Alderan Confirms Potassic Altered, Copper and Molybdenum Mineralised Porphyry at Detroit

HIGHLIGHTS

- **Alderan has identified copper and molybdenum mineralised potassic altered porphyry in core samples from hole DD20M-003 at Detroit using petrographic examination.**
- **The petrographic results confirm the Basin Main anomaly as a high priority porphyry copper-molybdenum prospect plus the potential of the larger Basin Complex for porphyry related copper and gold deposits.**
- **Preparations are underway for drilling at Detroit in September.**

Alderan Resources Limited (ASX:AL8) (**Alderan** or the **Company**) is pleased to announce results of petrographic examinations on 11 core samples from hole DD20M-003 at its Detroit Project in Utah, USA. This hole was drilled in 2020 during Alderan's seven-hole programme in and around the Mizpah gold prospect[1] (Figure 1) and prior to the ground magnetic survey which defined the Basin Main anomaly and the larger Basin Complex[2] (Figure 2).

Petrography has confirmed the samples consist dominantly of potassic altered porphyry overprinted by sericite, chlorite, carbonate and clay alteration. Copper (chalcopyrite, bornite, chalcocite & covellite) +/- molybdenum mineralisation occurs in all samples. The intensity of alteration and mineralisation increases with depth. The results are consistent with classic porphyry alteration and mineralisation zoning (Figure 3).

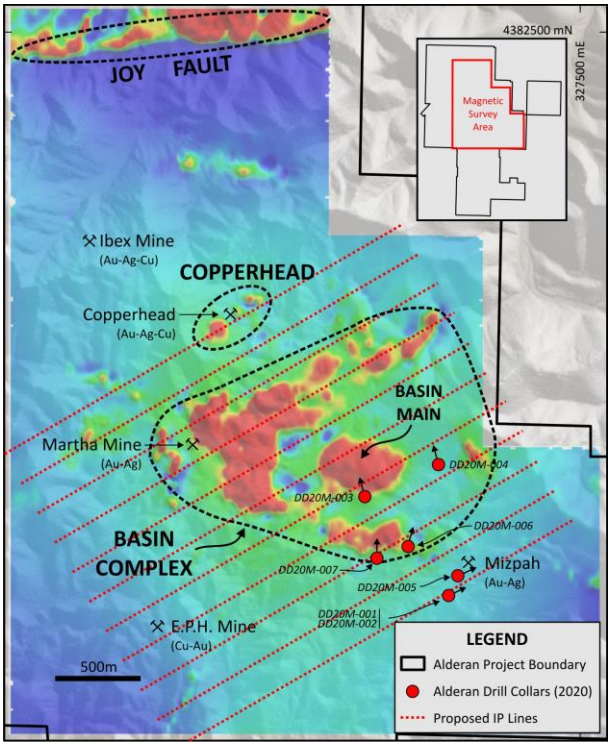

Figure 1 *(left): Detroit reduced to pole magnetics showing Basin Complex, Basin Main anomaly and Alderan drill holes.*

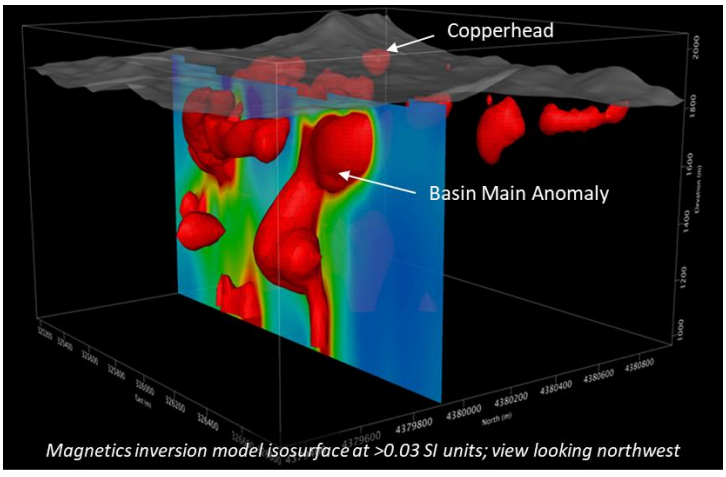

Figure 2 *(above): Basin Complex magnetic inversion model isosurface highlighting the Basin Main magnetic anomaly.*

[1] *Alderan ASX announcement 22 February 2021*
[2] *Alderan ASX announcement 11 May 2021*

Commenting on the results, Alderan Managing Director Scott Caithness said:

"Petrography on samples from hole DD20M-003 at Detroit reinforces our view that Basin Main is a high priority porphyry copper target within the larger Basin Complex. Results have confirmed increasing potassic alteration plus copper and molybdenum mineralisation closer to the modelled Basin Main magnetic anomaly. Additional distal disseminated, skarn and structure related prospects such as Copperhead, Southern Anomaly and Northern Extension have also been identified as high priority targets at Detroit[3]. Preparations are underway for Alderan to commence a drilling programme in September."

