22 April 2025

BENEFICIATION TESTWORK SUCCESSFULLY UPGRADES MINERALISATION AT RED MOUNTAIN LITHIUM PROJECT

Second phase diamond drilling underway with two holes completed

Key Highlights

- **Proof-of -concept beneficiation testwork completed on diamond drill core samples from Red Mountain Project area.**
- **Beneficiation testwork involved the concentration of low-grade mineralised material using a Falcon 'C' Concentrator.**
- **Successful outcomes achieved with 36% of the dense material removed from the sample together with a concurrent 22% increase in sample lithium grade.**
- **Further Falcon 'C' testwork to be undertaken on average and high lithium grade samples, as well as benefication using Attrition Scrubbing methods.**
- **Phase 2 drilling in progress at Red Mountain with the first two diamond drill-holes completed.**

Astute Metals NL (ASX: ASE) ("ASE", "Astute" or "the Company") is pleased to report further positive results from early-stage metallurgical testwork for its 100%-owned Red Mountain Lithium Project in Nevada, USA, supporting its commercial development potential.

Beneficiation testwork was primarily designed to liberate lithium-bearing clay from unmineralized gangue (waste) and concentrate the clay with a view to achieving the dual outcomes of decreasing mass and increasing lithium grade. In a mineral processing context, a reduction in tonnes and processing with an increased head-grade typically results in lower processing costs per product tonne.

The testwork program – conducted by Sepro Laboratories (Sepro) and utilising drill core samples from the Company's maiden diamond drilling campaign – provided clear proof-of-concept, achieving a reduction of sample mass by 36.3% with a concurrent increase in lithium grade of 22% (from 703 to 858ppm Li), with an overall 77.8% lithium recovery.

These initial results are an important step in demonstrating proof-of-concept that heavy gangue (waste) material may be separated from lighter material, including lithium-bearing clays, at Red Mountain. With the limited drill-core available at the time, only a single test was completed on low-grade material, and further testwork will be undertaken on average and high-grade samples. Sepro is of the opinion that separation performance is likely to be enhanced on more clay-rich material. The Company will also investigate other beneficiation processes, including Attrition Scrubbing test-work.

The Company's second diamond drilling campaign at Red Mountain is also making excellent progress, with two holes completed to date out of the 6-hole 1,400m program. Astute Chairman Tony Leibowitz visited site last week with CEO and Executive Director Matt Healy to see the drilling progress first-hand.

Astute Chairman, Tony Leibowitz, said: "*It was great to have the opportunity to visit Red Mountain last week to see the drilling rig in action and gain an appreciation of the scale and significance of this major lithium discovery. We are continuing to systematically unlock the potential of the Red Mountain Project, with very encouraging results received from the latest phase of metallurgical testwork.*

"The ability to upgrade low-grade mineralised material using simple beneficiation techniques is a very positive development for the Project which strongly supports its future commercial development potential. In the meantime, our second phase of drilling is making great progress as we continue to work to establish Red Mountain as a project of significance in the rapidly changing North American critical minerals landscape."

Figure 1. Chairman Tony Leibowitz and Chief Executive Officer Matt Healy inspecting drill core from RMDD003.

Background

Located in central-eastern Nevada (Figure 4), the Red Mountain Lithium Project was staked by Astute in August 2023.

The Project area has broad mapped tertiary lacustrine (lake) sedimentary rocks known locally as the Horse Camp Formation[1]. Elsewhere in the state of Nevada, equivalent rocks host large lithium deposits (see Figure 4) such as Lithium Americas' (NYSE: LAC) 62.1Mt LCE Thacker Pass Project[2] and American Lithium (TSX.V: LI) 9.79Mt LCE TLC Lithium Project[3].

Astute has completed substantial surface sampling campaigns at Red Mountain, which indicate widespread lithium anomalism in soils and confirmed lithium mineralisation in bedrock with some exceptional grades of up to 4,150ppm Li[1,5] (Figure 3).

A total of 13 RC and diamond drill holes have been drilled at the project to date for a combined 1,944m. These campaigns were highly successful with strong lithium mineralisation intersected in every hole drilled[4].

