

31 October 2022

## QUARTERLY ACTIVITIES REPORT

### QUARTER ENDING 30 SEPTEMBER 2022

Sarytogan Graphite Limited (ASX: SGA, "the Company" or "Sarytogan") is pleased to present the Quarterly Activity Report for the Quarter Ending 30 September 2022.

#### Highlights

- 29 diamond drill holes for 2,222m completed to end September at the Sarytogan Graphite Project since April.
- Thick high-grade graphite mineralisation reported, including in areas outside of the existing **209Mt @ 28.5%** TGC Inferred Mineral Resource (Refer Prospectus 23/2/22; ASX 14/7/22).
- Drilling is on track to be completed by November 2022 to enable an updated Mineral Resource Estimate in Q1 2023.
- Interim step of 92.1% purity graphite concentrate produced by our Australian lab partners using flotation, low-temperature caustic roasting, leaching with a weak sulphuric acid and a final calcine step (Refer ASX Announcement 12/10/22).
- Preferred product strategy identified as battery anode material at an optimal micro-crystalline sizing which attracts a premium product price.
- Optimisation and purification test work continuing in Germany and Australia.



Figure 1 – Two diamond drill rigs and support equipment at the Central Graphite Zone, Sarytogan Graphite Deposit.

Sarytogan Managing Director, Sean Gregory commented:

*"The first Quarter for Sarytogan as an ASX listed company has seen the rapid acceleration of drilling operations on site and the definition of our product strategy to face the rapidly growing battery anode market. We have welcomed our German laboratory partners to the team, and we remain on track for our first major milestone of an upgraded Mineral Resource in Q1 2023."*

## Diamond Drilling

29 holes for 2,222m have been completed this year as of 30 September 2022. Results for the first 14 holes have been reported (ASX Announcements 15/8/22 and 19/9/22) and are set out in Table 1. A further 15 holes had been completed as of 30 September and assays are pending (Table 2).

Table 1 – Drilling Results from the Sarytogan Graphite Deposit.

Hole	Easting	Northing	RL	Depth	From	Thickness	Grade	Inc	Grade
	WGS 84	WGS 84	mASL	m	m	m	% TGC	m	% TGC
ST-60	438225	5373708	908	84.5	0	62.0	27.49	5.7	40.12
ST-61	438123	5373792	899	125.6	0	30.5	34.06	20.0	36.02
					34.7	68.7	27.50	4.0	39.04
					109.1	10.4	17.54		
ST-62	438615	5373904	884	33.5	2	19.2	11.86		
ST-63	438585	5373976	926	84.8	5.2	77.5	28.83	4.0	41.49
ST-64	438555	5374053	921	128	18.2	25.7	28.10		
					67.5	38.5	31.68	18.2	40.95
					114.2	7.2	19.19		
ST-65	438517	5374137	927	37	7.7	9.8	31.13		
ST-66	438912	5374225	930	87.4	0	7.3	27.47		
					13.1	20.9	16.49		
					59.5	20.5	27.61	7.5	36.49
ST-67	439280	5374376	930	96	6.1	21.6	35.58	13.8	43.81
								2.0	53.85
					30.6	14.1	16.56		
					62.6	3.6	10.99		
					72.7	9.4	12.87		
ST-68	439490	5374392	924	141	0	22.9	29.93	15.8	36.05
					73.1	30.8	31.69	19.6	36.86
					123.9	4.8	20.43		
ST-69	440122	5375040	919	41.6	11.8	8	27.45		
ST-69A	440122	5375039	919	65.5	8.7	17.9	23.89	5.5	38.34
ST-70	440016	5374834	910	154.3	0	14.3	28.46		
					57.3	32.5	31.98	8.2	35.6
					123.7	20.7	24.75		
ST-71	439867	5374765	908	218.8	25.9	8.7	10.43		
					41.4	5.8	26.36		
					56.2	10.7	20.63		

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Hole	Easting	Northing	RL	Depth	From	Thickness	Grade	Inc	Grade
					71.2	22	14.87		
					117	21.5	19.36		
					142	36.1	27.15	12.9	35.77
					189.7	29.1	23.10		
					*ending in mineralisation at 218.8m				
ST-71A	439844	5374783	933	7.7	collared in granite and terminated				

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, minimum thickness of 4m and up to 6m internal dilution. Refer to ASX Announcements 15/8/22 and 19/9/22 for full details.

