

**Alba Mineral Resources plc**  
("Alba" or the "Company")

**Clogau-St David's Gold Mine Update**  
**Further Validation of Key Development Targets**

Alba Mineral Resources plc (AIM: ALBA) is pleased to provide an update on the progress of technical work at the Clogau-St David's Gold Mine ("Clogau").

**Key Points**

- Analysis of assays from the 2021 Phase 2 underground and surface drill core, 2019 drill core and additional in-mine rock samples has identified four distinct geochemical groupings.
- The most important grouping is the auriferous vein ("AV") group which:
  - has a compelling gold-silver-bismuth-lead-tellurium association indicative of the presence of gold-bearing mineralising fluids;
  - is directly comparable to the basket of metals for the bonanza-grade gold stage described in historical ore mineralogy assessments for the Dolgellau Gold Field; and
  - is present in all key development target structures identified to date, validating the potential of those targets to host untapped gold mineralisation.
- Alba continues to progress the preparation of detailed submissions seeking a reconsideration of its application to dewater the Llechfraith Shaft.

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

*"This detailed multi-element analysis of the core samples obtained during all our drilling at Clogau to date has provided further validation of the key development targets we have identified from that work. This includes the two clear targets which have been defined for near-term development: the Llechfraith Payshoot, below the Llechfraith Adit, where drilling has proven vein continuity up to ~122 m below existing workings, and the Main Lode System Extension, where drilling has defined a previously unknown Lode (termed the New Branch Lode) whilst also intercepting the 7-10 Lode and Grandfathers Payshoot at up to ~60 m below existing workings.*

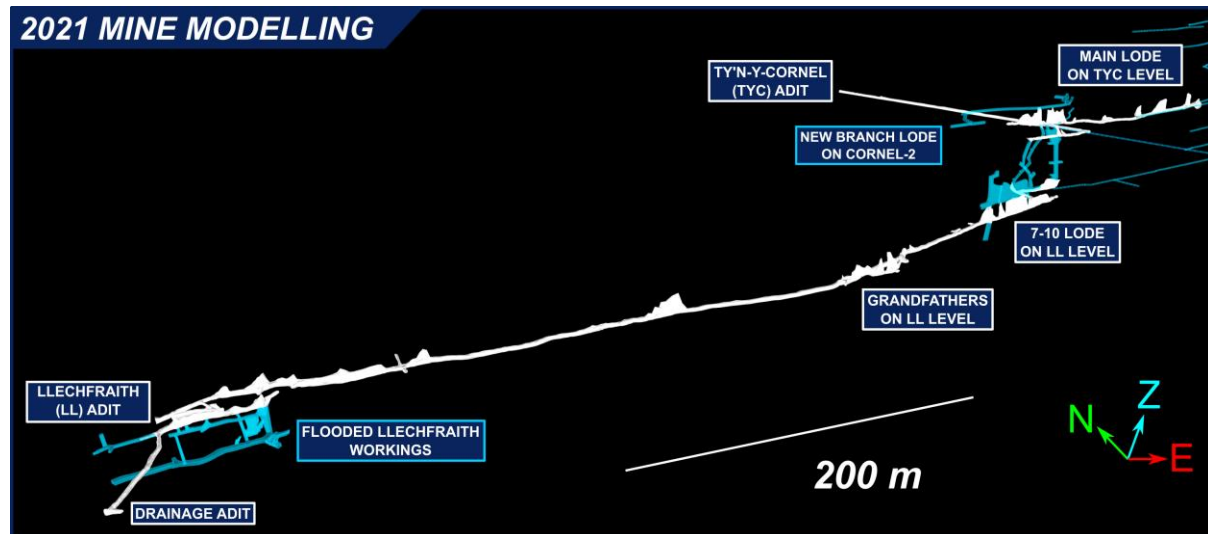
*"The fact that we are seeing the same multi-element signature in these areas as was found in the bonanza-grade gold stage at Clogau, gives us a great deal of confidence as we move forward with the development of these zones."*

**Phase 2 Drill Core Assay Results and Geostatistical Analysis**

Per Alba's announcement of 19 July 2021, the Phase 2 surface and underground drilling programme at Clogau was successful in its primary objective of defining a number of target zones for future development within structures which are known to host all of the historic high-grade gold within the mine.

