

# Hallgarten & Company

## Listing Preview

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## Rincon Lithium:

With potash as the icing on the cake  
Strategy: Strong Buy

ADY -Financial Data		2007	2008e	2009e	2010e
Current Price (AUD)	\$ 0.265		n/a	n/a	n/a
12-Month Target Price (AUD)	n/a		n/a	n/a	n/a
Upside to Target	n/a				
Market Cap (AUD mn)	\$ 293.1				
Shares Outstanding (millions)	1,106				
<b>Rincon - post-demerger</b>					
Estimated Price (AUD)	\$ 0.52		n/a	n/a	n/a
12-Month Target Price (AUD)	\$ 1.50		(\$0.01)	\$0.01	\$0.03
Upside to Target	188%				
Market Cap (AUD mn)	\$ 145.6		n/a	80.9	17.8
Shares Outstanding (millions)	280				
Consensus EPS			n/a	n/a	n/a
Hallgarten EPS			n/a	n/a	n/a
Actual EPS		(\$0.01)			
P/E		n/a	n/a	n/a	n/a

# Rincon Lithium

Spin-off creates a major new player in the lithium space

- + Admiralty Resources is spinning off its Argentine lithium/potash assets into a demerged vehicle on a one for one basis to existing shareholders.
- + The spun off company will shortly become one of the world's largest and lowest cost lithium carbonate producers with sidelines in potash (a rapidly revaluing mineral) and sodium sulphate (an important component in detergent production).
- + The lithium resource is enough to supply the planned production for 400 years, while the potash resource as currently delineated is around three times the annual production of Potash of Saskatchewan, a company with a \$75bn market capitalization at this time.
- + Rincon's strategy is to produce all our own input materials to keep our production costs as low as possible. To this end, it purchased, in September 2007, the Rio Grande sodium sulphate mine/production facility, in the process snaring the largest producer of this product in Argentina. It has ambitions to expand this resource and sell excess production to the detergent industry in Argentina and Brazil.
- ✗ Management has been a problem for the company. Not in its actions, but in the past dealings of some directors with the failed Opes Prime broking outfit. The wind-up of this firm pushed enormous amounts of stock out into the market with a depressing effect on the stock price for several months. The overhang is now cleared away.

## Its not gold in them thar hills..

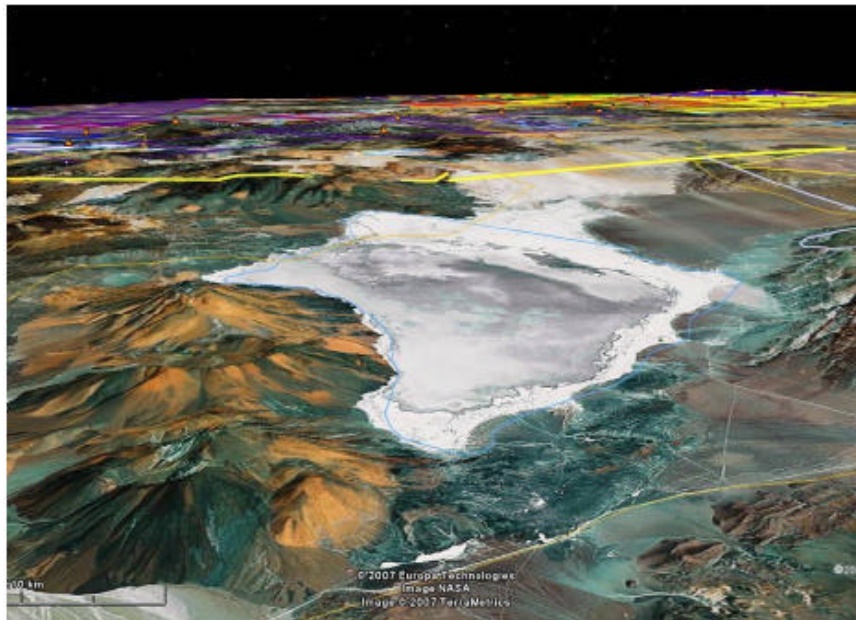
The El Dorado (Spanish for "the gilded one") legend began with the story of a South American tribal chief who covered himself with gold dust and would dive into a lake of pure mountain water. No one these days would be much inspired to leap into the murky depths of the lithium lakes of northern Argentina but it might be much more worth their while to explore those depths than the countless time and energy that the Spaniards expended on finding the gold dust that washed off the aforementioned chief in his ablutions.

The Andean region of northern Argentina and Chile and southern Bolivia is a rich hunting ground for lithium. Never a product to inspire much enthusiasm in the general populace, due to its linkage to psychiatric drugs, its real attraction is in applications related to cellular phone battery applications amongst other high tech uses. Also interesting in the case of Rincon Lithium, the company that is the subject of this note, is the associated potash deposits. In a world of soaring energy costs (coinciding with escalating agricultural commodity demand and prices) potash has assumed magical properties. It is not dependent upon natural gas consumption (as urea production is) and has an expanding demand linked to farmers switching over to alternatives to the rapidly inflating price of traditional agrochemical fertilizers. In this aspect even humble guano is getting a second win as an alternative. The latter is not available in amounts even vaguely sufficient to satisfy demand but potash resources do exist and Rincon has managed to corner one (if one will excuse the Spanish pun).

## The Rincon Story

This asset is currently part of the Australian-listed miner Admiralty Resources (ADY.ax). It also has a Bank of New York sponsored ADR program (ARYRY) on a 1:40 basis. Admiralty currently has an operating iron ore mine in Chile and a handful of other assets in Australia. It recently presented a proposal to shareholders to distribute shares in the Rincon Lithium subsidiary to existing shareholders

and this transaction is expected to take place in the third quarter of 2008. This split represents an exciting opportunity for investors to pounce on an undervalued part of an under-analyzed and largely ignored company. While the Chilean iron ore assets should be sexy enough in the current “Iron Rush” resulting from the broad reassessment of this oft-underestimated ore, we feel that the lithium/potash assets of Admiralty are even more alluring and that investors should get some exposure to the demerged entity.



The Rincon Salar asset (shown above) is a lithium, potassium, magnesium rich brine resource located in Salta Province, Argentina. It is a hyper-saline lake (shown above), brine enriched with lithium, magnesium and potash fed by three subterranean rivers percolating into the *salar* through volcanic rocks. The ponded evaporate deposit is estimated to contain:

7.4 million tonnes of lithium carbonate (LiCO<sub>3</sub>) equivalent

51 million tonnes of potassium chloride (KCl)

The key resources that can be produced from exploiting these deposits are lithium carbonate, lithium chloride and lithium hydroxide, potassium chloride (muriate of potash), sodium sulphate and magnesium.

The project is situated at 3,700 metres above sea level (very near to the Chilean border) within the Antofallos-Pocitos volcanic rift valley in the high Andean plains (shown at right). There are around 50 other *salar*s in the region. The tenements cover an area in excess of 250 square kilometers and are in close proximity to two of the largest producers of lithium and potassium (SQM and FMC) in the



world. Later in this report we shall discuss the other major players exploiting this unique geological zone.

