AUSTRALIAN
RESEARCH
INDEPENDENT INVESTMENT RESEARCH

Australian Potash Limited (ASX:APC)

July 2017

INDEPENDENT
INVESTMENT RESEARCH

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INDEPENDENT INVESTMENT RESEARCH

Australian Potash Limited (ASX: APC)

Initiation - July 2017

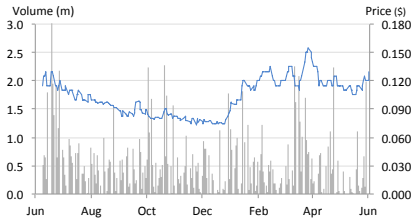
Note: This report is based on information provided by the company as at July 2017

Investment Profile	
Share Price as at 12 July 2017	$0.11
Price Target	$0.28
Issued Capital:	
Ordinary Shares	221.5m
Total Options	30.1m
In-Money Options	3.43m
Fully Diluted	251.5m
Diluted for In-Money Options	224.9m
Market Capitalisation diluted for In-Money Options	$24.74m
12 month L/H	$0.073/$0.16
Cash as at 31 March 2017	$3.3m
Cash on Option Conversion	$0.34m

Board and Management
Mr Matthew Shackleton: Executive Chairman
Mr Brett Lambert: Non-Executive Director
Mr Rhett Brans: Non-Executive
Mr Alan Rubio: Lead Project Manager
Mr Shaun Triner: Process Manager
Mr Carsten Kraut: Principal Hydrgeologist
Ms Leigh-Ayn Absolom: Company Secretary

Major Shareholders	
Yandal Investments P/L	13.11%
Perth Select Seafoods P/L	6.32%
Top 20	48.94%
Board and Management	1.64%

Share Price Performance



Senior Analyst – Mark Gordon

The investment opinion in this report is current as at the date of publication. Investors and advisers should be aware that over time the circumstances of the issuer and/or product may change which may affect our investment opinion.

HIGH MARGIN POTASH

Australian Potash ("Australian Potash" or "the Company"), an ASX listed sulphate of potash ("SoP") developer, is concentrating activities on the Bankable Feasibility Study ("BFS") for the 100% owned Lake Wells Potash Project ("Lake Wells" or "the Project") in the Eastern Goldfields region of the Yilgarn Craton of Western Australia. The recently completed Scoping Study has highlighted a robust, high margin operation producing a premium SoP product for a growing domestic and global market, with initial production targeted for late 2020.

KEY POINTS

Low enterprise value: Australian Potash is significantly undervalued when compared to peers, who all have similar SoP projects in Western Australia.

High margin SoP producer: With estimated life of mine production costs of A$343/tonne SoP and forecast sales prices of A$795/tonne SoP, Lake Wells has the potential to be a high margin producer, with a revenue to costs ratio of 2.32:1 - the economics are highlighted in the robust IRR of 33% and a pre-tax and pre-funding NPV_{10} of A$500 million as estimated in the recently completed Scoping Study.

Low cost and well understood production process: Brine operations are the lowest cost SoP producers globally, with well proven production methods - Lake Wells is well suited for this style of operation with an arid climate, high net evaporation and high grade potassium and sulphate brines - Western Australia is one of only few regions globally that have brines with the potassium and sulphate contents to enable SoP production.

Growing SoP markets: SoP markets have historically been supply constrained, with the majority of production from high cost secondary methods - the recent growth in brine production is changing this, and may lead to greater acceptance of the premium SoP product over the traditionally used muriate of potash ("MoP", KCl), particularly for higher value, chloride-sensitive crops.

Quality resource: The resource at Lake Wells has the size and grade to comfortably support the proposed 2 stage, up to 300,000tpa SoP operation, with the results of pumping tests also confirming the technical strength of the resource.

Ready access to transport infrastructure: Lake Wells is located 275km by road from the rail siding at Leonora, which is connected to the state and national rail networks and ports at Fremantle and Esperance, a vital consideration for any bulk commodity.

Permitting well underway: With the Native Title Process complete, and permits to construct pilot evaporation ponds approved, Lake Wells is a fair way down the permitting track.

Offtake MoUs: Australian Potash has signed non-binding Memorandums of Understanding ("MoUs") with two of China's largest fertiliser companies, Sino Agri Holding Company Limited ("Sino-Agri"), a subsidiary of CNAMPGC Holding Limited Corporation and Hubei Agricultural Means Production Group Co Ltd ("Hubei-Agri") - the MoUs each envisage high level commercial terms for SoP sales of up to 100,000tpa (total of 200,000tpa) from Stage 2 at Lake Wells.

Low sovereign risk jurisdiction: Western Australia is a proven mining jurisdiction, which ranked third globally in the 2016 Fraser Institute survey.

Experienced personnel: Company personnel, including consultants, have extensive industry experience in varied regions and commodities, including in brine evaporation operations.

Steady news flow: Ongoing activities related to the current Feasibility Study will produce steady news flow through the remainder of 2017 and into 2018

VALUATION SUMMARY

We have a base case valuation range of A$0.16 to A$0.39/share for Australian Potash, with our preferred value being the midpoint of A$0.28/share - this is based on a risked post-tax, geared DCF_8 valuation of Lake Wells, with the per share value calculated on a share capital diluted for our modelled equity raisings. We would expect our valuation to increase with on-going de-risking over coming months.

SWOT ANALYSIS

Strengths

- **Large resource:** The resource at Lake Wells should comfortably support the planned 20 year operation (it utilises <25% of the current drainable resource), and given the aquifer type, should have good pumping characteristics as demonstrated by pumping tests to date - there is also significant resource upside in undrilled areas of the palaeovalley.
- **Excellent location and transport infrastructure:** Lake Wells is just 275km from the rail head at Leonora, which is connected to the state and national rail networks, and allows access to ports at both Fremantle (900km) and Esperance (600km).
- **Scalable operation:** The Company, with proposing a two stage development, brings flexibility into operations, a relatively low up-front capex which should help funding, and an initial production level of up to 150,000tpa that may help ease the Company into the existing markets - this initial production is ~2.5% of current global SoP demand.
- **World class mining destination with low sovereign risk:** Western Australia is a proven mining destination and host to a number of world class deposits, with well developed mining legislation - the state ranked third globally in the 2016 Fraser Institute Survey of Mining Companies.
- **Experienced people:** Company personnel and consultants have extensive expertise in project development and brine evaporation projects - these include, amongst others, NovoPro (the Canadian based lead study manager), and the Process Manager, Shaun Triner, with 20 years experience at Dampier Salt.
- **Sino-Agri and Hubei-Agri MoUs:** Although high level and non-binding, the MoUs are a start to building relationships with potential regional customers and getting a handle on quality and volume requirements.

Weaknesses

- **Peer competition:** There are currently five companies looking to develop brine SoP projects in Western Australia, with a total combined planned production of ~1.8mtpa, or ~30% of the current market - these will all potentially be vying for the same pool of capital, and if all get up (which may be unlikely) will be feeding into the same relatively small, albeit growing market.

Opportunities

- **Project expansion:** Should markets warrant it, there is the potential to expand production utilising the current resource and there is also the potential to expand and upgrade the current resource.
- **Tightening SoP supply:** Although only 10% of the overall potash market, and with a growing annual market of ~6.0mtpa to 7.0mtpa, there have been some bottlenecks in existing production, and therefore the potential for new suppliers to enter the markets.
- **Expanding markets:** The largest growing fertiliser markets are those in Asia, with the Company's location in Western Australia ideally placed to supply such markets - some forecast the demand to reach 9mtpa over the next decade, with 50% of this being in China.

Threats

- **Potash markets and pricing**: Pricing is a perennial threat for any resources project; in the case of potash this is also exacerbated by having to break into markets with established suppliers, which can be difficult at times. There could also be the potential, should significantly more brine SoP come on stream, for prices to fall with the price base as set by the Mannheim process decreasing in influence, and current MoP users needing price incentives to switch to SoP over the traditionally used lower priced MoP - this is a threat affecting all potential market entrants.
- **Study funding:** The Company will require around $10 million to finalise the feasibility work, and with $3.3 million in the bank as of March 31, 2017 will need to raise funds - although markets are relatively good at the moment they can turn on a dime; on the positive side Salt Lakes Potash (ASX/AIM: SO4) has just raised $16 million to fund activities at their SoP project, also at Lake Wells.

OVERVIEW

STRATEGY AND PROJECT OVERVIEW

- Australian Potash's activities are concentrated on the 100% owned Lake Wells Potash Project, located in the Eastern Goldfields of Western Australia (Figure 1).
- Lake Wells is a brine resource, with the Company looking to produce high value SoP, both from the lake brines, and through the conversion of purchased MoP utilising the excess sulphate content in the brines - this process is used by Compass Minerals International Inc. ("Compass", NYSE: CMP) at their Great Salt Lake operation in Utah, USA.
- The Company recently completed a positive and robust Scoping Study on the Project, and is now commencing a BFS, with this work including, amongst other things, pilot evaporation pond test work and additional well drilling and pump testing.
- Dependent upon a successful outcome from the BFS, permitting and financing, the Company is looking towards construction in H2, 2018 and initial production in late 2020/ early 2021.