## Central Graphite Zone Mineralisation Extended

Drilling successfully targeted the granite-graphite contact zone observed in outcrop to the north-east of the established Mineral Resource Estimate of the Central Graphite Zone (CGZ) (Figure 3).

This granite intrusion is understood to be the heat source for the contact metamorphism that enriched the graphitic shales to graphite mineralisation. Surprisingly, the graphite mineralisation encountered here extended to depths of greater than 200m. Hole ST-71 was abandoned for technical drilling reasons at a depth of 218.8m, still in graphite mineralisation (Figure 2).

As these results extend up 300m north of the previous known extent of the mineralisation and with the significant depths encountered, they have the potential to extend the already giant Inferred Mineral Resource of **209Mt @ 28.5% TGC**<sup>1</sup>.



Figure 2 - High-grade graphite at 170m in ST-71 to the north-east of the CGZ



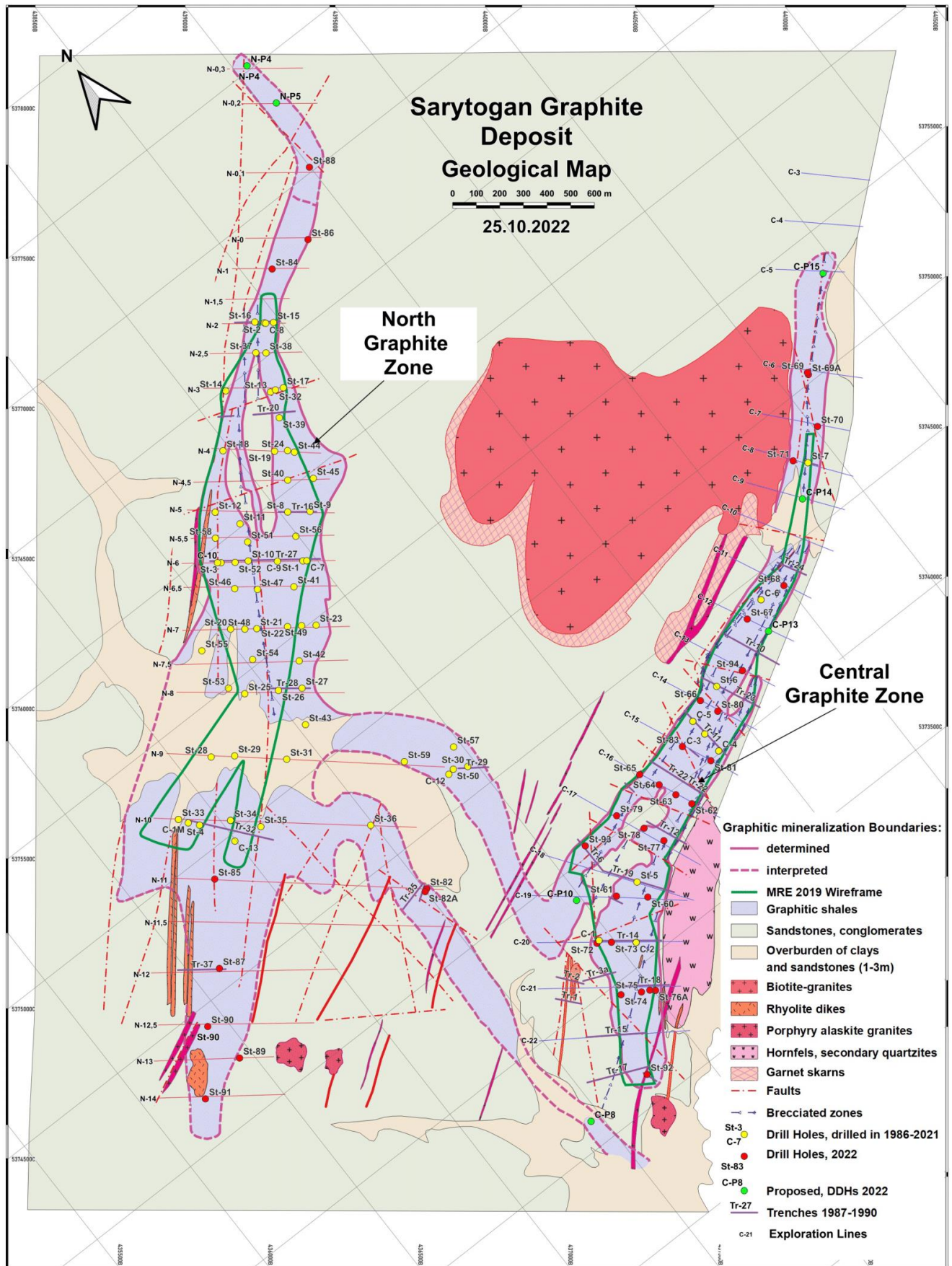


Figure 3 - Completed and Planned Diamond Drilling at the Sarytogan Graphite Deposit.

## Pending Results

Assays are pending from completed drill holes in the south of the CGZ (Figure 3). Identification of more intense contact metamorphism in this area, as evidenced by the presence of muscovite, sericite, tourmaline, and turquoise minerals in outcrop, suggests the potential for well-developed graphite mineralisation.

Drilling has also provided important coverage elsewhere across the CGZ at a nominal spacing of 200m x 100m.

*Table 2 - Drillholes pending assays at the Sarytogan Graphite Deposit*

Zone	Hole	Easting	Northing	RL	Depth
CGZ	ST-72	437935	5373686	903	95.8
