24 October 2024

Iltani targets high-grade silver in drilling at Orient East, QLD

Critical minerals and base metals explorer **Iltani Resources Limited** (ASX: ILT, "Iltani" or "the Company") is pleased to update the market on its latest drilling activities at the Herberton Project in Northern Queensland.

HIGHLIGHTS:

- Iltani has completed drilling at the Antimony Reward project and the RC (reverse circulation) drill rig has commenced drilling at the Orient project.
- Seven drill holes completed (for 683m drilled) on the Southern Vein system at Antimony Reward with 236 samples dispatched to the assay lab and first results are expected in 4 to 6 weeks. A total of 15 drill holes (for 1,395m drilled) were completed at Antimony Reward.
- Drill rig has moved to Orient Silver-Indium project to commence drilling at Orient East where Iltani has planned 22 drill holes, and to date, 5 drill holes (for 742m drilled) have been completed.
- First batch of Orient East drill samples have been dispatched to the assay lab, with results expected in 4 to 6 weeks.

Figure 1 Orient East Drilling

Iltani Managing Director Donald Garner commented: *"After being on site for the last couple of days, spending time at Antimony Reward and Orient, it was good to see the progress we are making. We are pleased to have finished the initial drill program at Antimony Reward and have moved the rig up the road to start drilling at the Orient Silver-Indium project.*

It is great to be drilling at Orient again, and the planned drilling at Orient East will give us a better understanding of the potential at Orient East, building on what we already have defined at Orient West.

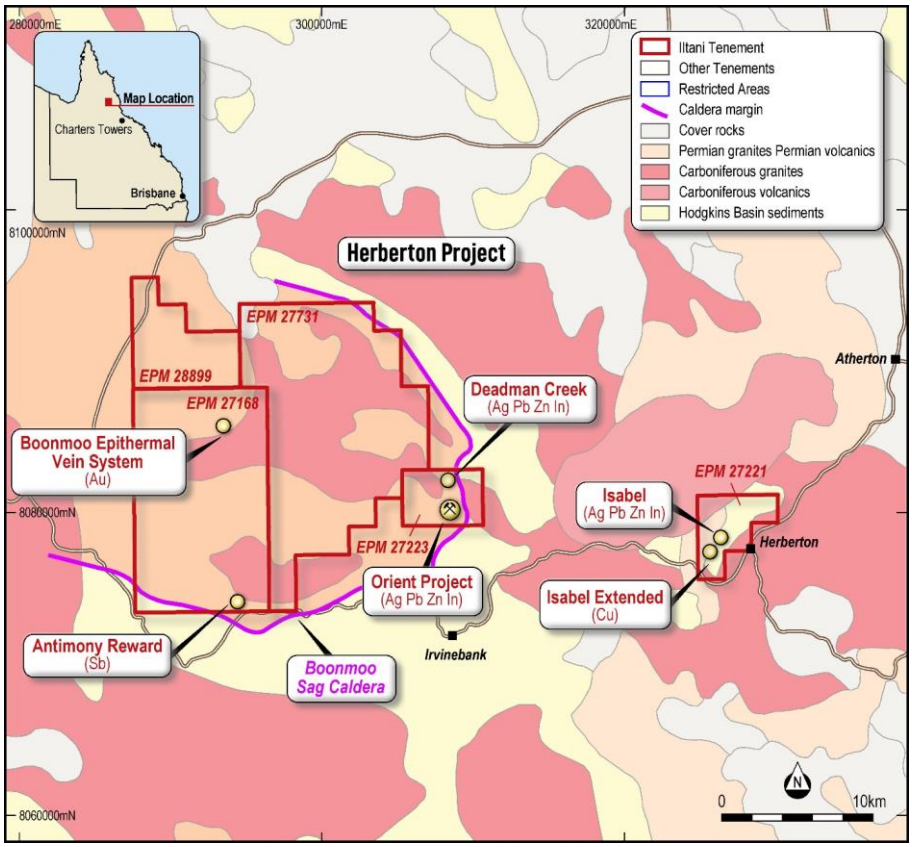
We are targeting the area at Orient East where we have previously intersected extensive high-grade mineralisation, notably 41m at 107.7g/t Ag Eq. from 39m including 5m at 346.1g/t Ag Eq. from 59m in ORR003 and 38m at 190.4g/t Ag Eq. from 19m including 7m at 454.9g/t Ag Eq. from 27m in ORR001."