Rincon has a technical team in place under the leadership of Drs Sorentino, Galli and Alonso. The extent of the resource for production needs has been identified while due diligence and extraction methods for processing the brine have been finalised. These show that pumping rates of as high as 375,000 litres per hour can be achieved by the production wells with no noticeable effect on the water level of the Salar. The capital expenditure program for the development of the Rincon Salar has been established at US\$105m. Major supplies of raw materials are located close by to produce calcium hydroxide and sodium carbonate needed for the separation processes.

The current market purchase price of lithium carbonate has exceeded US\$6,600 per tonne making for attractive margins. However, due to the relatively small number of deposits exploitable in size, there has been limited scope for new parties to step into this situation and take advantage of the higher prices. The Rincon Salar lithium project has the potential to become one of the largest lithium producing operations globally. Lithium product markets are anticipated to grow solidly owing in part to the expanded uptake for lithium batteries utilized in "greenhouse gas friendly" hybrid motor vehicles and other major applications in the glass and ceramics industries.

### **The Master Company – breaking up is easy to do**

Admiralty Resources is listed on the Australian Stock Exchange with diversified mineral interests in Australia, Chile and Argentina, plus a rather incongruous sideline in medical devices! While the goal of this note is to highlight the attractions of the spun-off entity, at this stage, investors wanting to get on board the Rincon story would need to position themselves in Admiralty first. Thus we feel it is important to offer some discourse, in a bare-bones fashion at least, upon the remnant assets of Admiralty at this time.

Admiralty is involved in four main mining projects. These are the:

- aforementioned Rincon Salar lithium carbonate, lithium hydroxide, lithium chloride, and potash project in Argentina
- Cia Minera Santa Barbara, Chile, iron ore joint venture, in which Admiralty hold a 60% interest
- Pyke Hill nickel and cobalt joint venture in Western Australia in which ADY holds a 50% interest
- Bulman zinc and lead project in Australia's Northern Territory

### **CIA MINERA SANTA BARBARA IRON ORE PROJECT - CHILE**

- In February 2005, Admiralty Resources NL acquired a 49% interest in the Sociedad Contractual Minera Santa Barbara iron ore mines, located near Vallenar in Region 3. Admiralty Resources has since increased this equity to 60%.
- The tenements cover an area in excess of 7,421 hectares, including ten existing mines and one operational mine, Japonesa.
- Japonesa has a JORC measured and indicated resource of 89,000 million tonnes of iron ore with an iron content averaging 18%. The quantities in the Japonesa, Mirador and Mariposa mines are currently being determined.
- There are three stockpiles of one million tonnes of partly processed iron ore fines located at Japonesa and Mirador.
- Production is 66,000 tonnes per month of magnetite iron ore averaging 63.5% iron with 0.06% phosphorous, 4% silicon and 0.01% sulphur.
- Iron ore is currently shipped out of Caleta, Caldera in handymax ships. In the last quarter of 2008 we expect this to be panamax ships from Candelaria, and in late 2009 cape size ships from Punta Alcalde, 55km from the mine site.
- Cia Minera Santa Barbara (CMSB) was recently successful in acquiring a further 3,455 hectares of prospective iron ore tenements: Pampa Tololo, covering 1,856 hectares divided into 375 properties and Cerro Varilla, covering 1,599 hectares with 321 properties. These tenements are located within

30 kilometres of the existing tenements and CMSB has committed to spend US\$147,000 over the next twelve months for further exploring these tenements.

#### PYKE HILL - WESTERN AUSTRALIA

- The 50% interest in Pyke Hill Resources Pty Ltd. is in partnership with Richore Pty Ltd. The partnership has provided Cougar Metals NL with an option agreement to further evaluate and if economic, mine the prospective Cobalt and Nickel deposit.
- Deposit is a high-grade laterite Nickel Cobalt ore.
- Cougar Metals NL have reached a separate agreement with Minara Resources who own the Murrin Murrin Nickel smelter close by.
- An inferred resource of 3.15 million tonnes at 1.15% Nickel and 0.07% Cobalt.
- Further drilling will be undertaken to take the inferred resource up to indicated or measured resource status.

#### BULMAN - NORTHERN TERRITORY

- Lead and Zinc laterite deposit located near Bulman Township in Northern Territory
- Four exploration licenses and two mining licenses.
- Deposit explored in the 1950's and 1960's and the resource estimated to be 930,000 tonnes of Lead and Zinc, ore grading between 8% and 15%.
- The two mining leases are located 3km from the township. Exploration licences cover 4 prospective areas of 250 sq kilometres.

#### NILNAV ORTHOPAEDICS

- Admiralty Resources have acquired a 10% interest in the Nilnav Orthopaedics Companies which offer a revolutionary, surgical technique and patented toolset for minimally invasive, "one cut" incision hip replacements.
- Key benefit of the system is simplicity and accuracy provided to the surgeon for implant of the hip cup and femoral stem in the leg of the patient.
- Nilnav has entered into a sales agency agreement with the Ellysian Group to globally commercialise this technology and technique

#### **The Demerger Process**

Admiralty Resources is in the approval process for the demerger of its core projects, the Cia Minera Santa Barbara iron ore operations and the Rincon Salar lithium project into separate Australian listings.

Under the proposed demerger, shareholders will receive one share in a new listed vehicle, Rincon Lithium Limited for every share they currently own in Admiralty. The shares will then be consolidated on the basis of one new share for every 3.47215 Rincon shares held to reduce the issued shares to a more manageable 280 million.

The company claims the most important rationale behind the decision to create separate listed vehicles for the key assets is that it enables appropriate debt financing facilities for the expansion of iron ore operations and development of the Rincon Salar lithium project. The company feels that the Rincon assets are more "chemical" in their nature and thus the split-up would provide investment clarity for shareholders/potential investors by separating ferrous and non-ferrous/chemical commodities. Admiralty claims that the shares of "chemical" companies trade at a 25%-40% premium, at this time over iron ore companies.

It also stresses that the two main projects are at differing stages of development with distinct equity and debt funding and operational requirements. Whilst the iron ore operations are currently being increased to

full capacity with the potential for significant expansion of production, the Rincon *salar* is in the pre-development phase with a pilot scale plant nearing completion in two weeks.

