19 October 2022 ASX Release

DRILLING INTERSECTS THICK PEGMATITES AT SISTER'S LITHIUM PROJECT

HIGHLIGHTS

- **First pass fifteen (15) RC drillholes totalling 2,355m completed with most drillholes intersecting extensive thick stacked sheeted pegmatites at depth. Thicker intersections are:**
  - **MBRC001 intersected 21m of Pegmatite from 134m**
  - **MBRC002 intersected 4m of Pegmatite from 43m**
  - **MBRC007 intersected 9m of Pegmatite from 17m**
  - **MBRC010 intersected 4m of Pegmatite from 18m**
    including **4m of Pegmatite from 34m**
    9m of Pegmatite from 86m
  - **MBRC011 intersected 4m of Pegmatite from 64m**
    including **8m of Pegmatite from 87m**
    14m of Pegmatite from 108m
  - **MBRC013 intersected 4m of Pegmatite from 45m**
  - **MBRC014 intersected 4m of pegmatite from 12m**
    including **4m of pegmatite from 26m**
    14m of Pegmatite from 65m
    8m of Pegmatite from 167m
    7m of Pegmatite from 199m
- **Ground reconnaissance and rock chip sampling over Sisters Southern Zone pegmatites identified two extensive lithium bearing pegmatites previously unknown within the Apex Basalt Greenstone.**
- **Three strongly anomalous rock chip samples assayed between *0.21% Li_2O and 0.29% Li_2O* with anomalous *rubidium assays from 121 to 776 ppm Rb*. The rubidium assay results highlight key indicator element for potential lithium mineralisation in weathered environments.**
- **Zone 1 rock chip sample 0.29% Li_20 (1,340 ppm Li) from weathered Pegmatite is located approximately 720m south-southeast of the current drilling area.**
- **Zone 2 rock chip sample 0.23% Li_20 (1,070 ppm Li) from a Pegmatite located approximately 1.85km west of the current drilling area.**
- **Most of the pegmatites in the Sisters Prospect area are concealed beneath extensive Tertiary floodplains.**

MinRex Resources Limited (**ASX: MRR**) ("**MinRex**" or "the **Company**") is pleased to announce the preliminary geological data from the completed RC drill program over the Sisters Lithium Project in the East Pilbara of WA. In conjunction, 3

rock chip samples were taken over newly identified pegmatites away from the firstly discovered spodumene rich pegmatites in the south-eastern portion of the E45/5871. These new identified highly anomalous lithium pegmatites have demonstrated more potential for pegmatites discoveries on the ground. The extensive floodplain covering the area has the potential to yield further untested pegmatites.

MinRex Resources Limited Managing Director Mr Karageorge commented:

"We are delighted in the very early stage of drilling to have intersected stacked pegmatites sheets that have extensions at depth from the outcropping high-grade lithium samples delineated earlier in the year. This has confirmed the geological model which supports the stacked sheeted pegmatites are continuing at depth from surface".

"The initial drilling to date has revealed the thickness of the pegmatites continues greater at depth as shown in Drillhole RC chip trays MBRC001, MBRC010 and MBRC014. From the initial discovery of pegmatites in the southern area of the tenement we have delineated further mineralised pegmatite extensions from the first reconnaissance rock chip programme yielded 3.46% Li_2O".

"We intend to drill test these new pegmatite zones ASAP as they lie beneath alluvial floodplains that may conceal further stacked sheeted pegmatites to test extensions in all direction. Further mapping and sampling programs are ongoing at generating targets along strike over the north-west of the Sister's Project as the historical elevated lithium soil samples will be mapped over all outcropping pegmatites over the Project area."

Sisters Lithium Project

The Sisters Project is situated 1.75km east of Global Lithium Ltd (GL1; ASX) Archer Lithium Deposit, which hosts 10.5Mt @ 1.0% Li_2O. The project hosts the same greenstone belt as the Archer Deposit. Extensive pegmatites were delineated within granite-greenstone "goldilocks zone ". These zones are typical of all major lithium deposits in the Pilbara region of Western Australia. Two zones of spodumene rich pegmatites were located in the southern zone of E45/5871 striking in a north-south direction with the greenstone lithology. This lithium rich zone is approximately 500m in length by 250m in width.

