7 May 2019

ASX:CRL

Comet Discovers Two New High Grade Graphite Zones

Comet Resources Ltd (Comet or the Company) (**ASX:CRL**) is pleased to announce the discovery of two new, high-grade, graphite zones at the 100% owned Springdale Graphite Project in south Western Australia. The new zones were discovered following a reconnaissance drill program targeting a series of electromagnetic (EM) anomalies along strike from the Company's recently announced maiden resource.

The two new graphite zones are particularly significant as they host high-grade, near-surface mineralisation that has the potential to extend over several kilometres of strike. In addition, the newly identified zones confirm a strong correlation between high-grade graphite and the numerous EM anomalies identified by the Company's recent geophysical surveys.

Highlights

- **Two new zones of high-grade mineralisation** identified along strike from current resources
- **High-grade intercepts** include:
  - **10m @ 16.1% TGC** from 40m incl. **7m @ 21.6% TGC**
  - **7m @ 18.44% TGC** from 34m and **6m @ 26.53% TGC** from 53m
- New discoveries suggest there is **significant potential to grow the current resource** base
- Drilling confirms a **strong correlation between EM anomalies and high grade graphite horizons significantly improving future drill targeting**. 26 Kilometres of prospective stratigraphy with less than 20% drill-tested

Comet Resources CEO, Philippa Leggat, commented:

"The shallow nature of the mineralisation in conjunction with the ability to use electromagnetic surveys to target high-grade mineralisation will aid our ability to cost-effectively increase the size of and certainty around our Resources.

"We are pleased with the new, high grade discoveries and have Tony Cooper, my predecessor, to thank for his work in identifying the Springdale Graphite Project. He has developed a solid technical base for us to transition the Project into the next stage of development."

Drilling Results

The recent drilling program included eleven shallow, reconnaissance-style, RC holes for a total of 651m. The drilling was successful in;

- discovering two new horizons of high-grade graphite mineralisation with an interpreted strike of approximately 3.5 km and 5 km, with mineralisation remaining open both along strike and down dip in both areas;
- solidifying the geophysical interpretation of prospective stratigraphy and
- confirming ground electromagnetic surveying as a useful tool for identifying high-grade graphite mineralisation.

Results include:

- Hole HR0142: **10m @ 16.1% TGC** from 40m including **7m @ 21.6%** TGC from 41m.
- Hole HR0150: **9m @ 9.5% TGC** from **21m including 1m @ 19.6%** TGC from 22m and 2m @ 24.9% TGC from 24m.
- Hole HR0151: bulks out to **38 m @ 9% TGC** and also contains highest 1m intersection to date of **48.8% TGC**.

  See Table 2 for full details of all significant intersections returned from the February/March drilling campaign.

