19th December 2023

FIRST SPHEROIDIZED GRAPHITE PRODUCED

Sarytogan Graphite Limited (ASX: SGA, "the Company" or "Sarytogan") is pleased to report that the first spheroidized graphite from the Sarytogan Graphite Deposit in Central Kazakhstan has been produced.

Highlights

- High combined spheroidization yield of 54% achieved ideal D50 sphere sizes of 32, 18, and 12 µm after classification with high tap densities ranging from 0.91 to 0.99 g/cm^3.
- All flowsheet elements now demonstrated for production of Uncoated Spherical Purified Graphite (USPG) and Ultra-High Purity Fines (UHPF).
- Both the USPG and UHPF products to now be tested in advanced battery applications.
- The PFS is advancing and is scheduled for completion no later than Q3 2024.

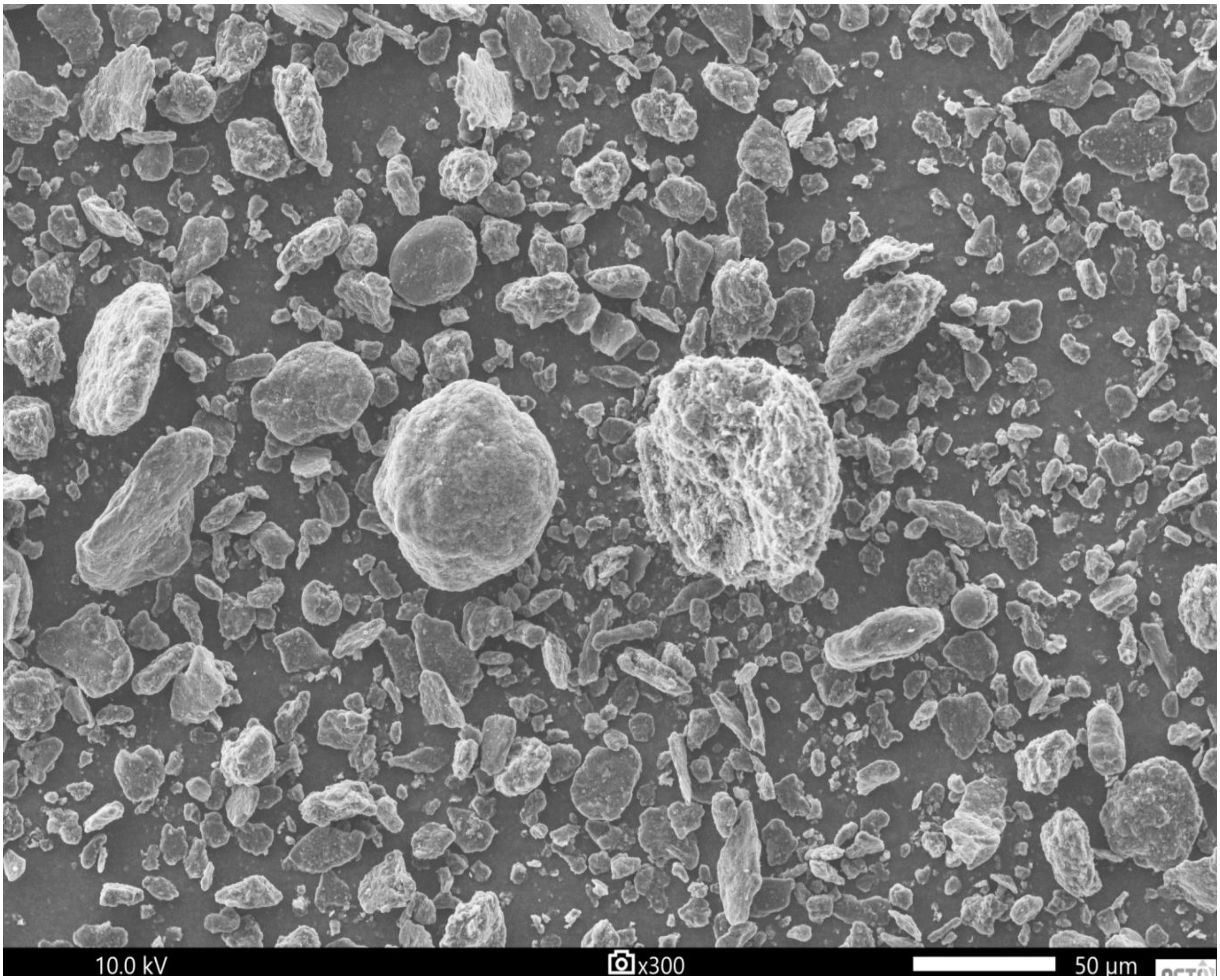


Figure 1 – Spheroidized Sarytogan Graphite, prior to classification. SEM image.

Sarytogan Managing Director, Sean Gregory commented:

> *"What a way to end the year! This result allays all doubts of the giant and exceptionally high-grade Sarytogan Graphite deposit's suitability to vie for a share of the rapidly growing lithium-ion battery market for electric vehicles and other uses, subject to customer qualification. We have now complimented the ultra-high purity of 99.998% with these outstanding physical spheroidization results at high yields of ideally sized spheres. We now charge into 2024 on a mission to measure the battery performance of these products."*

