

3 March 2023

**METALLURGICAL TEST WORK CONFIRMS GRAPHITE FLAKE,
GOLDEN GATE GRAPHITE PROJECT, CROYDON QLD.**

HIGHLIGHTS

- **FLOTATION OF A COMPOSITE SAMPLE ACHIEVED A FINAL CONCENTRATE PRODUCT WITH A GRAPHITE GRADE OF 95.3%**
- **GRAPHITE IS ULTRA-FINE GRAINED WITH 90.5% LESS THAN 53 MICRONS AND 66.6% LESS THAN 25 MICRONS**
- **GRAPHITE IS PRESENT AS PLATY FLAKE**
- **FUTURE TEST WORK TO FOCUS ON OPTIMISATION AND IF THE GRAPHITE IS AMENABLE TO MICRONISATION AND/OR SPHERONISATION PROCESSING**

Crater Gold Mining Limited (**the Company, ASX:CGN**) is pleased to announce the results of ongoing metallurgical test work on graphite mineralisation from the Golden Gate Graphite Project at Croydon in North Queensland.

As announced to the ASX ("*Graphite Metallurgical Test Work, Golden Gate Graphite Project, Croydon, QLD, 20 June 2022*") encouraging flotation test work results were obtained for a 7-stage cleaner concentrate from a 850 micron composite sample. There was very little coarse material present and insufficient of the finer grained fractions remaining to enable microscopic examination of the graphite product. The lack of coarse grains was surprising as previous petrological examination had indicated the presence of graphite flakes from fine sizes, up to, and exceeding 500 microns.

It was therefore decided to run the test work again using composite samples of 100% passing 1.0mm and 1.4mm. Graphite recoveries to the rougher concentrates of 77.4% and 78.7% respectively were achieved, but the graphite grades of the final concentrate products were low at 25.8% and 25.7%. Both sample rougher concentrates were then sized and found to have a good spread of grain sizes from + 500 microns to minus 25 microns. However, microscopic examination of these fractions revealed a surprising result, with the graphitic material appearing as sub-rounded clusters or nodules, rather than an expected size range of traditional flake material. This examination also showed that the coarser grain sizes were composed of graphite nodules, gangue minerals and un-separated graphite/gangue grains (Figure 1). The individual coarse graphite grains identified in the thin section petrology were not present in this test.

To investigate this matter further, it was decided to select a 1.0mm composite sample for more detailed metallurgical testing. This involved preparing a 7-stage cleaner concentrate rather than a 4-stage rougher concentrate that was previously used. This new test work involved less vigorous progressive regrinds for the cleaner concentrate stages. A high-grade final concentrate of 96.4% graphite was achieved, but the graphite recovery to the final concentrate was only 60.2%. Sizing of the cleaner concentrate product indicated that most of the graphite was ultra-fine grained with

95.4% being less than 53 microns and 73.4% being less than 25 microns. It was then decided to attempt to optimise the 1.0mm composite sample flotation test work by using only a 3 minute bead mill polish time for all of the cleaner concentrate stages.

This optimisation attempt resulted in a final concentrate grade of 95.3% graphite, with the graphite recovery to the final concentrate much higher at 78.9%. This result indicates that optimisation is heading in the right direction. The Company is confident that further optimisation will achieve higher graphite recovery and final product purity. Sizing of the graphite concentrate also indicated that most of the graphite was ultra-fine grained with 90.5% being less than 53 microns and 66.6% being less than 25 microns.

The minus 25 micron (Figure 2), minus 38 to +24 micron (Figure 3) and the minus 53 to + 38 micron (Figure 4) graphite concentrates from the optimised 1.0mm composite sample were then examined at high magnification via a Scanning Electron Microscope (SEM). This revealed that the graphite in all three ultra-fine grain sizes was present as platy flake. This has raised optimism that the graphite, being mostly ultra-fine grained and present as platy flake, may potentially be amenable to production of high value products and in particular battery anode material. Future metallurgical test work will concentrate on investigating these possibilities at a specialised metallurgical test laboratory.

