

Drilling for USA's Next Major Copper & Gold Discoveries

Investor Presentation - February 2022



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The information contained in this presentation that relates to the exploration potential for the Mizpah Prospect and the Drum gold mine peripheral to the historical pits is based on, and fairly reflects, information compiled by Dr Marat Abzalov, who is a Fellow of the Australian Institute of Mining and Metallurgy. Dr Abzalov is a consultant to 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'. Dr Abzalov consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears. Dr Abzalov holds securities in the Company.

This presentation has been approved for release by the Board of Alderan Resources Limited.



Highlights



Flagship Detroit project – historical copper, gold & manganese mining district with outstanding gold & copper potential

Six drill holes completed into copper & gold targets at Detroit in Q4 2021 – assays awaited

10 drill holes planned at Drum Gold Mine in Q1 2022 -

- 125Koz past production & deposit open
- Historical drill assays to 38g/t Au
- High grade historical drill intersections eg 23m @ 5.0g/t Au
- Alderan in-pit sample assays to 10g/t Au

Project pipeline – Frisco, Valley Crossroads & White Mountain copper and gold targets



Drill hole 9DD22-001 in Drum Mine East Pit at Detroit



Project locations



Modified from: Johnson, C.L et al; Toward a Global Carlin-Type Exploration Model: The Relationship between Eocence Magmatism and Diverse Gold Rich deposits in the Great Basin, USA; Nov 2020

- Utah a Tier 1 mining jurisdiction
 - 4th on Fraser Institute 2020 ranking of policy perception*
 - Excellent infrastructure
- Highly ranked copper and gold mining districts in Utah and neighbouring Nevada



- Detroit has potential for Bingham, Carlin & Battle Mountain deposit styles
- Drum one of Utah's most productive and economically significant historical gold producers



* Fraser Institute Annual Survey of Mining Companies 2020; <u>www.fraserinstitute.org</u>

Detroit: Alderan exploration history

October 2020

Mizpah drilling programme – seven holes confirmed & extended historical drilling

April 2020

Option

Agreement

executed

Tenement consolidation – three new option agreements executed

February 2021

Strong surface exploration results: Stream, rock & soil sampling, magnetics & IP geophysics, petrography

Mar–Aug 2021

Sept-Dec 2021

Drilled 6 holes (~1,200m) testing four Cu & Au targets – assays awaited

Drum Gold Mine option secured, historical data reviewed & in-pit sampling completed – drilling underway



Detroit: Drum's gold potential confirmed

- Historical drilling (1982-89) returned thick high grade gold intersections:
 - 13.7m @ 6.4g/t Au from 13.7m downhole including 4.6m @ 18.1g/t Au (YC-58A)
 - 22.9m @ 5.0g/t Au from 19.8m downhole including 9.1m @ 10.8g/t Au (YC-113A)
 - 15.2m @ 4.5g/t Au from 73.2m downhole including 6.1m @ 10.3g/t Au (YC-174)
 - 35.1m @ 4.3g/t Au from 25.9m downhole including 18.3m @ 7.7g/t Au (YC-169)
 - 38.1m @ 3.2g/t Au from 30.5m downhole including 15.2m @ 6.4g/t Au (YC-242)
 - 24.4m @ 2.7g/t Au from 9.1m downhole including 7.6m @ 7.6g/t Au (YC-60)





Drum Gold Mine - West Pit

- Drum produced 125Koz Au @ 1.22g/t Au from oxide ore (1984-89)
- No exploration since 1989 mine closure
- Alderan in-pit rock sample assays up to 10.7g/t Au confirm high grades
- Alderan has 3 year option to purchase with annual and option exercise payments totaling US\$500,000
 - Expenditure commitment of US\$120,000 already met
 - 2% NSR with option to purchase 1% for US\$450,000

Aerial view of Drum pits showing Alderan rock sample assay results



Refer Alderan ASX Announcements dated 30 September 2021, 16 December 2021, 30 December 2021

Detroit: Drum data review confirms gold potential

Alderan reviewed data from 404 drillholes (1980s) delineating the Drum oxide gold deposit with key findings:



Plan showing modelled Drum gold deposit above 0.15g/t Au cut-off grade based on historical drill holes plus significant historical drill hole intersections. Potential remnant mineralisation lies outside pit boundaries to the south, north and southwest and is open.

