26 April 2017

MARCH 2017 QUARTERLY REPORT

Figure 1: Graphene being exfoliated from Springdale Core HD004

HIGHLIGHTS

- **Metallurgy test work has recovered high quality graphene (several layers thick) by exfoliation, a very rare property in graphite deposits worldwide.**
- **Comet's high grade beneficiated graphite concentrate to be tested for battery feedstock.**
- **Multiple zones of graphite mineralization have been identified from surface and extend over at least 4km of strike.**
- **Graphite mineralisation is open along strike and at depth in all zones.**
- **High grade graphite mineralisation intersected in all zones.**
- **Located in Western Australia with access to existing roads, grid power and port facilities.**
- **Exploration drilling has confirmed excellent grade and widths including HD001 15.8 metres at 10% TGC and HD003 17.5 metres at 11 % TGC.**
- **Follow up diamond and aircore drilling planned to commence during the current quarter.**

BACKGROUND

Comet's Springdale 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-Frazer Orogen, which hosts the historic Halberts Graphite mine near Munglinup (50km away). The Munglinup area has produced the bulk of Western Australia's recorded graphite production. The tenement is over freehold land with sealed road access within 20km and is located approximately 150km from the port of Esperance.

Comet has three tenement's E74/562, E74/583 and ELA74/612 at the Springdale Graphite project. The total land holding at Springdale is approximately 220 square kilometres.

Comet completed a successful first pass aircore drilling program in February 2016. This program confirmed that graphite was present in a prospective zone/horizon. Following a second round program in September 2016, Comet has now drilled 113 aircore holes for 2,901 metres and 4 diamond holes for 282 metres at it 100% owned Springdale Graphite Project.

Comet has recently discovered that Graphene can be produced from Springdale ore by electrical exfoliation.

Comet is continuing to conduct metallurgical tests on diamond core from the Springdale Graphite Project and plans to conduct further drilling during Q2 2017.