Flowsheet Elements

This result is the final flowsheet element to produce Uncoated Spherical Purified Graphite (USPG) and Ultra-High Purity Fines (UHPF) targeting the lithium-ion and other battery markets (Figure 2).

The first element of the flowsheet is the giant and exceptionally high-grade **229 Mt** at **28.9%** Total Graphitic Carbon (TGC) Indicated and Inferred Mineral Resource (refer ASX Announcement 27th March 2023).

The second element of the flowsheet is the flotation, where the graphite is upgraded to greater than 80% TGC, which has now been demonstrated at the bulk scale (refer ASX announcement 13th November 2023).

The third element of the flowsheet, for the thermal option, is agglomeration where the graphite is bound into coarser beads to facilitate gas flow permeability allowing the sublimated diluents to vent through the fluidised bed reactor during the subsequent thermal purification step (refer ASX announcement 30th October 2023).

The fourth element of the flowsheet is thermal purification. Sarytogan Graphite and our American technology partner have achieved **99.998%** C (weight % carbon) at a temperature of 2,700° Celsius (refer ASX announcement 7th December 2023). This is 25 times purer than the typical chemical specification for lithium-ion batteries of 99.95% C (i.e. 20 ppm vs 500 ppm of impurities).

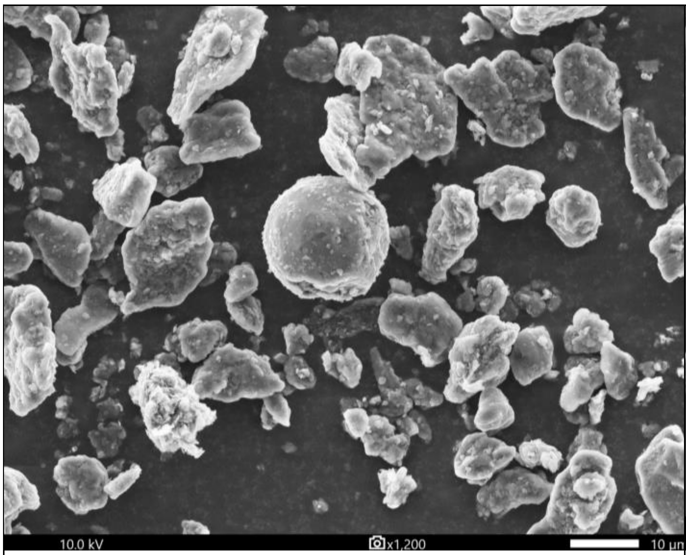
The fifth element of the thermal flowsheet is spheroidization, the subject of this announcement.

