

BIG SANDY LITHIUM PROJECT (ARIZONA, USA) MAIDEN MINERAL RESOURCE

- Total Indicated and Inferred Resources of 32.5 Million Tonnes (Mt) grading 1,850 parts per million (ppm) Li or 320,800 tonnes Lithium Carbonate Equivalent (LCE), reported above an 800 ppm Li cut-off.

Resource Classification	Tonnes (Mt)	Li Grade (ppm)	Contained Li Metal (t)	Contained LCE (t)
Indicated	14.6	1,940	28,400	150,900
Inferred	17.9	1,780	31,900	169,900
Total	32.5	1,850	60,300	320,800

- Maiden Mineral Resource delivered 14 months after first drilling commenced at Big Sandy, in line with the Company's rapid de-risking strategy.
- Total Resource tonnes are in the range reported in the Exploration Target.
- The area drilled for the calculation of the maiden Resource represents a mere 4% of the landholding at the Big Sandy Lithium project.
- The Resource includes a higher-grade zone of 12.7 Mt grading 2,360 ppm Li above a cut-off of 2,000 ppm Li for 159,500 tonnes LCE, representing 49% of the total contained LCE.
- Excellent potential to further expand the size of the Mineral Resource with further drilling planned targeting Blocks B and C in the Northern Mineralised Zone, which remains open to the north, south and west.
- Phoenix based engineer appointed to commence an examination of the key development elements leading to the commencement of a pre-feasibility study.

Hawkstone Mining Limited (ASX:HWK) ("**Hawkstone**", the "**Company**") is pleased to announce a maiden Mineral Resource Estimate for its Big Sandy sedimentary lithium project, located approximately 2.5 hours drive northwest of Arizona's state capital, Phoenix.

The total Indicated and Inferred Mineral Resource has been estimated by Cube Consulting in accordance with the guidelines set out by the JORC Code (2012). Cube Consulting estimated the total resources in Block A of the Northern Mineralised Zone ("**Resource**") at 32.5 Million tonnes grading 1,850 ppm Li containing 60,300 tonnes of lithium metal, which equals 320,800 tonnes Lithium Carbonate Equivalent ("**LCE**"). This includes a higher-grade zone of 12.7 Mt grading 2,360 ppm Li above a cut-off of 2,000 ppm Li for 159,500 tonnes LCE, representing 49% of the total contained LCE. This estimate follows the successful completion of the Phase 2 diamond drilling program (37 HQ diamond holes totalling 2,881m), focused on Block A in the

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Northern Mineralised Zone. Previous drilling results from the Phase 1 drilling program in conjunction with the results of geological mapping and surface sampling identified the area as having significant potential.

Table 1 – Big Sandy Project Mineral Resource Statement (above 800 ppm Li cut-off)

Resource Classification	Tonnes (Mt)	Li Grade (ppm)	Contained Li Metal (t)	Contained LCE (t)
Indicated	14.6	1,940	28,400	150,900
Inferred	17.9	1,780	31,900	169,900
Total	32.5	1,850	60,300	320,800

NB: Numbers may not add up due to rounding

Table 2 – Big Sandy Project Mineral Resource Statement (above 2,000 ppm Li cut-off)

Resource Classification	Tonnes (Mt)	Li Grade (ppm)	Contained Li Metal (t)	Contained LCE (t)
Indicated	6.4	2,330	15,000	79,800
Inferred	6.3	2,390	15,000	79,800
Total	12.7	2,360	30,000	159,500

NB: Numbers may not add up due to rounding

Hawkstone Mining Managing Director, Mr Paul Lloyd, commented:

“The estimate of the maiden Resource is another significant step forward in establishing Hawkstone as an emerging lithium supplier, and forms part of an aggressive program to move the project into pre-feasibility as quickly as possible. In addition to the appointment of Dr David Deak as a consultant to the Company and Barnaby Egerton-Warburton as Non-Executive Chairman, Hawkstone has also appointed a Phoenix based engineer to commence an examination of the key development elements, leading to the commencement of a pre-feasibility study.”

“The calculation of the maiden resource from a limited number of tightly spaced drill holes, comprising a mere 4% of the Big Sandy project area, highlights the size and potential of this world class lithium resource. The location in Arizona USA provides multiple development advantages, being strategically located near all major infrastructure and in close proximity to U.S. battery manufacturing facilities”.

“In addition, a stage 3 drilling program is planned for 2020 with the objective of converting the current reported Exploration Targets. This drilling will target Blocks B and C in the Northern Mineralised Zone as we continue to develop the Big Sandy Lithium Project.”

The information in this report that relates to Mineral Resources is based on and fairly represents information compiled by Mr Daniel Saunders, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Saunders is a full-time employee of Cube Consulting Pty Ltd, acting as independent consultants to Hawkstone Mining Limited. Mr Saunders 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 Saunders consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The following is a summary of material information used to estimate the Mineral Resource, as required by Listing Rule 5.8.1 and JORC 2012 Reporting Guidelines.

Mineral Tenement and Land Tenure Status

The Big Sandy lithium project consists of 311 mining claims of approximately 20 acres each, physically staked on Bureau of Land Management, Federally administered land (Figure 1). The claims have been granted and are subject to an annual payment. Excluding the payment, there is no requirement for minimum exploration or reporting and no expiry date on the claims.

All indigenous title is cleared and there are no other known historical or environmentally sensitive areas.

