



#### ASX Release

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Alloy Resources Limited  
ABN 20 109 361 195

ASX Code  
AYR

Executive Chairman  
Mr Andy Viner

Non-Exec Director  
Mr Allan Kelly

Non-Exec Director/Co Sec  
Mr Kevin Hart

Issued Shares  
1,116,993,360

Unlisted Options  
29,000,000

Email  
info@alloyres.com

Website  
www.alloyres.com

Principal Office  
+61 (8) 9322 9903  
Level 3, 35 Havelock St  
West Perth WA 6005

Postal & Registered Office  
+61 (8) 9316 9100  
Suite 6, 7 The Esplanade  
Mt Pleasant WA 6153

## Exploration Update Ophara Cobalt-Gold Project Drilling program

- **Drilling has not confirmed any bedrock sulphide conductors as interpreted by consultants at the main A1, A3, A5 and A6 targets.**
- **Ground and downhole EM was completed and confirmed that anomalies are conductive deep clay materials and containing salt water.**
- **Six (6) RC holes completed of a planned 9 hole program.**
- **Highly unexpected geology lowers potential for discovery of sulphide conductors in the northern part of the project area.**

### Summary

Alloy Resources Limited (ASX: **AYR**, **Alloy** or the **Company**) provides the following update on the field progress of exploration at the Ophara Project located 50 kilometres west of Broken Hill in New South Wales.

The RC drill program has not encountered any sulphides to explain the EM anomalies independently interpreted from the recent helicopter-borne VTEM survey. (*refer ASX release dated 23 October 2017*)

A ground EM crew were engaged during the course of the program to refine the interpreted helicopter-borne VTEM targets.

Based on what has been logged in the field the Company now believes that the conductors at these targets are likely to be thick conductive clays with saline groundwater and are not prospective for bedrock sulphide bodies.

All but one hole was completed as planned, with rain curtailing access to the site yesterday.

Despite not logging any obvious sulphide mineralisation, four metre composite drill samples will be submitted for analysis of a small suite of base and precious metals.

The Company will now complete a reassessment of all data with a view to defining the remaining potential for Cobalt-gold mineralisation in the southern areas proximal to the Great Goulburn prospect.



# Ophara Exploration Update

## Exploration Completed

The Company completed six RC holes of a planned nine hole program as listed in Table 1.

Drilling indicated an interpretation issue as unexpectedly deep clays were intersected and no strong sulphide mineralisation was observed in the bedrock.

**Table 1** Completed RC drill holes. All values approximate (MGA94 Zone 51)

Hole ID	VTEM target	East	North	Azimuth (approx)	Dip (approx)	EOH Depth
AORC13	A3	504200	6444550	360	70	160
AORC14	A6	507604	6446602	360	70	118
AORC15	A6	507433	6447154	90	60	142
AORC16	A5	506828	6448288	160	60	154
AORC17	A5	506823	6448217	160	60	130
AORC18	A1	500570	6444290	160	60	121

A ground EM survey crew was mobilised to the site after the first three drill holes to provide more accurate definition of the location of conductors at depth. In summary the results of this work indicated that both A3 and A6 conductors were shallower rather than deeper and likely to be sub-horizontal conductive weathered material which coincided with observed geology.

One down-hole EM survey was able to be completed on hole AORC13 and this did not indicate any conductors below the probe depth of 90 metres – confirming the main conductance being located in overlying micaceous clays.

Following ground EM surveying at A5 one further hole was drilled to test a possible steeper bedrock conductor however nothing was observed to explain this.

The last hole was at A1 where the northern anomaly was tested. strong rain made the site unsafe and drilling was suspended at about 110 metres overnight. On return excessive water and clay limited penetration to a depth of only 121 metres. The rain also stopped safe access to the A1 south drill target and hence the program was stopped early. Based on our observations to date it is unlikely that the remaining 3 holes from the planned program will be completed.

Full details and interpretation will be made available following compilation of all drill information and receipt of assays

### Andy Viner

Executive Chairman

Phone: +61 8 9322 9903

Or +61 8 9316 9100

## Exploration Results

Information in this report which relates to Exploration Results is based on information compiled by Andrew Viner, a Director of Alloy Resources Limited and a Member of the Australasian Institute of Mining and Metallurgy, Mr Viner has 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 a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves." Mr Viner consents to the inclusion in the report of the matters based on this information in the form and context in which it appears. Mr Viner is a shareholder and option holder of Alloy Resources Limited.



