



## OUTSTANDING DRILL RESULTS CONFIRM HIGH GRADE RUTILE AT THE RAILROAD PROSPECT

Sovereign Metals Limited (“**the Company**” or “**Sovereign**”) is pleased to announce that recent drilling has identified a potentially substantial zone of shallow, high-grade saprolite-hosted rutile mineralisation at the Railroad Prospect. These outstanding results confirm that Sovereign’s ground holding in Malawi has the potential to host a new, globally significant rutile province.

### HIGHLIGHTS

- ◆ First quantitative results from broad-spaced drill-holes at the **Railroad Prospect** including, from surface:
  - **13m @ 1.08% including 6m @ 1.25% rutile**
  - **8m @ 0.92% including 5m @ 1.06% rutile**
  - **5m @ 1.16% rutile**
  - **7m @ 0.86% rutile**

*\* rutile = rutile recovered to a heavy mineral concentrate as a percentage of the primary drill sample mass.*
- ◆ Drilling results confirm **high-grade**, residual placer-style **rutile mineralisation** occurs over **large areas**
- ◆ The **mineralised footprint** at Railroad is at least **1.6km long and 300m-500m wide** and remains open to the south west
- ◆ **Drilling is ongoing** and also **targeting a very large, high-tenor soil anomaly** at Railroad West that is over 3km wide
- ◆ Sovereign will **target an initial rutile mineral resource** at the Railroad and Railroad West prospects
- ◆ Regional soil sampling continues to delineate **further potential zones of rutile mineralisation**

Following the excellent drill results, **Sovereign’s Managing Director Dr Julian Stephens commented:**

*“The first quantitative results from our drilling program show a significant zone of rutile mineralisation at Railroad. Our immediate drilling program is looking to expand this zone and test the very large, high tenor rutile soil anomaly at Railroad West. Sovereign is at the beginning of what we think is the discovery of a potentially globally significant, strategic rutile province.”*

### Enquiries

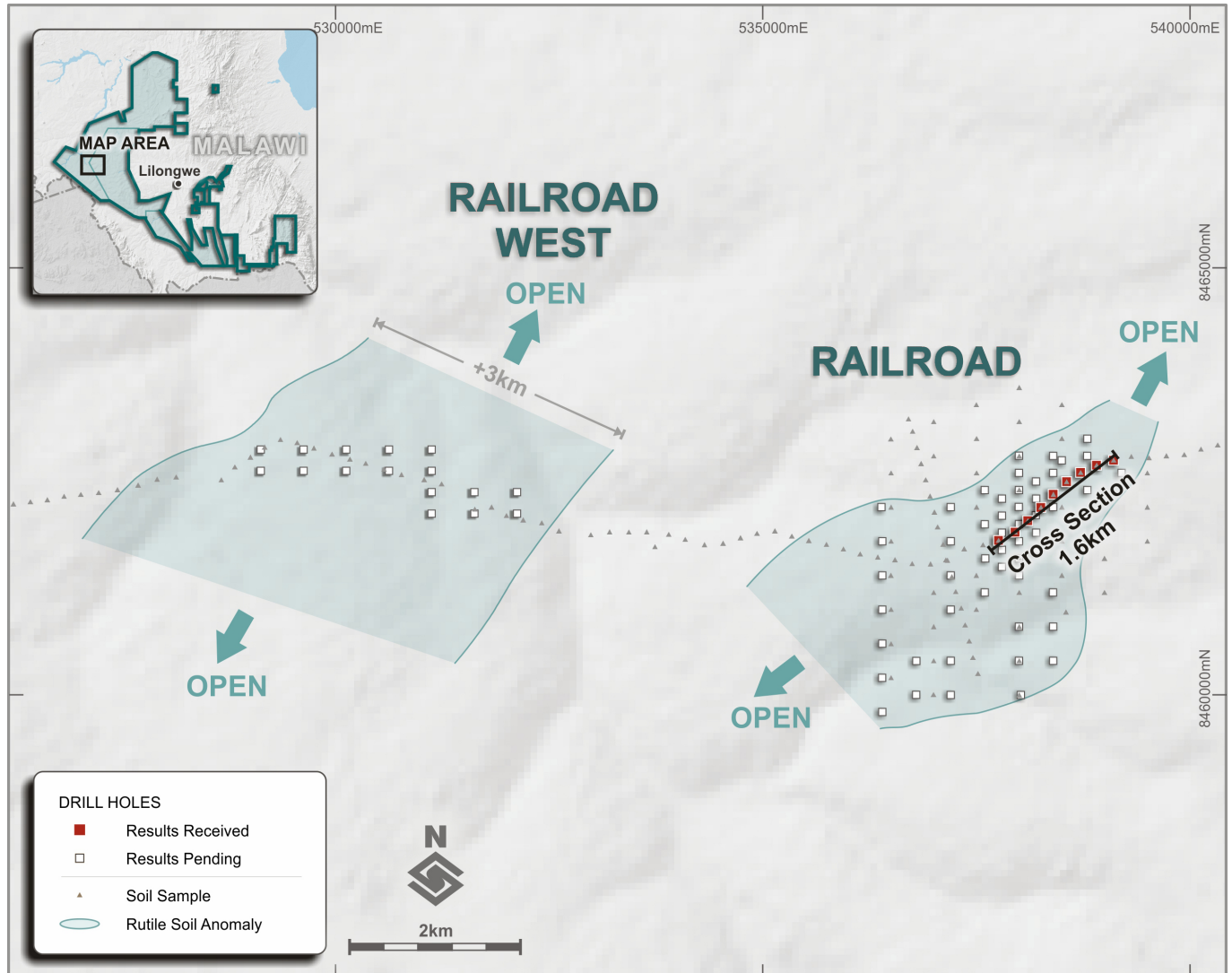
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## DRILLING RESULTS

