

## Alderan Intersects Copper Oxide and Copper Sulphide Zones in Third Hole at New Years Copper Prospect, Utah, USA

- up to 17.2% copper in averaged pXRF assay intervals in core

### HIGHLIGHTS

- Drilling at Alderan's New Years copper prospect in the Cactus copper-gold district, Utah, has confirmed high grade copper oxide mineralisation from **0-25m** down hole NY2024-DDH3 with averaged pXRF drill core assay intervals **up to 8.2% copper**.
- This interval is consistent with historical hole NY-2 which intersected **10.7m @ 1.52% Cu** within **27.4m @ 0.85% Cu** from surface.
- A second zone of primarily sulphide mineralisation from **73-92m** down hole has averaged pXRF drill core assay intervals **up to 17.2% copper**.
- The copper mineralisation occurs in tourmaline breccia, the same rock that hosts the neighbouring historical Cactus copper-gold mine.
- The archaeological site inspection for Stage 2 drilling and core sampling for lab analysis have been completed.
- New Years is one of 12 magnetic anomalies analogous to the Cactus Mine anomaly which have been targeted for followup in the Cactus district.



**Figure 1: High grade copper mineralisation in tourmaline breccia in hole NY2024-DDH3. Spot pXRF grades range up to 8.0% copper within the interval from 4.5-5.5m.**

**Cautionary Note:** Visual estimates and pXRF readings described in this release and detailed in Appendix 3 should not be considered a proxy or substitute for laboratory analyses. Laboratory assays are required to determine representative grades and mineralisation intervals reported from geological logging and pXRF readings. Visual estimates also potentially provide no information

*regarding impurities or deleterious physical properties relevant to valuations. Drill core from this programme is being sampled for laboratory analysis at ALS laboratories and results will be reported as soon as they become available.*

**Alderan Resources Limited (ASX: AL8) (Alderan or the Company)** is pleased to advise that the final hole, NY2024-DDH3, in its Stage 1 drilling programme at the New Years copper prospect in the Cactus copper-gold (Cu-Au) district in Utah, USA has **intersected high grade copper mineralisation based on visual inspection and pXRF readings on the drill core.**<sup>1</sup> Two separate zones of mineralisation have been identified, an oxide zone from 0-25m down hole and a predominantly sulphide zone from 73-92m down hole. In addition, a 3m zone of sulphide mineralisation occurs from 106m down hole.

**Spot pXRF readings reach grades of 14.8% copper in near surface oxide mineralisation between 3.0-4.0m down hole NY2024-DDH3 with the average of three separate readings over this interval being 8.2% copper.** This sits within a 25m interval from surface which contains high pXRF copper grades (see Appendix 3).

**The sulphide zone contains spot pXRF grades up to 27.0% copper between 76-78m down hole with the three readings within this interval averaging 17.2% copper** (see Figure 2). This is within an 18.7m interval from 73m which contains high pXRF copper grades. The 3m mineralised interval from 106m down hole contains averaged pXRF grades up to 2.9% copper.

The three hole (319m) Stage 1 drilling programme at New Years **aimed to verify copper mineralisation intersected in historical holes drilled in 1964 and 2002 plus identify geological controls on mineralisation.**<sup>2</sup> Stage 2 drilling

will focus on extending the mineralisation intersected in Stage 1 and testing geophysical targets. Preparations are currently underway for Stage 2 with the site archaeological inspection successfully completed. Sampling for lab analysis and detailed geological logging of the holes has been completed.

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

*“The New Years drilling programme has successfully intersected potentially high grade copper mineralisation in the second and third holes. The pXRF spot readings on the core from hole NY2024-DDH3 back up visual estimates that a near surface zone of potentially high grade of copper mineralisation has been intersected. The pXRF readings also indicate that there is a copper rich sulphide zone deeper in the breccia pipe.*

*“The 25m copper mineralised intersection from surface in the hole broadly correlates with historical hole NY-2 which intersected 10.7m @ 1.52% Cu within 27.4m @ 0.85% Cu from surface. The deeper zone of sulphide mineralisation which grades up to 17.2% copper over three averaged pXRF readings is a positive surprise however.*



**Figure 2:** Chalcopyrite (Cp) in tourmaline breccia between 74.0-76.0m down NY2024-DDH3. The averaged pXRF copper grade over 3 readings for the interval is 10.0%.

<sup>1</sup> Refer Alderan ASX announcement dated 30 September, 2024

<sup>2</sup> Refer Alderan ASX announcements dated 19 September 2024, 29 August 2024, 29 July 2024



*“Sampling of all holes for lab analysis has now been completed and the site archaeological inspection for permitting more holes has been done. The design of Stage 2 drilling can now be finalised pending lab assays”*

### New Years Drilling – Initial Results

Alderan has completed logging and pXRF analyses down the final hole in its three hole diamond drilling programme at the New Years copper project in the Cactus District in Utah. The aim of the drilling was to verify high grade copper intersected in historical holes drilled in 1964 and 2002 and to determine controls on the mineralisation.

