Lake Resources NL (ASX:LKE)

**Kachi Production Expected to Double to 50ktpa LCE in DFS**

*(Currency is A$ unless noted otherwise)*

<table>
<thead>
<tr>
<th>Closing Price (A$/sh)</th>
<th>$0.99</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rating</td>
<td>BUY</td>
</tr>
<tr>
<td>Target (A$/sh)</td>
<td>$2.20</td>
</tr>
<tr>
<td>Return to Target</td>
<td>123%</td>
</tr>
<tr>
<td>S2 Week Low / High</td>
<td>$0.16 / $1.19</td>
</tr>
</tbody>
</table>

**CAPITALIZATION**

<table>
<thead>
<tr>
<th>Shares Outstanding (M)</th>
<th>1,216.0 / 1,369.7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market Capitalization (SMM)</td>
<td>$1,197.8</td>
</tr>
<tr>
<td>Enterprise Value (SMM)</td>
<td>$1,141.8</td>
</tr>
<tr>
<td>Cash and Cash Equivalents (SMM)</td>
<td>$56.0</td>
</tr>
<tr>
<td>Total Debt (SMM)</td>
<td>$0.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FYE: JUN 30</th>
<th>2021A</th>
<th>2022E</th>
<th>2023E</th>
</tr>
</thead>
<tbody>
<tr>
<td>LCE produced (t)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total cash costs (US$/t)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>EPS (A$/sh)</td>
<td>0.00</td>
<td>0.00</td>
<td>-0.02</td>
</tr>
<tr>
<td>CFPS (A$/sh)</td>
<td>0.00</td>
<td>0.00</td>
<td>-0.02</td>
</tr>
</tbody>
</table>

**STOCK CHART**

**RELATIVE PERFORMANCE**

**RELATIVE VALUATION**

<table>
<thead>
<tr>
<th>CS EV/t LCE</th>
<th>$233.2 / 0.40x</th>
</tr>
</thead>
<tbody>
<tr>
<td>P/NAV</td>
<td>$167.8 / 0.73x</td>
</tr>
</tbody>
</table>

**MAJOR SHAREHOLDERS**

Management (9.12%), Acuity Capital Investment Management (3.29%), Sydney Business Advisers Pty Ltd (1.22%), Purple Manggis Pty Ltd (1.07%)

**DISCLOSURE CODE:**

(please refer to the disclosures listed on the back page)

Source: RCS, Company Information, S&P Capital IQ

**Company Description**

Lake Resources NL is a clean lithium developer utilising clean, direct extraction technology for the development of sustainable, high purity lithium from its flagship Kachi project, as well as three other lithium brine projects in Argentina. The projects are located in a prime location within the Lithium Triangle, where 40% of the world’s lithium is produced at the lowest cost. The Kachi project covers 70,000 ha over a salt lake, just south of Livent Corp.’s lithium operation in Argentina, and hosts a large indicated and inferred resource estimate of 4.4Mt LCE.

**Impact: Very Positive**

Lake Resources has increased the planned production at its flagship Kachi project in Argentina from 25.5ktpa to 50ktpa lithium carbonate equivalent (LCE). The upcoming Definitive Feasibility Study (DFS) will use 50ktpa as its base case, and the increased production is expected to be supported by an updated resource estimate. **We view this production increase very positively, as the PFS which utilized a 25.5ktpa scenario had already shown robust economics. We anticipate the DFS to demonstrate even stronger economics and are therefore increasing our target price for Lake to A$2.20/sh (was A$1.25/sh).**

- **Several drivers led to double production decision.** This included: 1) increased demand for high-purity LCE from interested parties (off-takes pending), 2) support by UK and Canadian Export Credit Agencies (ECAs) to cover 70% of the project debt, with additional interest from various international banks, 3) lowering of export taxes by the Argentinian government, and 4) confidence in its technology partner, Lilac Solutions, to scale up the modular and cost-effective direct lithium extraction (DLE) technology to be implemented at Kachi.

- **Expect a resource upgrade shortly.** Only 25% of its 4.4Mt LCE JORC compliant brine resource is classified as M&I resources. Furthermore, only 20% of the resource was being utilized to support the 25.5ktpa production scenario, thus we believe existing resources can already support the increased LCE production. Expect recent drilling to help upgrade resources to a level suitable for inclusion in the DFS.

- **Increasing our target price to A$2.20/sh.** While details were not provided, we are updating our model to include the expanded production scenario. We assume Kachi begins producing in Q4/24 and ramps up to 50,000tpa by H2/26. We also assume that doubling production will increase capex (US$544M in the 2021 PFS) by ~60%, yielding total capex requirements of US$870M. Given the commitments received from the ECA’s we assume that 70% of capex will be funded via project debt with the rest covered by Lilac Solutions *(read more)* and through future equity financings.

- **Primary focus remains on Kachi in 2022.** An initial 1,200m, four well drill program is underway to expand resources and more importantly upgrade from inferred to indicated. While Kachi continues to be the focus, a 10-hole program is expected to commence shortly at its 100%-owned Olaroz, Cauchari and Paso brine projects *(read more)*. More information on Kachi can be found in our initiation report.

We maintain our BUY rating and are increasing our price target to A$2.20/sh *(was A$1.25/sh)*. Our target price is derived using the discounted cash flow method (DCF) to which we apply a 0.7x multiple. We believe the upcoming DFS, drilling results as well as general advancements at Kachi should continue to re-rate the stock. **Upcoming catalysts:** 1) Demo plant (Q1/22), 2) Assays from brine projects (2022), 2) Off-take discussions (ongoing), 3) Resource update, DFS and ESIA (Q2/22), 4) Construction decision (H2/22), and 5) H2/24 production.
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January 19, 2022

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