

30 March 2023

## Four New Graphite Discoveries from RC Drilling Results at Crater Gold Mining's Croydon Project.

### KEY HIGHLIGHTS:

- Four new areas of graphite mineralisation discovered at EM anomalies S1-S, S4-N, S7 and 1.5kms to the NW of the Golden Gate Graphite Prospect
- The S1-S graphite discovery potentially extends the currently known Golden Gate Graphite Prospect by over 1.5kms to the SE
- The discovery to the NW of the Golden Gate Graphite Prospect possibly extends the prospect by 1.5kms to the NW
- 3 Drill holes at S4 with a strike length of 800m
- Graphite intersections ranging up to 6.02% over 21m and 8.87% over 5m
- A follow-up exploration drilling program is scheduled to commence in late April / early May as soon as ground access is possible

### DRILLING RESULT HIGHLIGHTS

#### 1. ANOMALY S1-S

- Hole RC058 21m (40-61m) @ 6.02% graphite (cut-off 4.41% graphite)
- Hole RC059 4m (113-117m) @ 6.78% graphite (cut-off 5.3% graphite)

#### 2. NW EXTENSION OF GOLDEN GATE GRAPHITE PROSPECT

- RC01 SHAFT 1 including 9m (9-18m) @ 3.26% graphite (cut-off 2.85% graphite)

#### 3. ANOMALY S4-N-- 3 HOLES DRILLED OVER A 800m STRIKE LENGTH

- Hole RC251 including 5m (54-59m) @ 8.87% graphite (cut-off 4.06% graphite),
- Hole RC252 including 6m (73-79m) @ 5.29% graphite (cut-off 4.13% graphite)
- Hole RC253 including 12m (40-52m) @ 5.36% graphite (cut-off 3.91% graphite)

#### 4. ANOMALY S7

- Hole RC05 SHAFT 4 8m (32-40m) @ 3.57% graphite (cut-off 3.03% graphite) - open ended intersection
- Hole 501 20m (1-21m) @ 2.08% graphite (cut-off 1.50% graphite)
- Hole 503 12m (5-17m) @ 2.29% total carbon (cut-off 1.41% total carbon)

Crater Gold Mining Limited (**Crater** or the **Company**) (ASX:CGN) is pleased to announce four new graphite discovery areas identified from the Croydon reverse circulation (RC) drilling program undertaken in November of last year. The program was designed to commence follow-up investigation of first priority EM anomalies identified by the helicopter borne EM survey undertaken in July 2022 (refer to ASX announcement 5<sup>th</sup> October 2022 titled, "Preliminary Results Identify High Priority Targets at the Croydon Project, Nth Qld").

The program involved a total of 19 drill holes for a total of 1,075m. Of this total, 8 holes for 674m were drilled in EPM 18616 with 11 holes for 401m drilled in EPM 8795 (refer to **Figure 1** for hole and Anomaly locations).

Of the 7 major anomalies identified from the EM program, the initial anomalies drill tested were anomalies S1-South, S4-N and S7. Two holes were drilled to test Anomaly S1-S, located at the southern end of EM Anomaly S1, where there had been no previous drilling undertaken for graphite. Both holes intersected graphite mineralisation grades of over 6.0% indicating a new SE extension zone of the Golden Gate Graphite Prospect, potentially extending that prospect by over 1.5kms to the SE. Two holes were also drilled to test an area of old shallow mine workings in an area of graphite mineralised scree (not identified as an EM anomaly), located along a potential NW strike extension of the Golden Gate Graphite Prospect approximately 1.5km to the NW. A significant new zone of shallow low-grade graphite was intersected, ranging up to 2.72% over 19m.

