### **Drilling for USA's Next Major Copper & Gold Discoveries**



Shareholder Presentation August 2021



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### **Highlights**

Projects located in Utah, USA – a tier 1 mining jurisdiction



Flagship Detroit copper-gold project in historical mining district



Detroit exploration results highlight outstanding copper & gold potential



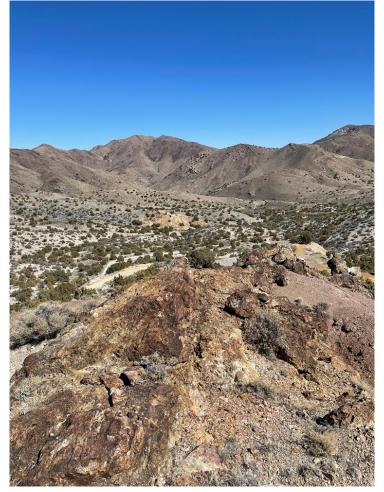
**Detroit drilling to commence in September CY21** 



Prospect pipeline developed - Valley Crossroads, Frisco & White Mountain



Highly experienced Board & executive team



Historical Copperhead Mine at Detroit



#### **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



Geologist with 35 yrs
experience in mineral
exploration in Australia,
Asia, Africa and the Pacific.
Former roles include
Director 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

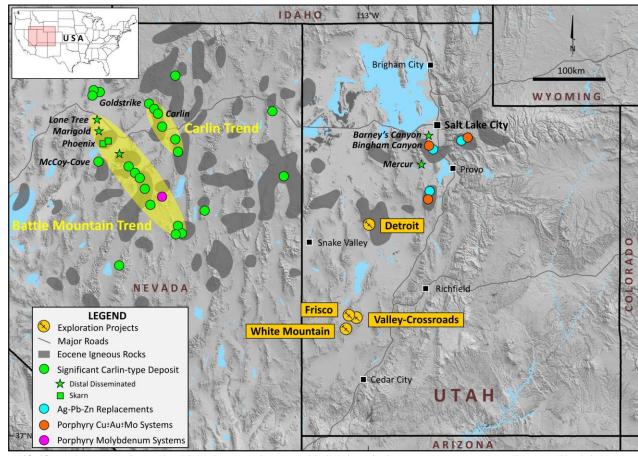


Has been employed by and acted as an independent director, company secretary and CFO for numerous resource companies in Australia, Africa, Canada and the USA.

