

3 February 2020

## SIGNIFICANT NEW RUTILE PLACER DISCOVERY IN MALAWI

Sovereign Metals Limited ("**the Company**" or "**Sovereign**") is pleased to announce that shallow handauger drilling completed in late 2019 has identified a new, sand-hosted placer rutile prospect in Malawi. This new discovery is additional to the significant saprolite-hosted rutile mineralisation already identified, and further supports the Company's belief it has identified a potentially globally significant, strategic rutile province across its large Malawi ground holding.

### **BUA CHANNEL PROSPECT - HIGHLIGHTS**

- New high-grade, placer-style, sand-hosted rutile mineralisation identified at Bua Channel Prospect ("Bua Channel") drilled over initial 8km length. Entire channel totals approximately 50km length with widths ranging from 300m to 700m.
- First results from initial shallow hand auger drilling on a single section at the **Bua Channel** show **excellent rutile grades** with accessory zircon and ilmenite.
- Key hand-auger results include (Figure 1):
  - 7m @ 0.81% rutile, 1.0% ilmenite & 0.11% zircon (from surface)
     Inc. 3m @ 1.03% rutile, 1.2% ilmenite & 0.13% zircon (from 4m) remains open at depth
  - 5m @ 0.72 % rutile, 0.9% ilmenite & 0.09% zircon (from 2m)
     Inc. 1m @ 0.97% rutile, 1.3% ilmenite & 0.10% zircon (from 6m) remains open at depth
  - 5m @ 0.64% rutile, 0.9% ilmenite & 0.10% zircon (from surface)
     Inc. 3m @ 0.70% rutile, 0.9% ilmenite & 0.10% zircon (from 2m) remains open at depth

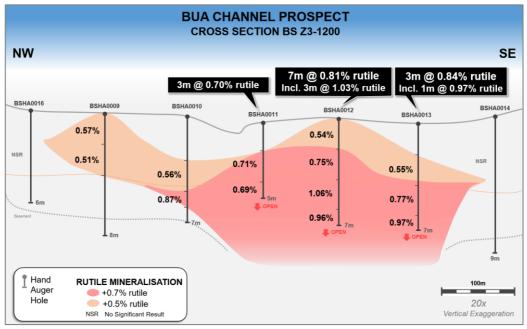


Figure 1. Cross-section BS Z3-1200 showing initial hand-auger drilling results and rutile mineralisation at Bua Channel.

3 February 2020



\$ \$ Key shallow hand-auger drill holes in the highest grade rutile zone remain open at depth

New exploration licence granted covering +40km northern extension of the Bua Channel

Following the discovery of Bua, Sovereign's Managing Director Dr Julian Stephens commented:

"The discovery of classic sand-hosted, placer-style rutile mineralisation further supports our belief that we have identified a potentially globally significant, strategic rutile province. We now have two styles of rutile mineralisation, residual saprolite-hosted and placer sand-hosted within our large ground holding in Malawi. A substantial number of hand-auger and deeper aircore drilling samples are being processed in Perth with further results expected in a number of batches in the coming weeks."

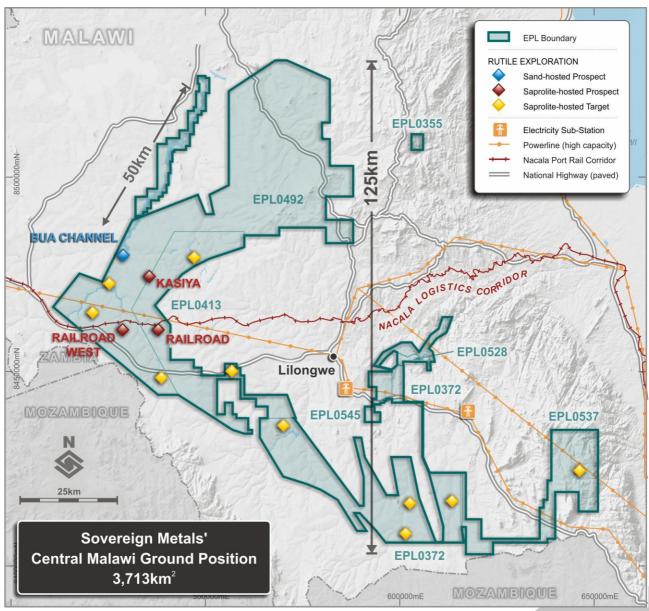
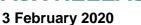


Figure 2. Project map showing key rutile prospects and the Company's large ground holding in central Malawi.