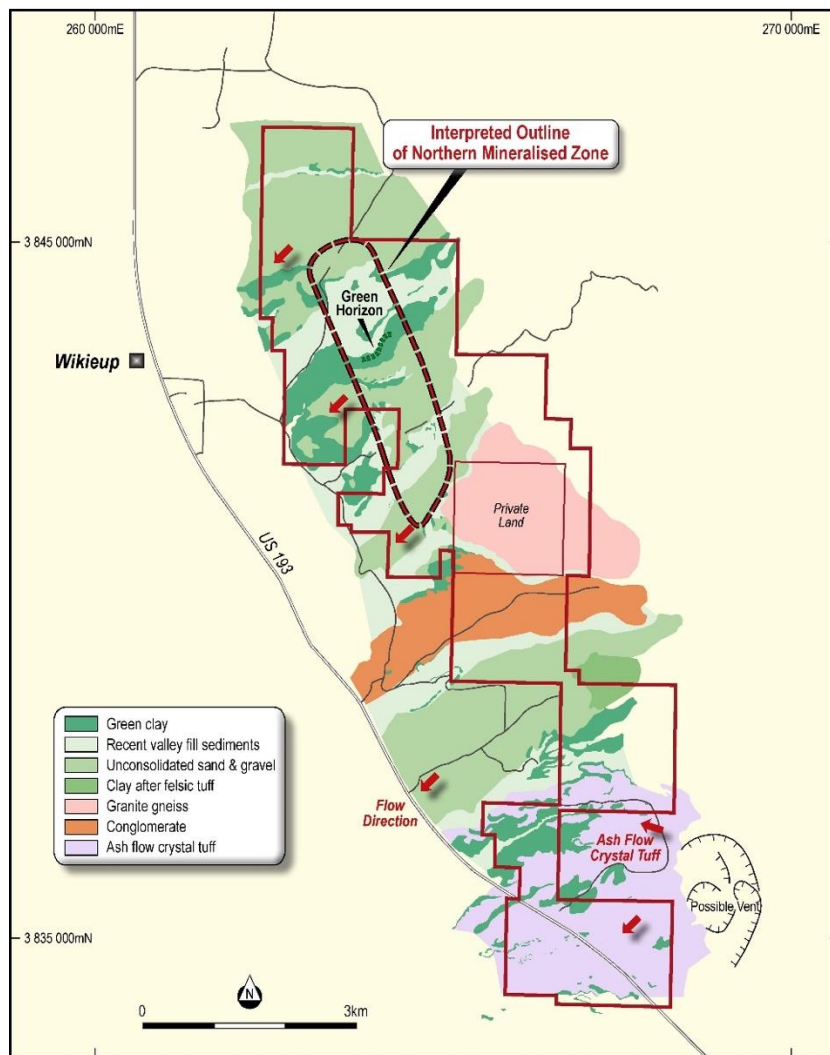


Figure 1 – Project Location Plan

Geology

The geology is characterised by flat-lying basin sediments comprising predominantly lacustrine sediments, interpreted to have been deposited in a block faulted inter-mountain graben. The alteration and accompanying sedimentary lithium mineralisation, is associated with clay minerals interpreted to have resulted from one or all of the following processes: remobilisation from underlying or surrounding acid volcanics; interaction of hot springs within the basin; or periods of non-deposition where evaporation resulted in the upward migration and concentration of the lithium.

The identified mineralisation is defined as a tabular body ranging from 15 m to 65 m in thickness extending up to one kilometre along a north-south axis and up to 750 m along an east-west axis. The sediments containing the mineralisation are flat lying and display an erosional upper contact with the overlying colluvium (Figure 2).

