

Drilling to Commence at Alderan's New Years Copper Prospect, Cactus District, Utah, USA

HIGHLIGHTS

- A three hole Stage 1 drilling programme (340m) will commence at New Years copper prospect in the Cactus copper-gold district, Utah in first week of September, 2024
- Drilling aims to verify past (1964 & 2002) drill intersections into New Years and the gap between the historical Cactus copper-gold mine and New Years prospect which include:
 - o Hole NY-6: 13.7m @ 2.32% Cu within 19.8m @ 1.67% Cu from 22.9m downhole
 - o Hole NY-2: 10.7m @ 1.52% Cu within 27.4m @ 0.85% Cu from surface
 - Hole NYM-1: 10.7m @ 1.60% Cu and 4.6m @ 1.3% Cu within 42.7m @ 0.80% Cu from surface
- New Years, like the historical Cactus and Comet copper-gold mines, has a coincident magnetic low anomaly and sits in the same northwest-southeast magnetic low corridor.
- The 400m x 300m New Years pXRF soil anomaly grades up to 0.33% copper and there are three new anomalies on the sampling grid
- New Years has not been drilled since 1964 and has potential for both oxide copper mineralisation from surface and deeper primary mineralisation.
- Alderan's 3-D magnetic inversion modelling has identified twelve new Cactus 'look-a-like' magnetic anomalies in the Cactus district.
- Alderan's 3-D modelling of the Cactus and Comet deposits suggests that mineralisation remains open and that more remains than was historically mined.

Alderan Resources Limited (ASX: AL8) (Alderan or the **Company)** is pleased to advise that drill site preparations at the New Years copper (Cu) prospect in the Cactus copper-gold (Cu-Au) district in Utah, USA will commence next week on Tuesday 3rd September following the USA Labour Day holiday long weekend. Drilling is scheduled to commence the following week on Monday 9th September following completion of the site preparation.

Alderan has designed a two stage drilling programme at New Years with Stage 1 a three hole (340m) programme to verify copper mineralisation intersected in historical holes drilled in 1964 and 2002. The Stage 2 programme, which is dependent on Stage 1 results, will focus on extending the mineralisation and testing geophysical targets at New Years. Stage 2 will require permitting following archaeological inspections of the proposed drill sites which will be undertaken during the initial drilling programme.

Cactus is an historical copper-gold mining district in the Frisco project in southern Utah, USA. Reported historical production at the Cactus mine (1905-1919) was **1.27Mt at a grade of 2.07% copper, 0.33g/t gold.** The New Years prospect lies at the northwest end of a 1.2km northwest-southeast trending mineralised zone along the Cactus Canyon fault which includes the Cactus mine and the historical Comet gold-copper mine. Historical drilling at New

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¹ Refer Alderan ASX announcement dated 22 February 2024



Years (1964) intersected 13.7m @ 2.32% Cu within 19.8m @ 1.67% Cu from 22.9m downhole (NY-6) and 10.7m @ 1.52% Cu within 27.4m @ 0.85% Cu from surface (NY-2). Hole NYM-1 (2002) drilled midway between Cactus and New Years intersected 10.7m @ 1.60% Cu and 4.6m @ 1.3% Cu within 42.7m @ 0.80% Cu from surface.²

Managing Director of Alderan, Scott Caithness, commented:

"Stage 1 drilling at New Years will get underway next week with the programme expected to be completed before the end of September.

"New Years has not been drilled since 1964 and has potential for both oxide and primary copper mineralisation. Old reports indicate that the depth of oxidation extends irregularly to depths of over 42m which is consistent with hole NYM-1 which was drilled midway between Cactus and New Years in 2002 and intersected 42.7m of oxide copper mineralisation grading 0.8% from surface. This hole suggests that in addition to the mineralisation at New Years prospect itself there is potential for near surface oxide mineralisation extending from Cactus to New Years.

"New Years is an outstanding copper target within the same northwest-southeast trending corridor which hosts the historical high grade Cactus and Comet copper-gold deposits. Like Cactus and Comet, it has high-grade drill intersections of +10m grading +1.5% Cu and a magnetic low anomaly plus it has a 400m x 300m copper soil anomaly with pXRF grades up to 0.33% and surface rock samples grading up to 4.6% Cu.

