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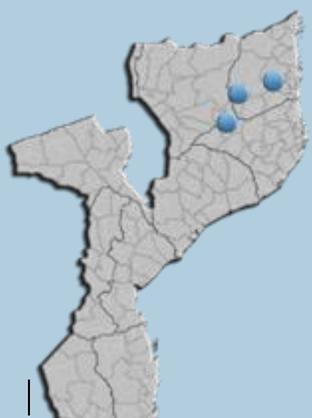

23 February 2017

MAIDEN ANCUABE T16 METALLURGICAL TESTWORK CONFIRMS PREMIUM FLAKE GRAPHITE

- **Outstanding metallurgical testwork results for the recent T16 discovery and additional metallurgical testwork results for T12 at Ancuabe confirm coarse, high-purity graphite flake concentrates**
- **Flake size distribution on average approximately 56% large flake graphite (>180 microns), approximately 30% jumbo flake graphite (>300 microns)**
- **Excellent concentrate purity of between 97.5 and 99.2% LOI1000**
- **Attractive flake size distribution and purity suitable for high value expandable graphite and lithium-ion battery markets**
- **Results underpin Scoping Study scheduled for release at end of Q1 2017**

Triton Minerals (ASX: TON) ('Triton' or the 'Company') is pleased to announce that it has received excellent results from six metallurgical samples recently submitted to IMO Project Services in Perth Western Australia. The samples were selected from diamond drill (DD) cores from the 2016 exploration drilling campaign at the T12 and T16 deposits.

Managing Director Peter Canterbury said, *"The metallurgical test work results demonstrate that large flake size and high purity levels extend across both the T12 and T16 deposits. These results are very significant, demonstrating that Ancuabe graphite will be able to meet the key criteria required to produce a premium product suitable for the expandable graphite and lithium-ion battery markets. These results also differentiate Triton from many of our peers with predominantly medium or small flakes size deposits.*

In addition, the results are based on non-optimized process testwork and there is scope to optimise further through a coarser initial grind to preserve large to jumbo flakes. Petrographic studies also show the material is course grained which suggest the potential for low cost extraction.

We have now commenced the Ancuabe Scoping Study that will be completed by the end of March 2017. Triton is focused on fast tracking the development studies for Ancuabe to enable an early investment decision."

Table 1: Average metallurgical test work results, flake size distribution

Ancuabe Flake Graphite	Average[1]
+500 microns	7%
+300 microns	30%
+180 microns	56%
+150 microns	66%

Note 1: cumulative, arithmetic average of six composite core samples, refer to Table [5]

These results confirm and add to previous metallurgical test work undertaken by Triton on six composite quarter core samples from drill holes IVD001, IVD007, IVD010 and IVD011 in 2016 which yielded coarse high-purity concentrates (Triton, 2016a and 2016d).

The current six composite core samples were selected from three diamond drill holes (DD) drilled during Q4 2016 (see Figure 1, Figure 2 and Table 2 for collar locations). The primary purpose of testing these samples was to confirm the expected performance for T12 and to gain an understanding of the expected performance for T16. Examples of the drill cores are presented in Figures 3 and 4.

Metallurgical test results

The flotation test work, based on a standard graphite process flowsheet developed by Independent Metallurgical Operations' (IMO) Perth Laboratory, demonstrated that a range of high purity graphite flakes can be extracted. The process flowsheet included rougher flotation, followed by several regrind and cleaner flotation stages. Refer to Tables 3, 4 and 5 for sample descriptions, head assays and test results.

Key metallurgical highlights include:

- Head grades of between 4.6 and 9.3 % Total Graphitic Carbon (TGC)
- ~22 to 46% of graphite flakes mass > 300 micron (Jumbo Flake)
- ~20 to 29% of graphite flake mass 180 to 300 micron (Large Flake)
- Overall concentrate grades between 97.5 and 99.2% purity (LOI1000 - Loss on Ignition at 1000^{o}C)
- Recoveries greater than 88% for four of T16 composites tested, based on LOI1000
- Recoveries greater than 86% for the two T12 composites tested, based on LOI1000
- Minimal discernible difference in graphite purity from oxidised, transitional or fresh weathering domains

It is noted that the process testing has not been optimised and that there is scope for coarser initial grind and preservation of large flakes. Flotation tests were all carried out under open circuit conditions with the above recoveries excluding graphite from intermediate tailings streams. Recoveries are expected to improve with recycling of said intermediate tailings streams during locked cycle testing.