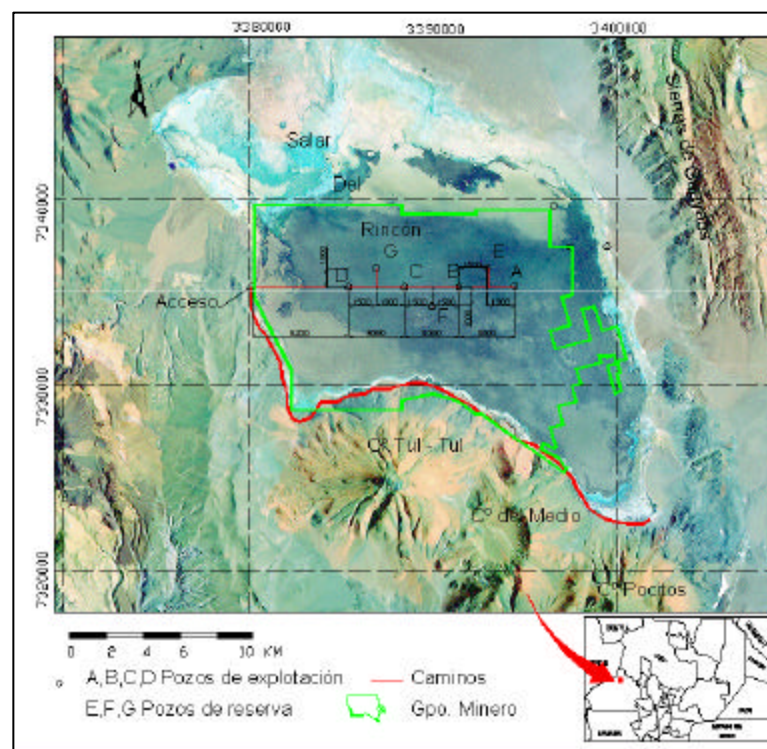
It is intended that both companies will have separate devoted management teams. This will enable them to focus on the respective operational imperatives to generate maximization of shareholder value. Although iron ore production is not currently large on a global scale, potential exists to further increase reserves/resources to enable greater operational capacity going forward. Only a relatively small proportion of Admiralty's iron ore tenements have been explored to date as the strategic imperative to date has been on cash flow generation.

After the spin-off of Rincon, Admiralty Resources will also be consolidated along the same lines (with the same ratio) and it too will have 280 million shares on issue.

### The Assets in the Spun-off Entity

The Rincon Salar tenements, covering an area in excess of 250 sq kms, were acquired in February 2001. This is a major lithium and potash brine resource, located in the Salta Province of Argentina and close to two of the largest producers of lithium and potassium in the world.

It would appear in light of the JORC resource estimate that Rincon Salar could also be considered a world-class resource with components of lithium, potassium, sodium and magnesium. The satellite photo below shows the salar. The Chilean border is just outside the photo to the left.



In early June the company announced that Rincon Salar was progressing well. The company initially constructed five hectares of lined evaporation ponds (two layers of 100 micron PVC). This is to feed the pilot plant, where some steam evaporation is undertaken to speed what would be an entirely solar process in the full version of the evaporation process (with five square kilometers of ponds in that iteration).



As a result of very favorable evaporation conditions during the (Southern) 2007/8 summer and an improved production process the site is now consistently producing high recoveries of lithium. In the company's view the mass balance results have been outstanding in terms of minimal loss of lithium as the brine moves through the production process. The pilot plant has already (in 2008) produced 12 tonnes of lithium carbonate (97% purity) using the new production process and chemical inputs that originate from Rincon's vertically integrated supply model. The lithium carbonate so far produced will be further purified when the next stage of pilot plant (due to be complete by November 2008) will produce 30 tonnes per month of 99.0+%  $\text{Li}_2\text{CO}_3$ . This additional equipment, when installed will generate other by-products such as sodium hydroxide. Battery standard lithium carbonate is 99.99% purity (known as **Four 9s** in the industry).

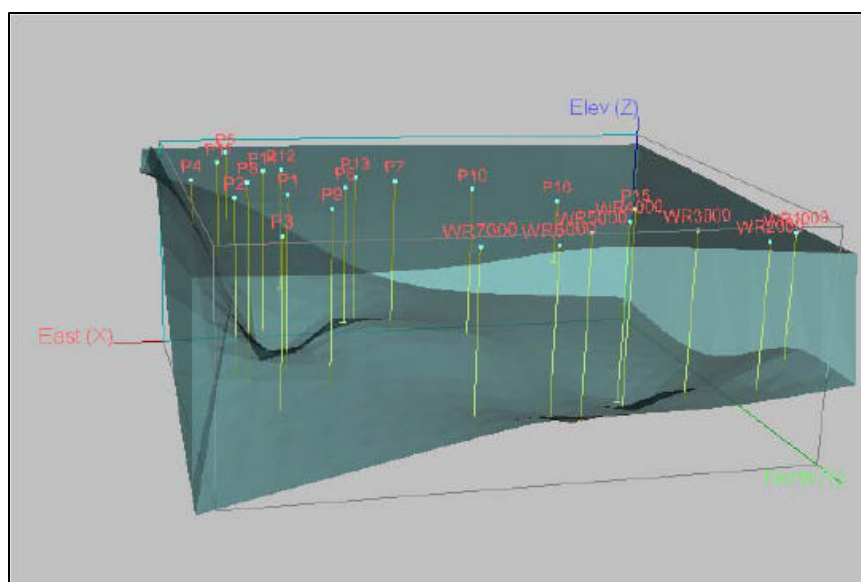
**(1) Lithium Reserves**, expressed as Li metal, after 75% recovery:

	Low	Expected	High	Uncertainty of the estimate
	kilo tonnes			
Proved Reserves	746	911±53	1,098	±10%
Probable Reserves	288	492±72	762	±25%
Total reserves	1,035	1,403±126	1,861	±15%

**(2) Potash Reserves**, expressed as KCl, after 70% recovery:

	Low	Expected	High	Uncertainty of the estimate
	mega tonnes			
Proved Reserves	27.1	33.0±1.9	39.5	±10%
Probable Reserves	10.5	17.8±2.6	27.4	±24%
Total reserves	37.5	50.8±4.5	67.0	±15%

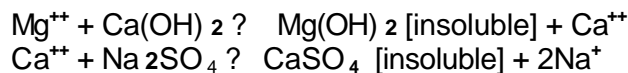
Production of Potash will commence when the necessary equipment is installed to bring it up to 99.75% purity. The focus to date has been on lithium carbonate production but potash will commence soon. Originally the company had plans to commence potash production before lithium. At that time the planned output was 40,000 tpa of potash. In 2005, it even signed a heads of agreement with Reochem PLC for the sale of all the production on an end-user and agency basis.



The company has acquired an R-C drill that is being sent to Argentina to expand drilling work with a view to increasing the resource size. At the left is the geo-hydrological 3D model of the lake.

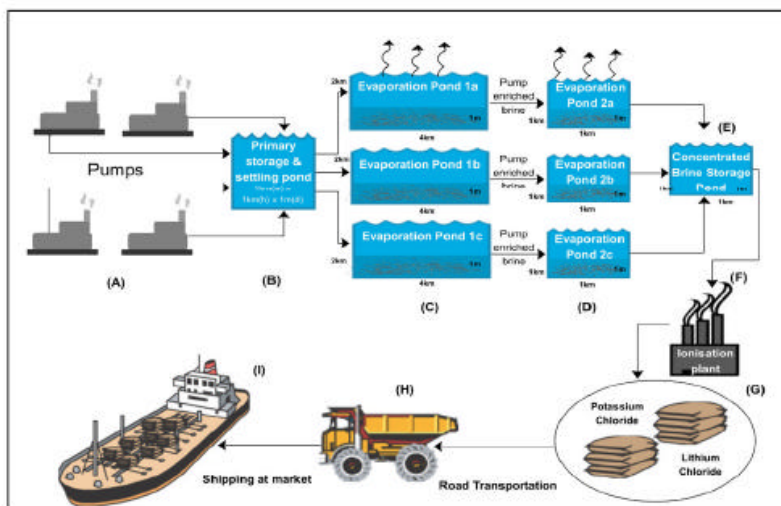
### The processing of Rincon's output

All mining is a chemical process to some degree. The production of lithium and its by-products highlights this fact. Firstly the brines are evaporated, with the evaporation rate at the *salar* being around 3,000mm per annum. Thus far the site has four hectares of lined evaporating ponds. Then the output from the Salar del Rincón requires the selective precipitation of calcium and magnesium cations (positively charged ions) that interfere in the recovery of lithium of sufficient quality. These cations are precipitated in a two step pre-treatment process:



These pre-treatments require the input of lime that will be produced from limestone quarries owned by Rincon and sodium sulphate from the newly acquired Rio Grande complex. To produce 15,000 tpa of LiCl will require approximately 84,000 tpa of sodium sulphate.

