

24 July 2018

ASX ANNOUNCEMENT

ASX: ASN, ASNOB

## Anson Receives Positive Results from “Reactor” Evaporation Work

### Highlights:

- Reactor evaporation completed within 2 hours
- Lithium concentration increased to 891ppm
- Magnesium reduced to <2ppm
- Calcium reduced to <5ppm

Anson Resources Limited (Anson) is pleased to announce that it has received further encouraging results from the third and final evaporation technique trialled by Outotec, carried out on the bulk sample extracted from the Cane Creek 32-1 well. This work, which is being run in parallel with the lithium extraction process by Lilac Solutions, forms part of Anson’s plan to fast-track the Paradox Lithium Project in Utah, (the Project) into production.

The goal of the Outotec test work was to study the behaviour of the brine during evaporation and to observe whether the lithium concentration could be increased. Outotec tested three evaporation processes; heat, vacuum and reactor. The successful increase in lithium concentration using a reactor to 891ppm after both magnesium and calcium extraction, completed within 2 hours, resulted in what is considered to be a suitable lithium brine concentration as a feed for the proposed processing plant. Outotec’s conceptual process (see ASX announcement 20 April, 2018) utilising reactors is shown in figure 1.

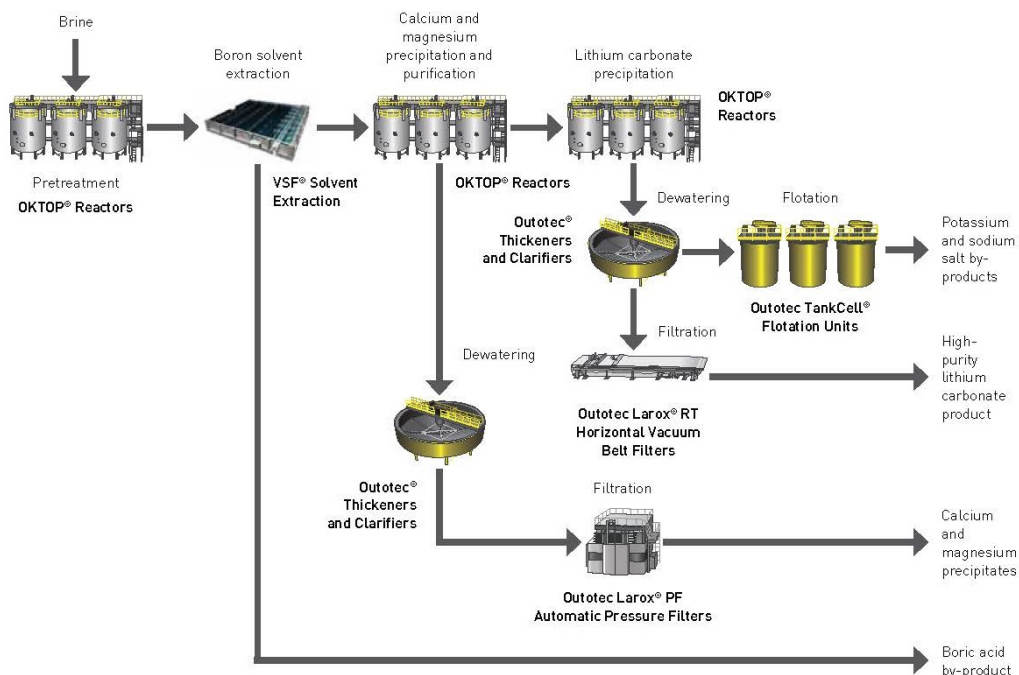
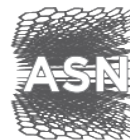


Figure 1: Outotec’s conceptual brine process using reactors



All three evaporation processes tested by Outotec are considered to be successful. The Reactor process was carried out after the extraction of magnesium and calcium, using precipitation, to levels below detection. The removal of the magnesium and calcium are considered important steps as high concentration of these minerals are considered inhibitors to a successful lithium extraction process.

The initial Outotec trials on the magnesium and calcium extraction techniques were completed on a synthetically prepared brine of mineral concentrations similar to that found at the Paradox Lithium Brine project, see ASX announcement 6 July 2017. The extraction of the Mg and Ca resulted in a Li loss of only 1 to 3% in those trials dependent on the pH of the solution.

