

## BOARD & MANAGEMENT

Glenn Davis - Chair Michael Schwarz - MD Gary Ferris - NED Jarek Kopias - Co Sec

## CAPITAL STRUCTURE

Ordinary Shares Issued 96.1M

Options Issued 3.0M

Performance rights Issued 0.3M

#### CONTACT

Address: Level 3, 170 Greenhill Rd PARKSIDE SA 5063

Email: info@itechminerals.com.au

Website: www.itechminerals.com.au

Telephone: +61 2 5850 0000



# Location: Eyre Peninsula Project, South Australia

#### Contact:

Michael Schwarz Managing Director

E: mschwarz@itechminerals.com.au
Ph: +61 2 5850 0000
W: www.itechminerals.com.au

# PENINSULA, SOUTH AUSTRALIA



Location near drill hole WG021 on the Lacroma West drill target

#### **SUMMARY**

- Extensive drill target defined at Lacroma Graphite Prospect on the Eyre Peninsula
- A 12 km long airborne electromagnetic anomaly maps an extensive graphitic horizon on EL6634
- iTech has modelled a first stage drill target in the northern 6 km of the anomaly from electromagnetic sections and drill holes
- Drilling has confirmed the anomaly is caused by thick graphite mineralisation with drill hole WG021 intersecting 60m @ 6.8% total graphitic carbon (TGC)
- Preliminary metallurgy of dill hole WG021 demonstrates that a high-grade graphite concentrate of >90% TGC with recoveries of ~83% can be achieved using the same flowsheet established for the Campoona Graphite Deposit
- Landowner approvals are in place and government drilling approvals have been submitted to commence drilling in the next few months
- The Lacroma Prospect is in addition to the Company's recently announced exploration target at the Sugarloaf Graphite Prospect of 158-264 Mt @ 7-12 % TGC (see ASX Release 19 September 2022)

"Lacroma constitutes a near surface, large-scale graphite drill target extending for over 6 km. With confirmed graphite mineralisation in drilling, positive metallurgical results, landowner approvals in place and government drilling approvals submitted, iTech is excited to start drill testing this target in the next few months."

Managing Director Mike Schwarz

Investors should be aware that the potential quantity and grade of the Exploration Target reported are conceptual in nature, there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.



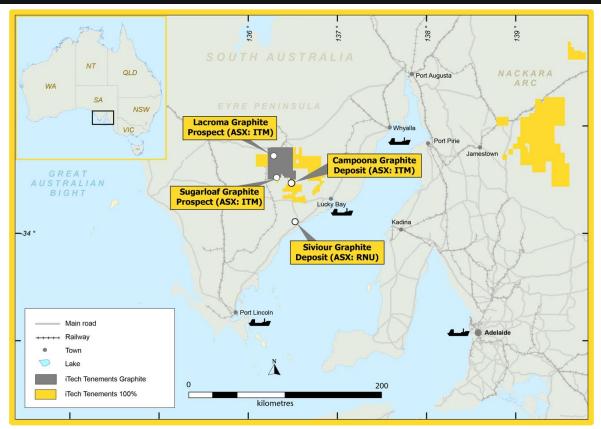


Figure 1. Location of iTech's Graphite Deposits and Prospects – Eyre Peninsula, South Australia

#### **Lacroma Graphite Prospect**

The Lacroma Graphite Prospect is located approximately 45 km north-west of Cleve on the central Eyre Peninsula and <20 km from iTech's proposed graphite processing plant for the Campoona Spherical Graphite Project. The graphite at this location occurs within the Paleoproterozoic Hutchison Group Metasediments and is likely to have formed from organic rich stratigraphic horizons metamorphosed during regional upper greenschist to lower amphibolite facies metamorphism during the Kimban Orogeny. The western Lacroma graphite rich horizon forms a north-south trending structure with a shallow easterly dip. As the structure falls to depth to the east, it is thrust back to surface along a north-south fault to form the eastern Lacroma Target, as interpreted from drilling and detailed airborne and ground-based electromagnetics (Figures 2 & 3).