Scoping leachability testwork on mineralised material from Red Mountain indicates high leachability of lithium of up to 98%, varying with temperature, acid strength and leaching duration[6].

Geological mapping undertaken in late 2024 delineated the extents of various rock types across the project, identified the most clay-rich rock units, and included the taking of numerous structural measurements in order to increase confidence in geological understanding of the project.

About Beneficiation

The primary purpose of beneficiation is to optimise the value of mineralised material through separating unwanted waste material (gangue) from valuable minerals.

Testwork conducted to date at Red Mountain indicates that lithium is hosted by clay minerals. Mineralised rocks at Red Mountain typically have some coarser grained material, such as particles of sand, that do not contain appreciable lithium.

Successful beneficiation would remove as much of this unwanted waste as possible, while retaining as much of the valuable clay fraction that contains lithium. This would have the effect of increasing contained lithium, while reducing the tonnes of material that contains lithium.

Successful beneficiation can result in reduced reagent consumption, reduced plant wear and tear, and reduced environmental footprint.

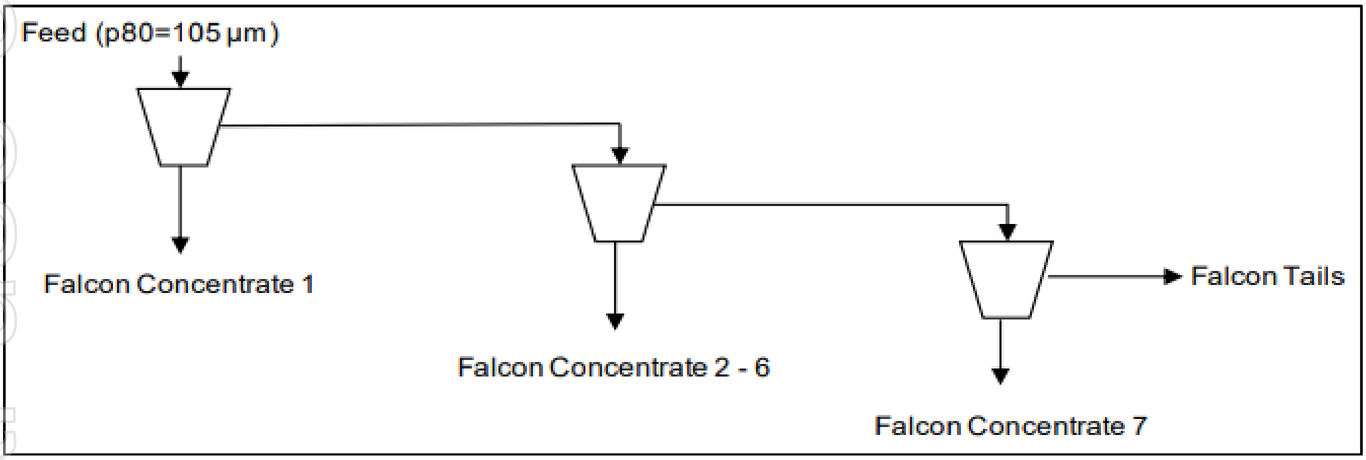

Figure 2. Falcon C Rougher test-work flowsheet.

Test-work Overview

In February the Company despatched a composite sample of drill core to Sepro for scoping-level beneficiation test-work using a Falcon Continuous (Falcon C) Concentrator (Figure 2).

Sepro, which is based in Langley, British Columbia, Canada, has conducted Falcon C testwork for other lithium clay projects in Nevada, such as Surge Battery Metals (TSX: NILI) Nevada North Project[7].

The testwork program included:

- Crushing to 6-mesh and homogenisation of samples;
- Splitting into test charges and sample for head assay;
- Grinding of test charge to p80 of approximately 105μm;
- Conducting a seven-stage Falcon C Rougher test and associated 4-acid/ICP assay of samples;
- Analysis of process water; and
- Duplicate assay of Falcon tail samples (i.e. clay concentrate).

Falcon test conditions comprised a pulp density of 15%, a G-Force of 300g and 78.3Hz speed.

The Falcon C Concentrator is primarily used to maximise mineral recoveries while reducing tonnages to downstream processing, such as acid leaching. The purpose of the testwork was to establish whether lithium-bearing clays from mineralised Red Mountain rocks can be concentrated using conventional gravitational methods.

