SOVEREIGN METALS LIMITED

9 September 2020

STAND-OUT RECOVERY AND RUTILE SPECIFICATIONS FROM KASIYA BULK SCALE (1 TONNE) METALLURGY PROGRAM

Sovereign Metals Limited ("the Company" or "Sovereign") is pleased to report exceptional bulk scale metallurgy test-work results from Kasiya, the Company's large, high-grade, saprolite-hosted rutile deposit located in Malawi. The results demonstrate the ability to produce a high-grade, premium quality rutile product with a high recovery, via simple, conventional processing methods.

HIGHLIGHTS

- **Premium quality rutile specification at 96.3% TiO_2** with low impurities
- Excellent overall rutile **recovery** from bulk feed to product of **98.3%**
- Very favourable **product sizing** at d_{50} of **145µm**
- **Simple, conventional** process flow sheet
- Initial **product marketing commenced**: samples to be despatched to major end users, including TiO_2 pigment producers
- Maiden Mineral Resource is now targeted for Q4 2020 in order to incorporate additional drill results

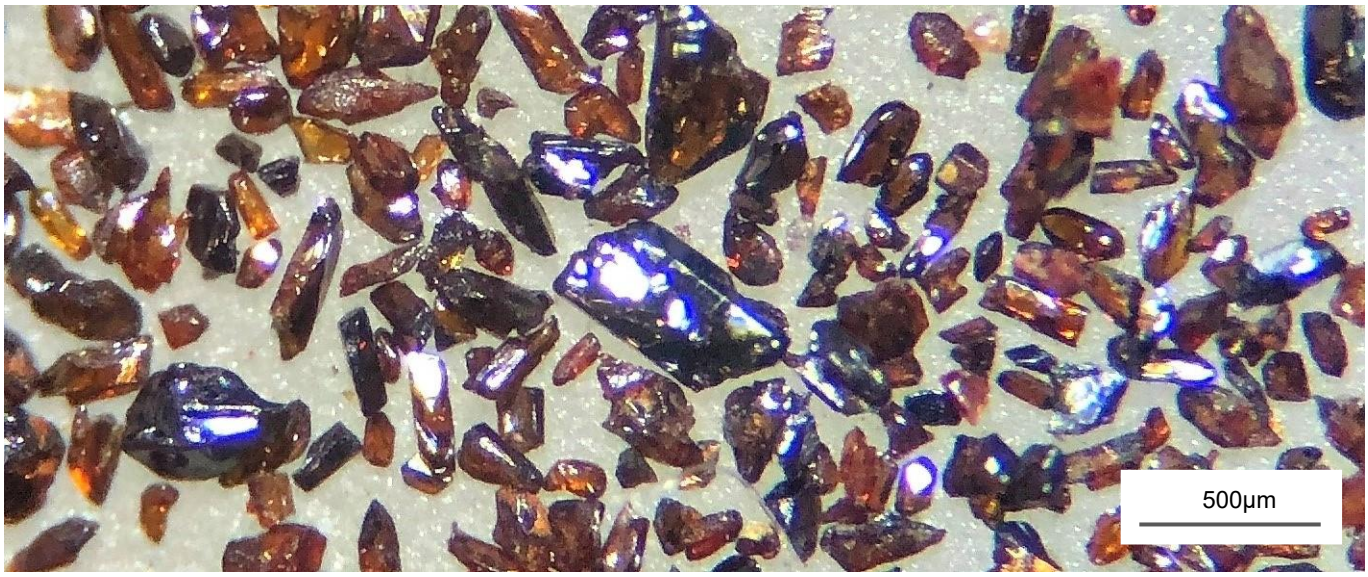

Figure 1. Photo-micrograph of Sovereign's premium rutile concentrate.

Sovereign's Managing Director Dr Julian Stephens commented:

"To be able to achieve a premium rutile specification with stand-out recovery via simple, conventional "off the shelf" processing methods is a significant milestone for the Kasiya Project and for the Company. This exceptional metallurgical outcome in conjunction with recent spectacular high-grade drilling results consolidates our view that Kasiya could develop into a truly globally significant rutile project."