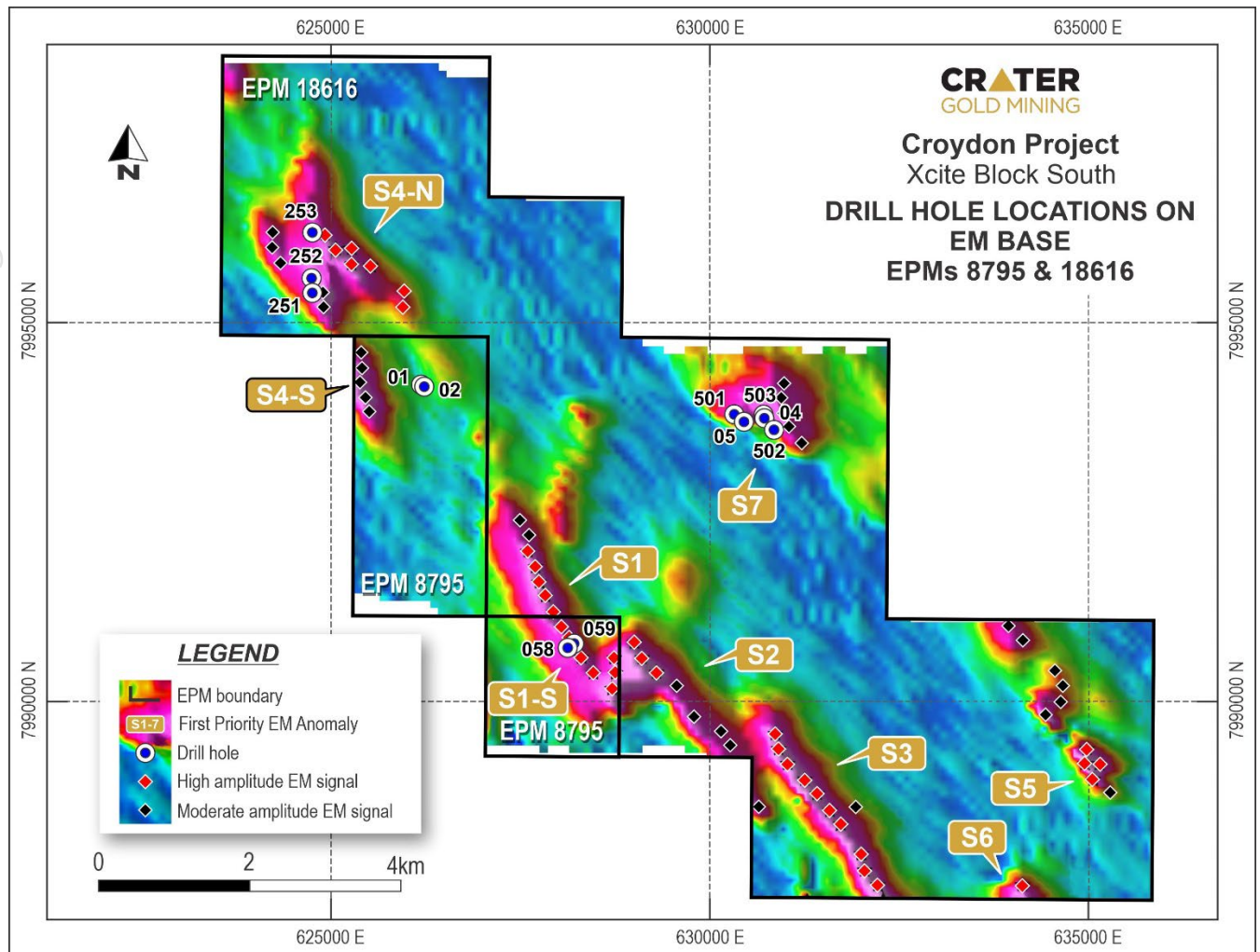
Good results were also obtained from Anomaly S4-N with all three holes drilled in this anomaly intersecting a new discovery zone with good graphite grades. All 3 holes intersected graphite grades of over 5%. Drill testing within this anomalous zone has indicated that graphite mineralisation extends along a strike extent of at least 800m

Significant zones of lower grade mineralisation from close to surface were intersected in 3 of the 5 holes drilled at a new graphite discovery area at Anomaly S7.

Overall, for the drilling program, 1m graphite intervals over more than 1.0% grade, ranged from 1.02% up to 12.65%. The intersections provided below are based on intervals of 1m or more with over 1% graphite from the four new graphite discovery areas.

### Management Commentary

CGN's Managing Director, Russ Parker, commented: "We are delighted with the results from our initial drilling program from Croydon. The results from S1-South extend our Golden Gate Graphite Prospect area by over 1.5kms to the South East & the results at S4 are equally as impressive, already indicating a strike length of over 800m. At S7 it is interesting that the graphite recorded was basically from surface. We plan to target further EM identified areas in our upcoming drilling program due to commence late April / early May."



