

## NEAR MINE EXPLORATION PROGRAM TO COMMENCE AT THE RENISON TIN MINE

Metals X Limited (**Metals X**) is pleased to provide an update on the approved near mine exploration program at the Renison Tin Operations (**Renison**), in which it holds a 50% equity interest. Renison is managed by Bluestone Mines Tasmania Joint Venture Pty Ltd (the **Manager**) on behalf of the joint venture owners.

### Summary

Metals X has committed to an exploration program consisting of a regional soil sampling and geochemistry campaign across the Renison mine lease and a diamond drilling program targeting a recent electromagnetic survey. These programs signal a renewed commitment to targeted regional exploration by the Joint Venture and will both commence in the final quarter of 2021.

### Soil Geochemistry Campaign

A soil lithogeochemical study will be conducted to complement and upgrade previous work with the aim of “fingerprinting” the signature of each of the main mineralisation styles, their alteration halos and the various unmineralised host rocks. This will improve the understanding of the evolution of the mineralising fluids and potentially allow the identification of “near misses” in planned exploration drill holes. The study will also allow better stratigraphic positional interpretations in step-out exploration holes.

Previous soil surveys and geochemistry programs were conducted at Renison in the 1960’s and 1970’s by several companies in NE-SW and NW-SE grids with a variety of line spacings and sample intervals (Figure 1). This previous data has been reviewed and analysed in 2019 by BMT JV Exploration Geologists using MapInfo software and this review has identified anomalous zones of Zinc, Arsenic and Copper and enabled the identification of metal zoning within the previous sample grids and associated sampling coverage (Figure 2).

In addition, in 2018 and 2019, BMT JV conducted two Litho-Geochemistry programs at Renison using core samples from previously drilled holes with the intent of further understanding the Renison hydrothermal system from the hanging wall through to the footwall. In the 2018 study a total of 395 samples were analysed for 49 elements by ICP\_MS (Figure 3) with the following broad conclusions:

- Mineralisation has a distinct Tin-Arsenic-Bismuth-Antimony-Indium signature. This association will be used in analysis of future soil sampling and geochemical programs.
- Significant hydrothermal alteration halo in the hangingwall to mineralisation best mapped by anomalous levels of Cesium and Lithium. This will be used as a pathfinder for “near misses” in historic and new drilling.
- The Pine Hill granite has been confirmed as a highly fractionated intrusive system confirming its intimate relationship with mineralisation.
- Geothermal gradient (hotter) can be predicted with higher values of Tungsten.

