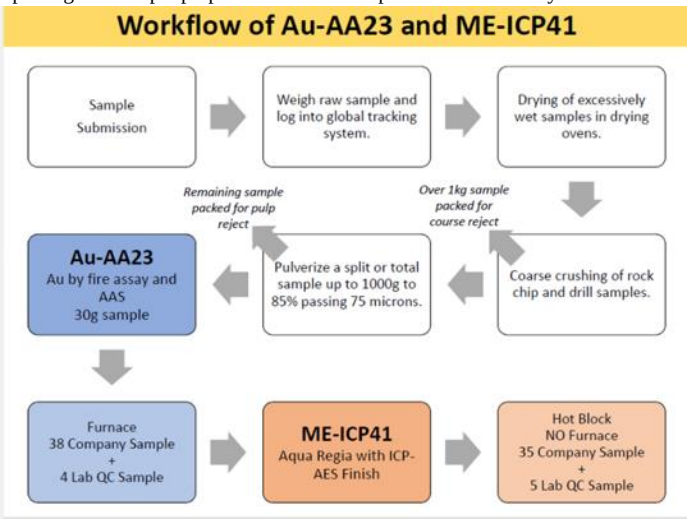
JORC Code, 2012 Edition – Table 1

Kizilcukur, Western Turkey *(data as at May 2020)*

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) sampling: Samples were collected at 1 m intervals and split using a two-stage riffle splitter, running each sample through twice. • Diamond Drilling: Full core was split using a rock saw and half-core samples were taken at variable intervals ranging from 0.43 m to 1 m. Core recovery was recorded into the database.
Drilling techniques	• *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).*	• Pre-2015 drilling was undertaken by HQ diameter diamond drilling (1792 m). • 2015 drilling was undertaken by RC drilling (1598 m). • 2018-19 drilling was undertaken by NQ diameter diamond drilling (746 m).
Drill sample recovery	• *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.*	• Recoveries were monitored and recorded into the sampling database. • Overall core recovery for diamond drilling in 2018-2019 is >75%. The figure is low due to recoveries falling below 10% where historic workings and cavities were intercepted. Holes without old workings had recoveries of up to 95%. • Overall recovery for RC drilling is >90% and >85% for mineralised zones. Recoveries fall below 10% where historic workings and cavities were intercepted.
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.*	• 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, lithological characteristics. Portable XRF analysis was conducted post drilling, to provide supporting geochemical data for non-sampled regions. Areas

Criteria	JORC Code explanation	Commentary
	Core (or costean, channel, etc) photography. • *The total length and percentage of the relevant intersections logged.*	identified as geochemically anomalous by pXRF were further sampled. The pXRF was calibrated with the calibration disks on a regular basis. • Logging of RC samples was carried out on washed samples with geological characteristics recorded to a database.
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. • RC sampling: Samples were collected at 1 m intervals and split using a two-stage riffle splitter, running each sample through the splitter twice. • Splitting and sample prep conducted on samples at the laboratory: 
Quality of assay data and laboratory tests	• *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.*	• QC procedures for 2015 drilling included the insertion of certified reference standards, blank samples, duplicates and umpire laboratory check samples to monitor the accuracy and precision of laboratory data. The protocol followed included the insertion of one standard, one blank and two duplicates; each batch corresponding to 22 drilling samples. The overall quality of QA/QC meets or exceeds the currently accepted industry standards, to ensure the validity of the data used for resource estimation purposes.

Criteria	JORC Code explanation	Commentary
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 were submitted to the internationally accredited laboratory of ALS Global in Turkey (ISO 9001:2008 accredited). • At the resource definition stage three staged duplicates; one field, one crush and one pulp, are inserted into each 22 sample batch.
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 and later surveyed by a professional surveyor using DGPS equipment. Downhole deviation surveys were routinely carried out in all holes, using a down-hole Gyro on 4 m intervals. The Gyro data was then later calibrated with Flex-it survey tool data and corrected to ED50 UTM 35N.
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.*	• Due to the steep terrain, drill spacing is largely dependent on accessible sites. In many instances more than one hole was drilled from a single site with drill hole separation achieved by using diverging downhole trajectories.
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.* • *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.*	• The dip of the vein mineralisation for most of the deposit is steeply dipping to subvertical, striking 310º NW. Local grade continuity follows the dip of the mineralisation for the entire deposit. Drill hole trajectories were angled in order to intersect the mineralisation. • No biases are expected from the drilling direction.
Sample security	• *The measures taken to ensure sample security.*	• 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 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).
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Reviews on sampling and assaying results were conducted for all data internally.

