

### 16 September 2024

# Antimony Reward delivers up to 46.5% antimony; Iltani prepares to drill

Critical minerals and base metals explorer **Iltani Resources Limited** (ASX: ILT, "Iltani" or "the Company") is pleased to announce assay results from its recent completed mapping and sampling program at the Antimony Reward Project in Herberton, North Queensland, confirming the presence of extensive high-grade antimony mineralisation.

## HIGHLIGHTS:

- Nineteen samples of an initial mapping and sampling program across two mapped vein systems at the Antimony Reward Project in Herberton, North Queensland have delivered results of:
  - Vein System 1 (14 samples): average assay result of 16.2% Sb with a maximum assay result of 46.5% Sb
  - Vein System 2 (5 samples): average assay result of **10.9% Sb** with a maximum assay result of **17.7% Sb**
- High-grade assay results extend beyond the zone of historical drilling on the Vein 1 System (strike extent of 500m+) and are also reported from the Vein 2 System (strike extent of 300m+) which was not previously drilled.
- Iltani is working with the landowner and First Nations group to accelerate drilling activities with drilling planned to occur late September / early October.
- China, the world's biggest producer of antimony, has placed export controls on some antimony products from 15 September 2024. Antimony is currently trading at US\$25,100/tonne (Argus Metals, antimony ingot min 99.65% fob China).

Figure 1 Antimony Reward Sampling 294500mE 295000mE Iltani rock chip sample Iltani planned RC hole Sb Vein System 1 4.5% St Historic RC hole N 8074000mN 17.0% Sb 150m 9.2% Sb 18.8% Sb 5.9% Sb 24.4% Sb 46.5% Sb 13.6% Sb 2.8% Sb 20.0% Sb 25.4% Sb 11.8% Sb 9.9% Sb Sb Vein System 2 17.2% Sb 8073750r 0.5% Sb 11.6% Sb 11.7% Sb 17.7% Sb 13.3% Sb 8073500mN









Massive to subhedral orthorhombic stibnite crystals to 10cm bladed in hydrothermal/epithermal quartz vein, some chalcedonic quartz with drusy crystals lining vughs and milled breccia with rounded cordierite hornfels clasts to 2cm in altered felsics. (Vein System 1)





Figure 3 Sample AR010 – **25.4% Sb** 



Brecciated quartz vein to 1m wide, massive to subhedral stibnite crystals grading to stibiconite on weathered surface. (Vein System 1)



**Iltani Managing Director Donald Garner** commented: *"These are fantastic assay results from our Antimony Reward Project. It is good to see the presence of high-grade antimony mineralisation in both mapped vein systems, and more importantly extending far beyond the area of historical drilling.* 

We are focused on commencing drilling at the project as soon as we can – and we are targeting end of September as a start date. We have signed a Conduct and Compensation Agreement with the landowner and are moving forward with First Nations clearance activities.

It will be great to see the drill rig in action – as we are all extremely excited as to the potential of the Antimony Reward system to deliver a high-grade antimony resource, and with antimony currently trading at US\$25,100/tonne, there is not a better time to be doing this work.

The antimony mineralisation sampled at Antimony Reward to date contains exceptionally low arsenic. Arsenic is a key penalty element with regards to antimony concentrates, so this is another good sign."

# 1. Antimony Reward Project

Iltani Resources' Herberton Project (Figure 4) includes the Antimony Reward antimony deposit, which is located on Iltani's wholly owned exploration permit EPM 27168, and is approximately 45km from Herberton, and 25km from the Orient Silver-Indium project, in Northern Queensland.



Figure 4 Antimony Reward Project Location









*Epithermal quartz float, abundant over a wide area with abundant stibnite grading to stibiconite on weathered surface. (Vein System 2)* 



# 2. Antimony Reward Mapping and Sampling

The Antimony Reward prospect is located within the Featherbed Volcanic Complex, also host to the Orient silver-indium deposit. The prospect is hosted by rhyolitic ignimbrite near the southern margin of the caldera. Structurally controlled mineralisation along the two main NE-SW trending zones occurs as stibnite within epithermal-style chalcedonic quartz veining and hydrothermal breccias. There appears to be no other significant elements associated with the stibnite mineralisation. Vein widths at surface were recorded from 10cm to over 1m. Historical workings have mainly exploited the northern zone which has been traced on surface for approximately 500m. Vein outcrop has been traced over 200m strike extent along the southern zone, with sizeable stibnite-bearing quartz float samples recognised for a further 100m to the southwest.

