

## **ASX ANNOUNCEMENT**

## **RED MOUNTAIN MINING LTD**

1 August 2023

# **High Grade Lithium Results Continue to Impress at Lithic**

### **HIGHLIGHTS**

- Lithium assay values to a high of 1,541ppm lithium returned from latest surface sampling program at Lithic
- Ten (10) samples obtained with lithium values over 1000ppm
- Latest sampling results bolster confidence for a fully funded drill program planned at Lithic
- Preparation for drill targeting & permit application underway

Red Mountain Mining Limited ("RMX" or the "Company") is pleased to provide an update on further reconnaissance lithium surface sampling at the Company's Lithic Project, in Nevada, U.S.A.

An additional 29 surface samples were received from American Assay Laboratories, with Figure 1 & Table 1 providing a detailed summaries of the latest sampling results. These samples were additionally collected from areas of claystone outcrop mostly in the western parts of the mineral claim.

The highest assay result of **1,541ppm Li** was taken from an auger sample of grey-green claystone sediments located on the western side of the Lithic property.

A total of **ten (10)** surface samples returned assay results of **over 1,000ppm Li**, which are highly anomalous given the high mobility of lithium in the weathered surficial environment. Typical mineral resource cutoff grade for Claystone lithium in the Big Smoky Valley and Clayton Valley is around 500ppm Li<sup>1</sup>.

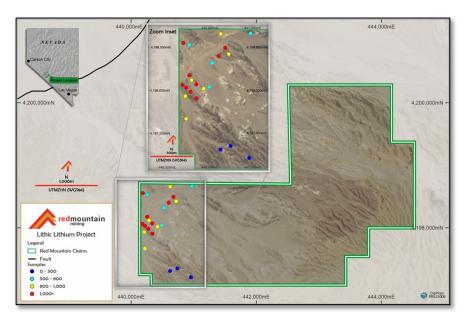


Figure 1. Lithium sampling results to date at Lithic (including prior results from April this yearl<sup>2</sup>)

<sup>&</sup>lt;sup>1</sup> Refer to American Lithium company announcement dated 16 January 2023

<sup>&</sup>lt;sup>2</sup>Refer to RMX Announcement dated 27 April 2023

## **Forward Plan for Lithic**

Based on the successful sampling program, Red Mountain intends to generate maiden drill targets for the Lithic Project, as well as commencing preparations for a drill permit application to the Nevada Bureau of Land Management shortly.

Sample #	East	North	Li (ppm)	Observations
1792555	440179	4198064	1002	Auger sample in claystone
1792556	440676	4198497	1518	Auger sample in claystone
1792557				Samples not submitted
1792558				Samples not submitted
1792559	440465	4198730	1020	Auger sample in claystone thin bedded with minor FeOx
1792560	440624	4198660	817	Auger sample in claystone, thin plated with minor calcite and FeOx
1792561	440257	4198531	674	Grab of thin bedded claystone
1792562	440187	4198555	1541	Auger sample in thin-bedded grey-greenish claystone
1792563	440339	4197907	1163	Grab of blocky, slightly platy light green claystone
1792564	440273	4197984	1250	Grab from 2' hole of blocky, slightly platy light green and tan claystone
1792565	440221	4198032	1035	Grab of blocky, slightly platy light green claystone
1792566	440211	4197932	829	Grab of blocky light green claystone, slight oxides on fractures.
1792567	440219	4197668	842	Grab from wash bank, grey-green claystone
1792568	440490	4198039	521	Grab of thin platy claystone, blocky in upper portion of hole, more coarse grained. Thick brine layers composed of Na, Ca and possibly B
1792569	440338	4198070	1247	Grab of thin, platy claystone with lenses of glass and lithic rich rather unaltered tuff
1792570	440285	4198119	831	Grab of grey-tan, greenish claystone
1792571	440096	4197945	952	Grab of light grey, silty claystone
1792572	440526	4198319	772	Grab from 3+' deep hole of grey-green thin bedded claystone with yellowish clay, minor FeOx observed
1792573	440600	4198401	1150	4' deep auger hole of green-grey block to thin bedded claystone
1792574	440718	4198424	954	Grab from 3' deep hole, grey green claystone
1792575	440972	4198666	569	Grab from 3' deep hole, grey green claystone
1792576	440924	4198773	1180	2' deep auger of grey claystone
1792577	440743	4198741	221	2' deep auger hole-claystone
1792578	434953	4205710	181	Grab of clay silt sand.
1792579	434350	4205293	153	Grab of green clayey silt
1792580	433734	4201840	823	Grab from 2' deep hole, green claystone
1792581	433857	4201925	283	Grab of yellow tan/grey claystone with silt breaks angular
1792582	433737	4240505	586	Grab of claystone, water lain tuff altered in water
1792583	433696	4240557	176	Grab of grey- green claystone
1792584	460015	4222389	51	Grab from 3'+ deep hole into silty layer
1792585	432292	4235966	353	Grab from cutbank of perched wash. Blocky, tan-grey claystone bed ~2' thick-saline

