

15 MARCH 2022

ASX Release

SPODUMENE DISCOVERED OVER 3 MINREX PILBARA LITHIUM PROJECTS

Exploration program and application for ground proofing & drilling underway

HIGHLIGHTS

- Large pegmatites hosting visible Spodumene, Lepidolite, Tourmaline, Tantalite, Cassiterite, Kunzite identified over the Tambourah North, Leavers Well and Twin Well Project areas.
- Tambourah North Project hosts large, stacked pegmatites over 1.5km length by 150m in width.
- Tambourah pegmatites housed in the Soansville Group Formation hosting Pilbara Minerals (ASX-PLS) Pilgangoora Lithium Deposit 226Mt @ 1.29% Li₂O & Mineral Resources (ASX-MRL) Wodgina Lithium Deposit 236MT @ 1.2% Li₂O.
- Tambourah pegmatites stacked at surface in goldilocks zone in the Granite-Greenstone Pilbara Craton Super Suite-Soansville Group Formation and have visible coarse and fine grained Spodumene & Lepidolites with zoning along strike and across strike.
- Leavers Well pegmatites host visible extensive coarse-grained tourmaline, albite rich with green Spodumene laths and acicular Spodumene in large pegmatite dyke over 450m wide and 1.5km strike length.
- Twin Wells Prospect extensive stacked pegmatite swarms over 650m wide & historically mined form Tantalum containing Beryl, Corundum and Kunzite (lithium oxide) as found at Tabba Tabba Tantalum Deposit Western Pilbara WA.
- 16 rock chip samples recovered from reconnaissance, with assays pending.
- No modern exploration drilling for Lithium has ever been carried out within the tenement areas.
- Minrex advancing Heritage Agreement and Native Title Surveys over Marble Bar Lithium Projects
- Planning for RC Drilling underway to test pegmatites over all 3 project areas.
- MinRex well-funded \$5.1M cash on hand to commence Lithium exploration in the Pilbara.

MinRex Resources Limited (ASX: MRR) (“MinRex” or “the Company”) is pleased to announce the second ground reconnaissance field program over MinRex new acquired Lithium Projects in the East Pilbara of WA.

About the Reconnaissance Field Trip

Lithium expert geologists Mr George Karageorge, Mr Pedro Kastellorizos along with Dr Darren Holden and Mr Ian Shackleton, (founding Geologist of the Global Lithium Resources ASX-GLI Archer Lithium deposit in Marble Bar) conducted a helicopter reconnaissance program over the Tambourah North Lithium Project, Haystack Well Lithium Project, and the Coondina South Lithium Projects.

MinRex Resources Limited Non-Executive Director Mr Karageorge commented:

“We are delighted to have identified spodumene within extensive outcropping pegmatites over 3 Projects areas. These rich spodumene stacked pegmatites have extensive width, strike and zoning which have all the hallmarks of a potential Archer Lithium Deposit.

MinRex is currently working on the first RC drill program to test the extensive stacked pegmatites over all 3 project areas with a view of signing the drilling contractor to undertake drilling over the projects once all approvals have been issued.

Tambourah North Lithium Project

Tambourah is located approximately 200 km south southeast of Port Hedland and 80km southwest of Marble Bar within the Pilbara Mineral Field. Access is via the Great Northern Highway or the Marble Bar – Port Hedland Road and the connecting Woodstock – Hillside Road. In 2013 Altura Mining Limited identified outcropping lithium mineralisation hosted within pegmatites. Initial investigation of the licence for rare metal mineralisation suggests that lithium is present as lepidolite in pegmatites located along the granite-greenstone margin. The dykes are up to 1 km in strike and 100 meters width and trend east-west across the dominant structural trend at Tambourah. 2

During the reconnaissance, a series of stacked pegmatites hosting spodumene striking 330° over 1 km with approximately 50m in width were located within the greenstone belt. Acicular-lepidolite-albite-muscovite rich pegmatites were located on the contact zone between the Petroglyph Gneiss and Apex Basalt greenstone belt.

