

#### 13 March 2025

# DRILLING UNDERWAY TO SECURE WATER SUPPLY

Sarytogan Graphite Limited (ASX: SGA, "the Company" or "Sarytogan") is pleased to provide an update on water drilling to supply the Sarytogan Graphite Project in Kazakhstan.

## Highlights

- The Pre Feasibility Study (PFS) identified the Sherubainura River Aquifer 14 kilometres northwest of the Sarytogan Graphite site as the most suitable water source for the project.
- Two additional water wells are presently being drilled and 7 of the 11 existing water bores are undergoing pump testing.
- This will inform the water resource estimate and hydrogeological reports required to support the application for the water allocation for the project.



Figure 1 – Water bore drilling underway in the Sherubainura River Aquifer

Sarytogan Managing Director, Sean Gregory commented:

"Water is a critical resource for any mining project. We are fortunate at Sarytogan to have identified a plentiful fresh water source near the project. Securing the water allocation will be another derisking step towards realising the value of our extraordinary project."



#### Water Source

Eleven exploration water bores were drilled by TsentrGeolSzemka LLP and ground water modelling and analysis was conducted by Pennington Scott to support the PFS (Refer ASX Announcement 12 August 2024).

The project's water demands could reach up to 454 ML/year, primarily for mineral processing. Water demand peaks during the winter when water recovery from the tailings storage facility halts due to freezing of the tailings, and it is at its lowest during the spring thaw when the tailings melt and release water. While the tight bedrock of the mine pits offers poor prospects for developing groundwater supply, there are excellent prospects for developing a makeup water supply from shallow alluvial groundwater resources associated with the Sherubainura River near the village of Kenshoky, several kilometres northwest of the site (Figure 2). Although the saturated aquifer is less than 10 m thick, numerical modelling indicates that a skimming borefield comprising 11 to 14 bores, each pumping at 1.0 to 1.25 L/s, could feasibly sustain the peak project demand of 16 L/s for a full year between seasonal spring thaw river recharge events, without causing unacceptable drawdown impacts around the borefield.

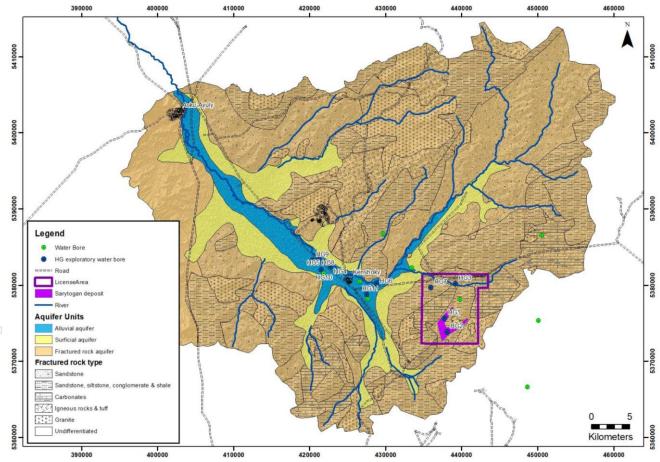


Figure 2 - Hydrogeology of the Sarytogan area showing the target alluvial aquifer and the 11 water bores drilled by Sarytogan in 2023.



### Water Drilling and Test Pumping

Two additional water wells are presently being drilled and 7 of the 11 existing water bores are subject to pump testing underway (Figure 3). Full chemical and radiological analysis of water samples will be conducted. Sustainable flow rates measured will inform the water resource estimates to be updated to support our application for a water licence with the Kazakh government regulators.



Figure 3 – Pump testing of the HG7 water bore.

#### **Next Steps**

The data collected from this water drilling and pump testing will inform the application for the water licence for the project.

Other early works for the Definitive Feasibility Study continue to progress including power and transport studies, metallurgical variability tests and the preparation of customer samples.

This announcement is authorised by:

Sean Gregory

**Managing Director** 

admin@sarytogangraphite.com



# About Sarytogan

The Sarytogan Graphite Deposit is 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 4).



Figure 4 - Sarytogan Graphite Deposit location.

The Sarytogan Graphite Deposit was first explored 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** (Table 1), refer ASX Announcement 27 March 2023).

Table 1 - Sarytogan Graphite Deposit Mineral Resource (> 15% TGC).

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



Sarytogan has produced bulk flotation concentrates at higher than **80% C** and further upgraded the concentrate up to **99.9992% C** "five nines purity" by thermal purification, without any chemical pre-treatment (refer ASX Announcement 5 March 2024). Sarytogan envisages three product types:

- Microcrystalline graphite at 80-85% C ("Micro80C") for traditional uses,
- Ultra-High Purity Fines (UHPF) for advanced industrial use including batteries, and
- Spherical Purified Graphite (USPG and CSPG) for use in lithium-ion batteries.

A Pre-Feasibility Study (PFS) was completed in August 2024 that outlined a staged development plan to match market penetration, minimise initial capital expenditure and deliver attractive financial returns.

An Ore Reserve of **8.6 Mt @ 30.0% TGC** (Table 2) was estimated using the Guidelines of the 2012 Edition JORC Code (refer ASX announcement 12 August 2024).

Ore mass	TGC	Concentrate mass	Concentrate grade	TGC in conc. Mass
kt	%	kt	%	kt
8,587	30.0	2,654	81.4	2,160

Table 2 - August 2024 Sarytogan Probable Ore Reserve estima	ite
---	-----

Notes:

- Tonnes and grades are as processed and are dry.
- The block mass pull varies as it is dependent on the TGC grade, concentrate grade (fixed) and process recovery (fixed) resulting in a variable cut-off grade, block by block. The cut-off is approximately 20% TGC with minimal mass below 20% TGC contributing.

Sarytogan is also progressing copper porphyry exploration at its Baynazar and Kopa projects across the highly prospective Central Asian Orogenic Belt.

#### **Compliance Statements**

The information in this report that relates to Sarytogan Mineral Resources was first reported in ASX announcement dated 27 March 2023. The information in this report that relates to Sarytogan Ore Reserves was first reported in ASX announcement dated 12 August 2024.

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 and Ore Reserves, 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.

The Company confirms that all the material assumptions underpinning the production target, or the forecast financial information derived from the production target, in the initial public report (12 August 2024) continue to apply and have not materially changed.