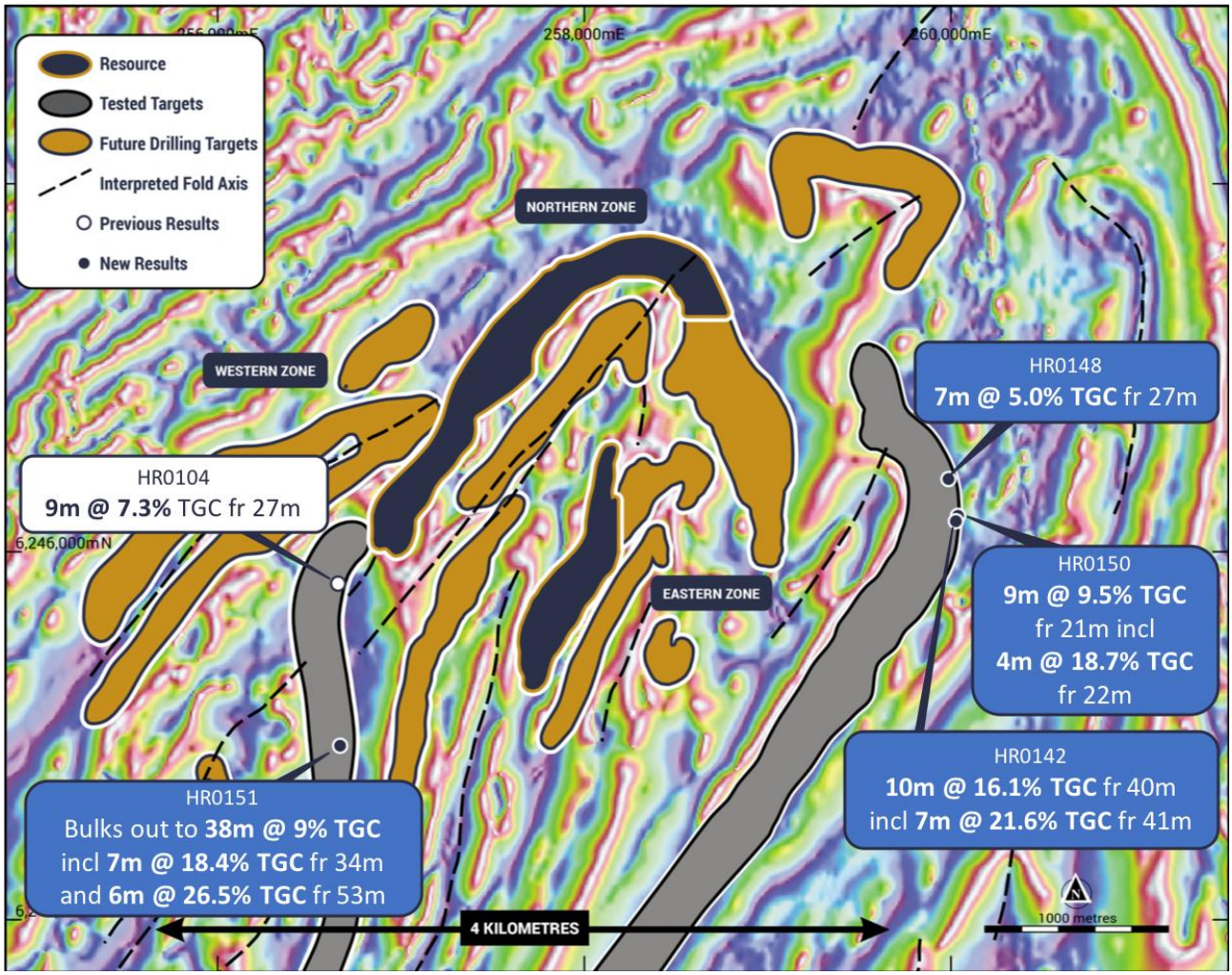


Figure 1 – Location of recent and selected existing drilling at the Springdale Graphite Project.

Selected intercepts from recent and previous drilling are overlayed on the Reduced to Pole aeromagnetic image above, with existing resources; tested targets where the recent drilling campaign and the ground electromagnetic surveys were conducted and future drilling targets showing the prospective areas of stratigraphy.

Drill targeting for recent drilling

Following on from the success of discovering the high-grade Northern Zone and the completion of the Maiden Resource Estimate, Comet planned an RC drilling program to test two undrilled high priority graphite targets (see tested targets in figure 1).

Target areas were defined using aeromagnetic data to define stratigraphy prospective for graphite mineralisation. Review of the aeromagnetic data with existing drill hole information identified that graphitic horizons intersected in existing drilling were located in distinct magnetic lows.

Targets were further refined by ground electromagnetic (EM) surveys completed by Southern Geoscience Consultants Pty Ltd.

Several conductors of interest were identified in these surveys, two of which were successfully tested in the recent RC drilling program.

Having identified the new graphitic horizons, Comet will focus on further defining the high-grade zones with additional RC and diamond drilling over the coming months.

