

# Alderan's drilling extends Cactus mineralisation along strike and depth

## HIGHLIGHTS

- Drilling results confirm extensive copper-gold mineralisation along strike from the historic Cactus Mine and below historic workings
- Assays from holes ALCA003-005 returned:
  - 27m at 1.01% Cu, 1.24 g/t Au, 30.6 g/t Ag from 74m including
     17m at 1.35% Cu, 1.39 g/t Au, 44.89 g/t Ag; and
  - 13m at 1.13% Cu, 0.28 g/t Au, 9.2 g/t Ag from 126m (ALCA005)
  - 18m at 0.70% Cu, 0.58 g/t Au, 9.7 g/t Ag from 130m (ALCA004)
  - 25.5m at 0.65% Cu, 0.08 g/t Au, 6.3 g/t Ag from 332.5m (ALCA003)
- Results increase confidence in the continuity of mineralisation between the Cactus and Comet Mine
- Assay results from ALCA003 also confirm an extension of mineralisation below historical mining at the Cactus Mine
- Results build on historical drill results and sampling which intersected significant mineralisation across the Cactus Corridor
- Drilling recommenced on 10 January at ALCA008 which is drilling along strike from ALCA004/5 near the Comet Mine
- Cactus is the first of several targets to be tested within the Frisco system, which also includes the large Accrington copper-skarn and Perseverance porphyry prospect. The Company expects to expand drilling beyond the Cactus area in February/March

## Drilling extends mineralisation to depth and along strike

Alderan Resources Limited (ASX: AL8) is pleased to announce results from its continuing 10,000m diamond drilling program at the Cactus Mine, part of the Company's Frisco Project in Utah, USA. Results from holes ALCA003 to ALCA005 are shown in Table 1 below.

Alderan completed drillhole ALCA003 to a depth of 473.10m to test beneath historical workings and ALCA001-002. The hole intersected mineralisation within tourmaline/ chalcopyrite veins beneath the deepest level of historical workings, extending known mineralisation to depth.

Drillhole ALCA004 and ALCA005 were drilled approximately 185m southeast of ALCA001/ALCA002 to test for extensions to mineralisation beyond the historical Cactus claim boundary and intersected significant widths and grades of mineralisation at shallow depth (74m), including higher gold grades. Historical mining ceased at the claim boundary due to a dispute with the then owner of the neighbouring Comet claim. Alderan's results in ALCA004-005 confirm that mineralisation extended beyond historical claim boundaries and is likely to continue to the Comet Mine to the south-east of the Cactus Mine.

## **BOARD AND MANAGEMENT**

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The increase in gold grades within ALCA004-005 is also consistent with historical drilling which intersected higher gold grades at the Comet Mine, indicating a horizontal or vertical zonation within the Cactus orebody towards higher gold grades within the Comet Mine, which lies at a higher elevation than the Cactus Mine.

Mineralisation intersected in ALCA004-005 was hosted within tourmaline-quartz-pyritechalcopyrite breccia, as blebby clasts and within tourmaline-quartz veins or within strongly faulted breccia mineralisation (ALCA005 – 126m to 139m).

Alderan has recommenced drilling at Cactus following the Christmas-New Year break at drill hole ALCA008, along strike from ALCA004/005 towards the Comet Mine.

The 10,000m+ diamond drill program commenced in late September 2017, aiming to test the grade and extent of mineralisation remaining within the Cactus Mine and the continuity of mineralisation across the 1000m Cactus Corridor. Following the current drill program at Cactus, drilling will move onto the large Accrington copper-skarn and Perseverance porphyry prospect.

Hole ID	From (m)	To (m)	Interval (m)	Cu %	Au g/t	Ag g/t
ALCA003	332.5	358	25.5	0.65	0.08	6.26
ALCA004	117	148	31	0.51	0.46	7.7
and	130	148	18	0.7	0.58	9.66
ALCA005	74	101	27	1.01	1.24	30.6
including	74	91	17	1.35	1.39	44.89
and	126	139	13	1.13	0.28	9.2

Table 1: Results from	ALCA003 to ALCA005,	Cactus Prospect
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Figure 1: Cross section showing ALCA004/005, down-hole mineralised intervals and historical mine workings.