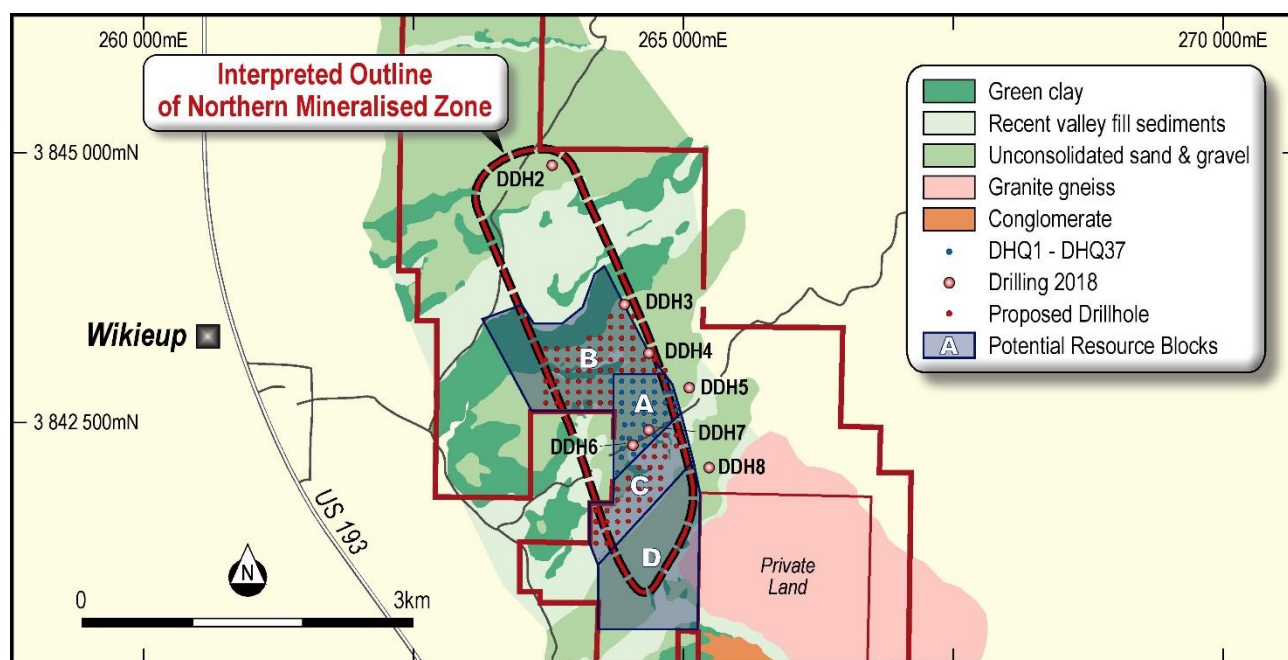


Figure 2 – Project Geology with Current and Planned Drill Hole Locations

Drilling Techniques and Hole Spacing

Drilling completed at the Big Sandy project used to support the mineral resource includes 40 diamond core (DDH) holes for a total of 2,896.3 m (Figure 3). Drilling was completed at a spacing of approximately 100 m except where drill sites were modified due to topography.

DDH drilling has been completed in two phases (2018 and 2019). The drilling in 2018 used BQ core size (~36.5 mm diameter), while the 2019 drilling used a HQ size (~63.4 mm). Only three of the 2018 drill holes were used in estimate of the Mineral Resource. Geological logging was completed on intervals aligned with observed changes in the logged core and all diamond holes are drilled from surface and oriented vertically.

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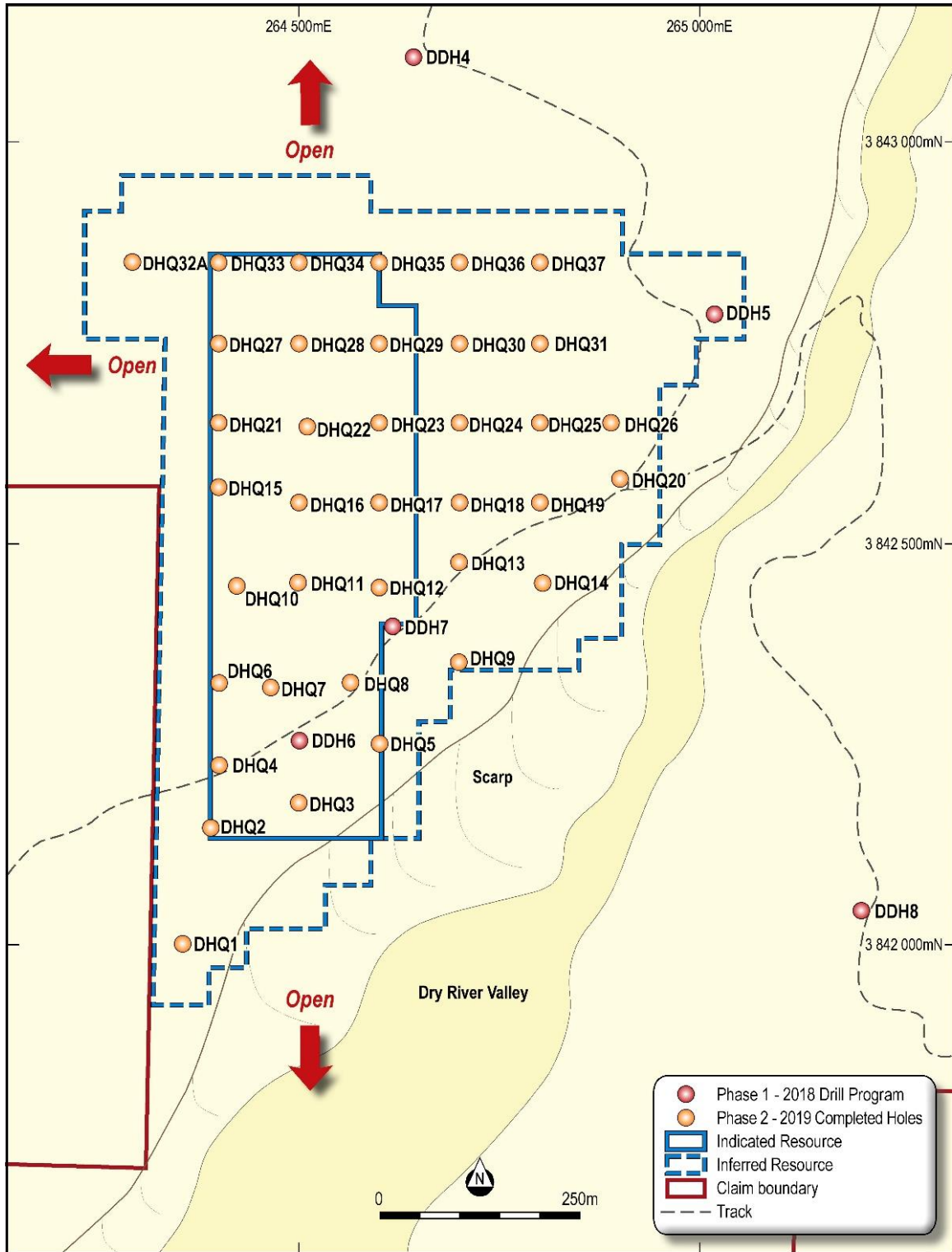


Figure 3 – Drill Hole Location Plan showing Resource Classification Outlines

Sampling

Sampling of the DDH core was completed at one-metre intervals. Drill core is sawn in half length-wise, with half submitted for analysis and the other half retained in the core tray for future reference. Standards, blanks, and field duplicates (quarter core) are submitted into the sample stream at a rate of 1 in 10.

