## FURTHER EXCEPTIONAL RUTILE DRILLING RESULTS EXPAND KASIYA

Sovereign Metals Limited ("the Company" or "Sovereign") is pleased to report further exceptional drilling results from Kasiya, the Company's large, high-grade rutile deposit located in Malawi. The results continue to grow the mineralised footprint and show increased areas of very high-grade rutile from surface. These results will be incorporated into a maiden JORC Mineral Resource Estimate due in late Q3, 2020.

## HIGHLIGHTS

Phase 4 drilling results demonstrate high-grade rutile in the south-east area of the mineralised envelope, with key results from a total of 17 holes:

- 14m @ 1.24\% rutile inc. 4m @ 1.95\% rutile from surface
- 13m@1.13\% rutile inc. 4m @ 1.86\% rutile from surface
- 9m @ 1.00\% rutile inc. 4m @ 1.46\% rutile from surface
-12m@1.23\% rutile inc. 3m @ 1.43\% rutile from surface
- 12m @ 1.07\% rutile inc. 8m @ 1.26\% rutile from surface

The mineralised zone now has a surface width of up to $\mathbf{3 k m}$, a strike length of $\boldsymbol{+ 5 . 5 \mathrm { km }}$ and continues to be open along strike and laterally to the east

Exceptionally high rutile grades from surface substantially enhance the economic potential of Kasiya

A significant number of rutile drill intercepts remain open at depth where mineralisation is interpreted to extend to the base of the soft saprolite estimated at approximately 25 m vertical

QEMSCAN mineralogy analysis shows excellent rutile liberation and particle size distribution with $\mathrm{d}_{50}$ averaging $129 \mu \mathrm{~m}$ - comparable or better than other leading natural rutile products

Maiden JORC Mineral Resource Estimate remains on track for late Q3 2020

Sovereign's Managing Director Dr Julian Stephens commented:
"The drilling results from Kasiya continue to be exceptional. The footprint of high-grade rutile mineralisation continues to expand and displays what we believe to be some of the highest-grade, thickest and spatially expansive rutile drill-intercepts globally. New QEMSCAN mineralogy results show that rutile is very well liberated with excellent sizing characteristics suggesting it should be suitable for all major end-use markets. Kasiya is emerging as a truly special discovery within the Company's broader licence package where we have identified a new, potentially globally significant rutile province."


Figure 1. Kasiya drill plan showing extents of rutile mineralisation with the new extended areas defined by the Phase 4 drill-holes. Pending holes are also shown.

## KASIYA EXTENSIONAL DRILL PROGRAM - PHASE 4

Results for Phase 4 drilling comprise a further 17 hand-auger holes for 175 m over four drill-lines. This brings the total number of holes reported to 79 (Phases 1 through 4 combined).

The Phase 4 results show high-grade and thick rutile drill intercepts as predicted by the Company's now refined geological exploration targeting model. Importantly, the highest-grade intercepts are almost always from surface. The mineralised footprint continues to grow and take on definition at +5.5 km strike length with surface widths up to 3 km . The results reported also show the high-grade envelope bifurcates into two zones toward the southern extent of reported drilling. The mineralised envelope continues to be open in both directions along strike and laterally to the east.

High-grade rutile has been encountered as deep as 14 m below surface in some holes (the depth limit of hand-auger drilling) but generally has an average thickness of approximately 7 m to 8 m . 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. This depth of mineralised saprolite can be reasonably assumed from existing geological knowledge to be around 25 m from surface. However, deeper drilling techniques such as air-core, diamond-core or sonic will need to be employed to confirm this at Kasiya.

Key Phase 4 drilling results received from the total of 17 holes include:

- 14m @ 1.24\% rutile inc. 4m @ 1.95\% rutile from surface
- 13m @ 1.13\% rutile inc. 4m @ 1.86\% rutile from surface
- 9m @ 1.00\% rutile inc. 4m @ 1.46\% rutile from surface
- 12m @ 1.23\% rutile inc. 3m @ 1.43\% rutile from surface
- 12m @ 1.07\% rutile inc. 8m @ 1.26\% rutile from surface


Figure 2. Cross section 8479200 mN showing the broad, high-grade mineralisation with multiple holes open at depth.

## KASIYA - EXCELLENT PARTICLE SIZE DISTRIBUTION

QEMSCAN mineralogy analysis on the non-magnetic fraction of heavy mineral concentrates (HMCs) from routine drill samples in the $45 \mu \mathrm{~m}$ to $600 \mu \mathrm{~m}$ fraction show clean and well liberated rutile grains with a particle size distribution $\mathrm{d}_{50}$ averaging $129 \mu \mathrm{~m}$. This is comparable or better than other leading natural rutile products in the market.