Figure 1: Project location map

Source: Australian Potash

FINANCIAL POSITION

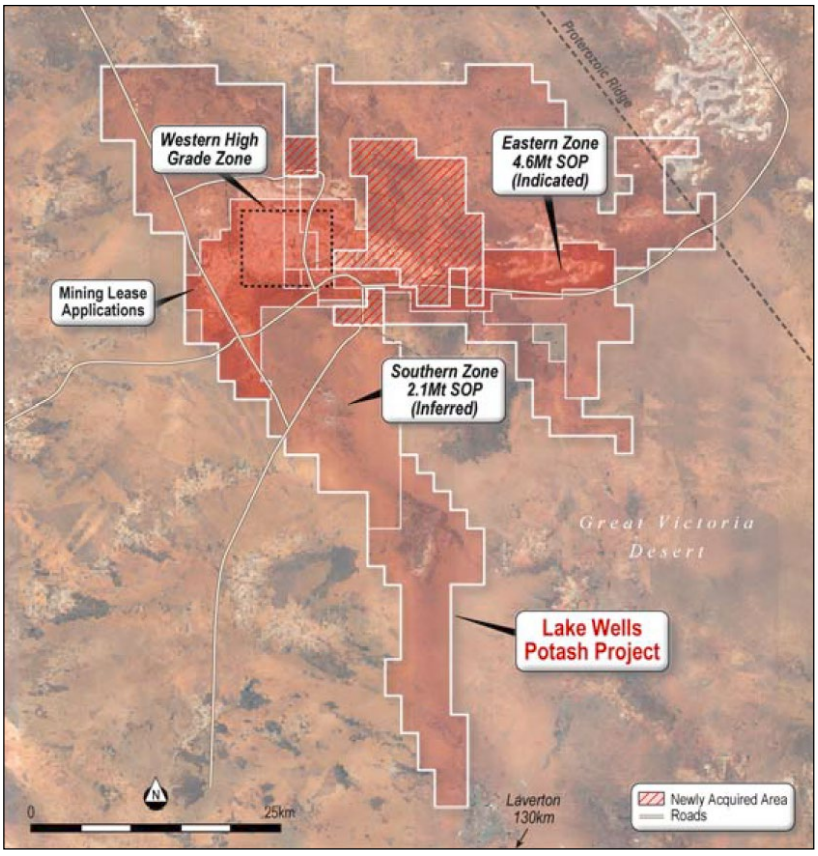
- As of March 31, 2013, the Company had $3.295 million in cash and no debt.
- Over the fifteen months to March 31, 2017, the Company raised a total of $1.100 million (before costs) in a placement at $0.064/share in March 2016.
- In addition, $6.047 million has been raised through conversions of options – this included $5.5 million from an over-subscribed fully underwritten option agreement over 68.9 million listed $0.08 options that expired on September 30, 2016.
- Over the same period the Company spent $3.493 million on exploration and development activities, and $0.971 million on staff and administration costs.

LAKE WELLS POTASH PROJECT (APC – 100%)

Location and Tenure

- Lake Wells is located in the Eastern Goldfields region of Western Australia, some 275km NE of the railhead at Leonora (Figure 1).
- The Project is located partly over Lake Wells Station, and has good access by the Great Central and Lake Wells Roads from Laverton, some 180km away – there is also an airstrip at Lake Wells Station.
- Lake Wells covers some 2,000km^2, and includes 13 granted exploration licences ("EL", 1,910km^2) three exploration licence applications ("ELA", 90km^2) and three mining lease applications ("MLA", 28.26km^2, over existing EL's, Figure 2).
- The granted tenements fall into two ownership groups – 11 held 100% by Australian Potash (including three acquired from AngloGold Ashanti Australia) in June 2017 for $300,000) and two for which 100% of the potash rights were acquired from Mark Creasy's Lake Wells Exploration P/L ("LWE").
- The terms of the Sale and Split Commodity Agreement with LWE, concluded in September 2015, include:
  - Australian Potash acquired 100% of the rights to extract, process and sell all potash minerals contained within brine within the two tenements, E38/2742 and E38/2742,
  - LWE is assisting Australian Potash to secure ML's over the EL's, and transfer the ML's to Australian Potash at the Company's request,
  - Australian Potash issued 19.9% of its ordinary shares to LWE (now diluted to 13.11%) – this was calculated post any capital raising within six months of the completed date, and,
  - Australian Potash issued 6,860,000 options with an expiry period of five years, and exercisable in two equal tranches at $0.10/option and $0.15/option.

Figure 2: Lake Wells tenement and resource map – red shaded tenements are the MLA's.



Source: Australian Potash

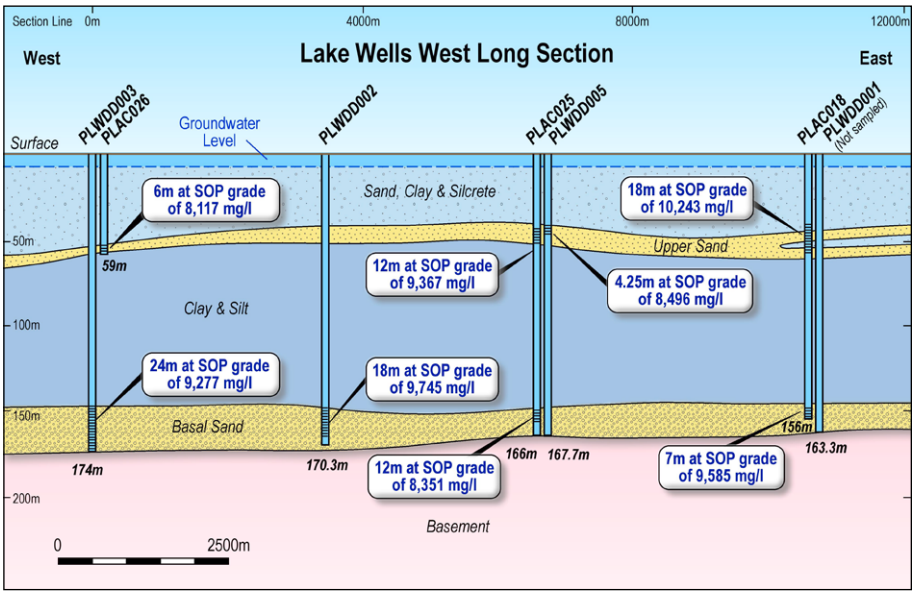
Historic Work

- Historic work has included aircore drilling, largely targeted at gold mineralisation, including some testing the bedrock under the Lake Wells playa lake and palaeovalley complex.

Work by Australian Potash

- Early work by Australian Potash (then Goldphyre Resources) was targeted at gold, nickel and copper mineralisation, and included reconnaissance aircore and rotary air blast ("RAB") drilling.
- The focus changed to potash in mid 2014, with sampling from test pits across the Lake Wells system returning high grade values of up to 7,360mg/l K, equivalent to 16,410mg/l SoP, with the average across 11 pits returning 4,840mg/l K (10,790mg/l SoP).
- A review of all drilling records showed strong water inflows and a deep palaeochannel in the central part of the project area.
- An initial drilling programme was completed in the September quarter, 2015, with this including 17 aircore holes for 1,227m (with the deepest being 141m) and 18 shallow auger holes – five of the holes did not intersect bedrock, highlighting the depth of the palaeovalley system.
- The drilling returned broad zones of high grade brines, including 96m @ 12,730mg/l SoP, confirming the potential of Lake Wells.
- Two seismic surveys were completed in late 2015/early 2016 to ascertain profiles across the palaeochannel – the initial survey was on the original Australian Potash tenements, with the second covering the LWE tenements – this work confirmed that the palaeovalley extends westward into the LWE tenure and that the palaeovalley has a length of over 55km in tenure now controlled by Australian Potash
- This also showed peak depths of 150m to 170m for this feature.
- Data collected as of March 2016 was used in the estimation of an Exploration Target which included:
  - Total in-situ volume of SoP of 79Mt to 123Mt @ 11,400mg/l to 13,900mg/l SoP.
  - Recoverable volume of SoP of 6Mt to 37Mt @ 8,900mg/l to 13,900mg/l SoP.
- A second drilling programme was completed in May 2016 – this included an additional 10 aircore holes for 1,040m and five mud rotary/diamond holes for 734.4m, with four of these being used for later pump testing and monitoring.
- Assaying from this programme targeted specific aquifers rather than the overall sediment package, returning values of up to 18m @ 10,243mg/l SoP in the upper sand and 18m @ 9,046mg/l SoP in the basal sand (Figure 3).

