



ASX ANNOUNCEMENT  
ASX:HWK

4 April 2019

## DIAMOND DRILLING CONFIRMS WIDE, HIGH-GRADE LITHIUM AT BIG SANDY

### HIGHLIGHTS

- First assay results received from Hawkstone's 37-hole Phase 2 diamond drill program at its Big Sandy Lithium-Clay Project, located in Arizona USA.
- Ongoing drilling over the Northern Mineralised Zone has returned significant intersections from 3 diamond drill holes, demonstrating continued thickness and continuity of the clay-hosted lithium mineralisation, best intersections include:
  - **DHQ4 Upper Zone: 19.5m @ 2,200 ppm Li from 11.5m to 31.0m**  
**Lower Zone: 34.0m @ 1,941 ppm Li from 32.0m to 66.0m**
  - **DHQ7 Upper Zone: 14.7m @ 2,344 ppm Li from 14.3m to 29m**  
**Lower Zone: 29.0m @ 1,891 ppm Li from 30.0m to 59.0m and**  
**4.0m @ 1,273 ppm Li from 61.0m to 65.0m**
  - **DHQ8 Upper Zone: 23.3m @ 2,154 ppm Li from 6.7m to 30.0m**  
**Lower Zone: 35.0m @ 2,078 ppm Li from 31.0m to 66.0m**
- The Phase 2 drilling program is now well advanced with drilling ongoing and geological logging and sampling of drill core assisting in targeting a JORC compliant resource in the Northern Mineralised Zone.

Hawkstone Mining Limited (ASX:HWK) (**Hawkstone** or **Company**) is pleased to announce the first results from its fully funded 37-hole Phase 2 diamond drilling program currently underway at its Big Sandy Lithium-Clay Project (**Big Sandy**), located in Arizona USA, a world-class mining jurisdiction ranked 8<sup>th</sup> globally for Investment Attractiveness by the Fraser Institute<sup>1</sup>.

Hawkstone's 100% owned Big Sandy and Lordsburg Projects (Figure 1) are located within the United States **Battery Corridor**, which includes the prolific Clayton Valley lithium region and Tesla Motors (NASDAQ:TSLA) Gigafactory 1, a lithium-ion battery and electric vehicle subassembly factory near Reno, Nevada.

<sup>1</sup> Fraser Institute – 2018 Survey of Mining Companies  
<https://www.fraserinstitute.org/sites/default/files/annual-survey-of-mining-companies-2018.pdf>

