## **Alba Mineral Resources plc**

("Alba" or the "Company")

# Amitsoq Graphite Update Maiden Drilling Campaign Intersects Significant Graphite Layers

Alba Mineral Resources plc (AIM: ALBA) is pleased to report on the successful completion of drilling operations at the Amitsoq Graphite Project in southern Greenland.

## **Key Points**

- Drilling operations at the Amitsog Island deposit have been completed.
- Drilling has confirmed the existence of two significant and laterally continuous graphite horizons, confirming Alba's existing geological model.
- All completed drillholes intersected either the Upper Graphite Layer ("UGL") or Lower Graphite Layer ("LGL") or both.
- Several graphite intersections are considerably thicker than expected from the modelling, up to 8.19m in the UGL and up to 15.54m in the LGL.
- Ground geophysics and sampling of the Kalaaq mainland discovery and environmental baseline studies have also been completed.
- Trenching of target areas at Kalaaq have revealed graphite beds up to 10m thick.

## Mark Austin, Alba's Chief Operating Officer, commented:

"We are delighted to have encountered such thick graphite intersections at Amitsoq, well in excess of what we had projected from our structural modelling. We were also pleasantly surprised by the condition of the old mine workings and this will be an important factor as we move towards the long-term development of this very high-grade graphite project."

"We will be sending the drill core to an accredited laboratory for assaying as soon as possible. The assay results will then be handed over to the independent competent person to assist in his resource estimation work."



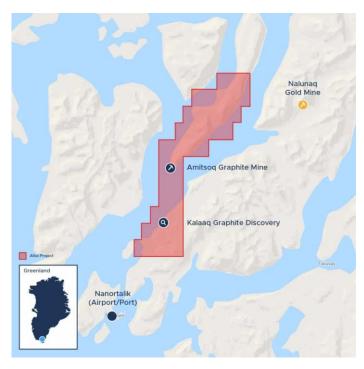
Figure 1: Photo of drill core intersection of LGL from hole DD 005 - 15.54m wide intersection

#### Details

Alba subsidiary Obsidian Mining Limited ("Obsidian") has completed its planned diamond-drilling programme at the Amitsoq Island deposit, part of the Amitsoq Graphite Project, with the aim of establishing a maiden Mineral Resource there.

A follow-up mapping and ground geophysical survey of the Kalaaq graphite deposit has also been completed on the mainland section of the Amitsog licence area.

Figure 2 (right): Amitsoq Graphite Project in southern Greenland, showing Amitsoq Island graphite deposit to north (site of former graphite mine) and Kalaaq Discovery to south



Obsidian's field exploration team of geologists and assistants, drill crew and environmental contractors were accommodated on a chartered vessel anchored close to the drill site for the duration of the programme. Helicopter support was provided in order to transport equipment to site and to move the drill rig between pad locations.

Of the five drill pads that had been prepared, only Pads A, B, C, and E were utilised. The most northerly location, Pad D, was not reached due to technical issues. All eight completed holes intersected graphite mineralisation, two from Pad A, three from Pad B and three from Pad E. A total of 935m were drilled. This was down on the planned 15 holes for up to 1,700 metres, principally due to ground conditions at Pads C and D. Although drilling was commenced from Pad C, it did not manage to attain the required depths to intersect the expected graphite horizons due to ground conditions. This will be revisited in the next drilling programme, using different techniques to counteract the ground conditions.

The core was drilled initially using an HQ3 drill string but switched to NQ for the last two holes. Figure 3 shows a photograph of the southern part of Amitsoq Island facing northwest and showing the position of the drillholes on the topography.



Figure 3 (left): Drill sites (white triangles) at southern end of Amitsoq Island, view towards NW.

Outcrops of graphite layers indicated in yellow with mapped faults in red dashed lines.

Table 1 summarises the results of the drilling programme to date.

Table 1: Summary of graphite intersections [NB: UTM 23N. True Width assuming a graphite dip of 30°]

Hole Number	Pad	Co-Ordinates		Azimuth	Inclination	ion Upper Graphite		True	Lower Graphite		True	eoh (m)	Coro Cino
noie Number		X	Υ	(°)	(°)	From	То	Width	From	То	Width	eon (m)	Core Size
AM-DD-013A	Α	-492790	-6682969	VERTICAL	-90°	20.90	30.36	8.19	-	-	-	110.7	HQ3
AM-DD-014	Α	-492790	-6682969	141°	-60°	18.71	25.80	7.09	-	-	-	26.0	HQ3
AM-DD-004	В	-492936	-6683205	VERTICAL	-90°	47.67	51.89	3.65	-	-	-	105.0	HQ3
AM-DD-005	В	-492936	-6683205	141°	-60°	45.75	48.71	2.96	93.64	109.18	15.54	112.8	HQ3/NQ
AM-DD-006	В	-492936	-6683205	141°	-85°	45.29	49.69	3.81	102.21	118.66	14.25	122.0	NQ
AM-DD-008	Ε	-492860	-6683075	141°	-70°	-	-	-	95.60	99.50	3.38	107.5	HQ3
AM-DD-009	Ε	-492860	-6683075	141°	-45°	-	-	-	95.48	96.00	0.45	104.2	HQ3
AM-DD-015	E	-492860	-6683075	VERTICAL	-90°	-	-	-	113.00	121.35	7.23	128.4	HQ3

