

# GEOPHYSICAL SURVEY DELINEATES NEW TARGETS AT HORSE ROCKS LITHIUM PROJECT

- High resolution drone magnetic survey completed over the Horse Rocks Lithium Project (E15/1770).
- Survey shows correlation between magnetic low features and mapped pegmatites.
- Multiple areas with intense magnetic low features identified, indicating potential for larger buried pegmatites.
- Mineralogical assessment has identified the presence of fine grained **weathered spodumene** in drill chips from Phase 1 RC program.
- Drilling to commence imminently post heritage survey, to test the potential of this LCT-system.



Figure 1 - Magnetic image with new target areas & previous drilling results



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**Lord Resources Limited (ASX: LRD) ("Lord" or the "Company")** is pleased to announce the completion of a high-definition drone magnetic survey, as well as highly encouraging results from mineralogical analysis at the Company's 100% owned Horse Rocks Lithium Project (E15/1770), located 20km south of Coolgardie, in Western Australia.

#### **Commenting on the ongoing exploration, LRD Exploration Manager Georgina Clark:**

"The results of the new geophysical survey have exceeded expectations, delivering magnetic data of exceptional high quality. The data has assisted with ongoing detailed lithostructural review of the Horse Rocks Lithium Project, which has assisted in the design of the upcoming Phase 2 drilling.

The intense magnetic low features are very compelling, creating additional targets in areas that are yet to be field mapped. The technical team is eager to be back in the field drilling the Horse Rocks Lithium Project".

#### **DRONE MAGNETIC SURVEY**

A high-detailed magnetic survey has been completed at the Horse Rocks Lithium Project. The 1,076-line kilometre survey was conducted at 25m line spacing and 25m height. The survey was designed to gain detailed structural and lithological interpretation to assist with drill planning of deeper holes targeting anomalous LCT pegmatites at greater depth.

The results from the survey are of excellent quality, producing high resolution images that provide clear and detailed magnetic view of the project. The magnetic high features in the image represent the ultramafic units within the anticlinal greenstone structure, while mapped pegmatites often correlate with magnetic low features.

The technical team has identified multiple new target areas, where clusters of intense magnetic low features indicate potential pegmatite bodies at depth. The erratic orientation of these features indicates they are unlikely to be stratigraphic.

These are **new** high priority targets for field reconnaissance and potential drill testing.

Ongoing geophysical interpretation of the drone magnetic survey is currently underway, with a reconnaissance mapping trip in progress to assess the targets at surface.

#### **MINERALOGICAL ANALYSIS**

Selected drill chips from the Companys' initial RC drill program were submitted for automated mineralogy analysis utilising SEM-based TESCAN Integrated Mineral Analysis (TIMA) and Laser Induced Breakdown Spectroscopy (LIBS). TIMA analysis provides a mineralogical analysis of a polished sample, where LIBS provides an elemental map.

The TIMA analysis of some drill chips from 23RC026 12m (0.29%  $Li_2O$ ) identified small amounts of fine grained **spodumene** and **cookeite**, within weathered quartz crystals. There were also drill chips composed of secondary lithium minerals, including bityite and zinnwaldite, which can form as a result from weathering of primary lithium minerals (such as spodumene, petalite and lepidolite).





Furthermore, these results confirm Horse Rocks is situated within a highly fertile LCT pegmatite system.

## **NEXT STEPS**

- Further analysis and interpretation of newly acquired geophysical data.
- Field reconnaissance of intense mag-low features
- Heritage survey over drill targets
- Commencement of deeper RC drilling

#### - END -

This release is authorised by the Board of Directors of Lord Resources Limited. For further information please contact:

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## **COMPETENT PERSON'S STATEMENT**

The information in this report that relates to exploration results is based on and fairly represents information compiled by Ms Georgina Clark, a Competent Person who is a Member of the Australian Institute of Geoscientists. Ms Clark is a full-time employee of the Company. Ms Clark has sufficient experience that is relevant to the style of mineralisation and type of deposit 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, Mineral Resources and Ore Reserves' ("JORC Code"). Ms Clark consents to the inclusion in the report of the matters based on her information in the form and context in which it appears.

