

6<sup>th</sup> March 2018

## NEW HIGH GRADE GRAPHITE DISCOVERY Springdale Project, Western Australia

### Highlights:

- Assay highlights include:
  - **HR0060 - 20m @ 19% TGC from 30m including 13m @ 26% TGC mineralised to end of hole;**
  - **HR0061 - 7m @ 16% TGC from 15m including 3m @ 35% TGC and 15m @ 7% TGC from 24m including 2m @ 23% TGC and 2m @ 16% TGC;**
- High grade graphite discovery in interpreted fold closure;
- Current drill program completed (numerous results pending);
- Springdale now has 3 highly prospective graphite target zones; and



## Overview

In September 2017 Comet Resources Limited (ASX: CRL) (**Comet**) conducted a 220 sq km detailed aeromagnetic survey over the Springdale Graphite Project in Western Australia (ASX release 10<sup>th</sup> November 2017). Interpretation of this survey delineated **26 kilometres of stratigraphy deemed to be prospective for graphite mineralisation (currently less than 20% tested)**. Comet's current drill program has already made a new high grade graphite discovery. **This new discovery along with the Western Zone, discovered in 2016, and the Eastern Zone, discovered in 2017, demonstrates the prospectivity of the Springdale Project.**

## RC Drilling

A reverse circulation (RC) drill program was designed to test a number of selected aeromagnetic targets. 93 shallow, reconnaissance style, RC holes were drilled between December 2017 and February 2018 for a total of 5320 metres (m). Drilling has discovered a new high grade graphite horizon in the northern fold closure (Figures 1 and 2). **This release focuses on this exciting new discovery known as the Northern Zone.**

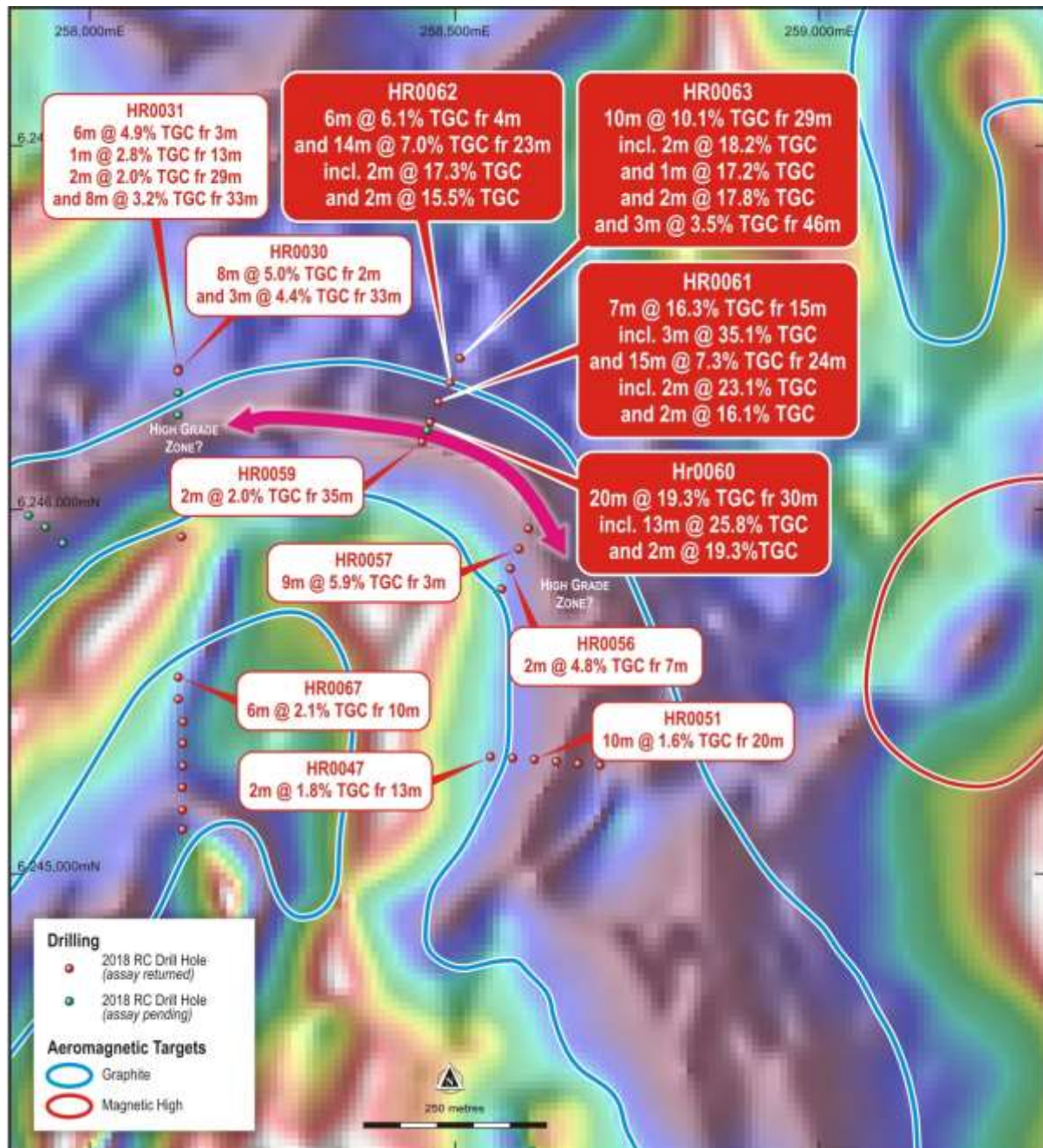
The Northern Zone is located within an interpreted fold closure (Figure 1). The aeromagnetic survey identified this as a high priority structural target with the potential for a thicker and higher grade graphite horizons. RC holes were drilled 30m apart to a nominal depth of 50m. Five irregular 200-300m spaced lines, utilising existing tracks, tested different sections of the prospective stratigraphy (Figure 1). This was a previously untested target and the objective was to locate any graphitic horizons for further drill testing. The drill line in the northern portion of the prospective stratigraphy was successful in locating a new high grade graphite zone. This Northern zone is open at depth and along strike. Assay highlights include:

- **HR0057**
  - **9m @ 5.9% TGC (Total Graphitic Carbon) from 3m**
- **HR0060**
  - **20m @ 19.3% TGC from 30m including 13m @ 25.8% TGC and 2m @ 19.3% TGC mineralised to end of hole**
- **HR0061**
  - **7m @ 16.3% TGC from 15m including 3m @ 35.1% TGC**
  - **15m @ 7.3% TGC from 24m including 2m @ 23.1% TGC and 2m @ 16.1% TGC**
- **HR0062**
  - **6m @ 6.1% TGC from 4m**
  - **14m @ 7% TGC from 23m including 2m @ 17.3% TGC and 2m @ 15.5% TGC**
- **HR0063**
  - **10m @ 10.1% TGC from 29m including 2m @ 18.2% TGC, 1m @ 17.2% TGC and 2m @ 17.8% TGC**

All samples have now been submitted. Numerous assay results are expected over the coming weeks and will be announced after interpretation has been completed.

The discovery demonstrates the potential for the Sprigdale project area. A full list of significant intersections are given in Table 1 and displayed on Figure 1.

**Figure 1 – Location of recent RC drilling covering the Northern Zone. Significant intersections for assays returned. Reduced to the pole (RTP) aeromagnetic image underlay.**





**Table 1 – Significant intersections assays returned for holes drilled December 2017 to February 2018 over the Northern Zone ( $\geq 1\%$  TGC, up to 1m of internal waste).**

HOLEID	SIGNIFICANT GRAPHITE INTERSECTIONS
HR0030	8m @ 5% TGC from 2m.
and	3m @ 4.4% TGC from 33m.
HR0031	6m @ 4.9% TGC from 3m.
and	1m @ 2.8% TGC from 13m.
and	2m @ 2% TGC from 29m.
and	8m @ 3.2% TGC from 33m
HR0047	2m @ 1.8% TGC from 13m
HR0051	10m @ 1.6% TGC from 20m
HR0056	2m @ 4.8% TGC from 7m
HR0057	9m @ 5.9% TGC from 3m
HR0059	2m @ 2% TGC from 35m
HR0060	20m @ 19.3% TGC from 30m including 13m @ 25.8% TGC and 2m @ 19.3% TGC. Mineralised to end of hole
HR0061	7m @ 16.3% TGC from 15m including 3m @ 35.1% TGC
and	15m @ 7.3% TGC from 24m including 2m @ 23.1% TGC and 2m @ 16.1% TGC
HR0062	6m @ 6.1% TGC from 4m
and	14m @ 7% TGC from 23m including 2m @ 17.3% TGC and 2m @ 15.5% TGC
HR0063	10m @ 10.1% TGC from 29m including 2m @ 18.2% TGC and 1m @ 17.2% TGC and 2m @ 17.8% TGC
and	3m @ 3.5% TGC from 46m
HR0067	6m @ 2.1% TGC from 10m
HR0069	6m @ 9.5% TGC from 38m including 2m @ 16.2% TGC