Figure 3: Lake Wells western long section showing drilling and results (note vertical exaggeration)

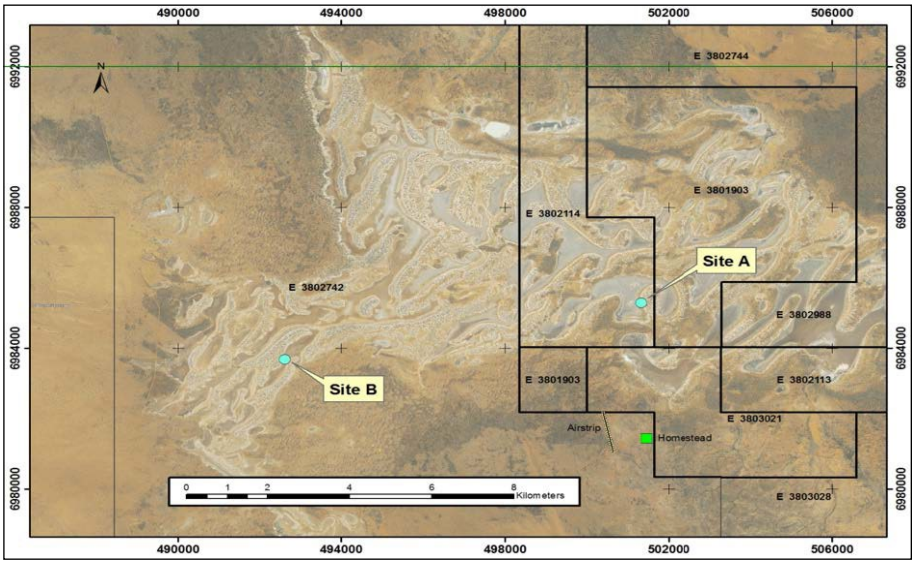


Source: Australian Potash

- Data was used to calculate an initial Inferred Mineral Resource Estimate ("MRE"), released to the market in June 2016, and later upgraded as part of the Scoping Study (discussed later).
- Laboratory evaporation test work has been completed, and showed the suitability of the brines to produce potassium salts.
- Initial well pumping test work was undertaken in the second half of 2016, with this returning very encouraging results.

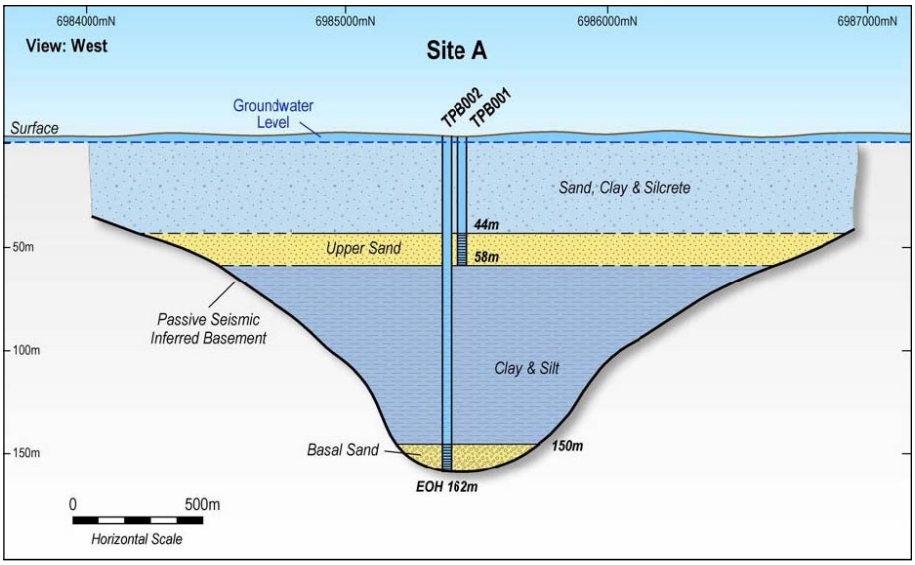
- This tested two sites – one in the centre of the tenement package and one at the western end of the playa system (Figures 4 and 5), and returned encouraging results, including a constant rate yield of 20l/s over 10 days, and step test pumping yields of up to 16l/s to 39l/s.
- Site A tested both the upper and lower aquifers, with Site B testing the lower only – Site B also included a monitoring well - data was used in the Scoping Study which incorporated the upgraded MRE (discussed later).

Figure 4: Lake Wells pump testing site locations



Source: Australian Potash

Figure 5: Site A showing bores into the shallow and deep aquifers - note vertical exaggeration of 10x



Source: Australian Potash

- Evaporation pans and a weather station were installed on site in late 2016, with data collection from these ongoing and to be used in the Feasibility Study and for permitting.
- Permitting and licencing activities have included ongoing environmental studies, the now completed Native Title Process, and other ongoing works associated with the Mining Lease applications.

Geology and Mineralisation

- Lake Wells is a composite playa lake and incised palaeovalley system, developed during the Tertiary and still active.
- The underlying basement includes Archaean granites and greenstones of the Yilgarn Craton.
- Within the Company's tenements, the palaeovalley has a length of 55km, widths of up to 4km and depths of up to 174m.

- Sediments include an Eocene basal sand layer aquifer ranging between 5m and 30m thick, a Miocene lacustrine clay aquitard and an upper Pliocene sand layer aquifer – these are overlain by highly variable Pliocene to Quaternary lacustrine sediments and silcrete, forming an upper unconfined aquifer (Figure 3).
- As typical for the goldfields, the playa lake systems are saturated with hypersaline brines, with the salts in the brines being sourced by weathering of the surrounding and underlying bedrock, with granites the source of the potassium.

Resources

- The most recent MRE dates from March 2017, and was included as part of the Scoping Study – a summary is shown in Table 1, with this detailed in Appendix 1.

Table 1: Lake Wells Mineral Resource Estimate summary

Lake Wells Mineral Resource Estimate summary						
Classification	**Aquifer Volume (MCM)**	**Specific Yield**	**Drainable Brine Volume (MCM)**	**K Grade mg/l)**	**SOP Grade (mg/l)**	**SOP Resources (Mt)**
Indicated Resources	17,050	9%	1,521	3,707	8,267	12.7
Inferred Resources	3,279	10%	340	2,674	5,963	2.1
Total Resources	20,329	9%	1,861	3,541	7,896	14.7
Resources do not include exploration target at Lake Wells South (tenement areas south of Southern Zone)						

Source: Australian Potash

- This is a static resource only, and is an estimate of the recoverable brine in the defined aquifer – it does not take into account changes that may occur during pumping, including mixing of brines from the different aquifers once pumping begins.

Scoping Study

- The Scoping Study, which was released to the market in March 2017, highlights a two stage project, initially producing 150,000tpa of premium granular SoP, and from year six producing 300,000tpa of the same premium granular product - the staged plan will allow for a relatively low initial capex, which should aid in financing.
- Any decision to ramp up will also depend upon markets and product sales.
- The study envisages commencement of the two year construction period in H2, 2018, with first production in late 2020/early 2021 - pumps and ponds will be installed early to allow evaporation to be ongoing during construction of the plant.
- Parameters and outcomes are shown in Table 2.

Table 2: Lake Wells scoping study parameters and outcomes

Lake Wells scoping study parameters and outcomes		
Parameter	**Stage 1**	**Stage 2**
Life of mine	5 years	15 years
Annual plant capacity (SOP production)	150,000 tonnes	300,000 tonnes
SoP produced from brines	100,000 tonnes	200,000 tonnes
SoP produced from MoP	50,000 tonnes	100,000 tonnes
Capital expenditure	A$175m/US$135	A$163m/US$125m
Payback	2.9 years	1.7 years
LOM NPV10% A$ (approximate, pre-tax, unfunded)	A$500m	
LOM NPV10% US$ (approximate, pre-tax, unfunded)	A$385m	
LOM IRR (approximate)	33.00%	
LOM average annual OPEX	A$343/US$264 t SOP	
Discount rate	10%	
US$:AU$ exchange rate	0.77	
State royalty	A$0.73/t	
Sale price of granular grade SOP delivered to Fremantle	A$795/US$612 t SOP	
Price of MoP delivered to site	A$407/US$407/t MoP	

Source: Australian Potash

- The production includes converting imported MoP to SoP using the high sulphate contents of the Lake Wells brine – this includes 50,000tpa of the total production of 150,000tpa of SoP during Stage 1 and 100,000tpa out of 300,000tpa of SoP during Stage 2, with the balance being produced directly from the pumped brines.
- The Project has an initial capital requirement of $174.9 million (+-35%), with the Stage 2 requirements of $162.9 million (Table 3) – these later capital costs are largely expected to be able to be funded out of cash-flow – our modelling using a 60:40 debt:equity scenario for the initial capex indicates that at least part of this will need to be externally funded.
- Operating costs are shown in Table 4 – these include costs associated with purchasing and transporting MoP (via backloading) to site, with our estimations indicating that this will be in the order of $93/tonne of total SoP produced using a delivered MoP price of A$325/tonne.
- Our view is that these costs appear reasonable when compared with the results of peers' studies, however operating costs are some 60% lower than published figures for Compass' Great Salt Lake operation in Utah, USA.
- The Compass operation has a significantly lower evaporation rate and lower brine grade, thus adding to costs - the Great Salt Lake operation is the only global SoP brine producer that costs are readily available for.