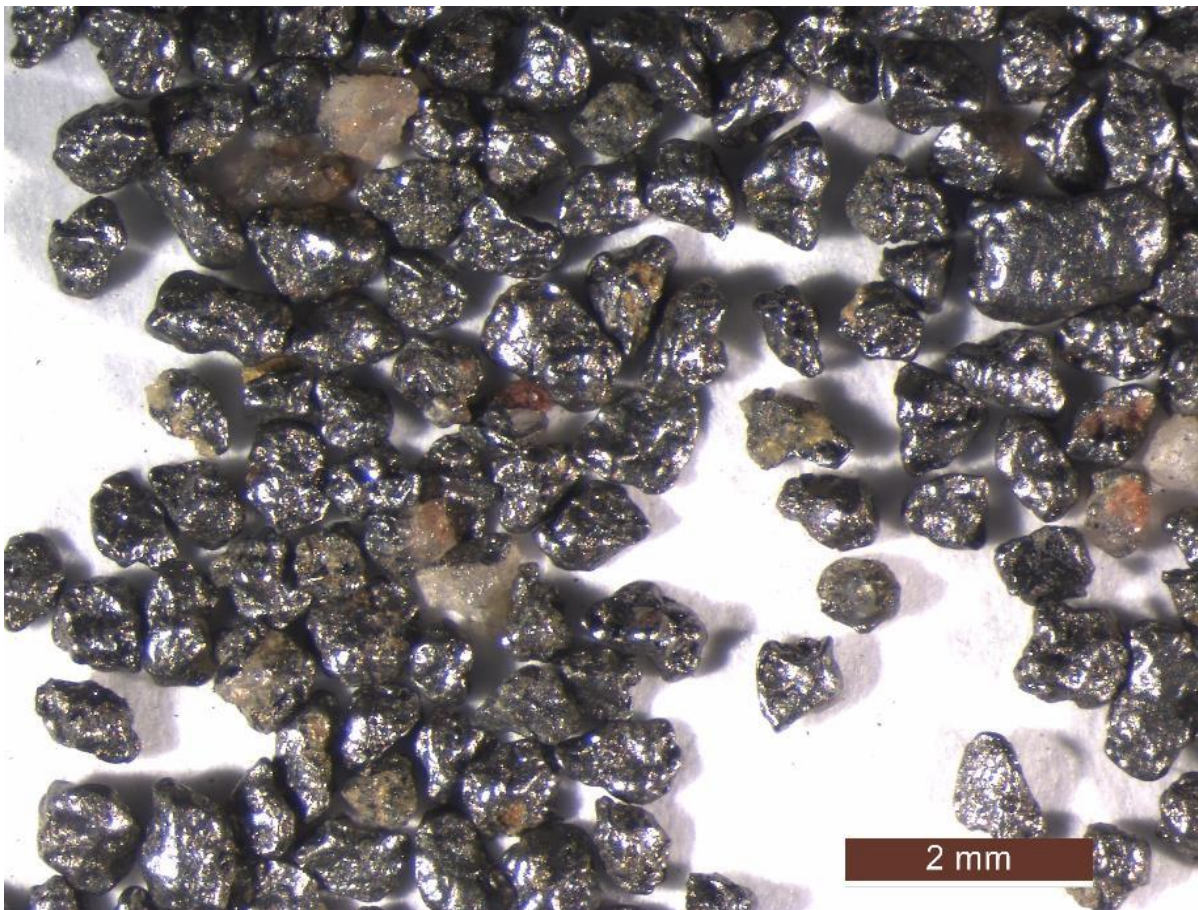


Figure 1: 1.0mm composite sample rougher concentrate, 500 microns fraction, showing sub-rounded graphite nodules and silicate gangue