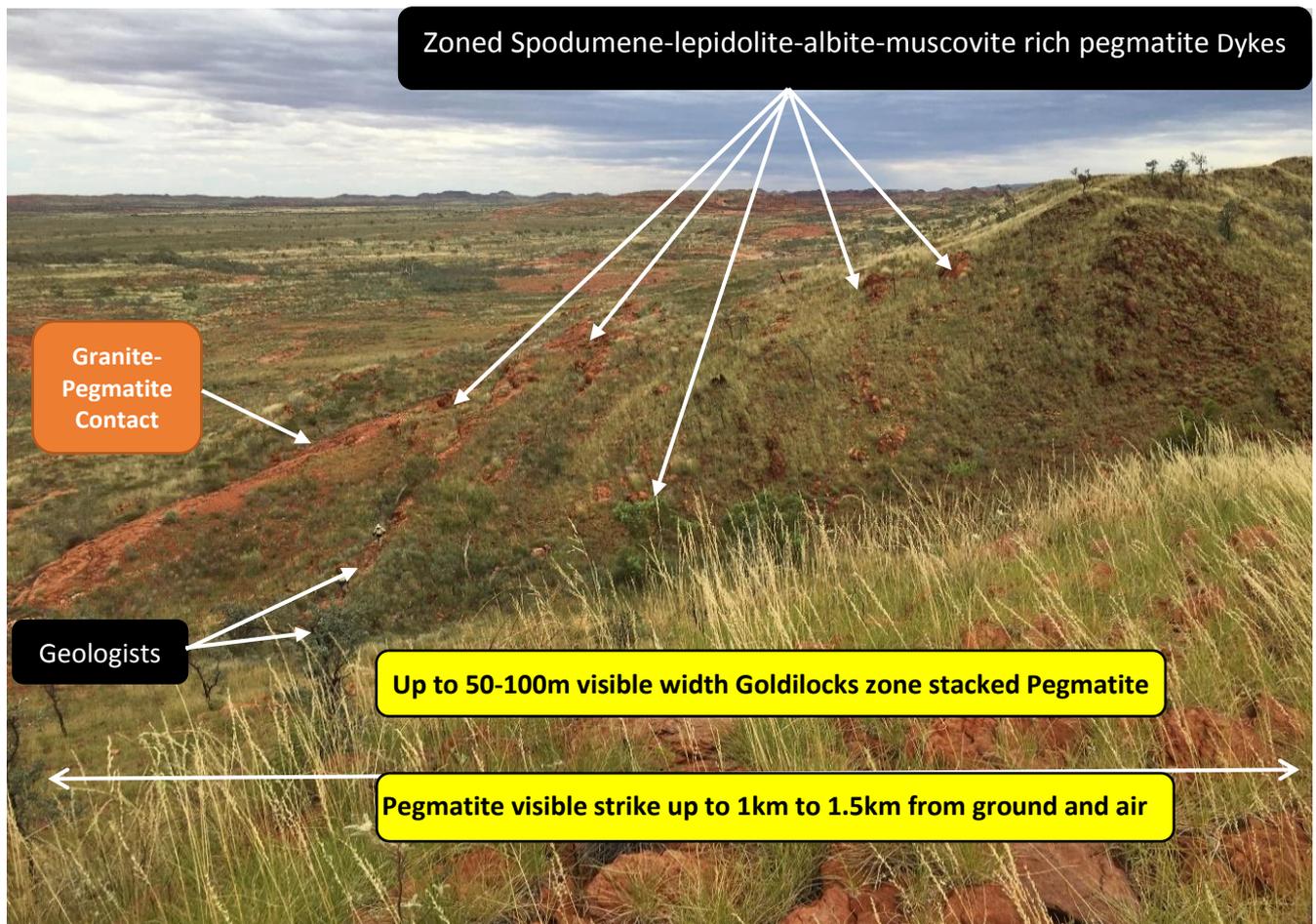


Photo 1 – Tambourah North Prospect showing a wide 100 m wide stacked pegmatites running southerly direction hosted within the Greenstone Belt – Photo looking North



Photo 2 –Zoned 50m wide pegmatite with coarse and acicular fine grained Spodumene from Tambourah North

Haystack Well Lithium Project Area

The tenement is located 170km north of Newman, and 35km south of Nullagine, accessed via Marble Bar Rd. The project includes historic tantalum alluvial workings (MINEDEX registration S0029250) - a strong indicator of localised LCT pegmatites. Within the central portion of the tenement, pegmatite hosting microcline-muscovite-altered green micas was located within a granite greisen. The Twin Wells Alluvial Prospect showed strong extensive stacked swarms pegmatites striking within a southerly direction over 650 metres. Several rock chip samples were collected from the pegmatites for assaying. Samples over the historic Twin Wells alluvial tailings have also been sampled for assaying.

