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Highly Encouraging Magnesium Testwork Results from McDermitt

- Testwork converts MgSO_4 from McDermitt ore into high-purity MgO (93.4% equivalent MgO content)
- Results establish an initial proof of concept for a potential higher-value magnesium by-product at McDermitt
- MgO is an important feedstock for producing primary Magnesium (Mg) metal, designated a high-risk critical mineral by the US Government
- Further testwork and studies will assess commercial viability, reagent recycling and potential by-product economics

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Jindalee Lithium Limited (**Jindalee**, or the **Company**; ASX: **JLL**, OTCQX: **JNDAF**) is pleased to advise that high-grade magnesium oxide (**MgO** or **Magnesia**) has been successfully produced from ore from the McDermitt Lithium Project (**McDermitt** or the **Project**), one of the largest lithium deposits in the United States (**US**) and of global significance¹.

The result is an important proof of concept in Jindalee's magnesium value-optimisation program. McDermitt contains a substantial magnesium endowment^{1,2}, and previous pre-feasibility study (**PFS**)-stage testwork confirmed that magnesium can be efficiently extracted alongside lithium using sulphuric-acid leaching, with extraction of up to 97.2% reported from representative mineralised units. The PFS nonetheless treated magnesium as waste, removing it from the process as magnesium sulphate (**MgSO₄**) with no revenue credit applied. This work demonstrates a potential route to convert that stream into MgO , an important feedstock for primary magnesium metal production as well as a range of established industrial applications, including refractories. Further testwork, engineering and commercial assessment are required to establish product specifications, scalability and commercial viability at McDermitt.

Latest Testwork Results

Testwork undertaken by Kemetco Research Inc. (**Kemetco**) investigated producing MgO from MgSO_4 brine samples produced from McDermitt ore using the following two approaches:

- Adding carbonates to the brine to precipitate magnesium carbonate (**MgCO₃**) followed by a calcination stage to produce MgO
- Crystallising hydrated MgSO_4 from the brine, followed by thermal conversion to anhydrous MgSO_4 ahead of a reductive calcination stage to produce MgO

Both approaches produced MgO grades greater than 93%, with the highest grade being 93.4% MgO, while conversion in the calciner for both approaches was very high with values reaching 99.95%.

The latest results provide a technical basis for Jindalee to assess whether a magnesium stream previously treated as waste can instead be converted into potentially higher-value magnesium products. If viable, McDermitt could contribute to strengthening US magnesium supply chains while creating an opportunity to assess reagent recycling and a potential magnesium by-product credit while at the same time significantly reducing long-term waste storage requirements and associated costs. No commercial viability or economic benefit has yet been established.

Path to the Current Testwork

Jindalee completed the McDermitt PFS in November 2024. The PFS identified scope for process optimisation and potential magnesium by-product recovery.

In October 2025, Jindalee commenced a value-optimisation program to assess options to recover and monetise magnesium streams previously assumed to be discarded in the PFS.² Approximately 100 kg of leachate was sent to Kemetco in January 2026 for magnesium-focused testwork.³ In April 2026, Jindalee reported successful production of fertiliser-grade MgSO_4 from this material and outlined its intention to assess higher-value magnesium products.⁴

Magnesium – a Strategic US Supply-Chain Issue

Magnesium metal is important to US industrial, defence and advanced-manufacturing supply chains. Key uses include aluminium alloys, automotive lightweighting, aerospace components, titanium production, steel desulphurisation, military flares and other specialist applications.⁵

The US supply chain is exposed to substantial concentration and import risk, with China controlling approximately 90% of global magnesium supply.⁶ US Magnesium LLC, previously the only domestic producer of primary magnesium, ceased operations in 2022 and filed for Chapter 11 bankruptcy protection in September 2025, leaving the US supply chain vulnerable to disruption.⁷ Magnesium metal is ranked in the highest risk category of the 84 mineral commodities assessed in the US Geological Survey's 2025 draft list of Critical Minerals⁸ and is included on the Critical Materials List published by the US Department of Energy.⁹

Given McDermitt's substantial magnesium endowment, the ability to produce MgO from McDermitt-derived magnesium sulphate is strategically encouraging, offering a potential pathway to significantly de-risk the US magnesium metal supply chain.