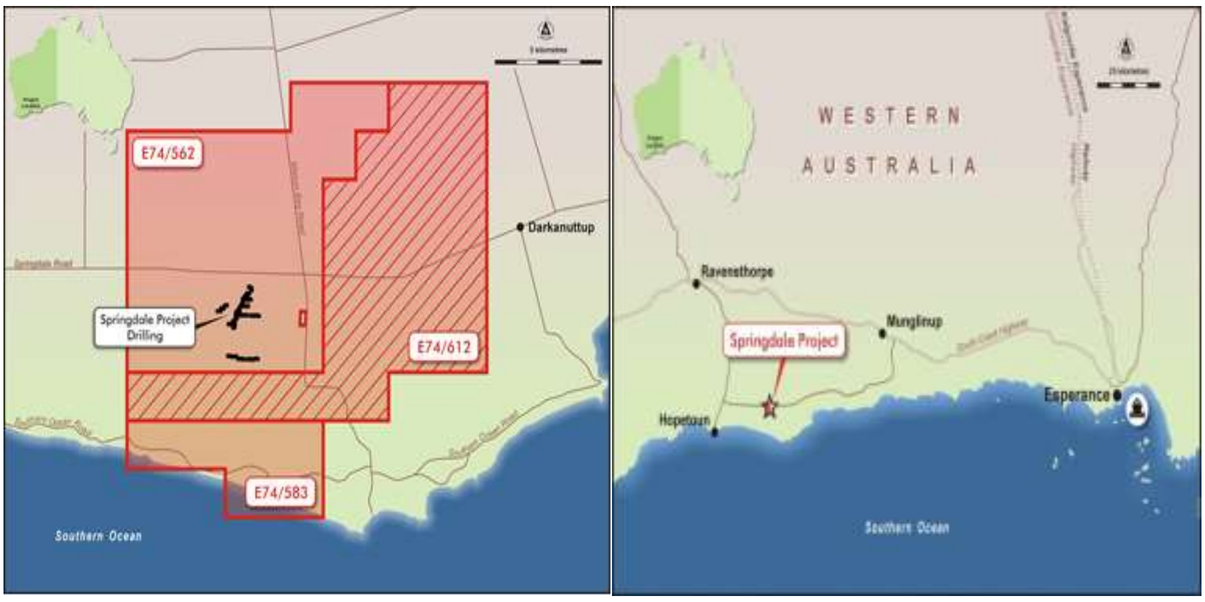

Figure 2: Plan Showing Location, Tenements and Area Drilled

METALLURGICAL TESTWORK

Figure 3: Exfoliation of HD002 Core

Metallurgical testwork has identified graphene (several layers thick) from Springdale ore. The work was managed by IMO Project Service Pty Ltd (**IMO**), Comet's metallurgical consultant. The core was subjected to a technique called exfoliation. This process utilised Springdale graphitic rock as it

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was extracted from the ground (in this case diamond core, a 10 cm core sample from HD002 (45.6m to 45.7m)). The exfoliation method is used to peel graphene flakes from the graphite in the rock. The few layered graphene particles are then separated from the product produced by exfoliation using a series of simple process steps.

A sample of the separated graphene was sent to Curtin University, located in Perth Western Australia for analysis. A few drops of the suspended particles were transferred onto a glass coverslip. The sample was spin coated to achieve an even distribution on the glass surface. Atomic-Force Microscopy (AFM) and confocal Raman analysis were used to identify the presence of few layered graphene using a WITec Alpha 300SAR with 2ω NdYAG laser (λ = 532nm) instrument. This method is used to identify the number of layers of Graphene within a particle and to confirm the particle being analysed conforms to the structure of few layered graphene. A picture of the identified graphene particle along with a particle thickness scale is shown in Figure 2.

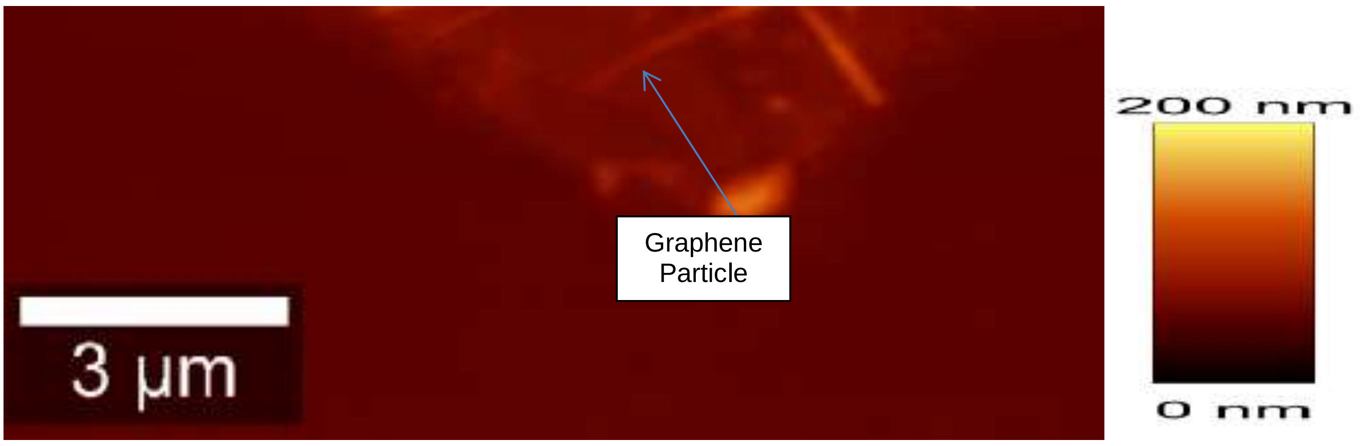

Figure 4: AFM Captured Few Layered Graphene Image and Thickness Chart

A Raman plot of the few layered graphene particle is shown in Figure 3. The Comet particle correlates with the reference sample indicating the high quality of Comets graphene particle.

