14 March 2025

Exploration restarts at Orient Silver-Indium Deposit, QLD

Silver and base metals explorer **Iltani Resources** (ASX: ILT, "Iltani" or "the Company") is pleased to announce the restart of exploration activities at Orient, Australia's largest known silver-indium deposit, located in northern Queensland.

HIGHLIGHTS:

- Bulldozer mobilised to site to commence drill pad preparation activities at Orient.
- Track-mounted reverse circulation (RC) drill rig expected to arrive at site on 17 March to commence the JORC Resource infill drilling program at Orient West (28 drill holes).
- Wheel-mounted RC drill rig expected to commence the JORC Resource infill drilling program at Orient East (26 drill holes) by the end of March.
- Diamond drill rig expected on site in late April and will complete four holes, two at each prospect.
- Data generated from infill drilling programs will be used by independent mining consultant Mining One to model and estimate the initial JORC Resources for Orient West & East.
- Iltani will also seek to grow the Orient deposit targeting Orient North, Orient South plus the mineralisation undercover between Orient West & East.

Figure 1 Bulldozer at Orient West

Iltani Managing Director Donald Garner commented: *"We are looking forward to picking up where we left off at Orient at the end of 2024 as we plan to convert the Exploration Targets at Orient West and East to JORC Inferred Resources, and continue to grow the Orient Deposit, targeting Orient North, Orient South and the undercover zone between Orient West and East.*

To date, we only ever have had one drill rig active at Orient – in 2025, we plan to have two RC rigs and a diamond drill rig active at Orient. This is a material step up for us and is an indication of the potential we are seeing at Orient.

We believe that Orient is Australia's largest known silver-indium deposit and is on track to being the largest silver project in Australia.

These exploration activities will provide strong news flow for our Shareholders and we look forward to keeping you updated on our progress."

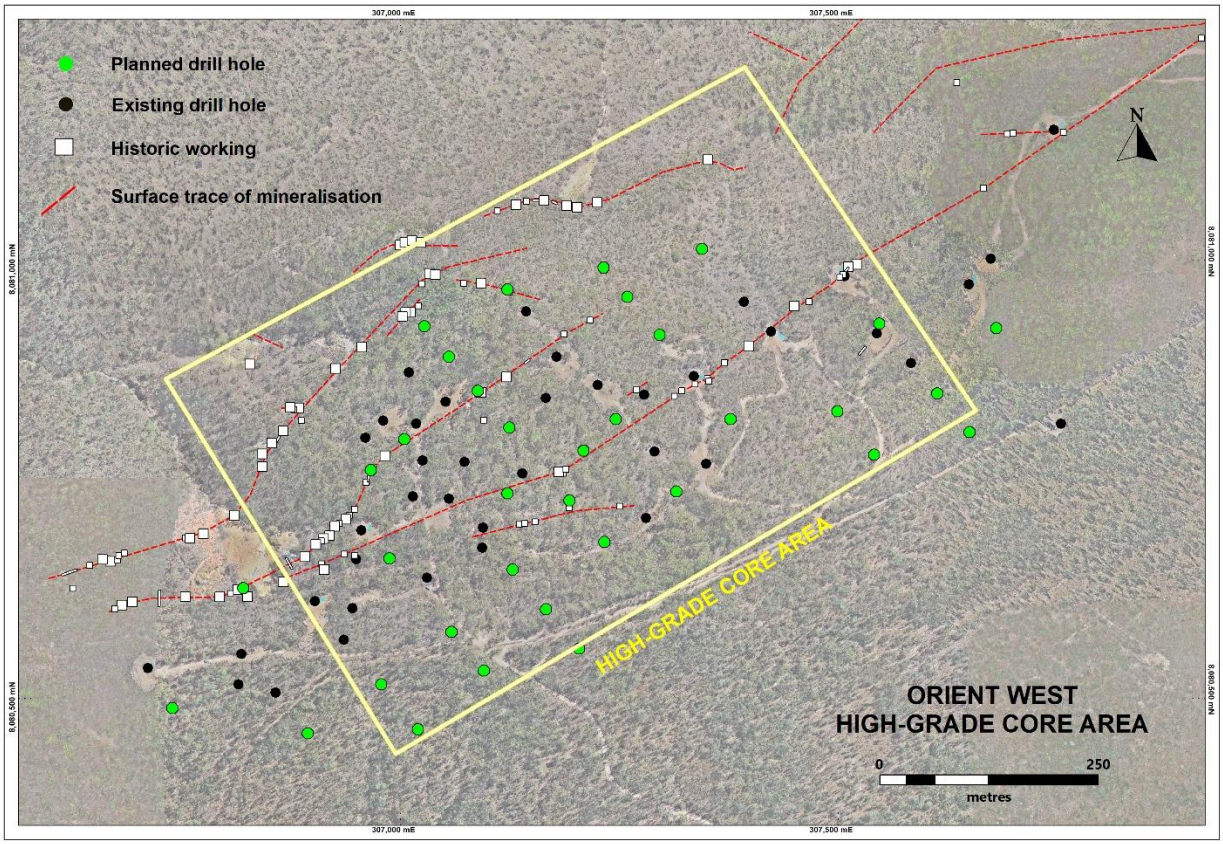
Figure 2 Historical Workings at Orient North

