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Aterian PLC
30 September 2024

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# Operational Update:
# Scout Drilling Confirms Copper-Silver Mineralisation, Agdz Project, Morocco

**Aterian Plc**
("**Aterian**" or the "**Company")**

**Aterian Plc (LSE: ATN)**, the critical metal-focused exploration and development company, is pleased to provide an update on the recently completed scout reverse circulation ("**RC**") drill programme conducted on the Company's Agdz Copper-Silver ("**Cu-Ag**") Project ("**Agdz**" or the "**Project**") in the Kingdom of Morocco ("**Morocco**").

The Project, which is 100% owned by the Company, covers 34.5 $km^2$ and is located in Morocco's eastern Anti-Atlas Mountains.

## Highlights:

- 13 RC holes completed for 1,080 m
- Copper and silver mineralisation reporting from 6 holes and over three separate prospects confirm the copper-silver potential of the Project
- Results highlight the near-surface potential of the mineralisation over a broad geographic area
- High silver values (154 g/t Ag and 124 g/t Ag, both over 1 m intervals) reported from drilling in the north of the Makarn prospect
- Results include:
    - o 1.24 % Cu and 101 g/t Ag over 3 m from 8 m (downhole) - Makarn (North) prospect
    - o 0.45 % Cu and 3 g/t Ag over 11 m from 32 m (downhole) - Makarn (South) prospect
    - o 0.79 % Cu and 5 g/t Ag over 6 m from 6 m (downhole) - Amzwaro prospect
    - o 0.27 % Cu and 3 g/t Ag over 4 m from 16 m (downhole) - Daoud prospect
- Planning for follow-up exploration to define prospect-scale drilling now in progress

**Charles Bray, Chairman of Aterian, commented:**
*"We are pleased to announce our first drill results from the AgdzCopper-Silver Project in central Morocco. These scout holes were widely spaced across a large area to provide an initial indication of the sub-surface potential from several prospects previously identified across the licence. They proved themselves very informative as multiple locations indicated the presence of near-surface copper and silver. The drill programme demonstrated mineralisation across the target areas as a first-pass test of several geophysical and structural targets within four priority prospects.*

*"Given the broad approach with only 13 drill holes across the 34.5 $km^2$ licence, we consider these results highly encouraging, with near-surface copper and silver reporting from three prospects: Makarn, Amzwaro and Daoud. We had an intersection reporting a 3m interval containing 1.24 % Copper and 101 g/t Silver, which demands further investigation. This promising intersection represents the clearest target area for step-out drilling work on the project. We now need to continue the work to understand the geological model and resource potential.*

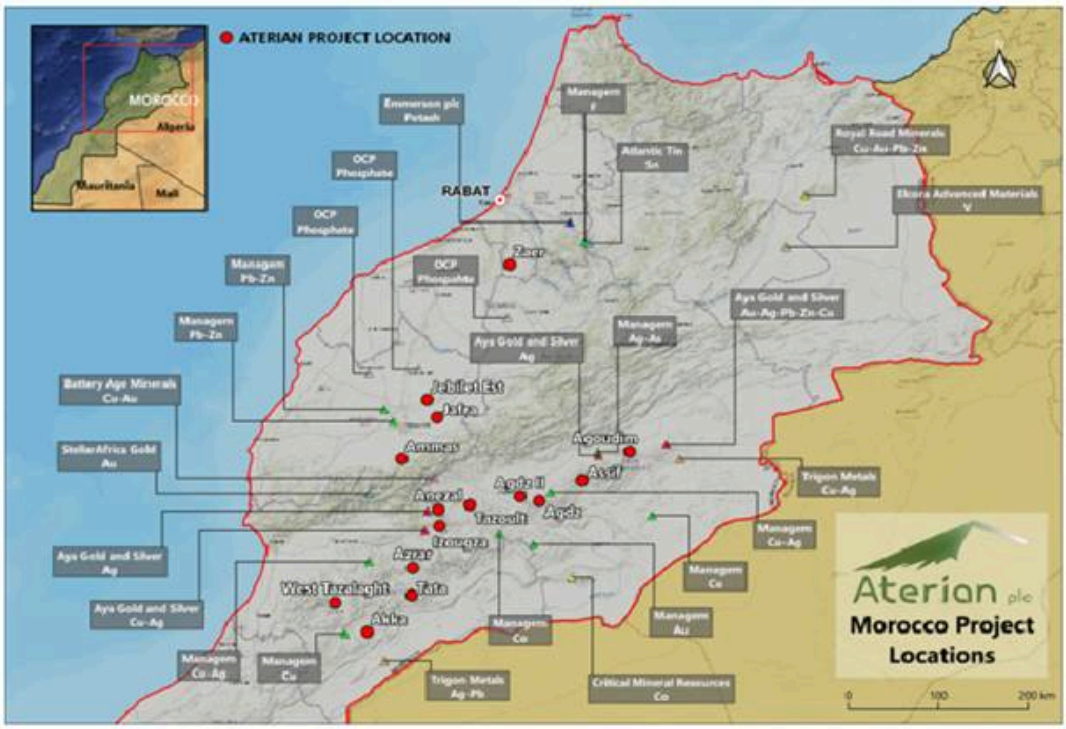
*"We are continuing to evaluate these results and the outcomes of the previous mapping and geophysical surveys conducted at Agdz to generate new work plans to advance this project further."*