	ST-73	437986	5373652	907	64.8
	ST-74	437881	5373452	899	93.0
	St-75	437957	5373408	901	53.0
	St-76A	438008	5373377	899	20.9
	St-76	437990	5373392	906	34.3
	St-77	438425	5373854	912	106.6
	St-78	438392	5373947	921	30.3
	St-79	438333	5374060	931	62.7
	St-80	438942	5374145	927	70.5
	St-81	438790	5373998	910	34.0
	St-82A	437497	5374306	907	34.9
St-82	437509	5374312	907	42.2	
NGZ	St-83	438732	5374119	916	129.6
	St-84	438608	5376778	874	44.4
	and since 30 September:				
	St-85	436829	5374895	897	103
	St-86A	438804	5376783	873	14.4
	St-86	438791	5376825	873	30.4
	St-87	436829	5374895	897	78.7
	St-88	438998	5377021	871	24.0
	St-89	436829	5374895	897	19.0
	St-90	436422	5374422	908	81.0
CGZ	St-91	436226	5374187	921	22.9
	St-92	437761	5373119	891	29.4
	St-93	438154	5374037	934	51.0
	St-94	439130	5374216	917	40.8
	St-95	439320	5374272		27.0
	ST-96	437455	5373104		18.7
	ST-97	439775	5374618		In progress
	ST-98	437964	5373842		In progress

## Northern Graphite Zone Extensional Drilling

Drilling is now underway aimed at extending the Mineral Resource in the Northern Graphite Zone (NGZ). Based on geological mapping and surface test pitting, additional holes have been planned up to 1km both north and south of the current Mineral Resource (Figure 3).

The planned drilling is expected to be completed by November 2022, with results to be periodically announced in thematic batches as they become available.

## Initial Metallurgical Results

Our Australian laboratory partners Independent Metallurgical Operations Pty Ltd (IMO) is progressing metallurgical test work at Metallurgy Pty Ltd mineral processing laboratory in Perth, Western Australia (Refer ASX Announcement 12 October 2022).

