

25 November 2025

## ALKALI FLATS INITIAL METALLURGY RESULTS

### Highlights

- Positive lithium extraction results at low temperatures and short leach times:
  - Up to 91% lithium recovery after a 4-hour sulfuric acid leach at 60°C.
  - Up to 72% lithium recovery at ambient temperature.
- Similar claystone mineralogy to local advanced claystone projects suggesting strong potential for beneficiation upgrading.
- Permitting work is underway for Phase 3 drill program including core holes for detailed metallurgical studies, infill drilling and to test extensions of the known mineralisation.

The Directors of Fulcrum Lithium Ltd (ASX: FUL, **Fulcrum** or **the Company**) are pleased to announce the results of the first metallurgical program at the Company's Alkali Flats project in Esmeralda County, Nevada, USA (Figure 1).

Eight composite samples were constructed from cuttings samples taken every 1.5m over broad, 30m zones of varying lithium grades from 5 reverse circulation (**RC**) drill holes completed during the Alkali Flats Phase 2 drill program. The composite samples, which returned average lithium grades up to 674ppm, were analysed by Kappas, Cassiday and Associates (**KCA**) in Reno, Nevada. for the project's initial, scoping metallurgical program.

The scoping program was designed to gain a preliminary understanding of leachability, to compare the performance of different clay zones within the project and to analogue claystone projects, as well as to guide and accelerate a more detailed metallurgical program from the upcoming Phase 3 drilling program.

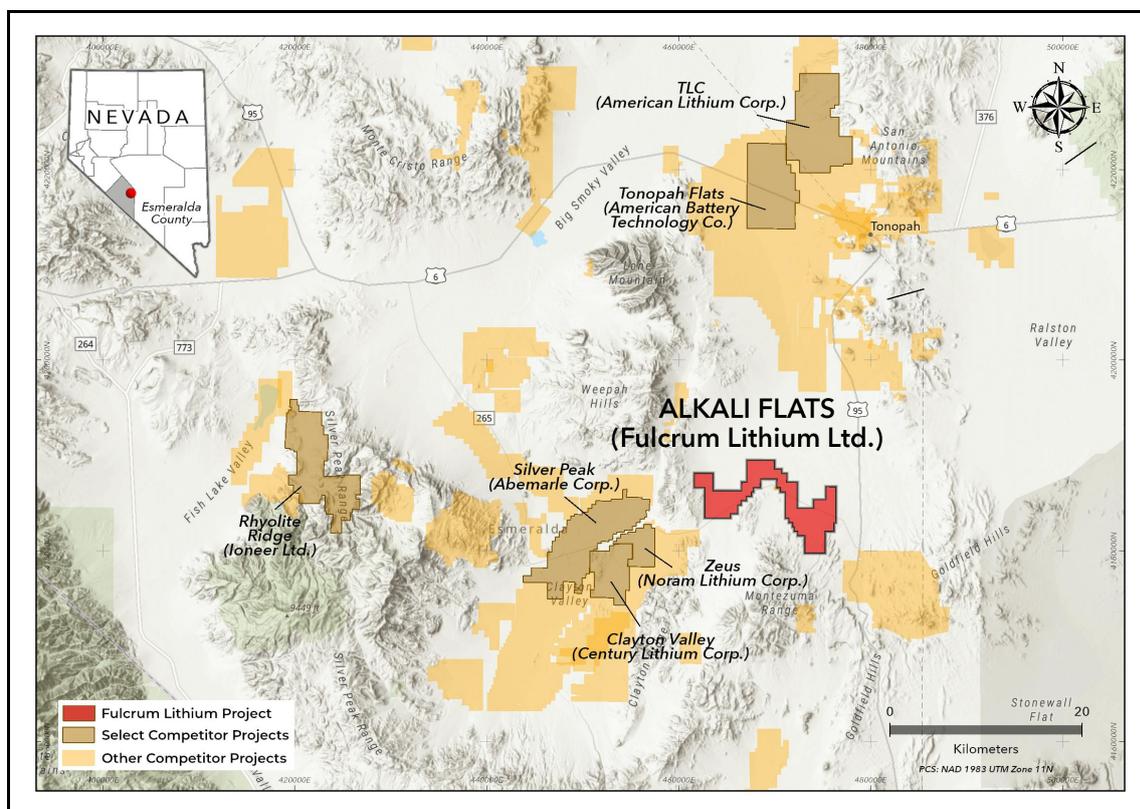
Mineralogy and grade analysis on the composite sample, particle size screening and acid leach tests with varying acid strengths and temperatures were completed to understand initial general performance and parameters to guide future metallurgical work. Results from this initial program have demonstrated positive leachability results and give an early insight into the compositional nature of the clays for future targeted test work.