Metallurgical Sample Selection

A composite 24.8kg sample was selected to allow for the planned testwork as well as follow-up tests as required. The sample comprised a single consecutive 7.6m (25ft) of half-HQ drill core from diamond drill-hole RMDD002, collared in the north of the Red Mountain Project (see Figure 3, Table 4). Due to limited drill core availability from only two diamond drill holes that have been drilled to date at the Project, the Company elected to perform only a single test on a low lithium grade sample.

A summary of the metallurgical samples is tabulated below in Table 1.

Sample ID	Sample Type	Hole ID	Interval (ft)	Summary Lithology
703361	½ HQ Core	RMDD002	285 - 290	Clayey pebble conglomerate and minor sandstone
703362	½ HQ Core	RMDD002	290 - 295	
703363	½ HQ Core	RMDD002	295 - 300	Fine-grained clayey sandstone and minor pebble conglomerate
703364	½ HQ Core	RMDD002	300 – 305	
703365	½ HQ Core	RMDD002	305 - 310	

Table 1. Metallurgical sample details

Results

Results of the Falcon C test are shown in Tables 2 and 3 below. The first stage of the test achieved the highest mass rejection, with diminishing mass rejection for the following six stages, with a total of 36.3% mass rejection.

Lithium grade increased from a calculated head grade of 703ppm to a final Falcon tails concentrate grade of 858ppm Li, representing a 22% increase. Lithium recovery was 77.8%. Notably, calcium grades decreased 15.9% from 13.2wt% in the calculated head to 11.2wt% Ca in the tails concentrate.

Interpretation and Next Steps

The results of the single test demonstrate that feed grade of Red Mountain mineralised material can be upgraded using the Falcon C process, providing proof-of-concept for beneficiation potential at Red Mountain.

Sepro recommended providing higher clay content samples for follow-up testwork, as these are likely to have an improved response to the Falcon C method. The reduction of calcium from the head to the tails concentrate is highly encouraging, as calcium (as the mineral calcite) is the most significant consumer of acid reagents in the processing of lithium clays. Calcite was the most predominant calcium mineral identified in mineralogy conducted previously at the Project[6].

The Company intends to perform additional Falcon C tests on samples containing greater clay concentrations and associated lithium grades. Attrition Scrubbing test-work will be undertaken in due course to provide a comparative beneficiation method.

Products	Heavy Weight		Li Grade (ppm)		Li Distribution (%)	
	(%)	Cum. (%)	Heavy	Light	Heavy	Light
Falcon Stage 1	6.37	6.37	443	720	4.01	96.0
Falcon Stage 2	5.48	11.84	425	739	3.31	92.7
Falcon Stage 3	5.52	17.36	444	758	3.49	89.2
Falcon Stage 4	5.39	22.75	427	782	3.27	85.9
Falcon Stage 5	5.20	27.95	396	809	2.93	83.0
Falcon Stage 6	4.27	32.22	418	834	2.54	80.4
Falcon Stage 7	4.07	36.29	460	858	2.66	77.8
Total Falcon	**36.29**	**36.29**	**430**	**858**	**22.2**	**77.8**
Falcon Tails	*63.71*		*858*		*77.8*	
Calculated Head	**100.00**		**703**		**100.0**	
Assayed Head			806			