A master composite sample was blended from samples collected from 6 diamond drill holes across the Northern Graphite Zone of the Sarytogan Graphite Deposit. Through multiple flotation and grinding stages, the sample was upgraded to 81.3% Total Graphitic Carbon (TGC) with 88% recovery.



Figure 4 – Flotation test on Sarytogan graphite at the IMO Metallurgy laboratory, Perth

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The flotation concentrate was then further upgraded with a low-temperature caustic-roast, a weak sulphuric acid wash and a final calcine step to 92.1% TGC purity at a recovery of 80%. The cumulative recovery of both process steps currently stands at 70%.

The remaining diluent is almost exclusively silica; 7.3% silica, 0.6% other. This indicates that the alumino-silicate minerals such as andalusite and muscovite have been effectively leached. It provides a focus for the next step of optimisation of the caustic roast conditions to target the remaining quartz. This may include moderate temperatures for shorter duration.

Sarytogan is confident that further optimisation will yield positive results as historical test work achieved 98.6% graphite purity via a similar flowsheet consisting of flotation, sintering, and leaching with weak 5% sulphuric acid (Refer Prospectus dated 23 February 2022 published on the ASX on 14 July 2022).

### Preferred Battery Anode Material Product Strategy

The premium fine sizing of the Sarytogan graphite supports a preferred pathway towards high-value spherical graphite products for the lithium-ion battery market. 96% of the concentrate from these initial tests passes a 20 micron wet screen and visual inspection of Scanning Electron Microscope (SEM) images indicates the modal size is below 10 microns (**Figure 5**)

