INDEPENDENT COMPETENT PERSON'S REPORT

ON THE

CENTRAL MALAWI RUTILE PROJECT

Prepared for Sovereign Metals Limited and RFC Ambrian Limited.

PRINCIPAL AUTHOR:

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Dear Sirs,

RE: Independent Competent Person's Report: Central Malawi Rutile Project

Placer Consulting Pty Ltd (**Placer**) has been commissioned by Sovereign Metals Limited (**SVM**) to provide an Independent Competent Person's Report (**CPR**) on mineral assets owned by SVM in central Malawi. Sovereign Metals Limited is an Australian public company with its registered office in Perth, Western Australia. Placer understands that the CPR will accompany the Admission Appendix and Schedule One in connection with the proposed admission of the ordinary shares of Sovereign to trading on the AIM market of the London Stock Exchange (**AIM**) by being made available on Sovereign's website.

A site visit by Placer is not possible at this time. Placer is satisfied that site practices are governed adequately by formalised procedures and monitored on site by an experienced, senior Geologist. Placer is satisfied that there is sufficient current information available to allow an informed appraisal to be made and that no significant additional benefit would have been gained through a site visit at this time. Placer has endeavored, by making reasonable enquiries, to confirm the authenticity, accuracy and completeness of the technical data upon which this report is based. Sovereign Metals Limited has been given a final draft of this report and thereby have been given an opportunity to identify any material errors or omissions in it. Placer has not verified the status of tenements or reviewed any issues regarding ownership, agreements or access pertaining to the tenements.

This report was prepared by Mr Richard Stockwell (Principal Geologist) of Placer Consulting in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2012 Edition). The report has also been prepared in accordance with ASIC Regulatory Guides 111 (Contents of Expert Reports) and 112 (Independence of Experts) and the AIM Note for Mining, Oil and Gas Companies, June 2009 (and updates pursuant to AIM Notice 56). Mr Stockwell is a Fellow of The Australian Institute of Geoscientists. Mr Stockwell is a full-time employee of Placer and has sufficient experience, which is relevant to the styles of mineralisation and types of deposit under consideration and to the activity which he is undertaking, to qualify as a Competent Person as defined in the JORC Code 2012 Edition.

Consent has been sought from SVM's representatives to include technical information and opinions expressed by them. No other entities referred to in this report have consented to the inclusion of any information or opinions and have only been referred to in the context of reporting any relevant activities.

Placer and its employees/associates are not, nor intend to be, directors, officers or employees of SVM and have no material interest in any of the projects or SVM. The relationship with SVM is solely one of professional association between client and independent consultant. The review work and this report are prepared in return for professional fees based upon agreed commercial rates and the payment of these fees is in no way contingent on the results of this Report.

In consideration of the definition provided in the JORC Code, the mineral assets of SVM are classified as Mineral Resources and results from drilling campaigns, where stated, are classified as Exploration Results. The mineral properties are considered prospective, although subject to varying degrees of risk, to warrant further exploration and development of their economic potential consistent with the programs proposed by SVM.

Placer confirms that nothing has come to its attention to indicate any material changes to what is reported in the CPR.

Placer confirms that it has reviewed the information contained elsewhere in the Admission Document relating to information contained in the CPR and confirms that the information presented is accurate, balanced, complete and not inconsistent with the CPR.

Signed for and on behalf of Placer Consulting Pty Ltd,

Richard Stockwell BSc (Hons) Geology, FAIG
Director/Principal

This report has been commissioned from and prepared by Placer for the exclusive use of Sovereign Metals Limited. Each statement or opinion in this report is provided in response to a specific request by Sovereign Metals Limited to provide that statement or opinion. Each such statement or opinion is made by Placer in good faith and in the belief that it is not false or misleading. Each statement or opinion contained within this report is based on information and data supplied by Sovereign Metals Limited to Placer, or otherwise obtained from public searches conducted by Placer for the purposes of this report.

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EXECUTIVE SUMMARY

Sovereign is focused on the exploration and development of its newly identified rutile province in Malawi. The Company recently achieved a major technical milestone with the announcement of the maiden Mineral Resource Estimate (**MRE**) for Kasiya.

Kasiya is a strategic and globally significant natural rutile discovery with substantial additional resource growth expected. The maiden MRE covers 49km^2 or just 38% of the total 129km^2 of drill-defined rutile-mineralised footprint.

Mineral Resource Category	Material Tonnes (millions)	Rutile (%)	Rutile Tonnes (millions)
Inferred	644	1.01	6.49
Total	**644**	**1.01**	**6.49**

Cut-off: 0.7% rutile
Sovereign has a 100% interest in the Resources
Operator: McCourt Mining Limited (Malawi)
Source: Richard Stockwell (Competent Person for the Resources)

All mineralisation within the MRE occurs in a single, large and coherent, eluvial deposit with much of the high-grade material occurring within the top ~5 metres from surface. This potentially globally significant rutile province is located in Malawi, a stable, transparent jurisdiction with an established Mining Act.

Central Malawi boasts excellent existing infrastructure including grid power and a sealed road network. The Project is located in close-proximity to the capital city of Lilongwe, providing access to a skilled workforce and mining and industrial services. The location provides access to the operating Nacala Rail Corridor linking to the Indian Ocean port of Nacala in Mozambique, providing a low-cost transport solution and access to major international markets.

Natural rutile is traditionally a by-product or co-product from mineral sands mining where ilmenite is commonly the dominant mineral in the assemblage, alongside lesser natural rutile and zircon. Natural rutile is considered to be a genuinely scarce commodity, with no other known large rutile dominant deposits being discovered in the last half century.

When compared to the other major rutile-dominant resources, Kasiya ranks alongside Sierra Rutile as one of the two largest deposits globally. Future resource growth is likely, which may result in Kasiya becoming the world's largest and pre-eminent rutile deposit, with central Malawi potentially set to become the largest rutile province in the world.

The rutile market is in supply deficit with prices rising steadily over the last 12 months. This is due to increased demand coupled with existing global rutile reserves being in overall decline and limited additional supply forecast to come online in the near to medium term.

The Company is completing infill and extension drilling to increase the resource inventory and upgrade regions of high-rutile grade to JORC Indicated status. A Scoping Study (**Study**) is underway, which is targeting a large-scale natural rutile operation that could fill some of the existing supply deficit with the purest and most environmentally sustainable titanium feedstock. The objective is to develop a large-scale, long life, environmentally sustainable and socially responsible natural rutile operation.

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1 INTRODUCTION

1.1 Terms of Reference

Sovereign Metals Limited (**SVM** or **Sovereign**) has appointed RFC Ambrian Limited (**RFC Ambrian**) as the Company's Nominated Adviser and commissioned Placer Consulting Pty Ltd (**Placer**) to prepare a Competent Persons Report (**CPR**) on the Company's mineral sands assets in Central Malawi (Table 1). Included, are the Kasiya Deposit (**Kasiya**), Nsaru Deposit (**Nsaru**) and the Bua Channel (**Bua**) prospect.

Table 1: Summary of land ownership and status.

Licence	Holding Entity	Percentage Interest	Status	Expiry	Licence Area km^2	Comments
EL 0372 (Malawi)	SSL	100%	Exploration	13/03/2022	729.2	Granted
EL 0492 (Malawi)	SSL	100%	Exploration	29/01/2023	935.4	Granted
EL 0528 (Malawi)	SSL	100%	Exploration	27/11/2021	16.2	Granted
EL 0545 (Malawi)	SSL	100%	Exploration	12/05/2022	53.2	Granted
EL 0561 (Malawi)	SSL	100%	Exploration	15/09/2023	124.0	Granted
EL 0574 (Malawi)	SSL	100%	Exploration	15/09/2023	292.0	Granted
EL 0582 (Malawi)	SSL	100%	Exploration	15/09/2023	285.0	Granted
EL 0609 (Malawi)	MML	100%	Exploration	25/09/2024	440.5	Granted
RL 0012 (Malawi)	SSL	100%	Exploration	26/07/2026	6.0	Granted
					2881.5 km^2	

SSL: *Sovereign Services Limited*
MML: *McCourt Mining Limited*

This CPR is to be used for the purposes of SVM's proposed admission of the ordinary shares of Sovereign to trading on the AIM market of the London Stock Exchange (**AIM**), and a copy of the CPR will be available on SVM's website.

Due to the COVID-19 pandemic, Placer has been unable to complete a site visit to Sovereign's projects in Malawi. Placer is satisfied that site practices are governed adequately by formalised procedures and monitored on site by an experienced, senior Geologist and that no significant additional benefit would have been gained through a site visit at this time.

This Report has been prepared in accordance with the Guidance Note for Mining, Oil and Gas Companies issued by the London Stock Exchange (June 2009). This report has been prepared in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012 Edition) and the Australasian Code for Public Reporting of Technical Assessments and Valuations of Mineral Assets for Independent Expert Reports (VALMIN Code, 2015 Edition). The report has also been prepared in accordance with Australian Securities and Investments Commission (ASIC) Regulatory Guides 111 (Contents of Expert Reports) and 112 (Independence of Experts).

1.2 Context

Sovereign is a public company listed on the Australian Securities Exchange (**ASX**) which is advancing its various mineral sands projects in Malawi.

A Mineral Resource Estimate (**MRE**) has been classified at an Inferred level of confidence for the Kasiya Deposit. It includes 644.1 million tonnes of material at 1.01% rutile and 48% slimes (minus 45µm) for 6.49 million tonnes of contained rutile. The MRE has been completed in accordance with JORC (2012) guidelines and comprises a single and coherent surface rutile enrichment.

Placer has advised SVM on an infill drilling strategy at Kasiya, which has been actioned by SVM. The results of the drilling and analysis programme is anticipated to deliver a resource update in Q4 2021 at an Indicated level of confidence.

A Scoping Study on a potential open pit mining operation at Kasiya is progressing and targeting completion by the end of 2021. Drilling programs continue to increase the scale and confidence level associated with the existing Kasiya MRE and to underpin additional MRE's at the other mineral sands deposits.

1.3 Principal Sources of Information

This report is based on information available to end-September 2021 and includes substantial excerpts from the MRE Report prepared by Placer (2021). The geological setting, mineralisation styles, exploration potential, planned exploration and established procedures were prepared by SVM and reviewed for context and accuracy by Placer prior to their incorporation into this report. Figures and tables were supplied, in the most part, by SVM. Data are delivered to Placer by Sovereign in a secure, cloud-based data room. Additional data and explanation have been sourced from the public domain and includes both published and unpublished technical reports, geophysical data and historical company information, relevant to the project area.

A site visit by Placer is not possible at this time. Placer is satisfied that site practices are governed adequately by formalised procedures and monitored on site by an experienced, senior Geologist. Placer is satisfied that there is sufficient current information available to allow an informed appraisal to be made and that no significant additional benefit would have been gained through a site visit at this time. Placer has endeavored, by making reasonable enquiries, to confirm the authenticity, accuracy and completeness of the technical data upon which this report is based.

1.4 Tenement Status Verification

For the preparation of this report, Sovereign has made available all relevant data in its possession and additional technical reports and maps included in the body of the report.

1.5 Disclaimer

The author of this report and Placer are independent of SVM, its directors, senior management and advisors and have no economic or beneficial interest (present or contingent) in any of the mineral assets being reported on. Placer is remunerated for this report by way of a professional fee determined in accordance with a standard schedule of commercial rates, which is calculated based on time charges for review work carried out, and is not contingent on the outcome of this report.

The relationship with SVM is solely one of professional association between client and independent consultant. None of the individuals employed or contracted by Placer are officers, employees or proposed officers of SVM or any group, holding or associated companies of SVM.

The report has been prepared in compliance with the AIM Note for Mining, Oil and Gas Companies, June 2009, and the Corporations Act and ASIC Regulatory Guides 111 and 112 with respect to Placer's independence as experts. Placer regards RG112.31 to be in compliance whereby there are no business or professional relationships or interests which would affect the expert's ability to present an unbiased opinion within this report.

This CPR has been compiled based on information available up to and including the date of this report, any statements and opinions are based on this date and could alter over time depending on exploration results, commodity prices and other relevant market factors. The effective date (the "Effective Date") of this CPR is deemed to be 8 October 2021, and is co-incident with future cash-flow projections as they relate to the Development Strategy and Exploration Program incorporated herein.

1.6 Qualifications, Experience and Independence

Placer (formerly Hornet Drilling and Geological Services Pty Ltd) has been consulting to the mining industry since 2013 with its services that include project due diligence, prospectivity review, independent technical reporting, JORC gap analysis, exploration management, resource development and resource estimation. Placer's capabilities include reporting for all the major securities exchanges and encompass a diverse variety of commodity types within the detrital minerals group (Ironsands, Garnet, Ilmenite, Zircon, Rutile, Gold, etc). A summary of Placer personnel, their qualifications, professional memberships and responsibilities pertaining to this report are summarised in Table 2.

Table 2: Summary of qualifications, professional memberships and responsibilities.

Name	Qualifications	Professional Memberships	Sections Responsible
Richard Stockwell	BSc (Hons)	FAIG	All Sections

Author: Richard Stockwell, Principal Geologist BSc (Hons), FAIG

Richard Stockwell is a Fellow of The Australian Institute of Geoscientists and has 22 years' experience in minerals geology, which includes 20 years' experience in the detrital minerals industry. Richard has held various roles in senior management, consulting, exploration, resource estimation, resource development, underground mining and open pit mining. He has extensive experience with a wide variety of commodities across numerous geological terrains within the African and Asia-Pacific region. Richard was a member of the senior leadership team at Iluka Resources Limited with responsibilities including management of exploration and resource development of their Western Australian assets. In 2013, Richard founded Hornet Drilling and Geological Services Pty Ltd, a detrital minerals-focused geological consultancy and drilling service. As Principal Geologist and Managing Director, Richard completed numerous project prospectivity reviews, due diligence reviews, resource estimation and held exploration management roles for Base Resources Ltd, Australian Garnet Pty Ltd, MKK Mines (Malaysia). Many of these roles persist to this day with Placer Consulting Pty Ltd, founded in 2020 by Richard. Richard holds the relevant qualifications and professional associations required by the ASX, JORC and VALMIN Codes in Australia to qualify as a Competent Person as defined in the JORC Code.

Peer Reviewer:

All substantive information pertaining to the geology, mineralisation, procedures and MRE are peer reviewed in the MRE report (Placer, 2021).

1.7 Specialist Declarations, Consent and Competent Person's Statement

The information in this report that relates to the Technical Assessment of Mineral Assets, reflects information compiled and conclusions derived by Mr Richard Stockwell. Mr Stockwell is the Principal of Placer, a qualified Geologist and a Fellow of the Australian Institute of Geoscientists (AIG). Placer is qualified, under the AIM Rules, to provide such reports for the purpose of inclusion in public company prospectuses and Admission Documents.

Placer has given and has not withdrawn, its written consent for the CPR to be used for the purposes of SVM's Admission to trading on AIM, including publication on SVM's company website and to the inclusion of statements made by Placer and to the references to its CPR and its name in other documents pertaining to SVM's Admission to trading on AIM, in the form and context in which the report and those statements appear. Placer 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 paragraph 1.3 of Annex I to the AIM Rules.