1. Orient West Infill Drilling Program

The Orient West infill drilling program plans to consist of 28 RC holes (for an estimated 7,000 metres drilled) and two diamond holes (for an estimated 450m drilled), aiming to convert the current high-grade Orient West Exploration Target (**20 to 24Mt @ 110 – 120 g/t Ag Eq.**, 80 g/t Ag Eq. cut-off grade) to an initial JORC Inferred Mineral Resource.

As part of the infill drilling program, drillholes ORR062 to ORR068 were completed at the end of 2024 and intersected high-grade silver-lead-zinc-indium mineralisation (refer to ILT ASX release 23 Jan 2025: First infill holes at Orient West deliver up to 1,933 g/t Ag Eq.). The Orient West drilling program will restart on 17 March, when the tracked-mounted RC rig arrives on site.

Figure 3 Orient West – Historic and Planned Drilling



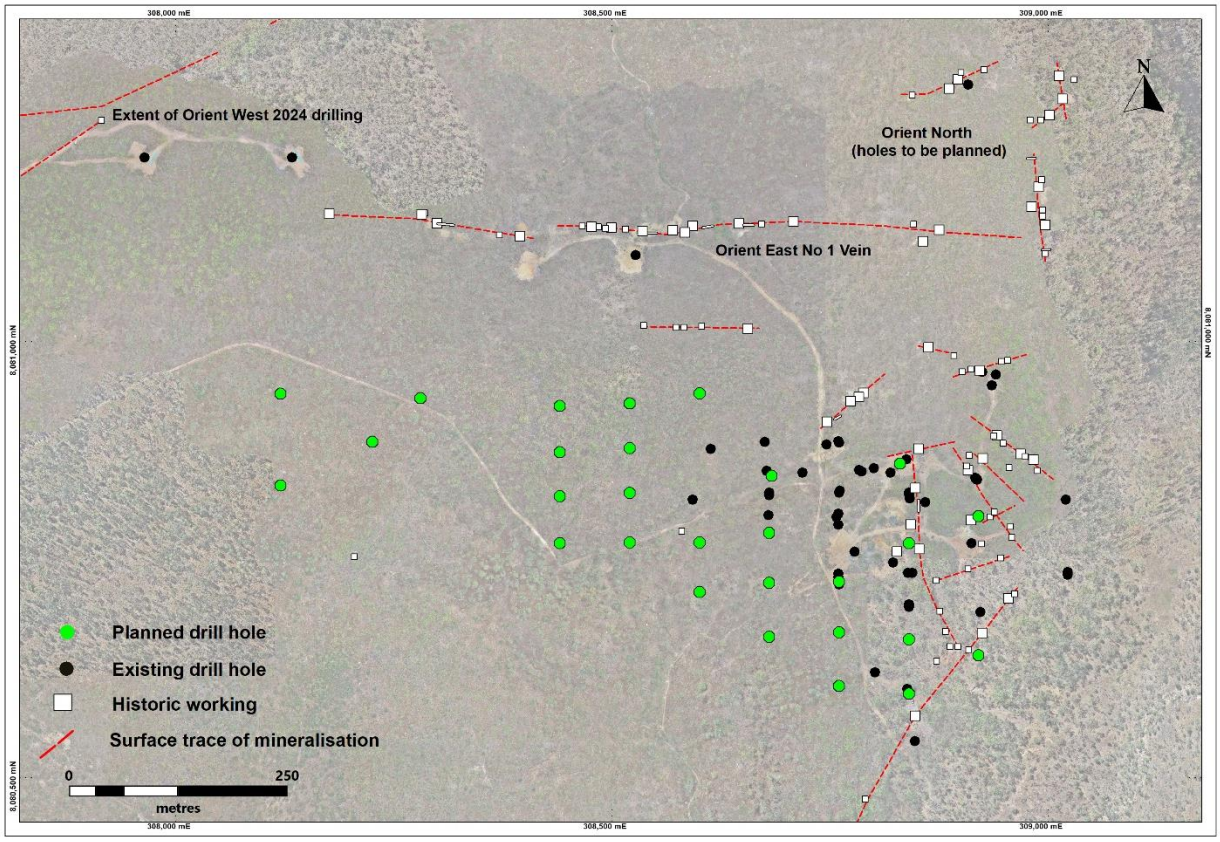
The potential quantity and grade of the Exploration Target is conceptual in nature. There has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource. The Exploration Target has been prepared in accordance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