**Figure 1:** Location of drill holes Croydon RC drilling program. All holes pre-fixed with RC. Holes RC051 to RC057 located under the RC058 and RC059 locations.

### **ANOMALY S1-S (EPM 8795)**

The graphite in the two deep holes drilled here is hosted within hematite, sericite and pyrite altered granite. Both holes intersected encouraging graphite mineralised intersections in excess of 6.0% graphite, identifying a new previously unrecognised SE extension zone of the Golden Gate Graphite Prospect but which was defined as a first priority EM Anomaly at the southern end of S1.

#### **Hole S1-S\_RC058 Collar 628130E/7990727N Vertical Hole: Total Depth 80m (EPM 8795)**

- 21m (40-61m) @ 6.02% graphite (cut-off 4.41% graphite)
  - o Incl 10m (45-55m) @ 6.57% graphite (cut-off 5.74% graphite)
  - o Incl 2m (47-49m) @ 7.79% graphite (cut-off 7.6% graphite)

#### **Hole S1-S\_RC059 Collar 628204E/7990776N Vertical Hole: Total Depth 136m (EPM 8795)**

- 4m (113-117m) @ 6.78% graphite (cut-off 5.3% graphite)

### **POSSIBLE NW EXTENSION - GOLDEN GATE GRAPHITE PROSPECT (EPM 8795)**

Extensive outcrop of graphite was noted in this area as were many old shallow workings. The graphite here is hosted within hematite and sericite altered granite. The area lies along the suspected strike extension of the Golden Gate Graphite prospect and as such identifies a new area of graphite mineralisation.

**Hole SHAFT 1\_RC01 Collar 626203E/7994180N Vertical Hole: Depth 40m (EPM 8795)**

- 15m (3-18m) @ 2.72% graphite (cut-off 1.51% graphite)
  - o Incl 6m (3-9m) @ 1.98% graphite (cut-off 1.51% graphite)
  - o Incl 9m (9-18m) @ 3.26% graphite (cut-off 2.85% graphite)
- 7m (18-25m) @ 1.49% graphite (cut-off 0.77% graphite)
- 8m (25-33m) @ 1.60% total carbon (cut-off 0.89% total carbon)
- 3m (33-36m) @ 1.67 % graphite (cut-off 0.96% graphite)

**Hole SHAFT 1\_RC02 Collar 626217E/7994181N 60 to 030°M: Depth 64m (EPM 8795)**

- 14m (4-18m) @ 1.87% graphite (cut-off 1.34% graphite)
- 19m (33-52m) @ 2.52% graphite (cut-off 1.02% graphite)
  - o Incl 4m (33-37m) @ 2.12% graphite (cut-off 1.74% graphite)
  - o Incl 8m (37-45m) @ 3.14% graphite (cut-off 2.31% graphite)
  - o Incl 7m (45-52m) @ 2.52% graphite (cut-off 1.02% graphite)

**ANOMALY S4-N (EPM 18616)**

The S4-N EM anomaly area as shown on Figure 1, extends along strike (NW/SE) for around 2.5km. The Drill testing within the anomalous zone has indicated that graphite mineralisation extends along this strike for at least 800m of this distance, with encouraging zones of greater than 5% graphite over individual vertical distances of 5m (8.87%), 6m (5.29%) and 12m (5.36%), together with significant lower grade zones of plus 1.0%. The graphite is hosted within hematite and sericite altered granite. The wide EM anomalous zone of up to 1.0km (NE/SW) may suggest that there are several separate shallow dipping graphite zones present.

Intersections provided below are based on intervals of 1m or more with over 1% graphite.