**Project Summary:**

The Company's wholly-owned subsidiary, Aterian Resources Limited, holds a 100 % interest in the 34.5 $km^2$ Agdz Copper-Silver Project. The Project lies in the Souss-Massa-Drâa region of the Anti-Atlas Mountains of central Morocco, approximately 350 km south of the capital, Rabat, and approximately 35 km east of the city of

Ouarzazate where high-standard infrastructure and services exist, including a regional airport. The 'Noor 1' solar power station, the world's largest concentrated solar power plant with a planned output of 580 MW, is located approximately 40 km northwest of Agdz. The Project is accessed via a paved road, a network of unpaved roads, and vehicle tracks close to and within the licence.

Agdz lies approximately 14 km southwest of the Bouskour copper-silver mine (53 Mt at 0.8 % Cu and 9 g/t Ag), with the world-class Imiter silver mine (131 Moz of silver at 500 g/t Ag) located 80 km northeast of the Project. Both deposits are operated by the Moroccan mining company, Managem Group (it should be noted that mineralisation hosted at the adjacent mines is not necessarily indicative of mineralisation at Agdz).



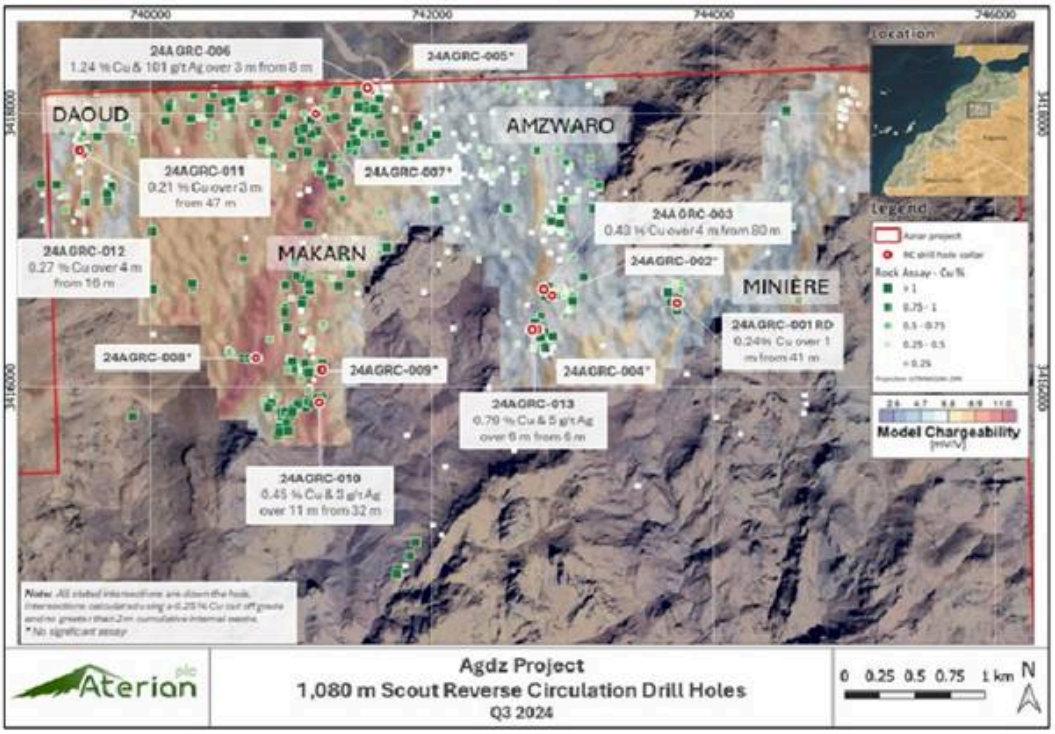

## Aterian Scout Drill Programme

This scout RC programme consisted of 13 holes, between 20 m and 125 m downhole depth, totalling 1,080 m. The programme aimed to test the sub-surface below areas of known copper-silver mineralisation previously mapped on the surface and identified in reconnaissance channel samples. The programme also targeted several ground-based geophysical anomalies. The best intersections reported were 3 m grading 1.24 % Cu and 101 g/t Ag starting at a downhole depth of 8 m from a hole collared on the Makarn prospect and 6 m grading 0.79 % Cu and 5 g/t Ag starting from a downhole depth of 6 m collared on the Amzwaro prospect. The collar locations are widely spaced across approximately 8-10 $km^2$ and were located to test several geological areas of interest and geophysical anomalies.

