

ALDERAN COMMENCES DRILLING AT DETROIT PROJECT TARGETING CARLIN-LIKE GOLD MINERALISATION

HIGHLIGHTS

- Alderan commences drill program at the Mizpah prospect at Detroit Project, Utah after reviewing data from previous exploration, detailed geological mapping, rock chip assaying and ground magnetics.
- Alderan expects to drill at least 6 holes for 1,200m.
- Drilling will test gold sulphidisation after review of data confirmed most historic holes ended in mineralisation but stopped when sulphides were intersected.
- Previous drilling included 124 shallow vertical holes (2,889m) in the gold oxide cap, averaging 23m depth. Results cannot be released in compliance with the JORC Code 2012, due to poor historical records over the last 35 years.
- Drill program expected to be complete mid-November 2020 with assay results expected January 2021.

Alderan Resources Limited (ASX: AL8) (**Alderan** or the **Company**) is pleased to announce it has commenced drilling at the Mizpah prospect at the Detroit Mining Project, Utah, USA.



Figure 1: Drilling operations commence at Mizpah prospect

Alderan will drill a minimum of six holes for 1,200m in its maiden drill program at Detroit, aiming to test gold sulphidisation intersected which was identified by the Company's review of historical drilling at the project. The drilling will test the full thickness of the reactive "dirty limestone" stratigraphy beneath and down-dip of the Mizpah oxidised gold mineralisation, as well as known gold mineralised intrusives and skarns that are reflected in the ground magnetics.

The Detroit Project is located in the Drum Mountains, about 56km northwest of Delta, Utah, which is host to a range of mineralisation styles. Location of the range and adjacent areas is shown below (Figure 2). The focus of Alderan's exploration efforts at Detroit is to discover a Carlin-like gold deposit.

Key features¹ of Carlin-like deposits include:

- a) Favourable permeable reactive rocks (silty limestones and limey siltstones);
- b) Favourable structures often coincident with mineral-related intrusives;
- c) Gold-bearing hydrogeochemical hydrothermal solutions;
- d) Micron-sized gold in fine-grained disseminated pyrite;
- e) Common geochemical indicators As, Sb, Ba, Te, Se, Hg; and
- f) Common argillization and jasperoids; fairly common decalcification.

Alderan designed the drill program after a review of results from a ground magnetic program integrated with the surface geological and geochemical mapping at the Mizpah prospect identified two intense magnetic anomalies.

It expects first results from the drill program January, 2021.

