

## New Modelling Highlights Multiple Untested Copper-Gold Targets at Frisco, Utah, USA

### HIGHLIGHTS

New 3D modelling of the historical Cactus-Comet copper-gold mines and the recent Kennecott drone magnetics over the Frisco project area highlight multiple copper-gold deposit targets with key findings:

- Both Cactus and Comet are open with potential for additional lenses plus incremental mineralisation on their margins.
- Cactus and Comet are characterised by magnetic low anomalies - an additional 12 magnetic low anomalies have been identified including over the New Years prospect.
- The New Years magnetic low is significantly larger than Cactus and historical drill intersections into this prospect include:
  - 10.7m @ 2.78% Cu within 19.8m @ 1.67% Cu (NY-6)
  - 10.7m @ 1.52% Cu within 27.4m @ 0.85% Cu (NY-2)
- Down hole sample assays at New Years grade up to 5.4% Cu and there has been no drilling on the prospect for over 55 years.
- Post mining drill intersections at Cactus incorporated in the modelling include:
  - 4.9m @ 6.72% Cu within 43.6m @ 1.69% Au from 207.9m downhole (DDH8; no Au assays)
  - 12.2m @ 3.31% Cu within 22.9m @ 2.06% Cu from 1.5m downhole (R14; no Au assays)
  - 8.0m @ 3.11% Cu, 0.96g/t Au within 32m @ 1.24% Cu, 0.31g/t Au from 61m downhole (ALCA010)
  - 6.5m @ 3.11% Cu, 0.55g/t Au from 94.3m downhole (ALCA001)
  - 12.2m @ 2.77% Cu within 25.9m @ 1.62% Cu from 42.7m downhole (R13B; no Au assays)
  - 41m @ 1.9% Cu, 0.62g/t Au within 74m @ 1.1% Cu, 0.35g/t Au from 252m downhole (SAWM0001)
  - 22.9m @ 1.84% Cu from 39.6m downhole (R12; no Au assays)
  - 17m @ 1.41% Cu, 0.41g/t Au within 151m @ 0.36% Cu, 0.08g/t Au from 147m downhole (ALCA002)
  - 38.4m @ 1.40% Cu from 218.2m downhole (DDH8B; no Au assays)

Alderan Resources Limited (ASX: AL8) (Alderan or the Company) is pleased to announce that three-dimensional (3-D) modelling of drilling and geophysical data at its Frisco project in Utah USA has highlighted strong potential for multiple medium scale high-grade copper deposits. The 3-D modelling has been carried out on the Cactus and Comet copper-gold deposits drill hole data and 3-D inversion modelling has been completed on drone magnetics data over the entire Frisco tenement area.

Drill holes such as Kennecott Exploration Company's (KEX) SAWM0001 which intersected 41m @ 1.9% Cu, 0.62g/t Au within 74m @ 1.1% Cu, 0.35g/t Au at Cactus confirm this potential and assist in verifying historical

post mining holes which also contain high-grade copper intersections.<sup>1</sup> KEX completed a detailed drone magnetic survey over the Frisco project area during its exploration for large scale porphyry copper deposits under an option agreement with Alderan during 2019-23.<sup>2</sup>

Fourteen magnetic low anomalies similar to the anomalies that coincide with Cactus and Comet have been identified from the 3-D inversion modelling of the magnetics. This includes the New Years prospect which has historical drill hole intersections of **10.7m @ 2.78% Cu** within **19.8m @ 1.67% Cu** in NY-6 and **10.7m @ 1.52% Cu** within **27.4m @ 0.85% Cu** in NY-2.<sup>3</sup> Down hole assays over 1.5m intervals grade up to 5.4% Cu, 0.22g/t Au and there has been no drilling at New Years since the mid-1960s.

**Managing Director of Alderan, Scott Caithness, commented:**

*"The results of the 3-D modelling of the Cactus and Comet deposits and the 3-D inversion modelling of the Frisco magnetics have confirmed that there are multiple targets for high grade copper-gold deposits in the historical copper-gold mining District. The targets are discrete magnetic low anomalies in the TMI inversion model that occur within magnetic low zones interpreted to be zones of alteration along fault zones.*

*"The New Years prospect represents an immediate drill target which sits within the NW-SE trending Cactus Canyon fault zone. It is a much larger target than Cactus with a handful of shallow historical drillholes some of which have intersections grading +2% copper. No exploration has been carried out at New Years since the mid-1960s.*

*"Given that 12 separate discrete magnetic targets have been identified, a number of which are much larger than the Cactus anomaly, and utilising the Cactus modelling results it is feasible that a significantly larger copper and gold inventory exists within the historical Frisco copper-gold mining district.*

*"Next steps will involve prioritising the targets for future drilling by compiling all historical exploration data to determine whether any have been adequately tested in the past."*

### **3-D Deposit Modelling**

3-D modelling of the Cactus and Comet deposits has been completed using Leapfrog software. The modelling used all available past drill hole assay data from 70 holes drilled in and around the Cactus and Comet deposits with the aim of gaining a better understanding of the deposits' geology, controlling structures and mineralisation plus determining whether they have potential for additional mineralisation. Both deposits were mined intermittently from 1870 to 1957 with Cactus reportedly producing 1.27 million tonnes of ore at a recovered grade of 2.07% Cu, 7.36g/t Ag and 0.33g/t Au.<sup>4</sup>

Significant drill intersections from historical drillholes are show in Table 1.

Key conclusions from the modelling include:

- Both Cactus and Comet have not been closed off by drilling with Cactus having potential to host additional lenses at depth as the structure hosting the deposit pinches and swells.
- There is potential for incremental mineralisation on the margins of the known Cactus and Comet deposits where gaps of >25m occur in the drilling.
- Cactus and Comet appear to be structurally controlled by the NW-SE trending Cactus Canyon structure and an intersecting NNW-SSE structure.