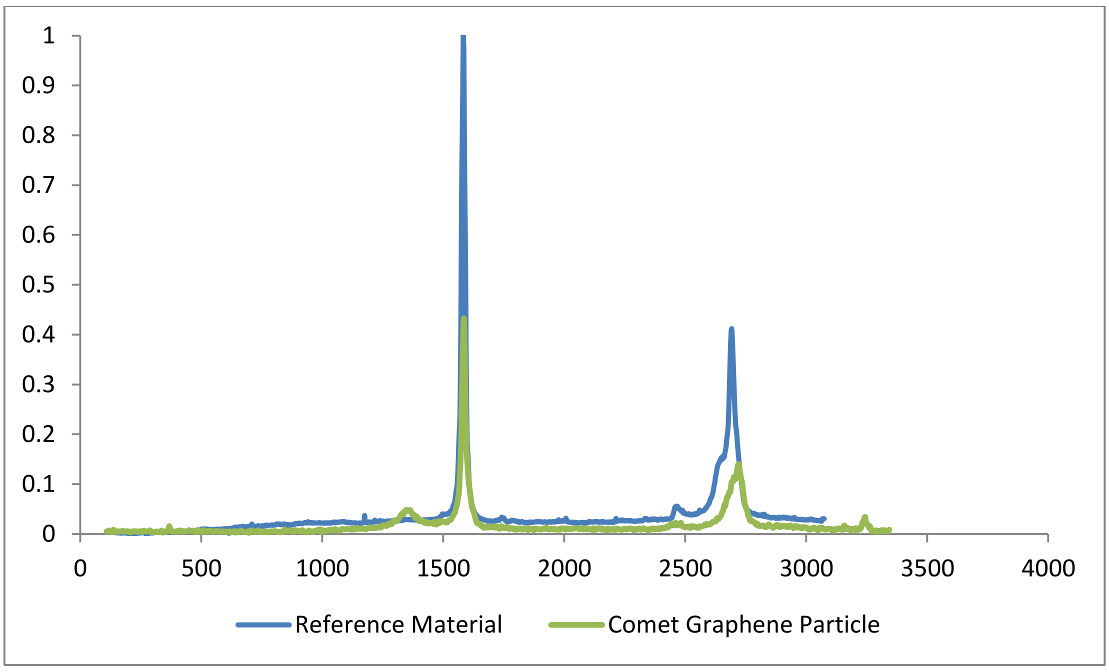

Figure 5: Comet Few Layered Graphene Raman Plot

It is very rare for a graphite deposit to be able to produce graphene using the exfoliation method. Graphene production is normally expensive to scale up, however the exfoliation method is believed to be a lower cost and scalable process.

Further work has been planned testing more core samples, work out qualitative processes and to also explore other process routes in forming and extracting graphene from Springdale graphite. Drilling more diamond core at Springdale is planned to commence soon.

WHAT IS GRAPHENE?

Graphene is a natural material. Researchers discovered 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 and graphite a 3 dimensional material, the challenge is to separate the sheet. Graphene is the most expensive material in the world and some commentator's call 2004 the start of the graphene Era.

WHY GRAPHENE

- It is the thinnest and toughest 2D material. 200 times stronger then 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 main 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 are expensive.

The other method is exfoliation. This is the method that comet has been successful in using to treat Springdale ore. It is not an expensive process but it is extremely rare to be able to produce graphene from graphite ore using this method. This makes the Springdale project very unique.

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. Over 13,000 graphene related patents have been filed and this number grows weekly.

BATTERY GRAPHITE

Comet has entered into a scope of work with IMO to determining the amenability of Comet's high grade beneficiated graphite concentrate as a lithium ion battery feedstock as part of Comets plan to asses potential commercial products from Springdale ore.

Figure 6: Comets Concentrated Graphite

HIGHLIGHTS OF THE GRAPHITE BATTERY MARKET

- **There is 11 times more graphite than Lithium in a typical Li-ion battery.**
- **High growth in the Li-ion Battery Industry**
- **High growth in the Electric Vehicle Market**

IMO will use approximately 0.5 kg from Comet's batch testwork product. IMO will then spheroidise this concentrate using a Planetary Mill.