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



#### **Project Locations**

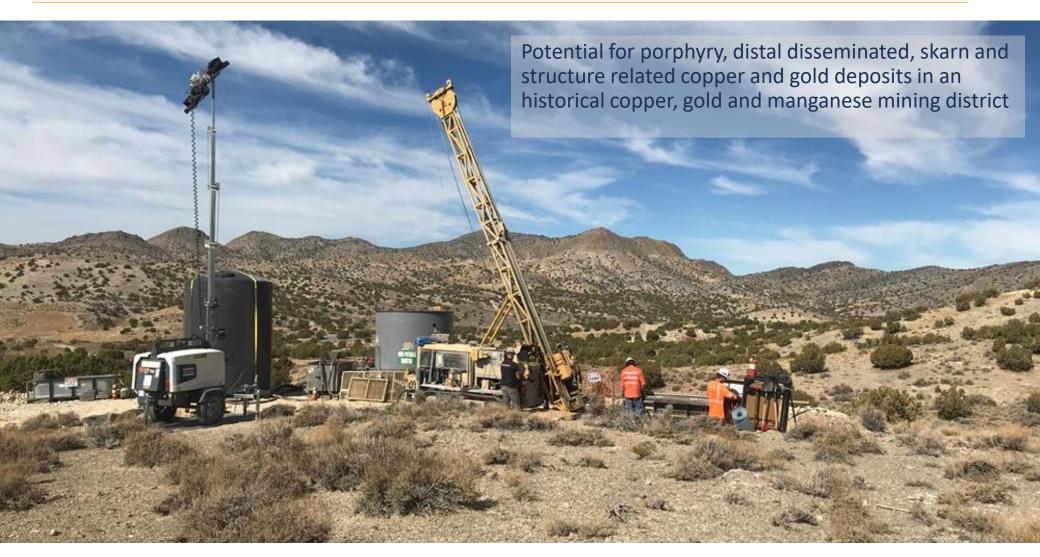


Modified from: Johnson, C.L et al; Toward a Global Carlin-Type Exploration Model: The Relationship between Eocence Magmatism and Diverse Gold Rich deposits in the Great Basin, USA; Nov 2020

- Utah a Tier 1 mining jurisdiction
  - 4<sup>th</sup> on Fraser Institute 2020 ranking of policy perception\*
- Excellent access to infrastructure
- Major copper and gold mining districts in Utah and neighbouring Nevada
  - · Bingham copper & gold
  - · Carlin gold
  - Battle Mountain gold & copper
- Detroit has potential for Bingham,
   Carlin & Battle Mountain deposit
   styles
  - · Porphyry copper-molybdenum-gold
  - Distal disseminated gold
  - Skarn copper-gold
  - Carbonate replacement

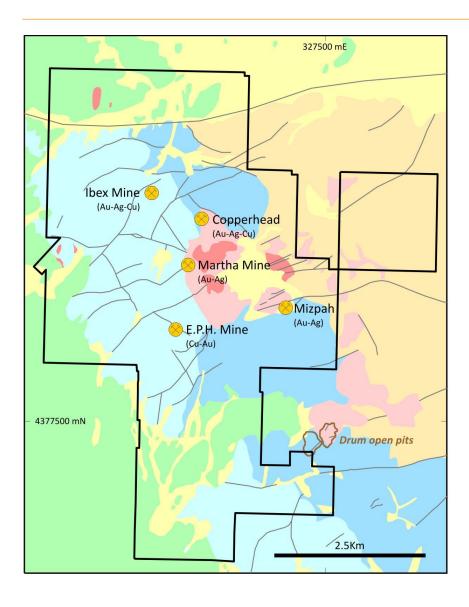


### **Detroit Project**





#### **Detroit: Overview**



- Gold, copper & manganese mining dating from 1890's
- Alderan has consolidated district tenement - first time in +100 years
- Potential to host gold and porphyry copper-gold deposits
- Mizpah a distal disseminated gold deposit
  - 40 of 200 historic drill holes (1980s) ended in significant gold
  - Alderan hole DDM20-006: 83m @ 0.41g/t
     Au incl 6.9m @1.98 g/t Au<sup>1</sup>
- Post consolidation exploration includes data compilation, rock, stream & soil sampling, ground magnetics & induced polarisation (IP) geophysics
  - Soil analysis in progress
- Next step: drilling

