This Background Paper is compiled mainly based on internet research and company presentations etc, whose accuracy has not been verified by Fox Davies Capital, and is solely for information purpose. For further details on sources, please contact FDC.
Lithium Metal and Applications

Lithium is a soft metal, the lightest in the periodic table, with a silvery white appearance that reacts immediately with water and air. Lithium also has the highest electrochemical potential of all metals. These properties provide very high energy and power densities for long useful life in small and comparatively lightweight packages that is driving growth in demand.

Lithium does not occur as a pure element in nature but is contained within mineral deposits or salts including brine lakes and sea water. The contained concentration of lithium is generally low and there are only a limited number of resources where lithium can be economically extracted.

Lithium and its chemical compounds exhibit a broad range of beneficial properties including:

- The highest electrochemical potential of all metals
- An extremely high coefficient of thermal expansion
- Fluxing and catalytic characteristics
- Acting as a viscosity modifier in glass melts

As a result, lithium is used in numerous applications which can be divided into two broad categories: chemical applications and technical applications.

Chemical Applications

Lithium can be processed to form a variety of chemicals, including lithium carbonate, lithium bromide, lithium chloride, butyl lithium and lithium hydroxide. The fastest growing (and second-largest) market for lithium globally is for use in batteries.

Batteries

The two main lithium battery types are:

- Primary (non-rechargeable): including coin or cylindrical batteries used in calculators and digital cameras. Lithium batteries have a higher energy density compared to alkaline batteries, as well as low weight and a long shelf and operating life.
- Secondary (rechargeable): key current applications for lithium batteries are in powering cell phones, laptops, other handheld electronic devices, power tools and large format batteries for electricity grid stabilisation. The advantages of the lithium secondary battery are its higher energy density and lighter weight compared to nickel-cadmium and nickel-metal hydride batteries.

A growing application for lithium batteries is as the power source for a wide range of electric vehicles including electric bikes / scooters, buses, taxis, trucks as well as passenger electric vehicles. There are three main categories of electric passenger vehicles: Hybrid Electric Vehicles, Plug-in Hybrid Electric Vehicles and Electric Vehicles.

Other Chemical Applications

Lithium chemicals are also used in a variety of other applications including:

- Lubricants: lithium is used as a thickener in grease ensuring lubrication properties are maintained over a broad range of temperatures.
- Aluminum Smelting: the addition of lithium during aluminum smelting reduces power consumption, increases the bath electrical conductivity and reduces fluorine emissions.
- Air Treatment: lithium may be used as an absorption medium for industrial refrigeration systems and for humidity control and drying systems.
- Pharmaceuticals: lithium is used in the treatment for bi-polar disorder as well as in other pharmaceutical products.

**Technical Applications**

Lithium products are used directly in technical applications, particularly where lithium products with low iron concentration are necessary to meet the highly specialised requirements of end users. Currently, the largest global market for lithium is for use in glass and ceramics.

**Glass and Ceramics**

- Glass: including container glass, flat glass, pharmaceutical glass, specialty glass and fibreglass. These glass products may be designed for durability or corrosion resistance or for use at high temperatures where thermal shock resistance is important. The addition of lithium increases the glass melt rate, lowers the viscosity and the melt temperature providing higher output, energy savings and moulding benefits.

- Ceramics: including ceramic bodies, frits, glazes and heatproof ceramic cookware. Lithium lowers firing temperatures and thermal expansion and increases the strength of ceramic bodies. The addition of lithium to glazes improves viscosity for coating, as well as improving the glaze’s colour, strength and lustre.

- Specialty Applications: including induction cook tops and cookware. Lithium’s extremely high coefficient of thermal expansion makes these products resistant to thermal shock and imparts mechanical strength.

**Other Technical Applications**

Lithium is also used in a variety of metallurgical applications including:

- Steel Castings: the addition of lithium to continuous casting mould fluxes assists in providing thermal insulation and lubricates the surface of the steel in the continuous casting process.

- Iron Castings: in the production of iron castings, such as engine blocks, lithium reduces the effect of veining, thereby reducing the number of defective casts.

**Exhibit 1: Lithium Applications 2011**

Source: signumBOX
Lithium Resources

Lithium-containing products are currently derived from two resource types with varying degrees of contained concentrations of lithium salts from –

- Hard rock mines, mainly in Australia, that produce mineral concentrates for technical mineral-based uses and conversion to lithium chemicals almost exclusively in China, and
- Continental brines, e.g. the salars mainly in Argentina, Chile, and USA for lithium carbonate, hydroxide and chloride production.