Sovereign have warranted to Placer that full disclosure has been made of all material in their possession and, that to the best of the knowledge and belief of the directors of Sovereign, this information is complete, accurate and true. Neither the Author, nor any associates or employees, have any material interest either direct, indirect or contingent in Sovereign nor in any of the mineral assets included in this report nor in any other Sovereign asset nor has any such interest existed previously.

Mr Stockwell has sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity which he is undertaking, to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code).

2 BACKGROUND

Sovereign Metals Limited (**Sovereign, SVM**) is a public company listed on the Australian Securities Exchange (**ASX**). Sovereign is exploring and developing the Central Malawi Rutile Project (**Project**) which includes the saprolite-hosted Kasiya Deposit (**Kasiya**) and Nsaru Deposit (**Nsaru**) in addition to the Bua Channel (**Bua**) placer prospect.

Sovereign's principal exploration and development activity in Malawi is conducted through its 100% owned subsidiary Sovereign Services Limited (**SSL**).

The Company has commissioned Placer Consulting Pty Ltd (**Placer**) to complete this competent person's report (**CPR**) for the purpose of the company seeking Admission to trading on the AIM of the London Stock Exchange (**AIM**).

2.1 Project Location

The Central Malawi Rutile Project encompasses an area of 2,881km^2 and is centered in the Lilongwe District of Malawi, surrounding Malawi's capital, Lilongwe (Figure 1).

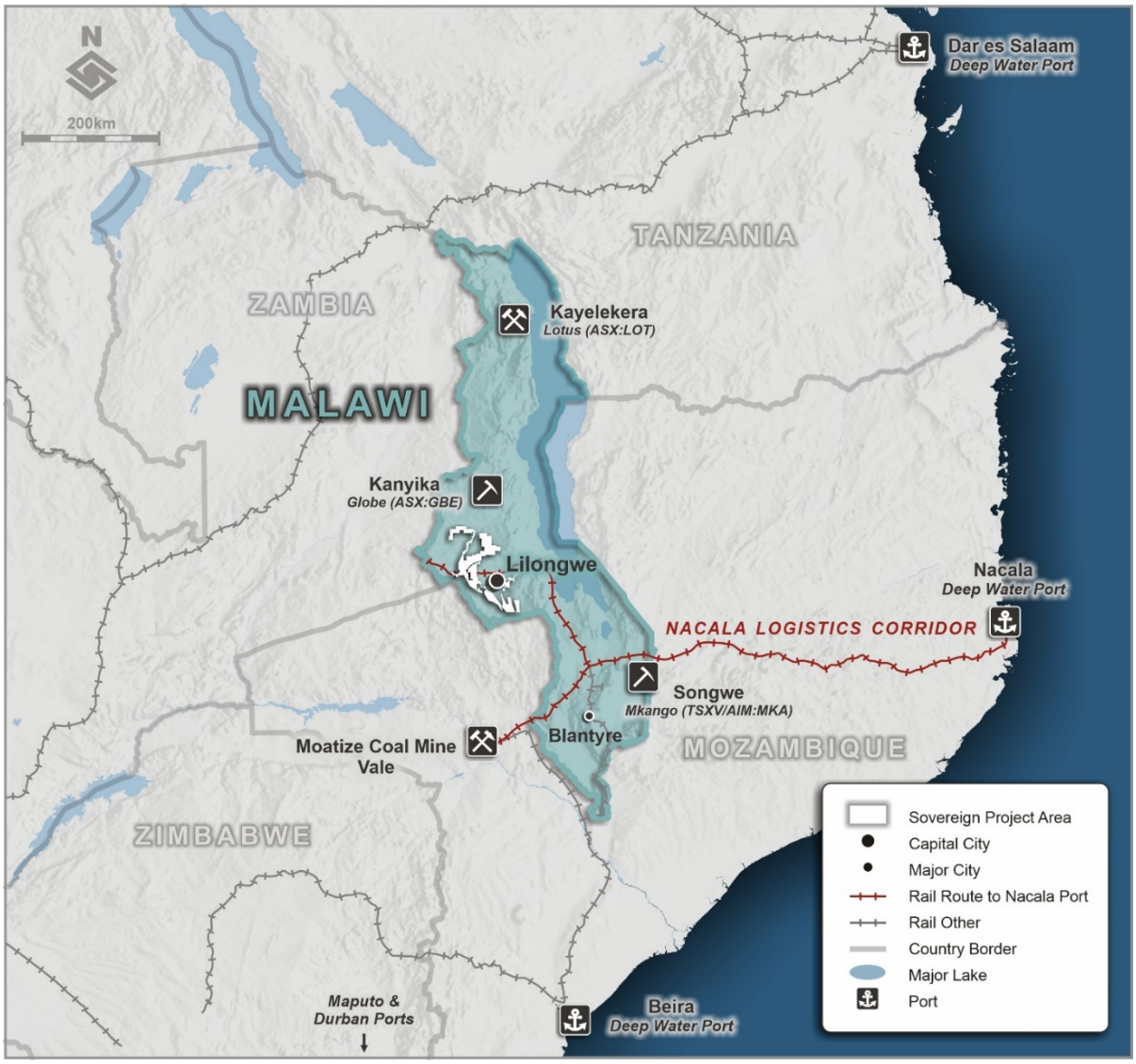

Figure 1: Map outlining the Central Malawi Rutile Project's location (source: SVM).

The Kasiya Deposit lies 10km from the operating rail of the Nacala Logistics Corridor and is in close proximity to grid power infrastructure. There is a sealed road network across the project area and investigations are underway on potential process water options.

2.2 Review of Sovereign Metals Interests

The Central Malawi Rutile Project comprises 8 Exploration Licences (**EL**) and 1 Retention Licence (**RL**) covering 2,881km^2 (Table 3). The Project includes the saprolite-hosted Kasiya Deposit (Kasiya), the saprolite-hosted Nsaru Deposit (Nsaru) and the Bua Channel (Bua) placer prospect. A MRE has been prepared by Placer for the Kasiya Deposit.

ELs are held by either Sovereign Services Limited or McCourt Mining Limited, both wholly owned Malawi-registered subsidiaries of Sovereign Metals Limited (**SVM**).

The Company's three main mineral sands deposits, Kasiya, Nsaru and the Bua Channel lie within the Company's Exploration License EL0609, EL0582 and EL0492, respectively.

Table 3: Summary of land ownership and status.

Licence	Holding Entity	Percentage Interest	Status	Expiry	Licence Area km^2	Comments
EL 0372 (Malawi)	SSL	100%	Exploration	13/03/2022	729.2	Granted
EL 0492 (Malawi)	SSL	100%	Exploration	29/01/2023	935.4	Granted
EL 0528 (Malawi)	SSL	100%	Exploration	27/11/2021	16.2	Granted
EL 0545 (Malawi)	SSL	100%	Exploration	12/05/2022	53.2	Granted
EL 0561 (Malawi)	SSL	100%	Exploration	15/09/2023	124.0	Granted
EL 0574 (Malawi)	SSL	100%	Exploration	15/09/2023	292.0	Granted
EL 0582 (Malawi)	SSL	100%	Exploration	15/09/2023	285.0	Granted
EL 0609 (Malawi)	MML	100%	Exploration	25/09/2024	440.5	Granted
RL 0012 (Malawi)	SSL	100%	Exploration	26/07/2026	6.0	Granted
					2881.5 km^2	

SSL: *Sovereign Services Limited*
MML: *McCourt Mining Limited*

No Director (other than Julian Stephens) of Sovereign or its subsidiaries, Competent Person, or promoter has any interest, current or past, in any of the assets presented in Table 3, other than by virtue of equity ownership in Sovereign.

Pursuant to the acquisition by Sovereign of the Malawi projects in November 2012, the following consideration was paid:

- A$1,000,000 cash
- 12,500,000 fully paid ordinary shares in Sovereign
- 8,750,000 convertible performance shares (1:1 conversion to fully paid ordinary shares on delineation of Resources of at least 25Mt at 10% graphitic carbon or equivalent within 3 years of transaction completion). These performance shares converted into ordinary shares on 9 December 2014.
- 8,750,000 convertible performance shares (1:1 conversion to fully paid ordinary shares on announcement of a positive scoping study within four years of transaction completion). These performance shares converted into ordinary shares on 2 October 2015.
- 2.0% gross profit royalty (gross sales revenue minus cash operating costs of mining and processing) payable to the original Project vendor for ore extracted from the licence area in the initial acquisition, which includes Kasiya and Nsaru.

Sovereign's Managing Director, Dr Julian Stephens, was an original vendor of the Malawi projects pertaining to a 25% entitlement in the consideration outlined above.

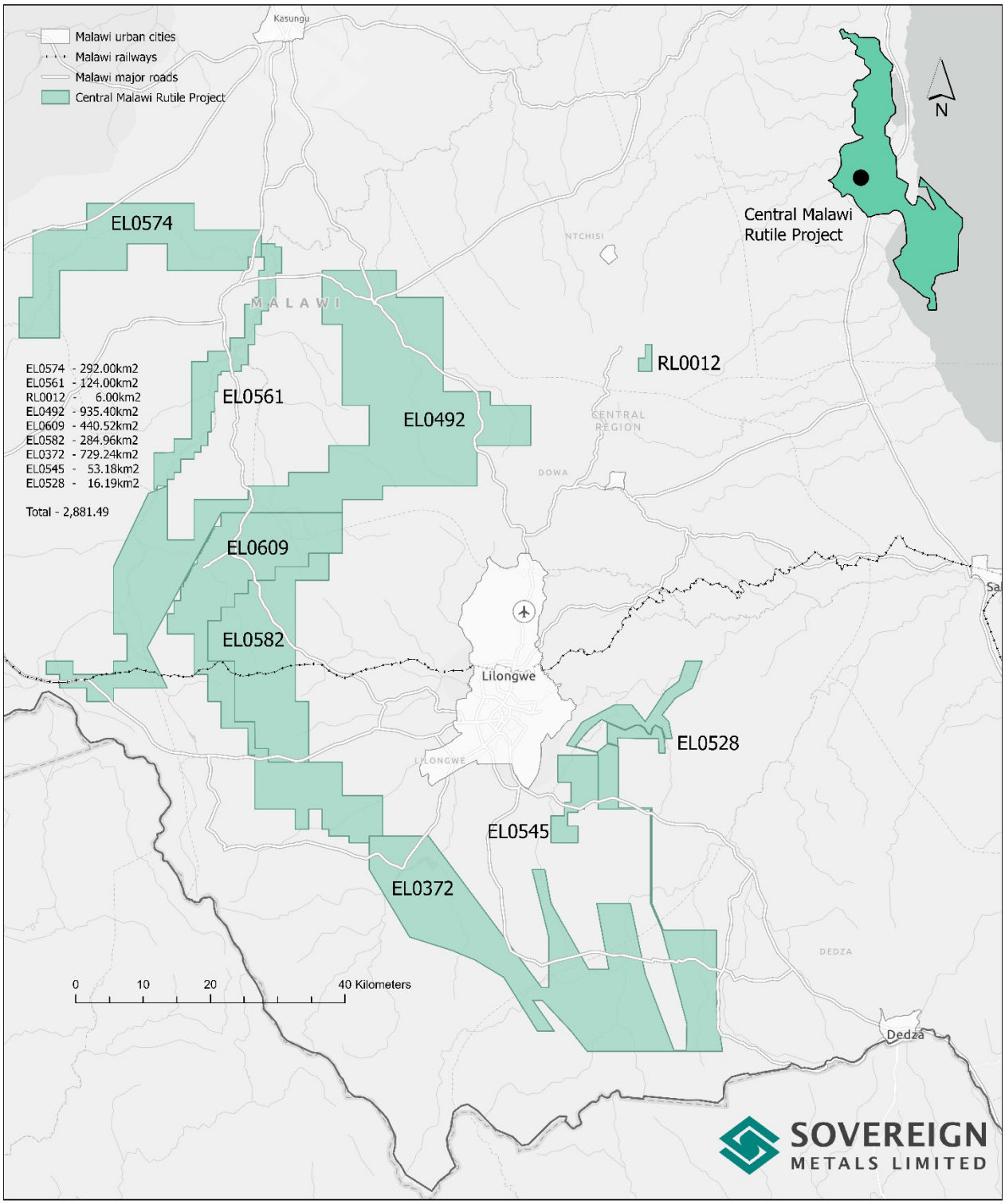

Figure 2: Tenement location plan (source: SVM).

2.3 Overview of Projects

Rutile mineralisation at Kasiya lies in laterally extensive, near surface, flat "blanket" style bodies in areas where the weathering profile is preserved and not significantly eroded. The high-grade zones are geologically continuous with limited variability along strike. The neighbouring Nsaru Deposit appears to be a similar residual placer or elluvial style deposit.

A Mineral Resource Estimate ("MRE") at Kasiya totalling 644.1 million tonnes at 1.01% rutile and 48% slimes (minus 45µm) for 6.49 million tonnes of contained rutile have been estimated in accordance with JORC (2012) guidelines at Kasiya, with all mineralisation within the MRE occurring in a single, large, and coherent deposit with much of the high-grade material occurring within the top ~5 metres from surface.

The Company has drilled a total area of ~129km^2 of which the Kasiya MRE covers 49km^2 or 38% (Figure 3). The Inferred resource remains open to the northeast, east, and southwest. Widely-spaced exploratory drilling has confirmed the mineralised rutile footprint extends beyond the current constraints of the Inferred resource boundary. A substantial unclassified resource was reported by Placer in the maiden MRE and it was recognised that substantial resource additions are likely in areas drilled and beyond.