Mining	Flotation	Agglomeration	Purification	Spheroidizdation	Target Markets
Giant Resource 229 Mt @ 28.9% TGC[1]	80% TGC[2] Micro-Crystalline Graphite Product	Pre-treatment for thermal[3]	99.998% C thermal[4]	Demonstrated[5] 54% yield 3 cuts at d50 32, 18 ,12 µm	USPG for Li-ion anodes, UHPF for other battery uses

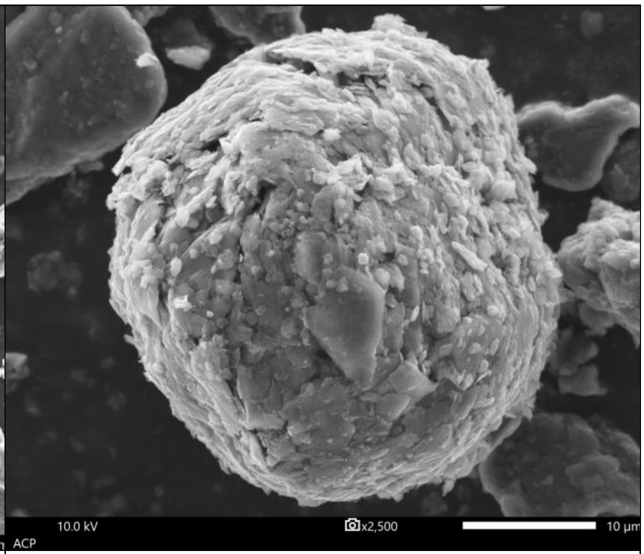
Figure 2 – Elements of thermal flowsheet option for the Sarytogan Graphite Project

Spheroidization

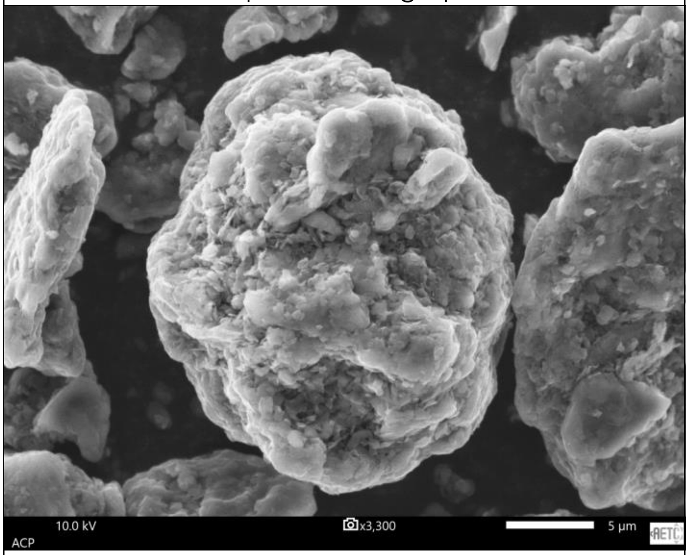
Our American technology partner took the **99.998%** C purified Sarytogan Graphite they produced and spheroidized it in a mechano-chemical mill. The graphite particles are subjected to intense impact, compressive and lapping forces. The forces generate sufficient energy to fuse the particles onto the surface of the neighboring particles creating a new composite material that has a spheroidal shape (Figure 3).



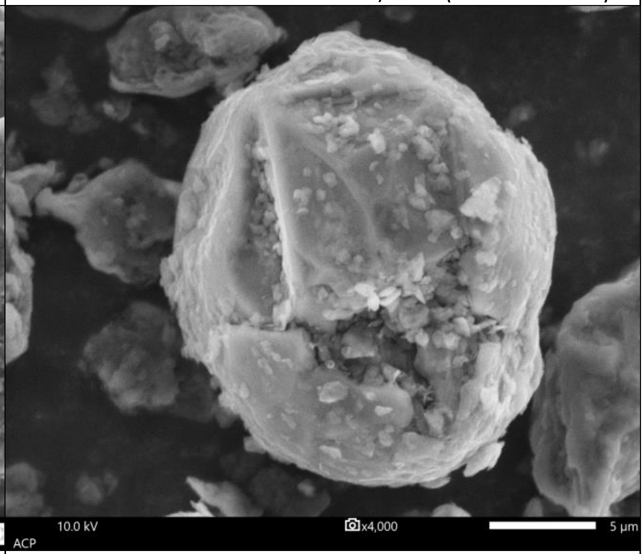
Unclassified bulk spheronized graphite.