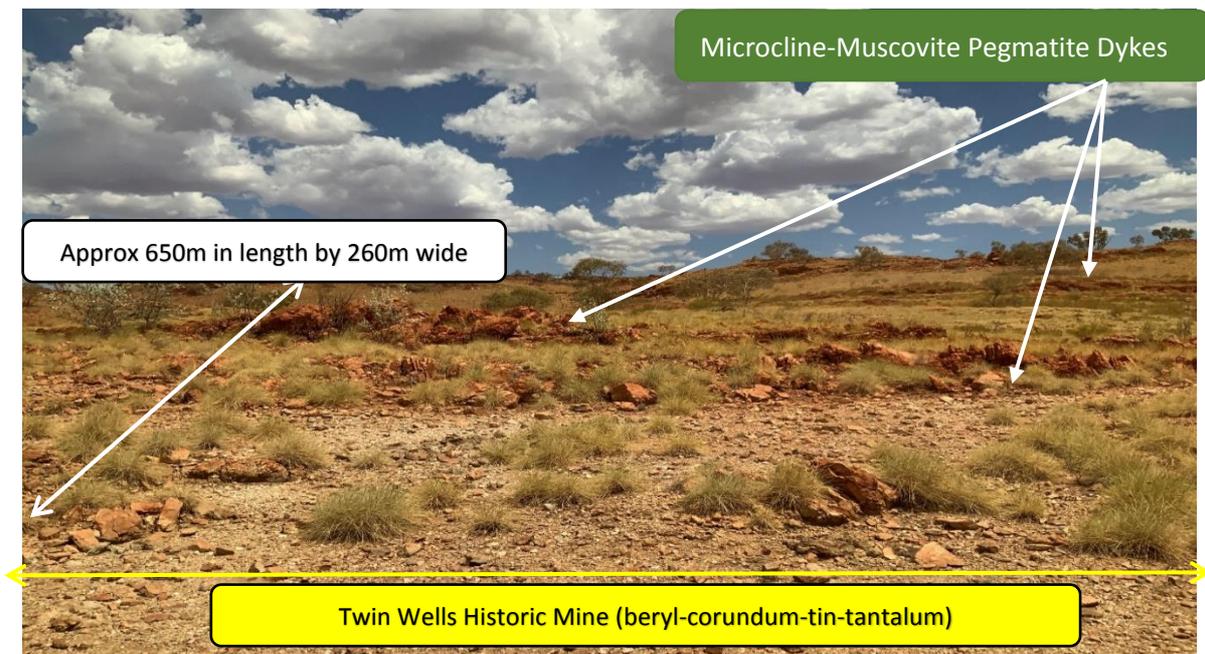


Photo 3 - Twin Wells Alluvial Tantalum Prospect showing 3 stacked pegmatites running southerly direction hosted within the Bonny Downs Granite Formation

Coondina South Lithium Project

The Coondina South Project is located approximately 20km south of the historic Coondina Tin Field, and 18km north of the East Pilbara Iron Project/Cloud Break Mine owned by Fortescue Metals Group (FMG). The reconnaissance concentrated mainly over the Leavers Well South Prospect were extensive tourmaline rich spodumene pegmatites were located along the low-lying areas through the upper ridges of the Hamersley Basin Sediments. These pegmatites are located with the goldilocks zone where the geological settings are favourable for lithium mineralisation.