The LOI1000 results for each size fraction, in comparison to Total Carbon (TC) results from previous metallurgical samples, exhibit a generally positive bias to a maximum 2.2% absolute grade difference (Triton, 2016d). On average for the total concentrate, the differential between LOI1000 and TC is approximately 1% absolute grade i.e. for an LOI1000 value of 99%, the corresponding TC grade would be expected to be around 98%.

Analytical methods

The flake graphite concentrates were analysed for Loss on Ignition (LOI) and TC by Nagrom, Kelmscott, Western Australia. Loss on Ignition is the percentage weight loss that occurs when a dry graphite sample is heated in air at 1000°C until constant weight and is considered a proxy for Carbon content in high-purity graphite concentrates. TC is measured to verify the LOI results; this method combusts the sample at 1400°C in an oxygen stream which converts all carbon to CO_2 which is then measured in an infrared absorption cell. LOI is expected to give higher values than either TC or TGC methods when analysing rock samples, as weight loss may include the decomposition of other carbon-bearing minerals (e.g. calcite) and hydrous silicate minerals (e.g. mica). For final concentrate samples the difference between LOI and either TC or TGC will be significantly lower, as the fraction of other carbon-bearing minerals and hydrous silicate minerals will be significantly less.

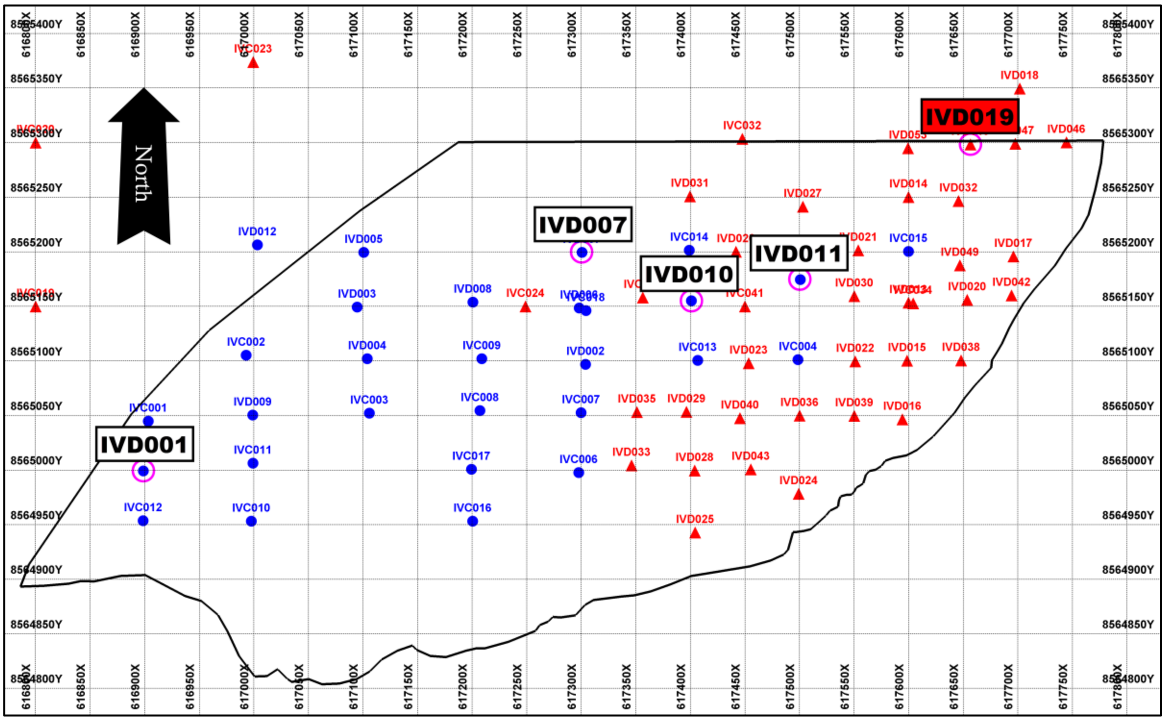

Figure 1: Location of drill collars at T12. Extent of the Mineral Resource announced in May 2016 shown by the black polygon. Blue collars = RC and DD drilled 2015. Red collars = RC and DD drilled 2016 (hand-held GPS coordinates). Previous metallurgical composites from holes IVD001, IVD007, IVD010 and IVD011 reported in 2016 (Triton, 2016a and 2016d). Two composites from IVD019 tested in February 2017. Map grid 100 x 100 m

