

## June 2015 Quarter Activities Report

### **ABOUT ARC EXPLORATION LIMITED**

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

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.

The Company also has interests in Australia. It exercised its Options to Farm-in to two gold properties in New South Wales, Junee and Oberon and holds an Option to Farm-in to another gold property in the Mount Garnet district of Far North Queensland.

All three projects in Australia contain drill-delineated gold resources with potential for expansion through further exploration.

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### **INDONESIA**

#### **Trenggalek Project, East Java**

- Low level of activity during the quarter.
- The Company is considering its forward strategy on the project.

### **AUSTRALIA**

#### **Junee Project, NSW**

- Low level of activity during the quarter.
- A petrographic report was completed on some historic RC chip samples collected at Forest Hill Prospect.

#### **Oberon Project, NSW**

- No field activity to report.

#### **Mount Garnet Project, Queensland**

- Assessment of all data to decide the exercise option to earn-in or not.
- A petrographic report was completed on some surface rock samples collected near Triple Crown.

### **CORPORATE CORPORATE**

- AGM conducted on 22 May 2015, all resolutions passed
- 41,804,446 new shares issued, in lieu of Directors fees and salaries, at an average price of 0.36 cents per share.

## INDONESIA

ARX is exploring for gold and base metal deposits along Indonesia's highly prospective magmatic arcs and associated geological terranes (Figure 1). The primary exploration targets are porphyry-related copper-gold and high-grade epithermal gold-silver veins.



Figure 1. Trenggalek Project Location & major gold and base metal deposits in Indonesia

### Trenggalek Project, East Java (95% ARX)

ARX operates a joint venture with its local Indonesian partner, P.T. Sumber Mineral Nusantara, who holds the Trenggalek Exploration IUP tenement, located in the Southern Mountains of East Java. The Southern Mountains is composed of an older segment of the Sunda-Banda magmatic arc which hosts the Tumpangpitu porphyry copper-gold located about 200 kilometres to the east of Trenggalek, and the large Batu Hijau and Elang porphyry copper-gold deposits located on Sumbawa Island. Trenggalek contains a similar package of rocks to those hosting these three major porphyry deposits.

The Trenggalek Exploration IUP tenement is valid until November 2016 and covers an area of about 300 km<sup>2</sup> or 29,969 Ha.

Early exploration work by ARX on the Trenggalek IUP concentrated on testing of intermediate-sulphidation epithermal gold-bearing veins, breccias, jasperoid and high-grade float targets at multiple prospects identified within the tenement. These gold targets are hosted by Oligo-Miocene age volcanic and volcanoclastic rocks, limestone, subvolcanic plugs and possible diatreme breccias. Several of the prospects have had limited drill testing and produced some significant gold-silver intercepts including 9 m at 4.5 g/t Au & 8 g/t Ag at Sentul, 13.7 m at 3.2 g/t Au & 60 g/t Ag at Buluroto, and 6.6 m at 4.9 g/t Au & 149 g/t Ag at Kojan. High-grade gold-vein float occurrences identified at the Jati and Jombok have yet to be traced to source and remain a valid exploration target.

A new phase of exploration commenced in late 2011 under a Joint Venture with Anglo American to explore for porphyry copper-gold targets. This partnership continued until late 2014 when Anglo American withdrew due to a global rearrangement of their exploration priorities. The partnership provided the first opportunity to test the porphyry potential of the Trenggalek IUP and generated an extensive geophysical and geochemical database for porphyry targeting.

Scout drilling of targets identified at Jerambah and Singgahan prospects in the south-eastern corner of the IUP with Anglo American in late 2013 – early 2014 confirmed the occurrence of large porphyry-style alteration systems containing low-grade copper-gold-molybdenum mineralisation associated with multiple diorite-quartz diorite-tonalite intrusions and diatreme breccias at both prospects. These large alteration systems remain open and have only been partly explored.

A low-level of exploration activity was conducted at Trenggalek during the quarter whilst the Company considers its options on moving this project forward.

Exploration expenditure at Trenggalek for the quarter totalled US\$50,352.

## AUSTRALIA

ARX holds agreements with New South Resources Pty Ltd ("NSR") to farm-in to their Junee and Oberon projects located in New South Wales (see ASX announcements of 3<sup>rd</sup> July 2013 and 30<sup>th</sup> June 2014). These two projects occur within the Lachlan Orogen, a complex geological province endowed with world-class gold and gold-copper deposits.

