

## September 2017 Quarter Activities Report

### ABOUT ARC EXPLORATION LIMITED

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

The Company has a joint venture interest with PT Sumber Mineral Nusantara on the Trenggalek Project in East Java. PT Danusa Tambang Nusantara is farming into the Trenggalek Project. The Project lies on the highly prospective Sunda-Banda magmatic arc, which is host to several known high-grade epithermal gold and porphyry copper-gold deposits.

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### INDONESIA

#### Trenggalek Project, East Java

- PT Danusa Tambang Nusantara continues to manage and fund exploration work at Trenggalek.
- Detailed re-mapping and re-sampling conducted at Jerambah Prospect.
- Induced Polarisation survey conducted along 10 lines using 50m dipole spacing and 2 additional lines using 200m spacing.
- Ground Magnetic survey also conducted at Jerambah.
- The Induced Polarisation and Ground Magnetic results combined with re-interpretation of aeromagnetic data, spectral analyses, re-mapping and re-sampling of the area have identified two drill targets.
- Scout drilling commenced to test these targets after consultation with the local community and local authorities.

### CORPORATE

- The Company is focused on identifying and evaluating new opportunities in the resources sector which have the potential to create shareholder value.

## INDONESIA

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



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

### Trenggalek Project, East Java (farming out up to 80%)

ARX operates a joint venture in respect of the Trenggalek Exploration IUP tenement, located in the Southern Mountains of East Java (See Figure 1). The Southern Mountains is composed of an older segment of the Sunda-Banda magmatic arc, which hosts several known large porphyry copper-gold deposits; *Tumpangpitu* (*Tujuh Bukit*) located about 200 kilometres to the east of Trenggalek, and *Batu Hijau* and *Elang* located on Sumbawa. Trenggalek contains a similar package of rocks to those hosting these three major porphyry deposits.

The Trenggalek Exploration IUP tenement is held by ARX's Indonesian partner, PT Sumber Mineral Nusantara ("SMN"). The tenement, covering an area of 29,969 ha or about 300 km<sup>2</sup>, is valid until November 2018.

Since November 2015 PT Danusa Tambang Nusantara (Danusa), a subsidiary of one of the largest contract miners in Indonesia, has been managing and funding exploration work at Trenggalek. In early 2017 Danusa agreed to continue with Stage 2 Exploration with a budget of US\$ 1 million.

### Jerambah Prospect

There has been only one hole drilled previously at the Jerambah Prospect (Figure 2) which intersected extensive hydrothermal alteration and disseminated pyrite with traces of base metal mineralisation in a prospective rock package (see ARX announcement 12 December 2013). Subsequent petrological studies on selected core samples confirmed the presence of porphyry-associated alteration mineral assemblages, fragments of porphyry-style quartz veins, anhydrite veining, traces of disseminated chalcopyrite and molybdenite mineralisation and narrow structurally controlled zones of high-sulphidation epithermal mineralisation overprints. These petrological results are interpreted that the hole was drilled in a peripheral position to a potential mineralised porphyry system (see ARX announcement of 9 April 2014).