Independent Market Analysis Supports Product Strategy

Jindalee has commissioned preliminary independent market analysis to help inform its magnesium product strategy and identify potential higher-value pathways for magnesium recovered at McDermitt.

The analysis supports MgO as a logical product for further evaluation: magnesia is the largest of the magnesium compound markets by volume, spans refractory, industrial and environmental applications, and the US is a net importer. This work has helped guide Jindalee's current technical and commercial assessment of magnesium-product pathways.

Next Steps

- Complete further market and engineering studies to assess the financial viability of producing magnesium by-products, including operating cost impacts, capital efficiency, market demand and overall project economics.
- Undertake additional testwork designed to further improve on these initial results.
- Update Mineral Resource estimate to include magnesium.

Further updates from these work programs are expected in Q4 2026.

Jindalee Managing Director and CEO Ian Rodger commented:

“These results are a significant technical step in assessing the magnesium opportunity at McDermitt. We have demonstrated a potential pathway to convert magnesium from a stream treated as waste in the PFS into a high-purity MgO product.

Magnesium is strategically important to US industrial and defence supply chains, yet the country remains exposed to a concentrated and import-dependent supply base.

Given McDermitt’s substantial magnesium endowment, we believe this opportunity warrants further work. It is too early to draw concrete conclusions on commercial viability or Project economics, but our next phase will focus on completing the work necessary to decide whether a magnesium by-product will be incorporated into the upcoming McDermitt Feasibility Study.

Subject to those studies, we are encouraged by the potential to evaluate reagent recycling and the introduction of a material magnesium by-product credit at McDermitt.”

Authorised for release by the Jindalee Board of Directors. For further information please contact:

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References

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2. Jindalee Lithium ASX announcement 22/10/2025: “JLL to Explore High Value Magnesium By-Product at McDermitt”
3. Jindalee Lithium ASX announcement 23/01/2026: “Quarterly Activities Report – December 2025”
4. Jindalee Lithium ASX announcement 21/04/2026: “Quarterly Activities Report – March 2026”
5. Source: <https://www.youtube.com/watch?v=WNdTMQt33qk> (IMA Webinar: Magnesium in Aerospace & Defense Applications)
6. <https://www.semafor.com/article/11/17/2024/china-expands-export-controls-on-critical-minerals>
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8. <https://pubs.usgs.gov/of/2025/1047/ofr20251047.pdf>
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About Jindalee

Jindalee Lithium Limited (Jindalee) is an Australian company focused on developing the McDermitt Lithium Project, one of the largest lithium resources in the US¹. With 100% ownership and unencumbered offtake rights, Jindalee is strategically positioned to support America’s energy security and domestic supply of critical minerals. In 2024 the Company completed a Pre-Feasibility Study (PFS) confirming McDermitt’s scale, long-life, and low-cost production potential, with strong engagement from US government agencies, including the Department of Energy and Department of Defense. As a deeply undervalued lithium (and potentially magnesium) developer, Jindalee presents a compelling investment opportunity heading into the next lithium market upcycle.

Competent Person’s Statement

The information in this report that relates to Exploration Results is based on information compiled by Mr Lindsay Dudfield. Mr Dudfield is a director and shareholder of, and consultant to, the Company and a Member of the Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. Mr Dudfield has sufficient experience relevant to the styles of mineralisation and types of deposits under consideration, and to the activity being undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the ‘Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves.’ Mr Dudfield consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.

The Company confirms that it is not aware of any further new information or data that materially affects the information included in the original market announcements by Jindalee Lithium Limited referenced in this report and in the case of estimates of Mineral Resources, production targets and Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. To the extent disclosed above, the Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

Forward-Looking Statements

This document may contain certain forward-looking statements. Forward-looking statements include but are not limited to statements concerning Jindalee's current expectations, estimates and projections about the industry in which Jindalee operates, and beliefs and assumptions regarding Jindalee's future performance. When used in this document, the words such as "anticipate", "could", "plan", "estimate", "expects", "seeks", "intends", "may", "potential", "should", and similar expressions are forward-looking statements. Although Jindalee believes that its expectations reflected in these forward-looking statements are reasonable, such statements are subject to known and unknown risks, uncertainties and other factors, some of which are beyond the control of Jindalee and no assurance can be given that actual results will be consistent with these forward-looking statements.

