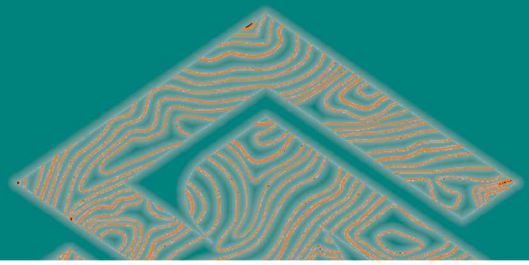
SOVEREIGN METALS LIMITED

26 October 2022



FURTHER AIRCORE DRILLING CONFIRMS SIGNIFICANT PIT EXPANSION POTENTIAL AT DEPTH

- Drilling results from the Company's targeted deep air-core (**AC**) program extend substantial zones of high-grade rutile mineralisation to depth beneath initial planned open pit shells (main areas averaging ~15m depth).
- This newly defined high-grade rutile and graphite mineralisation at depths >15m is consistent and occurs in coherent blocks.
- Highlights include:
  - **28m @ 1.07% inc. 5m @ 1.52% rutile**
  - **26m @ 1.04% inc. 5m @ 1.48% rutile**
  - **24m @ 1.02% inc. 6m @ 1.42% rutile**
  - **23m @ 1.05% inc. 3m @ 1.69% rutile**
  - **23m @ 1.03% inc. 5m @ 1.26% rutile**
  - **23m @ 1.01% inc. 5m @ 1.18% rutile**
  - **22m @ 1.08% inc. 5m @ 1.68% rutile**
  - **21m @ 1.06% inc. 5m @ 1.51% rutile**
  - **20m @ 1.23% inc. 5m @ 1.70% rutile**
  - **20m @ 1.22% inc. 3m @ 1.95% rutile**
  - **20m @ 1.18% inc. 6m @ 1.58% rutile**
  - **18m @ 1.26% inc. 8m @ 1.39% rutile**
- Kasiya's Pre-Feasibility Study (**PFS**) and Environmental and Social baseline workstreams are advancing with all major project work programs already underway.

Sovereign Metals Limited (**ASX:SVM; AIM:SVML**) (**Sovereign** or **the Company**) is pleased to report further significant results for 61 AC holes from the Kasiya Rutile Project (**Kasiya**), the world's largest rutile deposit.

The results confirm that rutile and graphite mineralisation is continuous from surface down to the top of saprock generally at 20-25m vertical depth in key mineralised areas. Results highlight the potential for the mining pits to be extended at depth.

Sovereign's Managing Director Dr Julian Stephens commented: "*We're really pleased with the continued success from the deep air-core program which is confirming the potential for several pit expansions at depth. It remains a very busy time for the Company as we continue to receive drilling results and our PFS is approaching a peak level of activity".*

ENQUIRIES

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KASIYA AIR CORE DRILLING

The completed 191-hole AC drilling program was divided into an initial 32-hole sighter phase with results previously reported (refer ASX announcement on 8 September 2022) and a second more expansive 159-hole phase.

These results of 61 holes (of 159) for 1,298m are the first batch of the expansive phase with results for the remaining 98 Holes for 2,548m pending.

