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AIM: AAU

## **SALINBAS JORC EXPLORATION TARGET**

Ariana Resources plc ("Ariana" or "the Company"), the exploration and development company with gold mining operations in Turkey, is pleased to announce a Joint Ore Reserves Committee ("JORC") Exploration Target for its Salinbas Gold Project ("Salinbas" or "the Project"). Salinbas is located in the Hot Gold Corridor and is 100% owned by Ariana through its shareholding in Greater Pontides Exploration B.V. ("GPE").

### **Highlights:**

- JORC Exploration Target\* of up to 2.7Moz gold and 16.1Moz silver established in the Salinbas area, excluding current JORC Indicated and Inferred Resources of c.1Moz gold.
- Potential for further resource extensions to be delineated within high-grade and steeply plunging breccia pipes akin to Hot Maden, which feed in to the Salinbas Horizon.
- Drilling programme fully planned to systematically test this area and to determine its potential to yield additional JORC-compliant resources.
- Exploration drilling plan, comprising c.10,000m of drilling, to be executed in at least two phases once final forestry permits are secured.

**\* An Exploration Target (as per JORC 2012) is conceptual in nature and there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.**

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

*"We are extremely encouraged by the results of recent work completed at Salinbas during the past few months. A detailed three-dimensional model has been developed to visualise a highly prospective stratigraphic horizon at Salinbas, which, in parallel with the discovery of Salinbas North, has added significant confidence towards defining an Exploration Target in accordance with the JORC code. This model can be viewed via the following link: <https://arianaresources.com/in-the-media/1178-salinbas-model>*

*"Our confidence in the potential for the Salinbas Project to host a multi-million ounce gold system in the area surrounding the Ardala Cu-Au-Mo porphyry has grown significantly during the past year. The diligent work undertaken by our exploration team in recent months, involving the meticulous relogging of over 50 drill holes, along with the associated three-dimensional modelling, has underscored this potential. We now look forward to our summer exploration programme at Salinbas, which will be focused on follow-up surface sampling to*

*further define this prospective horizon ahead of drill testing. Permitting for drilling is underway and trial-mining of the Ardala licence is due to commence shortly, ahead of licence renewal during 2019.”*

**This announcement contains inside information for the purposes of Article 7 of EU Regulation 596/2014.**

## **Project Summary**

The Salinbas Project is located in the Pontide Metallogenic Province in northeastern Turkey and lies approximately 80km southeast of the coastal city of Hopa and 20km east of Artvin. The project contains three notable prospects: Salinbas, Ardala and Hizarliyayla, across three licences which are owned 100% by the operating subsidiary, Pontid Madencilik San. ve Tic. Ltd. Two of the licences remain in process at the General Directorate of Mining Affairs (“GDMA”) for conversion to operational status following recent site inspections conducted by representatives of the GDMA.

During late 2017, the Ariana exploration team completed detailed regional and prospect scale geological mapping, covering an area of over 160km<sup>2</sup> within a prospective trend of mineralisation known as the Hot Gold Corridor. This mapping programme contributed significantly towards an improved understanding of the controls on mineralisation across the district and resulted in the identification of several new prospect areas.

This work was followed-up in early 2018 with relogging of the majority of the Salinbas diamond drill-core in order to: 1) better correlate surface mapping with down-hole interpretations; 2) re-evaluate the existing geological model and interpretations of the processes of mineralisation; and 3) to plan a drilling programme to test new surface exploration targets defined in late 2017, notably at Salinbas North and Ardala North. To date a total of 50 diamond drill holes have been selectively re-evaluated, totalling 7,806m of drill core. This work resulted in further refinements in the understanding of surface and subsurface geology, which has led to the development of a more coherent geological model for both Salinbas and Ardala.