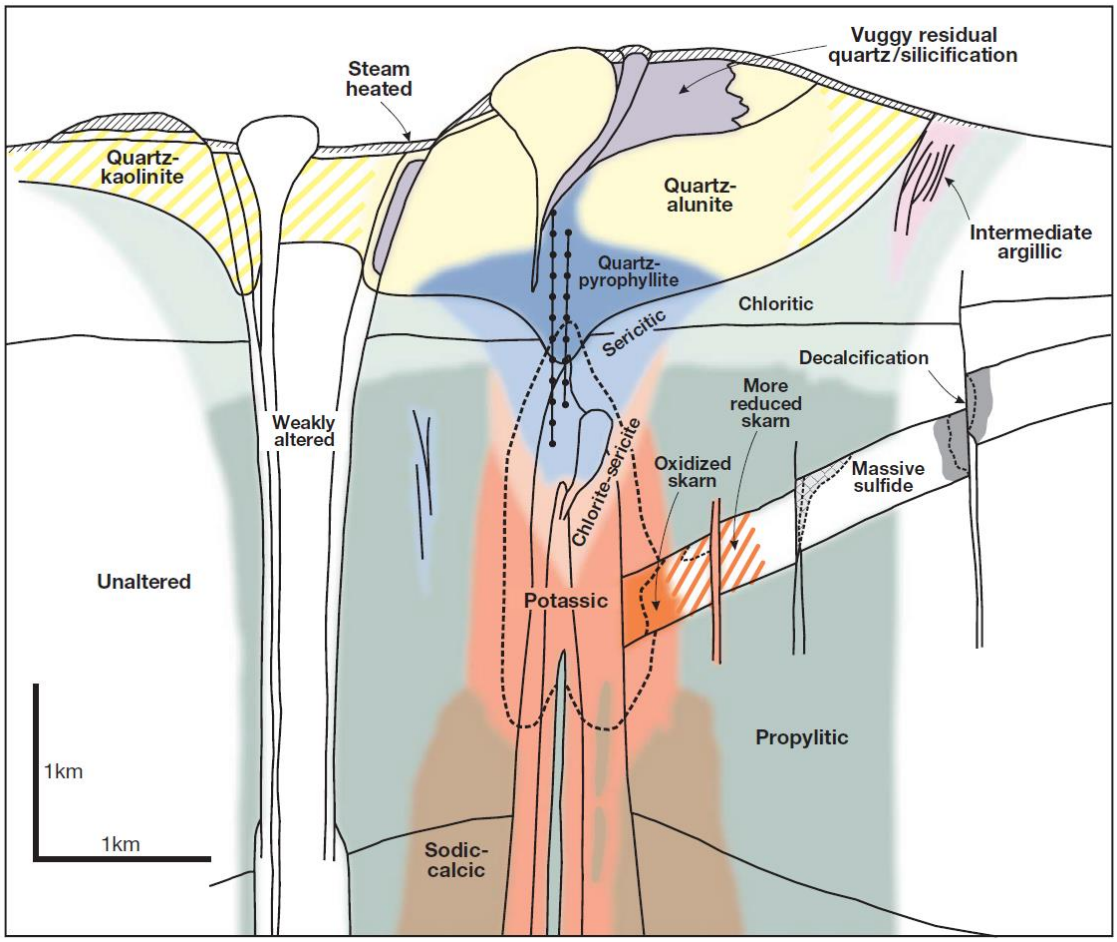

***Figure 3**: Generalised alteration-mineralization zoning pattern for telescoped porphyry Cu deposits.*
(From: Sillitoe, R. H.: Porphyry Copper Systems; Economic Geology v.105; 2010)

Discussion on Petrography

Petrographic examinations involve viewing thin sections of rock under a microscope to identify the individual minerals present and their relative volume so that rock type can be determined. It is commonly used to help identify original rock types particularly where rocks have been altered by later hydrothermal or metamorphic processes. It is also valuable in determining the alteration types and identifying mineralisation (Figures 4 & 5).

US petrographics consultant McComb Petrographics completed petrographic examinations on 11 pre-prepared thin sections of core from drill hole DD20M-003, one of Alderan's seven Mizpah drill holes completed in 2020.

The petrology aimed to identify rock types, alteration mineral assemblages and sulphide minerals down the hole as it moved towards the Basin Main magnetic anomaly which is interpreted to be the potassic altered core of the

[3] *Alderan ASX announcement 9 June 2021*

Basin Complex porphyry. The hole was drilled to a depth of 209.3m and the thin sections are from between 42m and 209m downhole.