The drill programme was designed with the following objectives:

- To intersect mineralisation of a suitable grade and width to be deemed as showing economic potential.
- To understand the down-dip continuity of the copper-silver mineralisation mapped and sampled at the surface within outcropping alteration zones.
- To provide geological and geochemical datasets to aid in defining a deposit-scale model.
- To provide geological and geochemical datasets with which to aid in the interpretation of geophysical anomalies.

Geophysical targets were defined from a previously completed 137-line-km IP gradient array and a 12-line high-resolution IP survey, which were interpreted together with the ground magnetic survey data.




The more significant intersections are reported below:

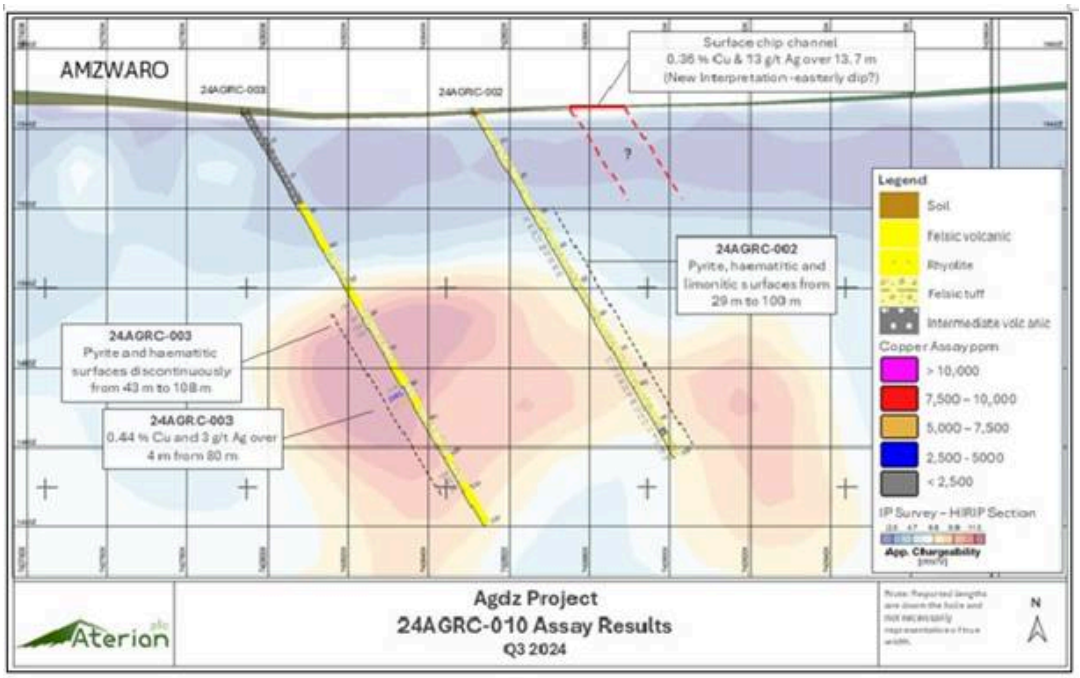
| Hole No | Prospect | From (m) | To (m) | Interval (m) | Cu (%) | Ag (g/t) |
|---|---|---|---|---|---|---|
| 24AGRC-003 | Amzwaro Central | 80.00 | 84.00 | 4.00 | 0.44 | 3 |
| 24AGRC-006 | Makarn North | 8.00 | 11.00 | 3.00 | 1.24 | 101 |
| 24AGRC-010 | Makarn South | 32.00 | 43.00 | 11.00 | 0.45 | 3 |
| 24AGRC-011 | Daoud | 47.00 | 50.00 | 3.00 | 0.21 | 1 |
| 24AGRC-012 | Daoud | 16.00 | 20.00 | 4.00 | 0.27 | 3 |
| 24AGRC-013 | Amzwaro South | 6.00 | 12.00 | 6.00 | 0.79 | 5 |