Authorised for and on behalf of the Board,

Mauro Piccini

**Company Secretary** 

# Why Lithium, Why Nevada?

Lithium is considered a critical mineral around the globe because of a number of factors playing into importance, including:

- Macroeconomic Factors Favorable short, medium, and long-term market fundamentals.
- Environmental Factors Lithium is an indispensable component of electric vehicle batteries and other energy storage solutions required to achieve an electrified and clean energy future.
- Policy Factors A global policy initiative transitioning to a clean energy future. The United States, in particular Nevada, is a Tier-1 mining jurisdiction due to the following reasons:
- Mining Friendly Nevada was ranked the top jurisdiction for mining according to the Fraser Institute 2020 annual survey.
- Geological Setting Nevada hosts the world's largest known lithium deposits including:
  - Defence Production Act The USA has recently invoked the Defense Production Act in an effort to encourage and secure domestic production of battery materials.
  - Offtake Partners Close proximity to gigafactories and manufacturers with substantial lithium supply requirements.
  - Security Nevada enjoys a legal framework characterized by clear laws and reliable enforcement.
  - Policy In the United States there is bipartisan support and funding for promoting clean energy and fostering clean energy investment.
  - o Minimal Outlays Nevada has no minimum annual expenditure requirements.

### **About Red Mountain Mining**

Red Mountain Mining Limited is an ASX-listed (ASX: RMX) mineral exploration and development company. Red Mountain has a portfolio of critical minerals including lithium, rare earth and base metal projects, located in the USA and Australia. The Company's flagship project is based in Nevada USA, which is prospective for lithium claystone mineralisaton. The Company's other projects include the Monjebup Rare Earths Project, the Koonenberry Gold Project and the Mt Maitland base metals project.

#### **Competent Persons Statement**

The information in this announcement that relates to Exploration Results and other technical information complies with the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). It has been compiled and assessed under the supervision of Mark Mitchell, Independent consulting geologist. Mr Mitchell is a Member of the Australasian Institute of Geoscientists and 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 JORC Code. Mr Mitchell consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

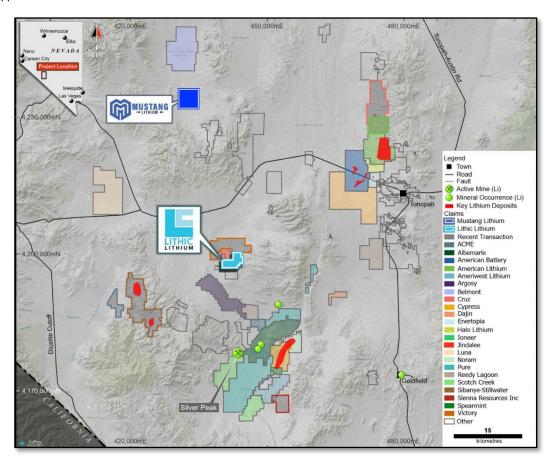


Figure 2. Location map showing RMX's two projects relative to its neighbors in Nevada

## Lithic Lithium Project (Nevada, USA)

Lithic is located on the on the southern flank of the Big Smokey Valley, 20 km North of Century Lithium's (formerly Cypress Development Corp) Clayton Valley Lithium Project, and 18 km North of Albemarle's brine recovery project.

The Lithic project comprises 115 claims (961 ha) of a generally flat alluvial outwash plane with well exposed fines-dominant sediments beneath lithic tuff caps. The outcrops are finely laminated mudstone beds and volcanic tuff and ash layers. This mixed unit of lacustrine sedimentary beds with minor volcanics is similar to host rocks found at American Lithium's TLC deposit and Cypress' Clayton Valley deposit. This claim area is within the Southern end of Big Smokey Valley known to contain a significant basin of volcanic lacustrine sediments capable of hosting lithium. Tuffaceous sediments are pervasive in the area, many containing significant lithium concentrations.