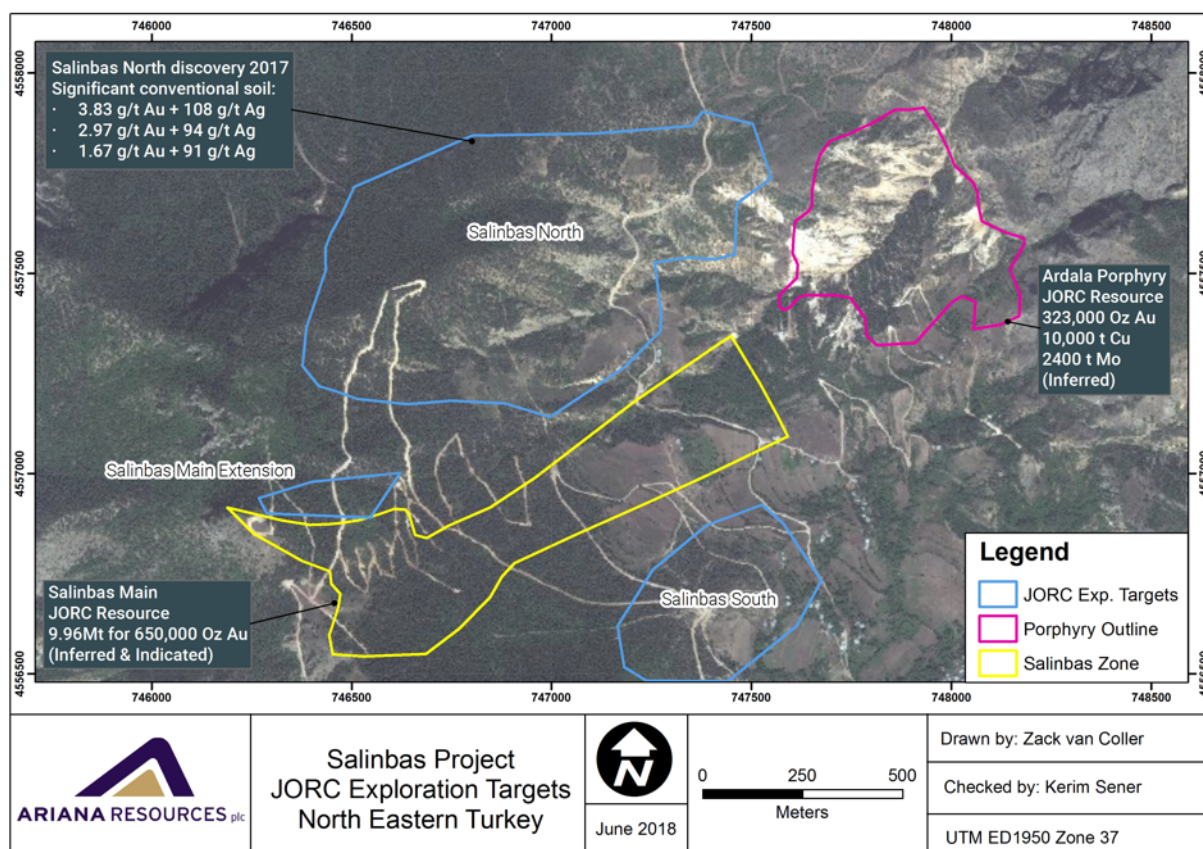
Previous work completed between 2009 and 2015 led to a geological model which envisaged the emplacement of mineralisation along a particular series of thrust fault surfaces developed during regional compression. However, the timing of mineralisation with respect to such tectonic activity was far less clear. As a result of the recent mapping and relogging of drill-core, it appears that the mineralisation at Salinbas and its relationship to the Ardala porphyry is significantly less complex. The resulting model developed from this improved understanding does not envisage the development of mineralisation under a compressional tectonic regime. Rather, the new model suggests that mineralising sulphide-rich fluids were dispersed outward from the Ardala porphyry and selectively propagated along a palaeo-weathering surface located between two key geological units.

The Salinbas-style of mineralisation is typically identified as a replacement-type and is sulphide-rich to gossanous in character, selectively forming within an irregular polymictic horizon, located between the Late Cretaceous (c.100 Ma) Ziyarettepe Formation (comprising massive fossiliferous limestones) and Late Palaeocene (c.56 Ma) Kizilcik Formation (comprising an intercalated sequence of conglomerates, limestones, siltstones and mudstones, including black shales). This horizon marks a key unconformity within the stratigraphy and is a mappable target unit for further Salinbas-style mineralisation. The source of the sulphide-rich mineralising fluids, was a volcanic event which coincided with the

intrusion of both mineralised and unmineralised porphyries in the Ardala Porphyry Complex at approximately 52.3 Ma. This event also resulted in the deposition of volcanic rocks during the Early Eocene (56-41 Ma) which correlate to the units of the Avclar Formation, which have been mapped around the project area and which lie unconformably over the Kizilcik Formation.

