

ASX Announcement

22 February 2017

# High grade cobalt confirms Polinga Project as a significant new discovery

## Highlights

- First drill holes assayed at Polinga Project have returned multiple broad zones of high grade cobalt.
- Results include:
  - 6m @ 0.15% Co from 27m and 3m @ 0.11% Co from 38m in hole PRC0024.
  - 5m @ 0.095% Co from 31m in hole PRC003.
- Previous high grade cobalt reported by Archer at southern end of Polinga (6m @ 0.2% from 32m –ASX announcement 23/01/17)
- Structure hosting Polinga extends over 20km and is open north and south along strike.
- Only 6 drillholes have been assayed at central Polinga, remaining 26 drill holes to be assayed in coming weeks.
- Polinga Project compliments Archer's high grade Ketchowla Cobalt Project and Broken Hill Cobalt Project.

Archer Exploration Limited (ASX: "AXE") is pleased to announce high grade cobalt results from the first six holes assayed at the Polinga Project, Eyre Peninsula, South Australia. The results confirm Polinga, as a major new discovery of high grade cobalt.

The Polinga Project comprises a large north south trending structure that extends for over 20km and is open to north and south. At the southern end of Polinga, historic drilling by Lincoln Minerals intersected 6m @ 0.2% cobalt from 32 metres at Cockabidnie. At Central Polinga 5 out of 6 six holes assayed contained cobalt grades greater than 0.1%. Whilst historical rock chip samples at Hodgins (northern end of Polinga) have assays reporting up to 0.1% cobalt.



Commenting on the drilling results, Archer's Executive Chairman, Greg English said:

"Archer has identified high grade cobalt with the first batch of central Polinga samples submitted and we are highly encouraged by the potential of the larger Polinga Project. The Polinga project extends for over 20km and remains open to the north and south."

"The high-grade cobalt results confirm Polinga as a new cobalt discovery. Although the single hole tested at Hodgins did not report any cobalt greater than 0.1% the presence of high grade cobalt in rock chips gives Archer the confidence to submit additional Hodgins drillholes for assay."

"The Polinga Project compliments Archer's existing Ketchowla Cobalt Project and Broken Hill Cobalt Projects. Archer expects to start drilling Ketchowla in April."

#### About Polinga

The Polinga Project was first drilled by Monax Mining in 2008. Exploration efforts and drilling by Monax was primarily focussed on the discovery of manganese, with almost no assaying for cobalt.

Hole Id	From (m)	To (m)	Interval (m)	%Cobalt
PRC003	31	36	5	0.095
PRC004	53	55	2	0.18
PRC024	27	33	6	0.15
PRC024	38	41	3	0.11
PRC025	48	53	5	0.09
PRC030	43	44	1	0.14

High grade cobalt was intersected at Polinga, with best results including:

Table 1: Significant intervals from available Polinga drillholes.

Archer has only assayed 6 out of 32 holes at central Polinga and 1 out of 17 holes at Hodgins. Whilst the 1 hole tested at Hodgins did not show anomalous cobalt Archer is confident that the cobalt mineralisation extends to Hodgins and Archer will submit further drill samples for assay in the coming weeks.

The indications from re-assaying work to date is, that the Polinga mineralised horizon (structure) extends some 20km north to south and is open along strike (Figure 1).



Archer identified previous drill holes and submitted samples for assay for cobalt mineralisation. Archer is undertaking work to locate the remaining samples and prepare the samples for assay. Only a fraction of the drilling has been submitted for assay with additional drill hole sample to be submitted in the coming weeks.

Location	Number of drillholes	Number of holes assayed by Archer	Holes with intervals above 0.1% Co
Central Polinga	32	6	5
Bunora	3	3	0
Hodgins	17	1	0

Table 2: summary of holes submitted for Cobalt assay



Figure 1: Location of drill holes shown on electromagnetic (EM) image





Figure 2: Central Polinga drillholes and results shown on electromagnetic image

Only 3 holes were drilled at Bunora, limited manganese was intersected at the time and no values over 200ppm cobalt are reported.