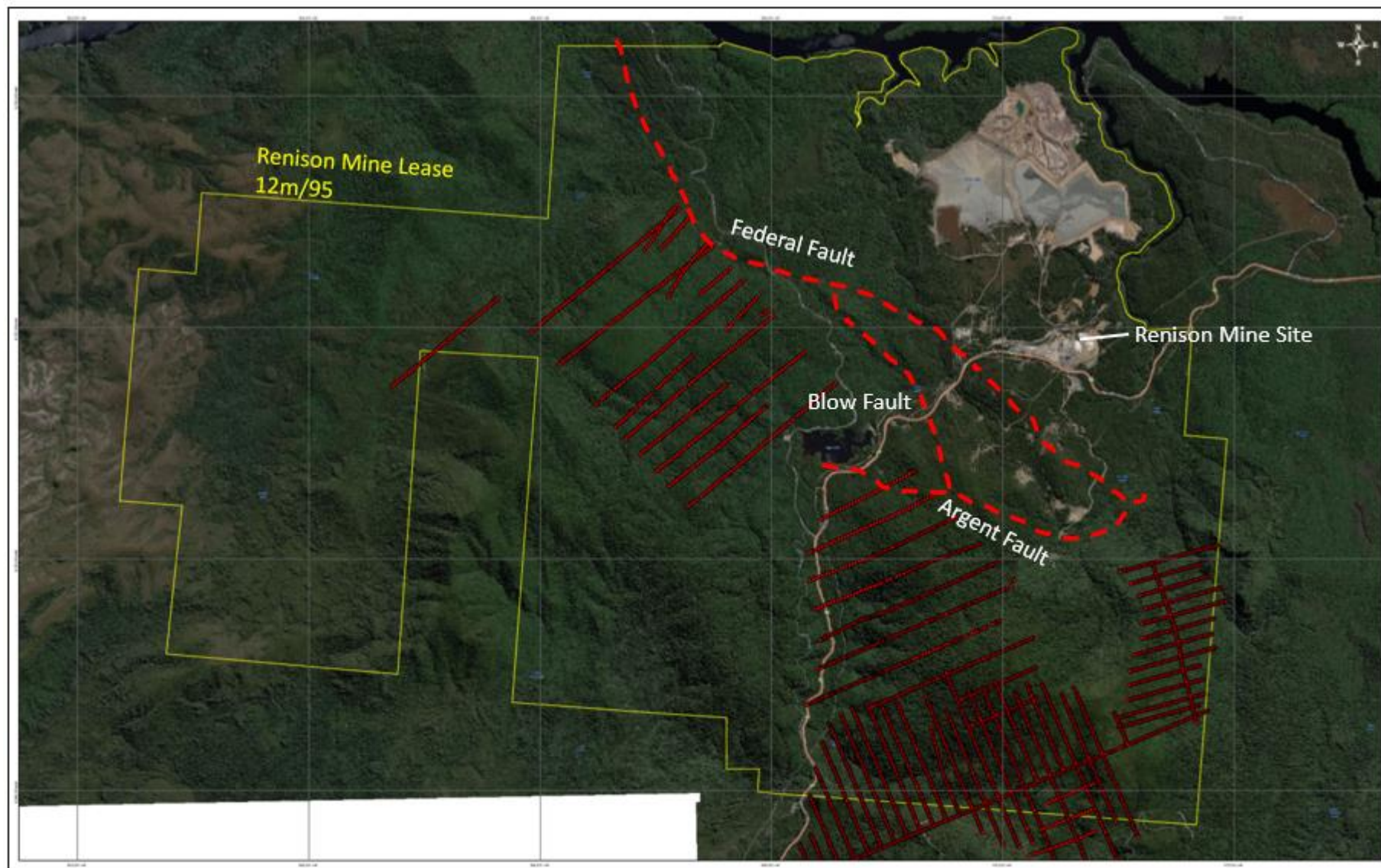
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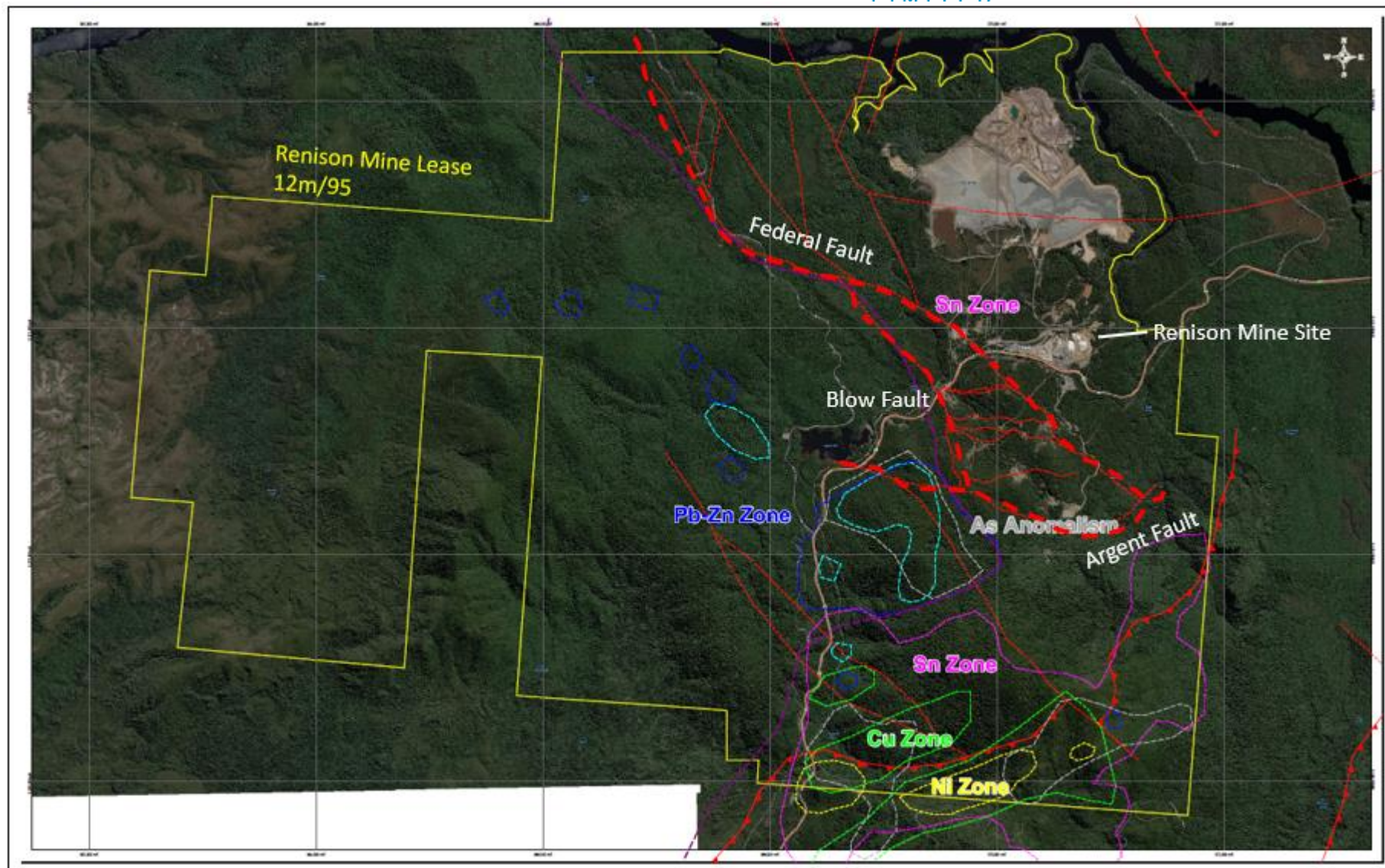


