

17 November 2021



## SOVEREIGN TO DUAL LIST ON AIM

*Sovereign Metals Limited (the Company or Sovereign) is pleased to announce it is in the process of dual listing on the AIM market of the London Stock Exchange (AIM) to extend the Company's exposure in the northern hemisphere.*

The Company has lodged its Pre-admission announcements for the Company's ordinary shares to trade on AIM (AIM Admission). Allowing for the required 20 business day notice period, it is anticipated that the Company will be admitted to AIM on or about 14 December 2021 with an AIM ticker code of SVML. The Company's ordinary shares will continue to be listed and trade on the ASX as normal.

As part of the dual listing, the Company's current London-based Director, Mr Ben Stoikovich will take the role of Non-Executive Chairman and Mr Ian Middlemas will become Non-Executive Director. These changes will become effective at Admission on AIM.

RFC Ambrian Limited (RFC Ambrian) has assisted with the dual listing process and is the Company's nominated adviser and Optiva Securities has been appointed as the Company's broker.

Further information, including the AIM Pre-admission announcements, are included below and will be available on the Company's website.

### **Sovereign's Managing Director Dr Julian Stephens commented:**

*"We are really pleased to be listing on the AIM Market which will provide exposure of our globally significant rutile discovery to new capital markets. The Company is looking forward to presenting the initial Kasiya Scoping Study before the end of the year to both current and new investors."*

### **ENQUIRIES**

Dr Julian Stephens (Perth)  
Managing Director  
+61(8) 9322 6322

Sam Cordin (Perth)  
+61(8) 9322 6322

Sapan Ghai (London)  
+44 207 478 3900

<b>ANNOUNCEMENT TO BE MADE BY THE AIM APPLICANT PRIOR TO ADMISSION IN ACCORDANCE WITH RULE 2 OF THE AIM RULES FOR COMPANIES (“AIM RULES”)</b>
COMPANY NAME:
Sovereign Metals Limited
COMPANY REGISTERED OFFICE ADDRESS AND IF DIFFERENT, COMPANY TRADING ADDRESS (INCLUDING POSTCODES) :
Level 9, 28 The Esplanade Perth WA 6000 Australia
COUNTRY OF INCORPORATION:
Australia
COMPANY WEBSITE ADDRESS CONTAINING ALL INFORMATION REQUIRED BY AIM RULE 26:
<a href="http://www.sovereignmetals.com.au">www.sovereignmetals.com.au</a>
COMPANY BUSINESS (INCLUDING <u>MAIN COUNTRY OF OPERATION</u> ) OR, IN THE CASE OF AN <u>INVESTING COMPANY</u> , DETAILS OF ITS <u>INVESTING POLICY</u> ). IF THE <u>ADMISSION</u> IS SOUGHT AS A RESULT OF A REVERSE TAKE-OVER UNDER RULE 14, THIS SHOULD BE STATED:
<p>Sovereign Metals Limited (“Sovereign” or “the Company”) is developing the Kasiya Rutile Project (“Kasiya”) in their Malawi Rutile Province located in Malawi, Southeast Africa. The project, which is Sovereign’s near-term focus, has delineated Inferred Resources of 644Mt at 1.01% rutile (0.7% rutile cut-off) including a high-grade component of 137Mt at 141% rutile (1.2% rutile cut-off) and is on track to release a scoping study in late 2021. Sovereign’s graphite projects in Malawi include Malingunde, where Resources and Reserves under the JORC Code (2012 edition) have been previously delineated supporting a 2018 prefeasibility study (and updated per the DRA competent persons report on the Company’s website). The Company’s senior management are based in Perth, Western Australia and the Company’s shares are listed on the Australian Securities Exchange (“ASX”).</p> <p>The Company’s activities and assets are more fully described in announcements and documents available on the Company’s website and on the ASX’s website (available at <a href="http://www.asx.com.au">www.asx.com.au</a>), and in competent person’s reports prepared by Placer Consulting Pty Ltd and DRA Global available on the Company’s website.</p>
DETAILS OF SECURITIES TO BE ADMITTED INCLUDING ANY <u>RESTRICTIONS AS TO TRANSFER</u> OF THE SECURITIES (i.e. where known, number and type of shares, nominal value and issue price to which it seeks admission and the number and type to be held as treasury shares):
<p>As at the date of notification the Company has 423,357,327 fully paid ordinary shares of no par value that will be admitted to AIM. There are no restrictions as to transfer of the securities.</p> <p>No shares are held as treasury shares.</p>
CAPITAL TO BE RAISED ON ADMISSION (AND/OR SECONDARY OFFERING) AND ANTICIPATED MARKET CAPITALISATION ON ADMISSION:

The Company does not intend to raise any capital prior to or concurrent with admission to AIM.

The market capitalisation on Admission is expected to be approximately A\$280 million (being approximately GBP£150 million).

**PERCENTAGE OF AIM SECURITIES NOT IN PUBLIC HANDS AT ADMISSION:**

19.6%

**DETAILS OF ANY OTHER EXCHANGE OR TRADING PLATFORM TO WHICH THE AIM SECURITIES (OR OTHER SECURITIES OF THE COMPANY) ARE OR WILL BE ADMITTED OR TRADED:**

The Company's ordinary shares are listed for trading on the ASX – ticker SVM

**FULL NAMES AND FUNCTIONS OF DIRECTORS AND PROPOSED DIRECTORS (underlining the first name by which each is known or including any other name by which each is known):**

Mr Benjamin Rade Stoikovich - *Non-Executive Chairman*  
Dr Julian Rodney Stephens – *Managing Director*  
Mr Ian Peter Middlemas – *Independent Non-Executive Director*  
Mr Mark Laurence Pearce - *Independent Non-Executive Director*

The board composition set out above is as will be the case on Admission. Currently Mr Ian Middlemas holds the role of Independent Non-Executive Chairman and Mr Ben Stoikovich holds the role of Non-Executive Director.

**FULL NAMES AND HOLDINGS OF SIGNIFICANT SHAREHOLDERS EXPRESSED AS A PERCENTAGE OF THE ISSUED SHARE CAPITAL, BEFORE AND AFTER ADMISSION (underlining the first name by which each is known or including any other name by which each is known):**

	Before and After Admission
<u>Sprott</u> Inc	10.19%
<u>Arredo</u> Pty Ltd <sup>1</sup>	3.80%
Mr <u>Mark</u> Stuart Savage	3.49%
Dr <u>Julian</u> Stephens	3.15%

Arredo Pty Ltd is an entity holding interests of Mr Ian Middlemas, a Director of the Company

**NAMES OF ALL PERSONS TO BE DISCLOSED IN ACCORDANCE WITH SCHEDULE 2, PARAGRAPH (H) OF THE AIM RULES:**

No persons to be disclosed in accordance with Schedule 2, Paragraph (H) of the AIM Rules.

- (i) ANTICIPATED ACCOUNTING REFERENCE DATE  
(ii) DATE TO WHICH THE MAIN FINANCIAL INFORMATION IN THE ADMISSION DOCUMENT HAS BEEN PREPARED (this may be represented by unaudited interim financial information)  
(iii) DATES BY WHICH IT MUST PUBLISH ITS FIRST THREE REPORTS PURSUANT TO AIM RULES 18 AND 19:

- (i) 30 June  
(ii) n/a  
(iii) 31 March 2022 (interim accounts for the 6 months ending 31 December 2021)  
31 December 2022 (accounts for the year ending 30 June 2022)  
31 March 2023 (interim accounts for the 6 months ending 31 December 2022).

<b>EXPECTED ADMISSION DATE:</b>
14 December 2021
<b>NAME AND ADDRESS OF NOMINATED ADVISER:</b>
RFC Ambrian Limited Octagon Point 5 Cheapside London EC2V 6AA United Kingdom
<b>NAME AND ADDRESS OF BROKER:</b>
Optiva Securities Limited 49 Berkeley Square Mayfair London W1J 5AZ United Kingdom
<b>OTHER THAN IN THE CASE OF A QUOTED APPLICANT, DETAILS OF WHERE (POSTAL OR INTERNET ADDRESS) THE ADMISSION DOCUMENT WILL BE AVAILABLE FROM, WITH A STATEMENT THAT THIS WILL CONTAIN FULL DETAILS ABOUT THE APPLICANT AND THE ADMISSION OF ITS SECURITIES:</b>
n/a
<b>THE CORPORATE GOVERNANCE CODE THE APPLICANT HAS DECIDED TO APPLY</b>
As a result of its listing on the ASX, the Company complies with Australian corporate governance standards, including the ASX Corporate Governance Council's " <i>Corporate Governance Principles and Recommendations, 4<sup>th</sup> Edition</i> "
<b>DATE OF NOTIFICATION:</b>
16 November 2021
<b>NEW/ UPDATE:</b>
New
<b>QUOTED APPLICANTS MUST ALSO COMPLETE THE FOLLOWING:</b>
<b>THE NAME OF THE <u>AIM DESIGNATED MARKET</u> UPON WHICH THE APPLICANT'S SECURITIES HAVE BEEN TRADED:</b>
The Company's ordinary shares are listed for trading on the ASX – ticker SVM
<b>THE DATE FROM WHICH THE APPLICANT'S SECURITIES HAVE BEEN SO TRADED:</b>
22 January 2007
<b>CONFIRMATION THAT, FOLLOWING DUE AND CAREFUL ENQUIRY, THE APPLICANT HAS ADHERED TO ANY LEGAL AND REGULATORY REQUIREMENTS INVOLVED IN HAVING ITS SECURITIES TRADED UPON SUCH A MARKET OR <u>DETAILS OF WHERE THERE HAS BEEN ANY BREACH:</u></b>
The Directors of the Company confirm following due and careful enquiry, that as at the date of this Announcement, the Company has adhered to all legal and regulatory requirements involved in having their securities traded on the ASX and has not been in breach.



AN ADDRESS OR WEB-SITE ADDRESS WHERE ANY DOCUMENTS OR ANNOUNCEMENTS WHICH THE APPLICANT HAS MADE PUBLIC OVER THE LAST TWO YEARS (IN CONSEQUENCE OF HAVING ITS SECURITIES SO TRADED) ARE AVAILABLE:

[www.sovereignmetals.com.au](http://www.sovereignmetals.com.au)

DETAILS OF THE APPLICANT'S STRATEGY FOLLOWING ADMISSION INCLUDING, IN THE CASE OF AN INVESTING COMPANY, DETAILS OF ITS INVESTING STRATEGY:

Following Admission, the Company will continue its strategy as set out below.

The objective of the Group is to create long-term shareholder value through the discovery, development and acquisition of technically and economically viable mineral deposits.

To date, Sovereign has not commenced production of any minerals. To achieve its objective, the Company currently has the following business strategies and prospects over the medium to long term:

- Complete a Scoping Study to establish a cost profile and determine the potential economics of the Kasiya rutile project;
- Conduct further exploration programs across rutile targets identified on the Company's tenements; and
- Continue to examine other new business development opportunities in the resources sector, both locally and overseas..

A DESCRIPTION OF ANY SIGNIFICANT CHANGE IN FINANCIAL OR TRADING POSITION OF THE APPLICANT, WHICH HAS OCCURRED SINCE THE END OF THE LAST FINANCIAL PERIOD FOR WHICH AUDITED STATEMENTS HAVE BEEN PUBLISHED:

Subsequent to 30 June 2021, the Company issued 2,160,500 ordinary shares upon the conversion of options, raising \$380,250.

There are no other matters or circumstances which have arisen since 30 June 2021 that have significantly affected or may significantly affect:

- the operations, in financial years subsequent to 30 June 2021 of the Group;
- the results of those operations, in financial years subsequent to 30 June 2021 of the Group; or
- the state of affairs, in financial years subsequent to 30 June 2021 of the Group.

A STATEMENT THAT THE DIRECTORS OF THE APPLICANT HAVE NO REASON TO BELIEVE THAT THE WORKING CAPITAL AVAILABLE TO IT OR ITS GROUP WILL BE INSUFFICIENT FOR AT LEAST TWELVE MONTHS FROM THE DATE OF ITS ADMISSION:

The Directors of the Company have no reason to believe that the working capital available to the Company will be insufficient for at least twelve months from the date of its Admission.

DETAILS OF ANY LOCK-IN ARRANGEMENTS PURSUANT TO RULE 7 OF THE AIM RULES:

All Directors, applicable employees for the purpose of Rule 7 of the AIM Rules, and related parties, whose interests in Shares and Options are detailed in Section 10 of the Appendix to this Schedule One **Error! Reference source not found.**, have undertaken to RFC Ambrian and the Company, in accordance with Rule 7 of the AIM Rules, not to dispose of any interest that they have in the Company's securities (including any securities which they may subsequently acquire within 12 months of Admission) for a period of 12 months from

Admission except in the very limited circumstances allowed by the AIM Rules and as set out below.

It should be noted that certain Company Directors, Applicable Employees for the purpose of Rule 7 of the AIM Rules, and related parties, Julian Stephens, Ben Stoikovich, Mark Pearce, Dylan Browne, Sam Cordin, Reidwel Nyrienda and Sapan Ghai (collectively the "Exception Parties") have or are likely to have:

- Option positions in the Company, a material number of which expire during the period of 12 months from Admission, thereby posing cash flow implications to the Exception Parties as the exercise of these Options requires significant personal cash resources; and/or
- Performance Rights in the Company, a material number of which are expected to vest during the period of 12 months from Admission, thereby posing cash flow implications to the Exception Parties as their vesting triggers income tax liabilities.

Accordingly, under the terms of the lock-in arrangements the Exception Parties are permitted to sell only the minimum number of Shares needed to realise sufficient proceeds in order to fund the total cost of exercising said Options and/or to realise sufficient proceeds in order to meet the income tax liabilities that would crystallise as applicable..

The Company has no other "related parties" or "applicable employees", as defined in the AIM Rules, who would be required to enter into a lock-in agreement.

**A BRIEF DESCRIPTION OF THE ARRANGEMENTS FOR SETTLING THE APPLICANT'S SECURITIES:**

To settle the securities to be traded on AIM, the Company has applied for Depository Interests, representing its ordinary shares, to be admitted to CREST with effect from Admission. Accordingly, settlement of transactions in the Depository Interests following Admission will take place within the CREST system. CREST is a voluntary system and shareholders who wish to have them held outside of CREST will have their details recorded on the Company's share register maintained in Australia. Settlement on the ASX will continue to be conducted under the ASX's electronic CHES system.

Further details are provided in the Appendix to this Schedule One.

**A WEBSITE ADDRESS DETAILING THE RIGHTS ATTACHING TO THE APPLICANT'S SECURITIES:**

[www.sovereignmetals.com.au](http://www.sovereignmetals.com.au)

**INFORMATION EQUIVALENT TO THAT REQUIRED FOR AN ADMISSION DOCUMENT WHICH IS NOT CURRENTLY PUBLIC:**

The Appendix to this Schedule One contains, inter alia, information equivalent to that required for an Admission Document which is not already public. All other public information is available at [www.sovereignmetals.com.au](http://www.sovereignmetals.com.au) and [www.asx.com.au](http://www.asx.com.au).

Detailed information on the Company's material assets is also set out in competent person's reports prepared by Placer Consulting Pty Ltd and DRA Global available on the Company's website.

**A WEBSITE ADDRESS OF A PAGE CONTAINING THE APPLICANT'S LATEST ANNUAL REPORT AND ACCOUNTS WHICH MUST HAVE A FINANCIAL YEAR END NOT MORE THAN NINE MONTHS PRIOR TO ADMISSION AND INTERIM RESULTS WHERE APPLICABLE. THE ACCOUNTS MUST BE PREPARED IN ACCORDANCE WITH ACCOUNTING STANDARDS PERMISSIBLE UNDER AIM RULE 19:**

[www.sovereignmetals.com.au](http://www.sovereignmetals.com.au)

The website contains the audited annual financial statements of the Company for the financial year ended 30 June 2021 and the unaudited interim accounts for the period ending 31 December 2020.

The financial report has been prepared in accordance with and complies with Australian Accounting Standards as issued by the Australian Accounting Standards Board (AASB) and International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board.

**THE NUMBER OF EACH CLASS OF SECURITIES HELD IN TREASURY:**

None

THIS DOCUMENT IS IMPORTANT AND SHOULD BE READ IN ITS ENTIRETY. If you are in any doubt about the contents of this document, you should consult an independent financial adviser authorised for the purposes of the Financial Services and Markets Act 2000 (as amended) who specialises in advising on the acquisition of shares and other securities if you are in the United Kingdom or, if you are not resident in the United Kingdom, another appropriately authorised independent financial adviser.



(Incorporated in Australia with Australian Business Number 71 120 833 427)

## APPENDIX TO PRE ADMISSION ANNOUNCEMENT FURTHER INFORMATION ON SOVEREIGN METALS LIMITED IN CONNECTION WITH ITS PROPOSED ADMISSION TO TRADING ON AIM

Nominated Adviser



Application will be made for the entire issued ordinary share capital of Sovereign Metals Limited ("Sovereign" or the "Company") to be admitted to trading ("Admission") on the AIM market operated by the London Stock Exchange plc ("London Stock Exchange"). It is expected that Admission will become effective and dealings in the ordinary shares of the Company will commence on AIM on 14 December 2021.

AIM is a market designed primarily for emerging or smaller companies to which a higher investment risk tends to be attached than to larger or more established companies. AIM securities are not admitted to the Official List of the United Kingdom Listing Authority.

A prospective investor should be aware of the risks of investing in such companies and should make the decision to invest only after careful consideration and, if appropriate, consultation with an independent financial adviser.

Each AIM company is required pursuant to the AIM Rules for Companies to have a nominated adviser. The nominated adviser is required to make a declaration to the London Stock Exchange on admission in the form set out in Schedule Two to the AIM Rules for Nominated Advisers.

The London Stock Exchange has not itself examined or approved the contents of this document.

### *Directors Declaration*

The Directors of the Company, whose names appear on page 5 of this document, and the Company, accept responsibility both individually and collectively for the information contained in this document and for compliance with the AIM Rules for Companies. Having taken all reasonable care to ensure that such is the case, to the best of the knowledge of the Directors and the Company, the information contained in this document is in accordance with the facts and when read in accordance with the Public Record (as defined below) makes no omission likely to affect the import of such information.

### *Information in Appendix and Public Record*

This Appendix has been prepared in accordance with Rule 2 of, and Schedule One (and its supplement for quoted applicants) of, the AIM Rules for a quoted applicant. It includes, inter alia, all information that is, under these rules, equivalent to that required for an admission document and which is not currently in the Public Record. Information which is in the Public Record includes, without limitation, all information filed with the Australian Securities Exchange (available at [www.asx.com.au](http://www.asx.com.au)) and all information available on the Company's website at [www.sovereignmetals.com.au](http://www.sovereignmetals.com.au). The information on the Company's website does not form part of the Announcement unless that information is incorporated by reference into the Announcement. The Public Record can be accessed freely. This Appendix should be read in conjunction with the 20 Day Schedule One Announcement Form made by the Company and the Public Record. This Appendix and the 20 Day Schedule One Announcement Form together constitute "the Announcement". A copy of this Appendix, which is dated 16 November 2021, will be available on the Company's Website, [sovereignmetals.com.au](http://sovereignmetals.com.au), from 16 November 2021.

### *Notice from Nominated Adviser and Broker*

RFC Ambrian Limited, a company incorporated in England and Wales ("RFC Ambrian"), and which is a member of the London Stock Exchange and authorised and regulated by the Financial Conduct Authority, is the Company's nominated adviser in connection with the proposed arrangements described in the Announcement. RFC Ambrian's responsibilities as the Company's nominated adviser, including a responsibility to advise and guide the Company on its responsibilities under the AIM Rules, are owed to the London Stock Exchange. RFC Ambrian is not acting for, and will not be responsible to, any other persons for providing protections afforded to customers of RFC Ambrian nor for advising them in relation to the proposed arrangements described in the Announcement.

Optiva Securities Limited, a company incorporated in England and Wales and which is a member of the London Stock Exchange and is authorised and regulated by the Financial Conduct Authority ("Optiva") is the Company's broker. Optiva is acting for the Company and no one else in connection with the proposed arrangements described in the Announcement. Optiva will not regard any other person as their customer nor be responsible to any other person for providing protections afforded to the clients of Optiva nor for providing advice to any other person in connection with the proposed arrangements described in the Announcement.

This document does not constitute an offer to sell or an invitation to subscribe for, or the solicitation of an offer to buy or to subscribe for, Shares.

An investment in the Company may not be suitable for all recipients of this document. Any such investment is speculative and involves a high degree of risk. Prospective investors should carefully consider whether an investment in the Company is suitable for them in light of their circumstances and the financial resources available to them. Attention is drawn in particular to the risk factors referred to in section 8 of this document.

This document contains forward looking statements. These statements relate to the Company's future prospects, developments and business strategy. Forward looking statements are identified by their use of terms and phrases, including without limitation, statements containing the words "believe", "anticipated", "expected", "could", "envisage", "estimate", "may" or the negative of those, variations or similar expressions including references to assumptions. Such forward looking statements involve unknown risk, uncertainties and other factors which may cause the actual results, financial condition, performance or achievement of the Company, or industry results to be materially different from any future results, performance or achievements expressed or implied by such forward looking statements. Given these uncertainties, prospective investors are cautioned not to place any undue reliance on such forward looking statements. These forward looking-statements speak only as at the date of this document. The Company disclaims any obligations to update any such forward looking statements in this document to reflect events or developments except as may be otherwise required by applicable securities laws.

No representation or warranty, express or implied, is made by RFC Ambrian as nominated adviser to Sovereign or Optiva as Broker to Sovereign, as to the contents of this Announcement and no liability is accepted by RFC Ambrian or Optiva for the accuracy or opinions contained in, or for the omission of any material information from the Announcement, for which the Company and the Directors are solely responsible.

## DEFINITIONS

"A\$"	Australian Dollars
"Admission"	Admission of the Shares to trading on AIM in accordance with the AIM Rules
"AIM"	The AIM market operated by the London Stock Exchange
"AIM Rules"	The AIM Rules for Companies published by the London Stock Exchange from time to time
"ASIC"	Australian Securities and Investments Commission
"Associates"	Persons and entities associated with an entity, as defined in section 12 of the Australian Corporations Act (in the context of provisions under the Australian Corporations Act), section 6 of the FATA (in the context of provisions under the FATA) and as defined in paragraph (c) of the definition of "related party" in the AIM Rules (in the context of the UK)
"ASX"	The Australian Securities Exchange operated by ASX Limited
"ASX Listing Rules"	The Listing Rules of the ASX and any other rules of ASX which are applicable while the Company is admitted to the official list of the ASX
"Australian Corporations Act"	The Corporations Act 2001 of the Commonwealth of Australia (as amended)
"Australian Registrar"	Computershare Investor Services Pty Ltd, a company incorporated in Australia
"Board" or "Directors"	The directors of the Company whose names are set out on page 6 of this document
"Broker"	Optiva Securities Limited
"CHESS"	The Clearing House Electronic Subregister System, being the system used to settle securities traded on the ASX
"City Code"	The UK City Code on Takeovers and Mergers published by the Panel on Takeovers and Mergers
"Company" or "Sovereign"	Sovereign Metals Limited, a company incorporated in Australia with Australian Business Number 71 120 833 427, and where the context allows, including the subsidiaries of the Company
Company Website	<a href="http://www.sovereignmetals.com.au/">www.sovereignmetals.com.au/</a>
"Competent Persons"	Placer and DRA
"Constitution"	The constitution of the Company at the date of this document
CPRs	competent person's reports prepared by Placer and DRA on the Company's material assets and available on the Company's website at <a href="http://www.sovereignmetals.com.au">www.sovereignmetals.com.au</a>
"CREST"	The system for paperless settlement of trades and holdings of uncertificated securities administered by Euroclear UK & International Limited in the UK
"Deed Poll"	The deed poll to be executed by the Depositary in favour of the holders of the Depositary Interests from time to time as summarised in Section 15.E of this Appendix
"Depositary"	The UK Registrar, or its nominee
"Depositary Agreement"	The agreement to be entered into by the Company and the Depositary appointing the Depositary as summarised in Section 15.D of this Appendix
"Depositary Interests"	The depositary interests representing Shares which may be traded through CREST in uncertificated form, details of which are set out in Section 5 of this Appendix
"DRA"	DRA Global Ltd, who have prepared a competent person's report on the Company's material graphite assets
"DTRs"	The Disclosure Guidance and Transparency Rules sourcebook made by the Financial Conduct Authority containing the Disclosure Guidance, the Transparency Rules, the Corporate Governance Rules and the rules relating to primary information providers
"FATA"	The Foreign Acquisitions and Takeovers Act 1975 of the Commonwealth of Australia (as amended)
"Group"	Includes Sovereign and its subsidiary companies
Indicated Resource	That part of a Mineral Resource for which quantity, grade (or quality), densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and

	evaluation of the economic viability of the deposit. Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes, and is sufficient to assume geological and grade (or quality) continuity between points of observation where data and samples are gathered
Inferred Resource	That part of a Mineral Resource for which quantity and grade (or quality) are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade (or quality) continuity. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes
JORC Code	The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (2012 Edition)
“Kasiya Project”	The Kasiya mineral sands project in Malawi, Southeast Africa being explored and evaluated by the Company, details of which are set out in Section 1 of this Appendix
“London Stock Exchange”	London Stock Exchange plc
“MAR”	the UK version of Regulation (EU/596/2014) of the European Parliament and of the Council on market abuse, which is part of UK law by virtue of the European Union (Withdrawal) Act 2018 and, where relevant, associated delegated legislation and guidance
Measured Resource	That part of a Mineral Resource for which quantity, grade (or quality), densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit. Geological evidence is derived from detailed and reliable exploration, sampling and testing gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes, and is sufficient to confirm geological and grade (or quality) continuity between points of observation where data and samples are gathered
Mineral Resource	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
“MWK”	Malawian Kwacha
“Nomad”	Nominated Adviser as defined in the AIM Rules (being RFC Ambrian)
“Options”	Options to subscribe for Shares
Optiva	Optiva Securities Limited, a company incorporated in England and Wales with registered number 3068464, acting as broker to the company
Ore Reserve	The economically mineable part of Measured and/or Indicated Mineral Resources
“PDMR”	person discharging managerial responsibilities
Performance Rights	Contractual rights to receive Shares in the future if certain conditions and/or performance hurdles are met
“Placer”	Placer Consulting Pty Ltd, who have prepared a competent person’s report on the Company’s material rutile assets
“Public Record”	Without limitation, all disclosures made by the Company to the ASX (available at <a href="http://www.asx.com.au">www.asx.com.au</a> ) and all information available on the Company’s website (available at <a href="http://www.sovereignmetals.com.au">www.sovereignmetals.com.au</a> as at the date of this document)
“RFC Ambrian”	RFC Ambrian Limited, a company incorporated in England and Wales with registered number 04236075, acting as Nomad to the Company
“Shareholders”	Holders of Shares from time to time
“Shares”	Fully paid ordinary shares of no par value in the capital of the Company
“Significant Shareholder”	As defined in the AIM Rules, includes a person who holds any legal or beneficial interest directly or indirectly in 3% or more of the Shares
“Substantial Shareholder”	As defined in the AIM Rules, includes a person who holds any legal or beneficial interest directly or indirectly in 10% or more of the Shares
“UK”	The United Kingdom of Great Britain and Northern Ireland

“USD”	United States dollar
“UK Registrar”	Computershare Investor Services plc, a company incorporated in England and Wales with registered number 03498808
VWAP	Volume Weighted Average Price
“£”	UK Pounds



## DIRECTORS, SECRETARY AND ADVISERS

<b>Directors on Admission</b>	Mr <u>Benjamin</u> Rade Stoikovich Dr <u>Julian</u> Rodney Stephens Mr <u>Mark</u> Laurence Pearce Mr <u>Ian</u> Peter Middlemas	<i>Non-Executive Chairman</i> <i>Managing Director</i> <i>Non-Executive Director</i> <i>Non-Executive Director</i>
<b>Company Secretary</b>	Mr Dylan Browne	
<b>Registered Office &amp; Principal Place of Business</b>	Level 9, 28 The Esplanade Perth WA 6000 Australia Ph: +61 (0) 8 9322 6322	
<b>Company Website</b>	<a href="http://www.sovereignmetals.com.au">www.sovereignmetals.com.au</a>	
<b>Nominated Adviser</b>	RFC Ambrian Limited Octagon Point 5 Cheapside London EC2V 6AA United Kingdom	
<b>Broker</b>	Optiva Securities Limited 49 Berkeley Square Mayfair London W1J 5AZ United Kingdom	
<b>Solicitors to the Company</b>	<i>In Australia</i> Thomson Geer Level 27, Exchange Tower 2 The Esplanade Perth WA 6000 Australia	<i>In the UK</i> CMS 1 West Regent Street Glasgow G2 1AP United Kingdom
<b>Malawi Title Opinion Lawyers</b>	William Faulkner William Faulkner House, Area 15/175 Ntcheu Street P. O. Box 30636 Lilongwe 3, Malawi	
<b>Competent Persons</b>	Placer Consulting Pty Ltd PO Box 110 Darlington WA 6070 Australia	DRA Global Limited 256 Adelaide Terrace Perth WA 6000 Australia
<b>Auditors</b>	Deloitte Touche Tohmatsu Level 7-9, Brookfield Place, Tower 2 123 St George's Terrace Perth WA 6000 Australia	
<b>Share Registry</b>	<i>In Australia</i> Computershare Investor Services Pty Ltd Level 11, 172 St Georges Terrace Perth WA 6000 Australia	<i>In the UK</i> Computershare Investor Services plc The Pavilions Bridgwater Road Bristol BS99 6ZZ United Kingdom

## EXPECTED TIMETABLE

All references to time in this document and in the expected timetable are to the time in London, United Kingdom, unless otherwise stated. Each of the times and dates in the table below are indicative only and may be subject to change.

<b>Publication of this Announcement</b>	16 November 2021
<b>Admission effective</b>	14 December 2021

## SHARE CAPITAL

<b>Issued share capital at Admission</b>	423,357,327
<b>ASX Ticker</b>	SVM
<b>AIM Ticker</b>	SVML
<b>ISIN Code</b>	AU000000SVM6
<b>LEI</b>	213800NSPXSASTENFQ34.
<b>SEDOL Number</b>	BN4LJ02

## 1. DESCRIPTION OF THE COMPANY'S BUSINESS

Sovereign Metals Limited ("Sovereign" or "the Company") is an ASX listed company developing the Kasiya Project in their Malawi Rutile Province located in Malawi, Southeast Africa. The Kasiya Project, which is Sovereign's near-term focus, has delineated Inferred Resources of 644Mt at 1.01% rutile (0.7% rutile cut-off) including a high-grade component of 137Mt at 141% rutile (1.2% rutile cut-off) and is on track to release a scoping study in late 2021. Sovereign's graphite projects in Malawi include Malingunde, where Resources and Reserves under the JORC Code (2012 edition) have been previously delineated supporting a 2018 prefeasibility study (and updated per the DRA CPR).

Following Admission, the Company will continue its strategy as set out below, with the objective of the Group being to create long-term shareholder value through the discovery, development and acquisition of technically and economically viable mineral deposits. To date, Sovereign has not commenced production of any minerals. To achieve its objective, the Company currently has the following business strategies and prospects over the medium to long term:

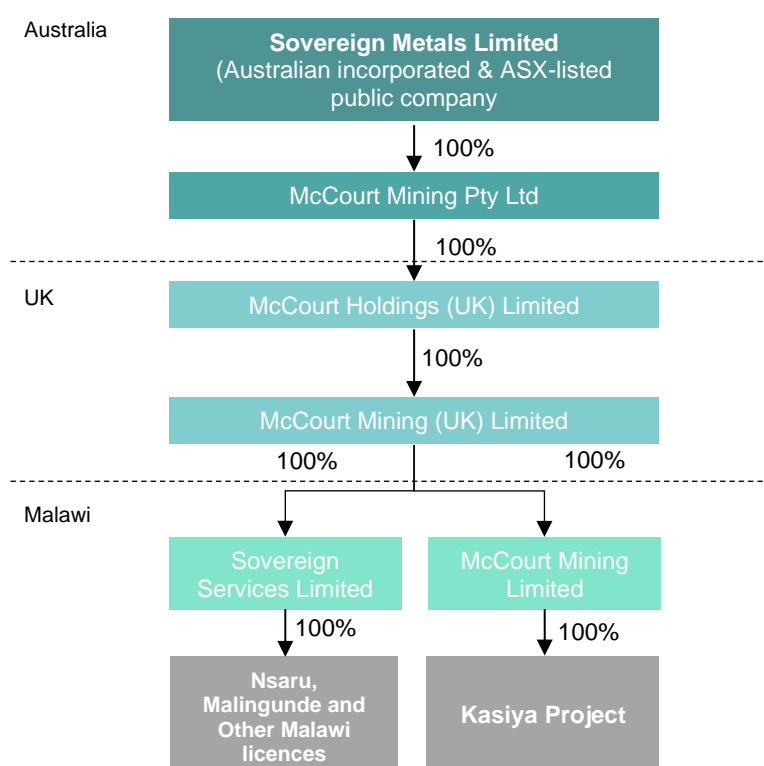
- Complete a Scoping Study to establish a cost profile and determine the potential economics of the Kasiya Project;
- Conduct further exploration programs across rutile targets identified on the Company's tenements; and
- Continue to examine other new business development opportunities in the resources sector, both locally and overseas.

The Company's activities and assets are more fully described in announcements and documents available on the Company's website, on the ASX's website (available at [www.asx.com.au](http://www.asx.com.au)), and in the CPRs.

## 2. INCORPORATION

The Company is domiciled in Australia and was incorporated and registered in Australia as an Australian public company limited by shares on 20 July 2006. The Company's Australian Business Number is 71 120 833 427. Sovereign was formed and operates under the Australian Corporations Act 2001 and is headquartered in Perth, Western Australia.

The simplified corporate structure of the Group underpinning its operations is as follows:



Note: Non-core and dormant subsidiaries excluded from the above diagram

Sovereign has the following subsidiaries:

Subsidiary	Country of Incorporation	Sovereign's Equity Interest (%)
McCourt Mining Pty Ltd <sup>(i)</sup>	Australia	100
Sovereign Cloncurry Pty Ltd <sup>(i)</sup>	Australia	100
Sovereign Mozambique Pty Ltd <sup>(i)</sup>	Australia	100
Sovereign Moçambique Limitada	Mozambique	100
Sovereign Zambia Pty Ltd <sup>(i)</sup>	Australia	100
Sovereign Metals (Zambia) Ltd	Zambia	100
Sovereign Coal Pty Ltd <sup>(i)</sup>	Australia	100
NGX Limited	Australia	100
NGX Graphite Pty Ltd	Australia	100
McCourt Mining Limited	Malawi	100
Sovereign Services Limited	Malawi	100
NGX Mining Limited	Malawi	100
NGX Exploration Limited	Malawi	100
McCourt Mining (UK) Limited	United Kingdom	100
McCourt Holdings (UK) Limited	United Kingdom	100
NGX Holdings UK Limited	United Kingdom	100
NGX Exploration UK Limited	United Kingdom	100
NGX Mining UK Limited	United Kingdom	100

Note: (i) Member of the tax consolidated group

### 3. AUSTRALIAN CORPORATIONS ACT

Below is a general description of the relevant corporate laws and policies in Australia. The law, policies and practice are subject to change from time to time and the description below should not be relied upon by Shareholders or any other person. It does not purport to be a comprehensive analysis of all the consequences resulting from holding, acquiring or disposing of Shares or interests in Shares. If you are in any doubt as to your own legal position, you should seek independent advice without delay.

The Company is obliged to comply with the Australian Corporations Act and also with specific obligations arising from other laws that relate to its activities.

The ASIC is responsible for administering and enforcing the Australian Corporations Act.

#### A. Takeovers

The Company is incorporated, is resident, and has its head office and central place of management, in Australia. Accordingly, transactions in Shares will not be subject to the provisions of the City Code. There are, however, provisions under Australian law and regulations applicable to the Company, particularly Chapter 6 of the Australian Corporations Act, that are, in part, similar or analogous to certain provisions of the City Code.

As an Australian public listed company, a takeover of the Company is governed by the Australian Corporations Act. The Australian Corporations Act contains a general rule that a person must not acquire a 'relevant interest' in issued voting shares of such a company as a result of a transaction in relation to securities entered into by or on behalf of the person if, because of the transaction, a person's voting power in the company:

- increases from 20 per cent or below to more than 20 per cent; or

- increases from a starting point which is above 20 per cent but less than 90 per cent.

Under the Australian Corporations Act, a person's "voting power" is defined in broad terms and includes any relevant interest in shares held by a person and their Associates.

Certain acquisitions of relevant interests are exempt from the above rule including, among others, acquisitions under takeover bids, acquisitions under a court approved compromise or arrangement, acquisitions approved by Shareholders, acquisitions that do not result in the person having voting power more than 3 per cent higher than that person had 6 months before the acquisition (so long as the person maintained voting power of at least 19 per cent during that 6 month period), and acquisitions that result from rights issues, dividend reinvestment schemes and issues to an underwriter or sub-underwriter.

If a person wishes to acquire more than a 20 per cent interest, or increase a holding which is already beyond 20 per cent (but less than 90 per cent), the person must do so under one of the exemptions (as noted above), which includes undertaking a takeover bid in accordance with the Australian Corporations Act.

A person who holds 90 per cent or more of the voting power in a company may conduct a compulsory acquisition of all remaining shares under the Australian Corporations Act. This ability to compulsorily acquire all remaining shares can arise following a takeover bid (if at least 75 per cent of the shares the subject of that takeover bid were accepted into the bid) or from a general compulsory acquisition power under the Australian Corporations Act. Separate from the concept of conducting a compulsory acquisition, if a person reaches this 90 per cent (or more) shareholding as a result of a takeover bid, then that person must make an offer to all minority shareholders to acquire their shares (giving them the option to accept that offer). The Australian Corporations Act also provides for circumstances in which other securities of a company (e.g. convertible securities) may be compulsorily acquired.

While not specifically related to takeovers, the Australian Corporations Act also provides protection to minority shareholders where the conduct of the company's affairs or an act or omission (including a resolution of members or a class of members) by a company is contrary to the interests of the members as a whole, or oppressive to, unfairly prejudicial to, or unfairly discriminatory against a member or group of members.

No person has made a public takeover bid for the Company's issued share capital since the Company was admitted to the official list of the ASX.

## **B. Substantial Shareholdings**

Under the Australian Corporations Act, in relation to a company, a person has a "substantial holding" if that person and that person's Associates have a relevant interest in 5 per cent or more of voting shares in the company or where the person has made a takeover bid for voting shares in the company and the bid period has started but not yet ended.

A person who:

- begins to have, or ceases to have, a substantial holding in a listed company;
- has a substantial holding in a listed company and there is movement by at least 1 per cent in their holding; or
- makes a takeover bid for securities of the listed company,

must give notice to the company and to the ASX. The contents of the notice are prescribed in the Australian Corporations Act, sections 671B(3) and (4).

As the Company is not incorporated in the UK, it is not subject to chapter 5 of the DTRs that apply to UK incorporated companies whose shares are admitted to trading on AIM and which require shareholders to make various notifications when they hold over 3 per cent of a company's issued shares. However, AIM listed companies not subject to the DTRs are required to use all reasonable endeavours to comply with AIM Rule 17 notwithstanding that the local law applicable to some AIM companies does not contain provisions that are similar to the DTR. In practice, the obligations contained in chapter 5 of the DTRs and AIM Rule 17 are similar. In addition to the substantial shareholding notification requirements (as detailed above), the Australian Corporations Act also contains provisions giving companies the power

to ask any registered holder(s), including nominee holders, to provide details of the identity of their underlying beneficial holders.

### **C. Foreign Investment**

In Australia, foreign investment in, and ownership of, companies and property is regulated by the *Foreign Acquisitions and Takeovers Act 1975* (Cth) ("FATA"), which is administered by The Treasury of the Australian federal government with assistance from the Foreign Investment Review Board ("FIRB"). FIRB's functions are advisory only, and responsibility for making decisions on proposals rests with the Treasurer of the Australian federal government ("Treasurer").

FATA provides for, among other things, a notification and approval process for proposed investments in Australia by "foreign persons" (individuals, corporations or trusts), which may result in foreign control or ownership of Australian businesses or companies. Generally, small proposals are exempt from notification (subject to some exceptions), and larger proposals which require notification are approved unless determined to be contrary to the Australian national interest. Under the FATA (and under the Australian government's broader foreign investment policy) the threshold requirements for notification vary according to the nature of the foreign investor (e.g. whether the foreign investor is privately or state owned), the nature and value of the business to be acquired and the aggregate Australian land holding of that business.

FATA generally provides that where:

- the Treasurer is satisfied a person proposes to acquire shares in a corporation which carries on an Australian business;
- the acquisition would result in the corporation being controlled by a foreign person; and
- the result would be contrary to the national interest,

the Treasurer may make an order prohibiting the acquisition.

A proposed acquisition of shares (unless an exempt dealing under FATA) will have the effect of a foreign person acquiring a controlling interest in an Australian corporation if one of the following applies:

- that person alone, or together with their Associates, directly or indirectly acquires 20 per cent or more of the shares or controls 20 per cent or more of the voting power (or potential voting power) in an Australian corporation; or
- that person, together with other foreign persons and each of their Associates, directly or indirectly acquires 40 per cent or more of the shares or controls 40 per cent or more of the voting power (or potential voting power) in an Australian corporation.

If a foreign person must give notice of a proposed acquisition to the Treasurer under FATA it must either await the decision of the Treasurer or allow for a prescribed period following notification to the Treasurer to lapse before entering into a binding agreement to acquire shares which will result in a foreign person acquiring a controlling interest in a corporation.

### **D. ASX Listing Rules**

As a company admitted to the official list of the ASX, the Company is bound to comply with the ASX Listing Rules, as amended from time to time. The ASX Listing Rules address such matters as Admission to listing, quotation of securities, continuous disclosure, periodic disclosure, certain requirements for terms of securities, issues of new capital, transfers of securities, disclosure of corporate governance practices, mining and exploration reporting requirements, escrow (lock-in) arrangements, transactions with related/controlling parties, significant transactions, shareholder meetings, trading halts and suspensions and fees payable. The ASX also publishes guidance notes regarding the interpretation of parts of the ASX Listing Rules.

The ASX Listing Rules and guidance notes can be found at [www.asx.com.au](http://www.asx.com.au).

## **4. SHARE CAPITAL**

All Shares are currently admitted to quotation on the ASX and trade under the ASX ticker "SVM". The Shares have been traded on the ASX since 22 January 2007 and are uncertificated.

The Company confirms that, following due and careful enquiry, it has adhered to the legal and regulatory requirements involved in having the Shares traded on the ASX.

Copies of all documents or announcements which the Company has made public over the last two years (in consequence of having its Shares listed for trading on the ASX) are available on the Company Website.

The International Securities Identification Number (ISIN) Code for the Shares is AU000000SVM6.

The Company, as at the date of this document, has in issue 423,357,327 Shares, a total of 20,714,500 Options and a total of 16,800,000 Performance Rights. The Shares were issued in A\$, have no par value and are recorded in the accounts of the Company at their issue price less expenses associated with their issue. Shareholders have no further liability in respect of their Shares. No Shares are held as treasury shares and there are no restrictions on the transfer of Shares.

The Company intends to make an application for all of its Shares to be admitted to trading on AIM. The Shares and Options that the Company expects to have on issue as at Admission are set out in the table below.

Shares	Number
Listed ordinary fully paid Shares	423,357,327
Options	Number
Unlisted Options exercisable at A\$0.14 on or before 30 June 2022	6,375,000
Unlisted Options exercisable at A\$0.18 on or before 30 June 2022	2,000,000
Unlisted Options exercisable at A\$0.50 on or before 09 April 2022	9,839,500
Unlisted Options exercisable at A\$0.18 on or before 31 July 2022	2,500,000
<b>Total Number of Options</b>	<b>20,714,500</b>

The Performance Rights that the company expects to have on issue at Admission are set out below.

Vesting Condition and Expiry	Number
Announcement of a positive Scoping Study – Expiry 31 December 2021	4,360,000
Announcement of a positive Feasibility Study – Expiry 31 December 2023	5,070,000
Announcement of a Decision to Mine (Malawi rutile) – Expiry 31 October 2025	7,370,000
<b>Total Number of Performance Rights</b>	<b>16,800,000</b>

No application is to be made for the unlisted Options to be listed on the ASX or any other market and no application is to be made for the unlisted Options to be admitted to trading on AIM. However, application will be made for any Share issued on exercise of any Option or upon conversion of any vested Performance Right to be listed on the ASX and admitted to trading on AIM.

#### A. Potential and/or Contingent Share, Option and Performance Rights Issues

In addition to the Shares, Options and Performance Rights tabled above, the Company has an Employee Equity Incentive Plan (“Plan”) which enables the Company to offer Performance Rights, Options, and Shares upon conversion or exercise of those Performance Rights and Options to be issued under the Plan to eligible Directors (excluding Mr Ian Middlemas and Mr Mark Pearce), employees and contractors. Details of the Plan are set out in the Company’s publicly available ‘Notice of AGM and Explanatory Memorandum’ dated 23 October 2020. The Company also intends to issue a separate tranche of 750,000 Performance Rights to director Mr Mark Pearce. The issue of these Performance Rights to Mr Pearce will be subject to shareholder approval, with details set out in the Company’s Appendix 3X announcement on ASX dated 21 May 2021 and ‘Notice of AGM and Explanatory Memorandum’ dated 15 October 2021.

