

# Alderan intersects thick gold zones in all Mizpah drill holes

# HIGHLIGHTS

- All remaining holes in Alderan's 22-hole reverse circulation drilling programme at Mizpah intersected thick near surface gold mineralisation which remains open to the southwest.
- Higher-grade zones within thick gold mineralised intercepts in Mizpah drill holes include:
  - o 7.6m @ 2.2g/t Au within 15.2m @ 1.28g/t Au from 1.5m downhole (3MZRC22-012)
  - o 9.1m @ 2.1g/t Au within 42.7m @ 0.76g/t Au from 18.3m downhole (3MZRC22-006)
  - o 7.6m @ 1.5g/t Au within 36.6m @ 0.62g/t Au from 4.6m downhole (3MZRC22-005)
  - o 7.6m @ 1.4g/t Au within 27.4m @ 0.56g/t Au from 33.5m downhole (3MZRC22-015)
  - o 10.7m @ 1.3g/t Au within 32.0m @ 0.55g/t Au from 13.7m downhole (3MZRC22-007)
  - 9.1m @ 1.3g/t Au within 112.8m @ 0.38g/t Au from 22.9m downhole (3MZRC22-014)
  - o 7.6m @ 1.3g/t Au within 25.9m @ 0.58g/t Au from 16.8m downhole (3MZRC22-22)
- Mizpah gold mineralisation starts from surface, gold intercepts in 15 of the 22 holes start from depths of less than 20m and the deepest intercept starts at 55m downhole.
- The average length and grade of gold mineralised intersections across all holes is 29.5m and 0.58g/t Au with intercepts ranging from 4.6m to 112.8m in length.
- Higher grade mineralised intervals down holes average 8.5m in length and grade 1.2g/t Au.
- The highest grade sample interval (1.5m) is 5.23g/t Au with all holes having maximum sample grades ranging from 0.93-5.23g/t Au.
- Depth of oxidation ranges from 3-38m across all holes with gold mineralisation occurring in oxide, mixed oxide-sulphide and sulphide zones.
- Mizpah lies in the same rock units 2km north of the historical Drum gold mine which produced 125Koz @ 1.2g/t Au. Gold intersections in Alderan's H1 2022 drilling at Drum include 6.5m @ 2.5g/t Au within 17.8m @ 1.7g/t Au (9DD22-003).
- Assay results are expected over coming weeks for Alderan's infill soil samples to better delineate high order gold-in-soil anomalies at Basin Main (assays to 0.32g/t Au) and Midway (assays to 0.19g/t Au) which lie in the same rock units 800m north and 1km south of Mizpah respectively.
- Alderan's next step is first pass metallurgical testwork for gold recoveries with further drilling planned pending soil and metallurgical results.



Alderan Resources Limited (ASX: AL8) (**Alderan** or the **Company**) is pleased to announce assay results for the final 16 holes in its recently completed reverse circulation (**RC**) drilling programme at its Mizpah oxide gold prospect, at the Detroit project in the Drum Mountains region of western Utah, USA.<sup>1</sup> The 22 hole programme (1,797m) focused on intersecting high-grade near-surface oxide gold mineralisation and demonstrating that the deposit is open down dip to the southwest (see Figure 1 and Appendix 1 for hole details). Alderan also received assay results for a redrilled hole at Drum.

In addition, Alderan has received research data on heap leach gold deposits in the USA compiled independently by CSA Global and sourced from S&P Global Capital IQ and. This data enables Alderan to internally benchmark its Detroit exploration results against producing heap leach gold mines and deposits in the scoping study to development stage.

Alderan Managing Director Scott Caithness said: "Alderan has intersected gold in all of its Mizpah reverse circulation drill holes plus demonstrated that the mineralisation is from surface and dips gently to the southwest. Gold intersections can exceed 100m in length which is significantly longer than intercepts drilled in the 1980s.

"Importantly, Mizpah could be much larger as the deposit remains open to the west and southwest, grade-thickness contouring suggests NE-SW structures may host deeper and better grade zones of mineralisation and Alderan holes drilled up to 350m west of the historical deposit have intersected thick zones of gold mineralisation.

"The Mizpah results, particularly when combined with Alderan's Drum drilling results from Q1 2022, suggest that Detroit has potential to be a large gold district. The infill soil sample assays to better define the Basin Main and Midway gold in soil anomalies to the north and south of Mizpah could add to this potential. These assays are expected in the coming weeks."

# Mizpah Drilling Results

All holes in the Mizpah drilling programme intersected gold mineralisation (see Table 1). Alderan collected samples over five-foot (1.52m) intervals which it sent to ALS in Nevada for gold analysis. Gold grades in Alderan holes are consistent with historical drill holes however the average thickness of intersections is significantly longer than historical holes. Alderan's strategy was to traverse the entire prospective rock sequence consisting of predominantly fine-grained siltstones and sandstones with lesser carbonates and marbles of the Tatow unit before moving into quartzites of the Lower Pioche Formation.

