

February 2017 PFS being updated

First product early 2019

Recommendation

Strong BUY, High Risk

Price

1.8c

Valuation

7.3c

Commodity

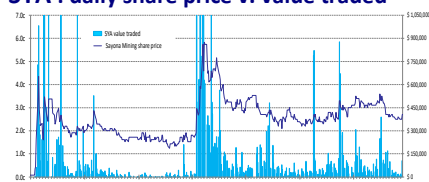
Lithium / spodumene

- **SYA announced the results of its PFS on 16 February**
 - Reserves of 10.2Mt, grading 1.02% Li₂O, within Resources of 13.74Mt, grading 1.07% Li₂O;
 - C\$ 66m project capital to process 700kt/yr of ore, to produce 99kt/yr of 5.75% Li₂O concentrate;
 - Cash costs C\$ 367/t of conc.
- **SYA is currently updating parts of its PFS to**
 - Reduce waste movement and hence operating costs;
 - Increase reserves; and
 - Improve recoveries from 80%, and conc grade
- **Beer & Co.'s risked, base case valuation assumes that throughput is doubled, to 1.4Mt/yr after year 3, and a Long-Run price for 6.0% Li₂O conc of US\$ 550/t.**

Snapshot

Market Cap	\$16.8m
Cash on hand (31 March 2017)	\$1.04m
Shares on Issue	932.5m
52 Week High	5.2c
52 Week Low	1.7c
1 month / 6 month VWAP	2.0c / 3.0c

SYA : daily share price v. value traded



In May 2016, the acquisition of the Authier spodumene project was announced, with the acquisition completed on 21 July. SYA also announced the commencement of a PFS to be completed by end of 2016.

In November, SYA announced an updated Mineral Resource Estimate of 13.74Mt grading 1.07% Li₂O.

SYA announced the results of a PFS on Authier in February 2017, and is presently updating / optimising the work.

By developing a 700kt/yr project, Authier can be fast-tracked, with first product (spodumene concentrate grading up to 6.0% Li₂O) targeted end 2018.

SYA also has a graphite prospect and spodumene projects in WA.

Author : Pieter Bruinstroop
pbruinstroop@beerandco.com.au

Authier spodumene project

Authier has spodumene contained in out-cropping pegmatites. It is about 45km from the established mining centre of Val d'Or in Quebec, with sealed road and grid power nearly to site; and rail to ports on St Lawrence seaway.

PFS announced 16 February 2017

- Reserves of 10.2Mt, grading 1.02% Li₂O, within Resources of 13.74Mt, grading 1.07% Li₂O
- C\$ 66m project capital to process 700kt/yr of ore, to produce 99kt/yr of 5.75% Li₂O concentrate
- Cash costs C\$ 366/t of conc.

At a throughput rate of 700kt/yr, SYA is able to bring Authier quickly into production as the scope of the environmental studies is limited.

In Beer & Co.'s view, the extent of mineralisation warrants a higher throughput rate, and we allow for expansion after year 3, allowing for the extra 2 years of environmental studies and subsequent approvals.

SYA updating PFS; expect results in July

SYA is updating the PFS work to increase resources, reserves, lower costs, improve recoveries and concentrate grade.

Lithium pricing remains firm

Product prices have firmed slightly.

Recent spodumene concentrate pricing has been from US\$ 750/t to US\$ 905/t for 2017 and US\$ 880/t to Dec. 2019.

Beer & Co.'s analysis assumes that prices fall to US\$ 550/t in the long term.

Beer & Co.'s risked, base case valuation is 7.3c/share

Beer & Co.'s valuation assumes that the production rate is increased to 1,400kt/yr after year 3. Our base case does NOT allow for any benefit from the current work to lower costs or improve metallurgical performance.

Beer & Co initiates research with a Strong BUY, High Risk

This report was produced by Beer & Co Research, an independent research and advisory firm. Beer & Co is an authorised representative of Melbourne Venture Securities, which holds AFSL No. 224 313. This research is intended for wholesale investors ONLY. If you do not wish to receive our research, please email to info@beerandco.com.au with "unsubscribe" If you wish to receive, free of charge, Beer & Co research, please register at <http://beerandco.com.au/all-research/>

Sayona Mining (SYA)

Introduction

On 3 May, 2016, SYA announced the acquisition of an option to acquire the Authier spodumene project. The acquisition was completed on 21 July 2016.