Sample Analysis

All DDH samples were prepared at ALS Laboratories in Tucson, Arizona and involved crushing to 70% less than 2mm, riffle splitting a 250g sub-sample, and pulverising to achieve better than 85% passing 75 microns. Resultant pulps were then dispatched to ALS Laboratories in Vancouver for analysis using the 48-element method ME-MS61 employing a four-acid total digest.

Estimation Methodology

The geological interpretation utilised surface geological mapping, lithological logging data, and assay data to guide and control the Mineral Resource estimation. Leapfrog™ implicit modelling software was utilised to generate three-dimensional wireframes of the major lithological units and geochemical sub-domains. These solids were imported into Surpac™ and used to code the geological model.

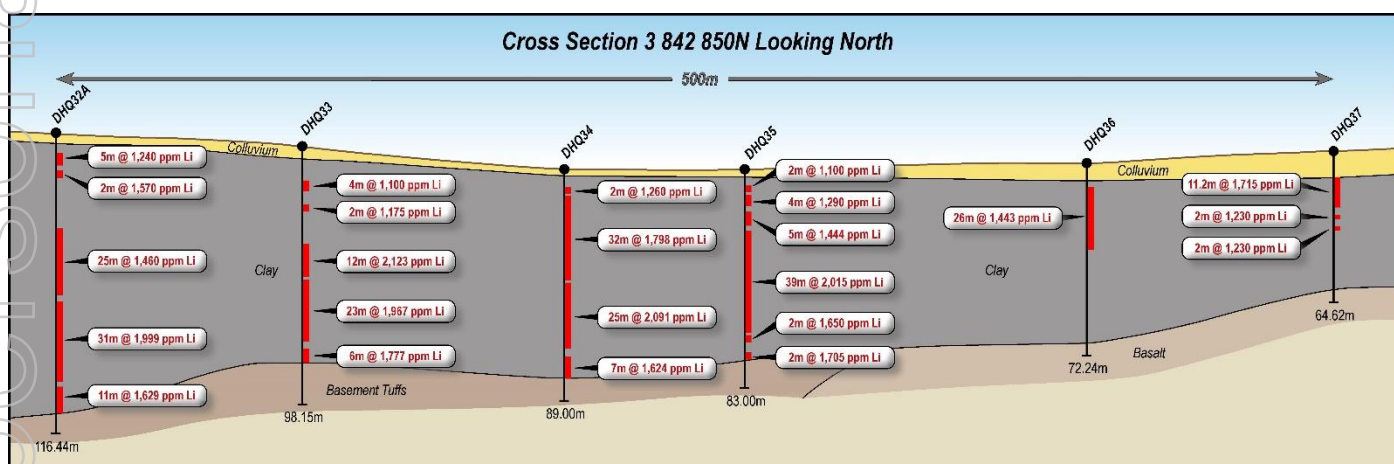


Figure 4 – Cross section at 3,842,850N

Drill hole sample data was flagged using domain codes generated from three-dimensional mineralisation domains. Sample data was composited to one-metre downhole lengths using a best fit-method. No residuals were generated. Statistical analysis was carried out on data from all estimated domains, with both hard and soft boundary techniques employed dependant on applicable estimation domains.

Outlier analysis of the composite data indicated application of top-cut values for Li within three estimation domains, two of which related to the basement domain. A total of 12 composites were cut for lithium within these domains. Top cuts were also applied to secondary variables Cs, Na, Sr and Zr for selected domains based on distribution statistics.

Nine grade attributes (Li ppm, Al %, Ca %, Cs ppm, Fe %, K %, Na %, Sr ppm and Zr ppm), were estimated for input into mine planning and processing assessments. The grade estimation process was completed using Surpac™ software. Interpolation of grades was via Ordinary Kriging (OK) for all estimated variables.

For estimation domains with insufficient sample data a variogram model from a comparable domain was assigned.

Interpolation parameters were selected based on kriging neighbourhood analysis with a minimum number of 10 composites and a maximum number of 24 composites, with a restriction on the number of composites per drill hole set to four. Blocks were estimated in a single pass strategy with maximum search distances for lithium between 250 and 500 metres depending on estimation domain.

The model has a block size of 50 m (X) by 50 m (Y) by 5 m (Z) with sub-celling of 12.5 m (X) by 12.5 m (Y) by 1.25 m (Z). Grades were estimated into the parent cells.

The block model was validated using a combination of visual and statistical techniques including global statistics comparisons, and trend plots.

Resource Classification

A range of criteria was considered by Cube when addressing the suitability of the classification boundaries. These criteria include:

- Geological continuity and volume;
- Drill spacing and drill data quality;
- Modelling technique; and
- Estimation properties, including search strategy, number of informing composites, average distance of composites from blocks and kriging quality parameters.