Gold intercepts start from surface with the deepest intercept commencing at 54.86m below surface in hole 3MZRC22-021. The average length of gold intercepts across all holes is 29.5m with intercepts ranging in length from 4.57m in hole 3MZRC22-019 to 112.78m in 3MZRC22-014.

The average grade of intercepts across all holes is 0.58g/t Au, marginally below the median grade of 0.6g/t Au for heap leach gold deposits in the CSA Global study, and intercepts commonly contain on average 8.5m thick higher-grade zones, many of which grade +1.0g/t Au.

The highest gold grade for an individual sample interval (1.52m) is 5.23g/t Au which occurs in a 7.62m zone grading 2.18g/t Au from 3.05m below surface in hole 3MZRC22-012. Eighteen of the 22 holes drilled have individual sample intervals which grade +1g/t Au with the remaining holes having maximum assays in the range of 0.9-1.0g/t Au.

The gold intercepts occur in oxidised, mixed oxide-sulphide (transition) and reduced sulphide rich (un-oxidised) rocks in the same sequence of calcareous sediments as the Drum mine, 2km to the south. The depth of oxidation ranges from 3.05m to 38.10m down holes 3MZRC22-021 and 3MZRC-008 respectively.

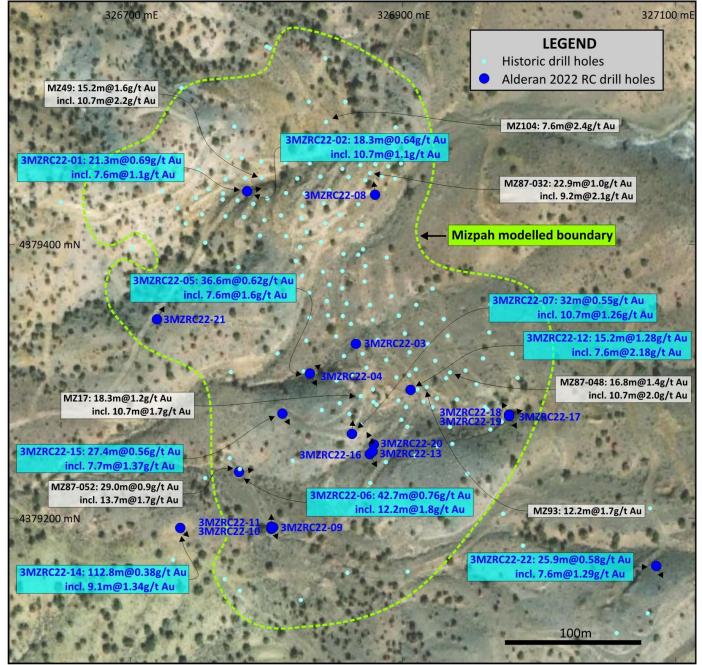
Gold grade x thickness (GT) contouring of both Alderan and historical drill hole data indicates that the Mizpah deposit is open to the west and southwest. Alderan holes DD20M-006 and 3DD22-001 drilled 200m and 350m to the west-

<sup>&</sup>lt;sup>1</sup> Refer Alderan ASX announcement dated 3 August 2022, 25 August 2022 and 30 September 2022 for further information.

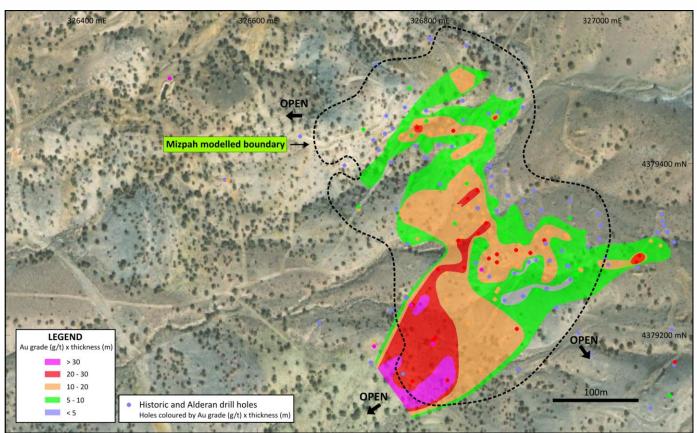


northwest of the historical Mizpah deposit intersected 83m grading 0.41g/t Au and 69m grading 0.18g/t Au respectively. These holes suggest that the Mizpah mineralising system is significantly larger than the historically defined deposit.