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 Kizilcukur Project consists of one operational license (No. 200700970) and is 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). • It is located in the Balikesir Province in Western Turkey (coordinates: 626150 mE; 4360440 mN). • A royalty of 2% Net Smelter Return on commercial production from the Project is payable to Dogu Akdeniz Mineralleri San. Ve Tic. Ltd. • There are no known impediments to the current operations.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Pre-2007, Eurogold identified the occurrence of gold and silver at Kizilcukur through various stream sediment sampling programmes. • Kefi Minerals Plc acquired the project in 2007. • In 2007, systematic rock and channel sampling was undertaken by Kefi for 485 samples. • In 2008, Kefi completed 1,185.2 m of diamond drilling for 8 holes. During this time Kefi also contracted external polished block and other petrological analyses. • In 2009, Kefi completed an initial soil sampling programme for 452 samples. • In 2011, Kizilcukur was acquired by Ariana Resources.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Project covers an area containing a series of sub-parallel quartz veins hosted by ophiolitic units that trend northwest and extend for about two kilometres. The veins exhibit classic low-sulphidation epithermal features and attain a maximum true width of 8 m. The Zeki vein extends over a strike length of 820 m.

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:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *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*
		• Diamond drilling for a total of 745.8 m (for 13 holes) was completed during Q1 2019 at the Kizilcukur Project. All drilling was conducted within the limits of the previously optimised Zeki open pit. The primary objective of the programme was to: 1) provide in-fill drilling data for the Zeki vein at a depth of approximately 25 m along the strike limit of the planned Zeki open pit and; 2) identify the potential for high grade shoots in areas not previously tested by drilling.

Criteria	JORC Code explanation	Commentary
	Competent Person should clearly explain why this is the case.	

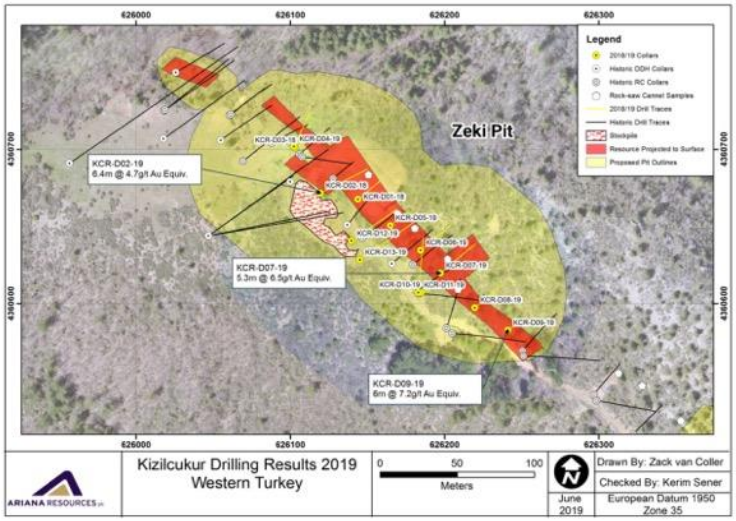
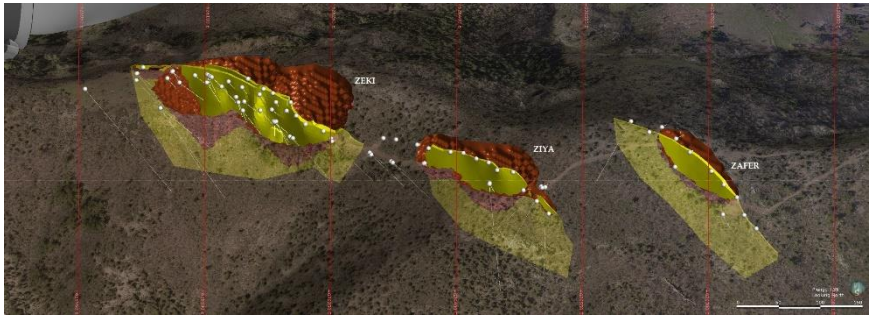
Hole_ID	dip	azimuth	East	North	RL	z_on_topo	interception depth	Max_Depth
KCR-D01-18	59	48	626144	4360668	1180	1179	17-20.1	35.7
KCR-D02-18	56	61	626120	4360672	1176	1177	37.6-44	60.7
KCR-D03-18	70	65	626103	4360701	1174	1174	26.1-29.7	65.7
KCR-D04-19	68	26	626102	4360702	1174	1174	24.9-26.5	62.6
KCR-D05-19	60	51	626165	4360651	1181	1181	15.3-23.1	30.7
KCR-D06-19	59	50	626185	4360635	1181	1181	0-13.4, 21.5-23.5	49.7
KCR-D07-19	50	52	626197	4360620	1179	1179	6-11.3	45
KCR-D08-19	60	51	626220	4360597	1174	1175	0-4	45
KCR-D09-19	59	50	626241	4360583	1175	1175	1.1-8	11
KCR-D10-19	67	83	626185	4360607	1173	1172	4.3-5.3, 47.3-48.3, 64.45-65.4	76.3
KCR-D11-19	66	3	626183	4360607	1173	1172	40.8-41.7, 68.9-69.9	85.5
KCR-D12-19	69	55	626140	4360641	1177	1176	83.3-85.9	94.5
KCR-D13-19	59	54	626145	4360628	1173	1173	64.1-64.8	83.4

