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# KASIYA EXTENDED BY HIGHEST GRADE RUTILE DRILLING RESULTS RECEIVED TO DATE

Sovereign Metals Limited ("the Company" or "Sovereign") is pleased to report its highest-grade rutile drilling results achieved to date from Kasiya, the Company's flagship, large-scale, high-grade rutile deposit in Malawi.

Extensional drilling results continue to grow the mineralised footprint toward the south-west and show increasing areas of high-grade rutile from surface. The first infill drilling results demonstrate continuity of high-grade rutile in the central zone and provide greater definition of mineralisation as the Company moves toward a maiden Mineral Resource Estimate.

### HIGHLIGHTS

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- Phase 5 drilling completed with results including the highest-grade rutile ever drilled at the flagship Kasiya deposit extending known mineralisation to the south west.
- The strike length of high-grade mineralisation has increased by about 1km to a total of ~6.5km with widths of the mineralised envelope ranging up to ~3km.
- Mineralisation continues to remain open along strike to the north, south west, south east and laterally to the east.
- Key Phase 5 extensional drilling results from surface along the south west area include;
  - <u>10m @ 1.53%</u> rutile inc. <u>6m @ 1.77%</u> rutile inc. <u>3m @ 2.31% rutile</u>
  - 10m @ 1.01% rutile inc. 5m @ 1.05% rutile
  - 8m @ 1.01% rutile inc. 4m @ 1.50% rutile
  - Infill drilling in the central zone of Kasiya also continues to produce high-grade results from surface and provides further definition on the mineralised envelope. Key infill results include;
    - 12m @ 1.26% rutile inc. 8m @ 1.50% rutile
    - 11m @ 1.01% rutile inc. 4m @ 1.32% rutile
    - 11m @ 1.13% rutile inc. 2m @ 1.76% rutile
    - 11m @ 1.07% rutile inc. 5m @ 1.34% rutile
    - 8m @ 1.05% rutile inc. 4m @ 1.27% rutile
    - 11m @ 0.98% rutile inc. 4m @ 1.61% rutile
    - 7m @ 1.16% rutile inc. 3m @ 1.56% rutile
    - 11m @ 0.98% rutile inc. 4m @ 1.54% rutile
    - 7m @ 1.28% rutile inc. 3m @ 1.37% rutile

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

"We have intersected our highest rutile grades to date at Kasiya in new extensional drilling to the south west. Additionally, our first infill holes at the central zone have also returned high-grades and thick intercepts, as expected. Kasiya is continuing to expand and the Company is looking forward to releasing the maiden JORC resource estimate toward the end of the quarter."

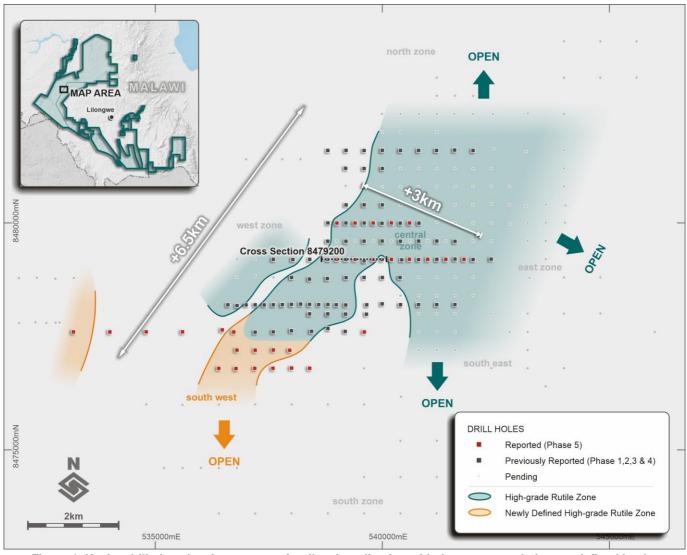


Figure 1. Kasiya drill plan showing extents of rutile mineralisation with the new extended areas defined by the Phase 5 extensional and infill drill-holes. Pending holes are also shown.







### **KASIYA EXTENSIONAL & INFILL DRILL PROGRAM – PHASE 5**

Phase 5 drilling comprised a further 30 (17 extensional and 13 infill) hand-auger holes for 271m total. This brings the total number of holes reported to 109 (Phases 1 through 5 combined).