GT contouring also highlights higher GT zones potentially associated with northeast-southwest trending structures which are open to the southwest. These structures have potential for thicker zones of higher-grade mineralisation.



**Figure 1:** Mizpah prospect showing the location of Alderan RC drill holes, significant Alderan gold intersections and selected historical hole gold intersections.



**Figure 2:** Mizpah gold grade x thickness contour plan highlighting that the highest GT zones remain open to the southwest and the mineralisation remains open to the west and south.

A summary of all drill hole intersections in the Mizpah reverse circulation drilling programme, including holes 3MZRC22-001 to -006 previously reported, is in the Table 1. All intercepts are calculated using a cut-off grade of 0.15g/t Au which is consistent with heap leach gold deposits in the USA.

Hole Number	Hole Depth (m)	From (m)	To (m)	Width (m)	Au Grade (g/t)	Comments
3MZRC22-001	50.29	3.05	24.38	21.33	0.69	Max assay 3.9g/t Au at 9.1m
includes		3.05	10.67	7.62	1.14	downhole
3MZRC22-002	54.86	3.05	21.34	18.29	0.64	
includes		3.05	13.72	10.67	1.06	Max assay 2.57g/t Au at 12.2m downhole
includes		9.14	13.72	4.58	2.83	downhole
3MZRC22-003	70.1	0.00	41.15	41.15	0.48	
includes		0.00	13.70	13.70	1.02	Max assay 3.79g/t Au at 7.6m downhole
includes		1.52	9.14	7.62	1.54	downnoie
3MZRC22-004	76.2	1.52	19.81	18.29	0.48	Max assay 0.96g/t Au at 16.8m
includes		7.62	18.29	10.67	0.65	downhole
3MZRC22-005	89.92	4.57	41.15	36.58	0.62	Max assay 3.96 g/t Au at 19.8m
includes		19.81	27.43	7.62	1.55	downhole
3MZRC22-006	80.77	18.29	60.96	42.67	0.76	
includes		33.53	45.72	12.19	1.75	Max assay 3.74g/t Au at 41.1m downhole
includes		35.05	44.20	9.15	2.08	
3MZRC22-007	85.34	13.72	45.72	32.00	0.55	

# Table 1: Summary of Mizpah RC Drill Hole Gold Intersections\*



2 November 2022

		18.29	28.96	10.67	1.26	Max assay 2.62g/t Au at 24.38m downhole	
3MZRC22-008	50.29	18.29	38.10	19.81	0.34	Max assay 1.39g/t Au at 19.81m	
		18.29	22.86	4.57	0.89	downhole	
3MZRC22-009	124.97	3.05	13.72	10.67	0.54		
and		35.05	109.73	74.68	0.43	Max assay 1.85g/t Au at 96.01m	
includes		50.29	70.10	19.81	0.67	downhole	
includes		94.49	100.58	6.09	1.24		
3MZRC22-010	100.58	28.96	77.72	48.76	0.42	Max assay 2.63g/t Au at 50.25m	
		48.77	64.01	15.24	0.85	downhole	
3MZRC22-011	89.92	33.53	67.06	33.53	0.50	Max assay 1.81g/t Au at 47.24m	
		41.15	51.82	10.67	0.89	downhole	
3MZRC22-012	70.1	1.52	16.76	15.24	1.28	Max assay 5.23g/t Au at 9.14m	
		3.05	10.67	7.62	2.18	downhole	
3MZRC22-013	65.53	19.81	41.15	21.34	0.43	Max assay 0.92g/t Au at 24.38m	
includes		19.81	30.48	10.67	0.69	downhole	
3MZRC22-014	135.64	22.86	135.64	112.78	0.38	Max assay 4.91g/t Au at 129.54m downhole	
includes		99.06	106.68	7.62	0.87		
includes		124.97	134.11	9.14	1.34	downinole	
3MZRC22-015	77.72	33.53	60.96	27.43	0.56	Max assay 3.95g/t Au at 48.77m	
includes		48.77	56.39	7.72	1.37	downhole	
3MZRC22-016	65.53	22.86	47.24	24.38	0.30	Max assay 0.95g/t Au at 30.48m	
includes		27.43	33.53	6.10	0.48	downhole	
3MZRC22-017	60.96	15.24	39.62	24.38	0.45	Max assay 1.23g/t Au at 32.0m	
includes		28.96	33.53	4.57	1.01	downhole	
3MZRC22-018	41.15	13.72	25.91	12.19	0.59	Max assay 1.93g/t Au at 22.86m	
includes		18.29	22.86	4.57	1.00	downhole	
3MZRC22-019	41.15	24.38	30.48	6.10	0.45	Max assay 1.35g/t Au at 38.10m	
and		36.58	41.45	4.57	1.03	downhole	
3MZRC22-020	85.34	19.81	45.72	25.91	0.52	Max assay 1.93g/t Au at 22.86m	
includes		19.81	27.43	7.62	0.91	downhole	
3MZRC22-021	89.92	54.86	64.01	9.15	0.78	Max assay 1.19g/t Au at 57.91m	
includes		56.39	62.48	6.09	0.96	downhole	
3MZRC22-022	199.64	16.76	42.67	25.91	0.58	Max assay 2.57/t Au at 41.15m	
includes		33.53	41.15	7.62	1.29	downhole	

\* All intersections calculated using a 0.15g/t Au cut-off grade.