ENQUIRIES

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

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

Sapan Ghai (London)
+44 207 478 3900

SOVEREIGN METALS LIMITED
ASX:SVM

OUTSTANDING RUTILE PRODUCT SPECIFICATIONS

Kasiya is the Company's large, saprolite-hosted, high-grade rutile deposit with a current mineralised footprint of over 7.5km strike with widths up to 3km. The high-grade rutile mineralisation occurs from surface in soft, free-dig saprolite material and remains open in a number of directions. Sovereign plans to report the maiden JORC Mineral Resource Estimate for Kasiya in Q4 2020 to incorporate additional expansional drill results.

The Company was able to achieve outstanding results from its bulk metallurgy program performed on 1,000kgs of mineralised material extracted from its flagship Kasiya Deposit. On the basis of these premium chemical parameters, rutile produced from Kasiya should be suitable for all major natural end-use markets including TiO_2 pigment feedstock, titanium metal and welding flux markets.

Table 1: Comparison of Sovereign's rutile specifications to leading global producers

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

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

The full rutile particle size distribution from the Kasiya bulk metallurgy test-work based on QEMSCAN is shown in Figure 2 and 3 below. A d_{50} sizing of 145µm is recognised as world-class and suggests the product should be suitable for all major end use markets.

It is recognised that +75µm is typically preferred by pigment producers, the largest consumer of natural rutile. Products incorporating the -75µm fraction would target other end use markets or be used for blending into TiO_2 pigment feed-stock. A full market assessment of various rutile product specifications for a range of end-use markets is planned as part of Sovereign's upcoming Scoping Study.