Under the terms of an engagement letter dated 6 October 2021 between the Company and Optiva (also see Section 15.B), the Company has agreed to issue Optiva:

- broker warrants in the Company, equivalent in exercise value to 5% of the funds raised and introduced by Optiva in any fundraisings (“Exercise Value”), exercisable at the placing price and with a maturity of 3 years, and equivalent in number to the Exercise Value divided by the placing price;
- £30,000 broker warrants (the “Performance Warrants”), to be granted at time of Admission and exercisable at the higher of the Company’s closing share price after the first day of trading on AIM and the pound sterling equivalent of A\$0.50 for a period of 3 years (“Exercise Price”). The number of warrants is variable as it is calculated as the value (being £30,000) divided by the Exercise Price. 50% of the Performance Warrants shall only vest if the 5-day VWAP of the Company exceeds a 100% premium to the Exercise Price, and the remainder shall only vest if the 5-day VWAP of the Company exceeds a 200% premium to the Exercise Price. These warrants will expire after 3 years, regardless of whether they have vested.

Apart from the above, the Company has not (i) entered into any other agreements under which it has agreed, or (ii) is not otherwise considering plans, to issue any further securities as at the date of this Appendix.

## **B. Future Share Issue Restrictions**

The Company does not have an authorised share capital. There is generally no limit in the Australian Corporations Act or the Constitution on the power of the Directors to issue shares. In particular, the general concept under English law that existing shareholders have a statutory right (subject to certain exceptions) to be offered newly issued shares in a company for cash only before such shares can be offered to new investors does not apply to Australian companies unless it is specifically included in their constitution, which is not the case in respect of the Company. However, subject to certain exceptions (including those in respect of pro rata issues and issues under employee schemes):

- (a) ASX Listing Rule 7.1 prohibits a company which is listed on the ASX from issuing or agreeing to issue securities (including shares, options or performance rights) representing more than 15 per cent of its issued capital in any 12 month period without shareholder approval unless one of the exceptions set out in ASX Listing Rule 7.2 apply. Such shareholder approval requires an ordinary resolution passed by a simple majority;
- (b) ASX Listing Rule 7.1A allows a company listed on ASX and classified as an “eligible entity” to seek shareholder approval at its annual general meeting to issue further ASX listed securities (including shares, options or performance rights) representing no more than an additional 10 per cent of its issued capital in any 12 month period to that permitted by ASX Listing 7.1. Such shareholder approval requires a special resolution passed by a 75 per cent majority and for a company to be an “eligible entity” to utilise the additional 10 per cent placement capacity under ASX Listing Rule 7.1A, with the eligibility criteria being that the company must:
  - (i) have a market capitalisation of less than the prescribed amount (currently \$300 million); and
  - (ii) not be included in the S&P/ASX 300 Index.
- (c) ASX Listing Rule 10.11 prohibits a company which is listed on the ASX from issuing or agreeing to issue securities (including shares, options or performance rights) to certain persons including related parties (e.g. directors of the company) and substantial shareholders (being a shareholder who holds voting power of 30% or more in the company or a shareholder who holds voting power of 10% and who has nominated a director to the board of the company) without shareholder approval unless one of the exceptions set out in ASX Listing Rule 10.12 apply. Such shareholder approval requires an ordinary resolution passed by a simple majority;
- (d) As explained in Section 3 above, save in relation to certain exempt acquisitions, Chapter 6 of the Australian Corporations Act prohibits the acquisition of a “relevant interest” in voting shares in a company (whether by transfer or issue) if, as a result of the acquisition, the “voting power” of the acquirer (or any other person) would increase:
  - (i) from 20 per cent or below to more than 20 per cent; or
  - (ii) at all from a starting point which is above 20 per cent but less than 90 per cent; and
- (e) the Australian Corporations Act contains provisions governing the disclosure obligations of a company making an offer/issue of securities. The general rule is that an offer of securities must be



accompanied by disclosure to potential investors in a prescribed document (either a prospectus, a short form prospectus, a profile statement or an offer information statement) unless the type of offer falls within an exemption. Types of offers which do not require disclosure include offers to sophisticated investors and professional investors, offers to people associated with the company, certain offers to existing holders of securities and issues for no consideration.

Unless otherwise disclosed in this document or in the Public Record:

- (a) no Share of the Company has been issued or is now proposed to be issued, fully or partly paid, either for cash or for a consideration other than cash;
- (b) no Share of the Company is under option or is agreed conditionally or unconditionally to be put under option;
- (c) no commission, discount, brokerage or other special term has been granted by the Company or is now proposed in connection with the issue or sale of any part of the share capital of the Company;
- (d) no founder, management or deferred shares have been issued by the Company; and
- (e) no amount or benefit has been paid or is to be paid or given to any promoter of the Company.

## **5. ADMISSION, SETTLEMENT (CREST) AND DEALINGS**

To be traded on AIM, securities must be capable of transfer and settlement through the CREST system, a UK computerised paperless share transfer and settlement system, which allows shares and other securities, including depositary interests, to be held and transferred in electronic form rather than in paper form. The Australian equivalent of this system is called CHESS. Shares of non-UK companies cannot be held and transferred directly into the CREST system. For such foreign securities, in this case the Shares, to be effectively transferred and settled through CREST they need to be in the form of depositary interests.

The Company, through its UK Registrar, is establishing a facility whereby (pursuant to the Deed Poll) "Depositary Interests" will be issued by the UK Registrar (or its nominee), acting as "Depositary", to persons who wish to hold the Shares in electronic form within the CREST system. It is intended that the Company will apply for the Depositary Interests, to be settled in CREST with effect from Admission. Accordingly, settlement of transactions in Depositary Interests following Admission may take place within the CREST system if the relevant Shareholders so wish.

The Depositary Interests will be independent securities constituted under English law that may be held and transferred through CREST. Depositary Interests will have the same security code (ISIN) as the underlying Shares. The Depositary Interests will be created and issued pursuant to the Deed Poll, which will govern the relationship between the Depositary and the holders of the Depositary Interests. The terms of the proposed Deed Poll are summarised in Section 15.E of this Appendix.

Shares represented by Depositary Interests will be held on bare trust for the holders of the Depositary Interests. Each Depositary Interest will be treated as one Share for the purposes of determining eligibility for dividends, issues of bonus stock and voting entitlements. In respect of any cash dividends, the Company will put the Depositary in funds for the dividend and the Depositary will transfer the money to the holders of the Depositary Interests. In respect of any bonus stock, the Company will allot any bonus stock to the Depositary who will issue such bonus stock to the holder of the Depositary Interest (or as such holder may have directed) in registered form.

In respect of voting, the Depositary will cast votes in respect of the Shares as directed by the holders of the Depositary Interests which represent the relevant Shares.

Further information regarding the depositary arrangement and the holding of Shares in the form of Depositary Interests is available from the Depositary. The Depositary may be contacted at The Pavilions, Bridgwater Road, Bristol, BS99 6ZZ, United Kingdom or by telephone on +44 (0)370 702 0003.

The Shares will remain listed and traded on the ASX, with trades settled electronically on the Australian register through CHESS.

Shares held on the Australian register cannot be used to settle trades on AIM and similarly, Depositary Interests held on the UK Registrar's register cannot be used to settle trades on the ASX. However, subject to the relevant regulations, Shares held through CHESS on the Australian register may be transferred into Depositary Interests held through CREST on the UK Registrar's register and vice versa.

Shareholders wishing to undertake such a transfer will generally need to contact their broker and allow a reasonable time for the transfer to be effected. Furthermore, Shareholders will need to establish an account with a broker in the market to which they are transferring their Shares in order to trade their Shares on that market. The Company advises that under its Broker Engagement Letter with Optiva (see Section 15.B), Optiva will set up a facility to enable the transfer of ASX shares to AIM depository interests.

For further information concerning CREST, Shareholders should contact their brokers or Euroclear UK & International Limited at 33 Cannon Street, London, EC4M 5SB or by telephone on +44 (0)20 7849 0000.

## **6. LOCK-IN ARRANGEMENTS**

All Directors, applicable employees for the purpose of Rule 7 of the AIM Rules, and related parties, whose interests in Shares and Options are detailed in Section 10, have undertaken to RFC Ambrian and the Company, in accordance with Rule 7 of the AIM Rules, not to dispose of any interest that they have in the Company's securities (including any securities which they may subsequently acquire within 12 months of Admission) for a period of 12 months from Admission except in the very limited circumstances allowed by the AIM Rules and as set out below.

It should be noted that certain Directors, applicable employees for the purpose of Rule 7 of the AIM Rules, and related parties, Julian Stephens, Ben Stoikovich, Mark Pearce, Dylan Browne, Sam Cordin, Reidwel Nyrienda and Sapan Ghai (collectively the "Exception Parties") have or are likely to have:

- Option positions in the Company, a material number of which expire during the period of 12 months from Admission, thereby posing cash flow implications to the Exception Parties as the exercise of these Options requires significant personal cash resources; and/or
- Performance Rights in the Company, a material number of which are expected to vest during the period of 12 months from Admission, thereby posing cash flow implications to the Exception Parties as their vesting triggers income tax liabilities.

Accordingly, under the terms of the lock-in arrangements the Exception Parties are permitted to sell only the minimum number of Shares needed to realise sufficient proceeds in order to fund the total cost of exercising said Options and/or to realise sufficient proceeds in order to meet the income tax liabilities that would crystallise as applicable..

## **7. DIVIDEND POLICY**

The Directors anticipate that the Company will be focused on advancing the exploration and evaluation of the Kasiya Project during the 12-month period following Admission. Accordingly, the Company does not expect to declare any dividends during that period. Thereafter, it is the Directors' intention to pay dividends when profit, available cash flow and capital requirements allow and in accordance with the Company's strategy for growth. However, the Directors can give no assurance as to the payment of future dividends.

## **8. RISK FACTORS**

There are a number of risks which may have a material and adverse impact on the future operating and financial performance of Sovereign and the value of Sovereign securities, and, if any such risks materialise, an investor could lose all or part of its investment. These include risks that are general risks associated with any form of business and specific risks associated with Sovereign's business and its Kasiya Project in Malawi. Whilst many of these risk factors are largely beyond the control of Sovereign and its Directors, the Company will seek to mitigate these risks to the extent that the Directors consider appropriate for a company of the size and nature of Sovereign, where possible.

The Directors believe the following risks to be the most relevant and material to the Company. However, the list below is not an exhaustive list, nor is it an explanation of all the risk factors involved in investing in the Company and nor are the risks set out in any order of priority (save that those risks that the Directors believe to be specific to the Company are set out ahead of those risks they consider to be general). Further risks which are not presently known to the Directors, or that the Directors currently deem immaterial, may also have a material adverse effect on the business, financial condition, prospects and share price of the Company.

## **A. Specific Risks Relating to Sovereign's Business Activities**

### **i. Legislative changes, government policy and approvals**

Changes in government regulations and policies in Australia and in Malawi may adversely affect the financial performance of the Company. For example, the Company's capacity to explore and potentially exploit its mineral deposits may be affected by changes in government policy which are beyond the control of the Company.

### **ii. The Company's exploration properties may never be brought into production**

The exploration for, and development of, mineral deposits involves a high degree of risk. Few properties which are explored are ultimately developed into producing mines. To mitigate this risk, the Company will undertake systematic and staged exploration and testing programs on its mineral properties and, subject to the results of these exploration programs, the Company will then progressively undertake a number of technical and economic studies with respect to its projects prior to making a decision to mine. However there can be no guarantee that the studies will confirm the technical and economic viability of the Company's mineral properties or that the properties will be successfully brought into production.

### **iii. Operating history**

The Company is exploring and evaluating its Kasiya Project but has not to date conducted mining production operations. There can be no assurance that it can bring its Kasiya Project into production or operate it profitably. While the Company aims to generate working capital through future mining operations, there is no assurance that the Company will be capable of producing positive cash flow on a consistent basis or that any such funds will be available for further exploration and development programs.

### **iv. Resource and Reserve estimates**

Mineral Resource and Ore Reserve estimates are expressions of judgment based on knowledge, experience and industry practice. Estimates which were valid when originally calculated may alter significantly when new information or techniques become available. In addition, by their very nature, Mineral Resource and Ore Reserve estimates are imprecise and depend to some extent on interpretations, which may prove to be inaccurate. As further information becomes available through additional fieldwork and analysis, the estimates are likely to change. This may result in alterations to development and mining plans which may, in turn, adversely affect the Company's future operations.

There can be no guarantee, and Shareholders should not assume, that:

- anticipated tonnages and grades of ore will be achieved during production or, even if they could be, that they will be sufficient to sustain a profitable mining operation; or
- there will not be significant increases in costs in contractors, labour, plant, materials or utility charges (or the availability of any of these) in a manner that will adversely impact on anticipated capital, development or operating costs.

### **v. Operating risks**

The current and future operations of the Company, including exploration, appraisal and possible production activities may be affected by a range of factors, including:

- adverse geological conditions;
- limitations on activities due to seasonal weather patterns and cyclone activity;
- unanticipated operational and technical difficulties encountered in geophysical surveys, drilling and production activities;
- mechanical failure of operating plant and equipment;
- industrial and environmental accidents, industrial disputes and other force majeure events;
- unexpected shortages or increases in the costs of labour, consumables, spare parts, plant and equipment; and
- inability to obtain necessary consents or approvals.

### **vi. Contractor and partner risks**

The development of the Kasiya Project by the Company depends significantly on the maintenance of good relationships with, the solvency of, and performance of its obligations by, its key consultants and contractors. It also relies on the maintenance of good relationships with regulatory and governmental departments. Failure to maintain these relationships may adversely impact the Company's performance.

#### **vii. Future capital requirements**

The exploration and any development of the Company's exploration properties will require substantial additional financing. Failure to obtain sufficient financing may result in delaying or indefinite postponement of exploration and any development of the Company's properties or even a loss of property interest. There can be no assurance that additional capital or other types of financing will be available if needed or that, if available, the terms of such financing will be favourable to the Company.

#### **viii. Dependence on key executives and personnel**

The Company's prospects depend in part on the ability of its executive officers, senior management and key consultants to operate effectively, both independently and as a group. To manage its growth, the Company must attract and retain additional highly qualified management, technical, sales and marketing personnel and continue to implement and improve operational, financial and management information systems. Investors must be willing to rely to a significant extent on management's discretion and judgement, as well as the expertise and competence of outside contractors.

### **B. General Risks Relating to Malawi and Australia**

#### **i. Malawi**

The Kasiya Project is located in Malawi, Africa. Malawi transitioned to a functioning democracy in 1994 and over subsequent period has been relatively peaceful and transparent, increasingly attracting international investment with significant potential for mining to contribute to the country's economic growth and development. It has however more recently elected a new leader following a period of turmoil after a disputed 2019 election that resulted in countrywide protests. It ranks among the world's least developed countries, typically experiences greater economic, social and political volatility than developed Western countries, and there is therefore a higher degree of geo-political risk associated with doing business there. As a result, the Company's future operations in Malawi may be impacted by:

- potential difficulties in enforcing agreements and collecting receivables through the local legal and regulatory systems;
- potential difficulties in protecting / enforcing rights and interests in assets, including changes in laws relating to foreign ownership and government or local partner participation rules;
- changes in government policies and procedures, including restrictive governmental actions, such as imposition of trade quotas, tariffs and other taxes, restrictions on the transfer / repatriation of funds and monetary policies;
- property ownership (including rights of access) in a foreign country is generally subject to the risk of expropriation or nationalisation with inadequate compensation;
- currency fluctuations, high inflation and deteriorating economic conditions; and
- civil unrest and industrial action, personal security issues, disease outbreaks, and social and religious conflict.

The likelihood of any of these risks eventuating, and their possible effects, if any, cannot be determined by the Company with any clarity at the present time, but they may include disruption, increased costs and, in some cases, total inability to establish or to continue to operate its current and future mineral sands exploration, development and production activities..

#### **ii. Australia**

Legal, tax and regulatory changes in Australia, where the Company is incorporated, may also impose additional financial obligations on the Company or otherwise adversely affect the value of the Company's assets and the financial position and performance of the Company.

### **C. General Resource Company Business Risks Relating to the Company**

#### **i. Title risk**

Minerals licences are granted subject to various conditions. Failure to comply with conditions may lead to forfeiture.

All of the mineral properties in which the Company has an interest will be subject to renewal. If any of the mineral properties are not renewed for any reason, the Company may suffer damage through loss of opportunity to participate in advancement or development.

#### **ii. Environmental risks and regulations**

The Company's projects are subject to laws and regulations regarding environmental matters and the discharge of hazardous wastes and materials. As with all mining projects, these projects would be expected to have a variety of environmental impacts should development proceed.

The Company conducts its activities in an environmentally responsible manner and in accordance with applicable laws and industry standards. Areas disturbed by the Company's activities will be rehabilitated as required. However, there is always a risk of environmental damage arising from the Company's operations, including through accident, which may give rise to liabilities and costs for the Company, including through the imposition of fines and the potential for operations to be delayed, suspended or shut down.

#### **iii. Uninsured risks**

Insurance against all risks associated with mineral deposit exploration, evaluation, and potentially eventual mine development and operation is not always available or affordable. The Company intends to maintain insurance where it is considered appropriate for its needs. However, it may not be insured against all risks either because appropriate cover is may not be available or because the Directors may consider the required premiums to be excessive in the circumstances.

#### **iv. Risks associated with the need to maintain an effective system of internal controls**

There can be no assurance that the Company will be able to effectively manage its proposed growth plans, or that the Company's current personnel, systems, procedures and internal controls will be adequate to support the Company's future developments. Any failure of the Board to manage effectively the Company's growth and development could have a material adverse effect on its business, financial condition and results of operations. There is no certainty that all or, indeed, any of the elements of the Board's strategy will develop as anticipated.

#### **v. Litigation**

Whilst the Company currently has no outstanding material litigation, there can be no guarantee that the current or future actions of the Company will not result in litigation since the mining industry, as all industries, is subject to claims, both with and without merit. Defence and settlement costs can be substantial, even with respect to claims that have no merit. Owing to the inherent uncertainty of the litigation process, there can be no assurance that the resolution of any particular legal proceeding will not have a material effect on the Company's financial position or results of operations.

#### **vi. Volatility of mineral prices**

Future production, if any, from the Company's mineral properties will be dependent upon the price of rutile and other commodities being adequate to make these properties economic. The mining industry is competitive and there is no assurance that a profitable market for the sale of the products, if any, from the Kasiya Project would be sustained.

Mineral prices, including that of rutile, are subject to volatile price changes from a variety of factors outside the control of the Company including international economic trends, expectations of inflation, global and regional demand, currency exchange fluctuations, interest rates, global or regional consumption patterns, speculative activities and increased production due to improved mining and production methods or increased exploration.

#### **vii. Foreign exchange risk**

While Company's costs are currently principally denominated in Australian dollars the Group operates internationally and is exposed to foreign exchange risk arising from various currency exposures, primarily with respect to the USD and the MWK.

Foreign exchange risk arises from future commercial transactions and recognised assets and liabilities denominated in a currency that is not the entity's functional currency and net investments in foreign operations. The Group has not formalised a foreign currency risk management policy however it monitors its foreign currency expenditure in light of exchange rate movements. The functional currency of the subsidiary companies incorporated in Malawi is USD. All parent and remaining subsidiaries balances are in Australian dollars. The Group does not have any material exposure to foreign currency risk relating to MWK.

#### **viii. COVID-19 risks**

The global economic outlook is facing uncertainty due to the current COVID-19 pandemic, which has been having, and will likely continue to have, a significant impact on global capital markets, commodity prices and foreign exchange.

To date, the COVID-19 pandemic has not had any material impact on the Company's operations, however, any infections occurring on site at the Company's projects could result in the Company's operations being suspended and otherwise disrupted for an unknown period of time, which may have an adverse impact on the Company's operations as well as adverse implications on the Company's future cash flows, profitability and financial condition. Supply chain disruptions resulting from the COVID-19 pandemic and measures implemented by governmental authorities around the world to limit the transmission of the virus (such as travel bans and quarantining) may, in addition to the general level of economic uncertainty caused by the COVID-19 pandemic, also adversely impact the Company's operations, financial position and prospects.

Governmental or industry measures taken in response to COVID-19 may materially adversely impact the Company's operations and are likely to be beyond the control of the Company. To date, the measures imposed by Government or industry, including the restrictions in place as at the date of this Appendix, have not had a material adverse impact on the Company's operations. However, future measures imposed by Government or industry may affect the Company's ability to freely move people and equipment to and from exploration projects, which may cause delays or cost increases.

### **D. Share Ownership and Investment Risks**

#### **i. Share price volatility and share market risks**

Prospective investors should be aware that the value of an investment in the Shares may go down as well as up and that the market price of the Shares may not reflect the operating performance and underlying value of the Company. Investors may therefore realise less than, or lose all of, their investment.

The share prices of quoted companies, in particular mining and exploration companies, can be highly volatile and shareholdings may be illiquid. The price at which the Shares are quoted and the price which investors may realise for their Shares may be influenced by a large number of factors, some of which are specific to the Company and its operations and some of which may affect quoted companies generally. These factors include, without limitation:

- the operating performance of the Company and market expectations of future performance;
- changes in general economic conditions and outlook, including interest rates, inflation rates, exchange rates, commodity prices and the demand for, and supply of, capital;
- natural disasters, terrorism events and other hostilities and conflicts;
- changes in government policies, taxation and other laws;
- large purchases or sales of Shares by other investors;
- changes in investor sentiment towards particular market sectors and the equity markets in general; and
- other factors which are outside of the control of the Company.

Such factors also impact on the ability of the Company to raise further funds by the issue of further Shares or other securities in the Company. Neither Sovereign nor its Directors warrant the future performance of Sovereign or any return on investment in Sovereign.

## ii. Share trading liquidity and future sales of Shares

Although the Shares are already listed on the ASX and are to be admitted to trading on AIM, there is no guarantee that there will be a liquid market in the Shares on either AIM or the ASX in the future or that the price of Shares will increase. There may be relatively few buyers or sellers of Shares on the ASX or AIM at any given time. It may therefore be difficult, in certain circumstances, to achieve the prevailing market price for sales of Shares or to sell Shares at all, and to realise a return on investment in the Shares.

Although the Shares are to be admitted to trading on AIM, they will not be listed on the Official List of the London Stock Exchange (the "Official List"). An investment in securities traded on AIM may carry a higher degree of risk than securities quoted on the Official List.

## 9. RIGHTS ATTACHING TO SHARES AND POWERS OF THE COMPANY

A shareholding in the Company is held subject to the Constitution, which can be accessed on the Company's website at [www.sovereignmetals.com.au](http://www.sovereignmetals.com.au).

The Constitution contains provisions in relation to voting rights, dividends, issues of new securities, the transfer of Shares, meetings and notices, election of directors, the indemnification of directors and rights on winding up.

It should also be noted that as an ASX listed company, the requirements of the ASX Listing Rules override what may be contained in the Constitution. However, the Company is not aware of any areas of its Constitution which are inconsistent with the requirements under the ASX Listing Rules.

## 10. DIRECTORS', APPLICABLE EMPLOYEES' AND RELATED PARTIES' INTERESTS IN SHARE CAPITAL

As at the date of this document and as expected at Admission, the Directors and entities in which the Directors have a substantial interest hold 35,638,360 fully paid ordinary Shares, a total of 3,500,000 Options and 4,950,000 Performance Rights (none yet tested against their vesting conditions) in the capital of the Company representing 9.6% of the Company's fully diluted share capital assuming all Performance Rights vest and 8.8% if none of the Performance Rights vested. The percentage of Shares not held in public hands as at the date of this document and as expected at Admission is 19.6%, comprising the interests of Directors, the other parties subject to an AIM Rule 7 lock-in and substantial shareholders as defined by the AIM Rules.

As at the date of this document, the holdings of the Directors and any other PDMR of the Company, and their spouses, civil partner or children under the age of eighteen years, in the share capital of the Company or a related financial product referenced to the Shares: (i) which would be required to be notified by the Company pursuant to Article 19 of MAR under the Company's share dealing policy maintained under Rule 21 of the AIM Rules; or (ii) are holdings of a person connected (within the meaning of sections 252 to 254 of the UK Companies Act 2006 (as amended)) with a Director which would, if the connected person were a Director, be required to be disclosed under (i) above and the existence of which is known to, or could with reasonable due diligence be ascertained by, the Directors are as follows:

Name	Position on Admission	Shares Held	Options Held	Performance Rights Held
Mr Ian Middlemas	Independent Non-Executive Director	16,100,000 <sup>(1)</sup>	-	-
Dr Julian Stephens	Managing Director	13,317,518 <sup>(2)</sup>	2,000,000 <sup>(3)</sup>	3,000,000 <sup>(4)</sup>
Mr Benjamin Stoikovich	Non-Executive Chairman	2,150,000 <sup>(5)</sup>	1,500,000 <sup>(6)</sup>	1,200,000 <sup>(7)</sup>
Mr Mark Pearce	Independent Non-Executive Director	4,070,842 <sup>(8)</sup>	-	750,000 <sup>(9)</sup>
<b>Total</b>		<b>35,638,360</b>	<b>3,500,000</b>	<b>4,950,000</b>

1. The Shares held by Mr Middlemas are held indirectly through Arredo Pty Ltd of which Mr Middlemas is director and shareholder.
2. The Shares held by Dr Stephens are held indirectly through One Way Trust in which Dr Stephens has a beneficial interest.
3. The Options held by Dr Stephens are held indirectly through One Way Trust, in which Dr Stephens has a beneficial interest, and are unlisted and exercisable at A\$0.14 on or before 30 June 2022.
4. The Shares held by Dr Stephens are held indirectly through One Way Trust in which Dr Stephens has a beneficial interest.
5. The Shares held by Mr Stoikovich are held directly and indirectly, with 400,000 held directly, 1,500,000 held indirectly by Selwyn Capital Limited (in which Mr Stoikovich has a beneficial interest) and 250,000 held indirectly in Mr Stoikovich's UK Self Invested pension Plan.
6. The Options held by Mr Stoikovich are held indirectly through Selwyn Capital Limited in which Mr Stoikovich has a beneficial interest, and are unlisted and exercisable at A\$0.14 on or before 30 June 2022.
7. The Performance Rights held by Mr Stoikovich are held indirectly through Selwyn Capital Limited in which Mr Stoikovich has a beneficial interest.
8. The Shares held by Mr Pearce are held directly and indirectly with 820,000 held directly, 339,691 are held indirectly by Mr Mark Pearce and Mrs Natasha Pearce through the NMLP Family A/C (trustee and beneficial interest), 1,911,151 held indirectly through Apollo Group Pty Ltd (as a director and indirect shareholder) and 1,000,000 held indirectly through Crystal Brook Investments Pty Ltd (as director and beneficial interest).
9. Subject to shareholder approval, the Performance Rights in the Company have been offered to Mr Pearce (or his nominee)

The Company is committed to appointing an additional non-executive director, to be based in the UK, during the first calendar quarter of 2022.

## 11. ADDITIONAL INFORMATION ON THE DIRECTORS

Details of the Directors and their backgrounds can be found in the Company's Public Record.

The directorships and partnerships of the Directors, including of the Company and the Company's subsidiaries, held at present and within the five years preceding the date of this document are provided in the table below.

Name	Current Directorships/Partnerships	Past Directorships/Partnerships (within past 5 years)
Mr Ian Peter Middlemas (Aged 61)	Sovereign Metals Limited	Piedmont Lithium Ltd
	Peregrine Gold Limited	Waratah Rise Pty Ltd
	AEGM Pty Ltd	Latitude Energy (Services) Pty Ltd
	Apollo Minerals Limited	Latitude Energy Pty Ltd
	Arredo Pty Ltd	Cradle Resources Limited
	Berkeley Energia Limited	MMA Aust Pty Ltd
	Constellation Resources Limited	MT Phillips Exploration Pty Ltd
	Equatorial Resources Limited	OTC ACCM Pty Ltd
	Hartshorne Coal Mining Pty Ltd	OTC Mount Magnet Pty Ltd
	HCM Resources Pty Ltd	OTC Port Hedland Pty Ltd
	Salt Lake Potash Limited	Outback Network Pty Ltd
	Bald Eagle Resources Pty Ltd	Syntonic Limited
	IJM Foundation Pty Ltd	WCP Copper Pty Ltd
	Jedan Pty Limited	WCP Energy Pty Ltd
	Mineral Investments Pty Ltd	WCP Gold Pty Ltd
	Odyssey Gold Limited	WCP Phosphate Pty Ltd
	Paringa Resources Limited	PDZ (UK) Limited
	Petersview Pty Ltd	PD Co Holdings (UK) Limited
	NGX Limited	McCourt Holdings (UK) Limited
	Prairie Mining Limited	McCourt Mining (UK) Limited
Siti Investments Pty Ltd		
LIP Investments Limited		



Name	Current Directorships/Partnerships	Past Directorships/Partnerships (within past 5 years)
Dr Julian Rodney Stephens (Aged 49)	Sovereign Metals Limited Sovereign Services Limited McCourt Mining Pty Ltd McCourt Mining Limited McCourt Holdings (UK) Limited McCourt Mining (UK) Limited	Tate Minerals Pty Ltd HPAA Pty Ltd Coastal View Investments Pty Ltd North West Nickel Pty Ltd Nebula Resources Pty Ltd
Mr Mark Laurence Pearce (Aged 51)	Sovereign Metals Limited Apollo Group Pty Ltd NGX Limited Equatorial Resources (UK) Limited Bald Eagle Resources Pty Ltd Constellation Resources Limited Crystal Brook Investments Pty Ltd Equatorial (Africa) Pty Ltd Equatorial Exploration Pty Ltd Equatorial Resources Limited McCourt Mining Pty Ltd Mineral Investments Pty Ltd PDZ Holdings Pty Ltd Peregrine Gold Limited PGD (SC) Pty Ltd Prairie Mining Limited Roseberry Holdings Pty Ltd Sovereign Cloncurry Pty Ltd Sovereign Coal Pty Ltd Sovereign Mozambique Pty Ltd Sovereign Zambia Pty Ltd Trafalgar Mining Pty Ltd	Piedmont Lithium Ltd Apollo Minerals Limited Apollo Iron Ore No 2 Pty Ltd Apollo Iron Ore No 3 Pty Ltd Apollo Iron Ore Pty Ltd Southern Cross Lithium Pty Ltd Southern Cross LCT Pty Ltd Hartshorne Coal Mining Pty Ltd HCM Resources Pty Ltd Latitude Energy Pty Ltd Latitude Energy (Services) Pty Ltd Mt Philips Exploration Pty Ltd Montage Petroleum Pty Ltd NWS O&G Pty Ltd Odyssey Gold Limited Pacific Ore Exploration Pty Ltd Pacific Ore (WA) Pty Ltd Pacific Ore Mining Pty Ltd McCourt Mining (UK) Limited McCourt Holdings (UK) Limited PD Co Holdings (UK) Limited PDZ (UK) Limited Powersands Limited Salt Lake Potash Limited Southern Exploration Pty Ltd Syntonic Holdings Pty Ltd WCP Copper Pty Ltd WCP Energy Pty Ltd WCP Gold Pty Ltd WCP Phosphate Pty Ltd

Name	Current Directorships/Partnerships	Past Directorships/Partnerships (within past 5 years)
Mr Benjamin Rade Stoikovich (Aged 48)	Sovereign Metals Limited Prairie Mining Limited PDZ Holdings Pty Ltd PDZ (UK) Limited PD Co Holdings (UK) Limited PD Co sp z.o.o Karbonia S.A McCourt Holdings (UK) Limited McCourt Mining (UK) Limited McCourt Mining Limited Sovereign Services Limited Selwyn Capital Ltd ERI Bedwas Limited Arbitration Advisory Ltd Berkeley Exploration Limited NGX Exploration UK Limited NGX Mining UK Limited NGX Holdings UK Limited Apollo Minerals (UK) Limited Gemini Resources (Kroussou) Limited NGX Limited NGX Graphite Pty Ltd Mineral Investments Pty Ltd Windellama Super Pty Ltd	Windellama Capital Limited Karski sp z.o.o

Mr Middlemas was appointed as a non-executive director to the board of IHG Limited (“**IHG**”) on 03 Feb 2000. IHG subsequently changed its name to Smartworld Corporation Limited (“**SWC**”) on 30 Oct 2000. Mr Middlemas resigned as a director from SWC on 28 August 2001. On 5 Sep 2001 SWC was suspended from its official quotation on the ASX before being placed into voluntary administration on 12 September 2001. In January 2002, SWC entered into a deed of company arrangement with its creditors and subsequently changed its name to View Resources Ltd (“**VRE**”) on 14 March 2003. Following the restructuring of its business from a technology focus to exploration VRE was re-admitted to the official quotation on 23 April 2002.

Mr Middlemas has been a non-executive director to the Board of Salt Lake Potash Limited (“**SO4**”) since 21 January 2010 and its Chairman since 29 August 2014. On 29 July 2021, SO4 was voluntarily suspended from its official quotation on the ASX. On 19 October 2021, SO4 requested a suspension of trading in its securities on AIM. On 20 October 2021, Mr Martin Jones, Mr Thomas Birch and Mr Hayden White of KPMG Restructuring were appointed as Voluntary Administrators, and Mr Richard Tucker and Mr Craig Shepard of KordaMentha were appointed as Receiver and Managers, of SO4.

Mr Pearce was a Non-Executive director of Mustang Group Limited (“**MGL**”) which acquired a health/personal wellbeing company called The Metabolism Centre. Pursuant to the terms of the agreement, Mr Pearce resigned as a director of MGL and new management and directors were appointed in September 2003. MGL then changed its name to Metabolism Health Limited (“**MHL**”). In January 2004, MHL was placed into voluntary administration. In April 2004, MHL entered into a Deed of Company Arrangement with its creditors and in July 2004, MHL was released from external administration under the name M Health Limited.

Mr Pearce was a Non-Executive Director of Leisure and Gaming Corporation Ltd (“**LGC**”) in March 2000, a company that was establishing an online gaming business, with a view to undertaking an initial public offering and listing on the ASX. Following the establishment of LGC, substantial legislative restrictions were imposed on the industry by the Federal Government. LGC’s attempt to list on ASX was not successful and withdrawn, with LGC subsequently placed into liquidation in April 2003.

Other than as set out above, none of the Directors:

- (a) has any unspent convictions in relation to indictable offences; or
- (b) has been bankrupt or the subject of an individual voluntary arrangement, or has had a receiver appointed to the assets of such director; or
- (c) has been a director of any company which, while they were a director or within 12 months after they ceased to be a director, had a receiver appointed or went into compulsory liquidation, creditors voluntary liquidation, administration or company voluntary arrangement, or made any composition or arrangement with its creditors generally or with any class of its creditors; or
- (d) has been a partner of any partnership which, while they were a partner or within 12 months after they ceased to be a partner, went into compulsory liquidation, administration or partnership voluntary arrangement, or had a receiver appointed to any partnership asset; or
- (e) has had any public criticism by statutory or regulatory authorities (including recognised professional bodies); or
- (f) has been disqualified by a court from acting as a director of a company or from acting in the management or conduct of the affairs of any company.

## 12. DIRECTORS' SERVICE AGREEMENTS AND REMUNERATION

Details of the current remuneration arrangements for the Directors and their remuneration for the financial year ending 30 June 2021 are disclosed in the Remuneration Report included in the Company's Annual Report for the year ended 30 June 2021 which is available on the Company's website [www.sovereignmetals.com.au](http://www.sovereignmetals.com.au). Dr Stephens' employment contract has a rolling annual term and may be terminated by the Company by giving 3 months' notice. No amount is payable in the event of termination for neglect or incompetence in relation to the performance of duties. There are no termination notice periods or required payments, other than accrued fees and any expenses properly incurred, in relation to the employment of the remaining Directors.

The Directors are indemnified by the Company in accordance with the Constitution and deeds of indemnity, insurance and access between each Director, individually, and the Company.

Selwyn Capital Limited, a company associated with Mr Stoikovich is engaged under an agreement to provide consulting services to the Company, on a rolling 12-month term that either party may terminate with one month written notice. Apollo Group Pty Ltd, a company of which Mr Mark Pearce is a Director and beneficial shareholder is paid a monthly retainer fee of \$25,000 for the provision of serviced office facilities, administration services and additional consulting services. The agreement can be terminated by either party with one month's notice.

## 13. SIGNIFICANT SHAREHOLDERS

Subject to the limitations set out in Section 3.B, other than as tabled below, the Company is not aware of any holding (within the meaning of the AIM Rules) in its issued Share capital which would, as at the date of this document, represent three (3) per cent or more of the Company's issued Shares (a Significant Shareholder):

Shareholder	No. of Ordinary Shares Owned*	% of Fully Paid Ordinary Shares*
Sprott Inc.	43,138,641	10.19%
Arredo Pty Ltd	16,100,000	3.80%
Mr Mark Stuart Savage	14,781,118	3.49%
Julian Stephens	13,317,518	3.15%

\*Note: The above percentage holdings are on an undiluted basis based on the total issued fully paid share capital of 423,357,327 (as tabled in Section 4 of this document) which does not include any of the potential Shares that may be issued upon the exercise of the 20,714,500 Options on issue, the 16,800,000 Performance Rights on issue, or any of the potential new issues of Shares as set out in Section 4.

None of the Company's Significant Shareholders has voting rights that are different from the other Shareholders.

Save as disclosed in this Appendix or in the Public Record, the Directors are not aware of any person who either, at the date of this Appendix, or immediately following Admission, exercises or could exercise, directly or indirectly, jointly or severally, control over the Company.

The Directors are not aware of any arrangements in place or under negotiation which may, at a subsequent date, result in a change of control of the Company.

#### **14. TAXATION IMPLICATIONS FOR AUSTRALIAN AND UK RESIDENTS INVESTING IN SOVEREIGN**

The paragraphs below do not constitute tax advice and are intended as a general guide to the general Australian and UK taxation position of individual and corporate resident and non-resident Shareholders in relation to the payment of dividends by the Company and the future disposal of their Shares.

**The following comments are intended as a general guide to the Australian and UK tax implications only. This should not be a substitute for individual advice from an appropriate professional adviser and all Shareholders or prospective Shareholders are strongly advised to obtain their own professional advice on the tax implications of acquiring, owning and disposing of Shares based on their own specific circumstances.**

The comments are based on the law and understanding of the published practice of the tax authorities in Australia and the UK at the date of this document and do not take into account or anticipate changes in the taxation law or future judicial and administrative interpretations of the Australian and UK taxation laws. Current law and published practice are both subject to change at any time, possibly with retrospective effect.

##### **C. Australian Taxation**

An Australian resident taxpayer includes in Australian tax assessable income certain ordinary income and statutory income from Australian and foreign sources, may be entitled to a deduction for certain losses in respect of that income, must generally lodge an Australian income tax return and pays Australian income tax to the Australian Taxation Office on that net Australian taxable income at Australian resident taxpayer rates, with a tax free threshold.

A non-Australian resident taxpayer includes in Australian tax assessable income certain ordinary income and statutory income from Australian sources, may be entitled to a deduction for certain losses in respect of that income, must generally lodge an Australian income tax return and pays Australian income tax to the Australian Taxation Office on that net Australian taxable income at non-resident taxpayer rates, without a tax free threshold.

##### **iii. Taxation of future Share transactions**

###### **a. Australian resident Shareholders – General**

Australian resident Shareholders who acquire, hold and cease to hold Shares in the ordinary course of their business will hold their Shares as trading stock. These Shareholders will include profits from the disposal of their Shares in their Australian tax assessable income in the Australian income tax year in which they cease to hold those Shares. These Shareholders may value their trading stock of Shares at the end of an income year at its cost, market selling value or replacement value. The choice as to which valuation method to use varies as the value of closing trading stock directly affects the calculation of the assessable income of these Shareholders. Any difference between the value of their opening and closing trading stock value of Shares on hand for an income year will be brought to account as either Australian tax assessable income (in the case of an increase in the value of their trading stock of Shares on hand) or as a deduction from their Australian tax assessable income (in the case of a decrease) as at the end of each Australian income tax year the Shares are held as trading stock.

Australian resident Shareholders who acquire, hold and cease to hold Shares for the purpose of re-sale at a profit (but do not hold those shares as trading stock) will hold those Shares on revenue account. Australian resident Shareholders must include any profits made on ceasing to hold those Shares held

on revenue account in their Australian tax assessable income in the Australian income tax year in which the cease to hold those Shares.

Losses realised by Australian resident Shareholders who cease to hold Shares held as trading stock or on revenue account may be entitled to deduct the loss against their Australian tax assessable income in the Australian income tax year in which they cease to hold those Shares.

Australian resident Shareholders that hold their Shares on revenue account will concurrently hold those shares on capital account. All other Australian resident Shareholders will hold their Shares on capital account. These Australian resident Shareholders must consider the impact of Australian capital gains tax (CGT) rules on transacting in their Shares.

Australian resident Shareholders derive a capital gain on the disposal or other specified CGT event of Shares where the capital proceeds received or receivable exceeds the cost base of the Shares, unless the capital gain is disregarded or deferred by rollover.

Australian resident Shareholder incur a capital loss on the disposal or other specified CGT event of Shares where the capital proceeds received or receivable is less than the reduced cost base of the Shares, unless the capital loss is denied.

All capital gains and losses for the Australian tax year are offset to produce a net capital gain or loss. A net capital gain for an Australian tax year is included in the Australian resident taxpayer's assessable income and is subject to taxation in Australia. A net capital loss can only be used to offset other capital gains and cannot be used to offset ordinary income. Subject to satisfying certain continuity ownership requirements, net capital losses may generally be carried forward to future years to be deducted against future capital gains.

Australian resident Shareholders that hold shares on concurrent revenue account and capital account will calculate the tax in alternate ways and pay tax at whichever produces the greatest tax liability.

#### ***b. Non-Australian resident Shareholders – General***

Non-Australian resident Shareholders who acquire, hold and cease to hold Shares as trading stock or on revenue account may need to include profits from ceasing to hold those Shares in their Australian Tax assessable income on the same basis as that described above for Australian resident shareholders..

Non-Australian resident Shareholders who acquire, hold and cease to hold Shares on capital account would only be subject to Australian capital gains tax upon ceasing to hold their Shares where the following conditions are met:

- if the non-Australian resident Shareholders (together with their associates) held 10 per cent or more of the Company's issued capital at the time of or for any 12 month period in the 24 months preceding ceasing to hold the Shares; and
- at the time of ceasing to hold the Shares, more than 50 per cent of the market value of the assets of the Company are represented (either directly or indirectly) by real property interests situated in Australia or mining rights in respect of certain resources situated in Australia (indirect Australian real property (**IARP**)).

Australian double taxation agreements with the country applicable to the Non-Australian resident shareholder may provide relief from Australian taxation.

#### ***c. Capital gains tax discount***

Australian resident Shareholders that are qualifying individuals, the trustee of trusts or complying superannuation funds (and in some cases a life insurance company) may be entitled to the capital gains tax discount in relation to capital gains derived from ceasing to hold Shares, provided that the Shares were held for at least 12 months prior. If the capital gains tax discount applies, the amount of the capital gain will be reduced by 50 per cent (in the case of Shareholders who are individuals or trusts) and 33 1/3 per cent (in the case of complying superannuation funds and, in certain circumstances, life insurance companies). Shareholders that are companies (other than acting as a trustee) are not eligible for the capital gains tax discount.

Non-Australian resident Shareholders are not entitled to the capital gains tax discount in relation to capital gains derived from ceasing to hold shares acquired on or after 8 May 2012

**d. CGT Foreign Vendors Withholding**

Non-Australian Shareholders that acquire, hold and cease to hold Shares on capital account that are indirect Australian real property (IARP) with a market value of \$750,000 or more, the purchaser must withhold 12.5% capital gains tax from the capital proceeds and remit the amount to the Australian Taxation Office, unless exempt under a clearance certificate or valued at \$2,000,000 and excluded under a non-foreign declaration. When the Non-Australian Shareholder lodges an Australian income tax return in respect of that capital gain, the Australian Taxation Office will set-off the withheld amount and refund any amounts in excess of the Australian taxation liability.

**iv. Dividends**

An Australian resident company will pay Australian income tax on Australian taxable income at corporate tax rates and records a 'franking credit' for that tax. The company does not receive a deduction for any dividends paid to shareholders, but may allocate a franking credit to a dividend, which may be a tax-offset to the shareholder referable to the tax paid by the company.

Dividends paid to Shareholders out of after tax profits may be unfranked, partially franked or fully franked with that tax offset.

It should be noted that the definition of dividend for Australian tax purposes is broad and can include certain capital returns and off-market share buy-backs.

**a. Australian resident Shareholders - Non-corporate**

Australian resident non-corporate Shareholders will include dividends in their Australian tax assessable income for the period in which they receive the dividends.

The amount to be included in the Australian tax assessable income is the amount of the dividend plus the amount of the franking credit notified by the company (if any) and the grossed-up amount is used to calculate the tax payable.

Australian Resident non-corporate Shareholders who are individuals, trustees who are assessed on a resident beneficiary's share of income, complying superannuation funds, certain exempt institutions and certain life insurance companies may reduce the tax payable on that grossed up dividend to the extent of the franking credit tax offset in respect of the dividends.

