

## LAKE WELLS POTASH (SOP) PROJECT WESTERN AUSTRALIA

### Best Positioned for Early Market Entry

May 2017



## CAUTIONARY STATEMENT & DISCLAIMER

#### Scoping study - cautionary statement

The Study referred to in this announcement is a preliminary technical and economic investigation of the potential viability of the Lake Wells Potash Project. It is based on low accuracy technical and economic assessments, (+/- 35% accuracy) and is insufficient to support estimation of Ore Reserves or to provide assurance of an economic development case at this stage; or to provide certainty that the conclusions of the Study will be realised.

Approximately 86% of the existing Mineral Resource is in the Indicated category, with the remainder in the Inferred category. There is a low level of geological confidence associated with Inferred mineral resources and there is no certainty that further exploration work will result in the determination of Indicated or Measured Mineral Resources. Furthermore, there is no certainty that further exploration work will result in the conversion of Indicated and Measured Mineral Resources to Ore Reserves, or that the production target itself will be realised.

The Scoping Study is based on the material assumptions outlined below. These include assumptions about the availability of funding. While Australian Potash Limited considers all the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be accurate or that outcomes indicated by the Study will be achieved.

To achieve the outcomes indicated in this Study, initial funding in the order of A\$175m/US\$135m will likely be required. Investors should note that there is no certainty that Australian Potash Limited will be able to raise funding when needed. It is also possible that such funding may only be available on terms that may be dilutive to or otherwise affect the value of Australian Potash Limited's existing shares.

It is also possible that Australian Potash Limited could pursue other value realisation strategies such as sale, partial sale, or joint venture of the Project. If it does this could materially reduce Australian Potash Limited's proportionate ownership of the Project.

Given the uncertainties involved, investors should not make any investment decisions based solely on the results of this Scoping Study.

#### Forward looking statements disclaimer

This announcement contains forward-looking statements that involve a number of risks and uncertainties. These forward-looking statements are expressed in good faith and believed to have a reasonable basis. These statements reflect current expectations, intentions or strategies regarding the future and assumptions based on currently available information. Should one or more of the risks or uncertainties materialise, or should underlying assumptions prove incorrect, actual results may vary from the expectations, intentions and strategies described in this announcement. No obligation is assumed to update forward looking statements if these beliefs, opinions and estimates should change or to reflect other future developments.



## COMPETENT PERSONS STATEMENT

The information in the announcement that relates to Exploration Targets and Mineral Resources is based on information that was compiled by Mr Jeffery Lennox Jolly. Mr Jolly is a principal hydrogeologist with AQ2, a firm that provides consulting services to the Company. Neither Mr Jolly nor AQ2 own either directly or indirectly any securities in the issued capital of the Company. Mr Jolly has over 30 years of international experience. He is a member of the Australian Institute of Geoscientists (AIG) and the International Association of Hydrogeologists (IAH). Mr Jolly has experience in the assessment and development of palaeochannel groundwater resources, including the development of water supplies in hypersaline palaeochannels in Western Australia. His experience and expertise is such that he qualifies as a Competent Person as defined in the 2012 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Jolly consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

The Hydrogeological information in this report has been prepared by Carsten Kraut, who is a member of the Australasian Institute of Geoscientists (AIG), and International Association of Hydrogeologists (IAH). Carsten Kraut is contracted to the Company through Flux Groundwater Pty Ltd. Carsten Kraut has experience in the assessment and development of palaeochannel groundwater resources, including the development of water supplies in hypersaline palaeochannels in Western Australia. His experience and expertise is such that he qualifies as a Competent Person as defined in the 2012 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Kraut consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to Exploration Results is based on information compiled by Brenton Siggs who is a member of the Australasian Institute of Geoscientists (AIG). Mr Siggs is the principal geologist of Reefus Geology Services, a firm that provides geological consulting services to the Company. Mr Siggs is a director and shareholder of Goldphyre WA Pty Ltd, a company that holds ordinary shares and options in the capital of Australian Potash Limited (Australian Potash Limited), Annual Report 2016). Mr Siggs is a Non-Executive Director of Australian Potash Limited. Mr Siggs has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity currently being undertaken to qualify as a Competent Person as defined in the 2012 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Siggs consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.