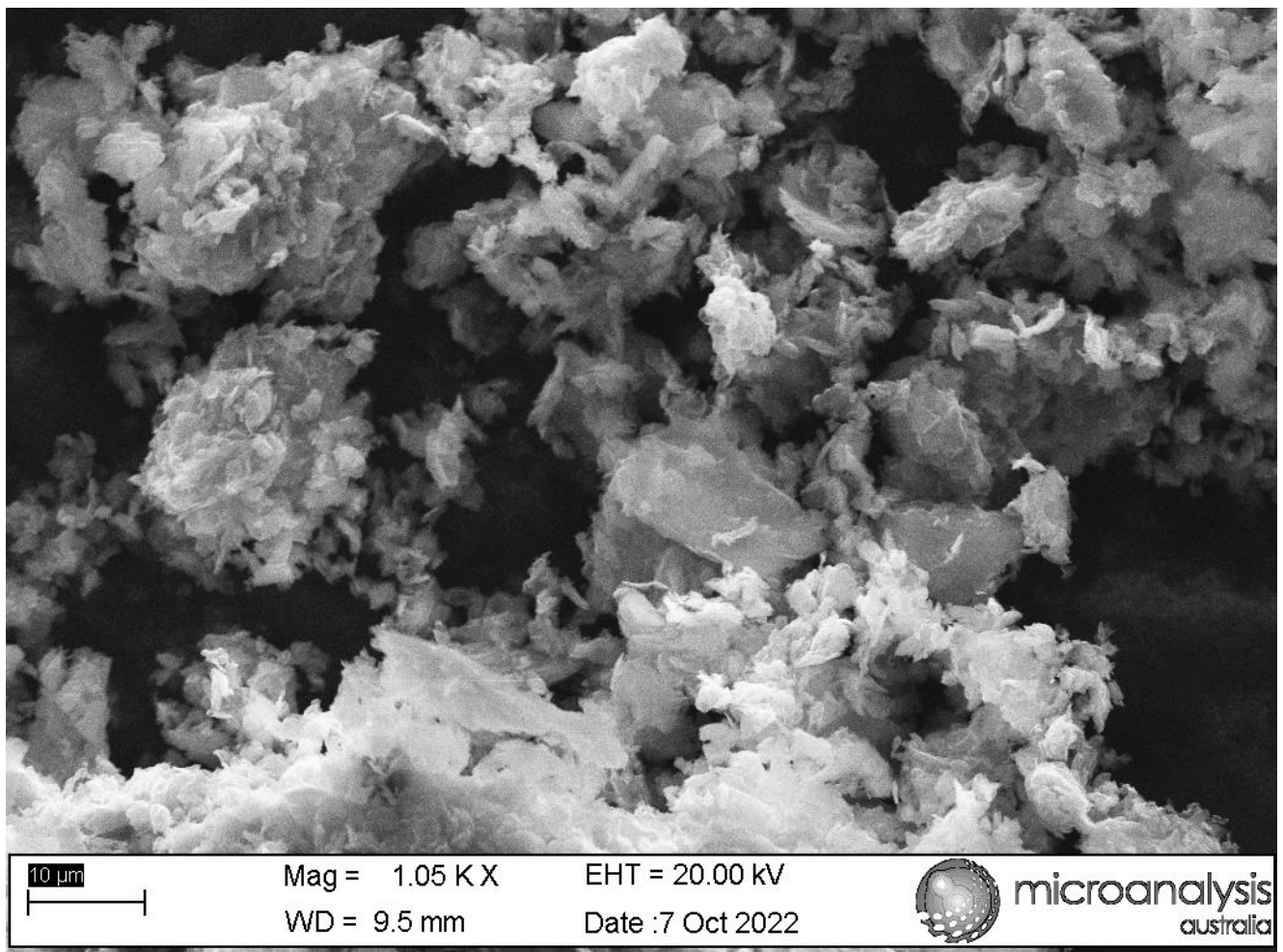


Figure 5 - SEM image of Sarytogan graphite after flotation, caustic roasting and leaching with weak sulphuric acid.

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Whilst the 20th century graphite market was focused on flake size, the new paradigm for premium pricing is for finer spherical graphite products that are required for lithium-ion batteries.

For example, 90-93% carbon at a small flake size of minus 150 micron attracts US\$598/t and 94-95% carbon at a large flake size of plus 180 micron attracts US\$1,190/t (Source: Benchmark Mineral Intelligence, September 2022).

21st century graphite market growth is being led by the lithium-ion battery sector which is set to become the largest graphite market within a few years. In this market, it is the finer-sized value-added spherical graphite products at a 99.95% carbon specification that attract even higher prices. For example, uncoated spherical graphite at a size of 20 micron attracts US\$2,920/t and the finer 10-micron uncoated spherical graphite attracts a premium US\$3,330/t (Source: Benchmark Mineral Intelligence September 2022).

Further work is required on the Sarytogan graphite samples to demonstrate spheroidization and thermal or chemical purification to the required 99.95% carbon specification.

Sarytogan notes that several larger ASX listed graphite companies are also pursuing a value-adding fine spherical graphite product strategy including Talga Resources Ltd (ASX: TLG) and Renascor Resources Ltd (ASX: RNU). Both these companies have more advanced projects having completed Definitive Feasibility Studies on Measured and Indicated Mineral Resources. Sarytogan is looking to be a “fast follower” of this strategy.

### Additional Flake Product Strategy

Sarytogan also has the potential to make flake graphite products as ribbons of graphite are commonly observed in thin sections (figure 6). The flotation test work to date has focused on grinding to finer sizes to liberate the minerals in pursuit of higher levels of graphite purity. This approach will be further tested with our German laboratory partners.



Figure 6 - Thin section photomicrograph of St-47-56.4 (21\_1310\_209) in reflected light (XPL, 5x objective). Thick graphitic ribbons in graphite schist with late-stage quartz veins crosscutting the fabric.



## German Laboratory Partners

Sarytogan is also pleased that two leading specialist graphite laboratories in Germany, namely Pro-Graphite and Anzaplan, are partnering with Sarytogan to progress the next steps of the metallurgical test work program.

Pro-graphite has just commenced a series of tests on samples of Sarytogan Graphite. The testwork at Pro-Graphite is being led by Mr. Christoph Frey M.Sc. who is highly regarded in the graphite industry with several decades of experience in technical, operational, executive and board roles with leading graphite producers.