Figure 2 Orient East Drilling

1. Orient Silver-Indium Project

Iltani Resources' Orient Silver-Indium project (Figure 3) is located on Iltani's wholly owned exploration permit EPM 27223, and is approximately 20km from Herberton in Northern Queensland.

Figure 3 Orient Project Location



Mineralisation at the Orient Project consists of a series of epithermal vein systems with associated stockwork mineralisation and extensive alteration (Orient West, Orient East and Deadman Creek) identified over an area of at least approximately 6km^2 (refer to Figure 4).

Prior to the commencement of the current program, Iltani had completed a total of 35 drill holes for 5758m drilled at Orient, with the majority of drilling completed at Orient West where Iltani has recently defined the following Exploration Target:

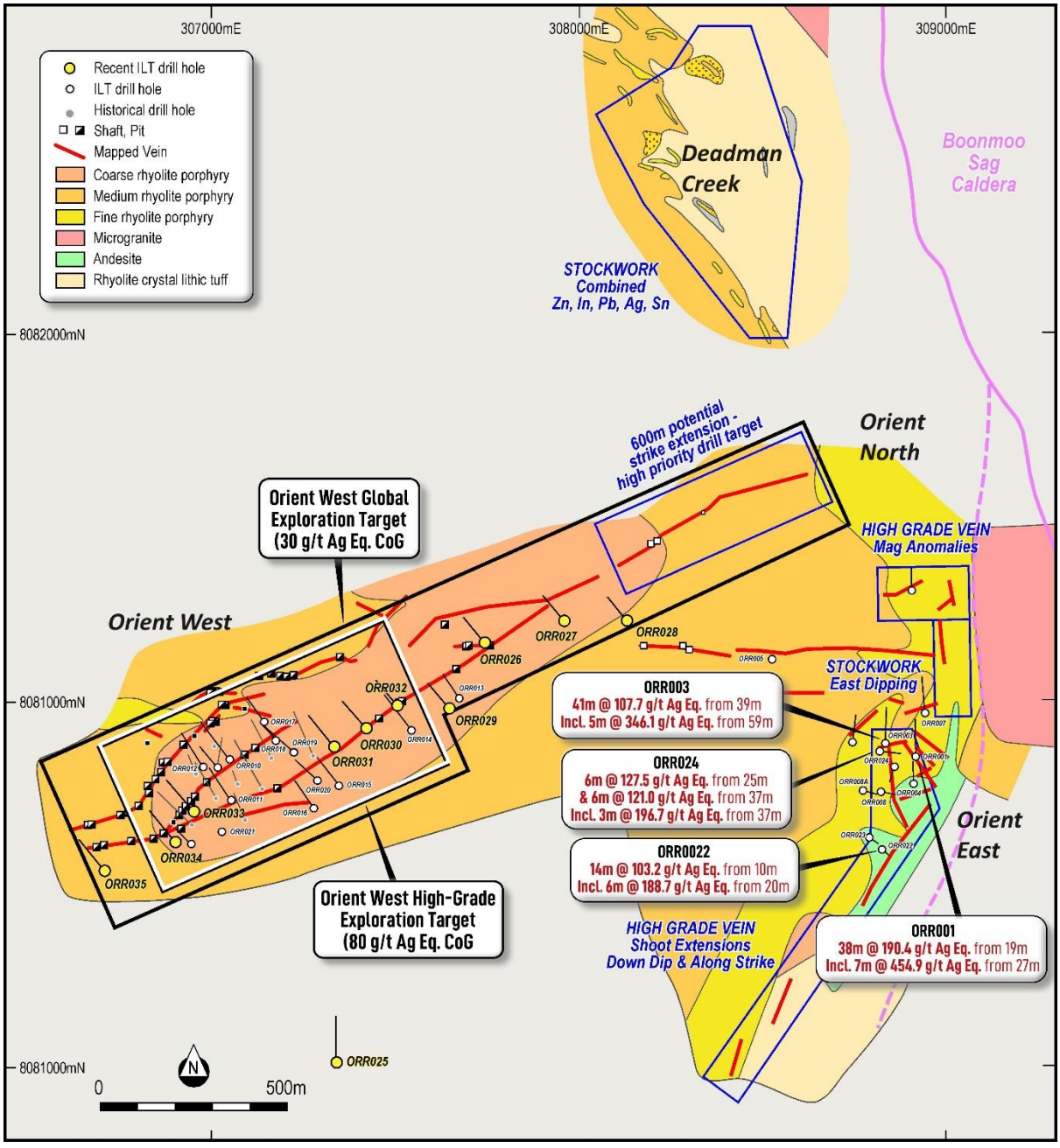
Orient West Global Exploration Target: 74 – 100 Mt @ 55 – 65 g/t Ag Equivalent (30 g/t Ag Eq. cut-off grade) inclusive of high-grade core material in multiple lenses of 20 – 24Mt @ 110 – 120 g/t Ag Equivalent (80 g/t Ag Eq. cut-off grade)