The spheroidised concentrate will be split and one sample will undergo a two stage acid leaching process. Both the spheroidised only and leached spheroidised material will be used to form a lithium ion battery anode. Under an inert environment the graphite anode will be pressed with a lithium metal cathode and lithium solution working electrode into a coin cell. This coin cell will then be subjected to a known electrical charge to determine:

- First Charge Capacity;
- First Discharge Capacity;
- Charge Capacity after 100 Cycles.

This data will be compared against known industry values to benchmark Comet's beneficiated concentrate with and without hydrometallurgical refining as a lithium ion battery feedstock.

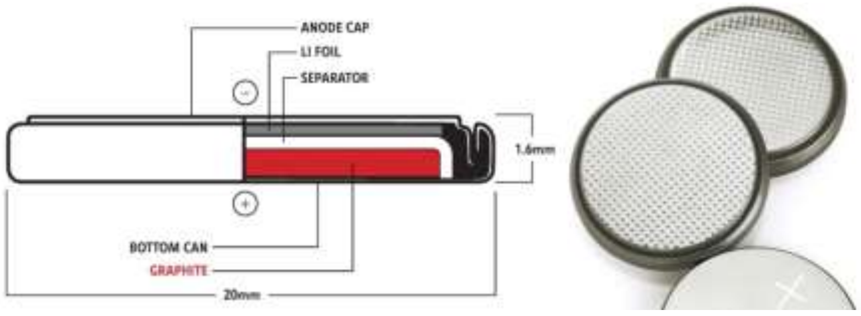

Figure 7 Cross Section of CR2016 Coin Cell

Comparison of Synthetic Graphite and Natural Graphite

Synthetic Graphite Facts
•Graphitizing an Oil by-product
•Devolatilization: Vacuum Gas Oil 480ºC
•Needle Coke (Green Coke Un-Calcined)
•Calcined: Remove traces of oil 1,350ºC
•Micronized & Coated
•Graphitization @ 2,800ºC for weeks
•Oil-Based Feedstock & Energy Intensive

Natural Graphite Facts
•Performs better than Synthetic
•Mining Graphite Ore Springdale
•Typical processing (crush, grind, flotation)
•Micronized & Spheronized (one step)
•Purification at low heat.
•Minimal to nil carbon footprint

Synthetic Graphite Conclusion

- Larger Carbon Footprint
- Higher Production Costs
- Energy Intensive
- Time Consuming
- Not aligned with Green Energy applications

EXPLORATION

During September and October 2016 comet conducted a reconnaissance aircore drilling program at the Springdale Project **The program produced the highest 1 meter intersection to date of 39.7% Total Graphitic Carbon (TGC) in hole H0065 as part of a 13 meter intersection @ 10.9% TGC. This hole is on the most Northern drill line. Hole H0100 intersected 4 metre @ 6.6% TGC on the most Southern drill line. Hole H0082 intersected 5 meters @ 4% TGC and 2 meters @ 25.9% TGC in the last two metres of that hole. This is the most Eastern hole drilled. (Figure 8)**

Three zones of graphite mineralisation have been identified. Each zone reported high grade graphite (+15% TGC). There are several graphite horizons within each zone. Graphite has been detected in holes H0065 and H0100 approximately 4 kilometres apart but these holes appear to be on two different Graphite zones. (**Figure 12**)

The program achieved its designed purpose demonstrating the continuity of graphite mineralisation over several kilometres of strike. The mineralisation is still open along strike and at depth in all zones. Further Diamond and aircore drilling is planned to commence early 2017.

A **total of 103 aircore holes were drilled for 2,577 metres**.

Figure 8: Plan showing selected intersections

Comet's diamond drilling in September 2016, near aircore holes from the February 2016 program, reported significantly higher graphitic grades than reported in aircore holes. The diamond drilling results included:-

HD001: **15.6 metres at 9.9% TGC** from 30.4 metres including **7 metres at 20.8% TGC** from 31 metres.

HD002: **8 metres at 9.9% TGC** from 44 metres including 2 metres at 22.3% TGC from 44 metres and 1 metre at 18.2% TGC from 50 metres,

HD003: **17.5 metres at 11.3% TGC** from 27 metres, including **6 metres at 22.3% TGC** from 37 metres.