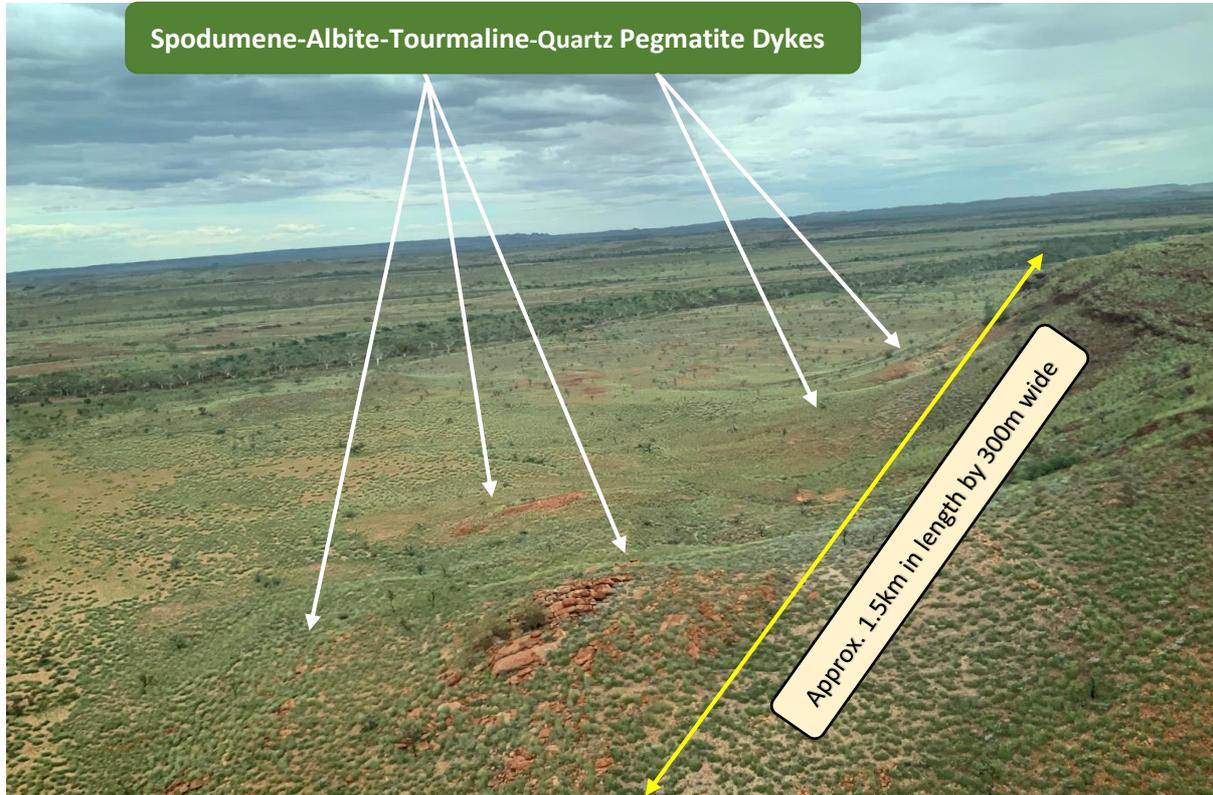


Photo 4 - Leavers Well South Prospect (Coondina South Project) showing series of stacked pegmatites approx. 300m in width striking east-west direction over 1 km

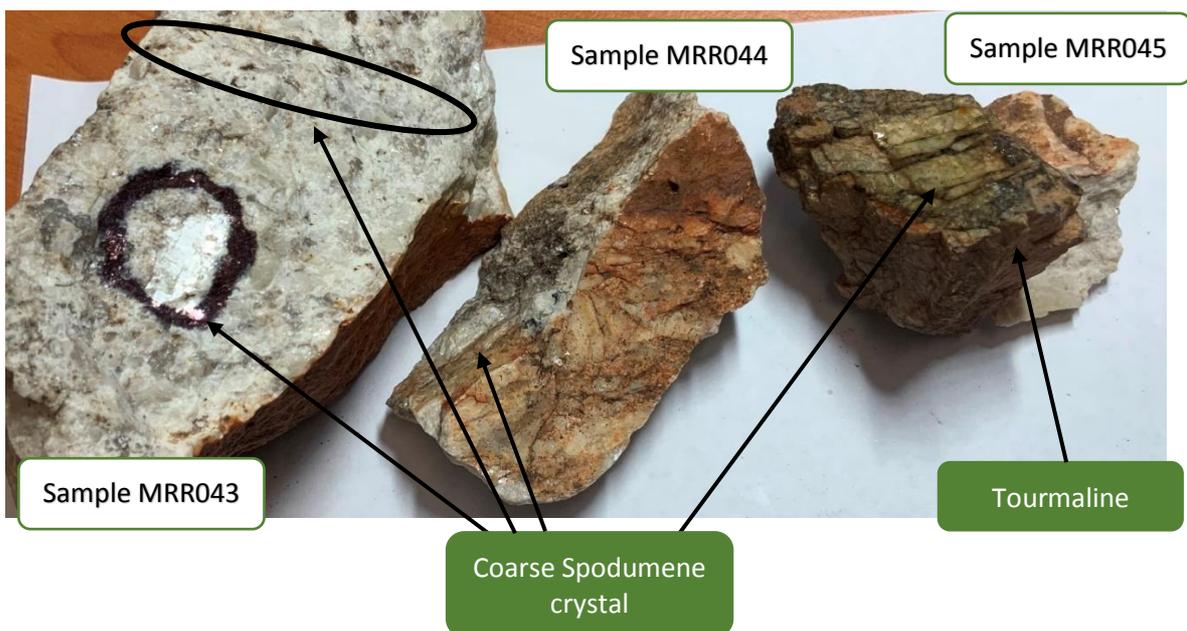


Photo 5 - Leavers Well South Prospect pegmatite hosting abundant spodumene-tourmaline-quartz

