

# **March 2019 Quarterly Activities Report**

#### **COMPANY ACTIVITIES**

- Following a detailed review of the results of the 2018 drilling programme at Frisco, Utah by Company management and additional mapping by an independent consultant, two areas have been chosen for major drilling focus in 2019:
  - The **White Mountain Epithermal Gold Project**, located 10km SW of Frisco, which has recently been acquired through staking by Alderan; and,
  - The copper-bearing **Cactus Tourmaline Breccias**, which are located in the north central region of the Frisco Claims.
- Detailed mapping and sampling was undertaken during the quarter at the Cactus
   Tourmaline Breccias and at White Mountain. Results are to be released when
   final assays and map compilations are complete.
- Ongoing discussion with potential corporate partners were continued.

Alderan Resources Limited (ASX: AL8) is pleased to report on its activities for the quarter ended 31 March 2019.

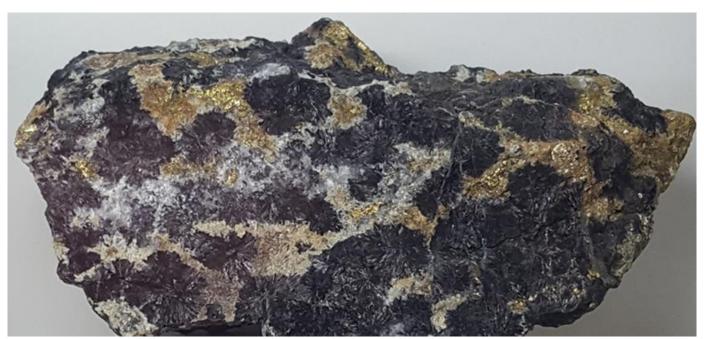


Figure 1: Chalcopyrite-rich tourmaline breccia from the Cactus Breccia.



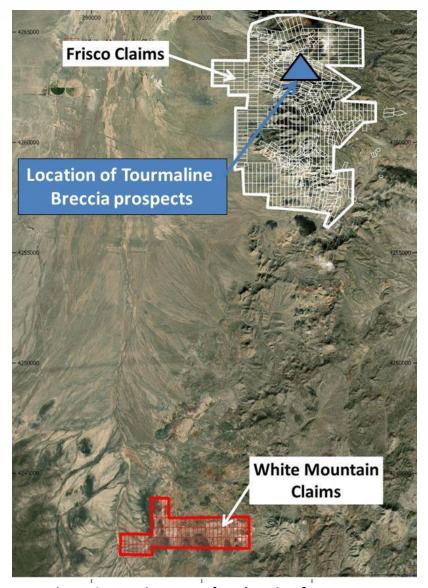


Figure 2: Location map of exploration focus areas

### White Mountain Epithermal Gold System

White Mountain is a large scale, outcropping epithermal system showing many attributes of a large, fully preserved epithermal gold/ silver system. Sinter terraces, large zones of chalcedony/quartz and argillite/alunite alteration over approximately 5km by 2km at surface indicate an upper level setting of the system with the potential of a larger hydrothermal system preserved at depth. Alunite has been historically mined in larger quantities in the area and minor workings for gold exist.

Epithermal Gold Deposits are vertically/horizontally zoned hydrothermal systems. The general geological characteristics are well established, with barren quartz (sinter zones, chalcedony) along with clay alteration (such as alunite, argillite or kaolinite) at surface. Gold usually occurs within favorable accomodation zones such as structures (high grade veins) or permeable rocks at depth (large tonnage/ lower grade targets). White Mountain shows evidence for a high level setting of a large, low sulphidation epithermal system with sinter terraces at surface and a preserved hydrothermal system at depth where higher grades are expected.



Many excellent examples of this type of deposit are found in the western Americas. A nearby example is the blind Midas discovery in Nevada (2.7mt @ 34g/t Au). References to resources do not in any way guarantee that Alderan will have similar success in defining an economic deposit.

During the quarter the Company conducted mapping and sampling program at **White Mountain**. Mapping conducted confirmed that White Mountain has the attributes of a large, fully preserved epithermal gold/ silver system including sinter terraces, large zones of chalcedony/quartz and argillite/alunite alteration at surface, with the potential of a large mineralised system preserved at depth. Reconnaissance rock sampling was also undertaken, with results expected in the coming weeks which are intended to help todefine areas for drilling.