Table 3: Lake Wells scoping study capital cost estimate

Lake Wells scoping study capital cost estimate		
Description	**Stage 1: 150ktpa**	**Stage 2: Expansion to 300ktpa**
Brine Bore Field	A$15.4m	A$26.0m
Evaporation Ponds	A$26.4m	A$25.5m
Process Plant	A$62.9m	A$60.4m
Non-Process Infrastructure	A$11.0m	A$3.6m
Sub-Total Direct Costs	A$115.7m	A$115.5m
Indirect Costs	A$34.8m	A$24.3m
Contingency	A$24.4m	A$23.1m
Total	**A$174.9m**	**A$162.9m**

Source: Australian Potash

Table 4: Lake Wells scoping study operating cost estimate

Lake Wells scoping study operating cost estimate						
Development	**Stage 1: 150ktpa**			**Stage 2: Expansion to 300ktpa**		
Cost Category	A$m/yr	A$/t	%	A$m/yr	A$/t	%
General & Administration	A$2.6m	A$17	5	A$3.2m	A$11	3
Labour	A$7.2m	A$48	13	A$8.6m	A$29	9
Power	A$14.9m	A$98	26	A$29.1m	A$97	29
Reagents/Consumables	A$19.0m	A$127	34	A$37.8m	A$126	37
Maintenance	A$1.4m	A$9	3	A$2.1m	A$7	2
Product Transport	A$10.4m	A$69	19	A$20.7m	A$69	20
Total	**A$55.5m**	**A$368**	**100**	**A$101.5m**	**A$339**	**100**

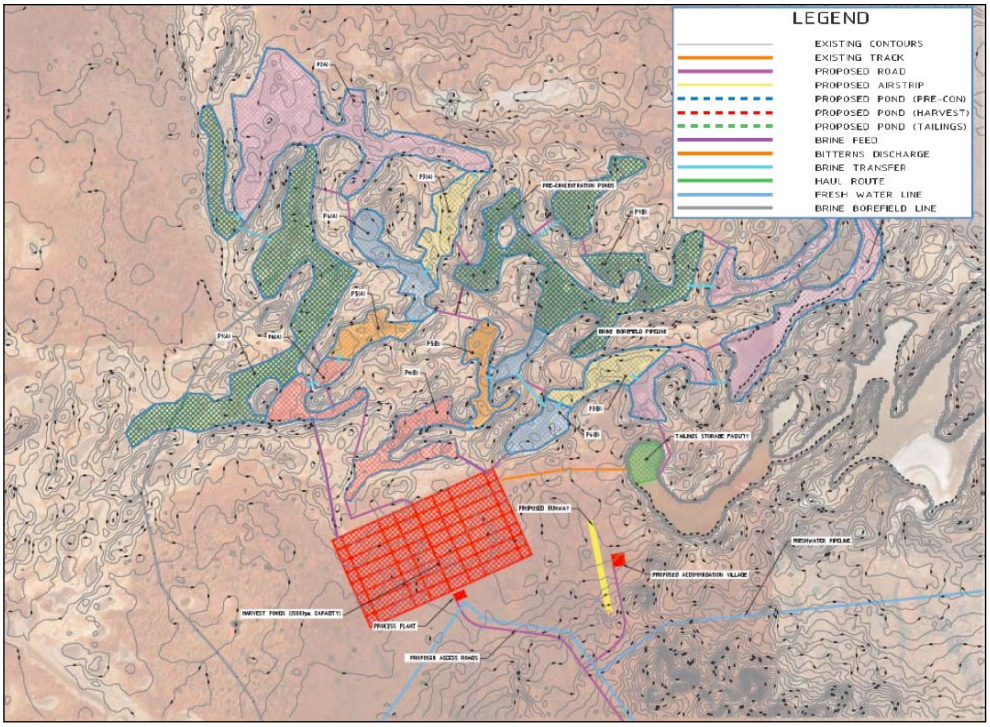
Source: Australian Potash

Brine Extraction, Harvesting and Processing

- Assuming an average K concentration of 3,700mg/l, at full Stage 2 production, the company expects that a field of 35 bores at 250m spacing along the centreline of the palaeovalley will produce some 102,200kl/day of brine, with the first phase producing some 46,400kl/day on a continuous basis – brines will be pumped from both the upper and lower sand aquifers.
- Hydrological modelling indicates that brines in the surface aquifer will be drawn down into the upper sand during pumping, and hence there will be no requirement for trenching to harvest the surface brines.

- The total volume of brine to be extracted represents some 34% of the Indicated Resource in the Western Zone, 33% of the Inferred Resources in the Southern Zone and nothing from the Eastern Zone.
- Any resource risk here is mitigated by the potential to extend the bore field to the Indicated Resources in the Eastern Zone.
- Brines will be pumped to the evaporation ponds, which include three types (Figure 6):
  - Brine pre-concentration and storage ("Storage/Concentrators"),
  - Sodium chloride (halite) deposition ("Crystallisers"), and,
  - Mixed potassium salt deposition/harvest ("Harvest").
- Brines are initially pumped to the pre-concentration ponds where, as water evaporates, halite precipitates and the potassium concentration nears saturation – as halite precipitates the pond floor rises and thus the berms will need to be raised periodically.
- The lake surface is suitable for siting the concentrator and crystalliser ponds, with the harvest ponds being off the lake and with the floors being sealed to mitigate any seepage.

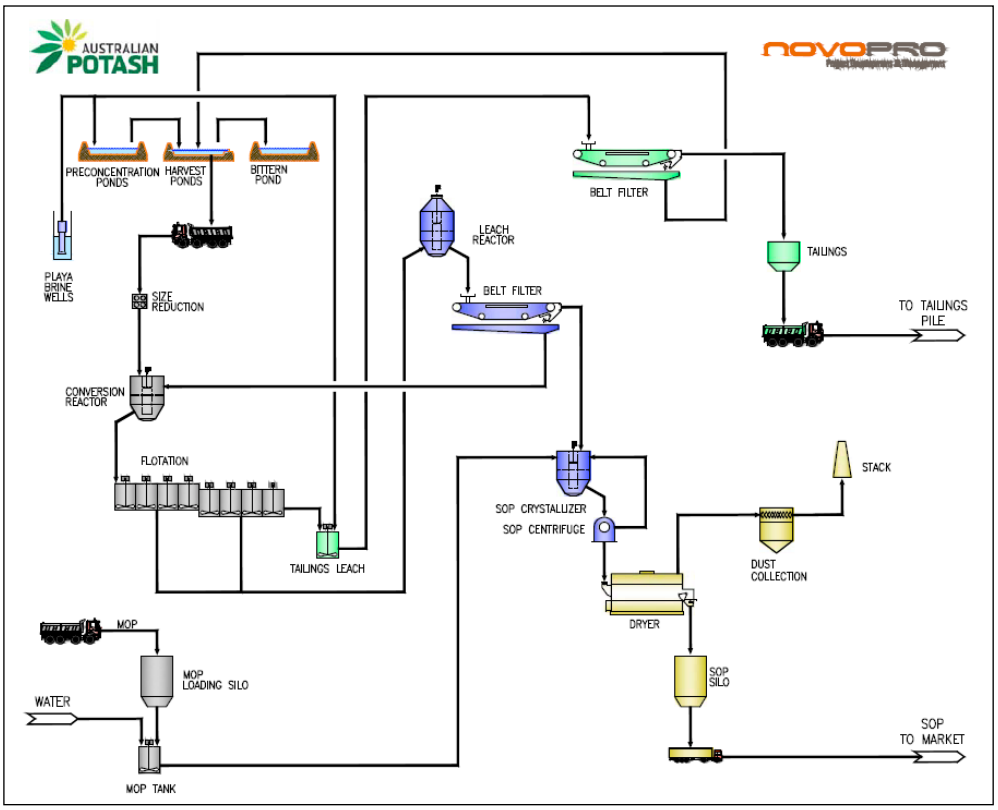
Figure 6: Indicative pond layout



Source: Australian Potash

- Saturated brines are then pumped to the crystalliser ponds, where further halite and other non-potassium salts precipitate – when potassium salts start to precipitate the brines are moved to the harvest ponds, in which mixed potassium salts are precipitated, and then dry harvested using soft wheeled loaders.
- The final brines from the harvest ponds are high in magnesium chloride which will be pumped out and stored separately and used for dust suppression.
- Mixed salts will be transferred to the process plant (Figure 7) where they will be processed to a final, high quality granulated SoP product. The initial part of the process includes mixing the salts with a conversion brine to form a salt slurry, which is then mixed with a "mother liquor" in tank reactors to produce a single potassium bearing mineral, schoenite ($K_2SO_4.MgSO_4.6H_2O$).
- Schoenite is then concentrated using flotation, with the concentrate transferred to a leach reactor, with the leached solids being transferred to a centrifuge to separate the SoP crystals, which are then dried, screened and packaged.

