24 August 2023

Iltani discovers epithermal vein system at Boonmoo prospect, QLD.

Critical minerals and base metals explorer **Iltani Resources Limited** (ASX: ILT, "Iltani" or "the Company") is pleased to announce results of an initial reconnaissance mapping and sampling program across EPM 27168 and EPM 27331 at its Herberton Project, QLD as part of ongoing exploration.

HIGHLIGHTS:

- Reconnaissance mapping and sampling program completed with 29 samples collected.
- Discovery of low sulphidation epithermal vein system – initial sample (BM025) returns outstanding assay of 7.85 g/t Au and 2.17 g/t Ag.
- Follow-up mapping and sampling confirms vein outcrops intermittently over a strike length of at least 600m with indicative boiling zone textures, colloform & crustiform banding plus gossanous zones and boxworks after sulphides.
- Sampling of historical workings at Boonmoo Bonanza and Union Jack returned grades of up to 455g/t Ag, 25 g/t In, 2.3% Cu, 6.3 % Pb and 1.7% Zn
- Iltani has prioritised follow-up detailed mapping and sampling activities targeting the vein system and surrounding area at Boonmoo – with a further 13 samples submitted for assay and results expected in 4 to 6 weeks time.

Figure 1 Epithermal Quartz Vein: BM025 sample returned 7.85 g/t Au & 2.17 g/t Ag

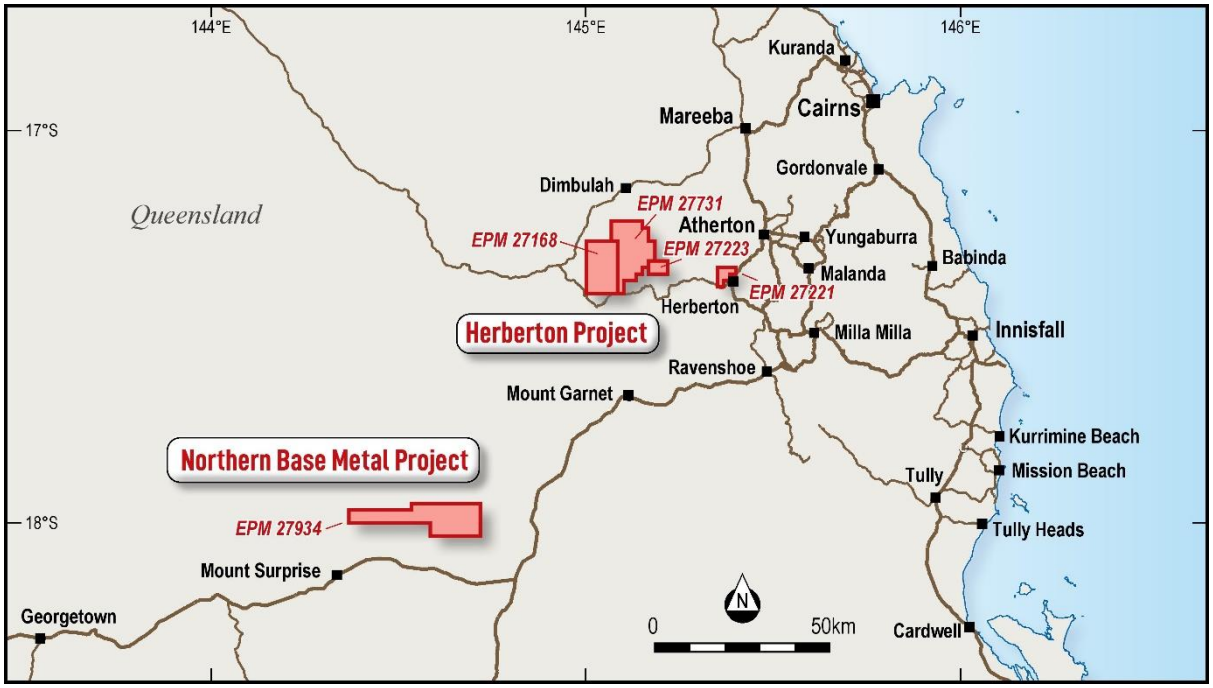
Iltani Managing Director Donald Garner commented:

"Our kick-off reconnaissance and mapping program in the Boonmoo area has delivered some really exciting results – the discovery of a hitherto unknown low sulphidation epithermal vein system extending over at least 600m, with an initial sample returning 7.85 g/t Au and 2.17 g/t Ag. Plus we have identified multiple tourmaline breccia pipes associated with extensive alteration zones and confirmed the presence of high-grade silver-indium-copper-lead-zinc mineralisation at multiple historic workings.