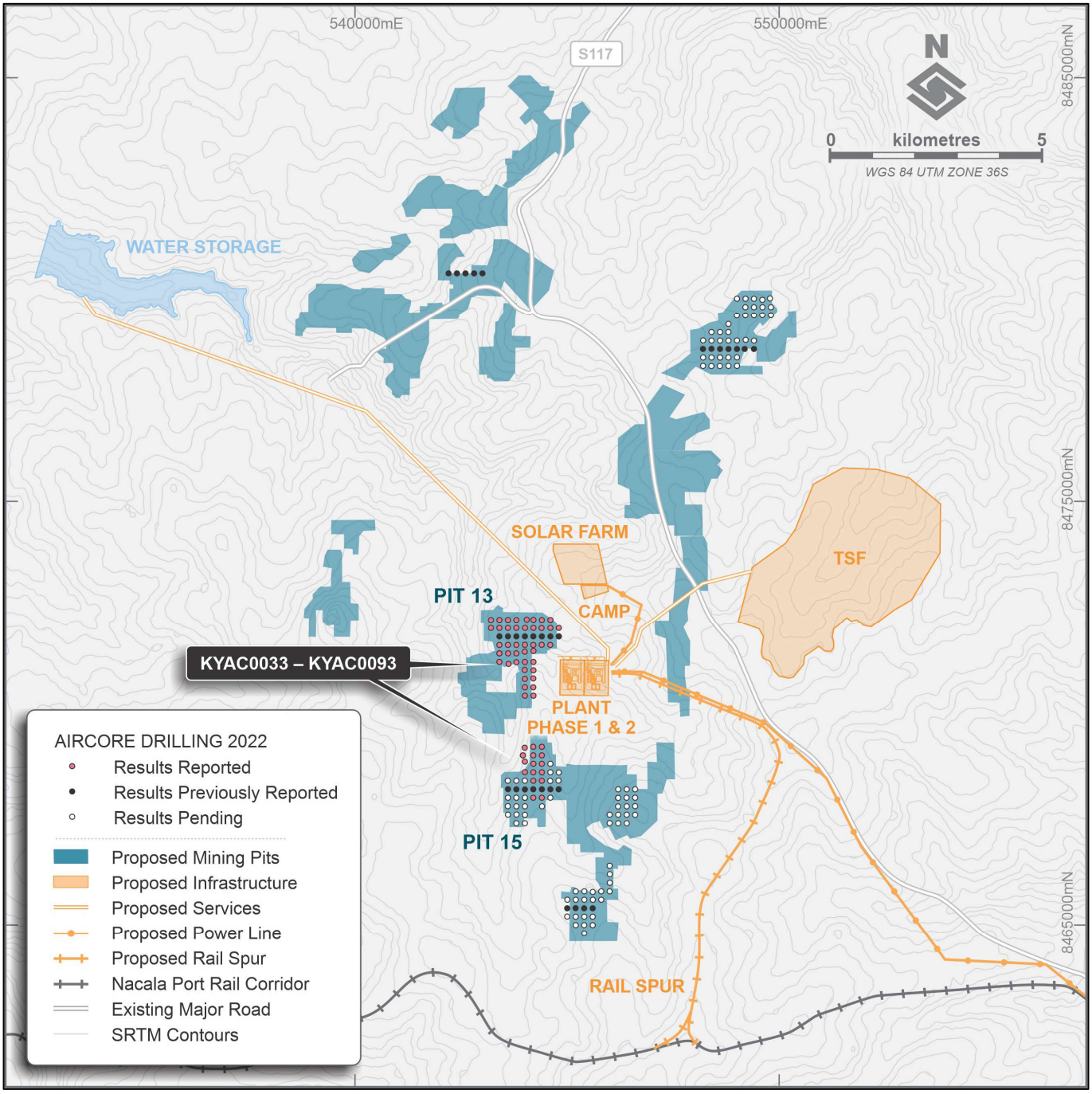


Figure 1: Kasiya AC drilling location map showing the drilling concentrated within proposed mining pits.

The sighter phase AC drilling program focused on mineralised corridors where high-grade rutile mineralisation was hypothesised to persist at depth. Once validated, the company shifted its focus to a second phase concentrating on depth extensions to the early-scheduled mining pit shells.

Pit 15 revealed the most pronounced, deep mineralised corridor, illustrated in the 1.4km long section (Figure 3). Rutile and graphite mineralisation is seen to be pervasive throughout the saprolite zone.

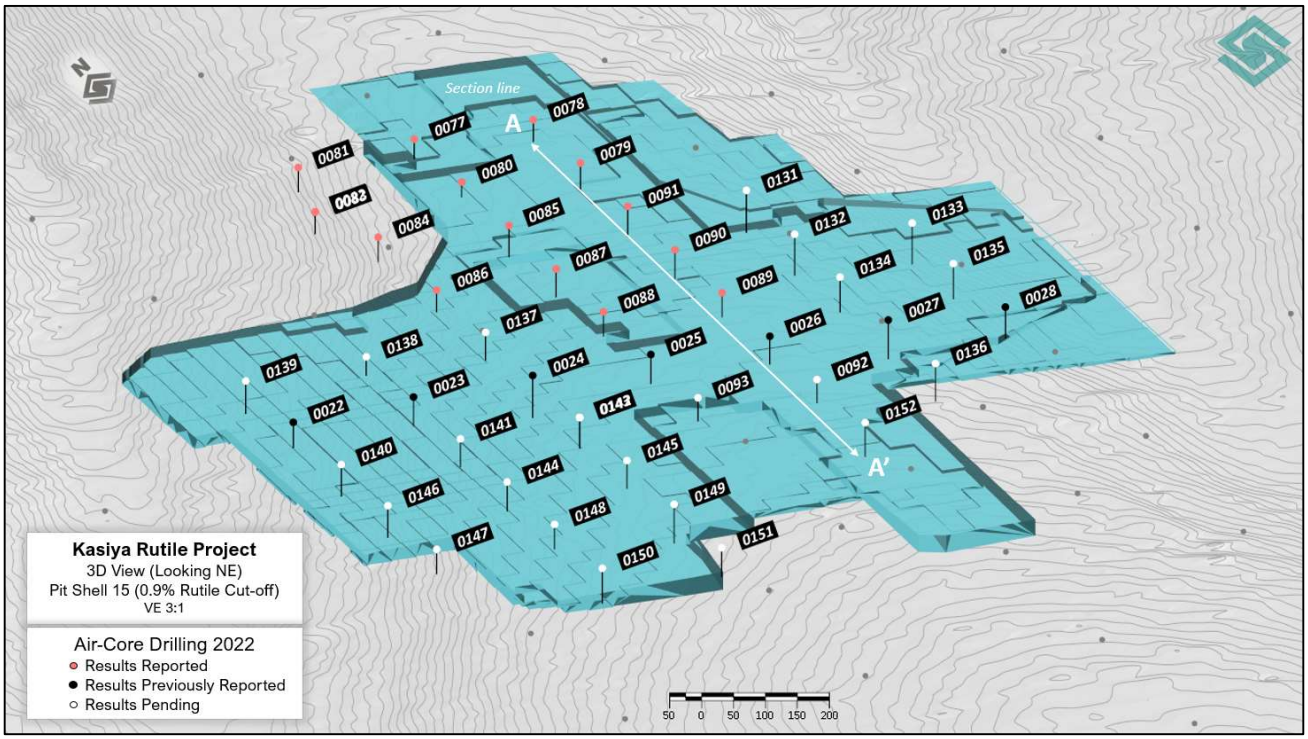


Figure 2: Kasiya Pit Shell 15 showing AC drilling collars.

