

11 April 2025

Iltani receives CEI grant to fund Herberton airborne geophysical survey

Iltani Resources Limited (ASX: ILT, “Iltani” or “the Company”) is pleased to announce it has been awarded a grant to fund an airborne geophysical survey at Iltani’s Herberton Project in Queensland through Round 9 of the Collaborative Exploration Initiative (CEI) under the Queensland Department of Natural Resources and Mines, Manufacturing and Regional and Rural Development’s Industry Development Plan.

HIGHLIGHTS:

- Iltani receives \$230,375 grant through Round 9 of the Collaborative Exploration Initiative (CEI) under the Queensland Department of Natural Resources and Mines, Manufacturing and Regional and Rural Development’s Industry Development Plan.
- CEI grant will fund the Featherbed Volcanics helicopter-borne Versatile Time Domain Electromagnetic (VTEM) Survey. The VTEM helicopter-borne survey will undertake coincident VTEM and magnetic surveys of 464 line kilometres, comprising:
 - **Orient Silver-Indium Deposit VTEM Survey:** Fly Orient area at a 100m line spacing and target mineralisation undercover between Orient West and East, plus the extensions to the system (Orient North, South and Deadman Creek)
 - **Boonmoo Sag Caldera VTEM Survey:** Fly the target area at a 200m line spacing and target the mapped tourmaline breccia pipes plus the known historical small scale base metal mines within the Caldera Complex to assess the potential for deep seated intrusive related base metal mineralisation
- Iltani expects to complete VTEM survey in May / June 2025 and the results will be used to plan further exploration at Orient and regional exploration across the Herberton Project.

Iltani Managing Director Donald Garner commented: *“We are very pleased to receive this CEI funding from the Queensland Department of Natural Resources and Mines, Manufacturing and Regional and Rural Development which will enable Iltani to complete the Featherbed Volcanics VTEM Survey. The survey has the potential to be a game-changer for Iltani in multiple areas:*

- *Orient – we know the sulphide (silver-lead-zinc-indium) mineralisation at Orient responds well to EM (from the work we did last year). So flying the Orient area should enable us to locate more sulphide mineralisation – including the mineralisation at depth and undercover. This will enable us to better evaluate the total extent of the Orient System and delineate new drilling targets, expanding the Orient System.*
- *Boonmoo Sag Caldera – this area has never been explored in any detail. Previous explorers in the Herberton region targeted tin mineralisation, which is unlikely within the Caldera Complex, so the area was consequently ignored. There are some small historical small-scale base metal mines within the Caldera Complex plus Iltani reconnaissance exploration identified multiple tourmaline breccia pipes (tourmaline breccia pipes can host high-grade copper sulphide mineralisation and can also be associated with porphyry copper deposits at depth). The VTEM survey is designed to cover all these target areas.*

Figure 1 Looking NW from Iltani's Orient silver-indium deposit into the Boonmoo Sag Caldera Complex

