

Soil Sample Assays confirm the New Years Copper-Gold Prospect and Highlight New Targets, Utah, USA (Amended)

Alderan Resources Limited (ASX: AL8) (Alderan or the Company) refers to its announcement dated 17 June 2024 titled "Soil Assays Highlight New Years Copper-Gold and New Targets".

The Company provides the attached revised version of the announcement in which the following information has been updated:

- Reference provided for previous ASX announcement relating to surface rock samples of mineralised breccia as shown in figure 3;
- Additional information regarding calibration of pXRF machines; and
- Additional cautionary statement added to page 4.

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About Alderan Resources Limited

Alderan Resources specialises in critical and precious metal exploration. In addition to the acquisition of seven (7) lithium projects in Minas Gerais, Brazil (Refer ASX announcement dated 20 September 2023) the Company has 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. 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/>

Soil Sample Assays confirm the New Years Copper-Gold Prospect and Highlight New Targets, Utah, USA

HIGHLIGHTS

- Portable XRF assays of soil samples over the New Years target have successfully outlined four high order copper anomalies with grades up to 0.33% against a background grade of 60ppm.
- The New Years prospect soil anomaly covers 400m x 250m with grades ranging from 120ppm to 0.33% Cu.
- Anomaly 1 with grades up to 615ppm Cu occurs 700m to the west of New Years and coincides with a magnetic low within the composite New Years magnetic anomaly.
- Anomalies 2 and 3 with copper grades up to 444ppm and 524ppm are located in the center and southeast corner of the sampled grid.
- High copper assays in soils define the zone between the Cactus Mine and New Years with grades up to 0.7%. This sample site coincides with the location of historical hole NYM-1 which intersected 42.7m @ 0.8% Cu from surface and may be impacted by past mining.
- Drill site permitting is underway with a Stage 1 four hole (500m) diamond drilling programme at New Years to be ready to commence in late June – early July 2024.
- Shallow historical drill intersections into New Years and the gap between the Cactus and New Years magnetic anomalies include:
 - 13.7m @ 2.32% Cu within 19.8m @ 1.67% Cu from 22.9m downhole (NY-6)
 - 10.7m @ 1.52% Cu within 27.4m @ 0.85% Cu from surface (NY-2)
 - 10.7m @ 1.60% Cu and 4.6m @ 1.3% Cu within 42.7m @ 0.80% Cu from surface (NYM-1)
- New Years has received no exploration since the 1960s

Alderan Resources Limited (ASX: AL8) (Alderan or the Company) is pleased to announce that the grid soil sampling completed over the New Years prospect in the Cactus district of the Frisco copper-gold project area has successfully outlined a high order copper anomaly. It has also highlighted three additional copper anomalies to the west, southwest and south of the New Years prospect.

Cactus is an historical copper-gold mining district in the Frisco project in southern Utah, USA. Reported historical production at the Cactus mine was 1.27Mt at a grade of 2.07% copper, 0.33g/t gold. The New Years prospect lies approximately 400m northwest of Cactus mine in the Cactus Canyon fault zone which also hosts the historical Comet copper-gold mine. Historical drilling in the 1960s at New Years 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 drilled midway between Cactus and New Years in 2002 intersected 10.7m @ 1.60% Cu and 4.6m @ 1.3% Cu within 42.7m @ 0.80% Cu from surface.¹

¹ Refer Alderan ASX announcements dated 22 February 2024, 13 March 2024 & 29 April 2024

Managing Director of Alderan, Scott Caithness, commented:

“The soil sample assays over the New Years grid have clearly highlighted the New Years prospect with grades up to 0.3% Cu. Three additional anomalies not associated with historical mining have copper grades of over 400ppm, which is more than 6 times background. The sampling programme has clearly demonstrated that soils will be an effective tool for prioritising the twelve Cactus ‘look-a-like’ magnetic anomalies that were identified from 3-D inversion modelling of the drone magnetic survey.

*“Preparations are continuing for drilling at New Years which has not been drilled since the early 1960s despite high grade intersections of **+10m grading +1.5% Cu** and surface rock samples that grade up to **4.6% Cu**. The prospect has excellent potential for both primary and near surface oxide copper mineralisation and lies only 400m northwest of the historical Cactus mine which produced 1.27Mt at a grade of 2.1% Cu and 0.3g/t Au and remains open at depth and along strike.”*

New Years Soil Assays

Portable XRF (pXRF) assays for the soil sampling grid covering the large composite New Years magnetic anomaly clearly highlight the New Years prospect with grades up to 0.33% Cu plus three additional anomalies with maximum grades ranging from 447-615ppm Cu. The background copper grade in the survey area is less than 60ppm hence these anomalies have assays greater than six times background. Figure 1 shows Alderan’s soil sampling grid over the New Years 3D inversion modelled magnetic anomaly and Figure 2 shows the colour contoured copper assay results overlain on the magnetic anomaly.