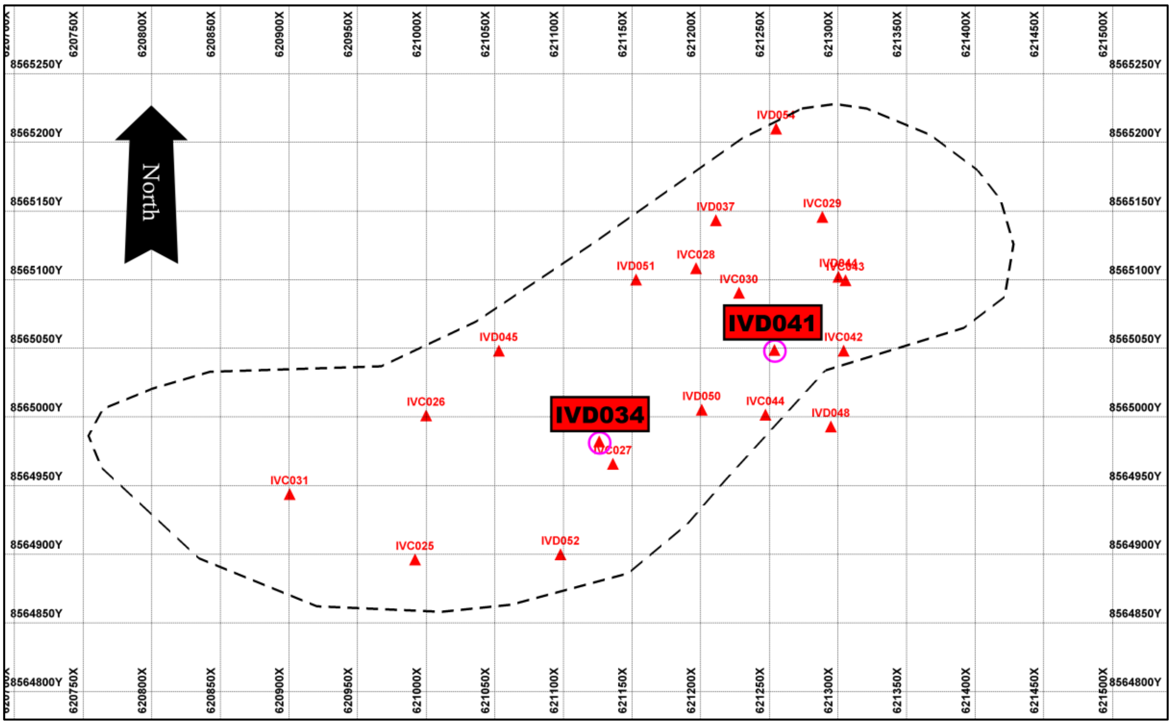

Figure 2: Location of drill collars at T16. Black dashed polygon = VTEM target. Red collars = RC and DD drilled 2016 (hand-held GPS coordinates). Four composites from IVD034 and IVD041 tested in February 2017. Map grid 100 x 100 m

Figure 3: Example of quarter core samples submitted for metallurgical testing from IVD041 composite 12