On the 2 August 2022, the Company announced the high-grade rock chip sample results, which yielded **3.42% Li_2O, 1.59% Li, 105 ppm Cs, 80 ppm Ta, 120 ppm Nb, 130 ppm Sn, 1,980 ppm Rb** from the stacked pegmatites. Drilling has concentrated around the newly identified lithium-rich pegmatites.

Figure 1 – Sisters Project showing RC drilling with Homeward Bound Granite

The drill program comprised 15 RC drill holes, totalling 2,355m to test the outcropping pegmatites identified from the initial rock chip sampling program reported in August and September 2022. All samples have been dispatched to Nagrom Laboratories in Perth in early October and will be assayed for all the battery elements. All drill holes were collared within the Homeward Bound Granite with pegmatites intersected consisting of feldspar-minor mica-weakly altered epidote with traces of garnet in part. The drill assays will be announced to the market once received from Nagrom Laboratories.

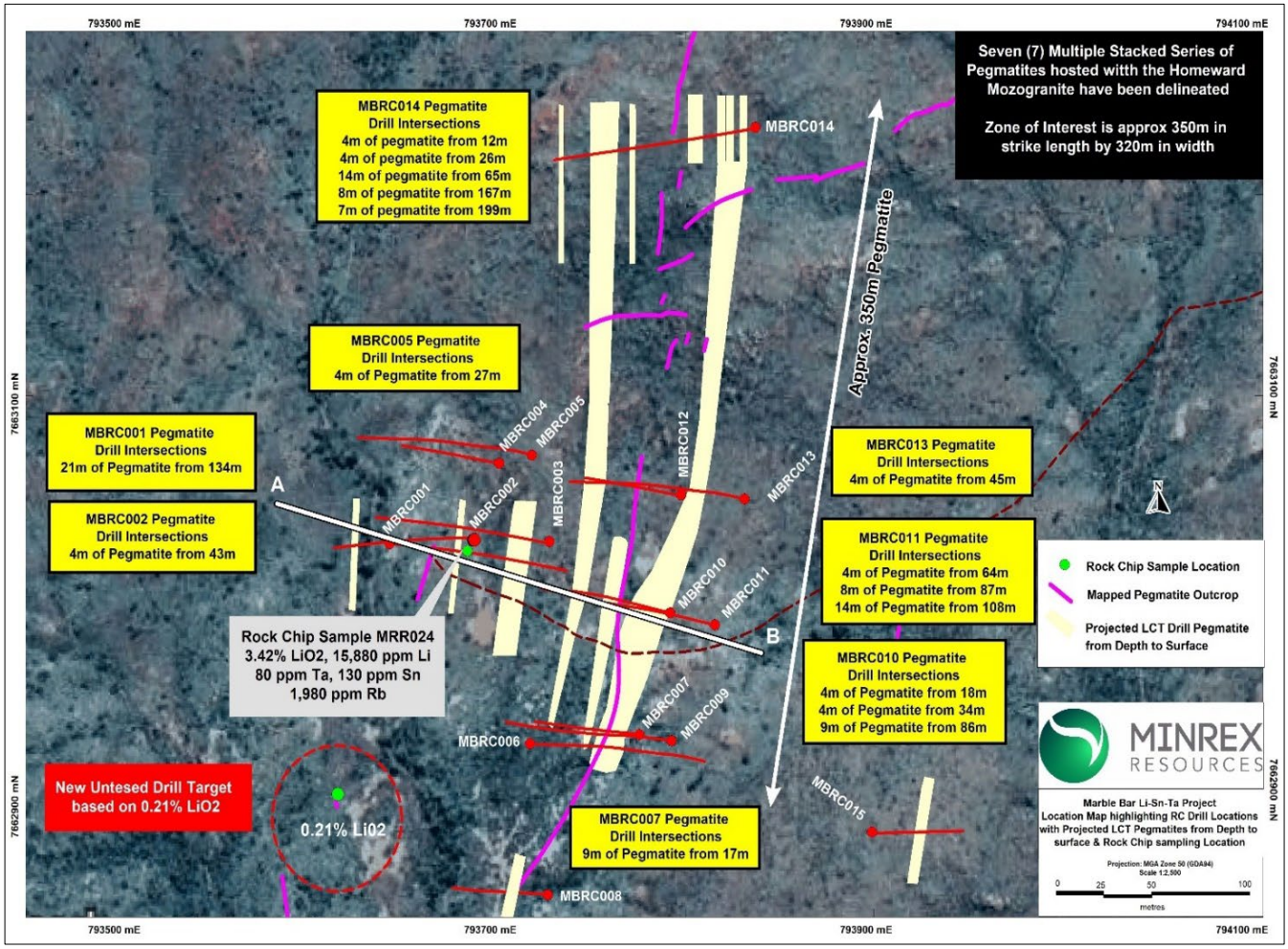

Figure 2 – Sisters Project highlighting the Plan View RC Drillhole Location with the Projected LCT Pegmatites from Depth to Surface along with the recent Rock Chip Lithium Assay Results