Particle size distribution is an important consideration for end-users of natural rutile since it influences efficiency and performance in downstream applications. The favourable particle size distribution of rutile from Sovereign's Kasiya deposit demonstrates the potential to produce commercial rutile specifications suitable for all three major rutile end-use markets including pigment, titanium metal and welding flux.

| Table 1: Comparison of Sovereign's Kasiya rutile $\mathrm{d}_{50}$ to leading global producers |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Kasiya <br> (Sovereign Metals) | RBM <br> (Rio Tinto) | Namakwa Sands <br> (Tronox) |
| $\mathrm{d}_{50}$ | $\mathbf{1 2 9 \mu m}$ | $124 \mu \mathrm{~m}$ | $124 \mu \mathrm{~m}$ |
| "Rio Tinto" is Rio Tinto opc: "Tronox" is Tronox Holdings plc. |  |  |  |

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## FORW ARD PLAN

Sovereign has identified a potentially globally significant rutile deposit at Kasiya in Malawi. Rutile mineralisation identified to date has generally not been spatially constrained by drilling and the potential is thought to be immense.

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

Step-out and regional drilling at Kasiya and the broader surrounding area to identify extensions and satellite mineralised zones

Work toward the maiden JORC Resource Estimate for Kasiya which is on target for late Q3 2020
$\leqslant$
Bulk-scale metallurgical test-work is well underway on a 1 tonne representative sample from Kasiya
$\leqslant$
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 in order to feed in to a future Scoping Study
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 3. Drill plan showing Phases 1, 2, 3 and 4 of reported and pending shallow hand-auger holes at Kasiya.

## COVID-19 UPDATE

Drilling and sample preparation activities have recommenced on a limited basis with a reduced and safe personnel level.

The Company is actively evaluating 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.


Figure 4. Map of the broader Kasiya and Bua Channel area showing the multiple targets discovered.

DRILL RESULTS

Shallow drilling results from Phase 4 at Kasiya are shown below in Table 2.

| Hole ID | Interval Thickness | Rutile \% | From (m) Downhole | Comments |
| :---: | :---: | :---: | :---: | :---: |
| KYHA0096 | 11 m | 0.93 | surface | open at depth |
| incl | $9 m$ | 1.00 | surface |  |
| incl | $4 m$ | 1.46 | surface |  |
| KYHA0097 | $12 m$ | 1.23 | surface | open at depth |
| incl | $3 m$ | 1.43 | surface |  |
| KYHA0098 | 13m | 1.13 | surface | open at depth |
| incl | $8 m$ | 1.30 | surface |  |
| incl | $4 m$ | 1.86 | surface |  |
| KYHA0099 | No significant results |  |  |  |
| KYHA0100 | $6 m$ | 0.90 | surface |  |
| incl | $2 m$ | 1.67 | surface |  |
| KYHA0101 | 3 m | 0.79 | surface |  |
| KYHA0102 | $4 m$ | 1.05 | surface |  |
| incl | $2 m$ | 1.51 | surface |  |
| KYHA0103 | 4 m | 1.13 | surface |  |
| KYHA0104 | $12 m$ | 1.07 | surface | open at depth |
| incl | $8 m$ | 1.26 | surface |  |
| KYHA0105 | $14 m$ | 0.77 | surface | open at depth |
| incl | $6 m$ | 1.05 | from 8m |  |
| incl | $2 m$ | 1.24 | from 8m |  |
| KYHA0106 | $8 m$ | 0.72 | surface | open at depth |
| incl | $2 m$ | 1.04 | from 6m |  |
| KYHA0107 | No significant results |  |  |  |
| KYHA0108 | 4 m | 0.56 | surface |  |
| KYHA0109 | No significant results |  |  |  |
| KYHA0110 | 9 m | 0.72 | surface | open at depth |
| KYHA0111 | $14 m$ | 1.24 | surface | open at depth |
| incl | $8 m$ | 1.48 | surface |  |
| incl | $4 m$ | 1.95 | surface |  |
| KYHA0112 | 4 m | 1.10 | surface |  |

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## Competent Persons' Statements

The information in this report that relates to Exploration Results and QEMSCAN 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.