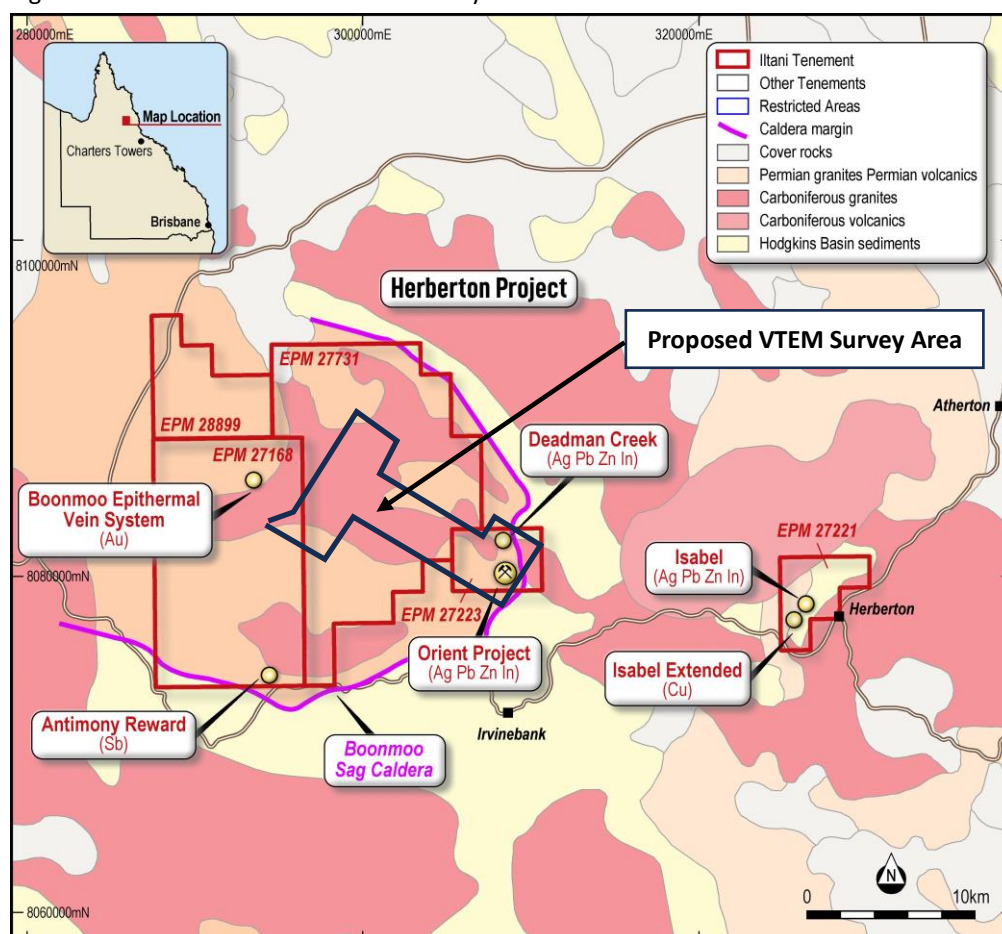


1. Featherbed Volcanics VTEM Survey

Itani has received a \$230,375 grant through the Collaborative Exploration Initiative (CEI) Round 9 to fund the Featherbed Volcanics helicopter-borne VTEM Survey. The VTEM Survey will consist of a helicopter-borne survey which will undertake coincident VTEM and magnetic surveys and comprises 464 line kilometres.

The survey is designed to cover multiple targets, the priority target being the Orient area, flown at 100m line spacing, then the Boonmoo Sag Caldera area at 200m line spacing. Line direction is 120° – 300° to ensure suitable coverage of the variably oriented structures to be tested (Figure 2).