The geological model used for the Exploration Target calculation, as shown in Figure 4, has been confirmed by the drilling results. Five intersections of the Upper Graphite Layer have been recorded, measuring 8.19m, 7.09m, 3.65m, 2.96, and 3.81m (true widths), as well as five intersections of the Lower Graphite Layer, measuring 15.54m, 14.25m, 3.38, 0.45m and 7.23m (true widths).

Figure 4 shows the details of the holes drilled from Pad B. It is noteworthy that the intersections are generally greater in width than predicted by the geological model. Figure 5 is a 3D view showing the five drill fences and the projected graphite bodies.

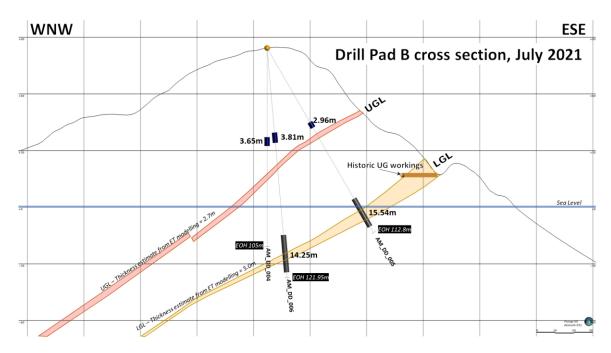


Figure 4: detailed cross-section through Pad B showing the actual graphite intersections (black rectangles) compared to the Exploration Target Geological Model (pink and yellow shapes).

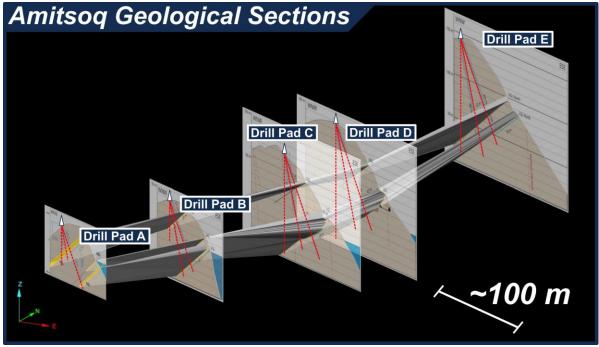
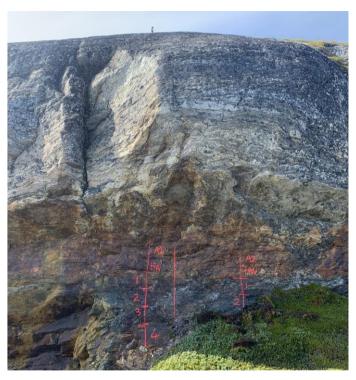


Figure 5: Exploration Target 3D model of graphite mineralisation and planned drillhole fences.

In addition to the drilling, Obsidian's geological team have chip sampled the graphite outcrops in line with the drill fences in order to supplement the graphite mineralisation information to be used in the forthcoming resource estimation work (see Figure 6).



The graphite mine, which was abandoned in the 1930s, has been accessed and mapped by the geological team.

Figure 7 shows the condition of the workings and the scale of the graphite (the Lower Graphite Layer is shown in this photo) which is in agreement with some of the borehole intersection widths.

The workings will be channel sampled in the next exploration campaign and will, undoubtably, contribute important information for the resource and future mining layouts.

Figure 6 (left): graphite outcrop marked up in one metre intervals for sampling. Note drill rig at top of photograph.



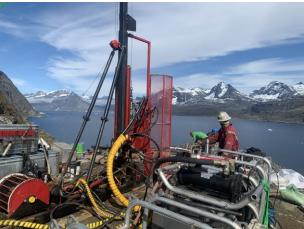


Figure 7 (above left): Lower graphite workings from the abandoned Graphite Mine on the southern tip of Amitsoq Island. Figure 8 (above right): view of the drill rig on Drill Pad A looking south.