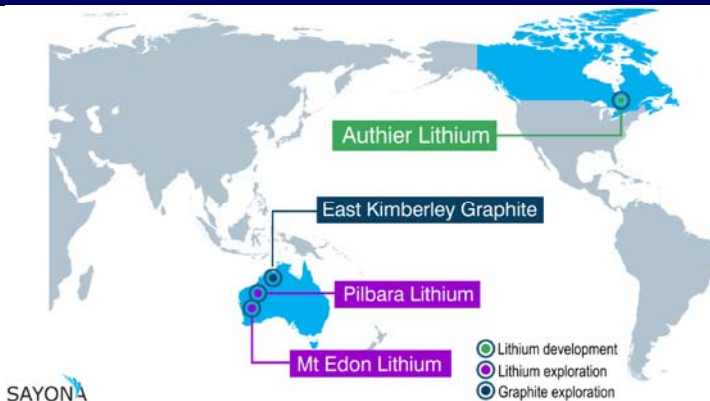
SYA is focussed on developing its Authier project in Quebec

A Preliminary Economic Analysis (PEA) was completed on Authier in March 2013 by Glen Eagle Resources Inc (GER.TSX-V). Building on this work, SYA announced the results of a Pre-Feasibility Study (PFS) on 16 February 2017. SYA is now updating some parameters of that work.

While SYA has spodumene and graphite exploration projects in WA, as shown in Figure 1, its focus is in the development of the Authier lithium project.

SYA also has 3 spodumene prospects and 1 graphite prospect, all in WA

Figure 1 : SYA's portfolio of projects



SAYONA

Source : SYA presentation, November 2016

Authier

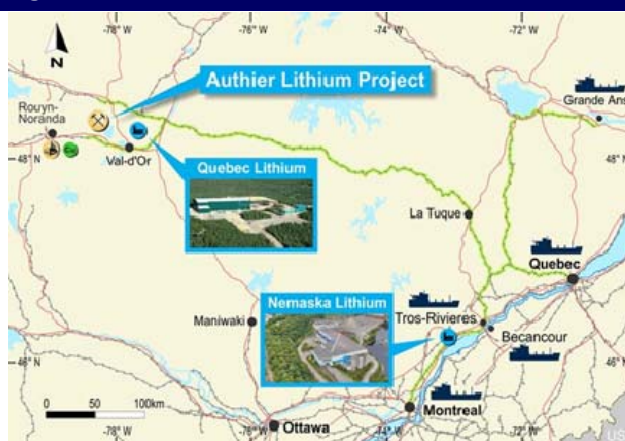
Authier is in Quebec province, about 45km from Val d'Or, and connected by highway, rail and energy reticulation

Figure 2 shows that Authier project is located about 45km from the established mining centre of Val d'Or, which has a population of 33,000 and is connected

- by major highway 525km to Montreal;
- by rail, 520km to the port of Quebec City, on the St Lawrence seaway; and
- by air, from Montreal to major airports in Canada and USA.

Authier is only 60km from the Quebec Lithium plant, which is being re-commissioned.

Figure 2 : Authier, new Val d'Or, Quebec



Source : Sayona Mining

Resources

Authier has 13.7Mt in resources, grading 1.07% Li₂O

Prior to SYA's acquisition, 150 holes for a total of 19,735m had been drilled into Authier.

On 23 November 2016 SYA announced an update of this estimate, following further drilling. This is shown in Figure 3.

Figure 3 : Resource Estimate, 2017

cut-off = 0.5% Li ₂ O	volume	Li ₂ O grade	contained Li ₂ O
Measured	4.72 Mt	1.03 %	48,519t
Indicated	7.13 Mt	1.10 %	78,280t
	11.85 Mt	1.07 %	126,799t
Inferred	1.90 Mt	1.05 %	19,901t
TOTAL	13.74 Mt	1.07 %	146,700t

Source : SYA ASX announcement, 23 November 2016

of which 11.85Mt is in the Measured + Indicated categories.

Pre-Feasibility Study

On 16 February, 2017, SYA announced the results of their PFS.

SYA is currently undertaking work on certain parameters used in the PFS and expect to announce the results in July, and the results of the DFS by the end of 2017.

SYA expect to upgrade Resources and Reserves estimates after completing their current drill programme

Figure 5 shows that of the 11.85Mt of Measured + Indicated Resources, grading 1.07%, the Reserves is estimated to be 10.2Mt, grading 1.02%, as shown in Figure 4.