Table 2. Falcon Rougher Test Results

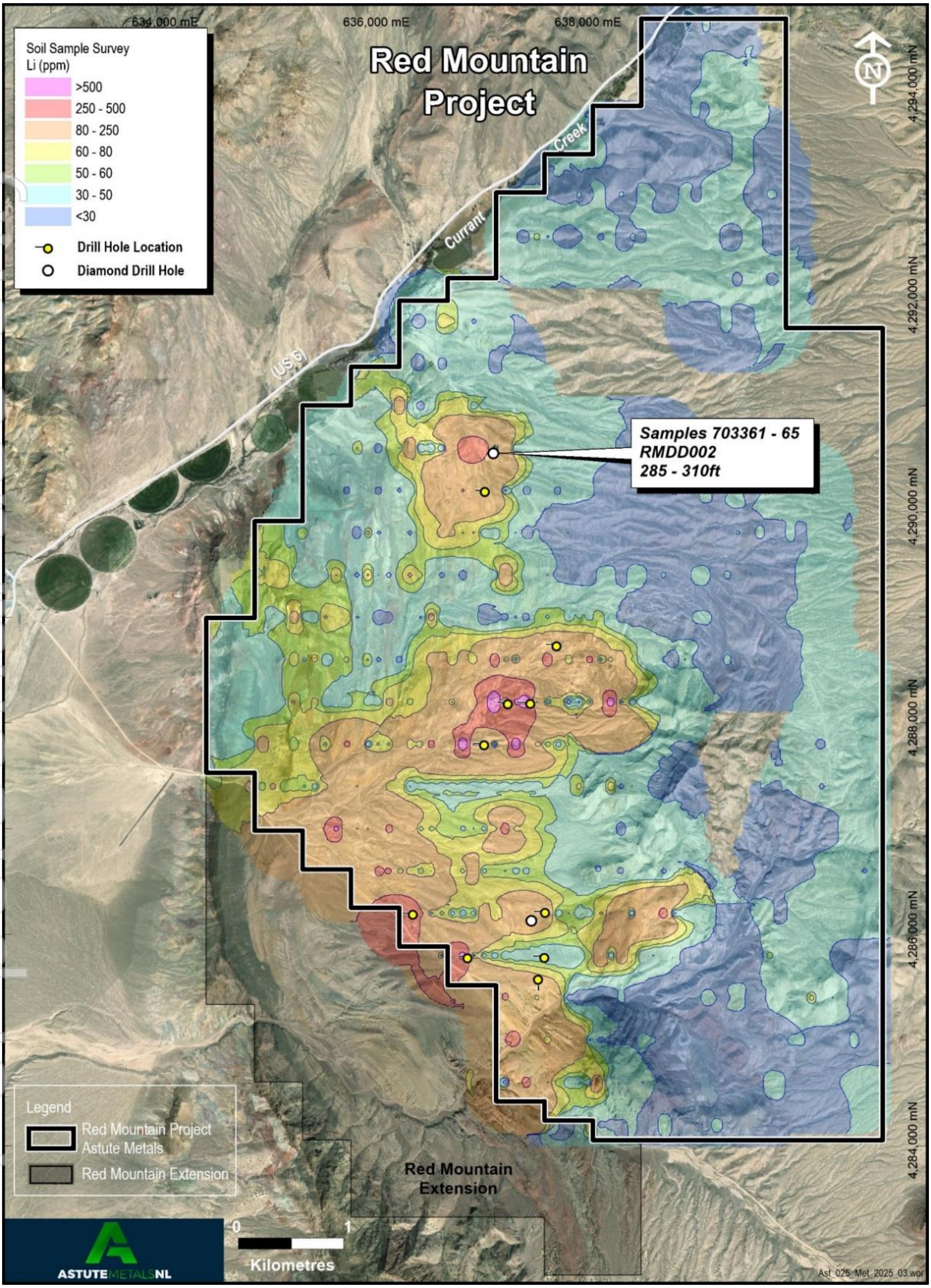

Figure 3. Metallurgical sample location plan over gridded lithium in soil geochemistry.

Products	Weight (%)	Assay (%)								
		Al	As	Ca	Co	Cr	Cu	Fe	K	Li
Falcon Concentrate 1	6.37	3.54	0.02	15.9	0.002	0.02	0.007	1.52	3.60	0.043
Falcon Concentrate 2	5.48	3.76	0.01	15.8	0.002	0.01	<0.005	1.36	3.70	0.043
Falcon Concentrate 3	5.52	3.80	0.01	15.4	0.002	0.01	<0.005	1.27	3.90	0.044
Falcon Concentrate 4	5.39	3.72	0.01	16.3	0.002	<0.01	<0.005	1.16	3.70	0.046
Falcon Concentrate 5	5.20	3.81	0.01	15.9	0.002	<0.01	<0.005	1.13	3.80	0.042
Falcon Concentrate 6	4.27	3.97	0.01	15.0	0.002	<0.01	<0.005	1.05	4.10	0.038
Falcon Concentrate 7	4.07	3.99	<0.01	15.1	0.002	<0.01	<0.005	1.05	4.10	0.048
Total Falcon Concentrate	**36.29**	**3.78**	**0.01**	**15.7**	**0.002**	**0.01**	**0.005**	**1.24**	**3.82**	**0.043**
Falcon Tails	63.71	4.03	0.0	11.8	<0.002	<0.01	<0.005	1.05	4.65	0.085
Calculated Head	**100.00**	**3.94**	**0.017**	**13.2**	**0.002**	**0.011**	**0.005**	**1.12**	**4.35**	**0.070**
Assayed Head		3.90	0.020	12.3	<0.002	<0.01	<0.005	1.13	4.15	0.081

