



Trading Symbol  
AIM: AYM

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Anglesey Mining plc  
("Anglesey" or "the Company")

## Parys Mountain – Exploration and Drilling Update

Anglesey Mining plc (AIM:AYM), the UK minerals development company, is pleased to provide an update on progress at the Company's Parys Mountain Cu-Zn-Pb-Ag-Au project located on the Isle of Anglesey.

### Highlights

- **Central Alliance engaged for Proof-of-Concept Study on Muon Tomography at Parys Mountain**
- **Northern Copper Zone drilling expected to start September 2023**
- **Groundwater studies about to commence as part of the ongoing permitting process**

**Jo Battershill, Chief Executive of Anglesey Mining, commented:** *"We are very excited to announce the proof-of-concept study with Central Alliance and its muon tomography technique. Historical drilling across the Parys Mountain project has identified many zones of interest that have not been followed up on or included within the current resource estimates and the Morris Shaft provides an ideal location to test this cutting-edge exploration tool."*

*"With conventional geophysical methods being increasingly difficult to employ on the Isle of Anglesey due to impediments such as power cables, windfarms and roads, the need to develop new technology is becoming more important."*

*"We believe that the entire Parys Mountain stratigraphy remains highly prospective, and that existing mineralisation should extend both along strike and at depth, as seen at many other VMS deposits around the world. Bringing modern exploration methods to this project could facilitate and expedite both the discovery of additional mineralised zones and the development of the current known resources."*

### Summary

The Company confirms it has engaged the ground engineering technical services company Central Alliance ("CA") to conduct a Proof-of-Concept study ("PoC") on the use of Muon Tomography as an exploratory tool to identify new resources and assist with the delineation of existing zones of mineralisation at Parys Mountain. Muon Tomography is a technique that measures naturally generated subatomic particles, called muons, from which it creates an image of the subsurface through density differentials (further details on the technique are included in the Appendix to this announcement). The process is analogous to medical x-ray imaging.

Muon Tomography has previously been used to deliver accurate spatial representation of metallic ore bodies and generate extensive drilling targets over large detection areas, as demonstrated in the following paper (<https://www.tandfonline.com/doi/pdf/10.1071/ASEG2015ab054>). At Parys Mountain, this process should enable much more focused drilling programmes and could potentially save drilling costs and time.

Muon sensors will be deployed by CA in stages down the 300m deep Morris Shaft at the Parys Mountain mine, with the acquired muon data subsequently analysed offsite. The Morris Shaft location will enable CA to

conduct an orientation survey with the known White Rock and Engine Zone deposits; and potentially identify both new zones of interest and extensions to these zones.

As part of the PoC the post-processed muon data set will be interfaced to Leapfrog geological modelling software to enable a reconciliation between the current geological model and the density anomaly model generated from the survey. If the data demonstrates suitability at Parys Mountain, then it will be utilised in the upcoming NCZ drilling, which is targeting down to 625m, with a downhole tool variant. The NCZ currently has a lateral extent of over 1.2km and remains open to the northeast and at depth, therefore it is interpreted to be a target-rich environment for additional sulphide discoveries.

### ***Drilling***

In addition, the proposed Northern Copper Zone (“NCZ”) drilling is expected to start shortly, with the drill rig scheduled to be mobilised in the week commencing 11 September 2023. The six-hole programme, for approximately 3,725m of diamond core drilling, has been designed to increase the resource confidence category for the upper levels of the NCZ, extend the high-grade Garth Daniel resource estimate and test the Central Zone, which is not currently in the Parys Mountain resource estimate.

The six proposed holes could potentially provide numerous pierce points across the NCZ, the Garth Daniel Zone and the Central Zone, based on current interpretations. Following rig mobilisation in September, the Company expects the programme to be completed over approximately six months.

## Appendix:

### Muon Tomography

Central Alliance have been engaged by Anglesey Mining to conduct a Proof-of-Concept study (PoC) whereby the use of Muon Tomography can be used to delineate geological boundaries through the modelling of changes in density as measured through using Muon Tomography. Muon sensors will be deployed in stages down the 300-metre-deep Morris Shaft at the Parys Mountain mine, with the acquired muon data then analysed offsite.