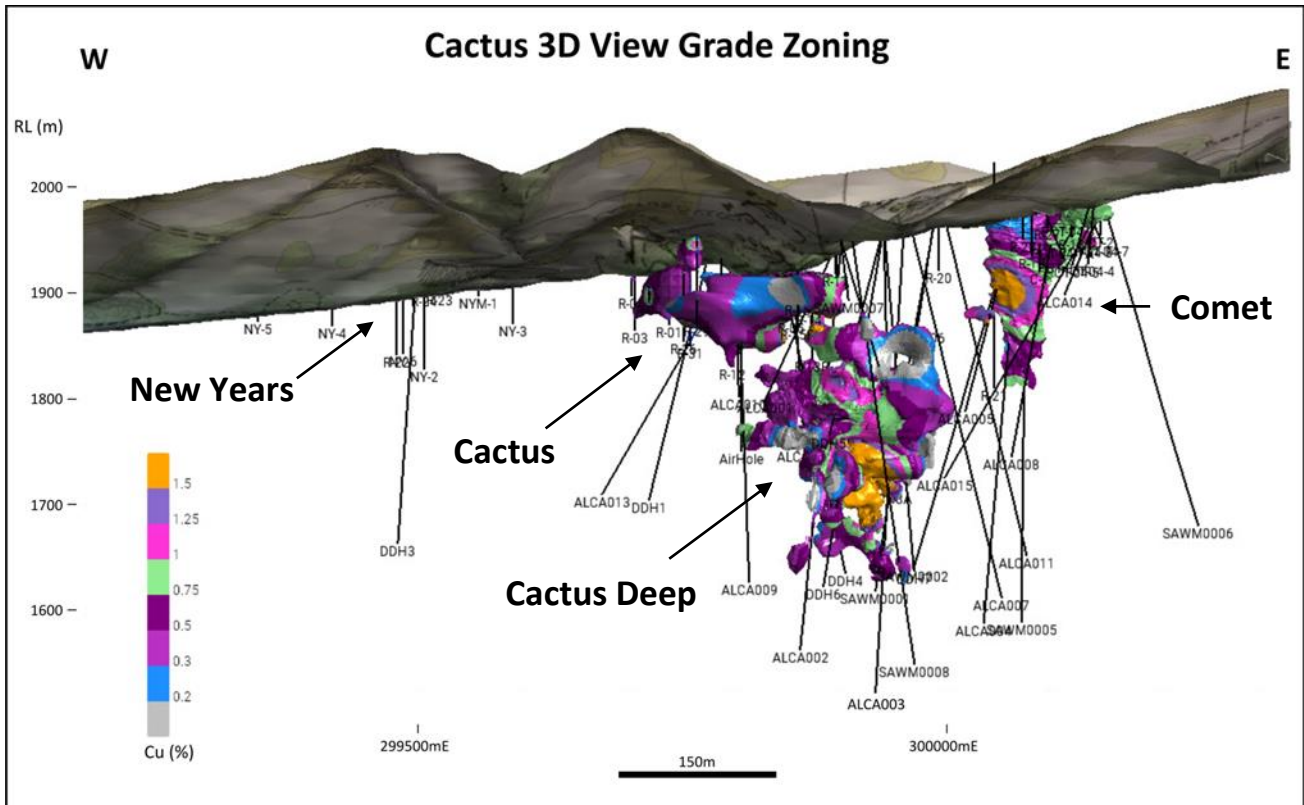
<sup>1</sup> Refer AL8 ASX announcement dated 22 September 2020

<sup>2</sup> Refer AL8 ASX announcement dated 21 January 2022

<sup>3</sup> Refer AL8 ASX announcement dated 28 June 2017, 12 September 2017

<sup>4</sup> Refer AL8 Prospectus ASX announcement dated 8 June 2017

- Cactus consists of two separate lenses which are zoned from +1% copper grades in the core to lower grades on the outer margins of the lenses.
- Gold grades are based on limited assay data; at Cactus higher gold grades correlate with high copper grades whereas the Comet deposit is more gold rich with lower copper grades.
- It is possible that Cactus and Comet join at depth although the NW-SE trending Cactus Canyon structure is interpreted to separate them.



**Figure 1:** Long section showing 3-D models of the Cactus and Comet deposits (0.3% Cu cutoff) with copper grade zonation. Drill hole traces are shown in black.

The deposit modelling also extended to the New Years prospect which lies approximately 400m northwest of Cactus along the Cactus Canyon fault trend. New Years was drilled in the late 1950s and mid 1960s by Anaconda (1 angled hole to 901 feet; no data) and Rosario (6 vertical holes to depths ranging from 85-375 feet). Rosario holes NY-6 and NY-2 intersected significant copper mineralisation with intersections of **10.7m @ 2.78% Cu** within **19.8m @ 1.67% Cu** from 21.3m downhole and **10.7m @ 1.52% Cu** within **27.4m @ 0.85% Cu** from surface respectively. Gold grades through these intervals range up to 0.16g/t.

**Table 1:** Cactus and New Years Copper-Gold Deposits - Significant post mining drill holes with intersections<sup>5</sup>

**Cactus**

Company	Hole Number	Year Drilled	Depth (m)	From (m)	To (m)	Width (m)	Cu (%)	Au (g/t)	Ag (ppm)
Anaconda	DDH4	1959	303.6	27.40	47.60	20.20	2.44	0.40	14.60
				173.4	175.90	2.50	5.35	NA	NA

<sup>5</sup> Refer Alderan ASX announcements dated 8 June 2017, 15 June 2017, 28 June 2017, 15 December 2017, 29 March 2018, 11 March 2021, 5 July 2023 for further information.

				180.10	203.60	23.50	1.49	NA	NA
			includes	183.20	203.60	20.40	1.48	0.21	6.43
			includes	189.00	201.50	12.50	2.03	0.28	8.54
Anaconda	DDH5	1959	217.9	153.30	178.00	24.70	1.50	NA	NA
Anaconda	DDH8	1959	251.5	207.90	251.50	43.60	1.69	NA	NA
			includes	244.10	249.00	4.90	6.72	NA	NA
Anaconda	DDH8 (Splay)	1959	281.0	218.20	256.60	38.40	1.40	NA	NA
Rosario	R12	1968-71	89.2	39.60	62.50	22.90	1.84	NA	NA
				69.30	89.20	19.90	0.68	NA	NA
Rosario	R13B	1968-71	82.3	22.90	35.10	12.20	2.64	NA	NA
				42.70	68.60	25.90	1.62	NA	NA
			includes	50.30	62.50	12.20	2.77	NA	NA
Rosario	R14	1968-71	38.1	1.50	24.40	22.90	2.06	NA	NA
			includes	1.50	13.70	12.20	3.31	NA	NA
Rosario	UDH602	1968-71	153.0	37.20	62.50	25.30	1.22	NA	NA
Alderan	ALCA001	2017	208.7	76.00	84.90	8.90	0.92	0.14	7.79
			208.7	94.30	100.85	6.55	3.11	0.55	18.08
Alderan	ALCA002	2017	403.15	147.20	298.00	150.80	0.36	0.08	3.20
			includes	175.60	232.00	56.40	0.81	0.19	6.03
			includes	175.60	193.15	17.55	1.41	0.41	5.40
			includes	226.00	232.00	6.00	1.48	0.19	22.50
Alderan	ALCA010	2018	158.3	61.00	93.50	32.50	1.24	0.31	10.60
			includes	76.00	84.00	8.00	3.11	0.98	29.20
Alderan	ALCA013	2018	255.9	43.70	94.20	50.50	0.64	0.09	5.80
				47.00	49.00	2.00	2.54	0.83	75.50
				76.00	92.00	16.00	1.35	0.12	6.80
Kennecott	SAWM0001	2020	377.2	219.00	293.00	74.00	1.10	0.35	4.50
			includes	252.00	293.00	41.00	1.90	0.62	7.10