## SIGNIFICANT OPPORTUNITY TO PRODUCE POTASH

- Australia is one of the best and most successful mining jurisdictions in the world, especially Western Australia
- Yet, Australia imports 100% of its potash needs
- Farm gate prices in Australia for Sulphate of Potash (SOP) approximately US\$700 – US\$800 per tonne
- Historically, brine evaporation operations outside of Australia are able to produce potash for c. US\$200 -\$300 per tonne
- The right SOP deposit in Australia can produce SOP in the lowest cost quartile and capture the highly lucrative opportunity to capture supply constrained Australian and global demand







## STRONG INVESTMENT CASE IN A GROWING MARKET

- 100% ownership of Lake Wells in a low risk mining jurisdiction with proximity to domestic customers and export logistics
- Strong Sulfate of Potash ("SOP") demand outlook in an undersupplied market, 2016 SOP demand ~7mt or ~10% of global potash supply
- Primary SOP production from salt lakes such as Lake Wells has a significant cost advantage over high cost secondary production sources
- Potential for long life, lowest cost quartile operation
- Relatively low upfront capital hurdle through two stage development strategy to 300ktpa SOP<sup>1</sup>
- Feasibility study underway to be completed in 1H 2018 as APC seeks to rapidly de-risk Lake Wells and gain first mover advantage





## THE TEAM TO TAKE LAKE WELLS FORWARD

CAPITAL STRUCTURE (APC.ASX)	
Shares on issue (m)	221
Unlisted options (m)	30
12 months share price range	\$0.07-0.16ps
Share price (25 May 2017)	\$0.11ps
Market capitalisation (A\$m)	25
Cash (31 March 2017) (A\$m)	3.3

2%
13%
49%

BOARD & MANGEMENT	
<b>Matthew Shackleton</b> – Executive Chairman	Experienced Chartered Accountant and resources sector executive, with 20 year experience in senior management and board roles
<b>Brett Lambert</b> – Non Executive Director	Experience mining engineer and company director. Currently NED at Mincor. B.App.Sc (Mining Engineering)
<b>Rhett Brans</b> – Non Executive Director	+45 years resources experience focused on feasibility study management and construction across a range of commodities and geographies. Currently NED at Syrah Resources. Dip.Engineering (Civil)
<b>Alan Rubio</b> – Lead Project Manager	+20 years experience in engineering design and project management roles. Previous roles with Worley Parsons, Hatch, Bateman Engineering, Northern Minerals and Arafura Resources. B.Eng (Mechanical)
<b>Shaun Triner</b> – Process Manager	+30 years experience in the mining and minerals process industry, including 21 years in leadership roles at Rio Tinto's Dampier Salt as Manager Process Development and Technical Marketing. B.Sc (Minerals Science)
<b>Carsten Kraut</b> - Principal Hydrogeologist	+20 years experience in groundwater resource evaluation and development in the mining and construction industries. B.App.Sc (Applied Geology), Post Graduate Diploma (Hydrogeology) and M.Sc (Hydrogeology & Ground Water Management)

# LAKE WELLS – A HIGH QUALITY OPPORTUNITY

- High returning scoping study for production of 300ktpa premium SOP through two stage modular development
  - Stage 1 production of 150ktpa with a relatively low pre-development capital hurdle
  - Year 5 expansion to 300ktpa SOP funded out of cashflow
  - Long life and lowest quartile operating costs
- High sulphate content in brine will be utilised to convert Muriate of Potash ("MOP") to SOP
  - Reduces plant waste streams and improves capital efficiency
- Feasibility study underway
  - Expected to be completed in 1H 2018
  - Study to be completed to a +/- 15%
    Industry leading potash and
    hydrogeologists engaged

Study outcome <sup>1</sup>	LOM
Assumed life of mine (years)	20
Stage 1 production rate	150,000tpa SOP
Pre-production capital expenditure (Stage 1)	US\$112m
Contingency	US\$18m

Stage 2 production rate	300,000tpa SOP
Optional capital expenditure (Stage 2) <i>funded from cashflow</i>	US\$104m
Contingency	US\$17m

Operating Expenditure	US\$264 tonne SOP
SOP Sales Price	US\$612 tonne SOP
Average Annual Operating Pre-tax Cashflow	US\$81m

