanite graphite sometimes with garnet and calcium silicate and cipolin (marble)

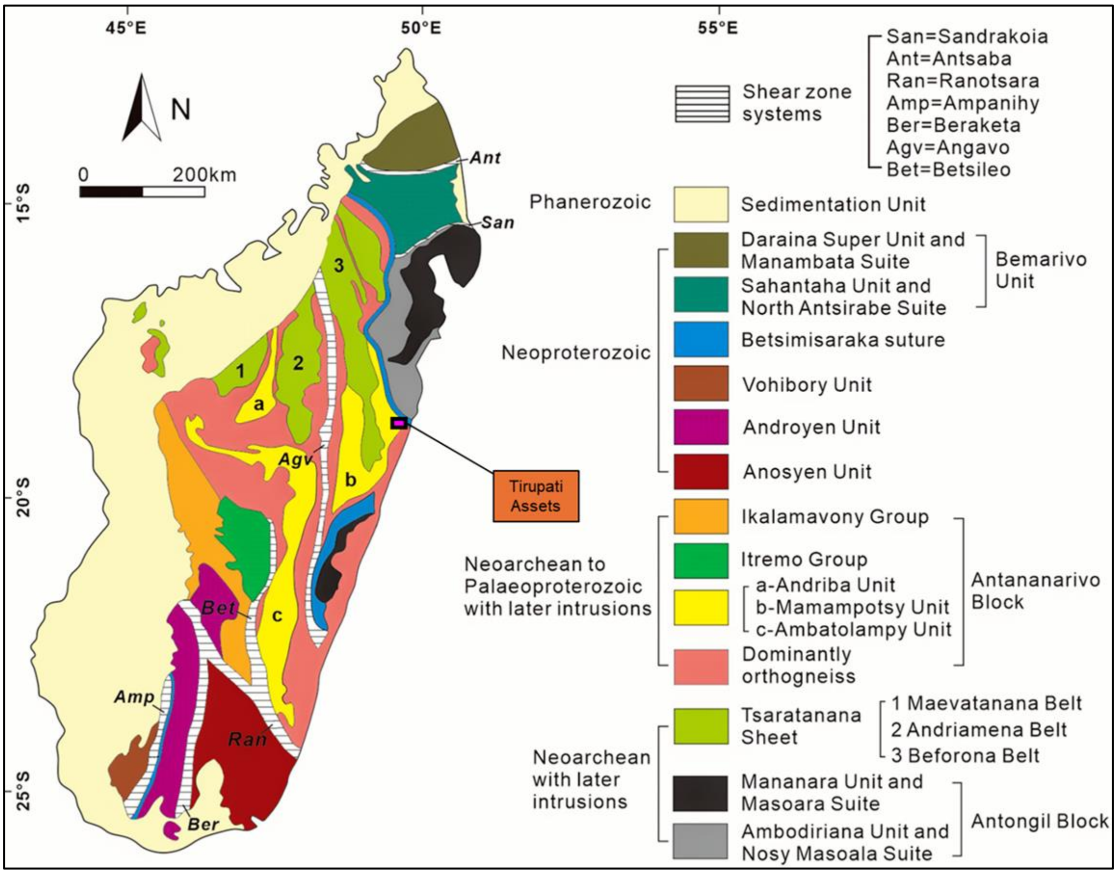


Figure 4-4: Regional Geological Setting (Source: MDPI)

4.6.2 Geology

The Sahamamy project (Figure 4-5) lies within the tectono-stratigraphic domains of Anaboriana and Manampotsy belts, formations which are regionally evaluated to be prospective for graphite mineralization and correspond to the Betsimisaraka Suture Zone. High pressure terranes along the Betsimisaraka Suture Zone may have facilitated metamorphism and associated graphite mineralization in the belt.

The geology in the Sahamamy block is dominated by saprolite at the top (underlying the alluvium/topsoil of 2-3 m) with varying thickness of between 15–25 m, underlain by migmatite-gneiss. The graphitic mineralization is present within the saprolite unit. The saprolite is a resultant of deep weathering of the gneiss, ‘Graphitic Gneiss’, comprises quartz, feldspar, biotite, graphite flakes disseminated with minor mica and amphiboles.

The original structures like foliation and lithological contacts are preserved within the graphitic gneiss. The structural configuration indicates that the area has undergone multiphase of deformation, thereby variation in the strike and dip direction is observed. The general strike varies from N-S to NE-SW and dips primarily towards west at around 40º, whereas in the Sahamamy Block it dips due east and west with varying dip amount and NE-SW trend.

Graphitic zones (defined by melanosome of the gneissic bands) within the saprolite are generally sharp in contact with the waste rock (defined by leucosome of the gneissic bands). Graphitic gneiss shows sharp contact with the dolerite dyke and porphyritic granite gneiss. The dyke trends generally N-S and dips towards east at 50° dip amount whereas contact with porphyritic granite gneiss is steeper with 65° towards east.

Quartzo-feldspathic Gneiss is exposed all around the graphitic gneiss in both the Sahamamy and Sahasoa blocks. Quartzo-feldspathic Gneiss shows gradational contact with the graphitic gneiss and sharp contact with the intrusive dolerite dyke and porphyritic granite gneiss. The unit is devoid of graphite mineralisation.

Dolerite occurs as intrusive into the gneisses, graphitic gneiss and in porphyritic granite gneiss. The average thickness of the dolerite dykes is less than 10 m. Based on the geological mapping and drilling program by Tirupati, multiple dolerite dykes are reported in the project area with varying trends, the dominant being N-S. The contact between dykes and graphitic gneiss trends N-S to NE-SW and dipping easterly.

4.6.3 Style of Mineralisation

The graphite mineralisation in Madagascar occurs predominantly in quartzo-feldspathic schists and gneisses (+/- sillimanite, garnet and biotite), that have been variably weathered. The graphite, originally formed along cleavage and shear planes, remains relatively inert during the formation of the (lateritic) regolith, resulting in a free-dig graphitic material comprising of clays and other oxide minerals.

Graphite mineralization at the Sahamamy comprises disseminated crystalline graphite hosted within weathered gneissic rocks. The graphite mineralization occurs in multiple bands/lenses with varying thickness, 0.50 – 5.0 m.

The graphitic carbon content within the mineralised zones varies from 1.0% to around 23% (maximum), with an average of around 4%. The graphite flakes vary from 0.2 mm (small flakes) to 5-6 mm (Jumbo flakes) within the graphitic zones.

4.6.4 Deposit Type

The graphite deposits in Sahamamy project are saprolite hosted graphite deposit, epigenetic within the gneissic banded formation (Manampotsy Gneiss), which was deformed and metamorphosed at upper amphibolite to granulite facies.

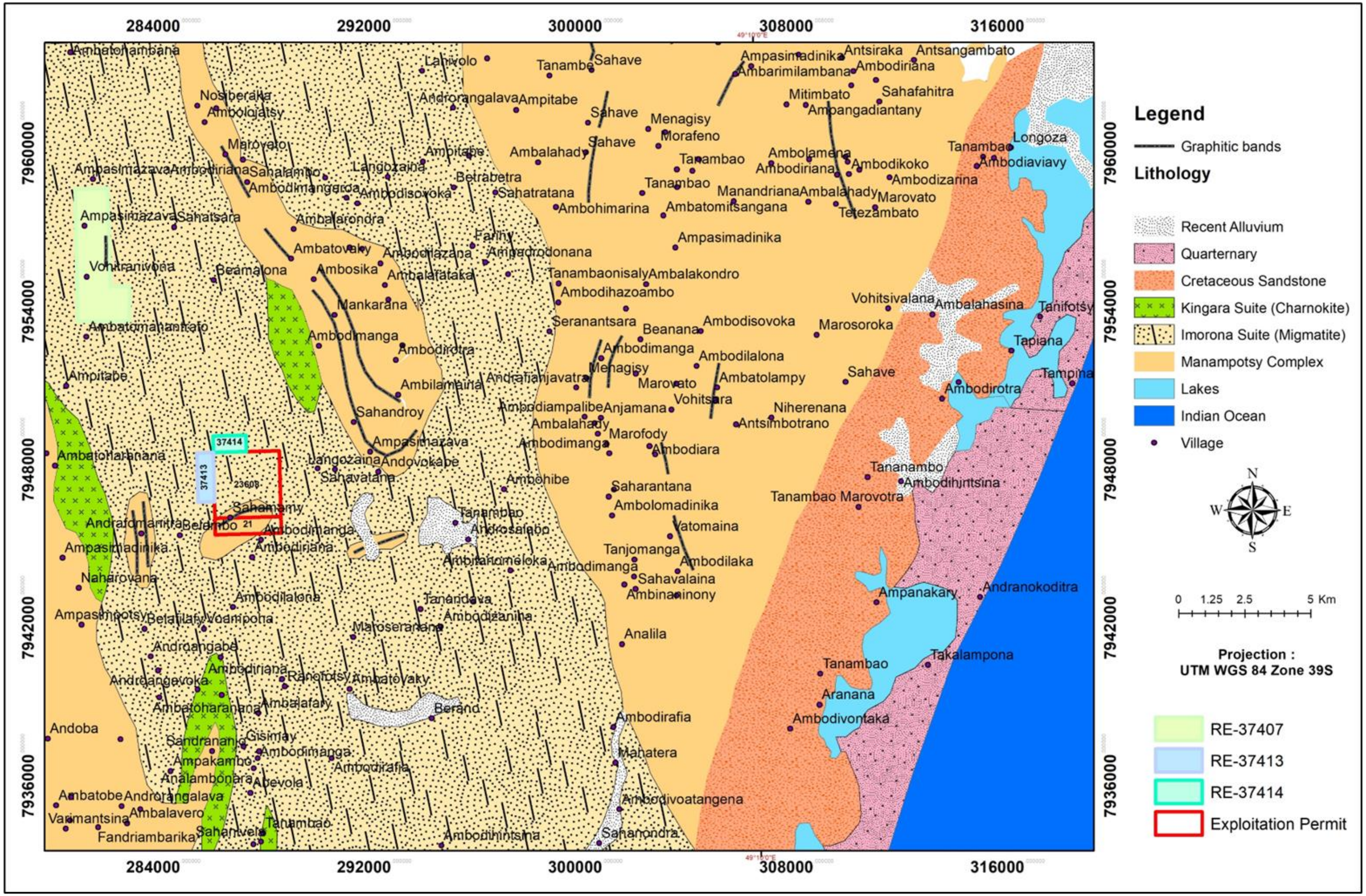


Figure 4-5: Sahamamy Geological Map

4.7 Exploration

Sahamamy is extensively covered with soil and outcrops of rocks are rare. In absence of any historical data from the assets, including geological maps of appropriate scale, Tirupati developed the following exploration strategies:

- Obtaining appropriate understanding of the geological characteristics of the mineralised horizon, including the control and local continuity of the mineralised horizons, as reflected in the artisanal mine in Vatomina and the small operating pits in Sahamamy and then use such knowledge in the relatively unknown areas.
- Develop progressive Areas of Interest (AoI) in the line of its overall development plan for the assets.
- Develop appropriate access to such AoI to mobilise drilling rigs and other equipment that are required for undertaking the required exploration.
- Dynamically review the exploration results and continuously update the geological maps and conceptual geological models to allow effective use of the exploration budget.

A geological mapping exercise was substantiated by hand auger, pitting and trenching data to establish the mineralization continuity which was further planned to be verified by core drilling.

In addition to geological mapping, pitting and trenching, Tirupati carried out both auger and core drilling. A summary of the drilling works carried out to date in presented in Table 4-6 and illustrated in Figure 4-6.

Table 4-6: Sahamamy drilling summary

Asset	Hole Type	Number of Drillholes	Drilled Meterage (m)	Maximum Depth (m)	Avgerage Depth (m)
Sahamamy	Auger	1,600	11,332	9	7
Sahamamy	DDH	41	1,240	56	30

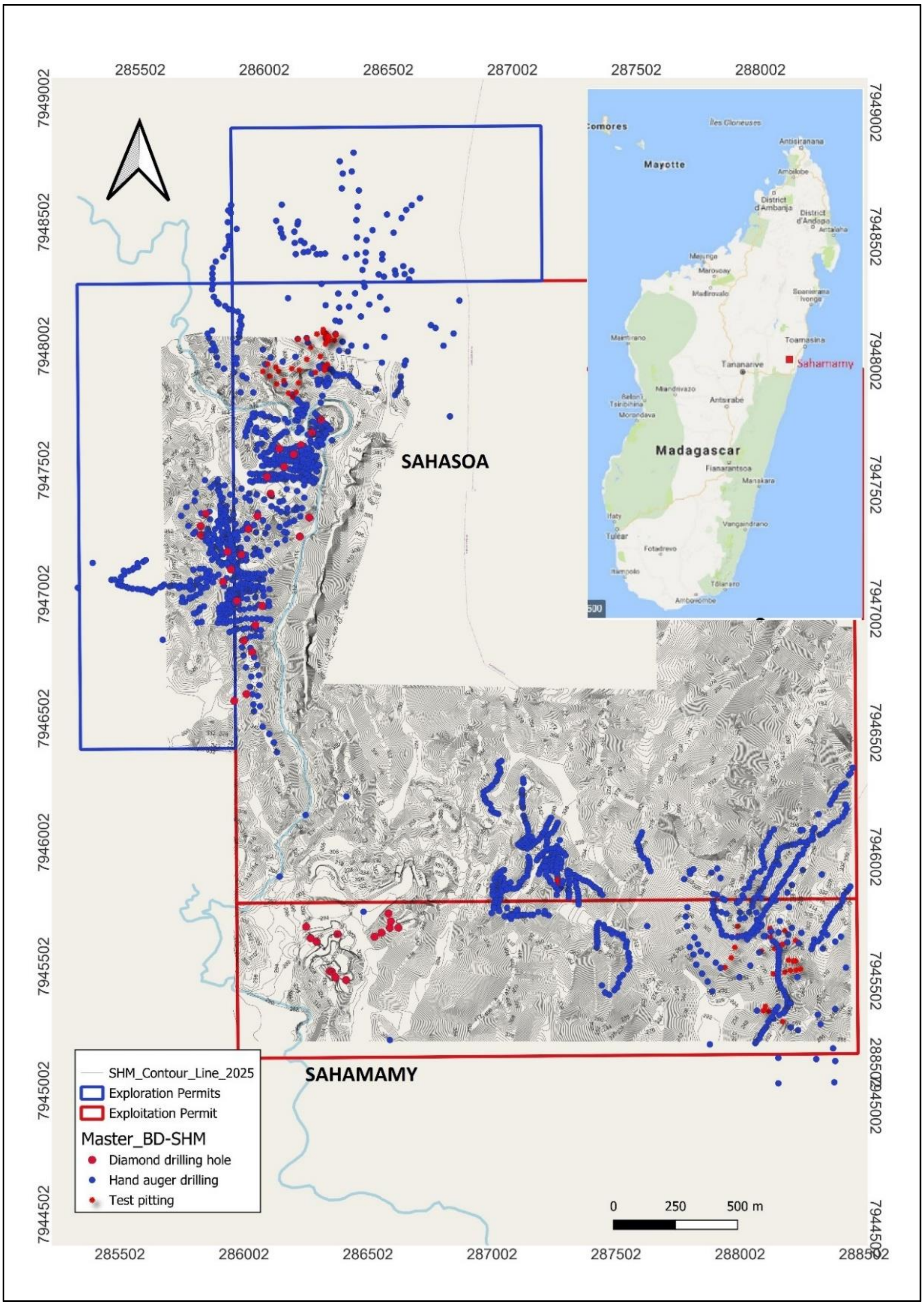


Figure 4-6: Sahamamy Drillhole Distribution

4.7.1 Topography

SGDM, based in Antananarivo, was engaged in November 2017 to carry out topographical survey in Sahamamy block, for an area of 5 km^2. SGDM used Total Station (Nikon, Leica and Topcon make) for collection of ground survey points along with recording of surface features like roads, populated areas (villages), water bodies, electrical lines, camps, etc. The density of survey points was used to prepare a topographic map in 1:5000 scale with 2 m contour interval.

The ground survey data were processed in AutoCAD for preparation of digital maps. Subsequently, the topographic map was used as a base mas for geological mapping. Tirupati used inhouse Total Station ((Nikon, Leica) to update the mine surface from time to time which was super imposed on the original topography survey data. Latest updated topographic survey data is as of April 2025.

4.7.2 Geological Mapping

Geological mapping post-2020 (Figure 4-7) in Sahamamy was focused north of the Sahasoa block and east of the Sahamamy block that was mostly un-explored. The area is covered by dense vegetation and outcrops are limited. The highly weathered graphitic gneiss and gneiss, exposed as saprolite, were mapped along the road cuttings. Between 2021-2023, traverse were taken to identified areas covering approximately 4 km^2 in 1:5000 scale which was further checked by auger drilling, pitting and trenching to delineate the graphite gneiss (mineralized rock) continuity trending N-S in Sahasoa and NE-SW in Sahamamy. The regional geological map is also showing the NE continuity of graphitic gneiss within the Sahamamy area.

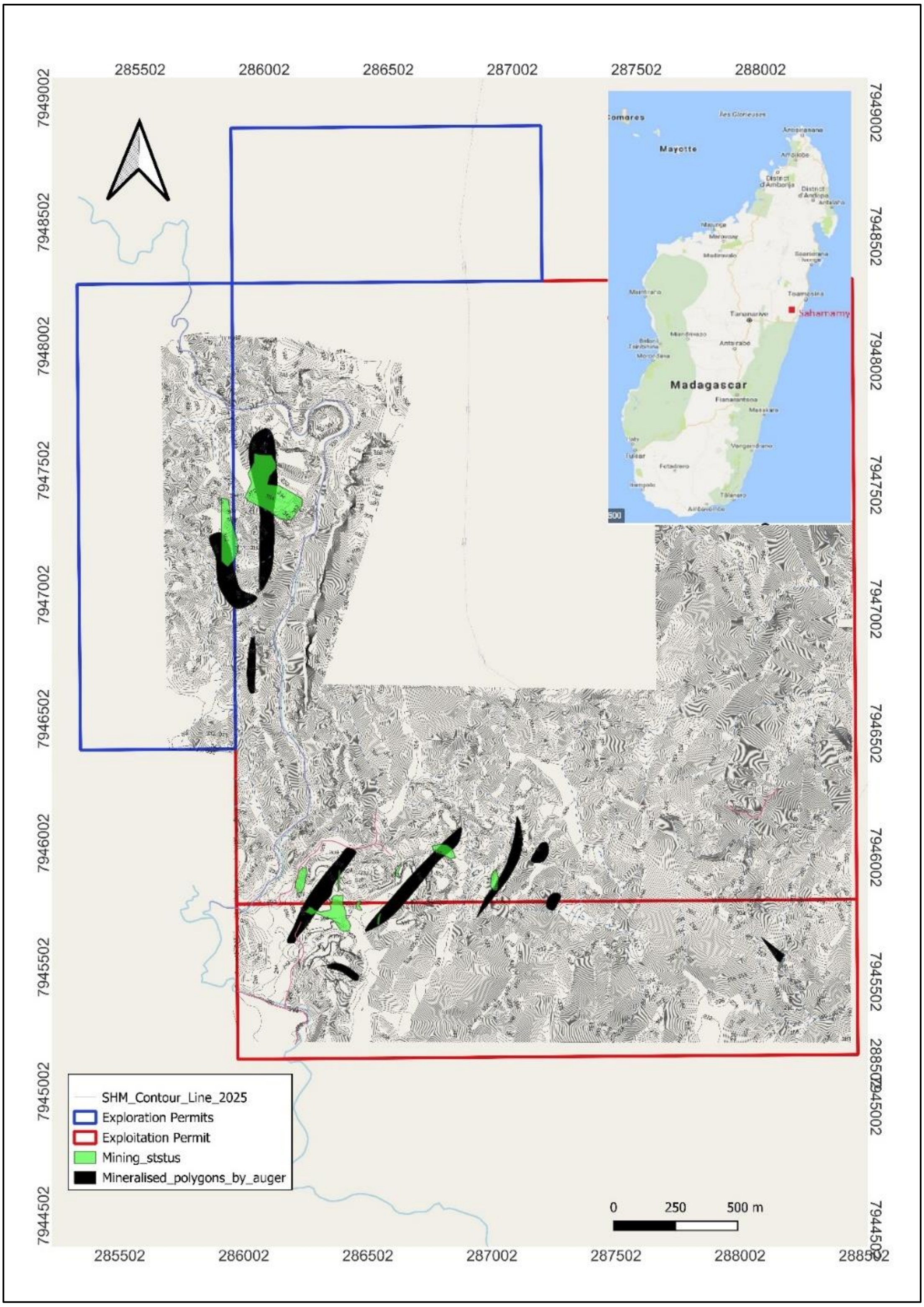


Figure 4-7: Sahamamy Permit Graphitic Bands

4.7.3 Trenching

Tirupati carried out channel sampling in 25 trenches within the Vatomina permit in 2022-2023. Samples were collected from channels of 10 cm width to 8 cm depth (cross cutting band or horizontal channel). The sample length was selected based on the thickness of graphite bands. The trenching data is summarised in Table 4-7. SRK has reviewed the field procedures followed by Tirupati and considers these to be in line with industry good practices.

Table 4-7: Summary of the Trenching in Sahamamy (post 2020)

Asset	Hole Type	Number of Drillholes	Drilled Meterage (m)	Year of Completion
Sahamamy	TRN	7	168	2022
Sahamamy	TRN	8	25.5	2022
Sahamamy	TRN	10	1500	2023
Total		**25**	**1,693.5**	

4.7.4 Auger Drilling

Tirupati conducted auger drilling in the northern part of Sahasoa and eastern part of Sahamamy during 2021-2023 to establish the location and the continuity of graphite mineralisation and the host graphitic gneiss in the un-explored area. A total of 1,600 boreholes were drilled with total meterage of 11,332 m. The average depth of the boreholes was 9 m. The size of the auger boreholes is equivalent to NQ size, 47.6 mm hole diameter. The drilling was undertaken by Tirupati, with supervision by Company geologists. The auger drilling is summarised in Table 4-8 and illustrated in Figure 4-8.

Table 4-8: Sahamamy auger drilling summary (post 2020)

Asset	Hole Type	Number of Drillholes	Drilled Meterage (m)	Year of Completion
Sahamamy	HAG	68	440	2023
Sahamamy	HAG	257	1782	2021-2023
Sahamamy	HAG	975	7005	2021-2023
Sahamamy	HAG	300	2105	2022-2023
Total		**1600**	**11,332**	

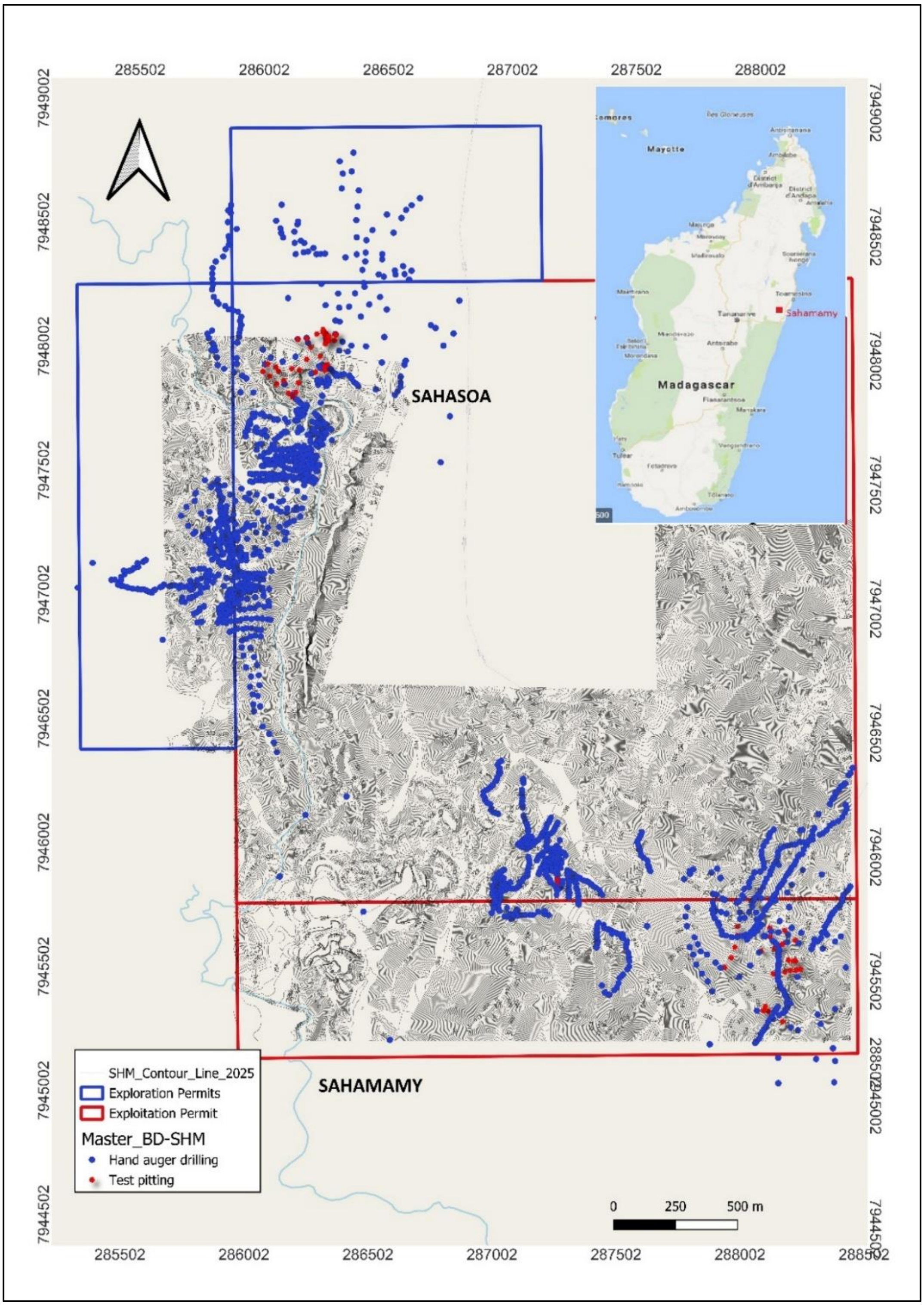


Figure 4-8: Distribution of Sahamamy auger boreholes and test pits

4.7.5 Core Drilling

The diamond core drilling (DDH) was undertaken by the in-house drilling team under the supervision of Company geologists. Core drilling program was taken up from post-2020 which to date, has completed 41 boreholes totalling around 1,200 m of core drilled. Tirupati used an in-house top drive hydraulic rig of Kores make for the core drilling campaign.

The objective of the core drilling program was to intersect mineralisation at deeper levels beyond the saprolite zone and in fresh rocks and to establish resources down to about 50 m vertical depth. The maximum depth of the core drilling program was 56.0 m, with an average depth of 30.0 m. The azimuth of the boreholes was decided based on the structural trend of the mineralisation, mostly varying between NE and SE. Most of the boreholes (11 were drilled vertical) were inclined planned at 50-60°, but due to non-availability of any borehole deviation tool, no boreholes were surveyed for deviation.

Core size was typically NQ series (triple tube), whereas HW and NW (casing bit diameter) was used for the top weathered and loose formations. Details of the core drilling are presented in Table 4-9 and illustrated in Figure 4-9.

Table 4-9: Sahamamy core drilling summary (post-2020)

Asset	Hole Type	Number of Drillholes	Drilled Meterage (m)	Year of Completion
Sahasoa	DDH	3	88.5	2022
Sahamamy	DDH	20	615.9	2022-2023
Sahasoa	DDH	18	535.6	2023
TOTAL		**41**	**1240**	

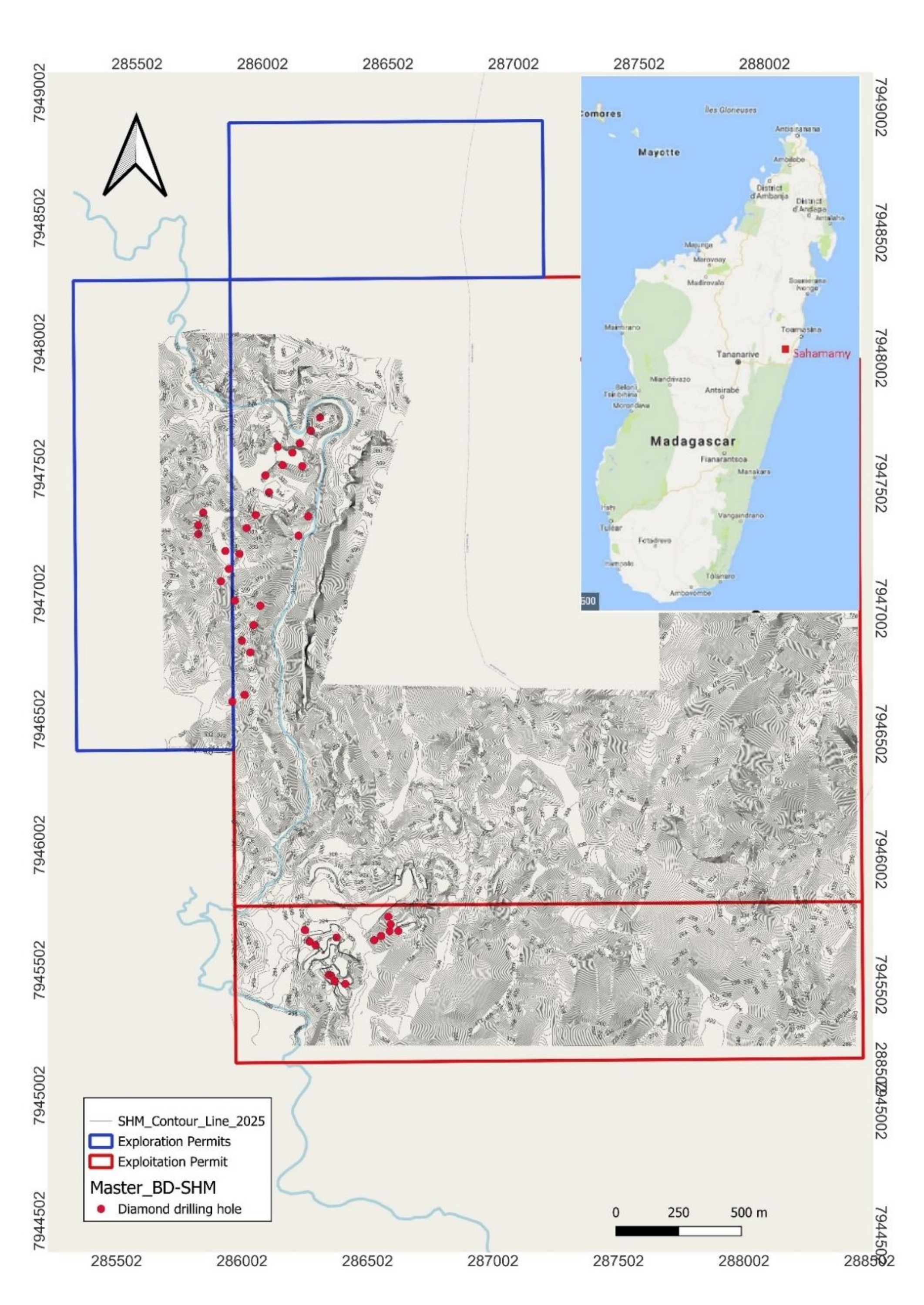


Figure 4-9: Sahamamy diamond core boreholes locations

4.7.6 Sampling

Sampling honoured the lithological breaks, mainly the mineralised units, such as graphitic gneiss and saprolite along with the visual identification of presence of any graphite in other lithological units like pegmatite veins, pedolith, etc.

In the case of auger drilling, continuous samples were taken with 1.0 m sample lengths. For DDH core drilling, a sample interval for the mineralized zone was between 1.0 to 3.0 m but typically 2.0 m. The overall sampling interval for drilled cores varied from 0.40 m to 4.0 m within the mineralised units.

4.7.7 Geological Logging

The standard format for logging was designed by Tirupati to record the lithological units in terms of colour, weathering profile, texture, mineralisation and lithological description. Standard lithological codes were developed for the major lithological units and separate codes for weathering, mineralisation and grain size. A secondary lithological code was developed to record any alteration zone like ferruginous, saprolite, etc. In case of core drilling, additional data on core recovery and RQD (where applicable) were recorded for each drill run in standard log formats.

4.7.8 Sample Preparation

Sample preparation was undertaken in-house for Sahamamy using conventional methods (Figure 4-10). In the case of auger drilling, sampling was on a continuous basis of 1.0 m. For DDH core drilling, sample interval for the mineralized zone was considered at 1.0 to 3.0 m but generally 2.0 m. The overall sampling interval for drilled cores varied from 0.40 m to 4.0 m within the mineralised units. Drill cores were marked, which were later split into two halves. For samples from saprolite (soft) formation, the samplers used chisel knife and metal plates to retrieve the half portion of the core for sample preparation. For harder rocks, a core cutting machine was used.

The half core sample weighing about 800–900 g is first manually crushed to approximately 2 mm, followed by homogenization and coning–quartering to obtain two equal portions of around 400–450 g each. One half is preserved as a coarse duplicate, while the other half is used for pulp preparation by further crushing with a hand mortar to approximately 140 mesh size and sieving to ensure 95% passing, with the oversize retained as coarse rejects. The resulting pulp is then divided into three equal parts of 100–150 g each; one portion is sent for laboratory analysis, the second retained as a pulp duplicate, and the third stored at the exploration camp for record purposes.

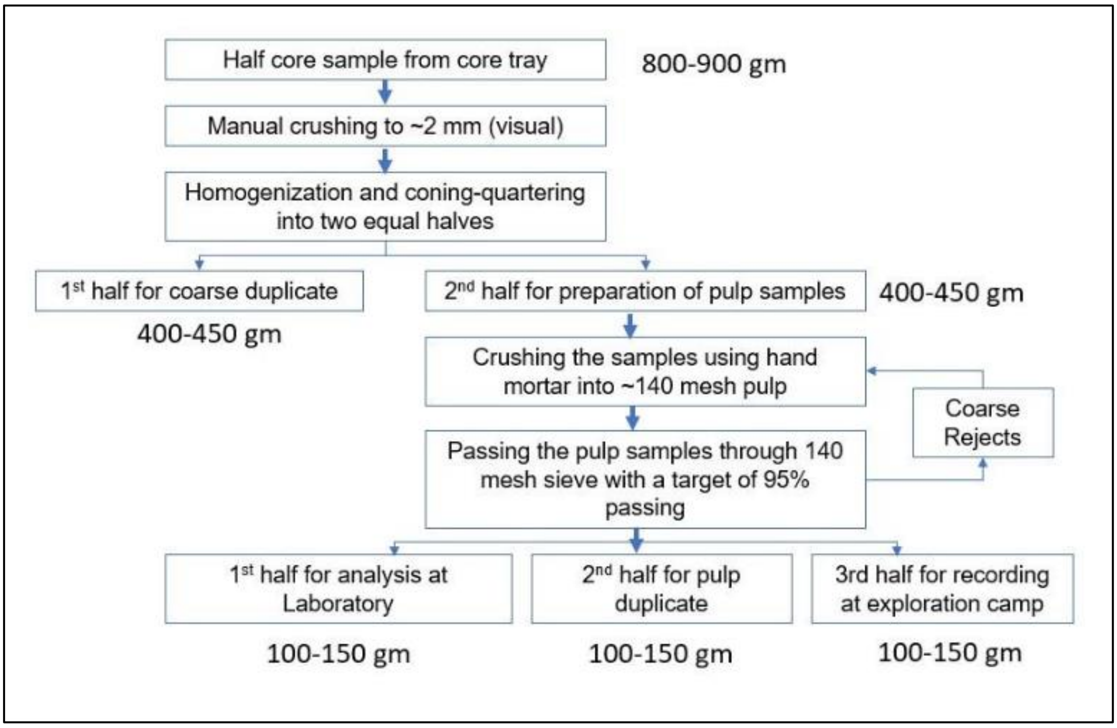


Figure 4-10: Standard sample preparation flowsheet

4.7.9 Assay

Exploration samples (core drilling) generated from the Sahamamy project were prepared at the Tirupati in-house laboratory following standard crushing, drying (natural drying process), and pulverization protocols to ensure sample representativeness. The prepared pulps were then dispatched under chain-of-custody procedures to SGS India, which serves as the primary laboratory for this project.

At SGS India, the samples are analysed for FC content using the Muffle Furnace method. In this procedure, weighed samples are heated in a controlled furnace environment to a defined temperature profile, during which volatile matter, moisture, and non-carbonate impurities are burned off. The residual weight, expressed as a percentage of the original sample mass, is reported as FC**.** The assay results have not yet been provided by SGS India.

4.7.10 QAQC

At the Sahamamy project, Tirupati implements a rigorous QAQC protocol to ensure the reliability and integrity of FC assay results from diamond drill cores. Analytical batches consist of 20 samples, with 4 QC samples (approximately 20%) incorporated in each batch. The QC suite comprises:

- Certified Reference Materials (two types): monitor analytical accuracy and detect systematic bias.
- Field Duplicates: assess variability arising from sampling and sub-sampling.
- Pulp Duplicates: evaluate laboratory precision and sample homogenisation.
- Field Blanks: inserted systematically as every 20th sample during preparation to detect potential contamination.

At the time of reporting, assay results from SGS India are awaited. Once received, results will be reviewed and validated through internal QA/QC protocols, including comparison with check assays and insertion of field duplicates and standards, before integration into the project geological database and subsequent resource modeling.

4.7.11 Database

All field-generated data were systematically transferred into a digital database using a standardized template developed in Microsoft Excel. The use of a consistent template ensured uniformity in data entry and facilitated effective validation and compilation of geological information. Detailed geological logging sheets, incorporating standardized logging codes for lithology, structure, and mineralization characteristics, were also maintained in Excel format to ensure consistency across the dataset.

The digital database is managed and regularly updated by Tirupati's geological team, who are responsible for verifying the accuracy and completeness of incoming data from the field and drilling programmes. Periodic data reviews and updates are carried out to incorporate new drilling, sampling, and assay results, ensuring that the database remains current and serves as a reliable foundation for geological interpretation and resource estimation.

4.7.12 SRK Comments

SRK is of the opinion that the drilling data for the project has been generated in a professional and systematic manner, adhering to industry-standard exploration and data management practices. The exploration work at Sahamamy has been carried out in a phased manner, beginning with reconnaissance through hand auger drilling to delineate graphite-bearing zones, followed by confirmatory DDH core drilling across the leasehold area. This systematic approach has enabled Tirupati to progressively build geological understanding and confirm the lateral and vertical continuity of graphite mineralisation.

Data from both hand auger and core drilling programmes have been carefully logged, recorded in standardized templates, and regularly updated in the project database, ensuring traceability and reliability. In addition, limited mining from selected parts of the lease has provided valuable validation of the interpreted geological model and graphite occurrence.

Once the pending assay results are received, a comprehensive reconciliation between drilling, assay, and production data can be undertaken. This will enable refinement of grade distribution and geological continuity, thereby supporting a more robust and higher-confidence Mineral Resource Estimate for the Sahamamy project.

4.8 Metallurgical Tests

No metallurgical testwork has been made available for review.

4.8.1 SRK Comments

Without metallurgical testwork to review, no predictions of plant performance, in the event of a re-construction and return to production can be made.

4.9 Mineral Resource Estimation

SRK used Leapfrog Geo software to produce 3D geological models and Datamine RM software for block modelling and grade and tonnage estimation. The block models are classified in accordance with the terms and guidelines of the JORC Code.

4.9.1 Database

A summary of the exploration database used for Sahamamy Mineral Resource estimation is presented in Table 4-10.

Table 4-10: Sahamamy Resource Database Summary

Drilling Type	Count of Boreholes	Drilled (m)
Auger Drilling	99	732
Channel Samples	4	38
Trench	1	10
Total	**104**	**780**

4.9.2 Data Validation

Prior to the construction of geological modelling, SRK undertook a data validation exercise to ensure the data quality is appropriate for undertaking a Mineral Resource Estimate. Those included:

- validation of the borehole coordinates;
- overlapping intervals;
- harmonisation of the geological logging codes;
- missing interval and missing assay results;
- assigning appropriate value for those samples where the TGC% were reported below the detection limit; and
- Reconciliation of the geological logs with the assay results.

SRK did not find any material issue in terms of the integrity of the exploration database. SRK has, however, noted that:

- The samples generated post-2020 are pending analytical results from SGS India. As these assay results were not yet available at the time of review, SRK has not incorporated this dataset into the current Mineral Resource model update. Once the results are received and validated, they can be integrated to further refine the geological interpretation and enhance the confidence in the resource estimation
- For those samples logged as internal waste and which were not assayed or reported a grade below the detection limit, SRK assumed a default value of 0.25% TGC.

4.9.3 Geological Modelling

Topographic Model

The 3D topographic digital elevation model for Sahamamy was constructed using Leapfrog Geo software, based on the topographic survey data, generated by Tirupati using Total Station survey equipment. SRK imported the elevation grid model into Leapfrog Geo software and created the 3D topographic surface with a resolution of 25 x 25 m.

Geological Model

In order to define the mineralised zone in Sahamamy, SRK considered 2 m minimum thickness with at least 2% TGC. Graphite bearing zones were then correlated and coded. SRK modelled six such zones, which were interpreted to be dipping toward south with a varying dip of 20º to 30º. Figure 4-11 presents a 3D view of the Sahamamy geology model.

Domaining of the different graphic bands were constructed based on the lithological data, there position in the regolith profile and the available assay results. Based on the preliminary statistical study SRK decided a threshold value of 2% TGC over a minimum composite length of 2 m to be included into the estimation domains. Figure 4-12 and Figure 4-12 presents an overview of different zones that were identified during interpretation. In order to delineate the geometry of the graphitic bands, SRK used the structural data generated by Tirupati.

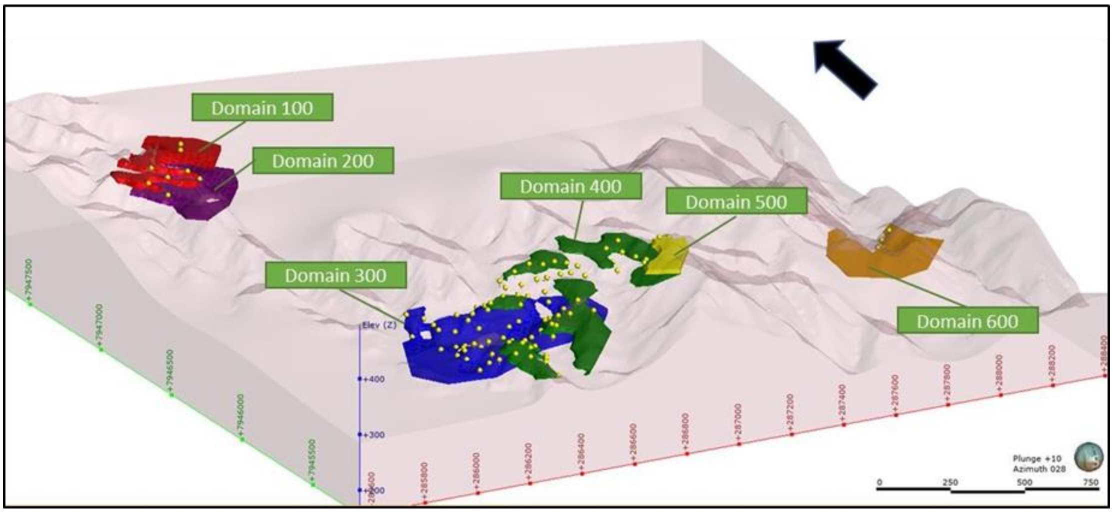


Figure 4-11: Sahamamy Geological Model 3D View (looking NW)

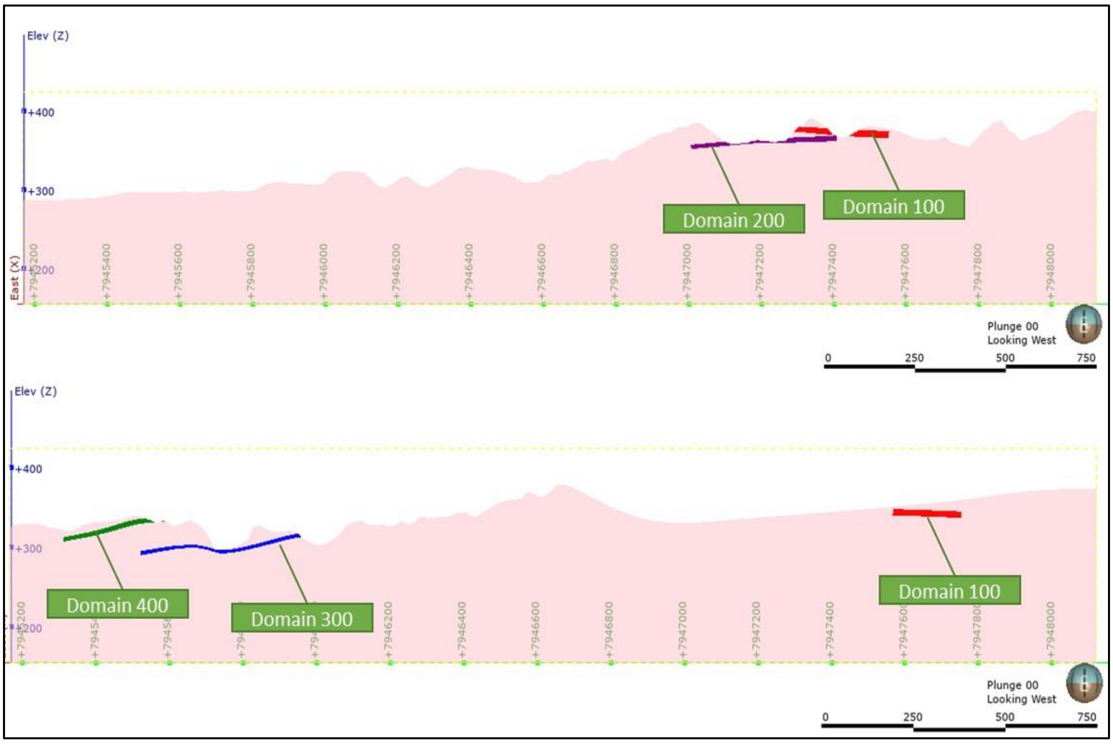


Figure 4-12: Sahamamy Example Cross Section Reflecting Different Estimation Domains

4.9.4 Domaining Definition

For the Sahamamy deposit, SRK defined the mineralised domains based on a minimum composited thickness of 2 m with a cut-off grade of 2% TGC. Graphite-bearing intervals meeting these criteria were correlated across drill sections and subsequently coded to delineate continuous mineralised zones. Six domains were modelled, interpreted to dip southwards with variable dips ranging between 20° and 30°.

4.9.5 Sample Statistics

The sample statistics of Sahamamy is presented in Table 4-11. The summary statistics show low coefficient of variation (CoV) which indicate a low degree of GC% variability within the modelled mineralised zones.

Table 4-11: Sahamamy Sample Statistics Summary

Zone	Field	Count	Minimum	Maximum	Mean	Variance	StdDev	CoV
100	GC	40	2.20	8.40	4.98	3.08	1.75	0.35
200	GC	13	1.80	3.50	2.53	0.35	0.59	0.23
300	GC	42	0.80	9.90	3.68	2.85	1.69	0.46
400	GC	43	1.00	18.30	6.00	17.30	4.16	0.69
500	GC	8	3.20	4.30	3.91	0.14	0.37	0.10
600	GC	2	3.70	5.20	4.45	0.56	0.75	0.17

4.9.6 Compositing

Prior to generating the MRE, the samples were composited to equal lengths such that a constant volume was achieved, therefore honouring the sample support theory. As sampling was predominantly based on lithological intervals, the actual sample lengths range between 0.1 to 3.75 m with a mean sample length of 1.4 m. A composite length of 2 m was used. SRK undertook a statistical analysis to ensure that the resultant capping and composites did not result in a reduction in the mean GC grade. A summary of the composite statistics for Sahamamy is presented in Table 4-12.

Table 4-12: Sahamamy 2 m Composite Statistics Summary

Zone	Field	Count	Minimum	Maximum	Mean	Variance	StdDev	CoV
100	GC	40	2.20	8.40	4.98	3.08	1.75	0.35
200	GC	13	1.80	3.50	2.53	0.35	0.59	0.23
300	GC	42	0.80	9.90	3.68	2.85	1.69	0.46
400	GC	43	1.00	18.30	6.00	17.30	4.16	0.69
500	GC	8	3.20	4.30	3.91	0.14	0.37	0.10
600	GC	2	3.70	5.20	4.45	0.56	0.75	0.17

4.9.7 Geostatistical Analysis

A geostatistical study was undertaken to investigate the grade continuity and to derive parameters for grade interpolation. The 3D variogram analysis was undertaken in Snowden Supervisor software.

Semi-variograms were constructed for each domain to determine the grade continuity and spatial variability of TGC% and to determine the search neighbourhood approach and setting up the kriging parameters.

Initially, the Nugget Effect was determined from the downhole experimental semi-variograms. SRK attempted to construct directional variograms, but due to the absence of closed spaced drilling at this stage of the project, SRK relied on the omni-directional variograms. Graphical representation of the constructed omni-directional semi-variograms for Sahamamy is presented in Figure 4-13. Table 4-13 presents the summary of the variogram parameters.

