

# **AUSTRALIAN POTASH LIMITED (APC)**

### LSOP DFS delivers a strong margin, long-life project

Australian Potash Limited (APC) recently completed the Definitive Feasibility Study (DFS) on the development of its 100%-owned Lake Wells Sulphate of Potash Project (LSOP) in WA.

The DFS confirms the strong technical and economic viability of the project, and highlights potential for a long-life (+30 years), potash operation designed to produce 150ktpa SOP, and has capital costs of A\$208M (includes a contingency of A\$20M). LOM operating costs of US\$262/t (~A\$391/t) are also expected to be highly competitive (first quartile) and translate to solid margins for capital payback in under 5 years on post-tax earnings estimates. An estimated all-in-sustaining cost (AISC) for the project is ~US\$285/t (~A\$425/t), which implies a margin of +US\$270/t at current spot SOP prices.

The capital intensity of the project also appears attractive at ~A\$1,387/t SOP, which is below the peer average, and ~30% less capital intensive than some more recently constructed brine projects globally.

### Next steps FEED, binding offtakes and project financing

APC now plans to complete binding off-takes for its premium-quality SOP and finalise the debt package for the project financing. The front-end engineering design (FEED) is commencing imminently, with the LSOP expected to be developed over ~24 months from the final investment decision (FID). We see potential for FID in early CY20, assuming offtakes and project financing can be secured, and now model first production from mid CY22.

### High confidence maiden reserve providing 95% of LOM output

The LSOP is expected to be serviced by a borefield network consisting of some 78 bores. APC has an envious position of having a deep palaeochannel (3-4x deeper than peers) which has made the estimation of reserves, and the anticipated abstraction of brine easier. The Company recently upgraded its Lake Wells SOP resource to 18.1Mt, with 100% of the resource Measured. The high confidence drainable resource has been converted to a maiden reserve of 3.6Mt of SOP, providing 95% of the LOM output and the balance coming from further Measured resources.

While the project is located ~280kms from a rail terminal at Leonora, the DFS has been modelled on the assumption of a 100% road freight to the Geraldton Port. The local shire of Laverton continues with works to tar-seal the Great Central Road, providing ~70kms of bitumen for improved transport logistics. The upgrade of the access road into Lake Wells (~90kms) is also being considered. The improved logistics, lowering transport costs was one of the outcomes delivered in the DFS.

### Undervalued, favourable economics, funding seen as key risk

APC remains undervalued on peer comparisons, and we would argue still offers good value, in regards to highly favourable economics, transport infrastructure, low capital intensity and high-quality SOP product offerings.

We maintain our **Speculative Buy** on APC, with a price target of 30cps (up from 25cps). APC's current cash position is estimated to be ~A\$3M, which provides some funds to commence FEED activities and for ongoing offtake decisions. Project funding is seen as the key near-term risk to development.

### APC.asx Speculative Buy

	30 Aug 2019
Share Price	\$0.110
Valuation	\$0.30
Price Target (12 month)	\$0.30

Brief Business Description: Potash (SOP) explorer/developed

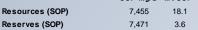
Hartleys Brief Investment Conclusion 100%-ow ned Sulphate of Potash (SOP) Project at Lake Wells in WA. Targeting brine SOP production of 150ktpa for domestic and export markets. DFS completed and now working on offtakes and project financing.

Board

Jim Walker (Non-Exec Chair) Matt Shackleton (MD & CEO)

Top Shareholders
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		SOP mg/L	M t SOP
P/E	-4.2	-27.6	2.5
EPS (cps)	-3.6	-0.5	5.9
CF/Share (cps)	-2.6	-0.4	4.3
Norm NPAT	-26.4	-5.8	62.9
Op Cash Flw	-13.9	3.6	52.0
Prod (kt SOP)	0.0	37.5	150.0
Prelim. (A\$m)	FY21e	FY22e	FY23e
EV/Reserve t			A\$10.1/t
EV/Resource t			A\$2.0/t
EV			A\$36.3m
Debt (est)			A\$0.0m
Cash (est)			A\$3.0m
- fully diluted			A\$51.1m
Market Cap			A\$39.3m
- fully diluted			464.4m
Issued Capital			357.6m
West Perth WA 6005	5		
31 Ord Street			
Company Address	5		
Board and Managem	ent		2.5%
Perth Select Seafood	ł		4.5%
Yandal Investments	(Creasy)		8.5%
Top Shareholders			





Mike Millikan Resources Analyst

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E: mike.millikan@hartleys.com.au Hartleys has completed a capital raising in the past 12

months for Australian Potash Limited ("APC") for which it has earned gross fees. The analyst has a beneficial interest in APC shares.

