

1<sup>st</sup> March 2019

## **Drilling Commences at Springdale Graphite Project Testing Northern Zone and Selected New Priority Targets**

### **Highlights:**

- RC drilling program has commenced
- Drilling to include testing strike extensions to the Northern Zone graphite resource
- Previous drill highlights from the Northern Graphite Zone include:
  - HR0060 20m @ 19.3% TGC from 30m including **13m @ 25.8% TGC**
  - HR0083 21m @ 14.57% TGC from 37m including **12m @ 21.75% TGC**
  - HR0101 **31m @ 10.7% TGC** from 14m including 8m @ 24.5% TGC
  - HR0114 **27m @ 11.9% TGC** from 27m including **14m @ 17.8% TGC**
  - HR0126 **46m @ 12.2% TGC** from 38m including 7m @ 17.1% TGC and **17m @ 19.2% TGC**
  - HR0127 25m @ 14% TGC from 30m including **12m @ 26.6% TGC**
- The Northern Graphite Zone ticks all the boxes of a great discovery including, high grade, shallow dip, near surface, close to infrastructure and low sovereign risk
- Drilling planned to test **NEW PRIORITY TARGETS**
- 26 kilometres of stratigraphy deemed to be prospective for graphite mineralisation - currently less than 20% of this has been drill tested
- Comet has been awarded EIS co-funding grants to assist with drilling costs
- Graphene and Battery metallurgical testwork continues

## SPRINGDALE GRAPHITE PROJECT WESTERN AUSTRALIA (100% CRL)

Comet Resources Limited (ASX: **CRL**) ("**Comet**" or the "**Company**"), is pleased to announce that a reverse circulation (**RC**) drilling program has commenced at the Springdale Graphite Project. This program will test strike extensions to the Northern Zone graphite resource and test a selected number of high priority new targets.

Comet released its **Maiden Springdale Graphite Resource of 15.6Mt @ 6% Graphite** (Total Graphitic Carbon (**TGC**)) including **2.6Mt @ 17.5% of High-Grade Graphite** (TGC) late last year (ASX announcement 6<sup>th</sup> December 2018).

The Northern Zone of that resource is located within an interpreted fold closure identified from Comet's aeromagnetic survey (ASX announcement 10<sup>th</sup> November 2017). The 2018 drilling programs located broad high-grade graphite mineralisation within this zone. **The shallow dip (more tonnes per vertical metre containing high grade graphite) and high grade makes the Northern Zone a great new discovery.** Extensions along strike are being tested with this current program.

A selection of new high priority targets will be tested from Comet's Aeromagnetic interpretation that covers less than 10% of Comet's 220km<sup>2</sup> land holding. The interpretation delineated approximately 26km of prospective stratigraphy for graphite mineralisation. Less than 20% of that has been drill-tested to date. Historically drill testing of identified prospective stratigraphy has been successful in discovering graphite mineralisation.