Figure 5 : Ore Reserves, Authier

cut-off = 0.45% Li ₂ O	Li ₂ O grade	contained Li ₂ O	
Proven	4.9 Mt	0.97 %	47,530t
Probable	5.3 Mt	1.06 %	56,180t
TOTAL	10.2 Mt	1.02 %	103,710t

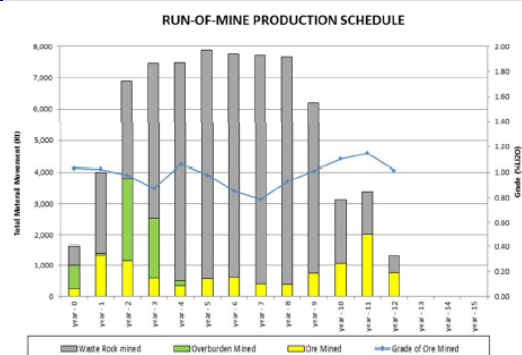
Source : SYA ASX announcement, 16 February 2017

SYA announced the results of their PFS in February 2017, about 7 months after initial acquisition.

Figure 6 shows the expected production from Authier.

It shows wide variation in the waste to ore ratio through the project life, though the total amount of material moved is relatively stable, around 7.5Mt/yr.

Figure 6 : Authier production profile



Source : SYA ASX announcement, 16 February 2017

The PFS is based on 10.2Mt of reserves, but with significant variability in the amount of ore mined each year.

The plan is to process 700kt/yr, as the permitting process at this rate is less onerous.

The expected capital cost to process 700kt/yr of ore is C\$ 66m as shown in Figure 7.

Figure 7 : Cap.Ex

Site Civil works	\$C 4.7m
Mine pre-strip	\$C 6.6m
Process Plant	\$C 34.9m
Plant infrastructure	\$C 1.1m
Other Infrastructure	\$C 4.8m
EPCM, working capital	\$C 9.2m
Contingency	\$C 4.3m
TOTAL	\$C 65.6m

Source : SYA ASX, 16 Feb 2017

Project capital costs are expected to be C\$66m to bring into production a project processing 700kt/yr of ore to produce about 99kt/yr of 5.75% Li₂O concentrate, at a cash cost of C\$ 367/t, FOB,

In addition, SYA advised sustaining capital costs over the life of the project totalling C\$ 41m, of which C\$ 35m is for mine fleet leasing after the start of commercial production.

In their PFS announcement, SYA advised costs of

- C\$ 2.88/t of material mined;
- C\$ 20.9/t of ore processed; and
- C\$ 38/t of product trucked 20km to Val d'Or, the loaded onto train to be railed 525km to port and loaded onto a ship.

SYA also advised a royalty of about 2% to vendors. Figure 8 shows the detail of the expected cash costs of C\$ 367/t of 5.75% Li₂O concentrate

Lithium Prices

Prices for spodumene concentrate are difficult to determine as there are few trades.

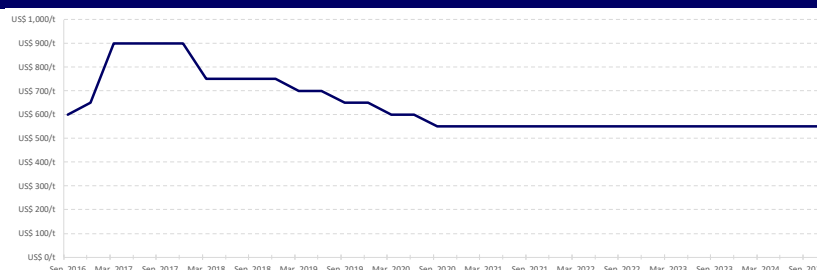
Nearly all of the conversion of spodumene concentrate into either Li_2CO_3 or LiOH occurs in China, due to the strength of local demand and the development of a processing industry using local hard rock sources.

Recently announced prices have included :

- US\$ 750/t for 6.0% Li_2O concentrates shipped by 30 June 2017 (with later shipments to be reviewed), from Mt Marion, announced by NeoMetals (NMT.SSX) and Mineral Resources (MIN.ASX) on 16 February 2017;
- US\$ 830/t for 5.5% Li_2O concentrate, equivalent to US\$ 905/t for 6.0% Li_2O , from Galaxy Resources (GXY.ASX) Mt Caitlin project, announced on 14 December 2016; and
- US\$ 880/t for 6% Li_2O concentrate, FOB Esperance, for deliveries from 15 March 2018 to 31 December 2019 by Tawana Resources (TAW.ASX), announced 26 April 2017.

Figure 9 shows the price projections used by Beer & Co in this analysis, showing that present prices hold for a period before falling as more supply comes on-line, to a long run price of US\$ 550/t, compared with current pricing of \$905 or \$880 or \$750 in 2017 and \$880/t for 2018.

Figure 9 : Beer & Co.'s assumed price profile



Source : Beer & Co estimates

Beer & Co.'s Long-Run price is at the low end of the range of other estimates.