This announcement refers to an Exploration Target estimate which was announced on 18 July 2024 (Iltani Defines Orient West Exploration Target). Iltani confirms that it is not aware of any new information or data that materially affects the information included in the release and that all material assumptions and technical parameters underpinning the results or estimates in the release continue to apply and have not materially changed. For additional disclosures please refer to the Appendices attached to this ASX release.

2. Orient East Infill Drilling Program

The Orient East infill drilling program plans to consist of 26 RC holes (for an estimated 5,200 metres drilled) and two diamond drill holes, aiming to convert the current high-grade Orient East Exploration Target (**12 to 18 Mt @ 110 – 130 g/t Ag Eq.**, 80 g/t Ag Eq. cut-off grade) to an initial JORC Inferred Mineral Resource.

Figure 4 Orient East – Historic and Planned Drilling



The drilling program is planned to start by the end of March when a second RC rig arrives on site. The program is expected to take 7 weeks to complete, and the data will be handed to Mining One to model and estimate an initial JORC Resource.

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')

This announcement refers to an Exploration Target estimate which was announced on 24 February 2025 (Iltani Defines Orient East Exploration Target). Iltani confirms that it is not aware of any new information or data that materially affects the information included in the release and that all material assumptions and technical parameters underpinning the results or estimates in the release continue to apply and have not materially changed. For additional disclosures please refer to the Appendices attached to this ASX release.

3. Orient Exploration Program

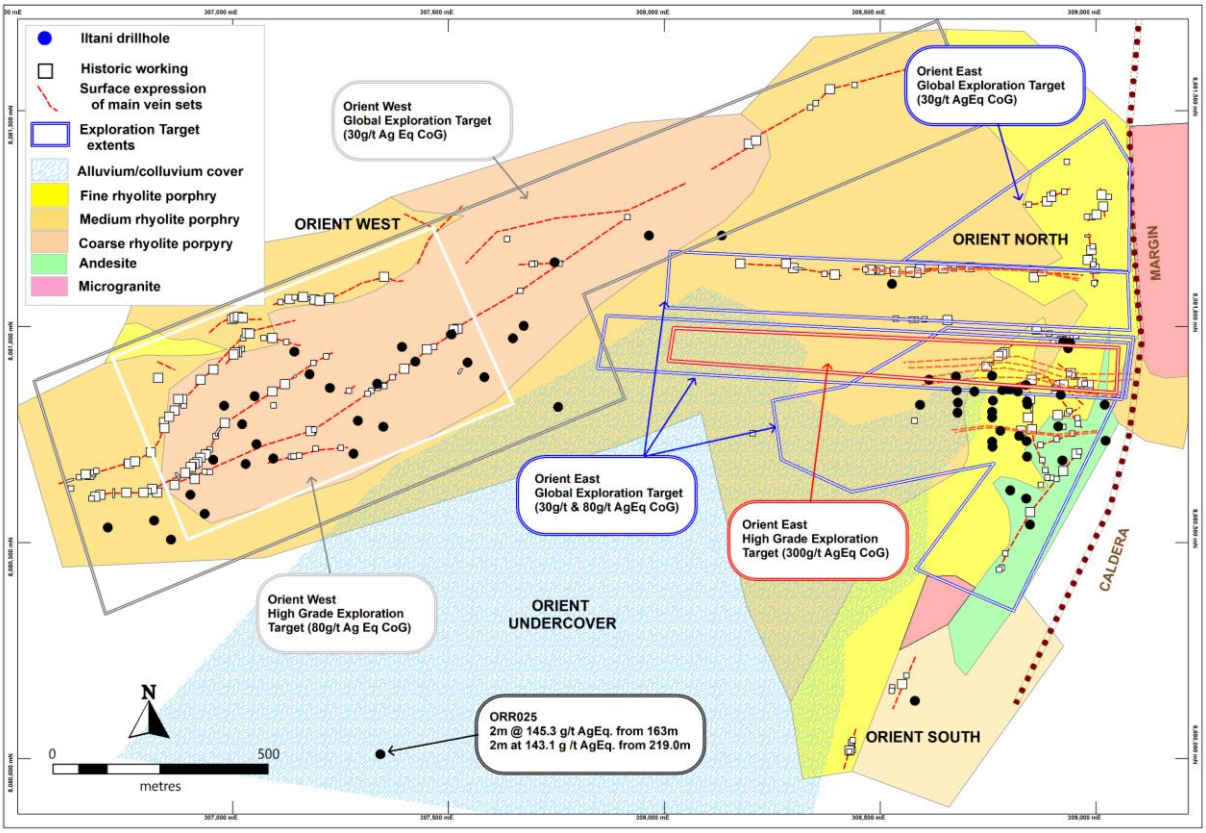
To date, Iltani's exploration (drilling) at Orient has concentrated on the Orient West High-Grade Core Area (area of 0.40km^2) and Orient East (area of 0.24km^2), with the total Orient System (including Deadman Creek) estimated to cover an area greater than 6km^2. During 2025, Iltani plans to target the following (refer to Figure 5):