Assay results have now been received in respect of the drilling programme and have validated the potential of all key development target structures identified to date to host untapped gold mineralisation. All core samples were analysed using an aqua-regia digestion and ICP-MS methodology to give results for 59 elements. The same methodology was also applied to core samples from Alba's 2019 drilling programme, as well as to a suite of rock samples taken from a specific in-mine exploration target on the Tyn-y-Cornel level, where the Main Lode displays a split to the east (see Figure 2). This

lode has not been historically developed and displays a similar morphology to the Paraffin Lode split on which significant historical high-grade workings have been developed.



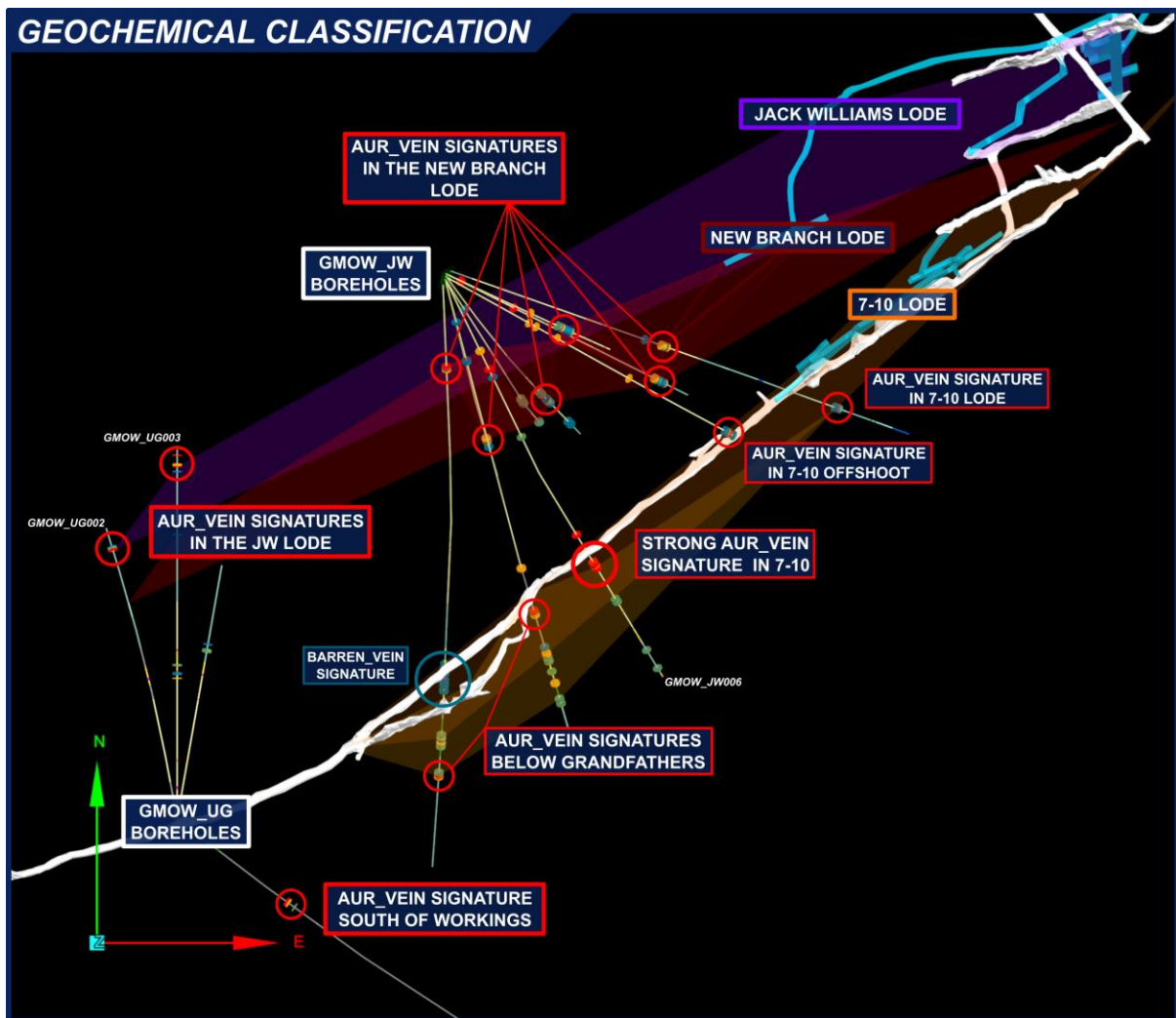
**Figure 1: Existing underground development at Clogau-St David's, with principal development targets labelled.**

A total of 23 elements were selected from this broad analytical suite to approximate potential lithological and mineralogical contrasts between different styles of mineralised and barren veins, as well as samples influenced by wall rock lithologies. From that selection, four distinct groupings were defined, believed to distinguish between auriferous veins ("AUR\_VEIN" or "AV"), barren veins ("BV"), sulphide-rich samples ("SR") and host rock influenced ("HRI").

