

## HIGH GRADE SAPROLITE-HOSTED GRAPHITE RESULTS CONTINUE AT MALINGUNDE

Sovereign Metals Limited ("the Company" or "Sovereign") is pleased to report the final batch of assay results from the 2016 aircore and diamond resource drilling program completed at the Malingunde saprolite-hosted flake graphite deposit in Malawi.

The results continue to confirm the excellent consistency of mineralisation along strike, as well as the substantial vertical thickness of the deposit, and will be **incorporated into the maiden JORC resource estimate for Malingunde, expected to be delivered in the coming weeks.** 

#### Highlights:

- Assays for the final batch of aircore (93 holes of total 180) and diamond drilling (5 holes of total 13) continue to show zones of discrete, very high grade graphite mineralisation within the broader envelopes of graphite mineralisation.
- Latest results include:
  - MGDD0002 34m @ 12.0% TGC inc. 20.3m @ 16.3% TGC
  - MGDD0013 16.3m @ 11.4% TGC inc. 3m @ 23.6% TGC
  - MGAC0156 23m @ 16.3% TGC inc. 13m @ 20.3% TGC
  - MGAC0157 15m @ 18.1% TGC
  - MGAC0167 25m @ 14.9% TGC inc. 8m @ 20.4% TGC
  - MGAC0093 20m @ 10.3% TGC inc. 6m @ 16.2% TGC
  - MGAC0108 21m @ 10.2% TGC inc. 9m @ 14.6% TGC
  - MGAC0119 29m @ 10.8% TGC inc. 5m @ 15.9% TGC
  - MGAC0139 11m @ 12.8% TGC inc. 6m @ 19.9% TGC
  - MGAC0144 32m @ 9.4% TGC inc. 4m @ 20.3% TGC
- Sovereign's resource consultant, CSA Global have commenced work on the maiden JORC resource estimate for Malingunde with completion expected in the coming weeks.
- Work is progressing on the Malingunde Scoping Study, with results due toward the end of April 2017.

Managing Director Dr Julian Stephens commented, "This final batch of drilling results results further confirms the Company's belief that Malingunde is a world-class graphite deposit. The deposit boasts high-grade, coarse and jumbo flake concentrates, as well as having the potential for very low capital and operating costs due to the soft and easy to mine and process saprolite mineralisation."

#### Enquiries: Dr Julian Stephens – Managing Director +61 8 9322 6322

#### Continued Aircore and Diamond Drilling Results

At Malingunde, saprolite-hosted graphite mineralisation has been identified in diamond, aircore and hand auger drilling over 3.3km of strike. The latest results continue to show discrete zones of high-grade graphite mineralisation within broader zones up to 200m wide.

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The 2016 program comprised 180 aircore holes and 13 PQ diamond holes. Results for the final batch comprising 93 aircore holes and 5 diamond holes are presented in this report. All results reported for this batch of samples are presented in Table B. in Appendix 1.

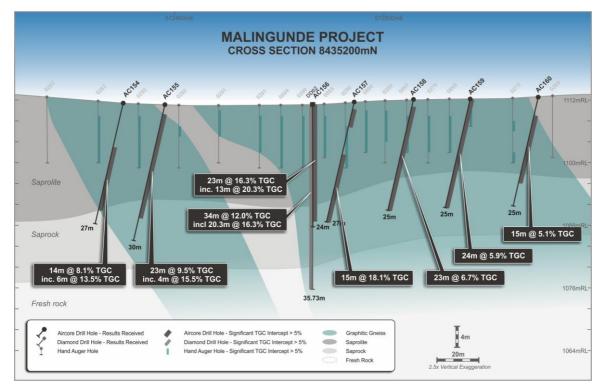
Results reported include:

- MGDD0002 34m @ 12.0% TGC inc. 20.3m @ 16.3% TGC
- MGDD0013 16.3m @ 11.4% TGC inc. 3m @ 23.6% TGC
- MGAC0156 23m @ 16.3% TGC inc. 13m @ 20.3% TGC
- MGAC0157 15m @ 18.1% TGC
- MGAC0167 25m @ 14.9% TGC inc. 8m @ 20.4% TGC
- MGAC0093 20m @ 10.3% TGC inc. 6m @ 16.2% TGC
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- MGAC0119 29m @ 10.8% TGC inc. 5m @ 15.9% TGC
- MGAC0139 11m @ 12.8% TGC inc. 6m @ 19.9% TGC
- MGAC0144 32m @ 9.4% TGC inc. 4m @ 20.3% TGC

Previously reported results include:

- MGAC0020 23m @ 16.1%TGC
- MGAC0030 30m @ 15.3% TGC inc. 10m @ 20.8% TGC
- MGAC0017 31m @ 10.8% TGC inc. 6m @ 25.3% TGC
- MGAC0058 24m @ 11.9% TGC inc. 10m @ 17.1% TGC
- MGAC0065 26m @ 11.0% TGC inc. 4m @ 20.0% TGC
- MGAC0047 12m @ 15.7% TGC inc. 6m @ 23.8% TGC
- MGDD0007 25m @ 15.1% TGC inc. 15m @ 19.7% TGC
- MGDD0006 20m @ 13.7% TGC inc. 12m @ 17.1% TGC

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Figure 1. Cross-section showing high-grade, saprolite-hosted graphite mineralisation.