Although the Hodgins prospect lies to the east of the interpreted Polinga mineralised horizon, historical rock chip samples have assays reporting up to 0.1% Co, indicating that Polinga extends to the north. Drill holes reporting +10% manganese were selected to determine if cobalt is present. Only one hole out of 17 was available for assay submission, the remaining intervals will need to be located and sampled in the coming weeks.

#### **Next Steps**

Further drill hole intervals at Polinga and Hodgins are to be located and submitted for assay with results expected in the coming weeks.

For further information please contact:

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Figure 3: Section interpretation of partial data at Polinga

#### **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 drill hole information

Hole ID	Easting	Northing	RL (m)	Final Depth (m)	Dip (°)	Azimuth (°)
BWRC001	617174	6319197	200	57	-60	270
BWRC002	617198	6319198	200	60	-60	270
BWRC003	617221	6319199	202	60	-60	270
HRC009	617707	6323750	201	51	-60	270
PRC003	620927	6303782	224	58	-60	40
PRC004	620608	6304051	228	55	-60	40
PRC012	620639	6304099	230	60	-60	270
PRC024	620952	6303504	221	51	-60	270
PRC025	620978	6303505	216	67	-60	270
PRC030	621025	6303300	215	58	-60	270

The following table provides information on RC drilling results reported elsewhere in this announcement. The drilling was undertaken by Monax Mining prior to March 2012.

## Summary of drilling results

The following table provides the significant intersections from RC drilling done by Monax Mining prior to March 2012. The following table reports all intervals re-assayed for Cobalt by Archer Exploration Ltd

Significant assays listed within the announcement to which this table is attached are summaries of the data below.

Hole ID	From (m)	To (m)	Interval (m)	Co (ppm)	Mn (%)
BWRC001	0	4	4	Not A	Assayed
BWRC001	4	8	4	17.8	0.45
BWRC001	8	12	4	21.7	0.78
BWRC001	12	16	4	2.9	0.14
BWRC001	48	52	4	210	3.5
BWRC001	52	56	4	92.6	4.82
BWRC001	56	57	1	Not Assayed	
BWRC002	0	28	28	Not A	Assayed
BWRC002	28	32	4	30.9	0.86
BWRC002	32	55	23	Not A	Assayed
BWRC002	55	57	2	93.6	6.89
BWRC002	57	60	3	159	7.61
BWRC003	0	36	36		
BWRC003	36	40	4	152	10



Hole ID	From (m)	To (m)	Interval (m)	Co (ppm)	Mn (%)
BWRC003	40	60	20	Not A	Assayed
HRC009	0	5	5	Not A	Assayed
HRC009	5	9	4	5	0.66
HRC009	9	13	4	4.7	0.45
HRC009	13	17	4	1.1	0.05
HRC009	17	51	34	Not A	Assayed
PRC003	0	23	23	Not A	Assayed
PRC003	23	24	1	106	9.20
PRC003	24	25	1	106.5	7.81
PRC003	25	26	1	566	22.26
PRC003	26	27	1	303	12.10
PRC003	27	28	1	312	12.79
PRC003	28	29	1	229	10.84
PRC003	29	30	1	286	0.015
PRC003	30	31	1	224	8.73
PRC003	31	32	1	1100	10.03
PRC003	32	33	1	973	18.21
PRC003	33	34	1	917	15.49
PRC003	34	35	1	861	24.26
PRC003	35	36	1	916	17.85
PRC003	36	37	1	248	12.09
PRC003	37	42	5	Not A	Assayed
PRC003	42	44	2	54.4	0.62
PRC003	44	52	8	Not A	Assayed
PRC003	52	54	2	26.3	0.41
PRC003	54	56	2	18.3	0.41
PRC003	56	58	2	22	0.60
PRC004	0	33	33	Not A	Assayed
PRC004	33	34	1	35.8	4.52
PRC004	43	44	1	148	6.21
PRC004	53	54	1	1070	7.73
PRC004	54	55	1	2540	2.79
PRC012	0	26	26	Not A	Assayed
PRC012	26	28	2	233	7.73
PRC012	28	30	2	140	8.86
PRC012	30	32	2	289	11.66