The AV grouping is the most significant, in that it represents data points heavily influenced by gold (Au), silver (Ag), bismuth (Bi), lead (Pb) and tellurium (Te). This is directly comparable with the basket of metals found in the bonanza-grade gold stage described in historical independent assessments of ore mineralogy in the Dolgellau Gold Field, notably Mason, J., Bevins, R., and Alderton, D. (2002), "Ore mineralogy of the mesothermal gold lodes of the Dolgellau gold belt, North Wales" (*Applied Earth Science: IMM Transactions section B 111(3): 203–214*).

49 of the samples included in the study have been classified into the AV group. Figure 2 shows the distribution of samples classified in the AV group in the Phase 2 surface and underground holes. The modelling of these groupings reveals AV signatures throughout the newly identified New Branch Lode, located between the Main Lode Extension and the 7-10 Lode. This gives a strong indication of the presence of auriferous or gold-bearing fluids in this structure.

Identifying the presence of such pathfinder elements is key in projects like Clogau, where, given the particular geological setting, the purpose of all drilling is by necessity for structural confirmation, not for the determination of a representative grade. Given the small sample sizes produced by diamond drilling combined with Clogau being a narrow vein, nuggety effect gold deposit, the absence of elevated gold grades in drilling is expected and normal, as shown by the highest-grade gold intercept in Phase 2 (in drill hole GMOW\_JW002) grading a modest 0.09 g/t Au over 0.43 m from 96.45 m.

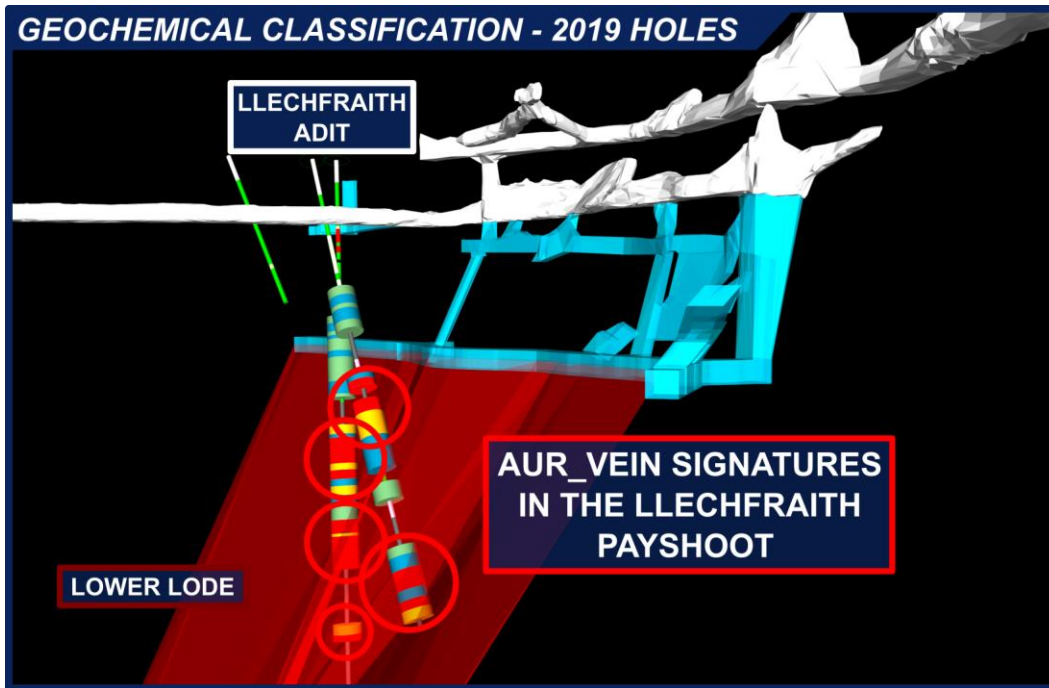


**Figure 2: Top-down view of the Phase 2 Surface and Underground holes superimposed onto the three modelled structures and mine workings. Labelled in red are drill intercepts which show the prospective AV or AUR\_VEIN geochemical signature.**