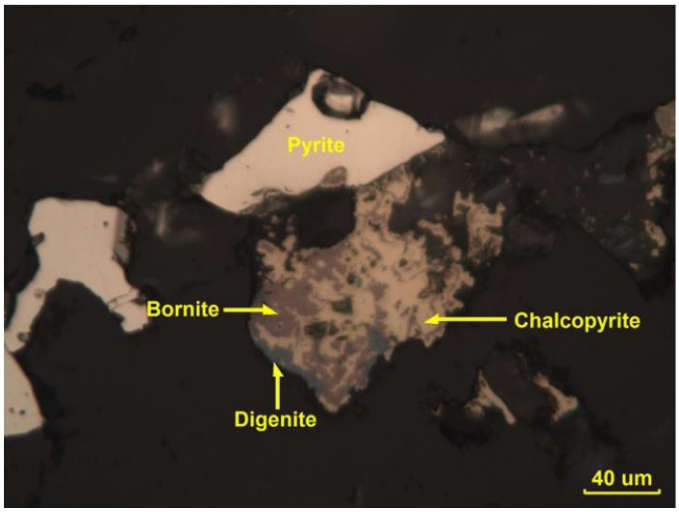

***Figure 4**: Photomicrograph from sample DS143 showing bornite grain being sulfidized to chalcopyrite and being replaced by later digenite (reflected light).*

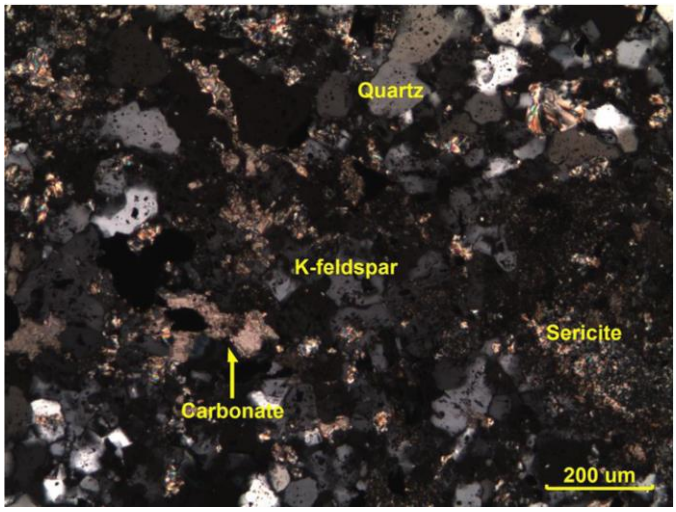

***Figure 5**: Photomicrograph from sample DS179 showing microcrystalline K-feldspar alteration is being overprinted by sericite and carbonate (transmitted light, cross-polars).*

The 3D inversion modelled Basin Main magnetic anomaly has dimensions of approximately 500m east-west, 300m north-south and extends to a depth of over 500m from surface. Hole DD20M-003 was not designed to test Basin Main and the anomaly was fully defined only following tenement consolidation which took place after completion of the drilling programme.

The hole was collared to the south of Basin Main and drilled to the north penetrating the modelled isosurface of the anomaly at approximately 150m below surface (Figure 6). Due to the angle of the hole and subvertical nature of the magnetic anomaly, it penetrated the modelled anomaly shell by a horizontal distance of only 15m.