Phase 5 drilling shows the highest-grade rutile results received from Kasiya to date extending the area of the deposit to the south west. These results show the strike length of high-grade mineralisation has increased by about 1km to a total ~6.5km with widths of the mineralised envelope ranging up to ~3km. Mineralisation continues to remain open along strike to the north, south-west, south-east and open laterally to the east.

The mineralisation style at Kasiya can be described as eluvial, or otherwise known as a residual placer. This style of mineralisation occurs as flat "blankets" draped across expansive, elevated plateaus that have not experienced any significant erosion. In this way, the mineralisation style has many similarities to bauxite (aluminium ore) having been formed by the same general weathering and volume reduction processes to leave behind the valuable, physically and chemically immobile minerals. The significant difference being that the residual rutile placer mineralisation at Kasiya is naturally unconsolidated, liberated and free-dig, unlike bauxite which generally requires blasting.

The current geological interpretation is that high-grade, free-dig rutile mineralisation is likely to continue vertically to the base of saprolite in the areas where holes terminated in mineralisation. The depth of mineralised saprolite can be reasonably assumed from existing geological knowledge to be around 25m from surface. Deeper drilling techniques such as air-core, diamond-core or sonic will need to be employed to confirm this at Kasiya.

Key Phase 5 extensional drilling results from surface along in the south west area include;

- 10m @ 1.53% rutile inc. 6m @ 1.77% rutile inc. 3m @ 2.31% rutile
- 10m @ 1.01% rutile inc. 5m @ 1.05% rutile
- 8m @ 1.01% rutile inc. 4m @ 1.50% rutile

Phase 5 infill drilling in the central zone continues to produce high-grade results from surface as expected and provides further definition on the mineralised envelope. Key infill results include;

- 12m @ 1.26% rutile inc. 8m @ 1.50% rutile
- 11m @ 1.01% rutile inc. 4m @ 1.32% rutile
- 11m @ 1.13% rutile inc. 2m @ 1.76% rutile
- 11m @ 1.07% rutile inc. 5m @ 1.34% rutile
- 8m @ 1.05% rutile inc. 4m @ 1.27% rutile
- 11m @ 0.98% rutile inc. 4m @ 1.61% rutile
- 7m @ 1.16% rutile inc. 3m @ 1.56% rutile
- 11m @ 0.98% rutile inc. 4m @ 1.54% rutile
- 7m @ 1.28% rutile inc. 3m @ 1.37% rutile



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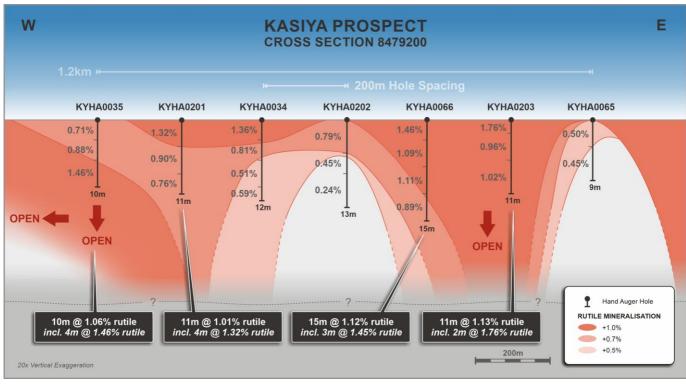


Figure 2. Cross section 8479200 showing the broad, high-grade mineralisation at surface and a number of holes terminating in high-grade mineralisation at depth.

### A NEW RUTILE PROVINCE

Additional to the flagship Kasiya rutile deposit, numerous other prospects and targets have been identified by the Company. Sovereign believes it has now discovered a potentially globally significant, strategic rutile province across its large Malawi ground holding.

The Malawi Rutile Province features two confirmed, discrete rutile mineralisation styles hosted respectively in sand and saprolite (soft, friable weathered material) which are both amenable to conventional processing. Rutile mineralisation identified to date has generally not been spatially constrained by drilling at either of the two main prospects, Kasiya (saprolite) and the Bua Channel (sand). The Company is targeting large resources that could support long-life, large-scale rutile production.