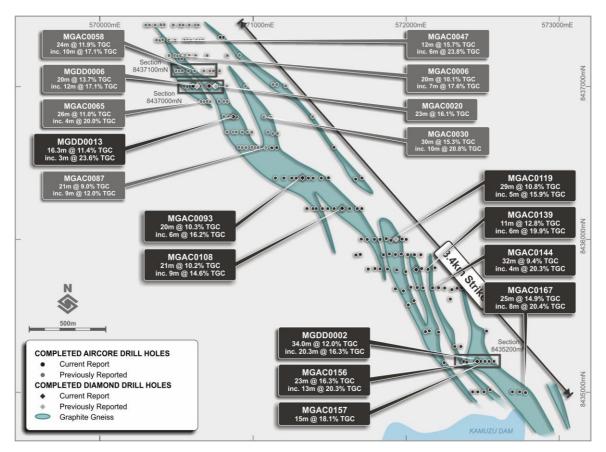


Figure 2. Map showing selected, recently received drilling results over mineralised zones at Malingunde

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#### **Ongoing Work Program**

The Malingunde work program remains on schedule with the aim of reporting the Scoping Study by late April 2017:

- Initial Resource Estimate: Within the coming weeks.
- Scoping Study: Targeted for early Q2 2017.
- **Metallurgy**: Ongoing flowsheet optimisation and variability test-work continues. Work in H1 2017 will include production of larger quantities of concentrates for evaluation by potential offtake partners.
- **Downstream Test-work:** A program of downstream test-work focussed on Li-Ion battery suitability and expandable graphite applications has commenced at a renowned German industrial minerals laboratory. Results are expected in Q2 2017.
- Offtake: Discussions with potential offtake and strategic partners are ongoing.
- **2017 Exploration Program**: Planning is underway to undertake mineralisation extension exploration within the vicinity of the Malingunde deposit, utilising low cost exploration methods successfully employed at Malingunde, such as auger drilling.

#### Background

In 2015, Sovereign's in-country geological team made a new and significant graphite discovery using hand auger drilling techniques in an area of no outcrop. The new deposit is located at Malingunde, just 15km SW of Lilongwe, Malawi's capital city, and has access to enviable infrastructure; being 25km from rail access, 15km from the high-capacity Lilongwe power sub-station and with plentiful fresh water.

Malingunde is particularly significant for Sovereign as it is hosted within weathered, soft saprolite (clay) material. Saprolite-hosted flake graphite mining operations, similar to those in China and Madagascar, usually have significant cost and environmental advantages over hard rock mining operations due to:

- The free-dig nature and very low strip ratios of the near surface mineralised material;
- Simple processing, generally with no primary crushing and grinding circuit resulting in large capital and operating cost advantages;
- The preservation of coarse flakes in the weathering profile due to graphite's chemically inert properties; and
- The absence of sulphides offers substantial tailings and waste management advantages.

Recently reported results for a saprolite-hosted graphite mining operation in Madagascar processing material grading 4-5% TGC, suggest mine-gate operating costs significantly lower than those of similar hard rock operations.

#### Geology

Saprolite is the very soft, graphite-bearing, clay-rich oxide material that is formed from intense weathering of the original underlying bedrock. Sovereign's Malingunde saprolite-hosted flake graphite deposit is located on the Lilongwe Plain which is underlain by a paragneiss basement rock package containing extensive graphitic units. This area has a largely preserved, deep tropical weathering profile containing significant thicknesses of saprolite. Graphite is preserved in the weathering profile, a function of its inert nature, at the expense of the silicate and micaceous minerals which are altered to clays.



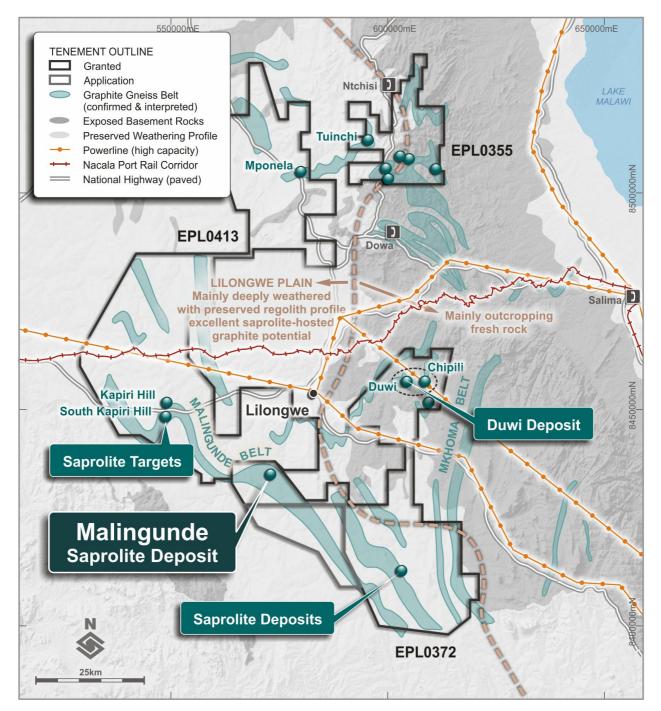


Figure 3. Map showing Sovereign's large 3,788km<sup>2</sup> ground package in Central Malawi with the major flake graphite deposits and target areas shown.



#### Competent Person Statement

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 shares, options and performance rights 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.

The information in this announcement that relates to previous Exploration Results is extracted from announcements 26 November 2016, 18 January 2017 and 21 February 2017. These announcements are available to view on www.sovereignmetals.com.au. The information in the original announcements that related to Exploration Results were based on, and fairly represents, information compiled by Dr Julian Stephens, a Competent Person who is a member of the Australasian Institute of Geoscientists (AIG). Dr Stephens is the Managing Director of Sovereign Metals Limited and a holder of shares, options and performance rights 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'. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements. 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.