The final hole, NY2024-DDH3, has verified historical hole NY-2 which intersected **10.7m @ 1.52% Cu** within **27.4m @ 0.85% Cu** from surface. NY-2 was drilled in 1964 using a hammer drill rig which produced rock chips as opposed to the diamond drill core produced by Alderan. No geological log is available for NY-2 however assays based on five foot sample intervals are available. The historical sampling was continuous for the first 29m of NY-2 and then reverted to every second interval to the end of the hole at 114m. There is not information on sample recoveries.



**Figure 3:** Alderan’s drill holes (yellow) and historical holes (black) at New Years plus the location of the Cactus and Comet historical copper-gold mines.

Alderan’s hole NY2024-DDH3 collared on the northern slope of the New Years hill, has intersected **visual copper mineralisation** which is **supported by spot high copper grades in pXRF readings**. Logging has identified copper oxide mineralisation, azurite and malachite, from surface to a depth of approximately 92m down the hole while pyrite and chalcopyrite sulphides are apparent from 37m to the end of the hole at 121.3m. The chalcopyrite copper sulphide occurs in two zones between 73-92m and 106-109m down the hole.

pXRF readings on the core highlight a zone from surface to a depth of 25m with high grade copper oxide mineralisation. The spot copper readings through this interval range from a low of 175ppm through to a high of 14.8% with the averaged three reading intervals within the zone ranging from 434ppm (the next lowest averaged interval grades 0.23% copper) to 8.19% copper. The mineralisation appears to be occurring in narrow fractures in the rock and is also disseminated in the tourmaline matrix.

Visible pyrite and chalcopyrite sulphide mineralisation occur from 37m downhole and have been discontinuously logged to the end of the hole at 121.9m. High grade pXRF copper assays occur in two zones between 73-91.7m and 106-109m down the hole. In the 18.7m interval commencing at 73m downhole, apart from the low grade pXRF readings at 83m, all other averaged readings in the interval range from 1.4-17.2% copper. The two averaged pXRF readings taken at 106m and 109m down hole grade 2.9% copper and 2.4% copper respectively.



**Figure 4:** Disseminated malachite (green) and azurite (blue) copper oxide mineralisation at 22-23m down NY2024-DDH3. Averaged pXRF assays in this interval grade 3.2% copper.

The hole intersected a 1.5m void at a depth of 90m which is likely to be an opening from the old mining at New Years.

### pXRF Analyses of New Years Drill Core

pXRF readings have been collected at approximately 3 metre intervals down New Years drill hole NY2024-DDH3. These readings and the visual estimates provide confidence that copper mineralisation has been intersected down the holes however they may not be reflective of the absolute copper content and should not be considered a proxy or substitute for laboratory analyses. The core from all holes in the drilling programme has been cut and sampled in preparation for analysis at the ALS laboratory in Nevada which will determine the representative grades and mineralisation intervals in the drill core.

Alderan's pXRF collection process for NY2024-DDH3 involved collecting three spot readings on the core per core tray. This equated to three readings over approximately 1m at 3 metre intervals down the hole. The readings will typically include a spot location which the sampler believes may contain copper mineralisation and then two additional readings on the core approximately 50cm either side of this initial reading. These second and third spot readings at a location may or may not have observed mineralisation. The

three pXRF readings are then averaged to provide a final reading for the 3m interval.

All readings and averages collected to date are included in Appendix 3.

### Next Steps

All drill holes in the current programme have been sampled for lab analysis. Archaeological inspection over the New Years prospect area has been carried out and will be included in the submission for permitting the Stage 2



drilling programme. This inspection is standard procedure in Utah's historical mining districts prior to approval from Utah's Department of Oil, Gas & Mining for this drilling.

While awaiting lab assay results and the Stage 2 drilling permit, soil sampling over magnetic low zones identified from the 3-D inversion modelling completed by Alderan over the Cactus district and geological mapping will be carried out with a focus on identifying fault structures which have the potential to host additional tourmaline breccia pipes.

Stage 2 drill sites will be finalised following receipt of lab assays and assessment of the initial drilling results.