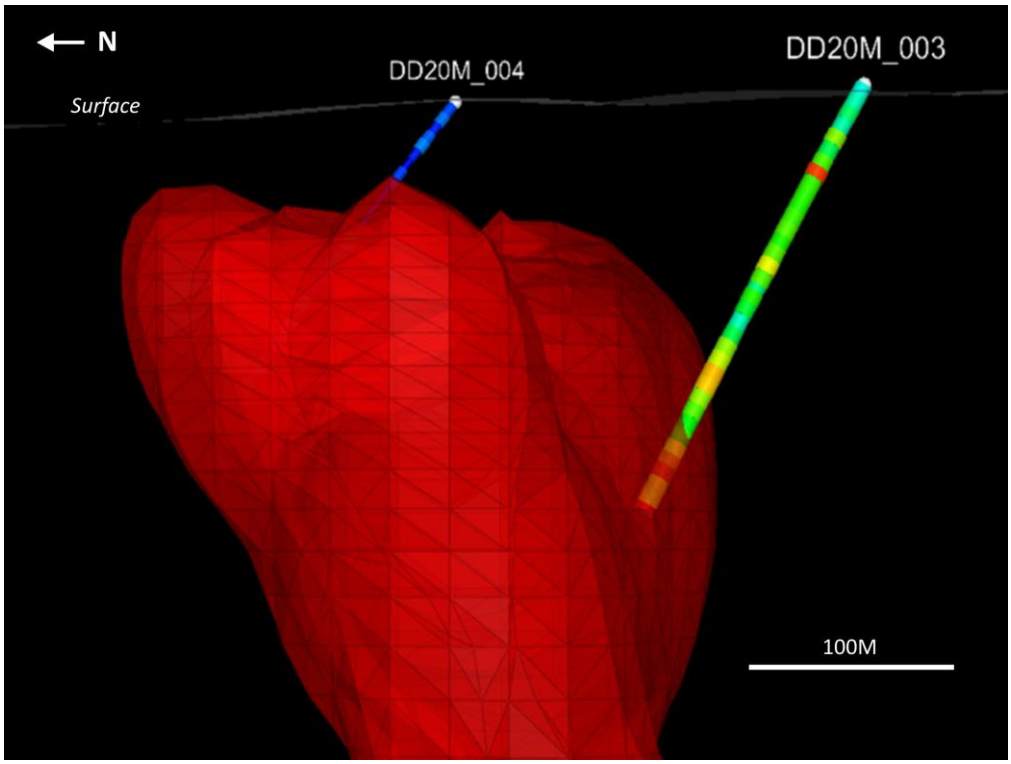

***Figure 6**: Basin Main magnetic anomaly inversion model isosurface showing the trace of hole DD20M-003 which enters the anomaly approximately 30m from the end of the hole; view looking east. (Note: Hole DD20M-004 is not drilled into the Basin Main anomaly)*

The McComb report states:

"All of the samples except DS120 are considered altered porphyry in thin section. DS120 is calcsilicate skarn/calc-silicate marble. Alteration in this suite of samples is generally quartz + K-feldspar + biotite + magnetite which are variably overprinted by sericite, chlorite, carbonate, and clay."

"Mineralization in this suite of samples is dominantly pyrite, which is interpreted to have been introduced during sericite, chlorite, and carbonate overprinting of potassic assemblages. Pyrite often contains tiny blebs of pyrrhotite and chalcopyrite, which is a characteristic seen in many different styles of deposits. Sulfides that most likely were introduced during potassic alteration include molybdenite, bornite, and some chalcopyrite. Chalcopyrite emplacement is interpreted to have continued during overprinting, as it was observed replacing bornite in DS143. It is common for bornite to sulfidize to chalcopyrite in porphyry deposits during sericitic overprinting of potassic alteration. The latest sulfides emplaced are chalcocite and covellite, which were seen rimming chalcopyrite in DS042 and DS071."

The report indicates that all rocks, with the exception of sample DS120, are identified as altered porphyry with potassic alteration (K-feldspar + biotite + magnetite) dominant (Table 1). The potassic alteration appears to intensify with depth. Pyrite and trace chalcopyrite occur in all samples. Chalcopyrite and molybdenum contents increase with hole depth which is consistent with laboratory analyses of core samples where the highest assays came from the bottom the hole as it entered the Basin Main anomaly.

***Table 1**: Summary results of the petrographic examination of the thin section samples in hole DDM20M-003.*

Sample	Depth	Lithology	Alteration	Mineralisation
DS042	42m	Altered Porphyry	Quartz + Biotite (Altered) + Minor Magnetite > Sericite + Chlorite + Clay	Pyrite; Trace Chalcopyrite; Minor Pyrrhotite, Covellite, Chalcocite & Molybdenite
DS071	71m	Altered Porphyry	Quartz + Biotite (Altered) + Minor Magnetite > Sericite + Chlorite	Pyrite; Trace Chalcopyrite; Minor Pyrrhotite, Chalcocite & Molybdenite
DS091	91m	Altered Porphyry	Quartz + Biotite + K-feldspar (?) + Magnetite > Sericite + Chlorite + Clay + Carbonate	Pyrite; Trace Chalcopyrite; Minor Pyrrhotite
DS120	120m	Calc-Silicate Skarn/Calc-Silicate Marble	Diopside + Phlogopite + Tremolite + Garnet	Pyrite; Trace Chalcopyrite
DS122	122m	Altered Diorite (?) Porphyry	Biotite + Minor Magnetite > Clay + Carbonate + Chlorite + Zeolite	Pyrite; Trace Chalcopyrite
DS143	143m	Altered Porphyry (Quartz Monzonite?)	Quartz + Biotite + K-feldspar + Magnetite > Chlorite + Carbonate + Sericite/Clay	Pyrite; Trace Chalcopyrite & Molybdenite; Minor Bornite
DS162	162m	Altered Porphyry (Quartz Monzonite?)	Quartz + K-feldspar + Biotite + Magnetite > Sericite + Chlorite + Carbonate + Epidote	Pyrite; Trace Chalcopyrite
DS179	179m	Silicified Porphyry	Quartz + K-feldspar + Magnetite + Biotite (?) > Sericite + Carbonate + Chlorite + Epidote	Pyrite; Trace Chalcopyrite
DS182	182m	Altered Porphyry	Quartz + K-feldspar + Biotite + Magnetite > Sericite + Chlorite + Carbonate	Pyrite; Trace Chalcopyrite & Molybdenite
DS192	192m	Altered Porphyry	Quartz + K-feldspar + Biotite + Magnetite > Sericite + Chlorite + Carbonate	Pyrite; Trace Chalcopyrite & Molybdenite; Minor Pyrrhotite
DS209	209m	Altered Porphyry	Quartz + K-feldspar + Biotite + Magnetite > Sericite + Chlorite + Carbonate	Pyrite; Minor Chalcopyrite

Detroit Project

The Detroit Project is one of four projects held by Alderan (Figure 7) in Utah, USA. It lies within the Detroit Mining District, approximately 175km southwest of Salt Lake City, and contains numerous historical copper, gold and manganese mines. The district has been explored for copper and gold in the past by major mining companies such as Anaconda Copper, Kennecott, Newmont, BHP and Freeport-McMoRan but no one company was able to build a significant contiguous land position to enable district-wide modern exploration. After consolidating the District, Alderan exploration has identified porphyry, distal disseminated, skarn and structure related copper and gold targets which are the focus of its ongoing work.