Figure 3 – MBRC010 Drillhole intersecting 9 metres of Pegmatite from 87m to 95m

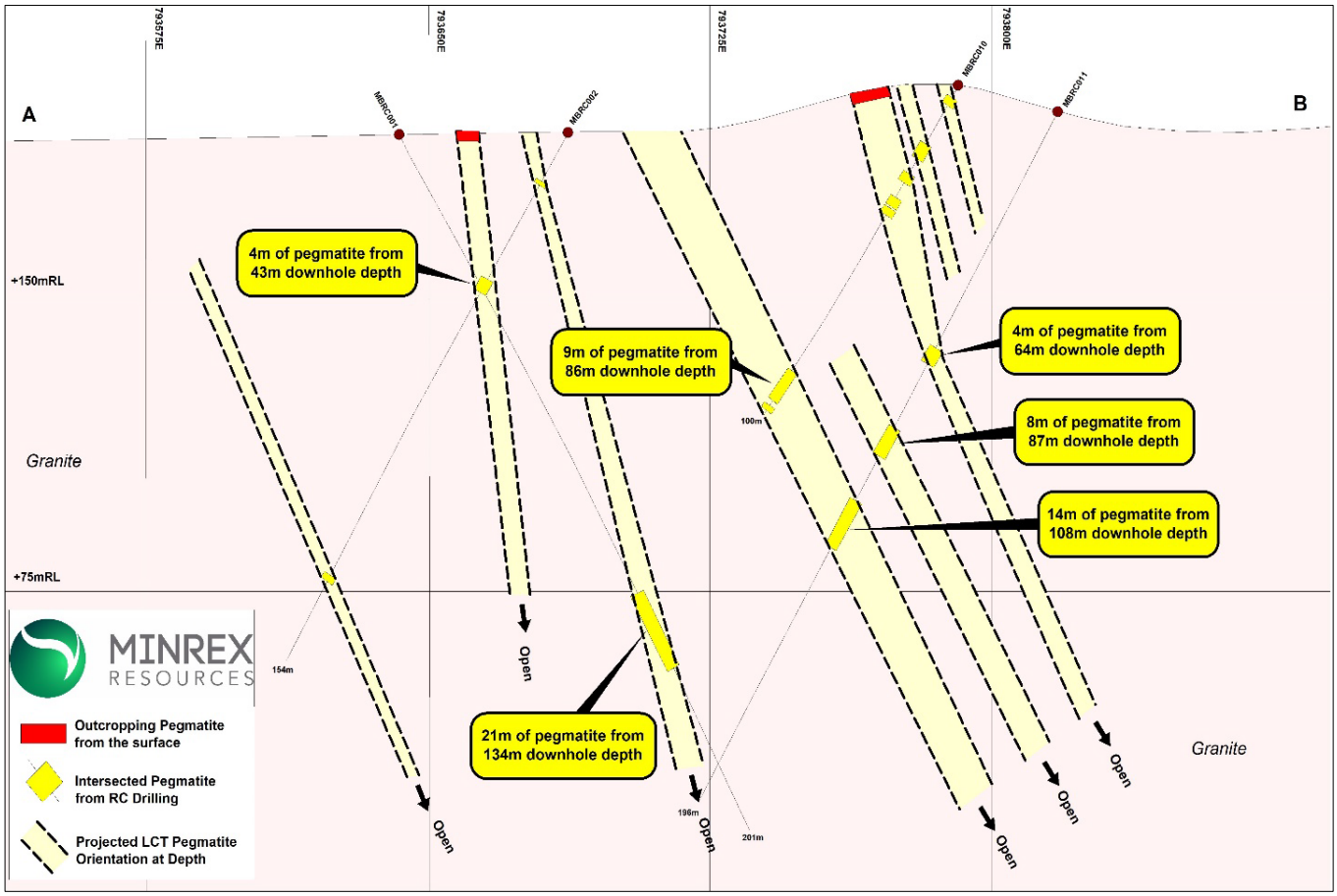

Figure 4 – Cross Section showing the RC drilling intersected Pegmatite at Depth

Figure 5 – MBRC007 Drillhole intersecting 6 metres of Pegmatite from 20m to 26m

Also, during the month of September 2022, the Company's geologist conducted a 3-day ground mapping and rock chip sampling program over the southern portion of the Sister's Project. The aim of the reconnaissance survey was to follow-up on the historic elevated lithium