



## UPDATE ON SCOPING STUDY FOR THE KASIYA RUTILE PROJECT

Sovereign Metals Limited (the **Company** or **Sovereign**) is pleased to report on the progress of the Scoping Study (**Study**) for the Kasiya Rutile Project, one of the largest undeveloped rutile deposits in the world.

The Study represents the next major technical milestone toward developing a strategic, large-scale, long life and sustainable rutile operation.

### HIGHLIGHTS

---

- ◆ **Established a strong owner's team**, including mineral sands veteran, Mr Paul Marcos as Head of Development and highly experienced Study Manager, Mr Russell Bradford.
- ◆ Sovereign has **appointed internationally recognised consultant**, DRA Global to lead the Study with support from other industry-leading consultants.
- ◆ Multi rig core drilling program **underway targeting high-grade rutile corridors** at Kasiya for conversion to the Indicated category to feed into the Study.
- ◆ Commencement of further bulk scale metallurgy test-work, driven by end-users' requests for product samples and refinement of the flowsheet.
- ◆ Continued engagement with Tier 1 potential rutile off-take partners.
- ◆ Study targeted for completion in late 2021.

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

*"After delivering one of the world's largest natural rutile deposits in our maiden Mineral Resource Estimate, Sovereign has moved quickly forward into a Scoping Study. The Study is targeting a large-scale natural rutile operation to fill some of the existing supply deficit of the purest and most environmentally sustainable titanium feedstock."*

*We are very happy with the strong team that has been assembled for the Study and look forward to unlocking the value from Kasiya 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

## SCOPING STUDY

---

The Study is the next major technical milestone for the Company in advancing Kasiya towards production. The objective is to develop a large-scale, long life, environmentally sustainable and socially responsible natural rutile operation. The Study has been designed to demonstrate an economic assessment of the business case to an accuracy of +/- 30%.

### *Appointment of Owner's Team*

Sovereign has established a strong owner's team with the appointment of two key members, Study Manager, Mr Russell Bradford and recently announced, mineral sands veteran, Mr Paul Marcos as Head of Development.

Mr Bradford has successfully managed numerous technical studies that have advanced through to mine construction and successful developments including several African operations.

Mr Marcos brings deep mineral sands metallurgical processing, engineering, and operations expertise. As Head of Development, Mr Marcos will lead and manage key technical components of the Kasiya project, including for the ongoing Scoping Study due for completion this year, and for future feasibility study programs.

Mr Marcos brings 27 years of operations, engineering and consulting expertise, the majority of this in mineral sands. Prior to joining Sovereign, Mr Marcos spent over five years at Base Resources Limited where he served as Metallurgical and Processing Superintendent – Project Development and worked on pre-feasibility studies, definitive feasibility studies and engineering design studies for the Kwale North and Kwale Phase 2 Projects in Kenya as well as the Toliara Project in Madagascar.

### *Engagement of Key Consultants*

Sovereign has appointed internationally recognised engineering firm DRA Global (**DRA**) to lead the Study. DRA have extensive experience with minerals sand and graphite projects across Eastern Africa. They have an established track record in studies and project delivery of comparable natural to Kasiya.

The Company has also engaged other leading consultants for the Study, including;

- Orelogy Mining for mine scheduling and pit optimisation;
- Paragon Tailings to assist with mining method and tailings management;
- Epoch Resources for tailings disposal;
- Allied Minerals Laboratories (**AML**) for flowsheet development and metallurgy;
- Dhamana Consulting with supporting consultants for environmental and social; and
- TZMI for marketing.



## DRILLING

The Company has extensive drilling programs underway.

Sovereign has reported a total of ~114km<sup>2</sup> of drilled, high-grade rutile mineralisation (Kasiya 89km<sup>2</sup> + Nsaru 25km<sup>2</sup>). The area covered by the Kasiya Mineral Resource Estimate (**MRE**) represents only 49km<sup>2</sup> or 43% of the 114km<sup>2</sup> drilled mineralised footprint. The opportunity to significantly expand on the maiden MRE in the near to medium term is achievable.

Two core drilling rigs are now in operation on a 200+ hole program at Kasiya. The program is being executed by Malawi drill contractors, Geoconsult, with additional support from Bamboo Rock Drilling. This core program is designed to bring the central, high grade areas of rutile mineralisation at Kasiya into the JORC Indicated category to underpin the Study. Hand-auger drilling is also ongoing at the Company's Nsaru deposit.

The Company's Managing Director, Julian Stephens is currently in Malawi overseeing the drilling programs and conduct meetings with senior Government officials and other key stakeholders.



Figures 1, 2 & 3: Core rig in action at Kasiya (top left). Drill team extracting the core from the drill rods (top right). Sovereign's Managing Director, Julian Stephens in Malawi inspecting the core.