The first holes drilled at Railroad targeted a high-tenor soil anomaly near the Nacala Rail Corridor. To test the anomaly, hand-auger drilling averaging about 12m depth was undertaken along the original soil sampling line.



**Figure 1. Railroad and Railroad West prospects showing soil anomalies and drilling completed to date.**

Soil sampling at the Railroad Prospect showed a broad rutile anomaly over at least 5km length. Within this soil anomaly the initial drill results show a more defined mineralised area of at least 1.6km in length, with widths estimated to be between 300m and 500m. The drilled mineralisation is still open to the south west.

At Railroad West, drilling is ongoing and currently targeting a very large, high-tenor soil anomaly that is over 3km wide.

The Railroad discovery confirms the Company's belief that its central Malawi project has the potential to be a new, globally significant rutile province. Infill and step-out drilling is now focusing on the best areas of mineralisation identified so far in order to work toward an initial mineral resource.

The majority of holes intersected significant grades of rutile mineralisation in highly-weathered, soft "free-dig" saprolite material. Significant intercepts are listed in Table 1 below.

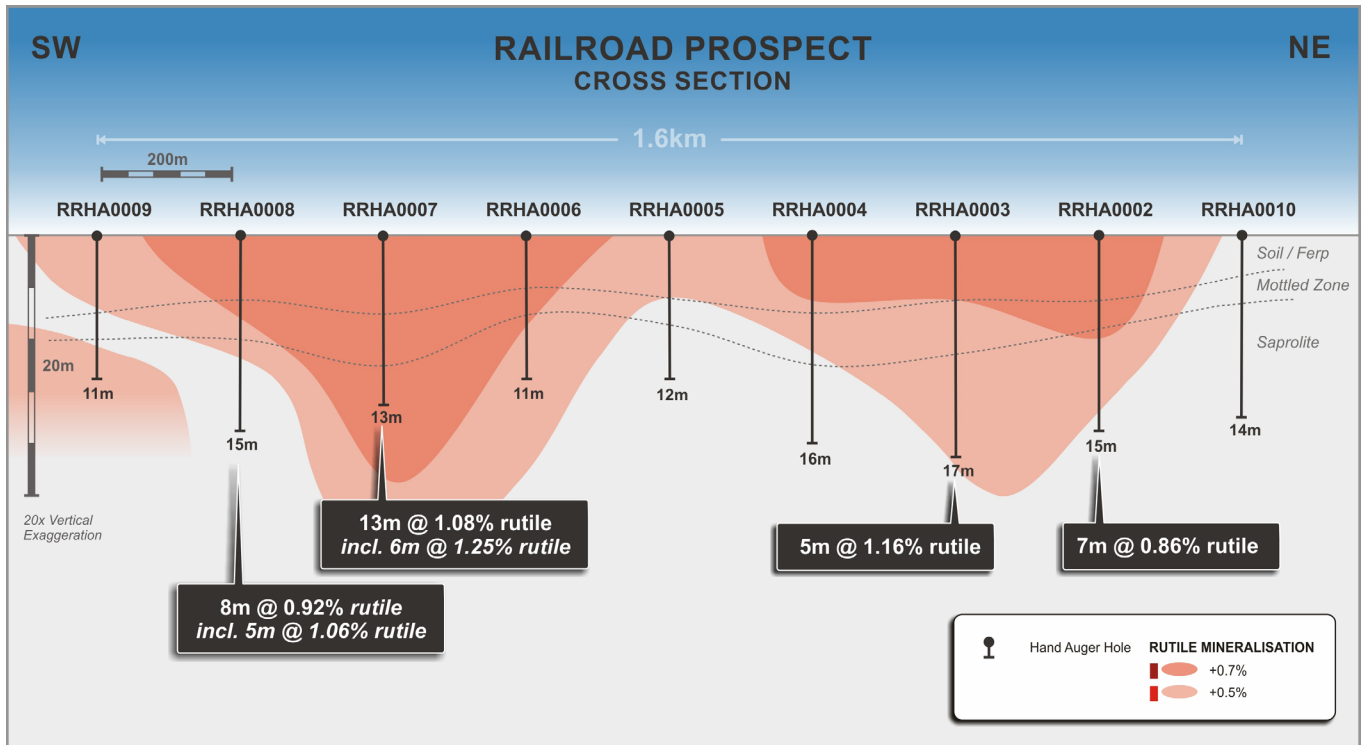


Figure 2. Railroad cross-section SW-NE.

\*For simplicity and due to the extreme vertical exaggeration required in the cross-section (Figure 2), the differing RLs of the drill collars are not depicted.

Table 1. Significant rutile intercepts for hand-auger holes RRHA0002-0010.

Hole ID	Interval (m)	Rutile %		Interval	Rutile %
RRHA0002	7	0.86			
RRHA0003	17	0.76	inc.	5	1.16
RRHA0004	10	0.66	inc	6	0.77
RRHA0005	5	0.58			
RRHA0006	11	0.79	inc.	4	0.99
RRHA0007	13	1.08	inc	6	1.25
RRHA0008	8	0.92	inc	5	1.06
RRHA0009	11	0.51			
RRHA0010	No significant results				

\*All reported intercepts are from surface. All holes were vertical. Recovered rutile refers to the rutile recovered to a heavy mineral concentrate as a percentage of the primary drill sample mass.

For reference, the rutile deposits in Sierra Leone controlled by Sierra Rutile (wholly owned by Iluka Resources Limited) have a global resource of 714mt @ 1.1% rutile<sup>1</sup>. The majority of the Sierra Leone deposits occur in placers with vertical thicknesses generally ranging from 5 to 15m. Sierra Rutile is considered the only world class rutile deposit currently known.