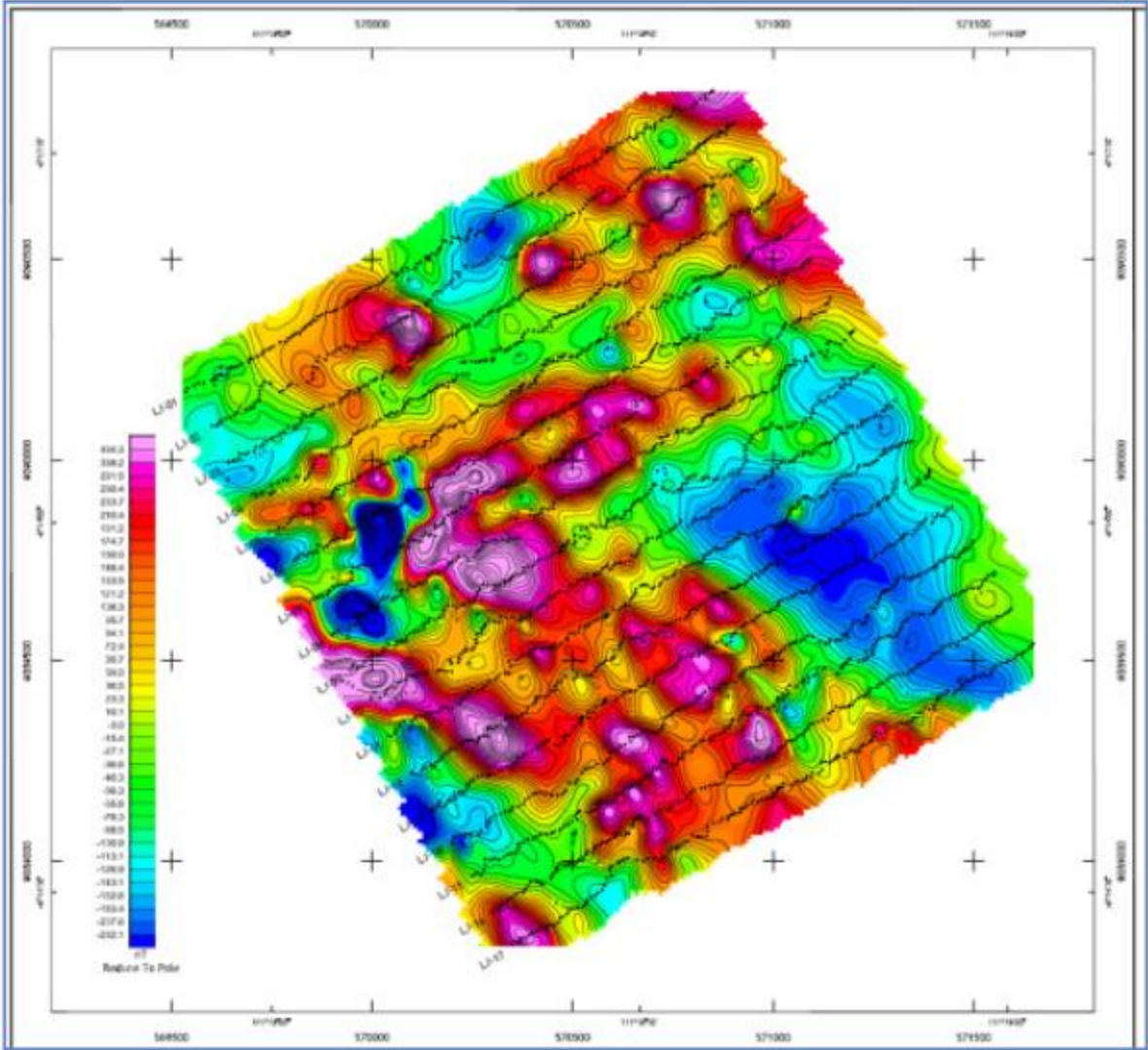
Further large grid-based soil sampling programmed shows a new cluster of overlapping spotty copper-gold-molybdenum anomalies north of Jerambah Prospect thus highlighting the untested potential of this prospect (see ARX announcement of 9 April 2014).

During this quarter an Induced Polarisation and ground magnetic surveys in combination with additional mapping and soil sampling were undertaken at Jerambah.

Outcrops of diorite with quartz-sericite-(chlorite) alteration and quartz stockworks were identified (assaying 0.15% Cu and 0.15g/t Au). Alteration zones were mapped with the aid of a Terraspec machine.

The Induced Polarisation survey was conducted in July and August 2017 along 10 lines using a 50m dipole spacing with 2 additional lines using a 200m dipole spacing to obtain a deeper profile. IP pseudo-sections show continuous chargeability anomaly of > 30 ms with medium resistivity of 150 ohm-m covered by what is interpreted to be advanced argillic volcanoclastic unit.

The Ground magnetic survey confirmed the mapping results that the area is dominated by dioritic rocks with a strong NW-SE structural control (Figure 3).