**LEGEND** 

Mineral-related intrusive rocks

Potential host rock - quartzite

Alderan Project Boundary

**Faults** 

Recent cover Volcanics

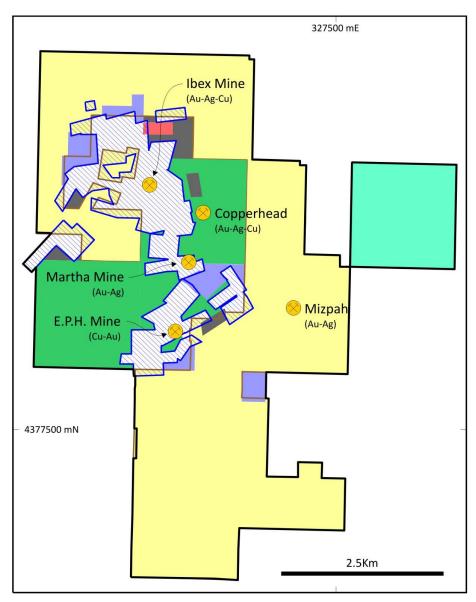
Altered rocks

Upper carbonates

Target host rocks



#### **Detroit: Alderan is District 'First Mover'**



- LEGEND

  Alderan Project Boundary

  Alderan

  Tamra

  Miller/Myer

  DMMP

  Hartshorn

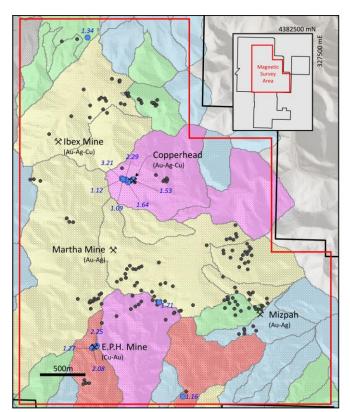
  Lowder

  Areas not controlled
- Alderan has consolidated tenement at Detroit - now controls 24.7km<sup>2</sup> through options
  - First consolidation in +100 years
- One year process of negotiating with multiple tenement owners
  - Freeport, Tamra and 3 local claim/tenement owners
- Enables first modern exploration to be carried out over entire District by one company



#### **Detroit: Copper & Gold in Streams & Rocks**

#### Highly anomalous copper and gold in catchments and rocks



LEGEND

Alderan Project Boundary

Magnetic Survey Area

Alderan Rock Chip Samples

Alderan Rock Chip Samples > 1% Cu

Copper in BLEG Stream Sediments (2020)

Cu BLEG (ppm)

0.00 - 18.84

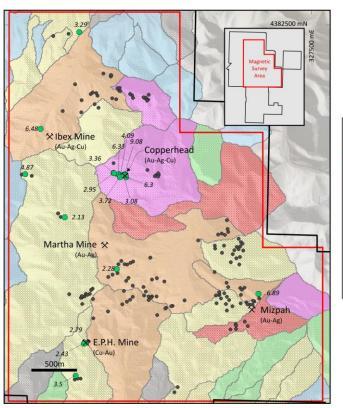
18.85 - 22.24

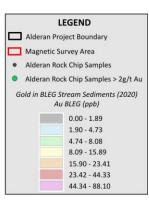
22.25 - 28.46

28.47 - 36.33

36.34 - 52.68

52.69 - 99.50





Copper in stream catchments and rock sampling highlighting +1% copper

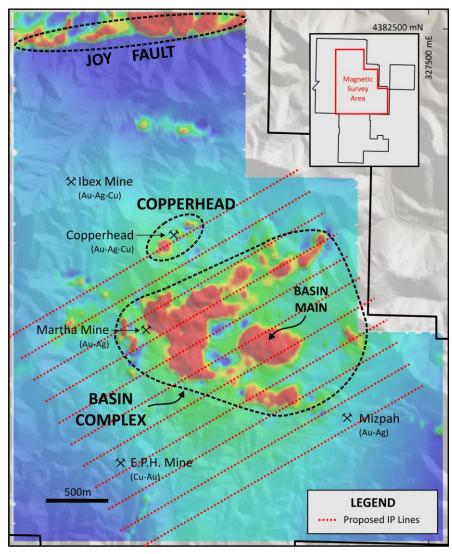
- Bulk leach extraction gold (BLEG) stream sediment sampling completed
- Highly anomalous copper and gold in streams

Gold in stream catchments and rock sampling highlighting +2g/t gold

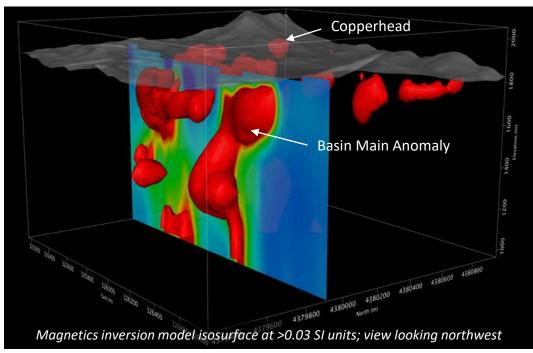
- 197 rock samples collected
- 17 samples grade >0.5% copper with max. 3.2% copper
- 28 samples grade >1g/t gold with maximum 9.0g/t gold