1. See ASX release 23 March 2017, "Exceptionally strong scoping study findings"

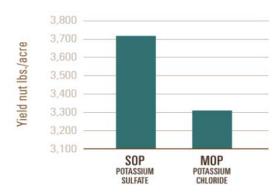


## STRONG FUNDAMENTAL DEMAND OUTLOOK

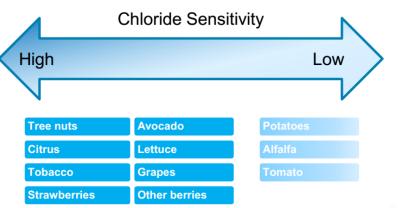
- SOP or potassium sulfate (K<sub>2</sub>SO<sub>4</sub>) is a premium product to MOP
  - Chloride free for use in chloride sensitive crops
  - Comprises 10% of aggregate potash market globally, significantly below the levels of chloride sensitive crops which would benefit from chloride free fertiliser
  - SOP cumulative annual growth rate of ~7% between
    2010- 2015
- Demand fundamentals driven by
  - Reduction in arable land and chase for higher yields
  - Rising global population and income growth in key emerging markets
  - Changing dietary preferences towards high value crops
  - Improved produce storage and shelf life
  - Enhanced 'quality' characteristics including; appearance, tastes, texture and higher nutrient value

#### SOP has significant impact on crop economics

K Source Yield Study Almond Field Day 2010 UC-Davis



Source: Compass Minerals, February 2017



Crop specific chloride sensitivity

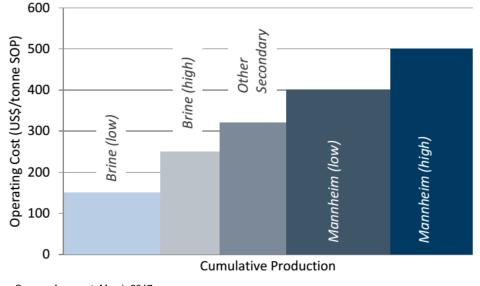
Source: Compass Minerals, February 2017



## SUPPORTIVE COST CURVE AND INDUSTRY STRUCTURE

- Industry cost curve supports the potential for high margins from primary production brine assets, such as Lake Wells
  - High cost secondary Mannheim production represents ~60% of global supply
  - Mannheim production involves the conversion of MOP through the use of sulphuric acid & high temperatures (~550 degrees) with a hydrochloric acid waste product
- MOP pricing dynamics and outlook set the base for Mannheim production costs
- Scoping study results position Lake Wells in the bottom quartile of the cost curve

#### High cost secondary production to support pricing outcomes



Source: Argonaut, March 2017



## ESTABLISHED PRICE PREMIUM

- Pricing history demonstrates a sustainable and growing premium over MOP
- Use of SOP in high value crops drives relative price inelasticity over MOP
- As a primary producer within close proximity to market, APC has the potential to become a high margin SOP producer
- Australian total potash demand estimated at 345ktpa, of which ~72ktpa is SOP
  - Potential for substitution of MOP with SOP with increasing availability and product awareness
  - SOP is distributed in Australia by bulk fertilizer companies including; CSBP, Summit and Incitec Pivot

#### Robust SOP pricing premium over MOP



Source: Fertecon, May 2017

#### 1000 900 ce (A\$/t) 800 700 pri 600 SOP 500 landed 400 300 ian 200 Austra 100 APC Scoping Fertecon CRU Green Markets Australian study distributors Long term price assumption (A\$/t) Lake Wells Scoping Study Cost (A\$/t FOB)

Source: Fertecon, CRU, Green Markets, March 2017

#### Significant margin opportunity at Lake Wells

## A CAPTIAL EFFICIENT PATH TO PROJECT DERISKING

- APC owners team focused on de-risking key aspects of the project during the scoping study, including;
  - How big is the potential resource and how much can be efficiently extracted?
  - Can the project area support a cost effective evaporation pond network?
  - Can the resource produce a premium SOP product?
- Scoping study utlised industry leading consultants to target key risk areas and address the questions in a capital efficient approach to de-risking the project
  - Test production bore program to determine grades and sustainable flow rates and for brine extraction
  - Brine sampling and process modelling by recognized SOP experts to confirm SOP product potential
- Opportunity to fast track the development timeline with the advanced construction of the evaporation ponds prior to full project funding