### The Lithium Extraction Process



- b. Salt removed
- c. Magnesium removed
- d. Sodium sulphate removed
- e. Potash removed
- f. Lithium Chloride produced, then LiCO<sub>3</sub>, LiOH

The brine passes through a series of evaporation ponds (phases B, C & D above). These are all of one metre in depth. Then the potash is extracted at the concentrated brine phase (E). Finally the ionization plant (at phase F) creates the finished chemicals for bagging and then export.

The company's studies indicate that the magnesium (at phase C) produced as a by-product is not of economic value and thus plans have not been predicated upon any income accruing from that source.

### The Rio Grande Purchase - Securing Rincon's sodium sulphate needs

To deal with this need, in September 2007, Admiralty announced that it had purchased the Rio Grande *salar*, approximately 250 kms distant from the Rincon asset, as a means of securing its future supplies of sodium sulphate, a vital input in lithium processing. The purchase price was not revealed but the



company claimed that it represented less than the first year's savings to Rincon. The acquisition was funded by a short-term debt facility.

The *salar* represents an 18.5 million tonne deposit of  $\text{Na}_2\text{SO}_4$  and contains approximately 18.5 million cubic meters of mineable material. The *salar* covers a surface of about 110 km and hosts a 56 square km central zone enriched with sodium sulphate. The area purchased by Admiralty covers 74 square km equivalent to two thirds of the *salar's* surface. They include the richest zones of mineralisation. The Salar del Río Grande is an evaporitic deposit in the Argentine Puna with measured, probable and inferred resources of about 3.8 million tonnes of recoverable anhydrous sodium sulphate

Via this purchase Rincon has grabbed a strategic hold on a unique asset with more applications than just mining. The *salar* represents the most significant resource of sodium sulphate in Argentina and one of the most significant resources in South America. The Salar del Río Grande has yielded almost all of the domestic production of this commodity over the last 25 years.

This purchase was driven by the economic considerations related to the large distance alternative sources of sodium sulphate are from the Rincon site. Moreover, there is a globally tight supply situation for the mineral and it would cost approximately US\$160 per tonne to buy sodium sulphate on the open market for the fractional crystallisation process to produce lithium chloride and lithium carbonate. By buying the deposit and using the gas supply located at the plant site, Rincon will be able to produce sodium sulphate for less than US\$40 per tonne. Rincon will require 110,000 tonnes of sodium sulphate to produce 10,000 tonnes of lithium carbonate, 3,000 tonnes of lithium chloride and 4,000 tonnes of lithium hydroxide per annum. Procuring its own source should provide cost savings of US\$15 million p.a. lowering the projected operational expenditure in 2009/10 to USD\$35million (shaving 30% off the costs).

The table below extracted from the JORC report completed by Dr Carlos Sorentino shows the *salar* has measured, indicated and inferred resources of around 3.8 million tonnes of recoverable anhydrous sodium sulphate:

<b>Resource Classification</b>	<b>Average grade, anhydrous <math>\text{Na}_2\text{SO}_4</math></b>	<b>Mineralised volume, thousand <math>\text{m}^3</math></b>	<b>Mineral mass, Kt</b>
<i>Measured resources</i>	20.4%	4,119	842
<i>Probable resources</i>	22.2%	3,762	835
<i>Inferred resources</i>	19.7%	10,620	2,092
<b>Total</b>	<b>20.4%</b>	<b>18,501</b>	<b>3,769</b>

In addition, there are a number of groundwater bodies within the *salar* that could contribute an additional 670,000 tonnes of mineral from brines containing an average of 11.8%  $\text{Na}_2\text{SO}_4$ .

The Rio Grande mine is fully operational producing 10,000 tonnes of sodium sulphate as at the start of June 2008. Rincon has a team of twelve working at the Rio Grande and shortly shall be completing construction of permanent offices and a geological office facility. This has already created savings of more than US\$1.3million (\$190 vs \$60 per tonne) to date compared to buying finished product.

The beauty of the Salar del Río Grande purchase is that it has a resource capable of supplying all the requirements for the production of lithium from Rincón for the foreseeable future (more than 40 years). The purchase also provides an interesting possibility to sell excess sodium sulphate to the detergent industry in Argentina and Brazil. Detergent grade sodium sulphate currently sells for \$130-\$140 per tonne. Rincon is currently working on the feasibility of processing and selling 20,000-40,000 tonnes per annum of extracted and processed sodium sulphate in the domestic market.

This potential to provide by-products to regional markets, beyond the core lithium and potash output, almost tempts us to view Rincon as an Argentine version of Soquimich, in the making.



### Lithium – Andean nations seize the competitive advantage

As mentioned earlier, the mid-Andean region is a hot spot for lithium/potassium brine lakes, called *salares* by the locals. The lithium industry at the global level was dominated by the US until the 1980s with hard rock mining from spodumene, mainly in North Carolina. This industry was made extinct over a short period by the better economics offered by the Chilean and then the Argentine brine lake deposits. The map above shows the intense concentration of activity in the Andean region.

Company	Holding company	Location	Current production
Comibol	Bolivian government, Bolivia	Salar de Uyuni	Pilot plant construction begins May 2008
Minera del Altiplano SA	FMC Lithium, USA	Salar de Hombre Muerto	17,500 tpa lithium carbonate
Rincon Lithium Ltd	Admiralty Resources, Australia	Salar de Rincon	8 tpm lithium carbonate, 10 tpm potash (pilot)
Sdad Chilena de Litio	Chemetall, Germany	Salar de Atacama	30,000 tpa lithium carbonate
SQM SA	SQM SA, Chile	Salar de Atacama	42,000 tpa lithium carbonate

The biggest players are the sometime investor darling Soquimich (which trades as an ADR under the symbol SQM) and the German company, Chemetall, which used to be paired with the ill-fated Metallgesellschaft. Meanwhile in Argentina, the US agrochemical major FMC controls the only major mine (thus far) in the country where Rincon is looking to move into production. Over the border in Bolivia, Comibol, the State mining franchise is trying to move into the lithium space.

### The Lithium Pioneer in Argentina – FMC

The US-listed agrochemicals company, FMC is a major global player in lithium and operates in Argentina via its subsidiary, Minera del Altiplano S.A.. Its prime “mine” is El Salar del Hombre Muerto located in the Andean province of Catamarca, in the far northwest of the province in the department of Antofagasta de la Sierra, some 700 kilometers from the provincial capital.