The 7-10 intercepts show the same distinct geochemical characteristics, including a very strong and consistent AV signature in borehole JW006 (Figure 2). The Grandfather's payshoot also shows evidence of the AV signature, highlighting the potential for gold mineralisation at depth below existing workings. Phase 2 drilling confirmed the physical extension of the Grandfather's Lode at depth.

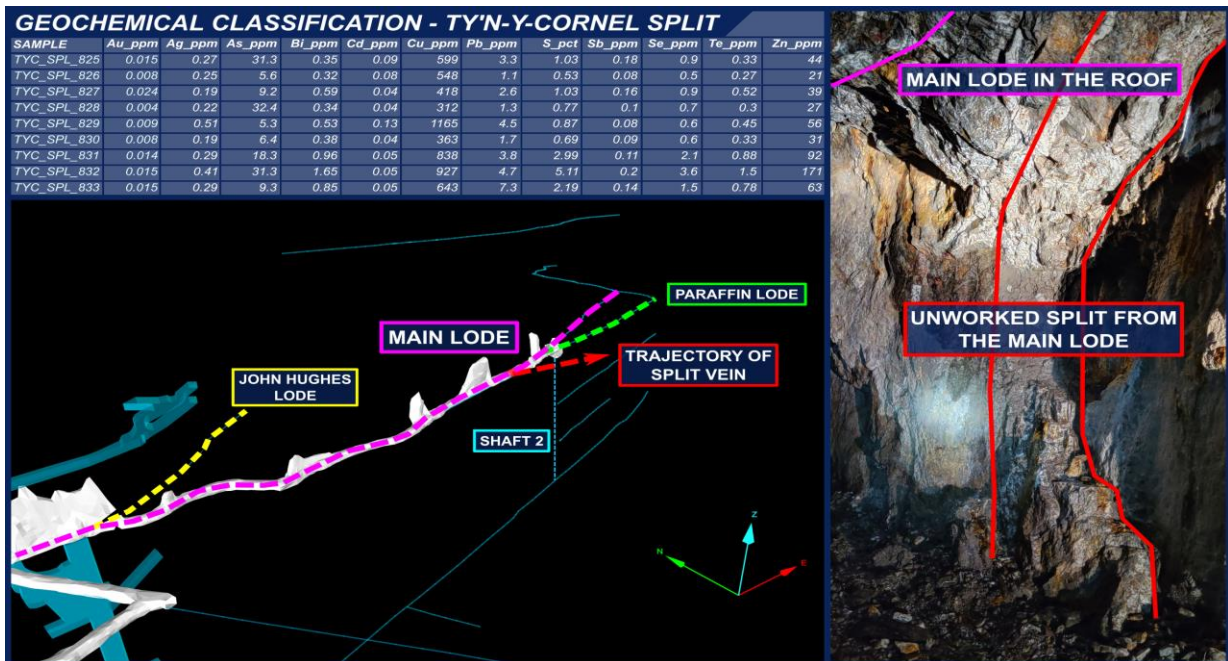
Underground holes GMOW\_UG002 and UG003 both intersected the Jack Williams Lode, albeit in a poorly developed stringer zone. However, the multi-element analysis suggests that these intercepts also show AV signatures (Figure 2). This also highlights how AV signatures were identified in a vein structure intersected to the south of the mine, which likely approximates to the Canol Vein System identified previously in the Phase 1 Surface Drilling.

The 2019 surface drill holes completed by Alba targeted the Llechfraith payshoot (see Figure 3) and represent the closest intercepts to a historically mined target structure. The fact that these intercepts display strong AV signatures close to where historical production has taken place helps to validate these geochemical classifications.



**Figure 3: 3D View of 2019 Surface drilling, highlighting the presence of AUR\_VEIN signatures in the Llechfraith payshoot.**

On the Tyn-y-Cornel Level, a previously unworked vein fork has been identified close to where the Paraffin Lode splits off to the east from the Main Lode (see Figure 4). This secondary fork shows a similar morphology to the Paraffin Split but has not been exploited historically, possibly because the vein hosted at this location is hosted within a greenstone sill and did not display sufficient visible gold mineralisation to warrant further investigation historically (when mining for grade was done solely by visible sorting).