In the latest test work, using brine from Cane Creek 32-1 well, the volume of brine decreased from 10 litres to 0.38 litres, corresponding to an approximate 96% evaporation level and with an 80% Li recovery in this first pass test work, see Table 1 and Graph 1.

In addition, Sodium (Na) and Potassium (K) concentrations were high but they tended to precipitate out during the evaporation as NaCl and KCl.

Sample	Li (ppm)	Mg (ppm)	Na (ppm)	K (ppm)	Ca (ppm)	Evaporation (approx %)
Original Brine Feed	100	32,400	25,300	28,800	45,000	0
Feed (after Mg and Ca extraction)	42	<2	86,000	17,700	<5	0
After Stage 1, 50% Evaporated (10l feed)	111	<2	119,000	42,300	<10	50
After Stage 2, 50% Evaporated (3.85l feed)	202	2	99,000	78,600	24	75
After Stage 3, 50% Evaporated (2.05l feed)	345	3	92,900	100,000	43	87.5
After Stage 4, 50% Evaporated (1.1l feed)	537	5	96,100	79,600	68	93.8
After Stage 5, 50% Evaporated (0.69l feed)	891	9	89,800	82,600	119	96.9

**Table 1: Metal concentration in solution during the reactor test work.\***

Evaporation was carried out using stirred and heated “reactors”. The evaporation temperature was approximately 100<sup>o</sup> C and was completed in 5 stages to combat the high solid generation. At the end of each stage the crystal slurry was removed and the solution transferred to a smaller reactor.

The 5 “reactors” were 10, 5, 3, 2 and 1 litre in size. The “reactors” were installed on a heating plate and they were equipped with mechanical agitation, temperature measurements and control.

The lithium values during the evaporation test work were assayed both in the saturated brine and the crystal salts by standard lithium assay methods. The precipitated crystals also entrap the crystallising mother liquor and some lithium in it, see Table 2. As in regular mineral processing, the lithium in the crystals can be extracted by further processing.

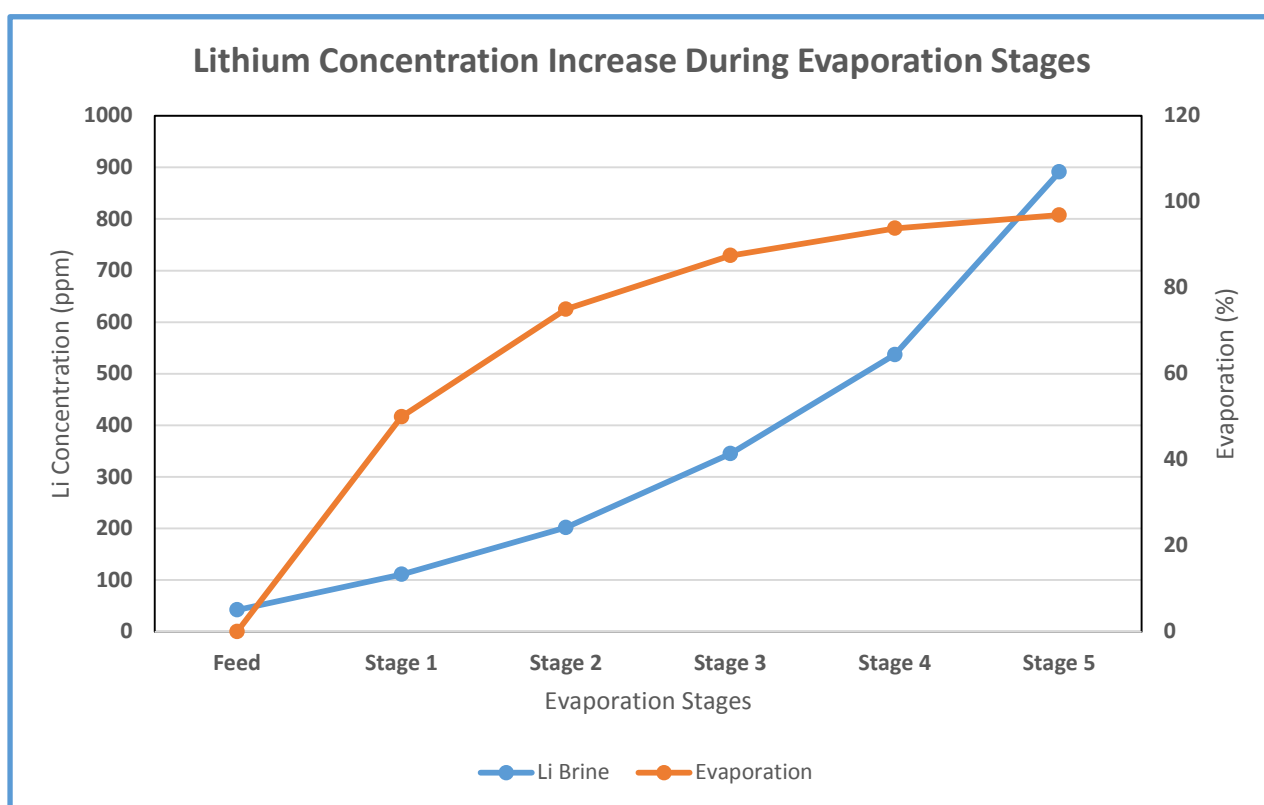
**\* Lithium Brine Evaporation Tests, Anson Resources Ltd Test work status, Eero Kolehmainen (Senior Research Metallurgist-Hydrometallurgy), Outotec**