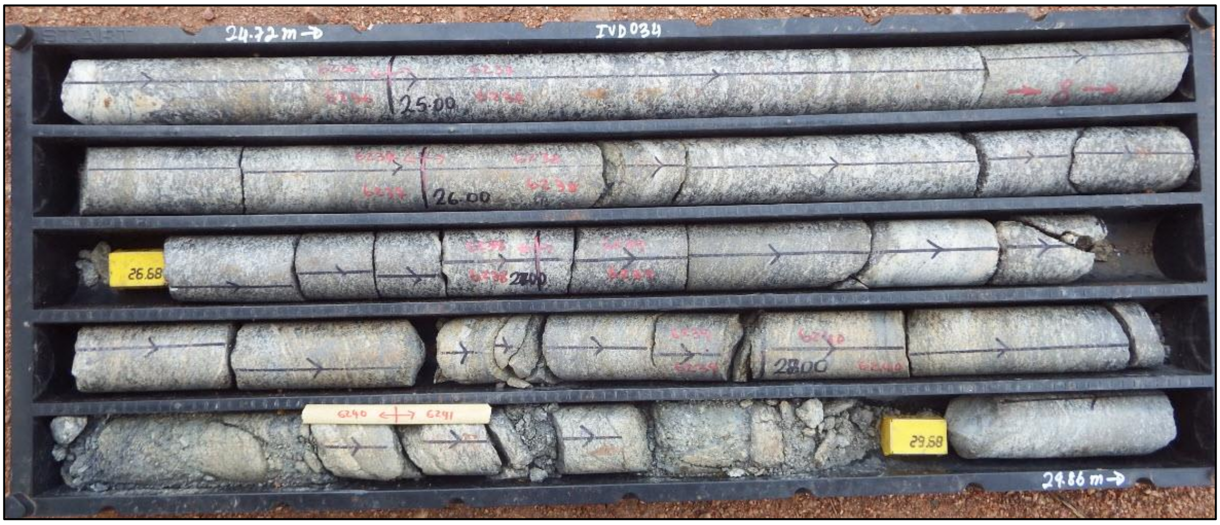

Figure 4: Photograph of IVD034 drill core, Composite 10 (see also Table 3) illustrating a typical representation of approximately 5m of mineralised graphitic gneiss, occurring between 24.7m – 29.9m, out of the total composite interval of 13.2m, between 23.2m – 36.6m

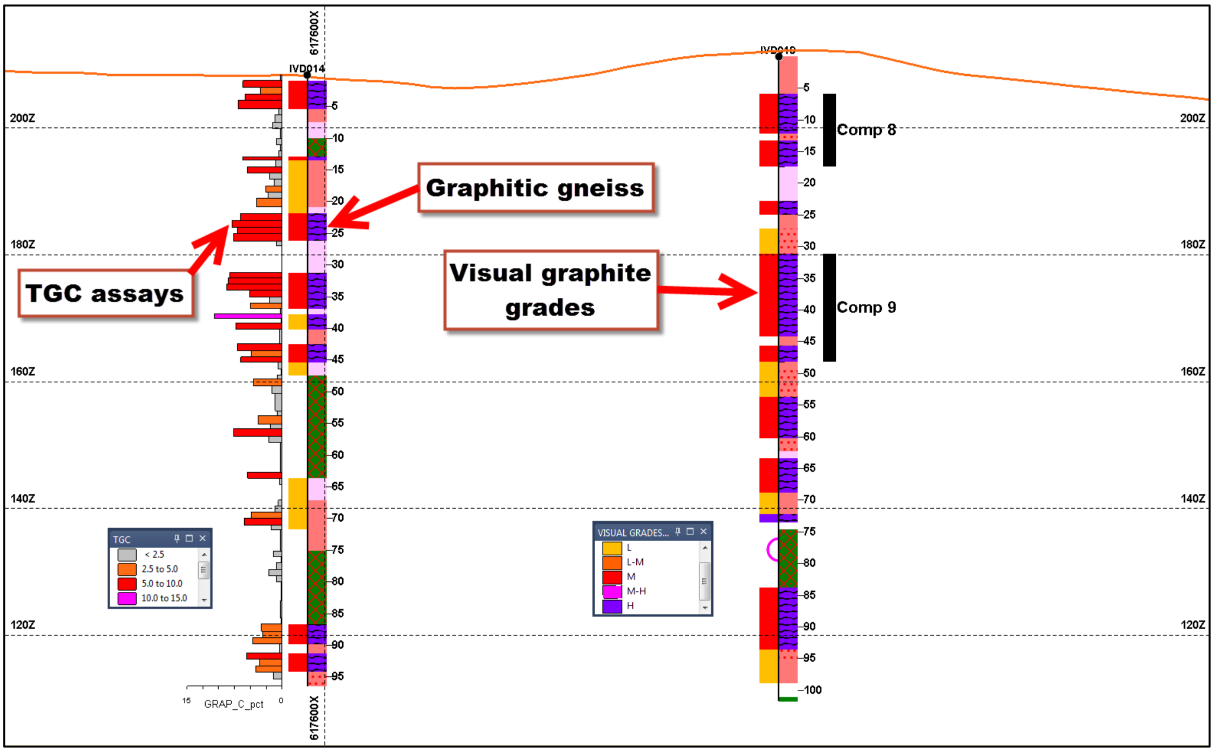

Figure 5: Strike section showing visually-logged graphite grades, geology and metallurgical sample locations for current metallurgical results (T12, IVD019 composites 8 and 9). Visual graphite grades were estimated to range from Low (less than approximately 5% graphite) to Medium (approximately 5 to 10% graphite) and High (more than approximately 10% graphite). Section looking NW. Holes IVD014 and IVD019 are about 75 m apart. No vertical exaggeration