Cut 0 = D50 32 micron, 21% yield (of 54% total)



Cut 1 = D50 18 micron, 19% yield (of 54% total)



Cut 2 = D50 12 micron, 14% yield (of 54% total)

Figure 3 - Sarytogan Graphite spheres before and after classification.

The spheronized graphite was then classified into different size fractions with different tap densities. The three coarsest cuts all had tap densities of greater than 0.9 g/cm^3, which is the recommended criteria for application in lithium-ion batteries (Table 1).

The combined mass yield of these spheres was 54% which compares favorably with the 35-50% yield typical in China. The remaining 46% is Ultra-High Purity Fines (UHPF) which is anticipated to also be a high-value product for use in batteries.

Table 1 - Characterisation of three coarsest cuts of spheronized graphite after classification

Sample	Mass Yield (%)	Tap Density (g/cm³)	D50 (µm)
Cut 0	21	0.99	32
Cut 1	19	0.94	18
Cut 2	14	0.91	12
Sub total	**54**		

The result allays all concerns regarding the fine nature of Sarytogan Graphite. The agglomeration, thermal purification and spheroidization steps are all playing a role in coarsening the size distribution to that typically used in lithium-ion battery anodes.

Next Steps

The test-work for 2024 will be market development focussed.

The spheres are targeted for the rapidly growing lithium-ion battery market and specifically for electric vehicles. The performance of the spheres in coin-cell lithium-ion batteries will be measured in short-term and long-term cycling tests. The short-term tests are expected to be available in Q1 2024.

The fine UPHF by-product will be tested in a host of other commercially available advanced battery systems such as alkaline, lithium primary, and lead-acid batteries and also as a conductivity enhancer in the cathode of lithium-ion batteries.

The alternative chemical purification flowsheet is also under development in Germany.

This result is an important input into the Pre-Feasibility Study which is progressing towards completion no later than Q3 2024.

This announcement is authorised by the Board of Directors of the Company.

Sean Gregory

Managing Director

About Sarytogan

Sarytogan's namesake project is the Sarytogan Graphite Deposit, located in the Karaganda region of Central Kazakhstan. It is 190km by highway from the industrial city of Karaganda, the 4th largest city in Kazakhstan (Figure 3).

Sarytogan is also exploring the Kenesar Graphite Exploration Project in Akmola province Northern Kazakhstan, 40km from the city of Kokshetau (Figure 3).

Figure 3 - Sarytogan and Kenesar Graphite Project locations

The Sarytogan Graphite Deposit was first explored during the Soviet era in the 1980s with sampling by trenching and diamond drilling. Sarytogan's 100% owned subsidiary Ushtogan LLP resumed exploration in 2018. An Indicated and Inferred Mineral Resource has recently been estimated for the project by AMC Consultants totalling **229Mt @ 28.9% TGC** (Refer ASX Announcement 27th March 2023, Table 1). Sarytogan has upgraded the mineralisation to **99.87% C** by chemical purification (refer ASX Announcement 6 December 2022) and to **99.998% C** by thermal purification (Refer ASX announcement 7th December 2023) and is pursuing a strategy to supply high-quality anode material for the rapidly growing electric vehicle battery market. A Pre-Feasibility Study is underway scheduled for completion no later than Q3 2024.

Table 1 - Sarytogan Graphite Deposit Mineral Resource (> 15% TGC). Refer ASX announcement 27 March 2023.

