

# Rio Tinto commences Copper Gulch drilling at Alderan's Frisco Project

#### **HIGHLIGHTS**

- Rio Tinto subsidiary Kennecott Exploration Company (KEX) commences drilling on the Copper Gulch prospect at Alderan's Frisco project in Utah, USA.
- Copper Gulch lies 500m southwest of the Cactus Mine and is highlighted by drone magnetics and elevated copper in historical surface rock samples.
- The Copper Gulch anomaly is approximately 1,500m long and 500m wide.
- KEX has planned one 500m drill hole with a second to follow, dependent on results.
- Past drill holes on the margins of Copper Gulch target have copper and molybdenum mineralisation and porphyry style potassic alteration.
- Kennecott can earn up to 70% interest in Frisco through US\$30 million exploration spend over 10 years under its farm-in agreement with Alderan.

Alderan Resources Limited (ASX: **AL8**) (**Alderan** or the **Company**) is pleased to announce that Rio Tinto subsidiary Kennecott Exploration Company (**KEX** or **Kennecott**) is commencing drilling on the Copper Gulch prospect at Alderan's Frisco Project in Utah, USA.

Copper Gulch is a 1,500m long by 500m wide magnetic and copper geochemistry anomaly which lies approximately 500m southwest of the historical Cactus copper mine. Past KEX and Alderan drilling at Cactus includes intersections of 41m @ 1.9% Cu, 0.62g/t Au and 32m @ 1.2% Cu, 0.3g/t Au in tourmaline breccias<sup>1</sup>.

KEX identified the Copper Gulch target following processing and modelling drone (**UAV**) magnetic data collected over the Frisco project in 2021. The drone survey aimed to identify new magnetic targets and provide better resolution of existing targets<sup>2</sup>.

KEX has planned one hole to a depth of 500m to test the magnetic anomaly, with potential for a second hole pending positive results. KEX's first hole is expected to be completed in July with assays likely by early Q4, 2022. KEX will await the results of the drillhole before making a decision on whether a follow-up hole is warranted.

Frisco is the subject of an option agreement between KEX and Alderan's 100% subsidiary Volantis Resources Corp<sup>3</sup>. KEX can earn up to a 70% interest in Frisco by spending US\$30 million in three stages over 10 years.

Alderan Managing Director Scott Caithness said:

"Copper Gulch is an excellent porphyry copper target only 500m southwest of the copper-rich tourmaline breccias at Cactus. Depth slices through the modelled magnetics indicate that the anomaly becomes more prominent at depth with a classic high magnetic core ringed by a magnetic low zone. It is further enhanced by anomalous copper in historical surface rock sampling, porphyry style phyllic and potassic alteration plus pyrite, chalcopyrite and molybdenite mineralisation in peripheral historical holes. The anomaly itself has never been previously drilled.

"Kennecott's exploration at Frisco has delivered a high potential large scale porphyry target in a copper rich environment. It will be exciting to see the core as the hole progresses."

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<sup>&</sup>lt;sup>1</sup>Alderan ASX announcements dated 29 March 2018, 19 August 2020 & 11 March 2021 for further information.

<sup>&</sup>lt;sup>2</sup> Alderan ASX announcements dated 11 June 2021 & 21 January 2022 for further information.

<sup>&</sup>lt;sup>3</sup>Alderan ASX announcement dated 18 November 2019 for further information.



#### **Copper Gulch**

KEX identified the Copper Gulch target following completion of in-house processing and modelling of its drone magnetics and orthophoto surveys, field inspections and review of historical core from holes drilled on the margins of the target. The aerial surveys covered the majority of Sawmill Canyon, which hosts Cactus, in greater detail than previous aerial surveys with a total of 21.5km² flown for magnetics at 25m line spacing (see Figure 1). Results clearly define already known targets and highlight Copper Gulch.

