ASX RELEASE
21 OCTOBER 2019
ASX: JRL

MINERALISED AREA CONTINUES TO GROW AT McDERMITT

- **Assays have been received from another 2 holes recently drilled at McDermitt**
- **Multiple thick lithium intercepts extend and confirm the continuity of mineralisation across the project area**
- **Shallow depths of mineralisation imply low strip ratios in any future potential development scenario**

Jindalee Resources Limited ('Jindalee') is pleased to announce further assay results from the drill program recently completed at its 100% owned McDermitt lithium project. Results have now been received from 5 of the 9 holes drilled (Figure 1), with the latest intercepts including:

- **MDD-007 38m @ 1496 ppm Li, including 18m @ 1774 ppm Li**
- **MDD-008 54m @ 1773 ppm Li, including 26m @ 2202 ppm Li** (Table 1)

Core from the remaining holes from the recent program continues to be processed and further assay results are expected in the coming weeks. Once these results have been received resource estimation work will commence.

The assays just received demonstrate that lithium mineralisation is found within all of the sedimentary units encountered. With the highest grades typically observed in the shale and mudstone units, and occasionally also within localised brecciated mudstone units interpreted to be associated with hydrothermal activity post deposition of the sediments. This provides a potential exploration targeting tool to locate higher grade zones in future drilling programs.

These results continue the theme already developing of lithium mineralisation extending across a larger area, deeper than that encountered in 2018, and in multiple stacked horizons. Initial compilation of results from the 2018 and 2019 programs (to date) highlights the increased areal extent of mineralisation (refer Figure 2) and the increased depth to which mineralisation has now been observed (refer cross section in Figure 3) in the deeper drilling undertaken in 2019.

The combination of multiple mineralised intervals, increased areal extent and greater vertical thickness is strongly supportive of a significant upgrade to the current Exploration Target Range of 160-780 Mt @ 1300-1600ppm Li[1], as well as being positive for proposed resource estimation work.

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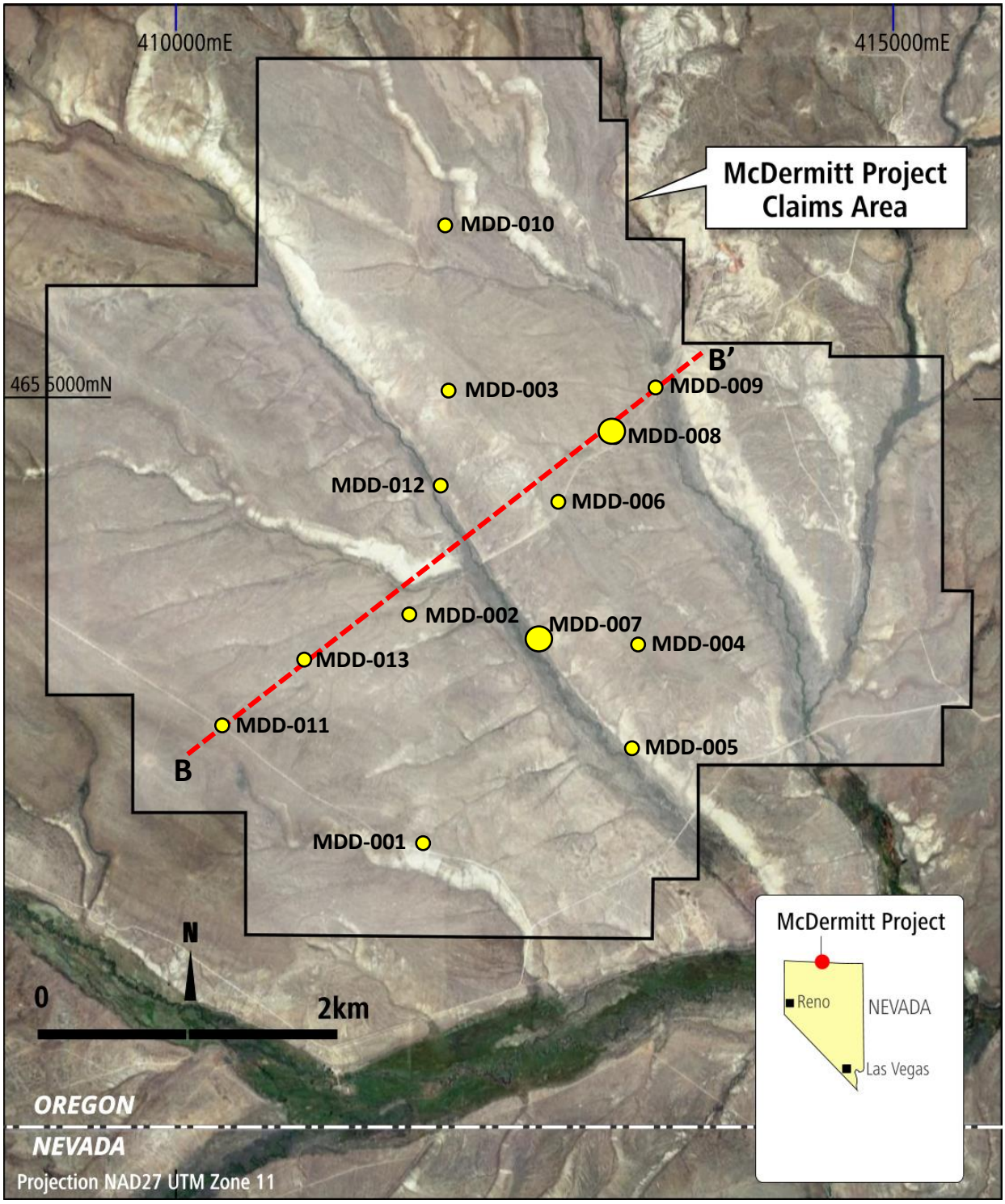