**Hole S4-N\_RC251 Collar 624755E/7995404N Vertical hole: Total Depth 91m (EPM 18616)**

- 20m (52-72m) @ 3.33% graphite (cut-off 1.03% graphite)
  - o Incl 2m (52-54m) @ 2.42% graphite (cut-off 1.28% graphite)
  - o Incl 5m (54-59m) @ 8.87% graphite (cut-off 4.06% graphite)
  - o Incl 1m (55-56m) @ 12.65% graphite
  - o Incl 8m (59-67m) @ 1.55% graphite (cut-off 1.03% graphite)
  - o Incl 1m (69-70m) @ 1.43% graphite
  - o Incl 1m (71-72m) @ 1.32% graphite

**Hole S4-N\_RC252 Collar 624751E/7995603N Vertical Hole: Total Depth 88m (EPM 18616)**

- 2m (63-65m) @ 1.30% graphite (cut-off 1.05% graphite)
- 1m (71-72m) @ 1.02% graphite
- 6m (73-79m) @ 5.29% graphite (cut-off 4.13% graphite)
- 2m (79-81m) @ 1.68% graphite (cut-off 1.22% graphite)

**Hole S4-N\_RC253 Collar 624756E/7996204N Vertical Hole: Total Depth 76m (EPM 18616)**

- 4m (27-31m) @ 1.16% graphite (cut-off 1.08% graphite)
- 1m (39-40m) @ 2.03% graphite
- 12m (40-52m) @ 5.36% graphite (cut-off 3.91% graphite)
- 1m (52-53m) @ 1.41% graphite

### **ANOMALY S7 (EPM 18616)**

At Anomaly S7 the graphite is hosted within altered volcanic rocks. Significant zones of mineralisation were intersected in 3 of the 5 holes. All of the graphite intersections occur from close to surface from 1m to 8m from surface. A one metre intersection of 0.37 g/t Au was reported from Hole Shaft 3\_RC04, with two metres of 0.46 g/t Au reported from Hole Shaft 4\_RC05. Intersections of more than 1.0% graphite or anomalous gold were as follows:

#### **Hole S7-W\_501 Collar 630325E/7993800N Vertical Hole: Total Depth 121m (EPM 18616)**

- 20m (1-21m) @ 2.08% graphite (cut-off 1.50% graphite)

#### **Hole S7-W\_502 Collar 630850E/7993600N Vertical Hole: Total Depth 106m (EPM 18616)**

- 1m (8-9m) @ 2.00% total carbon

#### **Hole S7-W\_503 Collar 630701E/7993801N Vertical Hole: Total Depth 79m (EPM 18616)**

- 12m (5-17m) @ 2.29% total carbon (cut-off 1.41% total carbon)

#### **Hole SHAFT 3\_RC04 Collar 630709E/7993754N 60° to 210°M: Depth 64m (EPM 18616)**

- 1m (2-3m) @ 0.37 g/t Au

#### **Hole SHAFT 4\_RC05 Collar 630450E/7993710N 60° to 230°M: Depth 49m (EPM 18616)**

- 4m (7-11m) @ 2.14% graphite (cut-off 1.32% graphite)
  - o Incl 2m (9-11m) @ 0.46 g/t Au (cut-off 0.19 g/t Au)
- 1m (31-32m) @ 1.04% graphite
- 8m (32-40m) @ 3.57% graphite (cut-off 3.03% graphite) [last assay 40m - 3.41% graphite)
  - o Incl 1m (37-38m) @ 0.17 g/t Au

### **PLACER GOLD TARGET (EPM 8795)**

In EPM8795, nine shallow holes were drilled in creek gravels to test a potential placer gold zone in Belmore Creek which drains part of the Gold Gate gold workings. Two of the holes were the upper alluvial sections of deeper holes S1-S\_RC058 and S1-S\_RC059. The holes were located in a small area on Figure 1 under the location where holes S1-S\_RC058 and S1-S\_RC059 are plotted. Only low-grade gold assays (maximum 0.31g/t Au) were obtained which are considered to be due to slightly anomalous rock float randomly distributed through the gravel profiles and not associated with placer gold that would be expected to be developed at the base of the gravels.