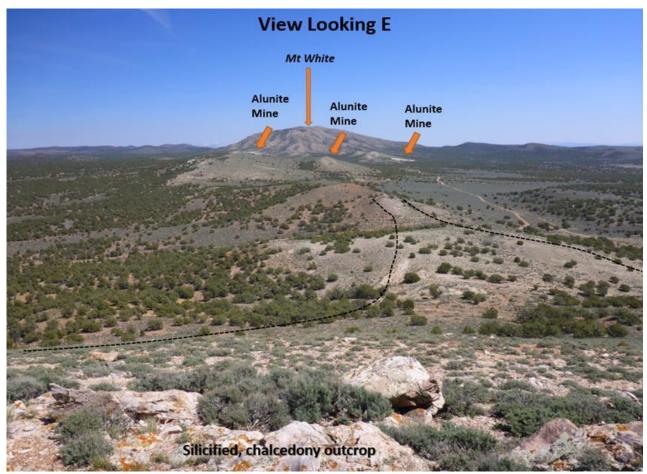


Figure 3: View looking East from the chalcedony outcropshowing large scale epithermal alteration and silicification on surface for about 2.5km and historic WWII Alunite mines in the background.

# Cactus Copper-Gold-Silver Tourmaline Breccia Target Area

Copper bearing tourmaline breccia clusters are an underestimated exploration target despite often hosting high grade mineralisation across multiple deposits with vertical extents of up to 1000m. Alderan's breccias on the Frisco Claims (Figure 4) exhibit similarities to other copper bearing tourmaline breccia clusters. Alderan's cluster deserves to be a high priority target given their location close to infrastructure and in a low-risk jurisdiction. This prospectivity was confirmed by an independent review in December 2018 which highlighted that this type of breccia can increase in size with depth and can have vertical dimensions exceeding one kilometer. The highest metal concentration is typically found near the inside margins and upper parts of the tourmaline breccias where there is often more intense development of shingle breccias (refer to Figure 5).



Previous drilling by the Company on the **Cactus Breccia** defined copper-gold-silver mineralisation across a 600m strike length. The recent independent review has highlighted that the **Cactus Breccia** has been eroded more than the other breccias. The New Years breccia displays greater preservation indicated by the presence of shingle breccias and extensive tourmaline breccia and alteration at surface associated with a distinct topographic high. Historical drilling at **New Years** was restricted to shallow drill holes which encountered mineralisation over significant widths in several drill holes.

An independent geologist conducted a site trip and a mapping and sampling programme at the Cactus copper-gold-silver breccia pipes in order to define and refine drill targets. The programe focussed on areas identified from a review of the **Tourmaline Breccia** area as announced in March 2019. The results of this programme will be announced in the coming weeks.

The Company believes that drilling at Cactus has been limited to upper-level portions of the tourmaline-chalcopyrite breccia system and that additional outcropping, demagnetized brecciazones may present a lead to further buried breccia pipes. Previous drilling by the Company and historical explorers intersected mineralisation associated with the Cactus, Comet and New Year pipes across a structural corridor approximately 1000m long.

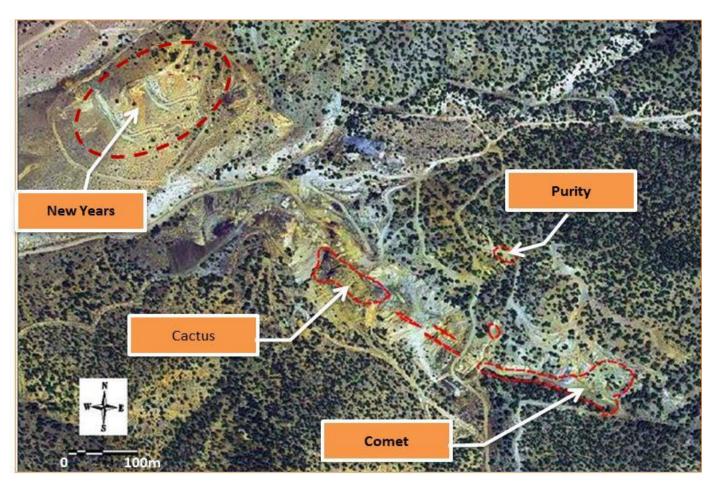


Figure 4: Detailed view of the area of the currently known and mapped Tourmaline Breccias. New Years appears to be unexplored at depth and along strike.