## Appendix 1

Table A. Aircore and Diamond Drill-hole Collar Details

Hole ID	Easting UTM (Zone 36S)	Northing UTM (Zone 36S)	RL AMSL (m)	Final depth (m)	Dip	AZI (UTM)	Hole Type	Comment
MGAC0088	571154.37	8436599.9	1145.63	36	-60	270	Aircore	
MGAC0089	571145.58	8436400.2	1144.49	35	-60	270	Aircore	
MGAC0090	571201.58	8436400	1143.34	29	-90	360	Aircore	
MGAC0091	571253.1	8436400.1	1142.52	30	-60	270	Aircore	
MGAC0092	571281.78	8436400.6	1141.96	29	-60	270	Aircore	
MGAC0093	571314.25	8436400.1	1141.72	35	-60	270	Aircore	
MGAC0094	571325.98	8436399.9	1141.6	30	-80	270	Aircore	
MGAC0095	571362.45	8436399.9	1141.6	35	-60	270	Aircore	
MGAC0096	571392.74	8436400.1	1141.51	35	-60	270	Aircore	
MGAC0097	571493.52	8436401.1	1141.95	35	-60	270	Aircore	
MGAC0098	571446.19	8436399.8	1141.66	35	-60	270	Aircore	
MGAC0099	571710.02	8436400.6	1143.02	38	-60	270	Aircore	
MGAC0100	571670.93	8436393	1142.65	33	-60	270	Aircore	
MGAC0101	571528.23	8436600.8	1144.91	27	-60	270	Aircore	
MGAC0102	571392.28	8436199.9	1137.06	39	-60	270	Aircore	
MGAC0103	571351.96	8436200.2	1137.44	35	-60	270	Aircore	
MGAC0104	571413.05	8436199.8	1136.96	35	-60	270	Aircore	
MGAC0105	571487.06	8436200.1	1137.03	34	-60	270	Aircore	
MGAC0106	571452.1	8436200	1137.04	33	-60	270	Aircore	
MGAC0107	571530.02	8436200	1137.17	36	-60	270	Aircore	
MGAC0108	571569.66	8436195.8	1137.24	36	-60	270	Aircore	
MGAC0109	571583.64	8436195.2	1137.26	34	-80	270	Aircore	
MGAC0110	571629.8	8436199.9	1137.7	35	-60	270	Aircore	
MGAC0111	571680.16	8436200.5	1138.17	35	-60	270	Aircore	
MGAC0112	571709.93	8436199.8	1138.08	39	-60	270	Aircore	
MGAC0113	571707.31	8436000.7	1131.11	31	-60	270	Aircore	
MGAC0114	571745.99	8436000.3	1132.05	30	-60	270	Aircore	
MGAC0115	571793.07	8436000.2	1132.64	30	-60	270	Aircore	
MGAC0116	571829.76	8436000.2	1133.22	22	-60	270	Aircore	
MGAC0117	571869.59	8436004	1133.76	37	-60	270	Aircore	
MGAC0118	571899.59	8435992.6	1133.74	39	-60	270	Aircore	
MGAC0119	571924.83	8436000	1134.28	39	-60	270	Aircore	
MGAC0120	571939.98	8436000.2	1134.63	35	-90	360	Aircore	
MGAC0121	571973.88	8436000.8	1135.1	35	-60	270	Aircore	
MGAC0122	571999.7	8435999.3	1135.3	36	-60	270	Aircore	
MGAC0123	571700.41	8435900.8	1126.97	31	-60	270	Aircore	
MGAC0124	571671.66	8435897	1126.54	27	-60	270	Aircore	
MGAC0125	571850.51	8435899.9	1130.04	33	-60	270	Aircore	
MGAC0126	571890.04	8435903.7	1130.78	30	-60	270	Aircore	
MGAC0127	571929.44	8435900.2	1131.16	35	-60	270	Aircore	
MGAC0128	571969.21	8435904.7	1132.14	35	-58.2	274.33	Aircore	
MGAC0129	572010.95	8435899	1132.55	39	-58.6	278.13	Aircore	
MGAC0130	572054.73	8435898.3	1132.97	30	-60	270	Aircore	
MGAC0131	572095.41	8435898.3	1133.4	35	-60	270	Aircore	
MGAC0132	571752.12	8435805.9	1123.51	32	-60	270	Aircore	
MGAC0133	571796.88	8435808.6	1124.62	29	-60	270	Aircore	
MGAC0134	571829.39	8435807.2	1125.5	28	-60	270	Aircore	
MGAC0135	571878.46	8435804.7	1126.91	30	-60	270	Aircore	