# JORC Code, 2012 Edition - Table 1

# **Section 1 Sampling Techniques and Data**

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	31 grab samples of between 1-6kg were collected from surface. 29 Samples were submitted to American Assay Laboratories (AAL) (Nevada, U.S.A) where they were prepared by Basic Rock/Drill Prep Package (BRPP2KG). Rock chip samples were analysed using method 4 acid Lithium Exploration 28 element ICP-OES (Lab code: IO-4AB28), with 28 elements reported.
Drilling techniques	<ul> <li>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).</li> </ul>	No drilling completed
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	No drilling completed
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or</li> </ul>	No drilling completed

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	<ul> <li>JORC Code explanation     costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material</li> </ul>	<ul> <li>Between 1 and 6kg grab samples were collected from surface.</li> <li>Samples were prepared by Basic Rock/Drill Prep Package (BRPP2KG) at AAL.</li> <li>The sample size is considered suitable for this stage of exploration for the commodity in question.</li> <li>No duplicate samples were collected in the field. Duplicate samples were completed at AAL from reject re-split material.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>being sampled.</li> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul> <li>Rock chip samples were analysed at American Assay         Laboratories using 4 acid Lithium Exploration 28 element ICP-         OES (Lab code: IO-4AB28).</li> <li>Laboratory QAQC was utilized in the form of blanks, standards         and duplicates. This was deemed to have passed laboratory and         internal standards for this phase of exploration.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>No significant intersections</li> <li>No twinned drill holes</li> <li>Data is collected using the Gaia GPS application on Ipad. This is downloaded to laptop and tabulated and stored in Microsoft Excel.</li> <li>No adjustments to assay data</li> </ul>
Location of data points  Data spacing and distribution	<ul> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral</li> </ul>	<ul> <li>Sample locations are recorded using a Garmin handheld GPS (+/- 3m accuracy). No elevations are provided due to the limited accuracy of the handheld GPS that was used.</li> <li>Grid is NAD83 / UTM zone 11N</li> <li>Samples were collected at field locations where claystone was identified by the company geologist.</li> </ul>

Criteria	JORC Code explanation	Commentary				
	Resource and Ore Reserve estimation procedure(s) and classifications applied.  • Whether sample compositing has been applied.	<ul> <li>Data spacing and distribution would not be suitable for a MRE at this point in the exploration process.</li> <li>No sample composition has been applied.</li> </ul>				
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul> <li>Sample orientation targeted claystone in surface deposits. It is not known if there is any structural control on lithium-bearing claystones.</li> <li>No drilling completed.</li> </ul>				
Sample security	The measures taken to ensure sample security.	<ul> <li>Samples were dug out of the ground, bagged into 7x12" cotton sample bags with sample # printed in black marker on the outside of the bag. A sample tag matching the bag number is placed in the bag. Sample details including coordinated are written into the sample tag book. Bagged samples were then placed into a larger plastic woven bag with sample intervals (contents written on the outside.</li> <li>The samples were transported to AAL in Nevada in the geologists 4wd vehicle.</li> </ul>				
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <li>Results have been reviewed by other personnel associated with the company.</li> </ul>				

# **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	<ul> <li>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.</li> <li>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.</li> </ul>	<ul> <li>The Lithic Project consists of 115 granted claims (961 ha).</li> <li>The project is subject to a Net Smelter Royalty ("NSR") in favour of Lithic Lithium LLC of 2%.</li> <li>There are no native title claims covering the tenement.</li> <li>No heritage surveys were required prior to commencing exploration activities.</li> <li>The Project does not intersect any underlying pastoral lease.</li> <li>The Project does not intersect an area identified as wilderness, national park or an area of environmental interest.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Relevant exploration for Lithium at the Lithic and Mustang Projects during 2022 was undertaken by Lithic Lithium LLC have included grab, trench and stream sediment samples.</li> </ul>

