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AIM: AAU

## CURRENT EXPLORATION & DEVELOPMENT AT KIZILTEPE

Ariana Resources plc ("Ariana" or "the Company"), the AIM-listed mineral exploration and development company with gold mining interests in Europe, is pleased to announce the results of recent exploration and development work conducted at Kiziltepe ("Kiziltepe" or "the Project"). The Kiziltepe Project is operated via Zenit Madencilik San. ve Tic. A.S. ("Zenit") in partnership with Proccea Construction Co. and Ozaltin Holding A.S. and is 23.5% owned by Ariana.

## Highlights:

- Recent drilling undertaken at the Kiziltepe Sector has defined the likely economic limits of the known vein systems.
- Drilling remains underway at Karakavak, with progression onto Kepez and with a separate programme ongoing at Kizilcukur.
- Targets defined following a recent Induced Polarisation (IP)/Resistivity survey will become the focus of further drilling across the Kiziltepe Sector.
- Opportunities to further extend mine life to nine years, through to 2025, and potentially beyond are being assessed.

#### Dr. Kerim Sener, Managing Director, commented:

"Kiziltepe currently remains our most important mining operation pending the successful commissioning of Tavsan which is currently under construction. Meanwhile, we have been working with the Zenit team to define further resource upside in the vicinity of the Kiziltepe operation. Successive drilling programmes conducted in recent years have already yielded success, extending mine life at a time when milling capacity was doubled. We are now looking to identify additional resources in the wider area and at several satellite locations such as Kizilcukur and Ivrindi. In addition, we remain excited by the potential for further discovery at Kepez, and we are now preparing for a new drilling programme to test this area appropriately. Road building for the drill rig is underway and we are looking to initiate the drilling programme in this location as soon as possible once drilling concludes at Karakavak.

Meanwhile, drilling at Kiziltepe specifically has tested most of the known vein extensions and some additional resource upside has already been determined, particularly at the northwest ends of both Arzu South and Arzu North. Beyond this, a recent geophysical survey has identified several priority drilling targets, one of which lies beneath cover to the northeast of the Arzu vein system and is currently under review to design a well-planned deep drilling programme. This has the potential to represent a capped vein system, which has been preserved beneath cover.

Once the drilling programmes across the Kiziltepe Sector are completed, including the active programmes in the Karakavak and Kepez areas and the programme recently started at

Kizilcukur, we will be undertaking a further review and reassessment of our resources and reserves."

The information contained within this announcement is deemed by the Company to constitute inside information as stipulated under the Market Abuse Regulations (EU) No. 596/2014 as it forms part of UK Domestic Law by virtue of the European Union (Withdrawal) Act 2018 ("UK MAR").

#### **Summary of Kiziltepe Operations**

The Kiziltepe mine has been operational since March 2017 and has produced over 133,000 ounces of gold and over 1.4 million ounces of silver up to the end of 2022, which compares to a total mine production of 117,000 ounces of gold over an envisaged mine life of eight years as per the Feasibility Study. Kiziltepe's most productive year was 2022, producing 28,421 ounces of gold and 326,206 ounces of silver. In July 2023, mining was initiated at Banu, the last of the five currently planned pits at the Kiziltepe Project identified in the Feasibility Study. Based on current estimates, mining is expected to continue at Kiziltepe until 2024, with additional potential sources of ore being developed as satellites at Kizilcukur and Ivrindi, among others. The opportunities to add additional years to the mine life through further exploration remain positive. This presents itself in two forms:

1) Current exploration or short-term input; primarily consisting of step-out drilling which was completed between 2020 and 2023, testing extensions along strike and down dip of known mineralisation.

2) Conceptual exploration or longer-term input; ongoing work to discover new mineralisation under cover, or in areas where geological factors such as structure, geophysical signatures, and/or subtle geochemical anomalies may provide vectors toward new discoveries.

Once all open pittable resources have been mined at Kiziltepe, the final phase of mining activities to be evaluated is the potential for underground development which target residual resources at depth beyond the open pit limits and in an area under cover to the northeast of the Arzu structure. Another area of underground potential is also being evaluated at Arzu Central, between the Arzu South pit and the Derya pit, where strip ratios exceed viability to open pit any deeper than the currently planned pit floors.

#### **Current Exploration Activities**

Since December 2020, the Ariana and Zenit exploration teams have been working on backto-back drilling campaigns on all projects across Turkey. However, the most significant focus of this work has been at Kiziltepe. Over 33,000 metres of drilling for 258 diamond drill holes have been completed over the last three years. Results from each phase of this ongoing work have been systematically reported to the regulators. This work is now largely concluded and the extent of peripheral mineralisation beyond the existing open pit limits is now well established.