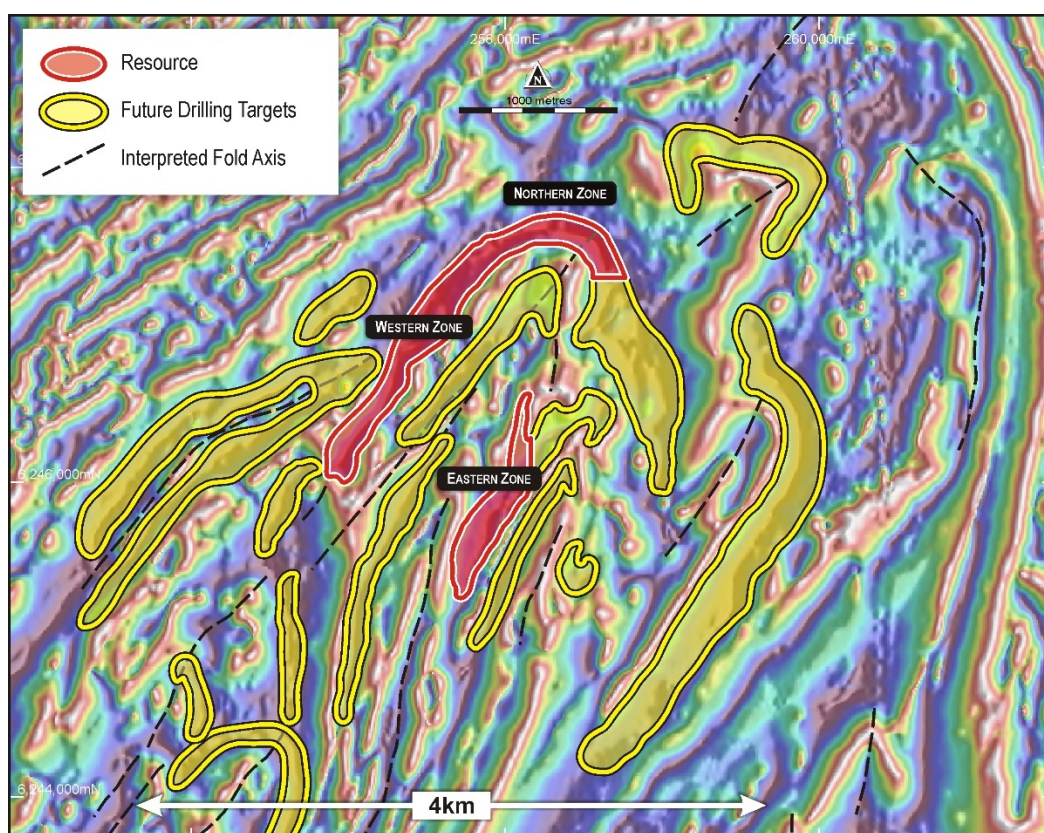


Figure 1: Map showing resource and targets prospective for graphite mineralisation

Comet has received funding approval from the Western Australian Government's Exploration Incentive Scheme (EIS) for planned drilling and would like to acknowledge the ongoing support provided by the State Government. The EIS co-funded drilling program preferentially funds high quality, technical and economically based projects that promote new exploration concepts and are assessed by a panel on the basis of geoscientific and exploration targeting merit

In addition to the physical exploration works, metallurgical testwork on samples from Springdale continues. Understanding the amenability of the graphite at Springdale to convert to graphene and/or to be used in battery anodes and other technologies is an integral part of understanding and realising its commercial value.

**-ENDS-**

For further information please contact:

**Mr Tony Cooper**

Comet Resources Limited

Tel (08) 9466 7770

Email [tony.cooper@cometres.com.au](mailto:tony.cooper@cometres.com.au)

Web [www.cometres.com.au](http://www.cometres.com.au)

#### **About Comet**

Comet listed on the Australian Stock Exchange in 1994. The Company discovered and studied the Ravensthorpe Nickel Project. In 2001 Comet successfully sold its final equity to BHP Billiton and returned to Comet shareholders \$32 million. Comet has several exciting projects that it is currently exploring and advancing. Comet has cash assets of approximately \$0.8 million and has approximately 230 million shares on issue.

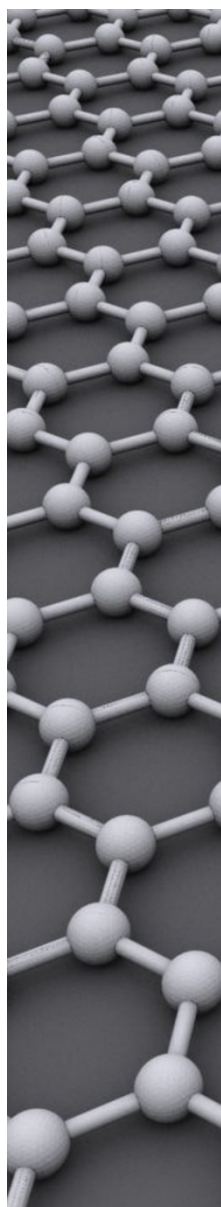
#### **Forward-Looking Statements**

This document includes forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning Comet Resources Limited's planned exploration programs, corporate activities and any, and all, statements that are not historical facts. When used in this document, words such as "could," "plan," "estimate," "expect," "intend," "may", "potential," "should" and similar expressions are forward-looking statements. Comet Resources Limited believes that its forward-looking statements are reasonable; however, forward looking statements involve risks and uncertainties and no assurance can be given that actual future results will be consistent with these forward-looking statements. All figures presented in this document are unaudited and this document does not contain any forecasts of profitability or loss

#### **Competent Persons Statement**

*The information in the report to which this statement is attached relates to Exploration Results, Mineral Resources or Ore Reserves compiled by Mr. A Cooper, who is a Consultant and director to Comet is also a Member of The Australian Institute of Mining and Metallurgy, with over 30 years' experience in the mining industry. Mr. Cooper 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 "Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Cooper consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*

## ABOUT GRAPHENE



### What is Graphene

Graphene is a natural material. Researchers theorised the existence of graphene in the 1940s; it was only in 2004 that a graphene sheet was isolated. In 2010 this achievement was awarded a Nobel Prize.