HD004: 1.5 metres at 11.7% TGC from 55.5 metres, **10 metres at 13% TGC** from 60 metres including and 1.7 metres at 20.6% TGC from 60 metres and 2 metres at 21.5% TGC from 66 metres.

It has been proposed that the samples produced from aircore drilling, with the high water flow rates experienced at the Springdale Project, may have graphite washed from the collected sample (graphite can float on water) (**Figure 9**). This would lower the amount of graphite collected in a sample. Therefore, you would expect a lower reported grade from aircore drilling then the actual in ground grade or a diamond drill hole which would be reporting the correct in ground grade (**Figures 10 and 11**). Further work is continuing on this with diamond drill holes planned to twin aircore holes during the next phase of drilling. However as a reconnaissance tool to locate the graphite mineralisation aircore is still considered to be the best drilling method.

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Figure 9: Picture showing aircore drilling and water flow

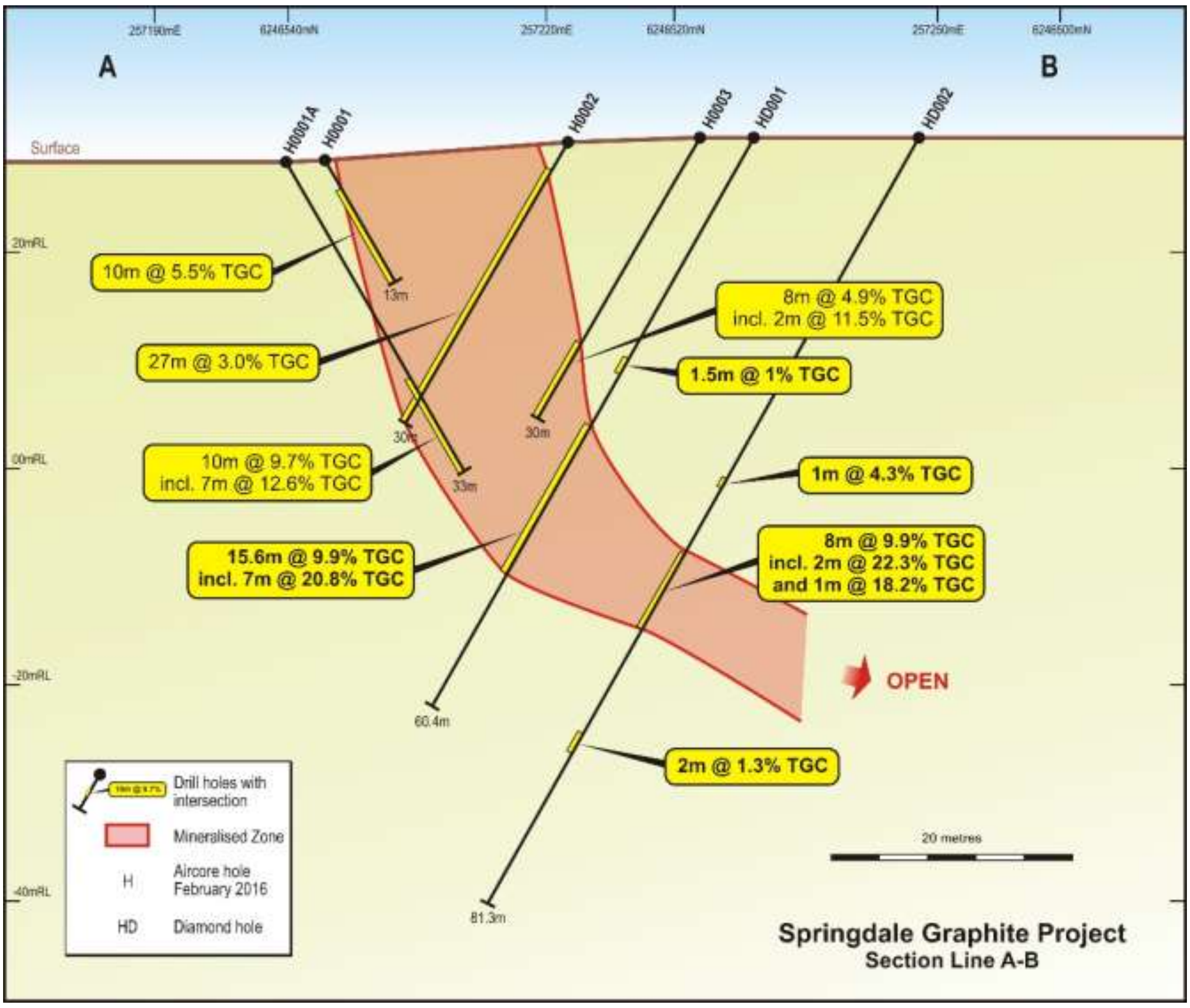

Figure 10: Section showing diamond holes HD001 and HD002 and aircore comparison grades