ARX also holds an option to farm-in to a gold property owned by Snowmist Pty Ltd ("Snowmist") located in the Mount Garnet mining district of Far North Queensland. This option period extends until August 2015.

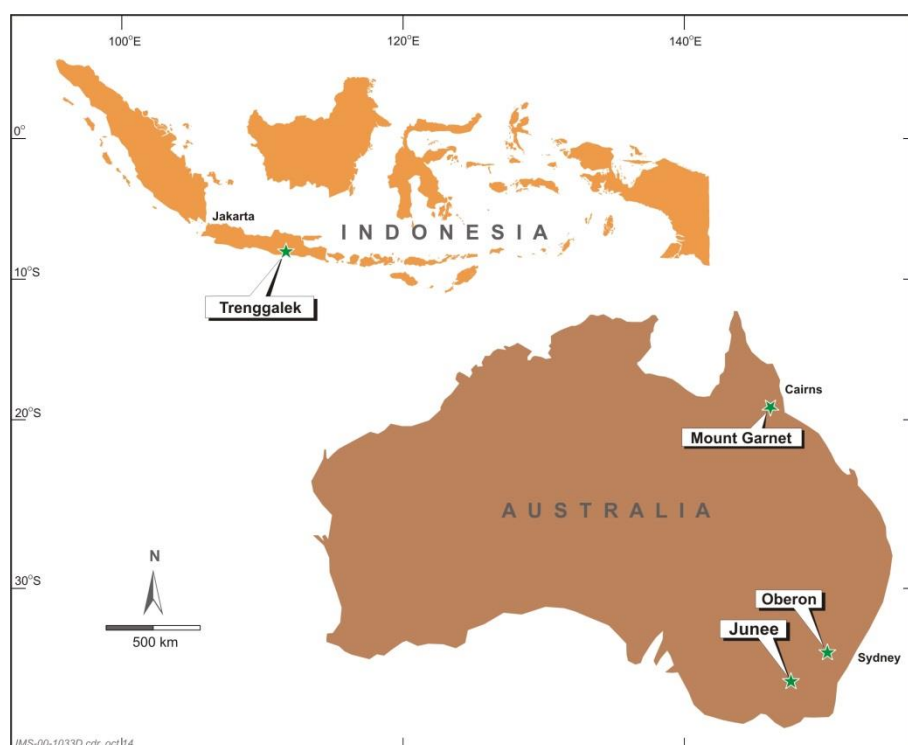


Figure 2. Australian and Indonesian Project Locations

### Junee Project, NSW (100% NSR; ARX earning up to 80%)

The **Junee Project** is located close to existing mine operations and development infrastructure and near the major regional centre of Wagga Wagga. It comprises three Exploration Licences (EL's 6516, 6768 & 8152). The total area of this tenement package is about 73 square-kilometres (Figure 4).

The tenements straddle the major regional Gilmore Fault Zone and cover rocks of the Junee-Narromine Volcanic Belt, part of the highly prospective Ordovician-Early Silurian Macquarie Volcanic Arc in the Lachlan Orogen. Large porphyry-related gold and gold-copper deposits (E.g. Northparkes, Gidginbung and Cowal) occur along this fertile volcanic belt and their distribution is believed to be spatially related to the Gilmore Fault Zone and its associated fault splays.

EL 6516 contains the 77,000-ounce *Dobroyde* gold deposit (see ASX announcements of 3<sup>rd</sup> and 10<sup>th</sup> July 2013) on which historic drilling has produced some spectacular high-grade gold intercepts within a low-grade mineralisation envelope, including 22m at 37.3 g/t gold, 16m at 10.5 g/t gold and 6m at 18.2 g/t gold (see ASX announcements of 9<sup>th</sup> October 2013).

