1 February 2022

AIM: AAU

RESOURCE AND RESERVE UPDATE: KIZILTEPE SECTOR

19% Increase in Total Resources

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 a resource update for the Kiziltepe Sector, including the satellite projects of Kepez, Kizilcukur and Ivrindi. Kiziltepe is owned by 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:

- Increase in global (undepleted) Mineral Resource Estimate to over 380,000 oz Au and 6,100,000 oz Ag contained metal*.
- Ore Reserves of 1.10Mt @ 2.38 g/t Au and 43.16g/t Ag for over 80,500 oz Au and 1,400,000 oz Ag, equivalent to approximately three years of production*.
- Resource update represents a c. 19% increase over the previous (2020) undepleted global resource estimate (announced in April 2020) on a gold ounce only basis.
- Over 1.33Mt of ore has been mined from the open pits at Kiziltepe to the end of December 2021, of which approximately 1.03Mt has been processed (quoted as dry tonnes).

**All Mineral Resource and Ore Reserve figures in the announcement are quoted gross with respect to Zenit of which Ariana owns 23.5%.*

Dr. Kerim Sener, Managing Director, commented:

"This updated Resource Estimate, demonstrating a 19% increase in total resources compared with our 2020 estimate, is an excellent result and represents the culmination of a full year of work at Kiziltepe, involving over 15,000m of drilling and other detailed technical studies by the Zenit and Ariana teams. This work highlights the resource upside remaining at Kiziltepe, as operations proceed successfully into their sixth year. Our total depleted resource is broadly equal to the undepleted resource before mining commenced, inclusive of the satellite prospects. This highlights the value of the exploration undertaken over recent years, with approximately 125,000 ounces of gold having been added to the resource base since start-up.

"For the first time since our Feasibility Study, we are also reporting a major update to our Reserves since operations commenced in 2017. This is particularly relevant given we have now produced more gold from Kiziltepe than envisaged in the Feasibility Study, despite having only mined for 5 years out of a projected 8-year mine life. Significantly our remaining Resources and Reserves include the remaining parts of Arzu South, Arzu North, Derya and possible future mining areas at Banu, Kepez West, Karakavak, Kizilcukur and Ivrindi. Late last year we commenced mining and haulage of high-grade ore (7-8 g/t Au) from Kepez North, and this is likely to be followed by many other satellite operations in the coming years.

"The increase in Reserves is an outstanding success, with our current Reserve tonnage of 1.1Mt being equal to that of our pre-operational Reserves in early 2017. This revised Reserve is expected to support at least three years of additional higher-throughput production at a conceptual rate of c. 25,000 ounces of gold per annum, and enable the doubling of total life of mine output, as compared to the Feasibility

Study. With the additional conversion of Resources to Reserves in the coming years, we are currently expecting operations at Kiziltepe to continue through to 2026 and are planning accordingly. In addition, several significant Exploration Target areas, which are not included in current conceptual planning, could be converted to Resources and Reserves with further exploration and resource development work within the next few years."

Introduction

Between late 2021 and early 2022, the Ariana and Zenit teams undertook a significant new drilling programme across the Kiziltepe Sector (Figure 1), following which an extensive re-estimation of Mineral Resources, Ore Reserves and Exploration Targets were completed. Additionally, the team have also re-assessed historically announced resources contained within other deposits which are located within potential haulage distance of the Kiziltepe Processing Plant. These deposits include the satellite areas of Kepez, Kizilcukur and Ivrindi.

This announcement summarises the modelling and Resource Estimation methods, in addition to the approach taken for Reserve Estimation and the definition of the Exploration Target at Kiziltepe. The classified resources include all Kiziltepe Sector resources, as detailed in the separate JORC Table 1's specific to each project which are provided on the Ariana Resources website for further reference.

This latest iteration of the Resource Estimate includes the addition of 12,579 metres of new diamond drilling data, which was announced systematically through 2021, as assay results became available. The 2021 drilling programme focused on the expansion of resources at four main areas within Kiziltepe: Arzu South, Arzu North, Derya and Banu. Where possible, additional drilling was also completed to enable the better definition of peripheral Exploration Target areas.

Also included here are the summary results of a new pit optimisation study which uses and integrates the latest resource model and mine reconciliation data. This work was completed internally by the Zenit Mining team and is incorporated into Ariana's own evaluations. With the aim of outlining a Global Resource for the Kiziltepe Sector, the total resource and reserve figures stated within this announcement also include the following areas:

- Kepez West (RNS 31 May 2018, unrevised) and Kepez North (RNS 21 July 2021, updated here), located 16.7km haulage distance from Kiziltepe Mine; since November 2021, haulage of surface scree material commenced from Kepez North.
- Kizilcukur (RNS 11 May 2020, unrevised).
- Ivrindi (RNS 29 Oct 2013, unrevised) completed in accordance with JORC 2004.

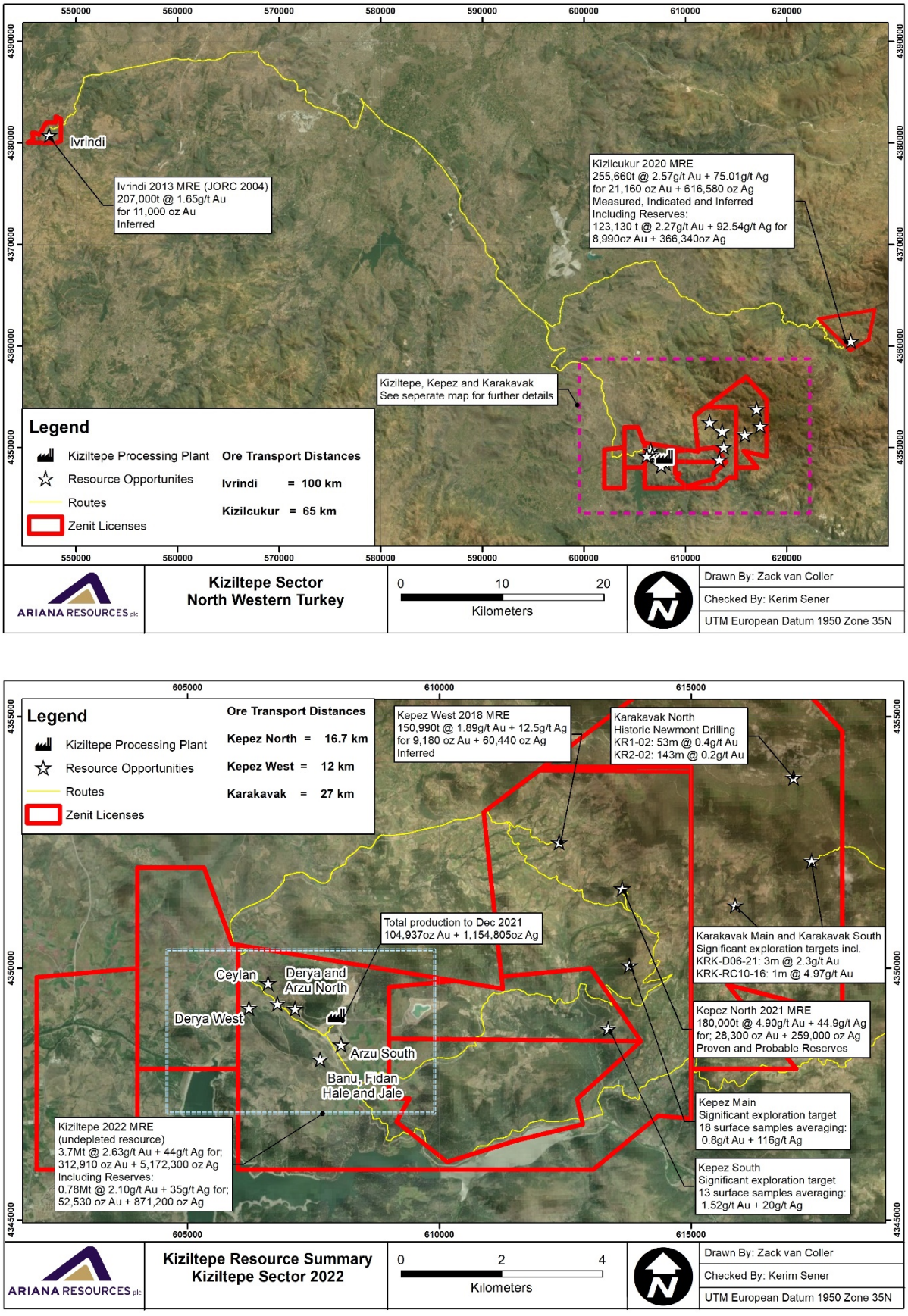

Figure 1: Kiziltepe Sector summary map (top) and Kiziltepe, Kepez and Karakavak area map (bottom) showing estimated resources, primary access routes and locations of significant mineralisation and exploration opportunities.

Kiziltepe Resource and Reserve Estimate

The new Mineral Resource and Reserve Estimate is prepared in accordance with JORC 2012 and is based on 275 diamond drill holes (26,235 m), 164 RC drill holes (16,066 m), 15 rotary air blast (RAB) holes (348 m) and 130 rock-saw channels (975 m) as well as in-pit grade control sampling data (over 101,830 m across 2,111 lines perpendicular to mineralisation).

This data was collectively reviewed and modelled to create representative three-dimensional mineralisation domains for the vein mineralisation and host rock alteration typical of the Kiziltepe deposit. Estimation of grade and tonnage was attributed to the mineralisation models based on internal and external laboratory assay data, and drill core density studies (where available), undertaken by the on-site geologists.

A three-dimensional block model was constructed from the mineralisation model based on optimal data spacing parameters as defined by the Zenit mining team. This was then reconciled against all existing production numbers since operations commenced in 2017. This reconciliation was completed on a pit-by-pit and bench-by-bench basis to ensure that any remaining or newly defined down-dip and/or along strike mineralisation was accurately modelled within the grade/tonnage expectations of the mining team.

Finally, the appropriately reconciled mineralisation model and associated block models were subjected to a new open-pit optimisation study completed internally by the Zenit mining team, under revised economic input parameters according to the latest economic and processing factors. Measured and Indicated Resources captured by the latest pit-shells produced during this study are included as Proven and Probable Ore Reserves. Taking the Arzu North area as an example, it is apparent that the existing open-pit can be expanded further to the northwest based on the revised Mineral Resource Estimate (Figure 2).

Figure 2: Current status of the Arzu North open-pit, taken from the southeastern pit wall. The main vein structure is seen in the far northwest wall of the pit (reddish tinged rock) and continues for a further 570 m in that direction beyond the pit boundary. This is likely to become an important exploration and resource development area in the future.

Kiziltepe Geological Modelling

The Kiziltepe vein system is low-sulphidation epithermal in character and typically dips 75-85° towards the northeast, and occurs with associated wallrock alteration halos which are also mineralised in places. This vein system is modelled here using assay data, geological logging and three-dimensional interpolation modelling methods. This was completed within Leapfrog Geo 6.0, using the "Vein System" tool to define mineralisation domains based on manually isolated economic drill composites. Economic composites with up to one meter of internal dilution were defined by nominal 0.5g/t Au, 1.0g/t Au and 2.0g/t Au modelling cut-offs (depending on the vein being modelled). Lower grade or peripheral intercepts were domained as Alteration Halos using standard interpolation modelling methods and lower modelling cut-offs set at 0.25g/t Au, then clipped using the vein model volumes to create an interlocking vein and alteration model. The continuity of the various structures is reflected in the Mineral Resource classification. Exploration target areas on the periphery of the vein system are defined by surface vein mapping, rock-chip and channel sampling assay results and drilling where available. A 0.25g/t Au modelling cut-off was applied to define the JORC Exploration Targets.

Kiziltepe Estimation Methodology for Resources

Tonnage and grade estimation of the defined mineralisation and alteration domains was completed using Leapfrog EDGE. This was done using an Inverse Distance Weighting Squared (IDWS) estimation method, with a three-pass search approach to outline mineralisation to enable later classification according to the spacing of sample and assay data.

Top-cuts applied to the mineralisation model (where required) ranged from 8g/t Au to 20g/t Au and 200g/t Ag to 400g/t Ag for vein domains. Additional top-cuts were also applied to the alteration halo model domains. These were applied based on specific areas within the vein system; Arzu South 10g/t Au and 200g/t Ag, Arzu North 5g/t Au and 200g/t Ag and Derya 5g/t Au and 100g/t Ag. Further details concerning the use of top-cuts is described in JORC Table 1 for Kiziltepe (see Appendix).

Compositing of assay data was completed within Leapfrog EDGE, using a 1m best fit routine within the domain boundaries. Hard domain boundaries were applied to all deposit models, which forced all samples to be included in one of the composites by adjusting the composite length, while keeping it as close as possible to the selected intervals of 1m.

Specific density averages were applied to both the mineralisation and alteration models based on diamond drill core data defined from 4,794 sample measurements. A statistical review of this data captured within each geological domain has highlighted that density varies across the Kiziltepe system with depth, varying locally from vein cluster to vein cluster. For the purposes of this MRE update, average densities applied to the various areas within the Kiziltepe area are as follows:

Vein Area	Average density applied (g/cm^3)
Arzu South Vein	2.60
Arzu South Alteration Halo	2.50
Arzu North Vein	2.45
Arzu North Alteration Halo	2.40
Derya Vein	2.55
Derya Alteration Halo	2.50
Banu Vein	2.50
Exploration Targets	2.50
Waste Rock	2.53

The block model used is a non-rotated conventional model with no sub-blocking applied (Figure 3). The block models were constructed using a 1m E by 5m N by 5m RL parent block size. Isotropic search ellipses and ranges were used. The variable orientation function (dynamic anisotropy) was used in Leapfrog EDGE to better represent the grade distribution. Estimation was carried out using IDWS at the parent block scale using a three-pass estimation using all available composites within the hard boundary. The IDWS method was selected as the most suitable method of interpolation for this deposit, as there is not sufficient nugget affect to warrant an IDWC method.

The estimates were completed separately for vein and alteration halo. Domaining the alteration halo separately minimises cross-boundary extrapolation of grades from the main vein to the alteration halo and *vice versa*. Areas of alteration and Exploration Targets have been modelled above a 0.2g/t Au cut-off grade and reported above a 0.75g/t Au cut-off grade (Figure 4). Veins have been modelled above a 1.0g/t Au cut-off and reported above a 1.0g/t Au cut-off grade. Cut-off grade is based on assumptions concerning mining and processing cost, metallurgical recovery and metals prices.

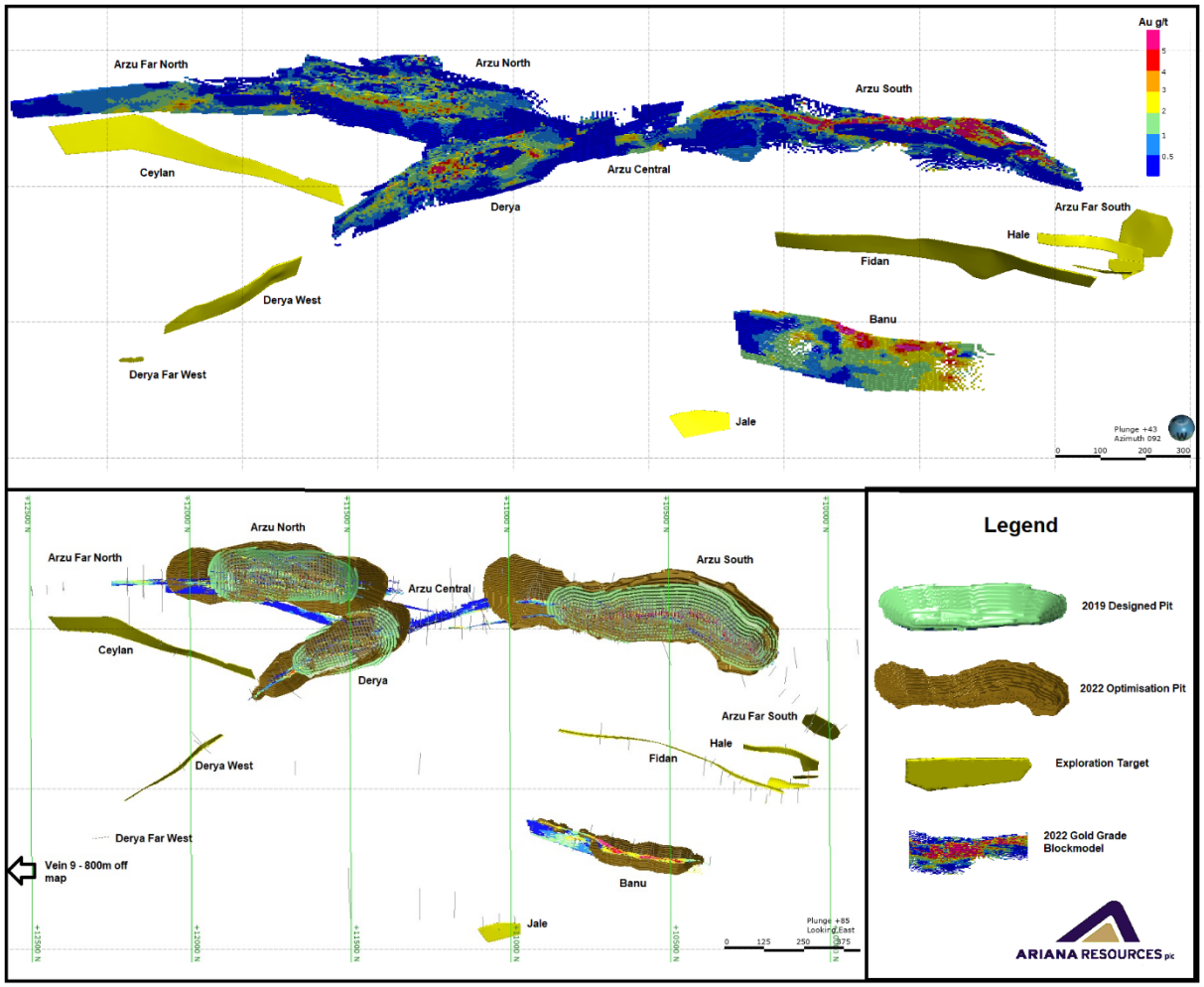

Figure 3: Oblique view of the Kiziltepe undepleted block model of veins and alteration halos (shown in g/t Au) forming the Mineral Resource Estimate and Exploration Target areas, facing north (top). Current and newly (2022) optimised pits for Arzu South, Arzu North, Derya and Banu are shown (bottom). The Kepez area is not included in this figure.