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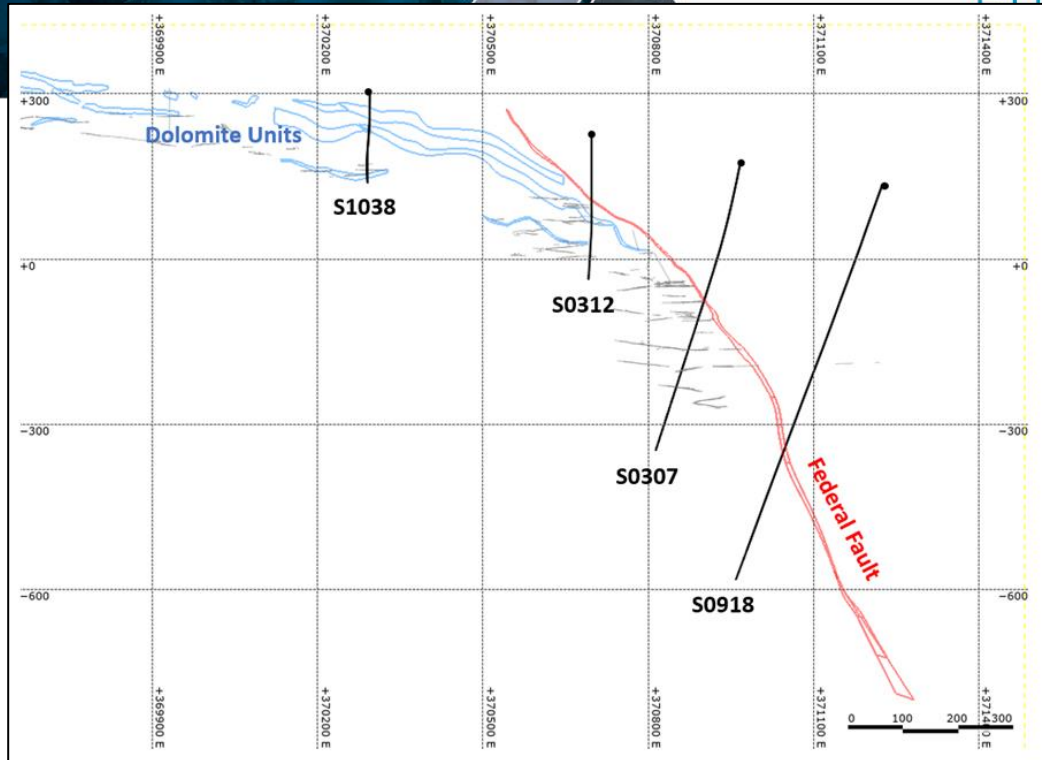
**Figure 1:** Soil sampling grid coverage conducted in the 1970's over mining lease 12M/1995. Major faults – red dashed lines.





**Figure 2:** Metal zonation identified by BMT JV Exploration Geologists using MapInfo software from 1970's soil sampling grades.