Samples have also been dispatched to Anzaplan in Germany who will conduct initial sample characterisation and quote on process development testwork. Anzaplan is a specialist in the industrial and specialty minerals and metals business with a one-stop shop solution across all phases of the development, technical and economic evaluation of mining and mineral projects. They bring technological expertise from their own chemical and mineralogical laboratories, test centres and pilot plant processing facilities.

The test work at the laboratories in Germany will include ore characterisation, flake size determination, and purification.

## Corporate

The Company listed on ASX on 18 July 2022 following the acquisition of the Sarytogan Graphite Project and a capital raising of \$8.660M.

As of 30 September 2022, Sarytogan and its Kazakh Ushtogan LLP subsidiary had cash of \$6.075M at bank.

The Company provides the following information pursuant to ASX Listing Rule requirements:

1. ASX Listing Rule 5.3.1: Exploration and Evaluation Expenditure spend during the quarter was \$480,000 materially comprising drilling, assay and metallurgical expenses as set out in this report.
2. ASX Listing Rule 5.3.2: There were no substantive mining production and development activities during the quarter.
3. ASX Listing Rule 5.3.5: Payment to related parties of the Company and their associates during the quarter as set out in Section 6.1 of the attached Appendix 5B relate to director salaries and fees in the quarter.

The Operating Cash Flows for the quarter set out in section 1 of the attached Appendix 5B included 'one-off' cash expenditure in this quarter resulting from expenses incurred during the IPO process that were paid out of the proceeds of the IPO. These expenses were detailed in the Use of Funds statement in the prospectus dated 23 February 2022 and the supplementary prospectus dated 22 May 2022. The 'normalised' amounts can be reflected as follows:

Operating Cash Flow	Expended in the quarter \$'000	Relating to Pre-IPO Matters \$'000	Normalised quarterly expenditure \$'000
Staff Costs	(565)	(290)	(275)
Admin & corporate costs	(535)	(276)	(259)
Interest	(37)	(37)	Nil

## Next Steps for the Sarytogan Graphite Project

### Drilling

The addition of the second diamond drill rig (ASX Announcement 1 September 2022) has seen productivity improvements on site and the drilling program is forecast to be completed by November 2022. This will enable the Mineral Resource Estimate to be updated in Q1 2023. The focus will be on upgrading inferred to indicated Mineral Resources.

### Metallurgy

Metallurgical test-work including floatation, sintering (roasting), and leaching is underway at laboratories in Australia. Test work is also underway at laboratories in Germany aimed at replicating historical results that returned purities up to 98.6% (Prospectus dated 23 February 2022, published on the ASX on 14 July 2022).

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

**Sean Gregory**

**Managing Director**

admin@sarytogangraphite.com

## About Sarytogan

The Sarytogan Graphite Deposit is located in the Karaganda region of Central Kazakhstan. It is 190km by highway from the industrial city of Karaganda, the 4<sup>th</sup> largest city in Kazakhstan (Figure 7).