These are the primary brines and minerals based feedstocks for derivative lithium chemicals, as well as much smaller volumes of lithium metal and alloy. Generally, but not exclusively, lithium-hosted continental brines are regarded as being less expensive to exploit and therefore more commercially viable compared to lithium minerals although all are in remote locations and between them present very different technical and logistical challenges, and continue to underperform expectations. The other important aspect to consider when looking at the brine source method versus hard rock brines is the quality grade of the lithium carbonate. It is imperative for lithium to be ‘battery grade’ and leave behind the unwanted contaminants that the deposits may contain from brine sources. Due to the variance in grades of lithium carbonate producers have strict approval and testing processes to ensure quality of supply.

Exhibit 2: Lithium Reserves by Country

Source: signumBOX estimates 2011

Minerals

Lithium can be contained within hard rock minerals. There are three lithium minerals commercially mined today: spodumene, petalite and lepidolite. Spodumene is the most important commercially mined lithium mineral given its higher inherent lithia content. Both open pit and underground mining methods are used to extract lithium minerals. Typically, the mineralized rock contains approximately 12% to 20% spodumene, or approximately 1% to 1.5% lithium oxide.

Once extracted, the lithium mineral ore is crushed and subjected to a number of separation processes to upgrade the lithium content by removing waste materials. Different separation processes will produce concentrate with differing levels of lithium content, which can be used in either the technical or chemical-grade markets. Chemical grade lithium concentrate sold to chemical producers undergoes additional processing through the sulphate route process to convert the chemical-grade lithium concentrate to a variety of lithium chemicals including lithium carbonate, lithium chloride and lithium hydroxide.
Brines

Lithium brine bodies in salt lakes, or salars, are formed in basins where water which has leached the lithium from the surrounding rock is trapped and concentrated by evaporation. The process of extracting the lithium from brines involves pumping the brines into a series of evaporation ponds to crystallize other salts, leaving lithium-rich liquor. This liquor is further processed to remove impurities before conversion to either lithium carbonate or lithium chloride for further upgrading to lithium hydroxide. The majority of the products from the brine operations are destined for the chemical application markets, with the remainder consumed in technical applications.

Nearly one-half of the world’s lithium production comes from lithium brines in an Andes mountains’ region encompassing parts of Argentina, Chile and Bolivia (no current production). This area is often referred to as the “Lithium Triangle” and the primary brines are illustrated below. In the mid-1990s, the development of these large-scale, low-cost brine resources in Chile and Argentina by SQM, Rockwood and FMC fundamentally changed global lithium supply. With its cost advantage over mineral-based production, brine producers lowered prices to gain market share, resulting in closure of mineral conversion plants in the USA, Russia and China.

Sources: Company presentations, Roskill and independent consultants (to Orocobre) estimates
Note: stated resources are not NI 43-101 compliant
- Represents smaller brines
Demand

The fact that so much future growth is dependent on technology changes make forecasting especially difficult. A dozen or so lithium demand forecasts have been made in the last three years that vary widely with forecasts for 2015 in the range of 138,500-265,000t for lithium carbonate equivalent (“LCE”) and by 2020 at between 174,800-500,000t LCE; as portrayed in Exhibit 3, the largest increase by end-use is projected to be rechargeable batteries.

The Lithium Market Outlook 2017, by RIS noted that lithium consumption increased by a rate of 10% per year between 2000 and 2008. With few alternatives for lithium within portable devices, the industry is set for continuing strong demand, particularly for lithium-ion batteries and lithium compounds of which they are manufactured.

Exhibit 3: World Consumption of Lithium by End-Use

In terms of volume, glass and ceramics are still the largest end use markets for lithium minerals and chemicals whilst consumption of lithium chemicals in small batteries increased substantially from 2000 to overtake use in lubricating greases and aluminium refining (Exhibit 3). Lithium is important in the glass-making industry as lithium acts as a viscosity modifier in glass melts.

The small battery market (calculators, computers, cameras, communications devices, etc) is forecast to maintain high growth levels (10% pa) whilst the emerging large battery market for electric bicycles, hybrid and all electric vehicles is expected to grow substantially (up to 28% pa) to 2020.