**Figure 3:** MGA grid system Section 5371000 Nth showing key selected holes (S1038, S0312, S0307, S0918) in the 2018 hangingwall to footwall Litho-Geochemical program.

For the 2019 study, core samples from three previously drilled holes were selected away from mining activities to the north-east of known Federal Fault extensions (Figure 4).



**Figure 4:** Collar locations (red dots) of the three selected drill holes (S0594, S0645, S1008) in the 2019 Federal Fault north-east extension Litho-Geochemical program.

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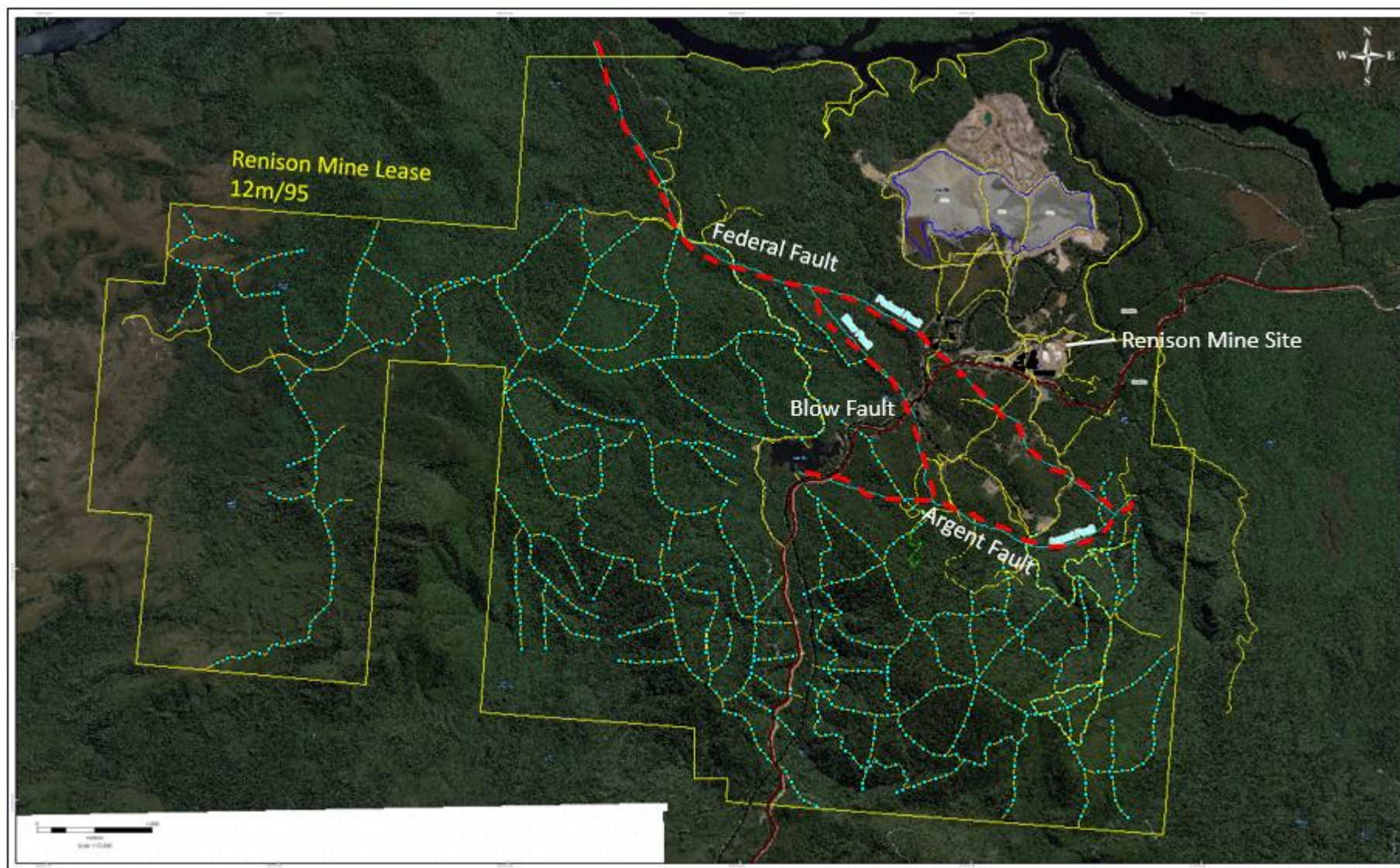
In the 2019 study a total of 148 samples were analysed for 49 elements by ICP\_MS with the following broad conclusions:

- Geothermal gradient can be predicted with higher values of Tungsten.
- Titanium between 0.5%-2.5% identifies the Crimson Creek Formation (Hangingwall of the mine sequence) and Titanium <0.5% in the Dalcoath Member (Footwall wall of the mine sequence).
- Thorium >15% identifies the Dalcoath Member (Footwall of the mine sequence).
- Mineralisation shows a distinct relationship between Tin-Arsenic-Bismuth-Antimony-Indium.
- There is no correlation between Cesium or Lithium, but Cesium detection levels were lower indicating more distal from the granite.

The next phase of Renison surface exploration lithogeochemical work will comprise of a ridge and spur soil sampling program of 75 kilometers with soil sample spacing of 50-100m for a total of approximately 742 samples being analysed for 49 elements (Figure 5).

Assay data will be combined with historical data from the previous assay results collected in the 1970's surface soil sampling programs. It is intended that the new data will allow ongoing metal zonation to be identified and, leveraging the learnings from the 2018 and 2019 down hole lithogeochemical programs, target new fertile tin bearing structures and hangingwall alteration systems.





**Figure 5:** September 2021 BMT JV planned soil sampling, ridge and spur program over Renison Mining Lease for ~75km of tracks and ~742 samples.

## Down Hole electromagnetic survey diamond drilling program

A diamond drilling program has been designed based on the results of the BMT JV Down Hole Electro Magnetic (DHEM) survey program completed between June and July 2019 (Figure 6) that successfully:

- Re-entered, cleaned out and PVC cased 7 historical diamond holes for 4,532m.
- Re-established key tracks and 11.5 line km of tracks for DHEM surface loops.
- Conducted 19 DHEM surveys of 7 PVC cased historical diamond holes with 9 surface loops.
- Identified 24 conductive plates within 7 separate target areas.

The proposed diamond drilling program comprises 3 holes totalling approximately 1,800m that are designed as priority drill holes targeting the top three ranked DHEM conductive plate target zones (Figure 6 and 7).

The planned diamond drilling program will endeavour to target not only the priority conductive plates, but other geological features that may be spatially associated. The drilling program will also develop the geochemical assay data set in the target zones and add important stratigraphic, lithological, and structural information and orientations. Post drilling analysis will enable a better understanding of the cause of the DHEM conductive signatures in the target zones and potentially provide further vectors to Sn mineralisation or other metallic mineralised zones.