Figure 1 – Completed drill holes at McDermitt, showing the location of the schematic cross-section shown in Figure 3, and highlighting the holes with assays just received.

MDD-007	Depth From (m)	Depth To (m)	Thickness (m)	Li (ppm)
	6	26	20	1419
	36	54	18	1516
	72	110	38	1496
including	*72*	*90*	*18*	*1774*
MDD-008	**Depth From (m)**	**Depth To (m)**	**Thickness (m)**	**Li (ppm)**
	6.6	22	15.4	1233
	36	90	54	1773
including	*52*	*78*	*26*	*2202*
MDD-009	**Depth From (m)**	**Depth To (m)**	**Thickness (m)**	**Li (ppm)**
	2.2	6	3.8	1319
	12	58	46	1674
including	*22*	*32*	*10*	*2246*
including	*42*	*52*	*10*	*2114*

Table 1 – Significant intercepts from holes MDD-007, MDD-008 and MDD-009 (updated)

[1] JRL's ASX announcement 20 November 2018: "Lithium Exploration Target at McDermitt".

* The current Exploration Target Range at McDermitt is 160-780 Mt @ 1300-1600ppm Li[1]. Note that the potential quantity and grade of the Exploration Target Range is conceptual in nature. There has been insufficient exploration to determine a mineral resource and it is uncertain whether future exploration will result in the definition of a mineral resource.

[2] JRL's ASX announcement 9 October 2019: "Assay Results Extend Mineralisation at McDermitt".