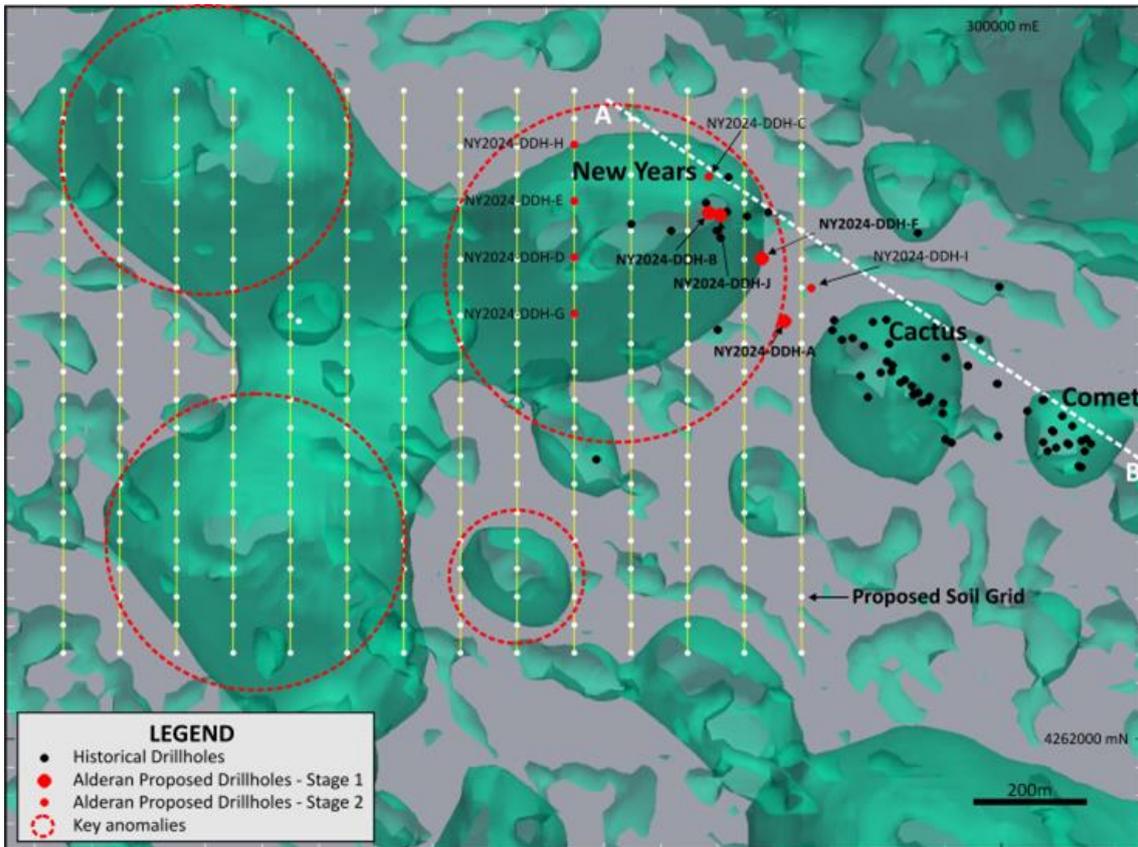


Figure 1: Plan showing the grid soil sampling over the 3-D inversion model magnetic anomalies at New Years plus the location of the Cactus and Comet magnetic anomalies, historical drill holes and Alderan proposed holes.