About the Springdale Graphite Project in Western Australia

The 100% owned Springdale graphite project is located approximately 30 kilometres east of Hopetoun in south Western Australia. The project is situated on free hold land, with good access to infrastructure being within 150 kilometres of the port at Esperance via sealed roads.

The tenements lie within the deformed southern margin of the Yilgarn Craton and constitute part of the Albany-Fraser Orogen. Comet owns 100% of the three tenement's (E74/562, E74/583 and E74/612) that make up the Springdale project, with a total land holding of approximately 220 square kilometres.

Comet Resources Limited
ABN 88 060 628 202

Suite 9, 330 Churchill Avenue
Subiaco WA 6008

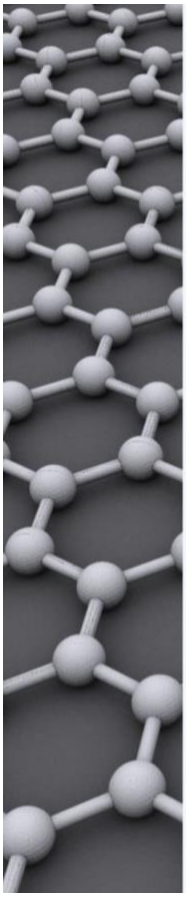
AU +61 (8) 6489 1600
comet@cometres.com.au
PO Box 866 Subiaco WA 6904
cometres.com.au
ASX:CRL

Key information

- Comet completed a first pass aircore drilling program in February 2016, which confirmed that graphite was present in a prospective zone (Western Zone).
- September 2017 a 220sq.km detailed aeromagnetic survey conducted *(ASX release 10 Nov 2017)*. Interpretation delineated 26 kilometres of stratigraphy deemed to be prospective for graphite mineralisation. Less than 20% of the identified stratigraphy has been drill tested, indicating the potential scale of the Project.
- The Northern Zone was defined as a high priority drill target. RC drilling completed between December 2017 and February 2018 was successful in identifying high grade graphite mineralisation in the Northern Zone.
- Comet released a Maiden Resource *(Table 1)* at the Springdale Graphite Project late 2018 that incorporated the Northern, Western and Eastern Zones *(ASX release 6 Dec 2018)*.
- The high-grade portion of the resource is 2.6Mt at 17.5% Total Graphitic Carbon (TGC) *(Table 1).*
- Metallurgical test work in April 2017 proved 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.

About Graphene

Visit the Comet website to watch graphene being made from graphite https://cometres.com.au



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 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 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.

Comet Resources Limited
ABN 88 060 628 202

Suite 9, 330 Churchill Avenue
Subiaco WA 6008

AU +61 (8) 6489 1600
comet@cometres.com.au
PO Box 866 Subiaco WA 6904
cometres.com.au
ASX:CRL

For further information please contact:

PHILIPPA LEGGAT

Chief Executive Officer

(08) 6489 1600
pleggat@cometres.com.au
cometres.com.au
Suite 9, 330 Churchill Avenue Subiaco WA 6008
PO Box 866 Subiaco WA 6904

Appendices

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.

Table 1

Springdale Project Resource Estimate reported at a >=2% TGC cut-off grade.

DOMAIN	TONNES (MT)	DENSITY (t/m3)	Graphite (TGC%)	CLASSIFICATION
HIGH GRADE	2.6	2.1	17.5	INFERRED
LOW GRADE	13.0	2.2	3.7	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.