Sample	Li (%)	Mg (%)	Na (%)	K (%)	Ca (%)	Moist Crystal (g)
Feed						
After Stage 1, 50% Evaporated (10l feed)	<0.02	<0.01	38	0.358	<0.01	1,103
After Stage 2, 50% Evaporated (3.85l feed)	<0.02	<0.01	37.6	0.451	<0.01	568
After Stage 3, 50% Evaporated (2.05l feed)	<0.02	<0.01	28	14.2	<0.01	397
After Stage 4, 50% Evaporated (1.1l feed)	<0.02	<0.01	15.9	30.2	<0.01	173
After Stage 5, 50% Evaporated (0.69l feed)	<0.02	<0.01	26.3	15.5	<0.01	107

**Table 2: Metal concentration in crystal during the reactor test work.\***

The initial volume of the brine feed was 10 litres and was Mg and Ca free. The Mg was precipitated as  $Mg(OH)_2$  by adding NaOH solution which also increased the pH to 9.5. The precipitate was filtered off and the Ca was precipitated from the resultant filtrate as  $CaCO_3$  by the addition of  $Na_2CO_3$ . The slurry was again filtered and the solution evaporated in the reactors.

Extracting the Mg and Ca results in the initial dilution of the brine and therefore a decrease in the Li concentration due to the water additions with the NaOH and  $Na_2CO_3$  solutions. Evaporation in the stirred tanks after the 5 evaporation stages resulted in an increase of the Li concentration from 42 ppm to 891 ppm Li. The metals concentration in the solution during the evaporation is presented in Table 1 and the metals concentration in the crystals is listed in Table 2.



**Graph 1: Graph showing the increase in lithium concentrations during the reactor precipitation.**



Anson's Managing Director, Bruce Richardson, commented, "A total of four different processes are being tested for the evaporation and initial processing of the brine to achieve the best economic outcome for the Company and add to shareholder value. It is very pleasing that similar results have been achieved using the reactor evaporation process on Cane Creek artesian super saturated brines to those achieved using a synthetic brine based upon assay results of brine taken from the Long Canyon. While this test work is not complete, the successful removal of calcium and magnesium are important steps. The Company is continuing with its objective of fast tracking the Paradox Lithium Project into production while at the same time ensuring that the best economic result is achieved for its shareholders."

