Alderan stream sediment/BLEG survey on Drum Mountains shows extensive highly anomalous polymetallic mineralisation

HIGHLIGHTS

- **As part of Alderan's first pass assessment of the Drum Mountains, it completed a high quality, multi-element stream sediment survey over its new Drum tenement holding, with remote planning, supervision and execution.**
- **Survey defined highly anomalous catchments outside of current drilling, anomalous in Au, As, S, Sb, Hg, Cu, Ag, Te, Tl and Mo over signficant area.**
- **Multi-element response indicates the likelihood of Intrusive related, distal disseminated precious metal deposits – potential Carlin-like mineralisation.**
- **Elements added to host rocks in all Carlin-like deposits include Au, As, S, Sb, Hg, and Tl.**
- **These results support the findings of the first pass drill program, including 6.9m @ 1.98 g/t Au and 83m @ 0.41 g/t Au, as reported on 22 Februay 2021.**
- **3d IP and ground magnetic surveys have now been planned and will be executed as soon as weather conditions permit, expected to be within 4 weeks. Drilling is planned to start mid June.**

Alderan Resources Limited (ASX: AL8) (**Alderan** or the **Company**) is pleased to provide results from a high density, high sensitivity, multi-element bulk leach extraction gold (**BLEG**) survey over its recently acquired continuous leases in the Drum Mountains, adjacent to the Detroit Mining gold/copper/molybdenum project (**Detroit Mining Project**) in Utah, USA.

Alderan is earning up to 70% of the Detroit Mining Project through an agreement with Tamra Mining LLC but executed three property deals[1] in areas surrounding the project to increase its land position to 24.7km^2.

STREAM SEDIMENT/ BLEG SAMPLING

As part of Alderan's appraisal of the Drum Mountains, an extremely high-quality, high sensitivity, geochemical sampling of all of the streams (BLEGS/Stream Sediment Survey) that drain from the Drum Mountains has been undertaken (Refer figures 1-11).

There are many stream sediment sampling techniques. The one deployed for Alderan builds off the Guyana Geological Survey technique that utilizes a composite sample, the use of flocculated fines and submission of samples to an extremely high-quality laboratory for bulk leach extraction gold (BLEG) to 0.1ppb Au and a broad suite of commodity and pathfinder elements at very low detection limits using Aqua Regia and a mass spectrometer (ICP-MS and ICP-OES).

Sample sites were pre-planned through the use of high-resolution satellite imagery (NAIP + Bing Maps) and a digital elevation model (NED-5m). The stream sediment survey was extremely detailed. The smallest catchment was only 0.3km^2, the largest, that tested off lease to the SW a modest 21.96km^2.

[1] *Refer ASX announcement dated 11 February 2021.*

Some stream sediment sites were deliberately located immediately downstream of drilling and mining activity to assist with characterising the multi-element signature and signal tenor emanating from known mineralisation and areas of interest.

All samples were sent to Perth, Western Australia for analysis by Bureau Verita. Thresholds were determined for all elements prior to plotting using Log probability plots and looking for natural breaks. The stream sediment data has been reconciled against rock chip and historic shallow mining. BLEG Au has highest correlation with: Cu, Fe, Mn, S, As, Hg, Pb, Te, Tl, U.

Palaeozoic carbonates (limestones and dolomites) across the breadth of the Great Basin (USA) for all intents and purposes are devoid of gold - <0.005 ppm. Exceptions, insignificant volumetrically, are very rare, thin, "Exhalative Horizons" that occur in deeper parts of the Palaeozoic basin west of the Carlin Trend in North-Central Nevada. Intrusives and related volcanics of all ages in the same space are also devoid of gold - <0.010 ppm.

The BLEG survey results support other exploration data, including the mapping and sampling outcrops of the altered rocks that has identified a wide abundance of the gold-bearing jarocite including the high-grade occurrences (Fig. 2). In general, the different exploration data support there being a strong likelihood of:

1. An extensive Carlin like gold mineralising system
2. Porphyry intrusive sytems.

Within the Drum Mountains. These results build on the first pass drilling program (6 hole), completed by Alderan. These results include **6.9m @ 1.98 g/t Au and 83m @ 0.41 g/t Au**[2].

Next steps

Alderan has planned the following next steps:

1. Detailed geological mapping of all exisiting historical mines and surrounding areas (started, in progress now), focussing in identified target areas;
2. 3D IP surveying, scheduled to start as soon as weather clears and contractor availability. Expected to be within 4 to 5 weeks;
3. 3d Ground Magnetic surveys which may start before the 3d IP surveying;
4. Soil Geochemical Program; and
5. Drilling, and to this end a contractor has been booked to start mid June, 2021.

Peter Williams, the Managing Director of Alderan, stated *"The BLEG Stream Sediment survey results have effectively lit up the potential of the Drum Mountains, confirming the previous geological mapping, rock chip sampling and drilling completed by Alderan. This is history in the making."*