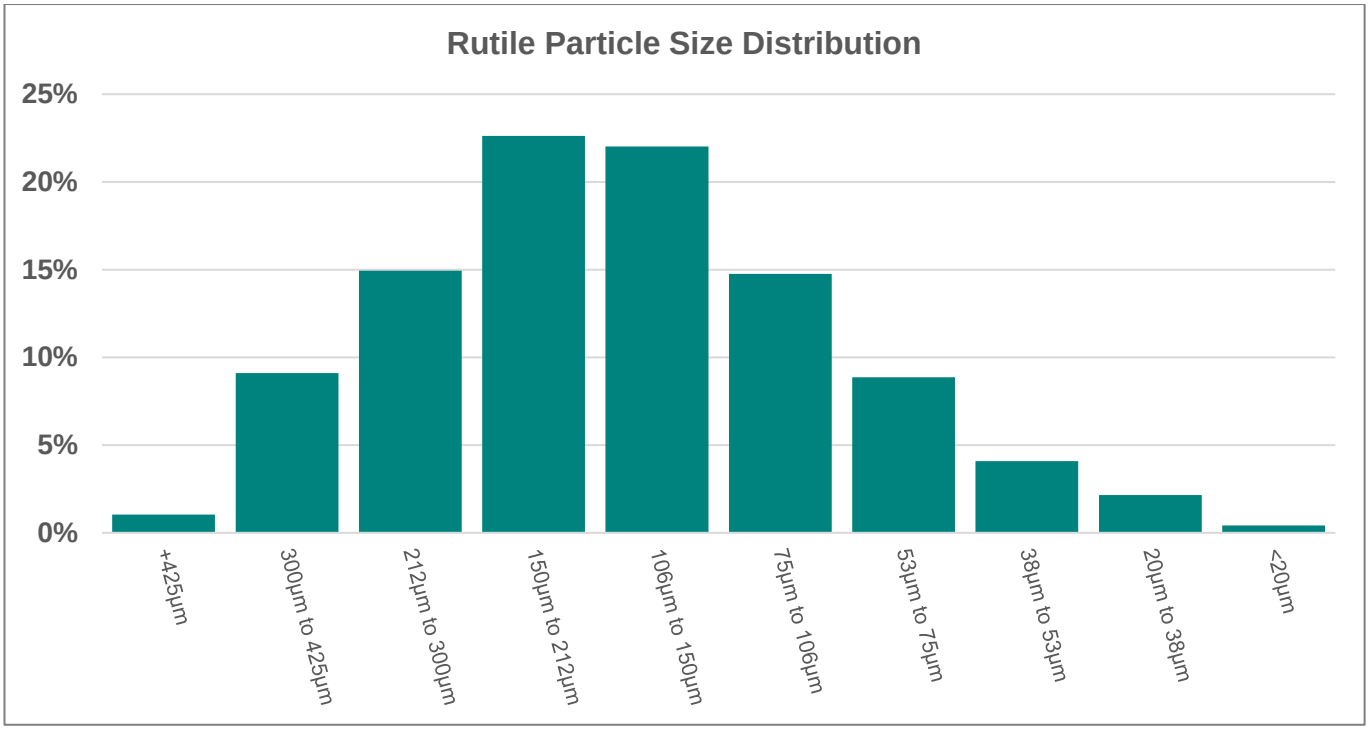

Figure 2. Bar graph showing size distribution of Sovereign's premium rutile product from Kasiya.