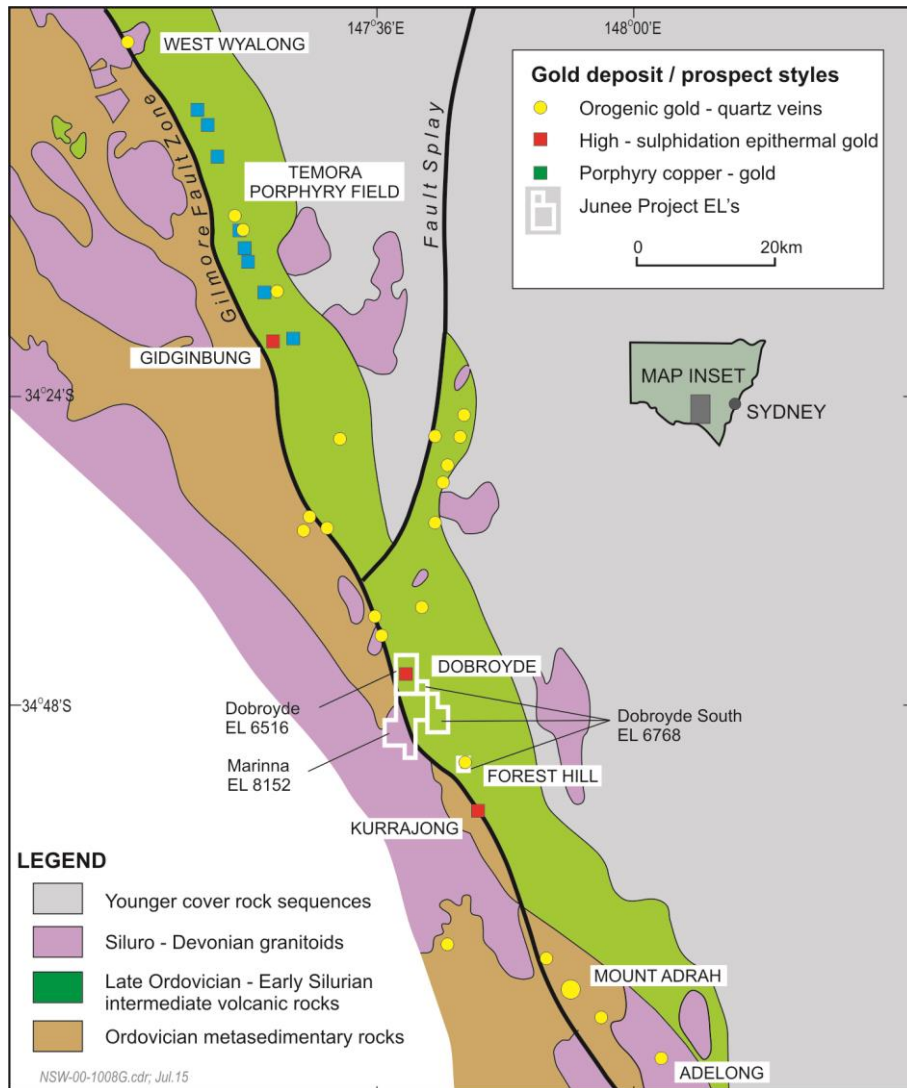


Figure 3. Junee Project Location on Regional Geology

No field activities to report for the quarter.

A petrographic evaluation of 5 RC chip samples collected from the Forest Hill Prospect in the previous quarter was completed by an industry consultant. Forest Hill is located about 15-km south of Dobroyde gold deposit and has produced some gold and copper anomalies from previous work including up to 1.1 g/t Au and 400 ppm Cu in historic RC drill chip samples. The petrographic work confirmed the presence of a monzonite intrusion in some of the chip samples, which represents a potential porphyry copper-gold target.

The northern tenement, EL 6658, expired during the quarter and was not renewed because it was thought to cover less prospective ground compared to the southern tenements.

ARX expenditure on the Junee Project for the quarter totalled A\$24,087.

### **Oberon Project, NSW (100% NSR, ARX earning up to 80%)**

The **Oberon Project** is located close to existing mine operations and development infrastructure near the major regional centre of Bathurst. It comprises two Exploration Licences (EL's 6525 & 8349). The total area of this tenement package is about 188 square-kilometres.

The project area covers Siluro-Devonian and Ordovician volcanic rocks of the Hill End Trough and the Macquarie Volcanic Arc and is located on the eastern side of the Lachlan Orogen. The Siluro-Devonian volcano-sedimentary rocks in this region are host to VMS-related gold-base metal (McPhillamys, Lewis Ponds) and orogenic gold-vein (Hill End, Lucknow) deposits. Ordovician volcanic rocks within the project area are of a similar age and composition to those hosting the multiple gold-copper porphyry and gold-copper skarn deposits found in the nearby Cadia district. The Oberon Project area is therefore prospective for similar styles of mineralisation.