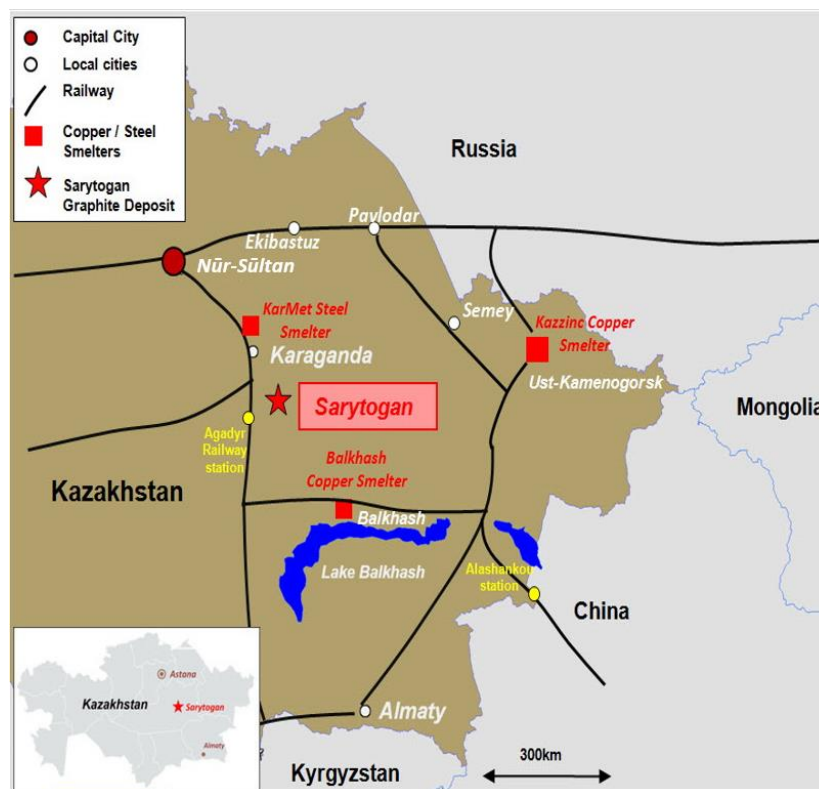


Figure 7 - Sarytogan Graphite Deposit location

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## Previous Exploration

The Sarytogan Graphite Deposit was first explored during the Soviet era in the 1980s with sampling by trenching and diamond drilling. Metallurgical test work utilising floatation, sintering, and leaching successfully produced graphite concentrate of up to 98.6% purity (reported in the 23 February 2022 Prospectus). Further testing is planned and underway to validate these historical results.

Diamond drilling and surface sampling resumed after a 30-year hiatus in 2019 that enabled the estimation of an Inferred Mineral Resource of **209Mt @ 28.5% TGC for 60Mt contained graphite** by CSA Global (Table 3).

*Table 3 - Sarytogan Graphite Deposit Inferred Mineral Resource (cut-off grade of 15%). Refer to Prospectus dated 23 February 2022, published on the ASX 14 July 2022, for full details of the Mineral Resource Estimate.*

<b>Zone</b>	<b>JORC Classification</b>	<b>In-Situ Tonnage (Mt)</b>	<b>Total Graphitic Carbon (TGC %)</b>	<b>Contained Graphite (Mt)</b>
North	Inferred	159	28.8	46
Central	Inferred	49	27.5	14
<b>Total</b>	<b>Inferred</b>	<b>209</b>	<b>28.5</b>	<b>60</b>

## Compliance Statement

The information in this report that relates to JORC estimates of Mineral Resources and 2021 Exploration Results was first reported in the Prospectus dated 23 February 2022 and published on ASX on 14 July 2022. The information relating to 2022 Exploration Results was first reported in ASX Announcements dated 15 August 2022, 19 September 2022 and 12 October 2022. These reports are available at [www.asx.com.au](http://www.asx.com.au). 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.



**Appendix 5B**  
**Mining exploration entity and oil and gas exploration entity**  
**quarterly report**

Name of entity	<b>SARYTOGAN GRAPHITE LIMITED</b>
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ABN	Quarter ended ("current quarter")
<b>91 107 920 945</b>	<b>30/09/2022</b>

Consolidated statement of cash flows	Current quarter \$A'000	Year to date 3 months) \$A'000
<b>1.0 Cash flows from operating activities</b>		
1.1 Receipts from customers		
1.2 Payments for		
(a) exploration & evaluation (if expensed)	-	-
(b) development	-	-
(c) production	-	-
(d) staff costs	(565)	(565)
(f) administration and corporate costs	(535)	(535)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	-	-
1.5 Interest and other costs of finance paid	(37)	(37)
1.6 Income taxes paid		
1.7 Government grants and tax incentives		
1.8 Other (provide details if material)		
<b>1.9 Net cash from / (used in) operating activities</b>	<b>(1,137)</b>	<b>(1,137)</b>

