

15 May 2023

Operational Update: High Silver and Base Metal Grades, Jafra Project, Morocco

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

Aterian Plc (LSE: ATN), the critical and strategic metal-focused exploration and development company, is pleased to announce the results, including 170 g/t and 159 g/t silver ("**Ag**"), from initial geological reconnaissance work completed on the Company's Jafra Project (the "**Project**"). The Project covers 29 km² and is located 35 km northeast of Marrakech within the Marrakech-Safi Region of the Kingdom of Morocco ("**Morocco**"). The Project is one of 15 copper, silver and base metal projects owned by Aterian, covering a total area of 762 km² in Morocco, within established current and historic mining districts.

Highlights:

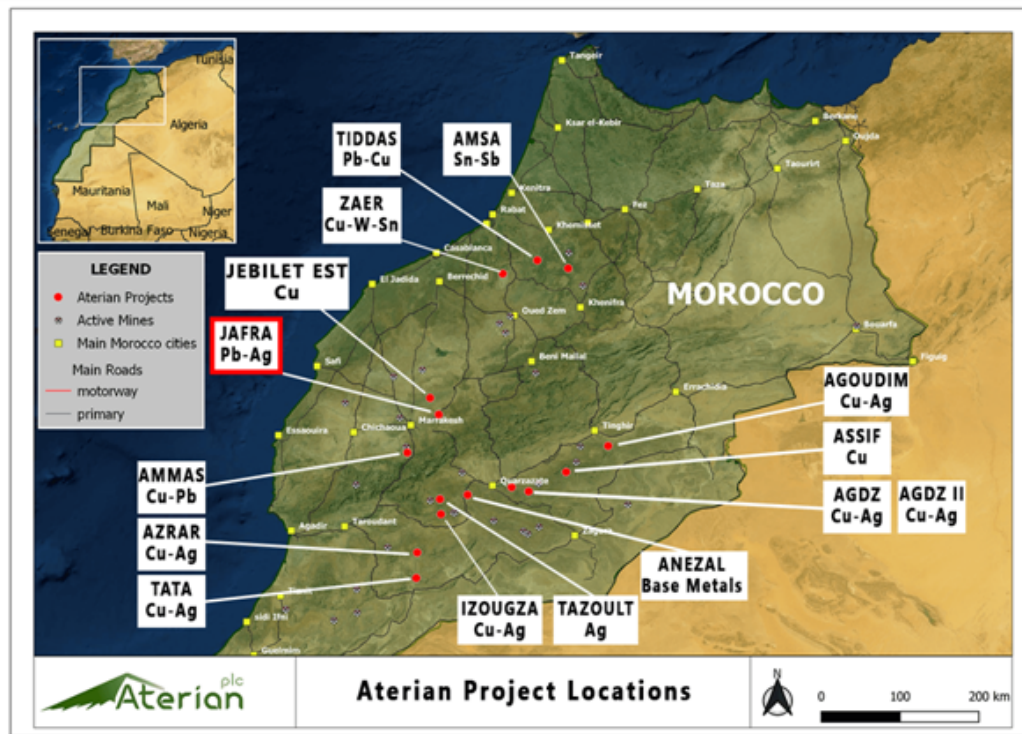
- Sampling reports high silver and lead grades of 170 g/t Ag, 22.2 % Pb and 157 g/t Ag, 21.2 % Pb.
- Project hosts a historically mapped lead ("**Pb**") occurrence, and several historical workings have been identified.
- Situated on the eastern margin of a Hercynian-age granite.
- Located 35 km east of the former Roc Blanc silver mine.
- The project lies 14 km south of the Company's Jebilet Est Copper Project.
- Project located close to good infrastructure.

Charles Bray, Chairman of Aterian, commented:

"These preliminary results from the initial reconnaissance at Jafra are very encouraging with much of the area targeted covered by loose, surface scree material on the hillside, which obscures visible outcrop. These results further support our project portfolio's strong and broad potential in Morocco. Jafra demonstrates the metal diversification of our Moroccan projects and is well located, close to power and rail links and only 35 km outside Marrakech. The high silver values supported by very high lead grades are an excellent starting point for further exploration of the Project. At Aterian, we firmly believe that our existing asset portfolio has the potential to deliver tremendous value to the Company, its shareholders and other stakeholders. We will continue exploring this Project along with the other assets within our portfolio, which from the work reported thus far, are showing significant upside potential. I look forward to updating shareholders with the results from this as well as the other exploration programmes in due course."

