# Alba Mineral Resources plc

("Alba" or the "Company")

## Structural Geology Field Work at Amitsoq Extends Strike Length at Mainland Discovery

Alba Mineral Resources plc (AIM: ALBA) is pleased to announce that it has now completed a second phase of the summer 2017 field work programme at the high-grade Amitsoq Graphite Project in southern Greenland (the "Project"). The purpose of the field work was to carry out a detailed review of the structural geology and setting of the known graphite horizons both in and around the former graphite mine at Amitsoq, as well as at the new mainland graphite discovery reported in our announcement of 18 July 2017, now referred to as the Kalaaq Mainland Discovery. In addition a ground electromagnetic (EM) geophysical survey was carried out at the mainland discovery.

The initial results of the second phase of the Company's summer 2017 field work programme are summarised below.

# Highlights

- The ground geophysical survey has identified additional graphite beds at the Kalaaq Mainland Discovery, in addition to those discovered in the field work earlier this year.
- Tracing the graphite beds southwards indicates that a zone consisting of multiple thick graphite layers is present for a distance of at least 460 m.
- The structural geology field work has also identified drilling targets in the vicinity of the historic mine. The two graphite beds in the area were traced over a distance of approximately 1000 m.
- Detailed satellite images are in the process of being acquired over both main graphite horizons, which will be used to construct accurate topographic maps that can then be used to refine proposed drilling locations.
- Channel samples taken at the Kalaaq Mainland Discovery are being dispatched to SGS in Canada for detailed metallurgical test work designed to confirm metallurgical characteristics of the Kalaaq discovery and in particular whether it displays the same metallurgical characteristics to the high-grade graphite found in the area of the former Amitsoq mine.

## George Frangeskides, Alba's Executive Chairman, commented:

"I am excited by the exploration results for the Kalaaq Mainland Discovery. As we perform additional work in this new discovery zone, we continue to expand the area of graphite mineralization, and identify zones of structurally thickened mineralization. The present study indicates that the mineralization remains open to the south, and the down-dip extensions remain untested." "We were already very encouraged by this year's work at Amitsoq, in and around the former mine site on Amitsoq Island. However, this discovery of a whole new graphite deposit on the mainland portion of our licence represents more than just a "bonus"; it could be a real game changer for the economic viability of the Project overall".

# Second stage field work completed

As reported on 18 July 2017, in the first part of the field work programme at the Amitsoq graphite project (the "Project") undertaken during this past summer, the outcomes included the following:

- Several of the airborne EM anomalies identified in the EM Survey were confirmed as graphite horizons along strike and proximal to the Amitsoq graphite mine.
- Two new areas of thick graphite accumulation were identified:
  - The first area is located 8.75 km to the north-east of the former Amitsoq mine, and corresponds to a strong EM anomaly, with a true thickness of at least 4.85 m.
  - The second area is located on the mainland portion of Alba's licence, 11.5 km northnortheast from Nanortalik (Figures 1 and 2), and consists of at least three beds of apparently purer graphite than the Amitsoq mine area, with true thicknesses of 6.3, 4.9 and 3.6 m. These beds (the "Kalaaq Mainland Discovery") represent a new graphite discovery.

These significant developments have now been further consolidated and advanced in a second phase of the summer 2017 field work programme, further described below.

Geological field mapping and a coincident ground electromagnetic (EM) survey, supervised by SRK Exploration Services led by Senior Exploration Geologist Dr Jeroen Van Gool, was undertaken at the Kalaaq Mainland Discovery in September 2017. The field work supports the earlier (July 2017) interpretation by Alba fieldwork that the area contains multiple beds of graphite orientated in a general north-south trend in the northern part of the zone, and a more south-westerly trend in the southern (upland) extension (Figures 1 and 2). Based on visual observations and ground geophysics, the graphite beds appear to connect and are locally repeated by folding. The true thickness of the graphite beds are generally 2 to 3 m over much of their length, but increase locally to 7 m in the south. Where the beds have been folded, the true thickness could be up to 15 m.