Blocks have been classified as Indicated or Inferred, mostly based on drill data spacing in combination with other model estimate quality parameters.

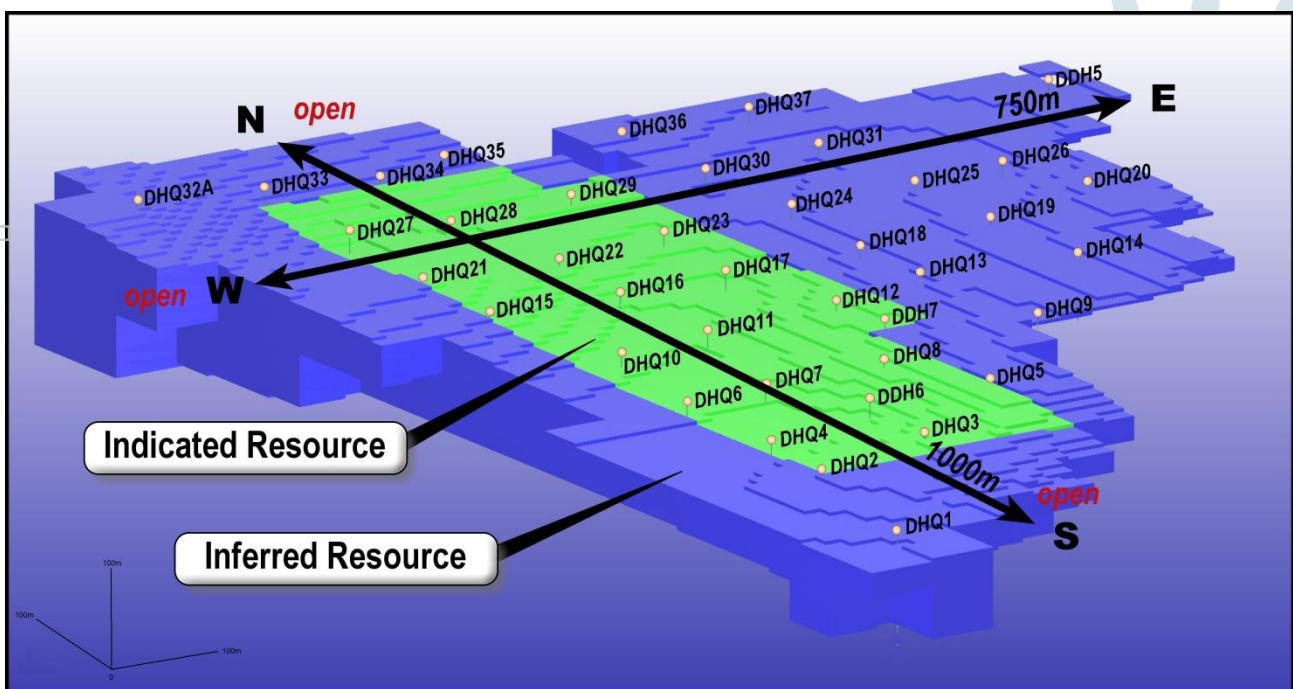


Figure 5 – Oblique view of Mineral Resource blocks with Drill Hole Locations

Cut-off Grade

The Mineral Resource has been reported above an 800 ppm Li cut-off. Mineralisation above this cut-off has, in the opinion of the Competent Person, demonstrated reasonable prospects for economic extraction via assessment against an optimisation shell. Input parameters utilised for the optimisation are based on analysis of market peers having completed advanced studies on comparable mineralisation styles.

Mining and Metallurgy

Development of this Mineral Resource assumes mining using standard equipment and methods. The assumed mining method is conventional truck and shovel, open pit mining at an appropriate bench height.

Preliminary metallurgical test work on mineralisation at the project has been completed and previously reported (ASX release dated 29 November 2018). Results of test work indicate lithium recoveries between 85% and 97% during a maximum duration of 24 hours. These results are considered adequate to achieve reasonable expectations of economic metallurgical processing of the project mineralisation.



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	<i>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</i>	This announcement primarily relates to sampling completed as a result of a diamond drill program.
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	Samples of drill core were taken at 1m intervals with respect for geological contacts.
	<i>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 1m 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 (e.g. submarine nodules) may warrant disclosure of detailed information.</i>	With the exception of the surficial colluvium that was not sampled the entire diamond core was split (halved) and sampled at 1m intervals. The samples are dispatched to ALS laboratories in Tucson, Arizona where it is prepared by Method Prep-31 (crush to 70% less than 2mm, riffle split off 250g, pulverize split to better than 85% passing 75 microns).
Drilling techniques	<i>Drill type (e.g. core, reverse circulation, open hole hammer, 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 is oriented and if so, by what method, etc.).</i>	The drilling was completed using a Mooroka mounted Longyear 44 and core recovered in a standard 3.05m core barrel. It produced HQ sized core of 63.4mm in diameter. As all of the stratigraphy is flat lying all holes are drilled vertical and no core orientation is required. Downhole surveys were not completed due to maximum depths being generally less than 100 m and holes being drilled vertically.