Figure 7: Processing flowsheet



Source: Australian Potash

Transport

- It is planned to package SoP in one tonne bulka bags, with these then containerised in six meter containers for transport – this will include 275km by road to the rail spur at Leonora, which connects to the state and national rail network.
- The scoping study assumes railing the containers ~900km to Fremantle, with MoP then being back loaded to Lake Wells.
- The Company will also investigate the potential for bulk export sales through Esperance (which hasn't got the container handling facilities that Fremantle has), with Esperance being ~600km by rail from Leonora.

Power

- Estimated power requirements are 8MW, with plans for a build-own-operate ("BOO") diesel fired power station to be co-located with the process plant, with this powering the brine field and process plant - estimated power costs are A$0.22/kWh.
- Current plans are to power the accommodation camp and fresh water bore field using individual generator sets.
- The Company will investigate additional fuel sources in future study work.

Water

- Approximately 1.3GL/year of fresh to brackish water will be required for the process plant – Lake Wells station currently pumps water from fractured rock aquifers through twelve windmill bores, with the Company looking to install two bores at each of seven locations to provide the required 42l/s.

Other Infrastructure

- The Company will look at the construction of a single-story accommodation village, initially of 40 rooms and expanding to 50 – this will also contain messing and recreational facilities, and there may be the potential to source a good quality second-hand camp.
- The current Lake Wells airstrip will be upgraded through widening, lengthening and repairing the pavement to make it suitable for 20 seat aircraft – suitable construction materials are available nearby.
- Some minor upgrades will also be required on the ~80km Lake Wells Station road part of the access from Laverton – the first 100km of access to site is on the Great Central Road which sees significant vehicle movements and is maintained by the Laverton Shire.

Marketing and Sales

- As part of the Scoping Study Australian Potash assumed 50% domestic and 50% export sales, using a modelled price of A$795/tonne SoP (US$612/tonne at a USD/AUD exchange rate of 0.77.
- This is at a discount to the weighted average of the calculated export sales price of A$756/tonne and actual FOT domestic sales prices of A$946/tonne, which is A$851/tonne.
- The Company will look at selling domestic product to the major bulk fertiliser companies such as CSBP, Summit and Incitec Pivot rather than selling direct to the end users - the domestic strategy will also include looking to expand the market over time with raising awareness of the scientific and commercial value of SoP.
- With regards to export sales, the strategy is to secure sales into the larger regional Asian markets, the largest of which is China, which consumes some 50% of global SoP production.
- To that end, and as announced to the market on June 9, 2017 and June 19, 2017 Australian Potash has signed non-binding MoUs with Sino-Agri and Hubei-Agri, two of China's largest fertiliser companies, with each considering high level commercial terms for sales of up to 100,000tpa of SoP.
- The combined tonnage of 200,000tpa comprises 2/3 of the planned Stage 2, 300,000tpa output - this is a start to engaging with potential customers to allow specifications and volumes of products from Lake Wells to be tailored to suit customers' requirements.
- The Company will look to strengthen its relationship with both groups in parallel with the development of Lake Wells.

Permitting

Mining Leases

- The Company is currently undertaking activities related to the permitting of the three mining leases.

Native Title and Heritage

- As announced to the market on May 12, 2017 the Native Title Process has been completed successfully, with this an integral part of the Mining Lease application - as part of this Australian Potash would have needed to undertake the right to negotiate process with any claimant group that made a claim by April 11, 2017 and had it registered by May 11, 2017 - no claims were made nor registered.
- Aboriginal heritage surveys have been completed, and did not identify any Aboriginal heritage sites within the area that will be impacted by the Project - the Company has developed good relations with the Traditional Owners.

Environmental Surveys

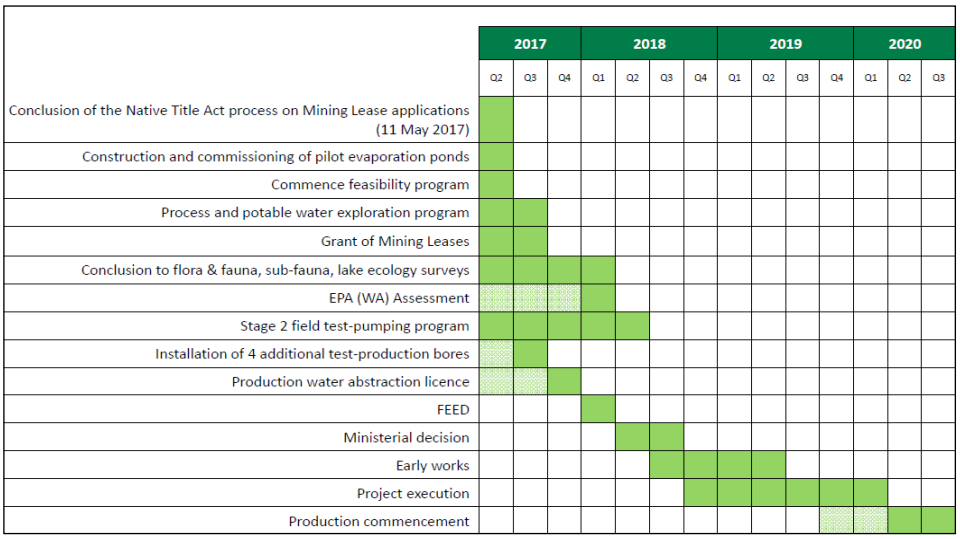
- Ongoing environmental work includes terrestrial flora and fauna, subterranean fauna, lake ecology, surface hydrology and acid sulphate soil surveys.
- The majority of these commenced in March 2017, and hence are ongoing; the first part of a Level 2 flora and fauna survey completed in September 2016 identified no threatened species, however did identify one priority plant species and one new species of scorpion.
- The subterranean fauna survey will concentrate on the areas of influence of the fresh water bore fields.
- An acid sulphate soil risk assessment completed in November 2016 concluded that no acid generating materials were present in the playa sediments, and that the sediments have a moderate to high acid neutralising capacity.

Current and Planned Activities

- Activities are targeted towards commencement of production in early 2020, with construction starting in H2, 2018 (dependent upon permitting and financing) as shown in Figure 8.
- Current activities include ongoing environmental studies and other permitting activities, and significantly, the planned commencement of construction of the fully permitted pilot evaporation ponds, as part of the feasibility study to be run in parallel with permitting.

- The pilot evaporation pond work will build on the pan evaporation test work that has been ongoing for a number of months.
- Stage 2 continuous pump testing is planned to start soon, with this expected to take seven months - brine extraction and evaporation are the key risk areas at Lake Wells, and this test work, if successful, will go a long way to mitigating the overall project risk.

Figure 8: Planned work programme



Source: Australian Potash.

PEER GROUP ANALYSIS

- Our peer group includes five ASX-listed companies (with SO4 also listed on AIM) looking to develop brine deposits in Western Australia – these are shown in Table 5.
- Most are at a similar stage of pilot scale development, however In terms of studies, Australian Potash is the most advanced, now progressing the BFS.
- Despite the above Australian Potash has the lowest market capitalisation and enterprise value of its peers, particularly when compared to Agrimin (which is the most remote of all of the projects) and Salt Lake Potash, which, like Australian Potash, is located on Lake Wells and thus has a number of factors in common with Australian Potash.
- Kalium is yet to publish financial figures - they listed in late 2016, and are now close to completing a pre-feasibility study.

Table 5: Australian Potash peer group

Australian Potash peer group						
Company	**Units**	**Australian Potash**	**Kalium Lakes [1]**	**Reward Minerals**	**Agrimin**	**Salt Lake Potash**
Code		APC	KLL	RWD	AMN	SO4
Last Price	c/share	11	42.5	20	47	41.5
Market Cap	A$ m	$24.360 m	$51.763 m	$27.152 m	$73.376 m	$73.043 m
Enterprise Value (EV)[2]	A$ m	$21.060 m	$42.349 m	$23.521 m	$59.018 m	$55.122 m
Project		Lake Wells	Beyondie	Lake Disappointment	Lake Mackay	Lake Wells
Total Aquifer Volume	MCM	20,329		105,647	44,088	24,723
Total Brine Volume			10,919		19,839	9,691
Drainable Brine Volume	MCM	1,861	1,454	13,481	2,812	
SOP Grade	mg/l	7,896	13,548	11,350	8,250	8,740
Recoverable SOP Resource	mt	14.69	19.70	153.00	23.20	
Project Stage	N/A	BFS Underway	PFS Underway	PFS Underway	PFS Underway	PFS Underway
Extraction Type	N/A	Bores	Trenching/ Bores	Trenching/ Bores	Trenching	Trenching/ Bores