Figure 2 Featherbed Volcanics VTEM Survey Location

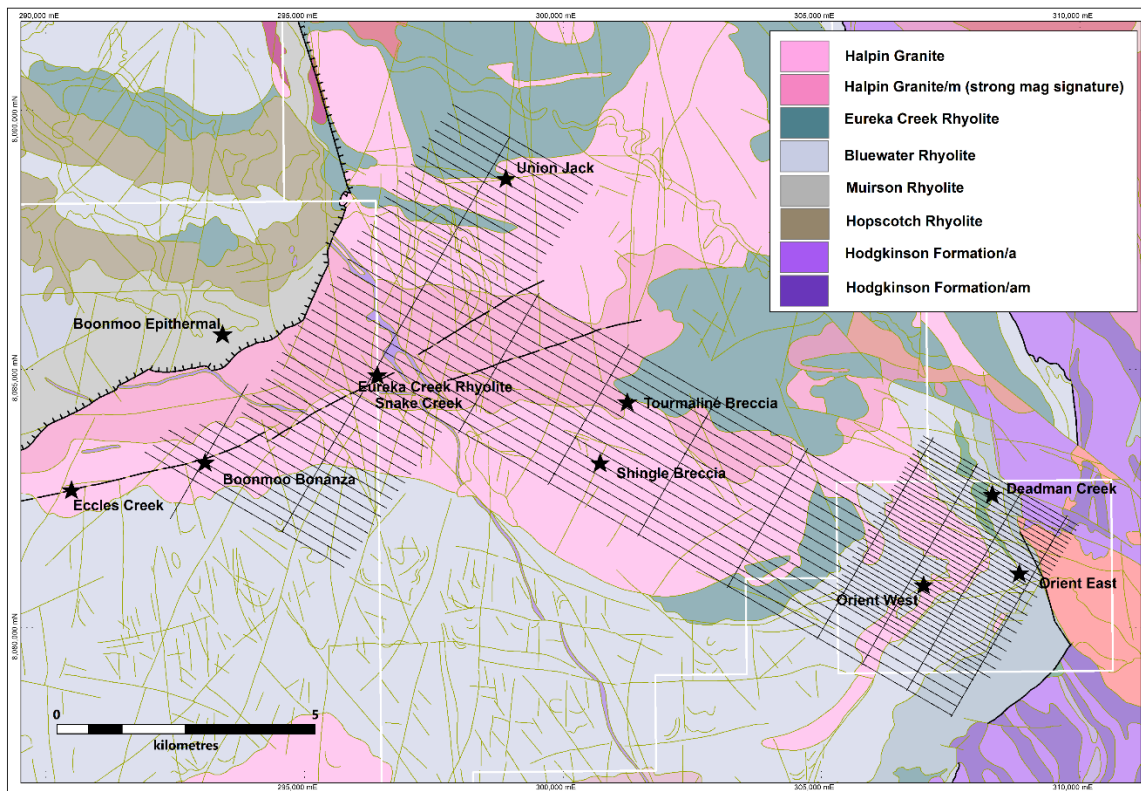


The survey is planned to take place in mid-2025 and will cover three tenements, EPM27223, EPM27731 and EPM27168, all wholly owned by Itani Resources which are located approximately 20km to 35km west of Herberton in Northern QLD.

The survey will be conducted by UTS Geophysics Pty Ltd with Geotech Ltd.'s Versatile Time-Domain Electromagnetic (VTEM™ Max) geophysical system and interpretation by Kate Hine of Mitre Geophysics. The VTEM™ Max Time Domain EM system is excellent for locating discrete conductive anomalies as well as mapping lateral and vertical variations in resistivity and also includes a high-sensitivity caesium magnetometer for mapping geologic structure and lithology.

VTEM induces a “primary” magnetic field into the earth, which produces eddy currents in any conductors this field passes through. These eddy currents produce a time-varying secondary magnetic field that the VTEM Max system can measure. The stronger the conductor, the slower the secondary-field decays, so a “late-time” response is a favourable outcome. VTEM can directly detect massive sulphides and/or identify conductive formations.

Figure 3 Featherbed Volcanics VTEM Survey Area



In line with the CEI operating to support ‘proof of concept’ exploration activities; the Featherbed VTEM survey is designed to test the following targets (also refer to Table 1):

- Define additional “blind” mineralisation within the Orient Project area, particularly between Orient East and Orient West;
- Determine the extent of mineralisation associated with identified historic base metal sulphide workings;
- Determine the presence of sulphide mineralisation along structures associated with known mineralisation in areas of surficial cover;
- Assess the tourmaline breccia pipes for deep-seated sulphide base metal mineralisation.

Table 1 Featherbed Volcanics VTEM Survey Targets

Target	Mineralisation Style	Target Commodities
Orient Complex	Epithermal base metal	Ag-Pb-Zn-In +/- Sn
Tourmaline Breccia	Intrusion related	Cu-Ag
Union Jack	Epithermal base metal	Ag-Cu-Pb-Zn-In
Snake Creek	Epithermal base metal	Ag-Cu-Pb-Zn-In
Boonmoo Bonanza	Epithermal base metal	Ag-Cu-Pb-Zn-In

With receipt of CEI funding and with first-hand knowledge of various mineralisation styles present within the Boonmoo Sag Complex, Iltani will be able to define immediate “blind” drill targets associated with sulphide mineralisation at Orient and to quickly assess the potential for further Orient-style Ag-Cu-In-Pb-Zn mineralisation and/or copper mineralisation within the poorly explored central portion of the Boonmoo Sag Complex.