"If Alderan's exploration at New Years proves successful, Alderan's magnetics modelling has identified a further twelve new targets to test in the Cactus District."

New Years Prospect Drilling

Stage 1 drilling at New Years, as outlined in Table 1 and Figure 1, will be carried out from three permitted drill sites.³ The holes aim to verify the mineralisation intersected in historical holes drilled in 1964 and 2002.

Table 1: New Years Prospect – Stage 1 Proposed Drill Holes

Hole Number	WGS84 Easting	WGS84 Northing	SRTM30	Azimuth	Dip	Depth (m)	Comments
NY2024- DDH-A	299620.00	4262740.00	1926.0	0	-90	100	Twin hole of Newmont's NYM-1 drilled in 2002 which intersected 10.7m @ 1.6% Cu from 22.9m within 42.7m @ 0.8% Cu; mineralisation not closed and all oxide
NY2024- DDH-B	299483.27	4262932.68	1939.8	0	-90	120	Twin hole of Rosario's NY-6 drilled in 1964 which intersected 13.7m @ 2.3% Cu, 0.22g/t Au from 22.9m downhole
NY2024- DDH-J	299502.49	4262928.28	1943.0	0	-90	120	Twin hole of Rosario's NY-2 drilled in 1964 which intersected 9.1m @ 1.69% Cu, 0.22g/t Au within 27.8m @ 0.85% Cu from surface
Total						340	

² Refer Alderan ASX announcements dated 22 February 2024, 13 March 2024

³ Refer Alderan ASX announcements dated 29 April 2024, 29 July 2024



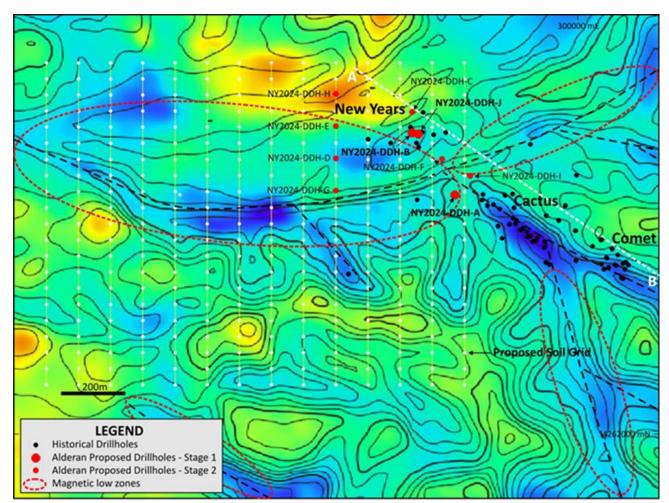


Figure 1: New Years Stage 1 and Stage 2 drill holes on an image of the total magnetic intensity overlain on contours of the shape of the magnetic field. The magnetics highlights that Cactus and Comet sit within a northwest trending magnetic low zone (blue) which trends northwest into New Years and is interpreted to be the Cactus Canyon fault. There are a number other magnetic low zones which have potential for copper mineralisation. The New Years soil grid is shown on the magnetics and anomalous soils coincide with magnetic lows (see Figure 4).

The New Years prospect sits within the Cactus Canyon fault zone approximately 400m and 700m respectively northwest of the historical Cactus and Comet copper-gold mines. Past production at the Cactus mine (1905-1919) is reportedly 1.27Mt grading 2.07% copper, 0.33g/t gold while no production figures are recorded for the smaller more gold rich Comet mine.

Alderan's exploration in the Cactus district has entailed 3-D modelling of mineralisation at the Cactus and Comet mines, 3-D inversion modelling of drone magnetics over the Cactus district and grid soil sampling over the New Years prospect. The key findings of this work include:

- Cactus and Comet mineralisation remains open at depth and to the northwest
- Cactus, Comet and New Years have coincident magnetic anomalies overa 1.2km strike length and there are 12 additional Cactus 'look-a-like' magnetic anomalies (see Figure 2 & 3)
- New Years prospect has historical copper drill intersections of +10m @ >1.5% Cu with assays over five foot intervals up to 5.4% Cu and has not been drilled since 1964 (see Table 1)
- Hole NYM-1 drilled in 2002 midway between Cactus and New Years intersected 10.7m @ 1.60% copper plus 4.6m @ 1.3% Cu within 42.7m @ 0.80% Cu from surface all oxidized (see Figure 3)