- Orient North: High-priority target (old workings, geophysical anomalies)
- Orient South: High-priority target (old workings, geophysical anomalies)
- Orient Undercover: Target mineralisation undercover between Orient West and East

ORR025 intersected multiple silver-lead-zinc-indium vein systems and returned **2m @ 145.3 g/t Ag Eq.** from 163.0m downhole; **2m @ 143.1 g/t Ag Eq.** from 219.0m downhole; and **1m @ 64.2 g/t Ag Eq.** from 186.0m downhole in an area of minimal outcrop and no surface expression of mineralisation (refer to ILT ASX release 5 June 2024: IP drillhole results confirm extension to Orient Project mineralisation).

Figure 5 shows the location of ORR025 and the extent of colluvium and alluvial sheetwash to the south and between Orient East and West where there is minimal outcrop and hence no historic workings, and where surface geochemical methods are not effective. This is a large area of approximately 2km^2 under which may lie further blind mineralisation. Due to the previously reported effectiveness of the EM geophysical technique trialled on the deep diamond hole that definitively identified the Orient West mineralisation, Iltani is investigating the application of aerial EM surveys to investigate areas of cover in the Orient area for blind sulphide mineralisation.

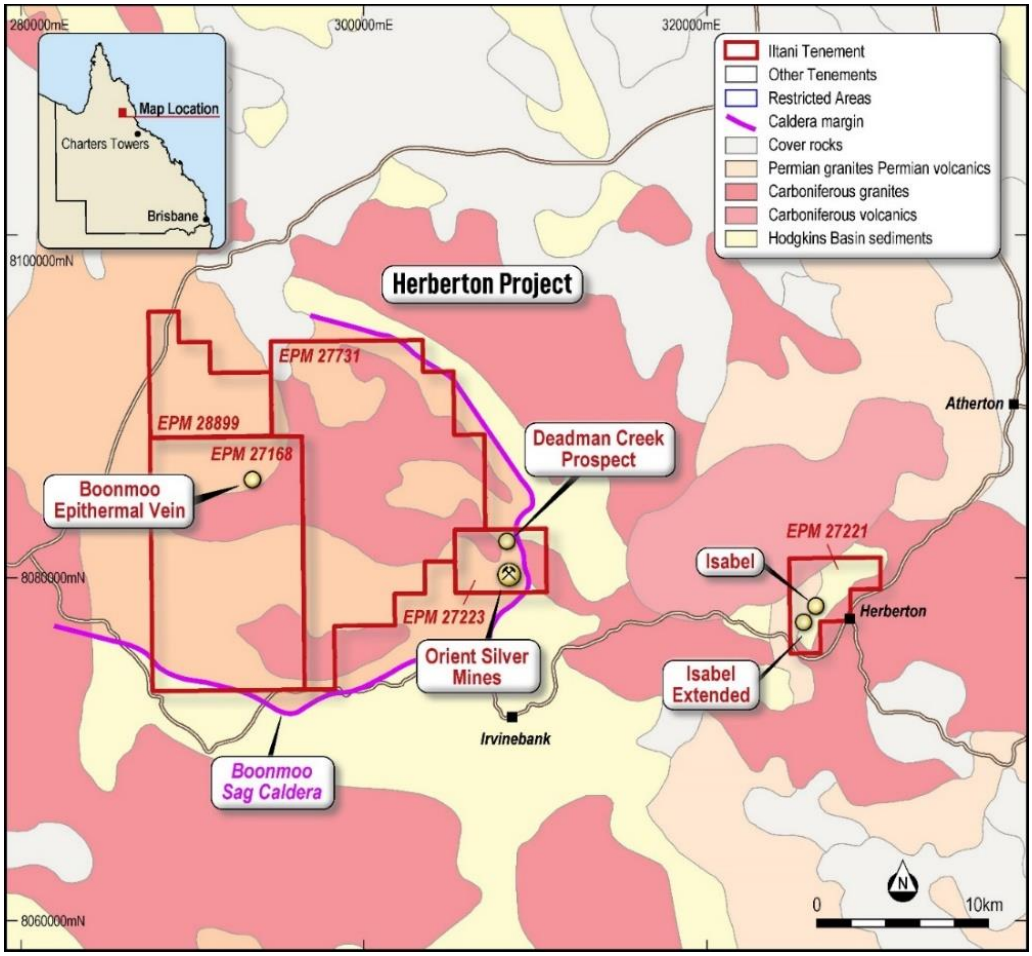
Figure 5 Orient Exploration Targets



4. Orient Project Overview

The Orient project is located on Iltani's wholly owned tenement EPM 27223, approximately 20km west of the historic mining town of Herberton and 9km north of Irvinebank (Figure 6) in Northern Queensland. Access is via the Herberton-Petford Road and then the Hales Siding Road.

Figure 6 Orient Project Location



Authorisation

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

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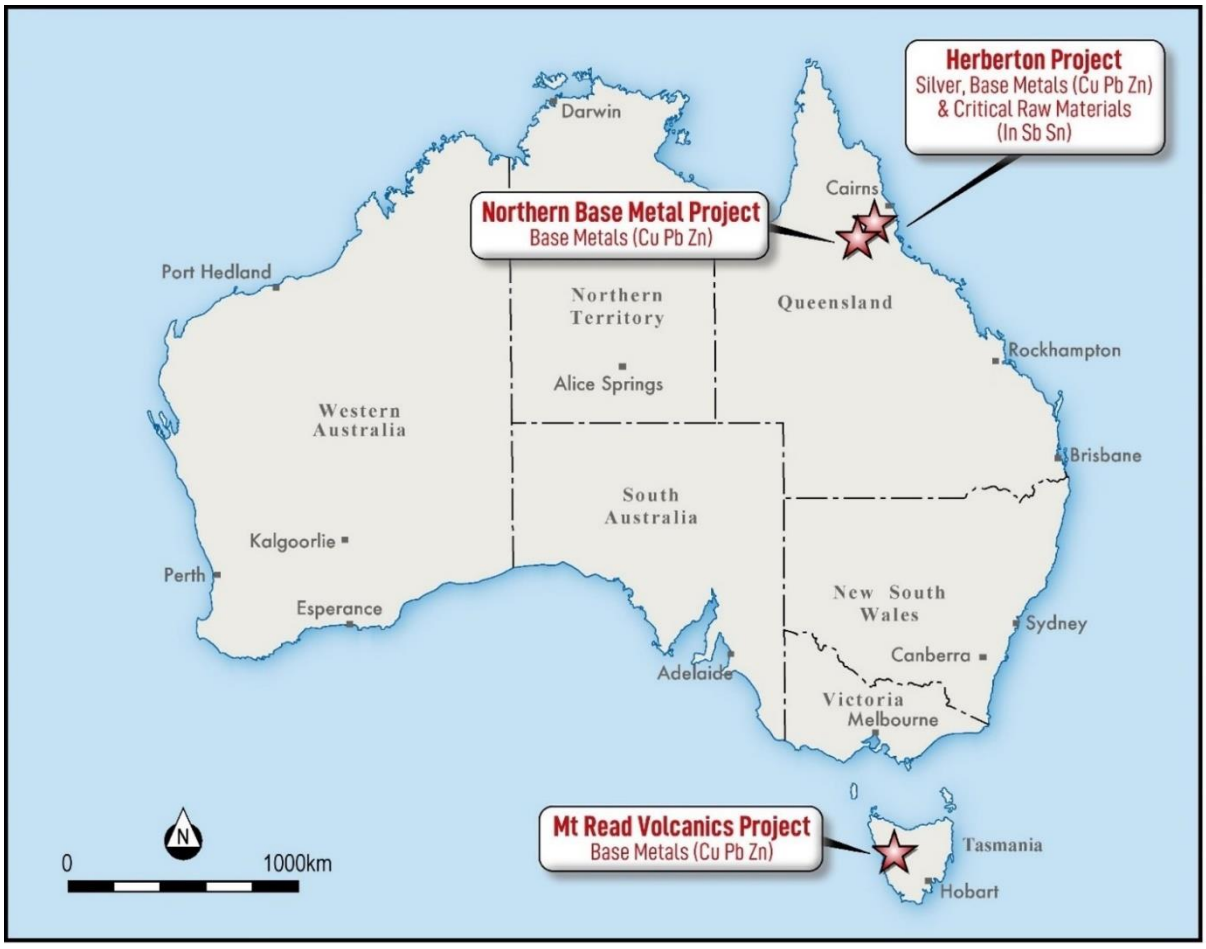
About Iltani Resources