"Based on these initial results, we have already returned to the low sulphidation epithermal vein system and commenced additional mapping and sampling. A further 13 samples have been submitted for assay, and results are expected in 4 to 6 weeks time".

Iltani commenced reconnaissance mapping and sampling program targeting EPM 27168 and EPM 27331 in July 2023. The program is running in conjunction with Iltani's drilling at Orient (EPM 27223), where 11 RC holes (1,788m drilled) have been successfully completed to date out of a planned 16 hole program.

Figure 2 Project Location Map



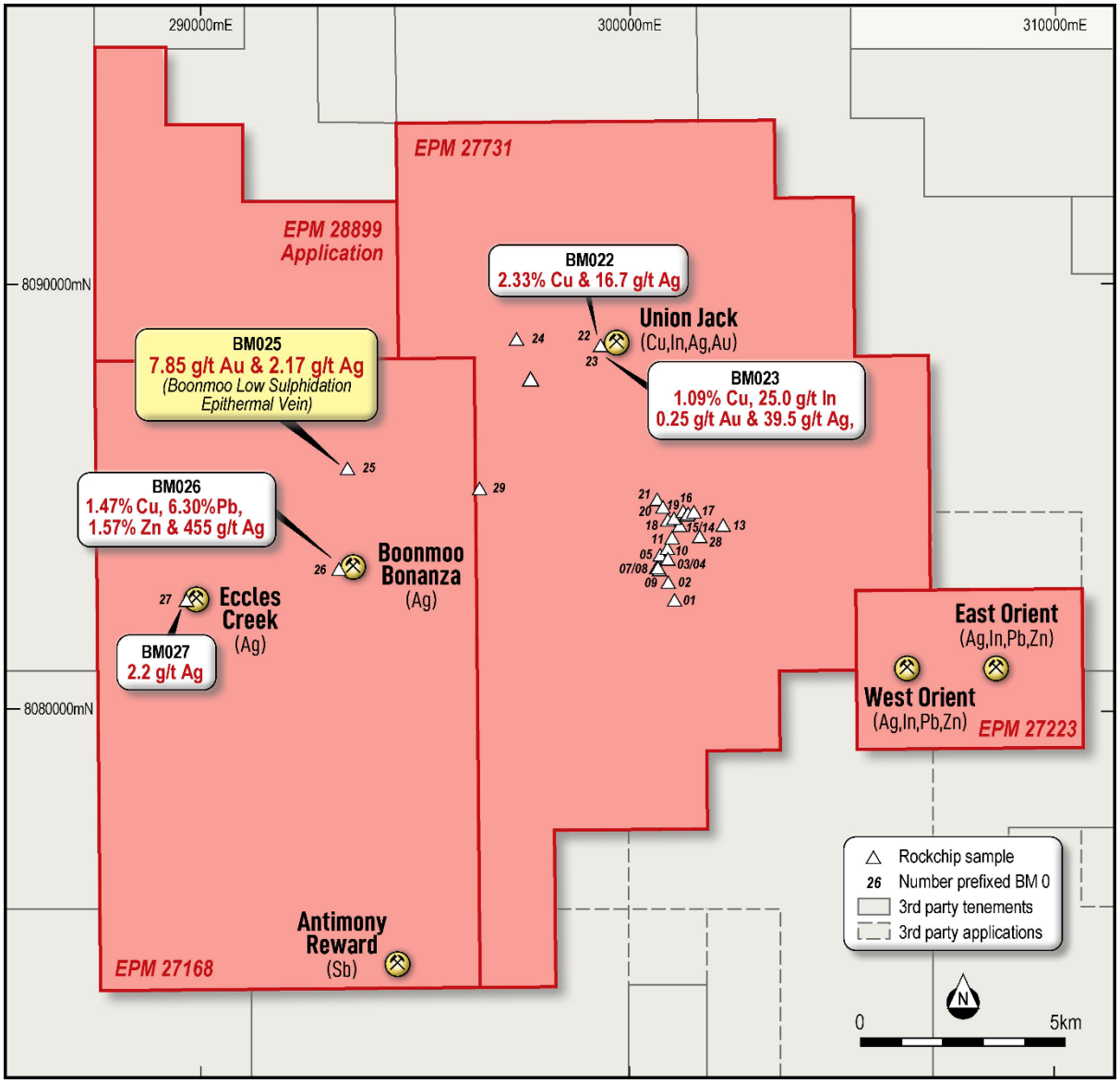
Iltani's reconnaissance sampling program aimed to follow up areas of interest (historical workings, known mineral occurrences) plus generate new exploration targets. The program was an outstanding success, with multiple tourmaline breccia pipes identified, historical workings mapped and sampled plus the discovery of a hitherto unknown low sulphidation epithermal vein system.