## Moving Forward.

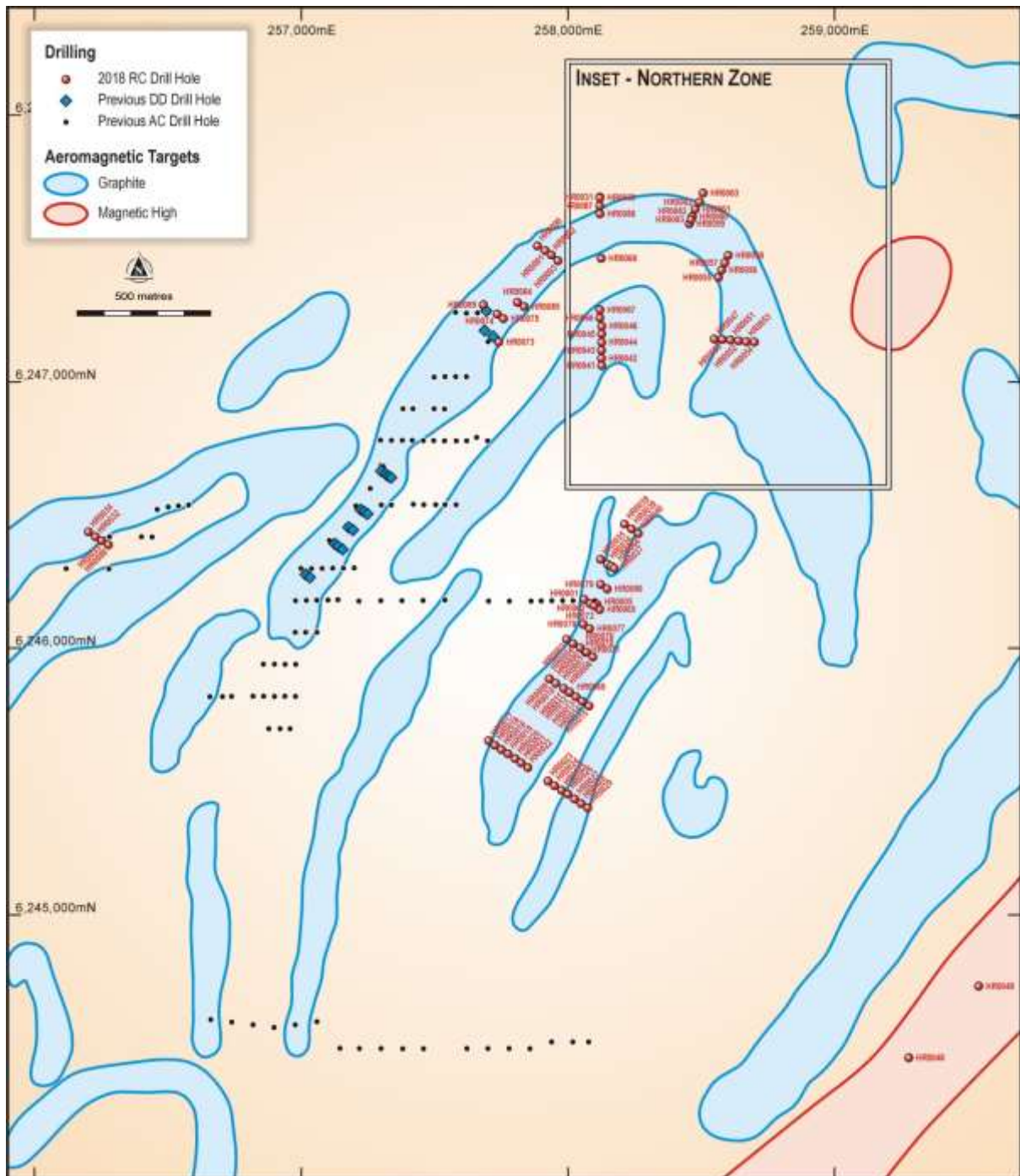
Comet plans to progress the assessment of the graphite and graphene at Springdale Project through the following work programs:

Geological/Structural Interpretation – Review drill results with aeromagnetic data to identify the most prospective stratigraphic horizons. This will generate new targets and focus drilling on existing targets.