Scott Keenan, COO, commented:

*"This initial scoping metallurgical program at the Alkali Flats project is a very encouraging start to understanding the properties and lithium extraction performance of the Company's significant lithium claystone discovery. To see such positive lithium extraction results at ambient temperatures and short leach times is a great start and this early information will be very useful for focusing our more detailed metallurgical work and testing with innovative extraction techniques."*

## Alkali Flats Project

The Alkali Flats project comprises 512 lode claims, an area of 43 km<sup>2</sup>, located in Esmeralda County, Nevada, USA approximately 15km south of the Tonopah Flats and TLC lithium projects and 10km east of Albermarle’s Silver Peak Lithium mine, the only operating lithium mine in the USA.



**Figure 1. FULCRUM’S ALKALI FLATS PROJECT LOCATION**

## Metallurgical Program Results

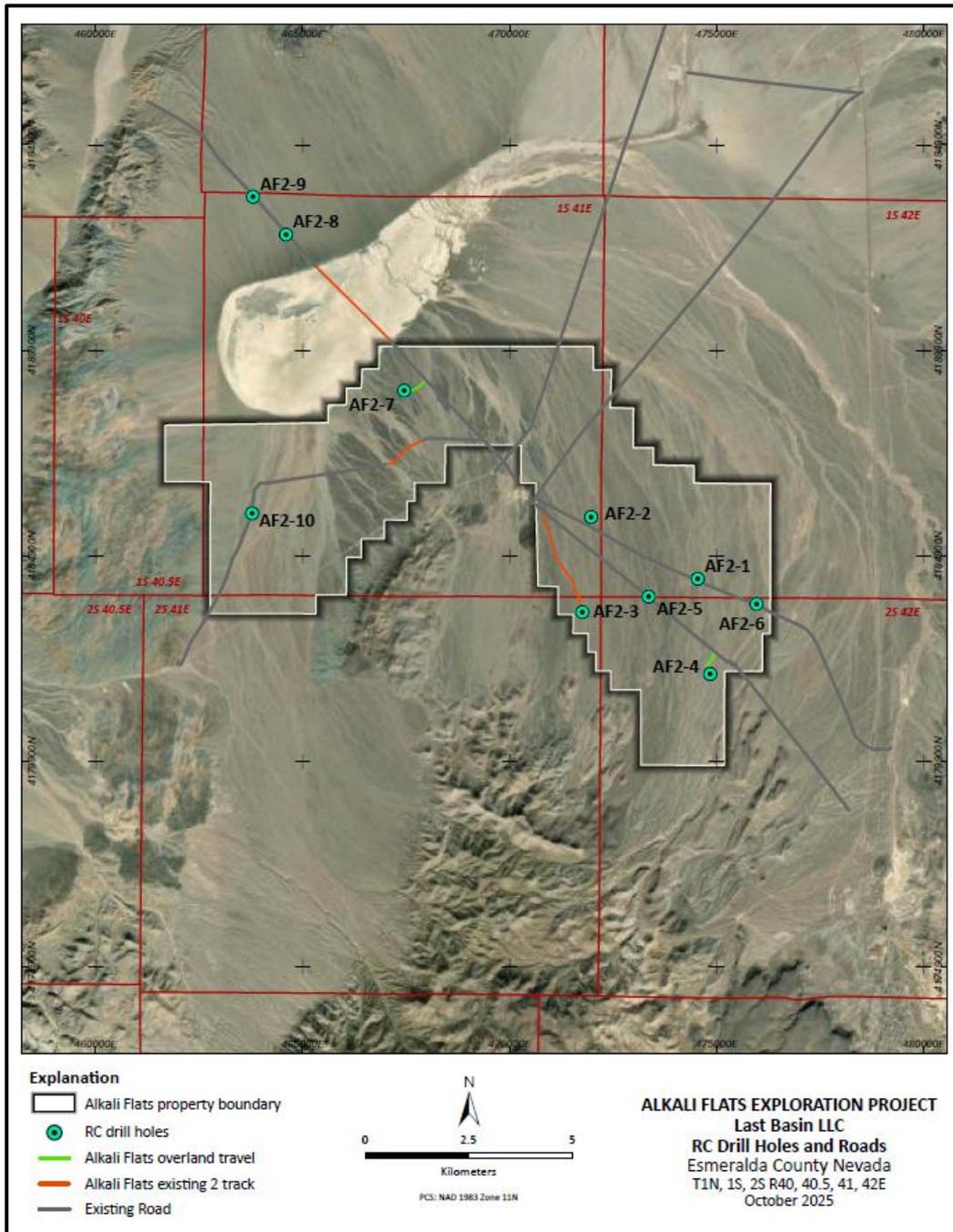
The Alkali Flats Phase 2 RC drilling program resulted in the discovery of significant lithium mineralised claystones (>300ppm) intercepted in all holes that penetrated the Siebert Formation, over at least a 9 km<sup>2</sup> area, displaying significant grade, thickness and lateral extent. Zones of up to 30 metres were selected across 5 drill holes representing higher grade, lower grade zones and 2 control zones. Samples across each zone were composited to represent the average properties over the broader 30m zone.