Iltani collected 29 rock chip samples from multiple locations across the target area (refer to Table 1 and Table 2 for further details). The highlight of the program was the discovery of an epithermal vein system located in the northern part of EPM 27168 (refer to Figure 3).

One rock chip sample (BM025) was taken from the low sulphidation epithermal vein system and this has returned an outstanding assay of 7.85 g/t Au & 2.17 g/t Ag.

In recognition of the importance of the new discovery (BM025), Iltani has prioritised follow up detailed mapping and sampling activities at the vein location (refer to Figure 3). Iltani has also lodged an application for the vacant ground to the north of EPM 27168.

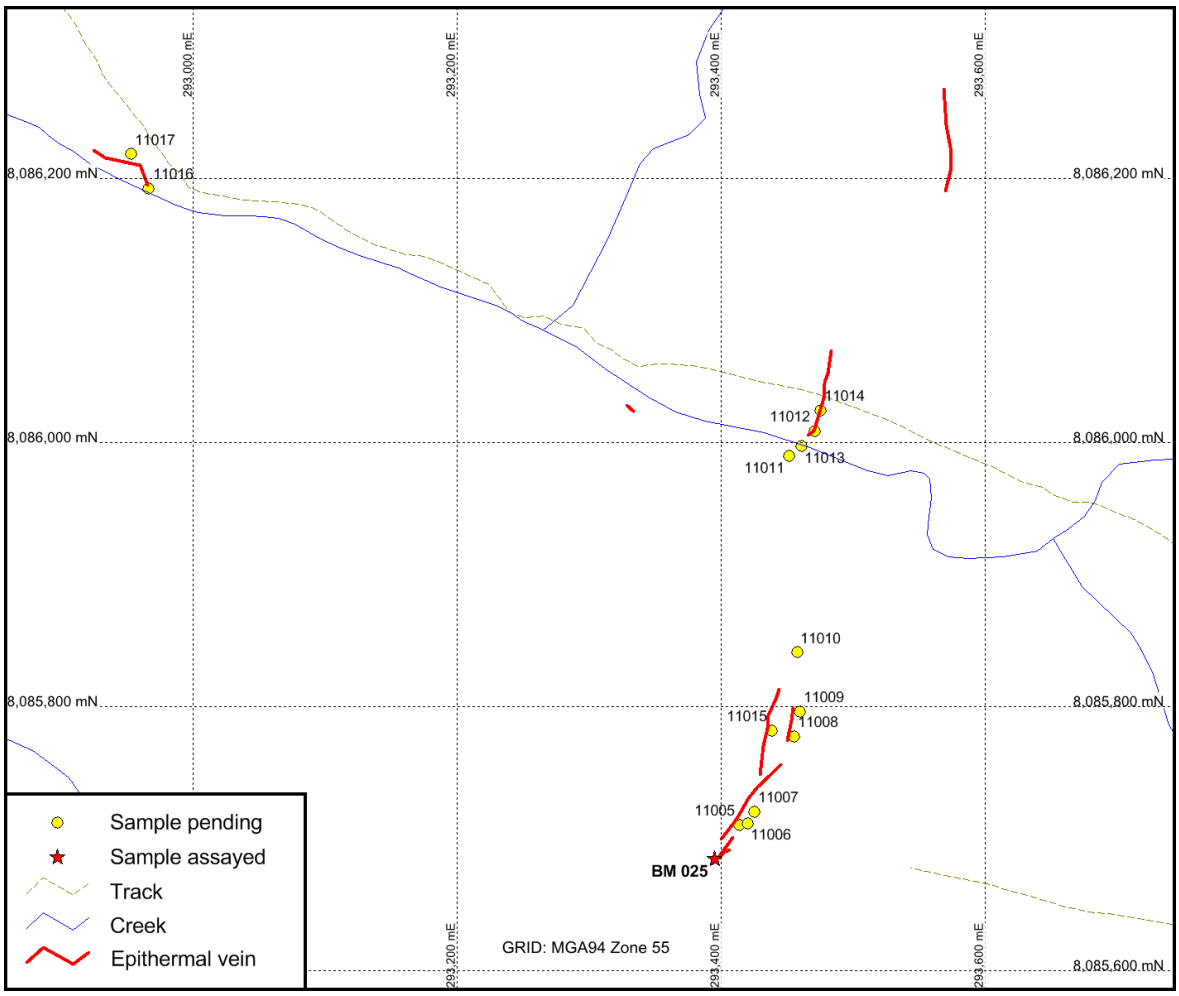
Figure 3 Boonmoo reconnaissance program sampling locations