The photo above shows the FMC resource/mine in all its Martian splendour. There are only three regions in the world with deposits similar to those in Antofagasta de la Sierra, that of FMC being the most significant.

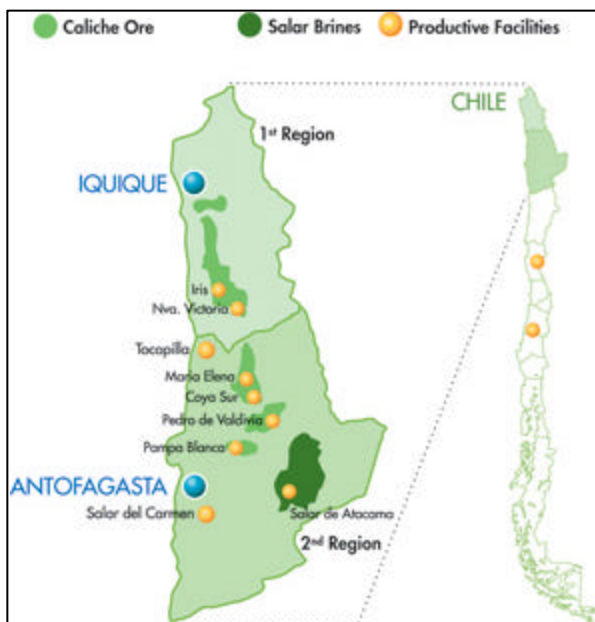
The useful life of this “mine” is estimated at around 40 years. It produces lithium chloride and lithium carbonate, of which 100% goes to export markets. The product goes to its markets by rail to Antofagasta in Chile and then by ship to the US.

The lithium carbonate plant of FMC began production in the third quarter of 1997 and the lithium chloride plant, at Güemes in Salta, started up in January of 1998.

### The Brine Giant - Soquimich (SQM)

This company has been around as an ADR since at least the early 1990s. It has had various phases of enthusiasm depending on the fickle tendencies of the international emerging markets investors. It has recently caught something of a second wind. It has been able to cast aside some of the negative vibes surrounding the Chilean energy crisis and forge to new highs. While the processing process for lithium and potash requires some energy, it is important to remember that evaporation is the most important component and the Atacama Salt Desert (located between the first and second region of Chile), where SQM has nine plants, is one of the driest places on the planet and nature drives the SQM production process (as it does to a lesser extent at Rincon).

SQM has exclusive access to the Atacama reserves that include the biggest iodine and nitrate reserves in the world and the highest lithium and potassium concentrations currently recorded. SQM has the mining and exploration rights of over 2.5 million hectares of these deposits, accounting for almost 75% of current mineral economic deposits in Chile. It was control of these assets that prompted the War of the Pacific in the late 1800s that resulted in Chile seizing these territories from Bolivia and Peru.

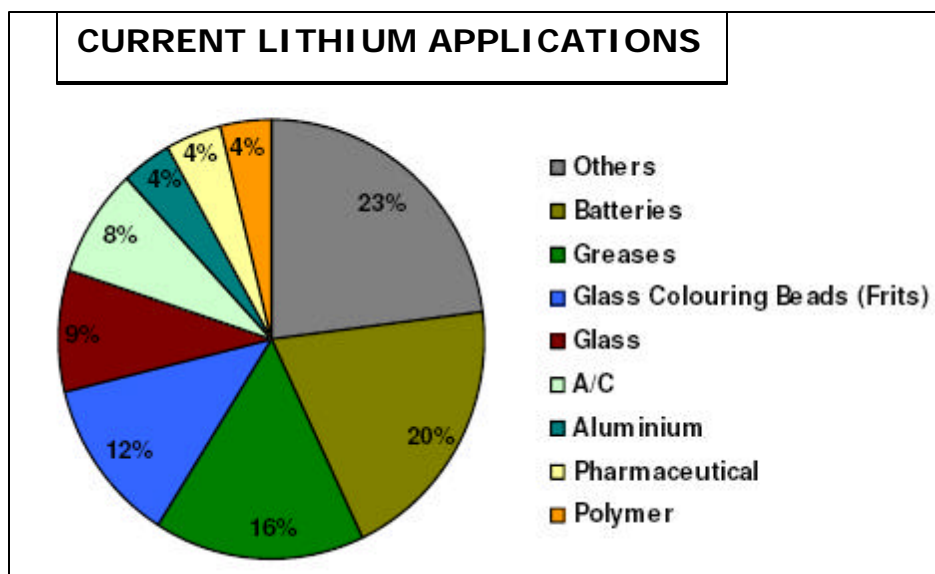


The chemical resources in SQM's mining areas (shown at the right) have leached down from the high Andes, originating in the areas where Rincon (and FMC) have their resources. SQM's *caliche* (iodine and nitrate deposits) and *salar* brine reserves provide the minerals that feed its three main lines of business: specialty plant nutrition, iodine, and lithium.

## The Lithium Market

Lithium compounds have long been used for various applications, but the metal has moved to a new level of interest in recent times with the dynamics of firstly the cellular phone industry with its demand for lightweight batteries and more recently the massive upsurge in hybrid automobile demand and production. A long term negative for the electric powered auto niche had been the weight of batteries involved.

Demand for lithium (according to the consultants Roskill) has shown strong growth in the mid-2000s, with world consumption estimated to have increased by 45% p.a. since 2002 to reach a record level close to 80,000 tonnes of lithium carbonate equivalent (LCE) in 2005. The new applications for lithium have produced a surge in specialist demand with the usage of lithium in secondary batteries rising at a compound annual growth rate of 25% between 2000 and 2005. In 2005, batteries accounted for 20% of total lithium consumption, more than double the 9% share held in 2000.



Growth in the use of lithium secondary batteries has been driven by the rapid expansion in the portable consumer electronics sector. By 2005, nearly all mobile phones and over 90% of laptop computers incorporated lithium-based secondary batteries due to their higher energy density and lighter weight than nickel-cadmium and nickel-metal hydride products. Global Strategic Analysts predict that the market for lithium ion (Li-ion) batteries is likely grow at a compounded annual growth rate of over 32% to 2010.

We would note that the real surge in hybrid demand didn't really begin until 2005. The automobile manufacturers that are now using Lithium-ion batteries include Ford with its the Escape 4WD and the Mercury Mariner while General Motors has the Sierra and Saturn and Honda has the Accord. Citroen announced at the 2007 Frankfurt Motor Show that all Citroen cars would be hybrid diesel-electric powered by 2012.

Lithium-ion batteries remain the only currently viable solution with the cost of hydrogen infrastructure currently prohibitive for hydrogen fuel or hydrogen fuel cell technology. This will inevitably change but already the spread of hybrid vehicles is being hampered by ampan and high purchase costs (which make the hybrids thus far as upper-middle class conscience toy).

The response of the battery manufacturers (which is largely driven by the Japanese at the technology front) has been to get new battery technologies near market ready to "cut hydrogen off at the pass". A

critical mass of usage make sit difficult for alternative technologies to gain a foothold, particularly when it would need a massive new “filling station” infrastructure to implement the hydrogen alternative. Amongst the new lithium products evolving is a Lithium Polymer (that allows the battery to be molded like putty, particularly into very thin shapes) and Lithium Ceramic anodes, which would provide higher energy density/greater number of recharges.