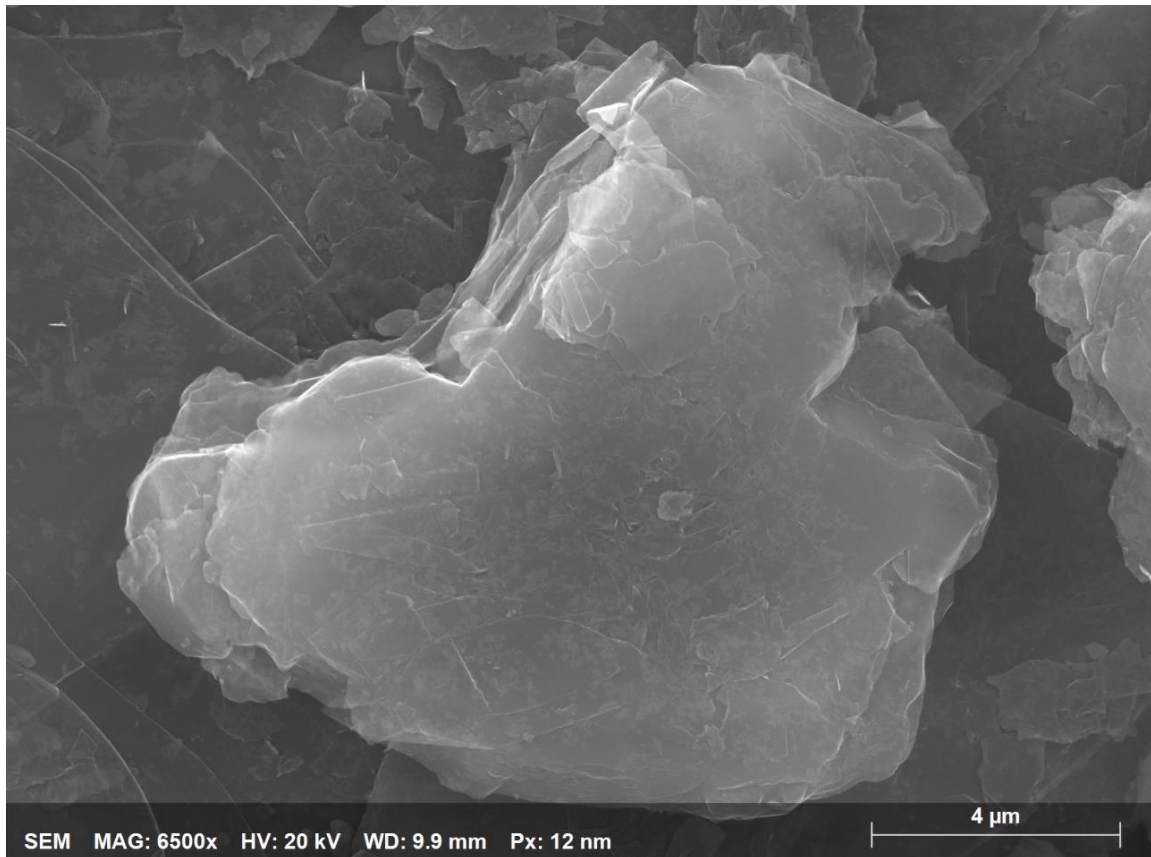


Figure 2: Platy graphite flake in minus 25 micron cleaner concentrate

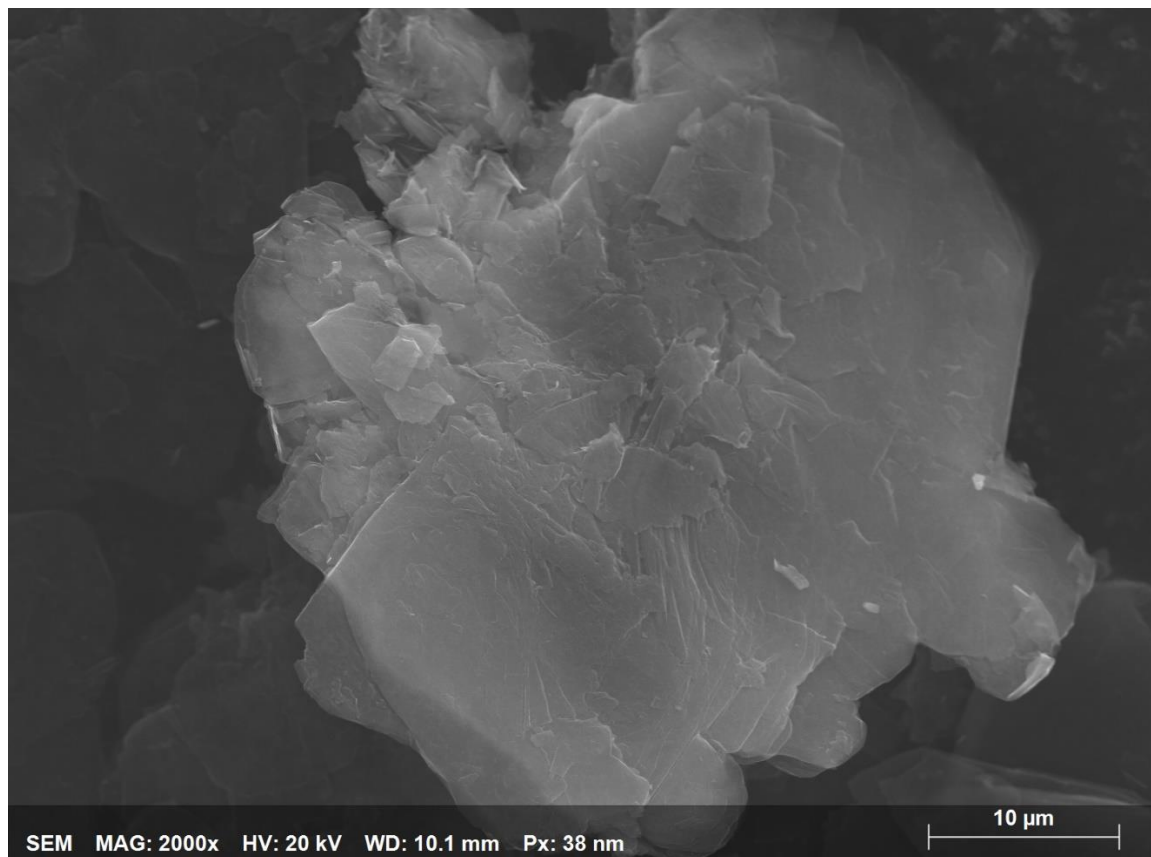


Figure 3: Platy graphite flake in minus 38 to + 25 micron cleaner concentrate