Table 3. Falcon Rougher Test Assay Results

Drill Hole ID	Easting (NAD83)	Northing (NAD83)	RL (m)	Dip (°)	Azimuth (°)	Depth Drilled (m)
RMDD002	637186	4290574	1709	-50	270	182.88

Table 4. RMDD002 drill-hole collar details

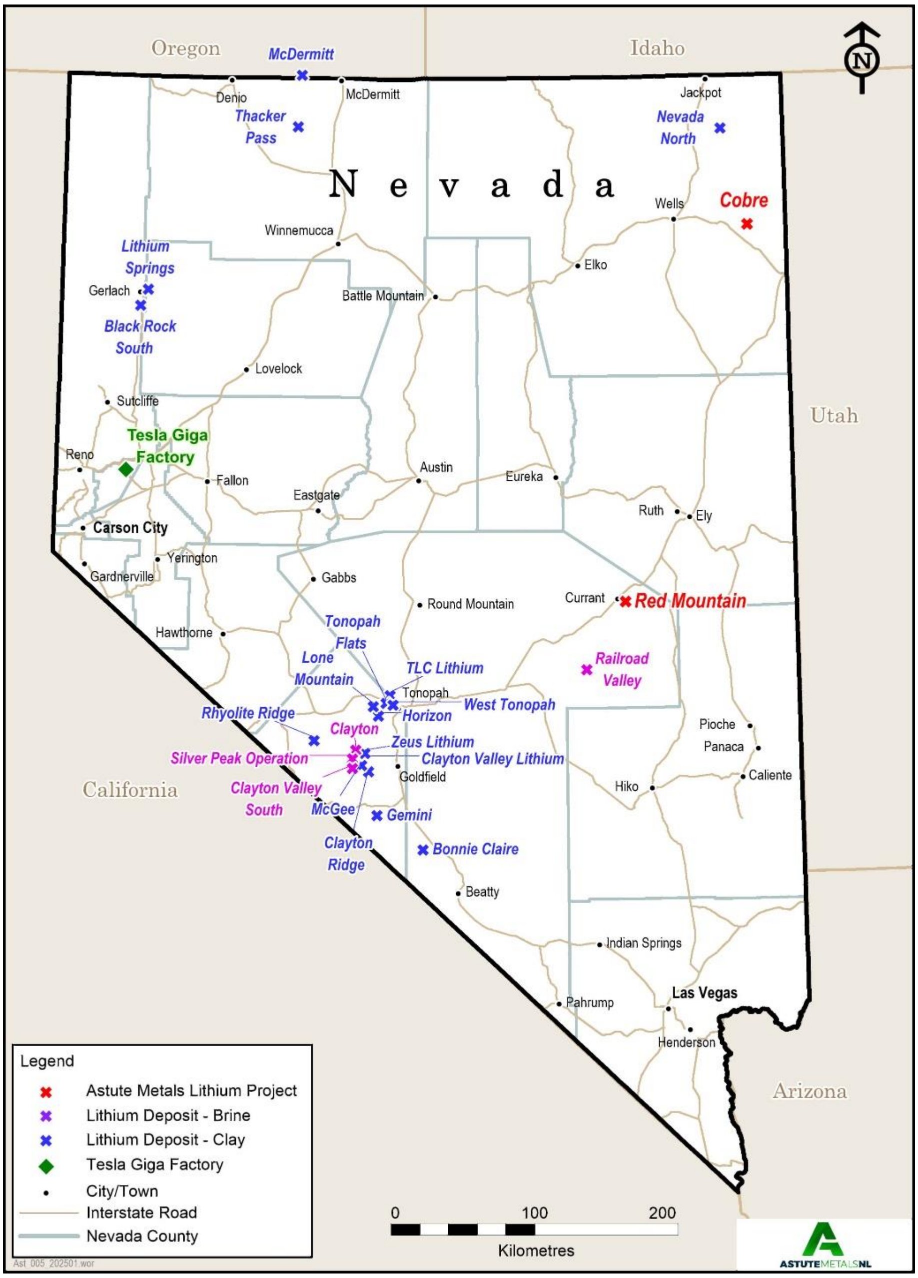

Figure 4. Location of Astute Lithium Projects and Nevada lithium deposits.

1 ASX: ASE 8 July 2024 'High-Grade Rock Chip Assays at Red Mountain Project'
2 NYSE: LAC 31 December 2024 Updated NI 43-101 Technical Report for the Thacker Pass Project
3 TSX.V: LI 17 March 2023 'Tonopah Lithium Claims project NI 43-101 technical report – Preliminary Economic Assessment'
4 ASX: ASE 20 January 2025 'Extension of Lithium Discovery at Red Mountain Project'
5 ASX: ASE 20 November 2023 'Large Lithium Soil Anomalies Discovered at Red Mountain'
6 ASX: ASE 9 December 2024 'Positive initial metallurgical results from Red Mountain'
7 TSX: NILI October 29 2024 Surge Battery Metals Acheives Successful Lithium Clay Beneficiation

Authorisation

This announcement has been authorised for release by the Board of Astute.

Astute Metals NL Interactive Investor Hub

Engage with Astute Metals through accessing reports, presentations, interviews and other Company content.

Ask questions and browse responses to other investors' questions

Click on https://astutemetals.com/auth/signup and follow the prompts to sign up

More Information

Matt Healy
Executive Director & CEO
mhealy@astutemetals.com
+61 (0) 431 683 952

Nicholas Read
Media & Investor Relations
nicholas@readcorporate.com.au
+61 (0) 419 929 046

Competent Persons

The information in this report that relates to Sampling Techniques and Data (Section 1) is based on information compiled by Mr. Matthew Healy, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy (AusIMM Member number 303597). Mr. Healy is a full-time employee of Astute Metals NL and is eligible to participate in a Loan Funded Share incentive plan of the Company. Mr. Healy 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'. Mr. Healy consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to Reporting of Exploration Results (Section 2) is based on information compiled by Mr. Richard Newport, principal partner of Richard Newport & Associates – Consultant Geoscientists. Mr. Newport is a member of the Australian Institute of Geoscientists and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person under the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr. Newport consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