Due to the soil cover in some of the areas the beds do not always outcrop, and the thickness is based on the ground EM survey. However, to rule out the possibility of locally transported (scree) material causing the anomalies, several pits were dug over the EM anomalies. The pitting confirmed that the anomalies were due to bedrock graphite.

Tracing the graphite bed to the north, towards the coast, was hampered by several metres of glacial moraine overlying the bedrock in the area. The EM survey did, however, pick up some weak signal along the trace of the beds. Mapping in July 2017 identified a thin (0.8 m) graphite horizon on the coast. Tracing the upper bed southward indicated that this thick (more than 3 m) graphite horizon is present for a distance of at least 460 m, possibly more based on satellite image interpretation.

SRK Exploration Services also performed structural mapping in the vicinity of the former Amitsoq mine (Figures 1 and 2). The two graphite beds in the area were traced over a distance of approximately 1000 m and structural measurements recorded. These measurements were used to update the geology map of the island, determine controls on the variable thickness of the graphite beds, and help predict the distribution of graphite at

depth. All of these interpretations were then used to refine the location of proposed drilling sites.

Final approval is being sought from the Greenland government to export channel samples from two of the graphite horizons at the Kalaaq Mainland Discovery collected in early August. These samples, along with a 5 m composite chip sample from the upper graphite horizon at the former Amitsoq mine, are being sent to SGS Canada Inc in Ontario for metallurgical testing.

Figure 1. Graphite zones at the historic Amitsoq mine site (left) and at the Kalaaq Mainland Discovery (right). The Kalaaq discovery zone consists of several graphite horizons and is open to the south. Note similar scales on both maps.

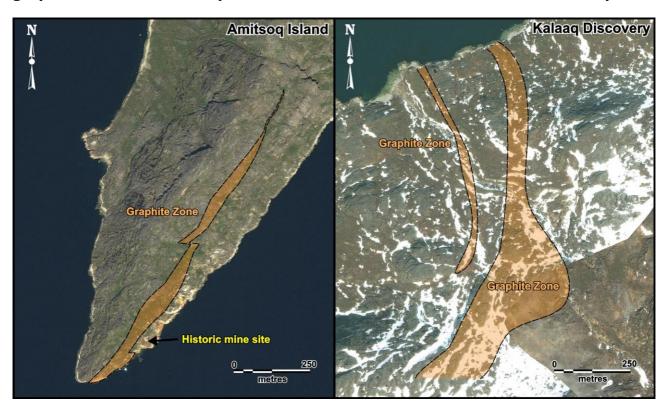
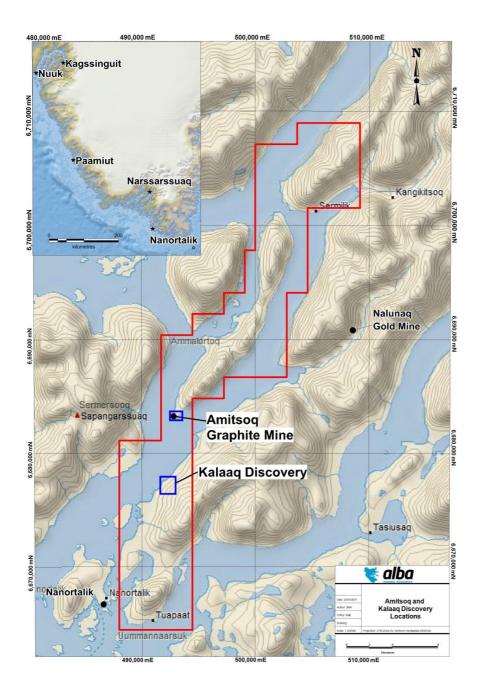


Figure 2: Extent of the Amitsoq licence (red boundary) showing the location of the main graphite zones on Amitsoq Island and at the Kalaaq Mainland Discovery



## **Field Team**

Structural mapping and technical supervision during this second stage field work programme was performed by Dr. Jeroen Van Gool, Senior Exploration Geologist, SRK Exploration Services Denmark, a branch of SRK Exploration Services Limited UK. Dr. Van Gool has previously worked with the Geological Survey of Denmark and Greenland (1999-2008) and has also performed exploration work in Greenland for several years as a consulting geologist on a variety of commodities.