The potential quantity and grade of the Exploration Target is conceptual in nature. There has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource. The Exploration Target has been prepared in accordance with the 2012 Edition of The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves ('the JORC Code')

Iltani's drilling to date at Orient East has returned the following notable intersections:

- ORR001 - **38m at 190.4g/t Ag Eq.** from 19m incl. **7m at 454.9g/t Ag Eq.** from 27m
- ORR003 - **41m at 107.7g/t Ag Eq.** from 39m incl. **5m at 346.1g/t Ag Eq.** from 59m
- ORR022 - **16m at 103.2g/t Ag Eq.** from 10m incl. **6m at 188.7g/t Ag Eq**. from 20m
- ORR024 - **6m at 127.5g/t Ag Eq.** from 25m & **6m at 121.0g/t Ag Eq.** from 37m incl. **3m at 196.7g/t Ag Eq.** from 37m.

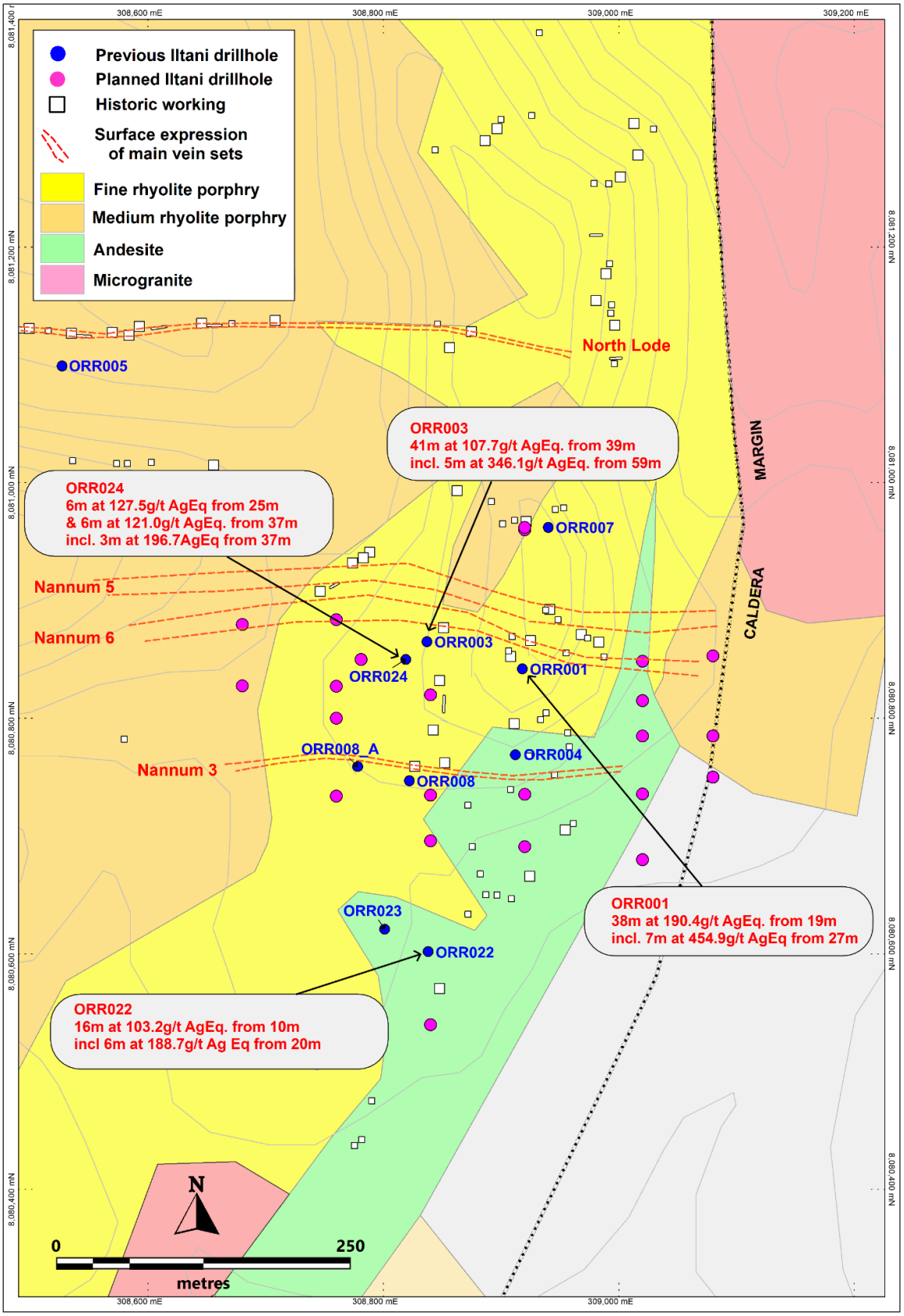
Figure 4 Orient Project Overview



The current round of drilling is targeting the Orient East core area (approximately 250m by 400m) where there are multiple intersecting higher-grade vein systems with associated low-grade stockwork mineralisation, representing the potential to define an open pittable resource.

Iltani plans to drill 22 holes (refer to Figure 5) to gain a better understanding of the core area and to lay the foundation for an initial JORC resource estimate.

Figure 5 Orient East Planned Drilling



As at 23 October, Iltani had completed drill holes ORR036 to ORR040 at Orient East for a total of 742m drilled. Samples from ORR036 and ORR040 are in the process of being dispatched to the assay laboratory, and assays will be expected in 4-6 weeks.

Authorisation

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

Contact Details

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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.

Exploration Target

The Exploration Target estimate has been prepared by Mr Stuart Hutchin, who is a Member of the Australian Institute of Geoscientists. Mr Hutchin is a full time employee of Mining One Consultants. Mr Hutchin has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity for which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves".

Mr Hutchin consents to the inclusion in the release of the matters based on his information in the form and context in which it appears.

Metallurgical Equivalent Calculation

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

Table 1 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%

It is Iltani's opinion that all the elements included in the metal equivalents calculation have a reasonable potential to be recovered and sold.

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, and Rookwood Projects in Queensland plus the Mt Read Project, a highly strategic 99km^2 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 6 Location of Iltani Resources' projects in Queensland and Tasmania