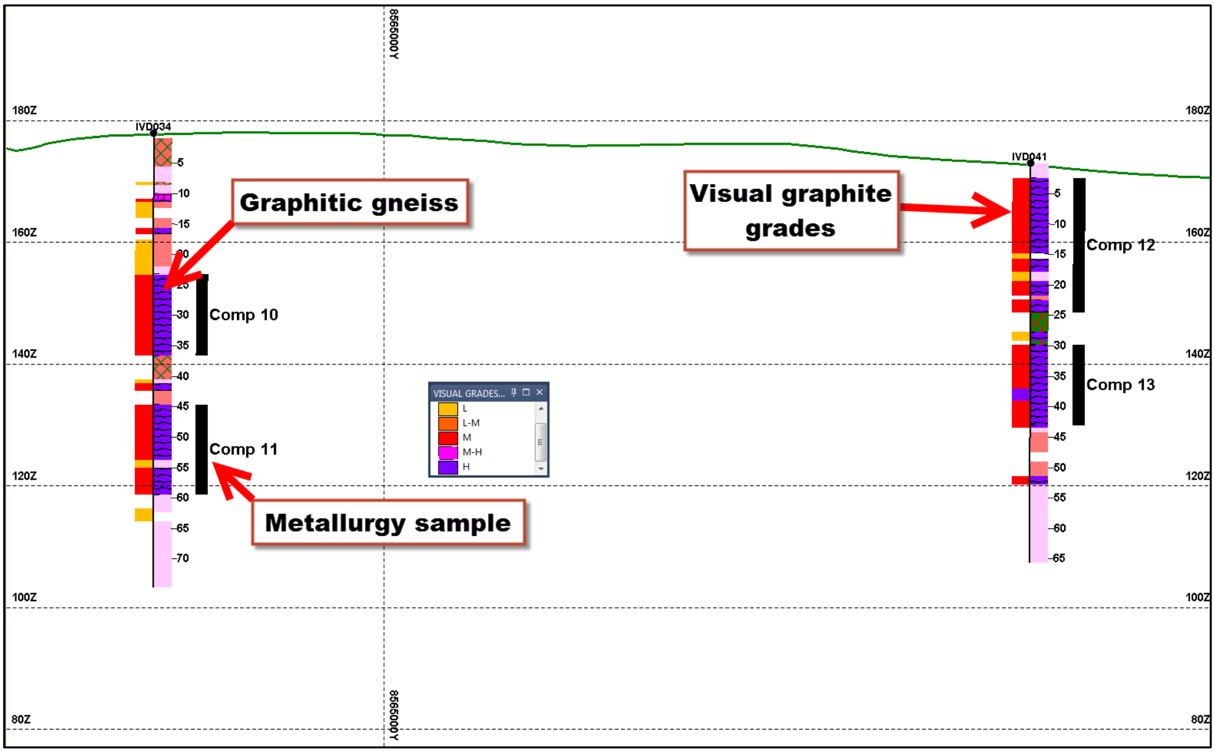

Figure 6: Strike section showing visually-logged graphite grades, geology and metallurgical sample locations for current metallurgical results (T16, IVD034 composites 10 and 11, and IVD041 composites 12 and 13). Section looking NNW. Holes IVD034 and IVD041 are about 150 m apart. No vertical exaggeration

Table 2: Metallurgical sample drill collar coordinates (WGS94 UTM Zone 37S). Measured by hand-held GPS and elevation derived from LIDAR topographic surface

Hole_ID	X	Y	Z	Final Depth	Type
IVD019	617,657	8,565,298	211	101.7	DD
IVD034	621,126	8,564,982	178	74.7	DD
IVD041	621,254	8,565,049	173	65.7	DD

Table 3: Metallurgical sample descriptions

Hole_ID	From (m)	To (m)	Width	Sample type	Weathering	Mineralisation domain	Sample ID	Mass
IVD019	5.9	17.4	11.5	1/4 PQ core	Oxide / transitional	T12_5	Comp 8	23.5
IVD019	31.1	48.2	17.0	1/4 HQ core	Fresh	T12_4	Comp 9	27
IVD034	23.2	36.6	13.4	1/4 HQ core	Fresh	T16_2	Comp 10	19
IVD034	44.6	59.5	14.8	1/4 HQ core	Fresh	T16_1	Comp 11	23
IVD041	2.4	24.5	22.1	1/4 HQ,1/4 PQ core	Oxide / transitional	T16_2	Comp 12	41.5
IVD041	29.8	43.0	13.2	1/4 HQ core	Fresh	T16_1	Comp 13	21.5