Hole ID	Easting UTM	Northing UTM	RL AMSL (m)	Final depth (m)	Dip	AZI (UTM)	Hole Type	Comment
MGAC0136	571937.96	8435799.9	1127.93	30	-60	270	Aircore	
MGAC0137	571996.5	8435788.3	1128.81	30	-90	270	Aircore	
MGAC0138	572101.71	8435809.3	1131.09	30	-60	270	Aircore	
MGAC0139	572142.8	8435804.4	1131.33	30	-61.1	271.83	Aircore	
MGAC0140	572187.97	8435814.3	1132.17	33	-60	270	Aircore	
MGAC0141	572030.95	8435687	1126.42	30	-60	270	Aircore	
MGAC0142	572072.96	8435685.2	1129	33	-60	270	Aircore	
MGAC0143	572109.64	8435683.1	1130	35	-60	270	Aircore	
MGAC0144	572171.36	8435683.3	1131	39	-60	270	Aircore	
MGAC0145	572211.42	8435683.7	1132	39	-60	270	Aircore	
MGAC0146	572251.62	8435681.7	1132	38.8	-60	270	Aircore	
MGAC0147	572298.96	8435671.6	1129.14	44	-60	270	Aircore	
MGAC0148	572361.35	8435683.1	1129.43	35	-60	270	Aircore	
MGAC0149	572331.98	8435679.9	1129.45	35	-58.3	267.53	Aircore	
MGAC0150	572126.39	8435395.9	1118.04	30	-60	270	Aircore	
MGAC0151	572151.93	8435401.4	1119.72	33	-60	272.13	Aircore	
MGAC0152	572211.54	8435393.7	1120.04	30	-60	270	Aircore	
MGAC0153	572247.77	8435194.1	1113.46	30	-61.9	269.73	Aircore	
MGAC0154	572375.58	8435200.6	1111.72	27	-60	270	Aircore	
MGAC0155	572395.32	8435196.3	1111.11	30	-60	270	Aircore	
MGAC0156	572465.94	8435202.2	1111.75	24	-90	360	Aircore	
MGAC0157	572485.92	8435202	1112.05	27	-60	270	Aircore	
MGAC0158	572514.24	8435202.8	1112.54	25	-60	270	Aircore	
MGAC0159	572541.56	8435202.3	1113.07	25	-60	270	Aircore	
MGAC0160	572574.02	8435202.1	1113.41	25	-60	270	Aircore	
MGAC0161	572435	8435003.3	1100.56	21	-60	270	Aircore	
MGAC0162	572467.21	8435002.2	1100.74	18	-60	270	Aircore	
MGAC0163	572507.57	8435002.8	1101.66	21	-60	270	Aircore	
MGAC0164	572548.72	8435015.8	1103.11	25	-60	270	Aircore	
MGAC0165	572693.46	8435003.1	1103.76	27	-60	270	Aircore	
MGAC0166	572741.38	8435002.6	1102.2	27	-60	270	Aircore	
MGAC0167	572779.22	8434998.8	1100.21	25	-60	270	Aircore	
MGAC0168	572525.54	8435401.5	1120.13	30	-60	270	Aircore	
MGAC0169	572355.65	8435303.5	1116.21	30	-60	270	Aircore	
MGAC0170	572318.67	8435303.1	1116.31	30	-61.1	272.13	Aircore	
MGAC0171	572050.56	8435599.6	1124.04	29	-60	270	Aircore	
MGAC0172	572016.29	8435574.3	1121.03	11	-60	270	Aircore	
MGAC0173	571981	8435663	1124	25	-60	270	Aircore	Handheld GPS survey only
MGAC0174	571930	8435676	1122	24	-60	270	Aircore	Handheld GPS survey only
MGAC0175	572013	8435570	1121	27	-60	270	Aircore	Handheld GPS survey only
MGAC0176	572288	8435610	1127	33	-60	270	Aircore	Handheld GPS survey only
MGAC0177	571122	8436598	1148	25	-60	270	Aircore	Handheld GPS survey only
MGAC0178	570609	8437000	1148	25	-80	90	Aircore	Handheld GPS survey only
MGAC0179	570806	8437320	1137	26	-60	265.93	Aircore	Handheld GPS survey only
MGAC0180	570786	8437320	1137	26	-61.1	266.83	Aircore	Handheld GPS survey only
MGDD0002	572465.78	8435203	1111.513	35.73	-90	360	Diamond	
MGDD0010	572067.69	8435806.3	1130.29	35.89	-80	262.92	Diamond	
MGDD0011	571581.56	8436202.7	1137.172	35.92	-80	270	Diamond	
MGDD0012	571325.42	8436401.7	1141.684	35.89	-80	270	Diamond	
MGDD0013	570870.58	8436802.4	1147.129	35.95	-80	270	Diamond	

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Hole ID	From (m)	To (m)	Width (m)	Grade (%)	Saprolite From (m)	Saprolite To (m)	Saprock From (m)	Saprock To (m)	Comment
MGAC0088	4	23	19	9.06	4	21	21	23	
MGAC0089					NSI				
MGAC0090	4	29	25	6.03	4	24	24	29 (EOH)	
MGAC0091	5	14	9	6.14	5	14			
and	23	30	7	6.11			23	30 (EOH)	
MGAC0092	14	26	12	5.18	14	20	20	26	
MGAC0093	3	23	20	10.3	3	23			
inc	9	15	6	16.23					
MGAC0094	2	28	26	9.38	2	26	26	28	
inc	10	20	10	12.74					
MGAC0095	3	35	32	8.3	3	25	25	35 (EOH)	
inc	22	29	7	10.6					
MGAC0096	7	32	25	5.96	7	28	28	32	
MGAC0097	8	14	6	6.03	8	14			
and	29	35	6	5.73			29	35 (EOH)	
MGAC0098	4	12	8	6.36	4	12			
and	20	31	11	7.35	20	27	27	31	
MGAC0099	4	21	17	7.84	4	21			
and	30	34	4	9.6			30	34	
MGAC0100					NSI				
MGAC0101					NSI				
MGAC0102	18	22	4	5.3	18	22			
MGAC0103					NSI				
MGAC0104	3	13	10	6.04	3	13			
MGAC0105	7	34	27	6.84	7	31	31	34 (EOH)	
MGAC0106	4	22	18	6.99	4	22			
MGAC0107	9	36	27	5.56	2	29	29	36 (EOH)	
MGAC0108	2	23	21	10.18	2	23			
inc	4	13	9	14.61					
MGAC0109	5	26	21	7.94	2	25			
MGAC0110	6	35	29	5.32	6	30	30	35 (EOH)	
MGAC0111	4	8	4	6.73	4	8			
and	26	31	5	12.14			26	31	
MGAC0112	1	6	5	5.96	1	6			
and	21	33	12	5.15	21	33			
MGAC0113	5	28	23	6.45	5	22	22	28	
MGAC0114	1	6	5	5.36	1	6			
and	15	29	14	6.04	15	19	19	29	
MGAC0115	3	30	27	6.81	2	23	23	30 (EOH)	
MGAC0116					NSI				
MGAC0117	4	16	12	6.69	4	16			
MGAC0118	4	31	27	8.71	4	31			
inc	5	9	4	14.93					
MGAC0119	10	39	29	10.82	10	36	36	39 (EOH)	
inc	24	29	5	15.86					
MGAC0120	5	35	30	6.78	5	31	31	35 (EOH)	
MGAC0121	7	35	28	6.01	7	32	32	35 (EOH)	
MGAC0122	4	36	32	6.21	4	32	32	36 (EOH)	
MGAC0123	22	27	5	8.64	22	24	24	27	
MGAC0124	9	13	4	8.85	9	13			
MGAC0125	7	29	22	6.2	7	17	17	29	
MGAC0126	4	24	20	6.36	4	22	22	24	