Grid electricity storage is an emerging market for large lithium batteries and applications in solar and nuclear energy are forecast to emerge before 2015 (Byron Capital 2011). Lithium salts are intensively used as working fluid in utility sized concentrated solar power plants (CSP); which was estimated to grow from 1.5GW in 2010 to 25GW in 2020 (Greenpeace/IEA SolarPACES/ESTELA).

Aerospace and defence are also markets to keep watch of in terms of the future growth of lithium; alloys are 10% lighter than composite-intensive planes, 30% less expensive to build and operate as well as the ability to have larger windows; additionally allowing for a 12% increase in fuel efficiency, higher humidity and higher cabin pressure. These features rank highly in the demand for lithium in shuttle production, particularly from NASA’s viewpoint.
Batteries

Lithium based batteries are able to store as much as three times more energy than other materials giving it a competitive advantage and making it the key ingredient for batteries. Other benefits of lithium–ion batteries include higher energy density to weight ratio, longer life, and no memory effects. Lithium is also considered more environmentally friendly due to lithium recovery having virtually no waste when mining, in comparison to existing nickel-metal hydride or lead-acid technologies, as once the lithium is recovered, the chemicals can be recycled, for example the production of by-products that can be sold on as compounds like potash.

Rechargeable batteries accounted for about 27% of global lithium consumption in 2012, up from 15% in 2007 and 8% in 2002, says Minerals research firm Roskills. End-use was responsible for 44% of the net increase in lithium consumption over the last ten years, and 70% over the last five years. In the base-case growth scenario it is expected to contribute 75% of the growth in forecast demand to 2017, when total demand for lithium is expected to reach slightly over 238,000t lithium carbonate equivalent (LCE).

According to signumBoX estimate (see Exhibit 4), battery demand for lithium in grid and hybrid & electric vehicles will experience over 20% annual growth rate till 2025. Total lithium demand in batteries (all types combined) will be around 65% of the total consumption.

**Exhibit 4: Battery Demand for Lithium**

<table>
<thead>
<tr>
<th>Application / Tonnes LCE</th>
<th>2011</th>
<th>2025</th>
<th>CAGR 2011-2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>Batteries for Portable Devices</td>
<td>30,416</td>
<td>111,176</td>
<td>9.7%</td>
</tr>
<tr>
<td>Batteries for Grid</td>
<td>500</td>
<td>7,500</td>
<td>21.3%</td>
</tr>
<tr>
<td>Batteries for Hybrid and Electric Vehicles</td>
<td>6,967</td>
<td>204,901</td>
<td>27.3%</td>
</tr>
<tr>
<td>Other Lithium Applications</td>
<td>91,400</td>
<td>174,994</td>
<td>4.7%</td>
</tr>
<tr>
<td><strong>Total Lithium Demand</strong></td>
<td>129,283</td>
<td>498,571</td>
<td>10.1%</td>
</tr>
</tbody>
</table>

*Source: signumBOX, January 2012*

The uptake of EVs will be the focal point of growth for the industry, major car manufacturers including: Toyota, Nissan, Ford, GM, Tata Motors and Volkswagen are anticipating adding a further 40ktpa of LCE consumption to the market by 2015. Toyota is expecting to increase their lithium ion battery production by as up to six times with a new production line planned at a cost of US$194M subsequently increasing its output capacity in line with their projections for the uptake in demand for lithium after establishing its Joint Venture with Orocobre at a brine project in Argentina. The project is anticipated to reach 17,500 tonnes per annum of low-cost battery grade lithium carbonate. This change shift in using lithium based automobiles and focus on new production capabilities by firms like Toyota has been highlighted by switching to selling their new Prius Plug in Hybrid Electric Vehicle, with the demand anticipated to accelerate for lithium ion batteries in EVs as the new Hybrid is lighter and less costly.