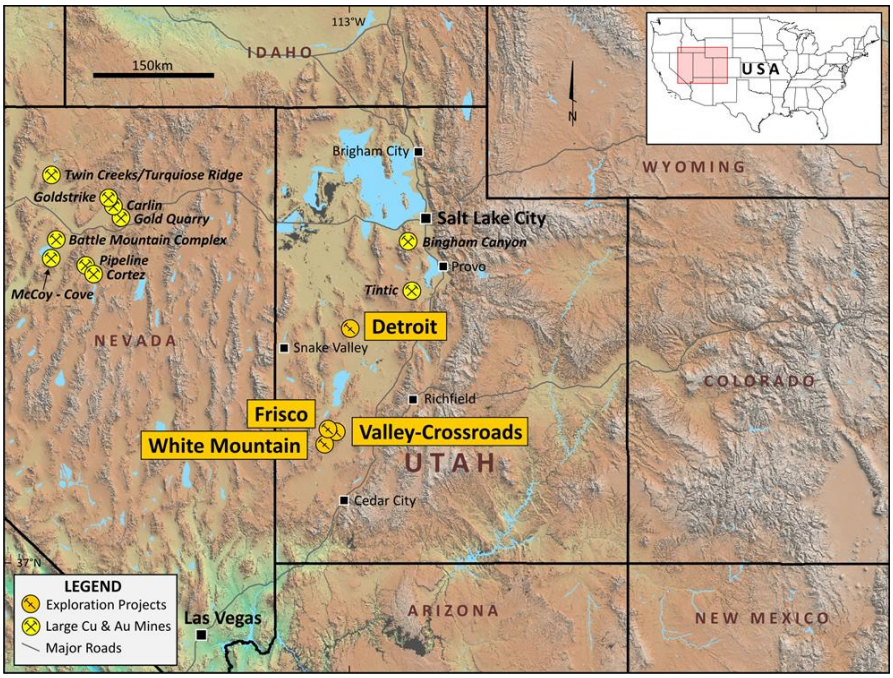

***Figure 7**: Alderan Resources project locations in western Utah.*

ENDS

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

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Competent Persons Statement

The information contained in this announcement that relates to new exploration results is based, 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.

The information in this announcement that relates to historical exploration results were reported by the Company in accordance with listing rule 5.7 on 9 June 2021, 11 May 2021 and 22 February 2021. The Company confirms it is not aware of any new information or data that materially affects the information included in the previous announcement.

Appendix 1: Drill Hole Location Details

Drill hole ID	***Target***	***Easting***	***Northing***	***Dip***	***Azimuth***	***Depth (m)***	***Drill Type***
*DD20M-003**	*Gold Skarn Target*	*326,248*	*4,379,773*	*-60*	*345*	*209.1*	*Diamond*

* *The exploration data presented in this announcement include results of the petrographic study undertaken using the diamond-drill core samples collected from the drillhole* ***DD20M-003*** *. The DD20M-003 location details are shown in the table above and have previously been released to the ASX on 22 February 2021.*

Appendix 2: JORC Code, 2012 Edition – Table 1 Report

Section 1 - Sampling Techniques and Data

(Criterial in this section apply to all succeeding sections)

Criteria of JORC Code 2012	***JORC Code (2012) explanation***	***Details of the Reported Project***
Sampling techniques	*Nature and quality of sampling (e.g. cut channels, random chips, or specific specialized industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.*	*The exploration data presented in this announcement include results of the petrographic study undertaken using the diamond-drill core samples collected from the drillhole DD20M-003.* *Initially the drill-core samples were collected for assaying for gold and trace elements. Sample widths vary from 1 to 3 meters dependent on observed geologic characteristics.* *The core was sawn or split in equal halves ensuring that geologic characteristics were represented equally in both the analytical sample and archive materials. Sample weights delivered to the analytical lab vary from 4 to 14 kilograms in weight.* *Additional samples were collected from the remaining half of the core, following the industry standard approach, assuring that sample is representative for the given rock.*
	Include reference to measures taken to ensure sample representativeness and the appropriate calibration of any measurement tools or systems used.	*HQ diameter drillcore was used for sampling. Sample length was 1 to 3 metres, that provides good representative material.*
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	*The drillcore samples are analysed for gold and multi-element geochemistry. Individual samples were selected based on their geological characteristics including lithology, alteration, and mineralization styles. Materials are being analysed at ALS North American facilities.* *The gold method being used is the ALS procedure that uses a 30-gram charge for fire assay (Au-AA23). Multi-element geochemical analysis will be completed on geologic composite that vary in width from 4 to 6 meters that development from remaining gold sample pulps. That ALS procedure for this is ME-MS61m.* *Petrographic study including macro-scoping and micro-scoping description. Microscopy included both, study using the transmitted and reflect light.*