# JORC Code 2012 Edition Summary (Table 1)

## EL 8475 Ophara Prospect RC Drilling - November 2017

### Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<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> </ul>	<ul style="list-style-type: none"> <li>The VTEM and ground EM and downhole EM surveys reported collected measurements of the earths conductivity via a Time Domain EM System.</li> </ul>
	<ul style="list-style-type: none"> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> </ul>	<ul style="list-style-type: none"> <li>EM sampling methods have been well established in the Industry.</li> </ul>
	<ul style="list-style-type: none"> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> </ul>	<ul style="list-style-type: none"> <li>No determination of mineralisation has been made from the EM surveys except by correlation to known conductors which were mineralised in the survey area (A2).</li> </ul>
	<ul style="list-style-type: none"> <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>Relative EM anomalies (conductors) are regarded as appropriately processed and advised by Industry expert consultants.</li> </ul>
<b>Drilling techniques</b>	<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>132mm Reverse Circulation to a maximum vertical depth of ~160m.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> </ul>	<ul style="list-style-type: none"> <li>Sample recoveries were generally high, dropping to &lt;50% in wet samples.</li> </ul>
	<ul style="list-style-type: none"> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> </ul>	<ul style="list-style-type: none"> <li>RC Drilling: sample splitter was cleaned at the end of each rod to ensure no sample hang-ups have occurred. Assay sample weights are recorded and in general were approximately 2kg.</li> <li>Wet samples due to excess ground water were noted when present.</li> </ul>
	<ul style="list-style-type: none"> <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>As sample recoveries are generally high, there is no known relationship between sample recovery and grade.</li> </ul>
<b>Logging</b>	<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> </ul>	<ul style="list-style-type: none"> <li>Holes logged to a level of detail to support future mineral resource estimation: lithology; alteration; mineralization; structural.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> </ul>	<ul style="list-style-type: none"> <li>Qualitative: lithology, alteration, foliation</li> <li>Quantitative: vein quartz percentage; mineralization (sulphide) and magnetite percentage; assayed for gold;</li> <li>Standard reference chip samples collected at 1m intervals for all holes, and archived.</li> </ul>
	<ul style="list-style-type: none"> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>All holes logged for the entire length of hole.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> </ul>	<ul style="list-style-type: none"> <li>No core has been drilled or sampled</li> </ul>
	<ul style="list-style-type: none"> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> </ul>	<ul style="list-style-type: none"> <li>Not reported</li> </ul>
	<ul style="list-style-type: none"> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> </ul>	<ul style="list-style-type: none"> <li>Not reported</li> </ul>
	<ul style="list-style-type: none"> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> </ul>	<ul style="list-style-type: none"> <li>Not reported.</li> </ul>
	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Not reported.</li> </ul>
	<ul style="list-style-type: none"> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>Not reported.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<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> </ul>	<ul style="list-style-type: none"> <li>Not reported.</li> </ul>
	<ul style="list-style-type: none"> <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> </ul>	<ul style="list-style-type: none"> <li>Not reported.</li> </ul>
	<ul style="list-style-type: none"> <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>Not reported</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>• <b>The verification of significant intersections by either independent or alternative company personnel.</b></li> </ul>	<ul style="list-style-type: none"> <li>• Not reported.</li> </ul>
	<ul style="list-style-type: none"> <li>• The use of twinned holes.</li> </ul>	<ul style="list-style-type: none"> <li>• Not reported.</li> </ul>
	<ul style="list-style-type: none"> <li>• Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> </ul>	<ul style="list-style-type: none"> <li>• Not reported</li> </ul>
	<ul style="list-style-type: none"> <li>• Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>• No adjustments made to assay data.</li> </ul>
<b>Location of data points</b>	<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> </ul>	<ul style="list-style-type: none"> <li>• Collars: reported are surveyed with Garmin GPS with expected relative accuracy of approximately 5m.</li> </ul>
	<ul style="list-style-type: none"> <li>• Specification of the grid system used.</li> </ul>	<ul style="list-style-type: none"> <li>• Holes are located in MGA Zone 54.</li> </ul>
	<ul style="list-style-type: none"> <li>• Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>• Not accurate.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>• Data spacing for reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>• Holes the subject of this announcement were widely spaced.</li> </ul>
	<ul style="list-style-type: none"> <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> </ul>	<ul style="list-style-type: none"> <li>• Not relevant – testing geophysical targets.</li> </ul>
	<ul style="list-style-type: none"> <li>• Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>• Not reported .</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<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> </ul>	<ul style="list-style-type: none"> <li>• Not reported</li> </ul>
	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>• Not reported.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>• The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>• Not reported.</li> </ul>
<b>Audits or reviews</b>	<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>• Not reported e.</li> </ul>

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<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 reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>The Ophara prospect is located within Exploration Licence 8475. Alloy has a 100% interest in the tenement. A land access agreement is current between Alloy and the holder of the Western Lands Lease.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Exploration prior to Alloy in the region was limited to grid-based ground magnetic surveying and calcrete sampling, shallow RAB drilling and the drilling of four RC percussion and two cored holes, around the historic Great Goulburn workings. This early work was focused on gold and base metal exploration.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>Ophara is a metamorphosed quartz-magnetite hosted Au-Co-Cu deposit with similarities to the Muturoo deposit a short distance to the west in South Australia.</li> </ul>
<b>Drill hole Information</b>	<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>Not reported in detail as this is an update with further work required such as geological interpretation and sample analysis..</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>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.</i></li> <li><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>Not reported.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li><i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li><i>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').</i></li> </ul>	<ul style="list-style-type: none"> <li>No mineralisation has been reported.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Not reported.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Not reported.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>All meaningful and material information has been included in the body of the text as initial observations relating to what was observed in drill samples versus expected and actual geophysical signatures/expectations.</li> <li>Consultants have received field corrected preliminary data and processed the ground and downhole EM data. The Company has conducted numerous discussions to understand this process and has reported its conclusions which concur with the independent experts conclusions.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>The company is continuing to review past and current results before defining further exploration plans.</li> </ul>