**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>3</sup> The Company has eight (8) lithium projects in Minas Gerais and Bahia, Brazil plus copper and gold projects in Utah, USA with tenements held either directly or through option agreements via Alderan's USA subsidiaries, Volantis Resources Corp and Valyrian Resources Corp (see Figures 5 & 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,

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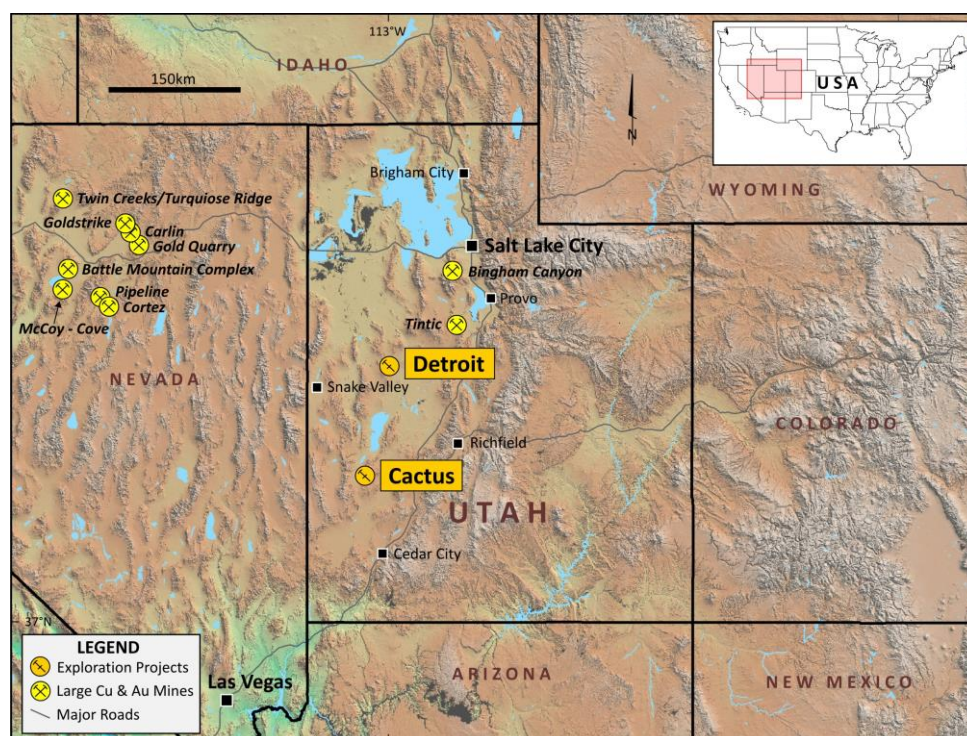
<sup>3</sup> <https://www.energy.gov/cmm/what-are-critical-materials-and-critical-minerals>

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.

### 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 and visual results, the Company cautions that estimates of copper mineral abundance from pXRF or visual results should not be considered a proxy for quantitative analysis of a laboratory assay result. Visual estimates also potentially provide no information regarding impurities or deleterious physical properties relevant to valuations. Assay results are required to determine the actual widths and grade of the mineralisation. Drill core from this programme is being sampled for laboratory analysis at ALS laboratories and results will be reported as soon as they become available.



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



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

**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)*

<b>Criteria of JORC Code 2012</b>	<b>JORC Code (2012) explanation</b>	<b>Details of the Reported Project</b>
Sampling techniques	<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>Sampling at 2m intervals down the length of drill holes NY2024-DDH1-3 has been completed. These samples are being submitted for lab analysis for 53 elements using ICP-MS.</p> <p>pXRF spot readings down hole NY2024-DDH3 have been collected at intervals ranging from 1.0-3.7m down the hole and most commonly at approximately 3m intervals. Three spot readings have been taken over approximately 1.0m at each interval and then the copper assays averaged to give a reading for the interval. These readings are detailed in Appendix 3 of this announcement. This provides an indication of copper mineralisation but is not a proxy or substitute for lab assays. The lab assays will ultimately determine the levels of copper mineralisation in the holes.</p>
	<i>Include reference to measures taken to ensure sample representativeness and the appropriate calibration of any measurement tools or systems used.</i>	<p>pXRF spot readings were collected using a standard procedure consisting of three readings over 1.0m at intervals ranging from 1.0-3.7m down the hole and most commonly at approximately 3m intervals. The three copper readings have then been averaged to give an indicative pXRF copper grade for the interval. These readings are detailed in Appendix 3 of this announcement.</p> <p>The Olympus pXRF machine used for the spot readings has undergone daily calibration checks against standards. Its calibration was also certified against six separate standards by the Olympus Scientific Solutions Americas on 1 July 2024. These standards included OREAS 98 for copper sulphide ore.</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 fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual</i>	<p>The drilling was carried out using a track mounted diamond drill rig. HQ sized drill core was collected throughout the holes. The drill core has been cut and sampled at 2m intervals as per standard industry practice and is being submitted to the ALS commercial laboratory in Nevada for ICP-MS analysis. The analytical results will be reported as soon as they are available.</p> <p>Alderan has collected pXRF readings down NY2024-DDH3 using a standard procedure consisting of three spot readings over 1m at intervals ranging from 1.0-3.7m down the hole and most commonly at approximately 3m intervals down the un-cut core. The three copper readings have then been averaged to give an indicative pXRF copper grade for the interval. These readings are detailed in Appendix 3 of this announcement. This provides</p>