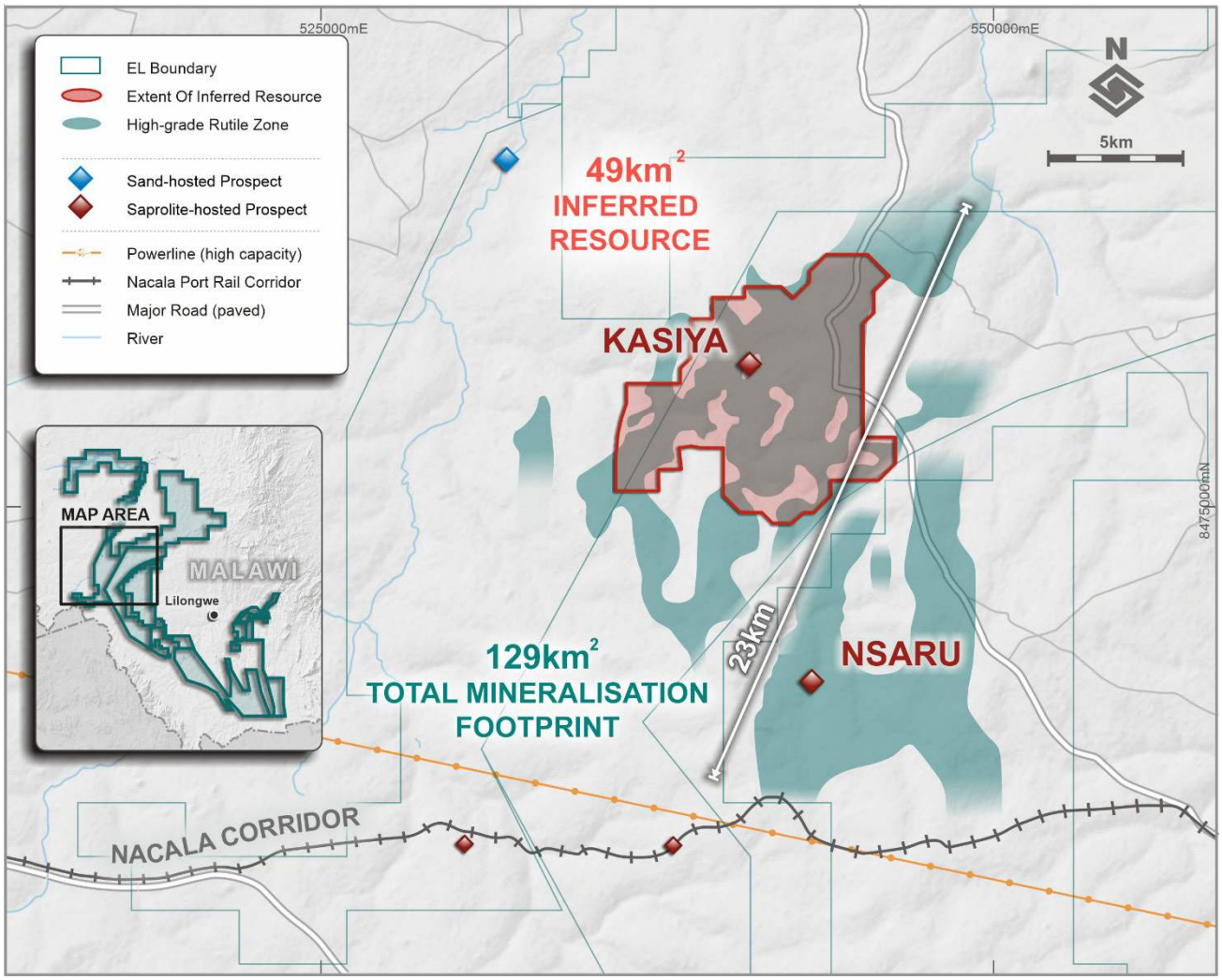

Figure 3: Kasiya MRE with the remaining mineralisation footprint (source: SVM).

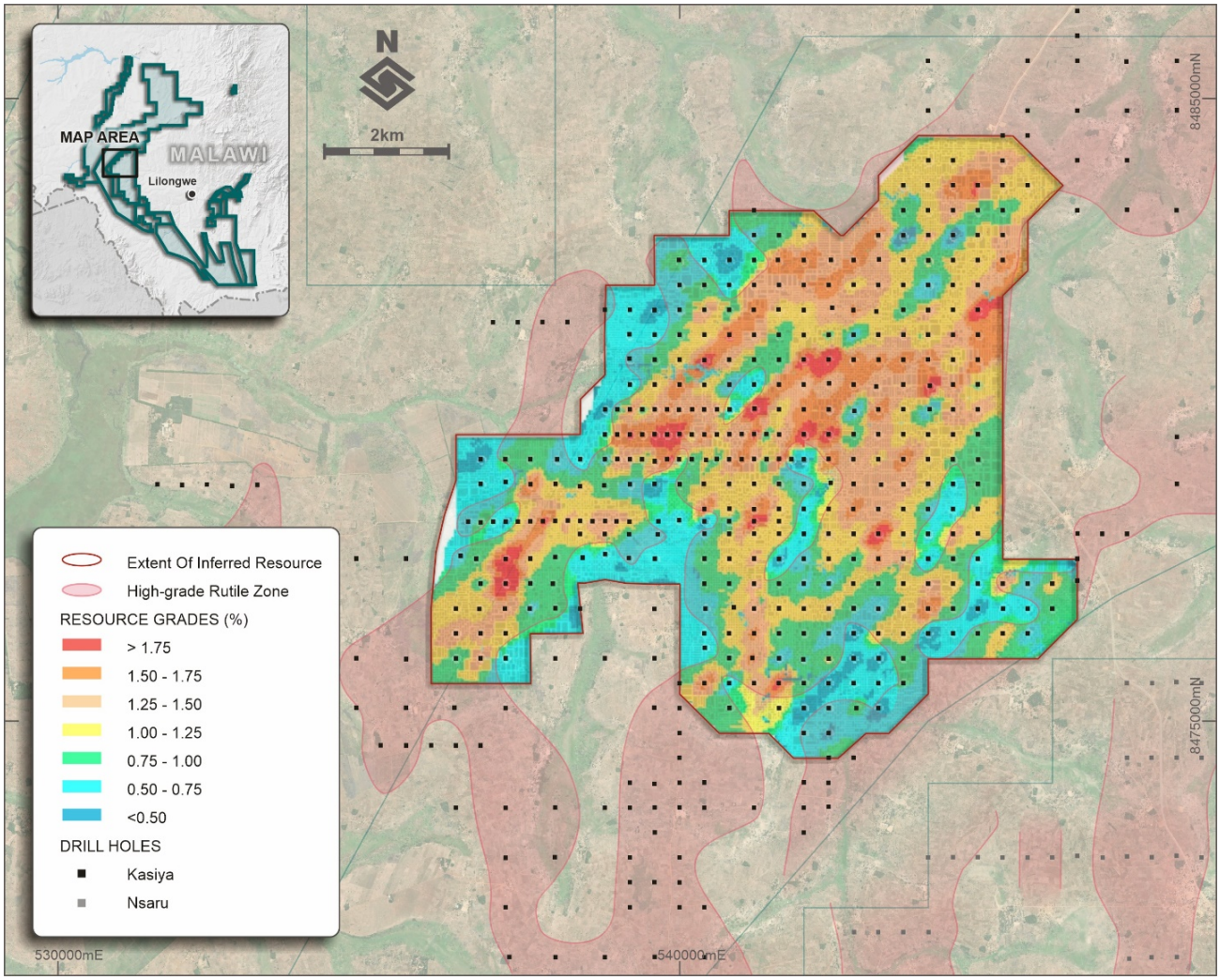

Figure 4: Drill density map over the Kasiya MRE showing rutile grades in the uppermost part of the MRE block model (source: SVM).

2.4 Climate, Land Use and Community

2.4.1 *Climate*

The central Malawi region features a humid sub-tropical climate. Winters are generally dry and mild with the majority of rainfall occurring during the summer months, between November and April. The average temperature is moderated by elevation and averages 20.3°C, with annual precipitation averaging 860mm per year. Monthly average temperature and rainfall measurements are for the city of Lilongwe (Source climate-data.org).

Maximum temperatures are highest on average in October at around 30°C with July being the coldest month of the year with an average maximum temperature of 23.2°C (Figure 5). Monthly rainfall peaks in January at 225mm with the minimum rainfall generally being encountered in months of June to September where monthly rainfall averages between 0 and 2 mm/month (Figure 6).

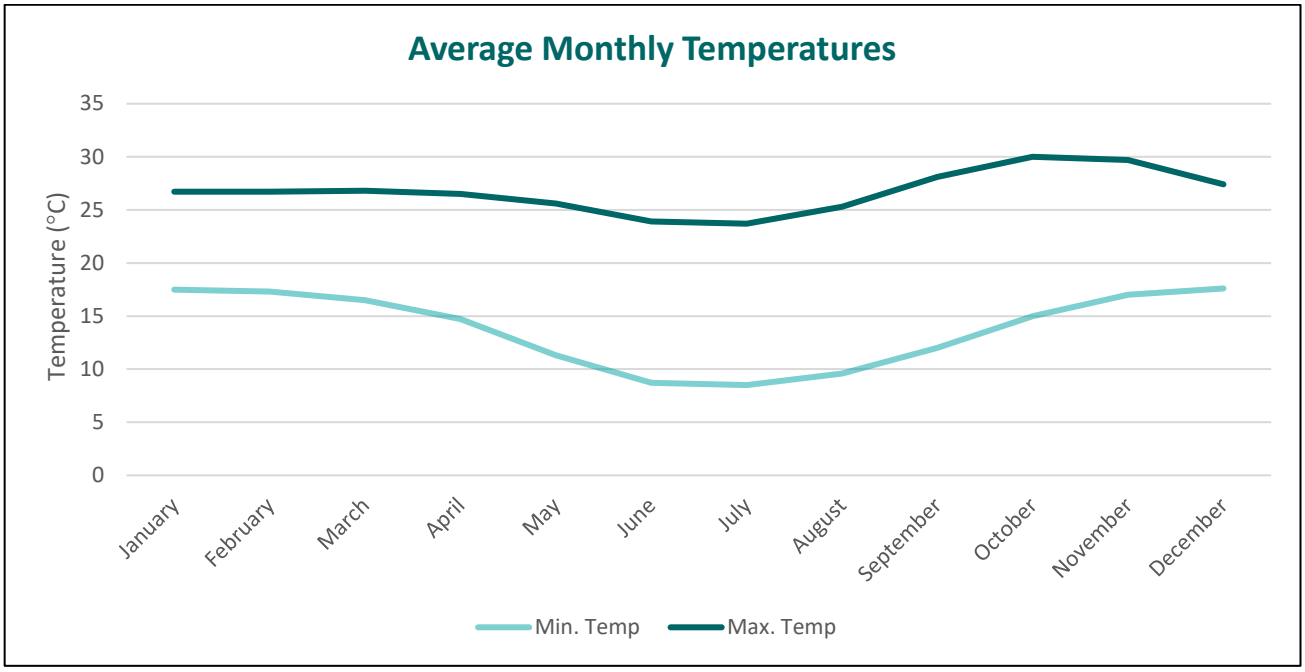

Figure 5: Lilongwe monthly temperature data (source: SVM).

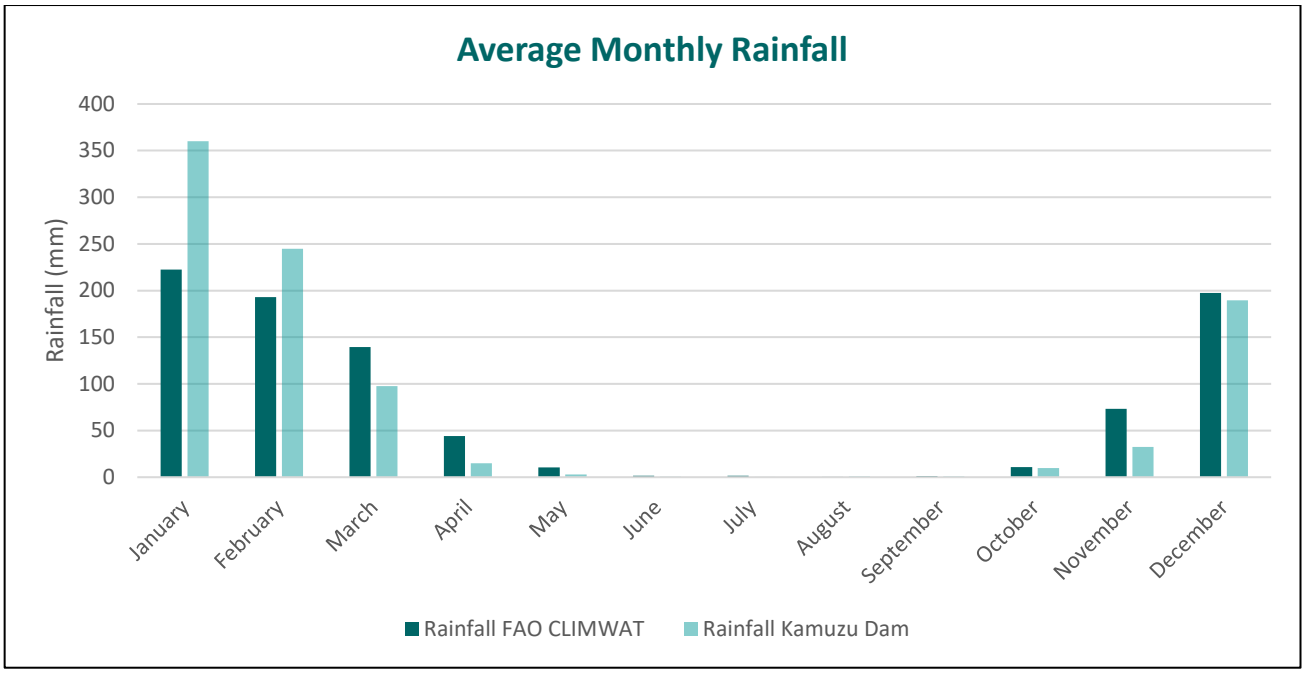

Figure 6: Chart of rainfall for the Lilongwe District (source: SVM).

2.4.2 *Land Use*

The topography on the site is generally flat with variation in elevation across the project area between 1,050m and 1,100m above sea level (Figure 7).

Figure 7: Field at Kasiya demonstrating its flat topography (source: SVM).

The area around Kasiya is moderately populated with the dominant land use being subsidence agriculture and lesser areas of commercial agriculture and degraded native bushland. The main food crops in the area are maize, cassava, peanuts and sweet potatoes, while the main industrial agricultural crop is maize.

The Bua Channel area has minimal directly affected local inhabitants due to it experiencing flooding during each wet season. A number of communities exist near the broader banks of the channel.

2.4.3 *Community*

Sovereign has operated in Malawi for over eight years. The Company has retained its senior staff since inception allowing for long standing relationships across government, traditional authorities leaders and the business sector.

Currently, the Company employs a number of Malawi nationals in various positions during drilling programs. Sovereign is also active in the communities, with a number of initiatives completed including the installation of water pumps, assistance with fertilizer and seed to local communities.

Further to this, Sovereign holds regular discussions with local landholders and community groups to keep them well informed of the status and future planned work programs for the project.

An Environmental Impact Assessment (**ESIA**) program has commenced with an initial site visit completed in August 2021. Environmental and social baseline studies are currently in planning with appropriately qualified independent experts as part of the Scoping Study. The Company has also completed a high-level risk assessment to identify major environmental and social risks which could affect the development of the Project, along with mitigating strategies to allow identified risks to be addressed early in the project design phase.

Placer is satisfied that Sovereign is committed to conduct its activities in full compliance to the requirements of national regulations, to fulfil its obligations under international conventions and treaties and give due consideration to international best practices and policies. Significant engagement has occurred with the community and is ongoing ahead of negotiation of a Community Development Agreement (**CDA**).

There appears to be no environmental or community issues currently identified that cannot be appropriately mitigated in accordance with standard practices adopted for the development of mining projects.

2.5 Project History

Sovereign has been conducting exploration in Malawi since 2012. Between 2012 and 2017 the Company was focused on graphite exploration culminating in the release of two separate graphite resources, and the completion of a Pre-feasibility Study (**PFS**) for the Malingunde Graphite Deposit in November 2018.

Since 2018, the Company has been focused on rutile exploration which has resulted in discoveries at Kasiya, Nsaru and Bua Channel.

2.6 Country & Mining Sector Overview

Malawi is a stable, transparent jurisdiction, increasingly attracting international investment with significant potential for mining to contribute to the country's economic growth and development. It is a small, landlocked country in the heart of Africa surrounded by Tanzania to the north, Zambia to the north-west and Mozambique to the south.