**Exhibit 5: World Consumption of Lithium by End-Use**

<table>
<thead>
<tr>
<th>Uses</th>
<th>Lithium Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pure Electric Vehicles (EV)</td>
<td>8-40 kg</td>
</tr>
<tr>
<td>Plug-in Electric Vehicles (PHEV)</td>
<td>1-10 kg</td>
</tr>
<tr>
<td>Hybrid Electric Vehicles (HEV)</td>
<td>0.8-2 kg</td>
</tr>
<tr>
<td>Power tool Batteries</td>
<td>40-60 g</td>
</tr>
<tr>
<td>Laptop Batteries</td>
<td>30-40 g</td>
</tr>
<tr>
<td>Tablet Batteries</td>
<td>20-30 g</td>
</tr>
</tbody>
</table>
A Citi Research (Citigroup) forecast in July 2012 projected the lithium-ion battery market to rise from US$13.9bn in 2011 to US$16.1bn in 2012, US$18.6bn in 2013, US$23.6bn in 2015, and US$34.3bn in 2020. Citi analysts also noted that an “upside” 2020 forecast of US$45bn based on an improved Chinese domestic market for vehicle and storage batteries. While most lithium-ion batteries are currently used in consumer electronic devices, Citi anticipates expansion over the longer-term for automotive applications (for HEVs, PHEVs, EVs), storage applications, and industrial use applications. Citi estimates that the market for lithium-ion battery cells used in consumer electronics at US$8.5bn in 2011, US$9.6bn in 2012, US$10.9bn in 2013, US$13.2bn in 2015, and US$14.7bn in 2020. In the automobile sector, Citi expects demand from HEVs to drive overall demand over the medium term, as full-scale market penetration of PHEVs and EVs will be difficult until the issues surrounding driving range, price and charging infrastructure are resolved. Despite these perceived market challenges, Citi’s automotive lithium ion battery market projection indicates a rise from US$1.2bn in 2011, to US$2.0bn in 2012, US$2.8bn in 2013, US$4.4bn in 2015, and US$10.2bn in 2020. Roskill estimates that the largest consumer of lithium in 2011 continued to be the glass/ceramics sector, for industrial applications such as strengthening glass and hardening ceramic glazes, which accounted for approximately 30% of lithium consumption. The second largest market segment was lithium-ion batteries, with an estimated 23% of total lithium consumption, followed by greases (11%), air treatment (4%), metallurgical casting (4%), and polymers (3%), and, as illustrated in the graph below.

**Demand from Asia**

China and India are driving demand in emerging economies where the middle classes are expanding and demanding goods such as electronics and electronic vehicles, both of which contain lithium. Due to the Chinese government support, the country has become a particularly attractive investment environment for automakers, which are partnering with Chinese manufacturers. Lithium battery production in China increased from units worth US$2.1B in 2007 to units worth US$5.4B in 2011. RIS have reported an annual demand growth forecast of 11% from 2011 to 2017, this being dependent on the uptake of hybrid electric vehicles (“HEVs”) and electrical vehicles (“EVs”). As well as EVs, electric bikes are expected to grow in demand, particularly in China. It’s expected that by 2016, almost 60% of electric bikes that are manufactured in China will use lithium-ion batteries, which is likely to double demand (Lux Research). Lithium is presently used in all EVs, with over 30 models available and demand for electric buses of 200kg LCE compares to 15kg LCE for a car.

Chengdu Tianqi, China’s leading producer of lithium chemicals has now acquired Talison the largest hard rock lithium producer in the world, and with the support of the Chinese state, has ambitious expansion plans to meet growing demand, which is not only being driven by the demand for EV products, but also an increasing number of wind and solar projects, expecting demand for lithium-ion batteries to reach nearly US$9.2B by 2016.
Supply

Today, the lithium market is predominantly served by four major suppliers. For 2011, the US Geological Survey estimated 70% of the 34,000 tonnes world lithium production was attributed to Australia (33%) and Chile (37%) exploiting lithium minerals and brines respectively. Other major sources were Argentina and China with 25% of global production, particularly the lithium carbonate produced from the Salar’s brines in South America contributing greatly to world supply. SignumBOX gives similar estimates (see Exhibit 6) as the US Geological Survey, with the US taking a 3% share and the rest of world 5%.

China continues to underperform in terms of lithium production from its four brine operations, owing to a variety of technical and logistical reasons, which has subsequently triggered new areas of advancing resources development particularly in Australia, Canada, and USA. However, technological advances in China, Korea and Japan are creating the most future demand growth led by revolutionary automotive technology change. China is consequently investing in lithium assets and companies, shown recently by the takeover of Talison by Chengdu Tianqi and Jiangxi Ganfeng increasing its equity stake in International Lithium to 14.7%.

