

ASX Announcement

17 March 2017

## More high grade cobalt discovered at Ketchowla

### Highlights

- Additional significant cobalt results from Ketchowla Project.
- Cobalt up to 0.64% and manganese > 50% reported from recent field work.
- Preparation for drilling at Ketchowla underway – drilling to start next month.
- Assay results from Polinga drill samples expected next week.

Archer is pleased to report that recent exploration at the Ketchowla Project has identified further high grade cobalt in rock chips with the highest grade of 0.64% cobalt and an average grade of 0.28% cobalt. The Ketchowla Cobalt Manganese Project, is located north of Burra, South Australia, within the Nuccaleena Formation.

In addition to high grade cobalt, manganese grades > 50% were reported at several locations. These manganese grades were so high that the actual grade could not be measured at this time so were simply reported as > 50% Mn. The average grade reported was 37.3% Mn.

The exploration was undertaken as part of the preparatory work for the upcoming Ketchowla RC drilling program which is scheduled to commence in late April (subject to permitting). A total of 18 samples were collected from the K1, K2 and K8 prospects with 17 samples (94% of all samples) reporting grades of > 0.1% Co.

### The Ketchowla Project

The Ketchowla Project is located approximately 45km north of Burra and 200km north of Adelaide, South Australia. The standard gauge east-west Trans Australian Railway line is located 35km north of the main project area. Established electricity and water infrastructure is also within close proximity.

The Ketchowla Cobalt Manganese Project comprises:

- K1 Prospect which is centred along strike of a small historic manganese open cut mine (**Ketchowla Mine**) and located on the western limb of the main fold structure, figure 1.

- K2 – K9 prospects. Prospects K3 to K9 are located on the eastern limb of the main fold structure with K2 offset to the east of the main fold. The known K2 to K9 mineralisation demonstrates the potential size (30km strike length) of the mineralising system at Ketchowla.