The population is 19.8 million with an area of 118,484km^2 (Land: 94,080km^2) straddling the southern end of the Great African Rift Valley. GDP is estimated at US$6.3 billion (US$1,100 per-capita).

Malawi does not have a large mining industry and is overshadowed by its neighbours Zambia, Mozambique and Tanzania in this respect. The Government of Malawi recognizes that the minerals sector has significant potential to contribute towards the rapid economic growth and development of the country.

Mining has been contributing less than 3% of GDP and export earnings. The industry is predominantly made up of small producers of rock aggregate, bituminous coal, gemstones, limestone and a range of construction materials.

The Country's only mine of significant scale by international standards is the Kayelekera uranium mine which was developed by Paladin Energy Limited (Paladin). Kayelekera was commissioned in 2009 and put into care and maintenance in 2014, subsequent to the Fukushima disaster, which caused a significant and prolonged decline in uranium spot prices. Kayelekera produced 10.9Mlb of U_3O_8 between 2007 and 2014. In 2019, Paladin sold Kayelekera to Lotus Resources Limited (ASX: LOT).

The other company of note is Canadian and London listed Mkango Resources (TSX.V: MKA and LSE: MKA.L) which is developing the Songwe rare earth project in southern Malawi in joint venture with Talaxis (a subsidiary of Noble Group).

2.7 Main Cities and Infrastructure

Lilongwe, with a population of approximately one million is the capital of Malawi. It is centrally located and is the base of operations for Sovereign. Kamuzu International Airport, located on Lilongwe's northern outskirts, provides daily flights to several southern and central African air travel hubs, including Johannesburg (South Africa) and Nairobi (Kenya).

The roads of Malawi are in good repair, given the significant reliance upon the roads for the import and export of goods. Figure 8 shows the condition of the primary sealed road at Kasiya.

Malawi's rail lines are part of the Nacala Rail Corridor, operated by Central East African Railways (**CEAR**) under a rail concession agreement with Mitsui & Co. Ltd, Vale SA and the Malawian and Mozambique Governments (Figure 9).

The main rail line is in excellent condition with capacity to provide approximately 22 to 24Mt of outbound cargo per year. Roads and rail appear significantly underutilised with ample capacity for Sovereign's potential operations. Placer understands that road and rail freight cost will be delivered by the current Scoping Study.

Figure 8: Sealed dual lane road bisects the large Kasiya deposit (source: SVM).

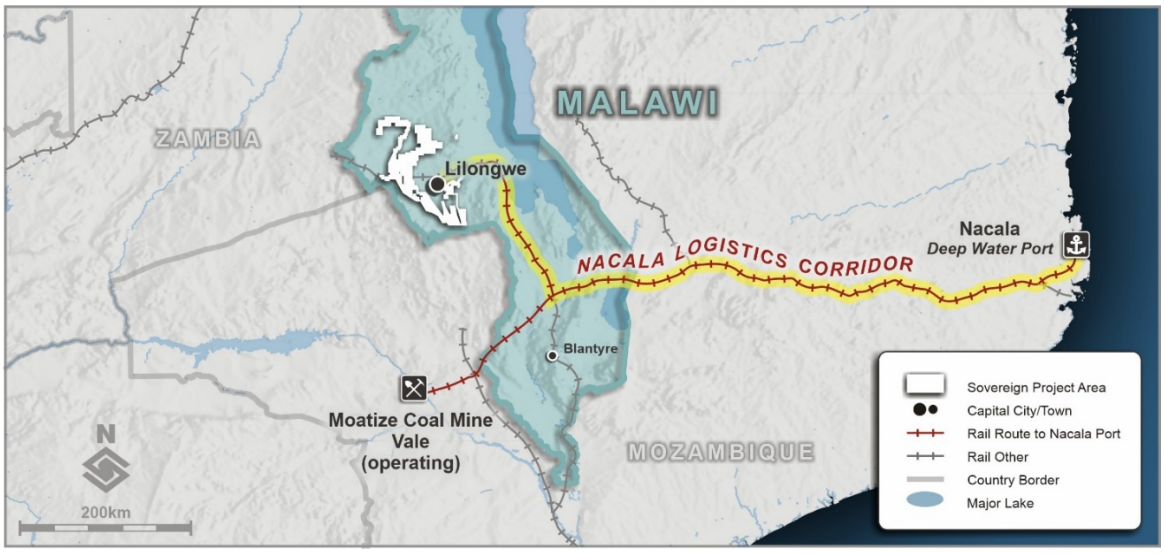

Figure 9: Nacala Logistics Corridor.

The majority of Sovereign's ground holding falls within a 75km radius of Malawi's capital city of Lilongwe. This provides the Company with abundant access to sealed roads with an approximate 52km haulage distance to the rail head at the Kanengo operational intermodal rail siding (Figure 10) and then on to access the Nacala Logistics Corridor (NLC) and Nacala deep water port in Mozambique. Placer acknowledges a previous transport assessment of this rail and port infrastructure was completed by Sovereign for the Malingunde Graphite Project PFS.

Figure 10: Kanengo rail head in operation (February 2020) (source: SVM).

Fresh water is relatively plentiful in the immediate area and the current Scoping Study is investigating process water options. Access to labour has proven to be excellent to date and is expected to remain so as Kasiya advances.

2.8 Regulatory and Fiscal Setting

2.8.1 *Regulatory*

Exploration and Mining activities in Malawi and regulated by the Mining Act (2019).

The Ministry of Natural Resources, Energy and Mining (**MNREM**) is the Government entity responsible for the administration of the minerals sector, which includes the granting of exploration and mining licences. It has statutory oversight of the energy, minerals, and forestry sectors. Table 4 outlines the various types of licences and the key terms for each type:

Table 4: Summary of licences and the key terms for each type.

Type	Term	Typical Permitted Activities	Size
Reconnaissance	12 months + 12 month extension	Not land disturbing exploration and supporting activities	No more than 100,000km^2
Exploration	3 years + 2 year extensions (max. 2x) - 7 years	Exploration activities, scoping and pre-feasibility studies	No more than 2,500km^2
Retention	5 years	Feasibility studies	No more than 25km^2
Mining *	Up to 25 year or LoM + extensions of 15 years (unlimited)	Mining	As per PFS mine plan

Sovereign has indicated to Placer that, subject to successful exploration and achieving positive technical studies, Sovereign endeavours to apply for a Mining Licence (**ML**) to secure mineral deposits for mining. The following requirements, milestones and approvals are needed to submit a ML application in a duly incorporated Malawian company:

- Demonstrate technical and financial competency.
- Achieve approval under the Environment Management Act.
- Conduct Pre-Feasibility Study.
- Submit operation plans: community engagement, mining operations, mine site, waste management, rehabilitation & closure, resettlement and employment & training plans.
- Commence on-site development within six months of ML approval.
- Comply with Operating Requirements: all expected good practice mining operating and reporting requirements.

As a condition of retaining the current rights to tenure to exploration tenements, Sovereign is required to pay an annual rental charge and meet minimum expenditure requirements for each licence. These obligations are at the sole discretion of Sovereign and the majority of the remaining exploration commitments relate to licences with a term greater than one year. For the purposes of disclosure, Sovereign has apportioned the remaining commitments on an equal monthly basis over the remaining term of all of its exploration licences in Table 5.

Sovereign has assured Placer that all tenement conditions are being met and all fees are paid. Placer can confirm sighting an independent legal opinion to this effect and that, in this regard, tenements remain in good standing with the MNREM at this time.

Table 5: Summary of exploration commitments.

Commitment	2021	2020
Within one year	$555,909	$237,507
After one year but not more than five years	$316,439	$151,519
Total	**$389,026**	**$389,026**

2.8.2 *Fiscal Setting*

The main taxes and fees imposed on companies operating in the mining sector include Corporate Tax, Dividends Tax, Royalties and Fees. The Malawi Revenue Authority (MRA) is the primary body responsible for collecting and managing taxes paid to the central government. The taxation regime for mining companies in Malawi is a corporate income tax of 30%. A Rent Resource Tax (RRT) of 15% after tax profit is currently legislated in the Taxation Act of 2018. However, it is understood that it is not currently being applied to any mining projects in Malawi and it is uncertain if it would apply to Sovereign's projects in the future. Table 6 outlines other fiscal rates applied to mining operations:

Table 6: Summary of Malawi fiscal rates.

Instrument	Rate	Fixed/Negotiable	Comments
Royalty	Generally 5%	Negotiable	Depending of level of processing (Royalties can be up to 10%).
Dividend Withholding	Variable		
Import duty	Variable	Based on tariff book	Zero for all capital equipment (subject to pre-approval).
VAT	16.5%	Fixed	Zero input for exports.
VAT – Fuel	-	Negotiable	Application for 0% for fuel used to generate power.
State Equity	Up to 10%	Fixed (based on size of project)	The Government shall have the right, but not the obligation, to acquire, directly or through a Government nominee, without cost, a free equity ownership interest of up to ten percent (10%) in any mining project that will be subject to a large-scale mining licence (>5Mt mined per annum or >US$250m Capex).
Annual Rents	Fixed rate per km^2	Fixed	Calculated based on a fixed fee times area

3 Geology

3.1 Regional Geology

The greater part of Malawi is underlain by crystalline Precambrian to lower Paleozoic rocks referred to as the Malawi Basement Complex. In some parts these rocks have been overlain unconformably by sedimentary and volcanic rocks ranging in age from Permo-triassic to Quaternary (Figure 11). The Basement complex has undergone a prolonged structural and metamorphic history dominated by uplift and faulting, which has resulted in the formation of the Malawi Rift Valley.

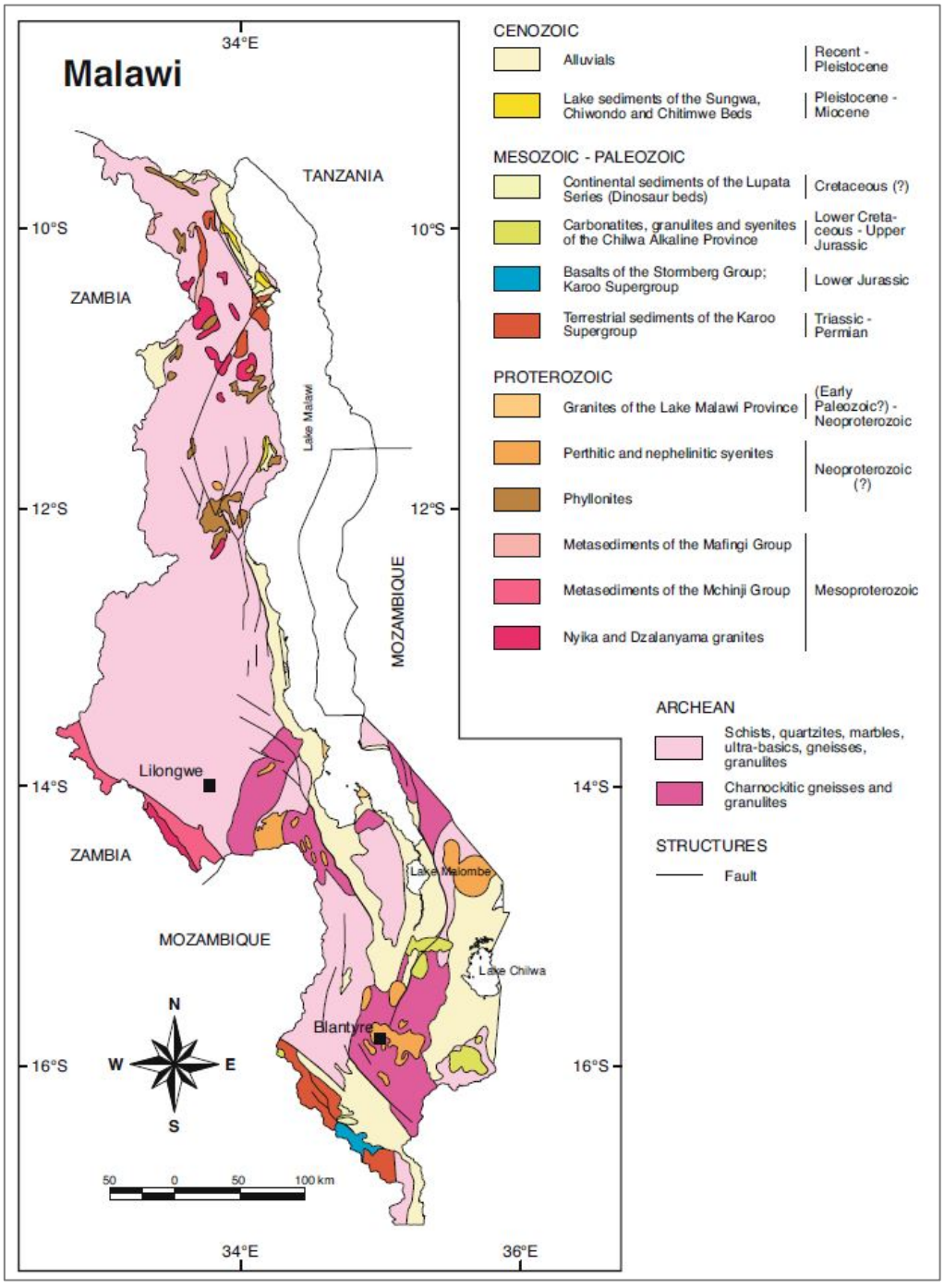

Figure 11: Regional geology map of Malawi.

Kasiya is located on the Lilongwe Plain which is underlain by the Basement Complex paragneisses and orthogneisses which are part of the Mozambique Belt. The bulk of the gneisses are semi-pelitic but there are bands of psammitic and calcareous rocks that have been metamorphosed under high pressure and temperature conditions to granulite facies. Interspersed within the paragneiss units are lesser orthogneisses, often cropping-out as conspicuous tors, as well as amphibolites, pegmatites and minor mafic to ultramafic intrusions. Foliation and banding in the gneisses have a broad north-south strike over the general area. Thick residual soils and pedolith with some alluvium overlie the gneisses and include sandy, lateritic and dambo types (Figure 12).

Figure 12: Drone photo above the Kasiya Deposit showing the open flat terrain and the numerous all-weather unpaved roads in the area.

3.2 Project Geology

Sovereign's tenure covers an area known as the Lilongwe Plains; a generally flat to gently undulating plain. The underlying geology of the Lilongwe Plains is dominated by the Precambrian Basement Complex which is made up of paragneiss with pelitic, psammitic and calcareous units.

A particular paragneiss unit is rich in rutile and graphite (**PGRG**) and is the primary source of both of these minerals in the area. This area was deeply weathered during the Tertiary and in the PGRG zones rutile concentrated in the upper part of the weathering profile forming a residual placer, such as the Kasiya Deposit. Once this material is incised and eroded, it is transported and deposited into wide, regional braided river systems forming alluvial heavy mineral placers such as the Bua Channel (Figure 13).