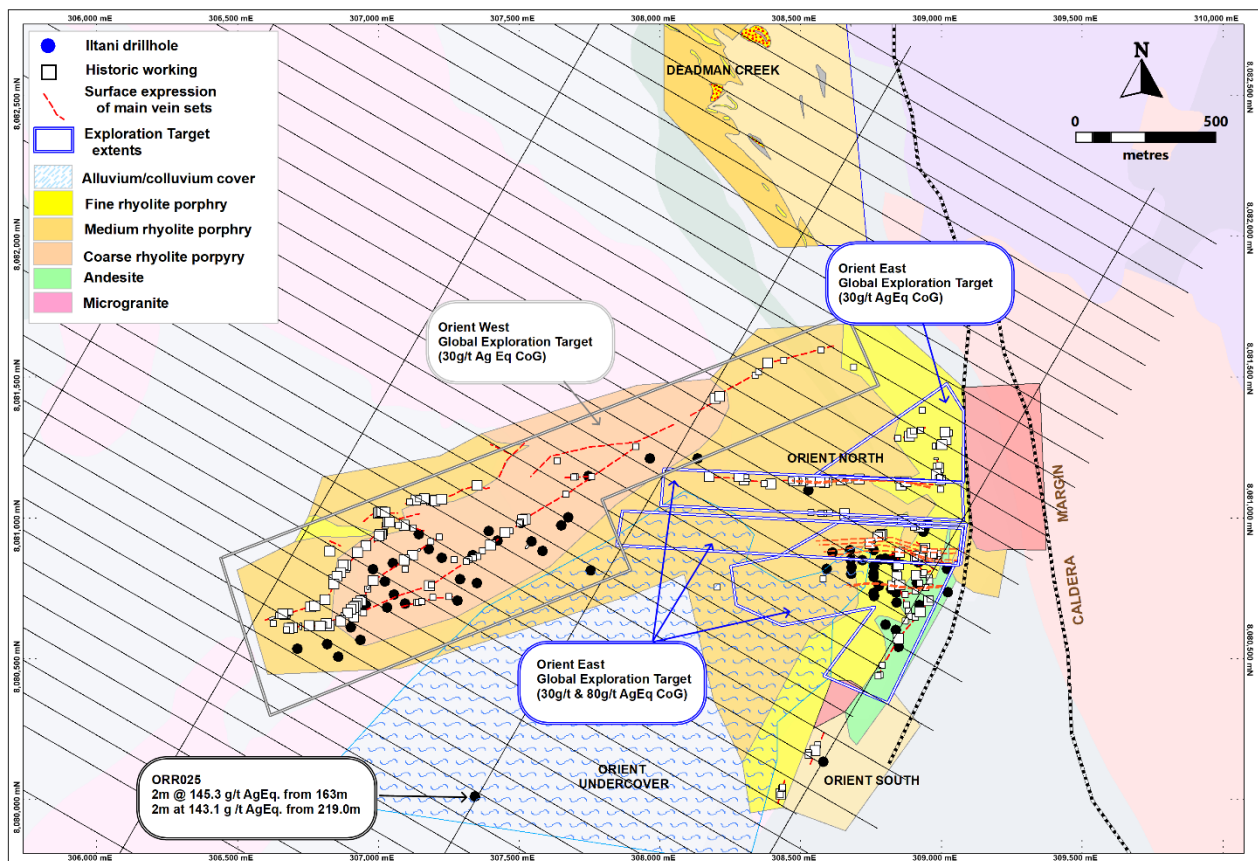
2. Orient VTEM Survey

Iltani completed a downhole electromagnetic (DHEM) survey at Orient West in 2024, demonstrating that the Orient West vein system produced a very strong response to EM, with conductors defined representing the lower and upper parts of the sulphide vein system and lesser zones of sulphide mineralisation were also delineated.

Based on the success of the DHEM survey at not only delineating the main Orient West lode package but also minor sulphide zones, Iltani believes that the proposed VTEM survey covering the Orient project area at 100m line spacing (Figure 3) will detect “blind” sulphide vein systems that have no surface expression. The survey will also aid in delineating the three dimensional orientation of the sulphide lodes, with variable strike and dip of the vein systems recognised particularly in the Orient East area and to determine the presence of higher-grade feeder zones at depth.

A key target of the Orient VTEM survey will be the Orient Undercover Zone, the area under alluvium/colluvium cover between Orient West and East (Figure 4).

Figure 4 Orient VTEM Survey Targets



To date, Iltani has completed one RC drill hole (ORR025) in this area, targeting a blind geophysical anomaly (induced polarisation anomaly) in this area, located 650m south of Orient West (the A2 geophysical anomaly). The cover sequence (sheetwash) was circa 5m thick in the area – and there was no evidence of old workings and/or mineralised float.

ORR025 intersected multiple silver-lead-zinc-indium veins (**2m @ 145.3 g/t Ag Eq.** from 163m and **2m @ 143.1 g/t Ag Eq.** from 219m downhole), confirming the Orient System mineralisation continues under the more recent cover sediments and demonstrates the potential to materially expand the Orient System.