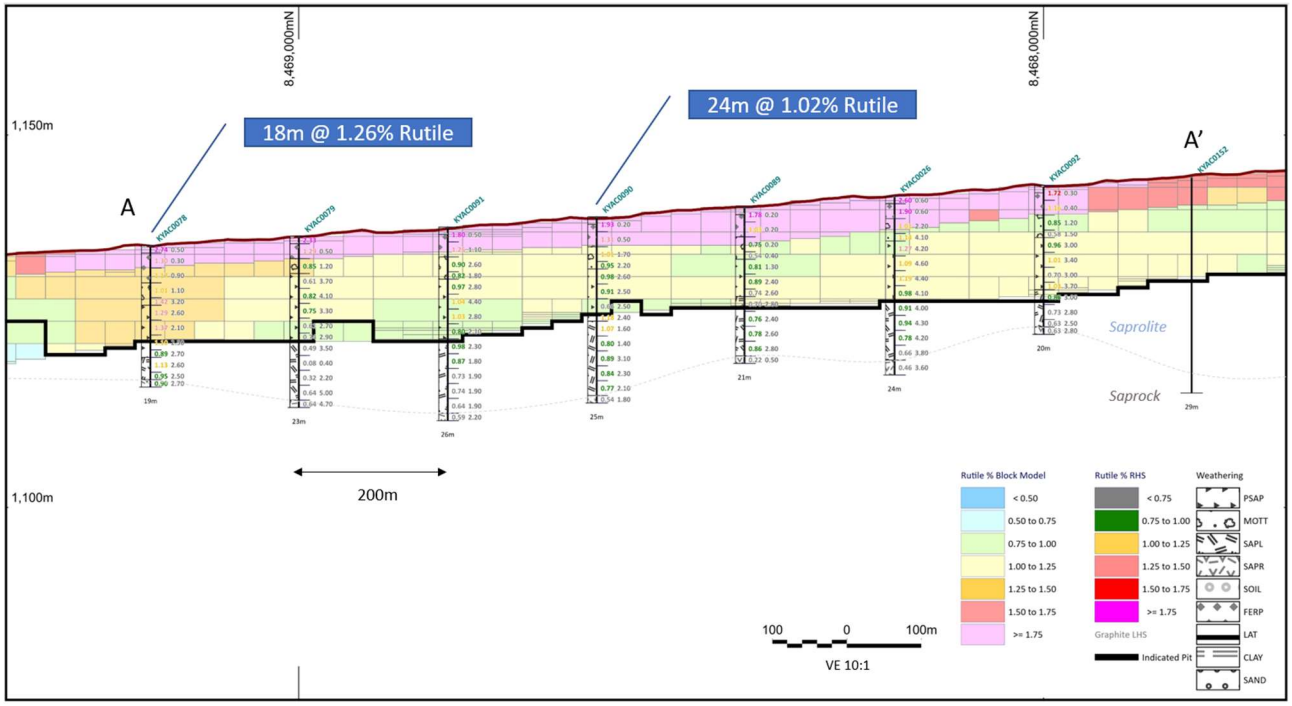


Figure 3: Pit 15 long section 544,400mE including KYAC0078 to KYAC0079 and KYAC0089 to KYAC0092.

Pit 13 is proposed to be the first block in the mining schedule. This pit shows considerable rutile mineralisation outside and below the current block model and optimised pit shell.

Further results from deep drilling are expected in the coming months.

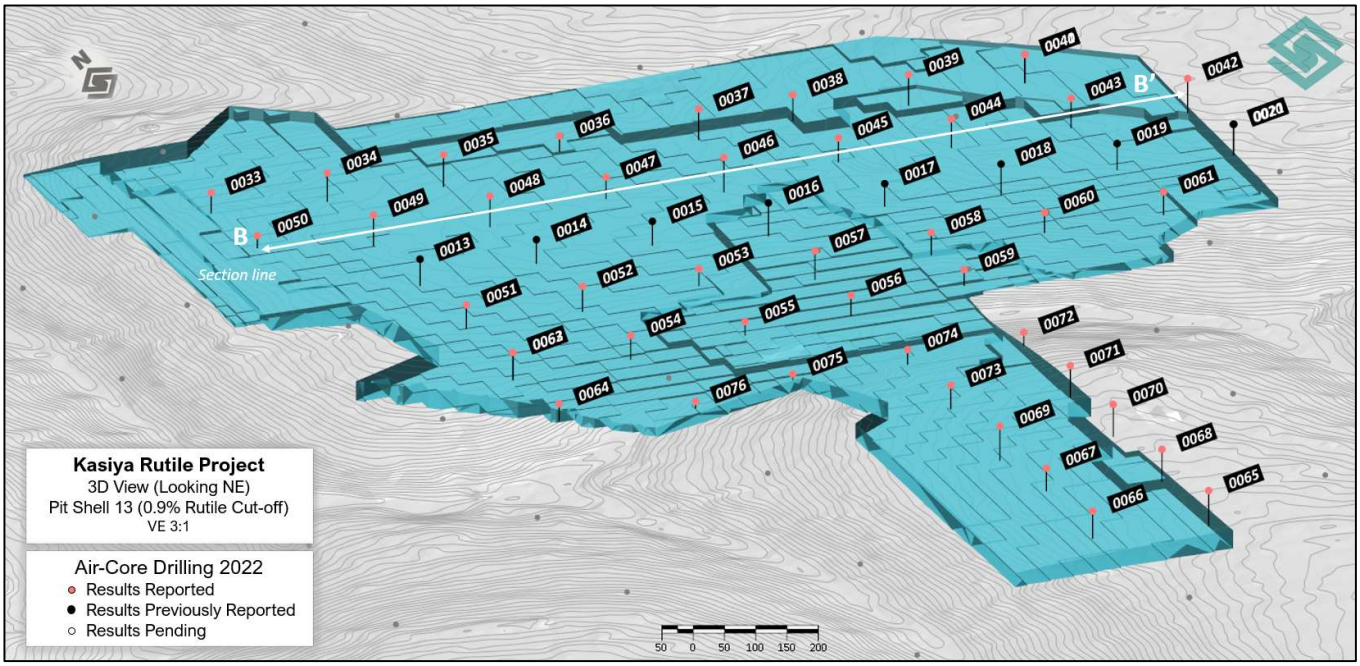


Figure 4: Kasiya Pit Shell 13 showing AC drilling collars.