Part of the northern zone (Sb Vein System 1) was drill tested during 2008 (see ASX release 26 Aug 2024 "Iltani targeting high-grade antimony at Antimony Reward" however the southern zone (Sb Vein System 2) has not previously been targeted.



### Figure 6 Antimony Reward Sample Locations

#### **Next Steps**

Iltani has designed a preliminary 15 to 20-hole (1,500m) reverse circulation drilling program to test the mineralisation, and Iltani is working with the landowner and First Nations group to enable drilling to commence by late September / early October.





Figure 7 Sample AR018 – **11.7% Sb** 



Chloritic altered rhyolite breccia with massive stibnite as matrix infill on southern lode (Vein System 2)





### Authorisation

This announcement has been approved for issue by Donald Garner, Iltani Resources Managing Director.

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### **Competent Persons Statement**

#### **Exploration Results**

The information in this report that relates to Exploration Results is based on information compiled by Mr Erik Norum who is a member of The Australasian Institute of Geologists (AIG), and is an employee of Iltani Resources Limited., and who has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activities being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves' (JORC Code).

Mr Norum consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.



## About Iltani Resources

Iltani Resources (ASX: ILT) is an ASX listed company focused exploring for the base metals and critical minerals required to create a low emission future. It has built a portfolio of advanced exploration projects in Queensland and Tasmania with multiple high quality, drill-ready targets. Iltani has completed drilling at the Orient Silver-Indium Project, part of its Herberton Project, in Northern Queensland. The drilling has returned outstanding intercepts of silver-lead-zinc-indium mineralisation, positioning Orient as Australia's most exciting silver-indium discovery.

Other projects include the Northern Base Metal, Southern Gold and Rookwood Projects in Queensland plus the Mt Read Project, a highly strategic 99km<sup>2</sup> licence in Tasmania's Mt Read Volcanics (MRV) Belt, located between the world-class Rosebery and Hellyer-Que River polymetallic (CuPbZn) precious metal rich volcanic hosted massive sulphide deposits.

Figure 8 Location of Iltani Resources' projects in Queensland and Tasmania







Sample ID	Easting	Northing	Sample description and notes	Estimated Stibnite (%)	
AR001	294441	8073919	Massive to subhedral orthorhombic stibnite crystals to 10cm bladed in hydrothermal/epithermal quartz vein, some chalcedonic quartz with drusy crystals lining vughs and milled breccia with rounded cordierite hornfels clasts to 2cm in altered felsics.	50 to 60%	
AR002	294332	8073898	Massive stibnite in epithermal brecciated quartz vein adjacent to narrow workings 10m x 2m	60 to 70%	
AR 003	294332	8073898	As above with stibnite grading to stibiconite on weathered surface	40 to 50%	
AR004	294332	8073898	White to grey chalcedonic quartz with fine disseminated stibnite, numerous vughs lined with drusy quartz and rare euhedral terminated stibiconite ex. stibnite pseudomorphs to 1cm in vughs	0 to 5%	
AR005	294351	8073906	Epithermal/hydrothermal breccia with milled rounded clasts of quartz and cordierite hornfels. numerous narrow quartz veins to 1cm	0 to 5%	
AR006	294362	8073914	Epithermal quartz breccia with angular clasts of hornfels and metasediments, granular to subhedral bladed stibnite to 5cm grading into stibiconite at weathered surface in wall of workings	10 to 15%	
AR007	294513	8073996	Narrow quartz vein to 10cm in altered rhyolite, granular to subhedral stibnite to 3cm in quartz veins grading to stibiconite on weathered surface	10 to 15%	
AR008	294559	8074025	Narrow chalcedonic veins in altered acid volcanics (?) with fine stibnite disseminated in chalcedony and massive to subhedral blades to 2cm grading to stibiconite on weathered surface.	5 to 10%	
AR009	294573	8074021	Massive to subhedral stibnite in 15cm quartz vein float exposed along the banks of Gibbs Creek	50 to 60%	
AR010	294273	8073836	Brecciated quartz vein to 1m wide, massive to subhedral stibnite crystals grading to stibiconite on weathered surface	50 to 60%	
AR011	294262	8073825	Quartz vein to 1m in old workings, fine acicular euhedral stibnite crystal in quartz, massive stibnite grading into stibiconite on weathered surface with fine disseminated stibnite in quartz.	0 to 10%	
AR012	294246	8073814	As above, bladed euhedral stibnite to 5cm in quartz.	0 to 10%	
AR013	294190	8073775	Bladed stibnite grading into massive stibiconite	10 to 20%	
AR014	294165	8073745	Numerous shallow workings, fine disseminated to bladed stibnite in quartz veins	10 to 20%	
AR015	294123	8073606	Epithermal quartz float in costean ex stibnite - stibiconite blades to 5mm	10 to 20%	
AR016	294112	8073564	Epithermal quartz float with bladed stibnite to 3cm and massive stibnite grading into stibiconite on weathered surface	40 to 50%	
AR017	294189	8073593	Epithermal quartz float, abundant over a wide area with abundant stibnite grading to stibiconite on weathered surface.	30 to 40%	
AR018	294228	8073611	Shallow workings, numerous epithermal quartz veins in brecciated pale green altered rhyolite with stibnite as infill matrix between clasts. Possibly multiple zones or pipe – high priority drill target	10-20%	
AR019	294409	8073662	Epithermal quartz vein at edge of costean, drusy quartz lined vughs with minor arsenopyrite.	0 to 5%	
All explorati Stibnite: Sb <sub>2</sub>	All exploration works are conducted in the GDA94 Zone 55 Grid. Stibnite: $Sb_2S_3$ (antimony sulphide)				