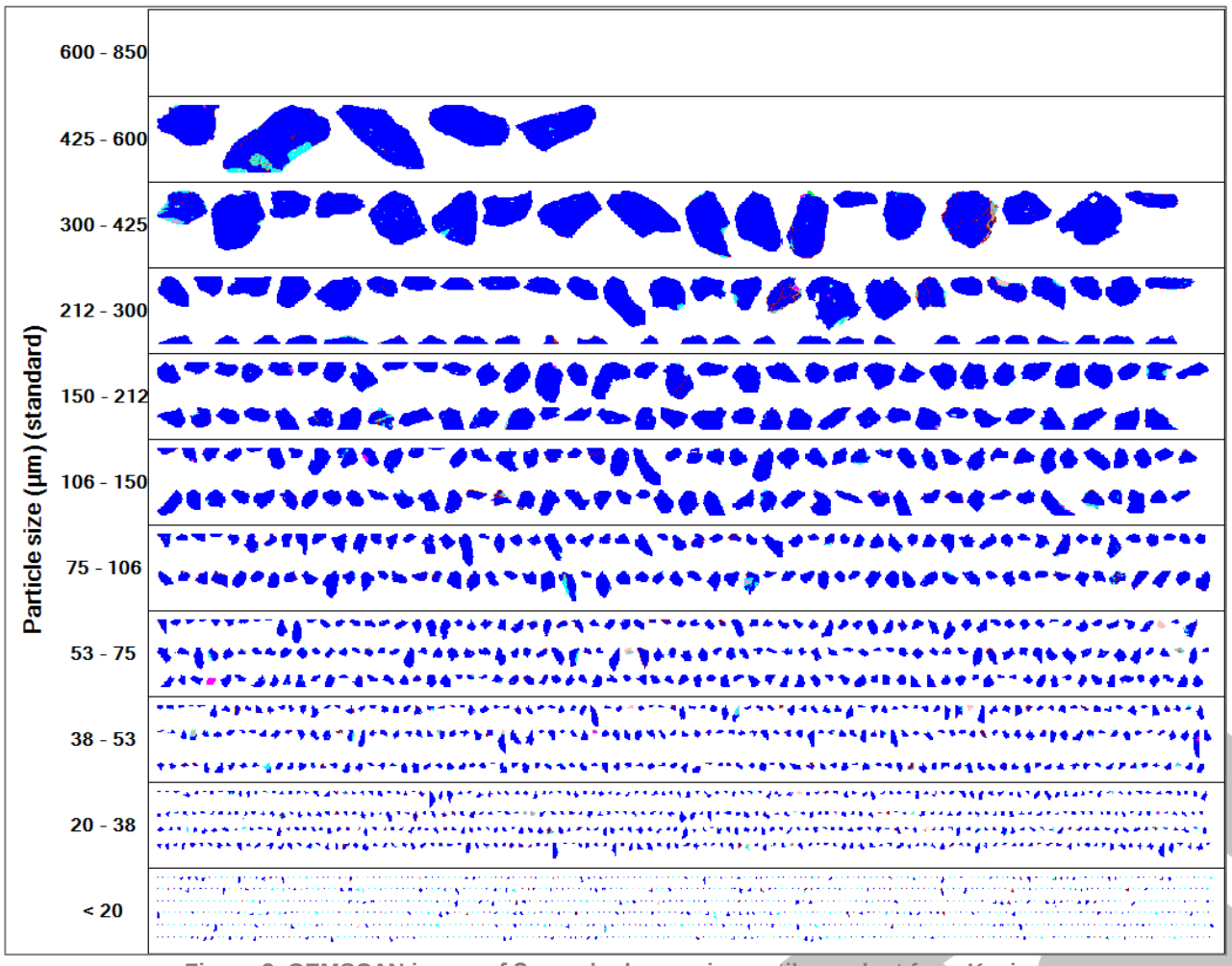

Figure 3. QEMSCAN image of Sovereign's premium rutile product from Kasiya.

BULK SAMPLE METALLURGICAL TESTWORK PROGRAM

The test work program was conducted at globally recognised laboratory, Allied Mineral Laboratories (AML) in Perth, Australia.

A mineralised sample of approximately 1,000kg was composited from a number of drill holes across the Kasiya deposit. The sample had a head grade of 0.96% recoverable rutile. The test-work focussed on producing a single heavy mineral product, rutile, however, visual observations and analysis of data indicate that graphite could be a potential by-product. Work is ongoing to establish whether a coarse-flake graphite product can be recovered.

The material was processed through a traditional mineral sands flowsheet, consisting of:

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

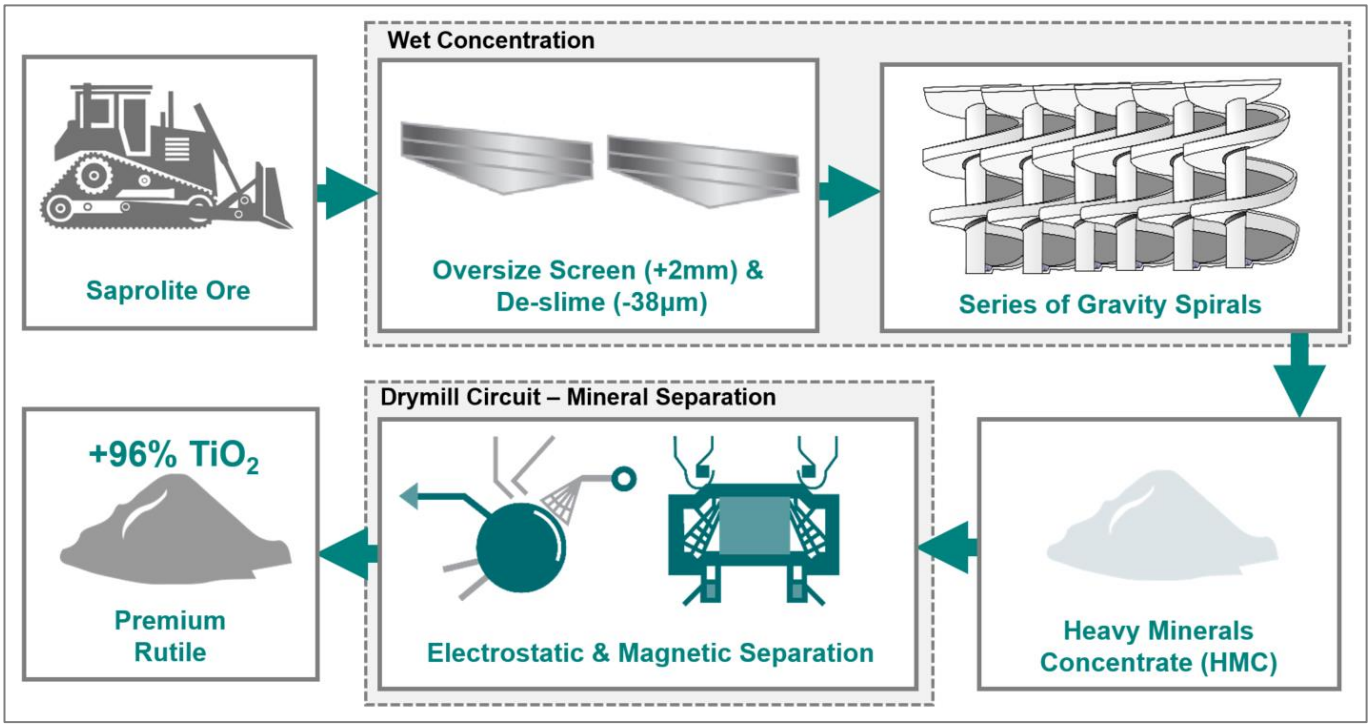

Figure 4. Simplified flowsheet developed for the Kasiya bulk metallurgy program.

Figure 5 & 6. Left: Trommel screen processing the raw material &
Right: +2mm oversize material

Figure 7 & 8. Left: Gravity spirals set-up for the processing of the deslimed and screen material &
Right: Close-up of the gravity spiral in the early phases of the process

CONCLUSIONS & FORWARD WORK PROGRAM

The exceptional outcomes of the bulk metallurgy program consolidate Sovereign's view that it has discovered a potentially globally significant rutile deposit at Kasiya in Malawi. The ability to produce rutile with premium chemical and sizing parameters with over 98% recovery, via simple, conventional "off the shelf" processing methods is a significant achievement.

The premium specifications of the product allows Sovereign the flexibility to work with major customers and adapt to their different needs and requirements. The Company is in the process of despatching product samples for initial assessment by market participants.

In addition to further metallurgical programs, including larger scale, optimisation and variability test work, Sovereign's ongoing rutile work programs for Kasiya and its other rutile prospects within the Malawi Rutile Province include;

- Continued analyses and reporting of drill samples over the coming weeks ahead of the maiden Mineral Resource Estimate for Kasiya targeted for Q4 2020 to incorporate additional drill results;
- Step-out and regional drilling at Kasiya and the broader surrounding area to identify extensions and satellite mineralised zones;
- 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 targeted for H1 2021;
- Feedback from rutile product sample assessment by major industry end-users to be incorporated into marketing studies in support of the upcoming Scoping Study;
- Targeting more high-grade, Kasiya-like rutile mineralisation through exploration further afield; and
- Investigation of the potential for a coarse-flake graphite by-product from Kasiya.

Competent Persons' Statements

The information in this report that relates to Metallurgical Test work Results is based on information compiled by Mr Gavin Diener, a Competent Person who is a member of the AusIMM. Mr Diener is a Director of Allied Mineral Laboratories Pty Ltd (AML), an independent mineral sands laboratory and is not a holder of any equity type in Sovereign Metals Limited. Mr Diener 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'. Mr Diener consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

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: JORC CODE, 2012 EDITION – TABLE 1

SECTION 1 - SAMPLING TECHNIQUES AND DATA

Criteria	JORC Code explanation	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 47 existing hand-auger holes and 9 newly drilled hand-auger holes in clusters were composited as the raw, primary sample for this metallurgical test work. Individual 1-metre raw samples were used to create a composite sample of mass circa 1,000kg and circa 0.96% recoverable rutile.
	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 Each 1-metre sample was sun dried and homogenised.
	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.	Existing rutile exploration results were used to determine the 1-metre intervals suitable to contribute to the 1,000kg bulk sample composite.
Drilling Techniques	*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).*	Hand-auger drilling with 62mm diameter bits with 1-metre long steel rods. Each 1-metre 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
	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.
Sub-sampling techniques and sample 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.	Primary individual 1-metre samples from all 56 auger holes drilled were sun dried and homogenised. No sub sampling has taken place on these samples.