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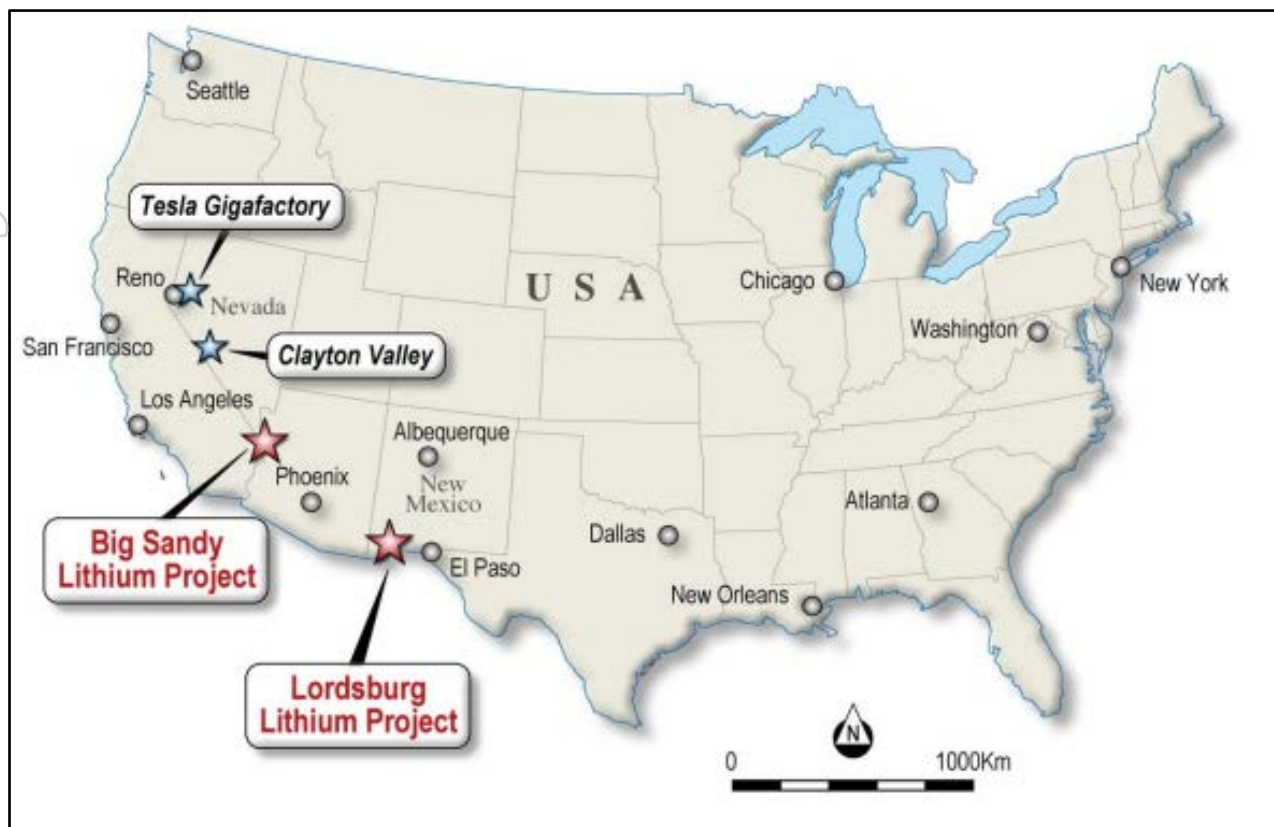


Figure 1 – Location of Hawkstone’s Big Sandy (lithium-clay) and Lordsburg (brine-hosted) Projects.

## PHASE 2 DRILLING PROGRAM (DETAILED)

Assay results have been received from the first 3 holes of a planned 37-hole diamond drill program designed to test the continuity and lateral extent of mineralisation encountered in DDH6 and DDH7 of the previously announced Phase 1 drilling program<sup>2</sup> (Figure 2). The 3 holes listed in Table 1 are considered significant because they constitute part of the Phase 2 program designed to enable the estimation of a JORC compliant resource over the Northern Mineralised Zone (Figure 3).

<sup>2</sup> ASX Announcement - COMPLETION OF MAIDEN DRILLING PROGRAM AT BIG SANDY