Graphite is stacked graphene sheets (a 1mm thick piece of graphite would be made from approximately 3 million sheets of graphene). Consider graphene as being a 2 dimensional (2D) material or sheet and graphite as 3 dimensional material, the challenge is to separate the 2D sheets from the 3 dimensional material.

### Why Graphene

- It is the thinnest and toughest 2D material. 200 times stronger than steel.
- Graphene is flexible and transparent, has the largest surface area of all materials, and is the most stretchable crystal. The material is also extremely impermeable, even helium atoms cannot go through it. Graphene is currently the best electricity conductor known to man and is the perfect thermal conductor.
- Graphene is light - it weighs just 0.77 milligrams per square meter. Because it is a single 2D sheet, it has the highest surface area of all materials.

### Graphene Production

There are two approaches to produce graphene and graphene-related materials. The first one is top-down, which means you begin with graphite and produce graphene. The second one is bottom-up: start with carbon in some form and synthesize graphene sheets or flakes. These production methods to date have been expensive.

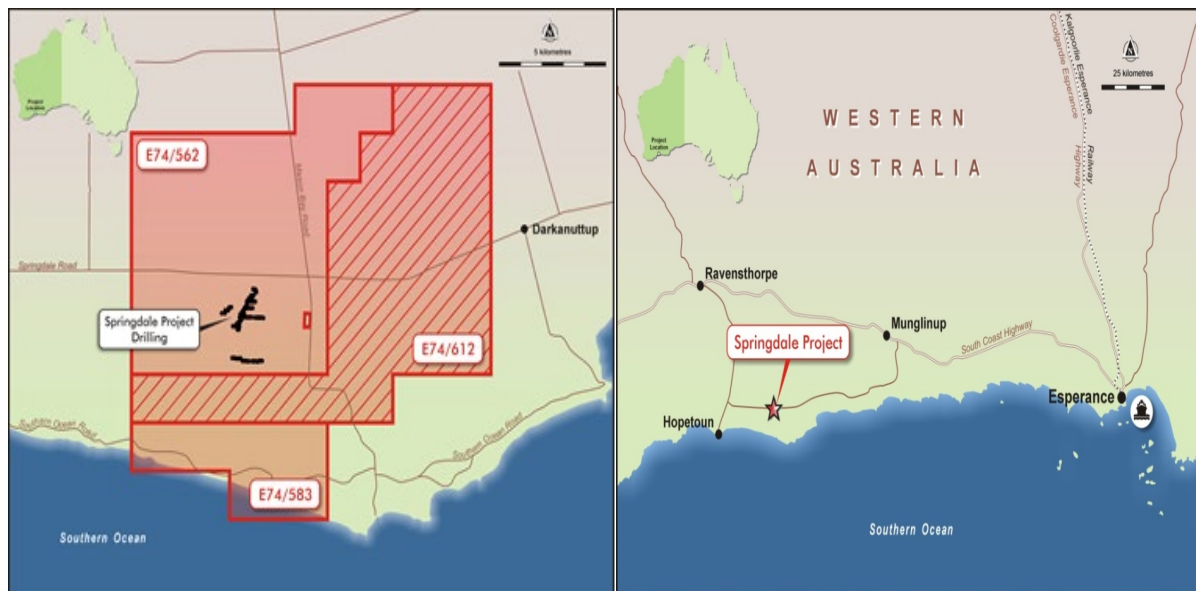
### Graphene Uses

Graphene's properties make it a wonder material that can be incorporated into a huge number of applications such as Coatings and paints, Composite materials, Conductive inks, Displays, Graphene thermal applications Energy containers, Membranes, 3D Printings, Sensors, Electronics, Energy generation, Photonics / Optics, Medicine and biology, Lubricants, Spintronics to list a few.



## SPRINGDALE GRAPHITE PROJECT

Comet's Springdale Graphite Project is located approximately 30 km east of Hopetoun, Western Australia. The tenements lie within the deformed southern margin of the Yilgarn Craton and constitute part of the Albany-Fraser Orogen. The tenements cover freehold land with sealed road access within 20km and are located approximately 150km from the port of Esperance. Comet owns 100% of the three tenement's (E74/562, E74/583 and E74/612) that make up the Springdale Graphite Project. The total land holding at Springdale is approximately 220 square kilometres.