Annexure A:
JORC Code, 2012 Edition – Table 1
Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<i>Nature and quality of sampling (eg 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.</i> <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i> <i>In cases where 'industry standard' work has been done this would be relatively simple (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.</i>	- Diamond drilling was used to collect HQ triple tube (HQ3 63.5mm) diameter core. - Core was cut and quarter core sampled on 1.5m intervals or lithological and/or alteration boundaries. - Colluvium/overburden was not sampled. - All samples were placed into individually labelled, consecutively numbered sample bags. - Metallurgical test work samples were a composite sample of quarter core or coarse rejects from the previously conducted geochemical assaying and are believed to be representative of the interval under investigation. - The samples (approximately 700kg total) came from holes MDD004, MDD006, MDD012, MDD018, MDD023 and MDD026 with samples taken from Units 4, 6, 8 and 10 within the Indicated portion of conceptual Pit Shell 5 (nominal 0-20 years).
Drilling techniques	<i>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).</i>	- Diamond drilling was used to collect HQ3 (63.5mm) diameter core. - Core holes were drilled vertically, and core was not oriented.
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i> <i>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.</i>	- Core blocks inserted by the drilling company indicated the length of a run and the amount of recovered core in feet. The site geologist converted this to metres and core recovery was recorded on the sampling sheet. Core recovery was the primary focus for the drill contractor and was typically >90% in the zones of interest. - Core recovery was recorded by the site geologist, and 1m downhole depths marked prior to geological logging and sampling. - No relationship between recovery and grade was observed, no core loss was observed over the interval under investigation.

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.	- Qualitative lithological descriptions were recorded by the field geologist once core had been presented and depths marked. Correlation of this information to the field mapping and stratigraphic sections described in the immediate area is ongoing to build a comprehensive picture of the geology over the project area. - Photos (wet and dry) were taken of all core trays for later review.
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.	- Core was cut, and quarter core sampled over 2m intervals. - The samples were individually crushed to 70% passing less than 2mm, and 500g sub samples were riffle split off by ALS Laboratories in Reno, Nevada with the remaining samples (coarse residues) averaging approximately 1.7kg each. - Quarter core and the coarse residue samples from ALS Laboratories were forwarded to Hazen Research Inc. in Golden, Colorado (Hazen) where they were crushed to 100% passing 1.7mm before compositing to be used for metallurgical testwork including acid leaching, prior to production of lithium carbonate from the leachate. - In January 2026 approximately 100kg of the leachate was shipped from Hazen to Kemetco Research Inc. in Richmond, British Columbia, Canada (Kemetco) for the testwork documented in this announcement.
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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	- Samples were originally assayed by ALS Laboratories in Reno, Nevada via a 4-acid digest of a 0.25g sample split with a 48 element ICP-MS finish as previously reported. - Hazen analysed the head sample for Li and a range of other elements (including Mg) using 4-acid digest and peroxide fusion digest with the digested solution analysed by ICP-OES. - Laboratory QAQC involves the use of internal lab standards, splits and replicates as part of in-house procedures. Both Hazen and Kemetco participate in numerous external umpire assessments to maintain high levels of QAQC in relation to their peers.
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	- Assay results were verified by more than one Jindalee geologist. - Data from Hazen and Kemetco is received and stored electronically. To date no .pdf certificates have been received for the assays completed by either Hazen or Kemetco.

Criteria	JORC Code explanation	Commentary
	verification, data storage (physical and electronic) protocols. • Discuss any adjustment to 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.	• Drill hole locations were surveyed using a handheld Garmin GPS with an accuracy of +/- 3m horizontally, and +/- 5m vertically; hole positions were also checked against a Digital Elevation Model (DEM), and subsequently resurveyed using a DGPS. • Locations are reported in metres NAD83 Zone11. • Downhole surveys were undertaken at approximately 30m intervals downhole and at the end of hole. The maximum variation from vertical observed was 1.7°, typically <0.5°, with a survey accuracy of +/- 0.1°.
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.	• Spacing of drilling and associated sampling is adequate for assessment of the areas and geological horizon(s) of interest. • An Indicated and Inferred Mineral Resource has been estimated for the McDermitt Project (refer Jindalee's ASX announcement dated 27 February 2023 for further details). • Sample compositing was undertaken for metallurgical test work as described above.
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.	• Vertical drill holes were appropriate for assessing the flat lying units of interest. Downhole lengths reported are therefore the same as true widths.
Sample security	• The measures taken to ensure sample security.	• Samples were collected by qualified geological consultants engaged by Jindalee and stored on site in locked sample storage bins provided by ALS Laboratories, who then collected the bins and transported them to their facilities in either Reno or Elko, USA. • Metallurgical samples were sent from ALS Laboratories in Reno, Nevada to Hazen in Golden, Colorado, USA, and 100kg of leachate then shipped from Hazen to Kemetco in Richmond, British Columbia, Canada. • All samples were received as expected by the laboratories with no missing or mis-labelled samples.