Drilling techniques	*Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).*	*All core was of "HQ" diameter.*
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.*	*Core recoveries were measured by the geologist in charge of all logging. Core recovering for the entire program was excellent (> 98%).*
	Measures taken to maximize sample recovery and ensure representative nature of the samples.	*Industry standard practices, e.g. optimized drilling speed and regular changes of the drill bits, were used throughout to ensure no recovery or sample representation issues were encountered.*
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	*Not relationships observed between the core recovery and sample grades.*
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	*Geological, geotechnical, and geophysical (magnetic susceptibility) logging was completed on all of the core materials and is to an industry standard appropriate to the initial exploration nature of the program.*
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	*Geologic logging is qualitative to semi-quantitative making use of an experienced geologist and high-quality binocular microscope. Geotechnical and geophysical logging results are quantitative.*
	The total length and percentage of the relevant intersections logged.	*100% of the drill core was logged applying the same logging and documentation principles.*
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken*	*Drill core was sawn by a diamond saw and half core was sampled with remaining half core retained in the core trays.*
	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	*Not applicable, diamond drill core drilling was used.*
	For all sample types, the nature, quality, and appropriateness of the sample preparation technique.	*For the grade assays the samples are prepared in the ALS laboratory in USA. Sample preparation follows the standard procedure of the ALS lab, representing the industry common practice.* *Each sample was weighed, fine crushed to <2mm (70% pass) and split by a riffle splitter. The sample was then pulverized up to 250g at 85% < 75um.*

<table>
<tr>
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<table>
<tr><th colspan="2">SAMPLE PREPARATION</th></tr>
<tr><th>ALS CODE</th><th>DESCRIPTION</th></tr>
<tr><td>WEI-21</td><td>Received Sample Weight</td></tr>
<tr><td>LOG-22</td><td>Sample login - Rcd w/o BarCode</td></tr>
<tr><td>CRU-QC</td><td>Crushing QC Test</td></tr>
<tr><td>CRU-31</td><td>Fine crushing - 70% <2mm</td></tr>
<tr><td>PUL-QC</td><td>Pulverizing QC Test</td></tr>
<tr><td>SPL-21</td><td>Split sample - riffle splitter</td></tr>
<tr><td>PUL-31</td><td>Pulverize up to 250g 85% <75 um</td></tr>
<tr><td>CRU-21</td><td>Crush entire sample</td></tr>
<tr><td>LOG-24</td><td>Pulp Login - Rcd w/o Barcode</td></tr>
<tr><td>SND-ALS</td><td>Send samples to internal laboratory</td></tr>
</table>

Preparation for the petrographic study included cutting of the representative drill core sample from remaining half of the core, which was sent to the petrography consultant for preparation of the thin sections and polished blocks. This is a standard industry approach and doesn't require special description.
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<td>Quality control procedures adopted for all sub-sampling stages to maximise representativeness of samples.</td>
<td>The logging geologist supervised sample sawing and splitting to ensure all samples were geological representative. Quality of comminutions is verified by a control sieving, which is a standard procedure of the ALS laboratories.</td>
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<td>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</td>
<td>The diamond drill holes were oriented and drilled in such a way to attempt to cut inferred geologic controls (bedding, faults etc.) perpendicular to their strike in order to measure true thicknesses. The logging geologist supervised sample sawing and splitting to ensure all samples were geological representative.</td>
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<td>Whether sample sizes are appropriate to the grain size of the material being sampled.</td>
<td>Sample weight is in the range from 3 to 7 kg which is appropriate for mineralisation present in this project.

Weight and size of the sample used for petrographic study is irrelevant, because eventually the sample is used for making think section and polished blocks that are examined under the microscope.</td>
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<td>Quality of assay data and laboratory tests</td>
<td>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</td>
<td>Diamond drillcore samples were assayed at the ALS laboratory. The gold method being used is the ALS procedure that uses a 30-gram charge for fire assay, AKLS code is Au-AA23.