## Description of Intersections

24AGRC-003: Amzwaro Prospect

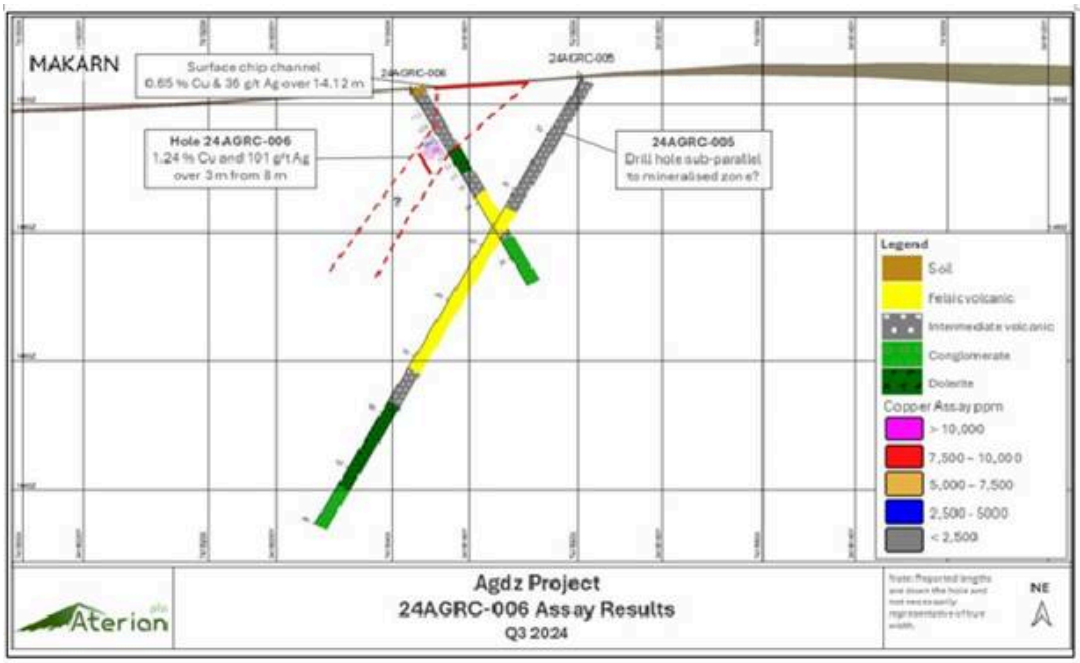
- Drill hole targets surface mineralisation and geophysical conductors.
- Copper mineralisation is locally associated with a visible pyrite-magnetite-specular haematite alteration assemblage.
- Alteration assemblages within 24AGRC-003 include :
    - o From 28 m to 112 m (84 m down-hole interval), specular haematite +/- magnetite, K-feldspar and carbonate as disseminations and veinlets.
    - o From 43 m to 108 m (65 m down-hole interval) pyrite, including haematitic and limonitic staining, specular haematite +/- magnetite, K-feldspar and carbonate as disseminations and veinlets.
- Alteration assemblages within 24AGRC-002 include:
    - o From 2 m to 42 m (40 m down-hole interval) chlorite-specular haematite +/- K-feldspar, actinolite, carbonate, quartz as fracture coatings, veinlets and disseminations.
    - o From 39 m to 52 m (13 m down-hole interval) actinolite-quartz fracture coatings and veinlets.
    - o From 52 to 100 m (48 m down-hole interval), magnetite +/- quartz and actinolite as disseminations, veinlets and fracture coatings.

- From 29 m to 100 m (71 m down-hole interval), pyrite, including haematitic staining, as disseminations, fracture coatings and veinlets.