The VTEM survey should give Iltani a clear picture of the location and extent of the silver-lead-zinc-indium mineralisation under the cover sequence, allowing Iltani to better target drilling.

3. Boonmoo Sag Caldera VTEM Survey

To date, minimal exploration work has been undertaken within the central portion of the Boonmoo Sag Complex and adjacent Eight Mile Cauldron due to the perception that there was no significant tin mineralisation present and due to rugged topography that impedes access.

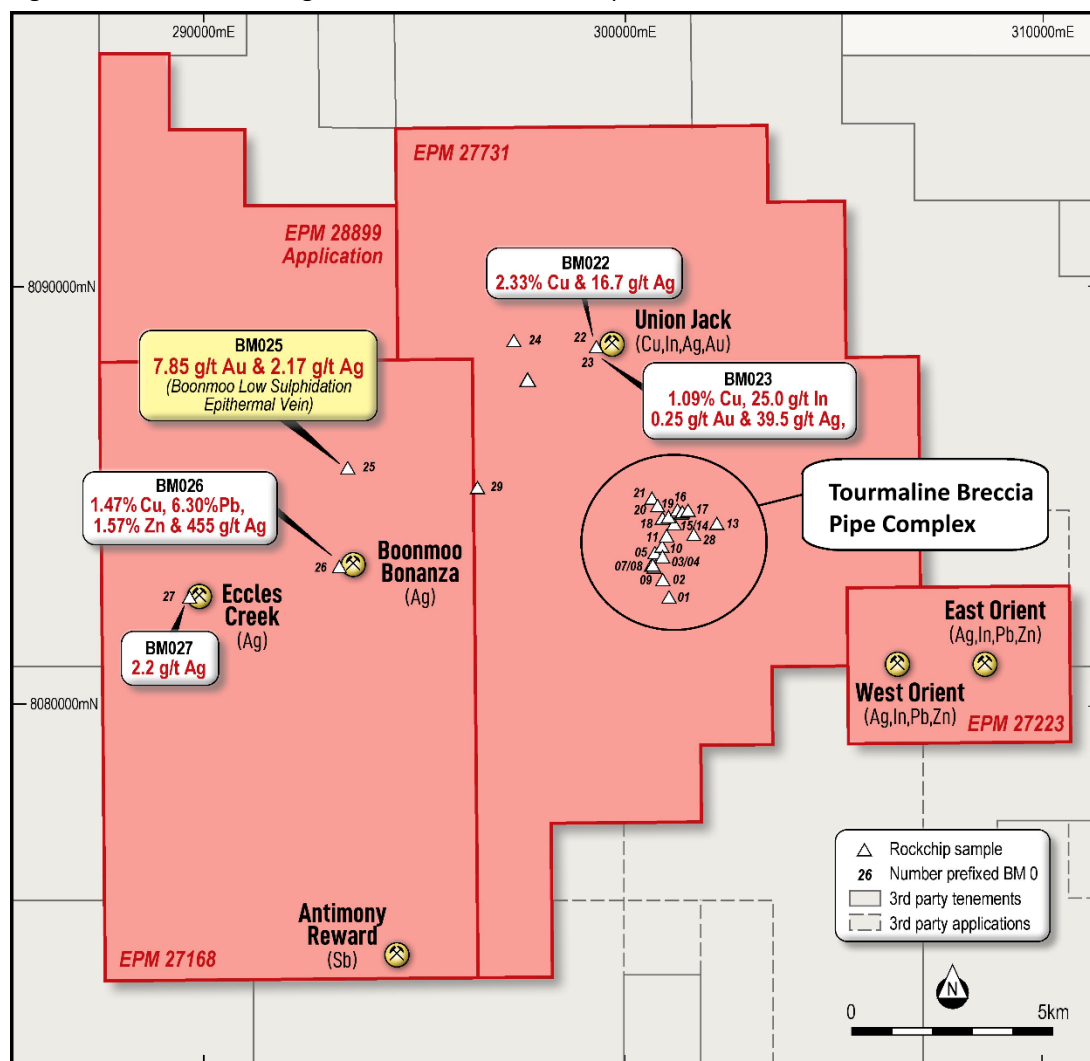
A halo of tin and other metal occurrences about 5km wide surrounds the Boonmoo Sag caldera. Most of the occurrences are vein and breccia style within basement sediments and carboniferous granitoids. This halo indicates a large fluid system with a large metal budget associated with the magmatic system is potentially beneath the caldera.