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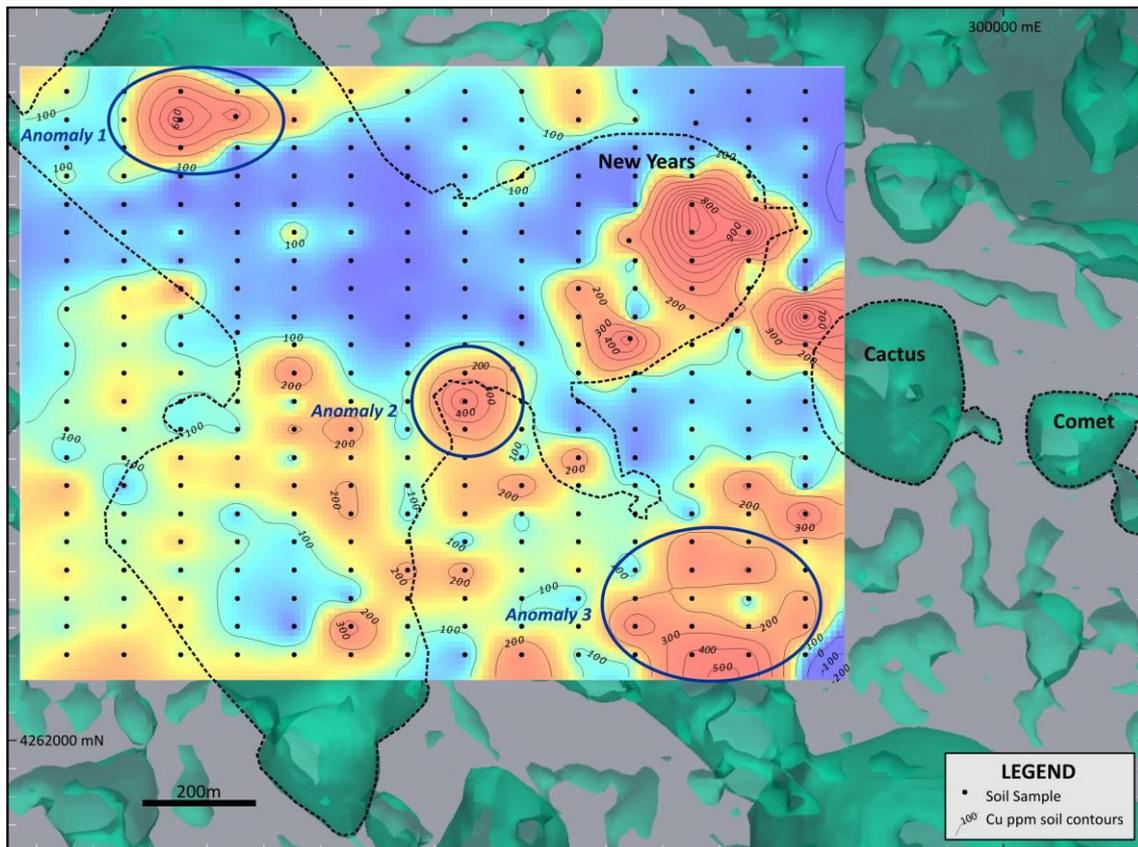


Figure 2: Colour contoured pXRF soil copper assays highlighting the New Years prospect anomaly plus Anomalies 1-3.

The historically drilled New Years prospect at the northeastern end of the New Years magnetic anomaly has been clearly highlighted by soil assays which grade in the range 118ppm Cu to 0.33% Cu. The anomalous soils cover an area of approximately 400m x 300m and trend southeast into the Cactus mine area. The area of the anomaly has had some surface disturbance from past drilling and a ‘promotional’ shaft sunk in the late 1800s² which may have impacted the soil assays but there are surface rock samples of mineralised breccia, the same rock which hosts the Cactus and Comet mineralisation, which grade up to 4.59% Cu (see Figure 3). Holes drilled in the 1960s into New Years include NY-6 which intersected **13.7m @ 2.32% Cu** within **19.8m @ 1.67% Cu** from 22.9m downhole and NY-2 which intersected **10.7m @ 1.52% Cu** within **27.4m @ 0.85% Cu** from surface.

The highest assay in the programme, 0.7% Cu, is located on the most eastern line midway between Cactus and New Years. This sample lies immediately adjacent to the collar of historical hole NYM-1 which intersected **10.7m @ 1.60% Cu** and **4.6m @ 1.3% Cu** within **42.7m @ 0.80% Cu** from surface but may be impacted by historical Cactus mine workings.

Anomaly 1 which lies 700m to the west of the New Years prospect on the northwest margin of the grid is highlighted by assays ranging from 107ppm Cu to 615ppm Cu. It is located immediately above a second magnetic low within the New Years composite magnetic anomaly and is open to the north. It also lies on the southern edge of the northwest trending Cactus Canyon fault structure which passes through New Years, Cactus and Comet and is not in an area of historical mining. The low grade soil assays which lie between this anomaly and the New Years prospect appear to lie within an area of landslip scree which could be masking any geochemical signature that extends from New Years.

² Wray, W.B.; *Mines and Geology of the San Francisco District, Beaver Country, Utah*; 26 Sept 2003

The two additional anomalies, Anomaly 2 and Anomaly 3, which lie in the centre and southeast corner of the grid have maximum grades of 524ppm Cu and 447ppm Cu respectively. Anomaly 2 coincides with a highly anomalous sample grading 0.31% Cu in the 1960s soil sampling. Anomaly 3 is also consistent with the historical soil sample assays and is open to the south. It also has a coincident magnetic low anomaly. Both of these anomalies are not in locations impacted by contamination from historical mining.

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 indicative 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 will be submitted for laboratory assay in due course and some variation from the results presented herein should be expected.



Figure 3: Tourmaline breccia with copper mineralisation from New Years

New Years Soil Sampling Programme and pXRF Analysis

The sampling was carried out on a 100m x 50m grid with lines oriented north-south. The grid was designed primarily to cover the New Years composite magnetic anomaly which consists of three linked magnetic lows which were highlighted in the 3-D inversion modelling of the 2021 drone magnetic survey. The aim of the programme was to better define the New Years prospect and determine whether soil sampling was an effective tool to prioritise the 12 Cactus-like magnetic anomalies that were identified from the magnetic inversion modelling.