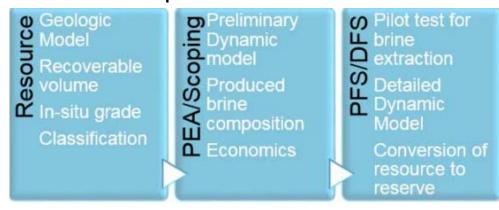
STUDY DISCIPLINE	KEY CONSULTANTS
Process modelling & plant design	Project Development & Management
Brine resource and bore field design	
Geotechnical investigations	
Evaporation pond and infrastructure design	SHAWMAC
Environmental surveys and assessments	BOTANICA Bennelongia



# A ROBUST RESOURCE AT LAKE WELLS

- APC has declared a Mineral Resource of 14.7mt SOP 

   7,896mg/l based on a specific yield methodology<sup>1</sup>
  - Includes a high grade zone of 10.5mt (a)
    8,706mg/l
- Scoping study mineral inventory extracts 34% of the Indicated Resource in the Western High Grade Zone and 33% of the Inferred Resource in the Southern Zone
  - Opportunities to extend LOM with inclusion of the Eastern Zone (4.6mt SOP Indicated)
- Brine resource estimates present a different proposition to hard rock minerals
  - Brine is a dynamic resource pumping brine depletes and ground water/brine inflow recharges
  - Specific yield is the relevant resource measure
  - Permeability governs the rate of extraction
  - Localised climate is a major factor
- 1. Specific yield refers to the amount of recoverable SOP, in compliance with NI43-101, the only CRIRSCO reporting code to include a brine standard.
- 2. See slide 24 for full details of JORC resource including specific yields



#### The path to a brine reserve

Source: SRK Consulting, 2016

#### Summary Lake Well resource table<sup>2</sup>

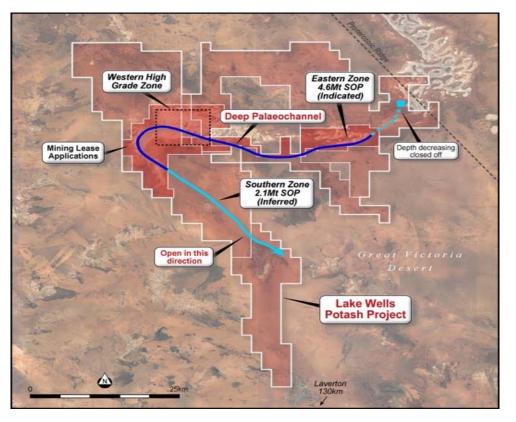
Resource zone	Aquifer Volume (MCM)	Drainable Brine Volume (MCM)	SOP grade (mg/l)	SOP Resource (mt)
Western high grade zone (indicated)	10,505	919	8,706	8.1
Eastern zone (indicated)	6,545	602	7,563	4.6
Southern zone (inferred)	3,279	340	5,963	2.1
Aggregate	20,329	1,861	7,896	14.7



## HIGH LEVEL OF FOCUS ON HYDROGEOLOGY

- Lake Wells hydrogeology model comprised four units
  - Surficial aquifer (25% contained brine recoverable)
  - Upper sand (70% brine recoverable)
  - Middle clay aquitard (15% contained brine recoverable)
  - Basal sand aquifer (50% contained brine recoverable)
- Drainable porosity is higher for coarser sediments namely the upper sands and basal sand aquifer at Lake Wells
  - Upper sand 40-58m below surface
  - Basal sand aquifer 139-173m below surface
- Lake Wells resource model incorporates
  - Lithological interpretation and aquifer parameters estimated from analysis of particle size distribution and test pumping data
  - ARANZ Leapfrog hydro 3D modelling tool to produce a static estimate and represents the volume of recoverable brine

#### Lake Wells resource and palaeochannel

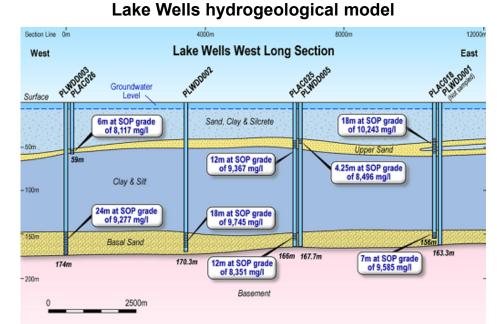


#### How it works



## STRONG BRINE EXTRACTION TEST RESULTS

- Brine extraction model is based on a low risk industry proven bore field development strategy
  - Commonly used in Western Australia's Eastern Goldfield region for mining operations water supply
  - Large scale borefield brine extraction operations include; SQM's Salar de Atacama, Orecobre's Olaroz
- Stage 1 scoping study envisages 35 bores
  - Average brine extraction rate of 46,400kl/d
  - Test pumping program completed for 3 bores at 2 sites across the high grade resource zone
  - Basel sand layer of deep aquifer produced step yield tests of up to 27l/s
  - Site A constant rate over 10 days of 16l/s
  - Site B constant rate over 10 days of 20l/s
- Test pumping limited by pump capacity and bore design with potential for higher rates with optimised production bores