soil anomalies areas. Based on the geological reconnaissance, it was concluded the anomalous lithium bearing soils were derived from lithium leaching out from the proximal outcropping pegmatites.

Limited samples were collected as the pegmatites are located within an extensive floodplain area with most of the pegmatite's outcrops are concealed by alluvial sediments.

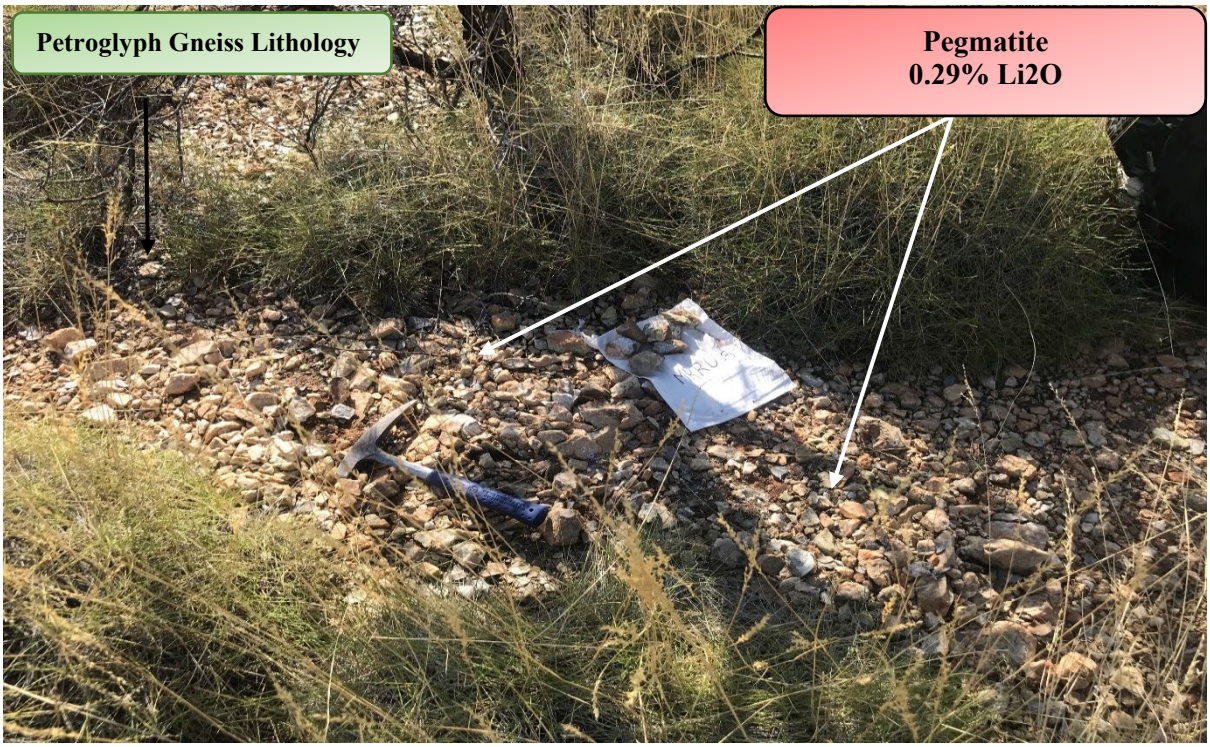

Figure 6 – Sisters (Southern Zone) pegmatite (Sample MRR056- 0.29% Li20) Quartz-sericite-trace feldspar pegmatite hosted Apex Basalt