Table 2

Significant intersections assays returned for holes drilled February/March 2019 (>=1% TGC, up to 1m of internal waste)

HOLE ID	INTERSECTION
HR0142	10m @ 16.1% TGC from 40m including 7m @ 21.6% TGC from 41m
	2m @ 5.42% TGC from 55m
HR0144	1m @ 1.61% TGC from 58m
HR0148	7m @ 5.03% TGC from 26m
HR0149	2m @ 1.29% TGC from 55m
HR0150	9m @ 9.5% TGC from 21m including 1m @ 19.6% TGC from 22m and 2m @ 24.9% TGC from 24m
	4m @ 1.91% TGC from 37m
HR0151	6m @ 5.5% TGC from 26m
	7m @ 18.44% TGC from 34m including 2m @ 38.1% TGC from 35m and 1m @ 26.7% TGC from 39m
	3m @ 2.98% TGC from 46m
	6m @ 26.53% TGC from 53m including 5m @ 30.5% TGC from 53m
	3m @ 2.64% TGC from 61m

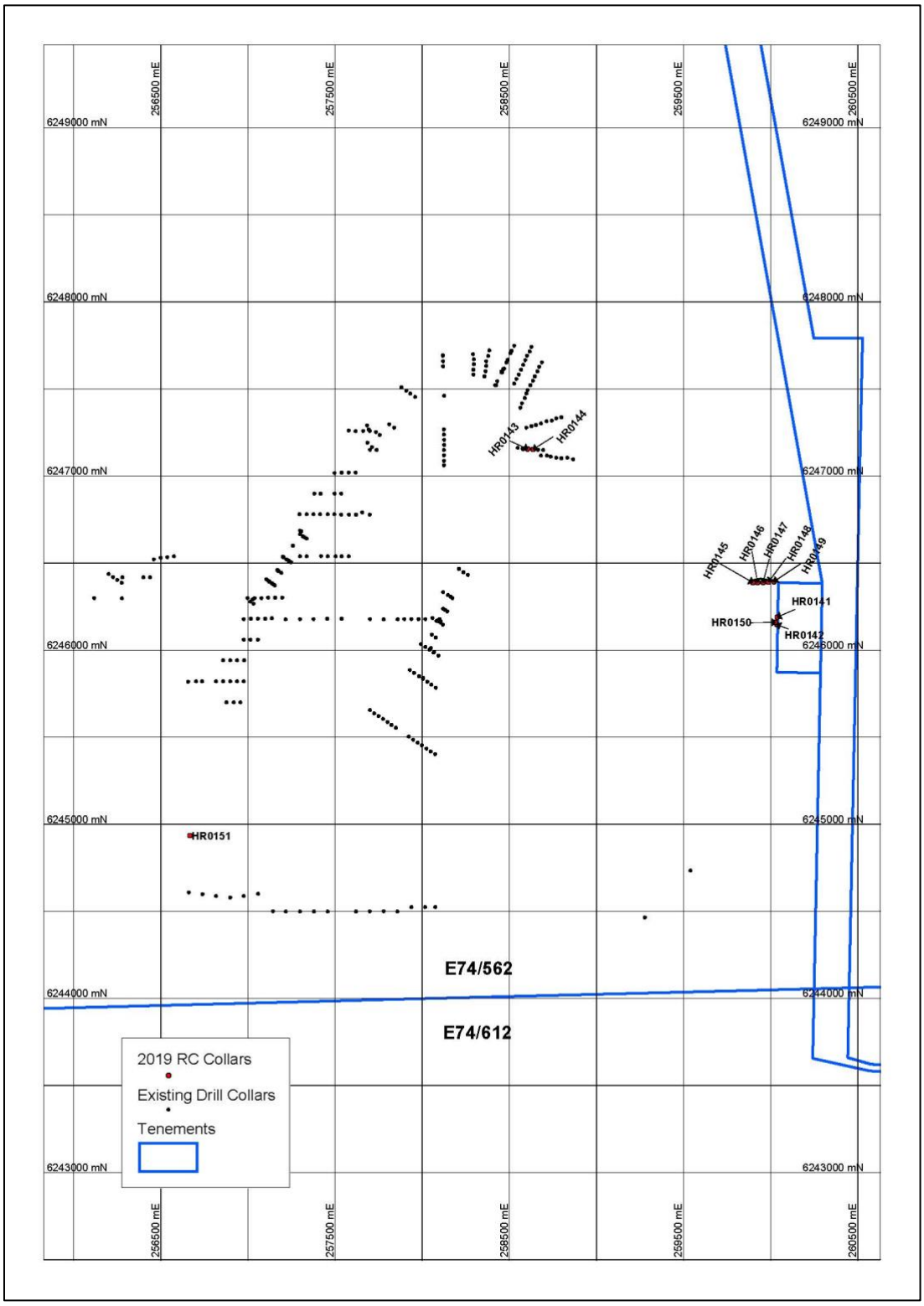
Comet Resources Limited
ABN 88 060 628 202