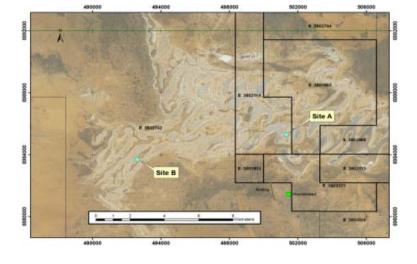


#### Lake Wells test pumping results

Pump type test	Target depth	Flow rate range (I/s)	Constant flow rate	Duration	Aquifer drawdown (m)
Test production bore (TPB001)	44-50 & 54-58	4-12	4	7	3
Test production bore (TPB002)	150-162	12-27	12	10	85
Site A		16-39	16		
Test production bore (TPB003)	144-168	15-27	20	10	41
Site B		15-27	20		×

14

## TEST PUMPING PROGRAM AT LAKE WELLS

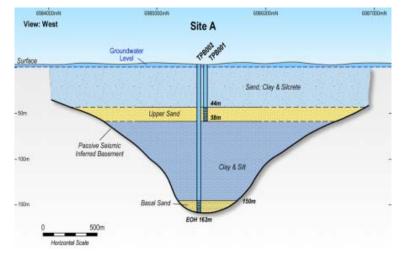


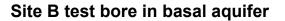
Site A & B test locations in plan view

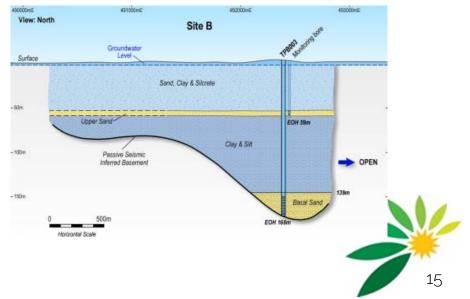
#### Test bore pumping program at Lake Wells



#### Site A test bore in shallow & basal aquifers



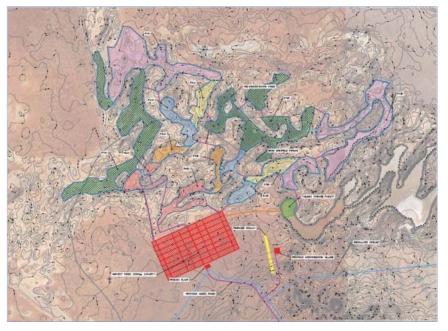




## ON-PLAYA EVAPORATION PONDS AN ADVANTAGE

- On-playa evaporation ponds will be built taking advantage of the natural topographic and lake surface structures
  - Geotechnical studies confirm sub-surface impermeable clay layer
- Harvest ponds (red) to be built off-playa and sealed to ensure maximum recovery of potassium
  - Stage 1 total pond area ~12.7km2 (incl. harvest ponds ~2.3km2)
  - Stage 2 total pond area ~25.4km2 (incl. harvest ponds ~4.5km2)
- Evaporation rate estimated to be 3,200mm pa
  - Far exceeds the average annual rainfall
    240mm pa
- International Standard Class A evaporation pan trial underway
  - Conducted outdoors to obtain relevant data based on localised weather factor across the annual cycle
- Weather station fully commissioned on site at Lake Wells





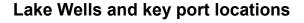
#### On site pan evaporation trial



## ESTABLISHED INFRASTRUCTURE TO MARKET

- Located 189km north-northwest of Laverton
- Existing road and rail network provide ready made transport logistics
  - 300km established roads to Leonora rail siding
  - Leonora rail spur connects to state and national rail network
- Transport cost modelled from first principles by Prime Logistics
  - Road haulage from mine gate to Leonora
  - Rail from Leonora to Fremantle
- Scoping study assumes product sales at Fremantle
  - Containerised (bulka-bag) FOB estimate
  - Potential to examine bulk export sales through Esperance
  - Back loading of MOP from Fremantle to Lake Wells
- Fresh water requirement estimated at 1.4Glpa for stage 1
- Airstrip upgrade at Lake Wells cattle station included in scoping study capex