#### **Drill Target**

The Lacroma drill target has been defined from a series of east-west conductivity sections spaced at 400m intervals and derived from a TEMPEST airborne electromagnetic survey flown in 2012 (Figure 3). Historical drilling, in the same year, tested the source of the conductivity anomaly and confirmed it was caused by significant thicknesses of graphite mineralisation. Of 4 holes designed to test the Lacroma target, WGC021, was correctly located to test the bulk of the conductivity anomaly. This drill hole returned 60 m @ 6.8% TGC from 74-134m downhole with a higher-grade interval of 21m @ 9% TGC from 100-121m downhole. Drill holes WG022-24 were drilled approximately 600 m to the north and intersected variable amounts of graphite mineralisation confirming that the eastern conductivity anomaly is caused by a north-south trending graphite rich horizon dipping gently to the east (Figures 4 & 5). No drilling has intersected the western conductivity anomaly and this target remains untested.



#### **Metallurgy Results**

In 2015, Archer Materials¹ undertook preliminary metallurgical test work, on sample from drill hole WG021, to determine if a suitable concentrate could be made by using the flow sheet developed for the Campoona Graphite Deposit. The program included four rougher and cleaner tests and two rod mill work index determinations on a 50 kg sample. From a 9% TGC head assay a concentrate of 90.7% TGC with 83% recovery, via simple flotation, was achieved with room for improvement in both grade and recovery with further optimisation.

#### **Next Steps - Drilling Program**

iTech is planning to drill test the Lacroma Graphite Prospect in the coming months. Landowner consent has been obtained to commence drilling in December once crops have been harvested. Applications for approval to drill have been submitted to the government and are expected to be received within 4-6 weeks. A suitable reverse circulation drill rig has been secured to complete the program. iTech will concentrate on drill testing the Lacroma West initially, as graphite mineralisation has already been confirmed by historical drilling and appears to be over a relatively over a large area according to the conductivity cross sections. Several test holes will be drilled into Lacroma East to confirm the anomaly is caused by graphite and determine the depth to mineralisation. The program is expected to take up to 6 weeks to complete and will be run in conjunction with drill testing the Sugarloaf Graphite Exploration Target approximately 20 km to the southwest.

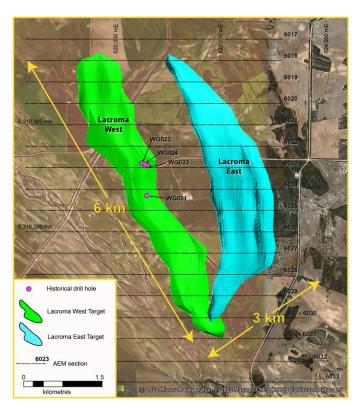
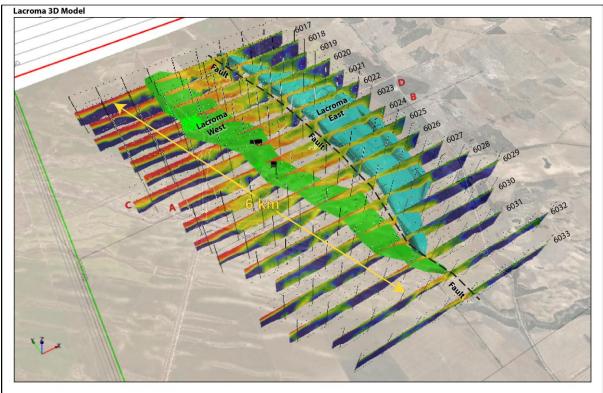


Figure 2. Plan view of the Lacroma Graphite Prospect – Eyre Peninsula, South Australia