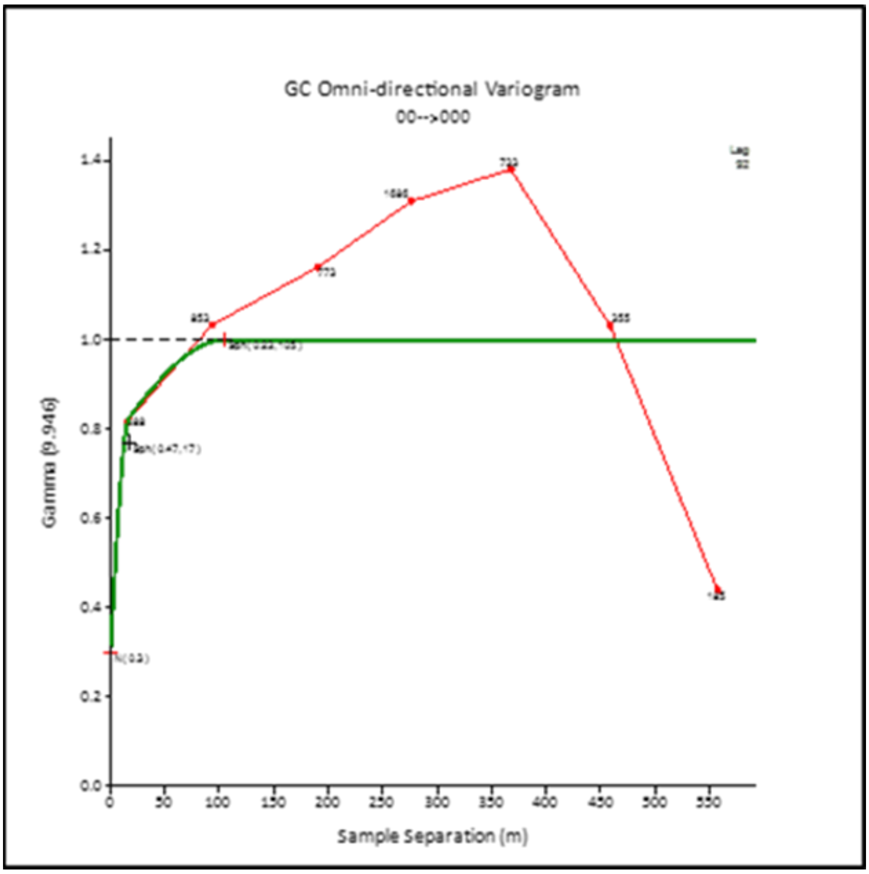


Figure 4-13: Sahamamy Omni-directional modelled variogram

Table 4-13: Sahamamy Normalised Variogram Summary

Parameter	Sahamamy
Element	TGC%
Variogram reference number	1
Rotation angle around Z axis	0
Rotation angle around X axis	0
Rotation angle around Z axis	-90
Nugget variance	3
Variogram model type (Structure 1)	1
First Range of Structure 1	3
Second Range of Structure 1	0.3
Third Range of Structure 1	1
Sill parameter of Structure 1	17
Variogram model type (Structure 2)	17
First Range of Structure 2	17
Second Range of Structure 2	0.47
Third Range of Structure 2	1
Sill parameter of Structure 2	105

4.9.8 Block Model

Following the construction of the wireframes and the geostatistical analysis, a 3D block model was created in the Datamine Studio 3 software. For the selection of the block model framework, SRK considered the average borehole spacing and possible open pit bench height. To increase the accuracy of the domain boundary definition, SRK used sub-blocks along each direction for all the modelled geological wireframes. Table 4-14 presents the summary of the block model parameters selected by SRK for Sahamamy.

Table 4-14: Sahamamy Block Model Framework Summary

	X (m)	Y (m)	Z (m)
Minimum	285300	7944900	170
Maximum	288700	7948400	430
Range	3400	3500	260
Parent block size	20	20	1
Number of blocks	170	175	260
Rotation	0	0	0

4.9.9 Grade Estimation

For Sahamamy, SRK used Ordinary Kriging (OK) for the grade interpolation into the block model, honouring the geological contacts defined by the geological modelling process and using the variogram parameters set out above. Before undertaking the grade estimation, SRK carried out a search neighbourhood analysis for the appropriateness of the search and estimation parameters through the optimisation of the following parameters:

- Search Ellipsoid Dimension.
- Number of minimum and maximum samples to be used for estimation.
- Optimisation of Search Octants.
- Number of discretisation points.

Based on the results of the above study, SRK selected the final search parameters for Sahamamy, which are reflected in Table 4-15. To compare the mean grades derived from the Ordinary Kriging, SRK also estimated the empty block model using Inverse Distance Weighted Method. The estimation parameters were set up by visually checking the data to ensure suitable minimum and maximum samples have been used, and that the factored searches were sufficiently large to fill the entire block model. Table 4-15 presents the search parameters used for the estimation.

Table 4-15: Sahamamy GC% Grade Estimation Search Parameters Summary

Domain	Domain100	Domain200	Domain300	Domain400	Domain500	Domain600
Element	GC	GC	GC	GC	GC	GC
Search Method	1	2	3	4	5	6
Rotation angle about Z Axis	2	2	2	2	2	2
Rotation angle about X Axis	100	100	100	300	300	300
Rotation angle about Z Axis	100	100	100	300	300	300
First Pass Search distance along strike	100	100	100	300	300	300
First Pass Search distance across strike	0	0	0	0	0	0
First Pass Search distance along dip	0	0	0	0	0	0
Minimum Number of Sample First Pass	0	0	0	0	0	0
Maximum Number of Sample First Pass	3	3	3	3	3	3
Second Pass Search distance along strike	1	1	1	1	1	1
Second Pass Search distance across strike	3	3	3	3	3	3
Second Pass Search distance along dip	3	2	3	3	3	2
Minimum Number of Sample for the Second Pass	5	5	8	8	5	5
Maximum Number of Sample for the Second Pass	2	2	2	2	2	2
Third Pass Search distance along strike	3	2	3	3	3	2
Third Pass Search distance across strike	5	5	8	8	5	5
Third Pass Search distance along dip	5	5	5	5	5	5
Minimum Number of Sample for the Third Pass	3	2	3	3	3	2
Maximum Number of Sample for the Third Pass	5	5	8	8	5	5
Use Octant Search	No	No	No	No	No	No
Number of octants containing samples	-	-	-	-	-	-
Minimum number of samples per octant	-	-	-	-	-	-
Maximum number of samples per octant	-	-	-	-	-	-
Maximum Number per borehole	2	3	2	2	-	-

4.9.10 Model Validation

SRK has undertaken a number of validation exercises on the resulting estimated model, to confirm that the modelled estimates represent the input sample data on both local and global scales, and to check that the estimate is not biased. Methods of validation used include:

- visual inspection of block grades in comparison with drillhole data;
- sectional validation and swath plots; and
- comparison of block model and sample mean grades.

Visual Validation

Visual validation provides a comparison of the interpolated block model on a local scale and in this case, this showed a reasonable correlation, with local block estimates displaying similar grades to nearby drillholes. Figure 4-14 shows an example of the visual validation checks for the model, which highlight the overall block grades corresponding with the composite sample's grades.

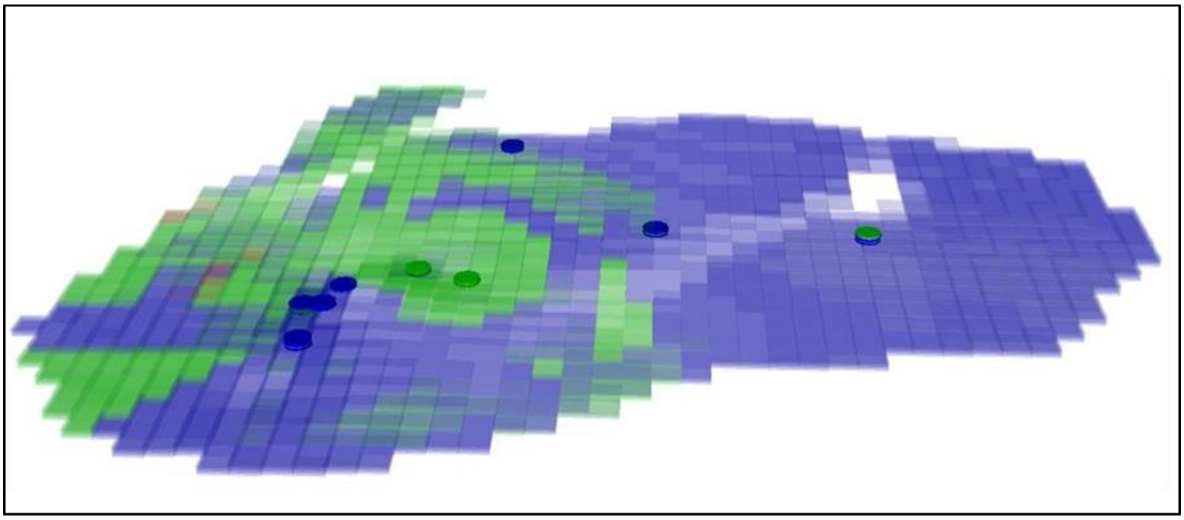


Figure 4-14: Example of visual validation of the Sahamamy block model against composite

Statistical Validation

A statistical validation of the interpolated block model has been undertaken, and the results are presented in Table 4-16. A comparison was made between the declustered capped composite samples and the OK grade estimate. In general, the declustered capped composite samples compare well with the OK block model estimates, with no sign of any bias therefore validating the global estimated grades. Based on the visual and statistical validation results, SRK accepted the grades in the block model.

Table 4-16: Sahamamy statistical validation of composite sample statistics versus estimated block model

ZONE	Composite Mean	Estimated Mean	Absolute Difference	% Difference
100	4.98	4.85	0.13	3%
200	2.53	2.55	-0.02	-1%
300	3.68	3.60	0.08	2%
400	6.00	5.85	0.15	2%
500	3.91	4.11	-0.20	-5%
600	4.45	4.47	-0.02	0%

4.9.11 Density Model

In absence of detailed study on the dry in situ bulk density measurement, SRK assumed a default density of 1.92 t/m^3 for all mineralised zones. SRK understands that Tirupati will be undertaking a next phase of exploration to generate further exploration data to enhance the density model.

4.9.12 Mineral Resource Classification

The Mineral Resource statement presented herein has been classified following the definitions and guidelines of the JORC Code (2012) from which the following definitions have been taken.

Inferred Mineral Resources

An 'Inferred Mineral Resource' is that part of a Mineral Resource for which tonnage, grade and mineral content can be estimated with a low level of confidence. It is inferred from geological evidence and assumed but not verified geological and/or grade continuity. It is based on information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes which may be limited or of uncertain quality and reliability. An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource.

The Inferred category is intended to cover situations where a mineral concentration or occurrence has been identified and limited measurements and sampling completed, but where the data are insufficient to allow the geological and/or grade continuity to be confidently interpreted. Commonly, it would be reasonable to expect that the majority of Inferred Mineral Resources would upgrade to Indicated Mineral Resources with continued exploration. However, due to the uncertainty of Inferred Mineral Resources, it should not be assumed that such upgrading will always occur.

Indicated Mineral Resources

An 'Indicated Mineral Resource' is that part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a reasonable level of confidence. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drillholes. An Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource but has a higher level of confidence than that applying to an Inferred Mineral Resource. Mineralisation may be classified as an Indicated Mineral Resource when the nature, quality, amount and distribution of data are such as to allow confident interpretation of the geological framework and to assume continuity of mineralisation. Confidence in the estimate is sufficient to allow the application of technical and economic parameters, and to enable an evaluation of economic viability.

Measured Mineral Resources

A 'Measured Mineral Resource' is that part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a high level of confidence. It is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are spaced closely enough to confirm geological and grade continuity.

Mineralisation may be classified as a Measured Mineral Resource when the nature, quality, amount and distribution of data are such as to leave no reasonable doubt, in the opinion of the Competent Person determining the Mineral Resource, that the tonnage and grade of the mineralisation can be estimated to within close limits, and that any variation from the estimate would be unlikely to significantly affect potential economic viability.

This category requires a high level of confidence in, and understanding of, the geology and controls of the mineral deposit.

Confidence in the estimate is sufficient to allow the application of technical and economic parameters and to enable an evaluation of economic viability that has a greater degree of certainty than an evaluation based on an Indicated Mineral Resource.

Key Considerations of Sahamamy Mineral Resource Classification

Based on the data available as of the Effective Date of reporting, SRK classified the Vatomina Mineral Resource into the Indicated and Inferred categories, as the terms defined in the JORC Code. In determining this, the following factors were considered:

- the quality, distribution and quantity of data used in the estimation;
- the geological knowledge and understanding, focusing on geological and grade continuity; and
- the quality of the geostatistics and quality of the estimation.

Table 4-17: Sahamamy Mineral Resource Classification Key Considerations

Criteria	SRK Consideration
Data Quality	The methodologies adopted by the Company for the drilling programme is in the line of the standard industry practice. The results from the QAQC programme, which were considered for resource model do not show evidence of material bias within the laboratory.
Data Distribution	The exploration was not done on regular grid.
Geological Knowledge and continuity	The geology of the graphite mineralised zone is complex. There are variations in thickness and grade between adjacent drillholes. In addition to that, the area has been intruded by a number of dolerite dykes.
Quality of Geostatistics and Grade Interpolation	The quality of the semi-variograms are comparatively poor. The resultant block model validates well when compared to the input sample data.

Considering the above, SRK classified the Mineral Resources using the following criteria, which is reflected in Figure 3-16:

- Indicated Mineral Resource: part of the mineralised horizon that occurs within the saprolitic horizon, where the continuity of the mineralised body has been established through DDH drilling which are broadly distributed at 100 m interval along the strike of the mineralised body and downdip continuity is established along the section; and the quality of the estimate is reasonably well.

- Inferred Mineral Resource: part of the mineralised horizon that occurs within the saprolitic horizon, where the continuity of the mineralised body has been assumed based on the diamond drilling which are broadly distributed between 100-200 m interval along the strike of the mineralised body; and the quality of the estimate is reasonably well.

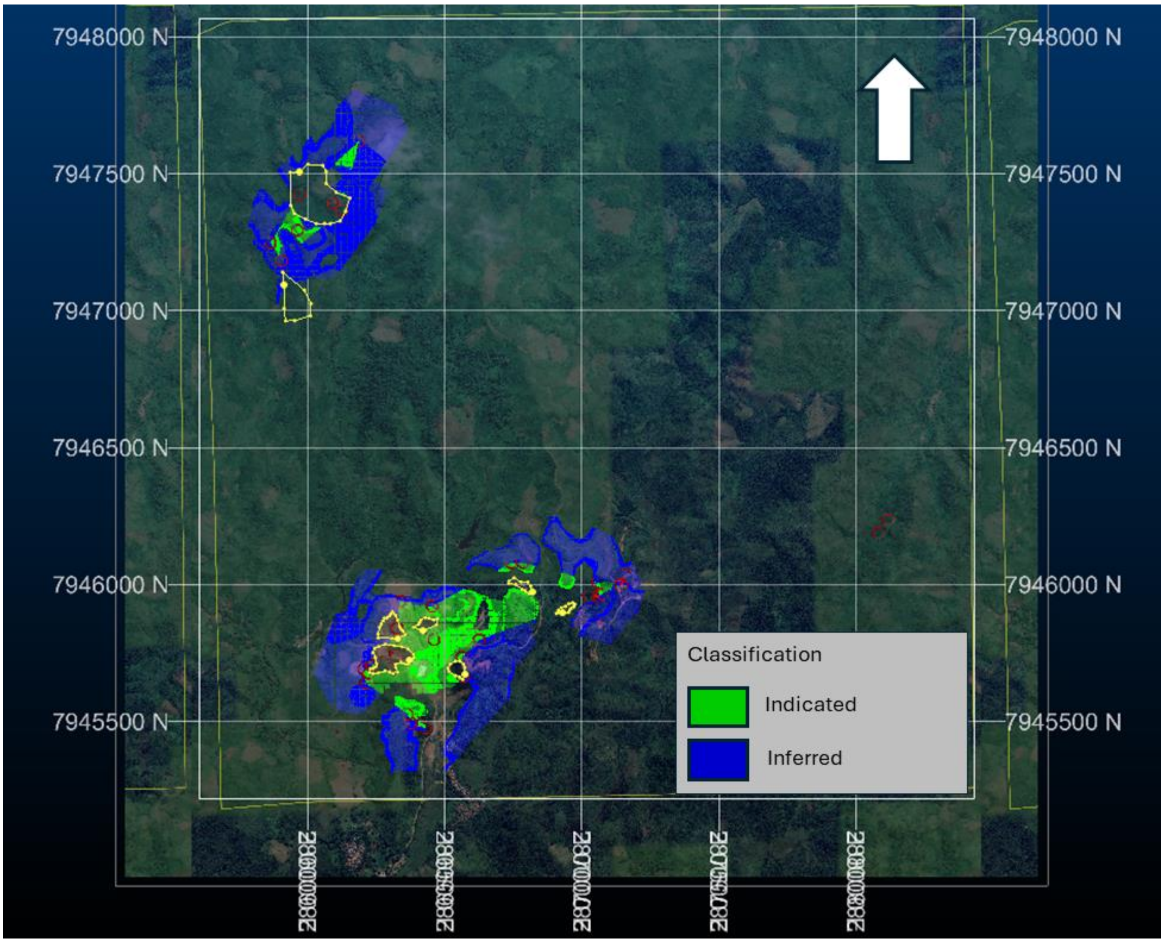


Figure 4-15: Sahamamy Mineral Resource Classification Scheme

4.9.13 RPEEE

To support assessment of the RPEEE, SRK has developed optimised pit shells for the project based on various technical and economic factors, summarised in Table 4-18.These parameters are based on benchmark numbers from similar operations, as well as budgeted costs provided by the Company. Given the lack of available actual cost data, SRK has benchmarked these costs against other graphite operations and elected to increase certain costs areas including mining, processing and selling costs.

Graphite price forecasts were sourced from S&P Global's Mining Intelligence platform. The graphite market is somewhat complex, with sales prices typically structured around flake size and concentrate grade. Differential pricing may also be realised depending on the destination of the graphite, with European markets often paying a premium over Asian markets. In the absence of any detail on the flake size distribution of the concentrate or the sales destination, SRK has elected to use the long-term FOB price forecast provided by S&P for a mixed flake concentrate with a grade of 94-95% TGC. A 30% premium to this price was included, consistent with standard industry approaches to reporting Mineral Resources.

Table 4-18: Parameters Used for Generating Conceptual Pit Shell to Define Mineral Resource

Parameters		Units	Value
Production			
	Production Rate - Ore	(tpa)	270,000
Geotechnical			
	Footwall	(Deg)	30
	Hangingwall	(Deg)	30
Mining Factors			
	Dilution	(%)	5.0
	Recovery	(%)	95.0
Processing			
	Average Mass Yield	(%)	5.0
Operating Costs			
	Mining Cost	(USD/t_{rock})	1.5
	Incremental Mining Cost	(USD/bench)	0.01
	Reference Level	(Z Elevation)	
	Processing	(USD/t_{ore})	6.9
	G&A	(USD/t_{ore})	7.6
	Transport and Other	(USD/t_{ore})	7.0
	Selling Cost	(USD/t_{conc})	107
Price			
	Graphite	(USD/t_{conc})	950
		(USD/t_{dmtu})	1,030
Product Grade		(%)	92
Other			
	Discount Rate	(%)	10
Cut-Off Grade			
	Marginal	(USD/t_{ore})	14.5
		(%)	1.81

4.9.14 Mineral Resource Statement

The Mineral Resource Statement for Sahamamy dated 30 September 2025 considering 2% TGC cut-off grade and reported within an optimised shell is presented in Table 4-19.

Table 4-19: Sahamamy Mineral Resource, 30 September 2026

Deposit		Type	Tonnage	TGC
			Mt	(%)
Sahamamy	Measured	Weathered	0	0
		Primary	0	0
		Total	**0**	**0**
	Indicated	Weathered	1.2	4.0
		Primary	0	0
		Total	**1.2**	**4.0**
	Inferred	Weathered	5.2	4.3
		Primary	0	0
		Total	**0**	**0**
	Total Resource	Weathered	6.4	4.2
		Primary	0	0
		Total	**6.4**	**4.2**

The following notes accompany the Mineral Resource Statement:

- The Mineral Resources have an effective date of 30 September 2025.
- Rounding as required by reporting guidelines may result in apparent summation differences between tonnes, grade and contained metal content. Where these occur, they are not considered material.
- Tonnages are reported in metric units, grades in percent (%) and grades are rounded appropriately.
- The Competent Person for the declaration of Mineral Resources is Mr Shameek Chattopadhyay, an employee of SRK.
- Mineral Resources are reported with reasonable prospects for eventual economic extraction, by applying appropriate technical and economic assumptions. A cut off grade of 2%TGC has been applied.
- Mineral Resources are not Ore Reserves and do not have demonstrated economic viability, nor have any mining modifying factors been applied.
- A JORC Table 1 has been completed and is available from the Company. All elements of Table 1 are included in this CPR.

4.10 Exploration Target

An Exploration Target, as the term defined in the JORC Code, is a statement or estimate of the exploration potential of a mineral deposit in a defined geological setting where the statement or estimate is quoted as a range of tonnes and a range of grade or quality, and relates to mineralisation for which there has been insufficient exploration to estimate Mineral Resources.

At Sahamamy, in addition to the areas where Mineral Resources have been reported, a conceptual geological model was prepared by Tirupati based on the auger drilling and geological mapping. SRK has reviewed this model and based on this estimates the Exploration Target of about 3-5 Mt of graphite mineralisation with an average grade ranging between 4-5% TGC. The following note is applicable to the Exploration Target:

- The estimated range of tonnages and grades is effective from 30 September 2025.
- The estimated range of tonnages and grades is in addition to the already reported Mineral Resources.
- The potential quantity and grade are conceptual in nature, that there has been insufficient exploration to estimate a Mineral Resource and that it is uncertain if further exploration will result in the estimation of a Mineral Resource.

Tirupati has provided SRK with details of their planned exploration activities and expenditure to explore such Exploration Target, which include a diamond drilling campaign of about 2,500 m which is expected to be completed in two years. To undertake such campaign, Tirupati envisages a budget of about GBP 450,000. SRK has reviewed the drilling plan and exploration budget and found reasonable to justify the Exploration Target. SRK has not seen such drilling budget is scheduled in 2026.

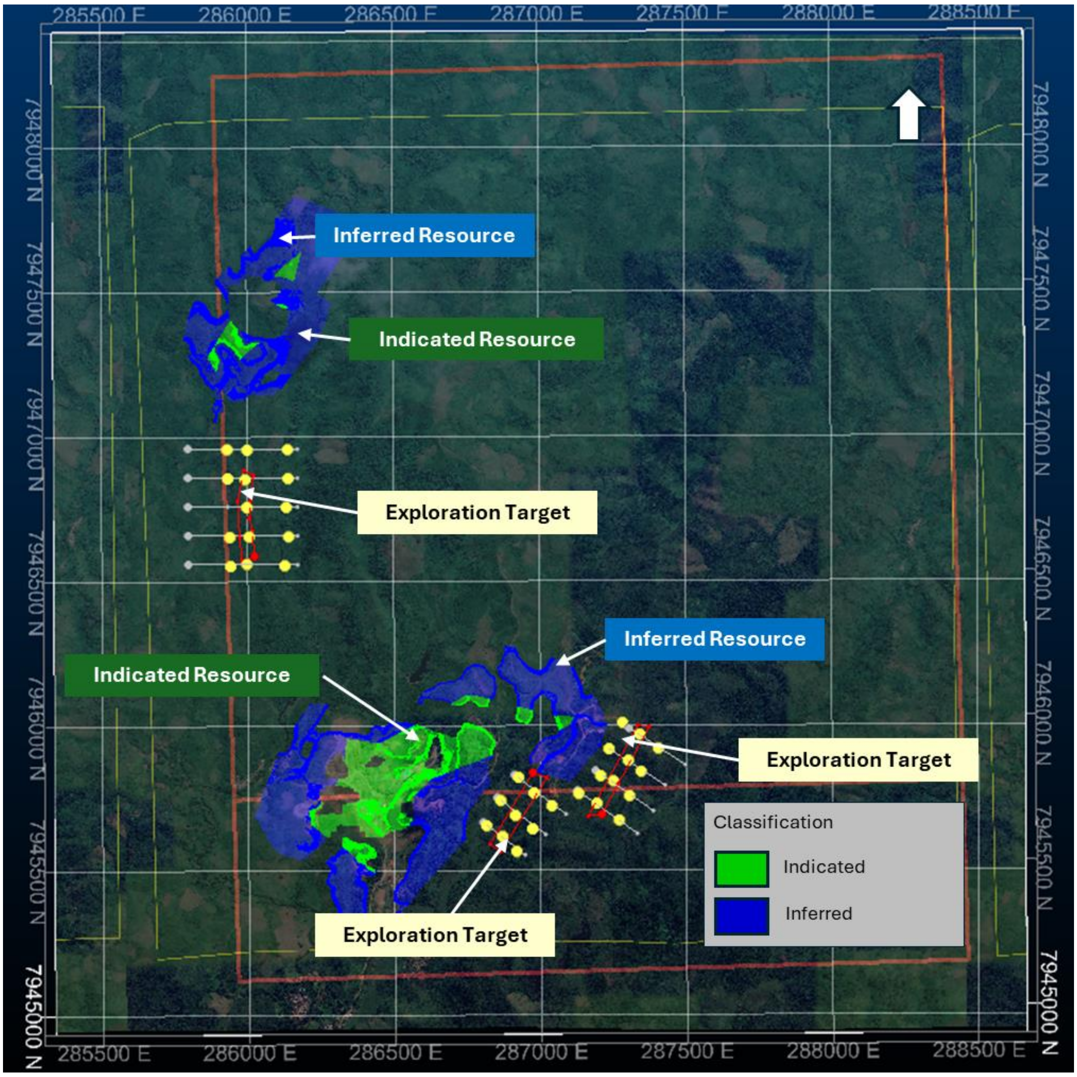


Figure 4-16: Sahamamy Exploration Target area and Tirupati Drilling Plan

4.11 Mining

No Ore Reserves are reported for the Sahamamy project.

Mining production at Sahamamy is understood to have commenced prior to the Company's purchase of the Property in January 2018, and was mined until March 2024 when it was placed on care and maintenance.

Mining initially fed a proof of concept mill at a rate of 3,000 tpa concentrate production; however, this was upgraded to an 18,000 tpa plant between December 2022 and February 2023 following stabilisation of production at Sahamamy. Previous mining areas (Figure 4-17, green polygons) are shown in the context of mineralised areas (Figure 4-17, black polygons). SRK notes that the mineralised areas shown do not necessarily correspond to the Mineral Resources reported for the project, and the provenance of these shapes is unknown.

Limited mining production statistics have been provided for the project for the period February 2023 to March 2024. These statistics do not include tonnes mined, but it is understood that the Company was not operating a RoM stockpile during this period so it has been assumed that ore tonnes mined are equal to processed tonnes in the same period. During this time, the Company reports that 163,796 t of ore were processed at an average grade of 3.65% TGC. Monthly ore processing rates are between 21,000 t (March 2023) and 4,976 t (February 2023), excluding periods where there was no production.

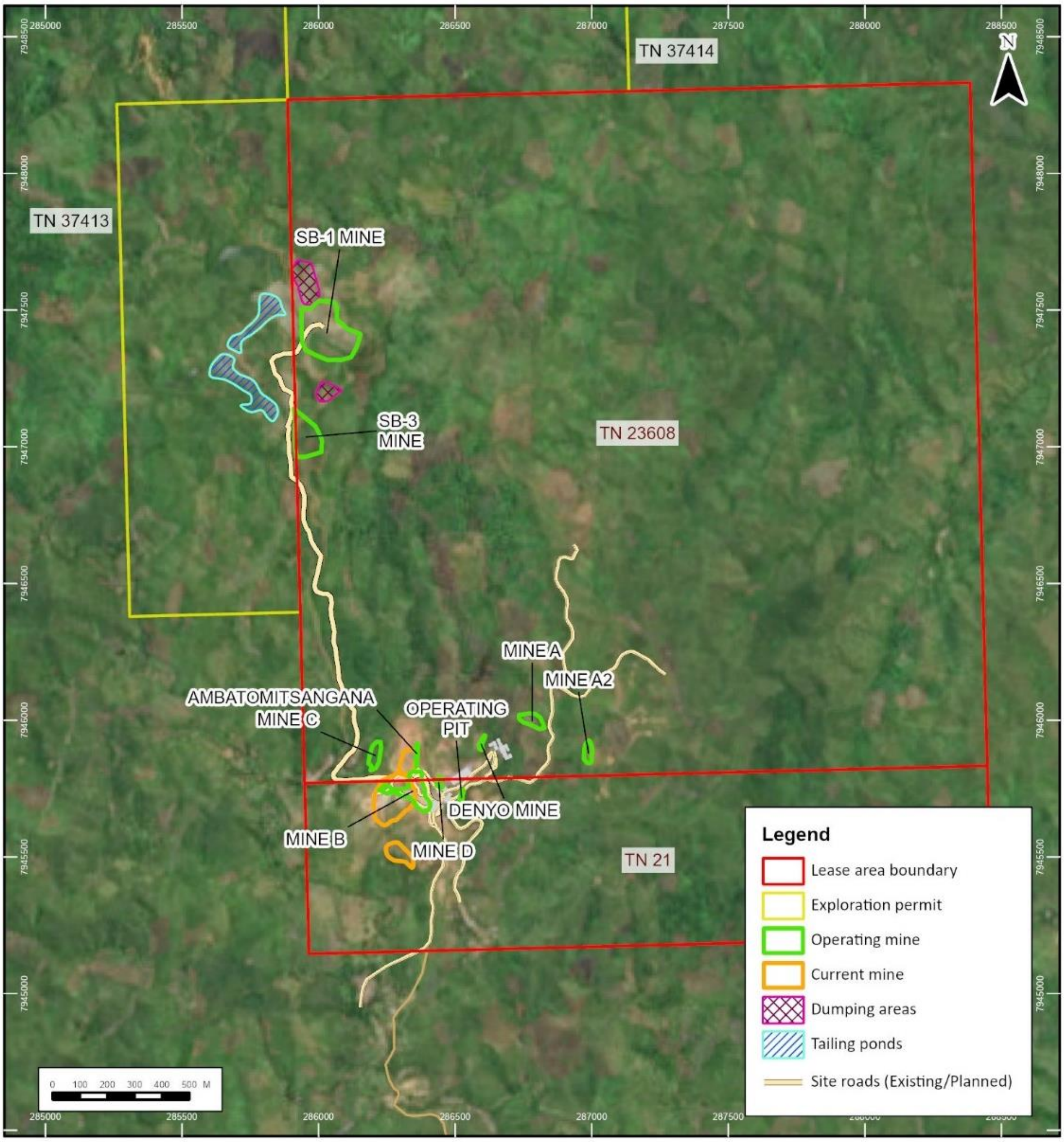


Figure 4-17: Sahamamy Mining Areas

4.12 Processing

4.12.1 Plant Historical Performance

The processing facilities at Sahamamy are reported as being identical to those operated at Vatomina with PCU located in the mining area, rejecting coarse clean waste in the form of silica sands, and a FCU located in the main mine facility.

The monthly production figures for the Sahamamy operation for the operating periods reported are shown in Table 4-20. The monthly records indicate that the processing facilities were capable of producing a graphite concentrate with a maximum graphite content of 94%, slightly short of the 96% target. Production of 4,433 t in 2023-24 was well short of the name-plate 18,000 tpa concentrate.

Table 4-20: Sahamamy Monthly Production Figures

Month	Ore Feed (t)	Ore Grade (FC%)	Product (t)	Product (FC%)	Recovery (%)
Feb 2023	4,976	3.55	146	93.5	77.2
Mar 2023	21,000	3.54	682	93.5	85.8
Apr 2023	12,000	3.93	450	93.6	89.4
May 2023	11,500	4.35	442	93.8	82.9
Jun 2023	9,088	3.79	316	93.7	85.9
Jul 2023	11,742	3.85	409	93.9	85.9
Aug 2023	13,390	4.26	462	93.6	75.8
Sep 2023	12,000	4.25	412	93.4	75.4
Oct 2023	19,500	3.45	545	93.2	75.5
Nov 2023	17,000	3.49	484	92.4	75.4
Dec 2023	-	-	-		
Jan 2024	6,500	3.11	193	91.2	87.1
Feb 2024	16,500	2.84	415	92.1	81.6
Mar 2024	8,600	3.17	305	70.5	78.9
Monthly Average	12,600	3.66	405	91.4	81.2

4.12.2 Plant Facilities

Since mothballing the operation, two PCU have been re-located to Vatomina where they operate as PCU3 and PCU4 located in the Old Mine. The remaining two PCU are also in the process of being re-located to Vatomina and will operate as PCU 5 and PCU 6 located in BK4.

4.12.3 SRK Comments

The inability to produce a saleable concentrate requires an investigation into the metallurgy of the Sahamamy deposit. A thorough testwork campaign should be undertaken to ensure that finished product can be produced at Sahamamy.

4.13 Environmental, Social and Governance Factors

SRK has undertaken a high-level, desktop-based review of environmental, social and governance information provided by Tirupati. The review included brief discussions with representatives of the company to clarify understanding of some issues.

Following the review, SRK notes the following risks which could impact the reasonable prospects assessment for this project:

- It is not clear whether the settlement pond and overflow system constructed within the 307413 licence area have been lawfully constructed in terms of environmental legislation. There is a risk that the regulator may impose penalties on Tirupati as a result. SRK notes, however, that evidence of the existence of this facility has been indirectly communicated to the regulator via inclusion of the pond on performance reports relating to PE 23608.
- Areas of the site that are prone to erosion have been identified and actions taken to curb erosion via restoration of vegetation and construction of erosion controls.

- Whilst operations at Sahamamy and Sahasoa have been suspended, the settlement ponds remain present on site. SRK has not been able to review the existing capacity in these systems and the extent to which they might overflow during high rainfall events. Tirupati noted in its ESG report to the regulator that the Ambovinany River has been contaminated by water from the settlement ponds and the project is obliged to supply residents with drinking water. Four gravity tanks were installed for this purpose.
- SRK has not verified whether all reports to government regulators are up to date. A previous report (for the 2022-23 year) was provided for review and it includes a comprehensive overview of activities undertaken on site during that period and the environmental and social monitoring programmes in place.
- Soil management programmes are in place with the objective of managing erosion. These include use of vegetation establishment on exposed slopes and drainage control structures.
- A nursery has been established to propagate species that can be replanted on impacted areas as part of the mine's restoration programme.
- SRK has not reviewed information related to routine engagements between the mine and local communities. The ESG reports to the regulator note that complaints were received via the mine's complaint management system relating to settlement of payments to occupants of land on which the preconcentration unit and ancillary works was established.
- To SRK's knowledge a mine closure plan has not been developed further than the conceptual objectives described in the approved EIE. A mine closure liability was also not available for review. The EIE commits Tirupati to the removal of infrastructure on the premises and rehabilitation of the area on closure. Mining benches will be revegetated and stabilised.

4.14 Redevelopment Programme

In March 2024, the mine was placed on Care and Maintenance, reported by the Company to be due to a combination of poor-quality material being mined, and the lack of a proper mine development strategy. Due to a lack of funding, undertaking the additional drilling, sampling, design and scheduling works to support a revised strategy was deemed unaffordable.

The Company has provided SRK with a proposed work programme to support re-starting operations. The plan is un-costed and there is no accompanying schedule, however the Company has stated that it has prepared an indicative cost estimate of between USD 5 million and USD 6 million for completion of the activities. They also note that undertaking this work would likely require additional financing or a joint-venture (JV) partnership.

A summary of the work programme is as follows:

- Secure new mining licences
- Construct a 10 km road from the current Sahamamy site to the new deposit area
- Upgrade the existing hydropower plant to a capacity of 700kW
- Procure and install the following equipment to support expanded plant throughputs:
  - two new PCUs at strategic locations
  - a double-deck screen with ~40 t per hour capacity at each PCU
  - an additional centrifuge for the FCU
  - A 5 t per hour electric dryer for drying graphite concentrate

- Upgrade the existing camp and guest house to support a larger workforce and visiting personnel.
- Extend the tailings dam or storage facility to ensure it has sufficient capacity to accommodate the higher tailings output from increased plant throughput.
- Install an automated sand removal and stacking system at each PCU
- Establish a comprehensive spare parts inventory management system and procure initial critical spares for machinery and equipment.
- Commence stripping of overburden at the new deposit or expanded pit area.
- Supply the necessary mining fleet (excavators, trucks, dozers, etc.) and begin mining operations, including building up a Run-of-Mine (ROM) ore stockpile.
- Develop and introduce an Environmental, Social, and Governance programme at the site. This may include initiatives like community development projects, environmental monitoring systems, workforce training, and safety programs. The ongoing costs of ESG activities will be treated as operating costs of the project.
- Repair and improve the existing main road to the mine as needed

4.15 SRK Conclusions

4.15.1 Geology and Mineral Resource

SRK has reviewed the geological databases and wireframes provided by the Company for the Sahamamy deposit, and is satisfied with the quality of the data and interpretations. Based on these data, SRK has prepared Mineral Resource Estimates for the deposit with Mineral Resources totalling 6.4 Mt at 4.2%TGC for 270 kt of contained graphite, including 1.2 Mt of Indicated Mineral Resources at 4.0% TGC for about 50 kt of contained graphite. The Mineral Resources of the project are summarised in Table 4-21.

Table 4-21: Sahamamy Mineral Resources, 30 September 2025

Deposit	Resource Classification	Tonnes (Mt)	Grade (%TGC)	Contained Graphite (kt)
Sahamamy	Measured	0.0	0.0	-
	Indicated	1.2	4.0	50
	Measured and Indicated	1.2	4.0	50
	Inferred	5.2	4.3	220
	Total Resource	6.4	4.2	270

During review, SRK identified certain aspects of the project where improvements can be made to improve confidence in the Mineral Resources and to support future conversion to Ore Reserves. These recommendations are summarised below:

- Understanding the structural complexity of the deposits could be improved with additional data collection from mapping and diamond core drilling.
- The availability of density data is noted as being limited for some areas of the deposit, which may result in wider variances to actual mined tonnes.
- Improvements can be made to the grade estimation routines to improve visual validation of block estimates.

4.15.2 Metallurgy, Processing

With no metallurgical testwork available and the little plant production information indicating that the Sahamamy operation was not able to achieve a final product grade > 94 % graphite, the deposit should be re-analysed and a new metallurgical campaign carried out to establish if a saleable product can be produced and what the process design criteria to achieve this will be.

4.15.3 ESG

The key Sahamamy ESG issues relate to water contamination and community relations. Tirupati is aware of these and has developed plans to address them. The status of their implementation cannot be assessed or confirmed by SRK ahead of a site visit. SRK has raised a potential permitting risk related to the settlement ponds located on TN 37413. SRK notes that no assessment of current environmental and social liabilities has been undertaken.

4.15.4 Work Programme

The Company has prepared a preliminary work programme for the Sahamamy project, which remains to be detailed, costed, committed to and commenced.

4.15.5 Key Risks

SRK perceives the following risk associated with the Sahamamy project.

- There is a risk related to community dissatisfaction with the Sahamamy project due to claims related to compensation for land use combined with ongoing water contamination issues.
- There is a legal risk relating to the construction and operation of the settlement ponds within the exploration licence area (307413) that do not appear to have been established with the necessary approvals from environmental authorities.
- The Sahamamy process plant averaged a final concentrate grade of 91% (FC). Metallurgical testwork on representative samples of the ore should be conducted as a first step in any plans to re-open the operation.
- A closure plan and associated financial liability has not yet been developed. These will be required before the company can declare Ore Reserve.

5 MONTEPUEZ

5.1 Introduction

The Montepuez Graphite project in northern Mozambique is a major flake graphite development, initially acquired by Suni Resources S.A. (Suni), a subsidiary of Battery Minerals Limited (BAT) in 2014. Early exploration included airborne VTEM surveys and drilling, which led to the discovery of the Buffalo, Elephant, and Lion deposits. A maiden resource was declared in 2015, followed by upgrades in 2016 that supported geotechnical, hydrogeological, and metallurgical studies, culminating in a Definitive Feasibility Study (DFS) in 2017. Continued drilling through 2017–2018 enhanced resource confidence and resulted in updated Mineral Resource and Ore Reserve estimates. Suni Resources S.A. secured a 3,666.88 ha mining license in 2018, which is a subsidiary of Tirupati Graphite since the acquisition in 2023. These systematic exploration and development efforts have established Montepuez as a strategically significant graphite project.

Suni declared *force majeure* for in relation to the Montepuez project on 15 December 2021. *Force majeur* has not been lifted at the Publication Date of the CPR. Tirupati will continue to assess the situation in country, and the management will take a call on further proceedings.

5.2 Location

The Montepuez Graphite project is located in the Cabo Delgado province in Northern Mozambique (Figure 5-1). The project site is roughly 60 km northwest of Montepuez's regional centre and 260 km inland to the west of Pemba, a coastal city and port. The Montepuez project is not located within or adjacent to protected areas or national parks. It is, however, located upstream of the Quirimbas National Park. This park extends to the Quirimbas Islands in addition to the mainland area.

Figure 5-1: Montepuez Project Location

5.3 History

The Montepuez Graphite project was acquired by Battery Minerals Limited in September 2014, and early reconnaissance confirmed limited surface exposure of graphitic rocks, requiring geophysics and drilling to define mineralisation. An airborne VTEM survey completed in October 2014, identified strong conductors that led to the discovery of the Buffalo, Elephant, and Lion deposits during the 2014–2015 drilling campaigns. A maiden resource was declared in November 2015, followed by further drilling in 2016 that significantly upgraded the resource and supported geotechnical, hydrogeological and metallurgical studies. By February 2017, a DFS was completed, reporting Mineral Resources and Ore Reserves. Continued infill and grade control drilling through 2017–2018 improved confidence in the Buffalo and Elephant deposits, with updated resource and reserve estimates published in mid and late 2018. This progression from acquisition through geophysical targeting, drilling, resource definition and feasibility has established Montepuez as a significant graphite development project in Mozambique.

5.4 Regulatory Framework

This section describes the main legal requirements that the project will be expected to adhere to as well as the current status of permits required for project development.

5.4.1 Mining legislation

Legal Requirements

The Mining Law (Law 20/2014, as amended) governs mining approvals in the country. Mineral rights are awarded by the Ministry of Mineral Resources and Energy, or provincial governors. The main titles that are relevant to this Report include:

- Prospecting or exploration licence; these are granted for a five year period and cover up to 19,998 ha.
- Mining Concessions are awarded to legal entities who are able to demonstrate technical and financial competency and that are incorporated in Mozambique. The licences are valid for 25 years and renewable for additional 25-year periods. Development, extraction, treatment, processing and disposal of minerals are included in these approvals.

Mozambique is currently reviewing its mining legal framework to modernise regulations, increase transparency, strengthen local content requirements, mandate partial domestic processing of strategic minerals and formalise state participation in strategic projects.

Current Status

Tirupati Graphite through its subsidiary company Suni Resources S.A. has a mining license/permit in Mozambique for an area of 3,666.88 ha. Montepuez Graphite is held under a mining concession granted on 22 February 2018 and valid for 25 years to 22 February 2043, with an option to renew for a further 25 years.

The ownership structure of Suni Resources S.A.; 99.997% held by Tirupati, 0.002% by Mr. Shishir Poddar and 0.001% by Ms. Puruvi Poddar.

Table 5-1: Montepuez Mineral Tenure Summary

Licence No.	Status	Area (ha)	Awarded	Expiry	Commodity
8770C	Mining license	3666.88	February 2018	February 2043	Graphite, Vanadium

5.4.2 Environmental legislation

Legal Requirements

Mining activities must also comply with the requirements of the Environmental Regulations for Mining Activity which classify operations based on severity of the expected environmental impacts. Exploration projects typically require simplified environmental procedures whereas mining operations will be subject to a full environmental impact assessment (EIA). Environmental management plans (EMPs) must also be developed that describes how impacts will be managed, monitored and the mining activity rehabilitated on closure.

Water permits are required for many activities typically undertaken by mining companies. These are issued in terms of the Water Law (Law 16/91 of 3 August 1991). Licenses are required for the abstraction of surface water and groundwater, discharge of treated mine water, storage or diversion of water.

Holders of mining concessions must provide and maintain an environmental financial guarantee to secure compliance to the approved environmental management and mine closure plans. These guarantees must be paid prior to the commencement of construction and adjusted over the life of the concession if plans or cost estimates change.

Current Status

The concession is supported by a DUAT (land use right), an environmental licence, and a water licence, making the project fully permitted, with an expiry date of November 2025. SRK has been advised that the licence validity periods are paused for the duration of the *force majeure* declaration and that these can be re-activated once the project resumes. The lease area (Mining license Number 8770) covers approximately 3666.88 ha (36.67 km^2). Within the limits of the CPR, SRK has not taken responsibility for undertaking a validation of these licences or the *force majeure* status.

5.5 Setting

5.5.1 Accessibility

Montepuez Graphite is accessible via a combination of sealed and unsealed roads from the town of Montepuez, which connects to the regional road network and nearby ports is situated in Cabo Delgado Province, northern Mozambique, approximately 185 km west-southwest of the regional port city of Pemba, which provides road, port and airport facilities. The project area is accessible year-round via a combination of sealed highways and laterite/gravel roads,

5.5.2 Climate

The climate is tropical with distinct wet and dry seasons, the wet season occurring between November and April and the dry season from May to October, which influences field activities and mine scheduling.

5.5.3 Local Resources

Local resources include availability of unskilled labour from surrounding villages, with skilled personnel, accommodation and basic services accessible from Montepuez town.

5.5.4 Infrastructure

Infrastructure in the region is developing, with road, port and power supply networks improving, and the project design includes dedicated mine-site facilities, tailings and water storage infrastructure.

5.5.5 Physiography

The area is characterised by gently undulating plains with low relief and seasonal drainage channels, providing favourable conditions for open-pit mining and site infrastructure development.

5.6 Geological Setting and Mineralisation

5.6.1 Regional Geological Setting

The project spans the tectonic boundaries of the Nairoto, Xixano, and Montepuez Complexes and is located within the Xixano Complex, a significant lithotectonic unit in northern Mozambique (Figure 5-2). The Mozambique Belt, which contains several periods of Neoproterozoic to Cambrian orogenesis linked to the formation of Gondwana, is made up of these complexes taken together.

A varied suite of metasupracrustal rocks that envelop cores of primarily mafic igneous rocks and high-grade granulites dominate the geological framework of the Xixano Complex. A regional synform that trends from north-northeast to south-southwest, indicating extensive folding and tectonothermal reworking during Pan-African episodes, characterizes the complex's structural architecture.

The paragneisses are notably heterogeneous and include:

- Mica gneiss and schist, which often display pronounced foliation and mineral lineation related to regional deformation.
- Quartz-feldspar gneiss, interpreted as metamorphosed felsic sedimentary or volcanic precursors.
- Metasandstone and quartzite, which represent sedimentary protoliths deposited in supracrustal sequences.
- Marble horizons, which locally preserve relic carbonate stratigraphy and may serve as key stratigraphic markers.

Amphibolite facies predominates in the metamorphic grade of these paragneisses, suggesting medium- to high-grade metamorphic circumstances with assemblages such hornblende + plagioclase ± garnet; however, rocks reach granulite facies in restricted areas, especially within the granulitic cores. These rocks contain high-temperature mineral assemblages such garnet + feldspar + pyroxene, which show deep crustal levels of metamorphism.

Important age limitations on the complex are provided by geochronological investigations. A weakly deformed meta-rhyolite intercalated within the metasupracrustal sequence is the oldest unit that has been dated, yielding a reliable extrusion age of 818 ± 10 Ma. This shows that before the peak Pan-African tectonothermal episodes (c. 600–500 Ma), volcanic activity was occurring in the area throughout the early Neoproterozoic.

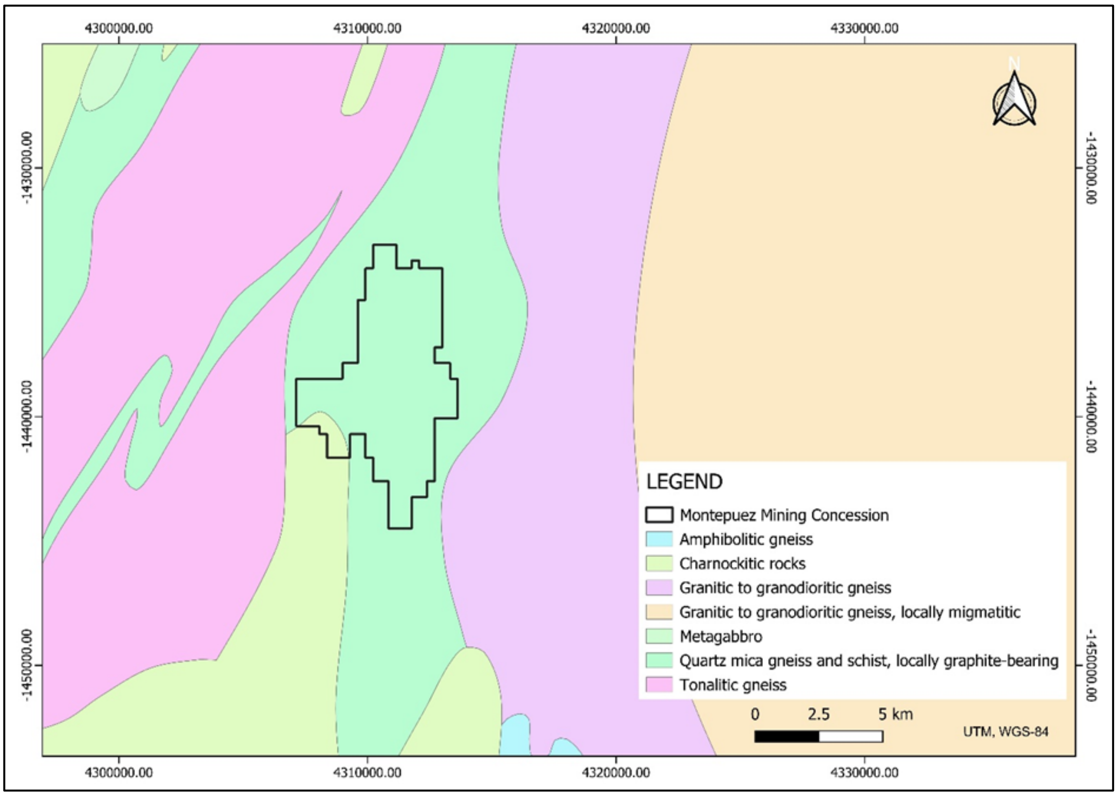


Figure 5-2: Regional Geological Setting

5.6.2 Geology

The Montepuez Graphite project-scale geology consists of an accumulation of dolerite meta-sediment, amphibolite, and psammite rocks, along with graphitic meta-sediments and graphitic schist, with a few minor cross-cutting pegmatite vein intrusions.

With 2–4 m of remaining red-brown soils, 13–15 m of saprolite, and oxidation along joints (transition zone) that extend to 20–30 m below the surface, the weathering profile is comparatively uniform throughout the project. The occurrence of new sulphides such as trace sphalerite, chalcopyrite, pentlandite, and pyrrhotite, which can be magnetic, usually correlates with this contact. The most prevalent sulphide found in drill core is pyrrhotite.

From a research perspective, the weathering profile extends 15 m past the joint oxidation horizon to 45 to 50 m below the surface, where new garnet, chlorite, and biotite are seen in the rocks. In the regolith profile, the matrix's feldspar component probably turns into clay.

Psammite and amphibolite are primarily non-graphite bearing, while graphite schist 1 (GS1) and 2 (GS2), graphite schist quartz feldspar (GSQF), and pegmatite (PEG) are all ± graphite bearing. Below is a description of each geological unit using the definitions used in core logging.