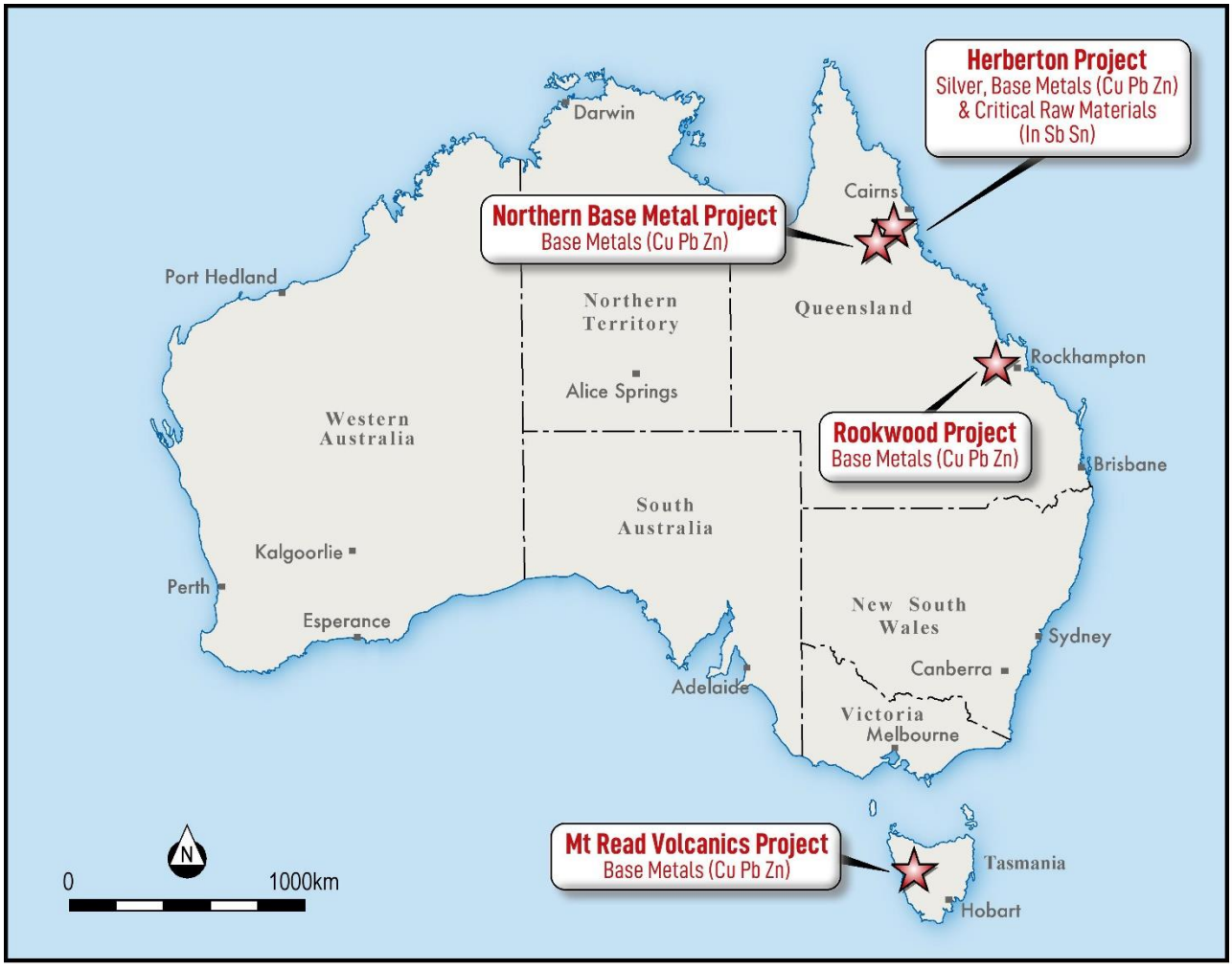

Table 2 Orient East RC Drill Program Drillhole Data

DH ID	Easting	Northing	Elevation (m)	Dip	Azi (Grid)	Depth (m)
ORR036	308924	8080965	834	-75	195	250
ORR037	308935	8080950	844	-50	195	160
ORR038	308847	8080542	790	-50	360	126
ORR039	308844	8080735	797	-60	360	94
ORR040	308840	8080696	550	-60	360	112