A total of 294 sites were sampled from B-horizon where possible however the soil horizons can be poorly developed in the area. Duplicate samples were collected at each site, one for pXRF analysis and one for check lab analysis. The pXRF samples were dried and coarse sieved to -1mm before undergoing analysis.

The analysis was carried out using two pXRF machines. The initial 111 samples which were collected on the western side of the grid were analysed with an Olympus Vanta pXRF analyzer. An Hitachi X-MET8000 pXRF analyzer was used for the remaining samples due to a technical failure with the Olympus. The pXRF machines are periodically checked and certified by the manufacturer and were calibrated daily against certified reference material (CRM) provided by the manufacturer. For example, the Hitachi pXRF has three CRMs, “stainless steel (10000883)”, “Nist 2711” and “FeOre 377-6” plus a silica blank and daily checks were run against these to ensure that the machine was assaying within specifications. A check against the CRMs was also carried out following completion of the sample assaying which indicated that the pXRF assays for copper marginally under-reported the CRM copper assays (see Appendix 1). One hundred of the duplicate soil samples have been submitted to the ALS laboratory in Nevada for ICP-MS multi-element analysis as a check on the pXRF assays with results expected in August, 2024.

To ensure that the assays for the two pXRF machines were calibrated against each other, twenty samples were assayed with both machines. This calibration resulted in the Hitachi assays being multiplied by a factor of 2.25 to match the Olympus assays which more closely aligned with the historical Cu assay levels for soils in the area³ (see Table 1).

Applying the 2.25 calibration factor to the Hitachi assays gave the results outlined in Table 2.

Table 1: Olympus-Hitachi pXRF Assays Comparison

	Olympus Cu Assay (ppm)	Hitachi Cu Assay (ppm)	Difference	Hitachi/Olympus	Olympus/Hitachi	
NYSS24 091	46	29	17	64%	157%	
NYSS24 092	45	17	28	37%	270%	
NYSS24 093	44	8	36	18%	550%	Outlier
NYSS24 094	125	64	61	51%	195%	
NYSS24 095	290	53	237	18%	551%	Outlier
NYSS24 096	94	53	41	56%	177%	
NYSS24 097	214	85	129	40%	253%	
NYSS24 098	91	36	55	39%	254%	
NYSS24 099	182	60	122	33%	304%	
NYSS24 100	115	68	47	59%	168%	
NYSS24 101	80	24	56	30%	333%	
NYSS24 102	80	43	37	54%	186%	
NYSS24 103	57	20	37	35%	290%	
NYSS24 104	34	4	30	11%	927%	Outlier
NYSS24 105	126	63	63	50%	199%	
NYSS24 107	149	100	49	67%	149%	
NYSS24 108	79	50	29	63%	159%	
NYSS24 109	35	13	22	36%	276%	
NYSS24 110	34	30	4	89%	112%	Outlier
Average Difference				45%	290%	

Olympus-Hitachi pXRF Assays Comparison with Outliers Removed

	Olympus Cu Assay (ppm)	Hitachi Cu Assay (ppm)	Difference	Hitachi/Olympus	Olympus/Hitachi
NYSS24 091	46	29	17	64%	157%

³ Refer Alderan ASX announcements dated 12 March 2024

NYSS24 092	45	17	28	37%	270%
NYSS24 094	125	64	61	51%	195%
NYSS24 096	94	53	41	56%	177%
NYSS24 097	214	85	129	40%	253%
NYSS24 098	91	36	55	39%	254%
NYSS24 099	182	60	122	33%	304%
NYSS24 100	115	68	47	59%	168%
NYSS24 101	80	24	56	30%	333%
NYSS24 102	80	43	37	54%	186%
NYSS24 103	57	20	37	35%	290%
NYSS24 105	126	63	63	50%	199%
NYSS24 107	149	100	49	67%	149%
NYSS24 108	79	50	29	63%	159%
NYSS24 109	35	13	22	36%	276%
Average Difference				48%	225%

Table 2: Assay results for Olympus and Hitachi after applying Calibration Factor to the Hitachi Assays

Olympus Vanta pXRF	Assay Threshold	Hitachi X-MET8000 pXRF	Assay Threshold
Olympus top 5% of assays	>285ppm	Hitachi top 5% of assays	>444ppm
Olympus top 10% of assays	>182ppm	Hitachi top 10% of assays	>291ppm
Olympus top 25% of assays	>131ppm	Hitachi top 25% of assays	>162ppm
Olympus top 50% of assays	>106ppm	Hitachi top 50% of assays	>103ppm
Olympus top 75% of assays	>62ppm	Hitachi top 75% of assays	>60ppm

As can be seen in Table 2, after the calibration factor was applied to the Hitachi pXRF copper assays the thresholds for the top 75% of assays were within 2ppm Cu for both machines and the thresholds for the top 50% of assays were within 3ppm. The gap in threshold for the top 25% increased to 31ppm Cu which is still considered acceptable. The most significant differences are for the top 10% and top 5% of copper assays however this can be explained by the fact that the Hitachi samples were collected on the eastern side of the grid which included the New Years prospect and the zone between New Years and the Cactus mine where the high assays are impacted by historical mining.