All parties have consented to the inclusion of their work for the purposes of this announcement. The interpretations and conclusions reached in this announcement are based on current geological theory and the best evidence available to the author at the time of writing. It is the nature of all scientific conclusions that they are founded on an assessment of probabilities and, however might be, they make no claim for absolute certainty. Any economic decisions which might be taken on the basis of interpretations or conclusions contained in this presentation will therefore carry an element of risk.





## **ABOUT HORSE ROCKS**

Located 20km south of Coolgardie in Western Australia's Eastern Goldfields, the Horse Rocks Lithium Project comprises a 23.8km2 exploration licence (E15/1770), 8km west of Mineral Resources' (ASX: MIN) Mt Marion Lithium Mine (51.4MT @ 1.45% Li2O).

The Horse Rocks Lithium Project lies within a folded portion of an isolated greenstone belt, within the Coolgardie Domain of the Yilgarn Craton. The greenstone belt is comprised of high-magnesium basalts, gabbroic sills and komatiite sequences. The granodiorite Depot Dome is to the immediate east of the greenstones and is the interpreted source of the many pegmatite intrusions within the tenure.

The Horse Rocks Lithium Project is considered prospective for pegmatite hosted lithium, nickel sulphide and orogenic gold mineralisation. Historical drilling has identified elevated nickel within the ultramafic sequences, along with gold anomalism in surface sampling. Large geochemical anomalies have been identified by Lord, and initial shallow drilling has identified anomalous lithium within highly fractionated pegmatites.



Figure 2 - Horse Rocks Li Project, located within the Coolgardie-Norseman Lithium Super-Province





## Appendix 1 JORC Code 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	<ul> <li>Geophysical results in this document refer to an aerial magnetic survey conducted via UAV drone at the Horse Rocks Lithium</li> </ul>
I.	chips, or specific specialised	Project.
	industry standard measurement	• Line spacing was 25m
	tools appropriate to the minerals	<ul> <li>Line direction was E-W</li> </ul>
	under investigation, such as	<ul> <li>Sensor height was 25m</li> </ul>
	down-noie gamma sondes, or handhold XRE instruments, etc.)	
	These examples should not be	• Mineralegical regults in this report refer to analysis of selected
	taken as limiting the broad	drill chips utilising SEM-based TESCAN Integrated Mineral
	meaning of sampling.	Analysis (TIMA) and Laser Induced Breakdown Spectroscopy
	Include reference to measures	(LIBS)
	taken to ensure sample	
	representivity and the	
	appropriate calibration of any	
	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	
	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.	
	mineralisation types (e.g.	
	submarine nodules) may warrant	
	disclosure of detailed	
	information.	
Drilling	Drill type (e.g. core, reverse	<ul> <li>No new drilling activities are being reported.</li> </ul>
techniques	circulation, open-hole hammer,	
	rotary air biast, auger, Bangka,	
	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.).	





Criteria	JORC Code explanation	Commentary
Drill sample	Method of recording and	• No new drilling activities are being reported.
recovery	assessing core and chip sample	
	recoveries and results assessed.	
	Measures taken to maximise	
	sample recovery and ensure	
	representative nature of the	
	Whather a relationship exists	
	between sample recovery and	
	grade and whether sample bias	
	may have occurred due to	
	preferential loss/gain of	
	fine/coarse material.	
Logging	Whether core and chip samples	<ul> <li>No drilling activities are being reported.</li> </ul>
	have been geologically and	
	geotechnically logged to a level	
	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	
Sub-sampling	If core whether cut or sawn and	• Mineralogical studies were conducted on selected drill chins
techniques	whether quarter, half or all core	where previous chemical analysis indicated anomalous lithium
and sample	taken.	content.
preparation	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	
	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	
	neid duplicate/second-halt sampling	
	Whether sample sizes are	
	appropriate to the grain size of	
	the material being sampled.	