Table B. Aircore and Diamond Drill-hole Significant Intercepts (>=5.0% TGC)

Hole ID	From (m)	To (m)	Width (m)	Grade (%)	Saprolite From (m)	Saprolite To (m)	Saprock From (m)	Saprock To (m)	Comment
MGAC0127	8	35	27	5.52	8	30	30	35 (EOH)	
MGAC0128	6	32	26	7.88	6	28	28	32	
inc	7	14	7	11.17					
MGAC0129	4	39	35	7.18	4	35	35	39 (EOH)	
MGAC0130	20	30	10	6.62	20	27	27	30 (EOH)	
MGAC0131	6	12	6	6.93	6	12			
MGAC0132					NSI				
MGAC0133					NSI				
MGAC0134					NSI				
MGAC0135	2	17	15	6.8	2	17			
MGAC0136	4	26	22	5.83	4	20	20	26	
MGAC0137	9	14	5	7.16	9	14			
MGAC0138	21	30	9	6.84	21	24	24	30 (EOH)	
MGAC0139	19	30	11	12.79	19	29	29	30 (EOH)	
inc	19	25	6	19.87					
MGAC0140					NSI				
MGAC0141	4	30	26	6.39	4	22	22	30 (EOH)	
MGAC0142	-		4 -		NSI	0.7			
MGAC0143	7	23	16	9.88	7	23			
inc	8	12	4	20.05					
MGAC0144	4	36	32	9.42	4	30	30	36	
inc	21	25	4	20.25					
MGAC0145	23	39	16	14.5	23	39 (EOH)			
inc	29	33	4	20.75					
MGAC0146	22	34	12	6.12	22	32	32	34	
MGAC0147	28	36	8	6.1	28	36			
MGAC0148	16	26	10	5.4	16	26			
MGAC0149		40			NSI	40			
MGAC0150	2	16	14	6.64	2	16			
and	22	30	8	5.84	22	30 (EOH)			
MGAC0151 and	0	16	16	5.54	0	16	00	01	
	24	31	7	5.49	24	26	26	31	
MGAC0152 inc	2	26	24	8.76	2	26			
	2	4	2 7	17.4	4	0			
MGAC0153	1	8		7.4	1	8	04	00	
and	16	26	10	5.88	16	24	24	26	
MGAC0154 inc	10	24 16	14 6	8.11 13.5	10	24			
	10	25	23	9.46	2	21	21	25	
MGAC0155 inc	2 21	25 25	23 4	9.46	2	21	21	20	
	0	25	23	16.32	0	20	20	23	
MGAC0156 inc	6	19	13	20.27	0	20	20	23	
	2	6	4	6.88	2	6			
MGAC0157 and	12	27	4 15	18.05	12	22	22	27 (EOH)	
MGAC0158	2	27	23	6.7	2	18	18	27 (EOH) 25 (EOH)	
MGAC0158 MGAC0159	1	25	23	5.9	2	17	10	25 (EOH) 25 (EOH)	
MGAC0159 MGAC0160	5	20	15	5.09	5	17	17	20 (EOR)	
MGAC0160 MGAC0161	1	20	20	6.81		20	20	20 21 (EOH)	
MGAC0161 MGAC0162	3	15	12	6.53	3	9	9	15	
MGAC0102 MGAC0163	2	21	12	6.65	2	14	14	21 (EOH)	
MGAC0103 MGAC0164	10	14	4	5.2	10	14	14		
	10	25	4 24	8.86	10	14	19	25	
MGAC0165 inc	8	12	4	13.25		10	10	20	
MGAC0166	3	25	22	9.74	2	23	23	25	
10100700100	5	25	~~~	3.74		20	25	20	

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Hole ID	From (m)	To (m)	Width (m)	Grade (%)	Saprolite From (m)	Saprolite To (m)	Saprock From (m)	Saprock To (m)	Comment
inc	9	17	8	14.63					
MGAC0167	0	25	25	14.91	0	21	21	25 (EOH)	
inc	7	15	8	20.4					
MGAC0168	16	20	4	5.55	16	20			
MGAC0169	19	24	5	19.12	19	24			
MGAC0170	11	15	4	10.1	11	15			
and	21	30	9	9.24	21	25	25	30 (EOH)	
MGAC0171	3	13	10	6.83	3	13			
MGAC0172					NSI				
MGAC0173	10	18	8	6	10	18			
MGAC0174					NSI				
MGAC0175	2	5	3	7.37	2	5			
MGAC0176					NSI				
MGAC0177	5	8	3	13.53	5	8			
MGAC0178	3	25	22	12.29	3	19	19	25 (EOH)	
inc	8	14	6	24.18					
MGAC0179					NSI				
MGAC0180	3	7	4	5.53	3	7			
MGDD0002	1.7	35.73	34.03	12.04	1.7	18	18	28	28.00-35.73m FRESH
inc	1.7	22	20.3	16.3					
MGDD0010	3.28	35.89	32.61	6.32	3.28	25.05	25.05	35.89 (EOH)	
MGDD0011	8.5	33.15	24.65	8.57	8.5	18.3	18.3	33.15	
inc	17.81	27.3	9.49	12.85					
MGDD0012	2.48	33	30.52	8.01	2.48	26.8	26.8	33	
MGDD0013	5.18	21.45	16.27	11.37	5.18	21.45			
inc	7	10	3	23.57					
and	33	35.1	2.1	5.59			33	35.1	