#### **Hole S1-S RC051: Collar 628203E/7990865N Vertical Hole: Total Depth 10m**

- 1m (0-1m) @ 0.03 g/t Au

#### **Hole S1-S RC052: Collar 628156E/7990847N Vertical Hole: Total Depth 16m**

- 1m (11-12m) @ 0.31 g/t Au

#### **Hole S1-S RC053: Collar 628123E/7990829N Vertical Hole: Total Depth 10m**

- 1m (3-4m) @ 0.04 g/t Au

#### **Hole S1-S RC054: Collar 628140E/7990777N Vertical Hole: Total Depth 13m**

- 1m (3-4m) @ 0.14 g/t Au

#### **Hole S1-S RC055: Collar 628183E/7990732N Vertical Hole: Total Depth 15m**

- 1m (11-12m) @ 0.04 g/t Au



**Hole S1-S RC056: Collar 628220E/7990786N Vertical Hole: Total Depth 13m**

- 1m (3-4m) @ 0.24 g/t Au

**Hole S1-S RC057: Collar 628115E/7990654N Vertical Hole: Total Depth 4m**

- 1m (14-15m) @ 0.22 g/t Au

**Top 15m of Hole S1-S RC058: Collar 628130E/7990727N Vertical Hole**

- 1m (14-15m) @ 0.22 g/t Au

**Top 15m of Hole S1-S RC059: Collar 628204E/7990776N Vertical Hole**

- 1m (0-1m) @ 0.27 g/t Au

A diamond core drilling program is planned for commencement at Croydon at the end of April, weather permitting. Initially this will concentrate on first priority EM anomaly S3 and follow-up of new discoveries at Anomalies S4-N, S7, S1-S and the NW extension of the Golden Gate Graphite Prospect.

This announcement was authorised for release by Russ Parker, Managing Director of Crater Gold Mining Ltd.

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**Table 1:** Drill hole details

Hole ID	EPM	GDA20 East (m)	GDA20 North (m)	RL	Type	Hole Size	Inclination	Azimuth	Hole depth
S1-S_RC051	8795	628203	7990865	NR	RC	5.25"	90		10
S1-S_RC052	8795	628156	7990847	NR	RC	5.25"	90		16
S1-S_RC053	8795	628123	7990829	NR	RC	5.25"	90		10
S1-S_RC054	8795	628140	7990777	NR	RC	5.25"	90		13
S1-S_RC055	8795	628183	7990732	NR	RC	5.25"	90		15
S1-S_RC056	8795	628220	7990786	NR	RC	5.25"	90		13
S1-S_RC057	8795	628115	7990654	NR	RC	5.25"	90		4
S1-S_RC058	8795	628130	7990727	NR	RC	5.25"	90		80
S1-S_RC059	8795	628204	7990776	NR	RC	5.25"	90		136
SHAFT 1_RC01	8795	626203	7994180	NR	RC	5.25"	90		40
SHAFT 1_RC02	8795	626217	7994181	NR	RC	5.25"	60	30	64
S4-N_RC251	18616	624755	7995404	NR	RC	5.25"	90		91
S4-N_RC252	18616	624751	7995603	NR	RC	5.25"	90		88
S4-N_RC253	18616	624756	7996204	NR	RC	5.25"	90		76
S7-W_RC501	18616	630325	7993800	NR	RC	5.25"	90		121
S7-W_RC502	18616	630850	7993600	NR	RC	5.25"	90		106
S7-W_RC503	18616	630701	7993801	NR	RC	5.25"	90		79
SHAFT 3_RC04	18616	630709	7993754	NR	RC	5.25"	60	210	64
SHAFT 4_RC05	18616	630450	7993710	NR	RC	5.25"	60	230	49

**COMPETENT PERSON STATEMENT**

The information contained in this report relating to exploration activities at Croydon is based on and fairly represents information and supporting documentation prepared by Mr Ken Chapple or by appropriately qualified company and consultant personnel and reviewed by Mr Chapple, who is an Associate Member of The Australasian Institute of Mining and Metallurgy and a Fellow of the Australian Institute of Geoscientists. Mr Chapple has sufficient experience relevant to the style of mineralisation and type of deposit involved to qualify as a Competent Person as defined in the 2012 JORC Code. Mr Chapple is an independent principal geological consultant with KCICD Pty Ltd and consents to the inclusion in this report of matters based on his information in the form and context in which it appears.