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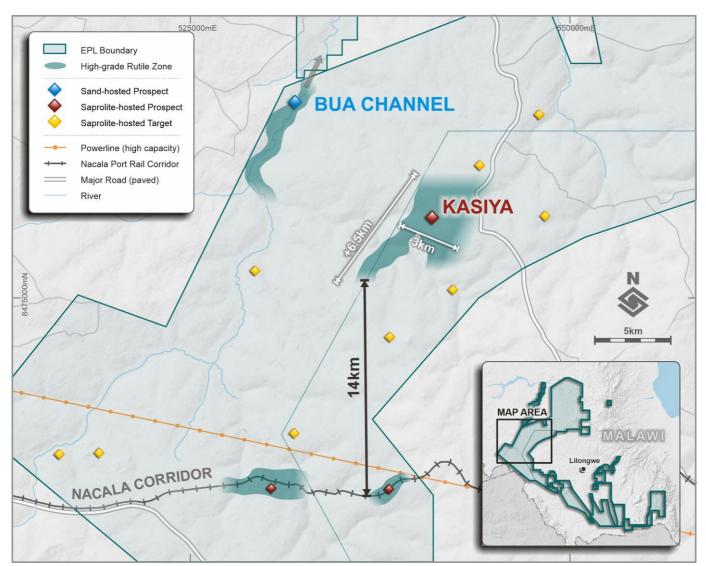


Figure 3. Map of the broader Kasiya and Bua Channel area showing the multiple rutile deposits, prospects and targets and proximity to the Nacala Rail Corridor.

### **COVID-19 UPDATE**

Sovereign is maintaining operations in Malawi on a reduced and safe basis. The Company continues to actively evaluate the situation for all risks to employees, communities and general operational safety and will make any required adjustments as the situation evolves, or as required by the Government of Malawi.



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### **FORWARD PLAN**



The ongoing rutile work programs for Kasiya and the Company's other prospects within the Malawi Rutile Province include;

- Continued analyses and reporting of drill samples over the next four to six weeks ahead of the maiden Mineral Resource Estimate for Kasiya which is on target for late Q3 2020;
- Step-out and regional drilling at Kasiya and the broader surrounding area to identify extensions and satellite mineralised zones;
- Bulk-scale metallurgical test-work is well underway on a 1 tonne sample from Kasiya;
- Push-tube drilling at Kasiya to twin hand-auger holes and to obtain cored samples for specific gravity (SG) determination and initial geotechnical analysis;
- Mining and tailings studies are ongoing which will feed into a future Scoping Study; and
- A regional desktop targeting exercise using all available knowledge and datasets is continuing with the goal of discovering more high-grade, Kasiya-like rutile mineralisation further afield.

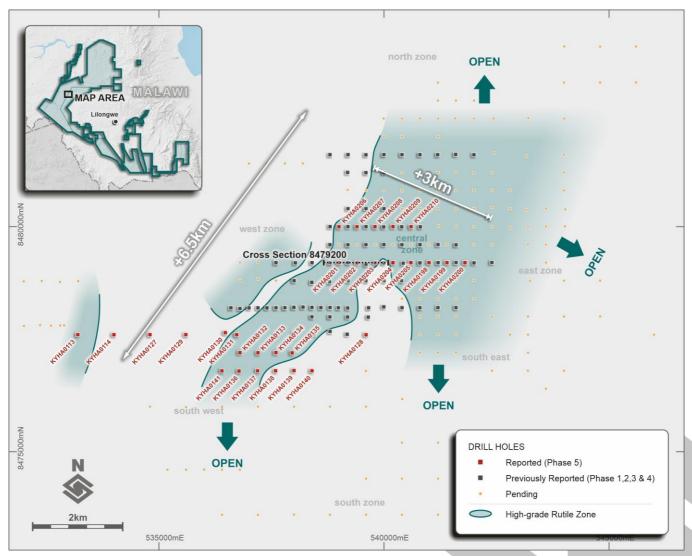


Figure 4. Drill plan showing completed Phases 1-5 of reported and pending shallow hand-auger holes at Kasiya.

