

ASX MARKET ANNOUNCEMENT

Monday, 22 January 2018

ASX Code : SRK

Burke Graphite Project – Update

Strike Resources Limited (ASX:[SRK](#)) (**Strike**) is pleased to provide the following update regarding progress on its Burke Graphite Project in Queensland (**Project**).

As previously announced¹, the Burke Project is one of the highest grade graphite deposits in the world held by an Australian listed company and presents the opportunity for Strike to participate in the anticipated growth in demand for graphite and graphite related products.



Figure 1 - Rapid growth in the numbers of electric vehicles and in the renewable energy sector will drive significant increases in demand for graphite, a key ingredient in the lithium-ion batteries used for electric vehicles and grid storage devices.

Marketing/Business Development

Strike's Managing Director has recently returned from a visit to China, where he met with a number of major lithium-ion battery manufacturers and graphite companies.

The purpose of the visit was to begin developing strategic relationships with potential graphite concentrate offtake partners and other parties who are otherwise active in the Chinese graphite/Graphene industry.

Strike notes that China itself is the world's largest producer and consumer of graphite. However, average graphite grades in China are typically much lower than that of the Burke Project and increasing environmental concerns in China are causing companies to look outside of China for stable supplies of high quality graphite concentrate.

The Chinese parties approached expressed keen interest in Strike's Graphite/Graphene deposit and its proposed development activities and discussions with these and other parties will be ongoing with a view to eventually forming binding commercial off-take and development agreements.

1 Refer Strike's ASX announcement dated [13 November 2017: Maiden Mineral Resource Estimate Confirms Burke Project as One of the World's Highest Grade Natural Graphite Deposits](#)



ASX : SRK

www.strikeresources.com.au

STRIKE RESOURCES LIMITED

Level 2, 23 Ventnor Avenue, West Perth, Western Australia 6005

T | (08) 9214 9700

F | (08) 9214 9701

A.B.N. 94 088 488 724

E | info@strikeresources.com.au

In this regard, an experienced Beijing-based Consultant has been retained to facilitate and advance these discussions.

In addition, Strike is currently holding discussions with various Universities and Research Institutions in Australia with regard to partnering with Strike on researching the development of commercial applications for its graphite. Such activities will be focused on areas with the best near-term commercial potential and where, if possible, Australian Government funding support can also be secured.

Lithium-Ion Battery Testwork

As has been previously reported², in addition to the exceptionally high-grade nature of the deposit, the Burke Graphite Project comprises natural graphite that has been demonstrated to be able to be processed by standard flotation technology to international bench mark product categories.

In this regard, flotation tests conducted by Independent Metallurgical Operations Pty Ltd (**IMO**) have confirmed that a concentrate of purity **in excess of 95% and up to 99% TGC** can be produced using a standard flotation process.^{1, 2}

Strike is now preparing further samples of high purity graphite concentrate, to be used to determine its suitability for use in lithium-ion batteries.

The application of graphite as an anode material for lithium-ion batteries currently dominates the battery industry - there is typically far more graphite by weight than lithium, in a lithium-ion battery.

The use of lithium-ion batteries (and hence the demand for graphite) is expected to dramatically increase over the coming years as environmental and regulatory issues force vehicle manufacturers to move away from fossil fuel-powered engines. In addition, the massive growth of solar, wind and other renewable power sources requires a commensurate increase in the use of grid storage batteries in order to smooth the impact of irregular power supply from these sources.

The testing to be undertaken by Strike will include the preparation of battery electrodes from samples of Strike's graphite and the construction of coin battery cells using these electrodes.

The cells will be repeatedly cycled with electrical charge/discharge and the performance independently assessed and compared with batteries made with baseline natural graphite material.

It is expected that the results of this work will be available by May/June 2018.

Graphene Exfoliation

Strike is continuing to optimise the production of Graphene from its graphite, using a process known as Electrochemical Exfoliation (**ECE**).

As has previously been reported², Graphene Nano Platelets (**GNP**) have been successfully extracted directly from natural unprocessed drill-core taken from the Burke Graphite Project, using the ECE process.

The ECE process is relatively low cost and environmentally friendly compared to other processes, yet it can produce very high purity Graphene products. The ECE process is however not applicable to the vast majority of worldwide graphite deposits as it requires a Total Graphitic Carbon (**TGC**) of over 20% and accordingly the Burke Deposit has potentially significant processing advantages over other graphite deposits.