### **Detroit: A 'Classic' Porphyry Magnetic Signature**



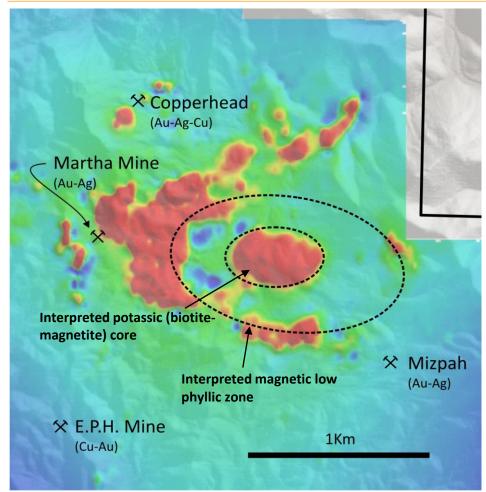
Reduced to Pole Magnetic image



- Basin Complex is ~1.6km diameter
- Basin Main potential copper mineralised potassic altered core of porphyry
  - Dimensions 500m E-W x 300m N-S x 500m (D)
- Magnetic & weakly magnetic (altered?) intrusives in outer rim
  - Potential for intrusive & skarn gold and base metals
- Copperhead magnetic anomaly
  - Potential for distal disseminated gold



#### **Detroit vs Alumbrera Magnetic Signatures**



Potassic (biotite-magnetite) core 25000 Magnetic low phyllic zone 24600 24300 24000 23600 **Kilometers** 23300

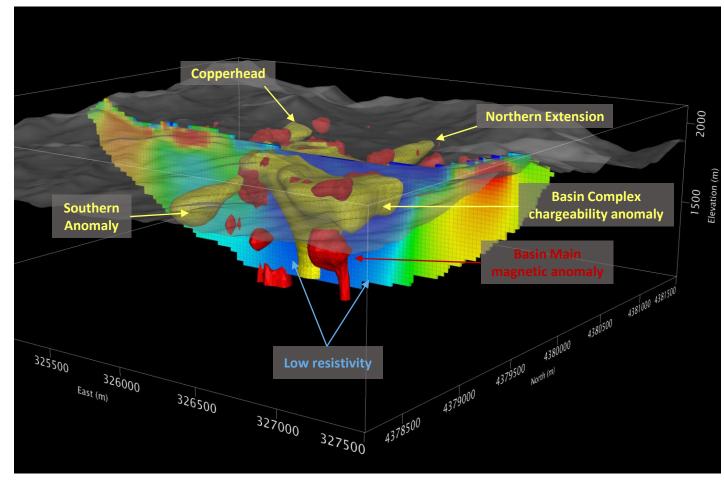
Detroit Basin Complex prospect reduced to pole magnetics

Bajo de la Alumbrera porphyry Cu-Au deposit reduced to pole magnetics\*

- Mining at Bajo de la Alumbrera in Argentina operated between 1998 and 2019
- Detroit has similar magnetic signature in size and amplitude



### **Detroit: Strong Chargeability Supports Magnetics**

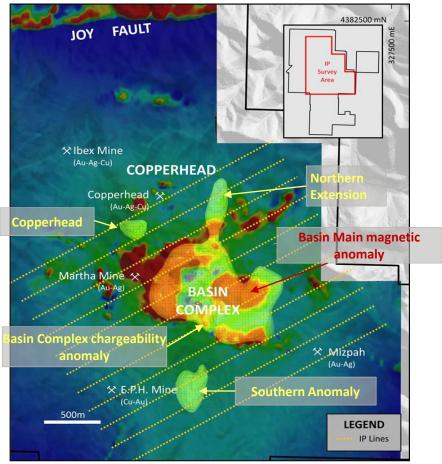


Magnetic isosurface cutoff >0.03 SI units; Chargeability isosurface cutoff >40 msec; view looking northwest