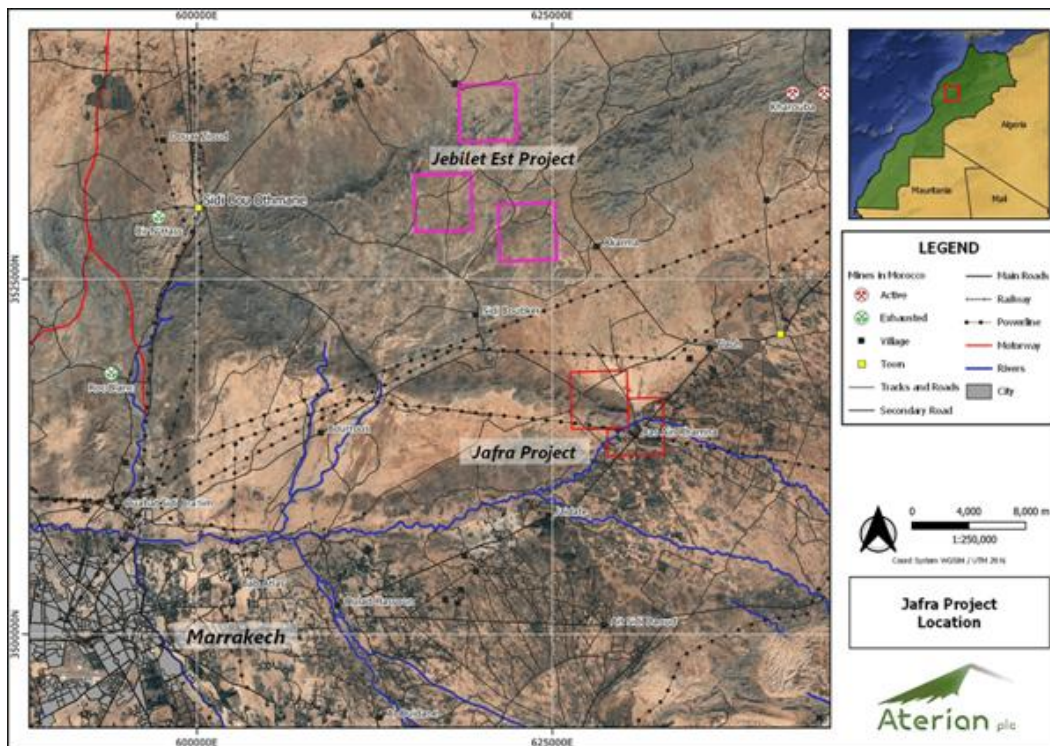
Project Summary:

The Jafra Project covers 29.0 km² and comprises two license blocks in the western Meseta, north-central Morocco, approximately 36 km northeast of Marrakech, 35 km east of the former Roc Blanc silver mine, and 32 km from the rail line to the port of Casablanca. The project is located at the eastern margin of the pluton within the metamorphic aureole. It hosts a historically mapped lead occurrence, coincident with apparent former artisanal mining associated with fault zones and a quartz-carbonate vein system. The Project lies 14km south of the Company's Jebilet Est Copper Project (an update on this project was released on 14th March 2023). Access to the Project is via asphalt roads and a network of smaller tracks. The Company holds a 100 % interest in the project.



Jafra is located in the highly prospective Jebilet Massif, which comprises part of the Jebilet-Guemassa Metallogenic Province. The Jebilet Massif includes deformed Hercynian age basement rocks surrounded by discordant Mesozoic and Cenozoic formations. The region hosts several base metal VMS deposits, including the polymetallic Draa Sfar (Zn-Cu-Pb), Hajar (Zn-Pb-Cu-Ag), Koudiat Aicha (Zn-Pb-Cu), and Kettara (Cu) deposits (note the mineralisation hosted at these deposits is not necessarily indicative of mineralisation at Jafra).

The project targets the Lower Carboniferous (Namurian) age Sarhelf series and a Hercynian age pluton, of which the license encompasses the eastern margin. The metamorphic aureoles of Hercynian age granites are known to host base metal deposits and occurrences in the region. There is a historically mapped lead occurrence in the suspected aureole of the granite pluton, which coincides with former artisanal workings and a reportedly 1.75km quartz-carbonate veins system.



Aterian Reconnaissance Exploration Results

Reconnaissance has focussed on two areas within the centre of the project, where several artisanal workings were identified on El Marassa Hill, a prominent topographic feature trending across the project. All mapped workings

appear to exploit quartz veins and a fault zone breccia showing visible sulphide mineralisation. However, several quartz and carbonate veins were recorded on the western part of the same hill, hosting minor mineralisation.

The abandoned artisanal workings are clustered on the ESE-WNW trending ridge close to the contact between granite rocks to the south and folded metasedimentary units. The workings are located on the slope of the hill where the surface scree material obscures the mappable outcrop. Consequently, exposure of these mineralised structures is limited to shallow workings. Sulphide mineralisation is observed in situ within the historical workings, and surface quartz-rich float containing galena is frequently observed in the old artisanal dumps.