APPENDIX 1 - JORC Code, 2012 Edition – Table 1

Section 1 - Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialisedindustry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheldXRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensuresample 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 (e.g. '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, suchas where there is coarse gold that has inherentsampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	Triple-tube HQ diamond drilling was undertaken for drill sample collection. Samples were collected on a nominal 5-foot basis or sampled to geological boundaries based on lithological logging. Samples were photographed, half-cored, and despatched to an external lab by an external contractor. The remaining half-core was selected for use in metallurgical test-work. Claystone hosted lithium deposits are thought to form as a result of the weathering of lithium-bearing volcanic glass within tertiary-aged tuffaceous lacustrine sediments of the mapped Ts3 unit. Inputs of lithium from geothermal sources have also been proposed.
Drilling techniques	Drill type (e.g. core, reverse circulation, open-holehammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core isoriented and if so, by what method, etc.).	Triple tube HQ drilling methods employed. Core was oriented where possible, although the soft nature of the lithology precluded this for the most part.
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/gainof fine/coarse material.	Sample recovery established by recovery logging and dry sample weights undertaken by independent laboratory prior to sample preparation and analysis Poor drill core recovery at surface. Instances of poor recovery are not expected to materially impact interpretation of results Sepro undertook weighing on sample receipt.
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 innature. Core (or costean, channel, etc.) photography. The total length and percentage of the relevantintersections logged.	Drill core for the entire hole was logged for lithology by company geologists Logging is qualitative