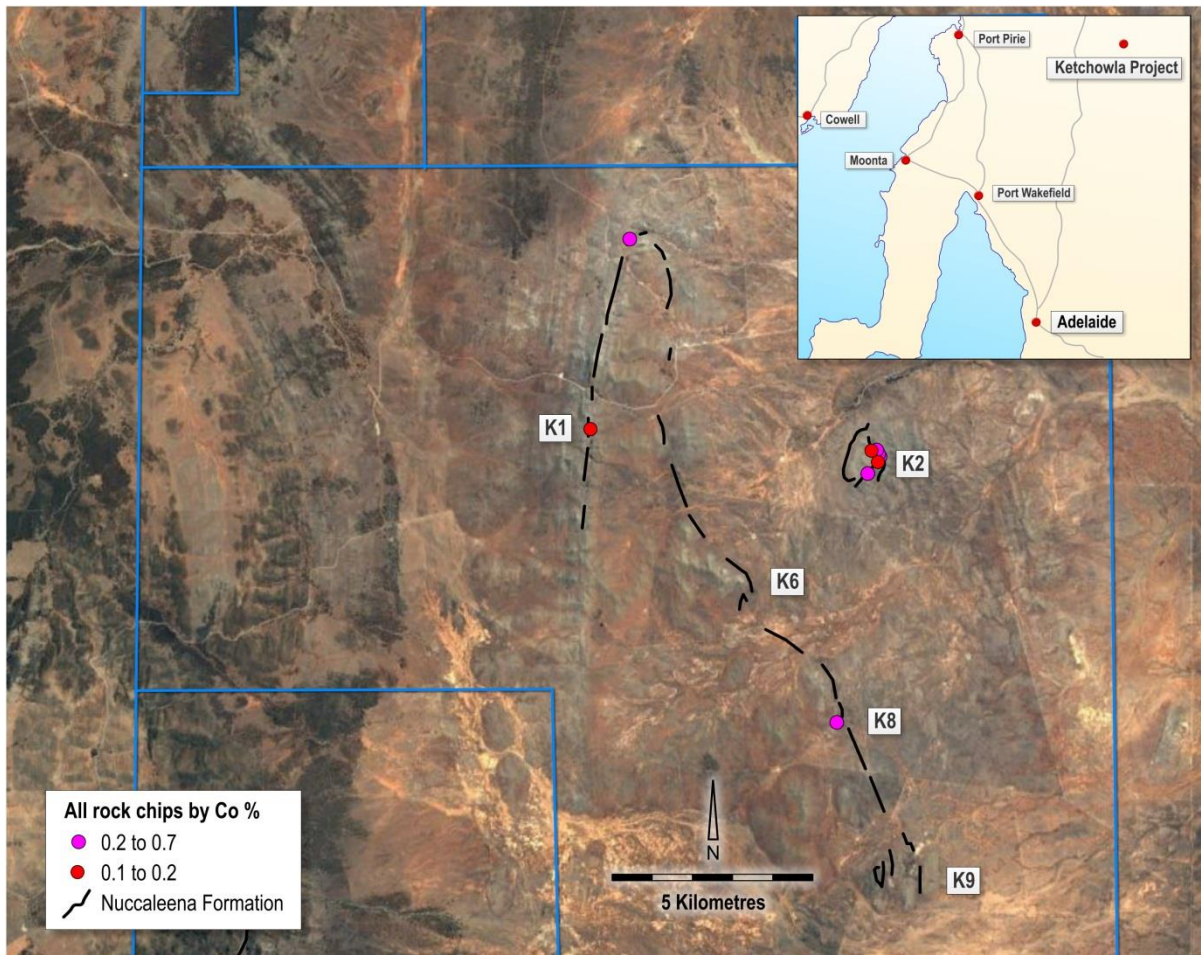


Figure 1: Location of reported rock chip samples from the Ketchowla Project.

## Next Steps

Preparations for drilling at Ketchowla are well advanced with drilling scheduled to commence in late April.

Poling drill samples have been submitted for assay with results expected next week.

For further information, please contact:

Mr Greg English  
Chairman  
Archer Exploration Limited  
Tel: (08) 8272 3288

Mr Cary Helenius  
Investor Relations  
Market Eye  
Tel: 03 9591 8906

## Competent Person Statement

The information in this report that relates to Exploration Results is based on information compiled by Mr Wade Bollenhagen, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy and is a full-time employee of Archer Exploration Limited.

Mr Bollenhagen has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity 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. Bollenhagen consents to the inclusion in the report of the matters based on his information in the form and context in which it appears

## Summary of sample information

The following table provides information on rock chips collected by Archer at the Ketchowla Project on 21 February 2017.

Sample no	Easting	Northing	RL	Co %	Mn %	Cu %	Ni %	Zn %
210217_K1A	332017	6313244	365	0.17	32.8	0.06	0.10	0.28
210217_K1B	332963	6317907	357	<b>0.64</b>	33.4	0.30	0.30	0.31
220217_K2A	339178	6312434	288	0.37	45.7	0.02	0.22	0.25
220217_K2B	339173	6312418	289	<b>0.44</b>	43.7	0.01	0.11	0.12
220217_K2C	339160	6312401	288	0.14	<b>&gt;50</b>	0.00	0.05	0.15
220217_K2D	339057	6312209	274	0.01	0.95	0.02	0.02	0.02
220217_K2E	338884	6312136	265	0.21	36.5	0.14	0.11	0.07
220217_K2G	339193	6312565	298	0.16	<b>&gt;50</b>	0.06	0.09	0.24
220217_K2F	339204	6312565	297	0.30	33.4	0.05	0.07	0.16
220217_K2H	339189	6312614	298	0.24	<b>&gt;50</b>	0.10	0.14	0.28
220217_K2J	339181	6312635	295	<b>0.44</b>	36.6	0.39	0.49	0.31
220217_K2J	339180	6312644	294	<b>0.44</b>	31.7	0.17	0.41	0.41
220217_K2K	339056	6312695	287	0.14	48.2	0.04	0.04	0.11
220217_K2L	339144	6312709	291	<b>0.38</b>	32.6	0.20	0.36	0.17
220217_K2M	339145	6312692	290	0.30	42.8	0.21	0.40	0.22
220217_K2N	339234	6312549	303	<b>0.35</b>	18.6	0.09	0.10	0.16
220217_K8A	338180	6305948	246	0.17	44.6	0.20	0.06	0.06
220217_K8B	338162	6305966	247	0.21	40.5	0.20	0.09	0.05