**Figure 4: 3D View of where the sampled vein fork is located on the Tyn-y-Cornel Level, including a labelled photo of the structure as seen at the face.**

Alba's technical team collected and sent material from this vein for multi-element assay, revealing above detection limits of gold as well as some enrichments in pathfinder elements. Incorporating this data into the geochemical model has shown the AV signature

in two of the ten samples, with a further three samples showing an SR signature. These preliminary assays indicate that this structure is of interest to Alba in its search for near-mine targets, and that more work should be done to test the potential of this structure.

### **Clogau-St David's Gold Mine - Update on Water Discharge Application**

The Company is pleased to provide an update further to the announcement on 22 November 2021, which reported on constructive discussions between Alba and the regulatory authorities regarding the Company's application for the necessary permits to allow treated mine water from the Llechfraith Shaft to discharge to the River Cwm-Llechen.

Following further discussions, the Company continues to progress its work on a set of detailed submissions seeking a further consideration by the authorities of the Company's dewatering application. Material updates will continue to be provided as and when they are available.

**ENDS**

***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.***

For further information, please visit [www.albamineralresources.com](http://www.albamineralresources.com) or contact:

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### **Glossary**

7-10 Lode	The 7-10 Lode is a parallel vein structure to the Main Lode, lying some 30-40m to the south of the Main Lode. The whole of the Llechfraith Level is developed on the 7-10 Lode.
Aqua Regia	A 3:1 mixture of concentrated Hydrochloric Acid and concentrated Nitric Acid used to dissolve geochemical samples for analysis. Aqua Regia can dissolve gold unlike some other wet chemistry methods.
Bonanza Grade	The commonly accepted industry definition is any result above 34g of gold per tonne of rock/ore. Also typically used to describe very high gold grades.
Borehole drillhole	or A hole drilled into bedrock using a diamond-coated bit to return core samples.
Geostatistical Analysis	Geostatistics is a class of statistics used to analyse and predict the values associated with spatial phenomena. In this case the data that is analysed is in the form of elemental assay data.



Grandfathers	Grandfathers or Grandfathers Lode is a pay-shoot within the 7-10 Lode.
ICP-MS	Inductively Coupled Plasma Mass Spectrometry is a common analytical method for determining the elemental concentrations in a sample with high precision and low detection limits.
Intercept	A section of core in which a target lithology, structure or significant assay result has been identified.
Jack Williams	The Jack Williams Stope is the most westerly mined portion of the Main Lode on the Tyn-y-Cornel Level.
Main Lode	The main quartz vein structure along which the majority of historic mining took place at Clogau-St David's. The Main Lode was mined from the Jack Williams Stope for approximately 300m eastwards to the Bryntirion Fault, on the other side of which it was mined over a strike of at least 150m at the St David's Mine.
Mineralisation	Any single mineral or combination of minerals occurring in a mass, or deposit, of economic interest. The term is intended to cover all forms in which mineralisation might occur, whether by class of deposit, mode of occurrence, genesis or composition.
Pathfinder Elements	Pathfinder elements or pathfinder minerals are used in mineral exploration to narrow down the search area for many different types of ore deposits. When found within sediments or rocks, these minerals indicate the possible presence and location of specific types of mineralisation and are commonly used in the search for gold.
Quartz vein	A sheet-like body consisting predominantly of the mineral quartz, which is known to host gold mineralisation in the Dolgellau Gold Field.
Stope	A mined-out area along a lode structure from which ore has been extracted.

### **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.

### **Alba's Projects and Investments**

<b><i>Mining Projects Operated by Alba</i></b>	<b><i>Location</i></b>	<b><i>Ownership</i></b>
Clogau (gold)	Wales	90%
Dolgellau Gold Exploration (gold)	Wales	90-100%
Gwynfynydd (gold)	Wales	100%
Limerick (zinc-lead)	Ireland	100%
<b><i>Investments Held by Alba</i></b>	<b><i>Location</i></b>	<b><i>Ownership</i></b>
GreenRoc Mining Plc (mining)	Greenland	54%
Horse Hill (oil)	England	11.765%