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 7 Location of Iltani Resources' projects in Queensland and Tasmania



Competent Persons Statement

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.

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.

Information in this report that relates to previously reported Exploration Results has been cross-referenced in this report to the date that it was reported to the ASX. Iltani Resources Limited confirms that it is not aware of any new information or data that materially affects information included in the relevant market announcements.

Orient Exploration Targets

Table 1 Orient East Exploration Target - Orient Silver-Indium Project (Queensland)

Global Exploration Target (30 g/t Ag Eq. cut-off grade)				**High-Grade Core (80 g/t Ag Eq. cut-off grade)**			
		Minimum	Maximum			Minimum	Maximum
Tonnes Range	**Mt**	**25**	**35**	**Tonnes Range**	**Mt**	**12**	**18**
Ag Eq.	**g/t**	**77**	**95**	**Ag Eq.**	**g/t**	**110**	**130**
Ag	g/t	22	27	Ag	g/t	32	39
In	g/t	4	5	In	g/t	7	9
Pb	%	0.6	0.7	Pb	%	0.8	1.0
Zn	%	0.7	0.8	Zn	%	0.9	1.1

Table 2 Orient West Exploration Target - Orient Silver-Indium Project (Queensland)

Orient West Exploration Target (30 g/t Ag Eq. cut-off grade)				**High-Grade Core (80 g/t Ag Eq. cut-off grade)**			
		Minimum	Maximum			Minimum	Maximum
Tonnes Range	**Mt**	**74**	**100**	**Tonnes Range**	**Mt**	**20**	**24**
Ag Eq.	**g/t**	**55**	**65**	**Ag Eq.**	**g/t**	**110**	**120**
Ag	g/t	15	20	Ag	g/t	28	35
In	g/t	11	13	In	g/t	20	24
Pb	%	0.3	0.5	Pb	%	0.7	0.8
Zn	%	0.5	0.6	Zn	%	0.9	1.1

Table 3 Orient Exploration Target - Orient Silver-Indium Project (Queensland)

Orient Exploration Target (30 g/t Ag Eq. cut-off grade)				**High-Grade Core (80 g/t Ag Eq. cut-off grade)**			
		Minimum	Maximum			Minimum	Maximum
Tonnes Range	**Mt**	**99**	**135**	**Tonnes Range**	**Mt**	**32**	**42**
Ag Eq.	**g/t**	**61**	**73**	**Ag Eq.**	**g/t**	**110**	**124**
Ag	g/t	17	22	Ag	g/t	30	37
In	g/t	9	11	In	g/t	15	18
Pb	%	0.4	0.6	Pb	%	0.7	0.9
Zn	%	0.6	0.7	Zn	%	0.9	1.1

Metallurgical Equivalent Calculation – Additional Disclosure

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

Table 4 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, which 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.

Orient West Exploration Target – Additional Disclosure

1. Summary of Relevant Exploration Data

The Exploration Target is based on the interpretation of the following geology and mineralisation data that has been collated as of the date of this announcement, which includes previously reported exploration results, and information in this report that relates to previously reported exploration results has been cross-referenced in this report to the date it was reported to the ASX. Exploration data is comprised of:

- 22 reverse circulation (RC) drill holes completed for 4,406 metres drilled
- 2,773 assay results from RC drill hole samples
- Detailed surface geological mapping
- Wireframing and 3D block modelling of the Orient West mineralised vein systems.