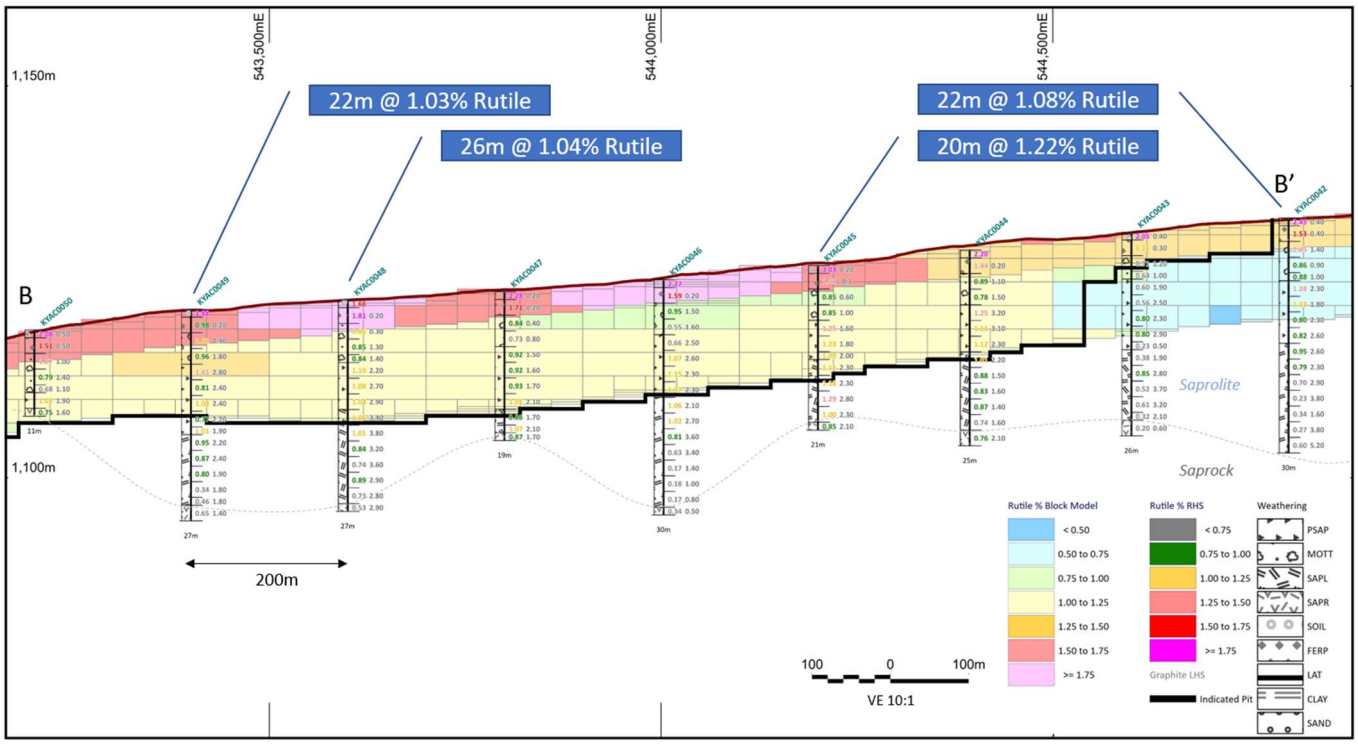


Figure 5: Pit 13 cross section 8,472,000mN including KYAC0050 to KYAC0042.

KASIYA PRE-FEASIBILITY STUDY PROGRESS

Sovereign is progressing the PFS which will build on the June 2022 Expanded Scoping Study (**ESS**) that confirmed Kasiya as one of the world's largest and lowest cost producers of natural rutile and natural graphite with a carbon-footprint substantially lower than current alternatives.

The 2022 AC drilling program is the first major PFS activity completed. The program was designed to extend Indicated zones at depth to base of saprolite ~25m, from the current ~14m average drill depth. Drilling was completed on a 200m x 200m grid to target Indicated classification which after receiving the final batch assays will be modelled to update the JORC resource estimate which is planned for Q1 2023.

Competent Persons Statement

The information in this report that relates to Exploration Results is based on information compiled by Mr Samuel Moyle, a Competent Person who is a member of The Australasian Institute of Mining and Metallurgy (AusIMM). Mr Moyle is the Exploration Manager of Sovereign Metals Limited and a holder of ordinary shares and unlisted performance rights in Sovereign Metals Limited. Mr Moyle 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 Moyle 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 announcement that relates to the Mineral Resource Estimate is extracted from the announcement dated 5 April 2022. The announcement is available to view on www.sovereignmetals.com.au. Sovereign confirms that a) it is not aware of any new information or data that materially affects the information included in the announcement; b) all material assumptions included in the announcement continue to apply and have not materially changed; and c) the form and context in which the relevant Competent Persons' findings are presented in this report have not been materially changed from the announcement.

Table 1: Kasiya Mineral Resource Estimate at 0.7% Rutile Cut-off

Mineral Resource Category	Material Tonnes (millions)	Rutile (%)	Rutile Tonnes (millions)	Total Contained Graphite (TGC) (%)	TGC Tonnes (millions)	RutEq. Grade* (%)
Indicated	662	1.05%	6.9	1.43%	9.5	1.76%
Inferred	1,113	0.99%	11.0	1.26%	14.0	1.61%
Total	**1,775**	**1.01%**	**18.0**	**1.32%**	**23.4**	**1.67%**

* RutEq. Formula: Rutile Grade x Recovery (98%) x Rutile Price (US$1,308/t) + Graphite Grade x Recovery (62%) x Graphite Price (US$1,085/t) / Rutile Price (US$1,308/t). All assumptions are taken from this Study ** Any minor summation inconsistencies are due to rounding

Forward Looking Statement

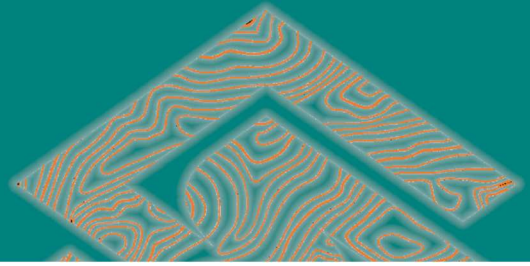
This release may include forward-looking statements, which may be identified by words such as "expects", "anticipates", "believes", "projects", "plans", and similar expressions. These forward-looking statements are based on Sovereign's expectations and beliefs concerning future events. Forward looking 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, Dr Julian Stephens.