### **Drum Hole Re-Drill**

Alderan received assay results for hole DPRC22-001, the re-drill of historical hole YC-174 which intersected 15.4m @ 4.5g/t Au and Alderan's hole 9DD22-007 which intersected 5.9m @ 1.2g/t Au before being abandoned.<sup>2</sup> Despite deviating significantly from its planned path, the hole intersected 7.62m @ 0.96g/t Au from 106.7m downhole which included 4.6m @ 1.27g/t Au. While the hole did not replicate the thickness and grade of YC-174, it clearly demonstrates that gold mineralised host stratigraphy mined in the Drum West Pit continues for at least 150m down dip to the southwest and remains open.

<sup>&</sup>lt;sup>2</sup> Refer Alderan ASX announcement dated 25 May 2022 for further information.



## **Next Steps**

Alderan expects to receive assay results for the infill soil samples at Detroit in coming weeks. The C-horizon soils were collected at 40m intervals along 100m spaced infill lines and to fill in gaps in the original 200m and 400m spaced lines where anomalies have been identified. This includes 3km strike of host stratigraphy between Drum and the high order Basin Main anomaly which is 800m north of Mizpah and has gold in soil grades up to 0.32g/t Au.<sup>3</sup> This zone also includes the Midway gold in soil anomaly which grades up to 0.19g/t Au.

Following the receipt of all drill hole assays at Mizpah, Alderan is selecting samples for early 'sighter' metallurgical testing to obtain an indication of gold metallurgical recoveries. The samples will focus on mineralised intersections grading greater than 0.3g/t Au. Further drilling will be planned pending the metallurgical results.

The environmental assessment required to obtain permitting for further drilling at Drum is ongoing.

## **Detroit Project**

The Detroit Project is one of four Alderan projects (Figure 3) in Utah, USA. It lies within the Detroit Mining District, approximately 175km southwest of Salt Lake City, and contains numerous historical copper, gold and manganese mines. The district has been explored for copper and gold in the past by major mining companies such as Anaconda Copper, Kennecott, Newmont, BHP and Freeport-McMoRan but no one company was able to build a significant contiguous land position to enable district-wide modern exploration. The United States Geological Survey (**USGS**) has also explored the area, sampling extensive mineralised jasperoids.

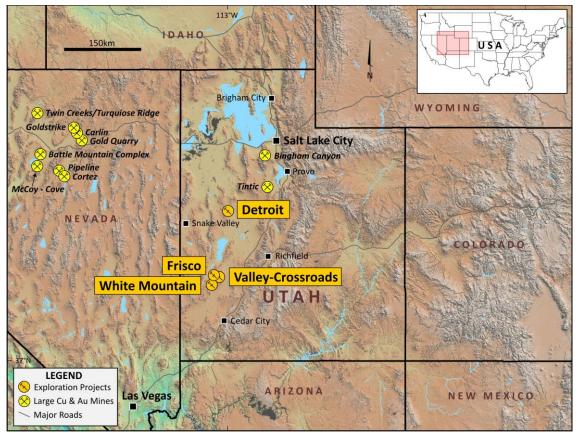


Figure 3: Alderan Resources project locations in western Utah.

<sup>&</sup>lt;sup>3</sup> Refer Alderan ASX announcement dated 27 June 2022 for further information.



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

#### ALDERAN RESOURCES LIMITED

ABN: 55 165 079 201 Suite 23, 513 Hay Street, Subiaco, 6008, WA www.alderanresources.com.au

For further information: e:info@alderanresources.com.au

p: +61 8 6143 6711 Scott Caithness Managing Director mailto:scott@alderanresources.com.au

#### **Competent Persons Statement**

The information contained in this announcement that relates to the new exploration results at the Company's Mizpah prospect 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.

The information in this announcement that relates to historical exploration results were reported by the Company in accordance with listing rule 5.7 on 25 May 2022, 27 June 2022, 3 August 2022, 25 August 2022 and 30 September 2022. The Company confirms it is not aware of any new information or data that materially affects the information included in the original announcements.