	<i>commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</i>	an indication of copper mineralisation but is not a proxy or substitute for lab assays. The lab assays will ultimately determine the levels of copper mineralisation in the holes.
<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>	All holes in this programme were drilled using a track mounted Odyssey Versa 1.4 diamond drill rig which produced HQ sized drill core. All holes were vertical and aimed at verifying adjacent historical vertical holes drilled in 1964 and 2002.
<i>Drill sample recovery</i>	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	Drill core recoveries are currently being calculated as part of the detailed logging of the holes which is currently underway. The initial assessment is that there has been no significant core loss although hole NY2024-DDH3 intersected a 1.5m cavity at approximately 91m down hole and a second smaller cavity which are interpreted to be historical mine openings.
	<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>	The information in this announcement is based on preliminary logging of the drill holes which is semi qualitative. Detailed logging of the holes may result in some variations but these are not expected to significantly alter the current logs of the holes. All holes will be photographed and core recoveries calculated.
	<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>	The core has been cut for lab analysis which will be carried out on half core.  The pXRF readings have been collected on the surface of cleaned, uncut drill core.
	<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>	Not applicable. Samples are in the process of being submitted to laboratory for preparation and analysis.
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representativeness of samples.</i>	Not applicable. Samples are in the process of being submitted to laboratory for preparation and 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>	<p>The samples to be submitted to the lab for analysis are half core collected at 2m intervals down the holes. This is considered to be adequate to provide representative samples for the holes.</p> <p>The pXRF readings provide an indication of copper mineralisation but are not a proxy or substitute for lab assays. The lab assays will ultimately determine the levels of copper mineralisation in the holes.</p>
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	Not applicable. Final logs of the holes are yet to be received and samples are in the process of being submitted to laboratory for preparation and analysis.
<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>	<p>Not applicable. Samples are yet to be submitted to laboratory for preparation and analysis.</p> <p>The pXRF analysis was carried out using an Olympus Vanta pXRF analyzer. Alderan collected readings down the holes using a standard procedure consisting of three spot readings over 1m at intervals ranging from 1.0-3.7m down the hole and most commonly at approximately 3m intervals down the un-cut core. The three copper readings have then been averaged to give an indicative pXRF copper grade for each interval. These readings are detailed in Appendix 3 of this announcement.</p> <p>The pXRF readings provide an indication of copper mineralisation but are not a proxy or substitute for lab assays. The lab assays will ultimately determine the levels of copper mineralisation in the holes.</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>The pXRF analysis was carried out using an Olympus Vanta pXRF analyzer model VMR-XXX. Alderan collected readings down the holes using a standard procedure consisting of three spot readings over 1m at intervals ranging from 1.0-3.7m down the hole and most commonly at approximately 3m intervals down the un-cut core. The three copper readings have then been averaged to give an indicative pXRF copper grade for each interval. The machine was operated at the daily ambient temperature typically in the range of 15-25 degrees celsius in a core shed in Utah, USA. Individual reading times are 20 seconds and all readings, including reading times, are detailed in Appendix 3 of this announcement.</p> <p>The pXRF machine was calibrated and certified on 1 July 2024 by Olympus Scientific Solutions using six standard Certified Reference Materials produced by Analytical Reference Materials International (ARMI), NIST and other certified materials. The machine was checked daily with a calibration check, and readings against a blank and a standard reference material.</p> <p>The pXRF readings provide an indication of copper mineralisation but are not a proxy or substitute for lab assays. The lab assays will ultimately determine the levels of copper mineralisation in the holes.</p>
	<i>Nature of quality control procedures adopted (e.g. standards, blanks,</i>	The pXRF analysis process consisted of collecting readings down the holes using a standard procedure consisting of three spot readings over 1m at intervals ranging from 1.0-3.7m down the hole and most commonly



	<i>duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i>	<p>at approximately 3m intervals down the un-cut core. These readings provide an indication of copper mineralisation but are not a proxy or substitute for lab assays. The lab assays will ultimately determine the levels of copper mineralisation in the holes.</p> <p>All pXRF assays will be checked by lab analysis with 2m samples of half core currently being collected down the holes for submission to the ALS laboratory in Nevada for ICP-MS analysis.</p>
<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>	All three holes in this programme were designed to verify historical holes drilled in 1964 and 2002.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	All data has been stored electronically in the company's secure digital database.
	<i>Discuss any adjustment to assay data.</i>	See Appendix 3 for all pXRF readings collected to date and the averaging carried out.
<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 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>	<p>The elevation data for sample sites is collected by the Garmin GPS used to locate each sample site. Elevation data is not considered critical.</p> <p>No new data has been generated for this announcement.</p>
<i>Data spacing and distribution</i>	<i>Data spacing for reporting of Exploration Results.</i>	pXRF readings were collected over 1m at intervals ranging from 1.0-3.7m down the hole and most commonly at approximately 3m intervals down the un-cut core.
	<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>	<p>The pXRF readings provide an indication of copper mineralisation but are not a proxy or substitute for lab assays. The lab assays will ultimately determine the levels of copper mineralisation in the holes.</p> <p>All pXRF assays will be checked by lab analysis with 2m samples of half core currently being collected down the holes for submission to the ALS laboratory in Nevada for ICP-MS analysis.</p>
	<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>	All three holes in this programme were designed to verify historical holes drilled in 1964 and 2002. No structural information has been used to site or orient the holes.