Figure 7 – Sisters (Southern Zone) pegmatite (Sample MRR057- 0.23% Li_2O) Feldspar-quartz-mica-sericite pegmatite, near 130 ppm Li soil result

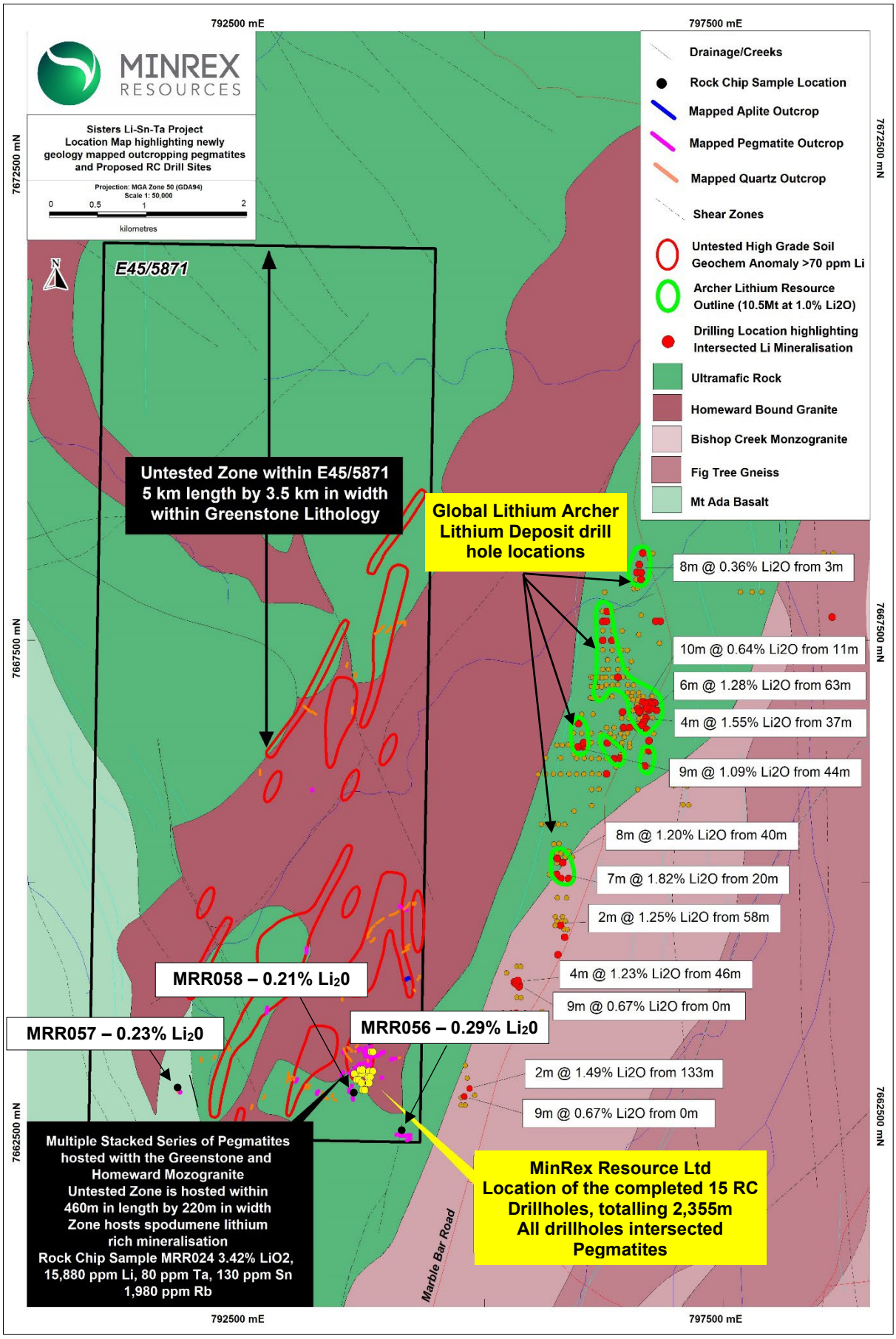

Figure 8 – Sisters Project highlighting the Rock Chip Location proximal Archer Lithium Resource Areas