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.	• Drilling reported is reverse circulation (RC) drilling. • Iltani Resources has completed 5 RC holes for 742m drilled. The drilling was completed by Charters Towers, Qld based drilling contractors Eagle Drilling Pty Ltd. • RC drilling returned samples through a fully enclosed cyclone system, then via a remote controlled gate into a cone splitter. 1m RC samples were homogenised and collected by a static cone splitter to produce a representative 3-5kg sub sample. • Sampling comprises 4m composite samples or, where visual mineralisation is encountered, 1m increment RC sub-samples, that were bagged and sent to Australian Laboratory Services Pty Ltd (ALS) in Townsville for preparation and analysis. • Preparation consisted of drying of the sample and the entire sample being crushed to 70% passing 6mm and pulverised to 85% passing 75 microns in a ring and puck pulveriser. • Analysis will consist of four acid digest with Inductively Coupled Plasma Mass Spectrometry (ICP-MS) (ME-MS61) 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. • Antinomy over range sample analysis will comprise ME-XRF analysis.
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).	• The drilling was completed using a truck mounted RC rig utilising 6m rods with reverse circulation capability. • Drilling diameter was 6.5 inch RC hammer using a face sampling bit. • RC hole length ranged from 94m to 250m with average hole length of 148m. • Downhole surveys were undertaken at nominal 30m intervals during drilling utilising a digitally controlled Reflex Gyro instrument
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	• All samples were weighted and weights recorder in the logging sheet. Samples with no recovery or very low recoveries were recorded also in the logging sheet. A few samples were collected wet due to rig unable to keep the hole dry. Wet samples were noted in the logging sheet. • Iltani personnel and Eagle Drilling crew monitor sample recovery, size and moisture, making

Criteria	JORC Code explanation	Commentary
	between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	appropriate adjustments as required to maintain quality. • A cone splitter is mounted beneath the cyclone to ensure representative samples are collected. • The cyclone and cone splitter were cleaned with compressed air necessary to minimise contamination. • No significant contamination or bias has been noted in the current drilling.
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.	• Geological logging was carried out on RC chips by suitably qualified geologists. Lithology, veining, alteration, mineralisation and weathering are recorded in the geology table of the drill hole database. Final and detailed geological logs were forwarded from the field following sampling. • Geological logging of the RC samples is qualitative and descriptive in nature. • Observations were recorded appropriate to the sample type based on visual field estimates of sulphide content and sulphide mineral species. • During the logging process Iltani retained representative samples (stored in chip trays) for future reference. All RC chip trays are photographed and the images electronically stored. • All drill holes are logged to the end of hole (EoH).
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.	• 1m increment samples were collected off the drill rig via cyclone - cone splitter into calico bags with a respective weight between 3-5kg. • The onsite geologist selects the mineralised interval from logging of washed RC chips, based on identification of either rock alteration and/or visual sulphides. • Industry standard sample preparation is conducted under controlled conditions within the laboratory and is considered appropriate for the sample types. • QAQC samples (standards, blanks and field duplicates) were submitted at a frequency of at least 1 in 25. Regular reviews of the sampling were carried out by Iltani Geologist to ensure all procedures and best industry practice were followed. • Sample sizes and preparation techniques are considered appropriate for the nature of mineralisation.

Criteria	JORC Code explanation	Commentary
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.	• Industry standard assay techniques were used to assay for silver and base metal mineralisation (ICP for multi-elements with a four-acid digest) • No geophysical tools, spectrometers or handheld XRF instruments have been used to determine assay results for any elements. • Monitoring of results of blanks, duplicates and standards (inserted at a minimum rate of 1:25) is conducted regularly. QAQC data is reviewed for bias prior to uploading results in the database.
Verification of sampling and assaying	• The verification of significant intersections by either independent or alternative company personnel. • The use of twinned holes. • Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. • Discuss any adjustment to assay data.	• No drill holes were twinned. • Primary data is collected in the field via laptops in a self-validating data entry form; data verification and storage are accomplished by Iltani contractor and staff personnel. • All drillhole data was compiled in Excel worksheets and imported into Micromine in order to query 3D data and generate drill plans and cross sections.
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.	• Drill hole collar locations are initially set out using a hand held GPS. • Downhole surveys completed at nominal 30m intervals by driller using a digitally controlled Reflex Gyro instrument. • All exploration works are conducted in the GDA94 zone 55 grid. • Topographic control is based on airborne geophysical survey and it is considered adequate.
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.	• Drilling was targeted on selected veins and areas of potential stockwork mineralisation. • Drill hole spacing is not adequate to report geological or grade continuity. • No sample compositing has been applied.
Orientation of data in relation to	• Whether the orientation of sampling achieves unbiased	• The drill holes were orientated in order to intersect the interpreted mineralisation zones as