Next Steps - New Years Prospect Drilling

Preparations are underway for the Stage 1 four-hole diamond drilling programme totalling 540m at New Years. The application for permitting was submitted in late May and approval is expected to be received by the end of June 2024. Quotations for drilling are currently being assessed.

It is expected that drilling will be ready to commence in late June – early July.

END

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

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www.alderanresources.com.au**For further information:****Scott Caithness**, Managing Director**Alderan Resources****M:** +61 409 401 078**E:** scott@alderanresources.com.au**Rod North**, Managing Director**Bourse Communications Pty Ltd****M:** +61 408 670 706**E:** rod@boursecommunications.com.au**About Alderan Resources Limited**

Alderan Resources specialises in critical and precious metal exploration.⁴ The Company has seven (7) lithium projects in Minas Gerais, Brazil (AL8 ASX announcement dated 20th 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 Figures 4 & 5). 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.

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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.

⁴ <https://www.energy.gov/cmm/what-are-critical-materials-and-critical-minerals>

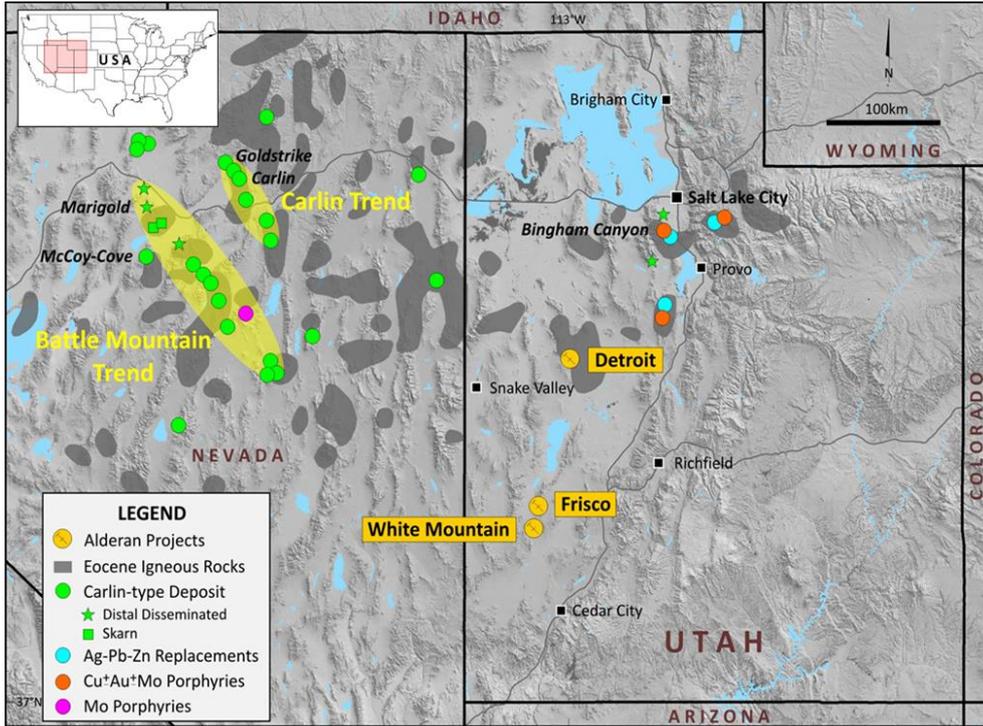


Figure 4: Alderan Resources project locations in Utah, USA.