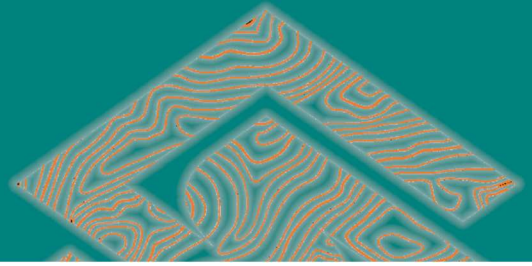
APPENDIX I – DRILL RESULTS

Rutile and graphite drilling results from Kasiya are shown below in Table 2.

Hole ID	Interval Thickness	Rutile %	TGC %	From (m) Downhole	Hole Type
KYAC0033	17.0	1.17	1.6	0.0	AC
incl	5.0	1.66	1.0	0.0	
KYAC0034	22.0	1.04	3.0	0.0	AC
incl	3.0	1.66	0.3	0.0	
KYAC0035	25.0	0.80	1.6	0.0	AC
incl	2.0	1.23	0.2	0.0	
KYAC0036	13.0	0.84	1.0	0.0	AC
incl	2.0	1.61	0.2	0.0	
KYAC0037	6.0	0.86	0.2	0.0	AC
incl	2.0	1.53	0.4	0.0	
KYAC0038		NSR			AC
KYAC0039	23.0	1.01	3.2	0.0	AC
incl	8.0	1.37	4.1	5.0	
KYAC0040	5.0	1.15	0.2	0.0	AC
incl	3.0	1.46	0.2	0.0	
KYAC0041	5.0	0.93	0.0	0.0	AC TWIN
incl	1.0	1.77	0.0	0.0	
KYAC0042	22.0	1.08	1.8	0.0	AC
incl	5.0	1.68	0.8	0.0	
KYAC0043	14.0	0.85	1.7	0.0	AC
incl	3.0	1.42	0.3	0.0	
KYAC0044	23.0	1.05	1.7	0.0	AC
incl	3.0	1.69	0.1	0.0	
KYAC0045	20.0	1.22	1.6	0.0	AC
incl	3.0	1.95	0.2	0.0	
KYAC0046	23.0	1.02	2.2	0.0	AC
incl	5.0	1.47	0.7	0.0	
KYAC0047	18.0	1.07	1.2	0.0	AC
incl	3.0	1.90	0.2	0.0	
KYAC0048	26.0	1.04	2.3	0.0	AC
incl	5.0	1.48	0.2	0.0	
KYAC0049	22.0	1.03	1.8	0.0	AC
incl	9.0	1.22	1.3	0.0	
KYAC0050	10.0	1.20	1.1	0.0	AC
incl	5.0	1.53	0.7	0.0	
KYAC0051	20.0	1.23	1.7	0.0	AC
incl	5.0	1.70	0.6	0.0	
KYAC0052	21.0	1.06	2.0	0.0	AC
incl	5.0	1.51	0.7	0.0	



Hole ID	Interval Thickness	Rutile %	TGC %	From (m) Downhole	Hole Type
KYAC0053	3.0	1.59	0.3	0.0	AC
KYAC0054	3.0	1.55	0.0	0.0	AC
KYAC0055	5.0	1.18	1.1	1.0	AC
KYAC0056	3.0	1.50	0.2	0.0	AC
KYAC0057	19.0	0.73	0.9	0.0	AC
incl	1.0	1.13	0.0	0.0	
KYAC0058	19.0	0.76	2.0	0.0	AC
incl	1.0	1.52	0.2	0.0	
KYAC0059	5.0	1.00	0.0	0.0	AC
KYAC0060	17.0	0.94	1.5	0.0	AC
incl	1.0	1.75	0.0	0.0	
KYAC0061	19.0	1.07	2.0	0.0	AC
incl	9.0	1.3	2.0	0.0	
KYAC0062	23.0	1.03	1.3	0.0	AC
incl	5.0	1.26	0.7	0.0	
KYAC0063	23.0	0.98	1.2	0.0	AC TWIN
incl	11.0	1.13	0.9	0.0	
KYAC0064	14.0	0.79	1.4	0.0	AC
KYAC0065	6.0	0.77	1.0	0.0	AC
incl	1.0	1.58	1.0	0.0	
KYAC0066	23.0	1.01	4.5	0.0	AC
incl	5.0	1.18	2.1	0.0	
KYAC0067	19.0	1.03	1.4	0.0	AC
incl	15.0	1.15	1.5	0.0	
KYAC0068	25.0	0.72	2.7	0.0	AC
incl	1.0	1.94	0.5	0.0	
KYAC0069	28.0	1.07	1.8	0.0	AC
incl	5.0	1.52	0.8	0.0	
KYAC0070	19.0	1.01	2.9	0.0	AC
incl	3.0	1.54	0.7	0.0	
KYAC0071	23.0	0.92	2.5	0.0	AC
incl	2.0	1.67	2.2	1.0	
KYAC0072	10.0	0.98	1.2	0.0	AC
incl	1.0	2.33	0.8	0.0	
KYAC0073	5.0	1.03	1.5	0.0	AC
KYAC0074	9.0	0.91	1.4	0.0	AC
incl	3.0	1.75	0.9	0.0	
KYAC0075	3.0	1.75	0.9	0.0	AC
KYAC0076	6.0	0.86	0.6	0.0	AC
KYAC0077	16.0	1.23	1.3	0.0	AC
incl	8.0	1.64	0.8	0.0	
KYAC0078	18.0	1.26	1.8	0.0	AC