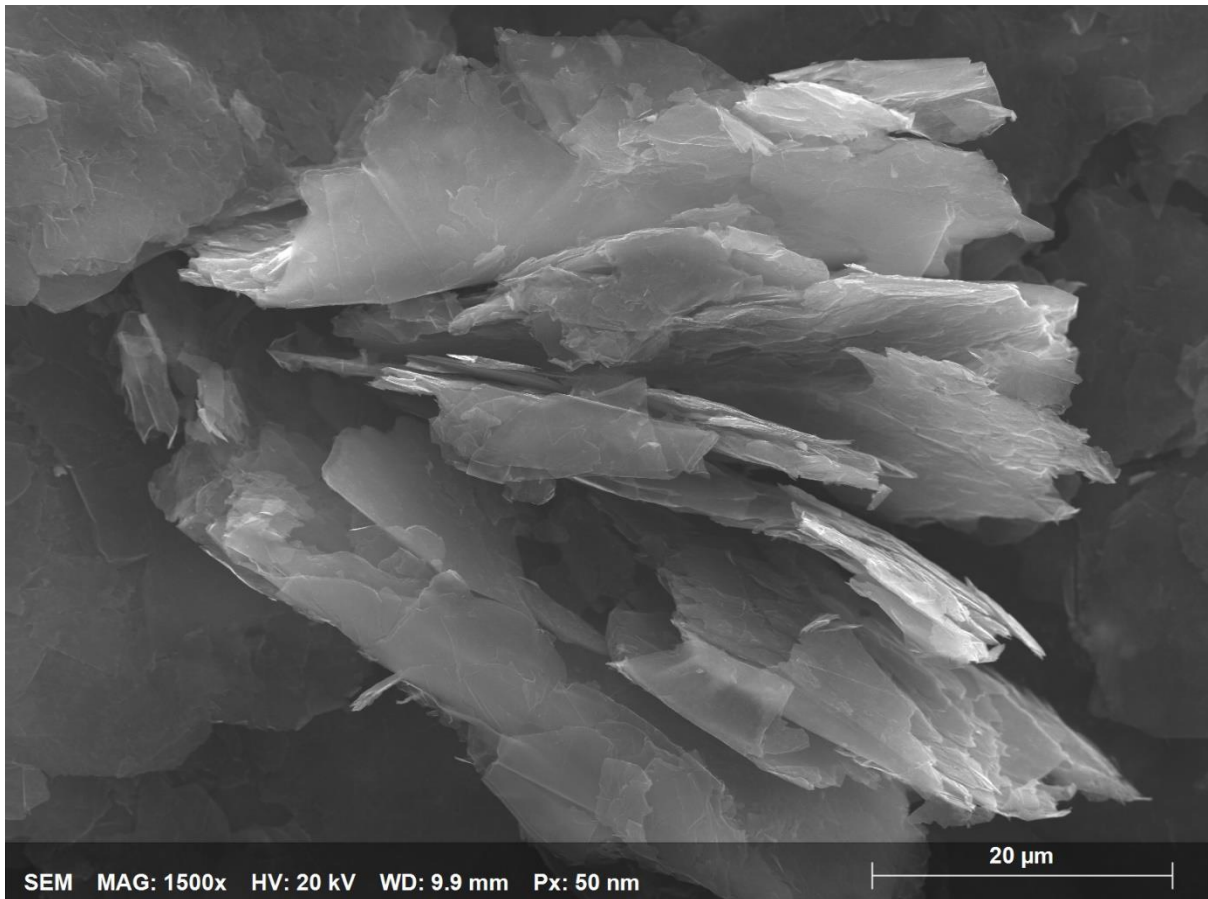


Figure 4: Platy graphite flake in minus 53 to + 38 micron cleaner concentrate

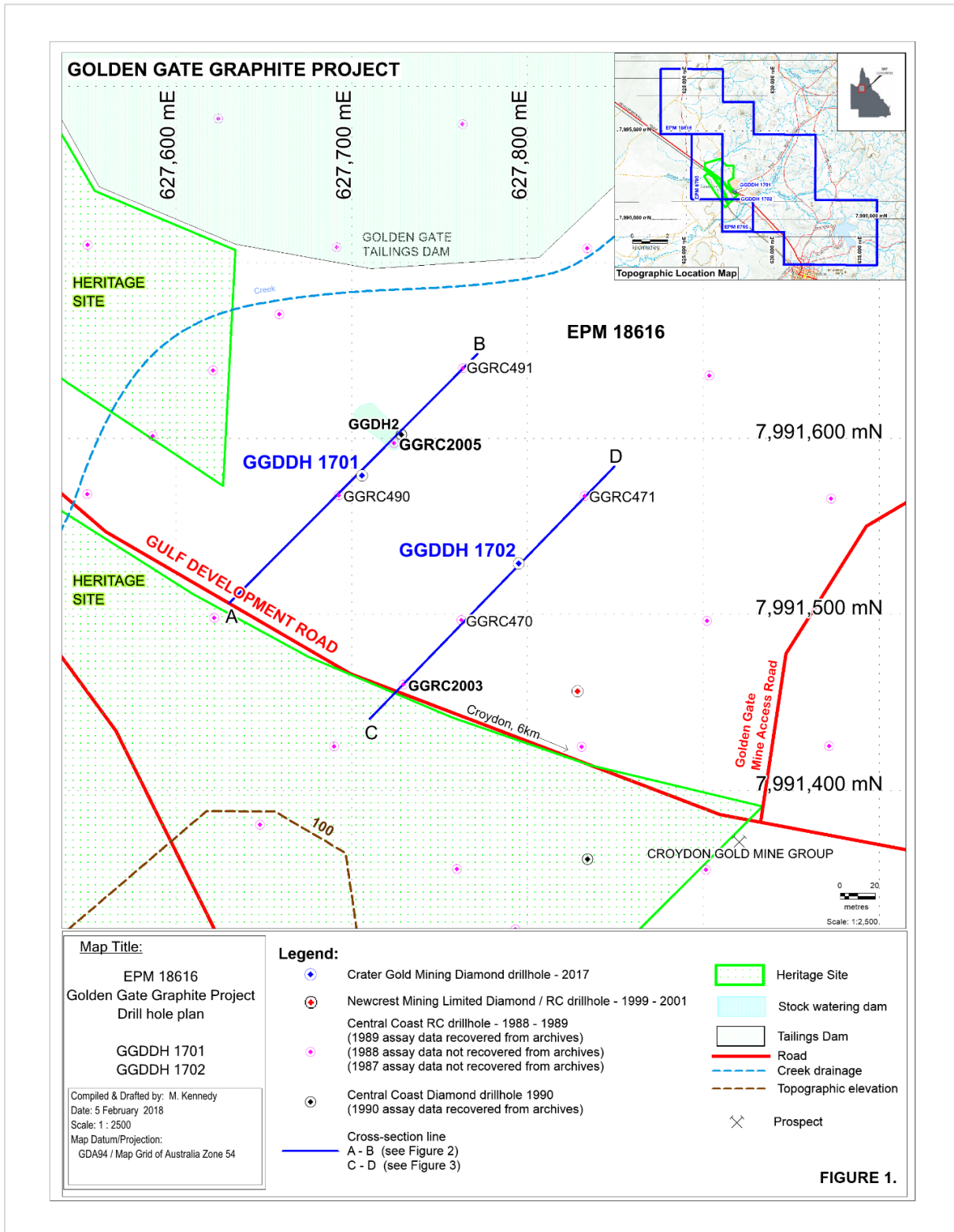


Figure 5: Plan location of diamond core hole GGDH 1702, Golden Gate Graphite Deposit