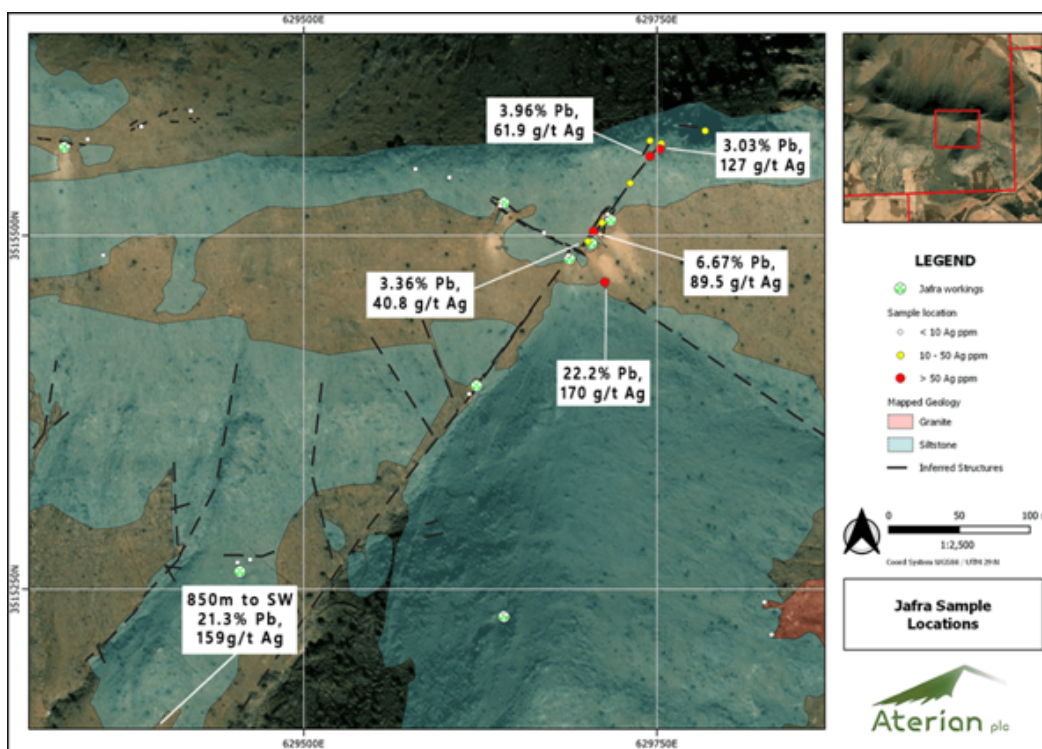
However, individual structures can be traced over 100 m along strike from the workings. Several breccia zones with variable widths up to 3 m have been identified and are typically composed of roughly parallel quartz-carbonate veins and breccia. Veins range from 1 to 30 cm wide with a general NE trend, cross-cutting the metasilstones.

A total of 39 rock chip samples (37 outcrop rock chip samples, one surface float sample and one surface grab sample collected from a historical mining dump) have been collected from the Project. From these, 13 samples (33 % of this batch) reported greater than 10 g/t Ag, with 5 (or 13 % of the batch) greater than 50 g/t Ag.

Nine samples reported Pb values greater than 1%, with two samples greater than 20%. Zn is generally low in the samples with six samples greater than 0.25 % Zn. Anomalous copper was identified in only one sample, returning 0.34 % Cu. Antimony (Sb), listed as a critical metal in 2022 by the USGS, returned 12 samples greater than 100 ppm Sb, with five samples greater than 500 ppm Sb. The maximum sample was 862 ppm Sb.

Several of the more significant anomalies reported from the surface grab sampling include:

- 170 g/t Ag, 22.2 % Pb, 0.12 % Zn reported from a quartz-siderite vein sample from a historical dump sample, with abundant galena.
- 159 g/t Ag, 21.3 % Pb reporting from quartz veins hosted in leucogranite.
- 127 g/t Ag, 3.03 % Pb reporting from a fault zone breccia.
- 89.5 g/t Ag, 6.67 % Pb, 0.34 % Cu, 0.41 % Zn reporting from a fault zone breccia.
- 61.9 g/t Ag, 3.96 % Pb reporting from a brecciated fault gouge



**A rock chip or grab sample cannot be taken as a representation of the overage grade average and potential deposit size. A float sample is collected from loose pieces of rock not connected to an outcrop.*