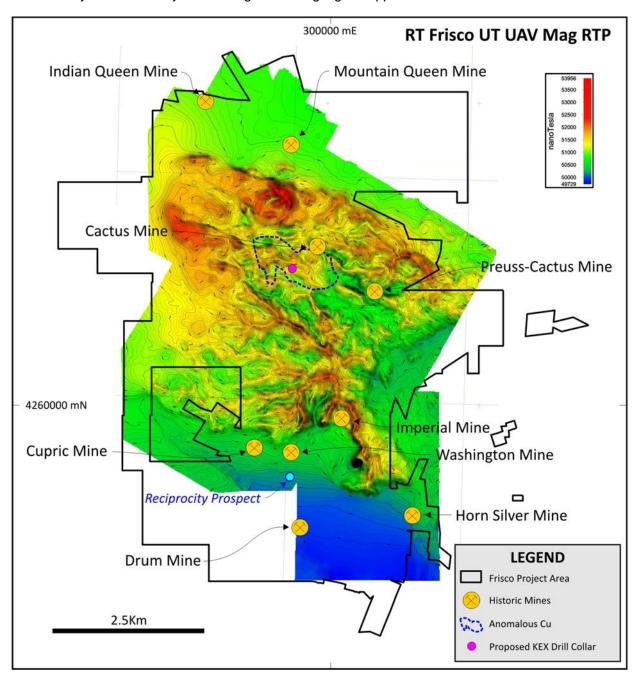


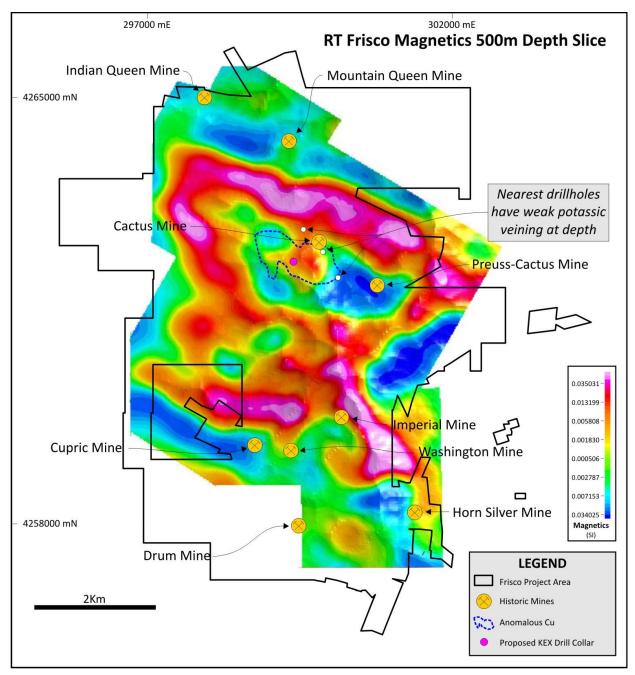
Figure 1: Frisco reduced to pole magnetics image highlighting the anomalous copper zone outlining the Copper Gulch target to the southwest of Cactus.

Copper Gulch is a 1,500m by 500m coincident magnetic high and copper rock sample anomaly. The magnetic anomaly becomes better defined at depth where a prominent magnetic high is circled by mag lows (see Figure 2). Historical surface rock samples contain anomalous copper and KEX surface mapping has identified mineralised and phyllic altered porphyry dikes. The anomaly has a similar NW-SE trend to other structures



observed including the Sawmill Canyon which hosts a number of copper and gold-rich tourmaline breccia pipes including Cactus.

Three historical holes have been drilled peripheral to the magnetic high anomaly. A KEX review of drill core from these holes identified potassic alteration and tourmaline breccias plus copper and molybdenum mineralisation in veinlets and along fractures typically associated with porphyry deposits. The most significant mineralised intercept was 30m @ 0.2% Cu from 640m downhole. The observations support the concept of a porphyry centre occurring below a large magnetic low. The magnetic lows surrounding the magnetic high are interpreted to represent potential Cactus tourmaline breccia type targets.



**Figure 2:** Depth slice 500m from surface of the Frisco magnetics highlighting the Copper Gulch target which is defined by a magnetic high and coincident anomalous copper zone.



### **Frisco Project**

The Frisco Project lies approximately 300km southwest of Salt Lake City in Utah (Figure 3) and contains numerous historical copper-gold and lead-zinc-silver mines such as the Horn Silver mine and the Cactus and Imperial copper mines. Mineralisation at Frisco consists of skarn or carbonate replacement deposits containing copper and other base and precious metals at Accrington, plus breccia-hosted copper-gold-silver mineralisation such as at Cactus Mine. Historical exploration has also intersected copper-molybdenum mineralisation within several deeper holes in Upper Cactus Canyon.

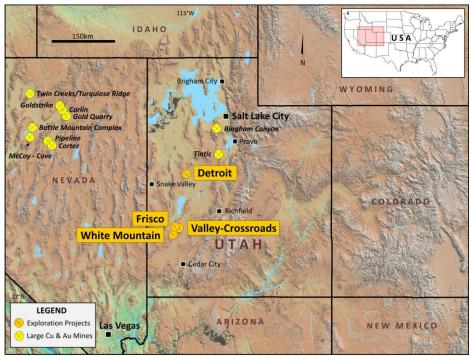


Figure 3: Alderan Resources project locations in western Utah.

Frisco was explored historically for copper and gold, including by Alderan, prior to signing an agreement with KEX in November 2019. Under the terms of the farm in agreement, KEX can earn up to a 70% interest in the project through spending US\$30 million on exploration in three stages over a total of 10 years. The first stage requires KEX to spend US\$6.0 million by November 2023 to earn a 55% interest.

KEX's exploration focus at Frisco is a porphyry copper-gold-molybdenum deposit.

KEX completed nine holes at Frisco with results for holes SAWM0001 to 0004 released by Alderan on 11 March 2021 and results for holes SAWM0005 to 0009 released on 11 June 2021.

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

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## ASX ANNOUNCEMENT 6 June 2022



#### **Competent Persons Statement**

The information in this announcement that relates to historical exploration results were reported by the Company in accordance with listing rule 5.7 on 29 March 2018, 5 August 2020, 19 August 2020, 18 November 2020, 11 March 2021 and 11 June 2021 and 21 January 2022. The Company confirms it is not aware of any new information or data that materially affects the information included in the previous announcements.