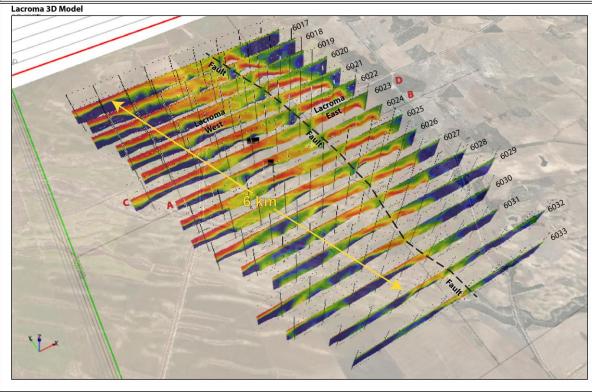


Figure 3. Lacroma Graphite Prospect showing conductivity depth images from AEM (top)and 3D model of the drill target defined from drilling and conductivity model (top). Note the shallow dipping nature of the target.

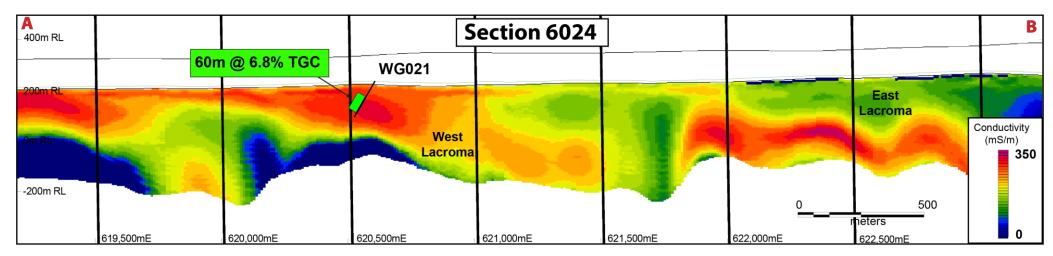


Figure 4. East-West section through the Lacroma Graphite Prospect - Eyre Peninsula, South Australia

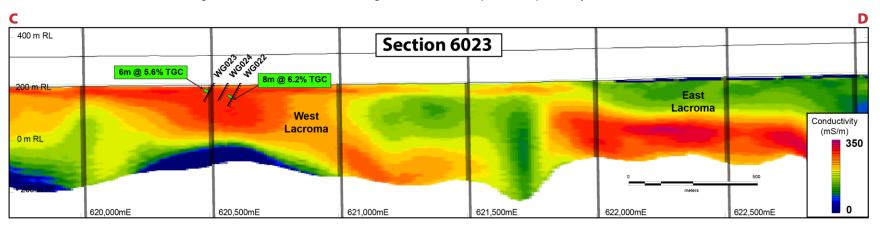


Figure 5. East-West section through the Lacroma Graphite Prospect – Eyre Peninsula, South Australia



Hole ID	From (m)	To (m)	Interval (m)	TGC (%)
WG021	74	134	60	6.8
including	100	121	21	9.0
WG022	29	37	8	6.2
WG023	37	43	6	5.6
WG024	NSI	NSI	NSI	NSI

Table 1. Significant graphite intersections in the Lacroma Graphite Drill Target.

For further information please contact the authorising officer Michael Schwarz:

#### iTech Minerals

Michael Schwarz, FAusIMM, AIG

Managing Director

E: mschwarz@itechminerals.com.au

Ph: +61 2 5850 0000

W: www.itechminerals.com.au

#### **ABOUT ITECH MINERALS LTD**

iTech Minerals Ltd is a newly listed mineral exploration company exploring for and developing battery materials and critical minerals within its 100% owned Australian projects. The company is exploring for graphite, kaolinite-halloysite, regolith hosted clay rare earth element mineralisation and developing the Campoona Graphite Deposit in South Australia. The company also has extensive exploration tenure prospective for Cu-Au porphyry mineralisation, IOCG mineralisation and gold mineralisation in South Australia and tin, Tungsten, and polymetallic Cobar style mineralisation in New South Wales.