Follow-up mapping and sampling has commenced, and the vein system has been traced intermittently over a strike length of at least 600m north of the discovery site (BM025). Areas between outcropping segments are covered with a lateritic soil profile that probably includes some transported alluvium. Eleven samples (11005 to 11015) were collected from the thickest part of the outcropping veins. Iltani is planning to undertake fieldwork to extend the veins south of the discovery site (BM025) and a further two samples (11016 to 11017) were taken from a 1m wide northwest trending quartz outcrop occurs approximately 500m west of the epithermal vein swarm (Figure 4). Refer to Table 3 for further details as regards the sampling.

The veins occur as anastomosing sets that define complex structures up to about 1m wide. Occasional pods of hydrothermal breccia up to about 0.5m wide occur within the structures.

Figure 4 Quartz veins and sample locations at the Boonmoo epithermal prospect.



Quartz within the veins is dominated by colloform and crustiform textures (Figure 6). A single example of float was observed with bladed carbonate replacement textures (Figure 7). This combination of textures indicates that the system is exposed immediately below the boiling zone of the hydrothermal system that generated the veins. The abundance of quartz, minor sulphide content and simple argillic alteration are characteristic indicators of low sulphidation epithermal systems.

Many vein exposures contain thin bands of gossan between crustiform bands of quartz, indicating the presence of sulphide bands similar to the "ginguro bands" that contain very high grade gold in some low sulphidation epithermal gold deposits (Figures 5 & 9). One sample (Figure 10) contained a layer of boxworks after coarse grained pyrite, confirming the presence of significant sulphide in the system

Figure 5 Gossan bands in vein system

Figure 6 Colloform crustiform banding cementing hydrothermal breccia

Figure 7 Bladed carbonate replacement texture

Figure 8 Pod of hydrothermal breccia with colloform and crustiform banded quartz infill