Table 4: Head sample assays. Major elements by XRF

Sample ID	TC	TGC	LOI 1000^{o}C	Total S	Al_2O_3	CaO	Fe_2O_3	K_2O	MgO	Na_2O	SiO_2	TiO_2
Comp 8	4.6	4.6	9.1	1.1	11.9	3.0	5.1	1.9	1.3	1.9	62.2	0.8
Comp 9	7.4	7.4	9.37	2.7	10.7	2.8	6.0	2.1	1.6	1.8	63.2	0.6
Comp 10	8.9	9	12.25	2.9	8.9	1.0	5.5	1.9	1.0	1.5	65.5	0.4
Comp 11	9.3	9.3	10.88	2.0	10.0	1.4	4.9	2.5	1.0	2.4	64.4	0.4
Comp 12	8.9	8.9	11.83	1.3	9.5	1.2	3.9	2.3	1.3	1.1	66.7	0.5
Comp 13	8.1	8	8.86	1.3	9.5	1.9	4.5	2.4	0.9	2.4	66.0	0.4

Table 5: Metallurgical test work results, distribution

Composite 8				
Screen	Mass	Mass	Cum Mass	LOI 1000
µm	g	%	%	%
500	1.8	2.3%	2.3%	97.47
300	16.2	20.7%	23.0%	98.64
180	22.6	28.8%	51.8%	98.76
150	9.4	12.0%	63.8%	98.62
106	8.6	11.0%	74.7%	98.56
75	6.3	8.0%	82.8%	98.34
-75	13.5	17.2%	100.0%	95.55
Calc Head	78.4	100.0%		98.08

Composite 9				
Screen	Mass	Mass	Cum Mass	LOI 1000
µm	g	%	%	%
500	5.8	4.2%	4.2%	98.77
300	33.4	24.0%	28.1%	98.89
180	38.9	27.9%	56.0%	98.88
150	15.5	11.1%	67.1%	98.91
106	13.5	9.7%	76.8%	98.78
75	10.0	7.2%	84.0%	98.73
-75	22.3	16.0%	100.0%	96.85
Calc Head	139.4	100.0%		98.54

Composite 10				
Screen	Mass	Mass	Cum Mass	LOI 1000
µm	g	%	%	%
500	6.8	4.0%	4.0%	98.42
300	31.0	18.4%	22.4%	98.51
180	42.1	25.0%	47.4%	98.36
150	20.6	12.2%	59.6%	98.24
106	19.6	11.6%	71.2%	98.01
75	15.4	9.1%	80.4%	97.84
-75	33.1	19.6%	100.0%	94.27
Calc Head	168.6	100.0%		97.48

Composite 11				
Screen	Mass	Mass	Cum Mass	LOI 1000
µm	g	%	%	%
500	15.7	9.6%	9.6%	98.45
300	44.4	27.1%	36.7%	98.72
180	40.0	24.4%	61.2%	99.07
150	15.8	9.7%	70.8%	98.79
106	13.6	8.3%	79.2%	98.81
75	11.2	6.8%	86.0%	98.63
-75	22.9	14.0%	100.0%	96.90
Calc Head	163.6	100.0%		98.53

Composite 12				
Screen	Mass	Mass	Cum Mass	LOI 1000
µm	g	%	%	%
500	6.8	4.2%	4.2%	98.73
300	33.8	21.0%	25.2%	99.08
180	41.8	26.0%	51.2%	98.47
150	18.5	11.5%	62.7%	98.30
106	17.4	10.8%	73.6%	98.45
75	13.0	8.1%	81.7%	98.09
-75	29.5	18.3%	100.0%	95.21
Calc Head	160.8	100.0%		97.96

Composite 13				
Screen	Mass	Mass	Cum Mass	LOI 1000
µm	g	%	%	%
500	26.4	17.2%	17.2%	98.92
300	43.7	28.5%	45.7%	99.37
180	31.3	20.4%	66.1%	99.53
150	11.9	7.8%	73.9%	99.48
106	10.4	6.8%	80.7%	99.42
75	8.6	5.6%	86.3%	99.29
-75	21.0	13.7%	100.0%	98.11
Calc Head	153.3	100.0%		99.16

Competent Persons' Statements

The information in this announcement that relates to exploration results for Ancuabe T12 and T16 is based on information compiled by Dr Andrew Scogings, who is a full-time employee of CSA Global Pty Ltd and consultant to Triton. Dr Scogings is a Member of both the Australian Institute of Geoscientists and Australasian Institute of Mining and Metallurgy and 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 in terms of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (JORC Code 2012) Dr Scogings consents to the inclusion of such information in this announcement in the form and context in which it appears.