Graphite from Strike's exceptionally high-grade Burke Project is particularly well suited to the ECE process, because of its very high grade (~20% TGC) and high conductivity.

Strike has engaged IMO to conduct further test work to optimise the production of Graphene Nano Platelets (GNP) using the ECE process and this work is ongoing.

2 Refer Strike's ASX announcement dated [16 October 2017: Test-work confirms the potential suitability of Burke graphite for Lithium-ion battery usage and Graphene production](#)

Initial test results are very promising with the current testing evaluating a range of different chemical solutions, anode configurations and 'Graphene harvesting' techniques, to improve recovery rates and Graphene purity.

Figure 2 below shows a sample of graphite from the Burke Project recently undergoing the ECE process, in which a lump of natural unprocessed graphite is inserted in a chemical solution and an electric current is passed through the solution, using the graphite as an anode.

Layers of Graphene then "peel off" and can be collected through a relatively simple process.



Figure 2. Sample of Burke Graphite drill-core undergoing Electrochemical Exfoliation to produce Graphene.

About Graphene

Graphene is a recently discovered "wonder material" that offers tremendous opportunities in a range of industries, possessing exceptional qualities of strength, electrical and thermal conductivity and impermeability.

Graphene is technically defined as a single atom layer of crystalline carbon in a two dimensional 'honeycomb' type structure, but the term "Graphene" is often extended to include material made up of multiple stacked single layers of (single layer) Graphene. Material comprising up to 10 layers of Graphene is sometimes referred to as "Few Layer Graphene" (**FLG**), whereas material with between 10–150 layers of Graphene is known as "Graphene Nano Platelet" (GNP).

As for single layer Graphene, both FLG and GNP exhibit far superior properties of strength and conductivity when compared to natural graphite and are expected over time to be used in a wide variety of commercial applications.

About the Burke Graphite Project³

As previously announced,⁴ CSA Global Pty Ltd (**CSA Global**) has completed an inferred Mineral Resource Estimate (**MRE**) for the Burke Graphite Project⁵:

- **6.3 million tonnes @ 16.0% Total Graphitic Carbon (TGC)** for **1,000,000 tonnes** of contained graphite;
- Within the mineralisation envelope there is included higher grade material of **2.3 million tonnes @ 20.6% TGC** (with a TGC cut-off grade of 18%) for **464,000 tonnes** of contained graphite which will be investigated further.

These grades place the Burke deposit as one of the highest-grade deposits of graphite in the world held by an Australian listed company. Based upon the MRE for the Burke Project referred to above, the following Chart illustrates the TGC grades of published Total JORC Resource/Reserves of selected ASX Listed Graphite Projects relative to the Burke Project.