	<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>	No applicable. Samples are yet to be submitted to laboratory for preparation and analysis
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 Cactus Prospect comprises 182 patented and unpatented claims which are governed by the Cactus 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.
	<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 Cactus 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 initial visual observations and pXRF copper assays on core from three diamond holes drilled into the New Years prospect.



Geology	Deposit type, geological setting, and style of mineralisation.	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.																																														
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:	New data generated for this announcement is primarily from drill hole NY2024-DDH3 which is the last of three diamond holes drilled into the New Years prospect in the Cactus Project. All relevant historical data is referenced in past Alderan announcements dating back to 2015 and recent announcements on 22 February 2024, 13 March 2024.																																														
	Easting and Northing of the drill hole collar. Elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar.	Hole co-ordinate and dip and azimuth details are in the Table 1 below																																														
	Dip and azimuth of the hole.																																															
	Down hole length and interception depth and hole length.																																															
		<table><caption>Table 1: New Years Prospect – Stage 1 Drill Holes</caption><thead><tr><th>Hole Number</th><th>WGS84 Easting</th><th>WGS84 Northing</th><th>SRTM30</th><th>Azimuth</th><th>Dip</th><th>Depth (m)</th><th>Comments</th></tr></thead><tbody><tr><td>NY2024-DDH1</td><td>299615.83</td><td>4262745.31</td><td>1926.0</td><td>0</td><td>-90</td><td>47.0</td><td>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;</td></tr><tr><td>NY2024-DDH2</td><td>299474.53</td><td>4262937.51</td><td>1939.8</td><td>0</td><td>-90</td><td>121.3</td><td>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</td></tr><tr><td>NY2024-DDH3</td><td>299502.49</td><td>4262928.28</td><td>1943.0</td><td>0</td><td>-90</td><td>121.9</td><td>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</td></tr><tr><td>Total</td><td></td><td></td><td></td><td></td><td></td><td>319.2</td><td></td></tr></tbody></table>							Hole Number	WGS84 Easting	WGS84 Northing	SRTM30	Azimuth	Dip	Depth (m)	Comments	NY2024-DDH1	299615.83	4262745.31	1926.0	0	-90	47.0	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;	NY2024-DDH2	299474.53	4262937.51	1939.8	0	-90	121.3	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-DDH3	299502.49	4262928.28	1943.0	0	-90	121.9	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						319.2	
Hole Number	WGS84 Easting	WGS84 Northing	SRTM30	Azimuth	Dip	Depth (m)	Comments																																									
NY2024-DDH1	299615.83	4262745.31	1926.0	0	-90	47.0	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;																																									
NY2024-DDH2	299474.53	4262937.51	1939.8	0	-90	121.3	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-DDH3	299502.49	4262928.28	1943.0	0	-90	121.9	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						319.2																																										
	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.	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>	No 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.
	<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"> <li>1. Finalising detailed logs of the hole</li> <li>2. Submitting drill hole samples to ALS laboratory for ICP-MS analysis</li> <li>3. Completing permitting for drill holes for Stage 2 drilling at the New Years target.</li> <li>4. Geological mapping and soil sampling over magnetic anomalies</li> <li>5. Drill site preparation</li> <li>6. Follow-up drill testing the New Years prospect</li> </ol>
	<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.