Historical exploration completed at Orient includes:

- 255 rock chip assay results from Orient East and Orient West
- Geophysical data sets (14km^2 drone mag survey over the Orient area plus 7.18 line km of a dipole-dipole Induced Polarisation survey)
- Great Northern Mining Corporation (GNMC) completed 16 diamond drill holes at Orient West in the 1970s. Drilling did not delineate the margins of mineralisation, leaving it open to extension in all directions. GNMC undertook limited assay of the drill samples (core and percussion) with a focus on the high grade vein system. Extensive low grade mineralisation was logged, usually forming halos around the higher grade veins but this was not assayed. The assay data was not used in the Exploration Target estimation process (due to lack of certainty of the data), and the geological data was used in the wireframing process.

2. Methodology to Determine the Grade and Tonnage Range for the Exploration Target

Iltani engaged Mining One Consultants to build a 3D model of the Orient System (Orient West and East) to better understand the size and scale of the mineralised vein systems, allowing Iltani to optimise drill hole design. This model has been continually updated as drilling has been completed and was used as the basis for estimating the Exploration Target.

Mineralised intercepts in downhole drilling align from section to section along structures that can be assumed to be continuous between drillholes. Mineralised zones broadly pinch and swell but can be linked together across drilled sections. Some areas of interpretation, especially regarding thin and lower grade lenses, should be considered initial and linkages between drillholes may change with further information, however the current interpretation holds true with concurrent surface geological observations and areas of denser drilling.

Apart from drilling, strike extents of the exploration model are also based on soil anomalism above the mineralised veins and the extent of historic workings which have been rock chip sampled. Mineralisation extends 2.6km from SW to NE and dips approximately 55° → 150°. The stacked system ranges from 270 – 330m in thickness from the footwall of the northern-most structure to the hanging wall in the south. The 13 modelled mineral domains (sulphide veins) range from 2 – 55 m in thickness.

Assays were composited in each domain to 1m which is the nominal assay interval. Domains were snapped to assay intervals and Ag, Pb, Zn & In were estimated from the composites constrained by each domain using hard boundaries and using inverse distance squared (ID^2) estimation in four passes.

Search ellipsoids were oriented according to the mineralised trend 55° → 150° or 153°. The Block Model has parent blocks 20m x 20m x 10m. It is sub-blocked using an octree method 8 x 8 x 16 resulting

in sub-blocks as small as 2.5 m x 2.5m x 0.625m to honour the vein geometry even as they pinch out or splay against each other.

Drilling intersects the mineralised structures at 60m intervals in the area of closest drilling. Grades were not capped. The highest grades are in the core of the deposit where the estimate uses up to 50 samples to estimate grade. High grades including outliers will impact local grades in the core of the deposit but will have very little influence on blocks away from drilling.

Global approximated exploration target figures were generated using a 30 g/t Ag equivalent cut off and the high-grade core target figures were approximated using an 80 g/t Ag equivalent cut off.

An assumed density of 2.7 g/cc was applied to determine the tonnes. Density vs sulphide content was inspected at other multi-commodity deposits to understand the effect of similar grades to density. At similar average grades to Orient, the result is negligeable. Some high sulphide zones likely have a higher density however, the volume of this material is very low and deemed negligeable for consideration in the current study.

The Exploration Target Estimation for Orient West has utilised the more rigorous methodology that is generally utilised for Mineral Resource Estimation without a more constrained statistical approach required for the latter. This is to ensure the Exploration Target Estimation result is meaningful and, with further drilling, will be used as a basis for a Mineral Resource Estimate.

3. Progress Towards a Mineral Resource Estimate

Proposed exploration activities designed to progress the Orient West Exploration Target to a Mineral Resource Estimate will consist of an infill drilling program and is planned to take place over the next 6 to 12 months.

Orient East Exploration Target – Additional Disclosure

1. Summary of Relevant Exploration Data

The Orient East Exploration Target is based on the interpretation of the following geology and mineralisation data that has been collated as of the date of this announcement and information in this report that relates to previously reported exploration results has been cross-referenced in this report to the date it was reported to the ASX. Exploration data is comprised of:

- 35 reverse circulation (RC) drill holes completed for 5,154 metres drilled
- 2,522 assay results from RC drill hole samples
- Detailed surface geological mapping
- Wireframing and 3D block modelling of the Orient East mineralised vein systems.