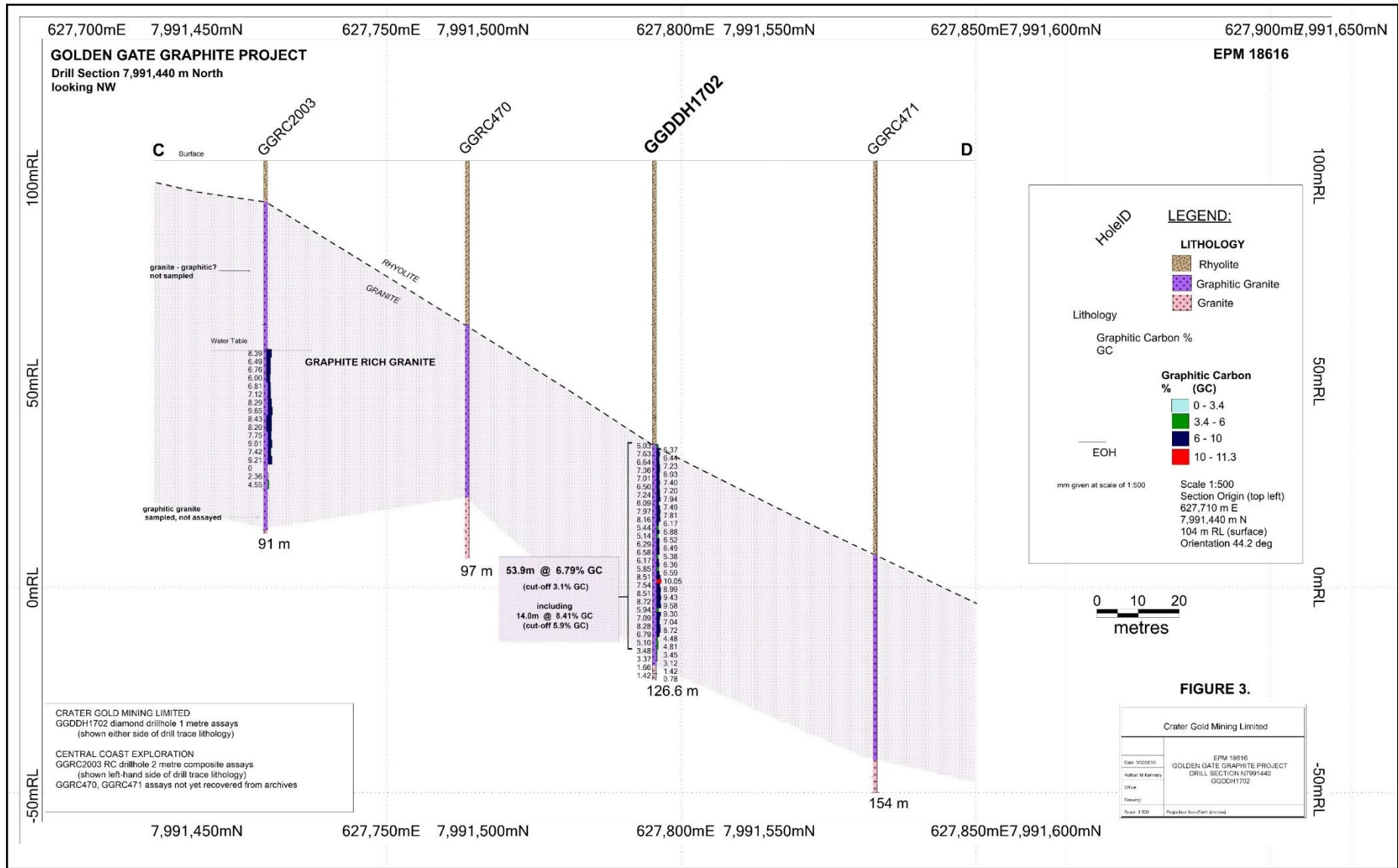


Figure 6: Diamond core drill hole GGDDH 1702 section showing graphite assays. Composite sample 2, 18m from depth of 70.0 to 88.0m

For further information contact:

Russ Parker

T: +61 8 6188 8181

E: info@cratergold.com.au

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"> 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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. 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. 	<p>The following information presented in this table is specifically directed to describing the work conducted and the results obtained from follow-up metallurgical test work undertaken by ALS Metallurgy, Perth, on a composite 2 sample prepared from drill hole GGDDGH 1702.</p> <p>The initial metallurgical test work undertaken and results obtained on composite 2 by ALS Metallurgy was reported in ASX Announcement titled "Graphite Metallurgical test Work, Golden Gate Graphite Project, Croydon, QLD", dated 20 June 2022</p> <ul style="list-style-type: none"> Diamond cored hole, GGDDH 1702, was one of two holes drilled to test the previously reported Gold Gate Graphite Deposit. It was successful in intersecting a thick (53.9m) horizon of graphite mineralization within strongly altered granite. The graphite interval core was sawn into two halves with one half submitted in one metre intervals for graphitic carbon and gold fire assay. The Company was particularly careful to ensure there was no contamination of the core by carbon bearing materials. The sample preparation and assaying procedures are considered to be of industry standard and appropriate for this type of mineralization. The program was participated in and overseen by experienced geologist Mr Ken Chapple who is the Competent Person who has prepared this Announcement.
Drilling techniques	<ul style="list-style-type: none"> 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). 	<ul style="list-style-type: none"> As high core recovery (>95%) was critical to achieve the program objectives, triple tube HQ3 coring was used (diameter 61.1mm). Also, a contract drilling company, Saxon Drilling, was engaged for the program as they specialize in high recovery geotechnical drilling. This proved to be successful with very high recoveries being achieved.

Criteria	JORC Code explanation	Commentary
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> • <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> • <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • As both holes were vertical, core orientation and down hole surveys were considered to be not relevant so were not attempted. • All core runs (mainly 3.0m unless broken ground was encountered) were pumped out from the triple tube splits, washed (to remove any carbon that may have accumulated from the contaminated recirculating drilling water) and placed into PVC tubes (cut into two equal halves). • Recoveries from each core run were then tape measured on-site in the PVC tubes for an accurate determination. Recoveries were found to be excellent such that representivity was achieved. One metre sample intervals were then marked out using a tape measure and a crayon pencil. • While the core was still in the PVC tubes, engineering measurements including discontinuity/fracture descriptions, fracture counts per core run, RQD and SCR (Solid Core Recovery) were recorded. • Each core run in the PVC tubes was then photographed (wet and dry) on-site to obtain a file record of the core before it was broken to fit into the core trays. • The core was then carefully placed in HQ core trays and transported some 7km to a secure core processing shed in Croydon. • With the high recovery achieved, there was no loss or gain of fine/coarse material and no sample bias.
<i>Logging</i>	<ul style="list-style-type: none"> • <i>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.</i> • <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i> • <i>The total length and percentage of the relevant intersections logged.</i> 	<ul style="list-style-type: none"> • At the core processing shed the boxed core was photographed (wet and dry) and geologically logged together with engineering measurements for weathering, hardness and fracture angles to the core axis. Appropriate tools were used for this work. • All of the core is considered to be quantitatively logged both geologically and geotechnically to a level to support appropriate deposit estimation, mining studies and metallurgical studies. • Samples were also collected for later petrological/mineralogical examination to assist in geological identification and logging. This has particularly been the case for the graphite mineralisation where only a preliminary visual estimate was attempted. • Features identified in the core that provide evidence for mineralisation styles and origins were specifically photographed for the record. • The logging was undertaken and overseen by experienced geologist Mr Ken Chapple who is the Competent Person who prepared this

Criteria	JORC Code explanation	Commentary
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> • <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> • <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> • <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> • <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> • <i>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.</i> • <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<p>announcement.</p> <ul style="list-style-type: none"> • All core sampled was halved by diamond saw with one half dispatched for assay and the other half retained in the core tray for the record or follow-up duplicate sampling. Sample numbers (format of hole number/consecutive numbers – eg 1702/23, 1702/24 etc) were written on the outside of the plastic sample bags and a matching numbered tag was placed inside each plastic sample bag to guard against numbering errors. • At the ALS Laboratory Services Pty Ltd laboratory in Brisbane, all 1m interval samples (mostly in the weight range 3 to 4kg) were crushed to 70% passing 6mm. • A maximum of 1.0 kg from each sample interval was riffle split off and pulverized to nominal 99% passing 75 microns. Representative splits were prepared from the pulverized sample intervals to be assayed for graphitic carbon and gold. • The remaining material from each sample (up to 3 kg) was then bagged and stored. The 70% passing 6mm is ideal for the preparation of composite samples for later detailed metallurgical testing - remaining sample was not compromised for this purpose by the crushing undertaken. • These procedures undertaken are considered to have provided representative sampling and that the sample sizes were appropriate for the grainsize of the material being sampled.
<i>Quality of assay data and laboratory tests</i>	<ul style="list-style-type: none"> • <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> • <i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i> • <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> 	<ul style="list-style-type: none"> • The assay work undertaken by accredited laboratory ALS Laboratory Services Pty Ltd, Brisbane is considered to be of an appropriate standard and consisted of the following; <ul style="list-style-type: none"> CRU-21 Crush entire sample to 70% passing 6mm. SPL-21 Split off maximum 1.0 kg sample, retain remaining coarse residue for later metallurgical test work. PUL-23 Pulverise 1.0kg sample split for assay determination BAG-01 Bag pulp. Au-AA25 Fire Assay gold, 30gm. C-IR18 Total Graphitic Carbon determination - small sample digested in 50% HCL to remove carbonate as CO2. Residue filtered, washed, dried then roasted to 425C. Residue analysed for carbon by high temperature LECO furnace with infra-red detection.