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# SUMMARY MODEL

imited				Sh	are Prie
					\$0.1 <sup>-</sup>
					\$0.1
					\$39.3 -\$3
ited					\$39.3
					\$36.3
					357.6 106.8
all options)					464.4
	d new capital)				1114.3
					\$0. <b>\$0</b> .
Unit	30 Jun 19	30 Jun 20	30 Jun 21	30 Jun 22	30 Jun
A\$m	0.0	0.0	0.0	31.9	125
A\$m	-5.6	-5.8	-6.9	-15.8	-57
A\$m	-5.6	-5.8	-6.9	16.1	68
10-		-	-		54
			••••		-1 5
	-5.0	-2.3	-7.0	-9.6	-1
A\$m	-5.5	-9.4	-20.3	-4.4	4
A\$m	0.0	0.0	0.0	0.0	(
A\$m	-7.2	-12.2	-26.4	-5.8	6
A\$m	1.7	2.8	6.1	1.3	-1-
					4
A\$m A\$m	0.0 - <b>5.5</b>	0.0 <b>-9.4</b>	0.0 -20.3	0.0 -4.4	4
			20 Jun 24		30 Jun
A\$m	30 Jun 19 2.0	106.4	20.2	30 Jun 22 10.9	30 Jun 20
A\$m	0.0	0.0	0.0	3.1	1
A\$m	2.0	106.4	20.2	14.0	3
	-1.2				18
					1
					20
A\$m	4.7	156.8	203.5	200.0	23
A\$m	-	-	-	-	
A\$m	0.2	0.3	0.3	0.6	
	0.2				
		150.0	150.0	150.0	12
		150.0	150.0	150.0	12
A\$m	0.2	150.3	150.3	150.6	12
A\$m	4.4	6.5	73.9	69.4	11
A\$m	-2.0	43.6	129.8	139.1	9
Unit			63.7%	66.7%	44.1
					30 Jun 6
					-
A\$m	0.1	-2.3	-7.0	-9.6	-
A\$m	-1.8	-6.8	-13.9	3.6	5
A\$m	0.0	-45.0	-155.0	-11.0	
A\$m	-3.9	-4.0	-5.0	-2.0	R
A\$m	1.3	0.0	0.0	0.0	
Aşm	-2.6	-49.0	-160.0	-13.0	-
A\$m	0.0	150.0	0.0	0.0	
A\$m	4.2	10.2	87.7	0.0	
A\$m A\$m	4.2 0.0	10.2 0.0	87.7 0.0	0.0 0.0	-3
A\$m A\$m <b>A\$m</b>	4.2 0.0 <b>4.2</b>	10.2 0.0 <b>160.2</b>	87.7 0.0 <b>87.7</b>	0.0 0.0 <b>0.0</b>	-3 1
A\$m A\$m A\$m A\$m	4.2 0.0 4.2 -0.2 30 Jun 19 358	10.2 0.0 160.2 104.4 30 Jun 20 443	87.7 0.0 87.7 -86.2 30 Jun 21 1,114	0.0 0.0 0.0 -9.4 <u>30 Jun 22</u> 1,114	-3 1 30 Jun 1,1
A\$m A\$m A\$m A\$m A\$m Unit m m	4.2 0.0 4.2 -0.2 30 Jun 19 358 331	10.2 0.0 160.2 104.4 30 Jun 20 443 400	87.7 0.0 87.7 -86.2 30 Jun 21 1,114 778	0.0 0.0 0.0 -9.4 30 Jun 22 1,114 1,114	-3 1 30 Jun 1,1 1,1
A\$m A\$m <b>A\$m</b> <b>A\$m</b> <b>Duit</b> m m m	4.2 0.0 4.2 -0.2 30 Jun 19 358 331 262	10.2 0.0 160.2 104.4 30 Jun 20 443 400 331	87.7 0.0 87.7 -86.2 30 Jun 21 1,114 778 708	0.0 0.0 -9.4 30 Jun 22 1,114 1,114 1,042	-3 1 30 Jun 1,1 1,1 1,0
A\$m A\$m A\$m A\$m Duit m m m Unit	4.2 0.0 4.2 -0.2 30 Jun 19 358 331 262 30 Jun 19	10.2 0.0 160.2 104.4 30 Jun 20 443 400 331 30 Jun 20	87.7 0.0 87.7 -86.2 30 Jun 21 1,114 778 708 30 Jun 21	0.0 0.0 -9.4 30 Jun 22 1,114 1,114 1,042 30 Jun 22	-3 30 Jun 1,1 1,1 1,1 30 Jun
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A\$m A\$m A\$m A\$m Duit m m m Unit	4.2 0.0 4.2 -0.2 30 Jun 19 358 331 262 30 Jun 19	10.2 0.0 160.2 104.4 30 Jun 20 443 400 331 30 Jun 20	87.7 0.0 87.7 -86.2 30 Jun 21 1,114 778 708 30 Jun 21	0.0 0.0 -9.4 30 Jun 22 1,114 1,114 1,042 30 Jun 22	-3 1 30 Jun 1,1 1,1 1,0 30 Jun
A\$m A\$m A\$m A\$m Unit m m m Unit A\$ cps x	4.2 0.0 4.2 -0.2 30 Jun 19 358 331 262 30 Jun 19 -0.5 -20.1	10.2 0.0 160.2 104.4 30 Jun 20 443 400 331 30 Jun 20 -1.7 -6.5	87.7 0.0 87.7 -86.2 30 Jun 21 1,114 778 708 30 Jun 21 -1.8 -6.2	0.0 0.0 -9.4 30 Jun 22 1,114 1,114 1,14 1,042 30 Jun 22 0.3 33.6	-3 1 30 Jun 1,1 1,1 1,0 30 Jun
A\$m A\$m <b>A\$m</b> <b>A\$m</b> <b>Unit</b> M A\$cps x A\$cps x AUD	4.2 0.0 4.2 -0.2 358 358 331 262 30 Jun 19 -0.5 -20.1 -1.7 -6.6	10.2 0.0 160.2 104.4 30 Jun 20 443 400 331 30 Jun 20 -1.7 -6.5 -2.3 -4.7	87.7 0.0 87.7 -86.2 30 Jun 21 1,114 778 708 30 Jun 21 -1.8 -6.2 -2.6 -4.2	0.0 0.0 -9.4 30 Jun 22 1,114 1,114 1,042 30 Jun 22 0.3 33.6 -0.4 -27.6	-30 ( -31 <b>30 Jun</b> 1,11 1,11 1,0- <b>30 Jun</b>
A\$m A\$m <b>A\$m</b> <b>A\$m</b> <b>Unit</b> <b>m</b> m m <b>m</b> <b>Unit</b> <b>A</b> \$cps x A\$cps x A\$cps x AUD %	4.2 0.0 4.2 -0.2 358 331 262 30 Jun 19 -0.5 -20.1 -1.7 -2.6 -2.0 0.0%	10.2 0.0 160.2 104.4 30 Jun 20 -1.7 -6.5 -2.3 -4.7 -0.0%	87.7 0.0 87.7 -86.2 30 Jun 21 -1.14 778 708 30 Jun 21 -1.8 -6.2 -2.6 -6.2 -2.6 -4.2 -0.0%	0.0 0.0 -9.4 30 Jun 22 1,114 1,114 1,042 30 Jun 22 0.3 3.3.6 -0.4 -27.6	( ( -3) <b>30 Jun</b> 1,1 1,1 1,1 1,0 <b>30 Jun</b>
A\$m A\$m <b>A\$m</b> <b>A\$m</b> <b>Unit</b> M A\$cps x A\$cps x AUD	4.2 0.0 4.2 -0.2 358 358 331 262 30 Jun 19 -0.5 -20.1 -1.7 -6.6	10.2 0.0 160.2 104.4 30 Jun 20 443 400 331 30 Jun 20 -1.7 -6.5 -2.3 -4.7	87.7 0.0 87.7 -86.2 30 Jun 21 1,114 778 708 30 Jun 21 -1.8 -6.2 -2.6 -4.2	0.0 0.0 -9.4 30 Jun 22 1,114 1,114 1,042 30 Jun 22 0.3 33.6 -0.4 -27.6	-3 30 Jun 1,1 1,1 1,0 30 Jun