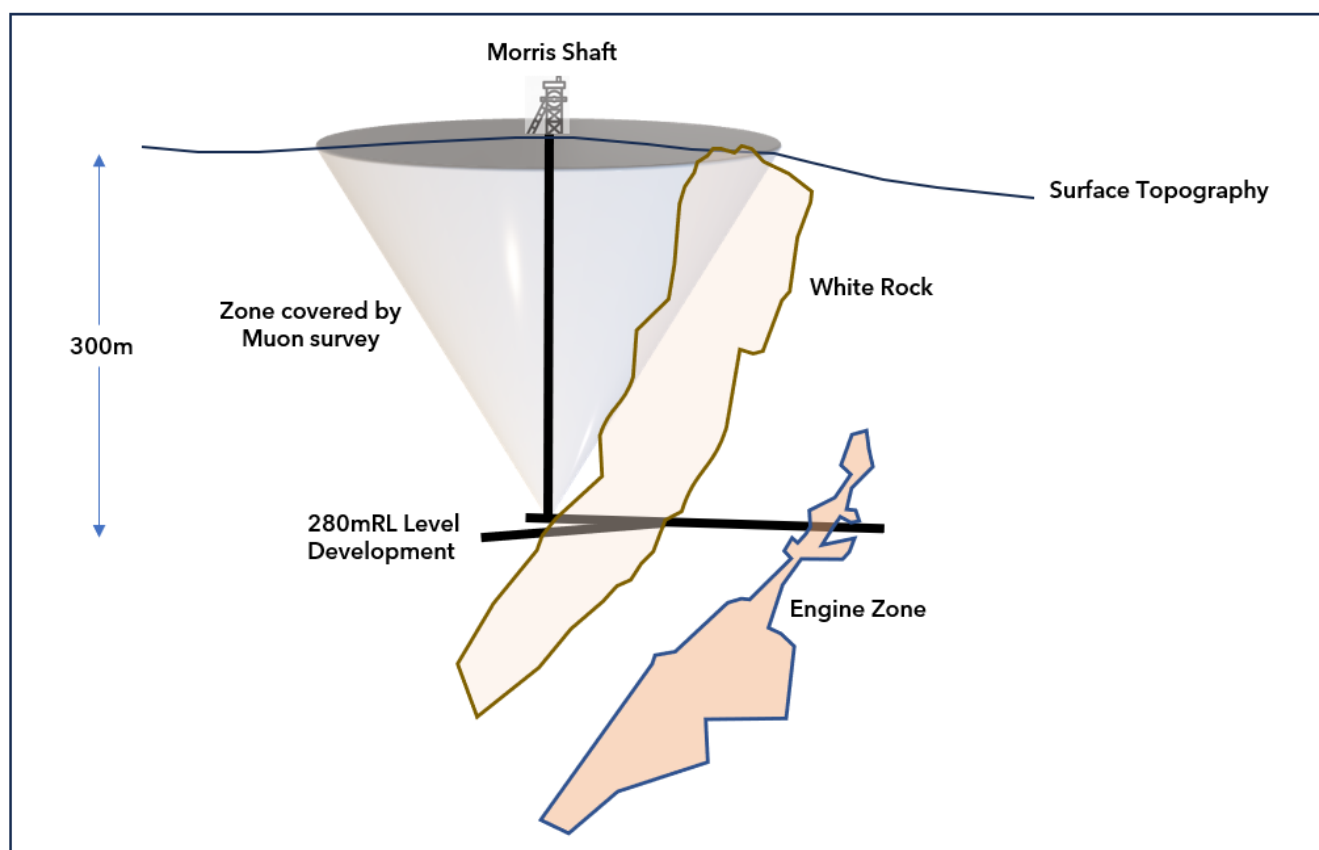


Figure 1 - Schematic section showing the Morris Shaft, the White Rock / Engine Zone deposits, and the area to be covered by the proposed Muon Tomography survey.

Muon Tomography is a technique that exploits naturally generated subatomic particles, called muons, to create an image of the subsurface. The process is analogous to medical x-ray imaging, where the source - the upper atmosphere in the case of muons - emits particles through a region of interest (ROI) and a higher fraction of particles are stopped as the density in the ROI increases. By measuring particle flux changes spatially, density changes can also be inferred.

Central Alliance's muon technology is designed and manufactured in the UK by its industry partner Geoptic. This multi award winning technology can be applied by deploying either NQ-size borehole or underground survey sensors. Large areas can be assessed by these sensors with volumes of over tens of millions of cubic meters analysed per location.

As part of the PoC, the post processed muon data set will be interfaced to Leapfrog (a geological modelling tool) to enable a reconciliation between the current geological model and the density anomaly model.

Development of the Muon Tomography method has demonstrated its ability to deliver accurate spatial representation of mineralised ore bodies and generate extensive drilling targets over large detection areas. This will potentially enable a much more focused drilling programme and save drilling costs and time.

Furthermore, a muon study should also enable geologists managing exploration programs to more confidently disregard certain areas that do not display any high-density anomalies that would traditionally be associated with a zone of mineralisation.

## **About Anglesey Mining plc**

Anglesey Mining is traded on the AIM market of the London Stock Exchange and currently has 420,093,017 ordinary shares on issue.

Anglesey is developing its 100% owned Parys Mountain Cu-Zn-Pb-Ag-Au deposit in North Wales, UK with a reported resource of 5.3 million tonnes at over 4.0% combined base metals in the Measured and Indicated categories and 10.8 million tonnes at over 2.5% combined base metals in the Inferred category.

Anglesey also holds an almost 50% interest in the Grängesberg Iron project in Sweden, together with management rights and a right of first refusal to increase its interest to 100%. Anglesey also holds 12% of Labrador Iron Mines Holdings Limited, which through its 52% owned subsidiaries, is engaged in the exploration and development of direct shipping iron ore deposits in Labrador and Quebec.

## **About Central Alliance**

In March 2018, RSK acquired Central Alliance, a ground engineering technical services company headquartered in Wakefield, UK. The company provides ground investigation, survey and geomatics, instrumentation and monitoring, specialist Electrokinetic consultancy and remediation and applied technologies across all sectors including infrastructure, transportation, mining, energy, utilities and defence.

Through its in-house experts and advanced technology such as electrokinetic geosynthetics, muon tomography, remote instrumentation and remote sensing capabilities, Central Alliance has been helping high-profile clients, including Network Rail and National Highways to deliver major infrastructure projects.

## **For further information, please contact:**

### **Anglesey Mining plc**

Jo Battershill, Chief Executive – Tel: +44 (0)7540 366000

John Kearney, Chairman – Tel: +1 416 362 6686

### **Davy**

*Nominated Adviser & Joint Corporate Broker*

Brian Garrahy / Daragh O'Reilly – Tel: +353 1 679 6363

### **WH Ireland**

*Joint Corporate Broker*

Katy Mitchell / Harry Ansell – Tel: +44 (0) 207 220 1666

LEI: 213800X8B08EK2B4HQ71