Diamond Drilling – A diamond drill program will be planned to follow up high grade intersections. This will provide sample for metallurgical testwork and high quality information to move the geological understanding forward.

Metallurgical Testwork – Metallurgical testwork will continue on existing and newly generated diamond core. Understanding the amenability of the graphite at Springdale to convert to graphene or be used in battery and other technologies is an integral part of understanding and realising its commercial value.

**Figure 2 – Collar location plan December 2017 – February 2018 RC drilling.  
Hole details for Northern Zone are in Table 2.**



## 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-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 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 (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. Significant intersections from drilling include;

### **Western Zone**

HD001

- 15.5m @ 9.9% TGC from 30.5m including 7m @ 20.8% TGC

HD003

- 17.5m @ 11.3% TGC from 27m including 6m @ 22.3% TGC

HD016

- 15.5m @ 7.5% TGC from 8.5m including 4m @ 12.1% TGC and 1.9m @ 19.3%TGC
- 14m @ 6.7% TGC from 28m including 3.25m @ 20.2% TGC

HD017

- 10.5m @ 7.6% TGC from 9.5 m including 4.95m @ 14.1% TGC

### **Eastern Zone**

HD015

- 1.5m @ 6.9% TGC from 8m
- 9m @ 4.4% TGC from 40m including 2m @ 14.5% TGC
- 9m @ 10.2% TGC from 32m including 2 metres @ 26.2% TGC

HD018

- 5.6m @ 7% TGC from 15.5m
- 4.6m @ 15.8% TGC from 40m including 3.1m @ 21% TGC
- 11m @ 25.6% TGC from 49m including 9 metres @ 30.2% TGC

### **Northern Zone**

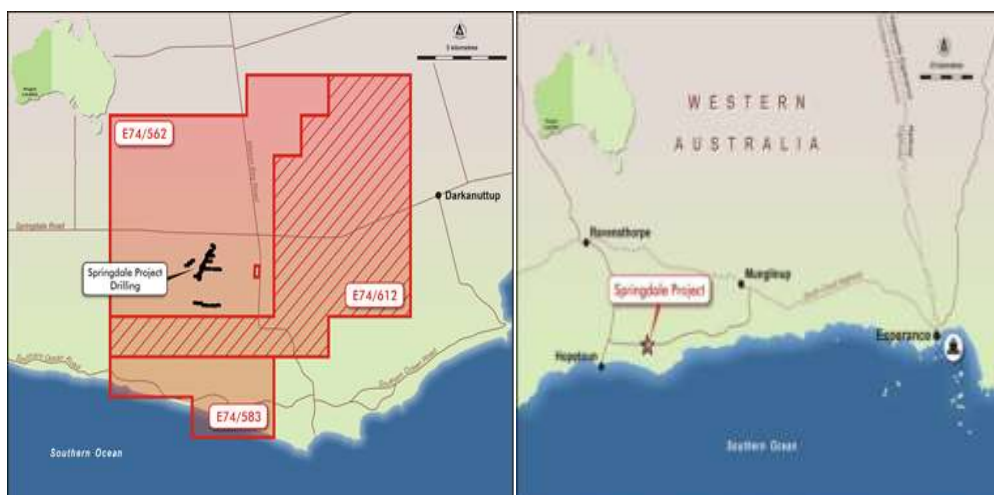
HR0060

- 20m @ 19.3% TGC from 30m including 13m @ 25.8% TGC and 2m @ 19.3% TGC mineralised at end of hole.

HR0061

- 7m @ 16.3% TGC from 15m including 3m @ 35.1% TGC
- 15m @ 7.3% TGC from 24m including 2m @ 23.1% TGC and 2m @ 16.1% TGC

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.