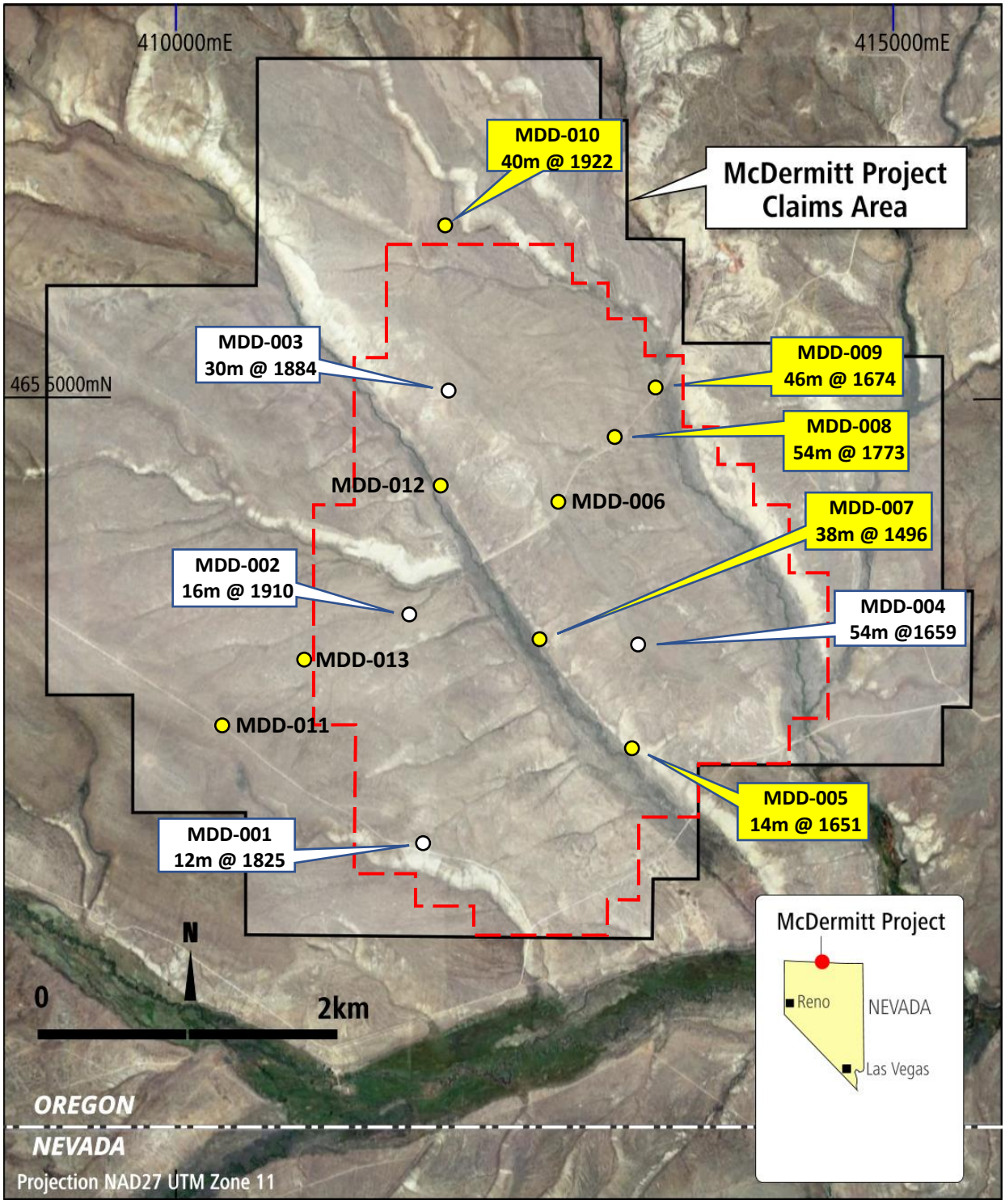

Figure 2 – Summary of significant intercepts (Lithium ppm) so far received at McDermitt with 2018 intercepts in white and 2019 intercepts in yellow. Holes without intercepts are awaiting assay results. Highlighting the much larger area over which lithium mineralisation is now observed, including outside the current Exploration Target Range[1] boundary (red dashed outline).