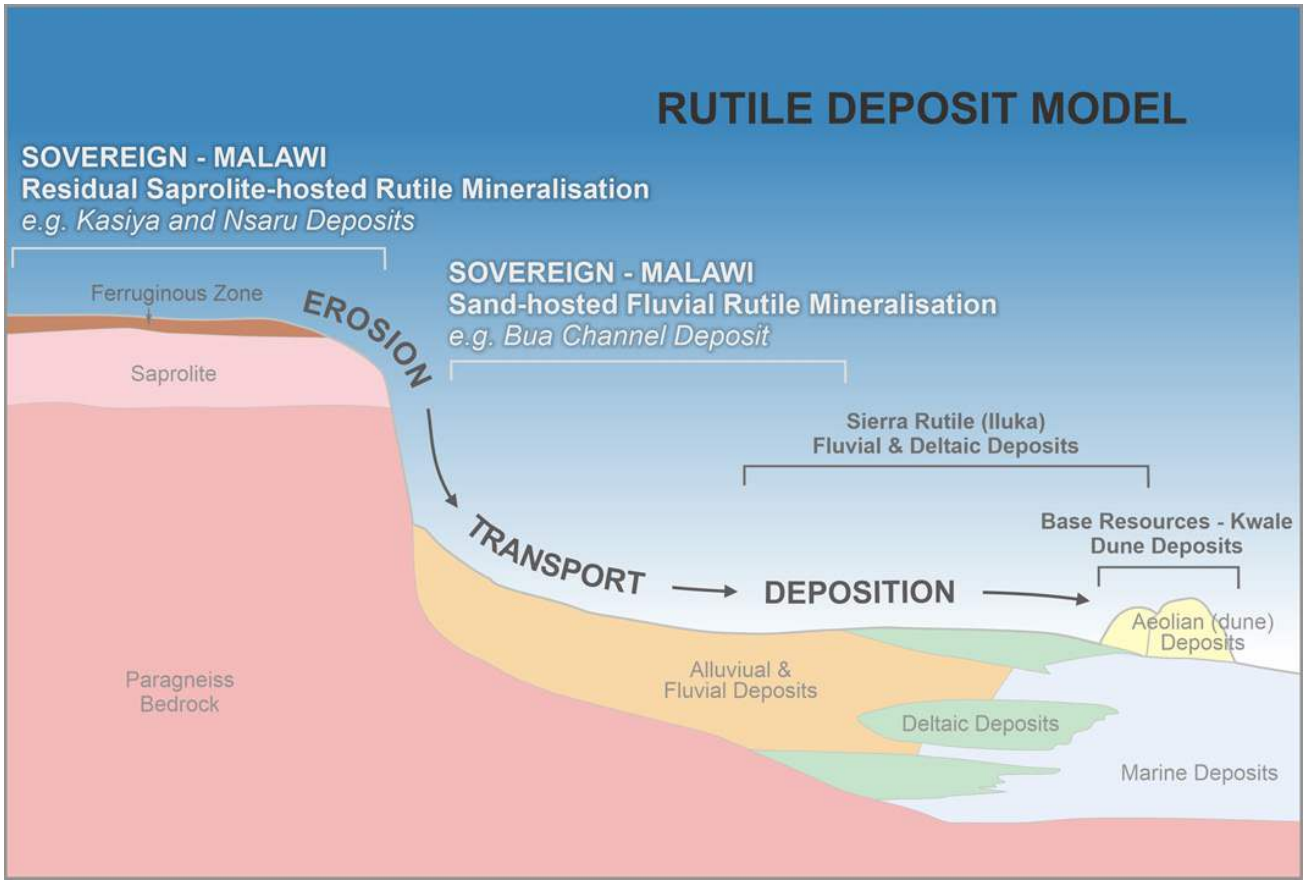

Figure 13: Rutile deposit model showing residual saprolite-hosted mineralisation and sand hosted fluvial mineralisation.

3.3 Kasiya

3.3.1 *Deposit Geology*

The high-grade rutile deposit at Kasiya is best described as a residual placer, or otherwise known as an eluvial heavy mineral deposit (Figure 14). It is formed by weathering of the primary host rock and concentration, in place, of heavy minerals, as opposed to the high-energy transport and concentration of heavy minerals in a traditional placer. As such, rutile is hosted in surface soils and the weathered profile, which averages 48% slimes (minus 45µm) and a little over 2% oversize (plus 5mm), primarily comprising ironstone/laterite cementation.

The highly aluminous nature (kyanite) and the presence of carbon (graphite) in the host material suggest that the protolith was of sedimentary origin. The protolith likely started with a 0.5-1.5Ga basin that also experienced consistent influx of titanium minerals.

These sedimentary rocks were subject to granulite facies metamorphism under reduced conditions in the Pan-African Orogeny at circa 0.5-0.6Ga. The reduced environment, relatively high titanium content and low iron content, resulted in rutile being the most stable titanium mineral under these conditions. Slow exhumation and cooling then resulted in in crystallisation of paragneisses containing coarse rutile and graphite.

The final and most important stage of enrichment came as tropical weathering during the Tertiary depleted the top ~10m of physically and chemically mobile minerals. This caused significant volume loss and concurrent concentration of heavy resistate minerals including rutile and kyanite.

Rutile mineralisation lies in laterally extensive, near surface, flat "blanket" style bodies in areas where the weathering profile is preserved and not significantly eroded. The high-grade rutile zones appear to be geologically continuous with limited variability along and across strike.

Accessory graphite mineralisation is depleted near surface, with much higher grades occurring in the saprolite and saprock layers from 6m and deeper. A typical cross section is described in Table 7.

Figure 14: Drone photo above the Kasiya Deposit showing the open flat terrain and the numerous all-weather unpaved roads in the area.

Table 7: Typical weathering profile encountered in the residual saprolite hosted mineralisation.

		Depth (m)	WEATH Code	Typical rutile %	Typical graphite %	Geological Description
		0				
	Pedolith	4	FERP	1.0% - 2.0%	0.5% to 2%	**Ferruginous Pedolith:** Ferruginous sandy with some clay. May locally contain variably cemented layers that tend towards a duricust, though where present is always less than 1m thick. Strongly enriched in rutile and kyanite, strongly depleted in graphite. Fine graphite flake size. Significant volume loss in this zone during the weathering process.
	Pedolith	6	MOTT	0.7% to 1.5%	1% to 5%	**Mottled Zone:** Ferruginous rich and less ferruginous clay+quartz rich mottled colouring. In-situ chemical weathering of clay gangue minerals with graphite remaining inert. Primary fabric (ie foliation) may be partialy destroyed. Generally medium graphite flake size. Moderate rutile enrichment, moderate graphite depletion. Some volume loss in this zone during teh weathering process.
	Saprolith	8	PSAP	0.4% to 1.2%	1% to 10%	**Pallid Saprolite:** Pale saprolite dominated by clay and quartz gangue mineralogy (i.e. same as SAPL). Has same graphite grade distribution as SAPL. Generally coarse graphite flake size. No rutile depletion or enrichment. No graphite depletion or enrichment.
	Saprolith	25	SAPL	0.4% to 1.2%	1% to 10%	**Saprolite:** In-situ, strongly chemically weathered bedrock, with a clay-quartz quartz gangue mineralogy. More than 20% of weatherable minerals (= feldspar/mica/sulphides) altered. Primary fabric of bedrock (i.e. foliation) retained. Generally coarse graphite flake size. No rutile depletion or enrichment. No graphite depletion or enrichment.
	Saprolith	35	SAPR	0.4% to 1.2%	1% to 10%	**Saprock:** More compact, slightly weathered rock with a lower porosity/permeability and higher density than saprolite. Less than 20% of weatherable minerals (= feldspar/mica/sulphides) altered. Generally requires a hammer blow to break. Sulphides are mostly oxidised. Weathering predominantly occurs along meso/micro fractures with the groundmass largely unweathered. Generally coarse graphite flake size. No rutile depletion or enrichment. No graphite depletion or enrichment.
	Bedrock		FRESH	0.4% to 1.2%	1% to 10%	**Fresh Rock:** Foliated graphitic gneiss: Primary mineralogy of feldspar-quartz-graphite-rutile+/-biotite+/-pyrite+/-pyrrhotite. Generally coarse graphite flake size. No rutile depletion or enrichment. No graphite depletion or enrichment.

3.3.2 *Drilling*

Hand Auger (HA) drilling has been used extensively at the Kasiya Deposit by Sovereign to define mineralisation and to obtain rutile assay information in the upper sections of the weathering profile. Push-tube drilling was advised by Placer to collect sample for density test work and to determine confidence in the hand auger drilling method for the MRE. Drilling methods are displayed in Figures 15 and 16.

A total of 507 HA holes for 4,820m and 36 PT (push-tube core) holes for 437m have been drilled at Kasiya since 2019. HA collars in the Inferred MRE area are spaced on a nominal 400 x 400m grid and infill lines completed at a 200m hole spacing. All extensional holes are designed to provide systematic strike and width extension of the anomalous lines of HA drilling previously reported along this same trend.

It is deemed that these holes should be broadly representative of the mineralisation style in the general area. More work is required to accurately determine the variability of the mineralisation in the Kasiya region.

All holes were drilled vertically on an east-west cross-sectional grid as the nature of the rutile mineralisation is broadly horizontal. No bias attributable to orientation of drilling has been identified.

Figure 15 & 16: Field drilling and sampling activities.

Hand Auger drilling is executed by SVM field teams using a manually operated enclosed-flight Spiral Auger (SP / SOS) system and produced by Dormer Engineering in Queensland, Australia. The HA bits are 62mm and 75mm in diameter with 1m long steel rods. Each 1m of drill advance is withdrawn and the contents of the auger flight removed into bags and set aside. An additional 1m steel rod is attached and the open hole is re-entered to drill the next metre. This is repeated until the drill hole is terminated often due to the water table being reached, and more rarely due to bit refusal. The auger bits and flights were cleaned between each metre of sampling to avoid contamination.

Core-drilling is undertaken for twin drilling analysis using a drop hammer Dando Terrier MK1. The drilling generated 1m runs of 83mm PQ core in the first 2m and then transitioned to 72mm core for the remainder of the hole. Core drilling is oriented vertically by spirit level.

Placer has reviewed SOPs for HA and push-tube drilling and found them to be fit for purpose and support the resource classifications as applied to the MRE.

3.3.3 *Sampling*

Hand Auger samples are obtained at 1m intervals generating on average approximately 2.5kg of drill sample. Samples are manually removed from the auger bit and sample recovery visually assessed in the field. As samples become wet at the water table and recovery per metre declines the drill hole is terminated.

Samples are collected in 1-metre increments. The sample is sun dried, logged, weighed and analysed by Niton XR3t, hand-held XRF. Samples are then composited based on the logged weathering zone. Care is taken to ensure that only samples with similar geological characteristics are composited together. An equal mass is taken from each contributing metre to generate a 1.5kg composite sample. Sub-samples were carefully riffle split to ensure representivity.

Composite samples are always greater than 1m and do not exceed 5m in width. This sampling and compositing method is considered appropriate and reliable based on accepted industry practice.

3.3.4 *Sample analyses*

The rutile assay processes adopted for the Kasiya Deposit resource samples is performed by the LLW laboratory with alternate HM separation and final stages of separation performed in Perth laboratories. Substantial QA of the LLW and Perth laboratories has been completed.

Graphite determinations are made on a duplicate split of the primary sample. The samples are submitted to Intertek Perth for analysis of Total Graphitic Carbon (**TCG%**) by method C73/CSA - Graphitic carbon method, removal of C-CO3 and volatile Organic Carbon. Analysis is by Infrared Spectrometry, which records the Carbon remaining after digestion of the sample with HCl and oven-heating to 420 degrees celsius.

The following workflow is undertaken on-site in Malawi for all HA samples.

- Dry composite sample in oven for 1 hour at 105°C
- Soak in 1% TSPP water and lightly agitate. Leave for 12 hours.
- Wet screen at 5mm, 600mm and 45µm to remove oversize, coarse sand and slimes material
- Dry +45µm -600mm (sand fraction) in oven for 1 hour at 105°C

Heavy mineral concentrates (**HMC**) are then either generated onsite via wet-tabling (***Workflow 1***) or at Diamantina Laboratories in Perth via heavy liquid separation (***Workflow 2***).

A total of 358 from 1382 sample assays informing the resource estimate were processed by Workflow 1, on-site in LLW. This included the following stages:

- Pass +45µm -600mm fraction across wet table twice to generate a heavy mineral concentrate (**HMC**)
- Dry HMC in oven for 30 minutes at 105℃
- Bag +45µm -600mm HMC Fraction and send to Perth, Australia for quantitative mineralogical determination.

A total of 994 from 1382 sample assays informing the resource estimate were processed by Workflow 2 at Diamantina Laboratory, Perth.

- Split ~150g off Sand fraction for (2 x 75g) Heavy Liquid Separation (**HLS**) using Tetrabromoethane (**TBE**, SG 2.96g/cc) as the liquid heavy media.

The HMC is then subject to magnetic separation at Allied Mineral Laboratories Perth (**AML**) in Perth by Carpco magnet @ 16,800G (2.9Amps) into a magnetic (**M**) and non-magnetic (**NM**) fraction.

The NM fractions were sent to either ALS Perth or Intertek Perth for quantitative XRF analysis. Intertek samples received the standard mineral sands suite FB1/XRF72. ALS Samples received XRF_MS.

Accuracy monitoring is achieved through submission of certified reference materials (**CRM's**). ALS and Intertek both use internal CRMs and duplicates on XRF analyses. Sovereign also inserts CRMs into the sample batches at a rate of 1 in 20.

Precision and accuracy assessment has been completed on all alternate workflow methodologies and a consistent method has been recommended by Placer Resource Geologists. Examination of the QA/QC sample data indicates satisfactory performance of field sampling protocols and assay laboratories providing acceptable levels of precision and accuracy. Rutile determination by alternate methods showed no observable bias.

QEMSCAN of the NM fraction shows dominantly clean and liberated rutile grains and confirms rutile is the only significant titanium species in the NM fraction (Figure 17). Recovered rutile is therefore defined and reported here as: TiO_2 recovered in the +45 to -600um range to the NM concentrate fraction as a % of the total primary, dry, raw sample mass divided by 95% (to represent an approximation of final product specifications). It therefore represents the recoverable rutile within the whole sample.