## About the Cactus Mine and Cactus Corridor

The Cactus Mine is part of a series of outcropping breccia pipes and mineralised zones (New Years, Cactus, Comet) aligned along the NW-SE trending structural Cactus Corridor. Historical exploration, previously reported by Alderan, has identified significant mineralisation within the Cactus mine boundaries (see ASX announcements dated 28 June 2017 and 21 August 2017). Historical high-grade underground channel sampling results included 21.5m @ 6.1% Cu, 32.5m @ 3.8% Cu and 83m @ 1.2% Cu. Historical drilling results included 130.45m @ 0.76% Cu, 43.6m @ 1.69% Cu, 38.4m @ 1.40% Cu.

Outcropping mineralisation at Cactus is associated with brecciated and strongly altered Cactus Stock monzonite containing quartz-tourmaline-pyrite-chalcopyrite +/- hematite within the breccia zones and a possible earlier vein-type quartz-magnetite-pyrite-chalcopyrite mineralisation event adjacent to and in between the breccia zones (see ASX announcement dated 12 September 2017).

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The Company believes that the mineralisation within the Cactus Corridor formed as part of a larger, porphyry style mineralising system (Cactus Canyon Prospect) and intends to use the data collected from recent drilling to identify vectors towards potential deeper seated mineralisation (see ASX announcements dated 12 September 2017 and 28 September 2017).

In order to complement the geological on site observations and magnetic geophysical datasets, Alderan is finalising the interpretation of a project scale dipole-dipole IP survey with further results expected shortly (refer to the ASX announcement on 20 December 2017). Technical data and parameters collected during drilling will be used to complement and refine the geophysical models going forward.

Drillhole ID	East	North	Dip	Azimuth	Elevation	Depth (m)	Drill type
ALCA001	299900	4262675	-49.64	213.86	1958 asl	208.68	Diamond
ALCA002	299900	4262675	-80	214.8	1958 asl	403.15	Diamond
ALCA003	299959	4262707	-80	210	1983 asl	473.10	Diamond
ALCA004	300070	4262600	-80	210	1997 asl	416.57	Diamond
ALCA005	300070	4262600	-65	210	1997 asl	230.32	Diamond
ALCA006	299990	4262629	-82	220	1989 asl	128.36	Diamond
ALCA007	299959	4262707	-70	042	1983 asl	396.5	Diamond
ALCA008	300105	426574	-55	195	2008 asl	297.50	Diamond

Table 2: Drill collar details. Co-ordinates are in WGS84 Zone 12.

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Figure 2: Cross section showing ALCA001-3 and ALCA007, down-hole mineralised intervals and historical mine workings.

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Figure 3: Long section through the Cactus and Comet Mine showing ALCA drill holes and historical drilling (refer to announcements on 28 June 2017 and 21 August 2017 for historical drill and channel sample results).

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Figure 4: Cactus Corridor showing Alderan and historical drillholes. For historical exploration results refer to the ASX announcemenst dated 28 June 2017 and 21 August 2017.

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## ALDERAN RESOURCES LIMITED

Ground Floor, 16 Ord Street, West Perth, 6005, WA www.alderanresources.com.au

For further information:

**e:**<u>info@alderanresources.com.au</u> **p:** +61 8 9482 0560

ABN: 55 165 079 201

Please direct enquiries to:

Nathan Ryan

NWR Communications

Mobile: 0420 582 887

## **Stay Connected**

Christopher Wanless Chief Executive Officer chris@alderanresources.com.au

Interested investors and shareholders are encouraged to subscribe to the Company's social media channels using the links below:



## **Competent Persons Statement**

The information in this press release that relates to exploration targets, exploration results, mineral resources or ore reserves is based on information compiled by Brian Kay, a competent person who is a member of Engineers and Geoscientists British Columbia (formerly The Association of Professional Engineers and Geoscientists of British Columbia). Brian Kay is the Exploration Manager of Alderan Resources Limited. Brian Kay has sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 edition of the JORC Code (JORC Code). Brian Kay consents to the inclusion of this information in the form and context in which it appears. Mr Kay confirms that that the information provided in this announcement provided under ASX Listing Rules Chapter 5.12.2 to 5.12.7 is an accurate representation of the available data and studies for the proposed exploration programmes that relate to this "material mining project".