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### **DRILL RESULTS**

| Hole ID  | Interval Thickness     | Rutile % | From (m) Downhole | Comments          | Purpose     |
|----------|------------------------|----------|-------------------|-------------------|-------------|
| KYHA0113 | 4                      | 1.01     | surface           | open at depth     | extensional |
| KYHA0114 | No significant results |          |                   | hole failed at 5m | extensional |
| KYHA0127 | 9                      | 0.59     | surface           |                   | extensional |
| KYHA0128 | 3                      | 0.56     | surface           |                   | extensional |
| KYHA0129 | No significant results |          |                   | hole failed at 5m | extensional |
| KYHA0130 | 5                      | 0.66     | surface           | open at depth     | extensional |
| KYHA0131 | 9                      | 0.75     | surface           |                   | extensional |
| incl     | 4                      | 0.95     | surface           |                   |             |
| KYHA0132 | 5                      | 0.94     | surface           |                   | extensional |
| KYHA0133 | 10                     | 1.53     | surface           | open at depth     | extensional |
| incl     | 6                      | 1.77     | surface           |                   |             |
| incl     | 3                      | 2.31     | surface           |                   |             |
| KYHA0134 | 11                     | 0.70     | surface           | open at depth     | extensional |
| KYHA0135 | 3                      | 0.89     | surface           |                   | extensional |
| KYHA0136 | 10                     | 1.01     | surface           | open at depth     | extensional |
| incl     | 5                      | 1.05     | surface           |                   |             |
| KYHA0137 | 8                      | 1.01     | surface           |                   | extensional |
| incl     | 4                      | 1.50     | surface           |                   |             |
| KYHA0138 | 3                      | 0.73     | surface           |                   | extensional |
| KYHA0139 | No significant results |          |                   | hole failed at 1m | extensional |
| KYHA0140 | No significant results |          |                   | hole failed at 6m | extensional |
| KYHA0141 | 6                      | 0.77     | surface           |                   | extensional |
| incl     | 2                      | 1.19     | surface           |                   |             |
| KYHA0198 | 12                     | 1.26     | surface           | open at depth     | infill      |
| incl     | 8                      | 1.50     | surface           |                   |             |
| incl     | 4                      | 1.67     | surface           |                   |             |
| KYHA0199 | 10                     | 0.71     | surface           | open at depth     | infill      |
| incl     | 4                      | 0.84     | surface           |                   |             |
| KYHA0200 | No significant results |          |                   |                   | infill      |
| KYHA0201 | 11                     | 1.01     | surface           | open at depth     | infill      |
| incl     | 8                      | 1.11     | surface           |                   |             |
| incl     | 4                      | 1.32     | surface           |                   |             |
| KYHA0202 | 5                      | 0.79     | surface           |                   | infill      |
| KYHA0203 | 11                     | 1.13     | surface           | open at depth     | infill      |
| incl     | 6                      | 1.22     | surface           |                   |             |
| incl     | 2                      | 1.76     | surface           |                   |             |
| KYHA0204 | 11                     | 1.07     | surface           | open at depth     | infill      |
| incl     | 8                      | 1.14     | from 3m           |                   |             |
| incl     | 5                      | 1.34     | from 6m           |                   |             |
| KYHA0205 | 8                      | 1.05     | surface           | open at depth     | infill      |
| incl     | 4                      | 1.27     | from 4m           |                   |             |
| -        |                        | 0.98     | surface           | open at depth     |             |



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| Hole ID  | Interval Thickness | Rutile % | From (m) Downhole | Comments      | Purpose |
|----------|--------------------|----------|-------------------|---------------|---------|
| incl     | 4                  | 1.61     | from 7m           |               |         |
| KYHA0207 | 12                 | 0.79     | surface           | open at depth | infill  |
| incl     | 4                  | 1.00     | from 8m           |               |         |
| KYHA0208 | 11                 | 0.96     | surface           | open at depth | infill  |
| incl     | 7                  | 1.16     | surface           |               |         |
| incl     | 3                  | 1.56     | surface           |               |         |
| KYHA0209 | 11                 | 0.98     | surface           | open at depth | infill  |
| incl     | 4                  | 1.54     | surface           |               |         |
| KYHA0210 | 7                  | 1.28     | surface           | open at depth | infill  |
| incl     | 3                  | 1.37     | surface           |               |         |

#### **Competent Person's Statement**

The information in this report that relates to Exploration Results are 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.

This ASX Announcement has been approved and authorised for release by the Company's Managing Director, Julian Stephens.