# **Next Steps**

The Company is awaiting completion of the acquisition of satellite images over the main targets areas at Amitsoq and at the Mainland Discovery. This will enable Alba to refine the drilling locations which have been selected for the maiden drilling campaign at the Project.

This announcement contains inside information for the purposes of Article 7 of EU Regulation 596/2014.

## For further information, please contact:

Alba Mineral Resources plc George Frangeskides (Executive Chairman)	Tel: +44 20 7264 4366
Cairn Financial Advisers LLP (Nomad) James Caithie/Liam Murray	Tel: +44 20 7213 0880
Dowgate Capital Stockbrokers Ltd (Broker) Neil Badger	Tel: +44 1293 517744

## **Competent Person's Declaration**

The information in this announcement that relates to the geology, exploration results and work programme is based on information compiled by and reviewed by EurGeol Dr Sandy M. Archibald, PGeo, Aurum Exploration Services, who is a Professional Geologist and Member of the Institute of Geologists of Ireland, and a Fellow of the Society of Economic Geologists. He is a geologist with fifteen years' experience in the exploration industry, and ten years post-graduate studies.

Sandy M. Archibald is a Technical Advisor to Alba Mineral Resources plc and has sufficient experience which is relevant to the style of mineralization and type of deposit under consideration, and to the type of activity which he is undertaking to qualify as a Competent Person as defined in the June 2009 Edition of the AIM Note for Mining and Oil & Gas Companies. Sandy M. Archibald consents to the inclusion in the announcement of the matters based on the information in the form and context in which it appears and confirms that this information is accurate and not false or misleading.

## Alba's Project Portfolio

#### Oil & Gas

*Horse Hill (Oil & Gas, UK):* Alba holds a 15 per cent interest in Horse Hill Developments Limited, the company which has a 65 per cent participating interest and operatorship of the Horse Hill oil and gas project (licences PEDL 137 and PEDL 246) in the UK Weald Basin.

*Brockham (Oil & Gas, UK):* Alba has a direct 5% interest in Production Licence 235, which comprises the previously producing onshore Brockham Oil Field.

## Mining

*Amitsoq (Graphite, Greenland)*: Alba owns a 90 per cent interest in the Amitsoq Graphite Project in Southern Greenland and has an option over the remaining 10 per cent.

*Black Sands (Ilmenite, Greenland)*: Alba owns 100 per cent of mineral exploration licences 2017/29 and 2017/39 in the Thule region, north-west Greenland.

*Melville Bay (Iron Ore, Greenland)*: Alba is entitled to a 51 per cent interest in mineral exploration licence 2017/41 in Melville Bay, north-west Greenland. The licence area benefits from an existing inferred JORC resource of 67 Mt @ 31.4% Fe.

*Inglefield Land (Copper, Cobalt, Gold)*: Alba owns 100 per cent of mineral exploration licence 2017/40 in north-west Greenland.

*Limerick (Base Metals, Ireland):* Alba has 100 per cent of the Limerick base metal project in the Republic of Ireland.

*El Mreiti (Uranium, Mauritania):* Alba has applied for the reissue of a uranium permit in northern Mauritania, centred on known uranium-bearing showings.

Alba continues actively to review numerous other project opportunities which have valueenhancing potential for the Company whether by bolt-on or stand-alone acquisition, farm in or joint venture.

Web: www.albamineralresources.com