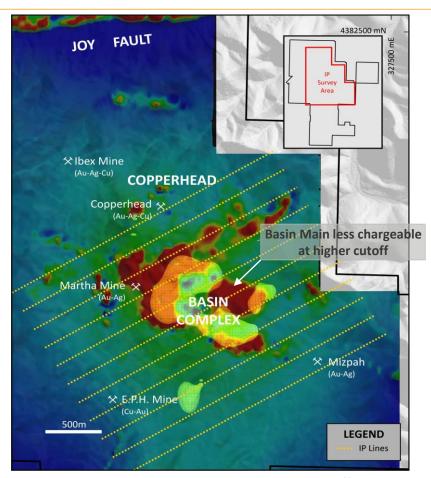
- Strong IP chargeability coincident with Basin Complex
  - Indicates presence of sulphides
- High chargeability wraps around
   Basin Main magnetic anomaly
- Resistivity low surrounds chargeability high
- 3 new chargeability targets -Copperhead, Northern Extension & Southern Anomaly
  - Distal disseminated gold potential



#### **Detroit: Basin Main Potentially Due To Copper Sulphides**



Chargeability anomaly at >40 millisecond cutoff

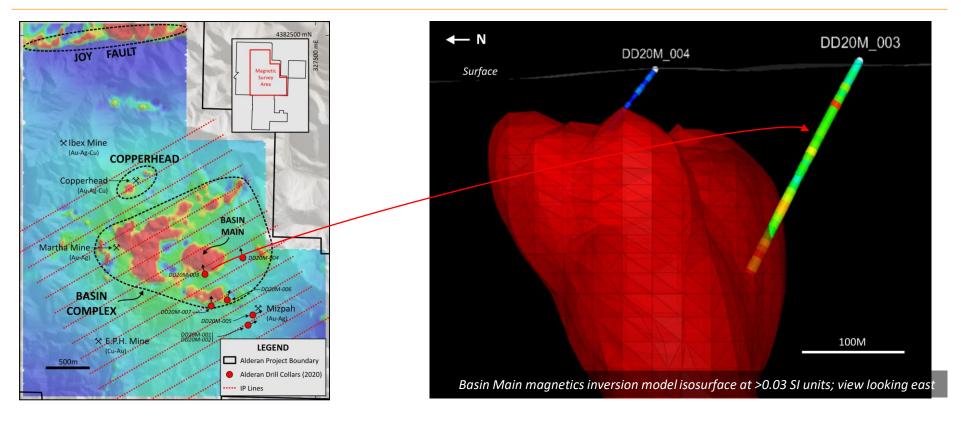


Chargeability anomaly at >60 millisecond cutoff

- Basin Main less chargeable at higher cutoff likely due to copper rich sulphides vs iron sulphides (pyrite)
- Magnetic low arc surrounding Basin Main has highest chargeability pyrite rich phyllic alteration



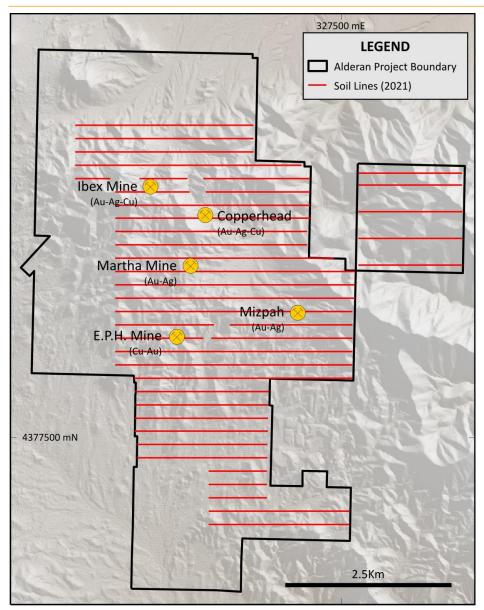
#### **Detroit: An Altered Mineralised Porphyry**