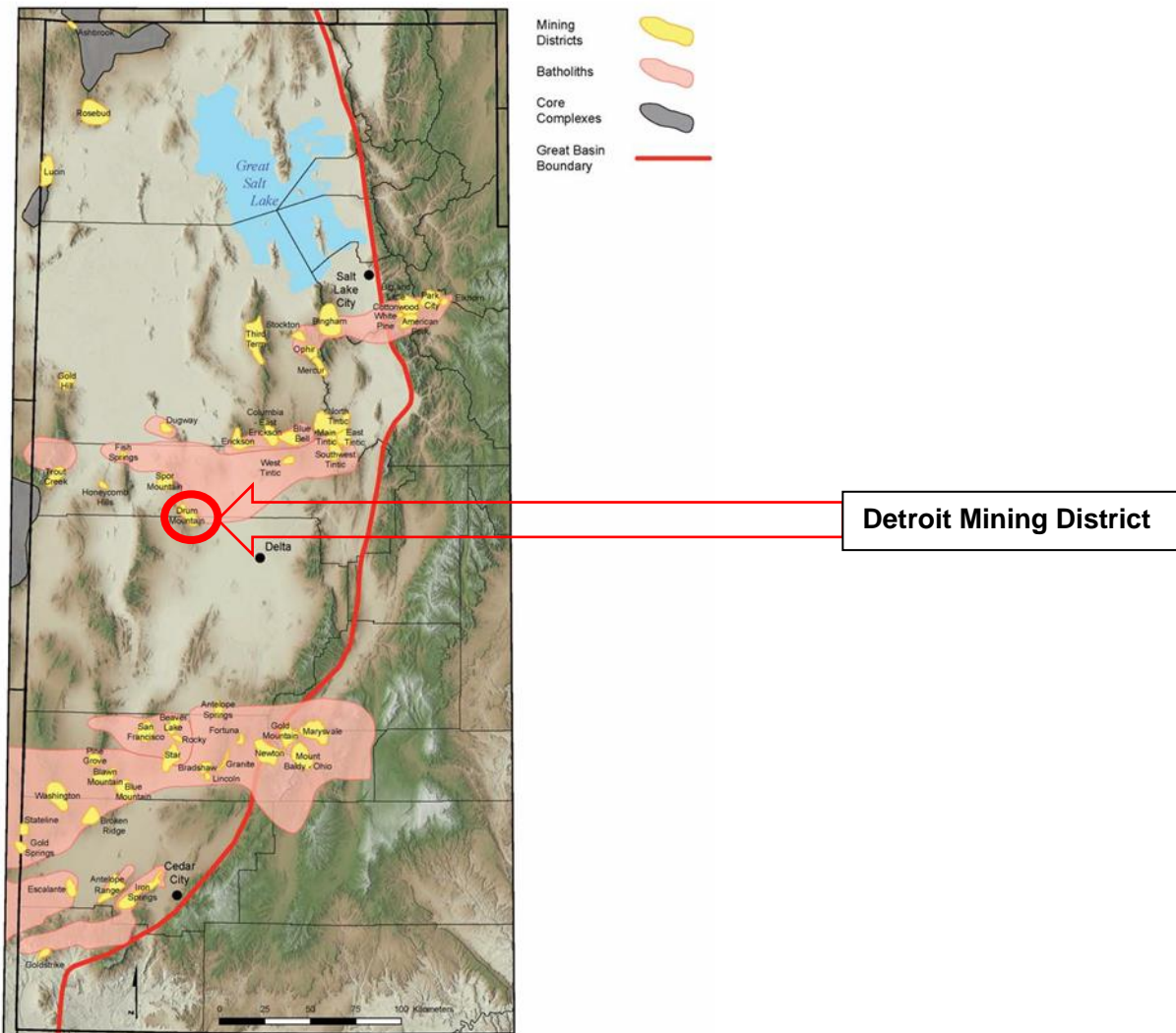


Figure 1b. Select Tertiary intrusive-related mining districts of the eastern Great Basin, modified from Doelling and Tooker (1983)

Figure 2: Detroit Project locality map

Background to Drum Mountains

The Drum Mountains of west central Utah have long been a subject of mining, targeting gold, copper, and manganese in the late 1800's and 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 (see ⁶, page 464).

Several samples of jasperoids similar to that which is commonly found in highly productive mining districts were collected in the Drum Mountains of Utah in 1963 as part of a study of the significance of jasperoid related to ore deposits ⁷. Later chemical analysis revealed that some of these samples contain as much as one-fourth of an ounce of gold per ton³ (7.7 g/t Au) as well as anomalous concentrations of other metals. Earlier reports (see ^{6,8}) indicated that gold production in the area was largely confined to the jasperoid.

Geochemical sampling in the Drum Mountains of Utah in the late 1960's^{3,4,7} revealed anomalous concentrations of gold in jasperoid outcrops. The gold-bearing jasperoids also contain anomalous amounts of other ore-stage metals and are useful guides to further exploration. Other elements detected include: Ag,

Bi, As, Sb (Antimony), Sn, Pb, Cu, Hg (mercury), and yttrium^{3,4,7,9}. None of these elements correlates strongly with the gold on a sample for sample basis. However, all give distribution patterns are broadly similar to that of gold. The similarity of geochemical patterns suggests a common origin of mineralizing solution or solutions throughout the area sampled.

Of 4,000 particles of gold studied by the USGS survey⁶, noted the small size of the gold particles in the samples that is similar to that found in the gold deposit at Carlin, Nevada, which previously had been noted as no pannelable gold was found in samples containing as much as 4 ounces of gold per ton.

Exploration for Carlin-type gold orebodies in the western United States typically involves sampling and analysis of jasperoid^{3,4,7,9}, a distinctive alteration type formed by intense silicification of marine sediments. In the study by Nelson⁹, rock suites were collected from six orebodies and four similar but barren systems. Jasperoids at all ten systems contain episodically silicified breccias, quartz vein stockworks, elevated As, Sb, Hg, Ba and Tl, and, locally, anomalous Au and Ag.

ENDS

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

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