## JORC Code, 2012 Edition – Table 1

### Section 1 Sampling Techniques and Data

Criteria	JORC Code Explanation	Commentary
<b>Sampling Techniques</b>	<ul style="list-style-type: none"> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole 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 (e.g. ‘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 (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>The assays being reported were collected as a part of reconnaissance work for drill planning.</li> <li>Sampling was guided by Archer’s protocols as the program was exploratory in nature. No standards were submitted by the company during analyses.</li> <li>All samples were sent to ALS laboratory in Adelaide for preparation and forwarded to Peth for multi-element analyses.</li> <li>All samples are crushed using LM2 mill to –4 mm and pulverised to nominal 80% passing –75 µm.</li> </ul>
<b>Drilling Techniques</b>	<ul style="list-style-type: none"> <li>Drill type (e.g. core, reverse circulation, open hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. 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>No drilling being reported.</li> </ul>

Criteria	JORC Code Explanation	Commentary
<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> <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>• No drilling being reported.</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> <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>• No drilling being reported.</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> <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 duplicate/second-half sampling.</li> <li>• Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>• No drilling being reported.</li> </ul>

Criteria	JORC Code Explanation	Commentary
<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> <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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>Only laboratory standards were used in the assessment of the analyses.</li> <li>Analyses was by ALS Perth using their ME-MS61 technique for multi-elements</li> </ul>
<b>Verification of Sampling and Assaying</b>	<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>No drilling being reported.</li> </ul>
<b>Location of Data Points</b>	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drillholes (collar and downhole 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>	<ul style="list-style-type: none"> <li>MGA94 Zone 54 grid coordinate system is used.</li> <li>A hand-held GPS was used to identify the sample location</li> <li>Quality and adequacy is appropriate for this level of exploration</li> </ul>
<b>Data Spacing and Distribution</b>	<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>No drilling being reported.</li> </ul>

Criteria	JORC Code Explanation	Commentary
<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> <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>No drilling being 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>It is assumed that best practices were undertaken at the time</li> <li>All residual sample material (pulp) are stored securely.</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>None undertaken.</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>Tenement status confirmed on SARIG.</li> <li>All work being reported is from EL 5433 (owned by SA Exploration Pty Ltd, a subsidiary of AXE).</li> <li>The tenement is in good standing with no known impediments.</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>The most significant exploration was undertaken by Aberfoyle in the early 1980's focussing on Cu-Mo mineralisation associated with granite intrusive.</li> <li>A large program of 1-5m deep holes were completed with little success.</li> <li>As a part of follow up to Mn exploration, in 2012 Archer flew EM over selected parts of the tenement and successfully identified buried anomalies that are not associated with the conductive Tapley Hill Formation.</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>The mineralisation is strataform and associated with Manganese.</li> <li>The orientation of the mineralisation is unknown.</li> </ul>



Criteria	JORC Code Explanation	Commentary
<b>Drillhole 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>Downhole 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>No drilling being reported.</li> </ul>
<b>Data Aggregation Methods</b>	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. 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>No drilling being reported.</li> </ul>
<b>Relationship Between Mineralisation Widths and Intercept Lengths</b>	<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 downhole lengths are reported, there should be a clear statement to this effect (e.g. 'downhole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>No drilling being reported.</li> </ul>
<b>Diagrams</b>	<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>See main body of report.</li> </ul>

Criteria	JORC Code Explanation	Commentary
<b>Balanced Reporting</b>	<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>The reporting is considered to be balanced.</li> </ul>
<b>Other Substantive Exploration Data</b>	<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>The mineralisation is restricted to within the Nuccaleena Formation which has been mapped by the SA govt geologists and reports up to 17m wide in locations. The unit is mappable over 10's of kilometres</li> </ul>
<b>Further Work</b>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (e.g. 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>Further drilling is required along strike as well as testing for mineralisation under cover.</li> <li>Figures in the body of this report highlight the gaps in the data.</li> </ul>