Beer & Co.'s cashflow projections for Authier

Defining our base case

Figure 10 shows the mining inventory assumed by Beer & Co in this analysis, of 13.7Mt, and we test for the impact of larger and smaller inventory.

Figure 11 shows SYA's current drill programme, seeking to infill and extend the resource.

Figure 10 : Beer & Co.'s mining inventory

	Li ₂ O		Waste : Ore
	grade	contained	
Reserves	10.20 Mt	1.02 %	103,710t
Resources	3.54 Mt	1.01 %	35,655t
Extension	3.00 Mt	1.05 %	31,455t
TOTAL	16.74 Mt	1.02 %	170,820t

Source : Beer & Co estimates

Beer & Co expects that SYA will be successful in its programme, which includes delineation of a pegmatite previously intersected to the north of the resource.

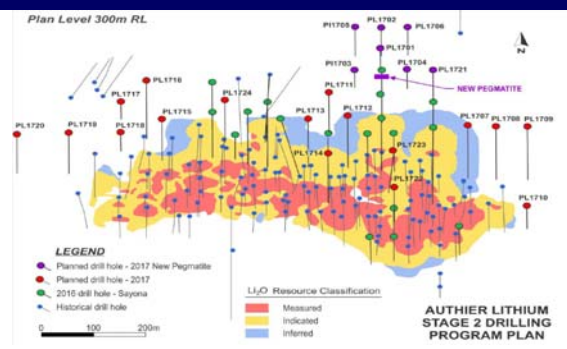
Prices for benchmark 6.0% Li_2O spodumene concentrate are not certain with current pricing ranging from US\$ 750/t to US\$ 905/t

The only known pricing for 2018 is US\$ 880/t

Beer & Co expects prices to fall progressively, down to a long run price of US\$ 550/t in about 5 years, as supply from the plethora of current

SYA is reviewing and updating some aspects of its PFS.

Figure 11 : Extending Authier’s mining inventory



Source : SYA presentation, March 2017

Beer & Co expects that SYA will increase its current reserves estimate from its drill programme.

SYA may also achieve other successes from its current drill programme

and its met test programme

but these are not in Beer & Co.’s base case

with the larger mining inventory, Beer & Co expects that processing capacity will be doubled in year 3

The drill programme should also result in a lower amount of waste moved

- From geo-technical work, steepening the hanging wall; and
- Infill re-classifying material from waste with zero Li2O.

In our base case, Beer & Co does not allow for lower waste movement, though we do test for the sensitivity of our results to changes in this.

SYA advised that QEMMSCAN analysis showed that amphibolitic material had been included in the product, reducing the Li2O grade. This deleterious material can be relatively easily rejected by a float circuit.

SYA is also undertaking testing to further reduce the iron level.

Beer & Co do NOT allow for any benefit from this in our analysis, but has assumed a product of 5.75% Li2O and 80% recovery, though we test for the impact of improved recovery.

Authier Operations

Figure 12 shows Beer & Co.’s projected operational outcomes. It shows that we allow for a doubling of processing capacity in Year 3, at a capital cost of C\$ 27.5m, allowing time for a 2 year environmental monitoring programme.

Figure 12 : Beer & Co’s projected operations for Authier

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
Mining Inventory	13,568 kt	11,528 kt	10,308 kt	9,009 kt	7,595 kt	5,707 kt	4,596 kt	2,769 kt	0 kt	0 kt	0 kt	0 kt
	1.02 %	0.96 %	0.93 %	0.93 %	1.07 %	1.10 %	1.10 %	1.02 %	0.00 %	0.00 %	0.00 %	0.00 %
Ore mined	176 kt	2,041 kt	1,220 kt	1,299 kt	1,414 kt	1,888 kt	1,112 kt	1,827 kt	3,278 kt	0 kt	0 kt	0 kt
waste : ore	5.4 : 1	2.5 : 1	5.8 : 1	10.5 : 1	9.6 : 1	6.9 : 1	12.5 : 1	7.2 : 1	2.4 : 1	0.0 : 1	0.0 : 1	0.0 : 1
Waste moved	949 kt	5,178 kt	7,030 kt	13,701 kt	13,586 kt	13,112 kt	13,888 kt	13,173 kt	7,972 kt	0 kt	0 kt	0 kt
Ore Stockpile	66 kt	1,407 kt	1,716 kt	1,615 kt	1,629 kt	2,117 kt	1,828 kt	2,255 kt	4,133 kt	2,733 kt	1,333 kt	0 kt
Li2O grade	1.02 %	1.01 %	0.98 %	0.95 %	1.01 %	1.07 %	1.08 %	1.06 %	1.02 %	1.02 %	1.02 %	0.00 %
Ore Processed	110 kt	700 kt	910 kt	1,400 kt	1,400 kt	1,400 kt	1,400 kt	1,400 kt	1,400 kt	1,400 kt	1,400 kt	1,333 kt
Li2O grade	1.02 %	1.02 %	0.99 %	0.96 %	0.96 %	1.03 %	1.07 %	1.08 %	1.04 %	1.02 %	1.02 %	1.02 %
Recovery	71 %	79 %	80 %	80 %	80 %	80 %	80 %	80 %	80 %	80 %	80 %	80 %
Li2O recovered	798 t	5,602 t	7,234 t	10,788 t	10,752 t	11,565 t	12,024 t	12,044 t	11,645 t	11,474 t	11,474 t	10,924 t
Conc grade	5.75 %	5.75 %	5.75 %	5.75 %	5.75 %	5.75 %	5.75 %	5.75 %	5.75 %	5.75 %	5.75 %	5.75 %
Li2O concentrate	13.9 kt	97.4 kt	125.8 kt	187.6 kt	187.0 kt	201.1 kt	209.1 kt	209.5 kt	202.5 kt	199.5 kt	199.5 kt	190.0 kt