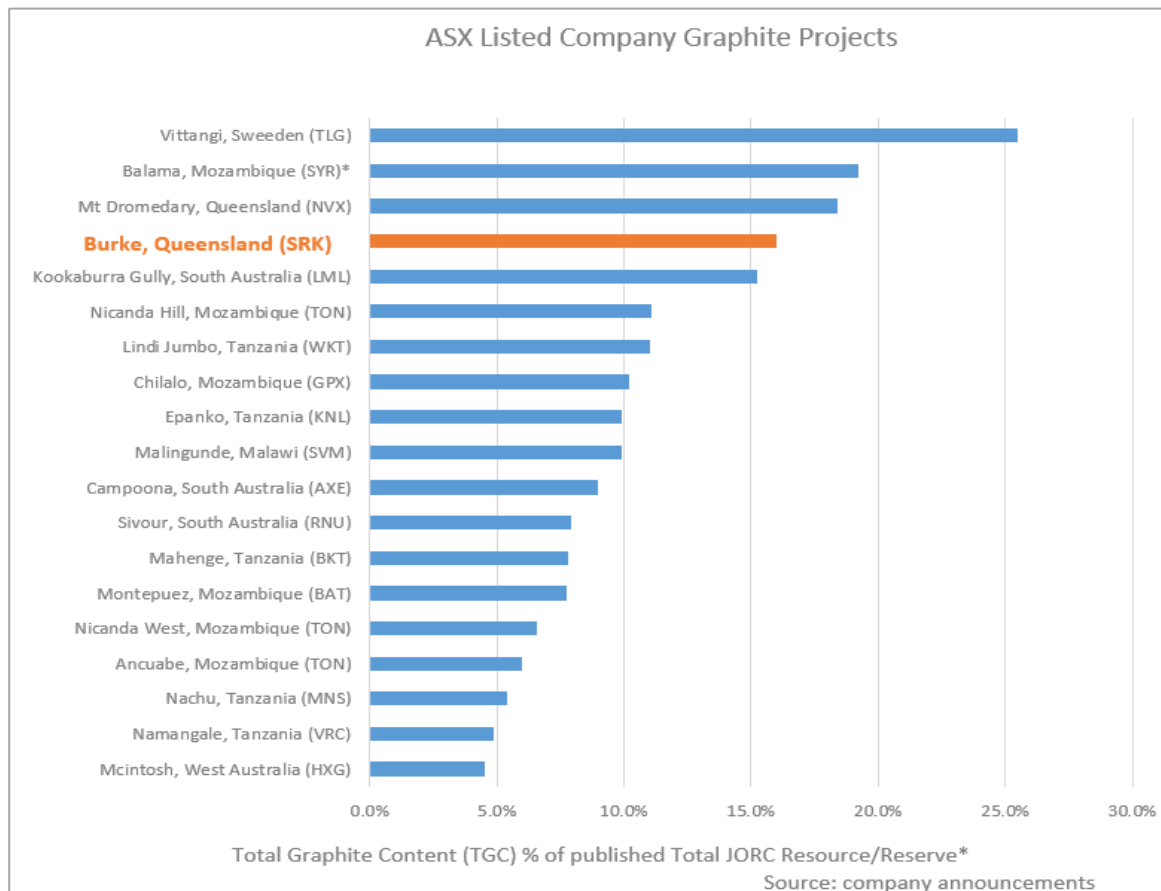


Figure 3 - Selected TGC% of Published Total JORC Resource/Reserve* vs. Maiden Burke Mineral Resource Estimates

Table 1: Burke Graphite Project Mineral Resource Estimate Results

Classification	Weathering State	Million Tonnes (Mt)	TGC (%)	Contained Graphite (Mt)	Density (t/m ³)
Inferred	Oxide	0.5	14.0	0.1	2.2
	Fresh	5.8	16.2	0.9	2.4
Inferred	Total Oxide + Fresh	6.3	16.0	1.0	2.4

Notes: The Mineral Resource was estimated within constraining wireframe solids defined above a nominal 5% TGC cut-off. The Mineral Resource is reported from all blocks within these wireframe solids. Differences may occur due to rounding.

3 Refer also Strike's ASX announcement dated [9 November 2016: Strike Secures Graphite Project in Queensland](#)

4 Refer Strike's ASX announcement dated [13 November 2017: Maiden Mineral Resource Estimate Confirms Burke Project as One of the World's Highest Grade Natural Graphite Deposits](#)

5 Refer Grade Tonnage Data in Table 2 of CSA Global's Burke Graphite Project MRE Technical Summary dated 9 November 2017 attached as Annexure A of Strike's ASX announcement dated [13 November 2017: Maiden Mineral Resource Estimate Confirms Burke Project as One of the World's Highest Grade Natural Graphite Deposits](#)

Strike's Burke Graphite Project (Strike 60%) is located in the Cloncurry region in North Central Queensland, where there is access to well-developed transport infrastructure to an airport at Mt Isa (~122km) and a port in Townsville (~783km) (refer Figure 4).