**Figure 3. Ground magnetic results confirming strong NW-SE structural control.**

The Induced Polarisation and Ground Magnetic results combined with re-interpretation of aeromagnetic data, spectral analyses, re-mapping and re-sampling of the area have identified two drill targets.

Scout drilling commenced late in the quarter to test these targets after consultation with the local community and local authorities. Results will be released to the market at the earliest opportunity.

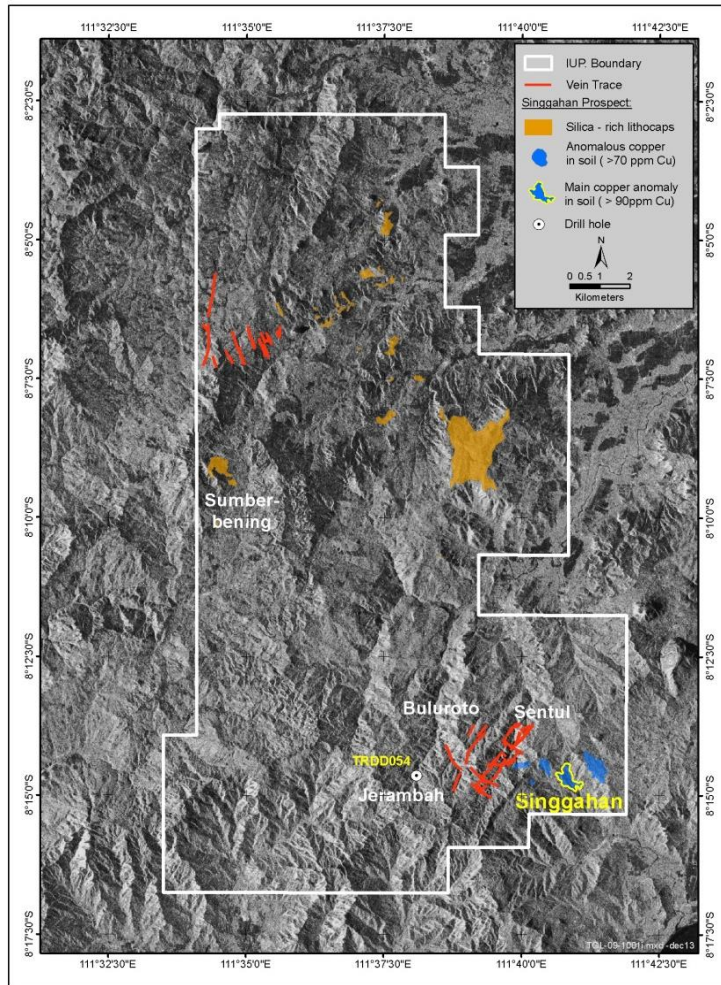


Figure 2. Trenggalek Exploration IUP

### Singgahan Prospect

Previous mapping, petrological studies and drilling at the Singgahan Prospect (Figure 2) identified the occurrence of porphyry style copper mineralisation. A Ground Magnetic survey consisting of 25.5 line km covering an area 1.5km x 1.6km was completed during the December 2016 quarter. Further geological mapping and soil sampling was undertaken earlier in 2017. These results combined with existing aeromagnetic data and detailed geological mapping have assisted in defining drill targets at Singgahan. Drilling at Singgahan will be pursued by Danusa after consultation with the local community and local authorities.

Exploration expenditure at Trenggalek by Danusa for the quarter totalled US\$168,774.

This report is dated 27 October 2017.

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### Competent Person Statement

The information in this report that relates to the following were created and reported in accordance with the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves:

- The exploration results in this report that relate to the Trenggalek Project is extracted from the following reports:
  - First Hole Completed on Porphyry Target at Trenggalek, Indonesia created and released to the ASX on 12 December 2013;
  - Update on Trenggalek Exploration Activities created and released to the ASX on 9 April 2014.

The reports referred to above are 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 these original market announcements. 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 announcements.