**Project Location: Tenements and Area Drilled to date**

Comet completed a successful first pass aircore drilling program in February 2016. This program confirmed that graphite was present in a prospective zone/horizon (Western Zone). Comet has now drilled 93 RC holes for a total of 5320m, 113 aircore holes for 2,901 metres and 20 diamond holes for 1,193 metres.

Comet released a maiden graphite resource at the Springdale Graphite Project late 2018 (ASX release 6<sup>th</sup> December 2018).

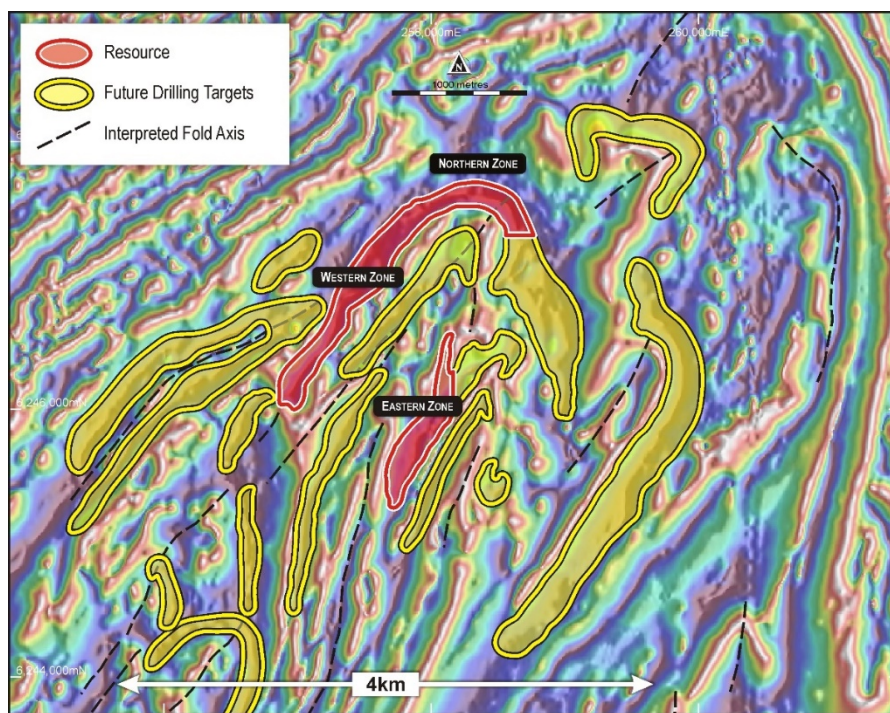
**Table 1 – Springdale Graphite Project Resource Estimate reported at a  $\geq 2\%$  TGC cut-off grade**

DOMAIN	TONNES (MT)	DENSITY (t/m <sup>3</sup> )	Graphite (TGC%)	CLASSIFICATION
HIGH GRADE	2.6	2.1	17.5	INFERRED
TOTAL RESOURCE	15.6	2.2	6.0	INFERRED

**Note – Inferred Resources have only been reported from within mineralised wireframe domains defined by a nominal 2% TGC cut-off for low-grade and a nominal 15% TGC cut-off for high-grade to a nominal depth of 100m.**

## RESOURCE POTENTIAL

Comet conducted a 220 sq. km detailed aeromagnetic survey over the Springdale Graphite Project (ASX release 10<sup>th</sup> November 2017). Detailed Interpretation of less than 10% of Comet's total land holding delineated **26 kilometres of stratigraphy deemed to be prospective for graphite mineralisation; currently less than 20% of this has been drill-tested**. Drill testing of identified prospective stratigraphy has been successful in discovering graphite mineralisation.



**Area of detailed interpretation**

Comet discovered in April 2017 that graphene can be produced from Springdale graphite by electrical exfoliation. It is very rare for a graphite deposit to be able to produce graphene using the exfoliation method on solid untreated rock.

The shallow, high-grade nature of the mineralisation together with positive indications from metallurgical test work completed for both graphene extraction through electrical exfoliation and battery applications supports the Company's opinion that the Springdale Graphite Project deposit has the potential for eventual economic extraction.