Suite 9, 330 Churchill Avenue
Subiaco WA 6008

AU +61 (8) 6489 1600
comet@cometres.com.au
PO Box 866 Subiaco WA 6904
cometres.com.au
ASX:CRL

Figure 2

Collar location plan and cross sections February/March 2019 RC drilling.



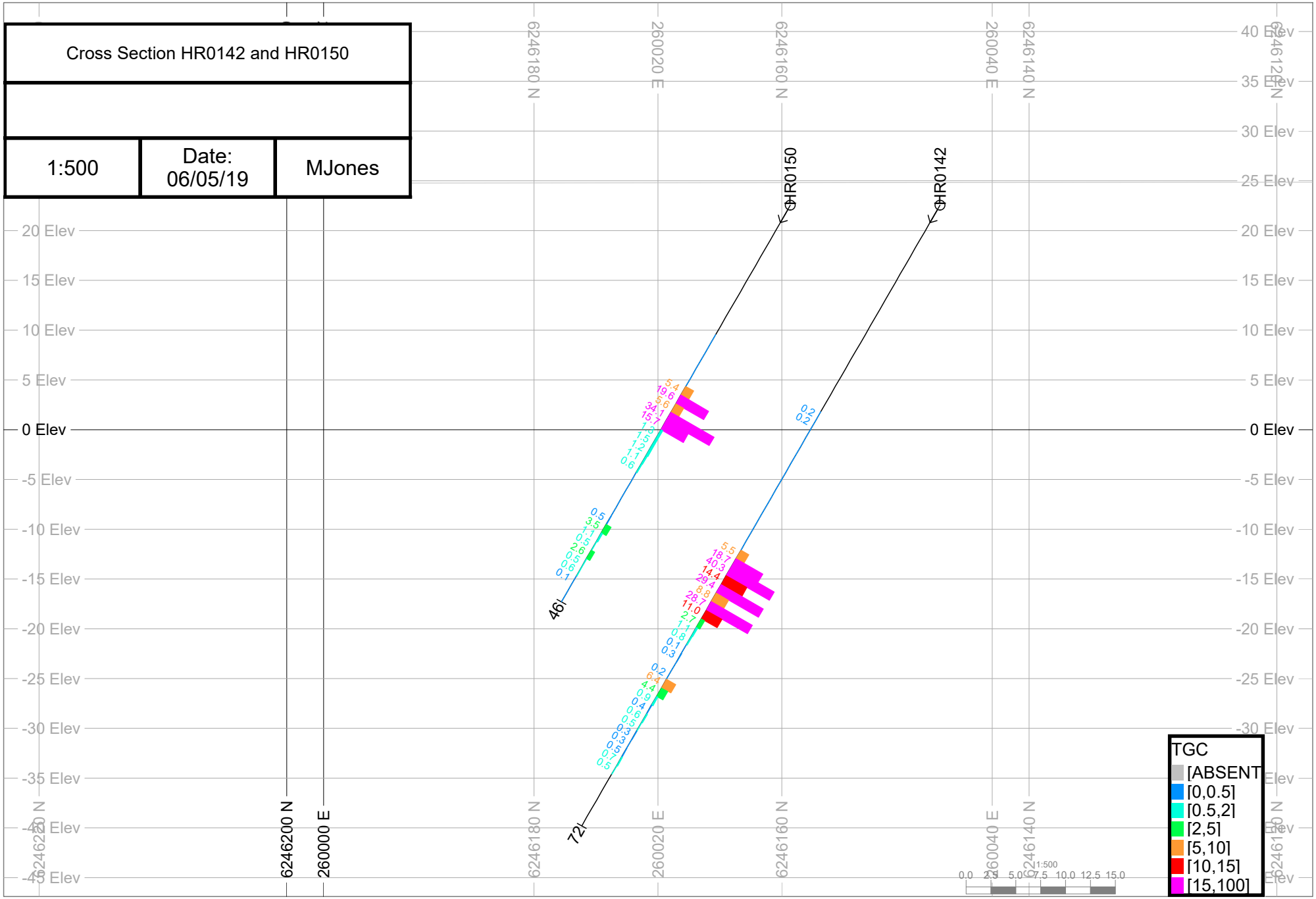


Figure 2: Preliminary geological interpretation suggests steeply dipping high grade zone, however further drilling will be required to confirm this interpretation.

JORC Table 1

Sampling Techniques and Data

Criteria	Explanation
Sampling techniques	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
Drilling techniques	Springdale drill program comprised 11 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.
Drill sample recovery	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.
Logging	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.
Sub sampling techniques and sample preparation	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.
Quality of assay data and laboratory tests	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.
Verification of sampling and assaying	Results of standards and field duplicates are within acceptable ranges. No independent or alternative company has yet been engaged to verify results.
Location of data points	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.

Criteria	Explanation
Data spacing and distribution	11 reverse circulation holes were completed with an average depth of 50m to a maximum of 78m. 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.
Orientation of data in relation to geological structure	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.
Sample security	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.
Audits or reviews	No audits or reviews have yet been conducted on the exploration data presented in this release.

JORC Table 2

Reporting of Exploration results

Criteria	Explanation
Mineral tenements and land tenure status	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.