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        50%         -5.8         -6.9         16.1           Asm         -5.6         -5.8         -6.9         16.1         -         50%           Asm         -0.1         -1.3         -6.4         -10.9         Asm         -5.5         9.4         -20.3         -4.4           Asm         0.0         0.00         0.00         0.00         0.00         Asm         -5.5         -9.4         -20.3         -4.4           Asm         -5.5         -9.4         -20.3         -4.4         Asm         -5.6         -5.8</td></td>	ted         Id options and new capital)         A options and new capital)         ASm       0.0         ASm       5.6         ASm       5.6         ASm       -5.6         ASm       -5.6         ASm       0.1         ASm       -0.1         ASm       -5.6         ASm       0.1         ASm       -5.6         ASm       0.1         ASm       0.0         ASm       0.0 <td>Ad options)           A options and new capital)           Asm         0.0         30 Jun 20         30 Jun 21           Asm         0.6         5.8         6.9           Asm         -5.6         -5.8         -6.9           Asm         0.1         -1.3         -6.4           Asm         0.1         -1.3         -6.4           Asm         0.1         -2.3         -7.0           Asm         0.5         9.4         -20.3           Asm         0.1         -2.3         -6.4           Asm         0.5         9.4         -20.3           Asm         0.5         9.4         -20.3           Asm         0.5         9.4         -20.3           Asm         0.5         9.4         -20.3           Asm         0.0         0.0         0.0           Asm         0.0         0.0         0.0           Asm         0.2         0.4         20.2           Asm         0.0         0.0         0.0           Asm         0.0         0.0         0.0           Asm         0.2         0.3         0.3           Asm</td> <td>Add options in a colspan="2"&gt;Add uptions and new capital)           Asm         0.0         0.0         0.0         30 Jun 21         30 Jun 22           Asm         0.0         0.0         0.0         31.9           Asm         5.6         -5.8         -6.9         16.1           na         -         50%         -5.8         -6.9         16.1           Asm         -5.6         -5.8         -6.9         16.1         -         50%           Asm         -0.1         -1.3         -6.4         -10.9         Asm         -5.5         9.4         -20.3         -4.4           Asm         0.0         0.00         0.00         0.00         0.00         Asm         -5.5         -9.4         -20.3         -4.4           Asm         -5.5         -9.4         -20.3         -4.4         Asm         -5.6         -5.8</td>	Ad options)           A options and new capital)           Asm         0.0         30 Jun 20         30 Jun 21           Asm         0.6         5.8         6.9           Asm         -5.6         -5.8         -6.9           Asm         0.1         -1.3         -6.4           Asm         0.1         -1.3         -6.4           Asm         0.1         -2.3         -7.0           Asm         0.5         9.4         -20.3           Asm         0.1         -2.3         -6.4           Asm         0.5         9.4         -20.3           Asm         0.5         9.4         -20.3           Asm         0.5         9.4         -20.3           Asm         0.5         9.4         -20.3           Asm         0.0         0.0         0.0           Asm         0.0         0.0         0.0           Asm         0.2         0.4         20.2           Asm         0.0         0.0         0.0           Asm         0.0         0.0         0.0           Asm         0.2         0.3         0.3           Asm	Add options in a colspan="2">Add uptions and new capital)           Asm         0.0         0.0         0.0         30 Jun 21         30 Jun 22           Asm         0.0         0.0         0.0         31.9           Asm         5.6         -5.8         -6.9         16.1           na         -         50%         -5.8         -6.9         16.1           Asm         -5.6         -5.8         -6.9         16.1         -         50%           Asm         -0.1         -1.3         -6.4         -10.9         Asm         -5.5         9.4         -20.3         -4.4           Asm         0.0         0.00         0.00         0.00         0.00         Asm         -5.5         -9.4         -20.3         -4.4           Asm         -5.5         -9.4         -20.3         -4.4         Asm         -5.6         -5.8