Figure 9 Breccia pod detail with gossan bands

Figure 10 Sulphide boxworks in colloform banded quartz

Table 1 - Boonmoo Reconnaissance Sampling Assay Data

Sample ID	Au	Ag	Cu	Cu	In	Pb	Pb	Zn	Zn
	ppm	ppm	ppm	%	ppm	ppm	%	ppm	%
BM 001	bdl	0.01	2.1		0.0	9.7		8	
BM 002	bdl	0.06	1.1		0.0	107		122	
BM 003	bdl	0.03	4.3		0.0	22.4		37	
BM 004	bdl	0.09	14.6		0.1	20.8		26	
BM 005	0.016	0.02	8.7		0.1	20.3		20	
BM 006	bdl	0.11	22		0.1	32.8		48	
BM 007	0.005	1.23	12.9		0.4		0.11%	168	
BM 008	bdl	0.04	25		0.1	17.4		91	
BM 009	bdl	0.2	1.5		0.1	39.6		19	
BM 010	bdl	0.02	2		0.0	16.7		16	
BM 011	bdl	0.02	5.1		0.1	8.6		11	
BM 012	bdl	0.02	3.6		0.6	5.2		12	
BM 013	bdl	0.02	2.9		0.6	2.8		9	
BM 014	bdl	0.02	2.6		0.6	7		10	
BM 015	bdl	0.03	3.4		0.2	9.1		5	
BM 016	bdl	0.04	3		0.3	7.9		9	
BM 017	bdl	0.04	2.8		0.0	13.4		10	
BM 018	bdl	0.02	1.5		0.1	4.4		4	
BM 019	bdl	0.01	1.8		0.2	4.8		6	
BM 020	bdl	0.11	8.8		0.1	60.7		21	
BM 021	bdl	0.16	19.2		0.1	18.3		14	
BM 022	0.019	16.7		2.33%	6.0		0.09%	470	
BM 023	0.254	39.5		1.09%	25.0		0.24%	166	
BM 024	bdl	0.89	126.5		1.4	482		156	
BM 025	7.85	2.17	48.9		0.0	30.0		12	
BM 026	0.007	455		1.47%	0.1		6.30%		1.57%
BM 027	bdl	2.2	14.3		0.1		0.25%		0.14%
BM 028	bdl	0.07	8.7		0.1	29.8		11	
BM 029	0.01	0.68	31.3		0.1	155.5		242	
bdl – below detection limit (<0.005 ppm Au)									