<b>2.0 Cash flows from investing activities</b>		
2.1 Payments to acquire:		
(a) entities		
(b) tenements		
(c) property, plant and equipment	-	-
(d) exploration & evaluation (capitalised)	(480)	(480)
(e) investments	-	-
(f) other non-current assets		
2.2 Proceeds from disposal of:		
(a) entities		
(b) tenements		
(c) property, plant and equipment		
(d) investments		
(e) other non-current assets		
2.3 Cash flows from loans to other entities		
2.4 Dividends received (see note 3)		
2.5 Other (provide details if material)		
<b>2.6 Net cash from / (used in) investing activities</b>	<b>(480)</b>	<b>(480)</b>

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<b>3.0</b>	<b>Cash flows from financing activities</b>		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	8,660	8,660
3.2	Proceeds from issue of convertible debt securities		
3.3	Proceeds from exercise of options	-	-
3.4	Transaction costs related to issues of equity securities, convertible debt securities	(634)	(634)
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	(800)	(800)
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid		
3.9	Other (provide details if material)		
<b>3.10</b>	<b>Net cash from / (used in) financing activities</b>	<b>7,226</b>	<b>7,226</b>

<b>4.0</b>	<b>Net increase / (decrease) in cash and cash equivalents for the period</b>		
4.1	Cash and cash equivalents at beginning of period	481	481
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(1,137)	(1,137)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(480)	(480)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	7,226	7,226
4.5	Effect of movement in exchange rates on cash held	-15	-15
<b>4.6</b>	<b>Cash and cash equivalents at end of period</b>	<b>6,075</b>	<b>6,075</b>

<b>5.0</b>	<b>Reconciliation of cash and cash equivalents</b>	<b>Current quarter</b>	<b>Previous quarter</b>
	at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	<b>\$A'000</b>	<b>\$A'000</b>
5.1	Bank balances	3,075	343
5.2	Call deposits	3,000	
5.3	Bank overdrafts		
5.4	Other (provide details)		
<b>5.5</b>	<b>Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>	<b>6,075</b>	<b>343</b>

<b>6.0</b>	<b>Payments to related parties of the entity and their associates</b>	<b>Current quarter</b>
		<b>\$A'000</b>
6.1	Aggregate amount of payments to related parties and their associates included in item 1	440
6.2	Aggregate amount of payments to related parties and their associates included in item 2	0

Note: If any amounts are shown in items 6.1 and 6.2, your quarterly activity report must include a description of and an explanation for, such payments

		Total facility amount at quarter end	Amount drawn at quarter end
		\$A'000	\$A'000
7.0	<b>Financing facilities available</b>		
	<i>Note: the term 'facility' includes all forms of financing arrangements available to the entity. Add notes as necessary for an understanding of the position</i>		
7.1	Loan facilities		
7.2	Credit standby arrangements		
7.3	Other (please specify)		
7.4	<b>Total financing facilities</b>		

7.5 **Unused financing facilities available at quarter end**

7.6 Include in the below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.

	8.0 Estimated cash available for future operating activities	\$A'000
8.1	Net cash from / (used in) operating activities (item 1.9)	(1,137)
8.2	Capitalised exploration & evaluation (Item 2.1(d))	(480)
8.3	Total relevant outgoings (Item 8.1 + Item 8.2)	(1,617)
8.4	Cash and cash equivalents at quarter end (Item 4.6)	6,075
8.5	Unused finance facilities available at quarter end (Item 7.5)	0
8.6	Total available funding (Item 8.4 + Item 8.5)	6,075
8.7	<b>Estimated quarters of funding available (Item 8.6 divided by Item 8.3)</b>	<b>3.8</b>

8.8 If Item 8.7 is less than 2 quarters, please provide answers to the following questions:

1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?

Answer:

2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?

Answer:

3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

Answer:

**Compliance statement**

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date: 31/10/2022

Authorised by: By the board



(Name of body or officer authorising release - see note 4)

**Notes**

1 The quarterly report and the accompanying activity report provides a basis for informing the market how the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.

2 If this quarterly report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standard applies to this report.

3 Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.

4 If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board. If it has been authorised for release to the market by a committee of your board of directors, you can insert her: "By the [name of board committee - eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".

5 If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Councils Corporate governance Principles and Recommendations, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.

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