SOVEREIGN METALS LIMITED

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OUTSTANDING METALLURGY WITH SIMPLE PROCESS FLOWSHEET FOR MALINGUNDE SAPROLITE

Sovereign Metals Limited ("the Company" or "Sovereign") is pleased to report that the first laboratory flotation tests for the Malingunde saprolite-hosted flake graphite deposit show high-grade concentrates with excellent coarse and jumbo flake distribution. Further, these concentrates can be easily produced with a simple process flowsheet that does not require primary crushing or grinding.

Highlights:

- *Initial bench-scale metallurgical test-work shows high-grade concentrates with excellent flake distribution can be produced from the Malingunde saprolite (clay) hosted graphite deposit.*
- *Results from the **first flotation test** on this material showed:*
  - *Combined concentrate across all flake size fractions grading **97.3% C(t)**.*
  - ***~50%** of the concentrate in the +149µm medium, large & jumbo flake size fractions.*
- *Concentrates produced using a simple flowsheet that incorporates an upfront scrubber (similar to a trommel) to wash & disaggregate the graphite flakes from the host material prior to flotation.*
- *Significant capital & operational cost benefits over traditional hard-rock crushing & milling equipment.*

Managing Director Dr Julian Stephens commented, "*These are outstanding initial metallurgy results. Many graphite projects can take dozens of flotation tests to produce marketable concentrates, but these results have come from our first flotation test that employs a simple process flowsheet without using primary crushing or grinding. This, in addition to the substantial thickness of the saprolite profile intersected in recent diamond drilling shows that the Malingunde deposit is a prime opportunity for the Company. Based on other successful saprolite-hosted graphite operations, Sovereign is targeting a low capex, low opex model for the development of Malingunde*".

Table 1. Results of flotation test #1 on Malingunde saprolite hosted graphite mineralisation.

MALINGUNDE 2016 FLOTATION RESULTS – TEST #1				
PARTICLE SIZE		C (%)	Distribution (wt. %)	Flake Category
Tyler Mesh	(µm)			
+ 48	+ 297	96.8	20.4	Extra Large (Jumbo)
-48 + 100	- 297 + 149	97.8	28.3	Large-Medium
-100 + 200	- 149 + 74	97.6	27.6	Small
-200	- 74	96.4	23.7	Amorphous
TOTAL		97.3	100.0	

[1] *The chemical analysis used to determine the total carbon content employs combustion of a sample followed by infrared detection on a LECO SC-632 instrument. All reported analytical results have an associated measurement uncertainty based on the expected precision and accuracy relating to the method and sample concentration. Values at 100% should not be treated as pure products without additional impurity testing. The estimated measurement uncertainty for total carbon values greater than 90% C is 1.7% (relative) with a resolution of 1 significant figure.*

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Metallurgical testwork

Sovereign's independent metallurgical test-work program for the Malingunde saprolite-hosted flake graphite deposit is being conducted at SGS Lakefield Canada under the supervision of Mr Oliver Peters (MSc, P.Eng, MBA).

The primary objectives of this initial bench-scale testwork program are two-fold:

1) To test whether high-grade flake graphite concentrates with large proportions of jumbo and coarse flake can be obtained from Malingunde saprolite material.

2) To establish whether marketable concentrates can be obtained with an operational flowsheet that relies solely on media assisted scrubbing to liberate the graphite from the ore, as opposed to primary crushing and rod milling processes used for hard-rock deposits.

The test-work was performed on a saprolite composite sample obtained through hand auger sampling with a head grade of 11.3% TGC (Holes MGHA0894-MGHA0898).

Initial disaggregation of the saprolite composite was conducted under conditions representative of a scrubber with ceramic media. This was followed by standard rougher flotation, polishing grind, cleaner flotation stages and a final gentle attritioning and cleaner flotation stage (Figure 2).

The **results from the first test** (Table 1) show that high-grade flake graphite concentrates of excellent flake size distribution can be produced with a flowsheet that does not require **any primary crushing or grinding**. Rather, the upfront treatment of the material is accomplished with a **scrubber** (Figure 1). This process also assists in the removal of fine (slimes) fractions, as well as oversize unmineralised material.

Figure 1. A scrubber of the type that would be used for the Malingunde saprolite-hosted flake graphite deposit in a production scenario.

Concluding Comments

Saprolite-hosted flake graphite deposits are sought after as they generally have substantially lower capital and operational costs compared with hard rock operations. This is primarily due to their free-dig nature, low life-of-mine stripping ratios and simplified processing plants that do not require more expensive crushing or primary milling circuits.