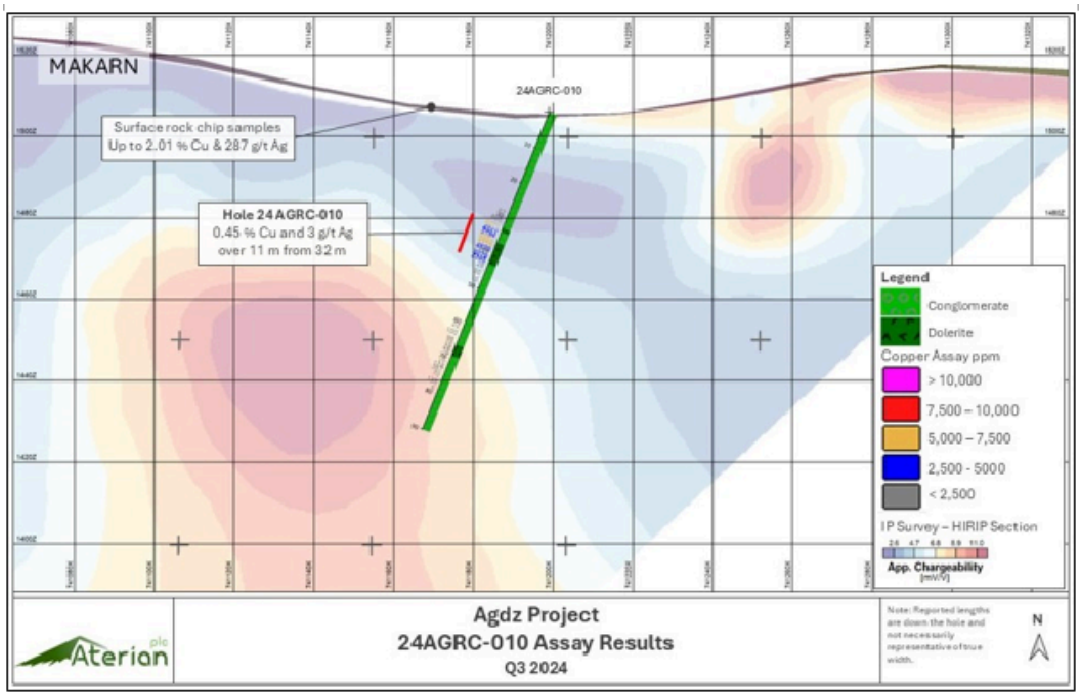

**24AGRC-006: Makarn Prospect - North Area**

- Drill hole targets surface mineralisation, 200 m along strike of an interpreted fault zone identified from ground IP survey data.
- Malachite and chalcocite, veinlets and disseminations are locally associated with chlorite, K-feldspar, and specular haematite alteration.
- Alteration assemblages within 24AGRC-006 include:
  - From 2 m to 35 m (33 m down-hole interval), chlorite and K-feldspar, specular haematite, and trace epidote as veinlets, fracture coatings and disseminations.
- Alteration assemblages within 24 AGRC-005 include:
  - From 2 m to 57 m (55 m down-hole interval), pervasive and fracture coating chlorite +/- k-feldspar, specular haematite, carbonate and trace epidote as fracture coatings, veinlets and disseminations.
  - From 57 m to 70 m (13 m down-hole interval), K-feldspar and/or epidote and/or haematite as veinlets and disseminations.




**24AGRC-010: Makarn Prospect - South Area**

- Drill hole targets surface mineralisation within conglomerate on the periphery of a conductive geophysical anomaly.
- Copper mineralisation is locally associated with a visible pyrite-chlorite alteration assemblage within conglomerate and dolerite dykes.
- Alteration assemblages include:
    - From 34 m to 43 m (10 m down-hole interval), pyrite as fracture coatings and disseminations.
    - From 66 m to 74 m (8 m down-hole interval), pyrite as fracture coatings and disseminations.
    - From 1 m to 90 m (89 m down-hole interval), chlorite +/- K-feldspar, quartz specular haematite as disseminations, fracture coatings and veinlets.




**24AGRC-011: Daoud Prospect**

- The drill hole targets surface mineralisation and extensive alteration within felsic to intermediate volcanic units and intermediate intrusives.

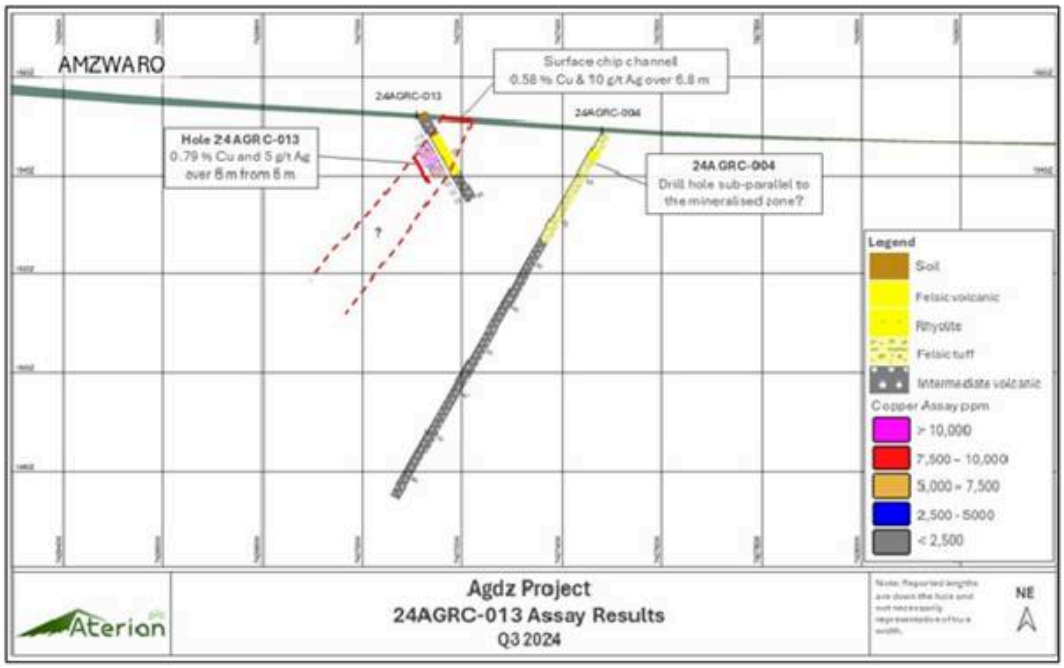
- Copper mineralisation is locally associated with a pyrite-chlorite alteration assemblage at the contact between an intermediate volcanic and intermediate intrusive.
- Alteration assemblages include:
    - From 43 to 53 m (10 m down-hole interval), pervasive and fracture coating chlorite, pyrite and K-feldspar +/- quartz and carbonate as veinlets.
    - From surface to 65 m (65 m down-hole interval), chlorite and K-feldspar +/- carbonate, quartz as fracture coatings and veinlets and disseminated haematite.