## Appendix 1: Drill hole location details

Drill hole ID	Easting*	Northing*	RL (m)	Dip	Azimuth	Depth (m)	Drill Type
3MZRC22-01	326,786	4,379,440	1,904	-90°	0°	50	Reverse circulation
3MZRC22-02	326,786	4,379,440	1,904	-45°	80°	55	Reverse circulation
3MZRC22-03	326,866	4,379,328	1,905	-90°	0°	70	Reverse circulation
3MZRC22-04	326,832	4,379,306	1,901	-65°	50°	75	Reverse circulation
3MZRC22-05	326,832	4,379,306	1,901	-65°	150°	90	Reverse circulation
3MZRC22-06	326,780	4,379,234	1,895	-80°	80°	80	Reverse circulation
3MZRC22-07	326,863	4,379,262	1,906	-60°	5°	85	Reverse circulation
3MZRC22-08	326,880	4,379,437	1,916	-45°	353°	50	Reverse circulation
3MZRC22-09	326,805	4,379,193	1,899	-60°	160°	125	Reverse circulation
3MZRC22-10	326,804	4,379,192	1,898	-90°	0°	100	Reverse circulation
3MZRC22-11	326,804	4,379,193	1,899	-60°	0°	90	Reverse circulation
3MZRC22-12	326,906	4,379,294	1,908	-90°	0°	70	Reverse circulation
3MZRC22-13	326,878	4,379,249	1,903	-50°	0°	65	Reverse circulation
3MZRC22-14	326,737	4,379,193	1,895	-45°	135°	135	Reverse circulation
3MZRC22-15	326,812	4,379,277	1,905	-65°	150°	77	Reverse circulation
3MZRC22-16	326,876	4,379,247	1,903	-55°	150°	65	Reverse circulation
3MZRC22-17	326,978	4,379,275	1,916	-45°	78°	60	Reverse circulation
3MZRC22-18	326,978	4,379,276	1,916	-50°	330°	40	Reverse circulation
3MZRC22-19	326,978	4,379,275	1,916	-55°	150°	40	Reverse circulation
3MZRC22-20	326,879	4,379,254	1,903	-60°	330°	85	Reverse circulation
3MZRC22-21	326,720	4,379,346	1,900	-50°	25°	90	Reverse circulation
3MZRC22-22	327,086	4,379,165	1,935	-70°	150°	200	Reverse circulation
9DPRC22-01	327,082	4,376,903	1,817	-90°	0°	130	Reverse circulation

\*NAD83-z12

## Appendix 2: JORC Code, 2012 Edition – Table 1 Report in relation to drilling

# Section 1 - Sampling Techniques and Data

(Criterial in this section apply to all succeeding sections)

Criteria of JORC Code 2012	JORC Code (2012) explanation	Details of the Reported Project
Sampling techniques	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	Reverse circulation drilling was used to obtain rock chip material which was then subject to gold geochemical analysis. Sample lengths were standardised at 5 feet (1.52m) meters down holes. Rock chips from the entire sample intervals were collected and despatched for analysis. Sample weights delivered to the
	down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.	analytical lab vary from 0.83 to 15.16 kilograms.
	Include reference to measures taken to ensure sample representativeness and the appropriate calibration of any measurement tools or systems used.	Reverse circulation drill chip samples were used for sampling. Sample lengths down holes were consistently 5 feet (1.52m) to provide good representative material.
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry	The reverse circulation drill chip samples based on 5 feet (1.52m) intervals were analysed for gold at ALS North American facilities.
2 111	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.	The gold method being used is the ALS procedure that uses a 30-gram charge for fire assay (Au-AA23).
Drilling techniques	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-	Reverse circulation drilling was used to obtain rock materials.

	sampling bit or other type, whether core is oriented and if so, by what method, etc.).	
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	All intervals down drill holes were sampled. Sample weights ranged from 0.83 to 15.16 kilograms for individual 5ft (1.52m) sample intervals. Geologist were on site during all drilling and responsible for all logging.
	Measures taken to maximize sample recovery and ensure representative nature of the samples.	Industry standard practices, e.g. optimized drilling speed, regular changes of the drill bits and drilling muds were used throughout to ensure no recovery or sample representation issues were encountered.
	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.	Not relationships observed between the core recovery and sample grades.
Logging	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.	Geological logging has been completed on all of the sample intervals and is to an industry standard appropriate to the initial exploration nature of the program.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	Geologic logging is qualitative to semi-quantitative making use of an experienced geologist and high-quality binocular microscope.
	The total length and percentage of the relevant intersections logged.	100% of the drill holes were logged applying the same logging and documentation principles.
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken	Not applicable
	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	All reverse circulation drill chips for sample intervals were collected and sent to the laboratory for preparation and analysis. No splitting, drying or other forms of sample preparation were carried out at the drill site.
	For all sample types, the nature, quality, and appropriateness of the sample preparation technique.	The samples are prepared in the ALS laboratory in USA. Sample preparation follows the standard procedure of the ALS lab, representing the industry common practice.
		Each sample was weighed, fine crushed to <2mm (70% pass) and split by a riffle splitter. The sample was then pulverized up to 250g at 85% < 75um.