Australian Resident non-corporate Shareholders who are trustees may distribute the dividends to the beneficiaries of the trust and the Australian resident beneficiaries who receive that flow-through dividend and franking credit (if any) calculate the tax payable on the dividends and may reduce the tax payable on that grossed up dividend to the extent of the franking credit tax offset in respect of the dividends. Australian Resident non-corporate shareholders who are a partnership will similarly distribute the dividends to the Australian resident partners who treat the dividend in a similar manner.

Australian resident non-corporate Shareholders (or flow-through dividend beneficiaries and partners) might receive a tax refund, if the franking credit tax offset in respect of the dividends exceeds the tax payable on their Australian taxable income. In the case of certain exempt institutions, a refund of the whole of the franking credit may be obtained.

Non-corporate Shareholders (or flow-through dividend beneficiaries and partners) will be liable to pay additional Australian income tax if the tax payable as a result of receiving the dividend exceeds the franking credits which are notified in respect to the dividend.

**b. Australian resident Shareholders – Corporate**

Australian resident corporate Shareholders will include the dividend in their assessable income in the year the dividend is paid.

The amount to be included in the Australian tax assessable income is the amount of the dividend plus the amount of the franking credit notified by the company (if any) and the grossed-up amount is used to calculate the tax payable.

Australian resident corporate Shareholders may reduce the tax payable on that grossed up dividend to the extent of the franking credit tax offset in respect of the dividends. This would result in no-further tax being paid by the Australian resident corporate shareholder to the extent that it is franked. A fully franked dividend should effectively be free of tax to an Australian resident corporate Shareholder.

Australian resident corporate Shareholders would record the franking dividend offset, and upon subsequent distribution of that dividend to the shareholder of that company, may allocate a franking credit to a dividend, which may be a tax-offset to the shareholder referable to the tax paid by the company. The shareholder of the company would be subject to tax in the way previously described.

Australian resident corporate Shareholders will have excess franking offsets if the total franking credits to which it is entitled for the year exceeds the income tax that it would have to pay for that year. Excess franking offsets of the Australian resident corporate Shareholders can be converted to a tax loss for the income year to prevent loss of the franking credits.

### ***c. Non-Australian resident Shareholders – General***

Non-Australian resident Shareholders do not include in Australia tax assessable income the amount of a fully franked dividend, which is, therefore, not subject to Australian tax.

An Australian resident company must withhold a final dividend withholding tax of 30% on unfranked dividend paid to foreign shareholders that are not conduit foreign income.

Partly franked and unfranked dividends paid to non-Australian resident Shareholders will generally be subject to an Australian final dividend withholding tax of 30% unless reduced under an Australian double tax agreement with the country applicable to the Non-Australian resident shareholder. The double taxation agreement may reduce the withholding tax rate to a rate range of between 5 per cent and 15 per cent depending on the country of residence of the non-Australian resident Shareholder.

Where the Australian resident company pays an unfranked dividend out of certain profits derived from non-Australian sources, the Company may declare a portion of the unfranked dividend to consist of conduit foreign income. Where this is the case, the portion of the unfranked dividend that consists of conduit foreign income will not be subject to Australian withholding tax and will not be subject to further Australian income tax in the hands of non-Australian resident Shareholders.

The franked part of a dividend paid to a non-Australian resident shareholder is not subject to withholding tax and again is not subject to further Australian income tax in the hands of non-Australian resident Shareholders

The non-resident trustee of a foreign trust is required to pay Australian income tax on any dividends not distributed to a beneficiary as if an individual.

Non-Australian resident Shareholders may be assessable for tax on any dividends in their country of residence. Non-Australian resident Shareholders may be able to reduce any foreign tax by a foreign tax credit under the domestic laws in their country of residence. They should consider the impact of dividends under their domestic tax regime.

### ***d. Other Australian Withholding Taxes***

Australian resident Shareholders will be required to provide their Tax File Number or Australian Business Number (as applicable) to the Australian resident company paying the dividend otherwise an amount (up to 46.5 per cent) could be withheld from unfranked dividends paid by the Company. The amount withheld will be credited against the Shareholder's Australian income tax liability. No amount should be withheld in respect of the franked part of a dividend.

The Australian resident trustee of an Australian trust is assessable on the income to which a non-resident beneficiary is presently entitled at corporate or foreign resident marginal tax rates. Where the trustee is liable to pay tax, the foreign beneficiary includes the amount in the beneficiary's assessable income and claims a credit for the tax paid and is entitled to a refund of any excess tax.

Every Australian person holding money due to a non-resident who derives Australian source income or capital gains must when required by the Australia Taxation Office pay the tax due and payable by the non-resident or becomes personally liable for the tax not withheld. The withholding obligation does not arise until the Australian Taxation Office issues the Australian person holding the money with a notice to withhold.

An Australian resident trustee of an Australian trust must withhold an amount (up to 46.5 per cent) of a distribution to an Australian resident beneficiary if the beneficiary has not notified the trustee of a Tax File Number to the Trustee.

#### **e. Australian Tax Avoidance Rules**

An Australian resident shareholder (or flow-through dividend beneficiaries and partners) that is not a 'qualified person' with a sufficient ownership and risk interest in the Share for at least 45-day or 90-day franking credit offset may be reduced (including to nil) for the Australian resident shareholder (or flow-through dividend beneficiaries and partners).

An Australian resident shareholder that undertakes a tax avoidance scheme by which Shares are sold on an ex-entitlement basis while retaining the entitlement to any franked dividend and then reacquiring a substantially identical parcel of shares on the ASX on a cum-dividend basis, the Australian Taxation Office may cancel the tax offset entitlement for any franking credit in relation to the shares sold and the shares acquired.

#### **v. Goods and Services Tax (GST) and stamp duty**

No Australian GST is payable on the supply of the Shares, being an input taxed financial supply.

State stamp duty is not payable on the acquisition or disposal of Shares in a public listed company.

### **D. UK Taxation**

#### *The Company*

The Company should have no liability in respect of United Kingdom (UK) corporation tax on the basis that it is expected that the Company will not carry on any activities or have any presence in the UK such that for UK corporation tax purposes it will not be regarded as either resident within the UK, nor carrying on a trade through a permanent establishment located in the UK, nor is it expected to receive income "arising in the UK" of such a type that it could fall within the scope of UK taxation regardless of the recipient's residency position (for example, rental income from UK property, or interest income arising in the UK).

#### *UK Shareholders*

The following paragraphs broadly outline the taxation position of Shareholders in the Company who are tax resident (and, if individuals, domiciled) in the UK for tax purposes. The statements are based on current UK tax legislation and HM Revenue and Customs published practice. The statements may be subject to change, including with retrospective effect. Furthermore, we can provide no assurances that the tax consequences contained in this summary will not be challenged by HMRC or will be sustained by a United Kingdom court if they were to be challenged. The statements may also not apply to certain classes of Shareholder such as individuals who acquire the shares in the course of employment, dealers, insurance companies and charities.

**The following paragraphs are intended as a general guide only and does not constitute tax advice. Each Shareholder's specific circumstances will impact on their taxation position. All Shareholders are recommended to obtain and to rely on their own taxation advice.**

**In particular, all Shareholders, including UK tax resident Shareholders are advised to consider the potential impact of any relevant double tax agreements on their shareholding.**

The statements apply only to Shareholders who are the beneficial owners of the Shares but are not applicable to all categories of Shareholders, and in particular are not addressed to:



- Shareholders who do not hold their Shares as capital assets;
- special classes of Shareholders such as traders, dealers in securities or currencies, broker-dealers, intermediaries, insurance companies, investment companies or collective investment schemes;
- Shareholders who hold Shares in connection with a trade, profession, vocation, office or employment carried on in the UK (whether through a branch or agency or otherwise);
- Shareholders who hold at least 10% of the voting power in the Company; or
- Shareholders who hold their Shares in a “tax wrapper” such as an individual savings account.

Such persons may be subject to special rules.

Except where indicated, the statements below in respect of the taxation of dividends and distributions and the taxation of chargeable gains only cover the principal UK tax consequences of holding Shares for holders who are resident in the UK for tax purposes although it should be noted that special rules, which are not covered, may apply to such holders of Shares who are not domiciled in the UK.

## vi. Taxation of capital gains

### a. UK resident Shareholders

#### Issue of Depositary Interests to Shareholders

UK Shareholders are not expected to be liable to UK capital gains tax (“UK CGT”) or corporation tax (“CT”) on chargeable gains as a result of the issue of Depositary Interests to Shareholders on the basis that such issue is not expected to result in a change in the beneficial ownership of the Shares and therefore should not give rise (or should not be treated as giving rise) to a disposal of the Shares.

#### Future disposals

A disposal or deemed disposal of Shares (including the Depositary Interests represented by them) by a UK Shareholder may, depending on the Shareholder’s particular circumstances and subject to any available exemption or relief give rise to a capital gain or allowable loss for the purposes of UK CGT, or, in the case of a UK resident corporate shareholder, the taxation of chargeable gains for CT purposes.

For Shareholders who are individuals subject to UK CGT, UK capital gains are currently chargeable at a rate of either 20 per cent or 10 per cent, depending on the individual’s total taxable income and gains, subject to certain reliefs and exemptions. The UK CGT annual exemption (which for tax year 2021/2022 is £12,300) will also be available to offset any chargeable gain (to the extent it is not otherwise utilised).

Individuals who are temporarily non-resident in the UK for UK CGT purposes at the date of disposal, may, on become resident for UK tax purposes in the UK again, be subject to capital gains tax in respect of gains realised on a disposal of Shares during their period of non-residence.

For corporations subject to UK CT on chargeable gains (which do not qualify for the substantial shareholdings exemption), any gain would be taxable at the rate applicable at the time of disposal (currently 19% increasing from 1 April 2023 to various marginal rates depending broadly on the profits of the company with a maximum rate of 25%), subject to the application of certain reliefs and exemptions.

## vii. Dividends

Dividends payable by the company may suffer withholding tax (“WHT”) (see Section 14(A)(ii)(d) - Non-Australian resident Shareholders – General). A holder of the Depositary Receipts in respect of the Shares is expected to be treated for UK tax purposes as the beneficial owner of the corresponding number of Shares. If a UK Shareholder receives an unfranked dividend on their Shares and Australian tax is withheld from the payment of the dividend, credit for the Australian tax may be available for set-off against any liability to UK CT or UK income tax on the dividends.

The credit would be limited to the lesser of (i) the WHT or (ii) the UK tax payable on the dividend. As the double tax agreement between the UK and Australia provides limits on the rate of withholding tax on

dividends which may be levied by Australia on dividends paid to beneficial owners who are resident in the UK, the UK tax credit relief may only be claimed up to the extent of such applicable treaty rate (although a double tax treaty claim may be available to mitigate Australian withholding tax suffered in excess of such rate).

**a. Individuals**

Any individual tax resident in the UK who holds Shares, will generally be within the charge to UK tax on income in respect of any dividends paid on the Shares. Those UK Shareholders who are within the charge to UK income tax will pay no tax on their cumulative dividend income in a tax year up to an annual dividend allowance (£2,000, for the 2021/2022 tax year). The rates of income tax on dividends received above the annual dividend allowance are currently (i) 7.5% for basic rate taxpayers; (ii) 32.5% for higher rate taxpayers; and (iii) 38.1% for additional rate taxpayers. It has been announced that each of these rates, other than the 0 per cent rate, will increase by 1.25% from April 2022. Dividend income that is within the dividend allowance counts towards an individual's basic or higher rate limits and will therefore affect the rate of tax that is due on any dividend income in excess of the annual dividend allowance. In calculating into which tax band any dividend income over the £2,000 allowance falls, savings and dividend income are treated as the highest part of an individual's income. Where an individual has both savings and dividend income, the dividend income is treated as the top slice.

**b. UK resident Company Shareholder**

UK Shareholders who are within the charge to UK corporation tax will be subject to UK corporation tax on any dividends on the Shares unless certain conditions for exemption are satisfied. The exemption is of wide application and such UK Shareholders will therefore ordinarily not be subject to UK corporation tax on the dividends received on the Shares. Accordingly, if the exemption applies, or such UK Shareholder otherwise does not suffer corporation tax on the dividend, no UK tax credit relief may be claimed.

**viii. UK stamp duty and stamp duty reserve tax ("SDRT")**

No UK stamp duty will be payable (i) in respect of a paperless transfer of Shares for which no written instrument of transfer is used; or (ii) on a written instrument of transfer of Shares if that transfer instrument is executed and retained outside the UK and does not relate to any property situated in the UK or to any other matter or thing done or to be done in the UK (which may include, without limitation, the involvement of UK bank accounts in payment mechanics).

Accordingly, no UK stamp duty is expected to be payable in respect of the transfer of the Shares into the CREST System, the issue of the Depositary Interests, or in respect of a later transfer of the Shares (including a related transfer of the Depositary Interests within the CREST System), on the assumption that no written instrument of transfer is used to effect any such transfers.

No UK SDRT should arise in respect of a transfer of the Shares provided that the Shares are not registered on a register that is kept in the United Kingdom. No UK SDRT should arise in respect of a transfer of the Depositary Interests within the CREST System as the Depositary Interests are expected to meet all the criteria set out for the SDRT exemption granted in the Stamp Duty Reserve Tax (UK Depositary Interests in Foreign Securities) Regulations 1999 (SI 1999/2383 as amended).

**Any person who is in any doubt as to their tax position or is subject to taxation in a jurisdiction other than Australia or the UK should consult an appropriate professional adviser as the tax legislation of the investor's Member State and that of Sovereign's country of incorporation, Australia, may have an impact on the income received from the securities.**

**15. MATERIAL CONTRACTS**

In addition to the agreements summarised in the Public Record, the following contracts, being either (i) material contracts entered into by the Company or its subsidiaries outside the ordinary course of business during the two years immediately preceding the date of this document which, in either case, are, or may be, material as of the date of this document or (ii) material contracts which are included within, or which relate to, the assets and liabilities of the Company or its subsidiaries whether in the ordinary course of business or not:

**A. Nomad Agreement**

An Admission Engagement letter dated 12 October 2020 and a Nomad Engagement letter dated 12 October 2021 between the Company and RFC Ambrian (the “Nomad Engagement Letters”), under the terms of which RFC Ambrian has agreed to act as Nomad for the Company in relation to the application for Admission and thereafter on an ongoing basis until terminated by either party providing 90 days’ notice. The Nomad Engagement Letters provide for an engagement fee, an upfront fee on publication of the Schedule One, a fee on Admission and an annual retainer, payable quarterly in advance, to be paid to RFC Ambrian Australia for its services. Additional fees for work outside of the scope will be set out in a separate engagement letter. The engagement letter also contains an indemnity and various undertakings from the Company in respect of, inter alia, compliance with all applicable regulations.

## **B. Broker Agreement**

An engagement letter dated 6 October 2021 between the Company and Optiva (“Broker Engagement Letter”), under the terms of which Optiva has agreed to act as the Company’s Broker in relation to the application for Admission and on an ongoing basis thereafter until terminated by either of the parties providing 3 months written notice, subject to a minimum term of 12 months from the date of the agreement. The engagement letter provides for:

- an annual retainer fee to be paid quarterly in arrears to Optiva for its services;
- a commission fee on funds raised and introduced by Optiva, including in the period of 12 months after termination by either party;
- a research fee for preparation of an Initiation of Coverage Note if requested by the Company;
- broker warrants in the Company, equivalent in exercise value to 5% of the funds raised and introduced by Optiva in any fundraisings (“Exercise Value”), exercisable at the placing price and with a maturity of 3 years, and equivalent in number to the Exercise Value divided by the placing price;
- £30,000 broker warrants (the “Performance Warrants”), to be granted at time of Admission and exercisable at the higher of the Company’s closing share price after the first day of trading on AIM and the pound sterling equivalent of A\$0.50 for a period of 3 years (“Exercise Price”). The number of warrants is variable as it is calculated as the value (being £30,000) divided by the Exercise Price. 50% of the Performance Warrants shall only vest if the 5-day VWAP of the Company exceeds a 100% premium to the Exercise Price, and the remainder shall only vest if the 5-day VWAP of the Company exceeds a 200% premium to the Exercise Price. These warrants will expire after 3 years, regardless of whether they have vested.

The Broker Engagement Letter contains an indemnity and various undertakings from the Company in respect of the services provided by Optiva.

## **C. Vendor Royalty Agreement**

As part of the acquisition of McCourt Mining Limited (“McCourt”) in November 2012, which held the licences that formed Sovereign’s entry into Malawi (licence EPL0355 and reconnaissance licence RL0416) (the “Transaction”), Sovereign agreed to pay a royalty to the project Vendors (“Vendor Royalty”) under the 2012 Share Sale Agreement (“2012 SSA”), even without the formal execution of the Royalty Agreement contained within the 2012 SSA (the “Royalty Agreement”). The Vendors included the Company’s current Managing Director, Dr Julian Stephens, who received a 25% relative interest in the Vendor Royalty. Dr Stephens was not yet a director of Sovereign however, only being appointed to Sovereign’s board on 22 January 2016.

Subsequently, the Company and its wholly owned subsidiaries McCourt Mining Pty Ltd, Sovereign Services Limited, and McCourt Mining Limited (collectively the “Grantor”) have executed the Royalty Agreement, which remains unchanged in all material aspects to that at the time of completion of the Transaction with the Vendors.

Key terms of the Vendor Royalty include:

- A 2% net mine gate royalty (being revenues minus mining and processing cash operating costs) to the Vendors from all products removed from all or any part of the Licences, whether or not subsequently beneficiated, processed or otherwise upgraded (collectively, “Product”)

- accruing from and be payable quarterly from the date of commercial production, and at all times thereafter for so long as the Product is produced;
- The royalty will be paid net of any deductions for any tax, duty, impost, charge or other withholding, subject to meeting certain administrative obligations; and
- The area over which the Royalty is granted is the exclusive prospecting license EPL0355 and reconnaissance license RL0146 and any other mining tenement or mining tenements which may be granted in lieu of or relate to the same ground as those licences (collectively, the “Licences”);

While the area covered by the Licences no longer aligns precisely with the Company’s current tenement package there remains significant overlap, including substantial parts of the Kasiya and Malingunde projects.

Should the Grantor relinquish, abandon or be obliged by law to surrender, the whole or any part of the Licences (“Dropped Area”), the Vendor Royalty will cease to apply to the Dropped Area for so long as the Grantor ceases to have an interest in the Dropped Area but will apply to any area which is subsequently re-applied for or otherwise acquired within the area of the Licences. Additionally, should the Grantor intend on surrendering any area of the Licences it must, as practicable, provide 30 days’ notice to the Vendors unless it intends nominating another party to apply for the surrendered area.

Typical clauses of assignment apply.

#### **D. Depositary Agreement**

The Company and the Depositary propose to enter into the Depositary Agreement, pursuant to which the Company will appoint the Depositary to constitute and issue from time to time, pursuant to the terms of the Deed Poll, the Depositary Interests.

Under that Depositary Agreement the Company will agree to pay the Depositary an annual fee of £6,000 (plus VAT if any) and to reimburse the Depositary for all out-of-pocket expenses provided that individual expenses of £1,000 or more are approved in writing and in advance by the Company. The Depositary’s maximum liability under the Depositary Agreement over any 12 month period will be capped at an amount equal to two times the Depositary’s fees earned in that 12 month period in respect of a single claim or in the aggregate. The parties are required to indemnify each other in certain circumstances. Neither party is liable to indemnify the other in respect of any loss arising from the fraud, negligence or wilful default of the other party or as a result of a breach by the other party of the Depositary Agreement. Upon completion of the initial period of five years, the appointment of the Depositary shall continue in force until terminated by either party giving the other not less than six months’ notice.

#### **E. Deed Poll**

The Deed Poll will be entered into by the Depositary and will contain certain provisions which will be binding upon the holders of Depositary Interests, including:

- a) the holders of Depositary Interests shall warrant that the Shares which are transferred or issued to the Depositary (or a custodian on behalf of the Depositary) are free and clear of all liens, charges, encumbrances or third party interests (other than the interests arising under a declaration of trust pursuant to the Deed Poll);
- b) the Depositary shall pass on to the holders of the Depositary Interests all rights and entitlements received by the Depositary or the custodian in respect of the underlying Shares;
- c) the Depositary shall be entitled to cancel Depositary Interests and treat the holder as having requested a withdrawal of the underlying securities in certain circumstances including where a holder of Depositary Interests fails to furnish to the Depositary such proof certificates or representations or warranties as to matters of fact, including the holder’s identity, as the Depositary deems necessary or appropriate;
- d) each holder of Depositary Interests will be liable to indemnify the Depositary and, where applicable, a custodian against all liabilities arising from or incurred in connection with the Deed Poll so far as they relate to the deposited property; and

- e) the Depositary may terminate the Deed Poll by giving 30 days' prior notice to the holders of the Depositary Interests. During such notice period holders shall be entitled to cancel their Depositary Interests and withdraw their deposited property and, if any Depositary Interests remain outstanding after termination the Depositary shall, among other things, deliver the deposited property in respect of the Depositary Interests to the relevant Depositary Interest holders or, at its discretion, sell all or part of such deposited property and request the removal of the relevant Depositary Interests from the CREST system. The Depositary shall, as soon as reasonably practicable thereafter, deliver the net proceeds of any such sale, after deducting any monies due to it, together with any other cash held by it under the Deed Poll pro rata to holders of Depositary Interests in respect of their Depositary Interests.

## 16. PAYMENTS RELATING TO MINERAL ASSETS

The schedule of mineral tenements disclosed in the Company's Annual Report for the year ended 30 June 2021 has undergone one change with EL0609, also 100% held, issued in substitute of EL0413. With regards to the acquisition of, or maintenance of its assets, Sovereign has made the following payments aggregating to over £10,000 to the Malawian government or regulatory authorities since its entry into Malawi in August 2012:

- £292,722 to the Ministry of Natural Resources, Energy and Mining.

## 17. LITIGATION

Other than as disclosed in this document or in the Public Record, the Company is not, and has not in the previous 12 months, been involved in any governmental, legal or arbitration proceedings, nor so far as the Directors are aware, are there any legal or arbitration proceedings active, pending or threatened by or against the Company which are having, may have or have had a significant effect on the financial position or profitability of the Company.

## 18. CORPORATE GOVERNANCE

As a result of its listing on the ASX, the Company has already established corporate governance practices and procedures and complies with the ASX Corporate Governance Council's 'Corporate Governance Principles and Recommendations – 4<sup>th</sup> Edition'.

Sovereign and the entities it controls believe corporate governance is important for the Company in conducting its business activities. The Board has adopted a suite of charters and key corporate governance documents which articulate the policies and procedures followed by the Company. These documents are available in the Corporate Governance section of the Company's website, [www.sovereignmetals.com.au](http://www.sovereignmetals.com.au). These documents are reviewed at least annually to address any changes in governance practices and the law.

The Company's 2021 Corporate Governance Statement, which is current as at 30 June 2021 and has been approved by the Board, explains how Sovereign complies with the ASX Corporate Governance Council's 'Corporate Governance Principles and Recommendations – 4<sup>th</sup> Edition' in relation to the year ended 30 June 2021. The Corporate Governance Statement is available in the Corporate Governance section of the Company's website, [www.sovereignmetals.com.au/corporate/corporate-governance](http://www.sovereignmetals.com.au/corporate/corporate-governance) and was lodged with ASX together with an Appendix 4G (also available at [www.sovereignmetals.com.au](http://www.sovereignmetals.com.au)) at the same time that the Company's Annual Report was lodged with ASX.

In addition to the ASX Corporate Governance Council's 'Corporate Governance Principles and Recommendations – 4<sup>th</sup> Edition' the Board has taken into account a number of important factors in determining its corporate governance policies and procedures, including the:

- relatively simple operations of the Company, which currently only undertakes mineral exploration and development activities;
- cost versus benefit of additional corporate governance requirements or processes;
- size of the Board;
- Board's experience in the resources sector;
- organisational reporting structure and number of reporting functions, operational divisions and employees;
- relatively simple financial affairs with limited complexity and quantum;
- relatively small market capitalisation and economic value of the entity; and

- direct shareholder feedback.

The Company currently operates a share dealing policy which applies to the Directors and certain employees of the Company. The Company has adopted, with effect from Admission, a revised share dealing policy for the Directors and employees of the Group which contains provisions appropriate for a company whose shares are admitted to trading on AIM (particularly relating to dealing during close periods in accordance with MAR) and the Company will take all reasonable steps to ensure compliance by the Directors and employees of the Group with such policy.

## 19. GENERAL

There are no other persons (excluding professional advisers otherwise disclosed in the Announcement and this Appendix or in the Public Record and trade suppliers) who have received, directly or indirectly, from the Company within the 12 months preceding the date of this document or with whom the Company has entered into contractual arrangements (not otherwise disclosed in this document or in the Public Record) to receive, directly or indirectly from the Company on or after Admission, fees or securities in the Company or any other benefit, with a value of £10,000 or more at the date of Admission.

Other than as disclosed in Section 16 above, there are no payments aggregating over £10,000 made to any government or regulatory authority as similar body made by the Company or on behalf of it, with regards to the acquisition of or maintenance of its assets.

The number of people employed by the Company, together with its subsidiaries, and including those employed under consultancy and service agreements, at the date of this document and as at the end of the financial years dated 30 June 2019, 30 June 2020 and 30 June 2021 was as follows:}]

Employees and contractors	30 June 2019	30 June 2020	30 June 2021	At date of this document
Directors including Managing Director (Australia)	3	3	4	4
Staff (Australia)	1	2	3	3
Malawi staff	10	21	20	22
<b>Total</b>	<b>14</b>	<b>26</b>	<b>27</b>	<b>29</b>

The costs, charges and expenses payable by the Company in connection with or incidental to Admission, including registration and stock exchange fees, legal fees and expenses are estimated to amount to approximately £352,383 excluding Goods and Services Tax (in Australia) and Value Added Tax (in the UK and Malawi).

Other than as disclosed in the Announcement, this document or as otherwise disclosed in the Public Record:

- there have been no interruptions in the Company's business which may have or have had in the last twelve months a significant effect on the Company's financial position;
- there are no significant investments by the Company under active consideration; and
- the Directors are not aware of any exceptional factors which have influenced the Company's activities.

The Company's accounting reference date is 30 June. Subsequent to 30 June 2021, the Company issued 2,160,500 ordinary shares upon the conversion of options, raising \$380,250.

There are no other matters or circumstances which have arisen since 30 June 2021 that have significantly affected or may significantly affect:

- the operations, in financial years subsequent to 30 June 2021 of the Group;
- the results of those operations, in financial years subsequent to 30 June 2021 of the Group; or
- the state of affairs, in financial years subsequent to 30 June 2021 of the Group.

The Directors have no reason to believe that the working capital available to Group will be insufficient for at least 12 months from the expected date of Admission.

Information equivalent to that required for an admission document which has not previously been made public (in consequence of the Company having its Shares traded on the ASX) is included in this document.

Copies of the Company's latest published accounts are available at the Company's website at [www.sovereignmetals.com.au](http://www.sovereignmetals.com.au).

The information required by Rule 26 of the AIM Rules for Companies will be available at [www.sovereignmetals.com.au](http://www.sovereignmetals.com.au) as from the date of Admission.

Copies of this document and the CPRs are available to the public free of charge at the Company's website [www.sovereignmetals.com.au](http://www.sovereignmetals.com.au).

## **20. CONSENTS**

RFC Ambrian has given and not withdrawn its consent to the inclusion of its name in this document of references thereto in the form and context in which they appear, but has not made any statements that are included in this document nor are statements identified in this document based on any statements made by RFC Ambrian.

Optiva has given and not withdrawn its consent to the inclusion of its name in this document of references thereto in the form and context in which they appear, but has not made any statements that are included in this document nor are statements identified in this document based on any statements made by Optiva.

The Competent Persons have given and have not withdrawn their written consent to the inclusion in this Appendix of references to their name in the form and context in which they appear.

The Competent Persons have confirmed to the Company and RFC Ambrian that there has been no material change of circumstances or available information since the date of the CPRs.

To the maximum extent permitted by law, each of the persons referred to above expressly disclaims and takes no responsibility for any part of the Announcement and Appendix other than the references to their name.

Dated 16 November 2021



# INDEPENDENT COMPETENT PERSON'S REPORT

ON THE

## CENTRAL MALAWI RUTILE PROJECT

Prepared for Sovereign Metals Limited and RFC Ambrian Limited.

PRINCIPAL AUTHOR:

Richard Stockwell BSc (Hons) Geol, FAIG

DATE ISSUED:

October 2021

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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.

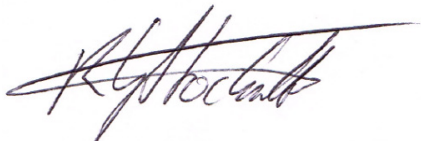
Placer and its employees/associates are not, nor intend to be, directors, officers or employees of SVM and have no material interest in any of the projects or SVM. The relationship with SVM is solely one of professional association between client and independent consultant. The review work and this report 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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Malawi

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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<sup>2</sup> or just 38% of the total 129km<sup>2</sup> of drill-defined rutile-mineralised footprint.

Mineral Resource Category	Material Tonnes (millions)	Rutile (%)	Rutile Tonnes (millions)
Inferred	644	1.01	6.49
<b>Total</b>	<b>644</b>	<b>1.01</b>	<b>6.49</b>

*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 <sup>2</sup>	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
					<b>2881.5 km<sup>2</sup></b>	

**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<sup>2</sup> 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<sup>2</sup> (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 <sup>2</sup>	Comments
EL 0372 (Malawi)	SSL	100%	Exploration	13/03/2022	729.2	Granted
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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
					<b>2881.5 km<sup>2</sup></b>	

**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 Nsar.

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.



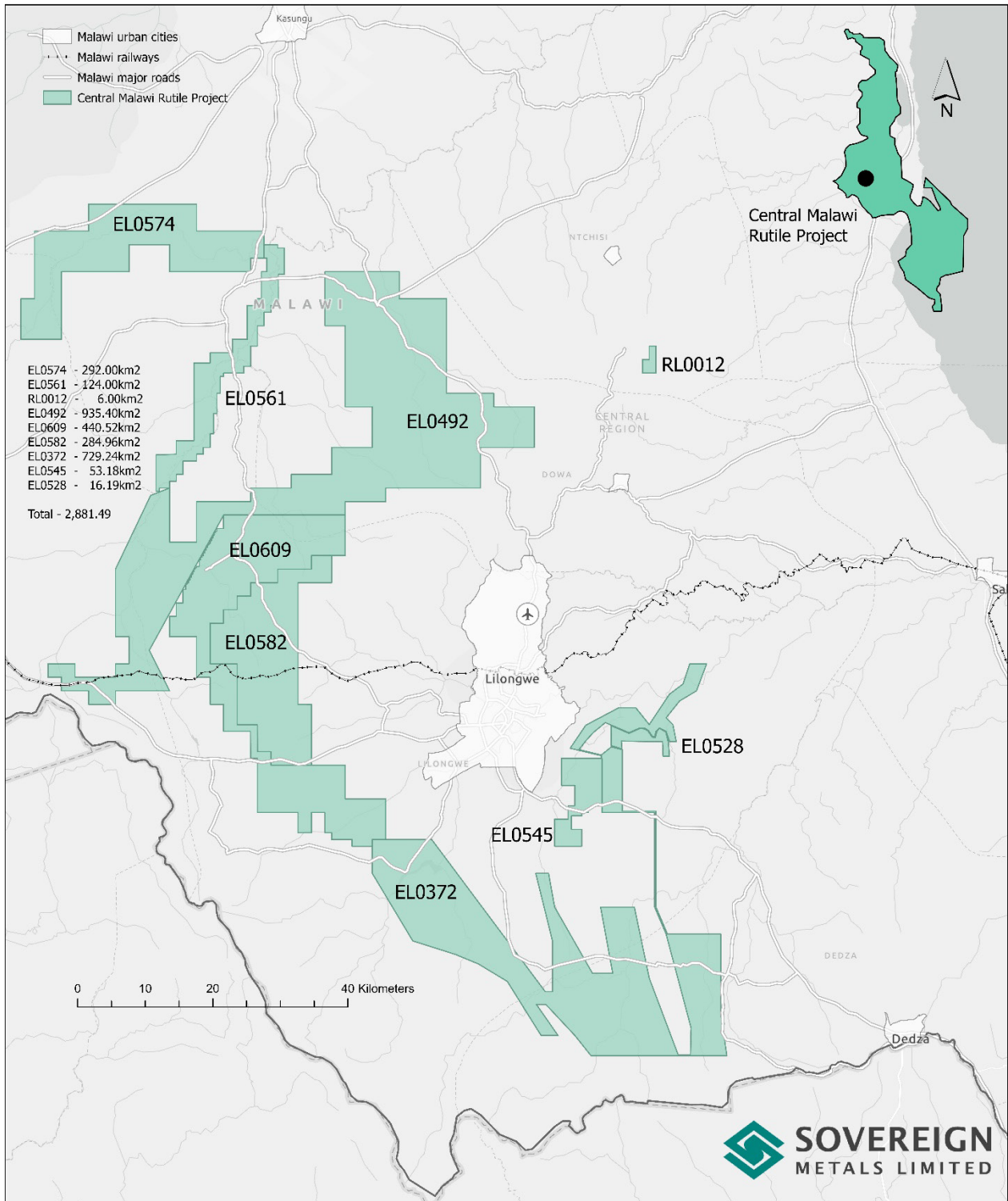


Figure 2: Tenement location plan (source: SVM).

### 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 Nsaruru 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<sup>2</sup> of which the Kasiya MRE covers 49km<sup>2</sup> 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.

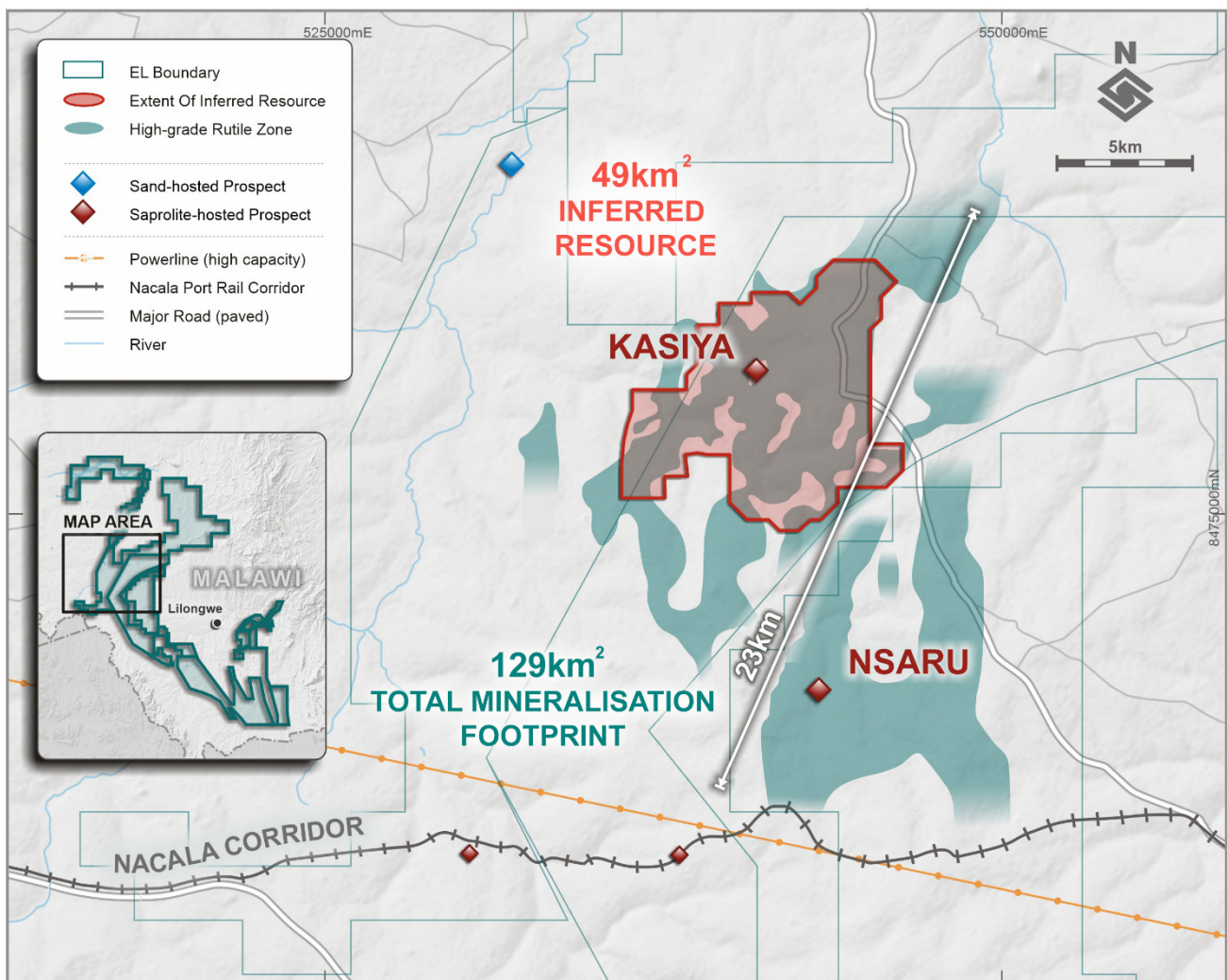


Figure 3: Kasiya MRE with the remaining mineralisation footprint (source: SVM).



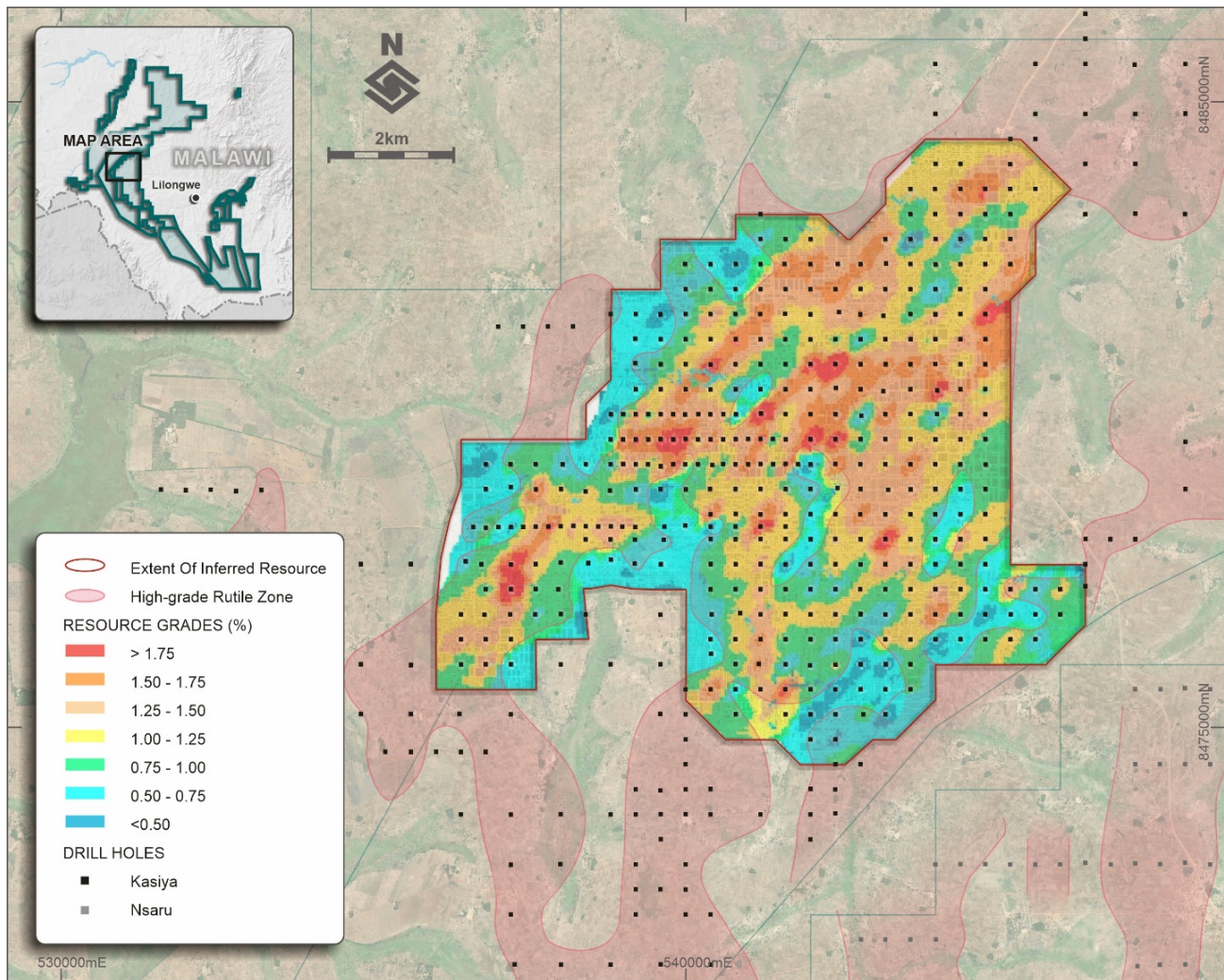


Figure 4: Drill density map over the Kasiya MRE showing rutile grades in the uppermost part of the MRE block model (source: SVM).

## 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).

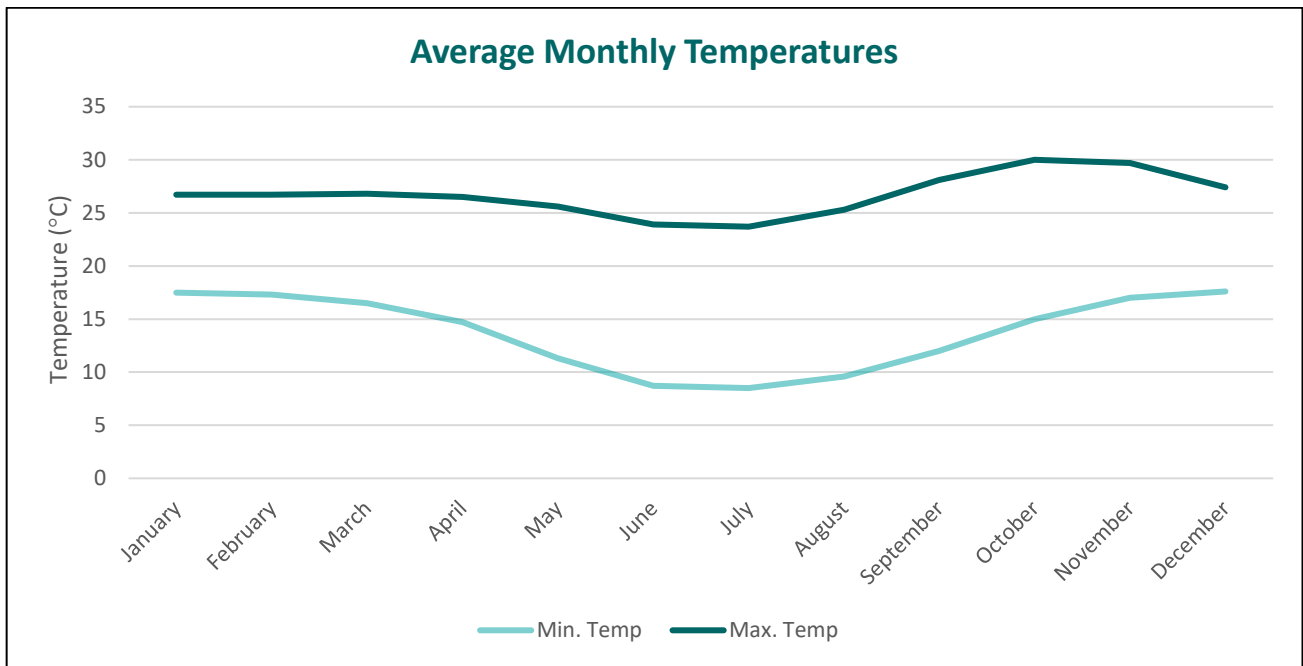


Figure 5: Lilongwe monthly temperature data (source: SVM).