Hole ID	Interval Thickness	Rutile %	TGC %	From (m) Downhole	Hole Type
incl	8.0	1.39	1.0	0.0	
KYAC0079	14.0	0.92	2.4	0.0	AC
incl	3.0	1.64	0.3	0.0	
KYAC0080	12.0	1.18	1.3	0.0	AC
incl	5.0	1.6	0.7	0.0	
KYAC0081	20.0	0.79	1.6	0.0	AC
incl	2.0	1.22	0.2	0.0	
KYAC0082	18.0	0.92	1.6	0.0	AC
incl	6.0	1.12	1.1	0.0	
KYAC0083	18.0	0.98	1.5	0.0	AC TWIN
KYAC0084	20.0	0.89	2.1	0.0	AC
incl	2.0	1.03	0.5	0.0	
KYAC0085	26.0	0.97	2.3	0.0	AC
incl	6.0	1.45	1.4	0.0	
KYAC0086	18.0	1.18	1.2	0.0	AC
incl	1.0	3.23	0.4	0.0	
KYAC0087	22.0	0.84	1.5	0.0	AC
incl	4.0	1.81	0.3	0.0	
KYAC0088	20.0	1.18	1.8	0.0	AC
incl	6.0	1.58	0.6	0.0	
KYAC0089	20.0	0.90	1.6	0.0	AC
incl	4.0	1.41	0.2	0.0	
KYAC0090	24.0	1.02	1.9	0.0	AC
incl	6.0	1.42	0.8	0.0	
KYAC0091	25.0	0.97	2.2	0.0	AC
incl	4.0	1.53	0.8	0.0	
KYAC0092	19.0	0.96	2.2	0.0	AC
incl	4.0	1.44	0.4	0.0	
KYAC0093	18.0	1.04	1.7	0.0	AC
incl	4.0	1.42	0.8	0.0	

APPENDIX II: DRILL HOLE COLLAR DATA – TABLE 3

Hole ID	Easting	Northing	RL	Depth
KYAC0033	543200	8472200	1118	18.0
KYAC0034	543400	8472200	1120	25.0
KYAC0035	543600	8472200	1120	28.0
KYAC0036	543800	8472200	1122	14.0
KYAC0037	544044	8472212	1124	27.0
KYAC0038	544202	8472202	1126	23.0
KYAC0039	544400	8472200	1129	27.0
KYAC0040	544600	8472200	1131	25.0
KYAC0041	544601	8472200	1131	25.0
KYAC0042	544801	8472000	1133	30.0
KYAC0043	544600	8472000	1131	26.0
KYAC0044	544394	8471999	1129	25.0
KYAC0045	544200	8472001	1127	21.0
KYAC0046	544003	8472001	1125	30.0
KYAC0047	543800	8472001	1124	19.0
KYAC0048	543600	8472000	1123	27.0
KYAC0049	543400	8472000	1122	27.0
KYAC0050	543200	8472000	1119	11.0
KYAC0051	543400	8471600	1120	21.0
KYAC0052	543600	8471600	1121	22.0
KYAC0053	543800	8471600	1121	15.0
KYAC0054	543604	8471401	1116	21.0
KYAC0055	543800	8471400	1113	12.0
KYAC0056	543998	8471439	1114	18.0
KYAC0057	544000	8471600	1121	25.0
KYAC0058	544200	8471600	1122	20.0
KYAC0059	544201	8471459	1116	14.0
KYAC0060	544396	8471602	1124	18.0
KYAC0061	544600	8471599	1127	20.0
KYAC0062	543400	8471400	1117	24.0
KYAC0063	543401	8471399	1117	24.0

Hole ID	Easting	Northing	RL	Depth
KYAC0064	543400	8471200	1111	15.0
KYAC0065	544201	8470403	1126	31.0
KYAC0066	544000	8470401	1124	24.0
KYAC0067	544000	8470600	1123	20.0
KYAC0068	544198	8470599	1125	28.0
KYAC0069	544000	8470801	1122	30.0
KYAC0070	544199	8470811	1123	28.0
KYAC0071	544200	8471000	1121	28.0
KYAC0072	544200	8471200	1112	12.0
KYAC0073	543997	8471007	1118	21.0
KYAC0074	544000	8471200	1112	13.0
KYAC0075	543800	8471193	1107	5.0
KYAC0076	543615	8471150	1106	6.0
KYAC0077	544200	8469200	1134	17.0
KYAC0078	544400	8469199	1135	19.0
KYAC0079	544400	8469000	1136	23.0
KYAC0080	544200	8469000	1135	13.0
KYAC0081	543996	8469179	1129	21.0
KYAC0082	543953	8469000	1129	19.0
KYAC0083	543953	8468999	1129	19.0
KYAC0084	544000	8468850	1132	21.0
KYAC0085	544200	8468800	1137	27.0
KYAC0086	543999	8468602	1135	19.0
KYAC0087	544200	8468600	1138	24.0
KYAC0088	544200	8468400	1140	21.0
KYAC0089	544400	8468402	1140	21.0
KYAC0090	544400	8468600	1139	25.0
KYAC0091	544400	8468800	1138	26.0
KYAC0092	544400	8468000	1143	20.0
KYAC0093	544200	8468000	1143	20.0

APPENDIX III: 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.*	Air-Core samples are composited based on regolith boundaries and sample chemistry, generated by hand-held XRF analysis. Each 1m of sample is dried and riffle-split to generate a total sample weight of 3kg for analysis, generally at 2m intervals. This primary sample is then split again to provide a 1.5kg sample for both rutile and graphite analyses.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Drilling and sampling activities are supervised by a suitably qualified Company geologist who is present at all times. All drill samples are geologically logged by the geologist at the drill site/core yard. Each sample is sun dried and homogenised. Sub-samples are carefully riffle split to ensure representivity. The 1.5kg composite samples are then processed. An equivalent mass is taken from each sample to make up the composite. A calibration schedule is in place for laboratory scales, sieves and field XRF equipment. Placer Consulting Pty Ltd (Placer) Resource Geologists have reviewed Standard Operating Procedures (SOPs) for the collection and processing of drill samples and found them to be fit for purpose. 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 TiO_2% obtained from handheld XRF are used to determine compositing intervals. Care is taken to ensure that only samples with similar geological characteristics are composited together
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).*	A total of 61 Air-Core holes for 1,298m are reported here from drilling at the Kasiya Rutile Deposit to obtain samples for quantitative determination of recoverable rutile and Total Graphitic Carbon (TGC). Placer has reviewed SOPs for Air-Core and found them to be fit for purpose and support the resource classifications as applied to the MRE.
Drill Sample Recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.*	Samples are assessed visually for recoveries. The configuration of drilling and nature of materials encountered results in negligible sample loss or contamination. Air-Core drilling recovery in the top few metres are moderate to good. Extra care is taken to ensure sample is recovered best as possible in these metres. Recoveries are recorded on the rig at the time of drilling by the geologist. Drilling is ceased when recoveries become poor once Sap rock has been encountered.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	The Company's trained geologists supervise drilling on a 1 team 1 geologist basis and are responsible for monitoring all aspects of the drilling and sampling process. Air-core drilling samples are recovered in large plastic bags. The bags are clearly labelled and delivered back to the laydown at the end of shift for processing.
	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 relationship is believed to exist between grade and sample recovery. The high percentage of silt and absence of hydraulic inflow from groundwater at this deposit results in a sample size that is well within the expected size range. No bias related to preferential loss or gain of different materials is observed.