Exhibit 6: Lithium Reserves & Supply

By company, the world lithium supply is dominated by four biggest producers (see Exhibit 6), with a market share of over 80%. Chinese manufactures supply a combined 18%.

In addition to the companies currently supplying the market, there are producers on the horizon moving forward with exploration activities, most probably to be taken over by the dominant four players.

Following Rockwood’s failed takeover attempt of Talison, and given their US$1B war chest, and their view that worldwide lithium demand will grow by 10-15% over the next ten years, it would come as no surprise to see the Company on the acquisition trail again. Other than minor amounts of lithium minerals production for local general ceramics and glass use in Portugal and Spain there is no world class operation producing lithium raw materials in Europe. However there are significant other early stage exploration projects other than GSZ in Austria. These include a project in Finland (Keliber Oy), and Ireland (International Lithium) which are targeting pure-play lithium minerals production and in Serbia, Rio Tinto (now joined by Pan Global Resources and Ultra Lithium) of boron and lithium production post 2016. However, there are several companies in Belgium, France, Germany, and UK that manufacture lithium chemicals and downstream battery materials which require imported raw materials. There are about thirty lithium exploration projects progressing in Canada including Critical Elements Corp, Glen Eagle

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1 Lithium metal content. Conversion factor 5.323 for lithium carbonate equivalent LCE
Resources and Rock Tech Lithium which are all spodumene projects, however, GSZ is the first to advance a project in Europe. The future supply will look to run in line with the pace of growth in demand as it is key to provide the ever advancing technology markets with cleaner energy, where the need for lithium is high. This is where the quality of spodumene in comparison to other brine alternatives is key, as it is of a higher calibre.

The Market is currently driven by consumer products that require battery grade lithium. Only a limited number of producers can supply the high end grade lithium; as a Seymour Pierce research noted, SQM, FMC, and Chemetall, the largest suppliers of lithium carbonate do not at present have the capability to supply 99.99% Li$_2$CO$_3$ to the market.

Exhibit 7: Lithium Battery Grade and Price

<table>
<thead>
<tr>
<th>Grade</th>
<th>&lt;99.0% LC</th>
<th>99.0% LC</th>
<th>99.5% LC</th>
<th>99.9% LC</th>
<th>99.99% LC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td>US$6,500/t</td>
<td>US$8,500/t</td>
<td>US$15,500/t</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Market Share</td>
<td>75%</td>
<td>15%</td>
<td>10%</td>
<td></td>
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</tr>
</tbody>
</table>

Source: Seymour Pierce research and Galaxy Resources
Pricing

The list prices for lithium raw materials are published by the major producers and are negotiated directly with buyers so there is no terminal market and virtually no third party spot market. As shown in Exhibit 8 prices have tripled since 2000; with the LCE price going from around $2,000/t to circa $6,000/t in 2011 and again in 2012, all four major producers increased prices by at least 20% due to the imbalance in the market.

Talison, which until recently only sold lithium concentrates, received an average sales price for the quarter ending September 2012 of US$352/t, following two price hikes in 2012 consisting of a 10% increase for technical grade and 20% for chemical grade concentrates. Analysis of historic data has shown that Talison’s lithium prices have increased by 7% pa per annum, while production is up by 40% to 126,558 tonnes over the same period. Galaxy Resources reported in June 2012 that the Chinese lithium carbonate price had increased by 17% over the previous year to US$6,600-6,900/t for battery grade and US$6,300-6,600/t for technical grade lithium carbonate while lithium hydroxide prices increased 15% to US$6,500-6,600/t. FMC has reported that it expects prices to be fairly flat for 2013, owing to the current market conditions. However Galaxy has forecast an average of US$6,757 for lithium carbonate prices by 2015.