Graphite Schist 1 (GS1): A high-grade graphite schist (15–25% TGC), typically massive to poorly foliated with occasional banding. It contains mainly fine flake graphite, locally coarser where carbonate is present, within a fine quartz-feldspar matrix. Accessory minerals include minor carbonate and trace sulphides. The unit shows high strain and shearing, appears metasedimentary, and becomes soft and friable when weathered.

Graphite Schist 2 (GS2): A massive to laminated graphitic schist (5–10% TGC) with fine to coarse graphite disseminated or foliation controlled in a quartz-feldspar matrix. Common accessories include 1–5% pyrrhotite and trace green sericite. Feldspar-rich and friable when weathered, the unit resembles metasediment, with graphite largely replacing primary amphibole textures.

Graphite Schist Quartz Feldspar (GSQF): A foliated quartz–feldspar rock with variable graphite, ranging from disseminated grains to coarse agglomerations. Interpreted as a tectonised, altered amphibolite, it shows evidence of pure shear, while simple shear features (cs fabrics, stretching lineation, etc) are absent or weak in drill core.

Pegmatite (PEG): Consists of medium- to coarse-grained quartz–feldspar intrusions with variable graphite. Contacts may be sharp or gradational (especially within GSQF), and thickness ranges from centimetres to several metres. Crosscutting relationships indicate emplacement penecontemporaneous to late deformation.

Psammite (SAM): A grey, fine- to medium-grained quartz-rich rock with well-developed banding, observed only in the southern part of the Elephant deposit.

Granulite (GLT): A grey to bleached white, massive to banded rock with fine- to medium-grained quartz–feldspar, minor pyroxene (1–3%), and patchy garnet (altered to chlorite–biotite). Graphite occurs as 1–2% disseminations or 5–10% in banded zones (0.5–5 m). It weathers to soft, clay-rich saprolite. Massive types resemble amphibolite, while banded sections resemble psammite with graphite and are locally termed GS2 or GSQFB.

Amphibolite (AMP) is a dark green, medium-grained feldspar–amphibole–quartz rock with weak to no tectonic fabric; finer-grained variants also occur.

The main deposits, Buffalo and Elephant, occur 1.5 km apart and are characterised by tightly folded graphitic schists. Buffalo shows a 1 km strike length and remains open along strike and at depth, while Elephant extends for 2 km with a shallower dip and also remains open at depth. Exploration commenced in 2014 using airborne VTEM surveys followed by multiple drilling campaigns, leading to the discovery of Buffalo, Elephant and Lion deposits. Diamond drilling provided detailed geological, structural and metallurgical data, supported by RC drilling for grade control.

5.6.3 Style of Mineralisation

The Buffalo gneiss and schist units in the Xixano Complex have flake graphite mineralization. Graphite, which occurs as scattered flakes in schist and gneiss, is the result of the metamorphism of organic carbonaceous materials into high-grade amphibolite facies. Crystalline graphite, composite flakes, homogeneous flakes, or globular carbon could have been the original depositional source of graphite. The mineralized schist strata usually exhibit moderate to steep dips, which is consistent with the structure of the project region, according to field examinations of outcrops.

5.6.4 Deposit Type

Buffalo and Elephant deposits are separated 1.5 km (E-W) across strata. The project contains lower-grade units (GS4) stacked with high-grade flake graphite schists (GS1–GS3). Metamorphosed carbon-rich sediments influence mineralization, which is linked to mica and sericite alteration. There are trace amounts of sulphides. Both lower-grade background mineralization and high-grade coarse-flake zones can be found from the various schist types.

5.7 Exploration

Exploration at Montepuez Graphite began with the project acquisition in September 2014, followed by a VTEM geophysical survey in October 2014, which later merged with competitor data to cover the Buffalo, Elephant, and Lion areas. Activities completed are summarised in Table 5-2.

Table 5-2: Summary of activities at Montepuez Graphite by Battery Minerals

Date/Period	Exploration Activity
29 Sep 2014	Project acquired
Oct 2014	VTEM survey flown over 52 km² (400 m line spacing)
Jan 2015	VTEM survey merged with competitor dataset covering Buffalo, Elephant and Lion
Dec 2014	First diamond drilling program (37 holes, 3,229 m) at Lion and Buffalo
May-Dec 2015	Second drilling program (63 holes, 5,396 m: 5 RC & 58 diamond), discovery of Elephant deposit
Nov 2015	Maiden Resource: 61.6 Mt at 10.3% TGC and 0.27% V2O5 (6.3 Mt graphite, 163 kt V)
Jul-Dec 2016	Third drilling program (31 diamond holes, 2,199 m) at Elephant; 16 geotechnical holes (TSF, WSF); 17 hydrogeological holes
Feb 2016	Final Actlabs results received for Buffalo deposit
Sep-Oct 2016	Final Actlabs results received for Buffalo deposit
Feb 2017	DFS announced; revised Mineral Resource and Ore Reserve: 105.9 Mt at 7.74% TGC; Ore Reserve 41.4 Mt at 8.8% TGC
Nov 2017 - Mar 2018	Infill RC grade control drilling at Elephant and Buffalo (weathered and transitional zones)
Jul 2018	Updated Mineral Resource Estimate announced for Elephant deposit
Oct 2018	Updated Group Resources including revised Buffalo estimate
Dec 2018	Updated Montepuez Ore Reserve announced

5.7.1 Topography

The Montepuez Graphite project area is characterised by gently undulating terrain with low relief, typical of northern Mozambique. The landscape is dominated by broad plains with occasional low hills and ridges formed by more resistant rock units. Elevations are moderate, and drainage is controlled by seasonal streams and small rivers that cut through the project area. The generally subdued topography provides favourable conditions for infrastructure development and open-pit mining activities.

5.7.2 Geological Mapping

Geological mapping at Montepuez was challenged by limited outcrop exposure (5–10%), so lithologies were mainly defined through drilling and projected to surface where cover was present, with maps updated during successive exploration campaigns. The mapping identified key rock types such as graphitic schists, amphibolite, psammite and pegmatite, which formed the basis of the deposit-scale geological models. To complement this work, an airborne Versatile Time Domain Electromagnetic (VTEM) survey was flown in October 2014 across 52 km², later merged with competitor data, which successfully delineated conductive zones associated with the Buffalo, Elephant, and Lion deposits. The geophysical data provided critical targets for drilling in concealed areas, confirming the presence of graphite-bearing schists and guiding resource definition.

5.7.3 Diamond Drilling

Between 2015 and 2018, Battery Minerals Limited carried out resource drilling and exploration at Buffalo. A total of 10,297 m of drilling completed, including diamond drill holes (DDH), RC holes, trenches, and water bores. Core sizes were typically HQ3 and NQ3, with a recovery rate of 96% stated. The report made no reference of the drill hole spacing. Using the same DE710 machinery and a truck mounted, Mitchell Drilling contractors completed the majority of the resource drilling. In 2016, 16 hydrogeology holes were drilled using MD Schram, and Agua Terra drilled RC holes and local camp water boreholes. A nominal 4.5 inch blade bit was used to achieve drilling penetration instead of a normal hammer bit.

A summary of the exploration and resource drillholes in Montepuez is given in Table 5-3 and illustrated in Figure 5-3. The summary of exploration and resource drillholes for the main 02 prospect, Buffalo and Elephant, are shown in Table 5-4.

Table 5-3: Montepuez Annual Exploration Summary (Source: Montepuez Graphite Implementation Project Report, 2019)

Year	Hole Type						Total Drilling (m)
	Trenches (m)	Trenches (m)	Diamond Drilling (m)	Diamond Holes No.	RC Drilling (m)	RC Holes No.	
2015	0	0	6,439.33	55	214	5	6,653.33
2016	149	4	4,259.38	39	0	0	4,408.38
2017	0	0	0	0	7,521	358	7,521.00
2018	0	0	0	0	3,841	155	3,841.00
TOTAL	149	4	10,698.71	94	11,567	518	22,423.71

Table 5-4: Buffalo and Elephant Deposits Drilling Summary

Hole Type	Buffalo project Area		Elephant project Area	
	Hole/ Trench No.	Total Meterage (m)	Hole/ Trench No	Total Meterage (m)
RC	244	5,044	240	4,968
DD	39	4,889	30	3,475
Water Bore	8	946	6	561
Trench	2	48	0	0
Total	293	10,297	276	9,004

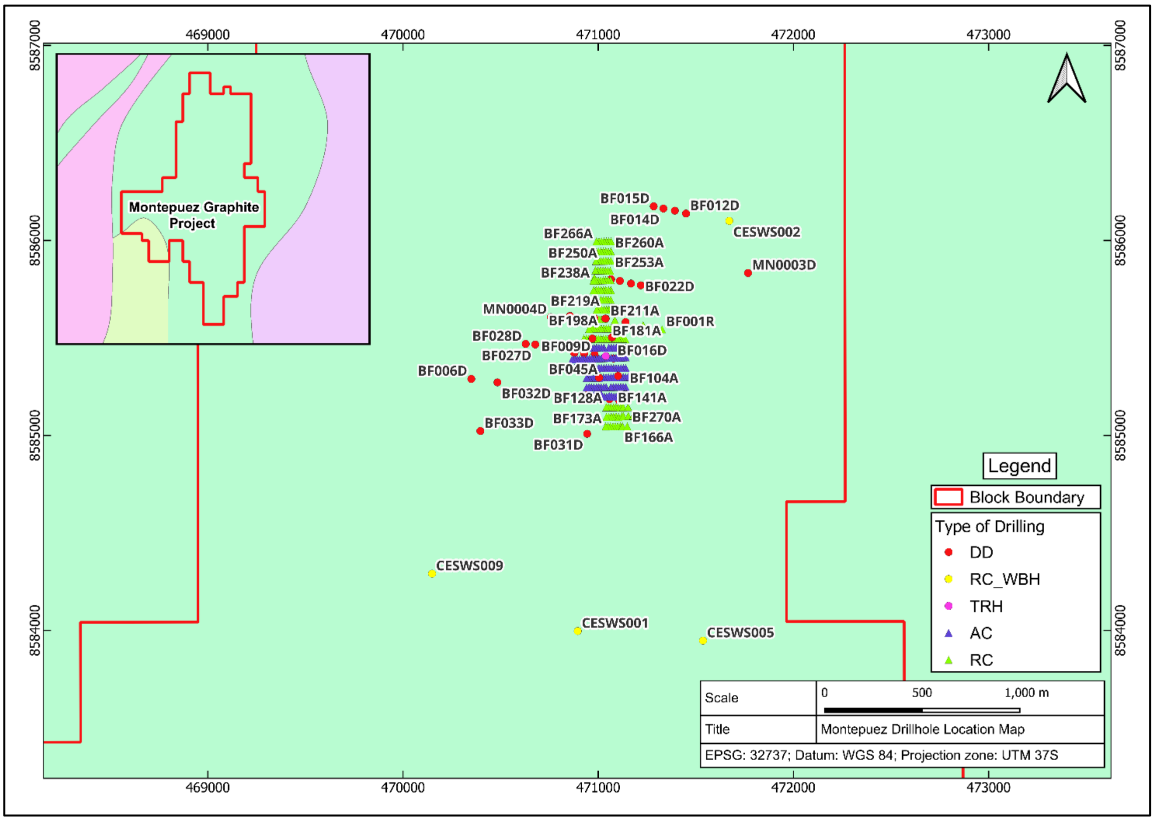


Figure 5-3: Montepuez Project Drilling Locations

5.7.4 Geological Logging

Battery Minerals Limited personnel systematically logged all drill holes for a wide range of geological and structural characteristics, including as lithology, mineralization, alteration, veining, and structural orientation. The diamond drill core was photographed in both wet and dry stages to offer a permanent visual record, and it was carefully measured for Rock Quality Designation (RQD) and core recovery, allowing for a quantitative assessment of rock mass integrity and drilling performance. Logging was first detailed on standardized paper logging sheets to ensure uniformity and accuracy in field observations.

To reduce data entry errors and provide controlled access, these documents were then converted into a safe, locked Microsoft Excel spreadsheet format. To ensure quality control, data management, and compliance with geological modelling and resource estimation tools, the verified digital dataset was subsequently imported into a Microsoft Access relational database and combined with other drilling datasets. Traceability, data integrity, and compliance with industry best practices for geological data management were guaranteed by this approach.

5.7.5 Sample Preparation

All drill core samples were sent to the ALS Minerals Laboratory, Johannesburg, South Africa (ALS Johannesburg), for initial preparation. To eliminate any remaining moisture, the complete sample was first oven-dried at 105°C. After that, it was crushed to a nominal particle size of -2 mm. An LM5 ring pulverizer was used to grind a representative 300 g sub-sample of this crushed material to a fineness of more than 85% passing -75 µm, guaranteeing homogeneity of the sample pulp. A Jones riffle splitter using multiple feed cycles was then used for dividing the freshly collected sample, producing a typical sub-sample weighing between 100 and 200 g. After being safely packed, this finished pulp was sent to the ALS Minerals Laboratory, Brisbane, Australia (ALS Brisbane), where it was subjected to elemental tests and geochemical examination for graphite content.

5.7.6 Sampling

Drilling at Montepuez Graphite focused on zones having visible graphite mineralization. Diamond core drilling was the single method used, with an H, N core diameter and typical triple-tube drilling procedures, resulting in outstanding core recoveries of 96%. To preserve precision and consistency, the mineralised core was regularly sampled as quarter core, with intervals of 1 or 2 m cut using a normal electric core saw. In locations with pegmatite intrusions or west materials even or either side of the mineralised zone there is no information in the report. Approximately 3088 samples were selected from the drilling program. To ensure uniformity and minimize sampling bias, all samples were collected from the same side of the drill core throughout the program. The entire RC hole was sampled and assayed at 1 m intervals. This careful sampling approach delivered high-quality, representative material for geochemical and metallurgical testing while maintaining the remaining core's integrity for future investigation.

5.7.7 Assay

At ALS Brisbane, the prepared samples underwent analytical techniques designed to characterise both the graphite content and the broader geochemical profile of the material, Ash-01 Ash Content, ME-GRA05g Loss on Ignition, ME-ICP06 Major Oxides, ME-MS81 Ultra Trace Level Method, ME-ACD81 Four Acid Digest, Method C-IR18 Total Graphitic Carbon, Method C-IR07 Total Carbon, and Method S-IR08 Total Sulphur.

RC grade control drilling samples were sent to Bureau Veritas, South Africa, for preparation and analysis. Bureau Veritas followed the same method as ALS Brisbane. Umpire analysis was performed on pulps taken from Bureau Veritas and delivered to ALS Johannesburg for QAQC.

5.7.8 QAQC

At a frequency of around one in every 20 samples, standards (certified by Geostats Pty Ltd :'GGC-01', 'GGC-03', 'GGC-04', 'GGC-05', 'GGC-06', and 'GGC-10' and a vanadium standard 'AMIS-0346' certified by African Mineral Standards), blanks, and field duplicates were systematically inserted into the sample stream to ensure data quality and integrity. This is summarised in Table 5-5. The accuracy and precision of the laboratory were continuously monitored during the process of analysis. Battery Minerals Limited geologists supervised the quality control program and frequently examined and verified the performance of the inserted control samples.

Table 5-5: Montepuez Graphite QAQC Control Sample Summary

Sample Type	Buffalo	Elephant
Total QC Samples Analysed	457	429
Pulp Duplicates	0	0
Coarse Duplicate	31	27
Blanks	212	201
Certified Reference Material	**214**	**201**
GGC01	23	28
GGC03	41	32
GGC04	25	26
GGC05	26	24
GGC06	40	29
GGC10	47	46
AMIS0346	12	16

5.7.9 Database

All field data was recorded in the MS Excel spreadsheets which were verified and validated and then transferred to a MS Access database.

5.7.10 SRK Comments

Battery Minerals Limited has carried out a systematic exploration in the Montepuez Graphite project in stages since 2014. The initial work was to establish the presence of graphite in the license area by carrying out mapping and geophysics (VTEM). Followed by the identification of the potential targets, trenching, RC drilling and core drilling was used to test the anomalies, thus defining the Elephant, Buffalo and Lion deposits. Battery Minerals Limited carried out further exploration works, RC drilling as an in-fill, to establish the continuity of the graphite deposits. Battery Minerals Limited reported Mineral Resources for Elephant and Buffalo deposits in accordance with the guidelines of JORC Code 2012.

Based on the MRE Reports prepared by RPM Global and Ashmore Advisory, the Montepuez project has high grade graphite along with Vanadium.

Battery Minerals Limited followed the industry standard practices in the drilling work by maintaining the drilling quality, recording of geological logs, sampling and sample assaying at reasonable confidence.

The core drilling used H and N sizes using a triple tube drilling technology to ensure maximum core recovery. The borehole collars were surveyed using DGPS by a survey agency Geosurvey. The downhole deviation for core drilling was measured and recorded at 30m intervals using multi-shot camera by the drilling agency. For RC drilling, the downhole deviation survey was not carried out since the boreholes were short in nature, around 36 m. Overall, the core recovery was more than 90%.

Sample lengths varied between 1 and 2 m intervals for drill cores and was cut into quarters using an electric saw for sample preparation. The cut samples were sent to ALS Johannesburg for sample preparation. The pulp fraction was sent to ALS Brisbane for analysis. The analytical techniques suitable for the graphite and vanadium were adopted by ALS.

Battery Minerals Limited introduced QAQC samples in the assay sample batches, and overall, the assay results returned a reasonable confidence on the accuracy and precision of the ALS data. The check samples to the Bureau Veritas (umpire laboratory) returned slightly biased towards the check laboratory, but no major concern on the assay data of ALS.

Battery Minerals Limited carried out bulk density measurements of drill cores using the water immersion techniques. The results from different zones, highly oxidised to fresh, returned reasonable results close to the global average of 2.26 kg/m^3.

SRK understands that there are geological risks and opportunities associated with the Montepuez Graphite project.

- The earlier reports from RPM Global and Ashmore Advisory suggested that further close spaced data is required to capture the structural complexity (localised faults) of the deposits which may impact the overall geometry and grade of the graphite mineralisation.
- More detailed logging of the weathering zones is required to establish the actual boundary between the oxidised and fresh rocks.

- Overall, QC samples returned reasonable values related to the accuracy and precision of the assay results; however, the limited number of field duplicate samples used in the program limits the confidence on any sample biasness.
- The VTEM suggested potential graphite mineralisation targets, out of which only few have been tested by Battery Minerals Limited. There are other potential targets to be explored.
- For the Elephant and Buffalo deposits, the strike and the down dip extensions are open and additional in-fill and step-out drilling is warranted to improving the confidence on the geological and grade continuity of the graphite mineralisation and potentially upgrade the Mineral Resources.

5.8 Metallurgical Testwork and Plant Design

5.8.1 Introduction

Three phases of metallurgical testwork (Table 5-6) have been undertaken by Battery Minerals Limited on samples from the Elephant and Buffalo zones of the Montepuez Graphite project. Subsequentially, the Company reports that additional testwork was carried out on bulk trench samples and remaining drill core from Montepuez at The International PranaGraf Mintech Research Centre (IGMRC) in Bhubaneswar, India in 2024.

The testwork demonstrated the ability to generate flotation concentrates with >96% TGC with conventional process equipment.

Table 5-6: Summary of phases of metallurgical testwork

Development Stage	Design Concept	Testwork Undertaken	Laboratory
Definitive Feasibility Study	100,000 tpa flake concentrate project at +95% TGC grade, with LoM recovery of 73%. Plant feed grade 8.8% TGC.	Comminution parameter testing. Milling, flotation and reagent parameter testwork, open circuit flotation flowsheet development and parameter input testwork	ALS (Perth)
Value Engineering Study	50,000 tpa flake concentrate project at +96% TGC grade, with LoM recovery of 80%, feed grade 12.0% TGC.	Grade improvement open circuit floatation flowsheet development and parameter input testwork	ALS (Perth)
Montepuez Graphite Implementation project (MGIP)	50,000 tpa flake concentrate at +96%TGC, with LoM recovery of 83%, feed grade 12.1% TGC.	Milling, floatation and reagent parameter testwork, locked cycle (closed circuit) floatation flowsheet development and parameter input testwork	BGRIMM*

*BGRIMM: Beijing General Institute of Mining and Metallurgy.

5.8.2 Sample Selection

Only the IGMRC Testwork Report was available for review at the time of writing and no information was available to identify the location of any of the samples collected for the metallurgical testwork.

A list of metallurgical testwork samples is provided in the Geology Section of the Battery Minerals Limited Montepuez Graphite Implementation Project Report as follows:

- Various batches of drill core mostly from Elephant was sent by DHL to ALS Johannesburg where the sample was prepared and then sent for analytical analysis to ALS Brisbane.

- Two separate batches of drill core were dispatched by DHL to Actlabs, Ontario Canada. The first batch was misplaced on arrival at the laboratory so a second repeat batch of core (another ¼ core sample) was dispatched also by DHL.
- Two batches of metallurgical core sample were dispatched from Mozambique to ALS Metallurgy Laboratory, Perth, Australia (ALS Perth). One was dispatched by DHL and another by Bolloré.
- A single batch of core samples was sent to ALS Perth for AMD test work.
- A single batch of core from the geotechnical drilling program at Buffalo (BFGT01-04) and Elephant (ELGT01-04) was dispatched by DHL to Rocklab, South Africa for geomechanical testwork.
- A single batch of pit and core sample was dispatched to Civilabs Engineering, South Africa, as part of the KP geotechnical tailings storage facility (TSF) and WSF assessment.
- Buffalo and Elephant pulp samples from the ALS Brisbane were dispatched to Bureau Veritas for umpire laboratory testwork at. Elephant pulp samples were dispatched from ALS Johannesburg to Bureau Veritas Rustenburg.
- A third batch of reject core samples was sent from ALS Johannesburg to ALS Perth.

Sample origins should be reviewed for their spatial and geological representivity for at least the first five years of mining activity. Sample head grades should align with the plant feed head grades for the short term mine plan. Variability testwork samples should include the hardest and softest ores as well as low and high grade feed samples.

5.8.3 Definitive Feasibility Study Testwork

The DFS testwork comprised comminution and flotation testwork and included the generation of bulk concentrate samples for marketing purposes. The final section of DFS metallurgical testing included a geometallurgical variability investigation using drill core assay reject samples selected to represent the lithologies within the pit shell and the mining schedule.

The final tranche of testwork undertaken in the MGIP development included locked cycle flotation testwork on both fresh and weathered ore and forms the design criteria and flowsheet, complete with equipment selection for the detailed design and implementation used in the final plant design.

Samples for the testwork campaigns were selected drill core composites for the fresh samples, and a fresh assay rejects composite for the fresh bulk samples. Weathered samples were collected from surface trenches.

In the DFS testwork, multiple stages of concentrate re-grinding were determined to be the best way to maintain graphite recovery when achieving a suitable concentrate grade. The flaky nature of the graphite was identified as a possible cause of higher than expected graphite losses if the final concentrate was de-slimed at 38 μm as the flakes report to the cyclone overflow.

Standard ore characterisation testing determined a range of Bond Rod Mill Work Indices from 4.2 – 13.2 kWh/t and Bond Ball Mill Work Indices from 3.7 – 12.4 kWh/t characterising the weathered material as soft and the fresh material as low to medium hardness. There is reasonable correlation of increasing hardness with depth of drill core sample.

Flotation testwork demonstrated production of a 96% TGC with open circuit recoveries ranging from 55.8% to 92.7%. Flotation results indicated that the two zones behaved in very similar metallurgical fashion. Kerosene and MIBC were demonstrated to be suitable, and readily available flotation reagents.

Test work for vanadium extraction for the Montepuez Graphite project was undertaken by Nagrom Laboratories, Perth, Australia. A combined sample of the Buffalo and Elephant mineralisation was used as the test work feed. The material went through grind and floatation to remove the graphite material and to simulate the Montepuez plant to produce a tailings stream. This tailings stream was the feed stream for the test work to determine the potential to extract the vanadium content from the project tailings material. Vanadium recovery testwork was not included in subsequent rounds of testing.

5.8.4 Value Engineering Study Testwork

The flotation testwork to this point had used stage-wise concentrate re-grinding to minimise generation of <38 mm graphite as this was rejected in a final concentrate desliming stage; however, as the project developed, a market for high grade (>97% TGC) fine graphite in the manufacture of anodes for electric vehicle batteries meant that this assumption had to be challenged and the testwork and circuit design re-visited.

A program of re-processing of the <150 µm material was carried out by ALS Perth which demonstrated that stage-wise flotation and regrinding of the flotation concentrates before re-cleaning could generate a final concentrate >97% TGC without desliming.

This successful outcome indicated a potential flowsheet change to the DFS flowsheet. A >150 µm concentrate with >96% TGC was produced with four stages of cleaner flotation and concentrate regrind. The <150 µm fraction would then be further processed in additional regrinding and flotation steps to improve the grade to 97% TGC in this fraction and allow the recovery of the -38 µm fraction.

5.8.5 Montepuez Graphite Implementation Project (MGIP) Testwork

Final flowsheet confirmation testwork was carried out by the Beijing General Institute of Mining and Metallurgy, Beijing, China (BGRIMM Beijing) on bulk samples of fresh and weathered material from the Buffalo and Elephant zones. The confirmation of the previous findings were confirmed using the larger bulk samples of weathered material that could be easily collected from surface trenches.

Primary grind size flotation variability testing was conducted and a primary grind P_{80} of 400 µm was selected as achieving the best recovery and the largest proportion of >150 µm product.

The previous reagent suite was confirmed and no benefit was gained from using suppressants or modifying the flotation pH.

Five concentrate re-grind (polishing) steps, each followed by re-flotation of the ground concentrate was used to produce a final concentrate. Rougher tailings had two stages of scavenger flotation to maximise middlings recovery, which were circulated back to the head of the roughers as shown in Figure 5-4.

The predicted performance from the Battery Minerals MGIP report for the two weathered ore types is presented in Table 5-7. Once the locked cycle testwork conditions had been developed for the weathered material, the same conditions were used to determine the grade and recovery for the fresh samples. The fresh material is slightly harder than the weathered and there was an increase in recycle of coarse middlings. The circuit was modified so that the rougher scavenger middlings returned to the first stage secondary mill as shown in Figure 5-5, instead of the head of the rougher cells as shown in Figure 5-4.

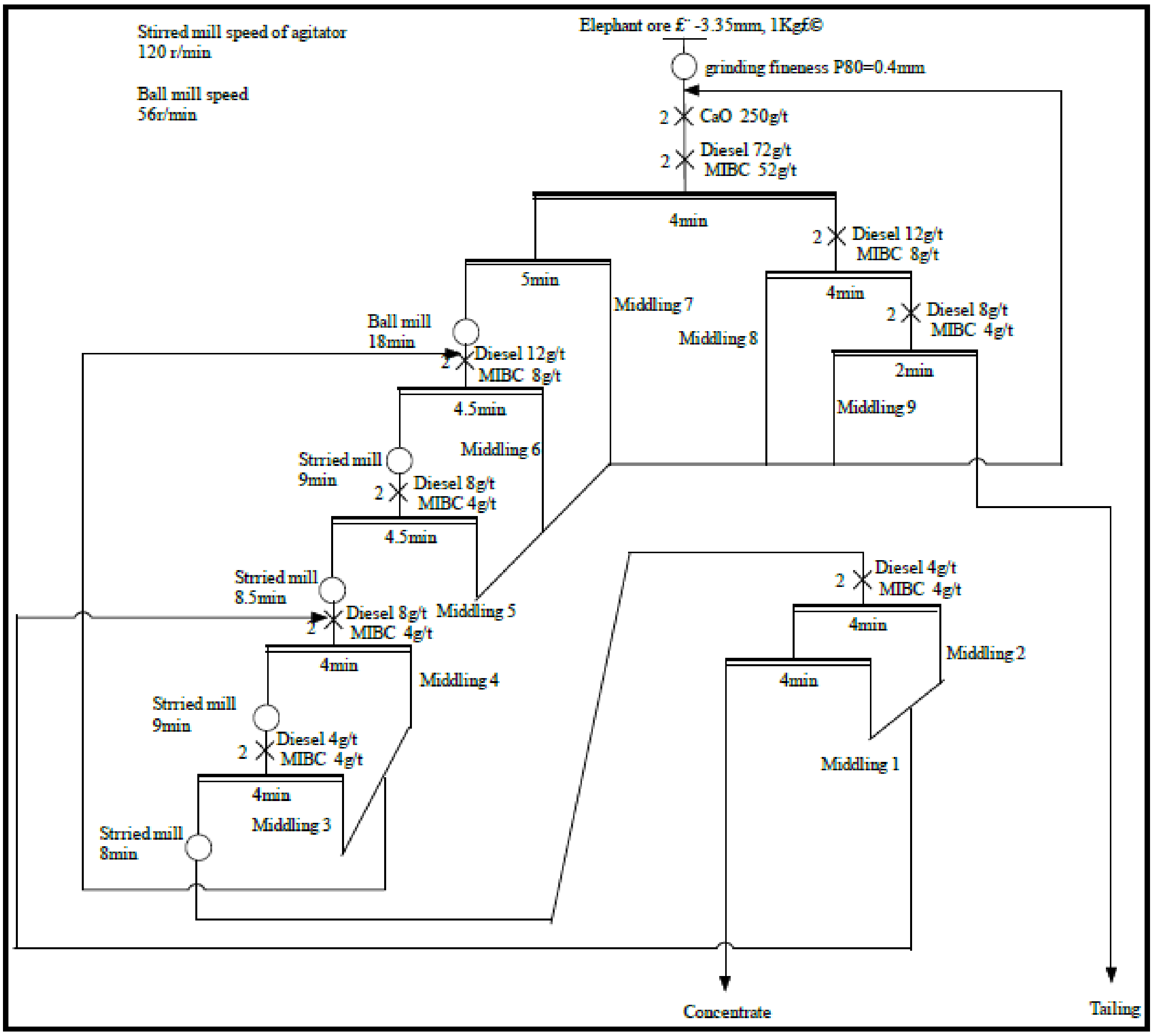


Figure 5-4: Locked Cycle Flowsheet

Table 5-7: Weathered Ore Design Criteria

Stream	Elephant Weathered Ore	Buffalo Weathered Ore	Design Criteria
Wt (%) < 150 µm	77.3	74.5	75.9
Wt (%) < 45 µm	34.7	24.8	29.8
Overall Grade (% TGC)	96.3	97.0	96.7
Overall Recovery (%)	87.9	89.3	88.6

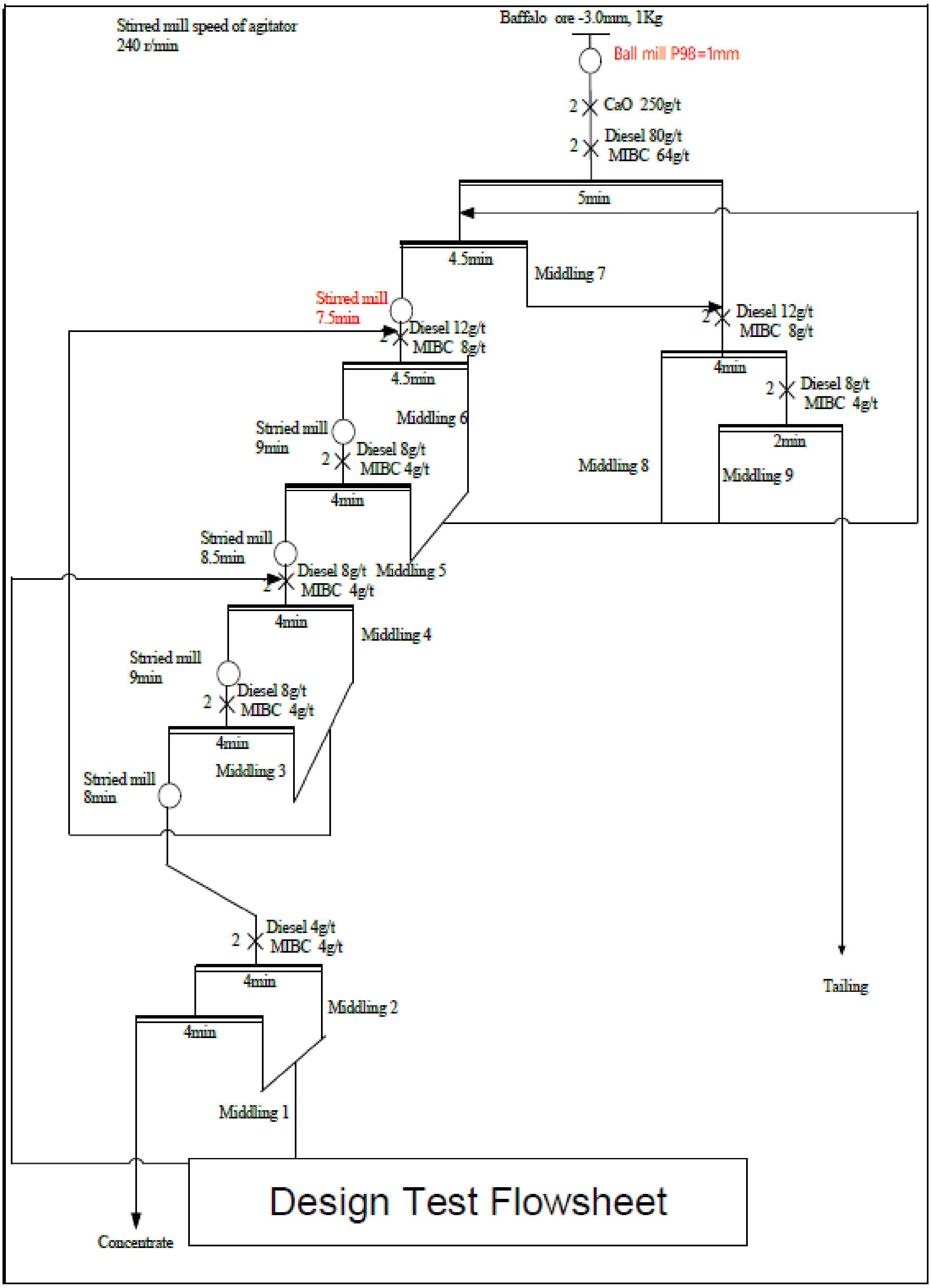


Figure 5-5: Design Test Flowsheet

5.8.6 IGMRC Testwork

Under the Tirupati ownership, additional process testwork was carried out at The International PranaGraf Mintech Research Centre (IGMRC), Bhubaneswar, India, in 2024 and summarised in the IGMRC Report No. 2024/MINMET/18.

Multi-stage milling and flotation was undertaken with a focus on maximising production of flake graphite. The work was carried out on two bulk samples of un-stated origin and remaining drill core.

Bond Work Index testing was completed. The samples were classified as soft to medium hard.

Open circuit rougher and cleaner flotation tests were undertaken.

No locked cycle testing was carried out and no determination of concentrate regrind requirements were reported in the testwork.

5.8.7 SRK Comments

Several rounds of testwork have been carried out on samples from the Buffalo and Elephant deposits, culminating in several campaigns of locked cycle flotation testwork at BGRIMM Beijing. Locked cycle testing is well understood and can be used to scale up laboratory performance, develop a process design criteria and select full scale equipment for plant design.

The testwork up to the MGIP phase has been carried out by reputable testing centres and, once the sample location is confirmed as being within the pit shell and early years of mine life, will be suitable for designing the process plant.

The changes in market for graphite, specifically around the market for size fractions which were not previously attractive should be taken into account when reviewing the flowsheet for opportunities to increase recovery of material previously not thought to be worth pursuing.

Subject to confirmation that the samples selected for the testwork remain within the pit shell and are representative of the feed to the plant in terms of grades and lithologies, the testwork could be used as part of the plant design process.

A subsequent study carried out by IGMRC can only be considered indicative at best as the lack sample identity and open circuit flowsheet configuration mean the results cannot be to form the basis of design for a process plant.

5.9 Mineral Resource Estimation

Tirupati provided the validated database, 3D geological models, and the block model in Surpac format, which was used to generate the Mineral Resource Estimate. SRK reviewed the data and models using Leapfrog Geo and Datamine to validate and prepare the Mineral Resource statement. The block models were classified in accordance with the guidelines and principles of the JORC Code.

5.9.1 Buffalo

Database

A summary of the exploration database used for Buffalo Mineral Resource estimation is presented in Table 5-8 and illustrated in Figure 5-6. All drillhole collars were surveyed using the WGS84 UTM Zone 37 South datum. Collar surveying was carried out by a differential GPS (DGPS) device with an accuracy of ±0.02 cm. Downhole dip and azimuth deviations for diamond drillholes were recorded at 30 m intervals using an electronic multi-shot tool. RC holes were not downhole surveyed.

Table 5-8: Buffalo Database Summary

Hole Type	Buffalo Drillholes Number	(m)	Mineral Resource Drillholes Number	(m)	Ore Intersection (m)
RC	244	5,044	156	3,665	2,893
DDH	39	4,889	36	4,646	1,661
WB	8	946			
TRH	2	48			
Total	293	10,297	192	8,311	4,554

WB = water bore, TRH = trench

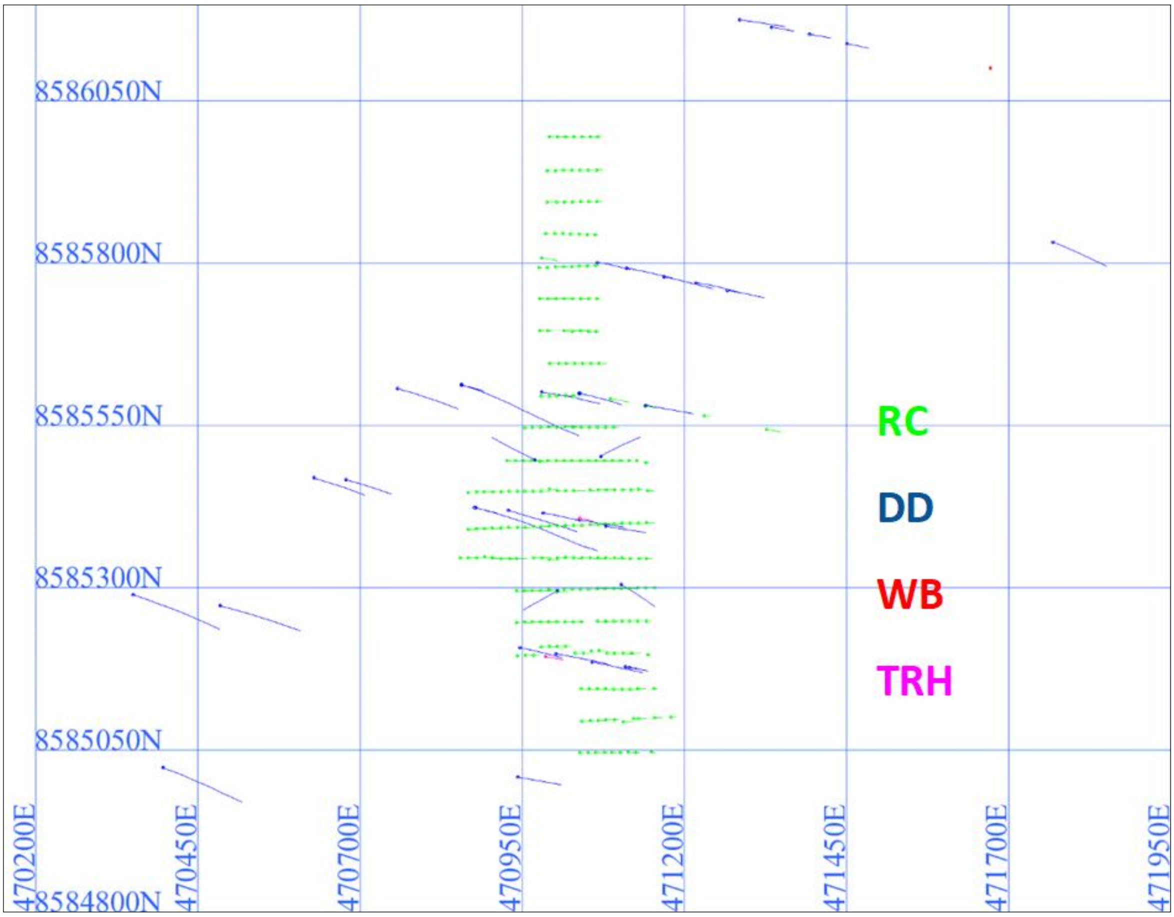


Figure 5-6: Drillhole Distribution at Buffalo

Data Verification

Prior to the construction of geological modelling, SRK undertook a data validation exercise to ensure the data quality is appropriate for undertaking a Mineral Resource Estimate. SRK did not find any material issue in terms of the integrity of the exploration database. Verficiation included:

- validation of the borehole coordinates;
- overlapping intervals;
- harmonisation of the geological logging codes;
- missing interval and missing assay results;

- assigning appropriate value for those samples where the GC% were reported below the detection limit; and
- reconciliation of the geological logs with the assay results.

Geological Model

Section outlines were manually triangulated to create wireframes (Figure 5-7 to Figure 5-9). The end sections were extended halfway to the next section or up to 100 m, adjusted to match the dip, strike, and plunge of the zone. The completed wireframes were validated in Surpac software and converted into solid models.

Six graphitic schist wireframes were developed to define the mineralised zones used for grade estimation and to constrain the block model. Each wireframe acted as a hard boundary. The domains are created based on 2.5% TGC cutoff and minimum 4 m width, derived through statistical analyses.

Geological wireframes were prepared based on geological logging. Additional solids were created for the amphibolite syncline units and the amphibolite intrusion/sill units. All material outside the graphitic schist units was classified as amp.

Weathering surfaces were also constructed using geological logging data. The following surfaces were created:

- base of overburden;
- base of complete oxidation;
- base of saprolite; and
- top of fresh rock.

Battery Minerals Limited provided topographic contour data at 0.5 m resolution from WorldView-3 stereo imagery (30 cm panchromatic). Drillhole collars were also added to create the final topographic surface.

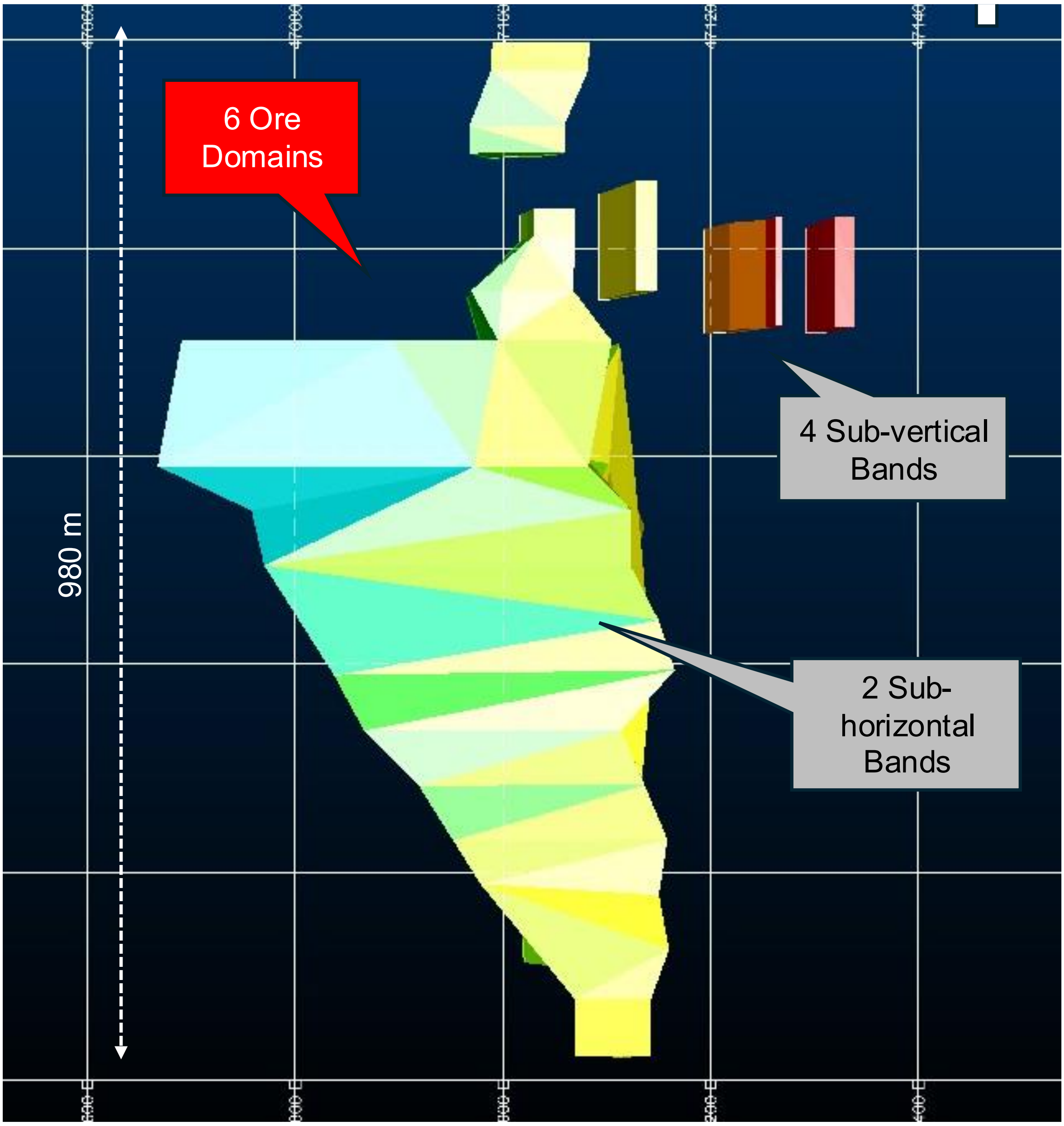


Figure 5-7: Buffalo Wireframes and Drilling Plan View

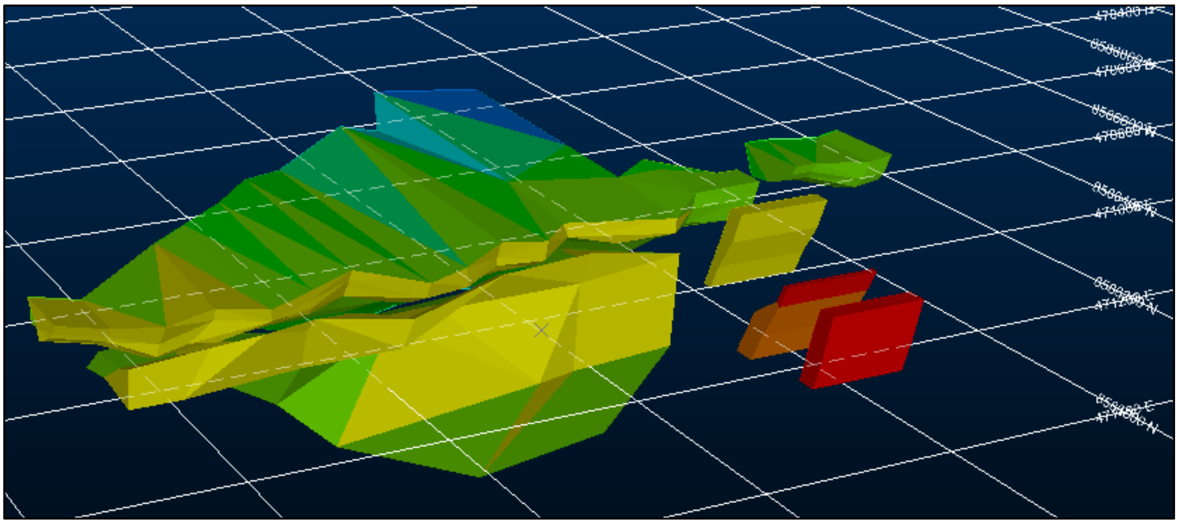


Figure 5-8: Buffalo Wireframes 3D view

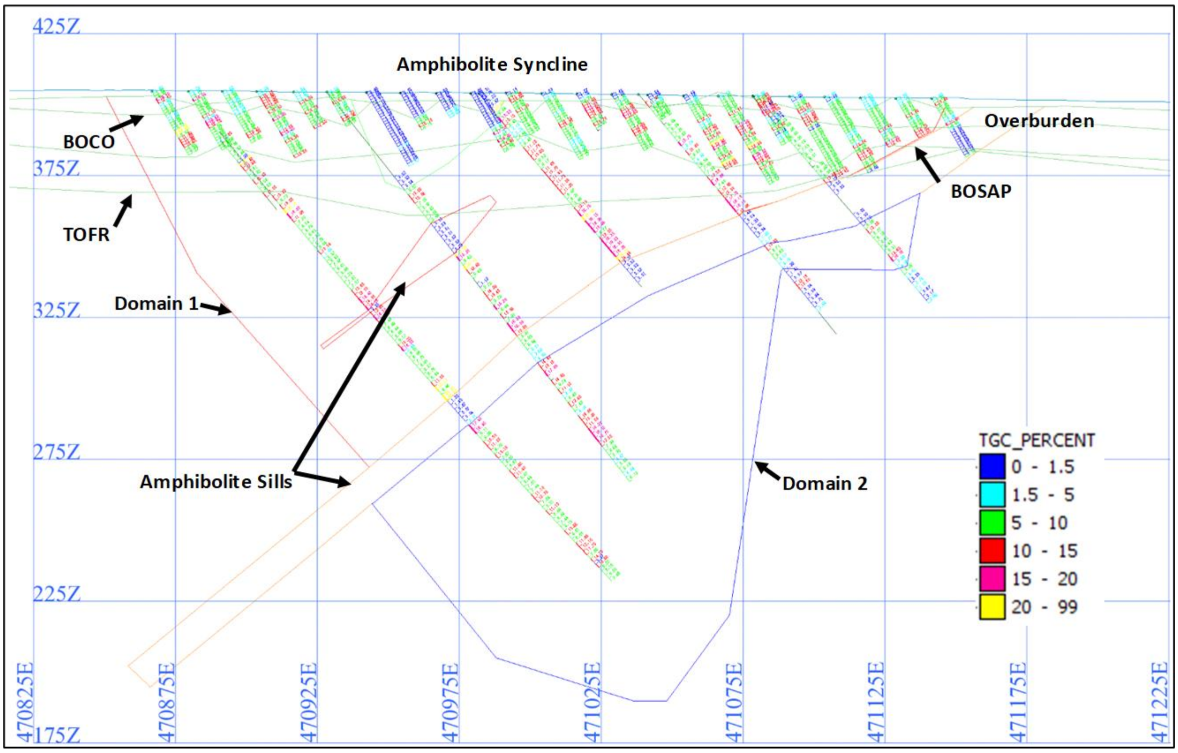


Figure 5-9: Buffalo Representative Cross Section Showing Wireframes and Drilling

Domain Definition

The geological domain boundaries are based on logged geology, reconciled with TGC grades and statistical analysis (Figure 5-10). The main mineralised zone (GS) includes the GSQF, GS1, and GS2 lithologies. The surrounding country rock is amphibolite and was treated as waste. Grades for TGC, V_2O_5, S, LOI, and TiO_2 were estimated in both the ore and waste domains. Raw assay data were analysed in Supervisor software to identify an appropriate cut-off grade for defining ore. Distinct grade population breaks occurred at 2% and 2.5% TGC, and 2.5% TGC was adopted as the lower cut-off to define the ore. A minimum width of 4 m was used to model the mineralisation, with limited internal dilution was included to maintain geological continuity of the wireframes. Hangingwall and footwall boundaries are not diluted.