**New Years**

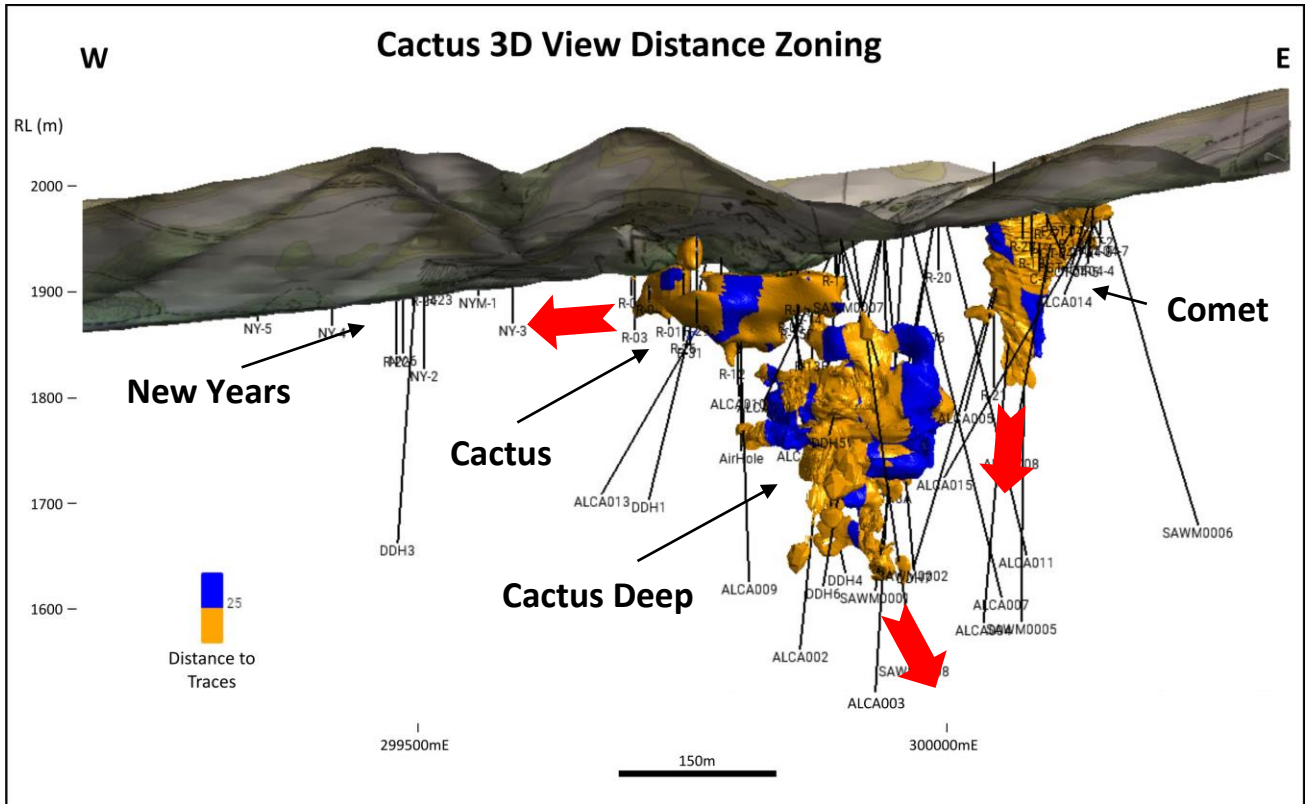
Rosario	NY-2	1966	114.2	0.00	25.91	25.91	0.84	0.11	5.52
			includes	16.76	27.43	10.67	1.51	BLD	3.43
Rosario	NY-6	1966	106.7	21.34	41.15	19.81	1.67	0.15	6.06
				24.38	35.05	10.67	2.78	0.22	6.86

**Notes:**

- 0.5% Cu cutoff used to define broader intercepts
- Samples analysed for intercepts pre-Alderan were not subject to JORC standard QA/QC protocols
- NA = assays not available; BLD = below detectin limit

**Cautionary Statement**

The Company stresses that the pre-Alderan assay data from historical drill holes shown in Table 1 and used in the 3-D modelling was not subject to modern quality assurance and quality control practices and hence could not be used in a JORC compliant resource estimate. These assays and drill intersections are regarded as indicative only.



**Figure 2:** Long section looking north showing 3-D models of the New Years, Cactus and Comet deposits (0.3% Cu cutoff) in brown. The red arrows highlight areas where the mineralisation is open and the blue areas have potential for incremental mineralisation) on the margins of the deposits. Drill hole traces (black) are in black.

**3-D Inversion Modelling of Magnetics**

3-D inversion modelling of drone magnetic data acquired by KEX in 2021 over the Frisco project area has confirmed that Cactus and Comet sit within a NW-SE trending magnetic low zone on the total magnetic intensity (TMI) image (see Figure 3) and are highlighted as discrete circular magnetic low anomalies in the TMI susceptibility inversion (see Figure 4). Figure 5 is a NW-SE long section through the Cactus and Comet deposits which shows that New Years is a much larger magnetic anomaly plus highlights at least three additional magnetic low anomalies which are Cactus ‘look-a-likes’. The north-south section (Figure 6) again clearly shows the Cactus magnetic low anomaly plus three additional similar anomalies.