<i>Drill sample recovery</i>	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	All recoveries are calculated and 1m downhole depths marked prior to geological logging and sampling.
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	The core was drilled with a bit that has been found to work exceptionally well in sediments. Both the rotation speed and feed rate are slowed to maximise recovery.
	<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>	Core recovery was greater than 95% in the mineralised intervals. The Li mineralisation is hosted in sediment that is extremely fine grained and even textured.
<i>Logging</i>	<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>	Geological logging was completed on all core noting the rock type, grain size, colour, presence of carbonate and sediment type to a level required to support Mineral Resource estimation, mining studies and metallurgical studies.
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography</i>	Logging has been completed in the form of geology and recoveries. All core has been photographed both wet and dry.
	<i>The total length and percentage of the relevant intersections logged.</i>	The entire core is logged noting any intervals of low or non-recovery.
<i>Sub-sampling techniques and sample preparation</i>	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	All core is halved using a diamond saw.
	<i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i>	Half core is taken and bagged in consecutively numbered bags for analysis.
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	Representative of material drilled.
	<i>Quality control procedures adopted for all subsampling stages to maximise representivity of samples.</i>	A duplicate consisting of quarter core, a standard or blank were placed in the sample stream at a ratio of 1:10.
	<i>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance</i>	Half core taken as the sample with the exception of the duplicate samples where the half core was

	<i>results for field duplicate/second-half sampling.</i>	split into 2 samples consisting of a quarter core each.
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	Sample sizes are appropriate for grain size of material sampled. Lithium hosted in micron scale sedimentary minerals.
Quality of assay data and laboratory tests	<i>The nature, quality and appropriateness of the Assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	The assay technique (ME-MS61) is a total process, as a 4-acid digest is used to remove the lithium from the sediment prior to analysis. This method was used for core samples.
	<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> <i>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 precision have been established.</i>	These geophysical instruments are not used in assessing the mineralisation at the Project. Quality control procedures consist of inserting a standard, blank or duplicate sample into the sample stream at a ratio of 1:10. Review of the QC results show the performance is within acceptable levels to allow the reporting of Mineral Resources.
Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	All diamond drill results were examined by staff of Cube Consulting to ensure database integrity.
	<i>The use of twinned holes.</i>	No twin holes were drilled or have been drilled.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	The data are currently stored in hardcopy and digital format in the Company's office and with Cube Consulting who have established a digital database used in the resource estimate. A hard drive copy of the original data is stored with GL Smith.
	<i>Discuss any adjustment to assay data.</i>	No adjustment was made to assay data.
Location of data points	<i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i>	All diamond drill holes have been located using a handheld GPS unit accurate to within 3m.

	<p><i>Specification of the grid system used.</i></p>	<p>NAD83 UTM Zone 12N</p>
	<p><i>Quality and adequacy of topographic control.</i></p>	<p>A drone enabled air photo survey was completed. Control points were surveyed by Mohave Engineers and the resulting digital terrain model (DTM) has been used in the resource estimation. An accuracy of 0.018m, 0.035m and 0.038m has been quoted for the accuracy of the DTM X, Y and Z axis respectively. For the purposes of geological modelling and estimation, the drill hole collars were projected onto this topographic surface.</p>
<p><i>Data spacing and distribution</i></p>	<p><i>Data spacing for reporting of Exploration Results.</i></p>	<p>The diamond drilling described in the report preceding this table are at approximately 100 m centres except where the holes have been moved slightly to minimise environmental impact or due to topography.</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>The spacing of the drill holes is considered sufficient to support the reporting of Mineral Resources based on the interpreted continuity of both geology and grade.</p>
	<p><i>Whether sample compositing has been applied.</i></p>	<p>No sample compositing has been applied.</p>
<p><i>Orientation of data in relation to geological structure</i></p>	<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>The diamond holes were drilled to a depth of ~100m to determine the geology, grade distribution and potential extents of the mineralisation. The sampling occurs perpendicular to the flat lying strata and is therefore representative of the mineralisation.</p>
	<p><i>If the relationship between the drilling orientation and the orientation of key mineralised structures are considered to have introduced a sampling bias, this should be assessed and reported if material.</i></p>	<p>No sampling bias as the vertical diamond holes were drilled into flat lying lacustrine sediments.</p>
<p><i>Sample security</i></p>	<p><i>The measures taken to ensure sample security.</i></p>	<p>All samples were sampled and delivered directly to ALS sample preparation facility in Tucson, Arizona.</p>

<i>Audits or reviews</i>	<i>The results of any audits or reviews of sampling techniques and data.</i>	Cube Consulting has completed a site visit including a review of the sampling techniques and data prior to the commencement of the Mineral Resource estimate. In the opinion of the Competent Person the sampling methods employed are suitable to support the reporting of Mineral Resources.
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Section 2: Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code Explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i>	The Big Sandy project consists of 311 mining claims of approximately 20 acres each, physically staked on Bureau of Land Management, Federally administered land. All indigenous title is cleared and there are no other known historical or environmentally sensitive areas.
	<i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i>	The claims have been granted and are subject to an annual payment. Other than the payment there is no requirement for minimum exploration or reporting. There is no expiry date on the claims.
<i>Exploration done by other parties</i>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	There has been no exploration for lithium mineralisation on this project other than that completed previously by Big Sandy Inc (wholly owned subsidiary of Hawkstone Mining Ltd).
<i>Geology</i>	<i>Deposit type, geological setting and style of mineralisation.</i>	The geology is characterised by flat-lying basin sediments comprising predominantly lacustrine sediments interpreted to have resulted from the alteration of mudstones deposited in a block faulted inter-mountain graben. The alteration and accompanying lithium mineralisation is interpreted to have resulted from: (1) remobilisation from underlying or surrounding acid volcanics (2) interaction of hot springs within the basin and/or (3) periods of non-deposition where evaporation resulted in the upward migration and concentration of the lithium.