**ENDS**

**For further information please contact:**

**Bruce Richardson**  
**Managing Director**

**E: [info@ansonresources.com](mailto:info@ansonresources.com)**

**Ph: +61 8 9226 0299**

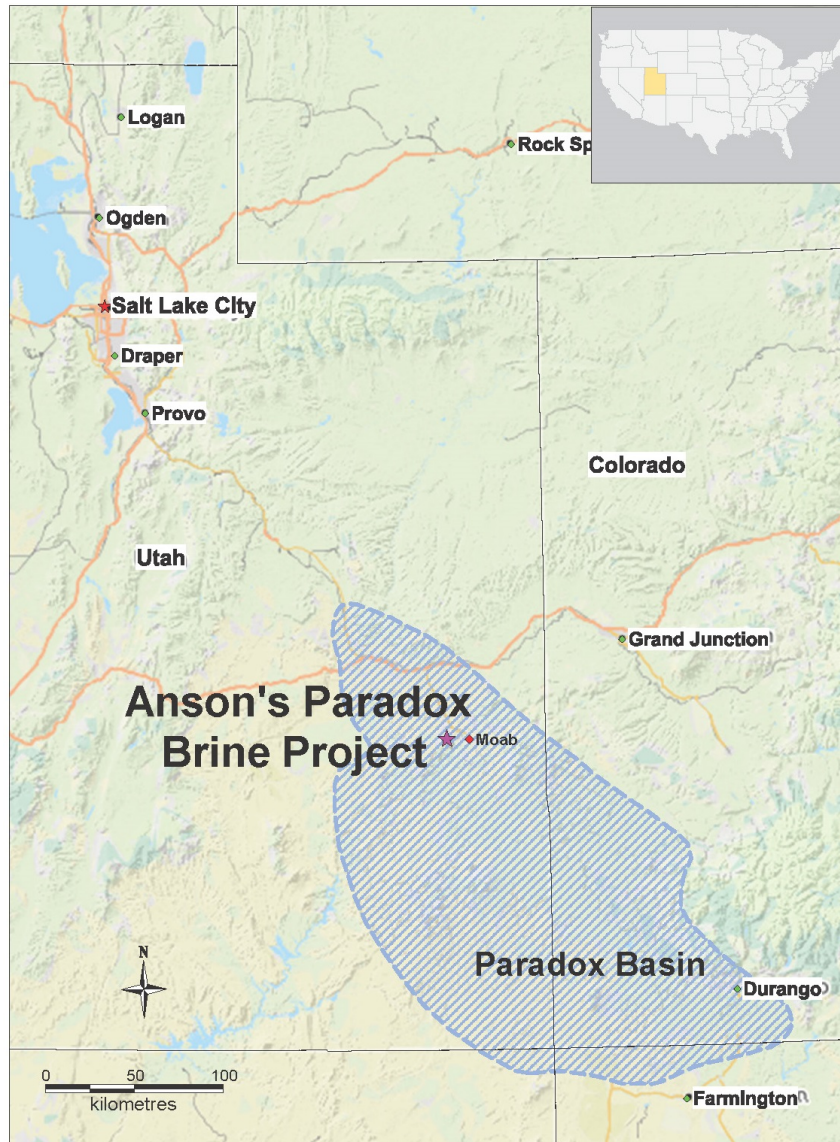
**[www.ansonresources.com](http://www.ansonresources.com)**

**Follow us on Twitter [@anson\\_ir](https://twitter.com/anson_ir)**

**Forward Looking Statements:** Statements regarding plans with respect to Anson's mineral projects are forward looking statements. There can be no assurance that Anson's plans for development of its projects will proceed as expected and there can be no assurance that Anson will be able to confirm the presence of mineral deposits, that mineralisation may prove to be economic or that a project will be developed.

## About the Utah Lithium Project

Anson is targeting lithium rich brines in the deepest part of the Paradox Basin in close proximity to Moab, Utah. Lithium values of up to 1,700ppm have historically been recorded in close proximity to Anson's claim area. The location of Anson's claims within the Paradox Basin is shown below:



**Competent Person's Statement:** The information in this announcement that relates to exploration results and geology is based on information compiled and/or reviewed by Mr Greg Knox, a member in good standing of the Australasian Institute of Mining and Metallurgy. Mr Knox is a geologist who has sufficient experience which is relevant to the style of mineralisation 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 and consents to the inclusion in this report of the matters based on information in the form and context in which they appear. Mr Knox is a director of Anson and a consultant to Anson.

**Chemical Engineer's Statement:** The information in this announcement that relates to lithium extraction and processing is based on information compiled and/or reviewed by Mr. Alexander Grant. Mr. Grant is a chemical engineer with a MS degree in Chemical Engineering from Northwestern University. Mr. Grant has sufficient experience which is relevant to the lithium extraction and processing undertaken to evaluate the data presented.