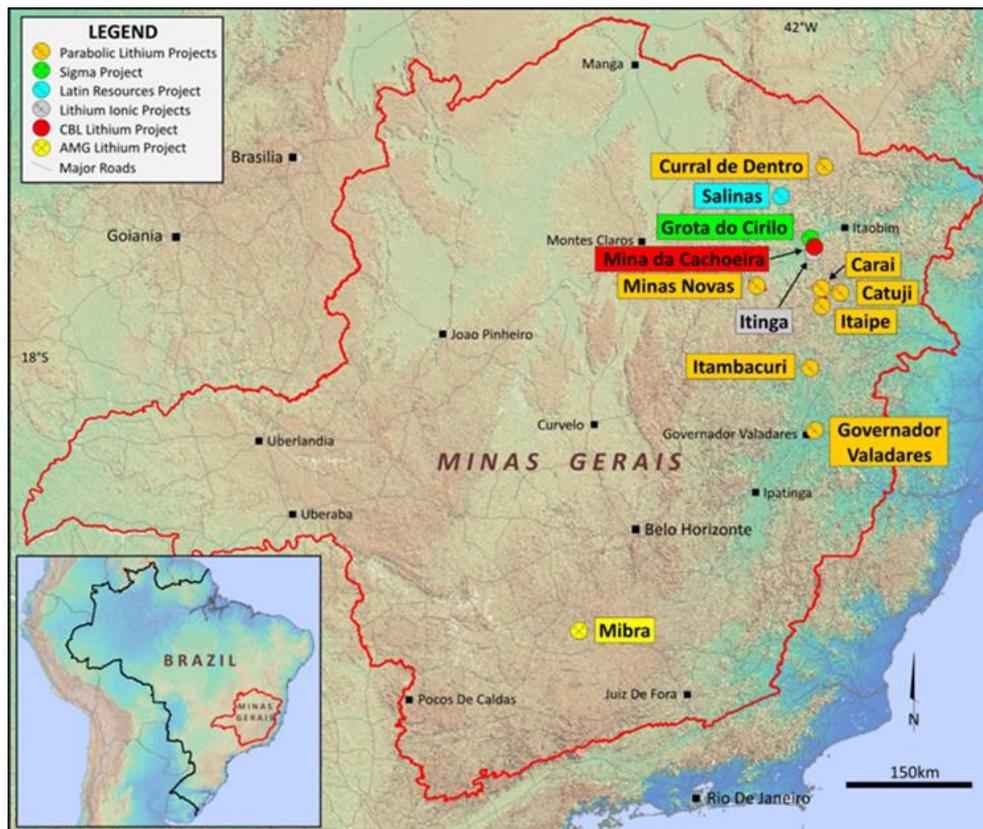


Figure 5: Alderan Resources project locations in Minas Gerais, Brazil.

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Appendix 1: JORC Code, 2012 Edition – Table 1 Report in relation to soil sampling at the Frisco project, Utah, USA.

Section 1 - Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections)

Criteria of JORC Code 2012	JORC Code (2012) explanation	Details of the Reported Project
<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>	294 duplicate B-horizon soil samples were collected on a 50 x 100m grid over the New Years composite magnetic anomaly. The samples were collected using standard industry equipment consisting of shovel, hand trowel and plastic bags. Where soils were poorly developed, the sample may be a combination of A and B horizon.
	<i>Include reference to measures taken to ensure sample representativeness and the appropriate calibration of any measurement tools or systems used.</i>	Samples were collected at each location using a standard sampling technique and are considered representative.
	<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 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>	The soil samples were typically collected within 30cm of surface with collected weights approximately 1kg. Samples were coarse sieved in the field to remove coarse rock material that could bias a result. For pXRF analysis, samples were dried and then sieved to -1mm to create a plastic cap charge for analysis. Any organic matter was removed. The pXRF machines were calibrated daily and the samples were analysed three times with the final sample assay being an average of the three analyses.

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<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>	Not applicable. The drilling results outlined in the announcement are from historical holes which were released in Alderan's ASX announcements on 22 February 2024 and 13 March 2024.
<i>Drill sample recovery</i>	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	Not applicable. The drilling results outlined in the announcement are from historical holes which were released in Alderan's ASX announcements on 22 February 2024 and 13 March 2024.
	<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 soil sample sites were described during sampling. The drilling results outlined in the announcement are from historical holes which were released in Alderan's ASX announcements on 22 February 2024 and 13 March 2024.
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i>	
	<i>The total length and percentage of the relevant intersections logged.</i>	
<i>Sub-sampling techniques and sample preparation</i>	<i>If core, whether cut or sawn and whether quarter, half or all core taken</i>	Not applicable
	<i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i>	Not applicable

	<i>For all sample types, the nature, quality, and appropriateness of the sample preparation technique.</i>	The soils were coarse sieved during collection in the field to remove coarse material that could bias the soil assays. They were then dried and sieved to -1mm with any organic matter removed ahead of packing into a charge cap for pXRF analysis. This is a standard sample preparation procedure for analysis using a pXRF machine.
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representativeness of samples.</i>	Duplicate samples were collected from all sites – one for pXRF and one for lab analysis. Alderan plans to analyse a selection of the lab samples to provide a quality control check on the pXRF assays for future reference. These will be reported once completed. Samples analysed with the pXRF machines were sieved to -1mm and homogenised ahead of placing in a charge cap for analysis.
	<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>	The soils were coarse sieved in the field to remove any coarse rock material that could bias assays. Duplicate samples were collected from all sites – one for pXRF and one for lab analysis. Alderan plans to analyse a selection of the lab samples to provide a quality control check on the pXRF assays for future reference. These will be reported once completed.
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	Sample sizes after sieving in the field were approximately 1kg which is considered appropriate for the programme being undertaken.
<i>Quality of assay data and laboratory tests</i>	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	The analysis was carried out using two pXRF machines. The analysis of the initial 111 samples collected on the western side of the grid were analysed with an Olympus Vanta pXRF analyzer. An Hitachi X-MET8000 pXRF analyzer was used for the remaining samples due to a technical failure with the Olympus. To ensure that the assays for the two pXRF machines were calibrated against each other, twenty samples were assayed with both machines which resulted in a calibration factor of 2.25 being applied to the Hitachi results as explained in the body of the announcement. It should be noted that pXRF analysis is not as accurate as lab analysis. The pXRF results are regarded by Alderan as indicative copper grades only but are viewed as suitable for determining areas of anomalous copper mineralisation.
	<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>	Not Applicable.
	<i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of</i>	A standard operating procedure was utilised throughout the pXRF analysis process. Assaying of 20 samples were duplicated with the Olympus and Hitachi pXRF machines so that the results could be compared and calibrated against each other. Duplicate samples were collected in the field at each sample site for future lab analysis which will provide a check on the pXRF assays.