#### **GLOSSARY**

AEM = Airborne Electromagnetic

EM = Electromagnetic

FC = Fixed Carbon

sg = specific gravity - a measure of density

TGC = Total Graphitic Carbon

#### **COMPETENT PERSON STATEMENT**

The information which relates to exploration results is based on and fairly represents information and supporting documentation compiled by Michael Schwarz. Mr Schwarz 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 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (the JORC Code). Mr Schwarz is a full-time employee of iTech Minerals Ltd and is a member of the Australian Institute of Geoscientists and the Australian Institute of Mining and Metallurgy. Mr Schwarz consents to the inclusion of the information in this report in the form and context in which it appears.

This announcement contains results that have previously released as "Replacement Prospectus" on 19 October 2021, "Campoona Graphite Battery Anode Test Work Underway" on 22 November 2021, "Campoona Spherical Graphite Project Concentrate" on 21 August 2022, "Campoona Spherical Graphite Project Bulk sample produced" on 5 July 2022 and "Sugarloaf Graphite Exploration Target, Eyre Peninsula" on 19 September 2022. iTech confirms that the Company is not aware of any new information or data that materially affects the information included in the announcement.

#### **REFERENCES**

<sup>1</sup> Archer Materials (ASX: AXE) ASX Release 20 August 2015 "Third project produces high grade graphite, boosting SA Mine options for Archer"

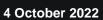


## JORC 2012 EDITION - TABLE 1 Section 1 Sampling Techniques and Data

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

Criteria	JORC Code Explanation	Commentary
Sampling Techniques	<ul> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole 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 (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>Sampling was guided by the company's protocols and QA/QC procedures</li> <li>RC samples are collected by a riffle splitter using a face sampling hammer diameter approximately 140 mm.</li> <li>All samples were sent ALS laboratory in Adelaide for preparation and forwarded to Brisbane for LECO C-IR18 analyses.</li> <li>All samples are crushed using LM2 mill to -4 mm and pulverised to nominal 80% passing -75 µm.</li> <li>The Competent Person has reviewed referenced publicly sourced information through the report and considers that sampling was commensurate with industry standards current at the time of drilling and is appropriate for the indication of the presence of mineralisation.</li> </ul>
Drilling Techniques	Drill type (e.g., core, reverse circulation, open hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. 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> <li>RC holes were drilled in a direction to hit the mineralisation orthogonally. Face sample hammers were used, and all samples collected dry and riffle split after passing through the cyclone.</li> <li>Diamond drilling was drilled as triple Tubed HQ diameter core.</li> <li>The Competent Person has reviewed the drilling program and considers that drilling techniques was commensurate with industry standards current at the time of drilling and is appropriate for the indication of the presence of mineralisation.</li> </ul>
Drill Sample Recovery	<ul> <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</li> </ul>	<ul> <li>The RC rig sampling systems are routinely cleaned to minimize the opportunity for contamination; drilling methods are focused on sample quality.</li> <li>The selection of RC drilling company, having a water drilling background enables far greater control on any water present in the system, ensuring</li> </ul>