Source : Beer & Co estimates

Beer & Co expects higher throughput to reduce unit operating costs by nearly 5%.

Valuation of Authier

Beer & Co.’s modelled costs matching the advised costs at the 700kt/yr rate, but, as shown in Figure 13, unit costs are projected to be lower at the higher throughput rate.

Figure 14 shows Beer & Co.’s projected cashflows for Authier.

Figure 13 : Estimated op costs

	PFS	Beer & Co	
		700 kt	1,400 kt
Mining	\$C 141/t	\$C 141/t	\$C 139/t
Processing	\$C 137/t	\$C 137/t	\$C 128/t
Transport	\$C 38/t	\$C 38/t	\$C 38/t
Other	\$C 51/t	\$C 50/t	\$C 45/t
TOTAL	\$C 367/t	\$C 367/t	\$C 350/t

Source : Beer & Co estimates

Beer & Co.'s valuation of Authier is \$154m

It shows that the Beer & Co calculate that the NPV of the after-tax cashflows for Authier is \$154m.

Figure 14 : Beer & Co.'s valuation of Authier

CAD m	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
AUD-USD	0.750	0.750	0.750	0.750	0.750	0.750	0.750	0.750	0.750	0.750	0.750	0.750	0.750
Spodumene	US\$ 800 /t	US\$ 800 /t	US\$ 725 /t	US\$ 625 /t	US\$ 550 /t	US\$ 550 /t	US\$ 550 /t	US\$ 550 /t	US\$ 550 /t	US\$ 550 /t	US\$ 550 /t	US\$ 550 /t	US\$ 550 /t
Li2O concentrate	0.0 kt	13.9 kt	97.4 kt	125.8 kt	185.8 kt	192.2 kt	203.8 kt	210.1 kt	210.0 kt	202.7 kt	199.6 kt	199.6 kt	190.1 kt
Revenue	\$ 0.0m	\$ 13.3m	\$ 90.2m	\$ 99.6m	\$ 130.6m	\$ 135.1m	\$ 143.2m	\$ 147.7m	\$ 147.6m	\$ 142.4m	\$ 140.3m	\$ 140.3m	\$ 133.6m
Cash Costs	\$ 0.0m	(\$5.3m)	(\$31.3m)	(\$43.3m)	(\$64.8m)	(\$70.2m)	(\$69.0m)	(\$72.0m)	(\$72.7m)	(\$61.1m)	(\$63.3m)	(\$64.9m)	(\$61.8m)
Royalties	\$ 0.0m	(\$0.3m)	(\$1.8m)	(\$2.0m)	(\$2.6m)	(\$2.7m)	(\$2.9m)	(\$3.0m)	(\$3.0m)	(\$2.8m)	(\$2.8m)	(\$2.8m)	(\$2.7m)
Dep'n & Amort'sn	\$ 0.0m	(\$0.7m)	(\$5.2m)	(\$6.7m)	(\$10.3m)	(\$10.3m)	(\$10.3m)	(\$10.3m)	(\$10.3m)	(\$10.0m)	(\$8.9m)	(\$2.1m)	\$ 0.0m
EBIT	\$ 0.0m	\$ 7.0m	\$ 51.9m	\$ 47.5m	\$ 52.8m	\$ 51.8m	\$ 61.0m	\$ 62.4m	\$ 61.6m	\$ 68.5m	\$ 65.3m	\$ 70.5m	\$ 69.1m
Interest Expense	\$ 0.0m	\$ 0.0m	(\$2.0m)	(\$1.5m)	(\$0.8m)	(\$0.0m)	\$ 0.0m	\$ 0.0m	\$ 0.0m	\$ 0.0m	\$ 0.0m	\$ 0.0m	\$ 0.0m
Tax Expense	\$ 0.0m	(\$1.9m)	(\$14.3m)	(\$13.0m)	(\$14.2m)	(\$13.7m)	(\$16.2m)	(\$16.5m)	(\$16.3m)	(\$18.1m)	(\$17.3m)	(\$18.7m)	(\$18.3m)
NPAT	\$ 0.0m	\$ 5.1m	\$ 35.7m	\$ 33.1m	\$ 37.9m	\$ 38.1m	\$ 44.8m	\$ 45.9m	\$ 45.3m	\$ 50.3m	\$ 48.0m	\$ 51.8m	\$ 50.8m
Feasibility / permitting	(\$2.1m)												
Project Cap.Ex	(\$23.0m)	(\$42.6m)											
Expansion Cap.ex	\$ 0.0m	\$ 0.0m	(\$7.1m)	(\$4.8m)									
Sus Cap. Ex	\$ 0.0m	(\$0.3m)	(\$3.1m)	(\$1.9m)	(\$2.0m)	(\$2.2m)	(\$2.9m)	(\$1.7m)	(\$1.2m)	\$ 0.0m	\$ 0.0m	\$ 0.0m	\$ 0.0m
Un-gear'd Net Cashflow	(\$25.1m)	(\$39.4m)	\$ 16.8m	\$ 21.5m	\$ 37.1m	\$ 42.5m	\$ 46.0m	\$ 51.7m	\$ 51.8m	\$ 51.1m	\$ 79.2m	\$ 76.2m	\$ 72.0m
Net Cashflow to Equity	(\$25.1m)	(\$6.6m)	\$ 6.3m	\$ 11.1m	\$ 26.7m	\$ 39.2m	\$ 46.0m	\$ 51.7m	\$ 51.8m	\$ 51.1m	\$ 79.2m	\$ 76.2m	\$ 72.0m