In summary the inversion modelling has highlighted 12 new circular magnetic low anomalies similar to Cactus and Comet which have received minimal or no past exploration including the New Years prospect.

Alderan commissioned the 3-D inversion modelling of the drone magnetic data acquired by KEX in 2021 over the Frisco project area by specialist geophysical consulting group, ExploreGeo Pty Ltd. The key objective of

this modelling was to determine the magnetic signature of the Cactus and Comet deposits and identify similar magnetic features that have potential to host 'Cactus-style' copper-gold mineralisation.

Key findings from the modelling are:

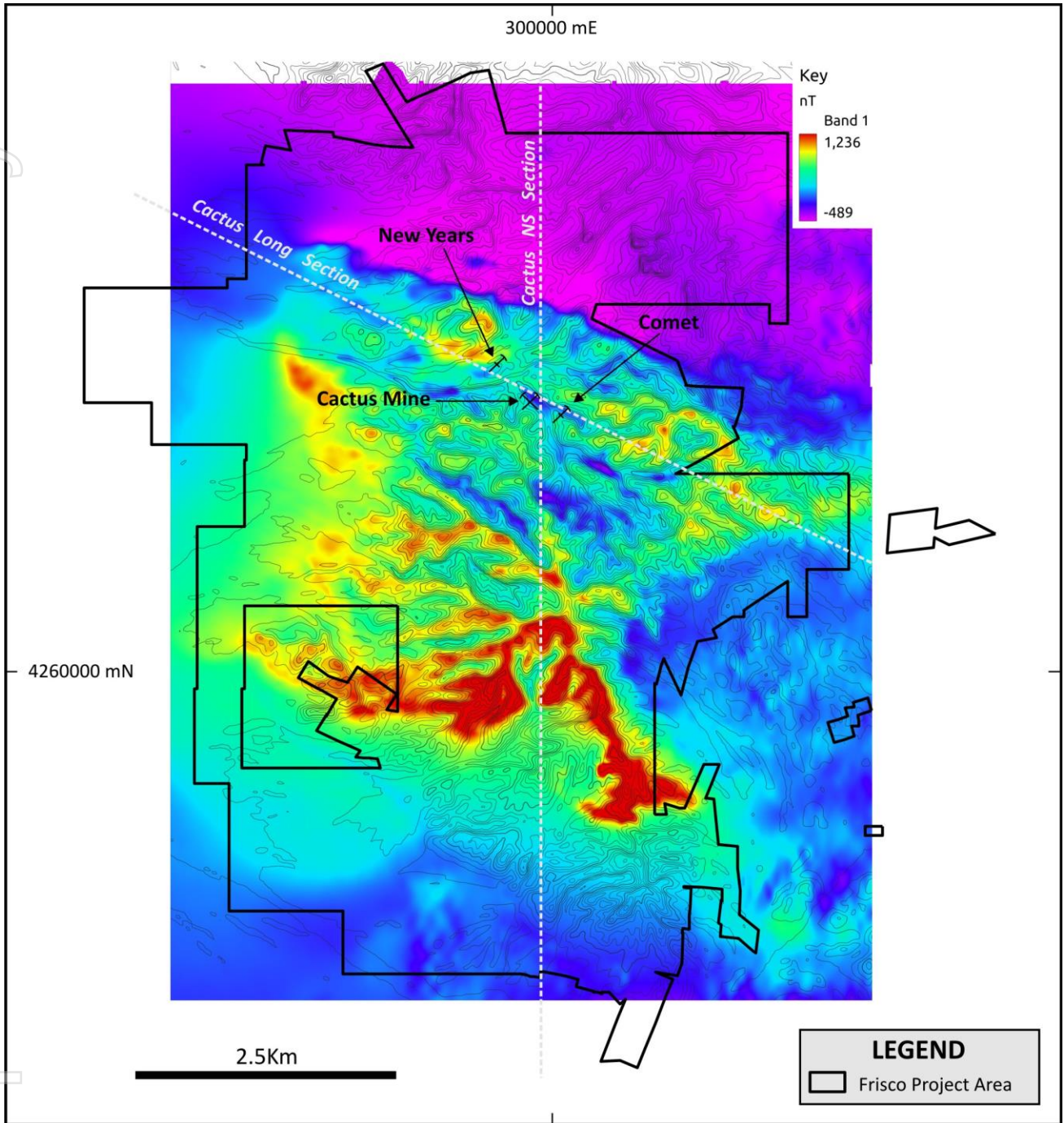
- The TMI susceptibility inversion modelling clearly shows that Cactus and Comet sit within discrete circular magnetic lows which are also evident in a TMI long and cross sections through the deposits.
- Cactus and Comet sit within a NW-SE trending TMI magnetic low zone which appears to align with the Cactus Canyon fault zone and trends to the New Years prospect.
- The TMI susceptibility inversion modelling highlights 12 magnetic low features similar to Cactus, some of which are significantly larger.
- The New Years prospect has a large coincident magnetic low, sits within the Cactus Canyon Fault zone, has high grade copper in historical drill holes and has received no exploration since the 1960s.

The magnetic low zone at Cactus and Comet in the TMI image is interpreted to be caused by alteration of the rocks hosting the mineralisation. It also appears that the lows are aligned with faults which are typically favourable locations for intrusive related mineralisation.