Zone	Classification (JORC Code)	In-Situ Tonnage (Mt)	Total Graphitic Carbon (TGC %)	Contained Graphite (Mt)
North	Indicated	87	29.1	25
	Inferred	81	29.6	24
	Total	168	29.3	49
Central	Indicated	39	28.1	11
	Inferred	21	26.9	6
	Total	60	27.7	17
Total	Indicated	126	28.8	36
	Inferred	103	29.1	30
	Total	229	28.9	66

Compliance Statement

The information in this report that relates to Exploration Results is based on information compiled by Dr Waldemar Mueller, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy. Dr Mueller is a full-time employee of the Company and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken 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'. Dr Mueller consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this document that relates to metallurgical test work is based on, and fairly represents, information and supporting documentation reviewed by Mr Alex Borger, who is a Member of The Australasian Institute of Mining and Metallurgy (AusIMM). Mr Borger is a full-time employee of Independent Metallurgical Operations Pty Ltd, who has been engaged by Sarytogan Graphite Ltd to provide metallurgical consulting services. Mr Borger consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to previous Exploration Results is cross referenced to the relevant announcements in the text. These reports are available at www.asx.com.au. The information in this report that relates to Sarytogan Mineral Resources was first reported in ASX announcement dated 27 March 2023.

The Company confirms that it is not aware of any new information or data that materially affects the information included in relevant market announcements and, in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Persons' findings are presented have not been materially modified from the original market announcements.

JORC Code, 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	*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 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 (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.*	Quarter HQ diamond core was sampled for metallurgical testing. 40kg was sampled from holes ST-9,12, 41,45, and 46 from the NGZ and combined with 30kg sampled from holes St5, 60 and 63 from the CGZ within the initial mining area. Sample lengths of these metallurgy samples were of 5-10m downhole length at a variety of depths from 8m to 130m below surface. The sample is considered representative of the first 20 years of mining.
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).*	Core drilling was completed by an XY-44T drill rig mounted on wheel-based mobile trailed platforms and equipped with a smooth-bore drill with a detachable core receiver of the Boart Longyear system equipped with double core tubes. Pre-drilling is completed with carbide crowns with a diameter of 112-132 mm to a depth of 2-4 m, followed by

Criteria	JORC Code explanation	Commentary
		casing. Drilling is carried out using a removable core receiver and HQ diamond crowns (diameter 96 mm), in rare cases, in complex geological conditions, diameter was reduced to NQ size (diameter 76 mm). Water was used as a washing liquid, and polymer solutions were used at absorption sites. All drill holes are vertical. At the completion of a drill hole, downhole survey is carried using a MIR-36 inclinometer with measurements every 20 m.
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.* *Measures taken to maximise sample recovery and ensure representative nature of the samples.* *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.*	To maximise core recovery, double tube HQ and NQ core drilling was used, with the drilling utilising drillers experienced in drilling difficult ground conditions. Drill penetration rates and water pressure were closely monitored to maximise recovery. During the diamond drilling the length of each drill run and the length of sample recovered was recorded by the driller (driller's recovery). The recovered sample length was cross checked by the geologists logging the drill core and recorded as the final recovery. Average core recoveries are greater than 98%. At present, no relationships between sample recovery and grade bias due to loss/gain of fines or washing away of clay material has been identified. It is assumed that the grade of lost material is similar to the grade of the recovered core.
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation,*	All logging is completed on paper and later transferred to a digital media. The core documentation includes information on the length of the drill