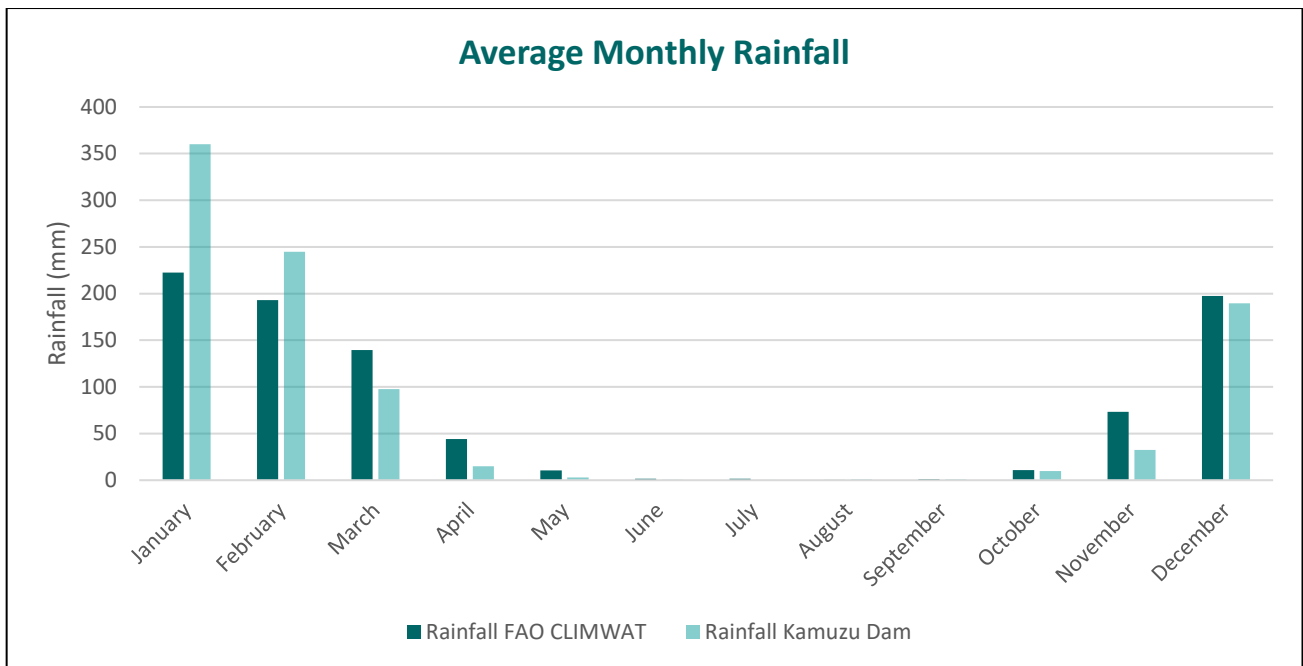


Figure 6: Chart of rainfall for the Lilongwe District (source: SVM).



#### 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 subsistence 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<sup>2</sup> (Land: 94,080km<sup>2</sup>) 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<sub>3</sub>O<sub>8</sub> 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 are 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 <sup>2</sup>
Exploration	3 years + 2 year extensions (max. 2x) - 7 years	Exploration activities, scoping and pre-feasibility studies	No more than 2,500km <sup>2</sup>
Retention	5 years	Feasibility studies	No more than 25km <sup>2</sup>
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
<b>Total</b>	<b>\$389,026</b>	<b>\$389,026</b>

### 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
<b>Royalty</b>	Generally 5%	Negotiable	Depending of level of processing (Royalties can be up to 10%).
<b>Dividend Withholding</b>	Variable		
<b>Import duty</b>	Variable	Based on tariff book	Zero for all capital equipment (subject to pre-approval).
<b>VAT</b>	16.5%	Fixed	Zero input for exports.
<b>VAT – Fuel</b>	-	Negotiable	Application for 0% for fuel used to generate power.
<b>State Equity</b>	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).
<b>Annual Rents</b>	Fixed rate per km <sup>2</sup>	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.

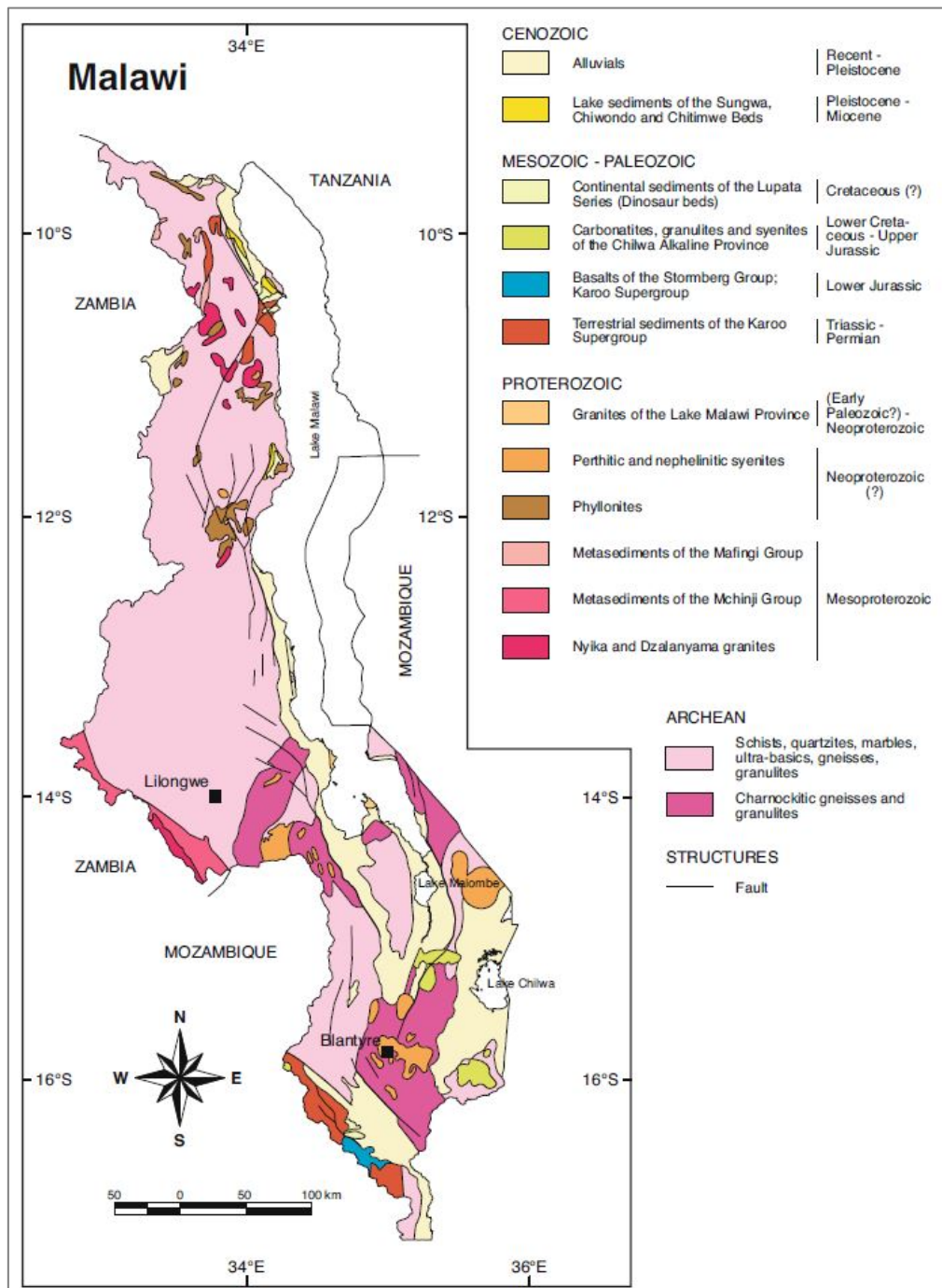


Figure 11: Regional geology map of Malawi.

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).



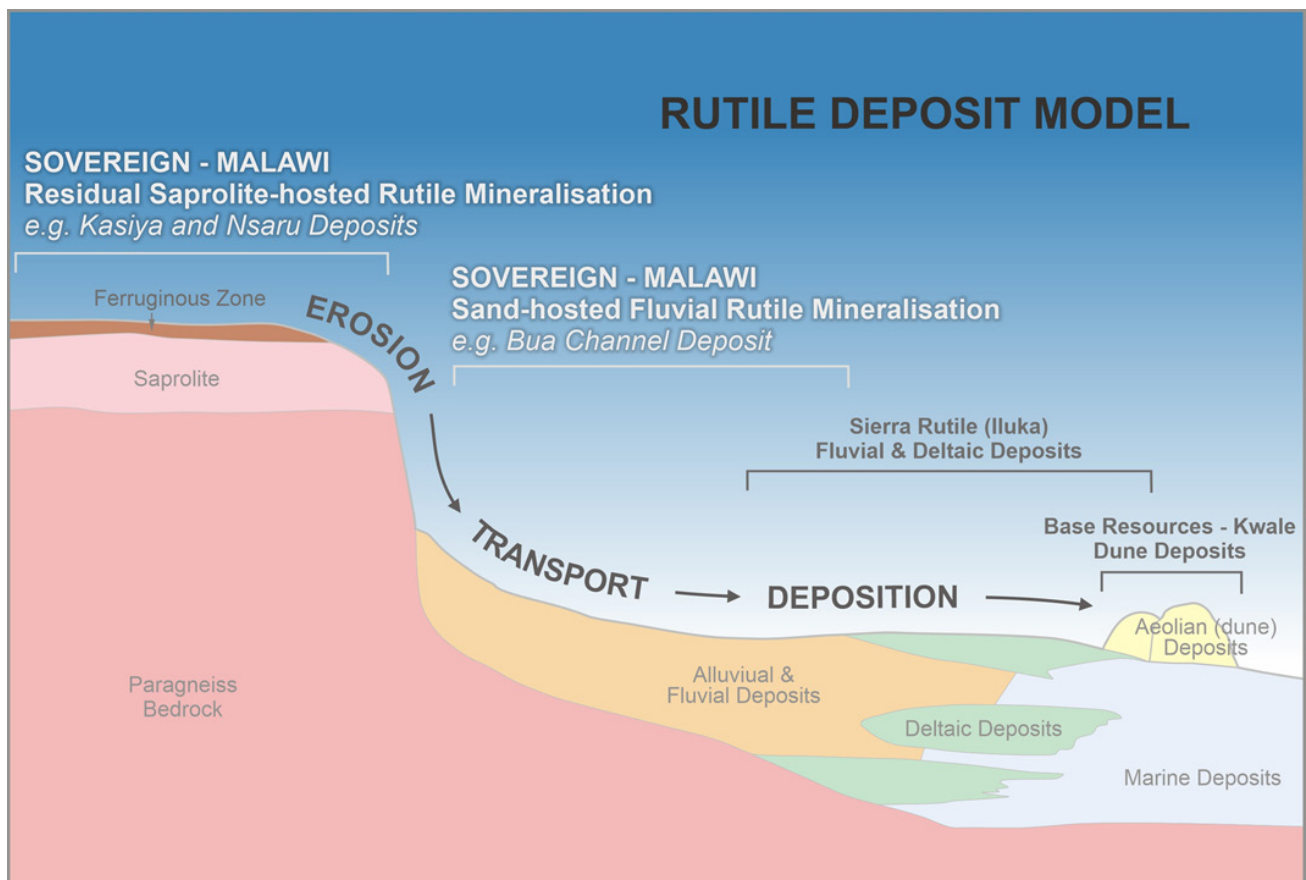


Figure 13: Rutile deposit model showing residual saprolite-hosted mineralisation and sand hosted fluvial mineralisation.

### 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 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.





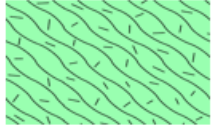
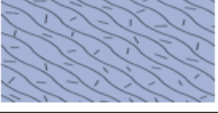
Accessory graphite mineralisation is depleted near surface, with much higher grades occurring in the saprolite and saprock layers from 6m and deeper. A typical cross section is described in Table 7.



**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									
	4	FERP	1.0% - 2.0%	0.5% to 2%	<b>Ferruginous Pedolith:</b> Ferruginous sandy with some clay. May locally contain variably cemented layers that tend towards a duricrust, 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.					
						6	MOTT	0.7% to 1.5%	1% to 5%	<b>Mottled Zone:</b> 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 partially destroyed. Generally medium graphite flake size. Moderate rutile enrichment, moderate graphite depletion. Some volume loss in this zone during the weathering process.
	8	PSAP	0.4% to 1.2%	1% to 10%						<b>Pallid Saprolite:</b> 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.
						25	SAPL	0.4% to 1.2%	1% to 10%	<b>Saprolite:</b> 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.
										
	Bedrock	FRESH	0.4% to 1.2%	1% to 10%	<b>Fresh Rock:</b> 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-CO<sub>3</sub> 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 +45 $\mu$ m -600mm fraction across wet table twice to generate a heavy mineral concentrate (**HMC**)
- Dry HMC in oven for 30 minutes at 105°C
- Bag +45 $\mu$ m -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 Carpc 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<sub>2</sub> recovered in the +45 to -600 $\mu$ m 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.



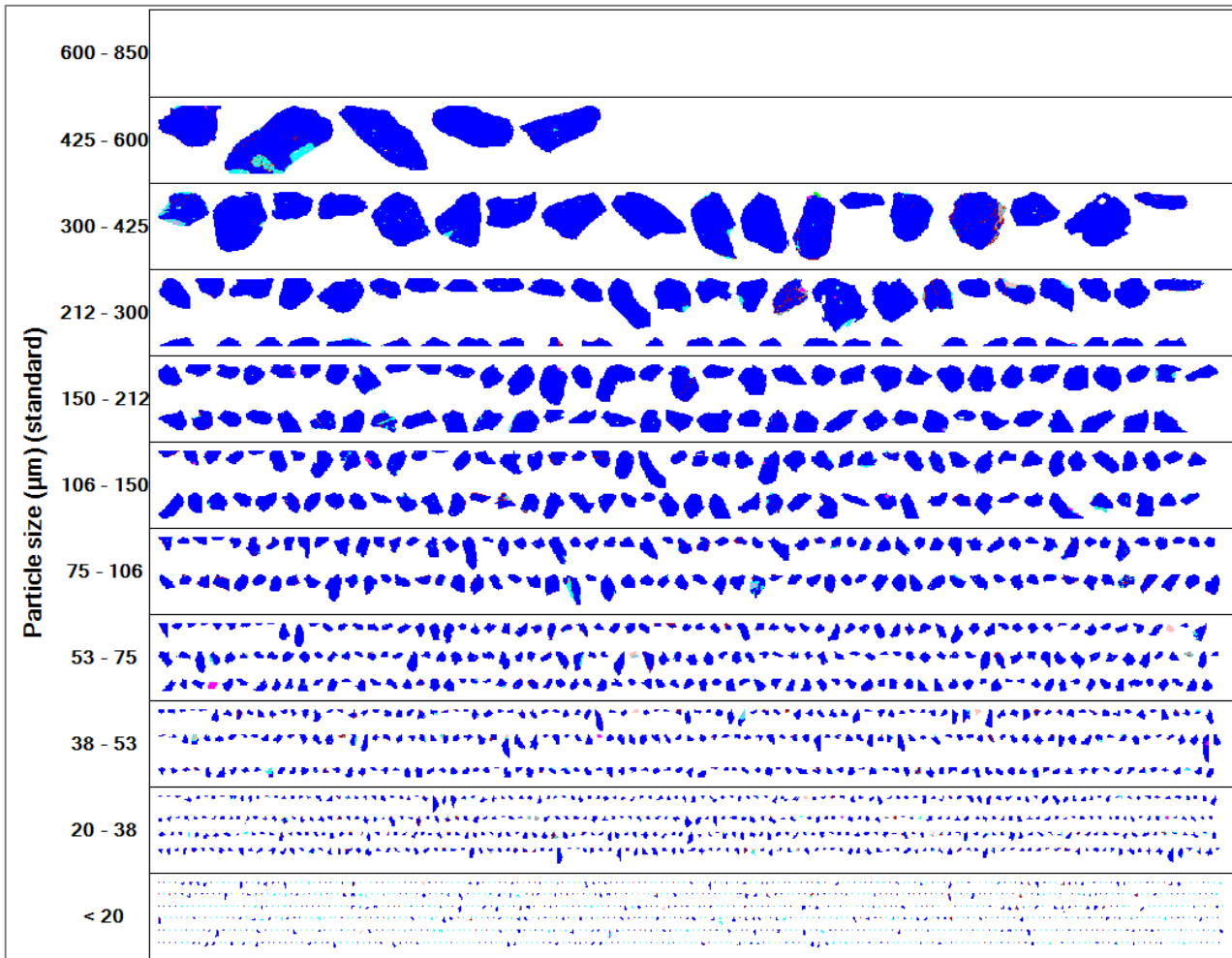


Figure 17: QEMSCAN image of Sovereign's premium rutile product from Kasiya.

### 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<sup>2</sup> 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<sub>2</sub>) 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.

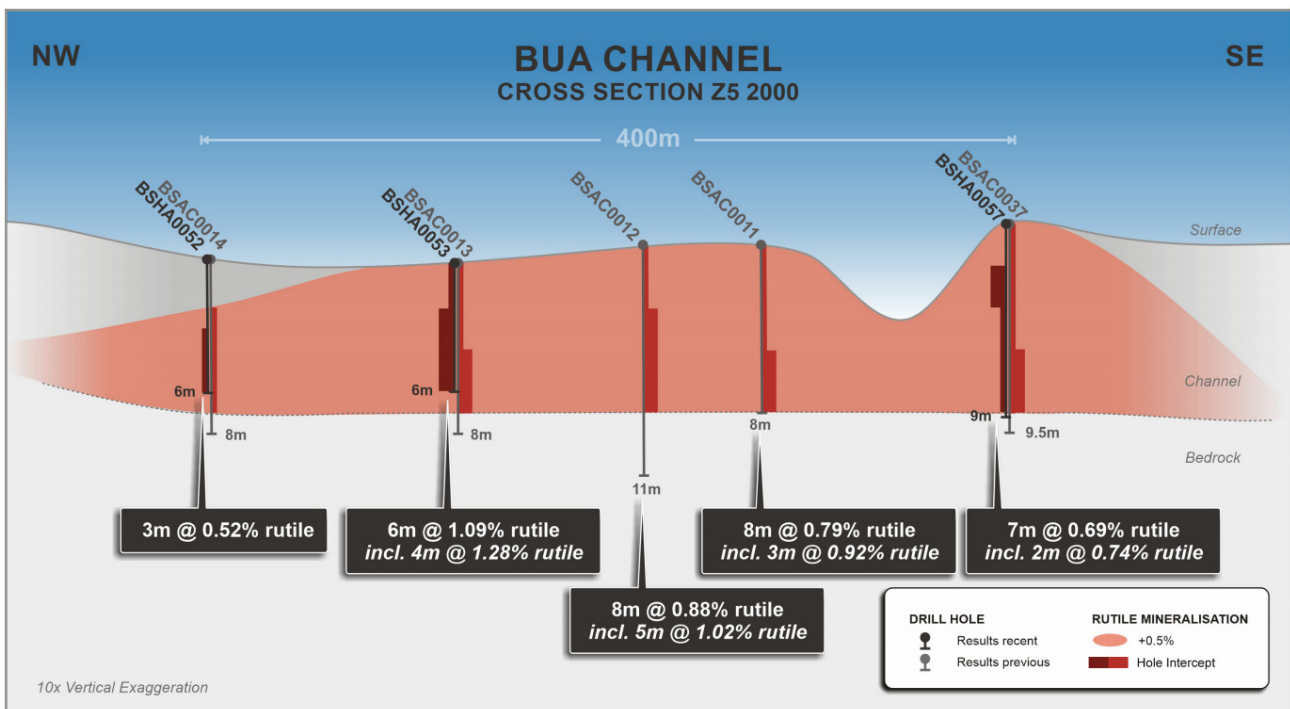


Figure 19: Cross section of Bua Channel.

### 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<sub>2</sub> 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)
<b>Total</b>	<b>644</b>	<b>1.01</b>	<b>6.49</b>	McCourt Mining Limited (Malawi)

Cut-off: 0.7% rutile

Sovereign has a 100% interest in the Resources

Source: Placer Consulting Pty Ltd

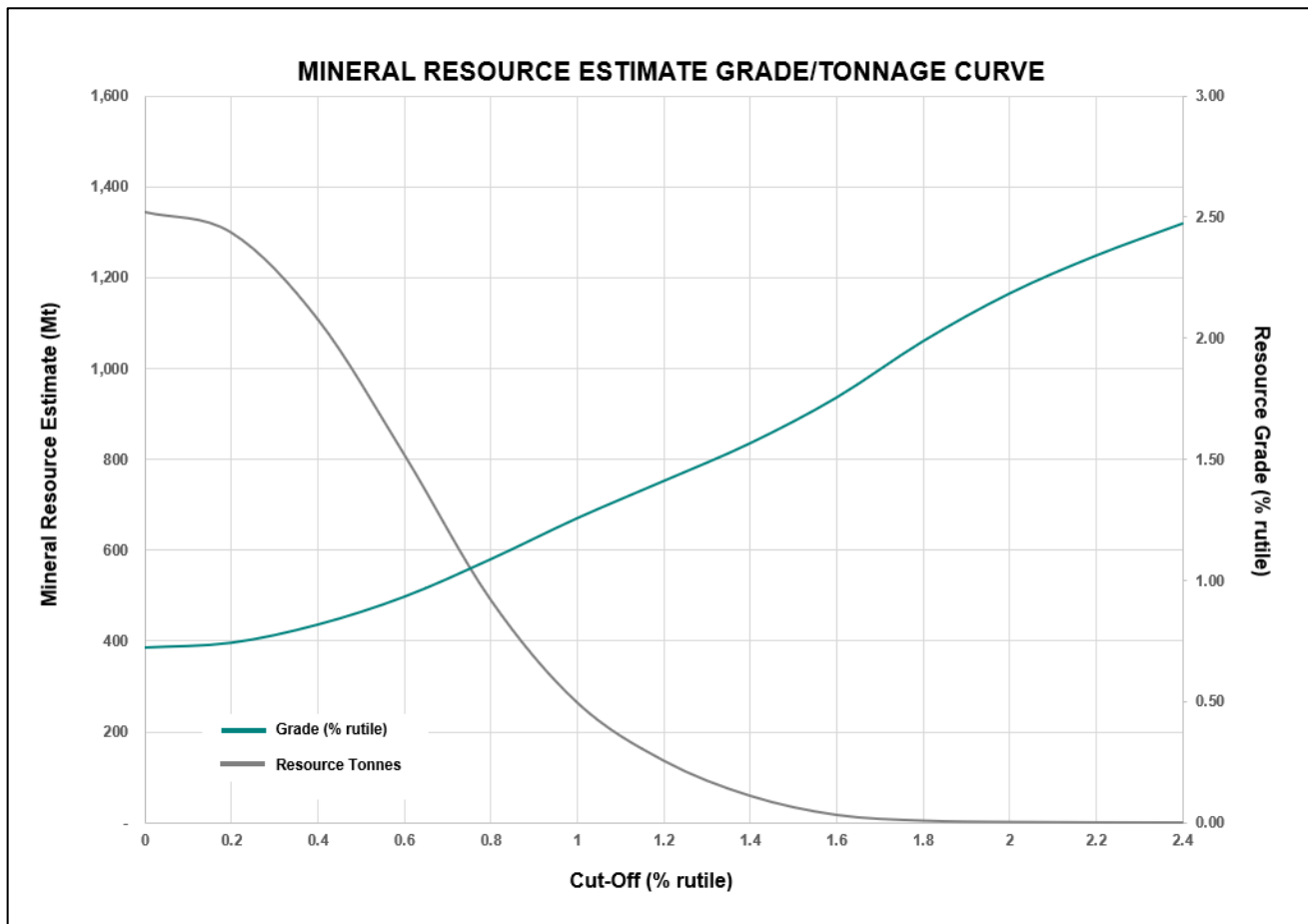


Figure 20: Grade cut-off versus tonnage curve.

#### 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<sup>3</sup> for the soil (SOIL) domain, 1.60 t/m<sup>3</sup> for the ferruginous pedolith (FERP) domain, 1.65 t/m<sup>3</sup> for the mottled (MOTT) domain, 1.68 t/m<sup>3</sup> for the pallid saprolite (PSAP) domain, 1.63 t/m<sup>3</sup> for the saprolite (SAPL) domain, and 1.93 t/m<sup>3</sup> 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.



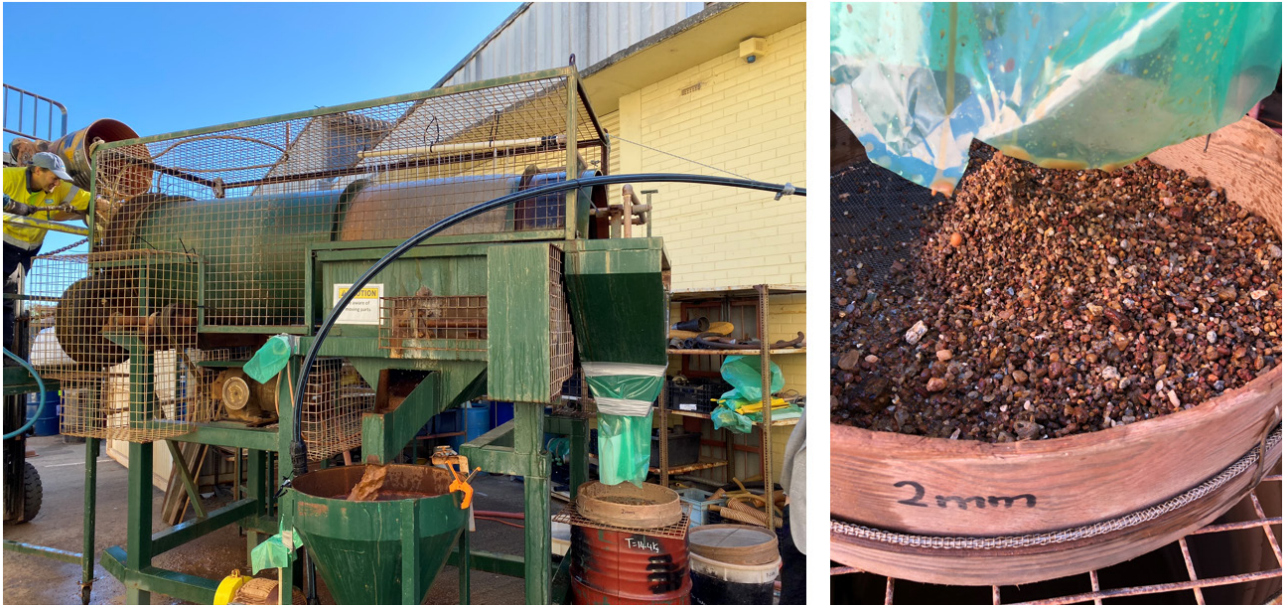


Figure 21: Trommel screen processing the raw material (left) & +2mm oversize material (right).



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).

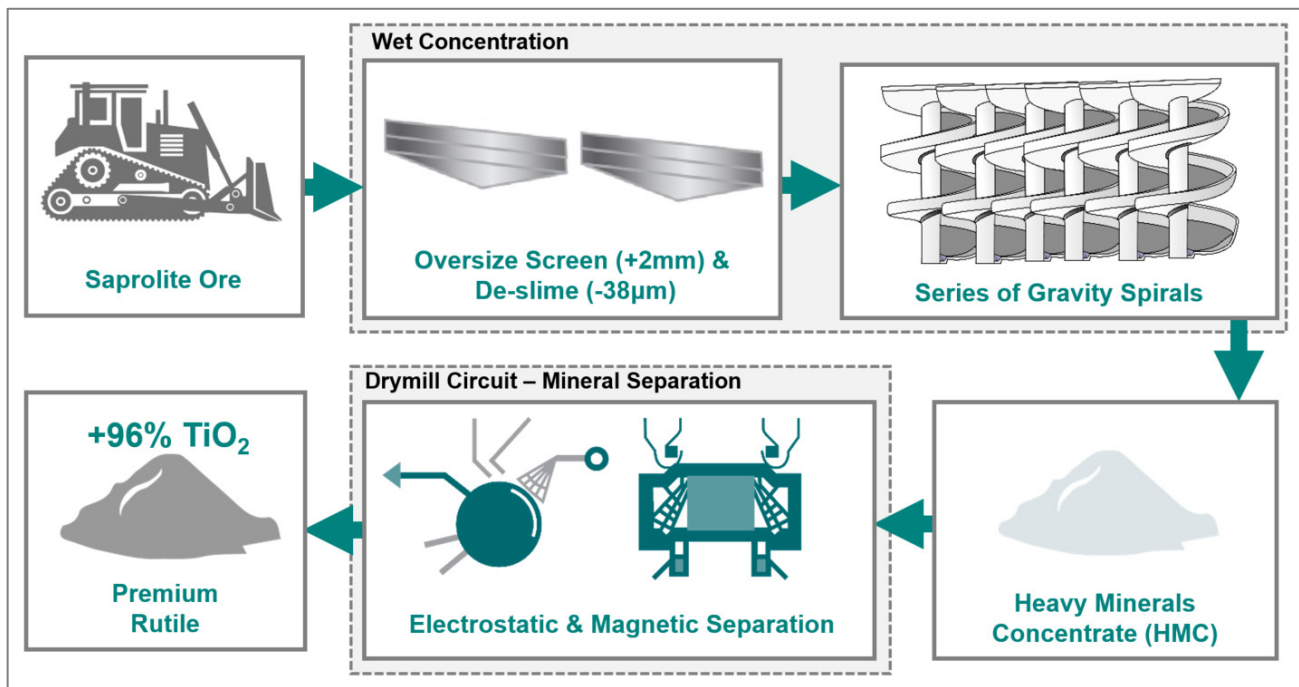


Figure 23: Simplified flowsheet developed for the Kasiya bulk metallurgy program.

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 <sub>2</sub>	%	<b>96.27</b>	96.29	93.30	96.18	94.50
ZrO <sub>2</sub> +HfO <sub>2</sub>	%	<b>0.52</b>	0.78	1.30	0.72	1.10
SiO <sub>2</sub>	%	<b>1.18</b>	0.62	2.00	0.94	2.00
Fe <sub>2</sub> O <sub>3</sub>	%	<b>0.59</b>	0.38	0.70	1.25	0.8
Al <sub>2</sub> O <sub>3</sub>	%	<b>0.41</b>	0.31	0.90	0.23	0.6
Cr <sub>2</sub> O <sub>3</sub>	%	<b>0.12</b>	0.19	0.11	0.17	0.14
V <sub>2</sub> O <sub>5</sub>	%	<b>0.66</b>	0.58	0.40	0.52	0.33
Nb <sub>2</sub> O <sub>5</sub>	%	<b>0.39</b>	0.15	0.30	-	0.04
P <sub>2</sub> O <sub>5</sub>	%	<b>0.01</b>	0.01	0.03	0	0.02
MnO	%	<b>0.01</b>	0.01	-	0.03	0.4
MgO	%	<b>0.02</b>	0.01	-	0.1	0.01
CaO	%	<b>0.01</b>	0.01	-	0.04	0.04
S	%	<b>0.01</b>	<0.01	<0.05	-	0.01
U+Th	ppm	<b>39</b>	26	100	-	-
d <sub>50</sub> sizing	µm	<b>145</b>	-	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<sub>2</sub>) 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<sub>2</sub> emissions. Up to 2.8 tonnes CO<sub>2</sub> 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.

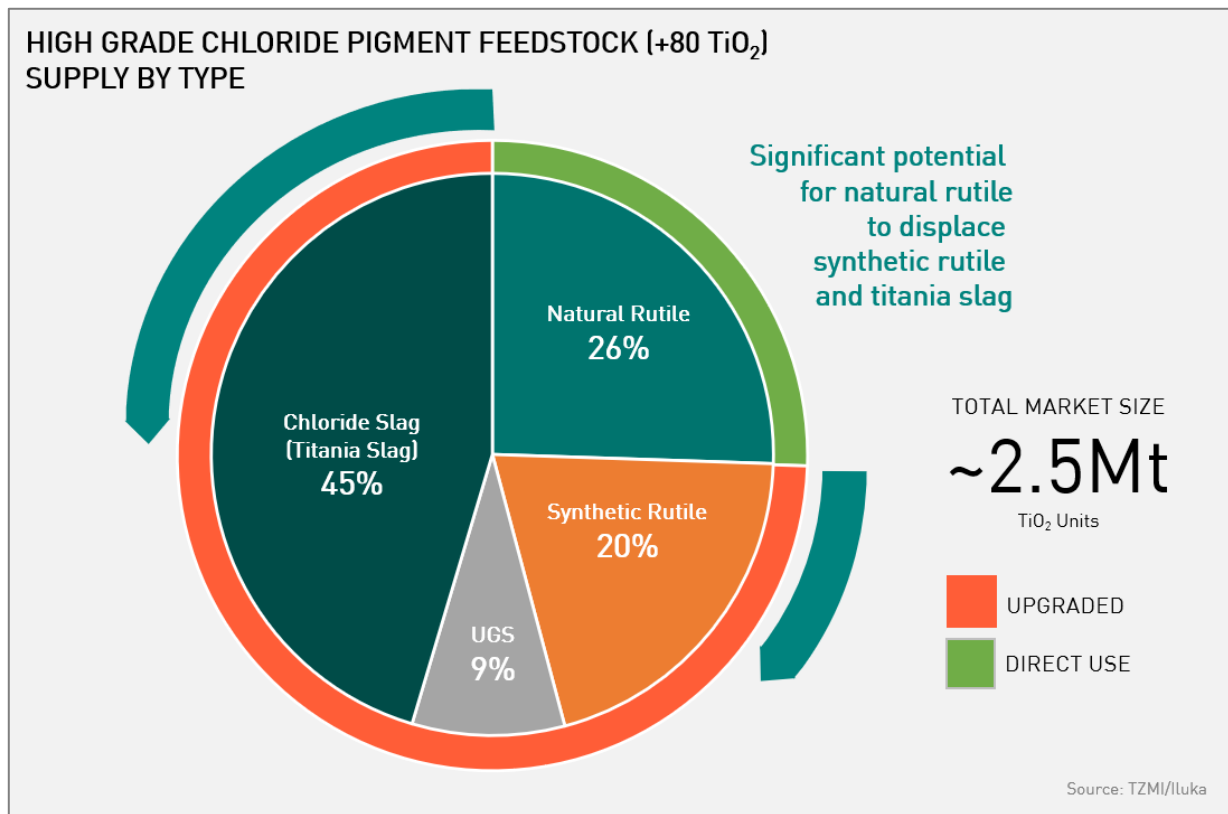


Figure 24: High-grade titanium feedstocks (+80% TiO<sub>2</sub>) by supply type  
(Source: TZMI/Iluka, based on 2018 data).

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.

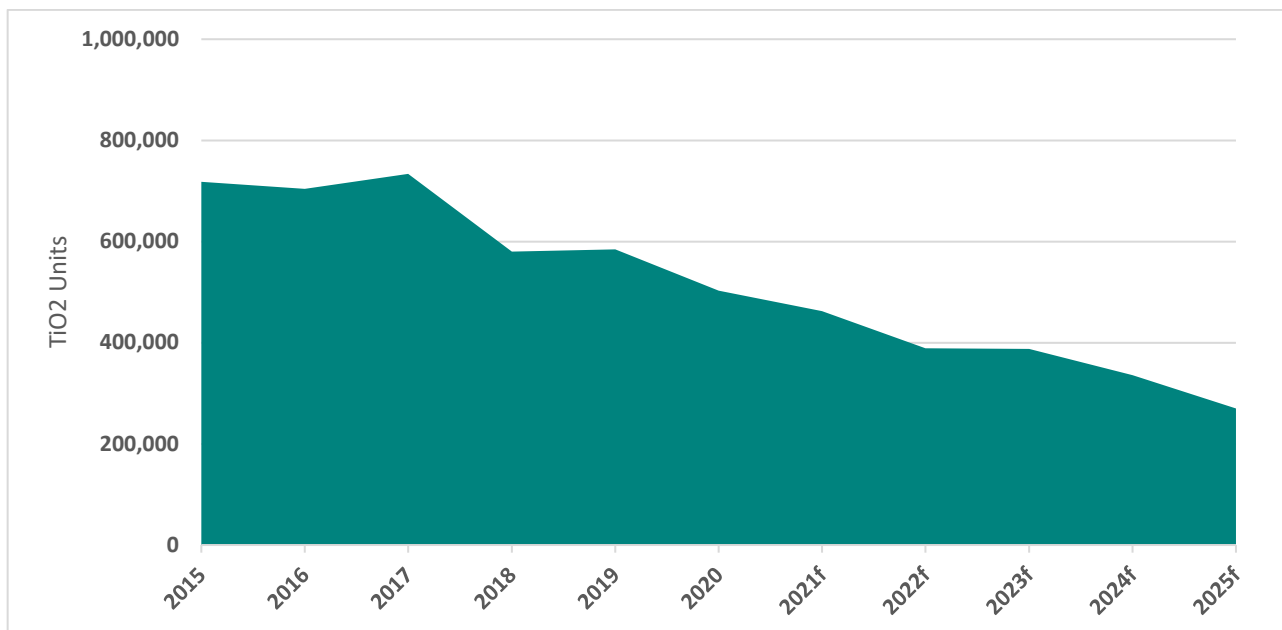


Figure 25: Actual and forecasted global rutile supply (source: TZMI).



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 45 $\mu$ m) 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
m <sup>2</sup>	Square Metre
m <sup>3</sup>	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
SO <sub>2</sub>	Sulphur Dioxide
SOP	Standard Operating Procedure
ST	Total Sulphur
SVM	Sovereign Metals Limited
t	Tonne (Metric)
t/h	Tonnes Per Hour
t/m <sup>3</sup>	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

## 12 References

BLOOMFIELD, K. (1966): Geological Map of Malawi, Scale 1:1,000,000. - Geological Survey Department; Zomba, Malawi.

CARTER, G. S. and BENNETT J.D. (1973). The Geology and Resources of Malawi, Second Rev Edition. The Government Printer, Geological Survey Department; Zomba, Malawi.

PLACER CONSULTING PTY LTD, 2021. Kasiya Deposit Resource Estimate Report. Unpublished internal report, 43p.

MINNOVO PTY LTD. (2018). Malingunde Graphite Project Prefeasibility Study Report. S091-REP-PR-001 A. Perth: Minnovo Pty Ltd.

SCHLÜTER, T. (2008). Geological Atlas of Africa. Springer. pp. 158–160.

SHRODER, J. F. (1972) Geological History and Structure of the Basement Complex. - Malawi in Maps, University of London Press, London.

8 October 2021

The Directors  
Sovereign Metals Limited  
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Perth, WA, 6000  
Australia

The Directors  
RFC Ambrian Limited  
Octagon Point  
5 Cheapside  
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United Kingdom

Dear Sirs,

**RE: SOVEREIGN METALS – COMPETENT PERSONS REPORT**

Sovereign Metals Limited (**Sovereign, SVM or the Company**) has engaged DRA Pacific Pty Ltd (**DRA**) to prepare a Competent Persons Report (**CPR**) on the Company's Malingunde graphite project located in Malawi. DRA 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.

The CPR was prepared in accordance with the standards set out in the "Joint Ore Reserves Committee" Code 2012 (**JORC 2012**) and the "Note for Mining, Oil and Gas Companies" (June 2009, the "**AIM Note**") which forms part of the AIM rules for companies, and has been signed off by a relevant Competent Persons (**CPs**) as defined in JORC 2012 and the AIM Note.

Neither of the contributing authors of the CPR, or any other employees or associates of DRA, have a material interest, either directly or indirectly in Sovereign or the assets which are the subject of the CPR. No commercial relationship has existed between DRA and Sovereign prior to the engagement to prepare this report and DRA's only financial interest is the right to charge professional fees at normal commercial rates, plus normal overhead costs, for work carried out in connection with the preparation of the CPR.

DRA is not a sole trader and is qualified under AIM Rules to provide such reports for the purposes of inclusion in public company prospectuses and admission documents. DRA has given and has not withdrawn, its written consent to 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 DRA 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. DRA has authorised the contents of its report and context in

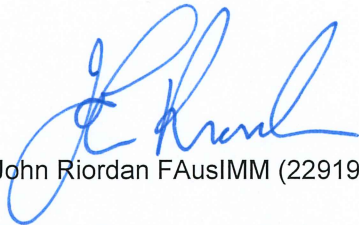
which they are respectively included and has authorised the contents of its report for the purposes of paragraph 1.3 of Annex I to the AIM Rules.

DRA confirms that to the best of its knowledge and belief (having taken all reasonable care to ensure that such is the case), the information contained in the CPR is in accordance with the facts and does not omit anything likely to affect the import of such information.

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

DRA 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.

Yours Faithfully,



John Riordan FAusIMM (229194)

Process Engineering Manager

**DRA Pacific Pty Ltd**







# COMPETENT PERSONS REPORT

## MALINGUNDE GRAPHITE PROJECT

*Sovereign Metals Limited / Malawi*

Project Number: IMWPPR5693

S206-REP-PR-002

Revision: A

## IMPORTANT NOTICE

This Competent Persons Report (“**the Report**”) has been prepared by the DRA Pacific Pty Limited (**DRA**) for the exclusive benefit of Sovereign Metals Limited (**Sovereign**) and exclusively in relation to the Malingunde Graphite Project (the “**Project**”) and is subject to a separate agreement entered into between DRA and Sovereign dated 29 April (the “**Agreement**”). Neither this Report (nor any of its contents) are intended for nor may they be relied upon by any other person or used for any other purpose without the written consent of DRA.

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## 1 EXECUTIVE SUMMARY

Sovereign Metals Limited (**Sovereign, SVM or the Company**) has commissioned DRA Pacific Ltd (**DRA**) to compile a Competent Persons Report (**CPR**) on one of the Company's material assets in Central Malawi. A copy of this CPR will be made available Sovereign's website in connection with the proposed admission of the ordinary shares of Sovereign to trading on the AIM market of the London Stock Exchange (**AIM**).

It is understood that the purpose of this CPR is to support an AIM Admission document in London and all of these documents have been compiled to comply with the AIM Guidance Note for Mining, Oil and Gas Companies issued in June 2009.

### 1.1 Malingunde Graphite Project

Sovereign's 100%-owned Malingunde Graphite Project (**Malingunde**) located in Malawi, southeast Africa is at Pre-Feasibility Study (**PFS**) level. Malingunde represents a high quality potential future mining operation producing premium quality natural graphite products. The PFS demonstrates low operating and low capital costs providing excellent margins. The compelling economic estimates can be attributed to the deposit being hosted entirely by soft saprolite material, its high grade at 9.5% Total Graphitic Content (**TGC**) and the excellent infrastructure availability.

Malingunde comprises a planned open cut mining and a beneficiation processing plant operation, treating run of mine ore to produce on average 52,000 tonnes per year of graphite concentrate at a purity of 97% TGC. The graphite concentrate will be bagged and trucked to the railhead at Kanengo, from where it will be packed into shipping containers for direct rail to the port of Nacala for export.

Soft-saprolite hosted graphite deposits are sought after as they have distinct operating and capital cost advantages over hard-rock deposits. Currently operating saprolite-hosted flake graphite mines are located in Madagascar, however these are mostly small and low grade (typically 4-6% TGC).

### 1.2 Resource & Ore Reserves

The Malingunde saprolite-hosted graphite deposit is the result of millions of years of tropical weathering of primary graphitic gneisses. Most of the silicate minerals other than quartz have been altered to clay, resulting in a soft, friable saprolite horizon averaging about 25m vertical thickness from surface. Graphite is also unreactive in this weathering environment, with the large graphite flakes preserved in the clay dominant matrix.

Sovereign has defined the largest & high grade saprolite hosted deposit in the world with Resources of 45.7Mt at 7.2% TGC which includes Ore Reserves of 9.5Mt at 9.5% TGC (each estimated under the JORC Code (2012)).

### 1.3 Metallurgy

The Malingunde process flowsheet enables the ability to produce very high-grade flotation concentrates from a simple flowsheet, not requiring primary crushing or grinding and employing only well-established mineral processing technologies. This provides significant capital and operating cost benefits over hard-rock processing.

### 1.4 Infrastructure

Operating rail allows low transport costs; below or comparable to regional peers utilising trucks. Operated by a joint venture wholly owned by Vale, the rail delivers product directly to the deep-water port at Nacala.

Additionally, Malingunde is located just 20km from Lilongwe, the capital of Malawi, providing enviable access to labour, water, power and other mine site services.

## 1.5 Graphite Market

The primary end-market for natural flake graphite is the refractory, foundries and crucible sectors which consumed approximately 77% (900,000 tonnes) of flake graphite production in 2020. The refractory industry is the volume driver for flake graphite, with foundries and crucibles offering smaller markets for higher purity graphite products. The major product flake graphite is consumed in is magnesia-carbon bricks, a mainstream, global refractory brick which is used in the steel industry.

The lithium-ion battery sector is the main emerging market for flake graphite. Greater capacity batteries, such as those required for electric vehicles, are expected to drive significant demand for graphite over the coming years. It is forecast the battery sector will become the largest segment by 2028.

China continues to be the world's leading producer of natural flake graphite, supplying approximately 62% of the market in 2020. Brazil, India, Canada, Mozambique, Madagascar and North Korea were major contributors of the remaining 38% of global production.

The supply-demand balance in the graphite market is forecast to remain in balance for an extended period. However, a significant supply deficit is anticipated by 2024 as demand is forecast to strengthen putting the market into deficit.

## 1.6 Key Project Metrics

<b>ECONOMIC</b>		
Development Capital	\$USm	45.7
Indirect & contingency	\$USm	18.0
<b>Total Capital</b>	<b>\$USm</b>	<b>63.6</b>
<b>Sustaining Capital</b>	<b>\$USm</b>	<b>28.2</b>
Mine Gate Operating	\$US/t conc.	275
Transport & Logistics	\$US/t conc.	63
<b>Total Operating Costs (Average LoM)</b>	<b>\$US/t conc.</b>	<b>338</b>

<b>PHYSICAL</b>		
<b>Average annual plant throughput</b>	tpa	600,000
<b>Average annual concentrate production</b>	Tpa	52,000
<b>LoM average feed grade</b>	% TGC	9.5%
<b>Mine life</b>	Years	16

<b>FINANCIAL</b>		
NPV 10% (post-tax)	\$USm	144
IRR (post-tax)	%	38%
EBITDA (average LoM)	\$USm	45

### 1.7 Conclusion

Malingunde offers a technically and economically robust, low risk pathway to production of premium quality, coarse flake graphite concentrates. The significant cost savings, compared to hard-rock peers, are realised by the soft, free dig nature of the mineralisation and low strip ratios, with no requirement for primary crushing or grinding in the processing plant.