					30 Aug Specula	ust 2019 tive Buy
Directors					Company Ir	formation
Jim Walker (Non-Exec Chair)						Ord Street
Matt Shackleton (MD & CEO)					West Pert	h WA 6005
Rhett Brans (Non-Excec Dir)						9322 1003
Brett Lambert (Non-Exec Dir)				ww	w.australianpota	ish.com.au
Sophie Raven (Company Secretary)						
Scott Nicholas (Chief Financial Office Jay Hussey (Chief Commerical Office			Stewart McCalli Chris Shaw (Exp			
Top Shareholders					m shares	% ord
Yandal Investments (Creasy)					30.5	8.5%
Perth Select Seafood					16.0	4.5%
Board and Management					9.0	2.5%
Reserves & Resources V	ol MCM	Yield	Brine Vol	K (mg/L)	SOP (mg/L)	SOP Mt
RESOURCES	-	-	-	-	-	-
Measured	27,678	9%	2,383	3,343	7,455	18.1
Indicated Inferred	-	-	-	-	-	-
TOTAL RESOURCES	27,678	- 9%	2,383	3,541	7,455	18.1
RESERVES	21,010	370	2,505	3,341	1,455	10.1
Probable			490	3,325	7,415	3.6
TOTAL RESERVES			490	3,325	7,415	3.6
LOM PLAN			511	3,350	7,471	3.8
Production Summary		Init	Jun 20	Jun 21	Jun 22	Jun 23
Production Summary Mill Throughput	N N		Jun 20	Jun 21	Jun 22 0.04	Jun 23 0.15
Potash equiv	N			-	0.04	0.15
Potash equiv (Attrib)	N			-	0.04	0.15
Potash (SOP)	N	1t	-	-	0.04	0.15
NaCl (Industrial)	N		-	-	0.00	0.00
NaCl (De-icing)		1t	-	-	0.00	0.00
Conversion of resources not in reserv Mine Life			30.0	30.0	30.0	29.0
Costs	y	r Init	30.0 Jun 20	30.0 Jun 21	30.0 Jun 22	29.0 Jun 23
Cost per processed tonne		A/t	-	-	368.9	368.9
EBITDA / tonne processed ore		A/t	-	-	429.0	454.5
Total cash costs	\$	A/t equiv.	-	-	421.5	383.3
Total cash costs		US/t equiv.	-	-	307.3	283.7
- ex shipping		US/t equiv.	-		296.5	272.7
C1: Operating Cash Cost = (a)		A/t equiv.	-	-	369	369
- ex shipping		A/t equiv. A/t equiv.	-	-	354 369	354 369
<ul> <li>(a) + Royalty = (b)</li> <li>C2: (a) + depreciation &amp; amortisation</li> </ul>		A/t equiv.	-	-	659	369 445
(a) + actual cash for development =		A/t equiv.	-		716	409
C3: (c) + Royalty		A/t equiv.		-	659	445
(d) + Royalty		A/t equiv.		-	716	409
C1: Operating Cash Cost = (a)		US/t equiv.	-	-	269	273
<ul> <li>ex shipping (mine gate)</li> </ul>	\$	US/t equiv.	-	-	258	262
Price Assumptions		Init	Jun 20	Jun 21	Jun 22	Jun 23
AUDUSD		\$/US\$	0.70	0.72	0.73	0.74
Potash (SOP)		JS\$/t	620	620	620	620
NaCl (industrial)		JS\$/t	90	90	90	90
NaCl (de-icing)	ι	JS\$/t	60	60	60	60
Hedging			Jun 20	Jun 21	Jun 22	Jun 23
Hedges maturing? Sensitivity Analysis			No	No	No	No
ochonivity Analysis				Valuation		
Base Case				0.30		
Spot Prices			0.	26 (-13.7%)		
Spot USD/AUD 0.67, SOP US\$555/t.						
AUDUSD +/10%				15 (-12.3% / 1		
SOP +/10% Production +/10%				3 (19.3% / -2 3 (19.0% / -2		
Operating Costs +/10%				.33 (19.0% / -2 .33 (-9.5% / 9		
Unpaid Capital						
Year Expires			<u>No. (m)</u>	<u>\$m</u>	Avg price %	ord
30-Jun-19			0.0	0.0	0.0	0%
30-Jun-20			48.3	9.7	0.2	14%
30-Jun-21 30-Jun-22			9.4	1.4	0.2	3%
TOTAL			49.1 106.8	6.0 17.2	0.1	14% 30%
Share Price Valuation (NAV)			Riske	d Est. A\$m	Est	. A\$/share
100% Lake Wells (pre-tax NAV at dis	c. rate of	10%)		352.7		0.32
Other Exploration				30.0		0.03
Forwards Corporate Overheads				0.0 -13.9		0.00 -0.01
Corporate Overheads Net Cash (Debt)				-13.9 3.0		-0.01 0.00
				-42.8		-0.04
Tax (NPV future liability) Options & Other Equity				0.3		0.00