- Deposit is open along strike to north & south and down dip to southwest
- 2. East Pit ore horizon not drilled down dip below West Pit
- 3. Drill hole assays to 38.8g/t Au over 5ft (1.54m) interval
- 4. 70m longest +1g/t Au intercept
- Only oxide mined average hole depth ~49m
- Exploration potential* for remnant oxide mineralisation of ~1.2-1.5Mt grading ~1.1-1.4g/t Au (~42,000-60,000 oz)
 - 0.15-0.3g/t Au cutoff range for
 - 0.15-0.3g/t Au cutoff range for heap leach oxide gold
- Potential for primary gold mineralisation is untested



Refer Alderan ASX announcements 18 & 19 November 2021. The Company notes that the quantity and grade of the exploration potential is conceptual in nature and that there has been insufficient exploration to estimate a Mineral Resource and that it is uncertain if further exploration will result in the estimation of a Mineral Resource.

Detroit: Drum remnant mineralisation open down dip



Drum long section showing gold mineralisation based on historical drill holes and interpreted geology plus significant down dip exploration potential.



Drum 3D long section on digital terrain model showing gold mineralisation that lies outside the pit walls from modelling of historical holes - highlights potential for significant remnant gold mineralisation and the down dip exploration potential.

- Mineralised units (Tatow and Chisholm) are open down dip to southwest
- High grade remnant gold mineralisation occurs outside the historical pits to north, south and southwest
- Potential to extend East Pit deposit more than 400m down dip
- Potential to extend West Pit deposit more than 150m down dip



Detroit: Drum open along strike to north and south



Drum East Pit north-south section showing the mineralised blocks above 0.15g/t Au cut-off based on historical drill holes – open to south



 Gold mineralisation is open along strike to north and south in both pits

- Significant remnant mineralisation to south of both pits
- High grade mineralisation in West pit
 - Reported limited underground mining towards end of mine life with grade ~4.4g/t Au in SW corner
- +65m thick mineralised intersections in East Pit
- +35m thick mineralised intersections in West Pit
 - +0.15g/t Au oxide halo around high grade zones
- Mizpah oxide gold deposit sits ~2km along strike to the north



Drum West Pit north-south section showing the mineralised blocks above 0.15g/t Au cut-off based on historical drill holes – open to south

Detroit: Drum drilling underway



Aerial view of Drum showing pit outlines, significant historical drill intersections and proposed Alderan drill holes

- Drilling underway with 10 holes planned (~1,200m)
- Initial objective to verify historical drill intercepts and extend mineralisation
- 9DD22-001 completed to verify YC-16 area – initial assays expected in March





Detroit: Mizpah data review confirms gold potential





Alderan reviewed 197 drillholes (1980s) delineating the Mizpah oxide gold deposit with key findings:

- **1.** Thick, high-grade intersections include:
 - 7.6m @ 2.3g/t Au from 19.8m downhole (MZ-104)
 - 10.7m @ 1.9g/t Au from 0m downhole (MZ-49)
 - 12.2m @ 1.7g/t Au from 0m downhole (MZ-93)
 - 16.8m @ 1.4g/t Au from 3.0m downhole (MZ-87-048)
 - 22.9m @ 1.0g/t Au from 3.0m downhole (MZ-87-032)
- 2. Deposit is open to NW, SE & down dip to SW
 - Alderan hole 350m to NW (DD20M-006) intersected 83m
 @ 0.41g/t Au incl 6.9m @ 1.98g/t
- 3. Drillhole assays to 9.1g/t Au over 2.3m, 40 holes (20%) ended in +0.5g/t Au, 20 ended in +1.0g/t Au
- 4. Drilled for near surface oxide gold av hole <30m
- 5. Exploration Potential* for in-situ oxide deposit of ~3.0-4.0Mt @ ~0.4-0.8g/t Au (~40,000-100,000 oz) based on historical holes using 0.15-0.3g/t Au cutoff
- 6. Potential for deeper second gold mineralized horizon
- 7. Primary mineralisation potential chargeability anomaly below drilling



*Refer Alderan ASX announcement on 24 August 2021. The Company notes that the quantity and grade of the exploration potential is conceptual in nature and that there has been insufficient exploration to estimate a Mineral Resource and that it is uncertain if further exploration will result in the estimation of a Mineral Resource.

Detroit: Mizpah open to north, south and down dip



Mizpah long section showing gold mineralisation based on historical drill holes and significant historical drill intersections. Deposit is open to the NW and SE with possible deeper second mineralised horizon.



Mizpah cross section showing gold mineralisation based on historical drill holes and significant historical drill intersections. Deposit is open down dip to SW and note high grades of last assays in some holes.