# Caraiden Fremanie Bubury -





# LAKE WELLS IN CONTEXT - CITIC'S GOLMUD

- APC management was hosted by CITC's at it Golmud SOP brine operation in 2016
  - Golmud is located on the Tibetan Plateau
- Visit highlights the proof of concept for the scale of Lake Wells
- Opportunity for continued shared knowledge base on both operations and Chinese market structure and growth objectives

COST AREA	Golmud	Lake Wells
Extraction method	Bore field	Bore field
Aquifer thickness (m)	10-35	10-35
Flow rate (l/s)	18	20
Number of bores	113	70
SOP production (ktpa)	500	300*
Evaporation/precipitation (mm pa)	3000/30	3400/200

\*Includes ~100kt of SOP production from MOP conversion





## INVESTMENT SUMMARY

- 100% of Australia's demand for potash is imported: import replacement opportunity
- Australia will become a producer of SOP to the rest of the world
- Brine evaporation operations are low OPEX and SOP commands a premium to other potash types
- 100% project ownership in a supportive jurisdiction
- Low CAPEX start-up: unique to the industry and important for first move advantage
- Tried and tested production methods
- A deposit with size, grade and technical strength – the deposit needs to be right! APC's Lake Wells is unique!









Matt Shackleton 0438 319 841 m.shackleton@australianpotash.com.au



## WELL PLACED TO DELIVER ON TIMELINE

		2017		2018			2019				2020			
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q
Conclusion of the Native Title Act process on Mining Lease applications (11 May 2017)														
Construction and commissioning of pilot evaporation ponds														
Commence feasibility program														
Process and potable water exploration program														
Grant of Mining Leases														
Conclusion to flora & fauna, sub-fauna, lake ecology surveys														
EPA (WA) Assessment														
Stage 2 field test-pumping program														
Installation of 4 additional test-production bores														
Production water abstraction licence														
FEED														
Ministerial decision														
Early works														
Project execution														
Production commencement													_	

## JORC MINERAL RESOURCE ESTIMATE

Hydrogeological Unit	Volume of Aquifer	Specific Yield	Drainable Brine Volume	K Concentration (mg/L)	SOP Grade (mg/L)	SOP Resource
	МСМ	Mean	МСМ	Weighted Mean Value	Weighted Mean Value	МТ
		Indicated F	Resources			
Western High Grade	Zone					
Surficial Aquifer	5,496	10%	549	3,738	8,336	4.6
Upper Sand	37	25%	9	4,017	8,958	0.1
Clay Aquitard	4,758	6%	308	4,068	9,071	2.8
Basal Sand Aquifer	214	29%	63	4,520	10,080	0.6
Sub Total (MCM / MT)	10,505		919	3,904	8,706	8.1
Eastern Zone						
Surficial Aquifer	3,596	10%	359	3,416	7,617	2.7
Upper Sand	22	25%	5	3,345	7,459	0.04
Clay Aquitard	2,689	6%	174	3,362	7,497	1.3
Basal Sand Aquifer	237	29%	69	3,352	7,475	0.5
Sub Total (MCM / MT)	6,545		602	3,391	7,563	4.6
Total Indicated						
Surficial Aquifer	9,092	10%	907	3,610	8,051	7.3
Upper Sand	59	25%	15	3,769	8,404	0.1
Clay Aquitard	7,447	6%	482	3,813	8,503	4.1
Basal Sand Aquifer	452	29%	132	3,906	8,711	1.1
Indicated Resource (MCM / MT)	17,050		1,521	3,707	8,267	12.7
		Inferred R	Resources			
Southern Zone						
Surficial Aquifer	1,296	16%	207	2,742	6,115	1.3
Clay Aquitard	1,901	6%	114	2,620	5,842	0.7
Basal Sand Aquifer	82	23%	19	2,871	6,401	0.1
Inferred Resources (MCM / MT)	3,279		340	2,674	5,963	2.1

Indicated Resource based modelled aquifer volume, mean specific yield and weighted mean K concentrations (derived from modelling)