	<p><i>accuracy (i.e. lack of bias) and precision have been established.</i></p>	<p>The pXRF machines are periodically checked and certified by the manufacturer and were calibrated daily against certified reference material (CRM) provided by the manufacturer. For example, the Hitachi pXRF has three CRMs, "stainless steel (10000883)", "Nist 2711" and "FeOre 377-6" plus a silica blank and daily checks were run against these to ensure that the machine was assaying correctly. A check against the CRMs was also carried out following completion of the assaying with the results for copper in the table below. As can be seen the pXRF readings have marginally under-reported the copper assays in comparison to the CRM assays.</p> <table border="1" data-bbox="891 395 2067 981"> <thead> <tr> <th>Name</th> <th>CRM</th> <th>CRM Cu Assay (ppm)</th> <th>CRM Cu Assay Standard Deviation</th> <th>Date</th> <th>Time</th> <th>Assay Time (Sec)</th> <th>pXRF Cu Assay (ppm)</th> <th>+/- Assay variation</th> <th>3 Reading Average (ppm)</th> </tr> </thead> <tbody> <tr> <td>SS</td> <td>Soil-FP</td> <td></td> <td></td> <td>19.6.24</td> <td>15:41:07</td> <td>30</td> <td>2565</td> <td>46</td> <td></td> </tr> <tr> <td>SS</td> <td>Soil-FP</td> <td>3560</td> <td>91</td> <td>19.6.24</td> <td>15:42:08</td> <td>30</td> <td>2388</td> <td>45</td> <td>2528</td> </tr> <tr> <td>SS</td> <td>Soil-FP</td> <td></td> <td></td> <td>19.6.24</td> <td>15:42:52</td> <td>30</td> <td>2630</td> <td>47</td> <td></td> </tr> <tr> <td>SiO2</td> <td>Soil-FP</td> <td></td> <td></td> <td>19.6.24</td> <td>15:46:02</td> <td>30</td> <td>0</td> <td>2</td> <td></td> </tr> <tr> <td>SiO2</td> <td>Soil-FP</td> <td>0</td> <td>0</td> <td>19.6.24</td> <td>15:46:42</td> <td>30</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td>SiO2</td> <td>Soil-FP</td> <td></td> <td></td> <td>19.6.24</td> <td>15:47:22</td> <td>30</td> <td>0</td> <td>2</td> <td></td> </tr> <tr> <td>Fe</td> <td>MiningLE-FP</td> <td>not available</td> <td>not available</td> <td>19.6.24</td> <td>15:50:18</td> <td>30</td> <td>817</td> <td>43</td> <td>not applicable</td> </tr> <tr> <td>Fe</td> <td>MiningLE-FP</td> <td>not available</td> <td>not available</td> <td>19.6.24</td> <td>15:51:00</td> <td>30</td> <td>874</td> <td>43</td> <td>not applicable</td> </tr> <tr> <td>Fe</td> <td>MiningLE-FP</td> <td>not available</td> <td>not available</td> <td>19.6.24</td> <td>15:51:39</td> <td>30</td> <td>898</td> <td>44</td> <td>not applicable</td> </tr> <tr> <td>NIST</td> <td>Soil-FP</td> <td>140</td> <td>4</td> <td>19.6.24</td> <td>15:53:23</td> <td>30</td> <td>128</td> <td>5</td> <td>117</td> </tr> <tr> <td>NIST</td> <td>Soil-FP</td> <td></td> <td></td> <td>19.6.24</td> <td>15:54:03</td> <td>30</td> <td>118</td> <td>5</td> <td></td> </tr> <tr> <td>NIST</td> <td>Soil-FP</td> <td></td> <td></td> <td>19.6.24</td> <td>15:55:13</td> <td>30</td> <td>105</td> <td>5</td> <td></td> </tr> </tbody> </table> <p>One hundred duplicate soil samples have been submitted to the ALS laboratory in Nevada for ICP-MS multi-element analysis which will provide checks against the pXRF assays. The assay results for these samples are expected in August 2024.</p>	Name	CRM	CRM Cu Assay (ppm)	CRM Cu Assay Standard Deviation	Date	Time	Assay Time (Sec)	pXRF Cu Assay (ppm)	+/- Assay variation	3 Reading Average (ppm)	SS	Soil-FP			19.6.24	15:41:07	30	2565	46		SS	Soil-FP	3560	91	19.6.24	15:42:08	30	2388	45	2528	SS	Soil-FP			19.6.24	15:42:52	30	2630	47		SiO2	Soil-FP			19.6.24	15:46:02	30	0	2		SiO2	Soil-FP	0	0	19.6.24	15:46:42	30	0	0	0	SiO2	Soil-FP			19.6.24	15:47:22	30	0	2		Fe	MiningLE-FP	not available	not available	19.6.24	15:50:18	30	817	43	not applicable	Fe	MiningLE-FP	not available	not available	19.6.24	15:51:00	30	874	43	not applicable	Fe	MiningLE-FP	not available	not available	19.6.24	15:51:39	30	898	44	not applicable	NIST	Soil-FP	140	4	19.6.24	15:53:23	30	128	5	117	NIST	Soil-FP			19.6.24	15:54:03	30	118	5		NIST	Soil-FP			19.6.24	15:55:13	30	105	5	
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<p><i>Verification of sampling and assaying</i></p>	<p><i>The verification of significant intersections by either independent or alternative company personnel.</i></p>	<p>Not applicable.</p>																																																																																																																																		
	<p><i>The use of twinned holes.</i></p>	<p>Duplicate samples were collected in the field at each sample site for future lab analysis which will provide a check on the pXRF assays.</p>																																																																																																																																		
	<p><i>Documentation of primary data, data entry procedures, data verification, data</i></p>	<p>All data has been stored electronically in the company's secure digital database.</p>																																																																																																																																		