[2] *Refer ASX announcement dated 22 February 2021.*

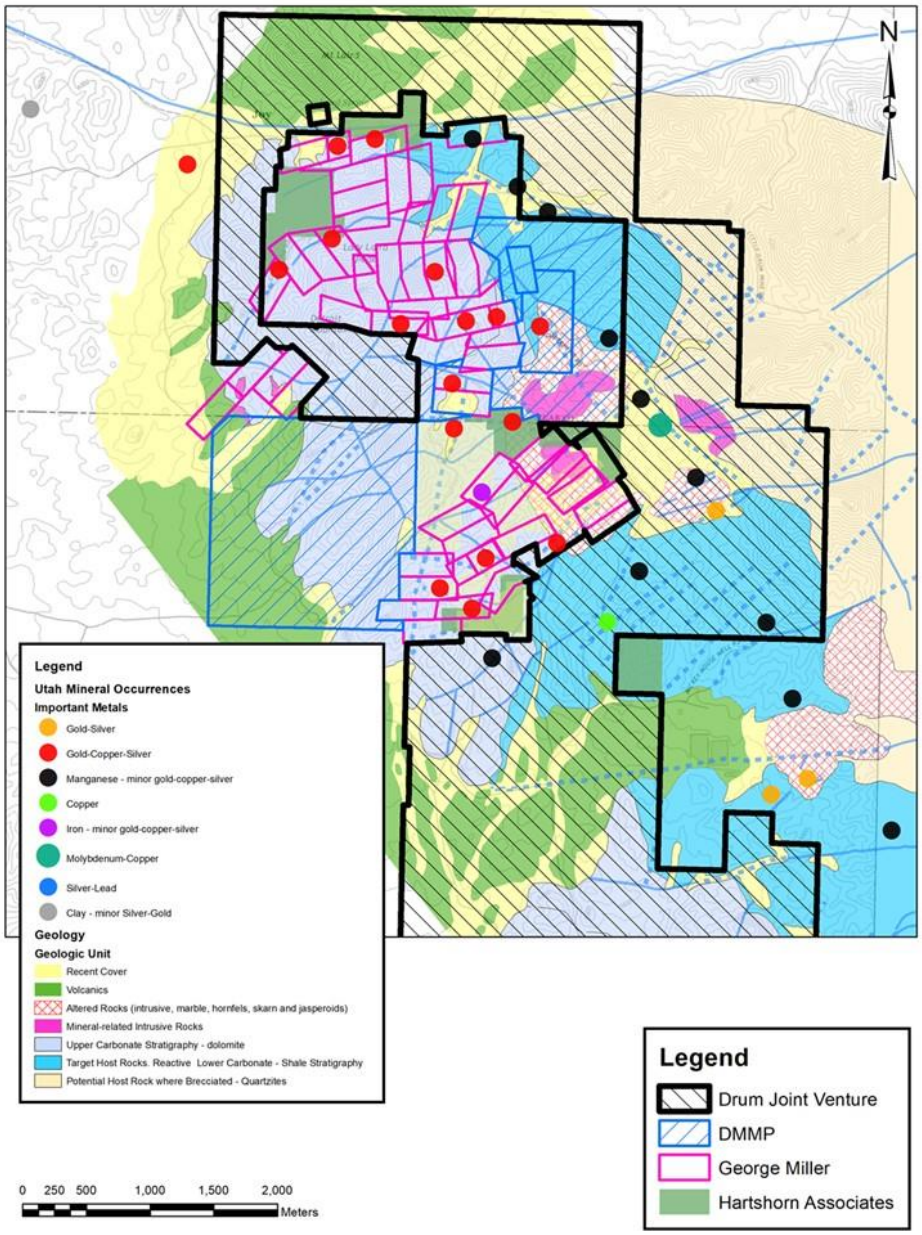

Figure 1: *Simplified Geology (focus on reactive stratigraphy) plus metal zonation as suggested by Utah Mineral Occurrences.*

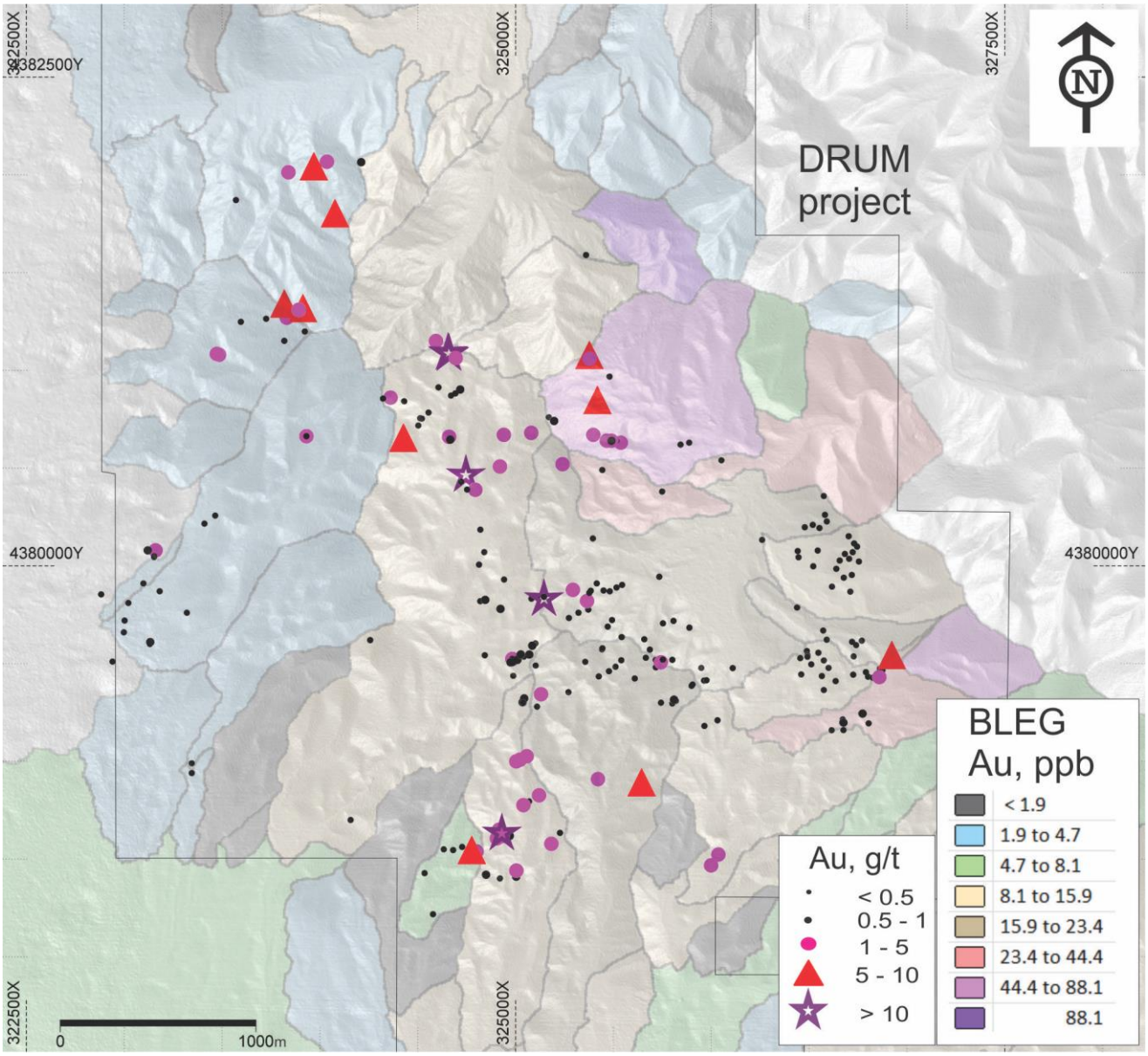

Figure 2: *Map summarising the geochemical exploration for* ***Gold*** *in the Drum project area. Stream Sediment BLEG results for* ***Gold*** *are shown as polygons representing the catchment areas. Abundance of the high-grade gold rock chips that are broadly coincident with the BLEG results is notable and highlights prospectivity of the area for* ***Gold*** *deposits.*