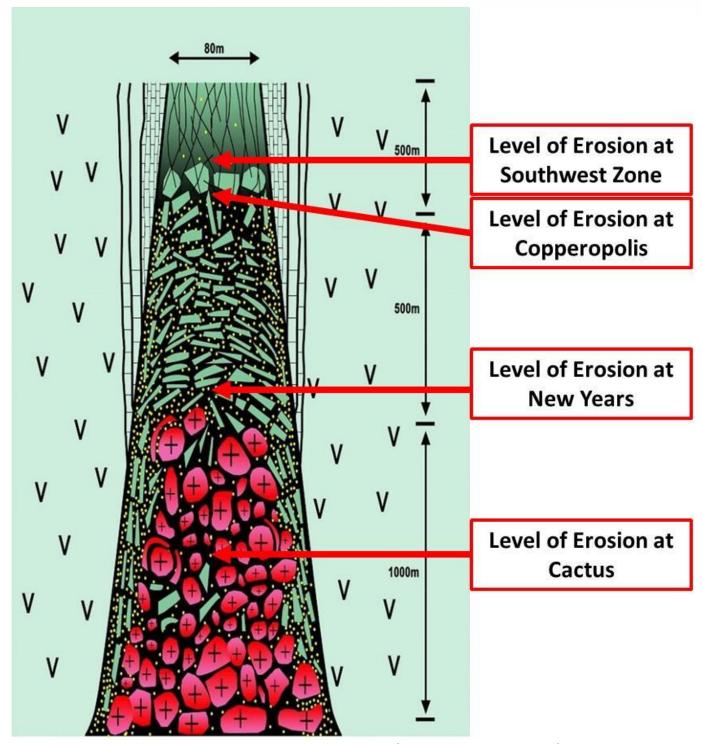


Figure 5: Conceptual model for a tourmaline breccia pipe (after Kirwin et al., 2017) showing the level of interpreted erosion at the various prospects. It appears that most of the Cactus Breccia has been eroded away while potential for higher tonnage exists at all the other prospects. The pale green represents the host rock, the black is tourmaline, the gold is chalcopyrite and other sulphides, and the pink is the causative intrusion.



## **Star Range Project**

The Company commenced field work activities at the Star Range project located approximately 25 km to the east of Frisco, including mapping, sampling and taking soil magnetic readings at the Copper King & Copper Queen prospects. The Company previously announced rock chip sampling results at Copper King & Copper Queen, and looks forward to releasing assay resuts in the coming weeks from the current program.

#### **CORPORATE**

In February 2019 the Company announced board and management changes consistent with its ongoing cost reduction program. Alderan's board and management is continuing is explore options to secure long term funding for exploration at Frisco, White Mountain and at Star Range, and continues discussions with a number of potential development partners.

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#### Please direct enquiries to:

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#### **Competent Persons Statement**

The information in this report as it relates to geological, geochemical, geophysical and exploration results was compiled by Mr Tom Eadie, FAusIMM, who is a Director of Alderan Resources Ltd. Mr Eadie has more than 20 years experience in the activities being reported on and has sufficient expertise which is relevant to the style of mineralisation and type of deposit under consideration to qualify as a Competent Person as defined in the 2012 edition of the JORC Code . He consents to the inclusion of this information in the form and context in which it appears in this report.

# **Forward Looking Statement**

Statements contained in this release, particularly those regarding possible or assumed future performance, costs, dividends, production levels or rates, prices, resources, reserves or potential growth of Alderan Resources Limited, are, or may be, forward looking statements. Such statements relate to future events and expectations and, as such, involve known and unknown risks and uncertainties. Actual results and developments may differ materially from those expressed or implied by these forward-looking statements depending on a variety of factors.