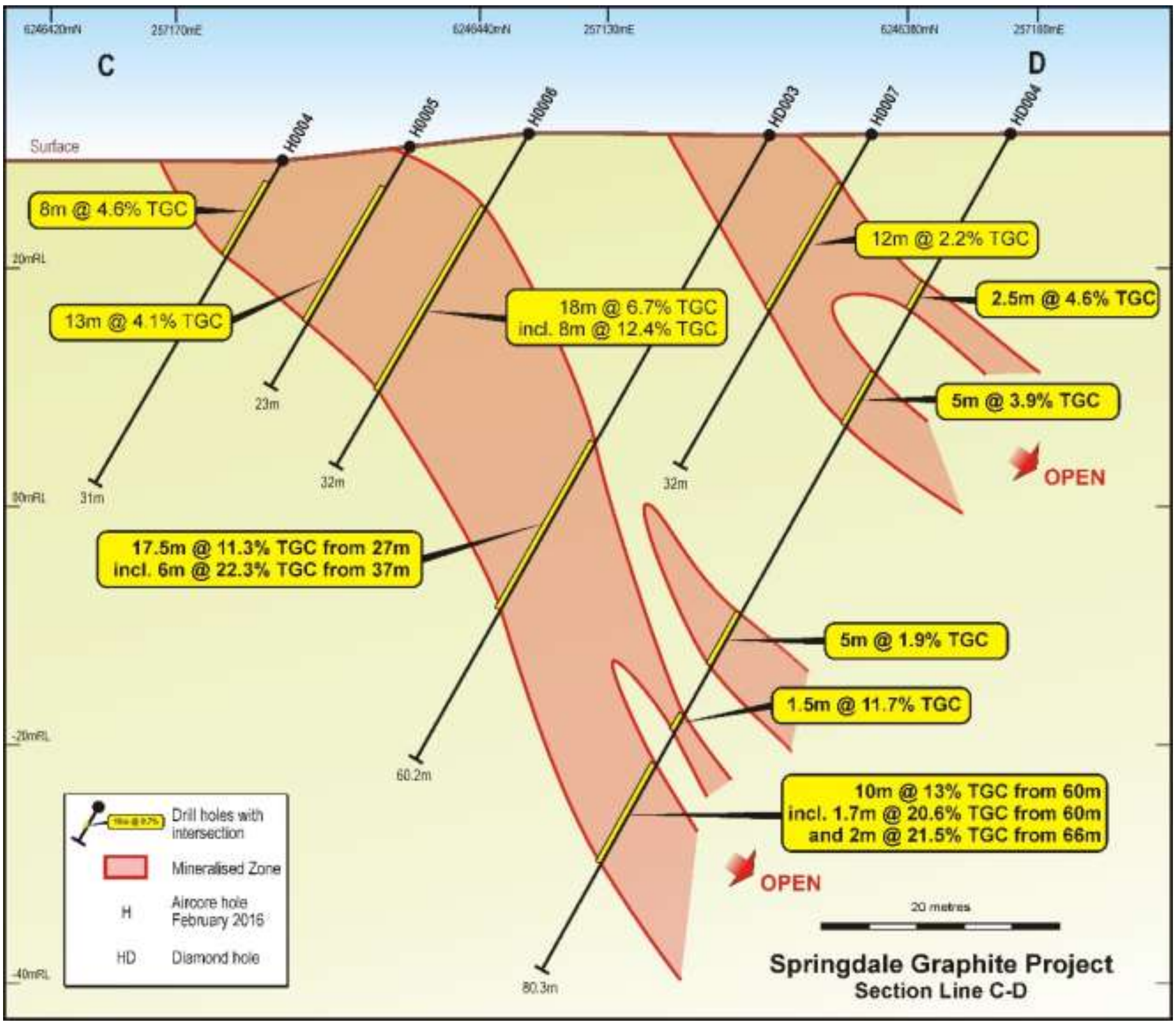

Figure 11: Section showing diamond holes HD003 and HD004 and aircore comparison grades

Further information on these intersections can be obtained from ASX release Diamond drilling intersects high grade graphite, 2nd November 2016.

Further diamond and aircore drilling has been planned. This is designed to test targets defined from the aircore program and extend strike and depth of known mineralisation.

Figure 12: Interpreted Graphite Zones

The reconnaissance aircore holes were drilled vertically at 40 or 80 meter spacing on 160 meter or wider spaced lines. Holes were generally stopped at 30 meters. Some areas were not drilled due to standing water from the high rain fall recorded last year. Also some holes were not drilled to depth due to ground conditions (poor penetration). Drilling contractor ONQ Exploration Solutions used an Edson 200 with 400/200 compressor and 90mm aircore bit to conduct the aircore drilling.

All Significant Intersections (+1% TGC) to Date:

Hole Number	From (m)	To (m)	Intersection (m)	Grade % TGC
H01	3	13*	10	5.5
H01A	23	33*	10	9.7
Including	26	33*	7	12.6
H02	3	30	27	3
H03	22	30*	8	4.9
Including	28	30*	2	11.5
H04	2	10	8	4.6
H05	4	17	13	4.1
H06	7	25	18	6.7
Including	16	24	8	12.4
H07	5	17	12	2.2
H08	17	21	4	7.6
Including	18	19	1	24
H09	1	22	21	3.2
H10	6	31	25	4
H0011	6	17	11	1.3
H0013	21	30	9	5.3*
H0014	3	5	2	1.9
H0014	12	14	2	7.5
H0015	27	28	1	1.4
H0021	3	11	8	2.9