	<i>storage (physical and electronic) protocols.</i>	
	<i>Discuss any adjustment to assay data.</i>	<p>As outlined in the body of the announcement, the initial 111 samples collected on the western side of the grid were analysed with an Olympus Vanta pXRF analyzer. An Hitachi X-MET8000 pXRF analyzer was used for the remaining samples due to a technical failure with the Olympus. To ensure that the assays for the two pXRF machines were calibrated against each other, twenty samples were assayed with both machines. This duplicate assaying resulted in a calibration factor being calculated and the Hitachi assays being multiplied by a factor of 2.25 to match the Olympus assays.</p> <p>The calibration factor led to excellent alignment of assays for the bottom 50% of assays and acceptable alignment for the top 25% of assays. The variation that occurs in the top 10% of assays is more likely due to higher grade assays coming from samples collected in known mineralised areas on the prospect.</p>
<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 sample sites were located using a Garmin Montana 750i GPS.
	<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 sample sites is collected by the Garmin Montana 750i GPS used to locate each sample site. Elevation data is not considered critical for the soil sampling. No new data has been generated for this announcement.
<i>Data spacing and distribution</i>	<i>Data spacing for reporting of Exploration Results.</i>	The soil sampling was carried out on a 100m x 50m grid.
	<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>	The 100m x 50m grid used for the soil sampling is considered appropriate to identify anomalous zones of mineralisation. Infill sampling may be required in future to better define the anomalous areas.
	<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>	Not applicable.
Sample security	<i>The measures taken to ensure sample security</i>	All samples were managed and controlled by the sampling crew from Burgex that executed the programme. Samples sent to the lab were transported by Burgex personnel.
Audits or reviews	<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)

Criteria of JORC Code 2012	JORC Code (2012) explanation	Details of the Reported Project
<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 over 300 patented and unpatented claims which are governed by the Cactus and Northern Carbonate lease agreements entered into with the private landowners and held by Alderan in its own right. 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 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%.
	<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 Cactus and Comet mines 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. This announcement covers pXRF copper assays for 294 soil samples collected over the New Years prospect.

<i>Geology</i>	<i>Deposit type, geological setting, and style of mineralisation.</i>	Mineralisation throughout the district includes copper-gold rich tourmaline breccias, 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 data has been generated for this announcement - all relevant historical data is referenced in past Alderan announcements dating back to 2015 and recent announcements on 22 February 2024 and 13 March 2024.
	<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. All new data has been reported in this announcement.
<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>	The method for calculating the calibration factor applied to the pXRF assays and the results of this calibration being applied has been outlined in the body of this announcement.
	<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.
	<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>	Not applicable
	<i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i>	Not applicable
	<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>	
<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>	All new data has been reported in this announcement.
<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>	All new data has been reported in this announcement.

<i>Further work</i>	<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>	<ol style="list-style-type: none">1. Permitting for drill holes to test the New Years target.2. Drill site preparation3. Drill testing the New Years prospect
	<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>	Maps showing targets are presented in the text of this ASX release.