### **Enquiries**

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## INTRODUCTION

In late 2019, the Company continued to rapidly progress its rutile exploration programs in Malawi via handauger and deeper air-core drilling programs. A total of 101 hand-auger holes for 800m were drilled across four separate prospects, whilst a total of 68 deeper air-core holes were drilled across the new Bua Channel prospect and the Railroad and Railroad West residual saprolite-hosted prospects. An initial 19 hand-auger holes were drilled on a new, highly prospective soil anomaly over saprolite at the Kasiya prospect.

The first initial shallow hand-auger results from Bua Channel have been returned and show high-grade, placer-style, sand-hosted rutile mineralisation. This discovery further supports the Company's belief that it has discovered a potentially globally significant, strategic rutile province with two confirmed, discrete mineralisation styles;

- Residual saprolite-hosted rutile mineralisation e.g. Railroad, Railroad West and the new prospect Kasiya
- Fluvial placer-style, sand-hosted rutile mineralisation e.g. Bua Channel

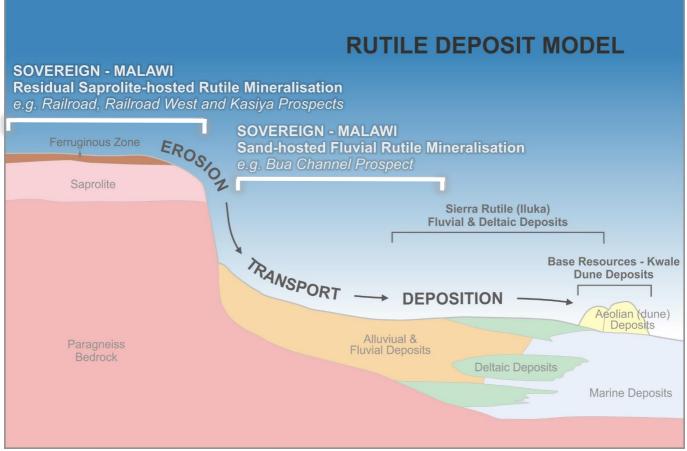


Figure 3. Geological model outlining the two discrete styles of mineralisation

The Company expects substantial drilling results over the coming weeks with numerous hand-auger and deeper (10m to 30m) air-core sample batches from all four main prospects currently undergoing processing in Perth laboratories.





3 February 2020

### **BUA CHANNEL PROSPECT**

The Company's geological team identified potential for placer (sand-hosted) rutile mineralisation in an extensive fluvial channel system in the far west of the tenement package. Initial in-field panning of sand samples showed visually high content of rutile with presents of ilmenite and zircon.

Sovereign has so far defined rutile mineralisation in the southern Bua Channel prospect over approximately 8km length with widths ranging from 300m to 700m and mineralised sand thicknesses ranging from about 4m to 10m.

A significant, +40km potential extension was identified to the north by the field team and this ground was secured in a new exploration licence recently granted by the Malawian Minister of Natural Resources, Energy and Mining.

A total of 57 shallow hand-auger holes for 364m and 54 deeper air-core holes for 473m were drilled at Bua Channel in late 2019. The Company to date has received only the results for shallow hand-auger drilling from 8 holes drilled on the first priority cross-section BS Z3-1200. Overall, these show a well-defined, sand-filled channel with high grades of recoverable rutile and accessory ilmenite and zircon.

Encouragingly, rutile grades are seen to consistently increase with depth as the sand becomes coarser grained. The hand-auger drilling was not able to penetrate much below the standing water table, and hence the three highest-grade holes in the core mineralised zone did not reach the base of the sand-filled channel. These three holes all ended in high-grade rutile mineralisation which remains open at depth.