1. Iluka Resources Limited Annual Report 2018



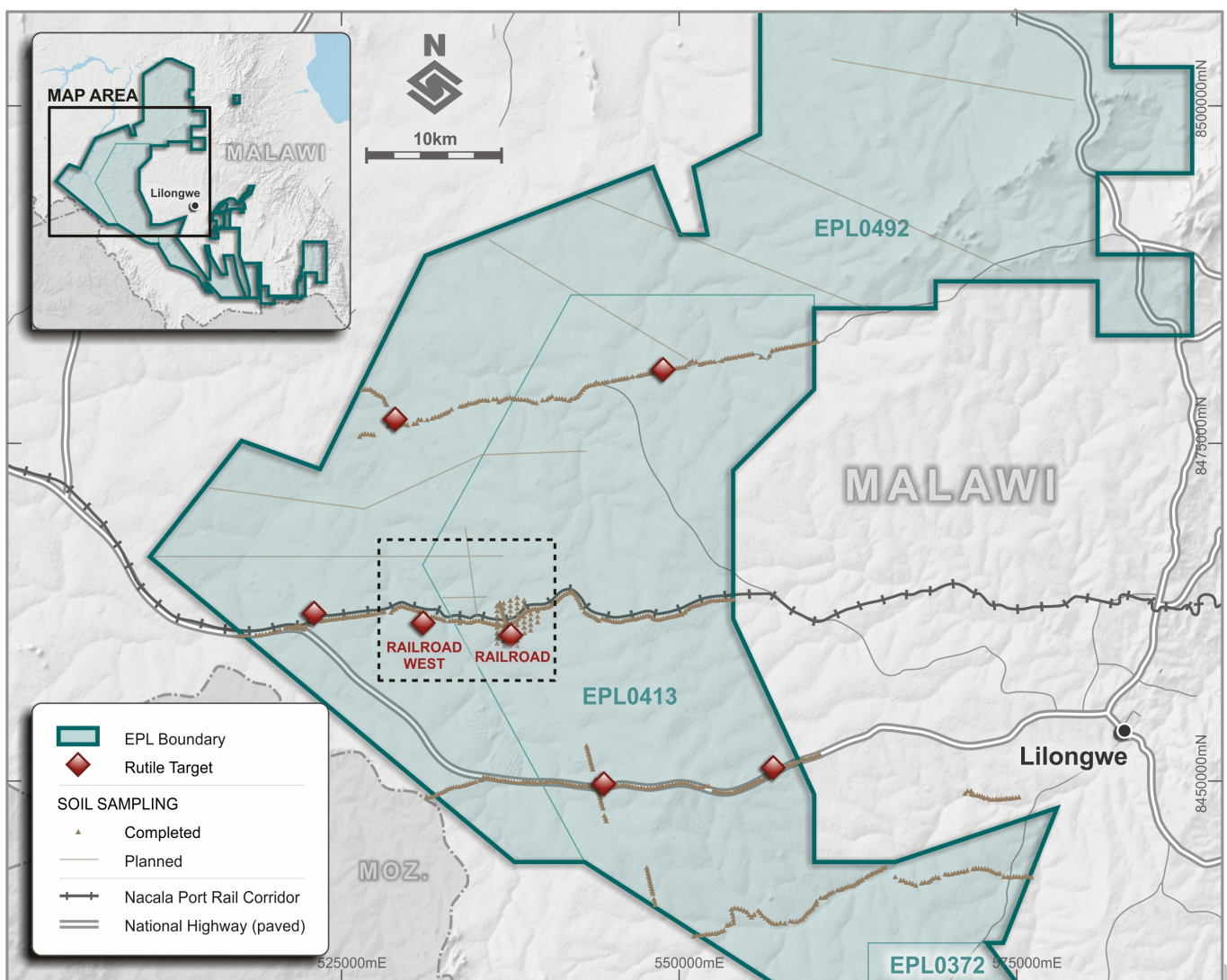
## OVERALL RUTILE EXPLORATION ACTIVITIES

As announced in September, the Company's on-going regional soil sampling program identified six new areas of rutile at surface. Drilling at these prospects is now complete with the first quantitative results from broad-spaced (~200m spacing) drill-holes at the **'Railroad Prospect'** confirming high-grade, residual placer-style rutile mineralisation occurs over substantial areas.

The results have also shown that soil sampling is a highly effective method to quickly identify target areas. Soil sampling over substantial regional areas is ongoing in order to identify further priority targets.

The Company's overall strategy is to define a substantial resource that can support a long-life, large scale rutile operation. Sovereign is taking a systematic and progressive approach to delineating potential mineral resources over the very large project area.

