12 December 2023

Iltani completes first phase of Stage 2 drilling at Orient silver-indium project, Queensland

Critical minerals and base metals explorer Iltani Resources Limited (ASX: ILT, "Iltani" or "the Company") is pleased to update the market on drilling progress at its exciting Orient silver-lead-zinc-indium project in Herberton, QLD, Australia.

HIGHLIGHTS:

- Iltani has completed the initial phase of its Stage 2 drilling program at the Orient silver-lead-zinc-indium project, part of Iltani's Herberton Project in Northern Queensland.
- Iltani has completed 8 RC holes (ORR017 to ORR024) for 1,276m drilled, and 852 samples have been dispatched to ALS (Townsville) for assay. Results are expected 4 to 6 weeks after sample submission.
- 5 RC holes (988m drilled) were completed at Orient West and 3 RC holes (288m drilled) were completed at Orient East.
- Due to forecast inclement weather (Cyclone Jasper), Iltani has demobilised the drill rig from site – drill rig will return in early 2024 to complete the remainder of the planned Stage 2 drilling.
- The Stage 2 drilling program is following up on the highly successful Stage 1 drilling program which returned multiple intersections of 30-40m thick silver-lead-zinc-indium mineralisation at Orient East and West, plus testing areas of extensive outcropping stockwork mineralisation identified in recent mapping. The program comprises 23 RC (reverse circulation) drill holes, with 9 RC drillholes planned at Orient East (for 1,300m drilled), 11 RC drill holes planned at Orient West (for 1,840m drilled) and 3 RC drillholes planned at Deadman Creek (for 360m drilled).

Figure 1 Stage 2 RC drilling at Orient Project

Figure 2 Stage 2 RC drilling at Orient Project

Iltani Managing Director Donald Garner commented:

"It has been fantastic to restart drilling at the Orient Project. The results we received from our Stage 1 drilling program significantly exceeded our expectations, with the drill bit delivering wide intersections (30-40m thick) of silver-lead-zinc-indium mineralisation at potentially open pittable depths. The Stage 2 drilling program aims to extend the mineralisation drilled in Stage 1 and test multiple stockwork targets recently mapped by a consultant geologist Nick Tate, including the Deadman Creek stockwork target.

After completing eight RC holes (for 1,276m drilled), we decided to demobilise the RC rig from site due to the forecast inclement weather associated with Cyclone Jasper. Dispatch of samples to ALS in Townsville has been completed, and we look forward to receiving the assay results. We will be back at Orient in early 2024 when the wet season abates to complete the Stage 2 drilling program."

Orient Silver-Indium Project

Orient hosts multiple high-grade zinc-lead-silver-indium veins and stockworks outcropping over at least a 4km^2 area, with zoned hydrothermal alteration (phyllic, argillic & propylitic) surrounding the mineralisation.

Mapping has confirmed the outcropping vein systems have epithermal textures, and Orient is an extensive silver-rich epithermal system with an igneous system (porphyry) at depth, with strong similarities to the world-class Bolivian Ag-Zn-Pb-In-Sn systems. The Orient mineralisation represents an epithermal deposit in the upper levels of a porphyry tin system that has been preserved at its current high level by the collapse of the large rhyolitic caldera complex associated with the igneous system.

Orient was mined from 1886 to 1924, with extensive (>200) historical workings which targeted high grade direct shipping silver-lead oxide ore.

Iltani's recently completed Stage 1 RC drilling program (14 RC drill holes for 2,034m drilled) represented the first drilling at Orient in over 35 years and returned multiple intersections of 30-40m thick silver-lead-zinc-indium mineralisation at Orient East and West. Notable intercepts included:

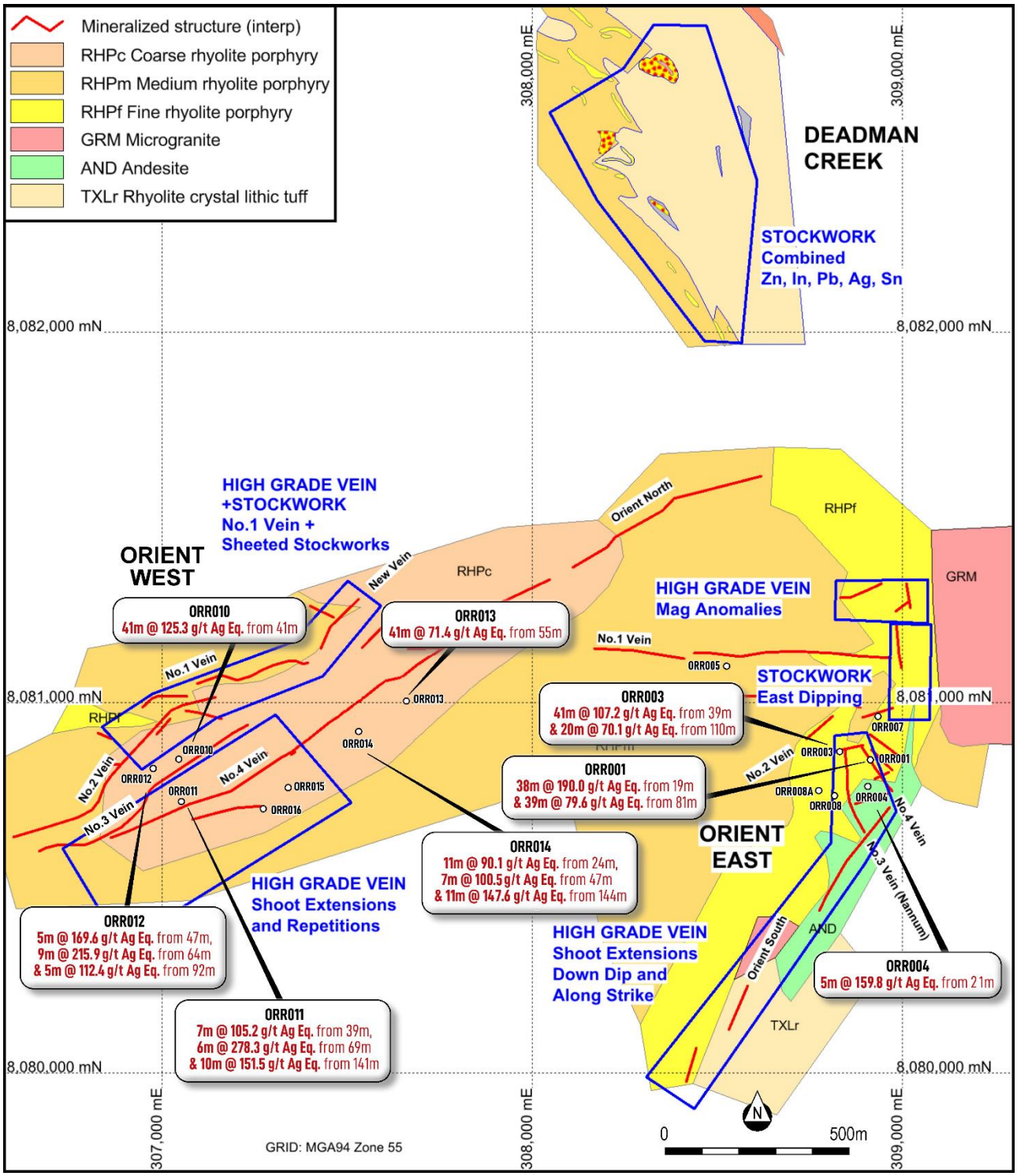
- **Orient West:**
  ORR010: 41m @ 125.3 g/t Ag Eq. from 60m downhole
  ORR013: 41m @ 71.4 g/t Ag Eq. from 55m downhole

- **Orient East:**
  ORR001: 38m @ 190.0 g/t Ag Eq. from 19m downhole
  ORR003: 41m @ 107.2 g/t Ag Eq. from 39m downhole

The Stage 2 drilling program is planned to consist of 23 RC (reverse circulation) drill holes, with nine RC drillholes planned at Orient East (1,300m), 11 RC drill holes planned at Orient West (1,840m) and three RC drillholes planned at Deadman Creek (360m).

With eight holes now complete, Iltani has demobilised the rig due to forecast inclement weather associated with Cyclone Jasper. It will complete the remainder of the program in early 2024, once the wet season has ended.

Figure 3 Orient Silver-Indium Project showing results from Iltani's Stage 1 drill program



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.

Competent Persons Statement

The information in this report that relates to Exploration Results is based on information compiled by Mr Donald Garner who is a member of The Australasian Institute of Mining and Metallurgy (AusIMM), and is a director and shareholder 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 Garner consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.

This ASX announcement contains information extracted from ASX market announcements reported in accordance with the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (2012 JORC Code). Further details (including 2012 JORC Code reporting tables where applicable) of exploration results referred to in this ASX announcement can be found in the following announcements lodged on the ASX:

Table 2 Iltani Orient Drilling ASX release

Date	Announcement
13 October 2023	Iltani hits wide intersections of silver-lead-zinc-indium-antimony-tin mineralisation at Orient
24 October 2023	Iltani confirms significant new discovery of silver-lead-zinc-indium-antimony-tin system at Orient, QLD

These announcements are available for viewing on the Company's website www.iltaniresources.com.au. Iltani Resources confirms that it is not aware of any new information or data that materially affects the information included in any original ASX announcement.

Authorisation

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

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About Iltani

Iltani Resources (ASX: ILT) is an ASX listed company exploring for the base metals and critical raw materials required to create a low emission future and has built a portfolio of advanced exploration projects in Queensland and Tasmania with multiple high quality, drill-ready targets.

Iltani has commenced drilling at the Orient Silver-Indium Project, part of its Herberton Project, in Northern Queensland. The drilling has returned outstanding intercepts of silver-lead-zinc-indium mineralisation, positioning Orient as Australia's most exciting silver-indium discovery.

Other projects include the Northern Base Metal, Southern Gold and Rookwood Projects in Queensland plus the Mt Read Project, a highly strategic 99km^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 4 Location of Iltani's projects in Queensland and Tasmania