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## Appendix 2: 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.	The aircore drilling method was employed to obtain bulk drill cuttings at nominal 1-metre (downhole) intervals from surface. All 1-metre samples were collected in plastic bags directly beneath the drilling rig cyclone underflow. The entire 1-metre sample was manually split using either a 3-tier (87.5:12.5 split) or single tier (50:50 split) riffle splitter or a combination thereof to facilitate the mass reduction of a laboratory assay split. Compositing of the laboratory sample split was performed on a geological basis. Mineralised (>=3% v/v visual) laboratory splits of 1-metre intervals from surface to the top of the saprolite zone were not composited whereas mineralised splits of the underlying saprolite and saprock intervals were composited nominally at 2-metres. Unmineralised (=<3% v/v visual), laboratory splits of 4-metre intervals from top of hole to bottom of hole were composited. PQ triple tube (PQ3) Diamond Drilling (DD) was employed to obtain drill core from surface, which was subsequently geologically and geotechnically logged. Flake graphite mineralisation content has been visually estimated as volume % (% vv) of total whole core intervals recovered. Further processing of drill core including samples that will be submitted for assay is in progress. Laboratory splits were submitted Intertek Perth for assay sample preparation. Total Graphitic Carbon (TGC)
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	AIRCORE Drilling and sampling activities were supervised by a suitably qualified Company geologist who was present at the drill rig at all times. All bulk 1-metre drill samples were geologically logged by the geologist at the drill site. All 1-metre downhole drill samples collected in plastic bags from directly beneath the cyclone underflow were individually weighed and moisture content was quantitatively logged prior to further splitting and sampling. All mass reduction (field and laboratory splitting) of samples were performed within Gy's Sampling Nomogram limits relevant to this style of mineralisation. Field duplicate splits were undertaken nominally every 20 <sup>th</sup> sample to quantify sampling and analytical error. A program of field replicate splitting of selected (~5%) mineralised intervals was completed at the conclusion of the drill program. DIAMOND Core recovery was closely monitored during drilling particularly through the mineralised zones. Standard industry drilling mud mixtures were employed to improve core recovery especially through the softer upper clay rich material and underlying saprolite horizon.
	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.	Flake graphite content is visually estimated as volume % (% v/v) of each 1-metre bulk drillsamples (or core logging intervals) during geological logging by Company geologist. A nominal lower cut-off of 5% TGC assay has been applied to define zones of 'mineralisation'.
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.).	AIRCORE Conventional blade bit aircore drilling was employed to obtain all drill cuttings from surface. Drilling was completed using a P900 drill rig mounted on a 4x4 truck. Drilling was completed using standard 3-inch diameter/3m length drill rods equipped with inner tubes. Drilling was performed with standard face discharge aircore blade bits. The nominal drill hole diameter is 87mm. DIAMOND Conventional wireline PQ triple tube (PQ3) Diamond Drilling (DD) was employed to obtain all drill core. Drilling was undertaken with an Atlas Copco Christensen CT14 truck mounted drilling rig. The nominal core diameter is 83mm and the nominal hole diameter is 122mm. Coring was completed with standard diamond impregnated tungsten carbide drilling bits. Drill runs were completed employing either a 3.0 or 1.5m length PQ core barrel. Core from all drilling runs was orientated using a Reflex ACTIII Electronic Orientation device. The orientation and marking of the bottom of hole (BOH) orientation line along the core was completed whilst the core was still within the drilling split. Core was transferred from the drilling split into PVC splits which were then wrapped with plastic layflat material, securely sealed and placed into core trays.