**Appendix 3 – pXRF Readings for Diamond Drill Hole NY2024-DDH3**

Hole ID	Instrument	Depth (m)	Date	Time	Method Name	Cu Concentration (PPM)	Cu Averaged Concentration (PPM)
NY2024-DDH3	821645		9/27/2024	10:44:26	Cal Check		
NY2024-DDH3	821645	1	9/27/2024	10:50:25	geoChem 3+Au	30,896	20,015
NY2024-DDH3	821645	1	9/27/2024	10:51:29	geoChem 3+Au	14,380	
NY2024-DDH3	821645	1	9/27/2024	10:53:05	geoChem 3+Au	14,769	
NY2024-DDH3	821645	3	9/27/2024	10:54:04	geoChem 3+Au	84,179	81,889
NY2024-DDH3	821645	3	9/27/2024	10:55:13	geoChem 3+Au	12,912	
NY2024-DDH3	821645	3	9/27/2024	10:56:20	geoChem 3+Au	148,577	
NY2024-DDH3	821645	5	9/27/2024	10:57:55	geoChem 3+Au	38,619	49,236
NY2024-DDH3	821645	5	9/27/2024	10:58:57	geoChem 3+Au	80,136	
NY2024-DDH3	821645	5	9/27/2024	10:59:59	geoChem 3+Au	28,952	
NY2024-DDH3	821645	6.5	9/27/2024	11:03:57	geoChem 3+Au	59,797	41,924
NY2024-DDH3	821645	6.5	9/27/2024	11:05:10	geoChem 3+Au	31,343	
NY2024-DDH3	821645	6.5	9/27/2024	11:08:51	geoChem 3+Au	34,632	
NY2024-DDH3	821645	7.5	9/27/2024	11:10:13	geoChem 3+Au	37,390	16,637
NY2024-DDH3	821645	7.5	9/27/2024	11:11:16	geoChem 3+Au	4,440	
NY2024-DDH3	821645		9/27/2024	11:12:17	geoChem 3+Au	8,081	
NY2024-DDH3	821645	8.5	9/27/2024	11:18:03	geoChem 3+Au	4,420	3,503
NY2024-DDH3	821645	8.5	9/27/2024	11:19:07	geoChem 3+Au	2,608	
NY2024-DDH3	821645	8.5	9/27/2024	11:20:33	geoChem 3+Au	3,481	
NY2024-DDH3	821645	11	9/27/2024	11:21:43	geoChem 3+Au	175	434
NY2024-DDH3	821645	11	9/27/2024	11:23:27	geoChem 3+Au	505	
NY2024-DDH3	821645	11	9/27/2024	11:24:25	geoChem 3+Au	621	
NY2024-DDH3	821645	14	9/27/2024	11:40:49	geoChem 3+Au	1,233	2,333
NY2024-DDH3	821645	14	9/27/2024	11:41:57	geoChem 3+Au	920	
NY2024-DDH3	821645	14	9/27/2024	11:42:54	geoChem 3+Au	4,847	
NY2024-DDH3	821645	16.8	9/27/2024	11:45:14	geoChem 3+Au	5,126	7,247
NY2024-DDH3	821645	16.8	9/27/2024	11:47:37	geoChem 3+Au	412	
NY2024-DDH3	821645	16.8	9/27/2024	11:48:54	geoChem 3+Au	16,203	
NY2024-DDH3	821645	19	9/27/2024	11:55:08	geoChem 3+Au	10,063	4,552
NY2024-DDH3	821645	19	9/27/2024	11:56:48	geoChem 3+Au	3,057	
NY2024-DDH3	821645	19	9/27/2024	11:57:54	geoChem 3+Au	535	
NY2024-DDH3	821645	21.5	9/27/2024	12:04:04	geoChem 3+Au	74,029	39,988
NY2024-DDH3	821645	21.5	9/27/2024	12:04:37	geoChem 3+Au	64,501	
NY2024-DDH3	821645	21.5	9/27/2024	12:05:59	geoChem 3+Au	12,945	
NY2024-DDH3	821645	21.5	9/27/2024	12:07:05	geoChem 3+Au	8,476	
NY2024-DDH3	821645	22.8	9/27/2024	12:08:54	geoChem 3+Au	40,755	31,695
NY2024-DDH3	821645	22.8	9/27/2024	12:10:39	geoChem 3+Au	45,051	
NY2024-DDH3	821645	22.8	9/27/2024	12:11:46	geoChem 3+Au	9,280	
NY2024-DDH3	821645	25	9/27/2024	12:14:15	geoChem 3+Au	21,188	23,115
NY2024-DDH3	821645	25	9/27/2024	12:15:20	geoChem 3+Au	15,934	
NY2024-DDH3	821645	25	9/27/2024	12:16:28	geoChem 3+Au	32222	