H0024	17	22	5	7.8
H0026	1	14	13	2.8
H0026	24	30	6	2.7*
H0028	5	9	4	0.9
H0047	6	12	6	9.1
H0053	23	24	1	4.5
H0053	28	32	4	2.7
H0054	22	27	5	2.0
H0055	8	14	6	1.7
H0056	34	35	1	2.5
H0057	5	16	11	1.8
H0058	17	21	4	2.3
H0059	23	24	1	1.4
H0061	9	20	11	5.2
H0063	26	34	8	1.3
H0064	16	19	3	4.0
H0065	7	20	13	10.9
H0080	4	6	2	2.5
H0082	8	13	5	4.0
H0082	28	30	2	25.9*
H0100	17	21	4	6.6
H0101	27	29	2	1.2
H0104	27	36	9	7.3*
Including	29	32	3	18.2
H0109	20	23	3	4.2
H0110	15	19	4	1.2
H0110	29	36	7	2.4
H0113	5	22	17	5.2
H0113	14	22	8	7.0
H0113	38	39	1	1.2
HD001	30.4	46	15.6	9.9
Including	31	38	7	20.8
HD002	44	53	9	9.9
HD003	27	45	17.5	11.3
including	37	43	6	22.3
HD004	55.5	57	1.5	11.7
HD004	60	70	10	13
*** End of hole. Orange shading aircore holes from aircore program.**				

CORPORATE

Comet Resources Limited (ASX: **CRL**)(**Comet)** currently has cash reserves of approximately 0.9 million dollars and 133 million shares on issue. Comet is evaluating its 100% owned Springdale graphite/graphene Project. Comet is continually evaluating opportunities to acquire prospective ground.

For further information please contact:

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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 a number of exciting projects that it is currently exploring and advancing. Comet has cash assets of approximately $0.9 million and has approximately 133 million shares on issue.

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.