The highly attractive attributes of the Malingunde saprolite-hosted flake graphite deposit include:

- Thick and extensive zones of saprolite-hosted flake graphite mineralisation identified over 3.4km strike, 140m average cumulative widths and 20-30m average vertical thicknesses.
- The mineralisation would be free-dig with a very low strip ratio.
- A simple process flowsheet using an upfront scrubber that would have very significant capital and operational cost benefits over traditional hard-rock crushing and milling equipment.
- Graphite concentrates of premium grade and flake size distribution can be easily produced. Further testwork will aim to improve on the initial results reported here.
- Malingunde has excellent infrastructure availability, being just 15km from the capital city of Lilongwe, 25km from rail access, 15km from high-capacity power-lines and with plentiful fresh water.

Sovereign is targeting a low capital and operational cost model for the development of the Malingunde saprolite-hosted graphite deposit.

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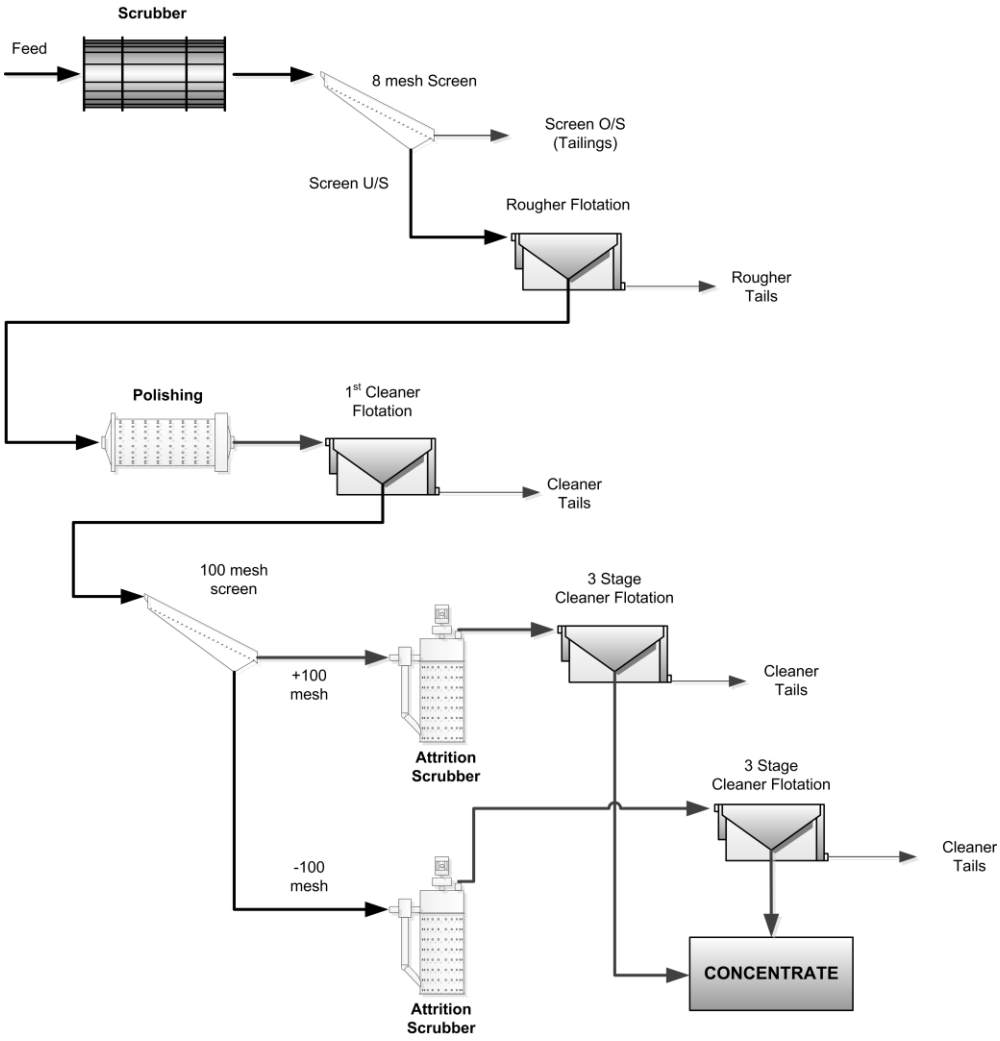

Figure 2. Initial Malingunde saprolite-hosted graphite flowsheet

Competent Person Statement

The information in this report that relates to Metallurgical Testwork Results is based on information compiled by Mr Oliver Peters, M.Sc., P.Eng., MBA, who is a Member of the Professional Engineers of Ontario (PEO), a 'Recognised Professional Organisation' (RPO) included in a list promulgated by the ASX from time to time. Mr Peters is a consultant of SGS Canada Inc. ("SGS"). SGS is engaged as a consultant by Sovereign Metals Limited. Mr Peters has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which 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'. Mr Peters 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.