Through 2020 and 2021, the primary exploration objective at Kiziltepe was to define potential for deepening and widening the Arzu South pit (AIM: 17 August 2021); in particular, to fully understand the potential to push the northern pit wall into the target area of Zone A (Figure 1). This work was successfully completed, and over the next year, the Company will be undertaking work to widen the Arzu South pit and then progress northwards to mine Zone A.



**Figure 1:** A long section through the Arzu South Pit, illustrating the approximate location of mineralised pierce points. An outline of the 2023 optimisation results can be seen as a dashed purple line, with the most significant area (Zone A) shown as a thick black line, where additional economic mineralisation is defined.

Through 2021 and 2022, focus turned to Arzu North, where the objective was to test the potential for pit expansion opportunities in both the north-west and south-east strike extensions of the vein system. Early results from the northern end of Arzu North identified significant potential in an area which is now known as Arzu Far North (AIM: 29 April 2021). Follow-up drilling through 2022 and into early 2023 went on to fully test the 300m Arzu Far North strike extent. A new optimisation study completed in March 2023 has outlined some potential to expand the Arzu North pit a further 150 metres into the Arzu Far North area, (Figure 2, Zone D). This potential expansion is part of a further study, which may include additional drilling. If the expansion goes ahead, this would increase the currently projected life of mine by potentially six months.

Other objectives completed in 2022 and 2023 included completing additional drilling at Banu to significantly increase the confidence of the estimated resource, particularly along its southern and northern limits. Exploration work was also completed at Ceylan, testing for low-grade bulk tonnage potential in this stockwork dominated region of the Kiziltepe vein system.

Drilling in 2023 primarily focused on testing lower-priority peripheral zones of the Kiziltepe vein system, with targets defined mainly from surface geochemistry and geological mapping. This work, partly as predicted, intercepted short zones of mineralisation (0.6 - 2.6m thick), and typically with lower grades ranging from 0.2 to 1.5g/t Au.

The 2023 phase of drilling at Kiziltepe consists of a total of 65 diamond drill holes for a total of 7,026 metres. Notable results from this programme include (see Table 1 for full results):

#### Arzu Central

- o KTP-D07-23: 1.1m @ 14.16g/t Au + 13.0g/t Ag from 89 metres
- KTP-D06-23: 1.3m @ 2.77g/t Au + 7.0g/t Ag from 31.4 metres
- KTP-D05-23: 1.2m @ 1.43g/t Au + 33.6g/t Ag from 91.9 metres
- Arzu Far North
  - o KTP-D14-23: 2.1m @ 6.16g/t Au + 131.5g/t Ag from 125.3 metres
  - KTP-D12-23: 1.8m @ 2.94g/t Au + 100.0g/t Ag from 152.7 metres
  - KTP-D13-23: 1.8m @ 2.89g/t Au + 61.1g/t Ag from 110.5 metres
- Derya West
  - o KTP-D40-23: 3.8m @ 1.85g/t Au + 103g/t Ag from 24.7 metres
  - KTP-D48-23: 1.3m @ 1.43g/t Au + 1.3g/t Ag from 56.7 metres
- Fidan
  - o KTP-D23-23: 0.6m @ 13.23g/t Au + 330.0g/t Ag from 44.4 metres
  - KTP-D37-23: 0.7m @ 9.40g/t Au + 144.0 Ag from 57.5 metres
  - KTP-D29-23: 1.3m @ 4.04g/t Au + 41.0g Ag from 6.1 metres



**Figure 2:** A long section through the Arzu North Pit, illustrating the approximate location of mineralised pierce points. An outline of the 2023 optimisation results can be seen as a dashed purple line, with the most significant area (Zone D) shown as a thick black line, where additional economic mineralisation is defined.



Figure 3: Summary map of drilling at Kiziltepe 2020 – 2023.

The final phase of drilling work completed at Kiziltepe during 2023, was designed to test lower priority peripheral targets on the northern extents of the Banu, Fidan, Arzu Central and Derya Far West vein.

#### **Conceptual Exploration and Future Targets**

Future exploration work at Kiziltepe will focus on conceptual targets based on key features identified in IP geophysical data (Figure 4). These targets were discussed in detail in early 2023 (AIM: 21 February 2023). However, a summary of the targets is presented below.

The Company is now planning a further 2,500m of priority drilling with up to 5,000m planned in total. This next phase of drilling is expected to start in Q3/Q4 2023, with the aim to systematically test the targets described below.



**Figure 4:** Merged 3D resistivity model of the Kiziltepe vein system with the mapped and modelled veins in red and interpreted structures in blue. Targets numbered 1-5, as described below.