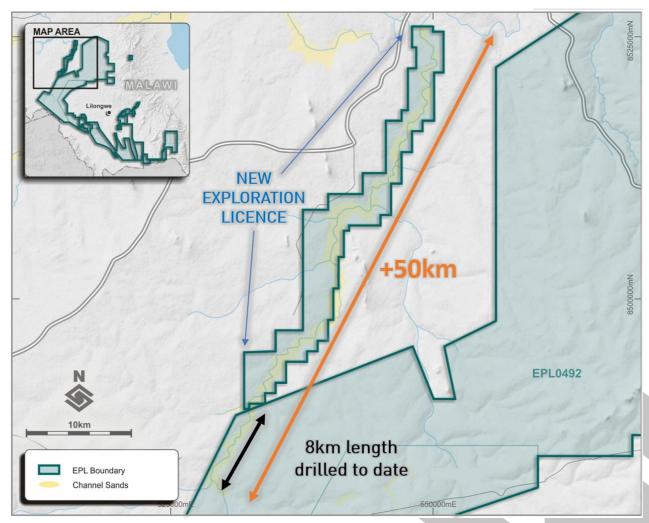


Figure 4. Map outlining the length of the Bua Channel. Only the southern 8km within EPL0492 has been drilled to date.

ASX RELEASE 3 February 2020



All results received to date for Bua Channel are shown in Table 1 and Figure 1.

Hole ID	From	То	Interval	Rutile %	Ilmenite %	Zircon %	Slimes %	Comment
BSHA0009	0	4	4m	0.54%	0.74%	0.08%	23.6%	
BSHA0010	3	6	3m	0.67%	0.89%	0.08%	22.1%	
BSHA0011	0	5	5m	0.64%	0.85%	0.10%	22.3%	Open
Inc.	2	5	3m	0.70%	0.92%	0.10%	14.5%	Open
BSHA0012	0	7	7m	0.81%	0.99%	0.11%	18.1%	Open
Inc.	2	7	5m	0.92%	1.12%	0.12%	14.6%	Open
Inc.	4	7	3m	1.03%	1.23%	0.13%	12.3%	Open
BSHA0013	2	7	5m	0.72%	0.92%	0.09%	22.8%	Open
Inc.	6	7	1 <i>m</i>	0.97%	1.33%	0.10%	10.0%	Open
BSHA0014	NSR				•		•	
BSHA0015	NSR							
BSHA0016	NSR							

### Table 1. All initial hand-auger drilling results from Bua Channel cross-section BS Z3-1200.



Figure 5. Logging and panning activities at Bua Channel



ASX RELEASE 3 February 2020





Figure 6. Drone photograph of aircore drilling at Bua Channel. Rutile mineralisation occurs in sand in this wide, meandering channel. The current-day river is approximately 20m wide.

### **ONGOING WORK PROGRAM**

Sovereign's ongoing rutile work program includes;

- Ongoing laboratory processing of the large number of drill samples from the late 2019 and 2020 drilling at Bua Channel, Railroad, Railroad West prospects and the new high-priority saprolite-hosted prospect at Kasiya.
- Initial hand-auger drilling on a number of new saprolite-hosted prospects identified by the Company's ongoing soil sampling program and refined predictive geological targeting model
- Additional air-core drilling to extend rutile mineralisation at depth and along strike on a number of prospects
- Continue with technical studies on mining methods and tailings disposal methodologies in advance of future potential Scoping Studies

3 February 2020





Figure 7. Malawi field operations and on-site laboratory

#### **Competent Persons' Statements**

The information in this report that relates to Exploration Results is 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	Easting	Northing	RL	Depth
BSHA0009	530160	8484970	1037	8.0
BSHA0010	530200	8484881	1036	7.0
BSHA0011	530250	8484800	1035	6.0
BSHA0012	530290	8484700	1036	7.0
BSHA0013	530350	8484610	1035	7.0
BSHA0014	530390	8484520	1036	9.0
BSHA0015	530051	8485140	1039	4.0
BSHA0016	530100	8485060	1037	6.0

3 February 2020



## 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 57 shallow hand-auger holes for 364m and 57 deeper air-core holes for 473m were drilled at Bua South in late 2019. The Company to date has received the results for shallow hand-auger drilling from 8 holes drilled on the first priority cross-section BS Z3-1200 which are reported here. Samples were composited based on logged geological boundaries, generally at 2 or 3m intervals.
-	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Each 1m sample was sun dried and homogenised. Sub-samples were carefully riffle split to ensure representivity. ~1kg composite samples were processed. Extreme care is taken to ensure an equivalent mass is taken from each 1m 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 TiO <sub>2</sub> % 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, 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-augers with 62mm diameter spiral bits with 1-metre steel rods were used. Each 1m 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.
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.	Samples from the 8 auger holes drilled were composited. Each 1m sample was sun dried and homogenised. Sub-samples were carefully riffle split to ensure sample representivity. ~1kg composite samples were processed. Extreme care is taken to ensure an equivalent mass is taken from each 1m sample to make up the composite. The primary composite sample is considered representative for this style of rutile mineralisation.
	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 dried nature of the samples.