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> For quality control, certified graphite reference material prepared by OREAS was submitted with the samples on the basis of 1 in 20. No issues with accuracy of the reported results were encountered. Reported assay results for laboratory inserted standards, blanks and duplicates revealed very good precision and accuracy. The assay results would be acceptable in later deposit evaluation if required. The Competent Person is satisfied that the reported graphitic carbon results are representative with good accuracy and precision. No external laboratory checks have been undertaken.
Verification of sampling and assaying	<ul style="list-style-type: none"> The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> No verification of the graphitic carbon intersections has been undertaken at this stage either by independent or alternative company personnel. No pulps have been sent to other laboratories for check assay. No attempt has been made to twin historical drill holes. However, both holes were collared relatively close to previous ones in an attempt to validate previously reported graphitic intersections depths and grades or extensions therefrom. The primary data, has been entered into a series of dedicated data sheets which is considered appropriate at this stage of the program. There has been no adjustment of assay data.
Location of data points	<ul style="list-style-type: none"> 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. Specification of the grid system used. Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> The drill collars of the two holes were located by a hand held GPS which indicated an accuracy of +/- 4m. The Grid system used was WGS84 Zone 54 K. Ground location is considered appropriate for the purpose of the work undertaken to date.
Data spacing and distribution	<ul style="list-style-type: none"> Data spacing for reporting of Exploration Results. 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. Whether sample compositing has been applied. 	<ul style="list-style-type: none"> Data spacing, being the drill core sample intervals, is considered appropriate for determining the degree of geological and grade continuity for deposit size estimation purposes at a future date. No sample compositing was initially attempted but has been undertaken for preparation of representative samples for metallurgical testing.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling 	<ul style="list-style-type: none"> The vertical drill holes have been drilled perpendicular to the essentially horizontal orientation of the graphite mineralised zone. The orientation of the drill holes is not considered to have introduced a sample bias.

Criteria	JORC Code explanation	Commentary
	<i>bias, this should be assessed and reported if material.</i>	
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> An experienced geologist, Mr Ken Chapple who is the Competent Person preparing this Announcement, was on site for the duration of the drilling program and closely monitored the handling of the drill core during all stages. After receiving the core from the drilling contractor, it was photographed and measured on-site as outlined above, then placed into core trays and transported the short distance (7km) to the Croydon core processing and storage facility. The storage facility was locked overnight and during the day processing of the core was undertaken and overseen by the Competent Geologist. For truck transport to Brisbane, the core samples were placed on pallets and secured with plastic pallet wrap to guard against samples falling off or being tampered with. The other half of the core is kept in core boxes that are stored on pallets under cover at the Croydon facility and wrapped in plastic pallet wrap to prevent them being tampered with and sealing them off from pests. During truck transport to Brisbane the samples were under the control of the transport company. Upon arrival in Brisbane, ALS assumed security of the samples. Following analytical work, the samples will be placed in secure storage at ALS. ALS did not report any evidence of tampering with the samples upon their arrival at their ALS sample preparation facility at Geebung in Brisbane.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> Other than the Competent Person, Mr Ken Chapple, participating in and overseeing the entire program, no audits or reviews of the sampling techniques and the data obtained have been undertaken.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> 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. 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. 	<ul style="list-style-type: none"> Tenure for the Golden Gate Graphite Project is held under EPM 18616 ("Black Mountain") which is 100% owned and operated by Crater Gold Mining Limited. The tenement is in good standing and current to 18 June 2023. A renewal to extend the EPM for another term is in preparation. The area from which the composite sample has been taken lies within the Golden Gate Mining and Town Complex State Heritage Place.

Criteria	JORC Code explanation	Commentary
		Application to undertake exploration activities within the 500m Buffer Zone to this Heritage area has been lodged.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Extensive exploration work including RC drilling undertaken by previous exploration companies Central Coast Exploration (a Barrick Mines Limited subsidiary) and Pancontinental Mining Limited. Under a joint venture, these two companies operated the Croydon Gold Mine, a carbon-in-pulp treatment operation. Extensive drilling by Central Coast and Pancontinental outlined the as yet, undeveloped, Golden Gate Graphite Deposit within EPM 18616.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> The Golden Gate Graphite Deposit is developed mainly within altered granite along, and in close proximity, to the shallow dipping contact between the Esmeralda Granite and the Croydon Volcanics. The graphite occurs in two differing styles. One is graphite in zones up to 10m thick that are closely associated with gold quartz reef mineralisation. The other is type occurs as thick "layers" up to 60 or more metres. This latter type is rarely associated with any significant gold mineralisation and often occurs in vertically "stacked" layers. The composite sample (composite 2) on which the new metallurgical test work was undertaken was taken from 18 one metre samples from diamond core drill hole GGDDH 1702, from a depth between 70.0 and 88.0m inclusive. At this location the graphite mineralisation is shallowly dipping to the NE and is up to 53.9m thick. The interval represents the expected first benches of a possible future commercial operation.
Drill hole Information	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. 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. 	<ul style="list-style-type: none"> Drill hole collar location information and orientation for Hole GGDDH 1702 is: <p>Collar: 0627795mE 7991529mN RL: 104m Core Size: HQ3 (61.1mm diameter) Dip: Vertical (-90) Azimuth (vertical) Hole Depth: 126.60m</p> Depth to top of the graphite is 69.10m, thickness to base is 53.9m.