The information in this announcement that relates to Exploration Results from the Jerambah Prospect is based on information compiled by Dr Jeffrey Malaihollo, who is a Fellow of the Australian Institute of Mining and Metallurgy and Fellow of the Geological Society of London. Dr Malaihollo has sufficient experience that is relevant to the styles of mineralisation and types of deposit under consideration and to the activity which is being undertaking 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.' Dr Malaihollo is a consultant to the Company and a director of the Company's subsidiary in Indonesia and consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

**Table 3. 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% (farming out up to 80%)

**Table 4. Exploration/Mining Tenements Acquired/Disposed of during the Quarter**

Project	Location	Tenement	ARX Interest	Comment
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# JORC Code, 2012 Edition – Table 3 Report template

## Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>An Induced Polarisation survey conducted undertaken along 10 lines using a 50m dipole spacing with 2 additional lines using a 200m dipole spacing to obtain a deeper profile.</li> <li>A Ground Magnetic survey was conducted.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>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).</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>
Logging	<ul style="list-style-type: none"> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p>duplicate/second-half sampling.</p> <ul style="list-style-type: none"> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	N/A
Data spacing and distribution	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>The results in this announcement relate to an Induced Polarisation survey conducted undertaken in July and August 2017 along 10 lines using a 50m dipole spacing with 2 additional lines using a 200m dipole spacing to obtain a deeper profile.</li> <li>There is insufficient data to establish a mineral resource.</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	N/A
Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>

## 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	<ul style="list-style-type: none"> <li>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.</li> <li>The security of the tenure held at the time of</li> </ul>	<ul style="list-style-type: none"> <li>Trenggalek Exploration IUP ("Izin Usaha Pertambangan") is held by PT. Sumber Mineral Nusantara ("SMN"). Total area is 29,969 ha (about 300 square-km) valid until 2 November 2018.</li> <li>ARX holds a joint venture with SMN and has a 95% interest in the Trenggalek Project.</li> <li>On 18 November 2015 ARX announced that it had</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p>reporting along with any known impediments to obtaining a licence to operate in the area.</p>	<p>signed formal documentation with PT Danusa Tambang Nusantara to explore the Trenggalek IUP for gold and base metals to earn equity in the project.</p> <ul style="list-style-type: none"> <li>• Sentul &amp; Buluroto prospects lie within the SE corner of the Trenggalek Exploration IUP. These prospects lie mainly within government forestry land having production &amp; partly protected status. SMN holds a valid <i>Pinjam-Pakai</i> Permit to work on the forestry land and negotiates access to other land with individual landowners.</li> </ul>
<p>Exploration done by other parties</p>	<ul style="list-style-type: none"> <li>• Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>• Sentul &amp; Buluroto prospects were previously identified by PT Aneka Tambang ('Antam') under a KP licence that they held over the same area in the 1990's; Antam did very limited surface trenching and drilling on both prospects.</li> <li>• ARX did scout drilling on the Sentul and Buluroto prospects in 2010 and 2011; results from which have been reported in previous ARX:ASX announcements, quarterly &amp; annual reports. A summary of the best drilling results is included in the next section – Geology.</li> <li>• ARX held a joint venture with Anglo American for two years from late 2012 until late 2014, exploring for porphyry copper.</li> <li>• The partnership with Anglo American provided the first opportunity to test the porphyry potential of the Trenggalek IUP and significantly expanded the project database, providing a solid platform on which to plan future exploration.</li> </ul>
<p>Geology</p>	<ul style="list-style-type: none"> <li>• Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>• Trenggalek is located in the Southern Mountains of East Java, which comprises an older segment of the highly prospective Sunda-Banda magmatic arc.</li> <li>• The Southern Mountains is composed of Oligo-Miocene and younger volcanosedimentary rocks, limestone and intermediate-felsic igneous intrusions that are prospective for epithermal-style and porphyry-related gold-base metal deposits.</li> <li>• The giant Tumpangpitu porphyry copper-gold-molybdenum and associated epithermal gold-silver deposit is located about 200 km from Trenggalek at the eastern end of the Southern Mountains. Tumpangpitu is believed to be hosted in rocks that are similar to those underlying the Trenggalek project area.</li> <li>• <b>Sentul</b> and <b>Buluroto</b> prospects are located in the SE corner of the IUP. Both prospects contain large intermediate-sulphidation epithermal vein systems hosted in andesitic-dacitic volcanoclastic rocks with minor intercalated limestone intruded by high-level andesite-dacite plugs.</li> <li>• <b>Sentul</b> consists of two main parallel NE-SW trending quartz-chalcedony-sulphide veins (West and East Sentul) connected by sigmoidal en echelon veins; the veins are up to 10-15 m wide and have greater than 10 km collective strike length.</li> <li>• <b>Buluroto</b> contains a hydrothermal breccia pod (150-200m long, up to 20m wide) developed at the confluence of two &lt;1-5m wide quartz-chalcedony-sulphide veins that are each 1-2 km long.</li> <li>• These epithermal vein systems are composed of polyphasal microcrystalline to fine-grained quartz, chalcedony, minor carbonate and disseminated sulphides (pyrite, arsenopyrite, base metal sulphides). The veins show hydrothermal breccia, banded and massive textures. Wall rock alteration is predominantly illitic clay/sericite, chlorite &amp; pyrite with epidote becoming more prominent at deeper levels</li> </ul>