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## About Alderan Resources Limited

Alderan is a copper explorer with a focus on the Frisco Project, located in Utah, United States of America. The Frisco Project encompasses an area of significant historical mining activity with numerous old mines and workings across an area of approximately 7km by 4km. These include:

- the Cactus copper-gold-silver deposit and breccia pipe, one of several mineralised breccia pipes over an area of approximately 1000 m by up to 400 m.
- the Accrington copper-zinc-silver-gold skarn, which hosts extensive mineralisation across an area of 1.8 km by 1.2 km; and
- the Horn zinc deposit, a historical lead-silver mine, which contains significant amounts of unmined high grade zinc.

The Company believes that these three deposits are genetically related to, and were formed contemporaneously with, underlying mineralised (copper-molybdenum-gold) porphyry intrusion(s). Work undertaken by the Company has identified a likely large mineralised porphyry system beneath and adjacent to the Accrington skarn associated with a 2-3 km diameter chargeability anomaly (Perseverance Prospect).

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# JORC Code, 2012 Edition – Table 1 report template 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 (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> <li>All samples collected by diamond drilling, half cut core using core saw, sampled at intervals designated by a geologist.</li> <li>Core was laid out in suitably labelled core trays. A core marker (core block) was placed at the end of each drilled run (nominally 1.5m) and labelled with down hole depth, length of drill run. Core was aligned and measured by tape, comparing back to this down hole depth consistent with industry standards.</li> <li>Mineralisation is determined by the presence of sulphide minerals as logged by a qualified geologist. Chalcopyrite is identified as the mineral of economic interest.</li> </ul>
Drilling techniques	<ul> <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> <li>Drilling is by diamond core of HQ (61mm) diameter, using triple tube splits and TruCore orientation device.</li> <li>The Trucore device requires competent core at the core lifter in order to result in a useable orientation line. Sections of core which are broken results in limited or no oriented core in these intervals.</li> <li>There is no known relationship between sample recovery and grade.</li> </ul>
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/gaarse material</li> </ul>	<ul> <li>Core is measured by a qualified geologist using downhole marking blocks placed by the driller. Zones of cave or fill are assessed by competence, texture and geologic relationship to surrounding rock, as well as reported cave from drill crew.</li> <li>Drilling through poor ground conditions has resulting in minor zones of poor drill recovery.</li> <li>ALCA002 - Casing depth is 14 6m. Average recovery, from 14 6m to be a superior of the surround conditions has recovery.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul> <li>end of hole is 97%.</li> <li>ALCA004 – Casing depth is 15.75m. Average recovery from 15.75m to end of hole is 94%.</li> <li>ALCA005 – Casing depth is 10.10m. Average recovery from 10.10m to end of hole is 87%.</li> <li>There is no known relationship between sample recovery and grade.</li> </ul>
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>All core has been geologically logged to a level of detail to support future geological modelling and resource estimation.</li> <li>All logging is qualitative with visual estimates of various characteristics conducted by a qualified geologist.</li> <li>Logged characteristics include lithology, alteration veining and mineralisation. Data collection of Specific Gravity, Magnetic Susceptibility is also undertaken at the logging stage</li> <li>All core is photographed by DMT Corescan and photographs recorded in a proprietary database.</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>All in-situ core is sampled and submitted for assay. Sample intervals are defined by a geologist to honor geological, mineralisation or alteration boundaries.</li> <li>Sample intervals are greater than 30cm up to 1.5m in length.</li> <li>Core is cut with an Almonte core saw.</li> <li>Laboratory Preparation procedures – samples are oven dried and crushed to 2mm in two stages, Riffle split to 250gm which is pulverized to 85% passing 75micron.</li> <li>Duplicates are taken at first crushing stage.</li> <li>Sampling techniques are industry standard and considered appropriate</li> </ul>
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 (eg standards, blanks,</li> </ul>	<ul> <li>Gold is determined using a 30g charge fire assay and Atomic Absorption finish</li> <li>Copper, Silver and 46 other elements are determined by Inductively Coupled Plasma Mass Spectroscopy following a 4 acid digest.</li> <li>Samples which exceed the upper detection limit (10,000ppm) are subjected to Ore Grade analysis by ICP Atomic Emission Spectroscopy</li> <li>Commercially prepared Certified Reference Materials (CRM)</li> </ul>