Sovereign plans to target an initial rutile mineral resource at the Railroad and Railroad West prospects.



**Figure 3. Soil sampling lines completed over the Company's large ground position showing all of the new targets identified**

## ONGOING WORK PROGRAM

Sovereign's ongoing rutile work program includes;

- ◆ Continued drilling at the Railroad and Railroad West prospects, which are the largest soil anomalies identified to date. The drilling program will target an initial JORC Resource in these areas
- ◆ Additional drilling to test a number of new regional targets discovered by soil sampling
- ◆ Continued regional soil sampling to identify new rutile targets
- ◆ Commencement of desktop studies to assess applicability of different mining methods
- ◆ Continued metallurgical test-work to confirm the flowsheet developed so far and produce rutile product for marketing purposes



**Figure 4. Malawi field operations and on-site laboratory**

### Competent Persons' Statements

The information in this report that relates to Exploration Results is based on information compiled by Dr Julian Stephens, a Competent Person who is a member of the Australian Institute of Geoscientists (AIG). Dr Stephens is the Managing Director of Sovereign Metals Limited and a holder of ordinary shares and unlisted options in Sovereign Metals Limited. Dr Stephens has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Dr Stephens consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

### Forward Looking Statement

This release may include forward-looking statements, which may be identified by words such as "expects", "anticipates", "believes", "projects", "plans", and similar expressions. These forward-looking statements are based on Sovereign'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 Sovereign, which could cause actual results to differ materially from such statements. There can be no assurance that forward-looking statements will prove to be correct. Sovereign makes no undertaking to subsequently update or revise the forward-looking statements made in this release, to reflect the circumstances or events after the date of that release.

## Appendix 1: Drill Hole Data

Hole ID	Easting	Northing	RL	Depth (m)
RRHA0002	538904	8462693	1136	15
RRHA0003	538717	8462609	1134	17
RRHA0004	538555	8462498	1133	16
RRHA0005	538400	8462352	1131	12
RRHA0006	538253	8462197	1129	11
RRHA0007	538102	8462042	1127	13
RRHA0008	537954	8461906	1125	15
RRHA0009	537760	8461810	1123	11
RRHA0010	539101	8462763	1138	14

*\*All reported intercepts are from surface. All holes were vertical.*



**Appendix 2: JORC Code, 2012 Edition – Table 1**

**SECTION 1 - SAMPLING TECHNIQUES AND DATA**

Criteria	JORC Code explanation	Hand Auger Drilling 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>	Nine hand auger holes were drilled to test a high-tenor rutile soil anomaly at Railroad and to obtain samples for quantitative mineralogical determination. Samples were composited based on regolith boundaries and chemistry generated by hand-held XRF.
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	Each 1m sample was sun dried and homogenised. Sub-samples were carefully coned and quartered to ensure sample representivity. ~2kg composite samples were processed. Extreme care is taken to ensure an equivalent mass is taken from each 1m sample to make up the composite. The primary composite sample is considered representative for this style of rutile mineralisation.
	<i>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.</i>	Regolith, lithological information and TiO <sub>2</sub> % obtained from handheld XRF were used to determine compositing intervals. Care is taken to ensure that only lithological/regolith units with similar geological and grade characteristics are composited together.
<b>Drilling Techniques</b>	<i>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).</i>	Hand-auger drilling with 62mm diameter spiral bits with 1-metre steel rods were used. Each 1m of drill sample is collected into separate sample bags and set aside. The auger bits and flights are cleaned between each metre of sampling to avoid contamination.
<b>Drill Sample Recovery</b>	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	Samples are assessed visually for recoveries. Overall, recovery is very good.
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	The Company's trained geologists supervise auger drilling on a 1 team 1 geologist basis and are responsible for monitoring all aspects of the drilling and sampling process.
	<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>	No bias related to preferential loss or gain of different materials has occurred.
<b>Logging</b>	<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>	All individual 1-metre auger intervals are geologically logged, recording relevant data to a set template using company codes. A small representative sample is collected for each 1-metre interval and placed in appropriately labelled chip trays for future reference.
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i>	All logging includes lithological features and estimates of basic mineralogy. Logging is generally qualitative.
	<i>The total length and percentage of the relevant intersection logged</i>	100% of samples are geologically logged.
<b>Sub-sampling techniques and sample preparation</b>	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	Not applicable – no core drilling conducted.
	<i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i>	Samples from the 9 auger holes drilled were composited. Each 1m sample was sun dried and homogenised. Sub-samples were carefully coned and quartered to ensure sample representivity. ~2kg composite samples were processed. Extreme care is taken to ensure an equivalent mass is taken from each 1m sample to make up the composite. The primary composite sample is considered representative for this style of rutile mineralisation.
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	Use of the above compositing and sampling technique is deemed appropriate given the dried nature of the samples.