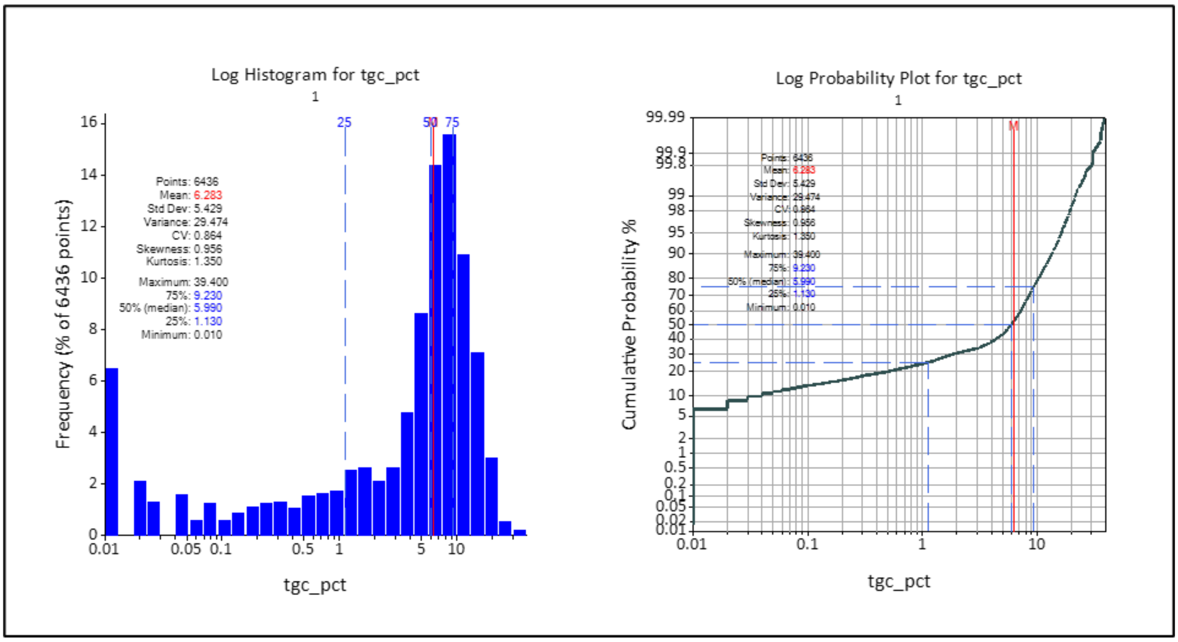


Figure 5-10: Log Histogram and Log Probability Plot to define Domain Boundary

Compositing

Prior to generating the MRE, the samples were composited to equal lengths such that a constant volume was achieved, therefore honouring the sample support theory. As sampling was predominantly based on lithological intervals, the actual sample lengths range between 0.6 m to 2.6 m. Most samples were 1 m or 2 m in length, as seen from the sample length histogram (Figure 5-11). A composite length of 1 m was used. SRK undertook a statistical analysis to ensure that the composites did not result in a reduction in the mean GC grade and found adequate. Five elements were extracted into the composite files which include total graphitic carbon TGC (%), V_2O_5 (%), S (%), TiO_2 (%) and LOI (%) (Table 5-9).

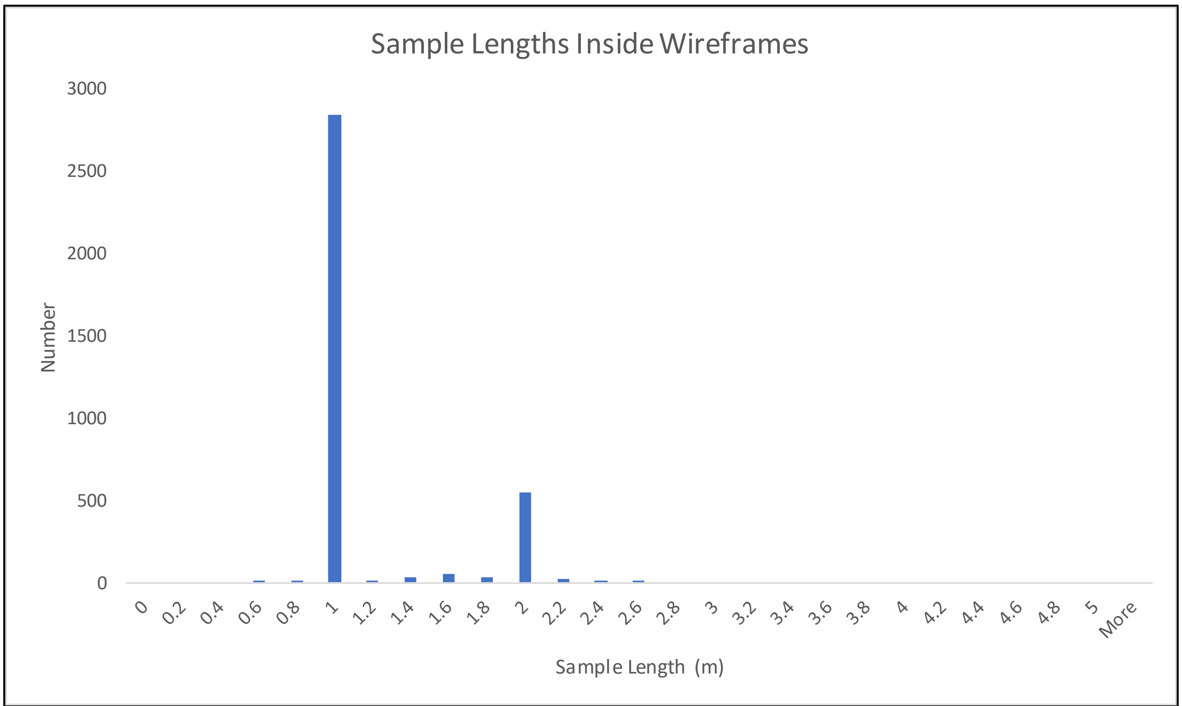


Figure 5-11: Sample Length

Table 5-9: Composite Statistics

Domain	Samples	Minimum	Maximum	Mean	Stan Dev	CoV	Variance
1	3,437	0.05	39.4	9.33	4.62	0.5	21.31
2	765	0.01	36.3	10.26	5.39	0.53	29.1
3	118	0.01	19.9	7.16	4.41	0.62	19.48
4	30	3.62	12.8	8.54	2.5	0.29	6.24
5	30	2.24	14.1	8.27	2.81	0.34	7.89
6	27	1.99	15.25	7.98	2.98	0.37	8.9

Declustering

Since the drillholes are uniformly distributed in a regular grid pattern and do not exhibit clustering, declustering was not necessary prior to resource estimation. The equal spacing of drillholes ensures that each sample contributes evenly to the estimation process, minimizing the risk of spatial bias or over-representation of certain areas within the dataset.

Grade Capping

SRK conducted a comprehensive capping analysis for each variable within each estimation domain. SRK analysed capping sensitivity plots and 3D visual inspections of grade distributions to assess the presence and influence of higher values. The results indicated that there are no significant higher values as outliers present and have no material impact on the statistical distributions. Consequently, no capping was necessary for any of the domains.

Geostatistical Analysis

Mineralization continuity was evaluated through variography, which analyses the spatial relationship between composite samples to identify the directions and ranges of grade continuity, as well as the degree of random variability (nugget effect) within the deposit. The results were used to define suitable kriging parameters for resource estimation.

For this deposit, SRK conducted experimental variogram analysis for Domain 1 using composited data for each element in Supervisor software. A two-structure nested spherical model provided a good fit to the experimental variograms. The downhole variogram, representing the best estimate of the true nugget effect, returned values of 0.18 for TGC, 0.05 for V_2O_5, 0.02 for S, 0.05 for LOI, and 0.05 for TiO_2 (Table 5-10 and Figure 5-12).

The orientation of the variogram models was aligned with the interpreted wireframe of the main mineralized zone. The first variogram direction corresponded to the primary axis of mineralization continuity, the second was oriented within the mineralized plane at 90° to the first, and the third was oriented perpendicular to the mineralization plane across its width.

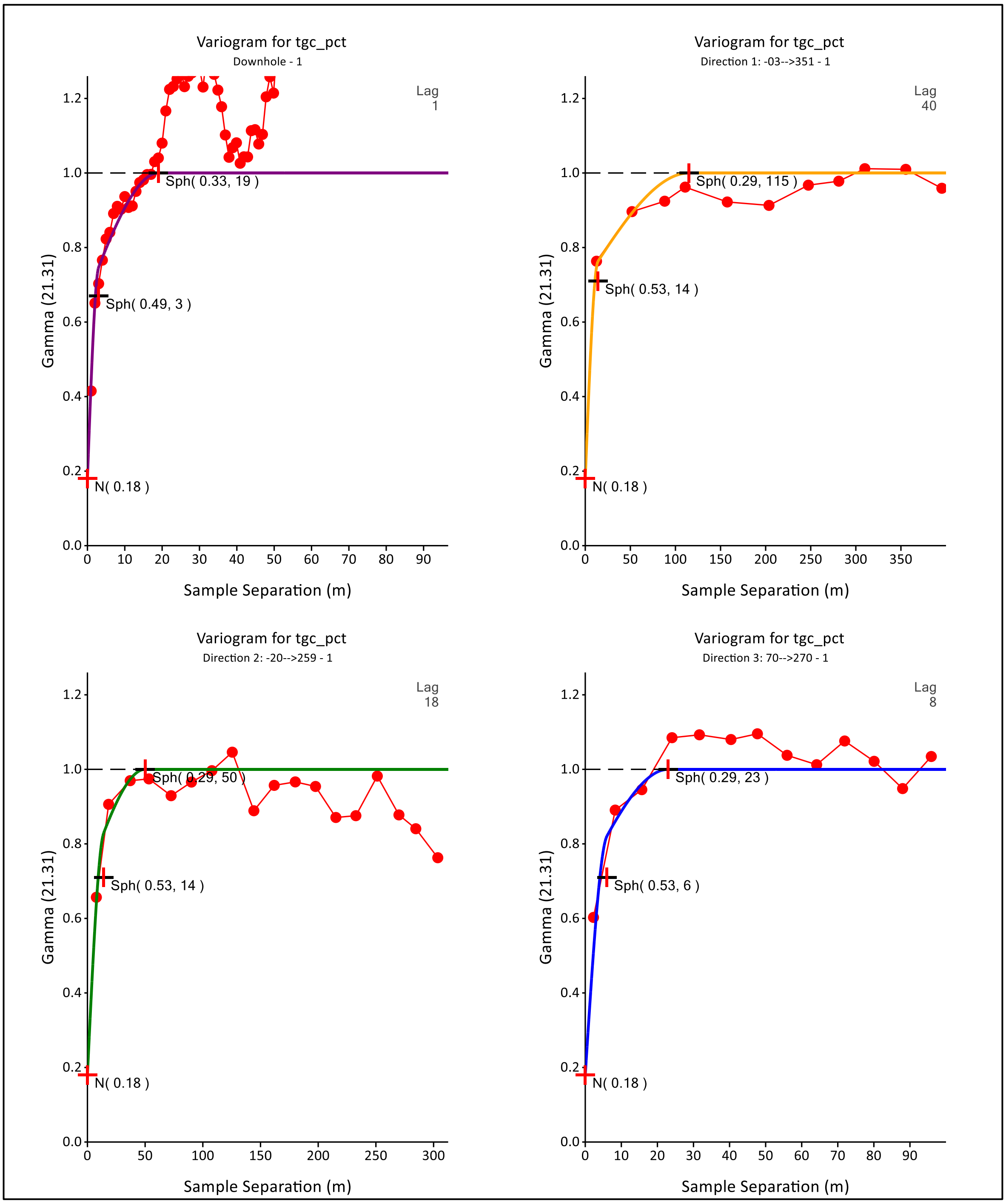


Figure 5-12: Variogram of TGC of domain 1 used for remaining domains

Table 5-10: Variogram Parameters of Buffalo Deposit for all Elements

Element	Major Direction	Nugget	Structure 1				Structure 2			
			C1	A1	Semi	Minor	C2	A2	Semi	Minor
TGC	-03-->351	0.18	0.53	14	1	2.3	0.29	115	2.3	5
V_2O_5	00-->000	0.05	0.55	67	7.4	13.4	0.4	137	3.5	6
S	00-->000	0.02	0.58	172	1.8	3.7	0.4	204	1.9	2.6
LOI	00-->000	0.05	0.52	76	1.5	15.2	0.43	89	1	3.9
TiO_2	00-->000	0.05	0.52	76	1	8.4	0.43	84	1	1.9

Block Model

Following the construction of the wireframes and the geostatistical analysis, a 3D block model was created in the Surpac software. For the selection of the block model framework, SRK considered the average borehole spacing and possible open pit bench height. To test the optimal block size for existing drilling at the deposit, Kriging Neighbour Analysis (KNA) was conducted within Supervisor for Domain 1. A range of block sizes were assessed for regression slope and kriging efficiency. In order to increase the accuracy of the domain boundary definition, SRK used sub-blocks along each direction for all the modelled geological wireframes. Sub-cells of 3.125 m along X, 1.25 m along Y and 1.25 m along Z has been used. Table 5-11 presents the summary of the block model parameters selected by SRK for Buffalo.

Table 5-11: Buffalo Block Model Framework Summary

	X (m)	Y (m)	Z (m)
Minimum	470,100	8,584,800	100
Maximum	471,700	8,586,200	450
Range	1600	1400	350
Parent block size	25	5	2.5
Number of blocks	64	280	140
Rotation	0	0	0

Grade Estimation

For Buffalo, SRK used Ordinary Kriging (OK) for the grade interpolation into the block model, honouring the geological contacts defined by the geological modelling process and using the variogram parameters set out above. Grades for TGC, V_2O_5, S, LOI, and TiO_2 were estimated in Surpac.

Before undertaking the grade estimation, SRK carried out a search neighbourhood analysis for the appropriateness of the search and estimation parameters through the optimisation of the following parameters:

- Search Ellipsoid Dimension.
- Number of minimum and maximum samples to be used for estimation.
- Optimisation of Search Octants.
- Number of discretisation points.

Based on the results of the above study, SRK selected the final search parameters for Buffalo for the elements TGC, V_2O_5, S, LOI, and TiO_2, which are reflected in Table 5-12 to Table 5-16. To compare the mean grades derived from the OK, SRK also estimated the empty block model using Inverse Distance Weighted Method. The estimation parameters were set up by visually checking the data to ensure suitable minimum and maximum samples have been used, and that the factored searches were sufficiently large to fill the entire block model. Minimum 6 and maximum 16 samples are used in first search for estimation. SRK adopted a block discretisation of 2 (X) by 5 (Y) by 2 (Z) for the Buffalo estimate. No octants used and max key was taken as 6. Maximum sample allowed per hole was 6.

Table 5-12: Search Parameters for the element TGC (Total Graphitic Content)

object	element	field	min_sam	max_sam	maj_dis	strike	plunge	dip	semi	minor	c0	c1	a1	semi1	minor1	c2	a2	semi2	minor2	pass	est_zone
1	tgc_pct	1	6	16	50	355	-3	20	2	5	0.18	0.53	14	1	2.3	0.29	115	2.3	5	1	1
1	tgc_pct	1	6	16	50	340	0	-55	2	5	0.18	0.53	14	1	2.3	0.29	115	2.3	5	1	2
1	tgc_pct	1	6	16	50	0	0	0	2	5	0.18	0.53	14	1	2.3	0.29	115	2.3	5	1	3
3	tgc_pct	1	6	16	50	0	0	10	2	5	0.18	0.53	14	1	2.3	0.29	115	2.3	5	1	1
1	tgc_pct	1	6	16	200	355	-3	20	2	5	0.18	0.53	14	1	2.3	0.29	115	2.3	5	2	1
1	tgc_pct	1	6	16	200	340	0	-55	2	5	0.18	0.53	14	1	2.3	0.29	115	2.3	5	2	2
1	tgc_pct	1	6	16	200	0	0	0	2	5	0.18	0.53	14	1	2.3	0.29	115	2.3	5	2	3
2	tgc_pct	1	6	16	200	0	0	30	2	5	0.18	0.53	14	1	2.3	0.29	115	2.3	5	1	1
3	tgc_pct	1	6	16	200	0	0	10	2	5	0.18	0.53	14	1	2.3	0.29	115	2.3	5	2	1
4	tgc_pct	1	6	16	200	0	0	65	2	5	0.18	0.53	14	1	2.3	0.29	115	2.3	5	1	1
5	tgc_pct	1	6	16	200	0	0	65	2	5	0.18	0.53	14	1	2.3	0.29	115	2.3	5	1	1
6	tgc_pct	1	6	16	200	0	0	75	2	5	0.18	0.53	14	1	2.3	0.29	115	2.3	5	1	1
20	tgc_pct	1	6	16	200	0	0	0	2	5	0.18	0.53	14	1	2.3	0.29	115	2.3	5	1	1
54	tgc_pct	1	6	16	200	0	0	45	2	5	0.18	0.53	14	1	2.3	0.29	115	2.3	5	1	1
55	tgc_pct	1	6	16	200	0	0	0	2	5	0.18	0.53	14	1	2.3	0.29	115	2.3	5	1	1
56	tgc_pct	1	6	16	200	0	0	30	2	5	0.18	0.53	14	1	2.3	0.29	115	2.3	5	1	1
57	tgc_pct	1	6	16	200	0	0	30	2	5	0.18	0.53	14	1	2.3	0.29	115	2.3	5	1	1
58	tgc_pct	1	6	16	200	0	0	75	2	5	0.18	0.53	14	1	2.3	0.29	115	2.3	5	1	1
59	tgc_pct	1	6	16	200	0	0	30	2	5	0.18	0.53	14	1	2.3	0.29	115	2.3	5	1	1
1	tgc_pct	1	4	16	400	355	-3	20	2	5	0.18	0.53	14	1	2.3	0.29	115	2.3	5	3	1
1	tgc_pct	1	4	16	400	340	0	-55	2	5	0.18	0.53	14	1	2.3	0.29	115	2.3	5	3	2
1	tgc_pct	1	4	16	400	0	0	0	2	5	0.18	0.53	14	1	2.3	0.29	115	2.3	5	3	3
2	tgc_pct	1	4	16	400	0	0	30	2	5	0.18	0.53	14	1	2.3	0.29	115	2.3	5	2	1
3	tgc_pct	1	4	16	400	0	0	10	2	5	0.18	0.53	14	1	2.3	0.29	115	2.3	5	3	1
4	tgc_pct	1	4	16	400	0	0	65	2	5	0.18	0.53	14	1	2.3	0.29	115	2.3	5	2	1
5	tgc_pct	1	4	16	400	0	0	65	2	5	0.18	0.53	14	1	2.3	0.29	115	2.3	5	2	1
6	tgc_pct	1	4	16	400	0	0	75	2	5	0.18	0.53	14	1	2.3	0.29	115	2.3	5	2	1
20	tgc_pct	1	4	16	400	0	0	0	2	5	0.18	0.53	14	1	2.3	0.29	115	2.3	5	2	1
54	tgc_pct	1	4	16	400	0	0	45	2	5	0.18	0.53	14	1	2.3	0.29	115	2.3	5	2	1
55	tgc_pct	1	4	16	400	0	0	0	2	5	0.18	0.53	14	1	2.3	0.29	115	2.3	5	2	1
56	tgc_pct	1	4	16	400	0	0	30	2	5	0.18	0.53	14	1	2.3	0.29	115	2.3	5	2	1
57	tgc_pct	1	4	16	400	0	0	30	2	5	0.18	0.53	14	1	2.3	0.29	115	2.3	5	2	1
58	tgc_pct	1	4	16	400	0	0	75	2	5	0.18	0.53	14	1	2.3	0.29	115	2.3	5	2	1
59	tgc_pct	1	4	16	400	0	0	30	2	5	0.18	0.53	14	1	2.3	0.29	115	2.3	5	2	1
1	tgc_pct	1	2	16	600	355	-3	20	2	5	0.18	0.53	14	1	2.3	0.29	115	2.3	5	4	1
1	tgc_pct	1	2	16	600	340	0	-55	2	5	0.18	0.53	14	1	2.3	0.29	115	2.3	5	4	2
1	tgc_pct	1	2	16	600	0	0	0	2	5	0.18	0.53	14	1	2.3	0.29	115	2.3	5	4	3
2	tgc_pct	1	2	16	600	0	0	30	2	5	0.18	0.53	14	1	2.3	0.29	115	2.3	5	3	1
3	tgc_pct	1	2	16	600	0	0	10	2	5	0.18	0.53	14	1	2.3	0.29	115	2.3	5	4	1
4	tgc_pct	1	2	16	600	0	0	65	2	5	0.18	0.53	14	1	2.3	0.29	115	2.3	5	3	1
5	tgc_pct	1	2	16	600	0	0	65	2	5	0.18	0.53	14	1	2.3	0.29	115	2.3	5	3	1
6	tgc_pct	1	2	16	600	0	0	75	2	5	0.18	0.53	14	1	2.3	0.29	115	2.3	5	3	1
20	tgc_pct	1	2	16	600	0	0	0	2	5	0.18	0.53	14	1	2.3	0.29	115	2.3	5	3	1
54	tgc_pct	1	2	16	600	0	0	45	2	5	0.18	0.53	14	1	2.3	0.29	115	2.3	5	3	1
55	tgc_pct	1	2	16	600	0	0	0	2	5	0.18	0.53	14	1	2.3	0.29	115	2.3	5	3	1
56	tgc_pct	1	2	16	600	0	0	30	2	5	0.18	0.53	14	1	2.3	0.29	115	2.3	5	3	1
57	tgc_pct	1	2	16	600	0	0	30	2	5	0.18	0.53	14	1	2.3	0.29	115	2.3	5	3	1
58	tgc_pct	1	2	16	600	0	0	75	2	5	0.18	0.53	14	1	2.3	0.29	115	2.3	5	3	1
59	tgc_pct	1	2	16	600	0	0	30	2	5	0.18	0.53	14	1	2.3	0.29	115	2.3	5	3	1

Table 5-13: Search Parameters for the element V_2O_5

object	element	field	min_sam	max_sam	maj_dis	strike	plunge	dip	semi	minor	c0	c1	a1	semi1	minor1	c2	a2	semi2	minor2	pass	est_zone
1	v2o5_pct	2	6	16	200	355	-3	20	2	5	0.05	0.55	67	7.4	13.4	0.4	137	3.5	6	1	1
1	v2o5_pct	2	6	16	200	340	0	-55	2	5	0.05	0.55	67	7.4	13.4	0.4	137	3.5	6	1	2
1	v2o5_pct	2	6	16	200	0	0	0	2	5	0.05	0.55	67	7.4	13.4	0.4	137	3.5	6	1	3
2	v2o5_pct	2	6	16	200	0	0	30	2	5	0.05	0.55	67	7.4	13.4	0.4	137	3.5	6	1	1
3	v2o5_pct	2	6	16	200	0	0	10	2	5	0.05	0.55	67	7.4	13.4	0.4	137	3.5	6	1	1
4	v2o5_pct	2	6	16	200	0	0	65	2	5	0.05	0.55	67	7.4	13.4	0.4	137	3.5	6	1	1
5	v2o5_pct	2	6	16	200	0	0	65	2	5	0.05	0.55	67	7.4	13.4	0.4	137	3.5	6	1	1
6	v2o5_pct	2	6	16	200	0	0	75	2	5	0.05	0.55	67	7.4	13.4	0.4	137	3.5	6	1	1
20	v2o5_pct	2	6	16	200	0	0	0	2	5	0.05	0.55	67	7.4	13.4	0.4	137	3.5	6	1	1
54	v2o5_pct	2	6	16	200	0	0	45	2	5	0.05	0.55	67	7.4	13.4	0.4	137	3.5	6	1	1
55	v2o5_pct	2	6	16	200	0	0	0	2	5	0.05	0.55	67	7.4	13.4	0.4	137	3.5	6	1	1
56	v2o5_pct	2	6	16	200	0	0	30	2	5	0.05	0.55	67	7.4	13.4	0.4	137	3.5	6	1	1
57	v2o5_pct	2	6	16	200	0	0	30	2	5	0.05	0.55	67	7.4	13.4	0.4	137	3.5	6	1	1
58	v2o5_pct	2	6	16	200	0	0	75	2	5	0.05	0.55	67	7.4	13.4	0.4	137	3.5	6	1	1
59	v2o5_pct	2	6	16	200	0	0	30	2	5	0.05	0.55	67	7.4	13.4	0.4	137	3.5	6	1	1
1	v2o5_pct	2	4	16	400	355	-3	20	2	5	0.05	0.55	67	7.4	13.4	0.4	137	3.5	6	2	1
1	v2o5_pct	2	4	16	400	340	0	-55	2	5	0.05	0.55	67	7.4	13.4	0.4	137	3.5	6	2	2
1	v2o5_pct	2	4	16	400	0	0	0	2	5	0.05	0.55	67	7.4	13.4	0.4	137	3.5	6	2	3
2	v2o5_pct	2	4	16	400	0	0	30	2	5	0.05	0.55	67	7.4	13.4	0.4	137	3.5	6	2	1
3	v2o5_pct	2	4	16	400	0	0	10	2	5	0.05	0.55	67	7.4	13.4	0.4	137	3.5	6	2	1
4	v2o5_pct	2	4	16	400	0	0	65	2	5	0.05	0.55	67	7.4	13.4	0.4	137	3.5	6	2	1
5	v2o5_pct	2	4	16	400	0	0	65	2	5	0.05	0.55	67	7.4	13.4	0.4	137	3.5	6	2	1
6	v2o5_pct	2	4	16	400	0	0	75	2	5	0.05	0.55	67	7.4	13.4	0.4	137	3.5	6	2	1
20	v2o5_pct	2	4	16	400	0	0	0	2	5	0.05	0.55	67	7.4	13.4	0.4	137	3.5	6	2	1
54	v2o5_pct	2	4	16	400	0	0	45	2	5	0.05	0.55	67	7.4	13.4	0.4	137	3.5	6	2	1
55	v2o5_pct	2	4	16	400	0	0	0	2	5	0.05	0.55	67	7.4	13.4	0.4	137	3.5	6	2	1
56	v2o5_pct	2	4	16	400	0	0	30	2	5	0.05	0.55	67	7.4	13.4	0.4	137	3.5	6	2	1
57	v2o5_pct	2	4	16	400	0	0	30	2	5	0.05	0.55	67	7.4	13.4	0.4	137	3.5	6	2	1
58	v2o5_pct	2	4	16	400	0	0	75	2	5	0.05	0.55	67	7.4	13.4	0.4	137	3.5	6	2	1
59	v2o5_pct	2	4	16	400	0	0	30	2	5	0.05	0.55	67	7.4	13.4	0.4	137	3.5	6	2	1
1	v2o5_pct	2	2	16	600	355	-3	20	2	5	0.05	0.55	67	7.4	13.4	0.4	137	3.5	6	3	1
1	v2o5_pct	2	2	16	600	340	0	-55	2	5	0.05	0.55	67	7.4	13.4	0.4	137	3.5	6	3	2
1	v2o5_pct	2	2	16	600	0	0	0	2	5	0.05	0.55	67	7.4	13.4	0.4	137	3.5	6	3	3
2	v2o5_pct	2	2	16	600	0	0	30	2	5	0.05	0.55	67	7.4	13.4	0.4	137	3.5	6	3	1
3	v2o5_pct	2	2	16	600	0	0	10	2	5	0.05	0.55	67	7.4	13.4	0.4	137	3.5	6	3	1
4	v2o5_pct	2	2	16	600	0	0	65	2	5	0.05	0.55	67	7.4	13.4	0.4	137	3.5	6	3	1
5	v2o5_pct	2	2	16	600	0	0	65	2	5	0.05	0.55	67	7.4	13.4	0.4	137	3.5	6	3	1
6	v2o5_pct	2	2	16	600	0	0	75	2	5	0.05	0.55	67	7.4	13.4	0.4	137	3.5	6	3	1
20	v2o5_pct	2	2	16	600	0	0	0	2	5	0.05	0.55	67	7.4	13.4	0.4	137	3.5	6	3	1
54	v2o5_pct	2	2	16	600	0	0	45	2	5	0.05	0.55	67	7.4	13.4	0.4	137	3.5	6	3	1
55	v2o5_pct	2	2	16	600	0	0	0	2	5	0.05	0.55	67	7.4	13.4	0.4	137	3.5	6	3	1
56	v2o5_pct	2	2	16	600	0	0	30	2	5	0.05	0.55	67	7.4	13.4	0.4	137	3.5	6	3	1
57	v2o5_pct	2	2	16	600	0	0	30	2	5	0.05	0.55	67	7.4	13.4	0.4	137	3.5	6	3	1
58	v2o5_pct	2	2	16	600	0	0	75	2	5	0.05	0.55	67	7.4	13.4	0.4	137	3.5	6	3	1
59	v2o5_pct	2	2	16	600	0	0	30	2	5	0.05	0.55	67	7.4	13.4	0.4	137	3.5	6	3	1

Table 5-14: Search Parameters for the element S

object	element	field	min_sam	max_sam	maj_dis	strike	plunge	dip	semi	minor	c0	c1	a1	semi1	minor1	c2	a2	semi2	minor2	pass	est_zone
1	s_pct	3	6	16	200	355	-3	20	2	5	0.02	0.58	172	1.8	3.7	0.4	204	1.9	2.5	1	1
1	s_pct	3	6	16	200	340	0	-55	2	5	0.02	0.58	172	1.8	3.7	0.4	204	1.9	2.5	1	2
1	s_pct	3	6	16	200	0	0	0	2	5	0.02	0.58	172	1.8	3.7	0.4	204	1.9	2.5	1	3
2	s_pct	3	6	16	200	0	0	30	2	5	0.02	0.58	172	1.8	3.7	0.4	204	1.9	2.5	1	1
3	s_pct	3	6	16	200	0	0	10	2	5	0.02	0.58	172	1.8	3.7	0.4	204	1.9	2.5	1	1
4	s_pct	3	6	16	200	0	0	65	2	5	0.02	0.58	172	1.8	3.7	0.4	204	1.9	2.5	1	1
5	s_pct	3	6	16	200	0	0	65	2	5	0.02	0.58	172	1.8	3.7	0.4	204	1.9	2.5	1	1
6	s_pct	3	6	16	200	0	0	75	2	5	0.02	0.58	172	1.8	3.7	0.4	204	1.9	2.5	1	1
20	s_pct	3	6	16	200	0	0	0	2	5	0.02	0.58	172	1.8	3.7	0.4	204	1.9	2.5	1	1
54	s_pct	3	6	16	200	0	0	45	2	5	0.02	0.58	172	1.8	3.7	0.4	204	1.9	2.5	1	1
55	s_pct	3	6	16	200	0	0	0	2	5	0.02	0.58	172	1.8	3.7	0.4	204	1.9	2.5	1	1
56	s_pct	3	6	16	200	0	0	30	2	5	0.02	0.58	172	1.8	3.7	0.4	204	1.9	2.5	1	1
57	s_pct	3	6	16	200	0	0	30	2	5	0.02	0.58	172	1.8	3.7	0.4	204	1.9	2.5	1	1
58	s_pct	3	6	16	200	0	0	75	2	5	0.02	0.58	172	1.8	3.7	0.4	204	1.9	2.5	1	1
59	s_pct	3	6	16	200	0	0	30	2	5	0.02	0.58	172	1.8	3.7	0.4	204	1.9	2.5	1	1
1	s_pct	3	4	16	400	355	-3	20	2	5	0.02	0.58	172	1.8	3.7	0.4	204	1.9	2.5	2	1
1	s_pct	3	4	16	400	340	0	-55	2	5	0.02	0.58	172	1.8	3.7	0.4	204	1.9	2.5	2	2
1	s_pct	3	4	16	400	0	0	0	2	5	0.02	0.58	172	1.8	3.7	0.4	204	1.9	2.5	2	3
2	s_pct	3	4	16	400	0	0	30	2	5	0.02	0.58	172	1.8	3.7	0.4	204	1.9	2.5	2	1
3	s_pct	3	4	16	400	0	0	10	2	5	0.02	0.58	172	1.8	3.7	0.4	204	1.9	2.5	2	1
4	s_pct	3	4	16	400	0	0	65	2	5	0.02	0.58	172	1.8	3.7	0.4	204	1.9	2.5	2	1
5	s_pct	3	4	16	400	0	0	65	2	5	0.02	0.58	172	1.8	3.7	0.4	204	1.9	2.5	2	1
6	s_pct	3	4	16	400	0	0	75	2	5	0.02	0.58	172	1.8	3.7	0.4	204	1.9	2.5	2	1
20	s_pct	3	4	16	400	0	0	0	2	5	0.02	0.58	172	1.8	3.7	0.4	204	1.9	2.5	2	1
54	s_pct	3	4	16	400	0	0	45	2	5	0.02	0.58	172	1.8	3.7	0.4	204	1.9	2.5	2	1
55	s_pct	3	4	16	400	0	0	0	2	5	0.02	0.58	172	1.8	3.7	0.4	204	1.9	2.5	2	1
56	s_pct	3	4	16	400	0	0	30	2	5	0.02	0.58	172	1.8	3.7	0.4	204	1.9	2.5	2	1
57	s_pct	3	4	16	400	0	0	30	2	5	0.02	0.58	172	1.8	3.7	0.4	204	1.9	2.5	2	1
58	s_pct	3	4	16	400	0	0	75	2	5	0.02	0.58	172	1.8	3.7	0.4	204	1.9	2.5	2	1
59	s_pct	3	4	16	400	0	0	30	2	5	0.02	0.58	172	1.8	3.7	0.4	204	1.9	2.5	2	1
1	s_pct	3	2	16	600	355	-3	20	2	5	0.02	0.58	172	1.8	3.7	0.4	204	1.9	2.5	3	1
1	s_pct	3	2	16	600	340	0	-55	2	5	0.02	0.58	172	1.8	3.7	0.4	204	1.9	2.5	3	2
1	s_pct	3	2	16	600	0	0	0	2	5	0.02	0.58	172	1.8	3.7	0.4	204	1.9	2.5	3	3
2	s_pct	3	2	16	600	0	0	30	2	5	0.02	0.58	172	1.8	3.7	0.4	204	1.9	2.5	3	1
3	s_pct	3	2	16	600	0	0	10	2	5	0.02	0.58	172	1.8	3.7	0.4	204	1.9	2.5	3	1
4	s_pct	3	2	16	600	0	0	65	2	5	0.02	0.58	172	1.8	3.7	0.4	204	1.9	2.5	3	1
5	s_pct	3	2	16	600	0	0	65	2	5	0.02	0.58	172	1.8	3.7	0.4	204	1.9	2.5	3	1
6	s_pct	3	2	16	600	0	0	75	2	5	0.02	0.58	172	1.8	3.7	0.4	204	1.9	2.5	3	1
20	s_pct	3	2	16	600	0	0	0	2	5	0.02	0.58	172	1.8	3.7	0.4	204	1.9	2.5	3	1
54	s_pct	3	2	16	600	0	0	45	2	5	0.02	0.58	172	1.8	3.7	0.4	204	1.9	2.5	3	1
55	s_pct	3	2	16	600	0	0	0	2	5	0.02	0.58	172	1.8	3.7	0.4	204	1.9	2.5	3	1
56	s_pct	3	2	16	600	0	0	30	2	5	0.02	0.58	172	1.8	3.7	0.4	204	1.9	2.5	3	1
57	s_pct	3	2	16	600	0	0	30	2	5	0.02	0.58	172	1.8	3.7	0.4	204	1.9	2.5	3	1
58	s_pct	3	2	16	600	0	0	75	2	5	0.02	0.58	172	1.8	3.7	0.4	204	1.9	2.5	3	1
59	s_pct	3	2	16	600	0	0	30	2	5	0.02	0.58	172	1.8	3.7	0.4	204	1.9	2.5	3	1

Table 5-15: Search Parameters for the element LOI

object	element	field	min_sam	max_sam	maj_dis	strike	plunge	dip	semi	minor	c0	c1	a1	semi1	minor1	c2	a2	semi2	minor2	pass	est_zone
1	loi_pct	4	6	16	200	355	-3	20	2	5	0.05	0.52	76	1.5	15.2	0.43	89	1	3.9	1	1
1	loi_pct	4	6	16	200	340	0	-55	2	5	0.05	0.52	76	1.5	15.2	0.43	89	1	3.9	1	2
1	loi_pct	4	6	16	200	0	0	0	2	5	0.05	0.52	76	1.5	15.2	0.43	89	1	3.9	1	3
2	loi_pct	4	6	16	200	0	0	30	2	5	0.05	0.52	76	1.5	15.2	0.43	89	1	3.9	1	1
3	loi_pct	4	6	16	200	0	0	10	2	5	0.05	0.52	76	1.5	15.2	0.43	89	1	3.9	1	1
4	loi_pct	4	6	16	200	0	0	65	2	5	0.05	0.52	76	1.5	15.2	0.43	89	1	3.9	1	1
5	loi_pct	4	6	16	200	0	0	65	2	5	0.05	0.52	76	1.5	15.2	0.43	89	1	3.9	1	1
6	loi_pct	4	6	16	200	0	0	75	2	5	0.05	0.52	76	1.5	15.2	0.43	89	1	3.9	1	1
20	loi_pct	4	6	16	200	0	0	0	2	5	0.05	0.52	76	1.5	15.2	0.43	89	1	3.9	1	1
54	loi_pct	4	6	16	200	0	0	45	2	5	0.05	0.52	76	1.5	15.2	0.43	89	1	3.9	1	1
55	loi_pct	4	6	16	200	0	0	0	2	5	0.05	0.52	76	1.5	15.2	0.43	89	1	3.9	1	1
56	loi_pct	4	6	16	200	0	0	30	2	5	0.05	0.52	76	1.5	15.2	0.43	89	1	3.9	1	1
57	loi_pct	4	6	16	200	0	0	30	2	5	0.05	0.52	76	1.5	15.2	0.43	89	1	3.9	1	1
58	loi_pct	4	6	16	200	0	0	75	2	5	0.05	0.52	76	1.5	15.2	0.43	89	1	3.9	1	1
59	loi_pct	4	6	16	200	0	0	30	2	5	0.05	0.52	76	1.5	15.2	0.43	89	1	3.9	1	1
1	loi_pct	4	4	16	400	355	-3	20	2	5	0.05	0.52	76	1.5	15.2	0.43	89	1	3.9	2	1
1	loi_pct	4	4	16	400	340	0	-55	2	5	0.05	0.52	76	1.5	15.2	0.43	89	1	3.9	2	2
1	loi_pct	4	4	16	400	0	0	0	2	5	0.05	0.52	76	1.5	15.2	0.43	89	1	3.9	2	3
2	loi_pct	4	4	16	400	0	0	30	2	5	0.05	0.52	76	1.5	15.2	0.43	89	1	3.9	2	1
3	loi_pct	4	4	16	400	0	0	10	2	5	0.05	0.52	76	1.5	15.2	0.43	89	1	3.9	2	1
4	loi_pct	4	4	16	400	0	0	65	2	5	0.05	0.52	76	1.5	15.2	0.43	89	1	3.9	2	1
5	loi_pct	4	4	16	400	0	0	65	2	5	0.05	0.52	76	1.5	15.2	0.43	89	1	3.9	2	1
6	loi_pct	4	4	16	400	0	0	75	2	5	0.05	0.52	76	1.5	15.2	0.43	89	1	3.9	2	1
20	loi_pct	4	4	16	400	0	0	0	2	5	0.05	0.52	76	1.5	15.2	0.43	89	1	3.9	2	1
54	loi_pct	4	4	16	400	0	0	45	2	5	0.05	0.52	76	1.5	15.2	0.43	89	1	3.9	2	1
55	loi_pct	4	4	16	400	0	0	0	2	5	0.05	0.52	76	1.5	15.2	0.43	89	1	3.9	2	1
56	loi_pct	4	4	16	400	0	0	30	2	5	0.05	0.52	76	1.5	15.2	0.43	89	1	3.9	2	1
57	loi_pct	4	4	16	400	0	0	30	2	5	0.05	0.52	76	1.5	15.2	0.43	89	1	3.9	2	1
58	loi_pct	4	4	16	400	0	0	75	2	5	0.05	0.52	76	1.5	15.2	0.43	89	1	3.9	2	1
59	loi_pct	4	4	16	400	0	0	30	2	5	0.05	0.52	76	1.5	15.2	0.43	89	1	3.9	2	1
1	loi_pct	4	2	16	600	355	-3	20	2	5	0.05	0.52	76	1.5	15.2	0.43	89	1	3.9	3	1
1	loi_pct	4	2	16	600	340	0	-55	2	5	0.05	0.52	76	1.5	15.2	0.43	89	1	3.9	3	2
1	loi_pct	4	2	16	600	0	0	0	2	5	0.05	0.52	76	1.5	15.2	0.43	89	1	3.9	3	3
2	loi_pct	4	2	16	600	0	0	30	2	5	0.05	0.52	76	1.5	15.2	0.43	89	1	3.9	3	1
3	loi_pct	4	2	16	600	0	0	10	2	5	0.05	0.52	76	1.5	15.2	0.43	89	1	3.9	3	1
4	loi_pct	4	2	16	600	0	0	65	2	5	0.05	0.52	76	1.5	15.2	0.43	89	1	3.9	3	1
5	loi_pct	4	2	16	600	0	0	65	2	5	0.05	0.52	76	1.5	15.2	0.43	89	1	3.9	3	1
6	loi_pct	4	2	16	600	0	0	75	2	5	0.05	0.52	76	1.5	15.2	0.43	89	1	3.9	3	1
20	loi_pct	4	2	16	600	0	0	0	2	5	0.05	0.52	76	1.5	15.2	0.43	89	1	3.9	3	1
54	loi_pct	4	2	16	600	0	0	45	2	5	0.05	0.52	76	1.5	15.2	0.43	89	1	3.9	3	1
55	loi_pct	4	2	16	600	0	0	0	2	5	0.05	0.52	76	1.5	15.2	0.43	89	1	3.9	3	1
56	loi_pct	4	2	16	600	0	0	30	2	5	0.05	0.52	76	1.5	15.2	0.43	89	1	3.9	3	1
57	loi_pct	4	2	16	600	0	0	30	2	5	0.05	0.52	76	1.5	15.2	0.43	89	1	3.9	3	1
58	loi_pct	4	2	16	600	0	0	75	2	5	0.05	0.52	76	1.5	15.2	0.43	89	1	3.9	3	1
59	loi_pct	4	2	16	600	0	0	30	2	5	0.05	0.52	76	1.5	15.2	0.43	89	1	3.9	3	1

Table 5-16: Search Parameters for the element TiO_2

object	element	field	min_sam	max_sam	maj_dis	strike	plunge	dip	semi	minor	c0	c1	a1	semi1	minor1	c2	a2	semi2	minor2	pass	est_zone
1	tio2_pct	5	6	16	200	355	-3	20	2	5	0.05	0.52	76	1	8.4	0.43	84	1	1.9	1	1
1	tio2_pct	5	6	16	200	340	0	-55	2	5	0.05	0.52	76	1	8.4	0.43	84	1	1.9	1	2
1	tio2_pct	5	6	16	200	0	0	0	2	5	0.05	0.52	76	1	8.4	0.43	84	1	1.9	1	3
2	tio2_pct	5	6	16	200	0	0	30	2	5	0.05	0.52	76	1	8.4	0.43	84	1	1.9	1	1
3	tio2_pct	5	6	16	200	0	0	10	2	5	0.05	0.52	76	1	8.4	0.43	84	1	1.9	1	1
4	tio2_pct	5	6	16	200	0	0	65	2	5	0.05	0.52	76	1	8.4	0.43	84	1	1.9	1	1
5	tio2_pct	5	6	16	200	0	0	65	2	5	0.05	0.52	76	1	8.4	0.43	84	1	1.9	1	1
6	tio2_pct	5	6	16	200	0	0	75	2	5	0.05	0.52	76	1	8.4	0.43	84	1	1.9	1	1
20	tio2_pct	5	6	16	200	0	0	0	2	5	0.05	0.52	76	1	8.4	0.43	84	1	1.9	1	1
54	tio2_pct	5	6	16	200	0	0	45	2	5	0.05	0.52	76	1	8.4	0.43	84	1	1.9	1	1
55	tio2_pct	5	6	16	200	0	0	0	2	5	0.05	0.52	76	1	8.4	0.43	84	1	1.9	1	1
56	tio2_pct	5	6	16	200	0	0	30	2	5	0.05	0.52	76	1	8.4	0.43	84	1	1.9	1	1
57	tio2_pct	5	6	16	200	0	0	30	2	5	0.05	0.52	76	1	8.4	0.43	84	1	1.9	1	1
58	tio2_pct	5	6	16	200	0	0	75	2	5	0.05	0.52	76	1	8.4	0.43	84	1	1.9	1	1
59	tio2_pct	5	6	16	200	0	0	30	2	5	0.05	0.52	76	1	8.4	0.43	84	1	1.9	1	1
1	tio2_pct	5	4	16	400	355	-3	20	2	5	0.05	0.52	76	1	8.4	0.43	84	1	1.9	2	1
1	tio2_pct	5	4	16	400	340	0	-55	2	5	0.05	0.52	76	1	8.4	0.43	84	1	1.9	2	2
1	tio2_pct	5	4	16	400	0	0	0	2	5	0.05	0.52	76	1	8.4	0.43	84	1	1.9	2	3
2	tio2_pct	5	4	16	400	0	0	30	2	5	0.05	0.52	76	1	8.4	0.43	84	1	1.9	2	1
3	tio2_pct	5	4	16	400	0	0	10	2	5	0.05	0.52	76	1	8.4	0.43	84	1	1.9	2	1
4	tio2_pct	5	4	16	400	0	0	65	2	5	0.05	0.52	76	1	8.4	0.43	84	1	1.9	2	1
5	tio2_pct	5	4	16	400	0	0	65	2	5	0.05	0.52	76	1	8.4	0.43	84	1	1.9	2	1
6	tio2_pct	5	4	16	400	0	0	75	2	5	0.05	0.52	76	1	8.4	0.43	84	1	1.9	2	1
20	tio2_pct	5	4	16	400	0	0	0	2	5	0.05	0.52	76	1	8.4	0.43	84	1	1.9	2	1
54	tio2_pct	5	4	16	400	0	0	45	2	5	0.05	0.52	76	1	8.4	0.43	84	1	1.9	2	1
55	tio2_pct	5	4	16	400	0	0	0	2	5	0.05	0.52	76	1	8.4	0.43	84	1	1.9	2	1
56	tio2_pct	5	4	16	400	0	0	30	2	5	0.05	0.52	76	1	8.4	0.43	84	1	1.9	2	1
57	tio2_pct	5	4	16	400	0	0	30	2	5	0.05	0.52	76	1	8.4	0.43	84	1	1.9	2	1
58	tio2_pct	5	4	16	400	0	0	75	2	5	0.05	0.52	76	1	8.4	0.43	84	1	1.9	2	1
59	tio2_pct	5	4	16	400	0	0	30	2	5	0.05	0.52	76	1	8.4	0.43	84	1	1.9	2	1
1	tio2_pct	5	2	16	600	355	-3	20	2	5	0.05	0.52	76	1	8.4	0.43	84	1	1.9	3	1
1	tio2_pct	5	2	16	600	340	0	-55	2	5	0.05	0.52	76	1	8.4	0.43	84	1	1.9	3	2
1	tio2_pct	5	2	16	600	0	0	0	2	5	0.05	0.52	76	1	8.4	0.43	84	1	1.9	3	3
2	tio2_pct	5	2	16	600	0	0	30	2	5	0.05	0.52	76	1	8.4	0.43	84	1	1.9	3	1
3	tio2_pct	5	2	16	600	0	0	10	2	5	0.05	0.52	76	1	8.4	0.43	84	1	1.9	3	1
4	tio2_pct	5	2	16	600	0	0	65	2	5	0.05	0.52	76	1	8.4	0.43	84	1	1.9	3	1
5	tio2_pct	5	2	16	600	0	0	65	2	5	0.05	0.52	76	1	8.4	0.43	84	1	1.9	3	1
6	tio2_pct	5	2	16	600	0	0	75	2	5	0.05	0.52	76	1	8.4	0.43	84	1	1.9	3	1
20	tio2_pct	5	2	16	600	0	0	0	2	5	0.05	0.52	76	1	8.4	0.43	84	1	1.9	3	1
54	tio2_pct	5	2	16	600	0	0	45	2	5	0.05	0.52	76	1	8.4	0.43	84	1	1.9	3	1
55	tio2_pct	5	2	16	600	0	0	0	2	5	0.05	0.52	76	1	8.4	0.43	84	1	1.9	3	1
56	tio2_pct	5	2	16	600	0	0	30	2	5	0.05	0.52	76	1	8.4	0.43	84	1	1.9	3	1
57	tio2_pct	5	2	16	600	0	0	30	2	5	0.05	0.52	76	1	8.4	0.43	84	1	1.9	3	1
58	tio2_pct	5	2	16	600	0	0	75	2	5	0.05	0.52	76	1	8.4	0.43	84	1	1.9	3	1
59	tio2_pct	5	2	16	600	0	0	30	2	5	0.05	0.52	76	1	8.4	0.43	84	1	1.9	3	1

Model Validation

A three-step process was followed to validate the grade estimates:

- A quantitative comparison was made between the average grades from the input samples and those from the block model for each lode.
- Swath plot between composite and block grades.
- A nearest neighbour (NN) estimate to verify the OK results.

The NN estimate used 2.5 m composites, matching the 2.5 m block height, to allow a direct comparison between methods.

Validation results show that, on a global scale, the estimated grades are slightly lower than the composite averages, indicating the model does not overstate high or low grades. The statistical comparison between block grade and composite grades demonstrates good correlation (Table 5-17).

Validation plots of Domain 1 show strong correlation between composite and block grades (Figure 5-13 and Figure 5-14). The same consistency was observed for the remaining domains. The NN and OK estimates are in close agreement, confirming that the interpolation process appropriately smooths the grades while maintaining the overall grade trends of the data.