Exhibit 8: Lithium Carbonate Prices

Source: Roskill and signumBox
### Exhibit 9: Company Peer Group

<table>
<thead>
<tr>
<th>Company</th>
<th>Ticker</th>
<th>Country</th>
<th>Measured KT/%Li2O</th>
<th>Indicated KT/%Li2O</th>
<th>Resource M+I KT</th>
<th>Inferred KT/%Li2O</th>
<th>Cut-Off</th>
<th>EV</th>
<th>M. Cap</th>
<th>Stage</th>
<th>Resource Valuation (A$/t)</th>
<th>EV / M+I</th>
<th>EV / Li2O</th>
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<tbody>
<tr>
<td><strong>Hard Rock</strong></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Global Strategic Metals</td>
<td>GSZ AU</td>
<td>Austria</td>
<td>3,700/1.5</td>
<td>3,200/1.5</td>
<td>6,900</td>
<td>10,000/1.6</td>
<td>0.75</td>
<td>7.8</td>
<td>5.2</td>
<td>Explorer &amp; Developer</td>
<td>1.13</td>
<td>55.7</td>
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</tr>
<tr>
<td>Canada Lithium</td>
<td>CLQ CN</td>
<td>Canada</td>
<td>6,914/1.18</td>
<td>26,325/1.19</td>
<td>33,239</td>
<td>13,757/1.21</td>
<td>0.8</td>
<td>130.7</td>
<td>150.9</td>
<td>Explorer</td>
<td>3.93</td>
<td>647.9</td>
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<tr>
<td>Glen Eagle Resources</td>
<td>GER CN</td>
<td>Mexico &amp; Canada</td>
<td>2,239/0.95</td>
<td>5,145/0.98</td>
<td>7,387</td>
<td>572/0.98</td>
<td>0.5</td>
<td>10.0</td>
<td>10.3</td>
<td>Explorer</td>
<td>1.35</td>
<td>153.4</td>
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<tr>
<td>Critical Elements</td>
<td>CRE CN</td>
<td>Canada</td>
<td>-</td>
<td>26,500/0.98</td>
<td>26,500</td>
<td>10,700/0.86</td>
<td>-</td>
<td>16.8</td>
<td>17.2</td>
<td>Explorer</td>
<td>0.63</td>
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<td>Nemaska Lithium</td>
<td>NMX CN</td>
<td>Canada</td>
<td>10,197/1.53</td>
<td>9,442/1.45</td>
<td>19,639</td>
<td>-</td>
<td>0.4</td>
<td>15.0</td>
<td>16.0</td>
<td>Explorer</td>
<td>0.76</td>
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<td>Reed Resources</td>
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<td>Australia</td>
<td>2,015/1.45</td>
<td>4,770/1.39</td>
<td>6,785</td>
<td>8,082/1.3</td>
<td>0.3</td>
<td>12.8</td>
<td>13.1</td>
<td>Explorer</td>
<td>1.89</td>
<td>215.9</td>
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<td><strong>Brines &amp; Hard Rock</strong></td>
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<tr>
<td>Talison Lithium*</td>
<td>TLH CN</td>
<td>Australia</td>
<td>600/3.2</td>
<td>117,900/2.4</td>
<td>118,400</td>
<td>2,100/2.0</td>
<td>0.7</td>
<td>-</td>
<td>-</td>
<td>Producer</td>
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<td></td>
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<tr>
<td>Galaxy Resources</td>
<td>GXY AU</td>
<td>Australia</td>
<td>3,139/1.17</td>
<td>10,613/1.06</td>
<td>13,752</td>
<td>4,382/1.08</td>
<td>0.4</td>
<td>268.4</td>
<td>75.2</td>
<td>Explorer</td>
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<td>Altura Mining</td>
<td>AJM AU</td>
<td>Australia</td>
<td>-</td>
<td>17,288/1.25</td>
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<td>7,869/1.2</td>
<td>0.7</td>
<td>40.4</td>
<td>54.5</td>
<td>Explorer &amp; Producer</td>
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<tr>
<td><strong>Clays</strong></td>
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</tr>
<tr>
<td>Western Lithium</td>
<td>WLC CN</td>
<td>USA</td>
<td>14,937/0.4</td>
<td>12,198/0.388</td>
<td>27,135</td>
<td>-</td>
<td>0.32</td>
<td>6.7</td>
<td>17.4</td>
<td>Explorer</td>
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<tr>
<td><strong>Average</strong></td>
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<td></td>
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<td>36.8</td>
<td>2.41</td>
<td>197.2</td>
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</tbody>
</table>

*Talison was recently taken over by Chendu Tianqi Lithium in a C$847 million bid
**Only includes hard rock resources.

Source: Industrial Minerals, Bloomberg, Lithium Report Jan 2013; FactSet
Canada Lithium
Ticker: CLQ CN 52 Wk Range: C$0.37 - 0.96
Share Price: C$0.39 Sh Outstanding(M): 363.6
Market Cap (M): C$141.8

Canada Lithium Corp. engages in the exploration and development of mineral properties with lithium deposits in Canada. It focuses on the development of Quebec Lithium project located in the northeast corner of La Corne Township, Canada. The company was founded on July 17, 1995 and is headquartered in Toronto, Canada.