The recognition of a single mappable geological horizon which is marked in particular by the stratigraphic position of the Salinbas deposit, is key to the definition of the JORC Exploration Target described herein (named the Salinbas Horizon). It is expected that Salinbas-style mineralisation will exist in places elsewhere along this prospective stratigraphic horizon, rather than within a complex and less-predictable fault system, as inferred from the previous geological model. In addition, relogging of certain drill holes in the area connecting Salinbas to Ardala, suggest the potential to identify a steeply plunging breccia-pipe style of mineralisation emanating from an extension of the Ardala porphyry and specifically where this impinges upon a zone around the Salinbas Horizon. This style of mineralisation appears akin to that encountered in places within the Hot Maden deposit, suggesting the potential for higher-grade feeder zones occurring beneath the Salinbas Horizon.

Zones of mineralisation discovered in late 2017, have further reinforced current understanding by demonstrating the geological continuity and potential for mineralisation along the prospective Salinbas Horizon. Salinbas North, a significant target defined by highly anomalous conventional soil sampling results, including 3.83 g/t Au + 108 g/t Ag, 2.97 g/t Au + 94 g/t Ag and 1.67 g/t Au + 91 g/t Ag, is located precisely at the boundary between the Ziyarettepe limestones and the Kizilcik sedimentary rocks, approximately 1km from Salinbas. Newly discovered old workings have also been mapped at this location, located exactly along the contact between the two geological formations.



**Figure 1:** Satellite map of the Salinbas area, showing the distribution of the JORC Exploration Target areas (in blue outline) in relation to the Salinbas and Ardala zones. The outline of the Salinbas deposit is shown in yellow.

### JORC Exploration Target

The JORC Exploration Target presented here is based on an assessment of the geological model outlined above and extrapolations of this model in to other areas of prospective geology (Figure 1 and 2). These areas have been modelled in three-dimensions utilising geological mapping, available drilling data and cross-sectional interpretation (Figure 2). Based on current understanding of the geology, the potential area containing the Salinbas Horizon is extensive and totals almost one million square metres. A video to present this model is provided in the following link: <https://arianaresources.com/in-the-media/1178-salinbas-model>

The Exploration Target areas (Figure 1 and 2) derived here have been labelled Salinbas North, Salinbas South and Salinbas Main Extension. Salinbas North comprises a 745,000m<sup>2</sup> area in which potential exists to discover a well-preserved, 10-15m thick mineralised horizon, to the north of the current c.650,000oz Au Indicated and Inferred Resource at Salinbas and developed within the same part of the stratigraphy. Salinbas South occurs five-hundred metres south of Salinbas and represents a less well-constrained target. This target area has been outlined over 195,000m<sup>2</sup>, is perhaps 5-10m thick, and comprises a Kizilcik Formation outlier showing anomalous conventional soil results exceeding 80ppb Au, suggesting a buried target horizon. A further target, referred to as Salinbas Main Extension occurs on the immediate northern flank of the Salinbas deposit and is 26,000m<sup>2</sup> in area and is perhaps 2.5-5m thick, represented by a zone of mineralisation which is in part outcropping though still underexplored. Further work is being undertaken on this area to define this target further and validate the JORC Exploration Target.