Criteria	JORC Code explanation	Commentary
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.*	Geologically, data is collected in detail, sufficient to aid in Mineral Resource estimation. All individual 1-metre intervals are geologically logged, recording relevant data to a set log-chief 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.
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.*	N/A
	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	Air-Core samples are dried, riffle split and composited. Samples are collected and homogenised prior to splitting to ensure sample representivity. ~1.5kg composite samples are processed. An equivalent mass is taken from each primary sample to make up the composite. The primary composite sample is considered representative for this style of mineralisation and is consistent with industry standard practice.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Techniques for sample preparation are detailed on SOP documents verified by Placer Resource Geologists. Sample preparation is recorded on a standard flow sheet and detailed QA/QC is undertaken on all samples. Sample preparation techniques and QA/QC protocols are appropriate for mineral determination.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	The sampling equipment is cleaned after each sub-sample is taken. Field duplicate, laboratory replicate and standard sample geostatistical analysis is employed to manage sample precision and analysis accuracy.
	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.	Sample size analysis is completed to verify sampling accuracy. Field duplicates are collected for precision analysis of riffle splitting. SOPs consider sample representivity. Results indicate a sufficient level of precision for the resource classification.
	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.*	Rutile The Malawi onsite laboratory sample preparation methods are considered quantitative to the point where a non-magnetic mineral concentrate (NM) is generated. Final results generated are for recovered rutile i.e, the % mass of the sample that is rutile that can be recovered to the non-magnetic component of a HMC. The HMC is prepared via wet-table, gravity separation at the Lilongwe Laboratory which provides an ideal sample for subsequent magnetic separation and XRF. All samples (incl. QA) included in this announcement received the following workflow undertaken on-site in Malawi; • Dry sample in oven for 1 hour at 105℃ • Soak in water and lightly agitate • Wet screen at 5mm, 600µm and 45µm to remove oversize and slimes material • Dry +45µm -600mm (sand fraction) in oven for 1 hour at 105℃ • Pass +45µm -600mm (sand fraction) across wet table to generate a heavy mineral concentrate (HMC) • Pan HMC to remove retained light minerals • Dry HMC in oven for 30 minutes at 105℃ • Magnetic separation of the HMC by Carpco magnet @ 16,800G (2.9Amps) into a magnetic (M) and non-magnetic (NM) fraction.

Criteria	JORC Code explanation	Commentary
		Bag NM fraction and send to Perth, Australia for quantitative chemical and mineralogical determination. • The NM fractions were sent to ALS Metallurgy Perth for quantitative XRF analysis. Samples received XRF_MS. <u>Graphite</u> All samples are initially checked in and processed to pulp at Intertek-Genalysis Johannesburg. The pulp samples are then dispatched to Intertek-Genalysis Perth where they undergo TGC assay via method C72/CSA. A portion of each test sample is dissolved in dilute hydrochloric acid to liberate carbonate carbon. The solution is filtered using a filter paper and the collected residue is the dried to 425°C in a muffle oven to drive off organic carbon. The dried sample is then combusted in a Carbon/ Sulphur analyser to yield total graphitic or elemental carbon (TGC). The graphitic carbon content is determined by eliminating other carbon forms from the total carbon content. The addition of acid to the sample liberates carbon dioxide thus removing carbonate carbon. Soluble organic carbon will also be removed. Insoluble organic carbon is removed by heating the samples at 425°C in an oxidising environment. The "dried" carbon-bearing sample that is analysed in the resistance furnace is considered to contain only graphitic carbon. An Eltra CS-800 induction furnace infra-red CS analyser is then used to determine the remaining carbon which is reported as Total Graphitic Carbon (TGC) as a percentage.
	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 XRF 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.	Sovereign uses internal and externally sourced wet screening reference material inserted into samples batches at a rate of 1 in 20. The externally sourced, certified standard reference material for HM and Slimes assessment is provided by Placer Consulting. Accuracy monitoring is achieved through submission of certified reference materials (CRM's). ALS and Intertek both use internal CRMs and duplicates on XRF analyses. Sovereign also inserts CRMs into the sample batches at a rate of 1 in 20. Three <u>Rutile</u> CRMs used by Sovereign. Rutile A (AMIS0602) containing TiO_2 XRF 90.62%. The CRM is supplied by African Mineral Standards (AMIS), South Africa. Rutile B containing TiO_2 XRF 70.71%. The CRM is supplied by OREAS and has been designed and matrix matched specifically for Sovereign. Rutile C containing TiO_2 XRF 40.76%. The CRM is supplied by OREAS and has been designed and matrix matched specifically for Sovereign. Two <u>Graphite</u> Standards are used by Sovereign. MPHLG1 containing 3.22% TGC TCMG1 containing 7.54% TGC Both these CRMs are supplied by OREAS and has been designed and matrix matched specifically for Sovereign. Analysis of sample duplicates is undertaken by standard geostatistical methodologies (Scatter, Pair Difference and QQ Plots) to test for bias and to ensure that sample splitting is representative. Standards determine assay accuracy performance, monitored on control charts, where failure (beyond 3SD from the mean) may trigger re-assay of the affected batch. Examination of the QA/QC sample data indicates satisfactory performance of field sampling protocols and assay laboratories providing acceptable levels of precision and accuracy.