Australian Potash peer group						
Company	**Units**	**Australian Potash**	**Kalium Lakes [1]**	**Reward Minerals**	**Agrimin**	**Salt Lake Potash**
Transport	N/A	Road/Rail	Road	Road	Road/Rail	Road/Rail
Port	N/A	Fremantle / Esperance	Geraldton	Port Hedland	Darwin	Esperance
Minimum Transport Distance	km	900	700	850	2,000	1,000
Potassium Recovery	%	71.5%	70.0%	60.0%	69.3%	71.5%
SOP recovered	mg/l	6,225	9,484	6,809	5,565	6,248
Initial SOP Production	tpa	150,000 tpa	75,000 tpa	400,000 tpa	370,000 tpa	200,000 tpa
Final SOP Production	tpa	300,000 tpa	300,000 tpa	400,000 tpa	370,000 tpa	400,000 tpa
Initial Capex	A$ m	$174.9 m	Not published	$319.8 m	$345.8 m	$224.0 m
Stage 2 Capex	A$ m	$162.9 m	Not published	$0.0 m	$0.0 m	$44.0 m
Full Production Capex	A$ m	$337.8 m	Not published	$319.8 m [3]	$345.8 m	$268.0 m
Capex Intensity	A$/t SOP	$1,126.00	Not published	$782.74	$934.59	$669.00
LOM Cash Cost	A$/t SoP	$343	Not published	$328	$341	$185
Site Costs	A$/t SoP	$181	Not published	$204	$151	$110
MOP Costs	A$/t SoP	$93	N/A	N/A	N/A	N/A
Transport	A$/t SoP	$69	Not published	$124	$190	$75

Source: IRESS, Company reports

1: Kalium Lakes, a late 2016 listing, is currently finalising a PFS - cost data has not been disclosed as yet

2: Enterprise value is market capitalisation less cash plus debt - cash is that as of March 31, 2017 plus subsequent raisings.

2: Reward's capital cost does not include contingencies.

- All companies, with the exception of Salt Lake Potash, have similar LoM operating costs, with the Salt Lake Potash costs, (including capital costs), hard to reconcile with the others.
- Reward's capital cost does not include a contingency, hence the relatively low capital intensity when compared to Agrimin and Australian Potash, however these can all be considered similar given the accuracy of scoping studies and the different production profiles.

VALUATION

- We have completed a post tax funded DCF valuation for Australian Potash using a discount rate of 8% (in the Scoping Study the Company used 10%) and an AUD/USD exchange rate of 0.75 (the Company used 0.77).
- Our funding structure assumes a 60;40 debt/equity mix for the initial capital of $174.9 million - we have assumed debt with a six year pay back term and an interest rate of 10% per annum.
- We have modelled that the equity portion is raised at a price of $0.30/share (this assumes significant price uplift with ongoing de-risking); this is in addition to a raising of $10 million assumed in the 2017/2018 financial year at a price of $0.12/share.
- These capital raisings have been run through the DCF model, hence have not been listed as separate lines in our NAV.
- Under this scenario the fully diluted share base for calculating the "per share" value for Lake Wells is 538 million.
- Our modelling indicates that some additional capital may be required in year 5 to help fund the project expansion, however the extra will be largely funded from cash flow, with the proportions very sensitive to changes in cash flow.

- We have used production profiles, US$ denominated SoP prices (US$612/tonne FOT Fremantle) and capital/operating cost figures as provided in the Company's March 2017 Scoping Study - as mentioned these appear to be reasonable, and are shown in Table 2, although there is potential downside risk in pricing.
- Our base case valuation for Lake Wells has been discounted for the weighted average of resource tonnages and confidences:
  - Measured Resources are weighted at 50% - 80%.
  - Indicated Resources are weighted at 20% to 50%.
  - Inferred Resources are weighted at 10% to 20%.
- Our weighting is based on the resources used in the 20 year mine life as presented in the Scoping Study - our calculations show that these are 80% Indicated and 20% Inferred - this results in a risk multiple of between 18-44% for Lake Wells, with a mid-point of 31%.
- Head office costs are based on an annual spend of $1 million, discounted at 8% until the end of the modelled Lake Wells Project life.
- This is a base case valuation - we would expect this to increase with ongoing de-risking of the Project over the next 6-12 months.

Table 6: APC indicative valuation (A$)

APC indicative valuation (A$)				
	Full NPV	Risked Low	Risked High	Risked Mid
Discounted for resource status	100%	18%	44%	31%
Lake Wells - Funded, Post Tax - NPV_8	$492 m	$88 m	$215 m	$152 m
Head Office - NPV_8	-$12 m	-$12 m	-$12 m	-$12 m
Cash -March 31, 2017	$3.30 m	$3.30 m	$3.30 m	$3.30 m
Total	**$483 m**	**$80 m**	**$207 m**	**$143 m**
	Per share valuation - based on diluted share base			
Lake Wells - Funded, Post Tax - NPV_8	$0.91	$0.16	$0.40	$0.28
Head Office - NPV_8	-$0.02	-$0.02	-$0.02	-$0.02
Cash -March 31, 2017	$0.01	$0.01	$0.01	$0.01
Total	**$0.91**	**$0.16**	**$0.39**	**$0.28**

Source: IIR analysis

- We note that our risked mid-point per share valuation of $0.28/share is lower than our assumed main raising price of $0.30/share, however we would assume that ongoing de-risking of the Project will lead to a significantly higher valuation and share price by the time that any capital is raised.
- Our analysis also includes a summary of key financial and production inputs and outputs as shown in Table 7.
- This highlights the potentially strong cash returns from Lake Wells, and, using an EBITDA multiple of five (typical for resources projects) gives an implied peak valuation of $715 million for Lake Wells as a going concern.

Table 7: Lake Wells key parameters and outcomes (A$)

Lake Wells key parameters and outcomes (A$)	
Parameter	**Result**
Production Life	20 years
LoM SoP Production	5,250,000 t
LOM SoP Production Cost	$343/tonne
LoM SoP Sales Price	$816/tonne
NPV - Unfunded, Pre-Tax	$635 m
NPV - Funded, Post-Tax	$492 m
IRR - Unfunded, Pre-tax	32%
Peak EBITDA	$143 m
Peak Free Cash Flow - Funded, Post Tax	$105 m
Total Free Cash Flow	$1,484 m
Peak NPAT	$86 m
Discount Rate	8%

Lake Wells key parameters and outcomes (A$)	
Parameter	**Result**
Project Finance Debt	60%
Debt Amount	$105 m
Financing Term	6 years
Interest Rate	10%
Project Finance Equity	$70 m
Project Finance Equity Price/Share	$0.30
Pre-Development Equity	$10 m
Pre-Development Equity Price/Share	$0.12
Diluted Shares on Issue	538 m
AUD/USD ER	0.75

Source: IIR analysis

- As part of our valuation we have completed a sensitivity analysis, with this indicating that Lake Wells is most sensitive to SoP prices and operating costs – diluted per share sensitivities are presented in Table 8.
- We note that changes in potash prices will also incrementally change the production price given the use of imported MoP in the processing route.

Table 8: Australian Potash risked per share sensitivity analysis

Australian Potash risked per share sensitivity analysis (A$)						
		Change in Site Operating Costs				
		-20%	-10%	0%	10%	20%
SoP Price, $US/tonne	US$450	$0.14	$0.12	$0.11	$0.09	$0.08
	US$500	$0.19	$0.18	$0.16	$0.15	$0.13
	US$550	$0.25	$0.23	$0.22	$0.20	$0.19
	US$600	$0.30	$0.28	$0.27	$0.25	$0.24
	US$650	$0.35	$0.34	$0.32	$0.31	$0.29
	US$700	$0.41	$0.39	$0.38	$0.36	$0.35

Source: IIR analysis

CAPITAL STRUCTURE

- Australian Potash currently has 221.4 million shares and 30.1 million unlisted options on issue.
- The options include 12.93 million that are in the money, and which have the potential to bring in A$1.53 million cash upon exercise.
- The top shareholder is Yandal Investments (Mark Creasy), with 13.11% of the stock.
- Total insider's interests are 1.64%, with the top 20 holding 48.94%
- The Company has 795 shareholders.

RISKS

- **SoP Prices –** This will be the key risk facing Lake Wells, however this is somewhat mitigated by the robust nature of the Project - it can comfortably accommodate a 20% fall in prices.
- **Costs -** Although a Company cannot affect prices, it can affect operational costs – however, as for prices, Lake Wells will be able to absorb adverse movements of 20% in the costs.
- **Funding –** Although short term funding for ongoing studies should be doable (we note Salt Lake Potash's recent $16 million raise), further down the track project financing may be more problematic - although the resources sector is undergoing a resurgence project financing is still relatively difficult, however this may be somewhat mitigated by the apparent robustness of Lake Wells.

- **Permitting –** This is a risk facing any potential developer, however this is now mitigated to some extent with approval for the construction of the pilot evaporation ponds being given and the finalisation of the Native Title Process - any risk here may be in time frames being longer than expected rather than permitting being denied.
- **Operations –** In our view the key operational risk will be in brine pumping and consistency of grades given the dynamic nature of these systems, however pumping test work to date has been positive and follow up testing is planned - the processing route is industry standard.