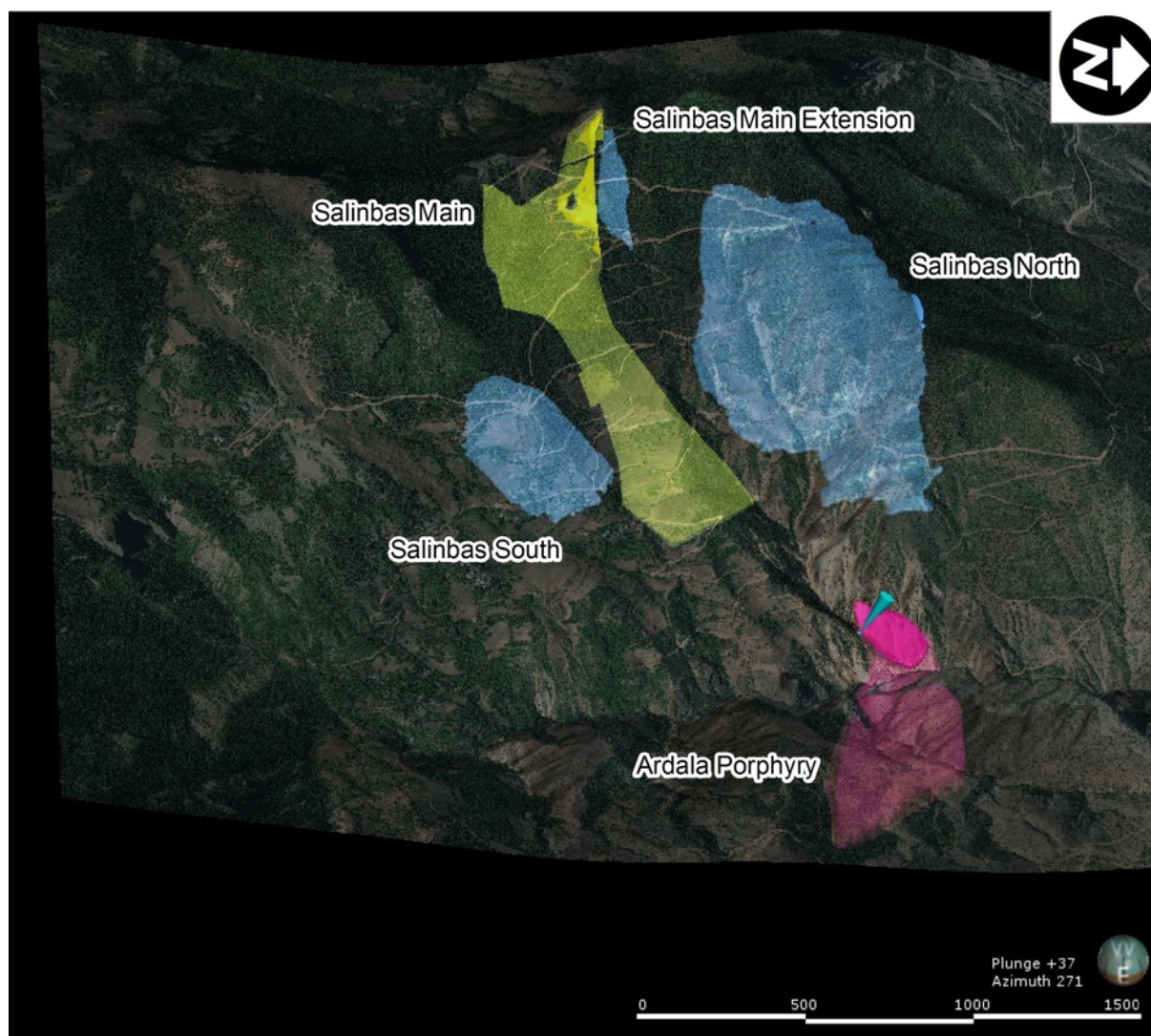
The range of tonnage for each target area is presented in Table 1 based on a range of thicknesses of the tabular Salinbas Horizon targets derived from cross-sectional interpretations and modelling. These results can be compared to the average thickness derived from the three-dimensional model, which is also shown in Table 1.

**Table 1:** Parameters used for the estimation of the JORC Exploration Target, by target area. Density of the mineralisation was set at 2.6 g/cm<sup>3</sup> based on 178 determinations made for the purposes of the Salinbas resource estimate. Upper and lower range bounds are provided for the tabular zones of the Exploration Target, from which a derived range of tonnages are calculated.

	Salinbas North	Salinbas South	Salinbas Main Extension	Total
<b>Model Area (m<sup>2</sup>)</b>	745,000	195,000	26,000	966,000
<b>Model Volume (m<sup>3</sup>)</b>	9,215,000	1,750,000	88,000	11,053,000
<b>Density (g/cm<sup>3</sup>)</b>	2.6	2.6	2.6	
<b>Model Thickness (m)</b>	12.4	9.0	3.4	
<b>Model Tonnes</b>	23,959,000	4,550,000	228,800	28,737,800
<b>Thickness (m) (upper)</b>	15	10	5	
<b>Thickness (m) (lower)</b>	10	5	2.5	

<b>Calculated (upper)</b>	<b>Tonnes</b>	29,055,000	5,070,000	338,000	34,463,000
<b>Calculated (lower)</b>	<b>Tonnes</b>	19,370,000	2,535,000	169,000	22,074,000

Estimations of grade were based largely on the existing JORC Resource Estimate for Salinbas (see announcement 1 April 2015). While the lower bound for gold was set at 2 g/t the upper bound was varied between +10% and +50% depending on the target area, proximity to surface (resulting in higher expected grades) and other expectations derived from current exploration data. The lower bound for silver was set at 10 g/t and the upper bound at 15 g/t, again based on assessments of current exploration data. The JORC Exploration Target is presented in Table 2, which comprises the above ranges of target tonnage and grade across each of the three named target areas.



**Figure 2:** Three-dimensional model of the Salinbas area, showing the distribution of the JORC Exploration Target areas (in blue) in relation to the Salinbas deposit (in yellow) and Ardala porphyry (in pink) zones. The JORC Exploration Target was generated by developing the three-dimensional model from geological mapping, drilling data and cross-sectional interpretation. The model is shown with the satellite-imagery draped over topography to provide geographic context.