#### **Other Field Work**

#### Kalaaq Exploration Programme

A follow-up mapping and ground geophysical survey of the Kalaaq graphite deposit has been completed on the mainland section of the Amitsoq licence area. The programme was led by senior Greenlandic geologist Ole Christiansen, and involved extensive mapping and sampling, as well as a "beep mat" survey to record electromagnetic (EM) conductivity and magnetic susceptibility down to 3 metres below surface, through the overburden. This technique was used to great effect in 2017 to identify and map the graphite occurrences at Kalaaq.

During the programme, the team excavated two trenches, revealing graphite zones. The Kalaaq area contains multiple horizons of graphite mineralisation that are interpreted to have been subject to complex folding. Average grades from sampling conducted at Kalaaq are 25.6% TGC, also among the highest of any project in the world.

The results of this exploration programme will be used to refine drill targets at Kalaaq.

## Environmental Baseline Studies

Experienced environmental consultants BioApp Greenland have completed the first-year environmental baseline screening programme at Amitsoq during this summer's field programme. The results of this work will form part of a future environmental impact assessment for the project, which will be a requirement for a future mining licence application.

This announcement contains inside information for the purposes of the UK Market Abuse Regulation and the Directors of the Company are responsible for the release of this announcement.

#### Forward Looking Statements

This announcement contains forward-looking statements relating to expected or anticipated future events and anticipated results that are forward-looking in nature and, as a result, are subject to certain risks and uncertainties, such as general economic, market and business conditions, competition for qualified staff, the regulatory process and actions, technical issues, new legislation, uncertainties resulting from potential delays or

changes in plans, uncertainties resulting from working in a new political jurisdiction, uncertainties regarding the results of exploration, uncertainties regarding the timing and granting of prospecting rights, uncertainties regarding the timing and granting of regulatory and other third party consents and approvals, uncertainties regarding the Company's or any third party's ability to execute and implement future plans, and the occurrence of unexpected events.

Without prejudice to the generality of the foregoing, uncertainties also exist in connection with the ongoing Coronavirus (COVID-19) pandemic which may result in further lockdown measures and restrictions being imposed by Governments and other competent regulatory bodies and agencies from time to time in response to the pandemic, which measures and restrictions may prevent or inhibit the Company from executing its work activities according to the timelines set out in this announcement or indeed from executing its work activities at all. The Coronavirus (COVID-19) pandemic may also affect the Company's ability to execute its work activities due to personnel and contractors testing positive for COVID-19 or otherwise being required to self-isolate from time to time.

Actual results achieved may vary from the information provided herein as a result of numerous known and unknown risks and uncertainties and other factors.

## **Competent Person Declaration**

The information in this release that relates to Exploration Results has been reviewed by Mr Mark Austin. Mr Austin is a member of SACNASP (Reg. No. 400235/06), Fellow of The Geological Society and Fellow of the Geological Society of South Africa. He has a B.Sc. Honours in Geology with 38 years' experience.

Mark Austin 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 targets, Exploration Results, Mineral Resources and Ore Reserves', also known as the JORC Code. The JORC code is a national reporting organisation that is aligned with CRIRSCO. Mr Austin consents to the inclusion in the announcement of the matters based on his information in the form and context in which they appear.

### **Glossary**

**Electromagnetic (or EM) survey**: a geophysical survey method which measures the electromagnetic properties of rocks.

**Graphitic**: of, relating to, resembling, or having the structure of graphite.

**Graphitic Carbon or Total Graphitic Carbon (TGC)**: Carbon may be present in rocks in various forms including organic carbon, carbonates or graphitic carbon. Carbon in rocks may be reported as fixed or total carbon (i.e. organic carbon + carbon in carbonate minerals + carbon as graphite) or as graphitic carbon or total graphitic carbon (or TGC) (i.e. total carbon - (organic + carbonate carbon)).

**Overburden**: material that lies above an area (the orebody) that lends itself to economical exploitation.

#### For further information, please contact:

**Alba Mineral Resources plc** George Frangeskides, Executive Chairman +44 20 3950 0725

**Cairn Financial Advisers LLP (Nomad)** 

+44 20 7213 0880

## ETX Capital (Broker) Thomas Smith

+44 20 7392 1494

## **Alba's Project and Investment Portfolio**

Project (commodity)	Location	Ownership						
Mining Projects								
Amitsoq (graphite)	Greenland	100%						
Clogau (gold)	Wales	90%						
Gwynfynydd (gold)	Wales	100%						
Inglefield (copper, cobalt, gold)	Greenland	100%						
Limerick (zinc-lead)	Ireland	100%						
Melville Bay (iron ore)	Greenland	100%						
TBS (ilmenite)	Greenland	100%						
Oil & Gas Investments	1							
Horse Hill (oil)	England	11.765%						