Glen Eagle Resources
Ticker: GER CN 52 Wk Range: C$0.18-0.385
Share Price: C$0.2 Sh Outstanding(M): 44
Market Cap (M): C$9.3

Glen Eagle Resources, Inc. engages in the acquisition, exploration, production and development of mining properties. The company primarily explores for phosphate and lithium. It holds interests in the Authier lithium project, which is located in Lamotte, Quebec; and Moose Lake and Lac Lisette phosphate properties that are located in Lac St-Jean area, Quebec. Glen Eagle Resources was founded on March 7, 1983 and is headquartered in Montreal, Canada.

Critical Elements
Ticker: CRE CN 52 Wk Range: C$0.1-0.275
Share Price: C$0.15 Sh Outstanding(M): 102.8
Market Cap (M): C$18

Critical Elements Corp. is a Canadian mining exploration company. The company operates through its subsidiary, Ruth Silver & Metal Corp. Its objective is to create value for its shareholders by acquiring promising projects that can be brought into production in the short term. The company is focused on the rare metals and rare earths, particularly tantalum. Its projects include Rose Tantalum-Lithium, Croinor and Matchi-Manitou, Rocky Mountain Rare Earths and Quebec Rare Earths. Critical Elements was founded on September 11, 1998 and is headquartered in Montreal, Canada.
Nemaska Lithium

Ticker: NMX CN  
52 Wk Range: C$0.115 - 0.65
Share Price: C$0.13  
Sh Outstanding(M): 113.1
Market Cap (M): C$15.1

Nemaska Lithium, Inc. is an exploration and development company which is engaged in the exploration and development of lithium mining properties and related processing of spodumene into lithium compounds. Its properties include Whabouchi and Sirmac. The company was founded on May 16, 2007 and is headquartered in Quebec, Canada.

Reed Resources

Ticker: RDR AU  
52 Wk Range: A$0.018 - 0.26
Share Price: A$0.022  
Sh Outstanding(M): 521.8
Market Cap (M): A$11.5

Reed Resources Ltd. engages in the exploration for gold, iron, nickel, vanadium and lithium and other minerals. The company's projects include Meekatharra Gold, Mt Marion Lithium, Barrambie Vanadium, Mt Finnerty Iron, Mt Finnerty Iron and Comet Vale Nickel. It operates through three segments: Gold, Vanadium and Other Minerals. The company was founded by Christopher John Reed and David John Reed on December 20, 2001 and is headquartered in West Perth, Australia.

Galaxy Resources

Ticker: GXY AU  
52 Wk Range: A$0.073 - 0.45
Share Price: A$0.094  
Sh Outstanding(M): 800.1
Market Cap (M): A$75.2

Galaxy Resources Ltd. is an Australian-based integrated lithium mining, chemicals and battery company, which explores for gold, iron ore, manganese, talc, uranium and tantalum. It also produces chemical products. The company owns the Mt Cattlin project near Ravensthorpe in Western Australia, where it mines lithium-bearing pegmatite ore and processes it on site to produce a spodumene lithium mineral concentrate and tantalum by-product. Galaxy Resources was founded on January 15, 1996 and is headquartered in West Perth, Australia.
Altura Mining

Ticker: AJM AU  
52 Wk Range: A$0.076 - 0.21
Share Price: A$0.12  
Sh Outstanding(M): 454.3
Market Cap (M): A$54.5

Altura Mining Ltd. is a mining and exploration company. The company holds a significant suite of prospective exploration and development projects including coal, iron ore and lithium in Indonesia and Australia. Altura is headquartered in Brookwater, Australia.

Western Lithium

Ticker: WLC CN  
52 Wk Range: C$0.12 - 0.235
Share Price: C$0.155  
Sh Outstanding(M): 102.1
Market Cap (M): C$15.8

Western Lithium USA Corp. is a mineral resource company, which focuses on the exploration and development of lithium resources. It focuses on the development of Kings Valley Properties, which consists of five areas of significant lithium mineralization the PCD Lens, South Lens, South Central Lens, North Central Lens and North Lens. The company was founded on November 27, 2007 and is headquartered in Vancouver, Canada.