## 3 February 2020

Criteria	JORC Code explanation	Hand Auger Drilling Commentary
	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.
	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 1m 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.
		<ul> <li>The following workflow for the samples was undertaken on-site in Malawi;</li> <li>Dry sample in oven for 1 hour at 105°C</li> <li>Soak in water and lightly agitate</li> <li>Wet screen at 5mm, 600mm and 45µm to remove oversize and slimes material</li> <li>Dry +45µm -600mm fraction in oven for 1 hour at 105°C</li> <li>Pass +45µm -600mm fraction across wet table twice to generate a heavy mineral concentrate (HMC)</li> <li>Dry HMC in oven for 30 minutes at 105°C</li> <li>Bag +45µm -600mm HMC Fraction and send to Perth, Australia for quantitative mineralogical determination.</li> </ul>
		<ul> <li>The following workflow for the samples was then undertaken at Perth based Laboratories.</li> <li>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.</li> <li>The M and NM fractions were sent to Intertek Genalysis Perth for quantitative XRF analysis.</li> <li>2g splits of selected M and NM fractions were sent to ALS for QEMSCAN analysis for further determination of mineralogy, grain size and other mineral chemistry and deportment information.</li> <li>1g splits of selected M and NM fractions were sent to Diamantina Laboratories for thin-section and 300-point count analysis.</li> <li>2g splits of selected M and NM fractions were sent to ALS Laboratories in Perth for quantitative QEMSCAN mineralogy</li> </ul>
	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.	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 content is calculated on the NM fraction by XRF analysis for $TiO_2$ %. The rutile content of the NM fraction is supported by QEMSCAN and 300-point thin section analysis on selected samples. Ilmenite content is calculated on the M fraction by XRF analysis for $TiO_2$ %. All $TiO_2$ units in the M fraction are either ilmenite or an altered ilmenite product. This is supported by QEMSCAN and 300-point thin section analysis on selected samples.



## 3 February 2020

Criteria	JORC Code explanation	Hand Auger Drilling Commentary
		Zircon content is calculated on both the M and NM fraction by XRF analysis for Zr%. The zircon content of both the M and NM fractions is summed together for a total zircon. The zircon content of the M and NM fraction is supported by QEMSCAN and 300-point thin section analysis on selected samples.
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 adequate topographic control (metres above mean sea level).
Data spacing & distribution	Data spacing for reporting of Exploration Results.	The hand auger collars are spaced at approximately 100m along this drill line. It is thought that these holes intercepts should be broadly representative of the mineralisation style in the general area. More work is required to accurately determine the variability of the mineralisation across Bua South Channel Prospect.
	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 the 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 8 auger holes drilled in order to obtain a primary sample of ~1kg mass for mineralogical 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.	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. 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 renewed in 2018 for 2 years and EPL0413 renewed in 2017 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 fluvial placer where eroded heavy minerals have been deposited in a meandering to braided, wide river channel.

## 3 February 2020



Criteria	Explanation	Commentary
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. 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 and an upper cut-off of 30% slimes.
	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 with short zones of high grade or longer lengths of low grade 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	These relationships are particularly important in the reporting of Exploration Results.	It is considered that the mineralisation lies in a shallow channel type form and hence the intercepts approximate true widths.
widths & intercept lengths	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	It is considered that the mineralisation lies in a shallow channel type form and hence the intercepts approximate true widths.
	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. High-grade 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 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 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.	There is no other substantiative exploration data to report.





## 3 February 2020

Criteria	Explanation	Commentary
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 the large number of drill samples from the late 2019 and early 2020 drilling at Bua South is ongoing. Further drilling is planned in 2020, especially in the area to the north of the current drill lines.
	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.