**24AGRC-012: Daoud Prospect**

- The drill hole targets surface mineralisation and extensive alteration within felsic to intermediate volcanic units and intermediate intrusive.
- Copper mineralisation is locally associated with a pyrite-chlorite alteration assemblage at the contact between an intermediate volcanic and intermediate intrusive.
- Alteration assemblages include:
    - From 16 to 20 m (4 m down-hole interval), pervasive and fracture coating chlorite, pyrite and K-feldspar +/- quartz and carbonate as veinlets.
    - From 51 to 65 m (14 m down-hole interval), pervasive and fracture coating chlorite, pyrite and K-feldspar +/- disseminated magnetite.
    - From surface to 42 m (42 m down-hole interval), pervasive chlorite +/- pervasive haematite and/or K-feldspar veinlets.
    - From 42 m to 70 m (28 m down-hole interval), pervasive chlorite +/- disseminated magnetite and K-feldspar veinlets.

**24AGRC-013: Amzwaro Prospect**

- Drill hole targets surface mineralisation.
- Copper mineralisation locally associated with chlorite-specular haematite alteration within a felsic volcanic unit between intermediate volcanics.
- Alteration assemblage includes:
    - From 1 m to 20 m (19 m down-hole interval), fracture coating chlorite and pervasive specular haematite.
- Hole 24AGRC-004 returned no significant alteration zones and may have been drilled sub-parallel to mineralisation.




The collar and survey information for the completed drill holes are listed below:

| Hole Number | Easting | Northing | Elevation | Azimuth | Dip | Final Depth (m) |
|---|---|---|---|---|---|---|

| | | | | | | |
|---|---|---|---|---|---|---|
| 24AGRC-001RD | 743738 | 3416612 | 1598 | 300 | -60 | 125 |
| 24AGRC-002 | 742851 | 3416672 | 1553 | 90 | -60 | 100 |
| 24AGRC-003 | 742794 | 3416715 | 1570 | 90 | -60 | 120 |
| 24AGRC-004 | 742748 | 3416422 | 1582 | 270 | -60 | 85 |
| 24AGRC-005 | 741562 | 3418170 | 1569 | 315 | -60 | 80 |
| 24AGRC-006 | 741540 | 3418184 | 1511 | 135 | -60 | 35 |
| 24AGRC-007 | 741174 | 3417996 | 1523 | 270 | -80 | 110 |
| 24AGRC-008 | 740749 | 3416216 | 1544 | 0 | -90 | 80 |
| 24AGRC-009 | 741219 | 3416129 | 1532 | 300 | -60 | 100 |
| 24AGRC-010 | 741199 | 3415890 | 1494 | 315 | -60 | 90 |
| 24AGRC-011 | 739522 | 3417704 | 1507 | 315 | -60 | 65 |
| 24AGRC-012 | 739499 | 3417728 | 1506 | 315 | -60 | 70 |
| 24AGRC-013 | 742711 | 3416421 | 1562 | 90 | -60 | 20 |

*Coordinates in WGS84/UTM zone 29N, Collar coordinates were acquired using a handheld GPS*

At two locations (24AGRC-005 and 24AGRC-004), a scissor hole (24AGRC-006 and 24AGRC-013) was drilled in the opposite direction to the initially planned drill hole.