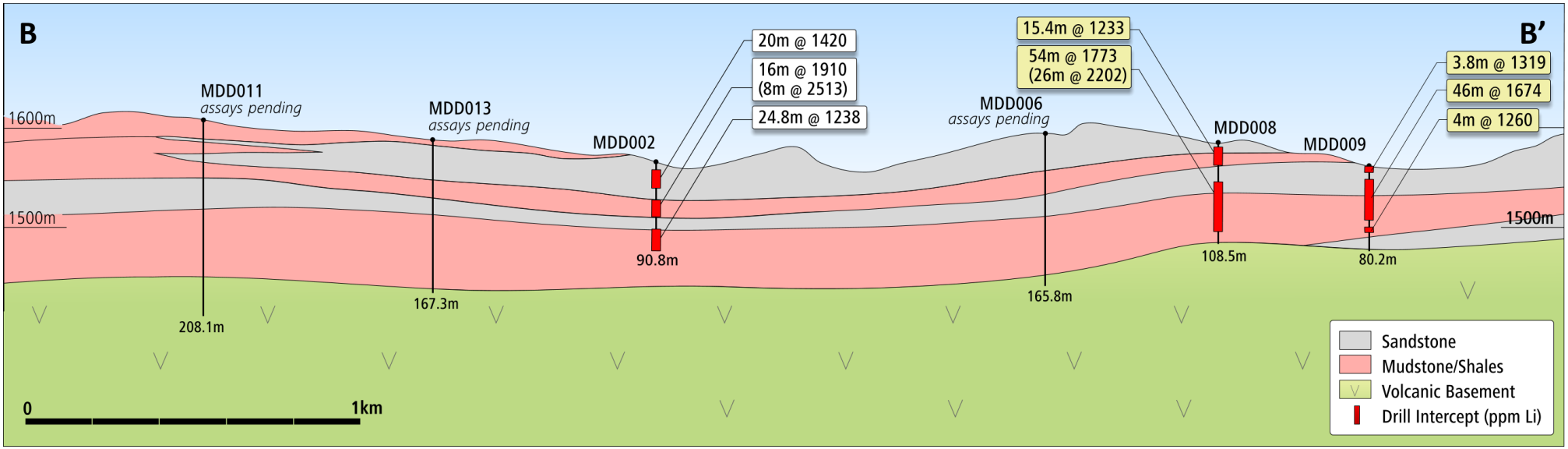

Figure 3 – Schematic cross section showing significant intercepts from the 2018 and 2019 drill programs. Note assay results are pending for holes MDD-006, MDD-011 and MDD-013. Significant intercepts for MDD-009 have been updated from those published in the previous ASX release[2].

Why Lithium Sediments?

Lithium is highly sought after for a range of industrial uses, in particular r energy storage where it is a vital component of most popular battery electrolytes and electrodes. A high charge and power to weight ratio makes Lithium ideal for applications where weight is a significant consideration (e.g. electric vehicles, mobile phones, hand tools, drones and robots).

Lithium is found in pegmatites, brines and sediments. Lithium bearing sediments at Jindalee's McDermitt Project have several positive characteristics including:

- Mineralisation is from or close to surface, flat-lying to shallowly dipping with low stripping ratios.
- Contained within soft rocks suggesting low cost mining.
- Favourable metallurgy - initial testwork has indicated high lithium recoveries from conventional sulphuric acid leaching at low temperature and atmospheric pressure.
- The economics of advanced sediment projects demonstrate the costs to produce lithium compounds used in battery manufacture are highly competitive.
- An adequate scale potential to support a long mine life.

Increasing domestic demand and energy security goals make the USA an ideal location for development of lithium projects:

- Growing local demand is currently satisfied overwhelmingly by imported material with the Silver Peak mine in Nevada owned by Albermarle (NYSE: ALB), the only operating production facility in the US.
- The USA is politically stable, with excellent infrastructure and a skilled labour force.
- Executive Order 'Federal Strategy to Ensure Secure and Reliable Supplies of Critical Minerals' signed by President Trump on 20 December 2017 makes the development of Lithium projects in the USA a focus and priority for Federal agencies.
- The US Geological Survey included Lithium in its June 2018 list of minerals critical to the USA economic and national security.
- US Department of the Interior report June 2018 includes Lithium as critical to economic and national security.
- Bipartisan Bill 'American Minerals Security Act' introduced May 2019 to secure mineral resources and reduce reliance on foreign sources.
- A domestic source of Lithium would not be subject to tariffs (currently 3.7% minimum).
- Jindalee's USA Lithium projects are located on 100% owned tenure, with no royalties.

About Jindalee

Jindalee Resources Limited (ASX: JRL) is an exploration company with direct and indirect exposure to gold, lithium, base and strategic metals, iron ore, uranium and magnesite through projects generated by the Company's technical team. Jindalee has a track record of rewarding shareholders, including priority entitlements to several successful IPO's and payment of a special dividend.

Jindalee's strategy is to acquire prospective ground, add value through low cost exploration and, where appropriate, either introduce partners to assist in funding further progress, or fund this activity via a dedicated company in which Jindalee retains a significant interest. At 30 June 2019 Jindalee held cash and marketable securities worth $3.2M, combining with the Company's tight capital structure (only 38.5M shares on issue) to provide a strong base for leverage into new opportunities.

Further information on the Company can be found at www.jindalee.net

Competent Persons Statement:

The information in this report that relates to Exploration Results and Metallurgy is based on information compiled by Mr Pip Darvall. Mr Darvall is an employee of the Company and a member of the Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. Mr Darvall has sufficient experience, relevant to the styles of mineralisation and types of deposits under consideration, and to the activity which is being undertaking, 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 Darvall consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

Forward-Looking Statements:

This document may include forward-looking statements. Forward-looking statements include but are not limited to statements concerning Jindalee Resources Limited's (Jindalee) planned exploration program and other statements that are not historical facts. When used in this document, the words such as "could", "plan", "estimate", "expect", "intend", "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 involve risks and uncertainties 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	• *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.* • *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 (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.*	• Diamond drilling was used to collect HQ triple tube (HQ3 63.5mm) diameter core. • Core was cut and quarter core sampled on 2m intervals. • Colluvium/overburden was not sampled • All samples were placed into individually labelled, consecutively numbered sample bags.
Drilling techniques	• *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).*	• Diamond drilling was used to collect HQ3 (63.5mm) diameter core. • Core holes were drilled vertically, and core was not oriented.
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 between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• 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 100% 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.
Logging	• *Whether core and chip samples have been geologically and*	• Qualitative lithological descriptions were recorded by the field