Criteria	JORC Code explanation	Commentary
		<p>of the system.</p> <ul style="list-style-type: none"> <li>• Previous drilling by ARX on the <b>West Sentul Vein</b> totalled 2002-m in 14 holes and returned some narrow high-grade gold intercepts (&gt;10 g/t gold) within thick vein structures, including a best intercept of 2 m at 17.2 g/t gold &amp; 13 g/t silver within 9 m at 4.5 g/t gold &amp; 8 g/t silver in the deepest hole TRDD-4; this vein has been drill tested to less than 175-m vertical depth.</li> <li>• Previous drilling by ARX on the <b>East Sentul Vein</b> totalled 475-m in 6 holes and returned a best mineralized intercept of 3 m at 5.53 g/t gold &amp; 14 g/t silver in hole TRDD-12; this vein has been drill tested to less than 75-m vertical depth.</li> <li>• Previous drilling by ARX on the <b>Buluroto breccia pod</b> totalled 652-m in 5 holes and returned a best intercept of 2 m at 8.7 g/t gold &amp; 48 g/t silver within 13.7 m at 3.2 g/t gold &amp; 60 g/t silver in hole TRDD-32; this breccia pod has been drill tested to less than 125-m vertical depth.</li> <li>• Sentul &amp; Buluroto are located close to 'porphyry targets' identified at nearby <b>Jerambah &amp; Singgahan</b> prospects that were scout drilled in partnership with Anglo American in 2014; the IUP is considered have good potential for porphyry-related gold-base metal deposits.</li> </ul>
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <li>• 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: <ul style="list-style-type: none"> <li>○ easting and northing of the drill hole collar</li> <li>○ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>○ dip and azimuth of the hole</li> <li>○ down hole length and interception depth</li> <li>○ hole length.</li> </ul> </li> <li>• If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>• N/A</li> </ul>
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> <li>• The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>• Not relevant to the results in this announcement.</li> </ul>
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <li>• These relationships are particularly important in the reporting of Exploration Results.</li> <li>• If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>• 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').</li> </ul>	<ul style="list-style-type: none"> <li>• Not relevant to the results in this announcement.</li> </ul>
<i>Diagrams</i>	<ul style="list-style-type: none"> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• Diagrams are included with this announcement.</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Representative reporting of the relevant results has been provided in this announcement.</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Encouraging results were reported in the <i>ARX March 2015 Qtly Rpt</i> from cyanide bottle-roll leach testing done on samples of weathered to fresh gold-mineralised quartz vein material from the Sentul West Vein; gold extractions averaging 81% were returned.</li> <li>Suggesting that gold-bearing veins discovered at Sentul may be amenable to processing by conventional carbon-in-pulp processing methods if a significant gold resource is defined.</li> </ul>
<i>Further work</i>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>Drilling on the Jerambah progress is currently in progress testing for mineralisation within the target areas identified by the work reported in this announcement.</li> </ul>