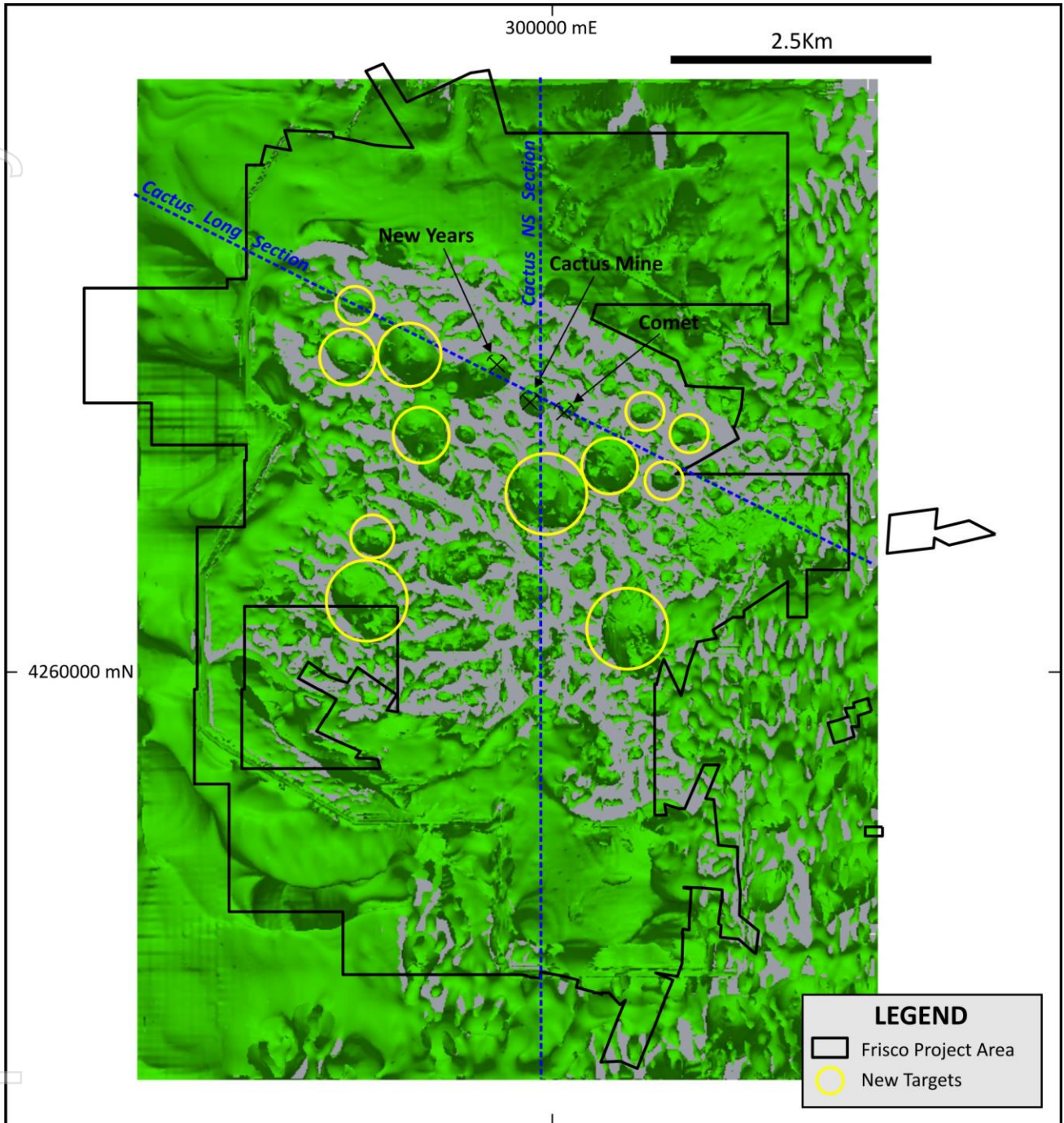
#### **Next Steps**

Next steps will include:

1. Accurately locating all past drill holes to determine whether they have adequately tested any of the new targets;
2. Compiling all surface sampling over the new targets to assist in ranking;
3. Designing drill holes to test the highest ranked targets.
4. Drill the highest priority targets – currently the New Years prospect



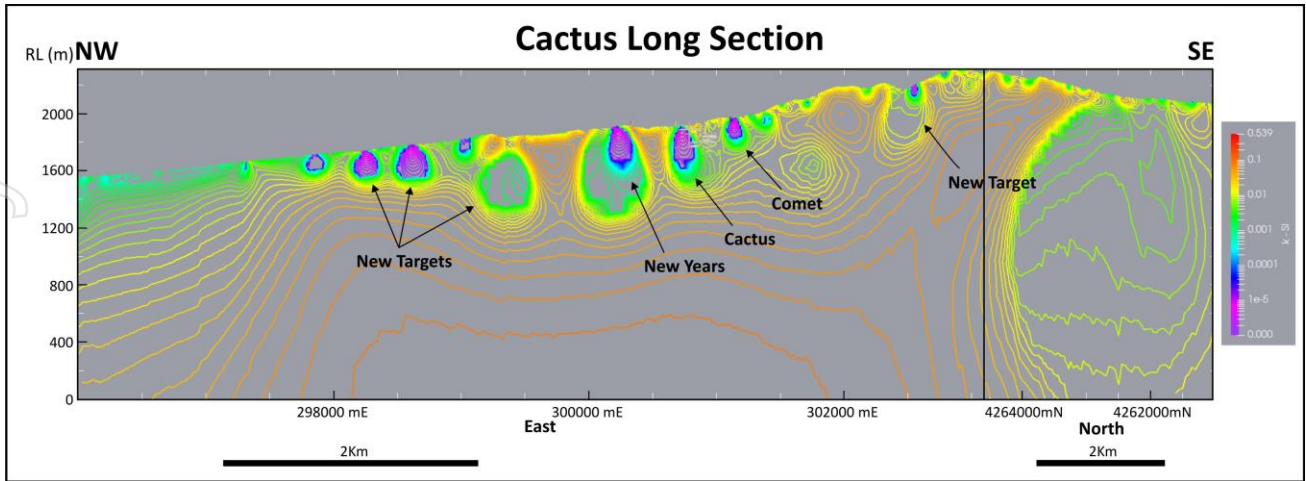
**Figure 3:** Image of merged total magnetic intensity overlain with contours of the shape of the magnetic field. Note that Comet, Cactus and New Year align along a NW-SE trending magnetic low which is the Cactus Canyon fault zone. Three parallel magnetic low zones occur to the south and there is an NNW-SSE trending low which intersects the Cactus Canyon fault zone at Cactus.