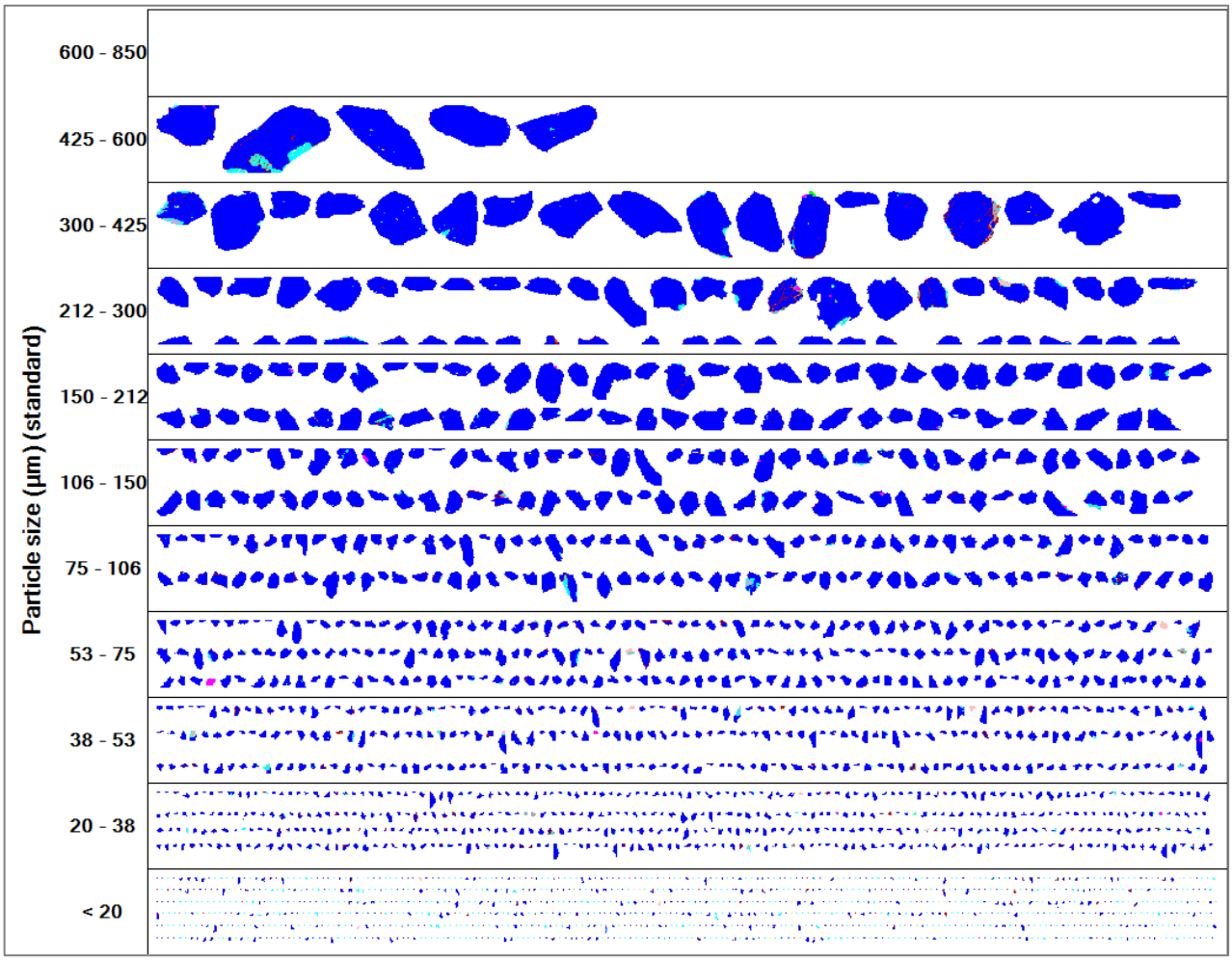

Figure 17: QEMSCAN image of Sovereign's premium rutile product from Kasiya.

3.4 Nsaru Deposit

3.4.1 *Prospect Geology*

The rutile deposit at Nsaru is identical to the Kasiya deposit, also being a surface, residual concentration formed by weathering of the primary host rock and concentration in place of heavy minerals. The rutile is preserved where the weathering profile is intact and graphite grades show higher concentrations in deeper saprolite and saprock lithologies.

3.4.2 *Drilling*

Hand Auger drilling is used to define mineralisation and to obtain rutile assay and graphite information in the upper sections of the weathering profile in the same manner as is performed at Kasiya.

A total of 137 HA holes for 1,213m have been drilled at Nsaru since its discovery. The drilling programs to date show a mineralised envelope of approximately 40km^2 with numerous areas of high-grade rutile defined.

3.4.3 *Sampling*

Refer to Section 3.3.3

3.4.4 *Sampling analyses*

Refer to Section 3.3.4

All Nsaru samples received ***Workflow 1*** rutile determination.

3.5 Bua Channel

3.5.1 *Prospect Geology*

Sovereign's geological team identified potential for placer (sand-hosted) rutile mineralisation in an extensive fluvial channel system in the far west of the tenement package. Initial in-field panning of sand samples showed visually high content of rutile and ilmenite with minor zircon.

The Company confirmed this sand-hosted, placer rutile mineralisation via drilling in the southern Bua Channel over approximately 8km length. Channel widths range from 300m to 700m and mineralised sand thicknesses ranging from about 4m to 10m (Figure 18).

A significant, +40km potential extension was identified to the north by the field team and this ground was secured with a new exploration licence granted in January 2020.

Figure 18: Bua Channel with channel width shown.

3.5.2 *Drilling*

A total of 57 shallow HA holes for 364m and 54 deeper, air-core (AC) holes for 473m were drilled at Bua Channel in late 2019. The drilling programs completed to date have shown high-grade rutile and accessory ilmenite (~60% TiO_2) over 8km within the southern channel area (Figure 19).

The AC and HA collars are spaced at approximately 100m along drill lines. All holes were drilled vertically and no bias attributable to orientation of drilling has been identified. Drill hole intercepts are considered broadly representative of the mineralisation in the Bua Channel.

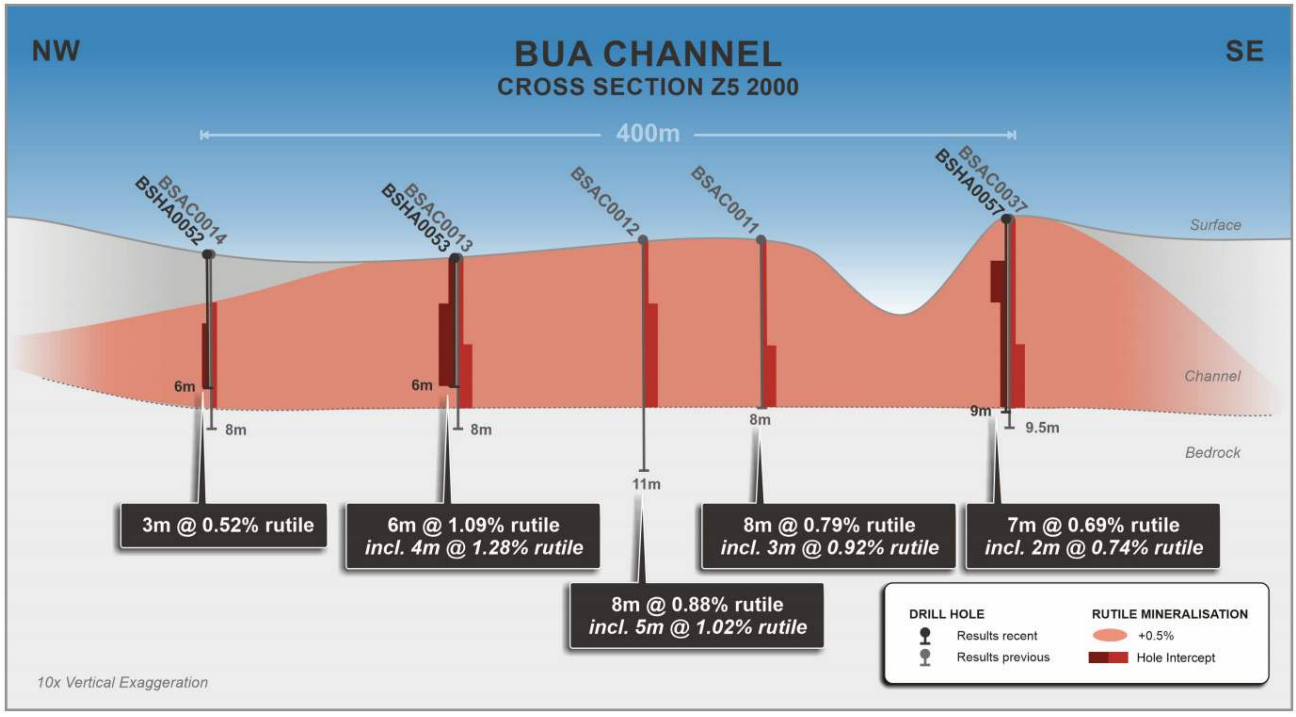

Figure 19: Cross section of Bua Channel.

3.5.3 *Sampling*

Hand Auger samples were obtained at 1m intervals generating approximately 2.5kg of sample. HA samples are manually removed from the auger bit and sample recovery visually assessed in the field. As samples become wet at the water table and as recovery per metre declines the drill hole is terminated.

Air core samples were obtained using standard face discharging air core blade bits. All 1m AC samples were collected into plastic bags from directly beneath the cyclone.

Each 1m HA and AC sample is sun dried, logged, weighed and analysed by Niton XR3t, hand-held XRF. Samples are then composited based on their weathering boundaries. Care is taken to ensure that only lithological units with similar geological and grade characteristics are composited together. An equal mass is taken from each contributing metre to generate a 1.5kg composite sample. Sub-samples were carefully riffle split to ensure representivity.

Composite samples are always greater than 1m and do not exceed 5m in width. This sampling method is considered appropriate and reliable based on accepted industry practice.

QEMSCAN mineralogy test-work shows clean and liberated rutile grains. Additionally, QEMSCAN shows the ilmenite to be very high quality with a TiO_2 content of ~60%, indicating it should be suitable as chloride feedstock.

3.5.4 *Sample analyses*

Sovereign's onsite laboratory is considered quantitative to the point where a HMC is generated.

The following workflow for the air-core composite samples was undertaken onsite at the Lilongwe Laboratory in Malawi;

- Dry composite sample in oven for 1 hour at 105°C
- Soak in water and lightly agitate
- Wet screen at 5mm, 600mm and 45µm to remove oversize and slimes material
- Dry +45µm -600mm fraction in oven for 1 hour at 105°C
- Pass the dry +45µm -600mm through 50:50 riffle splitter.
- Retain one split on site as library sample and send the second split to Perth for further quantitative mineralogical analysis.

The following workflow for the air-core composite samples was then undertaken in Perth based Laboratories.

- ~75g split taken from +45µm -600mm for heavy liquid separation (HLS).
- The laboratory used Tetrabromomethane (**TBE**) as the heavy liquid medium for HLS with a density of 2.95 g/ml.
- The sinks were then dried and weighed to give a HM content.
- Lithological HM composites were then generated for mineralogy profiling as per industry standards.

- Magnetic separation of the HM composites by a Carpco magnet @ 16,000G (2.9Amps) into a magnetic (**M**) and non-magnetic (**NM**) fraction. Work was undertaken at Allied Mineral Laboratories (**AML**) in Perth.
- The M and NM fractions were sent to Intertek Genalysis Perth for quantitative ICP analysis.
- 2g splits of selected M and NM fractions were sent to ALS for QEMSCAN analysis for further determination of mineralogy, grain size and other mineral chemistry and deportment information.

The following workflow for the hand-auger samples was undertaken on-site in Malawi;

- Dry composite sample in oven for 1 hour at 105°C
- Soak in water and lightly agitate
- Wet screen at 5mm, 600mm and 45µm to remove oversize and slimes material
- Dry +45µm -600mm fraction in oven for 1 hour at 105°C
- Pass +45µm -600mm fraction across wet table twice to generate a HMC
- Dry HMC in oven for 30 minutes at 105°C
- Bag +45µm -600mm HMC Fraction and send to Perth, Australia for quantitative mineralogical determination.

The following workflow for the hand-auger samples was then undertaken at Perth based Laboratories.

- Magnetic separation of the HMC by Carpco magnet @ 16,000G (2.9Amps) into a magnetic (**M**) and non-magnetic (**NM**) fraction. Work undertaken at Allied Mineral Laboratories (**AML**) in Perth.
- The M and NM fractions were sent to Intertek Genalysis Perth for quantitative XRF analysis.
- 2g splits of selected M and NM fractions were sent to ALS for QEMSCAN analysis for further determination of mineralogy, grain size and other mineral chemistry and deportment information.

4 Mineral Resources and Ore Reserves

4.1 Mineral Resources

The Kasiya MRE (Table 8) has been prepared by independent consultants, Placer Consulting Pty Ltd and is reported in accordance with the standards of the JORC Code (2012 Edition). A theoretical grade/tonnage curve for the MRE is displayed in Figure 20.

Table 8: Kasiya Deposit mineral resource estimate.

Mineral Resource Category	Material Tonnes (millions)	Rutile (%)	Rutile Tonnes (millions)	Operator
Inferred	644	1.01	6.49	McCourt Mining Limited (Malawi)
Total	**644**	**1.01**	**6.49**	McCourt Mining Limited (Malawi)

Cut-off: 0.7% rutile
Sovereign has a 100% interest in the Resources
Source: Placer Consulting Pty Ltd

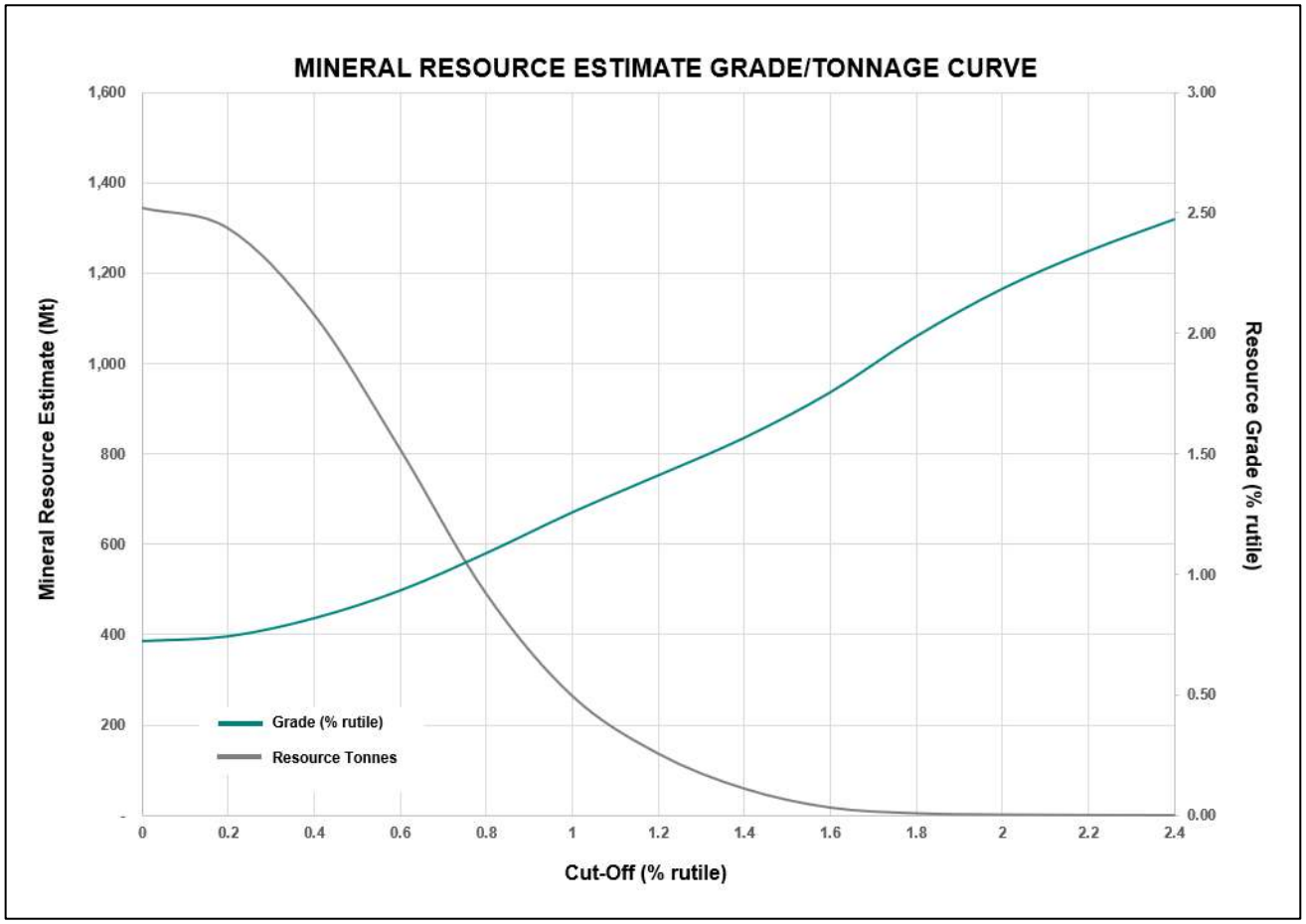

Figure 20: Grade cut-off versus tonnage curve.