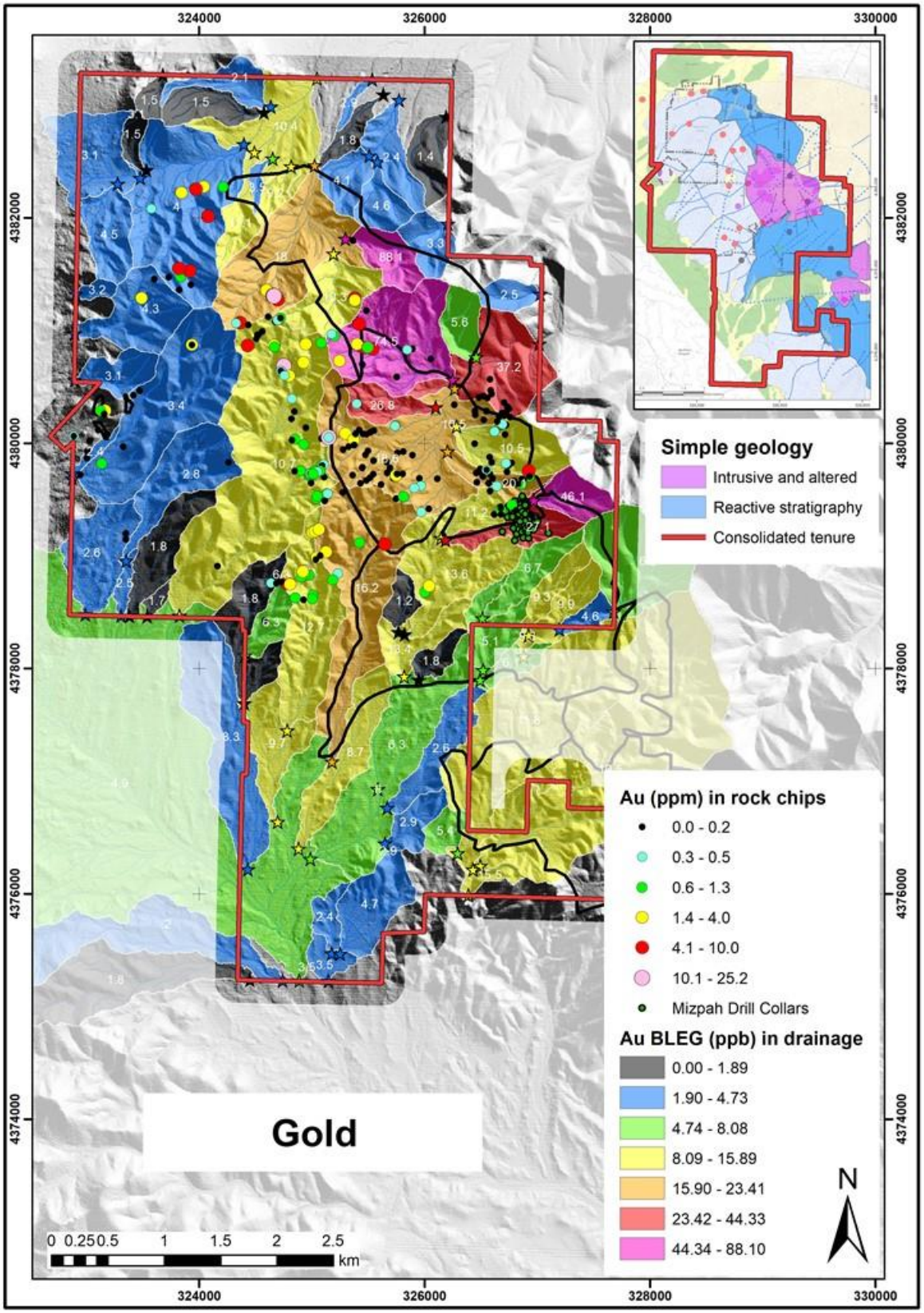

Figure 3: *The catchment areas of BLEG results for* ***Gold*** *coupled with the geological data with emphasis onto the reactive stratigraphy (black polygons) and intrusive/altered rocks (see coloured inset, top right).*

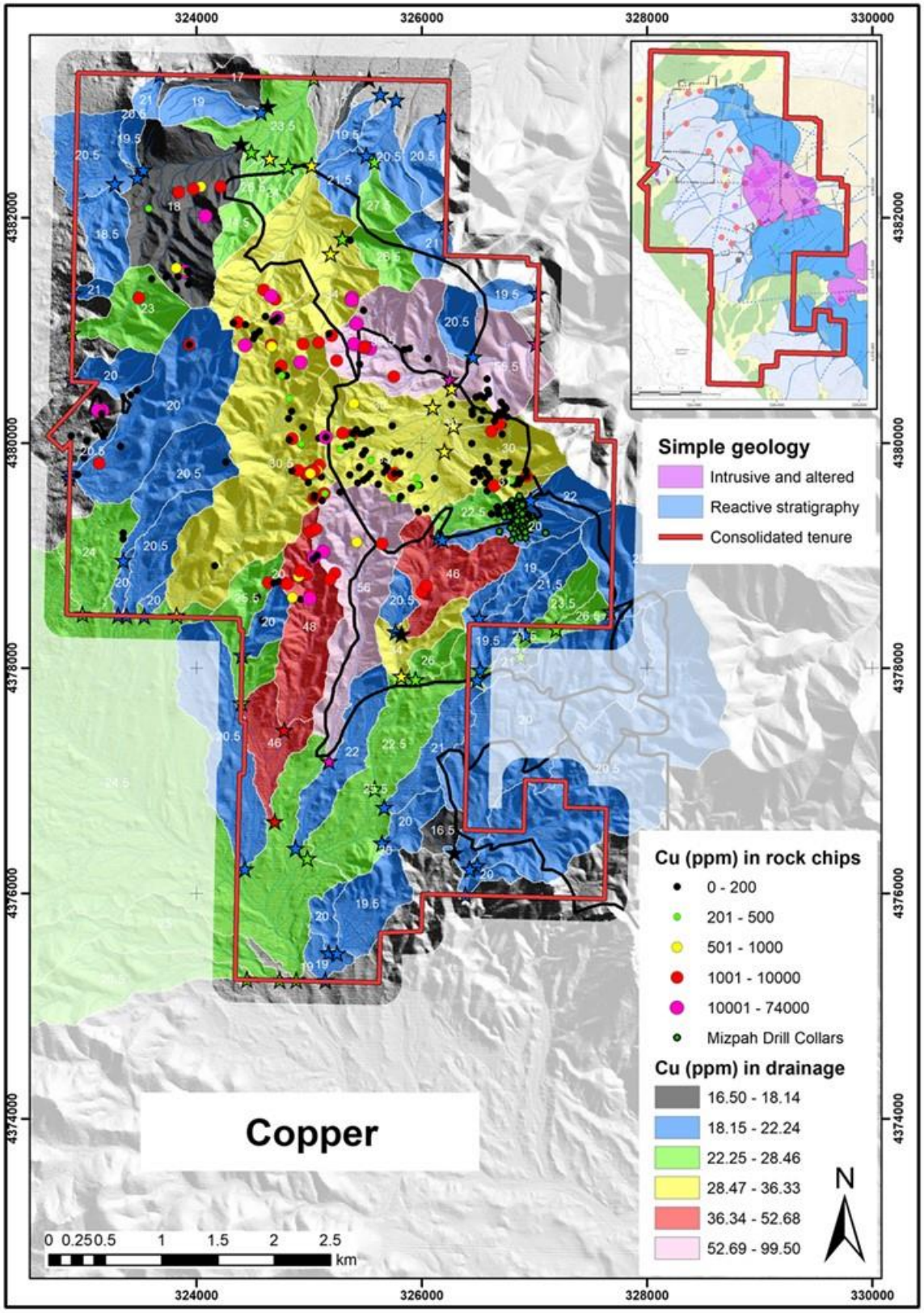

Figure 4: *Stream Sediment BLEG results for* ***Copper*** *with polygons representing the catchment areas. Black coloured polygons (not coloured), represent the interpreted of reactive stratigraphy and intrusive/altered rocks (see coloured inset, top right).*