Criteria	JORC Code explanation	Commentary
Data aggregation methods	<ul style="list-style-type: none"> 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. 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. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<ul style="list-style-type: none"> Graphite grade contributions for each sample interval were determined by dividing the length of each sample interval by the total length of the mineralized intersection and multiplying by the grade of that sample interval – this accounted for the inclusion of non-uniform sample intervals. Graphite intersections are as follows (GC=Graphitic Carbon); Hole GGDDH 1702 53.9m (69.1 to 123.0m) @ 6.79% GC {cut-off 3.1% GC} Including 14.0m (101.0 to 115.0m) @ 8.41% GC {cut-off 5.9% GC} No significant gold assays were reported.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. 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'). 	<ul style="list-style-type: none"> As the geometry of the mineralisation with respect to the vertical drill hole is not definitely known, all intersections must be considered as down hole lengths and not as true depths or thicknesses. However, as the hole is vertical and the engineering measurements indicate that most fractures in the graphite zone are near horizontal, the down hole lengths could, as a reasonable approximation, be considered close to true depths or thicknesses.
Diagrams	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Refer to Figures 5 (collar plan for hole GGDDH 1702) and 6 (drill section of hole GGDDH 1702) located at the end of the text.
Balanced reporting	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Refer to Figure 5 (showing graphitic carbon assay grades) located at the end of the text.
Other substantive exploration data	<ul style="list-style-type: none"> 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. 	<p>As indicated above, this announcement specifically details the graphite metallurgical test work and results obtained in follow-up work on the initial encouraging work undertaken by ALS Metallurgy on a new composite 2 prepared from drill hole GGDDH 1702 as announced in previous ASX announcement titled “Graphite Metallurgical test Work, Golden Gate Graphite Project, Croydon, QLD”, dated 20 June 2022</p> <ul style="list-style-type: none"> In summary, the previous flotation test work undertaken on a 850micron sample of composite 2 sample successfully achieved a 76.9% graphite recovery to a 7-stage cleaner concentrate for an encouraging graphite product grade of 89.4%. Sizing of the

Criteria	JORC Code explanation	Commentary
		<p data-bbox="1288 209 2094 355">concentrate from the 850 micron composite sample revealed that there was virtually no grain sizes above 75 microns present and that there was insufficient material available from the finer fractions to undertake microscopic examination of the graphite as had been intended.</p> <ul data-bbox="1249 427 2123 1409" style="list-style-type: none"> <li data-bbox="1249 427 2123 667">• This announcement details the work undertaken to follow-up on that favorable initial test result. For this, it was decided to undertake flotation tests for 1.0mm and 1.4mm composite samples. However, only 4-stage rougher concentrates were prepared for each of these as it was speculated that the rod mill regrind in the 7-stage cleaner concentrate preparation of the 850 micron sample may have been too vigorous and ground down graphite grains that had been observed in petrological thin section examination. <li data-bbox="1249 675 2123 754">• From this graphite, recoveries to the rougher concentrates were found to be 77.4% and 78.7%, but the graphite grade of the rougher concentrates were low at 25.8% and 25.7% respectively. <li data-bbox="1249 762 2123 882">• However, microscopic examination of the rougher concentrates revealed a surprising result with the graphite found to be present as sub-rounded clusters of nodules rather than the expected traditional flake material. <li data-bbox="1249 890 2123 978">• In addition, the coarser grain sizes were composed of graphite nodules, gangue minerals and un-separated graphite/gangue grains but no large individual graphite flakes were observed. <li data-bbox="1249 986 2123 1169">• To investigate this further, it was decided to test another 1.0mm composite sample involving a less vigorous progressive cleaner concentrate using a 5-minute bead mill polish instead of a rod mill to minimize potential graphite grain breakage. This resulted in a 96.4% final graphite grade of 96.4% but the graphite recovery to the final product was only 60.2%. <li data-bbox="1249 1177 2123 1409">• Another 1.0mm sample of the composite was prepared in an attempt to optimize the test work. Using a lesser 3 minute bead mill time for all cleaner polishes, a slightly lower final concentrate graphite grade of 95.3% was obtained, but the graphite recovery to the final concentrate was much higher at 78.9%, indicating that the attempted optimization was heading in the right direction. The Company is confident that further optimisation work will achieve higher graphite recovery and final product purity. Sizing indicated that most of the

Criteria	JORC Code explanation	Commentary
		<p>graphite was ultra-fine grained with 90.5% being less than 53 microns and 66.6% being less than 25 microns.</p> <ul style="list-style-type: none"> The three ultra-fine grained concentrate fractions (minus 25 microns, minus 38 to +25 microns and the minus 53 to +38 microns) were then examined under high SEM magnification. This generated encouragement as all three ultra-fine fractions were observed to contain only platy graphite flake (see images presented in the text).
<i>Further work</i>	<ul style="list-style-type: none"> <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> <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> 	<ul style="list-style-type: none"> There is optimism that the graphite may potentially be amenable to production of high value products and in particular battery anode material. Future metallurgical test work will now concentrate on investigating these possibilities at a specialized metallurgical test laboratory.