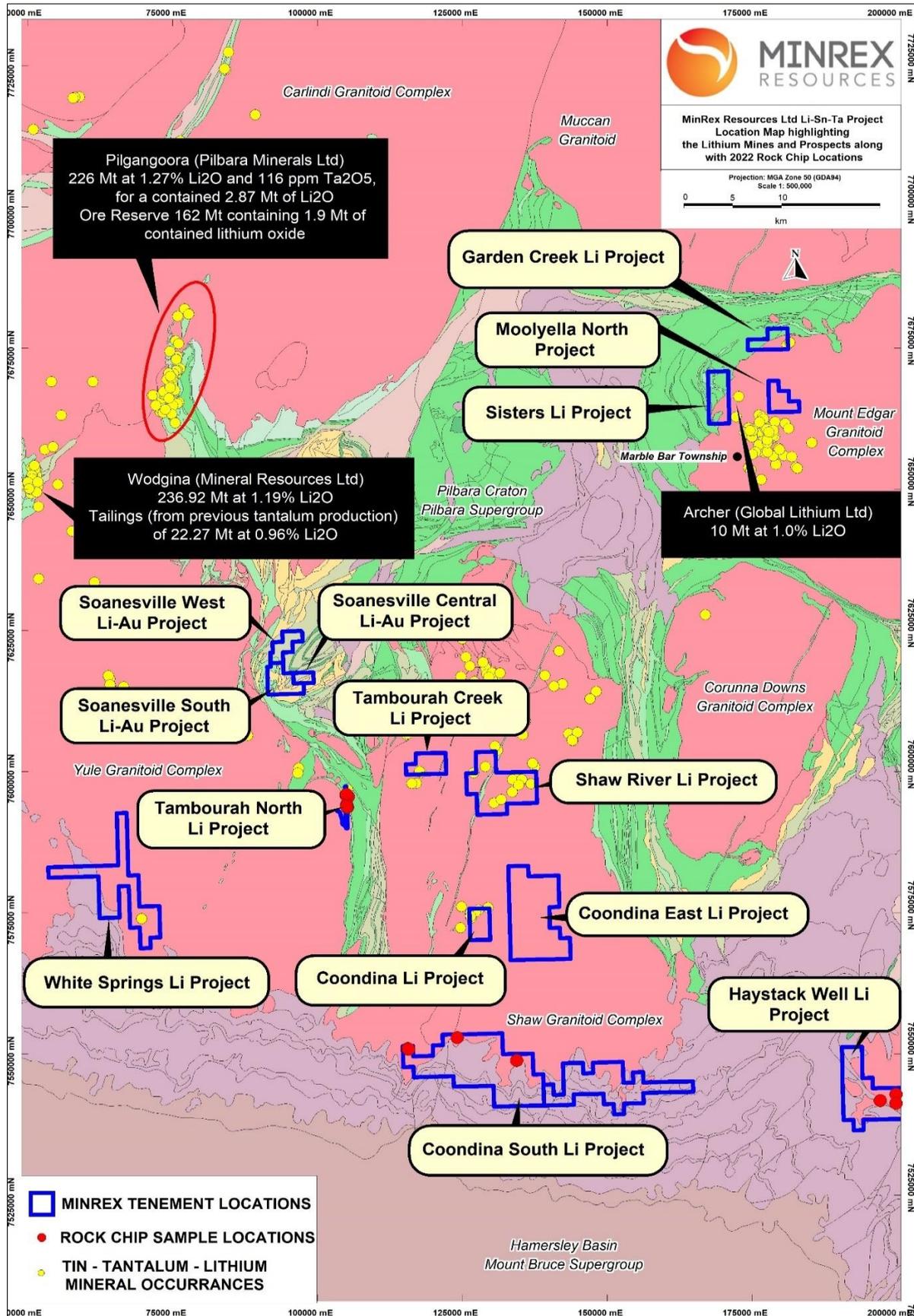


Figure 1 – MinRex Lithium Project Location Map highlighting the recent rock chip sample locations – see Table 1 for AMG Coordinates