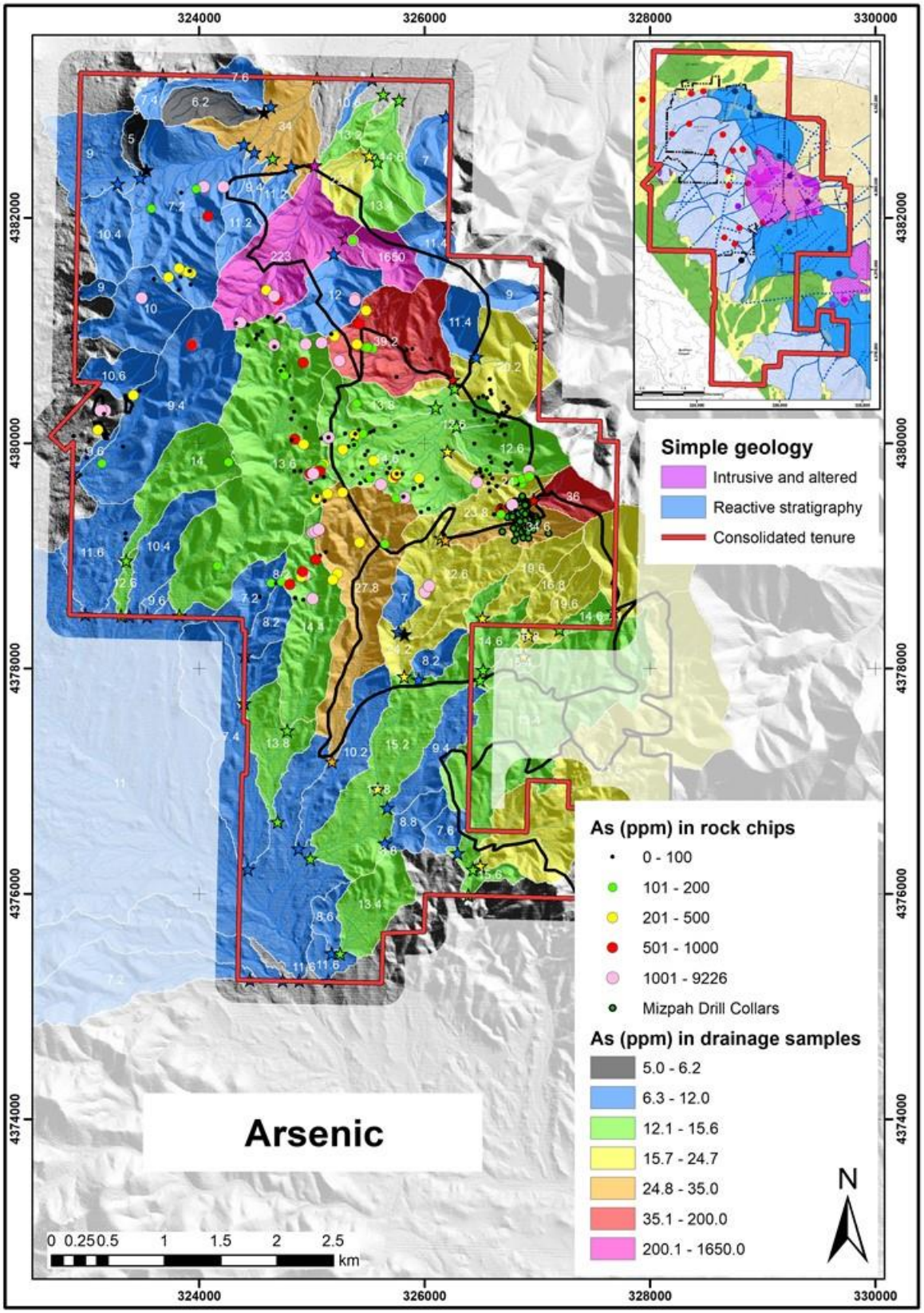

Figure 5: *Stream Sediment BLEG results for* ***Arsenic*** *with polygons representing the catchment areas. Black coloured polygons (not coloured), represent the interpreted of reactive stratigraphy and intrusive/altered rocks (see coloured inset, top right).*