During the review of the Kiziltepe MRE, a visual validation between drillhole data, composite data and block model data was carried out. The estimate was also compared to reconciliation data. No mining factors (i.e., dilution, ore loss, recoverable resources at selective mining block size) have been applied to the Resource Estimate. Likewise, no metallurgical factors have been applied, however, the Kiziltepe Processing Plant has life of mine (LOM) average recoveries of 92% and 75% for gold and silver, respectively. It is assumed that the remaining ore will be mined via open-pit operations with ore material hauled to the Kiziltepe Processing Plant for gold and silver extraction using the carbon-in-leach (CIL) method.

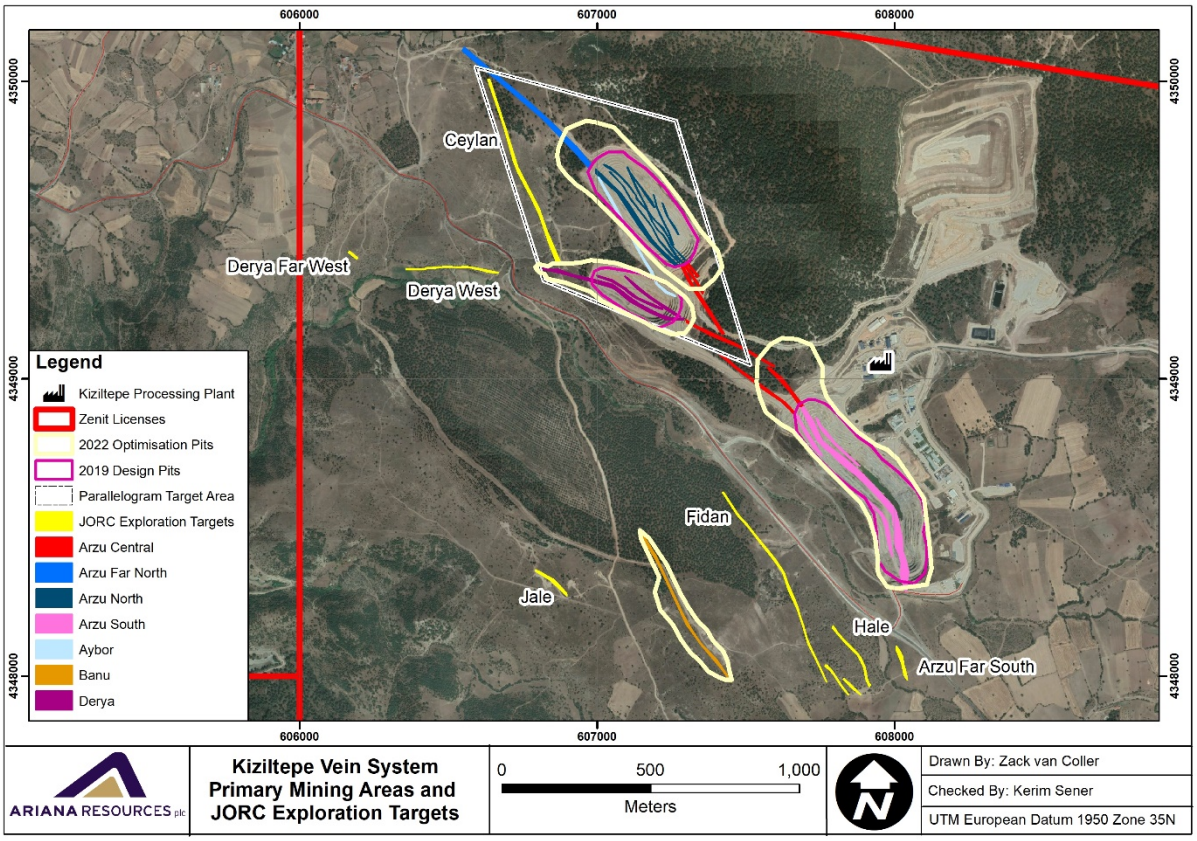

Figure 4: Kiziltepe vein system showing current mining areas and exploration target areas, including working pit outlines and 2022 optimisation pit outlines. This map does not show the Kepez area.

Kiziltepe Estimation Methodology for Reserves

For each of the stated Reserves documented here, no estimation input parameters were altered (with one exception, as detailed below), from the Mineral Resource Estimate reported. Conversion of Mineral Resources to Ore Reserves occur following the application of modifying factors, including economic studies, metallurgical response and permitting.

Recent work completed during the Kiziltepe annual mine reconciliation review determined that the application of a soft boundary with a 1-meter range to the vein or primary mineralisation domain resulted in more accurate correlation between modelled resources and reported ore mined, specifically in the areas of Arzu North and Derya. Accordingly, the estimation input parameters were modified to provide more realistic optimisation inputs for forward mine planning. This result is particularly significant in the Arzu North area, where vein swarms are significantly more stockwork-like in nature.

Changes in the estimation boundary type from hard to soft allows for more accurate representation of what is classified as ore, enabling the grade of material classed as “quartz veins” to be marginally influenced by the grade of “altered wall-rock” material. This has been proven in practice, particularly during the mining of Arzu North where vein widths of less than 1.5m in altered wallrock (defining lower grade ore) become mixed with the primary ore, lowering its overall grade. Further details on these modifications to the Kiziltepe Mineral Resource Estimate vs Ore Reserve Estimate is noted in the attached JORC Table 1. These changes were applied only to the main Kiziltepe veins (Arzu South, Arzu North and Derya) in the absence of data for other areas.

Kiziltepe Pit Optimisation Study

Through early January 2022, the Zenit mining team have completed an extensive peer review of the Ariana MRE studies, adding specific guidance on their experiences of mining at Kiziltepe over the last five years. The Kiziltepe resource model was then subjected to a revised open-pit optimisation study using revised 2021/2022 economic input parameters in line with current production forecasts (Figure 5). Mineral Resources classified as Measured and Indicated, and captured within the latest optimisation

study, have been defined as Proven and Probable Reserves, respectively. The latest open-pit optimisation results based on the addition of the 2021 drilling and the latest Measured and Indicated Mineral Resources for Kiziltepe only (not including the Reserves defined at Kepez or Kizilcukur), indicate a mine life of approximately two years, for approximately 52,500oz Au and 871,000oz Ag (Table 4). The addition of production from satellite areas such as Kepez and Kizilcukur could extend mine life further to approximately three years. Minor variation on the Reserves based on the optimisations are expected as a result of future mine design requirements.

Details of key input parameters for the 2022 Kiziltepe optimisation study can be found within Section 4 of the Kiziltepe JORC Table 1.

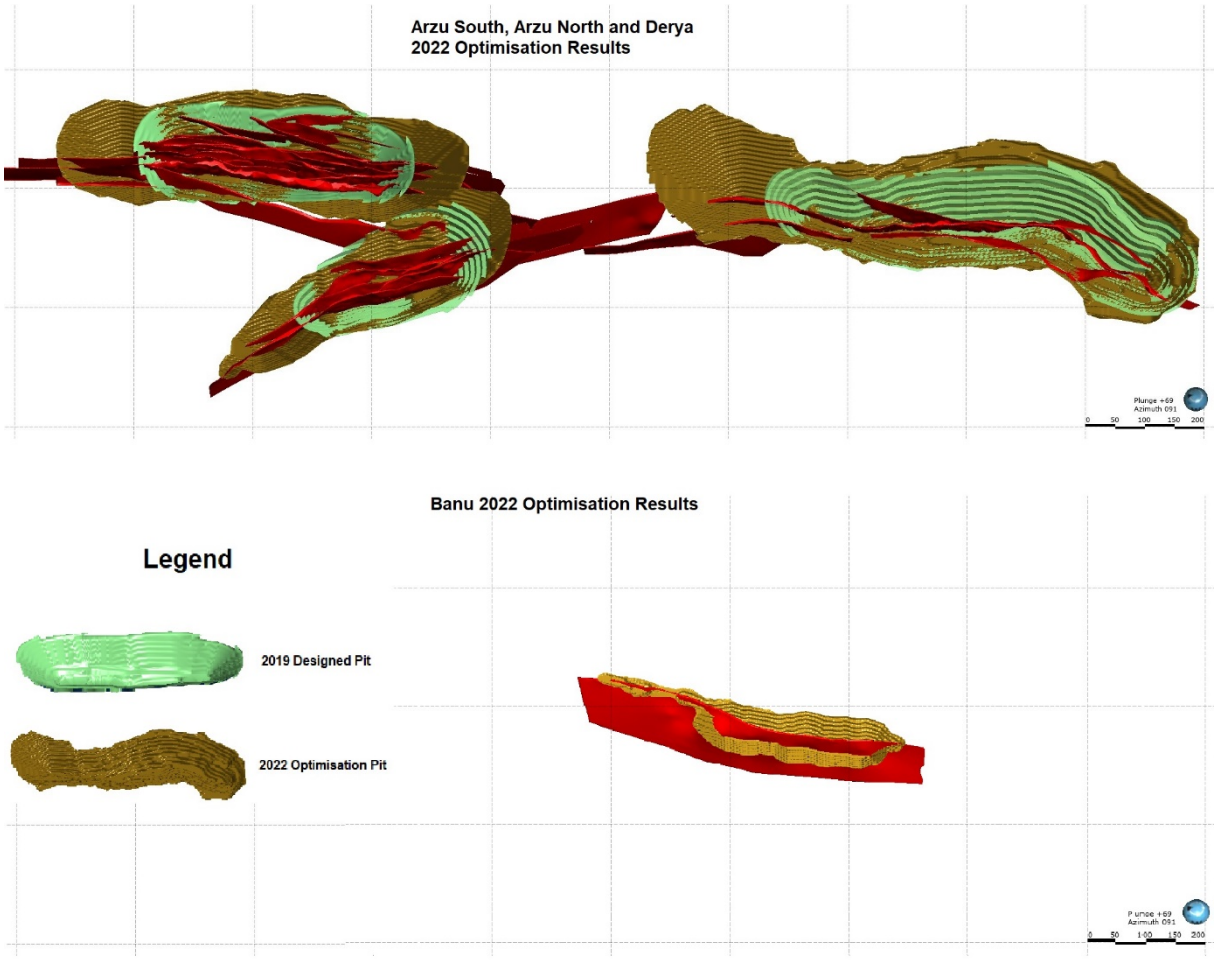

Figure 5: Oblique projection of the Kiziltepe vein system, showing the important development areas of Arzu South, Arzu North, Derya and Banu, with the veins shown in red. The open-pits currently in place or being worked toward are the 2019 designed pits. The revised pits will approximate the shape of the 2022 optimisation outputs.

Kepez North Resource Estimate

In July 2021, a MRE update was announced for Kepez North (Figure 6). This was based on new drilling completed as part of the wider Kiziltepe Sector development programme. Since the publication of this MRE, a second phase of drilling was completed during September 2021 on a grid pattern. This drilling was completed as a priority to support the commencement of mining activities, which were scheduled to commence in November 2021. The additional drilling brings the total drilling at Kepez North to 2,470m across 45 holes, of which 1,173m was drilled for 23 holes in 2021. 158m of channel sampling was used to support the estimate. An average specific gravity value of 2.6 g/cm^3 was used for vein and 2.55 g/cm^3 for scree material based on specific gravity measurements on core samples and operational data from the Kiziltepe Mine. The new drilling data is incorporated into the resource model and the revised estimation is presented here.

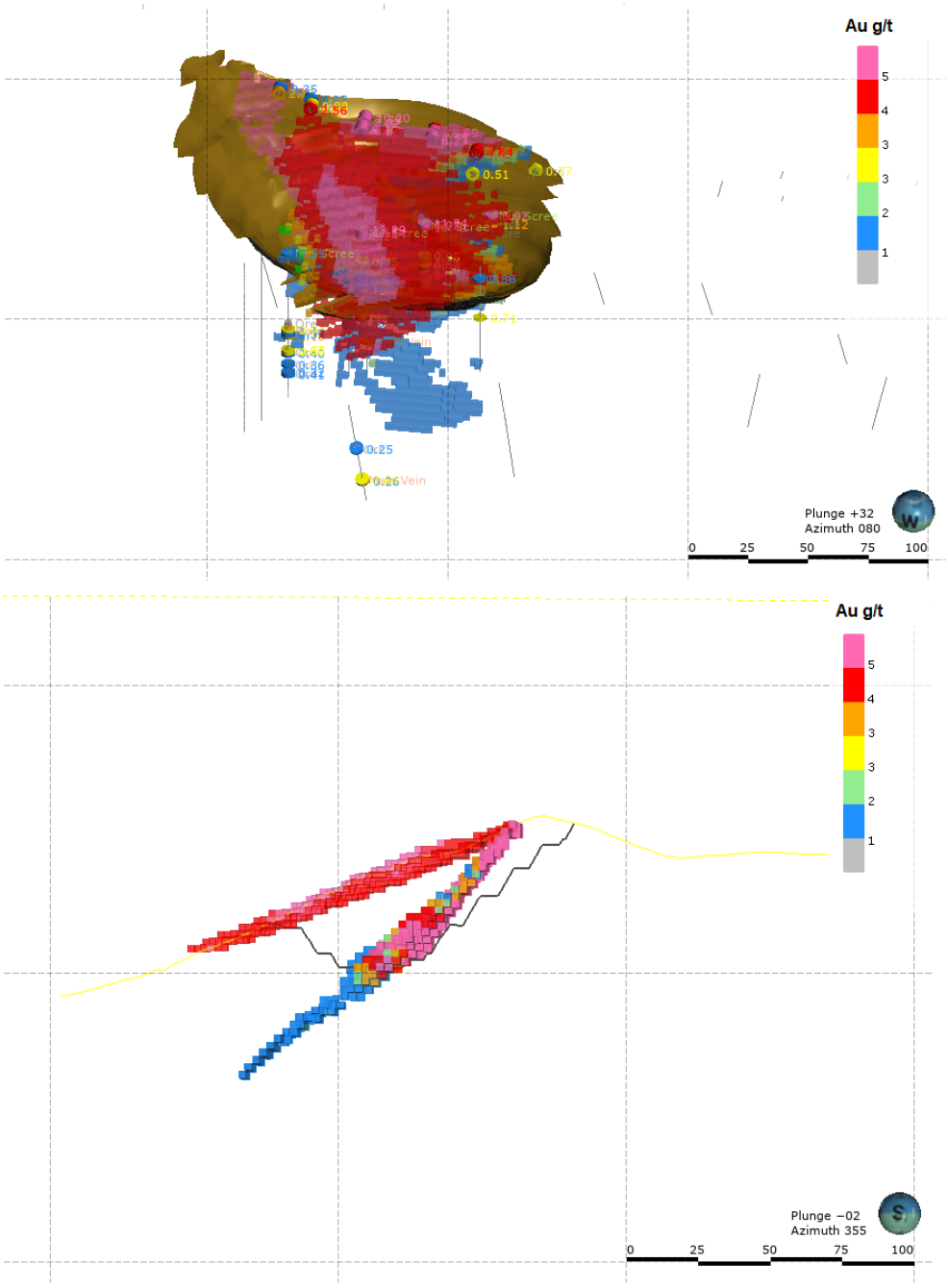

Figure 6: Kepez North block model, with designed pit outline, shown facing east (top) and in section facing north (bottom).

Kiziltepe Sector JORC Exploration Targets

Through 2021, the Ariana team continued to develop various exploration targets areas within and around Kiziltepe. This work is critical for generating future sources of potential ore for production at the Kiziltepe Processing Plant following the depletion of current Reserves. The areas included in the Exploration Target include a series of underexplored outcropping sub-cropping epithermal quartz veins situated at the periphery of more well-defined parts of the Kiziltepe vein system and elsewhere across the Kiziltepe Sector. These targets include, but are not limited to: Ceylan, Derya West, Fidan, Hale and Karakavak.

The Exploration Target defined here is prepared in accordance with JORC 2012 and are defined by Ariana with the support of a variety of data sources to which a range of confidence is applied. The ranges of potential volumes, tonnages and grades for these Exploration Targets are expressed in accordance with the guidance of JORC 2012. This Exploration Target is based on geological modelling and estimated separately from the Mineral Resources provided here. As with Inferred Resources, the defined Exploration Targets are not included in further economic studies.

The Exploration Target summarised here is defined by surface geological mapping (1:1,000 to 1:5,000 scale), surface rock-chip and channel sample assay results and any available drilling. As an example, the Exploration Target defined at Karakavak is supported by over 1,000m of diamond and RC drilling, soil assay and pXRF analysis, and systematic rock-saw channel sampling. However, in this case, this area still lacks sufficient data to appropriately upgrade to Inferred Resources.