			SAMPLE PREPARATION		
		ALS CODE	DESCRIPTION		
		WEI-21	Received Sample Weight		
		LOG-22	Sample login – Rcd w/o BarCode		
		LOG-24	Pulp Login – Rcd w/o Barcode		
		SND-ALS	Send samples to internal laboratory		
		CRU-QC	Crushing QC Test		
		PUL-QC	Pulverizing QC Test		
		CRU-31	Fine crushing – 70% <2mm		
		SPL-21	Split sample – riffle splitter		
		PUL-31	Pulverize up to 250g 85% <75 um		
	Quality control procedures adopted for all sub-sampling stages to maximise representativeness of samples.	r The logging geologist supervised sampling to ensure all samples were geological representative. Quality of comminutions is verified by a control sieving, which is a standard procedure of the ALS laboratories.			
	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.	The reverse circulation drill holes were either vertical or oriented and drilled in such a way to attempt to cut inferred geologic controls (bedding, faults etc.) perpendicular to their strike in order to measure true thicknesses. The logging geologist supervised sample collection to ensure all samples were geological representative.			
	Whether sample sizes are appropriate to the grain size of the material being sampled.				
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	Reverse circulation drill samples were assayed at the ALS laboratory. The gold method being used is the ALS procedure that uses a 30-gram charge for fire assay, AKLS code is Au-AA23.			

			ANALYTICAL PROCE	DURES
		ALS CODE	DESCRIPTION	
		ME-MS61	48 element four acid ICP-MS	
		Hg-MS42	Trace Hg by ICPMS	ICP-MS
		Au-AA23	Au 30g FA-AA finish	AAS
		should be made only on the results of ass	ssay were based solely upon the content of the sa y after the potential investment value of the claim ays of multiple samples of geological materials col ected by him/her and based on an evaluation of osed project. Statement required by Nevada St	or deposit has been determined based lected by the prospective investor or by a all engineering data which is available
		These are standard tech complete nature of the	niques commonly used for analysis of the gold miner assayed results.	alisation. 4acid digest assures a most
	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.	Not applicable. This ASX used.	announcement reports only drilling data, portable X	RF and geophysical instruments were not
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.		d standards and blanks have been inserted in the sam esponsible for the placement of these materials.	ple sequence at a rate of two percent. The
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Not applicable. The curr plus one hole at Drum.	ent announcement is reporting essentially the results	from the remaining 16 drill holes at Mizpah
	The use of twinned holes.	Not applicable. No twin mineralisation has been	ned holes are planned at the current exploration prog intersected.	gram. Twin holes will be used after economic
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	excel spreadsheets and	chips were rigorously documented by Alderan geolog validated. Assay results have been obtained electron d in the company offices in Perth and Park City, Utah	ically from the ALS laboratory.
		i i		

Location of data points	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.	A handheld sub-meter GPS was used for collars and geochemical sample locating. Accuracy of the GPS based techniques was deemed sufficient given the initial exploration nature of the drill program.
	Specification of the grid system used.	All data are recorded in a UTM zone 12 (North) NAD83 grid.
	Quality and adequacy of topographic control.	RL values obtained by GPS were routinely compared with the nominal elevation values.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Location and spatial distribution of the drillholes are applicable for assessment of the prospectivity of the project area but the data is not suitable and was not intended to be used for quantitative assessments of the project, i.e. not intended for estimation of the Mineral Resources.
	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.	Location and spatial distribution of the drillholes are applicable for assessment of the prospectivity of the project area but the data is not suitable and was not intended to be used for quantitative assessments of the project, i.e. not intended for estimation of the Mineral Resources.
	Whether sample compositing has been applied.	Sample intervals were not bulked and/or composited in any of the physical manners.
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	The reverse circulation drill holes were either vertical or oriented and drilled in such a way to attempt to cut inferred geologic controls (bedding, faults etc.) perpendicular to their strike in order to measure true thicknesses. The logging geologist supervised sample collection to ensure all samples were geological representative.
	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.	The reverse circulation drill holes were oriented and drilled in such a way to attempt to cut inferred geologic controls (bedding, faults etc.) perpendicular to their strike in order to measure true thicknesses. The logging geologist supervised sample collection to ensure all samples were geological representative.
Sample security	The measures taken to ensure sample security	Chain of custody was maintained at all steps of the drill and sampling procedure. Only authorised personnel handled or viewed the drill materials.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Drilling and sampling procedures were systematically reviewed by the company personnel with Scott Caithness, Alderan's Managing Director, acting as the project's Competent Person.