Carboniferous granites intrude both of the older rock sequences and the edges of these intrusions are prospective for gold skarn deposits (Lucky Draw, Browns Creek).

EL 6525 contains the 150,000-ounce *Murphys* gold deposit (see ASX announcements of 3<sup>rd</sup> and 10<sup>th</sup> July 2013) from historic drilling which has produced some broad low-grade gold intercepts including 49m at 0.75 g/t gold, 23m at 1.05 g/t gold and 34m at 0.62 g/t gold.

No field activities to report for the quarter.

The small tenement, EL 8110, expired during the quarter and was not renewed because it was thought to cover less prospective ground compared to the larger adjoining tenements, EL 6525 and EL 8349.

ARX expenditure on the Oberon Project for the quarter totalled A\$15,183.

### **Mount Garnet Project, Queensland (100% Snowmist, ARX has option to earn in)**

The **Mount Garnet** Project, located near the major regional centre of Cairns, comprises three Mining Leases (ML's 4363, 4390, 20018) covering about 150 hectares that are 100% held by Snowmist Pty Ltd ("Snowmist"), and an exploration tenement (EPM 25343) covering about 17 km<sup>2</sup> that is held by Arc Exploration Limited ("ARX").

ARX holds an option agreement with Snowmist Pty Ltd ("Snowmist") to farm into their package of mining tenements containing the *Triple Crown* gold deposit, which contains a drill-indicated gold resource estimated to be 69,000 ounces and includes a small oxide resource of about 25,000 ounces gold (see ASX announcement of 21<sup>st</sup> August 2013). Historic drilling at Triple Crown has produced some broad low-grade gold intercepts including 22m at 2.33 g/t gold, 51m at 1.73 g/t gold and 35m at 1.39 g/t gold.

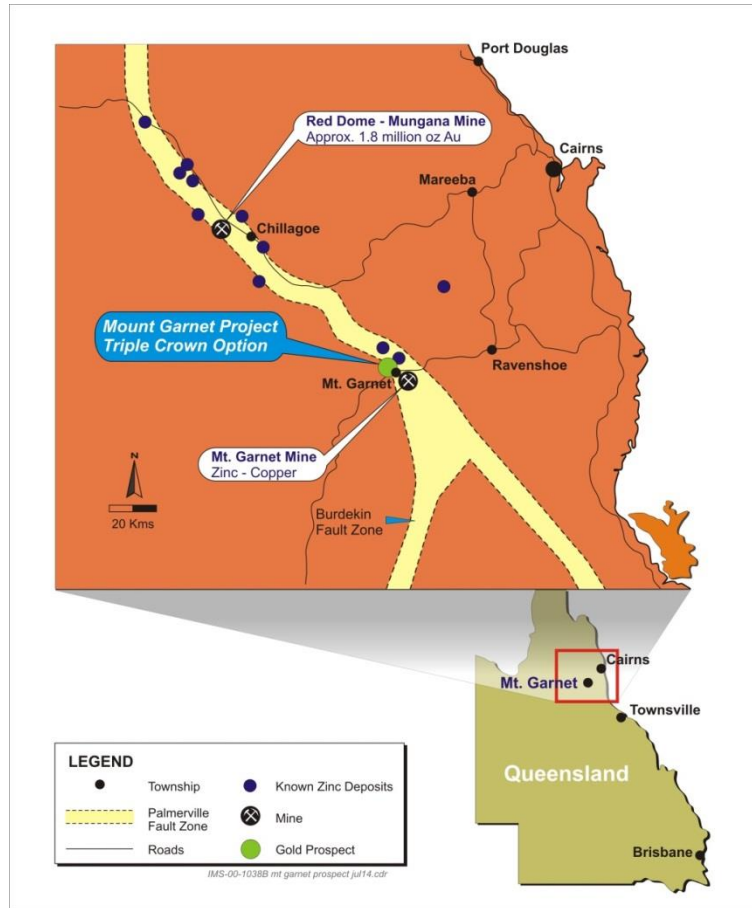
The project area lies in the Mount Garnet tin-base metal mining subdistrict of the Herberton Tinfield and within the southern end of a discontinuous belt of Siluro-Devonian calcareous metasedimentary rocks (Chillagoe Formation) that is bounded by the major regional Palmerville fault and intruded by Permo-Carboniferous granites. These rocks are host to a number of gold-base metal-tin skarn and disseminated gold-base metal-tin stockwork/breccia deposits in the region, including Red Dome (gold-copper), Mungana (gold-zinc) and King Vol (zinc) in the Chillagoe district, and Mount Garnet (zinc-copper), Gillian (tin) and Triple Crown (gold) in the Mount Garnet district.