Suite 6, Level 5, 189 Kent St, Sydney NSW 2000 | GPO Box 2733, Sydney NSW 2001
+61 (0) 2 8046 2799 | admin@astutemetals.com
www.astutemetals.com

APPENDIX 1 - JORC Code, 2012 Edition – Table 1

Criteria	JORC Code explanation	Commentary
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 representivityof 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.	Sample, once received by Sepro, was crushed to 6 mesh break up lumps within the sample, homogenised and split into representative test charges. A sub-sample was grinded to a p80 of 105µ for Falcon C Rougher tests.
Quality of assay data and laboratory tests	Whether sample sizes are appropriate to the grain size of the material being sampled. 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 precisionhave been established.	Head analyses were performed using a 4-acid digest and ICP-OES for individual elements. Peroxide fusion analysis was also conducted for 'whole rock' geochemistry. Falcon concentrate samples were assayed using a 4-acid digest and ICP-OES finish Falcon test process water was also collected for solution assay for lithium to ensure lithium was not being lost to process water. Results indicated insignificant concentrations of lithium in process water.
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.	Sub-samples, when processed by Sepro, were assigned a unique Sepro sample identification number for each sample/charge.
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.	Drill collar locations determined using hand-held GPS with location reported in NAD83 UTM Zone 11. Expected hole location accuracy of +/- 10m Downhole survey measurements were taken at nominal 100ft intervals using a north-seeking Gyro

Criteria	JORC Code explanation	Commentary
Data spacing anddistribution	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 MineralResource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied.	Drill spacing is appropriate for early exploration purposes
Orientationof 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 thedeposit 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.	Claystone beds are regionally shallow-dipping at ~20° to the east although locally this may vary across the Project with some evidence of faulting and potential folding
Samplesecurity	The measures taken to ensure sample security.	Samples stored at secured yard and shed located in township of Currant until freighted by UPS to the Sepro lab at BC, Canda
Audits orreviews	The results of any audits or reviews of samplingtechniques and data.	Not applicable

APPENDIX 1 - JORC Code, 2012 Edition – Table 1

ASTUTEMETALSNL

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 nationalpark 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.	Red Mountain Claims held in 100% Astute subsidiary Needles Holdings Inc. Claims located on Federal (BLM) Land Drilling conducted on claims certified by the Bureau of Land Management (BLM)
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	No known previous lithium exploration conducted at Red Mountain Exploration conducted elsewhere in Nevada by other explorers referenced in announcement body text
Geology	Deposit type, geological setting and style of mineralisation.	The principal target deposit style is claystone hosted lithium mineralisation. Claystone hosted lithium deposits are thought to form as a result of the weathering of lithium-bearing volcanic glass within tertiary-aged tuffaceous lacustrine sediments of the mapped Ts3 unit. Lacustrine environments formed as a result of extensional tectonic regime that produced 'basin and range' topography observed across the stateof Nevada. Inputs of lithium from geothermal sources have also been proposed.
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.	Drillhole locations, orientations and drilled depths are tabulated in body report
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.	Intersections, where quoted are weighted by length. Lengths originally recorded in feet are quoted to the nearest 10cm. Rounding is conducted to 3 significant figures A 500ppm Li cut-off was used to quote headline intersections, with allowance for 5ft of internal dilution by lower grade material. Low grade mineralisation (300-500ppm Li) is present outside of the quoted intersections Intersections are quoted in both lithium ppm and as wt% Lithium Carbonate Equivalent (LCE). LCE is calculated as LCE = Li (ppm) x 5.323 / 10,000, as per industry conventions.

Criteria	JORC Code explanation	Commentary
Relationship between mineralisatio n 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 (e.g. 'down hole length, true width not known').	Insufficient information available due to early exploration status
Diagrams	Appropriate maps and sections (with scales) andtabulations 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.	Included in ASX announcement
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	This release describes all relevant information
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysicalsurvey 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.	This release describes all relevant information
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). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drillingareas, provided this information is not commercially sensitive.	Falcon C beneficiation test-work results demonstrate further work at the Red Mountain project is warranted. Sepro consider that higher clay content samples are likely to have improved test-work outcomes.