Exploration done by other parties	Unpublished and verbal reports of graphite mineralisation encountered in shallow calcrete/limestone drilling and extractive industry operations at the Springdale Project.
Geology	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: Archaean style gold, nickel copper mineralisation in remnant greenstone and reworked Yilgarn Craton rocks; and Graphite mineralisation within metamorphosed Archaean granitic and sedimentary rocks.
Drill hole	Drilling details are in the main body of this announcement.
Data aggregation methods	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.
Relationship between mineralisation width and intercept lengths	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.
Diagrams	Appropriate plan maps are included in the body of this report.
Balanced reporting	The accompanying document is considered to represent a balanced report. Further evaluation into the significance of these results is ongoing.
Other substantive exploration data	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.
Further work	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.

JORC Table 3

Hole locations for RC holes drilled February/March 2019 (Datum MGA94 zone 51)

HOLE ID	TYPE	EASTING	NORTHING	RL	ZONE	DIP	AZIMUTH	DEPTH
HR0141	RC	260039.6	6246188.9	23.0	MGA94_51	-60	145	78
HR0142	RC	260037.5	6246147.6	22.5	MGA94_51	-60	325	72
HR0143	RC	258607.1	6247155.7	24.7	MGA94_51	-60	95	57
HR0144	RC	258637.7	6247153.5	24.4	MGA94_51	-60	95	66
HR0145	RC	259898.1	6246387.4	21.7	MGA94_51	-60	269	50
HR0146	RC	259926.4	6246388.5	20.6	MGA94_51	-60	269	50
HR0147	RC	259957.5	6246388.9	22.1	MGA94_51	-60	269	50
HR0148	RC	259987.9	6246389.9	23.4	MGA94_51	-60	269	50
HR0149	RC	260020.2	6246392.3	23.7	MGA94_51	-60	269	60
HR0150	RC	260028.0	6246159.3	22.5	MGA94_51	-60	325	46
HR0151	RC	256668.2	6244934.9	24.3	MGA94_51	-60	310	72