Forward Strategy

The Company has following upcoming work programs and results:

- Three work programs have been applied for with the Department of Mines, Industry, Regulation and Safety for the purposes of drilling over the South Coondina, Haystack Well and Tambourah North Projects, targeting all the areas mentioned with the ASX Release
- The Company anticipates drilling will commence in the second quarter of 2022.
- 16 battery metals samples have been submitted to Nagrom Labs Pty Ltd for geochemical analysis
- The Marble Bar Lithium Projects have advanced Heritage Agreement and Native Title Surveys in progress

This ASX announcement has been authorised for release by the Board of MinRex Resources Limited.

-ENDS-

For further information, please contact:

George Karageorge
Non-Executive Director
MinRex Resources Limited
T: +61 8 9481 0389
M: 0419 944 484
George.Karageorge@minrex.com.au
info@minrex.com.au

About MinRex Resources Ltd

MinRex Resources Limited (ASX: MRR) is an Australian based ASX-listed emergent battery metals explorer with Lithium-Tin-Tantalum Projects in the Pilbara (WA) in close proximity to world-class Lithium and Tantalum producers Pilbara Minerals, Mineral Resources, and Global Lithium. MinRex also has a highly prospective portfolio of Gold-Copper projects in the Mercherson and Pilbara Regions (WA) and Gold-Silver-Copper and other metals projects in the Lachlan Fold Belt (NSW). The Company's tenements package cover 1,000km² of highly prospective ground targeting multi-commodities type deposits. The Company also currently has JORC 2012 Resources totalling 352,213 oz gold at its Sofala Project (NSW).

Competent Persons Statement

The information in this report that relates to Exploration Targets and Exploration Results is based on information compiled by Pedro Kastellorizos. Mr. Kastellorizos is the Chief Executive Officer of MinRex Resources Limited and is a Member of the AusIMM of whom have sufficient experience relevant to the styles of mineralisation under consideration and to the activity being reported 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. Mr. Kastellorizos have verified the data disclosed in this release and consent to the inclusion in this release of the matters based on the information in the form and context in which it appears.

Forward Statement

This release includes forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning MinRex's planned exploration programs and other statements that are not historical facts. When used in this release, the words such as "could", "plan", "estimate", "expect", "anticipate", "intend", "may", "potential", "should", "might" and similar expressions are forward-looking statements. Although MinRex believes that its expectations reflected in these forward-looking statements are reasonable, such statements involve known and unknown risks and uncertainties and are subject to factors outside of MinRex's control. Accordingly, no assurance can be given that actual results will be consistent with these forward-looking statements.

References

Characteristics of Sn-Ta-Be-Li Industrial Mineral Deposits of the Archaean Pilbara Craton, Western Australia-Marcus T Sweetapple, AGSO Record 2000/44 2.

The Geology and Mineralogy of the Pilgangoora Li-Ta Pegmatite Deposit-Marcus T Sweetapple, John Holmes, John Young, Mike W Grigson, Lauritz Barnes & Stuart Till-Centre of Exploration Targeting, UWA, Western Australia 2017

A Preliminary Deposit Model for Li-Ce-Ta (LCT) Pegmatites, Dwight Bradley and Andrew McCauley, USGS Open File 2013-1008

REE-Enriched Granitic Pegmatites-T Scott Ercit, Canadian Museum of Nature, 2014. 5. DMIRS WAMEX Report.