**Forward Looking Statements:** This Announcement contains certain forward-looking statements. The words 'anticipate', 'believe', 'expect', 'optimism', 'project', 'forecast', 'estimate', 'likely', 'intend', 'should', 'could', 'may', 'target', 'plan', 'encouraging', 'significant' and other similar expressions are intended to identify forward looking statements. Forward-looking statements are subject to risk factors associated with the Company's business, many of which are beyond the control of the Company. It is believed that the expectations reflected in these statements are reasonable at the time made but they may be affected by a variety of variables and changes in underlying assumptions which could cause actual results or trends to differ materially from those expressed or implied in such statements. There can be no assurance that actual outcomes will not differ materially from these statements. You should therefore not place undue reliance on forward-looking statements.

# JORC Code, 2012 Edition – Table 1 report template

## Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>Representative reverse circulation (RC) drill chip samples for each metre of intersected mineralisation selected for assay.</li> <li>For each metre drilled the RC system recovered approximately 20 kg. Each one metre sample was passed through a drill rig-mounted cyclone which captured a 1.5-2.5kg representative sample from this for assay.</li> <li>Care was taken to ensure sample from each metre was removed before continuing with the next metre interval.</li> <li>Samples for assay were guided by the chip logging with ones identified as containing graphite assayed for graphite and/or those containing quartz veining submitted for gold assay. Where graphite was present but considered to be only low grade, a check using total carbon assay was used to reduce the assay cost. Previous work has indicated that total carbon very closely matches graphitic carbon. Where total carbon assays have been used in reported composited intervals, this has been noted.</li> <li>Industry standard sample assay was followed, with up to 3kg pulverized to produce a 30gm charge for gold assay and the required charge for graphite or total carbon assay.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>The drilling type was reverse circulation (RC) using a 51/4 inch drill bit. This provided an approximate 20kg bulk sample and a cyclone split off sample of around 1.5 to 2.5kg. All bulk samples have been stored for latter assay if required.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul style="list-style-type: none"> <li>Chip sample recoveries collected from the drill rig mounted cyclone were considered to be representative of each of the drilled one metre intervals. These samples, collected for submission to the laboratory for assay mainly ranged from 1.5 to 2.5 kg in weight with an overall average of 2.0 kg. The weight variation is considered to reflect the varying rock types, levels of oxidation and alteration. However, in view of the RC drilling technique, some of the variation could be due to dust loss and the accuracy of the driller in accurately judging the end of each one metre sample interval. Errors in this judgement</li> </ul>