<https://www.asx.com.au/asxpdf/20181113/pdf/440794wn7h3p1x.pdf>

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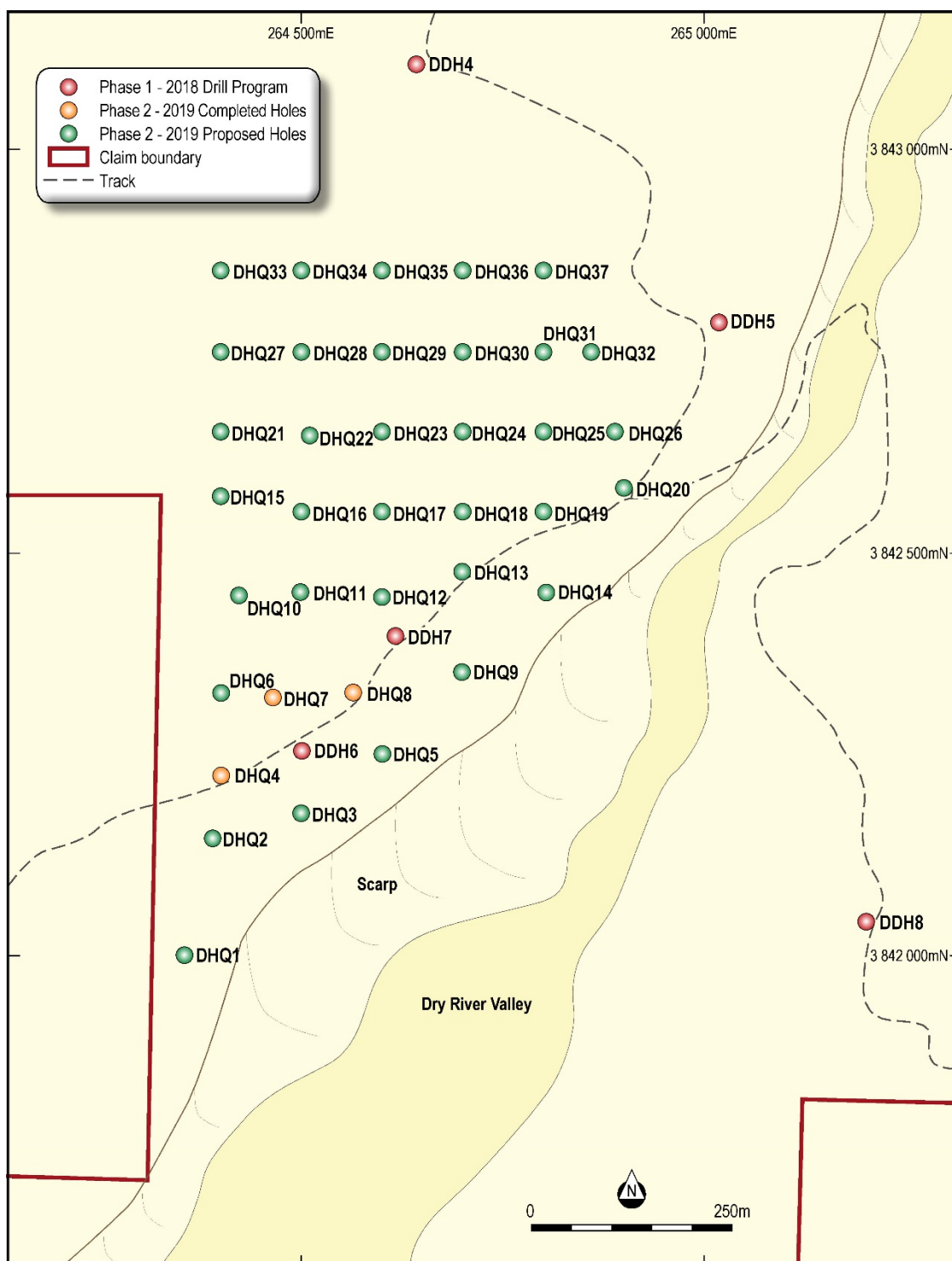
The following table presents the significant intercepts from drill holes DHQ4, DHQ7 and DHQ8. A bottom cut of 1,000 ppm Li was used in the calculation of the zones labelled Upper and Lower. A bottom cut of 2,000 ppm Li was used in the calculation of the higher grade internal intervals. All holes were drilled vertical.