**Table 2:** JORC Exploration Target defined by exploration area, showing a range of possible tonnages and gold and silver grades. Totals may not sum due to rounding of contained metal to nearest thousand.

Target	Tonnage (t)		Element	Grade (g/t)		Contained Metal (oz)	
	From	To		From	To	From	To
<b>Salinbas North</b>	19,370,000	29,055,000	Au	2.0	2.5	1,246,000	2,335,000
			Ag	10.0	15.0	6,228,000	14,012,000
<b>Salinbas South</b>	2,535,000	5,070,000	Au	2.0	2.2	163,000	359,000
			Ag	10.0	12.0	815,000	1,956,000
<b>Salinbas Main Extension</b>	169,000	338,000	Au	2.0	3.0	11,000	33,000
			Ag	10.0	15.0	54,000	163,000
<b>Global Total Ounces Au</b>						<b>1,419,000</b>	<b>2,727,000</b>
<b>Global Total Ounces Ag</b>						<b>7,097,000</b>	<b>16,131,000</b>

## Drilling Plan

An exploration drilling plan has been prepared in order to test the Exploration Target defined here. As much of the area to be tested falls within forestry grounds, an application to the General Directorate of Forestry has been submitted in order to provide access for this drilling programme. The programme is planned to systematically test areas of the Exploration Target and comprises 75 drill hole locations and approximately 10,000m of drilling. It is expected that such a drilling programme will be conducted in at least two phases. The forestry applications have been approved by the local forestry department in Artvin and have now been forwarded between departments to Ankara for final approvals. The Company expects to receive its forestry permits for this programme later in 2018, which would enable a drilling programme to commence in 2019.

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**Editors' Note:**

The information in this announcement that relates to exploration results is based on information compiled by Dr. Kerim Sener BSc (Hons), MSc, PhD, Managing Director of Ariana Resources plc. Dr. Sener is a Fellow of The Geological Society of London and a Member of The Institute of Materials, Minerals and Mining and has sufficient experience relevant to the styles of mineralisation and type of deposit under consideration and to the activity that has been undertaken to qualify as a Competent Person as defined by the 2012 edition of the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code) and under the AIM Rules - Note for Mining and Oil & Gas Companies. Dr. Sener consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

**About Ariana Resources:**

Ariana is an exploration and development company with mining operations focused on epithermal gold-silver and porphyry copper-gold deposits in Turkey, the largest gold producing country in Europe. The Company is developing a portfolio of prospective licences originally selected on the basis of its in-house geological and remote-sensing database, which now contain a total of 1.6 million ounces of gold and other metals. Ariana's objective is to cost-effectively add value to its projects through focused exploration and to develop its operations, primarily through well-financed joint ventures.

The Company's flagship assets are its Kiziltepe and Tavsan gold projects which form the Red Rabbit Gold Project. Both contain a series of prospects, within two prolific mineralised districts in the Western Anatolian Volcanic and Extensional (WAVE) Province in western Turkey. This Province hosts the largest operating gold mines in Turkey and remains highly prospective for new porphyry and epithermal deposits. These core projects, which are separated by a distance of 75km, form part of a 50:50 Joint Venture with Proccea Construction Co. The Kiziltepe Sector of the Red Rabbit Project is fully-permitted and is currently in production. The total resource inventory at the Red Rabbit Project and wider project area stands at c. 605,000 ounces of gold equivalent. At Kiziltepe a Net Smelter Return ("NSR") royalty of up to 2.5% on production is payable to Franco-Nevada Corporation. At Tavsan an NSR royalty of up to 2% on future production is payable to Sandstorm Gold.

In north-eastern Turkey, Ariana owns 100% of the Salinbas Gold Project, comprising the Salinbas gold-silver deposit and the Ardala copper-gold-molybdenum porphyry among other prospects. The total resource inventory of the Salinbas project area is c. 1 million ounces of gold equivalent. A NSR royalty of up to 2% on future production is payable to Eldorado Gold Corporation.

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

For further information on Ariana you are invited to visit the Company's website at [www.arianaresources.com](http://www.arianaresources.com).

**Glossary of Technical Terms:**

"Ag" the chemical symbol for silver;

"Au" the chemical symbol for gold;

"g/t" grams per tonne;

"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;

"Mt" million tonnes;

"oz" Troy Ounces. One Troy Ounce is equal to 31.1035 grams;

Ends.