The information in this release that relates to metallurgical test work is based on information compiled and / or reviewed by Mr Peter Adamini who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Adamini is a full-time employee of IMO Project Services. Mr Adamini consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

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The Company cannot and does not give any assurance that the results, performance, or achievements expressed or implied by the forward-looking statements contained in this announcement will actually occur and investors are cautioned not to place undue reliance on these forward-looking statements.

APPENDIX 1: JORC (2012) Table 1.

Section 1 Sampling Techniques and Data

Criteria	Commentary
Sampling techniques	• The metallurgical samples are from diamond drill (DD) core, using composited quarter cores that had been cut during the 2016 programme.
Drilling techniques	• DD holes are drilled with a PQ core size collar and HQ3 (61.1 mm diameter) to the end of hole. • Reverse Circulation (RC) holes were drilled with a 5.5 inch diameter hammer; however RC samples are not considered optimal for metallurgical tests as the percussion method is likely to destroy graphite flakes. This is an important factor for flake graphite, as being an Industrial Mineral it is required to be reported in terms of product specification, which includes flake size distribution.
Drill sample recovery	• Generally, drill core recovery was above 95% below the base of oxidation. Core recovery is measured and compared directly with drill depths to determine sample recoveries. • Diamond core was reconstructed into continuous runs on an angle iron cradle for orientation marking. Depths are checked against the depth given on the core blocks and rod counts are routinely carried out by the drillers.
Logging	• Geological logging was carried out on holes for the full mineral assemblage that can be identified in hand specimen, in addition to texture, structure and estimates of graphite flake content and size. • Geotechnical logging was carried out on all diamond drillholes for recovery, RQD and number of defects (per interval). Information on structure type, dip, dip direction, alpha angle, beta angle, texture, shape, roughness and fill material is stored in the structure table of the database. • The mineralogy, textures and structures were recorded by the geologist into a digital data file at the drill site, which were regularly submitted to the Perth office for compilation and validation. Logging includes lithology, mineralogy, mineralisation, weathering, colour and other features of the samples. DD core trays were photographed. Geological descriptions of the mineral volume abundances and assemblages are semi-quantitative. • All drillholes are logged in full.
Sub-sampling techniques and sample preparation	• Diamond core (PQ and HQ3) was cut into quarter core onsite using a diamond impregnated blade on a core saw. Samples were generally over one metre intervals and where possible defined by geological boundaries. • The drill sample sizes are considered to be appropriate to correctly represent mineralisation at T12 and T16 based on the style of mineralisation, the thickness and consistency of the intersections, the sampling methodology and graphite percent value ranges.
Quality of assay data and laboratory tests	• The analytical techniques used to analyse all individual drill core samples for Graphitic Carbon, Total Sulphur, and Total Carbon was by combustion infrared detection instrument. Detection limits for these analyses are considered appropriate for the reported assay grades. • The Total Carbon and LOI (1000ºC) head grade values reported for the composites by the IMO metallurgical laboratory were considered to be reasonably similar to visually estimated graphite contents from the geology logs. • The flake graphite concentrates for holes IVD001, IVD007, IVD010 and IVD011 were analysed for LOI and TC, as well as major and trace elements by Nagrom, Kelmscott, Western Australia. Concentrates from IVD019, IVD034 and IVD041 were analysed by Nagrom at the time of reporting for LOI and major and trace elements; TC analyses in progress. • Loss on Ignition ('LOI1000') is the percentage weight loss that occurs when a dry graphite sample is heated in air at 1000°C until constant weight in a LECO TGA701 TGA instrument to determine LOI1000 values. • Analyses for total carbon ('TC') were performed using a Labfit CS2000 carbon and sulphur analyser. The sample is weighed and placed in crucibles on the sample changer carousel, after which the sample is combusted at 1400°C in an oxygen stream. This process converts all carbon in the sample to carbon dioxide which is then measured in an infrared absorption cell.