Tonnages for all defined targets are generated from volumes produced during interpolation modelling from mapped surface outcrops, associated geochemistry and drilling. The models produced are generated using a 0.25g/t Au modelling cut-off, and are constrained to a maximum thickness, typically ranging from 1.5-3.0m, based on outcrop measurements and drill intercept true thickness lengths. Estimated gold and silver grade ranges are defined either using the arithmetic mean of surface samples or drill intercept samples. Whichever variable produces the lowest mean results is used to represent the minimum grade and *vice versa*. For silver grades, where sample values are typically low (less than 5g/t) a set value of 5g/t Ag was applied based on evidence of broader mineralisation from known and defined vein extensions within the area.

Resource Classification

The Mineral Resource is classified and reported in accordance with the 2012 JORC Code (JORC Table 1) as Measured, Indicated and Inferred (Table 1 and 2) and is reported in both undepleted and depleted forms, inclusive of Reserves (Table 4). The classification is determined based on search pass spacing, with confidence increasing with proximity to drill holes. Table 3 shows the Exploration Target reported in accordance with JORC (2012).

Table 1: Summary of undepleted 2022 Kiziltepe Sector MRE (including Kiziltepe, Kepez, Kizilcukur, and Ivrindi), classified and reported in accordance with JORC 2012 (see associated JORC Table 1's for details). Reporting is based on cut-off grades as noted in the table. See Table 2 for depleted resources. All figures are quoted gross with respect to Zenit. Figures in the table may not sum precisely due to rounding.

KIZILTEPE SECTOR						**Average Value**		**Material Content**	
UNDEPLETED RESOURCE		**Cut-off Grade**	**Density**	**Volume**	**Mass**	Au	Ag	Au	Ag
Classified		g/t Au	g/cm^3	m^3	t	g/t	g/t	oz	oz
Kiziltepe Dec-21 *Appendix 1*	Measured	0.75 halo, 1.00 vein	2.52	738,780	1,857,180	3.04	45.55	181,400	2,719,690
	Indicated	0.75 halo, 1.00 vein	2.51	294,680	740,930	2.39	45.94	56,850	1,094,250
	Inferred	0.75 halo, 1.00 vein	2.49	437,430	1,097,640	2.12	38.49	74,660	1,358,360
Kepez North Sep-21 *Appendix 2*	Measured	1.00	2.6 vein, 2.55 scree	69,430	179,650	4.90	44.92	28,320	259,480
	Indicated	n/a							
	Inferred								
Kepez West May-18 *Appendix 3*	Measured	n/a							
	Indicated								
	Inferred	1.25	2.55	59,210	150,990	1.89	12.50	9,180	60,440
Kizilcukur May-20 *Appendix 4*	Measured	1.00	2.55	51,180	130,510	2.79	84.11	11,720	352,940
	Indicated	1.00	2.55	34,430	87,800	2.60	69.01	7,340	194,830
	Inferred	1.00	2.55	14,650	37,340	1.75	57.31	2,100	68,810
Ivrindi Oct-13 *(JORC 2004, no Table 1)*	Measured	n/a							
	Indicated								
	Inferred	1.00	2.50	82,800	207,000	1.65	n/a	11,000	n/a
GLOBAL TOTAL	**Measured**		**2.52**	**859,380**	**2,167,340**	**3.18**	**47.82**	**221,430**	**3,332,110**
	Indicated		**2.52**	**329,110**	**828,740**	**2.41**	**48.38**	**64,190**	**1,289,080**
	Inferred		**2.51**	**594,080**	**1,492,970**	**2.02**	**30.99**	**96,940**	**1,487,610**
	TOTAL		**2.52**	**1,782,570**	**4,489,050**	**2.65**	**42.33**	**382,560**	**6,108,800**

Table 2: Summary of depleted 2022 Kiziltepe Sector MRE (including Kiziltepe, Kepez, Kizilcukur and Ivrindi), classified and reported in accordance with JORC 2012 (see associated JORC Table 1's for details) and excluding material mined to end November 2021. Reporting is based on cut-off grades as noted in the table. See Table 1 for undepleted resources. All figures are quoted gross with respect to Zenit. Figures in the table may not sum precisely due to rounding.

KIZILTEPE SECTOR						Average Value		Material Content	
DEPLETED RESOURCE		Cut-off Grade	Density	Volume	Mass	Au	Ag	Au	Ag
Classified		g/t Au	g/cm^3	m^3	t	g/t	g/t	oz	oz
Kiziltepe Dec-21 *Appendix 1*	Measured	0.75 halo, 1.00 vein	2.51	167,450	420,430	2.20	43.47	29,800	587,620
	Indicated	0.75 halo, 1.00 vein	2.51	277,830	698,260	2.33	46.09	52,310	1,034,790
	Inferred	0.75 halo, 1.00 vein	2.51	409,830	1,029,220	2.12	38.55	70,070	1,275,460
Kepez North* Sep-21 *Appendix 2*	Measured	1.00	2.6 vein, 2.55 scree	69,430	179,650	4.90	44.92	28,320	259,480
	Indicated	n/a							
	Inferred								
Kepez West May-18 *Appendix 3*	Measured	n/a							
	Indicated								
	Inferred	1.25	2.55	59,210	150,990	1.89	12.50	9,180	60,440
Kizilcukur May-20 *Appendix 4*	Measured	1.00	2.55	51,180	130,510	2.79	84.11	11,720	352,940
	Indicated	1.00	2.55	34,430	87,800	2.60	69.01	7,340	194,830
	Inferred	1.00	2.55	14,650	37,340	1.75	57.31	2,100	68,810
Ivrindi Oct-13 *(JORC 2004, no Table 1)*	Measured	n/a							
	Indicated								
	Inferred	1.00	2.50	82,800	207,000	1.65	n/a	11,000	n/a
GLOBAL TOTAL	**Measured**		**2.54**	**288,060**	**730,600**	**2.97**	**51.09**	**69,830**	**1,200,050**
	Indicated		**2.52**	**312,260**	**786,070**	**2.36**	**48.65**	**59,650**	**1,229,620**
	Inferred		**2.51**	**566,480**	**1,424,550**	**2.02**	**30.67**	**92,340**	**1,404,710**
	TOTAL		**2.52**	**1,166,800**	**2,941,220**	**2.35**	**40.55**	**221,820**	**3,834,380**

Table 3: Updated Exploration Target (reported in accordance with JORC 2012) originally established in 2017 for several additional vein systems and vein extensions at Kiziltepe based on geological modelling and grade estimations provided by along-strike and down-dip extrapolation of average grades from drilled sections of the same vein systems (January 2022). A density of 2.5 g/cm^3 is applied to estimated volumes to determine tonnage. All figures are quoted gross with respect to Zenit. Figures in the table may not sum due to rounding.

Kiziltepe Sector Exploration Targets	Mass		Average Value				Material Content			
	Min	Max	Au Min	Au Max	Ag Min	Ag Max	Au Min	Au Max	Ag Min	Ag Max
Jan-22	t	t	g/t	g/t	g/t	g/t	oz	oz	oz	oz
Kiziltepe	986,900	1,023,200	1.25	3.40	22.00	64.00	32,620	89,720	576,410	1,673,830
Karakavak	195,100	195,240	0.90	1.45	2.00	5.00	9,770	17,055	22,035	55,090
TOTAL	1,182,000	1,218,440	1.12	2.73	15.75	44.13	42,390	106,775	598,445	1,728,920

Reserve Classification

The Ore Reserves are classified and reported in accordance with the 2012 JORC Code (JORC Table 1) as Proven and Probable (Table 4). The classification is determined based on search pass spacing, with confidence increasing with proximity to drill holes. In addition to in-situ Reserves, stockpiled ore amounting to 308,350 tonnes, is also included as Proven Ore Reserves. Reserves stated below in Table 4 are included in the resources stated in Tables 1 and 2.

Table 4: Summary of the 2022 Kiziltepe Sector Reserves (Kiziltepe, Kepez and Kizilcukur), classified and reported in accordance with JORC 2012, based on the 2022 Kiziltepe Sector Resources with modifying factors applied. Reporting is based on a 0.75 and 1g/t Au economic cut-off grade for alteration halos and veins, respectively. Kiziltepe Reserves include ore in stockpiles to end of December 2021. Reserves are included in the Resources stated in Tables 1 and 2. All figures are quoted gross with respect to Zenit. Figures in the table may not sum precisely due to rounding.

KIZILTEPE SECTOR RESERVES		Cut-off Grade	Density	Volume	Mass	Average Value		Material Content	
						Au	Ag	Au	Ag
		g/t Au	g/cm^3	m^3	t	g/t	g/t	oz	oz
Kiziltepe Dec-21	Proven	1.00	2.50	171,660	428,810	1.90	29.30	24,830	385,210
	Probable	1.00	2.52	134,900	339,390	2.37	42.45	25,800	461,470
	Sub-total	*1.00*	*2.51*	310,140	777,150	2.10	35.05	52,530	871,200
Kepez Sep-21	Proven	1.00	2.60	14,140	36,770	5.11	84.18	6,030	99,500
	Probable	1.00	2.60	43,090	112,050	3.52	32.09	12,690	115,600
	Sub-total	*1.00*	*2.60*	*57,230*	*148,810*	*3.91*	*44.96*	*18,730*	*215,100*
Kizilcukur Jan-22 *Based on May 2020 model*	Proven	n/a							
	Probable	1.00	2.55	48,290	123,130	2.27	92.54	8,990	366,340
	Sub-total	*1.00*	*2.55*	*48,290*	*123,130*	*2.27*	*92.54*	*8,990*	*366,340*
TOTAL		**1.00**	**2.52**	**417,520**	**1,053,720**	**2.38**	**43.16**	**80,580**	**1,462,310**

Sampling and Assaying Procedures

All diamond drill core was processed at the Kiziltepe mine site and analysed at the Kiziltepe Mine Laboratory. The analytical results were assessed systematically according to each individual vein system within the Kiziltepe Sector.

For the most recent drilling programme, HQ size drill-core samples from Kiziltepe were cut in half by a diamond saw and sent for analysis in batches in line with the Company's quality control procedures. QA/QC sample insertion rates vary depending on the batch size accepted by the laboratory. For samples sent to Kiziltepe Mine Laboratory, a batch consists of 20 samples (incl. 1 blank, 1 CRM, 1 field duplicate and 1 internal Zenit lab sample) with an insertion rate of 16%. For samples sent to ALS Global, Izmir, a batch consists of 35 samples (incl. 1 blank, 1 CRM, 1 field duplicate and 1 pulp duplicate) for an insertion rate of 11%.

Core recovery for all drilling conducted at Kiziltepe is >90% for all mineralised zones, with >93% for diamond and >88% for RC drilling for all core (vein and host rock). Core recovery for the 2021 Kiziltepe drill programme is 92%. Drilling completed at Kepez in 2021 resulted in an average recovery for all core at 77%, the lower recovery due in part to the significant drilling which occurred in already broken rock. More detail on recoveries for each project is available in JORC Table 1 specific to each project.

Between 2020 and 2021, the Kiziltepe Mine Laboratory has been undergoing an extensive expansion to meet the significant demands for sample assaying, from both the mining and exploration teams. This expansion is now largely complete with the onsite laboratory now housing seven furnaces, two ICP-OES instruments, two Atomic Absorption Spectrometers (AAS), three drying ovens, three crushers and three pulverisers. The laboratory upgrades now allow the Zenit team to increase their sampling

throughput by 48% (70 samples per day to 135). The two major upgrades for 2021 included with the above mentioned is the addition of 1) a multi-element ICP-OES (PerkinElmer Avio 550) analyser, and 2) an Elementrac CS-i sulphur-carbon analyser. The ICP-OES is currently operational and now provides the team with a full suite of elements on selected samples (as opposed to just gold and silver). However, new operating procedures are currently being internally reviewed and calibrations of the new instruments are being assessed. As part of this, the laboratory team are sending in excess of 10% of their crushed rejects from selected drill core samples to ALS Global in Izmir for check assays. To date, these results have not yet been received, and as such, a full validation of Zenit's new laboratory procedures has not been fully completed. However, Zenit's internal QA/QC data and sample duplicates have been reviewed, and are considered satisfactory for Ariana's reporting purposes. In addition, the Kiziltepe laboratory meets the standard of "TS EN ISO/IEC 17025 General Requirements for the Competence of Experimental and Calibration Laboratories".

All samples were assayed for gold using a 30g or 50g fire assay, depending on the generation of drilling and lab-specific protocols since 2006 (and any drilling undertaken prior to Ariana). Reviews of the assay results have determined that all Quality Control and Quality Assurance samples (blanks, standards and duplicates) passed the quality control checks established by the Company, with duplicate samples showing excellent correlation. Laboratory sample preparation, assaying procedures and chain of custody are appropriately controlled. The Company maintains an archive of half core samples and a photographic record of all cores for future reference.

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Editors' Note:

The Mineral Resource estimate was prepared by Zack van Coller, BSc (Hons), Special Projects Geologist, a Competent Person as defined by the JORC Code. The estimate was reviewed internally by Ruth Bektas BSc (Hons) CGeol EurGeol, Projects Analyst, Ariana Resources plc. Miss Bektas is a Competent Person as defined by the JORC Code, 2012 Edition. Chief Mine Planning Engineer, Kadir Turan BSc, is responsible for the optimisation study and mine designs. The results are reported in accordance with the JORC Code, under the direction of Dr. Kerim Sener BSc (Hons), MSc, PhD, Managing Director of Ariana Resources plc, and a Competent Person as defined by the JORC Code. Miss Bektas and Dr. Sener have reviewed the technical and scientific information in this press release relating to the Mineral Resource and Reserve estimates and approve the use of the information contained herein.

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 joint venture 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 2021). The joint venture 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 2021). 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 Project** is located in western Turkey and contains a JORC Measured, Indicated and Inferred Resource of 253,000 ounces gold and 0.7 million ounces silver (as at June 2020). The project is being progressed through permitting and an Environmental Impact Assessment, with the intention of developing the site to become the second joint venture gold mining operation. 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 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.

Ariana owns 50% 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 16.6Mt @ 0.45% to 1.10% copper (excluding additional gold, silver and zinc).

Panmure Gordon (UK) Limited is broker to the Company and Beaumont Cornish Limited is the Company's Nominated Adviser and Broker.

For further information on Ariana you are invited to visit the Company's website at **www.arianaresources.com**.

Glossary of Technical Terms:

“Ag” chemical symbol for silver;

“Au” chemical symbol for gold;

“cut-off grade” The lowest grade, or quality, of mineralised material that qualifies as economically mineable and available in a given deposit. May be defined on the basis of economic evaluation, or on physical or chemical attributes that define an acceptable product specification;

“g/t” grams per tonne;

“IDWC” Inverse Distance Weighted Cubed is a conventional mathematical method used to calculate the attributes of mineral resources. Near sample points have a greater weighting than samples further away for any given resource block. The cubed method gives even stronger weighting to close samples than the squared method;

“IDWS” Inverse Distance Weighted Squared is a conventional mathematical method used to calculate the attributes of mineral resources. Near sample points have a greater weighting than samples further away for any given resource block, although the squared method gives less weighting to close samples than the cubed method;

“Indicated Resource” a part of a mineral resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a reasonable level of confidence. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are too widely or inappropriately spaced to confirm geological and/or grade continuity but are spaced closely enough for continuity to be assumed;

“Inferred Resource” a part of a mineral resource for which tonnage, grade and mineral content can be estimated with a low level of confidence. It is inferred from geological evidence and has assumed, but not verified, geological and/or grade continuity. It is based on information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that may be limited or of uncertain quality and reliability.

“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;

“m” Metres;

“Measured Resource” a part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a high level of confidence. It is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drillholes. The locations are spaced closely enough to confirm geological and grade continuity;

“Mt” million tonnes;

“oz” Troy ounces;

“Probable Ore Reserve” is the economically mineable part of an Indicated, and in some cases, Measured Mineral Resource. The confidence in the Modifying Factors applying to a Probable Ore Reserve is lower than that applying to a Proven Ore Reserve;

“Proven Ore Reserve” is the economically mineable part of a Measured Mineral Resource. A Proven Ore Reserve implies a high degree of confidence in the Modifying Factors.

Ends.

JORC Code, 2012 Edition – Table 1

Kiziltepe, Western Turkey *(data to end November 2021, MRE reported January 2022)*

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• Reverse circulation (RC) chips were collected at 1 m intervals and in some cases over 0.5 m intervals over the mineralised zone. The chips were collected into plastic sample bags from a cyclone to ensure maximum recovery. The samples were split using a standard riffle-splitter to around 0.25 to 0.5 kg per sample. • Diamond drillcore is split using a diamond rock saw, and half-core samples are taken at variable intervals. Core recovery is recorded into the database. • Samples were sent to an ISO accredited ALS laboratory in Romania for Au and Ag analysis by fire assay and latterly to a similar ALS laboratory in Izmir, which is still used as an external laboratory for QA/QC purposes. • Samples are now prepared and analysed at Zenit laboratory at Kiziltepe Mine, for Au (fire assay), Ag (AAS), and 4-acid digest for all other elements. • Under normal Company operational procedures, sampling undertaken as early-stage exploration or reconnaissance is submitted to the laboratory for 30g fire assay analysis. However, sampling undertaken on more advanced or resource stage projects are submitted for 50g fire assay analysis, where it is expected that the larger samples mass will provide marginally more representative results. • Through 2021, the Kiziltepe Mine Laboratory, under its current transforming setup, is only able to analyse samples at a 30g fire assay sample shot capacity. Therefore, check samples sent to ALS in Izmir for external review have been, and will continue to be sent as a mixture of both 30g and 50g assay shot capacities, so that the various teams involved can appropriately reconcile the minor variation in the compared datasets. • As of January 2022, the Zenit Laboratory houses two ICP-OES (PerkinElmer Avio 550 and PerkinElmer Optima 8000) instruments, two Atomic Absorption Spectrometers (PerkinElmer's PinAAcle 900F), three drying ovens, three crushers, three pulverisers and seven furnaces. • Portable X-ray Fluorescence (pXRF) analysis is typically used on 1m intervals on all drill core not sampled for assaying. This is primarily for geological modelling purposes. • Pulp rejects from all assayed samples are also analysed using pXRF analysis. This data is not used for mineral resource estimation purposes, but rather for internal evaluations conducted by the exploration team. pXRF certified reference standards are used on a regular basis in line with company procedures.