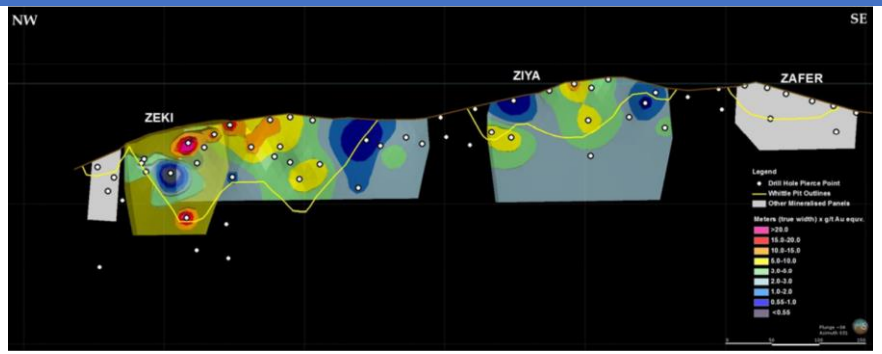
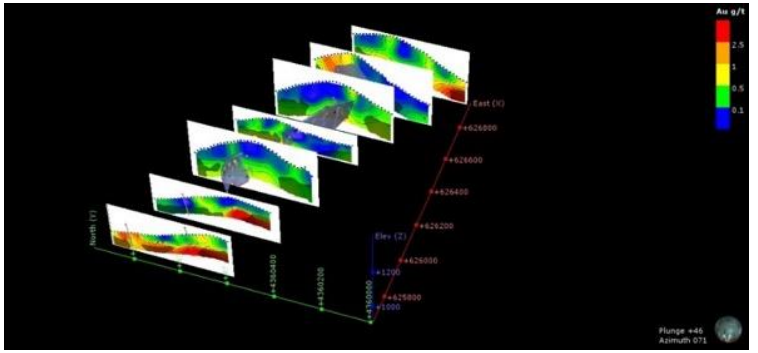
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Significant down-hole intercepts calculated for the Kizilcukur drilling programme, using a 0.5 g/t Au minimum cut-off and allowing for 0.5 m internal dilution. Arranged in order of significance from high to low. Au equivalent (g/t) is calculated based on a gold-silver price ratio of 70:1.

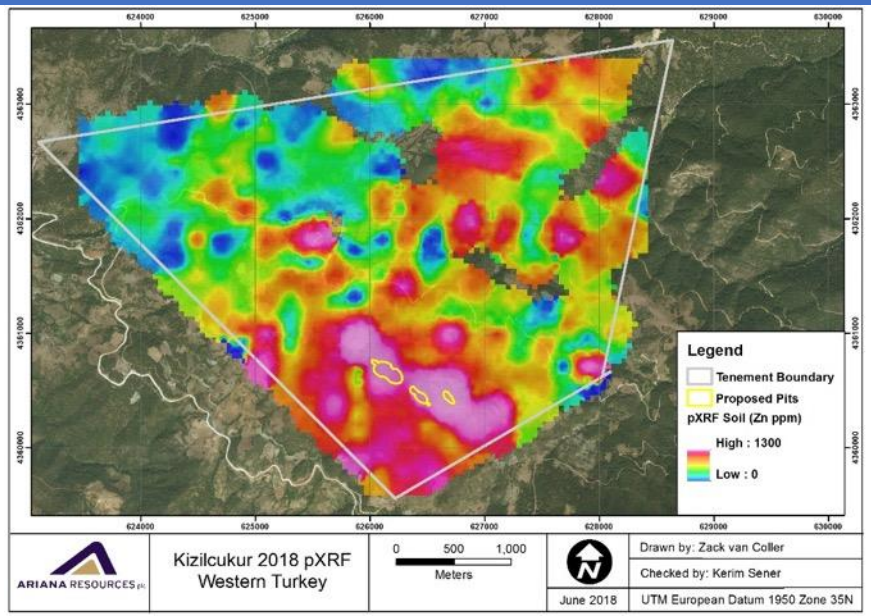
Criteria	JORC Code explanation	Commentary