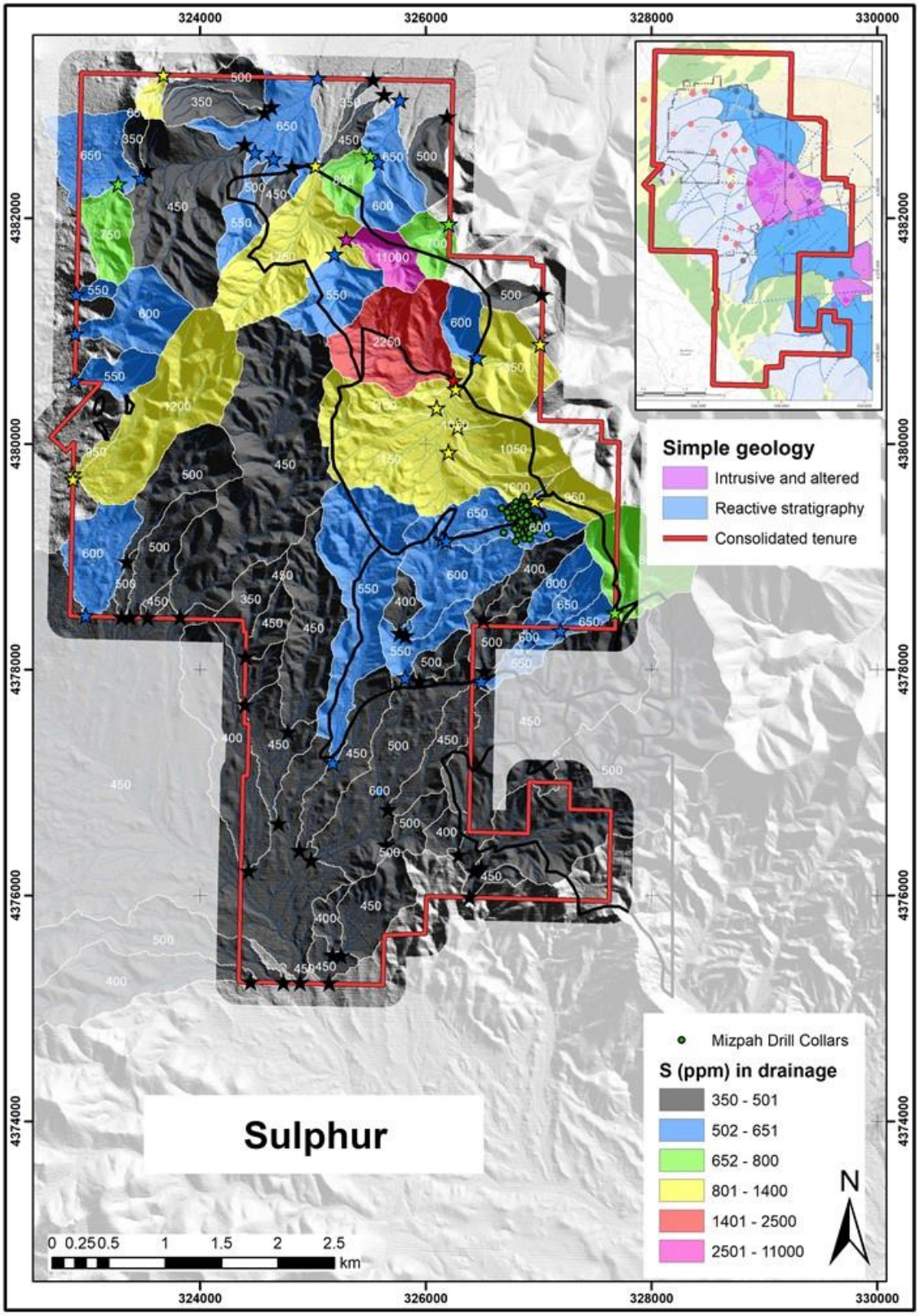

Figure 6: *Stream Sediment BLEG results for* ***Sulphur*** *with polygons representing the catchment areas. Black coloured polygons (not coloured), represent the interpreted of reactive stratigraphy and intrusive/altered rocks (see coloured inset, top right).*

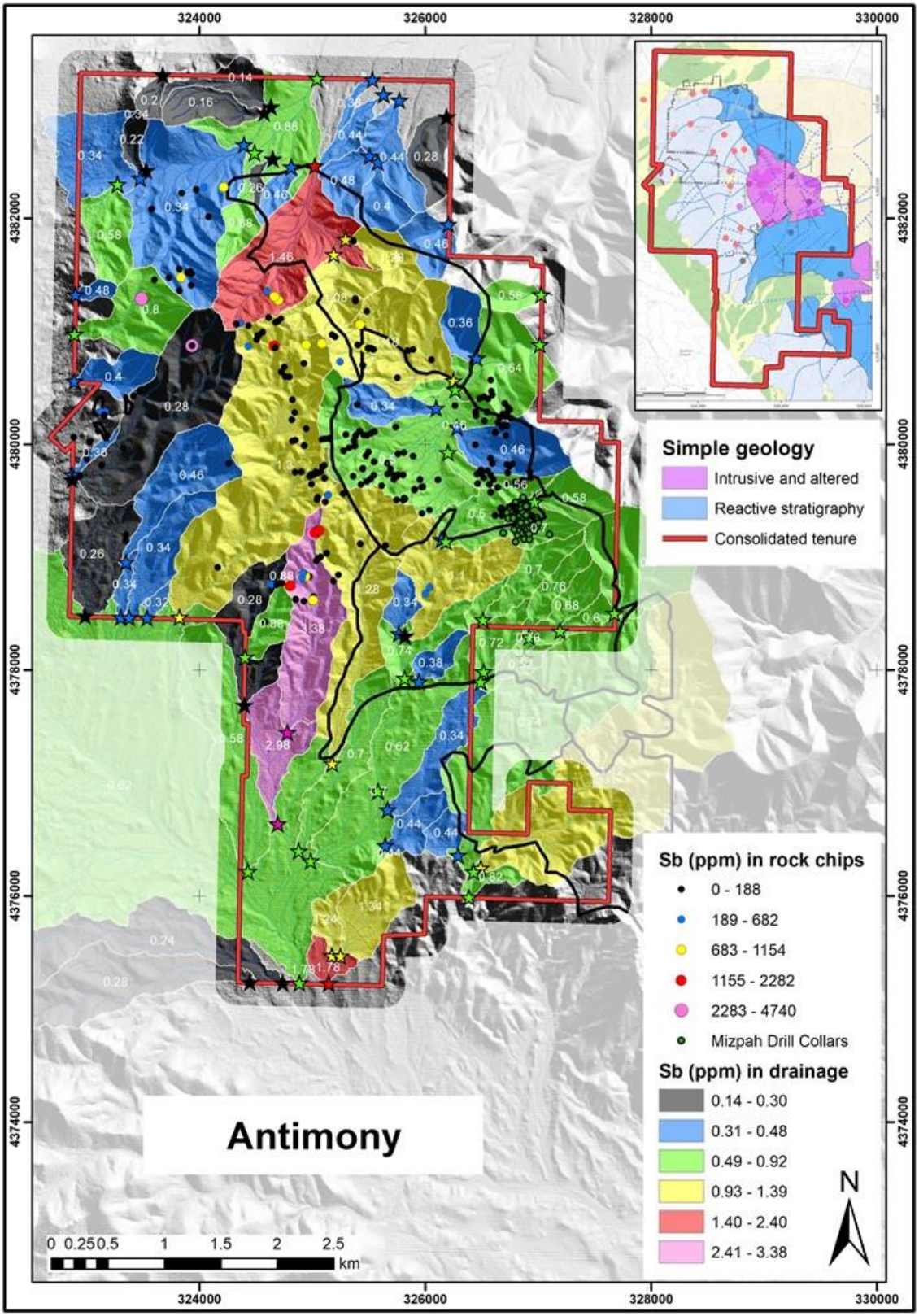

Figure 7: *Stream Sediment BLEG results for* ***Antimony*** *with polygons representing the catchment areas. Black coloured polygons (not coloured), represent the interpreted of reactive stratigraphy and intrusive/altered rocks (see coloured inset, top right).*