Analyst: Mike Millikan +61 8 9268 2805 "tbc capital" could be equity or debt. Our valuation is risk-adjusted for how this may be obtained. Sources: IRESS, Company Information, Hartleys Research

Last Updated: 30/08/2019

Project located ~500km NE of Kalgoorlie, WA

Potash as a high value bulk commodity which requires access to infrastructure

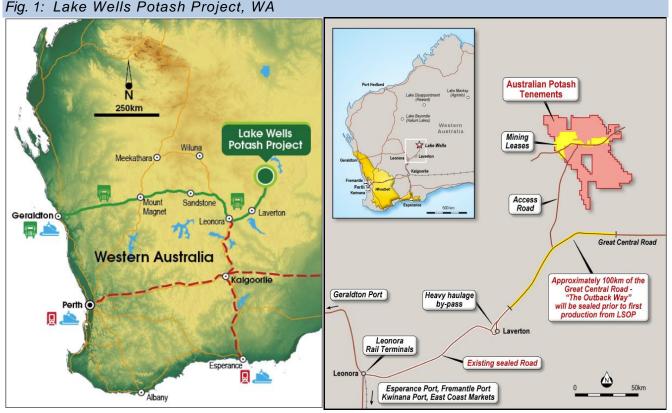
Brine SOP projects generally occupy the lower end of production cost curve and have lower capital hurdles then rock potash projects

# LAKE WELLS SOP PROJECT (LSOP) DFS DELIVERED FOR SOP PRODUCTION

The Lake Wells Sulphate of Potash (SOP) Project is located ~180km north-east of Laverton, ~500km north-east of Kalgoorlie in WA. The project area consists of tenure, which covers ~2,100km<sup>2</sup> and now includes granted Mining Leases spanning some 30,000Ha over the Lake Wells playa and palaeochannel system.