Criteria	JORC Code explanation	Hand Auger Drilling Commentary
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	The sampling equipment is cleaned after each sub-sample is taken.
	<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>	Extreme care is taken to ensure an equivalent mass is taken from each 1m sample to make up each composite.
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	The sample size is considered appropriate for the material 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>The Malawi onsite laboratories sample preparation methods are considered quantitative to the point where a heavy mineral concentrate (HMC) is generated. Final results generated are for recovered rutile i.e. the % mass of the sample that is rutile that can be recovered to a heavy mineral concentrate.</p> <p>The following workflow for the samples was undertaken on-site in Malawi;</p> <ul style="list-style-type: none"> <li>• Dry sample in oven for 1 hour at 105°C</li> <li>• Soak in water and lightly agitate</li> <li>• Wet screen at 5mm, 600mm and 45µm to remove oversize and slimes material</li> <li>• Dry +45µm -600mm fraction in oven for 1 hour at 105°C</li> <li>• Pass +45µm -600mm fraction across wet table twice to generate a heavy mineral concentrate (HMC)</li> <li>• Dry HMC in oven for 30 minutes at 105°C</li> <li>• Bag +45µm -600mm HMC Fraction and send to Perth, Australia for quantitative mineralogical determination.</li> </ul> <p>The following workflow for the samples was then undertaken at Perth based Laboratories.</p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• The M and NM fractions were sent to Intertek Genalysis Perth for quantitative XRF analysis.</li> <li>• A 2g split 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 department information.</li> <li>• A 2g split of selected M and NM fractions were sent to Diamantina Laboratories for thin-section and 300-point count analysis.</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>	Acceptable levels of accuracy and precision have been established. No handheld methods are used for quantitative determination.
	<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>	Intertek Genalysis used internal XRF standards and duplicates. The overall quality of QA/QC is considered to be good.
<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 qualified, alternative company personnel.
	<i>The use of twinned holes.</i>	No twin holes have been used.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	All data was collected initially 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.
	<i>Discuss any adjustment to assay data.</i>	<p>Rutile content is calculated on the NM fraction by XRF analysis for TiO<sub>2</sub>%. The rutile content of the M fraction is quantified through identified rutile abundance supported by QEMSCAN and 300-point thin section analysis on selected samples.</p> <p>The rutile content of both the M and NM fractions are then summed to give a total recoverable rutile within the sample.</p>
<b>Location of data points</b>	<i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys),</i>	A Trimble R2 Differential GPS was used to pick up the hand auger collars.