#### MALINGUNDE: MINING AND PROCESSING FRONT END

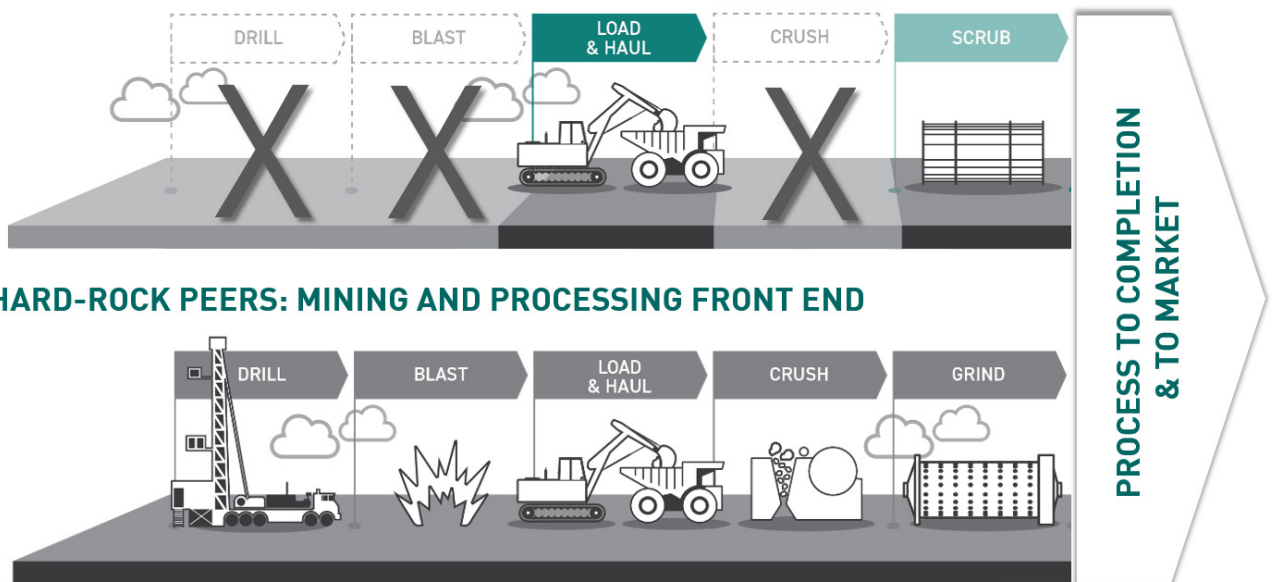


Figure 1.1 Malingunde's front end advantage

Malingunde is not reliant on an unrealistically large scale or overly optimistic basket pricing assumptions to be economically viable. The very low operating cost nature of the Project provides protection, and ensures profitability for the project, even in extreme downside global graphite pricing scenarios.

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## 2 INTRODUCTION

Sovereign Metals Limited (Sovereign, SVM or the Company) has commissioned DRA Pacific Ltd (**DRA**) to compile a Competent Persons Report (**CPR**) on one of the Company's material assets in Central Malawi. A copy of this CPR will be made available Sovereign's website in connection with the proposed admission of the ordinary shares of Sovereign to trading on the AIM market of the London Stock Exchange (**AIM**).

It is understood that the purpose of this CPR is to support an AIM Admission document in London and all of these documents have been compiled to comply with the AIM Guidance Note for Mining, Oil and Gas Companies issued in June 2009.

### 2.1 Summary of sources

Sovereign Metals Limited (**SVM**) completed a Prefeasibility Study (**PFS**) for their Malingunde Graphite Project (the Project) in Malawi in 2018. The PFS was conducted by Minnovo who was subsequently acquired by DRA Global.

In April 2021, DRA Pacific Ltd (**DRA**) was requested to update the PFS capital and operating costs for the Project to be used in developing a CPR for disclosure support for the AIM listing on the London Stock Exchange. During this process, no additional engineering or testwork has been considered, and thus the technical development of the Project is the same as was assumed in the PFS completed in 2018. However, the tailings storage facility (**TSF**) construction assumptions have been adjusted in reaction to new Global Industry Standards on Tailings Management (**GISTM**). As a result, the height and area required for the TSF starter wall is larger than originally assumed in the PFS, and the costs of construction are also increased.

This report draws significantly upon the detail in the PFS and updates the major assumptions for both capital and operating cost estimates and reasserts the overall context of the project by re-stating the highlights of the 2018 PFS that remain unchanged.

Resource delineation is principally underpinned by drill programs from 2016-2018 while significant processing testwork has been completed since 2016 by SGS Lakefield in Canada and ALS in Australia.

The list of contributing consultants who have provided updated cost estimates are:

- Mineral Resource Estimate – CSA Global.
- Ore Reserves and Mining – Orelogy.
- Process plant and Non-Process Infrastructure – DRA Pacific Ltd.
- Environmental Impact Assessment (**EIA**) including social impact – Dhamana Consulting with others.
- TSF design and water management – SLR Consulting.
- Shipping and logistics study – Morgan Sterling.
- Graphite Market – Fastmarkets (previously named Metals Bulletin)

#### 2.1.1 Site Visits

Site visits have been carried out by the following personnel:

- Mr David Williams, the Competent Person for the JORC Resource Estimate, and a representative of CSA Global has conducted a site visit in 2016; and
- Mr Ryan Locke, the Competent Person for the JORC Reserve estimate and a representative of Orelogy Pty Ltd has conducted a site visit in 2018.



Due to the COVID-19 pandemic, no consultants have been able to complete a site visit to Sovereign's projects in Malawi as part of this engagement.

## 2.2 Mineral Assets of Sovereign Metals

### 2.2.1 Summary

Sovereign is conducting exploration across its large ground package of over 2,880km<sup>2</sup>. Sovereign's ground package is made up of eight Exploration Licences (**ELs**) and one Retention Licence (**RL**) as summarised in Table 2.1. The ELs and RLs are held through SVM's wholly owned Malawian subsidiaries, Sovereign Services Limited and McCourt Mining Limited. The Malingunde Project is situated on EL0372.

**Table 2.1 Summary of Sovereign's Licences**

Licence	Holding Entity	Percentage Interest	Status	Expiry	Licence Area (km <sup>2</sup> )	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

SSL: Sovereign Services Limited  
MML: McCourt Mining Limited

Exploration licenses are generally granted for up to three years, with the licence renewable for two additional periods of two years each upon expiry. Mineral deposits contained within exploration licences that have come to the end of their term, can be converted to a retention licence for a term of up to five years, subject to certain criteria.

Exploitation of the Malingunde Project is planned to be by open cut mining and a beneficiation processing plant operation producing a graphite concentrate for export.

### 2.2.2 Review of Sovereign Metals' Interests

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 2.1, 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 Malingunde Graphite Project.

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.

## 2.3 Table of Reserves and Resources

### 2.3.1 Mineral Resources

Malingunde's Mineral Resources (inclusive of Ore Reserves) are reported in accordance with the 2012 Edition of the JORC Code as follows:

**Table 2.2 Mineral Resource Table**

Resource Category	Tonnes (Mt)	Grade (% TGC)	Contained Graphite (Mt)	Operator
<i>Measured</i>	4.8	8.5	0.41	SSL
<i>Indicated</i>	32.3	7.2	2.32	SSL
<i>Inferred</i>	27.9	7.0	1.95	SSL
<b>Total</b>	<b>65.0</b>	<b>7.2</b>	<b>4.68</b>	<b>SSL</b>

Sovereign has a 100% interest in the Resources  
Source: David Williams (Competent Person for the Resources)  
SSL: Sovereign Services Limited

### 2.3.2 Ore Reserves

Malingunde's Ore Reserves are reported in accordance with the 2012 Edition of the JORC Code as follows:

**Table 2.3 Ore Reserve Table**

Reserve Category	Tonnes (Mt)	Grade (% TGC)	Contained Graphite (Mt)	Operator
<i>Proved</i>	3.1	9.5	0.30	SSL
<i>Probable</i>	6.4	9.5	0.60	SSL
	<b>9.5</b>	<b>9.5</b>	<b>0.90</b>	<b>SSL</b>

Sovereign has a 100% interest in the Reserves  
Source: Ryan Locke (Competent Person for Reserves)  
SSL: Sovereign Services Limited

**Note:** Malingunde ore reserve is reported at a 6.75% total graphitic carbon ('TGC') lower cut-off grade for saprolite and between 9.5% and 11.0% for saprock.

### 3 OVERVIEW

#### 3.1 Project Location

The Project is located in the Lilongwe District of the Central Region of Malawi. The project site is located approximately 20km southwest of Lilongwe, with the northern border to Mozambique being 30km to the west. The nearest port is Nacala on the east coast of Mozambique which is connected by a railway line from Lilongwe. Figure 3.1 displays a map of the project location.

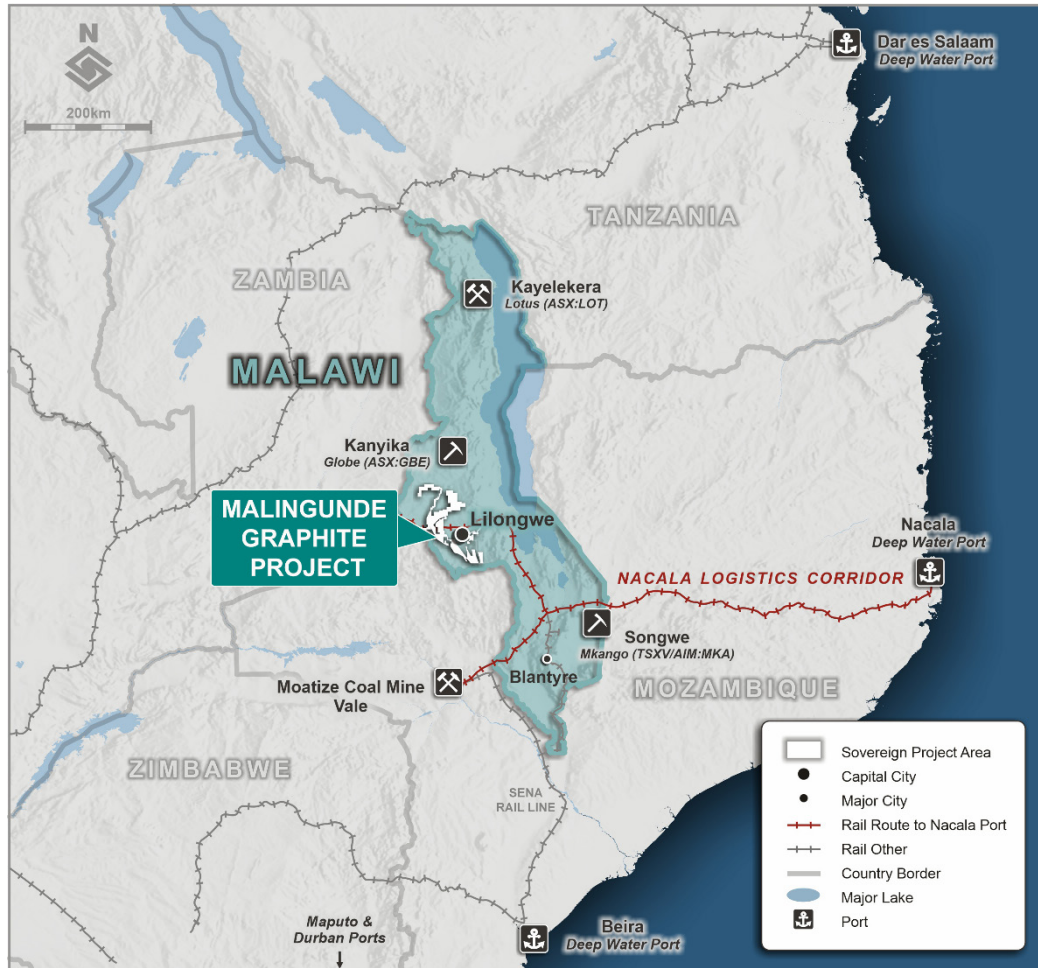


Figure 3.1 Malingunde Graphite Project Location Map

#### 3.2 Project Description

The Project is described in detail in the respective sections of this report. In summary, the Project comprises a planned open cut mining and a beneficiation processing plant operation, treating run of mine ore to produce on average 52,000 tonnes per year of graphite concentrate at a purity of 97% TGC. The graphite concentrate will be bagged and trucked to the railhead at Kanengo, from where it will be packed into shipping containers for direct rail to the port of Nacala for export.

The resource is a soft, saprolite-hosted graphite deposit which has specific benefits for the process, most specifically no drill or blast is required for mining as the material is free-dig and the upfront comminution circuit is limited to a sizer and a low energy scrubber.

The Project is a greenfields site and therefore the study includes all non-process infrastructure required to support the mining and processing operations.

### 3.3 Project History

SVM has been conducting exploration in country since 2012. In 2015, SVM's in-country geological team made new and significant discoveries in an area where there is no outcrop called the Lilongwe Plain. Following the discovery, extensive drilling was carried out over 3.4 km of strike length (see Figure 3.2 below) which led to the maiden Mineral Resource Estimate (MRE) being released in April 2017 (April 2017 MRE).

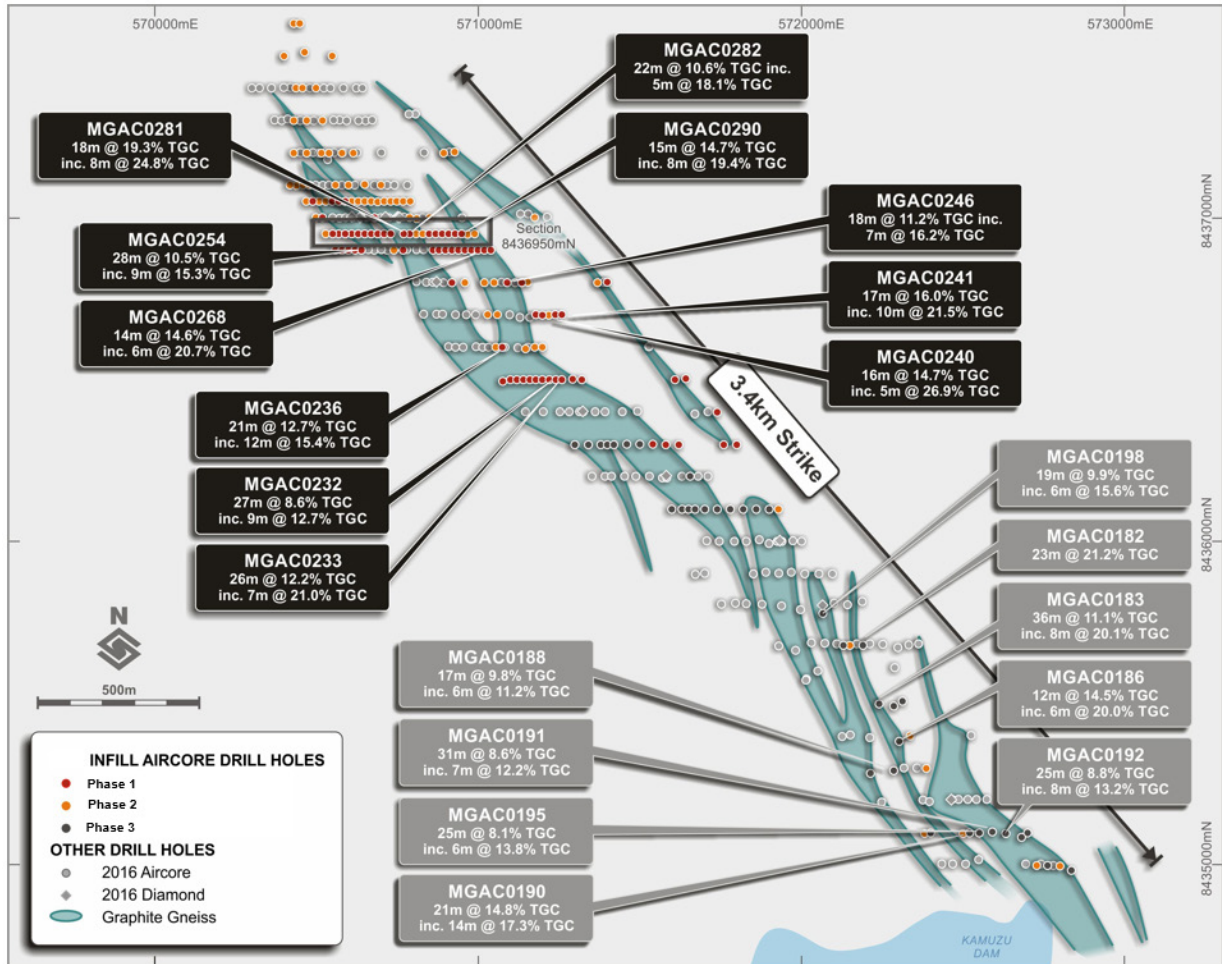


Figure 3.2 Malingunde Graphite Project – Mineralisation drillholes

The MRE, which was conducted by CSA Global, identified 65.1 Mt at 7.1% TGC for 4.6 Mt of contained graphite. In summary, at a 4% TGC cut-off grade, Indicated and Inferred resources are as follows:

- 28.8 Mt of saprolite @ 7.1% TGC.
- 17.0 Mt of saprock @ 7.0% TGC.
- 19.3 Mt of fresh rock @ 7.0% TGC.

SVM subsequently engaged AMEC Foster Wheeler to conduct a Scoping Study which was completed in June 2017.

The PFS commenced in November 2017 and used this same resource (April 17 MRE) as the basis for the mine design, scheduling and plant and infrastructure design work.

During the PFS period, the results from the 2018 in-fill drill program were used to produce an updated Mineral Resource announced in June 2018 (June 2018 MRE). Again, the work was carried out by CSA Global and identified 65.0 Mt at 7.2% total graphite content for 4.7 Mt of contained graphite. In summary, at a 4% TGC cut-off grade, Measured, Indicated and Inferred resources are as follows:

- 28.8 Mt of saprolite @ 7.2% TGC (Measured and Indicated - 23.5 Mt @ 7.4% TGC).
- 16.9 Mt of saprock @ 7.2% TGC (Indicated - 13.6 Mt @ 7.4% TGC).
- 19.3 Mt of fresh rock @ 7.3% TGC (all Inferred).

This updated resource (June 2018 MRE), along with the PFS engineering and design work was subsequently used for the Ore Reserve determination for the Project.

The Company completed an update on cost assumptions made in the 2018 PFS to Q2 2021 for the basis of compiling this report and confirm there has been no material changes.

### 3.4 Geological Setting

#### 3.4.1 Physiography

The dominant feature of the Malingunde project area is the South Lilongwe Plain, a gently undulating plain interrupted by occasional low inselbergs such as Malingunde Hill (1,250m above sea level) and cut by three major flowing rivers. The plain varies between 1,140m and 1,300m in height above sea level.

The major rivers of the South Lilongwe Plain all drain to the north-east, eventually arriving at Lake Malawi. Sinuous, tributary streams feed the major rivers of the plains, with seasonal swamps (dambo) a feature of the low gradient, lower energy regime of the plains.

The Lilongwe River is the principal river of the project area, flowing to the south of the Malingunde Deposit and cutting it off at the Kamuzu Dam. The Lilongwe River is deeply incised with rock bars and exposures common along its length. Immediately south of the Malingunde Deposit the Lilongwe River has been dammed, forming the twin walled Kamuzu Dam, which provides potable water to Lilongwe.

The geomorphology of the Lilongwe Plains comprises three erosion features:

- A Post-Gondwana surface, formed in the early and mid-Cretaceous, presently displayed as the occasional inselbergs dotted throughout the plain;
- The late Cretaceous – early Miocene African cycle, which formed extensive plains, including South Lilongwe Plain;
- Late-Miocene Post-African features, often merging with the African cycle erosional surface.

The climate of the South Lilongwe Plain can be described as tropical continental, with a mean annual temperature of 18-23 degrees Celsius, and an average rainfall of 860mm. Some 85% of rainfall occurs during the rainy season between December and March, and the hottest periods occur in the lead up to the rainy season, occasionally peaking around 35 degrees Celsius.

The moderate rainfall coupled with the generally fertile soils of the plains has resulted in the natural savannah vegetation having been almost entirely modified or removed and the land being extensively cultivated as subsistence farming dominated by maize crops and secondary cash crops of groundnuts and tobacco. The dambo grasslands are often utilised for grazing and small-scale sugar cane crops.



### 3.4.2 Regional Geology

The geological descriptions below rely on the systematic historic exploration work conducted by the Malawi Geological Survey Department during the mid-1900s, dominantly Bulletin 23 (Thatcher, 1968).

Malawi's geology is dominated by the Nyasa Rift, the southern extension of the Cenozoic East African Rift (EAR), which extends some 800km from southern Tanzania south to the Middle Shire Rivers, with some structures extending further south into Mozambique. The seismically active rift system is principally made up of a series of half grabens with complex fault geometries, and the Nyasa Rift is occupied by Lake Malawi.

The majority of the country is dominated by crystalline metamorphic and igneous basement rocks which have been subjected to several periods of deformation, primarily during the Precambrian. In the Permo-Triassic, the continental extension splitting the supercontinent Gondwana apart led to extensive faulting, resulting in the formation of long narrow north-east to south-west trending troughs in which sandstones, limestones and mudstones of the Karoo Supergroup were deposited. These sediments were subjected to repeated periods of uplift, erosion and faulting from the Jurassic to the present, producing graben structures in which Tertiary and younger sediments were deposited. Quaternary lacustrine sands and gravels are common in the Lake Malawi area, indicating the retreat of the lake to its present position.

There are some Jurassic-aged basalts in the far north and south of the country and several carbonatite intrusions in southern and south-central Malawi. Unlike the older rift system, however, there is little evidence of magmatic activity and volcanism associated with rift formation, with the exception of some Pleistocene volcanics found near the northern end of Lake Malawi. There are also hot springs in the western and southern lake area.

Lowermost in the South Lilongwe Plains recognised geological units is the Precambrian Basement Complex, made up of biotite rich gneisses, granulites and schists. Paragneisses and semi-pelitic schists dominate the rock units, metamorphosed under extreme temperature and pressure conditions to granulite facies. Interspersed within the paragneisses are lesser orthogneisses, with associated psammitic, pelitic, and calcareous horizons, as well as concordant and discordant amphibolites and felsic pegmatites and minor basic to ultrabasic intrusions.

The rock types of the Basement Complex include biotite gneisses, with subordinate hornblende gneisses, calc-silicate granulites and gneisses. The area from Dedza Boma extending northwest to Namitete and north to Ntchisi Boma includes a distinct group of kyanite-graphite-pyrite-pyrrhotite paragneisses, kyanite-muscovite gneisses, kyanite quartzites and graphitic quartzo-feldspathic schists and granulites.

The kyanite-mica gneisses observed around the Malingunde area have protoliths including thinly bedded sequence of arkosic sandstones with interspersed bands of carbonaceous shales deposited in a nearshore deltaic environment.

The entire rock package of the Malingunde area has been deformed by the Mozambique Orogeny imparting a strong north-south to northwest-southeast shear foliation and schistosity. The complex structural history of the area is not fully understood, though gneissic foliation is often compositional layer parallel around Malingunde, with north plunging folds observed in outcrop along the Lilongwe River.

The rocks of the South Lilongwe Plains are obscured by thick weathering profiles and residual soils. Deep residual weathering profiles to 45m have been observed in water exploration drilling. A red-brown sandy clay soil has been observed to be associated with ferruginous graphite-bearing rocks.

The localised presence of lateritic duricrust layer has proven to be beneficial, due to the cessation of physical weathering and hence protection of the highly weathered graphite-rich rocks.



Hydromorphic dark grey, black and mottled soils, composed of clay minerals and thin humus of A-horizon are found around dambos. A combination of very slow permeability and poor site drainage produces waterlogged soil and seasonal flooding. Pale coloured angular, sandy colluvium is washed into heads of dambos.

### 3.4.3 Project Geology

The Precambrian Basement Complex rich in graphite and pyrrhotite paragneisses occurs across RL0012 and the western parts of EL0372. This same package, though highly weathered, underlies the Lilongwe Plain and is covered by the western parts of EL0372 and the majority of EL0609 and EL0492.

The Malingunde Deposit comprises 4.5km strike length of shallowly north-east dipping, north-west striking graphitic gneisses. The mineralised package has up to six separate sub-parallel zones of graphite gneiss with cumulative across strike widths averaging 120m and locally exceeding 200m. The newly discovered Msinja Deposit, located 1.5km along strike to the south-east has a strike length of approximately 1.0km with about five parallel zones of mineralisation. Across strike cumulative widths of mineralisation range between 40 and 100m.

Lithologies described in historic geological survey work (Regional Geology, above) are commonly recognised in drilling samples. At surface, scattered areas of coarse kyanite float are reasonably common and occasional outcrops of iron rich, pisolitic duricrust are to be observed.

The host rocks at Malingunde have been subject to intense weathering under tropical climatic conditions. This has resulted in development of substantial thicknesses of saprolite and other weathered facies. A typical profile from surface is soil ("SOIL", 0-1m), ferruginous pedolith ("FERP", 1-4m), mottled zone ("MOTT", 4-7m), pallid saprolite ("PSAP", 7-9m), saprolite ("SAPL", 9-25m), saprock ("SAPR", 25-35m) and fresh rock ("FRESH" >35m). In some areas, a thin lateritic duricrust is present within the FERP, though this rarely exceeds 1m in thickness. A typical graphic summary of the weathering profile observed at the Malingunde Deposit can be seen in Figure 3.3.

		Depth (m)	WEATH Code	Geological Description
		0		
		1	SOIL	<b>Top soil/colluvium:</b> Colluvial soils included cultivated/cropped soil. Predominantly sandy clay, may contain grits and angular pebbles?
	Pedolith	4	FERP	<b>Ferruginous Pedolith:</b> Ferruginous (iron stained) sandy? clay. Some physical reworking of weathered material resulting in reworking of graphite flakes. Graphite appears to show a different grade distribution to MOTT/PSAP/SAPL. May locally contain variably cemented layers that tend towards a duricrust.
		6	MOTT	<b>Mottled Zone:</b> Ferruginous rich and less ferruginous clay-quartz rich (mottled colouring). Mottles typically range in size from 10-20mm? In-situ chemical weathering of clay gangue minerals with graphite remaining inert. Iron (produced predominantly from weathering of Fe-sulphide oxidation and surrounding clays) mobile during weathering producing secondary goethite [FeO(OH)] and jarosite [KFe <sub>3</sub> (SO <sub>4</sub> ) <sub>2</sub> (OH) <sub>6</sub> ]. Appears to have the same same graphite grade distribution as PSAP & SAPL but the primary fabric (ie foliation) may be partially destroyed.
"REDOX boundary"		8	PSAP	<b>Pallid Saprolite:</b> Pale (lacking colour) saprolite dominated by clay and quartz gangue mineralogy (i.e. same as Saprolite). Has same graphite grade distribution as MOTT/SAPL.
Local Water Table	Saprolite	25	SAPL	<b>Saprolite:</b> 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. Has same grade distribution as MOTT/PSAP
Regional Water Table (May Seasonally fluctuate)		35	SAPR	<b>Saprock:</b> More compact, slightly weathered rock with a lower porosity and higher density than saprolite. Less than 20% of weatherable minerals (= feldspar/mica/sulphides) altered. Generally requires a hammer blow to break. Sulphides are oxidised. Weathering predominantly occurs along meso/micro fractures with the groundmass largely unweathered
Weathering front / top of fresh rock		>35	FRESH	<b>Fresh Rock:</b> Foliated graphitic gneiss: Primary mineralogy of feldspar-quartz-graphite+/-biotite+/-pyrite+/-pyrrhotite
	Bedrock			

Figure 3.3 Typical weathering profile observed at the Malingunde Deposit

#### 3.4.4 Mineralisation

Flake graphite mineralisation occurs within graphitic gneiss units that are interlayered and separated locally by barren or low-grade biotite-kyanite+- graphite gneisses. Mineralisation is broadly conformable with the host paragneiss sequence, striking north-west and dipping at 10-40° to the north-east. The graphitic gneisses of central Malawi are very coarse grained resulting in a graphite flake distribution in concentrates of generally >60% +150um. This is likely because of the very high metamorphic grade (granulite facies) and long cooling period experienced by the host rock package allowing large flakes time to crystallise.

Graphite is generally chemically inert during the weathering process and in most of the weathering zones the flakes remain pristine. However, in the SOIL and FERP zones graphite grades are highly depleted, with very little material above 4% TGC occurring. Grades may also be slightly depleted in the MOTT zone. Recovered flake sizes are decreased significantly in the FERP zone and somewhat in the MOTT zones as opposed to the bulk SAPL zone. This is thought to be a result of physical reworking and some volume reduction in the upper levels with associated dilution and natural flake comminution.

### 3.5 Regional Population and Infrastructure

The Project is located within the Lilongwe District on Malawi. The Lilongwe District is 6,159 km<sup>2</sup> in size with an estimated population of 1.35 million persons. The village of Ndumila is located within the proposed mining areas where the village of Kumalindi is located on the northern edge of the project area straddling the S124 secondary road. The access road to the plant area will run from the S124 road along the eastern edge of this village to the plant site security gate.

In areas away from the villages, land use is limited to small scale seasonal farming and grazing of livestock.

The natural environment of the project area has been extensively transformed by agricultural activity with only a few small patches of remnant woodland remaining.

Local infrastructure is good with the S124 road connecting the project site to Lilongwe. A mobile communications tower with voice/data capability is located nearby at Malingunde Hill.

### 3.6 Communities

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 over 40 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**) is currently planned with reference to applicable Malawian and international environmental and social permitting and baseline requirements for the Project.

Sovereign is committed to conduct its activities in full compliance to the requirements of national regulations, its obligations under international conventions and treaties and giving due consideration to international best practices and policies. The Company plans to appoint an experienced environmental consultant to manage the ESIA process, and environmental and social baseline studies have commenced with appropriately qualified independent experts. 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.

The Company has embarked on several exercises with the communities in the area and there is a general positive acceptance of the Project.

Based on the current assessments and commenced ESIA, the Company believes there are no environmental issues currently identified that cannot be appropriately mitigated in accordance with standard practices adopted for the development of mining projects.

As the Project continues to develop, the Company expects to enter into a Community Development Agreement (**CDA**) with the surrounding communities. Significant engagement with these communities has occurred is ongoing ahead of negotiation of the CDA which is expected to be concluded during the DFS stage.

### 3.7 Topography and Climate

The topography on the site is generally flat with variation in elevation across the project area between 1050m and 1100m above sea level.

This 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 860 mm per year. Monthly average temperature and rainfall measurements for Lilongwe, some 20 km from the site (Source climate-data.org).

Monthly rainfall peaks in January at 225 mm with the minimum rainfall generally being encountered in months of June to September where monthly rainfall averages between 0 and 2 mm/month.

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.

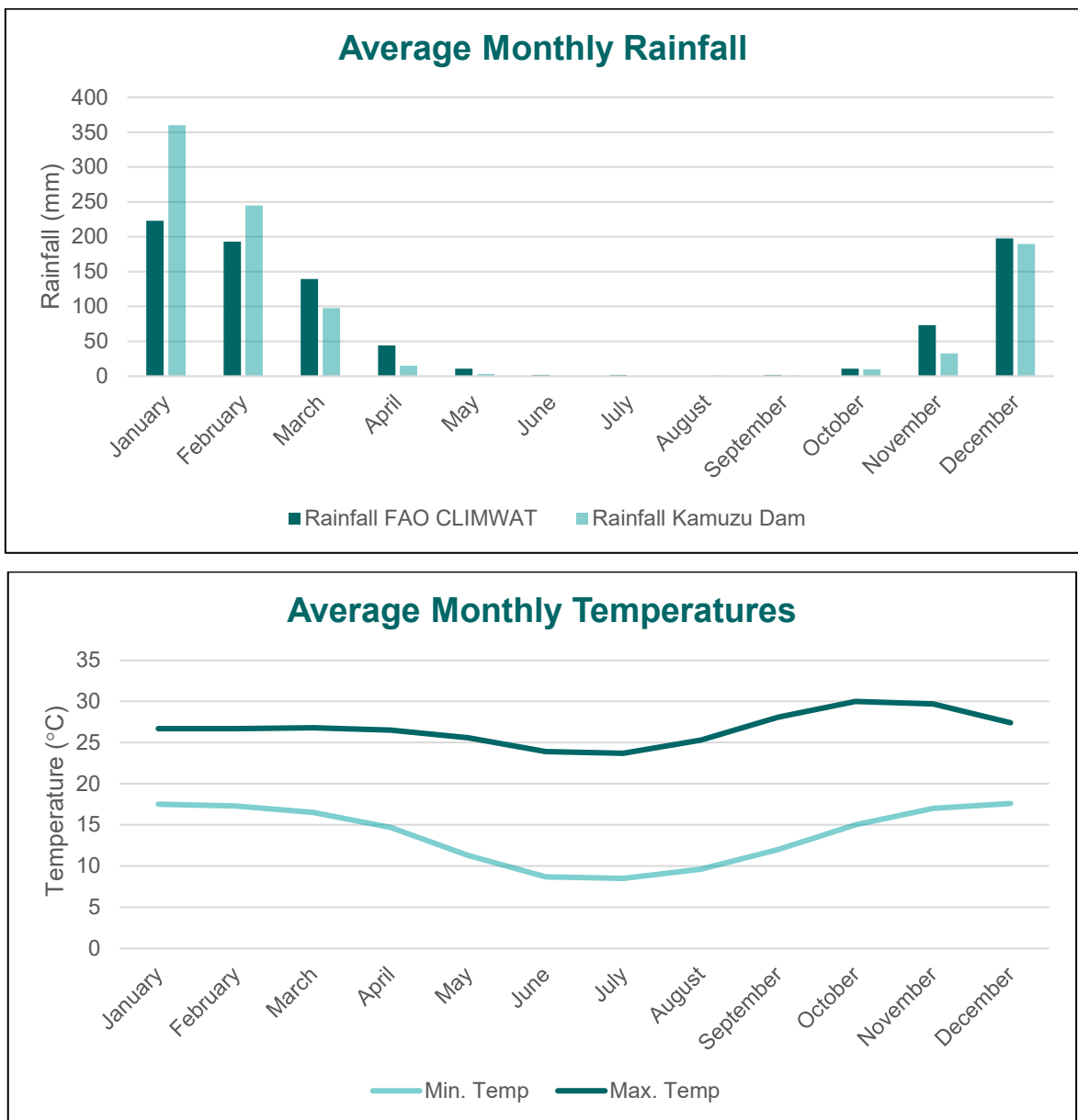


Figure 3.4 Lilongwe Monthly Rainfall and Temperature Data

## 3.8 Regulatory and Fiscal Setting

### 3.8.1 Regulatory

Exploration and Mining activities in Malawi are regulated by the Mining Act (2019). The new Act replaced the previous legislation, the Mines and Minerals Act (1981).

The Ministry of Natural Resources, Energy and Mining (MNREM) is the Government entity responsible for the administration of the minerals sector, including granting of exploration and mining licences. It has statutory oversight of the energy, minerals, and forestry sectors.

The following table outlines the various types of licences and the key terms for each type:

**Table 3.1 Summary of Licence Types**

Type	Term	Permitted Activity	Size
<b>Reconnaissance (Rec)</b>	12 months (12 month extension)	Not land disturbing exploration and supporting activities (non-exclusive)	No more than 100,000km <sup>2</sup>
<b>Exploration (EL)</b>	3 years (+ 2x 2 year extensions)	Exploration activities	No more than 2,500km <sup>2</sup>
<b>Retention (RL)</b>	5 years	Feasibility studies	No more than 25km <sup>2</sup>
<b>Mining (ML) *</b>	Up to 25 year or LoM + extensions of 15 years (unlimited)	Mining	As per PFS mine plan

Subject to successful exploration and achieving positive technical and economic outcomes with more advanced studies (such as Feasibility Study), Sovereign endeavours to apply for a Mining Licence (ML). The following requirements, milestones and approvals are needed to be completed prior to submitting a ML:

- Malawian incorporated company.
- Technically and financially competent.
- Approval under the Environment Management Act.
- Pre-Feasibility Study.
- Operation plans: community engagement, mining operations, mine site, waste management, rehabilitation & closure, resettlement and employment & training plans.
- Commencement of on-site development within six months.
- 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 as summarised below in Table 3.2:

**Table 3.2 Summary of Exploration Commitments**

Commitments	2021	2020
Within one year	\$555,909	\$237,507
After one year but not more than five years	\$316,439	\$151,519
<b>Total</b>	<b>\$389,026</b>	<b>\$389,026</b>

### 3.8.2 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 main 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 at 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.

The following table outlines other fiscal rates applied to mining operations: The following table outlines other fiscal rates applicable to a mining operation:

**Table 3.3 Summary of Other Fiscal Rates**

Instrument	Rate	Fixed/Negotiable	Comments
<b>Royalty</b>	Generally 5%	Negotiable	Depending on level of processing (Royalties can be up to 10%).
<b>Dividend Withholding</b>	Rate varies		
<b>Import duty</b>	Variable	Based on tariff book	Zero for all capital equipment (subject to pre-approval).
<b>VAT</b>	16.5%	Fixed	Zero input for exports.
<b>VAT – Fuel</b>	-	Negotiable	Application for 0% for fuel used to generate power.
<b>State Equity</b>	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).
<b>Annual Rents</b>	Fixed rate per km <sup>2</sup>	Fixed	Calculated based on a fixed fee times area



## 4 GEOLOGY AND RESOURCE

### 4.1 Overview

The Malingunde Deposit lies 20 km to the south-west of the city of Lilongwe, Malawi, and was initially defined by SVM's geologists during regional auger exploration works following up on airborne VTEM and ground FLTEM geophysics.

The Project is located within the Lilongwe District of Malawi. The Lilongwe District is 6,159 km<sup>2</sup> in size with an estimated population of 1.35 million persons. The village of Ndumila is located within the proposed mining areas where the village of Kumalindi is located on the northern edge of the project area straddling the S124 secondary road.

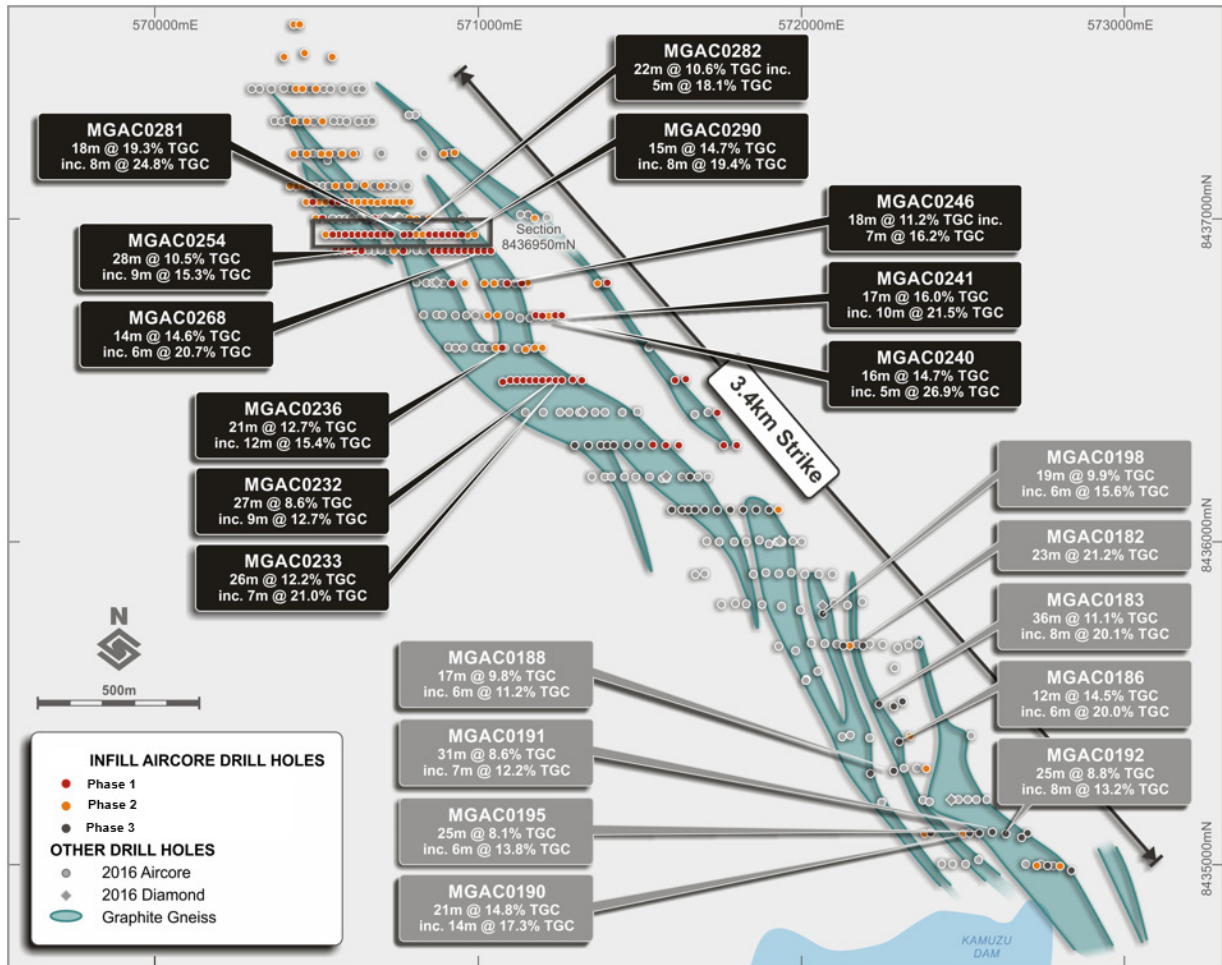
The flake graphite mineralisation occurs within graphitic gneiss units that are interlayered and separated locally by barren or low-grade biotite-kyanite-graphite gneisses. Mineralisation is broadly conformable with the host paragneiss sequence, striking north-west and dipping at 10-40° to the north-east.

In order to conduct a Mineral Resource Estimation (MRE) on the Malingunde mineralisation a program of diamond drilling (13 holes for 487.75 m) followed by a resource definition air core drilling program (180 holes for 5,516.8 m) were conducted during late 2016. Additionally, 569 hand auger holes (6,042 m) were also included to complete the MRE drill hole database.

In April 2017, CSA Global finalised the Malingunde Graphite Deposit MRE, resulting in a JORC 2012 Inferred and Indicated Mineral Resource of 28.8 Mt @ 7.1% TGC within saprolitic material types. Following a successful Scoping Study, SVM undertook a second resource drill campaign in 2018 comprising 176 holes for 5,295 m air core drilling. This data was used to provide additional data for the updated MRE announced in June 2018 that forms the basis for the Ore Reserve declaration and will be used in the proposed Feasibility Study (FS).

The combined exploration programs have created an effective grid over the Malingunde Graphite project of approximately 3,500m x 750m.

Figure 4.1 shows the location of the drill holes at the Malingunde Graphite Deposit.



## 4.2 Assaying

Hand-auger (HA), Air-core (AC) and Diamond core (DD) drilling form the basis of the MRE and are described below:

HA drilling was employed to obtain samples vertically from surface at nominal 1-metre depth intervals, with samples composited on geologically determined intervals. Composite samples were riffle split on site.

A total of 1,053 HA holes (10,686 m) support the MRE.

AC drilling was employed to obtain bulk drill cuttings at nominal 1-metre (downhole) intervals from surface. All 1-metre samples were collected in plastic bags directly beneath the drilling rig cyclone underflow. The entire 1-metre sample was manually split using either a 3-tier (87.5:12.5 split) or single tier (50:50 split) riffle splitter or a combination thereof to facilitate the mass reduction of a laboratory assay split. Compositing of the laboratory sample split was performed on a geological basis. Mineralised ( $\geq 3\%$  v/v visual) laboratory splits of 1-metre intervals from surface to the top of the saprolite zone were not composited whereas mineralised splits of the underlying saprolite and saprock intervals were composited nominally at 2-metres. Unmineralised ( $\leq 3\%$  v/v visual), laboratory splits of 4-metre intervals from top of hole to bottom of hole were composited.

A total of 384 AC holes (11,595.8 m) support the MRE.

DD drilling (angled and vertical) was designed to obtain representative large diameter (PQ3) core for geological, geotechnical and metallurgical testwork purposes. Subsequent to completion of all geological and geotechnical logging and sampling (whole core samples removed laboratory bulk density and strength testing) drill core was either manually hand split or sawn using a circular saw and sampled as  $\frac{1}{4}$  PQ3 core. Upon completion of laboratory bulk density and strength testing of the whole core intervals the entire core was submitted to the laboratory. A total of 13 DD holes (487.75 m) support the MRE. Laboratory splits were submitted Intertek Perth for assay sample preparation. Total Graphitic Carbon (TGC) analysis of all assay pulps samples was undertaken by Intertek Perth.