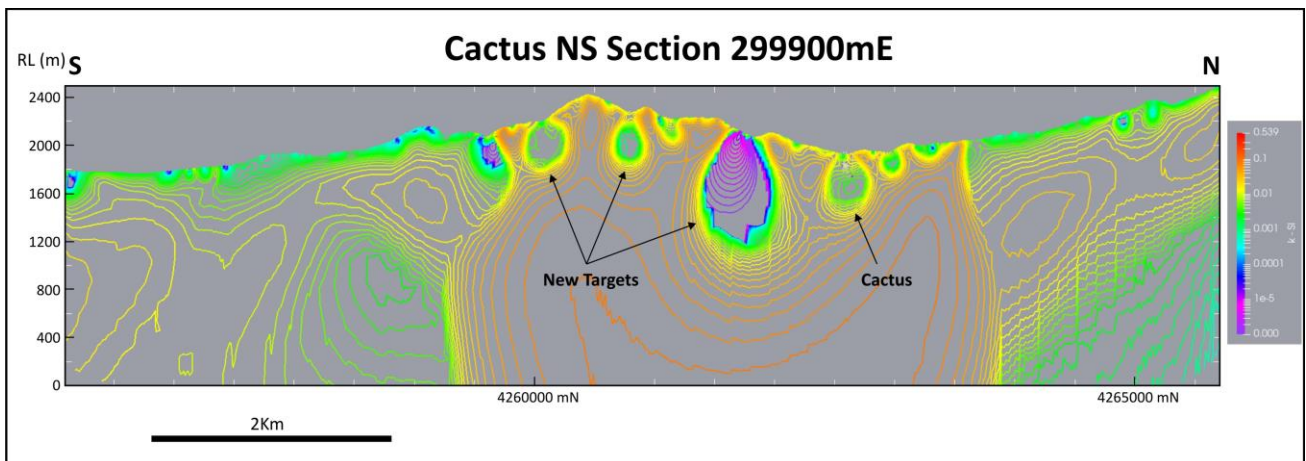
**Figure 4:** Plan view of an isosurface of 0.004 SI from the TMI susceptibility inversion which clearly highlights the Cactus and Comet deposits and the New Years prospect as discrete magnetic anomalies. At least 12 similar magnetic anomalies have been identified (yellow circles).

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**Figure 5:** NW-SE long section showing contours of magnetic susceptibility from the TMI inversion which highlight the New Years, Cactus and Comet magnetic low anomalies. Note that the New Years magnetic low anomaly is significantly larger than the Cactus anomaly and there are three magnetic low targets to the northwest of New Years.



**Figure 6:** North-South section showing contours of magnetic susceptibility from the TMI inversion through the Cactus deposit. Two of the new targets are similar to Cactus and one is significantly larger, more intense and extends for more than 800m below surface.

**END**

This announcement was authorised for release by the Board of Alderan Resources Limited.

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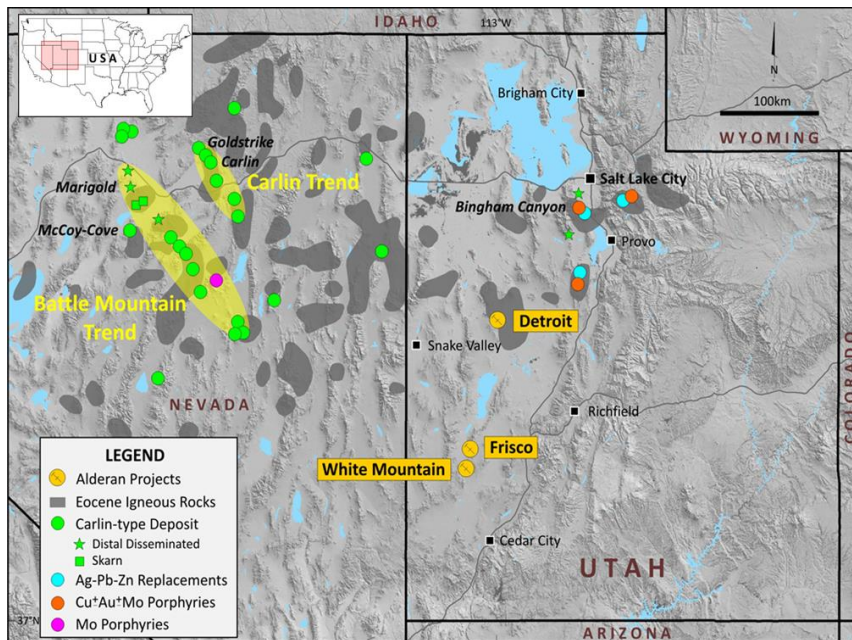
### About Alderan Resources Limited

Alderan Resources specialises in critical and precious metal exploration.<sup>6</sup> The Company has seven (7) lithium projects in Minas Gerais, Brazil (AL8 ASX announcement dated 20<sup>th</sup> October, 2023) plus copper and gold projects in Utah, USA (Frisco, Detroit, White Mountain), with tenements held either directly or through option agreements via Alderan's USA subsidiaries, Volantis Resources Corp and Valyrian Resources Corp (see Figure 7). Alderan's objective is to rapidly discover, delineate and develop critical metal and gold deposits for mining. The Company's project portfolio has high potential for discovery as it lies in under-explored geological belts with similar geology to neighbouring mining districts. Our exploration plans also include reviewing new opportunities to secure and upgrade our pipeline of projects.

For more information please visit: <https://alderanresources.com.au/>

### Competent Persons Statement

The information contained in this announcement that relates to geology is based on, and fairly reflects, information compiled by Mr Scott Caithness, who is a Member of the Australian Institute of Mining and Metallurgy. Mr Caithness is the Managing Director of Alderan and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is 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 Caithness consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears. Mr Caithness holds securities in the Company.



**Figure 7:** Alderan Resources project locations in Utah, USA.

<sup>6</sup> <https://www.energy.gov/cmm/what-are-critical-materials-and-critical-minerals>

**Appendix 1: JORC Code, 2012 Edition – Table 1 Report in relation to new 3-D modelling of historical drilling data on the Cactus-Comet Cu-Au deposits and 3-D inversion modelling of drone magnetics flown by Kennecott Exploration Company.**