Hole ID	From (m)	To (m)	Interval (m)	Co (ppm)	Mn (%)
PRC012	42	46	4	28.9	1.72
PRC012	46	60	14	Not A	Assayed
PRC024	0	25	25	Not A	Assayed
PRC024	25	26	1	670	3.01
PRC024	26	27	1	366	10.07
PRC024	27	28	1	1230	28.67
PRC024	28	29	1	1280	9.71
PRC024	29	30	1	2500	9.13
PRC024	30	31	1	1910	17.46
PRC024	31	32	1	469	1.7
PRC024	32	33	1	1520	11.41
PRC024	33	38	5	Not A	Assayed
PRC024	38	39	1	968	3.04
PRC024	39	40	1	1620	21.33
PRC024	40	41	1	768	6.57
PRC024	41	42	1	324	5.01
PRC024	42	51	9	Not A	Assayed
PRC025	0	26	26	Not A	Assayed
PRC025	26	27	1	254	8.1
PRC025	27	28	1	290	8.51
PRC025	28	29	1	383	14.07
PRC025	29	30	1	459	21.85
PRC025	30	31	1	273	16.95
PRC025	31	32	1	137	2.32
PRC025	32	48	16	Not A	Assayed
PRC025	48	49	1	1500	29.16
PRC025	49	50	1	1050	7.67
PRC025	50	51	1	650	8.16
PRC025	51	52	1	668	9.91
PRC025	52	53	1	820	6.78
PRC025	53	54	1	477	9.04
PRC025	54	55	1	451	8.28
PRC025	55	56	1	453	7.61
PRC025	56	67	11	Not A	Assayed
PRC030	0	43	43	Not A	Assayed
PRC030	43	44	1	1355	10.18



Hole ID	From (m)	To (m)	Interval (m)	Co (ppm)	Mn (%)
PRC030	44	45	1	174.5	4.76
PRC030	45	46	1	119	7.26
PRC030	46	47	1	166.5	4.14
PRC030	47	48	1	210	6.72
PRC030	48	49	1	64.3	6.06
PRC030	49	50	1	105.5	11.35
PRC030	50	51	1	223	14.83
PRC030	51	52	1	53.2	12.45
PRC030	52	53	1	168.5	20.93
PRC030	53	58	5	Not A	Assayed



# JORC Code, 2012 Edition – Table 1

#### Section 1 Sampling Techniques and Data

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

Criteria	JORC Code Explanation	Commentary
Sampling Techniques	<ul> <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> <li>The samples as reported were generated from a mixture of Rotary Air Blast, Aircore and Reverse Cycle drilling by the previous tenement owner.</li> <li>All samples were sent ALS laboratory in Adelaide for preparation and forwarded to Peth for multi-element analyses.</li> <li>All assay intervals submitted for Cobalt analyses are being reported.</li> <li>All samples are crushed using LM2 mill to -4 mm and pulverised to nominal 80% passing -75 μm.</li> </ul>
Drilling Techniques	<ul> <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>	All material being reported comes from historical data generated by the tenements previous owner, all holes were a mixture of Rotary Air Blast, Aircore and Reverse Cycle



Criteria	JORC Code Explanation	Commentary
Drill Sample Recovery	<ul> <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>	Archer cannot comment on the recovery of sample and its relationship (if any) to grade, it does believe that the exploration undertaken at the time would have been to industry standard and if bias was noticed then comment would have appeared in digital logs.
Logging	<ul> <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> <li>No detailed lithological logging was performed on the material being sampled</li> <li>Spot samples had brief descriptions of lithological type noted for future referencing.</li> </ul>
Sub- Sampling Techniques and Sample Preparation	<ul> <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> <li>The sample is indicative of the intervals geochemistry potential</li> <li>All sample material was dry.</li> <li>No additional quality control measures were taken for the sample submission.</li> <li>The sample sizes are considered appropriate for the material being sampled.</li> </ul>