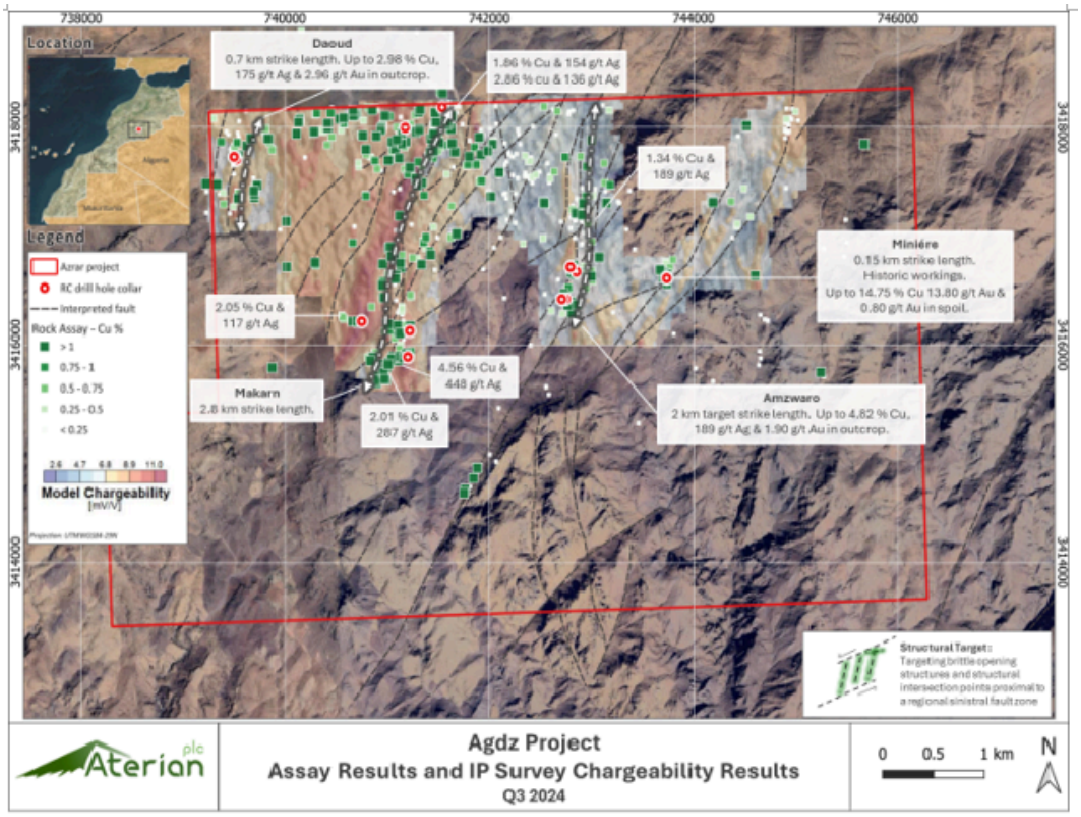
Water strikes were intersected in several holes, which is significant in itself, given that the Project lies in a dry region of Morocco. Groundwater was intersected at depths (vertical) between 24 and 30 m below the surface in the Amzwaro Prospect and 30 m at Makarn South.

**Previous Aterian Fieldwork**

Geological mapping and outcrop sampling, reconnaissance surface trenching, and ground-based geophysical surveys (magnetics, spectrometry, IP gradient array and high-resolution IP) undertaken on the Project have defined four priority prospects at Agdz, namely:

- **The Makarn & Markarn North Prospect**: A swarm of mineralised dykes, shears, and veins that predominantly strike NNE over a lateral distance of 2.8 km. Earlier results include 8.00 % Cu and 448 g/t Ag from rock chip samples*. Four linear, north-to-northeast trending geophysical anomalies of 2.5 km, 600 m, 400 m and 375 m have been interpreted from IP data.
- **The Amzwaro Prospect**: Multiple NNE and NNW trending structures within a zone up to 2 km long and 200 m wide, bound by extensional structures. Individual alteration zones are up to 33 m wide. Alteration is predominantly comprised of chlorite and silica in breccia and veins. Historical results include rock chip grades of 4.82 % Cu, 189 g/t Ag and 1.91 g/t Au. Two discrete geophysical anomalies of 575 m and 375 m strike length have been interpreted from IP data.
- **The Minière Prospect**: This 150 m by 90 m zone of historical underground artisanal mining exploits multiple sub-parallel copper-bearing zones associated with chloritic-potassic alteration. Historical results include rock chip and spoil sample grades of 13.05 % Cu, 12.90 g/t Ag, and 0.49 g/t Au.
- **The Daoud Prospect**: A series of NNW striking quartz veins and pervasive silicification, mapped discontinuously over a 700 m strike length and crosscut by ENE striking chlorite-rich alteration zones. Historical results include rock chip grades of 2.71 % Cu, 152 g/t Ag, and 2.96 g/t Au. Mineralisation at the surface coincides with a 900 m-long linear geophysical anomaly interpreted from IP data.

**A rock chip or grab sample cannot be taken as a representation of the overage grade average and potential deposit size.*




*Agdz Project - Previous Work Programme Assay Highlights*

**Sampling Methodology and Analysis**

Samples were collected every 1 meter, drilled down the hole, and riffle split onsite into sub-samples of approximately 2.5 kg for 1m samples and 5.4 kg for 2m composites for submission to the laboratory. All the reject samples are stored in the company's warehouse in Ouarzazate.