Multi-element geochemical analysis has been completed on geologic composite that vary in width from 4 to 6 meters that development from remaining gold sample pulps. That ALS procedure for this is ME-MS61m.</td>
</tr>
</table>

		ANALYTICAL PROCEDURES ALS CODE — DESCRIPTION ME-MS61 — 48 element four acid ICP-MS Hg-MS42 — Trace Hg by ICPMS — ICP-MS Au-AA23 — Au 30g FA-AA finish — AAS The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim 'or deposit has been determined based on the results of assays of multiple samples of geological materials collected by the prospective investor or by a qualified person selected by him/her and based on an evaluation of all engineering data which is available concerning any proposed project. Statement required by Nevada State Law NRS 519 *These are standard techniques commonly used for analysis of the gold mineralisation. 4acid digest assures a most complete nature of the assayed results* *Petrographic study was made by certified US consultant, Dr Mark McComb though his private consulting company, McComb Petrographics.*
	For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	*Not applicable. This ASX announcement reports only drilling data, portable XRF and geophysical instruments was not used.*
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	*Certified standard reference materials have been inserted in the sample sequence at a rate of two percent. These materials include certified gold pulps, blank pulps, and coarse blank materials. The logging geologist was responsible for the placement of these materials. Duplicate samples will be selected and submitted for analysis once initial gold results are received.* *For petrographic study, the quality control procedures are limited to photo-documentation of the petrographic observations.*
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	*Not applicable. The current announcement is reporting petrographic study results. Refer ASX announcement dated 22 February 2021 for drilling results for the project.*
	The use of twinned holes.	*Not applicable – no twinned holes are planned at the current exploration program. Twin holes will be used after economic mineralisation has been intersected.*
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	*Drillcore was rigorously documented by Alderan geologists. All field data are collected, entered into Excel spreadsheets and validated. Assay results have been obtained electronically from the ALS laboratory. All data are safely stored in the company office in Perth.*
	Discuss any adjustment to assay data.	*Not applicable – no adjustments made.*

Location of data points	*Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	*A handheld sub-meter GPS was used for collars and geochemical samples locating. Accuracy of the GPS based techniques was deemed sufficient given the initial exploration nature of the drill program.* *Location of the samples collected for petrographic study was accurately measured in the down-hole direction.*
	Specification of the grid system used.	*All data are recorded in a UTM zone 12 (North) NAD83 grid.*
	Quality and adequacy of topographic control.	*RL values obtained by GPS were routinely compared with the nominal elevation values that were deduced form the regional topographic datasets.*
Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	*Location and spatial distribution of the drillholes are applicable for assessment of a prospectivity of the project area but the data not suitable and was not intended to be used for quantitative assessments of the project, i.e. not intended for estimation of the Mineral Resources.*
	Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	*Location and spatial distribution of the drillholes are applicable for assessment of a prospectivity of the project area but the data not suitable and was not intended to be used for quantitative assessments of the project, i.e. not intended for estimation of the Mineral Resources.* *Distribution of the petrographic samples is adequate for description of the main types of the rocks and mineralisation intersected by the drillhole drilled into the proposed porphyry target.*
	Whether sample compositing has been applied.	*Sampled material was not bulked and/or composited in any of the physical manners.*
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	*The diamond drill holes were oriented and drilled in such a way to attempt to cut inferred geologic controls (bedding, faults etc.) perpendicular to their strike in order to measure true thicknesses. The logging geologist supervised sample sawing and splitting to ensure all samples were geological representative.*
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	*The diamond drill holes were oriented and drilled in such a way to attempt to cut inferred geologic controls (bedding, faults etc.) perpendicular to their strike in order to measure true thicknesses. The logging geologist supervised sample sawing and splitting to ensure all samples were geological representative.*
Sample security	*The measures taken to ensure sample security*	*Chain of custody was maintained at all steps of the drill and sampling procedure. Only authorised personnel handled or viewed the drill materials.*
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	*Not applicable – no audits.*

Section 2 - Reporting of Exploration Results

(Criterial in this section apply to all succeeding sections)

Criteria of JORC Code 2012	JORC Code (2012) explanation	Details of the Reported Project
Mineral tenement and land tenure status	*Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*	*All drill sites are located on unpatented lode claims subject to the terms of the Option to Joint Venture Agreement dated 10 April 2020 by and between Volantis Resources Corp. and Tamra Mining Company LLC. Locations are as follows: Site A – DM5; Site B-DM5; Site C-DM7; Site D-DM4; Site E-DM12; Site F-DM10; Site G-DM12: Site H-DM15; Site I-DM14.*
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.	*Title is maintained in accordance with the General Mining Act of 1872 and its associated regulations. The claims are valid and in good standing. The claims have been properly located and monumented. The claims may be freely transferable under the terms of the Option Agreement, subject only to the paramount title of the United States of America.*
Exploration done by other parties (2.2)	*Acknowledgment and appraisal of exploration by other parties.*	*The Drum Mountains of west central Utah have long been a subject of mining and exploration for gold, copper, and manganese, starting from 1800's and continued until 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 was produced from siliceous replacement fissure deposits in jasperoids, limestone and dolomite, for a total value of about $46,000.* *Exploration for gold and base metals intermittently continued through the entire 20's century. In particular, since early 1960's, when jasperoids similar to that commonly found in highly productive gold mining districts have been identified in the Drum Mountains of Utah, the specialised studies of the jasperoids have been undertaken by USGS and the different mining companies. Sampling of these rocks commonly reveals anomalous concentrations of gold.*
Geology	*Deposit type, geological setting, and style of mineralisation.*	*The mineralisation presented at the Drum area includes different types and mineralisation styles, main of which are Carlin-like gold, gold-bearing skarns, Cu-Mo-Au porphyries, and Marigold-type.* *The focus of Alderan's exploration efforts at Detroit is to discover a Carlin-like gold deposit. Key feature of Carlin-like deposits includes:* *a) Favorable permeable reactive rocks (silty limestones and limey siltstones)* *b) Favorable structures often coincident with mineral-related intrusive* *c) Gold-bearing hydrothermal solutions* *d) Micron-sized gold in fine-grained disseminated pyrite*