NY2024-DDH3	821645	27	9/27/2024	12:20:39	geoChem 3+Au	75	103
NY2024-DDH3	821645	27	9/27/2024	12:21:37	geoChem 3+Au	150	
NY2024-DDH3	821645	27	9/27/2024	12:22:36	geoChem 3+Au	85	
NY2024-DDH3	821645	30	9/27/2024	12:23:55	geoChem 3+Au	59	148
NY2024-DDH3	821645	30	9/27/2024	12:24:54	geoChem 3+Au	374	
NY2024-DDH3	821645	30	9/27/2024	12:25:51	geoChem 3+Au	12	
NY2024-DDH3	821645	33	9/27/2024	12:28:59	geoChem 3+Au	224	357
NY2024-DDH3	821645	33	9/27/2024	12:29:57	geoChem 3+Au	395	
NY2024-DDH3	821645	33	9/27/2024	12:30:55	geoChem 3+Au	452	
NY2024-DDH3	821645	35	9/27/2024	12:33:47	geoChem 3+Au	20	42
NY2024-DDH3	821645	35	9/27/2024	12:34:53	geoChem 3+Au	35	
NY2024-DDH3	821645	35	9/27/2024	12:35:51	geoChem 3+Au	70	
NY2024-DDH3	821645	38	9/27/2024	12:37:42	geoChem 3+Au	183	4,445
NY2024-DDH3	821645	38	9/27/2024	12:38:39	geoChem 3+Au	3,764	
NY2024-DDH3	821645	38	9/27/2024	12:39:39	geoChem 3+Au	9,388	
NY2024-DDH3	821645	40.5	9/27/2024	13:18:31	geoChem 3+Au	122	135
NY2024-DDH3	821645	40.5	9/27/2024	13:19:38	geoChem 3+Au	126	
NY2024-DDH3	821645	40.5	9/27/2024	13:20:37	geoChem 3+Au	157	
NY2024-DDH3	821645	44	9/27/2024	13:22:12	geoChem 3+Au	186	188
NY2024-DDH3	821645	44	9/27/2024	13:23:15	geoChem 3+Au	332	
NY2024-DDH3	821645	44	9/27/2024	13:24:20	geoChem 3+Au	45	
NY2024-DDH3	821645	46.6	9/27/2024	13:25:23	geoChem 3+Au	6,942	2,385
NY2024-DDH3	821645	46.5	9/27/2024	13:26:26	geoChem 3+Au	109	
NY2024-DDH3	821645	46.5	9/27/2024	13:27:25	geoChem 3+Au	104	
NY2024-DDH3	821645	49	9/27/2024	13:28:29	geoChem 3+Au	128	306
NY2024-DDH3	821645	49	9/27/2024	13:29:28	geoChem 3+Au	500	
NY2024-DDH3	821645	49	9/27/2024	13:30:25	geoChem 3+Au	291	
NY2024-DDH3	821645	51	9/27/2024	13:32:02	geoChem 3+Au	39	220
NY2024-DDH3	821645	51	9/27/2024	13:32:59	geoChem 3+Au	194	
NY2024-DDH3	821645	51	9/27/2024	13:33:57	geoChem 3+Au	427	
NY2024-DDH3	821645	54	9/27/2024	13:36:28	geoChem 3+Au	194	96
NY2024-DDH3	821645	54	9/27/2024	13:37:25	geoChem 3+Au	34	
NY2024-DDH3	821645	54	9/27/2024	13:38:28	geoChem 3+Au	60	
NY2024-DDH3	821645	57	9/27/2024	13:40:29	geoChem 3+Au	5,708	13,729
NY2024-DDH3	821645	57	9/27/2024	13:41:46	geoChem 3+Au	35,193	
NY2024-DDH3	821645	57	9/27/2024	13:42:56	geoChem 3+Au	286	
NY2024-DDH3	821645	59	9/27/2024	13:44:40	geoChem 3+Au	30	44
NY2024-DDH3	821645	59	9/27/2024	13:45:38	geoChem 3+Au	43	
NY2024-DDH3	821645	59	9/27/2024	13:46:35	geoChem 3+Au	60	
NY2024-DDH3	821645	62	9/27/2024	13:47:40	geoChem 3+Au	12	30
NY2024-DDH3	821645	62	9/27/2024	13:48:38	geoChem 3+Au	63	
NY2024-DDH3	821645	62	9/27/2024	13:49:39	geoChem 3+Au	14	
NY2024-DDH3	821645	65	9/27/2024	13:51:50	geoChem 3+Au	210	104
NY2024-DDH3	821645	65	9/27/2024	13:52:32	geoChem 3+Au	22	
NY2024-DDH3	821645	65	9/27/2024	13:53:32	geoChem 3+Au	80	
NY2024-DDH3	821645	67	9/27/2024	13:56:22	geoChem 3+Au	43	29