Work Plan for the Jafra Project

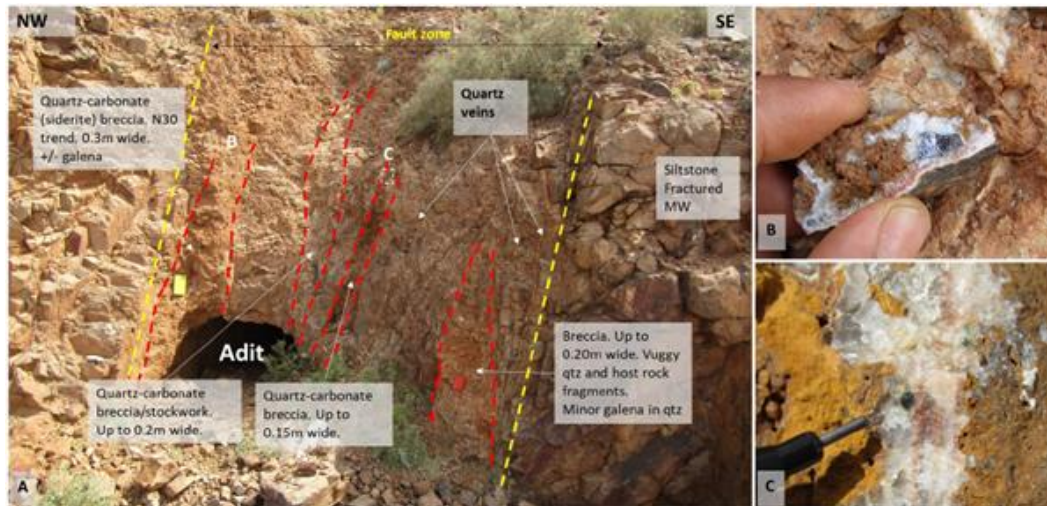
Future work programmes at the Jafra project will include further geological mapping supported by trenching and geophysics to determine the extent of the high-grade breccia and vein system that is poorly exposed on the flanks of El Marassa Hill.

Sampling Methodology and Analysis

ALS Limited, an accredited laboratory in Sevilla, Spain, undertook all sample preparation and analysis from these reported samples. Given the early-stage nature of these programmes, no QA/QC samples were included. 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 using four-acid digestion for a multi-element suite of 33 metals by Inductively Coupled Plasma Atomic Emission Spectroscopy (ICP-AES). In addition, all samples were analysed for their gold content by a 50g Fire Assay method with an atomic absorption finish.

Illustrations

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



A: View NE towards the working at JF-AB-001 shows structure within the fault zone; **B:** Galena observed within the breccia; **C:** Minor malachite and sulphides in 10cm-wide quartz-carbonate rich breccia.

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.

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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).

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Notes to Editors:

About Aterian plc

www.aterianplc.com

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

Aterian plc is actively seeking to acquire and develop new critical and strategic metal resources to strengthen its existing asset base whilst supporting ethical and sustainable supply chains. 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 has three partnerships in Rwanda exploring and developing tantalum-niobium-tin-lithium mining operations, and recently acquired Aterian Resources Limited, a wholly owned and battery metals-focused subsidiary of Elemental Altus Royalties Corp (formerly Altus Strategies plc). Aterian owns a portfolio of 15 copper-silver and base metal projects with a project area of 762 km² in the Kingdom of Morocco.

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

Geological Setting of the Jebilet Est Project

The Jafra Project is located within the Jebilet Massif in the Marrakech-Safi Region of western Morocco, which comprises a block of Carboniferous sedimentary rocks that were extensively deformed and metamorphosed during the Hercynian-Variscan orogeny. The Jebilet Massif extends for 170 km east to west and 40 km in a north-south orientation. It is interpreted as an intracontinental Devonian-Carboniferous rift-basin formed during a period of extension during rifting of the continental crust in a back-arc geodynamic environment. The Jebilet Massif consists of three litho-tectonic domains, the Western, Central, and Eastern Domains, which are separated by major shear zones. The Project area is within Palaeozoic metamudstones and quartzites proximal to Hercynian-age granite and mafic intrusive bodies in the Eastern Domain of the highly prospective Jebilet Massif.

The Roc Blanc silver mine, located 35k west of Jafra, was discovered in 1925 with an indicated and inferred resource, estimated at c.200,000 t at 297 g/t Ag and >56,000 t at 234 g/t Ag, respectively. Resources contain about 0.8% Pb and 1.01% Zn and a significant amount of copper and gold. The Roc Blanc deposit's mineralisation occurs as veins displaying banded or brecciated structures. It consists mainly of pyrrhotite, pyrite, arsenopyrite, chalcopyrite, sphalerite, galena, Ag-tetrahedrite, Pb-Ag-Sb sulphosalts, argentite, native silver, Ag-Au amalgam, and Ni-Co minerals. The mineralogy of the Roc Blanc ore corresponds to an intermediate- to low-sulphidation deposit.

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 <i>in situ</i> 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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