Criteria	JORC Code explanation	Commentary
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Individual dry primary 1-metre samples were combined into a 1,000kg bulk sample.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	No sub sampling has taken place.
	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.	No sub sampling has taken place.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	The sample size is considered appropriate for the nature of the test work.
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 following workflow was used to assess the recoverability of rutile and specifications on the final product; • Wet screen at 2mm and 38µm to remove oversize and slimes material • Pass 38µm -2mm (sand) fraction through Up current Classifier (UCC) • Pass UCC underflow (i.e. denser materials) across series of gravity spirals and wet tables to generate a heavy mineral concentrate (HMC) • Pass UCC overflow over wet table to generate a secondary stream HMC • Attrition HMC fractions in water using Freevis reagent, then deslime and dry • Dry separation circuit comprising a 3-stage electrostatic circuit followed by magnetic separation • Combine both rutile streams to create final rutile product Subsamples were retained at all critical parts of the flowsheet in order to allow a full mass and chemical balance to be undertaken. Subsamples were taken by splitting the relevant materials using a suitable riffle splitters. Chemical analysis comprised XRF analysis by ALS using the method as follows. Each entire sample crushed to nominally 100% -3mm in a Boyd crusher then pulverised to 85% -75µm using a Tungsten Carbide ring mill. Approximately 0.7g of pulverised sample is fused with a Lithium Borate flux mixture to produce a glass fusion bead and is analysed via XRFS (X-Ray Fluorescence Spectrometry). Calibration is affected by standard glass beads of known composition of both internal and external certified sources. Corrections are made for the catch weights, instrumental drift, line overlaps and inter element enhancement / absorption effects as well as moisture. 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. Sovereign's rutile product was analysed by QEMSCAN in Australia by leading independent laboratory services provider ALS Limited.
	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.
	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.	Internal XRF standards were used by ALS. No interrogation has been undertaken on these standards in this case.
Verification of sampling & assaying	*The verification of significant intersections by either independent or alternative company personnel.*	No drilling intersections are being reported.
	The use of twinned holes.	A cluster of 5 hand auger holes twinned KYHA0021 and a cluster of 4 hand auger holes twinned KYHA0097 for the sole purpose of collecting additional primary material to contribute to the bulk sample.

Criteria	JORC Code explanation	Commentary
	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.	No adjustment to assay data has been made.
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. 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 holes contributing to the bulk sample have been selected across the broad Kasiya deposit. 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.	Existing raw primary 1-metre sample in storage from 47 existing hand auger holes and 9 hand auger cluster holes drilled for the purpose of metallurgical sample collection have been composited together to create a circa 1,000kg sample for metallurgical analysis.
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.

SECTION 2 - REPORTING OF EXPLORATION RESULTS

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.

Criteria	Explanation	Commentary
	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 or eluviual 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" 0-1-metre) 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 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*	Existing holes reserve 1-metre material contributing to the bulk sample were: KYHA0020, 23, 24, 25, 26, 27, 28, 29, 32, 34, 35, 53, 54, 55, 60, 61, 62, 63, 64, 66, 67, 68, 69, 70, 76, 77, 78, 79, 80, 85, 86, 88, 89, 90, 92, 93, 94, 96, 98, 100, 102, 103, 104, 106, 111, 112, 9 cluster holes were drilled around the following existing drill holes: KYHA0021, 97. Collar information can be found in the in the following ASX announcements. - 16th March 2020 - 8th April 2020 - 26th May 2020 - 22nd June 2020
	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.*	No significant intercepts have been reported.
	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 included for any significant discovery being reported. These should include, but not be*	Refer to figures in the body of this report.

Criteria	Explanation	Commentary
	limited to a plan view of the drill collar locations and appropriate sectional views.	
Balanced reporting	*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.*	All results have been reported in this report.
Other substantive exploration data	*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.*	Rutile has been determined to be the major TiO_2-bearing mineral at and around several rutile prospects and within Sovereign's ground package. The company continues to examine numerous other areas within the large tenement package for rutile mineralisation.
Further work	*The nature and scale of planned further work (e.g. test for lateral extensions or depth extensions or large-scale step-out drilling).*	Laboratory processing of 2020 drilling samples on the saprolite prospects continues. Regional and extensional drilling is ongoing at the Kasiya prospect to further expand the area of known rutile mineralisation.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Refer to diagrams in the body of this report.