Table 5-17: Statistical Validation between Block Model Estimate and Composite Grade

Ore Domain	Block Model TGC	% TGC_NN	Composites % TGC	BM V Comp % TGC
1	9.78	9.57	9.33	4.59
2	9.29	9.58	10.26	-10.50
3	7.31		7.16	2.05
4	8.4	7.76	8.54	-1.62
5	8.58	6.98	8.27	3.57
6	8.2	7.91	7.98	2.70
Total	9.42	9.47	9.42	0.03

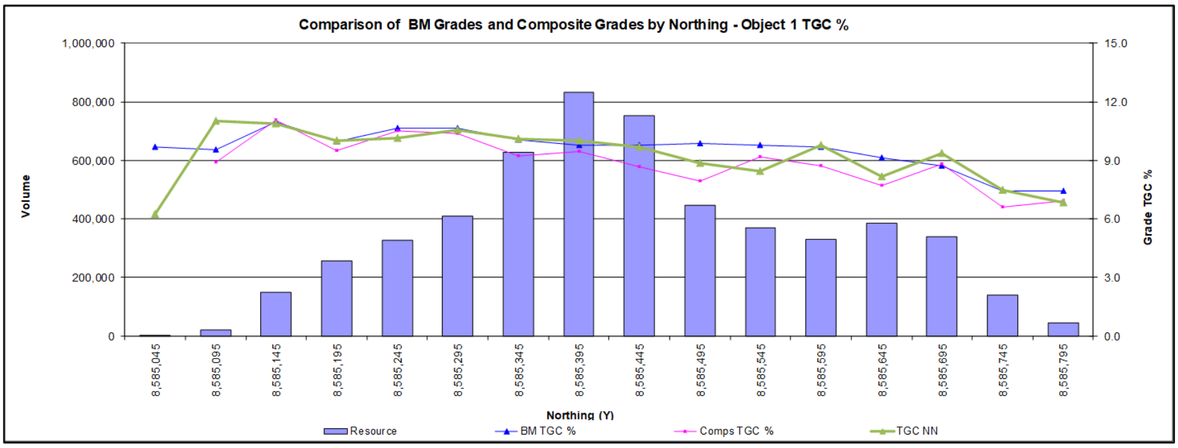


Figure 5-13: Swath Plot of TGC of Ore Domain 1 along Y direction

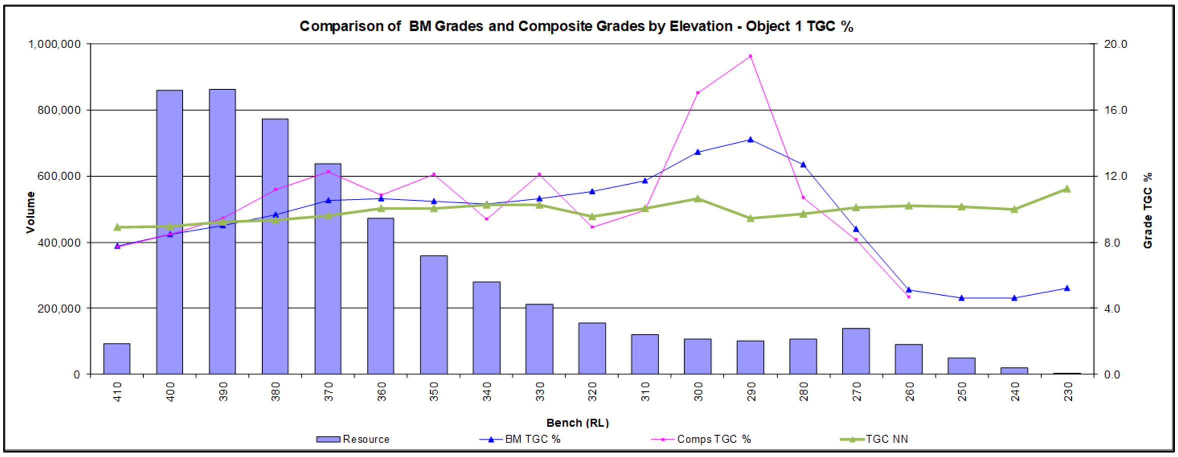


Figure 5-14: Swath Plot of TGC of Ore Domain 1 along Z direction

Density Model

A total of 1,484 bulk density measurements were taken from diamond drill core samples at the Buffalo deposit using the water immersion method. Because the samples were small (mostly less than 15 cm) and irregular, no estimation was carried out. The results were reviewed by comparing densities across different lithologies and mineralised zones in the block model. Overall, the mineralised samples showed slightly lower densities than the waste material. Table 5-18 and Table 5-19 summarises the density values assigned to the mineralised and waste domains, based on the different weathering zones.

Table 5-18: Density Summary of Mineralised Domains based on Weathering Profile

Oxidation	Statistics	Ore Wireframe Domain					
		1	2	3	4	5	6
Oxide	Samples	22	-	-	-	-	-
	Density	2.14	-	-	-	-	-
Saprolite	Samples	145	-	-	22	-	-
	Density	2.2	-	-	2.15	-	-
Joint Ox.	Samples	88	10	-	-	6	-
	Density	2.43	2.41	-	-	2.23	-
Fresh	Samples	189	258	-	11	24	26
	Density	2.78	2.74	-	2.61	2.72	2.77

Table 5-19: Density Summary of Waste Domain based on Weathering Profile

Oxidation/Type	Samples	Density
Overburden	28	2.03
Oxide	8	2.13
Saprolite	118	2.37
Joint Oxidised	114	2.59
Fresh	415	2.81

Mineral Resource Classification

The Buffalo deposit shows good continuity of the main mineralised lodes. The mineralisation displays uniform thickness, and grade distribution is consistent both along strike and across strike.

The Mineral Resource has been classified as Measured, Indicated, and Inferred based on data quality, sample spacing, and geological continuity. Following are classification scheme at Buffalo:

- Measured Resources occur in areas drilled on a 50 x 12.5 m grid using RC and diamond drilling and are limited to material above the top of fresh rock. These areas also include locations where metallurgical and product test samples were collected.
- Indicated Resources are defined in areas with close-spaced diamond drilling (generally less than 200 x 50 m) where the lode geometry is well established.
- Inferred Resources are assigned to zones with wider drill spacing (greater than 200 x 50 m), small, isolated pods of mineralisation outside the main lodes, and areas of geological complexity.

The Mineral Resource classification follows the guidelines of the JORC Code (2012), which outlines the technical and reporting standards required for public disclosure.

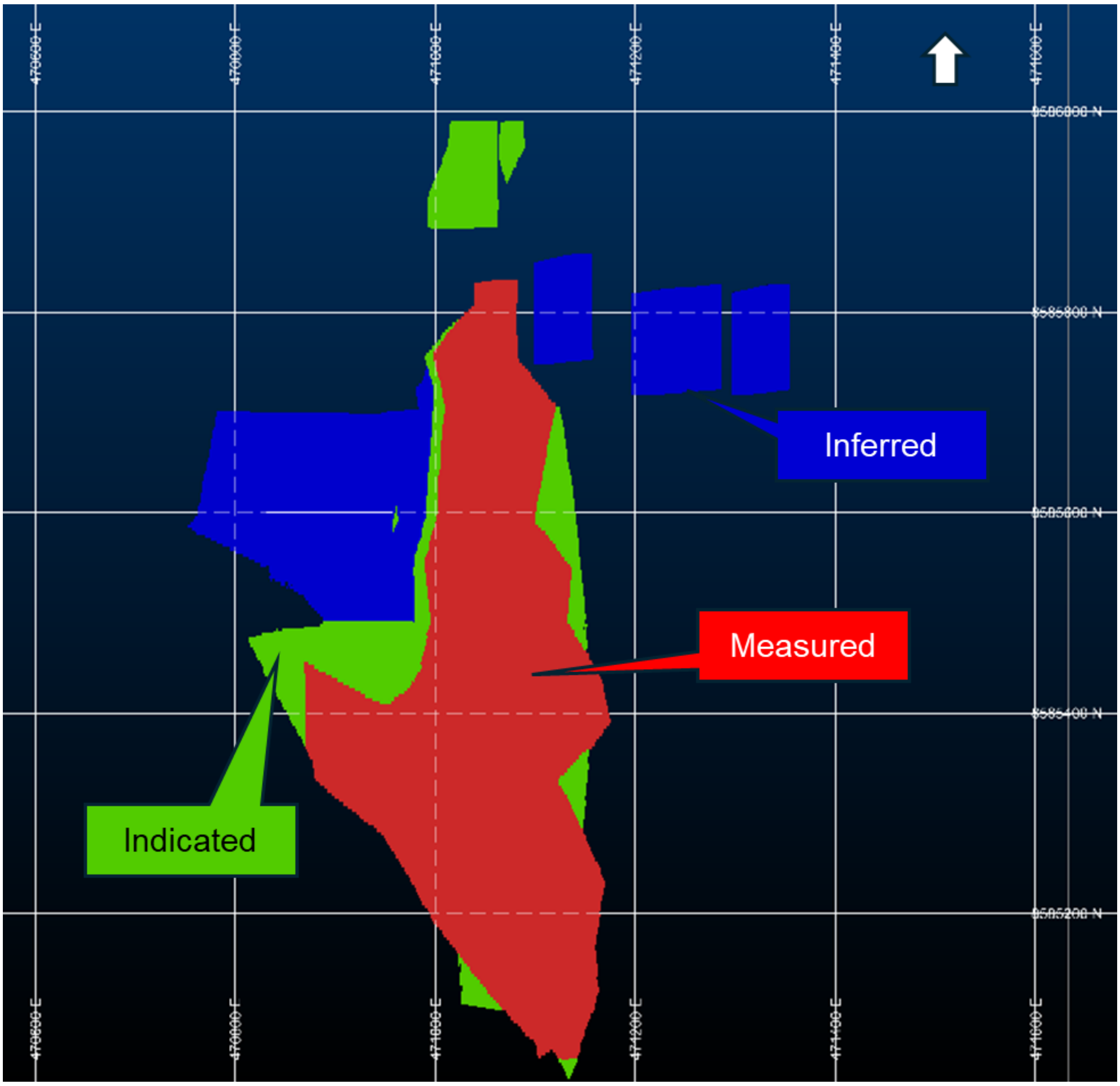


Figure 5-15: Buffalo Classification Scheme (Plan View)

RPEEE

The Mineral Resource is reported above a 2.5% TGC cut-off grade, constrained by geological wireframes and an optimised pit shell based on a USD 800/t concentrate price.

The Buffalo graphite deposit hosts natural graphite that can be processed using standard flotation technology to produce concentrates meeting international quality benchmarks. Flotation tests conducted by Minnovo Pty Ltd confirmed that a concentrate exceeding 95% purity can be achieved through conventional flotation methods.

The graphite concentrate from Buffalo is expected to be used in the production of Active Anode Material (AAM), a key component of lithium-ion batteries. AAM forms the negative electrode, where lithium ions are stored during charging. Mozambican graphite's high density allows more active material to be packed into a smaller battery cell volume, resulting in higher energy density and longer battery life. Its consistent particle size distribution supports uniform anode coating, improved charge/discharge performance, and enhanced battery efficiency and safety.

Mineral Resource Statement

Table 5-20 summarizes the Mineral Resource Statement for the Buffalo project as on 30 September 2025 considering 2.5% TGC cut-off grade.

Table 5-20: Buffalo Mineral Resource, 30 September 2025

Classification	Material	Tonnage (Mt)	TGC %
Measured	Primary	2.1	9.2
Measured	Weathered	3.4	8.8
Indicated	Primary	16.2	10.4
Indicated	Weathered	0.2	7.7
Inferred	Primary	19.6	8.9
Inferred	Weathered	0.1	8.3
Total Resources		41.6	9.5

The following notes accompany the Mineral Resource Statement:

- The Mineral Resources have an effective date of 30 September 2025;
- Rounding as required by reporting guidelines may result in apparent summation differences between tonnes, grade and contained metal content. Where these occur, they are not considered material.
- Tonnages are reported in metric units, grades in percent (%) and grades are rounded appropriately.
- The Competent Person for the declaration of Mineral Resources is Mr Shameek Chattopadhyay, an employee of SRK.
- Mineral Resources are reported with reasonable prospects for eventual economic extraction, by applying appropriate technical and economic assumptions. A cut-off grade of 2.5% TGC has been applied.
- Mineral Resources are not Ore Reserves and do not have demonstrated economic viability, nor have any mining modifying factors been applied.

- A JORC Table 1 has been completed and is available from the Company. All elements of Table 1 are included in this CPR.

Sensitivity

SRK has produced a grade-tonnage curve for TGC%, which is shown in Figure 5-16.

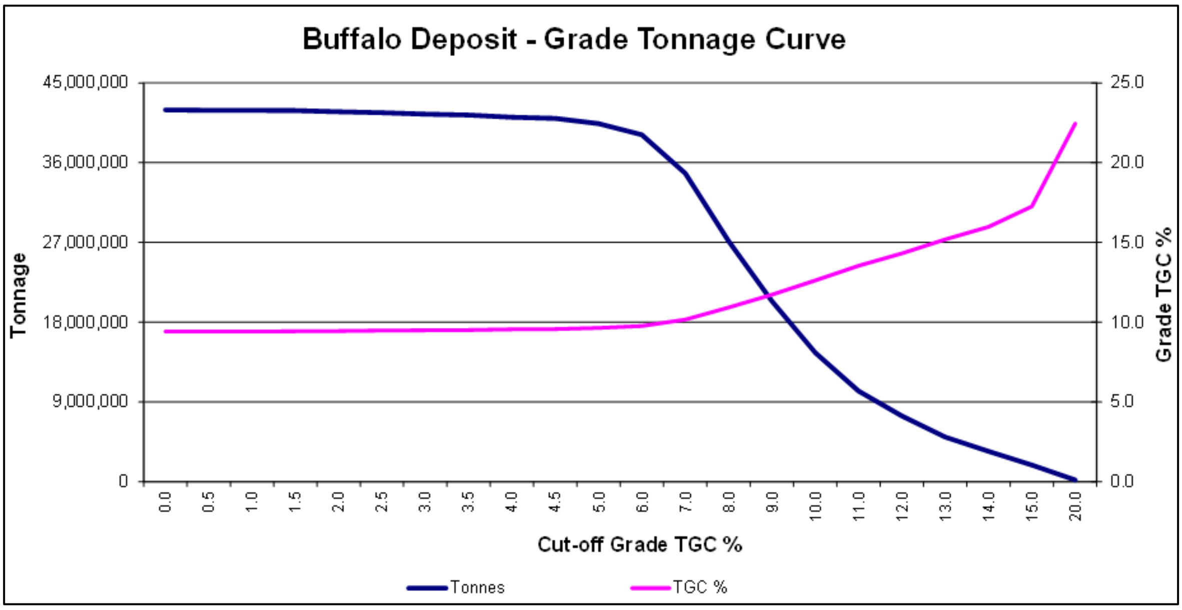


Figure 5-16: Buffalo Resource Grade Tonnage Curve

5.9.2 Elephant

Database

A summary of the exploration database used for Elephant Mineral Resource estimation is presented in Table 5-21 and illustrated in Figure 5-17. The water boreholes (WB) were excluded from the resource database. Of the total 276 drillholes, 217 were used for the resource estimation. All drillhole collars were surveyed using the WGS84 UTM Zone 37 South datum. Collar surveying was carried out by a differential GPS (DGPS) device with an accuracy of ±0.02 cm. Downhole dip and azimuth deviations for diamond drillholes were recorded at 30 m intervals using an electronic multi-shot tool. RC holes were not downhole surveyed.

Table 5-21: Elephant Database Summary

Hole Type	Elephant Drillholes		Mineral Resource Drillholes		Ore Intersection
	Number	(m)	Number	(m)	(m)
DDH	30	3,475	24	3,015	2,065
WB	6	561	-	-	-
RC	240	4,968	193	4,152	3,646
Total	276	9,004	217	7,617	5,711

WB = water bore.

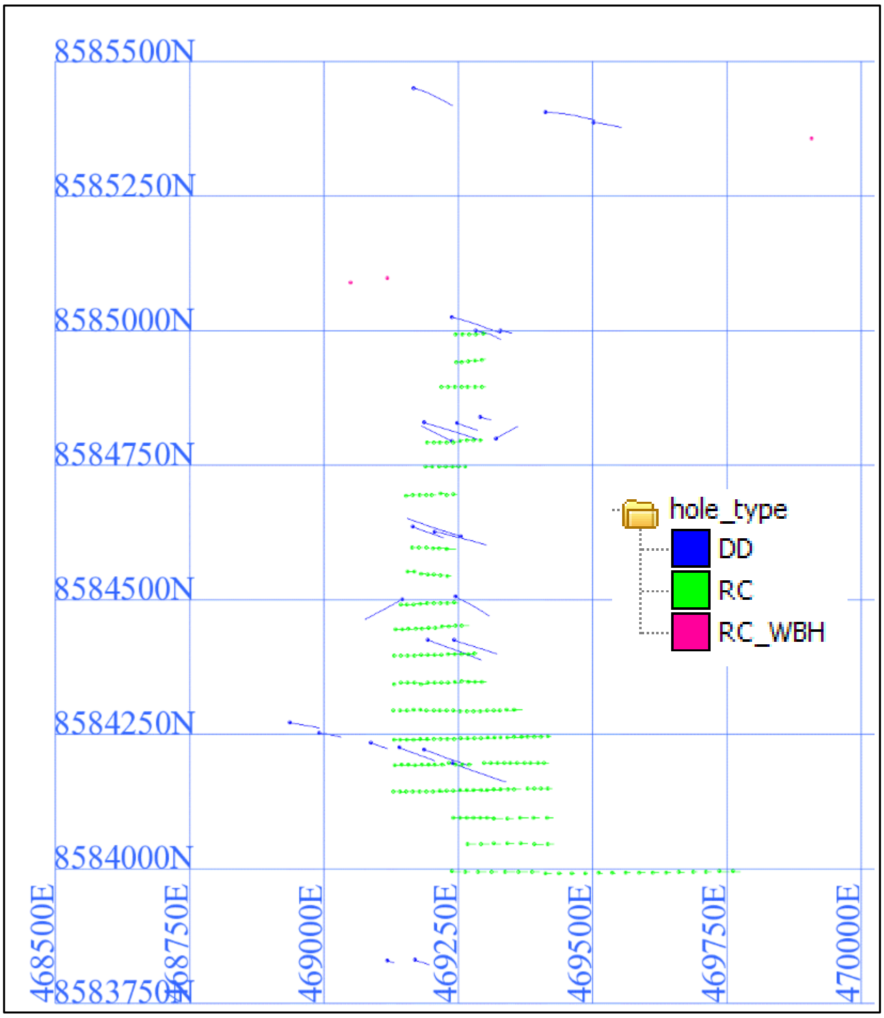


Figure 5-17: Elephant Drillhole Distribution

Data Verification

Prior to the construction of geological modelling, SRK undertook a data validation exercise to ensure the data quality is appropriate for undertaking a Mineral Resource Estimate. SRK did not find any material issue in terms of the integrity of the exploration database. Verification included:

- validation of the borehole coordinates;
- overlapping intervals;
- harmonisation of the geological logging codes;
- missing interval and missing assay results;
- assigning appropriate value for those samples where the GC% were reported below the detection limit; and
- reconciliation of the geological logs with the assay results.

Geological Model

Section outlines were manually triangulated to create wireframes. The end sections were extended halfway to the next section or up to 200 m, adjusted to match the dip, strike, and plunge of the zone. The completed wireframes were validated in Surpac software and converted into solid models.

A total of eleven graphitic schist wireframes were developed to define the mineralised zones used for grade estimation and to constrain the block model. Each wireframe acted as a hard boundary. The domains are created based on 2.5% TGC cut-off and minimum 4 m width, derived through statistical analyses.

Geological wireframes were prepared based on geological logging. A solid was also created for the amphibolite unit, which seems to crosscut graphitic schist mineralisation in the central eastern hanging wall.

RPM previously generated weathering surfaces using drill hole logging data for the top of fresh rock base of saprolite and base of complete oxidation. SRK reviewed the surface and found geologically adequate.

A topographic surface was generated from an aerial survey conducted during 2016.

Domain Definition

The geological domain boundaries are based on logged geology, reconciled with TGC grades. The main mineralised zone (GS) includes the GSQF, GS1, and GS2 lithologies. The surrounding country rock is amphibolite and was treated as waste. Interburdens of psammite is present and modelled based on the minimum thickness criteria. Grades for TGC, V_2O_5, S, LOI, and TiO_2 were estimated in both the mineralised and waste domains. Raw assay data were analysed in Supervisor software to identify an appropriate cut-off grade for defining ore. Distinct grade population breaks occurred at 2.5% TGC which was adopted as the cut-off to define the mineralization. A minimum width of 4 m was used to model the mineralised material, with limited internal dilution was included to maintain geological continuity of the wireframes. The modelled domains are illustrated in Figure 5-18 and Figure 5-19. Hangingwall and footwall boundaries are not diluted.

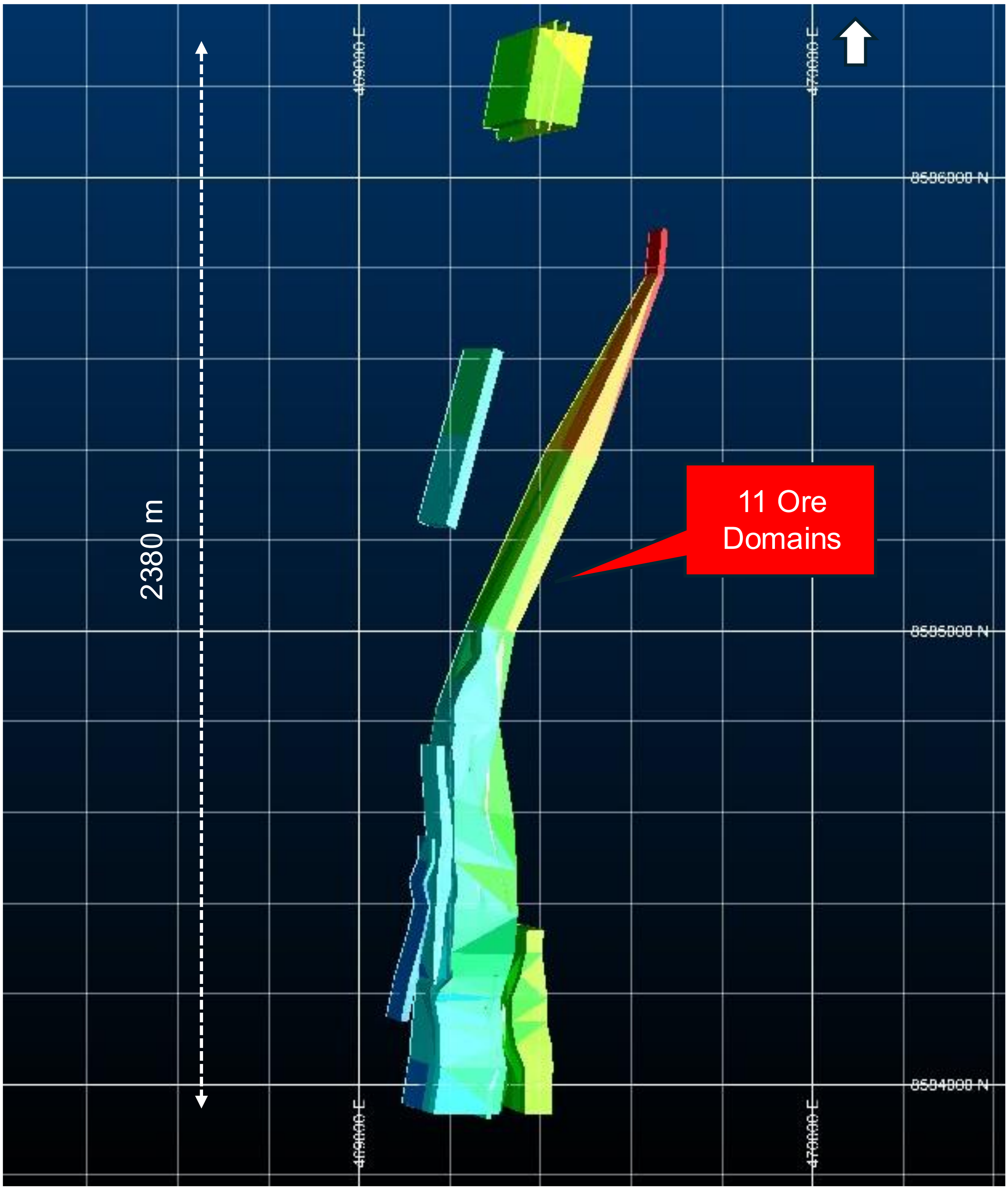


Figure 5-18: Elephant mineralized wireframes plan view

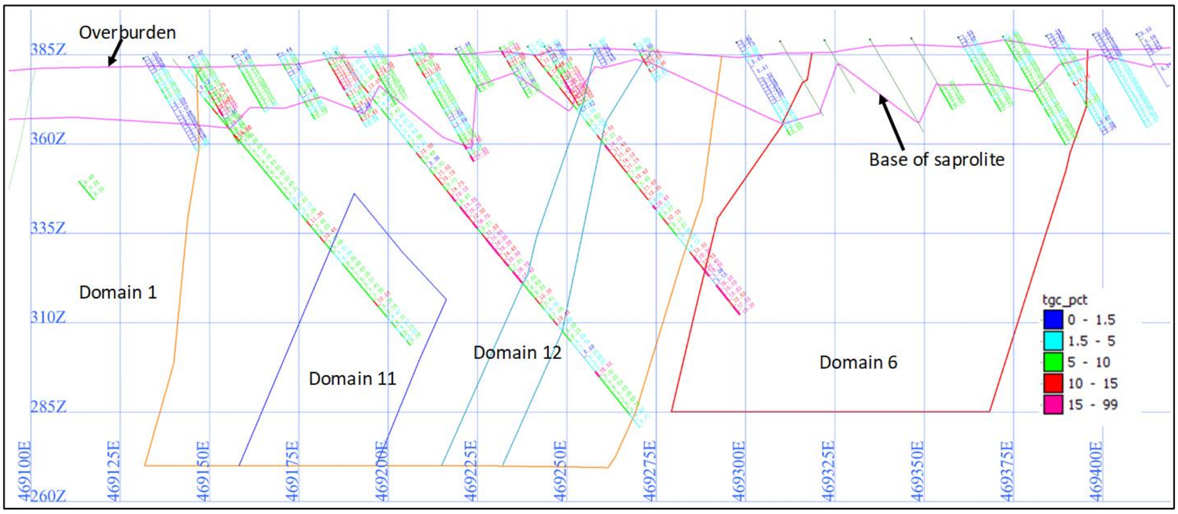


Figure 5-19: Elephant Wireframes and Drilling Representative Cross Section

Compositing

Prior to generating the MRE, the samples were composited to equal lengths such that a constant volume was achieved, therefore honouring the sample support theory. As sampling was predominantly based on lithological intervals, the actual sample lengths range between 1 m to 3 m. Most samples were 1 m or 2 m in length (Figure 5-20). A composite length of 1 m was used. SRK undertook a statistical analysis to ensure that the composites did not result in a reduction in the mean GC grade and found adequate (Table 5-22). Five elements were extracted into the composite files which include total graphitic carbon TGC (%), V_2O_5 (%), S (%), TiO_2 (%) and LOI (%).

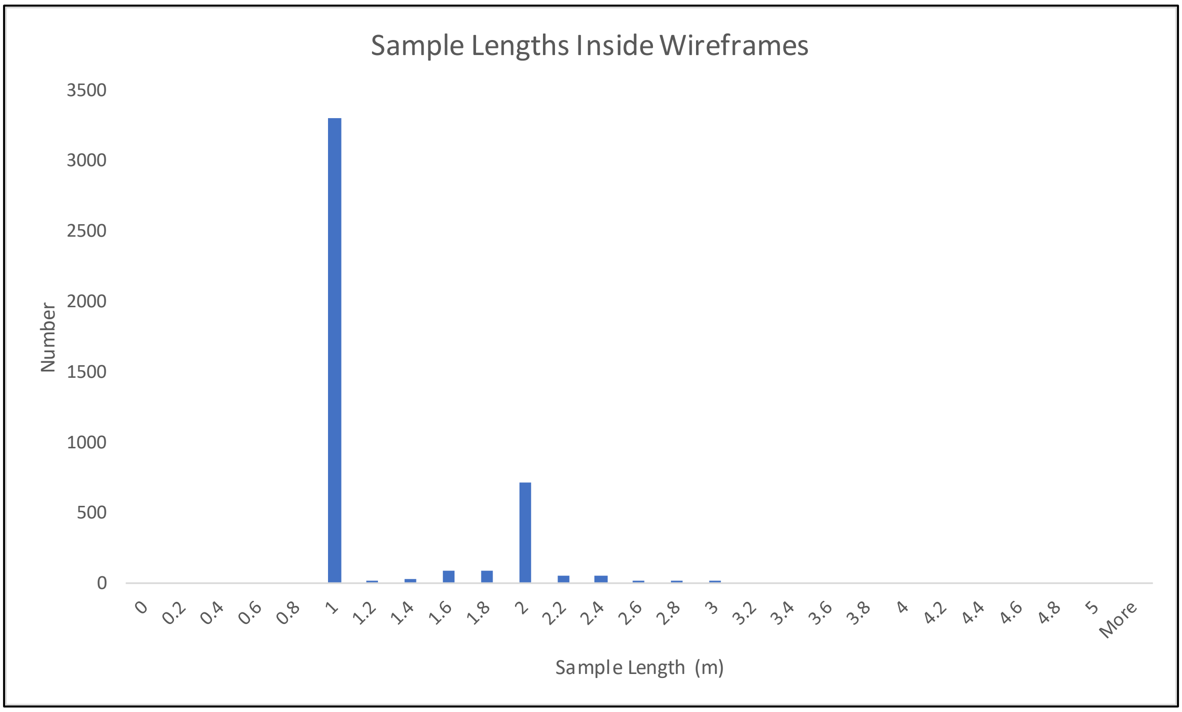


Figure 5-20: Elephant Sample length

Table 5-22: Composite Sample Statistics

Domain	Samples	Minimum	Maximum	Mean	Stan Dev	CoV	Variance
1	3,645	0.01	36.8	8.82	4.91	0.56	24.08
2	226	0.05	16.5	5.7	2.43	0.43	5.89
3	39	0.71	9.63	5.33	1.86	0.35	3.45
4	55	0.22	14.5	6.84	3.15	0.46	9.9
5	135	0.33	19.35	6.94	3.13	0.45	9.81
6	353	0.07	25.4	7.21	4.22	0.59	17.79
11	186	0.05	17.55	4.35	3.2	0.74	10.23
12	167	0.02	13.1	4.08	3.12	0.77	9.73
22	45	0.01	6	1.05	1.26	1.2	1.59
51	9	0.81	12.1	4.41	4.31	0.98	18.57
52	7	1.48	2.93	2.44	0.56	0.23	0.31

Declustering

Since the drillholes are uniformly distributed in a regular grid pattern and do not exhibit clustering, declustering was not necessary prior to resource estimation. The equal spacing of drillholes ensures that each sample contributes evenly to the estimation process, minimizing the risk of spatial bias or over-representation of certain areas within the dataset.

Grade Capping

SRK conducted a comprehensive capping analysis for each variable within each estimation domain. SRK analysed capping sensitivity plots and 3D visual inspections of grade distributions to assess the presence and influence of higher values. The results indicated that there are no significant higher values as outliers present and have no material impact on the statistical distributions. Consequently, no capping was necessary for any of the domains.

Geostatistical Analysis

Mineralization continuity was evaluated through variography, which analyses the spatial relationship between composite samples to identify the directions and ranges of grade continuity, as well as the degree of random variability (nugget effect) within the deposit. The results were used to define suitable kriging parameters for resource estimation.

For this deposit, SRK conducted experimental variogram analysis for Domain 1 using composited data for each element in Supervisor software. A two-structure nested spherical model provided a good fit to the experimental variograms. The downhole variogram, representing the best estimate of the true nugget effect, returned values of 0.11 for TGC, 0.02 for V_2O_5, 0.04 for S, 0.07 for LOI and 0.04 for TiO_2 (Table 5-23 and Figure 5-21).

The orientation of the variogram models was aligned with the interpreted wireframe of the main mineralized zone. The first variogram direction corresponded to the primary axis of mineralization continuity, the second was oriented within the mineralized plane at 90° to the first, and the third was oriented perpendicular to the mineralization plane across its width.

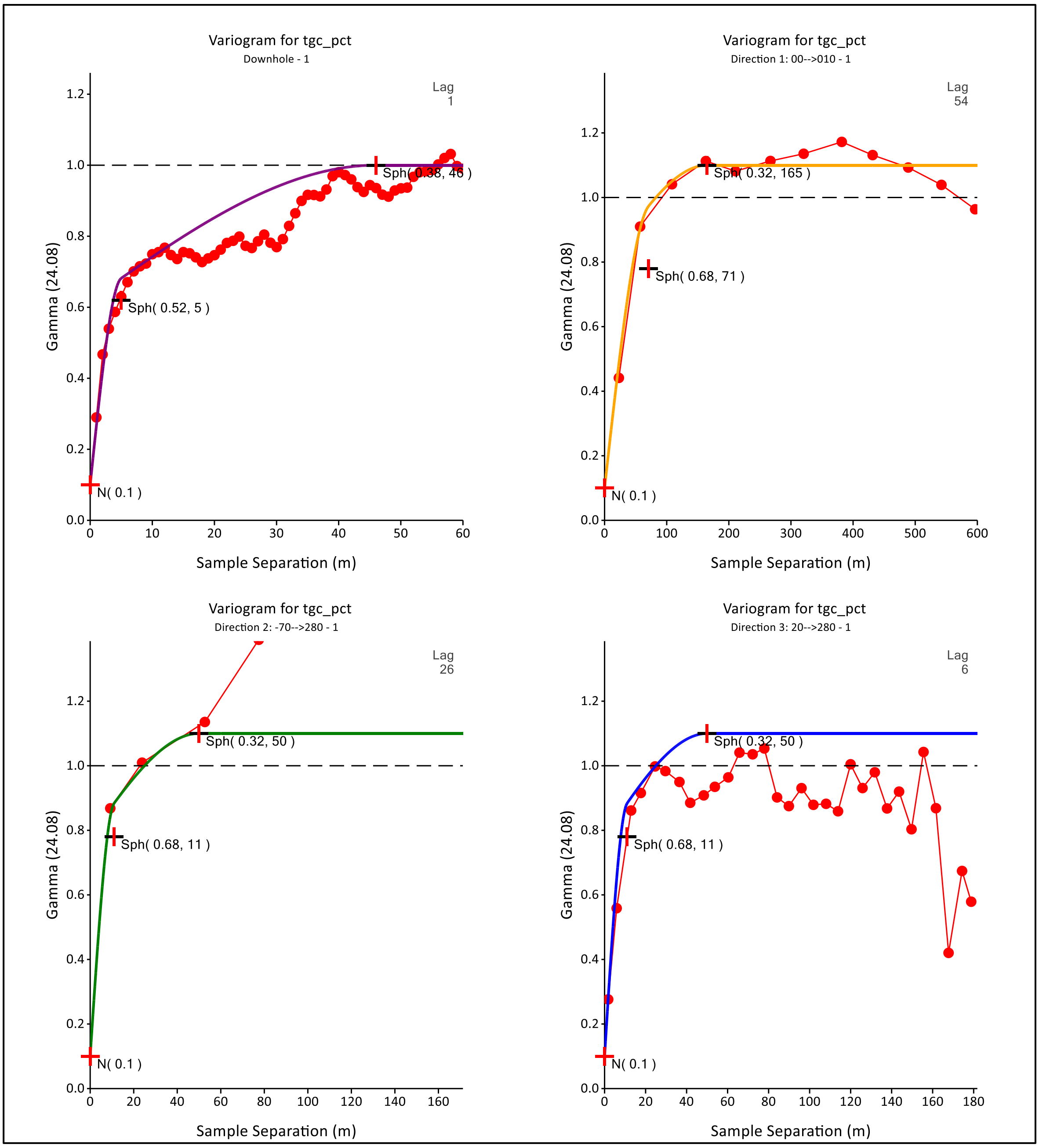


Figure 5-21: Variogram of TGC of domain 1 used for remaining domains

Table 5-23: Elephant Deposit Variogram Parameters for all elements

Element	Major Direction	Nugget	Structure 1 C1	A1	Semi	Minor	Structure 2 C2	A2	Semi	Minor
TGC	00-->010	0.1	0.68	71	6.5	6.4	0.32	165	3.3	3.3
V2O5	00-->010	0.02	0.32	95	15.8	15.8	0.66	140	3.6	3.6
S	00-->010	0.04	0.54	144	7.6	7.6	0.42	191	3.2	3.2
LOI	00-->010	0.07	0.41	28	9.3	9.3	0.52	195	6.3	6.3
TiO2	00-->010	0.04	0.39	213	4.5	11.2	0.57	214	3.2	3.9

Block Model

Following the construction of the wireframes and the geostatistical analysis, a 3D block model was created in Surpac software. For the selection of the block model framework SRK considered the average borehole spacing and possible open pit bench height. Besides, to test the optimal block size for existing drilling at the deposit, KNA was conducted within Supervisor for Domain 1. A range of block sizes were assessed for regression slope and kriging efficiency. In order to increase the accuracy of the domain boundary definition, SRK used sub-blocks along each direction for all the modelled geological wireframes. Sub-cells of 3.125 m along X, 3.125 m along Y and 3.125 m along Z has been used. Table 5-24 presents the summary of the block model parameters selected by SRK for Elephant.

Table 5-24: Elephant Block Model Framework Summary

	X (m)	Y (m)	Z (m)
Minimum	468600	8583500	150
Maximum	475600	8586800	3650
Range	7000	3300	3500
Parent block size	25	25	25
Number of blocks	280	132	140
Rotation	0	0	0

Grade Estimation

For Elephant, SRK used OK for the grade interpolation into the block model, honouring the geological contacts defined by the geological modelling process and using the variogram parameters set out above. Grades for TGC, V_2O_5, S, LOI, and TiO_2 were estimated in Surpac.

Before undertaking the grade estimation, SRK carried out a search neighbourhood analysis for the appropriateness of the search and estimation parameters through the optimisation of the following parameters:

- Search Ellipsoid Dimension.
- Number of minimum and maximum samples to be used for estimation.
- Optimisation of Search Octants.
- Number of discretisation points.

Based on the results of the above study, SRK selected the final search parameters for Elephant for the elements TGC, V_2O_5, S, LOI, and TiO_2, which are reflected in Table 5-25 to Table 5-29. To compare the mean grades derived from the OK, SRK also estimated the empty block model using Inverse Distance Weighted Method. The estimation parameters were set up by visually checking the data to ensure suitable minimum and maximum samples have been used, and that the factored searches were sufficiently large to fill the entire block model. Minimum 6 and maximum 16 samples are used in first search for estimation. SRK adopted a block discretisation of 2 (X) by 5 (Y) by 2 (Z) for the Elephant estimate. No octants used and max key was taken as 6. Maximum sample allowed per hole was 6.

Table 5-25: Elephant TGC (Total Graphitic Content)Search Parameters

object	element	field	min_sam	max_sam	maj_dis	strike	plunge	dip	semi	minor	c0	c1	a1	semi1	minor1	c2	a2	semi2	minor2	pass	est_zone
1	tgc_pct	1	6	16	200	10	0	75	2	8	0.1	0.68	71	6.5	6.5	0.32	165	3.3	3.3	1	1
1	tgc_pct	1	6	16	200	25	0	75	2	8	0.1	0.68	71	6.5	6.5	0.32	165	3.3	3.3	1	2
2	tgc_pct	1	6	16	200	0	0	75	2	8	0.1	0.68	71	6.5	6.5	0.32	165	3.3	3.3	1	1
4	tgc_pct	1	6	16	200	15	0	75	2	8	0.1	0.68	71	6.5	6.5	0.32	165	3.3	3.3	1	1
6	tgc_pct	1	6	16	200	0	0	75	2	8	0.1	0.68	71	6.5	6.5	0.32	165	3.3	3.3	1	1
11	tgc_pct	1	6	16	200	10	0	75	2	8	0.1	0.68	71	6.5	6.5	0.32	165	3.3	3.3	1	1
11	tgc_pct	1	6	16	200	25	0	75	2	8	0.1	0.68	71	6.5	6.5	0.32	165	3.3	3.3	1	2
12	tgc_pct	1	6	16	200	10	0	75	2	8	0.1	0.68	71	6.5	6.5	0.32	165	3.3	3.3	1	1
12	tgc_pct	1	6	16	200	25	0	75	2	8	0.1	0.68	71	6.5	6.5	0.32	165	3.3	3.3	1	2
22	tgc_pct	1	6	16	200	0	0	75	2	8	0.1	0.68	71	6.5	6.5	0.32	165	3.3	3.3	1	1
1	tgc_pct	1	4	16	400	10	0	75	2	8	0.1	0.68	71	6.5	6.5	0.32	165	3.3	3.3	2	1
1	tgc_pct	1	4	16	400	25	0	75	2	8	0.1	0.68	71	6.5	6.5	0.32	165	3.3	3.3	2	2
2	tgc_pct	1	4	16	400	0	0	75	2	8	0.1	0.68	71	6.5	6.5	0.32	165	3.3	3.3	2	1
4	tgc_pct	1	4	16	400	15	0	75	2	8	0.1	0.68	71	6.5	6.5	0.32	165	3.3	3.3	2	1
6	tgc_pct	1	4	16	400	0	0	75	2	8	0.1	0.68	71	6.5	6.5	0.32	165	3.3	3.3	2	1
11	tgc_pct	1	4	16	400	10	0	75	2	8	0.1	0.68	71	6.5	6.5	0.32	165	3.3	3.3	2	1
11	tgc_pct	1	4	16	400	25	0	75	2	8	0.1	0.68	71	6.5	6.5	0.32	165	3.3	3.3	2	2
12	tgc_pct	1	4	16	400	10	0	75	2	8	0.1	0.68	71	6.5	6.5	0.32	165	3.3	3.3	2	1
12	tgc_pct	1	4	16	400	25	0	75	2	8	0.1	0.68	71	6.5	6.5	0.32	165	3.3	3.3	2	2
22	tgc_pct	1	4	16	400	0	0	75	2	8	0.1	0.68	71	6.5	6.5	0.32	165	3.3	3.3	2	1
1	tgc_pct	1	2	16	600	10	0	75	2	8	0.1	0.68	71	6.5	6.5	0.32	165	3.3	3.3	3	1
1	tgc_pct	1	2	16	600	25	0	75	2	8	0.1	0.68	71	6.5	6.5	0.32	165	3.3	3.3	3	2
2	tgc_pct	1	2	16	600	0	0	75	2	8	0.1	0.68	71	6.5	6.5	0.32	165	3.3	3.3	3	1
4	tgc_pct	1	2	16	600	15	0	75	2	8	0.1	0.68	71	6.5	6.5	0.32	165	3.3	3.3	3	1
6	tgc_pct	1	2	16	600	0	0	75	2	8	0.1	0.68	71	6.5	6.5	0.32	165	3.3	3.3	3	1
11	tgc_pct	1	2	16	600	10	0	75	2	8	0.1	0.68	71	6.5	6.5	0.32	165	3.3	3.3	3	1
11	tgc_pct	1	2	16	600	25	0	75	2	8	0.1	0.68	71	6.5	6.5	0.32	165	3.3	3.3	3	2
12	tgc_pct	1	2	16	600	10	0	75	2	8	0.1	0.68	71	6.5	6.5	0.32	165	3.3	3.3	3	1
12	tgc_pct	1	2	16	600	25	0	75	2	8	0.1	0.68	71	6.5	6.5	0.32	165	3.3	3.3	3	2
22	tgc_pct	1	2	16	600	0	0	75	2	8	0.1	0.68	71	6.5	6.5	0.32	165	3.3	3.3	3	1

Table 5-26: Elephant V_2O_5 Search Parameters

object	element	field	min_sam	max_sam	maj_dis	strike	plunge	dip	semi	minor	c0	c1	a1	semi1	minor1	c2	a2	semi2	minor2	pass	est_zone
1	v2o5_pct	2	6	16	200	10	0	75	2	8	0.02	0.32	95	15.8	15.8	0.66	140	3.6	3.6	1	1
1	v2o5_pct	2	6	16	200	25	0	75	2	8	0.02	0.32	95	15.8	15.8	0.66	140	3.6	3.6	1	2
2	v2o5_pct	2	6	16	200	0	0	75	2	8	0.02	0.32	95	15.8	15.8	0.66	140	3.6	3.6	1	1
4	v2o5_pct	2	6	16	200	15	0	75	2	8	0.02	0.32	95	15.8	15.8	0.66	140	3.6	3.6	1	1
6	v2o5_pct	2	6	16	200	0	0	75	2	8	0.02	0.32	95	15.8	15.8	0.66	140	3.6	3.6	1	1
11	v2o5_pct	2	6	16	200	10	0	75	2	8	0.02	0.32	95	15.8	15.8	0.66	140	3.6	3.6	1	1
11	v2o5_pct	2	6	16	200	25	0	75	2	8	0.02	0.32	95	15.8	15.8	0.66	140	3.6	3.6	1	2
12	v2o5_pct	2	6	16	200	10	0	75	2	8	0.02	0.32	95	15.8	15.8	0.66	140	3.6	3.6	1	1
12	v2o5_pct	2	6	16	200	25	0	75	2	8	0.02	0.32	95	15.8	15.8	0.66	140	3.6	3.6	1	2
22	v2o5_pct	2	6	16	200	0	0	75	2	8	0.02	0.32	95	15.8	15.8	0.66	140	3.6	3.6	1	1
1	v2o5_pct	2	4	16	400	10	0	75	2	8	0.02	0.32	95	15.8	15.8	0.66	140	3.6	3.6	2	1
1	v2o5_pct	2	4	16	400	25	0	75	2	8	0.02	0.32	95	15.8	15.8	0.66	140	3.6	3.6	2	2
2	v2o5_pct	2	4	16	400	0	0	75	2	8	0.02	0.32	95	15.8	15.8	0.66	140	3.6	3.6	2	1
4	v2o5_pct	2	4	16	400	15	0	75	2	8	0.02	0.32	95	15.8	15.8	0.66	140	3.6	3.6	2	1
6	v2o5_pct	2	4	16	400	0	0	75	2	8	0.02	0.32	95	15.8	15.8	0.66	140	3.6	3.6	2	1
11	v2o5_pct	2	4	16	400	10	0	75	2	8	0.02	0.32	95	15.8	15.8	0.66	140	3.6	3.6	2	1
11	v2o5_pct	2	4	16	400	25	0	75	2	8	0.02	0.32	95	15.8	15.8	0.66	140	3.6	3.6	2	2
12	v2o5_pct	2	4	16	400	10	0	75	2	8	0.02	0.32	95	15.8	15.8	0.66	140	3.6	3.6	2	1
12	v2o5_pct	2	4	16	400	25	0	75	2	8	0.02	0.32	95	15.8	15.8	0.66	140	3.6	3.6	2	2
22	v2o5_pct	2	4	16	400	0	0	75	2	8	0.02	0.32	95	15.8	15.8	0.66	140	3.6	3.6	2	1
1	v2o5_pct	2	2	16	600	10	0	75	2	8	0.02	0.32	95	15.8	15.8	0.66	140	3.6	3.6	3	1
1	v2o5_pct	2	2	16	600	25	0	75	2	8	0.02	0.32	95	15.8	15.8	0.66	140	3.6	3.6	3	2
2	v2o5_pct	2	2	16	600	0	0	75	2	8	0.02	0.32	95	15.8	15.8	0.66	140	3.6	3.6	3	1
4	v2o5_pct	2	2	16	600	15	0	75	2	8	0.02	0.32	95	15.8	15.8	0.66	140	3.6	3.6	3	1
6	v2o5_pct	2	2	16	600	0	0	75	2	8	0.02	0.32	95	15.8	15.8	0.66	140	3.6	3.6	3	1
11	v2o5_pct	2	2	16	600	10	0	75	2	8	0.02	0.32	95	15.8	15.8	0.66	140	3.6	3.6	3	1
11	v2o5_pct	2	2	16	600	25	0	75	2	8	0.02	0.32	95	15.8	15.8	0.66	140	3.6	3.6	3	2
12	v2o5_pct	2	2	16	600	10	0	75	2	8	0.02	0.32	95	15.8	15.8	0.66	140	3.6	3.6	3	1
12	v2o5_pct	2	2	16	600	25	0	75	2	8	0.02	0.32	95	15.8	15.8	0.66	140	3.6	3.6	3	2
22	v2o5_pct	2	2	16	600	0	0	75	2	8	0.02	0.32	95	15.8	15.8	0.66	140	3.6	3.6	3	1