**Section 1 - Sampling Techniques and Data**

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

<b>Criteria of JORC Code 2012</b>	<b>JORC Code (2012) explanation</b>	<b>Details of the Reported Project</b>
<i>Sampling techniques</i>	<i>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialized 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.</i>	<p>This announcement is the result of new modelling of historical exploration data on the Frisco project area which has been previously reported on the ASX.</p> <p>All pre-Alderan geochemical and drill hole data over the Frisco project presented in this announcement is from historical exploration between 1959 and 2016 by a range of companies. All work prior to Alderan's involvement in the project has been reported in Alderan's announcements since listing in 2017 and referenced in this announcement. The pre-Alderan assays and drill intersections quoted in the announcement are not JORC compliant and are regarded as indicative only as there are no QA/QC protocols available.</p> <p>All exploration data post Alderan involvement (ie Alderan and Kennecott Exploration Company) is JORC compliant and has been announced on the ASX and referenced throughout this announcement.</p>
	<i>Include reference to measures taken to ensure sample representativeness and the appropriate calibration of any measurement tools or systems used.</i>	<p>Sample length in historical drillholes is variable but most typically either 2.5ft (approximately 75cm), 5ft (approximately 1.5m) or 6ft (approximately 1.8m) intervals. In some holes sampling is selective as determined by geologists. Sample length down holes drilled by Kennecott is variable but most commonly ranges from 2-3m and for Alderan holes they were typically less than 1.5m. These sample lengths are in line with industry standards and adequate to ensure representativeness of the units being sampled.</p>
	<i>Aspects of the determination of mineralisation that are Material to the Public Report. 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</i>	<p>Drilling techniques used by explorers throughout the history of the project include diamond, rotary, air core and percussion. All are industry standard techniques. Sample length in historical drillholes is variable but most typically either 2.5ft (approximately 75cm), 5ft (approximately 1.5m) or 6ft (approximately 1.8m) intervals. In some holes sampling is selective as determined by geologists. Sample length down holes drilled by Kennecott is variable but most commonly ranges from 2-3m and for Alderan holes they were typically less than 1.5m. These sample lengths are in line with industry standards and adequate to ensure representativeness of the units being sampled.</p>

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	<i>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.</i>	
<i>Drilling techniques</i>	<i>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.).</i>	Drilling techniques used by explorers throughout the history of the project include diamond, rotary, air core and percussion. All are industry standard techniques. Alderan drilling was by diamond core of HQ (61mm) diameter, using triple tube splits and TruCore orientation device. 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. Kennecott collected PQ and HQ size diamond core using a standard Boart Longyear drill rig.
<i>Drill sample recovery</i>	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	Information not available for historical holes. Alderan and Kennecott drill holes have recoveries exceeding 85% although lower recoveries were achieved when drilling through mineralised breccia. Alderan core recovery was measured by a qualified geologist using downhole marking blocks placed by the driller. Zones of cave or fill were assessed by competence, texture and geologic relationship to surrounding rock, as well as reported cave from drill crew. Drilling through poor ground conditions resulted in minor zones of poor drill recovery. Industry standard practices were in place for Alderan and Kennecott drill holes. Not applicable – high core recoveries were obtained by Alderan and Kennecott.
	<i>Measures taken to maximize sample recovery and ensure representative nature of the samples.</i>	
	<i>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.</i>	
<i>Logging</i>	<i>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.</i>	All holes were geologically logged by site geologists during the drilling programmes. All Alderan and Kennecott core was geologically logged to a level of detail to support future geological modelling and resource estimation. All logging was qualitative with visual estimates of various characteristics conducted by a qualified geologist. Logged characteristics include lithology, alteration veining and mineralisation. Quantitative data collection of Specific Gravity, Magnetic Susceptibility was also undertaken at the logging stage. All core was photographed and photographs recorded in a proprietary database.

	<p><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i></p>	100% of the core was logged.
	<p><i>The total length and percentage of the relevant intersections logged.</i></p>	
Sub-sampling techniques and sample preparation	<p><i>If core, whether cut or sawn and whether quarter, half or all core taken</i></p>	Information not available for historical holes. Sawn half core was sampled by Alderan and Kennecott.
	<p><i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i></p>	Information not available for historical holes.
	<p><i>For all sample types, the nature, quality, and appropriateness of the sample preparation technique.</i></p>	Information not available for historical holes. Alderan and Kennecott used standard sample preparation techniques developed by ALS (Figure A2) for rocks and commonly used by the mining companies in the region was used in the project.
	<p><i>Quality control procedures adopted for all sub-sampling stages to maximise representativeness of samples.</i></p>	Information not available for historical holes. Alderan and Kennecott used ALS quality control procedures for the industry standard sample preparation (see Figure A2) for this early stage of sampling.

SAMPLE PREPARATION	
ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test
LOG-22	Sample log in - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-32	Pulverize 1000g to 85% < 75 um
BAG-01	Bulk Master for Storage

**Figure A2:** sample preparation protocol used by the ALS laboratory

	<p><i>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.</i></p>	<p>Information not available for historical holes. Alderan and Kennecott systematically used field duplicates and CRMs to check the accuracy of lab analysis.</p>																											
<p><i>Quality of assay data and laboratory tests</i></p>	<p><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></p>	<p>Information not available for historical holes, Alderan and Kennecott used the techniques outlined in Figure 3</p> <table border="1" data-bbox="981 491 1818 874"> <thead> <tr> <th colspan="3">ANALYTICAL PROCEDURES</th> </tr> <tr> <th>ALS CODE</th> <th colspan="2">DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>ME-MS61L</td> <td colspan="2">Super Trace Lowest DL 4A by ICP-MS</td> </tr> <tr> <td>Au-ICP21</td> <td>Au 30g FA ICP-AES Finish</td> <td>ICP-AES</td> </tr> <tr> <td>pXRF-30RT</td> <td>RTX Semi-Quant pXRF for resistates</td> <td>PXRF</td> </tr> <tr> <td>pXRF-30NDL</td> <td>RTX Client Specific pXRF Below Valid DL</td> <td>PXRF</td> </tr> <tr> <td>ME-OG62</td> <td>Ore Grade Elements - Four Acid</td> <td>ICP-AES</td> </tr> <tr> <td>Cu-OG62</td> <td>Ore Grade Cu - Four Acid</td> <td></td> </tr> <tr> <td>S-OG62</td> <td>Ore Grade S- Four Acid</td> <td></td> </tr> </tbody> </table> <p>The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim or deposit has been determined based on the results of assays of multiple samples of geological materials collected by the prospective investor or by a qualified person selected by him/her and based on an evaluation of all engineering data which is available concerning any proposed project. Statement required by Nevada State Law NRS 519</p> <p><b>Figure A3:</b> Analytical procedures used for samples</p>	ANALYTICAL PROCEDURES			ALS CODE	DESCRIPTION		ME-MS61L	Super Trace Lowest DL 4A by ICP-MS		Au-ICP21	Au 30g FA ICP-AES Finish	ICP-AES	pXRF-30RT	RTX Semi-Quant pXRF for resistates	PXRF	pXRF-30NDL	RTX Client Specific pXRF Below Valid DL	PXRF	ME-OG62	Ore Grade Elements - Four Acid	ICP-AES	Cu-OG62	Ore Grade Cu - Four Acid		S-OG62	Ore Grade S- Four Acid	
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	<p><i>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.</i></p>	<p>Not Applicable.</p>																											
	<p><i>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.</i></p>	<p>Information not available for historical holes. Alderan and Kennecott quality control procedures were as follows:</p> <ul style="list-style-type: none"> <li>• Certified standards (OREAS-504c and MZ0150) were systematically used for assays quality control. Standard samples are inserted with every submitted batch of the samples, commonly every 10th sample was standard (i.e., ~10% of the drill core samples).</li> <li>• Duplicate samples analysis</li> <li>• Using of the blank samples</li> </ul>																											