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## **APPENDIX 1: DRILL HOLE DATA**

| Hole ID  | East   | North   | RL   | Depth<br>(m) |
|----------|--------|---------|------|--------------|
| KYHA0113 | 533199 | 8477602 | 1065 | 4            |
| KYHA0114 | 534000 | 8477600 | 1076 | 5            |
| KYHA0127 | 534800 | 8477603 | 1087 | 9            |
| KYHA0128 | 539604 | 8477599 | 1080 | 8            |
| KYHA0129 | 535598 | 8477603 | 1081 | 5            |
| KYHA0130 | 536475 | 8477646 | 1078 | 5            |
| KYHA0131 | 536728 | 8477601 | 1084 | 9            |
| KYHA0132 | 536799 | 8477201 | 1087 | 8            |
| KYHA0133 | 537200 | 8477201 | 1091 | 10           |
| KYHA0134 | 537599 | 8477203 | 1089 | 11           |
| KYHA0135 | 537960 | 8477198 | 1082 | 11           |
| KYHA0136 | 536779 | 8476794 | 1093 | 10           |
| KYHA0137 | 537191 | 8476799 | 1095 | 11           |
| KYHA0138 | 537592 | 8476800 | 1092 | 12           |
| KYHA0139 | 538001 | 8476804 | 1086 | 1            |
| KYHA0140 | 538400 | 8476800 | 1085 | 6            |
| KYHA0141 | 536400 | 8476798 | 1090 | 10           |
| KYHA0198 | 541000 | 8479200 | 1112 | 12           |
| KYHA0199 | 541400 | 8479200 | 1117 | 10           |
| KYHA0200 | 541800 | 8479200 | 1117 | 8            |
| KYHA0201 | 539000 | 8479202 | 1093 | 11           |
| KYHA0202 | 539399 | 8479198 | 1094 | 13           |
| KYHA0203 | 539800 | 8479201 | 1094 | 11           |
| KYHA0204 | 540200 | 8479199 | 1096 | 11           |
| KYHA0205 | 540598 | 8479202 | 1105 | 8            |
| KYHA0206 | 539000 | 8480000 | 1091 | 11           |
| KYHA0207 | 539400 | 8480000 | 1094 | 12           |
| KYHA0208 | 539800 | 8480001 | 1097 | 11           |
| KYHA0209 | 540200 | 8480002 | 1099 | 11           |
| KYHA0210 | 540602 | 8480000 | 1101 | 7            |

\* All holes were vertical.



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### **APPENDIX 2: JORC CODE, 2012 EDITION – TABLE 1**

#### **SECTION 1 - SAMPLING TECHNIQUES AND DATA**

| Criteria  | JORC Code explanation  | Hand Auger Drilling Commentary  |
|---|--|---|
| Sampling<br>Techniques                                      | Nature and quality of sampling (e.g. cut<br>channels, random chips, or specific specialised<br>industry standard measurement tools<br>appropriate to the minerals under investigation,<br>such as down hole gamma sondes, or handheld<br>XRF instruments, etc). These examples should<br>not be taken as limiting the broad meaning of<br>sampling.  | A total of 30 hand auger holes for 271m were drilled at the Kasiya Prospect to obtain samples for quantitative mineralogical determination. Samples were composited based on regolith boundaries and chemistry generated by handheld XRF, generally at 3, 4 or 5m intervals.  |
|   | Include reference to measures taken to ensure<br>sample representivity and the appropriate<br>calibration of any measurement tools or<br>systems used.   | Drilling and sampling activities were supervised by a suitably qualified Company geologist who was present at all times. All bulk 1-metre drill samples were geologically logged by the geologist at the drill site   |
|   |  | Each 1m sample was sun dried and homogenised. Sub-samples were carefully riffle split to ensure representivity. ~1.5kg 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. |
|   | Aspects of the determination of mineralisation<br>that are Material to the Public Report. In cases<br>where 'industry standard' work has been done<br>this would be relatively simple (e.g. 'reverse<br>circulation drilling was used to obtain 1 m<br>samples from which 3 kg was pulverised to<br>produce a 30 g charge for fire assay'). In other<br>cases more explanation may be required, such<br>as where there is coarse gold that has inherent<br>sampling problems. Unusual commodities or<br>mineralisation types (e.g. submarine nodules)<br>may warrant disclosure of detailed information. | Logged mineralogy percentages, lithology information and TiO2% obtained from<br>handheld XRF were used to determine compositing intervals. Care is taken to<br>ensure that only lithological units with similar geological and grade<br>characteristics are composited together.  |
| Drilling<br>Techniques                                      | Drill type (e.g. core, reverse circulation, open-<br>hole hammer, rotary air blast, auger, Bangka,<br>sonic, etc) and details (e.g. core diameter, triple<br>or standard tube, depth of diamond tails, face-<br>sampling bit or other type, whether core is<br>oriented and if so, by what method, etc).   | Hand-auger drilling with 62mm diameter spiral bits with 1-metre long steel rods.<br>Each 1m of drill sample is collected into separate sample bags and set aside.<br>The auger bits and flights are cleaned between each metre of sampling to avoid<br>contamination.   |
| Drill Sample<br>Recovery                                    | Method of recording and assessing core and<br>chip sample recoveries and results assessed.   | Samples are assessed visually for recoveries. Overall, recovery is very good.<br>Drilling is ceased when recoveries become poor once the water table has been<br>reached.   |
|   | Measures taken to maximise sample recovery<br>and ensure representative nature of the<br>samples.  | 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.  |
|   | Whether a relationship exists between sample<br>recovery and grade and whether sample bias<br>may have occurred due to preferential loss/gain<br>of fine/coarse material.  | No bias related to preferential loss or gain of different materials has occurred.   |
| Logging   | Whether core and chip samples have been<br>geologically and geotechnically logged to a<br>level of detail to support appropriate Mineral<br>Resource estimation mining studies and<br>metallurgical studies.   | 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.   |
|   | Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.  | All logging includes lithological features and estimates of basic mineralogy.<br>Logging is generally qualitative.  |
|   | The total length and percentage of the relevant<br>intersection logged   | 100% of samples are geologically logged.  |
| Sub-<br>sampling<br>techniques<br>and sample<br>preparation | If core, whether cut or sawn and whether quarter, half or all core taken.  | Not applicable – no core drilling conducted.  |
|   | If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.   | Samples from the 30 auger holes drilled were composited. Each 1m sample was sun dried and homogenised. Sub-samples were carefully riffle split to ensure sample representivity. ~1.5kg composite samples were processed. Extreme care is taken to ensure an equivalent mass is taken from each 1m sample to make up the composite.                                    |