**TABLE 1 – BIG SANDY PROJECT SIGNIFICANT INTERCEPTS**

Hole_id	Easting	Northing	RL (m)	Depth (m)	Zone	Width (m)	From (m)	To (m)	Li ppm
<b>DHQ4</b>	<b>264,400</b>	<b>3,842,223</b>	<b>615</b>	<b>78.33</b>	<b>Upper</b>	<b>19.55</b>	<b>11.45</b>	<b>31.00</b>	<b>2,200</b>
					<i>incl</i>	6.00	13.00	19.00	2,695
					<i>incl</i>	2.00	21.00	23.00	2,505
					<i>incl</i>	2.00	25.00	27.00	2,910
					<b>Lower</b>	<b>34.00</b>	<b>32.00</b>	<b>66.00</b>	<b>1,941</b>
					<i>incl</i>	5.00	32.00	37.00	2,238
					<i>incl</i>	4.00	39.00	43.00	2,523
					<i>incl</i>	3.00	49.00	52.00	2,587
					<i>incl</i>	3.00	55.00	58.00	2,363
					<i>incl</i>	2.00	63.00	65.00	2,400
<b>DHQ7</b>	<b>264,465</b>	<b>3,842,320</b>	<b>615</b>	<b>72.24</b>	<b>Upper</b>	<b>14.67</b>	<b>14.33</b>	<b>29.00</b>	<b>2,344</b>
					<i>incl</i>	11.67	14.33	26.00	2,529
					<b>Lower</b>	<b>29.00</b>	<b>30.00</b>	<b>59.00</b>	<b>1,891</b>
					<b>and</b>	<b>4.00</b>	<b>61.00</b>	<b>65.00</b>	<b>1,273</b>
					<i>incl</i>	5.00	34.00	39.00	2,238
					<i>incl</i>	4.00	41.00	45.00	2,783
					<i>incl</i>	2.00	51.00	53.00	2,235
<b>DHQ8</b>	<b>264,565</b>	<b>3,842,325</b>	<b>617</b>	<b>72.24</b>	<b>Upper</b>	<b>23.30</b>	<b>6.70</b>	<b>30.00</b>	<b>2,154</b>
					<i>incl</i>	3.00	8.00	11.00	2,493
					<i>incl</i>	4.00	13.00	17.00	2,555
					<i>incl</i>	4.00	18.00	22.00	2,923
					<b>Lower</b>	<b>35.00</b>	<b>31.00</b>	<b>66.00</b>	<b>2,078</b>
					<i>incl</i>	5.00	34.00	39.00	2,492
					<i>incl</i>	8.00	40.00	48.00	2,576
					<i>incl</i>	3.00	52.00	55.00	2,493
					<i>incl</i>	2.00	57.00	59.00	2,645

Note: Easting and Northing coordinates: NAD83 / UTM zone 12N

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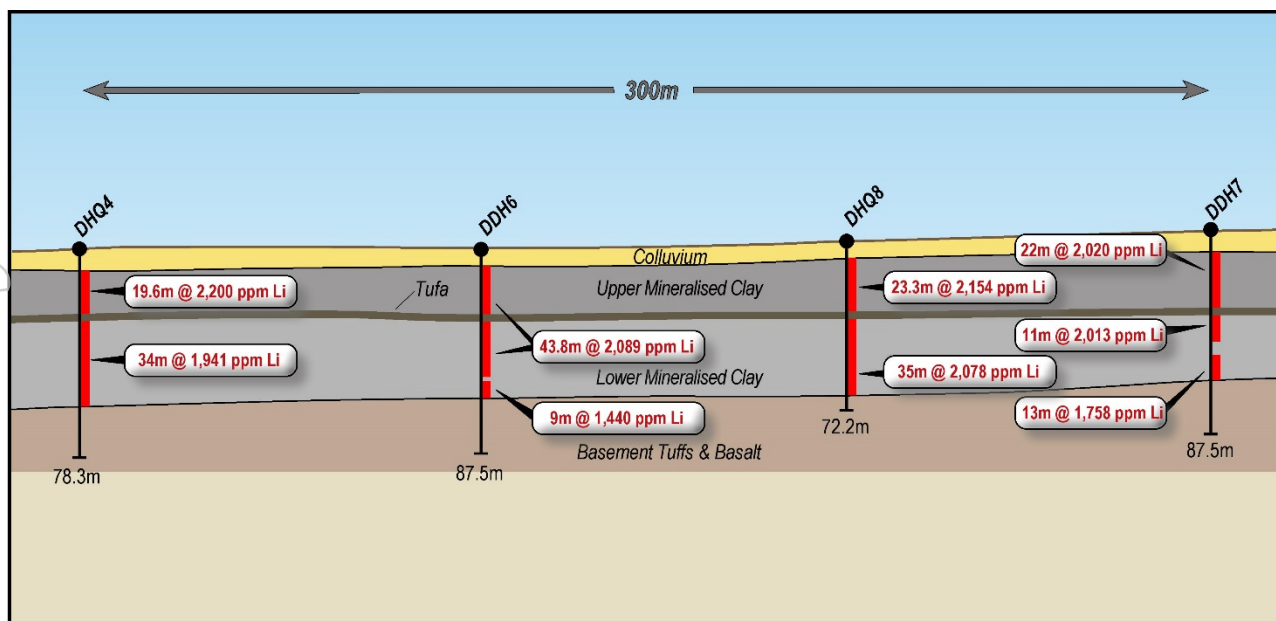


**Figure 2 – Phase 2 Drill plan comprising DHQ4, DHQ7 and DHQ8 and including drill holes DDH4, DDH5, DDH6 and DDH7 completed as part of the Phase 1 drilling program**

The drilling was completed using HQ diamond drilling equipment, producing a core with a diameter of 63.5mm. The previous drill program completed with BQ drill equipment and a core diameter of 36.5mm. This has produced 3 times the core volume resulting in better core recovery and a larger sample size.