### 4.3 Resource Estimation

The MRE is based upon data obtained from 13 DD drill holes (487.75 m), 384 AC holes (11,595.8 m) and 1,053 HA holes (10,686 m) drilled across the Malingunde and Msinja deposits. Five (5) pairs of AC/DD and eight (8) pairs of AC/HA twinned holes are included in the drilling totals. Drilling occurred during 2016 and 2017.

HA and AC holes are located on east-west transects across the entire strike of the modelled deposit spaced nominally at 100 m x 20 m with infill of 50 m (N) x 20 m (E) over a section of the northern area of the Malingunde deposit. DD holes were drilled on existing drill sections and spaced between 200 m and 400 m north-south along the strike extent of the deposit. All HA holes were drilled vertically whilst the majority of the AC and DD holes were angled, designed to intersect broadly orthogonal to the shallow-moderate east dipping mineralisation.

The drill hole collars were surveyed using a differential global positioning system (DGPS) to centimetre accuracy. All DD holes were down-hole surveyed using a Reflex Ez-Trak multi-shot survey tool at 30m intervals down hole. Owing to their shallow depths (maximum 12 m), HA holes were not downhole surveyed. AC holes were not routinely down-hole surveyed, however 23 holes (5%) were surveyed to verify the amount of downhole deviation.

HA and AC drill samples were geologically logged, recording relevant data to a set template at 1 m intervals. DD core was geologically logged based on geological intervals. DD core was also geotechnically logged and digitally photographed.

DD core (PQ3) was quarter cut and sampled according to geological intervals. HA samples were composited on geological intervals of between 2-3 m during the 2016 field season, and 1 m intervals in 2017 and submitted for Total Graphitic Carbon (TGC) analysis. AC samples were sampled at 1 m and 2 m intervals. Field quality assurance procedures were employed, including the use of analytical standards, coarse blanks and duplicates.

TGC wireframe interpretations were based upon a lower cut-off of 4% TGC, which is equivalent to the graphitic gneiss domain boundary, from geological logging of HA/AC/DD drill holes.

The MRE block model consists of 6 zones of TGC mineralisation in the Malingunde deposit, and 5 in the Msinja deposit. Mineralisation domains were encapsulated by means of 3D wireframed envelopes based upon a lower cut-off grade of 4% TGC. Weathering domains were interpreted based upon geological logs of drill samples. Domains were extrapolated along strike or down plunge to half a section spacing. Internal waste units were modelled within the graphitic gneiss mineralisation envelopes to define barren domains.

All drill hole assay samples were composited to 2m intervals. All assayed HA/AC/DD drill hole intervals were utilised in the grade interpolation.

The MRE for the Malingunde Graphite Project, reported in accordance with the 2012 Edition of the JORC Code, is presented in Table 4.1 below:

**Table 4.1 Mineral Resource Estimate**

Resource Category	Tonnes (Mt)	Grade (% TGC)	Contained Graphite (Mt)	Operator
<i>Measured</i>	4.8	8.5	0.41	SSL
<i>Indicated</i>	32.3	7.2	2.32	SSL
<i>Inferred</i>	27.9	7.0	1.95	SSL
<b>Total</b>	<b>65.0</b>	<b>7.2</b>	<b>4.68</b>	<b>SSL</b>

Sovereign has a 100% interest in the Resources above.. The MRE includes both the Malingunde and Msinja deposits.

Source: David Williams (Competent Person for the Resources)

SSL: Sovereign Services Limited

MALINGUNDE MINERAL RESOURCE ESTIMATE 4.0% cut-off grade								
	Measured		Indicated		Inferred		Total	
	Tonnes (Mt)	Grade (% C)	Tonnes (Mt)	Grade (% C)	Tonnes (Mt)	Grade (% C)	Tonnes (Mt)	Grade (% C)
Saprolite	4.8	8.5%	18.7	7.1%	5.4	6.3%	28.8	7.2%
Saprock	-	-	13.6	7.4%	3.3	6.3%	16.9	7.2%
<b>Total</b>	<b>4.8</b>	<b>8.5%</b>	<b>32.3</b>	<b>7.2%</b>	<b>8.6</b>	<b>6.3%</b>	<b>45.7</b>	<b>7.2%</b>
Fresh rock	-	-	-	-	19.3	7.3%	19.3	7.3%
<b>Total resource</b>	<b>4.8</b>	<b>8.5%</b>	<b>32.3</b>	<b>7.2%</b>	<b>27.9</b>	<b>7.0%</b>	<b>65.0</b>	<b>7.2%</b>

MALINGUNDE MINERAL RESOURCE ESTIMATE 7.5% cut-off grade								
	Measured		Indicated		Inferred		Total	
	Tonnes (Mt)	Grade (% C)	Tonnes (Mt)	Grade (% C)	Tonnes (Mt)	Grade (% C)	Tonnes (Mt)	Grade (% C)
Saprolite	2.7	10.0%	5.4	9.6%	1.1	9.0%	9.2	9.7%
Saprock	-	-	4.7	10.0%	0.6	9.1%	5.3	9.9%
<b>Total</b>	<b>2.7</b>	<b>10.0%</b>	<b>10.1</b>	<b>9.8%</b>	<b>1.7</b>	<b>9.0%</b>	<b>14.5</b>	<b>9.7%</b>
Fresh rock	-	-	-	-	6.5	9.9%	6.5	9.9%
<b>Total resource</b>	<b>2.7</b>	<b>10.0%</b>	<b>10.1</b>	<b>9.8%</b>	<b>8.3</b>	<b>9.7%</b>	<b>21.0</b>	<b>9.8%</b>

Note: Sovereign has a 100% attributable interest in the Resources above. The MRE includes both the Malingunde and Msinja deposits.

## 5 ORE RESERVES

Pit optimisation, mine design and mine scheduling were completed by Orelogy and is based on an average of 52,000 tonnes of concentrate produced per annum over 16 years LOM. This equates to an average throughput of 600,000 tonnes per year, with declared Ore Reserves, reported in accordance with the 2012 Edition of the JORC Code, shown below in (Table 5.1).

**Table 5.1 Ore Reserve Estimate**

Reserve Category	Tonnes (Mt)	Grade (% TGC)	Contained Graphite (Mt)	Operator
<i>Proved</i>	3.1	9.5	0.30	SSL
<i>Probable</i>	6.4	9.5	0.60	SSL
	<b>9.5</b>	<b>9.5</b>	<b>0.90</b>	<b>SSL</b>

Sovereign has a 100% interest in the Reserves

Source: Ryan Locke (Competent Person for Reserves)

SSL: Sovereign Services Limited

**Note:** Malingunde Ore Reserve is reported at a 6.75% total graphitic carbon ('TGC') lower cut-off grade for saprolite and between 9.5% and 11.0% for saprock

MALINGUNDE ORE RESERVE						
	Proved		Probable		Total	
	Tonnes (Mt)	Grade (% C)	Tonnes (Mt)	Grade (% C)	Tonnes (Mt)	Grade (% C)
Saprolite	3.1	9.5%	5.3	8.9%	8.4	9.1%
Saprock	-	-	1.2	12.3%	1.2	12.3%
<b>Total</b>	<b>3.1</b>	<b>9.5%</b>	<b>6.4</b>	<b>9.5%</b>	<b>9.5</b>	<b>9.5%</b>

Note: Sovereign has a 100% attributable interest in the Reserves. The ore reserve includes material from the Malingunde deposit only.

Reserves were defined by using a lower cut-off grade of 6.75% TGC for saprolite and between 9.5% and 11.0 % TGC for saprock.

To determine the reserves, a standard open pit optimisation techniques have been used to determine the location of the optimal three-dimensional geometry of the potential open pit. This is based on a range of modifying factors (e.g. costs, process recoveries, prices, overall wall slopes etc.). A range of optimisation runs were completed which showed the resource was effectively insensitive to mining costs, processing costs, selling costs and overall slopes. The work indicated the overall project value is most sensitive to changes in price and process recovery.

A more complete description of the proposed mining operations is set out in Section 6.

Orelogy were requested to review the 2018 PFS mining assumptions to validate or modify the ore reserves statement as required. The process of validation included a sensitivity analysis using the following primary factors which have been demonstrated to influence the Malingunde Ore reserve:

- Market Price.
- Mining Costs.
- Process recovery and costs.

In summary, the sensitivity analysis demonstrated that the typical variances of the influencing factors did impact the projected cash flow of the project, however they had no material change on the reported mining ore inventory. As such the ore reserves reported in the 2018 PFS remain valid.

The 2018 PFS ore reserve was based on the June 2018 MRE and the cost information generated from the second stage of the PFS work. This is based on an average of 52,000 tonnes of concentrate produced per annum over 16 years LOM. This equates to an average throughput of 600,000 tonnes per year, with declared Ore Reserves shown above in Table 5.1.

## 6 MINING

The Company engaged independent consultants Orelogy Mining Consultants Pty Ltd to carry out the pit optimisations, mine design, scheduling, mining cost estimation and Ore Reserve generation for the Malingunde PFS. The proposed mining method is a conventional truck and shovel mining operation. Free dig mining is considered appropriate for this style of shallow, saprolite-hosted graphite mineralisation. This methodology is used throughout the region for open pit mining operations and is a robust, easily implementable approach.

The proposed mining method requires conventional mining infrastructure including but not limited to mining equipment workshop, fuel & oil storage facilities, wash bay, offices, lunch and ablution facilities and a first aid room. These are to be supplied by the mining contractor. Sovereign Metals has defined a mining infrastructure area and will supply water and power to this location. As there is no anticipated requirement for blasting, no infrastructure is required for explosives storage. An initial contract mining strategy was selected for the first 7 years, transitioning to owner-operator model after this.

A schedule was developed that progressively mines material from the northern-west zones 1 and 2, then the central zones 3 and 4 and finally the south-east zone 5 (Figure 6.1). A three month pre-strip of 190kt of waste is required in order to provide sufficient material to construct the initial tailings storage facility (**TSF**). The life of mine strip ratio is 1:1 waste:ore including the capitalised pre-strip.

The mine schedule is based on achievable production rates for the specified size of mining fleet with only a single shift per day required. No assumptions have been made to date regarding minimum mining widths or dilution.

Mine designs have been undertaken using the geotechnical recommendation provided by Peter O'Bryan and Associates (POBA), the independent geotechnical consultant appointed by Sovereign Metals Ltd to undertake the geotechnical assessment. POBA provided specific berm, batter and inter-ramp angle design criteria for the deposit. The risk around any geotechnical uncertainty is mitigated by:

- The pits are relatively shallow, being a maximum of ~30m below surface.
- Sensitivity to slope angles was assessed during the optimisation phase and showed the deposit discounted value was insensitive (less than -4%) to changes in slope parameters.
- The nature of the deposit and the small scale and low strip ratio of the mining stages will enable access to other areas of the deposit in the event a mining area is inaccessible.

There is significant opportunity to increase the mine life beyond 16 years by processing lower grade material from the large resource base, or by discovering additional high-grade resources within reasonable trucking distance to the proposed processing plant.

The total Production Target of 9.5Mt run-of-mine (to produce approximately 830kt of concentrate) is underpinned by Proved Ore Reserves of 3.1Mt (32%) and Probable Ore Reserves of 6.4Mt (68%).

The Ore Reserve was derived by conversion of a portion of the Measured and Indicated Resource categories to Proved and Probable Ore Reserve categories respectively. No Inferred Resource material has been used in the PFS as discussed in Section 4.



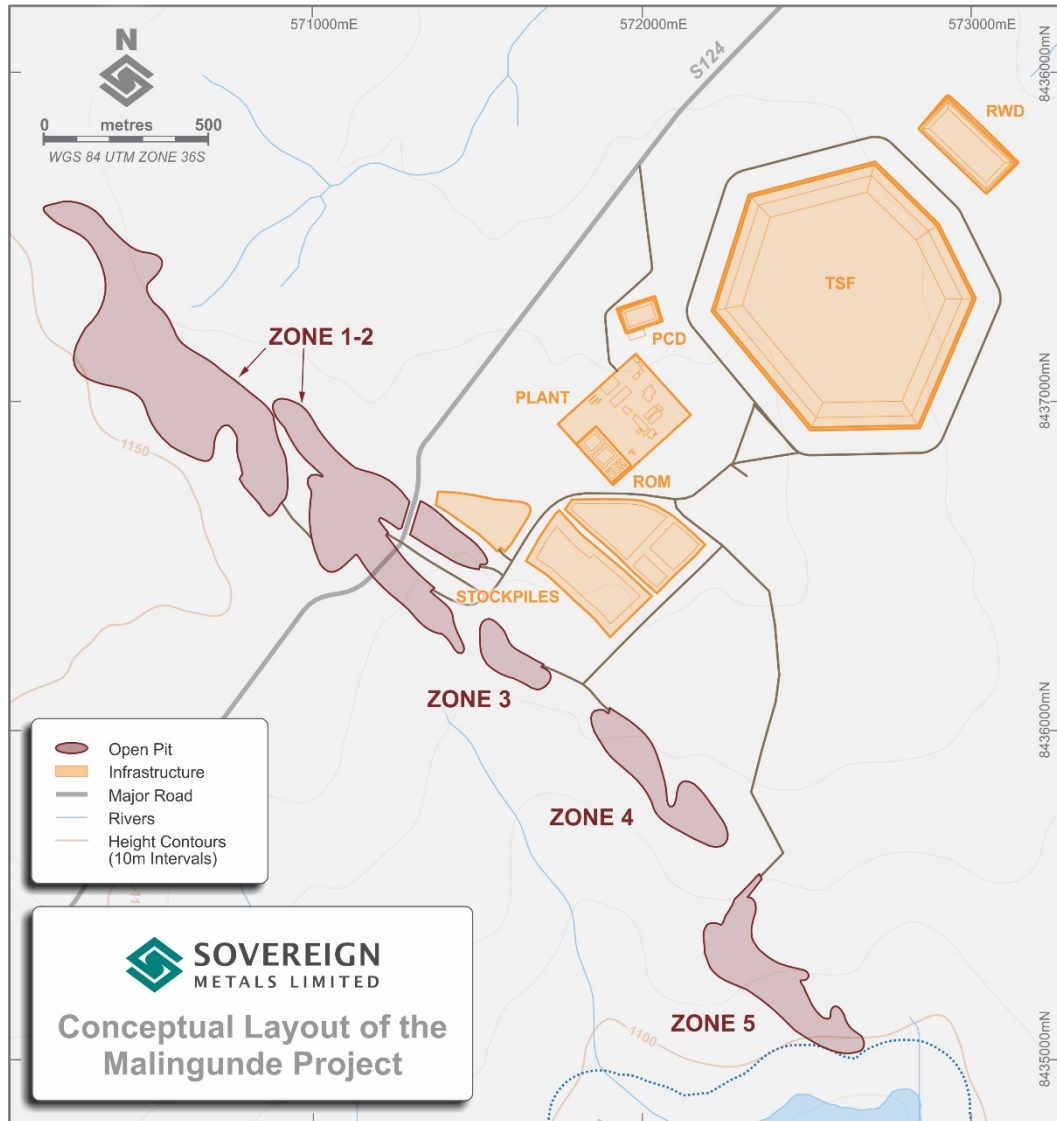


Figure 6.1 Mine Design and Infrastructure

The production schedules for the Ore Reserve determination showing the material type by period and grade profile are shown in Figure 6.2.

There is significant opportunity to increase the mine life beyond 16 years by processing lower grade material from the large resource base, or by discovering additional high-grade resources within reasonable trucking distance to the proposed processing plant. This mine life extension was not assessed in this CPR.

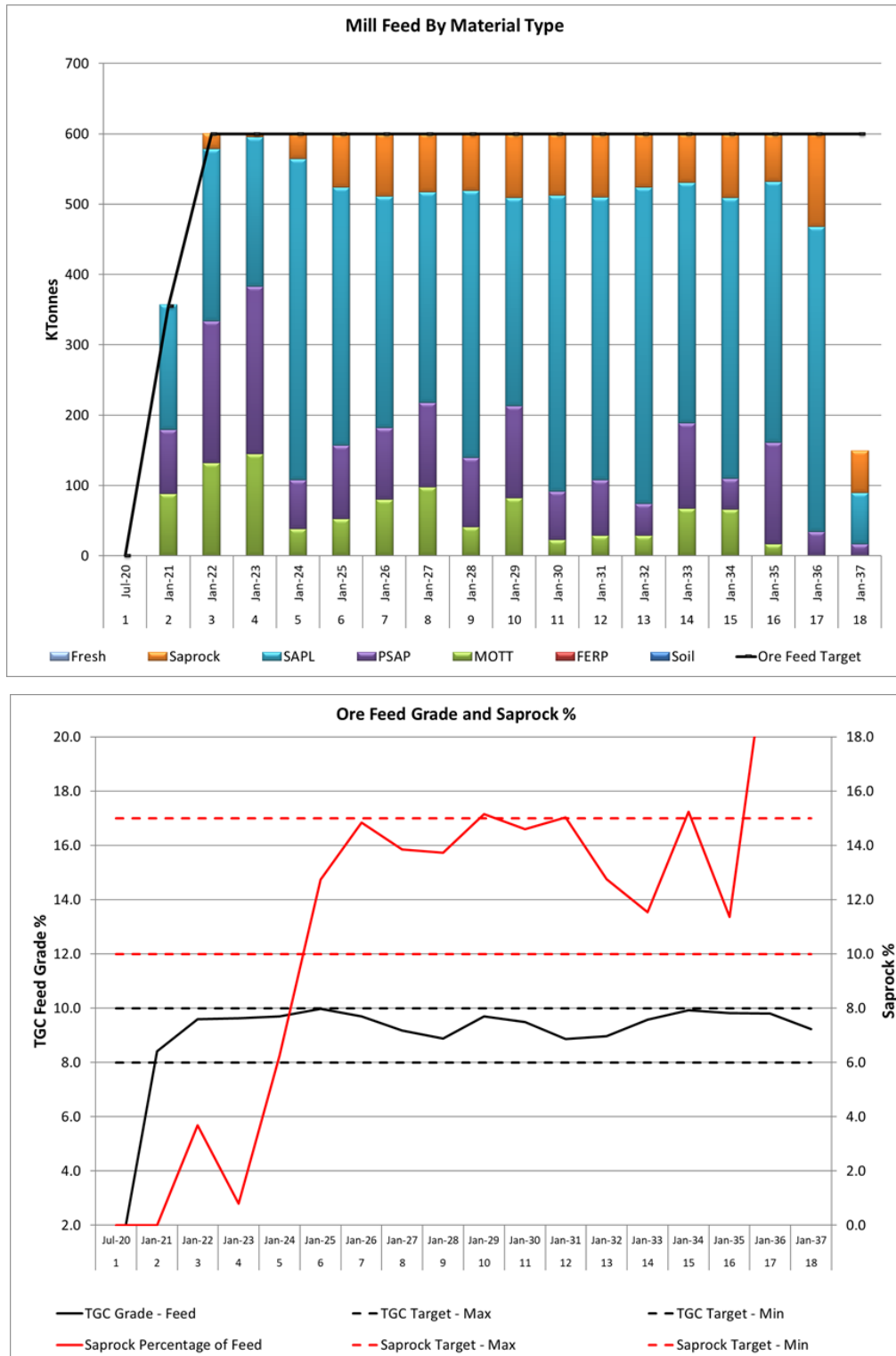


Figure 6.2 Process Plant Feed Material Types and Grade

## 7 METALLURGY AND PROCESSING

Significant metallurgical test-work programs have been conducted on the Malingunde saprolite hosted graphite deposit since 2016.

An optimised flowsheet was developed by SGS at Lakefield in Canada, and numerous variability tests were carried out on samples from varied lateral and vertical locations within the deposit. Overall, the test-work showed relatively consistent results across the deposit with 48%-78% of the concentrate in the coarser size fractions >149µm (>100 mesh). Combined concentrate grades consistently range between 95% and 98% TGC. Open circuit and locked cycle flotation tests (LCT) produced recoveries between 76% and 94%.

A substantial upscaled metallurgical program was undertaken as part of the PFS. This consisted of comminution and scrubber test-work undertaken at ALS in Perth and flotation and solid / liquid separation and tailings geochemical / geotechnical test-work undertaken at SGS in Canada. The test-work identified the ability to process the more competent saprock, located vertically beneath the very soft saprolite, as up to 15% of the overall feed blend. This enables access to substantial additional high-grade mineralised material previously not considered in the 2017 Scoping Study production target.

Overall, all metallurgical test-work undertaken to date shows a robust flowsheet capable of repeatable metallurgy for a wide range of feed samples has been developed for Malingunde.

The Company has used results from two recent locked cycle tests (LCTs) conducted as part of the PFS metallurgical program to estimate product grade, flake size distribution and recoveries.

The Company has applied an assumption of 97% C and an overall recovery of 90% for modelling production over the life of mine (LoM). These metallurgical results were the weighted average of two LCTs on a master composite ore sample that aimed to represent the LoM feed.

**Table 7.1 Malingunde Flake Distribution – weighted average LCT results.**

MALINGUNDE FLOTATION RESULTS – PFS INPUTS				
PARTICLE SIZE		C (%)	Distribution (wt. %)	Flake Category
Tyler Mesh	(µm)			
+32	+500	98%	5%	Super Jumbo
-32 +48	-500 +297	97%	19%	Jumbo
-48 +80	-297 +177	97%	26%	Large
-80 +100	-177 +149	97%	9%	Medium
-100 +200	-149 +74	97%	25%	Small
-200	-74	94%	16%	Amorphous
<b>TOTAL</b>		<b>97%</b>	<b>100%</b>	

The design of the processing plant is based on the SGS testwork and best practise in similar operations. Importantly, the process requires no primary crushing or grinding of the ore, a material advantage over hard-rock graphite deposits. The basic flowsheet is summarised below and also shown in Figure 7.1:

- The plant feed will be delivered from the run-of-mine (ROM) stockpile by front-end-loader (FEL) to the grizzly and ROM bin.
- Material is passed through a mineral sizer for primary size reduction.
- Plant feed at 100% -20 mm is processed through a scrubber charged with steel media.
- The scrubber discharge slurry is passed through a 10 mm screen with a small quantity (0-15%) oversize being directed to a small pebble crusher.

- The scrubber undersize is pumped to the rougher flotation section for processing. Rougher tailings are pumped to the tailing's thickener.
- Rougher concentrate undergoes a polishing regrind.
- The ground concentrate undergoes cleaner flotation stages with the cleaner concentrate split into coarse and fine fractions at 180 µm.
- Attritioning on the coarse and fine fractions followed by three stages of recleaner flotation.
- The final concentrate fractions +180 µm and -180 µm streams are combined and thickened.
- The concentrate is dewatered using a plate and frame filter with air blow and membrane squeeze steps.
- The filtered concentrate is dried using a flash dryer.
- Dried product is screened and bagged for despatch and sale.

The simple process design uses proven technology and is operational across a number of graphite mines today. The high-grade feed stock of 9.5% TGC over the life of the project assists in achieving the very low processing costs.

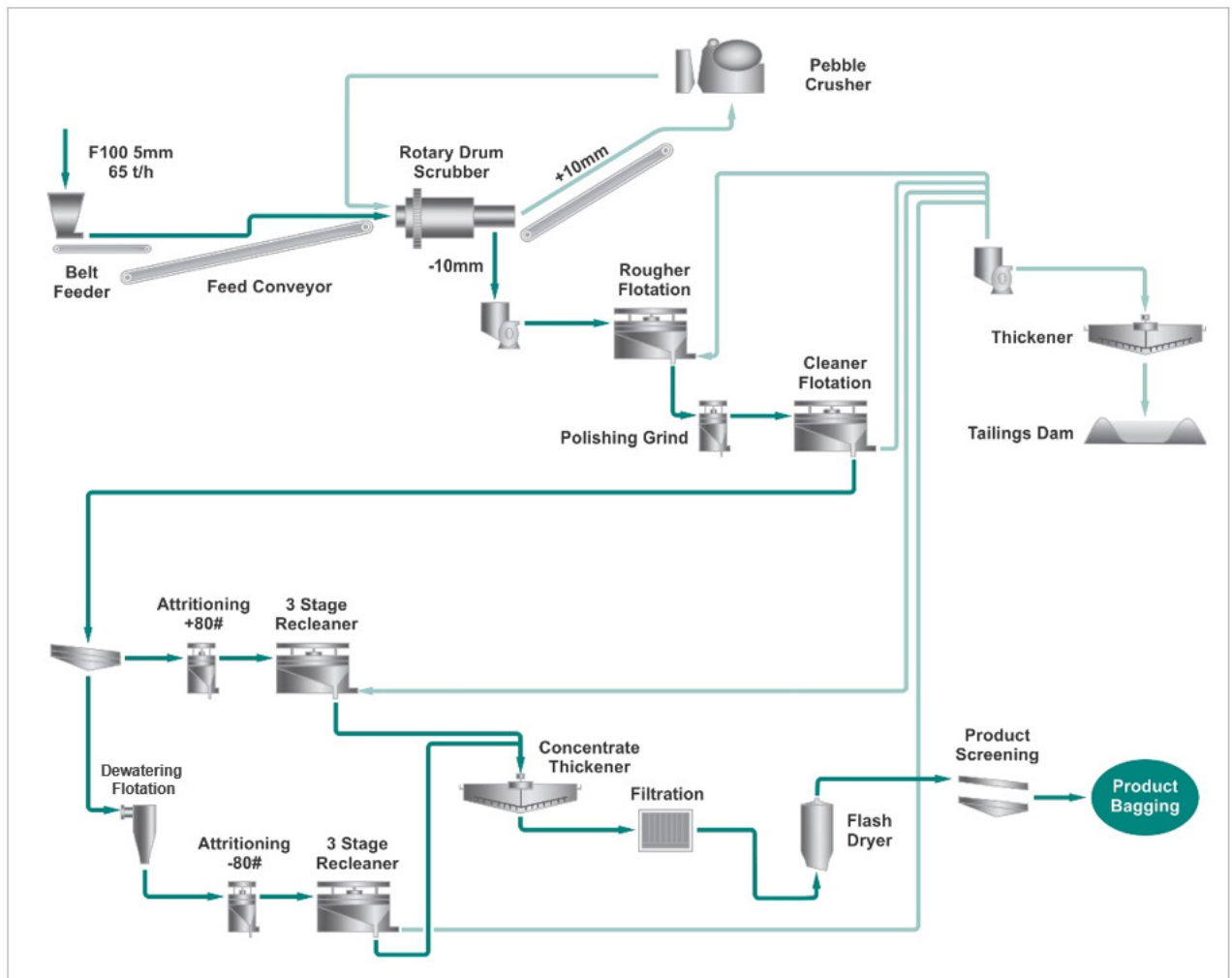


Figure 7.1 Process Flowsheet Schematic

## 8 INFRASTRUCTURE AND SERVICES

Malingunde is located approximately 20 km south west of Lilongwe, Malawi’s capital, and is serviced by a bitumen road from the main M1 highway to within 10 km of site where it becomes an all-weather gravel road. Final product is therefore only required to be hauled a short distance by road to the existing and underutilised operational intermodal rail siding at Kanengo before being railed to the port of Nacala.

The Malawi Electrical Supply Corporation (“ESCOM”) plans to construct a 132/11kV substation near Bunda, just 10 km to the east of Malingunde which will be linked to the national grid (Figure 8.1). The 2018 PFS assumed that a new Bunda substation would be operational by 2027 (4 Years after commissioning). and grid power as the primary source from this time. Although the Bunda substation may come online earlier, this cost update retains a conservative position that grid power will be available from Year 4 onwards and that diesel generators will supply all power for the first three years of operation. The Project economic model therefore assumes on site diesel power generation to the end of Year 3, with grid power availability from this point.

Water is relatively plentiful in the immediate area and the project will be able to source sufficient water from within the project area, predominantly as part of the pit dewatering requirements.

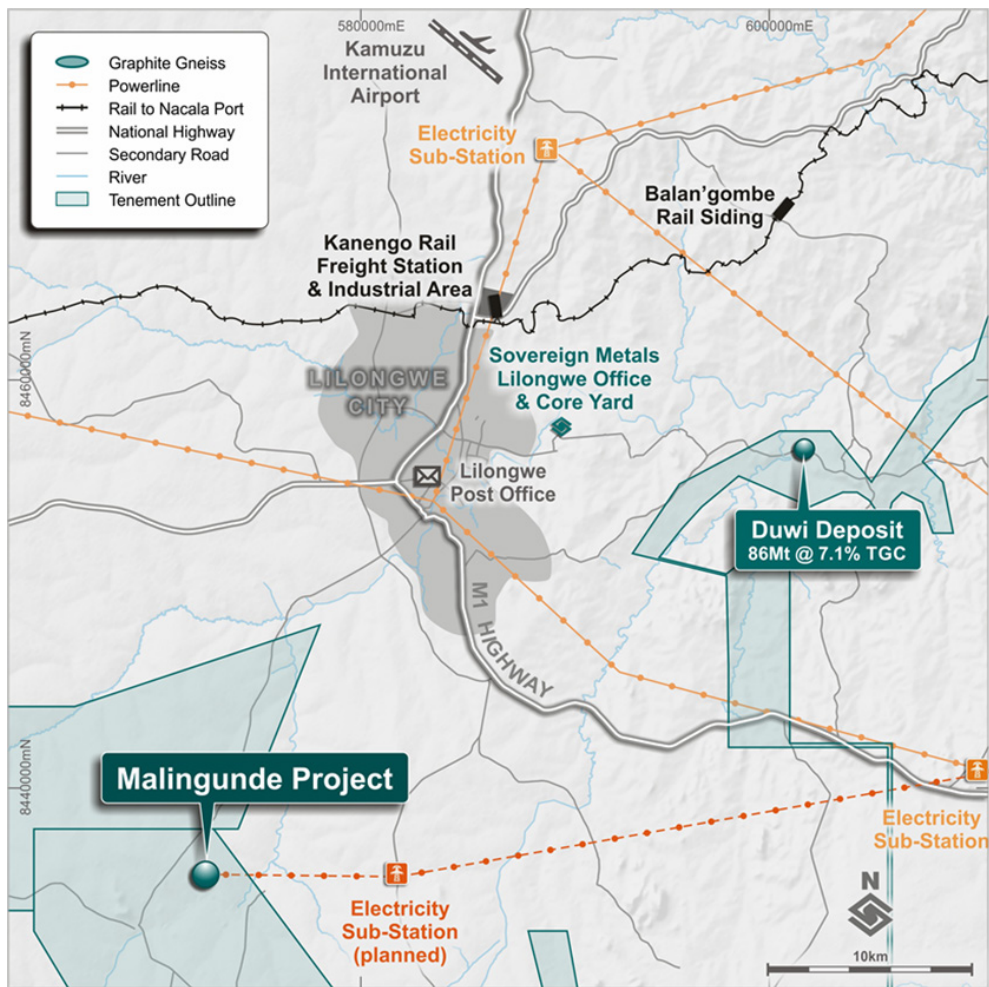


Figure 8.1 Map of Regional Infrastructure

## 9 HYDROLOGY, HYDROGEOLOGY AND TAILINGS STORAGE

The Tailings Storage Facility (TSF) for the Project was designed to safely contain the life of mine estimated tailings of 5.8 Mt. As per the outcome of sub-studies undertaken during the 2018 PFS the selected TSF option is unchanged as follows:

- A conventional slurry TSF was the most effective deposition method.
- TSF located to the northeast of the plant location was selected as the preferred site.
- Compacted earth walls and cyclone walls were options for the Project.
- In pit disposal should be evaluated during the next stage of study to suit the pit development mining schedule.

For the updated PFS costing, SLR Consulting (Africa) Pty Ltd (SLR) was requested to update design assumptions to align with the new Global Industry Standards on Tailings Management (GISTM). SLR provided a report documenting the design and cost implications of GISTM and updated the PFS level cost estimate to reflect the modified design and escalation to 2021. SLR completed a high-level Dam Break Assessment (DBA) and concluded that the TSF will likely be classified as a TSF with a “very high” consequence thereby requiring a more conservative engineering design than was originally included in the 2018 PFS.

Compared to the PFS design SLR recommends to only utilise downstream construction to increase the stability of the TSF. Also, the TSF starter wall (constructed from pit waste) will need to increase in height to ensure sufficient underflow during the life of the TSF and additional freeboard required by the GISTM. The increased initial starter wall height (from 4m to 8m) has resulted in the following variations compared to the 2018 PFS TSF starter wall assumptions:

- Larger starter wall footprint area.
- Larger requirement for pit waste for construction of the TSF starter wall.
- A requirement for borrow from the TSF basin to make up for the shortfall in pit waste material available at start up.
- Larger clearing and grubbing areas.
- Larger top soil removal area.
- Larger box cut volume.
- Larger base compaction area.

Hydrology, hydrogeology and geochemical assessments are unchanged since the 2018 PFS. SLR undertook these assessments at a PFS level. The baseline hydrology assessment indicates that the majority of samples collected within the Project area are within the three standards identified for the project (MS drinking water specifications, WHO Guidelines and IFC Mining Effluent Guidelines water quality specifications).

The baseline work for the hydrogeological studies indicate an approximately uniform hydrogeological environment, with boreholes producing between 1-2 m<sup>3</sup>/h. However, two of the boreholes, have sustainable yields in excess of 5 m<sup>3</sup>/h. The numerical modelling work has shown that for the pits, the cone of drawdown is at a maximum extent at the end of mining period (16 years) and recovers rapidly thereafter. After year 16, the residual drawdown is below 1m, with an aerial extent which decreases with time, indicating full recovery.

The maximum plume extent from the downstream toe of the TSF is predicted to reach 1,053 m, at the end of year 100 with the geochemical testwork indicating that the TSF pool and seepage water is of



relatively good quality. This needs to be included in the hydrogeological model during the next phase of design, but indications are that effects on groundwater will be negligible (or within acceptable limits).

In terms of water balance, it is expected the project will require an additional ~20,000m<sup>3</sup> per month during each nine month dry season for the first two years of operation.

The geochemical testwork on tailings indicates highly weathered lithologies with low acid potential and low neutralising potential. The low acid potential (<0.3% S) shows that the materials are unlikely to be capable of sustained acid generation and this is confirmed by the NAG tests, which indicate a near-neutral pH even after intense oxidation of the samples. Organic analytes were generally below detection limit. Only the total carbon fraction C10-C16 was indicated above detection limit (17 mg/kg), which is indicative of the diesel added to the process. The soil screening value for industrial sites given by the Oklahoma Department of Environmental (2012) is 2500 mg/kg. The concentration in the waste value is therefore not expected to be a concern.

## 10 OPERATIONS

The assumptions made with regard to the operating strategy for the Project at start-up are:

- Contractor mining covering load and haul, ore rehandling, haul road development and maintenance, stockpile management and associated fleet maintenance.
- Contractor covering the transport and logistics management for the concentrate product from mine gate to Nacala Port.
- Owner mineral resource management with grade control and contractor drilling for any exploration.
- Owner operated processing facility including process maintenance.
- Owner site management including financial management, procurement and materials management, human resources, stakeholder engagement / community affairs, health and safety and environment
- Outsourced services which will be managed by designated owner contract managers include:
  - Security including access control and perimeter patrols.
  - Operational catering and cleaning services.
  - Employee transport.
  - Resource, grade control, process and environmental sample analysis (Laboratory).
  - Fuel Supply and management.
  - Power supply from on-site generation.

## 11 HEALTH AND SAFETY

The principal legislation that regulates occupational health and safety in Malawi is the Occupational Safety, Health and Welfare Act, 1997. The Act regulates conditions of employment in workplaces with regard to safety, health and welfare of employees. The Act imposes duties on employers, persons in control of premises, manufacturers and suppliers.

It is the duty of every employer to ensure the safety, health and welfare at work of all employees.

The Act also places on employers a duty to provide information, instruction, training and supervision to ensure the safety and health at work of their employees. Every worker in a workplace is required to be adequately and suitably instructed and trained in the measures available for prevention and control and protection against health hazards at the workplace.

In addition to the Occupational Safety, Health and Welfare Act, SVM will also adhere to the relevant provisions of:

- Employment Act, 2002 as amended in 2010
- Gender Equality Act, 2013
- Disability Act, 2012

The above legislation largely deals with the health and safety of employees. However, SVM will also consider health and safety impacts on surrounding communities and put in place appropriate safeguards.

## 12 ENVIRONMENTAL & SOCIAL

The Project location in relation to the environmental and social setting is important and will inform project alternatives. These are important in evaluating project trade-offs and developing the appropriate management and mitigation measures to be implemented for the project. Consequently, they will also influence the feasibility of the Project in terms of cost related to environmental and social drivers.

The ESIA process in Malawi is undertaken in three distinct phases, namely the Project Brief, Environmental Scoping and ESIA Phases.

A Project Brief was submitted to the Environmental Affairs Department (**EAD**) on 12 June 2017 to initiate the ESIA process for the Project. The EAD indicated that, based on the nature and scale of the activities, an ESIA is required to be undertaken and an ESIA Report is to be submitted. The ESIA must be compliant with the Malawi Guidelines of Environmental Impact Assessment (1997).

Collection of environmental data and a number of baseline studies have been undertaken since April 2017 and were largely completed by July 2018. This included surface and groundwater sampling, aquatic biomonitoring, fish and mollusc sampling, air quality monitoring, terrestrial ecological surveys, wetland surveys, noise and vibration baseline surveys, soil sampling, socio-economic data collection and household surveys.

Information from initial surveys, baseline data collection and consultation as part of the environmental scoping phase were collated and documented in the form of an environmental scoping report (**ESR**). The draft ESR was made available from 5 March to 13 April 2018 for review and comments by stakeholders. Comments and queries were incorporated in the comments and response report, and the draft ESR was amended as needed. The revised ESR was submitted to the EAD for review and was approved in 20 June 2018.

The ESIA process will ultimately culminate in the compilation of an ESIA report that will be prepared in accordance with the requirements of the EIA Guidelines (1997). The detailed ESIA phase and all specialist studies are near completion.

Acquisition of land for the Project will physically and economically displace a number of households and land users. The Company will adequately and satisfactorily mitigate and offset these impacts, should the proposed project be implemented, by providing the affected parties with the necessary resettlement measures.

A resettlement action plan (**RAP**) for the Project is being prepared which will conform to both Malawian legislation and international best practice standards, specifically the IFC Performance Standards (2012) that deals with land acquisition and resettlement. At the current time the Company is unable to reliably estimate resettlement costs and has not included a provision in the estimated development costs.

An environmental and social management plan (**ESMP**) is being developed as part of the ESIA process. The ESMP will contain specific measures to minimise and manage potential environmental and social impacts of project activities, as well as monitoring programs to evaluate compliance with environmental targets and standards.

The ESMP will address project aspects such as land clearing, management of topsoil, protection of cultural heritage, management of waste materials, prevention of surface and groundwater contamination, management of storm water, management measures for dust and noise, rehabilitation and revegetation, and management of community impacts.

### 13 PRODUCT LOGISTICS

Malingunde is located approximately 20km south west of Lilongwe, Malawi's capital, and boasts excellent access to services and infrastructure. The site is serviced by a bitumen road from the main M1 highway to within 10km where it becomes an all-weather gravel road.

The logistics strategy is unchanged and the basis and cost build-up for product export logistics comprises the following:

- Road transport of bagged product on flat-bed trucks from the mine site to the Kanengo rail head in Lilongwe
- Packing bags into shipping containers at Kanengo and periodic loading onto lightweight rail wagons
- Rail transport to Nacala port in Mozambique
- Storage and loading onto seaborne container carriers

The proposed route is shown in Figure 13.1. Rail freight cost estimates were provided by Central East African Railways (**CEAR**), the existing rail concessionaire and rail operator. The rail concession is operated as a joint venture between Mitsui & Co., Ltd, Vale SA and the Malawi and Mozambique Governments. CEAR have advised that there is available capacity to accommodate Malingunde concentrates. Export out of the port of Beira may become an increasingly viable logistics option given recent announcements of upgrades of the Sena rail line which connects Beira and the Tete province (Moatize Coal Mine).

The Company engaged Morgan Sterling Consultants who completed the original logistics study for the 2018 PFS to provided an update to the costs and validation of the original strategy for this update. The outcomes of the review was no change to the reported strategy in the 2018 PFS.

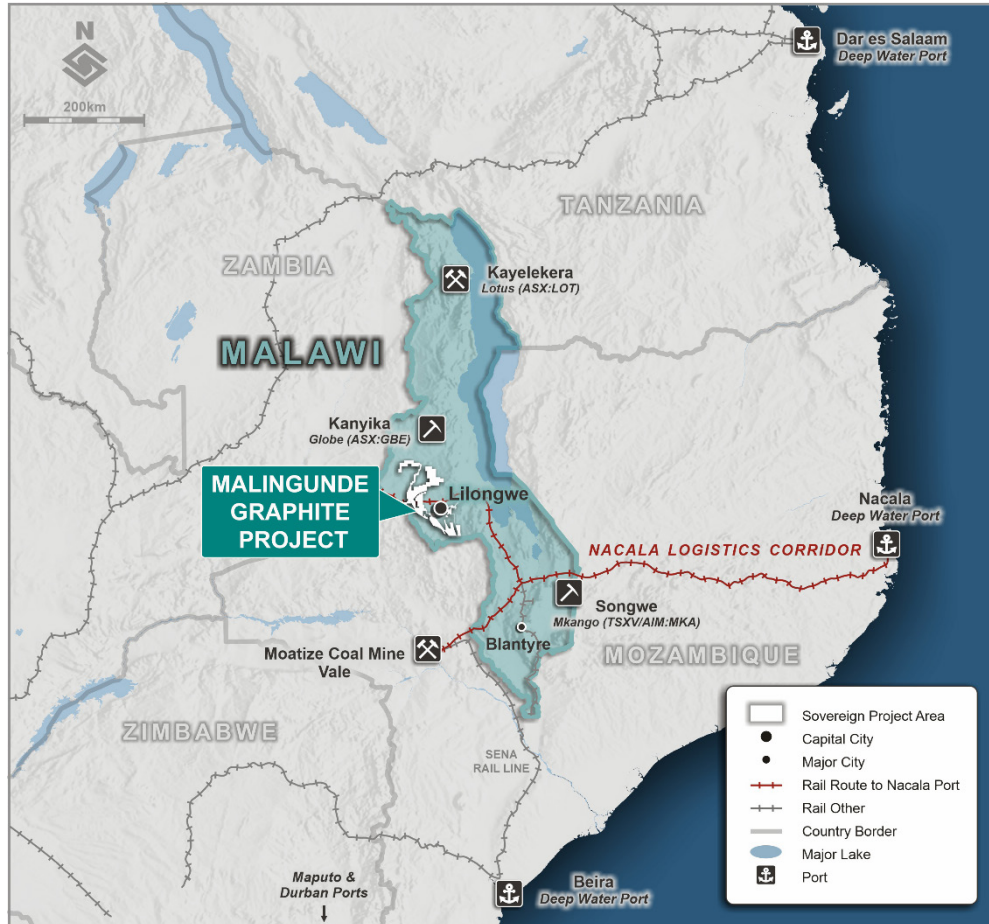


Figure 13.1 Nacala Rail Corridor

## 14 COST ESTIMATES

### 14.1 Capital Cost Estimates

As with the 2018 PFS, the base case that has been costed was described as the 600,000 t/y operation with TSF wall lifts using cyclone tailings.

For all areas of the project except for the TSF, engineered quantities, equipment and facility specifications and execution strategies are the same as per the 2018 PFS as no additional engineering has been completed. However, the labour and commodity rates (inclusive of installation) and equipment costs have been assessed and escalated to reflect a second quarter 2021 United States dollar (USD) estimate. As discussed in Section 9, the compliance with the new GISTM has resulted in a more conservative TSF design and resulted in increased cost in this area of the project.

The estimate has been divided into direct and indirect cost.

Processing and infrastructure capital costs are based on the cost of mechanical equipment provided primarily by Tier 1 and Tier 2 Chinese equipment vendors who have recently validated the costs originally provided in the 2018 PFS estimate.

Costs related to processing, processing infrastructure and associated costs were developed by DRA. Mining and TSF / Water Management costs were developed by Orelogy and SLR Consulting, respectively (SLR). Owners team costs were provided by SVM. The accuracy of the infrastructure capital costs is estimated to be +/-25%.

**Table 14.1 Capital Cost Estimate Breakdown (Q2,2021)**

Cost Category	Cost (US\$M) 600,000 t/y
<b><u>DIRECT COSTS</u></b>	
Processing	25.0
Site Preparation	2.2
Processing Infrastructure	3.7
Mining	2.2
Tailings & Water	12.6
<b>TOTAL DIRECT COSTS</b>	<b>45.7</b>
<b><u>INDIRECT COSTS</u></b>	
Indirect Costs	8.9
Owner's Costs	9.1
<b>TOTAL INDIRECT COSTS</b>	<b>18.0</b>
<b>TOTAL COST ESTIMATE</b>	<b>63.6</b>

Note: Rounding errors may be present in the table above

Sustaining capital amounts have been estimated for the Project as US\$28m. Majority of costs are associated with the TSF wall lifts, removal of overburden and capitalised waste mining as well as some plant equipment replacement (pumps only) and mobile equipment replacement.