Criteria	JORC Code Explanation	Commentary
Quality of Assay Data and Laboratory Tests	<ul> <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> <li>Only laboratory standards were used in the assessment of the analyses.</li> <li>The technique is considered a total analyses.</li> <li>Analyses was by ALS Perth using a methodology that is not reported.</li> </ul>
Verification of Sampling and Assaying	<ul> <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> <li>No verification of sampling, no use of twinned holes.</li> <li>Data is exploratory in nature and exists as excel spread sheets.</li> <li>No data adjustment.</li> </ul>
Location of Data Points	<ul> <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> <li>MGA94 Zone 53 grid coordinate system is used.</li> <li>A hand-held GPS was used to identify the sample location</li> </ul>
Data Spacing and Distribution	<ul> <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> <li>There is no pattern to the sampling, the spacing is random</li> <li>Data spacing and distribution are sufficient to establish the degree of geological and grade continuity for future drill planning, but not for resource reporting.</li> <li>Sample compositing has occurred at the time for the sample being taken, i.e. there are composited intervals being reported.</li> </ul>



Criteria	JORC Code Explanation	Commentary
Orientation of Data in Relation to Geological Structure	<ul> <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> <li>It is unknown whether the drill holes have interested the mineralisation in a perpendicular manner.</li> </ul>
Sample Security	• The measures taken to ensure sample security.	It is assumed that best practices were undertaken at the time
Audits or Reviews	The results of any audits or reviews of sampling techniques and data.	None undertaken.



### 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> <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> <li>Tenement status confirmed on SARIG.</li> <li>All work being reported is from EL 5815 (owned by Pirie Resources Pty Ltd, a subsidiary of AXE). The tenement is in good standing with no known impediments. Results are from pulps recovered from the previous owner, when it was drilled under its former EL number (EL 4693)</li> </ul>
Exploration Done by Other Parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Monax Mining was the former owner of the ground now covered by EL 5815, it has been historically explored CRA in 1980's and later by WMC, 1990's. The results being reported are from drilling first reported by MOX on the 19<sup>th</sup> September 2008 as a part of base metals exploration.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>Due to the insufficient data, it is not entirely possible to comment on the style of mineralisation, initial indications it is related to Mn. However, without a suite of multi-element chemistry it is not possible to state that there are other elemental associations.</li> <li>The orientation of the mineralisation is unknown.</li> </ul>



Criteria	JORC Code Explanation	Commentary
Drillhole Information	• 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:	All details are presented at the end of the release before this table.
	<ul> <li>Easting and northing of the drill hole collar</li> </ul>	
	<ul> <li>Elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> </ul>	
	<ul> <li>Dip and azimuth of the hole</li> </ul>	
	<ul> <li>Downhole length and interception depth</li> </ul>	
	– Hole length	
	<ul> <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>	
Data	• In reporting Exploration Results, weighting averaging techniques, maximum	No high-grade cuts were necessary.
Aggregation Methods	and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	No equivalents were used.
	• 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.	
	• The assumptions used for any reporting of metal equivalent values should be clearly stated.	
Relationship Between	• These relationships are particularly important in the reporting of Exploration Results.	All drill intervals are down hole length, the true width is not known.
Mineralisation Widths and	• If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	
Intercept Lengths	• 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').	



Criteria	JORC Code Explanation	Commentary
Diagrams	• 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.	See main body of report.
Balanced Reporting	• 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.	The reporting is considered to be balanced.
Other Substantive Exploration Data	• 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.	No other exploration data to report.
Further Work	<ul> <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>	Future work is centred of locating missing drill intervals and submitting them for multi-elemental chemistry.
Dimensions	• The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	Not Applicable