Criteria	Commentary
	• X Ray Fluorescence ('XRF') analyses were done on pulverised sample that are fused with a flux to produce a glass disk. Disks are analysed using a Panalytical Axios XRF spectrometer. For samples with over 10% graphite, a dilution procedure is required to fuse the sample disk. Lower limits of quantification are 0.1% absolute for the reported elements. For samples with less than 10% graphite, XRF disks can be fused without dilution. Lower limits of quantification are 0.01% absolute for the reported elements. • The LOI, TC and XRF methods used by Nagrom are considered appropriate for analysing the purity of flake graphite concentrates. • The crushing, flotation and regrind process used by IMO is considered to be an appropriate industry standard method for liberation of graphite flakes.
Verification of sampling and assaying	• A CSA Global representative visually verified the geology of the reported DD holes at T12 and T16, during the drilling programme from October to December 2016.
Location of data points	• Collar locations for all 2015 holes were surveyed with a differential GPS. The 2016 collars were measured using hand-held GPS and fitted to a LIDAR surface to estimate elevation. The 2016 collars have been surveyed using differential GPS and the results are awaited. • The dip and azimuth of all DD holes was measured by the drill company using a Reflex singleshot downhole survey tool. Readings were taken at the completion of the hole at an interval spacing of 30m on the diamond holes, and at the collar and end of hole on the RC holes. Stated accuracy of the tool is +-10%. • Topographic surface for drill section is based on LIDAR data obtained in 2015.
Data spacing and distribution	• The nominal drillhole spacing for the 2015 drill programme for RC and DD at T12 was 50m on drill lines spaced 100 m apart. The drill lines have a bearing of 180 degrees (north-south).
Orientation of data in relation to geological structure	• Most holes were drilled vertically. Holes IVD011, IVD032 and IVD036 were drilled inclined at 60 degrees. • The interpreted dip of the geological units has been estimated to be 15° to 30° to the northwest, with strike roughly ENE. The geological units appear to pinch and swell and be affected by gentle folding and possibly some faults.
Sample security	• Chain of custody is managed by Triton. The metallurgical samples were shipped directly to Triton's Perth office and personally delivered to the IMO laboratory in Welshpool by a Triton employee.
Audits or reviews	• The logging and assay data was validated during the process of Mineral Resource estimation, as reported by Triton on 17th May 2016 (Triton, 2016a). CSA Global representatives visited site several times during 2016 and verified selected drill collar positions, geological outcrops and inspected drill core.

Section 2 Reporting of Exploration Results

Criteria	Commentary
Mineral tenement and land tenure status	• The Ancuabe T12 and T16 projects are within Exploration Licence 5336 within the Cabo Delgado Province of Mozambique. The licence is held by Grafex Limitada (Grafex), a Mozambican registered company. Triton Minerals entered into a Joint Venture (JV) agreement in December 2012 with Grafex to earn up to an 80% interest in Grafex's portfolio of graphite projects. In 2014 Triton increased their holding in the projects to 80% by taking a direct equity interest in Grafex. • All statutory approvals have been acquired to conduct exploration and Triton Minerals has established a good working relationship with local stakeholders.
Exploration done by other parties	• No previous systematic graphite exploration is known to have been undertaken prior to Triton's interest in the area.
Geology	• The Ancuabe tenements are underlain mainly by rocks of the Proterozic Meluco Complex to the north that comprise granitic to tonalitic gneiss and, to the south, by rocks of the Lalamo Complex that comprise mainly biotite gneiss. • The eastern portions of 6357L are underlain by Cretaceous sediments belonging to the Pemba Formation. • The Meluco Complex consists of orthogneisses mainly of granitic to granodioritic composition, with tonalitic rocks as a subordinate component. • The interpreted dip of the geological units is on average 20° towards 340° with the strike roughly 70°. The geological units at the T12 deposit appear to be affected by gentle folding and are limited in extent by faulting. Several characteristic geological units have been delineated in several drill holes giving a higher degree of confidence in the attitude and orientation of the graphite mineralisation.
Drill hole Information	• Drill data was previously reported for T12 when Triton announced a Mineral Resource estimate on 17th May 2016. Triton also announced assays for RC and DD samples from T12 and T16 during 2017.
Data aggregation methods	• The metallurgical samples were composited across intervals interpreted to be geological units. All waste intervals of less than two metres downhole width were included in the composites.
Relationship between mineralisation widths and intercept lengths	• The intercept widths are downhole (apparent) and do not represent true width. This is not considered to have any material effect on the outcomes of the metallurgical tests.
Diagrams	• Refer to map of T12 and T16 within the main body of this report.
Other substantive exploration data	• Selected core samples from all DD drillholes are measured for bulk densities. Geotechnical logging is routinely carried out on all diamond drillholes for recovery, RQD and number of defects (per interval). Information on structure type, dip, dip direction, alpha angle, texture, shape, roughness and fill material is stored in the structure table of the database.
Further work	• Drilling was conducted over T12 and T16 during October – December 2016. • The 2016 drill samples are in the process of being prepared for assay. • Additional ¼ core composites will be selected from the 2015 and 2016 drilling and will be shipped to Triton's Perth office. It is anticipated that these samples will be tested metallurgically to assess variability based on weathering and lithological domains.