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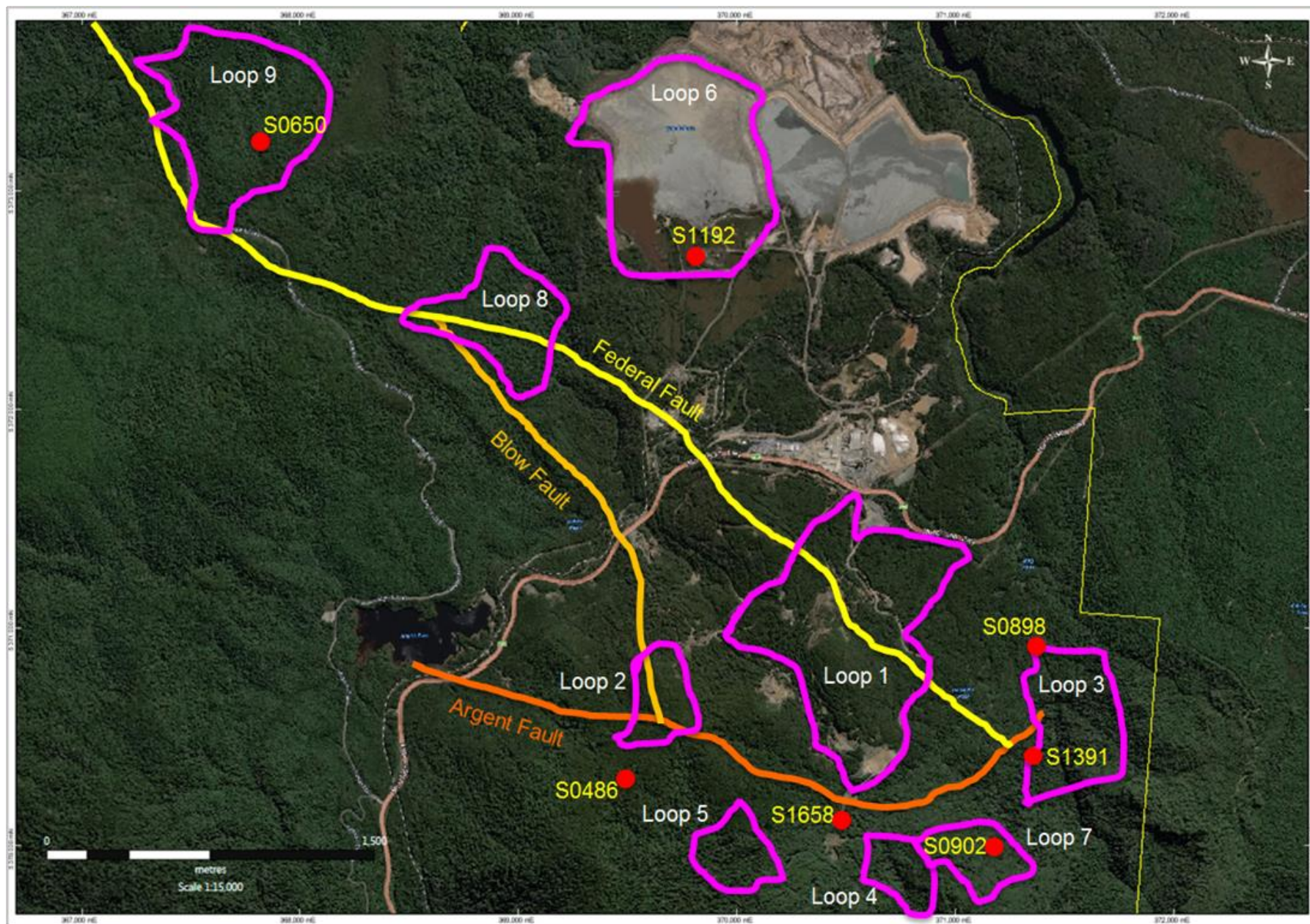
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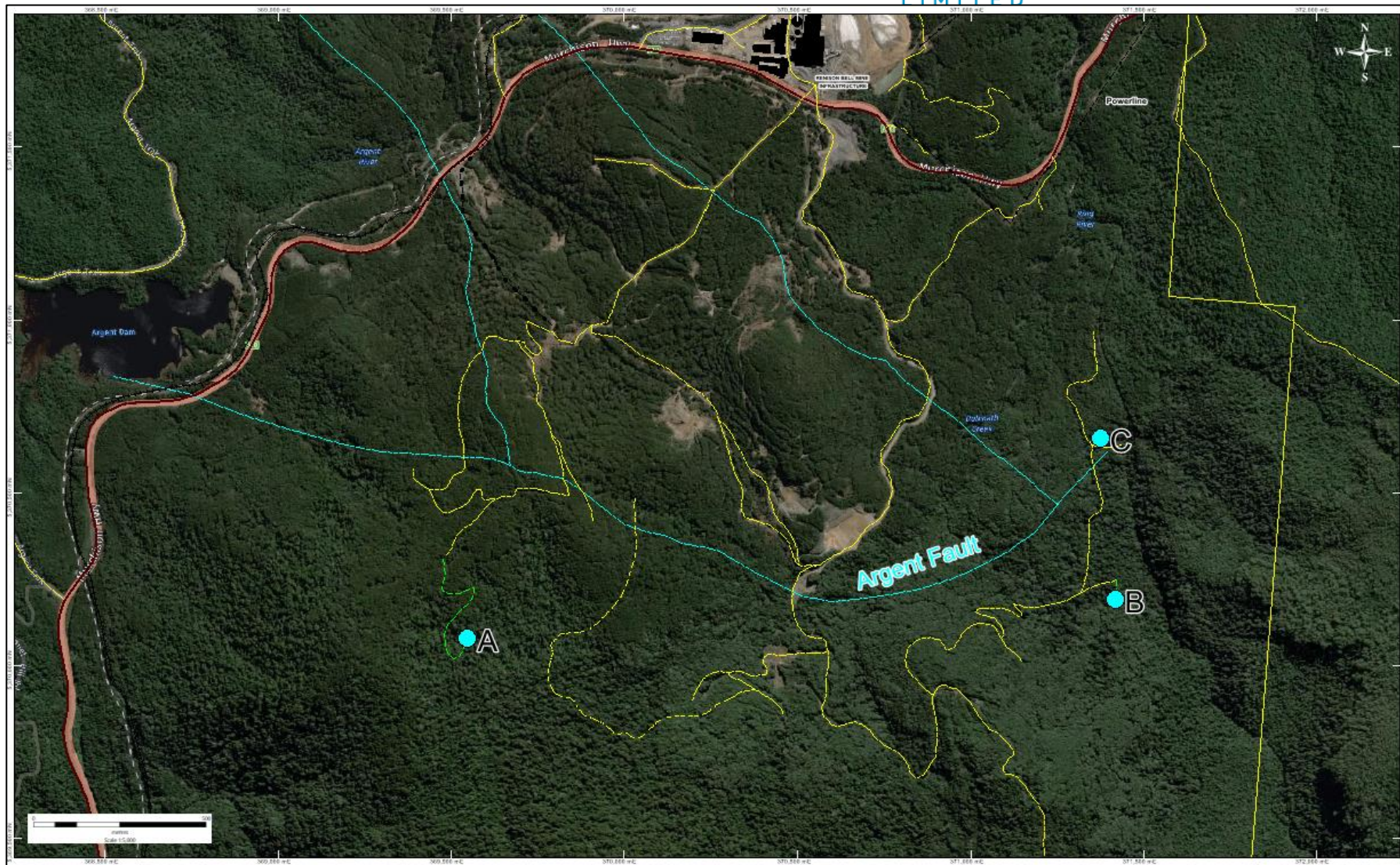
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**Figure 6:** 2019 BMT JV DHEM survey. Cleared and cased holes (red dots) and Surface DHEM loops (pink).