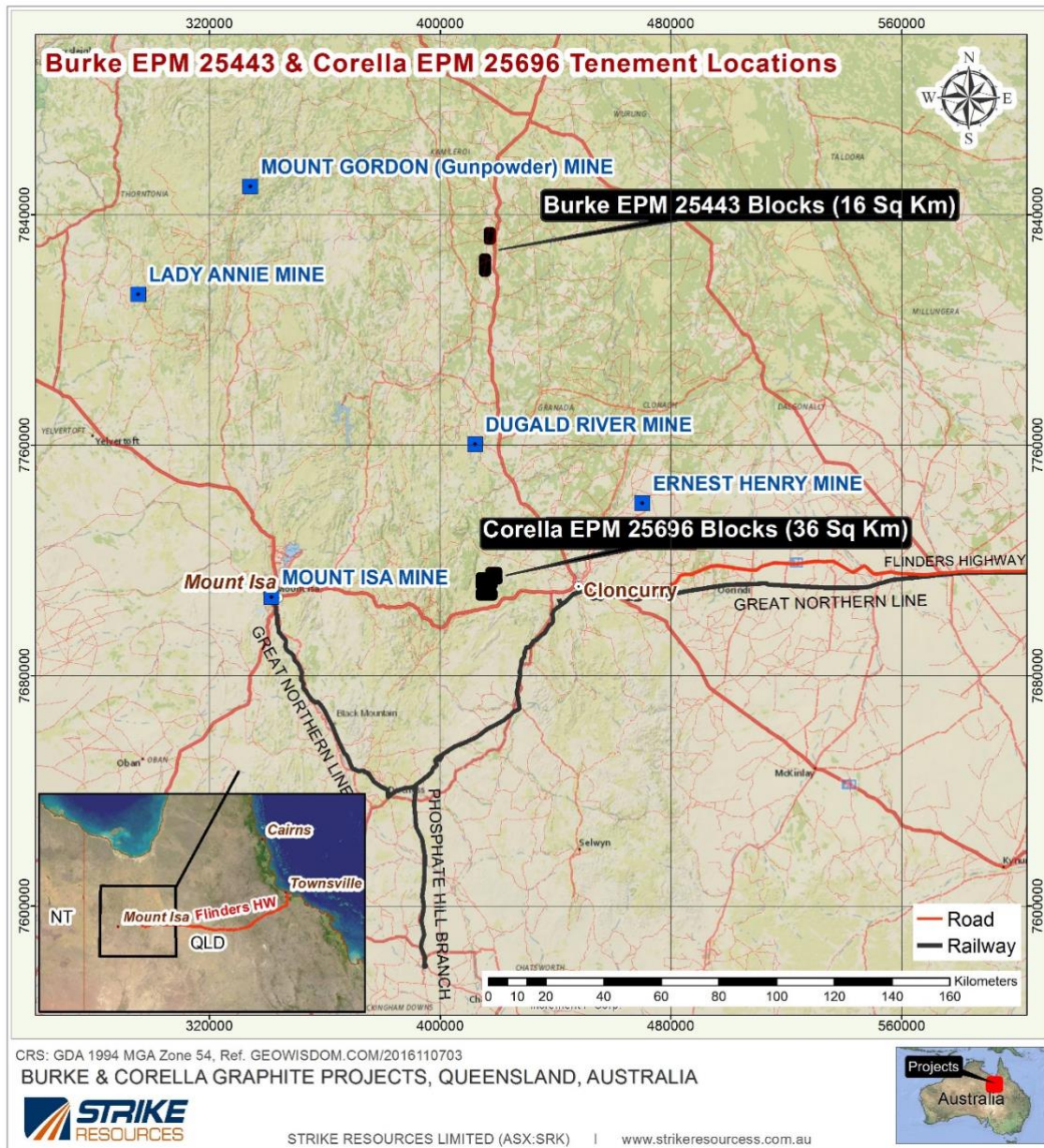


Figure 4 - Burke Graphite Project Tenement Location in North Central Queensland

The Burke graphite occurrence was identified by previous exploration dating back to the 1970's and is hosted by a mapped graphitic schist⁶ as a sub unit of the Corella Formation within the Mary Kathleen Group and is of Proterozoic age. The graphitic schists within Burke tenement EPM⁷ 25443 are intruded by the Black Mountain (1685-1640Ma) gabbro and sills with subsequent metamorphism to amphibolite grade during the Isan Orogeny (1600-1580Ma). The Corella tenement EPM 25696 (~36km²) also covers a sequence of mapped graphitic schists within the Corella Formation which have been intruded by gabbro dykes and sills and with subsequent metamorphism to amphibolite grade during the Isan Orogeny.

The key Burke tenement EPM 25443 (~16km²) comprises two blocks with the northern block (6km²) being immediately adjacent to the Mt Dromedary Graphite Project (refer Figure 5) held by Novonix (ASX:[NVX](#)).

