

## Significant widths and grades of nickel-copper-cobalt sulphides confirmed by drilling at Arthrath, Aberdeenshire

ELLON, Aberdeenshire, 08 June 2023.

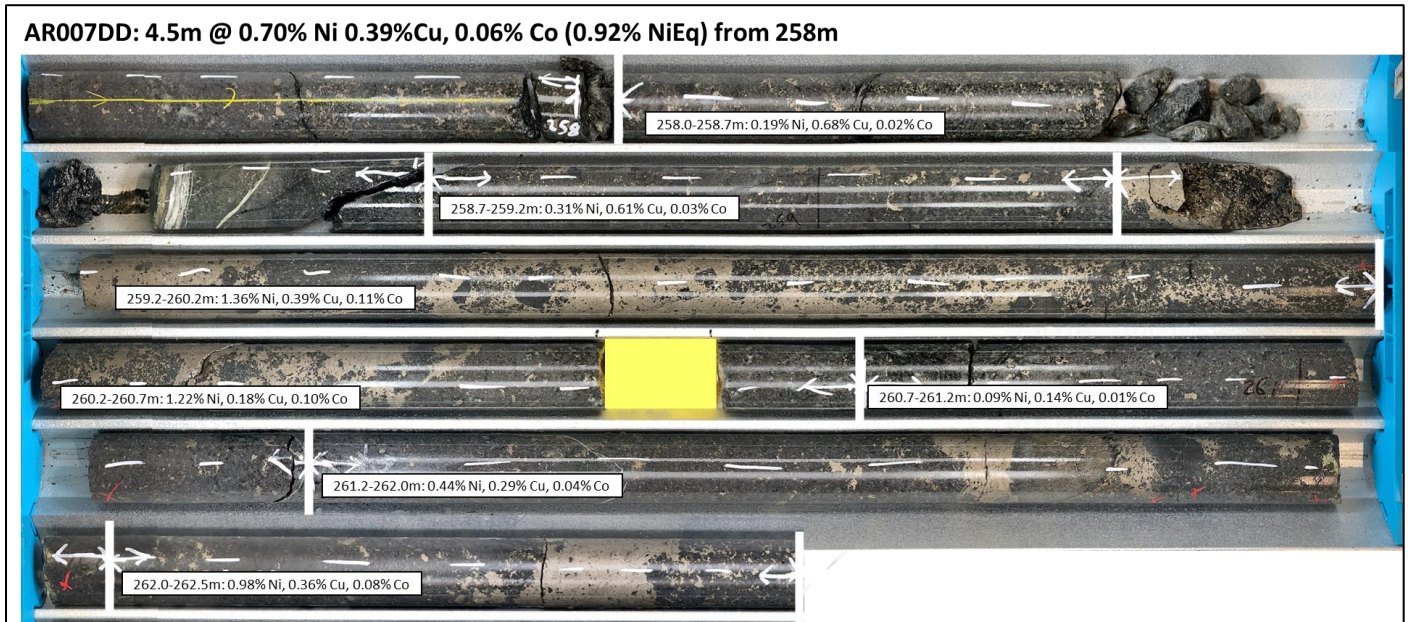
Aberdeen Minerals announces the completion of its first phase of drilling and assaying at the Arthrath Project in Aberdeenshire, where it is exploring for deposits of nickel, copper and cobalt. These metals are essential to an energy transition in Scotland and the UK but are currently wholly imported from overseas.

### KEY POINTS

- The company's **maiden drilling programme** involved the completion of seven angled diamond drill holes ranging in length from 130 to 400 metres for a total length of 1,715 metres.
- High grade highlights in the longest hole ever drilled at Arthrath, AR007DD (400 metres), confirm the **depth continuity of mineralisation 100 metres below the level of historical drilling** and include:
  - **1.7 metres grading 0.66% nickel (Ni), 0.47% copper (Cu), 0.06% cobalt (Co) (0.91% nickel equivalent, NiEq) from 249 metres**
  - **4.5 metres grading 0.70% Ni, 0.39% Cu, 0.06% Co (0.92% NiEq) from 258 metres**
  - **2.0 metres grading 0.73% Ni, 0.70% Cu, 0.07% Co (1.08% NiEq) from 270 metres**
- **Validated the Aberdeenshire mafic-ultramafic intrusive system is dynamic** and the application of modern nickel exploration technology and the latest 'conduit style' geological models could uncover higher grades than the shallow historical results.
- Intervals of net-textured and massive sulphides were intersected within a broader zone of disseminated style mineralisation, with **individual sample grades up to 2% nickel and 1.2% copper providing evidence for higher grade potential**.
- **All holes intersected nickel-copper-cobalt sulphides** within a wide and continuous zone of "magmatic sulphide" mineralisation which extends from near surface and is confirmed by drill intercepts including:
  - AR007DD: **90 metres grading 0.28% Ni, 0.18% Cu, 0.02% Co (0.38% NiEq) from 184 metres**
  - AR001DD: **89 metres grading 0.22% Ni, 0.17% Cu, 0.02% Co (0.30% NiEq) from 95 metres**
  - AR002DD: **44 metres grading 0.30% Ni, 0.29% Cu, 0.03% Co (0.44% NiEq) from 98 metres**
    - **Includes 12 metres grading 0.45% Ni, 0.44% Cu, 0.04% Co (0.67% NiEq)**
  - AR003DD: **15 metres grading 0.42% Ni, 0.28% Cu, 0.05% Co (0.59% NiEq) from 39 metres**.
- These results validate data from Rio Tinto drilling in 1972 therefore providing **confidence in the historical dataset** across the Project area.
- **Confirmed airborne geophysics as the leading vectoring tool** for identifying increasing intensity of mineralised sulphides beyond the limits of historical drilling.
- **Exciting exploration potential** for clusters of high priority targets in the broader 100km x 100km intrusive district generated from the Company's proprietary geophysical dataset (SkyTEM survey conducted in September 2022).

