

## September 2012 Quarter Activities Report

### ABOUT ARC EXPLORATION LIMITED

Arc Exploration Limited (**ASX Code: ARX**) is an Australian listed gold company focused on exploration in Indonesia.

The Company has a joint venture interest with PT Sumber Mineral Nusantara on the Trenggalek Project in East Java. This project lies on the Sunda-Banda magmatic arc and is prospective for high-grade epithermal gold-silver veins and porphyry copper-gold systems.

In association with Anglo American Group, the Company is exploring for large porphyry copper/gold deposits in Papua.

Arc Exploration Limited  
ABN 48 002 678 640  
Level 14  
19-31 Pitt Street  
Sydney NSW 2000  
AUSTRALIA

Tel: + 61 2 9241 3451  
Email: [info@arx.net.au](mailto:info@arx.net.au)

### Exploration - Indonesia

#### Trenggalek

- ARX entered into an agreement with Anglo American covering the Trenggalek Project. Anglo American may elect to move forward and earn a majority interest by sole funding ongoing activities.
- A high-resolution, airborne magnetic and radiometric survey was flown over the entire Exploration IUP in the quarter. The data has been processed and interpretation is in progress.
- Soil sampling was completed at Sumber Bening Prospect and results are awaited. Sumber Bening contains a high-sulphidation epithermal lithocap possibly overlying a deeper porphyry system.

#### Papua

- No field work was undertaken during the quarter in West Papua under the **ARX – Anglo Strategic Alliance**.

### Corporate

- Review of project and corporate opportunities continued during the quarter and are ongoing.

## PROJECT ACTIVITY – INDONESIA

ARX is exploring for gold, silver and base metal deposits along Indonesia's highly prospective magmatic arcs and associated terranes. The primary exploration targets are high-grade epithermal gold-silver veins and bulk tonnage porphyry-related copper-gold deposits.



### Java

#### **Tenggalek Project, East Java**

The Company has a joint venture with P.T. Sumber Mineral Nusantara, which holds the Tenggalek Exploration IUP license covering an area of 30,044 ha (~300 km²) in the Southern Mountains of East Java.

The region has excellent potential for major gold-copper deposits, highlighted by the discovery of the Tumpangpitu porphyry copper-gold deposit by Intrepid Mines at their Tugu Bukit Project.

Gold mineralisation at Tenggalek occurs in intermediate-sulphidation epithermal quartz vein systems associated with hydrothermal breccias and silica cappings in volcanic rocks and limestone. The IUP area is also prospective for replacement-style ("jasperoid") gold and porphyry-related copper-gold mineralisation.

A high-resolution, aeromagnetic & radiometric survey was flown over the entire Tenggalek IUP tenement in the quarter and ground work was undertaken on the IUP in non-forestry areas whilst awaiting renewal of the forestry use permit ("Pinjam Pakai") from the Indonesian Ministry of Forestry.

Exploration expenditure at Tenggalek during the quarter totalled A\$39,816 (excluding expenditure by Anglo American in relation to high-resolution airborne magnetic and radiometric surveys and surface geochemical and geological surveys referred to below).

#### **Agreement with Anglo American**

The Company has entered into an agreement with Anglo American in respect of the Tenggalek Project.

Under the agreement Anglo American has fully funded the high-resolution airborne magnetic and radiometric survey over the entire IUP tenement and undertaken some surface geochemical and geological surveys in selected areas.

Following the completion of these surveys and evaluation of the results Anglo American may elect to move forward and earn a majority interest by sole funding ongoing activities at the Tenggalek Project.

The agreement provides a further opportunity to build a close working relationship with Anglo American in Indonesia.

## **Airborne Survey**

A high-resolution, aeromagnetic & radiometric survey was flown over the entire Trenggalek IUP tenement in the quarter by Anglo American. It was flown using an MD500E helicopter with a stinger-mounted system. Data acquisition and processing were contracted to GPX Surveys P/L of Perth.

The survey was flown on 100-m spaced N-S oriented flight-lines and 1,000-m spaced E-W tie-lines at a nominal flight height of about 50-m above the ground surface. A total of 3,675 line-kms was flown. The primary objectives of the survey are to explore for large porphyry copper-gold and new epithermal gold-vein systems, and to determine future direction and targets within the Trenggalek IUP. The survey data was processed late in the quarter and is now being interpreted.

The geology of Trenggalek is similar to the Tujuh Bukit district in East Java, where Intrepid has discovered a large porphyry copper-gold system associated with distinctive magnetic features that were highlighted in a similar geophysical survey.

## **Sumber Bening**

Sumber Bening lies on prominent north-northwest-trending structures that cut across a 4km diameter-circular feature on the western side of the IUP. It contains an extensive area (+2-km by 1-km) of silica-clay-pyrite alteration with localised pods of vughy silica alteration centred on volcanoclastic rocks and quartz-feldspar porphyry intrusions.

Soil sampling and detailed geological mapping at this prospect were completed late in the quarter. All samples have now been submitted to the laboratory and results are awaited. The target is a possible porphyry system lying beneath the extensive silica-clay alteration lithocap identified in this area.

## **Papua**

### **Strategic Alliance – Anglo American**

The Company holds a 20% interest in a Strategic Alliance with Anglo American PLC (Anglo) to explore for copper-gold deposits in Papua and West Papua provinces. The Alliance currently holds three Exploration IUP tenements covering nearly 3,000 km<sup>2</sup> at the centre of the Bird's Head peninsula in West Papua Province which cover prospective ground in the region which also hosts Grasberg - Indonesia's largest porphyry copper-gold deposit.

Anglo is responsible for managing and funding all exploration activities. No field work was undertaken by Anglo during the quarter.

### **Qualified Persons**

The information in this report that relates to Exploration Results is based on information compiled by Mr John Carlile, who is a Fellow of the Australian Institute of Mining and Metallurgy, and Mr Brad Wake, who is a member of the Australian Institute of Geoscientists. Mr Carlile and Mr Wake have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.' Mr. Carlile and Mr. Wake are full time employees of Arc Exploration Limited and consent to the inclusion in this report of the matters based on their information in the form and context in which it appears.

This report is dated 24 October 2012.

For further information please contact:

**Andrew J. Cooke**

**Company Secretary**

Tel: + 61 2 9241 3451

Email: andrewcooke@arx.net.au