Table 5-27: Elephant S Search Parameters

object	element	field	min_sam	max_sam	maj_dis	strike	plunge	dip	semi	minor	c0	c1	a1	semi1	minor1	c2	a2	semi2	minor2	pass	est_zone
1	s_pct	3	6	16	200	10	0	75	2	8	0.04	0.54	144	7.6	7.6	0.42	191	3.2	3.2	1	1
1	s_pct	3	6	16	200	25	0	75	2	8	0.04	0.54	144	7.6	7.6	0.42	191	3.2	3.2	1	2
2	s_pct	3	6	16	200	0	0	75	2	8	0.04	0.54	144	7.6	7.6	0.42	191	3.2	3.2	1	1
4	s_pct	3	6	16	200	15	0	75	2	8	0.04	0.54	144	7.6	7.6	0.42	191	3.2	3.2	1	1
6	s_pct	3	6	16	200	0	0	75	2	8	0.04	0.54	144	7.6	7.6	0.42	191	3.2	3.2	1	1
11	s_pct	3	6	16	200	10	0	75	2	8	0.04	0.54	144	7.6	7.6	0.42	191	3.2	3.2	1	1
11	s_pct	3	6	16	200	25	0	75	2	8	0.04	0.54	144	7.6	7.6	0.42	191	3.2	3.2	1	2
12	s_pct	3	6	16	200	10	0	75	2	8	0.04	0.54	144	7.6	7.6	0.42	191	3.2	3.2	1	1
12	s_pct	3	6	16	200	25	0	75	2	8	0.04	0.54	144	7.6	7.6	0.42	191	3.2	3.2	1	2
22	s_pct	3	6	16	200	0	0	75	2	8	0.04	0.54	144	7.6	7.6	0.42	191	3.2	3.2	1	1
1	s_pct	3	4	16	400	10	0	75	2	8	0.04	0.54	144	7.6	7.6	0.42	191	3.2	3.2	2	1
1	s_pct	3	4	16	400	25	0	75	2	8	0.04	0.54	144	7.6	7.6	0.42	191	3.2	3.2	2	2
2	s_pct	3	4	16	400	0	0	75	2	8	0.04	0.54	144	7.6	7.6	0.42	191	3.2	3.2	2	1
4	s_pct	3	4	16	400	15	0	75	2	8	0.04	0.54	144	7.6	7.6	0.42	191	3.2	3.2	2	1
6	s_pct	3	4	16	400	0	0	75	2	8	0.04	0.54	144	7.6	7.6	0.42	191	3.2	3.2	2	1
11	s_pct	3	4	16	400	10	0	75	2	8	0.04	0.54	144	7.6	7.6	0.42	191	3.2	3.2	2	1
11	s_pct	3	4	16	400	25	0	75	2	8	0.04	0.54	144	7.6	7.6	0.42	191	3.2	3.2	2	2
12	s_pct	3	4	16	400	10	0	75	2	8	0.04	0.54	144	7.6	7.6	0.42	191	3.2	3.2	2	1
12	s_pct	3	4	16	400	25	0	75	2	8	0.04	0.54	144	7.6	7.6	0.42	191	3.2	3.2	2	2
22	s_pct	3	4	16	400	0	0	75	2	8	0.04	0.54	144	7.6	7.6	0.42	191	3.2	3.2	2	1
1	s_pct	3	2	16	600	10	0	75	2	8	0.04	0.54	144	7.6	7.6	0.42	191	3.2	3.2	3	1
1	s_pct	3	2	16	600	25	0	75	2	8	0.04	0.54	144	7.6	7.6	0.42	191	3.2	3.2	3	2
2	s_pct	3	2	16	600	0	0	75	2	8	0.04	0.54	144	7.6	7.6	0.42	191	3.2	3.2	3	1
4	s_pct	3	2	16	600	15	0	75	2	8	0.04	0.54	144	7.6	7.6	0.42	191	3.2	3.2	3	1
6	s_pct	3	2	16	600	0	0	75	2	8	0.04	0.54	144	7.6	7.6	0.42	191	3.2	3.2	3	1
11	s_pct	3	2	16	600	10	0	75	2	8	0.04	0.54	144	7.6	7.6	0.42	191	3.2	3.2	3	1
11	s_pct	3	2	16	600	25	0	75	2	8	0.04	0.54	144	7.6	7.6	0.42	191	3.2	3.2	3	2
12	s_pct	3	2	16	600	10	0	75	2	8	0.04	0.54	144	7.6	7.6	0.42	191	3.2	3.2	3	1
12	s_pct	3	2	16	600	25	0	75	2	8	0.04	0.54	144	7.6	7.6	0.42	191	3.2	3.2	3	2
22	s_pct	3	2	16	600	0	0	75	2	8	0.04	0.54	144	7.6	7.6	0.42	191	3.2	3.2	3	1

Table 5-28: Elephant LOI Search Parameters

object	element	field	min_sam	max_sam	maj_dis	strike	plunge	dip	semi	minor	c0	c1	a1	semi1	minor1	c2	a2	semi2	minor2	pass	est_zone
1	loi_pct	4	6	16	200	10	0	75	2	8	0.07	0.41	28	9.3	9.3	0.52	195	6.3	6.3	1	1
1	loi_pct	4	6	16	200	25	0	75	2	8	0.07	0.41	28	9.3	9.3	0.52	195	6.3	6.3	1	2
2	loi_pct	4	6	16	200	0	0	75	2	8	0.07	0.41	28	9.3	9.3	0.52	195	6.3	6.3	1	1
4	loi_pct	4	6	16	200	15	0	75	2	8	0.07	0.41	28	9.3	9.3	0.52	195	6.3	6.3	1	1
6	loi_pct	4	6	16	200	0	0	75	2	8	0.07	0.41	28	9.3	9.3	0.52	195	6.3	6.3	1	1
11	loi_pct	4	6	16	200	10	0	75	2	8	0.07	0.41	28	9.3	9.3	0.52	195	6.3	6.3	1	1
11	loi_pct	4	6	16	200	25	0	75	2	8	0.07	0.41	28	9.3	9.3	0.52	195	6.3	6.3	1	2
12	loi_pct	4	6	16	200	10	0	75	2	8	0.07	0.41	28	9.3	9.3	0.52	195	6.3	6.3	1	1
12	loi_pct	4	6	16	200	25	0	75	2	8	0.07	0.41	28	9.3	9.3	0.52	195	6.3	6.3	1	2
22	loi_pct	4	6	16	200	0	0	75	2	8	0.07	0.41	28	9.3	9.3	0.52	195	6.3	6.3	1	1
1	loi_pct	4	4	16	400	10	0	75	2	8	0.07	0.41	28	9.3	9.3	0.52	195	6.3	6.3	2	1
1	loi_pct	4	4	16	400	25	0	75	2	8	0.07	0.41	28	9.3	9.3	0.52	195	6.3	6.3	2	2
2	loi_pct	4	4	16	400	0	0	75	2	8	0.07	0.41	28	9.3	9.3	0.52	195	6.3	6.3	2	1
4	loi_pct	4	4	16	400	15	0	75	2	8	0.07	0.41	28	9.3	9.3	0.52	195	6.3	6.3	2	1
6	loi_pct	4	4	16	400	0	0	75	2	8	0.07	0.41	28	9.3	9.3	0.52	195	6.3	6.3	2	1
11	loi_pct	4	4	16	400	10	0	75	2	8	0.07	0.41	28	9.3	9.3	0.52	195	6.3	6.3	2	1
11	loi_pct	4	4	16	400	25	0	75	2	8	0.07	0.41	28	9.3	9.3	0.52	195	6.3	6.3	2	2
12	loi_pct	4	4	16	400	10	0	75	2	8	0.07	0.41	28	9.3	9.3	0.52	195	6.3	6.3	2	1
12	loi_pct	4	4	16	400	25	0	75	2	8	0.07	0.41	28	9.3	9.3	0.52	195	6.3	6.3	2	2
22	loi_pct	4	4	16	400	0	0	75	2	8	0.07	0.41	28	9.3	9.3	0.52	195	6.3	6.3	2	1
1	loi_pct	4	2	16	600	10	0	75	2	8	0.07	0.41	28	9.3	9.3	0.52	195	6.3	6.3	3	1
1	loi_pct	4	2	16	600	25	0	75	2	8	0.07	0.41	28	9.3	9.3	0.52	195	6.3	6.3	3	2
2	loi_pct	4	2	16	600	0	0	75	2	8	0.07	0.41	28	9.3	9.3	0.52	195	6.3	6.3	3	1
4	loi_pct	4	2	16	600	15	0	75	2	8	0.07	0.41	28	9.3	9.3	0.52	195	6.3	6.3	3	1
6	loi_pct	4	2	16	600	0	0	75	2	8	0.07	0.41	28	9.3	9.3	0.52	195	6.3	6.3	3	1
11	loi_pct	4	2	16	600	10	0	75	2	8	0.07	0.41	28	9.3	9.3	0.52	195	6.3	6.3	3	1
11	loi_pct	4	2	16	600	25	0	75	2	8	0.07	0.41	28	9.3	9.3	0.52	195	6.3	6.3	3	2
12	loi_pct	4	2	16	600	10	0	75	2	8	0.07	0.41	28	9.3	9.3	0.52	195	6.3	6.3	3	1
12	loi_pct	4	2	16	600	25	0	75	2	8	0.07	0.41	28	9.3	9.3	0.52	195	6.3	6.3	3	2
22	loi_pct	4	2	16	600	0	0	75	2	8	0.07	0.41	28	9.3	9.3	0.52	195	6.3	6.3	3	1

Table 5-29: Elephant TiO_2 Search Parameters

object	element	field	min_sam	max_sam	maj_dis	strike	plunge	dip	semi	minor	c0	c1	a1	semi1	minor1	c2	a2	semi2	minor2	pass	est_zone
1	tio2_pct	5	6	16	200	10	0	75	2	8	0.04	0.39	213	4.5	11.2	0.57	214	3.2	3.9	1	1
1	tio2_pct	5	6	16	200	25	0	75	2	8	0.04	0.39	213	4.5	11.2	0.57	214	3.2	3.9	1	2
2	tio2_pct	5	6	16	200	0	0	75	2	8	0.04	0.39	213	4.5	11.2	0.57	214	3.2	3.9	1	1
4	tio2_pct	5	6	16	200	15	0	75	2	8	0.04	0.39	213	4.5	11.2	0.57	214	3.2	3.9	1	1
6	tio2_pct	5	6	16	200	0	0	75	2	8	0.04	0.39	213	4.5	11.2	0.57	214	3.2	3.9	1	1
11	tio2_pct	5	6	16	200	10	0	75	2	8	0.04	0.39	213	4.5	11.2	0.57	214	3.2	3.9	1	1
11	tio2_pct	5	6	16	200	25	0	75	2	8	0.04	0.39	213	4.5	11.2	0.57	214	3.2	3.9	1	2
12	tio2_pct	5	6	16	200	10	0	75	2	8	0.04	0.39	213	4.5	11.2	0.57	214	3.2	3.9	1	1
12	tio2_pct	5	6	16	200	25	0	75	2	8	0.04	0.39	213	4.5	11.2	0.57	214	3.2	3.9	1	2
22	tio2_pct	5	6	16	200	0	0	75	2	8	0.04	0.39	213	4.5	11.2	0.57	214	3.2	3.9	1	1
1	tio2_pct	5	4	16	400	10	0	75	2	8	0.04	0.39	213	4.5	11.2	0.57	214	3.2	3.9	2	1
1	tio2_pct	5	4	16	400	25	0	75	2	8	0.04	0.39	213	4.5	11.2	0.57	214	3.2	3.9	2	2
2	tio2_pct	5	4	16	400	0	0	75	2	8	0.04	0.39	213	4.5	11.2	0.57	214	3.2	3.9	2	1
4	tio2_pct	5	4	16	400	15	0	75	2	8	0.04	0.39	213	4.5	11.2	0.57	214	3.2	3.9	2	1
6	tio2_pct	5	4	16	400	0	0	75	2	8	0.04	0.39	213	4.5	11.2	0.57	214	3.2	3.9	2	1
11	tio2_pct	5	4	16	400	10	0	75	2	8	0.04	0.39	213	4.5	11.2	0.57	214	3.2	3.9	2	1
11	tio2_pct	5	4	16	400	25	0	75	2	8	0.04	0.39	213	4.5	11.2	0.57	214	3.2	3.9	2	2
12	tio2_pct	5	4	16	400	10	0	75	2	8	0.04	0.39	213	4.5	11.2	0.57	214	3.2	3.9	2	1
12	tio2_pct	5	4	16	400	25	0	75	2	8	0.04	0.39	213	4.5	11.2	0.57	214	3.2	3.9	2	2
22	tio2_pct	5	4	16	400	0	0	75	2	8	0.04	0.39	213	4.5	11.2	0.57	214	3.2	3.9	2	1
1	tio2_pct	5	2	16	600	10	0	75	2	8	0.04	0.39	213	4.5	11.2	0.57	214	3.2	3.9	3	1
1	tio2_pct	5	2	16	600	25	0	75	2	8	0.04	0.39	213	4.5	11.2	0.57	214	3.2	3.9	3	2
2	tio2_pct	5	2	16	600	0	0	75	2	8	0.04	0.39	213	4.5	11.2	0.57	214	3.2	3.9	3	1
4	tio2_pct	5	2	16	600	15	0	75	2	8	0.04	0.39	213	4.5	11.2	0.57	214	3.2	3.9	3	1
6	tio2_pct	5	2	16	600	0	0	75	2	8	0.04	0.39	213	4.5	11.2	0.57	214	3.2	3.9	3	1
11	tio2_pct	5	2	16	600	10	0	75	2	8	0.04	0.39	213	4.5	11.2	0.57	214	3.2	3.9	3	1
11	tio2_pct	5	2	16	600	25	0	75	2	8	0.04	0.39	213	4.5	11.2	0.57	214	3.2	3.9	3	2
12	tio2_pct	5	2	16	600	10	0	75	2	8	0.04	0.39	213	4.5	11.2	0.57	214	3.2	3.9	3	1
12	tio2_pct	5	2	16	600	25	0	75	2	8	0.04	0.39	213	4.5	11.2	0.57	214	3.2	3.9	3	2
22	tio2_pct	5	2	16	600	0	0	75	2	8	0.04	0.39	213	4.5	11.2	0.57	214	3.2	3.9	3	1

Model Validation

A two-step process was followed to validate the grade estimates.

- Quantitative comparison between the average grades from the composite samples and estimated block model for each mineralised domain.
- Swath plot between composite and block grades.

The statistical comparison between block grade and composite grades demonstrates good correlation (Table 5-30).

Validation plots (Figure 5-22and Figure 5-23) for Domain 1 show strong correlation between composite and block grades. The same consistency was observed for the remaining domains.

Table 5-30: Statistical Validation between Block Model Estimate and Composite Grade

Wireframe Domain	Block Model TGC %	Composites TGC %	BM V Comp TGC %
1	8	8.82	-10.29%
2	5.7	5.7	0.05%
3	5.33	5.33	0.04%
4	6.45	6.84	-6.03%
5	6.94	6.94	0.04%
6	6.87	7.21	-5.07%
11	4.86	4.35	10.32%
12	4.56	4.08	10.54%
22	1.2	1.05	12.77%
51	4.41	4.41	0.02%
52	2.44	2.44	-0.08%
Total	7.19	8.03	-11.70%

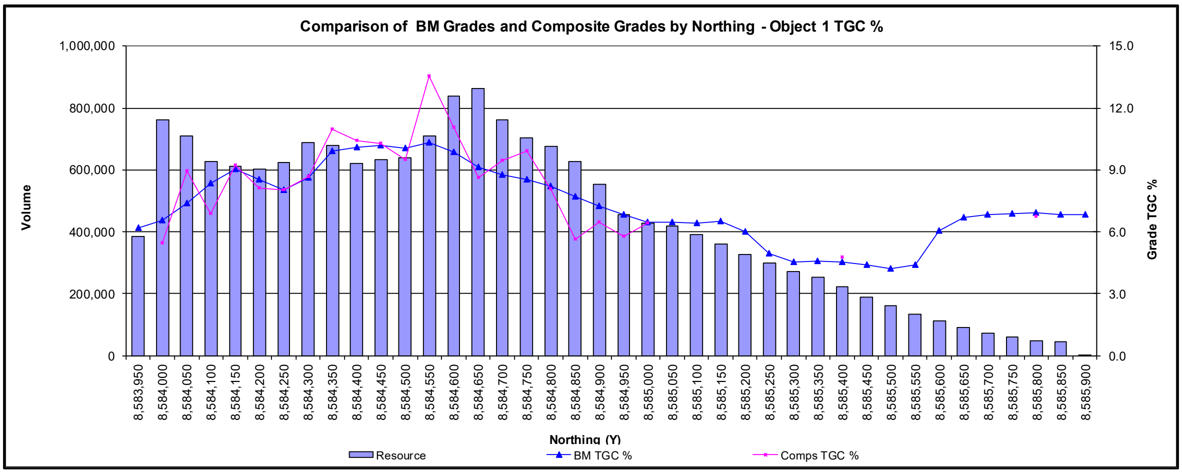


Figure 5-22: Swath Plot of TGC of Ore Domain 1 along Y direction

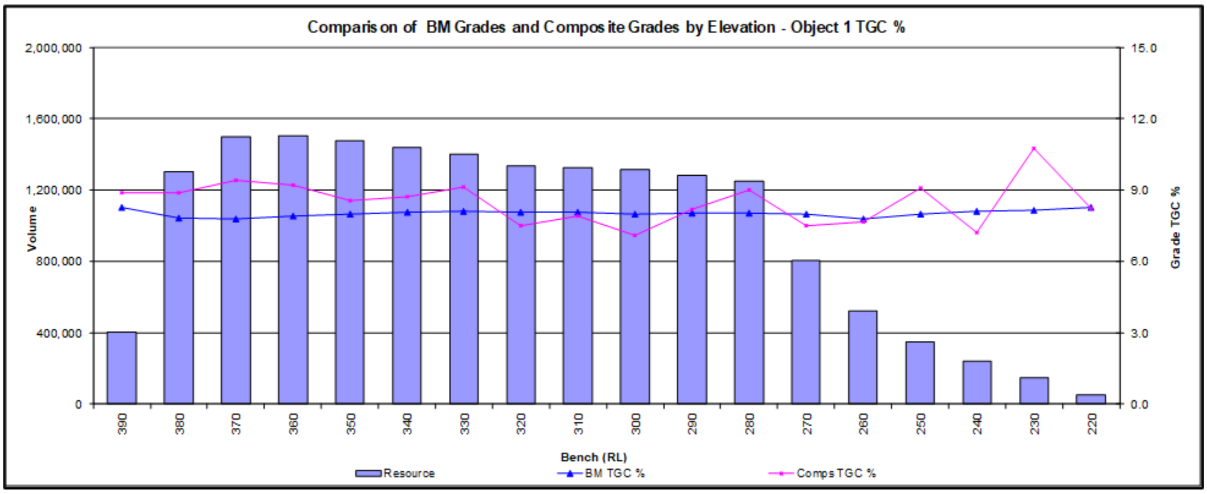


Figure 5-23: Swath Plot of TGC of Ore Domain 1 along Z direction

Density Model

A total of 1788 bulk density measurements were taken from diamond drill core samples at the Elephant deposit using the water immersion method. Because the samples were small (mostly less than 15 cm) and irregular, no estimation was carried out. The results were reviewed by comparing densities across different lithologies and mineralised zones in the block model. Overall, the mineralised samples showed slightly lower densities than the waste material. Table 5-31 and Table 5-32 summarises the density values assigned to the mineralised and waste domains, based on the different weathering zones.

Table 5-31: Bulk density of Mineralised Domains

Oxidation	Statistic	Ore Domain									
		1	2	3	4	5	6	11	12	51	52
Oxide	Samples	51	-	-	12	-	-	1	-	-	-
	Density	2.14			2.02			2.45			
Saprolite	Samples	174	15	-	3	20	-	15	-	-	-
	Density	2.21	2.25		2.42	2.29		2.17			
Joint Ox.	Samples	50	4	-	-	7	-	-	7	-	-
	Density	2.36	2.53			2.36			2.48		
Fresh	Samples	921	-	24	-	117	40	56	67	8	7
	Density	2.74		2.75		2.79	2.75	2.78	2.75	2.79	2.92

Table 5-32: Bulk density of Waste Domains

Oxidation/Type	Samples	Density
Overburden	23	2.17
Oxide	5	1.93
Saprolite	43	2.39
Joint Oxidised	14	2.72
Fresh	157	2.86

Mineral Resource Classification

The Elephant deposit shows good continuity of the main mineralised veins. The mineralisation displays uniform thickness, and grade distribution is consistent both along strike and across strike.

The Mineral Resource has been classified as Measured, Indicated, and Inferred based on data quality, sample spacing, and geological continuity. Following are classification scheme at Elephant:

- Measured Resources occur in areas drilled on a 50 x 12.5 m grid using RC and diamond drilling and are limited to material above the top of fresh rock. These areas also include locations where metallurgical and product test samples were collected.
- Indicated Resources are defined in areas with close-spaced diamond drilling (generally less than 200 m x 50 m) where the lode geometry is well established.
- Inferred Resources are assigned to zones with wider drill spacing (greater than 200 x 50 m), small, isolated pods of mineralisation outside the main lodes, and areas of geological complexity.

The veins were extended along strike only up to the previous drill spacing or a maximum of 200 m. Down-dip, they were extended up to the previous drill spacing or a maximum of 55 m. These extended areas are classified as Inferred Mineral Resources. The classification is shown in Figure 5-24.

The Mineral Resource classification follows the guidelines of the JORC Code (2012), which outlines the technical and reporting standards required for public disclosure.

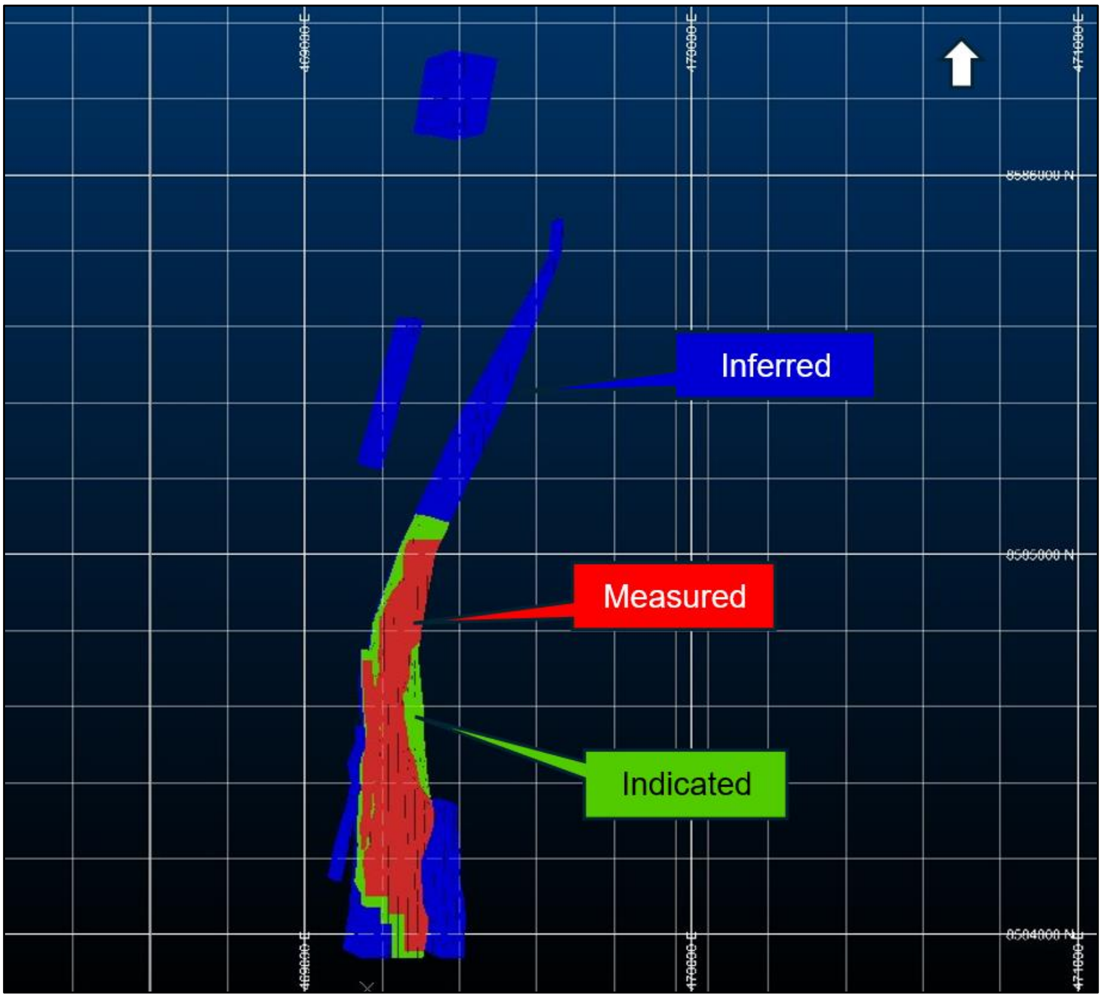


Figure 5-24: Elephant Classification Scheme

RPEEE

The Mineral Resource is reported above a 2.5% TGC cut-off grade, constrained by geological wireframes and an optimised pit shell based on a USD 800/t concentrate price.

The Elephant graphite deposit hosts natural graphite that can be processed using standard flotation technology to produce concentrates meeting international quality benchmarks. Flotation tests conducted by Minnovo Pty Ltd confirmed that a concentrate exceeding 95% purity can be achieved through conventional flotation methods.

The graphite concentrate from Elephant is expected to be used in the production of AAM, a key component of lithium-ion batteries. AAM forms the negative electrode, where lithium ions are stored during charging. Mozambican graphite's high density allows more active material to be packed into a smaller battery cell volume, resulting in higher energy density and longer battery life. Its consistent particle size distribution supports uniform anode coating, improved charge/discharge performance, and enhanced battery efficiency and safety.

Mineral Resource Statement

Table 5-33 presents the Mineral Resource Statement for the Elephant deposit as on 30 September 2025 considering 2.5% TGC cut-off grade.

Table 5-33: Elephant Mineral Resource, 30 September 2025

Classification	Material	Tonnage (Mt)	TGC %
Measured	Primary	2.7	8.3
Measured	Weathered	2.7	8.3
Indicated	Primary	29.3	8.2
Indicated	Weathered	0.3	5.9
Inferred	Primary	30.3	6.9
Inferred	Weathered	3.6	6.2
Total Resources		68.9	7.5

The following notes accompany the Mineral Resource Statement:

- The Mineral Resources have an effective date of 30 September 2025.
- Rounding as required by reporting guidelines may result in apparent summation differences between tonnes, grade and contained metal content. Where these occur, they are not considered material.
- Tonnages are reported in metric units, grades in percent (%) and grades are rounded appropriately.
- The Competent Person for the declaration of Mineral Resources is Mr Shameek Chattopadhyay, an employee of SRK.
- Mineral Resources are reported with reasonable prospects for eventual economic extraction, by applying appropriate technical and economic assumptions. A cut-off grade of 2.5% TGC has been applied.
- Mineral Resources are not Ore Reserves and do not have demonstrated economic viability, nor have any mining modifying factors been applied.
- A JORC Table 1 has been completed and is available from the Company. All elements of Table 1 are included in this CPR.

Sensitivity

SRK has produced a grade-tonnage curve for TGC%, which is shown in Figure 5-25.

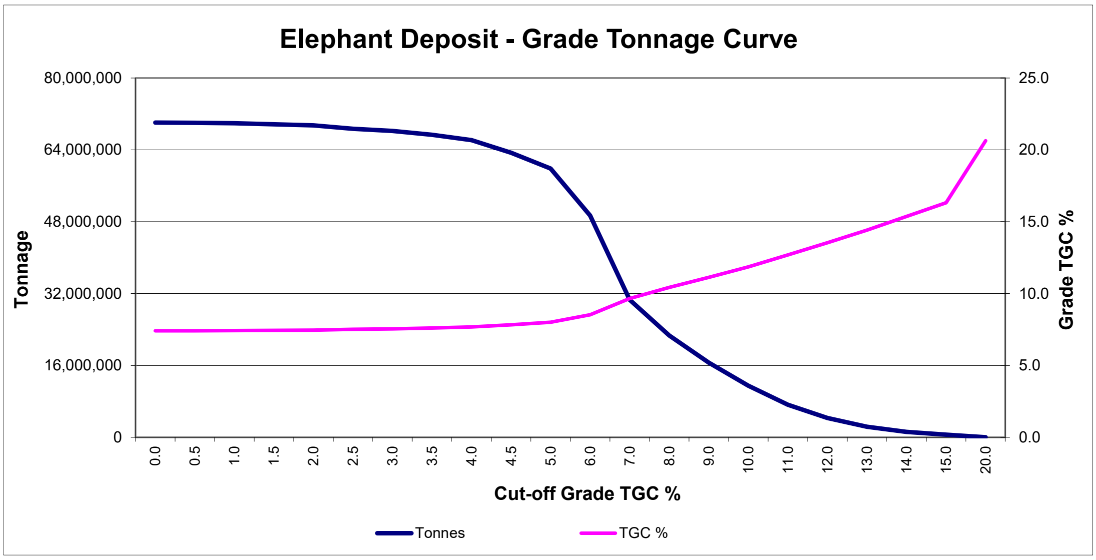


Figure 5-25: Elephant Resource Grade Tonnage Curve

5.10 Mining

There are no current Ore Reserves declared for the Montepuez project.

In 2017, previous owners Battery Metals Limited completed a DFS for the project, detailing plans to construct an open-cut mining and processing operation capable of producing 53 kt of flake graphite concentrate per year at a grade of 96% TGC. This was followed in 2019 with an Implementation Study. Given its age, the study's findings have limited applicability to today's economic environment.

Historical Mineral Reserves reported in 2019 totalled 42.2 Mt at 9.27% TGC at a cut-off grade of 4% TGC from the Buffalo and Elephant deposits. Corresponding waste rock tonnes mined, totalled 33.3 Mt, resulting in a LoM average stripping ratio of 0.79. Mining was scheduled over a period of 51 years at a total mine production rate (ore and waste) of between 1.8 Mtpa and 1.3 Mtpa. Processing of low-grade stockpiles would then continue for a further 35 years.

Re-reporting under current economic conditions is likely to reduce Reserves.

SRK also note that in development of this study, various other supporting studies have been undertaken, the results of which may be re-used (subject to review and applicability) in any updated studies. Examples of this data include geotechnical and hydrogeological investigations, graphite flake size determinations and variability testwork, metallurgical testwork, and process design.

5.10.1 SRK Comments

Whilst Ore Reserves have previously been reported for the project, it should not be assumed that development of an updated mine design, mining and processing schedule, and supporting economic analysis would yield the same quantum of Ore Reserves under current market conditions. Since the study was prepared in 2017, there has been considerable cost inflation globally, whilst the graphite market has remained relatively static. For example, SRK notes that the basket graphite price used in reporting Ore Reserves at Balama in 2017 was USD 1,106/t, and the basket price used in current Resource reporting at Montepuez is USD 800/t. On this basis alone, Ore Reserves could be expected to be materially lower than previous reported.

Should the Company intend to prepare an updated study for the project, SRK recommends that this should initially be at a scoping study level of detail, and that following this study further trade-off assessments may be required to optimise mining and processing strategies under current market conditions. Progressing the project back to a feasibility study level of detail is likely to require considerable time and financial investment.

5.11 Mineral Processing

The following is a summary of the process plant design described by Battery Minerals Limited in the 2017 Feasibility Study. This information is included for context only, and was considered optimised for the project under the prevailing economic conditions at the time of the study. SRK caution that since completion of 2017 Feasibility Study, there have been considerable cost inflations whilst graphite commodity prices have remained largely similar or even lower than conditions at the time. As such, significant updates are required to this study to confirm the viability of the plant as described below.

5.11.1 Process Design Criteria

The key Process Design Criteria are shown in Table 5-34. The target mill operating hours of 7,096 hours per year (81% availability) could be considered to be high but should be achievable given the generally soft nature of the ore as time between maintenance periods will be extended by the soft nature of the ore.

Table 5-34: Key Process Design Criteria

Item	Units	Fresh Ore	Weathered Ore
Concentrate production	t/y	53,000	53,000
Ore Head Grade	% TGC	12.1	12.1
Concentrate Grade	% TGC	> 96	>96
Overall Graphite Recovery	%	91	85
Crush-Mill-Float Operating Time	h/y	7,096	7,096
RoM Ore Throughput	t/y	462,000	497,000
Crush-Mill-Float Throughput	t/h	65	70

5.11.2 Plant Description

The plant is a relatively small capacity crush-mill-flotation concentrator with a product filtration, drying and bagging plant. The RoM will be stockpiled to allow for blending of material on the RoM pad or into the RoM bin. Primary crushing will be carried out in a semi-mobile impact crusher in closed circuit with a product screen. Primary grinding will be in closed circuit to control the product grind size. A SAG mill is proposed in the equipment list.

Upgrading of the graphite is carried out by flotation in multiple stages with concentrate re-grinding to liberate gangue minerals and increase product grade. The flowsheet uses conventional flotation cells and bead mills for fine regrinding.

Final concentrate is filtered before drying and bagging for transport to customers.

The plant flowsheet is illustrated in Figure 5-26.

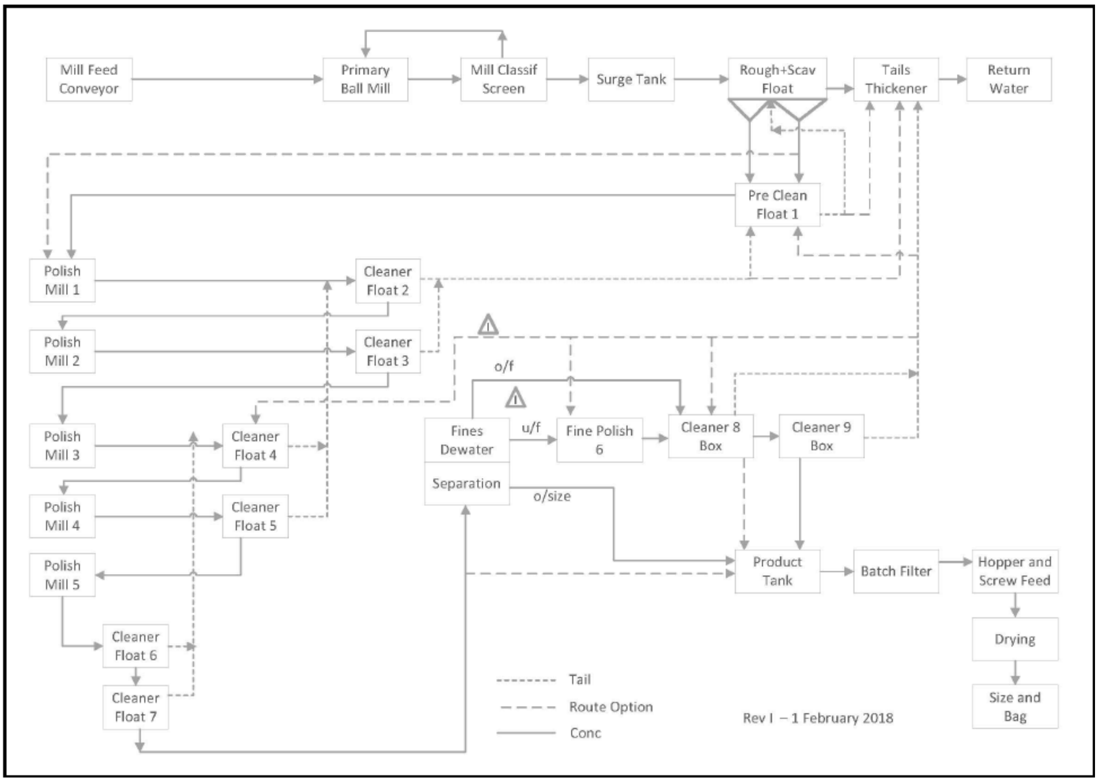


Figure 5-26: Overall Process Flowsheet

5.11.3 Plant Performance

The Battery Minerals Limited MGIP report states that the design flowsheet gives results of 97.1% TGC at a recovery of 91.8% for the Buffalo fresh ore and 96.8% TGC at a recovery of 94.1% for the Elephant fresh ore. In adhering to the Battery Minerals Limited conservative approach, in the financial model a recovery of 85% has been applied for both Elephant and Buffalo fresh ore.

5.11.4 Process Plant Design

Flowsheet

The flowsheet proposed is a conventional crush-mill-flotation arrangement and based on the results of comprehensive metallurgical testwork.

Comminution Equipment

The comminution equipment in the proposed flowsheet comprises a primary impact crusher followed by a SAG mill. Impact crushers tend to generate large proportions of fine material, and a multi-stage crushing circuit could be an attractive alternate to prepare the mill feed without generation of excess fines.

A SAG mill is proposed for the milling section, however at the relatively low tonnages in the Design Criteria it might not be feasible to install a SAG mill with sufficient diameter to generate the breakage energy required for comminution. Alternative milling technology, such as rod mills, could be considered. Rod mills have the advantage of limited fines production, however the feed top size that a rod mill can receive is typically limited to 19mm and the crushing required to reach this feed top size may generate additional fines in the crushing circuit which would be undesirable.

A comminution circuit trade-off study is recommended.

Flotation equipment

The flowsheet uses conventional flotation cells with inter-stage bead mills for fine regrinding. Column flotation, with froth washing, may increase the grade of concentrate without the need for as many stages of regrinding and cleaner flotation.

Earlier studies considered the potential for vanadium extraction as a by-product from the graphite tailings, but this work has not been progressed and would require further investigation to determine whether this is a feasible by-product from the Buffalo and Elephant projects.

Plant Performance

The testwork supports the production of saleable grade graphite concentrates.

Battery Minerals Limited reduced the predicted graphite recovery from 91.8% for the Buffalo fresh ore and 94.1% for the Elephant fresh ore to 85% recovery for both. This is considered to be prudent and should be retained.

5.12 Infrastructure

Prior to sale of the project to Tirupati, Battery Metals Limited began construction of certain aspects of the Montepuez project. This includes a site camp, a water retention dam, and early earthworks for the processing plant site, as well as internal access roads (shown in Figure 5-27). It is not possible to determine from satellite imagery exactly when these works were undertaken, with imagery from 26 May 2019 showing a constructed camp, road, completed earthworks and partial construction of the water dam. Imagery prior to this is from 2015, and shows no evidence of activity. It is assumed that work was largely undertaken in 2018-2019, alongside the implementation study for the project. The site was abandoned in May 2022 when *force majeure* was declared by Battery Metals Limited.

Whilst these structures are still visible from current satellite imagery (the site is most recently covered by imagery from two dates, with tiles broadly running down the centre of Figure 5-28. The western half is covered by imagery from 1 November 2022, and the eastern half by imagery from 22 June 2024), there has been significant vegetation re-growth in the intervening periods. The camp status is unknown, but it is reasonable to assume that most equipment (power generation, lighting, IT infrastructure, etc) will have been removed from the camp. The water dam is standing and holding water, but additional work may be required to repair this for use at the project.

Figure 5-27: Montepuez Site Infrastructure, 26 May 2019

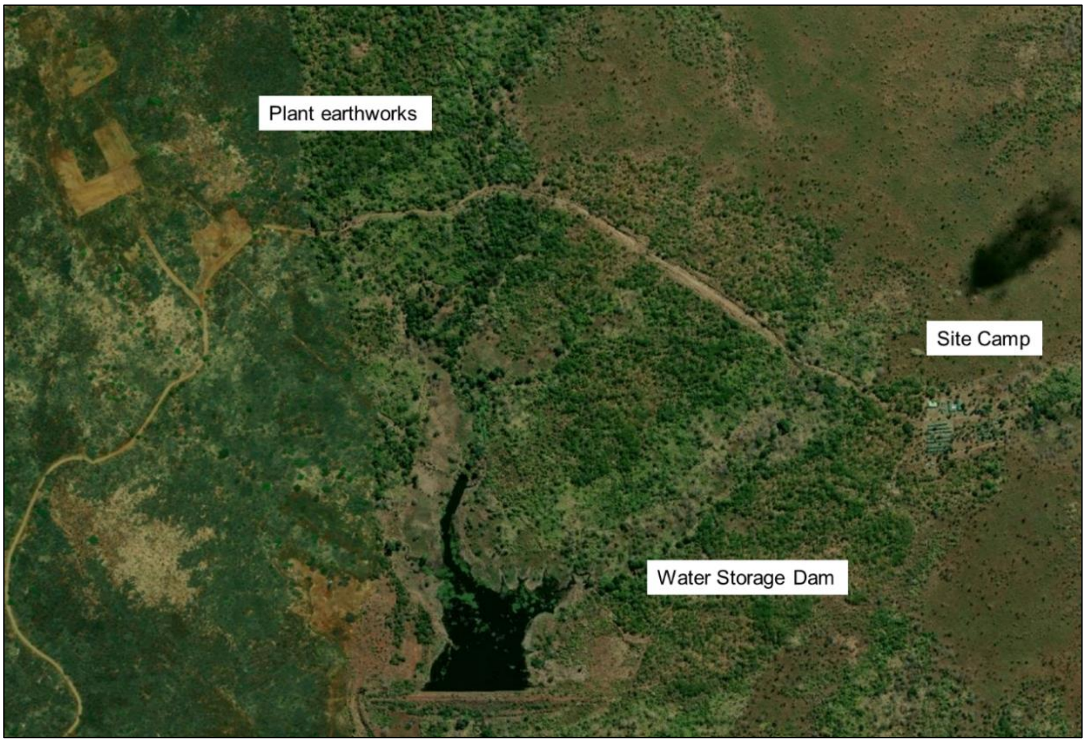


Figure 5-28: Montepuez Site Infrastructure, 1 November 2022 (west) and 24 June 2024 (east)

5.12.1 SRK Comments

Given the age of the infrastructure present at Montepuez, and the time it has been abandoned, SRK consider that the project has essentially no usable infrastructure present on site.

Upon lifting of the *force majeure*, considerable investment in site infrastructure is likely required to support new activities at the project.

5.13 SRK Comments

5.13.1 Geology and Mineral Resources

SRK has reviewed the geological databases and wireframes provided by the Company for the Elephant and Buffalo deposits, and is satisfied with the quality of the data and interpretations. Based on these data, SRK has prepared Mineral Resource Estimates for the two deposits with Mineral Resources totalling 110.6 Mt at 8.20% TGC for 9110 kt of contained graphite, including 57.0 Mt of Measured and Indicated Mineral Resources at 8.80% TGC for about 5040 kt of contained graphite. The Mineral Resources of the project are summarised in Table 5-35.

Table 5-35: Montepuez Graphite Mineral Resources, 30 September 2025

Deposit	Resource Classification	Tonnes (Mt)	Grade (%TGC)	Total Contained Graphite (kt)
Elephant	Measured	5.3	8.3	440
	Indicated	29.6	8.1	2,400
	Measured and Indicated	**34.9**	**8.1**	**2,840**
	Inferred	33.9	6.8	2,310
	Total	**68.8**	**7.5**	**5,150**
Buffalo	Measured	5.5	9.0	500
	Indicated	16.5	10.3	1,700
	Measured and Indicated	**22.0**	**10.0**	**2,200**
	Inferred	19.7	8.9	1,750
	Total	**41.7**	**9.5**	**3,950**
Total	Measured	10.9	8.6	940
	Indicated	46.1	8.9	4,100
	Measured and Indicated	**57.0**	**8.8**	**5,040**
	Inferred	53.6	7.6	4,070
	Total	**110.6**	**8.2**	**9,110**

During review, SRK identified certain aspects of the project where improvements can be made to improve confidence in the Mineral Resources, and to support future conversion to Ore Reserves. These recommendations are summarised below:

- Understanding the structural complexity of the deposits could be improved with additional data collection from mapping and diamond core drilling. At Buffalo, local faults have been identified by their geometries are poorly understood. At Elephant, there is evidence of complex parasitic folding in the drillcore, which at a macroscale may affect the deposit extents.
- The availability of density data is noted as being limited for some areas of the deposit, which may result in wider variances to actual mined tonnes.

In addition, certain opportunities were also identified, summarised below:

- VTEM anomalies at both deposits are yet to be drilled, leaving potential to discover additional Mineral Resources through further exploration.
- The deposits remain open at depth and along strike, again leaving potential for additional discoveries.

- Previous test work shows that V_2O_5 can be recovered as a by-product of graphite.

5.13.2 Mining

Whilst the previous studies completed on the Montepuez project are a positive indicator of the project's economic potential, much of this work is not applicable under current macroeconomic conditions. Significant parts of this study must be updated to support declaration of Ore Reserves. This is likely to require considerable time and financial investment to complete.

SRK caution that re-reporting under current economic conditions is likely to reduce Ore Reserves.

5.13.3 Metallurgy and Mineral Processing

Comprehensive process testwork has been carried out at reputable laboratories.

Subject to confirmation that the samples selected for the testwork remain within the pit shell and are representative of the feed to the plant in terms of grades and lithologies, the testwork could be used as part of the plant design process.

The changes in market for graphite, specifically around the market for size fractions which were not previously attractive should be taken into account when reviewing the flowsheet for opportunities to increase recovery of size fractions previously not thought to be worth pursuing.

5.13.4 Infrastructure

Given the age of the infrastructure present at Montepuez, and the time it has been abandoned, SRK consider that the project has essentially no usable infrastructure present on site.

Upon lifting of the *force majeure*, considerable investment in site infrastructure is likely required to support new activities at the project.

5.13.5 ESG

SRK has not been able to obtain and review copies of the exploration permits or the reported environmental approval. The status of the relationship between the Company and local stakeholders is not known, and SRK is therefore not able to comment on the social acceptance of the Company at this time. SRK notes that no assessment of current environmental and social liabilities has been undertaken.

5.13.6 Work Programme

Tirupati does not currently have firm plans to update the Montepuez feasibility study or undertake other studies.

5.13.7 Key Risks and Opportunities

The key project risks identified by SRK are:

- Whilst a feasibility study has historically been prepared for the project, changing macroeconomic conditions means that the results of this study are not applicable to present day. Updating of this study (and the supporting design, engineering and economic analysis) is likely to result in considerably reduced Ore Reserves for the project.
- The work required to update understanding of the project to a Feasibility level of detail is considerable, requiring significant time and financial inputs. SRK recommend that the next study undertaken on the project should be at a Scoping Study level of detail only, as the various economic inputs to the study will have changed significantly and a fundamental reassessment of the project scope will likely be required.
- The ongoing force majeure conditions of the project are a significant hurdle to the project's development.
- The project is located upstream of a designation national park. Exploration and future mining activities will need to be carefully planned to ensure that impacts to water courses do not occur.

The key project opportunities identified by SRK are:

- Previous test work shows that V_2O_5 can be recovered as a by-product of graphite.

6 BALAMA CENTRAL

6.1 Introduction

The Balama Central project is a significant flake graphite development located in the Cabo Delgado Province of northern Mozambique. The project hosts high-quality graphite mineralization predominantly within gneiss and schist units, with graphitic schists interlayered with quartz-feldspar-rich bands. Graphite occurrences in the area are enhanced by local weathering, which produces soft, friable material that is amenable to processing.

Balama Central is adjacent to the Syrah Resources mine, the largest graphite producing mine in the country. Battery Minerals Limited, the previous owner of the project, carried out exploration between 2015-2018 through a series of mapping, geophysics and drilling and identified two potential prospects of high-grade graphite in the lease area, Lennox and Byron, and reported Mineral Resources as per JORC Code 2012 in 2018. The project is explored in very limited area and holds a large potential.

6.2 Location

The Balama Central project is a mining concession in the Cabo Delgado region of Mozambique, East Africa, some 200 km west-southwest of the town of Pemba (Figure 6-1). The Lennox and Byron prospects are the two known graphite mineralization occurrences in the project. Balama Central is not located within or adjacent to protected areas or national parks. It is, however, located upstream of the Quirimbas National Park. This park extends to the Quirimbas Islands in addition to the mainland area.

Figure 6-1: Balama Central Location

6.3 History

Balama Central, located in Cabo Delgado Province, Mozambique, was first outlined in 2012 when Metals of Africa released a maiden mineral resource of approximately 16.3 Mt at 10.4% TGC across the Lennox and Byron prospects. In 2018, after further exploration and evaluation, Battery Minerals Limited completed a Scoping Study which outlined plans for staged development with an initial production target of around 55,000 tpa of graphite concentrate. Later that year, in December 2018, a Feasibility Study confirmed the project's economic potential, reporting ore reserves of 19.66 Mt at 11.06% TGC and Mineral Resources of 32.9 Mt at 10.2% TGC, supporting a 25-year mine life at a production rate of about 58,000 tpa. In June 2019, a mining concession application was lodged with the Mozambican government, and by November 2021 a full mining licence was granted. At that same time, Battery Minerals Limited announced the sale of its Mozambique graphite portfolio, including Balama Central, to Tirupati Graphite. The transaction was completed in April 2023, making Tirupati the 100% owner of the project through its acquisition of Suni Resources SA, thereby consolidating control over one of Mozambique's key high-grade flake graphite deposits.

6.4 Regulatory Framework

As Balama Central is also located in Mozambique, the Regulatory Framework presented in Section 5.4 also applies. The current status of the Balama Central project is described below.

6.4.1 Mining legislation

The project's mining licence (Concessão Mineira), licence 10031C, covering 1,543 ha, was granted in November 2021.

6.4.2 Environmental legislation

Tirupati has to comply and get necessary approvals for Environment License, Environmental Audit, Right to use the land and Resettlement Plan from the Government agencies. SRK is not aware of whether the project holds any environmental approvals at this time.

6.4.3 Tenure

Suni Resources S.A., a subsidiary of Tirupati Graphite, holds a mining license/permit for an area of 1,543.08 ha in the Cabo Delgado Province, granted in July 2021 and valid for 25 years till July 2046.

Table 6-1: Balam Central Mineral Tenure Summary

Licence No.	Status	Area (ha)	Awarded	Expiry	Commodity
10031C	Mining license	1543.08	July 2021	July 2046	Graphite

Balama Central is held under a mining concession granted in November 2021, valid for 25 years with an option to renew for a further 25 years. The concession is required to have necessary permissions/clearances by a DUAT (land use right), an environmental licence, and a water licence, for making the project fully permitted. The lease area covers approximately 1,543 ha.

The ownership structure of Suni Resources S.A., 99.997% held by Tirupati, 0.002% by Mr. Shishir Poddar and 0.001% by Ms. Puruvi Poddar.

As part of its tenure, the project is subject to several obligations, including the provision of a performance bond compliance with environmental monitoring and water use conditions, and delivery of social and community programs such as land access, compensation, and resettlement where required. Additional liabilities include compliance with Mozambique's mining and environmental laws, taxation and potential capital gains tax obligations, and the management of risks such as political or community disruptions. Overall, Balama Central's tenure is secure, but it carries typical operational, financial, and social responsibilities that the licence holder must maintain throughout the life of the mine.

6.5 Setting

6.5.1 Accessibility

Balama Central is situated in Cabo Delgado Province, northern Mozambique, approximately 200 km west-southwest of the regional port city of Pemba, which provides road, port and airport facilities. The project area is accessible year-round via a combination of sealed highways and laterite/gravel roads,

6.5.2 Climate

The region has a tropical climate, characterised by a warm wet season from November to April and a cooler dry season from May to October, conditions that allow exploration and mining activities to be carried out throughout most of the year.

6.5.3 Local Resources

Local villages provide a source of unskilled and semi-skilled labour, while skilled personnel, fuel and supplies are sourced from larger regional centres such as Pemba.

6.5.4 Infrastructure

Infrastructure in the region is developing, with proximity to the Nacala and Pemba ports providing potential export routes for graphite concentrate.

6.5.5 Physiography

The licence area comprises gently undulating terrain with low hills and inselbergs surrounded by broad plains, generally covered by thin soils and sparse vegetation.

6.6 Geological Setting and Mineralisation

6.6.1 Regional Geological Setting

Balama Central is located within Xixano Complex, part of the Cabo Delgado Nappe Complex (CDNC) (Figure 6-2). The Neoproterozoic Xixano Complex predominantly composed of paragneiss, biotite gneiss, and granulites, that form the core of a regional north-northeast to south-southwest trending synform. The metasedimentary domain in the Xixano Complex comprises mainly gneiss and schist, as well as metasandstone and marble. The protoliths of these rocks were deposited between ca. 850 and ca. 740 Ma (Norconsult Consortium, 2007).