## APPENDIX 1: DRILL HOLE DATA

| Hole ID | East | North | RL | Depth <br> $(\mathrm{m})$ |
| :--- | :---: | :---: | :---: | :---: |
| KYHA0096 | 540799 | 8479196 | 1109 | 11 |
| KYHA0097 | 541201 | 8479202 | 1115 | 12 |
| KYHA0098 | 541600 | 8479206 | 1118 | 13 |
| KYHA0099 | 542000 | 8479196 | 1116 | 9 |
| KYHA0100 | 542398 | 8479204 | 1114 | 11 |
| KYHA0101 | 540002 | 8478799 | 1082 | 7 |
| KYHA0102 | 540390 | 8478801 | 1099 | 11 |
| KYHA0103 | 538399 | 8477997 | 1074 | 13 |
| KYHA0104 | 538798 | 8477998 | 1080 | 12 |
| KYHA0105 | 539192 | 8477995 | 1081 | 14 |
| KYHA0106 | 539650 | 8477992 | 1065 | 8 |
| KYHA0107 | 539658 | 8478199 | 1078 | 3 |
| KYHA0108 | 539996 | 8478219 | 1091 | 6 |
| KYHA0109 | 540400 | 8478201 | 1099 | 8 |
| KYHA0110 | 540798 | 8478202 | 1108 | 9 |
| KYHA0111 | 541199 | 8478202 | 1106 | 14 |
| KYHA0112 | 541599 | 8478203 |  | 14 |

* 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 |
| :---: | :---: | :---: |
| Sampling Techniques | 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. | A total of 17 hand auger holes for 175 m were drilled at Kasiya to obtain samples for quantitative mineralogical determination. Samples were composited based on regolith boundaries and chemistry generated by hand-held XRF, generally at 3,4 or 5 m intervals. |
|  | Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or 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 <br> Each 1 m sample was sun dried and homogenised. Sub-samples were carefully riffle split to ensure representivity. ~2kg composite samples were processed. Extreme care is taken to ensure an equivalent mass is taken from each 1 m 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 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. | Logged mineralogy percentages, lithology information and TiO2\% obtained from handheld XRF were used to determine compositing intervals. Care is taken to ensure that only lithological units with similar geological and grade characteristics are composited together. |
| Drilling Techniques | Drill type (e.g. core, reverse circulation, openhole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, facesampling bit or other type, whether core is oriented and if so, by what method, etc). | Hand-auger drilling with 62 mm diameter spiral bits with 1-metre long steel rods. Each 1 m 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. |
| Drill Sample Recovery | Method of recording and assessing core and chip sample recoveries and results assessed. | Samples are assessed visually for recoveries. Overall, recovery is very good. Drilling is ceased when recoveries become poor once the water table has been reached. |
|  | Measures taken to maximise sample recovery and ensure representative nature of the 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 recovery and grade and whether sample bias may have occurred due to preferential loss/gain 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 geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation mining studies and 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. Logging is generally qualitative. |
|  | The total length and percentage of the relevant intersection logged | 100\% of samples are geologically logged. |
| Subsampling techniques and sample preparation | If core, whether cut or sawn and whether quarter, half or all core taken. | Not applicable - no core drilling conducted. |


| Criteria | JORC Code explanation | Hand-Auger Drilling Commentary |
| :---: | :---: | :---: |
|  | If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry. | Samples from the 17 auger holes drilled were composited. Each 1 m sample was sun dried and homogenised. Sub-samples were carefully riffle split to ensure sample representivity. ~2kg composite samples were processed. Extreme care is taken to ensure an equivalent mass is taken from each 1 m sample to make up the composite. <br> 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 subsampling stages to maximise representivity of samples. | The sampling equipment is cleaned after each sub-sample is taken. |
|  | 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. | Extreme care is taken to ensure an equivalent mass is taken from each 1 m 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 assay data and laboratory 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. <br> The following workflow for the samples was undertaken on-site in Malawi; <br> - Dry sample in oven for 1 hour at $105^{\circ} \mathrm{C}$ <br> - Soak in water and lightly agitate <br> - Wet screen at $5 \mathrm{~mm}, 600 \mathrm{~mm}$ and $45 \mu \mathrm{~m}$ to remove oversize and slimes material <br> - Dry $+45 \mu \mathrm{~m}-600 \mathrm{~mm}$ fraction in oven for 1 hour at $105^{\circ} \mathrm{C}$ <br> - Pass $+45 \mu \mathrm{~m}-600 \mathrm{~mm}$ fraction across wet table twice to generate a heavy mineral concentrate (HMC) <br> - Dry HMC in oven for 30 minutes at $105^{\circ} \mathrm{C}$ <br> - Bag $+45 \mu \mathrm{~m}-600 \mathrm{~mm}$ HMC Fraction and send to Perth, Australia for quantitative mineralogical determination. <br> The following workflow for the samples was then undertaken at Perth based Laboratories. <br> - 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. <br> - The M and NM fractions were sent to Intertek Genalysis Perth for quantitative XRF analysis. <br> - Rutile is reported as: rutile mineral recovered to the NM concentrate fraction as a \% of the total primary, dry raw sample mass. <br> - QEMSCAN of selected samples. <br> QEMSCAN is standard analytical method for providing quantitative analysis of minerals. QEMSCAN is an abbreviation standing for Quantitative Evaluation of Minerals by SCANning electron microscopy. QEMSCAN creates phase assemblage maps of a specimen surface scanned by a high-energy accelerated electron beam. The data includes bulk mineralogy, particle grain size and shape, mineral associations and mineral liberation. <br> Sovereign's rutile QEMSCAN composites were analysed in Australia by leading independent laboratory services provider ALS Limited. <br> d50 reported in the body of this announcement is the average of all six NM fractions analysed. <br> Sovereign's QEMSCAN samples are generated by compositing the known weathering horizons across holes located on the same section. Six pairs of M/NM samples analysed across two sections. |
|  | 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. | Acceptable levels of accuracy and precision have been established. No handheld methods are used for quantitative determination. |