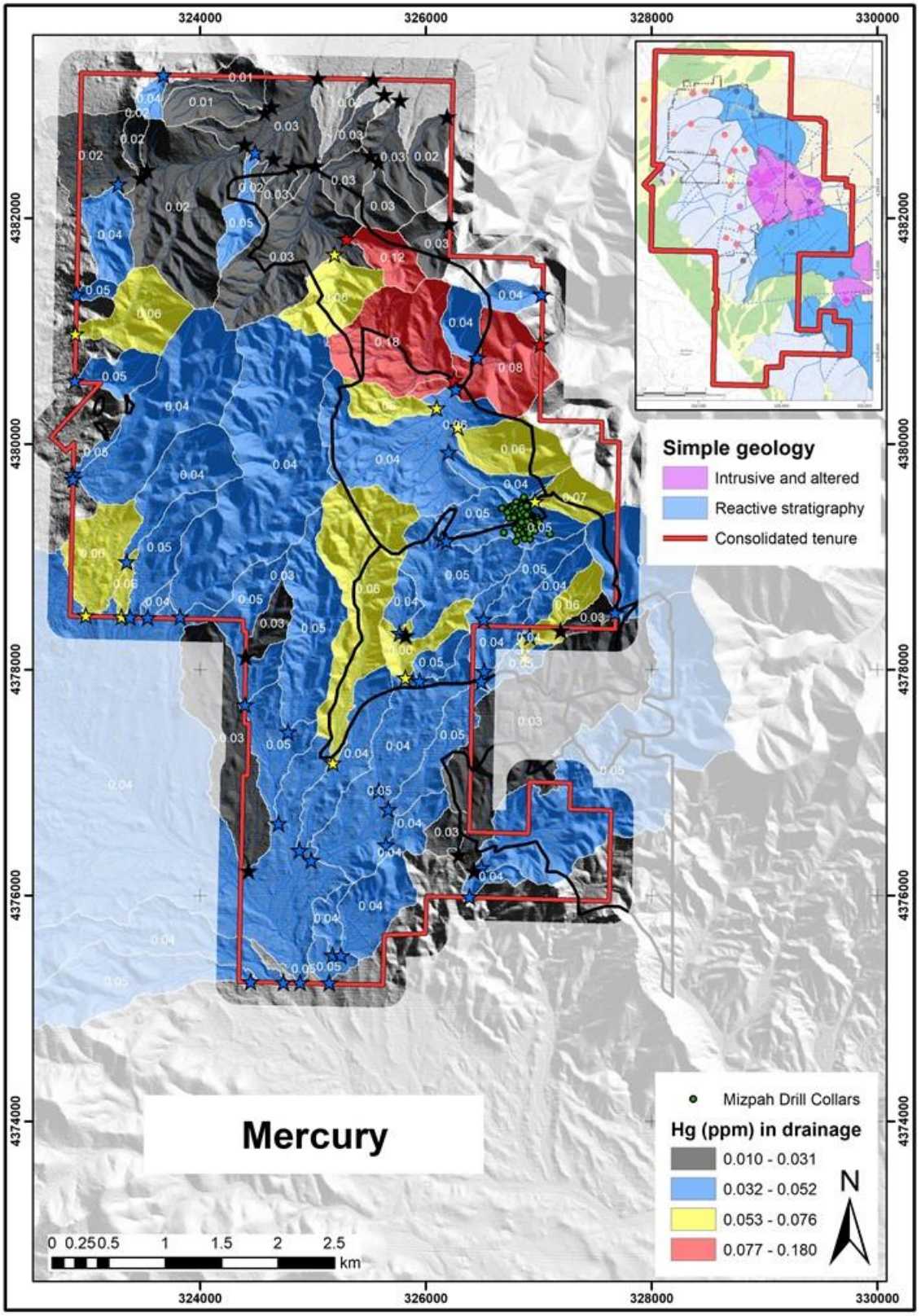

Figure 8: *Stream Sediment BLEG results for* ***Mercury*** *with polygons representing the catchment areas. Black coloured polygons (not coloured), represent the interpreted of reactive stratigraphy and intrusive/altered rocks (see coloured inset, top right).*

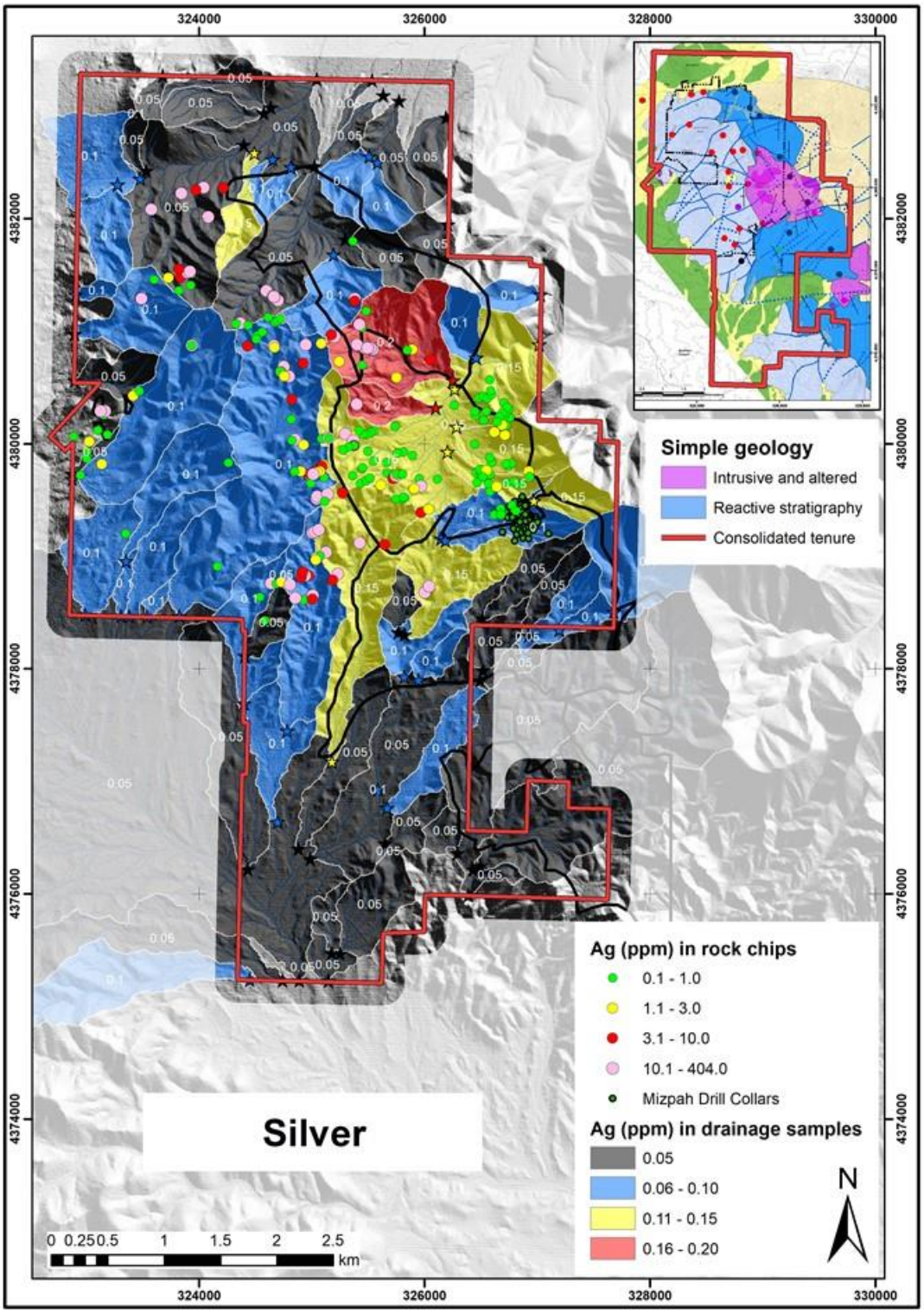

Figure 9: *Stream Sediment BLEG results for* ***Silver*** *with polygons representing the catchment areas. Black coloured polygons (not coloured), represent the interpreted of reactive stratigraphy and intrusive/altered rocks (see coloured inset, top right).*