1) At the northwest end, the resistivity anomaly is consistent at about 600m, suggesting a similar trend to the Banu vein.

2) The north-west extension of Arzu North vein is confirmed with both IP and resistivity anomalies, which have already been largely drill tested as part of the 2023 programme.

3.) A new zone of high resistivity defined to the immediate northeast side of Arzu North.

4 & 5) The two resistivity trends supported by moderate IP anomalies to the northeast of Arzu North, in the vicinity of the waste rock dump, which was defined in earlier surveys, are confirmed with the recent survey, and will be used to generate new deep drilling targets.

6) The survey also defined several potential structures at the south-east extensions of both the Arzu South and Fidan vein systems, which are less well-characterised and form future target areas.

Hole ID	From (m)	To (m)	Interval (m)	Gold g/t	Silver g/t	Area
	112.9	113.6	0.7	2.51	23.9	
KTP-D02-23	114.1	114.9	0.8	1.33	11.8	
	119.7	120.3	0.6	1.35	8.5	
KTP-D03-23	124.3	125.1	0.8	1.05	24.8	
	131.8	133	1.2	3.25	1.3	
	67.8	68.3	0.5	2.15	11.3	
KTP-D04-23	79.3	79.8	0.5	3.44	178.0	
	83.7	84.2	0.5	6.00	110.7	
	11.1	12.2	1.1	1.07	21.4	
	18.2	19.2	1	1.01	23.9	
	35.3	36.4	1.1	1.12	17.6	
KTP-D05-23	38.3	39.3	1	1.58	8.1	
	41.3	42.1	0.8	1.51	6.3	
	43.8	44.6	0.8	1.28	5.6	Arzu Contral
	91.9	93.1	1.2	1.43	33.6	Arzu Central
	17.7	18.6	0.9	1.11	22.0	
KTP-D06-23	20.6	21.7	1.1	1.11	5.7	
KTP-D00-25	26.4	28.4	2	1.41	3.1	
	31.4	32.7	1.3	2.77	7.0	
	59.2	59.8	0.6	14.07	135.0	
	78.9	81.5	2.6	1.71	11.2	
כב בטים מבא	89	90.1	1.1	14.16	13.0	
KTP-D07-23	91.2	92.8	1.6	3.23	16.0	
	94.9	96.2	1.3	1.00	6.3	
	103.5	104.4	0.9	1.06	2.8	
	96.2	96.6	0.4	2.16	59.4	
KTP-D08-23	99.5	101.1	1.6	5.25	140.0	
	102.4	103.5	1.1	1.03	7.3	
KTD D00 22	42.7	43.1	0.4	2.87	31.2	
KTP-D09-23	44.8	47.2	2.4	1.13	14.6	
KTP-D10-23	80.5	82.9	2.4	1.30	22.5	
VTD D11 22	82.1	82.8	0.7	1.09	41.8	Arzu Far North
KTP-D11-23	84	85	1	1.73	54.1	
KTP-D12-23	114.9	115.9	1	1.35	1.0	
	152.7	154.5	1.8	2.94	100.0	
KTP-D13-23	110.5	112.3	1.8	2.89	61.1	
KTP-D14-23	125.3	127.4	2.1	6.16	131.5	
KTP-D16-23	2.8	4.1	1.3	2.35	1.7	
	22.7	23.5	0.8	1.24	27.6	
KTP-D18-23	66	66.9	0.9	1.03	3.7	
KTP-D21-23	40.1	40.6	0.5	2.33	66.9	
KTP-D22-23	30.5	31.8	1.3	1.33	53.2	Fidan
KTP-D23-23	44.4	45	0.6	13.23	330.0	

 Table 1: Results of the 2023 phase of drilling at Kiziltepe.

Hole ID	From (m)	To (m)	Interval (m)	Gold g/t	Silver g/t	Area
KTP-D24-23	13.7	14.6	0.9	1.68	59.6	
KTP-D25-23	19.8	20.2	0.4	2.50	81.5	
KTP-D26-23	15.9	16.7	0.8	3.00	89.7	
KTP-D27-23	18.3	18.8	0.5	1.43	75.2	
	32.4	32.8	0.4	1.50	21.1	
KTP-D29-23	6.1	7.4	1.3	4.04	41.0	
	20.8	22	1.2	1.23	8.6	
KTP-D32-23	60.4	60.8	0.4	1.24	12.1	
KTP-D36-23	40	41.1	1.1	2.82	43.4	
KTP-D37-23	39.3	39.9	0.6	1.44	22.7	
	57.5	58.2	0.7	9.40	144.0	
KTP-D40-23	5.8	6.5	0.7	2.98	52.7	
	21.2	21.8	0.6	1.68	76.4	Derya West and Derya Far West
	24.7	28.5	3.8	1.85	103.3	
KTP-D42-23	33.6	34	0.4	3.69	35.3	
KTP-D47-23	35	35.7	0.7	1.57	12.0	
KTP-D48-23	56.7	58	1.3	1.43	1.3	