- Petrography confirms copper and molybdenum mineralised potassic altered porphyry in core from hole DD20M-003
  - 11 samples examined from 42m to 209m down hole
- Copper +/- molybdenum mineralisation identified in all samples
- The intensity of alteration and mineralisation increases with depth
- DD20M-003 drilled towards the Basin Main magnetic anomaly which was defined after drilling



#### **Detroit: Next Steps**



- Soil sampling completed assaying underway
  - 2,200 samples collected on 200m x 40m grid
  - Trialling DetectORE technology for sample analysis
- IP survey extended by 3 lines
  - 2 lines to south and 1 line to north to close off responses on last lines
- Permitting for ~25 drill holes underway
  - Drill targets and prioritisation being finalised
- Drilling to commence in September
  - First phase of drilling ~2,500m in 10 holes



#### **Detroit: In Summary**

- Alderan carrying out first districtwide modern exploration
- Completed stream, rock & soil sampling, magnetics and IP geophysics
- All work indicates strong potential for a copper-goldmolybdenum porphyry
   plus

distal disseminated, skarn, intrusive and structure related copper and gold deposits

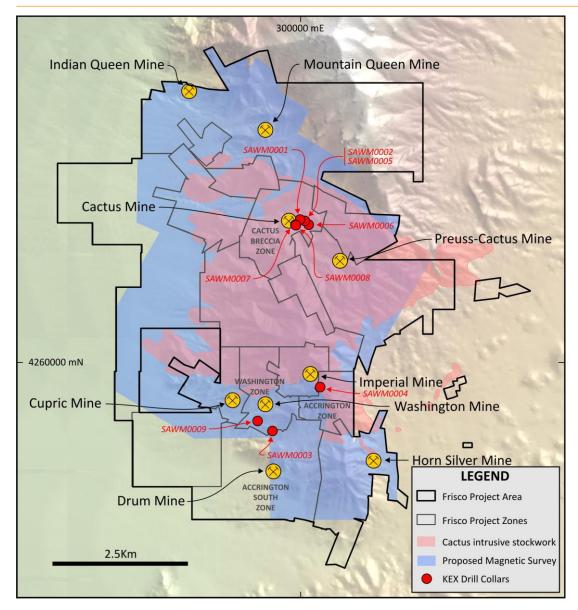
- 5 copper and gold drill targets identified
- Drill hole permitting underway for commencement in Sept CY21



Detroit Basin Complex looking to south



### Frisco: Porphyry, Skarn & Breccia Copper Deposit Potential



- 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
- Past exploration focus on breccia pipe copper deposits at Cactus & skarns at Accrington
  - Hole SAWM0001 intersected 41m @ 1.9%
     Cu, 0.62g/t Au, 7.1g/t Ag & 62.8ppm Mo
  - Hole SAWM0004 intersected 34m @ 0.99%
     Cu, 0.14g/t Au & 13.3g/t Ag

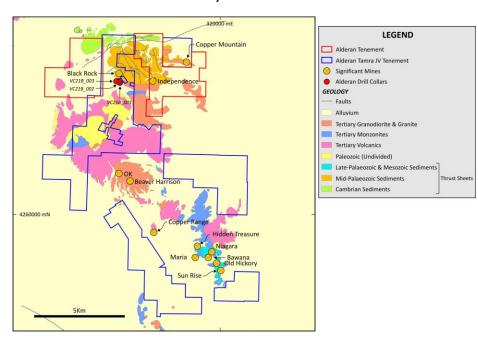
#### Next Steps

- KEX drone aeromagnetic survey
- Data integration and target identification ahead of decision on drilling