The Xixano Complex has undergone at least three phases of deformation. The dominant metamorphic grade is amphibolite facies, although granulite facies rocks locally occur.

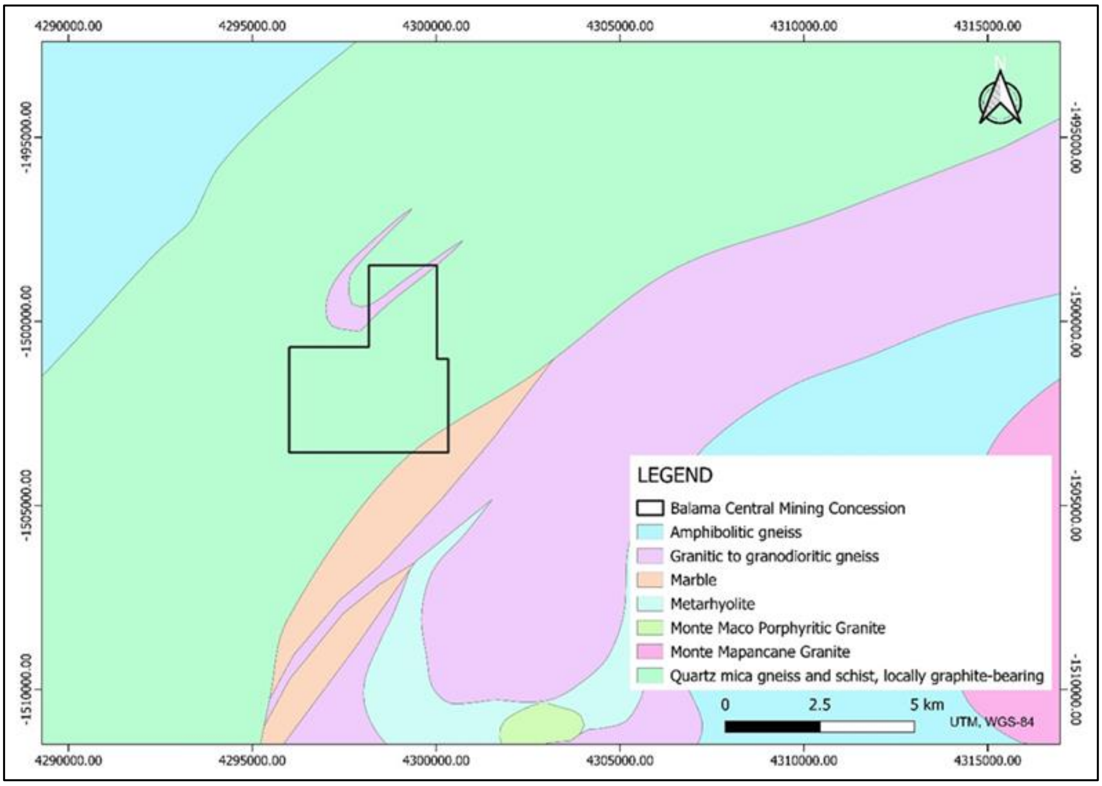


Figure 6-2: Balama Central Regional Geological Setting

6.6.2 Geology

The Balama Central project lies within the Xixano Complex with the major rocks reported are graphitic schists, quartzite and gneiss (Figure 6-3). The dominant lithology within the concession area geology includes granitic gneiss, schists, quartzite and graphitic schist ± sericite ± roscoelite. It has been reported that the rocks are typical of the graphitic psammopelite observed at the adjacent Syrah Resources deposit.

The rocks are reported to be enrich in vanadium found within the micaceous gneiss, dominated by coarse granoblastic quartz with 10-15% bright green vanadiferous sericite and roscoelite.

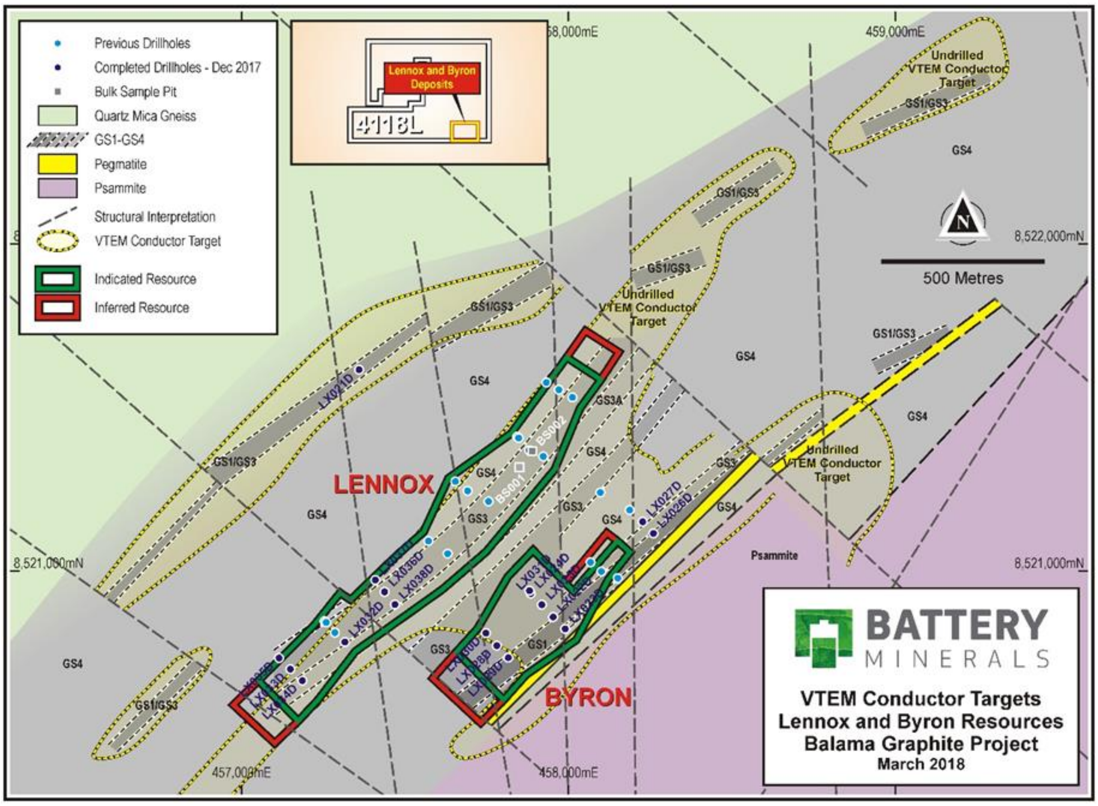


Figure 6-3: Geology Map of the Lennox and Byron deposits (Source: RPM Global Resource Estimation Report, 2018)

6.6.3 Style of Mineralisation

The graphite mineralisation is reported within the graphitic schists and psammites, formed in stratiform layers. The formation of the high-grade graphite in the Balama region is believed to be the resultant of the high-grade metamorphism (amphibolite facies) of the organic carbonaceous matter. The graphitic schists are reported to be moderate to steeply dipping units, based on the outcrops.

From the exploration program in 2018, Battery Minerals Limited reported the graphite mineralisation into four main types, as illustrated in Figure 6-4.

Balama Central hosts high-grade flake graphite schists (GS1–GS3) interlayered with lower-grade units (GS4) (Figure 6-5 and Figure 6-6). Mineralisation is controlled by metamorphosed carbon-rich sediments and associated with sericite and roscoelite alteration. Sulphides are presenthave been reported but in minor concentration. The different schist types provide both high-grade coarse-flake zones and lower-grade background mineralisation, all of which are important for resource modelling and processing. Outcrops of mineralisation and host rocks confirm the moderate to steeply dipping nature of the graphitic schist units.

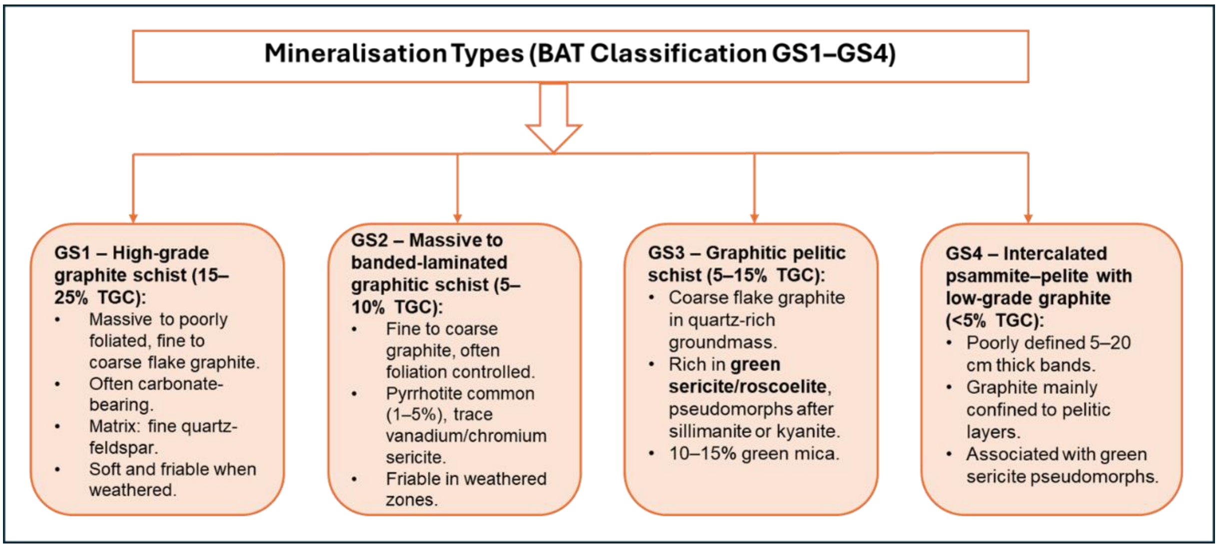


Figure 6-4: Classification of graphite mineralisation by Battery Minerals Limited

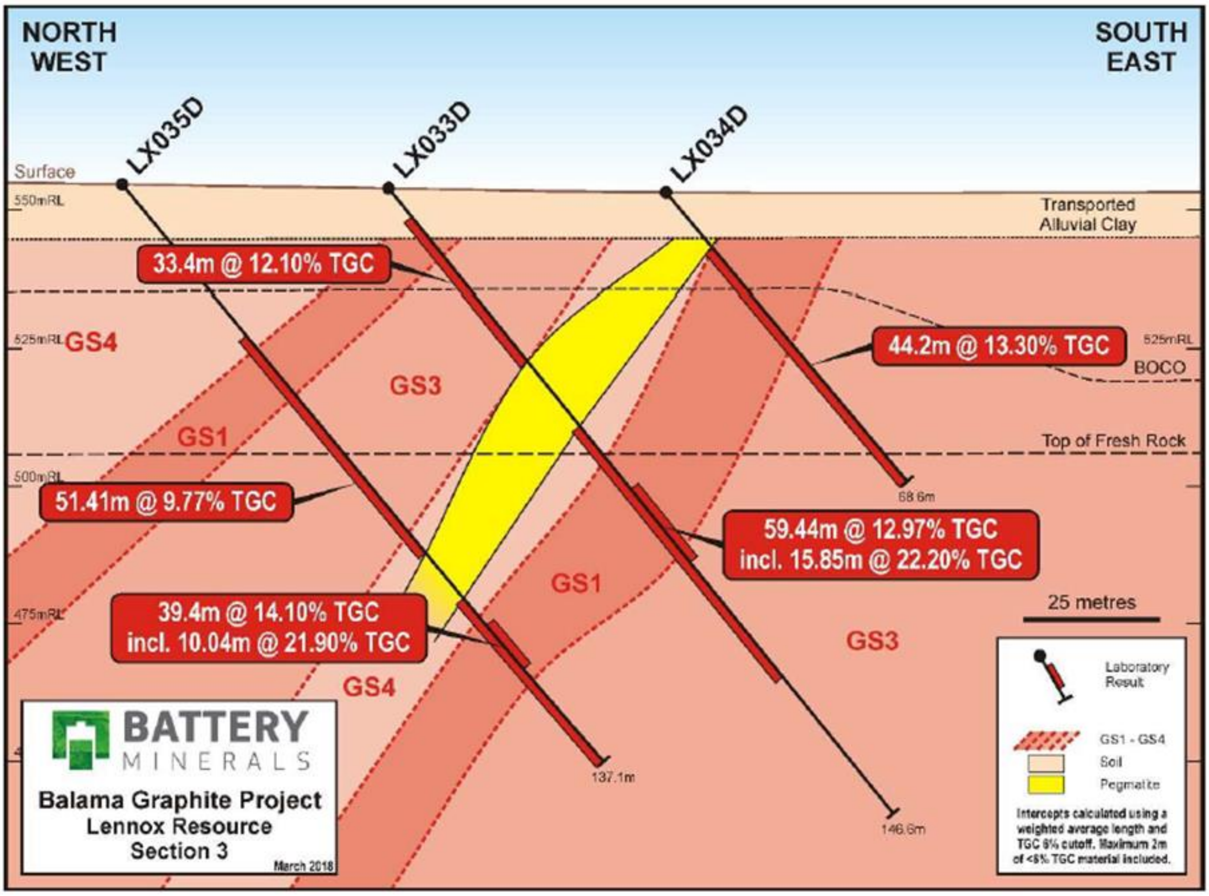


Figure 6-5: Sectional view of the graphite intersections in Lennox deposit (Source: RPM Global Resource Estimation Report, 2018)

Figure 6-6: Presence of mineralisation of Core from LX007D, 4 m at 22% TGC from 80 m (Source: RPM Global Resource Estimation Report, 2018).

6.6.4 Deposit Type

Flake graphite mineralization can be found in the Xixano Complex's gneiss and schist units of Balama Central. The high-grade amphibolite facies metamorphism of organic carbonaceous materials produced the graphite, which is found as dispersed flakes in the schist and gneiss. The graphite's initial depositional source could have been crystalline graphite, composite flakes.

6.6.5 Alteration Features

Vanadiferous sericite (green mica) and roscoelite are reported within the graphitic schists in the project area, which are frequently interbedded with zones rich in quartz and feldspar. Locally occurring sulphide minerals, mostly pyrrhotite, can make up as much as 5% of the rock. Friable graphite schists, which are created by weathering processes, are softer and easier to release, increasing the possibility of mineral recovery during processing.

6.7 Exploration

6.7.1 Topography

The project encompasses the Lennox and Byron graphite deposits, characterized by relatively simple geology with steeply dipping northwest host lithologies. The region's topography features graphitic schists interlayered with quartz-feldspar-rich bands, forming a ridge and three hills that rise up to 250 m above the surrounding plains. These elevated areas are conducive to open-pit mining operations, facilitating efficient extraction processes.

6.7.2 Geological Mapping

There was no historical drilling carried out in the project area prior to acquisition by Battery Minerals Limited. The area had been previously covered by government mapping at a 1:250,000 scale along with airborne geophysical surveys. In 2015, reconnaissance geological mapping and trenching were undertaken, which successfully identified mineralised zones within the project.

6.7.3 Diamond Drilling

Between 2015 and 2018, 38 diamond drill holes (DDH) totalling 3,224 meters of drilling were completed. The drilling is summarised in Table 6-2 and illustrated in Figure 6-7. With a recovery rate of 94.5%, the HQ3 drilling was drilled on a 200 × 50 m spacing.

Table 6-2: Balama Central Core Drilling Summary

Year	Drilling Method	No. of boreholes	Drilling Meterage (m)	Average Core Recovery (%)
2015-2018	Diamond Drilling	38	3,224	94.5

The WGS84 UTM Zone 37 South datum has been used to survey every drillhole collar. A contract surveyor company GEOSURVEY used a differential GPS device with an accuracy of 0.02 cm for the borehole collar surveys.

Down hole dip and azimuth variations were measured and recorded consistently by drilling contractors using an electronic multi-shot instrument. These data were gathered at 30 m intervals along the drillholes to ensure accuracy hole trajectory tracking.

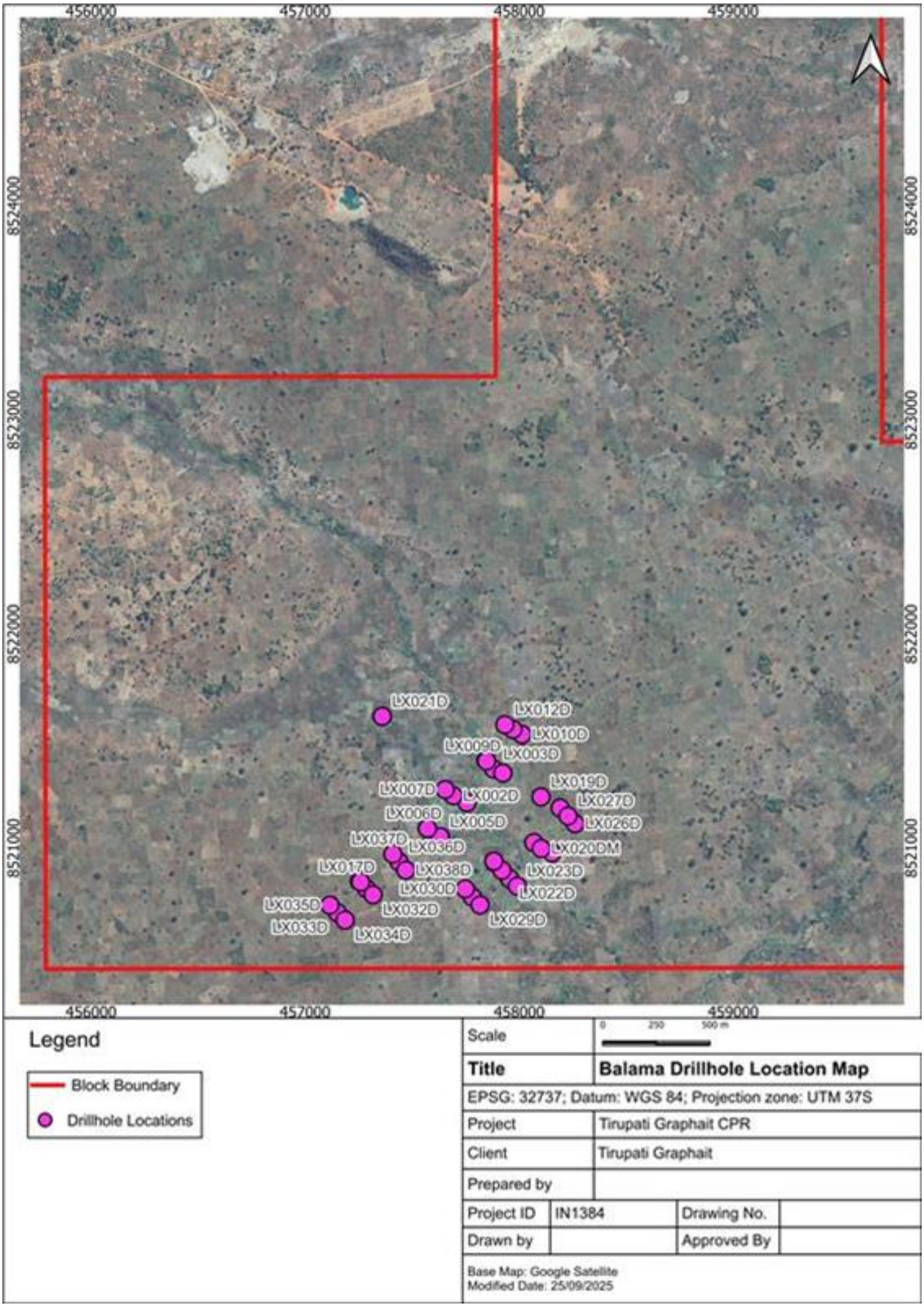


Figure 6-7: Balama Central Diamond Drillhole Location

6.7.4 Geological Logging

Battery Minerals Limited geologists systematically logged all drill holes for a wide range of geological and structural characteristics, including as lithology, mineralization, alteration, veining, and structural orientation. The diamond drill core was photographed in both wet and dry stages to offer a permanent visual record, and it was carefully measured for RQD and core recovery, allowing for a quantitative assessment of rock mass integrity and drilling performance. Logging was first detailed on standardized paper logging sheets to ensure uniformity and accuracy in field observations and then transferred to the MS Excel based spreadsheets and later imported to MS Access database.

6.7.5 Sampling

Drilling at Balama Central focussed on zones having visible graphite mineralization. To provide correct geological context, further sampling was conducted 2 to 4 m either side of the mineralized areas. Diamond core drilling was the single method used, with an HQ3 core diameter and typical triple-tube drilling procedures, resulting in outstanding core recoveries of 94.5%. To preserve precision and consistency, the mineralised core was regularly sampled as quarter core, with intervals of 1 or 2 m cut using a normal electric core saw. In locations with pegmatite intrusions, sample intervals were occasionally increased to 3 m. A total of 1284 samples were selected from the drill cores. For ensuring uniformity and minimize sampling bias, all samples were collected from the same side of the drill core throughout the program. This sampling approach delivered high-quality, representative material for geochemical and metallurgical testing while maintaining the remaining core's integrity for future investigation

6.7.6 Sample Preparation

All drill core cut samples were sent to the ALS Johannesburg for initial preparation. To ensure complete traceability, every sample was weighed upon receipt, given a distinct bar number, and methodically entered into the ALS Laboratory Information Management System (LIMS). To eliminate any remaining moisture, the complete sample was first oven-dried at 105°C. After that, it was crushed to a nominal particle size of -2 mm. An LM5 ring pulverizer was used to grind a representative 300 g sub-sample of this crushed material to a fineness of more than 85% passing -75 µm, guaranteeing homogeneity of the sample pulp. A Jones riffle splitter using multiple feed cycles was then used for dividing the freshly collected sample, producing a typical sub-sample weighing between 100 and 200 g. After being safely packed, this finished pulp was sent to the ALS Brisbane, where it was subjected to elemental tests and geochemical examination for graphite content

6.7.7 Assay

At ALS Brisbane, the prepared samples underwent a suite of analytical techniques designed to characterise both the graphite content and the broader geochemical profile of the material, Ash-01 Ash Content, ME-GRA05g Loss on Ignition, ME-ICP06 Major Oxides, ME-MS81 Ultra Trace Level Method, ME-ACD81 Four Acid Digest, Method C-IR18 Total Graphitic Carbon, Method C-IR07 Total Carbon, and Method S-IR08 Total Sulphur.

6.7.8 QAQC

At a frequency of around one in every 20 samples, standards and blanks were systematically inserted into the sample stream to ensure data quality and integrity (Table 6-3). The accuracy and precision of the laboratory were continuously monitored during the process of analysis. No Field Duplicates were introduced in the program.

Battery Minerals Limited geologists supervised the quality control program and frequently examined and verified the performance of the inserted control samples.

Table 6-3: ALS Total QAQC Samples Summary

Sample Type		Count
Total QC Samples Analysed		177
Pulp Duplicates		0
Coarse Duplicate		0
Blanks		74
Certified Reference Material		103
	GGC01	21
	GGC04	33
	GGC05	16
	GGC10	02
	AMIS0346	31

Certified Reference Material

In reviewing the results of the Certified Reference Materials assays, SRK notes:

- GGC01: Total 21 samples were inserted in the sampling stream. Analysis results of TGC fall within the 2SD of the Mean Values which within the accuracy limits.
- GGC04: Total 33 samples were inserted in the sampling stream. Analysis results of TGC, are falling well within the set of 2SD limit. One sample result is showing on slightly lower sides.
- GGC05: Total 16 samples were inserted in the sampling stream. Analysis results of TGC, are falling well within the set of 2SD limit.
- GGC10: Total 02 samples were inserted in the sampling stream. Analysis results of TGC, are falling well within the set of 2SD limit.
- AMIS0346: Total 31 samples were inserted in the sampling stream. Analysis results of V2O3, are falling well within the set of 2SD limit. Two samples result are showing on slightly lower sides.

Field Blanks

Overall, SRK considers that the assay results of used field blanks do not show any major indication that raise concerns over sample contamination.

6.7.9 Database

Battery Minerals Limited geologist-maintained MS Excel based spreadsheets for all data which were validated for any data gaps or overlap and transferred into MS Access database.

6.7.10 SRK Comments

Battery Minerals Limited carried out a systematic exploration at Balama Central in two stages since 2015. The initial work was to establish the presence of graphite in the license area by carrying out mapping and geophysics (VTEM). Followed by the identification of the potential targets, core drilling tested the anomalies, thus defining the Lennox and Byron deposits. Battery Minerals Limited reported Mineral Resources for Balama Central in accordance with the guidelines of JORC Code 2012.

Based on the MRE Reports prepared by RPM Global, Balama Central has high grade graphite along with Vanadium.

Battery Minerals Limited followed the industry standard practices in the drilling work by maintaining the drilling quality, recording of geological logs, sampling and sample assaying at reasonable confidence.

Core sizes were H and N using a triple tube drilling technology to ensure maximum core recovery. The borehole collars were surveyed using DGPS by a survey agency Geosurvey. The downhole deviation for core drilling was measured and recorded at 30m intervals using multi-shot camera by the drilling agency. Overall, the core recovery was more than 90%.

Samples were taken on 1 to 2 m intervals for drill cores and cut into quarters using an electric saw. The cut samples were sent to ALS Johannesburg for sample preparation. The pulp fraction was sent to ALS Brisbane for analysis. The analytical techniques suitable for the graphite and vanadium were adopted by ALS.

Battery Minerals Limited introduced QAQC samples (Standards and Blanks) in the assay sample batches, and overall, the assay results returned a reasonable confidence on the accuracy of the ALS data; however, no duplicate samples were introduced in the program and no check samples assayed in an umpire laboratory.

Battery Minerals Limited carried out bulk density measurements of drill cores using the water immersion techniques. The results from different zones, highly oxidised to fresh, returned reasonable results close to the global average of 2.26 kg/m^3.

SRK understands that there are geological risks and opportunities associated with the Balama Central.

- The earlier reports from RPM Global suggested that further close spaced data is required to capture the structural complexity (localised faults) of the deposits which may impact the overall geometry and grade of the graphite mineralisation.
- Overall QC samples returned reasonable values related to the accuracy of the assay results, however the absence of Field Duplicate samples in the program limits the confidence on any sample biasness or repeatability.
- The VTEM suggested potential graphite mineralisation targets, out of which only few have been tested by Battery Minerals Limited. There are other potential targets along the extension of the Lennox and Byron to be explored.
- The strike and the down dip extensions are open and additional in-fill and step-out drilling needs to be done, thus improving the confidence on the geological and grade continuity of the graphite mineralisation and upgrading the Mineral Resources.

6.8 Metallurgical Testwork

No additional metallurgical testwork has been made available since the completion of the MRE. The previous MRE testwork comments are therefore included below.

6.8.1 Preliminary Testwork

Battery Minerals Limited carried out a preliminary metallurgical testing of samples obtained from Balama Central.

The samples were collected from each prospect and differentiated by weathering and grade. The sample descriptions, flake distribution of product, concentrate grades and metallurgical recoveries are shown in Table 6-4. The test results suggested that high concentrate grades >96% TGC can be achieved for all material types and an average metallurgical recovery for the project is approximately 90%.

Table 6-4: Balama Central Metallurgical Sampling and Test Work Results Summary (Source: RPM Global Mineral Resource Report, 2018)

Prospect	ID	Sample Material				Metallurgical Testwork Results			
		Lithology	Domain	Sample (kg)	Grade %TGC	Sample Feed Grade %TGC	Average Product %TGC	Recovery %	+150 micron
Lennox	1	GS4	weathered	19.4	<5%	3.1	98.1	94.9	27.0
Lennox	2	GS1	primary	23.2	10-15%	22.2	96.1	94.5	42.5
Lennox	3	GS3	primary	19.6	5 -10%	10.3	98.1	92.4	70.8
Byron	4	GS4	primary	25.5	<5%	2.8	97.7	72.5	35.0
Byron	5	GS3	weathered	20.1	10 -15%	17.1	96.5	95.5	38.8
Byron	6	GS3	primary	21.8	10 -15%	18.0	97.8	96.3	52.8
Lennox	7	GS3	weathered	19.8	>10%	21.4	96.6	97.5	35.8

6.8.2 SRK Comments

Initial testwork indicates that a concentrate can be recovered of a high TGC to be a saleable product. Recovery values are high and there is a good proportion of flake material (material > 150 μm in size) in the concentrate.

SRK recommends further metallurgical testwork, undertaken along the lines of the Montepuez testwork campaigns to determine the ore characteristics, flotation response and ultimately develop a process design criteria for a concentrator.

6.9 Mineral Resource Estimation

Tirupati provided the validated database, 3D geological models, and the block model in Surpac format, which was used to generate the Mineral Resource Estimate. SRK reviewed the data and models using Leapfrog Geo and Datamine to validate and prepare the Mineral Resource statement. The block models were classified in accordance with the guidelines and principles of the JORC Code.

6.9.1 Database

A summary of the exploration database used for Balama Central Mineral Resource estimation is presented in Table 6-5.

Table 6-5: Balama Central Resource Database Summary

Drilling Type	Count of BHID	Drilled (m)
Diamond Drilling (DD)	32	2,938
Total	32	2,938

SRK undertook a data validation exercise to ensure the data quality is appropriate for undertaking a Mineral Resource Estimate. SRK did not find any material issue in terms of the integrity of the exploration database. Verification included:

- validation of the borehole coordinates;
- overlapping intervals;
- harmonisation of the geological logging codes;
- missing interval and missing assay results;
- assigning appropriate value for those samples where the GC% were reported below the detection limit; and
- reconciliation of the geological logs with the assay results.

6.9.2 Geological Modelling

- Topographic surface was generated using the drillhole collar elevation. All drillhole collar coordinates were surveyed using the WGS84 datum, UTM Zone 37 South. The collar surveys were conducted by the survey firm, GEOSURVEY, using differential GPS (DGPS) with a positional accuracy of ±0.02 cm.
- The geological and mineralisation models were developed by RPM using Surpac software. Mineralisation domains were defined based on a nominal 3% TGC) cut-off, with a minimum downhole continuity of 2 m. These domains were constructed as 3D envelopes to constrain the mineralised zones. A representative cross section is shown in Figure 6-8.
- At the Lennox prospect, a detailed review of grade distribution supported the delineation of internal high-grade domains using an approximate 10% TGC cut-off. These were modelled as discrete wireframes to reflect internal grade variability within broader mineralised zones.
- Geological logging data was used to define weathering surfaces, including the boundaries between oxide, saprolite, and fresh rock. Weathering surfaces were also constructed to represent:
- top of fresh rock;
- base of saprolite; and
- base of complete oxidation.

These surfaces were used to define oxidation domains within the block model and to support density assignment and metallurgical interpretations.

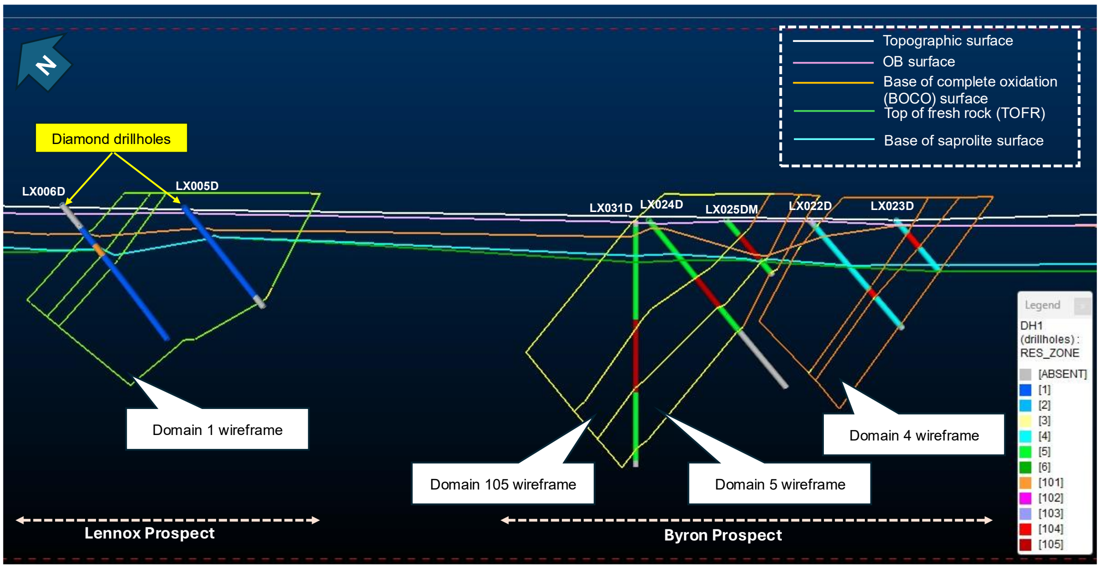


Figure 6-8: Balama Central Geological Model Typical Cross-Sectional View

6.9.3 Domain Definition

- Sub-domain was created based on 10% TGC cut-off. At the Lennox prospect, a detailed review of grade distribution supported the delineation of internal high-grade domains using an approximate 10% TGC cut-off. These were modelled as discrete wireframes to reflect internal grade variability within broader mineralised zones (Figure 6-9).
- Graphitic carbon (TGC) grades within the deposit are classified into two categories for resource estimation purposes: material containing less than 10% TGC is designated as medium-grade, typically representing lower-grade mineralisation that may be considered for blending or selective mining; whereas material with 10% TGC or higher is classified as high-grade, representing the primary target zones due to their higher carbon content and potential for enhanced economic recovery.
- Eleven mineralisation wireframes were created all together for the Lennox and Byron prospect. These wireframes were used to: select sample data for grade estimation, constrain the block model and apply hard boundaries, meaning only assays within a wireframe were used to estimate grades within that domain.

Based on the modelled domains, database was coded as res_zone. Accordingly, 11 different id were assigned.

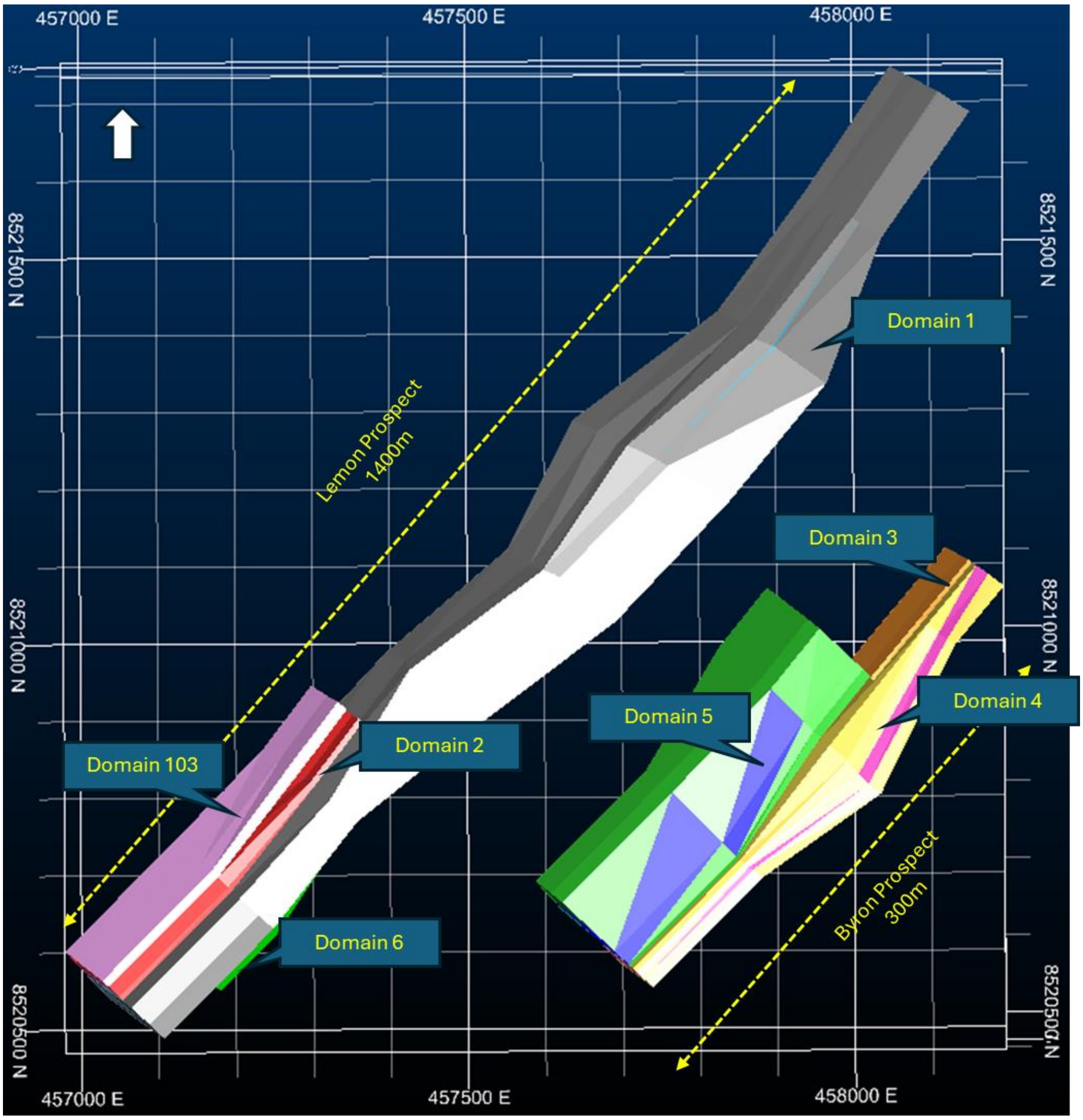


Figure 6-9: Balama Central Modelled Domains 3D View

6.9.4 Compositing

Prior to generating the MRE, the samples were composited to equal lengths such that a constant volume was achieved, therefore honouring the sample support theory. As sampling was predominantly based on lithological intervals, the actual sample lengths range between 0.2 m to 4.56 m (Figure 6-10). Following a detailed assessment of sample intervals within the wireframe domains, assay data were composited to uniform 2 m lengths to standardize input for resource modelling. Statistical analysis of the dataset confirmed that grade capping was not warranted due to the absence of significant outlier influence. SRK undertook a statistical analysis to ensure that the composites did not result in a reduction in the mean GC grade. Four elements were extracted into the composite files and include total graphitic carbon TGC (%), V_2O_5 (%), S (%) and LOI (%). Table 6-6 summaries the summary of the composite statistics of different domains for TGC%.

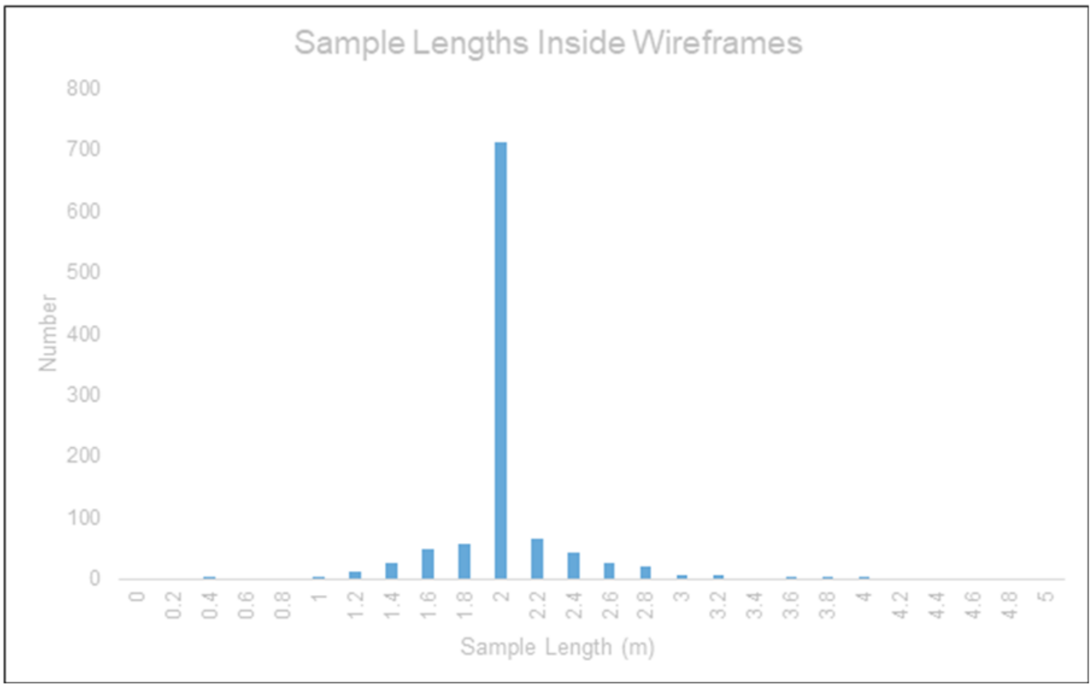


Figure 6-10: Sample length histogram within the domain wireframes

Table 6-6: Balama Central Composite Statistics of Domains for TGC% Summary

Domain	Description	Sample count	Min	Max	Mean	Stdev	CoV	Var
1	Medium Grade Domain	520	0.01	13.75	5.63	2.45	0.44	6.01
2	Medium Grade Domain	27	1.00	10.95	6.69	2.75	0.41	7.56
3	Medium Grade Domain	2	10.65	12.03	11.34	0.97	0.09	0.94
4	Medium Grade Domain	77	0.01	12.55	5.29	3.08	0.58	9.49
5	Medium Grade Domain	143	0.06	15.54	5.78	2.99	0.52	8.96
6	Medium Grade Domain	9	5.3	10	7.85	1.62	0.21	2.61
101	High Grade Domain	95	0.5	26.54	17.48	5.52	0.32	30.47
102	High Grade Domain	16	11.00	25.26	16.46	3.11	0.19	9.66
103	High Grade Domain	19	11.05	23.66	16.78	3.12	0.19	9.75
104	High Grade Domain	43	0.15	21.88	13.07	4.7	0.36	22.12
105	High Grade Domain	73	0.06	22.39	13.2	4.88	0.37	23.79

6.9.5 Geostatistical Analysis

Mineralisation continuity was evaluated through variographic analysis, which investigates the spatial correlation of composited samples to determine the principal directions and ranges of grade continuity, as well as the nugget effect representing short-range variability. These results form the basis for defining kriging parameters used in resource estimation. For Balama Central, RPM Global conducted variography on Surpac wireframe Domain 1 using Supervisor software, generating experimental variograms for each composited element (Figure 6-11). A two-structure nested spherical model provided a reasonable fit to the data. Down-hole variograms yielded nugget values of 0.17 for TGC, 0.09 for V_2O_5, 0.03 for S, and 0.11 for LOI (Table 6-7).

The orientation of the variogram models was aligned with the interpreted wireframe geometry of the main mineralised domain. Experimental variograms were calculated in three orthogonal directions: along the principal axis of mineralisation, within the mineralisation plane perpendicular to the first direction, and across the mineralisation width.

It is understood that modelled both down-hole and directional variograms for Domain 1, which exhibited reasonable structural continuity; however, it is observed that the semi-major directional variogram was poorly defined due to limited down-dip drilling. It is recommended that this variogram be updated following the acquisition of 25 m spaced infill drilling data to improve the reliability of the continuity model.

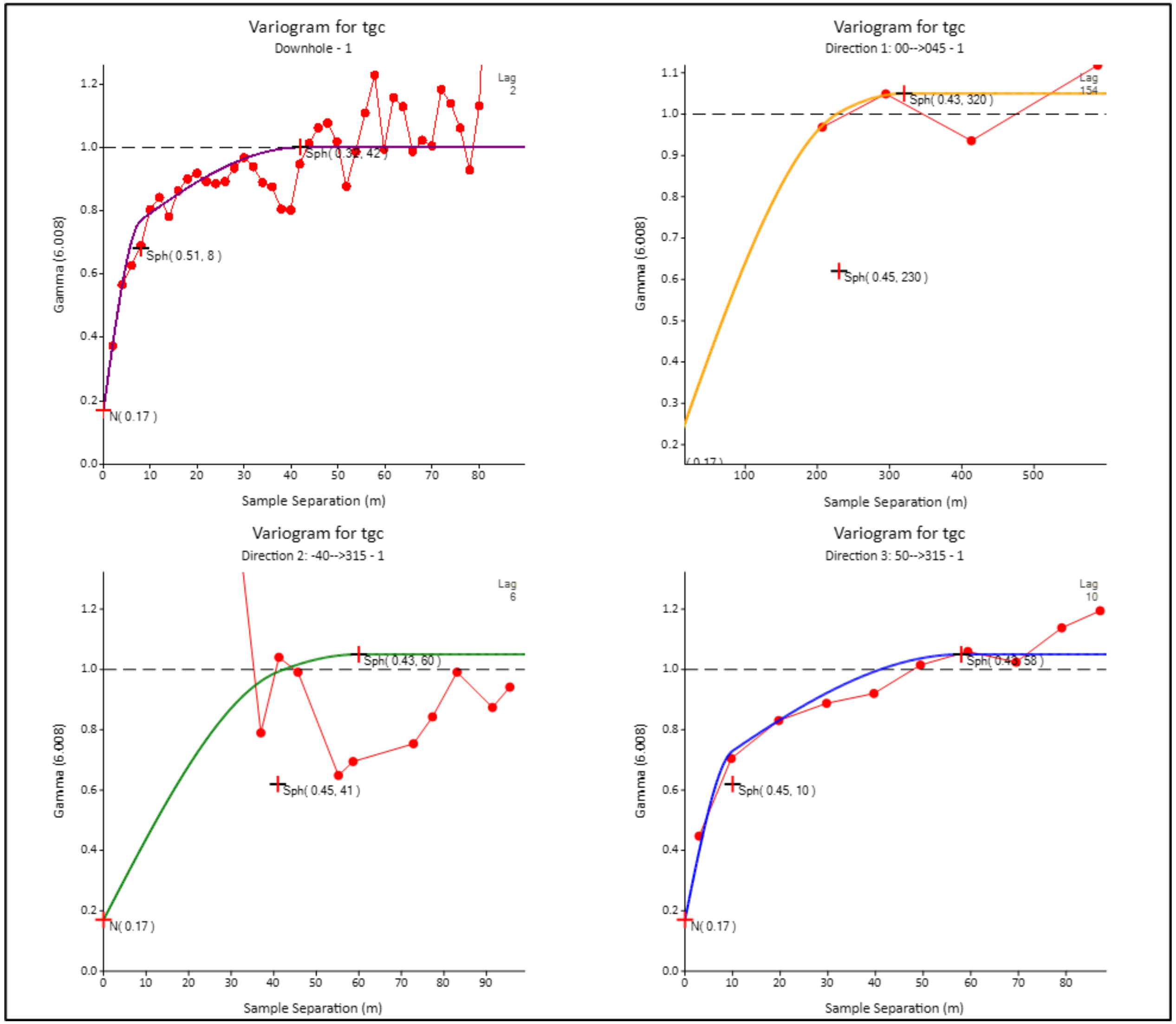


Figure 6-11: Summary of the semi-variogram used for Domain 1

Table 6-7: Balama Central Semi-variogram Parameters

Element	Major Direction	Nugget	Structure 1				Structure 2			
			C1	A1	Semi	Minor	C2	A2	Semi	Minor
TGC	00-->045	0.17	0.45	230	5.6	23.0	0.43	320	5.3	5.5
V_2O_5	00-->045	0.09	0.48	300	8.1	33.3	0.43	365	5.4	5.7
S	00-->045	0.03	0.71	370	6.1	11.6	0.26	440	7.1	8.3
LOI	00-->045	0.11	0.48	230	5.5	28.7	0.41	280	4.6	4.8

6.9.6 Block Model

Following the construction of the wireframes and the geostatistical analysis, a 3D block model was created in the Datamine Studio 3 software. For the selection of the block model framework SRK considered the average borehole spacing and possible open pit bench height. In order to increase the accuracy of the domain boundary definition, SRK used sub-blocks along each direction for all the modelled geological wireframes. Table 6-8 presents the summary of the block model parameters selected by SRK for Balama Central.

Table 6-8: Balama Central Block Model Framework Summary

	X (m)	Y (m)	Z (m)
Minimum	456500	8520700	360
Maximum	457750	8523100	660
Range	1250	2400	300
Parent block size	10	100	5
Number of blocks	125	240	60
Rotation	045°	045°	045°

6.9.7 Grade Estimation

For Balama Central, SRK used OK for the grade interpolation into the block model, honouring the geological contacts defined by the geological modelling process and using the variogram parameters set out above. Before undertaking the grade estimation, SRK carried out a search neighbourhood analysis for the appropriateness of the search and estimation parameters through the optimisation of the following parameters:

- Search Ellipsoid Dimension.
- Number of minimum and maximum samples to be used for estimation.
- Optimisation of Search Octants.
- Number of discretisation points.

Based on the results of the above study, SRK selected the final search parameters for Balama for the elements TGC, V_2O_5, S and LOI, which are reflected in Table 6-9 to Table 6-12. In order to compare the mean grades derived from the OK, SRK also estimated the empty block model using Inverse Distance Weighted Method. No grade capping was used. The estimation parameters were set up by visually checking the data to ensure suitable minimum and maximum samples have been used, and that the factored searches were sufficiently large to fill the entire block model.