Criteria	JORC Code explanation	Hand Auger Drilling Commentary
	<i>trenches, mine workings and other locations used in Mineral Resource estimation.</i>	No downhole surveying of auger holes is completed. Given the vertical nature and shallow depths of the auger holes drill hole deviation is not considered to significantly affect the downhole location of samples.
	<i>Specification of the grid system used.</i>	WGS84 UTM Zone 36 South.
	<i>Quality and adequacy of topographic control.</i>	DGPS pickups are considered adequate topographic control (metres above mean sea level).
<b>Data spacing &amp; distribution</b>	<i>Data spacing for reporting of Exploration Results.</i>	The hand auger collars are spaced at approximately 200m and were designed to provide systematic coverage of the anomalous area of soil samples previously analysed in this area. The drilling was completed along accessible road networks. It is thought that these holes intercepts should be broadly representative of the mineralisation style in the general area. More work is required to accurately determine the variability of the mineralisation across the Company's central Malawi ground package.
	<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>	Not applicable, no Mineral Resource or Ore Reserve estimations are covered by the data in this report.
	<i>Whether sample compositing has been applied.</i>	Individual 1-metre auger intervals have been composited over a determined interval of interest for the 9 auger holes drilled in order to obtain a primary sample of ~2kg mass for mineralogical analysis.
<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 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 drilling has been identified.
<b>Sample security</b>	<i>The measures taken to ensure sample security</i>	Samples were stored in secure storage from the time of drilling. The samples were sealed as soon as site preparation was completed, and again securely stored during shipment and while at Australian laboratories.
<b>Audits or reviews</b>	<i>The results of any audits or reviews of sampling techniques and data</i>	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>	The Company owns 100% of 7 Exclusive Prospecting Licences (EPLs) in Malawi. EPL0355 renewed in 2019 for 2 years, EPL0372 renewed in 2018 for 2 years and EPL0413 renewed in 2017 for 2 years. EPL0492 and EPL0528 were granted in 2018 for an initial period of three years (renewable). EPL0537 and EPL0545 were granted in 2019 for an initial period of three years (renewable).
	<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>	The rutile deposit type could be termed a residual placer formed by the intense weathering of rutile-rich basement paragneisses.  Rutile occurs in a mostly topographically flat area west of Malawi's capital known as the Lilongwe Plain where 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" >35m).
<b>Drill hole information</b>	<i>A summary of all information material to the understanding of the exploration results</i>	All collar and composite data is provided in the body and Appendices of this report. All holes were drilled vertically.

Criteria	Explanation	Commentary
	<p>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</p>	
	<p>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case</p>	No information has been excluded.
<b>Data aggregation methods</b>	<p>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.</p>	All results reported are of a length-weighted average. The results reported in the body of the report are on a lower cut-off of 0.5% rutile.
	<p>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.</p>	No significant aggregate intercepts with short zones of high grade or longer lengths of low grade have been reported.
	<p>The assumptions used for any reporting of metal equivalent values should be clearly stated.</p>	No metal equivalent values are used in this report.
<b>Relationship between mineralisation widths &amp; intercept lengths</b>	<p>These relationships are particularly important in the reporting of Exploration Results.</p>	It is considered that the mineralisation lies in laterally extensive, near surface, flat "blanket" style bodies in areas where the entire weathering profile is preserved and not significantly eroded.
	<p>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</p>	The mineralisation lies in laterally extensive, near surface, flat "blanket" style bodies.
	<p>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</p>	Downhole widths approximate true widths. Some mineralisation currently remains open at depth.
<b>Diagrams</b>	<p>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.</p>	Refer to figures in the body of this report.
<b>Balanced reporting</b>	<p>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.</p>	All results have been reported in this report.
<b>Other substantive exploration data</b>	<p>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.</p>	Rutile has been determined to be the major TiO <sub>2</sub> -bearing mineral at and around numerous rutile prospects within Sovereign's ground package. The company continues to explore across wide areas within the large tenement package for rutile mineralisation.
<b>Further work</b>	<p>The nature and scale of planned further work (e.g. test for lateral extensions or depth extensions or large-scale step-out drilling).</p>	Commencement of additional mineralogical and metallurgical test-work on samples from each of the significant mineralised areas to assess mineralogy, recoverable rutile grades, improve recovered rutile grades, determine the potential to produce other mineral by-products and further develop the flowsheet.

Criteria	Explanation	Commentary
		<p>Further analyses of historical drill samples to expand areas of known rutile mineralisation.</p> <p>Regional hand-auger drilling to attempt to delineate an initial rutile resource, if warranted, and further understand the regional distribution of rutile.</p>
	<p><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></p>	<p>Refer to diagrams in the body of this report. For simplicity and due to the extreme vertical exaggeration in the cross-section presented (Figure 2), the differing RLs of the drill collars are not depicted.</p>