## 14.2 Operating Cost Estimates

Graphite operations which process saprolite-hosted material have historically been the world's lowest cost producers of natural flake graphite concentrates. The Project estimates operating costs of approximately US\$338 per tonne concentrate free on board (**FOB**), or US\$275 at mine gate (**MG**), for its high-quality graphite concentrates at a production rate of 52,000 tonnes per annum over the life of mine. Additionally, estimated long term average costs move to just US\$291 FOB or US\$228 MG after year 7. The project is amongst the very lowest for unit operating costs amongst the current and future graphite development pipeline. The Project aims to produce at a reasonable scale that can easily be placed into existing traditional markets and the growing battery supply chain.

The extremely low operating cost is driven primarily by the saprolite advantage and low logistics costs compared to most East African peers. As the ore is hosted in soft saprolite, it offers a huge cost advantage for mining with its low strip ratios and free-dig nature. In terms of processing, no primary crush or grind is required, resulting in lower processing costs compared to hard-rock operations.

The proximity of the Project to Malawi's capital city Lilongwe offers significant infrastructure and other advantages. Access to an already established labour pool and other industrial services provides operating efficiencies. The largest advantages are the access to high voltage grid power after year 3, and the existing, operating rail/port logistics solution for product export.

Operating costs include all costs incurred by SVM in mining and processing ore to produce graphite concentrate and to transport the graphite concentrate to point of delivery being Free on Board (FOB) port of Nacala. The operating costs begin to be incurred from the date of introduction of first ore into the processing plant. The operating costs include general expenses and on-site administration costs.

The estimate has generally been developed from first principles. Exceptions are the plant maintenance materials cost which is a factored estimate based on the plant direct capital cost and parts of the General & Administration (G&A) cost which are allowances based on experience from other projects.

All currency amounts quoted are in United States Dollars (US\$) unless nominated otherwise. The base date of the estimate is second quarter 2021. The accuracy of the operating cost estimate is estimated to be +25 -15%.

The operating strategy for the project considers three separate phases through the life-of-mine as the project matures (such as replacing contract mining with owner operation) and new infrastructure (most notably grid power) becomes available. The key assumptions for each phase are described below and the estimated annual cash operating costs for this base case is summarised in Table 14.2.

**Phase 1. Years 1 - 3**

Labour – Full complement of expatriate employees.

Mining – By mining contractor.

Power – Contractor power generation with heat recovery.

**Phase 2. Years 4 - 7**

Labour – Reduction in expatriate labour.

Mining – By mining contractor.

Power – Grid with owner operated diesel back up power.

**Phase 3. Year 8 onwards**

Labour – Reduced expatriate labour as for Years 4 – 7.

Mining – by owner.

Power – Grid with owner operated diesel back up power.

**Table 14.2 Operating Cost Summary by Phase**

	Description	Phase 1 Unit Cost US\$/t product	Phase 2 Unit Cost US\$/t product	Phase 3 Unit Cost US\$/t product
<b>MINING</b>	Mining contractor	57.18	57.18	23.82
<b>PROCESS</b>	Labour (incl G&A)	74.47	52.30	52.30
	ROM ore rehandle	2.52	2.52	2.52
	Power	98.28	36.38	36.38
	Reagents and consumables	33.10	43.90	43.90
	Maintenance materials	14.24	14.24	14.24
<b>GENERAL &amp; ADMIN.</b>	Overall (excl Labour)	54.72	54.72	54.72
<b>Concentrate Transport</b>		63.13	63.13	63.13
<b>TOTAL</b>		<b>397.64</b>	<b>324.37</b>	<b>291.01</b>



## 15 PROJECT IMPLEMENTATION

The 2018 PFS generated a preliminary implementation schedule for the subsequent project phases, being the Definitive Feasibility Study (DFS), engineering design, construction and commissioning of the facilities, infrastructure and services for the Malingunde Graphite Project.

As the start dates for the commencement of the DFS are not defined, the milestones are presented as months from initiation of the DFS in Table 15.1.

Sovereign has recently completed an update on the 2018 PFS to develop a representative study based on 2021 costing and revenue factors.

**Table 15.1 Project Milestones**

Item	Milestone	Month
1	DFS Phase Kick-Off	date not defined
2	Commence Early Engineering Phase	12
3	Final Investment Decision	15
4	EPC Contract Award	15
5	Commence Construction	20
6	Commence Production	35

From the commencement of the DFS, the project is estimated to take 35 months until first production.

## 16 MARKETING

The primary end-market for natural flake graphite is the refractory, foundries and crucible sectors which consumed approximately 77% (900,000 tonnes) of flake graphite production in 2020. The refractory industry is the volume driver for flake graphite, with foundries and crucibles offering smaller markets for higher purity graphite products. The major product flake graphite is consumed in is magnesia-carbon bricks, a mainstream, global refractory brick which is used in the steel industry.

The lithium-ion battery sector is the main emerging market for flake graphite. Greater capacity batteries, such as those required for electric vehicles, are expected to drive significant demand for graphite over the coming years. It is forecast the battery sector will become the largest segment by 2028.

China continues to be the world's leading producer of natural flake graphite, supplying approximately 62% of the market in 2020. Brazil, India, Canada, Mozambique, Madagascar and North Korea were major contributors of the remaining 38% of global production.

The supply-demand balance in the graphite market is forecast to remain in balance for an extended period. However, a significant supply deficit is anticipated by 2024 as demand is forecast to strengthen putting the market into deficit.

SVM is targeting a very simple mining and processing operation, selling reasonable volumes of very high-quality, dominantly coarse flake graphite products into existing markets.

SVM is focusing on initial entry into existing primary end-markets, including the refractory, foundry and expandable graphite sectors. The Project's very low production costs are expected to allow SVM to compete on price point with China, the world's largest supplier of natural flake graphite.

Test-work on Malingunde flake graphite for suitability in lithium-ion battery and other high-tech applications is also being conducted. This will allow SVM to expand its market reach to capitalise on future growth in the lithium-ion battery demand.

SVM has engaged with a diverse range of potential off-takers across a number of industrial sectors and global locations. To date, concentrate samples have been provided to a significant number of potential partners for assessment. Larger quantities of sample are now being requested by a number of these groups in order to validate and qualify SVM's flake graphite concentrates for their particular requirements.

Industry participants confirm that the highest value graphite concentrates remain the large, jumbo and super-jumbo flake fractions, primarily used in industrial applications such as refractories, foundries and expandable products. These sectors currently make up the significant majority of total global natural flake graphite market by value.

SVM engaged Fastmarkets, a specialist international publisher and information provider for the global steel, non-ferrous and industrial minerals markets, to assess the marketability of Malingunde graphite product.

Fastmarket's PFS level assessment has confirmed that, based upon their high-level view on global demand and supply forecasts for natural flake graphite, and with reference to the specific attributes of the Malingunde Project, there is a reasonable expectation that the product will be able to be sold into existing and future graphite markets. Given the extremely low-cost profile and high-quality product, it is expected that output from Malingunde will be able to fill new demand or displace existing lower quality / higher cost supply.

The Company has taken a deliberately conservative view for its base-case PFS scenario on graphite pricing. Using these assumptions, the PFS shows high operating margins and significant cash generation.

**Table 16.1 Graphite Basket Price**

	$\mu\text{m}$	%	Discounted Fastmarket Pricing (US\$)	Contribution (US\$)
<b>Super jumbo +32 mesh</b>	+500	5%	\$2,955	\$158
<b>Jumbo +48 mesh</b>	+300	19%	\$2,391	\$448
<b>Large +80 mesh</b>	+180	26%	\$1,334	\$353
<b>Medium +100 mesh</b>	+150	9%	\$1,029	\$88
<b>Small +200 mesh</b>	+75	25%	\$818	\$206
<b>Amorphous -200 mesh</b>	-75	16%	\$277	\$44
<b>Basket Price</b>				<b>\$1,296</b>

The basket price used for the PFS was based on current pricing sourced from independent consultant, Fastmarkets. Prices are forecast to increase in the medium to long-term. The prices reported are in line with reported prices being received by other graphite producers with the prices discounted to incorporate market establishment and agent fees.

## 17 PROJECT ECONOMICS

The Company modelled numerous scenarios analysing the impact of several key inputs, including sales price, operating cost and capital cost, settling on a base case scenario using the following key parameters.

- Capital cost as set out in Section 14.1
- Operating cost as set out in Section 14.2
- Production assumptions as summarised in Sections 5, 6 and 7

- Life of Mine: 16 years
- Discount rate: 10%
- Tax rate: 30% (no RRT has been incorporated)
- Royalty rate: 5% royalty (Government) and 2% of gross profit (Original Project Vendor)
- Foreign exchanges:
  - USD:AUD = \$0.78
  - MWK:USD = \$790
  - ZAR:USD = \$14.3
- Pricing: A flat basket price of US\$1,296 per tonne as discussed in Section 16

The financial model has been prepared internally by the Company using inputs from the various expert consultants, and has been reviewed by an international accounting firm to validate the functionality and accuracy of the model.

The key metrics for the Project are shown below in Table 17.1.

**Table 17.1 Key Project Metrics**

<b><u>ECONOMIC</u></b>		
<b>Development Capital</b>	US\$M	45.7
<b>Indirect Costs</b>	US\$M	8.9
<b>Owner's Costs (Inc. Contingency)</b>	US\$M	9.1
<b>Total Development Costs</b>	<b>US\$M</b>	<b>63.6</b>
<b>Sustaining Capital (over Life-of-mine)</b>	US\$M	28.2
<b>Mine Gate Opex (exc. Royalties)</b>	US\$/t conc	275
<b>Product Transport &amp; Logistics</b>	US\$/t conc.	63
<b>Average LOM Opex (FOB Nacala)</b>	<b>US\$/t conc.</b>	<b>338</b>
<b><u>PHYSICAL</u></b>		
<b>Average Annual Plant Throughput</b>	t/y	600,000
<b>Average Annual Concentrate production</b>	t/y	52,000
<b>Average LOM Feed Grade</b>	% TGC	9.5%
<b>Average LOM Product Grade</b>	% TGC	97.0%
<b>Average LOM Plant Recovery</b>	%	90%
<b>Life-of-Mine (LOM)</b>	Years	16
<b>Average LOM Strip Ratio</b>	Waste : Ore	1.0

<u>FINANCIAL</u>		
NPV (10%) Pre-tax	US\$M	204
NPV (10%) Post-tax	US\$M	144
IRR Pre-tax	%	48
IRR Post-tax	%	36
Product basket Price applied	US\$/t conc.	1,296
Average Annual EBITDA LOM	US\$M	43
Average Annual Revenue (post ramp-up)	US\$M	64

### 17.1 Sensitivity Analysis

The Project economics presented were prepared at a  $\pm 25\%$  level of accuracy to investigate the technical and economic parameters of a natural flake graphite operation at the Malingunde Project. The Company also modelled a number of different scenarios to evaluate the impact of key inputs to the Project's economics.

In the early stages of the Project, the major power source will be diesel generators prior to the availability of grid power. Changes in the diesel price have been modelled to analyse the impact it has on the operating costs of the project over its life. Based on the modelling a 10% increase in diesel price results in an increase in the operating costs of less than 2%.

The Company has applied a concentrate grade assumption of 97% TGC and an overall processing recovery of 90% for modelling production over the life of mine based on a conservative basket price. Large flake sizes and higher purity concentrates attract a premium price. If, at an operational level, a better flake distribution is able to be achieved margins maybe be improved.

**Table 17.2 NPV Sensitivity based on discount rate**

	<i>Sensitivity</i> <i>Weighted Average Cost of Capital (WACC)</i>			
	6%	8%	Base (10%)	12%
NPV (US\$m) – post tax	230	182	<b>144</b>	115

A sensitivity analysis has been performed on the financial model to understand the impact of variations to estimates on the Project's economics. The purpose of this assessment is to indicate a possible range of project outcomes. The Table below shows the impact on the Project's NPV (10%) (post tax) for the variations to the following parameters:

- Sales price
- Operating Cost
- Capital Cost

**Table 17.3 Project variables sensitivity analysis (NPV)**

	<b>Sensitivity</b>				
	<b>NPV (10%) (US\$m) – post tax</b>				
	<b>-20%</b>	<b>-10%</b>	<b>Base</b>	<b>+10%</b>	<b>+20%</b>
<b>Price</b>	87	166	<b>144</b>	173	201
<b>Operating Cost</b>	122	133	<b>144</b>	155	167
<b>Capital Cost</b>	131	138	<b>144</b>	151	157

**Table 17.4 Project variables sensitivity analysis (IRR)**

	<b>Sensitivity</b>				
	<b>Internal Rate of Return (IRR) – post tax</b>				
	<b>-20%</b>	<b>-10%</b>	<b>Base</b>	<b>+10%</b>	<b>+20%</b>
<b>Price</b>	28%	33%	<b>38%</b>	42%	47%
<b>Operating Cost</b>	33%	35%	<b>38%</b>	40%	42%
<b>Capital Cost</b>	32%	35%	<b>38%</b>	41%	46%

## 18 CONCLUSIONS AND RECOMMENDATIONS

Malingunde Project's strong commercial potential, centred on very low operating and capital costs, with product revenues generated from a very high-quality product. The PFS validates Sovereign's strategy of exploring for soft, saprolite-hosted graphite mineralisation, with the aim of delivering:

- Very low operating costs.
- Low capital costs.
- Very simple mining & processing.
- Targeting entry to existing refractory, foundry and expandable graphite markets, with Li-ion battery markets as future upside.

The PFS shows that the Project is not reliant on an unrealistically large scale or overly optimistic basket pricing assumptions to be economically viable. The very low operating cost nature of the Project provides protection, and ensures profitability for the project, even in extreme downside global graphite pricing scenarios.

## 19 COMPETENT PERSONS STATEMENTS AND CONSENTS

### 19.1 Processing, Infrastructure and Capital Costs

The information in this CPR that relates to Processing, Infrastructure and Capital Costs are based on and fairly represent information compiled or reviewed by Mr Matthew Langridge, a Competent Person, who is a Fellow Member of The Australasian Institute of Mining and Metallurgy. Mr Langridge is employed by DRA Pty Ltd, an independent consulting company. Mr Langridge has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activities undertaken. Mr Langridge, consents to the inclusion in the Announcement of the matters based on his information in the form and context in which it appears.

### 19.2 Operating Costs

The information in this CPR that relates to Operating Costs are based on and fairly represent information compiled or reviewed by Mr John Riordan, a Competent Person, who is a Fellow Member of The Australasian Institute of Mining and Metallurgy. Mr Riordan is employed by DRA Pty Ltd, an independent consulting company. Mr Riordan has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activities undertaken. Mr Riordan, consents to the inclusion in the Announcement of the matters based on his information in the form and context in which it appears.

### 19.3 Geology and Resource

The information in this CPR that relates to the Malingunde Geology and Resource are based on and fairly represent information compiled or reviewed by Mr David Williams, who is a Member of The Australian Institute of Geoscientists. Mr Williams is employed by CSA Global Pty Ltd, an independent consulting company. Mr Williams has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity 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'. Mr Williams, consents to the inclusion in the CPR of the matters based on his information in the form and context in which it appears.

### 19.4 Ore Reserves and Mining

The information in this CPR that relates to Production Targets and Ore Reserves is based on and fairly represent information provided by Mr Ryan Locke, a Competent Person, who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Locke is employed by Orelogy Group Pty Ltd, an independent consulting company. Mr Locke has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity 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'. Mr Locke consents to the inclusion in the CPR of the matters based on his information in the form and context in which it appears.

### 19.5 Metallurgy and Processing

The information in this CPR that relates to Metallurgy is based on, and fairly represents, information provided by Mr Oliver Peters, M.Sc., P.Eng., MBA, who is a Member of the Professional Engineers of Ontario (PEO), a 'Recognised Professional Organisation' (RPO) included in a list promulgated by the ASX from time to time. Mr Peters is the President of Metpro Management Inc and a consultant to SGS Canada Inc. ("SGS"). SGS is engaged as a consultant by Sovereign Metals Limited. Mr Peters has sufficient experience, which is relevant to the style of mineralisation and type of deposit 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'. Mr Oliver consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

## 19.6 Consents

DRA has given and has not withdrawn, its written consent to 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 DRA 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. DRA 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.

**Table 19.1 Competent Person by section**

Section	Name Of Competent Person	Company Name
CPR	John Riordan	DRA
Geology & Resource	David Williams	CSA Global
Ore Reserves	Ryan Locke	Orelogy
Mining	Ryan Locke	Orelogy
Metallurgy & Processing	Oliver Peters	Metpro Management
Cost Estimate - Capital	Matthew Langridge	DRA
Cost Estimate – Operating	John Riordan	DRA

## 20 DECLARATIONS

CPs are not, nor intend to be, directors, officers or employees of SVM and have no material interest, past or current, 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

This report was prepared by DRA and accompanying CPs (qualifications set out in section 19) 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).

DRA 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.

## 21 REFERENCES

Minnovo Pty Ltd. (2018). *Malingunde Graphite Project Prefeasibility Study Report. S091-REP-PR-001 A*. Perth: Minnovo Pty Ltd.

## 22 GLOSSARY

Abbreviation	Description
°C	Degrees Celsius
µm	Micrometre or Micron
AC	Air-core
ALS	ALS Metallurgical Laboratory
amsl	Above Mean Sea Level
ARD	Acid Rock Drainage
AS	Australian 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
CSR	Corporate Social Responsibility
d	Day
D	Discharge
d/y	Days Per Year
DD	Diamond-core Drilling
DEM	Digital Elevation Model
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

Abbreviation	Description
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
GHG	Greenhouse Gas(es)
GISTM	Global Industry Standards on Tailings Management
h	Hour
H'	Diversity Index
h/d	Hours Per Day
h/y	Hours Per Year
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
IBC	Intermediate Bulk Container
ICP-MS	Inductively Coupled Plasma Mass Spectrometer
ICP-OES	Inductively Coupled Plasma Optical Emission Spectrometry
IFC	International Finance Corporation
IRR	Internal Rate of Return
IT	Information Technology
JORC	Australasian Joint Ore Reserves Committee
JPY	Japanese Yen
k	Kilo or Thousand
kg	Kilogram
km	Kilometre
KPI	Key Performance Indicator
kt	Kilo Tonne (Thousand Metric Tonne)
kW	Kilowatt (Power)
kWh	Kilowatt Hour
L	Litre
LCT	Locked Cycle Testwork

Abbreviation	Description
LME	London Metals Exchange
LoM	Life of Mine
LSE	London Stock Exchange
m	Metre
M	Million
m <sup>2</sup>	Square Metre
m <sup>3</sup>	Cubic Metre
Ma	Mega annum (million years)
MG	Mine Gate
mm	Millimetre
MNREM	Ministry of Natural Resources, Energy and Mining
MRA	Malawi Revenue Authority
MRE	Mineral Resource Estimate
mRL	Metre Reduced Level
Msal	Meters Above Sea Level
MSDS	Material Safety Data Sheet
Mt	Million Tonnes (Metric)
Mt/y	Million Tonnes Per Year
MW	Megawatt
N/A	Not Applicable
NA	Not Available
ND	Not Detected
NPI	Non Process Infrastructure
NPV	Net Present Value
OHS&E	Occupational Health, Safety & Environment
OK	Ordinary Kriging
PEA	Preliminary Economic Assessment
PFD	Process Flow Diagram
PFS	Pre-Feasibility Study
PPE	Personal Protective Equipment
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
SOP	Standard Operating Procedure
SVM	Sovereign Metals Limited
t	Tonne (Metric)

Abbreviation	Description
t/h	Tonnes Per Hour
t/m <sup>3</sup>	Tonnes Per Cubic Metre
t/y	Tonnes Per Year
TBC	To Be Confirmed
TC	Total Carbon
TC	Treatment Charge
TDS	Total Dissolved Solids
TGC	Total Graphitic Carbon
TSF	Tailings Storage Facility
UOM	Unit of Measure
US\$	United States Dollar
USD	United States Dollar
V	Volt
VAT	Value Added Tax
VTEM	Versatile Time Domain Electromagnetic
w/v	Weight/Volume
w/w	Weight/Weight
WBG	World Bank Group
WHO	World Health Organization
XRD	X-Ray Diffraction
XRF	X-Ray Fluorescence

## ASX INFORMATION

### SUMMARY OF MATERIAL ASSUMPTIONS AND MODIFYING FACTORS

Material assumptions used in the estimation of the production target and associated financial information for the revised PFS in the Competent Person's Report entitled 'Malingunde Graphite Project' (CPR) are set out in the following table.

Table 1: Assumptions	
Maximum accuracy variation - Capital costs	+25%/-15%
Maximum accuracy variation - Operating costs	±25%
Minimum LoM	16 years
Annual throughput (tonnes)	600,000
Head grade (TGC)	9.5%
Recovery	90%
Concentrate grade (TGC)	97%
Annual production (tonnes)	~52,000
USD:AUD	0.75
USD:RMB	0.147
USD:MWK	0.0014
USD:ZAR	0.0769
Basket Price (sale price)	US\$1,269/t
Government Royalty	5% of net sales revenue
Vendor Royalty	2% of gross profit
Initial Development Capital	US\$63.6m
Sustaining Capital	US\$28.2m
Operating Costs (LoM) – FOB Nacala	US\$338.30/t
Corporate Tax Rate	30%
Discount Rate	10%
Installation of grid power	2027



## MODIFYING FACTORS

The Modifying Factors included in the JORC Code have been assessed as part of the revised PFS in the CPR, including mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and government factors. The Company has received advice from appropriate experts when assessing each Modifying Factor.

**Mining** – refer to sections entitled ‘Ore Reserves’, ‘Mining’ and ‘Hydrology, Hydrogeology and Tailings Storage’ in the CPR.

The Company engaged independent consultants Orelogy Mining Consultants Pty Ltd to carry out the pit optimisations, mine design, scheduling, mining cost estimation and Ore Reserve generation for the Malingunde PFS. The proposed mining method is a conventional truck and shovel mining operation. Free dig mining is considered appropriate for this style of shallow, saprolite-hosted graphite mineralisation. This methodology is used throughout the region for open pit mining operations and is a robust, easily implementable approach. No alternative mining methods were considered in this study.

Mine designs have been undertaken using the geotechnical recommendation provided by Peter O’Bryan and Associates (POBA), the independent geotechnical consultant appointed by Sovereign Metals Ltd to undertake the geotechnical assessment. POBA provided specific berm, batter and inter-ramp angle design criteria for the deposit. The risk around any geotechnical uncertainty is mitigated by:

- The pits are relatively shallow, being a maximum of ~30m below surface.
- Sensitivity to slope angles was assessed during the optimisation phase and showed the deposit discounted value was insensitive (less than -4%) to changes in slope parameters.
- The nature of the deposit and the small scale and low strip ratio of the mining stages will enable access to other areas of the deposit in the event a mining area is inaccessible.

The mine schedule is based on achievable production rates for the specified size of mining fleet with only a single shift per day required.

The proposed mining method requires conventional mining infrastructure including but not limited to mining equipment workshop, fuel & oil storage facilities, wash bay, offices, lunch and ablution facilities and a first aid room. These are to be supplied by the mining contractor. Sovereign Metals have defined a mining infrastructure area and will supply water and power to this location. As there is no anticipated requirement for blasting, no infrastructure is required for explosives storage.

The Tailings Storage Facility (TSF) for the Project was designed by SLR Consulting to safely contain the life of mine estimated tailings of approximately 8.6Mt. Test-work has indicated a final settled density of 1.1t/m<sup>3</sup> which is the figure adopted for the study.

In terms of water balance, it is expected the project will require an additional ~20,000m<sup>3</sup> per month during each nine-month dry season for the first two years of operation. After this point, the mine becomes water positive for the remainder of its life and there will be a requirement to discharge the clean water from dewatering of the pits to the environment.

For the revised PFS, the Company engaged Orelogy to review the Mining and Ore Reserves section to confirm no material change has occurred.

**Metallurgy and Processing** – refer to section entitled ‘Metallurgy and Processing’ in the CPR.

The Company engaged graphite-industry veteran metallurgist Oliver Peters, MSc, P.Eng., MBA (Consulting Metallurgist for SGS and Principal Metallurgist of Metpro Management Inc.) to complete initial variability comminution and flotation bench-scale test-work on mineralised sample material from Malingunde. This was followed by completion of a number of locked-cycle tests (LCTs) which were used as the basis for the processing design in the PFS. Mr Peters has over 25 years’ experience in metallurgy on graphite and other commodities. He has operated numerous graphite pilot plants and commissioned a number of full-scale processing facilities. Mr Peters has developed the process flowsheet employed for the PFS.

The flowsheet involves washing and disaggregation by high-energy scrubber with ceramic media, followed by rougher flotation, polishing grind and final attritioning and cleaner flotation stages.

Processing engineering was completed by DRA Global (previously named Minnovo) who developed the process plant design and associated cost estimate for the PFS.

Overall average flotation recovery of 90% has been used. Overall concentrate grades average 97% TGC. These figures were derived from averaging 2 recent, optimised and representative LCTs.

It is acknowledged that laboratory scale test-work will not always represent actual results achieved from a production plant in terms of grade, flake size and recovery. Further upscaled test-work will be required to gain additional confidence of specifications and recoveries that will be achieved at full-scale production.

Overall, the process is conventional for saprolite-hosted graphite mineralisation and no novel features or equipment are incorporated.

**Infrastructure** – refer to section entitled ‘Infrastructure and Services’ and ‘Product Logistics’ in the CPR.

Malingunde is located approximately 20km south west of Lilongwe, Malawi’s capital, and boasts excellent access to services and infrastructure. The site is serviced by a bitumen road from the main M1 highway to within 10km where it becomes an all-weather gravel road.

The proximity to Lilongwe gives the project a number of benefits, including access to a large pool of professionals and skilled tradespeople. This removes the requirement for site accommodation during the mining phase. Additionally, product is only required to be hauled a short distance by road to the existing and underutilised operational intermodal rail siding at Kanengo.

The Malawi Electrical Supply Corporation (“**ESCOM**”) plans to construct a 132/11kV substation near Bunda, just 10km to the east of Malingunde which will be linked to the national grid. The Company has received advice from ESCOM that the planned Bunda substation will be operational by 2024. Construction of the transmission line linking the Project to the Bunda sub-station is planned to be complete by the time the Bunda sub-station comes online in 2027. The Project economic model therefore assumes on site diesel power generation to 2027, with grid power availability from this point.

Rail freight cost estimates were provided by Central East African Railways (“**CEAR**”), the existing rail concessionaire and rail operator. The rail concession is operated as a joint venture between Mitsui & Co., Ltd, Vale SA and the Malawi and Mozambique Governments. CEAR have advised that there is available capacity to accommodate Malingunde concentrates. The Company is in the process of drafting a formal agreement with CEAR, in accordance with the existing MOU between the parties.

Other transport cost estimates were provided by Morgan Sterling Consultants (Pty) Ltd (“**Morgan Sterling**”) based on market data, industry databases, industry contacts and Morgan Sterling’s existing knowledge of southern African transport infrastructure and freight market.

**Marketing** – refer to sections entitled ‘Marketing’ in the CPR.

The Company engaged Fastmarkets, a specialist international publisher and information provider for the global steel, non-ferrous and industrial minerals markets, to prepare a marketing report as a key input into the PFS.

Fastmarkets’ assessment has confirmed that based upon their high-level view on global demand and supply forecasts for natural flake graphite, and with reference to the specific attributes of the Malingunde project, there is a reasonable expectation that the product from the Malingunde project will be able to be sold into existing and future graphite markets. Given the extremely low-cost profile and high quality product, it is expected that output from Malingunde will be able to fill new demand or substitute existing lower quality / higher cost supply.

Project considerations taken into account by Fastmarkets in forming an opinion about the marketability of product include Malingunde’s:

- Modest production target
- Low capital costs
- Low operating costs
- High quality concentrate specifications

The Company has engaged with a diverse range of potential off-takers across a number of industrial sectors and global locations. To date, concentrate samples have been provided to a significant number of potential partners for assessment. Larger quantities of sample are now being requested by a number of these groups in order to validate and qualify Sovereign's flake graphite concentrates for their particular requirements.

Industry participants confirm that the highest value graphite concentrates remain the large, jumbo and super-jumbo flake fractions, primarily used in industrial applications such as refractories, foundries and expandable products. These sectors currently make up the significant majority of total global natural flake graphite market by value.

The Project's bias to large, jumbo and super-jumbo flake concentrates has resulted in the Company receiving significant interest from potential purchasers of these high-value graphite products. Sovereign is pursuing credible sales agreements with Tier 1 organisations to support the project's development.

Fastmarkets have confirmed that based on a high-level view of the market, there is a reasonable expectation the Company will be able to execute off-take agreements with customers.

Fastmarkets have formed their opinion based solely upon project information provided by Sovereign Metals to Fastmarkets, and have not conducted any independent analysis or due diligence upon the information provided.

**Economic** – also refer to section entitled 'Project Economics' in the CPR. Please also refer to the further economic analysis below.

Key parameters are disclosed in the body of the announcement, and include:

- Life of Mine: 16 years
- Discount rate: 10%
- Tax rate: 30%
- Royalty rate: 5% royalty (Government) and 2% of gross profit (Original Project Vendor)
- Pricing: Basket price of US\$1,269 per tonne

The financial model has been prepared internally by the Company using inputs from the various expert consultants, and has been reviewed by an international accounting firm to validate the functionality and accuracy of the model.

In 2018, the Company engaged the services of advisory firm, Argonaut, with regards to project economics. Argonaut is a financial advisory firm which specialises in multiple sectors, including metals and oil & gas. Argonaut is well regarded as a specialist capital markets service provider and has raised project development funding for companies across a range of commodities including the industrial and speciality minerals sector. Following the assessment of a number of key criteria, Argonaut has confirmed that, on the basis that a DFS arrives at a result that is not materially negatively different than the PFS as noted above, Sovereign should be able to raise sufficient funding to develop the Project, particularly given the current climate of capital markets.

An assessment of various funding alternatives available to Sovereign has been made based on precedent transactions that have occurred in the mining industry, including an assessment of alternatives available to companies that operate in industrial and specialty minerals sector. The assessment and advice from

Argonaut Capital (referred to above) indicates that financing for industrial mineral companies often involves a broader mix of funding sources than just traditional debt and equity. Argonaut Capital considers that given the nature of the Project, funding is likely to involve specialist funds, with potential funding sources including, but not limited to, traditional equity and debt, royalty financing and off-take agreements, at either the corporate or project level. It is important to note that no funding arrangements have yet been put in place as these discussions continue to take place. The composition of the funding arrangements ultimately put in place may also vary, so it is not possible at this stage to provide any further information about the composition of potential funding arrangement.

Since initial exploration of the Malingunde Project in December 2014, the Company has completed extensive drilling, sampling and geophysical surveys to understand the geological setting and define graphite resources within the Malingunde Project area. The Company's market capitalisation currently stands at approximately A\$210m. Upfront capital cost to develop Malingunde amounts to US\$64m (A\$88m) which represents only 41% of the Company's market capitalisation. Taking the market capitalisation into account, management are confident that it could secure funding for the Project in the form of equity, but in any event the Company would consider various funding alternatives based on precedent transactions that have occurred worldwide in the resources sector including equity style convertible notes, project finance, royalty financing and mezzanine finance.

Further, Sovereign has a high-quality Board and management team comprising highly respected resource executives with extensive finance, commercial and capital markets experience. The Directors have previously raised more than A\$1.75bn from capital markets for a number of exploration and development companies. Further, a number of the Company Directors have recently secured funding of over A\$250m in equity and debt funding to fully fund the construction and working capital requirements for a resources project.

As a result, the Board has a high level of confidence that the Project will be able to secure funding in due course, having particular regard to:

1. Required capital expenditure;
2. Sovereign's market capitalisation;
3. Recent funding activities by Directors in respect of other resource projects;
4. Ongoing discussions for potential offtake agreements; and
5. Investor interest to date.

***Environmental, Social, Legal and Governmental*** – refer to section entitled 'Environmental & Social in the CPR.

An Environmental Impact Assessment ("ESIA") is currently underway with reference to applicable Malawian and international environmental and social permitting and baseline requirements for the Malingunde Project.

Sovereign is committed to conduct its activities in full compliance to the requirements of national regulations, its obligations under international conventions and treaties and giving due consideration to international best practices and policies. The Company has appointed an experienced environmental consultant to manage the ESIA process, and environmental and social baseline studies have commenced with appropriately qualified independent experts. 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.

The Company has embarked on several exercises with the communities in the area and there is a general positive acceptance of the Project. No social responsibility costs have been factored into this PFS, however they will be assessed as part of the overall ESIA for the Project in the future.

Based on the current assessments and commenced ESIA, the Company believes there are no environmental issues currently identified that cannot be appropriately mitigated in accordance with standard practices adopted for the development of mining projects.

The Company expects to enter into a Community Development Agreement (“CDA”) with the surrounding communities. Significant engagement with these communities has occurred is ongoing ahead of negotiation of the CDA which is expected to be concluded during the DFS stage.

### **Forward Looking Statements**

*Statements regarding plans with respect to Sovereign’s project are forward-looking statements. There can be no assurance that the Company’s plans for development of its projects will proceed as currently expected. These forward-looking statements are based on the Company’s expectations and beliefs concerning future events. Forward looking statements are necessarily subject to risks, uncertainties and other factors, many of which are outside the control of the Company, which could cause actual results to differ materially from such statements. The Company makes no undertaking to subsequently update or revise the forward-looking statements made in this announcement, to reflect the circumstances or events after the date of that announcement.*

*This report has been authorised for release by Managing Director, Dr Julian Stephens*





Appendix 1: JORC Code, 2012 Edition – Table 1

SECTION 1 - SAMPLING TECHNIQUES AND DATA

Criteria	Explanation	Commentary
<b>Sampling Techniques</b>	<i>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</i>	<p>Hand Auger (HA), Air-core (AC) and Diamond core (DD) drilling form the basis of the Mineral Resource Estimate (MRE) and are described below:</p> <p><b>HA</b> drilling was employed to obtain samples vertically from surface at nominal 1-metre depth intervals, with samples composited on geologically determined intervals. Composite samples were riffle split on site.</p> <p>A total of 1,053 HA holes (10,686 m) support the MRE.</p> <p><b>AC</b> drilling was employed to obtain bulk drill cuttings at nominal 1-metre (downhole) intervals from surface. All 1-metre samples were collected in plastic bags directly beneath the drilling rig cyclone underflow. The entire 1-metre sample was manually split using either a 3-tier (87.5:12.5 split) or single tier (50:50 split) riffle splitter or a combination thereof to facilitate the mass reduction of a laboratory assay split. Compositing of the laboratory sample split was performed on a geological basis. Mineralised (<math>\geq 3\%</math> v/v visual) laboratory splits of 1-metre intervals from surface to the top of the saprolite zone were not composited whereas mineralised splits of the underlying saprolite and saprock intervals were composited nominally at 2-metres. Unmineralised (<math>\leq 3\%</math> v/v visual), laboratory splits of 4-metre intervals from top of hole to bottom of hole were composited.</p> <p>A total of 384 AC holes (11,595.8 m) support the MRE.</p> <p><b>DD</b> drilling (angled and vertical) was designed to obtain representative large diameter (PQ3) core for geological, geotechnical and metallurgical testwork purposes. Subsequent to completion of all geological and geotechnical logging and sampling (whole core samples removed laboratory bulk density and strength testing) drill core was either manually hand split or sawn using a circular saw and sampled as <math>\frac{1}{4}</math> PQ3 core. Upon completion of laboratory bulk density and strength testing of the whole core intervals the entire core was submitted to the laboratory. A total of 13 DD holes (487.75 m) support the MRE.</p> <p>Laboratory splits were submitted Intertek Perth for assay sample preparation. Total Graphitic Carbon (TGC) analysis of all assay pulps samples was undertaken by Intertek Perth.</p> <p><b>Metallurgy</b> samples were collected from PQ drill-core and comprise whole, three-quarter and half core. Metallurgical samples were composited into a Master Composite which is approximately weighted on weathering types within the Ore Reserve model.</p>
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	<p>Drilling and sampling activities were supervised by a suitably qualified Company geologist who was present at the drill rig at all times. All bulk 1-metre drill samples were geologically logged by the geologist at the drill site.</p> <p>All 1-metre downhole drill samples collected in plastic bags from directly beneath the cyclone underflow were individually weighed and moisture content was qualitatively logged prior to further splitting and sampling.</p> <p>All mass reduction (field and laboratory splitting) of samples were performed within Gy's Sampling Nomogram limits relevant to this style of mineralisation.</p> <p>Field duplicate splits were undertaken nominally every 20<sup>th</sup> sample to quantify sampling and analytical error. A program of field replicate splitting of selected (~5%) mineralised intervals was completed at the conclusion of the drill program.</p> <p><b>HA:</b> The auger spiral and rods are cleaned between each metre of sampling to avoid contamination.</p> <p><b>AC:</b> The sampling cyclone was routinely cleaned out between each drill hole. Sample recovery was quantitatively assessed throughout the duration of the drilling program. A program of field replicate splitting of selected (~5%) mineralised intervals was completed at the conclusion of the drill program to assess the sampling repeatability</p> <p><b>DD:</b> core recovery was closely monitored during drilling particularly through the mineralised zones. Standard industry drilling mud mixtures were employed to improve core recovery especially through the softer upper clay rich pedolith and saprolith horizons.</p>



Criteria	Explanation	Commentary
	<p>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</p>	<p>Flake graphite content is visually estimated as volume % (% v/v) of each 1-metre bulk drill samples during geological logging by Company geologist. A nominal lower cut-off of 5% TGC assay has been applied to define zones of 'mineralisation'.</p>
<p><b>Drilling Techniques</b></p>	<p>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).</p>	<p><b>HA:</b> drilling was performed manually by Sovereign employees using a conventional hand auger employing a combination of 62mm and 50mm diameter spiral auger flight and 1-metre long steel rods. Each 1m of drill advance is withdrawn and the contents of the auger flight removed. An additional 1-metre steel rod is attached and the open hole is re-entered to drill the next metre. This is repeated until the drill holes is terminated or reaches a maximum depth of 12m. The auger spiral and rods are cleaned between each metre of sampling to avoid contamination.</p> <p><b>AC:</b> conventional blade bit aircore drilling was employed to obtain all drill cuttings from surface. Drilling was completed using a P900 truck mounted rig with and separate truck mounted air compressor. Drilling was completed using standard 3-inch or 4-inch diameter/3m length drill rods equipped with inner tubes. Drilling was performed with standard face discharge aircore blade bits. The nominal drill hole diameter for 3-inch and 4-inch holes is 85mm and 114mm respectively. The nominal inner tube inside diameter for 3-inch and 4-inch holes is 37mm and 45mm respectively. Drilling of all 3-inch holes employed a 2-stage compressor rated at 300CFM:200PSI run continuously on high stage. All 4-inch holes were drilled employing a 2-stage compressor rated at 900CFM:350PSI with high-stage generally run below about 15m downhole.</p> <p><b>DD:</b> conventional wireline PQ triple tube (PQ<sub>3</sub>) diamond drilling (DD) was employed to obtain all drill core. Drilling was undertaken with an Atlas Copco Christensen CT14 truck mounted drilling rig. The nominal core diameter is 83mm and the nominal hole diameter is 122mm. Coring was completed with appropriate diamond impregnated tungsten carbide drilling bits. Drill runs were completed employing either a 1.5m or 3.0m length PQ<sub>3</sub> core barrel. Core from all drilling runs was orientated using a Reflex ACTIII Electronic Orientation device. The orientation and marking of the bottom of hole (BOH) orientation line along the core was completed whilst the core was still within the drilling split. Core was transferred from the drilling split into PVC splits which were then wrapped with plastic layflat material, securely sealed and placed into core trays.</p>
<p><b>Drill Sample Recovery</b></p>	<p>Method of recording and assessing core and chip sample recoveries and results assessed.</p>	<p><b>HA:</b> sample recovery was monitored visually during removal of the sample from the auger flights.</p> <p><b>AC:</b> sample recovery was recorded for all holes. The 1-metre drill samples collected in plastic bags from directly beneath the cyclone underflow were individually weighed and moisture content (dry/damp/moist /wet/saturated) recorded prior to further splitting and sampling. The outside diameter of the drill bit cutting face was measured and recorded by the driller prior to the commencement of each drill hole. Each 1-metre sample interval was separately geologically logged using standard Company project specific logging codes. Logging of weathering and lithology along with drill hole diameter, recovered sample weight, moisture content and dry bulk density measurements of PQ diamond core allow the theoretical sample recovery to be assessed. Analysis of the calculated sample recoveries indicate an average recovery of greater than 75% for all mineralised (&gt;=4% TGC) intervals.</p> <p><b>DD:</b> drilling core recovery was recorded for each drill run by measuring the total length whilst still in the drilling splits prior to being transferred into core trays. Downhole depths were validated against core blocks and drill plods during each shift. Holes MGDD0001, MGDD0004 and MGDD0005 were re-drilled due to core loss within a number of mineralised zones. An overall core recovery of 92% was achieved for all sampled core.</p>



Criteria	Explanation	Commentary
	<p><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></p>	<p><b>HA:</b> drill holes were terminated where they intersected the upper (perched) water table (approx. 7-8m)</p> <p><b>AC:</b> drill bit type (face discharge) used were appropriate for the type of formation to maximise amount of drill cutting recovered. Drill bits were replaced where excessive wearing of the tungsten cutting teeth had occurred. Adequate CFM/PSI of compressed air was used to maximise the drying of sample prior to recovering up the drill string. A number of the 2016 PQ diamond core holes were twinned by aircore holes to assess the representivity of AC drill samples. Where the ingress of water in deeper sections of holes resulted in wet samples (usually at the Saprolite/Saprock interface) the drill hole was terminated.</p> <p><b>DD:</b> core recovery was closely monitored during drilling particularly through the mineralised zones. Standard industry drilling mud mixtures were employed to improve core recovery especially through the softer upper clay rich material of the Pedolith and Saprolith zones. Other measures such quantity of water, amount of rotation and drill bit types that are appropriate to soft formation drilling were considered and employed during drilling when required. At the completion of each drill run the steel splits containing the core were pumped out of the retrieved core tube. Core was then carefully transferred from the drill split into plastic sleeves (layflat) which were secured in rigid PVC splits. The layflat was securely bound and sealed (to preserve moisture) with tape prior to transferring PVC splits into plastic core trays.</p>
	<p><i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i></p>	<p>Twin hole comparison of aircore vs hand auger and diamond core drill hole visually estimated grades indicates that no sample bias exists. There does not appear to be any relationship between aircore sample recovery and TGC % v/v grade.</p>
<b>Logging</b>	<p><i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation mining studies and metallurgical studies.</i></p>	<p>All drill holes were geologically logged by a suitably trained Company geologist using standard Company code system. Relevant data for each individual 1-metre sample for aircore or for each geological interval for diamond was initially recorded using a standard A4 paper template and later digitally entered into customised Company MS Excel spreadsheets designed with fully functional validation. Excel files are checked and loaded to MS Access by the Database Administrator. Upon loading into the Access database further validation is performed. In addition, all core is photographed wet and dry for future reference.</p> <p>This information is of a sufficient level of detail to support appropriate Mineral Resource estimation.</p>
	<p><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i></p>	<p>Logging is both qualitative and quantitative. Geological logging includes but is not limited to lithological features, volumetric visual estimates of graphite content and flake characteristics.</p>
	<p><i>The total length and percentage of the relevant intersection logged</i></p>	<p>100% of drill hole sample intervals have been geologically logged.</p>
<b>Sub-sampling techniques and sample preparation</b>	<p><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></p>	<p>Quarter PQ3 DD core is manually split and/or cut using a motorised diamond blade core saw and sampled for laboratory analysis.</p>
	<p><i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i></p>	<p><b>HA:</b> 1-metre samples are composited on geological intervals and then riffle split at 50:50 using a standard Jones riffle splitter. Wet samples are first air dried and then manually broken up prior to compositing or splitting.</p> <p><b>AC:</b> The entire 1-metre sample was manually split using either a 3-tier (87.5:12.5 split) or single tier (50:50 split) riffle splitter or a combination thereof to facilitate the mass reduction of a laboratory assay split. Compositing of the laboratory sample split was performed on a geological basis. Mineralised (&gt;=3% v/v visual) laboratory splits of 1-metre intervals from surface to the top of the saprolite zone were not composited whereas mineralised splits of the underlying saprolite and saprock intervals were composited nominally at 2-metres. Unmineralised (&lt;=3% v/v visual), laboratory splits of 4-metre intervals from top of hole to bottom of hole were composited.</p> <p>All wet samples were removed from the drill site without splitting and relocated to the Company's premises in Lilongwe. The wet samples were transferred into large metal trays and sun dried. Samples were subsequently hand pulverised and thoroughly homogenised prior to splitting 50:50 with a single tier riffle splitter. One of the off-splits was submitted to the laboratory for assay.</p> <p>All reject splits (i.e. the material not sent for assaying) of each individual 1-metre interval were returned to original sample bag, cable tied and placed in storage for future reference.</p>
	<p><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></p>	<p><b>HA samples:</b> sample preparation is conducted at Intertek's laboratory in Johannesburg. Each entire sample is crushed to nominal 100% -3mm in a Boyd crusher then pulverised to 85% -75µm in a LM5. Approximately 100g pulp is collected and sent to Intertek Perth for TGC analysis.</p> <p><b>AC samples:</b> sample preparation was conducted at either Intertek in Perth or Johannesburg. The entire submitted sample (&lt; ~3kg) is pulverised to 85% -75µm in a LM5. Approximately 100g pulp is collected and sent to Intertek-Genalysis Perth for chemical analysis.</p> <p><b>DD samples:</b> all sample preparation was conducted at Intertek Perth. Each entire sample is crushed to nominal 100% -3mm in a Boyd crusher then pulverised to 85% -75µm in a LM5. The entire submitted sample (&lt; ~3kg) is pulverised to 85% -75µm in a LM5. Approximately 100g pulp is collected and sent to Intertek-Genalysis Perth for chemical analysis.</p>

Criteria	Explanation	Commentary
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	<p>All sampling was carefully supervised. Ticket books were used with pre-numbered tickets placed in the laboratory sample bag and double checked against the sample register. Subsequent to splitting an aluminium tag inscribed with hole id/sample interval was placed inside the bulk 1-metre sample bag.</p> <p>Field QC procedures involve the use of certified reference material assay standards, blanks, duplicates, replicates for company QC measures, and laboratory standards, replicate assaying and barren washes for laboratory QC measures. The insertion rate of each of these averaged better than 1 in 20.</p>
	<i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i>	All mass reduction (field and laboratory splitting) of samples were performed within Gy's Sampling Nomogram limits relevant to this style of mineralisation. Field duplicate splits of HA/AC samples and quarter DD core were undertaken nominally every 20th sample to assess sampling errors. A program of field replicate splitting of selected (~10%) "mineralised" AC intervals was completed at the conclusion of the drill program. In addition, a number of air core holes were drilled to "twin" existing HA and DD holes, to assess the representivity of the AC drill samples. The results of these programs indicate there are no significant sampling errors.
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	All mass reduction of aircore drill samples undertaken during field sampling and laboratory sample preparation were guided by standard sampling nomograms and fall within Gy's safety limits for the type of mineralisation sampled.
<b>Quality of assay data and laboratory tests</b>	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	<p><b>HA, AC and DD</b> assaying and laboratory procedures are considered to be appropriate for reporting graphite mineralisation, according to industry best practice.</p> <p>Each entire sample was pulverised to 85% -75µm. Approximately 100g pulp is collected for analysis at Intertek-Genalysis Perth.</p> <p>A sample of 0.2g is removed from the 100-gram pulp, first digested in HCl to remove carbon attributed to carbonate, and is then heated to 450°C to remove any organic carbon. An Eltra CS-2000 induction furnace infra-red CS analyser is then used to determine the remaining carbon which is reported as Total Graphitic Carbon (TGC) as a percentage.</p> <p><b>Metallurgy:</b> Two Locked Cycle Tests (LCT) were conducted using the Scrubbed Master Composite. Each of the tests consisted of 6 cycles with the recycle tails from each cycle utilised in each subsequent cycle. The test used the conditions from optimisation program completed prior to the start of LCT. In the second LCT a marginal higher reagent dosage in the rougher circuit was trialled (120g/t vs 80g/t), all other conditions were the same. The LCTs involved the following:</p> <ul style="list-style-type: none"> <li>- Polishing grind (20 min, pebble mill, 1/2" ceramic)</li> <li>- +65 mesh Polishing Grind (10 min, SMM, steel)</li> <li>- -65 mesh Polishing Grind (20 min, SMM, steel)</li> </ul>
	<i>For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i>	No non-laboratory devices were used for chemical analysis.
	<i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicate, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i>	Field QC procedures involve the use of certified reference material assay standards, blanks, duplicates and replicates for company QC measures, and laboratory standards, replicate assaying and barren washes for laboratory QC measures. The insertion rate of each of these averaged better than 1 in 20.
<b>Verification of sampling &amp; assaying</b>	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	Significant mineralisation intersections were verified by alternative company personnel. An independent resource consultant (Competent Person, Mineral Resources) conducted a site visit during December 2016 during the aircore drilling program. All drilling and sampling procedures were observed by the CP during the site visit. These procedures remained in use for the 2017 drilling program.
	<i>The use of twinned holes.</i>	Several of the 2016 PQ diamond core holes were twinned by aircore holes to assess sampling representivity.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	<p>All data is initially collected on paper logging sheets and codified to the Company's templates. This data was hand entered to spreadsheets and validated by Company geologists. This data was then imported to a Microsoft Access Database then validated automatically and manually.</p> <p>Assay data is provided as .csv files from the laboratory and loaded into the project specific drill hole database. Spot checks are made against the laboratory certificates.</p>
	<i>Discuss any adjustment to assay data.</i>	No adjustments have been made to assay data.