<i>Drill hole Information</i>	<i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: 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.</i>	Details of exploration results have been previously reported in ASX releases on 13 November 2018, 4 April 2019, 29 April 2019, 6 May 2019, 14 May 2019, 23 May 2019, 27 June 2019, 10 July 2019, 23 July 2019, and 14 August 2019.
	<i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i>	This information has not been excluded.
<i>Data aggregation methods</i>	<i>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.</i>	No Exploration Results are reported.
	<i>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.</i>	As no Exploration Results are reported no aggregate intercepts are reported.
	<i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	No metal equivalent values are stated.
<i>Relationship between mineralization widths and intercept lengths</i>	<i>These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralization with respect to the drill hole angle is known, its nature should be reported.</i>	Where thicknesses are stated from the drilling the intercepts reflect the true thickness as the lacustrine sediments are flat lying.
	<i>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').</i>	As above.

Diagrams	<i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i>	Appropriate maps are included have been included with in ASX releases on 13 November 2018, 4 April 2019, 29 April 2019, 6 May 2019, 14 May 2019, 23 May 2019, 27 June 2019, 10 July 2019, 23 July 2019, and 14 August 2019.
Balanced reporting	<i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i>	Exploration results are not reported.
Other substantive exploration data	<i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i>	No other exploration data is reported. No bulk sampling has been completed. Initial metallurgical test work shows the lithium to be acid leachable. No water table has been identified in drilling to date.
Further work	<i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i>	Diamond drilling to further test the lacustrine sediments is planned.
	<i>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>	The diagrams in the attached release show the zone of proposed future drilling as well as the areas of possible extensions.

Section 3: Estimation and Reporting of Mineral Resources

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code Explanation	Commentary
Database Integrity	<i>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</i> <i>Data validation procedures used.</i>	The geology, assay and bulk density data were checked by the Competent Person. The data validation process used during Mineral Resource estimation consisted of: <ul style="list-style-type: none"> Examination of the assay, collar survey, downhole survey and geology data to

		<p>ensure that the data were complete and usable for all drillholes.</p> <ul style="list-style-type: none"> • Examination of the surveyed data in three dimensions to check for spatial errors. • Examination of the assay data in order to ascertain whether they were within expected ranges. • Checks for “FROM-TO” errors, to ensure that the sample data did not overlap one another or that there were no unexplained gaps between samples.
Site Visits	<p><i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i></p> <p><i>If no site visits have been undertaken indicate why this is the case.</i></p>	<p>The Competent Person completed a site visit in June 2019 to inspect the core, review the drilling, logging and sampling processes including sample and core security. The visit enhanced their understanding of the geology and mineralisation. They are of the opinion that the exploration work carried out by Hawkstone was appropriate for the style of mineralisation.</p>
Geological Interpretation	<p><i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i></p> <p><i>Nature of the data used and of any assumptions made.</i></p> <p><i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i></p> <p><i>The use of geology in guiding and controlling Mineral Resource estimation.</i></p> <p><i>The factors affecting continuity both of grade and geology.</i></p>	<p>The quantity and spacing of drilling has defined the shape and extents of the lithium bearing mudstones to sufficient confidence to allow the reporting of Mineral Resources.</p> <p>Geological logging and assay data were used to define estimation domains within the lithium sediments. Geochemical signatures within the geological package were used together with core photography to model a distinct “marker” horizon across the deposit. While not directly observed in mapping or drill core, significant changes in the depth profile of this marker allowed the inference of a fault trending north-south across the project area.</p> <p>Due to the sub-horizontal nature of the geology alternate interpretations are considered unlikely. The interpreted location of the north-south trending fault may vary however is unlikely to have a material impact on the interpreted mineralisation.</p>
Dimensions	<p><i>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</i></p>	<p>The area defined as a Mineral Resource is tabular body ranging from 15 m to 65 m in thickness extending up to one kilometre along a north-south axis and up to 750 m along an east-west axis. It has been drilled to a maximum depth of 116.44m.</p> <p>The sediments containing the Mineral Resource are flat lying.</p> <p>The Mineral Resource displays an erosional upper contact with the overlying colluvium.</p>
Estimation and modelling	<p><i>The nature and appropriateness of the estimation technique(s) applied and key</i></p>	<p>Nine grade attributes (Li ppm, Al %, Ca %, Cs ppm, Fe %, K %, Na %, Sr ppm and Zr ppm),</p>