Criteria	JORC Code explanation	Commentary
	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.*	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. • Sample preparation at the laboratory involved crushing to 70% less than 2mm, riffle split off 250g, pulverize split to better than 85% passing 75 microns. • Duplicate samples were inserted approximately every 15 samples to check the representivity of samples and precision in assaying. In most cases duplicate sample assays were within <10% of the original sample indicating samples are representative of the unit being assessed. Two duplicates in hole MDD007 varied by 20 and 23% and are being re-checked.
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 assayed by ALS Laboratories in Reno Nevada via 4 acid digest of 0.25g sample split with a 48 element ICP-MS finish. • 4 Acid digests are considered to approach a total digest, as some refractory minerals are not attacked. • Certified lithium sediment standards were inserted approximately every 15 samples. Assay results for all standards were well within the 95% confidence limits indicating no issues with laboratory accuracy or contamination. • Blank samples were inserted approximately every 15 samples to check for laboratory contamination. In all cases lithium assays indicated no external contamination. • Laboratory QAQC involves the use of internal lab standards, splits and replicates as part of in-house procedures. ALS Laboratories participates in external umpire assessments to maintain high levels of QAQC in relation to their peers.

Criteria	JORC Code explanation	Commentary
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.*	• Assay results were verified by more than one Jindalee geologist. • Data is received and stored electronically with a comparison between the .pdf certificates and the .csv data files indicating no errors in transmission.
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.*	• Sample locations were surveyed using a handheld Garmin GPS with an accuracy of +/- 3m horizontally, and +/- 5m vertically. • Locations are reported in metres in UTM Zone 11. • Downhole surveys were undertaken at approximately 30m intervals downhole and at the end of hole. The maximum variation from vertical observed was <1.9°, 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 first pass assessment of the areas and geological horizon(s) of interest. • No resource has been estimated and the information available is not currently adequate to do so.
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, boxed, palletised and sealed by Jindalee personnel, and subsequently delivered to ALS Laboratories by a third-party freight company. • All samples except for one missing blank in hole MDD-007 were received as expected by the laboratory with no mis-labelled samples.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• None undertaken.

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.*	• Samples reported are all from land managed by the US Bureau of Land Management, with the mineral rights held under placer claims owned 100% by HiTech Minerals Inc., a wholly owned US based subsidiary of Jindalee Resources Limited. • No joint ventures or royalty interests are applicable.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• At McDermitt, historic uranium exploration by Chevron first identified the presence of lithium. Lithium Americas Corp (TSX:LAC) is exploring the southern end of the McDermitt caldera, approximately 20km south of the Project area for lithium within geologically identical stratigraphy.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Lithium is hosted in flat-lying lacustrine sediments deposited within the Tertiary aged McDermitt caldera.

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:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *hole length.*
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*
		• MDD-007 collar located at 412887mE 4653353mN 1546m RL
		• Total hole depth 122.83m
		• MDD-008 collar located at 413423mE 4654668mN 1577m RL
		• Total hole depth 108.50m
		• Please see table and figures in main body of text.

Data aggregation methods	• *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.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used*	• Significant intercepts are presented as a simple average above a 1000ppm Li cut-off, with a maximum of 4m internal 'waste' (where 'waste' is defined as intervals with less than 1000ppm Li).

Criteria	JORC Code explanation	Commentary
	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.*	
Relationship between mineralisation widths and intercept lengths	• *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 (eg 'down hole length, true width not known').*	• Vertical drill holes were appropriate for assessing the flat lying units of interest. Downhole lengths reported are therefore the same as true widths.
Diagrams	• *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.*	• See main body of announcement.
Balanced reporting	• *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.*	• All drilling results above a cut-off of 1000ppm lithium containing a maximum of 4m internal 'waste' (where 'waste' is defined as intervals with less than 1000ppm Li) are regarded as significant and have been reported.
Other substantive exploration data	• *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.*	• Field mapping across the project area, and description of stratigraphic sections exposed in several escarpments will allow for correlation of the geology between drill holes once further results are available. • Also see main body of announcement.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Compilation of the drilling results, field mapping and stratigraphic sections, as well as the sourcing of additional data will be completed once additional assay results have been received. • Also see main body of announcement.