(NB: drill samples comprise 1m cone split samples, 4m composite spear samples, with some samples not submitted for assay as they were first tested with a portable XRF device).

Historical exploration completed at Orient includes:

- 255 rock chip assay results from Orient East and Orient West
- Geophysical data sets (14km2 drone mag survey over the Orient area plus 7.18 line km of a dipole-dipole Induced Polarisation survey)
- Great Northern Mining Corporation (GNMC) completed 16 diamond drill holes at Orient West and five diamond drill holes at Orient East in the 1970s. Drilling did not delineate the margins of mineralisation, leaving it open to extension in all directions. GNMC undertook limited assay of the drill core samples with a focus on the massive sulphide high grade veins only. Extensive low grade mineralisation was logged, usually forming halos around the higher grade veins but this was not assayed. The historic drill data was not used in the Exploration Target estimation process due to lack of certainty of the data.

2. Methodology to Determine the Grade and Tonnage Range for the Exploration Target

Iltani engaged Mining One Consultants to build a 3D model of the Orient System (Orient West and East) to better understand the size and scale of the mineralised vein systems, allowing Iltani to optimise drill hole design. This model has been continually updated as drilling has been completed and was used as the basis for estimating the Exploration Target.

Mineralised intercepts in downhole drilling align from section to section along structures that can be assumed to be continuous between drillholes. Mineralised zones broadly pinch and swell but can be linked together across drilled sections. Some areas of interpretation, especially regarding thin and lower grade lenses, should be considered initial and linkages between drillholes may change with further information, however the current interpretation holds true with concurrent surface geological observations and areas of denser drilling.

Apart from drilling, strike extents of the exploration model are also based on soil anomalism above the mineralised veins and the extent of historic workings which have been rock chip sampled.

The Exploration Target covers an area of 1,200m north-south by 1,300m east-west. The defined mineralised lenses were divided into two primary domains, the shallow to moderate south dipping Orient East Main Domain and the east-west steeply dipping Orient East Steep Domain.

Assays were composited in each domain to 1m which is the nominal assay interval. Domains were snapped to assay intervals and Ag, Pb, Zn & In were estimated from the composites constrained by each domain using hard boundaries and using inverse distance squared (ID2) estimation in four passes.

The Block Model has parent blocks 20m x 20m x 10m. It is sub-blocked using an octree method 8 x 8 x 16 resulting in sub-blocks as small as 2.5 m x 2.5m x 0.625m to honour the vein geometry even as they pinch out or splay against each other. Grade was estimated using a minimum of five samples and a maximum of ten samples for each block.

Drilling intersects the mineralised structures at 60m intervals in the area of closest spaced drilling. Grades were not capped. The highest grades are in the core of the deposit where the estimate uses up to 50 samples to estimate grade. High grades including outliers will impact local grades in the core of the deposit but will have very little influence on blocks away from drilling.

Global approximated exploration target figures were generated using a 30 g/t Ag equivalent cut off and the high-grade core target figures were approximated using an 80 g/t Ag equivalent cut off.

An assumed density of 2.9 g/cc was applied to determine the tonnes. Density vs sulphide content was inspected at other multi-commodity deposits to understand the effect of similar grades to density. At similar average grades to Orient, the result is negligeable. Some high sulphide zones likely have a higher density however, the volume of this material is very low and deemed negligeable for consideration in the current study.

The high-grade estimates (200 g/t Ag Eq. cut-off and 300 g/t Ag Eq. cut-off), which is domained in much narrower units, was limited to a minimum of 2 samples and maximum of five within 50m to reduce dilution from more distant assays. Blocks farther away than 50m from drilling revert to using minimum five and maximum ten to have a more smoothed out distribution.

The Exploration Target Estimation for Orient East has utilised a more rigorous methodology that is generally utilised for Mineral Resource Estimation without a more constrained statistical approach required for the latter. This is to ensure the Exploration Target Estimation result is meaningful and, with further drilling, will be used as a basis for a Mineral Resource Estimate.

3. Progress Towards an Orient East Mineral Resource Estimate

Proposed exploration activities designed to progress the Orient East Exploration Target to a Mineral Resource Estimate will consist of infill drilling and is planned to take place over the next six to twelve months