		e) Common geochemical indicators As, Sb, Ba, Te, Se, Hg *f) Common argillization and jasperoids; fairly common decalcification.* *Other types of mineralisation, representing exploration targets of Alderan in the Drum mountains area includes:* *1. Intrusion hosted/related gold mineralisation positions.* *2. Marigold style brecciated quartzites, which can spatially associate with the Carlin-like mineralisation.* *3. Magnetite copper-gold skarns that were identified through the ground magnetics.*
Drill hole Information	*A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*	*The drillhole DD20M-003 was used for petrographic studies. Refer Appendix 1 for all relevant drill hole information.*
	Easting and Northing of the drill hole collar. Elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar.	
	Dip and azimuth of the hole.	
	Down hole length and interception depth and *hole length.*	
	If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	*The drillhole information presented in the releases is adequately reported in the summary table shown at Appendix 1.*
Data aggregation methods	*In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.*	*Length weighted average was used for estimation the grade of the intersection.* *The samples grade of the mineralised interval varied from 0.04 to 1.15 g/t.* *No top cut was used at this stage given the relatively uniform low-grade characteristics of the mineralization.*

<table>
<tr><td></td><td>Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</td><td>Not applicable. This ASX announcement reports petrographic results. The data at this stage of exploration are insufficient for analysis relationships between thickness and grade of mineralisation.

The average grade of the intersections was estimated using length weighted method. Low- and higher-grade samples were approximately 2m long.

Example of the aggregation is shown in the table below, where the samples are arranged in the grade increasing order.

<table>
<tr><th>metre</th><th>Au ppm</th></tr>
<tr><td>2.00</td><td>0.043</td></tr>
<tr><td>0.84</td><td>0.105</td></tr>
<tr><td>2.06</td><td>0.111</td></tr>
<tr><td>1.48</td><td>0.358</td></tr>
<tr><td>1.46</td><td>0.408</td></tr>
<tr><td>1.22</td><td>0.411</td></tr>
<tr><td>2.36</td><td>0.437</td></tr>
<tr><td>1.88</td><td>1.155</td></tr>
</table>
</td></tr>
<tr><td></td><td>The assumptions used for any reporting of metal equivalent values should be clearly stated.</td><td>Not applicable, this ASX announcement reports the gold grade of single intersections.</td></tr>
<tr><td rowspan="3">Relationship between mineralisation widths and intercept lengths</td><td>These relationships are particularly important in the reporting of Exploration Results.</td><td>The diamond drill holes were oriented and drilled in such a way to attempt to cut inferred geologic controls (bedding, faults etc.) perpendicular to their strike in order to measure true thicknesses.</td></tr>
<tr><td>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</td><td>True width of mineralisation is not known.</td></tr>
<tr><td>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. ‘down hole length, true width not known’).</td><td>True width of mineralisation is not known. However, because the drilling was oriented approximately perpendicular to the strike of the exploration targets it is assumed that reported intersections of pyrite mineralised intervals are closely approximate their true thickness.</td></tr>
</table>

Diagrams	*Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	*Maps and tables are presented in the text of the release.*
Balanced reporting	*Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	*All new results are presented in the release and summarised in the tables and presented on the maps. These include results of the petrographic study results from drill hole DD20M-003 drilled by Alderan at the Drum - Detroit area. Full results from this drilling program were released on 22 February 2021.* *The announcement includes results of the petrographic study from the drill core of DD20M-003 which are summarised and reported concisely.*
Other substantive exploration data	*Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	*This announcement is focused on presenting the results of the petrographic studies. Obtained results and photomicrographs are presented in the main body of the announcement. Notable, that the assemblages of the hydrothermal alteration (K-spar, biotite, sericite) and the related sulphide mineral parageneses, in particular broad distribution of the disseminated sulphides, containing bornite, chalcopyrite and molybdenite, are indicative of the peripheral parts of the buried porphyry system.*
Further work	*The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	*The petrographic study results concur with interpreted porphyry target. Next phase of exploration is currently planned and will be announced separately.*