Fraser Gardiner, Chief Executive Officer of Aberdeen Minerals, commented:

*“Our maiden drilling programme at Arthrath has been a resounding success. The levels of mineralisation have exceeded our expectations and we are strongly encouraged by the evidence supporting an exploration model of increasing sulphides and corresponding metal grades at depth. It is now apparent that historical drilling only scratched the surface which makes us very excited about the mineral potential at the project and surrounding district.”*



Photograph of drill core from AR007DD noting individual sample grades making up the 4.5m high grade intercept.

Aberdeen Minerals is grateful to the landowners and community in the project area for their cooperation and support, as well as to Aberdeenshire Council and the Scottish Environmental Protection Agency (SEPA) for their constructive engagement ahead of the drilling programme. The Company also appreciated the visits of local Members of the Scottish Parliament, investors and other stakeholders interested in its work.

### Next steps

The company has retained CSA Global (a division of ERM), an independent mining industry consultancy, to prepare a maiden Mineral Resource Estimate and / or Exploration Target in accordance with the JORC Code 2012 Edition<sup>1</sup>. This first modern standard model and report for the Arthrath Project will represent a major milestone for Aberdeen Minerals, and is a key step towards accelerated investment in exploration and development of its projects in North East Scotland.

### Drilling programme technical details

The drilling was carried out by specialist contractor Priority Drilling UK Ltd using a single, small footprint drill rig. The programme was completed in compliance with the General Permitted Development (Scotland) Order 1992 (as amended) and the General Binding Rules of the Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended). AR007DD, being greater than 200 metres in vertical depth, was completed in compliance with a deep borehole construction and operation permit issued by SEPA. No lost time incidents or environmental incidents occurred during the programme.

Rig supervision, core logging and sampling, and general programme support were provided by Aurum Exploration Services. Collars were surveyed using GNSS by a local surveyor and downhole surveys were

<sup>1</sup> Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves

measured using a gyroscope instrument. Sample preparation and assaying services were provided by ALS Global, Ireland.

Holes were drilled approximately perpendicular to the interpreted strike orientation of the sulphide zone, at inclinations between -45 and -55 degrees. All drillholes commenced in HQ diameter core and were reduced to NQ in competent bedrock until the end of the hole. Core was oriented and recoveries were generally >95%. Core was logged, photographed and sampled at the company's technical unit in Ellon using standard industry practices. Samples were collected by cutting the core in half using a core saw, with half core samples sent for assay and the other half retained for reference. Quality control samples were inserted to batches as blanks (3%), duplicates (3%) and certified reference materials (5%) for a total average rate of 11%. No material QAQC issues arose. Approximately 20% of samples were measured for bulk density by the water displacement method.

The intercepts in this report are length-weighted and based on >0.25% Ni equivalent, with Ni equivalent calculated based on metal prices using the formula  $Ni + (0.36 \times Cu) + (1.44 \times Co)$ . Intercept widths are not true widths, which are subject to ongoing interpretation and modelling.

### **About Arthrath**

Arthrath is the largest known nickel deposit in the UK. Nickel-copper sulphide mineralisation was discovered in the late 1960s by Rio Tinto following reports of soil nickel toxicity affecting turnips, and the deposit was subsequently explored during the early 1970s in joint venture with Consolidated Goldfields. Additional exploration was carried out by AMAX in the late 1970s and in the mid-2000s by Alba Mineral Resource in joint venture with nickel major Inco (now Vale). Since the historical work of the 1970s new mineral deposit models have been developed and exploration technologies have improved such that deeper and higher grade discoveries can be targeted.

Arthrath is classified by Aberdeenshire Council in its Local Development Plan as an important mineral safeguarded site, where other forms of development should not generally be allowed, to protect mineral deposits from sterilisation. It is located 6 kilometres north of the town of Ellon and is easily accessible year-round by road infrastructure.

### **About Aberdeen Minerals Ltd**

Aberdeen Minerals is a privately owned UK company focused on the exploration and development of battery metal deposits in North East Scotland. Through its Scottish subsidiary, Aberdeen Minerals Exploration Ltd, the company has been investing in North East Scotland since 2018 and has secured exclusive land access and exploration agreements with a package of landowners over geologically prospective areas of Aberdeenshire. There is significant and growing demand for battery metals, including those targeted by the company in North East Scotland. Recent and ongoing geopolitical events have highlighted the strategic importance of long term, responsibly sourced and secure supplies of the raw materials critical to the transition to a green economy in Scotland and the UK.

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