Criteria	JORC Code explanation	Commentary
<i>Audits or reviews</i>	<i>The results of any audits or reviews of sampling techniques and data.</i>	The testwork undertaken by Hazen and Kemetco was supervised by metallurgists employed by Hazen and Kemetco. Hazen's results were reviewed by senior metallurgists and chemical engineers from Fluor Corporation and Kemetco's results were reviewed by a highly experienced consultant metallurgist engaged by Jindalee.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<i>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.</i> <i>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.</i>	- Samples reported are all from land managed by the US Bureau of Land Management, with the mineral rights held under placer and lode claims owned 100% by HiTech Minerals Inc., a wholly owned US based subsidiary of Jindalee Lithium Limited. - No joint ventures or royalty interests are applicable.
<i>Exploration done by other parties</i>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	At McDermitt, historic uranium exploration by Chevron first identified the presence of lithium. No data from historic work undertaken within the McDermitt Project area has been obtained.
<i>Geology</i>	<i>Deposit type, geological setting and style of mineralisation.</i>	Lithium is hosted in flat-lying, lacustrine sediments deposited within the Tertiary aged McDermitt caldera.
<i>Drill hole information</i>	<i>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:</i> <i>easting and northing of the drill hole collar</i> <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> <i>dip and azimuth of the hole</i> <i>down hole length and interception depth</i> <i>hole length.</i> <i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from</i>	Please see tables and figures in previous releases referenced above.

Criteria	JORC Code explanation	Commentary
	<i>the understanding of the report, the Competent Person should clearly explain why this is the case.</i>	
<i>Data aggregation methods</i>	<i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</i> <i>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.</i> <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	- Significant intercepts are presented as a weighted average above a 1000ppm Li cut-off, with a maximum of 10 feet (3.05m) internal 'waste' (where 'waste' is defined as intervals with less than 1000ppm Li) and a minimum downhole width of 20 feet (6.1m). - Conversion from Li ppm to Li₂O is achieved by multiplying by 2.153 and converting to %. - Lithium carbonate equivalent (LCE) is calculated by taking the Li value and multiplying by 5.323 to determine the molar equivalent in standard industry fashion. - Conversion from Mg ppm to MgO is achieved by multiplying by 1.658 and converting to %.
<i>Relationship between mineralisation widths and intercept lengths</i>	<i>These relationships are particularly important in the reporting of Exploration Results.</i> <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> <i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</i>	Vertical drill holes were appropriate for assessing the flat lying units of interest. Downhole lengths reported are therefore the same as true widths.
<i>Diagrams</i>	<i>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 plan view of drill hole collar locations and appropriate sectional views.</i>	See previous releases referenced above
<i>Balanced reporting</i>	<i>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.</i>	Only selected metallurgical test results relevant to this release have been reported.
<i>Other substantive exploration data</i>	<i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i>	- Field mapping across the project area, aerial photography and description of stratigraphic sections exposed in several escarpments allows for correlation of the geology between drill holes. - Metallurgical test work is reported herein. Other data published is from previous releases and references to these have been provided.

Criteria	JORC Code explanation	Commentary
Further work	<i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	- Metallurgical testwork (previously announced) has indicated high lithium and magnesium recoveries from leaching with sulphuric acid at moderate temperature and atmospheric pressure and that the mineralised material can be beneficiated using attrition scrubbing. - Extensive metallurgical test work was completed in 2024 with results included in the Pre-feasibility Study (PFS) announced 19 November 2024 (see previous releases referenced above). - Market and engineering studies to assess the financial viability of producing magnesium by-products will be undertaken, together with further testwork to build on the results announced in this report. - Additional drilling is planned to upgrade the mineral resource estimate and obtain samples for large scale metallurgical testwork (lithium and magnesium).