## JORC CODE 2012 “TABLE 1” REPORT

### Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where ‘industry standard’ work has been done this would be relatively simple (eg ‘reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay’). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<p><b>Cane Creek 32-1-25-20 well</b></p> <ul style="list-style-type: none"> <li>Mud Rotary (historic oil well).</li> <li>On re-entry, sampling of the supersaturated brines was carried out</li> <li>Samples were collected in a professional manner</li> <li>Samples were collected in IBC containers from which samples for assay were collected</li> <li>Initial samples were sent to multiple certified laboratories in the USA</li> <li>Bulk samples were sent to metallurgical laboratories</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>Mud Rotary Drilling (18 ½” roller bit).</li> <li>Inner tubing (2 7/8”)</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<p><b>Cane Creek 32-1-25-20</b></p> <ul style="list-style-type: none"> <li>Sampling of the targeted horizons was carried out at the depths interpreted from the newly completed geophysical logs. Clastic Zones 17, 19, 29, 31 and 33 were sampled</li> </ul>

## JORC CODE 2012 “TABLE 1” REPORT

Criteria	JORC Code Explanation	Commentary
<i>Logging</i>	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> </ul>	<p><b>Cane Creek 32-1-25-20</b></p> <p>All cuttings from the historic oil wells were geologically logged in the field by a qualified geologist</p>
	<ul style="list-style-type: none"> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>Geological logging is qualitative in nature.</li> <li>All the drillhole were logged.</li> </ul>
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled,</li> </ul>	<p><b>Cane Creek 32-1-25-20</b></p> <ul style="list-style-type: none"> <li>Sampling followed the protocols produced by SRK for lithium brine sampling</li> <li>Samples were collected in IBC containers and samples taken from them.</li> <li>Duplicate samples kept</li> <li>Storage samples were also collected and securely stored</li> <li>Bulk samples were also collected for future use.</li> </ul> <ul style="list-style-type: none"> <li>Sample sizes were appropriate for the program being completed.</li> <li>Due to artesian flow, continual brine samples can be collected</li> </ul>
<i>Quality of assay data and laboratory tests</i>	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<p><b>Cane Creek 32-1</b></p> <ul style="list-style-type: none"> <li>Assays were carried out in certified laboratories using standard assaying techniques</li> <li>ICP was used for cation and metal analysis</li> <li>IP was used for anion analysis</li> <li>The metallurgical assays were carried out in certified laboratories in Finland and California</li> <li>Assaying was carried out using ICP, the standard technique for Li, Na, Mg &amp; B</li> <li>Quality and assay procedures are considered appropriate</li> <li>Duplicate samples kept (can be sent to an external lab)</li> <li>Bulk sample (1000l) has been sent off for bench top test work</li> </ul>

## JORC CODE 2012 “TABLE 1” REPORT

Criteria	JORC Code explanation	Commentary
<p><i>Verification of sampling and assaying</i></p>	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> <i>Discuss any adjustment to assay data.</i></li> </ul>	<p><b>Cane Creek 32-1-25-20</b></p> <p>Documentation has been recorded and sampling protocols followed. Samples have been assayed at secondary lab to confirm results</p>
<p><i>Location of data points</i></p>	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <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> <i>Whether sample compositing has been applied.</i></li> </ul>	<p><b>Cane Creek 32-1-25-20</b></p> <ul style="list-style-type: none"> <li>• The project is at an early stage and information is insufficient at this stage in regards to sample spacing and distribution. No sample compositing has occurred.</li> </ul>
<p><i>Data spacing and distribution</i></p>	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <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></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Data spacing is considered acceptable for a brine sample but has not been used in any Resource calculations</li> <li>• No sample compositing has occurred.</li> </ul>
<p><i>Orientation of data in relation to geological structure</i></p>	<ul style="list-style-type: none"> <li>• <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></li> <li>• <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></li> </ul>	<ul style="list-style-type: none"> <li>• All drill holes were drilled vertically (dip -90).</li> <li>• Orientation has not biased the sampling</li> </ul>