- Mineralisation open to NW, SE & down dip to SW plus
- Shallow oxide deposit gold mineralisation from surface
- Potential for second gold mineralized horizon
 - Drum gold deposit sits in same geology 2km to south
- 20 holes ended in +1.0g/t Au with
 9.1g/t Au highest last assay
- 60m thick mineralised intersections
 - High grades sit within a thicker lower grade 0.15-0.3g/t halo
- Primary mineralisation potential below oxide deposit – large chargeability anomaly below drilling



Refer Alderan ASX announcement on 24 August 2021. The Company notes that the quantity and grade of the exploration target is conceptual in nature and that there has been insufficient exploration to estimate a Mineral Resource and that it is uncertain if further exploration will result in the estimation of a Mineral Resource.

Detroit: Copper & gold targets drilled – assays awaited



Basin Complex geophysical anomalies looking northwest; chargeability anomaly @ cutoff >40 msec (yellow) and magnetic anomaly @ cutoff >0.03 SI units (red)

- Six holes drilled testing four copper and gold targets in Q4, 2021 – Southern, Basin Main, Copperhead and Northern Extension
 - Complete assays awaited
- Basin Complex chargeability stem (site Y), Skarn (site P) Cu & Au targets remain to be drill tested
- Drilling focus now on Drum and Mizpah gold prospects
 - Historical deposits with significant upside potential

Refer Alderan ASX announcements 1 September 2021, 15 October 2021, 12 November 2021, 8 December 2021, 30 December 2021





7DD21-003 @ 45m: Porphyry with extensive silica and potassic alteration; 2-4% sulphides pyrite>molybdenite>chalcopyrite

Plan of Basin Complex showing Alderan proposed and completed drill holes plus historical holes on the chargeability anomaly [cutoff >20 msec (yellow)] and Basin Main magnetic anomaly [cutoff >0.03 SI units (red)]





Frisco: High-Grade Copper



KEX reduced to pole magnetics at Frisco showing location of new magnetic anomalies and 2020-21 drill holes

- Potential for porphyry, skarn and breccia pipe copper-gold deposits
- Kennecott Exploration (KEX) earning 70% interest through expenditure of US\$30 million over 10 yrs
 - \$6.0m to get to 55% by Nov 2023
 - Targeting a porphyry copper deposit
- Past Alderan and KEX drilling includes:

Cactus Breccia

- 41m @ 1.9% Cu, 0.6g/t Au from 252m downhole (SAWM0001)
- 32m @ 1.2% Cu, 0.3g/t Au from 61m downhole (ALCA0010)
- 6.5m @ 3.1% Cu, 0.5g/t Au from 94m downhole (ALCA001)

Accrington Skarn (Imperial)

- 34m @ 1.0% Cu, 0.1g/t Au from 153m downhole (SAWM0004)
- 54m @ 1.4% Cu, 0.2g/t Au from 46m downhole (FR18-007)
- Drone (UAV) magnetic survey identified three new targets

Next Steps

- Field checking and surface sampling of aeromagnetic targets in H1 2022 for porphyry copper potential
- Data integration ahead of decision on drilling



Refer Alderan ASX announcements released 15 December 2017, 29 March 2018, 14 November 2018, 22 September 2020, 11 March 2021, 11 June 2021, 21 January 2022

Valley Crossroads & White Mountain: Copper & Gold



Valley Crossroads







- Strong potential for copper-gold skarn deposits
 - Down dip extensions of deposits on neighbouring Tamra tenement
- Alderan completed aeromagnetics, rock sampling & drilling at Black Rock prospect

Next Steps

Re-processing & integrating all exploration data to identify targets for drill testing

- Preserved epithermal system with 5km zone of argillic, phyllic and silica alteration
 - Sinter terraces, alunite cap, chalcedony blanket & historical sulphur mining
- Ground magnetics and reconnaissance rock sampling completed

Target

High grade epithermal gold-silver deposit associated with Brimstone Fault



Board & Executive Team

Non-Executive Chairman Tom Eadie



Geologist & geophysicist with 40 yrs experience. Founding chair of Syrah Resources, Copper Strike & Discovery Nickel. Former Executive GM Exploration & Technology, Pasminco Limited.

BSc (Hons) Geology/ Geophysics - University of British Columbia; MSC Geophysics – University of Toronto; Grad Diploma in Applied Finance & Investment

Managing Director Scott Caithness



StGeologist with 35 yrs
experience in mineral
exploration in Australia,
Asia, Africa and the Pacific.
Former roles includeonDirector Exploration for the
Vedanta group, co-founder
and MD of Indian Pacific
Resources (now Akora
Resources (ASX: AKO)),
Austrade Senior Trade
Commissioner to Malaysia
& Brunei and GM
Exploration, Rio Tinto
Exploration.

BSc (Applied Geology) – RMIT University; GAICD

Non-Executive Director

Peter Williams

Former Managing Director of Alderan Resources and Chief Geophysicist & Manager of Geoscience Technology at WMC Resources. Founding member of Independence Group & founding Director of Ampella Mining.