**Figure 3 – Plan showing location, tenements and area drilled to date.**

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)

*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 \$0.6 million and has approximately 176 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.*

**JORC Table 1.****Section 1 Sampling Techniques and Data**

Criteria	Explanation
<i>Sampling techniques</i>	Reverse circulation drilling produced samples that were collected at one-metre intervals using a cone splitter to produce an approximate three-kilogram sample, which is considered representative of the full drill metre. This is considered to be an industry standard. Sampling was guided by qualified field personnel. Only sample that contained visible Graphite were submitted to ALS Laboratories Perth. Samples were analysed for Graphitic Carbon with selected Au and base metal analyses
<i>Drilling techniques</i>	Springdale drill program comprised 93 RC drill holes, which were completed by Westside Drilling using a 2002 MK10 Atlas Copco RC drill rig with an onboard Atlas Copco XRVS 900/350 psi compressor. An auxiliary booster was used on the majority of holes deeper than 70m. The majority of drilling was carried out using a 100mm RC face sampling hammer. When clays were problematic a 100mm aircore bit was used.
<i>Drill sample recovery</i>	Overall recoveries were good. Insufficient drilling and geochemical data is presently available to evaluate any potential sample bias. Many wet sampling were reported. A problem may exist with loss of graphite due to high water flows during drilling.
<i>Logging</i>	Geological logging of the drill chips were recorded for all holes, including lithology, mineralogy, grainsize, texture, weathering, oxidation, colour and other features of the samples. Drill chips were not logged to any geotechnical standard. Logging of RC drill chips is considered to be semi-quantitative given the nature of rock chip fragments and the inability to obtain detailed geological information. The drill holes were logged in full to the end of the hole.
<i>Sub sampling techniques and sample preparation</i>	All one-metre splits from the drill holes were passed through a cone splitter to produce a 15% split for assaying. Check or repeat samples have been submitted for analysis. Field logging was used to determine if a sample contained graphite. Samples that contained graphite were submitted for analysis. Each sample was weighed at the preparation laboratory and the weights recorded along with analytical results. No specific quality control procedure has been adopted for the collection of the samples. Samples were shipped to ALS laboratories in Perth WA for drying, pulverizing and splitting to prepare a pulp of approximately 200 grams which was analysed at ALS Laboratories in Queensland, Australia. The sample sizes are considered to be appropriate to correctly represent the sought after mineralisation style.
<i>Quality of assay data and laboratory tests</i>	Average sample weight submitted for prep was 2kg with a range from 1kg to 3kg. Analysis was by C-IR18 Graphitic Carbon, LECO Method. Samples were dried crushed and pulverised to minus 75 microns. This is an accepted industry analytical process appropriate for the nature and style of mineralisation under investigation. Blanks or standards were incorporated into the sampling procedure. ALS undertook their own internal checks and blanks.
<i>Verification of sampling and assaying</i>	Results of standards and field duplicates are within acceptable ranges. No independent or alternative company has yet been engaged to verify results.
<i>Location of data points</i>	All drill hole sites have been located using a GNSS receivers. The GPS recorded locations used the WGS 84 and accuracy is limited to sub 1 metre.
<i>Data spacing and distribution</i>	93 reverse circulation holes were completed with an average depth of 50m to a maximum of 132m. The spacing between these holes varied as indicated by the drill location imaged included in the body of the accompanying report. No sample composting was applied.



Criteria	Explanation
<i>Orientation of data in relation to geological structure</i>	The orientation of the comets drilling was designed to test the target zones and minimise the risk of biased sampling. The orientation of the drilling is deemed sufficient at this stage of exploration.
<i>Sample security</i>	All samples were collected in calico sample bags with sample number identification on the bag. Bags were then checked against field manifests and loaded into plastic bags for transportation to ALS sample preparation in Perth WA by Comet staff. Given the initial phase of exploration, combined with the limited number of field staff involved, the security over sample dispatch is considered adequate for these samples at this time.
<i>Audits or reviews</i>	No audits or reviews have yet been conducted on the exploration data presented in this release.