		Summary			
Indicated Resources	17,050	1,521	3,707	8,267	12.7
Inferred Resources	3,279	340	2,674	5,963	2.1
Total Resources	20,329	1,861	3,541	7,896	14.7

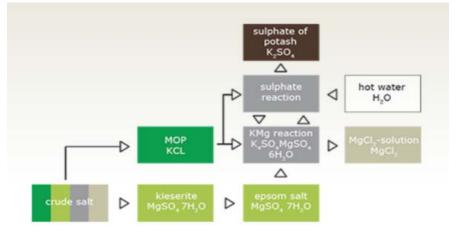
Resources do not include exploration target at Lake Wells South (tenement areas south of Southern Zone)

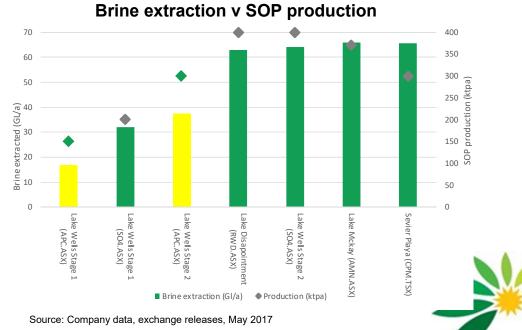


## VALUE ACCRETIVE MOP CONVERSION CIRCUIT

- Utilises excess sulphate levels in brine to maximise plant and capital efficiency
- Low risk and proven production process
  - Process involves the addition of MOP + water to the SOP crystalliser unit
  - Proven process by industry leader Compass Minerals and SDIC
- Capital efficiency and lower operating risk offset the operating costs impact of MOP purchase
  - ~20% reduction in pre production capex due to reduced bore field infrastructure and scale of evaporation ponds
  - Scoping study assumes MOP purchase price A\$326/t landed Lake Wells
  - Reduced brine extraction volumes per tonne of SOP product
  - Insulation from unseasonal weather events to de-risk product marketing

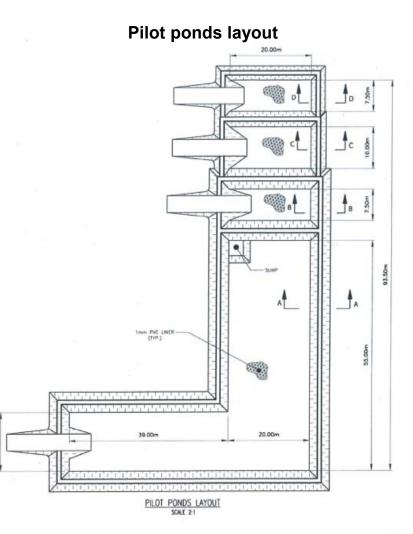
#### MOP to SOP conversion flowsheet





## PERMITED PILOT POND PROGRAM UNDERWAY

- APC has commenced a pilot evaporation pond program to build on data collected from the evaporation pan trials
  - 20 weeks from filling to reach crystallisation of mixed potash salts through evaporation
  - 8 weeks to recover all potassium from mixed salts for harvest
- The program will result in the harvest of bulk sample of potash salts which will be used for generation of product samples
- Pilot evaporation pond set up will mirror full-scale
  - Large pre concentration pond (A) and crystallisation ponds (B&C)
  - Harvest pond (D)
  - Process expected to yield 20t of mixed salts
- In conjunction with ongoing programs already established at Lake Wells the pilot ponds will provide a thorough understanding of the localised evaporative environment

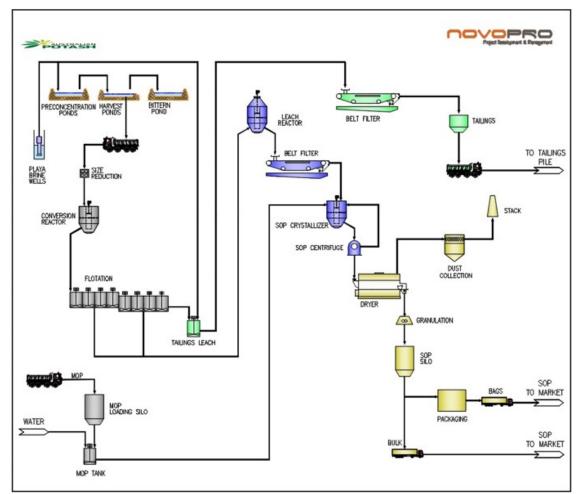




## PROVEN PROCESS PLANT DESIGN

- Process plant
  - Crush and screening
  - Conversion to schoenite
  - Flotation (schoenite separation)
  - SOP Crystallisation
- MOP conversion circuit to capture benefit of high sulphate levels
- Granulation plant
  - Design can produce 100% premium grade granulated SOP or standard SOP to meet the market
- Potential to expand product suite to include ancillary products (SOPM and MgSO4) increasing revenue