Criteria	JORC Code explanation	Commentary
		Acceptable levels of accuracy and precision are displayed in geostatistical analyses.
Verification of sampling & assaying	*The verification of significant intersections by either independent or alternative company personnel.*	Results are reviewed in cross-section using Micromine software and any spurious results are investigated. The deposit type and consistency of mineralisation leaves little room for unexplained variance. Extreme high grades are not encountered. Significant mineralisation intersections.
	The use of twinned holes.	Twinned holes are drilled across a geographically dispersed area to determine short-range geological and assay field variability. Twin drilling is applied at a rate of 1 in 20 routine holes. Acceptable levels of precision are displayed in the geostatistical analysis of twin drilling data. No twin holes are reported here.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	All data are collected initially on paper logging sheets and codified to the Company's templates. This data is hand entered to spreadsheets and validated by Company geologists. This data is then imported to a Datashed5 and validated automatically and then manually. A transition to electronic field and laboratory data capture is underway.
	Discuss any adjustment to assay data.	QEMSCAN of the NM fraction shows dominantly clean and liberated rutile grains and confirms rutile is the only titanium species in the NM fraction. Recovered rutile is therefore defined and reported here as: TiO_2 recovered in the +45 to -600um range to the NM concentrate fraction as a % of the total primary, dry, raw sample mass divided by 95% (to represent an approximation of final product specifications). i.e recoverable rutile within the whole sample.
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 is used to pick up the Air-Core collars. Daily capture at a registered reference marker ensures equipment remains in calibration. No downhole surveying of Air-Core holes is completed. Given the vertical nature and shallow depths of the Air-Core 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 Air-Core collars are spaced on a 200m x 200m grid which is deemed to adequately define the mineralisation.
	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.	The drill spacing and distribution is considered to be sufficient to establish a degree of geological and grade continuity appropriate for further future Mineral Resource estimation.
	Whether sample compositing has been applied.	Individual 1m intervals have been composited, based on lithology, at a max 2m sample interval for the 61 Air-Core holes.
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*	Sample orientation is vertical and approximately perpendicular to the orientation of the mineralisation, which results in true thickness estimates, limited by the sampling interval as applied. Drilling and sampling are carried out on a regular square grid. There is no apparent bias arising from the orientation of the drill holes with respect to the orientation of the deposit.
	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.	There is no apparent bias arising from the orientation of the drill holes with respect to the orientation of the deposit.
Sample security	*The measures taken to ensure sample security*	Samples are stored in secure storage from the time of drilling, through gathering, compositing and analysis. The samples are sealed as soon as site preparation is complete. A reputable international transport company with shipment tracking enables a chain of custody to be maintained while the samples move from Malawi to Australia or Malawi to Johannesburg. Samples are again securely stored once they arrive and are processed at Australian laboratories. A reputable domestic courier company manages the movement of samples within Perth, Australia.

Criteria	JORC Code explanation	Commentary
		At each point of the sample workflow the samples are inspected by a company representative to monitor sample condition. Each laboratory confirms the integrity of the samples upon receipt.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data*	Richard Stockwell (CP) has reviewed and advised on all stages of data collection, sample processing, QA protocol and mineral resource estimation. Methods employed are considered industry best-practice. Malawi Field and Laboratory visits have been completed by Richard Stockwell in May 2022. A high standard of operation, procedure and personnel was observed and reported.

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 the following Exploration Licences (ELs) and Retention Licence (RL) under the Mines and Minerals Act 2019, held in the Company's wholly-owned, Malawi-registered subsidiaries: EL0609, EL0492, EL0528, EL0545, EL0561, EL0582 and RL0012. A 5% royalty is payable to the government upon mining and a 2% of net profit royalty is payable to the original project vendor. No significant native vegetation or reserves exist in the area. The region is intensively cultivated for agricultural crops.
	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.*	Sovereign Metals Ltd is a first-mover in the discovery and definition of residual rutile and graphite resources in Malawi. No other parties are involved in exploration.
Geology	*Deposit type, geological setting and style of mineralisation*	The rutile deposit type is considered a residual placer formed by the intense weathering of rutile-rich basement paragneisses and variable enrichment by elluvial processes. 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). The low-grade graphite mineralisation occurs as multiple bands of graphite gneisses, hosted within a broader Proterozoic paragneiss package. In the Kasiya areas specifically, the preserved weathering profile hosts significant vertical thicknesses from near surface of graphite mineralisation.
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 are provided in the body and appendices of this report.
	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	No information has been excluded.

Criteria	Explanation	Commentary
	report, the Competent Person should clearly explain why this is the case	
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 of in-situ grades. The results reported in the body of the report are on a nominal lower cut-off of 0.5% Rutile and exclude bottom of hole samples where saprock has been geologically logged.
	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 data aggregation was required.
	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.*	The mineralisation has been released by weathering of the underlying, layered gneissic bedrock that broadly trends NE-SW. It lies in a laterally extensive superficial blanket with high-grade zones reflecting the broad bedrock strike orientation of ~045°.
	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	The mineralisation is laterally extensive where the entire weathering profile is preserved and not significantly eroded. Minor removal of the mineralised profile has occurred in alluvial channels. These areas are adequately defined by the drilling pattern and topographical control.
	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 limited to the sample intervals applied. Graphite results are approximate true width as defined by the sample interval and typically increase with 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 limited to a plan view of the drill collar locations and appropriate sectional views.*	Refer to figures in the body of this report.
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 are included 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, by QEMSCAN, to be the major TiO_2-bearing mineral at and around several rutile prospects within Sovereign's ground package. The company continues to examine areas within the large tenement package for rutile and graphite by-product 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).	Some additional core-drilling for metallurgical sample collection and water exploratory drilling is planned and ongoing throughout the remainder for 2022.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling	Refer to diagrams in the body of this report.

Criteria	Explanation	Commentary
	areas, provided this information is not commercially sensitive.	