One interesting feature of the supply side of the market is its opaqueness. Rincon refers to it as an oligopoly. As the chart below (provided by Rincon) shows there are some quite dramatic variances in output statistics by industry experts and insiders. Misinformation seems to be standard practice. Depending on which estimate one chooses to use, the Rincon output will still be a meaningful part of the whole, but we note that full production is still a few years away for Rincon allowed to demand to expand in the meantime to what is hopefully a larger deficit position which would make for even better pricing than currently.

	Admiralty Estimate	Japanese Corporate Estimate	Industrial Minerals Estimate	Roskill Report 2006	SQM 2006 Estimate Annual Report
Hombre Muerto FMC	12-15,000	16,000	17,500	12,168	
Attacama / Silver Peak, Chemetall	10-15,000	23,000	30,000		
Attacama SQM <sup>3</sup>	25-28,000	28,000	27,800	44,140	
Rincón Admiralty <sup>2</sup>	17,000	17,000	17,000		
Other	10,000 CITIC <sup>1</sup> China			14,600	
Total FMC+SQM+ Chemetall (Andes Brines)	57-68,000	67,000	75,300	70,908	83,800 <sup>4</sup>
Admiralty production as a percentage of total Brines	29.8%-25%	25.4%	22.6%	23.9%	20.3%

Demand from the battery market and higher production costs spurred a recovery in lithium carbonate prices from 2003, with a quickening in the pace through 2006. Tight supply was reflected in a 20% rise in Chilean lithium carbonate prices in 2005. SQM saw a 40% rise in prices between the first quarter of 2005, and the same period of 2006.

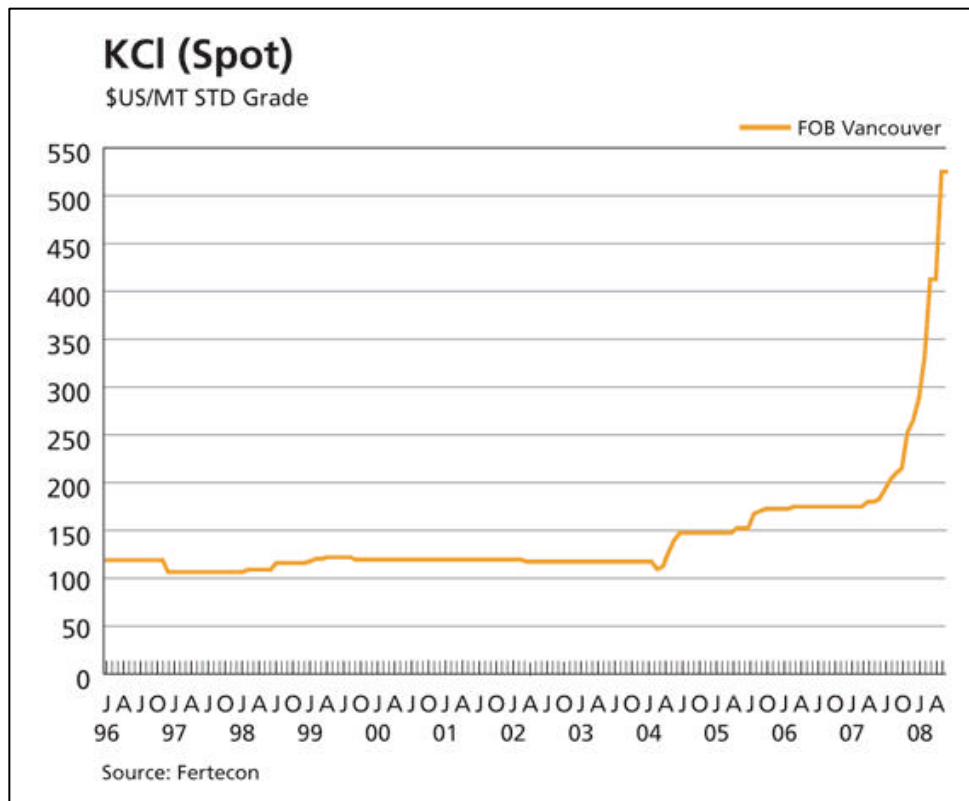
Pricing for 99% (or lower) lithium carbonate has been around US\$6,000 per tonne in recent times but escalates rapidly upon further refinement. The previously mentioned **Four 9** (99.99%) grade achieves over US\$13,000 per tonne. Lithium hydroxide fetches US\$10,500 per tonne while lithium chloride is priced around US\$8,500.

### Potash – Pricing trends

The current year has seen a liftoff in sentiment towards potash. Ironically, prices for potash have shown a bigger jump than many of the agricultural products that use potash as a fertilizer. A report by Resource Investor (and some broker upgrades) in March 2008, set off a chain reaction in the price of major stocks in the sector propelling the industry leader Potash of Saskatchewan to a market cap of over \$75bn. The article noted that bullish sentiment originated when both Belarusian Potash Co., a Belarus-based potash supplier, and Indian Potash Ltd. agreed to a contract potash price of C\$625 per metric tonne, a strong jump up from the previous price of C\$270 per tonne (compared to prices of averaging only C\$170 in 2001). Rincon has been working on the premise that potash is priced in the US\$450-550 range.

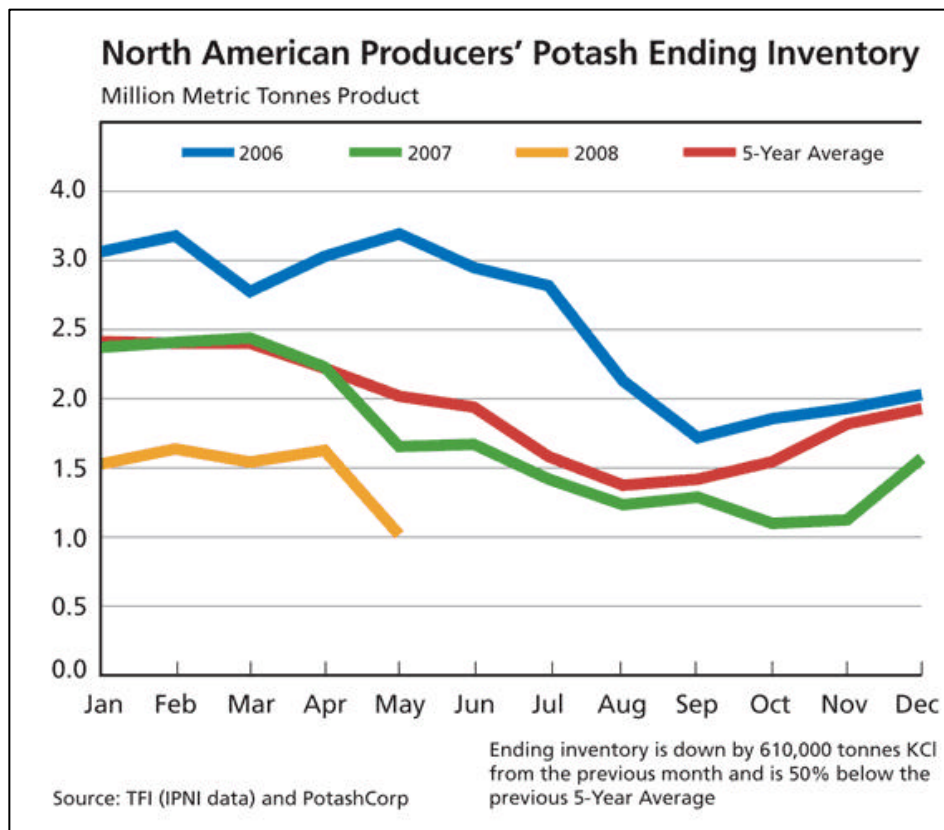


Pricing for all fertilizers had been boosted by factors including rising demand for ethanol, made from corn. We would note that potash is a different play to the base metal imperative of recent times. Essentially potash is being dragged up by the grain price/demand surge mixed with soaring natural gas prices, which militate against urea production from natgas. While debate still rages over the sustainability of base metal prices (though we have few doubts) there is almost a general consensus that the boom in agro demand is not only here to stay but could significantly worsen the supply/demand imbalance.