Table 1 – Sister's Rock Chip Assay Results

Sample Id	East GDA 94	North GDA 94	Zone	Li ICP004 ppm	Li_2O %	Be ICP004 ppm	Nb ICP004 ppm	Cs ICP004 ppm	Rb ICP004 ppm	Sn ICP004 ppm	Ta ICP004 ppm
MRR056	794120	7662386	50	**1,340**	**0.29**	2	25	10	**209**	**14**	9
MRR057	791820	7662841	50	**1,070**	**0.23**	10	10	4	**121**	9	4
MRR058	793615	7662902	50	**960**	**0.21**	2	20	21	**776**	7	**27**

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

-ENDS-

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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 Murchison and Pilbara Regions (WA) and Gold-Silver-Copper and other metals projects in the Lachlan Fold Belt (NSW). The Company's tenements package cover 1,000km^2 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 Ian Shackleton. Mr. Shackleton is the Non-Executive of MinRex Resources Limited and is a Member of the AIG 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. Shackleton has 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

Burton J., C58/2015 – Marble Bar Project Annual Report for the Period 1st February 2017 to 31st January 2018.

Hickman A. H. and Lipple S. L. 1978. 1:250,000 Geological Series-Explanatory Notes. Marble Bar, Western Australia, Sheet SF50-8 International Index. Geological Survey of Western Australia.

Lamerand J., 2008 Annual Report on E45/2680, Talga Project, for the Period 30 March 2007 to 29 March 2008. Montezuma Mining Company Ltd.

Shackleton. I. C58/2015 – Marble Bar Project Annual Report for the Period 1st February 2019 to 31st January 2020. Global Lithium Resources Pty Ltd.

Appendix 1

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	*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.*	Total of 3 rock chip samples were collected with the sample varies from 2 kg to 3 kg based on pegmatite outcrop as this maybe potential lithium indicative target mineralogy. All samples were collected by geologists on site with samples dispatched to Nagrom Labs in Perth. Nagrom used industry standard method for pegmatite analysis using ICP detection. Fifteen (15) RC drill holes over the Sister's project, totalling 2,355m was completed. Sample type was drilling cuttings from RC drilling, sampled every 1 metre. Every sample weighted between 3 and 5 kgs. Industry standard practices will used to ensure sample representation. Nagrom Laboratories in Perth will applied QA-QC for sample preparation and appropriate instrument calibration. Individual samples were collected from the riffle splitter below the cyclone into calico bags for analysis. Duplicates and standards will be submitted to ensure results are repeatable and accurate. Laboratory comparison checks will also be completed. With no statistically significant lab errors or biasing shown at this stage. Intervals were geologically logged by geologist currently on the drilling programme.
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).*	KLW 700 RC drill Rig using a 5 ¼" quarter hammer at an inclination of 60° east and west will be completed as part of the drill program. Drill samples are homogenised by riffle splitting prior to sampling and a 3-5g split sample is submitted for assay only.

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.*	All metre intervals were logged, and sample recoveries were estimated by geologist on site. All samples were dry as no water was encountered during drilling thus the representative nature of the sample remained the same. Dry RC samples have an exceptionally low potential for sample bias.
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.*	The rock chip samples were geological logged for the lithology, minerals and alteration. All RC drilling is qualitatively and quantitatively logged for a combination of geological and geotechnical attributes in their entirety including as appropriate major & minor lithologies, alteration, vein minerals, vein percentage, sulphide type and percentage, colour, weathering, hardness, grain size. All RC holes were geological logged from the start to the end of hole. The Project areas is currently classified as early stage of exploration and no Mineral Resource estimation is appliable with all rock chip logged based on their alteration, grain size and mineral composition. All fields' descriptions are qualitative in nature Some sample photos have been included highlighting the pegmatites intersected. The Project areas is currently classified as early stage of exploration and no Mineral Resource estimation is appliable Some sample photos have been included along with outcropping pegmatites.
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.*	All RC holes were sampled and split every 1 metre using a cone splitter to produce a sample between 3 and 5 kgs sub-sample for submission to Nagrom Labs in Perth. Approx. 7% of submitted samples are in the form of standards, blanks, and duplicates and will be submitted once the drilling programme has been completed. The sample sizes are appropriate to the grain size of the material been sampled.