## Section 2 – Reporting of Exploration Results

(Criterial in this section apply to all succeeding sections)

Criteria of JORC Code 2012	JORC Code (2012) explanation	Details of the Reported Project
Mineral tenement and land tenure status	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.	All drill sites are located on unpatented lode claims subject to the terms of the Option to Joint Venture Agreement dated 10 April 2020 by and between Volantis Resources Corp. and Tamra Mining Company LLC. See ASX release dated 16 April 2020.
	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.	Title is maintained in accordance with the General Mining Act of 1872 and its associated regulations. The claims are valid and in good standing. The claims have been properly located and monumented. The claims may be freely transferable under the terms of the Option Agreement, subject only to the paramount title of the United States of America.
Exploration done by other parties (2.2)	Acknowledgment and appraisal of exploration by other parties.	The Drum Mountains of west central Utah were the subject of mining and exploration for gold, copper, and manganese from the 1800's until early 1900's. This was followed by renewed interest in beryllium, gold, manganese, and uranium in the past 20 years.
		Gold and copper were discovered in the Drum Mountains in 1872, and from 1904 to 1917, gold, silver, and copper were produced from siliceous replacement fissure deposits in jasperoids, limestone and dolomite, for a total value of about \$46,000.
		Exploration for gold and base metals intermittently continued through the entire 20 <sup>th</sup> century, in particular, since the early 1960's when jasperoids similar to those commonly found in highly productive gold mining districts have been identified in the Drum Mountains of Utah. Specialised studies of the jasperoids have been undertaken by USGS and the other companies over this period and sampling of these rocks commonly reveals anomalous concentrations of gold.
Geology	Deposit type, geological setting, and style of mineralisation.	The mineralisation presented at the Drum area includes different types and mineralisation styles, main of which are Carlin- like gold, gold-bearing skarns, Cu-Mo-Au porphyries and Marigold-type distal disseminated gold.
		<ul> <li>The focus of Alderan's exploration efforts at Detroit/Drum is to discover a distal disseminated gold deposit. Key features of these deposits include: <ul> <li>a) Favorable permeable reactive rocks (silty limestones and limey siltstones)</li> <li>b) Favorable structures often coincident with mineral-related intrusive</li> <li>c) Gold-bearing hydrothermal solutions</li> <li>d) Micron-sized gold in fine-grained disseminated pyrite</li> <li>e) Common geochemical indicators are: As, Sb, Ba, Te, Se, Hg</li> <li>f) Common argillization, development of the jasperoids and decalcification of the host rocks.</li> </ul> </li> </ul>

		presented in this an Other types of mine 1. Intrusion 2. Carlin-like	nouncement. eralisation, rep hosted/relate e mineralisatio	presenting explo d gold mineralis	ration targ sation.	ets of Al	deran in the	Drum mountains	the drillhole, that is s area includes:
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following	Current announcement is focused on the new drilling results for drillholes 3MZRC22-007 to 3MZRC22-022 and hole 9DRC22- 001. The location of the drillhole collars is as follows:							
	information for all Material drill holes:	Drill hole ID	Easting*	Northing*	RL (m)	Dip	Azimuth	Depth (m)	Drill Type
	Easting and Northing of the drill hole collar. Elevation or RL (Reduced Level	3MZRC22-007	326,863	4,379,262	1,906	-60°	5°	85	Reverse circulation
	- elevation above sea level in metres)	3MZRC22-007	326,880	4,379,202	1,900	-00 -45°	353°	50	Reverse circulation
	of the drill hole collar. Dip and azimuth of the hole.	3MZRC22-008	326,885	4,379,193	1,899	-45 -60°	160°	125	Reverse circulation
	Down hole length and interception depth and hole length.	3MZRC22-010	326,804	4,379,192	1,898	-90°	0°	100	Reverse circulation
		3MZRC22-011	326,804	4,379,193	1,899	-60°	0°	90	Reverse circulation
		3MZRC22-012	326,906	4,379,294	1,908	-90°	0°	70	Reverse circulation
		3MZRC22-013	326,878	4,379,249	1,903	-50°	0°	65	Reverse circulation
		3MZRC22-014	326,737	4,379,193	1,895	-45°	135°	135	Reverse circulation
		3MZRC22-015	326,812	4,379,277	1,905	-65°	150°	77	Reverse circulation
		3MZRC22-016	326,876	4,379,247	1,903	-55°	150°	65	Reverse circulation
		3MZRC22-017	326,978	4,379,275	1,916	-45°	78°	60	Reverse circulation
		3MZRC22-018	326,978	4,379,276	1,916	-50°	330°	40	Reverse circulation
		3MZRC22-019	326,978	4,379,275	1,916	-55°	150°	40	Reverse circulation
		3MZRC22-020	326,879	4,379,254	1,903	-60°	330°	85	Reverse circulation
		3MZRC22-021	326,720	4,379,346	1,900	-50°	25°	90	Reverse circulation
		3MZRC22-022	327,086	4,379,165	1,935	-70°	150°	200	Reverse circulation
		9DRC22-001	327,082	4,376,903	1,817	<i>-90</i> °	0°	130	Reverse circulation