Drill hole DHQ8 was drilled between DDH6 and DDH7 of the Phase 1 program (Figure 2). DHQ8 returned similar results to that of the Phase I holes producing 2 distinct zones, an upper and a lower mineralised clay separated by the same tufa (limestone) horizon, that is directly underlain by the distinct green clays.

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**Figure 3 – Big Sandy drilling cross section looking north.**

DHQ4 is located 100m to the west and DHQ7 100m to the north of DDH6 intersected similar geology with results demonstrating two well defined mineralised zones both containing zones of higher-grade lithium.

#### **BIG SANDY PHASE 2 DRILLING PROGRAM – NEXT STEPS**

The Company is advancing its Phase 2 drilling program with drill holes DHQ3, DHQ5, DHQ9, DHQ11, DHQ12 and DHQ13 completed and geological logging and sampling underway with assays being sent to the laboratory on a hole-by-hole basis.

The Company expects a stream of results over the coming months as it builds momentum towards its targeted maiden JORC resource for the Big Sandy Project.

**FOR FURTHER INFORMATION PLEASE CONTACT:**

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## ABOUT HAWKSTONE

Hawkstone Mining is an ASX listed exploration company with clay and brine-hosted lithium projects located in the states of Arizona and New Mexico, United States of America. The Company's focus is its highly prospective lithium projects covering 49.6km<sup>2</sup> within some of the world's most highly attractive mining localities. The Company has a corporate office located in Perth, Australia and an expert technical team with extensive experience in exploration and discovery led by Chief Technical Officer Greg Smith, a geologist with 40 years of experience and Managing Director Paul Lloyd who has been responsible for numerous capital raisings, initial public offerings in the resources and oil and gas industries over the past decade.