Criteria	JORC Code explanation	Commentary
	mining studies and metallurgical studies. *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* *The total length and percentage of the relevant intersections logged.*	runs, drilling diameter, core recovery and sampling intervals. Special attention was paid to the zones of graphitised rocks, lithology, alteration and mineralisation, the orientation of quartz veins and veinlets were studied in detail. All drill core is digitally photographed and completed in separate room using a specially designed stand that provides a fixed angle. The camera positioned at the same distance from the stand. The core is photographed in 2 stages before sawing and then after sawing. The most interesting samples are photographed at close distances. A collection of representative samples is used during logging to provide consistency with descriptions
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.* *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* *For all sample types, the nature, quality, and appropriateness of the sample preparation technique.* *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* *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.* *Whether sample sizes are appropriate to the grain size of the material being sampled.*	Quarter HQ diamond drill core was sampled for metallurgical testing. Most core was cut using an electric diamond saw and some more friable intervals were split manually. All core for sampling was pre-marked with the cut line, and only one side of the core was sent for assay to maintain consistency. The quality of sampling is checked by comparing geological documentation and samples.
Quality of assay data	*The nature, quality and appropriateness of the assaying and laboratory*	The thermal purification reported here is on the bulk flotation concentrate

Criteria	JORC Code explanation	Commentary
and laboratory tests	*procedures used and whether the technique is considered partial or total.* *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.* *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.*	previously produced in Australia (refer ASX Announcement 13th November 2023). The thermal purification was conducted in USA. The purified graphite was assayed by Loss on Ignition in a platinum crucible and the diluents were assayed on the ash by solid ICP.
Verification of sampling and assaying	*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.*	Visual validation of mineralisation against assay results was undertaken for several holes. All diamond drill core samples were checked, measured, and marked up before logging in a high level of detail. The diamond drilling, sampling and geological data were recorded on paper into standardised templates and transferred to Microsoft Excel by the logging/sampling geologists. Geological logs and associated data were cross checked by the supervising Project Geologist. Laboratory assay results were individually reviewed by sample batch and the QC results checked before uploading. All geological and assay data were uploaded into Excel. This data was then validated for integrity visually and by running systematic checks for any errors in sample intervals, out of range values and other important variations. All drill core was photographed with corrected depth measurements before

Criteria	JORC Code explanation	Commentary
		sampling. Mineralisation observed was entirely compatible with reported assays in both drill core. No specific twin holes were drilled; however, some recent drill holes were placed and drilled close to the historical holes. Similar grades and distribution were observed in the recent drill holes.
Location of data points	*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.*	Topographic and geodetic works were carried out using modern, high-precision, satellite geodetic equipment — a single-frequency 12-channel GPS Sokia GRX1, represented by a base station and mobile receiver with a GPS antenna. The device at the measurement time has valid calibration certificates. For this report the holes were set out using the Sokia instrument and have been picked up by handheld GPS in the interim. The grid system used at the deposit is the WGS84 UTM Zone 43 coordinate system, Baltic elevation system. Downhole survey was carried out with a gyro instrument. Measurements of the angle and azimuth are carried out every 20 m. Control measurements have not revealed any inconsistencies and errors. The accuracy of the Sokia GRX1 results in deviations of no more than 10 cm.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.* *Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade*	The density of the drill holes within the estimated limits of the proposed open pit mining area is 40-100 m between the drill holes on each section. The distances between the sections is 250

Criteria	JORC Code explanation	Commentary
	continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. *Whether sample compositing has been applied.*	m, and the depths of the drill holes varies between 60 and 300 m. The grid is sufficient to trace mineralisation zones.
Orientation of data in relation to geological structure	*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 bias, this should be assessed and reported if material.*	The spatial position of the graphite zones is confined structurally to the western and southwestern limbs of the Shiyozek fold, complicated by the large curved Sarytoganbai syncline which trends in northeast and east directions. The North zone has a strike length of 2,300 m, a width of between 110 and 500 m, and a depth up to 190 m. The weighted average TGC for drill holes is 32.42% (for 20% cut-off). The average depth is 100 m. The Central zone has a strike length of 2,900 m, a width of between 86 and 114 m on the flanks up to 450 m in the centre, and a depth up to 80 m, with an average of 40 m. The weighted average graphite carbon content is 28.12% (for 20% cut-off).
Sample security	*The measures taken to ensure sample security.*	Control over the security of samples is carried out throughout the entire process. Each sample is assigned a unique number. The core samples selected after logging are transferred (with the corresponding orders and sample registers) to the sample preparation facilities, which is located in the Ekibastuz city. In the sample preparation laboratory, each sample underwent the entire processing cycle in compliance with all necessary requirements for the preservation of samples and the prevention of their contamination.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	A desktop review of the 2019 sampling techniques and data was carried out