4.1.1 *Mineral Resource Classification*

The HA collars are spaced at nominally 400m x 400m in the Inferred area of the resource. The PT core twin holes are selectively placed throughout the deposit to ensure a broad geographical and lithological spread for contact analysis and density sample collection.

The drill spacing and distribution is considered to be sufficient to establish a degree of geological and grade continuity appropriate for the MRE.

Variography and Kriging Neighbourhood Analysis, completed using Supervisor software, informs the optimal drill and sample spacing for the MRE. Based on these results and the experience of the Competent Person, the data spacing and distribution is considered adequate for the definition of mineralisation and adequate for mineral resource estimation.

Classification of the MRE has been conservative and reflects the uncertainty that remains in data spacing and down-hole sample interval definition and grade determinations.

A high-degree of uniformity exists in the broad and contiguous lithological and grade character of the deposit. Open-hole drilling technique has been expertly applied and data collection procedures, density assessments, QA protocols and interpretations conform to industry best practice.

Assay, mineralogical determinations and metallurgical test work conform to industry best practice and demonstrate a rigorous assessment of product and procedure. The development of a conventional processing flowsheet and marketability studies support the classification of the Kasiya Resource.

4.1.2 *Estimation Methodology*

Datamine Studio RM and Supervisor software is used by Placer for the resource estimation, with key fields being interpolated into the volume model using the Inverse Distance weighting (power 3) method. Dynamic Anisotropy search ellipses, informed by variography and kriging neighbourhood analysis, were used to search for data during the interpolation and suitable limitations on the number of samples, and the impact of those samples, was maintained.

Interpolation was constrained by hard boundaries (domains) that result from the geological interpretation. Topsoil has not been excluded in the MRE.

The average parent cell size used was approximately equivalent to half the average drill hole spacing over the bulk of the deposit (200m x 200m). Cell size in the Z-axis was established to cater for the varied sample and composite sample spacing. This resulted in a parent cell size of 200m x 200m x 3m for the volume model with 5 sub-cell splits available in the X and Y axes and 3 in the Z axis to smooth topographical and lithological transitions.

Extreme grade values were not identified by statistical analysis, nor were they anticipated in this style of deposit. No top cut is applied to the resource estimation.

Validation of grade interpolations was done visually in Datamine by loading model and drill hole files and annotating, colouring and using filtering to check for the appropriateness of interpolations.

Statistical distributions were prepared for model zones from both drill holes and the model to compare the effectiveness of the interpolation. Distributions of section line averages (swath plots) for drill holes and models were also prepared for each zone and orientation for comparison purposes.

The resource model has effectively averaged informing drill hole data and is considered suitable to support the resource classifications as applied to the estimate.

Density is calculated by the water immersion technique using core from geographically and lithologically diverse sample sites throughout the project. This methodology delivers an accurate density result that is interpolated in the MRE for each host material type.

Density data are interpolated into the resource estimate by geological domain. An average density of 1.39 t/m^3 for the soil (SOIL) domain, 1.60 t/m^3 for the ferruginous pedolith (FERP) domain, 1.65 t/m^3 for the mottled (MOTT) domain, 1.68 t/m^3 for the pallid saprolite (PSAP) domain, 1.63 t/m^3 for the saprolite (SAPL) domain, and 1.93 t/m^3 for the laterite (LAT) domain were calculated.

4.1.3 *Cut-off Grades*

The resource is reported at a range of bottom cut-off grades in recognition that optimisation and financial assessment is outstanding.

A nominal bottom cut of 0.7% rutile is offered, based on preliminary assessment of resource value and anticipated operational cost.

4.1.4 *Mining and Metallurgy Factors*

Conventional dry mining methods are assumed at this stage and will likely include a combination of loader and dozer feed to a mobile, in-pit mining unit. It is recognised that wet mining (hydro-mining) may be possible for this deposit style, though SVM will need to progress further studies to determine its potential applicability for Kasiya. It is considered that the strip ratio would be zero or near zero.

Dilution is considered to be minimal as mineralisation commonly occurs from surface and mineralisation is generally gradational with few sharp boundaries.

Recovery parameters have not been factored into the estimate. However, the valuable minerals are readily separable due to their SG differential and are expected to have a high recovery through the proposed, conventional wet concentration plant. Further detail on recovery is included in Section 5.

4.2 Ore Reserves

No Ore Reserves have been estimated.

5 Metallurgy

Sovereign has conducted bulk scale metallurgy test work at a globally recognised laboratory, Allied Mineral Laboratories (**AML**) in Perth, Australia (Figures 21 & 22).

A mineralised sample of approximately 1,000kg was composited from a number of drill holes across the Kasiya deposit. The sample had a head grade of 0.96% recoverable rutile. The program achieved excellent overall rutile recovery from bulk feed to product of 98.3%.

The material was processed through a traditional mineral sands flowsheet (Figure 23), which consisted of:

- Screening and sizing;
- Desliming;
- UCC (up-current classifier) and wet concentration via gravity spirals;
- Attritioning; and
- Mineral separation by electrostatic and magnetic methods.

Figure 21: Trommel screen processing the raw material (left) & +2mm oversize material (right).

Figure 22: Gravity spirals set-up for the processing of the deslimed and screen material (left) & close-up of the gravity spiral in the early phases of the process (right).

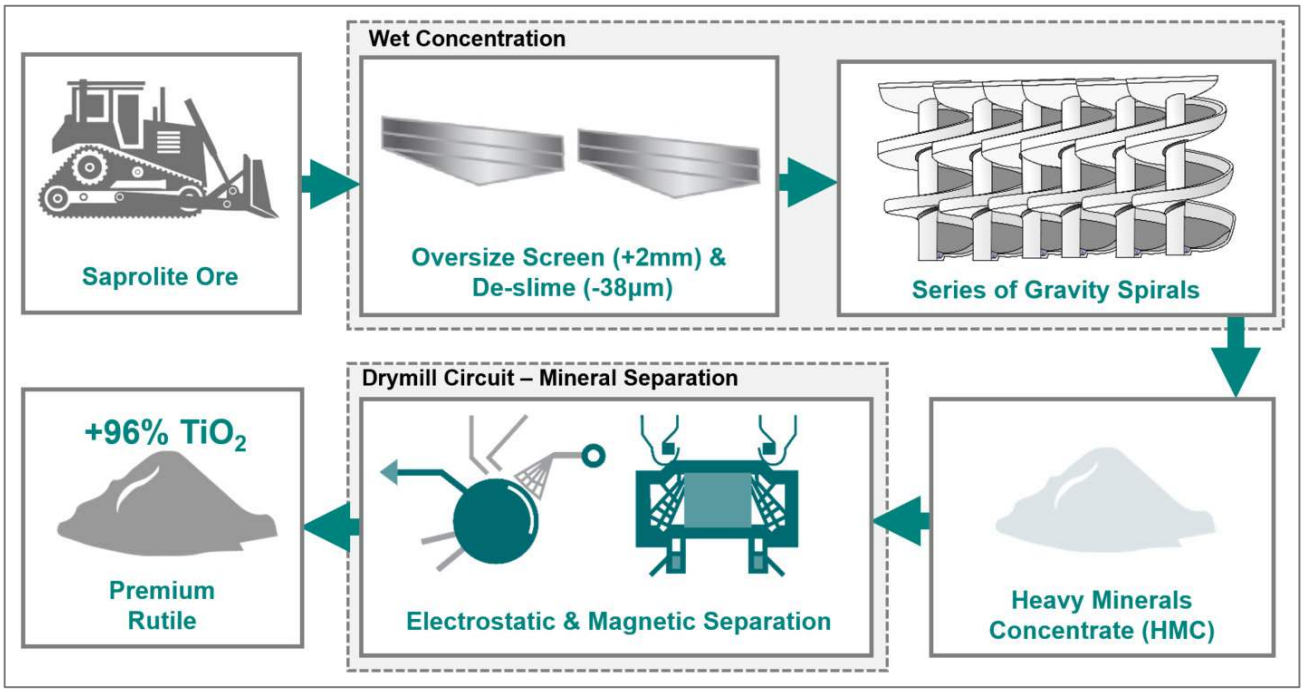

Figure 23: Simplified flowsheet developed for the Kasiya bulk metallurgy program.

Table 9 outlines the specifications achieved by Sovereign during the test work, against operating peers globally.

Table 9: Comparison of Sovereign's rutile specifications to leading global producers.

Constituent		Malawi Rutile (Sovereign)	Sierra Rutile (Iluka)	RBM (Rio Tinto)	Kwale (Base Resources)	Namakwa Sands (Tronox)
TiO_2	**%**	***96.27***	96.29	93.30	96.18	94.50
ZrO_2+HfO_2	%	***0.52***	0.78	1.30	0.72	1.10
SiO_2	%	***1.18***	0.62	2.00	0.94	2.00
Fe_2O_3	%	***0.59***	0.38	0.70	1.25	0.8
Al_2O_3	%	***0.41***	0.31	0.90	0.23	0.6
Cr_2O_3	%	***0.12***	0.19	0.11	0.17	0.14
V_2O_5	%	***0.66***	0.58	0.40	0.52	0.33
Nb_2O_5	%	***0.39***	0.15	0.30	-	0.04
P_2O_5	%	***0.01***	0.01	0.03	0	0.02
MnO	%	***0.01***	0.01	-	0.03	0.4
MgO	%	***0.02***	0.01	-	0.1	0.01
CaO	%	***0.01***	0.01	-	0.04	0.04
S	%	***0.01***	<0.01	<0.05	-	0.01
U+Th	*ppm*	***39***	26	100	-	-
d_{50} sizing	*µm*	***145***	-	124	-	124

"Iluka" is Iluka Resources Limited; "Rio Tinto" is Rio Tinto plc; "Base Resources" is Base Resources Limited; "Tronox" is Tronox Holdings plc. "-" is not disclosed. Sources: RBM data from World Titanium Resources Ltd TZMI Conference Presentation November 2011 (Updated January 2012); Sierra Rutile, Kwale and Namakwa Sands data from BGR Assessment Manual titled "Heavy Minerals of Economic Importance" 2010.

6 Products and Marketing

The Company has provided all market research and marketing information to Placer. Placer accepts the content is sufficiently accurate for inclusion in this report and that any predictions on market conditions are reasonable, as understood at this time.

Natural rutile is the purest, highest-grade natural form of titanium dioxide (TiO_2) and is the preferred feedstock in manufacturing titanium pigment and producing titanium metal. Titanium pigments are used in paints, coatings and plastics. Titanium also has specialty uses including in welding, aerospace and military applications.

The global titanium feedstock market is over 7.4Mt of titanium dioxide with the majority of this been consumed by the pigment industry. Natural rutile's high purity classifies it as a high-grade titanium feedstock. The high-grade titanium feedstock market consumes approximately 2.6Mt of contained titanium dioxide with strong demand driven from the pigment, welding and metal industries (Figure 24).

The lack of supply of natural rutile, due to its genuine scarcity, prompted the titanium industry to develop energy and carbon intensive processes to upgrade ilmenite (low-grade titanium mineral) to high-grade titanium feedstock products that can be used as substitutes for natural rutile (i.e. synthetic rutile and titania slag).

Natural rutile requires no upgrading for direct use as titanium pigment feedstock, eliminating the upgrading step required for ilmenite, resulting in zero additional CO_2 emissions. Up to 2.8 tonnes CO_2 eq. for each tonne of natural rutile utilised could be saved compared to the upgrading/beneficiation of ilmenite, via smelting and chemical processes, to high-grade titanium feedstocks like titania slag and synthetic rutile.

The downstream processes (i.e. pigment production) rely heavily on the use of upgraded titanium feedstocks such as synthetic rutile and titania slag, each having an associated substantial environmental impact.

Due to growing environmental pressures, and with the significant carbon footprints of numerous industry players related to pyrometallurgical ilmenite upgrading operations, Sovereign's natural rutile product is well positioned to impact the titanium supply chain with the ability to potentially displace and reduce the use of carbon and waste-intensive upgraded alternative titanium feedstocks.

High-grade titanium feedstock supply is tight with limited new projects coming online in the short to medium term (Figure 25). Iluka has recently announced the potential suspension of its Sierra Rutile operations. Sierra Rutile is the largest global producer of natural rutile, currently contributing over 20% of the total natural rutile market with production of about 150ktpa.

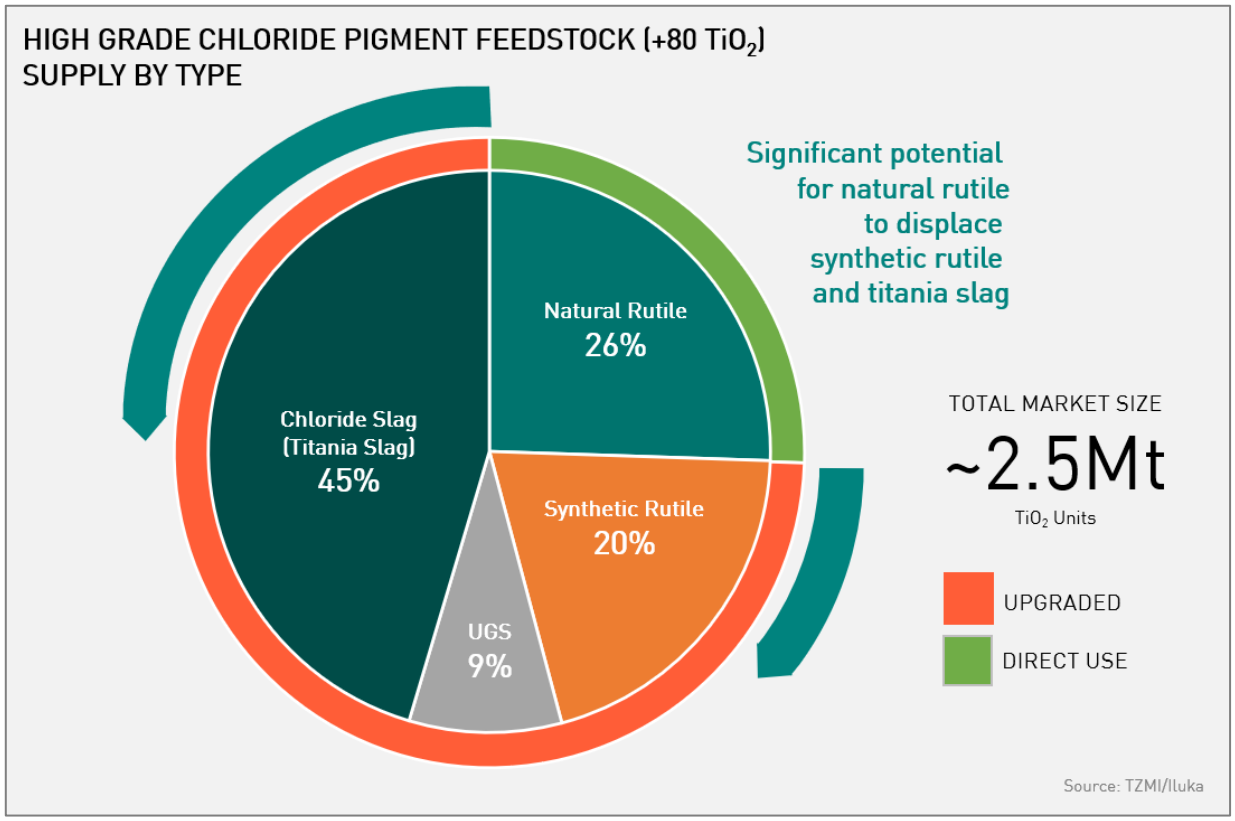

Figure 24: High-grade titanium feedstocks (+80% TiO2) by supply type
(Source: TZMI/Iluka, based on 2018 data).