Samples were run through the analytical process by KCA in a workflow that included a head analysis of mineralogy and lithium grade, particle size screening, sulfuric acid leaching tests with varying acid strengths and temperature.

**Table 1. HEAD GRADE ANALYSIS LITHIUM GRADE**

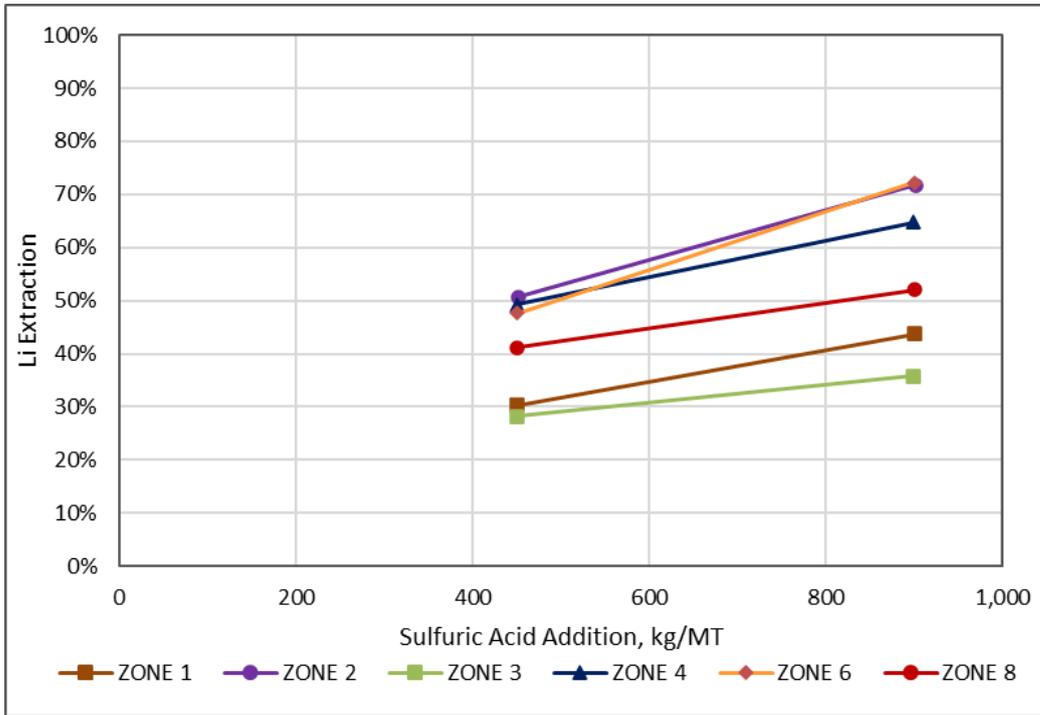
	ZONE 1	ZONE 2	ZONE 3	ZONE 4	ZONE 5 (CONTROL)	ZONE 6	ZONE 7 (CONTROL)	ZONE 8
<b>Hole</b>	AF2-2	AF2-2	AF2-3	AF2-4	AF2-4	AF2-5	AF2-5	AF2-10
<b>Depth From (m)</b>	100	183	134	16	82	53	133	52
<b>Depth To (m)</b>	130	213	147	34	112	83	136	82
<b>Lithium (mg/kg)</b>	414	652	472	636	156	674	142	592