- New Years has a 400m x 300m high order copper in soil anomaly with pXRF grades up to 0.33% Cu (see Figure 4) and a surface rock sample of breccia at New Years grades 4.5% copper⁴
- The New Years soil grid has three additional copper soil anomalies which are coincident with magnetic anomalies

Next Steps

During the initial drilling at New Years, preparations for Stage 2 drill holes which are designed to extend mineralisation intersected in the initial drilling and test geophysical targets will take place. This will involve archaeological investigations, a standard procedure in Utah's historical mining districts, the Stage 2 sites prior to approval from Utah's Department of Oil, Gas & Mining for this drilling. The current Stage 2 drilling plan will be finalised once the results of the initial drilling are obtained.

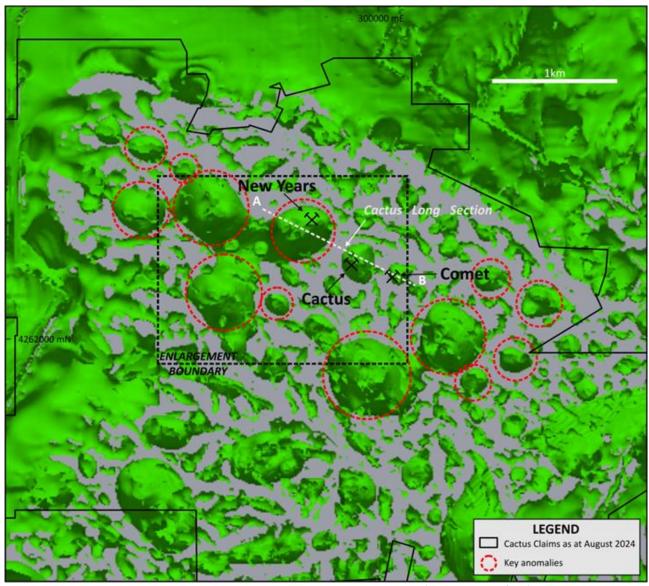


Figure 2: Total magnetic intensity susceptibility 3-D inversion modelling image (0.004 SI isosurface) highlighting magnetic low anomalies coincident with Cactus, Comet and New Years along the northwest trending Cactus Canyon fault. The New Years composite anomaly has three lows and extends for 1km east-west and 1.2km north-south. There are 12 additional Cactus and Comet 'look-a-like' anomalies highlighted by the red dashed circles.

⁴ Refer Alderan ASX announcements dated 25 June 2024, 8 July 2024



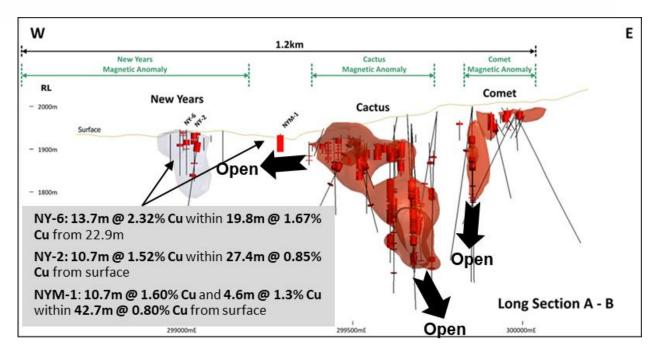


Figure 3: NW-SE section along the Cactus Canyon fault showing the Leapfrog 3-D modelled Cactus and Comet coppergold deposits and the New Years prospect. The 3D inversion modelled magnetic anomalies cover a distance of 1.2km. The section draws holes from a 300m wide corridor so that the deposits can be displayed.