A petrographic evaluation of 7 surface samples collected from the Triple Crown mining leases and the adjacent exploration tenement in the previous quarter was completed by an industry consultant. Two granite samples taken near the Triple Crown gold deposit were characterised as being part of the O'Brien Creek Supersuite, which is associated with some major gold and base metal deposits in the region, including Red Dome and Mungana.

Triple Crown has only been explored to shallow depth and there remains potential to significantly expand the known gold resource at greater depth.

Calc-silicate rocks sampled on the Triple Crown mining leases were described as having petrographic characteristics that are considered to be similar to the skarnoid rocks hosting high-grade zinc mineralisation at the nearby historic Mount Garnet mine. This supports the potential for high-grade zinc-rich skarn targets in the Triple Crown tenements area.

During the quarter ARX conducted full assessment of the data collected so far to determine whether it wants to exercise this option or not. The Company has the Option to earn-into-this project until 18 August 2015. Should it exercise this option, it can earn 51% of the project by spending \$500,000 by August 2017, after which it can increase its interest to 80% by spending an additional \$580,000 by August 2018.



ARX expenditure on the Mount Garnet Project for the quarter totalled A\$8,143.

## CORPORATE

During the Quarter the Company conducted its Annual General Meeting on 22 May 2015. All resolutions were passed and subsequently 41,804,446 shares were allotted to Directors and officers of the Company in lieu of Directors fees and salaries at an average price of 0.36 cents per share.

Following this the total number of shares in issue is: 1,105,193,577

This report is dated 15 July 2015.

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## Competent Person Statement

The information in this announcement that relates to Exploration Results is based on information compiled by Mr Brad Wake, BSc (Applied Geology), who is a member of the Australian Institute of Geoscientists. Mr Wake has sufficient experience that is relevant to the styles of mineralisation and types of deposit under consideration and to the activity which is being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.' Mr Wake is a full time employee of Arc Exploration Limited and consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to the *Dobroyde* and *Murphys* gold resources is extracted from the report entitled Junee and Oberon Projects - Statement of Resources created and released to the ASX on 10 July 2013.

The information in this report that relates to the *Triple Crown* gold resource is extracted from the report entitled Mount Garnet Project - Statement of Resources created and released to the ASX on 21 August 2013.

The report referred to above is available to view on the Company's website: [www.arcexploration.com.au](http://www.arcexploration.com.au) The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources or Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

**Table 1. Details of Tenements & ARX Interest**

Project	Location	Tenement	Area (km <sup>2</sup> )	ARX Interest
Trenggalek	East Java, INDONESIA	Exploration IUP	299.7 km <sup>2</sup>	95%
Oberon	New South Wales, AUSTRALIA	EL 6525	160 km <sup>2</sup>	Farm-in
		EL 8349	28.6 km <sup>2</sup>	100%
Junee	New South Wales, AUSTRALIA	EL 6658	14 km <sup>2</sup>	Farm-in
		EL 6768	20 km <sup>2</sup>	Farm-in
		EL 8152	36 km <sup>2</sup>	100%
Mount Garnet	Queensland, AUSTRALIA	ML 4363	129 ha	Under Option
		ML 20018	21 ha	Under Option
		ML 4390	1 ha	Under Option
		EPM 25343	17 km <sup>2</sup>	100%

**Table 2. Exploration/Mining Tenements Acquired/Disposed of during the Quarter**

Project	Location	Tenement	Area (km <sup>2</sup> )	ARX Interest
Oberon	New South Wales, AUSTRALIA	EL 8110 Expired licence	11 km <sup>2</sup>	None (Part of Farm-in with NSR)
Junee	New South Wales, AUSTRALIA	EL 6658 Expired licence	14 km <sup>2</sup>	None (Part of Farm-in with NSR)