<sup>1</sup> Refer ASX announcement 24 September 2025 ‘Alkali Flats Project Update – Lithium Discovery’

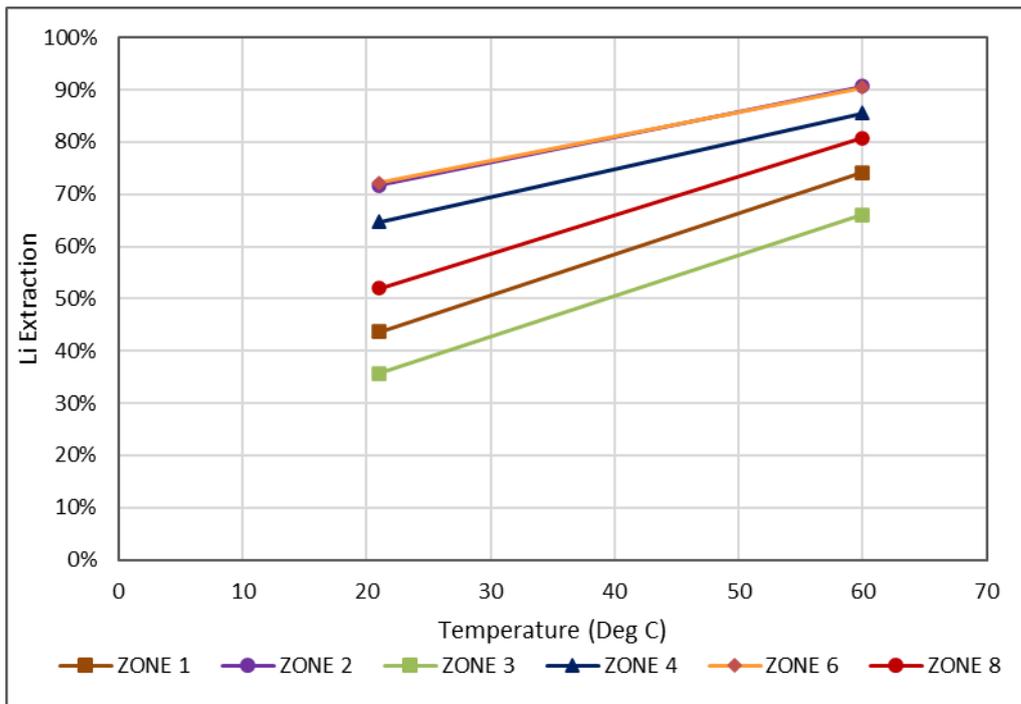


**Figure 2. ALKALI FLATS PHASE 2 COMPLETED DRILLING PROGRAM**

Results from the head screening analysis demonstrate that in the higher-grade zones, 97%-100% of the lithium was contained in the <0.045mm particle size fraction and up to 42% of carbonate (calcite) was removed in the >0.045mm particle size fraction.



**Figure 3. 4 HOUR SULFURIC ACID LEACH RESULTS WITH VARYING ACID STRENGTHS**



**Figure 4. 4 HOUR SULFURIC ACID LEACH RESULTS WITH VARYING TEMPERATURES**

Mineralogical analysis using Quantitative X-Ray Diffraction (**QXRD**) was completed to understand the mineral composition of the lithium claystones as well as the clay-types present. Results from this analysis describe the claystones as a mixture of illite and smectite clays containing calcite, K-feldspar and plagioclase fractions. This claystone composition is similar to other lithium clay deposits of the Siebert Formation in the local Esmeralda County area, including American Battery Technology’s Tonopah Flats Project, where successful beneficiation techniques have been shown to significantly upgrade initial lithium grades by approximately 2.85x to over 2,000 parts per million (ppm) lithium<sup>2</sup>.