6 Reference: Queensland Department of Natural Resources and Mines

7 EPM means exploration permit for minerals

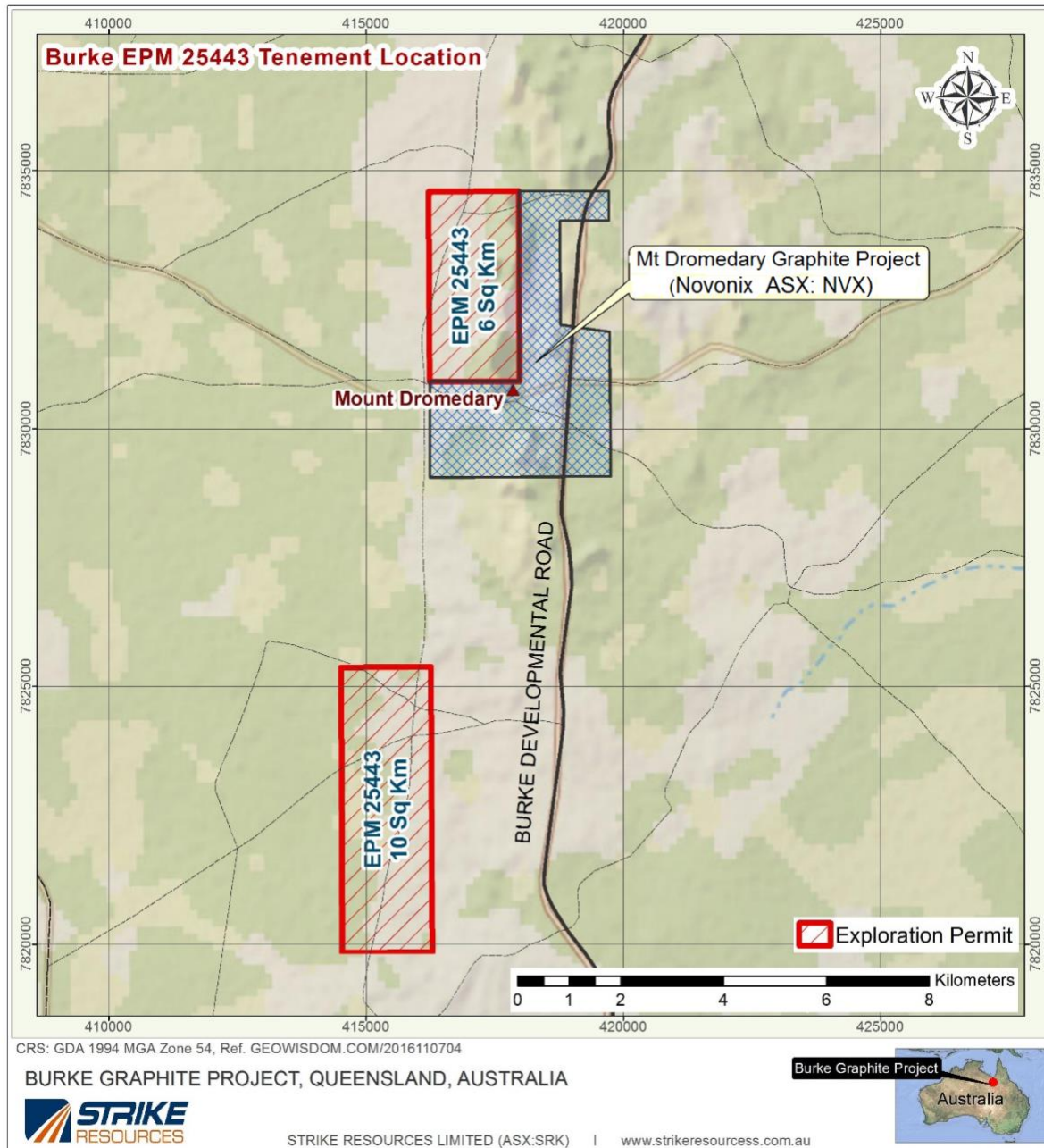


Figure 5 – Burke Tenement EPM 25443 Location

FOR FURTHER INFORMATION

William Johnson
Managing Director
T | (08) 9214 9700
E | wjohnson@strikeresources.com.au

Victor Ho
Director and Company Secretary
T | (08) 9214 9700
E | cosec@strikeresources.com.au

ABOUT STRIKE RESOURCES LIMITED (ASX: [SRK](#))

[Strike Resources](#) is an ASX listed resource company and owns the high grade [Apurimac Magnetite Iron Ore Project](#) and [Cusco Magnetite Iron Ore Project](#) in Peru and is currently developing its [Burke Graphite Project](#) in Queensland and [lithium](#) exploration tenements in Western Australia.