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| Criteria   | JORC Code explanation   | Hand Auger Drilling Commentary   |
|--|---|--|
|  |   | The primary composite sample is considered representative for this style of rutile mineralisation and is consistent with industry standard practice.   |
|  | For all sample types, the nature, quality and appropriateness of the sample preparation technique.  | Use of the above compositing and sampling technique is deemed appropriate given the dry nature of the samples.   |
|  | Quality control procedures adopted for all sub-<br>sampling stages to maximise representivity of<br>samples.  | The sampling equipment is cleaned after each sub-sample is taken.  |
|  | Measures taken to ensure that the sampling is<br>representative of the in situ material collected,<br>including for instance results for field<br>duplicate/second-half sampling.   | Extreme care is taken to ensure an equivalent mass is taken from each 1m sample to make up each composite.   |
|  | Whether sample sizes are appropriate to the grain size of the material being sampled.   | The sample size is considered appropriate for the material sampled.  |
| Quality of<br>assay data<br>and<br>laboratory<br>tests | The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.  | 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.   |
|  |   | The following workflow for the samples was undertaken on-site in Malawi;   |
|  |   | <ul> <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> </ul>  |
|  |   | <ul> <li>Dry +45µm -600mm (sand fraction) in oven for 1 hour at 105°C</li> </ul>   |
|  |   | The following workflow for the samples was then undertaken at Perth based Laboratories.  |
|  |   | <ul> <li>Split ~150g off Sand fraction for Heavy Liquid Separation (HLS) using<br/>Tetrabromomethane (TBE, SG 2.96g/cc) as the liquid heavy media. Work<br/>undertaken at Diamantina Laboratories.</li> <li>Magnetic separation of the THM Sinks by Carpco magnet @ 16,800G<br/>(2.9Amps) into a magnetic (M) and non-magnetic (NM) fraction. Work<br/>undertaken at Allied Mineral Laboratories (AML) in Perth.</li> <li>The NM fractions were sent to Intertek Genalysis Perth for quantitative XRF</li> </ul> |
|  |   | <ul> <li>Rutile is reported as: rutile mineral recovered to the total NM concentrate fraction as a % of the total primary, dry raw sample mass.</li> </ul>   |
|  | For geophysical tools, spectrometers, handheld<br>XRF instruments, etc., the parameters used in<br>determining the analysis including instrument<br>make and model, reading times, calibrations<br>factors applied and their derivation, etc. | Acceptable levels of accuracy and precision have been established. No handheld methods are used for quantitative determination.  |
|  | Nature of quality control procedures adopted<br>(e.g. standards, blanks, duplicate, external<br>laboratory checks) and whether acceptable<br>levels of accuracy (i.e. lack of bias) and<br>precision have been established.                   | Intertek Genalysis used internal XRF standards and duplicates. The overall quality of QA/QC is considered to be good.  |
| Verification<br>of sampling<br>& assaying              | The verification of significant intersections by<br>either independent or alternative company<br>personnel.   | Significant mineralisation intersections were verified by qualified, alternative company personnel.  |
|  | The use of twinned holes.   | No twin holes have been used.  |
|  | Documentation of primary data, data entry<br>procedures, data verification, data storage<br>(physical and electronic) protocols.  | All data was collected initially on paper logging sheets and codified to the<br>Company's templates. This data was hand entered to spreadsheets and<br>validated by Company geologists. This data was then imported to a Microsoft<br>Access Database then validated automatically and manually.   |
|  | Discuss any adjustment to assay data.   | Rutile is reported as: rutile mineral recovered to the total NM concentrate fraction as a % of the total primary, dry raw sample mass.   |
| Location of  | Accuracy and quality of surveys used to locate  | A Trimble R2 Differential GPS was used to pick up the hand auger collars.  |
| data points  | drill holes (collar and down-hole surveys),<br>trenches, mine workings and other locations<br>used in Mineral Resource estimation.  | No downhole surveying of auger holes is completed. Given the vertical nature<br>and shallow depths of the auger holes drill hole deviation is not considered to<br>significantly affect the downhole location of samples.  |
|  | Specification of the grid system used.  | WGS84 UTM Zone 36 South.   |