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<p><i>techniques</i></p>	<p><i>assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</i></p> <p><i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></p> <p><i>The assumptions made regarding recovery of by-products.</i></p> <p><i>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</i></p> <p><i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></p> <p><i>Any assumptions behind modelling of selective mining units.</i></p> <p><i>Any assumptions about correlation between variables.</i></p> <p><i>Description of how the geological interpretation was used to control the resource estimates.</i></p> <p><i>Discussion of basis for using or not using grade cutting or capping.</i></p> <p><i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i></p>	<p>were estimated for input into mine planning and processing assessments.</p> <p>Three-dimensional estimation domains were generated using Leapfrog™ software and resulted in the development of a stratigraphic sequence of colluvium, upper mineralised mudstone, marker horizon, lower mineralised mudstone, and basement. These domains were sub-divided to a west and east zone relative to the location of the north-south trending interpreted fault. Additional sub-domains were created following review of the geochemistry which indicated different clay mineralogy.</p> <p>Drill hole sample data was flagged using domain codes generated from the modelled domains and sub-domains as applicable. Sample data was composited to one-metre downhole lengths using a best fit-method.</p> <p>Outlier analysis of the composite data indicated application of top-cut values for Li within three estimation domains, two of which related to the basement domain. A total of 12 composites were cut for lithium within these domains. Top-cuts were also applied to secondary variables Cs, Na, Sr and Zr for selected domains based on distribution statistics.</p> <p>Continuity analysis was completed using Supervisor™ software. Variogram models were developed for all variables within the major domains.</p> <p>The grade estimation process was completed using Surpac™ software. Interpolation of grades was via Ordinary Kriging (OK) for all estimated variables. For estimation domains with insufficient sample data a variogram model from a comparable domain was assigned.</p> <p>Interpolation parameters were selected based on kriging neighbourhood analysis with a minimum number of 10 composites and a maximum number of 24 composites, with a restriction on the number of composites per drill hole set to four. Blocks were estimated in a single pass strategy with maximum search distances for lithium between 250 and 500 metres depending on estimation domain.</p> <p>The model has a block size of 50 m (X) × 50 m (Y) × 10 m (Z) with sub-celling of 12.5 m (X) × 12.5 m (Y) × 2.5 m (Z). Grades were estimated into the parent cells. Hard boundary techniques were employed for the majority of domains, with one-direction soft boundaries employed for</p>
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		<p>identified sub-domains within the main mineralised zones.</p> <p>The block model was validated using a combination of visual and statistical techniques including global statistics comparisons, and trend plots.</p> <p>No mining has taken place at the project, so reconciliation data is not available</p>
Moisture	<i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i>	Tonnages are estimated on a dry basis.
Cut-off parameters	<i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i>	The Mineral Resource has been reported above a 800 ppm Li cut-off. Mineralisation above this cut-off has, in the opinion of the Competent Person, demonstrated reasonable prospects for economic extraction via assessment against an optimisation shell. Input parameters utilised for the optimisation are based on analysis of market peers with advanced studies completed on comparable mineralisation styles.
Mining factors or assumptions	<i>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</i>	Development of this Mineral Resource assumes mining using standard equipment and methods. The assumed mining method is conventional truck and shovel, open pit mining at an appropriate bench height.
Metallurgical factors or assumptions	<i>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</i>	<p>Metallurgical test work was carried out on bulk samples derived from half core mineralised intersections in drill holes collected from several locations around the project area.</p> <p>Preliminary metallurgical test work on mineralisation at the project has been completed and previously reported (ASX release dated 29 November 2018). Results of test work indicate lithium recoveries between 85% and 97% during a maximum duration of 24 hours.</p> <p>These results are considered adequate to achieve reasonable expectations of economic</p>

		metallurgical processing of the project mineralisation.
<i>Environmental factors or assumptions</i>	<i>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</i>	Cube is not aware of the details of any environmental studies that have been carried out.
<i>Bulk density</i>	<i>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</i> <i>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</i> <i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i>	To date, 104 bulk density determinations have been carried out on drill core. All of these were completed on potentially mineralised mudstone material by the Archimedes principal, with 3 to 4 samples per hole dependant on depth. After sampling a single piece of the remaining half core, approximately 10 cm length, was weighed in air and then suspended in water and re-weighed, providing a wet bulk density. The sample was then placed into a calico bag, numbered with its assay sample number and its position noted in the core tray, and allowed to dry in the sun at +30°C for >2 days in the bag and its generally desiccated contents reweighed. This weight less the weight of the calico bag was used in the calculation of a dry bulk density. The average bulk density for all measurements was calculated at 1.6 g/cm ³ and assigned to the block model.
<i>Classification</i>	<i>The basis for the classification of the Mineral Resources into varying confidence categories.</i> <i>Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</i> <i>Whether the result appropriately reflects the Competent Person's view of the</i>	The Mineral Resource has been classified into the categories of Indicated (45%) and Inferred (55%). The determination of the applicable resource category has considered the relevant factors (geology, mineralisation continuity, sample spacing, data quality, geostatistical parameters, and others). The Competent Person is satisfied that the stated Mineral Resource classification reflects the relevant factors of the deposit.

	<i>deposit.</i>	
<i>Audits or reviews</i>	<i>The results of any audits or reviews of Mineral Resource estimates.</i>	<p>This Mineral Resource has been internally peer reviewed by Cube Consulting focusing on factors which may materially affect the reported resources.</p> <p>Cube completed an independent review of available QAQC results including standards, field duplicates and blanks relevant to the drilling. Performance was considered suitable to support the reporting of Mineral Resources.</p>
<i>Discussion of relative accuracy/ confidence</i>	<p><i>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</i></p> <p><i>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation.</i></p> <p><i>Documentation should include assumptions made and the procedures used.</i></p> <p><i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></p>	<p>The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource in accordance with the guidelines of the 2012 JORC Code.</p> <p>A total of 45% of the Mineral Resource is reported in the Indicated category, with 55% in the Inferred category.</p> <p>The statement relates to a global estimation of tonnes and grade.</p> <p>No mining has been undertaken at the project.</p>

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