Criteria	JORC Code explanation	Commentary
		could have had an influence on the reported laboratory assay values. RC drilling was used for the program described here as its purpose was mainly to determine if the first priority EM anomalies tested were due to the presence of graphite mineralisation. In the upcoming 2023 drilling program, diamond coring will be used, with at least the twining of one or more of the RC holes to check on the recorded intervals and graphite assay grades. This will determine if diamond coring is required for all follow-up drilling of the newly defined graphite mineralised zones.
Logging	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>Chip samples were logged on a metre by metre basis. As the samples were RC chips only lithological features, alteration and mineralisation were recorded. Examination of diamond core drilling would be required to obtain details of the structures and style of mineralisation in order to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. This will be addressed in the next drilling program commencing end of April 2023 by changing to diamond core drilling.</li> <li>Logging of the RC chip samples was undertaken, samples placed in 20 compartment trays and photographed.</li> <li>The total length of all holes was logged in this manner.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>RC drilling so sawing of samples not relevant.</li> <li>The RC chips were sampled by rig mounted cyclone by taking a small representative sample.</li> <li>The sampling procedure was considered to be appropriate for the purpose which was to evaluate the source of the EM anomalies.</li> <li>The rig mounted cyclone was trusted for collecting representative samples for assay.</li> <li>No duplicate samples were inserted in sample batches for assay.</li> <li>The sample sizes were considered appropriate for the grain size of the material being sampled.</li> </ul>
Quality of assay data and	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument</li> </ul>	<ul style="list-style-type: none"> <li>The laboratory procedure was of a conventual nature as follows; Drying Samples &gt;3kg crushed then riffle split Up to 3kg of sample pulverized to 85% passing 75 micron sieve Pulverized sample riffle split to obtain an assay pulp</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>laboratory tests</i>	<p><i>make and model, reading times, calibrations factors applied and their derivation, etc.</i></p> <ul style="list-style-type: none"> <li><i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i></li> </ul>	<p>Sample pulps then assayed for either graphitic carbon (C-IR018), total carbon (IR07) and gold (Au-AA26) as specified by the Company. For some intersections where graphite content appears to be low, only total carbon assays have been undertaken to save on analytical costs. This is based on previous experience from metallurgical test work that has shown there is very little difference between total carbon assay values and graphitic carbon assays for graphite in the Croydon area. In the assay interval data included in the text, where only total carbon assays have been undertaken (as indicated), the values have been used in the determination of "graphite" intersection grades. Graphite standards (Oreas) used for graphite submitted samples on a general 1 per 15 unknown samples. Some laboratory assays of the standards were marginally outside the ranges expected but is not considered material to the listed intersections – this aspect is being followed up with the laboratory.</p>
<i>Verification of sampling and assaying</i>	<ul style="list-style-type: none"> <li><i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li><i>The use of twinned holes.</i></li> <li><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li><i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>All intersections were described by an experienced contract geologist and verified by the author of this announcement who was on site during the entire RC drilling program.</li> <li>All logging was entered into a digital data log.</li> <li>No adjustment was made to any assay data</li> </ul>
<i>Location of data points</i>	<ul style="list-style-type: none"> <li><i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i></li> <li><i>Specification of the grid system used.</i></li> <li><i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>The location of all drill holes was recorded by handheld GPS. The accuracy was stated as being +/- 3m for co-ordinates but RL readings were consistent enough to record.</li> <li>Grid system used was GDA 2020</li> <li>Topographic control was considered to be adequate except for RLs which will need to be determined by ground survey before being used in any deposit size estimates.</li> </ul>
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <li><i>Data spacing for reporting of Exploration Results.</i></li> <li><i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></li> <li><i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>The RC drilling program was directed towards testing the EM anomalies that were interpreted to be defining zones of graphite mineralisation. The stage of the program did not involve grid based or closed spaced drilling – this will be the progressive objective as the graphite mineral deposits are better defined. Detailed data other than logging and assaying for deposit size and grade estimation not relevant at this stage.</li> <li>Sample compositing of selected diamond core samples of graphite mineralisation has been undertaken for metallurgical test work.</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul style="list-style-type: none"> <li>Based on other known graphite mineralised zones in the Croydon area, it is expected that the mineralisation will be layer like with shallow dips to the NE. Sampling is designed to achieve unbiased sampling of the mineralised horizons.</li> <li>Given the shallow dipping target horizons, all holes are vertical. No biased is expected by following this procedure.</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Samples are collected daily from the drill site and taken to the Company's Croydon operations base where they are safely stored. When the RC chips are logged and photographed, they are packed in poly sacks for submittal for assay. The bags are then placed on pallets and wrapped in plastic sheet for both secure truck transport to the Brisbane Laboratory and to reduce the risk of any tampering by third parties.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>No external audit review of the sampling techniques and data has been undertaken.</li> </ul>

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>The graphite project is located within EPMs 8795 and 18616 which are 100% owned by the Company. EPM 8795 was renewed in September 2022 for a new 2 year term and renewal of EPM 18616 for a further 5 year term commencing June 2023 has been lodged.</li> <li>Currently work within some of the tenement areas is restricted due to 500m Buffer Zones surrounding Heritage Sites. Application for entry into these areas to allow exploration work to be undertaken has been lodged.</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>The Company has access to many of the reports on the exploration work undertaken and results obtained prepared by previous explorers mainly in the period 1980s to 1890s. This work is considered to be of a good quality and provides a good background to the area. Of particular interest are the reported large but non-verified graphite deposit at Golden Gate and the non-verified gold deposit as Sunset</li> </ul>