**Figure 7:** Collar location of priority drill holes (A, B and C) targeting strongest DHEM survey conductor plates.







**This announcement has been authorised by the board of directors of Metals X Limited**

## **ENQUIRIES**

Mr Brett Smith  
Executive Director  
E: [brett.smitm@metalsx.com.au](mailto:brett.smitm@metalsx.com.au)

## **Competent Person's Statements**

The information in this report that relates to Exploration Results has been compiled by Bluestone Mines Tasmania Joint Venture Pty Ltd technical employees under the supervision of Mr Colin Carter B.Sc. (Hons), M.Sc. (Econ. Geol), AusIMM. Mr Carter is a full-time employee of the Bluestone Mines Tasmania Joint Venture Pty Ltd and has sufficient experience which is relevant to the style of mineralisation and types of deposit under consideration and to the activities 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". Mr Carter consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

## APPENDIX A – BMT JV Selected Drill Hole Lithogeochemical Sampling, 2018 and 2019

Program	Hole_ID	Hole_Type	Max_Depth	Dip	NAT_Azimuth	NAT_Grid_ID	NAT_East	NAT_North	NAT_RL
2018	S0307	DDH	547	-75	227	MGA94_55	370967	5371200	2172
2018	S0312	DDH	266	-90	318	MGA94_55	370697	5370965	2227
2018	S0430	DDH	233	-46	189	MGA94_55	369653	5371489	2217
2018	S0559	DDH	434	-44	166	MGA94_55	370531	5368738	2555
2018	S0651	DDH	611	-59	350	MGA94_55	370138	5368297	2471
2018	S0868	DDH	809	-70	265	MGA94_55	370759	5371649	2175
2018	S0910	DDH	95	-59	226	MGA94_55	370198	5371506	2304
2018	S0918	DDH	765	-69	260	MGA94_55	371224	5371172	2131
2018	S1038	DDH	168	-90	318	MGA94_55	370295	5370854	2305
2018	S1153	DDH	706	-90	318	MGA94_55	371431	5369670	2301
2018	S1157	DDH	211	-90	318	MGA94_55	369959	5371315	2307
2018	U0861	DDH	755	-90	318	MGA94_55	370360	5371505	1819
2018	U4433	DDH	180	-55	236	MGA94_55	370872	5371445	1367
2018	U4435	DDH	182	-49	260	MGA94_55	370872	5371445	1367
2018	U4436	DDH	204	-59	226	MGA94_55	370872	5371445	1367
2018	U4474	DDH	248	-46	82	MGA94_55	370614	5371433	1348
2019	S0594	DDH	391	-66	225	MGA94_55	368109	5372824	206
2019	S0645	DDH	540	-65	208	MGA94_55	368852	5372750	189
2019	S1008	DDH	643	-68	226	MGA94_55	368177	5373069	198

**Table 1 – Holes selected by BMT JV for down hole Lithogeochemical sampling in the 2018 and 2019 sampling programs**

The 2018 program consisted of 395 samples collected from 16 holes that were analysed for 49 elements by Australian Laboratory Services (ALS) using their four acid digestion with ICP-MS method ME-MS61.