<sup>2</sup>.[https://americanbatterytechnology.com/wp-content/uploads/ABTC\\_Pre-FeasibilityStudy\\_2025.pdf](https://americanbatterytechnology.com/wp-content/uploads/ABTC_Pre-FeasibilityStudy_2025.pdf)

## **Alkali Flats Project Forward Plan**

Fulcrum is currently planning the Phase 3 drilling program which will include core holes and is designed to infill and extend the relatively sparse Phase 2 drilling campaign data and provide drill core for a detailed metallurgical program. Data acquired from the forward plan will be required for Fulcrum to deliver a maiden JORC compliant resource estimate.

Data from this initial scoping level metallurgical testing program for the Alkali Flats Phase 2 RC drilling program will be used as input for Phase 3 drilling campaign and subsequent metallurgical program designs as well as additional work focussing on beneficiation to upgrade clay lithium grades.

## **About Fulcrum Lithium Ltd**

Fulcrum Lithium Ltd (ASX: FUL) listed on the ASX on 22 November 2024, to explore the largest lithium exploration lode claim holding area by a company, of approximately 230 km<sup>2</sup>, in the heart of Nevada's 'lithium belt' which hosts Albemarle Corporation's (NYSE: ALB) Silver Peak lithium mine, the only lithium producing mine in the USA.

Fulcrum's Alkali Flats project is proximate to and on trend with, significant lithium projects at various stages of exploration and development in a geologic setting with demonstrated success and a mining friendly jurisdiction.

### **For further information, please contact:**

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This announcement has been authorised for release by the Company Secretary.

### **Competent Person's Statement**

The information in this Report that relates to Exploration Results is based on, and fairly represents, information and supporting documentation prepared by Mr Bill R. Fleshman of Global Geological Services, LLC, a geologist who is a Fellow and Chartered Professional of the Australasian Institute of Mining and Metallurgy and (FAusIMM CP Geology #107342) and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activities which are 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 Fleshman is an independent consulting geologist and consents to the inclusion of the Exploration Results and Exploration Targets and supporting information in the form and context in which it appears.

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Section 1 Sampling Techniques and Data – Alkali Flats

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<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. 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>The RC drill cuttings samples were acquired every five feet (1.524 metres) collected from fluid and cuttings passed through a cyclone sample collector. Buckets were lined with pre-labelled bags. Sample bags and chip trays were pre-labelled for field staff. A Fulcrum geologist collected the samples or trained the rig sampler in methods. Field personnel monitored the drilled depth, and drilling was briefly paused at the end of each sample run to circulate the cuttings to surface. Each sample interval was logged at the rig by the supervising geologist. Samples were stored at the drill sites until pickup.</p> <p>RC samples were weighed, dried, combined and pulverised to form composite samples over intervals up to 30m wide for metallurgical testing.</p>
<b>Drilling techniques</b>	<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>	Not applicable for metallurgical reporting.
<b>Drill sample recovery</b>	<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>	Not applicable for metallurgical reporting.
<b>Logging</b>	<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.</i></p> <p><i>Core (or costean, channel, etc) photography.</i></p> <p><i>The total length and percentage of the relevant intersections logged.</i></p>	Not applicable for metallurgical reporting.
<b>Sub-sampling techniques and sample preparation</b>	<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>	Not applicable for metallurgical reporting.