Itlani undertook a program of regional mapping and sampling targeting the Boonmoo Sag Caldera in 2023¹. The program objective was fulfilled and led to the discovery of:

- A cluster of tourmaline breccia pipes (Tourmaline Breccia Complex) associated with an extensive alteration system
- Confirmed the prospective nature of multiple historical base metal workings (Boonmoo Bonanza and Union Jack).

The reconnaissance mapping and sampling program has indicated there is the potential for a larger (as yet undiscovered) mineralising system to have operated in the Boonmoo Sag Caldera.

Figure 5 Itlani Boonmoo Sag Caldera Reconnaissance Exploration Activities



¹ Refer to ILT ASX release dated 23 August 2023 – Itlani discovers epithermal vein system at Boonmoo Prospect, QLD

3.1. Tourmaline Breccia Pipe Complex

Iltni discovered the Breccia Pipe Prospect whilst undertaking reconnaissance of a circular ring fault structure in the centre of the Boonmoo Sag caldera. The erosion-resistant ridges in the area display a dominant circular feature visible on LIDAR and satellite aerial photography is thought to represent ring faults from a deep cooling subsiding contracting magma chamber. The ridges consist of highly hydrothermally sericitic altered granite, silica indurated, display numerous quartz veins, quartz tourmaline breccia veins and miarolitic cavities. Ground inspection of the ring feature revealed multiple tourmaline breccia pipes of differing styles.

Figure 6 Tourmaline Breccia Pipe Prospect



TBP - Tourmaline Breccia Pipes.

TB - Tourmaline Breccia in sericitic altered granite.

One breccia pipe is approximately 50m round with a dominant tourmaline matrix and angular quartz clast breccia with miarolitic cavities of euhedral quartz and tourmaline and unidirectional solidification textures on the pipe margins representing a high fluidisation matrix to clast ratio pipe. The tourmaline has a slight greenish tinge - schorl to olenite (Fe to Na) series. An additional tourmaline breccia pipe of an estimated 75m diameter is a shingle type breccia pipe displaying sheeted quartz veining on the margins of the pipe and rare miarolitic cavities displaying euhedral prismatic quartz to 3mm and rare sulphides. The pipe displays decompressive shock textures resulting from a drop in fluid pressure. The dominant clast is composed of shingle to lineal angular tourmaline fragments to several cm long,

fragments of sericite and volcaniclastics in a quartz dominant matrix. Shingle type breccias are regarded as prospective exploration targets due to the high clast to matrix ratio therefore providing permeability for sulphide mineralisation. Polyclastic shingle breccias are also indicative of upper level well preserved breccia's and therefore enhances their prospectivity. It should be noted that intrusive related tourmaline breccia pipes have significant vertical extent sometime in excess of 1km.