Appendix 1: Rock Chip Samples

Project	Sample No	Easting (GDA94)	Northing (GDA94)	Zone	Description
Tambourah North	MR006	725794	7599140	50	Albite rich pegmatite
Tambourah North	MR007	725779	7599167	50	Pegmatite – mica rich with green altered staining
Tambourah North	MR008	726167	7598805	50	Pegmatite with acicular spodumene
Coondina South	MR012	734802	7553794	50	Tourmaline pegmatite with coarse grained spodumene crystals
Coondina South	MR013	743249	7555513	50	Granite rich pegmatite
Haystack Well	MR014	199836	7542465	51	Potential tantalite in pegmatite
Tambourah North	MRR028	725857	7599227	50	Spodumene in Pegmatite
Haystack Well	MRR029	196312	7541394	51	Pegmatite microcline, muscovite, green micas altered granite greisen
Haystack Well	MRR030	199848	7542488	51	Twin Wells Alluvial Prospect stacked pegmatite trending 180 degrees
Haystack Well	MRR031	199853	7542434	51	Greisen Granite
Tambourah North	MRR038	725981	7596918	50	Pegmatite mod grained albite-mica rich acicular
Tambourah North	MRR039	725848	7597433	50	Series of pegmatite striking 330 deg 40m wide by 110m length
Tambourah North	MRR040	725823	7597113	50	Lepidolite pegmatite
Coondina South	MRR043	734665	7553859	50	Tourmaline spodumene pegmatite Levers Well Prospect
Coondina South	MRR044	734808	7553791	50	300m wide approx. 1 km length pegmatite tourmaline-quartz-spodumene
Coondina South	MRR045	753341	7551073	50	Pegmatite hosting tourmaline-albite-coarse grain spodumene

Appendix 2

JORC Code, 2012 Edition – Table 1 report

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<p><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></p> <p><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></p> <p><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></p> <p><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></p>	<p>Rock Chip samples varied in weight from 1kg up to 3 kg with sampling selected based on visual mineralisation or host rock potential within the indicative target mineralogy.</p> <p>All samples will be submitted to Nagrom Labs in Perth using standard industry assay methods for pegmatite analysis.</p>
Drilling techniques	<p><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></p>	N/A – No drilling was undertaken
Drill sample recovery	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></p> <p><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></p> <p><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></p>	N/A – No drilling was undertaken
Logging	<p><i>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.</i></p> <p><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></p> <p><i>The total length and percentage of the relevant intersections logged.</i></p>	<p>N/A – No drilling was undertaken.</p> <p>The Project areas is currently classified as early stage of exploration and no Mineral Resource estimation is applicable</p>
Sub-sampling techniques and sample preparation	<p><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></p> <p><i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></p> <p><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></p> <p><i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></p> <p><i>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.</i></p> <p><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></p>	The rock chip samples were collected from outcrop in the field.

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	<i>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.</i>	Assay will be completed by Nagrom Laboratory in Perth and analysis methods appropriate to pegmatite assaying. No field duplicates or standards have been taken due to the early nature of the work.
Verification of sampling and assaying	<i>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.</i>	The verification of significant intersections has been reviewed by independent consultant from Odessa Resources Pty Ltd No adjustment to assay data
Location of data points	<i>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.</i>	All rock chip locations were recorded with a handheld GPS with +/- 5m accuracy GDA94, Zone 50 was used
Data spacing and distribution	<i>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.</i>	Data spacing and distribution was dependant on the identification of pegmatite dykes. There is insufficient data to determine any economic parameters or mineral resources.
Orientation of data in relation to geological structure	<i>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.</i>	Not Applicable
Sample security	<i>The measures taken to ensure sample security.</i>	MinRex staff delivered all the samples from the field directly to Nagrom
Audits or reviews	<i>The results of any audits or reviews of sampling techniques and data.</i>	No audits or reviews have been undertaken

Section 3 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	<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. 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>	All Project areas are 100% held by MinRex Resources Ltd. Heritage agreements will be executed with the Native Title party during the course of the year.
Exploration done by other parties	<i>Acknowledgment and appraisal of exploration by other parties.</i>	Very little lithium exploration has been undertaken over these project areas. No ground geophysics and very little geological mapping has been historically completed.
Geology	<i>Deposit type, geological setting, and style of mineralisation.</i>	The deposit types been explored includes the Archer Lithium De which includes lithium bearing Pegmatites.
Drill hole Information	<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> <ul style="list-style-type: none"> ○ <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 the understanding of the report, the Competent Person should clearly explain why this is the case.</i>	N/A no drilling undertaken
Data aggregation methods	<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. 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.</i>	No high-grade cuts have been applied. No usage of metal equivalent has been used
Relationship between mineralisation widths and intercept lengths	<i>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').</i>	Samples are rock chips taken from surface and are not representative of the entire thickness of the pegmatite units

Criteria	JORC Code explanation	Commentary
Diagrams	<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>	All maps have been inserted within the announcement
Balanced reporting	<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>	Not applicable
Other substantive exploration data	<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>	Not applicable
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). 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>	Refer to the main body of announcement