APC has 100% ownership and all potash rights. Access to the project is via the Great Central (~90km sealed/unsealed road) and Lake Wells (~90km unsealed) roads. The project is located ~280km from a bulk rail terminal at Leonora. The climate for the project area is highly conducive to evaporation and thus a solar salt operation.

Australia currently imports 100% of its potassium fertiliser requirements, and the low chloride and high sulphate content of SOP makes it an ideal and preferred form of potassium (fertiliser) for Australian farmers. SOP attracts a superior price to muriate of potash (MOP), and is underpinned by limited brine supply (only 4 evaporative operations globally) and increasing demand (forecast growth of 4%). Australia currently has no potash production, but appears well endowed with resources across a number of its salt lake systems.



Source: Australian Potash Limited

Maiden reserve of 3.6Mt of SOP grading 7,415mg/L SOP, provides 95% of the LOM APC released a maiden SOP resource for its Lake Wells Project in late June 2016, updated the resource for the Scoping Study (March 2017) and has upgraded the resource for the DFS (August 2019).

The total resource estimate using specific yield provides **18.1Mt of SOP grading 7,455mg/L SOP**, with the resource in the highest confidence resource category of Measured. The high confidence drainable resource has been converted to a **maiden reserve** of **3.6Mt of SOP grading 7,415mg/L SOP**, providing 95% of the LOM output and the balance coming from further Measured resources. LOM plan is expected to Highlights from the DFS on the development of the LSOP includes:

- Long-life (+30 years)
- Production of 150ktpa SOP
- Capital costs of A\$208M (includes a contingency of A\$20M)
- LOM operating costs of US\$262/t (~A\$391/t)
- LOM AISC (est) of ~US\$285/t (~A\$425/t) ٠
- Margins of +US\$270/t at current spot SOP prices

To achieve the targeted 100ktpa SOP production from brine at Lake Wells, the operation must abstract 540L/sec from the palaeochannel through 70 production bores (with an additional 8 bores on standby). Brine is discharged into an on-playa buffer pond from which flow is controlled into the network of on-playa preconcentration ponds to adjust for seasonal changes and evaporation.

Potassium (K) supersaturated brine is transferred from the final pre-concentration pond into the lined, off-playa, harvest ponds. Potassium and sulphate bearing salts, along with other salts (some waste, some potentially saleable) are crystallised in the harvest ponds and collected for processing.

The processing plant has been designed in such a manner to include a muriate of potash (MOP) to SOP conversion circuit, which increases overall SOP production. The MOP to SOP conversion is using the excess naturally occurring sulphate in the brines, and involves no sulphuric acid use (not the Mannheim Process). SOP produced from reserves (and some resource conversion) is increased by 50% through the addition and conversion of MOP to SOP. In the LOM plan, 100ktpa of SOP will be produced from brine and 50ktpa will be produced from MOP conversion.

Fig. 2: LSOP DFS vs Scoping Study Comparison					
Lake Wells	Units	Sc	DFS		
	Units	Stage 1	Stage 2	LOM	LOM
Date			23-Mar-17		28-Aug-19
Total Resources	Mt SOP	14.7	14.7	14.7	18.1
M&Ind Resources	Mt SOP	12.7	12.7	12.7	18.1
Reserve	Mt SOP	0	0	0	3.6
Inventory	Mt SOP	0.75	4.5	5.3	4.5
Mine Life	yrs	1-5	6-20	20	30
Capital Costs (capex)	A\$M	175	163	338	208
Scale	ktpa SOP	150	300	263	150
Operating Costs (opex)	US\$/t SOP	283	261	264	262
Operating Costs (opex)	A\$/t SOP	368	339	343	391
Sustaining capex (est)	A\$Mpa	2.2	2.9	2.7	3.3
Sales price assumption	US\$/t SOP	612	612	612	614
Sales price assumption	A\$/t SOP	795	795	795	916
Annual cash flow (pre-tax)	A\$M	61	137	118	100
Payback (pre-tax)	yrs	2.9	1.7	4.6	4.0
Payback (post-tax)	yrs	na	na	na	4.8
				NPV10	NPV8
NPV (pre-tax)	A\$M			500	665
NPV (post-tax)	A\$M			na	441
IRR (pre-tax)	A\$M			33%	25%
IRR (post-tax)	A\$M			na	21%
Capital Intensity	A\$/t SOP			1,126	1,387
Revenue to Cost Ratio				2.3	3.5
Source: Australian Potash Limite	1				

150ktpa SOP operation, with more palatable capex and attractive operating

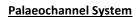
Source: Australian Potash Limited

The DFS was prepared by Lycopodium, with input from APC and its team of industry consultants: Novopro, AQ2, Knight Piesold, Argus and MBS Environmental

Financial analysis conducted by Origin Capital Group.