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.*	All samples will be submitted to Nagrom Labs in Perth for analysis. Geophysical Tools: Not Applicable A nominal one in twenty (6%) of all samples are analysed in duplicate. In addition, re-splits if required are also analysed to determine the precision of the sample preparation and analytical procedures. Blanks and reference material have been inserted as part of the accuracy levels All samples will be submitted to Nagrom Labs in Perth for analysis. Geophysical Tools: Not Applicable All samples were dried, crushed and pulverized to at less 85% passing <75um. Li20% was calculated from Li ppm using a conversion factor of 2.153 at the lab. Nagrom used 6 standards and 2 repeats Acceptable levels of accuracy for these rock chips were concluded.
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.*	Rock chip samples areas were documented in the field by qualified geologist with photos taken from each site. All samples were collected by GPS and validated through aerial photography. All field data was collected then transferred into a computer database.
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.*	All photo locations were recorded with a handheld GPS with +/- 5m accuracy Project used for the programme was GDA94, Zone 50.
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.*	Data spacings and distribution at this stage is not considered satisfactory for estimation of a Mineral Resource or Ore Reserve.
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.*	Samples were collected along strike and width of all identified pegmatites in the field. The drilling program was planned use 60° east and west dipping drill holes with the objective of achieving unbiased sampling of the potential mineralised ore shoot.

		The relationship between the drilling orientation and the orientation of the mineralised ore shoot is not considered to have introduced any material sampling bias.
Sample security	*The measures taken to ensure sample security.*	Sub-samples will be stored on site prior to being transported to the laboratory for analysis. The sample pulps will be stored at the laboratory and will be returned to the Company and stored in a secure location.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	No audits or reviews have been 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.*	Sister Lithium Project (E45/5871) is 100% held by MinRex Resources Ltd and was recently granted by the WA Mines Department.
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	Very little lithium exploration has been undertaken over these project areas. No ground geophysics and very little geological mapping has been historically completed.
Geology	*Deposit type, geological setting, and style of mineralisation.*	Lithium-Caesium-Tantalum pegmatites with structurally deformed greenstone similar to Archer Lithium Deposit
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.*	Table 1: Summary of Completed RC Drillhole Collars

Hole ID	East	North	RL	Depth	Dip	Azimuth
MBRC001	793642	7663027	192.028	201	-60°	93
MBRC002	793687	7663030	192.261	154	-60°	268
MBRC003	793727	7663028	192.342	208	-60°	275
MBRC004	793701	7663067	194.156	100	-60°	274
MBRC005	793718	7663071	195.617	184	-60°	276
MBRC006	793717	7662928	196.390	184	-60°	95
MBRC007	793775	7662932	192.103	100	-60°	274
MBRC008	793726	7662853	190.894	100	-60°	273

Criteria	JORC Code explanation	Commentary
		MBRC009 793792 7662929 187.155 184 -60° 276 MBRC010 793791 7662993 204.684 100 -60° 279 MBRC011 793815 7662987 193.154 196 -60° 280 MBRC012 793797 7663051 202.607 100 -60° 281 MBRC013 793831 7663050 198.399 184 -60° 276 MBRC014 793837 7663233 220.322 260 -60° 261 MBRC015 793899 7662884 200.370 100 -60° 87
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 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.*	Not applicable as no data averaging has been used
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').*	N/A
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.*	Figures 2 and 8 have been presented within the announcement outlining locations of RC Drill Collars and Rock Chip samples sites.
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.*	N/A
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.*	N/A
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*	Refer to the main body of the announcement.

Criteria	JORC Code explanation	Commentary
	geological interpretations and future drilling areas, provided this information is not commercially sensitive.	