NPV, at 12.0% d.r. = \$ 154m

Source : Beer & Co estimates

Beer & Co.'s base case SYA Valuation

Figure 15 shows Beer & Co.'s projected financial outcomes for SYA. It is based on the data shown in Figure 14, adjusted for corporate overheads and financing. It shows Beer & Co.'s projected increase in equity to finance the development of Authier.

Figure 15 : Beer & Co.'s projected financial outcomes for SYA

AUD m	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
AUD-USD	0.754	0.750	0.750	0.750	0.750	0.750	0.750	0.750	0.750	0.750	0.750	0.750	0.750	0.750
Spodumene	US\$ 688 /t	US\$ 800 /t	US\$ 800 /t	US\$ 725 /t	US\$ 625 /t	US\$ 550 /t	US\$ 550 /t	US\$ 550 /t	US\$ 550 /t	US\$ 550 /t	US\$ 550 /t	US\$ 550 /t	US\$ 550 /t	US\$ 550 /t
Sales revenue	0	0	13	90	100	131	135	143	148	148	142	140	140	134
Total Revenue	0	0	13	90	100	131	136	145	150	151	145	143	143	137
Cash Costs	0	0	(6)	(33)	(45)	(67)	(73)	(72)	(75)	(76)	(64)	(66)	(68)	(64)
Corporate Costs	(1)	(1)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(1)	0	0	0
Exploration Expense	0	0	(0)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(0)	0	0	(1)
Dep'n & Amort'sn	0	0	(1)	(5)	(7)	(10)	(10)	(10)	(10)	(10)	(10)	(9)	(2)	0
EBIT	(1)	(1)	5	50	45	51	51	61	63	62	70	68	73	72
Interest Expense	0	0	0	(2)	(1)	(1)	(0)	0	0	0	0	0	0	0
Tax Expense	0	0	(2)	(14)	(13)	(14)	(14)	(16)	(17)	(16)	(18)	(17)	(19)	(18)
NPAT	(1)	(1)	3	34	31	36	37	44	46	46	52	51	55	53
Fully diluted shares on issue	1,279m	2,283m	2,283m	2,283m	2,283m	2,283m	2,283m	2,283m	2,283m	2,283m	2,283m	2,283m	2,283m	2,283m
Earnings per Share	(0.1c)	(0.1c)	0.2 c	1.5 c	1.4 c	1.6 c	1.6 c	1.9 c	2.0 c	2.0 c	2.3 c	2.2 c	2.4 c	2.3 c

Source : Beer & Co estimates

Figure 16 shows Beer & Co.'s risk'd, base case valuation of SYA.