Afrilab, an accredited independent laboratory in Marrakech, Morocco, undertook sample preparation and analysis for 227 samples, including 27 QA/QC samples. Rock samples were crushed with 70 % passing -2 mm. The less than 2 mm fraction was pulverised, with 85 % of the sample passing <75 microns. All samples were analysed for a multi-element suite of 40 elements by Inductively Coupled Plasma Atomic Emission Spectroscopy (ICP-AES). In addition, 108, including QA/QC samples, were analysed for their gold content using the 50 g Fire Assay method with a gravimetric finish.

The 27 QA/QC samples were included in the submitted sample batches to the laboratory, consisting of nine field duplicates, nine blank samples, and nine samples of certified reference material sourced from Geostats (pty) Ltd in Australia. The QA/QC samples represent 12 % of the total sample batch sent to the laboratory.

**Work Plan for the Agdz Project**

Future work programmes will incorporate the drill data into a geological model for additional step-out drill planning. The objective would be to follow the mineralisation along strike and to test for deeper targets below the mineralised intersections reported in this new release. Additional drill holes will be planned over other targets not covered in this programme.

The southern part of the Agdz licence, covering an area of 15 $km^2$, remains unexplored. Initial reconnaissance of this area will consist of stream sediment sampling, geological traversing and sampling.

## Illustrations

The following figures have been prepared by Aterian and relate to the disclosures in this announcement.



RC Drilling in Makarn North



RC Drilling in Makarn South



Copper secondaries – 9 m to 10 m down the hole – 24AGRC-013



Copper secondaries – 8 m to 9 m down the hole – 24AGRC-006

**Qualified Person**
The technical disclosure in this regulatory announcement has been approved by Simon Rollason, Chief Executive Officer of Aterian Plc. A graduate of the University of the Witwatersrand in Geology (Hons). He is a Member of the Institute of Materials, Minerals and Mining, with over 30 years of experience in mineral exploration and mining.

- ENDS -

This announcement contains information which, prior to its disclosure, was inside information as stipulated under Regulation 11 of the Market Abuse (Amendment) (EU Exit) Regulations 2019/310 (as amended).

For further information, please visit the Company's website: www.aterianplc.comor contact:

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## Notes to Editors:

## About Aterianplc

www.aterianplc.com

Aterian plc is an LSE-listed exploration and development company with a diversified African portfolio of critical metals projects.

Aterian plc is actively seeking to acquire and develop new critical metal resources to strengthen its existing asset base whilst supporting ethical and sustainable supply chains as the world transitions to a sustainable, renewable future. The supply of these metals is vital for the development of the renewable energy, automotive and

electronic manufacturing sectors that are playing an increasing role in reducing carbon emissions and meeting climate ambitions globally.

The Company entered into a joint venture agreement with Rio Tinto Mining and Exploration Limited for Rio Tinto to earn into the HCK project in southern Rwanda to explore and develop lithium-tantalum-niobium-tin mining operations. Aterian currently holds a portfolio of multiple copper-silver and base metal projects in the Kingdom of Morocco. In January 2024, the Company announced the acquisition of a 90 % controlling interest in Atlantis Metals. This private Botswana registered company holds seven mineral prospecting licences for copper-silver in the Kalahari Copperbelt and three for lithium brine exploration in the Makgadikgadi Pans region. The total licence area in Botswana is 4,486 $km^2$.

The Company's strategy is to seek new exploration and production opportunities across the African continent and to develop new sources of critical mineral assets for exploration, development, and trading.

## Glossary of Terms

The following is a glossary of technical terms:

| | | |
|---|---|---|
| "Ag" | means | Silver |
| "Au" | means | Gold |
| "Breccia" | means | a rock consisting of angular fragments of stones cemented by finer materials |
| "Cu" | means | Copper |
| "Ferruginous" | means | containing iron oxides |
| "Float sample" | means | loose pieces of rock that are not connected to an outcrop |
| "g/t" | means | grams per tonne |
| "Hercynian or Variscan Orogeny" | means | an orogenic belt that evolved during the Devonian and Carboniferous periods, from about 419 to 299 million years ago |
| "km" | means | Kilometres |
| "m" | means | Metres |
| "mm" | means | Millimetres |
| "Mt" | means | millions of tonnes |
| "NI 43-01" | means | National Instrument 43-101 Standards of Disclosure of Mineral Projects of the Canadian Securities Administrators |
| "Outcrop" | means | a rock formation that is *in situ* and visible on the surface |
| "Qualified Person" | means | a person that has the education, skills and professional credentials to act as a qualified person under NI 43-101 |
| "Sb" | means | Antimony is used in alloys and in lead-acid storage batteries. The U.S. government has considered antimony a critical mineral mainly because of its use in military applications. |
| "Stratiform" | means | parallel to the bedding planes of the surrounding rock |
| "Vein" | means | a distinct sheetlike body of crystallised minerals within a rock |
| "Zn" | means | Zinc |

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