#### Lake Wells scoping study flow sheet

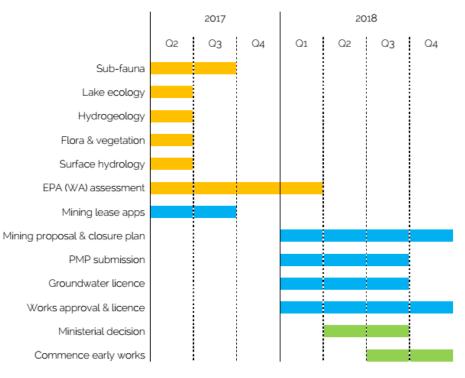




## REGULATORY AND ENVIRONMENTAL PERMITING

- Native Title
  - Consultation period under the Native Title Act completed with no claims registered
- Department of Water
  - Licences in place to facilitate bore drilling and test pumping volumes
- Department of Environment Regulation
  - Approvals in place for pilot pond program and harvesting of potash salts
- Department of Mines & Petroleum
  - Mining lease applications summited 4Q 2016
- Environment Protection Authority
  - Process water studies underway prior to submission of PIA

#### **Regulatory permitting timeline**

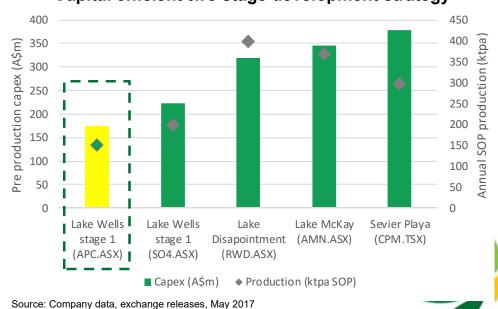




## RELATIVE LOW CAPEX FOR MARKET ENTRY

- Capital efficient capital development schedule
  - Modular 2 stage development strategy with stage 2 expected to be largely funded out of free cash flow
- Bore field capex includes
  - Borefield network incorporating 35 bores placed at 250m spacing along the centre line of the paleochannel
- Sustaining capital A\$39m over life mine
  - 3 evaporation pond embankment lifts in years
    5,10 and 15 of operations
- Relatively low upfront capex provides the potential for APC to realise first mover advantage

COST AREA	Pre-production stage 1 - 150ktpa (A\$m)	Pre-production stage 2 - 300ktpa (A\$m)
Brine bore field	15.4	26.0
Evaporation ponds	26.4	25.5
Process plant	62.9	60.4
Non-process infrastructure	11.0	3.6
Total direct capital	115.7	115.5
Indirect costs	34.8	24.3
Contingency	24.4	23.1
Total capital costs	174.9	162.9



#### Capital efficient two stage development strategy

# LOWEST QUARTILE OPERATING COSTS

- Scoping study positions Lake Wells in the lowest cost quartile of the global SOP cost curve
- Operating cost input derived from first principles models
  - Reagents/consumables reflect regional supplier quotes and landed at Lake Wells
  - MOP input cost assumption \$A326/t delivered
    Lake Wells represents ~70% of reagent costs
- Power cost reflective of contractor Build, Own, Operate supply at A\$0.22/kWh
  - Stage 1 expected power draw 8.7MW
- Scope to optimise the cost base through feasibility study
  - Pond permeability (smaller ponds = less brine pumping)
  - Alternative power supply sources including solar and alternative fuels
  - Increased utilisation of power station waste heat in the process plant
  - Capture advances in pumping technology

COST AREA	Pre-production stage 1 - 150ktpa (A\$/t)	Pre-production stage 2 - 300ktpa (A\$/t)
Reagents/consumables	127	126
Labour	48	29
Power	98	97
Maintenance	9	7
General & administration	17	11
Product transport	69	69
FOB operating costs	368	339