	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. Drillhole details are presented without exclusion.
Data aggregation methods	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.	Length weighted average was used for estimation the grade of the intersection. The sample grades within the mineralised intervals varied as follows: 3MZRC22-007: from 0.16 to 2.62g/t Au. 3MZRC22-008: from 0.015 to 1.395g/t Au 3MZRC22-009: from 0.048 to 1.855g/t Au 3MZRC22-010: from 0.08 to 2.63g/t Au 3MZRC22-011: from 0.059 to 1.81g/t Au 3MZRC22-012: from 0.15 to 5.23g/t Au 3MZRC22-013: from 0.081 to 0.925g/t Au 3MZRC22-013: from 0.081 to 0.925g/t Au 3MZRC22-015: from 0.076 to 3.95g/t Au 3MZRC22-015: from 0.076 to 3.95g/t Au 3MZRC22-016: from 0.058 to 1.225g/t Au 3MZRC22-017: from 0.058 to 1.225g/t Au 3MZRC22-018: from 0.162 to 1.365g/t Au 3MZRC22-019: from 0.18 to 1.355g/t Au 3MZRC22-020: from 0.086 to 1.93g/t Au 3MZRC22-021: from 0.086 to 1.93g/t Au 3MZRC22-021: from 0.393 to 1.195g/t Au 3MZRC22-021: from 0.351 to 1.405g/t Au
	Where aggregate interceptsincorporate short lengths of high-grade results and longer lengths oflow-grade results, the procedureused for such aggregation should bestated and some typical examples ofsuch aggregations should be shownin detail.The assumptions used for anyreporting of metal equivalent valuesshould be clearly stated.	The intersections presented in this ASX announcement have been estimated using the length weighing method which is a standard technique broadly used in the mining industry. Not applicable, this ASX announcement reports the gold grade.

Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results.	Alderan's aim with this phase of drilling at Mizpah was to intersect near surface high grade gold mineralisation. Rock units hosting the mineralisation are interpreted to dip relatively gently at 20-30° to the southwest. Historical data including sample assays, logs and sections of reverse circulation holes drilled in the 1980s interpreted mineralisation horizons, structures and geological contacts. Alderan's vertical drill holes are targeting the interpreted mineralised horizons and its angled holes are targeting either zones between historical drill holes or interpreted structures that have potential to host mineralisation. The true width of mineralisation has not yet been calculated and will vary from the intersections down drillholes.				
	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	The unit which hosts the mineralisation is interpreted to dip gently at between 20-30° toward the southwest at an azimuth of around 220°. Holes drilled vary from vertical to -45° depending on whether they are targeting the host unit, zones between historical drillholes or interpreted structures.				
	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').	Grade and length of mineralised intersections is estimated using nominal 0.15g/t Au as lower cut-off. The drill holes were aimed at intersecting near surface high grade gold mineralisation based on mineralised model blocks and drill intersections in historical drill holes collared during the 1980s. Given the highly variable nature of gold distribution in deposits, Alderan's intersections are generally consistent in grade with historical holes in their vicinity however some of Alderan's mineralisation intercepts are significantly longer in length. True width of mineralisation is not yet known and assay results for the remaining 16 holes in the Mizpah programme will enable a more accurate assessment of true width.				
Diagrams	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.	Maps and tables are presented in the text of this ASX release and in the JORC Table 1.				
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	The release is focused on presenting the new drilling results verifying presence of the gold mineralisation at the historically drilled Mizpah deposit.				

Other substantive exploration data	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.	Alderan rock and soil sampling has identified gold mineralisation at Mizpah and drilling in 2020 and earlier in H1,2022 confirmed presence of gold mineralisation in and around Mizpah (Refer ASX announcements dated 22 February and 22 March 2022). Alderan has also carried out magnetic and induced polarisation geophysical surveys in and around Mizpah.
Further work	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.	The assay results are from the final 16 drill holes at Mizpah. Assays are awaited for infill soil sample assays to better define the Mizpah and other anomalies within the Detroit project area. The next phase of work includes 'sighter' metallurgical testwork and designing further drilling to test for lateral and down dip extensions.