Hole No.	From (m)	To (m)	Intercept (m)	Grade Au (g/t)	Grade Ag (g/t)	Au Equiv. (g/t)
KCR-D09-19	2	8	6	4.21	205.85	7.15
KCR-D07-19	6	11.3	5.3	4.04	171.9	6.50
KCR-D02-18	37.6	44	6.4	3.44	89.28	4.72
KCR-D11-19	40.8	41.7	0.9	30.27	184	32.9
KCR-D08-19	0	4	4	2.41	171.99	4.87
KCR-D05-19	15.3	23.1	7.8	1.11	36.1	1.62
KCR-D01-18	17	20.1	3.1	2.71	79.61	3.85
KCR-D06-19	8.7	13.4	4.7	1.37	37.95	1.91
KCR-D06-19	0	2.7	2.7	0.6	114	2.23
KCR-D06-19	5.1	7.2	2.1	0.92	107	2.45
KCR-D03-18	26.1	29.7	3.6	0.55	59.3	1.39

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. • See Table above.

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.*	 • **Figure 1:** Summary map showing certain recent drilling results along with the historic drilling 

Criteria	JORC Code explanation	Commentary
		
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• 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.
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.*	• In 2011, Ariana completed an Induced Polarisation (IP) study to aid geological modelling and identify the resistive and chargeable properties of the Kizilcukur vein system.  • In 2012, detailed 1:500 scale mapping of outcropping epithermal veins was conducted. • In 2013, larger scale geological mapping (1:5,000) was conducted over the main project area, with the assistance of pXRF analysis for rock typing. • In 2018, a detailed soil pXRF survey was completed for 562 samples.

Criteria	JORC Code explanation	Commentary
		
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 sensitive.*	• To date, historic and recent exploration activities have identified approximately 2.3 km of anomalous outcropping epithermal veins within the Kizilcukur license. Presently, only 35% (0.8 km) of the exposed vein system have been drill-tested due to outcrop accessibility and infrastructure. Drill testing the remaining 65% of the known vein system may be undertaken in the future. • Ariana also have longer term plans to explore (using airborne geophysics), for potential shallow seated intrusive porphyries, which are likely sources for the Kizilcukur mineralisation and other associated mineralisation within the nearby district.

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 Kizilcukur resource data is stored in a MS Access Datashed database and is managed using MS Access and Excel software. • Data was logged onto field sheets which were then entered into the data system directly by geologists

Criteria	JORC Code explanation	Commentary
		working on the Project. • 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. • 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. • Independent consultants Coffey Geotechnics Ltd, a Tetra Tech company performed a visual validation by reviewing drill holes on section in Datamine Studio RM mining software.
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 2015 and 2018-2019 drilling, sampling and other operations at all times in order to introduce appropriate logging, sampling and drilling protocols. • Ruth Bektas BSc, CGeol, FGS of Coffey Geotechnics Limited, A Tetra Tech Company (Tetra Tech) is acting as the Competent Person for this study and has been on site during active drilling and exploration programmes. The site will be re-visited at a later date if further work is required.
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.*	• Sub-vertically-dipping vein-hosted mineralisation. • Interpretations by Ariana of geological surfaces derived from 3D modelling of drill hole lithological data. • The Project covers an area containing a series of sub-parallel quartz veins hosted by ophiolitic units that trend northwest and extend for about two kilometres. The veins exhibit classic low-sulphidation epithermal features and attains a maximum true width of 8 m. The Zeki Vein extends over a strike length of 820 m.
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.*	• In plan orientation, the deposit comprises four main lodes ranging in strike length from 140 m to 350 m over an overall strike length of 900 m. • One primary lode with minor footwall lodes and hanging-wall lodes in the northwest and isolated lode towards the east. • Lodes typically vary from 2 to 6.5 m in thickness with main lode averaging 2.5 m thickness. • Mineralisation has vertical extents of approximately 100 m.
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 elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage*	• Drill hole sample data was constrained within: Semi-manually constructed orebody wireframes defined by nominal 1 g/t Au cut off. Several <1 g/t Au intervals which contained silver intercepts were included to maintain geological continuity. • Sample data was composited to a 1 m downhole length using a 0.2 g/t Au cut-off and maximum 1 m internal waste. • An analysis of the grade distribution characteristics of the domain composites for each deposit was undertaken. Following analysis of the data it was decided that a top cut was not required. Both gold and silver were modelled. • A block model was constructed using a 10 m E by 15 m N by 5 m RL parent block size. • Estimation was carried out using inverse distance squared (ID^2) at the parent block scale. Three estimation