The 2019 program consisted of 148 samples collected from 3 holes that were analysed for 49 elements by Australian Laboratory Services (ALS) using their four acid digestion with ICP-MS method ME-MS61.

Individual assay intervals for analysed trace elements are not reported as they are not considered to be material to the definition of an economic resource. The results are used solely for the identification of host rock lithogeochemical characteristics as a means to identifying usable target vectoring for future exploration work and drilling campaigns.

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## APPENDIX B

### Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i></li> </ul>	<ul style="list-style-type: none"> <li>All Renison resources are hosted within 12M1995 and 12M2006. Both tenements are standard Tasmanian mining leases.</li> <li>No native title interests are recorded against the Tasmanian tenements.</li> <li>Tasmanian tenements are held by the Bluestone Mines Tasmania Joint Venture of which Metals X has 50% ownership.</li> <li>No royalties above legislated state royalties apply for the Tasmanian tenements.</li> <li>Bluestone Mines Tasmania Joint Venture operates in accordance with all environmental conditions set down as conditions for grant of the mining leases.</li> <li>There are no known issues regarding security of tenure.</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li><i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Renison area has an exploration and production history over the past 100 years.</li> <li>Bluestone Mines Tasmania Joint Venture work has generally confirmed the veracity of historic exploration data.</li> </ul>
<i>Geology</i>	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>Renison is one of the world's largest operating underground tin mines and Australia's largest primary tin producer. Renison is the largest of three major Skarn, carbonate replacement, pyrrhotite-cassiterite deposits within western Tasmania. The Renison Mine area is situated in the Dundas Trough, a province underlain by a thick sequence of Neoproterozoic-Cambrian siliciclastic and volcanoclastic rocks. At Renison there are three shallow-dipping dolomite horizons which host replacement mineralisation.</li> </ul>
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <li><i>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:</i> <ul style="list-style-type: none"> <li><i>easting and northing of the drill hole collar</i></li> <li><i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li><i>dip and azimuth of the hole</i></li> <li><i>down hole length and interception depth</i></li> <li><i>hole length.</i></li> </ul> </li> <li><i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from</i></li> </ul>	<ul style="list-style-type: none"> <li>Tables containing hole id, lode, drillhole collar, downhole survey and intersection data are included in the body of the report where relevant.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>the understanding of the report, the Competent Person should clearly explain why this is the case.</i>	
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>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.</i></li> <li><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>All results presented are length weighted.</li> <li>No high-grade cuts are used.</li> <li>Any contiguous zones of internal waste or high grade zones are clearly explained in relevant tables.</li> <li>Cu percentage is also reported for any significant Sn intersections as a bi-product indicator value.</li> <li>No metal equivalent values are stated.</li> </ul>
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <li><i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li><i>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').</i></li> </ul>	<ul style="list-style-type: none"> <li>Unless indicated to the contrary, all results reported are true width.</li> <li>Given restricted access in the underground environment the majority of drillhole intersections are not normal to the orebody.</li> </ul>
<i>Diagrams</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Appropriate diagrams are provided in the body of the release.</li> </ul>
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Appropriate balance in exploration results is provided.</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Results and recommendations of downhole geophysics are presented, this program consisted of single component downhole EM conducted on a total of 8 drillholes utilising a series of surface loops. The resultant data was modelled into potentially conductive plates. Three drillholes have been planned to intersect these modelled plates.</li> <li>Results of lithogeochemical sampling of historical diamond drill core, for a total of 543 samples. These were analysed by ICP_MS for 49 elements. This data was used to characterise the alteration halo surrounding the Renison mineralisation.</li> </ul>
<i>Further work</i>	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas,</i></li> </ul>	<ul style="list-style-type: none"> <li>Desktop study of mining lease and potential exploration lease areas.</li> <li>Soil and/or rock chip sampling of mining lease and potential exploration lease areas.</li> <li>Diamond drill testing of conductors defined by downhole geophysics.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<i>provided this information is not commercially sensitive.</i>	