Criteria	JORC Code explanation	Commentary
	duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	<ul> <li>consisting of High grade, Medium grade, Low grade and Blank were inserted at an average of 2 in 22 samples, with higher frequency in strongly mineralized intervals.</li> <li>Crush duplicate samples were inserted at 1 in 22 samples.</li> <li>Laboratory QAQC sampling includes insertion of CRM samples, and duplicates. This data was reported for each sample submission. Failed standards result in re-assaying of portions of the affected sample batches.</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>Drill data was compiled and collated, and reviewed by senior staff. External consultants do not routinely verify exploration data until resource estimation procedures are deemed necessary.</li> <li>Twinned holes have not been employed at this early stage of the project</li> <li>Logging is completed in Geobank, an industry standard geological software package. Logging is undertaken on laptops with live uplink to Alderan's proprietary database server.</li> <li>Data validation protocols are run within Geobank</li> <li>Digital assay datafiles are received from ALS and imported into the database</li> <li>Digital copies of Certificate of Analysis are stored in a central database</li> <li>No assay data was adjusted</li> </ul>
Location of data points	<ul> <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>	<ul> <li>Collar locations are set with handheld GPS with a positional accuracy of +/3m. Upon completion of drilling, collar locations will be surveyed with DGPS to a positional accuracy of +/-0.1m, to be conducted by a licensed surveyor.</li> <li>Progress downhole surveys are conducted by Boart Longyear personnel at 30m intervals using a Reflex EZshot single shot magnetic survey tool.</li> <li>End of hole downhole surveys are conducted by IDS Drilling Services using a North Seeking Gyro on 10m sample spacing.</li> <li>Grid coordinate system is WGS84 Zone 12, UTM (m) units.</li> <li>Upon completion of drilling, topographic control will be provided by DGPS to a positional accuracy of +/-0.1m, to be conducted by a licensed surveyor.</li> </ul>

Criteria	JORC Code explanation	Commentary
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>At this early exploration stage, the data spacing is variable as the focus is on identifying new zones of mineralisation.</li> <li>Reconnaissance drilling only, no resource estimation being undertaken at this time.</li> <li>No sample compositing is applied.</li> </ul>
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>Drillhole azimuth of approximatelyb210 degrees intersects the interpreted controlling ESE-WNW structures at an optimal angle.</li> <li>Insufficient data exists to properly asses degree of structural control or True Width.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>All logging and sampling is undertaken in a secured facility which is locked when unattended and video monitored at all times.</li> <li>Samples are bagged in cable-tied plastic bags, and batched into polyweave sacks for transport.</li> <li>ALS Laboratories personnel receive the samples at Alderan's facility in Milford Utah and perform appropriate chain of custody procedures onsite. ALS then transport the samples in their own trucks to the laboratory in Elko Nevada.</li> <li>Sample pulps and coarse rejects are returned to site for storage.</li> </ul>
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• No external audits have been undertaken. These would be part of future resource estimation work.