Stibiconite: Sb<sub>3</sub>O<sub>6</sub>(OH) (antimony oxide)



#### Table 2 Antimony Reward Assay Results

Sample ID	Vein System	Antimony (%)	Antimony (ppm)	Silver (ppm)	Arsenic (ppm)
AR001	Vein 1	46.5%	465,000	5.25	140.5
AR002	Vein 1	13.6%	136,000	1.23	52.4
AR003	Vein 1	24.4%	244,000	3.66	118.5
AR004	Vein 1	5.9%	59,000	23.8	45.5
AR005	Vein 1	2.8%	27,800	0.48	27.2
AR006	Vein 1	9.2%	91,600	2.09	30
AR007	Vein 1	18.8%	188,000	4.5	162
AR008	Vein 1	4.5%	45,200	0.78	41.3
AR009	Vein 1	17.0%	169,500	4.28	63.1
AR010	Vein 1	25.4%	254,000	8.06	119
AR011	Vein 1	20.0%	199,500	15.7	31
AR012	Vein 1	9.9%	99,200	1.29	25.2
AR013	Vein 1	11.8%	118,000	1.34	20
AR014	Vein 1	17.2%	172,000	4.84	28.3
AR015	Vein 2	11.6%	115,500	1.12	18.6
AR016	Vein 2	17.7%	177,000	3.92	75.9
AR017	Vein 2	13.3%	133,000	1.68	116.5
AR018	Vein 2	11.7%	117,000	3.99	50.5
AR019	Vein 2	0.5%	4,600	0.41	583



# JORC Code, 2012 Edition – Table 1 Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised 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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul> <li>Sampling reported is random rock chip grab sampling carried out by Iltani in August 2024</li> <li>Samples were bagged and sent to Australian Laboratory Services Pty Ltd (ALS) in Townsville for preparation and analysis.</li> <li>Analysis was for 48 element suite ME-MS61 (four acid digest followed by ICP-MS finish) with XRF15c for Sb for all samples.</li> </ul>
Drilling techniques	<ul> <li>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).</li> </ul>	<ul> <li>No drilling was carried out.</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and</li> </ul>	<ul> <li>No drilling was carried out.</li> </ul>





Criteria	JORC Code explanation	Commentary
	grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>No drilling was carried out.</li> <li>Rock chip samples were geologically described and recorded. All samples were photographed. Logging is qualitative in nature.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	No drilling was carried out.
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates,</li> </ul>	<ul> <li>Samples were submitted for assay to ALS (Townsville)</li> <li>Industry standard assay techniques were used: ME- MS61 48 element suite (four acid digest followed by ICP-MS finish) and XRF15c for Sb for all samples.</li> </ul>