The rutile market fundamentals continue to be robust with current and forecast pricing remaining very strong. In 2021, the market has rebounded strongly with pigment plant utilisation rates returning to pre-pandemic levels. Major producers have noted that very strong demand in the welding market is outstripping supply.

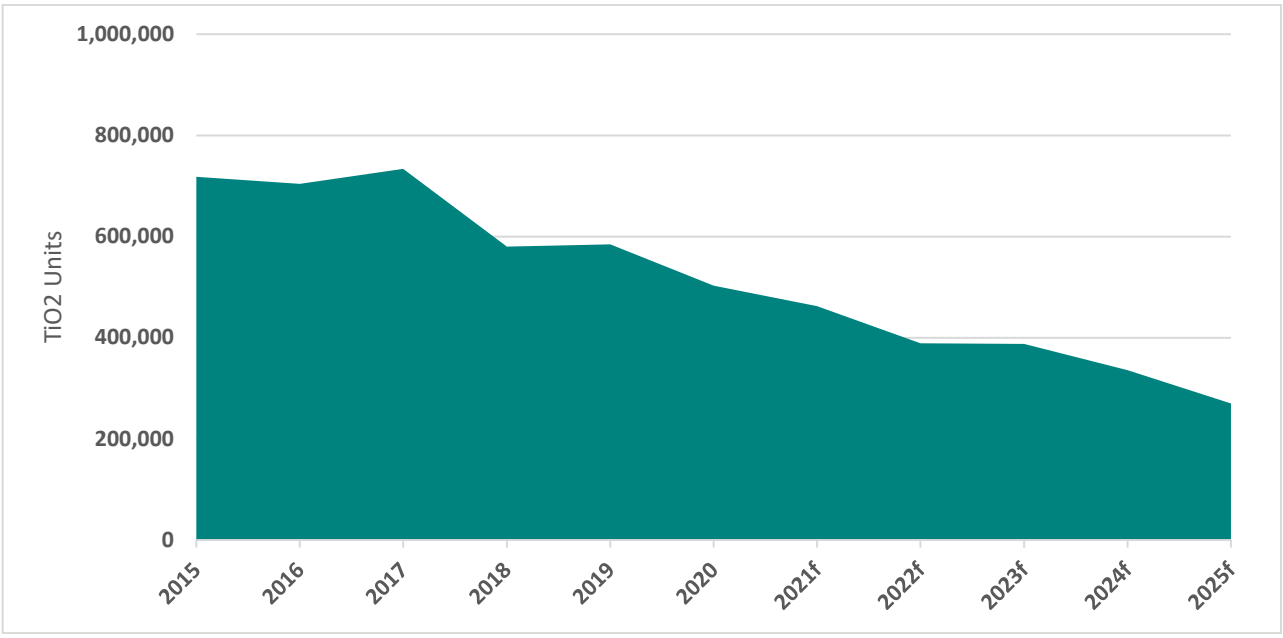

Figure 25: Actual and forecasted global rutile supply (source: TZMI).

A resurgence in demand for titanium pigment and from the welding sector combined with concurrent supply shortages has led the CIF China spot prices sharply upwards toward US$1,800 per tonne. In the quarter ended 30 June 2021, Iluka achieved rutile prices of US$1,224 per tonne with the majority of Iluka's sales under take-or-pay contracts.

As outlined in Section 6, the Company was able to achieve outstanding results from its bulk metallurgy program. On the basis of these premium chemical parameters, rutile produced from Kasiya should be suitable for all major natural end-use markets including titanium dioxide pigment feedstock, titanium metal and welding flux markets.

A full market assessment of various rutile product specifications for a range of end-use markets is planned as part of Sovereign's upcoming Scoping Study.

7 Exploration Program

Placer understands the Company's objective is to develop a large-scale, long life rutile operation that is environmentally responsible, sustainable and socially uplifting. Placer remains engaged with Sovereign in the work programs designed to deliver the following near and medium-term targets and developments:

- Resource infill and extension drilling to expand current resources and upgrade substantial areas from an Inferred to an Indicated category. This work is underway and planned for completion in Q4 2021. It includes:
  - Two core-drilling rigs have completed targeted infill drilling of high-grade areas within the Kasiya Inferred MRE. Additional data from this work are expected to deliver sufficient confidence to allow conversion of substantial areas of Inferred Resource to a JORC Indicated category; and
  - Step-out hand-auger drilling continues at Kasiya and Nsaru to expand the overall JORC resource with multiple drill teams mobilised across the Company's tenement package.
- The Kasiya Deposit Scoping Study is targeted for completion in late 2021 with multiple components well underway. These include:
  - Appointment of key team members, which includes a Study Manager and Technical Manager;
  - Mining method and pit optimisation studies which incorporate the MRE;
  - Tailings disposal design and methodology studies;
  - Process water investigations;
  - Continued metallurgical test-work now focused on variability;
  - Investigation of a potential graphite by-product; and
  - Commencement of the environmental and social impact studies.

8 Environmental Considerations

The company applies due consideration to the environmental disturbance created by ground disturbing operations as sighted in procedural documents and images. These include the following observations:

- Creation of pads placed to minimise disturbances and the impact on the environment and inhabitants.
- Drill-holes, trenches or any other excavations are immediately filled in, compacted and covered with topsoil to return the ground to its original condition.
- Any ridges or furrows that are flattened by equipment are returned to their original condition immediately once the drilling is complete so as not to create a disadvantage for the farmer.
- Disturbance allowance is always paid to farmers if any crop damage occurs.

9 Conclusion

The Kasiya Deposit represents an unconventional heavy mineral sand deposit, being a residual and eluvial concentration of high-quality Rutile. Rutile is a high-value, low-emissions source of Titanium Dioxide that is highly sought and in limited global supply, both current and projected. A coarse, flake-graphite is also evident in the lower saprolite and saprock zones and has been demonstrated to be separable as a by-product of the rutile processing operation.

The unique depositional setting and mineral assemblage has required the development of exploration and analysis methods, guided by the results of an extensive Quality Assurance program, that deliver meaningful results and allow the estimation of robust mineral resources, reported to the standards of the JORC Code, (2012 edition).

Average Slimes (minus 45µm) content of the dominantly saprolite-hosted Kasiya Deposit, reported in the MRE are high, at 48% and oversize (plus 5mm) is low at a little over 2%. Pilot-plant-scale test work has identified the separation of rutile is not detrimentally affected during the development of a conventional mineral sand separation flowsheet.

Resource extensions at Kasiya and in neighbouring deposits and prospects are anticipated, which will ensure the Central Malawi Project remains as one of the world's largest concentrations of high-quality Rutile. Malawi has proven to be a stable jurisdiction with an effective Mining Act. The availability of labour, transport options, process water and the attention to developing good community relations appear to place the Company in a favourable position to consider operational development.

A subsequent resource estimation campaign, scheduled for Q4, 2021, is expected to the conversion of a material portion of the 6.49 million tonnes of in-ground rutile to an Indicated level of confidence. The current Scoping Study will deliver a financial framework for the anticipated operation by the end of 2021.

10 Declarations

10.1 Independence

This report has been prepared independently and in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves ('the JORC Code'). The authors do not hold any interest in Sovereign Metals Limited, its associated parties, or in any of the mineral properties which are the subject of this report. Fees for the preparation of this report are being charged at Placer's standard consulting rates, while any expenses incurred during the course of this assignment are being reimbursed at cost. Payment of fees and expenses is in no way contingent upon the conclusions drawn in this report.

10.2 Material Change

Placer is not aware of any material change in any of the data used in this evaluation that would cause us to materially alter the estimates set forth herein.

11 Glossary

Abbreviation	Description
°C	Degrees Celsius
µm	Micrometre or Micron
AACE	American Association of Cost Engineering
AC	Air-core
ALS	ALS Metallurgical Laboratory
amsl	Above Mean Sea Level
ARD	Acid Rock Drainage
AS	Australian Standard
ASNZS	Australian and New Zealand Standard
ASX	Australian Stock Exchange
AUD	Australian Dollar
ave	Average
BCM	Bulk Cubic Meter
BOO	Build Own Operate
Capex	Capital Expenditure
CFR	Cost and Freight
CEAR	Central East African Railways
cm	Centimetre
CPR	Competent Persons Report
CRM	Certified Reference Material
CSR	Corporate Social Responsibility
d	Day
D	Discharge
d/y	Days Per Year
DAP	Delivered at Place
dB	Decibel
DD	Diamond-core Drilling
DFS	Definitive Feasibility Study
DL	Detection Limit
dmt	Dry Metric Tonne
DRA	DRA Pacific
EAD	Environmental Affairs Department (of Malawi)
EAP	Employee Assistance Program
EBITDA	Earnings Before Interest, Taxes, Depreciation And Amortisation
EHS	Environment, Health, And Safety
EIA	Environmental Impact Assessment
EL	Exploration Licence
EMP	Environmental Management Plan
EPC	Engineering, Procurement, Construction
EPCM	Engineering, Procurement & Construction Management
ERP	Emergency Response Plan
ESIA	Environmental And Social Impact Assessment
ESR	Environmental Scoping Report
FEED	Front End Engineering And Design
FEL	Front End Loader
FOB	Free on Board
FS	Feasibility Study
G&A	General & Administration
GEL	Generally Expected Levels
GHG	Greenhouse Gas(es)
GISTM	Global Industry Standards on Tailings Management
h	Hour
h/d	Hours Per Day
h/y	Hours Per Year

Abbreviation	Description
HA	Hand-auger
ha	Hectare
HR	Human Resources
HRMP	Human Resources Management Plan
HSE	Health, Safety and Environment
HSEMS	Health Safety and Environmental Management System
HSMP	Health and Safety Management Plan
HV	High Voltage
IBC	Intermediate Bulk Container
ICP-MS	Inductively Coupled Plasma Mass Spectrometer
ICP-OES	Inductively Coupled Plasma Optical Emission Spectrometry
ID	Internal Diameter
IDW	Inverse-Distance Weighted Algorithm
IFC	International Finance Corporation
IRR	Internal Rate of Return
IT	Information Technology
IUCN	International Union for Conservation of Nature
IVI	Important Value Index
J	Joule (Energy)
JECFA	Joint FAO/WHO Expert Committee on Food Additive
JHA	Job Hazard Analysis
JORC	Australasian Joint Ore Reserves Committee
k	Kilo or Thousand
kg	Kilogram
km	Kilometre
KPI	Key Performance Indicator
KRW	Korean Won
kt	Kilo Tonne (Thousand Metric Tonne)
kW	Kilowatt (Power)
kWh	Kilowatt Hour
L	Litre
LCT	Locked Cycle Testwork
LME	London Metals Exchange
LoM	Life of Mine
LSE	London Stock Exchange
LTI	Lost Time Injury
LV	Low Voltage
m	Metre
M	Million
m2	Square Metre
m3	Cubic Metre
Ma	Mega annum (million years)
MCC	Motor Control Centre
MG	Mine Gate
ML	Metal Leaching
mm	Millimetre
MNREM	Ministry of Natural Resources, Energy and Mining
MPA	Maximum Potential Acidity
MPN	Most Probably Number (Count of Coliforms and E. coli)
MRA	Malawi Revenue Authority
MRE	Mineral Resource Estimate
mRL	Metre Reduced Level
MRMR	Mining Rock Mass Rating
Msal	Meters Above Sea Level
MSDS	Material Safety Data Sheet
Mt	Million Tonnes (Metric)

Abbreviation	Description
Mt/y	Million Tonnes Per Year
MTI	Medical Treatment Injury
MTO	Material Take-Off
MW	Megawatt
N/A	Not Applicable
NA	Not Available
NAF	Non-Acid Forming
NAG	Net Acid Generation
NAPP	Net Acid Producing Potential
ND	Not Detected
NOH&SC	National Occupational Health and Safety Commission (Australia)
NPI	Non Process Infrastructure
NPV	Net Present Value
NR	Not Regulated
NT	Near Threatened
NTU	Normalised Turbidity Unit
OHS&E	Occupational Health, Safety & Environment
PEA	Preliminary Economic Assessment
PFD	Process Flow Diagram
PFS	Pre-Feasibility Study
PPE	Personal Protective Equipment
PS	Performance Standard
PSU	Practical Salinity Unit
PWTP	Potable Water Treatment Plant
QA/QC	Quality Assurance And Quality Control
RAP	Resettlement Action Plan
ROM	Run-Of-Mine
RRT	Resource Rent Tax
s	Second
SG	Specific Gravity
SGS	SGS Metallurgical Laboratory
SO2	Sulphur Dioxide
SOP	Standard Operating Procedure
ST	Total Sulphur
SVM	Sovereign Metals Limited
t	Tonne (Metric)
t/h	Tonnes Per Hour
t/m3	Tonnes Per Cubic Metre
t/y	Tonnes Per Year
ta	Comminution Test Parameter
TARP	Trigger, Action, Responsibility, Procedure
TBC	To Be Confirmed
TC	Total Carbon
TC	Treatment Charge
TDS	Total Dissolved Solids
TGC	Total Graphitic Carbon
TSF	Tailings Storage Facility
TSP	Total Suspended Particulates
TSS	Total Suspended Solids
UFD	Utility Flow Diagram
UOM	Unit of Measure
URTI	Upper Respiratory Tract Infection
US EPA	The United States Environmental Protection Agency
US$	United States Dollar
USD	United States Dollar
UTM	Universal Transverse Mercator

Abbreviation	Description
V	Volt
VAT	Value Added Tax
VSD	Variable Speed Drive
VTEM	Versatile Time Domain Electromagnetic
VU	Vulnerable
w/v	Weight/Volume
w/w	Weight/Weight
WBG	World Bank Group
WBS	Work Breakdown Schedule
WHO	World Health Organization
XRD	X-Ray Diffraction
XRF	X-Ray Fluorescence

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