Criteria	JORC Code explanation	Commentary
<b>Quality of assay data and laboratory tests</b>	<p><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></p> <p><i>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.</i></p> <p><i>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></p>	<p>Samples were analysed by Kappas Cassiday and Associates. of Reno, Nevada by a number of different industry standard techniques including below;</p> <ul style="list-style-type: none"> <li>• 4-Acid, ICP-OES</li> <li>• LECO,</li> <li>• Quantitative X-ray Diffraction (QXRD) + CEC - FLSMIDTH</li> </ul>
<b>Verification of sampling and assaying</b>	<p><i>The verification of significant intersections by either independent or alternative company personnel.</i></p> <p><i>The use of twinned holes.</i></p> <p><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></p> <p><i>Discuss any adjustment to assay data.</i></p>	<p>Sample intervals were assigned a unique sample identification number prior to sample dispatch.</p> <p>Lithium-mineralised claystone CRMs, duplicates and blanks were inserted into the sample stream at regular intervals to monitor lab accuracy and potential contamination during sample prep and analytical processes.</p>
<b>Location of data points</b>	<p><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.</i></p> <p><i>Specification of the grid system used.</i></p> <p><i>Quality and adequacy of topographic control.</i></p>	<p>Fulcrum geologists used handheld Garmin GPS units to record sample location sites and as QC. Fulcrum geologists have recorded the sample sites using NAD 83 Zone 11 datum.</p> <p>Location of data points is considered to be at acceptable levels of accuracy and precision.</p>
<b>Data spacing and distribution</b>	<p><i>Data spacing for reporting of Exploration Results.</i></p> <p><i>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.</i></p> <p><i>Whether sample compositing has been applied.</i></p>	<p>Drill holes were spaced 1500m-2500m apart. The spacing is considered adequate for this stage of exploration given the flat to moderately dipping sedimentary layers.</p>
<b>Orientation of data in relation to geological structure</b>	<p><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></p> <p><i>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></p>	<p>Drill holes were drilled vertical achieving unbiased sampling of the underlying structure. The stratigraphy comprises flat, bedded, mostly sedimentary layers.</p>
<b>Sample security</b>	<p><i>The measures taken to ensure sample security.</i></p>	<p>RC samples remained in the custody of Fulcrum onsite at the drill rig until collected by American Assay Laboratory personnel and transported securely to their laboratory. Samples were accompanied by submittal sheets. No security issues are suspected. RC samples were stored at AAL prior to dispatch to KCA laboratories.</p>
<b>Audits or reviews</b>	<p><i>The results of any audits or reviews of sampling techniques and data.</i></p>	<p>No audits or reviews of the data management system have been carried out.</p>

## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<p>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.</p> <p>The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.</p>	<p>The Fulcrum Projects are 100% owned by Fulcrum and are in the form of 512 unpatented US lode claims located on Federal Land administered by the US Bureau of Land management (BLM). Alkali Flats Project – 515 lode claims centred near 469,342 metres East, 4,187,705 metres North, Universal Transverse Mercator (UTM) NAD 83, Zone 11 datum in Esmeralda County, Nevada.</p> <p>The lode claims require an annual filing of an Intent to Hold declaration and are subject to annual Maintenance Fee payments to the BLM and Esmeralda County totalling US\$200 per claim. Surface rights sufficient to explore, develop and mine minerals on the unpatented lode claims are inherent to the claims provided the claims are maintained in good standing. The surface rights are subject to all applicable State and Federal environmental regulations.</p>
<b>Exploration done by other parties</b>	<p>Acknowledgment and appraisal of exploration by other parties.</p>	<p>Not applicable as no exploration done by other parties is reported.</p>
<b>Geology</b>	<p>Deposit type, geological setting and style of mineralisation.</p>	<p>The Fulcrum Projects are in areas favourable for claystone hosted lithium deposits. Project areas were selected based on the presence of favourable host lithologies within hydrogeological closed basins that also exhibited high geothermal activity. Fulcrum's Projects are geologically similar to other nearby lithium projects in the Tonopah area with advanced exploration programs. Several of those projects are currently being investigated at various exploration or development stages all based primarily on the United States Geological Survey (USGS) lithium depositional model as presented by Asher-Bolinder (1991) in which three diagenetic models are proposed for formation of enriched lithium clays in closed basins: Alteration of volcanic glass to lithium-rich smectite. Precipitation from lacustrine waters. Incorporation of lithium into existing smectites.</p>
<b>Drill hole Information</b>	<p>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:</p> <p>eastings 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.</p> <p>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.</p>	<p>A total of 10 holes planned at the Alkali Flats project were completed for a total of approximately 1666 metres. All holes were drilled vertically and drill hole coordinates and the depth of each hole are detailed in the report above.</p>

Criteria	JORC Code explanation	Commentary
<b>Data aggregation methods</b>	<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>	Not applicable for metallurgical reporting.
<b>Relationship between mineralisation widths and intercept lengths</b>	<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>	The Siebert Formation is generally flat (<5 degrees) in the drilled target. All holes are vertical, therefore all reported mineralisation widths will be very similar to the interception lengths quoted and the difference will be negligible.
<b>Diagrams</b>	<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>	Appropriate diagrams are included in the ASX announcement.
<b>Balanced reporting</b>	<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>	Inclusion of results for all zones were published in this announcement.
<b>Other substantive exploration data</b>	<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>	N/A – no other material exploration data was gathered in this period.
<b>Further work</b>	<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>	Further work for the Alkali Flats Project is described in the announcement.