Analiz Kodu	Element	Analiz Metodu	Alt Deteksiyon Limiti	Üst Deteksiyon Limiti
FA03	Au	Fire Assay (50gr)/AAS	0.005 ppm	10ppm

Analiz Kodu	Element	Analiz Metodu	Alt Deteksiyon Limiti	Üst Deteksiyon Limiti
ME01	Ag	4-Asit/AAS	1ppm	1000ppm

Analiz Kodu	Element	Analiz Metodu	Alt Deteksiyon Limiti	Üst Deteksiyon Limiti
ME15	As	2-Asit(Aqua Regia)/ICP-OES	1ppm	10000ppm
	Sb			

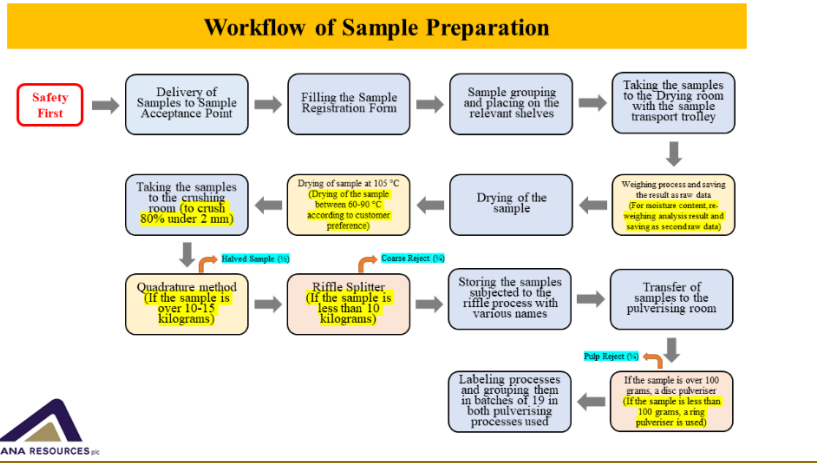
Analiz Kodu	Element	Analiz Metodu	Alt Deteksiyon Limiti	Üst Deteksiyon Limiti
ME12	Al	4-Asit/ICP-OES	100ppm	20%
	As*		1ppm	10.000ppm
	B		5ppm	1.000ppm
	Ba		1ppm	10.000ppm
	Bi		1ppm	5.000ppm
	Ca		100ppm	40%
	Cd		1ppm	5.000ppm
	Ce		1ppm	2.000ppm
	Co		1ppm	1.000ppm
	Cr		1ppm	10.000ppm
	Cu		1ppm	10.000ppm
	Fe		100ppm	30%
	Ga		2ppm	1.000ppm
	Hf		1ppm	1.000ppm
	In		1ppm	1000ppm
	K		100ppm	20%
	La		1ppm	1.000ppm
	Li		1ppm	5.000ppm
	Mg		100ppm	20%
	Mn		1ppm	10.000ppm
	Mo		1ppm	10.000ppm
	Na		100ppm	20%
	Nb		1ppm	1.000ppm
	Ni		1ppm	10.000ppm
	P		100ppm	10%
	Pb		2ppm	10.000ppm
	Rb		1ppm	1.000ppm
	S*		100ppm	50.000ppm
	Sb*		5ppm	10.000ppm
	Se		1ppm	1.000ppm
	Sn		1ppm	10.000ppm
	Sr		1ppm	10.000ppm
	Ta		1ppm	1.000ppm
	Th		1ppm	5.000ppm
	U		1ppm	100ppm
	V		1ppm	10.000ppm
	W		1ppm	10.000ppm
	Y		1ppm	1.000ppm
	Zn		1ppm	10.000ppm
	Zr		1ppm	1.000ppm

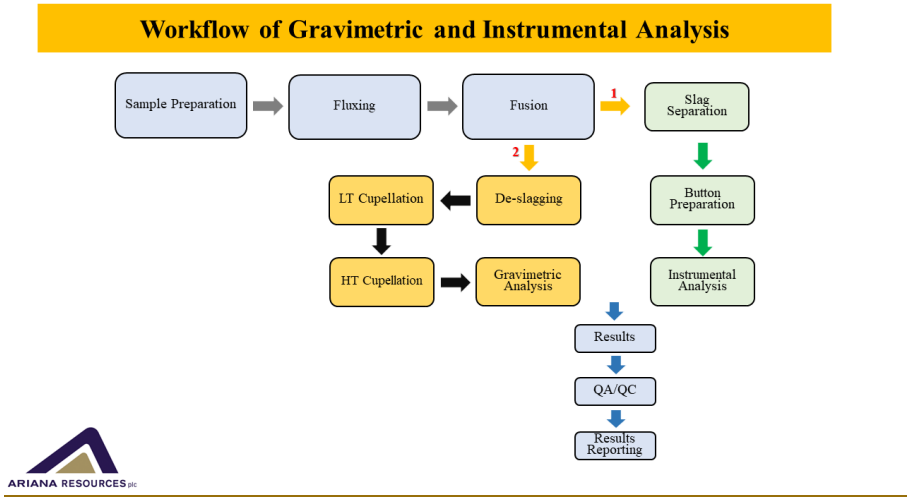
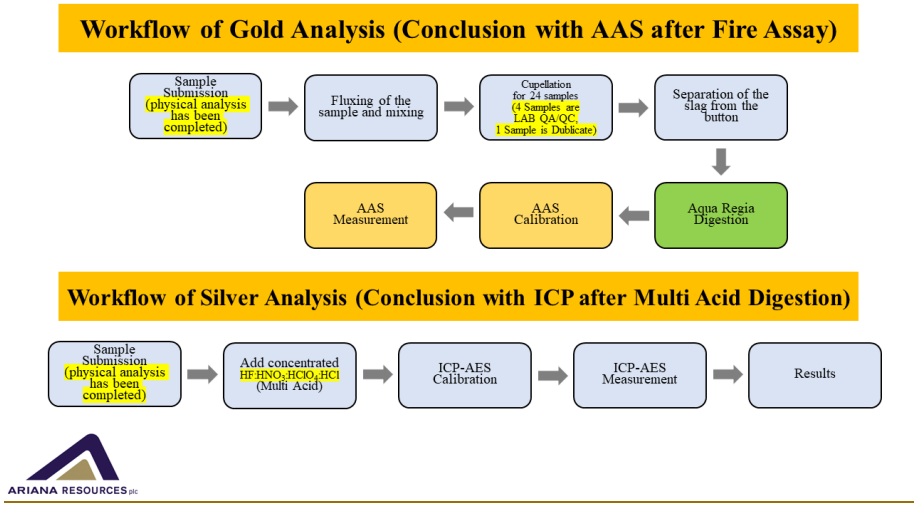
Full list of procedures offered by the Zenit laboratory since expansion in 2021.

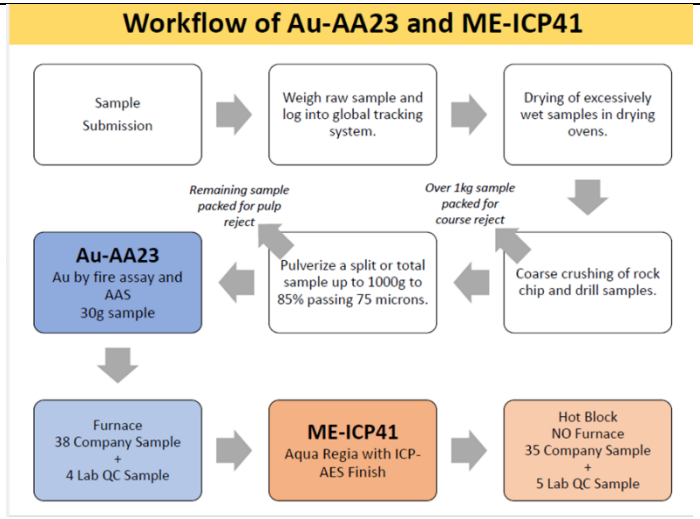
<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td>Drilling techniques</td><td>• Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</td><td>
<table>
<tr><th></th><th>Number of holes</th><th>Total metres</th></tr>
<tr><td>Rocksaw Channel Sampling (CH)</td><td>130</td><td>975</td></tr>
<tr><td>Rotary Air Blast (RAB)</td><td>15</td><td>348</td></tr>
<tr><td>Reverse Circulation (RC)</td><td>164</td><td>16,066</td></tr>
<tr><td>Diamond Drilling (DDH)</td><td>275</td><td>26,235</td></tr>
<tr><td>TOTAL</td><td>584</td><td>43,623</td></tr>
</table>
• Pre-2018 drilling programmes included percussion drilling, reverse circulation (RC, 130 mm diameter) and diamond drilling (NQ diameter).
• 2018 drilling was undertaken by NQ diamond drilling (918 m)
• 2019 drilling was undertaken by RC drilling (3,186 m)
• 2020 drilling was undertaken by HQ diamond drilling (2,391 m)
• 2021 drilling was undertaken by HQ diamond drilling (12,579 m)
</td></tr>
</table>

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><th></th><th></th><th></th><th></th><th></th><th colspan="3">Depth</th></tr>
<tr><th>Hole ID</th><th>Year</th><th>Type</th><th>Number of holes</th><th>Total metres</th><th>Average</th><th>Minimum</th><th>Maximum</th></tr>
<tr><td>KTP-ANT-IZ-xx</td><td></td><td>CH</td><td>9</td><td>23.5</td><td>2.6</td><td>2.4</td><td>2.9</td></tr>
<tr><td>KTP-RSCS-xxxx</td><td></td><td>CH</td><td>121</td><td>951.3</td><td>7.5</td><td>0.4</td><td>53.0</td></tr>
<tr><td>KTxx</td><td></td><td>DDH</td><td>9</td><td>1,269.1</td><td>141.0</td><td>90.0</td><td>240.0</td></tr>
<tr><td>RSCx</td><td></td><td>RC</td><td>8</td><td>515.6</td><td>64.5</td><td>50.0</td><td>105.8</td></tr>
<tr><td>KTP-Dxx-06</td><td>2006</td><td>DDH</td><td>36</td><td>3,304.3</td><td>91.8</td><td>49.9</td><td>164.8</td></tr>
<tr><td>KTP-RCxx-07</td><td>2007</td><td>RC</td><td>31</td><td>2,963.0</td><td>95.6</td><td>60.0</td><td>142.0</td></tr>
<tr><td>KTP-Dxx-07</td><td>2007</td><td>DDH</td><td>2</td><td>297.7</td><td>148.9</td><td>129.0</td><td>168.7</td></tr>
<tr><td>KTP-Dxx-08</td><td>2008</td><td>DDH</td><td>61</td><td>3,094.7</td><td>50.7</td><td>23.8</td><td>76.6</td></tr>
<tr><td>KTP-Dxx-09</td><td>2009</td><td>DDH</td><td>5</td><td>185.9</td><td>37.2</td><td>10.9</td><td>67.8</td></tr>
<tr><td>KTP-RCxx-09</td><td>2009</td><td>RAB</td><td>9</td><td>225.0</td><td>25.0</td><td>25.0</td><td>25.0</td></tr>
<tr><td>KTP-RABxx-10</td><td>2010</td><td>RAB</td><td>6</td><td>123.0</td><td>20.5</td><td>14.0</td><td>24.0</td></tr>
<tr><td>KTP-RCxx-10</td><td>2010</td><td>RC</td><td>26</td><td>1,854.0</td><td>71.3</td><td>48.0</td><td>96.0</td></tr>
<tr><td>KTP-Dxx-11</td><td>2011</td><td>DDH</td><td>29</td><td>2,103.4</td><td>72.5</td><td>38.2</td><td>160.5</td></tr>
<tr><td>KTP-Dxx-15</td><td>2015</td><td>DDH</td><td>3</td><td>92.0</td><td>30.7</td><td>14.0</td><td>41.8</td></tr>
<tr><td>KTP-RCxx-15</td><td>2015</td><td>RC</td><td>19</td><td>1,208.0</td><td>63.6</td><td>16.0</td><td>143.0</td></tr>
<tr><td>KTP-RCxx-16</td><td>2016</td><td>RC</td><td>55</td><td>6,363.0</td><td>115.7</td><td>31.0</td><td>242.0</td></tr>
<tr><td>KTP-Dxx-18</td><td>2018</td><td>DDH</td><td>16</td><td>918.2</td><td>57.4</td><td>16.5</td><td>105.0</td></tr>
<tr><td>KTP-RCxx-19</td><td>2019</td><td>RC</td><td>25</td><td>3,162.0</td><td>126.5</td><td>80.0</td><td>180.0</td></tr>
<tr><td>KTP-Dxx-20</td><td>2020</td><td>DDH</td><td>13</td><td>2,390.5</td><td>183.9</td><td>115.5</td><td>244.6</td></tr>
<tr><td>KTP-Dxx-21</td><td>2021</td><td>DDH</td><td>101</td><td>12,578.8</td><td>124.5</td><td>26.0</td><td>259.9</td></tr>
<tr><td>TOTAL</td><td></td><td></td><td>584</td><td>43,623.0</td><td></td><td></td><td></td></tr>
</table>
Note: x = drill hole numbering
</td></tr>
<tr><td>Drill sample recovery</td><td>• Method of recording and assessing core and chip sample recoveries and results assessed.
• Measures taken to maximise sample recovery and ensure representative nature of the samples.
• Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</td><td>• Recoveries were monitored and recorded into the sampling database. Drill recoveries for all mineralised intercepts exceeded 90% recovery.
• Overall core recovery for diamond drilling is >93%. The recent drilling (2021) had overall recovery of 92%.
• Overall recovery for RC drilling is >88%.
• There is no bias between sample recovery and grade.</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• All diamond core holes were logged lithologically using a coded logging system for rock type, grain size, colour, alteration and any other relevant observations. • Mineralised zones were identified from observation of mineralogy and lithological characteristics. Portable XRF (pXRF) analysis was conducted post drilling, to provide supporting geochemical data for non-sampled regions. Areas identified as geochemically anomalous by pXRF were further sampled. The pXRF was checked by use of certified referenced standards to ensure good quality data was produced. • Logging of RC samples was carried out on washed samples with geological characteristics recorded into a database. • All drilled metres [275 diamond drill holes (26,235 m), 164 RC drill holes (16,066 m), 15 rotary air blast (RAB) holes (348 m) and 130 rock-saw channels (975 m)] were logged regardless of presence of mineralisation.

Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.*
	• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*
	• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*
	• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*
	• *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.*
	• *Whether sample sizes are appropriate to the grain size of the material being sampled.*
		• Samples from diamond drill core were collected from sawn halves of identified zones of interest. Half core remains in the core tray for reference.
		• RC sampling: Samples were collected at 1 m intervals and split using a two-stage riffle splitter, running each sample through the splitter twice. Wet intervals were sub-sampled with scoop or spear. Samples were oven-dried at the laboratory if necessary.
		• Sample preparation technique is appropriate to the mineralisation style.
		• Splitting and sample preparation conducted on samples at the Zenit laboratory:
		  ○ Drying at 105^{O}C
		  ○ Crushing whole sample to ≤2mm
		  ○ Splitting of crushed sample to analyse
		  ○ Pulverising sub-sample to 80% passing ≤75µm
		 

Criteria	JORC Code explanation	Commentary
		  • Splitting and sample preparation conducted on samples at the ALS laboratory:

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td></td><td> 
</td></tr>
<tr><td>Quality of assay data and laboratory tests</td><td>• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.
• For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.
• Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</td><td>• QC procedures employed in all drill programmes prior to 2019 included the insertion of certified reference standards (1:22), blank samples (1:22), pulp and crush duplicates (2:22) to monitor the accuracy and precision of laboratory data when samples were submitted to ALS Global, Izmir. Insertion rate of 18%.
• In drill programmes since 2019, samples have been submitted in batches of 35 to ALS Global, Izmir, to include 1 blank, 1 CRM, 1 field duplicate and 1 pulp duplicate. Insertion rate of 11%.
<table>
<tr><th>Reconnaissance</th><th>Channel and Scout Drilling</th><th>Resource Definition Drill</th></tr>
<tr><td>Batch size 35</td><td>Batch size 35</td><td>Batch size 35</td></tr>
<tr><td>1 blank</td><td>1 blank</td><td>1 blank</td></tr>
<tr><td>1 CRM</td><td>1 CRM</td><td>1 CRM</td></tr>
<tr><td>1 field or 1 crush duplicate</td><td>1 field duplicate</td><td>1 field duplicate *</td></tr>
<tr><td>/</td><td>1 crush duplicate</td><td>1 crush duplicate</td></tr>
<tr><td>/</td><td>/</td><td>1 pulp duplicate</td></tr>
<tr><td>32 samples</td><td>31 samples</td><td>30 samples</td></tr>
<tr><td>8.57%</td><td>11.43%</td><td>14.29%</td></tr>
<tr><th colspan="3">QA/QC rate</th></tr>
</table>
• Samples submitted to Zenit Laboratory are in batches of 20 to include 1 blank, 1 CRM, 1 field duplicate and 1 internal Zenit Lab sample. Insertion rate of 16%.
• 10% of all drill samples are duplicated to submit to ALS Global, Izmir, as check samples at an external laboratory to confirm internal Zenit Laboratory results, whilst the laboratory expansion is taking place.</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
		• The overall quality of QA/QC procedures is considered adequate to ensure the validity of the data used for resource estimation purposes. • The handheld XRF is an Olympus Vanta. A series of 10 blank and certified reference material samples are used to check the quality of the pXRF data. These are scanned at a rate of 1 blank and 1 CRM for every 100 samples. The device does not require further calibration.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• All samples before 2019 were submitted to the internationally accredited laboratory of ALS Global in Izmir, Turkey (ISO 9001:2008 accredited). • Samples taken in 2019, 2020 and 2021 have been submitted to Zenit Laboratory at the Kiziltepe Mine, with 10% also selected for check assays at ALS Global in Izmir throughout the sampling programme. Samples are chosen from areas suspected to be mineralised. • Primary data, data entry procedures, data verification and data storage protocols are in line with industry best-practice. • Assay data has not been adjusted. • All samples (30g or 50g) are analysed using fire assay with AAS (Au-AA23) and aqua regia with ICP-AES (ME-ICP41). • Since early 2021 the Zenit Mine Laboratory has been undergoing expansion to deal with increased sample capacity. Initial verification of assay results from newly installed laboratory instruments is still undergoing internal review. To date, only partial check results from the external laboratory (ALS Izmir) have been received and reviewed. Initial checks have demonstrated that received assay data and associated QA/QC samples fall within expected levels. Evaluations of incoming check data for the Zenit and ALS laboratories will continue to be assessed through 2022 until results conclusively prove that all new instruments are appropriately calibrated and operating as intended.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• All collar positions were located initially by hand-held GPS (Garmin Etrex 10 and 30) and later surveyed by a professional surveyor using dGPS equipment. • Holes were surveyed using a standard Electronic Multi-shot Magnetic survey deviation tool (Devico PeeWee). All holes were surveyed in the 2021 drilling programme. • All coordinates are collected by dGPS, converted to the local grid and recorded in UTM ED50 35N. • Topographic data is collected by dGPS and regular surveys are completed to update the topography in areas being mined.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• At Kiziltepe, drill section spacing is typically 10 to 12.5 m with several holes often being collared from a single site. • 275 diamond drill holes (26,235 m), 164 RC drill holes (16,066 m), 15 rotary air blast (RAB) holes (348 m) and 130 rock-saw channels (975 m) were used to model the vein systems. In-pit grade control sampling data (over 101,830 m across 2,111 lines perpendicular to mineralisation) was also included in the geological modelling of veins and alteration. • Exploration targets are defined typically on sample drill collars spacing from 50m to a maximum of 200m, and must be supported by surface geological mapping, soil sampling and/or other forms of geochemical/geophysical verification. • Sample compositing has not been applied at the sampling stage. • Sample spacing and distribution is sufficient to establish the geological and grade continuity required for modelling and resource estimation.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	• The dip of the mineralisation for most of the deposit is 75-85° towards the northeast. • Local grade continuity follows the dip of the mineralisation for the entire deposit. All drilling is angled, thus intersecting the mineralisation obliquely.

Criteria	JORC Code explanation	Commentary
	• *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• No biases are expected from the drilling direction.
Sample security	• *The measures taken to ensure sample security.*	• Samples are stored at a secure company facility (Sindirgi Depot) in a clean area free of any contamination. • During drilling programmes pre-2019 samples were delivered to ALS Global, Izmir once a week by Aras Cargo, Sindirgi. The measures taken to ensure sample security for samples used for analysis and QA/QC include the following: 1. Chain of Custody is demonstrated by both the Company and ALS Global in the delivery and receipt of sample materials. 2. Upon receipt of samples, ALS Global delivers by email to the Company's designated Quality Control Manager, confirmation that each batch of samples has arrived, with its tamper-proof seal intact, at the allocated sample preparation facility. 3. Any damage to or loss of samples within each batch (e.g., total loss, spillage or obvious contamination), must also be reported to the Company in the form of a list of samples affected and detailing the nature of the problem(s). • In all drilling programmes since 2020, the majority of samples have been analysed by the laboratory at the Kiziltepe Mine. Samples are delivered securely from the drill site to the laboratory by the exploration team and are securely held at the laboratory in the fenced off and guarded mine site, with no unauthorised access.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Ariana has implemented QA/QC programmes covering all aspects of sample location and collection that meets or exceeds the currently accepted industry standards. • Ariana implemented a QA/QC programme based on international best practice during the initial exploration work and subsequent drilling programmes. The company has continued to review and refine the QA/QC programme as these exploration campaigns have progressed.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The Kiziltepe area is within one of three operating licences in the Sindirgi District of Balikesir Province in western Turkey owned by Zenit Madencilik San. ve Tic. A.S. ("Zenit") Joint Venture ("JV") with Proccea Construction Co. and Ozaltin Holding A.S. (23.5% owned by Ariana). Licence numbers: o Yolcupinar licence: 44830 o Coturtepe licence: 20065879 o Umurlar licence: 44828 • Royalties include the State Right payable to the Turkish Government and a Net Smelter Return ("NSR") royalty of up to 2.5% on production is payable to Franco-Nevada Corporation. • There are no known impediments to current operations.

Criteria	JORC Code explanation	Commentary
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• In 1990, Eurogold Madencilik A.S. conducted regional BLEG stream-sediment sampling around the Kiziltepe area. This led to the initial discovery of anomalous gold in the district. Follow-up work led to the identification of several gold-bearing low sulphidation epithermal veins. • The Kiziltepe deposit was then explored from 1991 by a Tuprag Madencilik Ltd. and Newmont Overseas Exploration Ltd. joint venture. In 1992 the licence area was acquired via state auction by Tuprag following the identification of areas of potential hydrothermal alteration, as defined in Landsat colour-composite imagery. The Kiziltepe and Kepez areas were drill-tested for the first time. • In 1994, Normandy La Source acquired the project from the joint venture. No further exploration was carried out and the licence areas were relinquished. • Newmont acquired the key licences via state auction in 2000. In 2002, Newmont undertook an exploration targeting exercise using Landsat structural interpretations and new BLEG stream-sediment geochemistry across the Sindirgi district, which led to the rediscovery of the epithermal veins. They completed an extensive programme of regional and detailed rock-chip sampling. Newmont completed 19 diamond drillholes in 2002/2003 on the Kiziltepe deposit (for 2,987.5 m). • By 2005 a total of 4,378 m of diamond drilling had been completed on the project before Galata Madencilik San. ve Tic. Ltd. This wholly owned subsidiary of Ariana acquired the licences in early 2005 from Newmont. • Since 2006 Ariana Resources and Zenit Madencilik have completed new mapping and sampling, including diamond drilling (HQ, NQ), reverse circulation drilling (RC), rotary air blast drilling (RAB), rock-saw channel sampling of vein outcrop and composite rock-chip sampling.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Kiziltepe area is dominated by Miocene volcanic rocks, comprising a series of dacitic volcanoclastic units, which host the low-sulphidation epithermal gold-silver style mineralisation. An upper dacitic ignimbrite unit, covers parts of the vein field. The dimensions of the en-echelon quartz veins vary and are typically between 100 m and 1200 m in strike length, although smaller vein systems are also present. The veins dip steeply and dip lengths are typically 100 m to 200 m. Vein widths are typically 2 m to 5 m, with some exceeding 7 m. A general 30° south plunge is noted on the veins in the Kiziltepe area.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* o *easting and northing of the drill hole collar* o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* o *dip and azimuth of the hole* o *down hole length and interception depth* o *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	• All drilling prior to 2021 has been reported. The table below summarises the 2021 HQ diamond drilling programme (UTM ED50 35N).

Criteria	JORC Code explanation	Commentary

Hole ID	X	Y	Z	Final Depth	Dip	Azi	Hole ID	X	Y	Z	Final Depth	Dip	Azi
KTP-D01-21	607647	4348911	379	210.7	44	54	KTP-D35-21	607437	4348051	384	71.5	51	195
KTP-D02-21	607108	4349327	373	115.8	58	195	KTP-D36-21	608099	4348532	345	140.2	51	252
KTP-D03-21	607075	4349350	366	110.7	61	195	KTP-D37-21	607431	4348061	384	107.0	61	235
KTP-D03A-21	607075	4349348	366	47.1	60	195	KTP-D38-21	607421	4348080	385	115.2	61	235
KTP-D04-21	607034	4349361	359	116.1	60	200	KTP-D39-21	608098	4348532	345	161.0	63	240
KTP-D05-21	606989	4349367	354	85.4	59	195	KTP-D40-21	607405	4348094	385	101.0	61	235
KTP-D06-21	607758	4349037	399	259.9	50	255	KTP-D41-21	608099	4348566	348	200.2	68	238
KTP-D07-21	607638	4348871	379	189.5	46	48	KTP-D42-21	606907	4348306	378	47.2	51	225
KTP-D07A-21	607639	4348872	379	165.5	49	48	KTP-D43-21	608097	4348590	351	171.5	52	241
KTP-D08-21	607353	4349210	431	128.1	63	210	KTP-D44-21	606840	4348308	380	100.0	52	225
KTP-D09-21	607656	4349098	427	222.2	51	245	KTP-D45-21	608098	4348590	351	214.5	66	237
KTP-D10-21	607634	4348868	379	190.5	51	64	KTP-D46-21	606770	4348436	391	131.3	46	45
KTP-D11-21	607830	4348841	355	136.6	59	245	KTP-D47-21	608084	4348620	352	211.2	63	230
KTP-D12-21	607566	4348931	384	199.9	55	55	KTP-D48-21	606691	4348507	399	152.3	44	45
KTP-D13-21	607831	4348840	355	140.2	51	215	KTP-D49-21	606804	4348341	380	75.6	46	45
KTP-D14-21	607476	4348989	389	200.0	55	35	KTP-D50-21	608021	4348690	352	170.0	49	230
KTP-D15-21	607809	4348877	360	66.3	51	265	KTP-D51-21	607202	4349344	390	179.0	48	210
KTP-D16-21	607809	4348877	360	125.0	63	265	KTP-D52-21	608073	4348651	355	221.2	61	234
KTP-D17-21	607410	4349034	392	169.0	51	45	KTP-D53-21	607248	4349305	390	203.5	52	205
KTP-D18-21	607274	4349265	390	204.2	45	45	KTP-D54-21	608074	4348650	355	250.2	64	230
KTP-D19-21	606939	4349776	409	64.7	70	225	KTP-D55-21	608051	4348671	354	226.2	60	236
KTP-D20-21	607318	4349100	391	233.0	45	45	KTP-D56-21	607113	4349341	360	153.7	61	195
KTP-D21-21	606940	4349776	409	80.2	81	225	KTP-D57-21	608057	4348649	353	200.2	58	235
KTP-D22-21	606906	4349815	406	100.1	80	225	KTP-D58-21	607066	4349366	360	145.0	60	205
KTP-D23-21	606883	4349834	407	101.1	72	290	KTP-D59-21	608067	4348641	353	166.6	48	235
KTP-D24-21	607329	4348179	385	68.5	56	270	KTP-D60-21	607794	4348849	350	104.5	59	235
KTP-D25-21	607314	4349399	390	91.0	50	225	KTP-D61-21	607800	4348842	350	103.7	53	235
KTP-D26-21	607340	4348166	385	49.9	57	245	KTP-D62-21	608132	4348515	354	226.1	70	260
KTP-D27-21	607334	4349423	390	116.1	49	225	KTP-D63-21	607804	4348882	360	130.8	47	235
KTP-D28-21	607351	4348142	386	47.5	47	245	KTP-D64-21	607828	4348838	355	122.1	48	231
KTP-D29-21	607351	4349446	389	152.1	49	225	KTP-D65-21	608133	4348483	356	191.2	61	255
KTP-D30-21	607371	4348127	385	53.5	56	245	KTP-D66-21	607881	4348799	349	151.5	46	233
KTP-D31-21	608086	4348426	334	151.6	66	268	KTP-D67-21	607794	4348913	364	126.9	44	235
KTP-D32-21	607375	4348100	386	47.5	61	245	KTP-D68-21	607274	4349265	390	178.9	45	75
KTP-D33-21	607392	4348090	386	53.0	61	245	KTP-D69-21	607699	4348953	384	121.1	75	45
KTP-D34-21	607437	4348052	384	76.0	56	235	KTP-D70-21	607780	4348862	350	111.4	75	55

Criteria	JORC Code explanation	Commentary

Hole ID	X	Y	Z	Final Depth	Dip	Azi
KTP-D71-21	606931	4349369	348	37.4	50	195
KTP-D72-21	606904	4349373	346	32.2	50	195
KTP-D73-21	606880	4349380	342	34.5	50	195
KTP-D74-21	606833	4349400	333	62.2	48	195
KTP-D75-21	606853	4349382	339	26.2	47	195
KTP-D75A-21	606854	4349382	339	26.0	51	195
KTP-D76-21	606920	4349386	345	75.6	60	195
KTP-D77-21	606970	4349382	350	101.0	60	195
KTP-D78-21	606872	4349403	338	95.2	66	198
KTP-D79-21	606938	4349810	414	65.2	45	225
KTP-D80-21	606939	4349811	414	97.7	59	225
KTP-D81-21	606902	4349855	416	106.8	61	225
KTP-D82-21	606881	4349833	407	151.6	51	225
KTP-D83-21	607220	4349528	340	82.3	45	225
KTP-D84-21	607255	4349492	340	78.1	47	225
KTP-D85-21	607256	4349491	340	106.0	42	180
KTP-D86-21	607185	4349564	340	88.0	48	225
KTP-D87-21	607150	4349600	340	71.0	56	225
KTP-D88-21	607128	4349626	340	80.2	62	255
KTP-D89-21	606982	4349772	415	100.8	58	225
KTP-D90-21	606981	4349771	415	85.6	46	228
KTP-D91-21	606844	4349877	416	85.9	44	225
KTP-D92-21	606807	4349913	424	56.2	43	225
KTP-D93-21	606768	4349868	425	165.0	50	225
KTP-D94-21	606830	4349934	426	123.1	61	225
KTP-D95-21	606830	4349934	426	115.9	45	225
KTP-D96-21	606872	4349905	421	127.8	62	225
KTP-D97-21	606871	4349904	421	130.6	44	225
KTP-D98-21	607084	4349676	345	82.0	66	65

Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some*	• Metal equivalents have not been used. • Significant down-hole intercepts calculated for the Kiziltepe 2021 drilling programme, using a 1.0 g/t Au minimum cut-off and allowing for 0.5 m internal dilution:

typical examples of such aggregations should be shown in detail.