Criteria	JORC Code explanation	Commentary
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>The deposit type and main target mineralisation model is of claystone hosted lithium.</li> </ul>
Drill hole Information	<ul> <li>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:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	No drilling completed
Data aggregation methods	<ul> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>No cut-off grades have been used during reporting</li> <li>No metal equivalent values have been reported.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	No drilling completed
Diagrams	<ul> <li>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.</li> </ul>	Maps and images are included within body of text.
Balanced reporting	<ul> <li>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.</li> </ul>	<ul> <li>The results and text provided within this report are considered comprehensive and representative. All significant assay results have been disclosed within the text.</li> </ul>

Criteria	JORC Code explanation	Commentary				
Other substantive exploration data	<ul> <li>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.</li> </ul>	<ul> <li>All relevant exploration results and observations have been reported that are pertinent to this stage of exploration.</li> </ul>				
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Red Mountain shall undertake further geological mapping and surface sampling to inform future RC drilling programs.</li> <li>The Company continues to assess additional opportunities to add to its current asset portfolio.</li> </ul>				

# Appendix 1.

SAMPLES	Wt BRPP2KG 0.01 kg	Aq IO-4AB12 0.3 ppm	As IO-4AB12 2 ppm	Ca IO-4AB12 300 ppm	Cu IO-4AB12 1	Fe IO-4AB12 300 ppm	Hq IO-4AB12 0.5 ppm	Li IO-4AB12 2 ppm	Pb IO-4AB12 3	Sb IO-4AB12 2 ppm	Zn IO-4AB12 3 ppm
1792555 1792556 1792559 1792560 1792561	1.55 1.72 1.99 1.64 1.37	-0.3 -0.3 -0.3 -0.3 -0.3	60 21 36 42 145	71575 66439 21614 51030 55928	16 15 35 19	23803 19771 32443 25531 23967	0.7 -0.5 0.9 0.6 0.5	1002 1518 1020 817 674	34 21 26 18 18	-2 -2 -2 -2 -2	64 102
1792562 1792562-X STD - OREAS 905 1792563 1792564	1.86 1.60 1.88	-0.3 -0.3 0.5 -0.3 -0.3	12 15 33 28 12	85310 84904 5972 29188 77500	20 19 1503 24 14	21066 21244 40569 28652 22875	-0.5 -0.5 -0.5 -0.5	1541 1545 22 1163 1250	16 16 31 17 15	-2 2 -2 -2 -2	130
1792565 1792566 1792567 1792568 1792569	1.55 1.33 1.72 1.30 1.32	-0.3 -0.3 -0.3 -0.3	25 30 12 8 17	61900 25691 42469 68116 66371	27 23 25 14 15	24573 29316 25015 24138 23871	0.5 0.5 0.8 0.6 -0.5	1035 829 842 521 1247	17 14 20 16 15	-2 -2 -2 -2 -2	83
1792570 BLANK 1792571 1792571-X 1792572	2.01 1.34 1.97	-0.3 -0.3 -0.3 -0.3	120 -2 54 60 86	23042 351 58860 59878 40735	16 -1 12 16 29	25997 -300 25731 26646 31315	0.5 -0.5 0.7 0.8 0.6	831 -2 952 968 772	18 6 16 16	-2 -2 -2 -2 -2	67 -3 62 63 87
1792573 1792574 1792575 1792576 1792576-X	2.33 1.63 1.37 1.09	-0.3 -0.3 -0.3 -0.3	52 35 30 9 14	70705 69723 45820 61116 59953	23 14 18 27 20	24768 21647 28455 23549 22846	-0.5 -0.5 -0.5 -0.5	1150 954 569 1180 1137	18 15 17 16	-2 -2 -2 -2 -2	69
1792577 1792578 1792579 1792580 STD - AMIS0342	1.57 1.14 1.12 1.35	-0.3 -0.3 -0.3 -0.3	5 18 24 126 12	134987 45420 46513 49336 3219	8 13 12 28 54	13117 27832 27318 25518 8823	-0.5 0.8 0.6 0.6	221 181 153 823 1632	9 19 18 20 10	-2 -2 -2 -2 5	59 73 71 79 47
1792581 1792581-x 1792582 1792583 1792584	0.80 1.45 1.49 1.02	-0.3 -0.3 -0.3 -0.3	22 21 168 74 35	3091 1743 67912 57092 13577	-1 -1 15 13	15095 14868 22120 30902 22234	-0.5 -0.5 -0.5 -0.5	283 278 586 176 51	17 17 13 17 21	-2 -2 -2 -2 -2	25 48
1792585	1.79	-0.3	38	107218	21	27560	0.7	353	12	-2	54