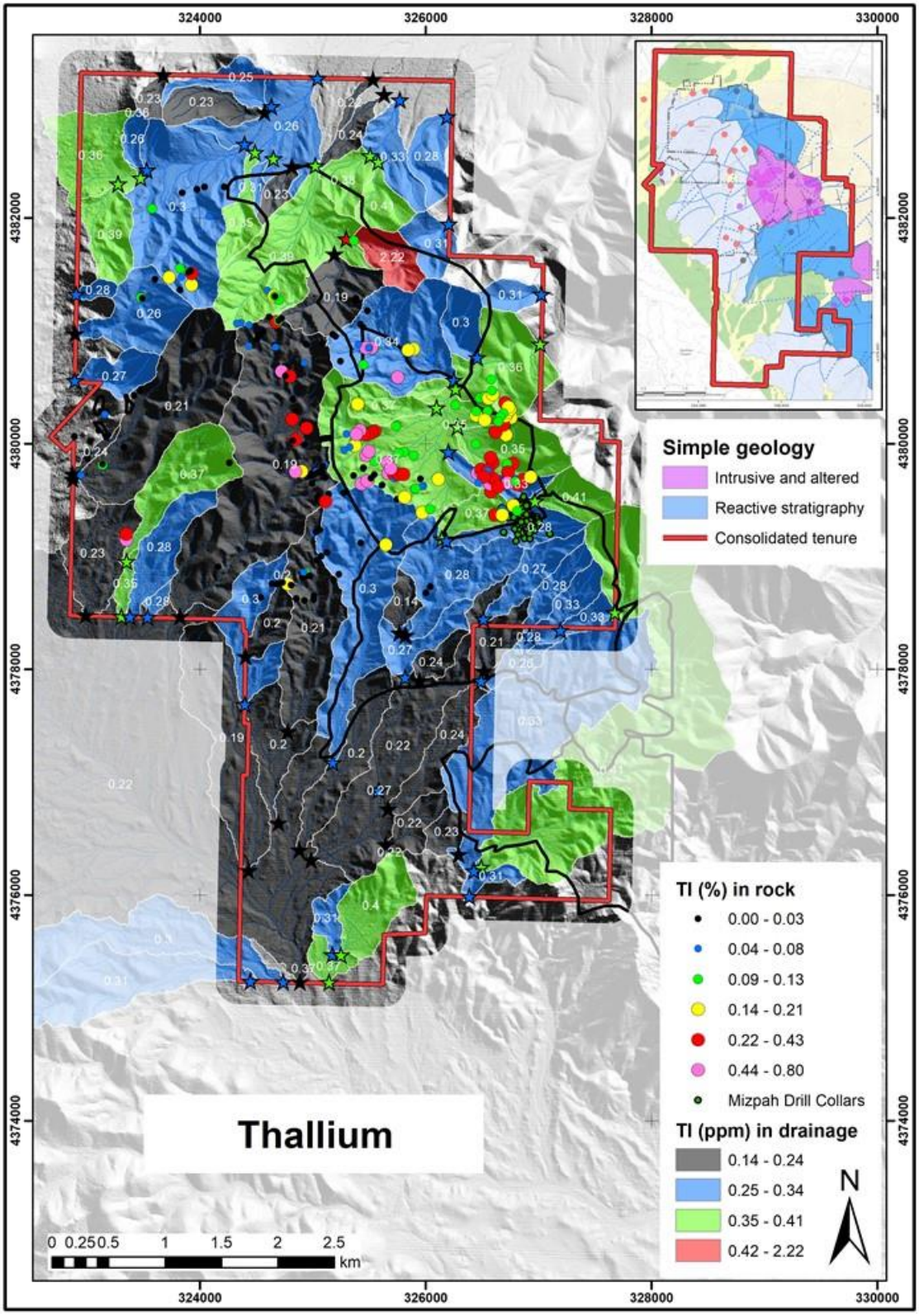

Figure 10: *Stream Sediment BLEG results for* ***Thallium*** *with polygons representing the catchment areas. Black coloured polygons (not coloured), represent the interpreted of reactive stratigraphy and intrusive/altered rocks (see coloured inset, top right).*

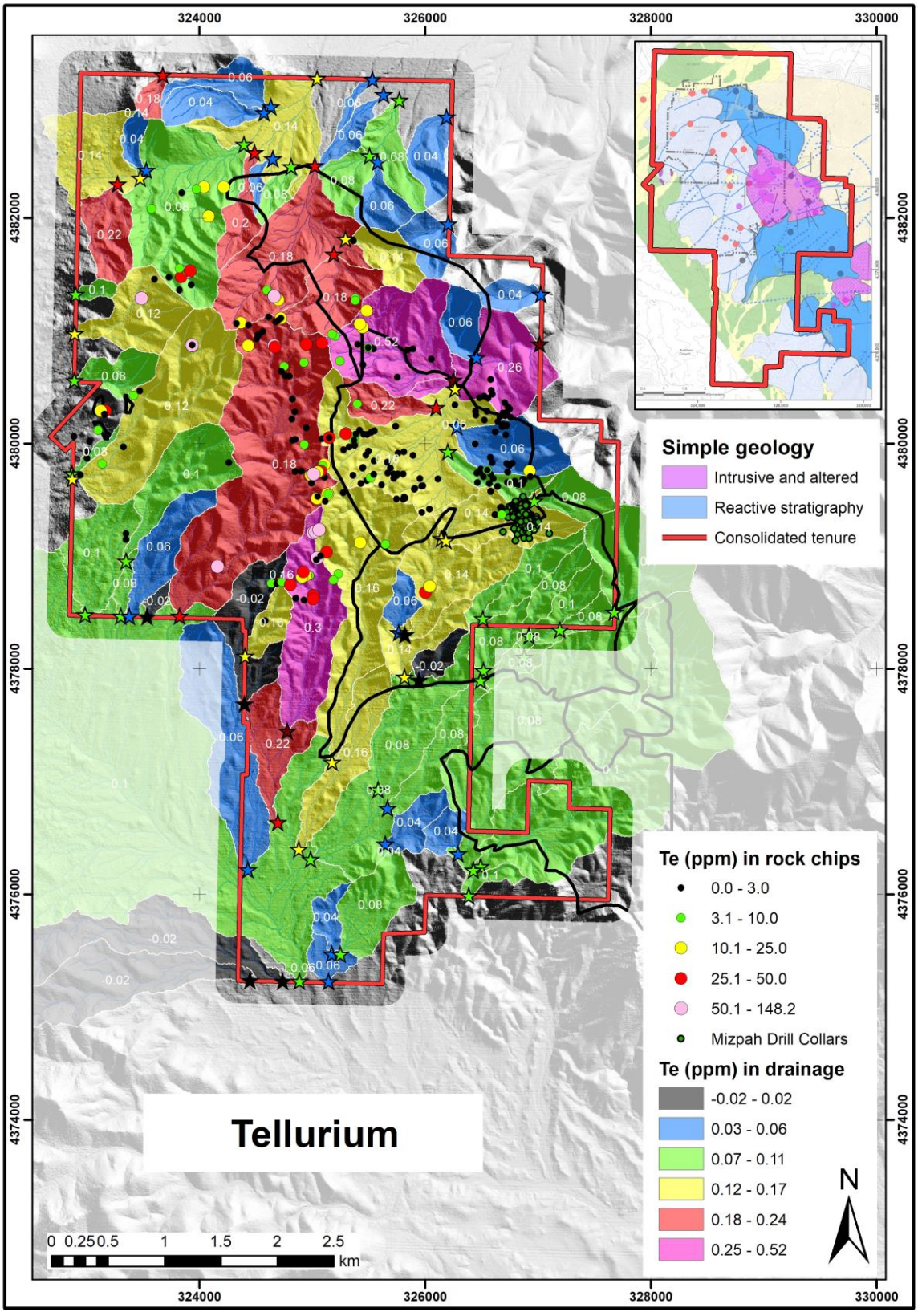

Figure 11: *Stream Sediment BLEG results for* ***Tellurium*** *with polygons representing the catchment areas. Black coloured polygons (not coloured), represent the interpreted of reactive stratigraphy and intrusive/altered rocks (see coloured inset, top right).*