NY2024-DDH3	821645	67	9/27/2024	13:57:19	geoChem 3+Au	27	
NY2024-DDH3	821645	67	9/27/2024	13:58:15	geoChem 3+Au	17	
NY2024-DDH3	821645	70	9/29/2024	16:47:28	geoChem 3+Au	66	1,132
NY2024-DDH3	821645	70	9/29/2024	16:48:31	geoChem 3+Au	2,405	
NY2024-DDH3	821645	70	9/29/2024	16:49:30	geoChem 3+Au	924	
NY2024-DDH3	821645	73	9/29/2024	16:51:00	geoChem 3+Au	351,512	117,341
NY2024-DDH3	821645	73	9/29/2024	16:52:05	geoChem 3+Au	51	
NY2024-DDH3	821645	73	9/29/2024	16:53:12	geoChem 3+Au	459	
NY2024-DDH3	821645	75.36	9/29/2024	16:54:11	geoChem 3+Au	299,869	100,101
NY2024-DDH3	821645	75.36	9/29/2024	17:12:14	geoChem 3+Au	323	
NY2024-DDH3	821645	75.36	9/29/2024	17:13:28	geoChem 3+Au	112	
NY2024-DDH3	821645	77	9/29/2024	17:15:58	geoChem 3+Au	270,502	172,112
NY2024-DDH3	821645	77	9/29/2024	17:18:15	geoChem 3+Au	19,428	
NY2024-DDH3	821645	77	9/29/2024	17:19:28	geoChem 3+Au	226,407	
NY2024-DDH3	821645	80	9/29/2024	17:22:34	geoChem 3+Au	76	19,958
NY2024-DDH3	821645	80	9/29/2024	17:23:41	geoChem 3+Au	52	
NY2024-DDH3	821645	80	9/29/2024	17:24:54	geoChem 3+Au	59,747	
NY2024-DDH3	821645	83	9/29/2024	17:31:32	geoChem 3+Au	279	119
NY2024-DDH3	821645	83	9/29/2024	17:33:01	geoChem 3+Au	40	
NY2024-DDH3	821645	83	9/29/2024	17:34:27	geoChem 3+Au	38	
NY2024-DDH3	821645	86	9/29/2024	17:37:01	geoChem 3+Au	61,927	20,913
NY2024-DDH3	821645	86	9/29/2024	17:38:30	geoChem 3+Au	498	
NY2024-DDH3	821645	86	9/29/2024	17:39:53	geoChem 3+Au	314	
NY2024-DDH3	821645	88	9/29/2024	18:26:24	geoChem 3+Au	40,385	14,418
NY2024-DDH3	821645	88	9/29/2024	18:27:41	geoChem 3+Au	82	
NY2024-DDH3	821645	88	9/29/2024	18:28:47	geoChem 3+Au	2,786	
NY2024-DDH3	821645	91.7	9/29/2024	18:31:44	geoChem 3+Au	51,757	18,083
NY2024-DDH3	821645	91.7	9/29/2024	18:32:57	geoChem 3+Au	17	
NY2024-DDH3	821645	91.7	9/29/2024	18:34:24	geoChem 3+Au	2,474	
NY2024-DDH3	821645	94	9/29/2024	18:39:17	geoChem 3+Au	63	41
NY2024-DDH3	821645	94	9/29/2024	18:40:31	geoChem 3+Au	31	
NY2024-DDH3	821645	94	9/29/2024	18:42:04	geoChem 3+Au	29	
NY2024-DDH3	821645	97	9/29/2024	18:46:30	geoChem 3+Au	28	22
NY2024-DDH3	821645	97	9/29/2024	18:47:35	geoChem 3+Au	5	
NY2024-DDH3	821645	97	9/29/2024	18:48:50	geoChem 3+Au	35	
NY2024-DDH3	821645	100	9/29/2024	18:51:12	geoChem 3+Au	29	40
NY2024-DDH3	821645	100	9/29/2024	18:51:34	geoChem 3+Au	25	
NY2024-DDH3	821645	100	9/29/2024	18:53:56	geoChem 3+Au	23	
NY2024-DDH3	821645	100	9/29/2024	18:55:08	geoChem 3+Au	83	
NY2024-DDH3	821645	103	9/29/2024	18:57:08	geoChem 3+Au	17	9
NY2024-DDH3	821645	103	9/29/2024	18:57:22	geoChem 3+Au	5	
NY2024-DDH3	821645	103	9/29/2024	18:59:42	geoChem 3+Au	5	
NY2024-DDH3	821645	106	9/29/2024	19:02:11	geoChem 3+Au	102	29,345
NY2024-DDH3	821645	106	9/29/2024	19:03:23	geoChem 3+Au	86,343	
NY2024-DDH3	821645	106	9/29/2024	19:04:39	geoChem 3+Au	1,591	
NY2024-DDH3	821645	109	9/29/2024	19:06:45	geoChem 3+Au	74,332	24,738

NY2024-DDH3	821645	109	9/29/2024	19:08:13	geoChem 3+Au	5	
NY2024-DDH3	821645	109	9/29/2024	19:09:17	geoChem 3+Au	14	
NY2024-DDH3	821645	112	9/29/2024	19:12:15	geoChem 3+Au	5	115
NY2024-DDH3	821645	112	9/29/2024	19:13:18	geoChem 3+Au	5	
NY2024-DDH3	821645	112	9/29/2024	19:14:35	geoChem 3+Au	337	
NY2024-DDH3	821645	115	9/29/2024	19:16:27	geoChem 3+Au	30	18
NY2024-DDH3	821645	115	9/29/2024	19:17:34	geoChem 3+Au	21	
NY2024-DDH3	821645	115	9/29/2024	19:18:49	geoChem 3+Au	5	
NY2024-DDH3	821645	118	9/29/2024	19:20:42	geoChem 3+Au	21	18
NY2024-DDH3	821645	118	9/29/2024	19:22:00	geoChem 3+Au	5	
NY2024-DDH3	821645	118	9/29/2024	19:23:09	geoChem 3+Au	29	
NY2024-DDH3	821645	121	9/29/2024	19:26:25	geoChem 3+Au	5	5
NY2024-DDH3	821645	121	9/29/2024	19:27:35	geoChem 3+Au	5	
NY2024-DDH3	821645	121	9/29/2024	19:28:39	geoChem 3+Au	5	