Figure 16 : Beer & Co's risk'd Valuation of SYA

VALUATION				
discount rate =	12.0 %	30 June 2016		22-May-17
	risk :	100%	Product	per share
Authier - Reserves	80 %	\$ 106m	\$ 85m	3.7 c
Authier - Extensions	65 %	\$ 26m	\$ 17m	0.7 c
East Kimberley Graphite	nom	\$ 3m	\$ 3m	0.1 c
Pilbara Lithium	nom	\$ 3m	\$ 3m	0.1 c
Mt Edon Lithium	nom	\$ 1m	\$ 1m	0.0 c
Exploration	100 %	(\$ 2m)	\$ 0m	0.0 c
Corporate	100 %	(\$ 9m)	(\$ 9m)	(0.4c)
Cash at Corporate level	100 %	\$ 0m	\$ 0m	0.0 c
Equity raisings	100 %	\$ 36m	\$ 36m	1.6 c
TOTAL		\$ 163m	\$ 135m	5.9 c
Shares on issue		537.3m	F P O shares	315.3m
		427m	FY 17	12.0m
		1,319m	Later	ex'd

Source : Beer & Co estimates

Beer & Co.'s valuation of SYA is based on Authier, with extra corporate costs and nominal value for SYA's exploration.

Beer & Co has risk'd the value of the Authier project, with the extensions having a higher risk

Figure 16 shows that Beer & Co has allowed a nominal valuation for SYA's assets outside of Authier, which is its focus.

Sensitivities

Beer & Co has tested our base case, risked, valuation for its sensitivity to a range of inputs.

Beer & Co.'s base case valuation is tested for a range of sensitivities. In each case, we also show the value of the Authier project being delivered in the manner we expect, which is the "un-risked" case.

Price

Figure 9 and Figure 14 showed Beer & Co.'s price projections, which show price falling from current levels to a long-run price of US\$ 550/t. Figure 17 shows the impact of long run prices \$50/t higher and \$50/t lower than Beer & Co.'s assumption.

Commodity prices have a big impact

Figure 17a : Price sensitivities, risked

Throughput	Long-Run Price		
	\$ 500/t	\$ 550/t	\$ 600/t
PFS Case	3.7 c	4.4 c	5.2 c
Base Case	6.2 c	7.3 c	8.5 c

Source : Beer & Co estimates

Figure 17b : Price sensitivities, un-risked

Throughput	Long-Run Price		
	\$ 500/t	\$ 550/t	\$ 600/t
PFS Case	4.2 c	5.1 c	6.1 c
Base Case	7.3 c	8.6 c	10.1 c

Source : Beer & Co estimates

There is little benefit to extra Resources if the processing rate remains 700kt/yr

Mining inventory / project life

Figure 10 showed Beer & Co.'s mining inventory. In Figure 18, our base case corresponds to Resources, while the Extension case is 16.7Mt of ore.

Figure 18 shows no benefit from a larger mining inventory at the 700kt/yr processing rate, but there is benefit at the 1.4Mt/yr rate.

If the processing rate is increased to 1.4Mt/yr, then larger resources have a significant benefit

Figure 18a : Project life, risked

Throughput	Mining Inventory		
	Reserves	Resources	Extension
PFS Case	4.3 c	4.4 c	4.5 c
Base Case	6.7 c	7.3 c	8.3 c

Source : Beer & Co estimates

Figure 18b : Project life, un-risked

Throughput	Mining Inventory		
	Reserves	Resources	Extension
PFS Case	5.0 c	5.1 c	5.2 c
Base Case	7.8 c	8.6 c	9.8 c

Source : Beer & Co estimates

Our valuation benefits from a lower strip ratio

Waste : Ore (Strip ratio)

SYA's current programme expects to be able to reduce the amount of waste moved, by about 10%. Figure 19 shows that this has a much bigger impact in the higher throughput case.

In all cases, there is a significant benefit from successful project delivery

Figure 19a : strip ratio, risked

Throughput	Waste : Ore	
	PFS case	Lower
PFS Case	4.4 c	4.6 c
Base Case	7.3 c	7.5 c

Source : Beer & Co estimates

Figure 19b : strip ratio, un-risked

Throughput	Waste : Ore	
	PFS case	Lower
PFS Case	5.1 c	5.2 c
Base Case	8.6 c	8.9 c

Source : Beer & Co estimates

Recoveries

Base case recoveries are 80% of the Li₂O in ore to concentrate. Figure 20 shows that if recoveries are increased from 80% to 82.5%, the impact is meaningful, while falling to 77.5% also has a noticeable impact.