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# Editors' Note:

The information in this announcement that relates to exploration results is based on information compiled by Dr. Kerim Sener BSc (Hons), MSc, PhD, Managing Director of Ariana Resources plc. Dr. Sener is a Fellow of The Geological Society of London and a Member of The Institute

of Materials, Minerals and Mining and has sufficient experience relevant to the styles of mineralisation and type of deposit under consideration and to the activity that has been undertaken to qualify as a Competent Person as defined by the 2012 edition of the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code) and under the AIM Rules - Note for Mining and Oil & Gas Companies. Dr. Sener consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

## About Ariana Resources:

Ariana is an AIM-listed mineral exploration and development company with an exceptional track-record of creating value for its shareholders through its interests in active mining projects and investments in exploration companies. Its current interests include gold production in Turkey and copper-gold exploration and development projects in Cyprus and Kosovo.

The Company holds 23.5% interest in **Zenit Madencilik San. ve Tic. A.S.** a partnership with Ozaltin Holding A.S. and Proccea Construction Co. in Turkey which contains a depleted total of c. 2.1 million ounces of gold and other metals (as at February 2022). The partnership comprises the Kiziltepe Mine and the Tavsan and Salinbas projects.

The **Kiziltepe Gold-Silver Mine** is located in western Turkey and contains a depleted JORC Measured, Indicated and Inferred Resource of 222,000 ounces gold and 3.8 million ounces silver (as at February 2022). The mine has been in profitable production since 2017 and is expected to produce at a rate of c.20,000 ounces of gold per annum to at least the mid-2020s. A Net Smelter Return ("NSR") royalty of 2.5% on production is being paid to Franco-Nevada Corporation.

The **Tavsan Gold Mine** is located in western Turkey and contains a JORC Measured, Indicated and Inferred Resource of 307,000 ounces gold and 1.1 million ounces silver (as at November 2022). Following the approval of its Environmental Impact Assessment and associated permitting, Tavsan is being developed as the second gold mining operation in Turkey and is currently in construction. A NSR royalty of up to 2% on future production is payable to Sandstorm Gold.

The **Salinbas Gold Project** is located in north-eastern Turkey and contains a JORC Measured, Indicated and Inferred Resource of 1.5 million ounces of gold (as at July 2020). It is located within the multi-million ounce Artvin Goldfield, which contains the "Hot Gold Corridor" comprising several significant gold- copper projects including the 4 million ounce Hot Maden project, which lies 16km to the south of Salinbas. A NSR royalty of up to 2% on future production is payable to Eldorado Gold Corporation.

Ariana owns 100% of Australia-registered **Asgard Metals Fund** ("Asgard"), as part of the Company's proprietary Project Catalyst Strategy. The Fund is focused on investments in high-value potential, discovery-stage mineral exploration companies located across the Eastern Hemisphere and within easy reach of Ariana's operational hubs in Australia, Turkey and the UK.

Ariana owns 75% of UK-registered **Western Tethyan Resources Ltd** ("WTR"), which operates across south-eastern Europe and is based in Pristina, Republic of Kosovo. The company is targeting its exploration on major copper-gold deposits across the porphyry-epithermal transition. WTR is being funded through a five-year Alliance Agreement with

Newmont Corporation (www.newmont.com) and is separately earning-in to 85% of the Slivova Gold Project which contains Measured, Indicated and Inferred Resource of 176,000 oz gold and 646,000 oz silver (as at July 2023).

Ariana owns 58% of UK-registered **Venus Minerals Ltd** ("Venus") which is focused on the exploration and development of copper-gold assets in Cyprus which contain a combined JORC Indicated and Inferred Resource of 17Mt @ 0.45% to 1.10% copper (excluding additional gold, silver and zinc.

Panmure Gordon (UK) Limited and WH Ireland Limited are brokers to the Company and Beaumont Cornish Limited is the Company's Nominated Adviser.

For further information on Ariana, you are invited to visit the Company's website at <u>www.arianaresources.com</u>.

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## **Glossary of Technical Terms:**

"Ag" chemical symbol for silver;

"Au" chemical symbol for gold;

"g/t" grams per tonne;

"IP" Induced Polarization;

"JORC" the Joint Ore Reserves Committee;

"JORC 2012" is the current edition of the JORC Code, which was published in 2012. After a transition period, the 2012 Edition came into mandatory operation in Australasia from 1 December 2013;

"km" Kilometres;

"m" Metres;

Ends.