## Section 2 Reporting of Exploration results

Criteria	Explanation
<i>Mineral tenements and land tenure status</i>	The Exploration license is current and 100% owned by Comet Resources Ltd. There are no outstanding issues regarding access or ownership on the targeted land.
<i>Exploration done by other parties</i>	Unpublished and verbal reports of graphite mineralisation encountered in shallow calcrete/limestone drilling and extractive industry operations at the Springdale Project.
<i>Geology</i>	Archaean greenstone belt and the surrounding Archaean Munglinup Gneiss which encapsulates the Belt. The greenstone belt is located within the deformed southern margin of the Yilgarn Craton and constitutes part of the Northern Foreland lithotectonic unit of the Albany-Frazer Orogen. Two different mineral deposit models are proposed: <ul style="list-style-type: none"> <li>a) Archaean style gold, nickel copper mineralisation in remnant greenstone and reworked Yilgarn Craton rocks; and</li> <li>b) Graphite mineralisation within metamorphosed Archaean granitic and sedimentary rocks.</li> </ul>
<i>Drill hole</i>	Drilling details are in the main body of this announcement.
<i>Data aggregation methods</i>	Reported intersections are based on an average of reverse circulation sample intervals. These intervals are uniformly 1 metre. No upper cuts are applied. Internal dilution of up to 1 metre has been incorporated in intersection calculations. No metal equivalents have been used in this report. A lower cut-off grade of 1% TGC has been used and nominal 1 metre waste (below 1%) has been included in extended intervals. Higher grade intercepts use a cut-off of 10% TGC.
<i>Relationship between mineralisation width and Diagrams</i>	There is insufficient understanding of the bedrock geology at present to determine the true thickness of any reported drill intersections. Any intersections included in this report are downhole lengths. The true widths of these intersections are not known.
<i>Balanced reporting</i>	The accompanying document is considered to represent a balanced report. Further evaluation into the significance of these results is ongoing.

<i>Other substantive exploration data</i>	Other exploration data collected by the Company is not considered as material to this report at this stage. Further data collection will be reviewed and reported when considered material.
<i>Further work</i>	These results will need to be verified in the field and duplicate test work conducted to ensure repeatability. In addition more drilling will need to be done to determine the extent of the graphite mineralisation. Further metallurgical and crystal size test work will also need to be conducted to give first indications of the potential to recover Graphite identified within the mineralised rocks.

Table 2 – Hole locations for holes drilled December 2017 to February 2018 (Datum MGA94 zone 51).

HOLEID	TYPE	EASTING (m)	NORTHING (m)	RL (m)	HOLEDPTH (m)	DIP (deg)	MGA_AZIMUTH (deg)
HR0001	RC	258060	6246185	28	59	-60	304
HR0002	RC	258084	6246168	28	60	-60	304
HR0003	RC	257995	6246035	27	48	-60	304
HR0004	RC	258019	6246018	27	54	-60	304
HR0005	RC	258108	6246165	28	66	-70	124
HR0006	RC	258043	6246002	26	50	-60	304
HR0007	RC	258067	6245986	26	48	-60	304
HR0008	RC	258094	6245968	26	50	-60	304
HR0009	RC	257930	6245886	27	50	-60	304
HR0010	RC	257954	6245869	27	50	-60	304
HR0011	RC	257984	6245849	27	50	-57	304
HR0012	RC	258005	6245836	26	48	-60	304
HR0013	RC	258030	6245819	25	50	-60	304
HR0014	RC	258054	6245803	24	50	-60	304
HR0015	RC	258079	6245785	23	50	-60	304
HR0016	RC	257751	6245621	22	50	-60	304
HR0017	AC	257702	6245654	21	49	-60	304
HR0018	AC	257726	6245637	21	50	-60	304
HR0019	AC	257775	6245605	22	50	-60	304
HR0020	AC	257802	6245587	23	48	-60	304
HR0021	RC	257825	6245571	23	50	-60	304
HR0022	RC	257850	6245553	24	50	-60	304
HR0023	RC	257925	6245503	25	50	-60	304
HR0024	RC	257949	6245486	25	50	-60	304
HR0025	RC	257976	6245468	25	50	-60	304
HR0026	RC	257999	6245454	26	50	-60	304
HR0027	RC	258025	6245436	27	50	-60	304
HR0028	RC	258049	6245419	27	50	-60	304
HR0029	RC	258074	6245403	26	50	-60	304
HR0030	RC	258120	6247690	26	43	-60	304
HR0031	AC	258120	6247693	26	50	-60	304
HR0032	AC	256228	6246419	26	50	-60	304
HR0033	AC	256251	6246404	27	60	-60	304
HR0034	AC	256202	6246437	26	50	-60	304
HR0035	AC	258122	6246334	28	50	-60	304
HR0036	AC/RC	258149	6246317	28	50	-60	304
HR0037	RC	258174	6246300	28	72	-60	304
HR0038	RC	258212	6246466	25	50	-60	304
HR0039	RC	258238	6246448	26	50	-60	304
HR0040	RC	258264	6246432	26	60	-60	304
HR0041	RC	258126	6247061	24	50	-60	180