Table 2 - Boonmoo Reconnaissance Sample ID, Location & Description

Sample	Easting	Northing	Description and Comments
BM 001	301082	8082580	Narrow discontinuous quartz vein to 0.5m - some epithermal texture, abundant cryptocrystalline chalcedony and abundant clear to purple fluorite hosted in propylitic altered (blebby epidote) coarse grained ignimbrite.
BM 002	300934	8083007	Layered sinter quartz calcite layered carbonate vein. chemical origin, minor iron possibly ex ankerite/siderite float in creek.
BM 003	300871	8083601	Tourmaline shingle breccia pipe > 50m round, shallow cover in part, minor sulphides and ex sulphides, rare miarolitic cavities with euhedral quartz to 3mm.
BM 004	300852	8083614	Sheeted veining on margins of shingle breccia pipe, minor ex sulphides and abundant sericitic alteration.
BM 005	300784	8083588	Quartz float, grey to white laminated quartz, minor miarolitic cavities with euhedral quartz to 2mm and common ex sulphide gossan.
BM 006	300733	8083647	Quartz vein to 2m wide (strike 110 degree) in highly altered granite, stockwork on margins of granite, some banded epithermal texture, minor ex sulphide grains.
BM 007	300689	8083353	Iron rich saccharoidal quartz vein (strike 220 degree), in alt granite
BM 008	300684	8083353	Weakly porphyritic chlorite, biotite (propylitic into argillic) altered tonalite dyke.
BM 009	300713	8083328	Quartz vein float in creek, source not found, abundant ex pyrite cubes.
BM 010	300911	8083815	Small quartz vein displaying rare epithermal comb structure, minor chalcedony.
BM 011	301014	8084039	Narrow brecciated quartz vein, shingle tourmaline breccia on contact with buck white quartz infill, minor miarolitic cavities
BM 012	301192	8084344	Tourmaline matrix dominated tourmaline breccia pipe with angular quartz clasts.
BM 013	302217	8084345	As BM012, larger miarolitic cavities on side of pipe to 15cm, quartz crystals to 1cm & acicular sprays of tourmaline
BM 014	301409	8084605	Hydrothermally altered granite, biotite alt and phlogopite surrounding alt feldspar crystals, tourmaline breccia quartz veins on margins of hill
BM 015	301392	8084603	As BM014
BM 016	301281	8084678	Quartz tourmaline breccia in hydro alt ignimbrite
BM 017	301527	8084629	Tourmaline breccia veins in hydrothermally altered granite & large tourmaline angular clasts.
BM 018	300928	8084457	Sericitic altered granite with ex sulphide cavities.
BM 019	301057	8084497	20m round outcrop of highly sericitic and hydro altered granite with multiple tourmaline breccia veins and numerous miarolitic cavities on the margins of outcrop with euhedral quartz and fine acicular tourmaline.
BM 020	300806	8084755	Gossan, laminated on margins on granite and porphyritic granodiorite dyke contact
BM 021	300662	8084929	Hydrothermally sericitic altered fine grain tuff on small hill with Fe on fracture planes
BM 022	299340	8088565	Union Jack copper workings, sericitic altered sheared granite, gossanous veins, abundant malachite and rare azurite.
BM 023	299340	8088565	Gossan from Union Jack workings, minor malachite
BM 024	297364	8088732	Blocky haematite float adjacent to track.
BM 025	293395	8085685	Epithermal vein to 0.5m wide, strike 25 degree, for 200m +in altered tuff
BM 026	293199	8083310	Boonmoo Bonanza workings, series of shallow diggings and one main collapsed timber shaft 2.5 x 1.5m. abundant malachite, chrysocolla, minor ex sulphides and abundant cerussite on thin 1mm to 1.5mm fracture filled veins in sheared granite
BM 027	289606	8082579	Eccles Creek prospect, small dozer cutting on side of hill in sheared altered ignimbrite with Fe and Mn oxides on fractures, minor ex sulphides and minor fresh sulphides on fresh rock.
BM 028	301665	8084090	Hill adj to dam in ring structure sericitic alt granite with numerous quartz veins with miarolitic cavities with euhedral quartz and specular haematite, shallow diggings, some veins contain tourmaline crystals - acicular
BM 029	296496	8085199	Fe oxides on fractures in alt granite on margins of porphyry intrusive. north of snake creek # 8 prospect, tourmaline float in creek.
All grid coordinates are AMG Zone 55K			

Table 3 - Boonmoo low sulphidation epithermal vein sampling (assays pending)

Sample	Easting	Northing	Description and Comments
11005	293414	8085710	1m wide quartz vein with stockworks (outcrop)
11006	293420	8085711	Colloform crustiform quartz vein 500mm wide (outcrop)
11007	293425	8085720	Colloform crustiform quartz vein (outcrop)
11008	293456	8085777	Stockwork crustiform quartz veins (subcrop)
11009	293460	8085796	100mm quartz vein (subcrop)
11010	293458	8085841	Colloform quartz vein (float)
11011	293451	8085990	Colloform crustiform breccia quartz vein (subcrop)
11012	293471	8086009	Colloform crustiform banded breccia quartz vein (outcrop)
11013	293461	8085997	Colloform crustiform quartz vein (float)
11014	293476	8086025	Multiphase breccia quartz vein (outcrop)
11015	293438	8085782	Crustiform colloform (subcrop)
11016	292966	8086193	1200mm massive quartz vein (outcrop)
11017	292953	8086219	Massive quartz vein chalcedonic and silicified rock (outcrop)

Authorisation

This announcement has been approved for issue by Donald Garner, 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 Carlos Duran who is a member of The Australasian Institute of Geologists (AIG), and is a consultant engaged by 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).