### **Valley Crossroads & White Mountain**

#### **Valley Crossroads**

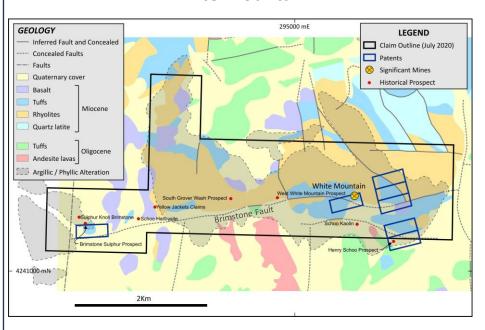


- Strong potential for copper-gold skarn deposits
  - Down dip extensions of deposits on neighbouring Tamra tenement
- Alderan completed aeromagnetics, rock sampling & drilling at Black Rock prospect

#### **Next Steps**

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

#### White Mountain



- 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

#### <u>Target</u>

High grade epithermal gold-silver deposit associated with Brimstone Fault



### **Conclusion: Drilling for a Major Copper-Gold Discovery**

- Alderan's flagship Detroit Project has potential for a porphyry copper-gold deposit <u>plus</u> peripheral distal disseminated, skarn, intrusive and structure related copper and gold deposits
  - Next steps: soil analyses, permitting and drilling
  - Initial drilling programme of 2,500m in ~10 holes to commence in Q3 CY21
- Alderan has built a portfolio of high quality copper and gold projects
  - Copper-gold intercepts in drillholes at Frisco
- Utah is globally ranked Tier 1 mining jurisdiction
  - Excellent mining infrastructure
- Highly experienced Board and executive team
  - +100 years of exploration and corporate experience in resources sector



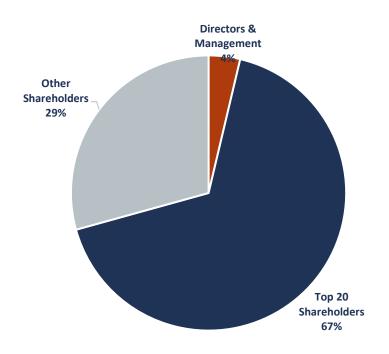
Detroit Project: East Copperhead historical mine looking to west



### **Corporate Structure**

SUMMARY – Following completion of Placement	
Share price (closing price prior to trading halt)	\$0.047
Shares on issue (post Placement)	425,566,080
Market capitalisation (post Placement)	A\$20 million
Options (post Placement)	96,732,292
Performance rights	400,000
Shares held by Directors & Management	~3.7%
Top 20 shareholders	~67%
Cash balance (post Placement)	A\$5.47 million

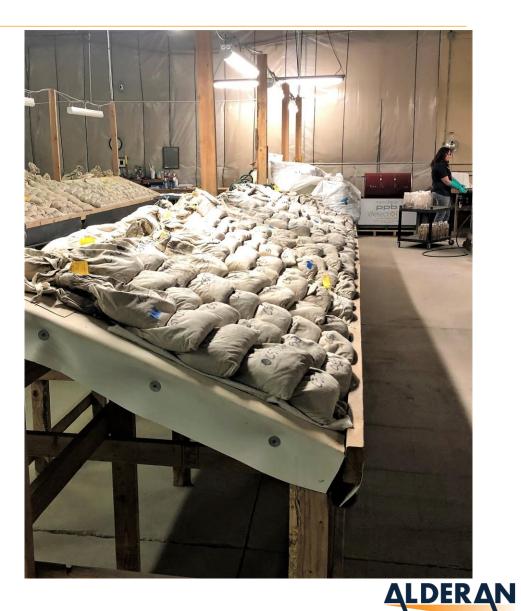
<sup>\*</sup>The above table incorporates the proposed changes to the capital structure and cash balance as a result of the Placement announced on 2 August 2021. Refer ASX announcement dated 2 August 2021 for further details regarding the Placement.





## **Thankyou**





Resources