ENDS

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

ALDERAN RESOURCES LIMITED
ABN: 55 165 079 201
Suite 23, 513 Hay Street, Subiaco, 6008, WA
www.alderanresources.com.au

For further information:
e:info@alderanresources.com.au

p: +61 8 6143 6711
Peter Williams
Managing Director
info@alderanresources.com.au

Competent Persons Statement

The information contained in this announcement that relates to 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.

In relation to previous announcements containing exploration results which have been referenced in this announcement on 30 September 2020 and 22 February 2021, the Company confirms that it is not aware of any new information or data that materially affects the information included in those announcements. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

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 the stream sediments sampling using BLEG method.* *Geochemical BLEG samples of the stream sediments were collected as 4-5kgs of a soft alluvial material. It was taken at surface as a composite sample collected by increments taken along a drainage channel, from the corresponding sheetwash and overbank spills. Detection limit of the BLEG method is 0.1ppb Au.*
	Include reference to measures taken to ensure sample representativeness and the appropriate calibration of any measurement tools or systems used.	*The BLEG samples were wet sieved to sub 100 microns.*
	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 used geochemical sampling procedures are standard, and broadly used in the mining industry for exploration. In particular, the used BLEG sampling approach is one of the basic methods for the gold and base-metal prospecting.*

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.).*	*N/A – no drilling completed.*
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.*	*N/A – no drilling completed.*
	Measures taken to maximize sample recovery and ensure representative nature of the samples.	*N/A – no drilling completed.*
	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.	*N/A – no drilling completed.*
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.*	*All samples were documented as per the geochemical exploration standards. Thus, includes documentation of the sample location and broad characteristics of the material sampled.*
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	*Geologic logging is qualitative.*
	The total length and percentage of the relevant intersections logged.	*100% of the samples were logged.*
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken*	*N/A – no drilling completed.*
	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	*N/A – no drilling completed.*
	For all sample types, the nature, quality, and appropriateness of the sample preparation technique.	*N/A – no drilling completed.*
	Quality control procedures adopted for all sub-sampling stages to maximise representativeness of samples.	*N/A – no drilling completed.*
	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.	*N/A – no drilling completed.*

	Whether sample sizes are appropriate to the grain size of the material being sampled.	*Geochemical BLEG samples of the stream sediments were collected as 4-5kgs of a soft alluvial material, this si a standard size of the BLEG samples.*
Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	*The BLEG samples were analysed by Bureau Veritas in Perth, using their 500g BL001 process and 40g Aqua Regia by ICPOES and ICPMS for a 48-element suite. The samples were pulverised with 75% passing through <75 micron.*
	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.	*N/A - 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.	*QAQC of the BLEG samples involved the blind insertion of reference materials that contained a known quantity of OREAS CN Leach CRM, at appropriate low concentration levels. A suite of OREAS Aqua Regia certified CRMs with appropriate low-level pathfinder and commodity elements were inserted throughout the batch at a rate of around 3%. Field duplicates were collected at a rate of 1 in 12 field samples. All QAQC data has been reviewed, confirming the high quality of the field collection method, contamination free sample preparation and high precision analysis.*
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	*N/A – not undertaken.*
	The use of twinned holes.	*N/A – not undertaken.*
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	*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.	*N/A – 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.*
	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 BLEG samples was chosen to assure a full coverage of the catchment areas is obtained.*

	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.	*N/A - Objective of the BLEG survey was to identify the high priority catchment areas that will be followed up by a more systematic exploration.*
	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.*	*Location and spatial distribution of the BLEG samples was chosen to assure a full coverage of the catchment areas is obtained.*
	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.	*N/A – orientation bias is not applicable to BLEG.*
Sample security	*The measures taken to ensure sample security*	*Chain of custody was maintained at all steps of the sampling procedure. Only authorised personnel handled or viewed the samples.*
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	*N/A – no audits undertaken.*

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.*	*On 11 February 2021, Alderan announced in consolidated its land position in the Drum Mountains, Utah, by executing three property deals to extend its Detroit Project to 24.7 km^2. The three separate agreements were with three separate unrelated parties of the Company, being Drum Minerals Mountain Properties LLC (DMMP), Hartshorn Claim Group and George Miller/Ron Myers.* *The agreement with DMMP is an Option to Joint Venture two State of Utah Metalliferous Leases and 12 unpatented mining claims totalling 1,018 acres. The agreement with Hartshorn Claim Group is an Option to Purchase four patented claims totalling 55 acres. The agreement with George Miller/Ron Myers is an Option to Purchase 60 patented claims totalling 1,010 acres. The location of each area is detailed in the ASX announcement dated 11 February 2020 and in figures referred to in the announcement.* *The key terms of each agreement are detailed in the ASX announcement dated 11 February 2021.*
	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.	*In relation to the Utah Metalliferous Leases, the Utah State Institutional Land Trust Administration has issued the Metalliferous Mineral Leases. Lease terms and status are of public record. Both leases are in good standing.* *In relation to the unpatented mining claims, 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.* *Patented claims are Fee land. Ownership of title was examined by a licensed land man and by a licensed attorney. As regards, those properties under Option from George Miller LLC and Ronald Meyer LLC, the Company retains a title insurance policy from Juab Title & Abstract in the amount of US$5,000,000.*

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:*	*N/A – no drilling completed.* *Multi-element geochemistry confirmed the Carlin-like distal disseminated style of mineralization. The geochemical (BLEG) sampling covers the area approximately 8.5 x 5 km*
	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.	*N/A – no drilling completed.*
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.*	*N/A - No aggregation or top cutting were used*
	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.	*N/A – no drilling completed.*
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	*N/A - this ASX announcement presents the geochemical survey results and not reports the metal equivalents.*
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results.*	*N/A – no drilling completed.*
	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	*N/A – no drilling completed.*
	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').	*N/A – no drilling completed.*

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 geochemical exploration results are presented in the release and summarised in the diagrams*
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.*	*The rock-chips geochemical survey results have been presented on the previous announcements of the Alderan and shown on the maps to show the good reconciliation of the different types of exploration data.*
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 next phase of exploration is currently planned and will be announced separately.*