Figure 7 Matrix Supported Tourmaline-Quartz Breccia



Figure 8 Tourmaline Shingle Breccia



**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).

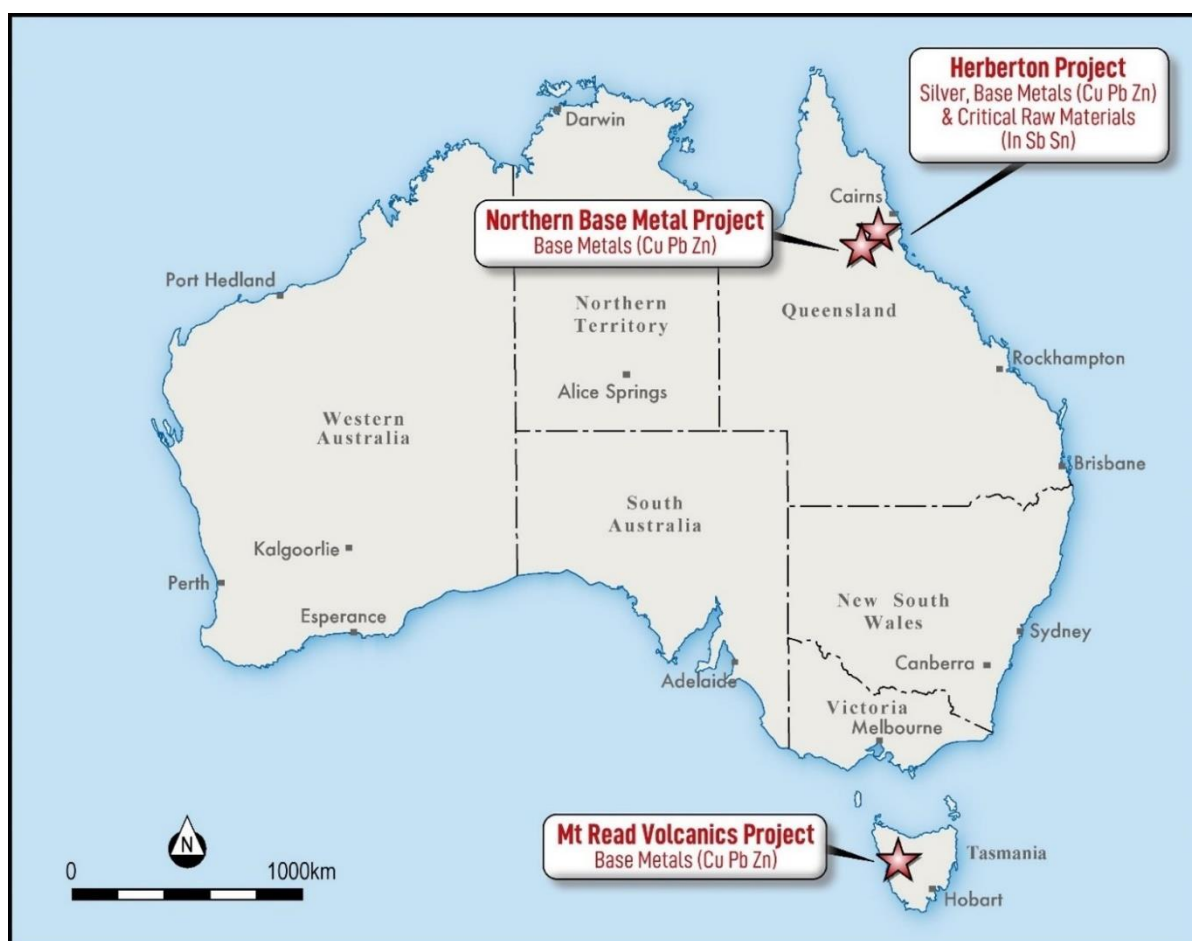
Mr Norum consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.

About Iltani

Iltani Resources (ASX: ILT) is an ASX listed company focused on exploring for and developing the precious metals and base metals projects to deliver the 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 Project in Northern Queensland plus the Mt Read Volcanics Project in Tasmania.

Figure 9 Location of Iltani Resources' projects in Queensland and Tasmania




Metallurgical Equivalent Calculation – Additional Disclosure

The equivalent silver formula is $Ag\ Eq. = Ag + (Pb \times 35.5) + (Zn \times 50.2) + (In \times 0.47)$

Table 2 Metal Equivalent Calculation - Recoveries and Commodity Prices

Metal	Price/Unit	Recovery
Silver	US\$20/oz	87%
Lead	US\$1.00/lb	90%
Zinc	US\$1.50/lb	85%
Indium	US\$350/kg	85%

Please refer to the release dated 14 November 2023 (Test Work Confirms Silver-Indium Production Potential) detailing the historical test work which Iltani is using to support the metal equivalent calculation.

The metal equivalent calculation (Ag Eq.) assumes lead and silver will be recovered to a lead concentrate and zinc, silver and indium will be recovered to a zinc concentrate. It is Iltani's opinion that all the elements included in the metal equivalent calculation have a reasonable potential to be recovered and sold.

It should be noted that there are other metals present, notably antimony and tin, that have the potential to be included in the metallurgical equivalent calculation, but at this stage, Iltani has chosen not to do so. These metals will likely also be recovered to the concentrates, notably the lead concentrate, however Iltani is currently assuming that these metals will not be payable, so are excluded from the metallurgical equivalent calculation.

Should this situation change, and the antimony and tin become payable in the lead concentrate and/or metallurgical test work indicates that the antimony or tin can be recovered to a separate concentrate where they are payable, then the metallurgical equivalent calculation could be expanded to include these metals.