In the LOM plan, 100ktpa of SOP will be produced from brine and 50ktpa will be produced from MOP conversion

costs



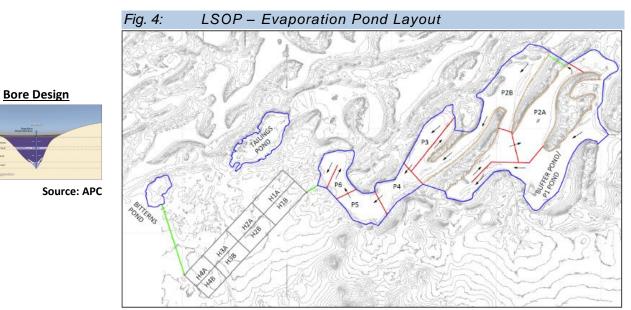




The Project will use a bore-field to abstract brine



Source: Australian Potash Limited



Source: Australian Potash Limited

Tig. 0. 2001 11000	33 TIONSITEET UITU DESI	gir r aramotoro	
		Parameter	Value
FLOTATION		Playa Brine Feed	19.4 Mtpa
		Harvest Salts to Plant	117.2 dry tph
TALINS LEACH	DRHDR SLO	MOP Addition	5.6 tph
MOP SLO	Ť	Annual Plant Availability	7800 hours
	SOP BULKTO MARKET	SOP Production	150,000 tpa
NOP TANK		Overall Process Potassium Recovery	81.5%

### Fig. 5: LSOP - Process Flowsheet and Design Parameters

Source: Australian Potash Limited

# PEERS – APC APPEARS UNDERVALUED

APC and Kalium Lakes (KLL) are the only two ASX listed stocks to have completed final studies (DFS and BFS). APC appears undervalued when compared to KLL, the projects are comparable, whereas KLL is now largely funded to complete construction.

Fig. 6: ASX-listed	110013	– APC a	
	Units	APC	KLL
Project		Lake Wells	Lake Beyondi
Commodity		SOP	SOP
Interest	%	100%	100%
Study Level		DFS	DFS
Consultant		Lycopodium	K-UTEC
Ord Shares	М	357.6	386.5
Price	S/s	\$0.110	\$0.50
Market Cap	A\$M	\$39.3	\$191.3
Cash	A\$M	\$3.0	\$87.4
Debt*	A\$M	\$3.0 \$0	\$176
EV	A\$M A\$M	\$36	\$280
EV adj	A\$M	\$244	\$285
	X X	7244	7.7
	~	LOM	LOM
Resource	Mt	18.1	19.6
Reserve	Mt	3.6	5.1
Mining Inventory	Mt	3.8	4.7
Mine Life	yrs	30	30
Extraction	Туре	Bores	Trenching/Bor
SOP Production	ktpa	150,000	164,000
SOP Resource (drainable)- M&Ind	Mt	18.1	10.9
SOP Resource (drainable) - Inf	Mt	0.0	8.8
SOP Resource (drainable)	Mt	18.1	19.7
. ,			
K Grade	mg/L	3,343	5,585
SOP Grade	mg/L	7,455	12,455
Road Distance to Port	km	1,060	1,088
Port		Geraldton	Fremantle
rine Extraction/Evaporation Ponds	A\$M	74.0	68
Plant	A\$M	58.0	102
Other infrastructure	A\$M	19.0	48.6
Indirect	A\$M	37.0	35.8
Contingency	A\$M	20.0	25.0
Total Capex	A\$M	208	285
Sustaining Capex - LOM	A\$Mpa	3.3	6.9
LOM Capex	A\$M	306	491
Cash costs	US\$/t	262	200
Cash costs	A\$/t	391 285	274 226
AISC (est) AISC (est)	<b>US\$/t</b> A\$/t	425	310
Capital Intensity	US\$/t	929	1268
Capital Intensity	A\$/t	1387	1737
Revenue to Cost Ratio	LOM	2.3	3.0
EV/Production t SOP	A\$/t SOP	242	1707
Price SOP used	US\$/t	614	606
FX A\$/US\$	A\$/US\$	0.67	0.73
Price SOP used	A\$/t	916	830
Payback (pre-tax)	years	4.0	7.0
Payback (post-tax)	years	4.8	8.3
Discount Rate		8%	8%
NPV (pre-tax)	A\$M	\$665	\$575
NPV (post-tax)	A\$M	\$441	\$347
NPV/Total Capex	х	3.2	2.0
NPV/LOM Capex	х	2.2	1.2
IRR (pre-tax)	%	25%	20%

164ktpa SOP production, whereas APC is planning on a 150ktpa SOP from the start

KLL has a two staged

ramp-up to achieve

KLL appears to be largely funded to production, whereas APC is working on offtakes and project financing solutions

APC's capital intensity is A\$1,387/t vs KLL's A\$1,737/t

Project returns are similar, though a slightly higher SOP price has been used by APC in its study

> Source: Hartleys Estimates; Company Reports Page 6 of 10

# VALUATION AND PRICE TARGET POTENTIAL FOR FIRST SOP MID-CY22

Our sum of parts valuation for APC is based largely on information supplied in the DFS. We assume SOP production of 150ktpa over a 30 year mine life with a similar capex and opex profile as per the latest study.