Criteria	JORC Code explanation	Commentary
Drill Sample Recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	AIRCORE AII 1-metre downhole drill samples collected in plastic bags from directly beneath the cyclone underflow were individually weighed and moisture content (dry/damp/moist/wet/saturated) recorded prior to further splitting and sampling. The outside diameter of the drill bit cutting face was measured and recorded by the driller prior to the commencement of each drill hole. Each 1-metre sample interval was separately geologically logged using standard Company project specific logging codes. Logging of weathering and lithology along with drill hole diameter, recovered sample weight, moisture content and dry bulk density measurements of PQ diamond core allow the theoretical sample recovery to be calculated. Preliminary analysis of actual sample recoveries indicate an average recovery of greater than 75% for mineralised intervals. DIAMOND At the completion of each drill run the steel splits containing the core were pumped out of the retrieved core tube. Core was then carefully transferred from the drill split into plastic sleeves (layflat) which were secured in rigid PVC splits. The layflat was securely bound and sealed with tape prior to transferring PVC splits into plastic core trays.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	AIRCORE Drill bits (face discharge) used were appropriate for the type of formation to maximise amount of drill cutting recovered. Drill bits were replaced where excessive wearing of the tungsten cutting teeth had occurred. A number of the 2016 PQ diamond core holes were twinned by aircore holes to assess the representivity of drill samples. DIAMOND Core recovery was closely monitored during drilling particularly through the mineralised zones. Standard industry drilling mud mixtures were employed to improve core recovery especially through the softer upper clay rich material and underlying saprolitic horizon. Other measures such quantity of water, amount of rotation and drill bit types that are appropriate to soft formation drilling were considered and employed during drilling.
		Hole MGDD0004 and MGDD0005 have been re-drilled due to core loss through a number of mineralised zones. An overall core recovery of 89% was achieved for all holes (196.29m) and the core recovery through mineralised zones (>=5% vv) averages 90%. Excluding MGDD0004 and MGDD0005, core recovery overall increases to 91% and in mineralised zones (>=5%vv) averages 95%).
	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.	Twin hole comparison of aircore vs hand auger and diamond core drill hole visually estimated grades indicates that no sample bias exists. There does not appear to be any relationship between aircore sample recovery and TGC % v/v grade.
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 drill holes were geologically logged by a suitably trained Company geologist using standard Company code system. Relevant data for each individual 1-metre sample for aircore or for each geological interval for diamond was initially recorded using a standard A4 paper template and later digitally entered into customised Company MS Excel spreadsheets designed with fully functional validation. Excel files are checked and loaded to MS Access by the Database Administrator. Upon loading into the Access database further validation is performed. In addition all core is photographed wet and dry for future reference.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	This information is of a sufficient level of detail to support appropriate Mineral Resource estimation. Logging is both qualitative and quantitative. Geological logging includes but is not limited to lithological features, volumetric visual estimates of graphite content and flake characteristics.
	The total length and percentage of the relevant intersection logged	100% of drill hole sample intervals have been geologically logged.
Sub-sampling techniques	If core, whether cut or sawn and whether quarter, half or all core taken.	1/4 DD drill core is manually split and/or cut using a motorised diamond blade core saw and sampled for laboratory analysis.
and sample preparation	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	The entire 1-metre sample was manually split using either a 3-tier (87.5:12.5 split) or single tier (50:50 split) riffle splitter or a combination thereof to facilitate the mass reduction of a laboratory assay split. Compositing of the laboratory sample split was performed on a geological basis. Mineralised (>=3% v/v visual) laboratory splits of 1-metre intervals from surface to the top of the saprolite zone were not composited whereas mineralised splits of the underlying saprolite and saprock intervals were composited nominally at 2-metres. Unmineralised (=<3% v/v visual), laboratory splits of 4-metre intervals from top of hole to bottom of hole were composited. All wet samples were removed from the drill site without splitting and relocated to the Company's premises in Lilongwe. The wet samples were transferred into large metal trays and sun dried. Samples were subsequently hand pulverised and thoroughly homogenised prior to splitting 50:50 with a single tier riffle splitter. One of the off-splits was submitted to the laboratory for assay. All rejects splits (i.e. the material not sent for assaying) of each individual 1-metre interval were returned to
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	original sample bag, cable tied and placed in storage for future reference. Sample preparation is conducted at either Intertek in Perth or Johannesburg. The entire submitted sample (=< ~3kg) is pulverised to 85% -75μm in a LM5. Approximately 100g pulp is collected and sent to Intertek- Genalysis Perth for chemical analysis.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	All sampling was carefully supervised. Ticket books were used with pre-numbered tickets placed in the laboratory sample bag and double checked against the sample register. Subsequent to splitting an aluminium tag inscribed with hole id/sample interval was placed inside the bulk 1-metre sample bag. Field QC procedures involve the use of certified reference material assay standards, blanks, duplicates, replicates for company QC measures, and laboratory standards, replicate assaying and barren washes for laboratory QC measures. The insertion rate of each of these averaged better than 1 in 20.

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Criteria	JORC Code explanation	Commentary				
	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.	AIRCORE A program of field replicate splitting of selected (5%) mineralised intervals was completed at the conclusion of the drill program. In addition, a number of air core holes have been drilled to "twin" diamond holes, to assess the representivity of the air drilling. The results of these programs will be assessed when results are received. DIAMOND Quarter core duplicate samples were collected every 20 <sup>th</sup> sample.				
	Whether sample sizes are appropriate to the grain size of the material being sampled.	AIRCORE All mass reduction of aircore drill samples undertaken during field sampling and laboratory sample preparation were guided by standard sampling nomograms and fall within Gy's safety limits for the type of mineralisation sampled. DIAMOND Quarter PQ3 core is considered appropriate for the material sampled. It is believed that grain size has no bearing on the grade of the sampled material.				
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 assaying and laboratory procedures are considered to be appropriate for reporting graphite mineralisation, according to industry best practice. Each entire sample was pulverised to 85% -75µm. Approximately 100g pulp is collected for analysis at Intertek-Genalysis Perth. A sample of 0.2g is removed from the 100 gram pulp, first digested in HCl to remove carbon attributed to carbonate, and is then heated to 450°C to remove any organic carbon. An Eltra CS-2000 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.	No non-laboratory devices were used for chemical analysis.				
	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.	Field QC procedures involve the use of certified reference material assay standards, blanks, duplicates and replicates for company QC measures, and laboratory standards, replicate assaying and barren washes for laboratory QC measures. The insertion rate of each of these averaged better than 1 in 20.				
Verification of sampling & assaying	The verification of significant intersections by either independent or alternative company personnel.	Significant mineralisation intersections were verified by alternative company personnel. An independent resource consultant conducted a site visit during December 2016 during the aircore drilling program. All drilling and sampling procedures were observed by the consultant during the site visit.				
	The use of twinned holes.	Several of the 2016 PQ diamond core holes were twinned by aircore holes to assess sampling representivity.				
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	All data is initially collected 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. Assay data is provided as .csv files from the laboratory and loaded into the project specific drill hole database. Spot checks are made against the laboratory certificates.				
	Discuss any adjustment to assay data.	No adjustments have been made to assay data.				
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.	Collars were tape measured from 20m separated DGPS surveyed auger holes (accuracy 0.02m x/y). All collars have been picked-up by the Company's consulting surveyor, using a Leica GPS System 1200 in RTK mode to define the drill-hole collar coordinates to centimetre accuracy. Down-hole surveying was undertaken on selected holes to determine drill hole deviation. Surveys were carried out using a Reflex Ez-Trak multi-shot survey tool at nominal 30m intervals down hole on selected holes was used to show that significant deviation does not occur over the relatively short length of the aircore holes. As such drill hole deviation is not considered material throughout the program.				
	Specification of the grid system used. Quality and adequacy of topographic control.	WGS84 (GRS80) UTM Zone 36 South The Company's consulting surveyor used a Leica DGPS System 1200 in RTK mode to accurately locate the x, y, z of drill collars. Previous checking of Hand Auger holes with the Shuttle Radar Topographic Mission (SRTM) 1-arc second digital elevation data has shown that the Leica GPS System produces consistently accurate results. Given the low topographic relief of the area it is believed that this represents high quality control.				
Data spacing & distribution	Data spacing for reporting of Exploration Results.	Aircore and core drill holes occur along east-west sections spaced at between 100-400m north-south between 8,435,400mN to 8,437,200mN.				
a ustribution	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.	between 8,433,400min to 8,437,200min. Not applicable. No Mineral Resource Estimate (MRE) has been completed for the Malingunde deposit.				
	Whether sample compositing has been applied.	No sample compositing has occurred.				
Orientation of data in relation to geological	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 upgrading of results has been identified.				