Table 6-9: Balama Central TGC (Total Graphitic Content) Search Parameters Summary

Object	Element	Field	Min_sam	Max_sam	maj_dis	Strike	Plunge	Dip	semi	minor	c0	c1	a1	semi1	minor1	c2	a2	semi2	minor2	pass	est_zone
1	tgc_pct	1	8	30	200	45	0	50	2	8	0.17	0.45	230	5.6	23	0.43	320	5.3	5.5	1	1
2	tgc_pct	1	8	30	200	45	0	50	2	8	0.17	0.45	230	5.6	23	0.43	320	5.3	5.5	1	1
4	tgc_pct	1	8	30	200	45	0	55	2	8	0.17	0.45	230	5.6	23	0.43	320	5.3	5.5	1	1
5	tgc_pct	1	8	30	200	45	0	55	2	8	0.17	0.45	230	5.6	23	0.43	320	5.3	5.5	1	1
101	tgc_pct	1	8	30	200	45	0	50	2	8	0.17	0.45	230	5.6	23	0.43	320	5.3	5.5	1	1
102	tgc_pct	1	8	30	200	45	0	50	2	8	0.17	0.45	230	5.6	23	0.43	320	5.3	5.5	1	1
103	tgc_pct	1	8	30	200	45	0	50	2	8	0.17	0.45	230	5.6	23	0.43	320	5.3	5.5	1	1
104	tgc_pct	1	8	30	200	45	0	55	2	8	0.17	0.45	230	5.6	23	0.43	320	5.3	5.5	1	1
105	tgc_pct	1	8	30	200	45	0	55	2	8	0.17	0.45	230	5.6	23	0.43	320	5.3	5.5	1	1
1	tgc_pct	1	4	30	400	45	0	50	2	8	0.17	0.45	230	5.6	23	0.43	320	5.3	5.5	2	1
2	tgc_pct	1	4	30	400	45	0	50	2	8	0.17	0.45	230	5.6	23	0.43	320	5.3	5.5	2	1
4	tgc_pct	1	4	30	400	45	0	55	2	8	0.17	0.45	230	5.6	23	0.43	320	5.3	5.5	2	1
5	tgc_pct	1	4	30	400	45	0	55	2	8	0.17	0.45	230	5.6	23	0.43	320	5.3	5.5	2	1
101	tgc_pct	1	4	30	400	45	0	50	2	8	0.17	0.45	230	5.6	23	0.43	320	5.3	5.5	2	1
102	tgc_pct	1	4	30	400	45	0	50	2	8	0.17	0.45	230	5.6	23	0.43	320	5.3	5.5	2	1
103	tgc_pct	1	4	30	400	45	0	50	2	8	0.17	0.45	230	5.6	23	0.43	320	5.3	5.5	2	1
104	tgc_pct	1	4	30	400	45	0	55	2	8	0.17	0.45	230	5.6	23	0.43	320	5.3	5.5	2	1
105	tgc_pct	1	4	30	400	45	0	55	2	8	0.17	0.45	230	5.6	23	0.43	320	5.3	5.5	2	1
1	tgc_pct	1	2	30	800	45	0	50	2	8	0.17	0.45	230	5.6	23	0.43	320	5.3	5.5	3	1
2	tgc_pct	1	2	30	800	45	0	50	2	8	0.17	0.45	230	5.6	23	0.43	320	5.3	5.5	3	1
4	tgc_pct	1	2	30	800	45	0	55	2	8	0.17	0.45	230	5.6	23	0.43	320	5.3	5.5	3	1
5	tgc_pct	1	2	30	800	45	0	55	2	8	0.17	0.45	230	5.6	23	0.43	320	5.3	5.5	3	1
101	tgc_pct	1	2	30	800	45	0	50	2	8	0.17	0.45	230	5.6	23	0.43	320	5.3	5.5	3	1
102	tgc_pct	1	2	30	800	45	0	50	2	8	0.17	0.45	230	5.6	23	0.43	320	5.3	5.5	3	1
103	tgc_pct	1	2	30	800	45	0	50	2	8	0.17	0.45	230	5.6	23	0.43	320	5.3	5.5	3	1
104	tgc_pct	1	2	30	800	45	0	55	2	8	0.17	0.45	230	5.6	23	0.43	320	5.3	5.5	3	1
105	tgc_pct	1	2	30	800	45	0	55	2	8	0.17	0.45	230	5.6	23	0.43	320	5.3	5.5	3	1

Table 6-10: Balama Central V_2O_5 Search Parameters Summary

Object	Element	Field	Min_sam	Max_sam	maj_dis	Strike	Plunge	Dip	semi	minor	c0	c1	a1	semi1	minor1	c2	a2	semi2	minor2	pass	est_zone
1	v2o5_pct	2	8	30	200	45	0	50	2	8	0.09	0.48	300	8.1	33.3	0.43	365	5.4	5.7	1	1
2	v2o5_pct	2	8	30	200	45	0	50	2	8	0.09	0.48	300	8.1	33.3	0.43	365	5.4	5.7	1	1
4	v2o5_pct	2	8	30	200	45	0	55	2	8	0.09	0.48	300	8.1	33.3	0.43	365	5.4	5.7	1	1
5	v2o5_pct	2	8	30	200	45	0	55	2	8	0.09	0.48	300	8.1	33.3	0.43	365	5.4	5.7	1	1
101	v2o5_pct	2	8	30	200	45	0	50	2	8	0.09	0.48	300	8.1	33.3	0.43	365	5.4	5.7	1	1
102	v2o5_pct	2	8	30	200	45	0	50	2	8	0.09	0.48	300	8.1	33.3	0.43	365	5.4	5.7	1	1
103	v2o5_pct	2	8	30	200	45	0	50	2	8	0.09	0.48	300	8.1	33.3	0.43	365	5.4	5.7	1	1
104	v2o5_pct	2	8	30	200	45	0	55	2	8	0.09	0.48	300	8.1	33.3	0.43	365	5.4	5.7	1	1
105	v2o5_pct	2	8	30	200	45	0	55	2	8	0.09	0.48	300	8.1	33.3	0.43	365	5.4	5.7	1	1
1	v2o5_pct	2	4	30	400	45	0	50	2	8	0.09	0.48	300	8.1	33.3	0.43	365	5.4	5.7	2	1
2	v2o5_pct	2	4	30	400	45	0	50	2	8	0.09	0.48	300	8.1	33.3	0.43	365	5.4	5.7	2	1
4	v2o5_pct	2	4	30	400	45	0	55	2	8	0.09	0.48	300	8.1	33.3	0.43	365	5.4	5.7	2	1
5	v2o5_pct	2	4	30	400	45	0	55	2	8	0.09	0.48	300	8.1	33.3	0.43	365	5.4	5.7	2	1
101	v2o5_pct	2	4	30	400	45	0	50	2	8	0.09	0.48	300	8.1	33.3	0.43	365	5.4	5.7	2	1
102	v2o5_pct	2	4	30	400	45	0	50	2	8	0.09	0.48	300	8.1	33.3	0.43	365	5.4	5.7	2	1
103	v2o5_pct	2	4	30	400	45	0	50	2	8	0.09	0.48	300	8.1	33.3	0.43	365	5.4	5.7	2	1
104	v2o5_pct	2	4	30	400	45	0	55	2	8	0.09	0.48	300	8.1	33.3	0.43	365	5.4	5.7	2	1
105	v2o5_pct	2	4	30	400	45	0	55	2	8	0.09	0.48	300	8.1	33.3	0.43	365	5.4	5.7	2	1
1	v2o5_pct	2	2	30	800	45	0	50	2	8	0.09	0.48	300	8.1	33.3	0.43	365	5.4	5.7	3	1
2	v2o5_pct	2	2	30	800	45	0	50	2	8	0.09	0.48	300	8.1	33.3	0.43	365	5.4	5.7	3	1
4	v2o5_pct	2	2	30	800	45	0	55	2	8	0.09	0.48	300	8.1	33.3	0.43	365	5.4	5.7	3	1
5	v2o5_pct	2	2	30	800	45	0	55	2	8	0.09	0.48	300	8.1	33.3	0.43	365	5.4	5.7	3	1
101	v2o5_pct	2	2	30	800	45	0	50	2	8	0.09	0.48	300	8.1	33.3	0.43	365	5.4	5.7	3	1
102	v2o5_pct	2	2	30	800	45	0	50	2	8	0.09	0.48	300	8.1	33.3	0.43	365	5.4	5.7	3	1
103	v2o5_pct	2	2	30	800	45	0	50	2	8	0.09	0.48	300	8.1	33.3	0.43	365	5.4	5.7	3	1
104	v2o5_pct	2	2	30	800	45	0	55	2	8	0.09	0.48	300	8.1	33.3	0.43	365	5.4	5.7	3	1
105	v2o5_pct	2	2	30	800	45	0	55	2	8	0.09	0.48	300	8.1	33.3	0.43	365	5.4	5.7	3	1

Table 6-11: Balama Central Summary of the Search Parameters for the S

Object	Element	Field	Min_sam	Max_sam	maj_dis	Strike	Plunge	Dip	semi	minor	c0	c1	a1	semi1	minor1	c2	a2	semi2	minor2	pass	est_zone
1	s_pct	3	8	30	200	45	0	50	2	8	0.03	0.71	370	6.1	11.6	0.26	440	7.1	8.3	1	1
2	s_pct	3	8	30	200	45	0	50	2	8	0.03	0.71	370	6.1	11.6	0.26	440	7.1	8.3	1	1
4	s_pct	3	8	30	200	45	0	55	2	8	0.03	0.71	370	6.1	11.6	0.26	440	7.1	8.3	1	1
5	s_pct	3	8	30	200	45	0	55	2	8	0.03	0.71	370	6.1	11.6	0.26	440	7.1	8.3	1	1
101	s_pct	3	8	30	200	45	0	50	2	8	0.03	0.71	370	6.1	11.6	0.26	440	7.1	8.3	1	1
102	s_pct	3	8	30	200	45	0	50	2	8	0.03	0.71	370	6.1	11.6	0.26	440	7.1	8.3	1	1
103	s_pct	3	8	30	200	45	0	50	2	8	0.03	0.71	370	6.1	11.6	0.26	440	7.1	8.3	1	1
104	s_pct	3	8	30	200	45	0	55	2	8	0.03	0.71	370	6.1	11.6	0.26	440	7.1	8.3	1	1
105	s_pct	3	8	30	200	45	0	55	2	8	0.03	0.71	370	6.1	11.6	0.26	440	7.1	8.3	1	1
1	s_pct	3	4	30	400	45	0	50	2	8	0.03	0.71	370	6.1	11.6	0.26	440	7.1	8.3	2	1
2	s_pct	3	4	30	400	45	0	50	2	8	0.03	0.71	370	6.1	11.6	0.26	440	7.1	8.3	2	1
4	s_pct	3	4	30	400	45	0	55	2	8	0.03	0.71	370	6.1	11.6	0.26	440	7.1	8.3	2	1
5	s_pct	3	4	30	400	45	0	55	2	8	0.03	0.71	370	6.1	11.6	0.26	440	7.1	8.3	2	1
101	s_pct	3	4	30	400	45	0	50	2	8	0.03	0.71	370	6.1	11.6	0.26	440	7.1	8.3	2	1
102	s_pct	3	4	30	400	45	0	50	2	8	0.03	0.71	370	6.1	11.6	0.26	440	7.1	8.3	2	1
103	s_pct	3	4	30	400	45	0	50	2	8	0.03	0.71	370	6.1	11.6	0.26	440	7.1	8.3	2	1
104	s_pct	3	4	30	400	45	0	55	2	8	0.03	0.71	370	6.1	11.6	0.26	440	7.1	8.3	2	1
105	s_pct	3	4	30	400	45	0	55	2	8	0.03	0.71	370	6.1	11.6	0.26	440	7.1	8.3	2	1
1	s_pct	3	2	30	800	45	0	50	2	8	0.03	0.71	370	6.1	11.6	0.26	440	7.1	8.3	3	1
2	s_pct	3	2	30	800	45	0	50	2	8	0.03	0.71	370	6.1	11.6	0.26	440	7.1	8.3	3	1
4	s_pct	3	2	30	800	45	0	55	2	8	0.03	0.71	370	6.1	11.6	0.26	440	7.1	8.3	3	1
5	s_pct	3	2	30	800	45	0	55	2	8	0.03	0.71	370	6.1	11.6	0.26	440	7.1	8.3	3	1
101	s_pct	3	2	30	800	45	0	50	2	8	0.03	0.71	370	6.1	11.6	0.26	440	7.1	8.3	3	1
102	s_pct	3	2	30	800	45	0	50	2	8	0.03	0.71	370	6.1	11.6	0.26	440	7.1	8.3	3	1
103	s_pct	3	2	30	800	45	0	50	2	8	0.03	0.71	370	6.1	11.6	0.26	440	7.1	8.3	3	1
104	s_pct	3	2	30	800	45	0	55	2	8	0.03	0.71	370	6.1	11.6	0.26	440	7.1	8.3	3	1
105	s_pct	3	2	30	800	45	0	55	2	8	0.03	0.71	370	6.1	11.6	0.26	440	7.1	8.3	3	1

Table 6-12: Balama Central Summary of the Search Parameters for the LOI

Object	Element	Field	Min_sam	Max_sam	maj_dis	Strike	Plunge	Dip	semi	minor	c0	c1	a1	semi1	minor1	c2	a2	semi2	minor2	pass	est_zone
1	loi_pct	4	8	30	200	45	0	50	2	8	0.11	0.48	230	5.5	28.7	0.41	280	4.6	4.8	1	1
2	loi_pct	4	8	30	200	45	0	50	2	8	0.11	0.48	230	5.5	28.7	0.41	280	4.6	4.8	1	1
4	loi_pct	4	8	30	200	45	0	55	2	8	0.11	0.48	230	5.5	28.7	0.41	280	4.6	4.8	1	1
5	loi_pct	4	8	30	200	45	0	55	2	8	0.11	0.48	230	5.5	28.7	0.41	280	4.6	4.8	1	1
101	loi_pct	4	8	30	200	45	0	50	2	8	0.11	0.48	230	5.5	28.7	0.41	280	4.6	4.8	1	1
102	loi_pct	4	8	30	200	45	0	50	2	8	0.11	0.48	230	5.5	28.7	0.41	280	4.6	4.8	1	1
103	loi_pct	4	8	30	200	45	0	50	2	8	0.11	0.48	230	5.5	28.7	0.41	280	4.6	4.8	1	1
104	loi_pct	4	8	30	200	45	0	55	2	8	0.11	0.48	230	5.5	28.7	0.41	280	4.6	4.8	1	1
105	loi_pct	4	8	30	200	45	0	55	2	8	0.11	0.48	230	5.5	28.7	0.41	280	4.6	4.8	1	1
1	loi_pct	4	4	30	400	45	0	50	2	8	0.11	0.48	230	5.5	28.7	0.41	280	4.6	4.8	2	1
2	loi_pct	4	4	30	400	45	0	50	2	8	0.11	0.48	230	5.5	28.7	0.41	280	4.6	4.8	2	1
4	loi_pct	4	4	30	400	45	0	55	2	8	0.11	0.48	230	5.5	28.7	0.41	280	4.6	4.8	2	1
5	loi_pct	4	4	30	400	45	0	55	2	8	0.11	0.48	230	5.5	28.7	0.41	280	4.6	4.8	2	1
101	loi_pct	4	4	30	400	45	0	50	2	8	0.11	0.48	230	5.5	28.7	0.41	280	4.6	4.8	2	1
102	loi_pct	4	4	30	400	45	0	50	2	8	0.11	0.48	230	5.5	28.7	0.41	280	4.6	4.8	2	1
103	loi_pct	4	4	30	400	45	0	50	2	8	0.11	0.48	230	5.5	28.7	0.41	280	4.6	4.8	2	1
104	loi_pct	4	4	30	400	45	0	55	2	8	0.11	0.48	230	5.5	28.7	0.41	280	4.6	4.8	2	1
105	loi_pct	4	4	30	400	45	0	55	2	8	0.11	0.48	230	5.5	28.7	0.41	280	4.6	4.8	2	1
1	loi_pct	4	2	30	800	45	0	50	2	8	0.11	0.48	230	5.5	28.7	0.41	280	4.6	4.8	3	1
2	loi_pct	4	2	30	800	45	0	50	2	8	0.11	0.48	230	5.5	28.7	0.41	280	4.6	4.8	3	1
4	loi_pct	4	2	30	800	45	0	55	2	8	0.11	0.48	230	5.5	28.7	0.41	280	4.6	4.8	3	1
5	loi_pct	4	2	30	800	45	0	55	2	8	0.11	0.48	230	5.5	28.7	0.41	280	4.6	4.8	3	1
101	loi_pct	4	2	30	800	45	0	50	2	8	0.11	0.48	230	5.5	28.7	0.41	280	4.6	4.8	3	1
102	loi_pct	4	2	30	800	45	0	50	2	8	0.11	0.48	230	5.5	28.7	0.41	280	4.6	4.8	3	1
103	loi_pct	4	2	30	800	45	0	50	2	8	0.11	0.48	230	5.5	28.7	0.41	280	4.6	4.8	3	1
104	loi_pct	4	2	30	800	45	0	55	2	8	0.11	0.48	230	5.5	28.7	0.41	280	4.6	4.8	3	1
105	loi_pct	4	2	30	800	45	0	55	2	8	0.11	0.48	230	5.5	28.7	0.41	280	4.6	4.8	3	1

6.9.8 Model Validation

Estimated grades were validated using the following techniques:

- Visual inspection of the block grades in comparison with the composite data.
- Statistical comparison between the estimated grades and composite grades; and
- Sectional validation of the mean sample grades in comparison with the mean estimated grade;

Figure 6-12 shows the comparison of the block model grade with the composited grade in a typical cross-section. Table 6-13 shows the statistical comparison of the estimated block model TGC% grade with the composite grade. Validation plots are illustrated in Figure 6-13 and Figure 6-14.

Validation plots indicate a strong correlation between composite grades and block model grades when assessed across strike panels and elevation levels. The block model effectively reflects the trends observed in the raw data, demonstrating that the interpolation process has preserved the geological continuity and grade distribution.

The interpolation introduces a degree of smoothing, resulting in block grades that are less variable than the original composite grades. This smoothing effect is typical in block modelling and reflects the averaging inherent in the estimation process.

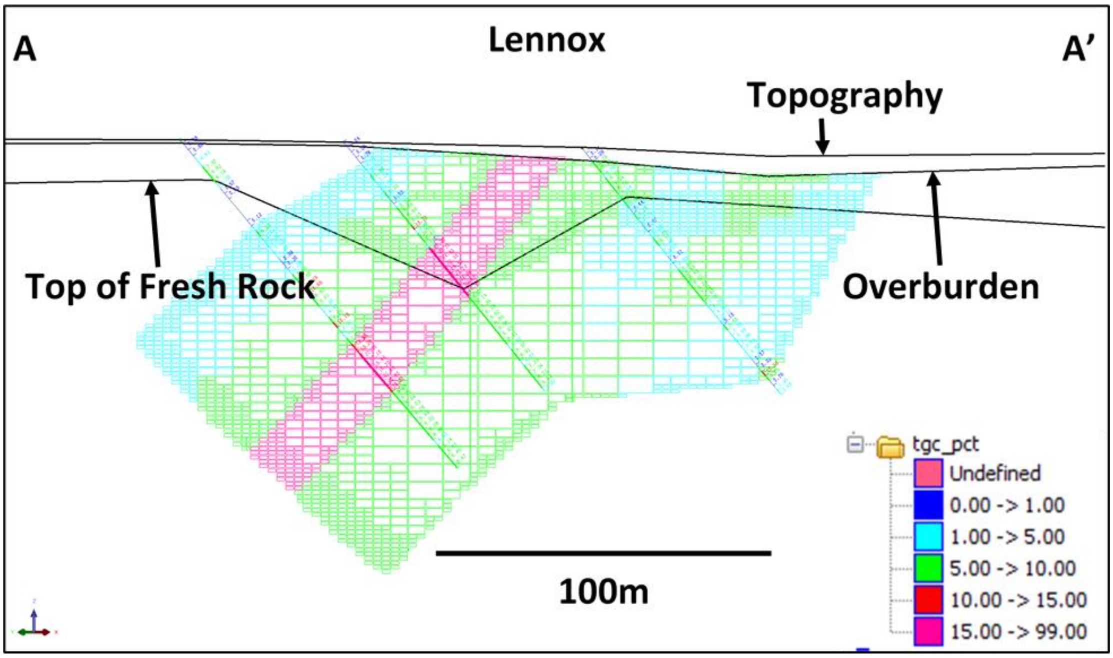


Figure 6-12: Typical cross-section showing block model grades compared with composited grade

Table 6-13: Statistical comparison of estimated grade with composite grade for TGC

Domain	Estimated Block Model TGC%	Composites TGC%	Comparison of BM vs Comp TGC
1	5.80	5.63	-0.03
2	6.62	6.69	0.01
3	11.34	11.34	0.00
4	5.14	5.29	0.03
5	5.60	5.78	0.03
6	7.85	7.85	0.00
101	17.82	17.48	-0.02
102	16.52	16.46	0.00
103	16.18	16.78	0.04
104	13.01	13.07	0.00
105	13.65	13.20	-0.03

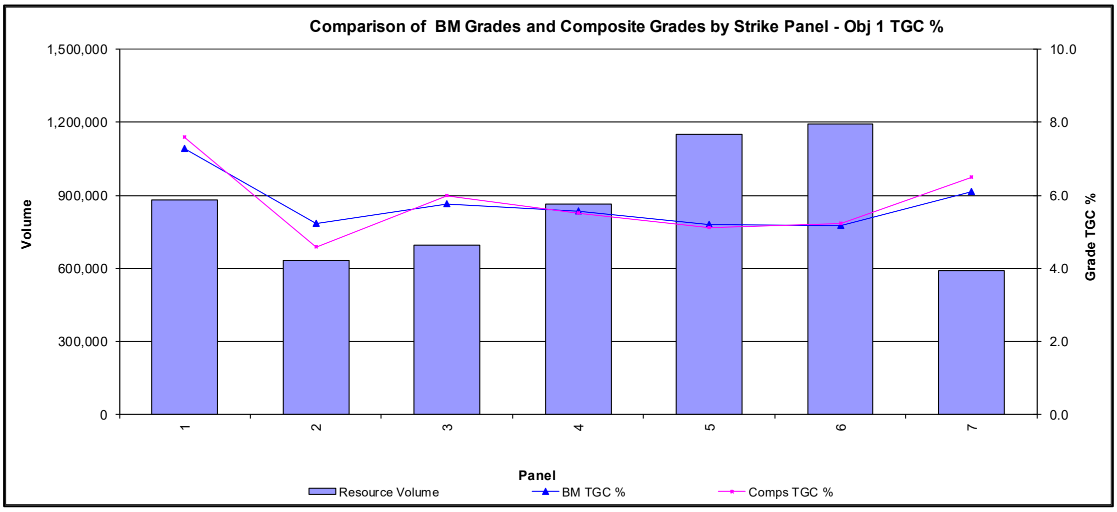


Figure 6-13: Swath Plot of Domain 1 across strike

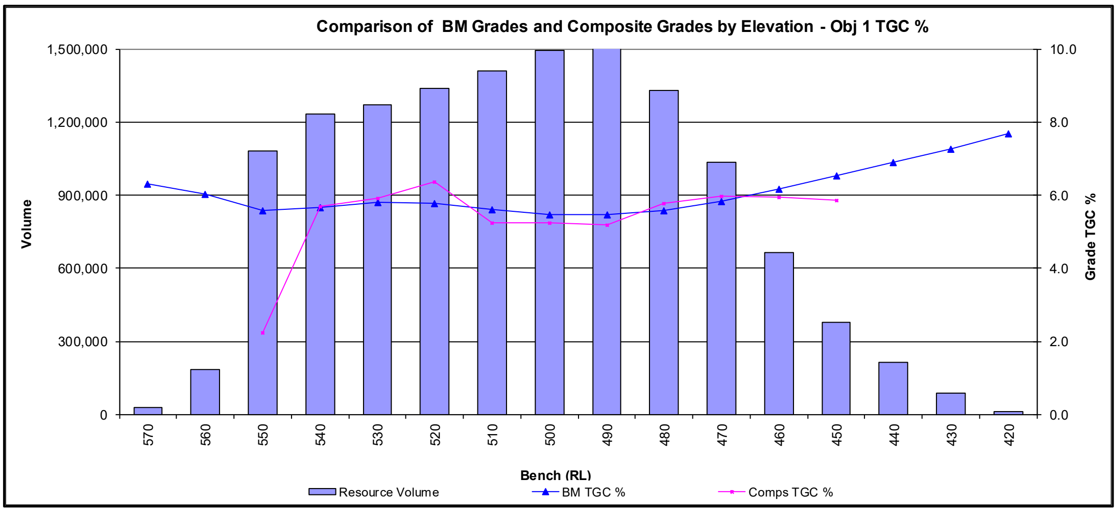


Figure 6-14: Swath Plot of Domain 1 along Z direction

6.9.9 Density Model

Bulk density determinations were conducted on 1,364 core samples obtained from diamond drilling across the project area. Measurements were performed using the Archimedes water immersion method, which is considered industry standard. Due to the short and irregular sample lengths (typically <15 cm), no compositing of density data was undertaken.

The bulk density data were analysed by oxidation state and wireframe domain, consistent with the geological and mineralisation domains used in the block model. The results (Table 6-14 and Table 6-15) indicated a general decrease in density within mineralised zones compared to adjacent waste material. The density data was reviewed and validated by SRK and found deemed appropriate for use in the Mineral Resource estimation.

Table 6-14: Balama Central density measurements (Mineralized zone) Summary

Zone	Statistic	Wireframe Domain										
		1	2	3	4	5	6	101	102	103	104	105
Oxide	Samples	44	12	-	9	-	-	-	11	-	-	-
	Mean	2.12	2.13	-	2.22	-	-	-	2.13	-	-	-
Saprolite	Samples	131	-	5	96	-	-	33	-	16	48	-
	Mean	2.24	-	2.22	2.26	-	-	2.17	-	2.05	2.22	-
Joint Ox.	Samples	61	19	-	19	-	-	11	9	-	16	-
	Mean	2.37	2.34	-	2.46	-	-	2.1	2.26	-	2.48	-
Fresh	Samples	577	1	-	75	-	-	32	-	-	21	-
	Mean	2.72	2.5	-	2.68	-	-	2.59	-	-	2.6	-

Table 6-15: Balama Central density measurements (Waste zone) Summary

Oxidation/Type	Number of Samples	Mean
Overburden	33	2.01
Oxide	86	2.19
Saprolite	35	2.37
Joint Oxidised	27	2.47
Fresh	145	2.73

6.9.10 Mineral Resource Classification

Balama Central demonstrates strong continuity of the principal mineralised lodes, enabling reliable interpretation of drill hole intersections into geologically consistent wireframes. The mineralised structures exhibit consistent thickness, and grade distribution is considered reasonably continuous both along strike and down dip.

Mineral Resource classification was based on data quality, drill spacing, and geological continuity.

- Indicated Mineral Resources were defined in areas with closely spaced diamond drilling, typically less than 200 m by 50 m, where lode geometry and grade continuity are well established.
- Inferred Mineral Resources were assigned to zones with wider drill spacing exceeding 200 m by 50 m, isolated pods of mineralisation outside the main lodes, and geologically complex regions.

All blocks within the mineralised wireframes were coded with a classification attribute for Indicated Mineral Resource and for Inferred Mineral Resource, within the block model. The classification boundaries are illustrated in the following Figure 6-15. It is understood that the extrapolation of mineralised lodes was constrained to a maximum of 200 m along strike or equivalent to the previous section spacing, and to 55 m down dip or the previous down-dip spacing. These extrapolated areas were conservatively classified as Inferred Mineral Resources due to reduced geological confidence.

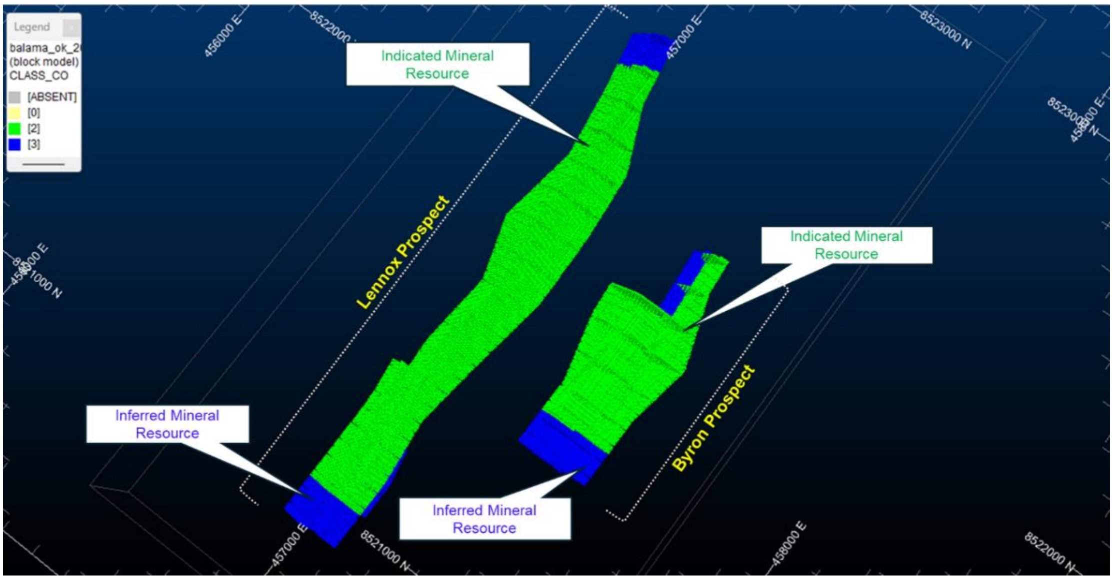


Figure 6-15: Mineral Resource Classification 2025 for Balama

6.9.11 RPEEE

Balama Central meets the criteria for reasonable prospects of eventual economic extraction, as defined by the 2012 JORC Code. The Mineral Resource estimate is based on robust geological modelling, constrained by wireframed lithological envelopes, and excludes external waste. It is reported above a 2.5% TGC cut-off grade, within an optimised pit shell using a graphite concentrate price of USD 800/t.

Metallurgical testing by Minnovo Pty Ltd has confirmed that the graphite can be processed using conventional flotation methods to produce a concentrate with purity exceeding 95%, aligning with international product standards. This supports the technical feasibility of extraction and downstream processing.

The concentrate is particularly suited for use in AAM for lithium-ion batteries, offering high energy density, consistent particle size distribution, and enhanced battery performance. These attributes are critical for battery manufacturers and contribute to the material's marketability.

Global demand for Mozambican graphite is strong, with key markets including China, the United States, Europe, India, and emerging hubs such as Indonesia. The strategic importance of this material, especially in the energy storage and electric vehicle sectors, further reinforces its economic potential.

Based on the deposit's grade, tonnage, metallurgical performance, and market demand, it is concluded that the Balama Central project has reasonable prospects for economic extraction via open-pit mining.

6.9.12 Mineral Resource Statement

Table 6-16 summarizes the Mineral Resource Statement for Balama Central as on 30 September 2025 considering 2.5% TGC cut-off grade.

Table 6-16: Balama Central Mineral Resource, 30 September 2025

Classification	Material type	Tonnage (Mt)	TGC %
Measured	Primary	0.0	0.0
Measured	Weathered	0.0	0.0
Indicated	Primary	39.3	7.6
Indicated	Weathered	10.8	8.1
Inferred	Primary	5.9	8.9
Inferred	Weathered	1.9	9.2
Total Resources		57.9	7.9

The following notes accompany the Mineral Resource Statement:

- The Mineral Resources have an effective date of 30 September 2025.
- Rounding as required by reporting guidelines may result in apparent summation differences between tonnes, grade and contained metal content. Where these occur, they are not considered material.
- Tonnages are reported in metric units, grades in percent (%) and grades are rounded appropriately.
- The Competent Person for the declaration of Mineral Resources is Mr Shameek Chattopadhyay, an employee of SRK.
- Mineral Resources are reported with reasonable prospects for eventual economic extraction, by applying appropriate technical and economic assumptions. A cutoff grade of 2.5%TGC has been applied.
- Mineral Resources are not Ore Reserves and do not have demonstrated economic viability, nor have any mining modifying factors been applied.
- A JORC Table 1 has been completed and is available from the Company. All elements of Table 1 are included in this CPR.

6.9.13 Sensitivity

SRK has produced a grade-tonnage curve for TGC%, shown in Figure 6-16.

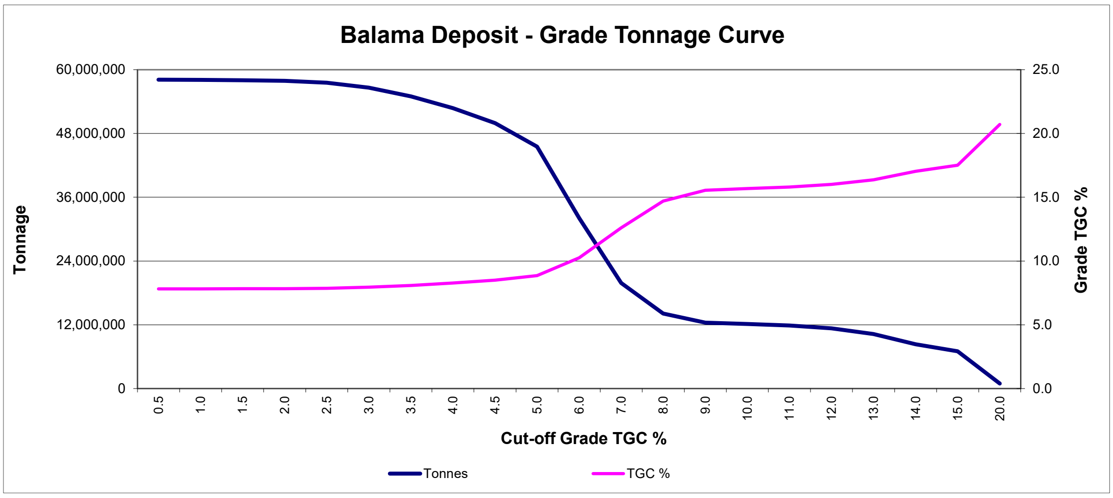


Figure 6-16: Balama Central Grade-Tonnage Curve Mining

There are no current Ore Reserves declared for the Balama Central project.

In December 2018, previous owners of the project, Battery Minerals Limited (ASX:BAT), reported the results of a Feasibility Study for the project, which included declaration of Ore Reserves totalling 19.66 Mt at 11.06% TGC for 2.17 Mt of contained graphite. Annual RoM processing was scheduled at 480 ktpa for 27 years and producing up to 58 kt graphite concentrate per annum at 96% TGC.

Given its age, the study's findings have limited applicability to today's economic environment, and re-reporting under current economic conditions is likely to considerably reduce Reserves. The study does, however, indicate that with additional study there is potential that the project could become a profitable mine.

SRK also notes that in development of this study, various other supporting studies have been undertaken, the results of which may be re-used (subject to review and applicability) in any updated studies. Examples of these data include geotechnical and hydrogeological investigations, graphite flake size determinations and variability testwork, metallurgical testwork, and process design.

6.9.14 SRK Comments

Whilst Ore Reserves have previously been reported for the project, it should not be assumed that development of an updated mine design, mining and processing schedule, and supporting economic analysis would yield the same quantum of Ore Reserves under current market conditions. Since the study was prepared in 2017, there has been considerable cost inflation globally, whilst the graphite market has remained relatively static. For example, SRK notes that the basket graphite price used in reporting Ore Reserves at Balama Central in 2017 was USD 1,106/t, and the basket price used in current Resource reporting is USD 800/t. On this basis alone, Ore Reserves could be expected to be as much as 20% lower than previous reported.

Should the Company intend to prepare an updated study for the project, SRK recommends that this should initially be at a Scoping Study level of detail, and that following this study further trade-off assessments may be required to optimise mining and processing strategies under current market conditions. Progressing the project back to a Feasibility Study level of detail is likely to require considerable time and financial investment.

6.10 SRK Conclusions

6.10.1 Geology and Mineral Resources

SRK has reviewed the geological databases and wireframes provided by the Company for the Balama Central deposits and is satisfied with the quality of the data and interpretations. Based on these data, SRK has prepared a Mineral Resource Estimate, totalling 57.9 Mt at 7.9% TGC for about 4560 kt of contained graphite. This includes some 50.1 Mt of Indicated Mineral Resources, at 7.7% TGC, for 3860 kt of contained graphite. The Mineral Resources of the project are summarised in Table 6-17.

Table 6-17: Balama Central Mineral Resources, 30 September 2025

Resource Classification	Tonnes (Mt)	Grade (%TGC)	Contained Graphite (kt)
Measured	0.0	0.0	-
Indicated	50.1	7.7	3,860
Measured and Indicated	50.1	7.7	3,860
Inferred	7.8	9.0	700
Total	57.9	7.9	4,560

During review, SRK identified certain aspects of the project where improvements can be made to improve confidence in the Mineral Resources, and to support future conversion to Ore Reserves. These recommendations are summarised below:

- Understanding the structural complexity of the deposits could be improved with additional data collection from mapping and diamond core drilling. Improvements to the geological modelling would also improve interpretation and 3D understanding the geology of the deposit. The presence and geometry of localised faulting within the project area remain insufficiently defined due to limited structural data. This introduces potential variability in both tonnage and deposit geometry, particularly in areas where faulting may disrupt continuity or influence mineralisation patterns.
- The semi-major axis of the variogram model exhibits weak structure, primarily due to limited down-dip drilling coverage. This affects the confidence in grade continuity along the dip direction and may influence the accuracy of grade interpolation in deeper zones.
- The availability of density data is noted as being limited for some areas of the deposit, which may result in wider variances to actual mined tonnes.
- The Mineral Resource extends up to the edge of the tenement boundary. As a result, portions of the resource may be rendered inaccessible due to regulatory buffer zones required between the pit design and the tenement limits, potentially leading to partial sterilisation of the resource.

In addition, certain opportunities were also identified, summarised below:

- The deposits remain open at depth and along strike, again leaving potential for additional discoveries.

6.10.2 Mining

Whilst the previous studies completed on the Montepuez Graphite project are a positive indicator of the project's economic potential, much of this work is not applicable under current macroeconomic conditions. Significant parts of this study must be updated to support declaration of Ore Reserves. This is likely to require considerable time and financial investment to complete.

SRK caution that re-reporting under current economic conditions is likely to reduce Reserves.

6.10.3 Processing

Additional metallurgical testwork is required to advance the project.

6.10.4 ESG

SRK has not been able to obtain and review copies of the exploration permits or the reported environmental approval. SRK notes that no assessment of current environmental and social liabilities has been undertaken.

6.10.5 Risks and Opportunities

Several geological and technical factors introduce uncertainty into the current Mineral Resource estimate for the Balama Central project:

- Geological understanding: The presence and geometry of localised faulting within the project area remain insufficiently defined due to limited structural data. This introduces potential variability in both tonnage and deposit geometry, particularly in areas where faulting may disrupt continuity or influence mineralisation patterns.
- The project is located upstream of a designation national park. Exploration and future mining activities will need to be carefully planned to ensure that impacts to water courses do not occur.
- The status of the relationship between the Company and local stakeholders is not known. SRK is therefore not able to comment on the social acceptance of the Company at this time.

The Balama Central project presents several opportunities for resource enhancement and project development:

- Exploration Potential: Undrilled segments of VTEM anomalies offer scope for identifying additional mineralisation, particularly along known trends adjacent to the Lennox and Byron zones.
- Resource Expansion: All prospects remain open along strike to the north and at depth. Extensional drilling in these directions may contribute to increased resource tonnage.
- Confidence Upgrade: Targeted infill drilling could improve data density and support the reclassification of existing resources to higher confidence categories.
- By-product Evaluation: Preliminary indications suggest potential for vanadium pentoxide (V_2O_5) recovery as a secondary product. Further investigation may reveal economic viability, adding value to the graphite operation.

7 CONCLUSIONS

SRK has undertaken a review of exploration and Mineral Resource estimates presented by the Company, and has reported Mineral Resources for all four assets. These are reported at an effective date of 30 September 2025, see Table 7-1.

Table 7-1: Mineral Resources Statement for Tirupati Mineral Assets, 30 September 2025

Deposit	Resource Classification	Tonnes (Mt)	Grade (%TGC)	Contained Graphite (kt)
Vatomina	Measured	-	-	-
	Indicated	1.6	3.8	60
	Measured and Indicated	**1.6**	**3.8**	**60**
	Inferred	4.4	3.8	170
	Total Resource	**6**	**3.8**	**230**
Sahamamy	Measured	-	-	-
	Indicated	1.2	4	50
	Measured and Indicated	**1.2**	**4**	**50**
	Inferred	5.2	4.3	220
	Total Resource	**6.4**	**4.2**	**270**
Elephant (Montepuez)	Measured	5.3	8.3	440
	Indicated	29.6	8.1	2,400
	Measured and Indicated	**34.9**	**8.1**	**2,840**
	Inferred	33.9	6.8	2,310
	Total	**68.8**	**7.5**	**5,150**
Buffalo (Montepuez)	Measured	5.5	9	500
	Indicated	16.5	10.3	1,700
	Measured and Indicated	**22**	**10**	**2,200**
	Inferred	19.7	8.9	1,750
	Total	**41.7**	**9.5**	**3,950**
Balama Central	Measured	-	-	-
	Indicated	50.1	7.7	3,860
	Measured and Indicated	**50.1**	**7.7**	**3,860**
	Inferred	7.8	9	700
	Total	**57.9**	**7.9**	**4,560**
Total	Measured	11	8.7	940
	Indicated	99	8.2	8,070
	Measured and Indicated	**109.8**	**8.2**	**9,010**
	Inferred	71	7.3	5,150
	Total	**180.8**	**7.8**	**14,160**

The following notes accompany the Mineral Resource Statement:

- The Mineral Resources have an effective date of 30 September 2025.
- Rounding as required by reporting guidelines may result in apparent summation differences between tonnes, grade and contained metal content. Where these occur, they are not considered material.
- Tonnages are reported in metric units, grades in percent (%) and grades are rounded appropriately.
- The Competent Person for the declaration of Mineral Resources is Mr Shameek Chattopadhyay, an employee of SRK.
- Mineral Resources are reported with reasonable prospects for eventual economic extraction, by applying appropriate technical and economic assumptions. A cut-off grade of 2.0%TGC has been applied for Vatomina and Sahamamy, and 2.5%TGC for Montepuez and Balama Central.

- Mineral Resources are not Ore Reserves and do not have demonstrated economic viability, nor have any mining modifying factors been applied.
- A JORC Table 1 has been completed and is available from the Company. All elements of Table 1 are included in this CPR.

In addition, Exploration Targets have been estimated for Vatomina and Sahamamy. At Vatomina, SRK estimates an Exploration Target of about 18-20 Mt of graphite mineralisation with an average grade ranging between 4-5% TGC. At Sahamamy, an Exploration Target of about 3-5 Mt of graphite mineralisation with an average grade ranging between 4-5% TGC is reported. Both of the Exploration Targets are supported by drilling plans and costed exploration programmes, which are considered reasonable.

In reviewing the MRE for the various assets, SRK notes that there is scope for improvements to be made. These include:

- Additional diamond drilling to improve confidence in the geological and grade continuity, and also to improve confidence in auger drilling.
- Implementation and review of appropriate field protocols for logging, sampling, sub-sampling, sample preparation, assay and QAQC for any additional drilling.
- Detailed structural mapping and interpretation to refine the existing model(s).
- Gathering additional density data to improve tonnage estimates.
- Adjustments to the grade estimates to improve the quality of the block models.

Various field work and technical studies are still required to advance the Mineral Assets to complete life of mine plans and enable Ore Reserves to be declared. SRK notes that the Company is still in the process of developing the projects.

The Company has prepared a work programme including sufficient work at Vatomina, the only Mineral Asset in operation at present, aiming to declare an Ore Reserve at the end of 2026. The plan is preliminary in nature and challenging, although this may be achievable. The work programme covers a 48 week period in 2026. The main activities are in theory achievable within the 48-week period as indicated by the Company, although this leaves little space for unplanned elements. Many of the activities proposed, especially those related to transitioning ESG alignment from Local Compliance to alignment with IFC Performance Standards may require significant time and financial investment. SRK recommends that a more detailed plan and budget is prepared ahead of starting these activities, detailing who will undertake the work (staff, laboratories, consultants, contractors, etc), any pre-requisite items, and detailed cost estimates

In addition to the work programme above, the Company recognises in this document that additional work is required to support the conversion of Mineral Resources to Ore Reserves. To support Ore Reserve declaration, the following items are noted:

- Development of robust resource models.
- Validation of metallurgical recoveries.
- Completion of hydrogeological and geotechnical studies.
- Pit optimisation and mine design.

- Definition of appropriate modifying factors.
- Development of a life of mine plan and financial model for approval by the Board.

No budgets, timelines or details supporting this intended work have yet been developed in detail at the date of the CPR.

A work programme outline has been prepared for Sahamamy, to be detailed and advanced, and the mine is currently on care and maintenance. The Company has provided SRK with a proposed work programme to support re-starting operations. The plan is un-costed and there is no accompanying schedule, however the Company has stated that it has prepared an indicative cost estimate of between USD 5 million and USD 6 million for completion of the activities.

No plans have been outlined for Montepuez and Balama Central, notably considering the geopolitical situation in the region. Previously completed technical studies for Montepuez and Balama Central have declared Ore Reserves, it should not be assumed that development of an updated mine design, mining and processing schedule, and supporting economic analysis would yield the same quantum of Ore Reserves under current market conditions.

SRK perceives the following risks associated with the Vatomina mine:

- Mining is currently being undertaken with no supporting (detailed) long-term or short-term strategic planning. This is considered a high-risk strategy, and this appears to have contributed to the reduced production performance noted by the Company for 2025 (YTD), for example the appearance of clays within certain parts of the deposit and the lower-than-expected mined grades.
- The Company's strategy for Mineral Resource development and conversion to Ore Reserves is highly conceptual and is not supported by detailed budgets and work plans. Whilst in principle the strategy may be achievable within the time period indicated by the Company, the level of planning could result in unforeseen delays or issues which limit progress.
- Mining activity is advancing into new areas where n metallurgical testwork has been carried out. A Relatively simple testwork program, based on the available equipment in the existing plant should be carried out on samples from the new mining areas to confirm the ability to produce saleable concentrates and determine target recoveries for financial planning.
- The process plant is currently achieving less than half of the nameplate capacity. Periods of downtime for maintenance and lack of spare parts is reported. Capital investment in the processing facilities will be required if production targets are to be achieved.
- The remaining capacity of the FCU tailings storage facility requires investigation and an operating life for the current facility needs to be determined as a priority so that planning can begin for a new facility which will have to be designed and permitted before it can be put into operation.
- There is a risk of community opposition to the project related to dissatisfaction with the Vatomina project due to claims related to compensation for land use combined with ongoing water contamination issues.

- There is a risk of regulators imposing fines or penalties on the company due to non-compliance with environmental commitments including water quality standards and non-compliance with water abstraction limits.
- A closure plan and associated financial liability has not yet been developed. These will be required before the company can declare Ore Reserve.

SRK perceives the following opportunities associated with the Vatomina mine.

- To identify additional Mineral Resources for the Vatomina asset through further exploration.
- To upgrade a portion of the Mineral Resources of the Vatomina asset to higher classifications through further drilling and sampling.

SRK perceives the following risk associated with the Sahamamy project.

- There is a risk related to community dissatisfaction with the Sahamamy project due to claims related to compensation for land use combined with ongoing water contamination issues.
- There is a legal risk relating to the construction and operation of the settlement ponds within the exploration licence area (307413) that do not appear to have been established with the necessary approvals from environmental authorities.
- The Sahamamy process plant averaged a final concentrate grade of 91% (FC). Metallurgical testwork on representative samples of the ore should be conducted as a first step in any plans to re-open the operation.
- A closure plan and associated financial liability has not yet been developed. These will be required before the company can declare Ore Reserve.

The key project risks identified by SRK for the Montepuez project are:

- Whilst a feasibility study has historically been prepared for the project, changing macroeconomic conditions means that the results of this study are not applicable to present day. Updating of this study (and the supporting design, engineering and economic analysis) is likely to result in considerably reduced Ore Reserves for the project.
- The work required to update understanding of the project to a Feasibility level of detail is considerable, requiring significant time and financial inputs. SRK recommend that the next study undertaken on the project should be at a Scoping Study level of detail only, as the various economic inputs to the study will have changed significantly and a fundamental reassessment of the project scope will likely be required.
- The ongoing force majeure conditions of the project are a significant hurdle to the project’s development.
- The project is located upstream of a designation national park. Exploration and future mining activities will need to be carefully planned to ensure that impacts to water courses do not occur.

The key project opportunities identified for the Montepuez project by SRK are:

- Previous test work shows that V_2O_5 can be recovered as a by-product of graphite.

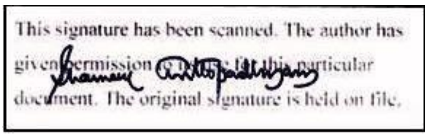
The key project risks identified for the Balma Central project by SRK are:

- The presence and geometry of localised faulting within the project area remain insufficiently defined due to limited structural data. This introduces potential variability in both tonnage and deposit geometry, particularly in areas where faulting may disrupt continuity or influence mineralisation patterns.
- The project is located upstream of a designation national park. Exploration and future mining activities will need to be carefully planned to ensure that impacts to water courses do not occur.
- The status of the relationship between the Company and local stakeholders is not known. SRK is therefore not able to comment on the social acceptance of the Company at this time.

The key project opportunities identified for the Balma Central project by SRK are:

- Undrilled segments of VTEM anomalies offer scope for identifying additional mineralisation, particularly along known trends adjacent to the Lennox and Byron zones.
- All prospects remain open along strike to the north and at depth. Extensional drilling in these directions may contribute to increased resource tonnage.
- Targeted infill drilling could improve data density and support the reclassification of existing resources to higher confidence categories.
- Preliminary indications suggest potential for V_2O_5 recovery as a secondary product. Further investigation may reveal economic viability, adding value to the graphite operation.

For and on behalf of SRK Mining Services (India) Private Limited



Competent Person
Mineral Resources:

Shameek Chattopadhyay, M.Sc., MAusIMM, MMEAI
Managing Director & Principal Consultant (Resource Geology),

Abbreviations and Units

ABBREVIATIONS

ARMDL	Acid-rock drainage or metalloid leaching
BCMM	Bureau du Cadastre Minier de Madagascar
CoV	Coefficient of variation
CPR	Competent Persons Report
DDH	Dimond drill hole
DUAT	Land use right
EIE	Environmental impact assessment
ESG	Environmental, social and governance
FC	Fixed carbon
FCA	Financial Conduct Authority
FCU	Final concentration unit
GC	Graphitic carbon
JORC	Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia
LoM	Life of mine
LoM	Life of mine
MAusIMM	Member of the Australian Institute of Mining and Metallurgy
MDPI	Multidisciplinary Digital Publishing Institute
MRE	Mineral Resource Estimate
O/F	Overflow
ONE	Office National pour l'Environment
PCU	Pre-concentration unit
PE	Exploitation Licences
PEE	Environmental Commitment Programme
PGRM	Projet de Gouvernance des Ressources Minières, Madagascar
QAQC	Quality control and quality assurance
QC	Quality control
RPEEE	Reasonable prospects of eventual economic extraction
RQD	Rock quality designation
SGDM	Society Geosciences Development of Madagascar
TGC	Total graphitic carbon
TMV	Tirupati Madagascar Ventures SARL
TRM	Tirupati Resources Mauritius
TSF	Tailings storage facility
U/F	Underflow
USGS	United States Geological Survey
VTEM	Versatile Time Domain Electromagnetic

UNITS

dmtu	Dry metric tonne unit
FY	Fiscal year
g/cm^2	Grammes per square centimetre/s
GBP	Great British Pounds
ha	hectare
km^2	Square kilometer/s
kt	Metric kilo tonnes
m	Meter
m^3	Cubic meter/s
Ma	Million years
mm	Millimeter
Mt	Million metric tonnes
t	Metric tonne
tpa	Metric tonnes per annum
tpm	Metric tonnes per month
USD	United Stated Dollars
YTD	Year to date