Figure 20a : recoveries, risked

Throughput	Recoveries		
	low	base case	high
PFS Case	4.1 c	4.4 c	4.8 c
Base Case	6.8 c	7.3 c	7.8 c

Source : Beer & Co estimates

Figure 20b: recoveries, un-risked

Throughput	Recoveries		
	low	base case	high
PFS Case	4.7 c	5.1 c	5.5 c
Base Case	8.0 c	8.6 c	9.2 c

Source : Beer & Co estimates

Beer & Co.'s valuation is sensitive to changes in recovery

Beer & Co.'s risked, base case valuation is more than 3x the current share price

There is significant further upside potential to our valuation.

Beer & Co initiates research on SYA with a

Strong BUY

High risk

recommendation

Conclusions

SYA formally acquired the Authier lithium project in July 2016. SYA's share price chart shows no discernible reaction to this announcement.

SYA has since announced the results of a PFS, which has also failed to stir interest.

SYA has further prospects, but SYA is focussed on the development of its Authier project.

In Beer & Co.'s view, the prospects for spodumene are much better than is reflected in share prices.

SYA also has potential further improvements at Authier, though our analysis shows that the greatest addition to value is to be able to increase the throughput from the base case of 700kt/yr.

Final Comments

Beer & Co.'s base case valuation is more than 3x the current share price, and we see significant further upside potential.

Beer & Co initiates research with a Strong BUY, High Risk, recommendation.

Important Information

Confidential

This document is for the confidential use of the recipients only and is not to be reproduced without the authority of Beer & Co Pty Ltd. It has been prepared at the request of Sayona Mining Limited and Beer & Co Pty Ltd will receive a fee for its preparation.

Disclaimer

The persons involved in or responsible for the preparation and publication of this report believe that the information herein has been obtained from reliable sources and that any estimates, opinions, conclusions or recommendations are reasonably held at the time of compilation. No warranty is made as to the accuracy of the information in this document and, to the maximum extent permitted by law, Beer & Co Pty Ltd and its related entities, their respective directors and officers disclaim all liability for any loss or damage which may be suffered by any recipient through relying on anything contained or omitted from this document.

General Advice

The content is of a general nature and is based on a consideration of the securities alone, and as such is conditional and must not be relied upon without advice from a securities adviser as to the appropriateness to you given your individual investment objectives, financial situation and particular needs. Whilst this document is based on information and assessments that are current at the date of publication, Beer & Co Pty Ltd has not undertaken detailed due diligence on the information provided and has no obligation to provide revised assessments in the event of changed circumstances.

Disclosure

Beer & Co Pty Ltd has been engaged by Sayona Mining Limited to prepare this research report and is being paid a fee for its preparation. In the future, Beer & Co Pty Ltd may provide capital raising services to Sayona Mining Limited on commercial terms.

Beer & Co Pty Ltd seeks to do work with those companies it researches. As a result, investors should be aware that Beer & Co Pty Ltd may have a conflict of interest that could affect the objectivity of this report.

Analyst Certification

The analyst responsible for this research report certifies that all of the views expressed reflect his personal views about the securities and the issuer.

Report prepared by : Pieter Bruinstroop pbruinstroop@beerandco.com.au

Beer & Co Recommendation

Beer & Co provide general recommendations only and do not consider the specific interests of the recipient of this report. Beer & Co generally provides a 2 part recommendation and both need to be considered together.

Recommendation : Beer & Co's investment recommendation is driven by the difference between our base case, risked valuation and the share price at the time. A Strong BUY recommendation means a very large difference (eg. over 100%), while BUY means a significant difference and Accumulate means a small, but positive difference. The recommendation is not independent of the uncertainty in Beer & Co's valuation.

Risk : Risk relates to the potential, over the long run, for an investor to lose money; it is a function of both the difference between our base case valuation and the uncertainty in our valuation due to the degree of estimation and/or uncertainties about project execution. Speculative means a high chance of loss; High risk means a good chance of loss and medium means some chance of loss, given the company size.

Beer & Co Pty Ltd, ABN 88 158 837 186, Authorised Representative of Melbourne Venture Securities Pty Ltd AFSL No. 224 313	Suite 4, Level 2, Bank House 11 - 19 Bank Place Melbourne, Vic, Australia 3000	Tel : (+613) 9600 3599 Fax : (+613) 9602 2291 e : info@beerandco.com.au W: www.beerandco.com.au
--	--	---