Criteria	JORC Code explanation	Commentary
structure	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 sampling upgrading of results has been identified. Flake graphite mineralisation is conformable with the main primary layering of the gneissic and schistose host lithologies. Drill hole inclination of -60 degrees are generally near orthogonal to the interpreted regional dip of the host units and dominant foliation.
Sample security	The measures taken to ensure sample security	Samples are securely stored at the Company's compound in Lilongwe. Chain of custody is maintained from time of sampling in the field until sample is dispatched to the laboratory.
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	JORC Code explanation	Commentary
Mineral tenement & land tenure	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 3 Exclusive Prospecting Licences (EPLs) in Malawi. EPL0355 granted in 2015 for 2 years, EPL0372 granted in 2016 for 2 years, EPL0413 granted in 2014 for 3 years. All EPLs are renewable for two additional periods of 2 years each upon expiry.
status -	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 graphite mineralisation occurs as multiple bands of graphite gneisses, hosted within a broader Proterozoic paragneiss package. In the Malingunde and Lifidzi areas specifically, a deep topical weathering profile is preserved, resulting in significant vertical thicknesses from near surface of saprolite-hosted 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	Refer to Tables A and B in Appendix.
	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	Not Applicable, no information has been excluded.
	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 sample assays contribute to significant intercepts, while adhering to a minimum total significant intercept grade of >=5%. For simplification of reporting following positive metallurgical results in the treatment of pedolith material, all material above the saprolite-saprock boundary is considered as saprolite during generation of significant intercepts.
Data aggregation methods	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.	Significant intercepts were calculated using an outer (edge) sample lower cut-off grade of >=5% TGC, minimum intercept width of 3m, and a maximum of 6m internal dilution where the final intercept averages >=5% TGC. Substantial higher grade zones are reported as separate "including" intercepts within Table B.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalent values are used in this report.
	These relationships are particularly important in the reporting of Exploration Results.	Preliminary interpretation of mineralised zones in aircore holes supported by DD (2016) orientated core measurements suggests that mineralised zones are shallow-moderate east dipping.
Relationship between mineralisation widths & intercept	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	Flake graphite mineralisation is conformable with the main primary layering of the gneissic and schistose host lithologies. Drill hole inclination of -60 degrees are generally near orthogonal to the regional dip of the host units and dominant foliation and hence specific drill hole intercepts for -60 degree holes may only approximate true width. The averaged strike of mineralised zones is approximately 160° grid whereas all -60 inclined aircore holes were orientated at grid east.
lengths	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'.	Not Applicable, refer to explanation directly above.
Diagrams	Appropriate maps and sections (with scales)	See Figures 1 and 2 within the main text of this report.



Criteria	JORC Code explanation	Commentary
	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.	
	Where comprehensive reporting of all	Representative reporting of low and high-grades has been effected within this report.
	Exploration Results is not practicable,	
Balanced	representative reporting of both low and	
reporting	high-grades and/or widths should be	
	practiced to avoid misleading reporting of	
	exploration results.	
	Other exploration data, if meaningful and	No additional meaningful and material exploration data has been excluded from this report that has not
	material, should be reported including (but	previously been reported to the ASX.
	not limited to: geological observations;	
Other	geophysical survey results; geochemical	
substantive	survey results; bulk samples - size and	
exploration	method of treatment; metallurgical test	
data	results; bulk density, groundwater,	
	geotechnical and rock characteristics;	
	potential deleterious or contaminating	
	substances.	
	The nature and scale of planned further work	The next phase of exploration is to complete additional infill, extensional and step-out air core drilling.
	(e.g. test for lateral extensions or depth	
	extensions or large-scale step-out drilling).	
Further work	Diagrams clearly highlighting the areas of	See Figure 2 within the main text of this report.
	possible extensions, including the main	
	geological interpretations and future drilling	
	areas, provided this information is not	
	commercially sensitive.	