| Criteria | JORC Code explanation | Hand-Auger Drilling Commentary |
| :---: | :---: | :---: |
|  | 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. | Intertek Genalysis used internal XRF standards and duplicates. The overall quality of QA/QC is considered to be good. |
| Verification of sampling \& assaying | The verification of significant intersections by either independent or alternative company 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 procedures, data verification, data storage (physical and electronic) protocols. | 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. |
|  | Discuss any adjustment to assay data. | Rutile is reported as: rutile mineral recovered to the NM concentrate fraction as a \% of the total primary, dry raw sample mass. |
| Location of data points | 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. | A Trimble R2 Differential GPS was used to pick up the hand auger collars. <br> 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. |
|  | Specification of the grid system used. | WGS84 UTM Zone 36 South. |
|  | Quality and adequacy of topographic control. | DGPS pickups are considered to be high quality topographic control measures. |
| Data spacing \& distribution | Data spacing for reporting of Exploration Results. | The hand-auger collars are spaced at approximately 400 m along the drill-lines and are designed to provide systematic strike and width extension of the anomalous lines of hand auger drilling previously reported along this same trend. <br> 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 sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation 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 17 auger holes drilled in order to obtain a primary sample of $\sim 2 \mathrm{~kg}$ mass for mineralogical analysis. <br> Sovereign's QEMSCAN samples are generated by compositing the known weathering horizons across holes located on the same section. |
| Orientation of data in relation to geological structure | Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known considering the deposit type | No bias attributable to orientation of sampling has been identified. |
|  | 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. | All holes were drilled vertically as the nature of the mineralisation is horizontal. No bias attributable to orientation of drilling has been identified. |
| Sample 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 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. |


| Criteria | Explanation | Commentary |
| :---: | :---: | :---: |
| Mineral tenement \& land tenure status | 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. | 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 reporting along with any known impediments 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 done by other 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" $0-1 \mathrm{~m}$ ) 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" $>35 \mathrm{~m}$ ) |
| Drill hole information | 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 | All collar and composite data is provided in the body and Appendices of this report. All holes were drilled vertically. |
|  | 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 | No information has been excluded. |
| Data aggregation methods | 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. | 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 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. | No significant aggregate intercepts have been reported. |
|  | The assumptions used for any reporting of metal equivalent values should be clearly stated. | No metal equivalent values are used in this report. |
| Relationship between mineralisation widths \& intercept lengths | These relationships are particularly important in the reporting of Exploration Results. | 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. |
|  | If the geometry of the mineralisation with respect to the drill hole angle is known, its 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 lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known'. | Downhole widths approximate true widths. Some mineralisation currently remains open at depth. |
| Diagrams | Appropriate maps and sections (with scales) and tabulations of intercepts should be | Refer to figures in the body of this report. |


| Criteria | $\quad$ Explanation |  |
| :--- | :--- | :--- |
|  | 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. | Commentary |
| 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-bearing mineral at and around <br> several rutile prospects and within Sovereign's ground package. The company <br> continues to examine all areas within the large tenement package for rutile <br> 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 prospects <br> continues. |
| Drilling is ongoing at the Kasiya prospect to further expand the area of known |  |  |
| rutile mineralisation. |  |  |


[^0]:    Source: BGR Assessment Manual titled "Heavy Minerals of Economic Importance" 2010.

[^1]:    *Significant results are reported at $0.5 \%$ rutile lower cut-off.