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td>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.</td><td>passes were undertaken using specific composite data for each separate domain/lode.
• A percentage model was used to report precisely the volume of material within each block. Material from historical underground mining has not been subtracted as the extent of these is not clear. Surface trial mining material has been depleted from the resource as updated topography was used.
• Search parameters were as in the table below.
<table>
<tr><th>Vein</th><th>Pass</th><th>Max</th><th>Medium</th><th>Min</th><th>Dip</th><th>Dip Azimuth</th><th>Pitch</th><th>Min Samples</th><th>Max Samples</th><th>Dh limiter</th></tr>
<tr><td>Zeki Main</td><td>1</td><td>30</td><td>15</td><td>7.5</td><td>80</td><td>220</td><td>50</td><td>2</td><td>50</td><td>4</td></tr>
<tr><td>Zeki Main</td><td>2</td><td>60</td><td>30</td><td>15</td><td>80</td><td>220</td><td>50</td><td>2</td><td>50</td><td>4</td></tr>
<tr><td>Zeki Main</td><td>3</td><td>120</td><td>60</td><td>30</td><td>80</td><td>220</td><td>50</td><td>2</td><td>50</td><td>no</td></tr>
<tr><td>Zeki 2</td><td>1</td><td>30</td><td>15</td><td>7.5</td><td>80</td><td>220</td><td>50</td><td>2</td><td>50</td><td>4</td></tr>
<tr><td>Zeki 2</td><td>2</td><td>60</td><td>30</td><td>15</td><td>80</td><td>220</td><td>50</td><td>2</td><td>50</td><td>4</td></tr>
<tr><td>Zeki 2</td><td>3</td><td>120</td><td>60</td><td>30</td><td>80</td><td>220</td><td>50</td><td>2</td><td>50</td><td>no</td></tr>
<tr><td>Zafer</td><td>1</td><td>30</td><td>15</td><td>7.5</td><td>80</td><td>220</td><td>50</td><td>2</td><td>50</td><td>no</td></tr>
<tr><td>Zafer</td><td>2</td><td>60</td><td>30</td><td>15</td><td>80</td><td>220</td><td>50</td><td>2</td><td>50</td><td>no</td></tr>
<tr><td>Zafer</td><td>3</td><td>120</td><td>60</td><td>30</td><td>80</td><td>220</td><td>50</td><td>2</td><td>50</td><td>no</td></tr>
<tr><td>Ziya</td><td>1</td><td>30</td><td>15</td><td>7.5</td><td>80</td><td>220</td><td>50</td><td>2</td><td>50</td><td>no</td></tr>
<tr><td>Ziya</td><td>2</td><td>60</td><td>30</td><td>15</td><td>80</td><td>220</td><td>50</td><td>2</td><td>50</td><td>no</td></tr>
<tr><td>Ziya</td><td>3</td><td>120</td><td>60</td><td>30</td><td>80</td><td>220</td><td>50</td><td>2</td><td>50</td><td>no</td></tr>
</table>
</td></tr>
<tr><td>Moisture</td><td>• Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</td><td>• Tonnes have been estimated on a dry basis.</td></tr>
<tr><td>Cut-off parameters</td><td>• The basis of the adopted cut-off grade(s) or quality parameters applied.</td><td>• Measured, Indicated and Inferred Resources have been reported above a 1.0 g/t Au cut-off grade, i.e., economical cut-off. This is the same cut-off applied in previous estimates.</td></tr>
<tr><td>Mining factors or assumptions</td><td>• 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</td><td>• No mining factors (i.e. dilution, ore loss, recoverable resources at selective mining block size) have been applied.
• It is assumed that the deposit will be an open pit operation with ore material trucked to the nearby Kiziltepe Mine carbon-in-leach plant for gold and silver extraction.</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
	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.	
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining 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.*	• No metallurgical assumptions have been built into the resources because there is no intent at this point in time to convert the Mineral Resource into a Mineral Reserve. • Initial metallurgical test work has been carried out at the Laboratory at the Kiziltepe Mine, with gold recoveries of 82 to 91%.
Environmen-tal 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, however, the estimate of Mineral Resources may be materially affected should such related issues arise.
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 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.*	• A bulk density of 2.55 g/cm^3 has been applied, based on calculations on drill core density measurements. • Further work is recommended for more accurate density measurements, with densities of up to 2.7 g/cm^3 possible based on experience with several other vein-hosted deposits in the area.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (i.e. 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.*	• Mineral Resources have been classified on the basis of confidence in geological and grade continuity using the drilling density, geological model and modelled grade continuity. • Measured Mineral Resources have been defined by a 30 x 15 x 7.5 m search ellipse. • Indicated Mineral Resources have been defined by a 60 x 30 x 15 m search ellipse. • Inferred Mineral Resources have been defined in areas beyond the indicated search ellipse to the limits of the resource wireframes.