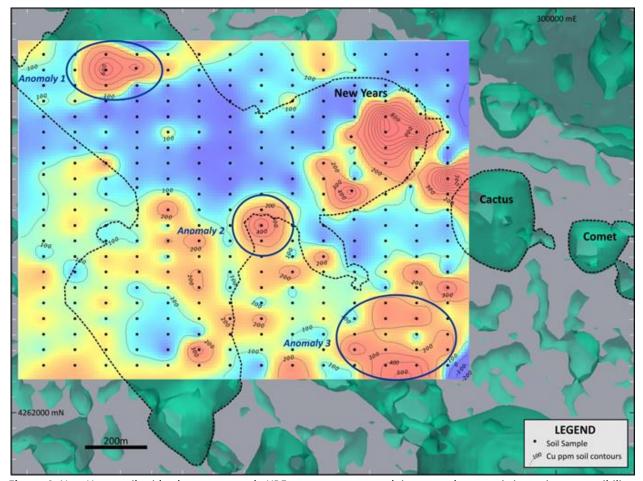


Figure 4: New Years soil grid colour contoured pXRF copper assays overlain on total magnetic intensity susceptibility 3-D inversion model (0.004 SI isosurface). The New Years prospect with grades up to 0.33% Cu and Anomalies 1-3 are highlighted. The New Years anomaly and Anomalies 1 & 2 coincide with magnetic low anomalies (see Figure 1)



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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.⁵ The Company has eight (8) lithium projects in Minas Gerais and Bahia, Brazil (AL8 ASX announcements dated 20th October, 2023 and 18th June 2024) 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 Figures 4-6). 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 exploration results 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.

⁵ https://www.energy.gov/cmm/what-are-critical-materials-and-critical-minerals



Cautionary Statements

The Company stresses that the pre-Alderan assay data from historical soil samples and drill holes noted in this announcement were not subject to modern quality assurance and quality control practices and hence are not JORC compliant. All historical assays for soils, rocks and drill holes are regarded as indictive of exploration potential only.

In relation to the disclosure of pXRF results, the Company cautions that estimates of copper mineral abundance from pXRF results should not be considered a proxy for quantitative analysis of a laboratory assay result. Assay results are required to determine the actual widths and grade of the mineralisation. The samples that are the subject of this report have been laboratory assayed and verified.

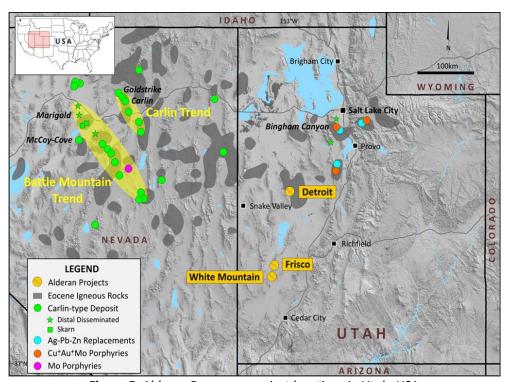


Figure 5: Alderan Resources project locations in Utah, USA.



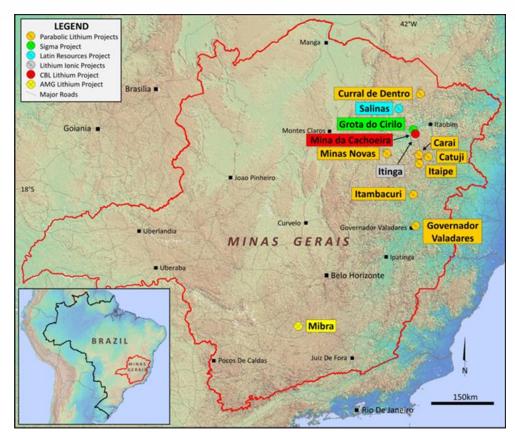


Figure 6: Alderan Resources project locations in Minas Gerais, Brazil.



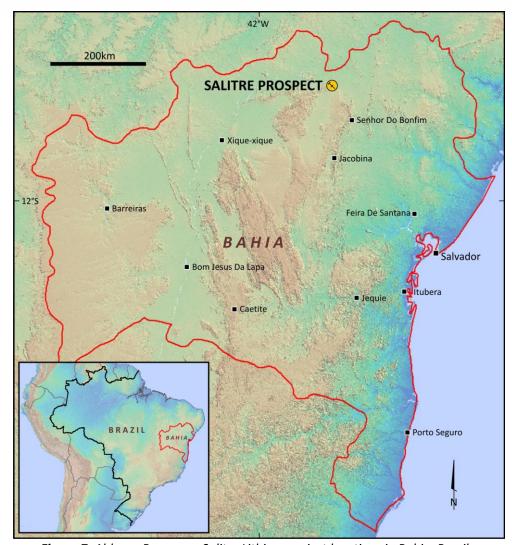


Figure 7: Alderan Resources Salitre Lithium project locations in Bahia, Brazil.