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| Criteria  | JORC Code explanation  | Hand Auger Drilling Commentary  |
|---|--|---|
|   | Quality and adequacy of topographic control.   | DGPS pickups are considered to be high quality topographic control measures.  |
| Data<br>spacing &<br>distribution                                   | Data spacing for reporting of Exploration<br>Results.  | The hand auger collars are spaced at approximately 400m along the extensional drill-lines and 200m along the infill lines. All extensional holes are designed to provide systematic strike and width extension of the mineralised lines of hand auger 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. |
|   | Whether the data spacing and distribution is<br>sufficient to establish the degree of geological<br>and grade continuity appropriate for the Mineral<br>Resource and Ore Reserve estimation<br>procedure(s) and classifications applied. | Not applicable, no Mineral Resource or Ore Reserve estimations are covered by new data in this report.  |
|   | Whether sample compositing has been applied.   | Individual 1-metre auger intervals have been composited over a determined interval of interest for the 30 auger holes drilled in order to obtain a primary sample of ~1.5kg mass for mineralogical analysis.  |
| Orientation<br>of data in<br>relation to<br>geological<br>structure | Whether the orientation of sampling achieves<br>unbiased sampling of possible structures and<br>the extent to which this is known considering<br>the deposit type  | No bias attributable to orientation of sampling has been identified.  |
|   | If the relationship between the drilling<br>orientation and the orientation of key<br>mineralised structures is considered to have<br>introduced a sampling bias, this should be<br>assessed and reported if material.                   | All holes were drilled vertically as the nature of the mineralisation is horizontal.<br>No bias attributable to orientation of drilling has been identified.  |
| Sample<br>security  | The measures taken to ensure sample security   | Samples were stored in secure storage from the time of drilling, through gathering, compositing and analysis. The samples were sealed as soon as site preparation was completed, and again securely stored during shipment and while at Australian laboratories.  |
| Audits or<br>reviews  | The results of any audits or reviews of sampling techniques and data   | 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  |
|--|--|---|
| Mineral<br>tenement &<br>land tenure<br>status | Type, reference name/number, location and<br>ownership including agreements or material<br>issues with third parties such as joint<br>ventures, partnerships, overriding royalties,<br>native title interests, historical sites,<br>wilderness or national park and environment<br>settings.   | The Company owns 100% of 8 Exclusive Prospecting Licences (EPLs) in Malawi. EPL0355 renewed in 2019 for 2 years, EPL0372 (under renewal application) and EL0413 renewed in 2019 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). EL0561 was granted in January 2020 for an initial 3 years (renewable) with field work permits subject to an acceptable Environmental and Social Management Plan – a new requirement under the Mining Act 2019. |
|  | The security of the tenure held at the time of<br>reporting along with any known impediments<br>to obtaining a licence to operate in the area.   | The tenements are in good standing and no known impediments to exploration or mining exist.   |
| Exploration<br>done by other<br>parties        | Acknowledgement and appraisal of exploration by other parties.   | No other parties were involved in exploration.  |
| Geology  | Deposit type, geological setting and style of mineralisation   | The rutile deposit type could be termed a residual placer formed by the intense weathering of rutile-rich basement paragneisses.<br>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).                                      |
| Drill hole<br>information                      | A summary of all information material to the<br>understanding of the exploration results<br>including a tabulation of the following<br>information for all Material drill holes: easting<br>and northings of the drill hole collar;<br>elevation or RL (Reduced Level-elevation<br>above sea level in metres of the drill hole<br>collar); dip and azimuth of the hole; down | All collar and composite data is provided in the body and Appendices of this report. All holes were drilled vertically.   |