Criteria	JORC Code explanation	Commentary

	Density	Tonnes t	Au g/t	Ag g/t	Au oz
Measured	2.55	130,511	2.79	84.11	11,716
Indicated	2.55	87,805	2.60	69.01	7,342
Meas+Ind	**2.55**	**218,317**	**2.72**	**78.04**	**19,058**
Inferred	2.55	37,344	1.75	57.31	2,098
Total	*2.55*	*255,660*	*2.57*	*75.01*	*21,156*

Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• The ID^2 model was validated against the input drill hole composites for each domain by visual comparisons carried out against the composited drill hole samples for each domain against the modelled block grade. • A comparison was made between the analytical volumes of the resource wireframes and the volumes reported through volumetric functions. The difference was less than 0.001%. Thus, a high level of confidence is appropriate for the model reports. The estimated grades were validated against average Au and Ag grade statistics for each lode.
Discussion of relative accuracy/ confidence	• *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 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.*	• 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.

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	• *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*	• The Measured and Indicated resources for the Kizilcukur area, as reported here, based on data to May 2020, were used as the basis for Ore Reserves. • The Ore Reserves, including adjustment for ore loss and dilution factors are included

Criteria	JORC Code explanation	Commentary
conversion to Ore Reserves	*inclusive of, the Ore Reserves.*	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 and economically viable, and that material Modifying Factors have been considered.*	• 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. • Kizilcukur is a satellite project to the Kiziltepe Mine, with mining planned for late 2023. • A mine plan that is technically achievable and economically viable has been identified, with an open pit mine life of approximately 1-2 years. • 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 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*	• Open pit designs were updated in 2021 • 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. • Overall pit wall slopes of 43º 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

Criteria	JORC Code explanation	Commentary
	sensitivity of the outcome to their inclusion. • *The infrastructure requirements of the selected mining methods.*	factor for reserve estimation is 90%. • 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 and available for use at Kizilcukur.
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 Kizilcukur will be 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 date is 92% for Au and 75% for Ag. The difference in the metallurgical characteristics of the Kizilcukur ore compared to Kiziltepe ore is accounted for by using predicted recoveries of 88% and 80% for gold and silver respectively. • 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.*	• The Kizilcukur Project is located within Operating Licence number 200700970. The ore will be trucked to the Kiziltepe Processing Plant for which an EIA was completed in 2013. The processing methods and tailings storage facility as assessed by the EIA (2013) 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 is (calcium carbonate) 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.

Criteria	JORC Code explanation	Commentary
Infrastructure	• *The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.*	• The existing infrastructure is adequate to support the existing operations. The processing 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 to the Kiziltepe Process Plant. • 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. A capital expenditure for Kizilcukur 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$47 per ton processed (including G&A) for this processing method are based on actual costs to date. • 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 is 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 detailed LOM mine schedule has not yet been completed. • Revenue is based on a gold price of US$1750 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 windows for the product.* • *Price and volume forecasts and the basis for these forecasts.*	• 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. • 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

Criteria	JORC Code explanation	Commentary
	• *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	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 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 and 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. • There are currently no Proven Reserves. • It is the opinion of the Competent Person for Ore Reserves that the results are an appropriate reflection of the deposit.
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 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,*	• 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 and satellite projects will continue. • Mining costs and haulage costs are as per the current contracts in place being utilised at Kiziltepe operation, as well as 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

Criteria	JORC Code explanation	Commentary
	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.*	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 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.