While the chart above looks frightening enough to those who need to purchase the product the inventory picture (see next page) looks even darker for its signals that things are getting worse, at least in North America on the stockpile front.

In an analysis just last week, a metals analyst at a leading Canadian bank noted that potash prices at the Port of Vancouver had jumped from US\$504 per tonne to \$525 per tonne in April and in the bank's opinion were likely to reach an average of more than US\$800 by late 2008. The bank also noted that potash prices of \$1,000 per tonne were affordable for most farmers, in light of soaring grain prices. At corn prices of US\$7 per bushel (and having touched over US\$8 in mid-June), potash prices at US\$1,000 would only account for 3.6% of revenue (assuming normal crop yields of 140 bushels per acre and 35 kg of potash applied per acre). While farmers may gripe about rising fertilizer inputs, this low percentage contribution to input inflation is clearly not the major culprit.



## Risks

The prime risk for Rincon may be perceived to be its presence in Argentina. These days there is Argentina and *Argentina* for those in the know. Mining in the country is essentially in the hands of the provinces though the Federal government can levy taxes on exports from the sector (a subject currently causing controversy). In assessing the risk in Argentina it is important to do this on a province-by-province basis. Rincon operates its mine in Catamarca, which is one of the über-mining areas of Argentina. It is where the massive Bajo de la Alumbrera mine of Xstrata is located. In fact all the northern provinces are well disposed to mining, with the current exception of La Rioja (where local political squabbling has made mining a football). We expect La Rioja to eventually "see the light". The reality driving the pragmatism of governors in these Andean provinces is that they are "hard-scrabble" agricultural areas and dramatically poor compared to the industrial and grain belt regions of the country. Mining has not only bought skilled and unskilled jobs and infrastructure, but also royalty flows which have helped in giving these provinces better leverage with the Federal government and made them slightly less dependent upon the "charity" emanating from Buenos Aires. Thus we do not expect problems at the provincial level. Moreover the site of Rincon's mine is so isolated that there are no local populations to raise environmental issues within any conceivable distance.

Might prices for the output collapse? Lithium is in much demand at the current time. Not being a product with a spot market, it has not attracted speculative buying of the type that keeps US Congressmen awake at night fantasizing of conspiratorial hedge fund managers. The price is thus a real one driven by supply and demand. The sexy new demand is hybrid cars. This business is still in its infancy with a strong component of fringe dwellers and *Hollywoodites* leading the charge at the showrooms. However, should hybrid go mainstream then lithium at current levels will be just a distant memory. The biggest danger is likely to be from the eventual rise of hydrogen powered vehicles. This is still early days for that option.

Then there is the potash output. This is looking most healthy. As we noted fertilizer is still only a very small component in the cost of grain production. It is generally felt that higher grain prices are here to stay. We prefer to posit that they will fluctuate but at a higher level than the give-away average prices of the last 50 years. Natgas is an increasingly scarce resource and thus urea production from this source may be priced out of the fertilizer market. This leaves great scope for potash to increase its share even further. The reality for Rincon is that it does very well firing on only one cylinder but if it fires on two (or more if we include the sodium sulphate potential), then the potential will be enormous to expand profits and market capitalization.

The chatter of a negative vibe in Australia relates to the funding nature of the company. The company raised AU\$5mn in May through a placing. Both Santa Barbara and Rincon are now producing (though Rincon only in a pilot mode). We would expect the split in the corporate structure to be the trigger for some more concerted funding efforts.

### **The Back Wash from Opes Prime**

Finally there is the issue of management reputation. There seems to be a whispering campaign about the management but we have seen nothing in their actions at the corporation to suggest anything untoward.

As foreign investors may be aware, a second tier broking firm called Opes Prime (with a focus on stock-lending and margin finance) went bust in the wake of the global sub-prime crisis. This firm had prominent exposures to ANZ and Merrill Lynch. One of ADY's directors, an Anthony Blumberg was also a director of Opes. He resigned from ADY in early March in preparation for the listing of Opes on the ASX. In the wind-up process of Opes it became widely known that ANZ had ended up with over 22.6% of the stock of Admiralty (equivalent to 222mn shares), related, in part, to a margin loan from Opes made to Phillip Martin the Managing Director of ADY (and possibly others). This spooked the market that feared a fire sale forcing the stock to new lows. However, in a letter to the ASX as at the 1<sup>st</sup> of May, the stake was no longer held by ANZ. On the 6<sup>th</sup> of May, a letter went to the ASX announcing that Phillip Martin had reduced his stake via the net sale of around 18.8mn shares, leaving him with a position of just over 28mn shares. The stock could barely get above 20 cts through April and May until the final placing of the ANZ stock was achieved. Then on the 6<sup>th</sup> of June 175mn shares were traded and on the 10<sup>th</sup> of June another 110mn were crossed. After this the stock swiftly rose 30% in a relief rally.

We note that Professor Ross Harper, the former President of the International Bar Association remains as Chairman of the company and in recent announcement on a management reshuffle (dated 18<sup>th</sup> of June) the rising star of Michael Clarke seemed to be confirmed. He currently is a board member and heads the Chilean Santa Barbara venture. He is a veteran mining character on a board that has long been more oriented to legal and financial skills. Clarke is a graduate of Montana State University and his most recent role was as Vice President Special Projects at Coeur d' Alene Mining Corporation in Latin America. He previously has worked for Cominco, and Placer Dome, amongst others. The exact nature of the management teams/boards after the demerger is not yet revealed.

### **Valuation**

How to value an entity so formative in a product category so obscure? Comparisons to SQM are worthless as it has more products in its mix and takes some of its potassium output to more refined and specialized levels. Comparisons to FMC are muddled by the wide array of products it produces beyond the lithium, or even chemical, space. To give an idea of valuations, FMC currently has a market capitalization of \$5.83bn and a trailing twelve months P/E of 33X. SQM is a more stunning US\$13.7bn market cap and a sky-high 67X trailing twelve months P/E.