Criteria	JORC Code Explanation	Commentary
	whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	<ul> <li>wet samples were kept to a minimum.</li> <li>All efforts were made to ensure the sample was representative.</li> <li>No relationship is believed to exist, but no work has been done to confirm this.</li> </ul>
Logging	<ul> <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> <li>Geological logging is completed for all holes and representative across the deposit.</li> <li>Logged data is both qualitative and quantitative depending on field being logged.</li> <li>All drill holes are logged.</li> <li>Collars were located using a handheld GPS</li> <li>As this is early-stage exploration, collar locations will have to be surveyed to be used in mineral resource estimation.</li> </ul>
Sub- Sampling Techniques and Sample Preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all cores 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> <li>All RC samples are split using a riffle splitter mounted under the cyclone, RC samples are drilled dry.</li> <li>Sample preparation at the ALS laboratory involves the original sample being dried at 80° for up to 24 hours and weighed on submission to laboratory. Crushing to nominal – 4 mm. Sample is split to less than 2 kg through linear splitter and excess retained. Sample splits are weighed at a frequency of 1/20 and entered into the job results file. Pulverising is completed using LM2 mill to 90% passing –75 µm. The pulverised residue is shipped to ALS in Brisbane for LECO analysis.</li> <li>A 0.1g sample is leached with dilute hydrochloric acid to remove Inorganic carbon. After filtering, washing and drying, the remaining sample residue is roasted at 425OC to remove organic carbon. The roasted residue is analysed for Carbon (graphitic – Cg%) - High temperature LECO furnace with infra-red detection.</li> </ul>
Quality of Assay Data and Laboratory Tests	<ul> <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 make and model, reading times, calibrations factors applied and their derivation, etc.</li> </ul>	Quality of assay data is assumed to be appropriate as commercial laboratories were used for analysis with appropriate internal QAQC practices.



Criteria	JORC Code Explanation	Commentary
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	
Verification of Sampling and Assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>No drill hole twins exist in drilling.</li> <li>Primary data are captured on paper in the field and then re-entered into spreadsheet format by the supervising geologist, to then be loaded into the company's database.</li> <li>No adjustments are made to any assay data.</li> </ul>
Location of Data Points	<ul> <li>Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>The location of drill hole collar was undertaken using a hand-held GPS which has an accuracy of +/- 5m using UTM MGA94 Zone 53.</li> <li>The quality and adequacy are appropriate for this level of exploration.</li> <li>All holes have had their surface locations surveyed for Northing, Easting and RL. No coordinate transformation was applied to the data.</li> <li>Downhole surveys collected by multishot camera</li> </ul>
Data Spacing and Distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>There is no pattern to the sampling and the spacing is defined by access for the drill rig, geological parameters, and land surface.</li> <li>Data spacing and distribution are sufficient to establish the degree of geological and grade continuity for future drill planning, but not for resource reporting.</li> </ul>
Orientation of Data in Relation to Geological Structure	<ul> <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> <li>It is believed that the drilling has intersected the geology at right angles, however, it is unknown whether the drill holes have interested the mineralisation in a perpendicular manner. The mineralised horizon is obscured by a thin veneer of transported material.</li> <li>It is believed there is no bias has been introduced.</li> </ul>
Sample Security	The measures taken to ensure sample security.	All samples were in the custody of the company's employees or their



### ASX RELEASE

4 October 2022

Criteria	JORC Code Explanation	Commentary
		contractors from the drill rig to the laboratory.  Best practices were undertaken at the time.  All residual sample material (pulps) is stored securely.
Audits or Reviews	The results of any audits or reviews of sampling techniques and data.	None 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> <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> <li>Tenement status confirmed on SARIG.</li> <li>The tenements are in good standing with no known impediments.</li> <li>The drill target is on EL6634 owned by Chemex Materials (ASX: CMX) and is subject to an agreement in which iTech owns 100% of the graphite rights through its wholly owned subsidiary Pirie Resources Pty Ltd.</li> </ul>
Exploration Done by Other Parties	Acknowledgment and appraisal of exploration by other parties.	Relevant previous     exploration has been     undertaken by Monax Mining     Ltd, Marmota Energy Ltd,     and Archer Materials Ltd     An airborne Electromagnetic     Survey was commissioned     by Monax Mining     Ltd/Marmota Energy Ltd in     2012 and was flown by     Fugro using their airborne     TEMPEST System.
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>The tenements are within the Gawler Craton, South Australia.</li> <li>iTech is exploring for graphite, porphyry Cu-Au, epithermal Au, kaolin and halloysite and REE deposits.</li> <li>The graphite at this location occurs within the Paleoproterozoic Hutchison Group Metasediments and is likely to have formed from organic rich stratigraphic horizons metamorphosed during regional upper greenschist to lower amphibolite facies metamorphism during the Kimban Orogeny. The graphite rich horizon forms a largely flat lying, shallow anticlinal structure as interpreted from drilling and detailed airborne and ground-based electromagnetics</li> </ul>