MSc Geophysics Engineering – Colorado School of Mines; Adjunct Professor, Centre for Exploration Targeting – University of Western Australia

VP Operations (US) Bruno Hegner



Corporate manager with 25 years experience. Former Managing Director of RT Copper Projects Group, Rio Tinto. Vice President of Resolution Copper Company.

BA – Fort Lewis College; JD, Law – Sturm College of Law – University of Denver

Company Secretary Mathew O'Hara



Has been employed by and acted as an independent director, company secretary and CFO for numerous resource companies in Australia, Africa, Canada and the USA.

B.Com. – University of Western Australia; Chartered Accountant (CA ANZ)



Corporate Structure

SUMMARY		
Share price (14 February 2022)	\$0.024	Directors & Management
Shares on issue	425,566,080	Other Shareholders 29%
Market capitalisation (14 February 2022)	A\$10.2 million	
Options	91,732,292	
Performance rights	200,000	Top 2 Sharehol
Shares held by Directors & Management	~3.7%	
Top 20 shareholders	~67%	67%
Cash balance	A\$2.77 million	

*Cash balance as per Quarterly Cashflow Report dated 27 January 2022.



Alderan: Investment highlights

Projects located in Utah – a global leading mining jurisdiction

Detroit – 'First mover' modern exploration over a consolidated porphyry copper & gold district

Midway through drilling programme to test multiple copper and gold targets – assaying in progress

Drilling has commenced at Drum Gold Mine which has remnant gold mineralisation, high gold grades , is open down dip and along strike and has not been explored since 1989

US technical team consists of +30 year experienced Rio Tinto and Newmont veterans Alderan market cap: A\$10.2 million; Enterprise value: A\$7.4 million



APPENDIX 1 – ADDITIONAL INFORMATION

Drum Gold Mine - Exploration Potential peripheral to historical pits

- As announced on 18 & 19 November 2021, Alderan used historical drill hole information (404 holes drilled on an approximate 20m x 20m grid) and assays to develop a 3D block model of the gold distribution at Drum which was used to estimate the exploration potential peripheral to the historical pits. Historical holes were analysed by either fire assay or AAS.
- An accurate DTM of the open pit and surrounding area was created using a drone-based topographic survey. This was used to define the remnant gold mineralisation outside of the pit shell.
- In determining the approximate grade and tonnage range of the exploration potential the average grade of the blocks located outside of the pit was estimated using 0.15g/t gold as the blocks lower cut off. The obtained average was then decreased and increased by approximately 15% to produce an approximate range of the target's average grade. Tonnage was estimated by assigning the default tonnage factor of 2.7 t/m3 to all blocks falling outside of the pit and the lower margin of the target's tonnage range was inferred by decreasing the total tonnage of the blocks by approximately 15%. The upper margin of the range was obtained applying more conservative value, approximately 10%.
- In order to test the exploration potential, Alderan has completed in-pit bench rock sampling which confirmed the presence of remnant mineralisation in pit walls. Drill site selection and permitting has been undertaken for a planned 10 hole drilling programme at Drum and drilling commenced in January 2022 to both verify and extend the modelled remnant gold mineralisation as part of the Detroit drilling programme. Additional exploration planned at Drum includes a magnetic geophysical survey to assist with structural and geological mapping plus an induced polarization geophysical survey will be considered depending on the results of this earlier work.

Mizpah Gold Prospect- Exploration Potential

- As announced on 24 August 2021, Alderan used historical drill hole information (197 holes drilled over an approximate 400m x 250m area) and assays to develop a 3D block model of the gold distribution at Mizpah which was used to estimate the exploration potential. Historical holes were analysed by either fire assay or AAS.
- In determining the approximate grade and tonnage range of the exploration potential at Mizpah, the average grade was estimated using a nominal 0.15g/t gold as the blocks lower cut off estimation. The average was then decreased and increased by approximately 15% to produce an approximate range of the target's average grade. Tonnage was estimated by assigning the default tonnage factor of 2.7 t/m3 to all blocks and the lower margin of the target's tonnage range was inferred by decreasing the total tonnage of the blocks by approximately 15%. The upper margin of the range was obtained applying more conservative value, approximately 10%.
- In order to test the exploration potential, Alderan has completed stream sediment and rock sampling programs plus ground magnetics and induced polarization (IP) geophysical surveys. Alderan also commenced a 10-hole (approximate 3,000m) drilling program at its Detroit project in November 2021 which is currently in progress. Drill site selection and permitting at Mizpah as part of this Detroit programme has been undertaken and drilling commenced in January 2022 with the objective of testing for extensions to the modelled gold mineralisation.