Criteria	JORC Code explanation	Commentary
		by CSA Global. The Competent Person from CSA Global also visited the site and sample preparation laboratory during August 2022. The results of this audit are pending and will be applied to the ongoing drilling and for the planned Mineral Resource upgrade. Visual validation of the drill hole and mineralised intersections was undertaken against hard copy drill sections and provided core photographs.

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	*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.*	The exploration licence 1139-R-TPI (1139-Р-ТПИ) was issued to Ushtogan LLP on 14/08/2018 and confirmed by 5406-TPI (5406-ТПИ) contract on 26/10/2018. The contract was extended in June 2022 for a further 3 years to June 2025. The exploration concession covers 70 km2. There are no other mineral deposits and protected natural areas within the concession area.
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	In the period from 1985 to 1987, geological exploration was carried out by the Graphite party of the Karaganda State Regional geological expedition. Since 2019, exploration drilling is being carried out by Ushtogan LLP a 100% owned subsidiary of Sarytogan Graphite Limited.
Geology	*Deposit type, geological setting, and style of mineralisation.*	Structurally, the Sarytogan site is confined to the western and southwestern wing of the Shiyozek fold, complicated by a large curved Sarytoganbai syncline which trends in

Criteria	JORC Code explanation	Commentary
		northeast and east directions. In general, the Sarytogan site is a large, over-intrusive zone; the volcanic and sedimentary rocks developed here have undergone extensive contact metamorphism; volcanogenic and terrigenous rocks are transformed into quartz-biotite, quartz-sericite hornfels; carbonaceous rocks are either altered into hornfels, or underwent significant graphitisation, and along contacts with intrusive granite domes, quartz-tourmaline and tourmaline hydrothermal rocks of the greisen type are developed. The deposit belongs to the black shale regional-metamorphic type and represents a carbon-bearing conglomerate sequence with a greisen zone with a thickness of more than 80 m in the over-intrusive zone of the granite massif that compose the Sarytoganbai syncline. Host rocks include graphite siltstone and graphite shale.
Drill hole Information	*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:* o *easting and northing of the drill hole collar* o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* o *dip and azimuth of the hole* o *down hole length and interception depth* o *hole length.* *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not*	Refer to the Prospectus dated 23 February and published on the ASX on 14 July 2022 and subsequent relevant ASX announcements for details of the specific drill holes.

Criteria	JORC Code explanation	Commentary
	detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	
Data aggregation methods	*In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., 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.*	Intervals are reported at a 10% TGC cut-off with up to 2m internal dilution. Higher-grade 'inc' zones are reported at a 35% cut-off at a minimum thickness of 4m and with up to 6m internal dilution.
Relationship between mineralisation widths and intercept lengths	*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 (e.g., 'down hole length, true width not known').*	The deposit is hosted in folded meta-sediments that vary in dip angle. The relationship between the drillholes and the meta-sediment dip is shown in the cross sections. Vertical holes are considered appropriate to define the mineralisation envelope at this stage.
Diagrams	*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.*	Refer to diagrams in body of text and the drilling results announcements.
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 to avoid misleading reporting*	The metallurgical testwork program has been exploratory in nature, testing several different pathways. The results of the preferred pathway is presented here.

Criteria	JORC Code explanation	Commentary
	of Exploration Results.	
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.*	The Prospectus dated 23 February 2022 available at asx.com.au also details historical metallurgical tests on the Sarytogan Graphite Deposit.
Further work	*The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).* *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	Metallurgical testwork is ongoing in Australia and at other labs worldwide.