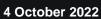
Criteria	JORC Code Explanation	Commentary
Drillhole Information	A summary of all information material to	See Appendix 1 and 2 for
	the understanding of the exploration	drill hole information.
	results including a tabulation of the	
	following information for all Material drill	
	holes:	
	<ul> <li>Easting and northing of the drill hole</li> </ul>	
	collar	
	<ul> <li>Elevation or RL (Reduced Level –</li> </ul>	
	elevation above sea level in metres) of the drill hole collar	
	Dip and azimuth of the hole	
	<ul> <li>Downhole length and interception</li> </ul>	
	depth	
	<ul><li>Hole length</li></ul>	
	<ul> <li>If the exclusion of this information is</li> </ul>	
	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.	
Data Aggregation	In reporting Exploration Results, weighting	No high-grade cuts were
Methods	averaging techniques, maximum and/or	<ul><li>necessary.</li><li>Aggregating was made for</li></ul>
	minimum grade truncations (e.g., cutting of high grades) and cut-off grades are	intervals that reported over
	usually Material and should be stated.	2% Cg (Carbon-graphitic %)
	<ul> <li>Where aggregate intercepts incorporate</li> </ul>	using a downhole interval
	short lengths of high-grade results and	weighted arithmetic average.
	longer lengths of low-grade results, the	Internal dilution was less than 3m
	procedure used for such aggregation	No equivalents were used.
	should be stated and some typical	
	examples of such aggregations should be	
	shown in detail.	
	<ul> <li>The assumptions used for any reporting of metal equivalent values should be clearly</li> </ul>	
	stated.	
Relationship	These relationships are particularly	All drill intervals are down
Between	important in the reporting of Exploration	hole length, the true width is
Mineralisation	Results.	not known.
Widths and Intercept	• If the geometry of the mineralisation with	All intercepts reported are
Lengths	respect to the drill hole angle is known, its	down hole lengths.
	nature should be reported.	
	• If it is not known and only the downhole lengths are reported, there should be a	
	clear statement to this effect (e.g.,	
	'downhole length, true width not known').	
Diagrams	Appropriate maps and sections (with	See main body of report.
•	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.	



### ASX RELEASE

4 October 2022

Criteria	JORC Code Explanation	Commentary
Balanced Reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced avoiding misleading reporting of Exploration Results.	<ul> <li>All other relevant data has been reported.</li> <li>The reporting is considered to be balanced.</li> <li>Where data has been excluded, it is not considered material.</li> </ul>
Other Substantive Exploration Data	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.	<ul> <li>The Project area has been subject of significant exploration for base metals, graphite and gold.</li> <li>All relevant exploration data has been included in this report.</li> <li>Metallurgical test work was undertaken by Archer Materials (ASX: AXE) in 2015 on a 50 kg sample from drill hole WG021. This consisted of grind and flotation test work to produce a concentrate then purification via leaching using hydrofluoric acid.</li> </ul>
Further Work	<ul> <li>The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	Further exploration, sampling, geochemistry, geophysics and drilling required to convert the drill target into resources.





# Appendix 1. Drill hole collars used in the Drill Target – Lacroma

Hole ID	Easting (m)	Northing (m)	RL (m)	Total Depth (m)	Dip (degrees)	Azimuth (degrees)
WG021	620607	6316589	235	163	-60	285
WG022	620619	6317163	224	103	-60	285
WG023	620516	6317206	224	82	-60	285
WG024	620570	6317180	224	80	-60	285