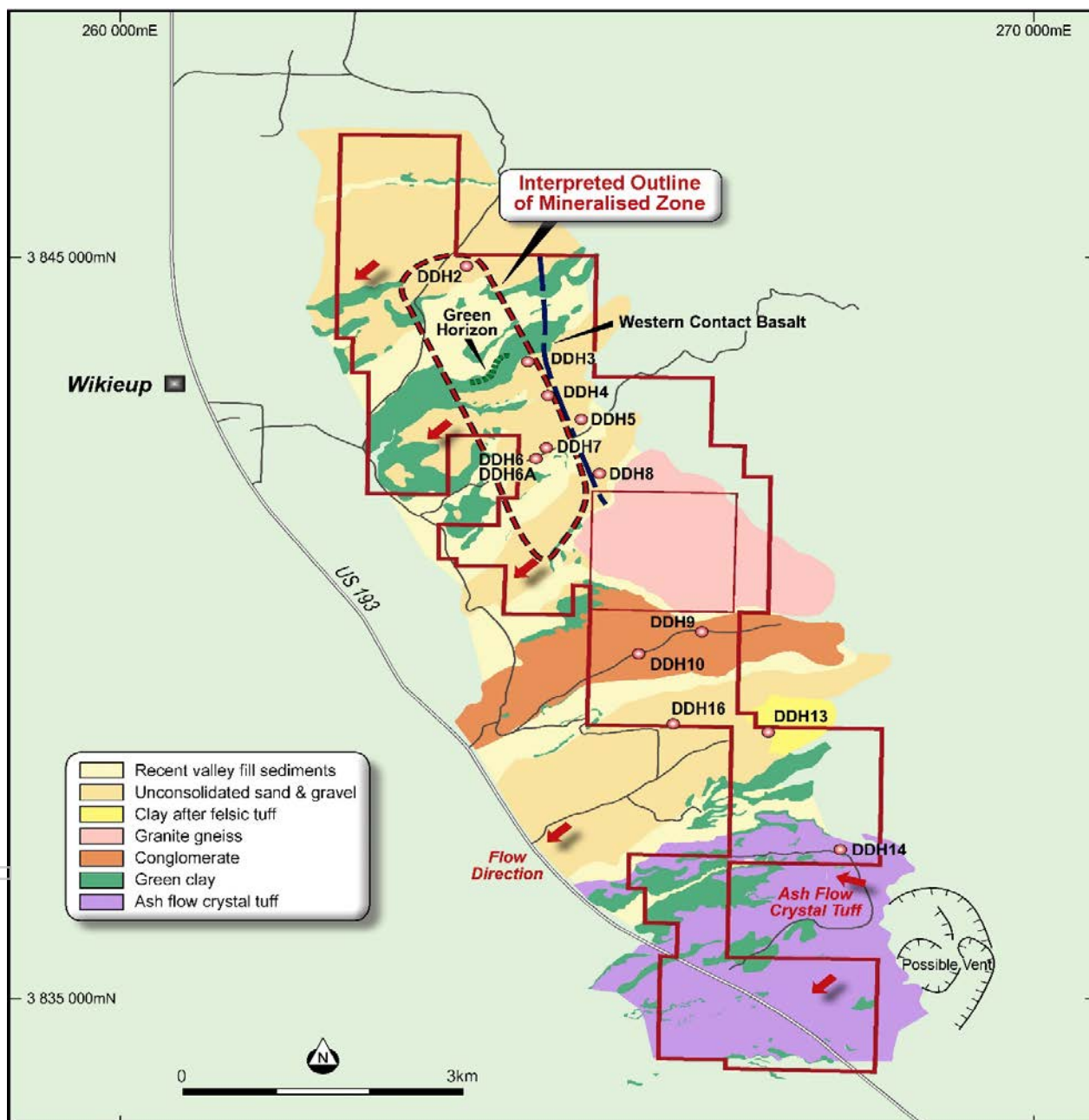


Figure 4 – Big Sandy Lithium-Clay Project geology and BLM Claims



## COMPETENT PERSONS STATEMENT

The information in this announcement that relates to exploration results for the Big Sandy Project is based on and fairly represents information compiled by Mr Gregory Smith, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Smith 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 Smith consults to the Company as its Chief Technical Officer and holds shares in the Company. Mr Smith consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

### 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	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.	This announcement primarily relates to sampling completed as a result of a diamond drill program.  Previous sampling programs have included diamond drilling, channel sampling and grab sampling as well as shallow auger drill holes.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Samples of drillcore were taken at approximately 1m intervals with respect for geological contacts.

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	<p>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.</p>	<p>With the exception of the surficial colluvium that was not sampled the entire diamond core was split (halved) and sampled.</p>
Drilling techniques	<p>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,</p>	<p>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.</p>
	<p>depth of diamond tails, face sampling bit or other type, whether core is oriented and if so, by what method, etc.).</p>	<p>As all of the stratigraphy is flat lying all holes are drilled vertical and no core orientation is required. As all potentially mineralised zones lie within 100m of surface no downhole surveys were completed.</p>
Drill sample recovery	<p>Method of recording and assessing core and chip sample recoveries and results assessed.</p>	<p>All recoveries were first calculated and 1m downhole depths marked prior to geological logging and sampling.</p>
	<p>Measures taken to maximise sample recovery and ensure representative nature of the samples.</p>	<p>The core was drilled with a bit that has been found to work exceptionally well in tuffs/clays. Both the rotation speed and feed rate were slowed to maximise recovery.</p>



	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.	Core recovery was greater than +95% in the mineralised intervals. The Li mineralisation is hosted in clay that is extremely fine grained and even textured.
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.	Geological logging was completed on all core noting the rock type, grain size, colour, presence of carbonate and clay type to a level required to support Mineral Resource estimation, mining studies and metallurgical studies.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography	Logging has been completed in the form of geology and recoveries. All core has been photographed both wet and dry.
	The total length and percentage of the relevant intersections logged.	The entire core is logged noting any intervals of low or non-recovery.
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	All core was halved using a paint scraper or diamond saw depending upon the hardness of the material.
	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	Half core was taken and bagged in consecutively numbered bags for analysis.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Representative of material drilled.
	Quality control procedures adopted for all subsampling stages to maximise representivity of samples.	A duplicate consisting of quarter core, a standard or blank were placed in the sample stream at a ratio of 1:10.