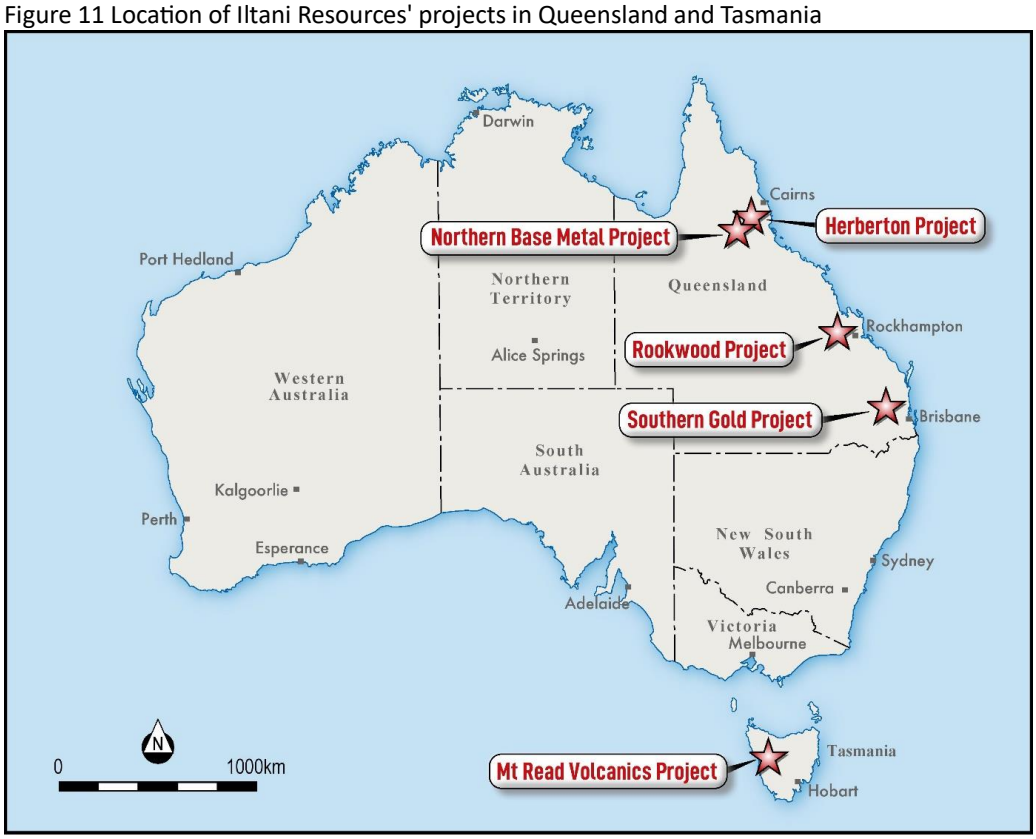
Mr Duran consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.

About Iltani

Iltani Resources (ASX: ILT) is a recently listed ASX company focused on the base metals and critical raw materials 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, including a high priority silver target at Orient, part of its Herberton Project, which will be its initial focus for exploration.

Other projects include the Northern Base Metal, Southern Gold and Rookwood projects in Queensland and its Mt Read Project is in application over a highly strategic 99km^2 licence in Tasmania's Mt Read Volcanics (MRV) Belt, located between the world-class Rosebery and Hellyer-Que River VHMS deposits.

Figure 11 Location of Iltani Resources' projects in Queensland and Tasmania



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	• 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. • Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. • 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.	• Source of rock samples is as per Table 2 in accompanying release • Samples were selected by company consultant to be representative of the sampling location • Samples were bagged and sent to Australian Laboratory Services Pty Ltd (ALS) in Townsville. • Samples were crushed to sub 6mm, split and pulverised to sub 75µm in order to produce a representative sub-sample for analysis. • Analysis consisted of 30g Fire Assay with AAS finish for Au and four acid digest with Inductively Coupled Plasma Mass Spectrometry (ICP-MS) (ME-MS61r) analysis for the following elements: Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Ga, Ge, Hf, In, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Rb, Re, S, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y Zn, Zr & REE (Dy, Er, Eu, Gd, Ho. Lu, Nd, Pr, Sm, Tb, Tm and Yb • Ore grade sample analysis consisted of four acid digest with Inductively Coupled Plasma Atomic Emission Spectroscopy (ICP-AES) finish. This was carried out for Cu, Pb, Zn & Ag.
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).	• No drilling was carried out
Drill sample recovery	• Method of recording and assessing core and chip sample recoveries and results assessed. • Measures taken to maximise sample recovery and ensure representative nature of the samples. • 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.	• No drilling was carried out