BOARD AND MANAGEMENT

- **Mr Matthew Shackleton - Executive Chairman:** Matt is a resources executive and Chartered Accountant with 20 years' experience in senior management and board roles. Previously the Managing Director of ASX listed Western Australian gold developer Mount Magnet South NL, Matt was the founding director of ASX listed and West African gold and bauxite explorer Canyon Resources Limited, and previously an Executive Director with Brazilian gold explorer Mineralis Limited. He has also held senior roles with Bannerman Resources Limited, a uranium developer, Skywest Airlines, iiNet Limited and DRCM Global Investors in London.

  Matt holds a B.Comm. (Economics & Accounting) from Murdoch University in Western Australia, an MBA from The University of Western Australia, and is a Fellow of the Institute of Chartered Accountants, Australia & New Zealand, and a member of the Australian Institute of Company Directors.

- **Mr Brett Lambert - Non-Executive Director:** Mr Lambert is a mining engineer and experienced company director in the Australian and international mineral resources industry. Over a career spanning 35 years, Mr Lambert has held senior management roles with Western Mining Corporation, Herald Resources, Western Metals, Padaeng Industry, Intrepid Mines, Thundelarra Exploration and Bullabulling Gold. He has successfully managed a number of green-fields resource projects through feasibility study and development and has been involved in numerous facets of financing resource project development.

  Mr Lambert has experience as a director of companies listed on the Australian Securities Exchange, AIM and the Toronto Stock Exchange and holds a B.App.Sc. (Mining Engineering) degree from Curtin University in Western Australia and is a Member of the Australian Institute of Mining and Metallurgy.

  Mr Lambert is currently a Non-executive Director of Mincor Resources NL.

- **Mr Rhett Brans – Non-Executive Director:** Mr Brans is an experienced director and civil engineer with over 45 years' experience in project developments. He is currently a Non-executive Director of Syrah Resources and Carnavale Resources Ltd. Previously, Mr Brans was a founding director of Perseus Mining Limited and served on the boards of Tiger Resources Limited and Monument Mining Limited

  Throughout his career, Mr Brans been involved in the management of feasibility studies and the design and construction of mineral treatment plants across a range of commodities and geographies. Importantly, he has extensive experience as an owner's representative for several successful mine feasibility studies and project developments. Mr Brans experience in guiding optimisation of treatment plant designs resulting in material financial improvements for projects has the potential to add significant value for APC at Lake Wells.

  Mr Brans holds a Dip.Engineering (Civil), and is a member of the Institution of Engineers, Australia and the Australian Institute of Company Directors.

- **Mr Alan Rubio - Lead Project Manager:** Alan has over 20 years' experience in engineering design and project management roles developing resource projects from concept stages through to operations. Alan has extensive experience assisting client teams to manage development programs and implement projects both in Australia and overseas. He has a strong background in project evaluation, strategic planning, project de-risking and in managing owner's teams and third-party consultants with specialty experience in the development of rare earths projects. Alan has previously worked for Northern Minerals, Greenland Minerals, Arafura Resources, Bateman Engineering, Worley Parsons and Hatch Associates.

Alan has a Bachelor of Engineering degree specialising in Mechanical Engineering, senior management roles in both Mining and a Power company since migrating to Australia in 2008.

- **Mr Shaun Triner – Process Manager:** Shaun Triner joined the APC team as Process Manager in December 2016. For the 20 years prior to joining APC, Shaun was the Manager Process Development and Technical Marketing at Dampier Salt. During this time Shaun was responsible for all facets of the solar salt production cycle, successfully leading the expansion of operations at that company across three sites. Shaun brings to the APC team directly relevant solar pond development and management experience, highlighting the focus the company is bringing to this area of the LWPP.
- **Mr Carsten Kraut – Principal Hydrogeologist:** Carsten is a hydrogeologist with over 20 years' experience in Australia, Asia and the Americas and APC been involved with groundwater resource evaluation and development in the mining and construction industries. He has held Senior and Principal Hydrogeologist roles with a variety of Australian and major international companies including Golder Associates, Aquaterra, AECOM, and WSP Parsons Brinckerhoff and his experience has spanned project direction and management to technical lead on projects both large and small.

  Carsten holds a B.App.Sc (Applied Geology) and Post Graduate Diploma (Hydrogeology) from Curtin University, and a M.Sc (Hydrogeology and Groundwater Management) from the University of Technology Sydney. He is a member of the International Association of Hydrogeologists (MIAH) and International Mine Water Association (MIMWA).
- **Ms Leigh-Ayn Absolom – Company Secretary:** Leigh-Ayn is a Chartered Accountant and Chartered Secretary with 16 years' experience in auditing, accounting and company secretarial roles within public practice and the resources industry. She commenced her career with Deloitte, originally in South Africa and then Australia, before moving into the mining sector with Murchison Metals Ltd. Leigh-Ayn APC held positions as Group Financial Controller and Company Secretary with uranium development company Bannerman Resources Limited, and Manager - Corporate with nickel explorer Resource Mining Corporation Limited.

  Leigh-Ayn is an Associate Member of the Governance Institute of Australia and the South African Institute of Chartered Accountants.

  Leigh-Ayn holds a B.Comm., B.Acc., CA, AGIA.

BACKGROUND – POTASH AND MARKETS

Fertiliser Markets

- Potash (chemical symbol K) is one of the three primary agricultural macro-nutrients essential for plant growth - potash, phosphorous (P) and nitrogen (N), collectively referred to as N-P-K.
- We are seeing major trends driving growth in the fertiliser markets, with these including:
  - Population growth,
  - Arable land intensity - the amount of arable land per capita has been declining since the 1960's, and hence more output is required per unit area,thus requiring more (or more efficient) fertilisers.
  - Diet - rising incomes, and an emergent middle class in emergent countries like China has led to increases in calorie and protein intake,and,
  - Under-application of potassium fertiliser - this applies to both overall potash fertiliser application and also SoP - developing countries tend to use more of the cheaper and more readily available nitrogen and phosphorous fertiliser, and where potash is used, there is a preference for the cheaper MoP over the more expensive and premium SoP.
- The total fertiliser market was estimated at 185mtpa contained nutrients in 2014 (IFA data), with an overall growth of 1.5% CAGR over the preceding 10 years - of this potash fertilisers had a CAGR of 2.2%.
- Potash assists in protein production and photosynthesis, it is also increases drought resistance and disease resistance, increases crop yields and lengthens shelf life.

- The main potash fertiliser is muriate of potash (KCl, or MoP), with this comprising some 86% of the total potash consumed, with SoP at ~ 10% and others at 4% - SoP markets are reasonable opaque, and unlike MoP reliable price and volume data is relatively hard to freely source.
- As production figures are commonly quoted on different bases we have included Table 9 which presents a matrix of conversion ratios between various potash compounds.
- As an example volumes are commonly expressed as tonnes of contained K_2O, and as an example 100t K_2O is equivalent to (100*1.85)t, or 185 tonnes of SoP.

Table 9: Potash compound conversion ratios

Potash compound conversion ratios							
				Convert to			
Convert From	Species	Mol Wt	K%	K	K_2O	KCl	K_2SO_4
	K	39.098	100%	1.000	1.205	1.907	2.229
	K_2O	94.196	83.01%	0.830	1.000	1.583	1.850
	KCl (SoP)	74.551	52.45%	0.525	0.632	1.000	1.169
	K_2SO_4 (SoP)	174.26	44.87%	0.449	0.541	0.855	1.000

Source: IIR analysis

- SoP comes in three main products, all with <1% Cl:
  - Standard powder (50 to 51% K_2O) - for blending in compound fertilisers;
  - Granular (50 to 51% K_2O) - for direct application, and which Australian Potash plans to produce, and,
  - Soluble (>52% K_2O) - for use in fertigation - this is largely produced through the Mannheim Process.
- The advantages of SoP include that it contains sulphur, which also helps yield and does not contain chloride, and hence has a low salinity index (unlike MoP), and thus is ideal for arid, saline and sulphur poor soils.
- Other advantages of SoP over MoP are that it improves the nutritional value and appearance of produce and it is also essential for use on chloride sensitive crops - these include nuts, fruit, vegetables and tobacco amongst others.
- As mentioned above however it is commonly not used as it should be due to the relatively high cost when compared with MoP, and in addition supply has been constrained by production capacity.