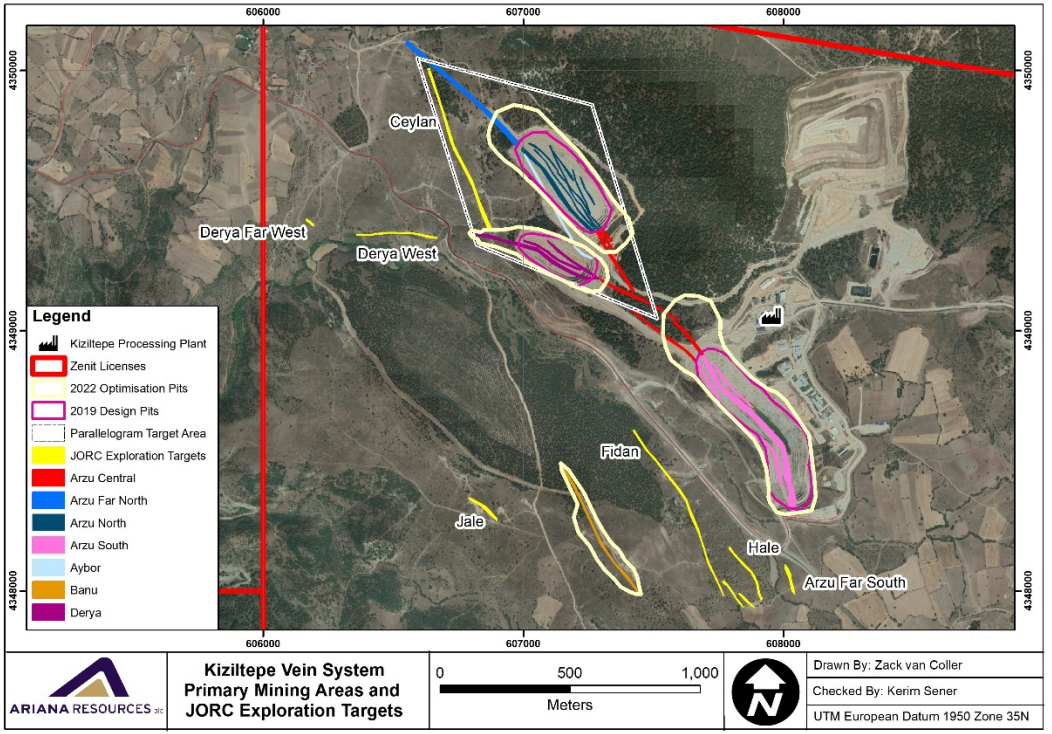
- *The assumptions used for any reporting of metal equivalent values should be clearly stated.*

Hole ID	From	To	Intercept Width	Au g/t		Hole ID	From	To	Intercept Width	Au g/t
KTP-D01-21	47.7	51.6	3.9	3.31		KTP-D25-21	37.8	39.9	2.1	2.31
	63.7	65.8	2.1	2.68			69.5	70.5	1.0	2.20
	67.0	70.5	3.5	3.44			77.5	83.7	6.2	1.97
KTP-D02-21	0.5	2.2	1.7	1.43		KTP-D26-21	42.9	46.1	3.2	3.65
	73.7	77.9	4.2	6.07		KTP-D27-21	73.3	76.3	3.0	2.07
	80.3	81.4	1.1	1.35			90.5	91.8	1.3	2.71
	83.0	86.5	3.5	2.01			101.1	102.1	1.0	1.09
KTP-D03-21	86.1	90.2	4.1	2.51			109.9	110.9	1.0	2.87
	104.7	105.7	1.0	3.13		KTP-D28-21	20.5	23.1	2.6	5.08
KTP-D03A-21	20.2	21.2	1.0	1.46		KTP-D29-21	55.5	56.5	1.0	1.06
	28.3	35.4	7.1	2.13			100.5	101.5	1.0	1.16
KTP-D04-21	43.9	46.0	2.1	3.31			109.5	111.1	1.6	3.29
	47.1	48.1	1.0	1.65			112.4	113.4	1.0	3.17
	62.1	64.3	2.2	1.04			114.5	116.6	2.1	4.70
	68.5	71.0	2.5	6.07			141.3	142.3	1.0	1.29
KTP-D05-21	39.0	40.0	1.0	1.41		KTP-D30-21	46.6	49.3	2.7	2.28
	44.7	51.8	7.1	2.23		KTP-D31-21	60.1	61.3	1.2	1.38
	53.8	54.8	1.0	1.65		KTP-D32-21	16.9	19.8	2.9	3.36
KTP-D07-21	34.7	41.5	6.8	1.37		KTP-D33-21	37.5	41.5	4.0	1.68
KTP-D07A-21	157.6	158.6	1.0	1.03		KTP-D34-21	44.5	45.5	1.0	1.33
KTP-D08-21	44.0	45.0	1.0	1.11			49.0	52.6	3.6	2.75
	95.6	96.6	1.0	16.14		KTP-D35-21	53.9	55.0	1.1	2.37
	110.5	112.5	2.0	2.94		KTP-D36-21	104.4	105.4	1.0	1.57
	115.7	119.0	3.3	3.31			126.3	127.8	1.5	2.07
KTP-D10-21	135.2	142.5	7.3	2.68		KTP-D37-21	85.6	87.3	1.7	1.33
KTP-D14-21	66.9	67.9	1.0	1.28		KTP-D38-21	98.9	103.0	4.1	3.58
	159.0	160.0	1.0	6.22		KTP-D39-21	152.0	153.0	1.0	1.43
KTP-D15-21	46.7	48.3	1.6	5.12		KTP-D40-21	85.6	88.0	2.4	2.61
KTP-D17-21	63.5	67.0	3.5	3.03		KTP-D44-21	9.5	10.5	1.0	1.24
KTP-D18-21	110.2	113.1	2.9	3.88		KTP-D50-21	142.8	143.9	1.2	1.49
KTP-D19-21	38.9	41.5	2.6	3.02		KTP-D55-21	209.2	210.2	1.0	1.00
	42.6	43.6	1.0	1.01		KTP-D57-21	165.1	166.1	1.0	2.08
KTP-D20-21	167.5	168.6	1.1	1.30			168.1	169.1	1.0	1.21
KTP-D21-21	11.3	12.5	1.2	1.19		KTP-D59-21	137.4	141.2	3.8	2.58
	15.4	16.4	1.0	1.23		KTP-D61-21	83.1	85.8	2.7	1.33
	29.0	30.9	1.9	2.49		KTP-D63-21	38.0	39.0	1.0	5.45
	52.9	65.0	12.1	1.97			107.5	109.0	1.5	2.33
	74.0	77.4	3.4	1.59		KTP-D64-21	25.5	26.5	1.0	2.84
KTP-D22-21	20.6	21.6	1.0	2.99			66.5	67.5	1.0	1.52
	49.2	56.4	7.2	2.16		KTP-D65-21	174.2	175.2	1.0	1.30
	62.9	66.5	3.6	1.55		KTP-D66-21	119.0	120.2	1.2	1.63
	70.0	79.5	9.5	1.65		KTP-D67-21	64.9	65.9	1.0	1.36
	92.2	94.4	2.2	2.20		KTP-D68-21	148.0	149.0	1.0	2.18
KTP-D23-21	47.3	49.7	2.4	1.04						
	51.1	66.0	14.9	2.68						
	94.3	95.3	1.0	1.37						

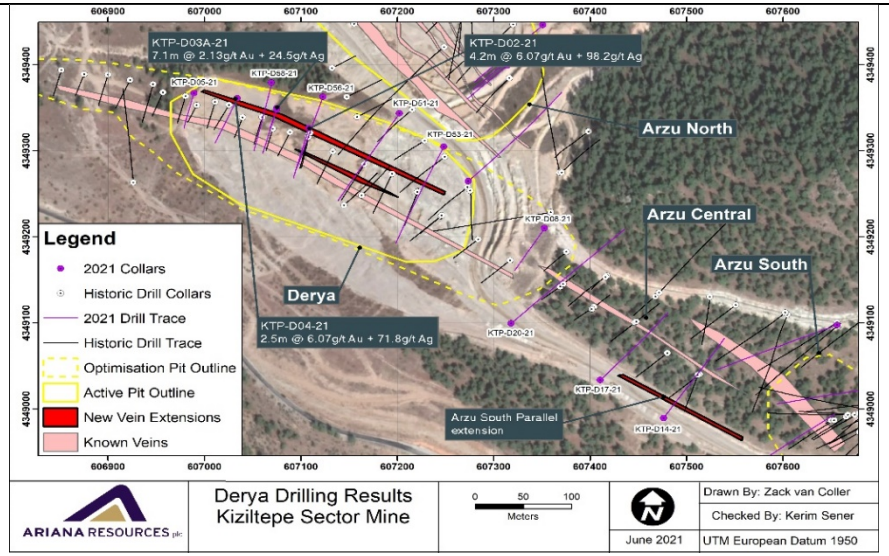
Criteria	JORC Code explanation	Commentary

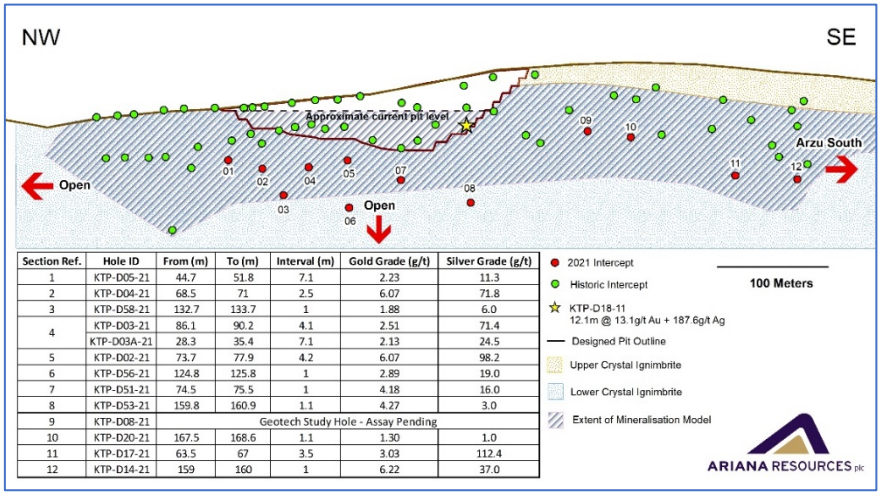
Hole ID	From	To	Intercept Width	Au g/t
KTP-D71-21	24.4	26.7	2.3	2.86
KTP-D73-21	22.0	23.4	1.4	1.54
KTP-D75-21	13.0	15.8	2.8	1.55
KTP-D75A-21	8.0	9.4	1.4	7.53
KTP-D76-21	54.6	60.7	6.1	2.00
KTP-D77-21	79.2	83.6	4.4	1.32
	90.8	91.9	1.1	3.43
KTP-D78-21	80.4	81.4	1.0	1.80
KTP-D80-21	53.2	54.5	1.3	3.20
	59.4	60.4	1.0	6.73
	61.5	62.5	1.0	1.04
	64.5	65.5	1.0	1.04
KTP-D81-21	65.0	71.9	6.9	2.70
	76.5	77.5	1.0	1.22
KTP-D83-21	35.6	36.7	1.1	2.05
KTP-D86-21	18.9	21.0	2.1	1.70
KTP-D87-21	2.8	3.9	1.1	1.87
KTP-D88-21	20.2	22.8	2.6	2.27
KTP-D89-21	68.4	69.6	1.2	1.42
	70.9	72.6	1.7	1.47
KTP-D90-21	34.0	35.5	1.5	5.43
	40.7	43.3	2.6	1.72
	52.0	53.6	1.6	1.99
	63.4	65.6	2.2	2.25
KTP-D91-21	26.2	28.7	2.5	1.56
	60.4	61.4	1.0	1.43
KTP-D94-21	79.2	80.4	1.2	2.13
KTP-D95-21	63.8	64.8	1.0	2.39
KTP-D96-21	92.0	93.0	1.0	5.00
	94.1	105.5	11.4	3.67
KTP-D97-21	71.7	72.9	1.2	2.62

Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• Down hole length, true width not known. All drilling has previously been reported and modelled in three-dimensions accordingly.

Criteria	JORC Code explanation	Commentary
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	KIZILTEPE  Derya

Criteria	JORC Code explanation	Commentary

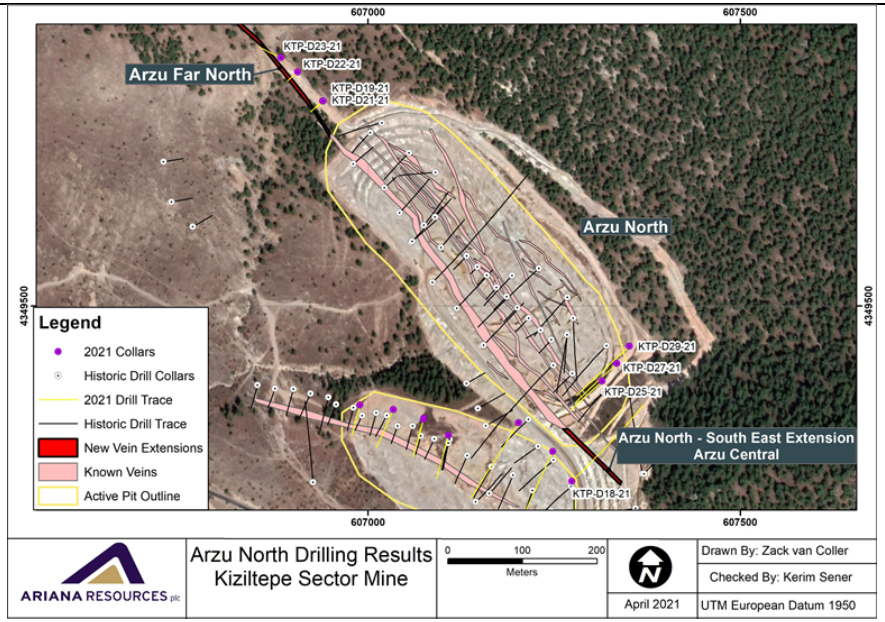


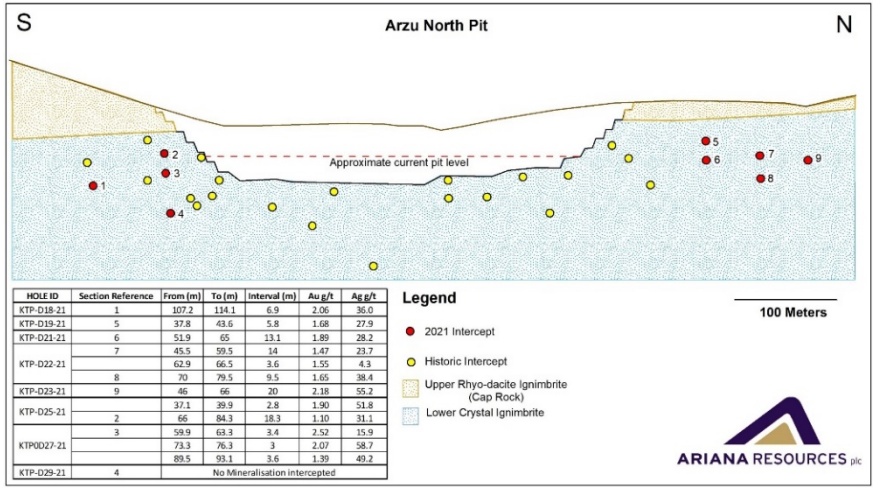


Section Ref.	Hole ID	From (m)	To (m)	Interval (m)	Gold Grade (g/t)	Silver Grade (g/t)
1	KTP-D05-21	44.7	51.8	7.1	2.23	11.3
2	KTP-D04-21	68.5	71	2.5	6.07	71.8
3	KTP-D58-21	132.7	133.7	1	1.88	6.0
4	KTP-D03-21	86.1	90.2	4.1	2.51	71.4
	KTP-D03A-21	28.3	35.4	7.1	2.13	24.5
5	KTP-D02-21	73.7	77.9	4.2	6.07	98.2
6	KTP-D56-21	124.8	125.8	1	2.89	19.0
7	KTP-D51-21	74.5	75.5	1	4.18	16.0
8	KTP-D53-21	159.8	160.9	1.1	4.27	3.0
9	KTP-D08-21	Geotech Study Hole - Assay Pending				
10	KTP-D20-21	167.5	168.6	1.1	1.30	1.0
11	KTP-D17-21	63.5	67	3.5	3.03	112.4
12	KTP-D14-21	159	160	1	6.22	37.0

Arzu North

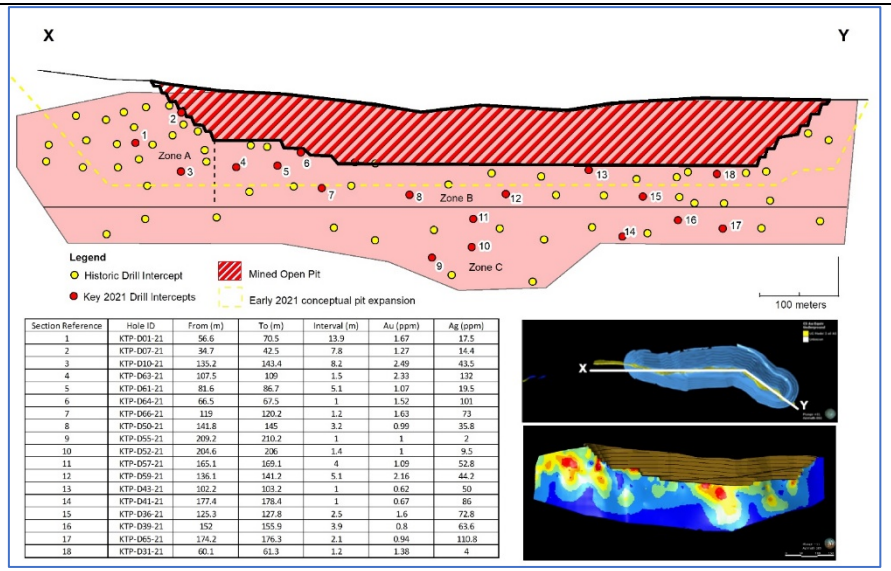
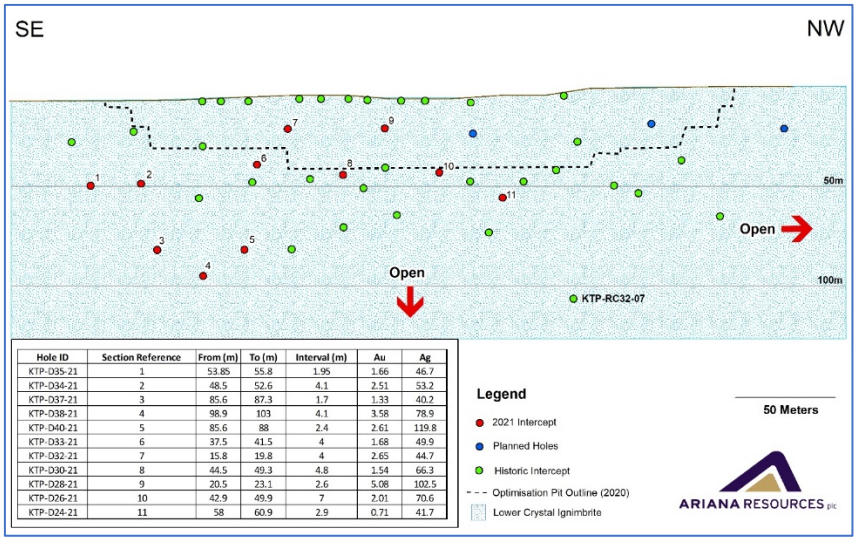
Criteria	JORC Code explanation	Commentary