Criteria	JORC Code explanation	Commentary
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. • Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. • The total length and percentage of the relevant intersections logged.	• A brief description of the rock samples was completed. • Photos of each sample were taken for reference.
Sub-sampling techniques and sample preparation	• If core, whether cut or sawn and whether quarter, half or all core taken. • If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. • For all sample types, the nature, quality and appropriateness of the sample preparation technique. • Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. • 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. • Whether sample sizes are appropriate to the grain size of the material being sampled.	• No sub sampling was undertaken. The entire rock chip sample was sent to the laboratory for analysis. • Sample preparation is industry standard, occurring at an independent commercial laboratory • Samples were crushed to sub 6mm, split and pulverised to sub 75µm in order to produce a representative sub-sample for analysis • The sample sizes are considered to be appropriate to correctly represent the mineralisation style
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. • 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. • 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.	• The assay methods employed are considered appropriate for near total digestion • No quality control samples were inserted into the sample batch • A check of the standards and duplicates analysed by the laboratory showed the results were within confidence limits.
Verification of sampling and assaying	• The verification of significant intersections by either independent or alternative company personnel. • The use of twinned holes.	• Laboratory results are reviewed by Company geologists • Due to random nature of the rock sampling, collection of a duplicate sample to check the high grade samples is not possible.

Criteria	JORC Code explanation	Commentary
	• Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. • Discuss any adjustment to assay data.	• The assay files (.csv and pdf) from the laboratory are stored on the Company Server at Melbourne. The assay data was cross matched with the sample data and copied into spreadsheets for use in evaluating the results. • There were no adjustments to the assay data
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. • Specification of the grid system used. • Quality and adequacy of topographic control.	• Rock chip samples were located using a hand held GPS with accuracy +/- 3m • Coordinate system used is MGA94 Zone 55
Data spacing and distribution	• Data spacing for reporting of Exploration Results. • 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. • Whether sample compositing has been applied.	• The number of samples collected at each site reflects the abundance and variety of accessible material
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. • 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.	• No drilling was carried out
Sample security	• The measures taken to ensure sample security.	• Samples have been overseen by company consultant during transport from site to ALS Townsville.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• No audits or reviews have been carried out at this point

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	• 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. • 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.	• The sampling was conducted on EPM27161 and EPM 27731 • EPM27168 and EPM27731 are held by Iltani Resources Limited • All leases/tenements are in good standing
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	• Limited historical exploration activities have been carried out in some of the areas by Red River Resources Limited and Great Northern Minerals, consisting of mapping and sampling
Geology	• Deposit type, geological setting and style of mineralisation.	• Mineralisation consists of vein hosted copper mineralisation and epithermal gold mineralisation
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, including, easting and northing, elevation or RL, dip and azimuth, down hole length, interception depth and hole length. • If the exclusion of this information is justified the Competent Person should clearly explain why this is the case.	• No drilling was carried out by Iltani Resources
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. • 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.	• No drilling was carried out

Criteria	JORC Code explanation	Commentary
	• The assumptions used for any reporting of metal equivalent values should be clearly stated.	
Relationship between mineralisation widths and intercept lengths	• These relationships are particularly important in the reporting of Exploration Results. • If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. • 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').	• No drilling was carried out.
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 plans and sections.	• Refer to plans and sections within report
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.	• The accompanying document is considered to represent a balanced report
Other substantive exploration data	• Other exploration data, if meaningful and material, should be reported.	• All meaningful and material data is reported
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).	• Exploration of the target area is ongoing. Iltani will follow up on positive sampling results with a more in depth sampling and mapping program. Further field work including mapping and rock chip/soil sampling is also planned to discover further mineralised prospects