HOLEID	TYPE	EASTING (m)	NORTHING (m)	RL (m)	HOLEDPTH (m)	DIP (deg)	MGA_AZIMUTH (deg)
HR0042	RC	258126	6247088	25	50	-60	180
HR0043	RC	258126	6247118	25	50	-60	180
HR0044	RC	258126	6247148	26	54	-60	180
HR0045	RC	258127	6247179	26	60	-60	180
HR0046	RC	258127	6247209	26	54	-60	180
HR0047	RC	258548	6247161	26	50	-60	277
HR0048	RC	259279	6244465	19	54	-90	0
HR0049	RC	259540	6244733	20	54	-90	0
HR0050	RC	258579	6247159	28	33	-60	277
HR0051	AC	258609	6247157	28	50	-60	277
HR0052	AC	258639	6247154	28	50	-60	277
HR0053	AC	258669	6247151	28	49	-60	277
HR0054	AC	258699	6247149	28	38	-60	277
HR0055	RC	258564	6247391	28	50	-60	205
HR0056	RC	258576	6247419	28	50	-60	205
HR0057	RC	258588	6247446	28	50	-60	205
HR0058	RC	258601	6247474	28	50	-60	205
HR0059	RC	258455	6247593	28	48	-60	205
HR0060	RC	258466	6247620	28	50	-60	205
HR0061	RC	258477	6247648	28	50	-60	205
HR0062	RC	258493	6247674	28	50	-60	205
HR0063	RC	258507	6247708	28	50	-60	195
HR0064	RC	258163	6246309	28	72	-60	305
HR0065	RC	258119	6246146	28	102	-85	180
HR0066	RC	258120	6247240	28	60	-60	180
HR0067	RC	258120	6247270	28	60	-60	180
HR0068	RC	258125	6247463	28	50	-60	180
HR0069	RC	258006	6245836	28	78	-60	305
HR0070	RC	258046	6246002	28	48	-60	305
HR0071	RC	258070	6245986	28	120	-60	305
HR0072	RC	258098	6246160	28	72	-70	305
HR0073	RC	257740	6247149	28	96	-60	305
HR0074	RC	257734	6247254	28	48	-60	305
HR0075	AC	257758	6247237	28	78	-60	305
HR0076	RC	258046	6246002	28	84	-60	305
HR0078	RC	258057	6246091	28	60	-60	305
HR0077	RC	258081	6246074	28	108	-60	305
HR0079	RC	258122	6246240	28	60	-60	305
HR0080	RC	258147	6246223	28	132	-60	305
HR0081	RC	258133	624623	28	72	-60	305
HR0082	RC	258467	6247620	28	42	-60	25
HR0083	RC	258462	6247609	28	60	-60	205
HR0084	AC	257811	6247298	28	78	-60	305



HOLEID	TYPE	EASTING (m)	NORTHING (m)	RL (m)	HOLEDPTH (m)	DIP (deg)	MGA_AZIMUTH (deg)
HR0085	AC	257836	6247282	28	78	-60	305
HR0086	AC	258120	6247630	28	50	-60	180
HR0087	AC/RC	258120	6247660	28	78	-60	180
HR0088	AC	256278	6246388	30	69	-60	305
HR0089	AC	257683	6247289	26	60	-60	125
HR0090	AC	257885	6247510	26	50	-60	305
HR0091	AC	257915	6247492	26	50	-60	305
HR0092	AC	257933	6247474	26	48	-60	305
HR0093	AC	257962	6247454	26	48	-60	305