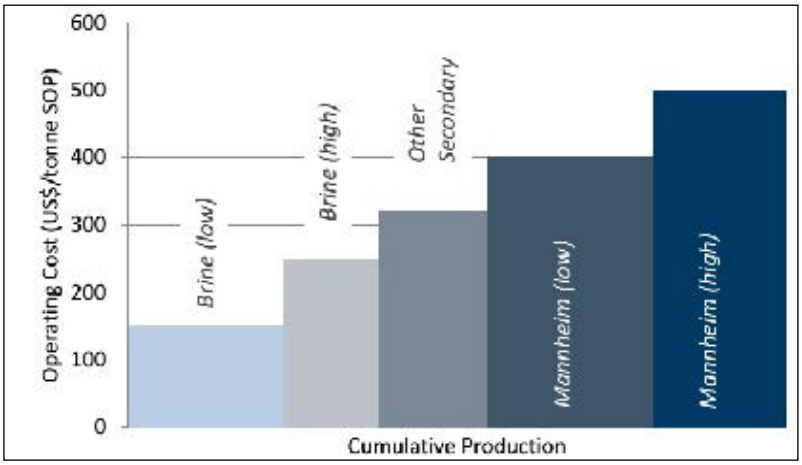
SoP Production and Supply

- There are very few natural sources of SoP, with 60% to 65% of supply coming from secondary processes, and 30% to 35% from salt lake brines - this has increased from ~20% from brines over recent years.
- The secondary processes include the relatively expensive Mannheim Process, which involves the reaction of MoP with sulphuric acid at 650° C to produce SoP and hydrochloric acid - besides the cost, another downside is the need to dispose of the hydrochloric acid, which has caused some issues for current producers.
- The Mannheim Process provides the price base for SoP, and a major producer is the Tessenderlo Group, through its 580,000tpa K_2O capacity plant in Ham, Belgium - the hydrochloric acid is used in downstream chemical plants.
- One key advantage of the Mannheim Process is that it produces a product lower in insoluble nutrients, and hence is more suitable for the soluble fertiliser applications such as fertigation.
- Other salt conversion processes include the reaction of MoP with Kieserite ($MgSO_4$) or Langbeinite ($K_2SO_4.2MgSO_4$) - this again is dependent upon MoP and other salt input prices, with a major user of the process being K+S Kali, which treats MoP from its own mines, and produces some 1mtpa of SoP.
- At least five SoP brine deposits are in production globally, including:
  - SDIC's Xinjiang Luobupo operation in China, with a production capacity of ~1.2mtpa,
  - Citic's Golmud operation, Tibet, with a capacity of ~500,000tpa,
  - Qinghai Bindi, China, with a capacity of ~450,000tpa,

- Compass, which in 2016 produced 313,000 short tons (284,000 metric tonnes) from its Great Salt Lake operation in Utah,
- SQM at the Salar de Atacama in Chile, with a capacity of ~300,000tpa, and,
- The Archaean Group, which has a capacity of ~130,000tpa at the Kutch project in Gujarat, India.

- Figure 9 compares the costs of the various production methods, highlighting the low brine production cost.

Figure 9: SoP production costs



Source: Australian Potash/Argonaut

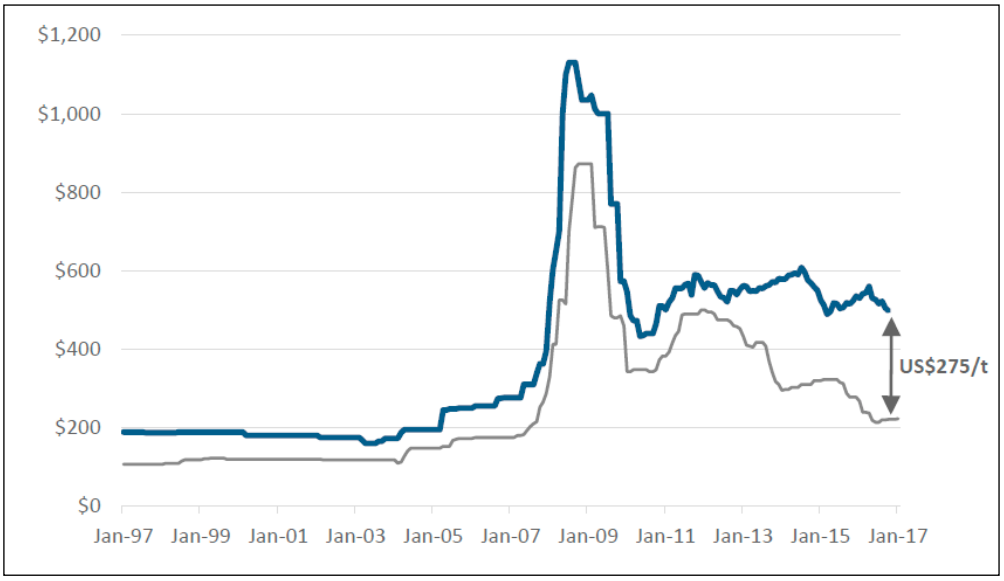
- China is the largest producer (and consumer), accounting for ~50% of global production, with this through both brines and Mannheim plants, with the remainder spread around a number of countries.
- Although the Chinese market is largely insular (they exported ~38,000t of SoP in 2016, there is reportedly a surfeit of potential SoP supply, but exports are discouraged through export tariffs, however some out looking companies, including Megal, which has Mannheim plants near the coast, could potentially export SoP should tariffs be dropped.
- Current Chinese brine producers are in remote areas of the country, with high transport costs to the main agricultural areas.
- The largest single global producers include Luobupo (China, brine, 1.2mtpa to 1.6mtpa depending upon source of data), Dingshang (China, Mannheim, 0.90mtpa) and K+S (Germany, Keiserite, reportedly 0.85mtpa to 1mtpa).

Potash Demand and Prices

- Global demand for SoP was reportedly ~6.0mt to 7.0mt in 2016, or up to 10% of total potash demand of ~70mt - this was a record, largely due to increasing use in China, which now consumes (and produces) around 50% of global SoP - published demand and supply figures are somewhat "elastic".
- Australian potash demand is estimated at 345ktpa, with ~72ktpa of this being SoP.
- Since 2000 SoP demand growth has been ~5.0% per year, compared with MoP with a demand growth of 2.2% per year.
- Demand for SoP is expected to continue to grow, with increasing acceptance with increasing supply, increasing salinity in soils and the ongoing requirement to increase crop yields - this growth is forecast at around 1% to 2% CAGR over the coming decade.
- Another driver for SoP demand is the sulphur content - recent times have seen a growth in sulphur deficient soils; this is partly due to no "free" sulphur being supplied by acid rain, with more awareness of and decrease in sulphur emissions from power stations.
- These, and other factors should see prices remain relatively strong - other factors include the use on high value crops where fertiliser quality is important and the fertiliser price has less of an impact on margins.
- However increasing SoP supply may see some downwards pressure on prices - price incentives may be required to get existing MoP users to convert to the more expensive SoP, particularly where it is used on lower value crops, or on higher value crops where chloride contents are not critical.

- Figure 10 shows SoP and MoP prices - this highlights the growing margin between the two products - this margin is larger for potash fertiliser imports into Australia, at around A$469/tonne.
- This price gap also highlights growing demand for SoP, with production just starting to catch up - MoP however will continue to be in oversupply for the foreseeable future, and hence prices are not expected to increase.

Figure 10: 20 year SoP (grey) and MoP prices (blue) - US$/tonne



Source: Australian Potash/Fertecon

- As can be seen in Figure 10, MoP prices declined from late 2011 until mid-2016, however have remained stable at ~US$215/tonne since August 2016 - this can be contrasted with the price of SoP, which has held up significantly better.
- Early 2017 sales data, as quoted in Australian Potash's March 23, 2017 Scoping Study release, ranged between US$550 to US$650/tonne FOB North America, with Australian east coast granular grade FOT domestic sales prices at A$946/tonne SoP, highlighting the price premium in Australia
- Some forecasts see SoP prices staying at around US$550/tonne FOB North America over the next decade, with the Australian premium remaining.
- As mentioned earlier however, downwards pressure may be placed on prices due to incentives being required to get existing MoP users to swap over to SoP, although any affect cannot be quantified and SoP should still trade at a significant premium to MoP.

APPENDIX 1 - LAKE WELLS MINERAL RESOURCE ESTIMATE

Lake Wells Mineral Resource Estimate						
Hydrogeological Unit	**Aquifer Volume (MCM)**	**Specific Yield**	**Drainable Brine Volume (MCM)**	**K Grade mg/l)**	**SOP Grade (mg/l)**	**SOP Resources (Mt)**
Western Zone High Grade - Indicated						
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**	**9%**	**919**	**3,904**	**8,706**	**8.1**
Eastern Zone - Indicated						
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**	**9%**	**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 (MCM/MT)	**17,050**	**9%**	**1,521**	**3,707**	**8,267**	**12.7**
Southern Zone - Inferred						
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 (MCM / MT)	**3,279**	**10%**	**340**	**2,674**	**5,963**	**2.1**
Indicated Resource based modelled aquifer volume, mean specific yield and weighted mean K concentrations (derived from modelling)						
Total Resources						
Indicated Resources	17,050	9%	1,521	3,707	8,267	12.7
Inferred Resources	3,279	10%	340	2,674	5,963	2.1
Total Resources	**20,329**	**9%**	**1,861**	**3,541**	**7,896**	**14.7**
Resources do not include exploration target at Lake Wells South (tenement areas south of Southern Zone)						

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