## JORC CODE 2012 “TABLE 1” REPORT

Criteria	JORC Code explanation	Commentary
<i>Sample security</i>	The measures taken to ensure sample security.	<b>Cane Creek 32-1-25-20</b> <ul style="list-style-type: none"> <li>• Sampling protocols were followed and chain of custody recorded.</li> <li>• Samples were delivered directly to the lab</li> </ul>
<i>Audits or reviews</i>	<i>The results of any audits or reviews of sampling techniques and data.</i>	<b>Cane Creek 32-1-25-20</b> <ul style="list-style-type: none"> <li>• No audits or reviews of the data have been conducted at this stage.</li> </ul>

### Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li>• <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></li> <li>• <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></li> </ul>	<b>Cane Creek 32-1-25-20</b> <ul style="list-style-type: none"> <li>• The project consists of 983 claims.</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li>• <i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<b>Cane Creek 32-1-25-20</b> <ul style="list-style-type: none"> <li>• Past exploration in the region was for oil exploration.</li> <li>• Brine analysis only carried out where flowed to surface during oil drilling.</li> </ul>
<i>Geology</i>	<ul style="list-style-type: none"> <li>• <i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Oil was targeted within clastic layers (mainly Clastic Zone 43)</li> </ul> <b>Cane Creek 32-1-25-20</b> <ul style="list-style-type: none"> <li>• Lithium is being targeted within the clastic layers in the Paradox Formation.</li> </ul>

## JORC CODE 2012 “TABLE 1” REPORT

Criteria	JORC Code explanation	Commentary
<p><i>Drill hole Information</i></p>	<ul style="list-style-type: none"> <li>• <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:</i> <ul style="list-style-type: none"> <li>○ <i>easting and northing of the drill hole collar</i></li> <li>○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li>○ <i>dip and azimuth of the hole</i></li> <li>○ <i>down hole length and interception depth</i></li> <li>○ <i>hole length.</i></li> </ul> </li> </ul>	<p><b>Drillhole Summary:</b>  <b>Cane Creek 32-1-25-20</b></p> <ul style="list-style-type: none"> <li>• 610,154E, 4,270,986N</li> <li>• 5,662 RL</li> <li>• Dip 90<sup>0</sup></li> <li>• Azim 0<sup>0</sup></li> <li>• 11,405 TD</li> <li>• CZ 29 – 6,170 ft depth</li> </ul>
	<ul style="list-style-type: none"> <li>• <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></li> </ul>	
<p><i>Data aggregation methods</i></p>	<ul style="list-style-type: none"> <li>• <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.</i></li> <li>• <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></li> <li>• <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<p><b>Cane Creek 32-1-25-20</b></p> <ul style="list-style-type: none"> <li>• No averaging or cut-off grades have been applied.</li> </ul>
<p><i>Relationship between mineralisation widths and intercept lengths</i></p>	<ul style="list-style-type: none"> <li>• <i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li>• <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li>• <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></li> </ul>	<p><b>Cane Creek 32-1-25-20</b></p> <ul style="list-style-type: none"> <li>• Exploration is at an early stage and information is insufficient at this stage.</li> <li>• Drill hole angle (-90) does not affect the true width of the brine</li> </ul>

## JORC CODE 2012 “TABLE 1” REPORT

Criteria	JORC Code explanation	Commentary
<i>Diagrams</i>	<ul style="list-style-type: none"> <li>• <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></li> </ul>	<p><b>Long Canyon Historic Wells</b></p> <ul style="list-style-type: none"> <li>• No new discoveries have occurred;</li> <li>• Most are historic results from the 1960's, though some oil wells drilled recently.</li> </ul>
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li>• <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></li> </ul>	<p><b>Cane Creek 32-1-25-20</b></p> <ul style="list-style-type: none"> <li>• Exploration is at an early stage</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li>• <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></li> </ul>	<p><b>Cane Creek 32-1-25-20</b></p> <ul style="list-style-type: none"> <li>• The exploration reported herein is still at an early stage.</li> <li>• Test work of the brine is on going</li> </ul>
<i>Further work</i>	<ul style="list-style-type: none"> <li>• <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li>• <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></li> </ul>	<p><b>Cane Creek 32-1-25-20</b></p> <ul style="list-style-type: none"> <li>• Further work is required which includes mapping and other exploration programs such as further core drilling.</li> <li>• Further metallurgical work is required.</li> </ul>