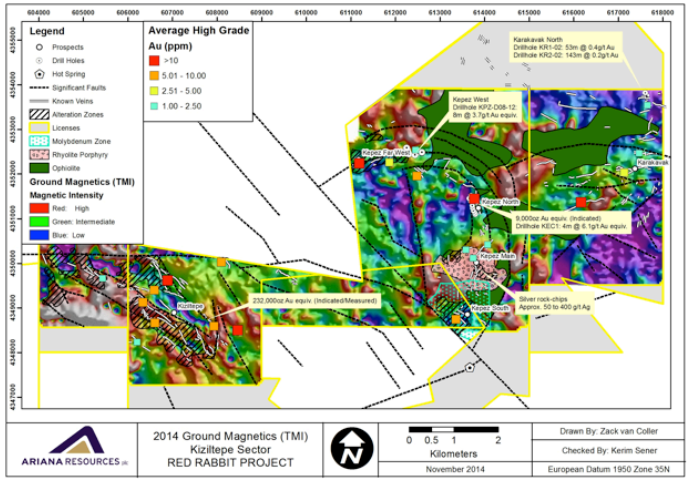




HOLE ID	Section Reference	From (m)	To (m)	Interval (m)	Au g/t	Ag g/t
KTP-D18-21	1	107.2	114.1	6.9	2.06	36.0
KTP-D19-21	5	37.8	43.6	5.8	1.68	27.9
KTP-D21-21	6	51.9	65	13.1	1.89	28.2
KTP-D22-21	7	45.5	59.5	14	1.47	23.7
		62.9	66.5	3.6	1.55	4.3
	8	70	79.5	9.5	1.65	38.4
KTP-D23-21	9	46	66	20	2.18	55.2
KTP-D25-21		37.1	39.9	2.8	1.90	51.8
	2	66	84.3	18.3	1.10	31.1
KTP0D27-21	3	59.9	63.3	3.4	2.52	15.9
		73.3	76.3	3	2.07	58.7
		89.5	93.1	3.6	1.39	49.2
KTP-D29-21	4	No Mineralisation intercepted				

Arzu South

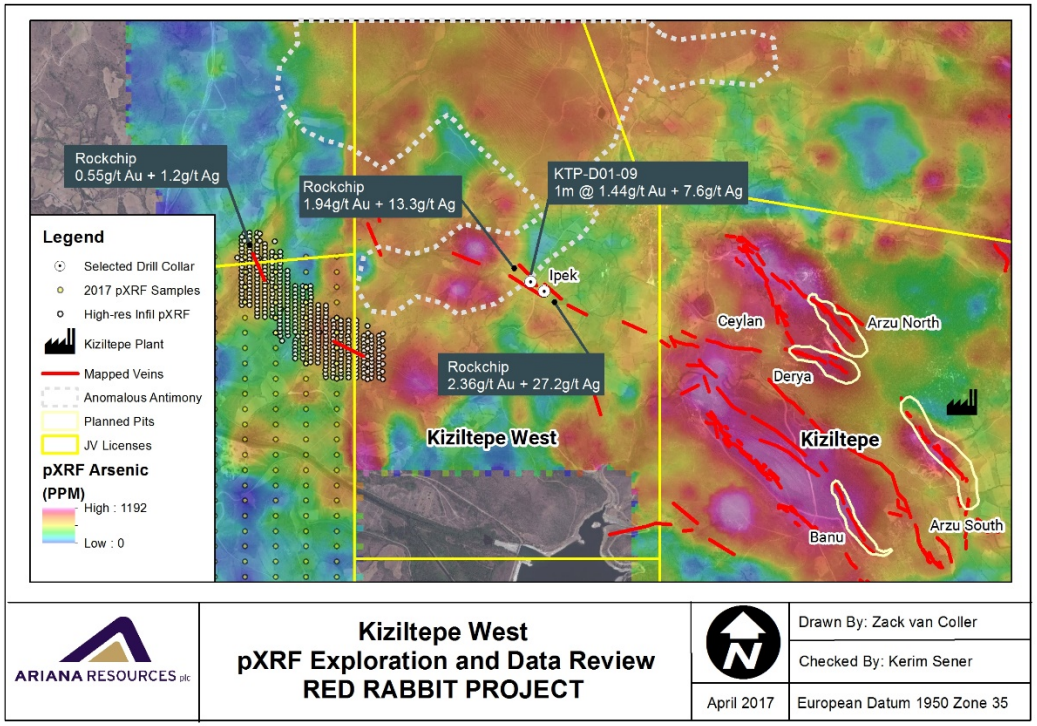
Criteria	JORC Code explanation	Commentary
		Banu  
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable,*	• Intercepts depths stated in the drill hole information but not stated in the data aggregation methods section are lower grade intersections. Widths of intercepts are stated.

Criteria	JORC Code explanation	Commentary
	representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• Ariana completed IP/resistivity geophysics from 2008 to 2010 over the Kiziltepe vein field. These survey results were initially modelled in 2D and then later as 3D inversions in 2012. The results highlighted several anomalous areas representing potential mineralisation at depth and beneath cover. • In October 2014, Ariana commenced a ground magnetic survey over the Kiziltepe Sector JV licences (totalling 50 km^2). The geophysical survey was undertaken by the Ariana field team utilising two backpack magnetometers with continuous readings undertaken along N-S oriented lines spaced 200 m apart.  • Prior to the initiation of the geophysical survey the Company collected approximately 15,000 soil samples across the JV licence area (totalling 100 km^2) and analysed these using a portable X-ray fluorescence (pXRF) device. The soil samples were collected every 50 m along N-S oriented lines spaced 100 m apart. The resulting XRF geochemical maps have provided an unprecedented amount of data coverage for key trace elements (e.g. antimony, arsenic, copper, lead, manganese, molybdenum and zinc) that can be used as vectors to gold and silver mineralisation.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially*	• Substantial at surface and near surface exploration targets exist within the immediate and surrounding areas of the Kiziltepe Sector. These generally exist as strike extensions of known gold bearing quartz veins that have not been drill tested adequately or are currently being drill tested according to exploration priority. Notable targets include; 1) the 600 m vein extension between Arzu South and Arzu North, where geochemical, drilling and geophysical evidence suggests vein continuity to exist under a 60-100 m thick rhyo-dacite cap rock; 2) the 600 m strike extension of Arzu North, where geological mapping and surface rock-chip sampling and recent drilling shows strong geological continuity of gold bearing quartz veins; and 3) the 700 m Ceylan vein structure as defined by three early stage exploration drill holes, surface rockchip sampling and geological mapping. These three major exploration zones are combined to form the Company's Parallelogram Target, where significant exploration is currently underway.

Criteria	JORC Code explanation	Commentary
	sensitive.	• Detailed exploration targets:

KIZILTEPE EXPLORATION TARGETS Dec-21		Density	Min mass	Max mass	Average Value Au Min	Au Max	Ag Min	Ag Max	Material Content Au Min	Au Max	Ag Min	Ag Max
		g/cm3	t	t	g/t	g/t	g/t	g/t	oz	oz	oz	oz
	Arzu Far South	2.50	30,000	35,000	0.40	0.70	47.00	42.00	410	750	48,480	43,330
	Ceylan	2.50	150,000	155,000	1.75	1.90	13.00	40.00	8,600	9,220	62,750	193,090
	Derya West	2.50	110,000	115,000	0.70	1.20	34.00	48.00	2,550	4,150	120,530	170,160
	Derya Far West	2.50	1,000	1,100	0.40	0.50	5.00	6.00	15	20	170	200
	Fidan	2.50	330,000	350,000	1.05	1.40	20.00	26.00	11,740	15,220	217,420	282,650
	Hale 1	2.50	254,000	254,300	0.80	6.80	12.00	112.00	6,540	55,570	101,320	915,230
	Hale 2	2.50	8,300	8,500	1.00	1.50	5.00	18.00	280	410	1,340	4,890
	Hale 3	2.50	15,900	16,100	0.95	2.40	5.00	24.00	490	1,210	2,570	12,330
	Ipek 1	2.50	13,900	14,100	0.90	0.90	5.00	12.00	405	420	2,250	5,400
	Ipek 2	2.50	47,700	47,900	0.60	1.20	10.00	27.00	920	1,850	15,370	41,500
	Jale	2.50	26,100	26,200	0.80	1.05	5.00	6.00	670	900	4,210	5,050
	TOTAL	**2.50**	**986,900**	**1,023,200**	**1.25**	**3.40**	**22.00**	**64.00**	**32,620**	**89,720**	**576,410**	**1,673,830**

KARAKAVAK EXPLORATION TARGETS Jan-22		Density	Min mass	Max mass	Average Value Au Min	Au Max	Ag Min	Ag Max	Material Content Au Min	Au Max	Ag Min	Ag Max
		g/cm3	t	t	g/t	g/t	g/t	g/t	oz	oz	oz	oz
	Main 1	2.50	84,300	84,320	1.10	1.60	2.00	5.00	8,200	11,630	14,905	37,270
	Main 2	2.50	72,800	72,820	0.40	1.10	2.00	5.00	935	2,575	4,680	11,700
	South	2.50	38,000	38,100	0.50	2.30	2.00	5.00	635	2,850	2,450	6,120
	TOTAL	**2.50**	**195,100**	**195,240**	**0.90**	**1.45**	**2.00**	**5.00**	**9,770**	**17,055**	**22,035**	**55,090**

Criteria	JORC Code explanation	Commentary
		

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	• The Kiziltepe resource data was stored in Datashed. Data has now been transferred to MX Deposit, the database management system used by the company, which started in Q3 2021. • Data was logged onto field sheets which were then entered into the data system by data capture technicians. • Data was validated on entry into the database, or on upload from the earlier MS Access databases, by a variety of means including the enforcement of coding standards, constraints and triggers. These are features built into the data model that ensure data meets essential standards of validity and consistency. • Laboratory data has been received in digital format and uploaded directly to the database. • Original data sheets and files have been retained and are used to validate the contents of the database against the original logging. • Zenit Madencilik and independent consultants such as Tetra Tech and Odessa Resources Pty Ltd performed a visual validation by reviewing drill holes

Criteria	JORC Code explanation	Commentary
		on section and by subjecting drill hole data to data auditing processes in specialised mining software (e.g. checks for sample overlaps etc.). • Independent consultants Tetra Tech performed a visual validation by reviewing drill holes on section in Datamine Studio RM mining software. • Ariana Resources performed validation checks in Leapfrog GEO and EDGE v. 6.0.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• Ariana staff have visited the site on numerous occasions, and supervised all drilling, sampling and other operations at all times in order to introduce appropriate logging, sampling and drilling protocols. • Zack van Coller (BSc) of Ariana Resources has been involved in all work on the project since 2010. • Ruth Bektas (BSc, CGeol, EurGeol) of Ariana Resources is acting as the Competent Person for this study, and has been on site during mining, active drilling programmes and other exploration activities. • Ariana Resources (Galata Madencilik) and Zenit Madencilik field staff are permanently on site.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• Veins in the Kiziltepe prospect, comprise WNW-NNW trending, sub-parallel, low sulphidation style veins and related stockworks are hosted by dacite and dacitic pyroclastic units. • At Arzu North and Banu the veins appear to bifurcate. • Interpretations of geological surfaces are derived from 3D modelling of drill hole and mine grade control data in Leapfrog GEO and EDGE v. 6.0. • Interpolation and wireframe modelling of the mineralised zones in Leapfrog EDGE was completed using a 0.25 g/t and 1.0 g/t Au modelling cut-off grade (CoG) for alteration and veins, respectively. Where continuity was not established between sections, the strike extrapolation was limited both manually (wireframes) and statistically (interpolations). The continuity of the various structures is reflected in the Mineral Resource classification.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	Arzu South • In plan orientation, the deposit is approximately 900 m long and 2 m to 10 m metres wide. • One primary lode trending 320° and 180 m northerly-trending southern section separated from main lode by interpreted fault. • Lodes vary from 2 m to 10 m in thickness with main lode averaging 5 m thickness. • Mineralisation has vertical extents ranging between 385 metres above reference level (mRL) and 150 mRL. Arzu North • The deposit is approximately 700 m long and comprises several steeply dipping parallel and partly overlapping 310° trending lodes. • Mineralisation has vertical extents ranging between 405 mRL and 220 mRL. Derya

Criteria	JORC Code explanation	Commentary
		• The deposit is approximately 500 m long and comprises several steep north dipping sub-parallel and partly overlapping, 290° trending lodes. • Mineralisation has vertical extents ranging between 390 mRL and 140 mRL (average 100 m down dip distance). Arzu Central • The deposit is approximately 350 m long and comprises several vertical 305° trending lodes. • Mineralisation has vertical extents ranging between 410 mRL and 250 mRL. Banu • The deposit extends over a strike length of 600 m and comprises a single subvertical 330° trending lode. The lode is disrupted by possible fault/shear zone that breaks up the lode into several sub-parallel segments. • Mineralisation has vertical extents ranging between 395 mRL and 245 mRL. Other Veins • There are extensions along strike to the main veins listed above. There are also other less well-defined veins between these, such as Ceylan at >400 m length. • Vertical lodes with a general 320° trend. • Mineralisation has vertical extents ranging between 400 mRL and 200 mRL.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious*	• Drill hole sample data was constrained within: o Systematic vein interpolation models based on manually isolated economic drill intercepts, where all the Kiziltepe vein were modelled using Seequent's "Vein System" model tool to define grade driven domains. Economic intercepts were defined by nominal 0.5 g/t Au, 1.0 g/t Au and 2.0 g/t Au modelling cut offs (depending on vein). o Lower grade or periphery intercepts were domained as Alteration Halos using standard interpolation modelling methods, then clipped using the vein model volumes to create an interlocking vein and alteration model. • Compositing was completed in Leapfrog EDGE using a 1 m best fit routine. Hard domain boundaries were applied to both deposit models, which forced all samples to be included in one of the composites by adjusting the composite length, while keeping it as close as possible to the selected intervals of 1m. • An analysis of the grade distribution characteristics of the domain composites for each deposit was undertaken. In each case one of the following was identified: o Noticeable high-grade inflection points on log-probability graphs. o Significant gaps on disintegration plots. • Top cuts were applied for Au and Ag, specific to each vein and alteration domain.

Criteria	JORC Code explanation	Commentary

elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).

- *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.*
- *Any assumptions behind modelling of selective mining units.*
- *Any assumptions about correlation between variables.*
- *Description of how the geological interpretation was used to control the resource estimates.*
- *Discussion of basis for using or not using grade cutting or capping.*
- *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*

	Vein		Alteration	
	g/t Au	g/t Ag	g/t Au	g/t Ag
Arzu South	20	400	10	200
Arzu North	20	400	5	200
Derya	20	400	5	100
Banu	8	200	no	no

- Isotropic search ellipses and ranges were used. The variable orientation function (Dynamic anisotropy) was used in Leapfrog to better represent the grade distribution.
- The block models were constructed using a 1 mE by 5 mN by 5 mRL parent block size.
- The block model is a non-rotated conventional block model with no sub-blocking used.
- Estimation was carried out using inverse distance weighted squared (IDWS) at the parent block scale using a three-pass estimation using all available composites within the hard boundary. The Inverse Distance Weighted Squared (IDWS) method was selected as the most suitable method of interpolation in this deposit, as there is not sufficient nugget affect to warrant an IDWC method. Ordinary Kriging was not used as satisfactory variograms were not obtainable.
- Samples for each block were limited:

		Boundary	Pass	Max	Int	Med	Min samples	Max samples	Octant	DH Limit
RESOURCES	**Alteration halo**	Hard	1	25	12	5	2	20	1 to 7	2
		Hard	2	50	25	10	2	20	1 to 7	2
		Hard	3	70	40	20	2	20	no	2
	Arzu South, Arzu North, Derya	Hard	1	30	15	5	5	20	1 to 4	4
		Hard	2	60	30	10	5	20	1 to 4	4
		Hard	3	120	80	20	5	20	no	2
		Hard	4	300	150	30	2	20	no	no
	Banu	Hard	1	30	15	5	3	20	no	4
		Hard	2	60	30	10	3	20	no	2
		Hard	3	120	80	20	3	20	no	2
		Hard	4	300	150	30	2	20	no	no

- Check estimates were carried out and the final estimate was compared to previous estimates and production figures.
- Gold and silver have been estimated as mining products. No by-products or deleterious elements have been modelled.
- In general, gold and silver show a positive correlation with each other.
- A visual validation between drillhole data, composite data and block model data is carried out. The estimate was also compared to mining reconciliation data.
- Reserves were estimated with the same parameters as above, but with soft boundaries with a 1m range applied to the vein domains of Arzu South, Arzu North and Derya, based on production data and reconciliation studies.

Criteria	JORC Code explanation	Commentary
		RESERVES **Alteration halo**: as in resource parameters **Arzu South, Arzu North, Derya**: Soft, 1, 30, 15, 5, 5, 20, 1 to 4, 4 / Soft, 2, 60, 30, 10, 5, 20, 1 to 4, 4 / Soft, 3, 120, 80, 20, 5, 20, no, 2 / Soft, 4, 300, 150, 30, 2, 20, no, no **Banu**: as in resource parameters • The application of soft boundaries with a 1m range to the named above quartz vein domains only, resulted in a more accurate overall estimated resource; when compared to the Zenit mine production models. This therefore provided a more accurate model for future production forecast once the revised models are applied to further economic studies, such as an open-pit optimisation analysis.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Tonnes have been estimated on a dry basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• Alteration and exploration resources have been modelled above a 0.2 g/t Au cut-off grade and reported above a 0.75 g/t Au cut-off grade. Veins have been modelled above a 1.0 g/t Au cut-off and reported above a 1.0 g/t Au cut-off grade. Cut-off grade calculated from assumptions on mining and processing cost, metallurgical recovery and metals prices.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• No mining factors (i.e., dilution, ore loss, recoverable resources at selective mining block size) have been applied to the original resource. • It is assumed that the remaining resources will be open pit operations with ore material trucked to the Kiziltepe Mine carbon in leach (CIL) plant for gold and silver extraction.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining*	• No metallurgical assumptions have been built into the resources. However, metallurgical test work conducted for the Feasibility Study (Tetra Tech DFS) concluded that recoveries of up to 87% and 64% for gold and silver respectively were possible. • The operating Kiziltepe plant has life of mine (LOM) average recoveries of 92% and 75% for gold and silver respectively.