Criteria	Explanation	Commentary
<b>Location of data points</b>	<i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i>	Collar points were set out using the Company's R2 Rover DGPS (accuracy 0.04m x/y), and upon completion of drilling all collars were picked-up again using the same survey tool. The accuracy of R2 Rover unit is quoted to be 0.04m x/y and 0.09m z.  Down-hole surveying was undertaken on selected holes to determine drill hole deviation. Surveys were carried out using a Reflex Ez-Trak multi-shot survey tool at nominal 30m intervals down hole on selected holes was used to show that significant deviation does not occur over the relatively short length of the aircore holes. As such drill hole deviation is not considered material throughout the program.
	<i>Specification of the grid system used.</i>	WGS84 (GRS80) UTM Zone 36 South
	<i>Quality and adequacy of topographic control.</i>	The Company's DGPS survey tool has sub 0.1m accuracy in the X, Y and Z planes. This is considered sufficiently accurate for the purposes of topographic control. In addition, the Company has installed several independently surveyed control pegs and undertakes QC surveys on these points before every survey program. Given the low topographic relief of the area it is believed that this represents high quality control.  Previous checking of Hand Auger holes with the Shuttle Radar Topographic Mission (SRTM) 1-arc second digital elevation data has shown that the Leica GPS System produces consistently accurate results.
<b>Data spacing &amp; distribution</b>	<i>Data spacing for reporting of Exploration Results.</i>	Drill holes occur along east-west sections spaced at between 100-400m north-south between 8,434,400mN to 8,437,800mN. Spacing along drill lines generally ranges between 15m and 40m. Between sections 8,436850 and 8,437,150 drill lines are spaced at 50 m intervals with holes along section lines at 20 m spacing.
	<i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i>	The Company's independent resource consultants completed a Mineral Resource Estimate (MRE) for Malingunde in 2017 following the completion of the 2016 drilling program. The drill hole sample data sourced in 2017 has allowed an update to the MRE (this document).
	<i>Whether sample compositing has been applied.</i>	No sample compositing has occurred.
<b>Orientation of data in relation to geological structure</b>	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known considering the deposit type</i>	No bias attributable to orientation of sampling upgrading of results has been identified.
	<i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i>	No bias attributable to orientation of sampling upgrading of results has been identified. Flake graphite mineralisation is conformable with the main primary layering of the gneissic and schistose host lithologies. Drill hole inclination of -60 degrees are generally near orthogonal to the interpreted regional dip of the host units and dominant foliation.
<b>Sample security</b>	<i>The measures taken to ensure sample security</i>	Samples are securely stored at the Company's compound in Lilongwe. Chain of custody is maintained from time of sampling in the field until sample is dispatched to the laboratory.
<b>Audits or reviews</b>	<i>The results of any audits or reviews of sampling techniques and data</i>	The Competent Person (Mineral Resources) reviewed sampling techniques and data during the December 2016 site visit. The field crew were following company sampling procedures and the CP did not note any issues of significance during the inspection.  It is considered by the Company that industry best practice methods have been employed at all stages of the exploration.



## SECTION 2 - REPORTING OF EXPLORATION RESULTS

Criteria	Explanation	Commentary
<b>Mineral tenement &amp; land tenure status</b>	<i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environment settings.</i>	Sovereign is conducting exploration across its large ground package of over 2,880km <sup>2</sup> . Sovereign's ground package is made up of eight Exploration Licences (ELs) and one Retention Licence (RL) as summarised in Table 2.1 of the CPR. The ELs and RLs are held through SVM's wholly owned Malawian subsidiaries, Sovereign Services Limited and McCourt Mining Limited. The Malingunde Project is situated on EL0372.
	<i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i>	The tenements are in good standing and no known impediments to exploration or mining exist.
<b>Exploration done by other parties</b>	<i>Acknowledgement and appraisal of exploration by other parties.</i>	No other parties were involved in exploration.
<b>Geology</b>	<i>Deposit type, geological setting and style of mineralisation</i>	<p>The graphite mineralisation occurs as multiple bands of graphite gneisses, hosted within a broader Proterozoic paragneiss package. In the Malingunde and Lifidzi areas specifically, a deep tropical weathering profile is preserved, resulting in significant vertical thicknesses from near surface of saprolite-hosted graphite mineralisation.</p> <p>Malingunde occurs in a topographically flat area west of Malawi's capital known as the Lilongwe Plain and a deep tropical weathering profile is preserved. A typical profile from top to base is generally soil ("SOIL" 0-1m) ferruginous pedolith ("FERP", 1-4m), mottled zone ("MOTT", 4-7m), pallid saprolite ("PSAP", 7-9m), saprolite ("SAPL", 9-25m), saprock ("SAPR", 25-35m) and fresh rock ("FRESH" &gt;35m).</p>
<b>Drill hole information</b>	<i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northings of the drill hole collar; elevation or RL (Reduced Level-elevation above sea level in metres of the drill hole collar); dip and azimuth of the hole; down hole length and interception depth; and hole length</i>	No new exploration results are included in this release.
	<i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case</i>	All drill holes within the resource area have previously been reported in releases to the ASX providing collar easting, northing, elevation, dip, azimuth, length of hole, and mineralised intercepts as encountered. All drill holes were used to prepare the MRE.
<b>Data aggregation methods</b>	<i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high-grades) and cut-off grades are usually Material and should be stated.</i>	No new exploration results are included in this release. All drill holes within the resource area have previously been reported.
	<i>Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i>	No new exploration results are included in this release. All drill holes within the resource area have previously been reported.
	<i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	No metal equivalent values are used in this report.
<b>Relationship between mineralisation widths &amp; intercept lengths</b>	<i>These relationships are particularly important in the reporting of Exploration Results.</i>	Interpretation of mineralised zones in aircore holes supported by DD (2016) orientated core measurements indicate that mineralised zones are shallow-moderate north-east dipping.
	<i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i>	Flake graphite mineralisation is conformable with the main primary layering of the gneissic and schistose host lithologies. Drill hole inclination of -60 degrees are generally near orthogonal to the regional dip of the host units and dominant foliation and hence specific drill hole intercepts for -60 degree holes may only approximate true width. The averaged strike of mineralised zones is approximately 160° grid whereas all -60 inclined aircore holes were orientated at grid east.
	<i>If it is not known and only the down hole lengths are reported, there should be a</i>	Refer to the statement above.



Criteria	Explanation	Commentary
	<i>clear statement to this effect (e.g. 'down hole length, true width not known'.</i>	
<b>Diagrams</b>	<i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of the drill collar locations and appropriate sectional views.</i>	Refer to figures in the body of this report.
<b>Balanced reporting</b>	<i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high-grades and/or widths should be practiced to avoid misleading reporting of exploration results.</i>	Exploration results are not reported here. All drill hole sample data were used to support the Mineral Resource estimate.
<b>Other substantive exploration data</b>	<i>Other exploration data, if meaningful and material, should be reported including (but not limited to: geological observations; geophysical survey results; geochemical survey results; bulk samples - size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i>	No additional meaningful and material exploration data has been excluded from this report that has not previously been reported to the ASX.
<b>Further work</b>	<i>The nature and scale of planned further work (e.g. test for lateral extensions or depth extensions or large-scale step-out drilling).</i>	The next phase of exploration is to complete aircore drilling on regional saprolite targets identified through hand auger drilling.
	<i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	Refer to diagrams in the body of this report.

## SECTION 3 - ESTIMATION AND REPORTING OF MINERAL RESOURCES

Criteria	Explanation	Commentary
<b>Database integrity</b>	Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.	Data used in the Mineral Resource estimate is sourced from an MS Access database. The database is maintained by Sovereign.  Relevant tables from the database were exported to csv format, and then imported into Datamine Studio RM software for use in the Mineral Resource estimate.
	Data validation procedures used.	Validation of the data import include checks for overlapping intervals, missing survey data, missing assay data, missing lithological data, and missing collars.
<b>Site visits</b>	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	The Competent Person (Mineral Resources) visited the project in December 2016. The aircore drilling rig was in operation and the Competent Person reviewed drilling and sampling procedures.  Planned drill sites were examined and assessed with respect to strike and dip of the interpreted geological model. Sample storage facilities were inspected. Discussions were held with the Sovereign geological staff regarding all drilling and sampling procedures and outcomes.  Selected diamond drill core was inspected, with all weathering types pertinent to the Mineral Resource reviewed. There were no negative outcomes from any of the above inspections, and all samples and geological data were deemed fit for use in the Mineral Resource estimate.
	If no site visits have been undertaken indicate why this is the case.	Not applicable, site visit was undertaken.
<b>Geological interpretation</b>	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	There is a high level of confidence in the geological interpretation in the Measured Mineral Resource volumes, based upon lithological logging of diamond drill core, aircore chip samples and hand auger samples. Multi-spectral satellite imagery and airborne geophysical data provided guidance for the initial geological interpretation of the strike continuity of the deposit.  Drill hole intercept logging and assay results (aircore, hand auger and diamond core), structural interpretations from drill core and geological logs of aircore and hand auger drill data have formed the basis for the geological interpretation.



Criteria	Explanation	Commentary
	Nature of the data used and of any assumptions made.	Assumptions were made on depth and strike extension of the gneiss, using drill hole assays as anchor points at depth and at intervals along strike. Geological mapping also supports the geological model.  Seven weathering domains were modelled and support the grade interpolation and Mineral Resource classification.
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	No alternative interpretations were considered because the geophysical models and diamond core support the current interpretation.
	The use of geology in guiding and controlling Mineral Resource estimation.	Graphitic Graphite mineralisation is hosted within a graphitic gneiss, which is mapped along its strike length within the project area and within the license area. Grade (total graphitic carbon, TGC%) is assumed to be likewise continuous with the host rock unit.  Mineralised waste and non-mineralised waste zones were modelled within the graphitic gneiss.
	The factors affecting continuity both of grade and geology.	The graphitic gneiss is open along strike and down dip.  The interpretation of the mineralisation domains is based upon a pre-determined lower cut-off grade for TGC, which is equivalent to the graphitic gneiss domain boundary. A variation to the cut-off grade will affect the volume and average grade of the domains, however there are no geological reasons identified to date to support higher grade TGC domains within the graphitic gneiss.
<b>Dimensions</b>	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	The Malingunde Deposit comprises 4,500 m strike length of shallowly north-east dipping, north-west striking graphitic gneisses. The mineralised package has up to six separate sub-parallel zones of graphite gneiss with cumulative across strike widths averaging 120 m and locally exceeding 200 m. The Msinja Deposit has a strike length of approximately 1.0 km with about five parallel zones of mineralisation. Across strike cumulative widths range between 40 and 100 m. The depth extent of the MRE is approximately 50 m although the mineralisation is believed to extend considerably deeper, but is not considered as an exploration target at this stage.
<b>Estimation and modelling techniques</b>	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	Datamine Studio RM software was used for all geological modelling, block modelling, grade interpolation, Mineral Resource classification and reporting. GeoAccess Professional and Snowden Supervisor (V8.7) were used for geostatistical analyses.  All samples were composited to 2 m intervals. All drill hole assay data (diamond, aircore and hand auger) were utilised in the grade interpolation.  A block model with parent cell sizes 10 m (E) x 25 m (N) x 5 m (RL) was constructed for Malingunde, compared to typical drill spacing of 20 m (E) x 50 m (N) within the Measured volumes.
	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	Inverse distance squared (IDS) estimation was run as a check estimate of the ordinary kriging (OK) grade estimation. No depletion of the Mineral Resource due to mining activity was required due to no mining having occurred historically. The Malingunde MRE was previously reported in 2017 and the current MRE has not presented an adjustment of any significance to tonnes or grade, but has improved the confidence levels as demonstrated in the classification of the MRE.
	The assumptions made regarding recovery of by-products.	No by-products were modelled.
	Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).	No estimation of deleterious elements or non-grade variables of economic significance were modelled.
	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	Grade estimation was by ordinary kriging (OK) with inverse distance squared (IDS) estimation run as a check estimate. A minimum of 12 and maximum of 28 composited samples were used in any one block estimate for all domains. A maximum of 6 composited samples per drill hole were used in any one block estimate. Cell discretisation of 3 x 3 x 3 was used. No hard estimation domain boundaries at weathering domain interfaces were used, although each mineralisation domain was a separate domain for grade interpolation.
	Any assumptions behind modelling of selective mining units.	No selective mining units were assumed in this model.
	Any assumptions about correlation between variables.	TGC grade was the only variable estimated.
	Description of how the geological interpretation was used to control the resource estimates.	Drill hole intercept logging and assay results (aircore, hand auger and diamond core), structural interpretations from drill core and geological logs of aircore and hand auger drill data have formed the basis for the geological interpretation. The drilling mostly targeted the SAPL and SAPR weathering horizons, with limited sampling below the upper level of the fresh rock (FRESH) domain.  The MRE block model consists of 6 zones of TGC mineralisation in the Malingunde deposit, and 5 in the Msinja deposit. Mineralisation domains were encapsulated by means of 3D wireframed

Criteria	Explanation	Commentary
		envelopes based upon a lower cut-off grade of 4% TGC. Weathering domains were interpreted based upon geological logs of drill samples.
	Discussion of basis for using or not using grade cutting or capping.	Top cutting of composited sample assays was applied to constrain extreme grade values when warranted. Top cuts were determined by reviewing histograms and log probability plots of domained assays, and iterative calculations of mean domain TGC grades, testing a range of top cuts. All top cuts were applied to data in the 99th percentile of data.
	The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	The grade model was validated by 1) creating slices of the model and comparing to drill hole samples on the same slice; 2) swath plots comparing average block grades with average sample grades on nominated easting, northing and RL slices; 3) mean grades per domain for estimated blocks and flagged drill hole samples; and 4) cross sections with block model and drill hole data colour coded in like manner. No reconciliation data exists to test the model. The estimated tonnes and grade compare favourably with the previous MR model.
<b>Moisture</b>	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	Tonnages are estimated on a dry basis.
<b>Cut-off parameters</b>	The basis of the adopted cut-off grade(s) or quality parameters applied.	Visual analysis of the drill analytical results demonstrated that the lower cut-off interpretation of 4% TGC corresponds to a natural break in the grade population distribution.  The lower cut-off of 4% TGC is approximately equivalent to the graphitic gneiss domain boundary, from logging of diamond drill core, aircore and hand auger chips.
<b>Mining factors or assumptions</b>	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	It is assumed the deposit, if mined, will be developed using open pit mining methods. No assumptions have been made to date regarding minimum mining widths or dilution.  The largest mineralisation domains in plan view have an apparent width of up to 250 m which may result in less selective mining methods, as opposed to (for example) mining equipment that would need to be used to mine narrow veins in a gold mine.  The insitu rock mass within the saprolite weathering zones are relatively friable and present an attractive mining scenario where drill and blast is generally not required for excavation of ore.
<b>Metallurgical factors or assumptions</b>	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	Sovereign announced metallurgical results to the ASX on a number of occasions during 2016 and 2017, relating to flake size distribution and purity of graphite concentrate. Metallurgical testwork is ongoing as part of the Prefeasibility Study.  Metallurgical data previously reported in 2017, plus new data generated in 2018, support the Mineral Resource classification. The flotation testwork on auger and diamond drill core samples demonstrated that approximately 50-80% of the liberated flakes are larger than 150 µm (100 mesh), and that final overall concentrate grades are in the range of approximately 97-99% Carbon for all weathering domains. The conventional flotation process produced flake graphite concentrates of acceptable quality, potentially for markets such as spherical graphite, expandable graphite, graphite foil, brake lining pads, lubrication and refractories. Performance tests verified that Malingunde graphite concentrates should meet or exceed the specifications for expandable graphite. The available process testwork in conjunction with drill sample observations from the remainder of the deposit supports the classification of the Malingunde deposit as an Industrial Mineral Resource in terms of the JORC Code Clause 49.  The Competent Person recommends continued variability flotation testing to verify product quality across the deposit.
<b>Environmental factors or assumptions</b>	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	A large portion of the Mineral Resource is confined to the saprolitic weathering domains, and any sulphide minerals have been oxidised in the geological past. Therefore acid mine-drainage is not anticipated to be a significant risk when mining from the oxidised domain. Acid-mine drainage would be considered if mining of the fresh-rock domain was to be undertaken in the future.  No major water courses run through the resource area, although a fresh water dam is located at the southern end of the Malingunde deposit, with the deposit believed to have strike continuity below the dam and extends to the Msinja deposit to the south-east. No Mineral Resources are reported within the dam limits.  The Malingunde and Msinja deposits are located within a farming area and has villages located along the strike of the deposit. Sovereign holds regular discussions with local landholders and community groups to keep them well informed of the status and future planned directions of the project.  Malingunde is in a sub-equatorial region of Malawi and is subject to heavy seasonal rainfall, with rapid growth of vegetation in season.
<b>Bulk density</b>	Whether assumed or determined. If assumed, the basis for the	Density was calculated from 213 billets of core taken from across the deposit, with density measured using wax coated immersion method performed by Intertek Perth. Density data was

Criteria	Explanation	Commentary
	assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.	loaded into a Datamine drill hole file, which was flagged against weathering horizons and mineralisation domains.
	The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vughs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.	All bulk density determinations were completed by the waxed immersion method.
	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	An average density value of 1.7 t/m <sup>3</sup> was determined for the soil domain, 1.8 t/m <sup>3</sup> for the ferruginous pedolith (FERP) domain, 1.8 t/m <sup>3</sup> for the mottled zone (MOTT) domain, 2.0 t/m <sup>3</sup> for the pallid saprolite (PSAP) domain, 2.0 t/m <sup>3</sup> for the saprolite (SAPL) domain, and 2.2 t/m <sup>3</sup> or 2.3 t/m <sup>3</sup> for the saprock (SAPR) rock profile, dependent upon the depth of the profile. A value of 2.4 t/m <sup>3</sup> was assigned to the upper 10 m of the fresh rock profile, which is reported as an Inferred Mineral Resource. A small data population did not allow for discernible differences in density between the waste and mineralisation zones to be determined.
<b>Classification</b>	The basis for the classification of the Mineral Resources into varying confidence categories.	<p>Classification of the Mineral Resource estimates was carried out taking into account the geological understanding of the deposit, quality of the samples, density data and drill hole spacing, supported by metallurgical test results that indicate general product marketability.</p> <p>The Mineral Resource is classified as a combination of Measured, Indicated and Inferred, with geological evidence sufficient to confirm geological and grade continuity in the Measured volumes.</p> <p>The Malingunde MRE is classified as Measured where drill spacing of 50 m (N) by 20 m (E) supports the geological interpretation and grade interpolation. Eight DD holes were drilled within the Measured footprint and provided detailed geological information as well as samples for metallurgical testwork. Drill spacing of 100 m (N) by 20 m (E) supports the Indicated classification, whilst drill spacing of 200 m (N) by 20 m (E) to 200 m (N) by 50 m (E) supports the Inferred classification.</p> <p>Drill spacing at Msinja supporting the Inferred classification ranges from 100 m (N) by 20 m (E) to 200 m (N) by 20 m (E).</p>
	Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).	All available data was assessed and the competent person's relative confidence in the data was used to assist in the classification of the Mineral Resource.
	Whether the result appropriately reflects the Competent Person's view of the deposit	The current classification assignment appropriately reflects the Competent Person's view of the deposit.
<b>Audits or reviews</b>	The results of any audits or reviews of Mineral Resource estimates.	No audits or reviews of the current Mineral Resource estimate have been undertaken, apart from internal reviews carried out by CSA Global and Sovereign.
<b>Discussion of relative accuracy/ confidence</b>	Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.	<p>An inverse distance estimation algorithm was used in parallel with the ordinary kriged interpolation, with results very similar.</p> <p>No other estimation method or geostatistical analysis has been performed.</p> <p>Relevant tonnages and grade above nominated cut-off grades for TGC are provided in the introduction and body of this report. Tonnages were calculated by filtering all blocks above the cut-off grade and sub-setting the resultant data into bins by mineralisation domain. The volumes of all the collated blocks were multiplied by the dry density value to derive the tonnages. The graphite metal values (g) for each block were calculated by multiplying the TGC grades (%) by the block tonnage. The total sum of all metal for the deposit for the filtered blocks was divided by 100 to derive the reportable tonnages of graphite metal.</p>
	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	The Mineral Resource is a local estimate, whereby the drill hole data was geologically dominated above nominated TGC cut-off grades, resulting in fewer drill hole samples to interpolate the block model than the complete drill hole dataset, which would comprise a global estimate.
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	No mining has taken place to date therefore no production data is available to reconcile model results.

SECTION 4 – ESTIMATION AND REPORTING OF ORE RESERVES

Criteria	Explanation	Commentary
<b>Mineral Resource estimate for conversion to Ore Reserves</b>	<p><i>Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.</i></p> <p><i>Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.</i></p>	<p>The Minerals Resource Estimate (“MRE”) declared on 12th June 2018 underpins the Ore Reserve. The Company engaged independent geological and mining consultants CSA Global Pty Ltd (“CSA”) to complete the MRE for the Malingunde deposit. The principal resource geologist Mr David Williams is highly experienced with more than 25 years in resource estimation and mine geology. David Williams is a Competent Person for the purposes of the MRE as defined and in accordance with the JORC Code 2012.</p> <p>The MRE as reported in this document is inclusive of the Ore Reserve declared in this document. The Ore Reserve does not include Inferred Mineral Resources.</p>
<b>Site visits</b>	<p><i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i></p>	<p>Site visits have been carried out by the following personnel:</p> <ul style="list-style-type: none"> <li>• Dr Julian Stephens, the Competent Person for Exploration Results and Managing Director of Sovereign Metals Ltd has conducted multiple site visits since the discovery of the Malingunde deposit;</li> <li>• Mr David Williams, the Competent Person for the JORC Resource Estimate, and a representative of CSA Global has conducted one site visit; and</li> <li>• Mr Ryan Locke, the Competent Person for the JORC Reserve estimate and a representative of Orelogy Pty Ltd has conducted one site visit.</li> </ul>
<b>Study status</b>	<p><i>The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.</i></p> <p><i>The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.</i></p>	<p>The technical and financial information in this release are at PFS-level enabling the declaration of Ore Reserves. The studies carried out have determined a mine plan that is technically achievable and economically viable with all material Modifying Factors having been considered.</p> <p>The Ore Reserve was underpinned by a mine plan detailing mining locations, ore and waste quantities; mill feed quantities and mill head grades. Scheduling was undertaken in monthly and quarterly periods.</p> <p>Mine planning activities included an updated pit optimisation, mine design, scheduling, mining cost estimation and financial analysis in order to confirm the ability to economically mine the Malingunde Ore Reserve.</p> <p>Modifying factors considered during the mine planning process included pit slope design criteria, mining costs, mining dilution and ore loss, processing recoveries, processing costs, selling costs, general and administration costs and product price.</p>
<b>Cut-off parameters</b>	<p><i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i></p>	<p>A cut-off of 4% Total Graphitic Carbon (TGC) was applied to the global JORC resource.</p> <p>Ore Reserve cut-off grades were determined as follows:</p> <ul style="list-style-type: none"> <li>• The break-even cut-off grade (i.e. material is treated as ore if the net revenue exceeds the total cost of processing) was determined based on the economic inputs. The break-even cut-off grade was calculated to be 2.1% TGC.</li> <li>• In order to reduce the global operating costs on a per tonne of concentrate basis, an elevated cut-off grade was assessed during the optimisation phase where multiple cut-off grades sensitivities were applied.</li> <li>• The final TGC cut-off grades applied to determine the Ore Reserve estimate are: <ul style="list-style-type: none"> <li>- 6.75% TGC to the saprolite material,</li> <li>- 9.5% TGC to the Saprock material located in the northern zone, and 11.0% TGC to the Southern Saprock material. (Saprock material incurred a higher cut-off grade over the saprolite material to reduce the proportion of Saprock material within the processing stream. The Southern proportion of the Saprock material incurred a higher COG than the Northern zone to ensure the processing blend could be achieved in the later years of the mine life)</li> </ul> </li> </ul> <p>Material mined above the 4% TGC break-even cut-off grade and below the Ore Reserve cut-off grade defined above is planned to be stockpiled for potential future processing. However, this material does not contribute to the Ore Reserve or project value estimation.</p>

Criteria	Explanation	Commentary			
<p><b>Mining factors or assumptions</b></p>	<p><i>The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).</i></p> <p><i>The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.</i></p> <p><i>The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc.), grade control and pre-production drilling.</i></p> <p><i>The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</i></p> <p><i>The mining dilution factors used.</i></p> <p><i>The mining recovery factors used.</i></p> <p><i>Any minimum mining widths used.</i></p> <p><i>The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.</i></p> <p><i>The infrastructure requirements of the selected mining methods.</i></p>	<p>The Company engaged independent consultants Orelogy Mining Consultants Pty Ltd to carry out the pit optimisations, mine design, scheduling, mining cost estimation and Ore Reserve generation for the Malingunde PFS.</p> <p>The proposed mining method is a conventional truck and shovel mining operation. Free dig mining is considered appropriate for this style of shallow, saprolite-hosted graphite mineralisation. This methodology is used throughout the region for open pit mining operations and is a robust, easily implementable approach. No alternative mining methods were considered in this study.</p> <p>Zero dilution factor was assumed and is warranted because the majority of the high-grade production target mineralisation is bounded by lower grade mineralisation, and, the free digging, non-blocky nature of the material would result in no displacement by blasting. An allowance of 2% ore loss was applied to account for mining inaccuracies.</p> <p>A contract mining strategy was selected for the initial eight years to mitigate project risk, although operational management will be retained by Sovereign personnel. An owner-operator model is adopted from Year 9 onwards.</p> <p>The deposit is planned to be mined on 2.5m high benches to maximise mining selectivity and therefore minimise dilution.</p> <p>A minimum mining width of 20m was used for all pit designs.</p> <p>Mine designs have been undertaken using the geotechnical recommendation provided by Peter O'Bryan and Associates (POBA), the independent geotechnical consultant appointed by Sovereign Metals Ltd to undertake the geotechnical assessment. POBA provided specific berm, batter and inter-ramp angle design criteria for the deposit. The risk around any geotechnical uncertainty is mitigated by:</p> <ul style="list-style-type: none"> <li>The pits are relatively shallow, being a maximum of ~30m below surface.</li> <li>Sensitivity to slope angles was assessed during the optimisation phase and showed the deposit discounted value was insensitive (less than -4%) to changes in slope parameters.</li> <li>The nature of the deposit and the small scale and low strip ratio of the mining stages will enable access to other areas of the deposit in the event a mining area is inaccessible.</li> </ul> <p>The mine schedule is based on achievable production rates for the specified size of mining fleet with only a single shift per day required.</p> <p>No inferred mineral resources have been used in the determination of the Malingunde Ore Reserve.</p> <p>The proposed mining method requires conventional mining infrastructure including but not limited to mining equipment workshop, fuel &amp; oil storage facilities, wash bay, offices, lunch and ablution facilities and a first aid room. These are to be supplied by the mining contractor. Sovereign Metals have defined a mining infrastructure area and will supply water and power to this location.</p> <p>As there is no anticipated requirement for blasting, no infrastructure is required for explosives storage.</p>			
<p><b>Metallurgical factors or assumptions</b></p>	<p><i>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</i></p> <p><i>Whether the metallurgical process is well-tested technology or novel in nature.</i></p> <p><i>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</i></p> <p><i>Any assumptions or allowances made for deleterious elements.</i></p> <p><i>The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole</i></p> <p><i>For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet specifications?</i></p>	<p>The Company engaged graphite-industry veteran metallurgist Oliver Peters, MSc, P.Eng., MBA (Consulting Metallurgist for SGS and Principal Metallurgist of Metro Management Inc.) to complete initial variability comminution and flotation bench-scale test-work on mineralised sample material from Malingunde. This was followed by completion of a number of locked-cycle tests (LCTs) which were used as the basis for the processing design in the PFS. Mr Peters has over 25 years' experience in metallurgy on graphite and other commodities. He has operated numerous graphite pilot plants and commissioned a number of full-scale processing facilities. Mr Peters has developed the process flowsheet employed for the PFS.</p> <p>The flowsheet involves washing and disaggregation by high-energy scrubber with steel media, followed by rougher flotation, polishing grind and final attritioning and cleaner flotation stages.</p> <p>Processing engineering was completed by Minnova (recently acquired by DRA Global) who developed the process plant design and associated cost estimate for the PFS.</p> <p>Overall average flotation recovery of 90% has been used. Overall concentrate grades average 97% C(t). These figures were derived from averaging 2 recent, optimised and representative LCTs.</p> <table border="1"> <tr> <td>Particle size</td> <td>C (%)</td> <td>Distribution (wt. %)</td> </tr> </table>	Particle size	C (%)	Distribution (wt. %)
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		<table border="1"> <thead> <tr> <th>Tyler mesh</th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>+ 32</td> <td>98</td> <td>5</td> </tr> <tr> <td>+ 48 - 32</td> <td>97</td> <td>19</td> </tr> <tr> <td>- 48 + 80</td> <td>97</td> <td>26</td> </tr> <tr> <td>-80+100</td> <td>97</td> <td>9</td> </tr> <tr> <td>- 100 + 200</td> <td>97</td> <td>25</td> </tr> <tr> <td>- 200</td> <td>94</td> <td>16</td> </tr> <tr> <td>TOTAL</td> <td>97</td> <td>100</td> </tr> </tbody> </table>	Tyler mesh			+ 32	98	5	+ 48 - 32	97	19	- 48 + 80	97	26	-80+100	97	9	- 100 + 200	97	25	- 200	94	16	TOTAL	97	100			<p>It is acknowledged that laboratory scale test-work will not always represent actual results achieved from a production plant in terms of grade, flake size and recovery. Further upscaled test-work will be required to gain additional confidence of specifications and recoveries that will be achieved at full-scale production.</p>
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<p><b>Environmental</b></p>	<p><i>The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.</i></p>	<p>An Environmental Impact Assessment (ESIA) is currently underway with reference to applicable Malawian and international environmental and social permitting and baseline requirements for the Malingunde Project.</p> <p>Sovereign is committed to conduct its activities in full compliance to the requirements of national regulations, its obligations under international conventions and treaties and giving due consideration to international best practices and policies. The Company has appointed an experienced environmental consultant to manage the ESIA process, and environmental and social baseline studies have commenced with appropriately qualified independent experts. 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.</p> <p>The Company has embarked on several exercises with the communities in the area and there is a general positive acceptance of the Project. No social responsibility costs have been factored into this Study, however they will be assessed as part of the overall ESIA for the Project in the future.</p> <p>Based on the current assessments and commenced ESIA, the Company believes there are no environmental issues currently identified that cannot be appropriately mitigated in accordance with standard practices adopted for the development of mining projects.</p>																											
<p><b>Infrastructure</b></p>	<p><i>The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.</i></p>	<p>Malingunde's proximity to the major city of Lilongwe means relatively minor area infrastructure upgrades and modifications are required outside of the immediate proposed mine-site area.</p> <p>Minnovo is a recognised global leader in mining and processing with capabilities extending to detailed engineering, procurement and construction management. All infrastructure related capital and operating costs were estimated by Minnovo.</p> <p>Power at site will be sourced from the local grid system with additional power provided via diesel generator located onsite as required.</p>																											
<p><b>Costs</b></p>	<p><i>The derivation of, or assumptions made, regarding projected capital costs in the study.</i></p> <p><i>The methodology used to estimate operating costs.</i></p> <p><i>Allowances made for the content of deleterious elements.</i></p> <p><i>The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co- products.</i></p> <p><i>Derivation of transportation charges.</i></p> <p><i>The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.</i></p> <p><i>The allowances made for royalties payable, both Government and private.</i></p>	<p><b>Operating Costs</b></p> <ul style="list-style-type: none"> <li>All cost information has been estimated to a PFS level of accuracy (±25%). Costs are presented in real 2018 terms and are exclusive of escalation.</li> <li>Mining costs have been calculated based on the submissions received for a Request for Budget Pricing (RFPB) sent to a range of African based mining contractors. The submission prices used have been adjusted to allow for the differences in the mine plan from the one presented in the RFBP. This includes: <ul style="list-style-type: none"> <li>Overhaul rates for longer haulage distances</li> <li>Updated diesel fuel price received.</li> </ul> </li> <li>The in-country diesel fuel price was supplied by Puma Energy.</li> <li>Processing costs have been estimated by Minnovo, a global expert in minerals processing. Processing costs are based upon a combination of first principle cost build-up, direct supplier quotes and similar projects in the region. Labour costs have been developed from similar projects in the region adjusted for Malawian labour rates.</li> <li>General &amp; administrative costs have been estimated by Minnovo.</li> <li>The PFS power supply model assumes provision of grid power to the project by 2024 based on written advice received from ESCOM, the Malawi power utility.</li> </ul>																											



Criteria	Explanation	Commentary
		<ul style="list-style-type: none"> <li>A Government royalty of 5% (applied to revenue) and a vendor profit share of 2% (applied to earnings) has been included in all project economics. Royalties are not included in the headline life of mine unit operating cost of US\$323/t concentrate.</li> <li>Operating costs do not make provision for the following:               <ul style="list-style-type: none"> <li>Corporate head office costs</li> <li>Mine closure and environmental costs</li> <li>Social responsibility costs</li> </ul> </li> </ul> <p><b>Capital Costs</b></p> <ul style="list-style-type: none"> <li>Capital estimates have been developed by Minnovo, using a combination of quotations and cost estimates from suppliers, historical data and reference to recent comparable projects. Costs are presented in real 2018 terms and are exclusive of escalation. The overall accuracy is determined to be ±25/-15%.</li> <li>Capital costs include the cost of all services, infrastructure and facilities used for the operation of the mine and processing plant. Capital costs do not make provision for the following:               <ul style="list-style-type: none"> <li>Mine closure and environmental costs; and</li> <li>Social responsibility costs.</li> </ul> </li> <li>Working capital requirements prior to plant commissioning and full ramp up have been excluded from the capital estimate, and are captured in project operating costs.</li> </ul>
<p><b>Revenue factors</b></p>	<p><i>The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.</i></p> <p><i>The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</i></p>	<p>Sales pricing is based on current market analysis by an independent party (see below)</p> <p>The Company has provided samples to multiple end-users which has generated substantive interest in the supply of high-quality natural flake from the Project.</p> <p>The Company has applied a conservative flake distribution and assumed pricing for the concentrate as shown in the economic model presented.</p> <p>No co-product revenue is considered.</p>
<p><b>Market assessment</b></p>	<p><i>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</i></p> <p><i>A customer and competitor analysis along with the identification of likely market windows for the product.</i></p> <p><i>Price and volume forecasts and the basis for these forecasts.</i></p>	<p>Sovereign Metals engaged Metal Bulletin Research ("Metal Bulletin"), a specialist international publisher and information provider for the global steel, non-ferrous and industrial minerals markets, to prepare a marketing report as a key input into the Malingunde Graphite Project PFS in August 2018.</p> <p>Metal Bulletin's assessment has confirmed that based upon their high level view on global demand and supply forecasts for natural flake graphite, and with reference to the specific attributes of the Malingunde project, there is a reasonable expectation that the product from the Malingunde project will be able to be sold into existing and future graphite markets. Given the extremely low cost profile and high quality product, it is expected that output from Malingunde will be able to fill new demand or substitute existing lower quality / higher cost supply.</p> <p>Project considerations taken into account by Metal Bulletin in forming an opinion about the marketability of product include Malingunde's:</p> <ul style="list-style-type: none"> <li>Ore Reserves</li> <li>Capital costs</li> <li>Operating costs</li> <li>Concentrate specifications</li> </ul> <p>Sovereign has undertaken extensive market discussions with international graphite industry participants, which have indicated substantive interest in the supply of high quality natural flake from a Malawian natural flake graphite project.</p> <p>Metal Bulletin have confirmed that based on a high level view of the market, there is a reasonable expectation the Company will be able to execute off-take agreements with customers.</p> <p>Metal Bulletin have formed their opinion based solely upon project information provided by Sovereign Metals to Metal Bulletin, and have not conducted any independent analysis or due diligence upon the information provided.</p>
<p><b>Economic</b></p>	<p><i>The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc</i></p> <p><i>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</i></p>	<p>Key parameters are disclosed in the body of the announcement, and include:</p> <ul style="list-style-type: none"> <li>Discount rate: 10%</li> <li>Tax rate: 30% (Super tax of 10% has not been applied)</li> <li>Royalty rate: 5% (Revenue) Government, 2% (Earnings) Vendor</li> <li>Pricing: Sensitivity analysis only</li> </ul> <p>The financial model has been prepared internally by the Company using inputs from the various expert consultants, and has been reviewed by an international accounting firm to validate the functionality and accuracy of the model.</p> <p>Refer to table 10.</p>

Criteria	Explanation	Commentary
		<p>In 2018, the Company engaged the services of advisory firm, Argonaut, with regards to project economics. Argonaut is a financial advisory firm which specialises in multiple sectors, including metals and oil &amp; gas. Argonaut is well regarded as a specialist capital markets service provider and has raised project development funding for companies across a range of commodities including the industrial and speciality minerals sector. Following the assessment of a number of key criteria, Argonaut has confirmed that, on the basis that a DFS arrives at a result that is not materially negatively different than the PFS as noted above, Sovereign should be able to raise sufficient funding to develop the Project, particularly given the current climate of capital markets.</p> <p>An assessment of various funding alternatives available to Sovereign has been made based on precedent transactions that have occurred in the mining industry, including an assessment of alternatives available to companies that operate in industrial and specialty minerals sector. The assessment and advice from Argonaut Capital (referred to above) indicates that financing for industrial mineral companies often involves a broader mix of funding sources than just traditional debt and equity. Argonaut Capital considers that given the nature of the Project, funding is likely to involve specialist funds, with potential funding sources including, but not limited to, traditional equity and debt, royalty financing and off-take agreements, at either the corporate or project level. It is important to note that no funding arrangements have yet been put in place as these discussions continue to take place. The composition of the funding arrangements ultimately put in place may also vary, so it is not possible at this stage to provide any further information about the composition of potential funding arrangement.</p> <p>Since initial exploration of the Malingunde Project in December 2014, the Company has completed extensive drilling, sampling and geophysical surveys to understand the geological setting and define graphite resources within the Malingunde Project area. The Company's market capitalisation currently stands at approximately A\$210m. Upfront capital cost to develop Malingunde amounts to US\$64m (A\$88m) which represents only 41% of the Company's market capitalisation. Taking the market capitalisation into account, management are confident that it that it could secure funding for the Project in the form of equity, but in any event the Company would consider various funding alternatives based on precedent transactions that have occurred worldwide in the resources sector including equity style convertible notes, project finance, royalty financing and mezzanine finance.</p> <p>Further, Sovereign has a high-quality Board and management team comprising highly respected resource executives with extensive finance, commercial and capital markets experience. The Directors have previously raised more than A\$1.75bn from capital markets for a number of exploration and development companies. Further, a number of the Company Directors have recently secured funding of over A\$250m in equity and debt funding to fully fund the construction and working capital requirements for a resources project.</p> <p>As a result, the Board has a high level of confidence that the Project will be able to secure funding in due course, having particular regard to:</p> <ul style="list-style-type: none"> <li>6. Required capital expenditure;</li> <li>7. Sovereign's market capitalisation;</li> <li>8. Recent funding activities by Directors in respect of other resource projects;</li> <li>9. Ongoing discussions for potential offtake agreements; and</li> <li>10. Investor interest to date.</li> </ul>
<p><b>Social</b></p>	<p><i>The status of agreements with key stakeholders and matters leading to social license to operate.</i></p>	<p>The Company expects to enter into a Community Development Agreement ("CDA") with the surrounding communities. Significant engagement with these communities has occurred is ongoing ahead of negotiation of the CDA which is expected to be concluded during the DFS stage.</p>
<p><b>Other</b></p>	<p><i>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</i></p> <p><i>Any identified material naturally occurring risks.</i></p> <p><i>The status of material legal agreements and marketing arrangements.</i></p> <p><i>The status of government agreements and approvals critical to the viability of the project, such as mineral tenement status and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.</i></p>	<p>No identifiable naturally occurring risks have been identified to impact the Malingunde Ore Reserve.</p> <p>The Company has no existing offtake agreement in place.</p> <p>The Company is yet to apply for a Mining Licence ("ML") covering the footprint of the project, however it is not anticipated for there to be any objections in obtaining the necessary government approvals.</p>

Criteria	Explanation	Commentary
<b>Classification</b>	The basis for the classification of the Ore Reserves into varying confidence categories. Whether the result appropriately reflects the Competent Person's view of the deposit. The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	<p>The Malingunde PFS Ore Reserves comprise Measured Mineral Resource material converted to "Proved" reserves and Indicated Mineral Resource material converted to "Probable" reserves.</p> <p>In line with JORC 2012 guidelines, Inferred Mineral Resource material has not been included.</p> <p>Approx. 32% of the Malingunde PFS Ore Reserve is Proved Reserves, with the remainder being in the Probable Reserve category.</p>
<b>Audit or reviews</b>	The results of any audits or reviews of Ore Reserve estimates.	No external audits or reviews have been carried out to date.