<i>Verification of sampling and assaying</i>	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	Not applicable.
	<i>The use of twinned holes.</i>	Not applicable however a number of separate drilling campaigns have been carried out by different companies on the Cactus deposit and some holes verify earlier drilling results.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	All drill holes used in 3-D modelling have been located and historical logs and assay results obtained. This historical data has been scanned and is stored electronically on the Company's server which is routinely backed up.
	<i>Discuss any adjustment to assay data.</i>	Not applicable.
<i>Location of data points</i>	<i>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.</i>	All drill holes used in 3-D modelling have been located using handheld GPS or through old records and historical logs and assay results obtained. Additional historical data such as the location of underground workings has also been obtained.
	<i>Specification of the grid system used.</i>	All data are recorded in a UTM zone 12 (North) NAD83 grid.
	<i>Quality and adequacy of topographic control.</i>	The elevation data for historical holes has been obtained either through old records or recorded by a Garmin GPS if the drill collar has been located in the field. A DTM file generated using the LiDAR data was used by Alderan and Kennecott for estimation the RLs of the drill hole collars.
<i>Data spacing and distribution</i>	<i>Data spacing for reporting of Exploration Results.</i>	Not applicable – no grid based sampling or drilling has been undertaken.
	<i>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.</i>	At Cactus the density of drilling is sufficient for geological 3-D modelling of a deposit however the assay quality assurance/quality control and downhole survey data for the historical holes is not adequate for Mineral Resource Estimation in line with the JORC code.
	<i>Whether sample compositing has been applied.</i>	No applicable.
<i>Orientation of data in relation to geological structure</i>	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	No applicable.

	<i>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.</i>	Holes drilled into the Cactus and Comet deposits have a range of orientations.
<i>Sample security</i>	<i>The measures taken to ensure sample security</i>	Alderan and Kennecott samples were submitted to the ALS lab by Company personnel and only authorised personnel have attended the samples.
<i>Audits or reviews</i>	<i>The results of any audits or reviews of sampling techniques and data.</i>	Not Applicable

## Section 2 – Reporting of Exploration Results

(Criteria in this section apply to all succeeding sections)

<b>Criteria of JORC Code 2012</b>	<b>JORC Code (2012) explanation</b>	<b>Details of the Reported Project</b>
<i>Mineral tenement and land tenure status</i>	<i>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.</i>	The Frisco Prospect comprises 275 patented and 252 unpatented claims, which are governed by the Cactus and Northern Carbonate lease agreements entered into with the private landowners, Horn Silver Mines Inc., Tank LC and the W. Hughes Brockbank Foundation. The 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. The Northern Carbonate Lease grants 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 an option to reduce the royalty to 1%. On 18 November 2018, Alderan announced the execution of an Earn-in and Joint Venture Agreement with Kennecott Exploration Company, a member company of Rio Tinto Group, for its Frisco Project. This agreement terminated in July 2022.
	<i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.</i>	All licences covering the Frisco project are granted.
<i>Exploration done by other parties (2.2)</i>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	A large amount of historical exploration has been carried out by numerous different parties dating back to the 1800's. Historical mining records including level plans and production records exist for the period between 1905 and 1915 when the vast majority of production occurred. Historical drilling has been carried out by multiple parties including Anaconda Company, Rosario Exploration Company, Amax Exploration and Western Utah Copper Corporation/Palladon Ventures. Data has been acquired, digitized where indicated, and interpreted by Alderan



<i>Geology</i>	<i>Deposit type, geological setting, and style of mineralisation.</i>	Mineralisation throughout the district include copper-gold rich breccia pipes, skarns, structurally hosted mineralisation and manto style mineralised zones. Part of the larger Laramide mineralising event. Overprinted by Basin and Range tectonics.
<i>Drill hole Information</i>	<i>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:</i>	No new drilling data has been generated for this announcement - all relevant historical data is referenced in past Alderan announcements dating back to 2017.
	<i>Easting and Northing of the drill hole collar. Elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar.</i>	
	<i>Dip and azimuth of the hole.</i>	
	<i>Down hole length and interception depth and hole length.</i>	
	<i>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.</i>	Not applicable – no drilling has been undertaken for . All data referenced in this announcement is historical.
<i>Data aggregation methods</i>	<i>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.</i>	Not applicable.
	<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>	Not applicable – no drilling has been undertaken.

	<i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	Not applicable.
<i>Relationship between mineralisation widths and intercept lengths</i>	<i>These relationships are particularly important in the reporting of Exploration Results.</i>	Information not available. Most holes at Cactus are either vertical or steeply dipping however historical underground mine workings give an indication of true mineralisation thickness for modelling purposes
	<i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i>	The Cactus and Comet mineralisation is steeply dipping to the north
	<i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</i>	All intersections in this announcement are down hole lengths however the deposit modelling is 3 dimensional using drilling and underground mine data.
<i>Diagrams</i>	<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>	Maps are presented in the text of this ASX release.
<i>Balanced reporting</i>	<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>	No new exploration data has been collected. This announcement covers new modelling of previously collected and reported data.
<i>Other substantive exploration data</i>	<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>	The 3-D inversion modelling of magnetic geophysical survey data was carried out on Kennecott UAV (drone) magnetic data collected in 2021 and reported to the ASX on 21 January 2022.

<p><i>Further work</i></p>	<p><i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). 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></p>	<ol style="list-style-type: none"> <li>1. Accurately locating all past drill holes to determine whether they have adequately tested any of the new targets;</li> <li>2. Compiling all surface sampling over the new targets to assist in ranking;</li> <li>3. Designing drill holes to test the highest ranked targets.</li> <li>4. Drill testing the highest priority targets</li> </ol>
	<p><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></p>	<p>Maps showing targets are presented in the text of this ASX release.</p>

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