Criteria	JORC Code explanation	Commentary
	external laboratory checks) and	
	whether acceptable levels of	
	accuracy (i.e. lack of blas) and	
	precision have been established.	
Verification of	<ul> <li>The verification of significant</li> </ul>	<ul> <li>No drilling was carried out.</li> </ul>
sampling and	intersections by either	All data was entered into excel spreadsheet.
assaying	independent or alternative	<ul> <li>No adjustment was made to assay data.</li> </ul>
	company personnel.	
	• The use of twinned holes.	
	• Documentation of primary data,	
	data entry procedures, data	
	verification, data storage (physical	
	Discuss any adjustment to access	
	Discuss any adjustment to assay	
Location of data	• Accuracy and quality of curveys	No Minoral Desource Estimation was undertaken
points	<ul> <li>Accuracy and quality of surveys</li> <li>used to locate drill boles (collar)</li> </ul>	No Mineral Resource Estimation was undertaken.
P	and down-hole surveys) trenches	<ul> <li>All exploration works are conducted in the GDA94</li> <li>Zene EE Crid</li> </ul>
	mine workings and other locations	
	used in Mineral Resource	<ul> <li>Topographic control is based on airborne</li> <li>goophysical survey and it is considered adequate</li> </ul>
	estimation.	geophysical survey and it is considered adequate.
	• Specification of the grid system	
	used.	
	<ul> <li>Quality and adequacy of</li> </ul>	
	topographic control.	
Data spacing and	Data spacing for reporting of	<ul> <li>No drilling was carried out.</li> </ul>
distribution	Exploration Results.	
	<ul> <li>Whether the data spacing and</li> </ul>	
	distribution is sufficient to	
	establish the degree of geological	
	and grade continuity appropriate	
	Reserve estimation procedure(s)	
	and classifications applied	
	Whether sample compositing has	
	been applied.	
Orientation of	Whether the orientation of	<ul> <li>No drilling was carried out.</li> </ul>
data in relation to	sampling achieves unbiased	
geological	sampling of possible structures	
structure	and the extent to which this is	
	known, considering the deposit	
	type.	
	If the relationship between the	
	drilling orientation and the	
	orientation of key mineralised	
	introduced a campling bias, this	
	incroudced a sampling blas, this	





Criteria	JORC Code explanation	Commentary
	should be assessed and reported if material.	
Sample security	<ul> <li>The measures taken to ensure sample security.</li> </ul>	<ul> <li>Samples were transported to Cairns by Iltani personnel, then from Cairns to ALS Townsville by a commercial courier</li> </ul>
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul> <li>No audits or reviews have been carried out at this point</li> </ul>



### Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary	
Mineral tenement and land tenure status	<ul> <li>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.</li> <li>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</li> </ul>	<ul> <li>Antimony Reward is located on EPM 27168</li> <li>EPM 27168 is wholly owned by Iltani Resources Limited</li> <li>All leases/tenements are in good standing</li> </ul>	
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>Exploration activities have been carried out (mapping, percussion drilling and surface geochemical surveys) by Kangaroo Metals in 2007 and 2008</li> <li>Gold Fields Exploration Pty Ltd carried out a program of mapping, sampling from May to November in 1985</li> </ul>	
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>Mineralisation occurs in epithermal vein systems containing stibnite (antimony sulphide)</li> </ul>	
Drill hole Information	<ul> <li>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, including, easting and northing, elevation or RL, dip and azimuth, down hole length, interception depth and hole length.</li> <li>If the exclusion of this information is justified the Competent Person should clearly explain why this is the case.</li> </ul>	<ul> <li>No drilling was carried out</li> </ul>	
Data aggregation methods	<ul> <li>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.</li> <li>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</li> </ul>	<ul> <li>No data aggregation methods have been used and no metal equivalents are used.</li> </ul>	





Criteria	JORC Code explanation	Commentary
	<ul> <li>detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	<ul> <li>No drilling was undertaken by Iltani</li> </ul>
Diagrams	<ul> <li>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 plans and sections.</li> </ul>	<ul> <li>Refer to plans and sections within report</li> </ul>
Balanced reporting	<ul> <li>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.</li> </ul>	<ul> <li>The accompanying document is considered to represent a balanced report</li> </ul>
Other substantive exploration data	<ul> <li>Other exploration data, if meaningful and material, should be reported.</li> </ul>	All meaningful and material data is reported
Further work	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> </ul>	<ul> <li>Exploration of the target area is ongoing.</li> <li>Iltani plans to conduct a 15 to 20 hole RC drilling program in September/October 2024</li> </ul>