Criteria	JORC Code explanation	Commentary
geological structure	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.	perpendicular as possible based on information to date. • Due to locally varying intersection angles between drillholes and lithological units all results will be defined as downhole widths. • No drilling orientation and sampling bias has been recognised at this time and it is not considered to have introduced a sampling bias.
Sample security	• The measures taken to ensure sample security.	• Samples were stored in sealed polyweave bags at the drill rig then put on a pallet and transported to ALS Townsville by using a freight carrying company.
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 drill program was conducted on EPM27223. • EPM27223 is wholly owned by Iltani Resources Limited • All leases/tenements are in good standing
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	• Exploration activities have been carried out (underground mapping, diamond drilling, surface geochemical surveys and surface mapping, pre-feasibility study) by Great Northern Mining Corporation and Mareeba Mining and Exploration over the West and East Orient areas from 1978 to 1989. • Exploration activities have been carried out (soils and rock chip sampling) around Orient West and East by Monto Minerals Limited from 2014 to 2017 • Red River Resources carried out mapping, sampling and geophysical exploration (drone mag survey and IP survey) in 2020 and 2021.
Geology	• Deposit type, geological setting and style of mineralisation.	• Mineralisation occurs in vein systems up to 2m wide (controlled by fractures/shears) containing argentiferous galena, cerussite, anglesite, sphalerite, pyrite, marmatite, cassiterite (minor), and stannite (minor). • The lead-zinc-silver-indium mineralisation at Orient is believed to represent part of an epithermal precious metals system. The Orient vein and stockwork mineralisation are associated with a strongly faulted and deeply fractured zone near the margin of a major caldera subsidence structure
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.	• Iltani Resources has completed 7 RC (Reverse Circulation) drill holes for 742m drilled (Refer to Table 2).

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td>Data aggregation methods</td><td>• 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.
• The assumptions used for any reporting of metal equivalent values should be clearly stated.</td><td>• No data aggregation methods have been used and no metal equivalents are used.
• Metal equivalents are used (silver equivalent)
• The equivalent silver formula is Ag Eq. = Ag + (Pb x 35.5) + (Zn x 50.2) + (In x 0.47)

Metal Equivalent Calculation - Recoveries and Commodity Prices
<table><tr><td>Metal</td><td>Price/Unit</td><td>Recovery</td></tr><tr><td>Silver</td><td>US$20/oz</td><td>87%</td></tr><tr><td>Lead</td><td>US$1.00/lb</td><td>90%</td></tr><tr><td>Zinc</td><td>US$1.50/lb</td><td>85%</td></tr><tr><td>Indium</td><td>US$350/kg</td><td>85%</td></tr></table>
• It is Iltani’s opinion that all the elements included in the metal equivalents calculation have a reasonable potential to be recovered and sold.</td></tr>
<tr><td>Relationship between mineralisation widths and intercept lengths</td><td>• 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’).</td><td>• Drilling is generally perpendicular to the structure by angled RC at 50° to 75° into structures dipping between 45° and 80°.</td></tr>
<tr><td>Diagrams</td><td>• 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.</td><td>• Refer to plans and sections within report</td></tr>
<tr><td>Balanced reporting</td><td>• 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.</td><td>• The accompanying document is considered to represent a balanced report</td></tr>
<tr><td>Other substantive exploration data</td><td>• Other exploration data, if meaningful and material, should be reported.</td><td>• All meaningful and material data is reported</td></tr>
<tr><td>Further work</td><td>• The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</td><td>• Exploration of the target area is ongoing.
• Iltani plans to complete a further drilling at the Prospect during 2024.</td></tr>
</table>