Criteria	JORC Code explanation	Commentary
	reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• The Competent Person is not aware of any known environmental or permitting issues on the projects. • Statutory forestry permits have been approved by the Prime Ministry and issued by the Department of Forestry for the Kiziltepe Sector.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk*	• Density is seen to increase with depth, in the sulphide zone, as seen in the Arzu South vein with densities varying from 2.4 to 2.8 g/cm^3. • Density modelling at Kiziltepe was evaluated from 4,794 drill core measurements taken from diamond drilling between 2016 and 2021. The data was domained according to the various model volumes. Statistical averages within each domain were used as a representative value of density. Further work is needed to code the density to each model to better show density variations to depth and along strike, rather than applying statistical averages. • For modelling purposes, average specific gravity values ranging from 2.4 to 2.6g/cm^3 were used for veins and 2.4 to 2.5g/cm^3 for alteration halos based on specific gravity measurements on core samples and operational data from the Kiziltepe Mine.

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td>material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.
• Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</td><td>
<table>
<tr><th>Vein Area</th><th>Average density applied (g/cm^3)</th></tr>
<tr><td>Arzu South</td><td>2.60</td></tr>
<tr><td>Arzu South Alteration Halo</td><td>2.50</td></tr>
<tr><td>Arzu North Vein</td><td>2.45</td></tr>
<tr><td>Arzu North Alteration Halo</td><td>2.40</td></tr>
<tr><td>Derya Vein</td><td>2.55</td></tr>
<tr><td>Derya Alteration Halo</td><td>2.50</td></tr>
<tr><td>Banu Vein</td><td>2.50</td></tr>
<tr><td>Exploration Targets</td><td>2.50</td></tr>
<tr><td>Waste Rock</td><td>2.53</td></tr>
</table>
</td></tr>
<tr><td>Classification</td><td>• The basis for the classification of the Mineral Resources into varying confidence categories.
• Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).
• Whether the result appropriately reflects the Competent Person's view of the deposit.</td><td>• The Mineral Resource is classified and reported in accordance with the 2012 JORC code as Measured, Indicated and Inferred. The classification is determined based on search pass spacing, with increasing confidence with proximity to drill holes. These are given in more detail under section "Estimation and modelling techniques".
• Measured Mineral Resources have been defined by Pass 1 (up to 30 m x 15 m x 5 m) depending on the vein characteristics and drill hole spacing.
• Indicated Mineral Resources have been defined by Pass 2 (up to 60 m x 30 m x 10 m) depending on the vein characteristics and drill hole spacing.
• Inferred Mineral Resources have been defined in areas beyond the Indicated search radius to the limits of the resource wireframes in Pass 3 (up to 120 m x 80 m x 20 m). Any material beyond Pass 3 but estimated by a 300 m x 150 m x 30 m pass was also classified as Inferred. However, the expansion of Inferred resources beyond pass 3 were manually constrained by surface and down-hole geochemistry and geological mapping.</td></tr>
<tr><td>Audits or reviews</td><td>• The results of any audits or reviews of Mineral Resource estimates.</td><td>• The IDWS model was validated against the input drill hole composites for each vein model by visual comparisons carried out against the composited drill hole samples and against the modelled block grade.
• The Zenit Mining team conducted their own internal MRE estimation of Kiziltepe, using both their own and Ariana's input parameters and domain models, but using different software (Datamine Studio RM). Results between the Ariana and Zenit estimations were peer-reviewed and discussed until a level of agreement was met between both parties in terms of correct data interpretations.</td></tr>
<tr><td>Discussion of relative accuracy/ confidence</td><td>• Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of</td><td>• The Mineral Resource estimate at the global level for the Measured and Indicated Resources based on the estimation technique and data quality and distribution is considered to be adequate for the classification. Inferred Resources have a lower level of confidence outside of this range, and the Exploration Target is categorised separately from Mineral Resources.
• The Mineral Resource estimate was compared to production data and appropriately adjusted to improve accuracy (introduction of soft boundaries with 1m range), allowing for the introduction of various mining factors (e.g. internal and external dilution). Overall, the 2022 MRE model reconciled with an average of 7% mass variance, 10% gold variance and 7% silver variance, which is deemed acceptable to suit Zenit's future mine planning studies.
•</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
	the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	

Mine Area	Mass variance %	Gold variance %	Silver variance %
Arzu South	8	3	4
Arzu North	3	9	11
Derya	9	19	6
Average	**7**	**10**	**7**

Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	• *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* • *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	• The Measured and Indicated resources for the Kiziltepe area, as reported here, based on data to end November 2021, were used as the basis for Ore Reserves. • The Ore Reserves, including adjustment for ore loss and dilution factors are included within declared Mineral Resources.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• See above for site visits of Competent Person for resource estimation. • Kadir Turan (BSc) of Zenit Madencilik is the Chief Mine Planning Engineer responsible for the Reserves, optimisation study and mine design. • Kerim Sener BSc (Hons), MSc, PhD, Managing Director of Ariana Resources plc, and a Competent Person as defined by the JORC Code is acting as the Competent Person for the Reserves part of this study.
Study status	• *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* • *The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable*	• The optimization and mine scheduling study was completed by the head Mine Planning Engineer of Ariana Resources' JV partner, Zenit Madencilik using Datamine Studio OP v2.10.200.0 and Auto scheduler plugin, as well as Studio NPVS v.1.0.51.0 for optimisation. • Kiziltepe is an existing and currently operating mine. • A mine plan that is technically achievable and economically viable has been identified, with an

Criteria	JORC Code explanation	Commentary
	and economically viable, and that material Modifying Factors have been considered.	open pit mine life of approximately 2-3 years for Kiziltepe, not including satellite projects. The mine plan and reserves are limited to current permit boundaries, and could potentially be expanded beyond this with the expansion of the permit boundaries. • All material modifying factors are considered by the Competent Person to have been accounted for in this Ore Reserve estimate.
Cut-off parameters	• *The basis of the cut-off grade(s) or quality parameters applied.*	• To determine the optimum open pit design, a cut-off grade estimate was performed. The cost per ton for mining, processing and overhead costs, mining dilution and loss factors, processing plant recoveries and net payable gold prices were derived from actual mine estimations, as provided by Zenit Madencilik. • A cut-off grade of 1g/t Au at a minimum mining width of 1.5 m was used to identify mineable shapes which formed the basis of the mine design. • These cut-off grades are currently being used for the mining operations and are considered by the Competent Person to be appropriate for the operation, considering the nature of the deposit and the associated project economics. • The mine currently produces gold/silver doré bars for sale to the Istanbul Gold Refinery.

Mining factors or assumptions	• *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).*
	• *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.*
	• *The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.*
	• *The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).*
	• *The mining dilution factors used.*
	• *The mining recovery factors used.*
	• *Any minimum mining widths used.*
	• *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.*
	• *The infrastructure requirements of the selected mining methods.*
		• Open pit designs were updated in 2021 and form the basis of the updated mine schedule, constrained by applying the following scheduling parameters:
		  ○ 325 tonnes/hour processing limit (85% operational efficiency, 90% mechanical efficiency, 90% usage efficiency)
		  ○ 3 stockpiles (for different ore characteristics) with capacity limits from 10,000t to 350,000t.
		  ○ Total loader capacity limit of 597 tonnes/hour at 100% availability.
		  ○ Additional loader (reclaimer) included for movement of ore within stockpiles and to feed the plant.
		  ○ Constraints on mineable tonnages by season and pit stages as well as areas which are able to be mined simultaneously.
		• The mining methods used for the life of mine schedule are in line with what is currently used on site.
		• The Competent Person considers the proposed mining method to be appropriate for the size and scale of mineralisation.
		• Pit wall slopes of 41-46º (Arzu North), 43-46º (Derya) and 45º (Banu) were used, with the optimum pit slope selected based on iteration with a combination of different pit designs. Geotechnical parameters were based on design work undertaken for the Kiziltepe Feasibility Study by the Middle East Technical University (METU) Mining Engineering Department in Ankara, taking into account geological structure, rock type and design orientation constraints. It was established that the geotechnical parameters considered for the operation to date are suitable for further mining.
		• Mining dilution assumed for the reserve estimation is 10%. Ore mining recovery factor for reserve estimation is 90-95% depending on the pit: 90% for Arzu North, 95% for Derya and

Criteria	JORC Code explanation	Commentary
		Banu. • A minimum mining width of 1.5 m and bench height of 10m (production slice height of 5m) is used based on the nature of the deposit and the equipment fleet currently in use at the Kiziltepe Mine.
Metallurgical factors or assumptions	• *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* • *Whether the metallurgical process is well-tested technology or novel in nature.* • *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* • *Any assumptions or allowances made for deleterious elements.* • *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.* • *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	• The ore extracted from Kiziltepe is treated at the Kiziltepe Processing Plant. This plant processes all ore sources from the Kiziltepe Sector. • Ore is ground using a standard crushing circuit followed by a ball mill for grinding. The ground ore is thickened and treated by a combination of Carbon in Column (CIC) and Carbon in Leach (CIL) processes. Gold and silver loaded carbon undergo standard elution, electrowinning and smelting processes to produce doré bars. • Ore is blended based on grade to maintain a constant input grade to the process plant. • As the mine has been operating since late 2016 (first gold pour in 2017), the metallurgical recoveries of different ore types are well understood. Metallurgical recovery for this processing plant to this date is 92% for Au and 75% for Ag. • There are no deleterious elements of significance. • See Section 3 for details on metallurgical test work. • The ore reserve estimation is based on the appropriate mineralogy and grades for the Kiziltepe Processing Plant.
Environmen-tal	• *The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.*	• A previous Environmental Impact Assessment (EIA) was completed in 2013. The Kiziltepe vein system is located within the Kiziltepe Licence area for which the EIA is valid. The processing methods and tailings storage facility as assessed by the EIA is the same as has been assumed for this Ore Reserve estimate. • Tailings from the process plant are discharged to the tailings dam after cyanide destruction. • Baseline environmental monitoring is carried out on and around mine site, in line with regulations. • The waste rock has potential for acid rock drainage (ARD) due to the presence of arsenic and sulphide bearing mineralisation. Limestone (calcium carbonate) is trucked to the waste rock dump (WRD) from a local quarry at regular elevation intervals and spread to cover the whole WRD to minimize any potential ARD. There is a water channel around the WRD diverting any water from the area. Water draining out of the WRD is channelled into a concrete sump, where it is monitored and then diverted to the tailings dam. • A top-soil management plan is in place, with soil stored for remediation purposes at the end of mine life. • Stockpile areas for waste rock were identified with sterilization drilling. Waste material is also utilized for construction of infrastructure such as road and earthworks. • Kiziltepe Gold and Silver Mine is an operating mine and is compliant with all local environmental regulatory requirements and permits.
Infrastructure	• *The existence of appropriate infrastructure: availability of land for plant*	• The existing infrastructure is adequate to support the existing operations. The processing

Criteria	JORC Code explanation	Commentary
	development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.	facilities were expanded in 2021 to allow greater ore throughput, accommodating the lower grade and higher tonnage nature of other areas of the Kiziltepe Sector. • The deposits are located within the Company's licence area with extraction rights according to the General Directorate of Mining and Petroleum Affairs (Maden ve Petrol İşleri Genel Müdürlüğü: MAPEG). Ore is processed at the Company's current facilities, with ore delivered by truck from the pit to the processing plant. Currently there is 1 complete and 2 operating pits, with further pits planned to come online as the others near the end of their life. • Offices and mechanical workshop buildings are available. Power for the offices, workshop and weighbridge is provided via the existing grid system, with diesel generators as backup. • Labour is readily available as the operation is in production and planned extraction rates are consistent with current capacity. • G&A and processing labour are part of the existing company staff. Canteen facilities and associated services requirements continue to be serviced by the current infrastructure.
Costs	• *The derivation of, or assumptions made, regarding projected capital costs in the study.* • *The methodology used to estimate operating costs.* • *Allowances made for the content of deleterious elements.* • *The source of exchange rates used in the study.* • *Derivation of transportation charges.* • *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* • *The allowances made for royalties payable, both Government and private.*	• Kiziltepe Gold and Silver Mine is an operating open pit mine with associated infrastructure and an operating processing facility on site. Capital expenditure is largely limited to that required to sustain the ongoing operation at the current level. • Operating cost estimates are derived from actual costs incurred by the existing mining and processing operations within the licence area. • Average mining operating costs (drill, blast, load, haul) of US$1.1 per ton was assumed, consistent with the current mining rates. • Assumed processing costs of US$35 per ton processed (including G&A) for this processing method are based on actual costs to date. The effect on the design below US$45/t processing costs is minimal. • There are no deleterious elements of significance at this project. • All financial calculations for the Ore Reserves have been completed using US Dollars. Local Turkish Lira exchange rates are pegged to the US Dollar. • Transportation charges are based on current contracts. • Gold/silver doré is sold to Istanbul Gold Refinery. Selling costs of US$160/oz are assumed. • Royalties and taxes are assumed as a percentage of ounce price plus smelter costs.
Revenue factors	• *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.* • *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	• A life of mine production schedule was derived from the mine design and the updated geological block model. The production schedule was used to generate monthly estimates of the mined tonnes and grade. • Revenue is based on a gold price of US$1,750 per troy ounce and silver price of US$24 per troy ounce. These are considered to be reasonable long-term average prices for the purposes of Ore Reserve estimates.
Market assessment	• *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.* • *A customer and competitor analysis along with the identification of likely market*	• The market for gold and silver is well established. The metal price is fixed externally, however the Company has reviewed a number of metal forecast documents from reputable analysts and is comfortable with the market supply and demand situation.

Criteria	JORC Code explanation	Commentary
	windows for the product. • *Price and volume forecasts and the basis for these forecasts.* • *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	• A specific study relating to customer and competitor analysis has not been completed as part of this project. Gold and silver are openly traded via transparent open-market systems and marketing of these products is generally straightforward. • Price and volume forecasts have been studied in reports from reputable analysts, based on metal supply and demand, US$ and global economics.
Economic	• *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.* • *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	• The Kiziltepe Mine is an operating asset and is not subject to project-type analysis. • The mine development and open pit designs are developed or updated on an annual basis and reflect current and projected mine performances for the Ore Reserves. • The mine plan created to derive the Ore Reserves is optimised to maximise cash flow, thus providing positive cash margins in all years when modifying factors are applied.
Social	• *The status of agreements with key stakeholders and matters leading to social licence to operate.*	• To the best of the Competent Person's knowledge, agreements with key stakeholders pertaining to social licence to operate are valid and in place.
Other	• *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* • *Any identified material naturally occurring risks.* • *The status of material legal agreements and marketing arrangements.* • *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*	• There are no material naturally occurring risks associated with the Ore Reserves. • The Company is currently compliant with all legal and regulatory requirements and marketing arrangements. • The project is located within a current operating licence area.
Classification	• *The basis for the classification of the Ore Reserves into varying confidence categories.* • *Whether the result appropriately reflects the Competent Person's view of the deposit.* • *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	• Measured Mineral Resources that are above the nominated Ore Reserves cut-off grade criteria and are within the open pit designs (which have been derived by applying the appropriate modifying factors as described above) have been classified as Proven Ore Reserves. • Indicated Mineral Resources that are above the nominated Ore Reserves cut-off grade criteria and are within the open pit designs (which have been derived by applying the appropriate modifying factors as described above) have been classified as Probable Ore Reserves. • It is the opinion of the Competent Person for Ore Reserves that the results are an appropriate reflection of the deposit. • No Probable Ore Reserves have been classified from Measured Mineral Resources.
Audits or reviews	• *The results of any audits or reviews of Ore Reserve estimates.*	• No external audits or reviews of this Ore Reserves estimate have been conducted. The Ore Reserves estimate and all work and reports underpinning the estimate have been internally reviewed by Zenit Madencilik and Ariana Resources.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of*	• The Ore Reserve has been completed to a feasibility standard with the data generated from a closely spaced drilling grid and grade control data, thus confidence in the resulting figures is considered high. • Extraction of ore from the Kiziltepe Mine will continue.

Criteria	JORC Code explanation	Commentary
	the factors which could affect the relative accuracy and confidence of the estimate. • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* • *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• Mining costs and haulage costs are as per the current contracts in place being utilised at Kiziltepe operation (Arzu South, Arzu North, Derya, Banu) and other mines in the Kiziltepe Sector. • Project capital is well managed and capital requirements are for maintenance of ongoing operations only. • The Modifying Factors for mining, processing, metallurgical, infrastructure, economic, gold price, legal, environmental, social and governmental factors as references above have been applied to the open pit designs and Ore Reserves calculation on a global scale and data reflects the global assumptions. • Ore Reserves are best reflected as global estimates. • Other than dilution and recovery factors described above, no additional modifying factors are applied. There is a high confidence in these models as the area is well known and well drilled and production data reconciles well with the Mineral Resource estimate, and thus the Ore Reserve estimate.

NOTE: Section 5 is not relevant to this work as there is no estimation or reporting of diamonds or other gemstones in this project.