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	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.	Half core taken as the sample with the exception of the duplicate samples where the half core was split into 2 samples consisting of a quarter core each.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Sample sizes are appropriate for grain size of material sampled. Lithium hosted in micron scale clay minerals.
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the Assaying and laboratory procedures used and whether the technique is considered partial or total.	The assay technique (ME-MS61) is a total process, as a 4 acid digest is used to remove the lithium from the clay prior to analysis. This method was used for core samples.
	<p>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.</p> <p>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.</p>	<p>These geophysical instruments are not used in assessing the mineralization at the Project.</p> <p>Quality control procedures consist of inserting a standard, blank or duplicate sample into the sample stream at a ratio of 1:10. From the data to date the results of the QC samples are within acceptable levels.</p>
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	All diamond drill results were examined by GL Smith a consultant geologist whom is contracted to the company.
	The use of twinned holes.	No twin holes were drilled or have been drilled.
	Documentation of primary data, data entry procedures, data	The data are currently stored in hardcopy and digital format in the Company's office.

	verification, data storage (physical and electronic) protocols.	A hard drive copy of this is stored with GL Smith.
	Discuss any adjustment to assay data.	No adjustment was made to assay data.
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.	All diamond drill holes have been set out utilizing hand held GPS units, having an accuracy of $\pm 3$ m in open ground.
	Specification of the grid system used.	NAD83 UTM Zone 12N
	Quality and adequacy of topographic control.	No survey has been undertaken. Hand held GPS coordinates have been utilized to locate drill holes to date. A survey is planned.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	The diamond drilling described in the report preceding this table are at approximately 100m centres except where the holes have been moved slightly to minimise environmental impact or due to topography.
	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.	The diamond drilling described in the report preceding this table are holes specifically used to determine the lithium grades below the surface colluvium/oxidisation, the geology and potential extent.
	Whether sample compositing has been applied.	No sample compositing has been applied.
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	The diamond holes are being drilled to a depth of $\sim 100$ m to determine the geology, grade distribution and potential extents.

	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.	No sampling bias as the vertical diamond holes were drilled into a near flat lying lacustrine sediments.
Sample security	The measures taken to ensure sample security.	All samples were sampled and delivered directly to ALS sample preparation facility in Tucson, Arizona.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No reviews have yet been completed.

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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
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	The Big Sandy project consists of 258 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.
	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.	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.

Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	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).
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Drill hole Information	<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> <ul style="list-style-type: none"> <li>• easting and northing of the drill hole collar</li> <li>• elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>• dip and azimuth of the hole</li> <li>• down hole length and interception depth</li> <li>• hole length.</li> </ul>	All information as listed is provided in the preceding tables.
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	<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>This information has not been excluded.</p>
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<p>Data aggregation methods</p>	<p>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.</p>	<p>Composite drill results at the Big Sandy Project are simple weighted averages with no upper or lower grade truncations. However significant intercepts generally include material grading &gt;1000ppm Li.</p>
	<p>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.</p>	<p>As all samples are 1m or near 1m intervals dependent on geology. Aggregate intercepts are the average of that interval.</p>
	<p>The assumptions used for any reporting of metal equivalent values should be clearly stated.</p>	<p>No metal equivalent values are stated.</p>
<p>Relationship between mineralization widths and intercept lengths</p>	<p>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.</p>	<p>Where thicknesses are stated from the drilling the intercepts reflect the true thickness as the beds are flat lying.</p>



	<p>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').</p>	<p>As above.</p>
<p>Diagrams</p>	<p>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.</p>	<p>Appropriate maps are included.</p>
<p>Balanced reporting</p>	<p>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.</p>	<p>This release includes results to date from the drilling.</p>
<p>Other substantive exploration data</p>	<p>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.</p>	<p>This information will be supplied as the project advances and said data is generated.</p>

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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).	Ongoing diamond drill testing the lacustrine sediments will continue.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	The diagrams in the attached release show the zone of proposed future drilling.

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