We assume existing infrastructure of roads and rail can be accessed and SOP prices of US\$620/t. We assume pre-production capex of ~A\$220M, which includes some additional working capital and funding through a 60% debt and 40% equity mix. We have now adjusted timing for first production to mid-CY22. Our sustaining capex assumption over the LOM is A\$120M, higher than forecast by APC, just to build some additional conservatism into our model. Our modelling also dilutes for additional equity required in the near-term. We now use a discount rate of 10% (down from 12%). Upon commencement of production our discount rate will be further lowered.

Our price target for APC is weighted for the different scenarios (as shown below).

Updated 12-month price target of 30cps (up from 25cps)

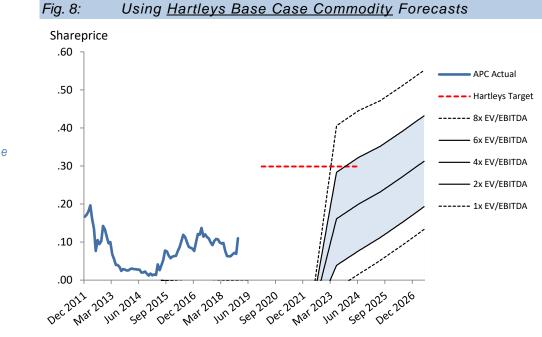
Latest APC NAV and

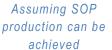
Price Target

Weighting	Spot	12 mth out
45%	\$0.30	\$0.32
25%	\$0.37	\$0.40
12%	\$0.01	\$0.01
18%	\$0.26	\$0.29
	\$0.27	
	\$0.30	
	\$0.110	
	171%	
	45% 25% 12%	45% \$0.30 25% \$0.37 12% \$0.01 18% \$0.26 <b>\$0.27</b> <b>\$0.30</b> \$0.110

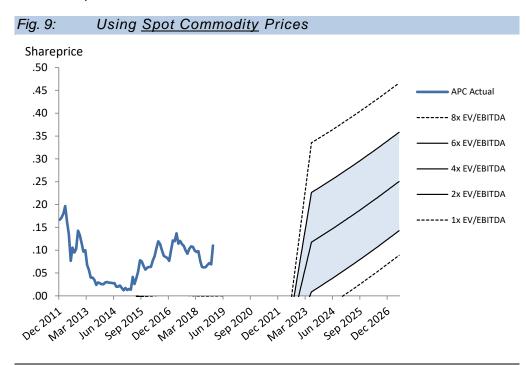
Source: Hartleys Estimates

### **EV/EBITDA BANDS**





Source: Hartleys Estimates



Source: Hartleys Estimates

# RISKS

Key risks for APC are funding, and commodity prices. Hence we view APC as high risk.

Fig. 10: Key assu	imptions and risks	for valuation	
Assumption	Risk of not realising assumption	Risk to valuation if assumption is incorrect	Comment
Model parameters for our APC valuation and price target	Med	Meaningful	We have made a number of assumptions in our APC valuation, based largely on the DFS. APC has no production history. Any changes to our assumptions have both upside and downside risks.
Favourable commodity prices	Low	Meaningful	APC remains sensitive to changes in commodity (potash) prices, exchange rates and market sentiment. Though with no current operations, direct impact from commodity prices is limited. We assume potash prices will remain stable into the near-term, which is open to speculation.
Funded for ongoing exploration and studies	Med	Moderate	APC's cash position is estimated to be ~A\$3M. As an explorer with no current production assets, ongoing funding will be required. We assume FEED activities will commence, offtakes can be secured and ultimately the project can be financed.
Conclusion	We have r	nade significant assumpti	ions but believe these are achievable.

Source: Hartleys Research

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Neutral	Take no action. Upside & downside risk/reward is evenly balanced.
Reduce / Take profits	It is anticipated to be unlikely that there will be gains over the investment time horizon but there is a possibility of some price weakness over that period.
Sell No Rating	Significant price depreciation anticipated. No recommendation.
Speculative Buy	Share price could be volatile. While it is anticipated that, on a risk/reward basis, an investment is attractive, there is at least one identifiable risk that has a meaningful possibility of occurring, which, if it did occur, could lead to significant share price reduction. Consequently, the investment is considered high risk.

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