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| Criteria  | Explanation   | Commentary   |
|---|---|--|
|   | hole length and interception depth; and hole length   |  |
|   | If the exclusion of this information is justified<br>on the basis that the information is not<br>Material and this exclusion does not detract<br>from the understanding of the report, the<br>Competent Person should clearly explain<br>why this is the case   | No information has been excluded.  |
| Data<br>aggregation<br>methods                        | In reporting Exploration Results, weighting<br>averaging techniques, maximum and/or<br>minimum grade truncations (e.g. cutting of<br>high-grades) and cut-off grades are usually<br>Material and should be stated.  | 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.   |
|   | Where aggregate intercepts incorporate<br>short lengths of high-grade results and<br>longer lengths of low grade results, the<br>procedure used for such aggregation should<br>be stated and some typical examples of such<br>aggregations should be shown in detail.   | No significant aggregate intercepts have been reported.  |
|   | The assumptions used for any reporting of<br>metal equivalent values should be clearly<br>stated.   | No metal equivalent values are used in this report.  |
| Relationship<br>between<br>mineralisation<br>widths & | These relationships are particularly important<br>in the reporting of Exploration Results.  | It is considered that the mineralisation lies in laterally extensive, near surface, flat<br>"blanket" style bodies in areas where the entire weathering profile is preserved<br>and not significantly eroded.  |
| intercept<br>lengths                                  | If the geometry of the mineralisation with<br>respect to the drill hole angle is known, its<br>nature should be reported.   | The mineralisation lies in laterally extensive, near surface, flat "blanket" style bodies.   |
|   | If it is not known and only the down hole<br>lengths are reported, there should be a clear<br>statement to this effect (e.g. 'down hole<br>length, true width not known'.   | Downhole widths approximate true widths. Some mineralisation currently remains open at depth.  |
| Diagrams  | Appropriate maps and sections (with scales)<br>and tabulations of intercepts should be<br>included for any significant discovery being<br>reported. These should include, but not be<br>limited to a plan view of the drill collar<br>locations and appropriate sectional views.  | Refer to figures in the body of this report.   |
| Balanced<br>reporting                                 | Where comprehensive reporting of all<br>Exploration Results is not practicable,<br>representative reporting of both low and<br>high-grades and/or widths should be<br>practiced to avoid misleading reporting of<br>exploration results.  | All results have been reported in this report.   |
| Other<br>substantive<br>exploration<br>data           | Other exploration data, if meaningful and<br>material, should be reported including (but<br>not limited to: geological observations;<br>geophysical survey results; geochemical<br>survey results; bulk samples - size and<br>method of treatment; metallurgical test<br>results; bulk density, groundwater,<br>geotechnical and rock characteristics;<br>potential deleterious or contaminating<br>substances. | Rutile has been determined to be the major TiO <sub>2</sub> -bearing mineral at and around several rutile prospects and within Sovereign's ground package. The company continues to examine all areas within the large tenement package for rutile mineralisation. |
| Further work  | The nature and scale of planned further work<br>(e.g. test for lateral extensions or depth<br>extensions or large-scale step-out drilling).   | Laboratory processing of 2020 drilling samples on the saprolite-hosted rutile prospects continues. Drilling is ongoing at the Kasiya prospect to further expand the area of known rutile mineralisation.   |
|   | Diagrams clearly highlighting the areas of<br>possible extensions, including the main<br>geological interpretations and future drilling<br>areas, provided this information is not<br>commercially sensitive.   | Refer to diagrams in the body of this report.  |