Criteria	JORC Code explanation	Commentary
Criteria Quality of assay data and laboratory tests Verification of sampling and assaying	JORC Code explanation 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. 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.	<ul> <li>Commentary</li> <li>TIMA and LIBS analysis is indicative of mineralogy on the selected drill chips only.</li> <li>No geophysical or handheld XRF data is being reported.</li> <li>No Standards (CRM's) were inserted within the sample sequence.</li> <li>No Standards (CRM's) were inserted within the sample sequence.</li> <li>Senior LRD personnel verified the results.</li> <li>All data has been entered into the Companies electronic database.</li> <li>Twinned holes have not been drilled.</li> <li>Assay data has not been adjusted.</li> </ul>
Location of data points	data 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.	<ul> <li>All coordinates were recorded in GDA94 z51.</li> <li>Magnetic data is not use in Resource Estimates</li> </ul>
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.	• Magnetic data was collected on 25m line spacing, at a height of 25m. This is considered highly detailed.





Criteria	JORC Code explanation	Commentary
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.	<ul> <li>Magnetic data was collected on east-west lines, which is perpendicular to the lithological units.</li> </ul>
Sample security	The measures taken to ensure sample security.	All data was collected under strict security measures
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	• Magnetic data has been received, reviewed and interpreted by the companies' consulting geophysicist.

## Section 2 Reporting of Exploration Results

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.	<ul> <li>The Horse Rocks Lithium Project, consists of one Exploration Licence E15/1770, covering 23.8km<sup>2</sup> and is located approximately 20km south of Coolgardie, Western Australia. It is readily accessible from Coolgardie via the sealed Coolgardie- Esperance highway and thereafter northwards along the unsealed fence lines and historic drilling tracks.</li> <li>The Project is within the Yallari Timber Reserve. A Conservation Management Plan (CMP) has been approved by the EnvironmentMinister and is attached as a tenement condition.</li> <li>E15/1770 is in good standing, and is held by Tailflower Pty Ltd, a wholly owned subsidiary of Lord Resources Ltd.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>The majority of past exploration work within the project area including drilling, surface sampling; geophysical surveys, geological mapping was largely completed in the 1970's by Carpentaria Exploration, and 1990's MPI and Newcrest.</li> <li>The reports are available on the West Australian Mines Department WAMEX open file library.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>The Project lies on the Coolgardie Domain, of the Kalgoorlie Terrain, within the Eastern Goldfields Supergroup, which is part of the Yilgarn Craton. The dominant geological feature of the tenure is an anticlinal folded portion of an isolated Archaean greenstone belt, between the Nepean-Coolgardie belt and the Saddle Hills-Spargoville belt. The greenstone unit has been metamorphosed to upper greenschist to mid-amphibolite facies.</li> <li>The Depot Dome intrusion is located to the east of the tenure. The Depot Granodiorite is a medium- to coarse grained hornblende leucogranodiorite-tonalite, with moderate to strong shearing. This discrete granitoid dome is the interpreted source for pegmatites intrusions which host the Mt Marion Lithium Mine.</li> </ul>

### Criteria in this section apply to all succeeding sections





Criteria	JORC Code explanation	Commentary
		<ul> <li>Pegmatites have been historically mapped within the greenstone sequence, but the lithium potential has not been determined.</li> <li>There are two east-north-easterly trending Proterozoic dykes bisecting the project area, the northern of which labelled the Celebration Dyke.</li> <li>The north trending Kununalling Shear Zone passes through the Horse Rocks Project. The Ghost Crab - Mount Marion gold deposits are spatially associated with shear zones.</li> </ul>
Drillhole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes: easting and northing of the drillhole collar elevation or RL (elevation above sea level in metres) of the drillhole collar dip and azimuth of the hole down hole length and interception depth hole length.	• No drilling is reported
Data aggregation methods	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.	• No assay results are reported.
Relationship between mineralisation widths and intercept lengths	If the geometry of the mineralisation with respect to the drillhole 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').	• The geometry of mineralisation is unknown.
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	• Refer to figures in this announcement.





Criteria	JORC Code explanation	Commentary
	of drill hole collar locations and appropriate sectional views.	
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.	<ul> <li>The report has been prepared to summarise the recent exploration. Further drilling will be completed and reported on in due course.</li> <li></li> </ul>
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.	• All material results from exploration at Horse Rocks have been disclosed in this announcement.
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).	• Planned further work includes field assessment of the intense magnetic low features, and drill testing the mineralised pegmatites at depth.