## **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>The Frisco Prospect comprises 275 patented and 252 unpatented claims, which are governed by the Horn, Cactus and Northern Carbonate lease agreements entered into with the private landowner, Horn Silver Mines Inc.</li> <li>The Horn and Cactus lease agreements grant Alderan all rights to access the property and to explore for and mine minerals, subject to a retained royalty of 3% to the landholder. Alderan holds options to reduce the royalty to 1% and to purchase the 231 patented claims.</li> <li>The Northern Carbonate Lease grants Alderan with all rights to</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul> <li>access the property and to explore for and mine minerals, subject to a retained royalty of 3% to the landholder. Alderan holds options to reduce the royalty to 1% and to purchase the 231 patented claims.</li> <li>Alderan was in full compliance with both lease agreements and all claims were in good standing at the time of reporting.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>A large amount of historical exploration has been carried out by numerous different parties dating back to the 1800's.</li> <li>Historical mining records including level plans and production records exist for the period between 1905 and 1915 when the vast majority of production occurred</li> <li>Historical drilling has been carried out by multiple parties including Anaconda Company, Rosario Exploration Company, Amax Exploration and Western Utah Copper Corporation/Palladon Ventures</li> <li>Data has been acquired, digitized where indicated, and interpreted by Alderan.</li> </ul>
Geology	• Deposit type, geological setting and style of mineralisation.	<ul> <li>Porphyry style mineralised district with several expressions of mineralisation at surface, such as breccia pipes, skarns, structurally-hosted mineralisation, and manto style mineralised zones, including outcropping porphyries.</li> <li>Part of the larger Laramide mineralising event.</li> <li>Overprinted by Basin and Range tectonics.</li> </ul>
Drill hole Information	<ul> <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> <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> <li>Details for hole ALCA003         <ul> <li>Easting WGS84 Zn12 – 299959mE</li> <li>Northing WGS84 Zn12 – 4262707mN</li> <li>Elevation - 1983m asl</li> <li>Collar dip -80.21°, Azimuth 202.52°</li> <li>Chalcopyrite mineralisation is noted from 146m downhole.</li> <li>Hole completed at 473.10m</li> </ul> </li> <li>Details for hole ALCA004         <ul> <li>Easting WGS84 Zn12 – 300070mE</li> <li>Northing WGS84 Zn12 – 4262600mN</li> <li>Elevation - 1997m asl</li> <li>Collar dip -78.70°, Azimuth 213.80°</li> <li>Chalcopyrite mineralisation is noted from 117m downhole.</li> <li>Hole was completed at 416.57m</li> </ul> </li> <li>Details for hole ALCA005         <ul> <li>Easting WGS84 Zn12 – 300070mE</li> <li>Morthing Zn2, Azimuth 213.80°</li> <li>Collar dip -78.70°, Azimuth 213.80°</li> <li>Chalcopyrite mineralisation is noted from 117m downhole.</li> </ul> </li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul> <li>Northing WGS84 Zn12 – 4262600mN</li> <li>Elevation - 1997m asl</li> <li>Collar dip -65.21°, Azimuth 213.56°</li> <li>Chalcopyrite mineralisation is noted from 74m downhole.</li> <li>Hole was completed at 230.32m</li> </ul>
Data aggregation methods	<ul> <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> <li>No cut off or top cut grades have been applied.</li> <li>Composites reported are calculated by length weighted average grades with internal high grades reported separately.</li> <li>No Metal Equivalents are presented</li> </ul>
Relationship between mineralisatio n widths and intercept lengths	<ul> <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> <li>Reported mineralisation is quoted in downhole depths. True width may be less than downhole intercept width (apparent width), and insufficient work has been completed to enable accurate calculation of true widths.</li> </ul>
Diagrams	<ul> <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> <li>See Figure 1 Section View viewing NW</li> <li>See Figure 2 holes ALCA004, ALCA005</li> <li>See Figure 2 Section View viewing NW holes ALCA001-3, ALCA007</li> <li>See Figure 3 Section View viewing NE Alderan and historic drilling</li> <li>See Figure 4 Plan Map and collar locations</li> </ul>
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.	<ul> <li>Cu Low 0.00016 High 4.57%</li> <li>Au Low below 0.005 High 5.8 g/t</li> <li>Ag Low 0.03 High 175 g/t</li> </ul>
Other substantive	• 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	• Details of other exploration results are recorded in the Independent Geologist's Report, contained in the Prospectus and on the

Criteria	JORC Code explanation	Commentary
exploration data	method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	announcements dated 28 June 2017, 15 December 2017.
Further work	<ul> <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> <li>Details of intended exploration activities are mentioned in the report above and in previous announcements made by the Company also recorded in the Independent Geologist's Report, contained in the Prospectus.</li> </ul>

## **Section 3 Estimation and Reporting of Mineral Resources**

## (Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	<ul> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used.</li> </ul>	No Resource estimation has been undertaken

## **Section 4 Estimation and Reporting of Ore Reserves**

## (Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	<ul> <li>Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.</li> <li>Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.</li> </ul>	No Reserve estimation has been undertaken