Criteria	JORC Code explanation	Commentary
		North.
Geology	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>Outcrop in the Croydon area is dominated by the co-magmatic Esmeralda Granite and the Croydon Volcanics. Their age was thought to be Proterozoic, but there is some evidence to suggest they are Paleozoic in age which would be in keeping with the association of the majority of similar mineralising systems in Queensland.</li> <li>The contact between the granite and the volcanics is gently dipping to the NW and is considered to represent a roof zone of the granite batholith.</li> <li>Gold occurs in association with quartz veining and graphite mineralisation occurs in shallow dipping zones in the granite and also within quartz veining in steep dipping zones in the volcanics. Both occur within close proximity of the granite/volcanic contact.</li> <li>Graphite mineralisation occurs in two varying styles The first of these is where graphite up to 10m in width occurs in close association with gold mineralised quartz reefs and quartz stringer zones. The main occurrences are prominent shallow dipping zones in both the volcanics and the granites in thicknesses of up to 60m or more (the latter usually very low in Au - trace to &lt; 0.1g/t). Drilling has identified two or more separate graphitic mineralised horizons, mainly developed within the granite.</li> <li>Graphite occurs in flake form and is considered to be of hydrothermal origin. Rounded to sub-rounded graphitic aggregates or nodules are a feature of the mineralisation style. These nodules may have developed as immiscible graphitic hydrothermal fluids “clots” in a developing granitization process. The presence of significant amounts of restite (residual material left over during granitization) provides evidence for such a process having taken place.</li> <li>The volcanics and granite in the Croydon area are partly overlain by a thin cover of Cretaceous and recent sediments.</li> <li>To the NE of Croydon in the Wallabadah area, polymetallic veining of interpreted granitic intrusion related origin has been intersected in drilling beneath the 100m+ Cretaceous sedimentary cover.</li> </ul>
Drill hole Information	<ul style="list-style-type: none"> <li><i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i></li> </ul>	<ul style="list-style-type: none"> <li>Information on drill hole collar co-ordinates, dip and azimuth of the holes, down hole lengths, intercept depths of mineralisation and hole length for all holes are listed within the main announcement text and</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>o <i>easting and northing of the drill hole collar</i></li> <li>o <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li>o <i>dip and azimuth of the hole</i></li> <li>o <i>down hole length and interception depth</i></li> <li>o <i>hole length.</i></li> <li>• <i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i></li> </ul>	are also listed in an appended excel spreadsheet. RL readings from the GPS unit provided a spread of elevations so are considered to be unreliable and have not been reported here. These will need to be determined by land survey before estimation of deposit sizes are undertaken.
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <li>• <i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</i></li> <li>• <i>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i></li> <li>• <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>• For mineralised intercepts in the results tabulation within the announcement text, all are listed with the start and finish of composite one metre intercepts, their grades and cut-offs. The list groups overall grade composites, distinguishing between low grade and higher grade intervals. Examples are evident in the assay tabulations.</li> <li>• No metal equivalents used.</li> </ul>
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <li>• <i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li>• <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li>• <i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</i></li> </ul>	<ul style="list-style-type: none"> <li>• As all holes are drilled on separate drill traverse lines, only single intercepts are obtained with no information obtained regarding dips of mineralised horizons. All intercepts are therefore down hole lengths and do not indicate widths. This will be partly addressed in the next drilling program when "second" holes are drilled on the initial traverse lines</li> </ul>
<i>Diagrams</i>	<ul style="list-style-type: none"> <li>• <i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i></li> </ul>	<ul style="list-style-type: none"> <li>• A plan view of drill collar location is provided in Figure 1, where the location of drill holes in relation to first priority EM anomalies is indicated. As only single holes at this stage have been drilled on traverse lines, sections have not been drafted as they would not display any information on mineralisation zone dips or true thicknesses.</li> </ul>
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li>• <i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Both low and high grade intercepts have been listed with all interval cut-off grades noted.</li> </ul>



Criteria	JORC Code explanation	Commentary
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li><i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></li> </ul>	<ul style="list-style-type: none"> <li>All drill hole locations in relation to first priority EM anomalies are noted. No metallurgical testing of the RC drill intercepts has been attempted from the program. This test work will be undertaken on diamond core composite samples from the up-coming core drilling program due for commencement late April when ground access is possible after the end of the wet season.</li> </ul>
<i>Further work</i>	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>A large diamond core drilling program is planned for commencement late April. This will be undertaken in first priority EM Anomalies S3, S4-N and S7 (refer to Figure 1). This will be a combination of lateral testing for graphite extensions and step-out drilling on drill traverse line where only single holes have currently been drilled to date. The later will provide important information on mineralisation horizon dips and thicknesses. Most of the holes will be vertical. Composite drill core samples for metallurgical testing will be selected from mineralised intersections.</li> </ul>