The company makes an interesting case. The total lithium reserve is shown in the JORC report at a midpoint of 1.4mn tonnes. The company states that is 400 years (!) worth of supplies at its expected 17,000 tpa production goal. With the conversion ratio from lithium to lithium carbonate being 5.32, this

implies a reserve of 7.46 million tonnes of lithium carbonate at US\$6,000 per tonne (using the 2006 price quoted by Industrial Minerals) with a historical value of US\$44.7billion. The conversion ratio to Lithium Chloride from lithium metal is 6.12 and for Lithium Hydroxide it is 1.49 times. That is certainly a stunning number, we would certainly be satisfied with even a fraction of that valuation after ADY's stock price has spent so long on a downtrend.

There are some unknowns that have to be put into the mix. The investment required for the full Rincon operation is estimated at around \$110mn. It's not clear how the market will value Rincon post-deal and yet there will need to be a financing in the mix. Thus the dilution of the post-consolidation entity is a big unknown. Operating costs are slightly easier to guess at this time, as the infrastructure needs of Rincon are not subject to the same rampant inflation as the rest of the mining industry. Rincon is a low energy user in its processes so not as subject to the steep inflation taking place in that sector. Even the machinery needs for an evaporative process are different. There are no ball mills, no giant trucks, none of the types of equipment that involves massive lead times in ordering.

Using what we know, proposed lithium output might be 17,000 tpa and potash of 40,000 tpa, we can scratch together some broad revenue numbers. For the sake of argument we shall use the commodity prices of the recent past i.e. lithium carbonate at \$6,500 and potash around \$600 per tonne. This would imply annual income of at least US\$135mn (that is without factoring in the higher prices achievable for lithium chloride and lithium hydroxide, the possibility of higher potash output than the number we use, possibly by 25%-30%, or the revenues that might come from ramping up the sodium sulphate sales to third parties). There is also a possibility that boric acid and borates could be produced with some extra plant investment, though we shall leave this to the side at this time.

If operating costs are US\$40mn per annum, it is clear that the operating profits for Rincon could be in excess of US\$80mn per annum. Financing costs could be between \$5-\$10mn p.a.. The company would benefit from tax breaks in its early years of production.

We could say that we feel that Rincon, with a \$50mn capital raise (with \$50mn debt financing) would be worth \$500mn one year into production. Is that too much to expect? That would represent around 4% of the value of SQM at this time. Indeed if one placed a 20X multiple on Rincon (compared to the 65X of SQM), then valuations of over \$1bn could be conceivable. However, when one considers the current valuation of ADY and arbitrarily splits it in half to represent the demerged parts then even low end valuations for Rincon once in production would still represent multiples of the valuation on the day of demerger, presuming the stock price stays around current levels until that event.

### **Pricing on demerger day**

We suspect that most of the current players in ADY are there for the iron ore. Producing assets usually trump exploration assets and iron ore is enormously sexy at this time. However, if we presume that investors value each "asset bundle" equally and that the price is around 30 cts pre-demerger then the post-deal value of 15cts for each share will be grossed up by the stock consolidation on the 1:3.47215 basis. This gives us a value of 52 cts once the dust clears. Different dynamics will come to bear on each "half" from that date.

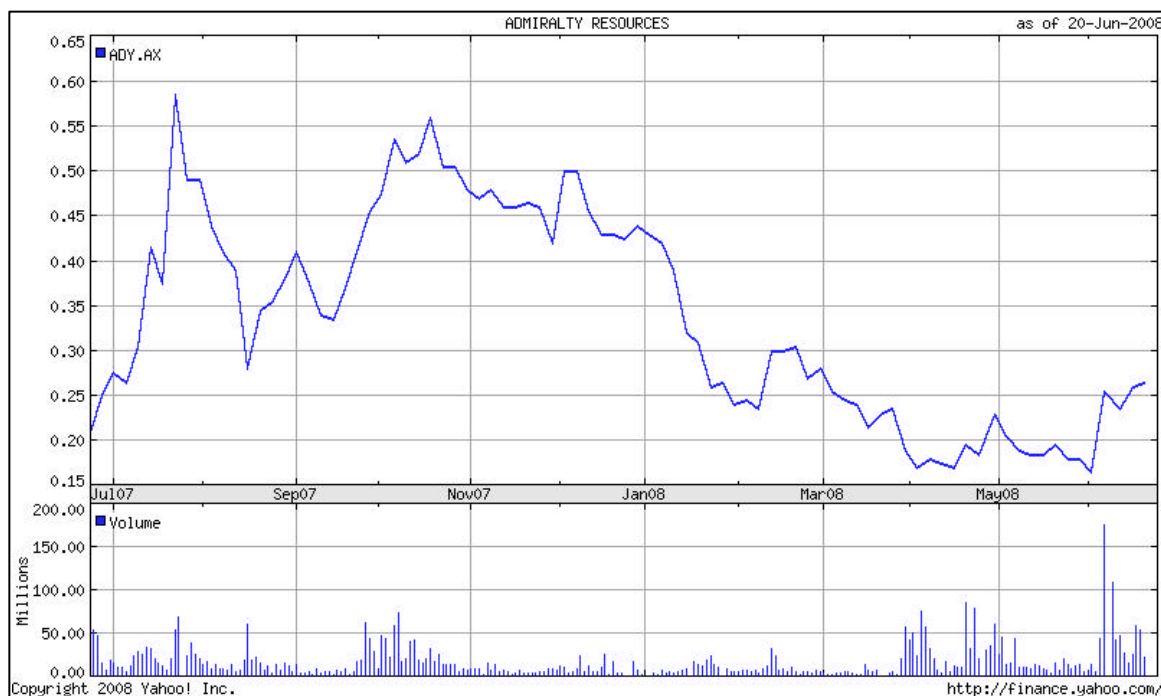
### **Conclusion**

The divorce of Rincon from Admiralty is an amicable one and in the best interests of both parties. Investors do not seem to have taken a negative slant towards the deal either, from what we have discerned. The woes of Admiralty's share price seem to have their roots in the global malaise, poor marketing by the company and some negative backwash from the tangential Opes Prime connection.

Looking beyond the immediate travails, we see Rincon as a company not literally "sitting on a goldmine" but certainly positioned on the quasi-liquid equivalent. Both of the products it will produce as it main

outputs are in strong demand with good long-term fundamentals and low production costs. In the case of lithium the market place is undersupplied with excessive concentration in a few hands. Rincon will break into that little club. Additionally, while accusations fly in so many commodity markets these days about manipulation, the market for lithium is very much one where real buyers and real sellers sit down and negotiate deals for real prices. Potash is a potential side bonanza with international recognition driving stocks like POT into the stratosphere without a fantasy factor driving valuations. Rincon has remained like a wallflower hidden under the skirts of Admiralty's Santa Barbara asset which, worthy as it is, represents a mere sideshow compared to Rincon's potential.

At this stage, investors should position in Admiralty with a view to the upcoming demerger. Both components look good to us, but eventually investors can divest their Admiralty and end up with their Rincon holdings for what we suspect will be almost a gift. For us, Rincon is the more unique asset. If Rincon, post-demerger/consolidation is valued at AUD 52 cts (market cap of AUD\$141mn), then our 12-month target would be AUD\$1.50 and our 24 month target would be over AUD\$2.50. We feel that ADY is a **Strong Buy** at this juncture.





## Important disclosures

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