JORC CODE (2012) COMPETENT PERSONS' STATEMENTS

The information in this announcement that relates to Exploration Results is extracted from the following ASX market announcements made by the Strike Resources Limited on:

- [21 April 2017: Jumbo Flake Graphite Confirmed at Burke Graphite Project, Queensland](#)
- [13 June 2017: Extended Intersections of High Grade Graphite Encountered at Burke Graphite Project](#)
- [21 June 2017: Further High Grade Intersection Encountered at Burke Graphite Project](#)
- [16 October 2017: Test-work confirms the potential suitability of Burke graphite for Lithium-ion battery usage and Graphene production](#)
- [13 November 2017: Maiden Mineral Resource Estimate Confirms Burke Project as One of the World's Highest Grade Natural Graphite Deposits](#)

The information in the original announcements that relates to Exploration Results is based on, and fairly represents, information and supporting documentation prepared by Mr Peter Smith, BSc (Geophysics) (Sydney) AIG ASEG, who is a Member of The Australasian Institute of Geoscientists (AIG). Mr Smith is a consultant to Strike Resources Limited. Mr Smith has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the [2012 Edition](#) of the "Australasian Code for Reporting of Mineral Resources and Ore Reserves" (JORC Code). 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.

The information in this announcement that relates to metallurgical test work is extracted from the following ASX market announcements made by the Strike Resources Limited on:

- [16 October 2017: Test-work confirms the potential suitability of Burke graphite for Lithium-ion battery usage and Graphene production](#)
- [13 November 2017: Maiden Mineral Resource Estimate Confirms Burke Project as One of the World's Highest Grade Natural Graphite Deposits](#)

The information in the original announcements that relates to metallurgical test work is based on, and fairly represents, information and supporting documentation prepared by Mr Peter Adamini, BSc (Mineral Science and Chemistry), who is a Member of The Australasian Institute of Mining and Metallurgy (AusIMM). Mr Adamini is a full-time employee of Independent Metallurgical Operations Pty Ltd, who has been engaged by Strike Resources Limited to provide metallurgical consulting services. 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.

The information in this announcement that relates to Mineral Resources is extracted from the following ASX market announcement made by the Strike Resources Limited on:

- [13 November 2017: Maiden Mineral Resource Estimate Confirms Burke Project as One of the World's Highest Grade Natural Graphite Deposits](#)

The information in the original announcement (including the CSA Global MRE Technical Summary in Annexure A) that relates to in situ Mineral Resources for the Burke Graphite Project is based on information compiled by Mr Grant Louw under the direction and supervision of Dr Andrew Scogings, who are both full-time employees of CSA Global Pty Ltd. Dr Scogings takes overall responsibility for this information. Dr Scogings is a Member of the Australian Institute of Geoscientists (AIG) and the Australasian Institute of Mining and Metallurgy (AusIMM) and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Mineral Resources and Ore Reserves" (JORC Code). The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement. 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 announcement.

The Strike ASX market announcements referred to above may be viewed and downloaded from the Company's website: www.strikeresources.com.au or the ASX website: www.asx.com.au under ASX code "SRK".

FORWARD LOOKING STATEMENTS

This announcement contains "forward-looking statements" and "forward-looking information", including statements and forecasts which include without limitation, expectations regarding future performance, costs, production levels or rates, mineral reserves and resources, the financial position of Strike, industry growth and other trend projections. Often, but not always, forward-looking information can be identified by the use of words such as "plans", "expects", "is expected", "is expecting", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates", or "believes", or variations (including negative variations) of such words and phrases, or state that certain actions, events or results "may", "could", "would", "might", or "will" be taken, occur or be achieved. Such information is based on assumptions and judgements of management regarding future events and results. The purpose of forward-looking information is to provide the audience with information about management's expectations and plans. Readers are cautioned that forward-looking information involves known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of Strike and/or its subsidiaries to be materially different from any future results, performance or achievements expressed or implied by the forward-looking information. Such factors include, among others, changes in market conditions, future prices of minerals/commodities, the actual results of current production, development and/or exploration activities, changes in project parameters as plans continue to be refined, variations in grade or recovery rates, plant and/or equipment failure and the possibility of cost overruns.