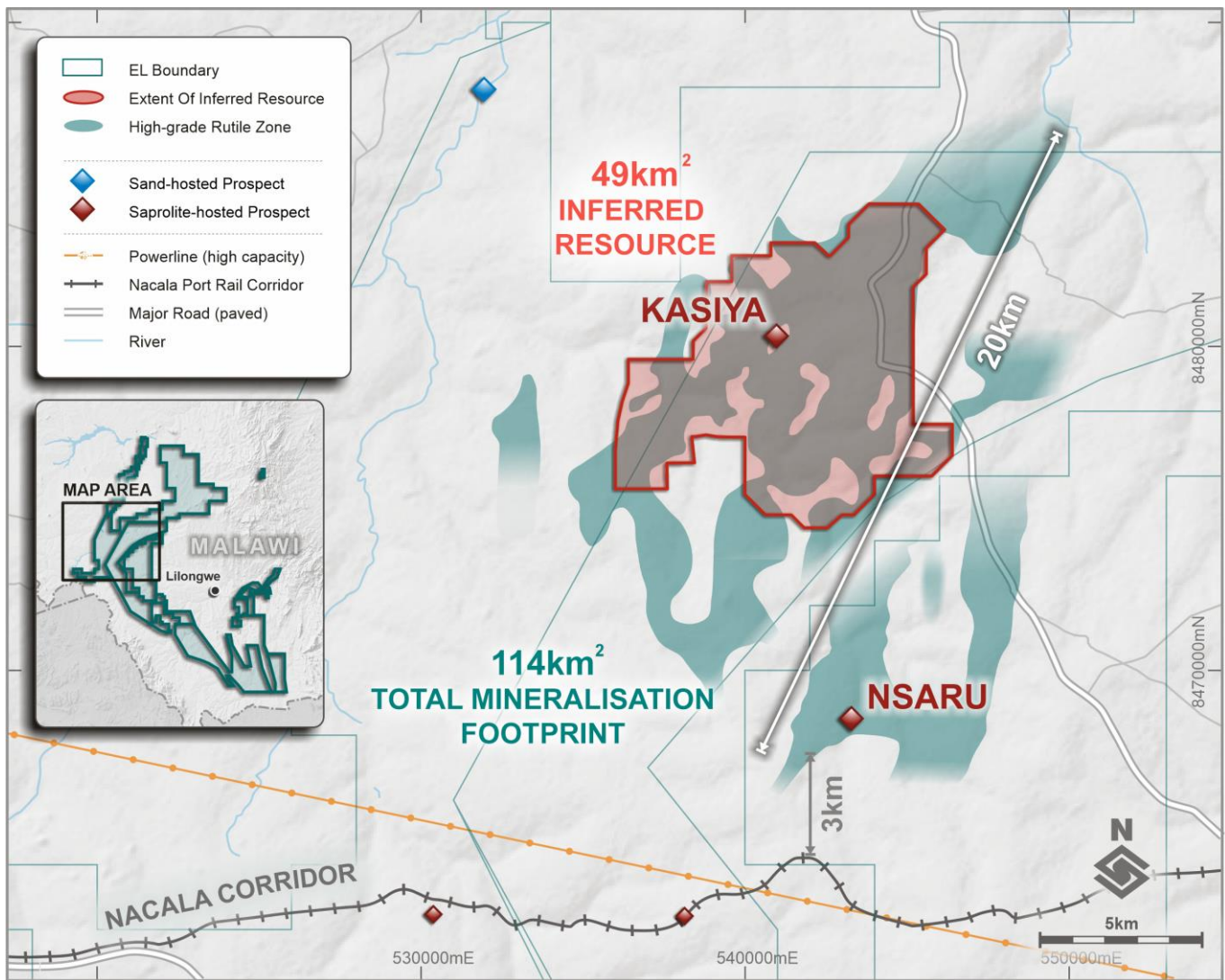


Figure 4: Kasiya MRE with the remaining mineralisation footprint.

## METALLURGY

After the successful bulk scale metallurgy program completed in late 2020, the Company has designed a Pre-Feasibility level bulk scale program. The objective of this program to further optimise flowsheet development and assess variability across the different weathering zones.

The Company will also continue to evaluate the potential of recovering a graphite by-product from the Kasiya rutile deposit.

The metallurgical test-work program is being conducted at globally recognised laboratory, AML in Perth, Australia with the 4-tonne sample already on hand in Perth.





Figure 5: Bulk sample preparations in Malawi prior to despatch to Australia.

## ENVIRONMENT

The Company has commenced significant components of the Environmental, Social, Impact Assessment (ESIA). Sovereign’s development strategy has a core focus on creating an environmentally and socially responsible and sustainable operation.

Baseline environmental studies have commenced covering terrestrial flora and fauna, aquatic biology, air quality, surface water and groundwater studies. The Company has continued engagement with all stakeholders from local communities through to the Government of Malawi.



Figure 6: Core rig mobilising at Kasiya

## CONCLUSION

---

The Study is the next major milestone for the Company to move the Kasiya Rutile Project closer towards potential production.

This globally significant rutile project is located in Malawi, a stable, transparent jurisdiction. Central Malawi exhibits excellent existing infrastructure including grid power and an extensive sealed road network. The Kasiya Rutile Project is strategically located in close-proximity to the capital city of Lilongwe, providing access to a skilled workforce mining facilities and industrial services. The location provides access to the operating Nacala Rail Corridor linking to the Indian Ocean deep water port of Nacala in Mozambique, enabling a low-cost transport solution and access to major international markets.

The Company's Study team and its ESG Advisory Committee are ensuring they integrate sustainability best practices across the Study. The ESG Advisory Committee plans to ensure Sovereign strives to:

- promote achievement of the UN Sustainable Development Goals through its business;
- recognise how the Company may responsibly continue its activities within the framework of the EU Taxonomy; and
- operate under the Principles of the International Council on Mining and Metals.

The Company is looking forward to presenting a robust Study in late 2021.

### **Competent Persons Statement**

*The information in the announcement that refers to the Kasiya MRE is extracted from an announcement dated 9 June 2021. This announcement is available to view on the Company's website at [www.sovereignmetals.com.au](http://www.sovereignmetals.com.au). The information in the original ASX Announcement that related to Mineral Resources were based on, and fairly represents, information compiled by Mr Richard Stockwell, a Competent Person, who is a fellow of the Australian Institute of Geoscientists (AIG). Mr Stockwell is a principal of Placer Consulting Pty Ltd, an independent consulting company. Mr Stockwell has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity he is undertaking, 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'. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.*

### **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 announcement has been approved and authorised for release by the Company's Managing Director, Julian Stephens.*